

# Service Manual

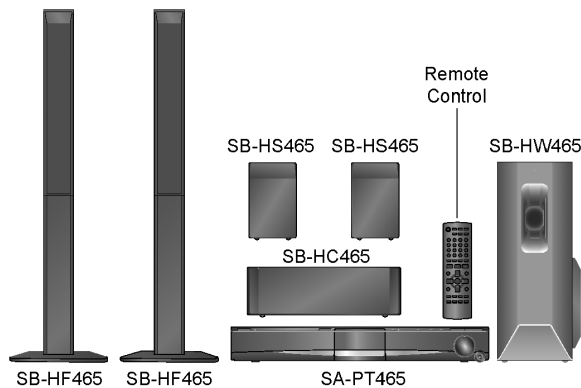
## DVD Home Theater Sound System



**SA-PT465GC**  
**SA-PT465GCS**  
**SA-PT465GCT**  
**SA-PT465GS**

Colour

(K).....Black Type



## Specifications

Main unit **SA-PT465GC/GCS/GCT/GS**

### ●GENERAL

**Power supply:** AC 110 to 127V/220 to 240V,  
50/60 Hz

**Power consumption:** This unit 135 W

**Power consumption in standby mode:**  
approx. 0.4 W

**Dimensions (W×H×D):** 430 mm×63 mm×327 mm

**Mass:** This unit 3.4 kg

**Operating temperature range:** +0 °C to +40 °C

**Operating humidity range:** 35 % to 80 % RH  
(no condensation)

### ●AMPLIFIER SECTION

**RMS Output Power: Dolby Digital Mode**

Front Ch: 125 W per channel (3 Ω), 1 kHz, 10% THD

Surround Ch: 125 W per channel (3 Ω), 1 kHz, 10% THD

Center Ch: 125 W per channel (3 Ω), 1 kHz, 10% THD

Subwoofer Ch: 125 W per channel (3 Ω), 100 Hz, 10 % THD

Total RMS Dolby Digital mode power:

750 W

PMPO

5600 W

**DIN Output Power: Dolby Digital Mode**

Front Ch: 75 W per channel (3 Ω), 1 kHz, 1% THD

Surround Ch: 75 W per channel (3 Ω), 1 kHz, 1% THD

Center Ch: 75 W per channel (3 Ω), 1 kHz, 1% THD

Subwoofer Ch: 75 W per channel (3 Ω), 100 Hz, 1 % THD

Total DIN Dolby Digital mode power:

450 W

### ●FM TUNER, TERMINALS SECTION

**Preset Memory:** FM 30 stations

**Frequency Modulation (FM)**

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

Antenna terminals: 75 Ω (unbalanced)

# Panasonic®

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**Digital audio input**

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

**Phone jack**

|           |                     |
|-----------|---------------------|
| Terminal: | Stereo, 3.5 mm jack |
|-----------|---------------------|

**Mic jack**

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

**USB Port**

|                            |                                                                      |
|----------------------------|----------------------------------------------------------------------|
| USB standard:              | USB 2.0 full speed                                                   |
| Media file format support: | MP3 (*.mp3)<br>WMA (*.wma)<br>JPEG (*.jpg) (*.jpeg)<br>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<sup>\*5, 6</sup>)
- (2) DVD-RAM (DVD-VR, MP3<sup>\*2, 5</sup>, JPEG<sup>\*4, 5</sup>, MPEG4<sup>\*5, 7</sup>, DivX<sup>\*5, 6</sup>)
- (3) DVD-R (DVD-Video, DVD-VR, MP3<sup>\*2, 5</sup>, JPEG<sup>\*4, 5</sup>, MPEG4<sup>\*5, 7</sup>, DivX<sup>\*5, 6</sup>)
- (4) DVD-R DL (DVD-Video, DVD-VR)
- (5) DVD-RW (DVD-Video, DVD-VR, MP3<sup>\*2, 5</sup>, JPEG<sup>\*4, 5</sup>, MPEG4<sup>\*5, 7</sup>, DivX<sup>\*5, 6</sup>)
- (6) +R/+RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW [CD-DA, Video CD, SVCD<sup>\*1</sup>, MP3<sup>\*2, 5</sup>, WMA<sup>\*3, 5</sup>, JPEG<sup>\*4, 5</sup>, MPEG4<sup>\*5, 7</sup>, DivX<sup>\*5, 6</sup>]

<sup>\*1</sup> Conforming to IEC62107

<sup>\*2</sup> MPEG-1 Layer 3, MPEG-2 Layer 3

<sup>\*3</sup> Windows Media Audio Ver.9.0 L3

●Not compatible with Multiple Bit Rate (MBR)

<sup>\*4</sup> 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.

<sup>\*5</sup> The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.

<sup>\*6</sup> Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile.

<sup>\*7</sup> MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders.

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

**Pick up**

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

**Audio output (Disc)**

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

**●VIDEO SECTION**

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

**Composite video output**

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

**Component video output**

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

**HDMI AV output**

|           |                        |
|-----------|------------------------|
| Terminal: | 19pin type A connector |
|-----------|------------------------|

**HDAVI Control:**

This unit supports "HDAVI Control 3" function.

**Note:**

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

**Solder:**

This model uses lead free solder (PbF).

**Mechanism:**

This model uses DLS6 mechanism.

|                   |                           |
|-------------------|---------------------------|
| System            | SC-PT465GCGCSGCTGS-K      |
| Main unit         | SA-PT465GCGCSGCTGS-K      |
| Front speakers    | SB-HF465E-K <sup>*1</sup> |
| Center speakers   | SB-HC465E-K <sup>*1</sup> |
| Surround speakers | SB-HS465E-K <sup>*1</sup> |
| Subwoofer         | SB-HW465E-K <sup>*1</sup> |

Refer to their respective original service manuals for \*1.

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

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Official DivX® Certified product.  
Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files.  
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iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

#### ■ Built-in decoders

You can play discs with these symbols.



## ⚠ WARNING

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

# CONTENTS

|                                                                                                        | Page | Page |
|--------------------------------------------------------------------------------------------------------|------|------|
| <b>1 Safety Precautions</b> .....                                                                      | 6    |      |
| 1.1. GENERAL GUIDELINES .....                                                                          | 6    |      |
| 1.2. Before Repair and Adjustment .....                                                                | 6    |      |
| 1.3. Protection Circuitry .....                                                                        | 6    |      |
| 1.4. Safety Parts Information .....                                                                    | 7    |      |
| 1.5. Caution for AC Cord .....                                                                         | 8    |      |
| <b>2 Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices</b> ..... | 9    |      |
| <b>3 Precaution of Laser Diode</b> .....                                                               | 10   |      |
| <b>4 About Lead Free Solder (PbF)</b> .....                                                            | 11   |      |
| 4.1. Service caution based on legal restrictions .....                                                 | 11   |      |
| <b>5 Handling Precautions for Traverse Unit</b> .....                                                  | 12   |      |
| 5.1. Cautions to Be Taken in Handling the Optical Pickup Unit .....                                    | 12   |      |
| 5.2. Grounding for electrostatic breakdown prevention .....                                            | 12   |      |
| <b>6 Accessories</b> .....                                                                             | 14   |      |
| <b>7 Operation Procedures</b> .....                                                                    | 15   |      |
| 7.1. Remote Control Key Buttons Operations .....                                                       | 15   |      |
| 7.2. Main Unit Key Buttons Operations .....                                                            | 16   |      |
| 7.3. Using the VIERA Link "HDAVI Control™" .....                                                       | 17   |      |
| 7.4. Using the iPod .....                                                                              | 19   |      |
| 7.5. USB Connection and Operation .....                                                                | 21   |      |
| 7.6. Audio and Video Connection .....                                                                  | 22   |      |
| 7.7. Disc Information .....                                                                            | 24   |      |
| <b>8 Self-Diagnosis and Special Mode Setting</b> .....                                                 | 26   |      |
| 8.1. Service Mode Summary Table .....                                                                  | 26   |      |
| 8.2. Service Mode Table .....                                                                          | 26   |      |
| 8.3. DVD Self Diagnostic Function-Error Code .....                                                     | 33   |      |
| 8.4. Sales Demonstration Lock Function .....                                                           | 35   |      |
| 8.5. Service Precautions .....                                                                         | 36   |      |
| <b>9 Assembling and Disassembling</b> .....                                                            | 38   |      |
| 9.1. Disassembly Flow Chart .....                                                                      | 40   |      |
| 9.2. Main Components and P.C.B. Locations .....                                                        | 41   |      |
| 9.3. Disassembly of Top Cabinet .....                                                                  | 42   |      |
| 9.4. Disassembly of Rear Panel .....                                                                   | 42   |      |
| 9.5. Disassembly of DVD Mechanism Unit .....                                                           | 42   |      |
| 9.6. Disassembly of Front Panel .....                                                                  | 43   |      |
| 9.7. Disassembly of Panel P.C.B. .....                                                                 | 43   |      |
| 9.8. Disassembly of Power Button P.C.B. .....                                                          | 44   |      |
| 9.9. Disassembly of USB P.C.B. .....                                                                   | 44   |      |
| 9.10. Disassembly of Mic P.C.B. .....                                                                  | 45   |      |
| 9.11. Disassembly of DVD Lid .....                                                                     | 45   |      |
| 9.12. Disassembly of Ipod Cradle P.C.B. .....                                                          | 45   |      |
| 9.13. Disassembly of AC Inlet P.C.B. .....                                                             | 46   |      |
| 9.14. Disassembly of Main P.C.B. .....                                                                 | 47   |      |
| 9.15. Disassembly of D-Amp P.C.B. .....                                                                | 48   |      |
| 9.16. Replacement of Digital Amp IC (IC5000) .....                                                     | 49   |      |
| 9.17. Replacement of Digital Amp IC (IC5300) .....                                                     | 50   |      |
| 9.18. Replacement of Digital Amp IC (IC5400) .....                                                     | 51   |      |
| 9.19. Disassembly of Voltage Selector P.C.B. .....                                                     | 53   |      |
| 9.20. Disassembly of SMPS P.C.B. .....                                                                 | 53   |      |
| 9.21. Replacement of Switch Regulator IC (IC5701) .....                                                | 53   |      |
| 9.22. Replacement of Switch Regulator Diode (D5702) .....                                              | 54   |      |
| 9.23. Replacement of Regulator Diode (D5801) .....                                                     | 56   |      |
| 9.24. Replacement of Regulator Diode (D5802) .....                                                     | 56   |      |
| 9.25. Replacement of Regulator Diode (D5803) .....                                                     | 57   |      |
| 9.26. Disassembly of Power Supply P.C.B. .....                                                         | 58   |      |
| 9.27. Replacement of Regulator IC (IC2903) .....                                                       | 59   |      |
| 9.28. Disassembly of DVD Module P.C.B. .....                                                           | 60   |      |
| 9.29. Disassembly of Coprocessor P.C.B. .....                                                          | 61   |      |
| <b>10 Assembling and Disassembling of DVD Mechanism Unit</b> .....                                     | 62   |      |
| 10.1. Disassembling Procedures .....                                                                   | 62   |      |
| 10.2. Assembling Procedure .....                                                                       | 63   |      |
| <b>11 Service Fixture and Tools</b> .....                                                              | 64   |      |
| <b>12 Service Position</b> .....                                                                       | 65   |      |
| 12.1. Checking & Repairing Main P.C.B. .....                                                           | 65   |      |
| 12.2. Checking & Repairing D-Amp P.C.B. .....                                                          | 65   |      |
| 12.3. Checking & Repairing SMPS P.C.B. .....                                                           | 67   |      |
| 12.4. Checking & Repairing Power Supply P.C.B. .....                                                   | 67   |      |
| 12.5. Checking & Repairing DVD Module P.C.B. .....                                                     | 68   |      |
| <b>13 Measurements and Adjustments</b> .....                                                           | 71   |      |
| 13.1. Service Tools and Equipment .....                                                                | 71   |      |
| 13.2. Important points in adjustment .....                                                             | 71   |      |
| 13.3. Storing and handling of test discs .....                                                         | 71   |      |
| 13.4. Optical adjustment .....                                                                         | 72   |      |
| <b>14 Voltage and Waveform Chart</b> .....                                                             | 73   |      |
| 14.1. DVD Module P.C.B. .....                                                                          | 73   |      |
| 14.2. D-Amp P.C.B. .....                                                                               | 75   |      |
| 14.3. Main P.C.B. .....                                                                                | 76   |      |
| 14.4. Panel P.C.B. .....                                                                               | 77   |      |
| 14.5. Power Supply P.C.B. .....                                                                        | 77   |      |
| 14.6. SMPS P.C.B. .....                                                                                | 78   |      |
| 14.7. Mic P.C.B. .....                                                                                 | 78   |      |
| 14.8. Waveform Chart .....                                                                             | 79   |      |
| <b>15 Illustration of IC's, Transistors and Diodes</b> .....                                           | 82   |      |
| <b>16 Wiring Connection Diagram</b> .....                                                              | 83   |      |
| <b>17 Block Diagram</b> .....                                                                          | 85   |      |
| 17.1. System Control .....                                                                             | 85   |      |
| 17.2. DVD (Servo) .....                                                                                | 86   |      |
| 17.3. DVD (Audio) .....                                                                                | 87   |      |

|                                                                        |            |                                                                                  |            |
|------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------|------------|
| 17.4. DVD (HDMI) .....                                                 | 88         | 20.4. D-Amp P.C.B. ....                                                          | 118        |
| 17.5. VIDEO .....                                                      | 89         | 20.5. SMPS P.C.B. ....                                                           | 119        |
| 17.6. Audio .....                                                      | 90         | 20.6. Ipod Cradle, Coprocessor, Mic & Voltage Selector P.C.B.<br>.....           | 120        |
| 17.7. Digital Audio Amp .....                                          | 91         | <b>21 Basic Troubleshooting Guide .....</b>                                      | <b>121</b> |
| 17.8. Power .....                                                      | 92         | 21.1. Troubleshooting Guide for F61 and/or F76 .....                             | 121        |
| <b>18 Schematic Diagram Notes .....</b>                                | <b>93</b>  | 21.2. Basic Troubleshooting Guide for Traverse Unit (DVD<br>Module P.C.B.) ..... | 128        |
| <b>19 Schematic Diagram .....</b>                                      | <b>95</b>  | 21.3. Basic Troubleshooting Guide for HDMI AV Output .....                       | 129        |
| 19.1. DVD Module Circuit .....                                         | 95         | <b>22 Overall Simplified Block for PT465 .....</b>                               | <b>131</b> |
| 19.2. Main Circuit .....                                               | 100        | 22.1. SMPS Module & Power Supply Block .....                                     | 132        |
| 19.3. Panel Circuit .....                                              | 104        | <b>23 Terminal Function of ICs .....</b>                                         | <b>133</b> |
| 19.4. Power Button, USB Circuit .....                                  | 105        | 23.1. IC2001 (RFKWPT460E): IC System Control .....                               | 133        |
| 19.5. D-Amp Circuit .....                                              | 106        | 23.2. IC1701 (MFI341S2095): IC Ipod Video .....                                  | 133        |
| 19.6. Power Supply Circuit .....                                       | 108        | 23.3. IC6901(C0HBB0000057): IC FL Driver .....                                   | 134        |
| 19.7. SMPS Circuit .....                                               | 110        | <b>24 Exploded Views .....</b>                                                   | <b>135</b> |
| 19.8. AC Inlet, Ipod Cradle .....                                      | 112        | 24.1. Cabinet Parts Location .....                                               | 135        |
| 19.9. Coprocessor Circuit, Voltage Selector Circuit .....              | 113        | 24.2. Packaging .....                                                            | 136        |
| 19.10. Mic Circuit .....                                               | 114        | <b>25 Replacement Parts List .....</b>                                           | <b>137</b> |
| <b>20 Printed Circuit Board .....</b>                                  | <b>115</b> | 25.1. Component Parts List .....                                                 | 138        |
| 20.1. DVD Module P.C.B. ....                                           | 115        | <b>26 Schematic Diagram for printing with letter size .....</b>                  | <b>154</b> |
| 20.2. Main P.C.B. ....                                                 | 116        |                                                                                  |            |
| 20.3. Panel, Power Button, USB, Power Supply & AC Inlet<br>P.C.B. .... | 117        |                                                                                  |            |

# 1 Safety Precautions

## 1.1. GENERAL GUIDELINES

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

### 1.1.1. LEAKAGE CURRENT COLD CHECK

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

### 1.1.2. LEAKAGE CURRENT HOT CHECK

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

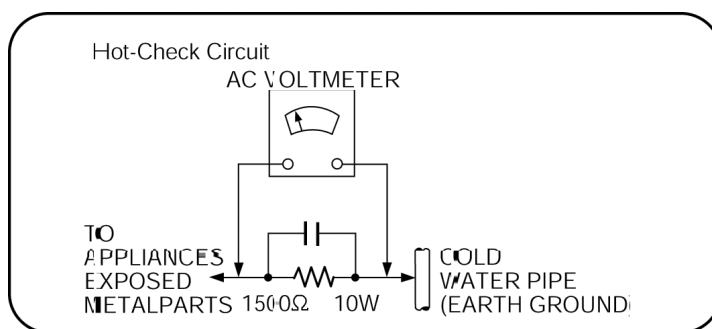


Figure 1

## 1.2. Before Repair and Adjustment

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

### Caution:

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices. After repairs are completed, restore power gradually using a variac, to avoid overcurrent. Current consumption at AC 240 V, 50 Hz in NO SIGNAL mode volume minimal should be  $\sim 600$  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  $\Delta$  in the Schematic Diagrams & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

**Table 1**

| Ref. No. | Part No.     | Part Name & Description              | Remarks                |
|----------|--------------|--------------------------------------|------------------------|
| 12       | REXX0640-J   | BLACK WIRE (AC TO SMPS)              | [M] $\Delta$           |
| 13       | REXX0641-J   | RED WIRE (AC TO SMPS)                | [M] $\Delta$           |
| 23       | RGRX0067C-B2 | REAR PANEL                           | [M] GC/GS $\Delta$     |
| 23       | RGRX0067C-C1 | REAR PANEL                           | [M] GCS $\Delta$       |
| 23       | RGRX0067C-D2 | REAR PANEL                           | [M] GCT $\Delta$       |
| 66       | RKMX0141-K   | TOP CABINET                          | [M] $\Delta$           |
| 75       | REXX0643-J   | BLUE WIRE (VOLTAGE SELECTOR TO SMPS) | [M] $\Delta$           |
| 77       | REXX0642-J   | WHITE WIRE VOLTAGE SELECTOR TO SMPS) | [M] $\Delta$           |
| PCB3     | REPX0622D    | SMPS INLET P.C.B.                    | [M](RTL) $\Delta$      |
| PCB4     | REPX0622D    | AC INLET P.C.B                       | [M](RTL) $\Delta$      |
| PCB5     | REPX0622D    | VOLTAGE SELECTOR P.C.B               | [M](RTL) $\Delta$      |
| DZ5701   | ERZV10V511CS | ZENER                                | [M] $\Delta$           |
| L5701    | ELF15N035AN  | LINE FILTER                          | [M] $\Delta$           |
| L5702    | G0B932H00001 | LINE FILTER                          | [M] $\Delta$           |
| L5703    | ELF22V022A   | LINE FILTER                          | [M] $\Delta$           |
| S5701    | K0ABCA000007 | AC VOLTAGE SELECTOR SWITCH           | [M] $\Delta$           |
| T2900    | G4D1A0000117 | SWITCHING TRANSFORMER                | [M] $\Delta$           |
| T5701    | ETS42BN1A6AD | SWITCHING TRANSFORMER                | [M] $\Delta$           |
| T5751    | ETS19AB256AG | SWITCHING TRANSFORMER                | [M] $\Delta$           |
| PC5701   | B3PBA0000402 | PHOTO COUPLER                        | [M] $\Delta$           |
| PC5702   | B3PBA0000402 | PHOTO COUPLER                        | [M] $\Delta$           |
| PC5720   | B3PBA0000402 | PHOTO COUPLER                        | [M] $\Delta$           |
| PC5799   | B3PBA0000402 | PHOTO COUPLER                        | [M] $\Delta$           |
| F1       | K5D802BNA005 | FUSE                                 | [M] $\Delta$           |
| FP2901   | K5G401A00008 | FUSE PROTECTOR                       | [M] $\Delta$           |
| TH5702   | D4CAC8R00002 | THERMISTOR                           | [M] $\Delta$           |
| TH5860   | D4CC11040013 | THERMISTOR                           | [M] $\Delta$           |
| P5701    | K2AA2B000017 | AC INLET                             | [M] $\Delta$           |
| A2       | K2CP2YY00001 | AC CORD                              | [M] GCT $\Delta$       |
| A2       | K2CQ2CA00007 | AC CORD                              | [M] GC/GCS/GS $\Delta$ |
| A2       | K2CT3CA00004 | AC CORD                              | [M] GS $\Delta$        |
| C5700    | F1BAF1020020 | 1000pF                               | [M] $\Delta$           |
| C5701    | F0CAF334A087 | 0.33uF                               | [M] $\Delta$           |
| C5704    | F1BAF1020020 | 1000pF                               | [M] $\Delta$           |
| C5705    | F1BAF1020020 | 1000pF                               | [M] $\Delta$           |
| C5706    | F1BAF1020020 | 1000pF                               | [M] $\Delta$           |
| C5707    | F1BAF1020020 | 1000pF                               | [M] $\Delta$           |

## 1.5. Caution for AC Cord

### (For Saudi Arabia and Kuwait)

("GS" area code model only)

For your safety, please read the following text carefully.

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

A 5-ampere fuse is fitted in this plug.

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

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

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

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

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

#### CAUTION!

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

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

If in any doubt please consult a qualified electrician.

#### IMPORTANT

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

Blue: Neutral, Brown: Live.

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

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

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

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

**THIS PLUG IS NOT WATERPROOF—KEEP DRY.**

#### Before use

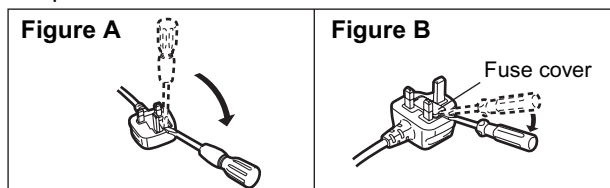
Remove the connector cover.

#### How to replace the fuse

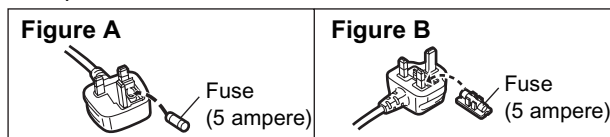
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



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



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

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

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

**Caution:**

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

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

### 3 Precaution of Laser Diode

**CAUTION:**

THIS PRODUCT UTILIZES A LASER.

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

**CAUTION :**

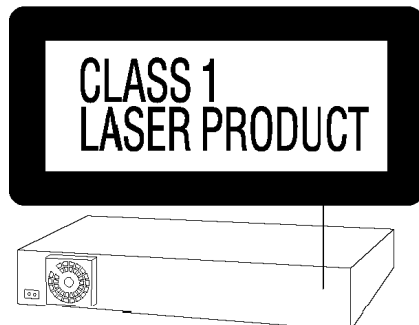
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

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

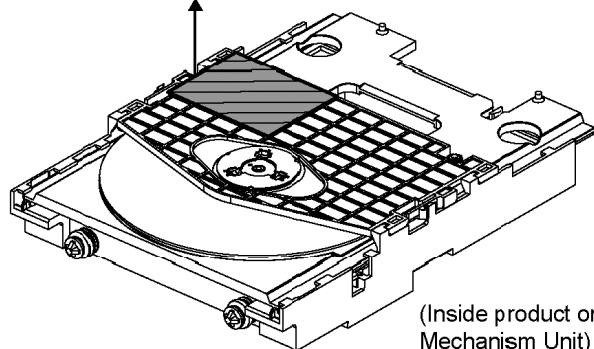
Maximum output radiation power from pickup: 100  $\mu$ W/VDE

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

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



(Back of product)



(Inside product on Mechanism Unit)

## 4 About Lead Free Solder (PbF)

### 4.1. Service caution based on legal restrictions

#### 4.1.1. General description about Lead Free Solder (PbF)

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

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

#### Definition of PCB Lead Free Solder being used

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

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

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

#### Recommended Lead Free Solder (Service Parts Route.)

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

#### Note

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

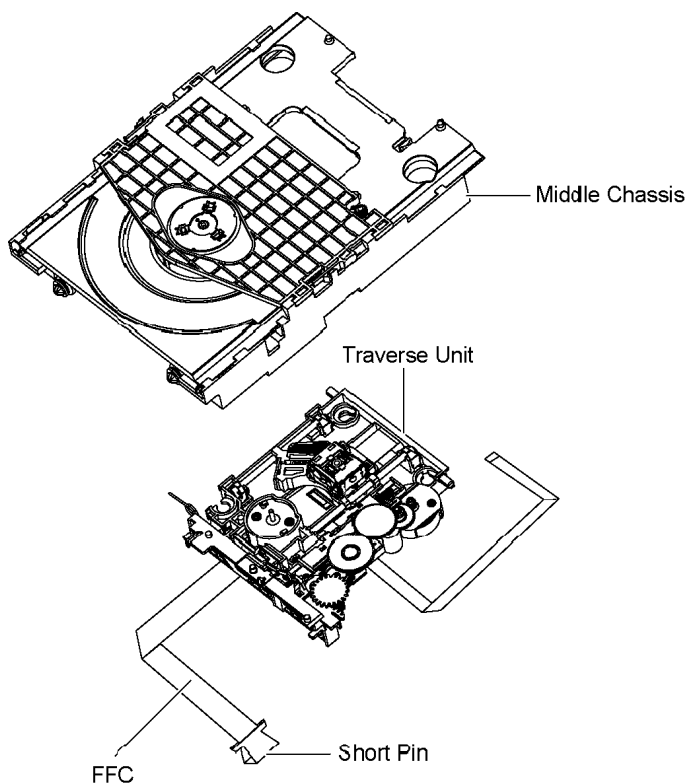
## 5 Handling Precautions for Traverse Unit

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

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

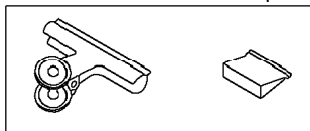
The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

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



#### [Caution]

Ground the cable with a clip or a short pin.



Clip or Short Pin

### 5.2. Grounding for electrostatic breakdown prevention

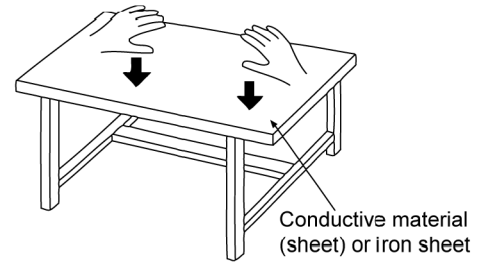
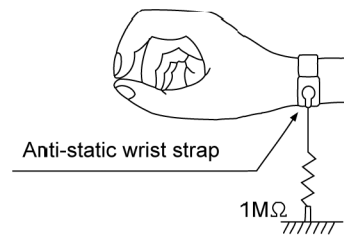
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

#### 5.2.1. Worktable grounding

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

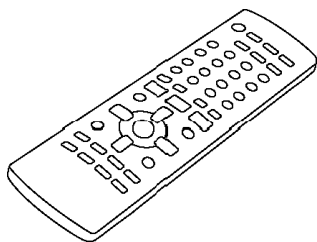
#### 5.2.2. Human body grounding

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

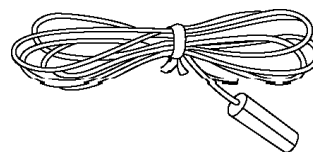


## 6 Accessories

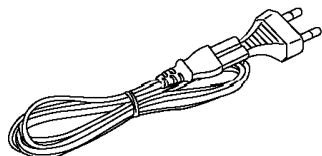
- Note: Refer to “Replacement Parts List” (Section 25) for the part number.



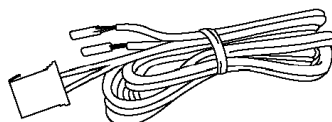
Remote control



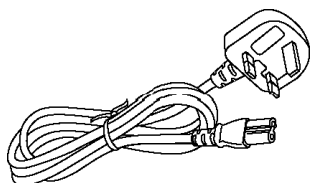
FM indoor antenna



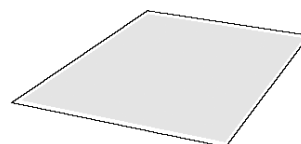
AC cord  
(GC/GCS/GCT only)



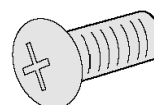
Speaker cord  
(center)



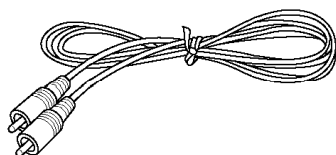
AC cord  
(GS only)



Speaker cable stickers



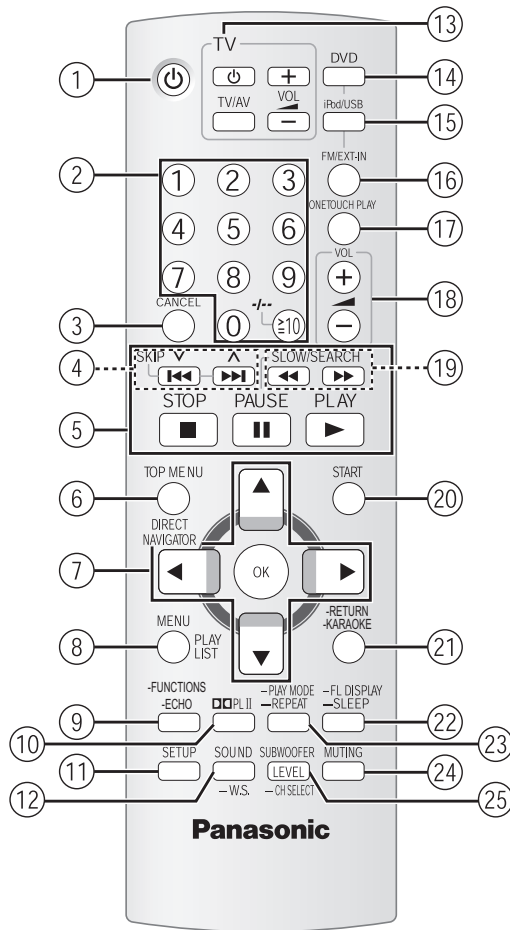
8 Screws



Video cable

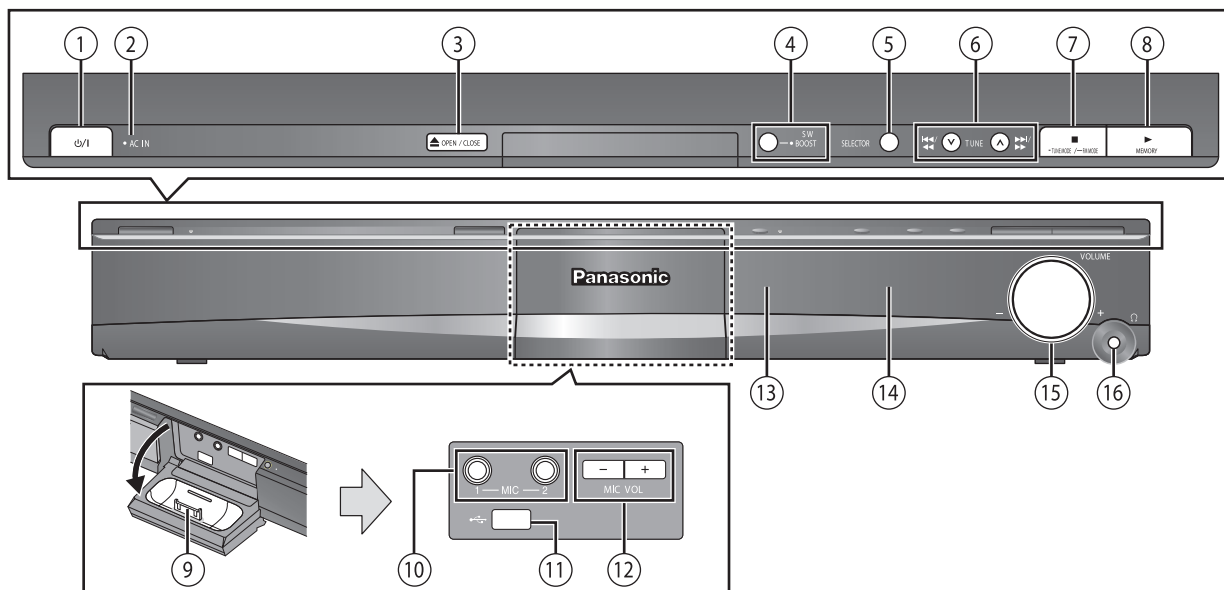
## 7 Operation Procedures

### 7.1. Remote Control Key Buttons Operations



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

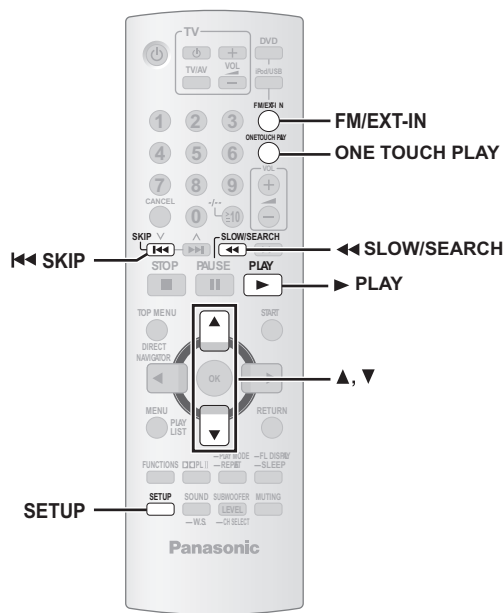
## 7.2. Main Unit Key Buttons Operations



- ① Standby/on switch [⏻/⏻]  
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ② This indicator lights when the unit is connected to the AC mains supply.
- ③ Open/Close the disc tray
- ④ Turn Subwoofer Boost on/off
- ⑤ Select the source  
DVD/CD→USB→FM→AUX→D-IN→IPOD  

- ⑥ Skip or slow-search play / Select the radio stations
- ⑦ Stop playing / Select the tuning mode / Adjust the FM reception condition
- ⑧ Play discs / Memorize the receiving radio stations
- ⑨ Connect iPod
- ⑩ Connect microphones
- ⑪ Connect USB device
- ⑫ Adjust microphone volume
- ⑬ Remote control signal sensor
- ⑭ Display
- ⑮ Adjust the volume of the main unit
- ⑯ Connect headphones  
Headphone plug type: Ø3.5 mm stereo mini plug
  - Reduce the volume before connecting.
  - Audio is automatically switched to 2-channel stereo.
  - To prevent hearing damage, avoid listening for prolonged periods of time.
  - Excessive sound pressure from earphones and headphones can cause hearing loss.

### 7.3. Using the VIERA Link “HDAVI Control™”



## VIERALink "HDAVIControl"

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

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

## Preparation

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

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

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

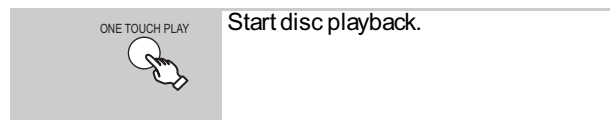
- 1 Press [FM/EXT-IN] to select "D-IN".
- 2 Press [SETUP] to select "TV AUDIO", then press [▲, ▼] to select "AUX" or "D-IN".

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

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

## One touch play

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



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

[Note]

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

## Auto input switching

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

## Power off link

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

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

[Note]

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

## Speaker control

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

### Home Cinema

This unit's speakers are active.

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

### TV

TV speakers are active.

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

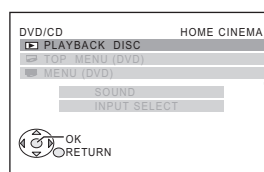
When switching between this unit's speakers and TV speakers, the TV screen may be blank for several seconds.

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

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

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

The START menu will be shown.  
e.g.



- 2 Select the desired item on the START menu.

### [Note]

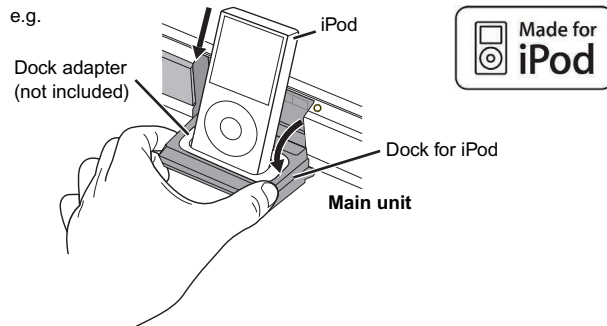
- Depending on the menu, some button operations cannot be performed from the TV's remote control.
- The START menu can also be shown by using a button on the TV's remote control (e.g. [OPTION]).
- You cannot input numbers with the numbered buttons on the TV's remote control ([0] to [9]). Use this unit's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

## 7.4. Using the iPod

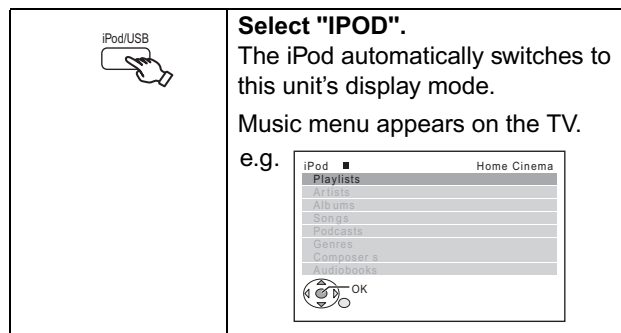
### Preparation

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

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

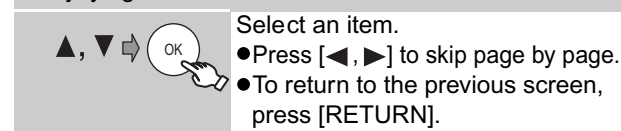


- Hold the dock when connecting/disconnecting the iPod.
  - Attach the dock adapter which should be supplied with your iPod to the dock for the stable use of the iPod.
- If you need an adapter, consult your iPod dealer.



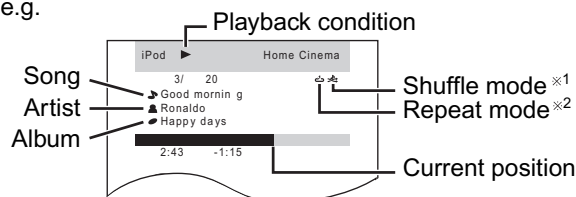
To operate through display of iPod, press [FUNCTIONS].

### Enjoying music



Play starts from the selected song.

e.g.



### \*1 To select shuffle modes

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



: Song shuffle



: Album shuffle

Off: Cancel

### \*2 To select repeat modes

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

Each time you press the button:



: Repeat 1 track



: Repeat all

Off: Cancel

## Enjoying photos/videos

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

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

[▲, ▼]: To navigate menu items

[OK]: To go to the next menu

[RETURN]: To return to the previous menu

## Basic controls (For music and videos only)

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

- You can enjoy surround sound effect when you press [DOLBY II] to turn on Dolby Pro Logic II (OI 29).

## When using the START menu in "IPOD" mode

Select "Music" or "Photos/Videos".

**Music:** Shows the music menu.

**Photos/Videos:** Switches to display of iPod.

## About recharging the battery

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

## Note

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

## Compatible iPod

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

Compatibility depends on the software version of your iPod.

## 7.5. USB Connection and Operation

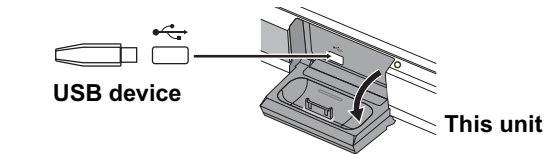
You can connect and play tracks or files from USB mass storage class devices.

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

### Preparation

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

**Connect the USB device (not included).**



|                 |                                                                                       |
|-----------------|---------------------------------------------------------------------------------------|
| <p><b>1</b></p> | <p><b>Select "USB".</b><br/>The menu screen appears.<br/>e.g.</p>                     |
| <p><b>2</b></p> | <p><b>Select an item.</b><br/>● To return to the previous screen, press [RETURN].</p> |

Play starts from the selected content.

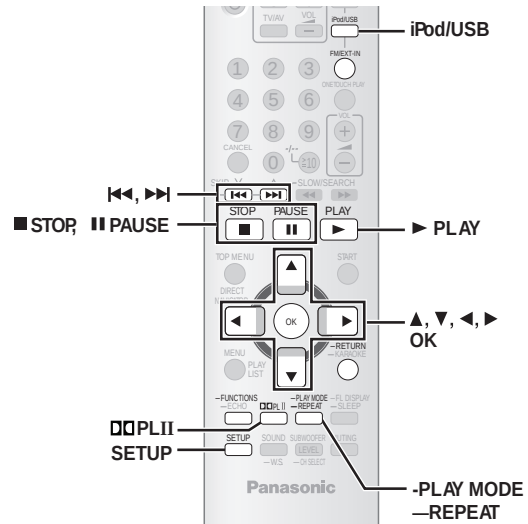
- You can enjoy surround sound effect when you press [DOLBII] to turn on Dolby Pro Logic II
- For other operating functions, they are similar to those described in "Playing discs"

### Supported Formats

|                       |                                                                                  |
|-----------------------|----------------------------------------------------------------------------------|
| <b>Still pictures</b> | <b>JPEG</b> (Extension: ".jpg", ".JPG", ".jpeg", ".JPEG")                        |
| <b>Music</b>          | <b>MP3</b> (Extension: ".mp3", ".MP3")<br><b>WMA</b> (Extension: ".wma", ".WMA") |
| <b>* Video</b>        | <b>MPEG4</b> (Extension: ".asf", ".ASF")                                         |

### Note

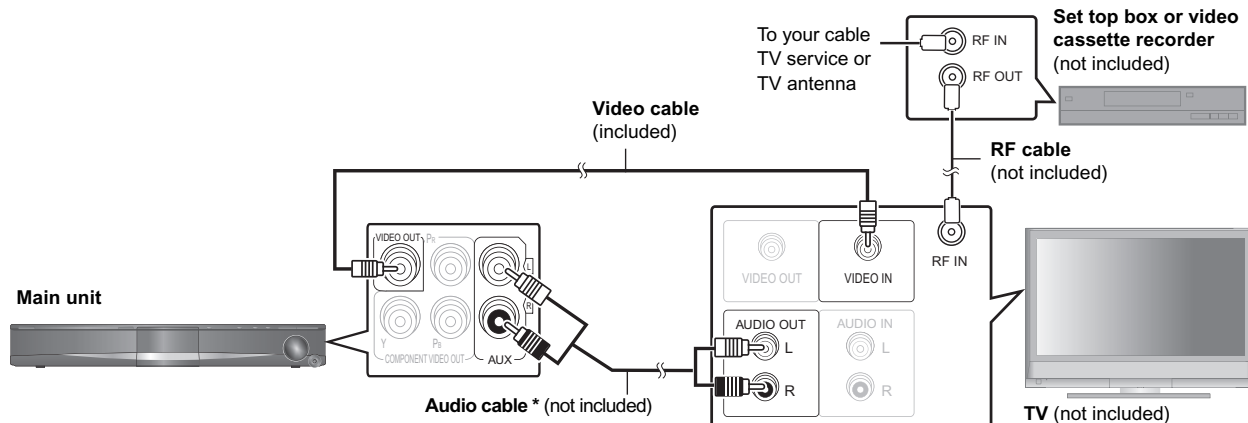
- Maximum: 256 folders, 4000 files, 12 characters for file/folder name
- Only one memory card will be selected when connecting a multiport USB card reader. Typically the first memory card inserted.
- When connecting the USB mass storage device, ensure the iPod has been disconnected.



## 7.6. Audio and Video Connection

### 7.6.1. Basic Setup

#### Basic setup example



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

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

| TV terminal                                                                                                                                                                        | Cable required (not included)                                                                                                                                                                                                                                                                | Main unit terminal                                                                                                    | Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                    | <p>HDMI cable</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>Non-HDMI-compliant cables cannot be utilized.</li> <li>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.</li> </ul> | <p>HDMI</p>                                                                                                           | <p>This connection provides the best picture quality.</p> <ul style="list-style-type: none"> <li>Set VIDEO PRIORITY to "ON"</li> <li>Set VIDEO FORMAT in Menu 5 (HDMI)</li> </ul> <p><b>VIERA Link HD AVI Control</b><br/>If your Panasonic TV is VIERA Link compatible, you can operate it synchronising with home theater operations or vice versa</p> <ul style="list-style-type: none"> <li>Make the extra audio connection when you use VIERA Link "HDAVI Control" function.</li> </ul> |
| <p>COMPONENT VIDEO IN</p> <p>Panasonic TVs with 576/50i-50p, 480/60i-60p input terminals are progressive compatible. Consult the manufacturer if you have another brand of TV.</p> | <p>Video cables</p>                                                                                                                                                                                                                                                                          | <p>COMPONENT VIDEO OUT</p> <ul style="list-style-type: none"> <li>Connect to terminals of the same colour.</li> </ul> | <p>This connection provides a much purer picture than the VIDEO OUT terminal.</p> <p><b>To enjoy progressive video</b></p> <ul style="list-style-type: none"> <li>Connect to a progressive output compatible TV.</li> <li>Set "VIDEO OUT (I/P)" in "VIDEO" menu to "PROGRESSIVE" and then follow the instructions on the menu screen.</li> </ul>                                                                                                                                             |

#### Note

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

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

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

### 7.6.3. Connecting to a Television with Optical Terminal

| TV or external equipment terminal                                                                | Cable required (not included)                                                                                                                                     | This unit terminal                                                                                                   | Features                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>OPTICAL OUT | <b>Optical digital audio cable</b><br><br>• Do not bend sharply when connecting. | <b>OPTICAL IN</b><br><br>OPTICAL IN | This unit can decode the surround signals received through the set top box, digital broadcasting or satellite broadcasts. Refer to your equipment's operating instructions for details. Only Dolby Digital and PCM can be played with this connection. <ul style="list-style-type: none"> <li>• After making this connection, make settings to suit the type of audio from your digital equipment</li> </ul> |

## 7.7. Disc Information

### 7.7.1. Disc Playability (Media)

#### Commercial discs

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

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

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

\* For EG only

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

<sup>※1</sup> This unit can play CD-R/RW recorded with CD-DA or Video CD format.

<sup>※2</sup> Discs recorded on DVD recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).

<sup>※3</sup> Discs recorded on DVD recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).

<sup>※4</sup> Discs recorded on DVD recorders or DVD video cameras using DVD-Video Format.

<sup>※5</sup> Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.

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

<sup>※7</sup> Closing the session will also work.

#### Note about using a DualDisc

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

#### ■ Discs that cannot be played

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

#### ■ Video systems

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

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

| Format       | Disc                                    | Extension                      | Reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-----------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WMA</b>   | <b>CD-R/RW</b>                          | .WMA<br>.wma                   | <ul style="list-style-type: none"> <li>Compatible compression rate: between 48 kbps and 320 kbps</li> <li>You cannot play WMA files that are copy-protected.</li> <li>This unit does not support Multiple Bit Rate (MBR: an encoding process for audio content that produces an audio file encoded at several different bit rates).</li> </ul>                                                                                                                                                                                              |
| <b>MP3</b>   | <b>DVD-RAM<br/>DVD-R/RW<br/>CD-R/RW</b> | .MP3<br>.mp3                   | <ul style="list-style-type: none"> <li>This unit does not support ID3 tags.</li> <li>Sampling frequency and compression rate:<br/>DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24 kHz (8 to 160 kbps), 44.1 and 48 kHz (32 to 320 kbps)<br/>CD-R/RW: 8, 11.02, 12, 16, 22.05, 24 kHz (8 to 160 kbps), 32, 44.1 and 48 kHz (32 to 320 kbps)</li> </ul>                                                                                                                                                                                               |
| <b>JPEG</b>  | <b>DVD-RAM<br/>DVD-R/RW<br/>CD-R/RW</b> | .JPG<br>.jpg<br>.JPEG<br>.jpeg | <ul style="list-style-type: none"> <li>JPEG files taken on a digital camera that conform to DCF Standard (Design rule for Camera File system) Version 1.0 are displayed.<br/>Files that have been altered, edited or saved with computer picture editing software may not be displayed.</li> <li>This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF), or play pictures with attached audio.</li> </ul>                                                                 |
| <b>MPEG4</b> | <b>DVD-RAM<br/>DVD-R/RW<br/>CD-R/RW</b> | .ASF<br>.asf                   | <ul style="list-style-type: none"> <li>You can play MPEG4 data [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system] recorded with Panasonic SD multi cameras or DVD recorders with this unit.</li> <li>The recording date may differ from that of the actual date.</li> </ul>                                                                                                                                                                                                      |
| <b>DivX</b>  | <b>DVD-RAM<br/>DVD-R/RW<br/>CD-R/RW</b> | .DIVX<br>.divx<br>.AVI<br>.avi | <ul style="list-style-type: none"> <li>Plays all versions of DivX® video (including DivX® 6) [DivX video system/MP3, Dolby Digital or MPEG audio system] with standard playback of DivX® media files. Functions added with DivX Ultra are not supported.</li> <li>DivX files greater than 2 GB or have no index may not be played properly on this unit.</li> <li>This unit supports all resolutions up to maximum of 720k 480 (NTSC)/720k 576 (PAL).</li> <li>You can select up to 8 types of audio and subtitles on this unit.</li> </ul> |

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

### DVD-RAM

- Discs must conform to UDF 2.0.

### DVD-R/RW

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

### CD-R/RW

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

## 8 Self-Diagnosis and Special Mode Setting

### 8.1. Service Mode Summary Table

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

Below is the summary for the various modes for checking:

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

**Note:**

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

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

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

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

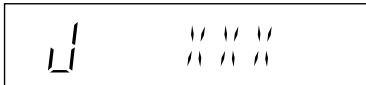
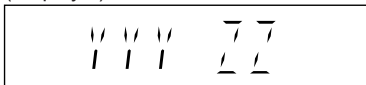
### 8.2. Service Mode Table

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

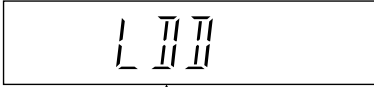
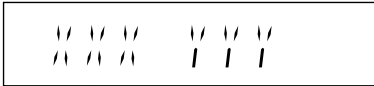
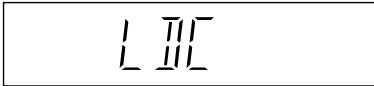
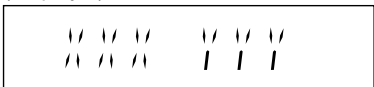
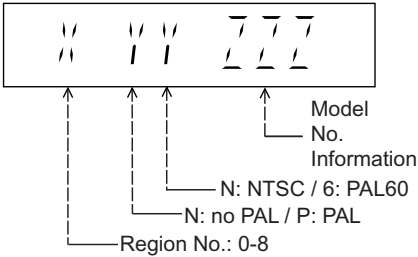
**Special Note:**

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

### 8.2.1. Service Mode Table 1

| Item                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | FL Display                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Key Operation                                                                                                                                                                                                                                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mode Name                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Front Key                                                                                                                                                                                                                                                                                                     |
| Error code check                       | <p>Error code check<br/>The latest error code stored in the EEPROM IC is displayed.</p> <p>Note: Refer to "Section 8.3 DVD Self Diagnostic Function-Error Code" for more detailed information on the error codes.</p>                                                                                                                                                                                                                                                                                                                                                                 |  <p style="text-align: center;">↑<br/>F / H / U</p> <p>Error code (play_err) is expressed in the following convention.<br/>           Error code = 0 x DAXX is expressed: → DVDnn U12<br/>           Error code = 0 x DBXX is expressed: → DVDnn H12<br/>           Error code = 0 x DXXX is expressed: → DVDnn F123<br/>           Error code = 0 x 0000 is expressed: → DVDnn F---<br/>           * "xx" denotes the error code</p>                                                                                            | <p>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.<br/>           Cancelled automatically 5 seconds later.<br/>           To exit, press [POWER] button on main unit or remote control.</p>         |
| Jitter check                           | <p>Jitter check.<br/>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.<br/>           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.<br/>           In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more.</p> <p>FL Display sequence:<br/>Display 1→2.</p> | <p>(Display 1)</p>  <p style="text-align: center;">↑                      ↑<br/>Jitter check      Jitter rate<br/>mode</p> <p>Jitter rate is shown in decimal notation to one place of decimal.<br/>           Focus drive value is shown in hexadecimal notation.</p> <p>(Display 2)</p>  <p style="text-align: center;">↑                      ↑<br/>Lead                  Focus Drive<br/>Error                  Value<br/>Counter</p>    | <p>In STOP (with disc inside tray) mode, press [STOP] button on the main unit, and [5] button on the remote control unit, after Display 1 appears, then press [PLAY].<br/>           Press [POWER] or [STOP] button to exit.</p> <p>Press [FL Display] on remote control unit for next page (FL Display).</p> |
| Initial setting of laser drive current | <p>Initial setting of laser drive current.<br/>Initial current value for the DVD laser and CD laser is separately saved in the EEPROM IC.</p> <p>FL Display sequence:<br/>Display 1→2.</p>                                                                                                                                                                                                                                                                                                                                                                                            | <p>(Display 1)</p>  <p style="text-align: center;">↑<br/>Laser current<br/>measurement<br/>mode</p> <p>The value denotes the current in decimal notation.</p> <p>(Display 2)</p>  <p style="text-align: center;">↑                      ↑<br/>CD                      DVD Laser<br/>Laser</p> <p>The above example shows the initial current is XXXmA and YYYmA for CD laser and DVD laser respectively when the laser is switched on.</p> | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [PAUSE] button on the remote control unit.<br/>           Cancelled automatically 5 seconds later.</p> <p>Press [FL Display] on remote control unit for next page (FL Display) on values of laser drive current.</p>                     |

## 8.2.2. Service Mode Table 2

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

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

NTSC (\*A)

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

NTSC (\*B)

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

PAL (\*C)

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

NTSC (\*D)

| Source       | Output |
|--------------|--------|
| Screen Saver | NTSC   |
| NTSC disc    | NTSC   |
| PAL disc     | NTSC   |

Explanation of Display

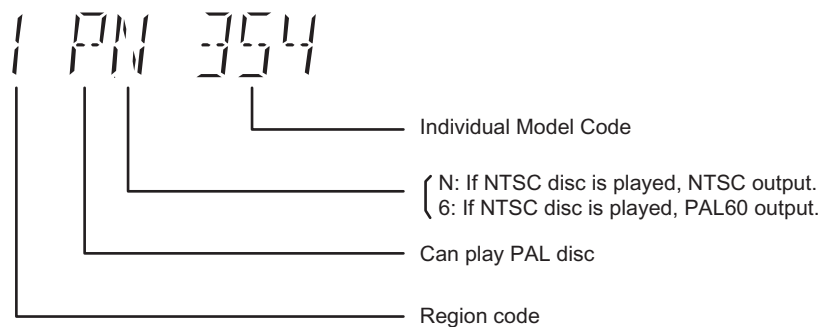
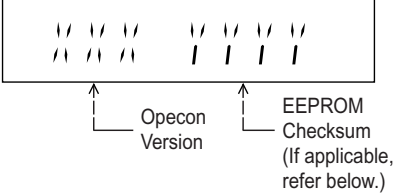
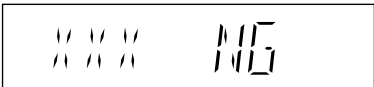
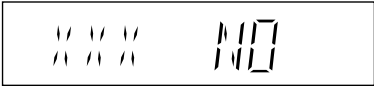
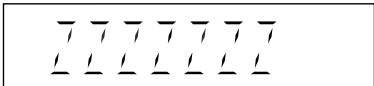
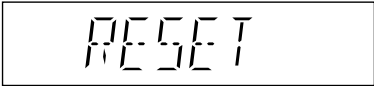
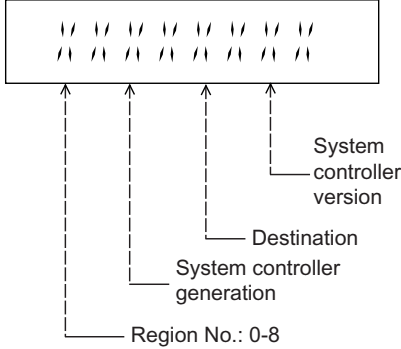


Figure 8.1 Video Design Information

### 8.2.3. Service Mode Table 3

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

## 8.2.4. Service Mode Table 4

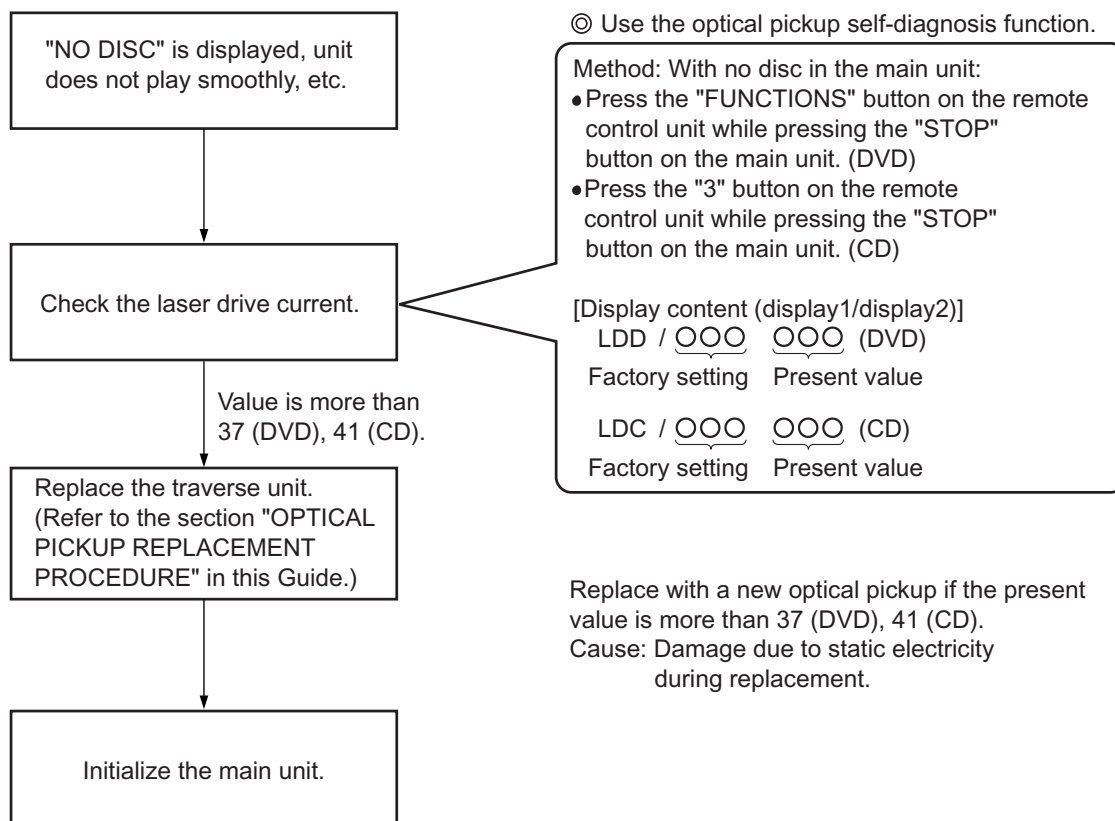
| Item                                       |                                                                                                                                                                                                                                                  | FL Display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

## 8.2.5. Optical Pick-up Self-Diagnosis

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

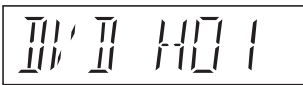
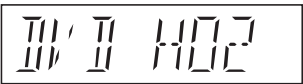
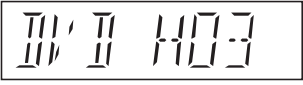
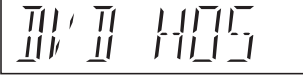
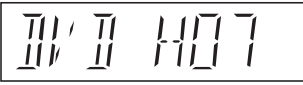
### Note:

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

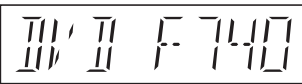
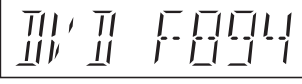
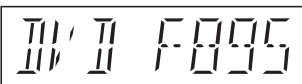
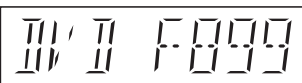


## 8.3. DVD Self Diagnostic Function-Error Code

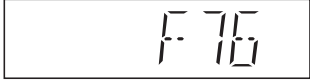
### 8.3.1. Mechanism Error Code Table

| 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.<br>(OPEN time: OPEN → CLOSE → OPEN → H01 at CLOSE: CLOSE → OPEN → CLOSE H01) |
| H02        | Spindle servo error         | The spindle servo/motor is abnormal. The FG pulse is abnormal. CLV servo error.                                                                            |    | Press [ ■STOP] on main unit for next error.                                                                              |
| H03        | Traverse servo error        | The traverse is abnormal. (Traverse servo, DV5 LSI IC (IC8001), TRV motor error.)                                                                          |    | Press [ ■STOP] on main unit for next error.                                                                              |
| H04        | Tracking servo error        | Tracking coil NG (OPU unit abnormal), DV5 LSI IC (IC8001) error.                                                                                           |    | Press [ ■STOP] on main unit for next error.                                                                              |
| H05        | Seek time out error         | It is not possible to access the disc. TOC cannot read. Abnormal disc etc. Pickup abnormal or disk is dirty. (TRV motor error, DV5 LSI IC (IC8001) error.) |   | Press [ ■STOP] on main unit for next error.                                                                              |
| H07        | Driver IC thermal shut down | The spindle motor is abnormal. (short between brushes)                                                                                                     |  | Press [ ■STOP] on main unit for next error.                                                                              |
| U11        | Focus servo error           | Focus coil, FE signal error. Disc may be dirty.                                                                                                            |  | Press [ ■STOP] on main unit for next error.<br>(Unfinalized DVD-R is likely to become U11.)                              |

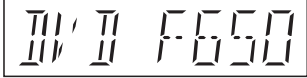
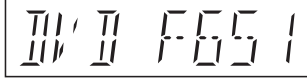
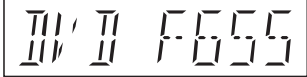
### 8.3.2. DVD Module Error Code Table

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

### 8.3.3. Power Supply & Digital Amplifier Error Code Table

| Error Code | Diagnosis Contents                                                  | Description of error                                                                                                                                                                                                                                            | Automatic FL Display                                                               | Remarks                                      |
|------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------|
| F61        | The abnormalities in an output or power supply circuit of POWER AMP | In normal operation, when DCDT2 goes to "L" (Low) (Not during POWER OFF condition), F61 appears on FLDisplay for 1 second and PCONT goes to "L" (Low). This is due to speaker output has DC voltage or fan is not working.                                      |  | Press [ ■ STOP] on main unit for next error. |
| F76        | Abnormality in the output voltage of stabilized power supply        | In normal operation when DCDT1 is detected "L" (Low) for two consecutive times, F76 is displayed on FL for 1 second and after that PCONT will be turned to "L" (Low). This is due to any of the DC voltages (+9V, +7V, -7V, +5V, +5.3V etc.) C22 not available. |  | Press [ ■ STOP] on main unit for next error. |

### 8.3.4. USB Error Code Table

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

## 8.4. Sales Demonstration Lock Function

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

### 8.4.1. Setting

- Prohibiting removal of disc

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

**Note:**

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

- **Prohibiting operation of selector and disc**

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

**Note:**

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

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

## 8.4.2. Cancellation

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

## 8.5. Service Precautions

### 8.5.1. Recovery after the DVD player is repaired

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

### 8.5.2. Firmware version-up of the DVD player

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

**Note:**

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

### 8.5.3. 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  $\geq 10$  on remote control while pressing "STOP" button on main unit. (To enter into initialization)

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

## 9 Assembling and Disassembling

### “ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges.

### Special Note:

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

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

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

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

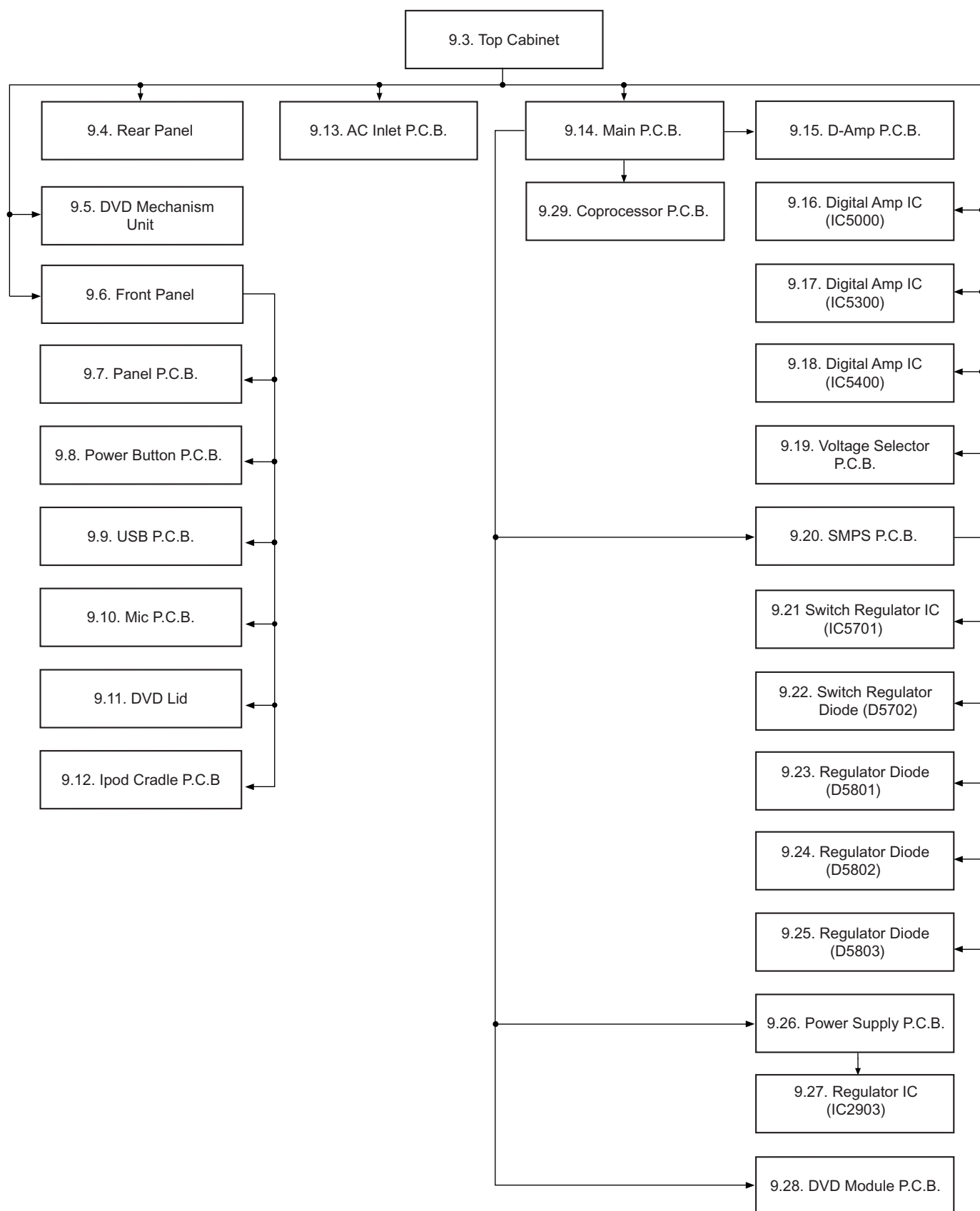
**CAUTION NOTE:**

Please use original screw and at correct locations.

