

Service  
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# Service Manual

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## SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING

## Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all Haier Company Equipment. The service procedures recommended by Haier and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. Haier could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, Haier has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by Haier must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

Hereafter throughout this manual, Haier Company will be referred to as Haier.

### WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics might create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from Haier. Haier assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicer assumes all liability.

### FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiations when open AVOID DIRECT EXPOSURE TO BEAM.

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

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)



# 1. General Specification

**Note**

- This model complies with the specifications listed below.
- Designs and specifications are subject to change without notice.
- This model may not be compatible with features and/or specifications that may be added in the future.

Model No.	LE32D2320	LE39D2380	LE42D2380	LE46D2380
<b>DISPLAY</b>				
Viewable	31.5"	38.5"	42"	46"
Television System	NTSC standard, ATSC standard (8-VSB, Clear-QAM)			
Channel Coverage	NTCS: CH2-CH69 Antenna CH1-CH135 Cable ATCS: CH2-CH69 Antenna CH1-CH135 Cable			
<b>CONNECTIONS</b>				
Rear Connectors	<p><b>Tuner input (75Ω)</b>  <b>AV IN:</b> AV/L/R video/audio input  <b>PC IN:</b> D-SUB and PC Audio (Headphone mini-jack)            Supported scan rate: 640x480@60Hz, 720x400@70Hz,                                      800x600@60Hz, 1024x768@60Hz, 1360x768@60Hz                                      1440x900@60Hz, 1680x1050@60Hz, 1920x1080@60Hz            Note:                                      1360x768@60Hz: For LE32D2320 only.                                      1440x900@60Hz, 1680x1050@60Hz, 1920x1080@60Hz:                                      For LE39D2380/LE42D2380/LE46D2380.            Recommended: For LE32D2320: 1360x768@60Hz                                      For LE39D2380/LE42D2380/LE46D2380: 1920x1080@60Hz</p> <p><b>Component Video and L/R Audio input</b>            Supported resolution: 480i@60Hz, 480p@60Hz,                                      720p@60Hz, 1080i@60Hz,                                      1080p@60Hz.</p> <p><b>HDMI input</b>            Supported scan rates: 480i@60Hz, 480p@60Hz,                                      720p@60Hz, 1080i@60Hz,                                      1080p@60Hz.</p>			
	HDMI 1/2 D-SUB COMPONENT 1 AV(Share Y) Audio Input Coax out			

Model No.	LE32D2320	LE39D2380	LE42D2380	LE46D2380
Side Connectors	PC Audio In HDMI3 USB Earphone Out			
<b>WEIGHT &amp; DIMENSION</b>				
Dimensions with Stand (W x H x D)	28.9"x19.3"x7.1"	34.9"x22.6"x8.5"	38.1"x24.5"x8.5"	41.6"x26.5"x8.5"
Dimensions without Stand (W x H x D)	28.9"x17.9"x2.6"	34.9"x21.3"x2.6"	38.1"x23.2"x2.6"	41.6"x25.1"x2.6"
Weight with Stand	17.38(lbs)	25.08(lbs)	29.96(lbs)	34.54(lbs)
Weight without Stand and Base	16.3(lbs)	22.66(lbs)	27.5(lbs)	32.12(lbs)
<b>WALL MOUNTING</b>				
VESA-compatible wall bracket (W x H)	200x100mm	200x200mm	400x400mm	400x400mm
Screw type	Metric 4x10 mm	Metric 6x10 mm	Metric 6x10mm	Metric 6x10mm
<b>POWER</b>				
Power Consumption	65W	120W	130W	130W
Standby	<0.5W			
Mains Power	120V ~ 60Hz			
Audio Power	5W + 5W	8W + 8W	8W + 8W	8W + 8W
Ambient Temperature	41°F - 95°F			
<b>PACKAGE CONTENTS</b>				
Supplied Accessories	TV unit x1 Base x1 Remote control x1 (with two size AAA alkaline batteries) Screws x 4 User manual x1 Registration Card x1			

## 2. Operating Instructions

### 2.1 The Use of Remote Control

#### Power

Press to power ON/OFF (standby) TV.

Note: The TV is never completely powered off unless physically unplugged.

#### PICTURE

Press to switch the picture mode.

#### AUDIO

Press to switch the audio mode.

#### ZOOM

Press to switch the display mode: Normal, Wide, Cinema, Zoom.

#### CCD

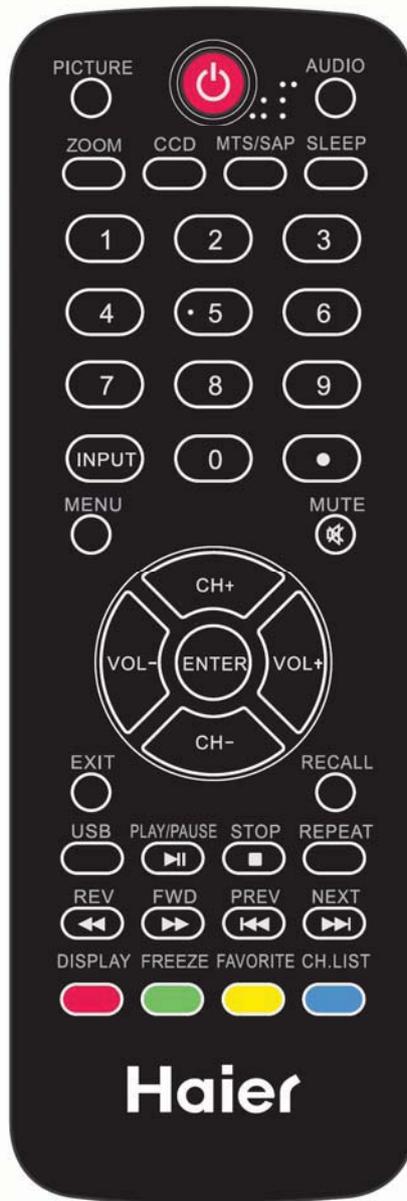
Press to switch the closed caption type: CC On/CC Off/CC On with mute.

#### MTS/SAP

Press to switch sounds: SAP, Stereo, Mono for NTSC TV, or switch audio language for DTV.

#### SLEEP

Press to set the sleep timer (off/10 minutes/20 minutes/30 minutes/40 minutes/50 minutes/60 minutes/90 minutes/120 minutes).



#### 0 ~ 9 / • number

Press to enter a TV channel number (Press "." to choose the sub-channel).

#### INPUT

Press "INPUT" to open the Source List.

#### MENU

Press to open or exit the menu.

#### MUTE

Switch the sound on/off.

#### CH+ / CH -

- Menu is displayed: Press CH+ or CH- to navigate up or down.
- Menu not displayed: Press CH+ or CH- to browse through the TV channels.

#### VOL+ / VOL-

- Menu is displayed: Press VOL+ or VOL- to navigate right or left.
- Menu not displayed: Press VOL+ or VOL- to adjust volume.

#### ENTER

Press to confirm a selection.

#### EXIT

Press to exit menu or on screen display (OSD).

#### RECALL

Press to display the previous channel.

**DISPLAY**

Press to show the information about the input source, TV channel, display resolution and current time.

**FREEZE**

Press to freeze picture.

**FAVORITE**

Press to open the Favorite Channel List.

**CH.LIST**

Press to display the Channel List.

For Multimedia use only.

**USB**

Press USB to switch to or exit the USB multimedia mode.

**PLAY/PAUSE ▶||**

Press to Play/Pause in Multimedia mode.

**STOP ■**

Press to Stop playing in Multimedia mode.

**REPEAT**

Press to toggle Repeat On/Off mode in Music mode.

**REV ◀◀**

Press to fast reverse MP3 playback in Music mode.

**FWD ▶▶**

Press to fast forward MP3 playback in Music mode.

**PREV |◀◀**

Press to display the previous photo during the photo slideshow. Press to play the previous file in Music mode. Press to return to the thumbnail mode when playing the first file in the current directory.

**NEXT ▶▶|**

Press to display the next photo during the photo slideshow. Press to play the next file in MP3 MusicBox. Press to return to the thumbnail mode when playing the last file in the current directory.

## 2.2 To Use the Menus

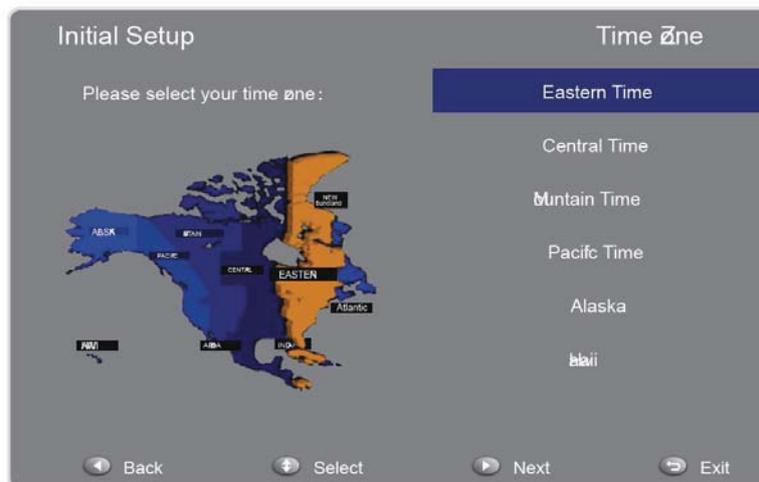
Initial Setup Welcome to use the wizard for initial Setup!! Please press [ENTER] to start the wizard.



Language Please select your language, press [CH-]/[CH+] to select, press [ENTER] to confirm:



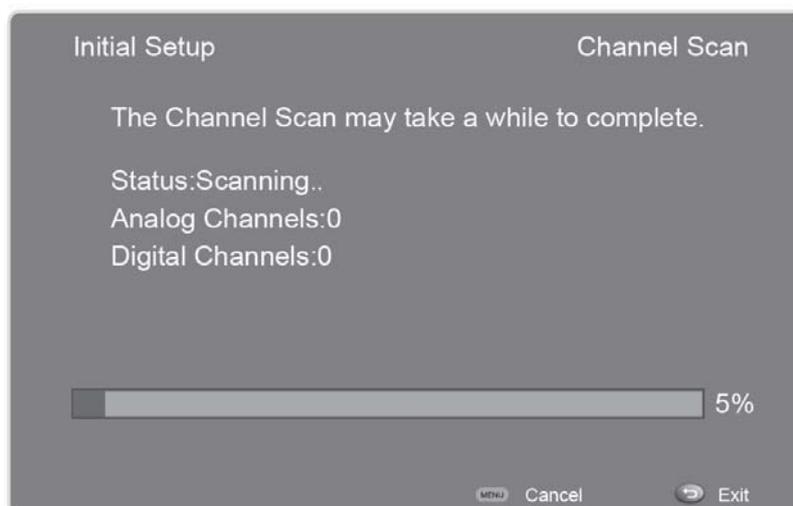
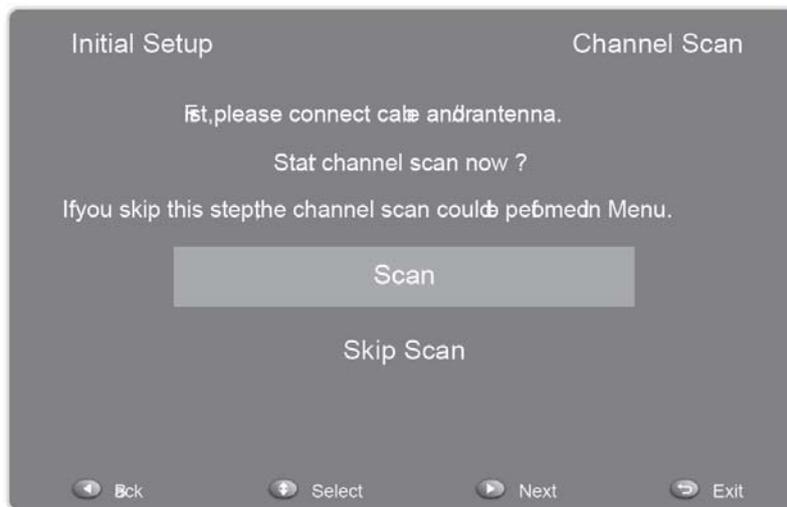
Time Zone Please select your time zone, press [CH-]/[CH+] to select, press [ENTER] to confirm:



Tuner Type Please select your tuner type, press [CH-]/[CH+] to select, press [ENTER] to confirm:

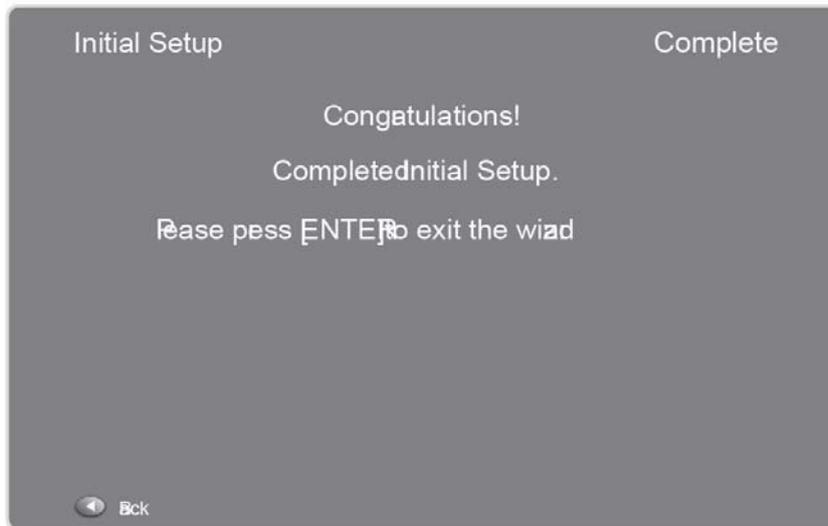


Antenna: Set the signal type to antenna. When set to Air, the TV can receive analog and digital (ATSC) broadcasting signals.  
2. Cable: Set the signal type to cable. When set to Cable, the TV can receive analog and QAM broadcasting signals.  
Scan Please select scan or skip scan, press [CH-]/[CH+] to select, press [ENTER] to confirm:

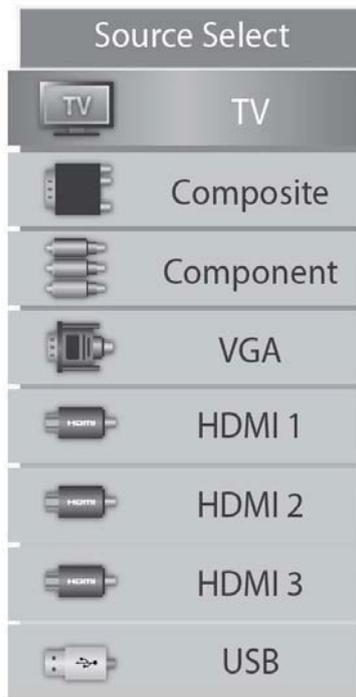


1. Scan: Automatically search for channels.
2. Skip Scan: Skip the scan and enter to the complete interface.

**Complete**

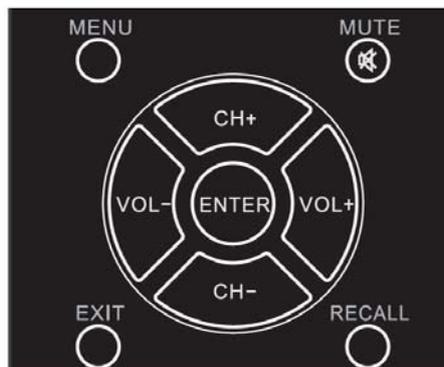


**INPUT SOURCE**



Press INPUT to display the input source list, and press [CH-]/[CH+] to select and ENTER to confirm.

**Using the Remote Control to Display and Navigate the On-Screen Main Menus**



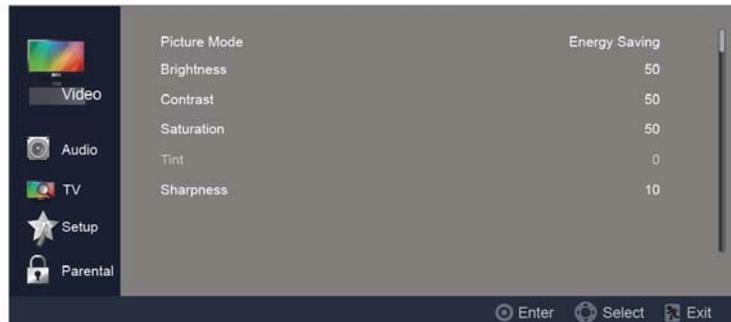
1. Press [MENU] to display the on-screen menu or to go back one level in the menu. At the top level menu,

pressing the MENU button will exit the menu.

2. Use the [VOL-] or [VOL+] buttons to highlight the desired menu icon. Press [ENTER] to select it.
3. Use the [CH+] or [CH-] buttons to scroll up and down through the features.
4. Follow the instructions on the screen.
5. Press [EXIT] to immediately exit the menu. Press once to display the on-screen menu, and press again to return to normal view. If no buttons are pressed, the menu closes automatically after about 60 seconds.

To exit the menus: Press [EXIT] (or [MENU])

## VIDEO



1. **Picture Mode:** Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press [VOL-] or [VOL+] to adjust.

**[Energy Saving]** – Picture settings that conserve the most energy.

**[Mild]** – Adjusts the brightness and contrast level, and lowers the sharpness for a soft picture viewing mode.

**[Standard]** – Select for standard picture settings. Recommended for home entertainment.

**[Bright Room]** – Select for enhanced picture brightness.

**[User]** – Allows you to store your preferred settings.

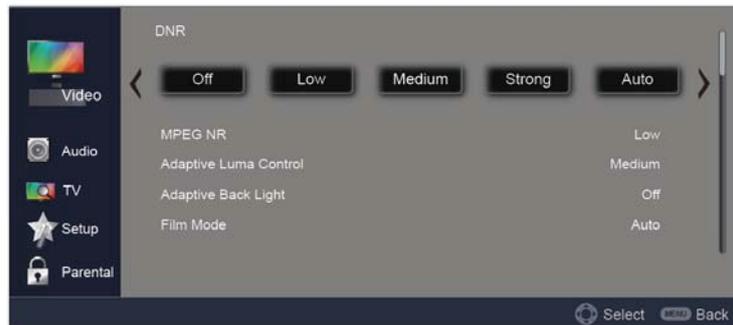
**Note: Changing the settings below will automatically change the Picture Mode to User.**

2. **Brightness:** Adjust to brighten or darken the picture. Press [VOL-] to darken the picture. Press [VOL+] to brighten the picture.
3. **Contrast:** Adjust the white level of the picture. Press [VOL-] to decrease the contrast. Press [VOL+] to increase the contrast.
4. **Saturation:** Adjust the color saturation of the picture. Press [VOL-] to increase the color saturation. Press [VOL+] to increase the color saturation.
5. **Tint:** Adjust the tint of the picture. Press [VOL-] to increase the red tones. Press [VOL+] to increase the green tones.
6. **Sharpness:** Adjust to sharpen or soften the picture. Press [VOL-] to soften the picture. Press [VOL+] to sharpen the picture.
7. **Color Temperature:** Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press [VOL-] or [VOL+] to adjust.

**[Cool]** – Select to give the white color a bluish tint.

**[Standard]** – Select to give the white color a neutral tint.

**[Warm]** – Select to give the white color a reddish tint.



1. Advanced Video: Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press [VOL-] or [VOL+] to adjust.

**[DNR]** – Digital Noise Reduction. You can clear up analog TV signal by reducing the dot noise. (This feature is not available at PC or Media source.)

**[MPEG NR]** – Similar with DNR, you can set to reduce the block noise.

**[Adaptive Luma Control]** – Dynamically change the brightness and contrast according to the amount of light and dark in the signal.

**[Adaptive Back Light]** – Dynamically change the back light of the screen according to the amount of light and dark in the signal.

**[Film Mode]** – A frame rate conversion to film format to avoid signal flashing.

**[VGA Mode]** – Graphic/Video (This feature is only available in VGA mode).

- Graphic: In this mode, images look smoother and text appears clearer. This is the default setting.
- Video: In this mode, images look sharper. Select this mode for watching videos from a computer. **[HDMI Mode]** – Auto/Graphic/Video (This feature is only available in HDMI mode).
- Auto: Choose Video/Graphic automatically.
- Graphic: In this mode, images look smoother and text appears clear. Select this mode when connecting a computer.
- Video: In this mode, images look sharper. Select this mode when watching videos from a computer or connecting video players, such as a DVD player, Blu-ray player, etc.

2. VGA:

**[Auto Adjust]** –Auto adjust H.Position/V.Position/Phase/Clock,select this option when the image does not fill the entire screen.

**[H.Position]** –Adjust picture's H Postion.

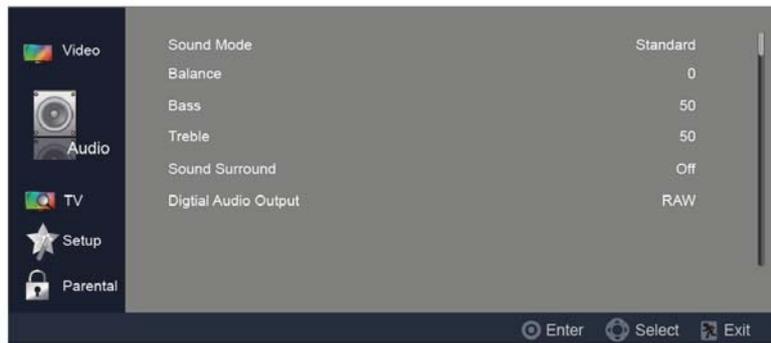
**[V.Position]** –Adjust picture's V Postion.

**[Phase]** –Adjust Phase.

**[Clock]** –Adjust Clock.

**[Reset Computer settings]** –Reset H.Position/V.Position/Phase/Clock.

## AUDIO



1. Sound Mode : Use the [CH-] or [CH+] buttons to highlight one of the following options, then press[ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

**[User]** – Allow you to store your preferred settings.

**[Standard]** – Select for standard sound settings. Recommended for home entertainment.

**[Soft]** – Select for soft sound settings.

**[Dynamic]** – Select for dynamic sound settings.

**Note: Changing the settings below will automatically change the Sound Mode to User.**

2. **Balance:** Adjust the level of sound coming from the left and right speakers. Press [VOL-] to shift the balance and emphasize the left speaker. Press [VOL+] to shift the balance and emphasize the right speaker.
3. **Bass:**Adjust the low frequency sounds.Press [VOL-] to decrease bass. Press [VOL+] to increase the bass.
4. **Treble:** Adjust the high frequency sounds.Press [VOL-] to decrease treble. Press [VOL+] to increase the treble.
5. Sound Surround:

**[Off ]** – Set surround sound off.

**[On]** – Set surround sound on.

6. Digital Audio Output:

**[Off ]** – Set the audio output type of coax or optical terminal off.

**[RAW]** – Output the original format of the audio stream.

**[PCM]** – PCM can be matched with most AV amplifiers.

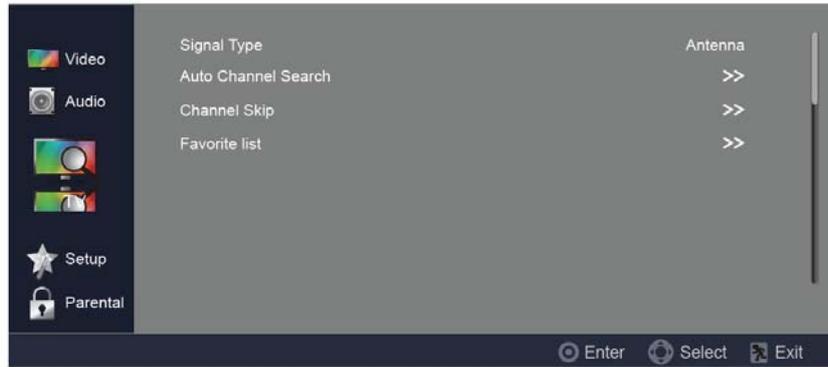


1. Auto Volume Control : Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

**[Off ]** – Set the auto volume control off.

**[On]** – Set the auto volume control on.

## TV



1. **Signal Type** : Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

**[Antenna]** – Set the signal type to antenna. When set to Air, the TV can receive analog and digital (ATSC) broadcasting signal.

