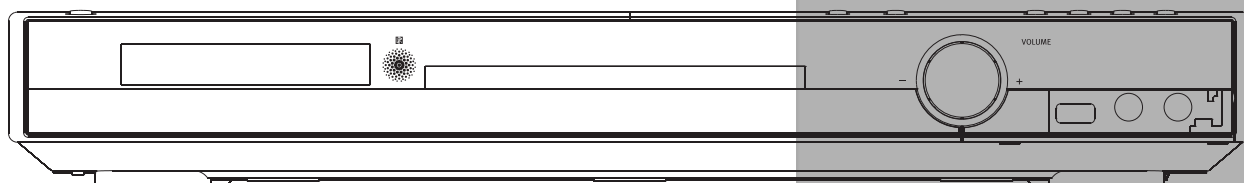


***IBB*K**

DK1515SI(RU)

Service Manual



Model Version: SI2.00/2.10

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Caution :

This Service Manual is only applicable to DK1515SI(RU) SI2.00,SI2.10.

Chapter One About Maintenance

1.1 Safety precautions

1.1.1 Power supply

When maintenance personnel are repairing DVD players, he should pay special attention to the power board with 220V AC and 330V DC which will cause hurt and damage to persons!

1.1.2 Precautions for antistatic

Movement and friction will both bring static electricity which causes serious damages to integrated IC. Though static charge is little, when a limited quantity of electric charge is added to large-scale integrated IC, as the capacitance is very small in the meantime, now the integrated IC is very much easy to be struck through by static electricity or the performance will decrease. Thus static electricity prevention is of extraordinary importance. The following are several measures to prevent static electricity:

1. Use a piece of electric conduction metal with the length of about 2 metres to insert into the earth, and Fetch the lead wire from the top of the surplus metal and connect to the required static electricity device. The length and depth of the metal embedded under the earth should be determined according to the wettability of the local soil. For humid places, it may be shorter, and longer and deeper for dry places. If possible, it can be distributed and layed in terms of “#” shape.

2. On operating table-board, the antistatic table cushion should be covered and grounded.

3. All devices and equipments should be placed on the antistatic table cushion and grounded.

4. Maintenance personnel should wear antistatic wrist ring which should be grounded.

5. Places around the operating position should also be covered with electric conduction cushion or Painted with antistatic paint.

1.1.3 Precautions for laser head

1. Do not stare at laser head directly, for laser emission will occur when laser head is working, which will Hurt your eyes!

2. Do not use wiping water or alcohol to clean laser head, and you may use cotton swab.

1.1.4 About placement position

1. Never place DVD player in positions with high temperature and humidity.
2. Avoid placing near high magnetic fields, such as loudspeaker or magnet.
3. Positions for placement should be stable and secure.

1.2 Maintenance method

1.2.1 Visualized method

Directly view whether abnormalities of collision, lack of element, joint welding, shedding welding, rosin joint, copper foil turning up, lead wire disconnection and elements burning up among pins of elements appear. Check power supply of the machine and then use hands to touch the casing of part of elements and check whether they are hot to judge the trouble spot. You should pay more attention when using this method to check in high voltage parts.

1.2.2 Electric resistance method

Set the multimeter in resistance position and test whether the numerical value of resistance of each point in the circuit has difference from the normal value to judge the trouble spot. But in the circuit the tested numerical value of resistance is not accurate, and the tested numerical value of integrated IC's pins can only be used for reference, so the elements should be broken down for test.

1.2.3 Voltage method

Voltage method is relatively convenient, quick and accurate. Set the multimeter in voltage position and test power supply voltage of the player and voltage of a certain point to judge the trouble spot according to the tested voltage variation.

1.2.4 Current method

Set the multimeter in current position and test current of the player of a certain point to judge the trouble spot. But when testing in current method, the multimeter should be series connected in the circuit, which makes this method too trivial and troublesome, so it is less frequently used in reality.

1.2.5 Cutting method

Cutting method should be combined with electric resistance method and voltage method to use. This method is mainly used in phenomena of short circuit and current leakage of the circuit. When cutting the input terminal voltage of a certain level, if voltage of the player rises again, it means that the trouble lies in this level.

1.2.6 Element substitution method

When some elements cannot be judged good or bad, substitution method may be adopted directly.

1.2.7 Comparison method

A same good PC board is usually used to test the correct voltage and waveform. Compared these data with those tested through fault PC board, the cause of troubles may be found.

Through the above maintenance method, theoretical knowledge and maintenance experience, all difficulties and troubles will be readily solved.

1.3 Required device for maintenance

- ◆ Digital oscillograph ($\geq 100\text{MHz}$)
- ◆ TV set
- ◆ SMD rework station
- ◆ Multimeter
- ◆ Soldering iron
- ◆ Pointed-nose pincers
- ◆ Cutting nippers
- ◆ Forceps
- ◆ Electric screw driver
- ◆ Terminal connecting cord
- ◆ Headphone
- ◆ Microphone

Chapter Two

Functions and Operation Instructions

2.1 Features

Compatible Disc Types:

- #Digital video playback : DVD-Video, Super VCD , VCD compatibility
- #MPEG-4 standard support: compatibility with DivX3.11, DivX Pro, XviD compressed video files
- #Digital audio playback: CD-DA and HDCD compatibility
- #Fully compatible with compressed audio files such as Mp3, WMA and OGG
- #Playback of DVD, VCD ,CD+G karaoke discs
- #Digital graphic albums playback: Kodak Picture CD, JPEG compatibility

Audio:

- #192 KHz/24 bit audio Digital/Analog converter
- #Coaxial and optical outputs for Dolby Digital/DTS/LPCM digital audio
- #Mixed audio output for amplifier or TV connection
- #Stereo signal input for external signal connection
- #Digital multi-channel decoders, providing Dolby Digital/ DTS audio stream playing
- #Built-in Dolby Pro Logic II decoder makes available to convert stereo signal into multi-channel
- #Dual-channel MIC inputs for karaoke function

Video:

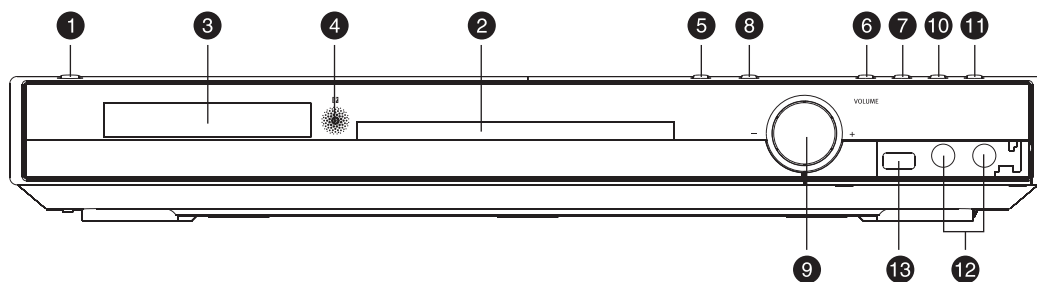
- #108 MHz/12 bit Video Digital/Analog converter
- #Progressive Scan Output(Y Pb Pr) producing flicker-free and stable images
- #Composite , component(Y Cb Cr), S-Video and RGB/SCART outputs for various types of connections
- # NTSC/PAL transcoder
- #Multiple dubbings, angles, subtitles support
- #Sharpness, gamma, brightness, contrast, hue, Saturation adjustment

Others :

- #Compatible disc types: CD-R/CD-RW, DVD-R/DVD-RW,DVD+R/DVDD+RW
- #Built-in digital FM/AM tuner with 30 radio stations memory
- #USB port, providing playback of files of supported formats from external flash-memory devices
- #KARAOKE + system, expanding karaoke function
- #Russia, CIS and Baltic States adaptation interface and filenames, ID3-tags and CD-Text support simplifies device operation
- #"Memory" function enables to save the last point after stop playback
- #"Q-Play" function provides direct playback and allows to skip commercial that is not possible to rewind
- #"Virtual Keyboard" function provides more convenient DVD playback control
- #"Browser" function provides easy access to playback control
- #Automatic screensaver function
- #Parental control function to protect children from watching inappropriate discs
- #Super wide range of operating power supplies(~110-250V, 50/60 Hz), automatic short circuit protection

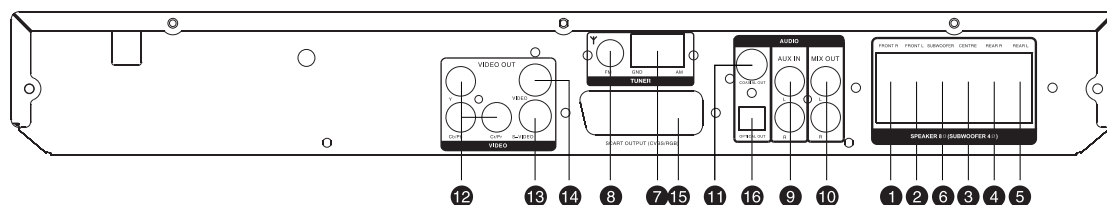
2.2 Controls and functions

2.2.1 Front panel controls



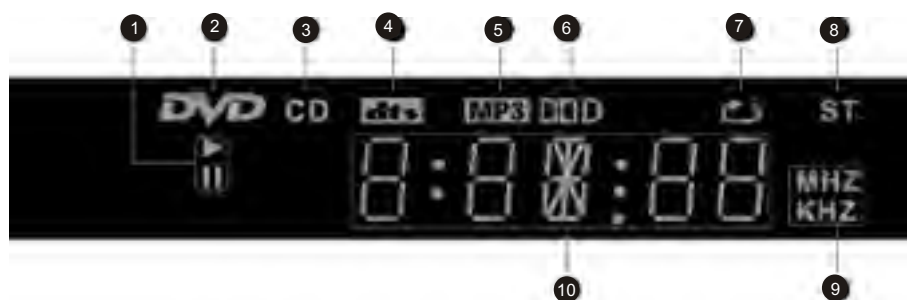
- | | |
|---|---|
| <p>1 STANDBY/POWER button
Press to switch the device on/into stanby</p> <p>2 Disc tray</p> <p>3 VFD display window</p> <p>4 Infrared sensor</p> <p>5 OPEN/CLOSE button
Press to open/close the disc tray.</p> <p>6 PLAY/PAUSE button
Press to playback pause.</p> <p>7 STOP button
Press to stop the playback.</p> | <p>8 SOURCE button
Press to switch between DVD receiver/Audio Input/Radio.</p> <p>9 VOLUME adjuster
Press to adjust volume.</p> <p>10 REW button
Press to fast reverse.</p> <p>11 FWD-button
Press to fast forward/radio station tuning.</p> <p>12 Dual-channel MIC inputs</p> <p>13 USB port</p> |
|---|---|

2.2.2 Rear panel connections



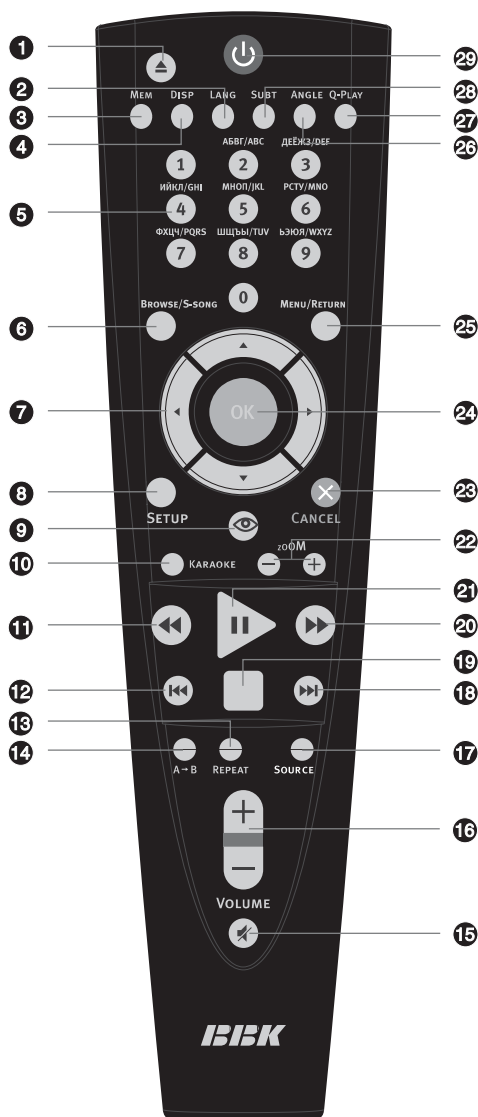
- | | |
|--|--|
| <p>1 Right front speaker input(output from the built-in amplifier)</p> <p>2 Left front speaker input(output from the built-in amplifier)</p> <p>3 Center speaker input(output from the built-in amplifier)</p> <p>4 Right Surround speaker input(output from the built-in amplifier)</p> <p>5 Left Surround speaker input(output from the built-in amplifier)</p> <p>6 Subwoofer input(output from the build-in amplifier)</p> | <p>7 AM Antenna input</p> <p>8 FM Antenna input</p> <p>9 Audio input</p> <p>10 Stereo audio output</p> <p>11 Coaxial digital audio output</p> <p>12 Component video output Y Cb(Pb)</p> <p>13 S-Video output</p> <p>14 Composite video output</p> <p>15 SCART</p> <p>16 Optical digital audio output</p> |
|--|--|

2.2.3 VFD display general view



- | | | |
|------------------|-----------------|---------------------------------------|
| 1 Playback/pause | 5 Mp3 | 9 Frequency |
| 2 DVD disc | 6 Dolby Digital | 10 Universal letter-digital indicator |
| 3 CD disc | 7 Repeat | |
| 4 DTS | 8 Stereo | |

2.2.4 Remote control general view



- 1 EJECT button
Press to open/close the disc tray.
- 2 LANG button
Press to change language.
- 3 MEM button
Press to memorize the point where playback was stopped/playback from the previously memorized point.
- 4 DISP button
Press to display the disc information.
- 5 Numeric buttons
- 6 BROWSE button
Press to turn on/off the browser function.
- 7 CURSOR buttons
- 8 SETUP button
Press to switch to setup mode.
- 9 Button
Press to turn on/off the virtual control panel.
- 10 KARAOKE button
Press to set the karaoke functions
- 11 Button
Press to start rewind/rewind scanning.
- 12 Button
Press to skip backward.
- 13 REPEAT button
Press to repeat playback.
- 14 A-B button
Press to repeat the selected portion.

- 15 Button  Press to turn on/off the sound.
- 16 VOLUME+/- button Press to adjust the volume.
- 17 SOURCE button Press to change the DVD/ USB /RADIO / AUX mode.
- 18 Button  Press to skip forward.
- 19 Button  Press to stop the playback.
- 20 Button  Press to start forward/forward scanning.
- 21 Button  Press to normal playback/pause.
- 22 ZOOM+/- button Press to zoom in/out.
- 23 CANCEL button Press to go one level back/cancel current operation.
- 24 OK button
MENU button
- 25 DVD disc menu/PBC function.
- 26 ANGEL button Press to change the camera angel/change the Mp3 and JPEG files playback mode.
- 27 Q-PLAY button Press to turn the Q-Play mode on.
- 28 SUBT button Press to change the subtitles language/change the playback mode of MP3 and JPEG files.
- 29 Button  Press to switch the device on/into standby.

