

Service  
Service

Service



# Service Manual



## Contents Survey of versions:

Chapter

/94

Sec. 1: Adjustment Procedures

Schematic Diagrams and CBA's

Exploded Views

Spare Parts Lists

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**PHILIPS**

# MAIN SECTION

## DVD PLAYER

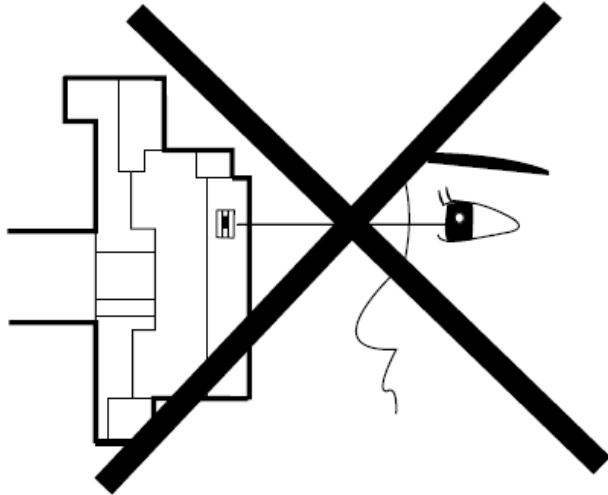
**Main Section:**  
**Adjustment Procedures**  
**Schematic Diagrams and CBA's**  
**Exploded Views**  
**Spare Parts List**

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# LASER BEAM SAFETY PRECAUTIONS

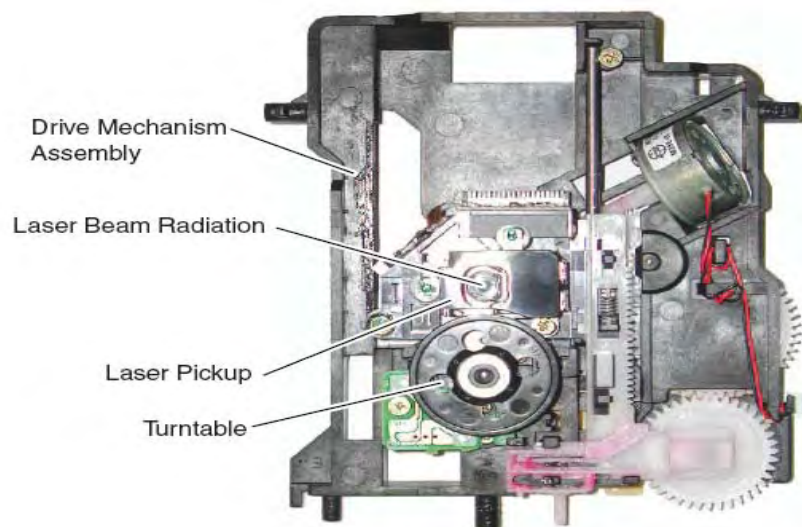
This DVD player uses a pickup that emits a laser beam.



Do not look directly at the laser beam coming from the pickup or allow it to strike against your skin.

The laser beam is emitted from the location shown in the figure. When checking the laser diode, be sure to keep your eyes at least 30 cm away from the pickup lens when the diode is turned on. Do not look directly at the laser beam.

**CAUTION:** Use of controls and adjustments, or doing procedures other than those specified herein, may result in hazardous radiation exposure.



**CAUTION**  
LASER RADIATION  
WHEN OPEN. DO NOT  
STARE INTO BEAM.

**Location: Top of DVD mechanism.**

# IMPORTANT SAFETY PRECAUTIONS

## Product Safety Notice

Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by a # on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The Product's Safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are carefully inspected to confirm with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

## Precautions during Servicing

**A.** Parts identified by the # symbol are critical for safety. Replace only with part number specified.

**B.** In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements. Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.

**C.** Use specified internal wiring. Note especially:

- 1) Wires covered with PVC tubing
- 2) Double insulated wires
- 3) High voltage leads

**D.** Use specified insulating materials for hazardous live parts. Note especially:

- 1) PVC tubing
- 2) Spacers
- 3) Insulators for transistors

**E.** When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.

**F.** Observe that the wires do not contact heat

producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).

**G.** Check that replaced wires do not contact sharp edges or pointed parts.

**H.** When a power cord has been replaced, check that 5 - 6 kg of force in any direction will not loosen it.

**I.** Also check areas surrounding repaired locations.

**J.** Be careful that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

**K.** Crimp type wire connector

The power transformer uses crimp type connectors which connect the power cord and the primary side of the transformer. When replacing the transformer, follow these steps carefully and precisely to prevent shock hazards.

Replacement procedure

1) Remove the old connector by cutting the wires at a point close to the connector.

**Important:** Do not re-use a connector. (Discard it.)

2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

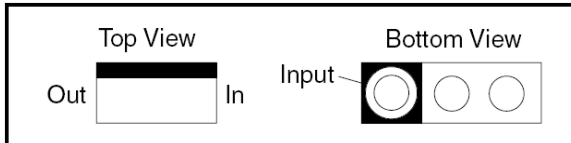
4) Use a crimping tool to crimp the metal sleeve at its center. Be sure to crimp fully to the complete closure of the tool.

**L.** When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC outlet.

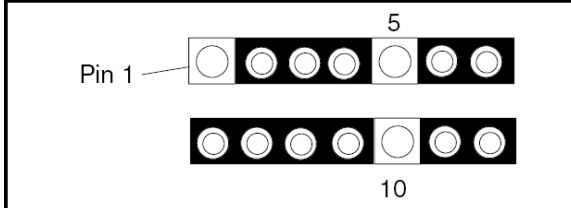
# STANDARD NOTES FOR SERVICING

## Circuit Board Indications

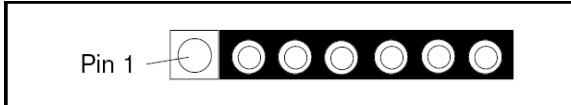
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



2. For other ICs, pin 1 and every fifth pin are indicated as shown.



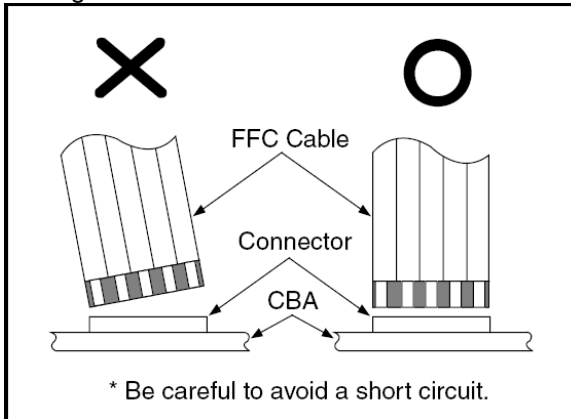
3. The 1st pin of every male connector is indicated as shown.



## Instructions for Connectors

1. When you connect or disconnect the FFC (Flexible Foil Connector) cable, be sure to first disconnect the AC cord.

2. FFC (Flexible Foil Connector) cable should be inserted parallel into the connector, not at an angle.



## Pb (Lead) Free Solder

When soldering, be sure to use the Pb free solder.



## IDENTIFICATION:

Regardless of special logo (not always

indicated)

One must treat all sets from 1.1.2005 onwards, according next rules.

**Important note:** In fact also products a little older can also be treated in this way as long as you avoid mixing solder-alloys (lead-free/lead-free). So best to always use SAC305 and the higher temperatures belong to this.

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your solder-equipment. In general use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for leadfree solder alloy. The solder tool must be able
  - To reach at least a solder-temperature of 400°C,
  - To stabilize the adjusted temperature at the solder-tip
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360°C - 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off un-used equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free). If one cannot avoid, clean carefully the solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).
- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:
  - always use the 12nc-recognizable soldering temperature profile of the specific BGA (for desoldering always use highest lead-free

temperature profile, in case of doubt)  
 - lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening, dependent of MSL-level seen on indicatorlabel in the bag, the BGA-IC possibly still has to be baked dry. This will be communicated via AYS-website.

Do not re-use BGAs at all.

- For sets produced before 1.1.2005, containing leaded soldering-tin and components, all needed spare-parts will be available till the end of the service-period. For repair of such sets nothing changes.
- On our website

[www.atyourservice.ce.Philips.com](http://www.atyourservice.ce.Philips.com) you find more information to:

- BGA-de-/soldering (+ baking instructions)
- Heating-profiles of BGAs and other ICs used in Philips-sets.

You will find this and more technical information within the "magazine", chapter "workshop news".

For additional questions please contact your local repair-helpdesk.

## How to Remove / Install Flat Pack-IC

### 1. Removal

#### With Hot-Air Flat Pack-IC Desoldering Machine:

1. Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the Flat Pack-IC (about 5 to 6 seconds). (Fig. S-1-1)

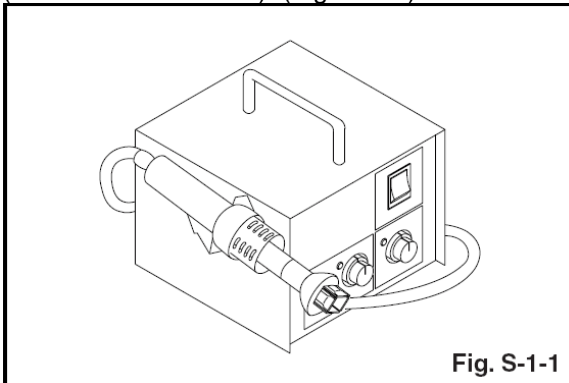


Fig. S-1-1

2. Remove the flat pack-IC with tweezers while applying the hot air.
3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will

be melted). (Fig. S-1-6)

4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### CAUTION:

1. The Flat Pack-IC shape may differ by models. Use an appropriate hot-air flat pack-IC desoldering machine, whose shape matches that of the Flat Pack-IC.
2. Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)
3. The flat pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or the solder lands under the IC when removing it.

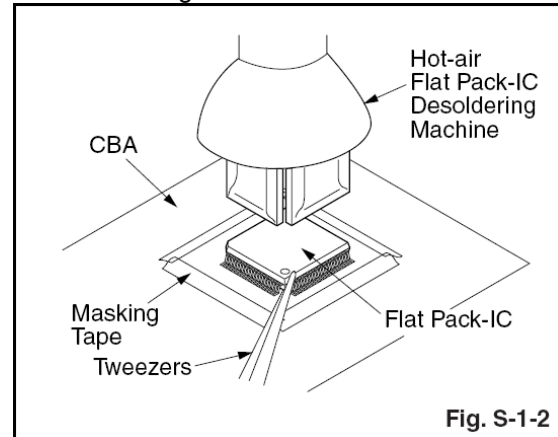


Fig. S-1-2

#### With Soldering Iron:

1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)

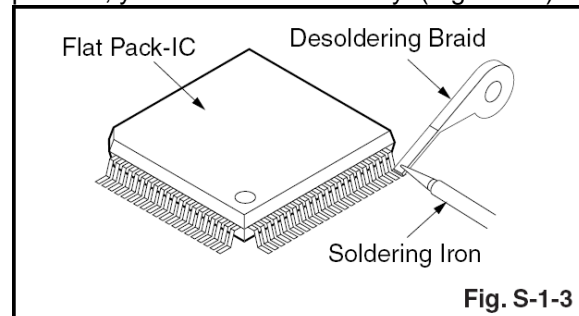
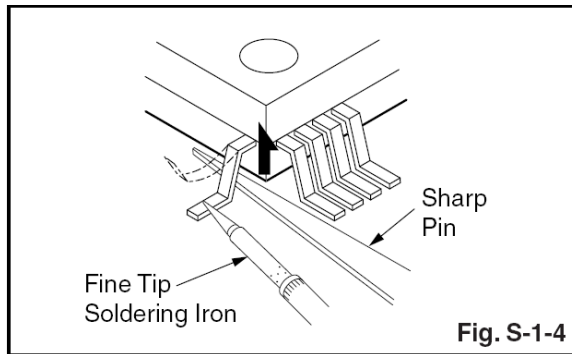


Fig. S-1-3

2. Lift each lead of the flat pack-IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)

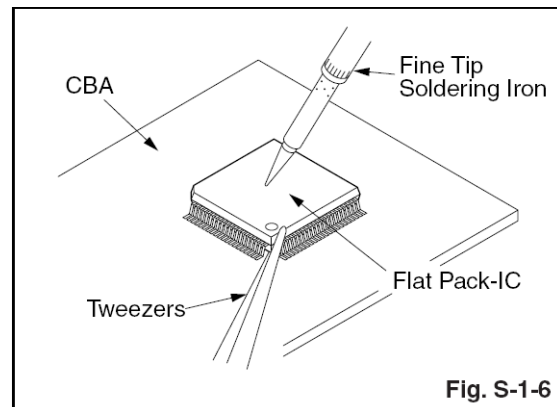
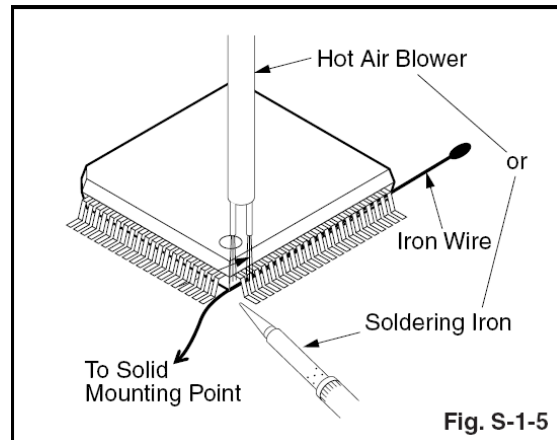


3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

#### With Iron Wire:

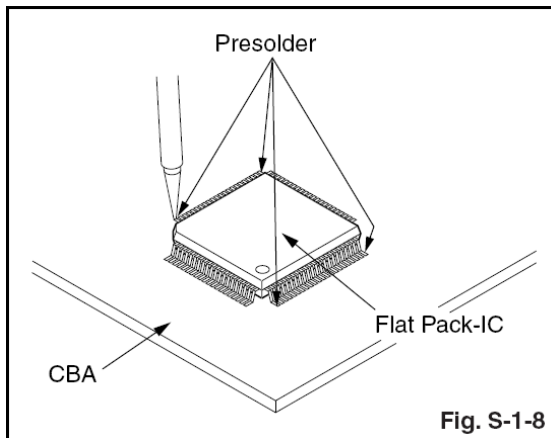
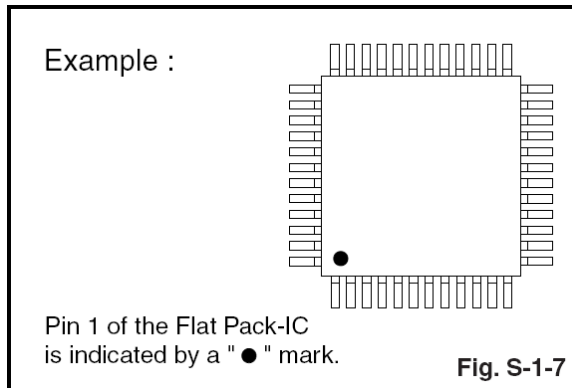
1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
2. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
3. While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the CBA contact pads as shown in Fig. S-1-5.
4. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
5. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

**Note:** When using a soldering iron, care must be taken to ensure that the flat pack-IC is not being held by glue. When the flat pack-IC is removed from the CBA, handle it gently because it may be damaged if force is applied.



## 2. Installation

1. Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the CBA so you can install a replacement flat pack-IC more easily.
2. The "●" mark on the flat pack-IC indicates pin 1. (See Fig. S-1-7.) Be sure this mark matches the 1 on the PCB when positioning for installation. Then presolder the four corners of the flat pack-IC. (See Fig. S-1-8.)
3. Solder all pins of the flat pack-IC. Be sure that none of the pins have solder bridges.



## Instructions for Handling

### Semiconductors

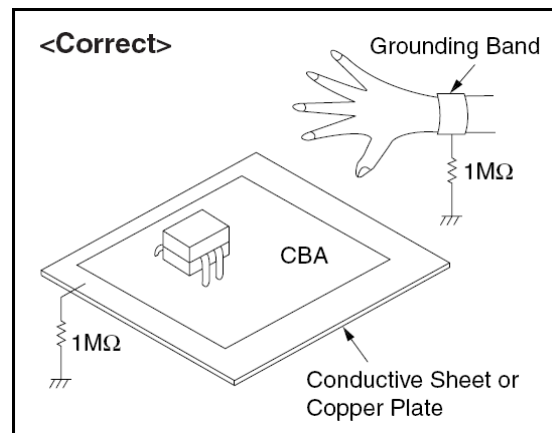
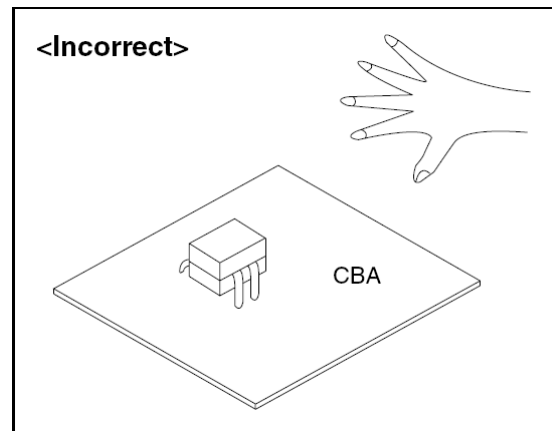
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

#### 1. Ground for Human Body

Be sure to wear a grounding band (1 M $\Omega$ ) that is properly grounded to remove any static electricity that may be charged on the body.