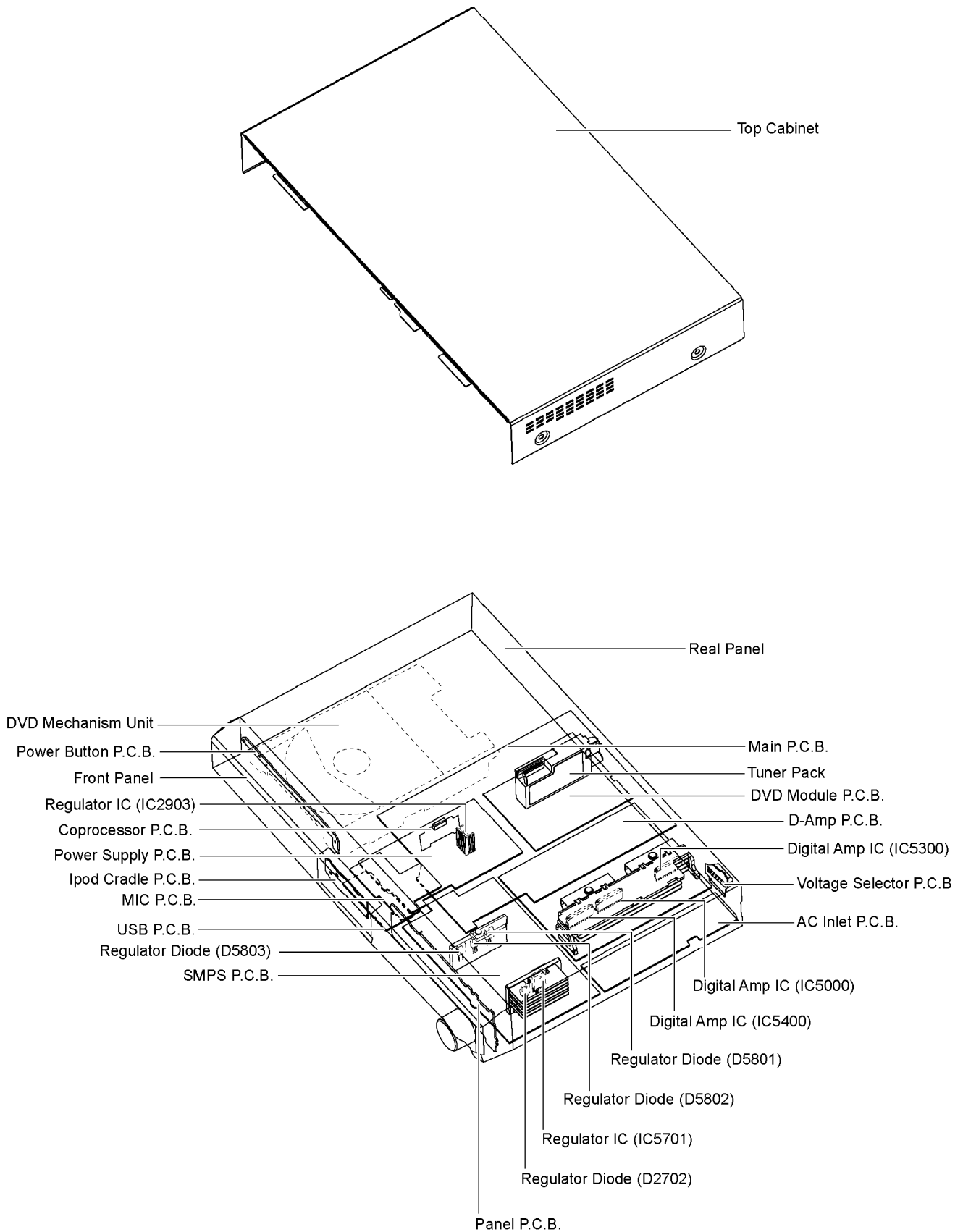
Below shown is part no. of different screw types used:

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

## 9.1. Disassembly Flow Chart

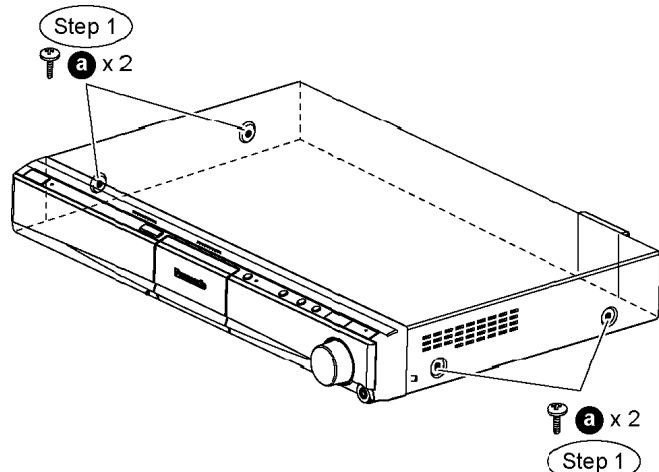


## 9.2. Main Components and P.C.B. Locations

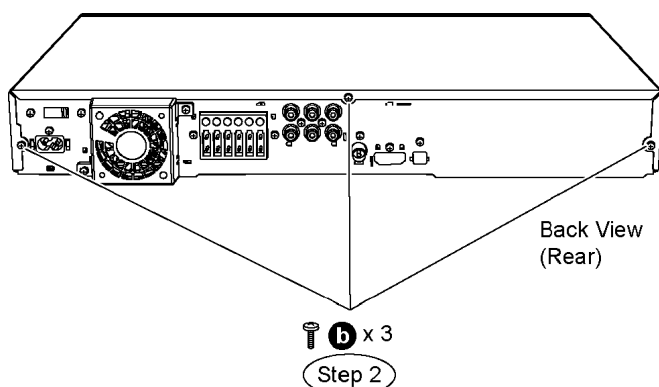


### 9.3. Disassembly of Top Cabinet

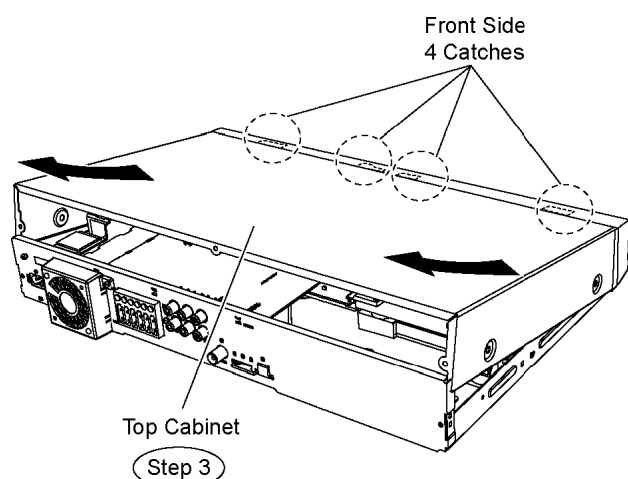
**Step 1** Remove 4 screws at the sides of the top cabinet.



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



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



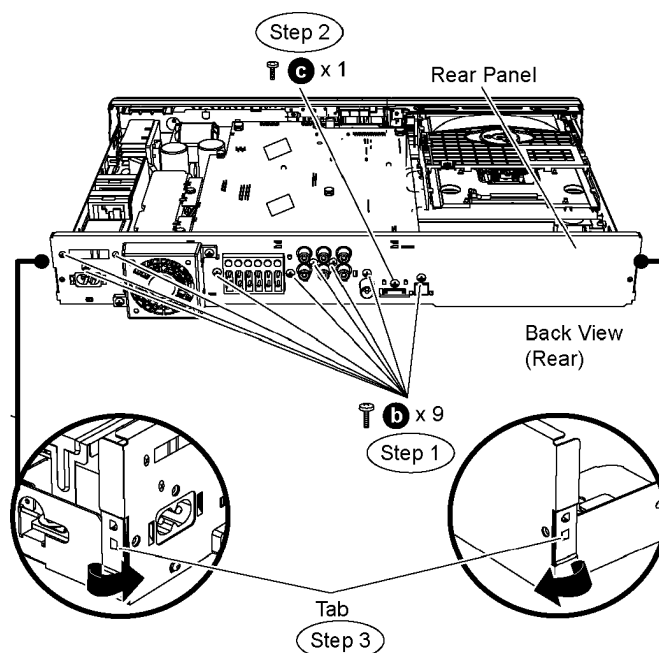
### 9.4. Disassembly of Rear Panel

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

**Step 1** Remove 9 screws at the rear panel.

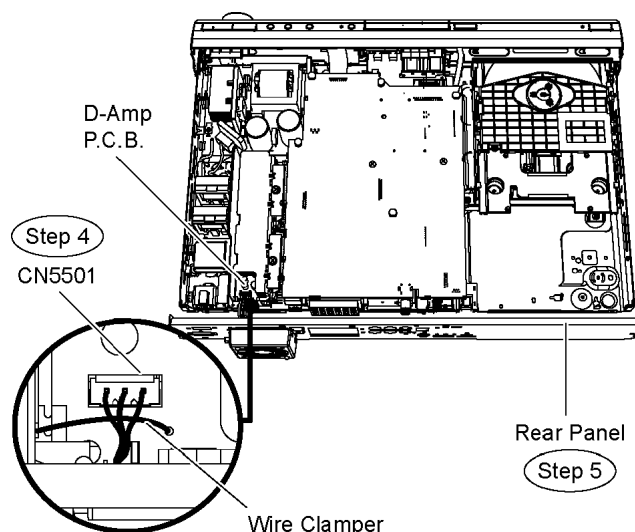
**Step 2** Remove 1 screw at the rear panel.

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



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

**Step 5** Remove the rear panel.



### 9.5. Disassembly of DVD Mechanism Unit

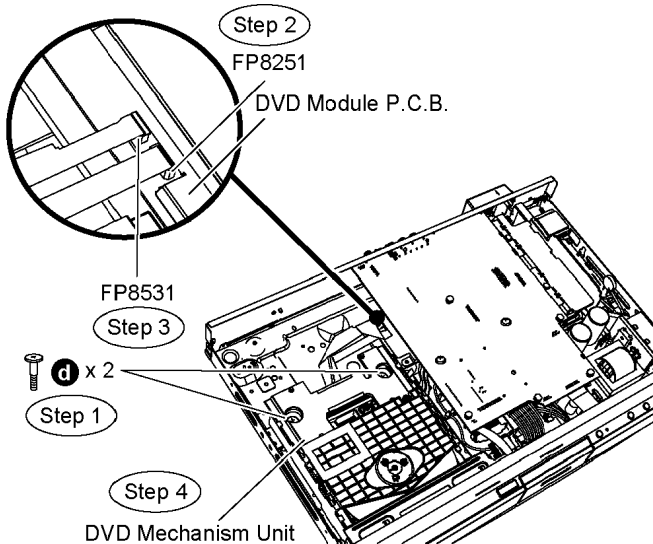
- Follow (Step 1) to (Step 3) of Item 9.3.

**Step 1** Remove 2 screws from DVD mechanism unit.

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

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

**Step 4** Remove the DVD mechanism unit.



## 9.6. Disassembly of Front Panel

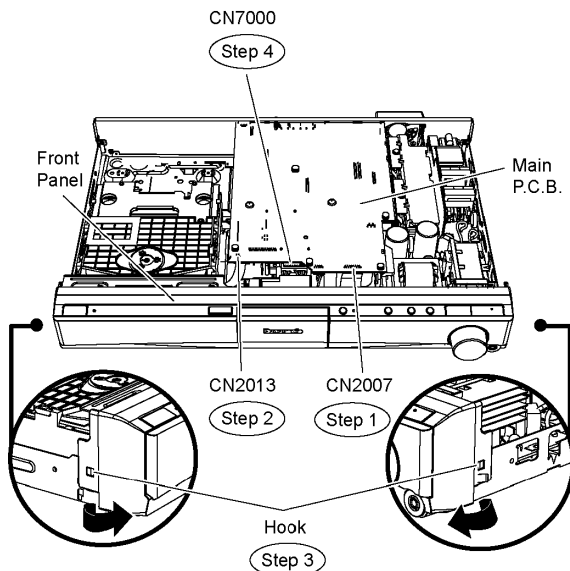
- Follow (Step 1) to (Step 3) of Item 9.3.

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

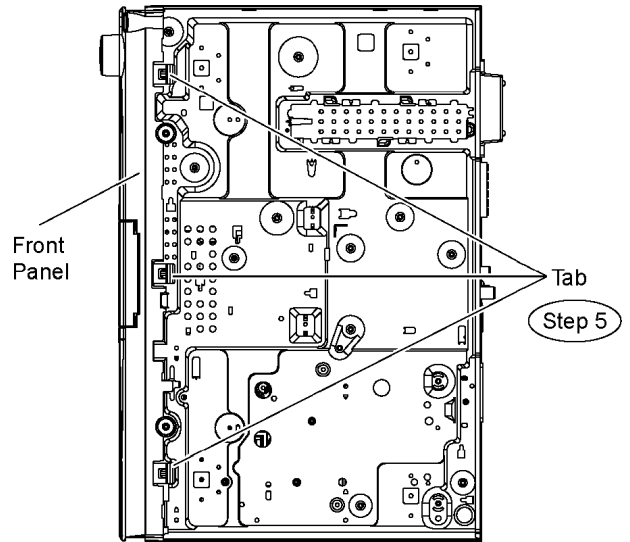
**Step 2** Detach 4P FFC cable at the connector (CN2013) on Main P.C.B.

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

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



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



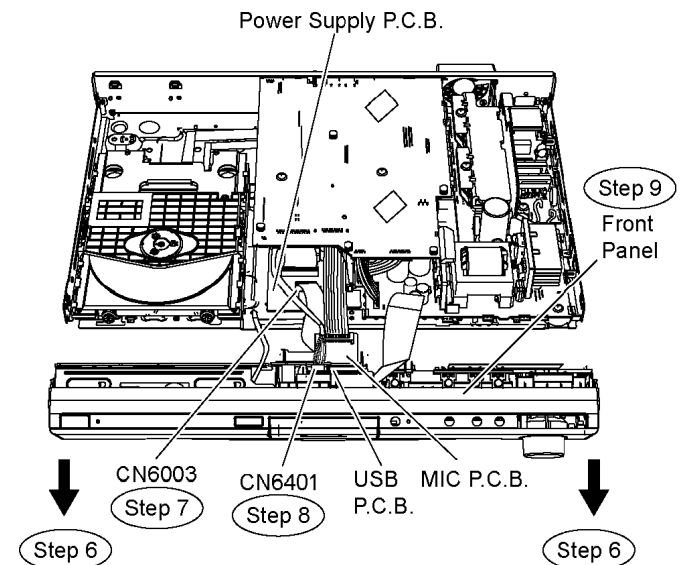
**Caution:** Do not exert strong force when releasing the tabs.

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

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

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

**Step 9** Remove the front panel.

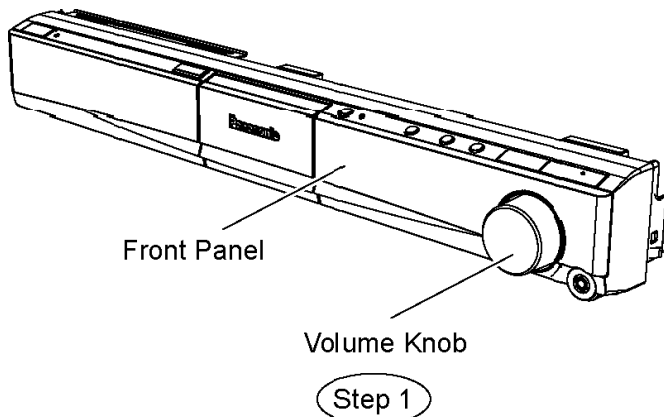


**Caution:** Do not attempt to exert strong force when detaching the front panel.

## 9.7. Disassembly of Panel P.C.B.

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

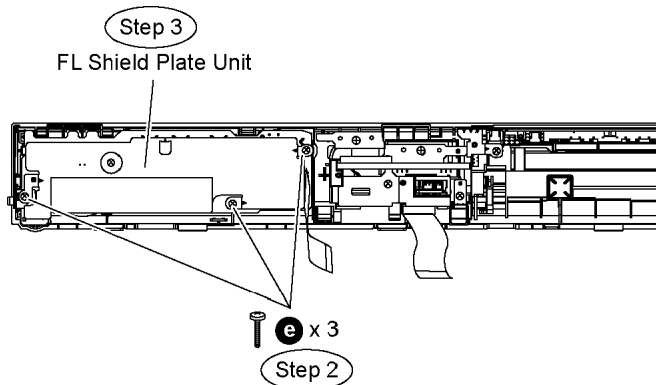
**Step 1** Remove the volume knob.



- Disassembly of FL shield plate unit.

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

**Step 3** Remove the FL shield plate unit.



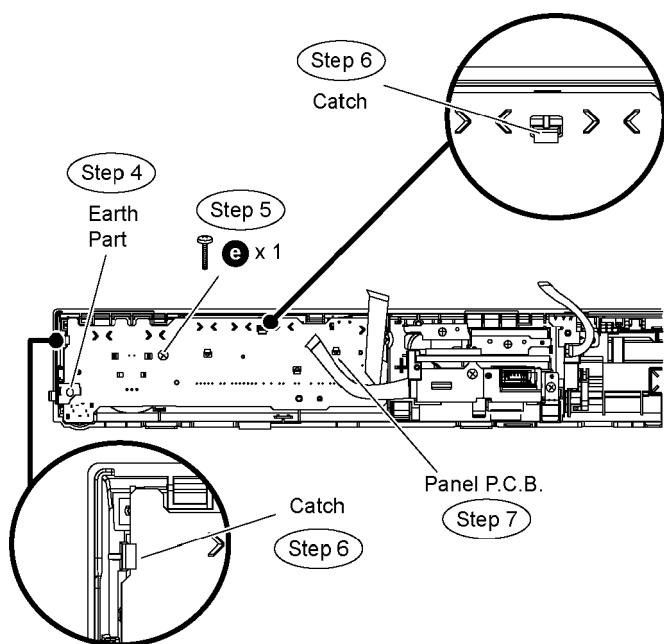
**Caution Note:** Keep the FL shield plate unit in safe place. Avoid denting it. Place it back during assembling.

**Step 4** Remove the earth spring.

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

**Step 6** Release the catch.

**Step 7** Remove Panel P.C.B.



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

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

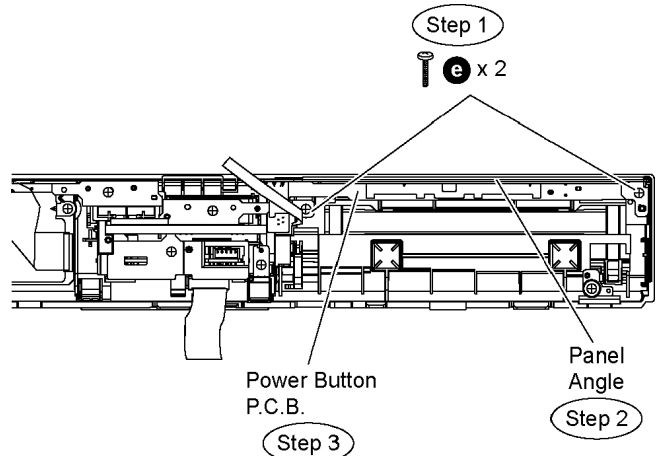
- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.6.

- Disassembly of Panel Angle.

**Step 1** Remove 2 screws from the panel angle.

**Step 2** Remove the panel angle.

**Step 3** Remove Power Button P.C.B.



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

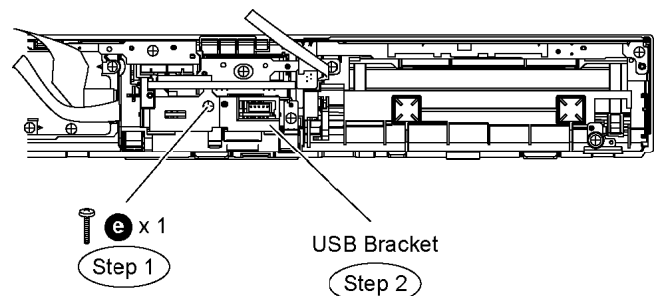
## 9.9. Disassembly of USB P.C.B.

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

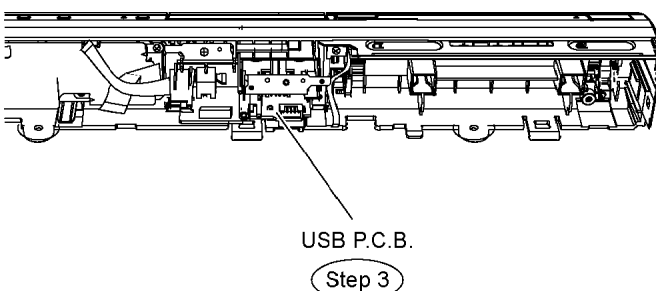
- Disassembly of USB Bracket.

**Step 1** Remove 1 screw from the USB bracket.

**Step 2** Remove the USB bracket.



**Step 3** Remove the USB P.C.B.



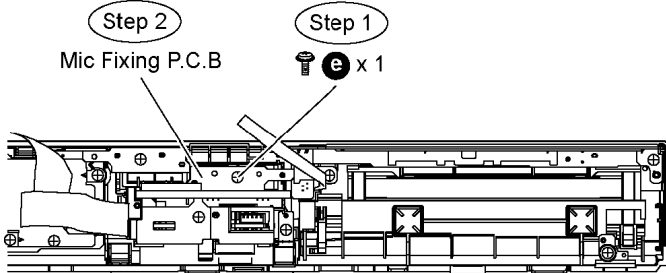
## 9.10. Disassembly of Mic P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.6.
- Follow (Step 1) to (Step 2) of Item 9.9.

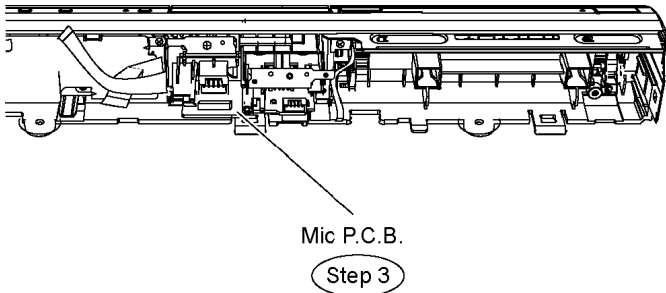
- Disassembly of Mic Fixing P.C.B.

**Step 1** Remove 1 screw on Mic Fixing P.C.B.

**Step 2** Remove the Mic Fixing P.C.B.



**Step 3** Remove Mic P.C.B.



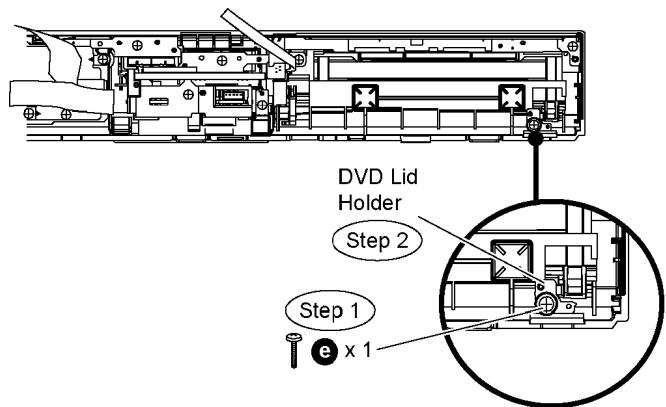
## 9.11. Disassembly of DVD Lid

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

- Disassembly of DVD Lid Holder

**Step 1** Remove 1 screw from the DVD lid holder.

**Step 2** Remove the DVD lid holder.



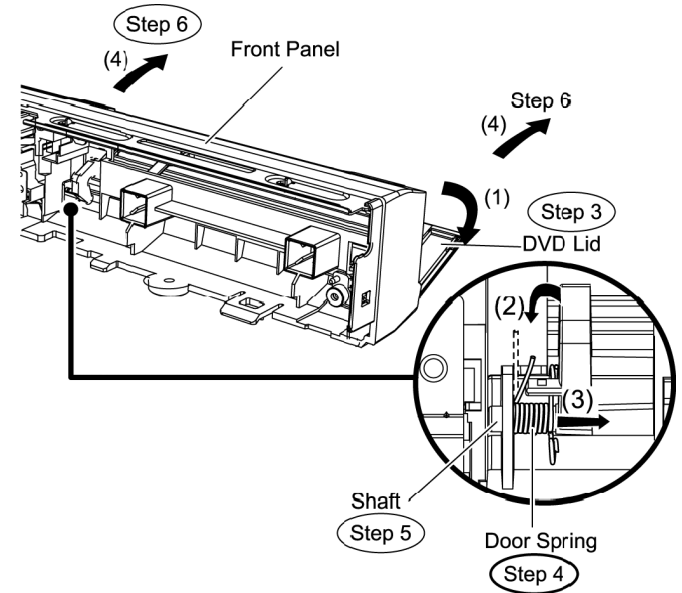
**Caution Note:** Keep the DVD lid holder in safe place. Avoid denting it. Place it back during assembling.

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

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

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

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

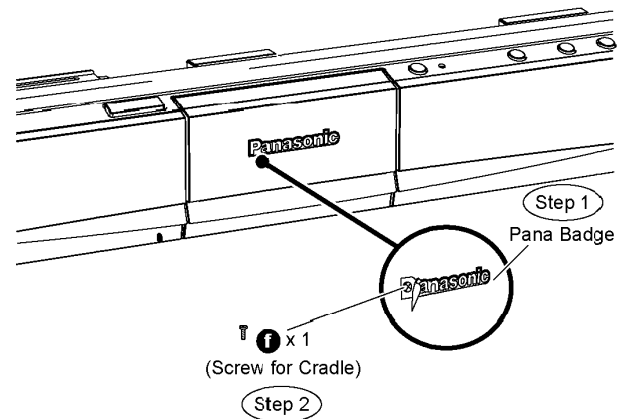


## 9.12. Disassembly of Ipod Cradle P.C.B.

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

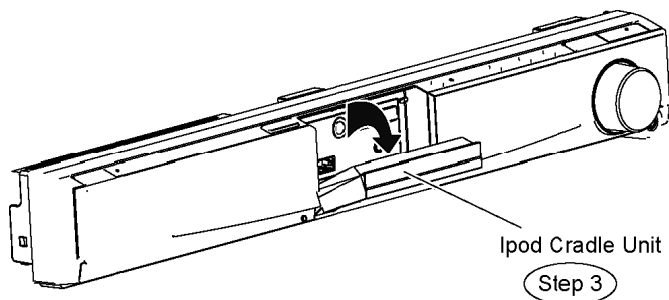
**Step 1** Peel off the portion of the pana badge (paste type) with a pen knife.

**Step 2** Remove the screw for cradle.



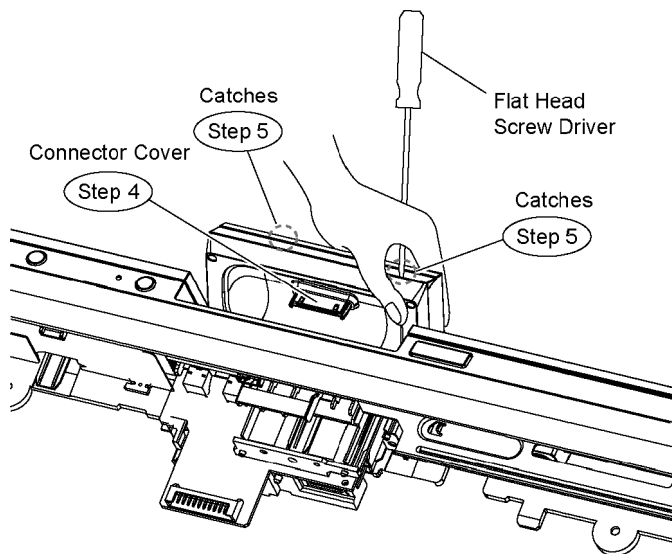
**Caution Note:** Keep the screw in safe place. Place it back during assembling.

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

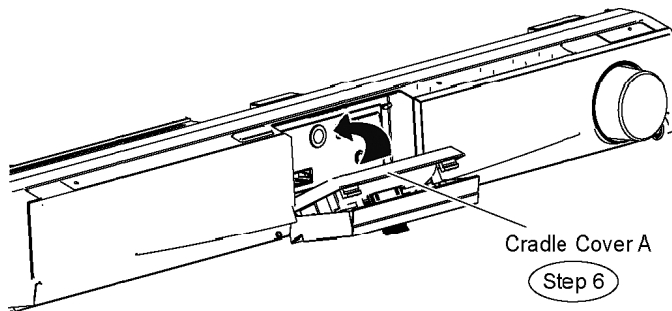


**Step 4** Remove the connector cover.

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

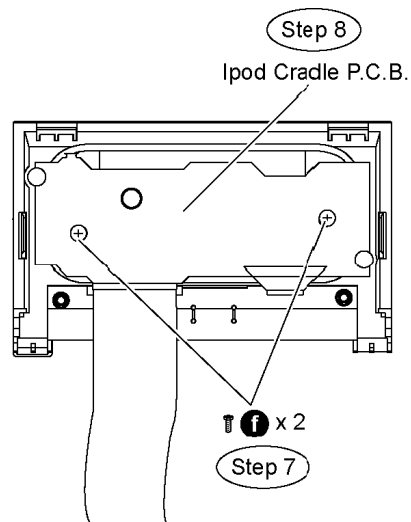


**Step 6** Remove cradle cover A as the direction of arrow.



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

**Step 8** Remove Ipod cradle P.C.B.

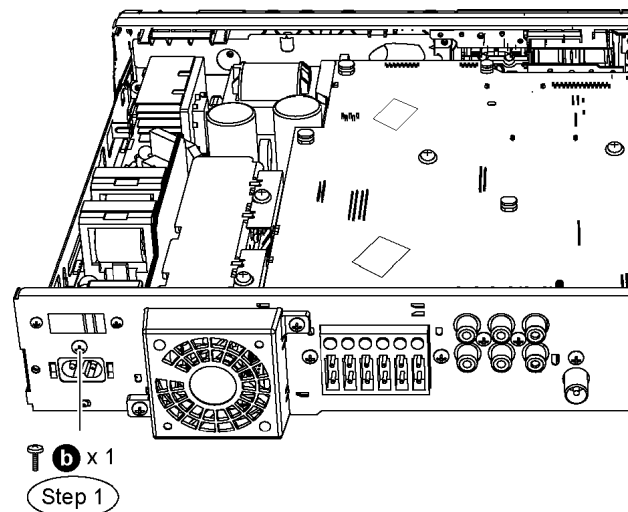


### 9.13. Disassembly of AC Inlet P.C.B.

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

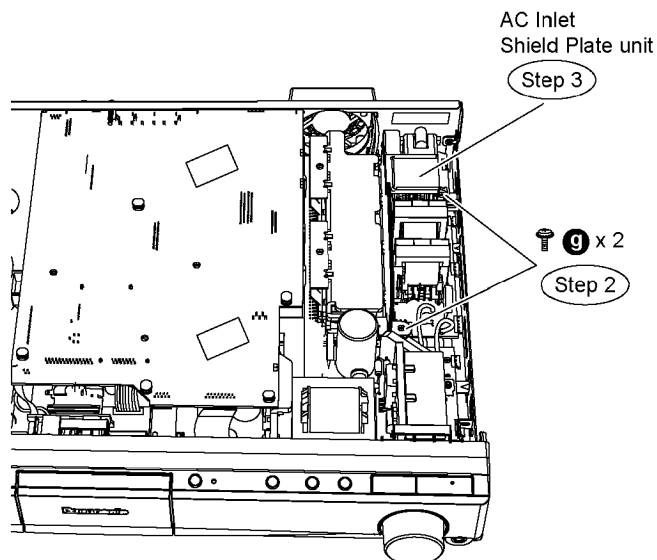
• Disassembly of AC Inlet Shield Plate Unit.

**Step 1** Remove 1 screw at the rear panel.



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

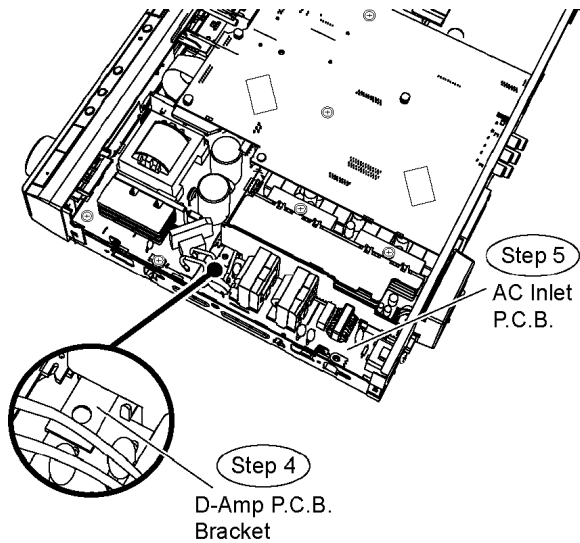
**Step 3** Remove the AC Inlet shield plate unit.



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

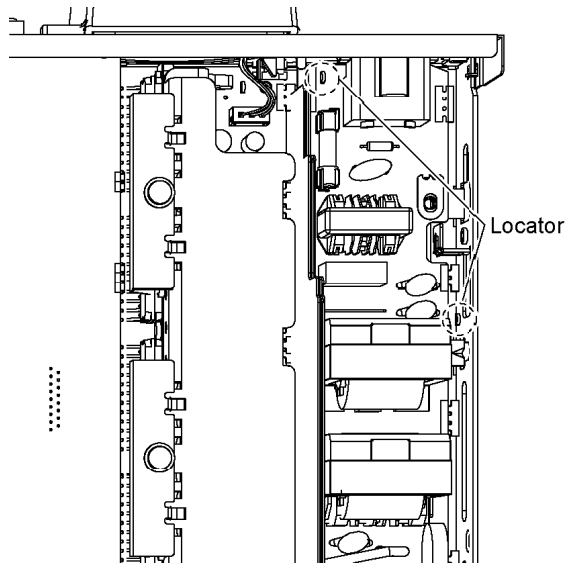
**Step 4** Remove the D-Amp P.C.B. bracket.

**Step 5** Remove AC Inlet P.C.B.



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

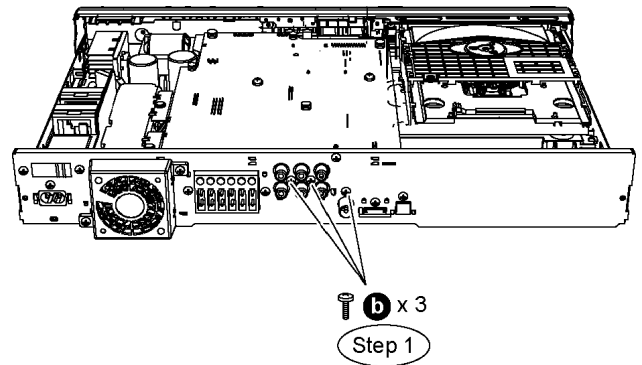
**Special Note:** During reassembling procedures, ensure the P.C.B. is seated properly at the locators.



## 9.14. Disassembly of Main P.C.B.

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

**Step 1** Remove 3 screws at the rear panel.



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

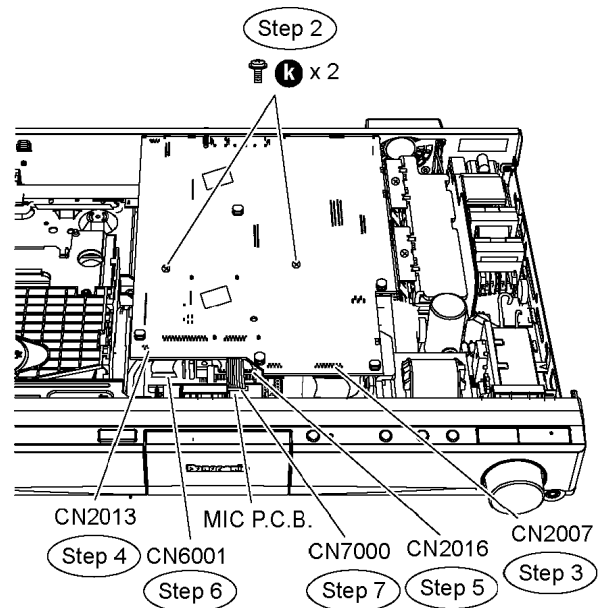
**Step 3** Detach 17P FFC cable at the connector (CN2007) on the Main P.C.B.

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

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

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

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



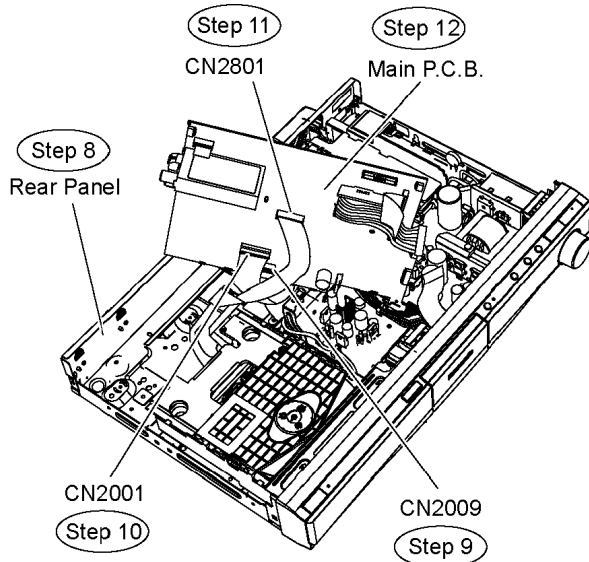
**Step 8** Detach Main P.C.B. from the rear panel.

**Step 9** Turn over Main P.C.B. to detach 17P FFC cable at the connector (CN2009) on the Main P.C.B.

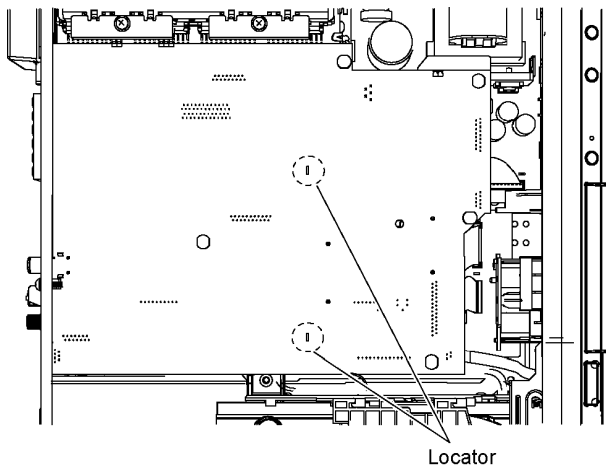
**Step 10** Detach 50P FFC cable at the connector (CN2001) on the Main P.C.B.

**Step 11** Detach 22P FFC cable at the connector (CN2801) on the Main P.C.B.

**Step 12** Remove Main P.C.B.



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



## 9.15. Disassembly of D-Amp P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 4) of Item 9.13.
- Follow (Step 1) to (Step 8) of Item 9.14.

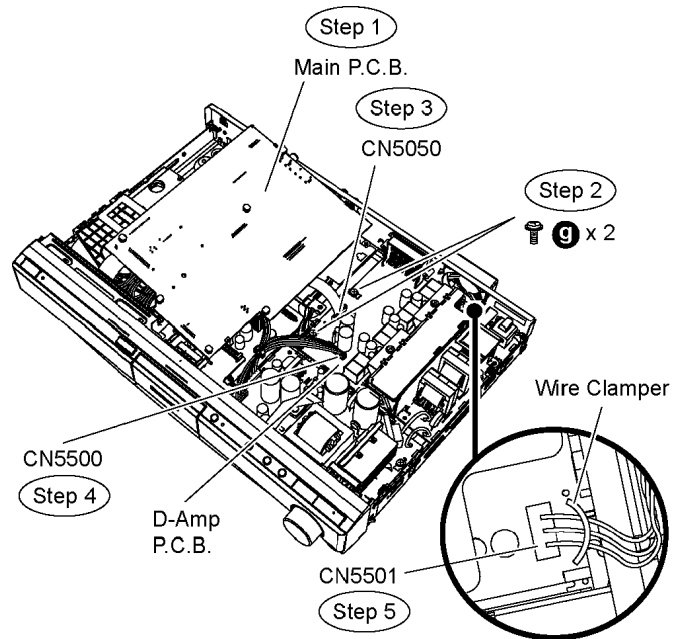
**Step 1** Move aside Main P.C.B. and position it according to the diagram shown.

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

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

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

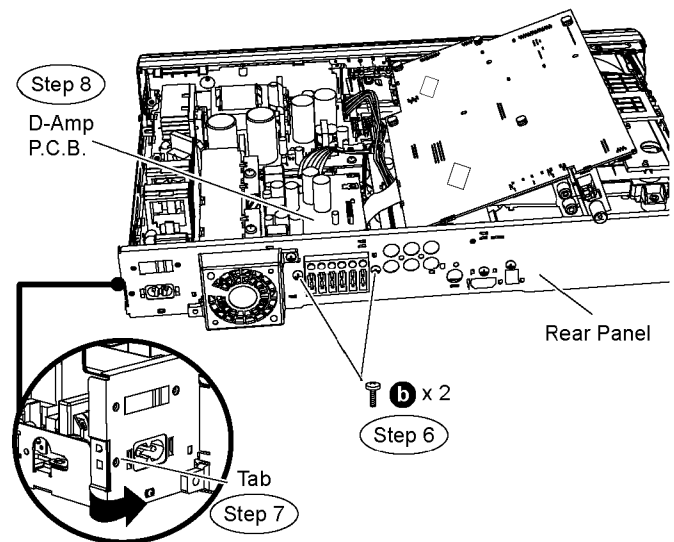
**Step 5** Twist the wire clammer to detach 3P cable at the connector (CN5501) on D-Amp P.C.B.



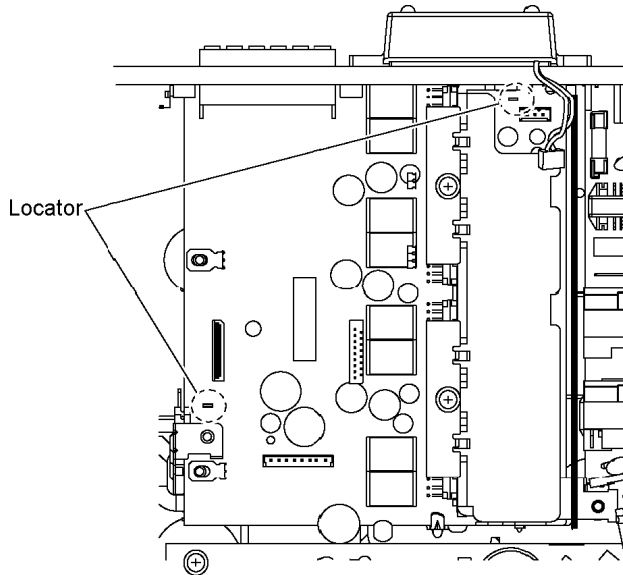
**Step 6** Remove 2 screws at the rear panel.

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

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



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

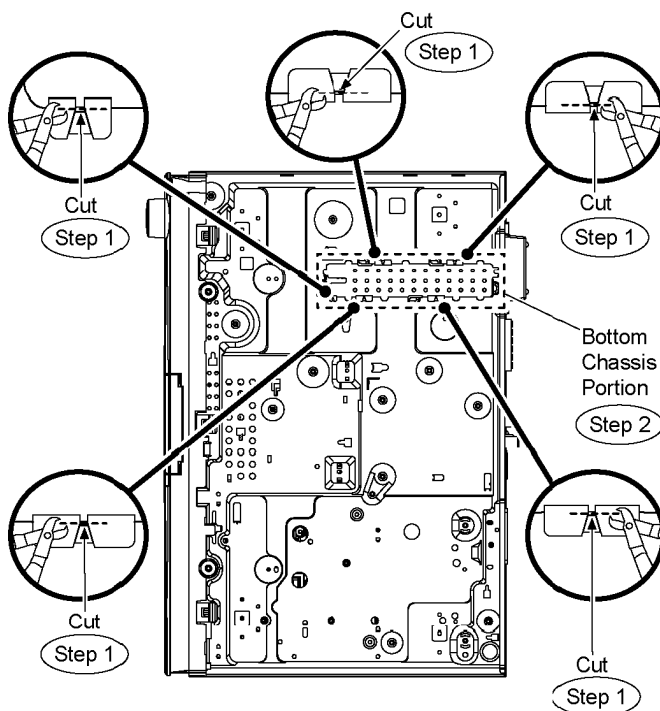


## 9.16. Replacement of Digital Amp IC (IC5000)

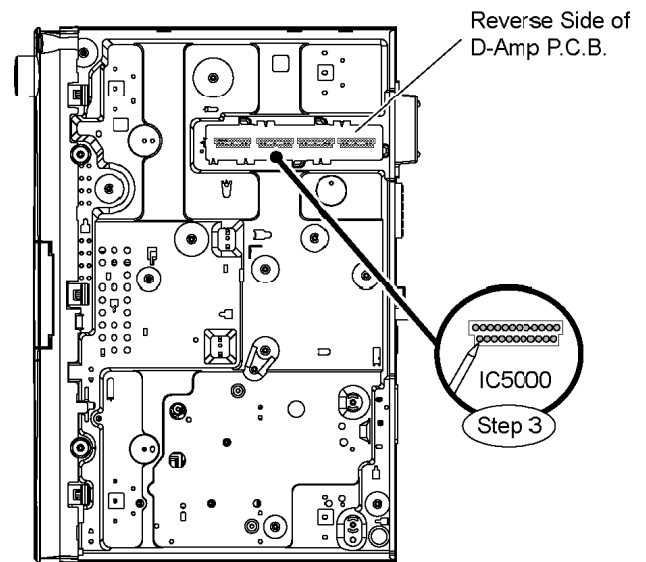
- Follow (Step 1) to (Step 3) of Item 9.3.

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

**Step 2** Detach the marked portion from the bottom chassis.



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

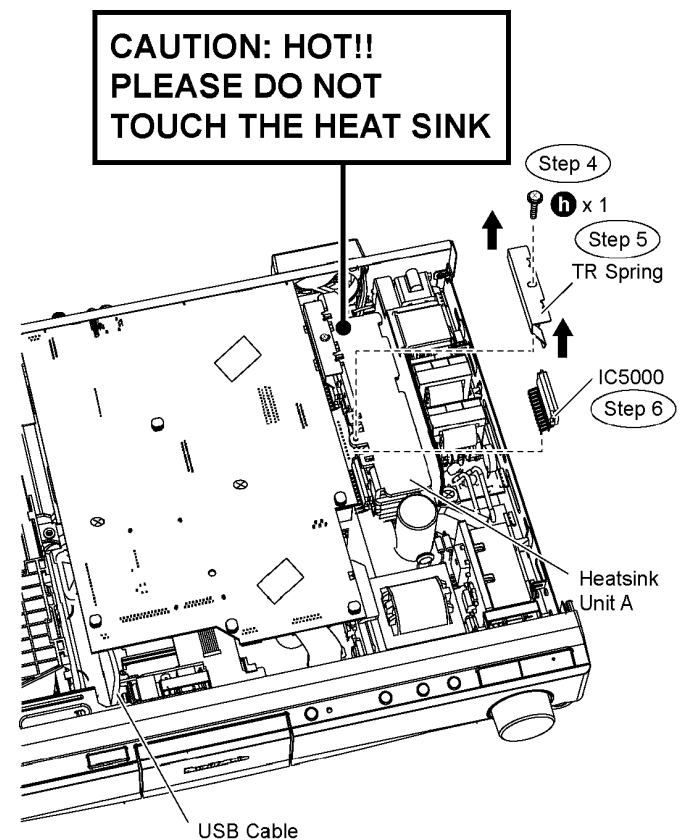


**Step 4** Remove 1 screw from the TR spring.

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

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

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



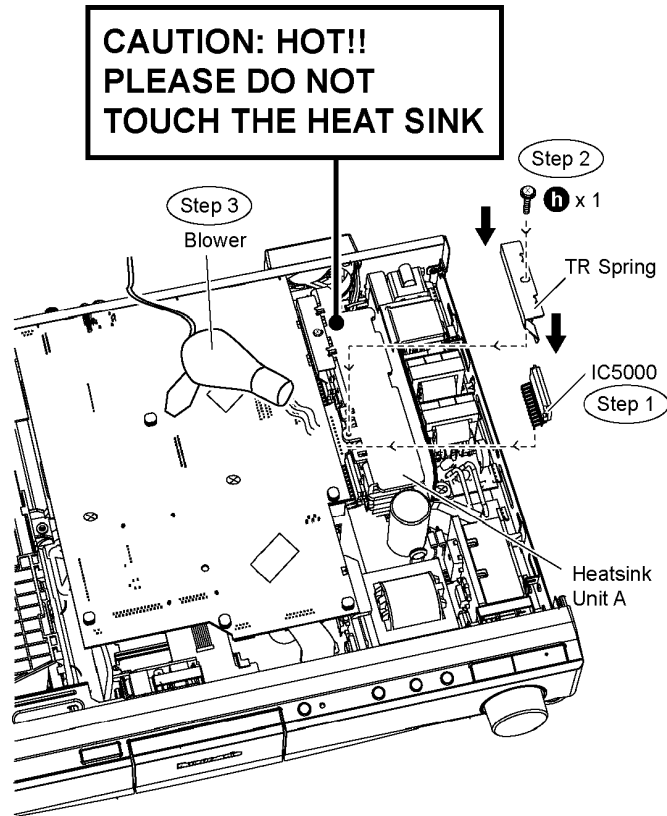
**Note:** Refer to the diagrams of D-Amp P.C.B. (Item 20.4.) for location of the part.

### 9.16.1. Assembly of the Digital Amp IC (IC5000)

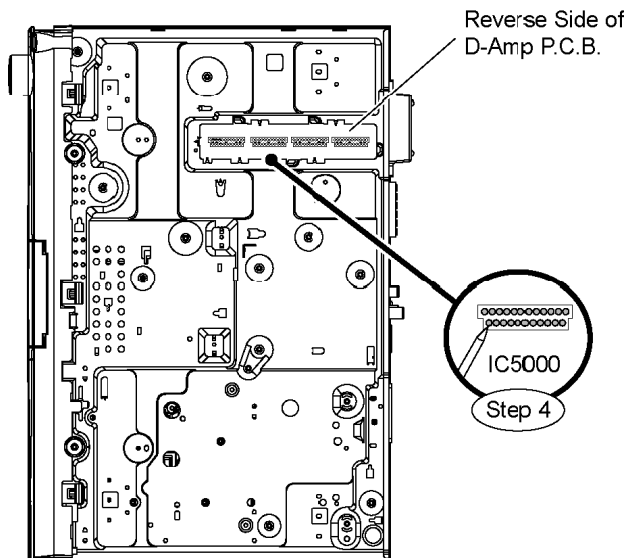
**Step 1** Fix the digital amp IC (IC5000) to the heatsink unit A.

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

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



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

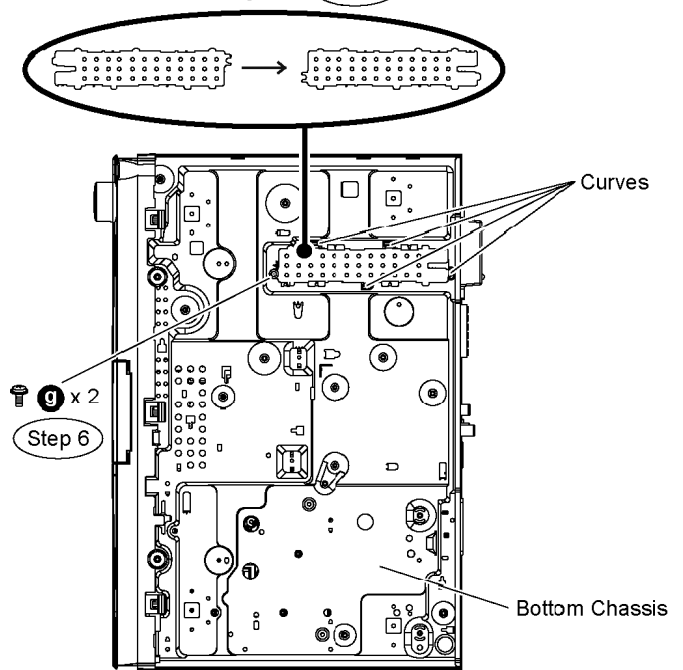


**Special Note:** Ensure pins of the digital amp IC (IC5000) are properly seated and soldered on D-Amp P.C.B.

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

**Step 6** Screw the portion to the bottom chassis.

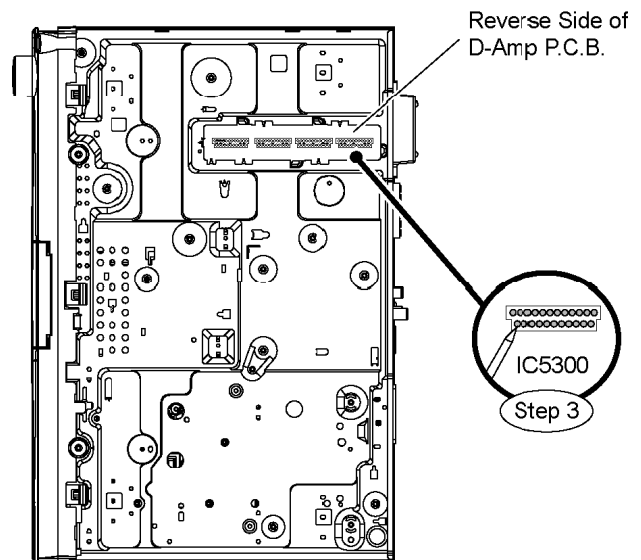
Rotate 180 degrees **Step 5**



## 9.17. Replacement of Digital Amp IC (IC5300)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 2) of Item 9.16.

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

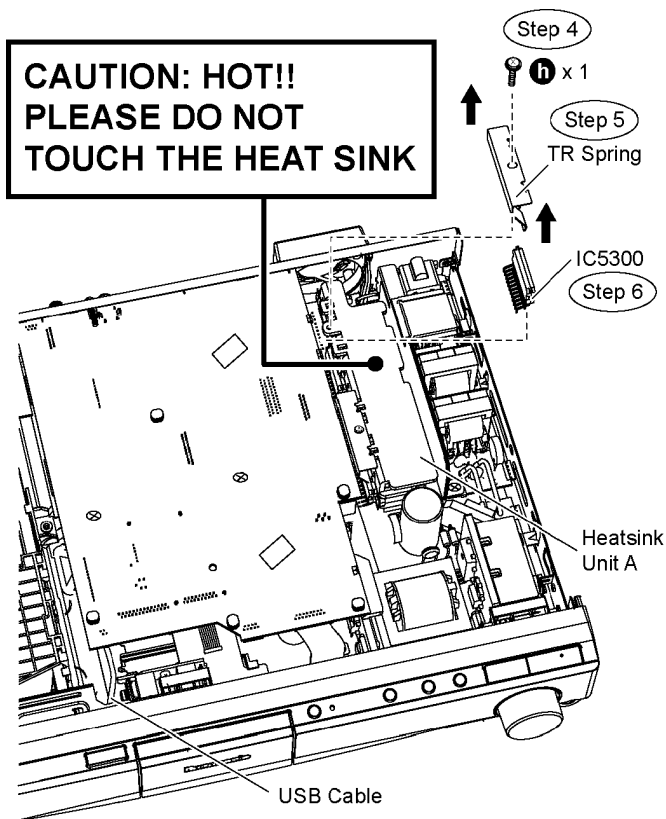


**Step 2** Remove 1 screw.

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

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

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



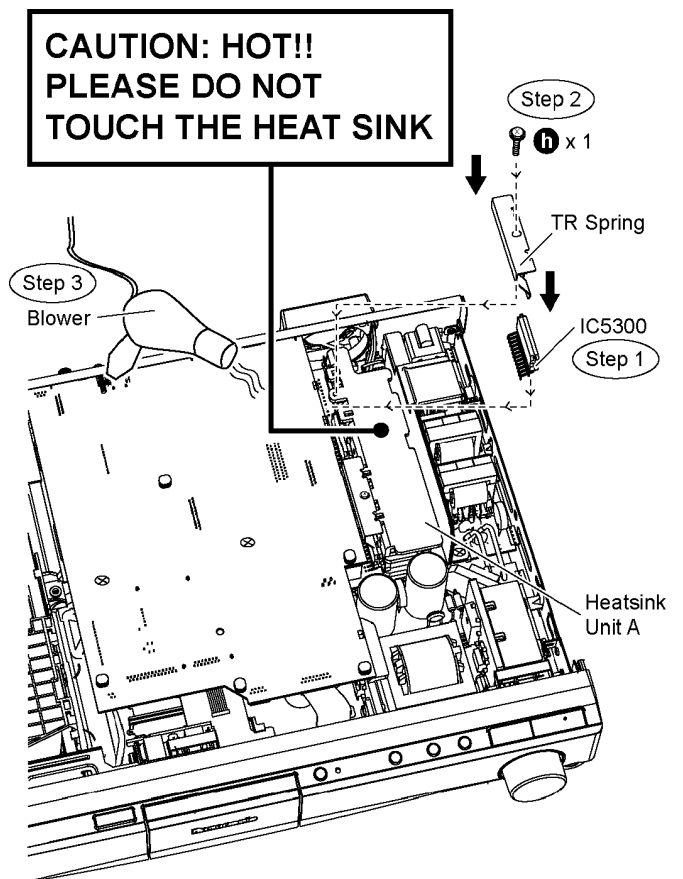
**Note:** Refer to the diagrams of D-Amp P.C.B. (Item 20.4.) for location of the part.

### 9.17.1. Assembly of Digital Amp IC (IC5300)

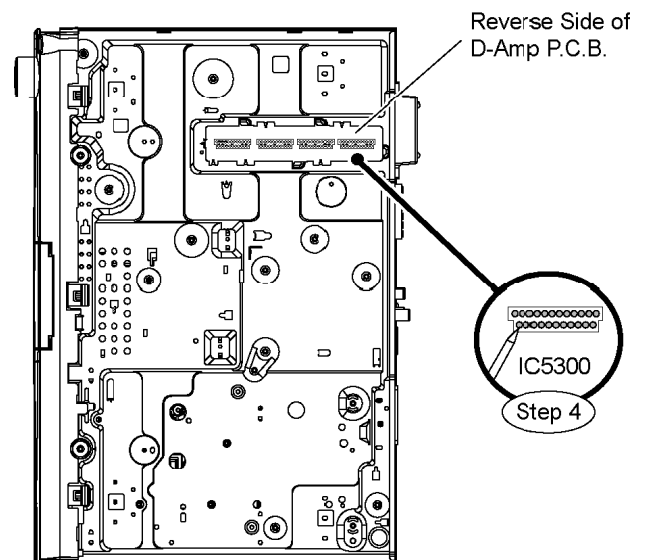
**Step 1** Fix the digital amp IC (IC5300) to the heatsink unit A.