2.3 Set list

DVD receiver	1PCS
Speakers	5PCS
Subwoofer	1PCS
Audio/Video Cord	1PCS
2xRCA-Mini-Jack audio cord	1PCS
Speaker cord	6PCS
FM Antenna	1PCS
AM Antenna	1PCS
Remote control	1PCS
AAA size battery	2PCS

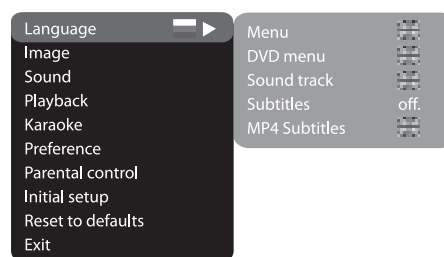
DM-998 microphone	1PCS
Microphone cable	1PCS
Karaoke disc	1PCS
Warranty card	1PCS
User manual	1PCS

2.4 FUNCTION SETTINGS

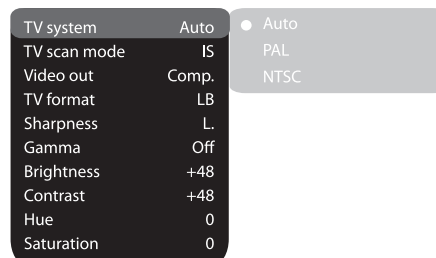
2.4.1 Function selection and change

Press the SETUP key to show the setup menu. You will see the following image on the screen, as shown on the figure:

Select the desired menu item using the UP/DOWN buttons button; press the OK key for confirmation.



- For example, if you wish to change the image settings, you have to select the Image item and press the OK or RIGHT key



- Using the UP/DOWN buttons, select the desired item and press OK or RIGHT button. For example, select the Sharpness item. Settings will appear on the screen. Then select the desired sharpness level and press OK for confirmation.
- Press LEFT for exit to previous menu level.
- Press SETUP to exit setup menu.

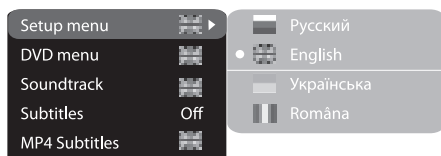


2.4.2 Language settings

1.Menu: interface language set-up

#Options: Russian, English, Ukrainian, Romanian.

#Default option: English.



2.DVD menu :selection of disc menu language

3.Sound: selection of translation language

#Disc menu/translation language options:

Russian, English, Estonian, Latvian, Kazakh, Romanian, Belarusian, Ukrainian, Chinese.

#Default menu/translation language option:

English.

#Selection of other languages: select the OTHERS item using the wheel and press OK. Enter the language code using the numeric buttons and press OK.

#If the language you selected is not recorded on the DVD disc, another available language will be used.

4.5.Subtitles DVD/MP4 : selection of subtitles language

#Options: Off, Russian, English, Estonian, Latvian, Kazakh, Romanian, Belarusian, Ukrainian and Chinese.

#Default option: Off.

#Selection of other languages: select the OTHERS item using the wheel and press OK. Enter the language code using numeric buttons and press OK.

If the language you selected is not recorded on the DVD/MP4 disc, another available language will be displayed.

2.4.3 Image settings menu

1.TV system: TV system selection

#Options: Auto, PAL, NTSC.

#Default option: Auto

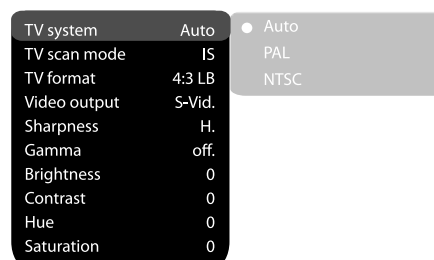
2.TV scan mode: scan mode selection

#Options: progressive, interlaced.

#Default option: interlaced.

#Progressive scan is transferred only via a component video output.

#Before switching to progressive scan, make sure that your TV set supports this operation mode.



3.TV Format: image ratio settings

#Options: 4:3 pan&scan, 4:3 letterbox and 16:9 TV.

#Default option: 4:3 pan&scan

#Some discs are recorded with support of only one ratio. The selected ratio must comply with the TV screen.

4.Video output: selection of video signal

#Options: S-Video, Comp, RGB.

#Default option: Comp.

5.Sharpness: image sharpness adjustment

#Options: High, Medium, Low.

#Default option: Low.

6.Gamma: adjustment of image color temperature

#Options: High, Medium, Low, Off.

#Default option: Off.

7.Brightness: adjustment of image brightness.

8.Contrast: adjustment of image contrast

9. Hues: adjustment of image hues.

10.Saturation: adjustment of image saturation

Adjustment of image brightness, contrast, hues and saturation:

#Select the desired item of the image adjustment section using the UP/DOWN buttons. Press OK or RIGHT key to start adjusting the relevant option.

#Change the option value using the wheel.

#Upon completion press the LEFT button of the UP/DOWN buttons to return to image setup menu.

2.4.4 Sound settings menu

1. Mixer

A)Configuration: setting of the mode for conversion of the 5-channel signal to stereo signal

#Options: Stereo

#Default option: Stereo.

#5.1 mode must be supported by the disc

Number of music accompaniment channels depends on the specific disc.

#Adjustment of the central speaker and surround speakers is available only if the Configuration option is set to 5.1 position.



B).Stereo mix: playback set-up while playing the disc with two independent audio channels.

#Options: L+R, L, R.

#Default option: L+R.

C) Surr. Mix: set-up of surround options while playing the stereo disc.

#Options: Off, sum, L+R, Virt. Surr.

#Default options: sum, L+R.

D).Low band: distribution of low frequencies through channels.

#Options: Front F, Center C, Surround Sr, Subwoofer SW.

#Default options: Front F, Subwoofer SW.

If you want the low-frequency component of the sound signal enter only the subwoofer channel, select and confirm the parameter Subwoofer SW.

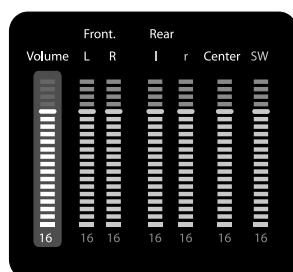


E)Channel settings: separate adjusting of volume by channels.

#Select the channel you want to adjust using the cursor buttons.

#Adjust the sound volume of each channel using the cursor buttons.

#Press the OK key to return to sound settings menu.

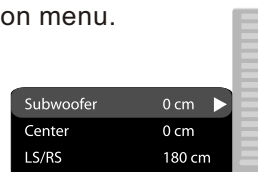


F)Delay of the channel: set-up signal delay in speaker channels(central, rear and subwoofer).

#Using the button of the cursor buttons, select the channel, for which you want to set up the delay, and press OK for confirmation.

#Using the cursor buttons set up the desired distance from the listener to each speaker(detailed description of this operation see on page36).

#Press the LEFT button to return to speaker configuration menu.



g). PRO Logic II: function of stereo sound conversion to 5-channels sound.

#Options: On, Off, Auto.

#Default option: Auto.

In Auto position, the DVD receiver determines itself, when to use the PRO Logic II decoder. Some discs do not support this function.

2.Digital audio output

A)SPDIF format: set-up of digital audio output options.

#Options: RAW, PCM.

#Default option: RAW.

#When you select the RAW option, the not decoded signal is transferred to the DVD receiver's digital outputs, the decoded signal is transferred to analog outputs. Decoding is performed by the built-in decoder of the DVD receiver.

This feature is meant to ensure that signal decoding at digital outputs is performed by an external device (e.g.an amplifier).

If you select the PCM option, a PCM coded signal will be transferred to the DVD receiver's digital outputs.

B)LPCM: set-up of digital audio output options to comply with different amplifiers and receivers.

#Options: 48 kHz 16 bit,96 kHz 24 bit.

#Default option: 48 kHz 16 bit.

3.Sound correction

A) Max volume: max volume limiting

#Using the cursor buttons, adjust the max volume level.

#Press the LEFT key to return to sound correction set-up menu.

B) Equalizer: equalizer modes

#Options: Off, rock, pop, live sound, dance music, techno, classics, soft sound.

#Default option: Off.

C)Echo: echo effects

#Options: Off, concert, living room, hall, bathroom, cave, arena, cathedral.

#Default option: Off.

D)Tone balance: adjustment of tone balance level.
 #Adjust the tone balance level using the cursor buttons.
 #Press the LEFT button to return to sound correction set-up menu.

2.4.5 Playback settings

1.DVD

Advertisement skip: skip the unskippable block while playing a DVD disc
 #Options: Yes, NO
 #Default option: NO



2. VCD/SVCD

PBS menu: PBC menu on/off
 #Options: On, Off.
 #Default option: On.
 # If on option is set, while reproducing discs, a menu will appear, in which you can select the order of playing the disc content. If the off option is set, the reproducing of content is performed in the order, in which it is recorded on the disc.

3. Files: selection fo reproduced files on the disc.
 #Options: Audio, Pictures, Video
 #Default option: A. P. V

4.Repeat: file repeat mode
 #Options: Off, Single, All.
 #Default option: Off.

5.Load effect: type of transition from one JPEG file to another
 #Options: Off, from top, from bottom
 #Default option: Off.

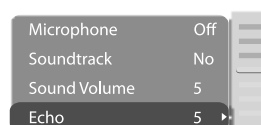
2.4.6 Karaoke settings menu

1.Microphone: microphone on/off
 #Options: Off, On.
 #Default option: Off.
 2.soundtrack: karaoke-disc playback mode
 #Options: Channels L, Channels R, No ast, No voc.
 #Default option: Without solo.



3. Sound Volume:

Microphone: microphone sound volume level
 #Using the wheel adjust the microphone volume level.
 #Press LEFT button to return to karaoke settings menu.
 4. Echo: echo level while playing the karaoke-disc
 #Adjust the echo level Using the cursor buttons.
 #Press LEFT button to return to karaoke settings menu.



2.4.7 Preference settings

1. Equalizer: spectrum analyzer

#Options: On, Off.
 #Default option: Off.

2.Screensaver: screen saver on/off

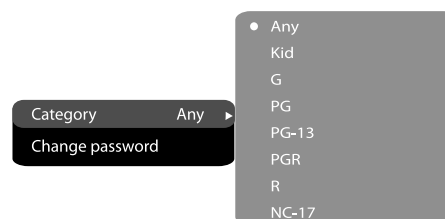
#Options: On, Off.
 #Default option: Off.



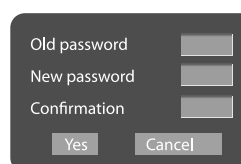
2.4.8 Family filter settings

1.Category: set-up of age restrictions to prevent children from seeing undesirable discs.

#Options: Any, Kid, G, PG, PG-13, PGR, R, NC-17.
 #Default option: Any.



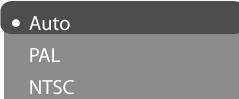
2.Change password: set-up of a four-digit password to change the level of age restrictions.
 #Default option: 7890.



2.4.9 Initial setup menu

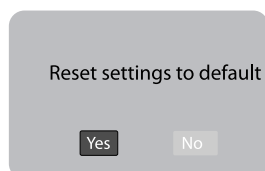
#Press the RIGHT key to enter the initial settings menu, then select the desired item using the cursor buttons and press OK key for confirmation.

#While being in this menu section, you cannot return to the previous level by pressing the LEFT key .



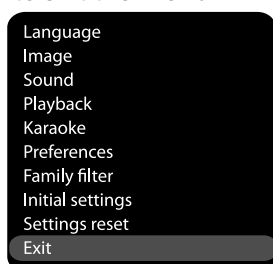
2.4.10 Reset to default

#Resetting all settings and restoring default options, except age restrictions level and password.



2.4.11 Exit settings menu

#Select the exit item using the Jog Dial and press the OK to exit the menu.



2.4.12 Channel delay set-up

Set-up of time delay in the surround channel

Usually, time delay in the Dolby Digital decoding system is preset to ensure best effect while installing the Home Theater. However, in case you wish to adjust your system more precisely, please consult instructions given in this manual. Set up of time delay for this device is possible in both Dolby Digital and Dolby Pro Logic modes.

To set the desired delay you have to know the distance from the place where you are, to the front speakers and Surround speakers as shown in Fig.1. Consult Fig.2(Dolby Pro Logic mode) and 3 (Dolby Digital mode) in order to determine the distance to Surround speakers(axis Y in the figure) and the distance to the front speakers(axis X in the figure). Crossing point of those two lines on the chart will give the recommended delay value.

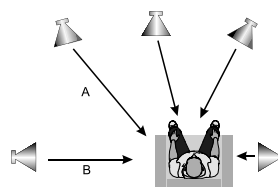


Fig.1. Take into account the A-B distance; use both figures for setting the desired time delay.

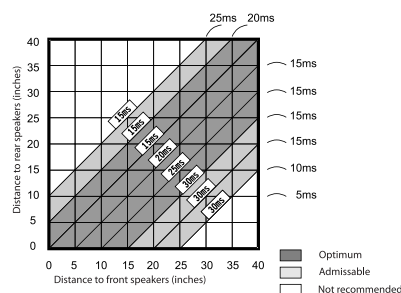


Fig.2. Determine delay value as to Dolby Pro Logic mode.

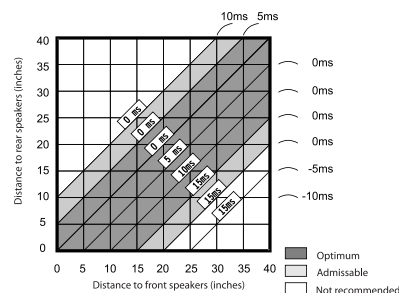


Fig.3. Determine delay value as to Dolby Digital mode.

Set-up of time delay in the central channel

Sometimes several people are listening to the music, and the space is limited. In this case, you can install three speakers(two front ones and a central one)as shown in Fig.1. With the distance to the listener being approximately the same. The central channel delay is to be set at"0".

Should the central speaker be in close proximity to left and right front speakers as shown in Fig.2, or the central speaker be nearer to listeners when compared with front speaker's location, or the central speaker be nearer to the listener by 1 foot, in all these cases you may set the delay value for the central channel at1 ms.

For instance, as shown in Fig.2, if the line C is by 1foot shorter than the lines R and L, the delay value is to be set at1 ms, If your sofa is broad enough, and there are several listeners sitting on it, it makes sense to locate the speakers in one line, as shown in Fig.3 with the delay value of the central channel to be set at"0".

Finally, if it will be necessary to install the central speaker behind the left and right front speakers, the delay value shall be set at “0”.

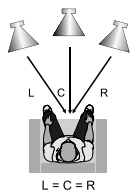


Fig.1. Delay of central channel=0
 $L=R=C$

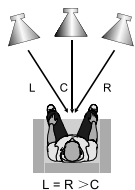


Fig.2. Small area
Delay of central channel
 $=L(\text{or } R)-C$

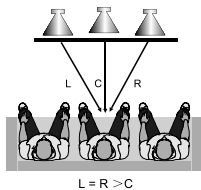
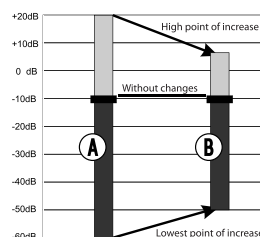


Fig.3. Small area
Delay of central channel=0
 $L = R > C$

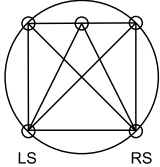
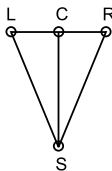
“Night” mode

The Dolby Digital system provides an extremely broad dynamic range of playback sound-from gentle to roaring. It creates the presence effect, especially while seeing motion pictures. However, at night a powerful sound with a broad dynamic range may give pleasure to you, but disturb and annoy your family and neighbors, if you just decrease the volume,

you will immediately notice that you ceased to hear, e.g, dialogues as clear as you do at normal volume, and such sound effects as rustle, whisper etc. Have merely disappeared. To avoid this, you just have to decrease the volume of “loud” sounds by simultaneously increasing the volume of “soft” sounds with the volume of “average” sounds left unchanged, i.e. just decrease the dynamic range of sound accompaniment. Only Dolby Digital system provides for such a method of sound control. It uses the principle of compressing the acoustic signal's dynamic range while recording; therefore, while playing an inverse transformation (volume expansion) takes place, This is called “night” mode. The regulation limits are restricted, however, to avoid distortions of resultant signal.