**[Cable]** – Set the signal type to cable. When set to Cable, the TV can receive analog and QAM broadcasting signal.

2. **Auto Channel Search**: Highlight and press ENTER to start the channel scan.
3. **Channel Skip**: Manually add and skip channels in your program list.
4. **Favorite List**: Manually add and skip channels in your favorite list.

## SETUP

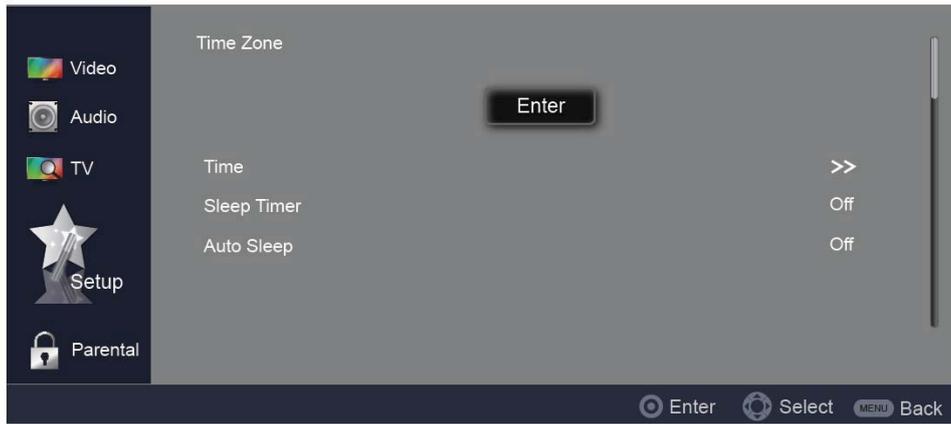


1. **Menu Language** : Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

Set the On-Screen-Display language.English/Espanol/Francais.

2. **Aspect Ratio**: Press to switch the display mode: Normal, Wide, Cinema, Zoom when having signal.
3. **MTS**: Set the preferred sound track of analog channels. Mono/Stereo/SAP.
4. **No Signal Power Off**: When this option is set to On, the TV will automatically turn off when there is no input signal.
5. **Blue Screen**: When this option is set to On, the screen will be blue instead of black when there is no input signal.
6. **Audio Only**: Press [ENTER] to turn down backlight ,and press any key to resume.
7. **Time Setup**: Set Time Zone/Time/Sleep Timer/Auto Sleep.
8. **Caption**: Set Caption Display/Analog Closed Caption/Digital Closed Caption /Digital Caption Style. For details, please refer to page 22.
9. **All Reset**: Reset all the Settings to default.

## Time Setup



1. **Time Zone** : Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

Set the current time zone. Press [VOL-] or [VOL+] / [ENTER] to adjust.

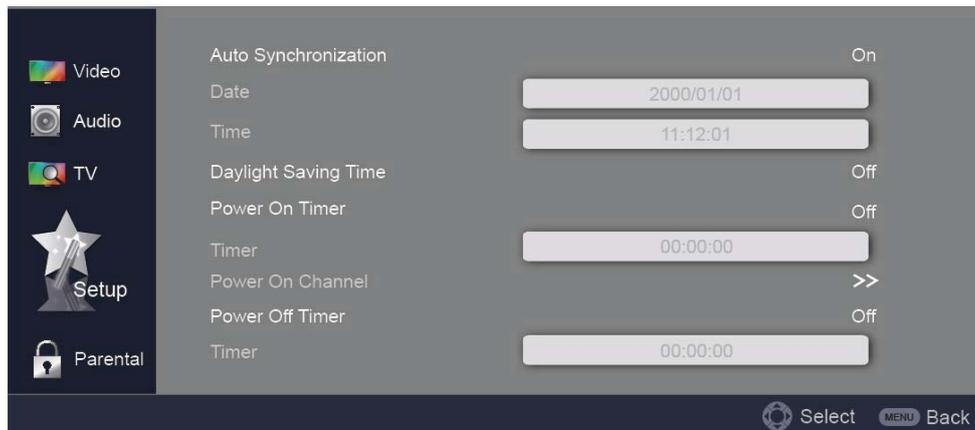
2. **Time** : Set the current date /time.Press [VOL-] or [VOL+] / [ENTER] to adjust.

Auto Synchronization/Date/TimeDaylight Saving TimePower On Timer/Timer/Power On ChannelPower Off Timer/Timer.

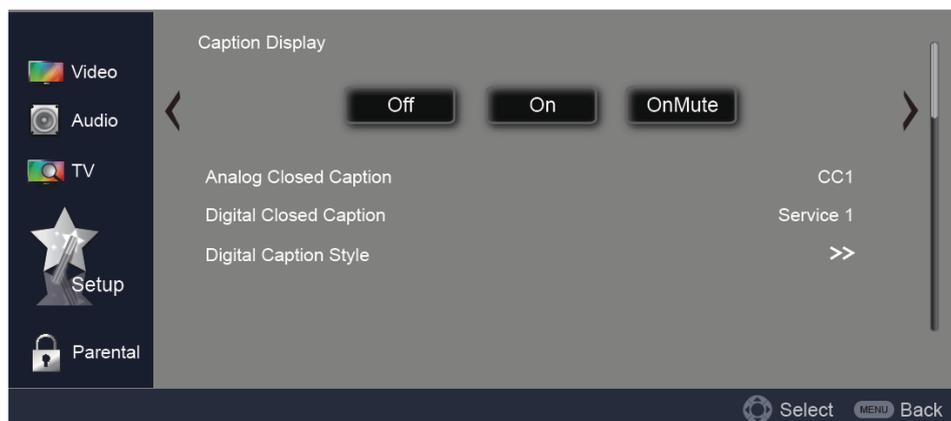
3. **Sleep Timer**: Set the sleep time.Press [VOL-] or [VOL+] to select the sleep time.

4. **Auto Sleep**:Set the Auto Sleep time .Press [VOL-] or [VOL+] to select OFF/1Hour/2Hours/5Hours.

## Time



## Caption



1. **Caption Display**: Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

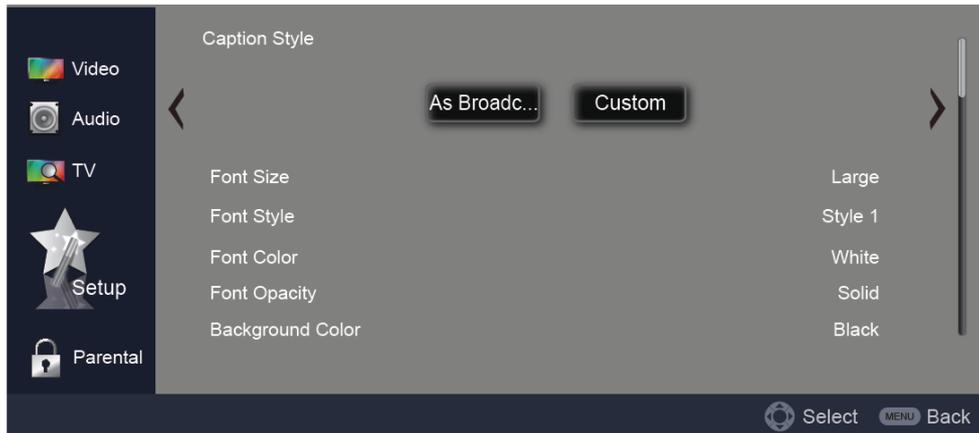
**[Off]** – Set the caption display off to hide the closed captions (CC).

[On] – Set the caption display on to display the CC.

[OnMute ] – When muted, the CC will be displayed. If audio line out is used, the line out will not be controlled.

2. **Analog Closed Caption:** Select the closed-captions mode for analog programs.CC1/CC2/CC3/CC4/TEXT1/TEXT2/TEXT3/TEXT4.
3. **Digital Closed Caption:** Select the closed-captions mode for digital programs. Off/Service1/Service2/Service3/Service4/Service5/Service6.
4. **Digital Caption Style:** Applies only to digital channels with closed captions. Set Caption Style/Font Size/Font Style/Font Color/Font Opacity /Background color/Background Opacity.

### Digital Caption Style



1. **Caption Style:** Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

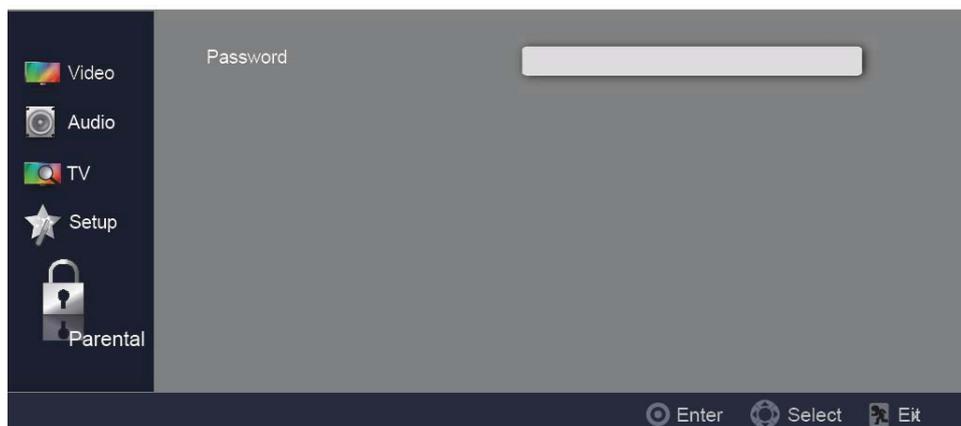
Set the style of caption.

As Broadcast/Custom.

**Note: Changing the settings below will automatically change the Caption Style to Custom.**

2. **Font Size:** Set the font size. Small/Medium/Large.
3. **Font Style:** Set the font style.Style1~style7.
4. **Font Color:** Set the font color.Black/White/Green/Blue/Red/Cyan/Yellow/Magenta.
5. **Font Opacity:** Set the font opacity. Solid/Translucent/Transparent/Flashing.
6. **Background Color:** Set the background color. Black/White/Green/Blue/Red/Cyan/Yellow/Magenta.
7. **Background Opacity:** Set the background opacity. Solid/Translucent/Transparent/Flashing.

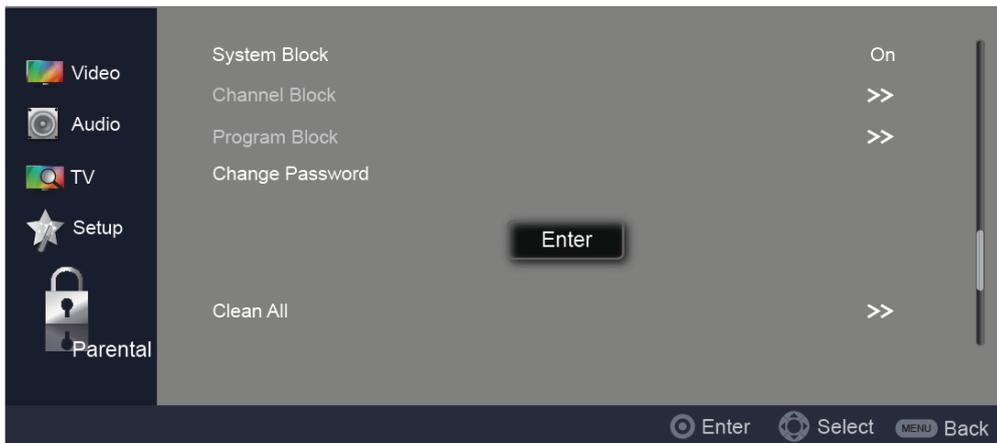
### PARENTAL



1. **Password:** Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to select it and then you will enter the password interface.



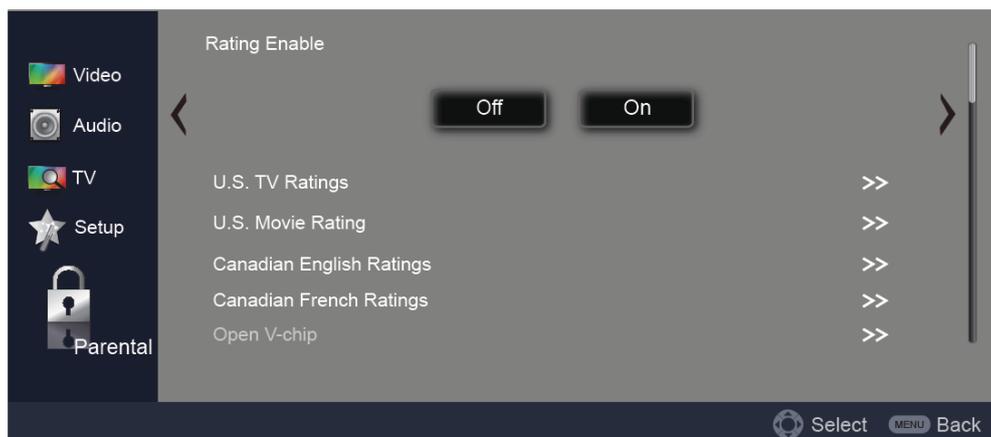
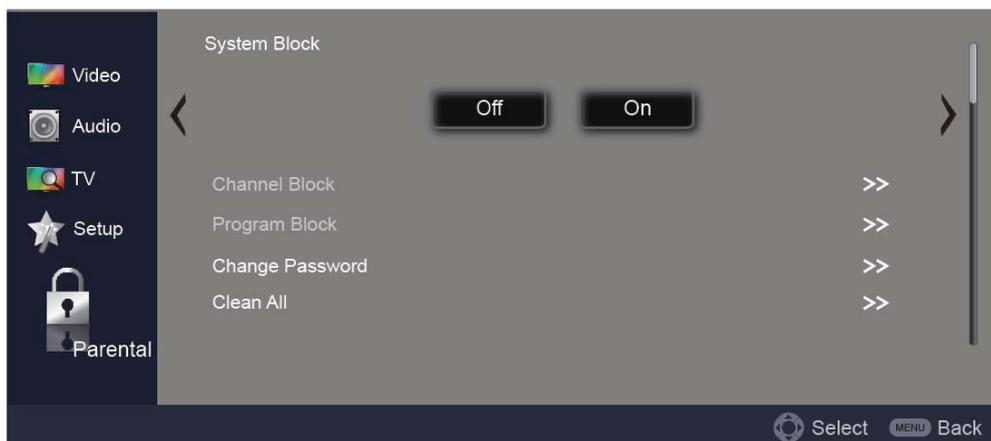
After entering the correct password, you will see the submenu shown below. The default password is “0000”.



1. **System Block:** Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

Set the channel / program block on or off.

2. **Channel Block:** Set the channels to be blocked.



3. **Program Block:** Use the [CH-] or [CH+] buttons to highlight one of the following options, then press [ENTER] to enter the sub-menu and press[VOL-] or [VOL+] to adjust.

Set the program to be locked. For details please refer to pages 24~25.

**[Rating Enable]** – Set the ratings on or off.

**[U.S. TV Ratings]** – See page 24.

[U.S. Movie Rating]—See page 24.

[Canadian English Ratings] – See page 24.

[Canadian French Ratings] – See page 25.

[Open V-chip] – Set the V-chip on.

[Clear Open V-chip Data] – Set the V-chip data to default values.

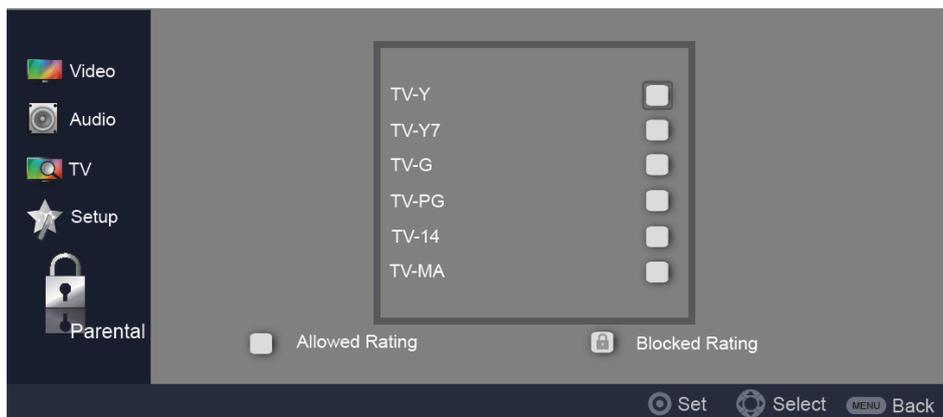
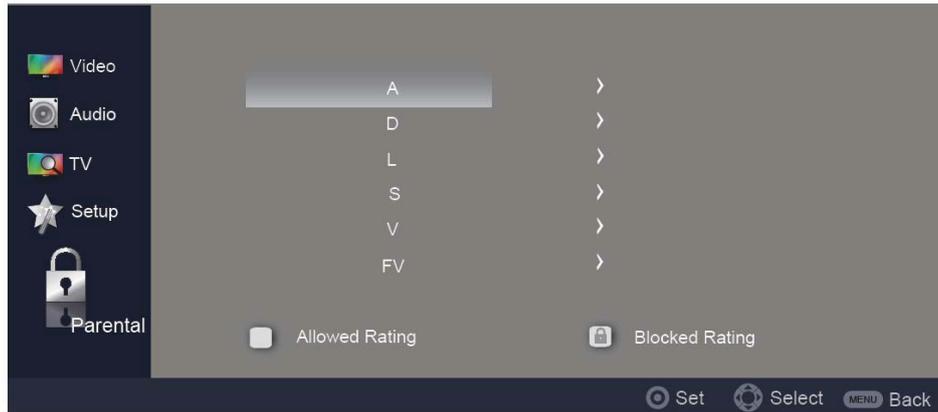
[Block Unrated] – Block the programs that do not have any valid rating flag.

4. Change Password: Enter the 4-digital new password and confirm it. New Password/Confirm password.

5. Clean All: Set the items in the lock menu to default values.

## U.S. TV Ratings

The TV rating compose of two aspects: age-based and content-based.



[A] – All

[D] – Suggestive dialogue

[L] – Strong language

[S] – Sexual situations

[V] – Violence

[FV] – Fantasy violence

[TV-Y] – All Children

[TV-Y7] – Directed to Older Children

[TV-G] – General Audience

[TV-PG] – Parental Guidance Suggested

[TV-14] – Parents Strongly Cautioned

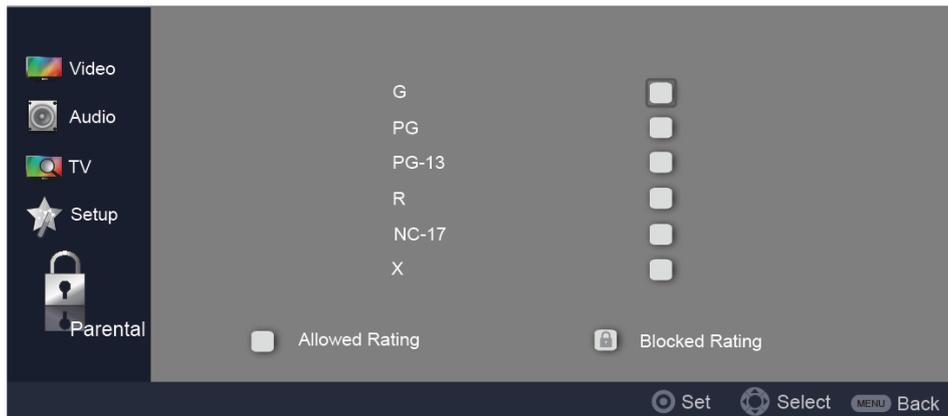
[TV-MA] – Mature Audience Only

**Note: The content ratings will increase depending on the level of the age-based rating. For example, a program with a TV-PG V(violence) rating may contain moderate violence, while a TV-14 V(violence) rating**

may contain intense violence. So locking a higher level option will automatically cause locking the options that has more sensitive level.

### U.S. Movie Ratings

This system defines the rating control which come from MPAA rules.



**[G]** – General audience. All ages admitted.

**[PG]** – Parental guidance suggested. Some material may not be suitable for children.

**[PG-13]** – Parents strongly cautioned. Some material may be inappropriate for children under 13.

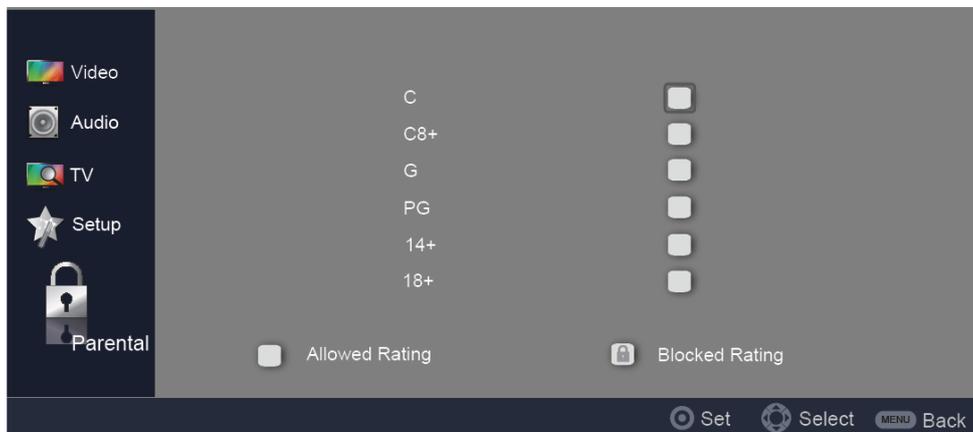
**[R]** – Restricted. Children under 17 require accompanying parent or adult guardian.

**[NC-17]** – No one 17 and under admitted.

**[X]** – Adult audience only.

### Canadian English Rating

These ratings are for programs which are using English rating system.



**[C]** – Children

**[C8+]** – Children 8 years and older

**[G]** – General programming

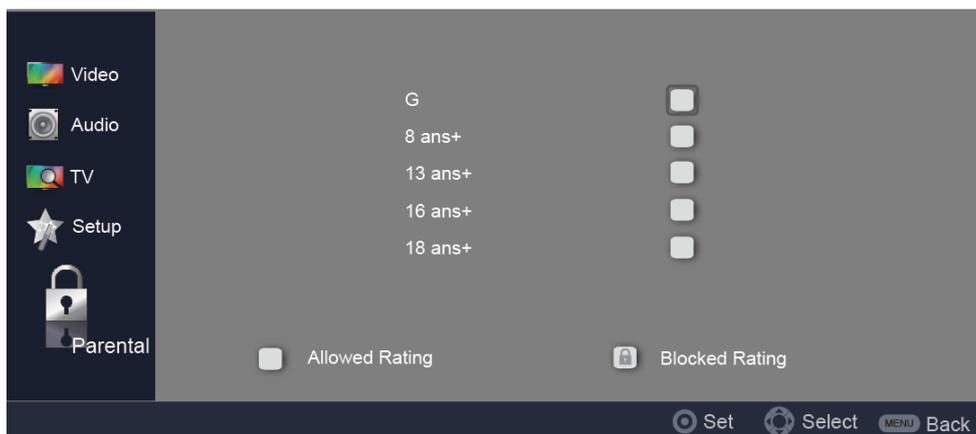
**[PG]** – Parental guidance

**[14+]** – Viewers 14 and older

**[18+]** – Adult programming

## Canadian French Rating

The ratings are for programs which are using French rating system.