#### 2. Ground for Workbench

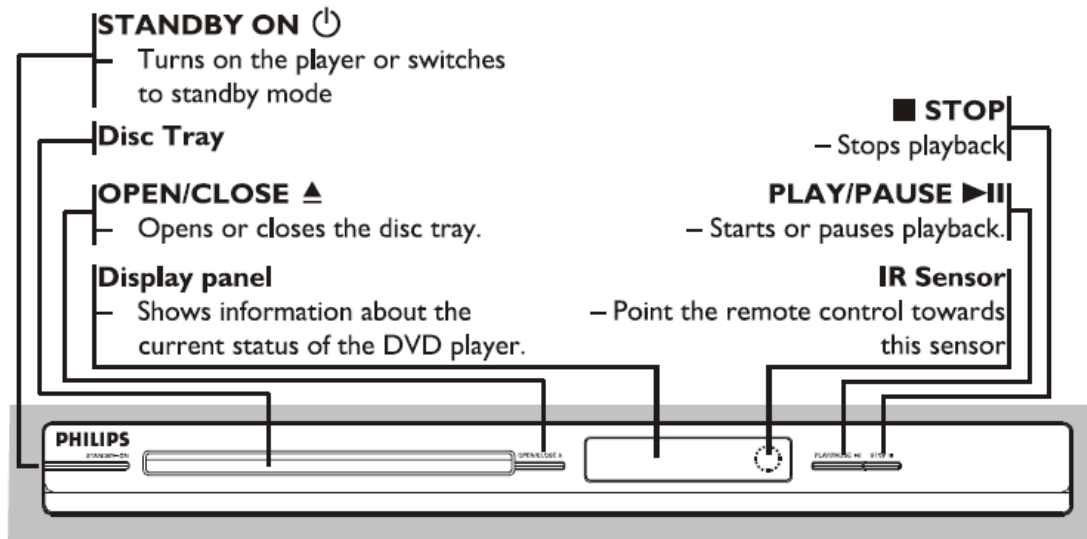
Be sure to place a conductive sheet or copper plate with proper grounding (1 M $\Omega$ ) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors with your clothing.



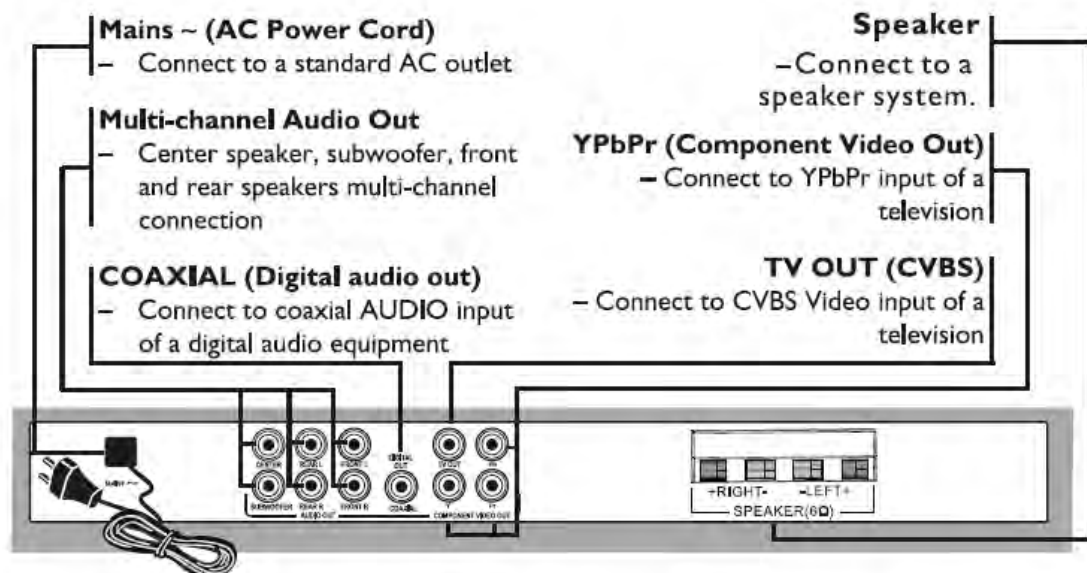


# OPERATING CONTROLS AND FUNCTIONS

## Front Panel



## Back Panel



# Remote Control

## DISC MENU

- Enters or exits the disc contents menu
- Switches on or off the playback control mode (for VCD 2.0 only)

## OK

- Confirms an entry or selection

## RETURN/TITLE

- To go back to previous menu/ show title menu

## PREV ◀◀

- Skips to the previous title/ chapter/ track

## 🔇 MUTE

- Disables or enables sound output

## ■ STOP

- Stops playback

## SUBTITLE

- To access subtitle language system menu

## ZOOM

- Enlarge a picture on the TV screen

## REPEAT

- Selects various repeat mode

## REPEAT A-B

- Repeats playback a specific section on a disc



- To switch the DVD player to standby mode or ON



- Opens or closes the disc tray.

## DISPLAY

- Displays information on TV screen during playback



- Cursor buttons for moving to the left or right, do a fast forward/reverse search.



- Cursor buttons for moving up/down, do a slow forward/backward

## SETUP

- Enters or exits the system setup menu

## ▶|| PLAY/PAUSE

- Starts or pauses playback

## NEXT ▶▶

- Skips to the next title/ chapter/track

## Alphanumeric keypad

- Selects numbered items in a menu

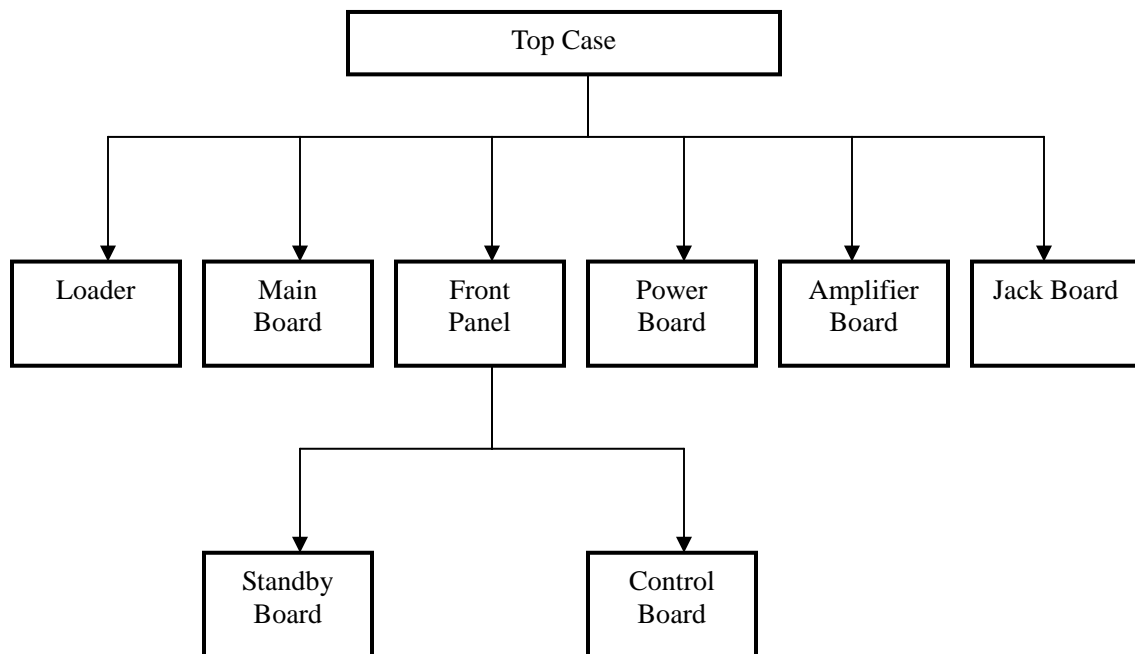
## AUDIO

- Selects an audio language (DVD/VCD) or an audio channel

# DISASSEMBLY INSTRUCTIONS

## 1. Disassembly Flowchart

This flowchart indicates the disassembly steps to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route, and dress the cables as they were originally.



## 2. Dismantling of top case

2-1. Ensure no disc in the tray and keep tray close, turn off the DVD player and then disconnect the mains supply. Loosen 5 screws "A" as shown in figure 2-1.

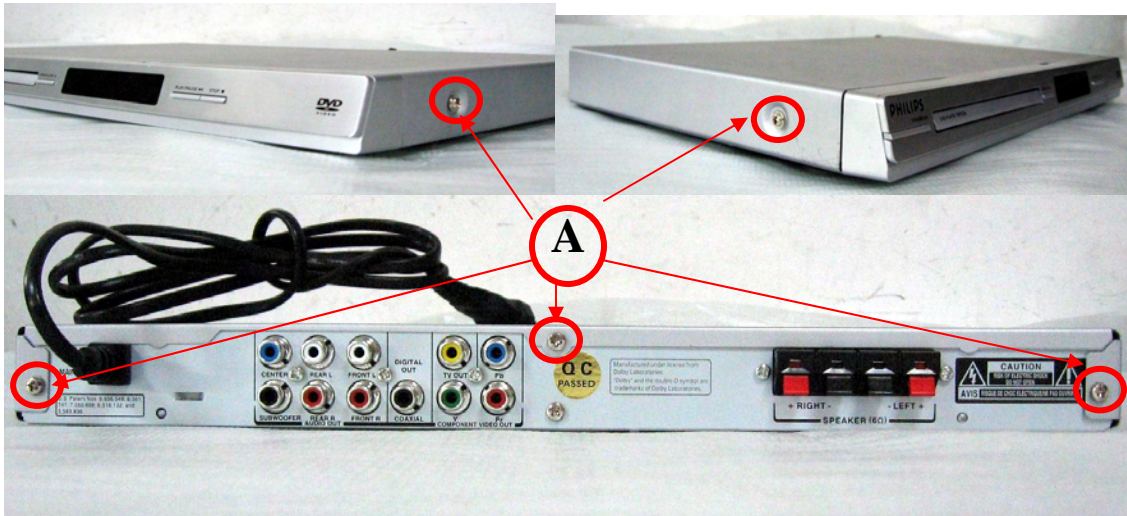


Figure 2-1.

2-2. Take off the top case as shown in figure 2-2.

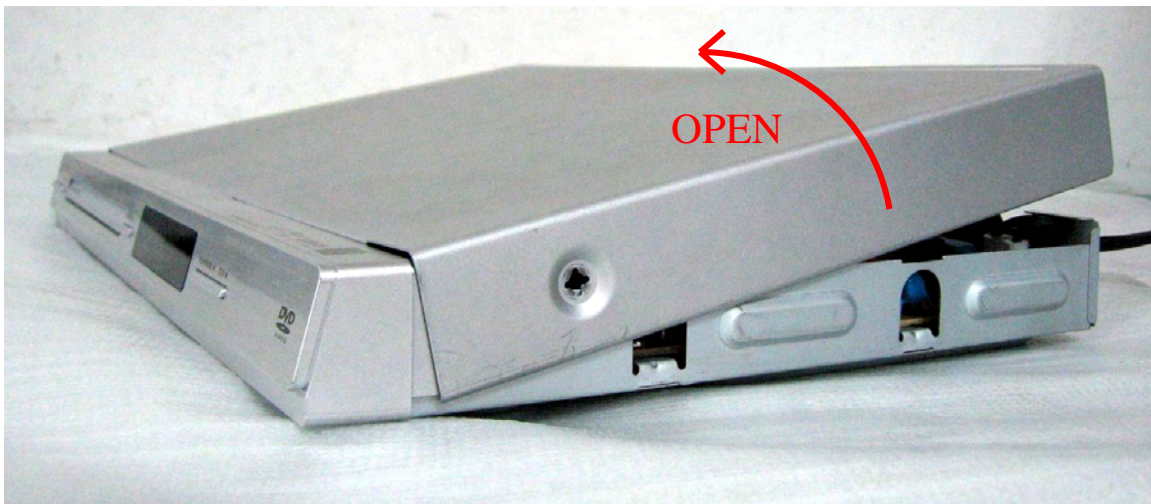


Figure 2-2.



### 3. Dismantling of control + standby board

3-1. Release the lock “B” at the same time as shown figure 3-1.

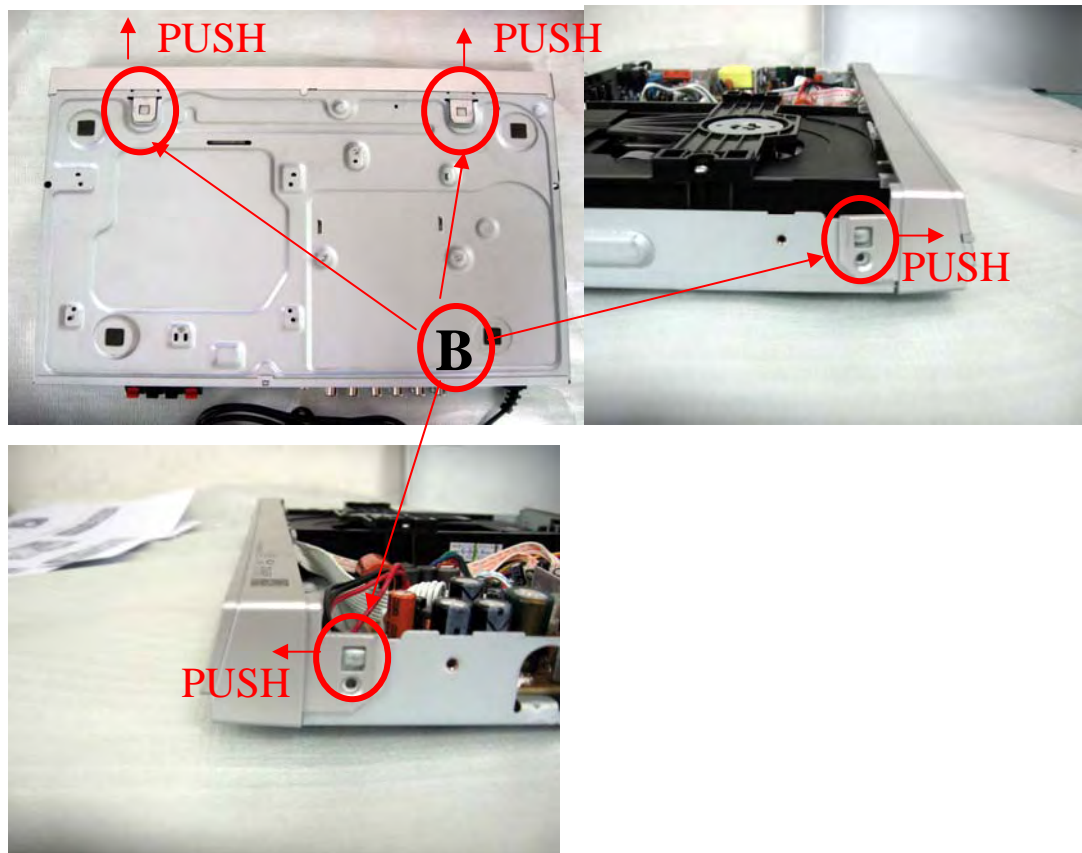


Figure 3-1

3-2. Loosen 5 screws “C” as shown in figure 3-2.

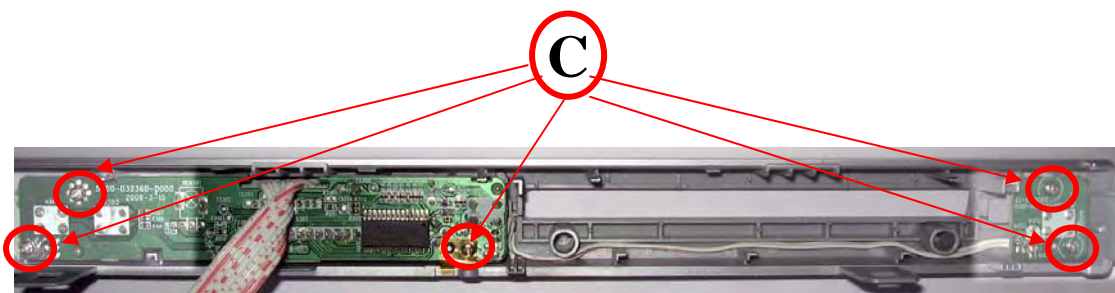


Figure 3-2

#### 4. Dismantling of loader

4-1. Loosen 3 screws “D” as shown in figure 4-1.