Principle of compressing the acoustic signal's dynamic range.

	Dolby Digital	Dolby Pro Logic surround
Rear channel	Stereo 20 Hz-20 kHz	Mono channel with limited frequency range(100Hz-7 kHz)
Low-frequency channel(subwoofer)	Available,20-120 Hz	N/a
Sound field distribution	Multivariate 	From left to right , from right to left, from front to rear, from rear to front 
Channels	6 independent channels, each reproducing its own signal at a time	4 segmented channels. Only one channel is decoded at a time.
Miscellaneous	Creates an optimum sound field with illusion of an equal distance from listener to each speaker.	The most cost-efficient way to ensure high-quality surround effect.

Miscellaneous	Allows adjusting the decompression degree of sound information("night" mode).	Surround sound may be received from any signal source.
	Possibility of programmable control of the decoder to transfer basses into low-frequency channel in systems equipped with broad-band speakers and a subwoofer.	Compatible with existing and future two-channel(stereo) formats.
	Undoubted progress in sound recording technology, especially important for program directors, film directors, sound engineers and actors.	Big progress in comparison with conventional stereo, the world's most popular surround format.

2.5 MISCELLANEOUS

2.5.1 Useful notes

- #To extend the service life of your DVD-receiver make pauses of not less than 30 seconds between switching off and repeatedly switching on the DVD receiver.
- #Disconnect the DVD-receiver from the wall outlet after shutdown.
- #Some DVD receiver's functions may not be applied to some discs.
- #Use supply sources of rated voltage, otherwise the DVD receiver may not function or be damaged.
- #In case of the DVD-receiver's occasional stops, please switch the power supply off and then on again.

Please check probable causes of malfunction before addressing the service center.

Sign of trouble	Cause of trouble	Actions to eliminate the trouble
No sound	1.Poor audio cable connection 2.Disc dirty or damaged. 3.Sound disabled by the MUTE button.	1.Make proper connection. 2.Clean the disc. 3. Press the MUTE button.
No image	1.Poor video cable connection. 2.Incorrect settings of your TV set. 3.The DVD receiver's is in the progressive scan mode while your TV set does not support this mode.	1.Make proper connection. 2.Correct the settings of your TV set. 3.Place the DVD receiver in the interlaced scan mode through the DVD-receiver's menu.
Black and white image	1.Incorrect TV color system selected. 2.Color level on the TV set adjusted incorrectly.	1.Set the appropriate color system via the menu: SETUP>Image>TV scan. 2.Readjust the color system of your TV set.
Discs cannot be read	1.Disc not inserted. 2.Disc inserted incorrectly. 3. Condensate on the DVD receiver's laser head.	1. Insert the disc. 2.Install the disc with the label side facing up. 3. Switch the DVD receiver on without disc for an hour.
Microphone does not operate	1.Microphone is unplugged. 2. Low level of the microphone's sound volume.	1. Connect the microphone. 2. Adjust the level of the microphone's sound volume.

Remote control does not operate	1.Remote control is incorrectly directed at the DVD players's screen. 2.Distance to the DVD receiver is in excess of 8 meters. 3. Run out batteries.	1.Use the remote control according to the manual. 2. Decrease the distance to the DVD receiver. 3. Replace both batteries.
Some functions do not work	1. Disc is recorded incorrectly. 2.Incorrect key sequence. 3.Static voltage on the DVD receiver's housing.	1.Wait 5-10 seconds and the DVD receiver will automatically return to normal state. 2. Repeat the operation one more time. 3.Switch the DVD receiver off for 1-2 minutes and then switch it on again.

Chapter Three Block Diagram

3.1 OVERALL WIRING DIAGRAM FOR PLAYER

Overall wiring diagram of DK1515SI(RU)player is shown in figure3.1.1

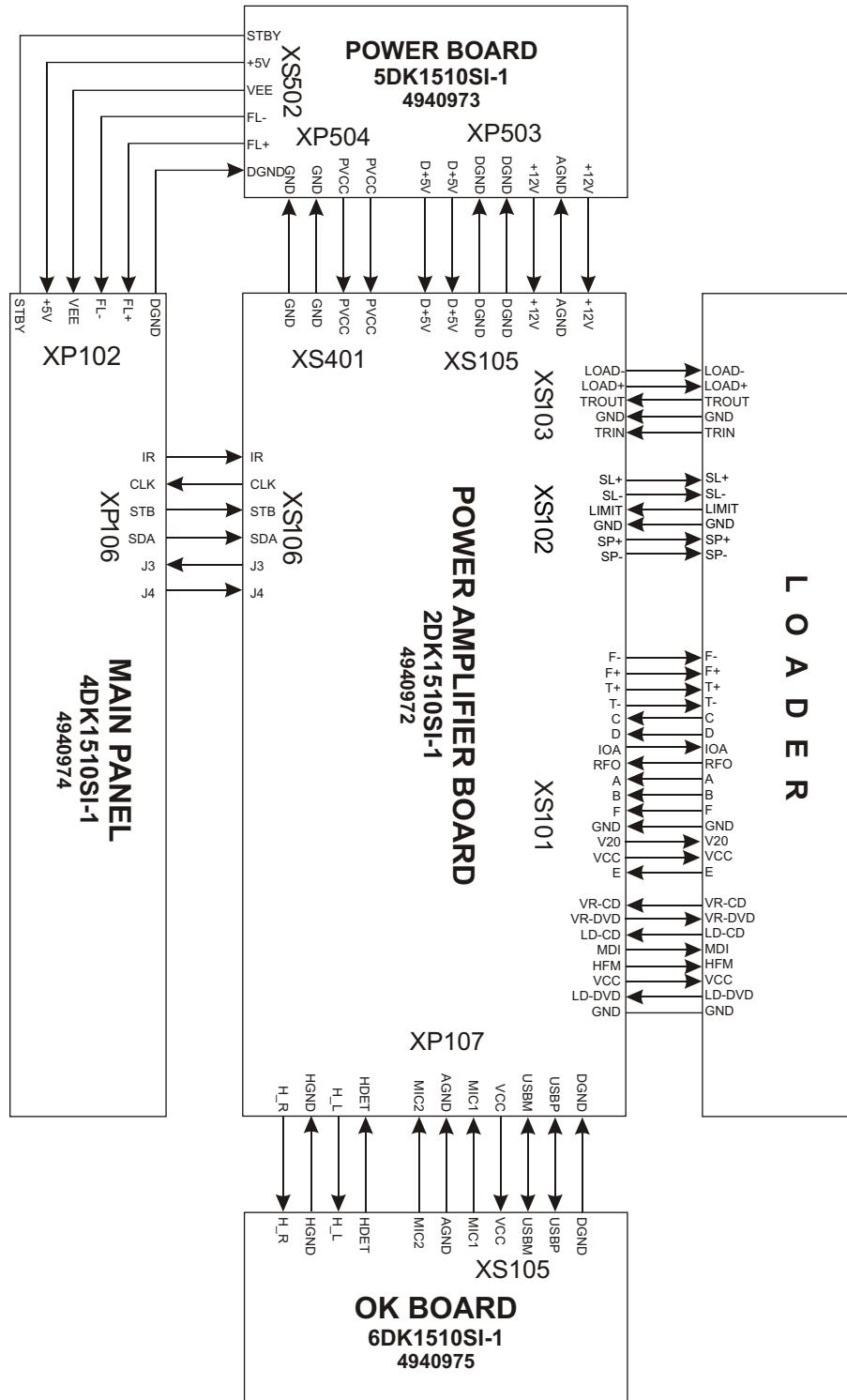


Figure3.1.1 Overall Wiring Diagram of DK1515SI(RU)

3.2 BLOCK DIAGRAM FOR PLAYER

Block diagram for DK1515SI(RU)player is shown in figure 3.2.1

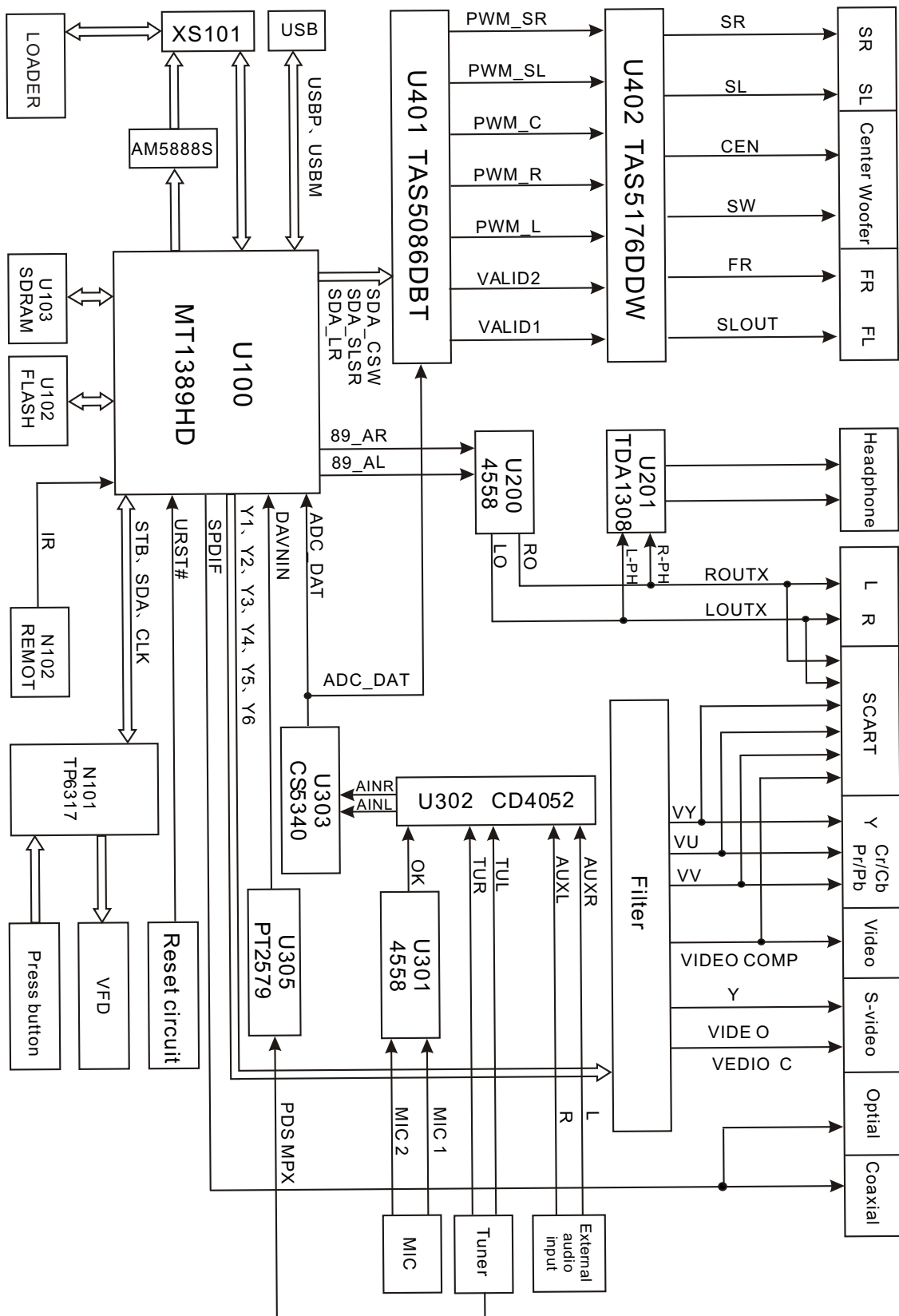


Figure 3.2.1 Block diagram of player

Chapter Four

Block Diagram of Unit Circuit

4.1 Servo circuit

Servo system of this machine adopts SONY loader and MTK decode scheme. And servo circuit is mainly composed of front signal processing, digital servo processing, digital signal processing chip MT1389 and driving chip AM5888. Mt1389 is also main part of decode circuit. Block diagram of servo circuit is shown in figure 4.1.1:

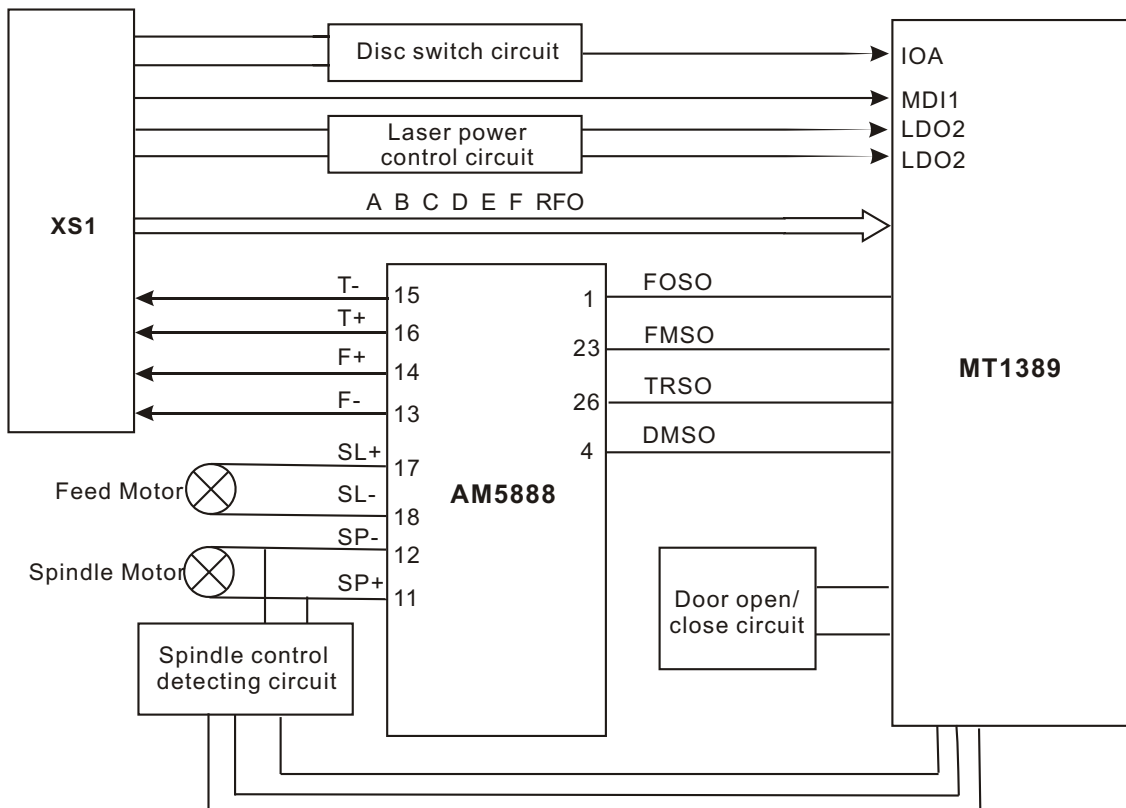


Figure 4.1.1 Block diagram of servo circuit

4.2 Decode Circuit

Decode circuit is mainly composed of MT1389, SDRAM and FLASH. Block diagram of circuit is shown in figure 4.2.1.