**[G]** – General

**[8 ans+]** – Not recommended for younger children

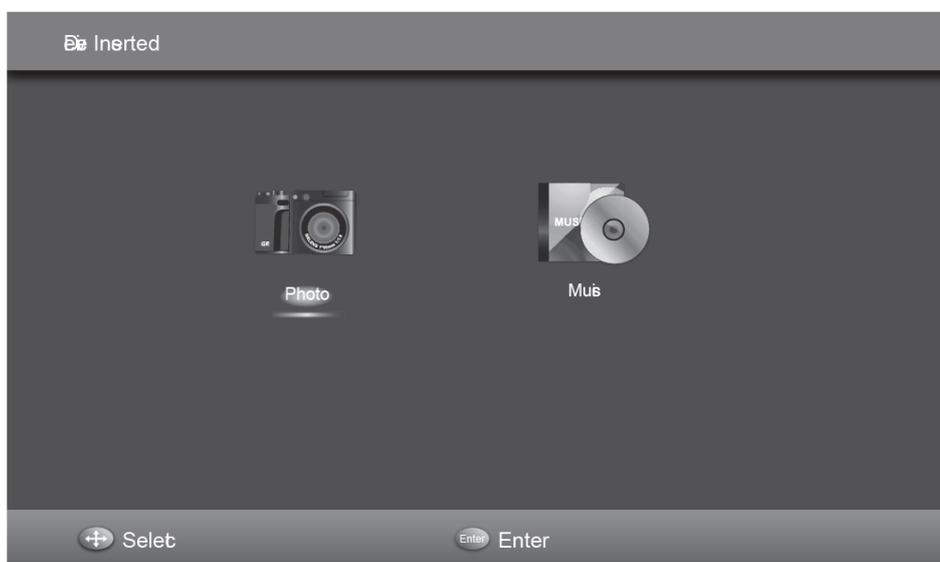
**[13 ans+]** – Not recommended for children under age 13

**[16 ans+]** – Not recommended for ages under 16

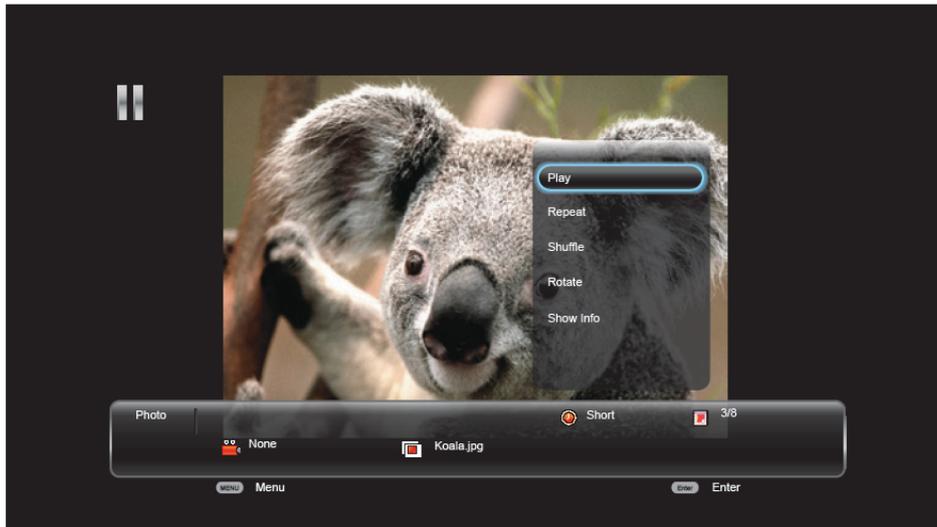
**[18 ans+]** – This program is restricted to adults

### MEDI

Insert a USB storage device, press INPUT, and select USB. The screen below will be shown. You can also press the USB button on the remote control.



## Picture



Press MENU to display the menu. Use the [CH+] and [CH-] buttons to select an option.

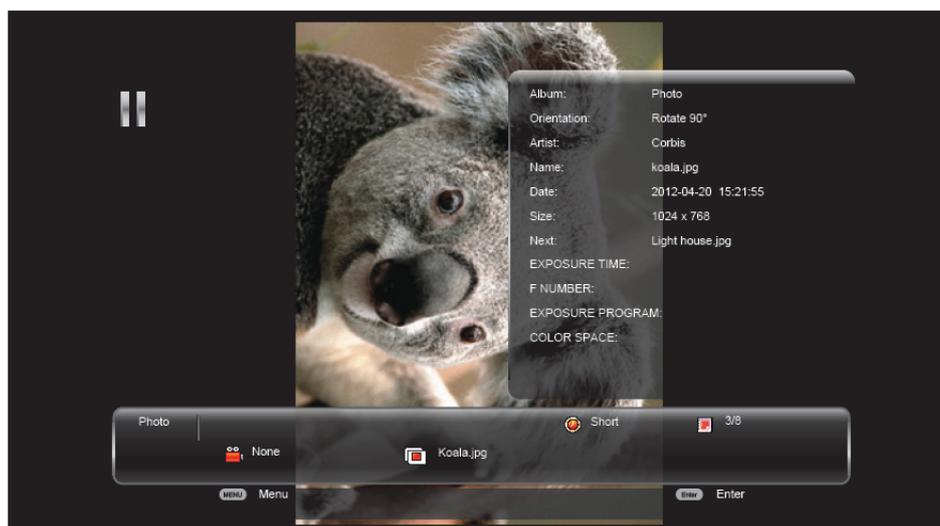
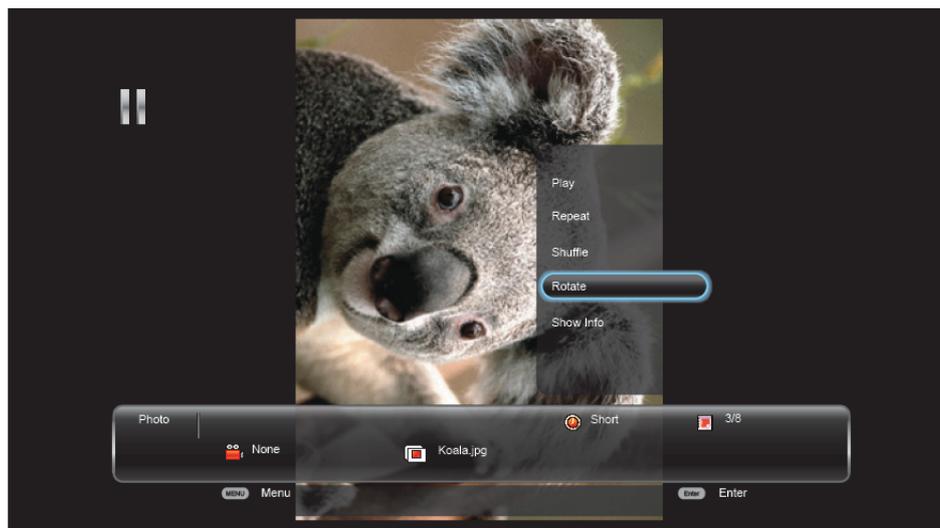
**[Play]** – Press ENTER to pause or play the music.

**[Repeat]** – None/Repeat One/Repeat All. Press ENTER to select the repeat mode.

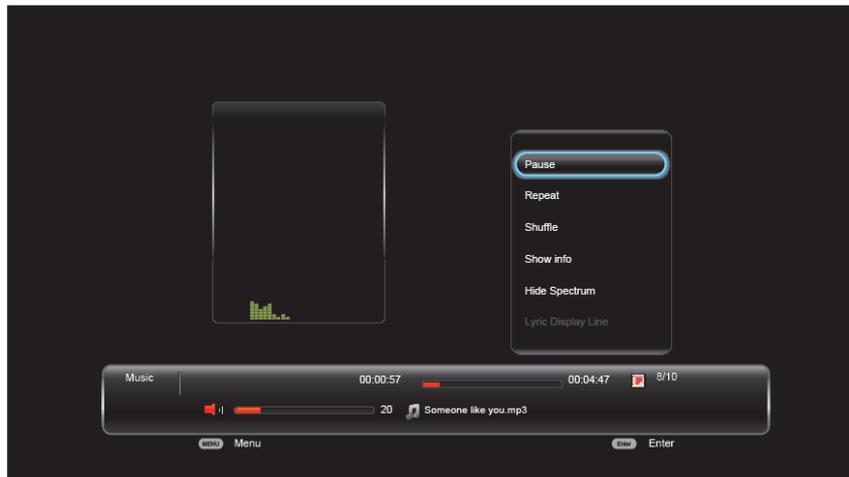
**[Shuffle]** – Press ENTER to enable shuffle mode.

**[Rotate]** – Press ENTER to rotate the picture.

**[Show Info]** – Press ENTER to display the information about the current picture.



## Music



Press MENU to display the menu. Use the [CH+] and [CH-] buttons to select an option.

**[Pause]** – Press ENTER to pause or play the music.

**[Repeat]** – None/Repeat One/Repeat All. Press ENTER to select the repeat mode.

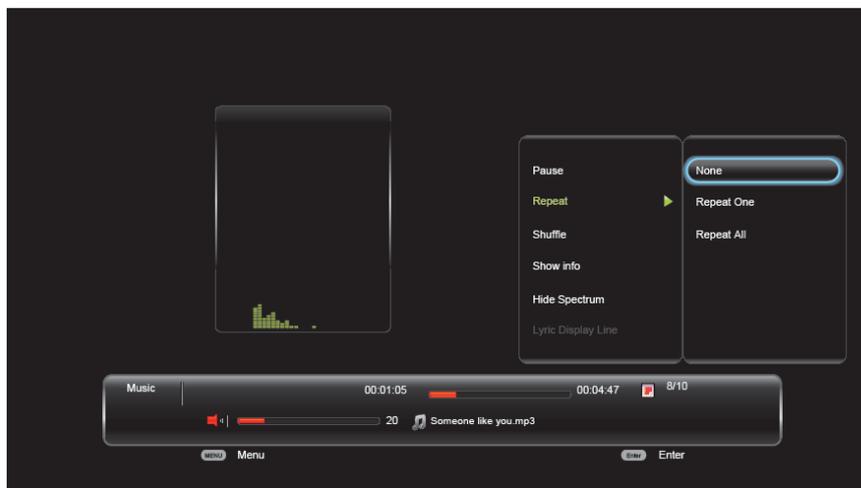
**[Shuffle]** – Press ENTER to enable shuffle mode.

**[Show info]** – Press ENTER to display the information about the current music.

**[Hide Spectrum]** – Press ENTER to hide or show the spectrum.

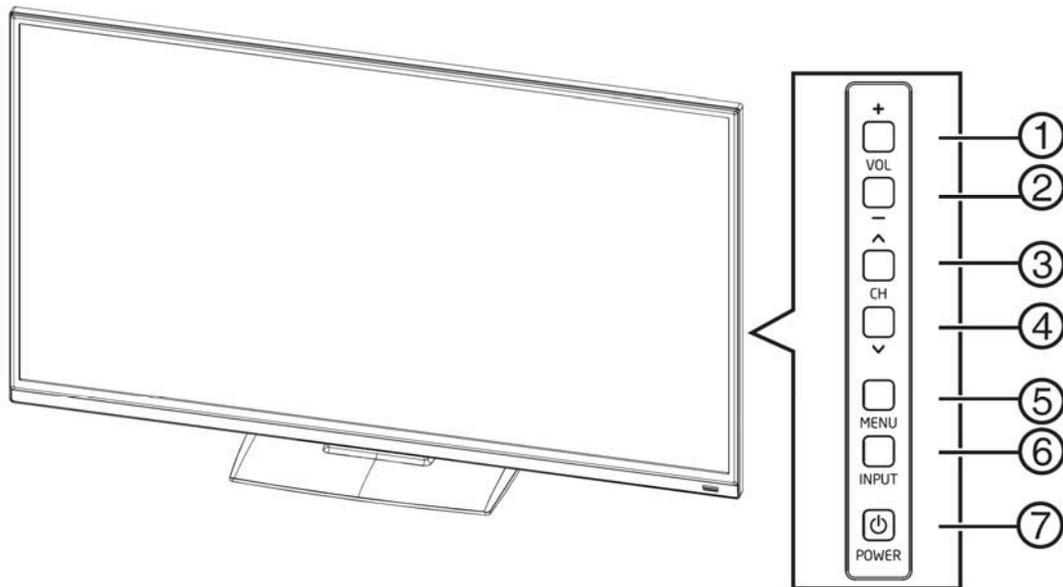
**[Lyric Display Line]** – Press Enter to adjust Lyric Display line (OFF, Single line, Multiple lines).

**[Audio Only]** – Press [ENTER] to turn down backlight, and press any key to resume.



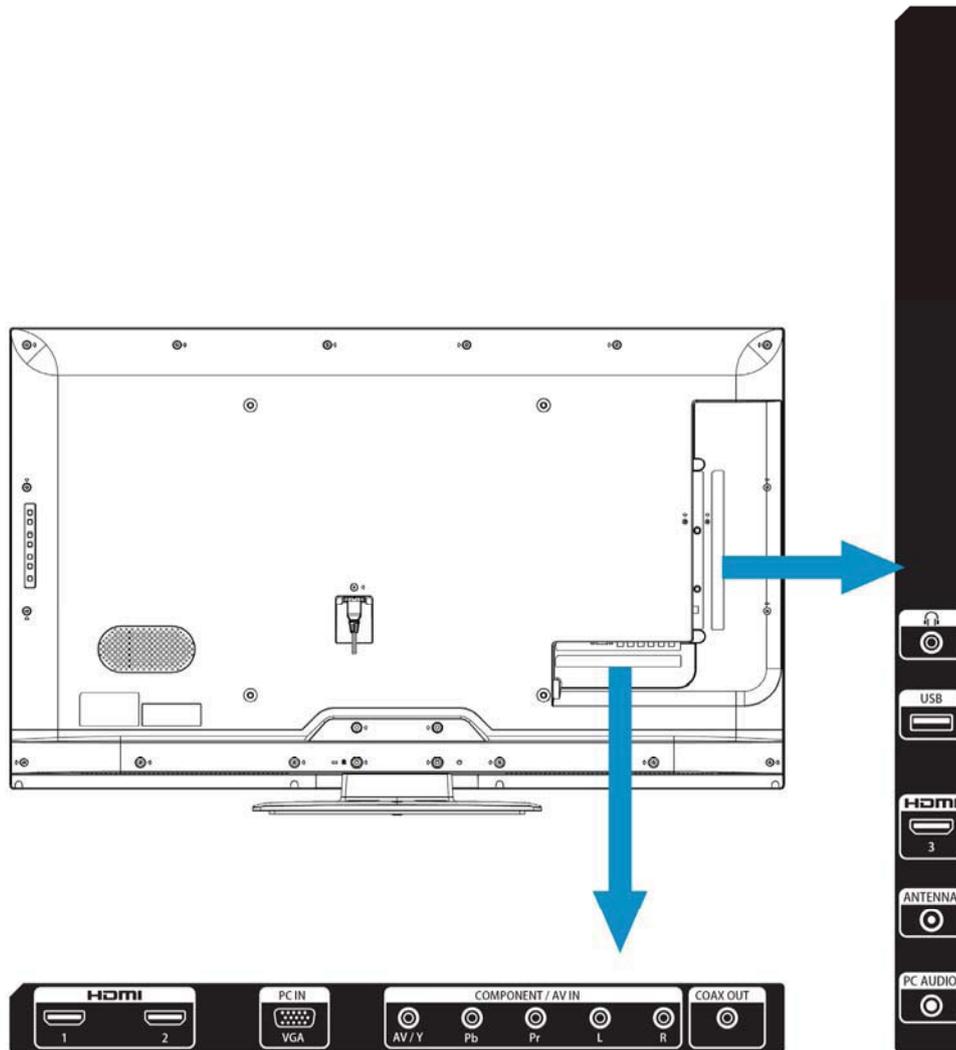
**Note:** Please refer to page 15 for details on how to use the remote control in the USB Multimedia mode.

## 2.3 Rear Panel Control Knobs



1.	VOL +	Press to increase the sound volume.
2.	VOL -	Press to decrease the sound volume.
3.	CH ▲	Press to increase the channel number.
4.	CH ▼	Press to decrease the channel number.
5.	MENU	Press to open or exit the OSD (on-screen display) menu.
6.	INPUT	Press to select the input source.
7.	⏻ POWER	Press to turn on / off (standby) the TV set.

## 2.4 How to Connect



1. HDMI – Connect the primary source for digital video such as a DVD multimedia player or set top box through this all digital connector.
2. PC IN/PC AUDIO – Connect the video and audio cables from a computer here.
3. AV IN (AV) – Connect the input source for composite video devices, such as a VCR or video game. Use the white and red connectors to connect the external audio from the same source.
4. COMPONENT (Y/Pb/Pr with Audio L/R) – Connect the primary source for component video devices such as a DVD Player or set top box here. Use red for Pr, blue for Pb, green for Y, red for right audio (R) and white for left audio (L) inputs.
5. ANTENNA(CABLE DIGITAL/ANALOG) – Connect to an antenna or digital cable (out-of-the-wall, not from Cable Box) for Digital TV.
6. COAX OUT – When a digital audio signal is associated with the input selected for viewing, the digital audio will be available on this COAX OUT connection to your home theater system.
7. USB PORT – Insert a USB storage device to the USB port to view JPEG/BMP photos, listen to MP3 music. (Please refer to pages 25-26 for more information.)
8. Earphone Output – Connect to headphones. When headphones are inserted to the plug, the TV speakers will be muted.

Once your equipment is connected, use the following procedure to view the input signal: Press the Source button on the remote control to select the relevant source to view. (ex: Press the INPUT button to select “Component” if you have connected a DVD palyer to Component input.)

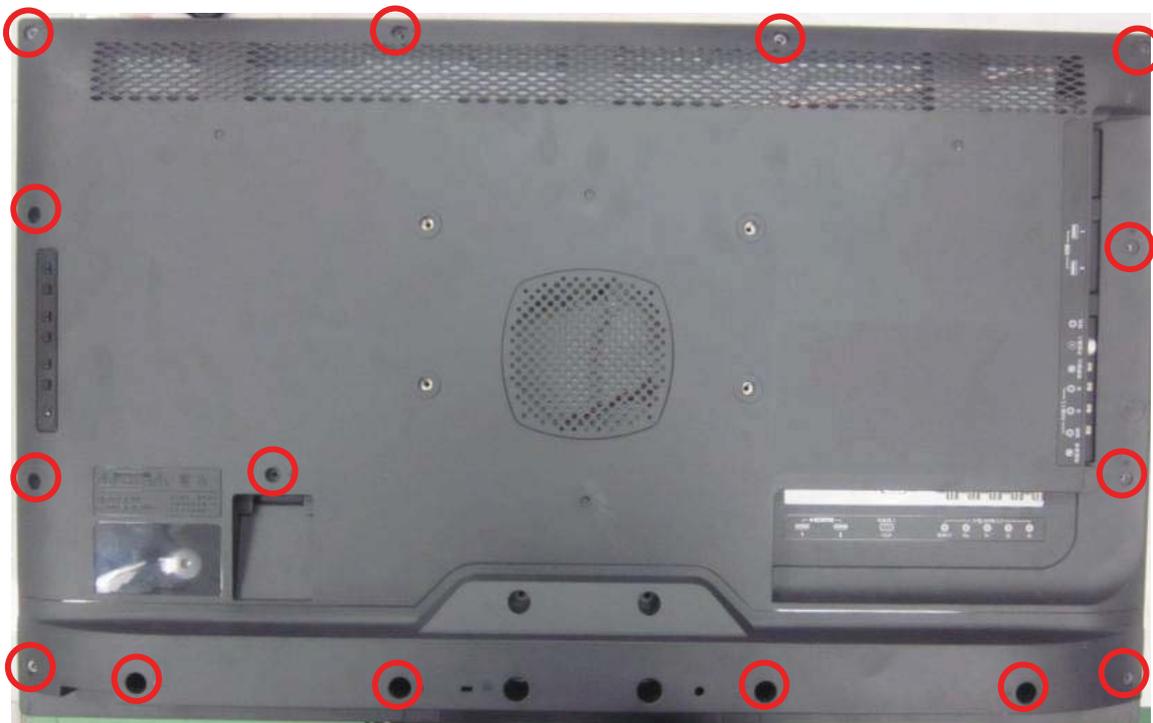
### 3. Mechanical Instructions

LE32D2320

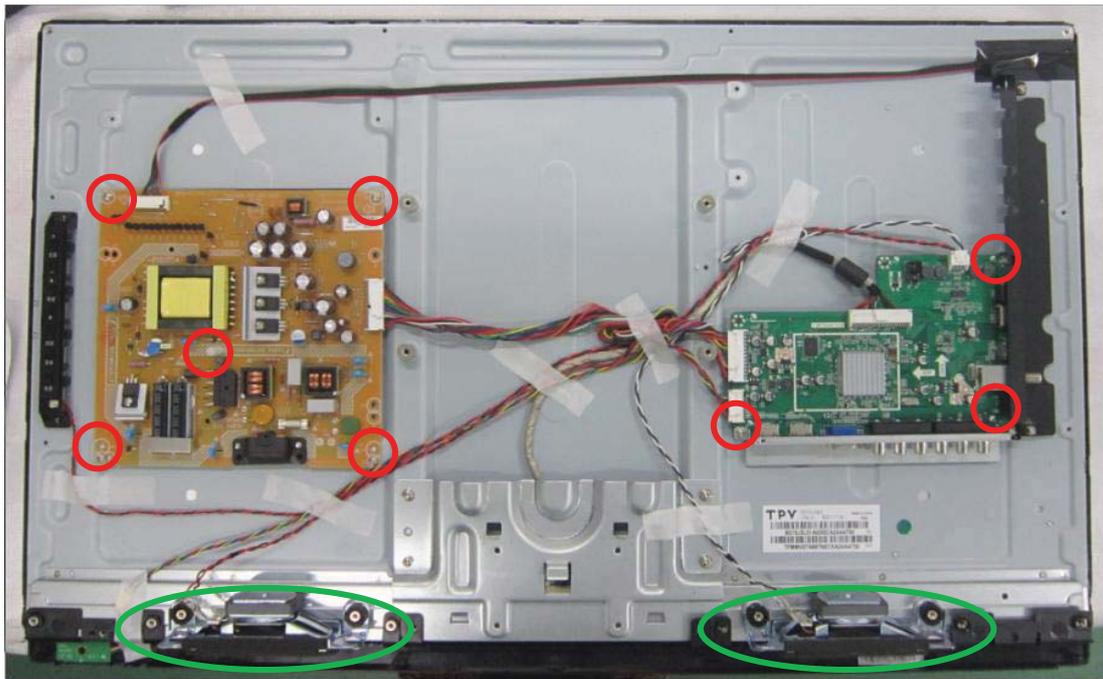
Step1. Remove the STAND BASE.