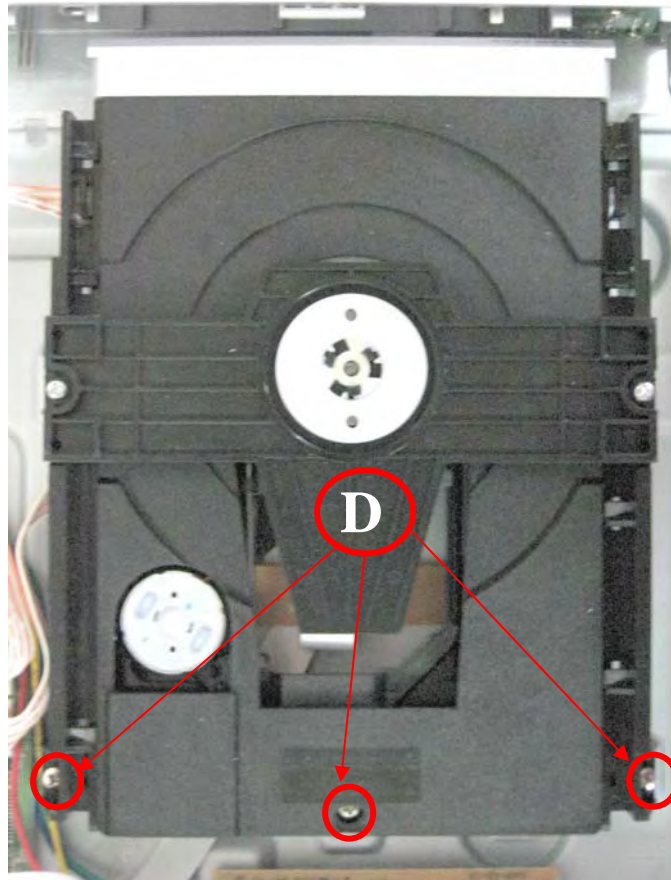


Figure 4-1.

## 5. Dismantling of main board

5-1. Loosen 5 screws as shown in figure 5-1.

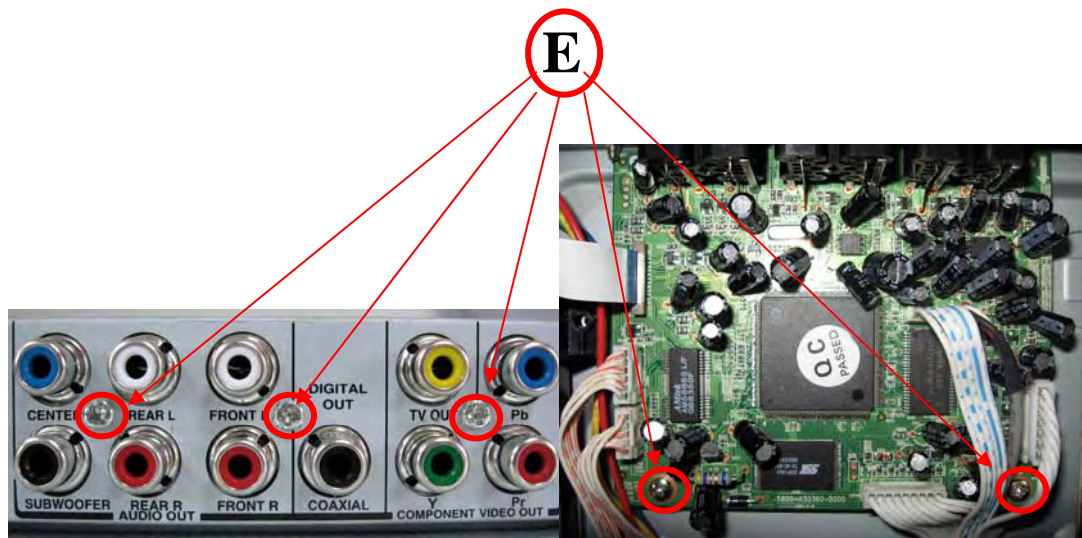


Figure 5-1.

## 6. Dismantling of power board

6-1. Loosen 2 screws “F” as shown in figure 6-1.

6-2. With a pincers to nip rubber nail “G” as shown in figure 6-1.

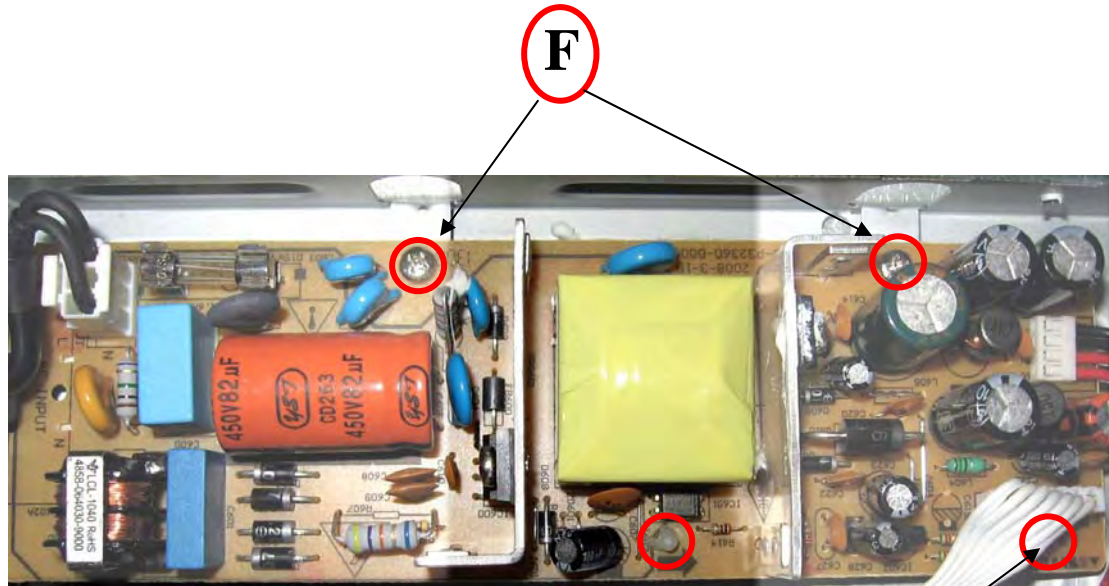


Figure 6-1



## 7. Dismantling of amplifier board

7-1. Loosen 1 screw “H” as shown in figure 7-1.

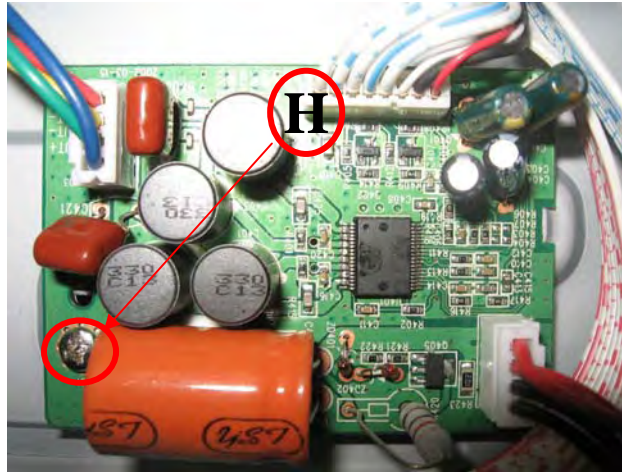


Figure 7-1.

## 8. Dismantling of Jack Board

8-1. Loosen 2 screws “T” as shown in figure 8-1.

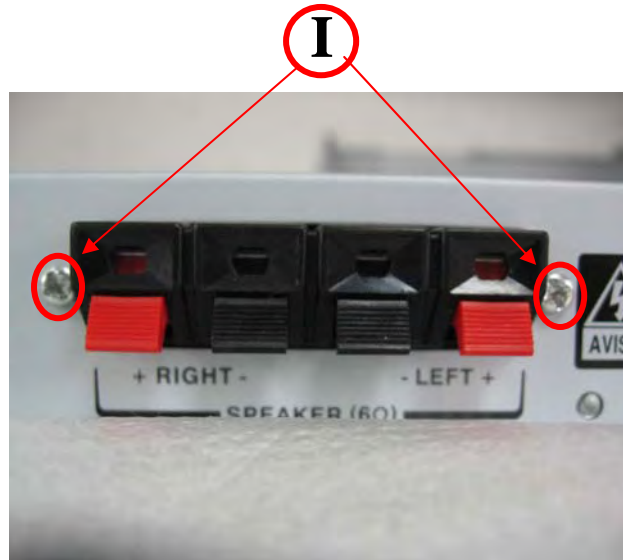


Figure 8-1

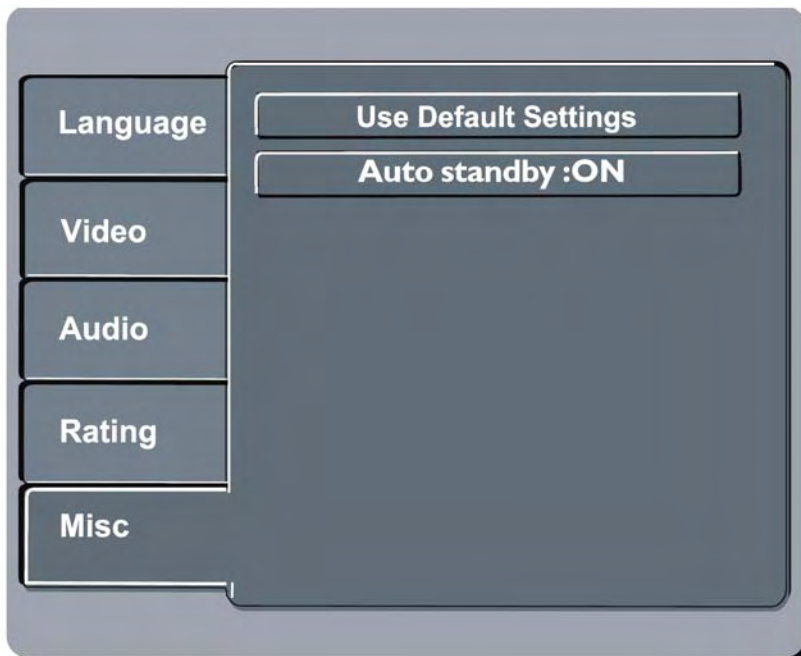
## HOW TO INITIALIZE THE DVD PLAYER

To put the program back at the factory- default, initialize the DVD player as the following procedure.

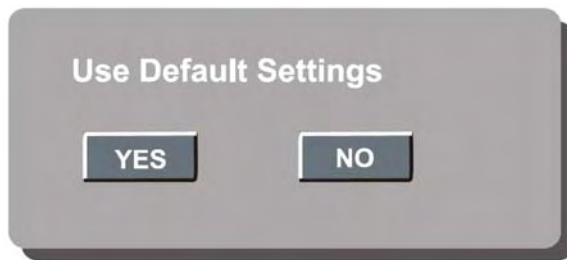
1. Press **SETUP** remote control, the screen display the following menu.



2. Press ▲ or ▼ select “Misc”, then press ►, menu appears as below.



3. Press ▲ or ▼ select the “Use Default Settings”, then press **OK** to access, display as below.



4. Press ◀ or ▶ select the “**YES**” button and press **OK** to confirm. Then Default Setting is complete.

# MODE FOR SERVICE

## 1. SERVICE MODE

Purpose:

The service mode is used to assist the service department in troubleshooting the various parts of sets brought in for servicing by customers.

### 1.1 Entering the Service Mode:

Press 2, 5, 8 when the tray is opened, the player will enter this mode.

The LED will display "SS01" and close the tray.

SS01: static message until key pressed.

S: refers to Service Mode.

S: refers to Version.

xx: refers to Software version number of main uP (ZORAN 966D). Counting up from 01 to 99. E.g.: "SS01" shows that main uP uses version 01.

Two Test modes:

Each test is entered by pressing the corresponding key.

### 1.2 TEST LED

A, Press RC PLAY key to enter LED test mode (test pattern 1), and the LED will display "88888".

B, Press RC PLAY key again, will enter display test pattern 2. The LED will display "55555".

C, Then press RC STOP key will exit the display test pattern. The LED will display "SS01".

### 1.3 TEST FRONT PANEL KEY

**A. Press RC EJECT key to enter key test to test the FP key, the LED will display "HE41".**

Then press FP POWER key, the LED will display "HE42",

Then press FP EJECT key, the LED will display "HE43",

Then press FP PLAY key, the LED will display "HE44",

Then press FP STOP key, the LED will display "STOP",

Panel/remote key	key	Led display
Remote key	Eject open/close	HE41 (Enter panel key test mode)
Front panel	Power	HE42
Front panel	Eject	HE43
Front panel	Play	HE44

Front panel	Stop	STOP
Remote key	Stop	SS01(Exit the panel key test mode)

**B. Press RC STOP key will exit the key test mode. The LED will display service version:"SS01".**

#### **1.4 Exit the Service Mode**

After you test all the function, you should standby the set, then power on, the set will enter the normal play state.

## **2. Trade Mode**

Purpose:

Trade mode is a feature that will block all set key on the set when enabled. It is for dealers to prevent customers from removing the disc, RC keys are still allowed however.

#### **Activation:**

To activate Trade Mode, open the disc tray ("Open/Close" key on Set or RC), then press 2, 5, 9 on RC. FTD shows "TRADE ON", and tray will close. Trade Mode is now enabled.

To deactivate Trade Mode, open the disc tray (Open/Close key on RC), then press 2, 5, 9 on RC. FTD shows "TRADE OFF", and tray will close. Trade Mode is now disabled.

#### **Description:**

Trade Mode **ON** – Set Keys all key on the set inactive. All RC keys can still be used. All discs are supported in trade mode. The screen saver is disabled. After set Trade Mode ON, switching on and off the mains power will not erase Trade Mode.

Trade Mode **OFF** – All Keys on Set and RC allowed. Set functions as normal

## FIRMWARE RENEWAL MODE

This function allows to upgrade new DVD software from an inserted disc. You should follow below procedure:

1. Start the DVD player.
2. Insert a upgrade CD with the filename "build.img" and "update.ver" for player.
3. Once the upgrade disc is inserted, the contents of the disc will be read. Display on screen as below.

Firmware Upgrade	
Erase and programme	
<b>OK</b>	Cancel

4. Then select "ok", the OSD change to

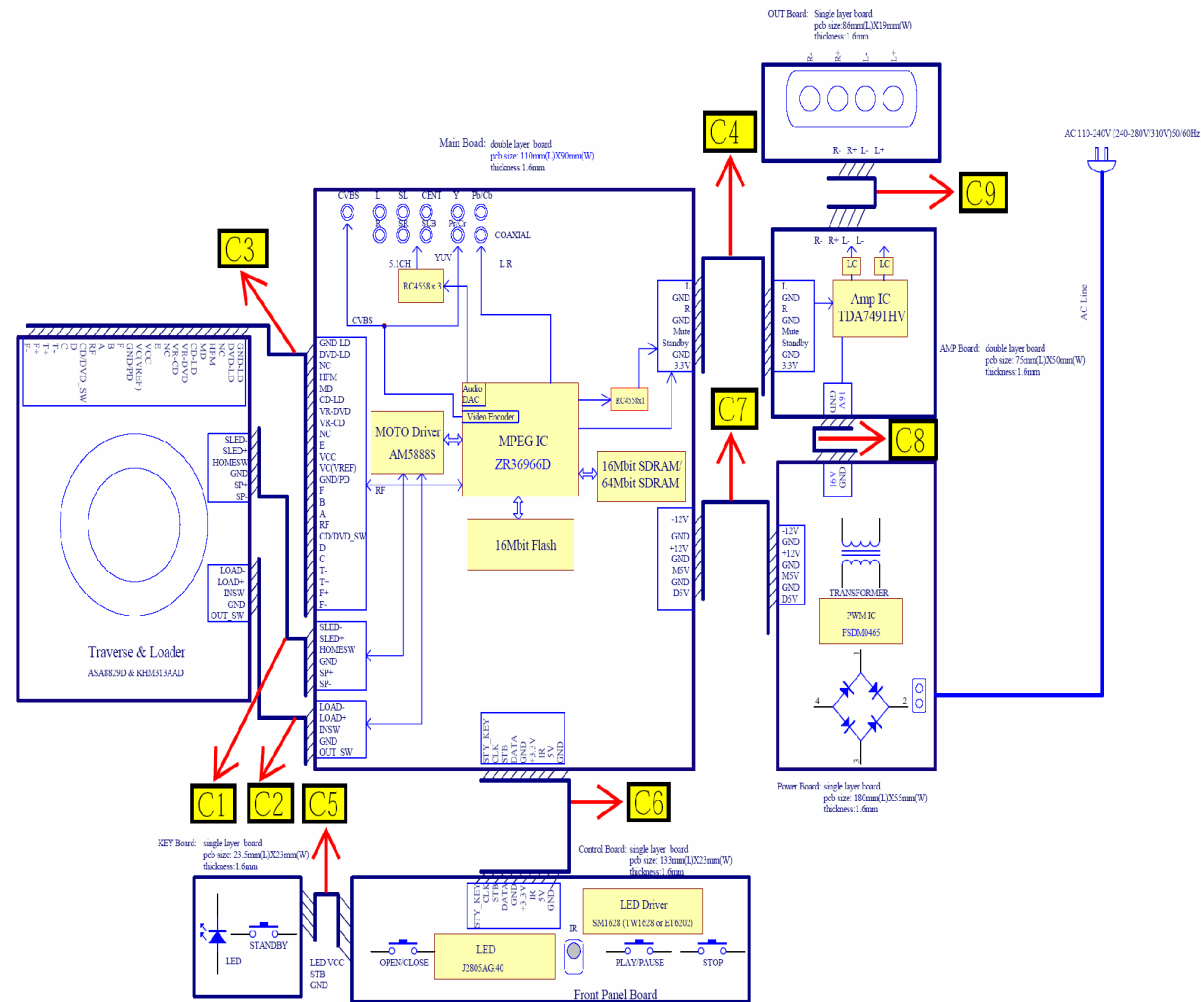
Firmware Upgrade
Programming, please wait...

the display (LED) will always show the "CDUPD" messages.