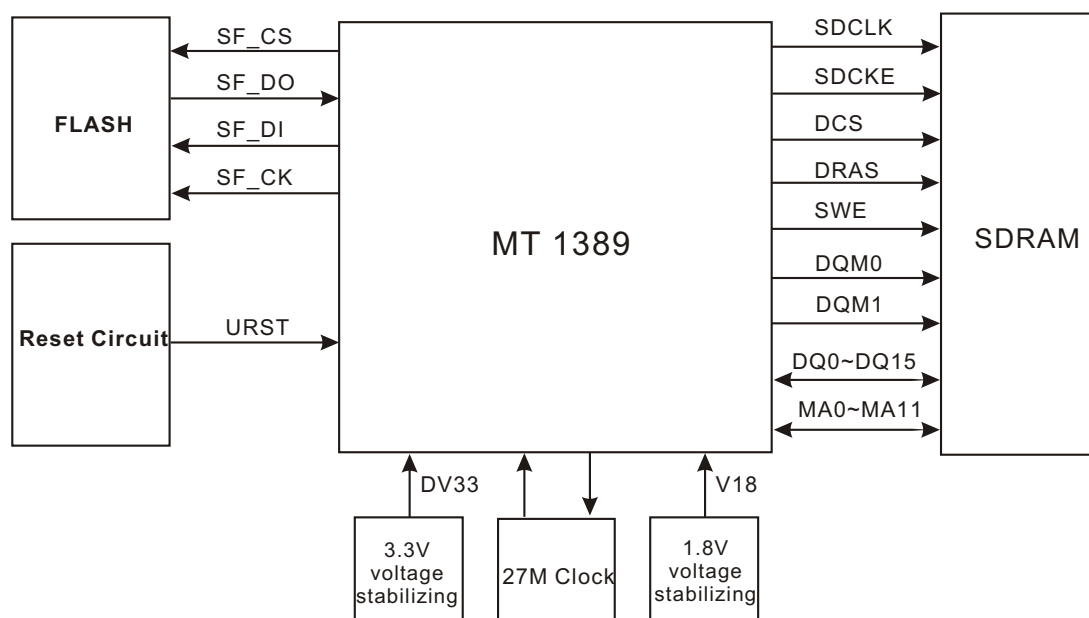


Figure 4.2.1 Block diagram of decode circuit

4.3 Video circuit

Video circuit block diagram is shown as the following figure 4.3.1:

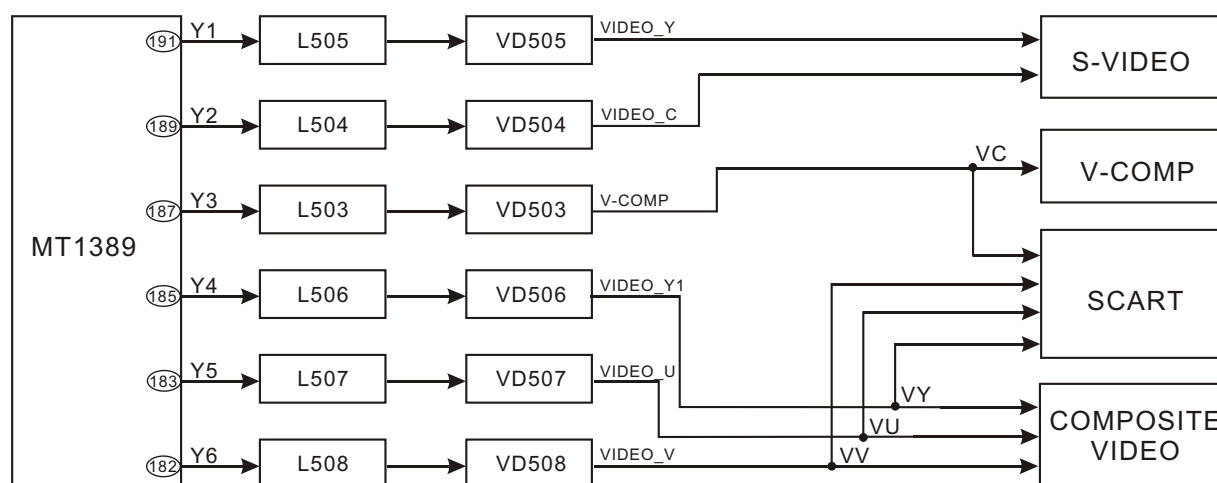


Figure 4.3.1 Video circuit block diagram

4.4 Audio power amplifying circuit block diagram

Audio power amplifying circuit block diagram is shown as the following figure 4.4.1:

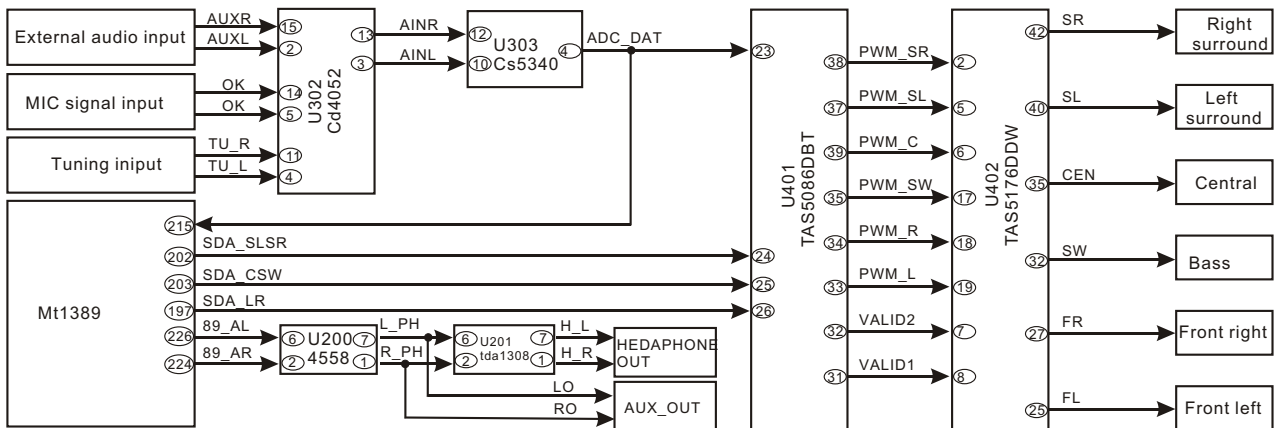


Figure 4.4.1 Audio power amplifying circuit block diagram

4.5 Power supply circuit

Power supply circuit block diagram is shown as the following figure 4.5.1:

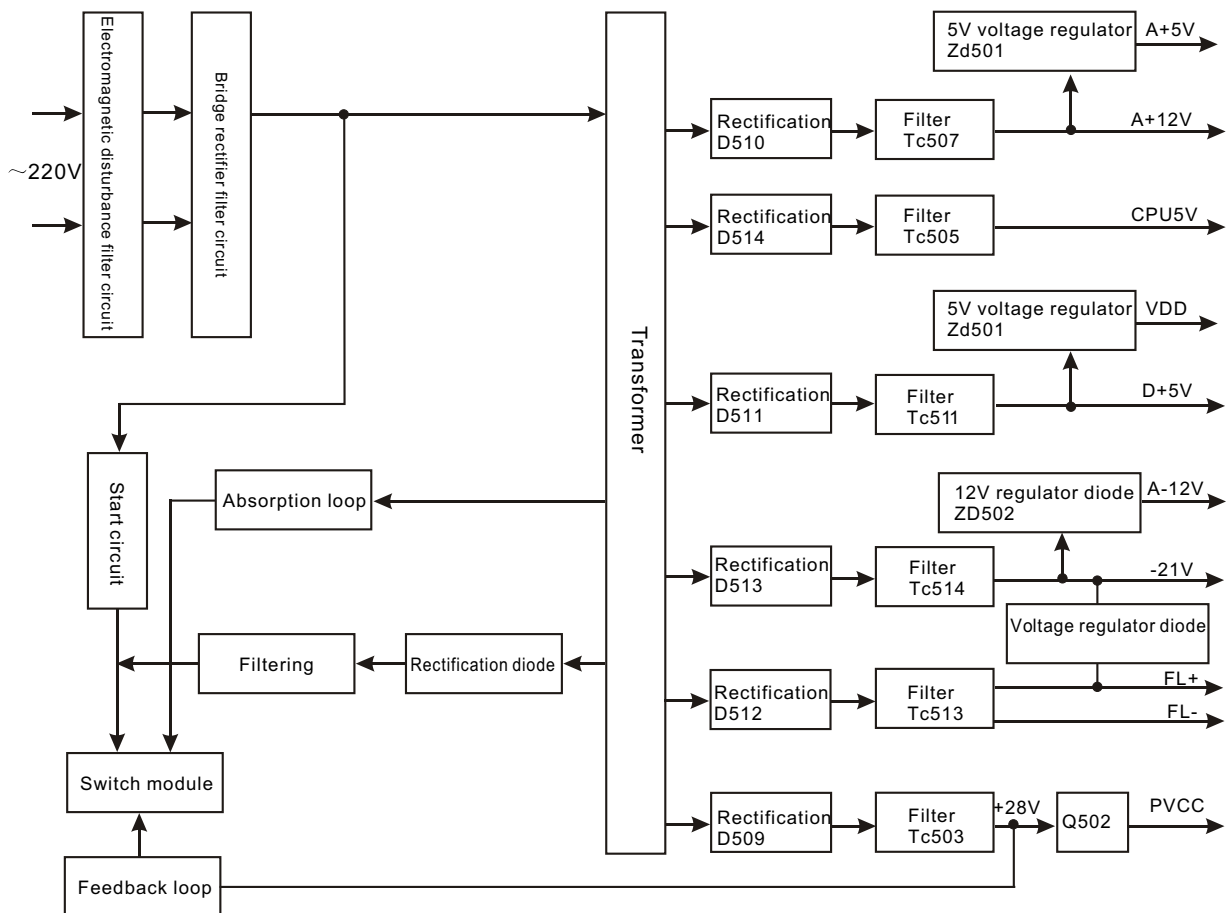
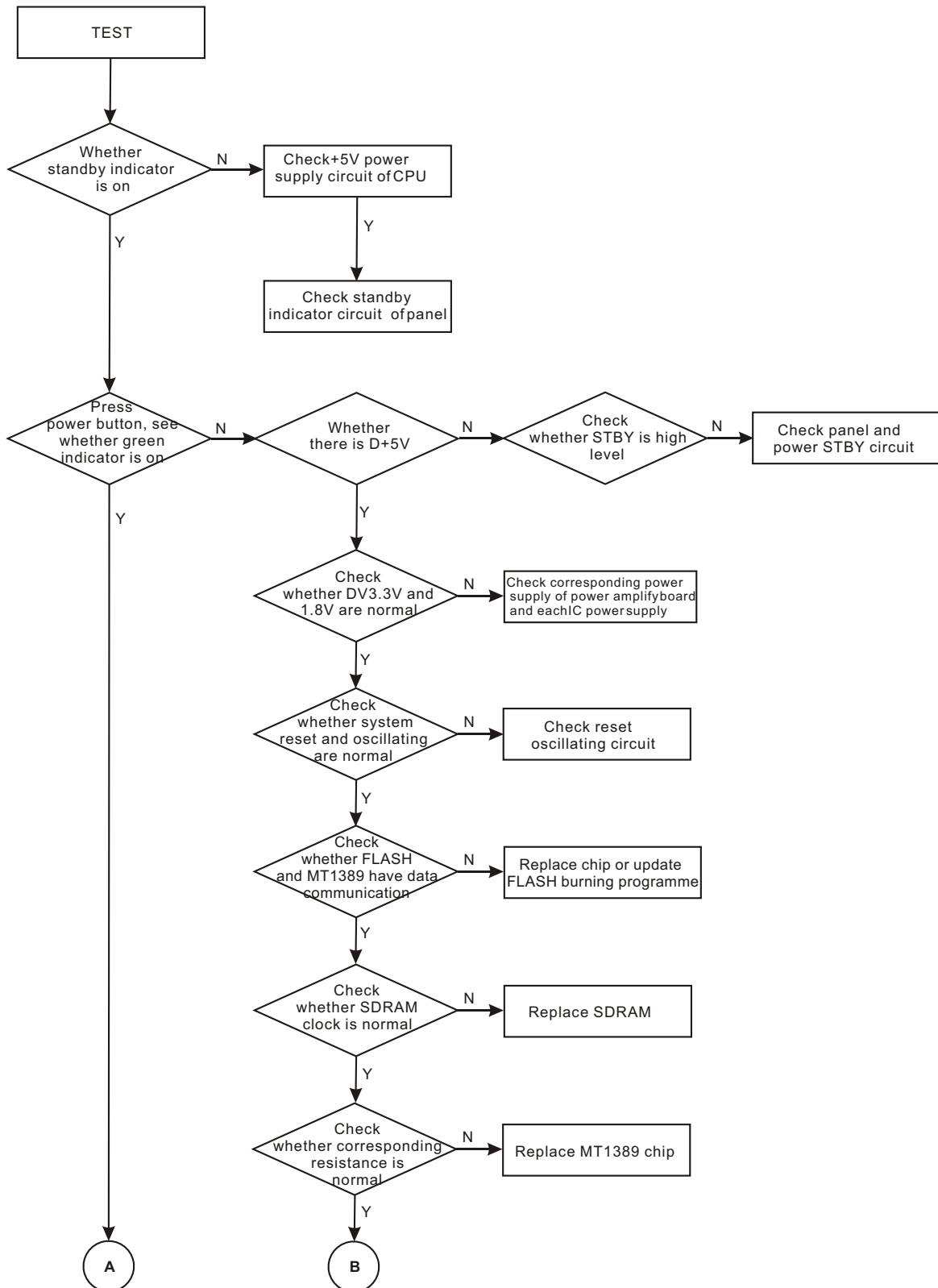
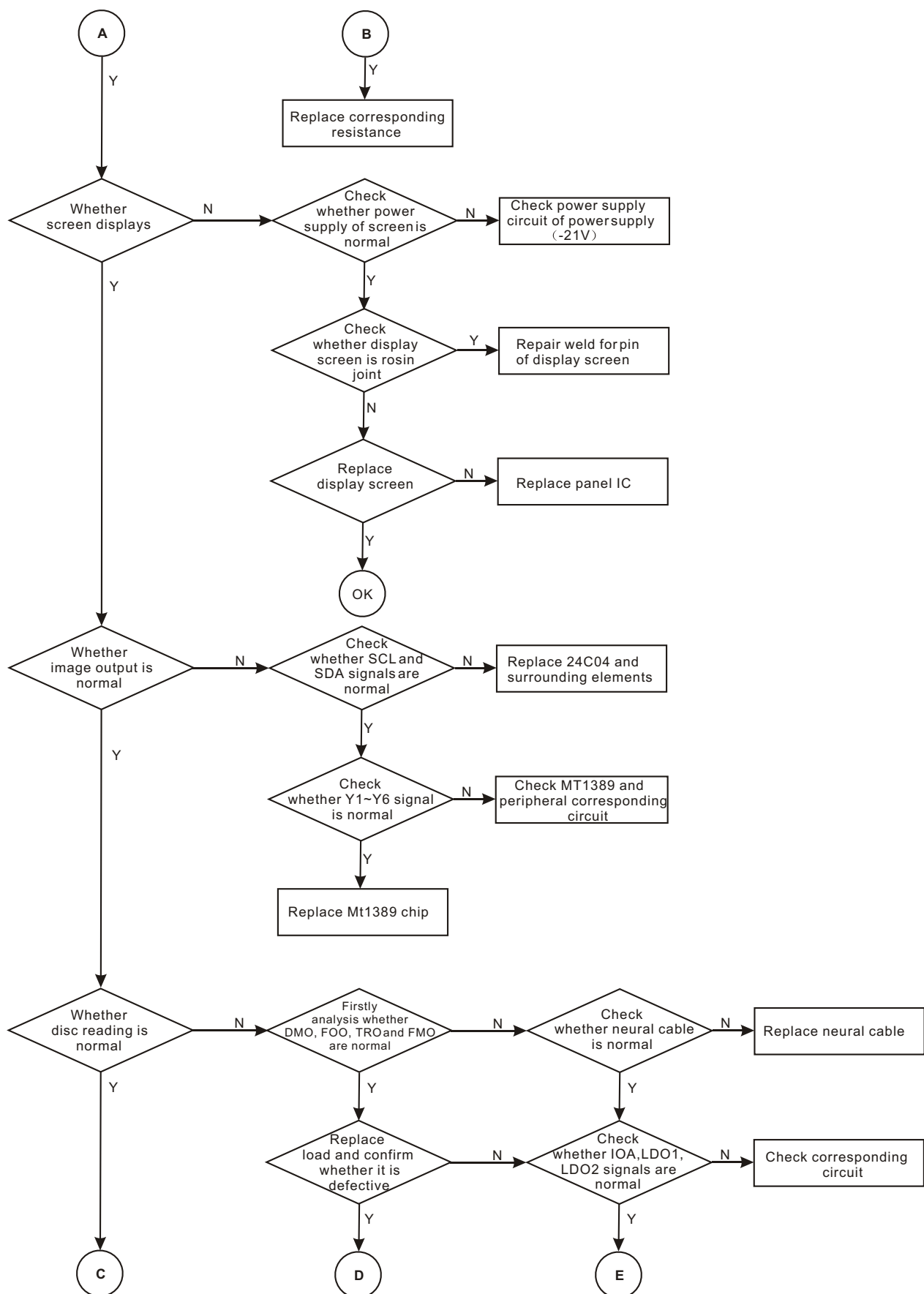
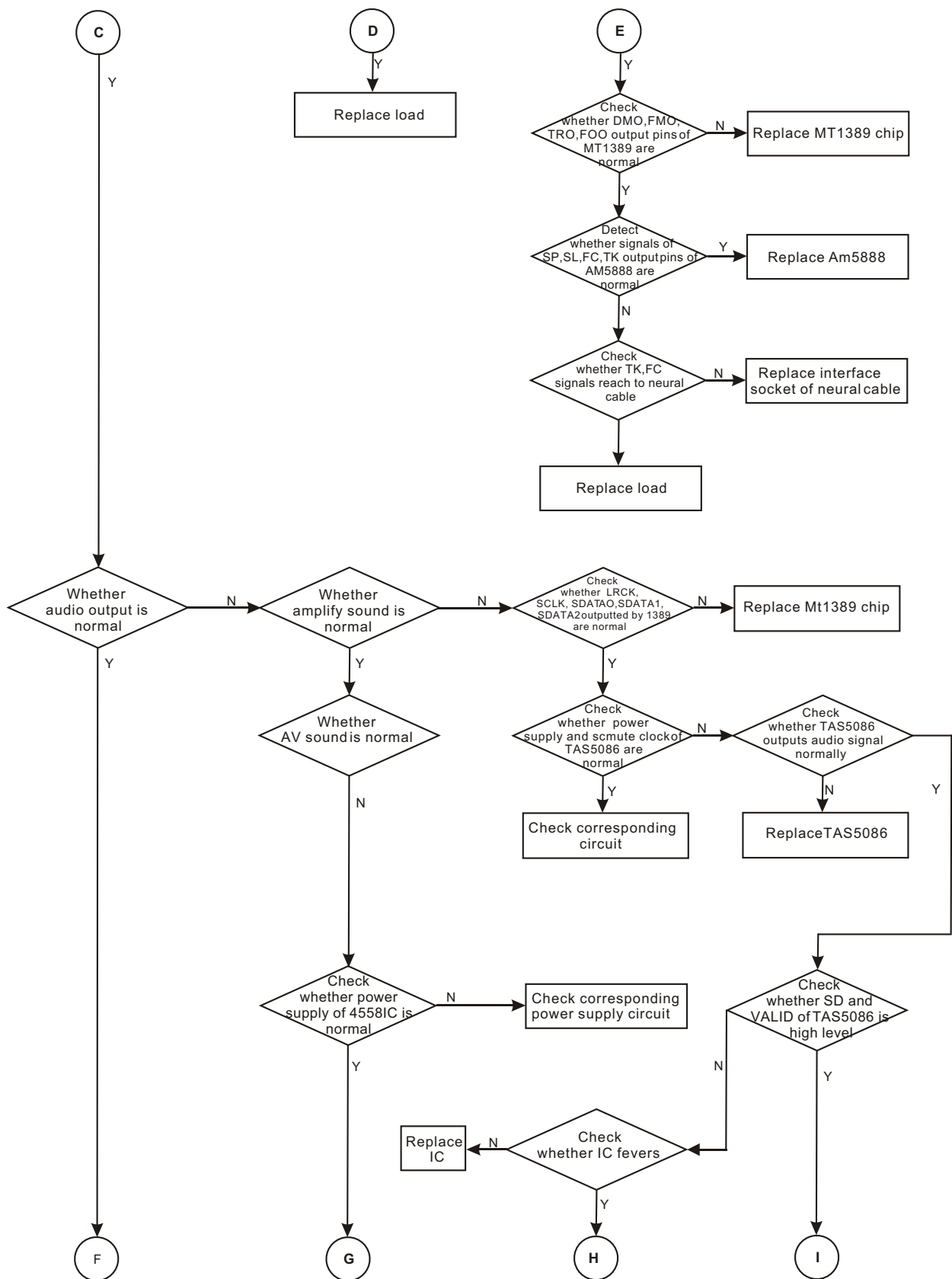