Step2. Remove the REAR COVER.



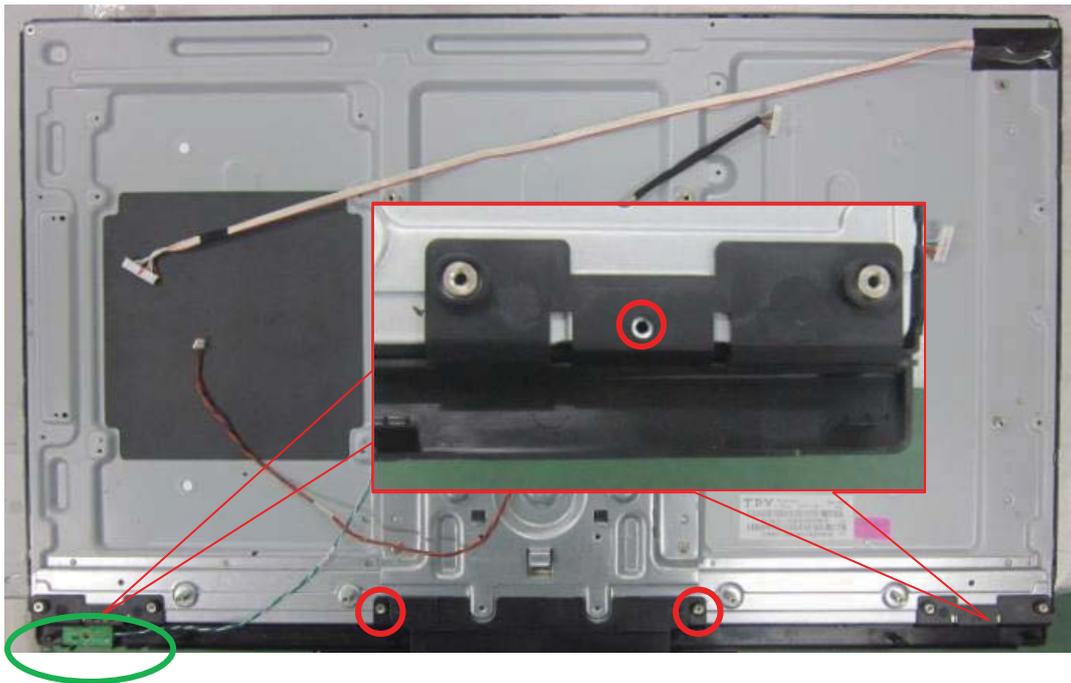
**Step3. Remove the MAIN BOARD, POWER BOARD and SPEAKERS.**



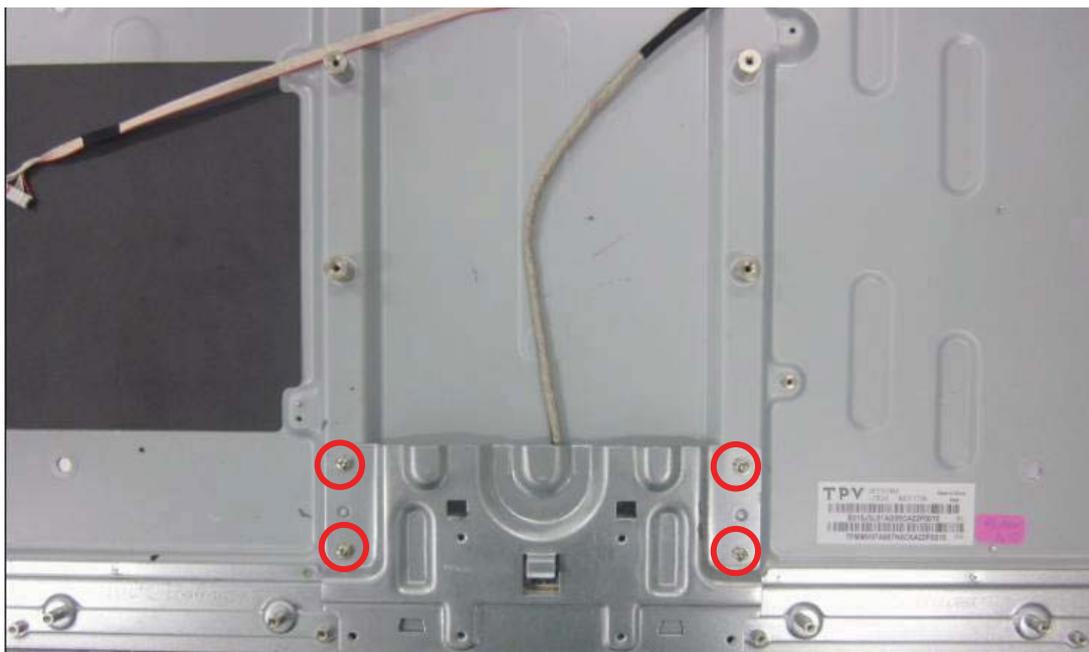
**Step4. Remove the KEY BOARD.**



**Step5. Separate the BEZEL and PANEL and remove the IR BOARD.**



**Step6. Remove the BKT.**



LE39D2380

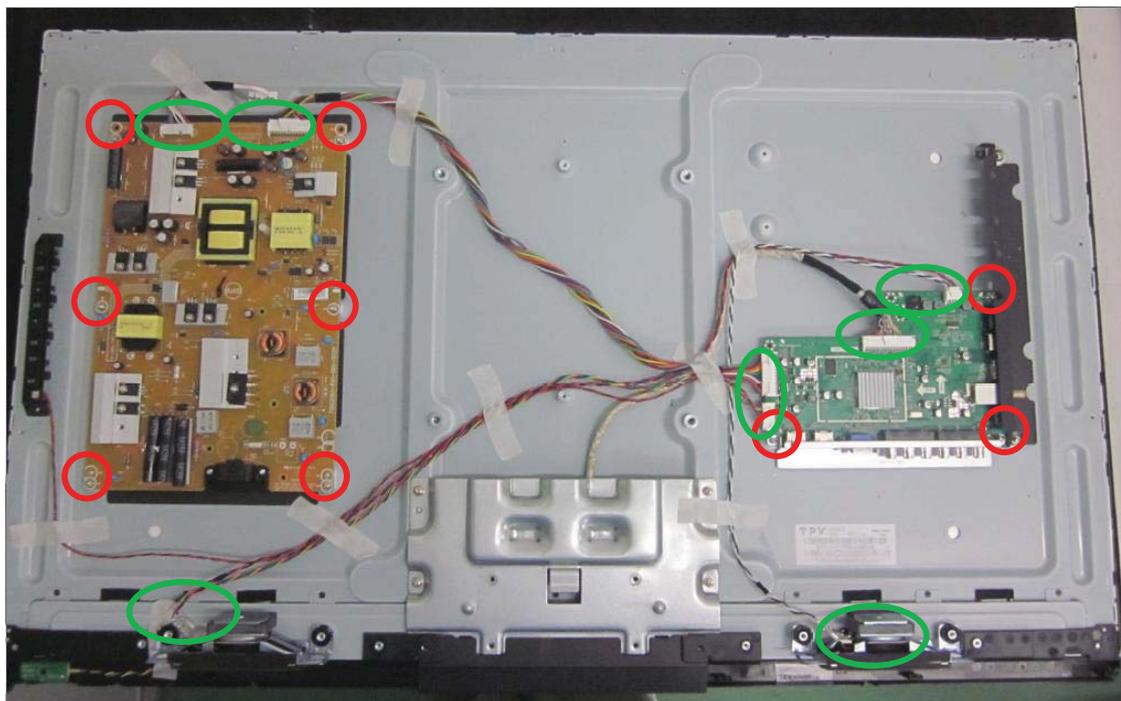
Step1. Remove the STAND BASE.



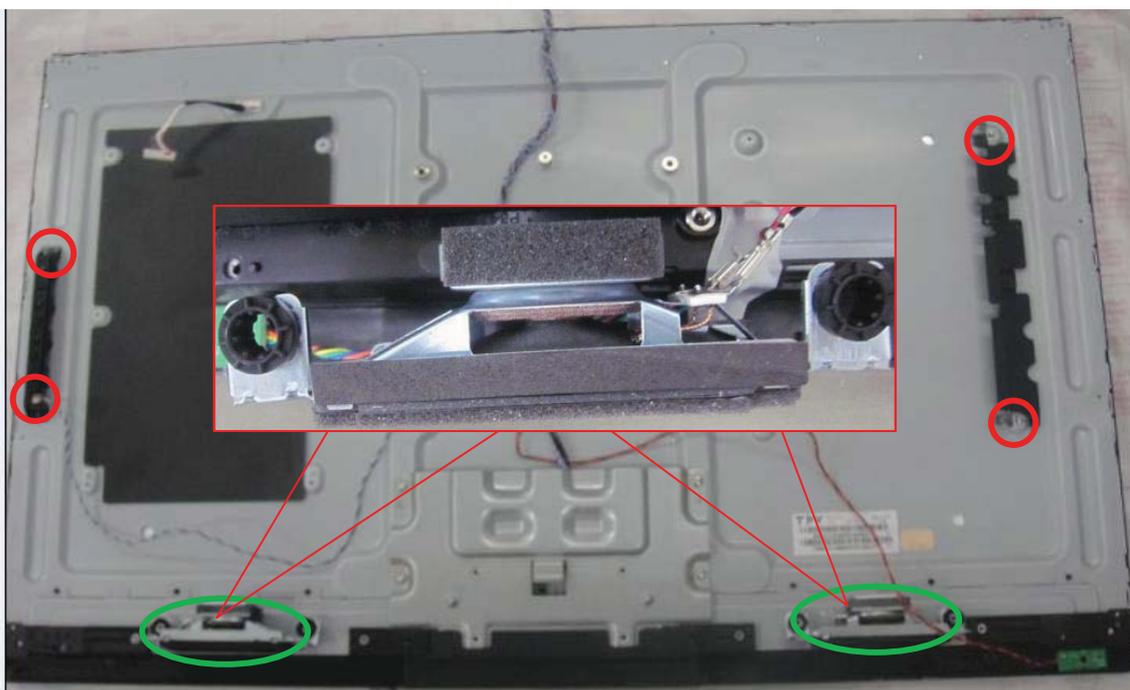
Step2. Remove the REAR COVER.



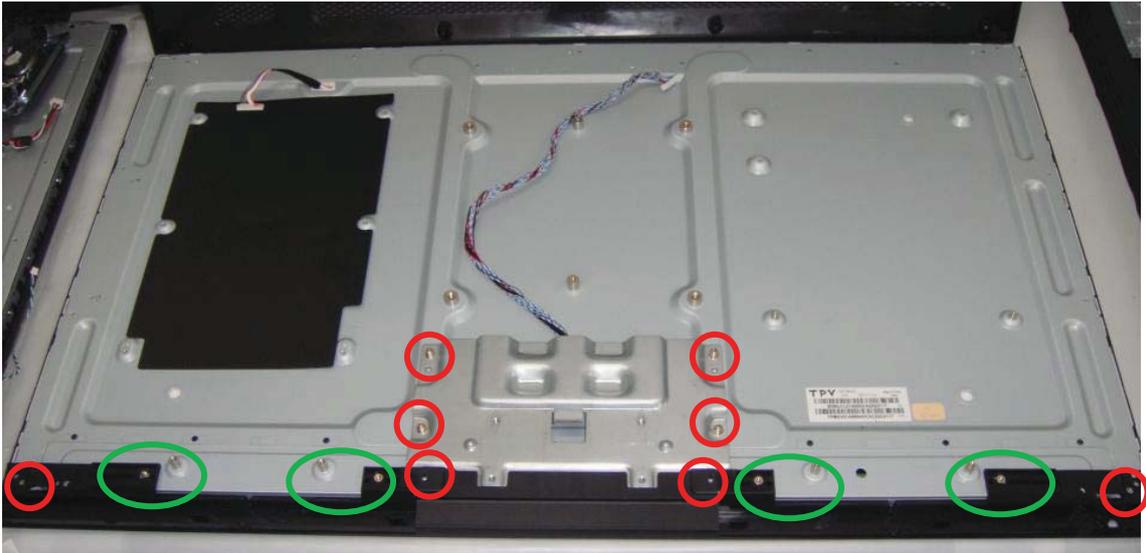
**Step3. Remove the MAIN BOARD and POWER BOARD.**



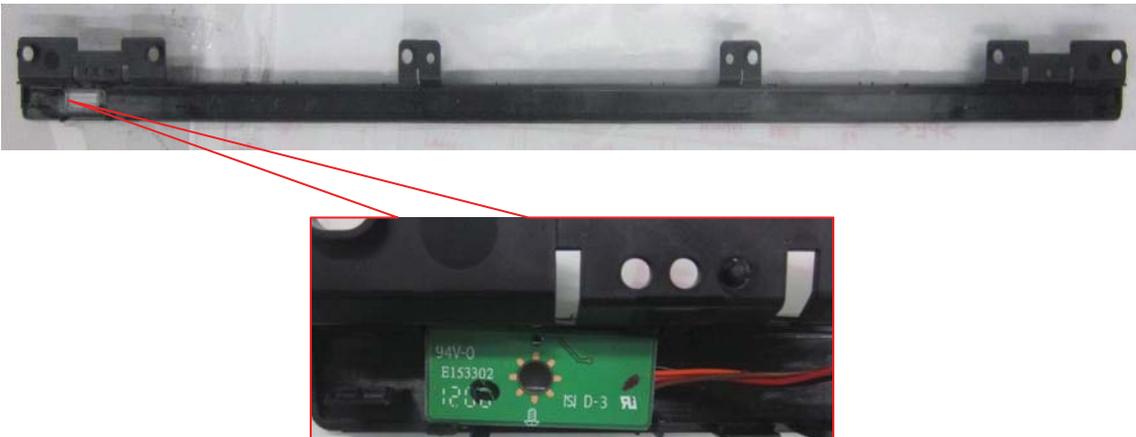
**Step4. Remove the SPEAKERS and KEY BOARD and the IO side iron.**



**Step5. Remove the BKT and separate the BEZEL and PANEL.**



**Step6. Remove the KEY BOARD.**

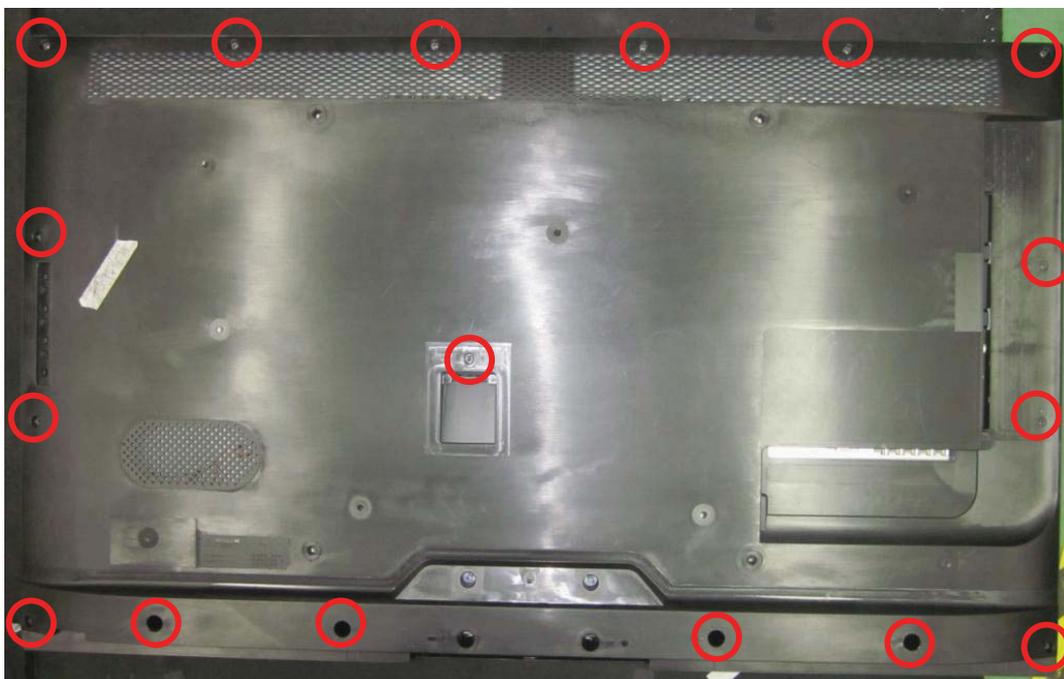


LE42D2380

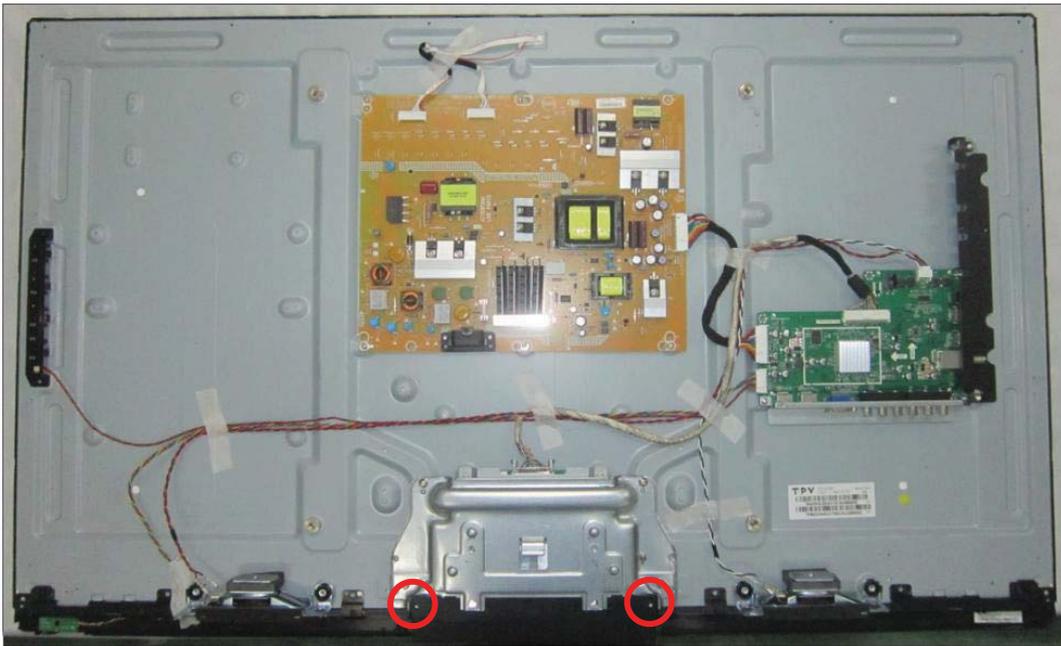
Step1. Remove the STAND BASE.



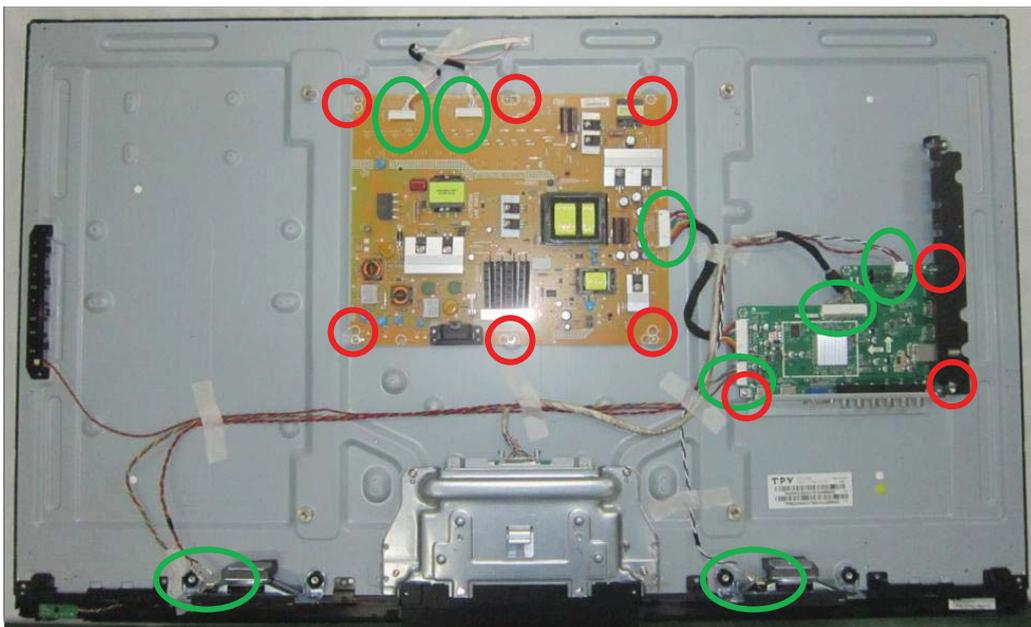
Step2. Remove the REAR COVER.