5. Then the tray will open automatically. Take out the upgrade disc at once, please.
6. Waiting for the tray close and go to standby. Then, upgrade is complete.
7. Check the version of software (Res. section :MODE FOR SERVICE -1.1) whether it is same as marked on upgrade disc. If it is, upgrade is successful. If not, ensure update disc is right and do above process again.

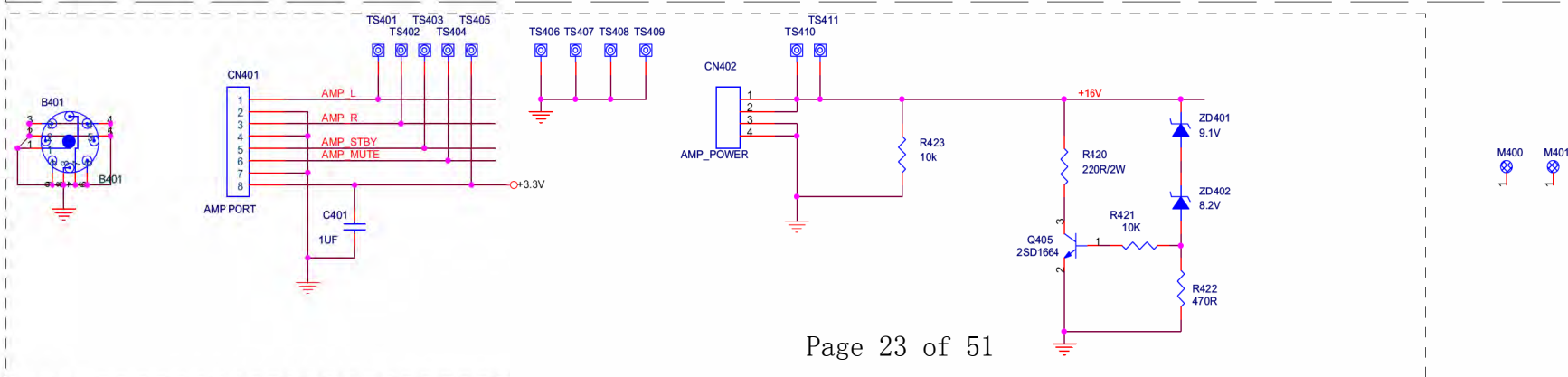
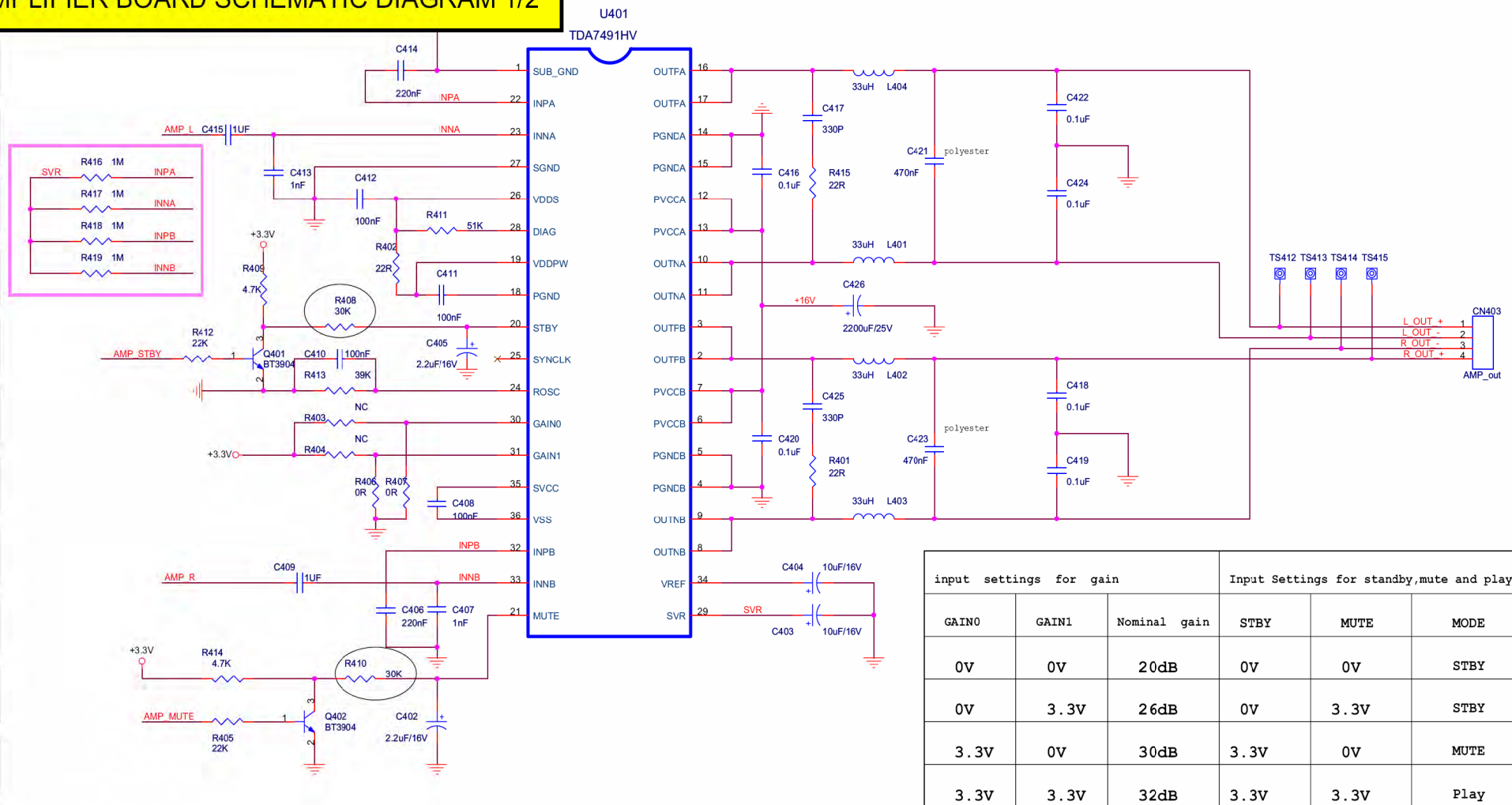
**Reminder: The upgrading time should not take more than 5 minutes .DO NOT unplug the set until upgrade is finished.**

# BLOCK WIRING DIAGRAM

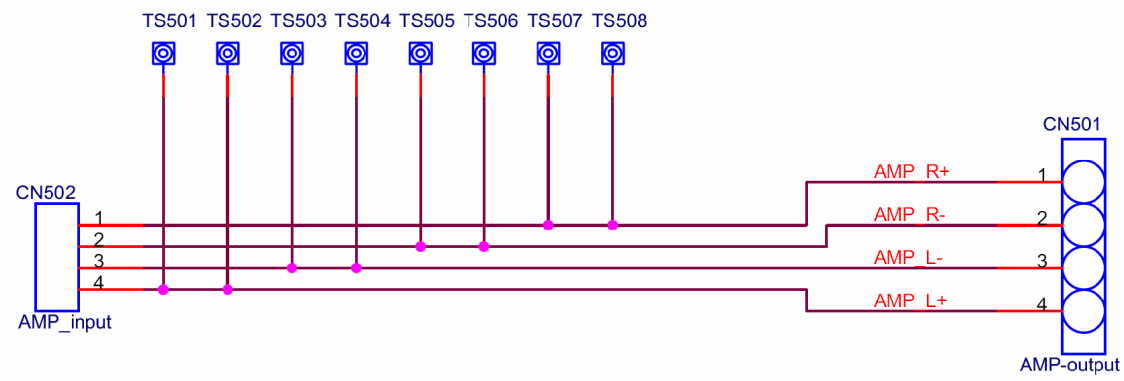




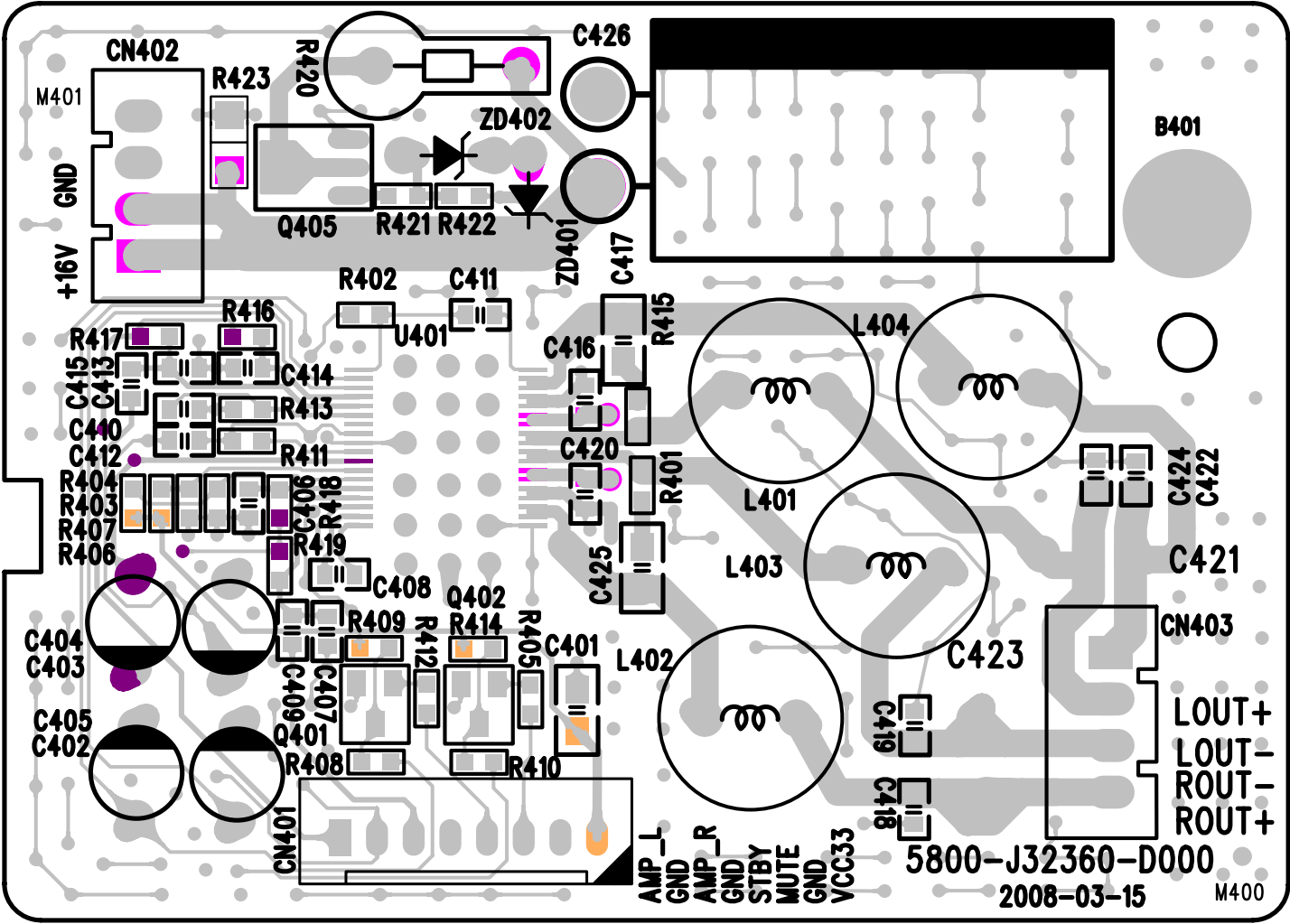
## AMPLIFIER BOARD SCHEMATIC DIAGRAM 1/2