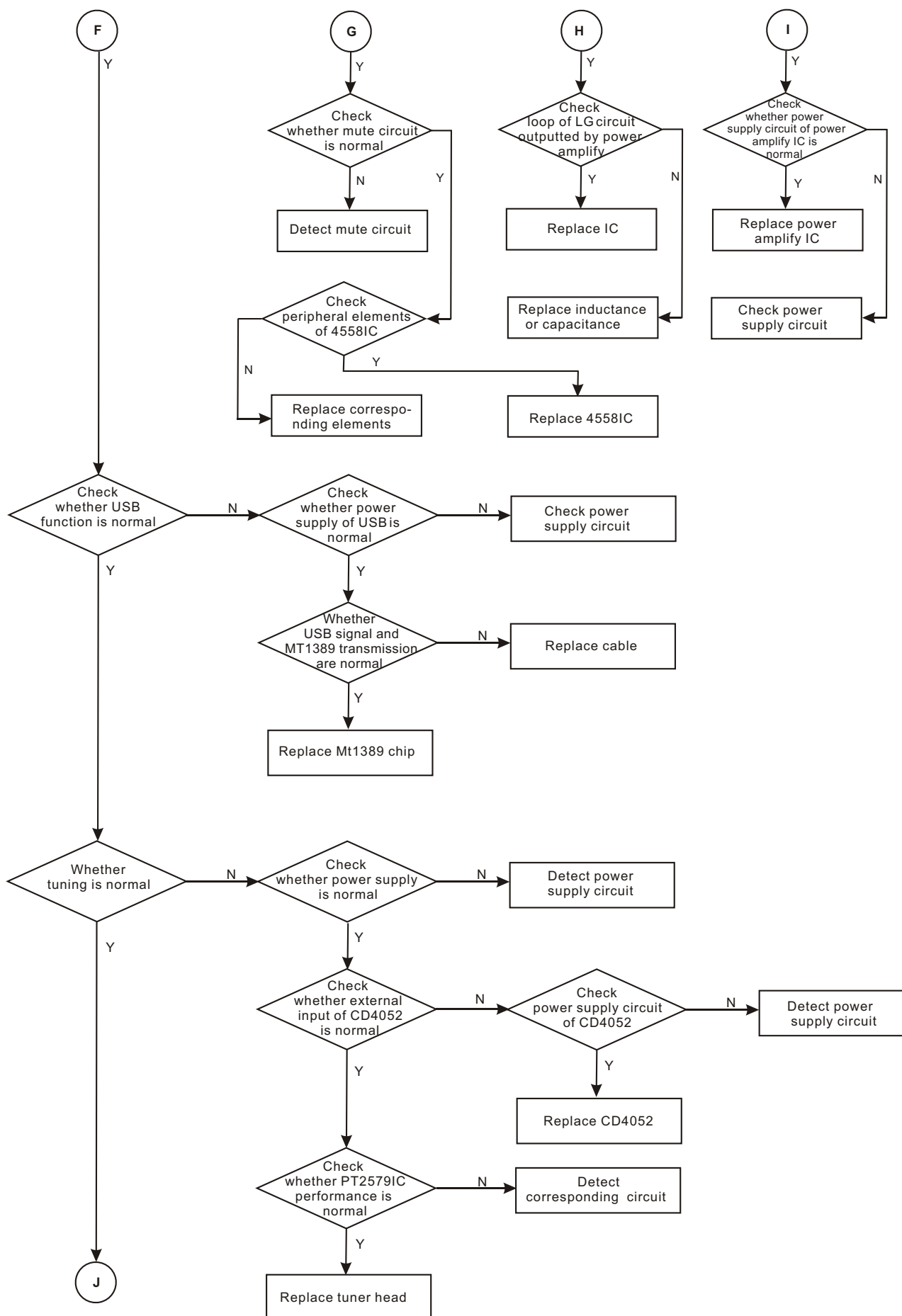
Figure 4.5.1 Powersupply circuit block diagram

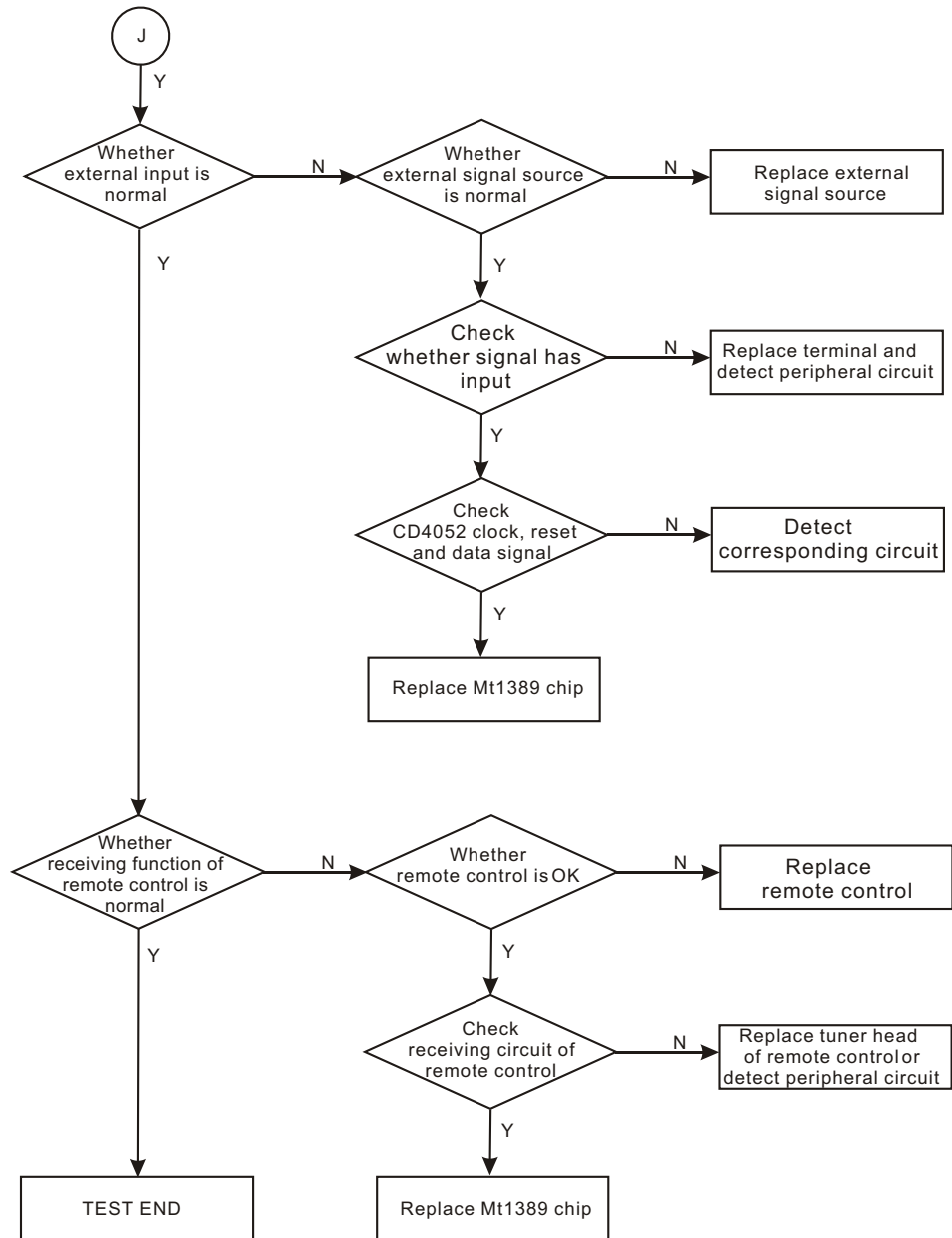
Chapter Five Troubleshooting Flow Chart







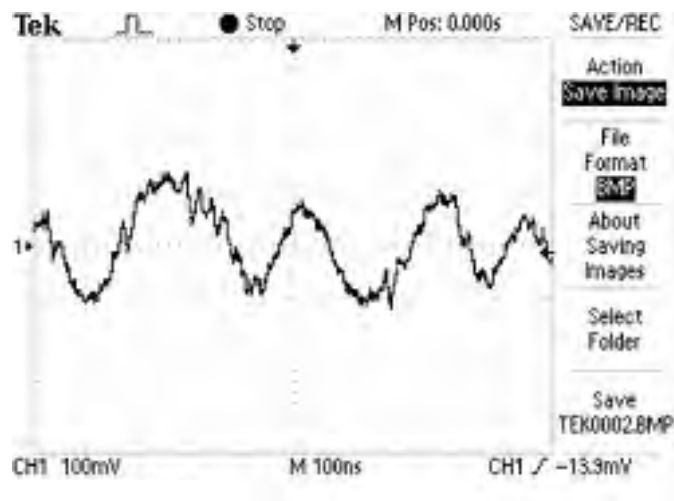




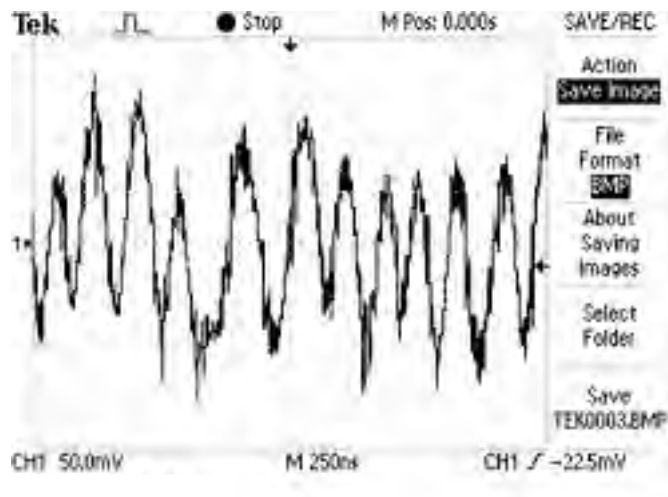
Chapter Six Waveform diagram

This section collects signal waveform diagram of audio, video and each unit circuit with the purpose to help servicing personnel to judge where trouble lies in accurately and quickly to improve servicing skills. For the difference of oscillograph's type, model and tuner, a certain difference may exist, so the servicing personnel are expected to pay more attention to check in daily operation.