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

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



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



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

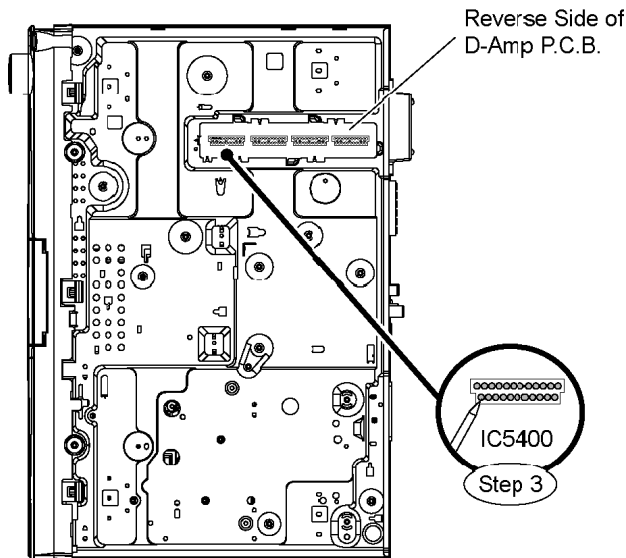
**Step 5** Follow (Step 5) to (Step 6) of Item 9.17.1

### 9.18. Replacement of Digital Amp IC (IC5400)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 2) of Item 9.16.

**Step 1** Desolder pins of the digital amp IC (IC5400) on the

reverse side of D-Amp P.C.B.



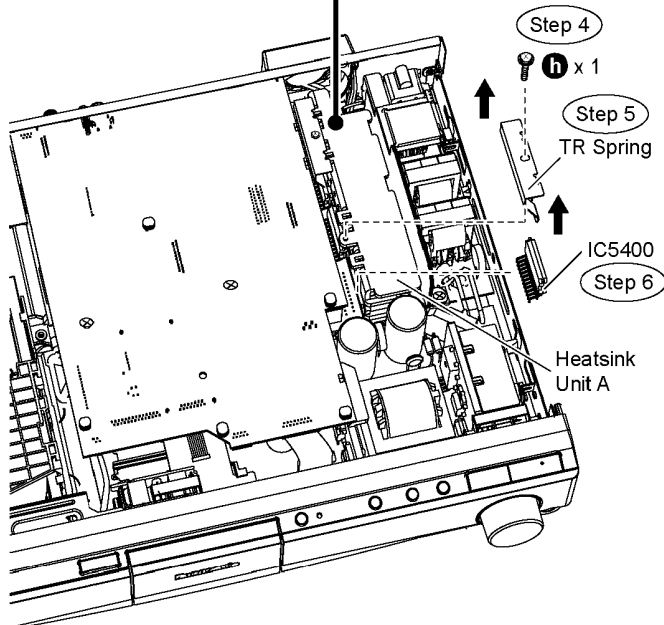
**Step 2** Remove 1 screw.

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

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

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

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



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

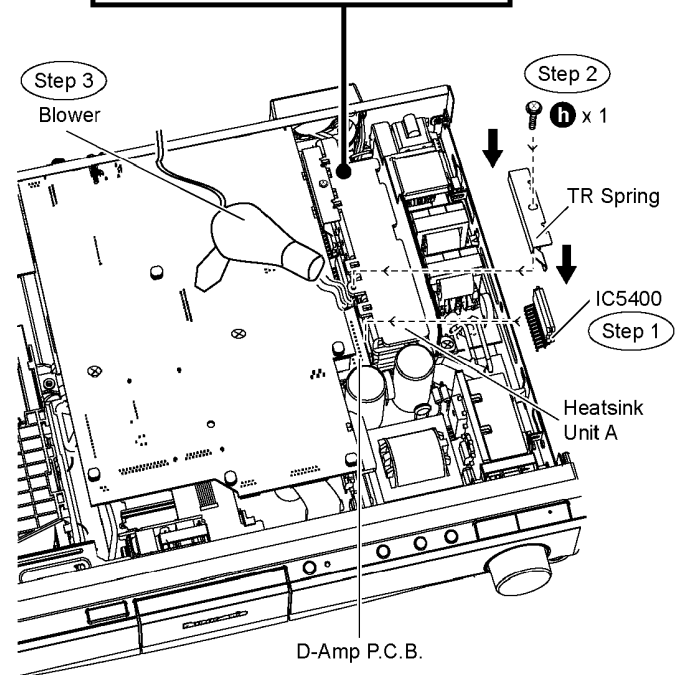
### 9.18.1. Assembly of Digital Amp IC (IC5400)

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

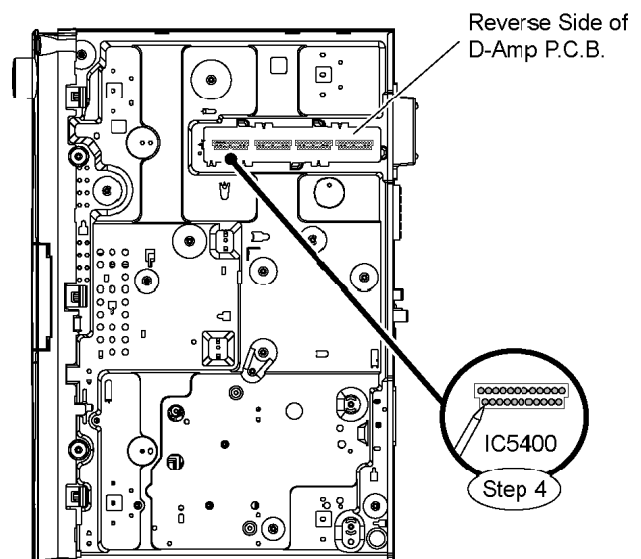
**Step 2** Screw the TR spring to the heatsink unit A.

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

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



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



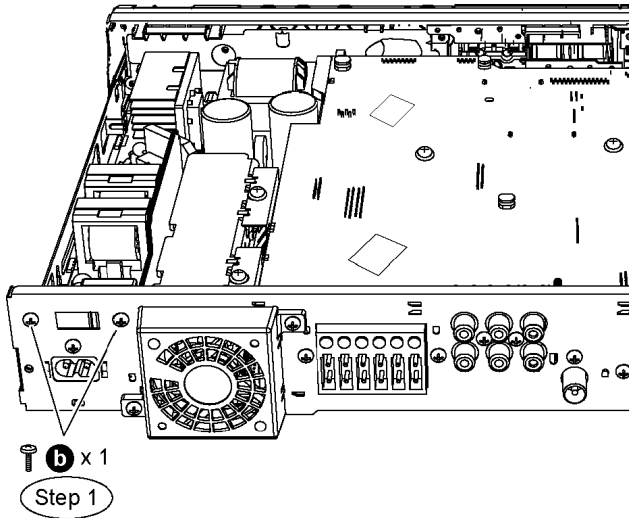
**Special Note:** Ensure pins of the digital amp IC (IC5400) are properly seated and soldered on D-Amp P.C.B.

**Step 5** Follow (Step 5) to (Step 6) of Item 9.17.1

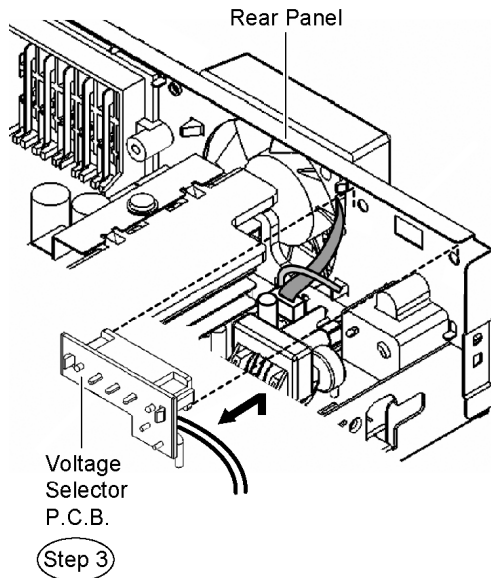
## 9.19. Disassembly of Voltage Selector P.C.B.

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

**Step 1** Remove 2 screws from the rear panel.



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



## 9.20. Disassembly of SMPS P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 8) of Item 9.14.

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

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

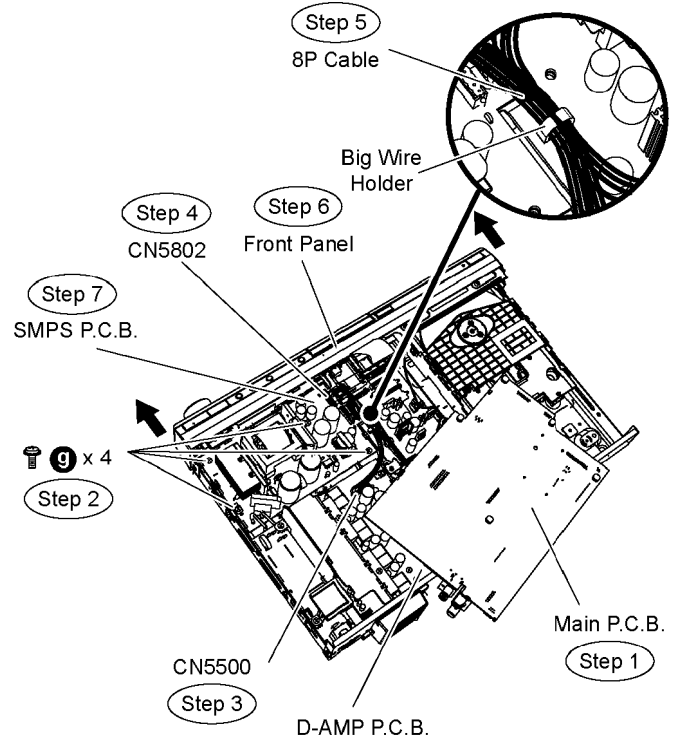
**Step 3** Detach 8P cable at the connector (CN5500) on D-Amp P.C.B.

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

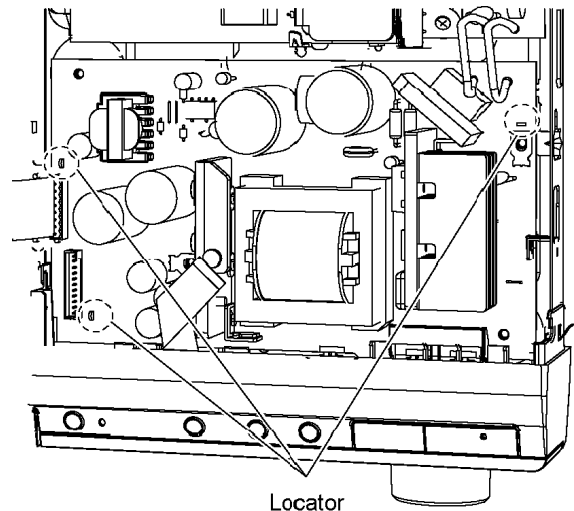
**Step 5** Remove 8P cable (SMPS P.C.B. to D-Amp P.C.B.) from the big wire holder.

**Step 6** Detach front panel in the direction of arrow.

**Step 7** Remove SMPS P.C.B.



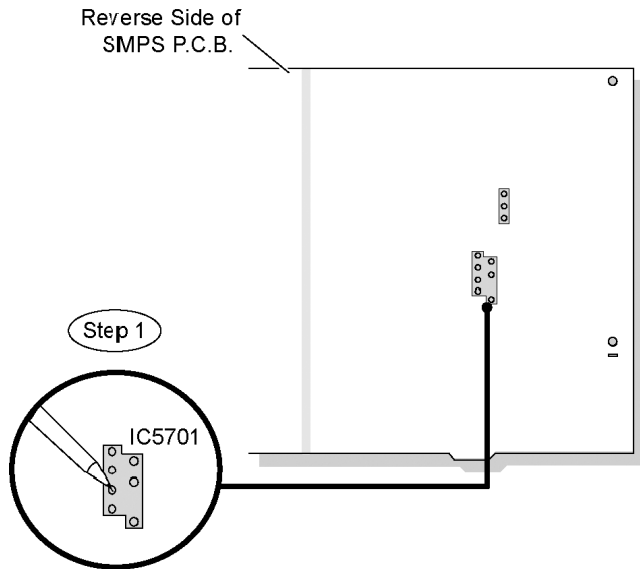
**Special Note:** During reassembling procedures, ensure the P.C.B. is seated properly at the locators.



## 9.21. Replacement of Switch Regulator IC (IC5701)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 8) of Item 9.14.
- Follow (Step 1) to (Step 6) of Item 9.20.

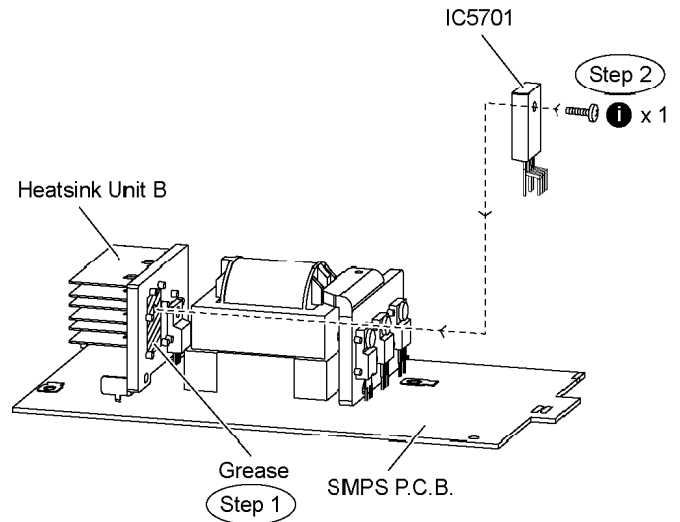
**Step 1** Desolder pins of the switch regulator IC (IC5701) on the reverse side of SMPS P.C.B.



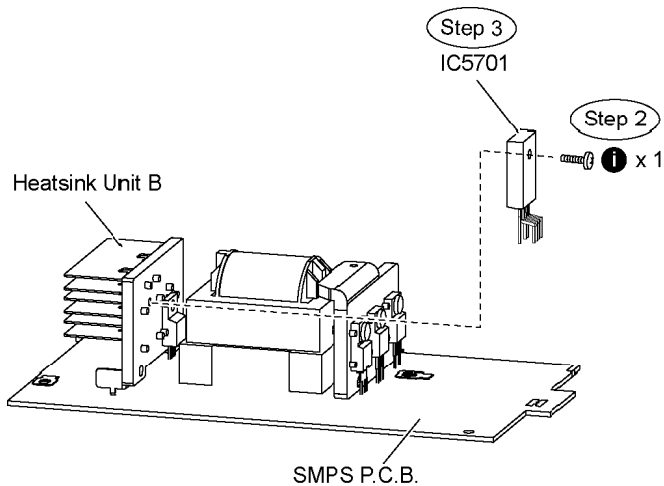
**Step 2** Remove 1 screw from the switch regulator IC (IC5701).

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

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



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



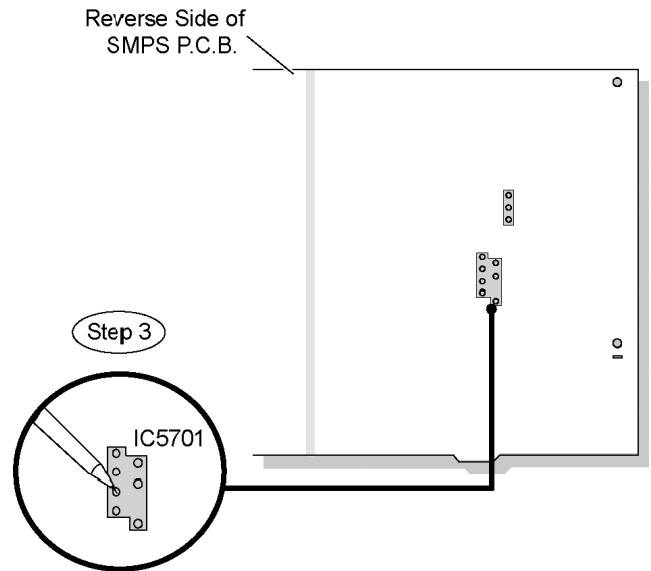
**Note :** Refer to the diagrams of SMPS P.C.B. (Item 20.5.) for location of the part.

### 9.21.1. Assembly of Switch Regulator IC (IC5701)

**Step 1** Apply grease to the heatsink unit B.

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

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



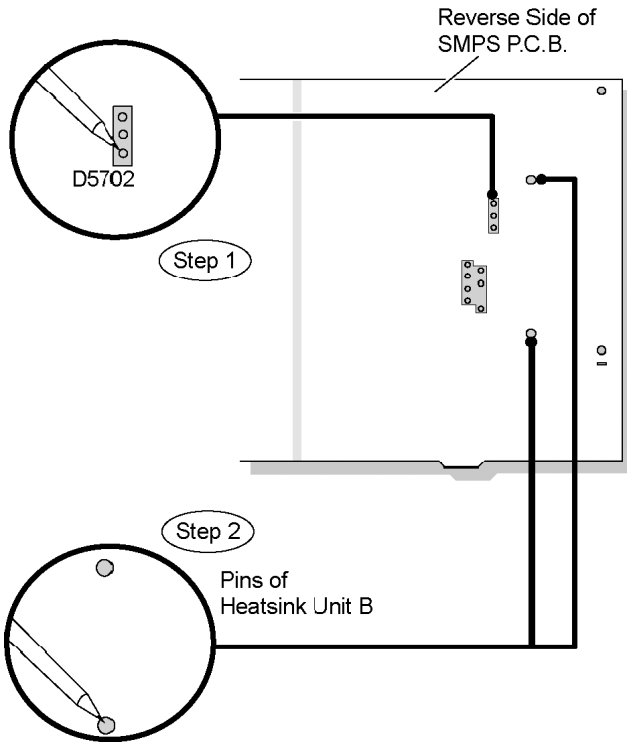
**Special Note:** Ensure pins of the switch regulator IC (IC5701) are properly seated and soldered on SMPS P.C.B.

## 9.22. Replacement of Switch Regulator Diode (D5702)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 8) of Item 9.14.
- Follow (Step 1) to (Step 6) of Item 9.20.

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

**Step 2** Desolder pins of the heatsink unit B.



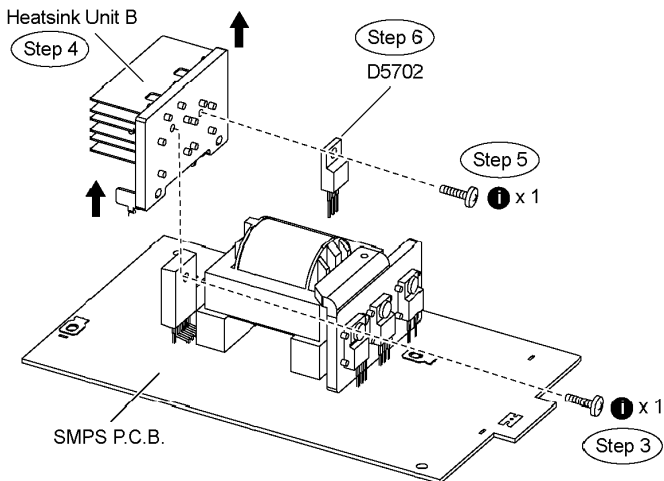
**Step 3** Remove 1 screw from the switch regulator IC (IC5701).

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

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

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

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



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

### 9.22.1. Assembly of Switch Regulator Diode (D5702)

**Step 1** Apply grease to the heatsink unit B.

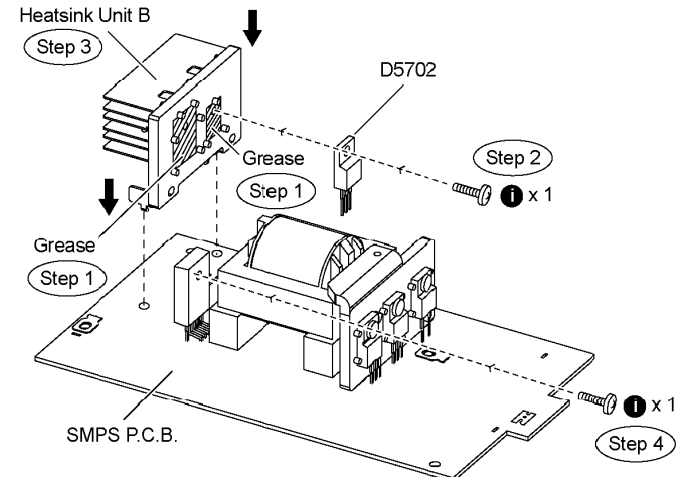
**Step 2** Fix and screw the switch regulator diode (D5702) to the

heatsink unit B.

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

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

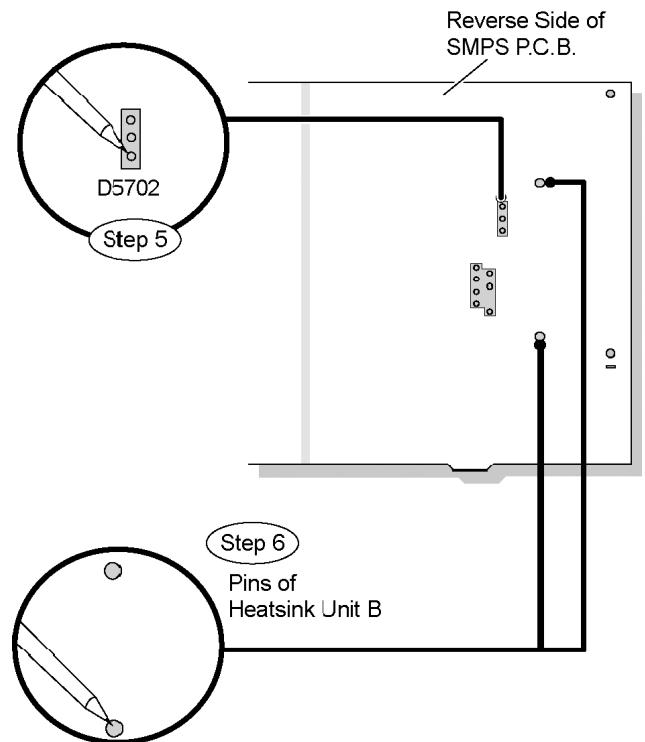
**Step 4** Fix and screw the switch regulator IC (IC5701) to the heatsink unit B



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

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

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

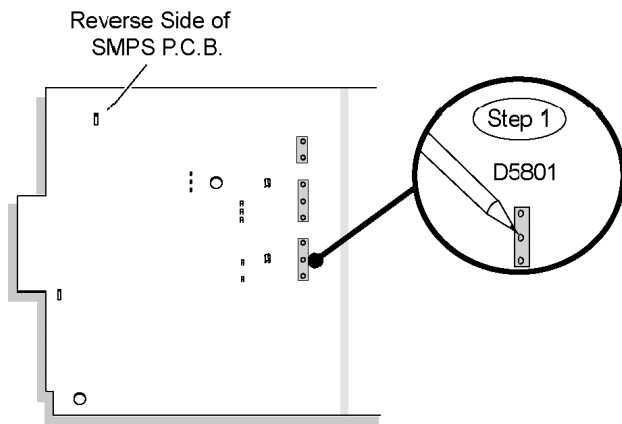


**Special Note:** Ensure pins of the switch regulator diode (D5702) are properly seated and soldered on SMPS P.C.B.

## 9.23. Replacement of Regulator Diode (D5801)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 8) of Item 9.14.
- Follow (Step 1) to (Step 6) of Item 9.20.

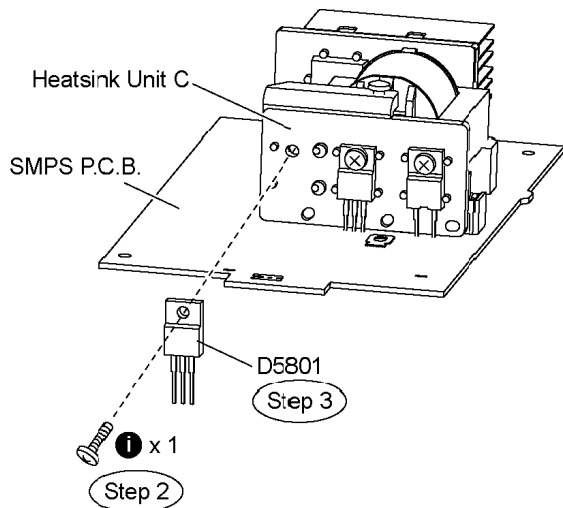
**Step 1** Desolder pins of the regulator diode (D5801) on the reverse side of SMPS P.C.B.



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

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

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



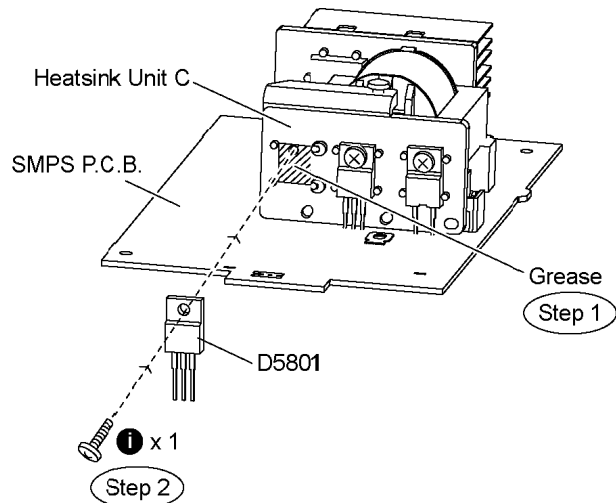
**Note:** Refer to the diagrams of SMPS P.C.B. (Item 20.5) for location of the part.

### 9.23.1. Assembly of Regulator Diode (D5801)

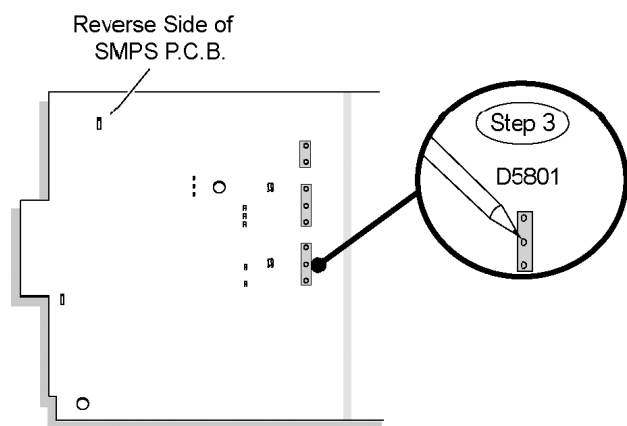
**Step 1** Apply grease to the heatsink unit C.

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

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



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

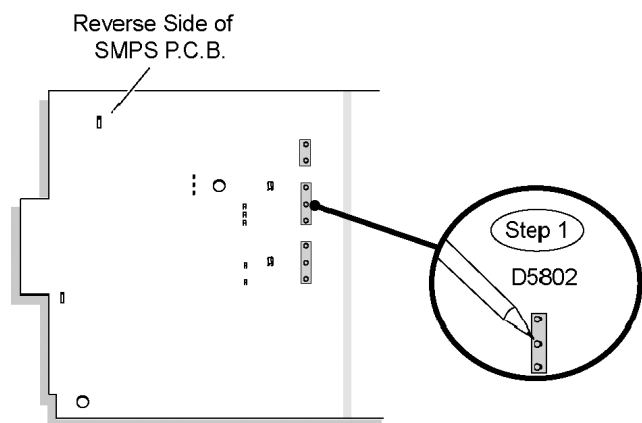


**Special Note:** Ensure pins of the regulator diode (D5801) are properly seated and soldered on SMPS P.C.B.

## 9.24. Replacement of Regulator Diode (D5802)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 8) of Item 9.14.
- Follow (Step 1) to (Step 6) of Item 9.20.

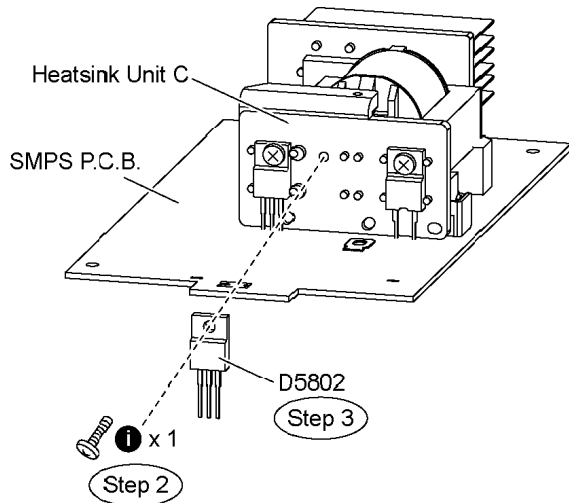
**Step 1** Desolder pins of the regulator diode (D5802) on the reverse side of SMPS P.C.B.



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

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

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



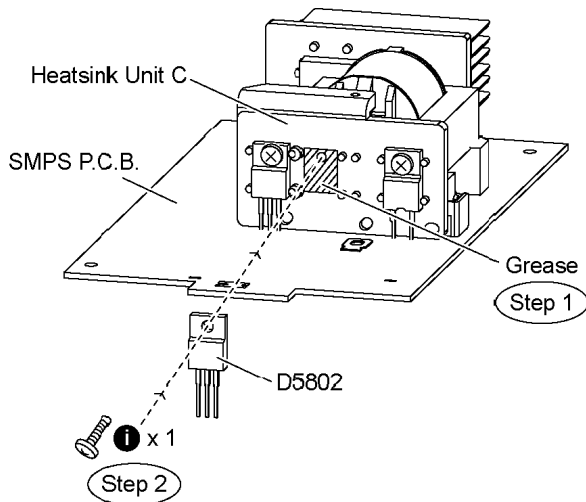
**Note:** Refer to the diagrams of SMPS P.C.B. (Item 20.5) for location of the part.

#### 9.24.1. Assembly of Regulator Diode (D5802)

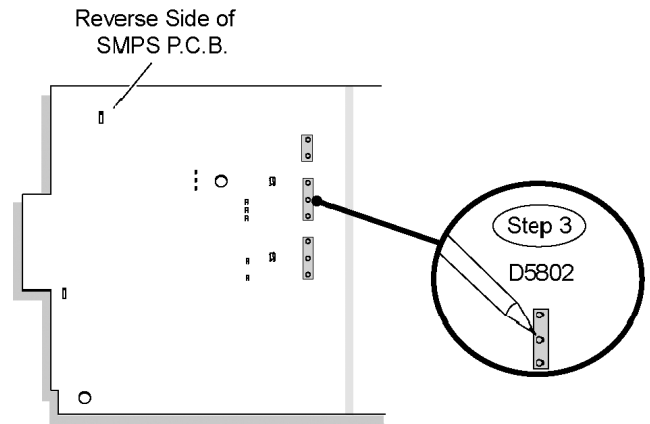
**Step 1** Apply grease to the heatsink unit C.

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

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



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

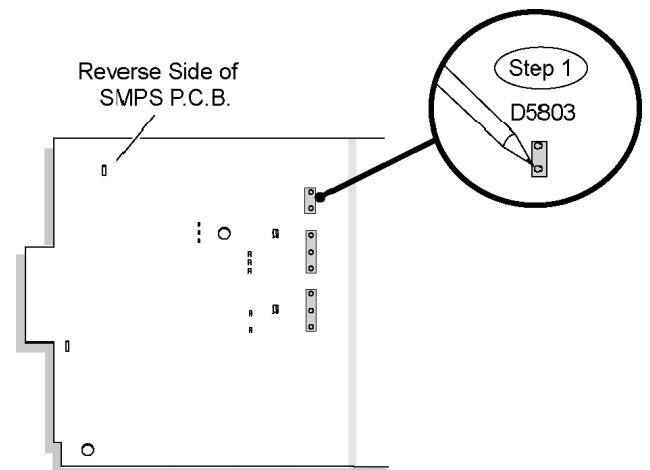


**Special Note:** Ensure pins of the regulator diode (D5802) are properly seated and soldered on SMPS P.C.B.

#### 9.25. Replacement of Regulator Diode (D5803)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 8) of Item 9.14.
- Follow (Step 1) to (Step 6) of Item 9.20.

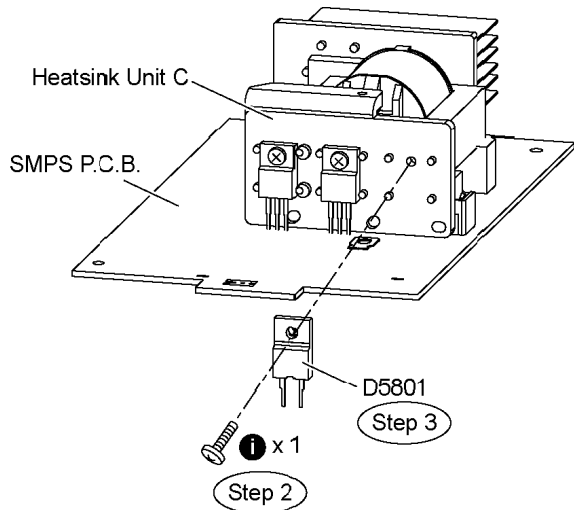
**Step 1** Desolder pins of the regulator diode (D5803) on the reverse side of SMPS P.C.B.



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

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

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



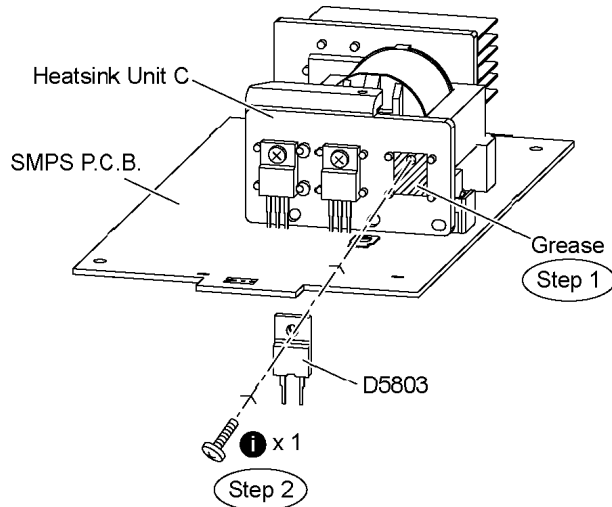
**Note:** Refer to the diagrams of SMPS P.C.B. (Item 20.5) for location of the part.

### 9.25.1. Assembly of Regulator Diode (D5803)

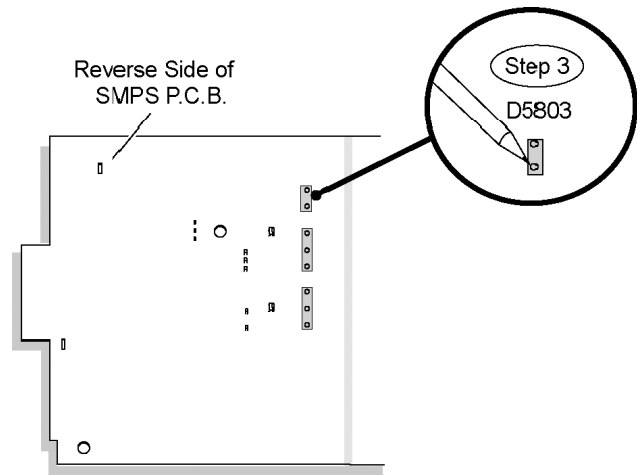
**Step 1** Apply grease to the heatsink unit C.

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

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



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



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

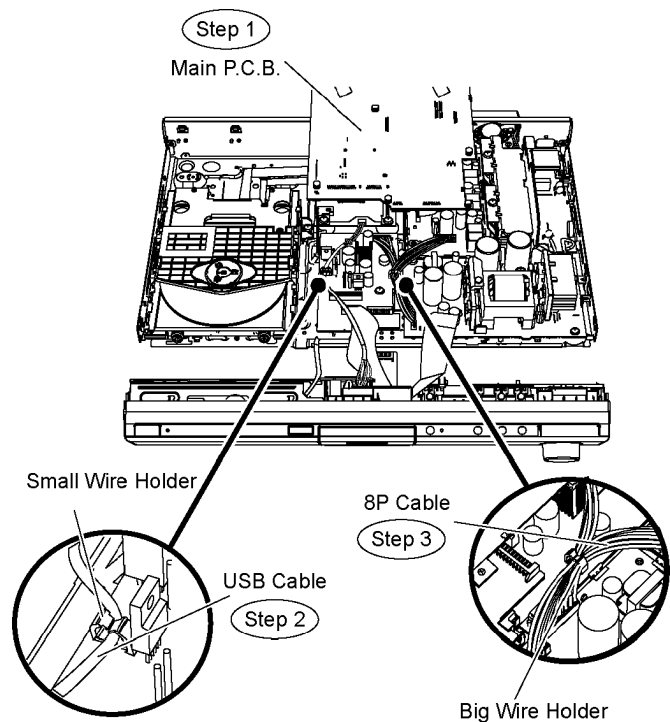
## 9.26. Disassembly of Power Supply P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 5) of Item 9.6.
- Follow (Step 1) to (Step 8) of Item 9.14.

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

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

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



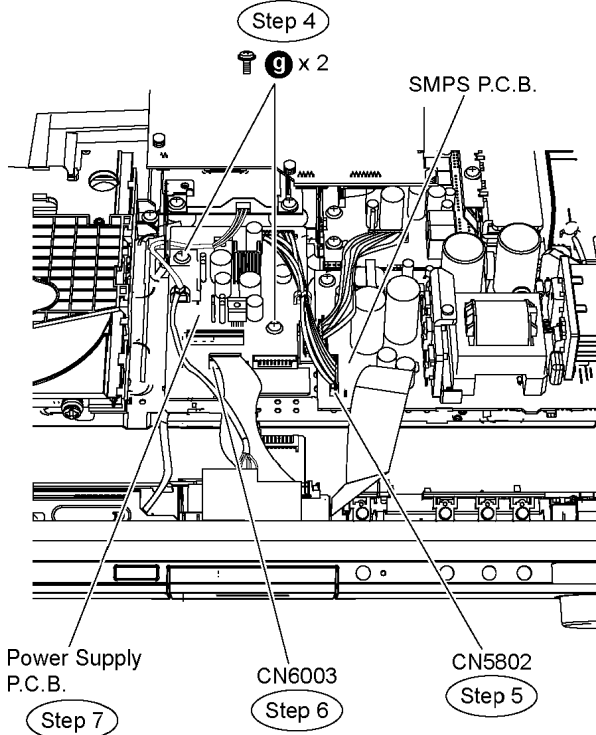
**Step 4** Remove 2 screws on Power Supply P.C.B.

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

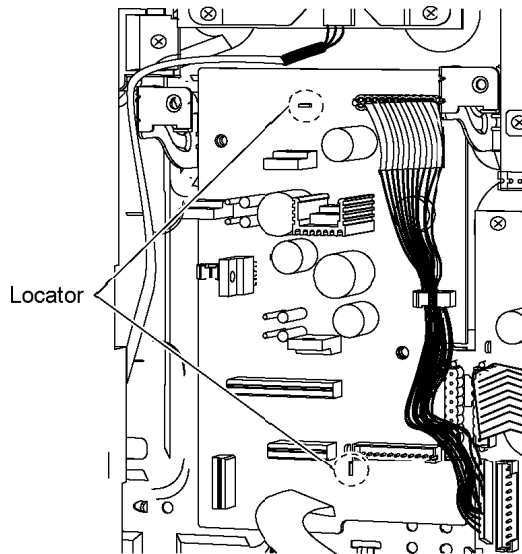
**Step 6** Detach 14P FCC cable at the connector (CN6003) on

the Power Supply P.C.B.

**Step 7** Remove Power Supply P.C.B.



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

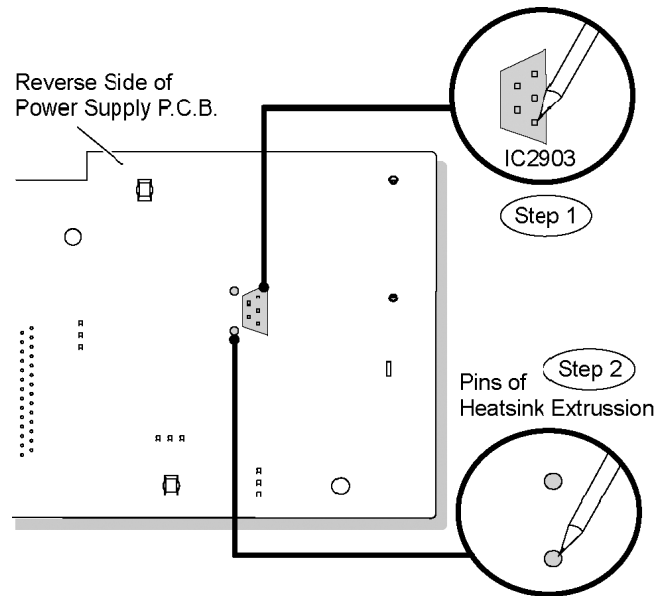


## 9.27. Replacement of Regulator IC (IC2903)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 5) of Item 9.6.
- Follow (Step 1) to (Step 8) of Item 9.14.
- Follow (Step 1) to (Step 7) of Item 9.26.

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

**Step 2** Desolder pins of the heatsink extrusion.

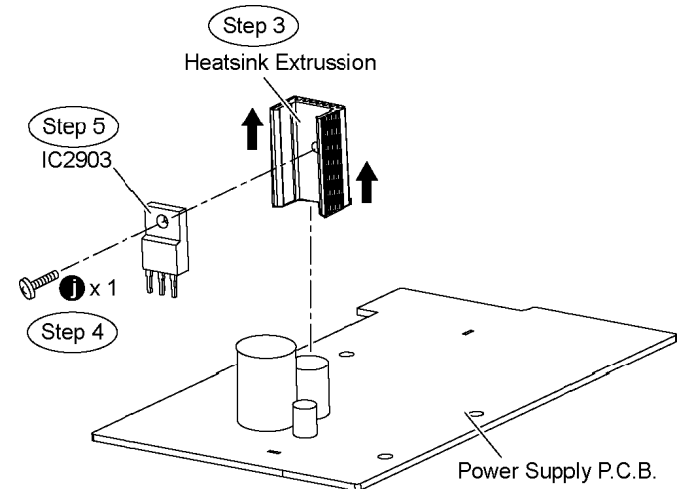


**Step 3** Remove the heatsink extrusion in the direction of arrows.

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

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

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



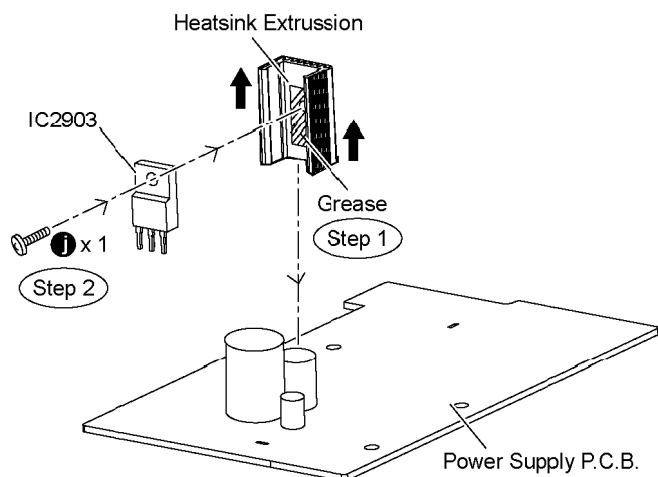
**Note:** Refer to the diagrams of Power Supply P.C.B. (Item 20.3) for location of the part.

### 9.27.1. Assembly of Regulator IC (IC2903)

**Step 1** Apply grease to the heatsink extrusion.

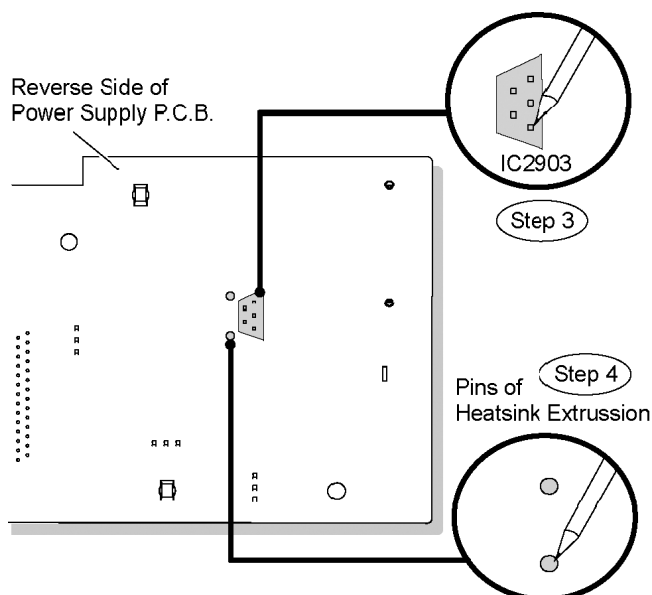
**Step 2** Fix and screw the regulator IC (IC2903) to the heatsink extrusion.

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



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

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

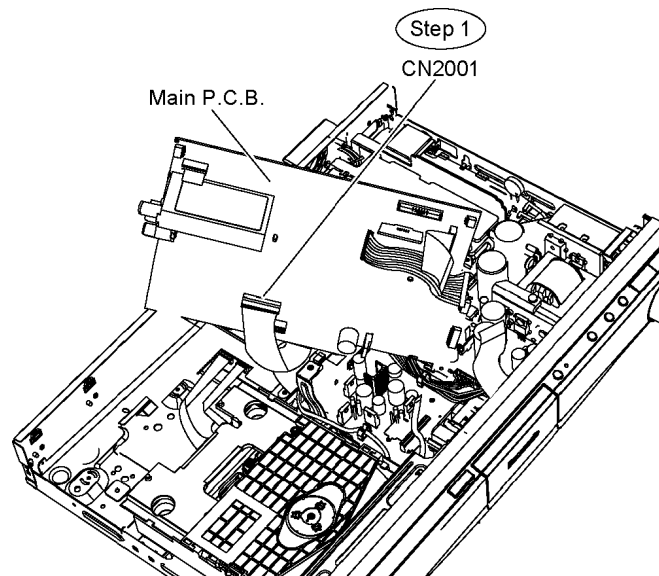


**Special Note:** Ensure pins of the regulator IC (IC2903) are properly seated and soldered on Power Supply P.C.B.

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

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

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

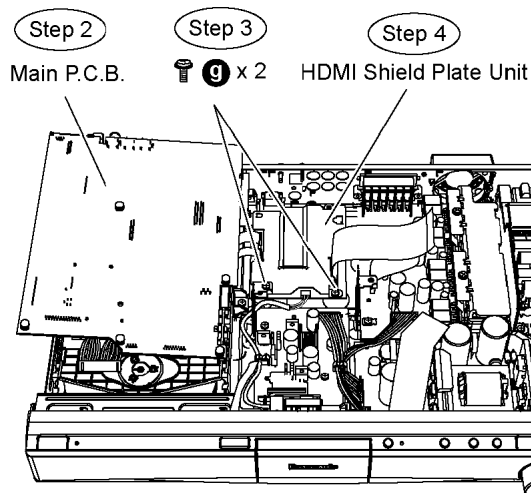


**Step 2** Move aside Main P.C.B. and position it according to the diagram shown.

- Disassembly at HDMI Shield Plate Unit

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

**Step 4** Remove the HDMI shield plate unit.

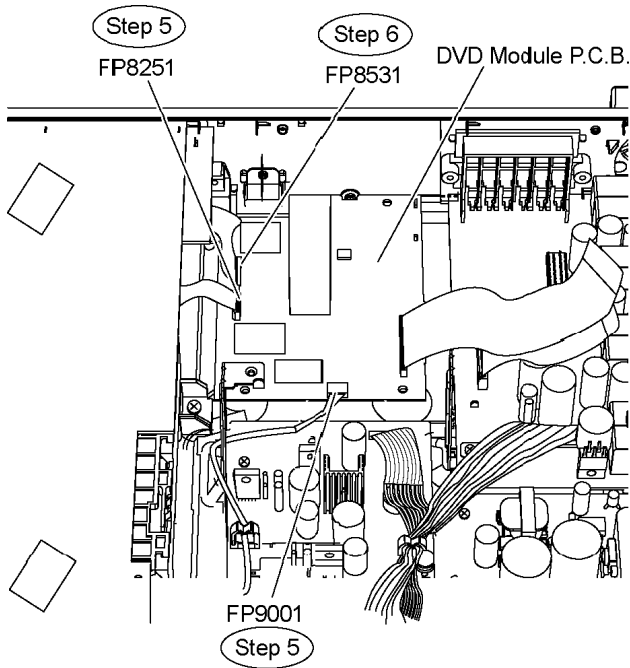


**Caution Note:** Keep the HDMI shield plate unit in safe place. Avoid denting it. Place it back during assembling.

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

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

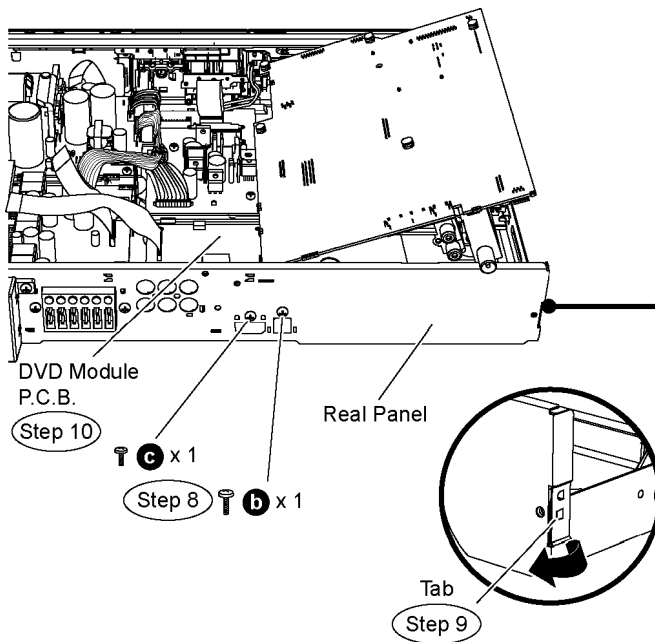
**Step 7** Detach 5P cable at the connector (FP9001) on DVD Module P.C.B.



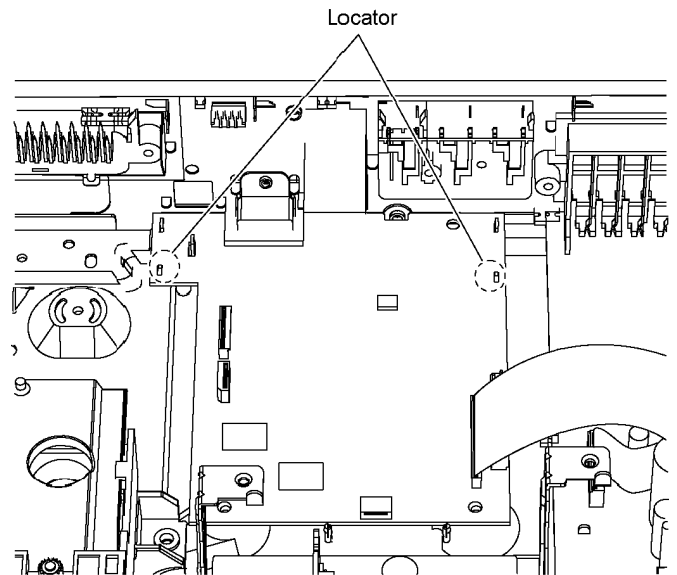
**Step 8** Remove 2 screws at the rear panel.

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

**Step 10** Remove DVD Module P.C.B.



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

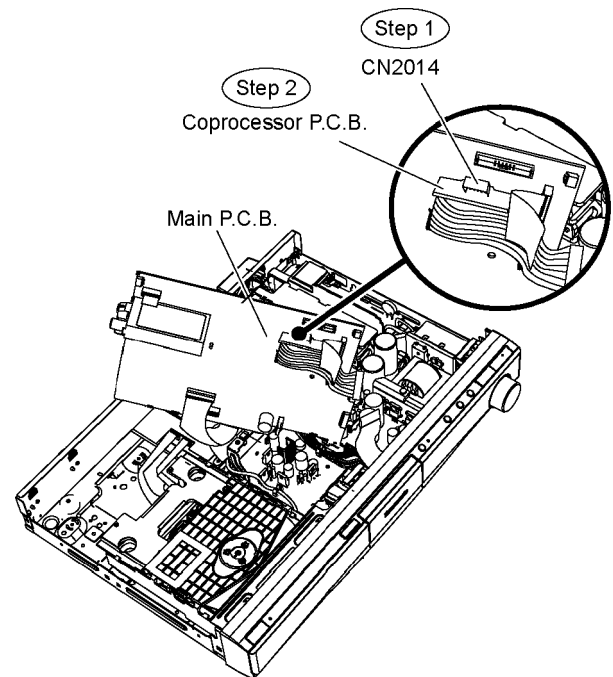


## 9.29. Disassembly of Coprocessor P.C.B.

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

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

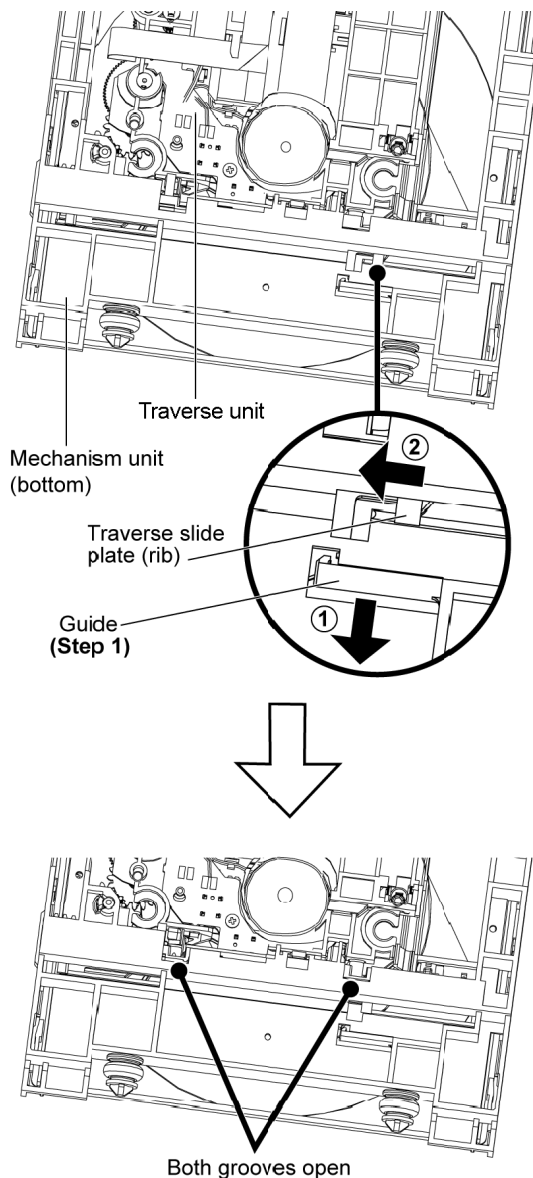
**Step 2** Remove Coprocessor P.C.B.



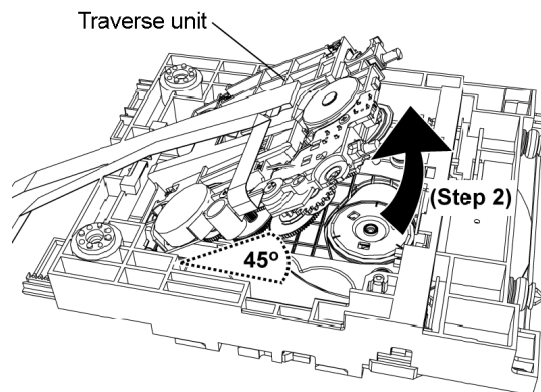
# 10 Assembling and Disassembling of DVD Mechanism Unit

## 10.1. Disassembling Procedures

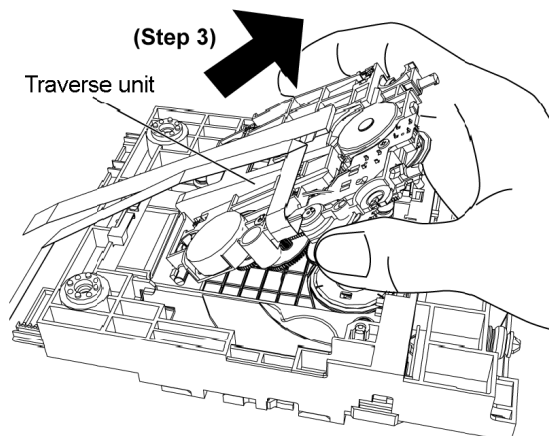
### 10.1.1. Disassembly of Traverse Unit



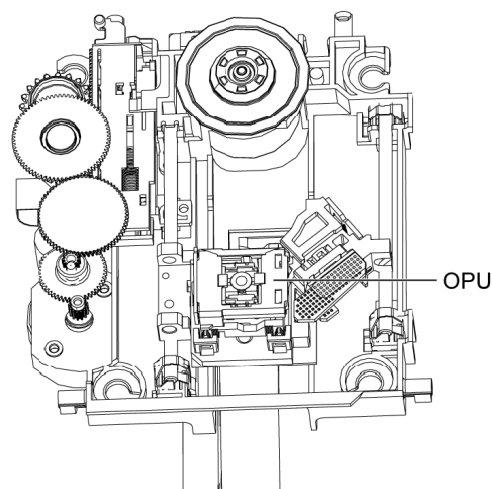
Step 1: Release the guide and slide the traverse slide plate (rib) as arrows shown.



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



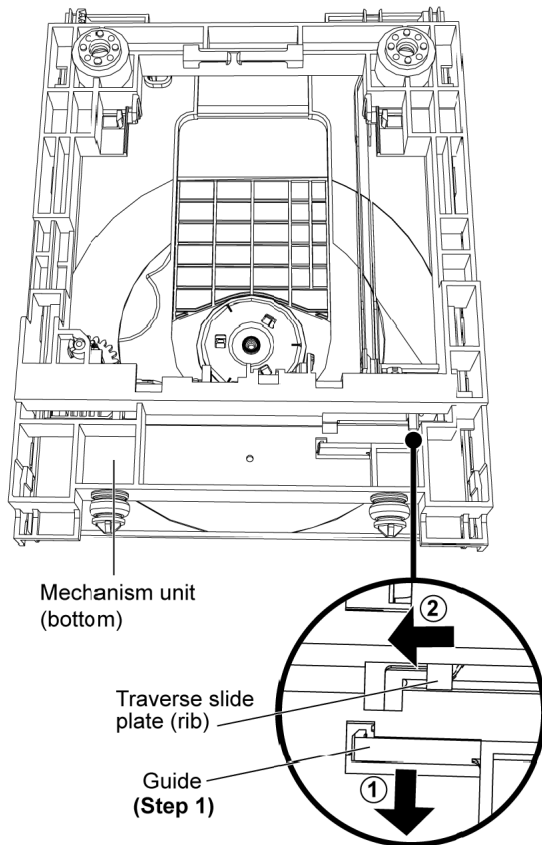
Step 3: Slide out the Traverse unit as arrow shown.



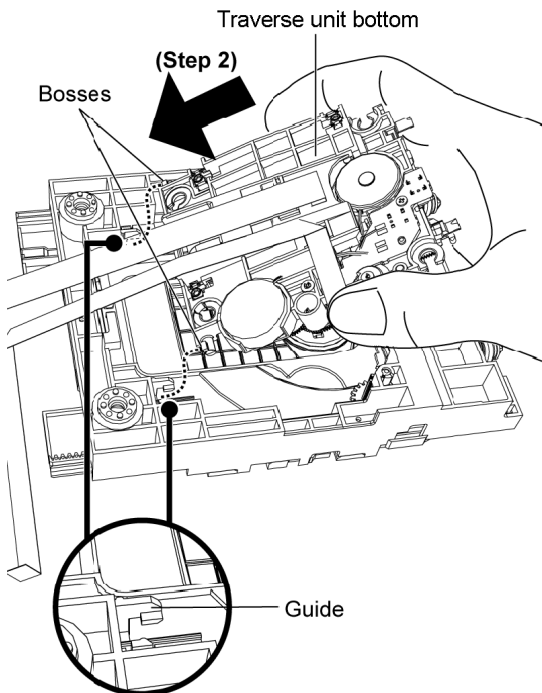
**Caution:** Do not touch the surface of the Traverse unit and place it so that the OPU is on top.

## 10.2. Assembling Procedure

### 10.2.1. Assembly of Traverse unit

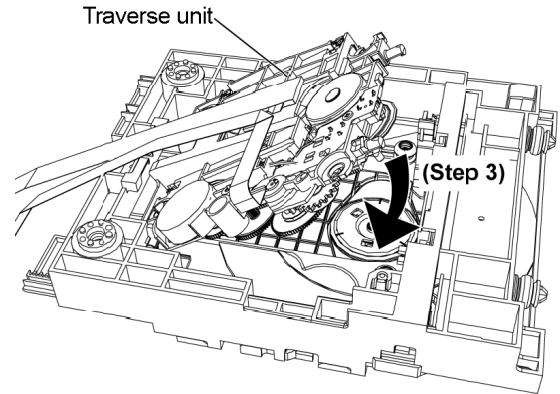


Step 1: Release the guide and slide the traverse slide palte (rib) as arrows shown.

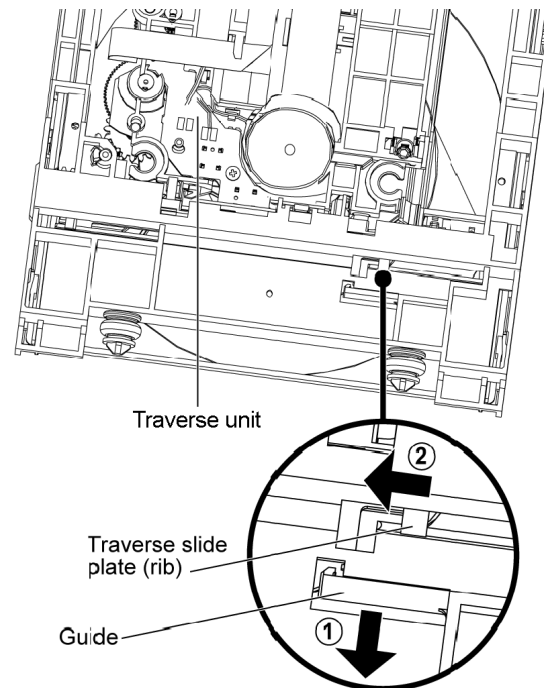


Step 2: Slot the Traverse unit approximately 45° into the mecha chassis as arrow shown.

**Note:** Ensure the bosses fix exactly onto the guides.



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



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

## 11 Service Fixture and Tools

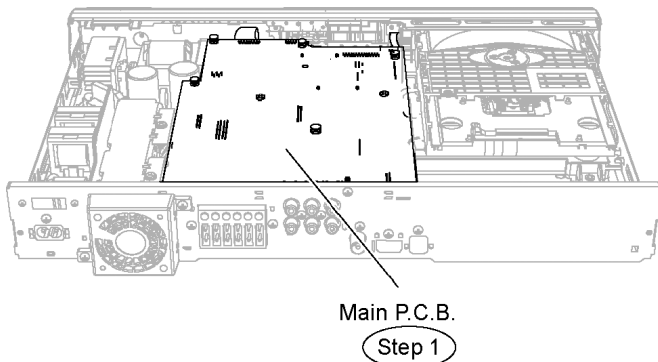
Prepare service tools before process service position.