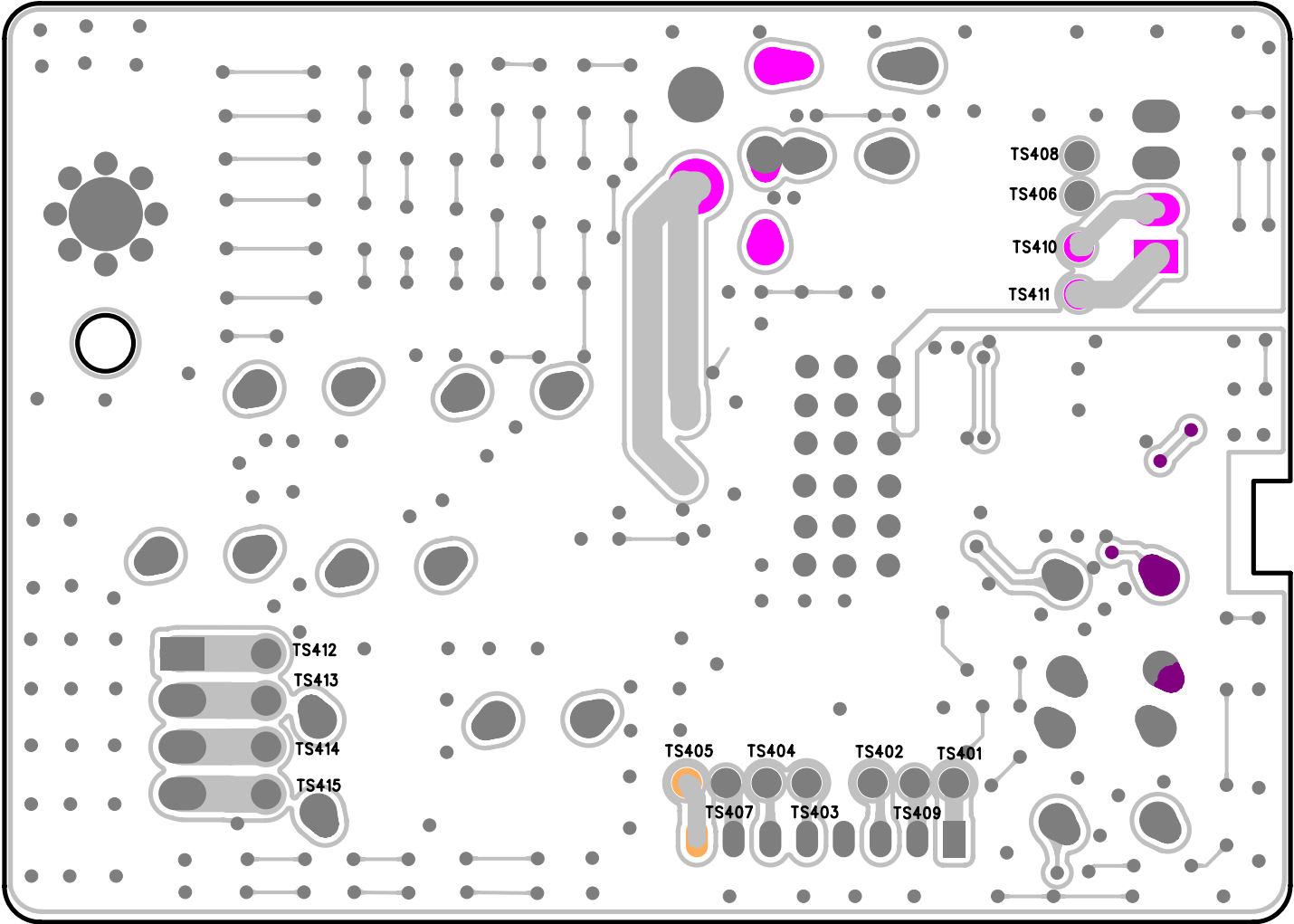


AMPLIFIER BOARD SCHEMATIC DIAGRAM 2/2



AMPLIFIER BOARD TOP VIEW



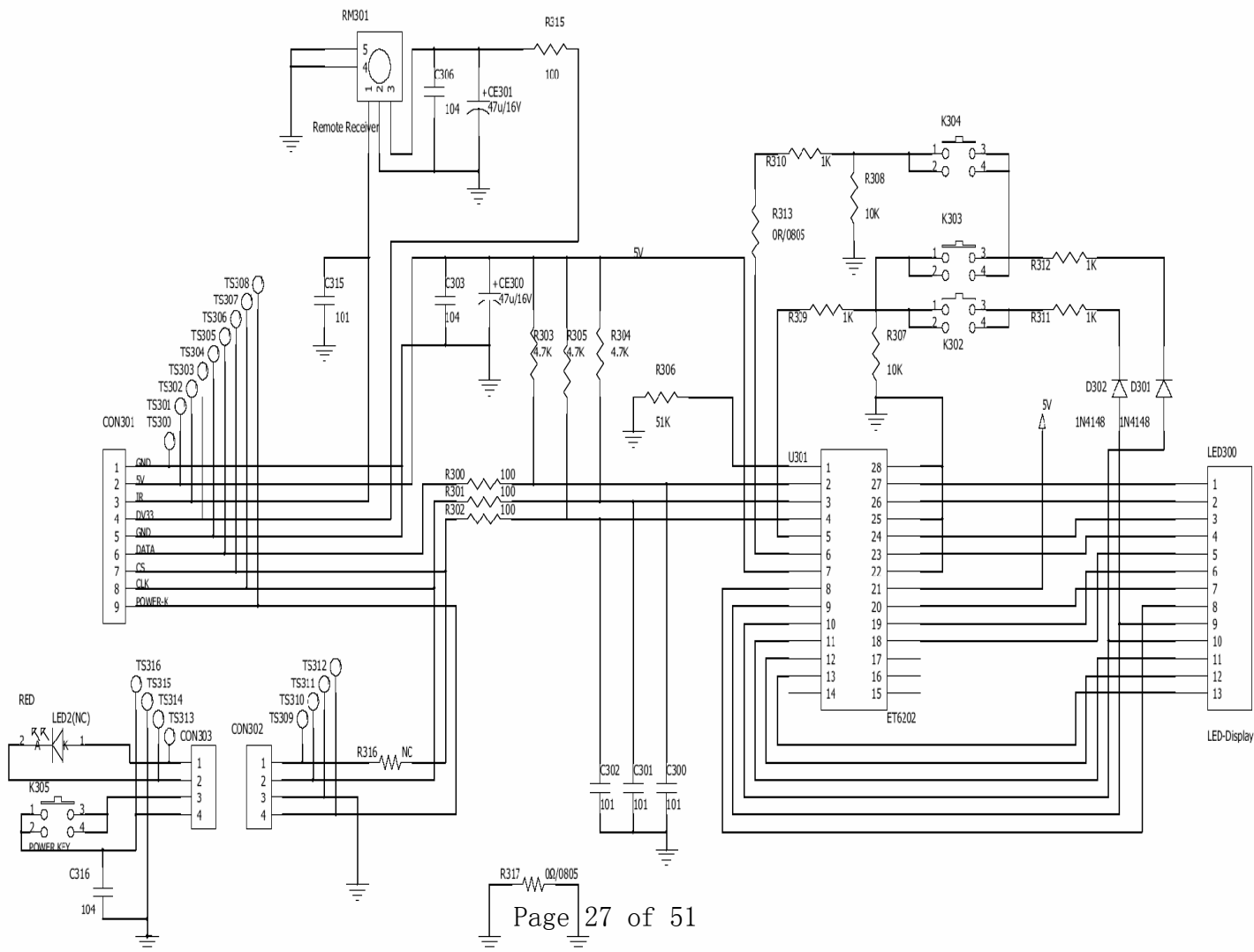


# CONTROL BOARD SCHEMATIC DIAGRAM

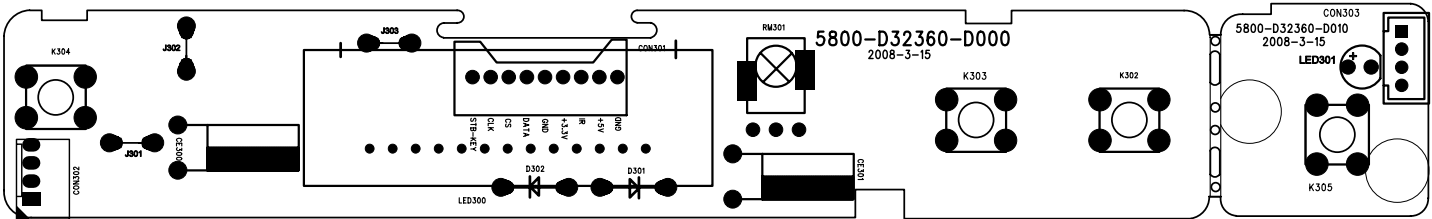
C

B

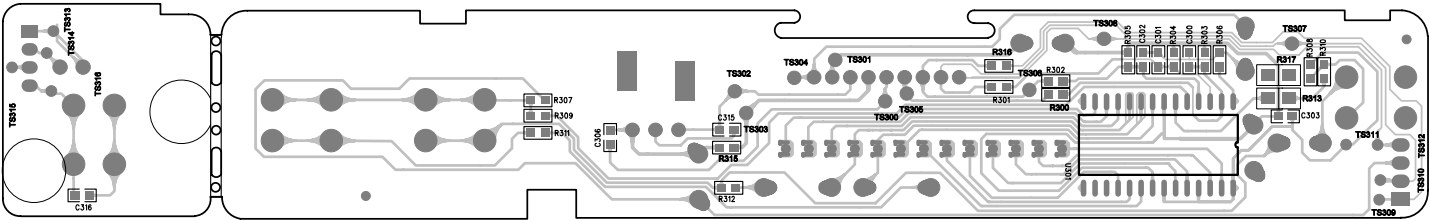
A



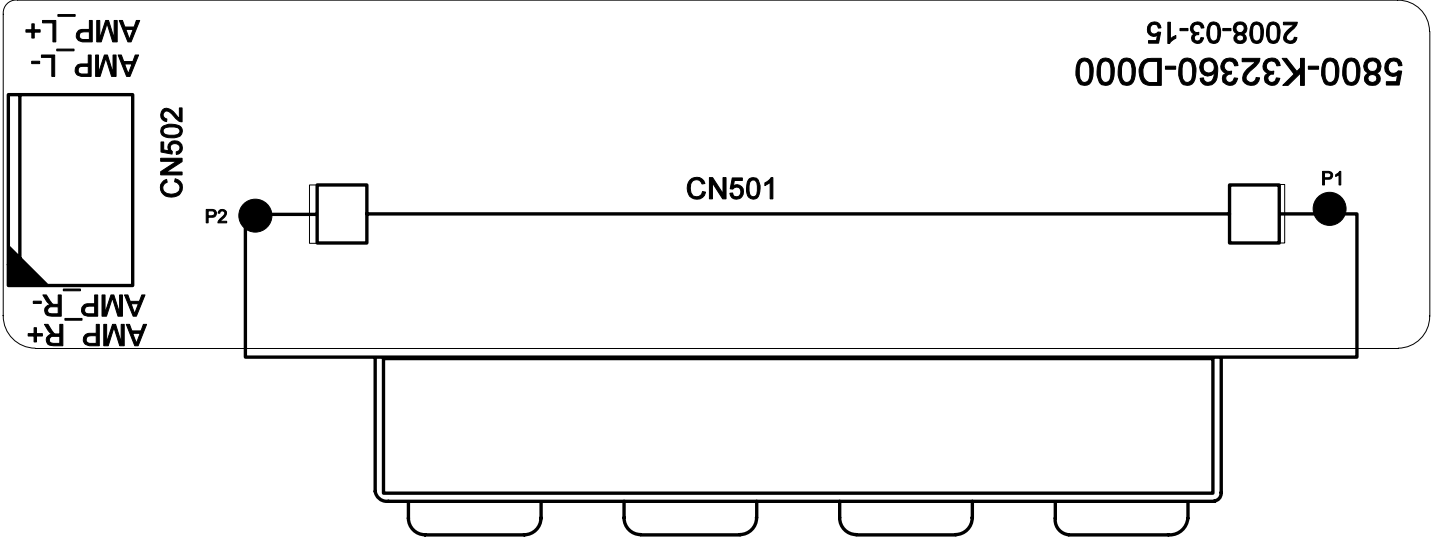
CONTROL BOARD+STANDBY BOARD TOP VIEW



CONTROL BOARD+STANDBY BOARD BOTTOM VIEW

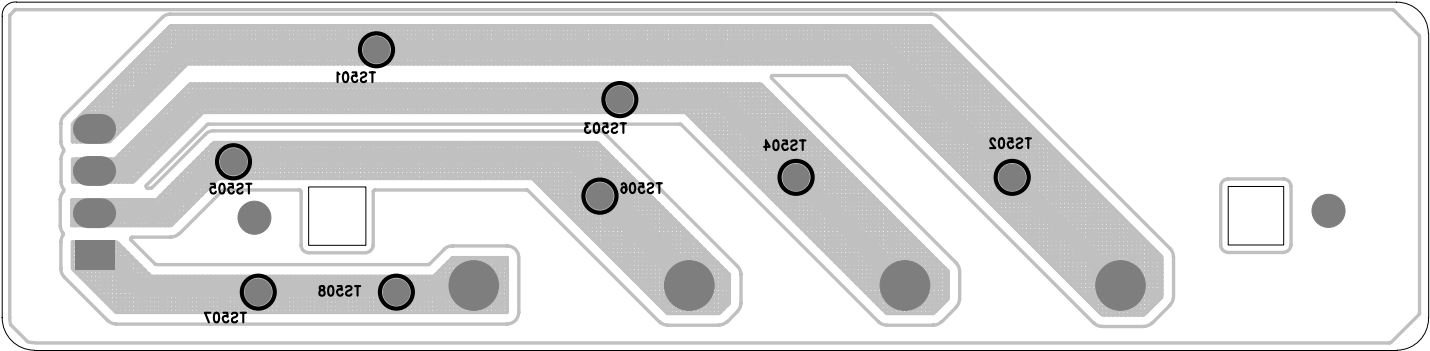


JACK BOARD TOP VIEW

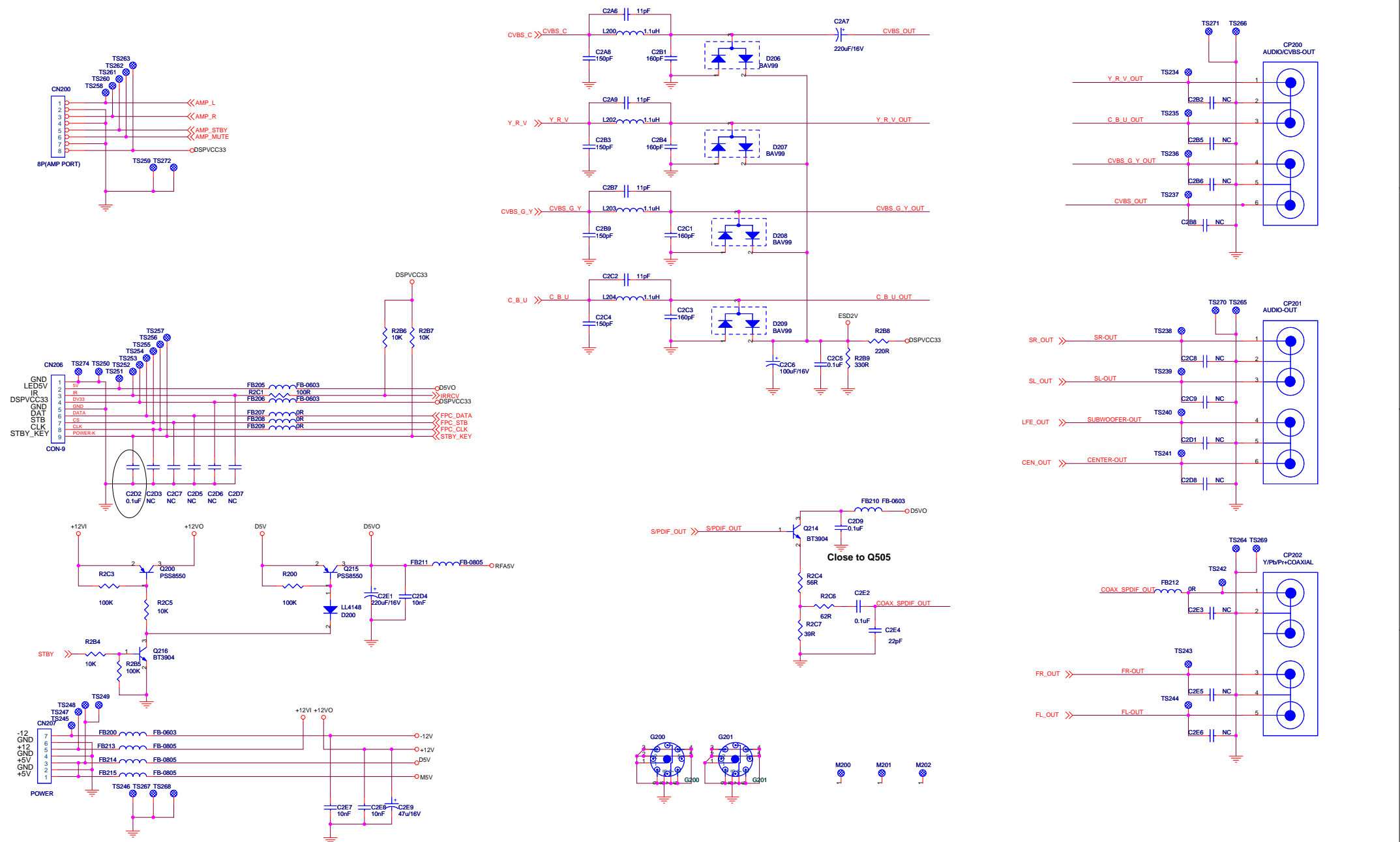