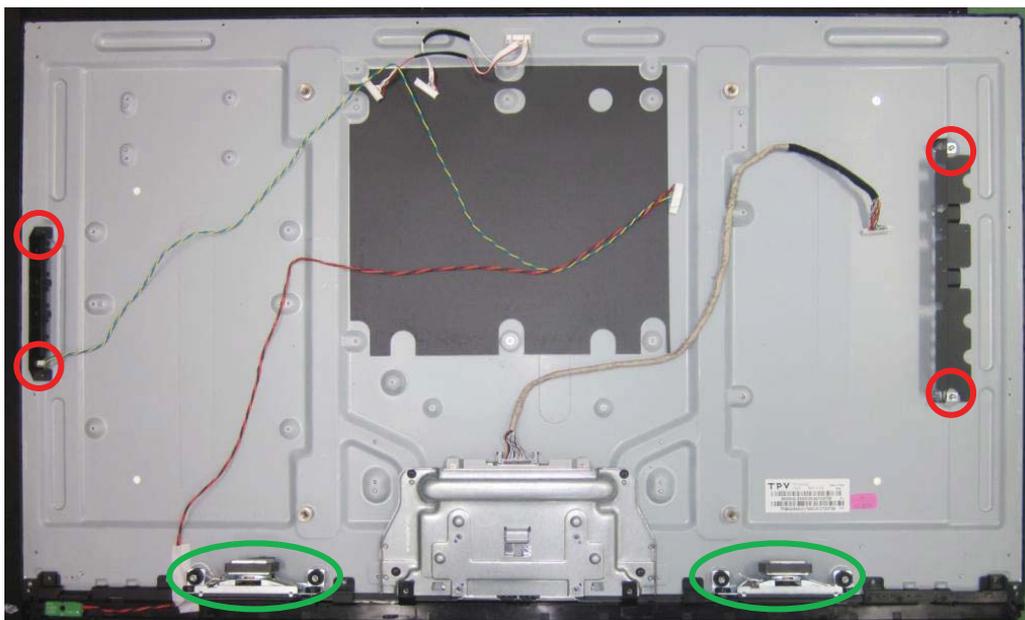
**Step3. Remove the HINGE COVER.**



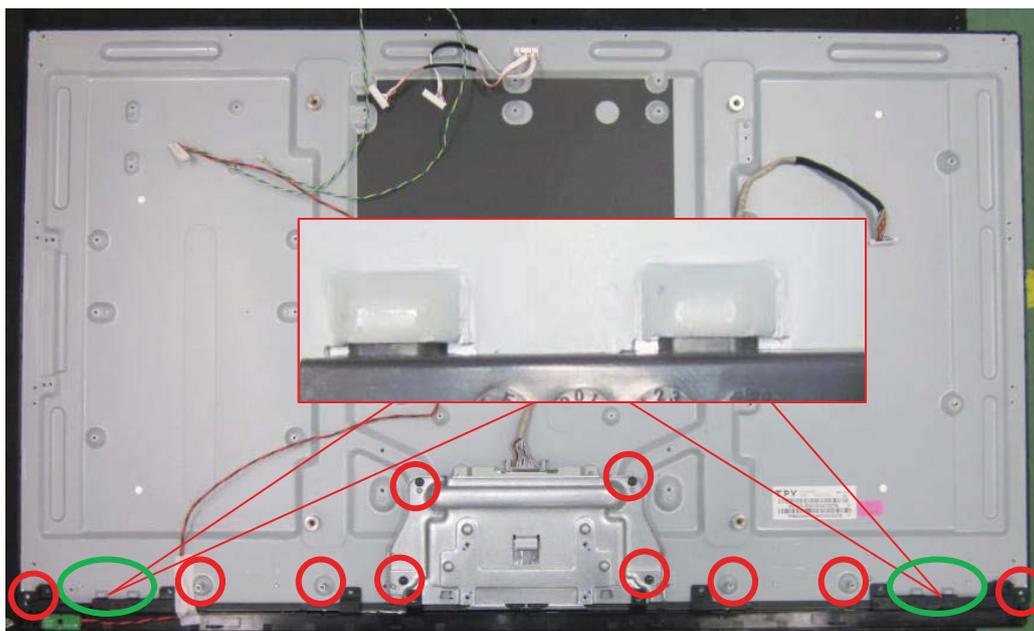
**Step4. Remove MAIN BOARD and POWER BOARD and SPEAKERS.**



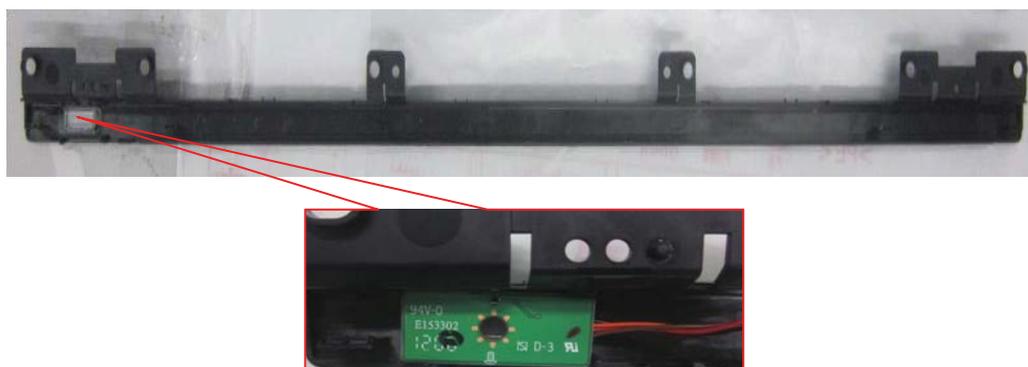
**Step5. Remove the SPEAKERS and KEY BOARD and the IO side iron.**



**Step6. Remove the BKT and separate the BEZEL and PANEL.**



**Step7. Remove the IR BOARD**

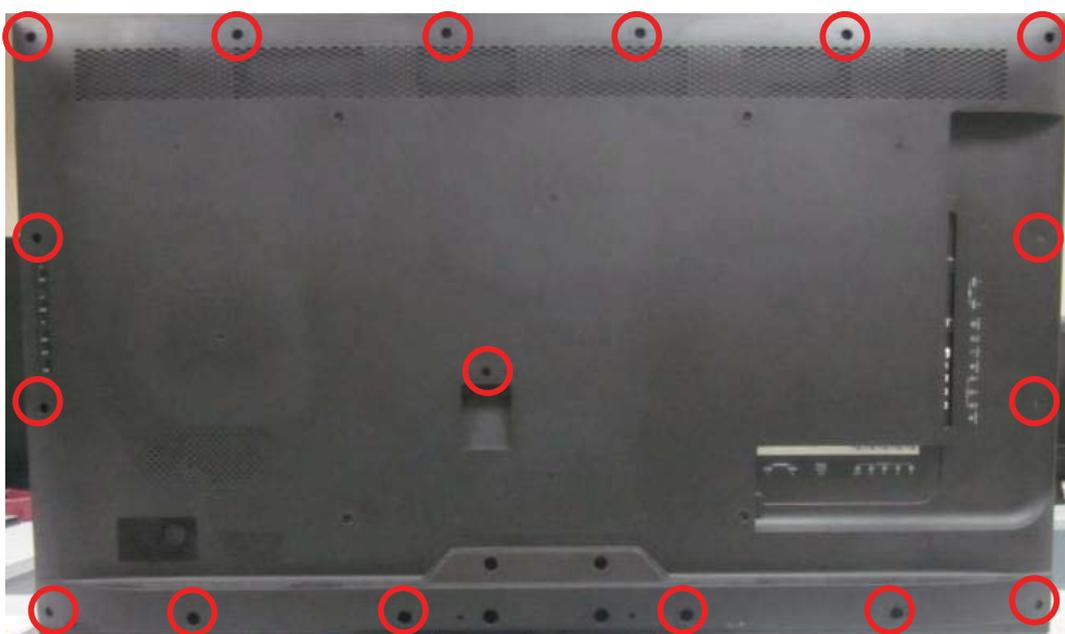


LE46D2380

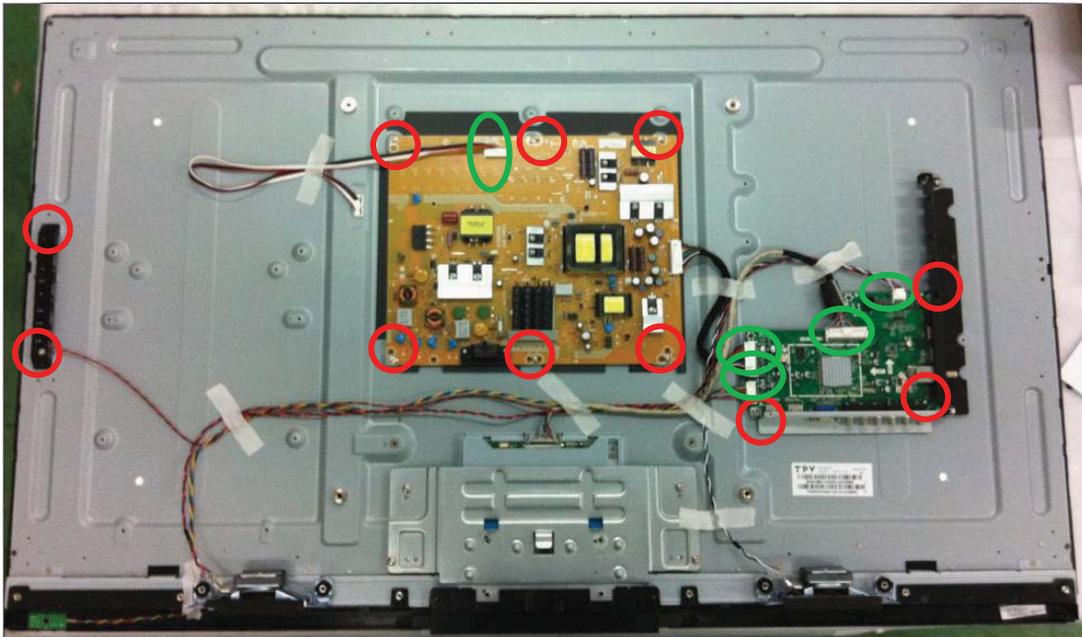
Step1. Remove the STAND BASE.



Step2. Remove the REAR COVER.



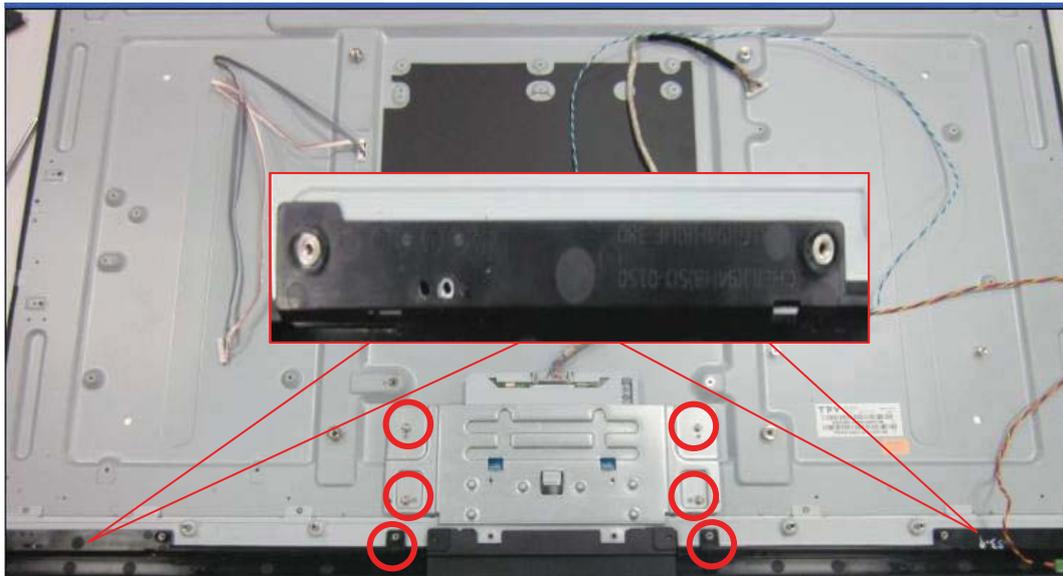
**Step3. Remove MAIN BOARD and POWER BOARD and KEY BOARD.**



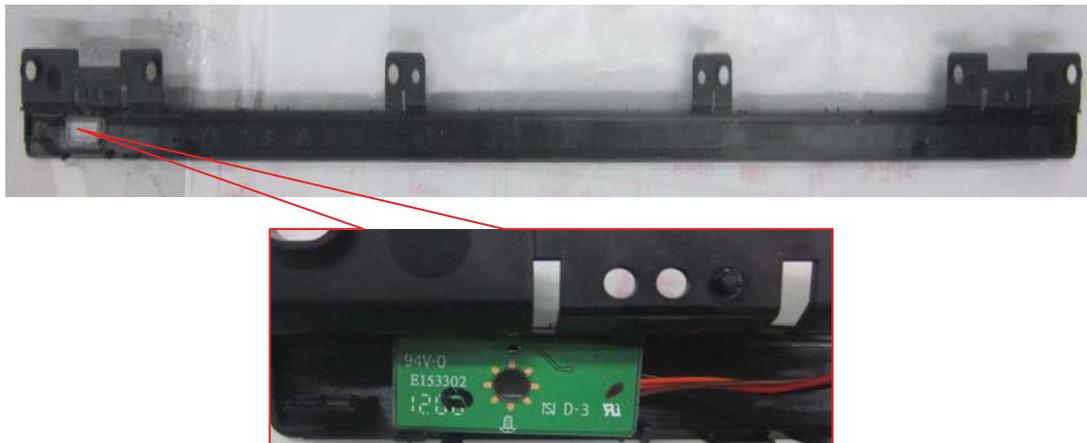
**Step4. Remove the SPEAKERS and the IO side iron.**