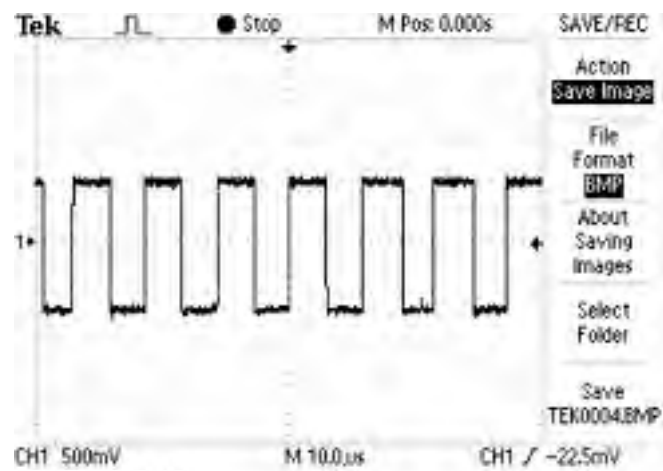
1. RFO signal waveform diagram of pin 17 of XS101



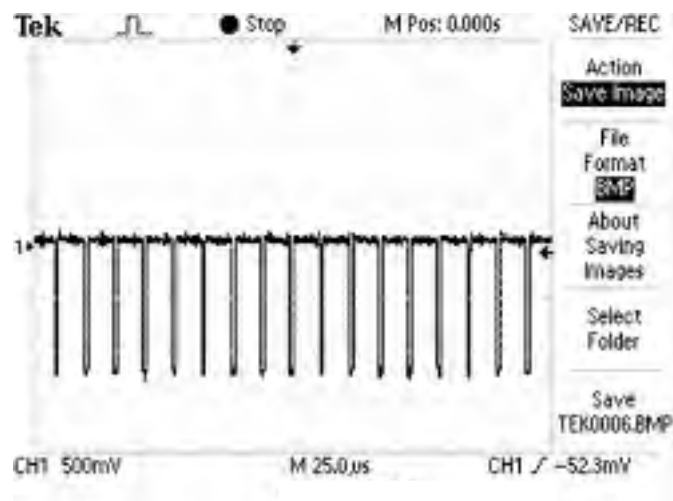
2. A signal waveform diagram of pin 16 of XS101(B、C、D、E、F)



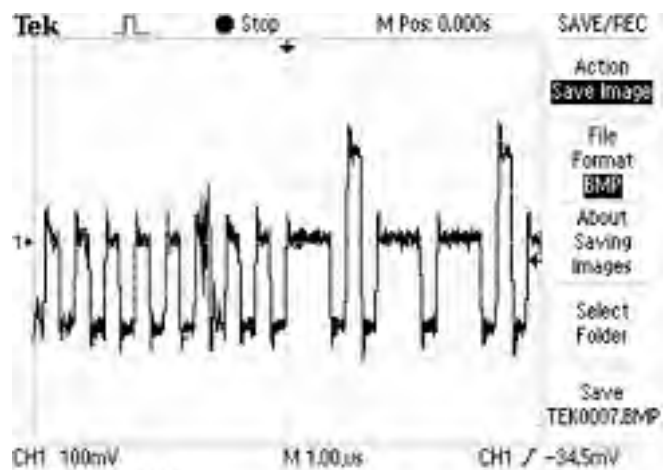
3. DMO signal (when there is main axis rotation) waveform diagram of pin 37 of U100 (MT1389)



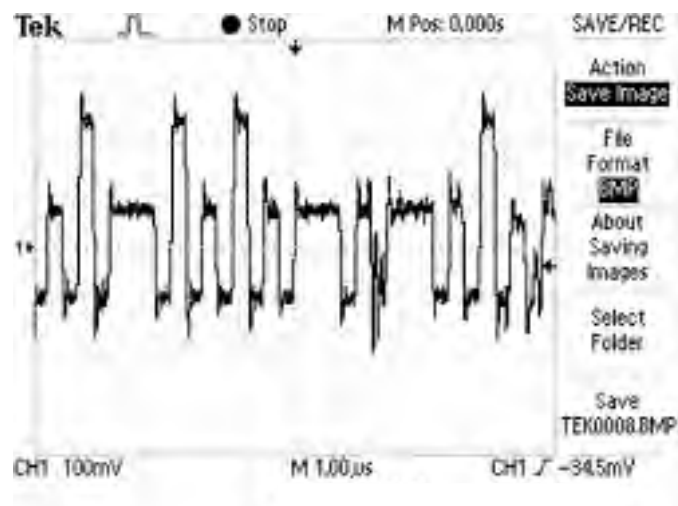
4. FMO signal (when there is feed) waveform diagram of pin 38 of U100 (MT1389)



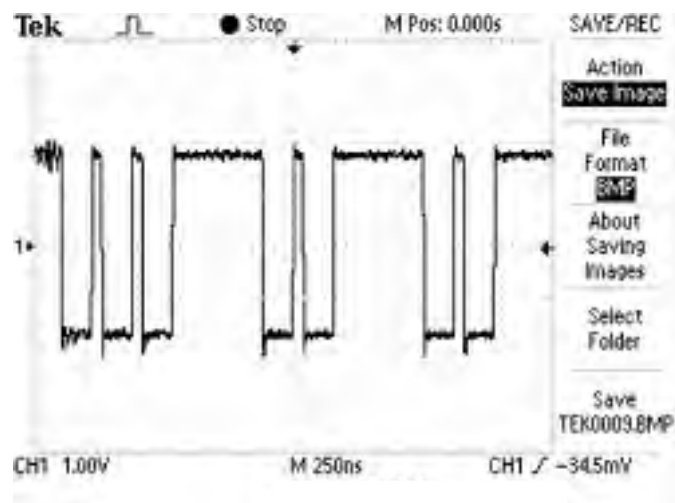
5. TRO signal (when there is trace) waveform diagram of pin 41 of U100 (MT1389)



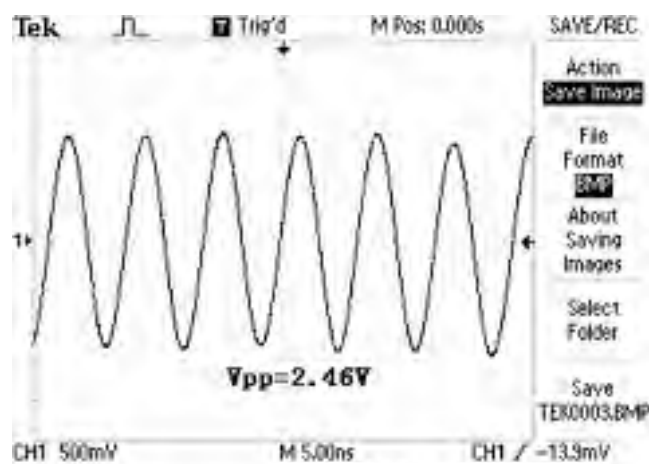
6. FOO signal (when there is focus) waveform diagram of pin 42 of U100 (MT1389)



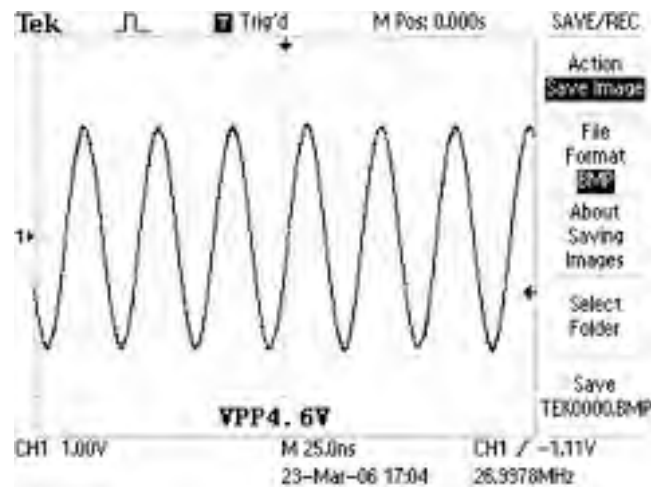
7. Waveform diagram of pin 29 (when no disc in) of U102 (FLASH)



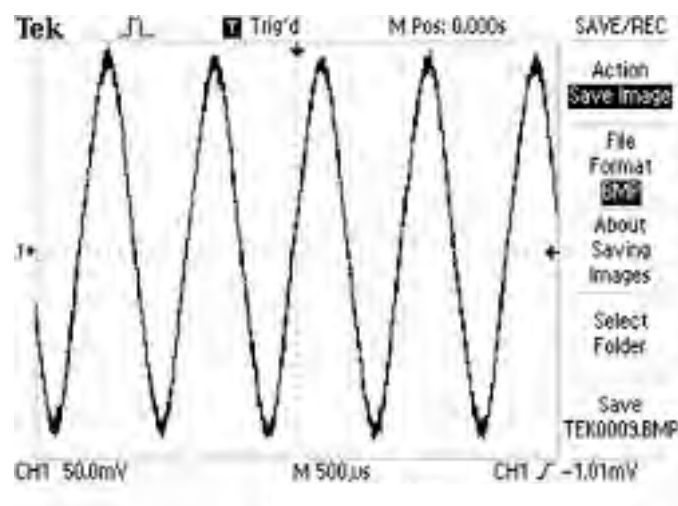
8. Waveform diagram of pin 38 of U103 (SDRAM)



9. 27M clock signal waveform diagram

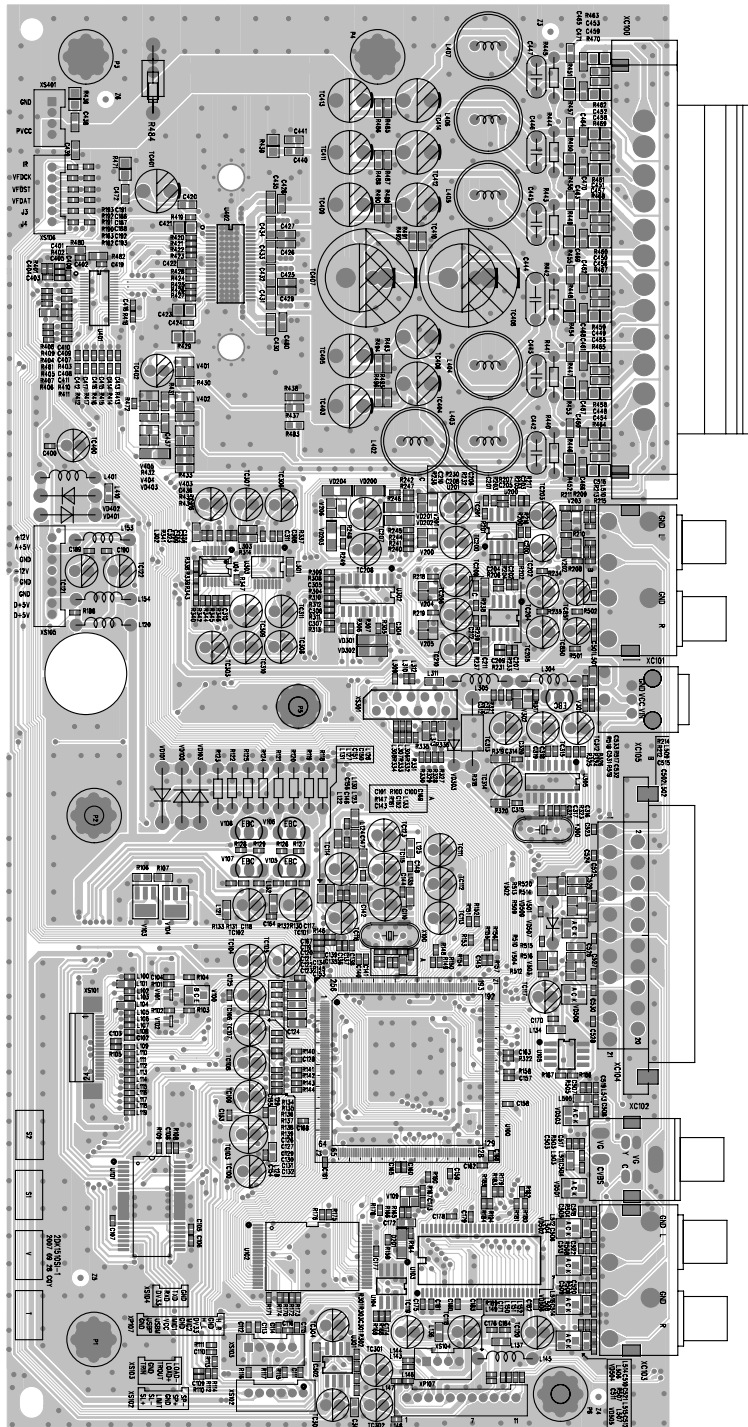


10. 1KHZ signal waveform diagram. It is suggested to use test disc, if not, the tested waveform will change at any time to affect judgment.