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

## 12 Service Position

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

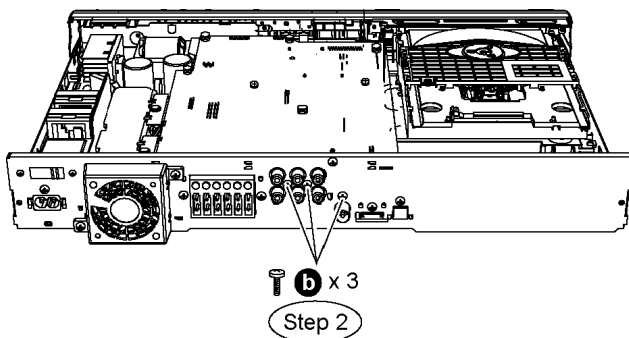
**Step 1** Remove the top cabinet to service Main P.C.B.



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

**Step 1** Remove the top cabinet.

**Step 2** Remove 3 screws at the rear panel.



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

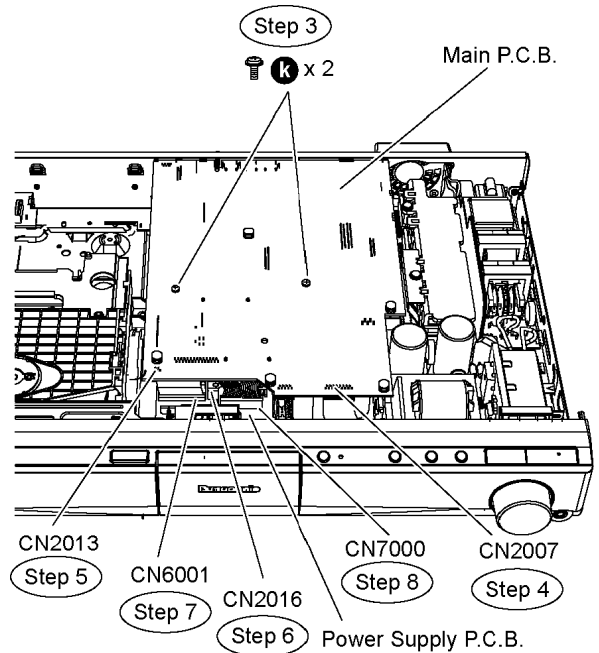
**Step 4** Detach 17P cable at the connector (CN2007) on Main P.C.B.

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

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

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

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

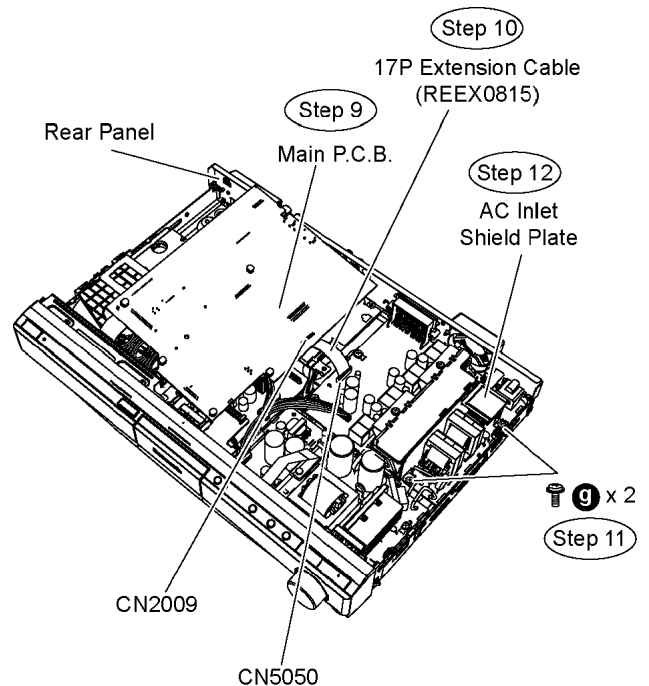


**Step 9** Detach Main P.C.B. from the rear panel and position it according to the diagram show.

**Step 10** Attach original cable with extension cable REEX0815 (17P cable from CN2009 to CN5050).

**Step 11** Remove 2 screws then remove the AC Inlet shield plate unit.

**Step 12** Remove Ac Inlet shield place unit.

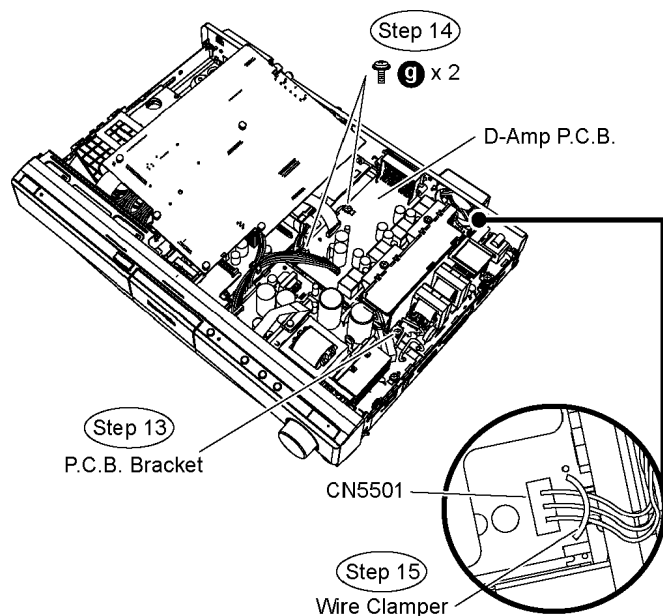


**Step 13** Remove the P.C.B. bracket.

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

**Step 14** Remove 2 screws on D-Amp P.C.B.

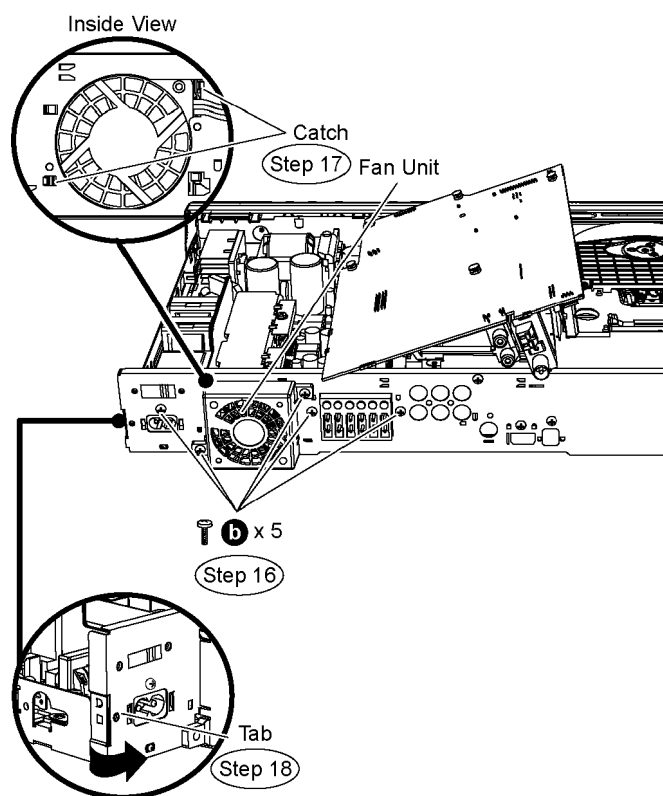
**Step 15** Remove the wire clammer to detach 3P cable at the connector (CN5501) on D-Amp P.C.B.



**Step 16** Remove 7 screws at the rear panel.

**Step 17** Release the catches and remove the fan unit.

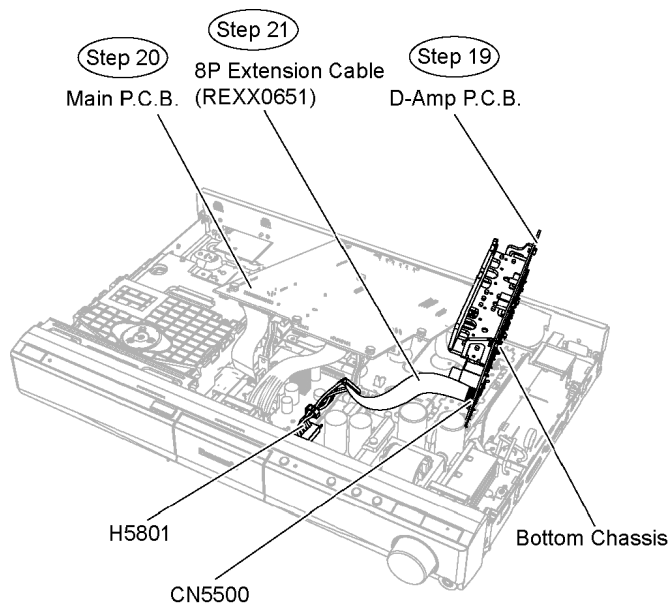
**Step 18** Release the tab of the rear panel in the direction of arrow.



**Step 19** Detach D-Amp P.C.B. from the bottom chassis and flip it vertically.

**Step 20** Position Main P.C.B. according to the diagram shown.

**Step 21** Attach original cable with extension cable REXX0651. (8P cable from H5801 to CN5500).



**Caution Note:** Ensure the cable is attached properly.

**Step 22** Connect 13P cable at the connector (CN2016) on Power Supply P.C.B.

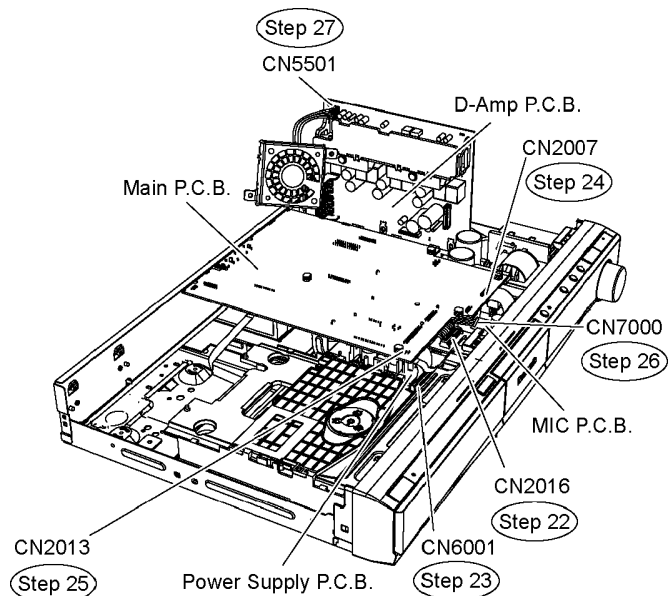
**Step 23** Connect 28P cable at the connector (CN6001) on Power Supply P.C.B.

**Step 24** Connect 17P cable at the connector (CN2007) on Main P.C.B.

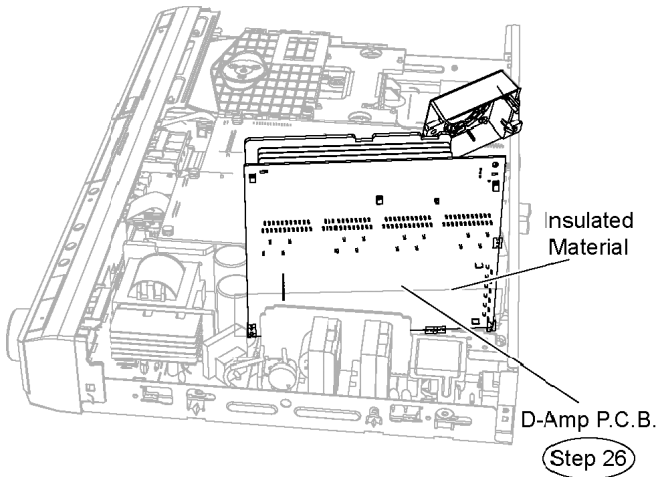
**Step 25** Connect 4P cable at the connector (CN2013) on Main P.C.B.

**Step 26** Connect 12P cable at the connector (CN7000) on Mic P.C.B.

**Step 27** Connect the fan unit at the connector (CN5501) on D-Amp P.C.B.



**Step 28** Position D-Amp P.C.B. with insulated material according to the diagram shown.



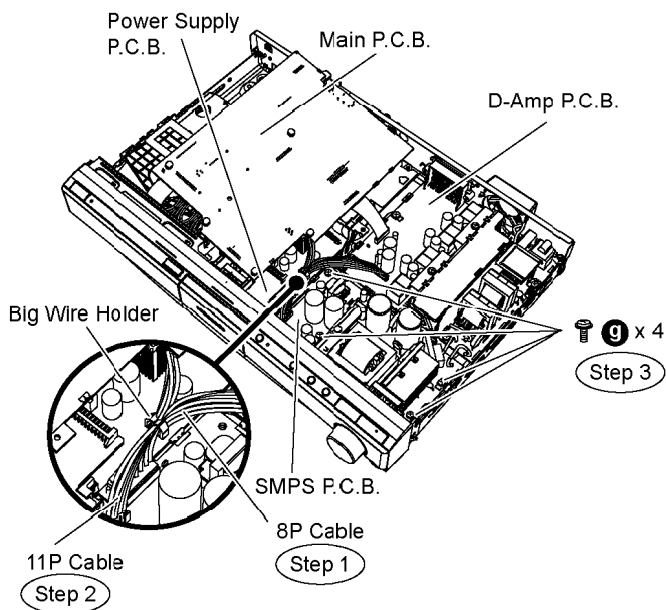
## 12.3. Checking & Repairing SMPS P.C.B.

- Follow (Step 1) to (Step 10) of Item 12.2.

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

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

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



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

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

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

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

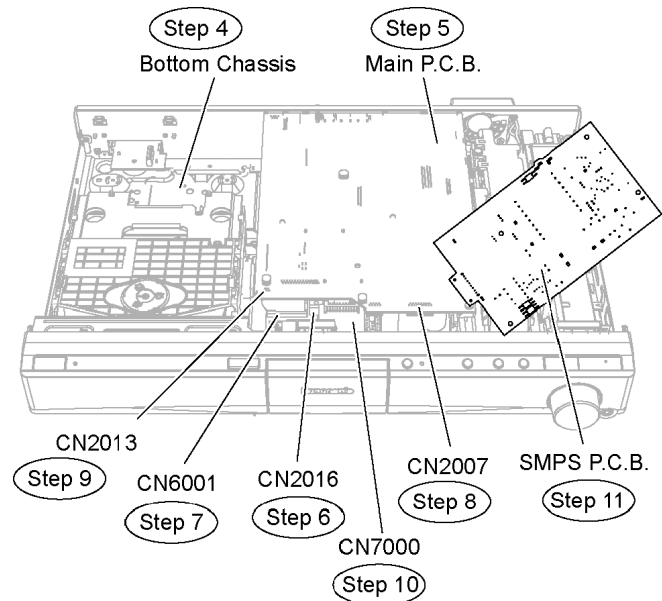
**Step 8** Connect 17P cable at the connector (CN2007) on Main P.C.B.

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

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

P.C.B.

**Step 11** Position SMPS P.C.B. according to the diagram shown.



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

**Step 1** Remove the top cabinet.

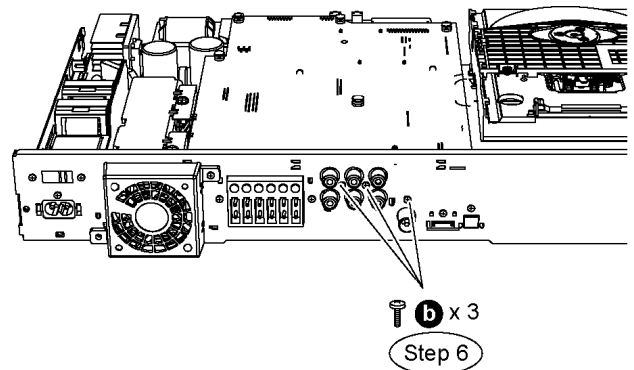
**Step 2** Remove the front panel.

**Step 3** Remove Panel P.C.B.

**Step 4** Remove Power Button P.C.B.

**Step 5** Remove Mic P.C.B.

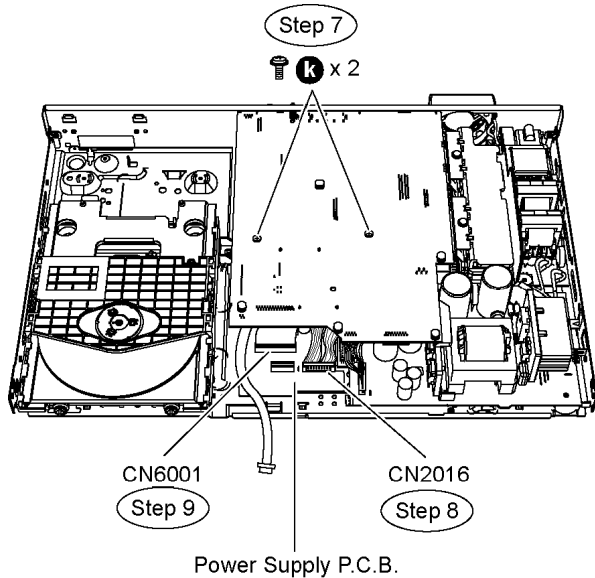
**Step 6** Remove 3 screws at rear panel.



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

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

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



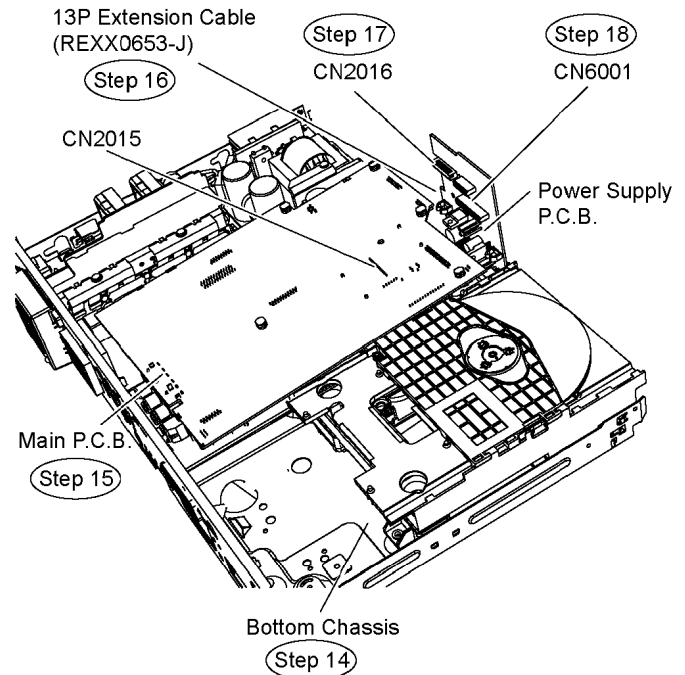
**Step 10** Detach Main P.C.B. from the rear panel and position it according to the diagram shown.

**Step 11** Remove 5P USB cable (USB P.C.B. to DVD Module P.C.B.) from the small wire holder.

**Step 12** Remove 8P cable (SMPS P.C.B. to D-Amp P.C.B.) from the big wire holder.

**Step 13** Remove 2 screws on Power Supply P.C.B.

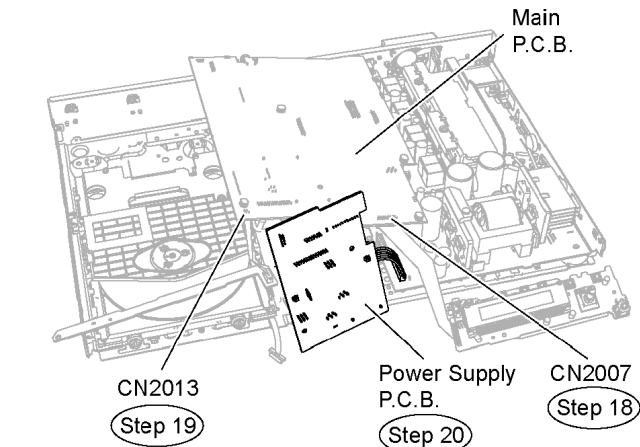
**Step 18** Connect 28P cable at the connector (CN6001) on Power Supply P.C.B.



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

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

**Step 21** Position Power Supply P.C.B. according to the diagram shown.



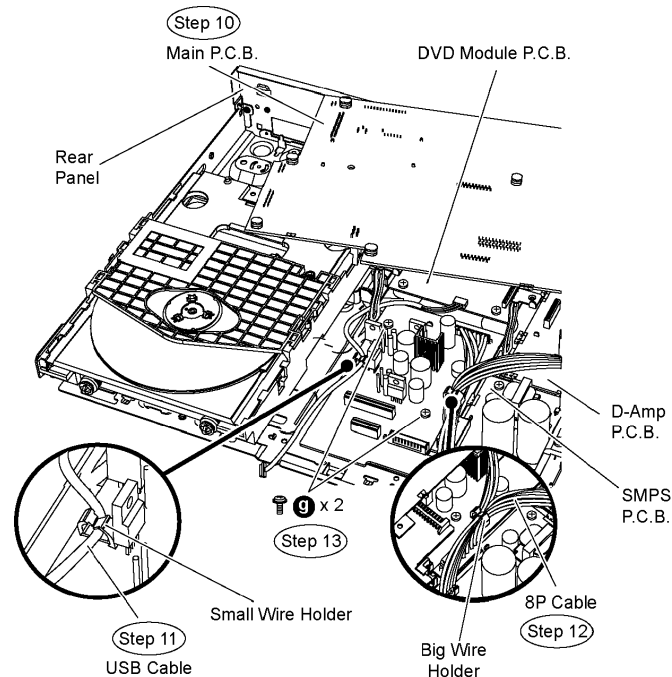
## 12.5. Checking & Repairing DVD Module P.C.B.

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

**Step 1** Remove the top cabinet.

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

**Step 3** Release the catches and remove the fan unit.

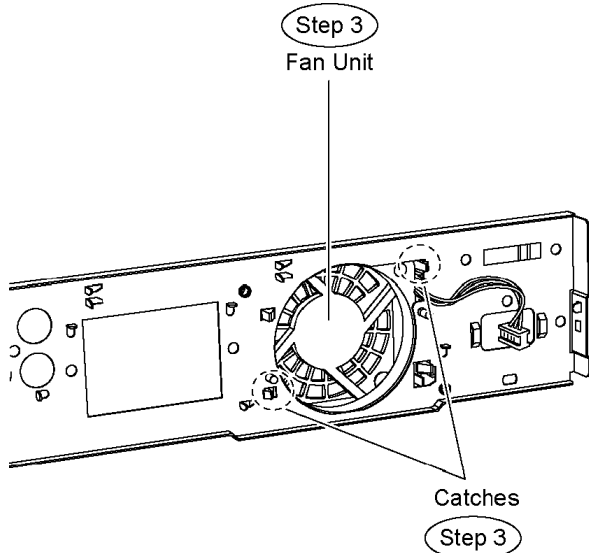


**Step 14** Detach Power Supply P.C.B. from the bottom chassis and flip it vertically.

**Step 15** Position Main P.C.B. according to the diagram shown.

**Step 16** Attach original cable with extension cable REXX0653-J (13P cable from CN2015 to CN2016)

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



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

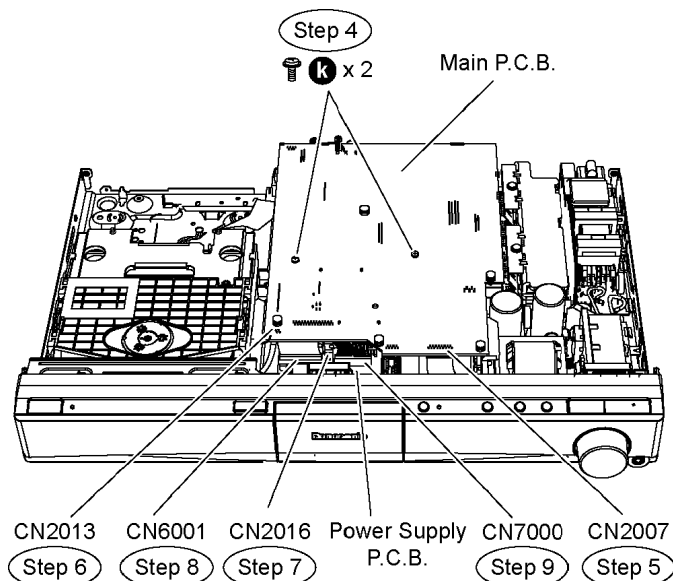
**Step 5** Detach 17p cable at the connector (CN2007) on Main P.C.B.

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

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

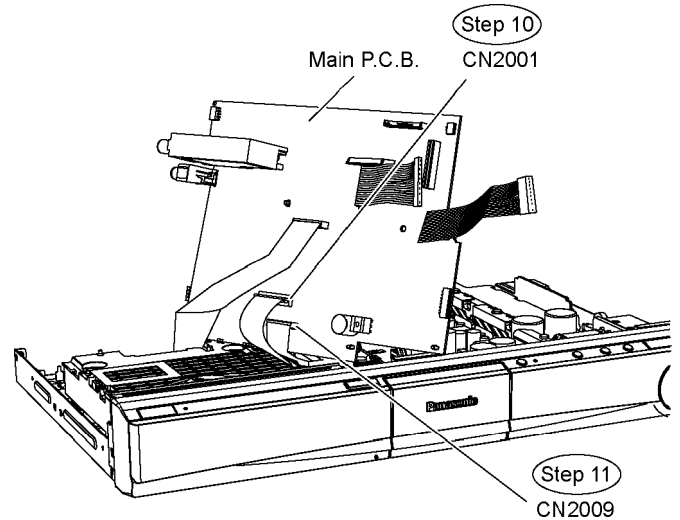
**Step 8** Detach 28P cable at the connector (CN6001) on Power Supply P.C.B.

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



**Step 10** Turn over Main P.C.B. to detach 50P cable at the connector (CN2001).

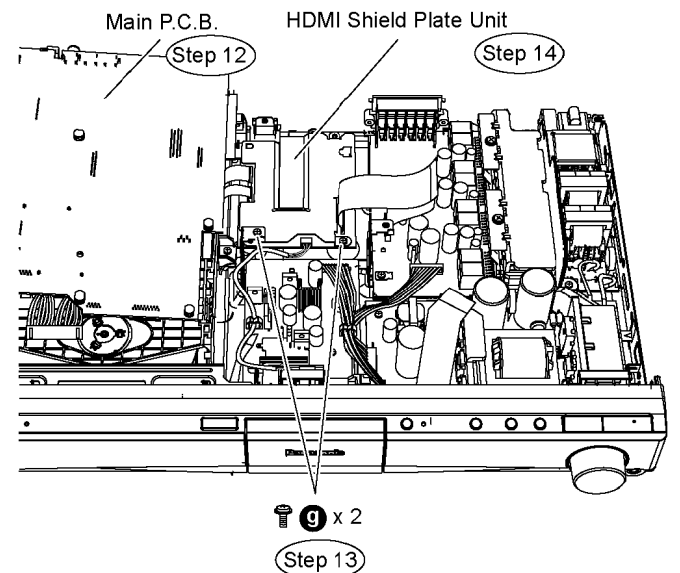
**Step 11** Turn over Main P.C.B. to detach 17P cable at the connector (CN2009).



**Step 12** Move aside Main P.C.B. and position it according to the diagram shown.

**Step 13** Remove 2 screws from the HDMI shield plate unit.

**Step 14** Remove the HDMI shield plate unit.



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

**Step 15** Move Main P.C.B. in the direction of arrow.

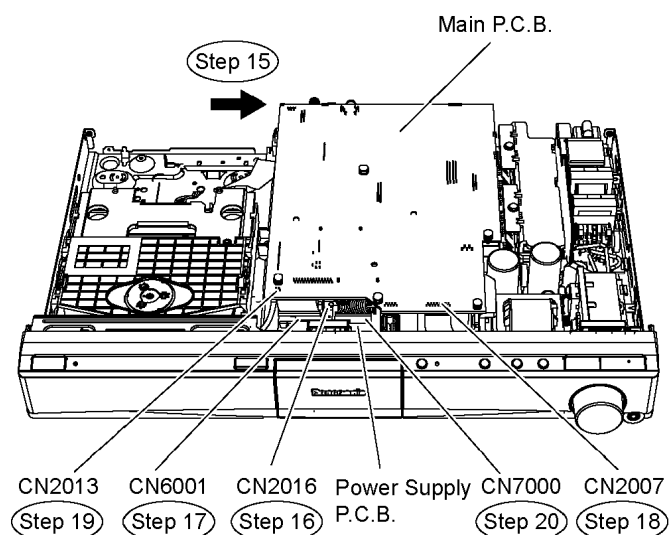
**Step 16** Connect 13P cable at the connector (CN2016) on Power Supply P.C.B.

**Step 17** Connect 28P cable at the connector (CN6001) on Power Supply P.C.B.

**Step 18** Connect 17P cable at the connector (CN2007) on Main P.C.B.

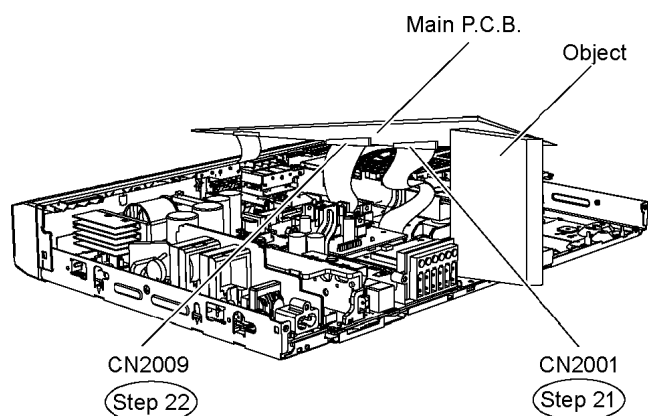
**Step 19** Connect 4P cable at the connector (CN2013) on Main P.C.B.

**Step 20** Connect 12P cable at the connector (CN7000) on Mic P.C.B.



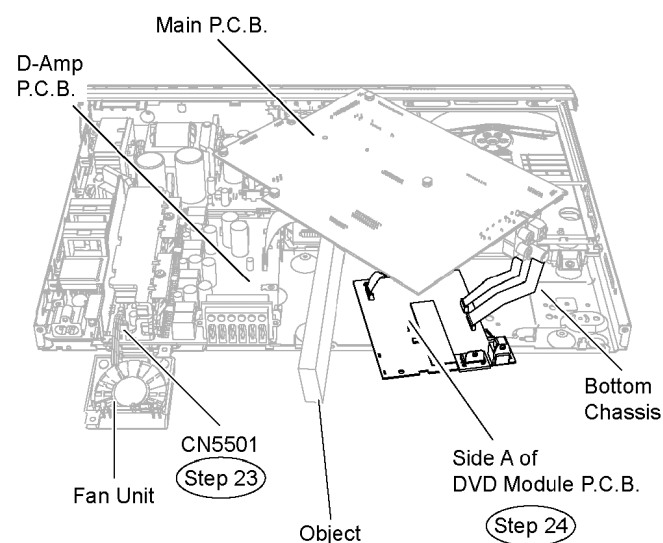
**Step 21** Connect 50P cable at the connector (CN2001) on Main P.C.B.

**Step 22** Connect 17P cable at the connector (CN2009) on Main P.C.B.



**Step 23** Connect the fan unit at the connector (CN5501) on D-Amp P.C.B.

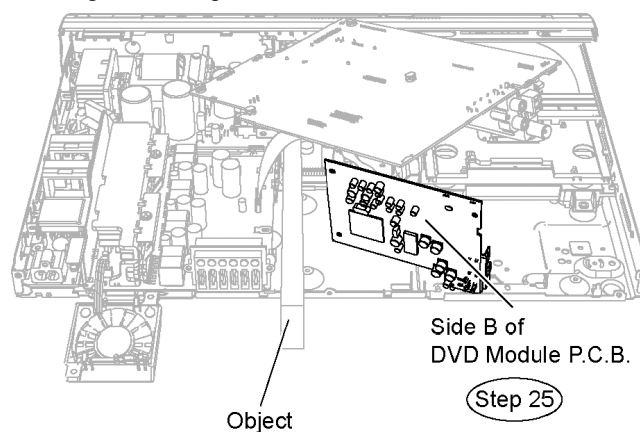
**Step 24** Detach DVD Module P.C.B. from the bottom chassis and position its side A according to the diagram shown.



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

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

**Step 25** Flip DVD Module P.C.B. to its side B and position it according to the diagram shown..



## 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<br>Tilt adjustment screw | T01 (inner periphery) play<br>T30 (center periphery)<br>T43 (outer periphery) play | DVDT-S20 [SPG] |
| Measuring equipment                             | Adjustment value                                     |                                                                                    |                |
| None (Main unit display for servicing is used.) |                                                      | Adjust to the minimum jitter value.                                                |                |

#### 13.4.1.1. Adjustment procedure

1. While pressing STOP button on the main unit, press "5" on the remote control unit.
2. Confirm that "J\_xxx/yyy\_zz" (Display 1/Display 2) is shown on the front display.

**For your information:**

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

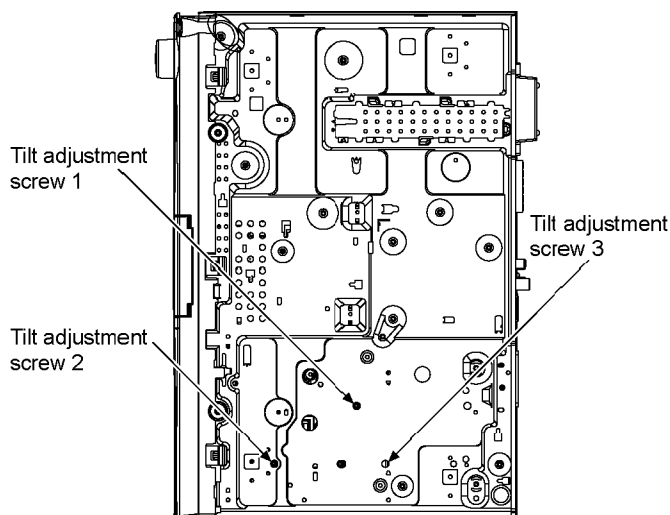
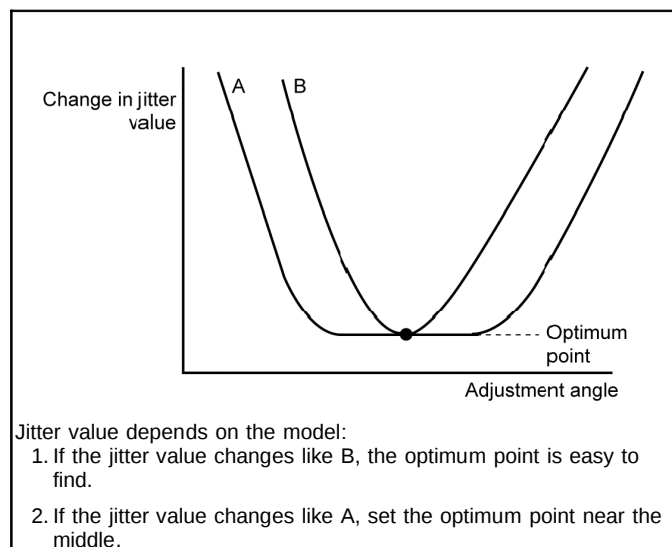
**Note:**

Jitter value appears on the front display.

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

#### 13.4.1.2. Important points

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

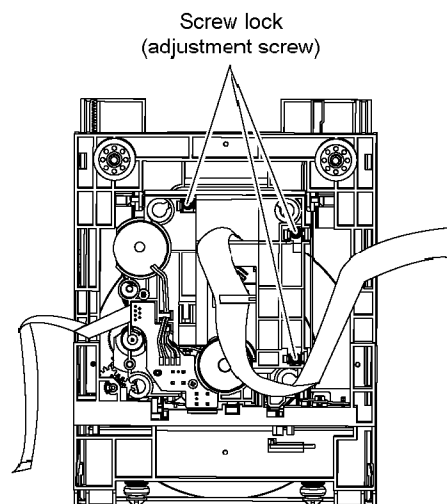


#### 13.4.1.3. Check after adjustment

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

#### 13.4.1.4. Procedure for screw lock

1. After adjustment, remove top cover, tray, 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 Voltage and Waveform Chart

## 14.1. DVD Module P.C.B.

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

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

PT465GC/GCS/GCT/GS DVD MODULE P.C.B.

## 14.2. D-Amp P.C.B.

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

PT465GC/GCS/GCT/GS D-AMP P.C.B.

### 14.3. 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 | 1.7    | 0   | 5.2   | 5.2 | 5.2 | 0   | 1.6   | 0   | 0   | 1.7 | 5.2   | 5.2 | 2.6   | 0   | -     | 5.2 | 5.2 | 5.2 | 3.8 | 1.7 |  |  |
| STANDBY | 1.7    | 0   | 5.2   | 5.2 | 5.2 | 0   | 1.6   | 0   | 0   | 1.6 | 5.2   | 5.1 | 2.6   | 0   | -     | 5.2 | 5.2 | 5.2 | 3.8 | 1.6 |  |  |
| REF NO. | 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      | 5.2 | 0     | 0   | 0   | 5.2 | 0     | 4.6 | 4.2 | 1.8 | 0     | 1.6 | 5.2   | 5.2 | 0     | 1.7 | 5.2 | 5.2 | 5.2 | 5.2 |  |  |
| STANDBY | 0      | 5.2 | 0     | 0   | 0   | 5.2 | 0     | 4.6 | 4.3 | 1.8 | 0     | 1.7 | 5.2   | 5.1 | 0     | 1.8 | 5.2 | 5.2 | 5.2 | 5.1 |  |  |
| REF NO. | 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   | 5.1   | 0   | 0   | 0   | 5.2   | 0   | 0   | 1.7 | 5.2   | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 1.9 |  |  |
| STANDBY | 0      | 5.2 | 5.0   | 5.0 | 0   | 0   | 5.2   | 0   | 0   | 1.8 | 5.1   | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 1.9 |  |  |
| REF NO. | IC2001 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 61     | 62  | 63    | 64  | 65  | 66  | 67    | 68  | 69  | 70  | 71    | 72  | 73    | 74  | 75    | 76  | 77  | 78  | 79  | 80  |  |  |
| CD PLAY | 5.2    | 5.2 | 5.2   | 0   | 0   | 1.4 | 0     | 5.0 | 0   | 0   | 5.2   | 1.8 | 0     | 5.2 | 5.7   | 5.2 | 0   | 0   | 0   | 5.2 |  |  |
| STANDBY | 5.2    | 5.2 | 5.2   | 0   | 0   | 1.4 | 0     | 5.0 | 5.1 | 0   | 5.1   | 1.7 | 0     | 5.2 | 5.7   | 5.2 | 0   | 5.0 | 0   | 5.2 |  |  |
| REF NO. | IC2001 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 81     | 82  | 83    | 84  | 85  | 86  | 87    | 88  | 89  | 90  | 91    | 92  | 93    | 94  | 95    | 96  | 97  | 98  | 99  | 100 |  |  |
| CD PLAY | 2.8    | 1.7 | 0     | 0   | 4.2 | 2.6 | 1.9   | 5.2 | 2.6 | 0   | 2.6   | 1.8 | 0     | 2.6 | 1.3   | 0   | 3.6 | 5.2 | 5.2 | 0   |  |  |
| STANDBY | 2.8    | 1.7 | 0     | 0   | 4.2 | 2.6 | 1.9   | 5.1 | 2.6 | 0   | 2.6   | 1.7 | 0     | 2.6 | 1.3   | 0   | 3.6 | 5.2 | 5.2 | 0   |  |  |
| REF NO. | IC2002 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 1      | 2   | 3     | 4   | 5   |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| CD PLAY | 5.2    | 0   | 5.2   | 0   | 3.3 |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| STANDBY | 5.2    | 0   | 5.1   | 0   | 3.3 |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| REF NO. | IC2003 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 1      | 2   | 3     | 4   | 5   | 6   | 7     | 8   |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| CD PLAY | 0      | 0   | 0     | 0   | 0   | 1.8 | 0     | 5.2 |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| STANDBY | 0      | 0   | 0     | 0   | 0   | 1.8 | 0     | 5.2 |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| REF NO. | 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   | 0     | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| STANDBY | 0      | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| REF NO. | 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      | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| STANDBY | 0      | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| REF NO. | 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   | 0   | 1.2 | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| STANDBY | 0      | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0   | 1.2 | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 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      | 5.2 | 0     | 5.2 | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| STANDBY | 0      | 5.2 | 0     | 5.2 | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| REF NO. | 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      | 0   | 6.8   | 6.8 | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| STANDBY | 0      | 0   | 6.8   | 6.9 | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0   | 0   | 0   | 0   |  |  |
| REF NO. | IC2102 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 1      | 2   | 3     | 4   | 5   | 6   | 7     | 8   |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| CD PLAY | 0      | 0   | 0     | 6.8 | 0   | 0   | 0     | 6.8 |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| STANDBY | 0      | 0   | 0     | 6.8 | 0   | 0   | 0     | 6.9 |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| REF NO. | IC2501 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 1      | 2   | 3     | 4   | 5   | 6   | 7     | 8   |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| CD PLAY | 0      | 0   | 0     | 6.7 | 0   | 0   | 0     | 6.8 |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| STANDBY | 0      | 0   | 0     | 6.7 | 0   | 0   | 0     | 6.9 |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| REF NO. | IC2801 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 1      | 2   | 3     | 4   | 5   | 6   | 7     | 8   | 9   | 10  | 11    | 12  | 13    | 14  | 15    | 16  | 17  | 18  | 19  | 20  |  |  |
| CD PLAY | 5.1    | 0   | 0     | 2.2 | 5.0 | 0.1 | 0     | 1.5 | 2.2 | 0   | 1.5   | 0   | 2.2   | 5.0 | 2.2   | 5.1 | 2.3 | 2.3 | 0   | 2.3 |  |  |
| STANDBY | 5.1    | 0   | 0     | 2.2 | 5.0 | 0.1 | 0     | 1.5 | 2.2 | 0   | 1.5   | 0   | 2.2   | 5.5 | 2.2   | 5.1 | 2.3 | 2.3 | 0   | 2.3 |  |  |
| REF NO. | IC2801 |     |       |     |     |     |       |     |     |     |       |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | 21     | 22  | 23    | 24  | 25  | 26  | 27    | 28  | 29  | 30  | 31    | 32  |       |     |       |     |     |     |     |     |  |  |
| CD PLAY | 2.3    | 0   | 1.4   | 1.4 | 0   | 1.4 | 1.4   | 0   | 1.5 | 1.5 | 0     | 2.3 |       |     |       |     |     |     |     |     |  |  |
| STANDBY | 2.3    | 0   | 1.4   | 1.4 | 0   | 1.4 | 1.4   | 0   | 1.5 | 1.5 | 0     | 2.3 |       |     |       |     |     |     |     |     |  |  |
| REF NO. | Q2001  |     | Q2002 |     |     |     | Q2003 |     |     |     | Q2004 |     |       |     | Q2005 |     |     |     |     |     |  |  |
| MODE    | E      | C   | B     |     | E   | C   | B     |     | E   | C   | B     |     | E     | C   | B     |     | E   | C   | B   |     |  |  |
| CD PLAY | 5.4    | 1.3 | 5.1   |     | 3.5 | 5.2 | 4.2   |     | 0   | 5.2 | 0     |     | 0     | 1.6 | 0     |     | 3.3 | 1.6 | 5.2 |     |  |  |
| STANDBY | 5.4    | 1.3 | 5.1   |     | 3.5 | 5.2 | 4.2   |     | 0   | 5.1 | 0     |     | 0     | 1.6 | 0     |     | 3.3 | 1.6 | 5.2 |     |  |  |
| REF NO. | Q2006  |     | Q2007 |     |     |     | Q2013 |     |     |     | Q2030 |     |       |     |       |     |     |     |     |     |  |  |
| MODE    | E      | C   | B     |     | E   | C   | B     |     | E   | C   | B     |     | E     | C   | B     |     |     |     |     |     |  |  |
| CD PLAY | 0      | 0   | 4.3   |     | 0   | 5.2 | 0     |     | 3.6 | 5.2 | 4.3   |     | 3.6   | 5.2 | 4.3   |     |     |     |     |     |  |  |
| STANDBY | 0      | 5.2 | 0     |     | 0   | 5.2 | 0     |     | 3.6 | 5.2 | 4.3   |     | 3.6   | 5.2 | 4.3   |     |     |     |     |     |  |  |
| REF NO. | Q2101  |     |       |     |     |     | Q2102 |     |     |     |       |     | Q2096 |     |       |     |     |     |     |     |  |  |
| MODE    | 1      | 2   | 3     | 4   | 5   | 6   |       | 1   | 2   | 3   | 4     | 5   | 6     |     | E     | C   | B   |     |     |     |  |  |
| CD PLAY | 0      | 4.5 | 0     | 0   | 4.5 | 0   |       | 0   | 4.5 | 0   | 0     | 4.5 | 0     |     | 0     | 0   | 0.6 |     |     |     |  |  |
| STANDBY | 0      | 1.0 | 0     | 0   | 1.0 | 0   |       | 0   | 1.0 | 0   | 0     | 1.0 | 0     |     | 0     | 0   | 0.6 |     |     |     |  |  |

| REF NO. | Q2097 |     |   |  | Q2203 |     |   |  | Q2501 |     |     |  | Q2502 |     |     |  | Q2504 |     |   |  |
|---------|-------|-----|---|--|-------|-----|---|--|-------|-----|-----|--|-------|-----|-----|--|-------|-----|---|--|
| MODE    | E     | C   | B |  | E     | C   | B |  | E     | C   | B   |  | E     | C   | B   |  | E     | C   | B |  |
| CD PLAY | 0     | 5.8 | 0 |  | 0     | 4.5 | 0 |  | 0     | 0   | 5.0 |  | 0     | 0   | 5.0 |  | 0     | 4.5 | 0 |  |
| STANDBY | 0     | 5.7 | 0 |  | 1.5   | 1.5 | 0 |  | 0     | 0   | 5.0 |  | 0     | 0   | 5.0 |  | 1.5   | 1.5 | 0 |  |
| REF NO. | Q2505 |     |   |  | Q2801 |     |   |  | Q2909 |     |     |  | Q2919 |     |     |  | Q2923 |     |   |  |
| MODE    | E     | C   | B |  | E     | C   | B |  | E     | C   | B   |  | E     | C   | B   |  | E     | C   | B |  |
| CD PLAY | 0     | 4.6 | 0 |  | 0     | 5.0 | 0 |  | 0     | 5.1 | 0   |  | 0     | 5.1 | 0   |  | 0     | 0   | 2 |  |
| STANDBY | 1.4   | 1.3 | 0 |  | 0     | 5.0 | 0 |  | 0     | 5.1 | 0   |  | 0     | 5.2 | 0   |  | 0     | 0   | 2 |  |
| REF NO. | Q2924 |     |   |  |       |     |   |  |       |     |     |  |       |     |     |  |       |     |   |  |
| MODE    | E     | C   | B |  |       |     |   |  |       |     |     |  |       |     |     |  |       |     |   |  |
| CD PLAY | 0     | 5.1 | 0 |  |       |     |   |  |       |     |     |  |       |     |     |  |       |     |   |  |
| STANDBY | 0     | 5.1 | 0 |  |       |     |   |  |       |     |     |  |       |     |     |  |       |     |   |  |

PT465GC/GCS/GCT/GS MAIN P.C.B.

## 14.4. Panel P.C.B.

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

PT465GC/GCS/GCT/GS PANEL P.C.B.

## 14.5. Power Supply P.C.B.

| REF NO. | IC2900 |      |      |     |       |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
|---------|--------|------|------|-----|-------|------|------|-----|-------|------|------|--|-------|-----|-----|--|-------|-----|-----|--|
| MODE    | 1      | 2    | 3    | 4   | 5     |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| CD PLAY | 16.6   | 8.8  | 0    | 1   | 15.9  |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| STANDBY | 16.8   | 8.8  | 0    | 1   | 16.1  |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| REF NO. | IC2903 |      |      |     |       |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| MODE    | 1      | 2    | 3    | 4   | 5     |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| CD PLAY | 16.6   | 5.2  | 0    | 1   | 16    |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| STANDBY | 16.8   | 5.2  | 0    | 1   | 16.2  |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| REF NO. | IC6101 |      |      |     |       |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| MODE    | 1      | 2    | 3    | 4   | 5     | 6    | 7    | 8   |       |      |      |  |       |     |     |  |       |     |     |  |
| CD PLAY | 3.4    | 3.4  | 3.4  | 0   | 3.4   | 3.4  | 3.4  | 6.8 |       |      |      |  |       |     |     |  |       |     |     |  |
| STANDBY | 3.4    | 3.4  | 3.4  | 0   | 3.4   | 3.4  | 3.4  | 6.8 |       |      |      |  |       |     |     |  |       |     |     |  |
| REF NO. | IC6601 |      |      |     |       |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| MODE    | 1      | 2    | 3    | 4   | 5     |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| CD PLAY | 1      | 0    | 6.8  | 1.7 | 1.7   |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| STANDBY | 1      | 0    | 6.8  | 1.7 | 1.7   |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| REF NO. | IC6602 |      |      |     |       |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| MODE    | 1      | 2    | 3    | 4   | 5     |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| CD PLAY | 0      | 5.2  | 0    | 0   | -     |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| STANDBY | 0      | 5.2  | 0    | 0   | -     |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| REF NO. | Q2900  |      |      |     | Q2901 |      |      |     | Q2902 |      |      |  | Q2903 |     |     |  | Q2904 |     |     |  |
| MODE    | E      | C    | B    |     | E     | C    | B    |     | E     | C    | B    |  | E     | C   | B   |  | E     | C   | B   |  |
| CD PLAY | 0      | 16.5 | -0.5 |     | -6.8  | -9.8 | -7.4 |     | 0     | -7.4 | -0.6 |  | 6.8   | 8.9 | 7.5 |  | 2.4   | 4.6 | 3.1 |  |
| STANDBY | 0      | 16.6 | -0.5 |     | -6.8  | -10  | -7.4 |     | 0     | -7.4 | -0.6 |  | 6.8   | 8.9 | 7.5 |  | 2.4   | 4.6 | 3.1 |  |
| REF NO. | Q2921  |      |      |     | Q2922 |      |      |     |       |      |      |  |       |     |     |  |       |     |     |  |
| MODE    | E      | C    | B    |     | E     | C    | B    |     |       |      |      |  |       |     |     |  |       |     |     |  |
| CD PLAY | 5.2    | 0    | 5.1  |     | 0     | 5.1  | 0    |     |       |      |      |  |       |     |     |  |       |     |     |  |
| STANDBY | 5.2    | 0    | 5.1  |     | 0     | 5.1  | 0    |     |       |      |      |  |       |     |     |  |       |     |     |  |

PT465GC/GCS/GCT/GS POWER SUPPLY P.C.B.

## 14.6. SMPS P.C.B.

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

PT465GC/GCS/GCT/GS SMPS P.C.B.

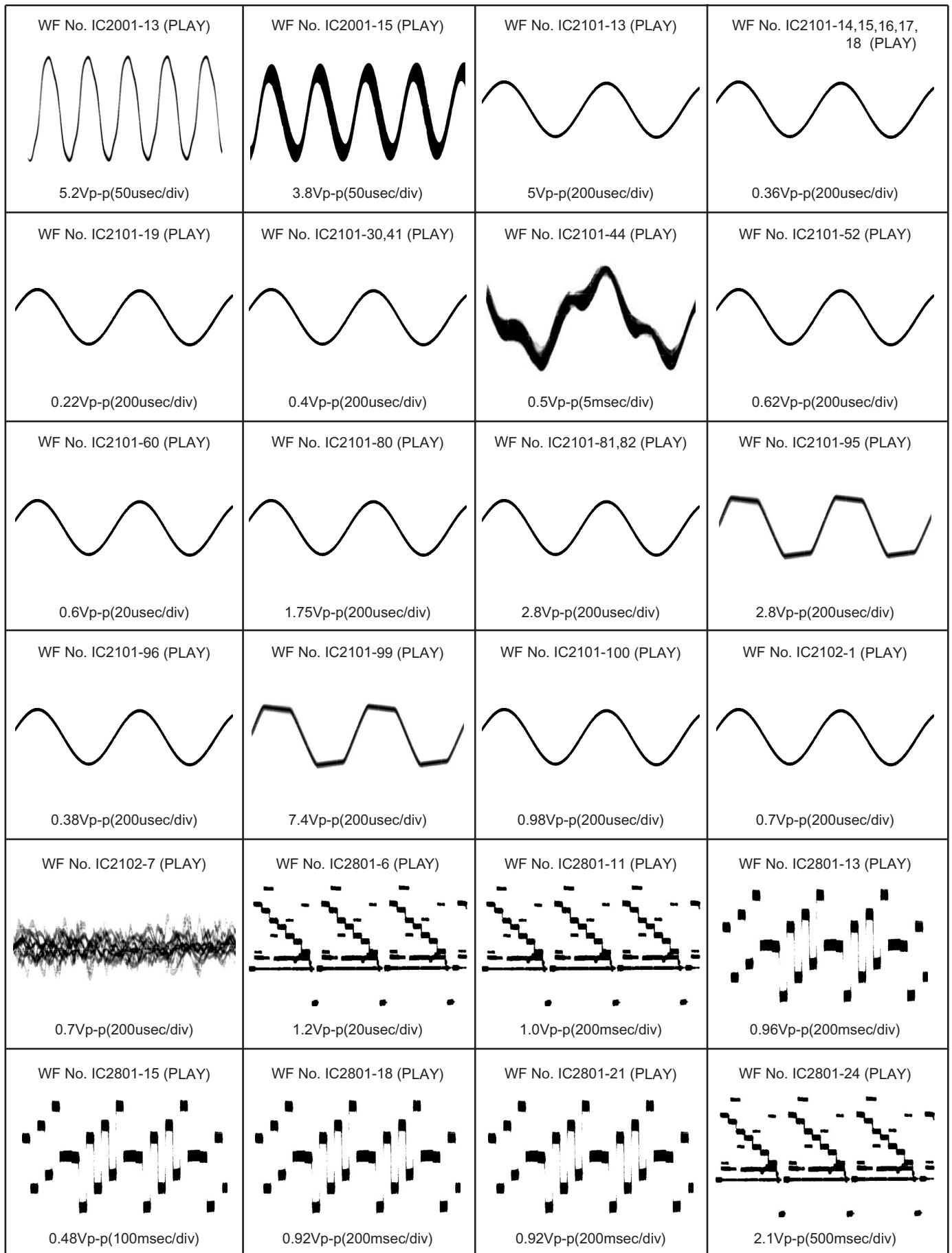
## 14.7. Mic P.C.B.

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

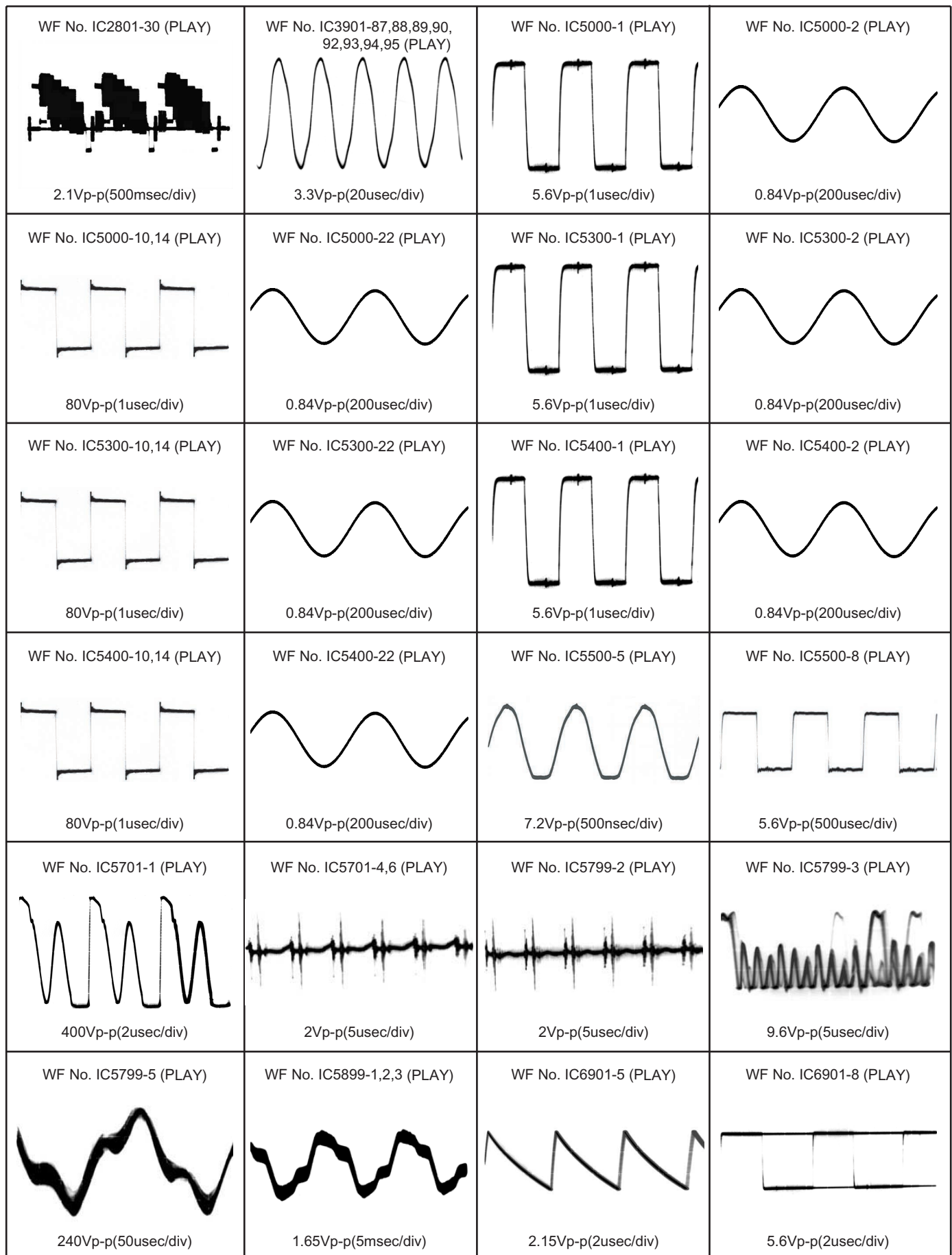
PT465GC/GCS/GCT/GS MIC P.C.B.