**Step5. Remove the BKT and separate the BEZEL and PANEL.**

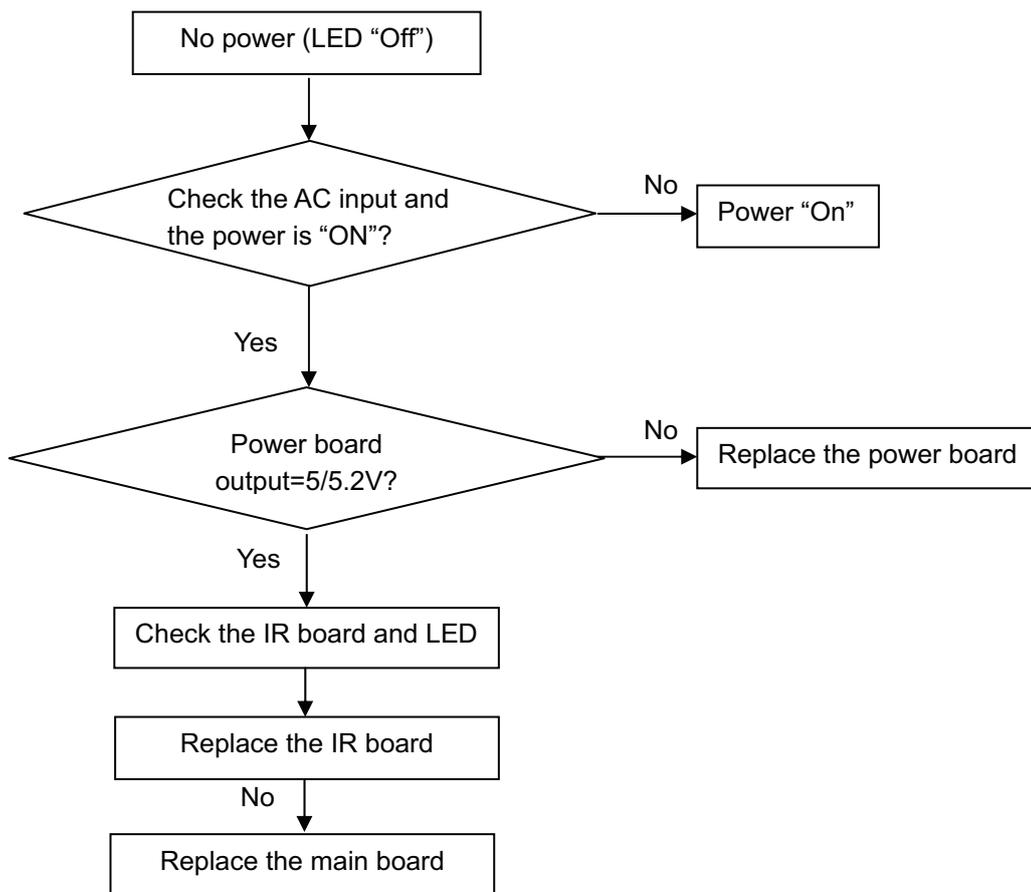


**Step6. Remove the IR BOARD**

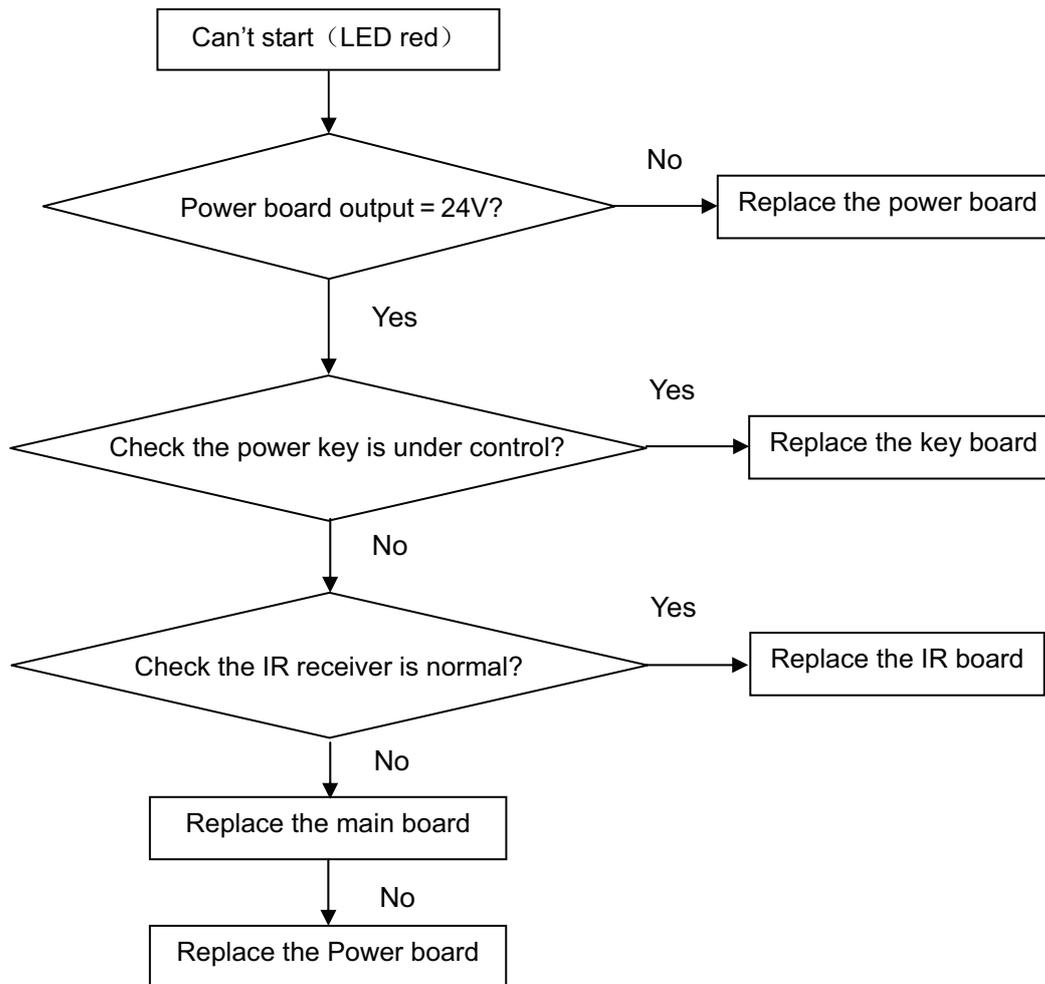


## 4. Repair Flow Chart

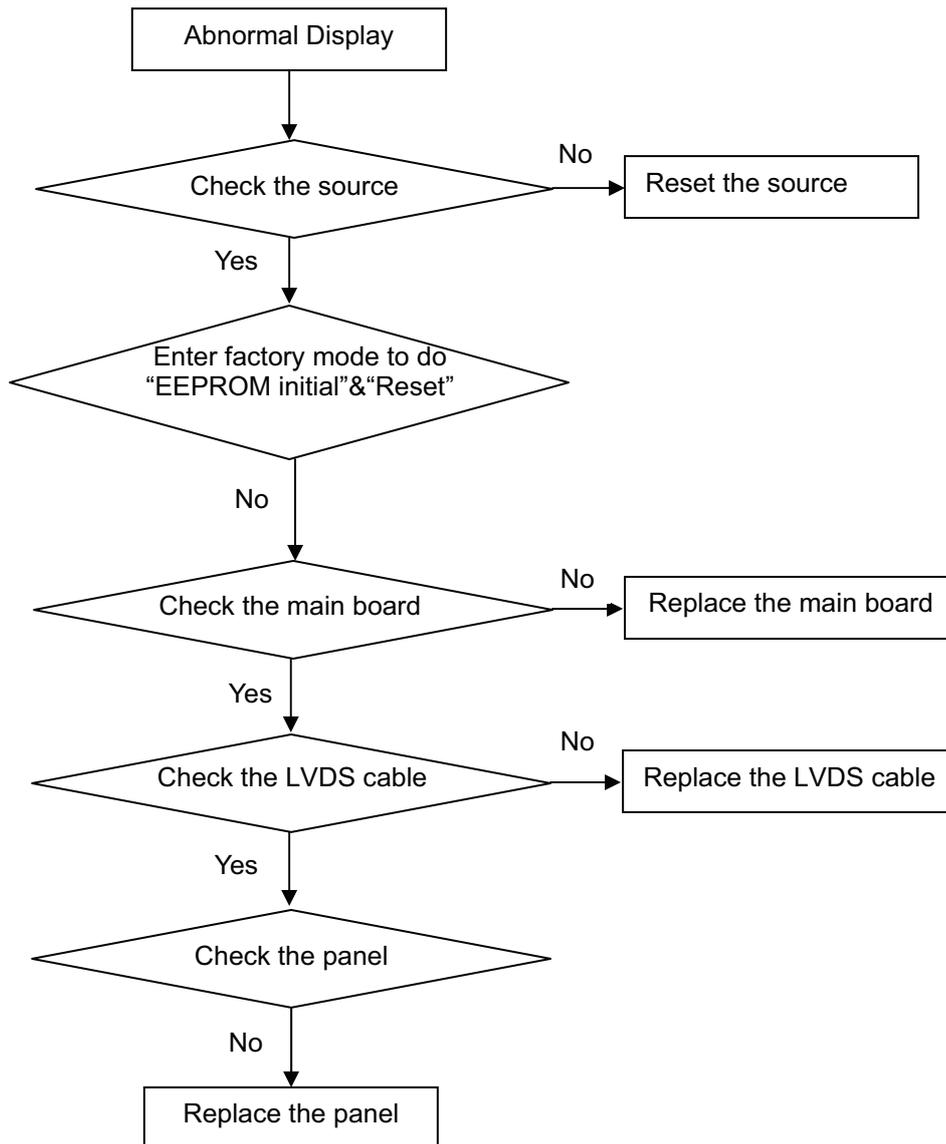
### 1. No power



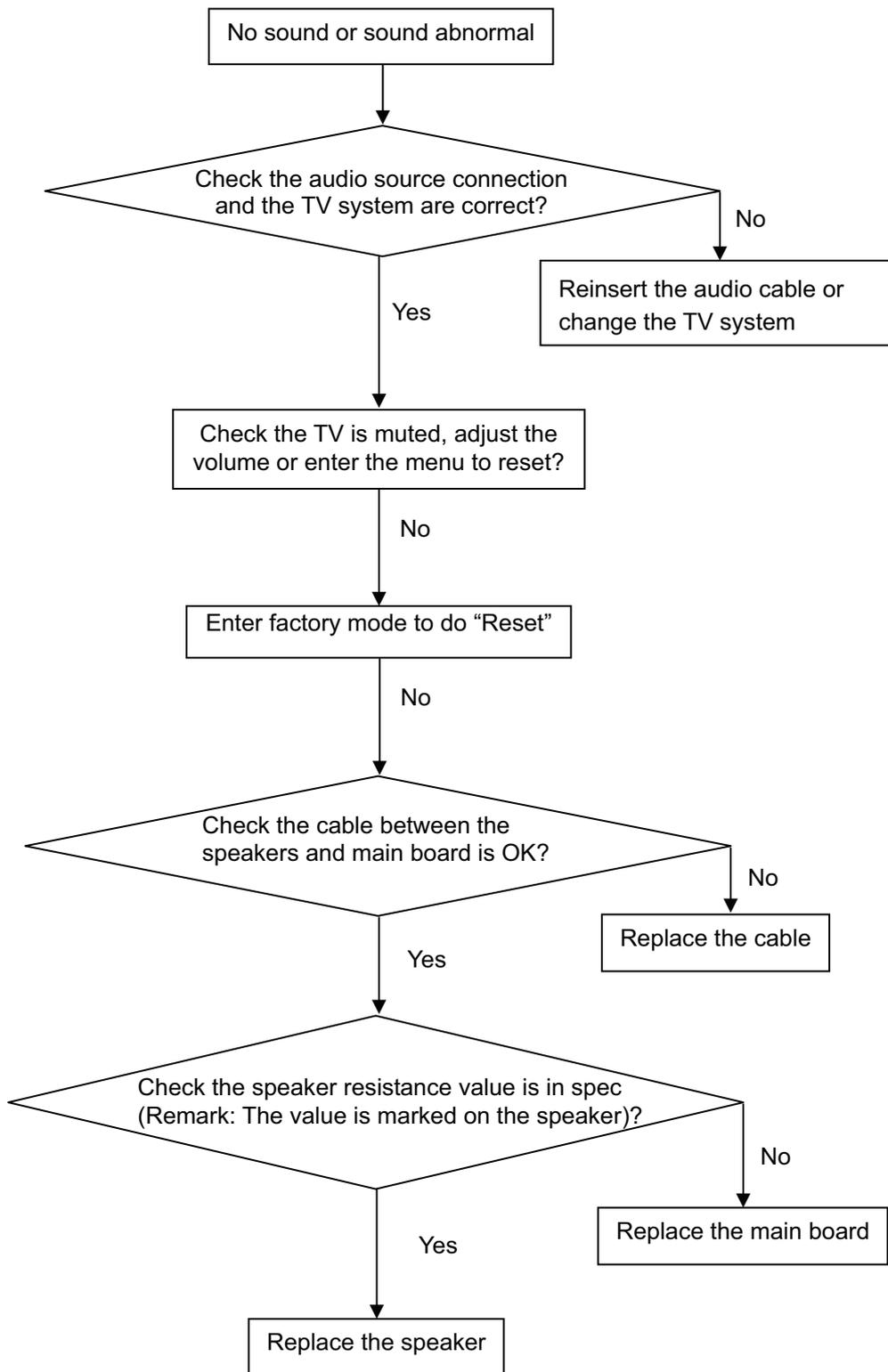
## 2. Can't start



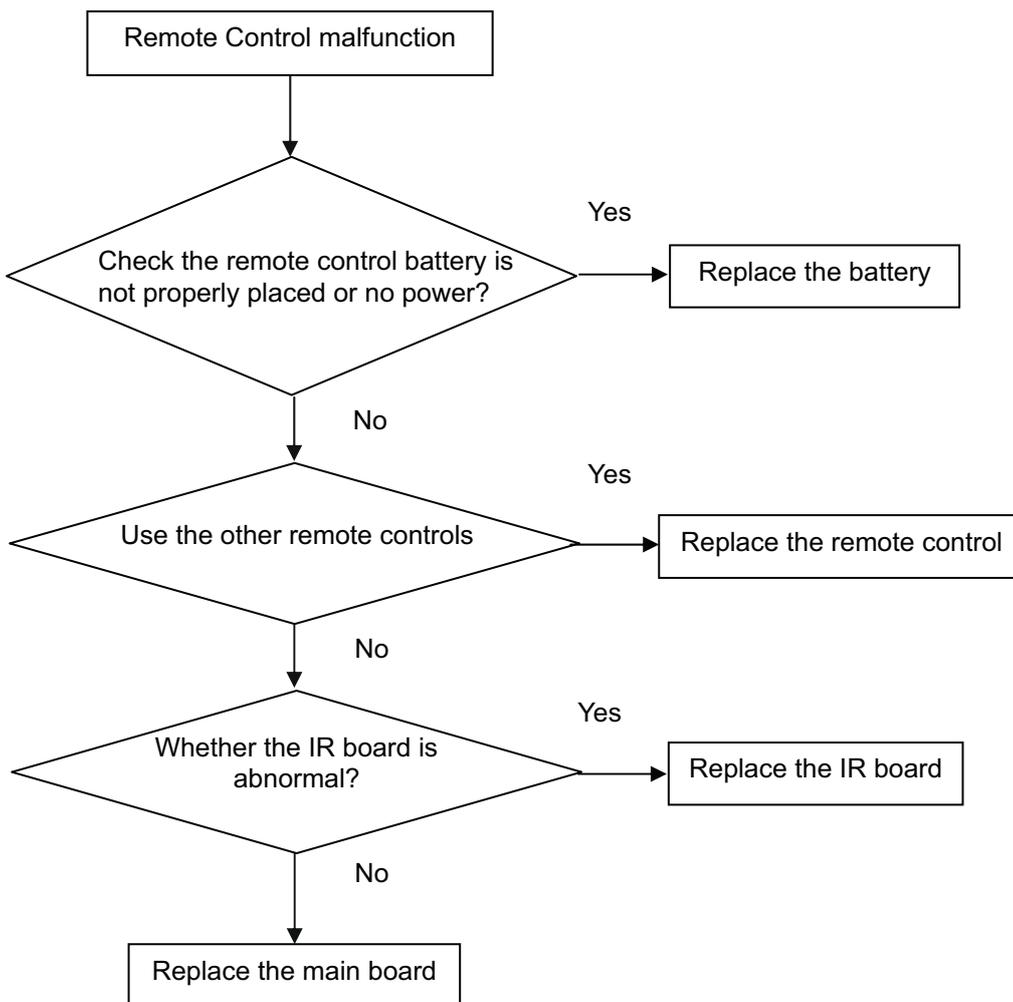
### 3. Abnormal Display



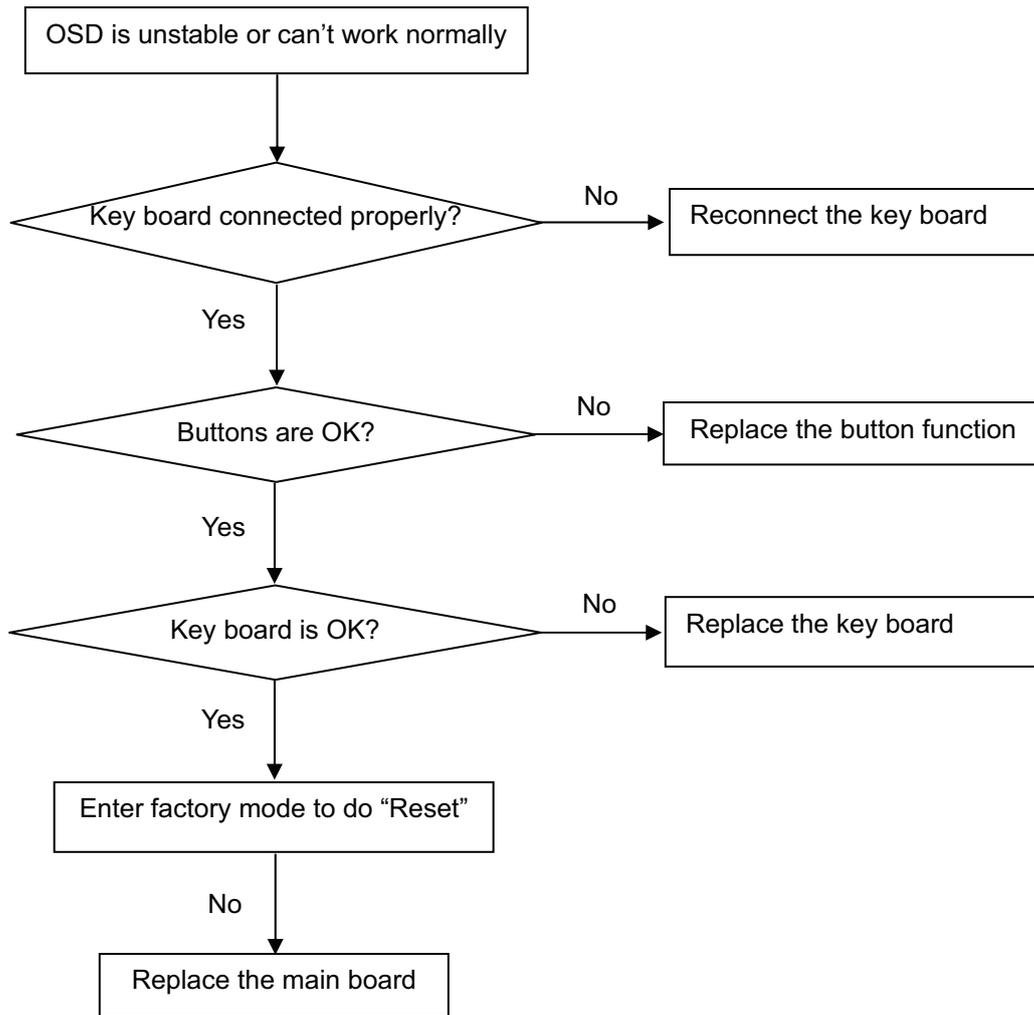
#### 4. Sound problem



## 5. Remote control malfunction



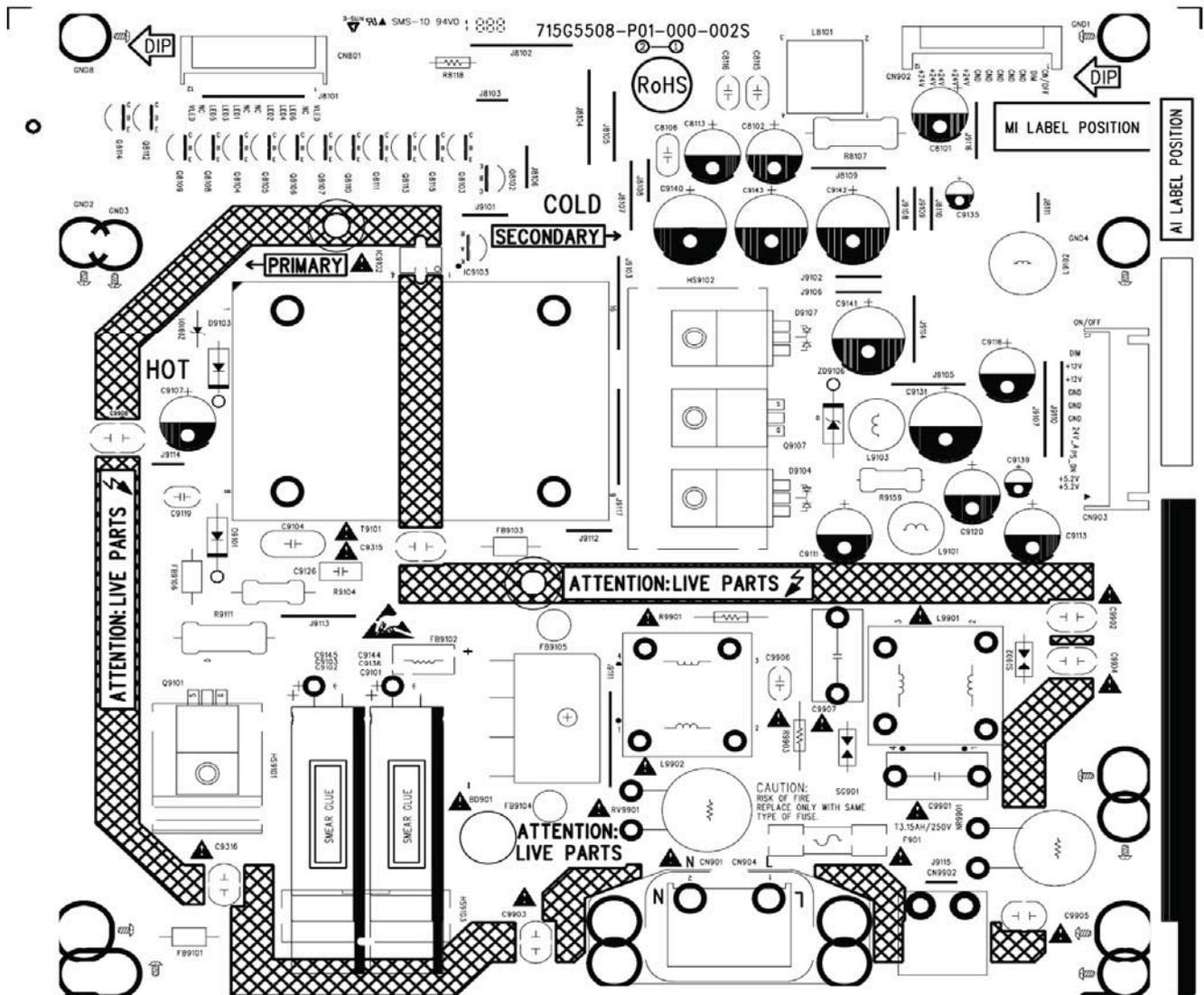
## 6. OSD is unstable or can't work normally