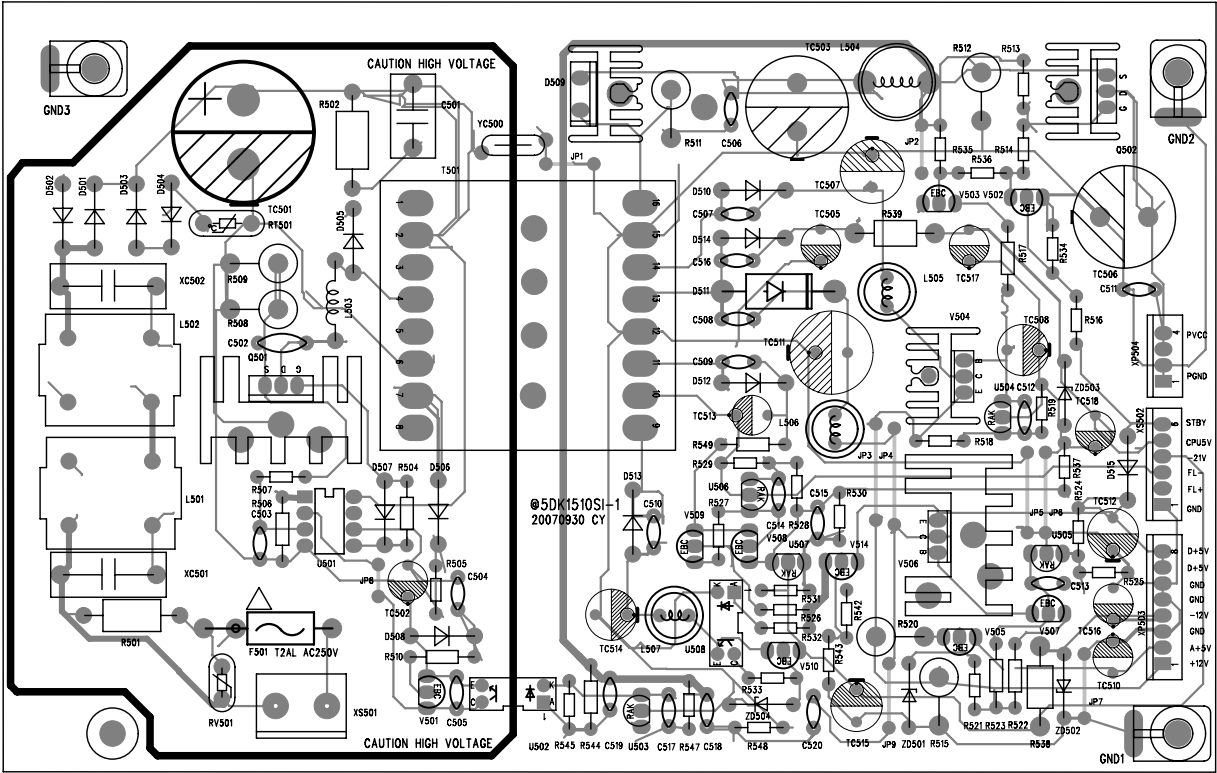


Chapter Seven PCB Board

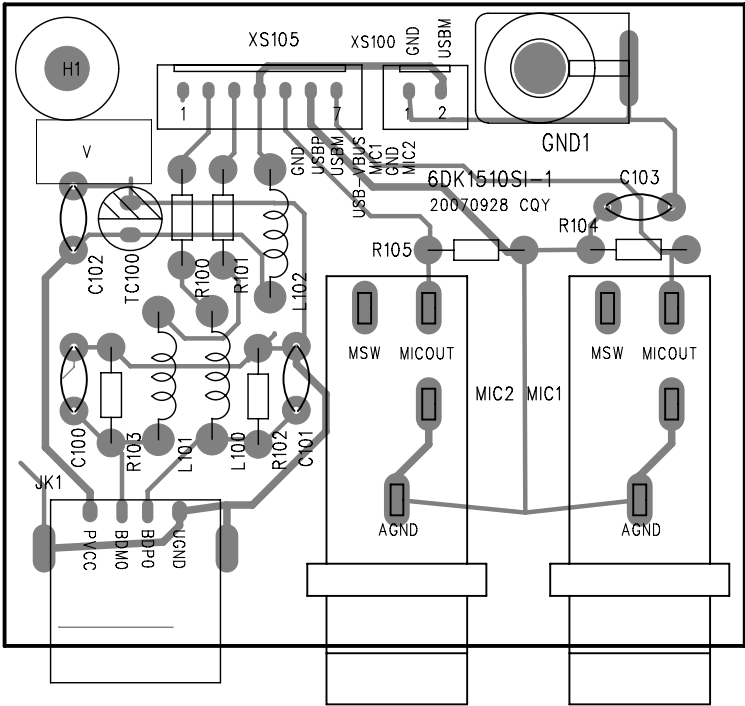
7.1 Surface layer of Decode Board(2DK1510SI-1)4940972



7.2 Power Board (@5DK1510SI-1)4940973



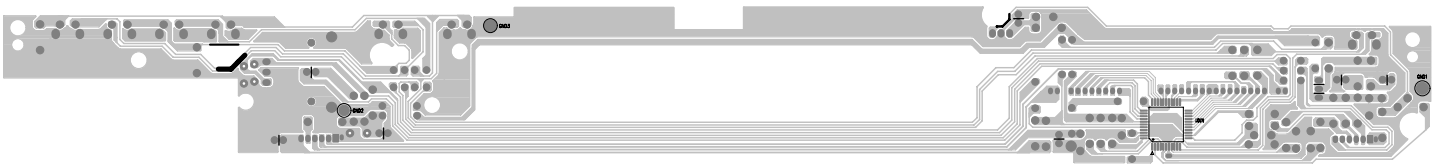
7.3 OK Board (6DK1510SI-1)4940975



7.4 Surface layer of Main Panel (4DK1510SI-1)4940974

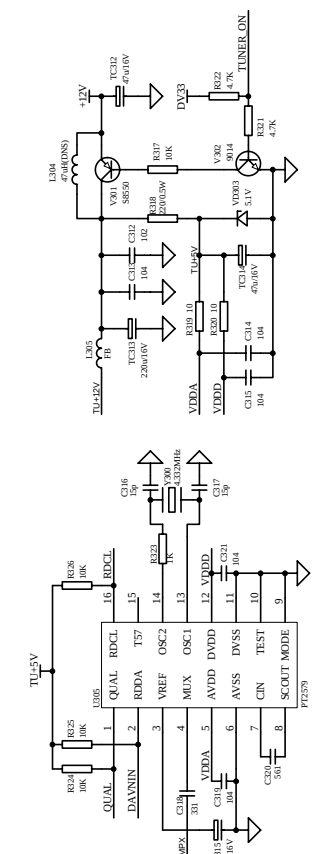
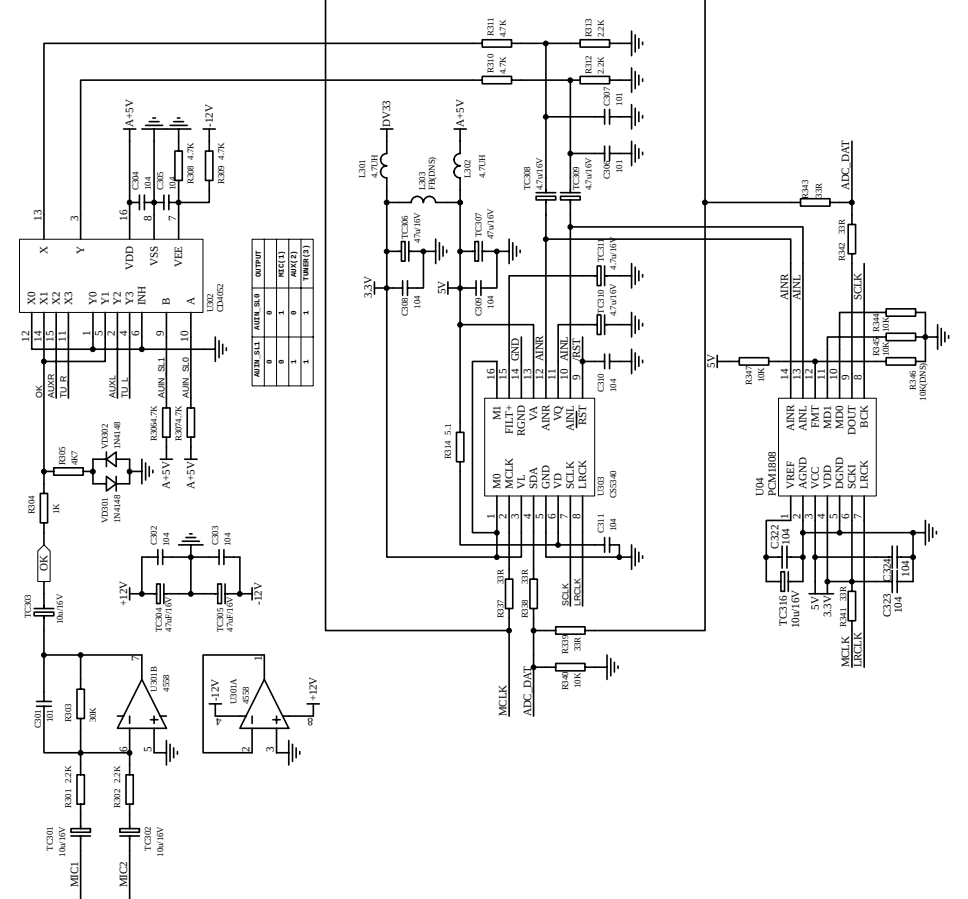
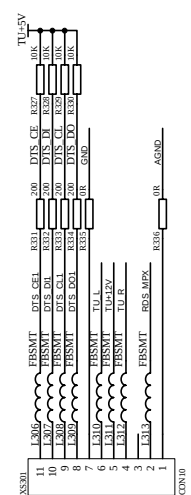
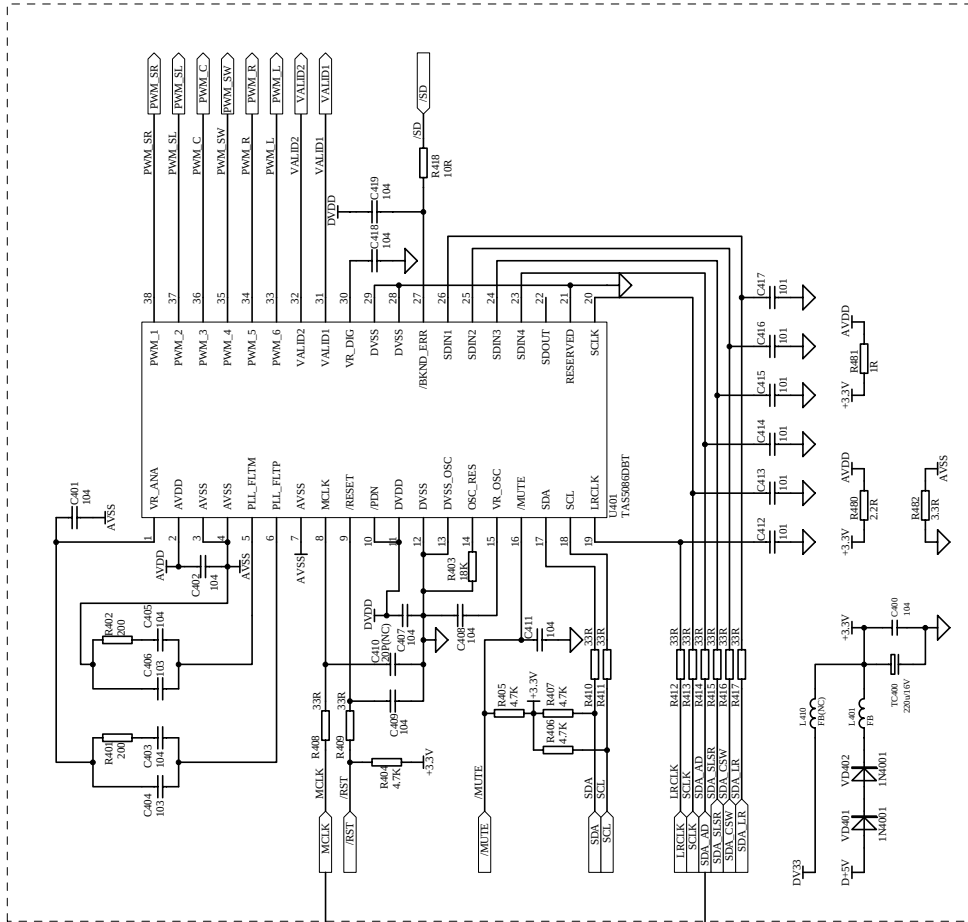


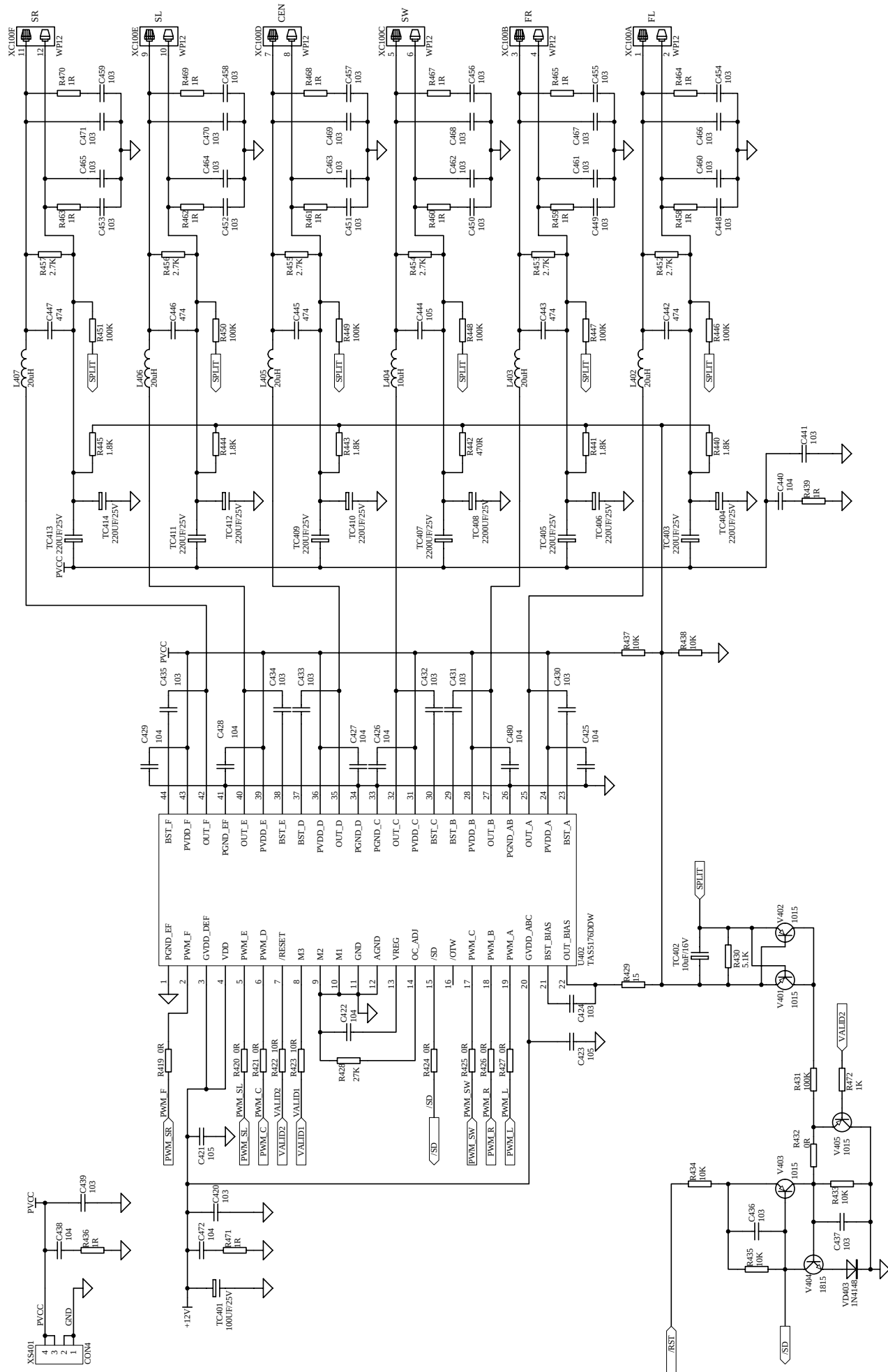
7.5 Bottom layer of Main Panel (4DK1510SI-1)4940974