## 14.8. Waveform Chart

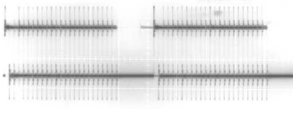
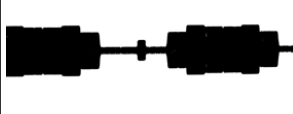
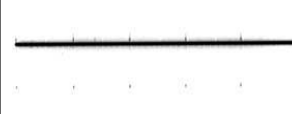
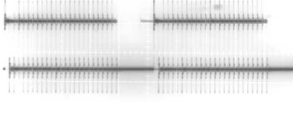
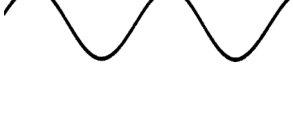
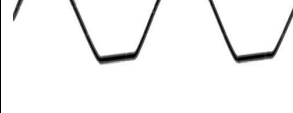
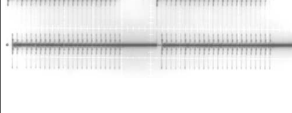
### 14.8.1. Waveform 1



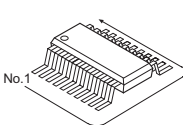
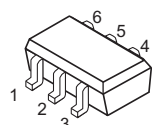
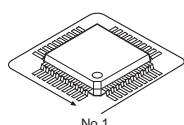
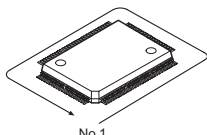
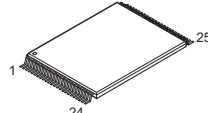
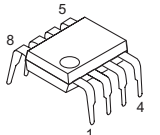
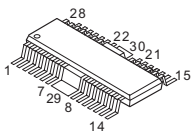
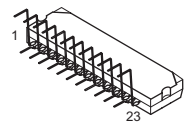
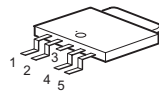
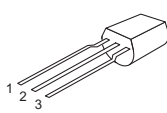
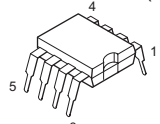
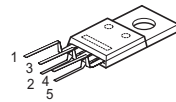
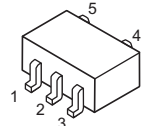
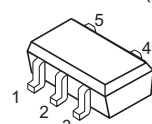
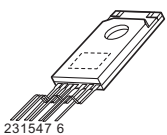
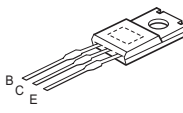
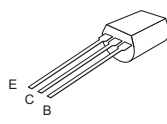
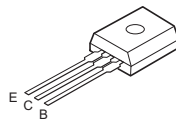
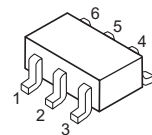
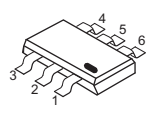
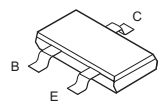
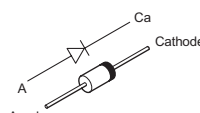
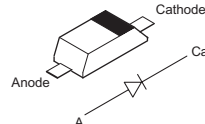
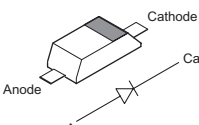
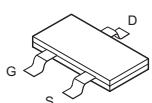
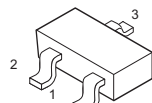
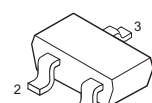
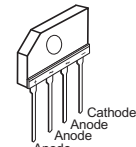
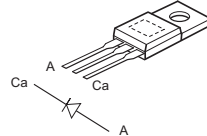
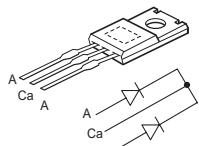
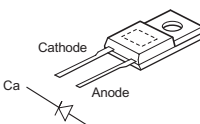
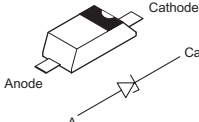
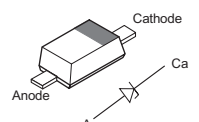
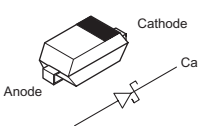
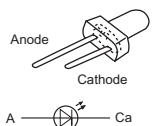
## 14.8.2. Waveform 2



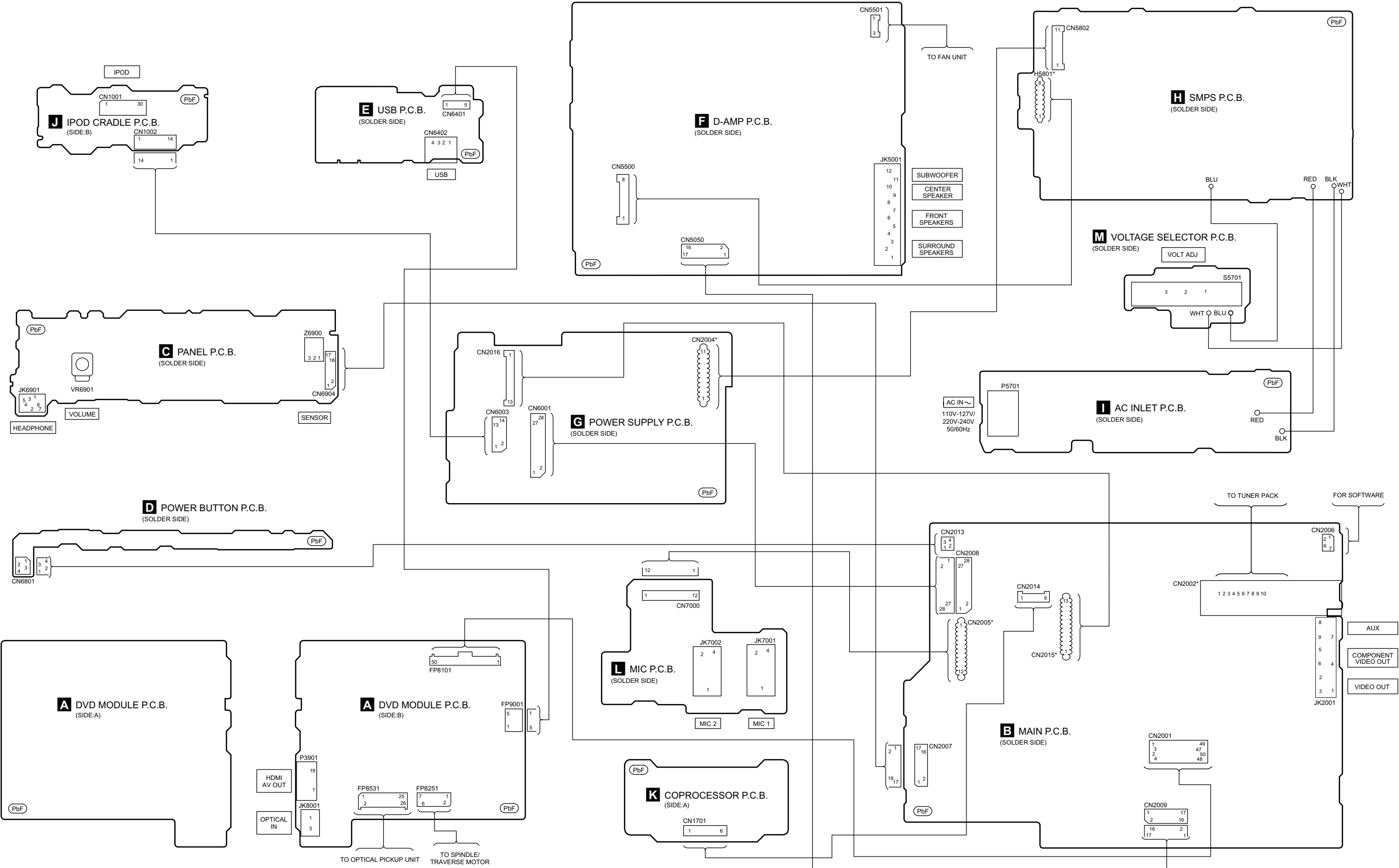
### 14.8.3. Waveform 3

|                                                                                                                                                   |                                                                                                                                               |                                                                                                                                                           |                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>WF No. IC8001-59,62,63,64 (PLAY)</p>  <p>6Vp-p(2usec/div)</p> | <p>WF No. IC8001-138 (PLAY)</p>  <p>1.05Vp-p(20usec/div)</p> | <p>WF No. IC8001-139 (PLAY)</p>  <p>0.95Vp-p(10usec/div)</p>            | <p>WF No. IC8001-144,146 (PLAY)</p>  <p>5.2Vp-p(500usec/div)</p> |
| <p>WF No. IC8421-9,10,11 (PLAY)</p>  <p>7.2Vp-p(2usec/div)</p>   | <p>WF No. IC8421-17 (PLAY)</p>  <p>2Vp-p(5msec/div)</p>      | <p>WF No. IC8421-18,19,20,21,22 (PLAY)</p>  <p>3.6Vp-p(200usec/div)</p> | <p>WF No. IC8421-24 (PLAY)</p>  <p>3.6Vp-p(200usec/div)</p>      |
| <p>WF No. IC8421-25 (PLAY)</p>  <p>0.5Vp-p(200usec/div)</p>      | <p>WF No. IC8422-1 (PLAY)</p>  <p>2.9Vp-p(200usec/div)</p>   | <p>WF No. IC8422-2 (PLAY)</p>  <p>0.4Vp-p(200usec/div)</p>              | <p>WF No. IC8422-9 (PLAY)</p>  <p>7.2Vp-p(2usec/div)</p>         |

# 15 Illustration of IC's, Transistors and Diodes

|                                                                                                                                           |                                                                                                                                                                   |                                                                                                                                                                 |                                                                                                                                                                                                             |                                                                                                                                                                            |                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>No.1</p>                                             | C0ABBB000230 (8p)<br>C0DBZYY00018 (8p)<br>C0DBZYY00266 (8p)<br>C0FBAK000026 (16p)<br>C0FBBK000044 (30p)<br>C0JBAB000902 (14p)                                     | C0JBAF000716 (14p)<br>C0JBAB000908 (6p)                                                                                                                         |  <p>1 2 3 4 5 6</p>                                                                                                        |  <p>No.1</p>                                                                            | C0HBB0000057 (44p)<br>RFKWPT460E (100p)<br>MFI341S2095 (40p)<br>MN2DS0018MP (216p)<br>MN864702A (128p)                                           |
| C1AB00002735 (100p)<br> <p>No.1</p>                       | RFKWMH32D320 (GCS/GCT) (48p)<br>RFKWMH32D323 (GC/GS) (48p)<br> <p>1 24 25 48</p> | C0AABB000125 (8P)<br>C0ABBA000168 (8P)<br>C3EBGC000056 (8P)<br> <p>1 4 5 8</p> | C0GBG0000048 (28P)<br> <p>1 14 15 28 29 30 31</p>                                                                          | C1BA00000487 (23P)<br> <p>1 23</p>                                                      | C0CBCDG000003 (5p)<br>C0DBEHG000006 (5p)<br> <p>1 2 3 4 5</p> |
| C0DABFC000002 (3p)<br>C0DAEMZ00001 (3p)<br> <p>1 2 3</p> | MIP4110MSSCF (8P)<br>C3EBGC000056 (8P)<br> <p>1 4 5 8</p>                        | C0DAAMH00012 (5p)<br>C0DAAYY00042 (5p)<br> <p>1 2 3 4 5</p>                    | C0ABAA000114 (5p)<br>C0CBCBC00140 (5p)<br>C0CBCDC00063 (5p)<br>C0EBA0000039 (5p)<br>C0EBE0000456 (5p)<br> <p>1 2 3 4 5</p> | C0JBAA000501 (5p)<br>C0JBAA000502 (5p)<br>C0JBAB000907 (5p)<br> <p>1 2 3 4 5</p>        |                                                                                                                                                  |
| C5HACYY000003 (7p)<br> <p>231547 6</p>                  | B1BABK000001<br> <p>E C B</p>                                                   | B1BACG000023<br>B1BCCG000002<br> <p>B C E</p>                                 | 2SC3940ARA<br> <p>E C B</p>                                                                                               | B1BACD000018<br> <p>E C B</p>                                                          | B1HBECA00004<br> <p>1 2 3 4 5 6</p>                          |
| XP0621400L<br> <p>3 2 1 4 5 6</p>                      | B1ABCF000176<br>B1ABGC000005<br>B1ADCE000012<br> <p>B C E</p>                  | B1ADCF000001<br>B1ADGB000008<br>B1GBCFJJ0051<br>B1GBCFJN0033<br>B1GBCFLL0037<br>B1GDCFGA0018                                                                    | UNR221400L<br>UNR521100L<br>2SA207700L<br>2SB1218ARL<br>2SC584500L<br>2SD0601AHL<br>2SD1819AOL                                                                                                              | B0EAKM000117<br>B0EAMM000057<br>B0HAMP000094<br>B0JAME000029<br> <p>Anode Cathode</p> | B0ACCK000005<br> <p>Anode Cathode</p>                       |
| MA2J11100L<br>MA2J72800L<br> <p>Anode Cathode</p>       | B1CFHA000002<br> <p>G S D</p>                                                  | B1GDCFJJ0002<br> <p>1 2 3</p>                                                | B1CFGC000004<br> <p>1 2 3</p>                                                                                            | B0FBAR000041<br> <p>Anode Cathode</p>                                                 | B0ZAZ0000052<br> <p>Anode Cathode</p>                       |
| B0HBSM000043<br> <p>Anode Cathode</p>                   | B0HFRJ000012<br> <p>Anode Cathode</p>                                          |  <p>Anode Cathode</p>                                                        | B0BC010A0007<br>B0BC01200019<br>B0BC019A0007<br>B0BC035A0007<br>B0BC2R4A0006<br>B0BC3R400001<br>B0BC5R000009<br>B0BC6R100010<br>B0BC7R500001                                                                |  <p>Anode Cathode</p>                                                                 | MAZ80510ML<br>MAZ80750ML<br>MAZ81200ML<br>MAZ81800ML<br>MAZ82400HL                                                                               |
| B0JCAE000001<br>B0JCPD000025<br> <p>Anode Cathode</p>  | B3AAA0000803<br>B3ABA0000397<br> <p>Anode Cathode</p>                          |                                                                                                                                                                 |                                                                                                                                                                                                             |                                                                                                                                                                            |                                                                                                                                                  |

# 16 Wiring Connection Diagram



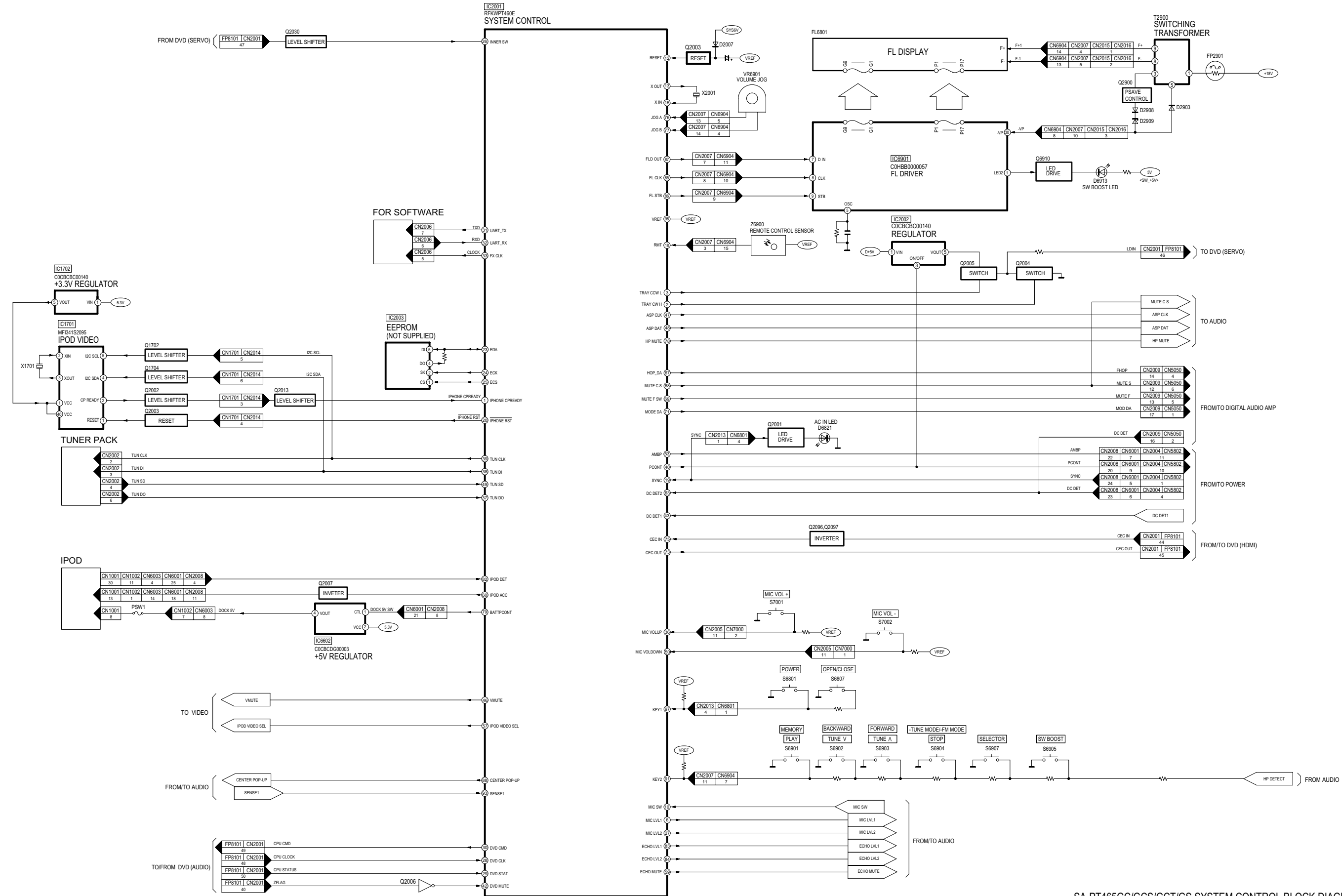
\* FOR INDICATION ONLY

SA-PT465GC/GCS/GCT/GS WIRING CONNECTION



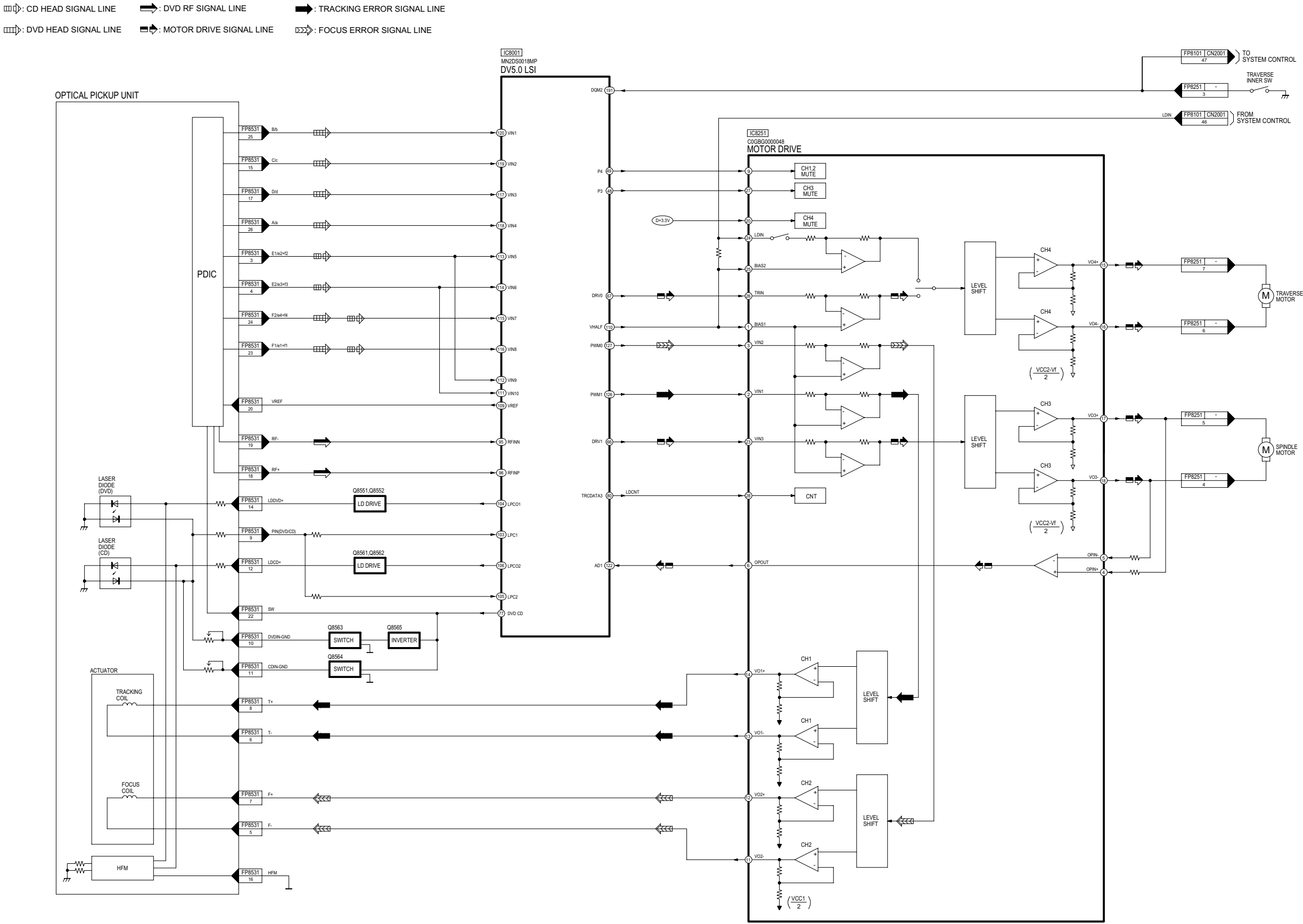
# 17 Block Diagram

## 17.1. System Control



SA-PT465GC/GCS/GCT/GS SYSTEM CONTROL BLOCK DIAGRAM

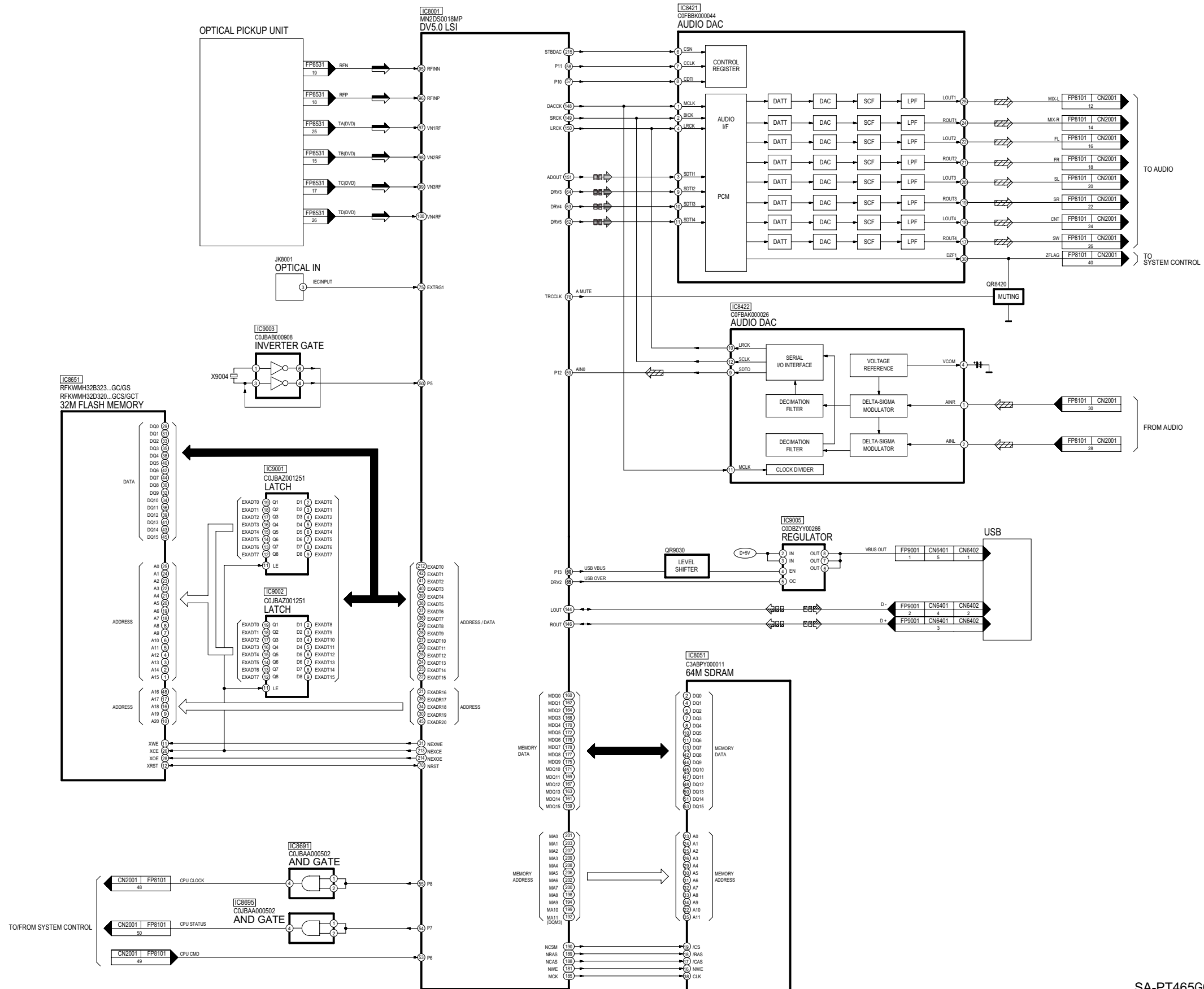
17.2. DVD (Servo)



SA-PT465GC/GCS/GCT/GS DVD (SERVO) BLOCK DIAGRAM

## 17.3. DVD (Audio)

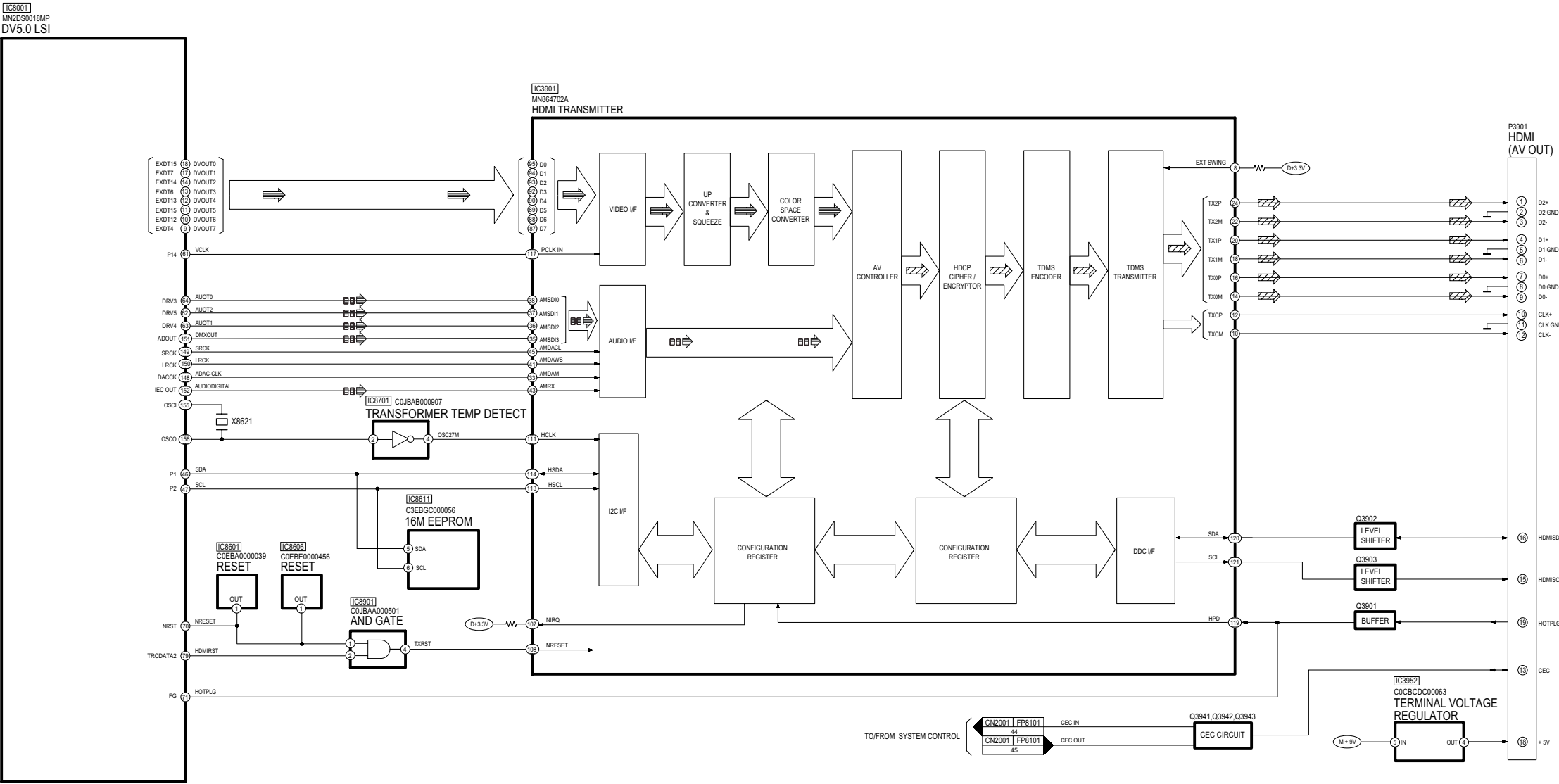
 : DVD RF SIGNAL LINE   
  : DVD AUDIO SIGNAL LINE   
  : MAIN SIGNAL LINE   
  : USB SIGNAL LINE



SA-PT465GC/GCS/GCT/GS DVD (AUDIO) BLOCK DIAGRAM

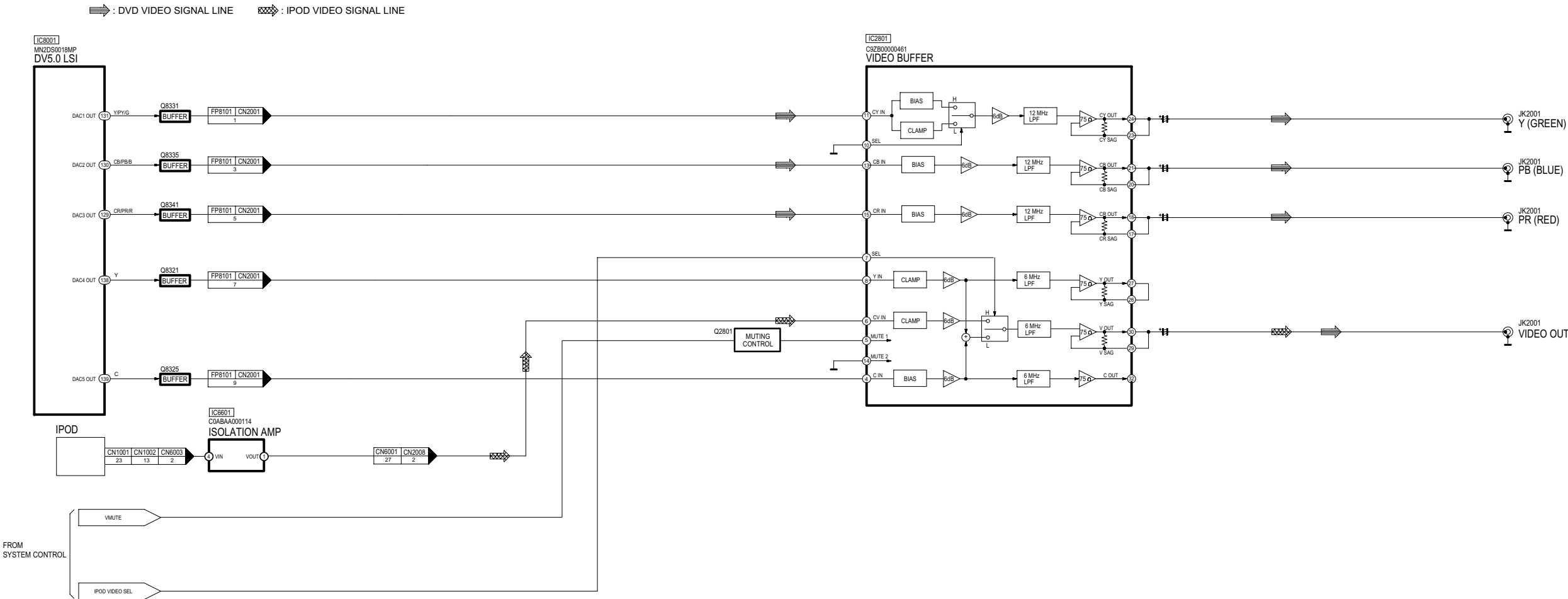
17.4. DVD (HDMI)

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

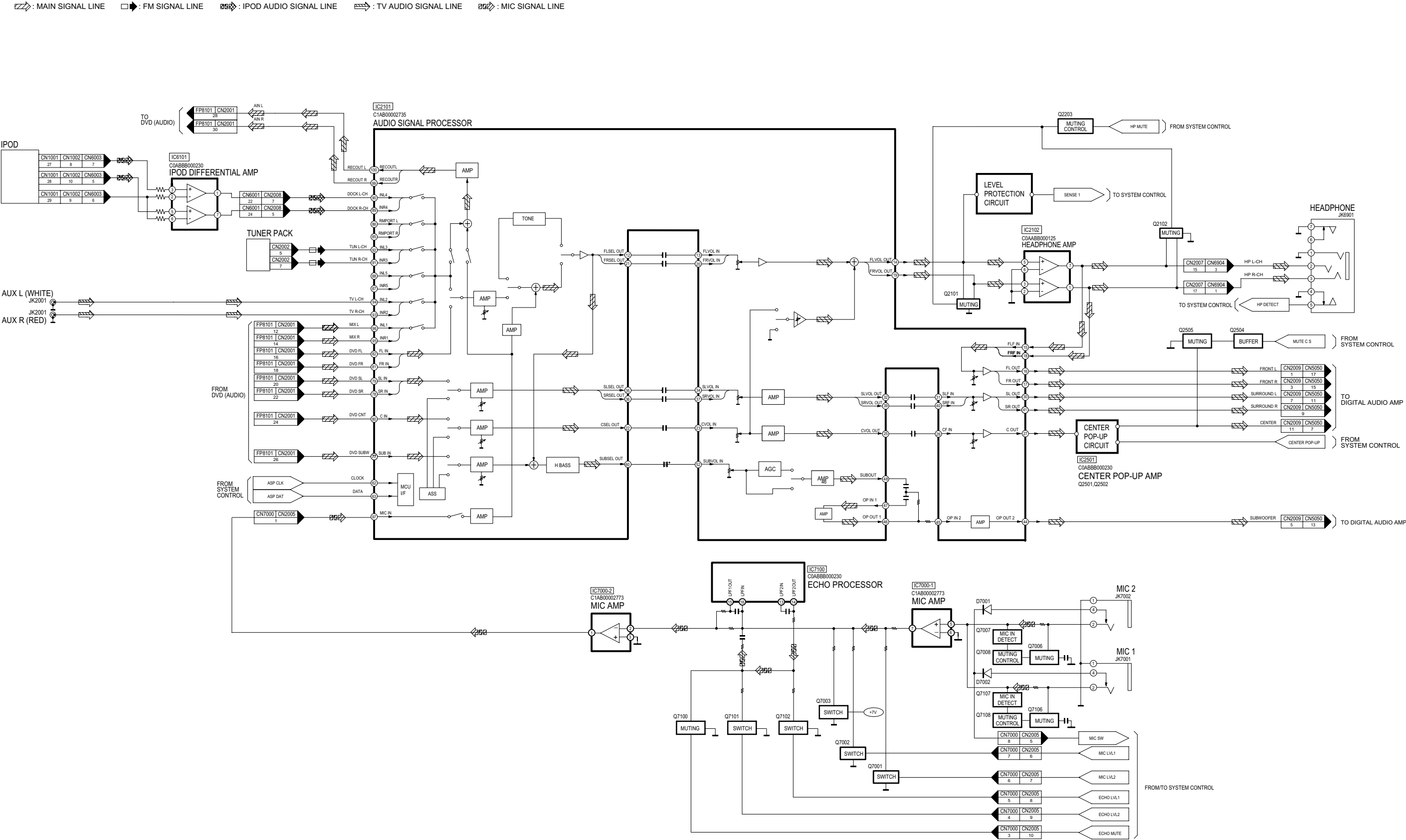


SA-PT465GC/GCS/GCT/GS DVD (HDMI) BLOCK DIAGRAM

# 17.5. VIDEO

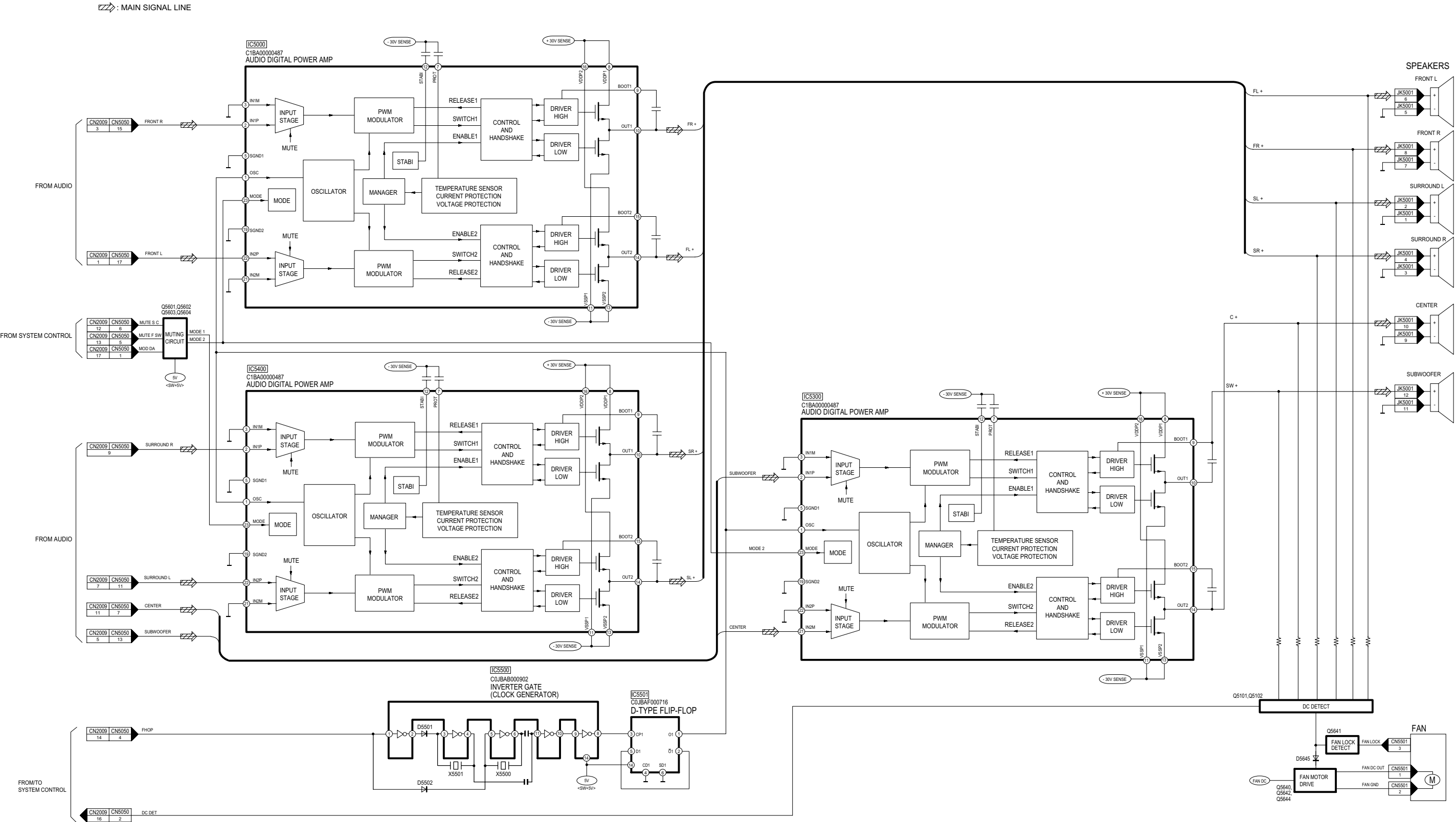


17.6. Audio



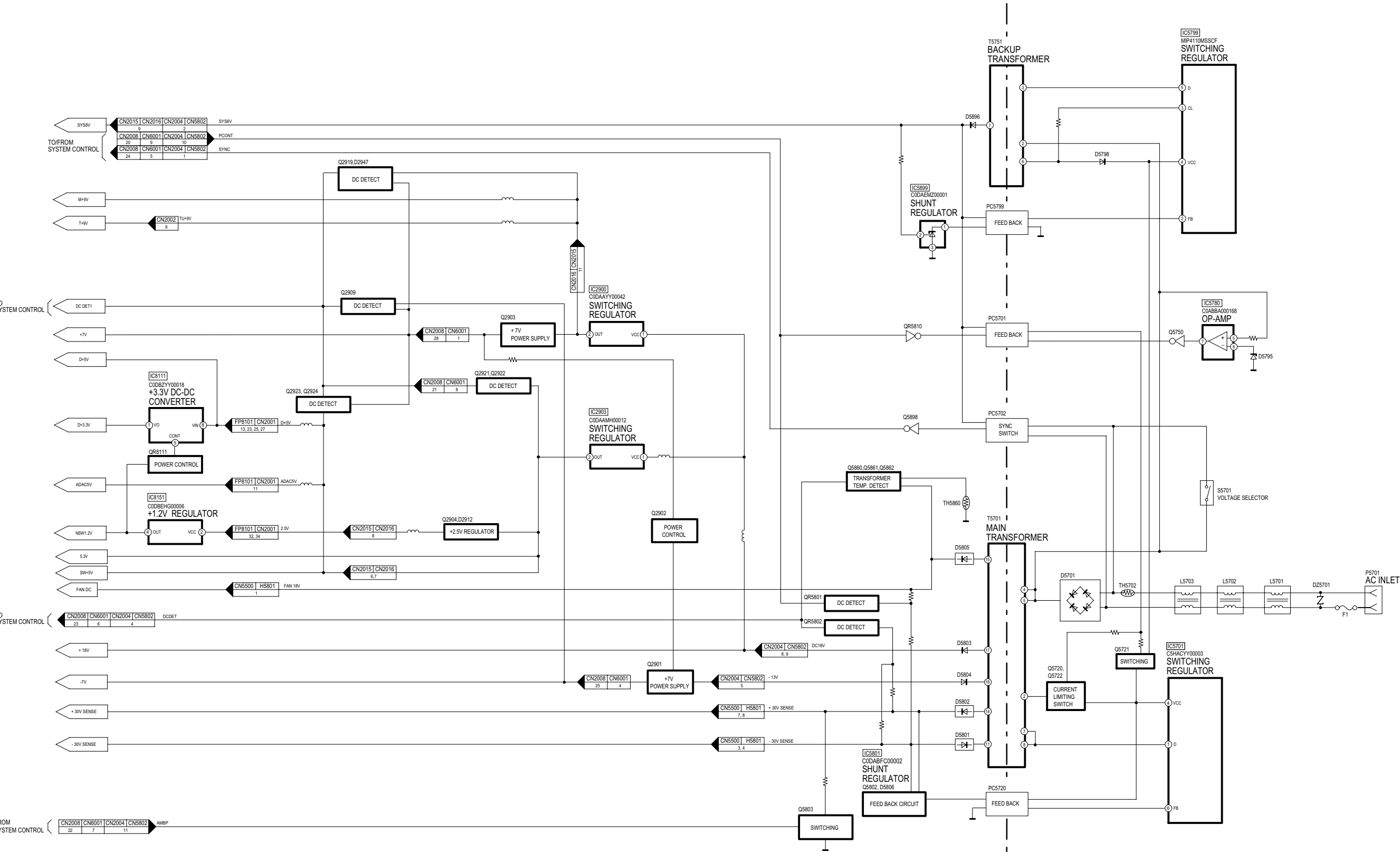
SA-PT465GC/GCS/GCT/GS AUDIO BLOCK DIAGRAM

# 17.7. Digital Audio Amp



SA-PT465GC/GCS/GCT/GS DIGITAL AUDIO AMP BLOCK DIAGRAM

17.8. Power



SA-PT465GC/GCS/GCT/GS POWER BLOCK DIAGRAM

# 18 Schematic Diagram Notes

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

## Notes:

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

- Important safety notice:

Components identified by  mark have special characteristics important for safety.

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

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

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

AC rated voltage capacitor:

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

- **Resistor**

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

- **Capacitor**

Unit of capacitance is  $\mu$ F, unless otherwise noted. F=Farad, pF=Pico-Farad

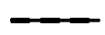
- **Coil**

Unit of inductance is H, unless otherwise noted.

- \*

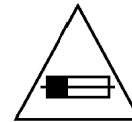
For indication only.

- Voltage and signal line

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

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

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



RISK OF FIRE-REPLACE FUSE AS MARKED.

## FUSE CAUTION



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



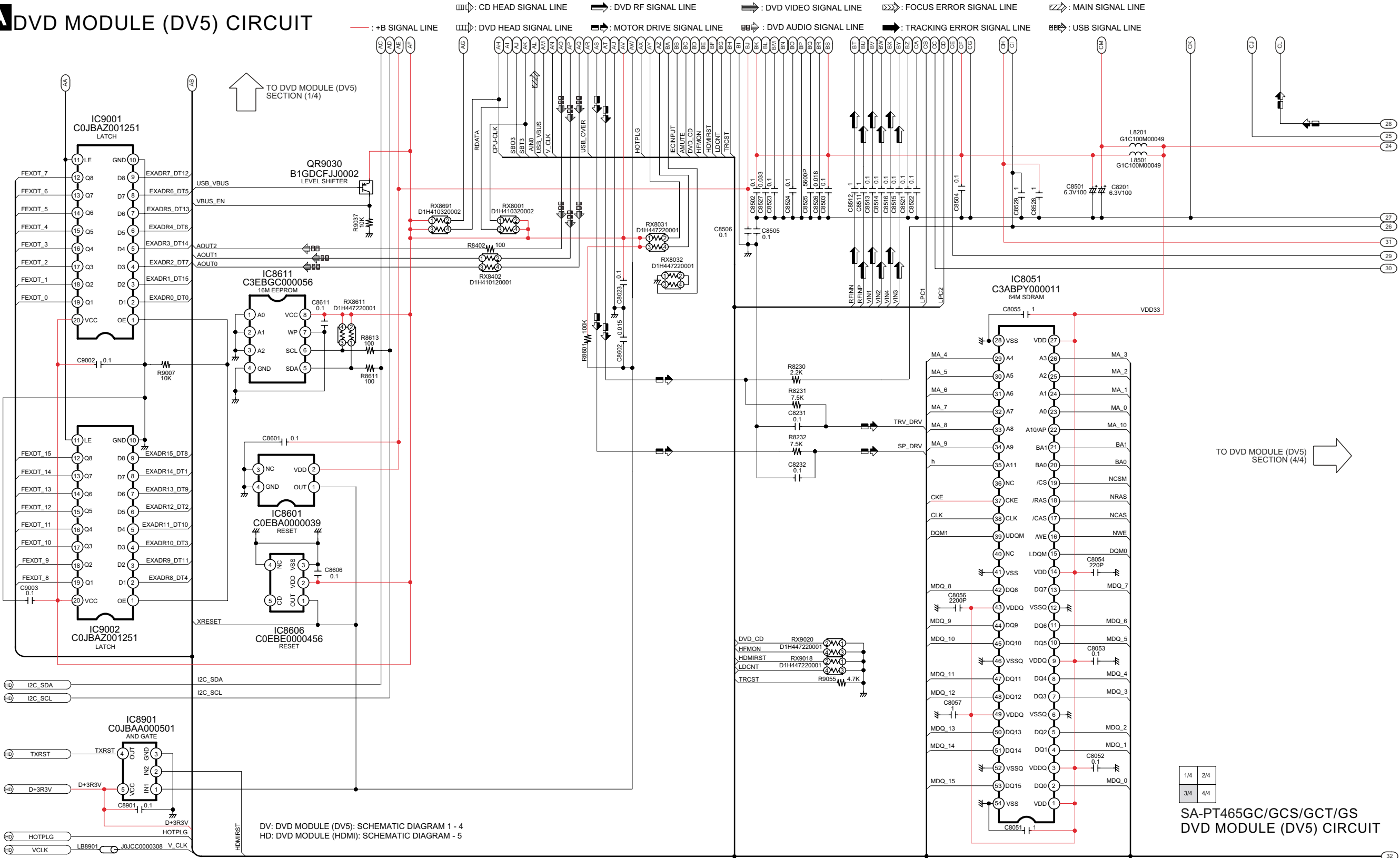


## A DVD MODULE (DV5) CIRCUIT



SCHEMATIC DIAGRAM - 3

**A** DVD MODULE (DV5) CIRCUIT

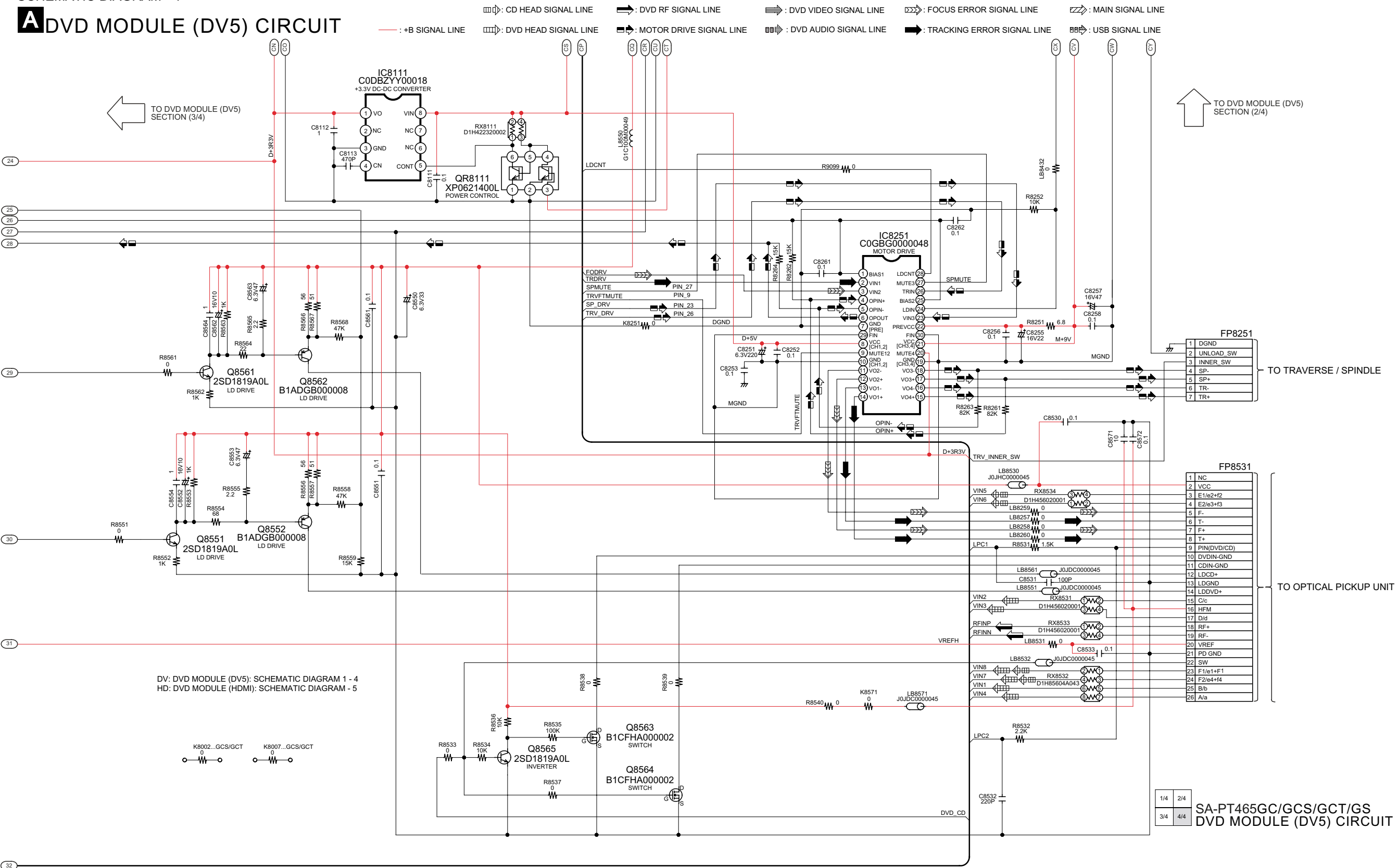


|     |     |
|-----|-----|
| 1/4 | 2/4 |
| 3/4 | 4/4 |

SA-PT465GC/GCS/GCT/GS  
DVD MODULE (DV5) CIRCUIT

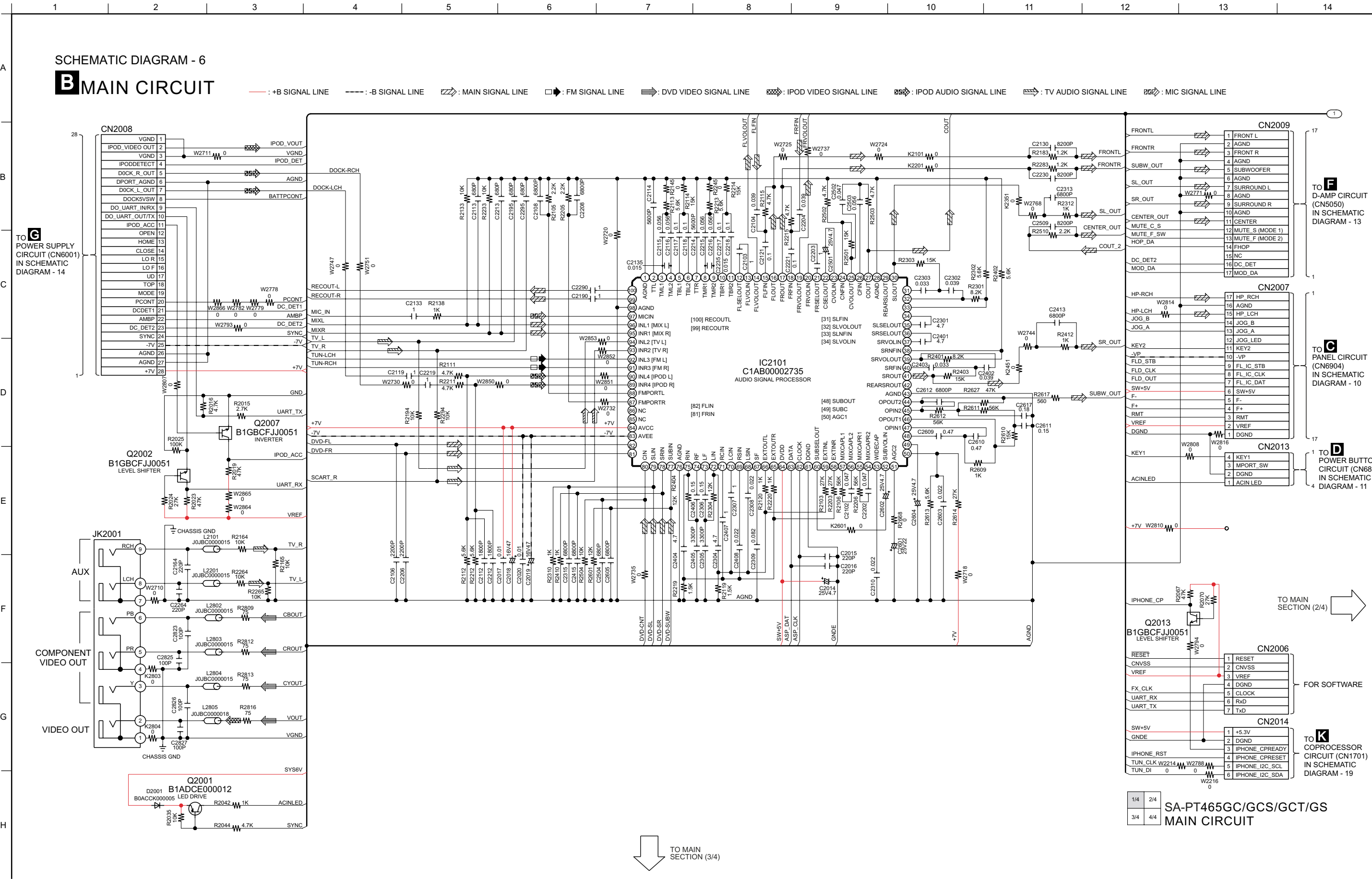
SCHEMATIC DIAGRAM - 4

**A** DVD MODULE (DV5) CIRCUIT





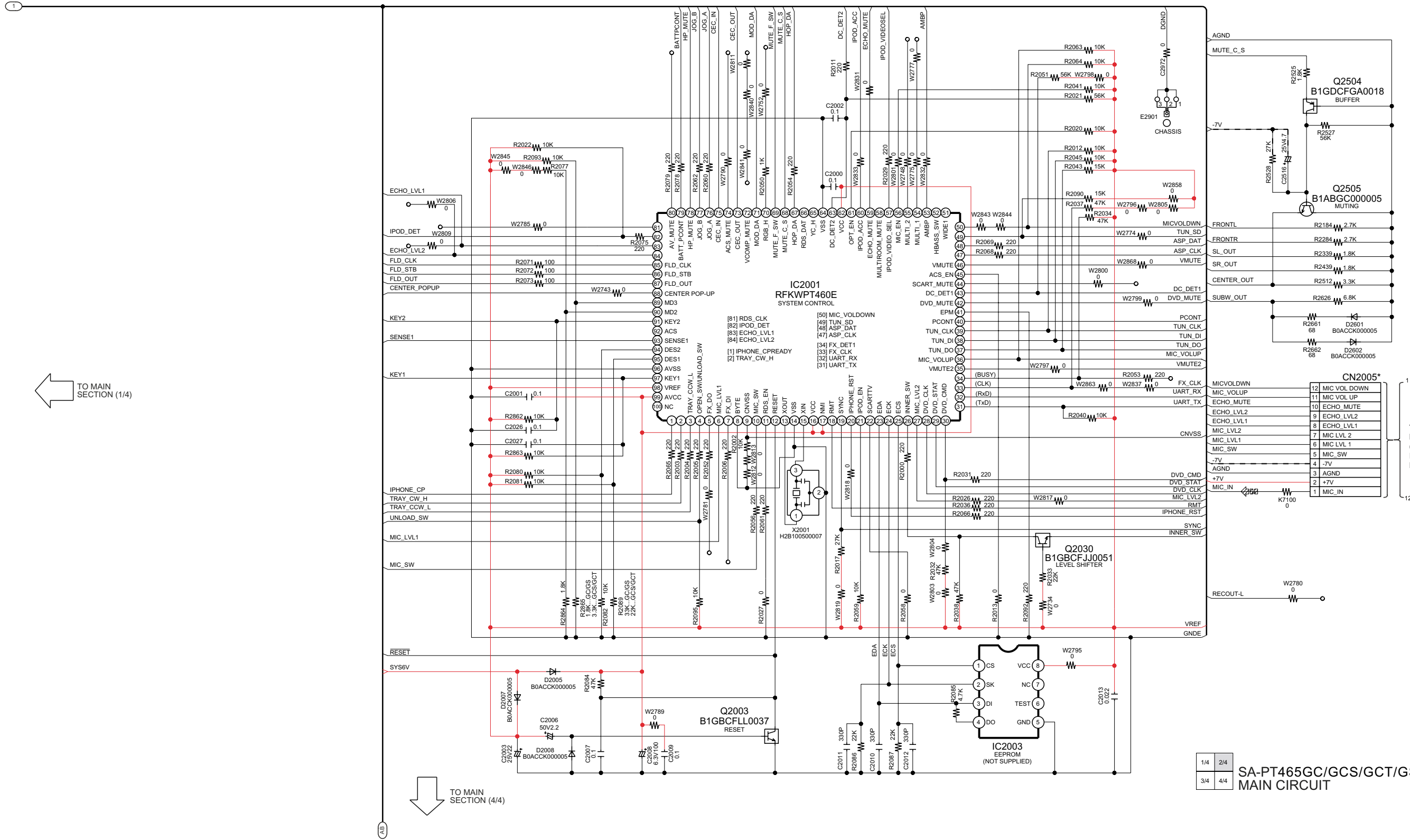
19.2. Main Circuit



SCHEMATIC DIAGRAM - 7

**B** MAIN CIRCUIT

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



TO MAIN SECTION (1/4)

TO MAIN SECTION (4/4)

SA-PT465GC/GCS/GCT/GS  
MAIN CIRCUIT

SCHEMATIC DIAGRAM - 8

**B** MAIN CIRCUIT

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

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

TO TUNER PACK  
(ENG06841QRF)

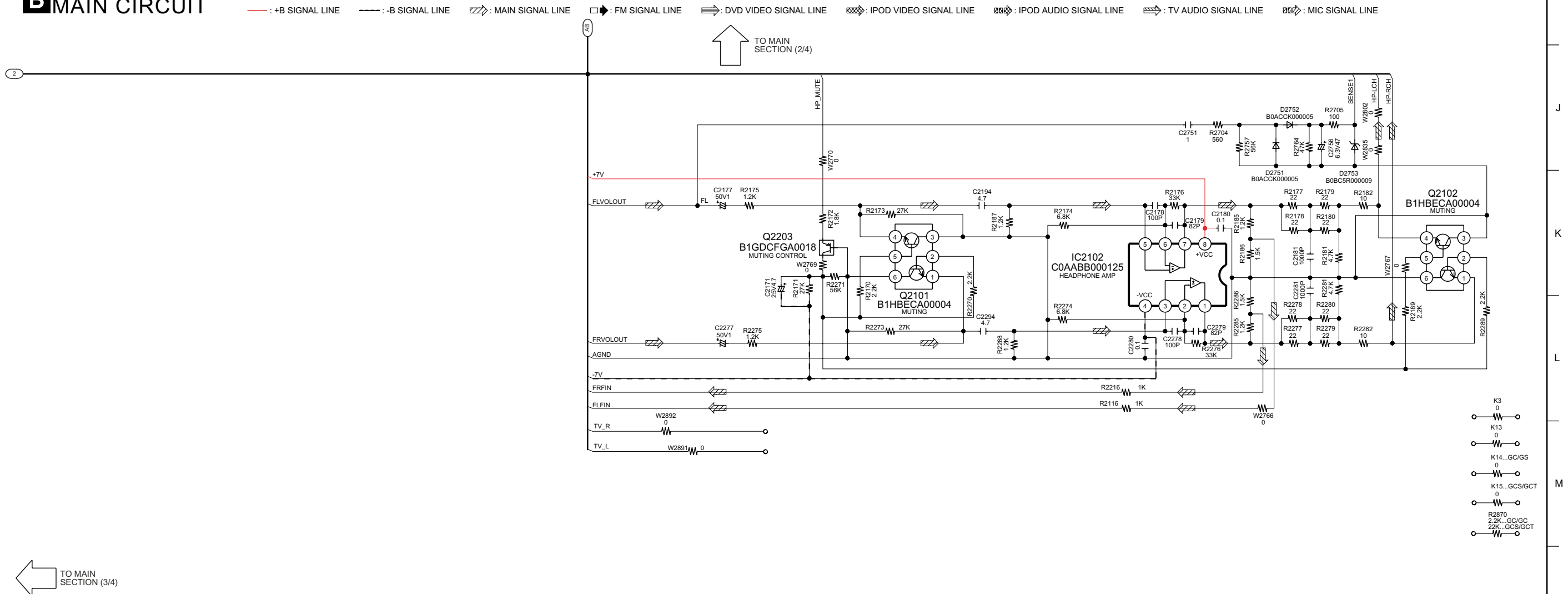
TO MAIN  
SECTION (4/4)

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

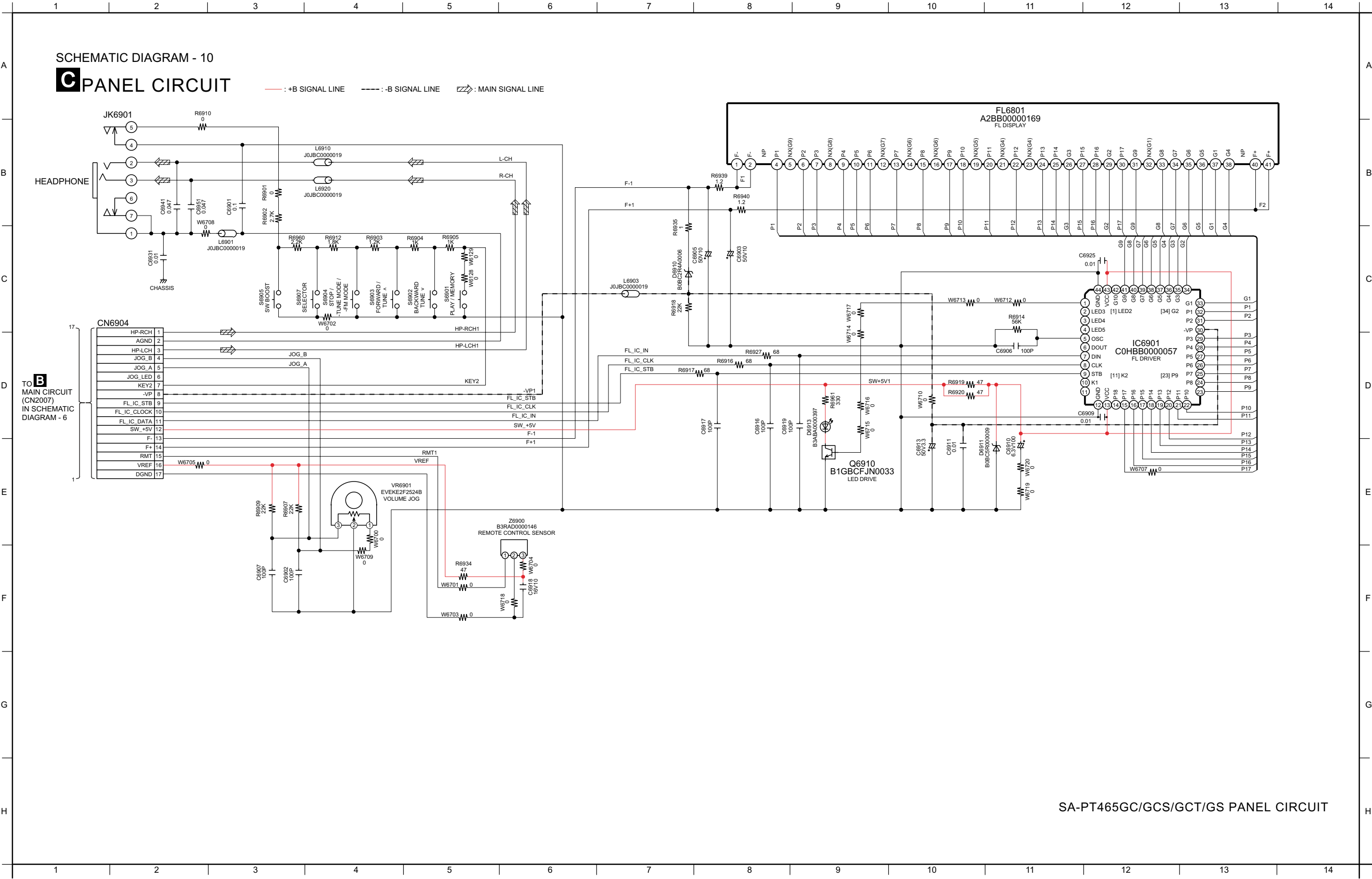
1/4 2/4  
3/4 4/4  
SA-PT465GC/GCS/GCT/GS  
MAIN CIRCUIT