JACK BOARD BOTTOM VIEW



## MAIN BOARD SCHEMATIC DIAGRAM 1/4

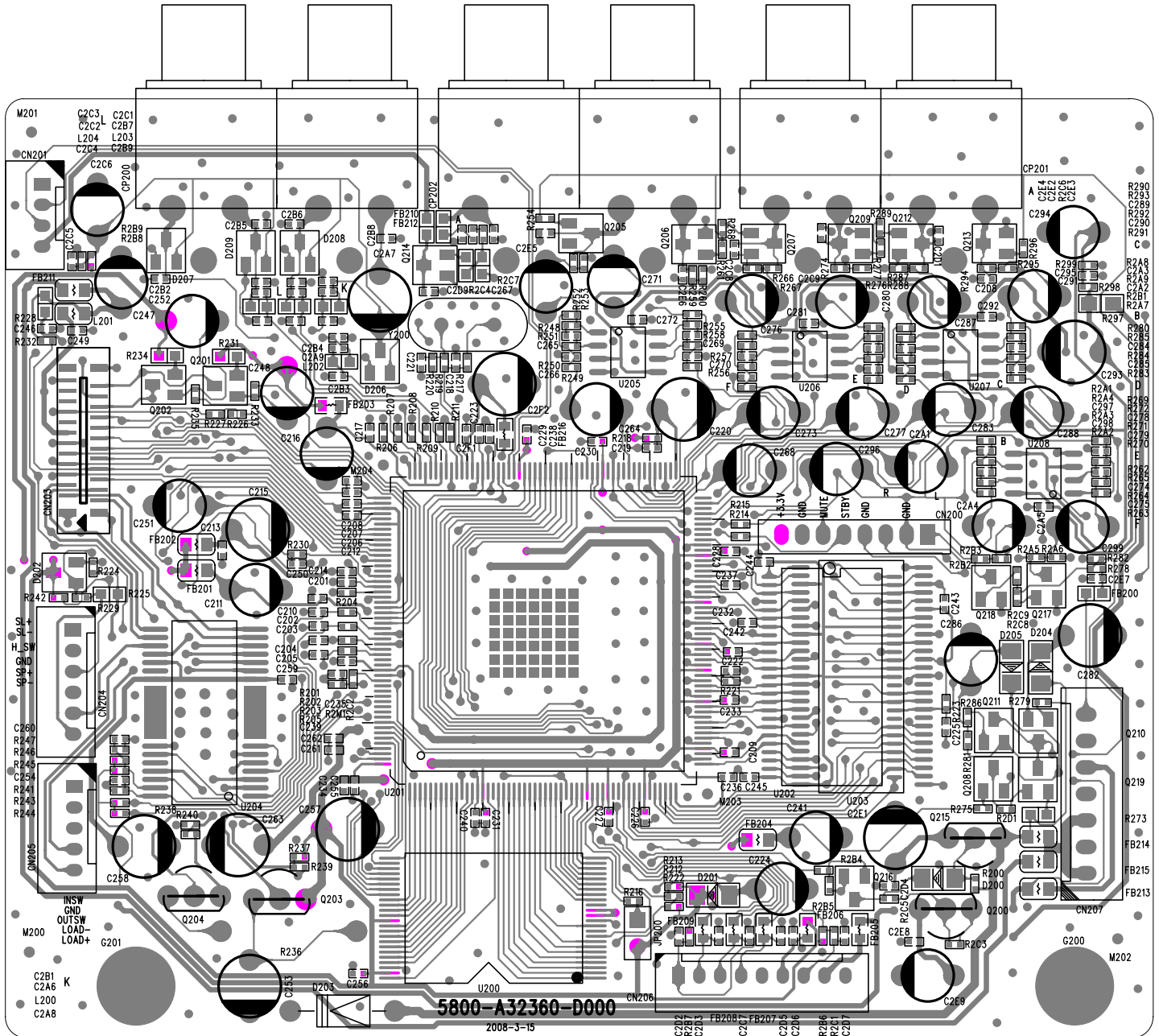




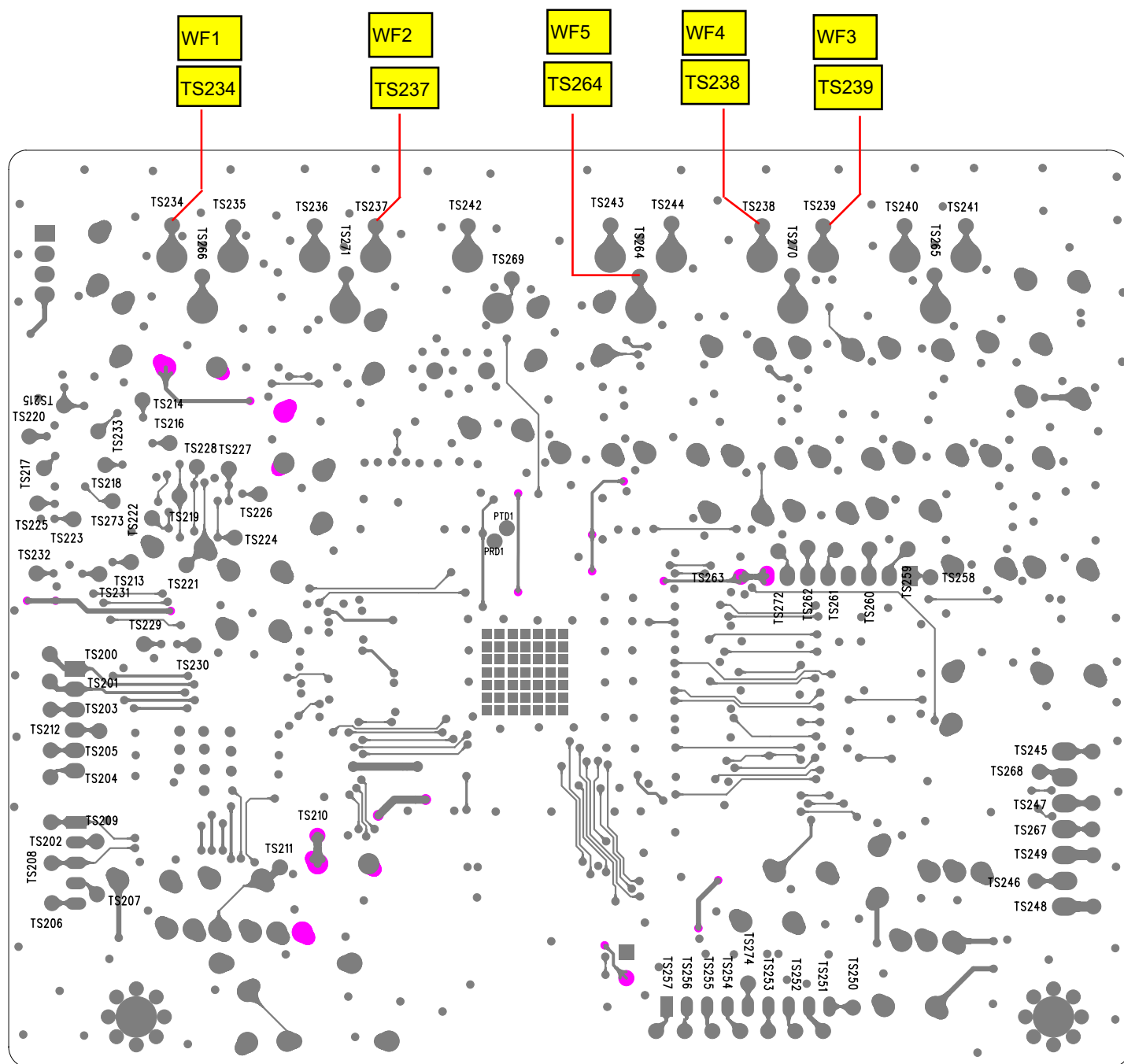


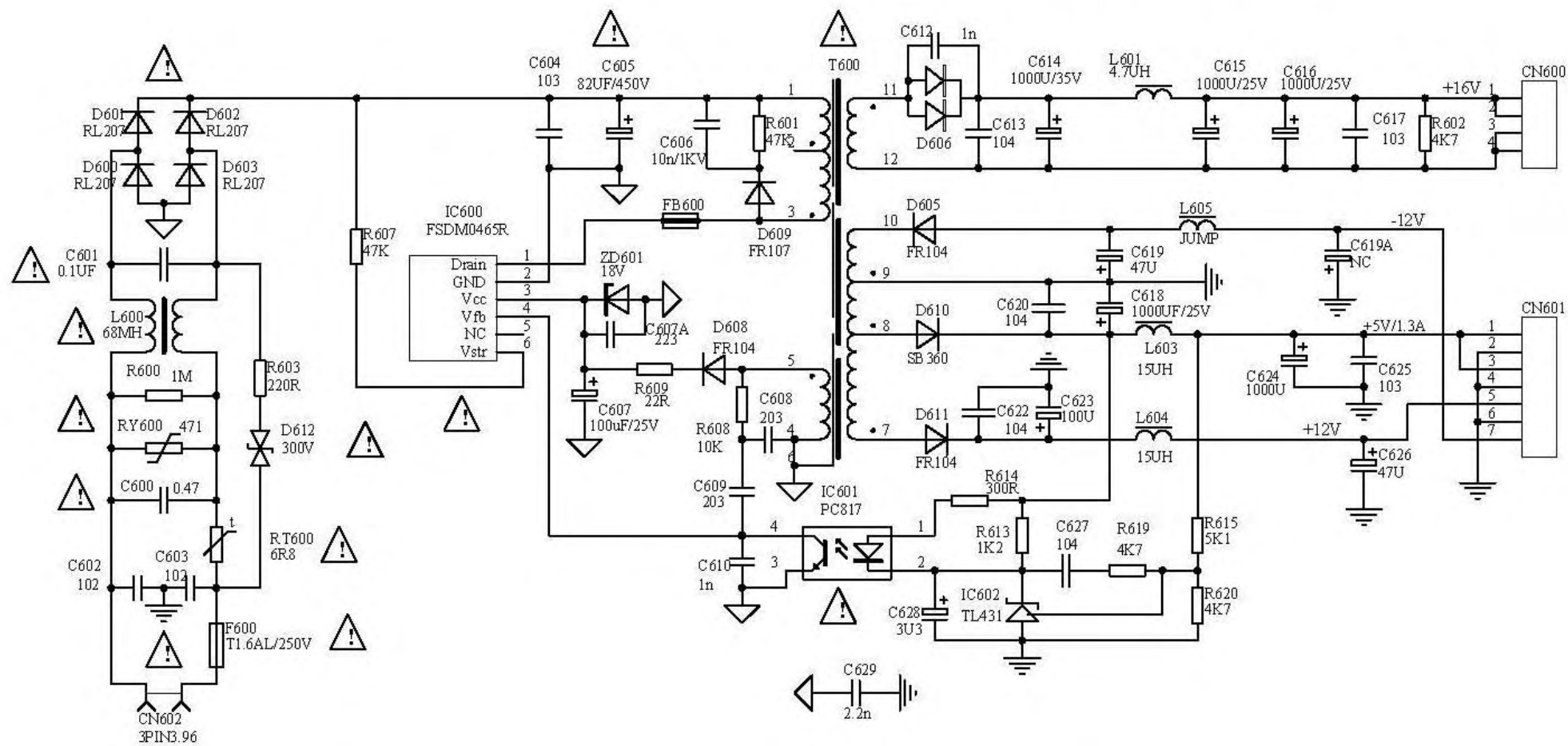


# MAIN BOARD TOP VIEW



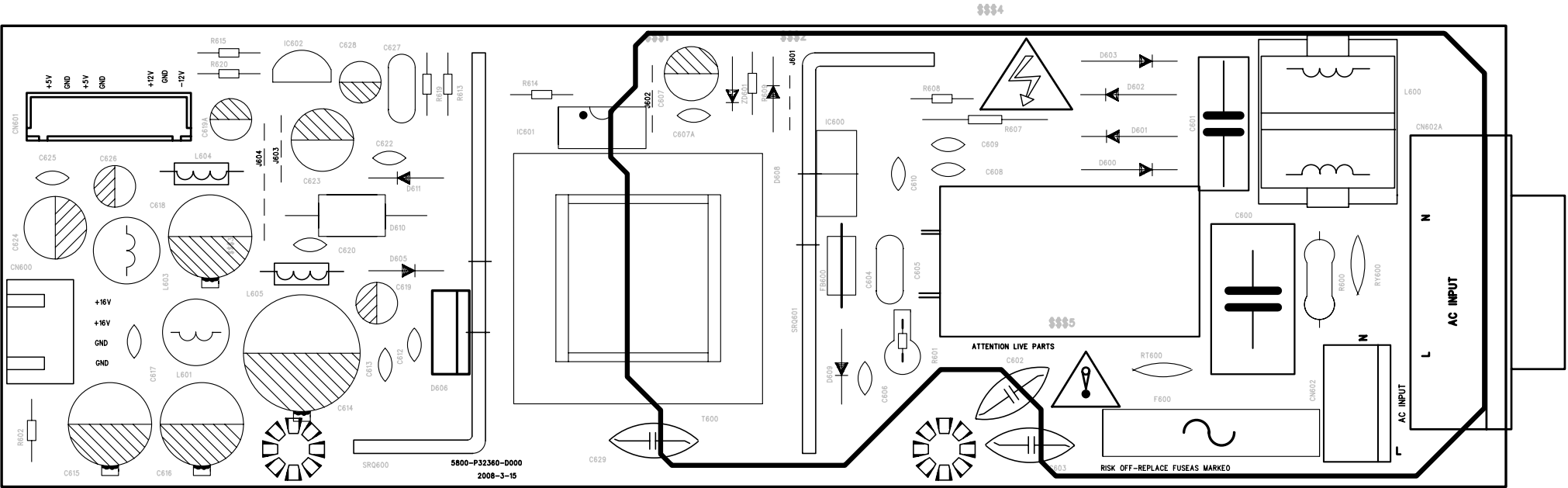
## MAIN BOARD BOTTOM VIEW



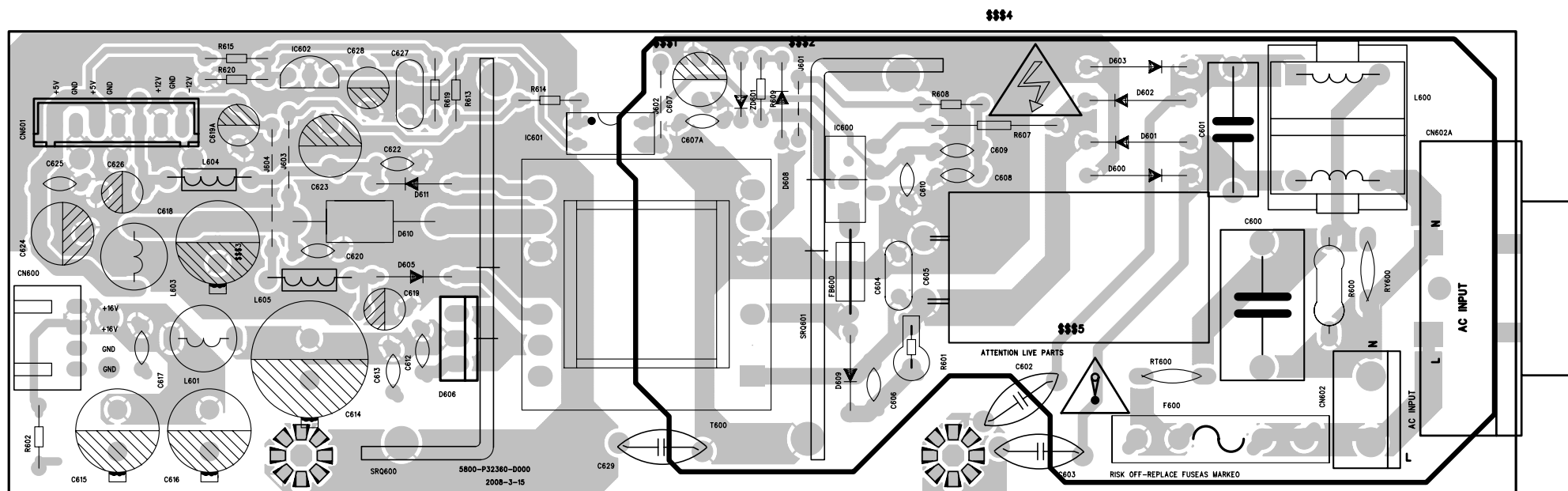




POWER BOARD TOP VIEW



POWER BOARD BOTTOM VIEW



# WAVEFORMS

## NOTE:

Input

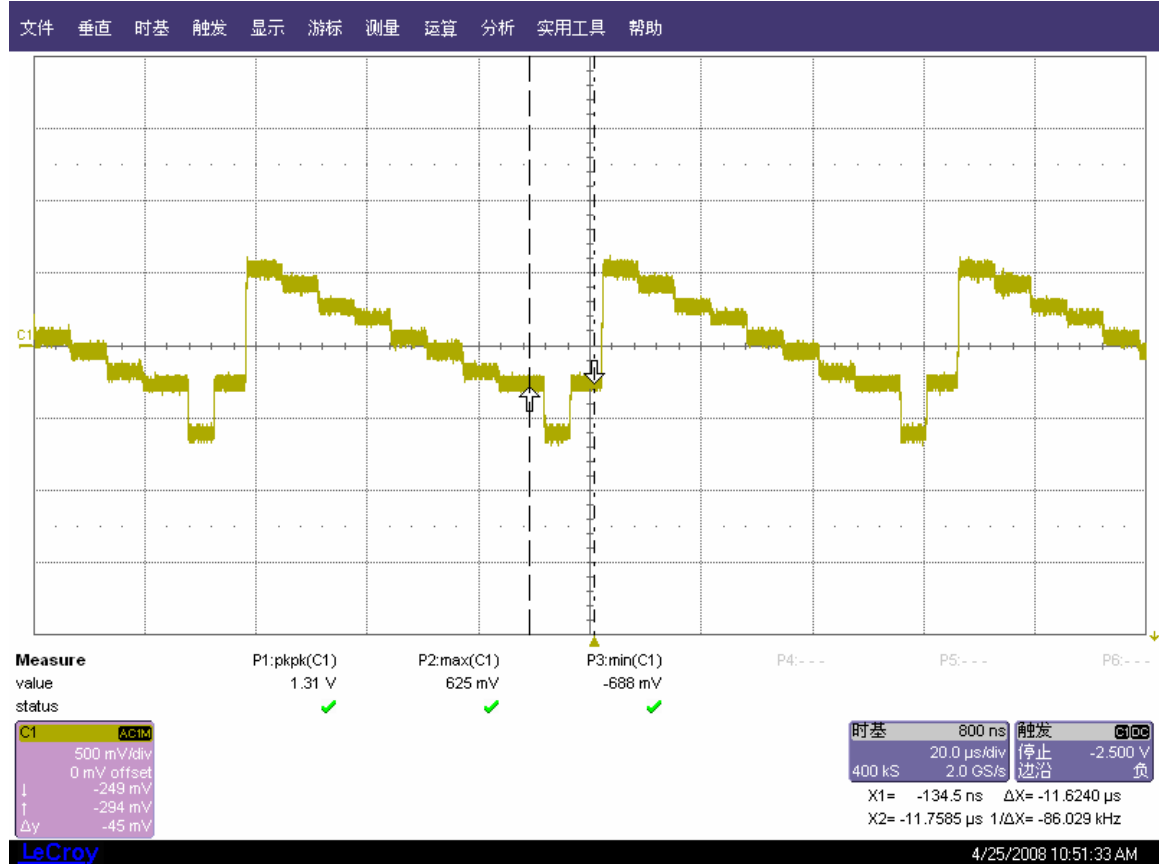
DVD: POWER ON (STOP) MODE

(WF1~WF2)