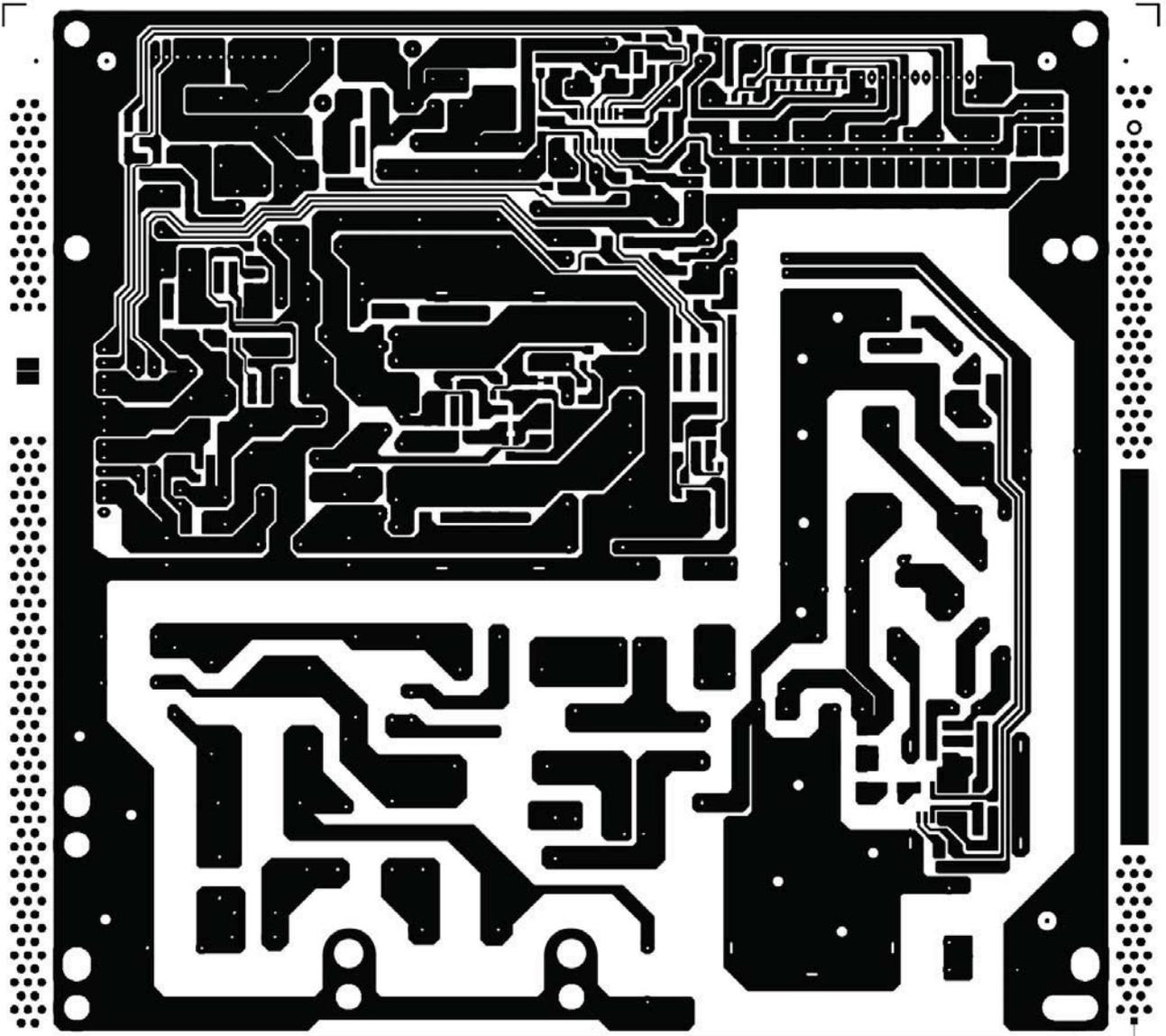
# 5. PCB Layout

## 5.1 Power Board

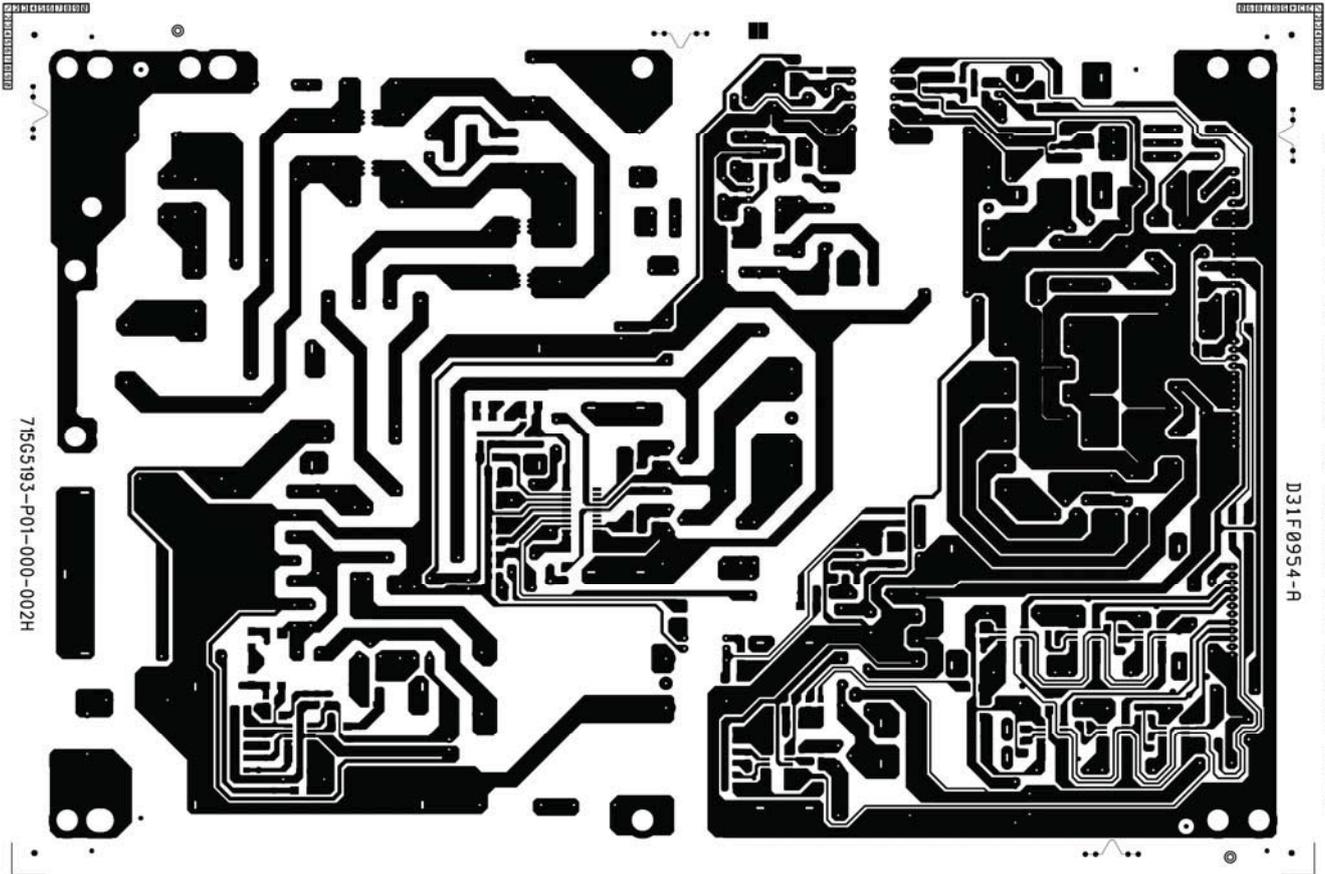
LE32D2320 715G5508P0100002S







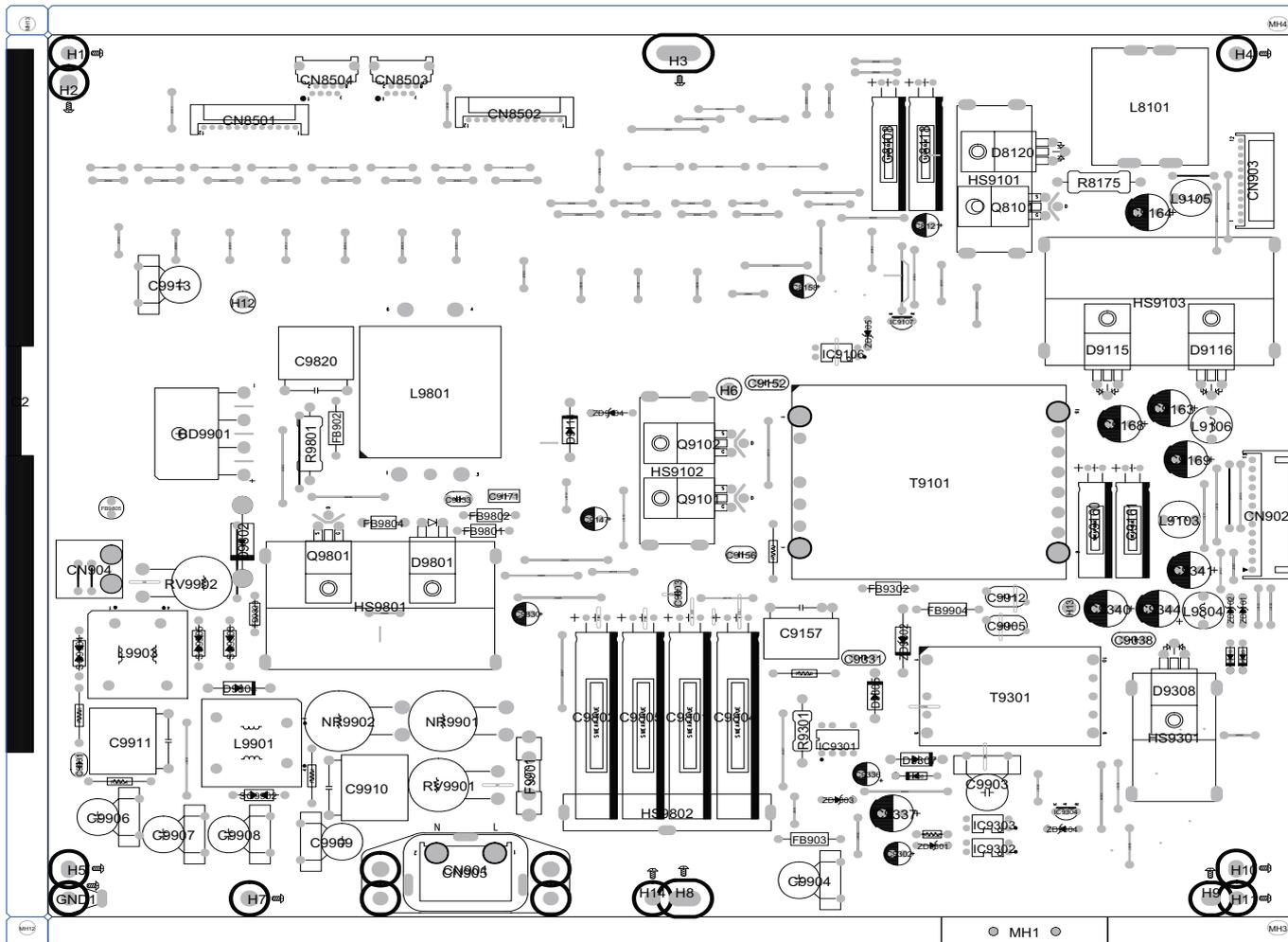


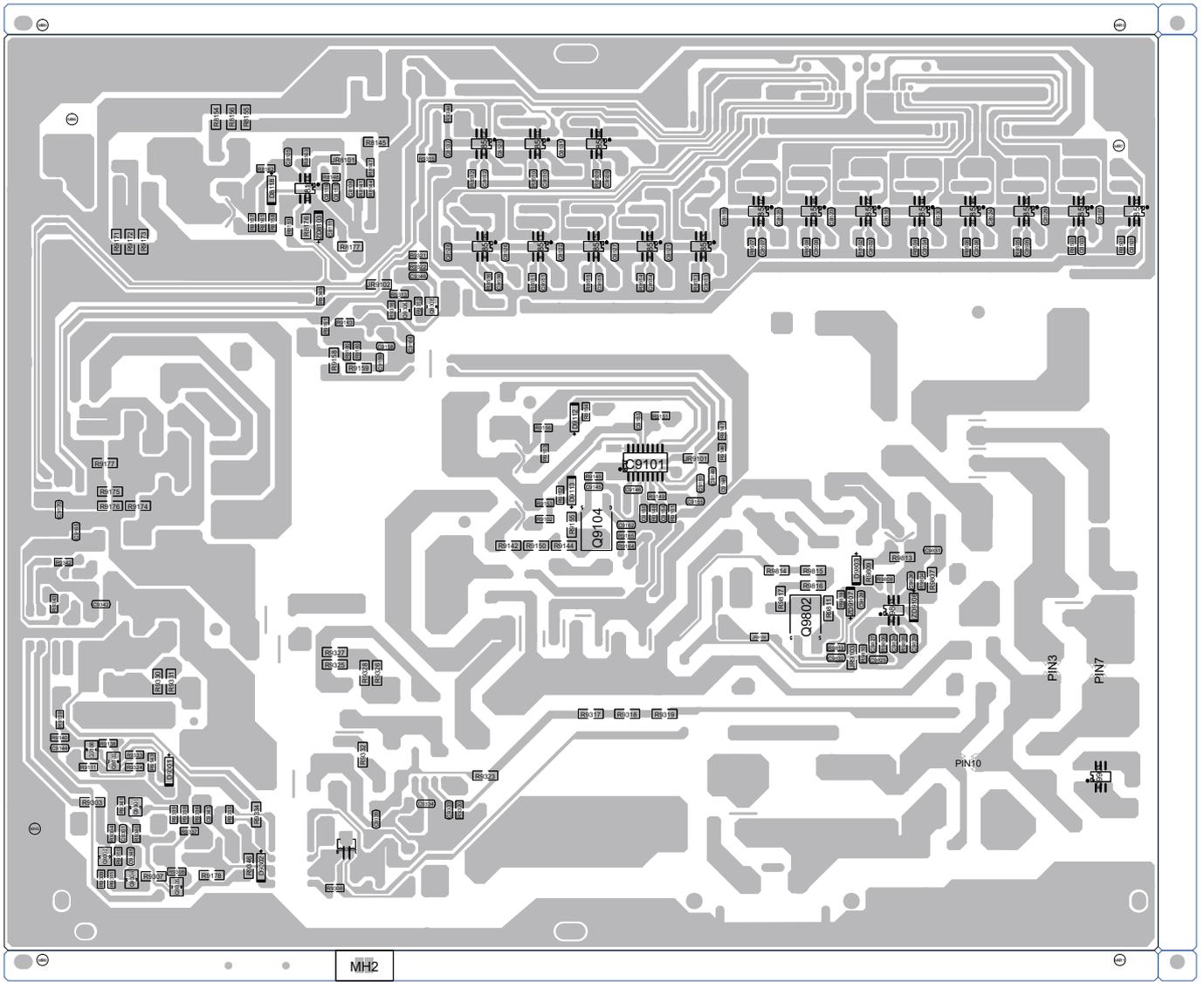


715G5193-P01-000-002H

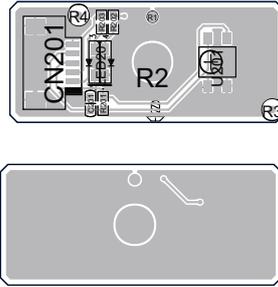
D31F0954-R

SAMPLE D31F0954-R D3 715G5193-001-000-002H GB2 ZY 2012-02-06

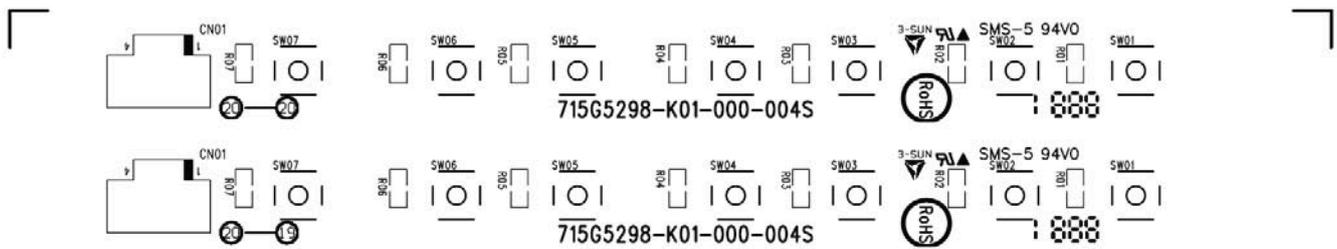
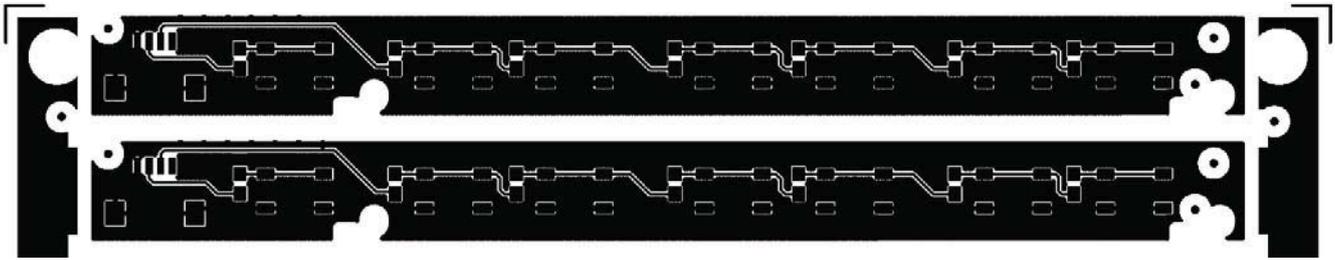




**5.2 IR Board**  
**715G5471R01000004B**



**5.3 Key Board**  
**715G5298K01000004S**



## 6. Adjustment

### 6.1 WB Adjustment

**WB adjust:** Choose the component source as the Current Source, Press “menu+8+8+9+3” enter the factory mode, then choose the Color temperature and press “OK” to go the mode of color temperature (Cool, standard, Warm), press “OK” and then choose the option of Gain to adjust R/G/B Gain, The color temperature specifications should be adjusted to the required range.

Such as LE26H100C:

**Notice:** R G B GAIN were less than 255 255 255 respectively, On this premise G GAIN goes to big tune as far as possible to enhance its brightness.

**White balance value check:** Current Source choose the “AV”/T304, “Component”/T314, “VGA”/T137 of the three mode, Color temperature specification also required within specification, the white balance adjustment OK.



pictures one



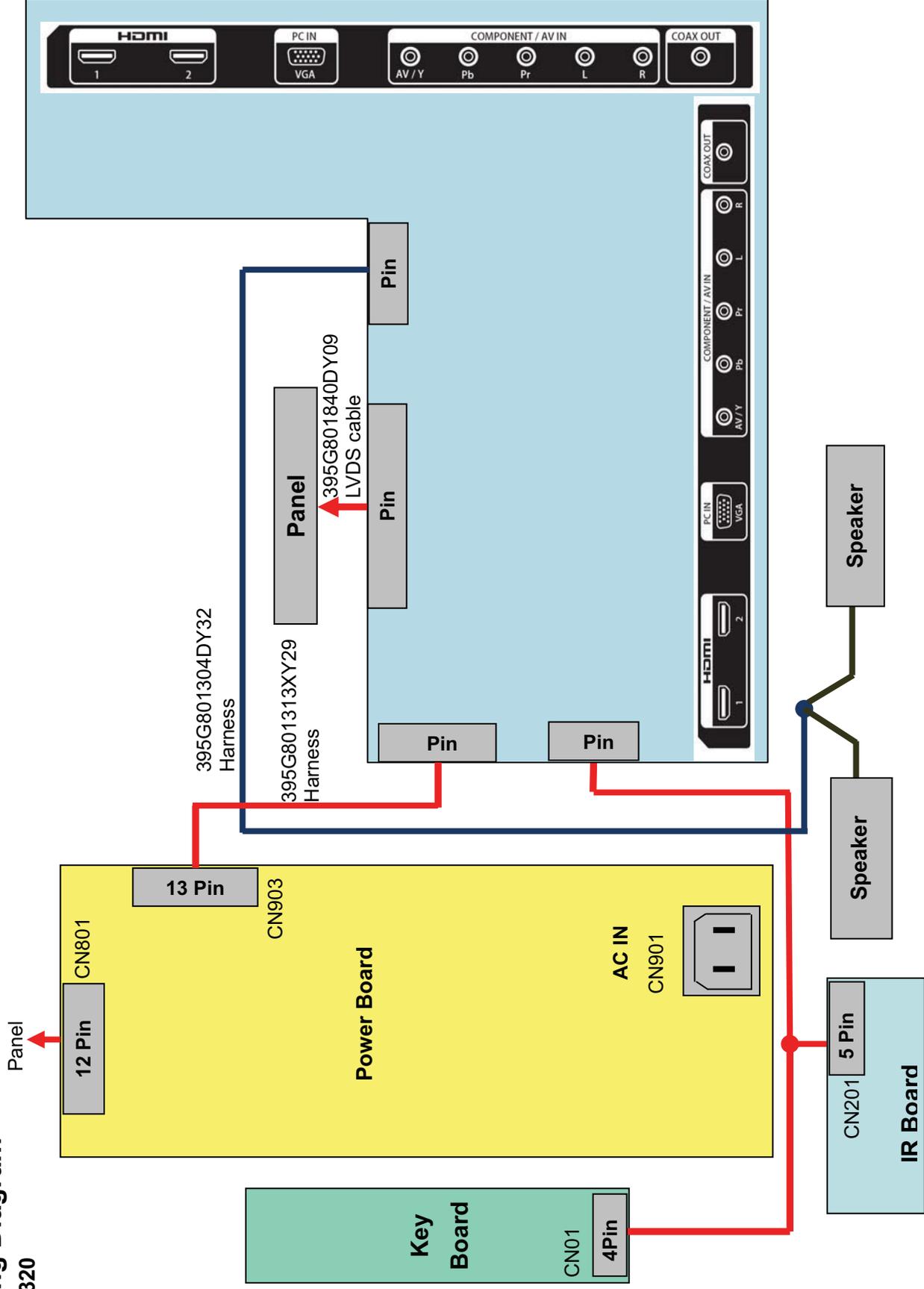
pictures two

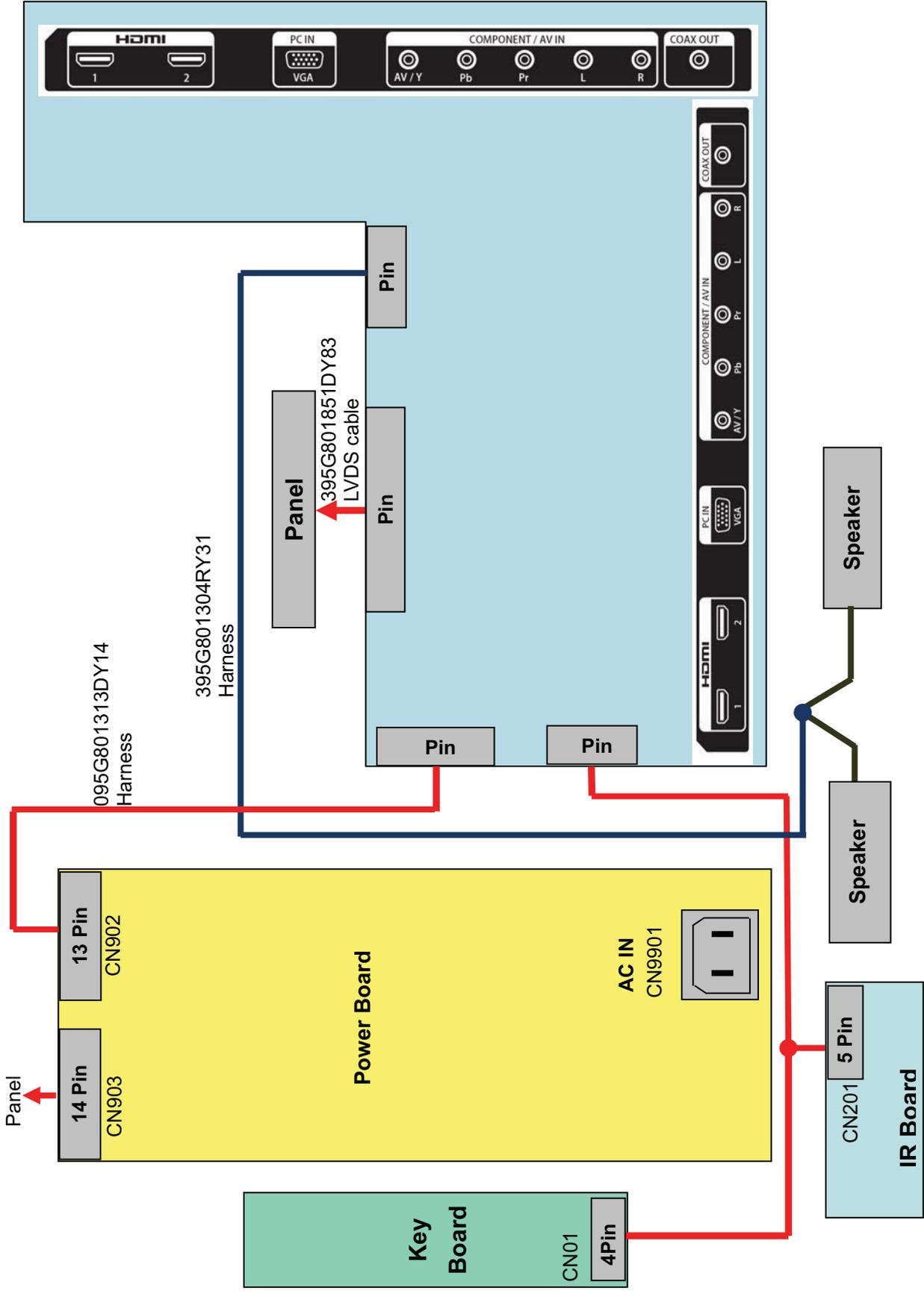
Adjustment specifications are written in white balance adjustment program, testing is based on the specifications of the product .

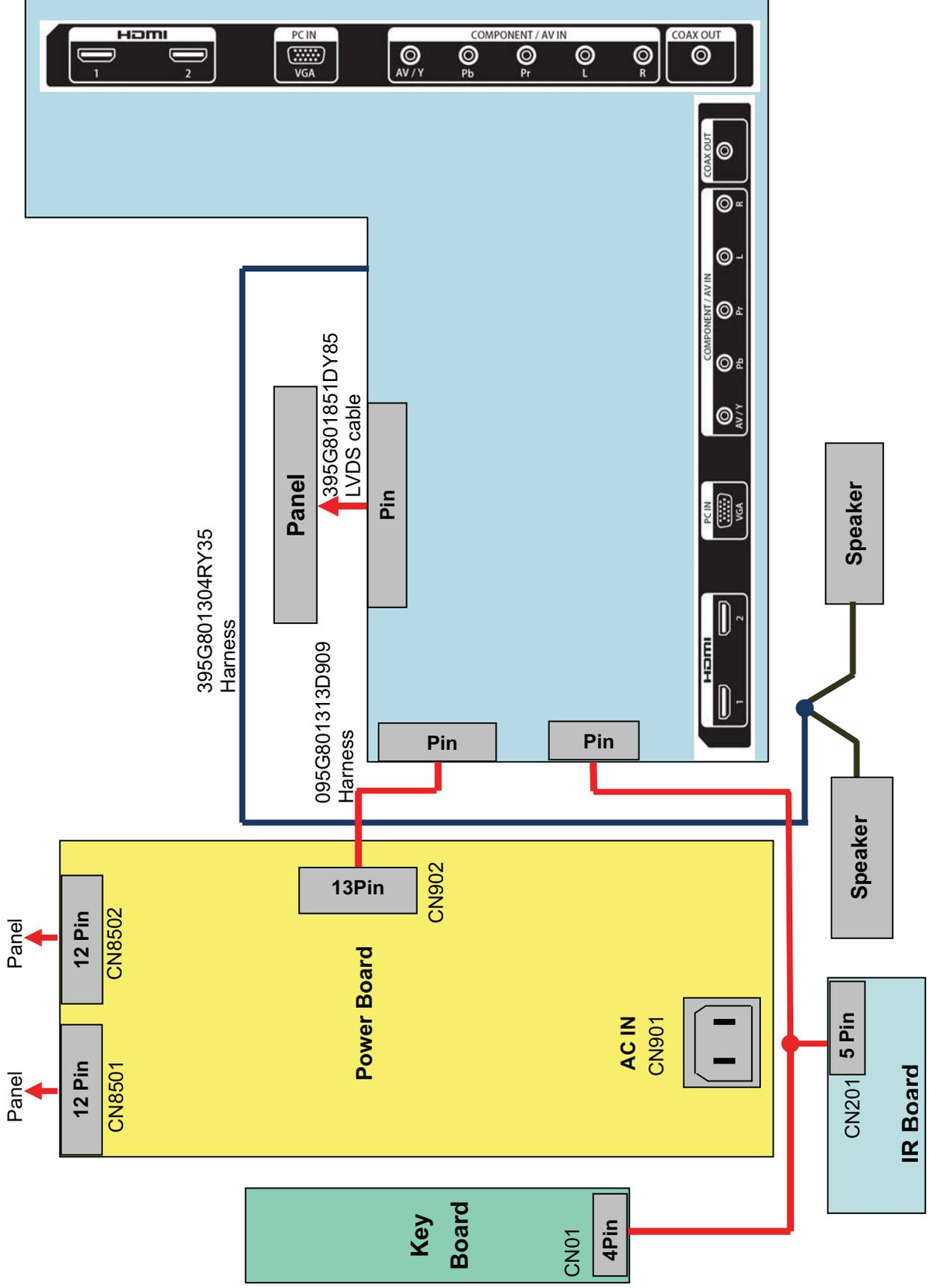
Color temperature (x,y)		Cool (0.265,0.268)		Normal (0.280,0.288)		Warm (0.313,0.329)	
Item	Level	x	y	x	y	x	y
Adjust specifications	80IRE	0.003	0.003	0.003	0.003	0.003	0.003
Product specifications	80IRE	0.030	0.030	0.030	0.030	0.030	0.030

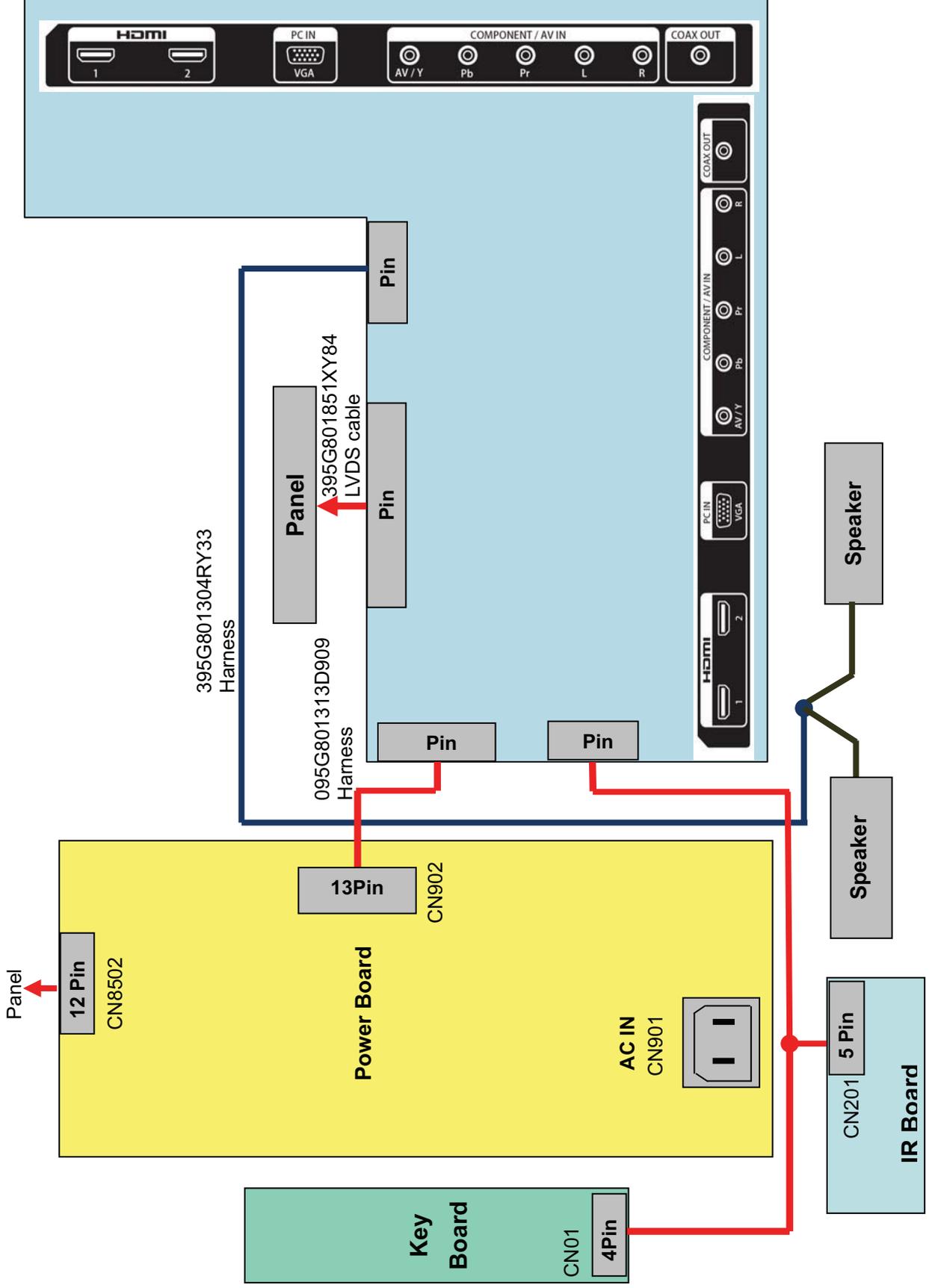
The TV's mainboard were offered by CVT, The ADC should not be adjusted.