SCHEMATIC DIAGRAM - 9

## B MAIN CIRCUIT



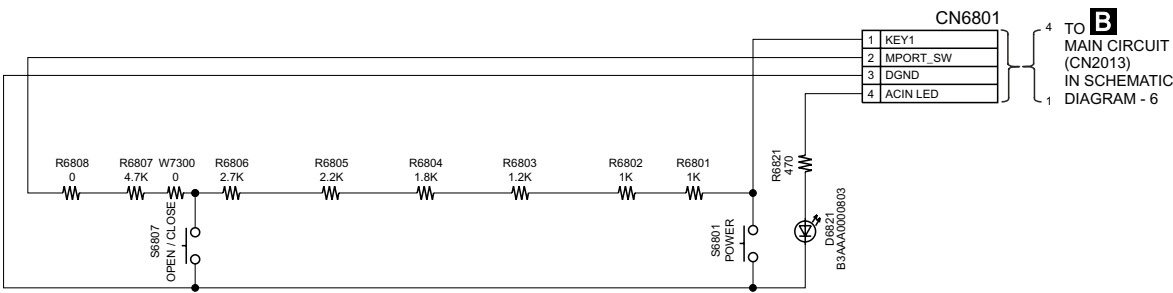
19.3. Panel Circuit



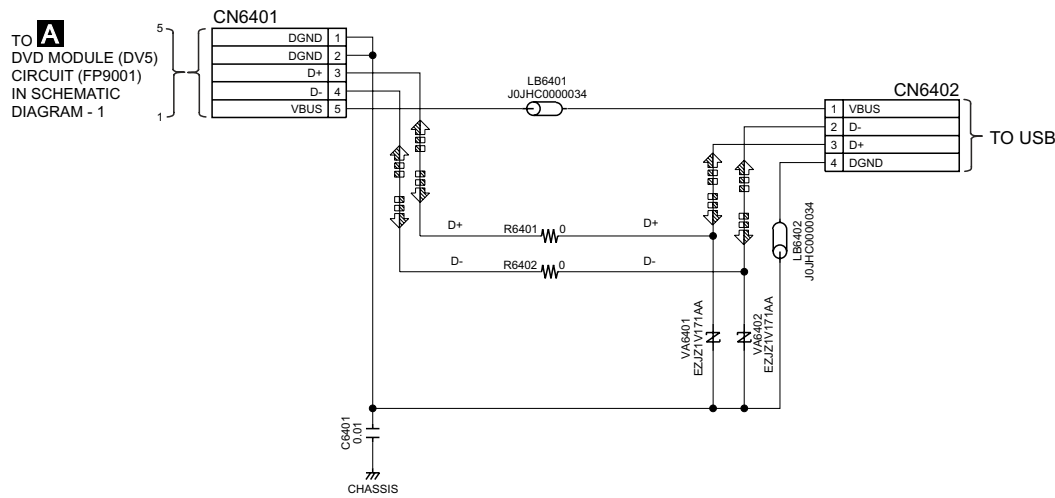
19.4. Power Button, USB Circuit

SCHEMATIC DIAGRAM - 11

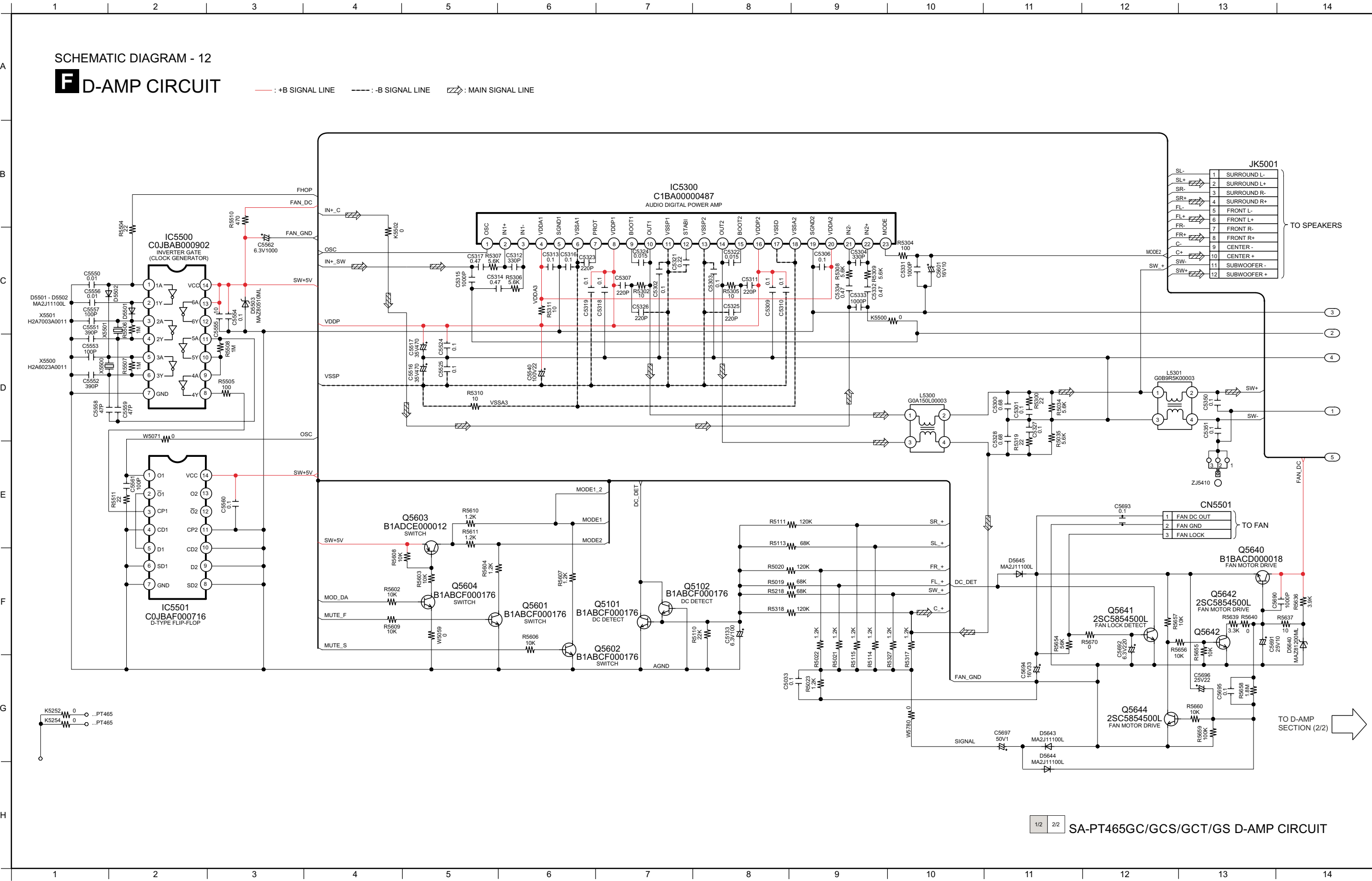
D POWER BUTTON CIRCUIT



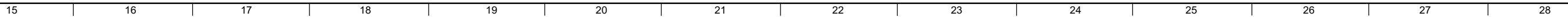
E USB CIRCUIT



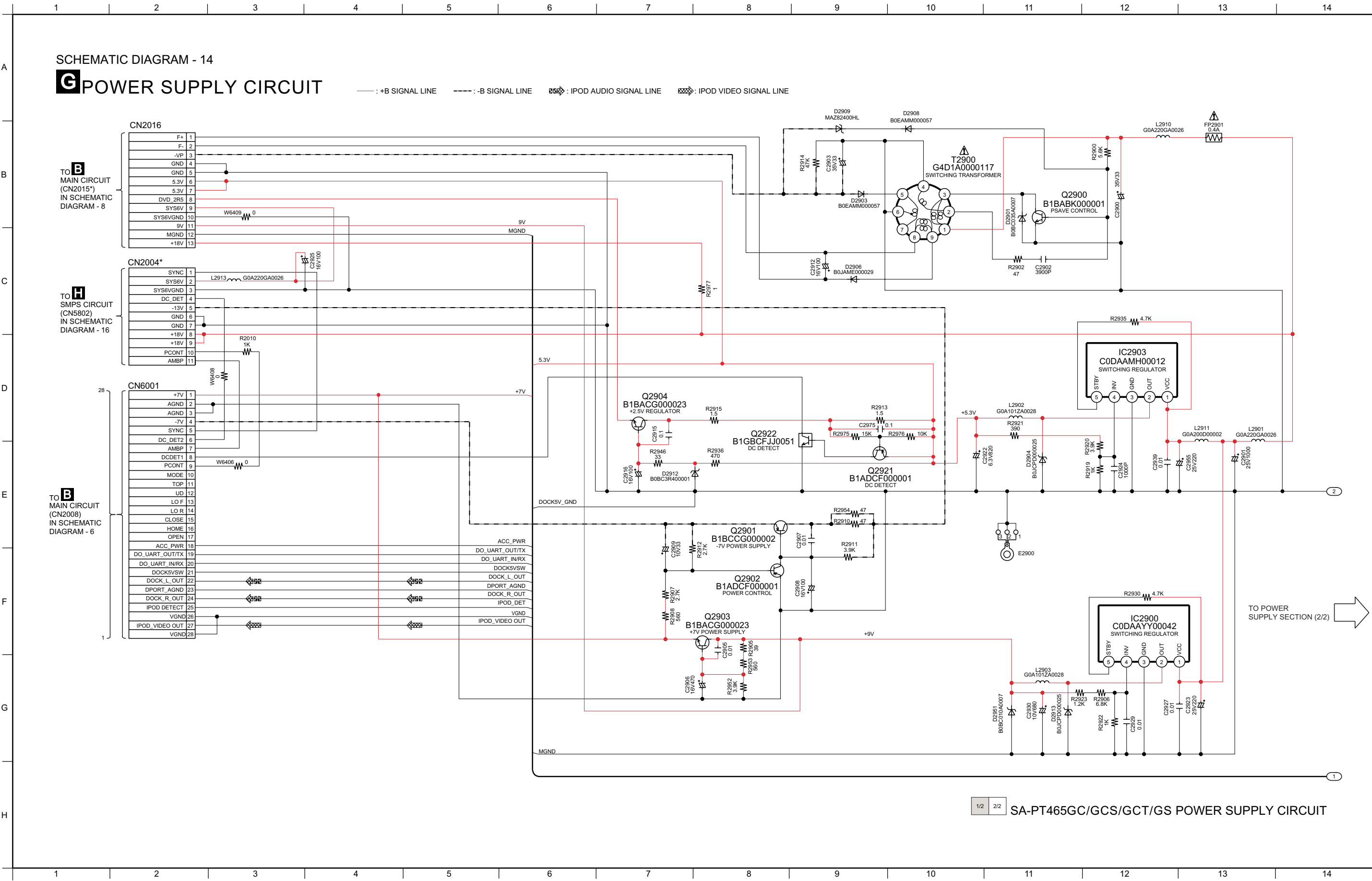
19.5. D-Amp Circuit



## F D-AMP CIRCUIT



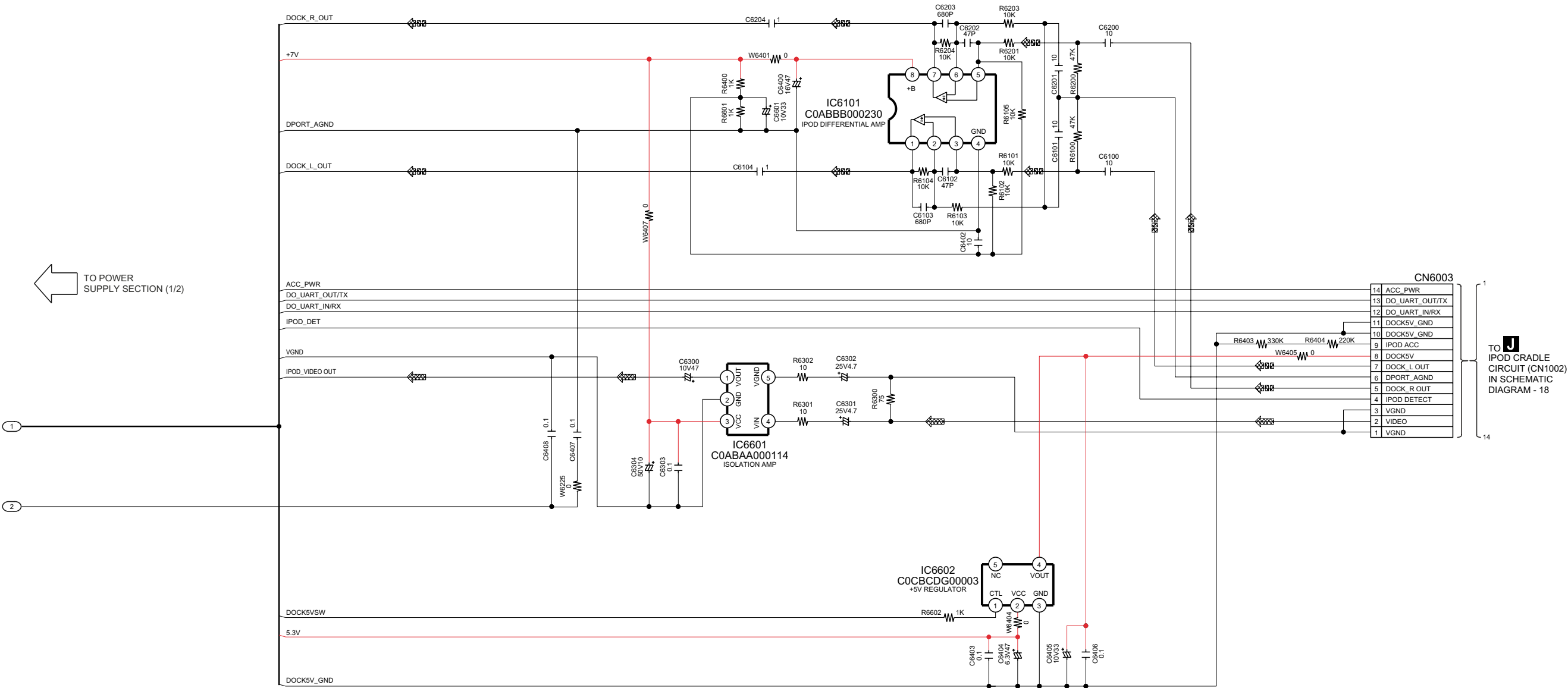
19.6. Power Supply Circuit



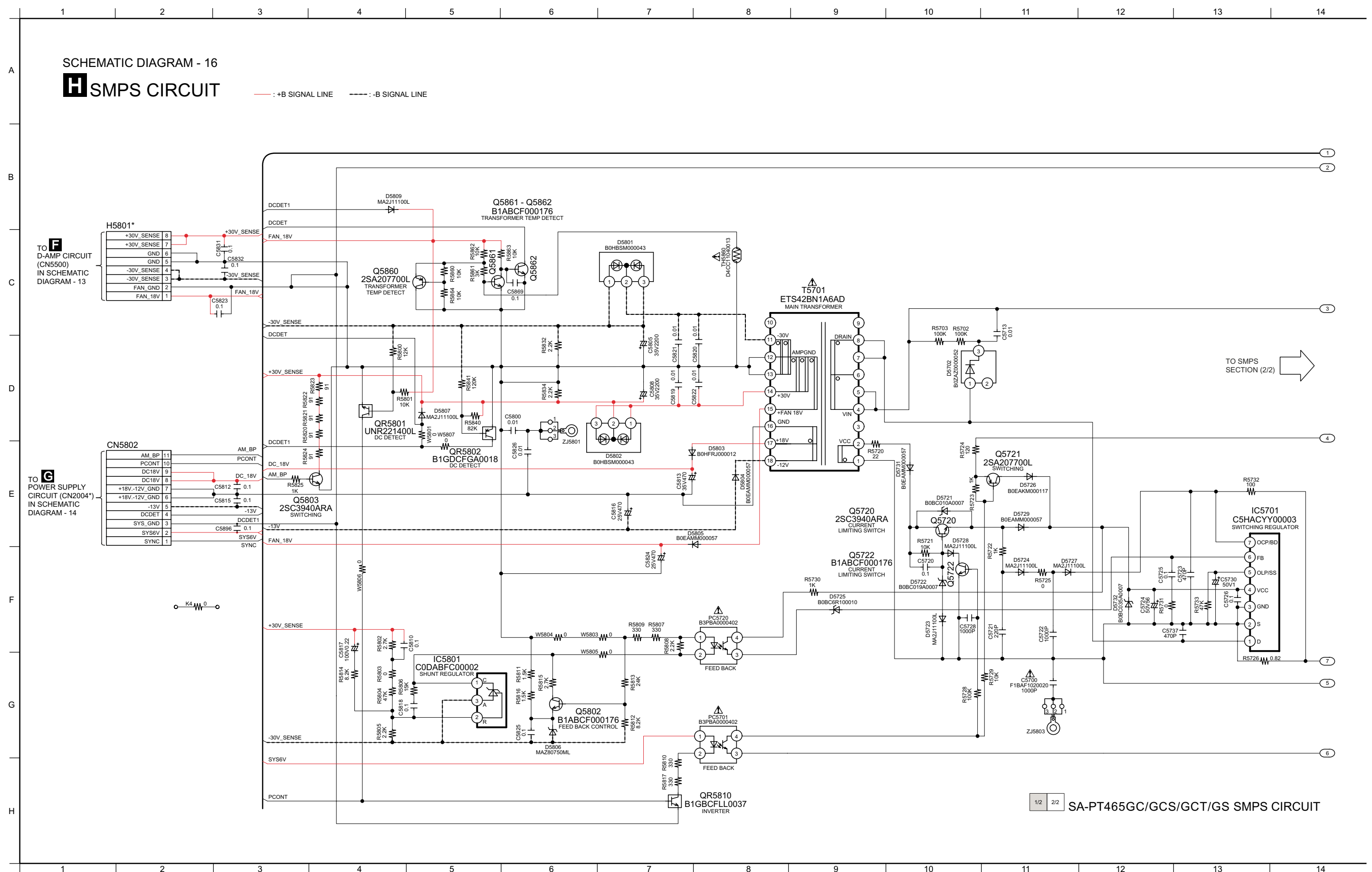
SCHEMATIC DIAGRAM - 15

**G** POWER SUPPLY CIRCUIT

— : +B SIGNAL LINE    - - - : -B SIGNAL LINE     : IPOD AUDIO SIGNAL LINE     : IPOD VIDEO SIGNAL LINE



## 19.7. SMPS Circuit



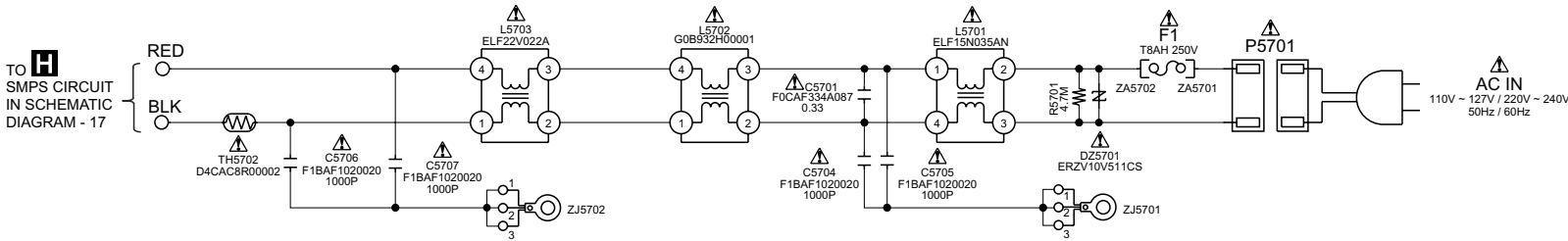
— : +B SIGNAL LINE      - - - : -B SIGNAL LINE

1/2 2/2 SA-PT465GC/GCS/GCT/GS SMPS CIRCUIT

19.8. AC Inlet, Ipod Cradle

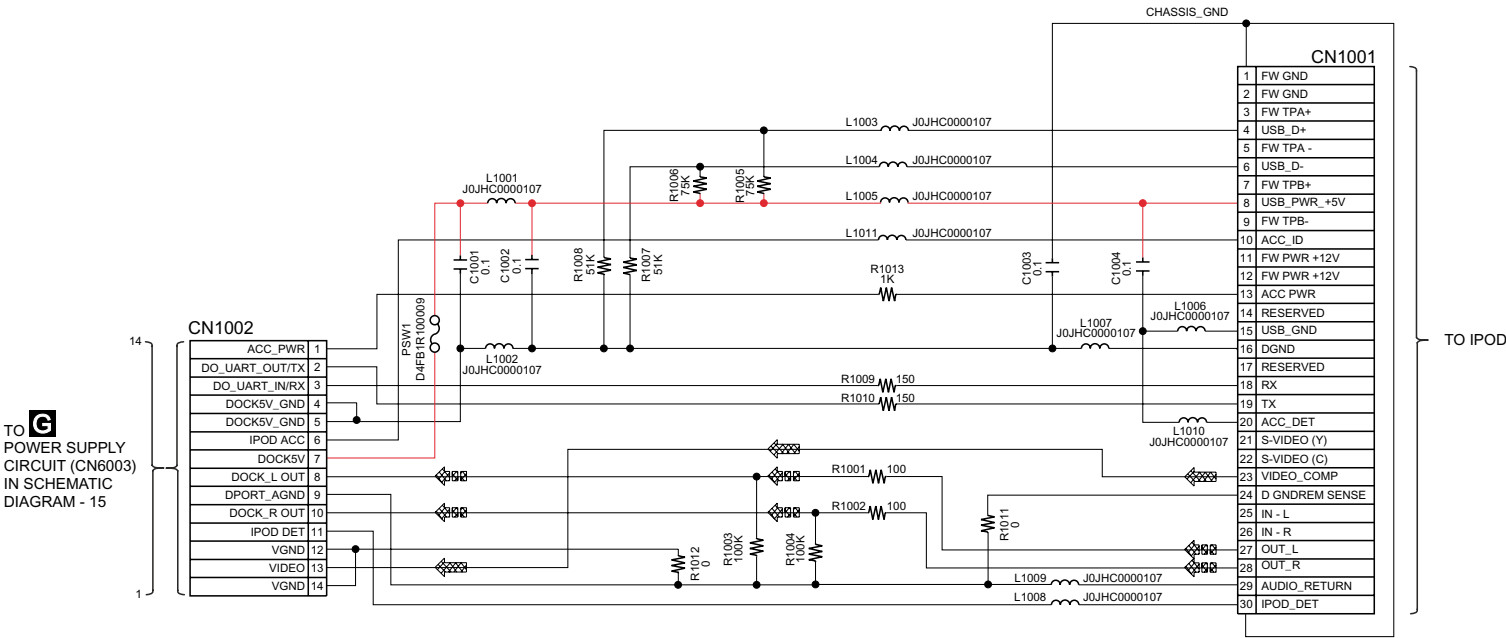
SCHEMATIC DIAGRAM - 18

I AC INLET CIRCUIT



J IPOD CRADLE CIRCUIT

— : +B SIGNAL LINE    : IPOD AUDIO SIGNAL LINE    : IPOD VIDEO SIGNAL LINE

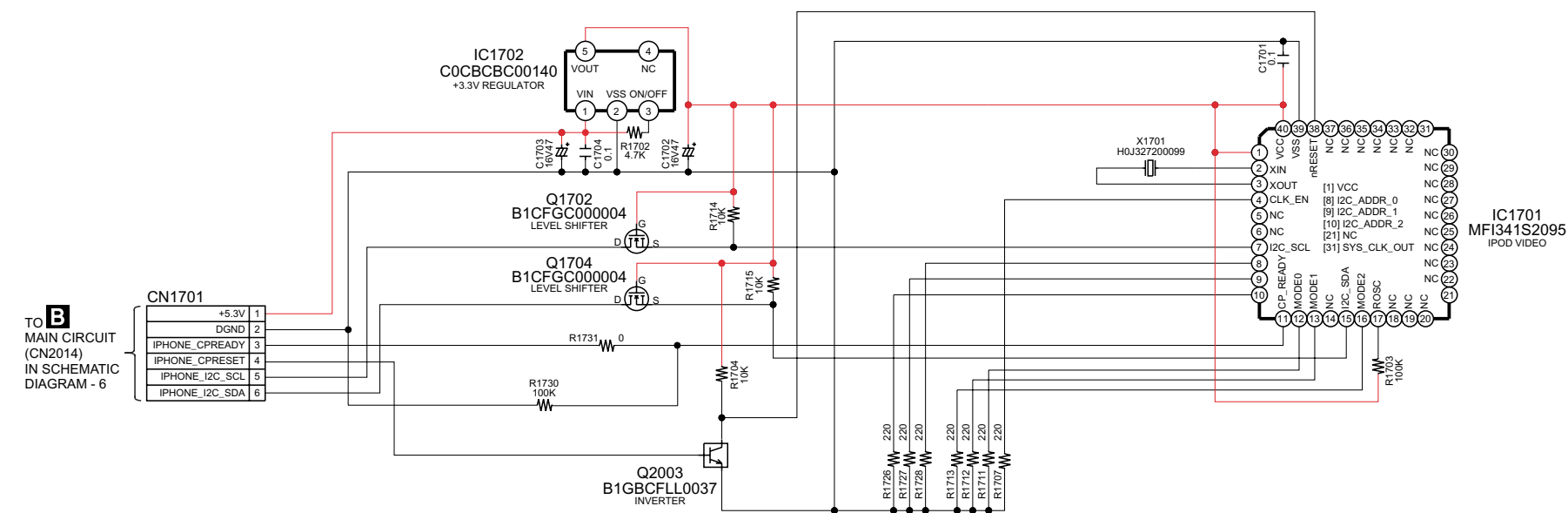


SA-PT465GC/GCS/GCT/GS AC INLET / IPOD CRADLE CIRCUIT

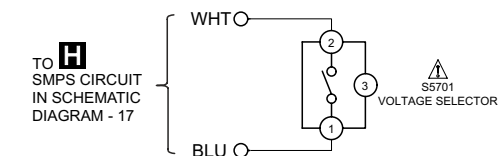
### 19.9. Coprocessor Circuit, Voltage Selector Circuit

SCHEMATIC DIAGRAM - 19

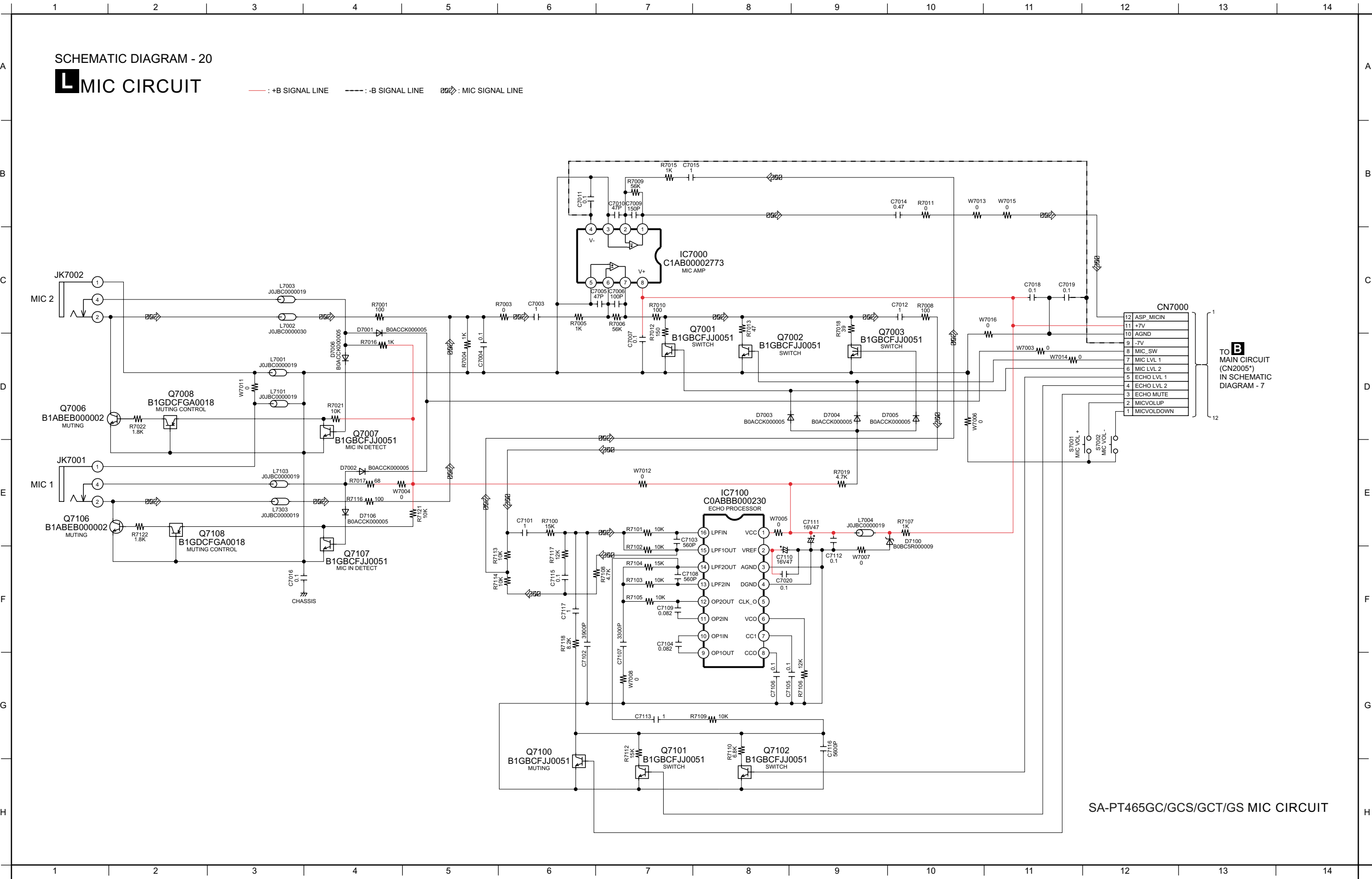
## KCOPROCESSOR CIRCUIT



## M VOLTAGE SELECTOR CIRCUIT



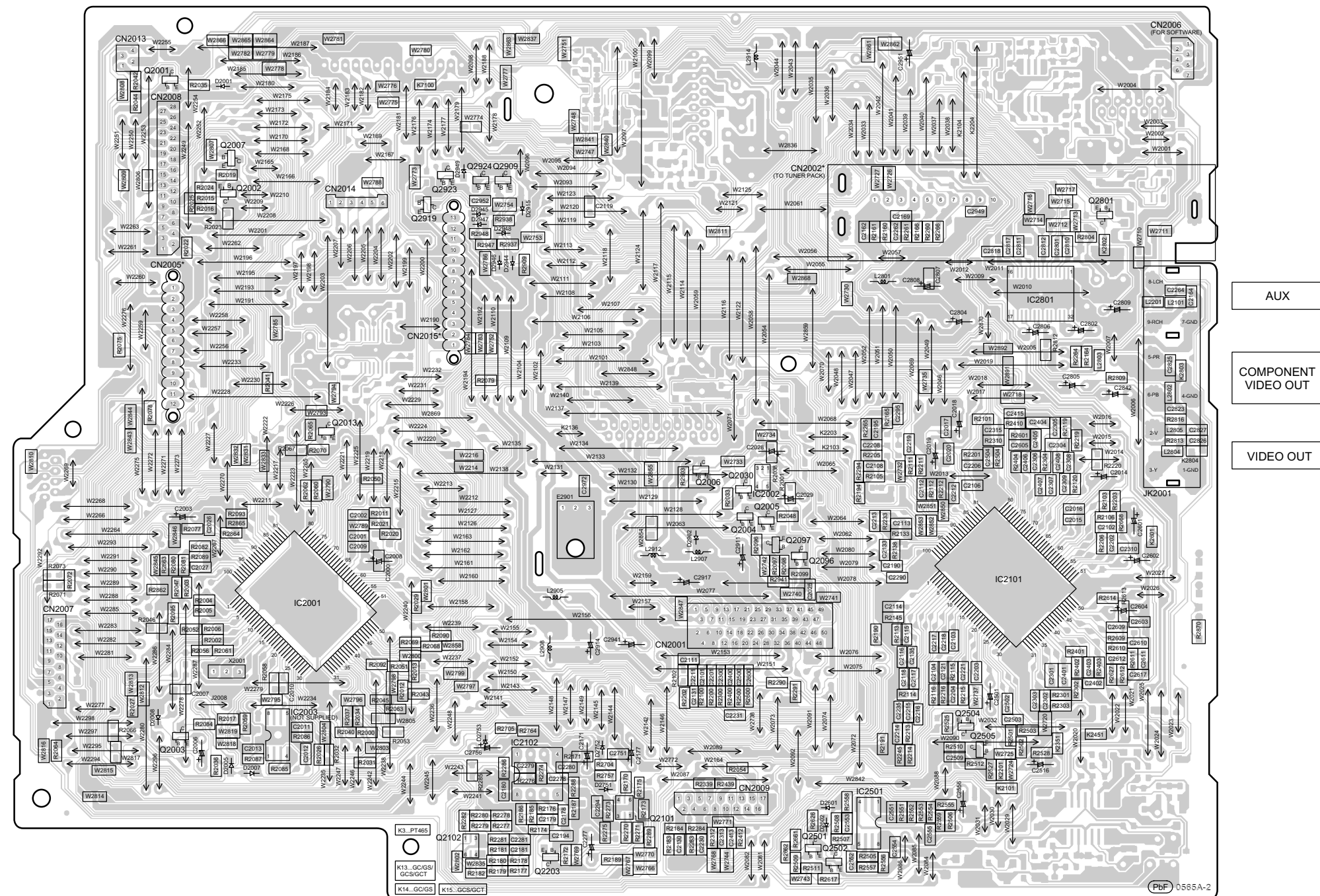
19.10. Mic Circuit





## 20.2. Main P.C.B.

**B** MAIN P.C.B. (REPX0630F...GC/GS)  
(REPX0630G...GCS/GCT)

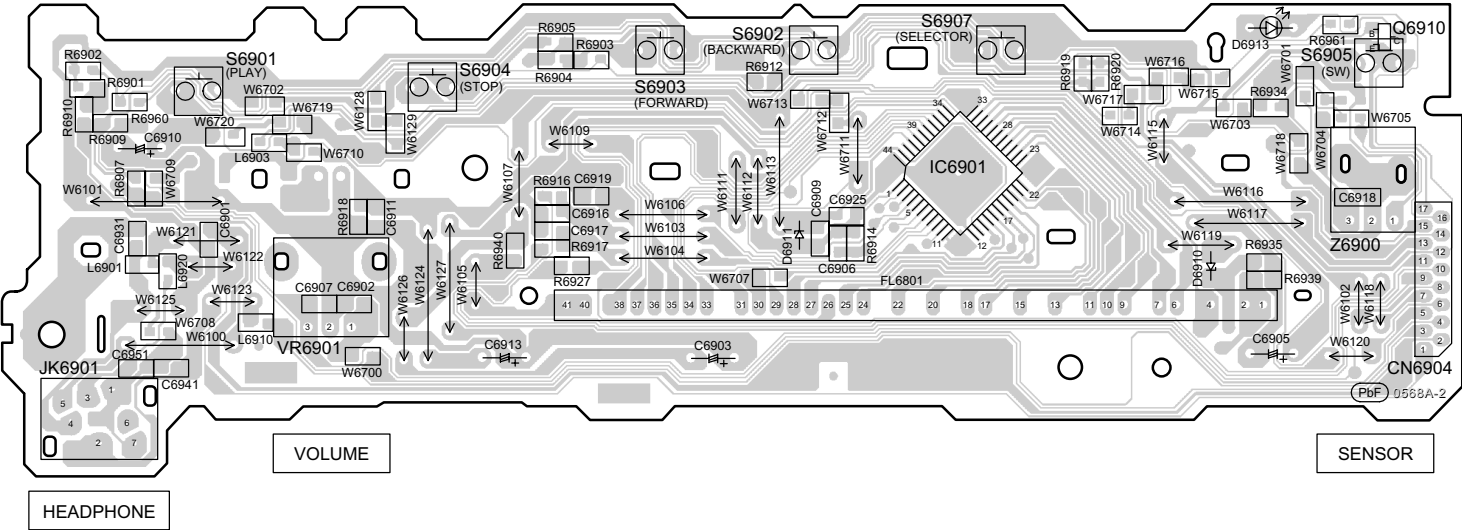


\* FOR INDICATION ONLY

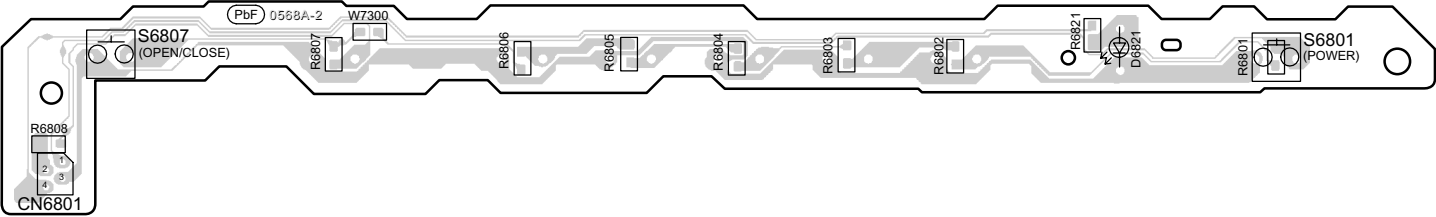
SA-PT465GC/GCS/GCT/GS  
MAIN P.C.B.

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

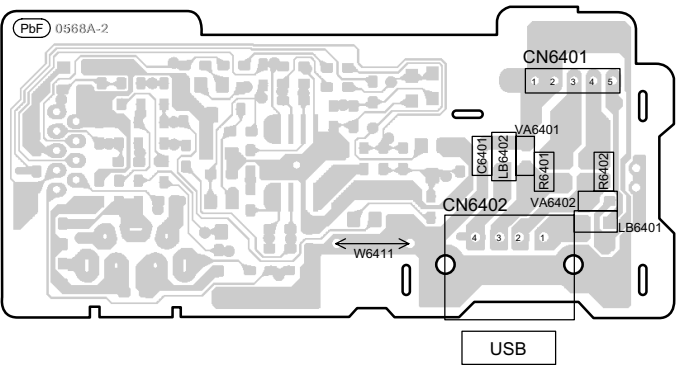
**C** PANEL P.C.B. (REPX0655B)



**D** POWER BUTTON P.C.B. (REPX0655B)

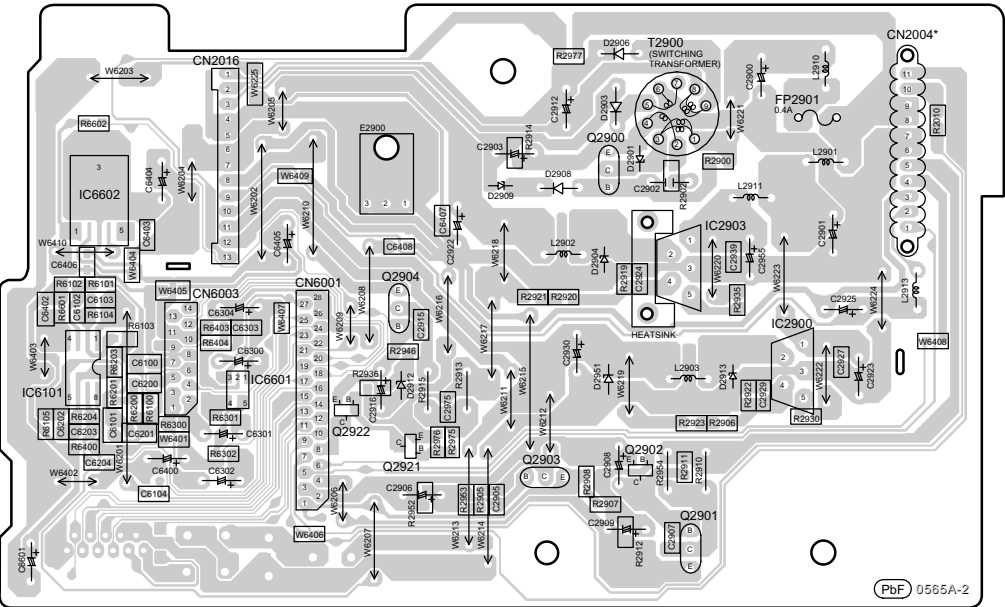


**E** USB P.C.B. (REPX0655B)

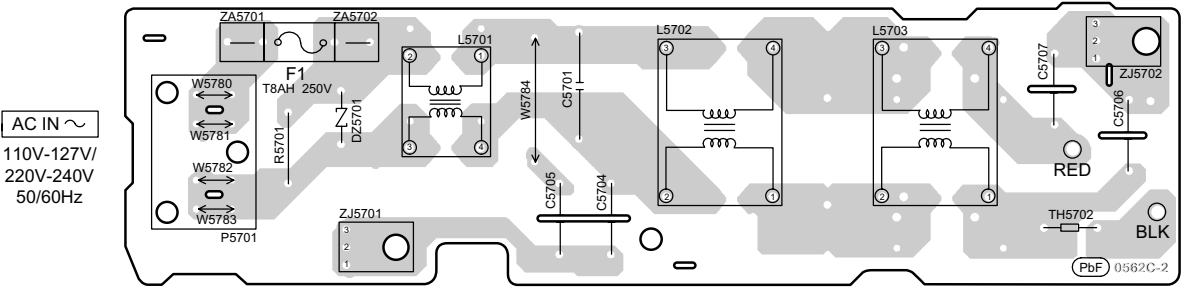


\* FOR INDICATION ONLY

**G** POWER SUPPLY P.C.B. (REPX0630F...GC/GS)  
(REPX0630G...GCS/GCT)



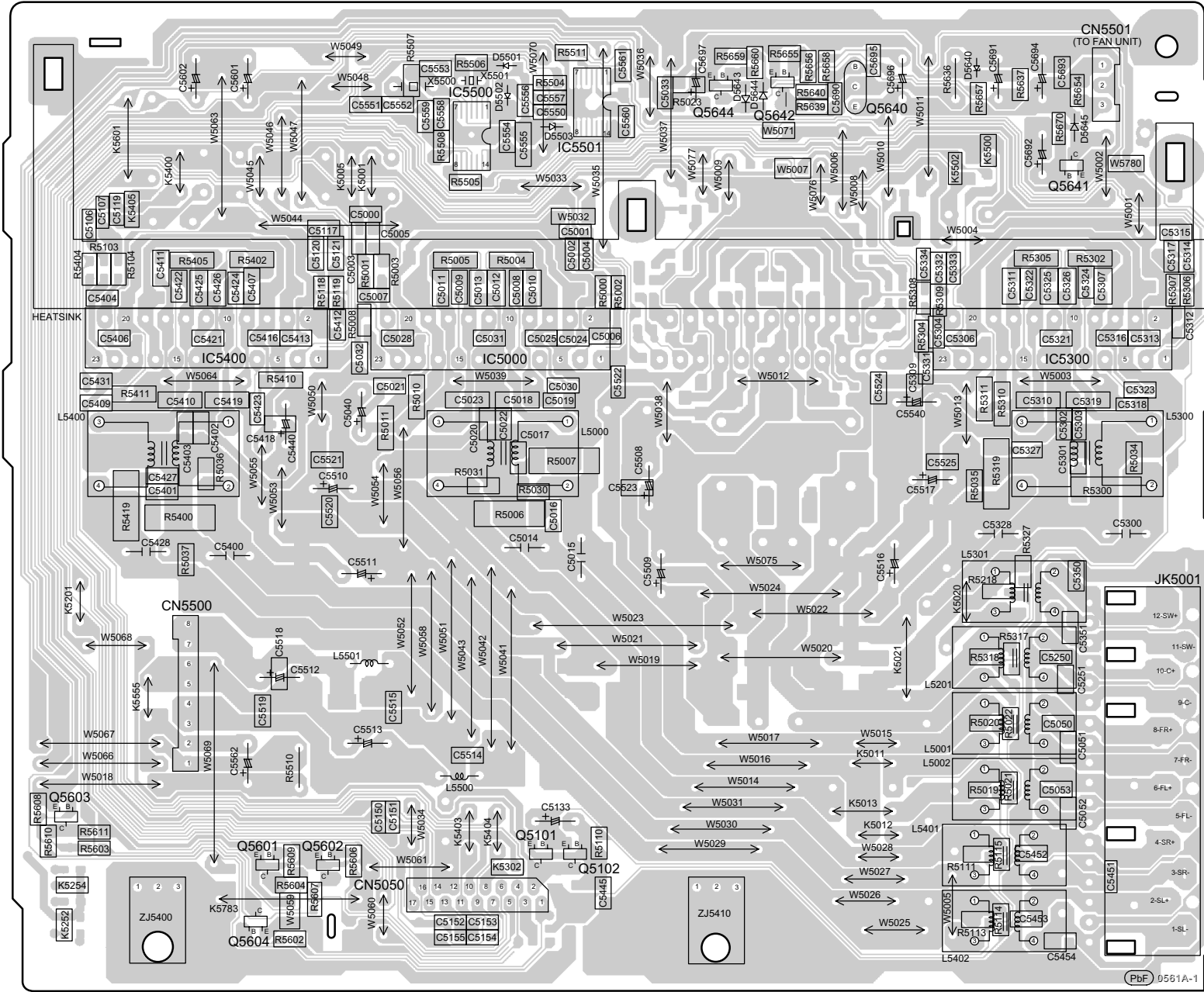
**I** AC INLET P.C.B. (REPX0622D)



SA-PT465GC/GCS/GCT/GS  
PANEL/POWER BUTTON/USB/POWER SUPPLY/AC INLET P.C.B.

20.4. D-Amp P.C.B.

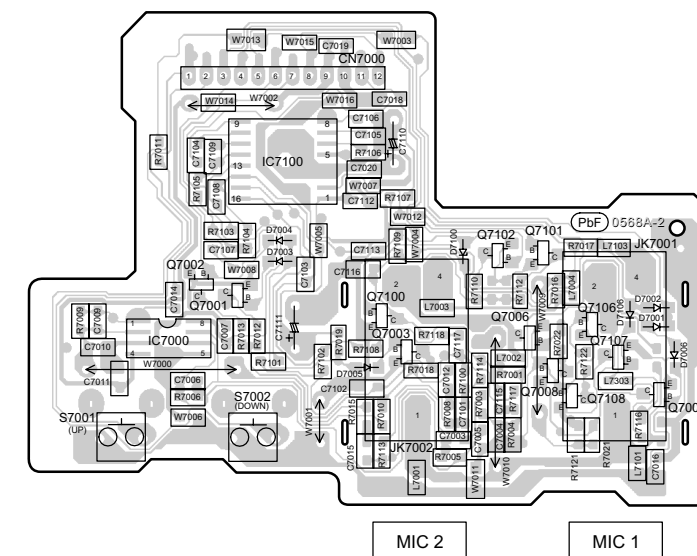
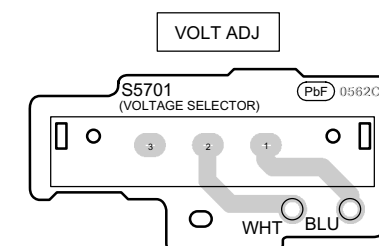
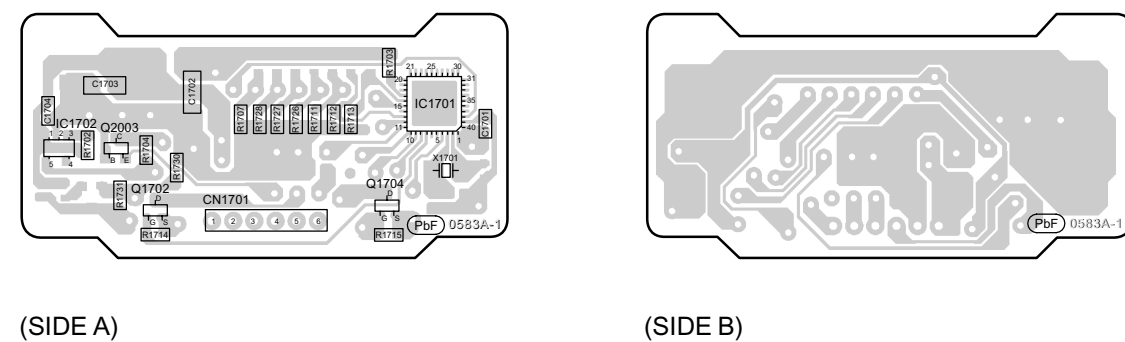
**F** D-AMP P.C.B. (REPX0621F)



- SUBWOOFER
- CENTER SPEAKER
- FRONT SPEAKERS
- SURROUND SPEAKERS



**L** MIC P.C.B. (REPX0655B)

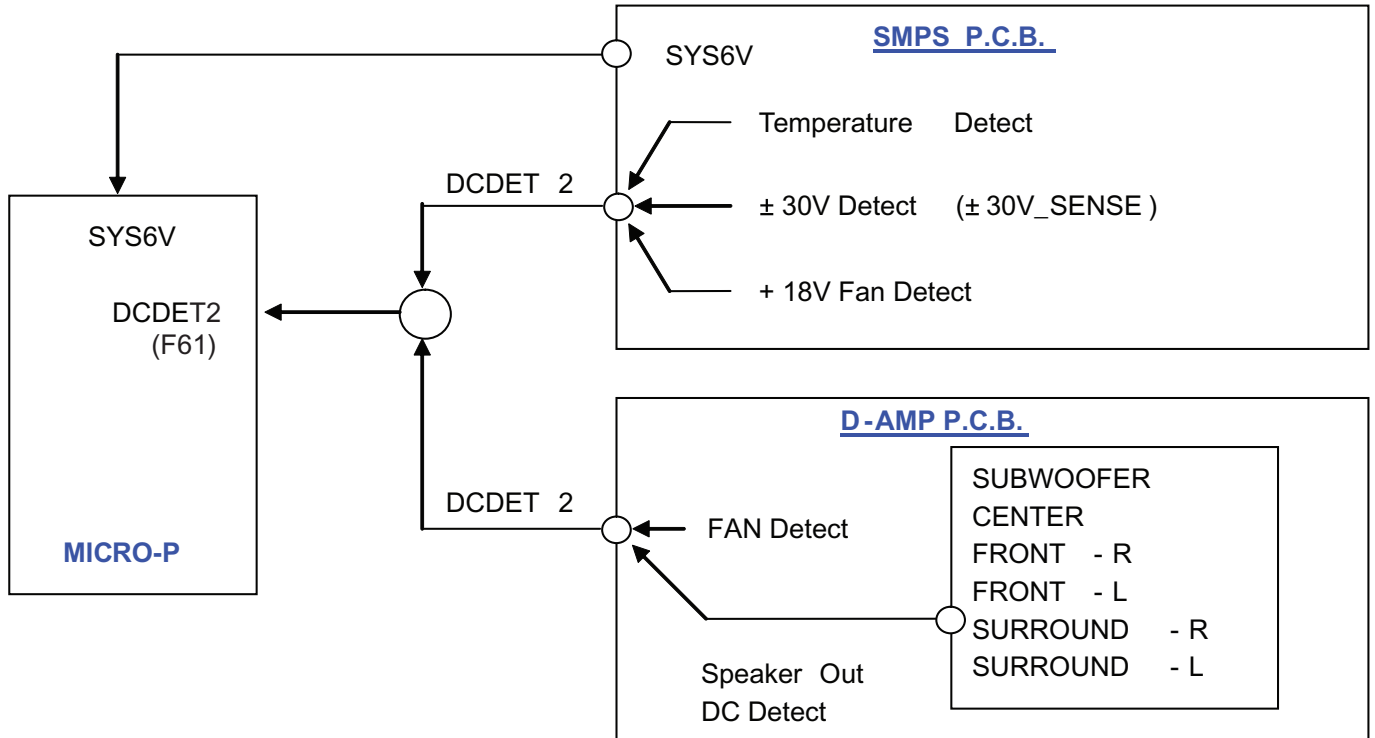
**M** VOLTAGE SELECTOR P.C.B. (REPX0622D)

## 21 Basic Troubleshooting Guide

### 21.1. Troubleshooting Guide for F61 and/or F76

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

#### 21.1.1. Block Diagram



### 21.1.2. Troubleshooting Guide

| Symptom                                                                  | Checking Items                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Repair Items                                                                                                                                                                                                                                                                                                                                                           | Remarks                                          |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| FL display blinking with abnormal segment when power ON the set or "F61" | <p>Check the soldering of the SMPS P.C.B.</p> <ul style="list-style-type: none"> <li>Is there any solder crack at area (Q5860, Q5861, Q5862, TH5860, QR5801)</li> <li>Check all the supply line <math>\pm 30V</math></li> <li>Is there any solderability at area of feedback circuit</li> <li>Check feedback circuit (IC5801, Q5802, D5806, PC5720, D5725)</li> </ul>                                                                                                                                                                                                                                                                                 | <p>Touch-up the solder crack area/<br/>Change the defective parts.</p> <ul style="list-style-type: none"> <li>Q5860, Q5861, Q5862, TH5860 (Temperature Detect)</li> <li>QR5801 &amp; QR5802 (<math>\pm 30V</math> Detect)</li> <li>Touch-up the necessary areas</li> <li>IC5801, D5806, PC5720, D5725</li> </ul>                                                       | <p>SMPS P.C.B.</p> <p>Refer to Fig. 1</p>        |
| First Power ON Display immediate show "F61".                             | <p>Check Speaker output by using multi-meter,</p> <ul style="list-style-type: none"> <li>If there is a DC Voltage around <math>\pm 30V</math></li> <li>Check Output IC (Pin 10 &amp; 14) which have DC Voltage at Speaker output short to <math>\pm V_{dd}/V_{ss}</math></li> <li>If shorted that means D-Amp damage already.</li> </ul>                                                                                                                                                                                                                                                                                                              | <p>Change the defective parts.</p> <p>D-AMP IC:<br/>IC5000/IC5200/IC5300/IC5400<br/>P/N = C1BA00000487</p> <p>For Configuration<br/>Refer to Table 1</p>                                                                                                                                                                                                               | <p>D-AMP P.C.B.</p> <p>Refer to Fig. 2</p>       |
| Power ON for a while then only trigger "F61".<br>(Symptom always happen) | <p>Check the fan connection &amp; feedback loop:</p> <ul style="list-style-type: none"> <li>If the fan not proper connected, "F61" will trigger when the volume increase.</li> <li>If the fan is not working, check for fan circuit.</li> </ul> <p>Check the soldering of the SMPS P.C.B.</p> <ul style="list-style-type: none"> <li>Is there any solder crack at area (Q5860, Q5861, Q5862, TH5860, QR5801)</li> <li>Check all the supply line <math>\pm 30V</math></li> </ul>                                                                                                                                                                       | <p>Re-connect the Fan to CN5501</p> <p>Fan circuit: Q5640, Q5641, Q5642, Q5644</p> <p>Touch-up the solder crack area/<br/>Change the defective parts.</p> <ul style="list-style-type: none"> <li>Q5860, Q5861, Q5862, TH5860 (Temperature Detect)</li> <li>QR5801 &amp; QR5802 (<math>\pm 30V</math> Detect)</li> </ul> <p>Feedback Circuit: IC5801, PC5720, D5725</p> | <p>D-AMP P.C.B.</p> <p>Refer to Fig. 3</p>       |
| Power ON for a while and then trigger "F76"                              | <p>Check all supply voltages as follows:</p> <p>Step 1: Check for supply voltages from SMPS P.C.B to Power Supply P.C.B at pin 8 &amp; 9 of CN2004. If there are supply voltages, proceed to Step 2.</p> <p>If no voltages detected, check wire connection and circuitry connection from SMPS P.C.B.</p> <p>Step 2: Check if there is supply voltages for <math>-V_p</math>, <math>F+</math> &amp; <math>F-</math> at CN2016</p> <ul style="list-style-type: none"> <li>If there is supply voltages of +5.3V, +2.5V (For DVD), +6V (SYS6V), +9V &amp; +18V at CN2016</li> <li>If there is supply voltages of <math>\pm 7V</math> at CN6001</li> </ul> | <p>Check and change the possible defective parts.</p> <ul style="list-style-type: none"> <li>FP2901 (Fuse Protector), T2900, D2901, D2906, D2908, D2909</li> <li>IC2903 (DC-DC Converter IC) &amp; related regulator circuit components</li> <li>IC2900 (DC-DC Converter IC) &amp; related regulator circuit components</li> </ul>                                     | <p>Power Supply P.C.B</p> <p>Refer to Fig. 4</p> |

### 21.1.3. Part Location

#### 21.1.3.1. SMPS P.C.B.

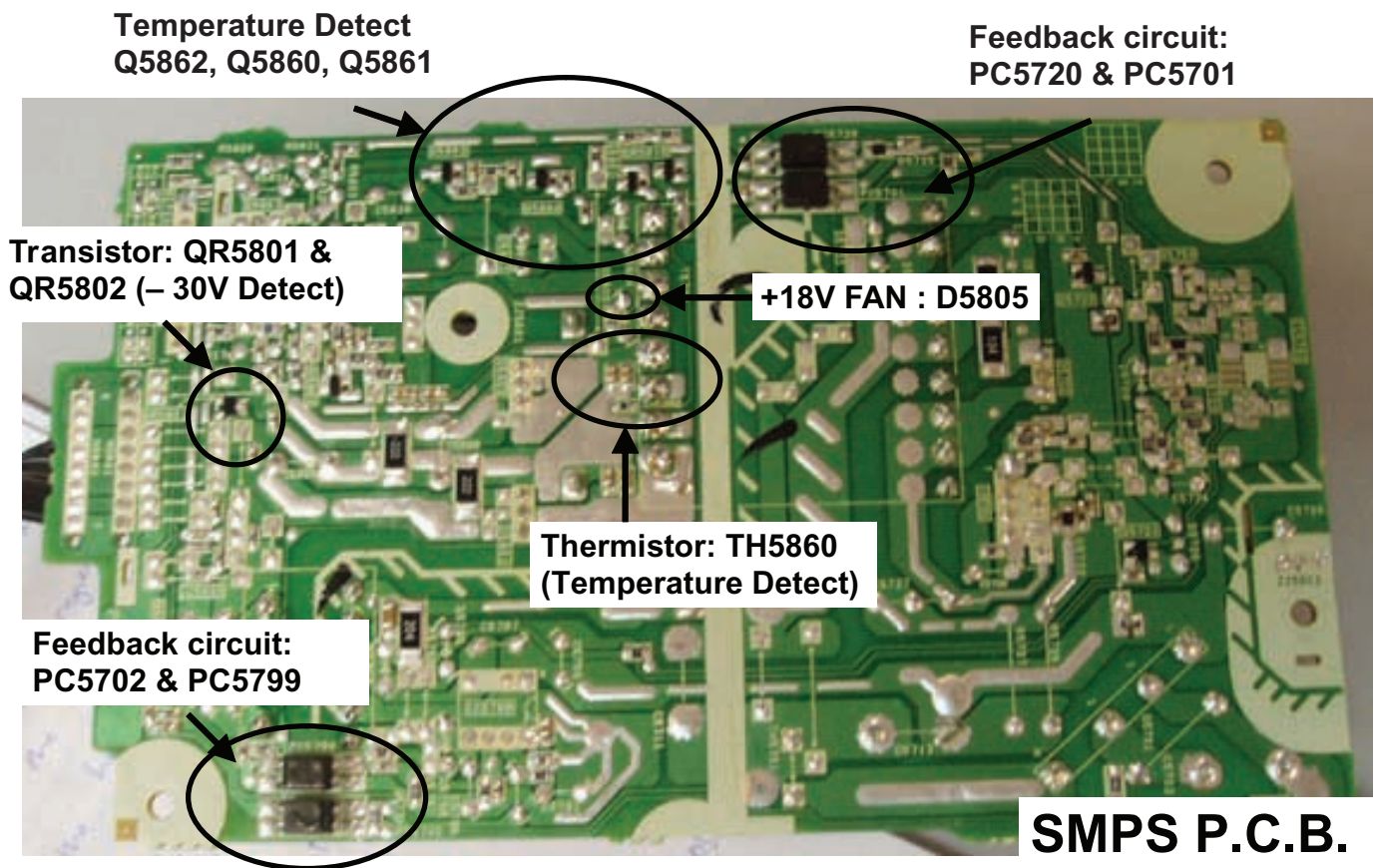


Fig. 1 SMPS P.C.B.