CD: 1kHz PLAY

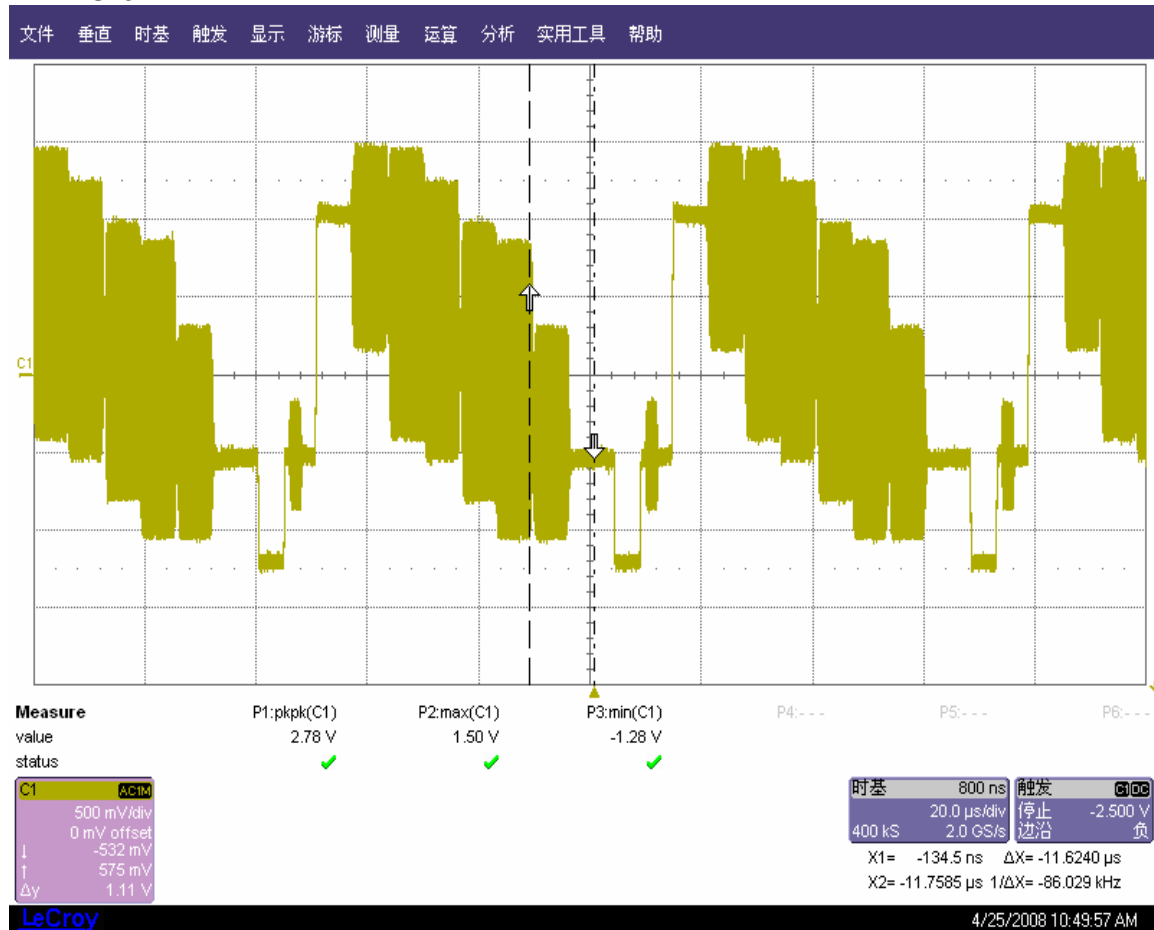
(WF3~WF5)