## 7. Wiring Diagram LE32D2320





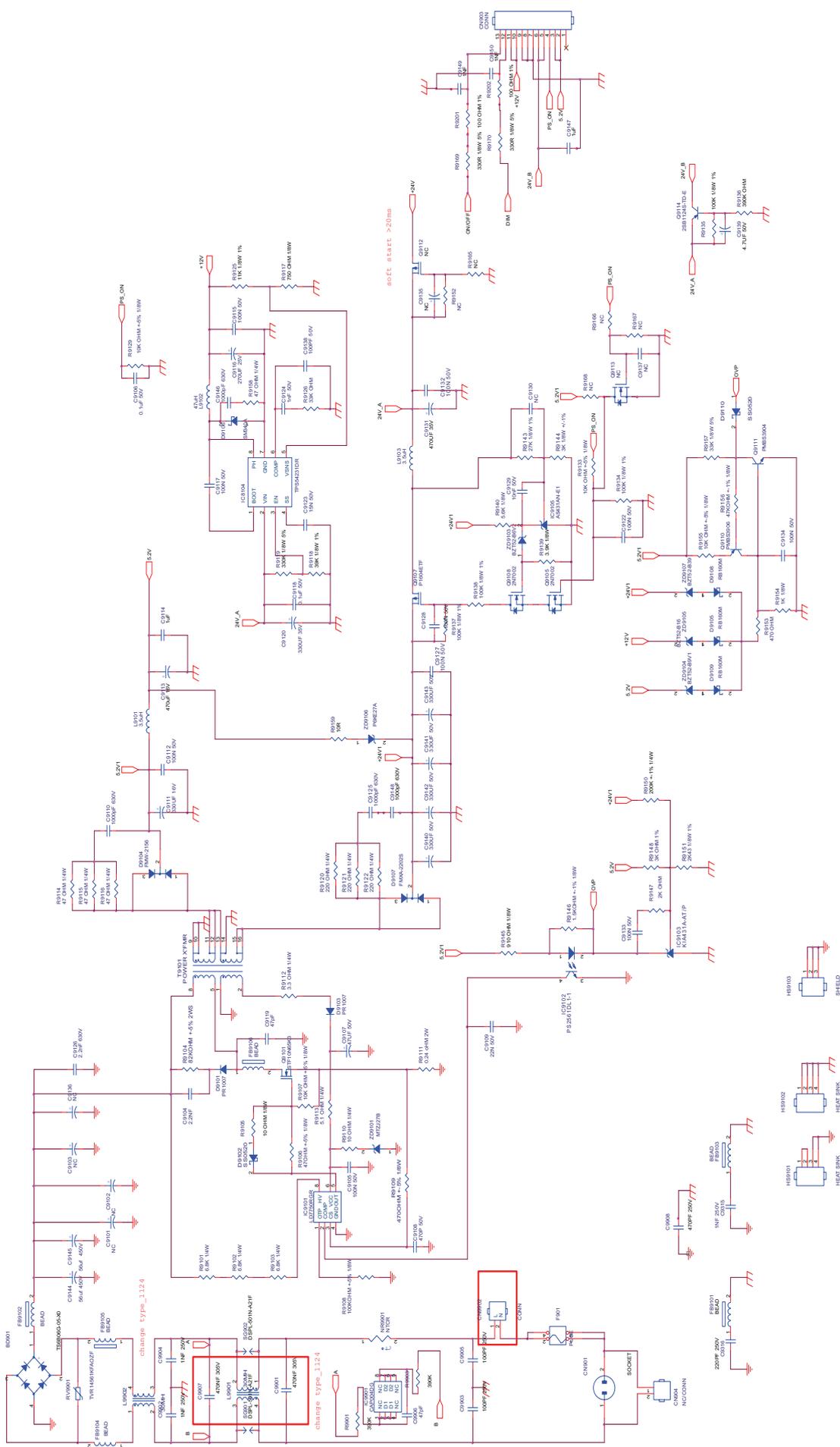




# 8. Schematic Diagram

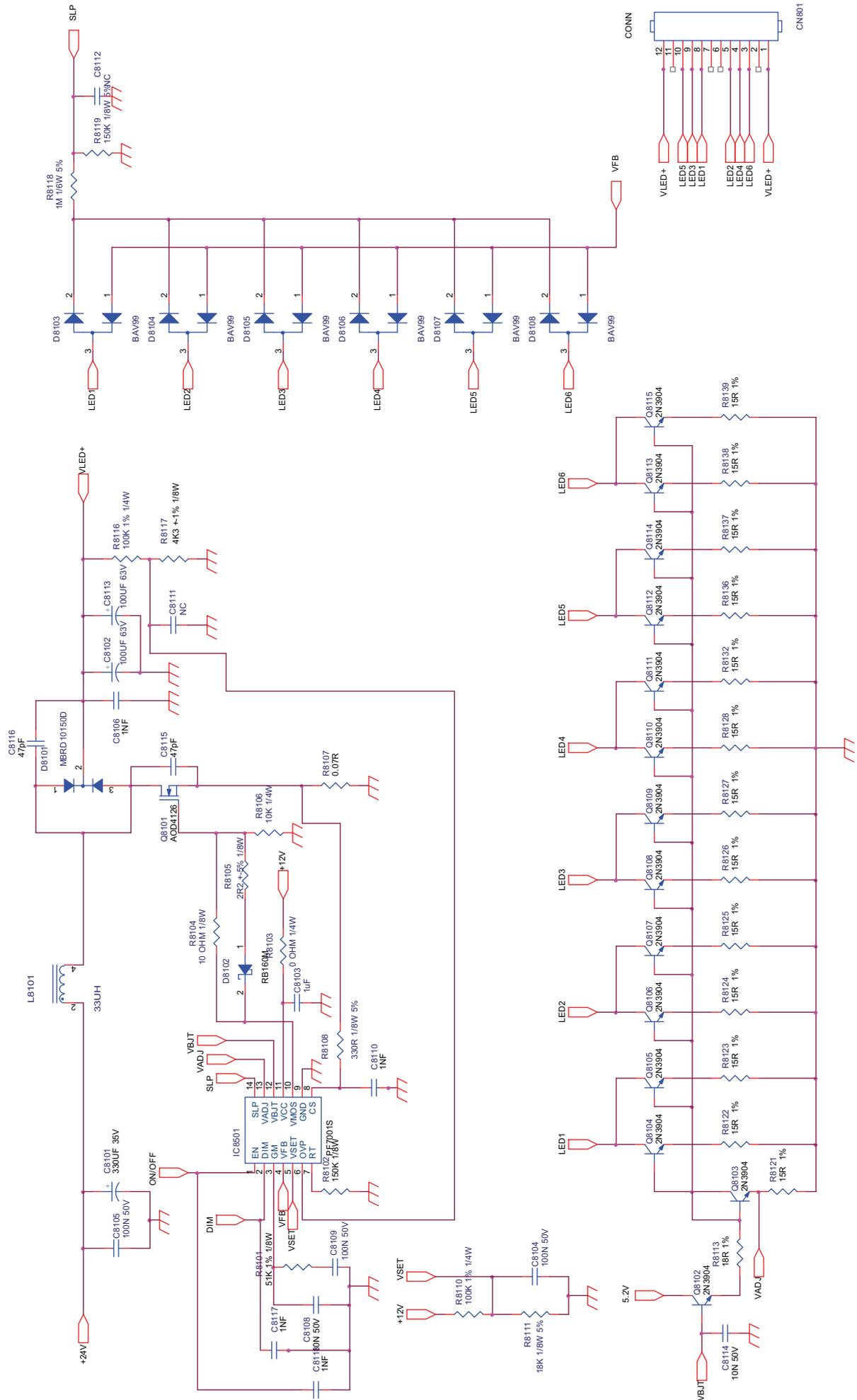
## 8.1 Power Board

### LE32D2320 715G5508P010000025



TPV (Top View)	Workbook Co. (LCL)	QRM ADDR	Size	Custom
TPV (Bottom View)		TPV ADDR	Rev	
TPV (Power)		QRM NAME	Rev	
TPV (Signal)		QRM	1 of 2	
TPV (Other)				

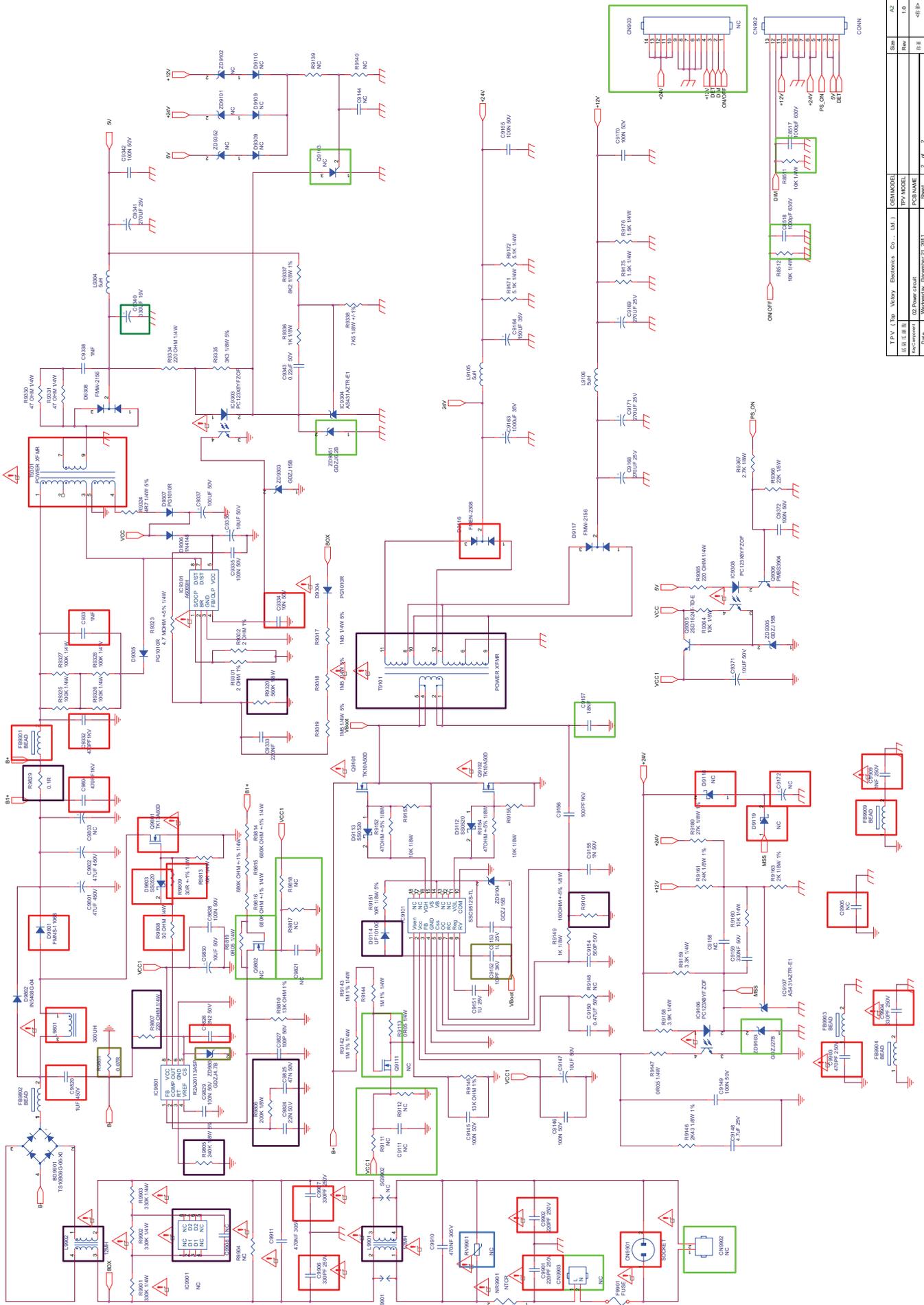




TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	Size	B
Key Component		TPV MODEL	Rev	
Date		PCB NAME	标题	
Tuesday, April 17, 2012		NEW-POA	2 of 2	







TP/V	Top	Bottom	Electronics Co., Ltd.	DEMOMODEL	Size	A2
1.0					Rev	1.0
2.0					PCB NAME	-08P>
3.0					Doc#	2 of 2
4.0					Drawn	
5.0					Wednesday, December 2, 2015	





TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	B
TPV 瓜洲廠	TPV MODEL	Rev	C
Key Component	PCB NAME	715G5246-POC-000-0030	
Date	Sheet	3 of 3	
Wednesday, February 29, 2012	PCB NAME	715G5246-POC-000-0030	
	Sheet	3 of 3	
	Date	Wednesday, February 29, 2012	
	TPV		
	TPV (Top Victory Electronics Co., Ltd.)		
	OEM MODEL		
	TPV MODEL		
	PCB NAME	715G5246-POC-000-0030	
	Sheet	3 of 3	
	Date	Wednesday, February 29, 2012	

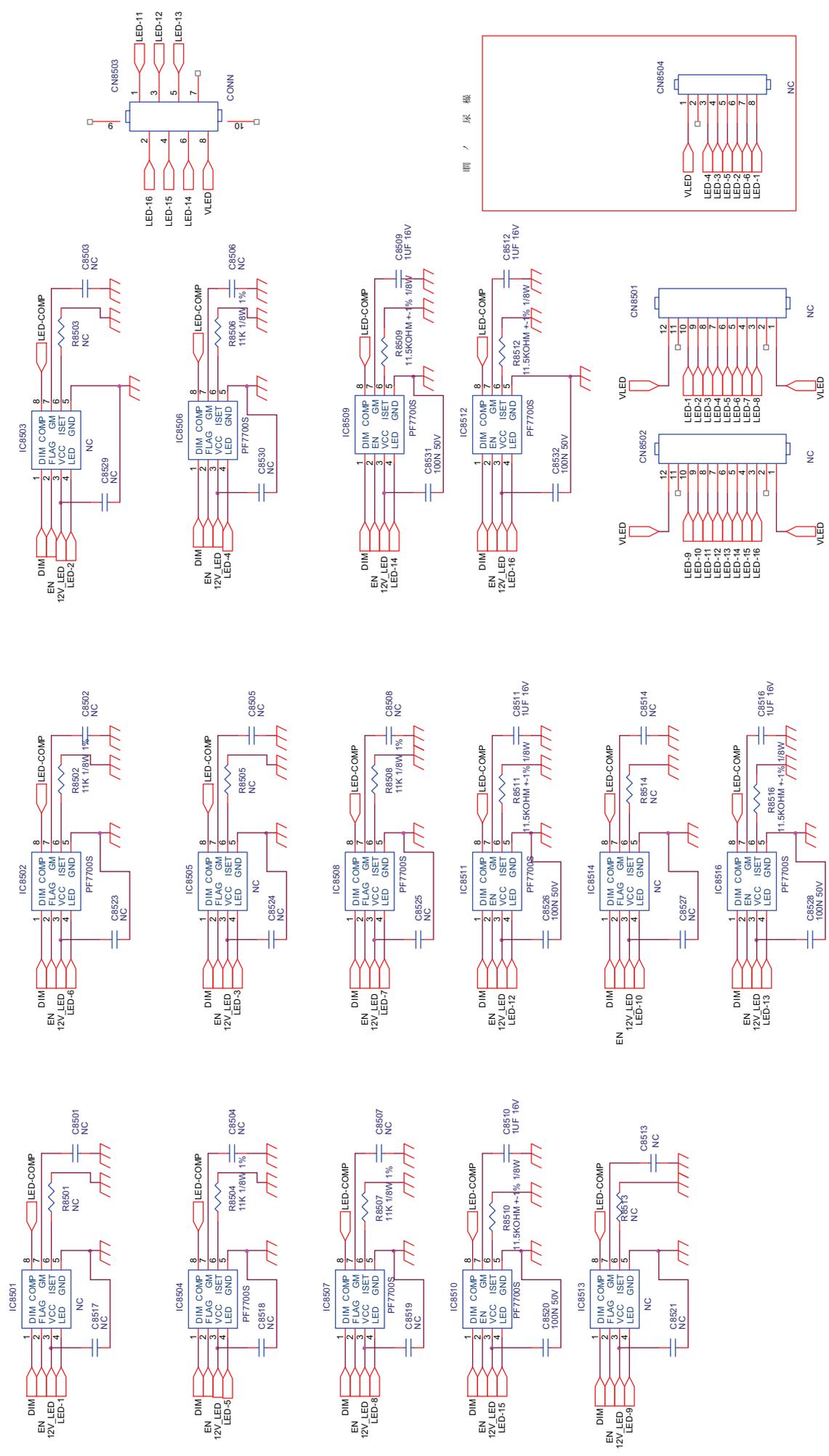
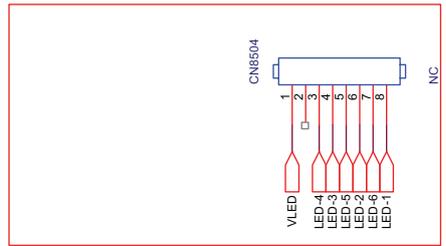
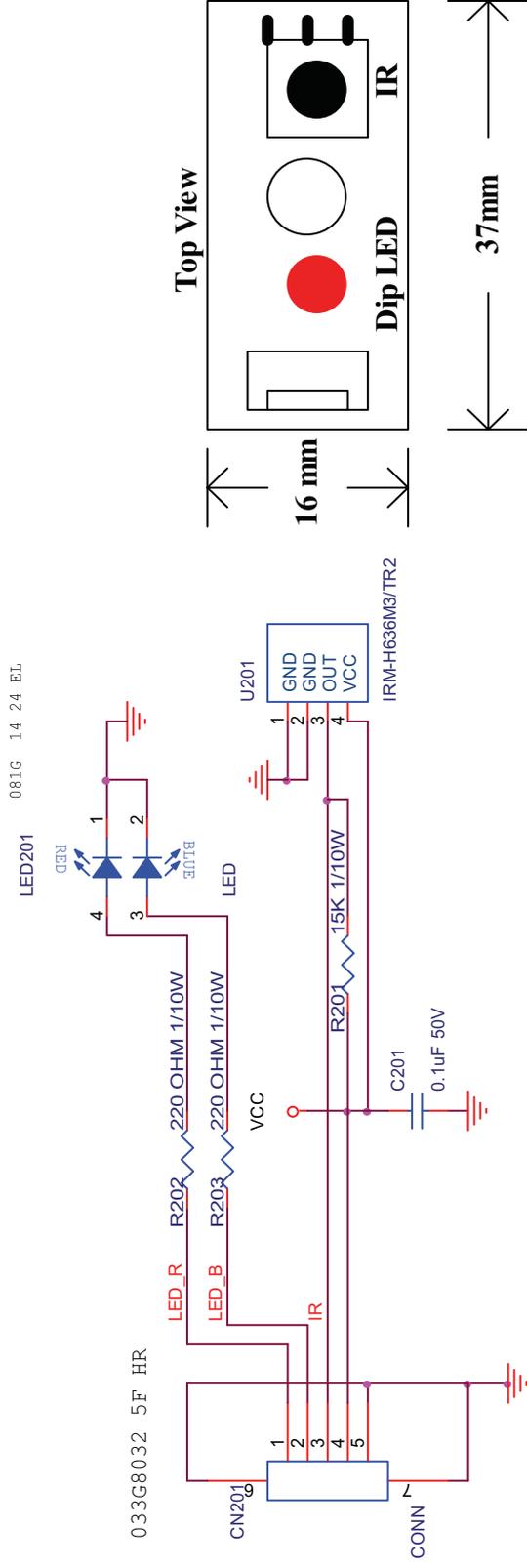


圖 / 原稿

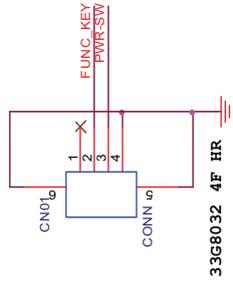
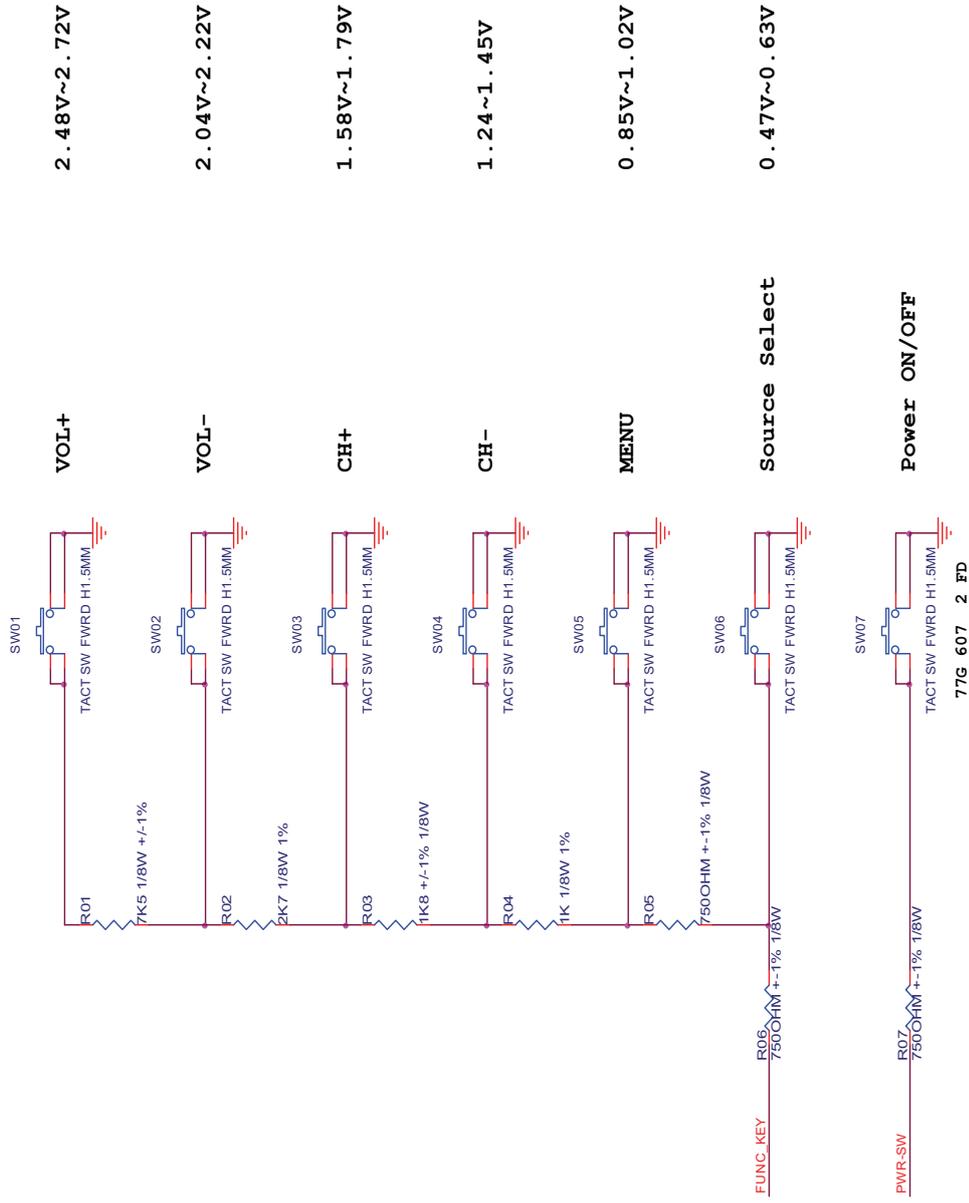


## 8.2 IR Board 715G5471R01000004B



TPV ( Top Victory Electronics Co., Ltd. )	OEM MODEL	Size	A
紙隔瓜 網腹	TPV MODEL	Rev	A
Key Component	PCB NAME	稱參	<稱參>
Date	Wednesday, January 18, 2012	Sheet	2 of 2

### 8.3 Key Board 715G5298K0100004S



TPV ( Top Victory Electronics Co., Ltd. )		OEM MODEL	Size	Custom
緯陽瓜組股		TPV MODEL	Rev	A
KeyComponent		PCB NAME	Rev	<修參>
Date		Sheet	2 of 2	
02-Keypad Friday, September 02, 2011		715GXXXX		