### 21.1.3.2. D-Amp P.C.B.

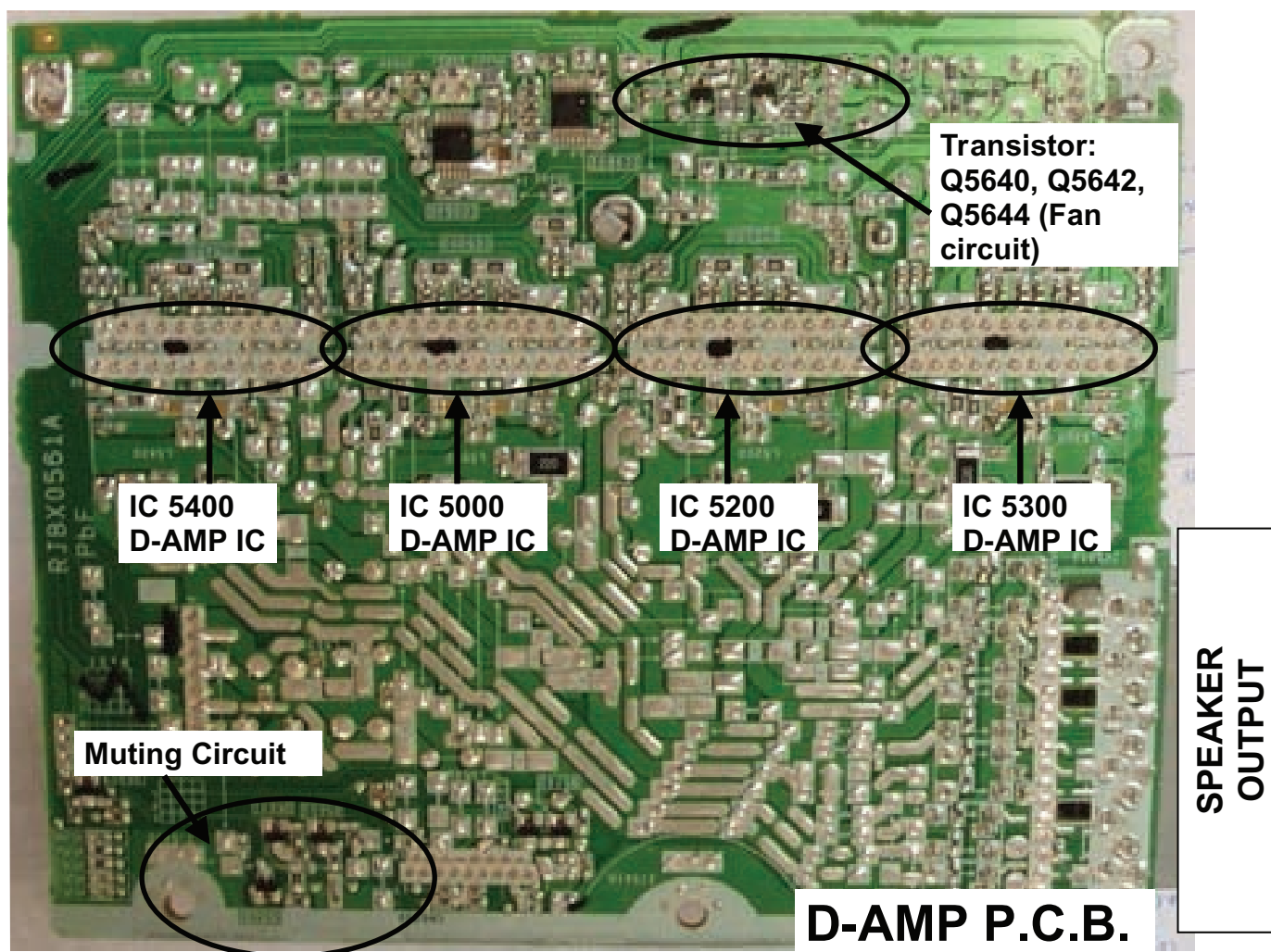


Fig. 2 D-Amp P.C.B

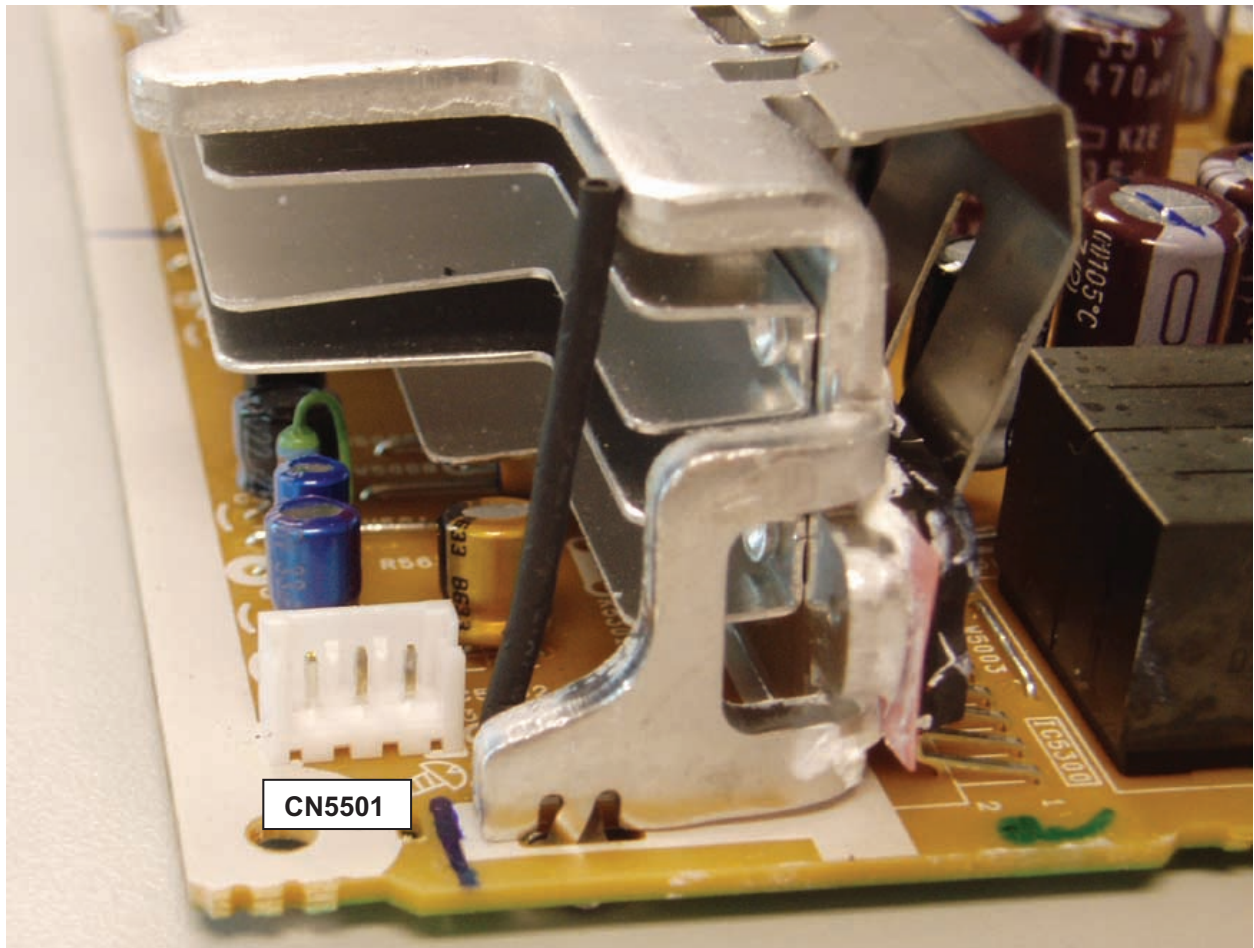


Fig. 3 Fan Connector

### 21.1.3.3. Power Supply P.C.B.

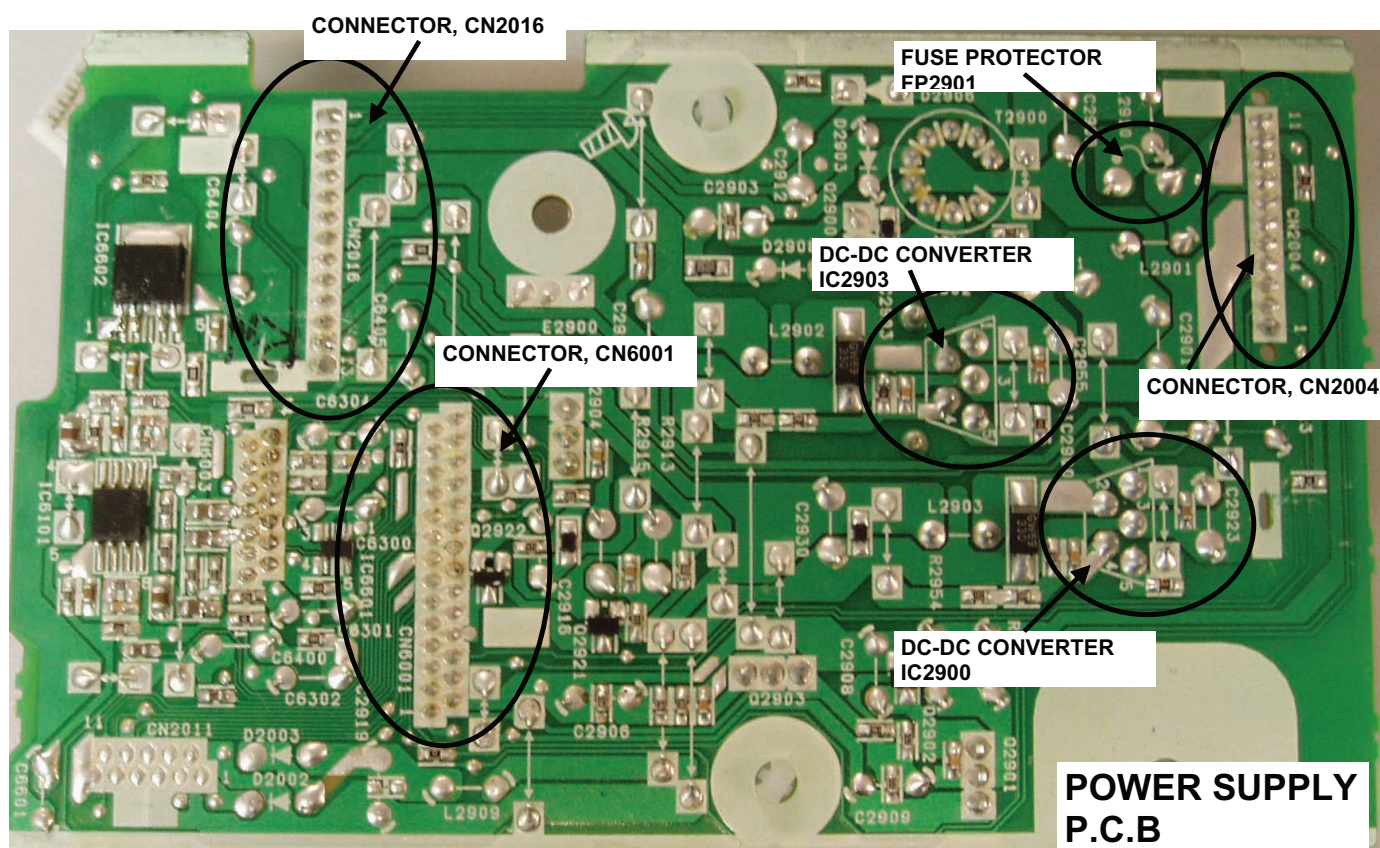


Fig. 4 Power Supply P.C.B.

### 21.1.3.4. D-Amp IC Configuration

|               |                 |                           |
|---------------|-----------------|---------------------------|
|               |                 | <b>PT465GC/GCS/GCT/GS</b> |
| <b>IC5300</b> | <b>Pin (10)</b> | <b>Sub-Woofer +</b>       |
|               | <b>Pin (14)</b> | <b>Center +</b>           |
| <b>IC5000</b> | <b>Pin (10)</b> | <b>Front Right</b>        |
|               | <b>Pin (14)</b> | <b>Front Left</b>         |
| <b>IC5400</b> | <b>Pin (10)</b> | <b>Surround Right</b>     |
|               | <b>Pin (14)</b> | <b>Surround Left</b>      |

Table 1

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

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

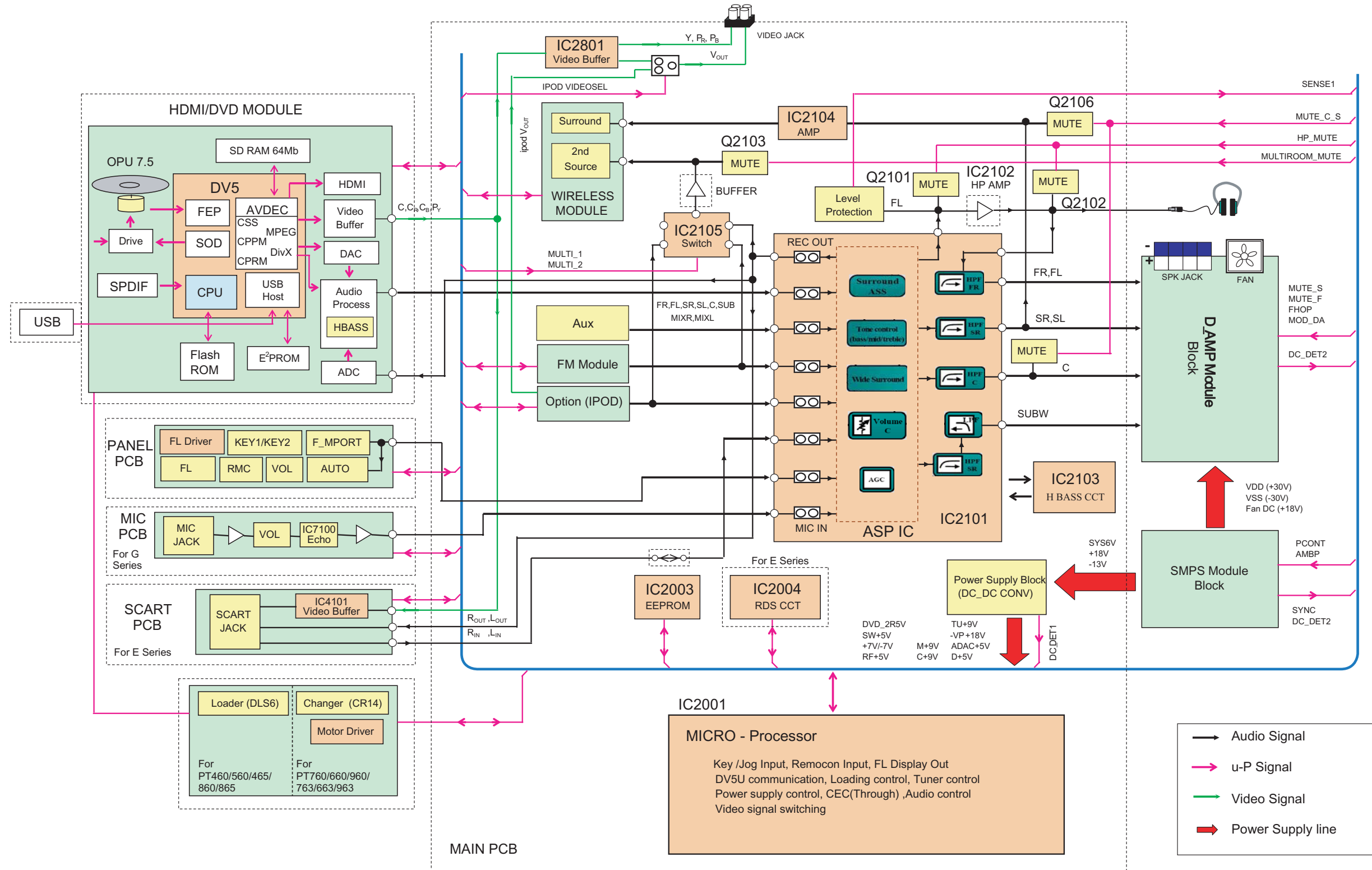
### 21.3. Basic Troubleshooting Guide for HDMI AV Output

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

| Problems                                                                                  | Checking Points                                                                                                         | Checking components                                                                                         |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 1) TV does not have any display. Set FL display shows U702/U703                           | 13) Hot-Plug Signal                                                                                                     | LB3906, R3902, R3903, Q3901, D3901                                                                          |
|                                                                                           | 14) TDMS Output swing amplitude control resistor                                                                        | R3901                                                                                                       |
|                                                                                           | 15) Host Interface External Input Clock from LSI (IC8001) to Up-Con IC (IC3901) - OSC27M                                | LB8702                                                                                                      |
|                                                                                           | 16) Video Data Lines from LSI (IC8001) to Up-Con (IC3901)                                                               | RX3707, RX3708, IC3901 (Pin 92 to 95, Pin 87 to 90)                                                         |
| 2) When switching the video output mode from 480P to 720p/1080i, TV display becomes blank | 1) Supply for Up-Con (IC3901)<br>- Pin 9,124<br>2) GND for Up-Con<br>- Pin 7,125<br>3) Check for capacitor short to GND | LB3902<br><br>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<br><br>2) Check setting of the set in Setup Menu whether the HDMI Audio output is turned On         | R8402, RX8402<br><br>* Check for solder short and/or component missing/damaged as well as signal condition. |

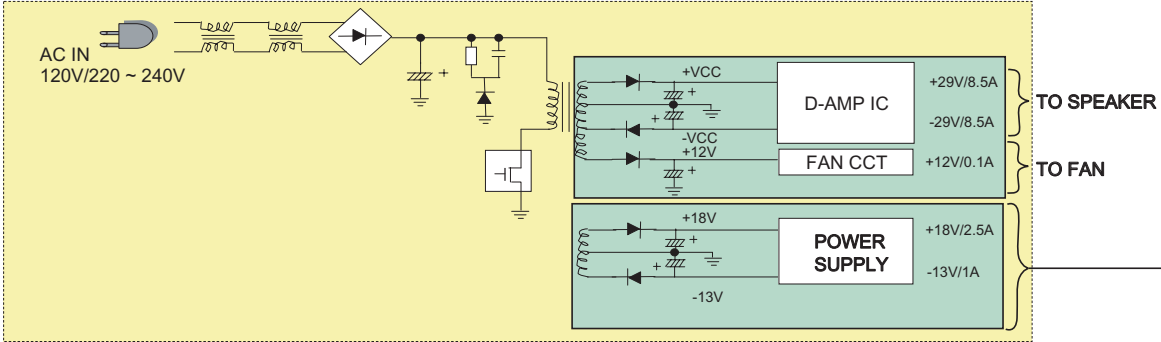
## 22 Overall Simplified Block for PT465

Overall Block Diagram

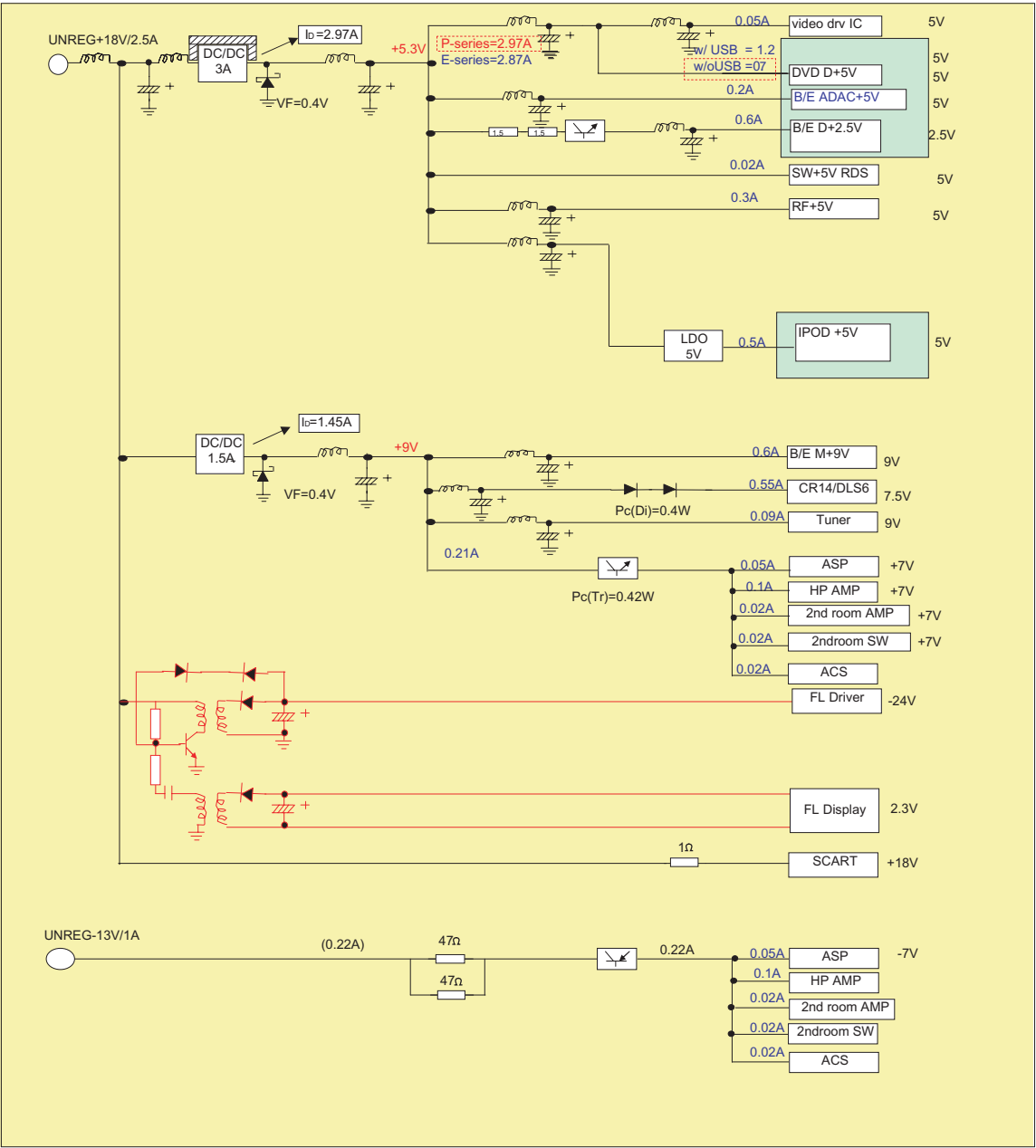


22.1. SMPS Module & Power Supply Block

SMPS MODULE BLOCK



POWER SUPPLY BLOCK



## 23 Terminal Function of ICs

### 23.1. IC2001 (RFKWPT460E): IC System Control

| Pin No. | Terminal Name      | I/O | Function                                      |
|---------|--------------------|-----|-----------------------------------------------|
| 1       | IPHONE_CPREADY     | I   | IPhone Detect Control Signal                  |
| 2       | TRAY_CW_H          | O   | Tray Control Signal 1                         |
| 3       | TRAY_CCW_L         | O   | Tray Control Signal 2                         |
| 4       | OPEN SW /UNLOAD_SW | I   | Open/Unload Signal                            |
| 5       | FX_DO              | -   | No Connection                                 |
| 6       | MIC_LVL1           | O   | MIC Volume Level Control Signal 1             |
| 7       | FX_DI              | -   | No Connection                                 |
| 8       | BYTE               | I   | VSS (GND)                                     |
| 9       | CNVSS              | I   | VSS (GND)                                     |
| 10      | MIC_SW             | -   | No Connection                                 |
| 11      | RDS_EN             | I   | RDS Enable (H: Enable L: Disable)             |
| 12      | RESET              | I   | System Reset Input                            |
| 13      | XOUT               | -   | Main Clock Output (10MHz)                     |
| 14      | VSS                | -   | GND (0V)                                      |
| 15      | XIN                | -   | Main Clock Input (10MHz)                      |
| 16      | VCC                | -   | Power Supply (+5V)                            |
| 17      | NMI                | I   | Connect to VCC External Interrupt I/P         |
| 18      | RMT                | I   | Remote Control Input                          |
| 19      | SYNC               | I   | AC Failure Detect Input                       |
| 20      | IPHONE_RST         | O   | IPhone Reset Output                           |
| 21      | IPOD_EN            | O   | IPhone Enable Output                          |
| 22      | SCARTTV            | I   | Scart TV Selector Enable Signal Input         |
| 23      | EDA                | O   | Data Signal for EEPROM IC                     |
| 24      | ECK                | O   | Clock Signal for EEPROM IC                    |
| 25      | ECS                | O   | Latch Signal for EEPROM IC                    |
| 26      | INNER SW           | O   | Control Signal                                |
| 27      | MIC_LVL2           | -   | No Connection                                 |
| 28      | DVD_CLK            | O   | Clock Signal for DVD                          |
| 29      | DVD_STAT           | I   | Status Signal for DVD                         |
| 30      | DVD_CMD            | O   | Command Signal for DVD                        |
| 31      | UART_TX            | O   | UART Transmitter Output Signal (For Software) |
| 32      | UART_RX            | I   | UART Receiver Input Signal (For Software)     |
| 33      | FX_CLK             | O   | Wireless Output Clock (For Software)          |
| 34      | FX_DET1            | I   | Wireless Detect Signal                        |
| 35      | VMUTE2             | O   | Video Muting Control Signal                   |
| 36      | MIC_VOLUP          | I   | MIC Volume Up Control Signal                  |
| 37      | TUN_DO             | O   | Tuner Stereo Detect Signal                    |
| 38      | TUN_DI             | O   | Tuner I2C Data Signal                         |
| 39      | TUN_CLK            | O   | Tuner I2C Clock Output Signal                 |
| 40      | PCONT              | O   | System Power Control                          |
| 41      | EPM                | I   | For Flash Programming                         |
| 42      | DVD_MUTE           | I   | DVD Muting Control Signal                     |
| 43      | DC_DET1            | I   | DC Detect Signal 1                            |
| 44      | SCART_MUTE         | O   | Scart Muting Control Signal (Line-Out)        |
| 45      | ACS_EN             | I   | Wide Sound Surround Enable Signal             |
| 46      | VMUTE              | O   | Video Muting Control Signal                   |
| 47      | ASP_CLK            | O   | Clock Signal for ASP IC                       |
| 48      | ASP_DAT            | O   | Data Signal for ASP IC                        |
| 49      | TUN_SD             | I   | Tuner Station Detect Signal                   |
| 50      | MIC_VOLDOWN        | O   | Mic Volume Down Control Signal                |
| 51      | WIDE1              | I   | No Connection                                 |
| 52      | HBASS SW           | O   | Harmonic Bass Control Signal                  |

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

### 23.2. IC1701 (MFI341S2095): IC Ipod Video

| Pin No. | Terminal Name | I/O | Function                          |
|---------|---------------|-----|-----------------------------------|
| 1       | VCC           | -   | Supply Voltage, Positive Terminal |
| 2       | XIN           | I   | 32.768 kHz Crystal Oscillator     |
| 3       | XOUT          | O   | 32.768 kHz External Clock Source  |

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

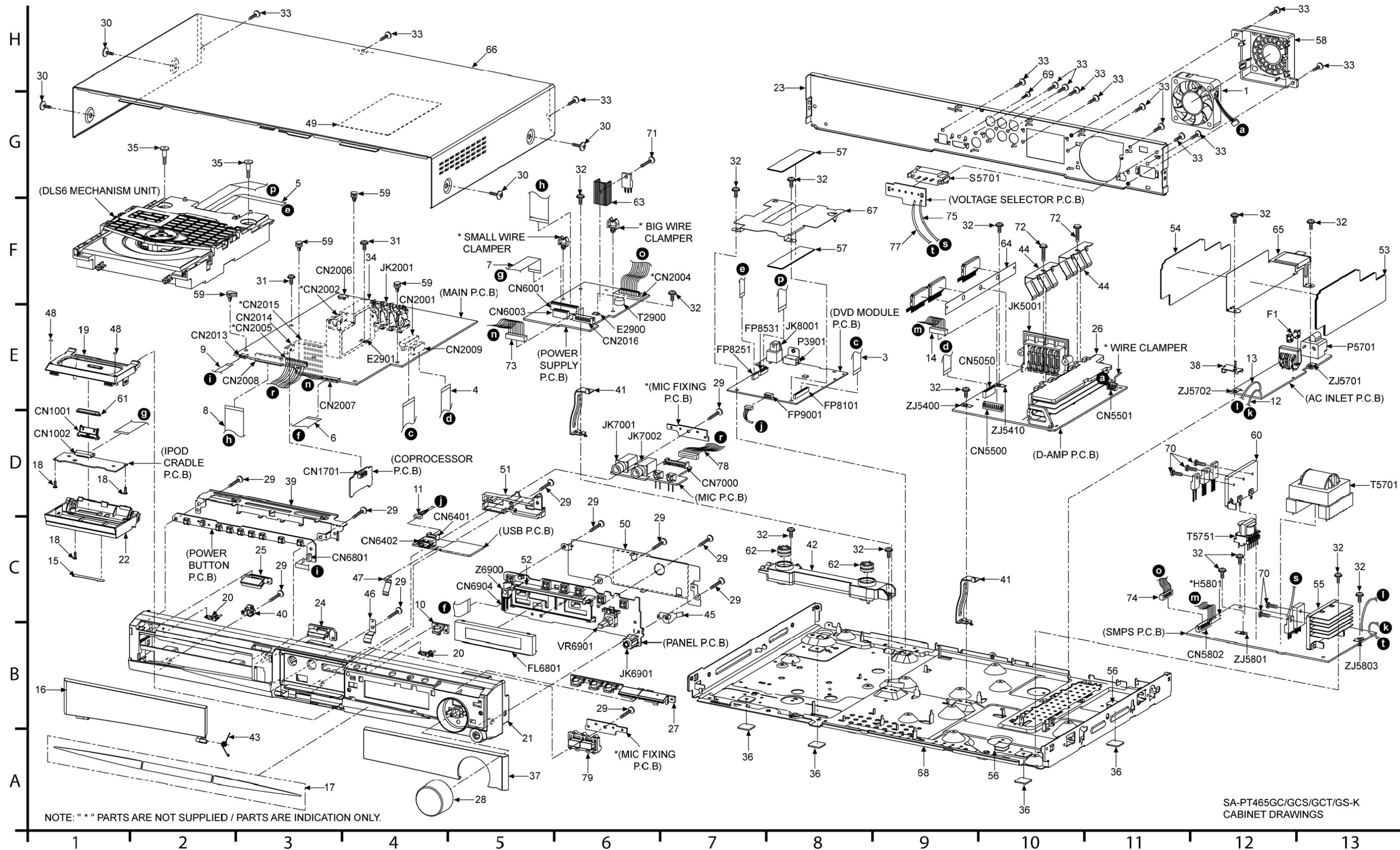
| Pin No. | Terminal Name | I/O | Function               |
|---------|---------------|-----|------------------------|
| 15      | P17           | O   | Segment Output 17      |
| 16      | P16           | O   | Segment Output 16      |
| 17      | P15           | O   | Segment Output 15      |
| 18 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

### 23.3. IC6901(C0HBB0000057): IC FL Driver

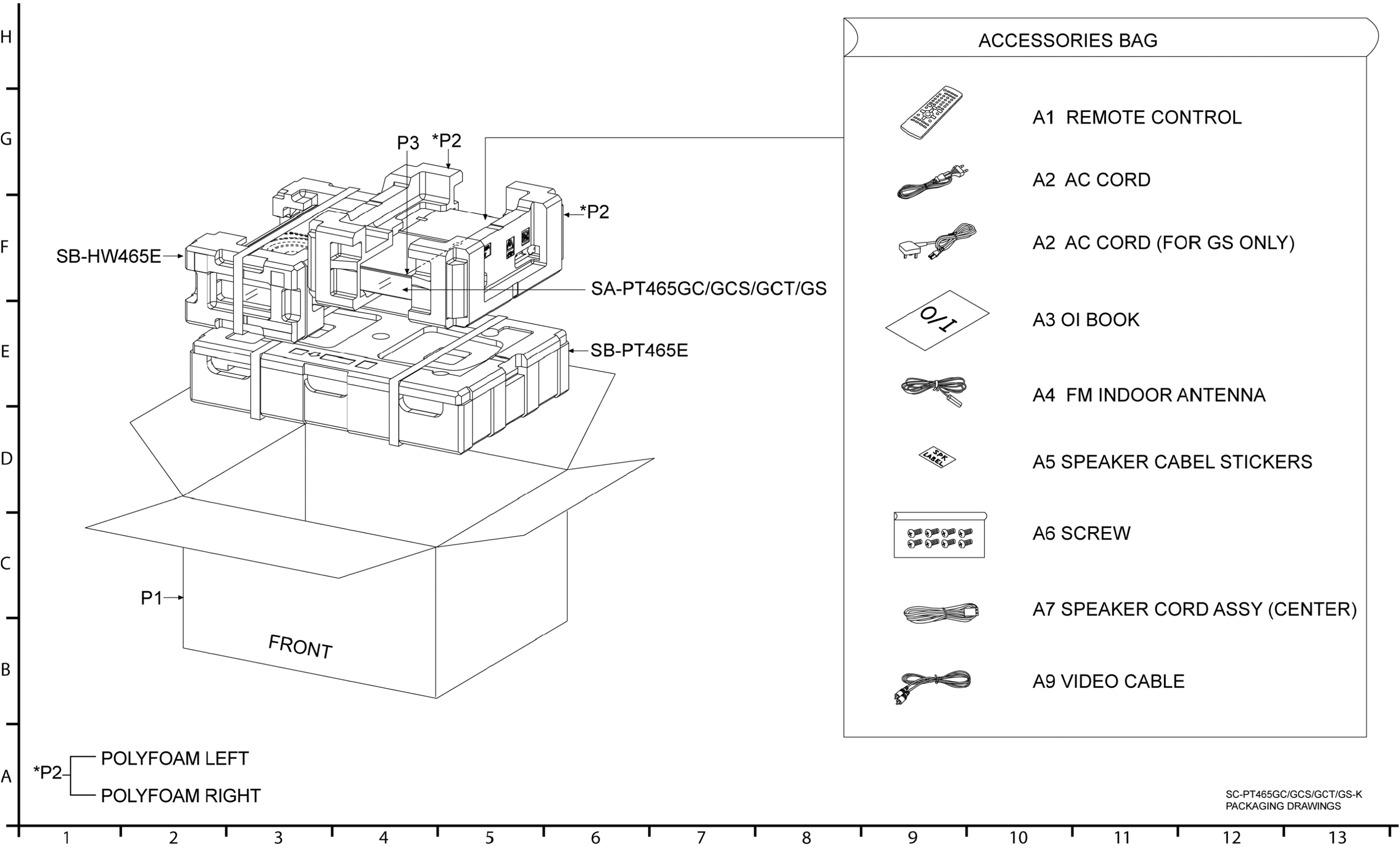
| Pin No. | Terminal Name | I/O | Function                         |
|---------|---------------|-----|----------------------------------|
| 1       | LED2          | O   | Led Drive Output                 |
| 2       | LED3          | -   | Led Drive Output                 |
| 3       | LED4          | -   | Led Drive Output                 |
| 4       | LED5          | -   | Led Drive Output                 |
| 5       | OSC           | I   | Oscillator Input                 |
| 6       | DOUT          | -   | Data Output                      |
| 7       | DIN           | I   | Data Input                       |
| 8       | CLK           | I   | Clock Input                      |
| 9       | STB           | I   | Serial Interface Strobe          |
| 10      | K1            | -   | Key Data Input 1 (No Connection) |
| 11      | K2            | -   | Key Data Input 2 (No Connection) |
| 12      | GND           | -   | GND                              |
| 13      | VCC           | -   | Power Supply (+5V)               |
| 14      | P18           | O   | Segment Output 18                |

## 24 Exploded Views

### 24.1. Cabinet Parts Location

SA-PT465GC/GCS/GCT/GS-K  
CABINET DRAWINGS

24.2. Packaging



## 25 Replacement Parts List

### Notes:

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

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

## 25.1. Component Parts List

| Ref. No. | Part No.     | Part Name & Description      | Remarks     |
|----------|--------------|------------------------------|-------------|
|          |              | CABINET AND CHASSIS          |             |
| 1        | L6FAJCCH0007 | FAN MOTOR                    | [M]         |
| 3        | REEX0814     | 50P FFC CABLE (MN-DVD)       | [M]         |
| 4        | REEX0815     | 17P FFC CABLE (MN-DAMP)      | [M]         |
| 5        | REEX0817     | 7P FFC CABLE (OPU-DVD)       | [M]         |
| 6        | REEX0820     | 17P FFC CABLE (PAN-MN)       | [M]         |
| 7        | REEX0821     | 14P FFC CABLE (IPOD-PWRSUPP) | [M]         |
| 8        | REEX0822     | 28P FFC CABLE (PWRSUPP-MN)   | [M]         |
| 9        | REEX0823     | 4P FFC CABLE (PWRBUT-MN)     | [M]         |
| 10       | RGUX0744-K   | SUBWOOFER BUTTON             | [M]         |
| 11       | REXX0636-J   | 5P WIRE (USB-DVD)            | [M]         |
| 12       | REXX0640-J   | BLACK WIRE (AC TO SMPS)      | [M] △       |
| 13       | REXX0641-J   | RED WIRE (AC TO SMPS)        | [M] △       |
| 14       | REXX0651     | 8P WIRE (SMPS TO DAMP)       | [M]         |
| 15       | RGB0164-S    | PANASONIC BADGE              | [M]         |
| 16       | RGKX0443-K   | DVD LID                      | [M]         |
| 17       | RGKX0489-S   | FRONT ORNAMENT               | [M]         |
| 18       | VHD1224-1    | SCREW                        | [M]         |
| 19       | RYPX0258-K1  | CRADLE UNIT                  | [M]         |
| 20       | RGLX0160-Q   | LIGHTING CHIP                | [M]         |
| 21       | RGPX0334K-K3 | FRONT PANEL                  | [M]         |
| 22       | RGPX0335B-K2 | CRADLE CHASSIS               | [M]         |
| 23       | RGRX0067C-B2 | REAR PANEL                   | [M] GC/GS △ |
| 23       | RGRX0067C-C1 | REAR PANEL                   | [M] GCS △   |
| 23       | RGRX0067C-D2 | REAR PANEL                   | [M] GCT △   |
| 24       | RGUX0741-K1  | OPEN/CLOSE BUTTON            | [M]         |
| 25       | RGUX0742-K   | POWER BUTTON                 | [M]         |
| 26       | RXXX0085-1J  | HEATSINK UNIT A              | [M]         |
| 27       | RGUX0745-K   | OPERATION BUTTON             | [M]         |
| 28       | RGWX0104-K   | VOLUME KNOB                  | [M]         |
| 29       | RHD26046     | SCREW                        | [M]         |
| 30       | RHD30007-K2J | SCREW                        | [M]         |
| 31       | RHD30090-1   | SCREW                        | [M]         |
| 32       | RHD30111-3   | SCREW                        | [M]         |
| 33       | RHD30119-S   | SCREW                        | [M]         |
| 34       | ENG06841QRF  | TUNER PACK                   | [M]         |
| 35       | RHDX03001    | SCREW                        | [M]         |
| 36       | RKA0059-K    | LEG FELT                     | [M]         |
| 37       | RKWX0279-Q   | FL WINDOW                    | [M]         |
| 38       | RMAX0118-1   | PCB BRACKET                  | [M]         |
| 39       | RMAX0129-1   | PANEL ANGLE                  | [M]         |
| 40       | RMAX0130     | DVD LID HOLDER               | [M]         |
| 41       | RMAX0131     | MAIN PCB BRACKET B           | [M]         |
| 42       | RMAX0132     | MECHA CHASSIS                | [M]         |
| 43       | RMBX0075-1   | DOOR SPRING                  | [M]         |
| 44       | RMC0465      | TR SPRING                    | [M]         |
| 45       | RMCX0042     | EARTH SPRING                 | [M]         |
| 46       | RMCX0055     | SPRING PLATE                 | [M]         |
| 47       | RMCX0057     | SPRING (USB)                 | [M]         |
| 48       | RMGX0050     | CRADLE RUBBER                | [M]         |
| 49       | RMNX0207     | SMPS PCB INSULATOR           | [M]         |
| 50       | RXQX0077     | FL SHIELD PLATE UNIT         | [M]         |
| 51       | RMNX0254     | USB BRACKET                  | [M]         |
| 52       | RMNX0260     | FL HOLDER                    | [M]         |
| 53       | RMNX0282A    | AC-IN PC SHEET A             | [M]         |
| 54       | RMNX0282B    | AC-IN PC SHEET B             | [M]         |
| 55       | RXXX0104     | HEATSINK UNIT B              | [M]         |
| 56       | RXQX0041     | CUSHION ASSY                 | [M]         |
| 57       | RMNX0286     | HDMI PC SHEET                | [M]         |
| 58       | RMQX0233-K   | FAN COVER                    | [M]         |
| 59       | RMR0502A-W   | PCB SUPPORT                  | [M]         |
| 60       | RXXX0105     | HEATSINK UNIT C              | [M]         |
| 61       | RMVX0117-K   | CONNECTOR COVER              | [M]         |
| 62       | RMX0302      | DAMPER RUBBER                | [M]         |
| 63       | RMVX0191     | HEATSINK EXTRUSSION          | [M]         |
| 64       | RMZX0038     | IC INSULATOR                 | [M]         |

| Ref. No. | Part No.     | Part Name & Description              | Remarks           |
|----------|--------------|--------------------------------------|-------------------|
| 65       | RSCX0188     | AC-IN SHIELD PLATE                   | [M]               |
| 66       | RKMX0141-K   | TOP CABINET                          | [M] △             |
| 67       | RSCX0191     | HDMI SHIELD PLATE                    | [M]               |
| 68       | RMKX0144-1   | BOTTOM CHASSIS                       | [M]               |
| 69       | XSN3+4FJ     | SCREW                                | [M]               |
| 70       | XTB3+10JFJ   | SCREW                                | [M]               |
| 71       | XTB3+8JFJ    | SCREW                                | [M]               |
| 72       | XTW3+8TFJ    | SCREW                                | [M]               |
| 73       | REXX0653-J   | 13P FLAT WIRE (MAIN TO RELAY)        | [M]               |
| 74       | REXX0639-J   | 12P FLAT WIRE (RELAY TO SMPS)        | [M]               |
| 75       | REXX0643-J   | BLUE WIRE (VOLTAGE SELECTOR TO SMPS) | [M] △             |
| 77       | REXX0642-J   | WHITE WIRE VOLTAGE SELECTOR TO SMPS) | [M] △             |
| 78       | REXX0652     | 12P FLAT WIRE (MAIN TO MIC PCB)      | [M]               |
| 79       | RGUX0747-K   | MIC BUTTON                           | [M]               |
|          |              | PRINTED CIRCUIT BOARDS               |                   |
| PCB1     | REPX0620A    | DVD MODULE P.C.B.                    | [M] (RTL) GC/GS   |
|          | REPX0620C    | DVD MODULE P.C.B.                    | [M] (RTL) GCS/GCT |
| PCB2     | REPX0621F    | D-AMP P.C.B.                         | [M] (RTL)         |
| PCB3     | REPX0622D    | SMPS INLET P.C.B.                    | [M] (RTL) △       |
| PCB4     | REPX0622D    | AC INLET P.C.B                       | [M] (RTL) △       |
| PCB5     | REPX0622D    | VOLTAGE SELECTOR P.C.B               | [M] (RTL) △       |
| PCB6     | REPX0630F    | MAIN P.C.B                           | [M] (RTL) GC/GS   |
|          | REPX0630G    | MAIN P.C.B                           | [M] (RTL) GCS/GCT |
| PCB7     | REPX0630F    | POWER SUPPLY P.C.B                   | [M] (RTL) GC/GS   |
|          | REPX0630G    | POWER SUPPLY P.C.B                   | [M] (RTL) GCS/GCT |
| PCB8     | REPX0655B    | PANEL P.C.B                          | [M] (RTL)         |
| PCB9     | REPX0655B    | POWER BUTTON P.C.B                   | [M] (RTL)         |
| PCB10    | REPX0655B    | USB P.C.B                            | [M] (RTL)         |
| PCB11    | REPX0655B    | MIC P.C.B                            | [M] (RTL)         |
| PCB12    | REPX0631A    | I-POD CRADLE P.C.B                   | [M] (RTL)         |
| PCB13    | REPX0657B    | CO-PROCESSOR P.C.B                   | [M] (RTL)         |
|          |              | INTERGRATED CIRCUITS                 |                   |
| IC1701   | MFI341S2095  | IC IPOD VIDEO                        | [M]               |
| IC1702   | C0CBCBC00140 | IC +3.3V REGULATOR                   | [M]               |
| IC2001   | RFKWP440E    | IC SYSTEM CONTROL                    | [M]               |
| IC2002   | C0CBCBC00140 | IC REGULATOR                         | [M]               |
| IC2101   | C1AB00002735 | IC AUDIO SIGNAL PROCESSOR            | [M]               |
| IC2102   | C0AABB000125 | IC HEADPHONE AMP                     | [M]               |
| IC2501   | C0ABBB000230 | IC CENTER POP-UP AMP                 | [M]               |
| IC2801   | C9ZB00000461 | IC VIDEO BUFFER                      | [M]               |
| IC2900   | C0DAAYY00042 | IC SWITCHING REGULATOR               | [M]               |
| IC2903   | C0DAAMH00012 | IC SWITCHING REGULATOR               | [M]               |
| IC3901   | MN864702A    | IC HDMI TRANSMITTER                  | [M]               |
| IC3952   | C0CBCDC00063 | IC TERMINAL VOLTAGE REGULATOR        | [M]               |
| IC5000   | C1BA00000487 | IC AUDIO DIGITAL POWER AMP           | [M]               |
| IC5300   | C1BA00000487 | IC AUDIO DIGITAL POWER AMP           | [M]               |
| IC5400   | C1BA00000487 | IC AUDIO DIGITAL POWER AMP           | [M]               |

| Ref. No. | Part No.     | Part Name & Description  | Remarks          |
|----------|--------------|--------------------------|------------------|
| IC5500   | C0JBAB000902 | IC INVERTER GATE         | [M]              |
| IC5501   | C0JBAF000716 | IC D-TYPE FLIP-FLOP      | [M]              |
| IC5701   | C5HACY000003 | IC SWITCHING REGULATOR   | [M]              |
| IC5780   | C0ABBA000168 | IC OP-AMP                | [M]              |
| IC5799   | MIP4110MSSCF | IC SWITCHING REGULATOR   | [M]              |
| IC5801   | C0DABFC00002 | IC SHUNT REGULATOR       | [M]              |
| IC5899   | C0DAEMZ00001 | IC SHUNT REGULATOR       | [M]              |
| IC6101   | C0ABBB000230 | IC IPOD DIFFERENTIAL AMP | [M]              |
| IC6601   | C0ABAA000114 | IC ISOLATION AMP         | [M]              |
| IC6602   | C0CBCD000003 | IC +5V REGULATOR         | [M]              |
| IC6901   | C0HBB0000057 | IC FL DRIVER             | [M]              |
| IC7000   | C0ABBB000230 | IC MIC AMP               | [M]              |
| IC7100   | C1AB00002773 | IC ECHO PROCESSOR        | [M]              |
| IC8001   | MN2DS0018MP  | IC DV5.0 LSI             | [M]              |
| IC8051   | C3ABPY000011 | IC 64M SDRAM             | [M]              |
| IC8111   | C0DBZY000018 | IC +3.3V DC-DC CONVERTER | [M]              |
| IC8151   | C0DBEHG00006 | IC +1.2V REGULATOR       | [M]              |
| IC8251   | C0GBG0000048 | IC MOTOR DRIVE           | [M]              |
| IC8421   | C0FBBK000044 | IC AUDIO DAC             | [M]              |
| IC8422   | C0FBAK000026 | IC AUDIO DAC             | [M]              |
| IC8601   | C0EBA0000039 | IC RESET                 | [M]              |
| IC8606   | C0EBE0000456 | IC RESET                 | [M]              |
| IC8611   | C3EBGC000056 | IC EEPROM                | [M]              |
| IC8651   | RFKWMH32D320 | IC FLASH ROM             | [SPG]<br>GCS/GCT |
| IC8651   | RFKWMH32B323 | IC FLASH ROM             | [SPG]<br>GC/GS   |
| 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   | C0DBZY000266 | IC REGULATOR             | [M]              |
|          |              | TRANSISTORS              |                  |
|          |              |                          |                  |
| Q1702    | B1CFG0000004 | TRANSISTOR               | [M]              |
| Q1704    | B1CFG0000004 | TRANSISTOR               | [M]              |
| Q2001    | B1ADCE000012 | TRANSISTOR               | [M]              |
| Q2002    | B1GBCFJJ0051 | TRANSISTOR               | [M]              |
| Q2003    | B1GBCFLL0037 | TRANSISTOR               | [M]              |
| Q2004    | 2SD0601AHL   | TRANSISTOR               | [M]              |
| Q2005    | B1ADCE000012 | TRANSISTOR               | [M]              |
| Q2006    | B1GBCFJN0033 | TRANSISTOR               | [M]              |
| Q2007    | B1GBCFJJ0051 | TRANSISTOR               | [M]              |
| Q2013    | B1GBCFJJ0051 | TRANSISTOR               | [M]              |
| Q2030    | B1GBCFJJ0051 | TRANSISTOR               | [M]              |
| Q2096    | 2SD0601AHL   | TRANSISTOR               | [M]              |
| Q2097    | 2SD0601AHL   | TRANSISTOR               | [M]              |
| Q2101    | B1HBECA00004 | TRANSISTOR               | [M]              |
| Q2102    | B1HBECA00004 | TRANSISTOR               | [M]              |
| Q2203    | B1GDCFGA0018 | TRANSISTOR               | [M]              |
| Q2501    | B1GBCFLL0037 | TRANSISTOR               | [M]              |
| Q2502    | B1GBCFLL0037 | TRANSISTOR               | [M]              |
| Q2504    | B1GDCFGA0018 | TRANSISTOR               | [M]              |
| Q2505    | B1ABGC000005 | TRANSISTOR               | [M]              |
| Q2801    | B1GBCFJN0033 | TRANSISTOR               | [M]              |
| Q2900    | B1BABK000001 | TRANSISTOR               | [M]              |
| Q2901    | B1BCCG000002 | TRANSISTOR               | [M]              |
| Q2902    | B1ADCF000001 | TRANSISTOR               | [M]              |
| Q2903    | B1BACG000023 | TRANSISTOR               | [M]              |
| Q2904    | B1BACG000023 | TRANSISTOR               | [M]              |
| Q2909    | B1ABCF000176 | TRANSISTOR               | [M]              |
| Q2919    | B1ABCF000176 | TRANSISTOR               | [M]              |
| Q2921    | B1ADCF000001 | TRANSISTOR               | [M]              |
| Q2922    | B1GBCFJJ0051 | TRANSISTOR               | [M]              |
| Q2923    | B1GBCFJJ0051 | TRANSISTOR               | [M]              |
| Q2924    | B1GBCFJJ0051 | TRANSISTOR               | [M]              |
| Q3901    | 2SD1819A0L   | TRANSISTOR               | [M]              |
| Q3902    | B1CFHA000002 | TRANSISTOR               | [M]              |
| Q3903    | B1CFHA000002 | TRANSISTOR               | [M]              |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| Q3941    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q3942    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q3943    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q5101    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5102    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5601    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5602    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5603    | B1ADCE000012 | TRANSISTOR              | [M]     |
| Q5604    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5640    | B1BACD000018 | TRANSISTOR              | [M]     |
| Q5641    | 2SC584500L   | TRANSISTOR              | [M]     |
| Q5642    | 2SC584500L   | TRANSISTOR              | [M]     |
| Q5644    | 2SC584500L   | TRANSISTOR              | [M]     |
| Q5720    | 2SC3940ARA   | TRANSISTOR              | [M]     |
| Q5721    | 2SA207700L   | TRANSISTOR              | [M]     |
| Q5722    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5750    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5802    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5803    | 2SC3940ARA   | TRANSISTOR              | [M]     |
| Q5860    | 2SA207700L   | TRANSISTOR              | [M]     |
| Q5861    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5862    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5898    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q6910    | B1GBCFJN0033 | TRANSISTOR              | [M]     |
| Q7001    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7002    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7003    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7006    | B1ABEB000002 | TRANSISTOR              | [M]     |
| Q7007    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7008    | B1GDCFGA0018 | TRANSISTOR              | [M]     |
| Q7100    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7101    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7102    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7106    | B1ABEB000002 | TRANSISTOR              | [M]     |
| Q7107    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q7108    | B1GDCFGA0018 | TRANSISTOR              | [M]     |
| Q8321    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8325    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8331    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8335    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8341    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8551    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q8552    | B1ADGB000008 | TRANSISTOR              | [M]     |
| Q8561    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q8562    | B1ADGB000008 | TRANSISTOR              | [M]     |
| Q8563    | B1CFHA000002 | TRANSISTOR              | [M]     |
| Q8564    | B1CFHA000002 | TRANSISTOR              | [M]     |
| Q8565    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| QR5801   | UNR221400L   | TRANSISTOR              | [M]     |
| QR5802   | B1GDCFGA0018 | TRANSISTOR              | [M]     |
| QR5810   | B1GBCFLL0037 | TRANSISTOR              | [M]     |
| QR8111   | XP0621400L   | TRANSISTOR              | [M]     |
| QR8420   | UNR521100L   | TRANSISTOR              | [M]     |
| QR9030   | B1GDCFJJ0002 | TRANSISTOR              | [M]     |
|          |              | DIODES                  |         |
|          |              |                         |         |
| D2001    | B0ACCK000005 | DIODE                   | [M]     |
| D2005    | B0ACCK000005 | DIODE                   | [M]     |
| D2007    | B0ACCK000005 | DIODE                   | [M]     |
| D2008    | B0ACCK000005 | DIODE                   | [M]     |
| D2601    | B0ACCK000005 | DIODE                   | [M]     |
| D2602    | B0ACCK000005 | DIODE                   | [M]     |
| D2751    | B0ACCK000005 | DIODE                   | [M]     |
| D2752    | B0ACCK000005 | DIODE                   | [M]     |
| D2753    | B0BC5R000009 | DIODE                   | [M]     |
| D2901    | B0BC035A0007 | DIODE                   | [M]     |
| D2903    | B0EAMM000057 | DIODE                   | [M]     |
| D2904    | B0JCPD000025 | DIODE                   | [M]     |
| D2906    | B0JAME000029 | DIODE                   | [M]     |
| D2908    | B0EAMM000057 | DIODE                   | [M]     |
| D2909    | MAZ82400HL   | DIODE                   | [M]     |
| D2912    | B0BC3R400001 | DIODE                   | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| D2913    | B0JCPD000025 | DIODE                   | [M]     |
| D2915    | B0ACCK000005 | DIODE                   | [M]     |
| D2944    | B0ACCK000005 | DIODE                   | [M]     |
| D2945    | B0ACCK000005 | DIODE                   | [M]     |
| D2946    | B0BC7R500001 | DIODE                   | [M]     |
| D2947    | B0BC010A0007 | DIODE                   | [M]     |
| D2948    | B0BC7R500001 | DIODE                   | [M]     |
| D2949    | B0BC5R000009 | DIODE                   | [M]     |
| D2951    | B0BC010A0007 | DIODE                   | [M]     |
| D2962    | B0BC5R000009 | DIODE                   | [M]     |
| D3901    | MA2J72800L   | DIODE                   | [M]     |
| D5501    | MA2J11100L   | DIODE                   | [M]     |
| D5502    | MA2J11100L   | DIODE                   | [M]     |
| D5503    | MAZ80510ML   | DIODE                   | [M]     |
| D5640    | MAZ81200ML   | DIODE                   | [M]     |
| D5643    | MA2J11100L   | DIODE                   | [M]     |
| D5644    | MA2J11100L   | DIODE                   | [M]     |
| D5645    | MA2J11100L   | DIODE                   | [M]     |
| D5701    | B0FBAR000041 | DIODE                   | [M]     |
| D5702    | B0ZAZ0000052 | DIODE                   | [M]     |
| D5721    | B0BC010A0007 | DIODE                   | [M]     |
| D5722    | B0BC019A0007 | DIODE                   | [M]     |
| D5723    | MA2J11100L   | DIODE                   | [M]     |
| D5724    | MA2J11100L   | DIODE                   | [M]     |
| D5725    | B0BC6R100010 | DIODE                   | [M]     |
| D5726    | B0EAKM000117 | DIODE                   | [M]     |
| D5727    | MA2J11100L   | DIODE                   | [M]     |
| D5728    | MA2J11100L   | DIODE                   | [M]     |
| D5729    | B0EAMM000057 | DIODE                   | [M]     |
| D5730    | MA2J11100L   | DIODE                   | [M]     |
| D5731    | B0EAMM000057 | DIODE                   | [M]     |
| D5732    | B0BC035A0007 | DIODE                   | [M]     |
| D5793    | B0HAMP000094 | DIODE                   | [M]     |
| D5795    | B0BC5R000009 | DIODE                   | [M]     |
| D5796    | MA2J11100L   | DIODE                   | [M]     |
| D5797    | MA2J72800L   | DIODE                   | [M]     |
| D5798    | B0HAMP000094 | DIODE                   | [M]     |
| D5799    | B0HAMP000094 | DIODE                   | [M]     |
| D5801    | B0HBSM000043 | DIODE                   | [M]     |
| D5802    | B0HBSM000043 | DIODE                   | [M]     |
| D5803    | B0HFRJ000012 | DIODE                   | [M]     |
| D5804    | B0EAMM000057 | DIODE                   | [M]     |
| D5805    | B0EAMM000057 | DIODE                   | [M]     |
| D5806    | MAZ80750ML   | DIODE                   | [M]     |
| D5807    | MA2J11100L   | DIODE                   | [M]     |
| D5809    | MA2J11100L   | DIODE                   | [M]     |
| D5896    | B0EAMM000057 | DIODE                   | [M]     |
| D6821    | B3AAA0000803 | DIODE                   | [M]     |
| D6910    | B0BC2R4A0006 | DIODE                   | [M]     |
| D6911    | B0BC5R000009 | DIODE                   | [M]     |
| D6913    | B3ABA0000397 | DIODE                   | [M]     |
| D7001    | B0ACCK000005 | DIODE                   | [M]     |
| D7002    | B0ACCK000005 | DIODE                   | [M]     |
| D7003    | B0ACCK000005 | DIODE                   | [M]     |
| D7004    | B0ACCK000005 | DIODE                   | [M]     |
| D7005    | B0ACCK000005 | DIODE                   | [M]     |
| D7006    | B0ACCK000005 | DIODE                   | [M]     |
| D7100    | B0BC5R000009 | DIODE                   | [M]     |
| D7106    | B0ACCK000005 | DIODE                   | [M]     |
| D8211    | MA2J11100L   | DIODE                   | [M]     |
| DZ5701   | ERZV10V511CS | ZENER                   | [M] △   |
|          |              |                         |         |
|          |              | INDUCTORS               |         |
|          |              |                         |         |
| L1001    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1002    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1003    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1004    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1005    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1006    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1007    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1008    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1009    | J0JHC0000107 | INDUCTOR                | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| L1010    | J0JHC0000107 | INDUCTOR                | [M]     |
| L1011    | J0JHC0000107 | INDUCTOR                | [M]     |
| L2101    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2201    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2801    | G0A101EA0017 | CHOKE COIL              | [M]     |
| L2802    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2803    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2804    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2805    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2901    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2902    | G0A101ZA0028 | CHOKE COIL              | [M]     |
| L2903    | G0A101ZA0028 | CHOKE COIL              | [M]     |
| L2905    | G0A100HA0023 | CHOKE COIL              | [M]     |
| L2907    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2908    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2910    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2911    | G0A200D00002 | CHOKE COIL              | [M]     |
| L2912    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2913    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2914    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L3903    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L3904    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L3905    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L3906    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L5000    | G0A150L00003 | CHOKE COIL              | [M]     |
| L5001    | G0B9R5K00003 | LINE FILTER             | [M]     |
| L5002    | G0B9R5K00004 | LINE FILTER             | [M]     |
| L5201    | G0B9R5K00004 | LINE FILTER             | [M]     |
| L5300    | G0A150L00003 | CHOKE COIL              | [M]     |
| L5301    | G0B9R5K00003 | LINE FILTER             | [M]     |
| L5400    | G0A150L00003 | CHOKE COIL              | [M]     |
| L5401    | G0B9R5K00003 | LINE FILTER             | [M]     |
| L5402    | G0B9R5K00004 | LINE FILTER             | [M]     |
| L5500    | J0JKB0000020 | INDUCTOR                | [M]     |
| L5501    | J0JKB0000020 | INDUCTOR                | [M]     |
| L5701    | ELF15N035AN  | LINE FILTER             | [M] △   |
| L5702    | G0B932H00001 | LINE FILTER             | [M] △   |
| L5703    | ELF22V022A   | LINE FILTER             | [M] △   |
| L6901    | J0JBC0000019 | INDUCTOR                | [M]     |
| L6903    | J0JBC0000019 | INDUCTOR                | [M]     |
| L6910    | J0JBC0000019 | INDUCTOR                | [M]     |
| L6920    | J0JBC0000019 | INDUCTOR                | [M]     |
| L7001    | J0JBC0000019 | INDUCTOR                | [M]     |
| L7002    | J0JBC0000030 | INDUCTOR                | [M]     |
| L7003    | J0JBC0000019 | INDUCTOR                | [M]     |
| L7004    | J0JBC0000019 | INDUCTOR                | [M]     |
| L7101    | J0JBC0000019 | INDUCTOR                | [M]     |
| L7103    | J0JBC0000019 | INDUCTOR                | [M]     |
| L7303    | J0JBC0000019 | INDUCTOR                | [M]     |
| L8001    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L8201    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L8301    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L8302    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L8303    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L8330    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L8501    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L8550    | G1C100M00049 | CHIP INDUCTOR           | [M]     |
| L9004    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| LB3901   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB3902   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB3903   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3904   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3905   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3906   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3907   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB3908   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB6401   | J0JHC0000034 | INDUCTOR                | [M]     |
| LB6402   | J0JHC0000034 | INDUCTOR                | [M]     |
| LB8001   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB8011   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB8401   | J0JCC0000308 | INDUCTOR                | [M]     |
| LB8530   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB8532   | J0JDC0000045 | INDUCTOR                | [M]     |