WF1 TS234



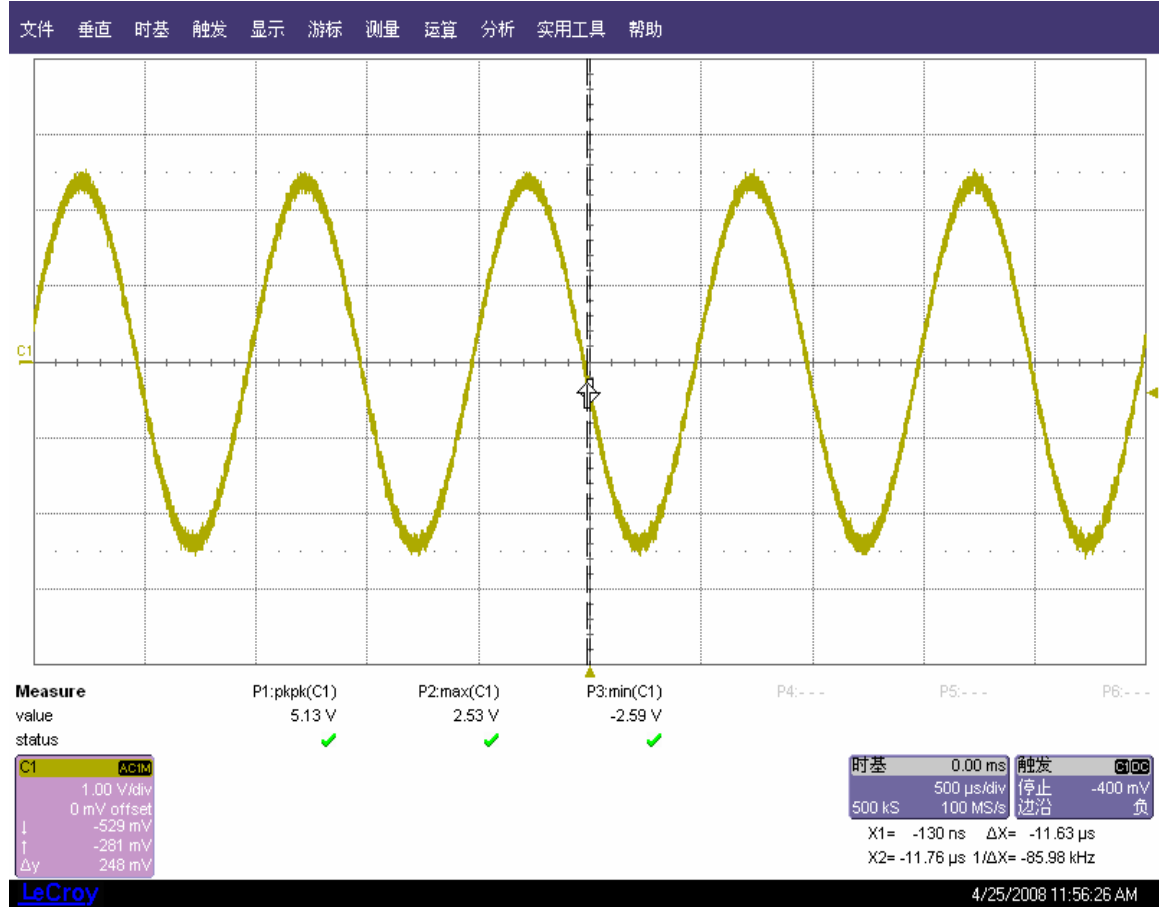
VIDEO-Y

# WF2 TS237

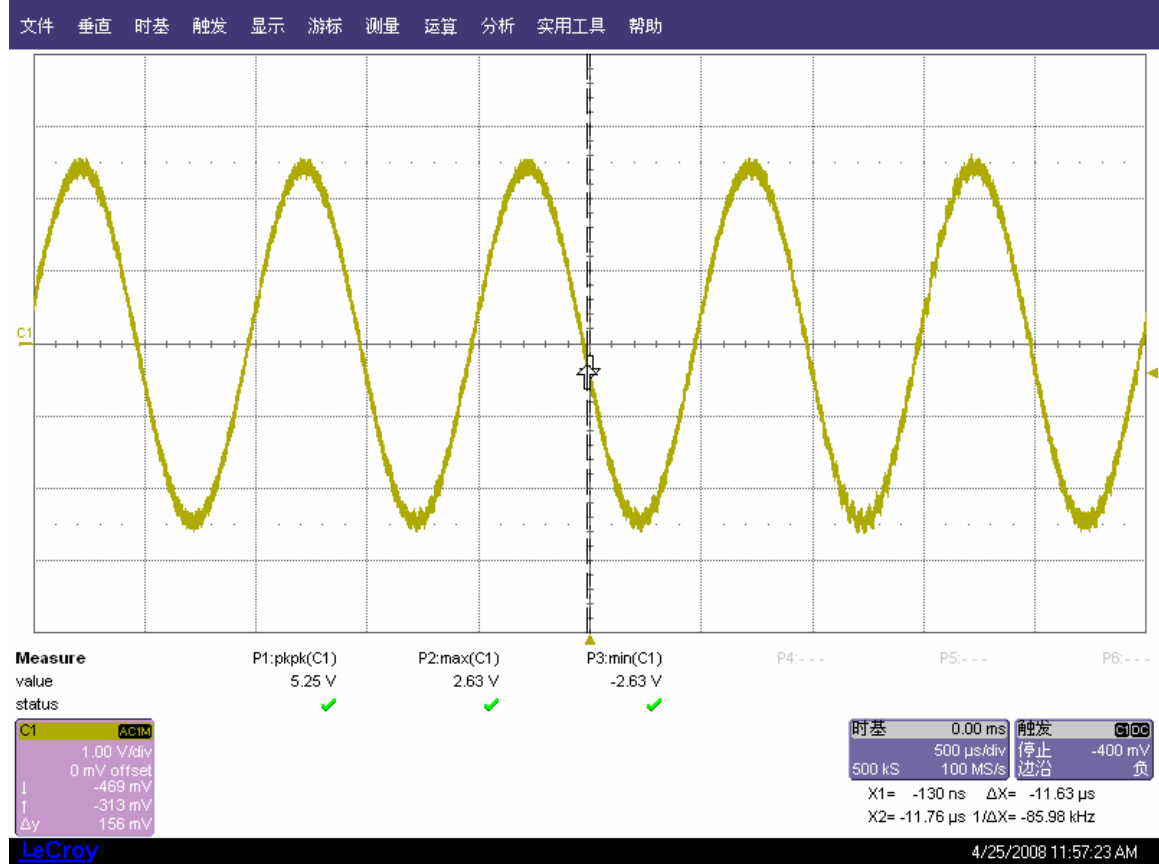


VIDEO-CVBS

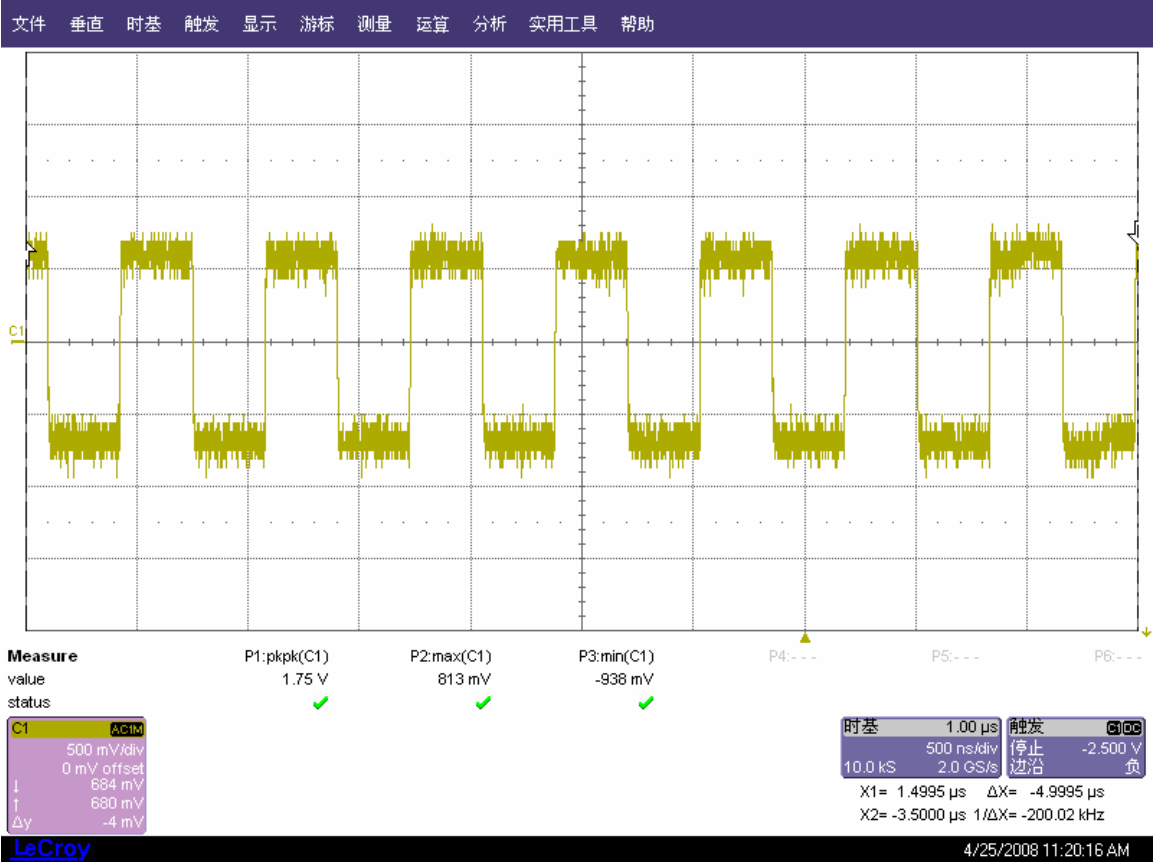
# WF3 TS239



AUDIO-R

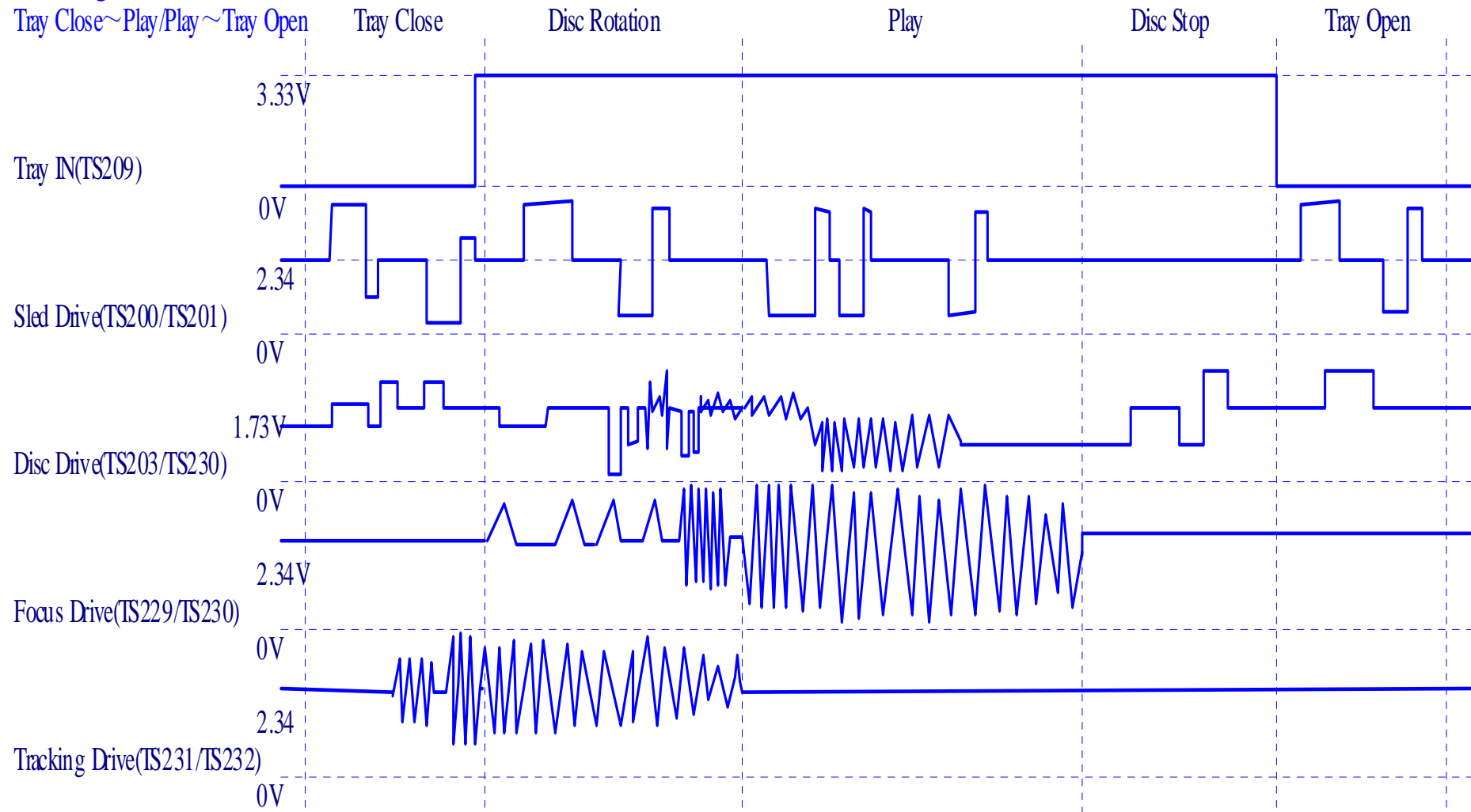


AUDIO-L



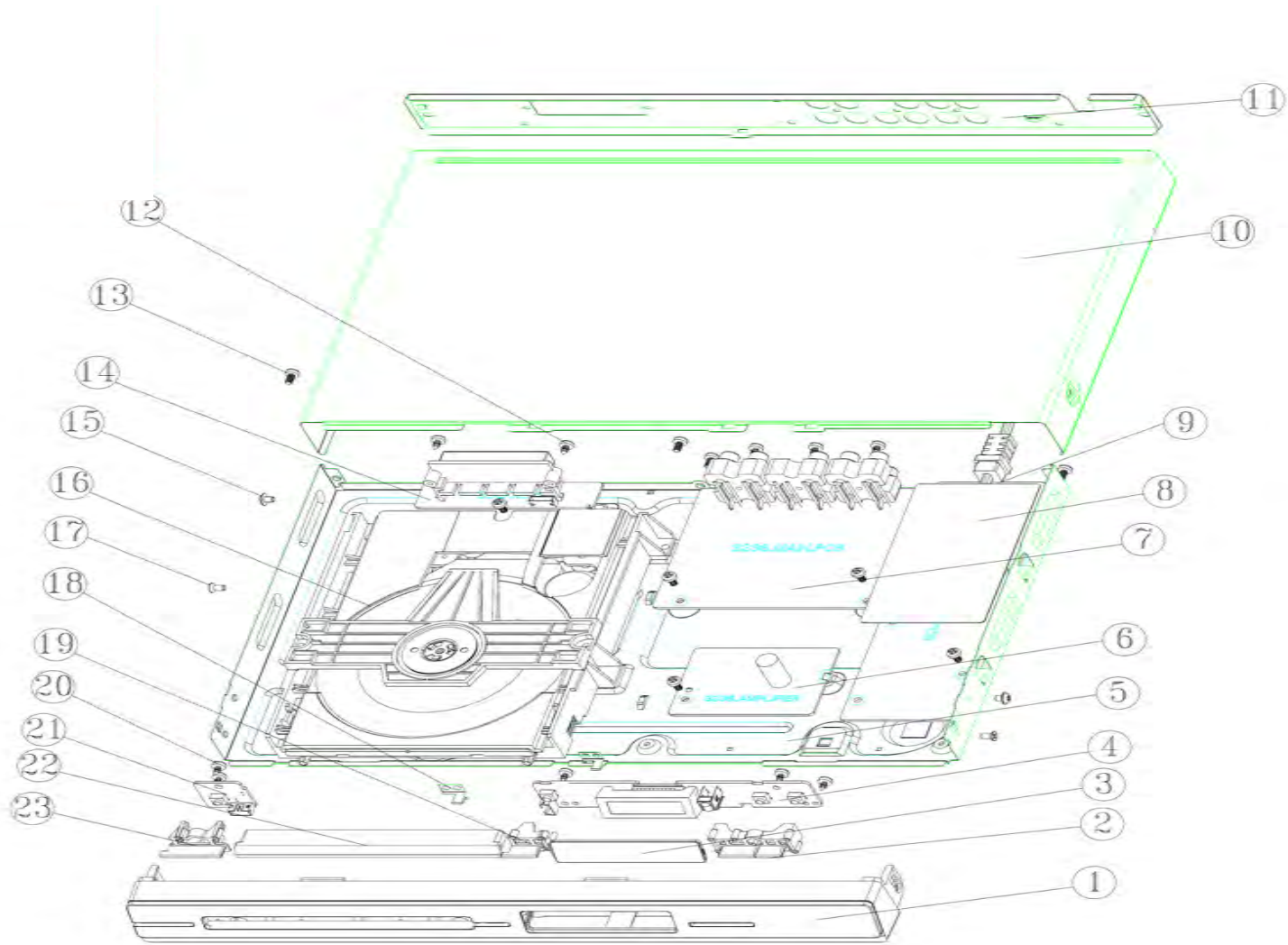
AUDIO-COAXIAL

# Timing Chart





MECHANICAL EXPLODE VIEW



A1=4+21

## DVP3236/94 Spare Parts List( Production Centre: Skyworth)

Position number	12NC NO.	Short Description
1	996510016207	FRONT PANEL
10	996510016210	TOP CASE
11	996510016212	BACKPANNEL
14	996510016204	JACK BOARD
16	996510016150	LOADERMODULE
19	996510016213	OPENBUTTON
2	996510016208	FOUNCTIONBUTTON
22	996510016214	CDDOOR
23	996510016215	POWER BUTTON
3	996510016209	FRONT LENS
5	996510016211	BOTTOMCASE
6	996510016178	AMPLIFIER BOARD
7	996510016155	MAINBOARD
9	996510016183	POWER BOARD
A1	996510016171	CONTROL+STANDBY BOARD
RC	996510016216	REMOTE CONTROL
<b>JACK BOARD</b>		
C9	996510016205	CABLE:4PIN+180MM
CN501	996510016206	SPEAKER TERMINAL
<b>LOADER MODULE</b>		
C1	996510016152	CABLE:6PIN+100MM
C2	996510016153	CABLE:5PIN+150MM
C3	996510016154	CABLE:24 PIN P=0.5MM L=212
TRAY	996510016151	DVD TRAY LOADER SONY
<b>AMPLIFIER BOARD</b>		
C426	996510016179	ELECTROLYTIC CAPACITOR 2200UF
CN401	996510016182	CONNECTOR 2mm H X 8 PIN
CN402	996520030941	WAFER 2.5mm H X 4 PIN
CN403	996520030941	WAFER 2.5mm H X 4 PIN
Q405	996510016180	SMD TRANSISTOR 2SD1664 ROHM
U401	996510016181	SMD I.C.TDA7491HV ST SSO-36
ZD401	996500040225	ZENER DIODE 9V1 1/2W      /-5%
ZD402	996500040224	ZENER DIODE 8V2 1/2W      /-5%

**MAIN BOARD**

C4	996510016166	CABLE:8PIN+120MM
CN203	996510016167	SMD FFC/FPC CONNECTOR 24 PIN P
CN204	996510016164	CONNECTOR 2MM H X 6 PIN
CN205	996510016163	CONNECTOR 2mm H X 5 PIN
CN206	996510016165	CONNECTOR 2mm H X 9 PIN
CN207	996500040667	WAFER 2.5mm H X 7 PIN
CP200	996510016169	RCA JACK *4H-TYPE PITCH=14MM 0
CP201	996510016170	RCA JACK*4H-TYPE PITCH=14MM 0.
CP202	996510016168	RCA JACK*3H-TYPE PITCH=14MM 0.
Q200	996510016156	TRANSISTOR SS8550 SAMSUNG
Q203	996510016156	TRANSISTOR SS8550 SAMSUNG
Q204	996510016156	TRANSISTOR SS8550 SAMSUNG
Q215	996510016156	TRANSISTOR SS8550 SAMSUNG
U200	996510016161	SMD IC SST39VF1601-70-4C-EKE S
U201	996510016160	SMD I.C.ZR36966ELCG-D ZORAN (
U202	996510016157	I.C.HY57V161610FTP-7-C HYUNDAI
U204	996510016158	I.C.AM5888S HSOP28
U205	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
U206	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
U207	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
U208	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
Y200	996510016162	CRYSTAL 27.000000MHZ 49/US CL:

**POWER BOARD**

ACLine	996510016203	AC LINE CORD 1500MM INDIA BS45
AVLine	996510016202	RCA TO RCA AV SIGNAL CABLE 150
C600	996510016187	AC CAPACITOR 0.22uF AC 275V+/-
C601	996510016186	AC CAPACITOR0.1uF AC275V+/-10%
C602	996500040565	SCC.0.001UF AC250V 400V /-20%
C603	996500040565	SCC.0.001UF AC250V 400V /-20%
C628	996500041116	EC.3.3uF 50V-100V /-20%
C629	996500041163	SCC.0.0022uF AC250V-400V /-20
C7	996510016198	CABLE:7PIN + 130MM
C8	996510016199	CABLE:4PIN + 90MM
CN602	996510016200	CONNECTOR 7.92mm
D600	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D601	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D602	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D603	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D605	996510016188	HIGH SPEED RECTIFIER DIODE FR1

D606	996510016190	NORMAL RECTIFIER DIODE FFPF20U
D608	996510016188	HIGH SPEED RECTIFIER DIODE FR1
D609	996510016189	HIGH SPEED RECTIFIER DIODE FR1
D610	996510016191	SCHOTTKY BARRIER RECTIFIER SB3
D611	996510016188	HIGH SPEED RECTIFIER DIODE FR1
D612	996500040274	GIGA SURGE ABSORBER 300V +/-30%
F600	996510016201	SMD FUSE 1.6A 250V FOR DVB
FB600	996510006020	FERRITE BEAD3.5X1X5MM
IC600	996510016193	IC FSDM0465RB FAIRCHILD (POWER
IC601	996500040601	I.C. PC817C (PHOTOCOUPLER)
IC602	996510006016	I.C.KA431Z FAIRCHILD
L600	996510016196	AC LINE FILTER 40MH X 2 (MIN)
L601	996510016195	CHOKE COIL 4.7UH+/-10% 2UEW 8.
L603	996510016194	CHOKE COIL 15UH +/-10% 2UEW 8.
L604	996500040254	PEAKING COIL 15uH +/-10%
RT600	996510016185	NTC THERMISTOR RESISTOR 5D2-10
RY600	996510016184	VARISTOR 10D471K 10%
T600	996510016197	SWITCHING TRANSFOMER
ZD601	996510004909	ZENER DIODE 18V 1/2W

**CONTROL+STANDBY  
BOARD**

C5	996510016174	CABLE:2PIN+170MM
C6	996510016175	CABLE:9PIN+180MM
CN303	996510016176	CONNECTOR 2mm H X 2PIN
LED300	996510016177	LED 5 DIGITS DISPLAY YELLOW-GR
RM301	996510016173	INFRARED RECEIVER MODULE 37.9K
U301	996510016172	SMD I.C.SM1628 SUNMOON (LED DR

**DVP3236X/94 Spare Parts List**  
**(Production centre: India. For**  
**PCBAs, please take DVP3236/94 as**  
**reference)**

Position number	12NC NO.	Short Description
6	-	AMPLIFIER BOARD
7	-	MAIN BOARD
9	-	POWER BOARD
14	-	JACK BOARD
16	996510019257	LOADER
A1	-	CONTROL+STANDBY BOARD
ACLine	996510016203	AC LINE CORD 1500MM INDIA BS45
AVLine	996510019266	RCA TO RCA AV SIGNAL CABLE 150
RC	996510016216	REMOTE CONTROL31 KEYS FOR(DVP3

**JACK BOARD**

C9	996510019262	CABLE:04PIN+180MM
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**LOADER**

C1	996510016152	CABLE:6PIN+100MM
C2	996510016153	CABLE:5PIN+150MM
C3	996510019258	CABLE:24PIN+212MM
TRAY	996510016151	DVD TRAY LOADER SONY KHM-313AA

**AMPLIFIER BOARD**

C426	996510016179	ELECTROLYTIC CAPACITOR 2200UF
CN401	996510016182	CONNECTOR 2mm H X 8 PIN
CN402	996520030941	WAFER 2.5mm H X 4 PIN
CN403	996520030941	WAFER 2.5mm H X 4 PIN
Q405	996510016180	SMD TRANSISTOR 2SD1664 ROHM (3
U401	996510016181	SMD I.C.TDA7491HV ST SSO-36
ZD401	996500040223	ZENER DIODE 7V5 1/2W /-5%
ZD402	996500040224	ZENER DIODE 8V2 1/2W /-5%

**MAIN BOARD**

C4	996510019260	CABLE:08PIN+120MM
CN203	996510019261	CONNECTOR:24PIN
CN204	996510016164	CONNECTOR 2MM H X 6 PIN
CN205	996510016163	CONNECTOR 2mm H X 5 PIN
CN206	996510016165	CONNECTOR 2mm H X 9 PIN
CN207	996500040667	WAFER 2.5mm H X 7 PIN
CP200	996510016169	RCA JACK *4H-TYPE PITCH=14MM 0
CP201	996510016170	RCA JACK*4H-TYPE PITCH=14MM 0.
CP202	996510016168	RCA JACK*3H-TYPE PITCH=14MM 0.
Q200	996510016156	TRANSISTOR SS8550 SAMSUNG
Q203	996510016156	TRANSISTOR SS8550 SAMSUNG
Q204	996510016156	TRANSISTOR SS8550 SAMSUNG
Q215	996510016156	TRANSISTOR SS8550 SAMSUNG
U200	996510016161	SMD IC SST39VF1601-70-4C-EKE S

U201	996510016160	SMD I.C.ZR36966ELCG-D ZORAN (
U202	996510016157	I.C.HY57V161610FTP-7-C HYUNDAI
U204	996510016158	I.C.AM5888S HSOP28
U205	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
U206	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
U207	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
U208	996510016159	I.C. NJM4558M "JRC" (DUAL OPER
Y200	996510019259	CRYSTAL 27.000000MHZ 49/US CL:

#### POWER BOARD

C600	996510016187	AC CAPACITOR 0.22uF AC 275V+/-
C601	996510016186	AC CAPACITOR 0.1uF AC275V+/-10%
C602	996500040565	SCC.0.001UF AC250V 400V /-20%
C603	996500040565	SCC.0.001UF AC250V 400V /-20%
C628	996500041116	EC.3.3uF 50V-100V /-20%
C629	996510019263	SCC.0.0022uF AC250V-400V +/-20
C7	996510019264	CABLE:07IN+130MM
C8	996510019265	CABLE:04PIN+90MM
CN602	996520031014	WAFER 7.92mm PITCH PIN DIA
D600	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D601	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D602	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D603	996510016192	HIGH SPEED RECTIFIER DIODE RL2
D605	996510016188	HIGH SPEED RECTIFIER DIODE FR1
D606	996510016190	NORMAL RECTIFIER DIODE FFPF20U
D608	996510016188	HIGH SPEED RECTIFIER DIODE FR1
D609	996510016189	HIGH SPEED RECTIFIER DIODE FR1
D610	996510016191	SCHOTTKY BARRIER RECTIFIER SB3
D611	996510016188	HIGH SPEED RECTIFIER DIODE FR1
D612	996500040274	GIGA SURGE ABSORBER 300V /-30%
F600	996510016201	SMD FUSE 1.6A 250V FOR DVB
FB600	996510006020	FERRITE BEAD3.5X1X5MM
IC600	996510016193	IC FSDM0465RB FAIRCHILD (POWER
IC601	996500040601	I.C. PC817C (PHOTOCOUPLER)
IC602	996510006016	I.C.KA431Z FAIRCHILD
L600	996510016196	AC LINE FILTER 40MH X 2 (MIN)
L601	996510016195	CHOKE COIL 4.7UH+/-10% 2UEW 8.
L603	996510016194	CHOKE COIL 15UH +/-10% 2UEW 8.
L604	996500040254	PEAKING COIL 15uH /-10%
RT600	996510016185	NTC THERMISTOR RESISTOR 5D2-10
RY600	996510016184	VARISTOR 10D471K 10%
T600	996510016197	SWITCHING TRANSFORMER BK-35-L0
ZD601	996510004909	ZENER DIODE 18V 1/2W

#### CONTROL+STANDBY BOARD

C5	996510016174	CABLE:2PIN+170MM
C6	996510016175	CABLE:9PIN+180MM
CON303	996510016176	CONNECTOR 2mm H X 2PIN
LED300	996510016177	LED 5 DIGITS DISPLAY YELLOW-GR
RM301	996510016173	INFRARED RECEIVER MODULE 37.9K
U301	996510016172	SMD I.C.SM1628 SUNMOON (LED DR

# REVISION LIST

Version 1.0

\*Initial release

Version 1.1

\*Adding Model DVP3236X/94