| Ref. No. | Part No.     | Part Name & Description       | Remarks |
|----------|--------------|-------------------------------|---------|
| LB8551   | J0JDC0000045 | INDUCTOR                      | [M]     |
| LB8561   | J0JDC0000045 | INDUCTOR                      | [M]     |
| LB8571   | J0JDC0000045 | INDUCTOR                      | [M]     |
| LB8701   | J0JCC0000308 | INDUCTOR                      | [M]     |
| LB8702   | J0JCC0000308 | INDUCTOR                      | [M]     |
| LB8901   | J0JCC0000308 | INDUCTOR                      | [M]     |
| LB9001   | J0JCC0000042 | INDUCTOR                      | [M]     |
|          |              |                               |         |
|          |              | VARISTORS                     |         |
|          |              |                               |         |
| VA3901   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3902   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3903   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3904   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3905   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3906   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3907   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3908   | EZAEG2A50AX  | ESD SUPPRESSOR                | [M]     |
| VA3909   | EZJZ0V800AA  | VARISTOR                      | [M]     |
| VA3910   | EZJZ0V800AA  | VARISTOR                      | [M]     |
| VA3911   | EZJZ0V800AA  | VARISTOR                      | [M]     |
| VA3912   | EZJZ0V800AA  | VARISTOR                      | [M]     |
| VA3913   | EZJZ0V800AA  | VARISTOR                      | [M]     |
| VA6401   | EZJZ1V171AA  | VARISTOR                      | [M]     |
| VA6402   | EZJZ1V171AA  | VARISTOR                      | [M]     |
|          |              |                               |         |
|          |              | VARIABLE RESISTORS            |         |
|          |              |                               |         |
| VR6901   | EVEKE2F2524B | VOLUME ENCODER                | [M]     |
|          |              |                               |         |
|          |              | SWITCHES                      |         |
|          |              |                               |         |
| S5701    | K0ABCA000007 | AC VOLTAGE SELECTOR SWITCH    | [M] △   |
| S6801    | EVQ21405R    | SW POWER                      | [M]     |
| S6807    | EVQ21405R    | SW OPEN/CLOSE                 | [M]     |
| S6901    | EVQ21405R    | SW PLAY/MEMORY                | [M]     |
| S6902    | EVQ21405R    | SW BACKWARD TUNE DOWN         | [M]     |
| S6903    | EVQ21405R    | SW FORWARD TUNE UP            | [M]     |
| S6904    | EVQ21405R    | SW STOP/- TUNE MODE/- FM MODE | [M]     |
| S6905    | EVQ21405R    | SW BOOST                      | [M]     |
| S6907    | EVQ21405R    | SW SELECTOR                   | [M]     |
| S7001    | EVQPC105K    | SW                            | [M]     |
| S7002    | EVQPC105K    | SW                            | [M]     |
| PSW1     | D4FB1R100009 | SW                            | [M]     |
|          |              |                               |         |
|          |              | CONNECTORS                    |         |
|          |              |                               |         |
| CN1001   | MFI514S0117  | 30P CONNECTOR                 | [M]     |
| CN1002   | K1MN14BA0141 | 14P CONNECTOR                 | [M]     |
| CN1701   | K1KB06B00038 | 6P CONNECTOR                  | [M]     |
| CN2001   | K1MY50AA0029 | 50P CONNECTOR                 | [M]     |
| CN2006   | K1MN07BA0004 | 7P FFC CONNECTOR              | [M]     |
| CN2007   | K1MN17BA0005 | 17P FFC CONNECTOR             | [M]     |
| CN2008   | K1MN28AA0004 | 28P CONNECTOR                 | [M]     |
| CN2009   | K1MN17AA0004 | 17P CONNECTOR                 | [M]     |
| CN2013   | K1MN04B00022 | 4P FFC CONNECTOR              | [M]     |
| CN2014   | K1KA06AA0031 | 6P CONNECTOR                  | [M]     |
| CN2016   | K1KA13AA0194 | 13P CONNECTOR                 | [M]     |
| CN5050   | K1MN17AA0004 | 17P CONNECTOR                 | [M]     |
| CN5500   | K1KA08AA0180 | 8P CONNECTOR                  | [M]     |
| CN5501   | K1KA03AA0301 | 3P CONNECTOR                  | [M]     |
| CN5802   | K1KA11AA0194 | 11P CONNECTOR                 | [M]     |
| CN6001   | K1MN28AA0004 | 28P CONNECTOR                 | [M]     |
| CN6003   | K1MN14AA0003 | 14P CONNECTOR                 | [M]     |
| CN6401   | K1KA05BA0061 | 5P CONNECTOR                  | [M]     |
| CN6402   | K1FY104B0011 | USB CONNECTOR                 | [M]     |
| CN6801   | K1MN04AA0003 | 4P CONNECTOR                  | [M]     |
| CN6904   | K1MN17AA0004 | 17P CONNECTOR                 | [M]     |
| CN7000   | K1KA12B00122 | 12P CONNECTOR                 | [M]     |
| FP8101   | K1MN50AA0082 | 50P CONNECTOR                 | [M]     |
| FP8251   | K1MN07AA0076 | 7P CONNECTOR                  | [M]     |
| FP8531   | K1MY26AA0021 | 26P CONNECTOR                 | [M]     |
| FP9001   | K1KA05BA0014 | 5P CONNECTOR                  | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| P3901    | K1FY119E0002 | CONNECTOR               | [M]     |
|          |              |                         |         |
|          |              | TRANSFORMER             |         |
|          |              |                         |         |
| T2900    | G4D1A0000117 | SWITCHING TRANSFORMER   | [M] △   |
| T5701    | ETS42BN1A6AD | SWITCHING TRANSFORMER   | [M] △   |
| T5751    | ETS19AB256AG | SWITCHING TRANSFORMER   | [M] △   |
|          |              |                         |         |
|          |              | COMPONENT COMBINATION   |         |
|          |              |                         |         |
| Z6900    | B3RAD0000146 | REMOTE SENSOR           | [M]     |
| ZA5701   | K3GE1ZZ00001 | FUSE HOLDER             | [M]     |
| ZA5702   | K3GE1ZZ00001 | FUSE HOLDER             | [M]     |
|          |              |                         |         |
|          |              | PHOTO COUPLERS          |         |
|          |              |                         |         |
| PC5701   | B3PBA0000402 | PHOTO COUPLER           | [M] △   |
| PC5702   | B3PBA0000402 | PHOTO COUPLER           | [M] △   |
| PC5720   | B3PBA0000402 | PHOTO COUPLER           | [M] △   |
| PC5799   | B3PBA0000402 | PHOTO COUPLER           | [M] △   |
|          |              |                         |         |
|          |              | OSCILLATOR              |         |
|          |              |                         |         |
| X1701    | H0J327200099 | CRYSTAL OSCILLATOR      | [M]     |
| X2001    | H2B100500007 | CRYSTAL OSCILLATOR      | [M]     |
| X5500    | H2A6023A0011 | CRYSTAL OSCILLATOR      | [M]     |
| X5501    | H2A7003A0011 | CRYSTAL OSCILLATOR      | [M]     |
| X8621    | H0J270500085 | CRYSTAL OSCILLATOR      | [M]     |
| X9004    | H1A4805B0027 | CRYSTAL OSCILLATOR      | [M]     |
|          |              |                         |         |
|          |              | FL DISPLAY              |         |
|          |              |                         |         |
| FL6801   | A2BB00000169 | FL DISPLAY              | [M]     |
|          |              |                         |         |
|          |              | FUSE                    |         |
|          |              |                         |         |
| F1       | K5D802BNA005 | FUSE                    | [M] △   |
|          |              |                         |         |
|          |              | FUSE PROTECTOR          |         |
|          |              |                         |         |
| FP2901   | K5G401A00008 | FUSE PROTECTOR          | [M] △   |
|          |              |                         |         |
|          |              | THERMISTORS             |         |
|          |              |                         |         |
| TH5702   | D4CAC8R00002 | THERMISTOR              | [M] △   |
| TH5860   | D4CC11040013 | THERMISTOR              | [M] △   |
|          |              |                         |         |
|          |              | JACKS                   |         |
|          |              |                         |         |
| JK2001   | K2HA6YYG0001 | JK                      | [M]     |
| JK5001   | K4AL12B00002 | JK SPEAKER              | [M]     |
| JK6901   | K2HC103A0031 | JK HEADPHONE            | [M]     |
| JK7001   | K2HC1YYA0018 | JK MIC1                 | [M]     |
| JK7002   | K2HC1YYA0018 | JK MIC2                 | [M]     |
| JK8001   | B3RAB0000056 | JK OPTO DEVICE          | [M]     |
| P5701    | K2AA2B000017 | AC INLET                | [M] △   |
|          |              |                         |         |
|          |              | EARTH TERMINALS         |         |
|          |              |                         |         |
| E2900    | K4CZ01000027 | TERMINAL                | [M]     |
| E2901    | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5400   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5410   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5701   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5702   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5801   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5803   | K4CZ01000027 | TERMINAL                | [M]     |
|          |              |                         |         |
|          |              | CHIP JUMPERS            |         |
|          |              |                         |         |
| K3       | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| K4       | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| K13      | ERJ3GEY0R00V | 0 1/10W                 | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks        |
|----------|--------------|-------------------------|----------------|
| K14      | ERJ3GEY0R00V | 0 1/10W                 | [M]<br>GC/GS   |
| K15      | ERJ3GEY0R00V | 0 1/10W                 | [M]<br>GCS/GCT |
| K2101    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K2201    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K2351    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K2451    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K2601    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K2803    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K2804    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K2802    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K3903    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K3905    | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| K3906    | D0GBR00JA008 | 0 1/16W                 | [M]            |
| K3907    | D0GBR00JA008 | 0 1/16W                 | [M]            |
| K5252    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K5254    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K5302    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K5405    | ERJ8GEY0R00V | 0 1/4W                  | [M]            |
| K5500    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K5502    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K7100    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K8002    | ERJ3GEY0R00V | 0 1/10W                 | [M]<br>GCS/GCT |
| K8007    | ERJ3GEY0R00V | 0 1/10W                 | [M]<br>GCS/GCT |
| K8100    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K8251    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| K8571    | D0GBR00JA008 | 0 1/16W                 | [M]            |
| LB8257   | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| LB8258   | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| LB8259   | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| LB8260   | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| LB8301   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8302   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8303   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8304   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8305   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8421   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8422   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8423   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8424   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8425   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8426   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8427   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8428   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8429   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8430   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8431   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8432   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8531   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB8690   | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| LB9002   | D0GBR00JA008 | 0 1/16W                 | [M]            |
| LB9003   | D0GBR00JA008 | 0 1/16W                 | [M]            |
| W2214    | ERJ8GEY0R00V | 0 1/4W                  | [M]            |
| W2216    | ERJ8GEY0R00V | 0 1/4W                  | [M]            |
| W2710    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2711    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2712    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2713    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2714    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2715    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2716    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2717    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2718    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2720    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2724    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2725    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2726    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2727    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2730    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |
| W2732    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| W2733    | ERJ6GEY0R00V | 0 1/8W                  | [M]            |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| W2734    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2735    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2737    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2740    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2741    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2742    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2743    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2744    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2747    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2748    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2751    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2752    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2753    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2754    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2766    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2767    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2768    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2769    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2770    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2771    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2773    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2774    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2775    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2776    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2777    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2778    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2779    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2780    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2781    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2782    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2783    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2784    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2785    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2786    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2788    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2789    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2790    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2793    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2794    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2795    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2796    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2797    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2798    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2799    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2800    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2801    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2802    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2803    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2804    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2805    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2806    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2807    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2808    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2809    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2810    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2811    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2812    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2813    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2814    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2815    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2816    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2817    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2818    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2819    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2831    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2832    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2833    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2835    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2837    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2840    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2841    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2843    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2844    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| W2845    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2846    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2847    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2850    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2851    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2852    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2853    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2854    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2855    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2858    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2861    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2862    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2863    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2864    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2865    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2866    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2868    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W2891    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W2892    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W5007    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W5032    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W5059    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W5071    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W5780    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W5801    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W5803    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W5804    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W5805    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W5806    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W5807    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6128    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6129    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6225    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W6401    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6404    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6405    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6406    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6407    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6408    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6409    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6700    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6701    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6702    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6703    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6704    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6705    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6707    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6708    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6709    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6710    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6712    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6713    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6714    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W6715    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6716    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6717    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6718    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6719    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W6720    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W7003    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W7004    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W7005    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W7006    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W7007    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W7008    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W7011    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W7012    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W7013    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W7014    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| W7015    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| W7016    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| W7300    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |

| Ref. No. | Part No.      | Part Name & Description   | Remarks             |
|----------|---------------|---------------------------|---------------------|
|          |               | PACKING MATERIALS         |                     |
| P1       | RPGX1872      | PACKING CASE              | [M] GC              |
| P1       | RPGX1873      | PACKING CASE              | [M] GS              |
| P1       | RPGX1874      | PACKING CASE              | [M] GCS             |
| P1       | RPGX1875      | PACKING CASE              | [M] GCT             |
| P2       | RPNX0529      | POLYFOAM                  | [M]                 |
| P3       | RPF0058-1J    | MIRAMAT BAG               | [M]                 |
|          |               | ACCESSORIES               |                     |
| A1       | N2QAYB000205  | REMOTE CONTROL            | [M]                 |
| A1-1     | RKK-HTR0051K  | R/C BATTERY COVER         | [M]                 |
| A2       | K2CP2Y000001  | AC CORD                   | [M] GCT<br>△        |
| A2       | K2CQ2CA000007 | AC CORD                   | [M] GC/GCS/<br>GS △ |
| A2       | K2CT3CA000004 | AC CORD                   | [M] GS<br>△         |
| A3       | RQTX0088-B    | O/I BOOK (En)             | [M]                 |
| A3       | RQTX0092-G    | O/I BOOK (AR/PE)          | [M] GC/GS           |
| A3       | RQTX0093-K    | O/I BOOK (CN)             | [M] GCS/GCT         |
| A4       | RSA0007-M     | FM INDOOR ANTENNA         | [M]                 |
| A5       | RQCA0968      | SPEAKER LABEL             | [M]                 |
| A6       | XTN5+10FFJK   | SCREW                     | [M]                 |
| A7       | REEX0858      | SPEAKER CORD ASSEMBLY     | [M]                 |
| A7-1     | RFKVBPT760-G  | CONNECTOR HOUSING (GREEN) | [M]                 |
| A9       | K2KA2BA000001 | VIDEO CABLE               | [M]                 |
|          |               | RESISTORS                 |                     |
| LB8691   | ERJ2GEJ101X   | 100 1/16W                 | [M]                 |
| LB8692   | ERJ2GEJ101X   | 100 1/16W                 | [M]                 |
| LB8693   | ERJ2GEJ101X   | 100 1/16W                 | [M]                 |
| R1001    | ERJ3GEYJ101V  | 100 1/10W                 | [M]                 |
| R1002    | ERJ3GEYJ101V  | 100 1/10W                 | [M]                 |
| R1003    | ERJ3GEYJ104V  | 100K 1/10W                | [M]                 |
| R1004    | ERJ3GEYJ104V  | 100K 1/10W                | [M]                 |
| R1005    | ERJ3GEYF753V  | 75K 1/10W                 | [M]                 |
| R1006    | ERJ3GEYF753V  | 75K 1/10W                 | [M]                 |
| R1007    | ERJ3GEYF513V  | 51K 1/10W                 | [M]                 |
| R1008    | ERJ3GEYF513V  | 51K 1/10W                 | [M]                 |
| R1009    | ERJ3GEYJ151V  | 150 1/10W                 | [M]                 |
| R1010    | ERJ3GEYJ151V  | 150 1/10W                 | [M]                 |
| R1011    | ERJ3GEY0R00V  | 0 1/10W                   | [M]                 |
| R1012    | ERJ3GEY0R00V  | 0 1/10W                   | [M]                 |
| R1013    | ERJ3GEYJ102V  | 1K 1/10W                  | [M]                 |
| R1702    | ERJ3GEYJ472V  | 4.7K 1/10W                | [M]                 |
| R1703    | ERJ3GEYF104V  | 100K 1/10W                | [M]                 |
| R1704    | ERJ3GEYJ103V  | 10K 1/10W                 | [M]                 |
| R1707    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R1711    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R1712    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R1713    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R1714    | ERJ3GEYJ103V  | 10K 1/10W                 | [M]                 |
| R1715    | ERJ3GEYJ103V  | 10K 1/10W                 | [M]                 |
| R1726    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R1727    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R1728    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R1730    | D0GB104JA008  | 100K 1/16W                | [M]                 |
| R1731    | ERJ3GEY0R00V  | 0 1/10W                   | [M]                 |
| R2000    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R2001    | ERJ3GEYJ102V  | 1K 1/10W                  | [M]                 |
| R2002    | ERJ3GEYJ103V  | 10K 1/10W                 | [M]                 |
| R2003    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R2004    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R2005    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R2006    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R2010    | ERJ3GEYJ102V  | 1K 1/10W                  | [M]                 |
| R2011    | ERJ3GEYJ221V  | 220 1/10W                 | [M]                 |
| R2012    | ERJ3GEYJ103V  | 10K 1/10W                 | [M]                 |

| Ref. No. | Part No.     | Part Name & Description | Remarks        |
|----------|--------------|-------------------------|----------------|
| R2013    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| R2015    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]            |
| R2016    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]            |
| R2017    | ERJ3GEYJ273V | 27K 1/10W               | [M]            |
| R2019    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2020    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2021    | ERJ3GEYJ563V | 56K 1/10W               | [M]            |
| R2022    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2023    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2024    | ERJ3GEYJ273V | 27K 1/10W               | [M]            |
| R2025    | ERJ3GEYJ104V | 100K 1/10W              | [M]            |
| R2026    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2027    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| R2029    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2031    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2032    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2033    | ERJ3GEYJ223V | 22K 1/10W               | [M]            |
| R2034    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2035    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2036    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2037    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2038    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2040    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2041    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2042    | ERJ3GEYJ102V | 1K 1/10W                | [M]            |
| R2043    | ERJ3GEYJ153V | 15K 1/10W               | [M]            |
| R2044    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]            |
| R2045    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2046    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]            |
| R2047    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]            |
| R2048    | ERJ3GEYJ203V | 20K 1/10W               | [M]            |
| R2050    | ERJ3GEYJ102V | 1K 1/10W                | [M]            |
| R2051    | ERJ3GEYJ563V | 56K 1/10W               | [M]            |
| R2052    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2053    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2054    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2056    | ERJ3GEYJ221V | 220 1/16W               | [M]            |
| R2058    | ERJ3GEY0R00V | 0 1/10W                 | [M]            |
| R2059    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2060    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2061    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2062    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2063    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2064    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2065    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2066    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2067    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2068    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2069    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2070    | ERJ3GEYJ273V | 27K 1/10W               | [M]            |
| R2071    | ERJ3GEYJ101V | 100 1/10W               | [M]            |
| R2072    | ERJ3GEYJ101V | 100 1/10W               | [M]            |
| R2073    | ERJ3GEYJ101V | 100 1/10W               | [M]            |
| R2075    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2077    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2078    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2079    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2080    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2081    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2082    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2084    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2085    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]            |
| R2086    | ERJ3GEYJ223V | 22K 1/10W               | [M]            |
| R2087    | ERJ3GEYJ223V | 22K 1/10W               | [M]            |
| R2089    | ERJ3GEYJ223V | 22K 1/10W               | [M]<br>GCS/GCT |
| R2089    | ERJ3GEYJ333V | 33K 1/10W               | [M]<br>GC/GS   |
| R2090    | ERJ3GEYJ153V | 15K 1/10W               | [M]            |
| R2092    | ERJ3GEYJ221V | 220 1/10W               | [M]            |
| R2093    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2095    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2096    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R2097    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2098    | ERJ3GEYJ225V | 2.2M 1/10W              | [M]     |
| R2099    | ERJ3GEYJ104V | 100K 1/10W              | [M]     |
| R2100    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R2101    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2102    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R2103    | ERJ3GEYJ273V | 27K 1/10W               | [M]     |
| R2105    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R2106    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R2111    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2112    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R2113    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R2114    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R2115    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2116    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2119    | ERJ3GEYJ152V | 1.5K 1/10W              | [M]     |
| R2120    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2133    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2138    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2145    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2160    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2161    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R2164    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2165    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2166    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2170    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R2171    | ERJ3GEYJ273V | 27K 1/10W               | [M]     |
| R2172    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R2173    | ERJ3GEYJ273V | 27K 1/10W               | [M]     |
| R2174    | ERJ3GEYJ682V | 6.8K 1/10W              | [M]     |
| R2175    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2176    | ERJ3GEYJ333V | 33K 1/10W               | [M]     |
| R2177    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2178    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2179    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2180    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2181    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2182    | ERJ3GEYJ100V | 10 1/10W                | [M]     |
| R2183    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2184    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]     |
| R2185    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2186    | ERJ3GEYJ152V | 1.5K 1/10W              | [M]     |
| R2187    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2189    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R2190    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2191    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R2194    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2200    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R2201    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2202    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R2203    | ERJ3GEYJ273V | 27K 1/10W               | [M]     |
| R2205    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R2206    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R2211    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2212    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R2213    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R2214    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R2215    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2216    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2219    | ERJ3GEYJ152V | 1.5K 1/10W              | [M]     |
| R2220    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2233    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2245    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2260    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2261    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R2264    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2265    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2266    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2270    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R2271    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R2273    | ERJ3GEYJ273V | 27K 1/10W               | [M]     |
| R2274    | ERJ3GEYJ682V | 6.8K 1/10W              | [M]     |
| R2275    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R2276    | ERJ3GEYJ333V | 33K 1/10W               | [M]     |
| R2277    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2278    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2279    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2280    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R2281    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2282    | ERJ3GEYJ100V | 10 1/10W                | [M]     |
| R2283    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2284    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]     |
| R2285    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2286    | ERJ3GEYJ152V | 1.5K 1/10W              | [M]     |
| R2288    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2289    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R2290    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2291    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R2294    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2300    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2301    | ERJ3GEYJ822V | 8.2K 1/10W              | [M]     |
| R2302    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R2303    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R2304    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R2310    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2312    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2339    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R2400    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R2401    | ERJ3GEYJ822V | 8.2K 1/10W              | [M]     |
| R2402    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R2403    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R2404    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R2410    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2412    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2439    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R2500    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2501    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R2502    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2503    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R2504    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R2505    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2506    | ERJ3GEYJ821V | 820 1/10W               | [M]     |
| R2507    | ERJ3GEYJ821V | 820 1/10W               | [M]     |
| R2508    | ERJ3GEYJ821V | 820 1/10W               | [M]     |
| R2509    | ERJ3GEYJ821V | 820 1/10W               | [M]     |
| R2510    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R2511    | ERJ3GEYJ821V | 820 1/10W               | [M]     |
| R2512    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R2525    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R2527    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R2528    | ERJ3GEYJ273V | 27K 1/10W               | [M]     |
| R2551    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R2552    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R2553    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2554    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2555    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R2556    | ERJ3GEYJ684V | 680K 1/10W              | [M]     |
| R2557    | ERJ3GEYJ271V | 270 1/10W               | [M]     |
| R2558    | ERJ3GEYJ821V | 820 1/10W               | [M]     |
| R2559    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R2600    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2601    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R2609    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2610    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R2611    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R2612    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R2613    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R2614    | ERJ3GEYJ273V | 27K 1/10W               | [M]     |
| R2617    | ERJ3GEYJ561V | 560 1/10W               | [M]     |
| R2626    | ERJ3GEYJ682V | 6.8K 1/10W              | [M]     |
| R2627    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R2661    | ERJ3GEYJ680V | 68 1/10W                | [M]     |
| R2662    | ERJ3GEYJ680V | 68 1/10W                | [M]     |
| R2668    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2704    | ERJ3GEYJ561V | 560 1/10W               | [M]     |
| R2705    | ERJ3GEYJ101V | 100 1/10W               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks        |
|----------|--------------|-------------------------|----------------|
| R2757    | ERJ3GEYJ563V | 56K 1/10W               | [M]            |
| R2764    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2804    | ERJ3GEYJ102V | 1K 1/10W                | [M]            |
| R2809    | ERJ3GEYJ750V | 75 1/10W                | [M]            |
| R2812    | ERJ3GEYJ750V | 75 1/10W                | [M]            |
| R2813    | ERJ3GEYJ750V | 75 1/10W                | [M]            |
| R2816    | ERJ3GEYJ750V | 75 1/10W                | [M]            |
| R2862    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2863    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2864    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]            |
| R2865    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]<br>GC/GS   |
| R2865    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]<br>GCS/GCS |
| R2870    | ERJ66EYJ222V | 2.2K 1/8W               | [M]<br>GC/GS   |
| R2870    | ERJ66EYJ223V | 22K 1/8W                | [M]<br>GCS/GCT |
| R2900    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]            |
| R2902    | ERJ3GEYJ470V | 47 1/10W                | [M]            |
| R2903    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]            |
| R2905    | ERJ3GEYJ390V | 39 1/10W                | [M]            |
| R2906    | ERJ3GEYF682V | 6.8K 1/10W              | [M]            |
| R2907    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]            |
| R2908    | ERJ3GEYJ561V | 560 1/10W               | [M]            |
| R2909    | ERJ3GEYJ393V | 39K 1/10W               | [M]            |
| R2910    | ERG2SJ470E   | 47 2W                   | [M]            |
| R2911    | ERJ3GEYJ392V | 3.9K 1/10W              | [M]            |
| R2912    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]            |
| R2913    | ERX2SJ1R5E   | 1.5 2W                  | [M]            |
| R2914    | ERJ3GEYJ473V | 47K 1/10W               | [M]            |
| R2915    | ERX2SJ1R5E   | 1.5 2W                  | [M]            |
| R2919    | ERJ3GEYJ102V | 1K 1/10W                | [M]            |
| R2920    | ERJ3GEYJ392V | 3.9K 1/10W              | [M]            |
| R2921    | ERJ3GEYJ391V | 390 1/10W               | [M]            |
| R2922    | ERJ3GEYF102V | 1K 1/10W                | [M]            |
| R2923    | ERJ3GEYF122V | 1.2K 1/10W              | [M]            |
| R2930    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]            |
| R2935    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]            |
| R2936    | ERJ3GEYJ471V | 470 1/10W               | [M]            |
| R2937    | ERJ3GEYJ393V | 39K 1/10W               | [M]            |
| R2938    | ERJ3GEYJ333V | 33K 1/10W               | [M]            |
| R2941    | ERJ3GEYJ223V | 22K 1/10W               | [M]            |
| R2946    | ERJ3GEYJ330V | 33 1/10W                | [M]            |
| R2947    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]            |
| R2948    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]            |
| R2952    | ERJ3GEYJ392V | 3.9K 1/10W              | [M]            |
| R2953    | ERJ3GEYJ561V | 560 1/10W               | [M]            |
| R2954    | ERG2SJ470E   | 47 2W                   | [M]            |
| R2975    | ERJ3GEYJ153V | 15K 1/10W               | [M]            |
| R2976    | ERJ3GEYJ103V | 10K 1/10W               | [M]            |
| R2977    | ERJ3GEYJ1R0V | 1.0 1/10W               | [M]            |
| R3901    | ERJ2GEJ511X  | 510 1/16W               | [M]            |
| R3902    | ERJ2GEJ103X  | 10K 1/16W               | [M]            |
| R3903    | ERJ2GEJ103X  | 10K 1/16W               | [M]            |
| R3904    | ERJ2GEJ472X  | 4.7K 1/16W              | [M]            |
| R3905    | ERJ2GEJ202X  | 2.0K 1/16W              | [M]            |
| R3906    | ERJ2GEJ472X  | 4.7K 1/16W              | [M]            |
| R3907    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]            |
| R3921    | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| R3924    | ERJ2GE0R00X  | 0 1/16W                 | [M]            |
| R3925    | ERJ2GEJ103X  | 10K 1/16W               | [M]            |
| R3941    | ERJ2GEJ273X  | 27K 1/16W               | [M]            |
| R3942    | ERJ2GEJ224X  | 220K 1/16               | [M]            |
| R3943    | ERJ2GEJ104X  | 100K 1/16W              | [M]            |
| R3944    | ERJ2GEJ221X  | 220 1/16W               | [M]            |
| R3945    | ERJ2GEJ103X  | 10K 1/16W               | [M]            |
| R3946    | ERJ2GEJ272X  | 2.7K 1/16W              | [M]            |
| R3947    | ERJ2GEJ103X  | 10K 1/16W               | [M]            |
| R5000    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]            |
| R5001    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]            |
| R5002    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]            |
| R5003    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]            |
| R5004    | D06F100JA014 | 10 1/8W                 | [M]            |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R5005    | D0GF100JA014 | 10 1/8W                 | [M]     |
| R5006    | D0GZ220JA012 | 22 1W                   | [M]     |
| R5007    | D0GZ220JA012 | 22 1W                   | [M]     |
| R5008    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5010    | D0GF100JA014 | 10 1/8W                 | [M]     |
| R5011    | D0GF100JA014 | 10 1/8W                 | [M]     |
| R5019    | ERJ3GEYJ683V | 68K 1/10W               | [M]     |
| R5020    | ERJ3GEYJ124V | 120K 1/10W              | [M]     |
| R5021    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5022    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5023    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5030    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5031    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5034    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5035    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5036    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5037    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5103    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5104    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5110    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R5111    | ERJ3GEYJ124V | 120K 1/10W              | [M]     |
| R5113    | ERJ3GEYJ683V | 68K 1/10W               | [M]     |
| R5114    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5115    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5118    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5119    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5218    | ERJ3GEYJ683V | 68K 1/10W               | [M]     |
| R5300    | D0GZ220JA012 | 22 1W                   | [M]     |
| R5302    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5304    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5305    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5306    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5307    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5308    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5309    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R5310    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5311    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5317    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5318    | ERJ3GEYJ124V | 120K 1/10W              | [M]     |
| R5319    | D0GZ220JA012 | 22 1W                   | [M]     |
| R5327    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5400    | D0GZ220JA012 | 22 1W                   | [M]     |
| R5402    | D0GF100JA014 | 10 1/8W                 | [M]     |
| R5404    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5405    | D0GF100JA014 | 10 1/8W                 | [M]     |
| R5410    | D0GF100JA014 | 10 1/8W                 | [M]     |
| R5411    | D0GF100JA014 | 10 1/8W                 | [M]     |
| R5419    | D0GZ220JA012 | 22 1W                   | [M]     |
| R5504    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R5505    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5506    | ERJ3GEYJ105V | 1M 1/10W                | [M]     |
| R5507    | ERJ3GEYJ105V | 1M 1/10W                | [M]     |
| R5508    | ERJ3GEYJ105V | 1M 1/10W                | [M]     |
| R5510    | ERG2SJ471E   | 470 2W                  | [M]     |
| R5511    | ERJ3GEYJ220V | 22 1/10W                | [M]     |
| R5602    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5603    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5604    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5606    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5607    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5608    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5609    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5610    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5611    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R5636    | ERDS1FVJ392T | 3.9K 1/2W               | [M]     |
| R5637    | ERJ3GEYJ100V | 10 1/10W                | [M]     |
| R5639    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R5640    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R5654    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R5655    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5656    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5657    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5658    | ERJ3GEYJ185V | 1.8M 1/10W              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R5659    | ERJ3GEYJ104V | 100K 1/10W              | [M]     |
| R5660    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5670    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R5701    | ERDS1TJ475B  | 4.7K 1/2W               | [M]     |
| R5702    | ERJ1TYJ104U  | 100K 1W                 | [M]     |
| R5703    | ERJ1TYJ104U  | 100K 1W                 | [M]     |
| R5704    | ERJ8GEYJ394V | 390K 1/4W               | [M]     |
| R5705    | ERJ8GEYJ394V | 390K 1/4W               | [M]     |
| R5720    | ERJ6GEYJ220V | 22 1/8W                 | [M]     |
| R5721    | ERJ6GEYJ103V | 10K 1/8W                | [M]     |
| R5722    | ERJ6GEYJ102V | 1K 1/8W                 | [M]     |
| R5723    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R5724    | ERJ6GEYJ121V | 120 1/8W                | [M]     |
| R5725    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R5726    | ERX2LJ82MP   | 82m 2W                  | [M]     |
| R5728    | ERJ3GEYJ104V | 100K 1/10W              | [M]     |
| R5729    | ERJ6GEYJ103V | 10K 1/8W                | [M]     |
| R5730    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R5731    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R5732    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5733    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R5751    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R5752    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R5786    | ERJ1TYJ204U  | 200K 1W                 | [M]     |
| R5787    | ERJ3GEYJ753V | 75K 1/10W               | [M]     |
| R5788    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R5789    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R5790    | ERJ3GEYF333V | 33K 1/10W               | [M]     |
| R5791    | ERJ3GEYF563V | 56K 1/10W               | [M]     |
| R5792    | ERJ8GEYJ394V | 390K 1/4W               | [M]     |
| R5793    | ERJ8GEYJ394V | 390K 1/4W               | [M]     |
| R5794    | ERJ8GEYJ394V | 390K 1/4W               | [M]     |
| R5795    | ERJ6GEYJ433V | 43K 1/8W                | [M]     |
| R5796    | ERDS1FVJ222T | 2.2K 1/2W               | [M]     |
| R5797    | ERJ6GEYJ472V | 4.7K 1/8W               | [M]     |
| R5798    | ERJ6GEYJ100V | 10 1/8W                 | [M]     |
| R5799    | ERJ6GEYJ100V | 10 1/8W                 | [M]     |
| R5800    | ERJ6GEYJ123V | 12K 1/8W                | [M]     |
| R5801    | ERJ6GEYJ103V | 10K 1/8W                | [M]     |
| R5802    | ERJ3RBD272V  | 2.7K 1/16W              | [M]     |
| R5803    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| R5804    | ERJ6RBD473V  | 47K 1/10W               | [M]     |
| R5805    | ERJ3RBD222V  | 2.2K 1/16W              | [M]     |
| R5806    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R5807    | ERJ6GEYJ331V | 330 1/8W                | [M]     |
| R5808    | ERJ6GEYJ222V | 2.2K 1/8W               | [M]     |
| R5809    | ERJ6GEYJ331V | 330 1/8W                | [M]     |
| R5810    | ERJ3GEYJ331V | 330 1/10W               | [M]     |
| R5811    | ERJ8GEYJ152V | 1.5K 1/4W               | [M]     |
| R5812    | ERJ3RBD822V  | 8.2K 1/16W              | [M]     |
| R5813    | ERJ3RBD243V  | 24K 1/16W               | [M]     |
| R5814    | ERJ3GEYJ822V | 8.2K 1/10W              | [M]     |
| R5815    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]     |
| R5816    | ERJ8GEYJ152V | 1.5K 1/4W               | [M]     |
| R5817    | ERJ3GEYJ331V | 330 1/10W               | [M]     |
| R5820    | ERG2SJ910E   | 91 2W                   | [M]     |
| R5821    | ERG2SJ910E   | 91 2W                   | [M]     |
| R5822    | ERG2SJ910E   | 91 2W                   | [M]     |
| R5823    | ERG2SJ910E   | 91 2W                   | [M]     |
| R5824    | ERG2SJ910E   | 91 2W                   | [M]     |
| R5825    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R5832    | ERJ1TYJ222U  | 2.2K 1W                 | [M]     |
| R5834    | ERJ1TYJ222U  | 2.2K 1W                 | [M]     |
| R5840    | ERJ3GEYJ823V | 82K 1/10W               | [M]     |
| R5841    | ERJ3GEYJ124V | 120K 1/10W              | [M]     |
| R5860    | ERJ3GEYF103V | 10K 1/10W               | [M]     |
| R5861    | ERJ3GEYF302V | 3K 1/10W                | [M]     |
| R5862    | ERJ6GEYJ103V | 10K 1/8W                | [M]     |
| R5863    | ERJ6GEYJ103V | 10K 1/8W                | [M]     |
| R5864    | ERJ6GEYF103V | 10K 1/8W                | [M]     |
| R5890    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R5891    | ERJ3RBD333V  | 33K 1/16W               | [M]     |
| R5892    | ERJ3RBD472V  | 4.7K 1/16W              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R5893    | ERJ3RBD393V  | 39K 1/16W               | [M]     |
| R5894    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R5895    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5896    | ERJ3GEYJ104V | 100K 1/10W              | [M]     |
| R5897    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R6100    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R6101    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6102    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6103    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6104    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6105    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6200    | ERJ3GEYJ473V | 47K 1/10W               | [M]     |
| R6201    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6203    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6204    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R6300    | ERJ3GEYJ750V | 75 1/10W                | [M]     |
| R6301    | ERJ3GEYJ100V | 10 1/10W                | [M]     |
| R6302    | ERJ3GEYJ100V | 10 1/10W                | [M]     |
| R6400    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R6401    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6402    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6403    | ERJ3GEYF334V | 330K 1/10W              | [M]     |
| R6404    | ERJ3GEYF224V | 220K 1/10W              | [M]     |
| R6601    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R6602    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R6801    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R6802    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R6803    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R6804    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R6805    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R6806    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]     |
| R6807    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R6808    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6821    | ERJ3GEYJ471V | 470 1/10W               | [M]     |
| R6901    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6902    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]     |
| R6903    | ERJ3GEYJ122V | 1.2K 1/10W              | [M]     |
| R6904    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R6905    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R6907    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R6909    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R6910    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6912    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R6914    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R6916    | ERJ3GEYJ680V | 68 1/10W                | [M]     |
| R6917    | ERJ3GEYJ680V | 68 1/10W                | [M]     |
| R6918    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R6919    | ERJ3GEYJ470V | 47 1/10W                | [M]     |
| R6920    | ERJ3GEYJ470V | 47 1/10W                | [M]     |
| R6927    | ERJ3GEYJ680V | 68 1/10W                | [M]     |
| R6934    | ERJ3GEYJ470V | 47 1/10W                | [M]     |
| R6935    | ERJ3GEYJ1R0V | 1.0 1/10W               | [M]     |
| R6939    | ERJ6GEYJ1R2V | 1.2 1/8W                | [M]     |
| R6940    | ERJ6GEYJ1R2V | 1.2 1/8W                | [M]     |
| R6960    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R6961    | ERJ3GEYJ331V | 330 1/10W               | [M]     |
| R7001    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R7003    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R7004    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R7005    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R7006    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R7008    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R7009    | ERJ3GEYJ563V | 56K 1/10W               | [M]     |
| R7010    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R7011    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R7012    | ERJ3GEYJ151V | 150 1/10W               | [M]     |
| R7013    | ERJ3GEYJ470V | 47 1/10W                | [M]     |
| R7015    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R7016    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R7017    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R7018    | ERJ3GEYJ390V | 39 1/10W                | [M]     |
| R7019    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R7021    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R7022    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R7100    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R7101    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7102    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7103    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7104    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R7105    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7106    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R7107    | ERJ3GEYJ680V | 68 1/10W                | [M]     |
| R7108    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R7109    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7110    | ERJ3GEYJ682V | 6.8K 1/10W              | [M]     |
| R7112    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R7113    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7114    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7116    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R7117    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R7118    | ERJ3GEYJ822V | 8.2K 1/10W              | [M]     |
| R7121    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R7122    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R8001    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8003    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8011    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8012    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8013    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8025    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R8153    | ERJ2RHD621X  | 620 1/16W               | [M]     |
| R8154    | ERJ2RHD102X  | 1K 1/16W                | [M]     |
| R8211    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8221    | ERJ2GEJ822X  | 8.2K 1/16W              | [M]     |
| R8225    | ERJ2GEJ822X  | 8.2K 1/16W              | [M]     |
| R8230    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]     |
| R8231    | ERJ2GEJ752X  | 7.5K 1/16W              | [M]     |
| R8232    | ERJ2GEJ752X  | 7.5K 1/16W              | [M]     |
| R8251    | ERJ6GEYJ6R8V | 6.8 1/8W                | [M]     |
| R8252    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8261    | ERJ2GEJ823X  | 82K 1/16W               | [M]     |
| R8262    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8263    | ERJ2GEJ823X  | 82K 1/16W               | [M]     |
| R8264    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8311    | ERJ2RHD242X  | 2.4K 1/16W              | [M]     |
| R8312    | ERJ2RHD102X  | 1K 1/16W                | [M]     |
| R8313    | ERJ2RHD153X  | 15K 1/16W               | [M]     |
| R8314    | ERJ2RHD153X  | 15K 1/16W               | [M]     |
| R8315    | ERJ2RKD240X  | 24 1/16W                | [M]     |
| R8316    | ERJ2RKD240X  | 24 1/16W                | [M]     |
| R8317    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8318    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8321    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8323    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8324    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8325    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8327    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8328    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8331    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8333    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8334    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8335    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8336    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8337    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8341    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8342    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8343    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8401    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8402    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8403    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8404    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8420    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]     |
| R8421    | ERJ2GEJ100X  | 10 1/16W                | [M]     |
| R8531    | ERJ2GEJ152X  | 1.5K 1/16W              | [M]     |
| R8532    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]     |
| R8533    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8534    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R8535    | ERJ2GEJ104X  | 100K 1/16W              | [M]     |
| R8536    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8537    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8538    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8539    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8540    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R8541    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8551    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8552    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8553    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8554    | ERJ2GEJ680X  | 68 1/16W                | [M]     |
| R8555    | ERJ2GEJ2R2X  | 2.2 1/16W               | [M]     |
| R8556    | ERJ3GEYJ560V | 56 1/10W                | [M]     |
| R8557    | ERJ3GEYJ510V | 51 1/10W                | [M]     |
| R8558    | ERJ2GEJ473X  | 47K 1/16W               | [M]     |
| R8559    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8561    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8562    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8563    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8564    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8565    | ERJ2GEJ2R2X  | 2.2 1/16W               | [M]     |
| R8566    | ERJ3GEYJ560V | 56 1/10W                | [M]     |
| R8567    | ERJ3GEYJ510V | 51 1/10W                | [M]     |
| R8568    | ERJ2GEJ473X  | 47K 1/16W               | [M]     |
| R8601    | ERJ2GEJ104X  | 100K 1/16W              | [M]     |
| R8611    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8613    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8621    | ERJ2GEJ105X  | 1M 1/16W                | [M]     |
| R8622    | ERJ2RHD102X  | 1K 1/16W                | [M]     |
| R9007    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9008    | ERJ2GEJ105X  | 1M 1/16W                | [M]     |
| R9009    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R9023    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9036    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9037    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9040    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9041    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9042    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9043    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9044    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9045    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9046    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9047    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9048    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9049    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9055    | ERJ2GEJ472X  | 4.7K 1/16W              | [M]     |
| R9080    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9083    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9084    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9085    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9086    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9087    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9088    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9099    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| RX3707   | D1H84714A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX3708   | D1H84714A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX3901   | D1H410120001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8001   | D1H410320002 | CHIP RESISTOR NETWORK   | [M]     |
| RX8011   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8012   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8013   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8014   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8015   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8016   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8017   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8018   | D1H422020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8019   | D1H422020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8020   | D1H422020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8031   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8032   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8111   | D1H422320002 | CHIP RESISTOR NETWORK   | [M]     |
| RX8401   | D1H410120001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8402   | D1H410120001 | CHIP RESISTOR NETWORK   | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| RX8531   | D1H456020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8532   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8533   | D1H456020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8534   | D1H456020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8611   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8691   | D1H410320002 | CHIP RESISTOR NETWORK   | [M]     |
| RX9014   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9015   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9016   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9017   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9018   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX9020   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
|          |              |                         |         |
|          |              | CAPACITORS              |         |
|          |              |                         |         |
| C1001    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C1002    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C1003    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C1004    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C1701    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C1702    | F2G1C470A076 | 47uF 16V                | [M]     |
| C1703    | F2G1C470A076 | 47uF 16V                | [M]     |
| C1704    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C2000    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2001    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2002    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2003    | ECEA1EKS220B | 22uF 25V                | [M]     |
| C2006    | ECEA1HKS2R2B | 2.2uF 50V               | [M]     |
| C2007    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2008    | ECEA0JKS101B | 100uF 6.3V              | [M]     |
| C2009    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2010    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C2011    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C2012    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C2013    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C2014    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C2015    | ECJ1VB1H221K | 220pF 50V               | [M]     |
| C2016    | ECJ1VB1H221K | 220pF 50V               | [M]     |
| C2017    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2018    | ECEA1CKS470B | 47uF 16V                | [M]     |
| C2019    | ECEA1CKS470B | 47uF 16V                | [M]     |
| C2020    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2025    | ECJ1VB1H221K | 220pF 50V               | [M]     |
| C2026    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2027    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2028    | ECEA1CKA100B | 10uF 16V                | [M]     |
| C2029    | ECEA1CKA100B | 10uF 16V                | [M]     |
| C2101    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2102    | ECJ1VB1C473K | 0.047uF 16V             | [M]     |
| C2103    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2104    | ECJ1VB1C393K | 0.039uF 16V             | [M]     |
| C2106    | ECJ1VB1H222K | 2200pF 50V              | [M]     |
| C2108    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2111    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2112    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C2113    | ECJ1VB1H681K | 680pF 50V               | [M]     |
| C2114    | ECJ1VB1H562K | 5600pF 50V              | [M]     |
| C2115    | ECJ1VB1C563K | 0.056uF 16V             | [M]     |
| C2116    | ECJ1VB1C563K | 0.056uF 16V             | [M]     |
| C2117    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2118    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2119    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2121    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2130    | ECJ1VB1H822K | 8200pF 50V              | [M]     |
| C2131    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C2133    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2135    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C2162    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C2164    | ECJ1VB1H221K | 220pF 50V               | [M]     |
| C2169    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2171    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C2177    | ECEA1HKA010B | 1uF 50V                 | [M]     |
| C2178    | ECJ1VC1H101J | 100pF 50V               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C2179    | ECJ1VC1H820J | 82pF 50V                | [M]     |
| C2180    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2181    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C2190    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2194    | ECJ2YB0J475K | 4.7uF 6.3V              | [M]     |
| C2195    | ECJ1VB1H681K | 680pF 50V               | [M]     |
| C2201    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2202    | ECJ1VB1C473K | 0.047uF 16V             | [M]     |
| C2203    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2204    | ECJ1VB1C393K | 0.039uF 16V             | [M]     |
| C2206    | ECJ1VB1H222K | 2200pF 50V              | [M]     |
| C2208    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2211    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2212    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C2213    | ECJ1VB1H681K | 680pF 50V               | [M]     |
| C2214    | ECJ1VB1H562K | 5600pF 50V              | [M]     |
| C2215    | ECJ1VB1C563K | 0.056uF 16V             | [M]     |
| C2216    | ECJ1VB1C563K | 0.056uF 16V             | [M]     |
| C2217    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2218    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2219    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2221    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2230    | ECJ1VB1H822K | 8200pF 50V              | [M]     |
| C2231    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C2235    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C2262    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C2264    | ECJ1VB1H221K | 220pF 50V               | [M]     |
| C2277    | ECEA1HKA010B | 1uF 50V                 | [M]     |
| C2278    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C2279    | ECJ1VC1H820J | 82pF 50V                | [M]     |
| C2280    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2281    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C2290    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2294    | ECJ2YB0J475K | 4.7uF 6.3V              | [M]     |
| C2295    | ECJ1VB1H681K | 680pF 50V               | [M]     |
| C2300    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2301    | ECJ2YB0J475K | 4.7uF 6.3V              | [M]     |
| C2302    | ECJ1VB1C393K | 0.039uF 16V             | [M]     |
| C2303    | ECJ1VB1H333K | 0.033uF 50V             | [M]     |
| C2304    | ECJ2YB0J475K | 4.7uF 6.3V              | [M]     |
| C2305    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C2306    | ECJ1VB1A154K | 0.15uF 10V              | [M]     |
| C2307    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2308    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C2309    | ECJ1VB1C823K | 0.082uF 16V             | [M]     |
| C2310    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C2313    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2315    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2400    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2401    | ECJ2YB0J475K | 4.7uF 6.3V              | [M]     |
| C2402    | ECJ1VB1C393K | 0.039uF 16V             | [M]     |
| C2403    | ECJ1VB1H333K | 0.033uF 50V             | [M]     |
| C2404    | ECJ2YB0J475K | 4.7uF 6.3V              | [M]     |
| C2405    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C2406    | ECJ1VB1A154K | 0.15uF 10V              | [M]     |
| C2407    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2408    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C2413    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2415    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2500    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2501    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C2502    | ECJ1VB1H473K | 0.047uF 50V             | [M]     |
| C2503    | ECJ1VB1C563K | 0.056uF 16V             | [M]     |
| C2504    | ECJ1VB1H681K | 680pF 50V               | [M]     |
| C2509    | ECJ1VB1H822K | 8200pF 50V              | [M]     |
| C2516    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C2551    | ECJ1VC1H560J | 56pF 50V                | [M]     |
| C2552    | ECJ1VB1H152K | 1500pF 50V              | [M]     |
| C2553    | ECJ1VB1H152K | 1500pF 50V              | [M]     |
| C2554    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2555    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2556    | ECEA1HKS2R2B | 2.2uF 50V               | [M]     |
| C2600    | ECJ1VB1C105K | 1uF 16V                 | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C2601    | ECEA1EKS220B | 22uF 25V                | [M]     |
| C2602    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C2603    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C2604    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C2605    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2609    | ECJ1VB1A474K | 0.47uF 10V              | [M]     |
| C2610    | ECJ1VB1A474K | 0.47uF 10V              | [M]     |
| C2611    | ECJ1VB1A154K | 0.15uF 10V              | [M]     |
| C2612    | ECJ1VB1H682K | 6800pF 50V              | [M]     |
| C2617    | ECJ1VB1A184K | 0.18uF 10V              | [M]     |
| C2751    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2756    | ECEA0JKA470B | 47uF 6.3V               | [M]     |
| C2801    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2802    | ECA0JM102B   | 1000uF 6.3V             | [M]     |
| C2804    | ECA1AM331B   | 330uF 10V               | [M]     |
| C2805    | ECA0JM471B   | 470uF 6.3V              | [M]     |
| C2806    | ECA0JM471B   | 470uF 6.3V              | [M]     |
| C2807    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2808    | F2A1A2210063 | 220uF 10V               | [M]     |
| C2809    | ECEA1EKS220B | 22uF 25V                | [M]     |
| C2810    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2811    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2812    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2817    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2818    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2823    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C2825    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C2826    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C2827    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C2842    | ECA0JM102B   | 1000uF 6.3V             | [M]     |
| C2900    | F2A1V330A379 | 33uF 35V                | [M]     |
| C2901    | ECA1EM102B   | 1000uF 25V              | [M]     |
| C2902    | ECQB1H392KF3 | 3900pF 50V              | [M]     |
| C2903    | F2A1V330A379 | 33uF 35V                | [M]     |
| C2905    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2906    | EEUFC1C471B  | 470uF 16V               | [M]     |
| C2907    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2908    | ECEA1CKA101B | 100uF 16V               | [M]     |
| C2909    | ECEA1AKA330B | 33uF 10V                | [M]     |
| C2911    | F2A0J102A551 | 1000uF 6.3V             | [M]     |
| C2912    | ECEA1CKS101B | 100uF 16V               | [M]     |
| C2914    | ECA0JAK221XB | 220uF 6.3V              | [M]     |
| C2915    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2916    | ECEA1CKA101B | 100uF 16V               | [M]     |
| C2917    | ECA0JM101B   | 100uF 6.3V              | [M]     |
| C2922    | EEUFC0J821B  | 820uF 6.3V              | [M]     |
| C2923    | ECA1EM221B   | 220uF 25V               | [M]     |
| C2924    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C2925    | EEUFC1C101B  | 100uF 16V               | [M]     |
| C2927    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2929    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2930    | EEUFM1A681B  | 680uF 10V               | [M]     |
| C2939    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2941    | ECA1CM221B   | 220uF 16V               | [M]     |
| C2949    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2951    | ECEA1CKA101B | 100uF 16V               | [M]     |
| C2952    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2955    | ECA1EM221B   | 220uF 25V               | [M]     |
| C2972    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| C2975    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3901    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3902    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3904    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3906    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3907    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3908    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3909    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3910    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3911    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3913    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3914    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3915    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3916    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C3917    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3918    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3919    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3920    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3921    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3922    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3923    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3924    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3925    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3926    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3927    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3928    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3929    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3930    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3932    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3940    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3941    | F1G1H221A444 | 220pF 50V               | [M]     |
| C3954    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C3955    | ECJ0EB1C103K | 0.01uF 16V              | [M]     |
| C3956    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3964    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C5000    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5001    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5002    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5003    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5004    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5005    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5006    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5007    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5008    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5009    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5010    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5011    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5012    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5013    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5014    | ECQV1H684JL3 | 0.68uF 50V              | [M]     |
| C5015    | ECQV1H684JL3 | 0.68uF 50V              | [M]     |
| C5016    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5017    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5018    | F1K2A1040007 | 0.1uF 100V              | [M]     |
| C5019    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5020    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5021    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5022    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5023    | F1K2A1040007 | 0.1uF 100V              | [M]     |
| C5024    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5025    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5028    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5030    | ECJ1VC1H221J | 220pF 50V               | [M]     |
| C5031    | ECJ1VB1C224K | 0.22uF 16V              | [M]     |
| C5032    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5033    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5040    | F2A2A2200035 | 22uF 100V               | [M]     |
| C5050    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5051    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5052    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5053    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5106    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5107    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5117    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5119    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5120    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5121    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5133    | F2A0J101A245 | 100uF 6.3V              | [M]     |
| C5150    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C5151    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C5152    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5153    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5154    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5155    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5250    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5251    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5300    | ECQV1H684JL3 | 0.68uF 50V              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C5301    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5302    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5303    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5304    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5306    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5307    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5309    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5310    | ECJ3YB2A104K | 0.1uF 100V              | [M]     |
| C5311    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5312    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5313    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5314    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5315    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5316    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5317    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5318    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5319    | ECJ3YB2A104K | 0.1uF 100V              | [M]     |
| C5321    | ECJ1VB1C224K | 0.22uF 16V              | [M]     |
| C5322    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5323    | ECJ1VC1H221J | 220pF 50V               | [M]     |
| C5324    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5325    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5326    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5327    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5328    | ECQV1H684JL3 | 0.68uF 50V              | [M]     |
| C5331    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5332    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5333    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5334    | F1H1A474A001 | 0.47uF 10V              | [M]     |
| C5350    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5351    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5400    | ECQV1H684JL3 | 0.68uF 50V              | [M]     |
| C5401    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5402    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5403    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5404    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5406    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5407    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5409    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5410    | F1K2A1040007 | 0.1uF 100V              | [M]     |
| C5411    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5412    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5413    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5416    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5418    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5419    | F1K2A1040007 | 0.1uF 100V              | [M]     |
| C5421    | ECJ1VB1C224K | 0.22uF 16V              | [M]     |
| C5422    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5423    | ECJ1VC1H221J | 220pF 50V               | [M]     |
| C5424    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5425    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5426    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5427    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5428    | ECQV1H684JL3 | 0.68uF 50V              | [M]     |
| C5431    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5440    | F2A2A2200035 | 22uF 100V               | [M]     |
| C5445    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5451    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5452    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5453    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5454    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5508    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5509    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5510    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5511    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5512    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5513    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5514    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5515    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5516    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5517    | F2A1V4710074 | 470uF 35V               | [M]     |
| C5518    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5519    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C5520    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5521    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5522    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5523    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5524    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5525    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5540    | F2A2A2200035 | 22uF 100V               | [M]     |
| C5550    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5551    | ECJ1VB1H391K | 390pF 50V               | [M]     |
| C5552    | ECJ1VB1H391K | 390pF 50V               | [M]     |
| C5553    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C5554    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5555    | F1K1C1060001 | 10uF 16V                | [M]     |
| C5556    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5557    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C5558    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C5559    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C5560    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5561    | ECJ1VC1H101J | 100pF 50V               | [M]     |
| C5562    | F2A0J102A016 | 1000uF 6.3V             | [M]     |
| C5601    | ECA1CAK100XB | 10uF 16V                | [M]     |
| C5602    | F2A1C100A234 | 10uF 16V                | [M]     |
| C5690    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5691    | ECA1EAK100XB | 10uF 25V                | [M]     |
| C5692    | ECA0JAK221XB | 220uF 6.3V              | [M]     |
| C5693    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5694    | ECA1CAK330XB | 33uF 16V                | [M]     |
| C5695    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5696    | ECEA1EKS220B | 22uF 25V                | [M]     |
| C5697    | ECA1HAK010XB | 1uF 50V                 | [M]     |
| C5700    | F1BAF1020020 | 1000pF                  | [M] △   |
| C5701    | F0CAF334A087 | 0.33uF                  | [M] △   |
| C5703    | F0C2H1040001 | 0.1uF 500V              | [M]     |
| C5704    | F1BAF1020020 | 1000pF                  | [M] △   |
| C5705    | F1BAF1020020 | 1000pF                  | [M] △   |
| C5706    | F1BAF1020020 | 1000pF                  | [M] △   |
| C5707    | F1BAF1020020 | 1000pF                  | [M] △   |
| C5711    | F2B2G331A073 | 330uF 400V              | [M]     |
| C5712    | F2B2G331A073 | 330uF 400V              | [M]     |
| C5713    | F0C2J1030005 | 0.01uF 630V             | [M]     |
| C5720    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5721    | ECJ1VB1H221K | 220pF 50V               | [M]     |
| C5722    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5723    | ECJ1VB1H471K | 470pF 50V               | [M]     |
| C5724    | F2A1H5600009 | 56uF 50V                | [M]     |
| C5725    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5726    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5728    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5730    | ECEA1HKS010B | 1uF 50V                 | [M]     |
| C5737    | F1A3A471A035 | 470pF 1000V             | [M]     |
| C5750    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5788    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5789    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5790    | ECJ3YB2J222K | 2200pF                  | [M]     |
| C5791    | ECEA1HKA2R2B | 2.2uF 50V               | [M]     |
| C5793    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5794    | ECJ1VC1H220J | 22pF 50V                | [M]     |
| C5795    | ECJ2VC1H222J | 2200pF 50V              | [M]     |
| C5796    | F1J1H104A717 | 0.1uF 50V               | [M]     |
| C5797    | F1A3A470A023 | 47pF 1000V              | [M]     |
| C5798    | F2A1H5600009 | 56uF 50V                | [M]     |
| C5799    | F2A1H5600009 | 56uF 50V                | [M]     |
| C5800    | F1J2E1030004 | 0.01uF 250V             | [M]     |
| C5805    | F2B1V222A007 | 2200uF 35V              | [M]     |
| C5808    | F2B1V222A007 | 2200uF 35V              | [M]     |
| C5810    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5812    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5813    | F2A1V4710035 | 470uF 35V               | [M]     |
| C5815    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5816    | F2A1E471A652 | 470uF 25V               | [M]     |
| C5817    | F2A2AR22A358 | 0.22uF 100V             | [M]     |
| C5818    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5819    | F1J2E1030004 | 0.01uF 250V             | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C5820    | F1J2E1030004 | 0.01uF 250V             | [M]     |
| C5821    | F1J2E1030004 | 0.01uF 250V             | [M]     |
| C5822    | F1J2E1030004 | 0.01uF 250V             | [M]     |
| C5823    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5824    | F2A1E471A652 | 470uF 25V               | [M]     |
| C5825    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5826    | F1J2E1030004 | 0.01uF 250V             | [M]     |
| C5831    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5832    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5869    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5896    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5897    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5898    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5899    | F2A1C221A104 | 220uF 16V               | [M]     |
| C6100    | ECJ2FB0J106K | 10uF 6.3V               | [M]     |
| C6101    | ECJ2FB0J106K | 10uF 6.3V               | [M]     |
| C6102    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C6103    | ECJ1VB1H681K | 680pF 50V               | [M]     |
| C6104    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C6200    | ECJ2FB0J106K | 10uF 6.3V               | [M]     |
| C6201    | ECJ2FB0J106K | 10uF 6.3V               | [M]     |
| C6202    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C6203    | ECJ1VB1H681K | 680pF 50V               | [M]     |
| C6204    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C6300    | ECA1AM470B   | 47uF 10V                | [M]     |
| C6301    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C6302    | ECEA1EKS4R7B | 4.7uF 25V               | [M]     |
| C6303    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C6304    | ECEA1HKA100B | 10uF 50V                | [M]     |
| C6400    | ECEA1CKA470B | 47uF 16V                | [M]     |
| C6401    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6402    | F1J0J106A014 | 10uF                    | [M]     |
| C6403    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C6404    | ECEA0JKA470B | 47uF 6.3V               | [M]     |
| C6405    | ECEA1AKA330B | 33uF 10V                | [M]     |
| C6406    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C6407    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C6408    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C6601    | ECEA1AKA330B | 33uF 10V                | [M]     |
| C6901    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C6902    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C6903    | ECEA1HKA100B | 10uF 50V                | [M]     |
| C6905    | ECEA1HKA100B | 10uF 50V                | [M]     |
| C6906    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C6907    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C6909    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6910    | ECEA0JKS101B | 100uF 6.3V              | [M]     |
| C6911    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6913    | ECEA1HKS3R3B | 3.3uF 50V               | [M]     |
| C6916    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C6917    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C6918    | ECJ3YB1C106K | 10uF 16V                | [M]     |
| C6919    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C6925    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6931    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6941    | ECJ1VB1H473K | 0.047uF 50V             | [M]     |
| C6951    | ECJ1VB1H473K | 0.047uF 50V             | [M]     |
| C7003    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C7004    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7005    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C7006    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C7007    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7009    | ECJ1VB1H151K | 150pF 50V               | [M]     |
| C7010    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C7011    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7012    | ECJ1VB1A105K | 1uF 10V                 | [M]     |
| C7014    | ECJ1VB1C474K | 0.47uF 16V              | [M]     |
| C7015    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C7016    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C7018    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7019    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7020    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7101    | ECJ1VB1C105K | 1uF 16V                 | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C7102    | ECJ1VB1H392K | 3900pF 50V              | [M]     |
| C7103    | ECJ1VB1H561K | 560pF 50V               | [M]     |
| C7104    | ECJ1VB1C823K | 0.082uF 16V             | [M]     |
| C7105    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7106    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7107    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C7108    | ECJ1VB1H561K | 560pF 50V               | [M]     |
| C7109    | ECJ1VB1C823K | 0.082uF 16V             | [M]     |
| C7110    | ECEA1CK5470B | 47uF 16V                | [M]     |
| C7111    | ECEA1CK5470B | 47uF 16V                | [M]     |
| C7112    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C7113    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C7115    | ECJ1VB1C104K | 0.1uF 16V               | [M]     |
| C7116    | ECJ1VB1H562K | 5600pF 50V              | [M]     |
| C7117    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C8001    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C8002    | F2G0J330A031 | 33uF 6.3V               | [M]     |
| C8003    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8004    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8005    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8006    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8007    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8010    | F1G1H221A444 | 220pF 50V               | [M]     |
| C8011    | F2G0J101A031 | 100uF 6.3V              | [M]     |
| C8012    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8013    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8014    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8015    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8016    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8018    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8020    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8021    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8022    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8023    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8026    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8051    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8052    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8053    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8054    | F1G1H221A444 | 220pF 50V               | [M]     |
| C8055    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8056    | ECJ0EB1E222K | 2200pF 25V              | [M]     |
| C8057    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8111    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8112    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8113    | ECJ0EB1E471K | 470pF 25V               | [M]     |
| C8151    | ECJ1VB0J475K | 4.7uF 6.3V              | [M]     |
| C8152    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C8201    | F2G0J101A031 | 100uF 6.3V              | [M]     |
| C8202    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8203    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8211    | F1G1E1220001 | 1200pF 25V              | [M]     |
| C8221    | ECJ0EB1E102K | 1000pF 25V              | [M]     |
| C8222    | F1G1E8210002 | 820pF 25V               | [M]     |
| C8225    | ECJ0EB1E102K | 1000pF 25V              | [M]     |
| C8226    | ECJ0EB1E102K | 1000pF 25V              | [M]     |
| C8231    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8232    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8251    | F2G0J221A031 | 220uF 6.3V              | [M]     |
| C8252    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8253    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8255    | F2G1C220A037 | 22uF 16V                | [M]     |
| C8256    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8257    | F2G1C470A076 | 47uF 16V                | [M]     |
| C8258    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8261    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8262    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8301    | F2G0J221A031 | 220uF 6.3V              | [M]     |
| C8302    | F2G0J330A031 | 33uF 6.3V               | [M]     |
| C8303    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8304    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8305    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8306    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8311    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C8312    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8313    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8320    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8321    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8325    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8330    | F2G0J470A031 | 47uF 6.3V               | [M]     |
| C8331    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8335    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8340    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8341    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8401    | ECJ0EC1H150J | 15pF 50V                | [M]     |
| C8421    | F2G0J221A031 | 220uF 6.3V              | [M]     |
| C8422    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8423    | F2G0J330A031 | 33uF 6.3V               | [M]     |
| C8424    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8425    | ECJ0EC1H150J | 15pF 50V                | [M]     |
| C8426    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8428    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8429    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8431    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8432    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8433    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8501    | F2G0J101A031 | 100uF 6.3V              | [M]     |
| C8502    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8503    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8504    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8505    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8506    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8511    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8512    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8513    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8514    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8515    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8516    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8521    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8522    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8523    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8524    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8525    | ECJ0EB1C562K | 5600pF 16V              | [M]     |
| C8526    | F1G1C183A039 | 0.018uF 16V             | [M]     |
| C8527    | ECJ0EB1A333K | 0.033uF 10V             | [M]     |
| C8528    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8529    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8530    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8531    | ECJ0EC1H101J | 100pF 50V               | [M]     |
| C8532    | F1G1H221A444 | 220pF 50V               | [M]     |
| C8533    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8541    | ECJ0EB1E472K | 4700pF 25V              | [M]     |
| C8550    | F2G0J330A031 | 33uF 6.3V               | [M]     |
| C8551    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8552    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8553    | F2G0J470A031 | 47uF 6.3V               | [M]     |
| C8554    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8561    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8562    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8563    | F2G0J470A031 | 47uF 6.3V               | [M]     |
| C8564    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8571    | F1J1A106A043 | 10uF 10V                | [M]     |
| C8572    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8601    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8602    | ECJ0EB1C153K | 0.015uF 16V             | [M]     |
| C8606    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8611    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8621    | ECJ0EC1H100D | 10pF 50V                | [M]     |
| C8622    | ECJ0EC1H100D | 10pF 50V                | [M]     |
| C8651    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8652    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8691    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8695    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8701    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8901    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C9002    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C9003    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |

| Ref.<br>No. | Part No.     | Part Name & Description | Remarks |
|-------------|--------------|-------------------------|---------|
| C9004       | F1G1H7R0A445 | 7pF 50V                 | [M]     |
| C9005       | ECJ0EC1H080D | 8pF 50V                 | [M]     |
| C9006       | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C9007       | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C9008       | F1G1H221A444 | 220pF 50V               | [M]     |
| FL8101      | F1H0J1050018 | 1uF 6.3V                | [M]     |
| FL8102      | F1H0J1050018 | 1uF 6.3V                | [M]     |
| FL8103      | F1H0J1050018 | 1uF 6.3V                | [M]     |
| FL8104      | F1J1E1040022 | 0.1uF 25V               | [M]     |
| FL8421      | F1H0J1050018 | 1uF 6.3V                | [M]     |