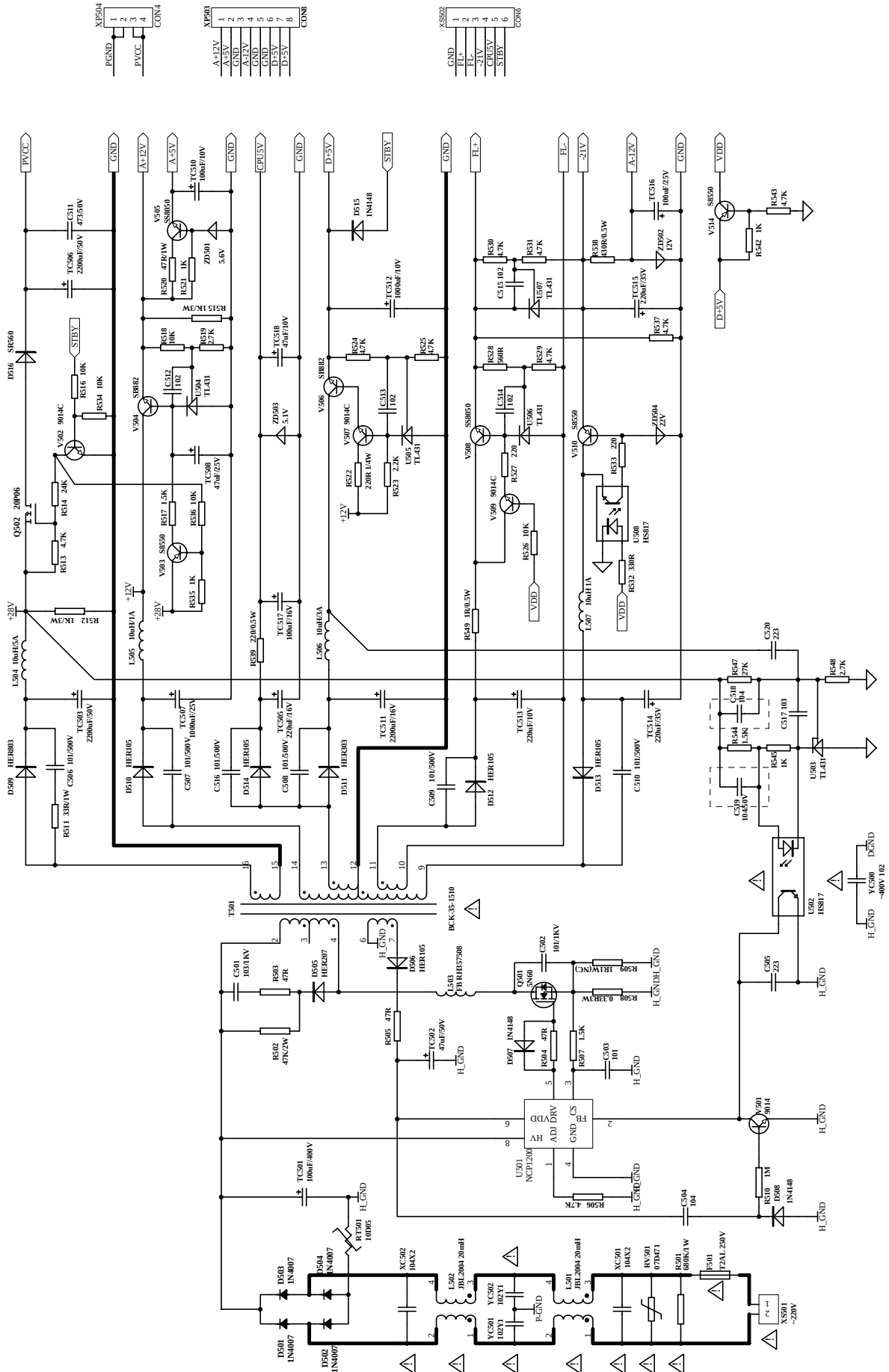
8.1 Decode Board(2DK1510SI-1)



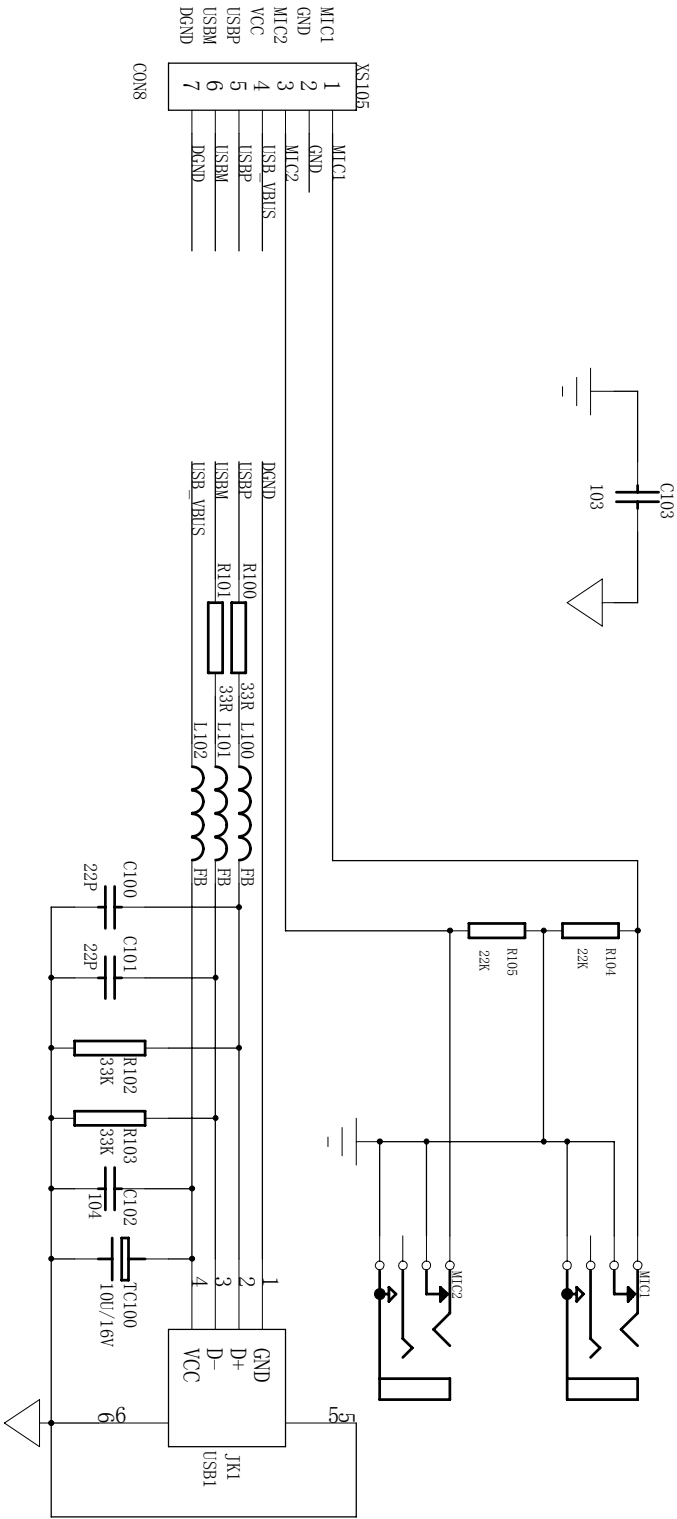




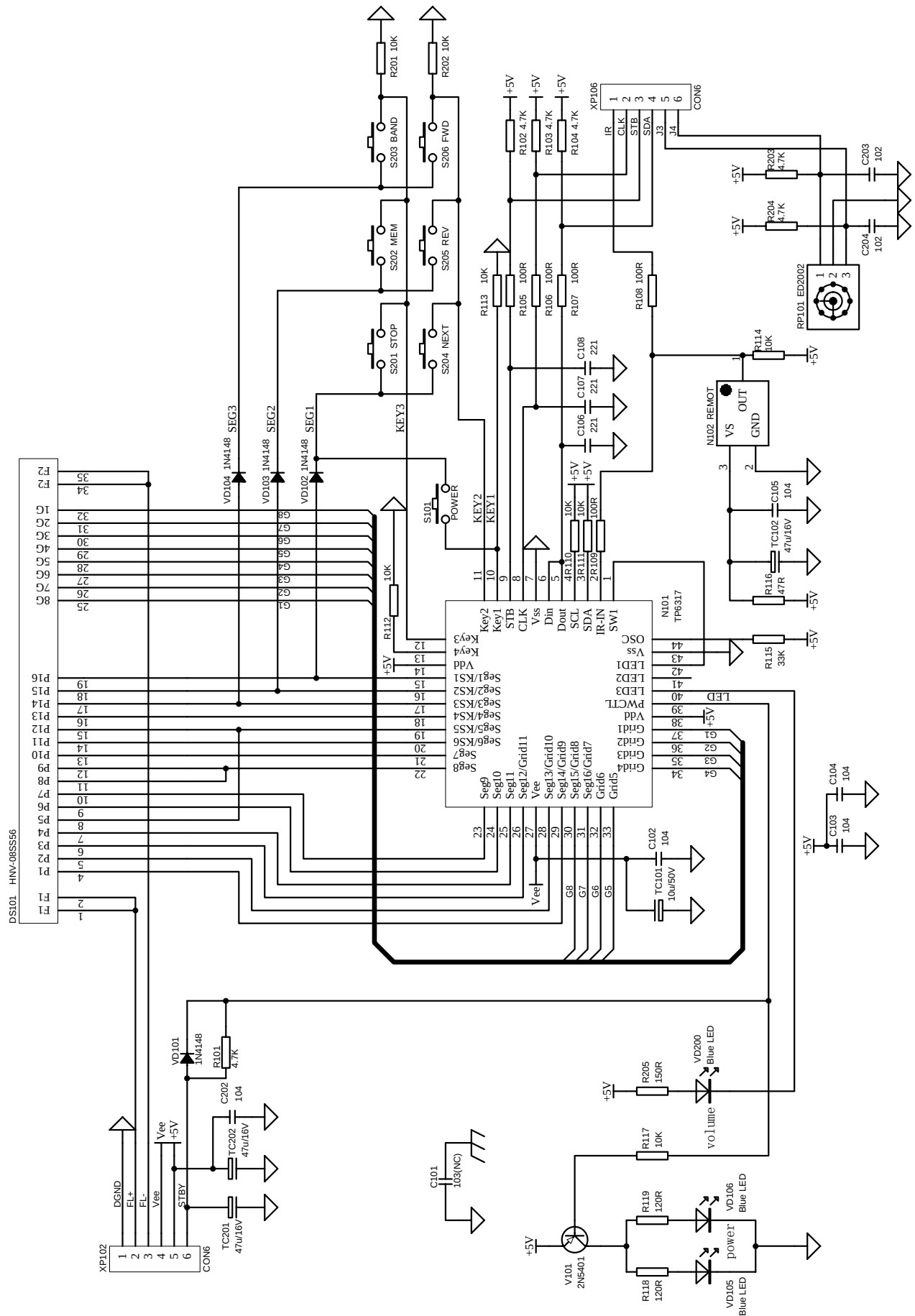
8.2 Power Board (@5DK1510SI-1)



8.3 OK Board(6DK1510SI-1)



8.4 Main Panel Board(4DK1510SI-1)



Chapter Nine BOM List

DVD HOME THEATER DK1515SI(RU)SILVER

POWER AMPLIFIER BOARD: 2DK1510SI-1 4940972			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
00000029	CARBON FILM RESISTOR	1/61Ω±5% BELT	R118~R125
00000169	CARBON FILM RESISTOR	1/6470Ω±5% BELT	R442
00004189	CARBON FILM RESISTOR	1/61.8K±5% BELT	R440,R441,R443,R444,R445
02101659	METAL POLYESTER FILM CAPACITOR	CL23X 63V 474±5% 5 BELT	C442,C443,C445,C446,C447
0210083	METAL POLYESTER FILM CAPACITOR	CL21X 63V 105±5% 7.5	C444
02601279	CD	CD11 16V4.7U±20%5×11 C2.5 BELT	TC308,TC309,TC310,TC311
02607799	CD	C11C 16V10U±20%4×7 C2.5 BELT	TC110,TC112,TC117,TC301,TC302,TC303,TC850,TC851
02607879	CD	C11C 16V47U±20%5×7 C2.5 BELT	TC104~TC109,TC111,TC115,TC116,TC119,TC120,TC123,TC200~TC203,TC304~TC307,TC312
02602549	CD	C11C 10V100U±20%6×5 2.5 BELT	TC100~TC102,TC113,TC208
02602229	CD	C11C 10V220U±20%6×7 2.5 BELT	TC103,TC114,TC118,TC121,TC207,TC313,TC400
02608259	CD	CD11T 25V10U±10%5×11 C2.5 BELT	TC402
02600049	CD	C11 25V220U±20% 8×12 C5 BELT	TC401
02608689	CD	CD288H 50V47U±20%6.3×11 C5 BELT	TC403~TC406,TC409~TC414
0260231	CD	CD11 25V2200U±20%13×25 5	TC407,TC408
07803199	TRIODE	SS8550 TO-92 BELT	V105~V108,V301
03900579	MAGNETIC BEADS INDUCTOR	RH354708 BELT	L120,L145,L153,L154,L305,L401
05700049	DIODE	1N4004 BELT	VD100,VD101,VD103,VD401,VD402
05800459	VOLTAGE REGULATOR DIODE	6.8V±5% 1/2W BELT	VD509
0410176	VERTICAL SCREEN SHIELD FILTERING INDUCTOR	10uH±10% 4A 5mm	L404
0410242	VERTICAL SCREEN SHIELD FILTERING INDUCTOR	22uH ±20% 7A 5mm	L402,L403,L405,L406,L407
0960020	CRYSTAL OSCILLATOR	27.00MHz 49-S	X100
1940022	SOCKET	4P 2.0mm	XS401

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1940024	SOCKET	5P 2.0mm	XS103
1940005	SOCKET	6P 2.0mm	XS102,XS106
1940008	SOCKET	8P2.0mm	XS105
1940033	CABLE SOCKET	11P 1.25mm DUAL RANK STRAIGHT INSERT	XS301
1940023	SOCKET	7P 2.0mm	XP107 (PLUG IN PIN 1 TO 1)
1990019	EXTERNAL SOURCES SOCKET	WP12-11	XC100
1910158	TERMINAL SOCKET	4-8.4-13	XC101
1910194	TERMINAL SOCKET	4-8.4-13/PB-08B	XC103
1090077	ELECTRO-OPTIC TRANSFORMER	1792	XC105 ①
1090098	ELECTRO-OPTIC TRANSFORMER	HK179A	XC105 ①
1910195	TERMINAL SOCKET	AVG-2-07 BLACK	XC105
1910159	TERMINAL SOCKET	CS TERMINAL D02	XC102
1860064	SCART SOCKET	SC107	XC104
3580265	HEAT RADIATION BOARD	40×10×20 1513SI(RU)	POWER AMPLIFY IC U402
5233174	RUBBER SPACER	9×9×1 SINGLE-FACED WITH GLUE IN REAR SIDE,CENTER HOLE φ3	POSITION OF POWER AMPLIFY IC SCREW
4000452	SELF-TAPPING SCREW	PWT 3×6×7H WHITE NICKEL	ASSEMBLE HEAT RADIATION

DVD HOME THEATER DK1515SI(RU)SILVER

POWER AMPLIFIER BOARD-SMD: 2DK1510SI-1 4940972			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090001	SMD RESISTOR	1/16W 0Ω±5% 0603	R336,R432,R483
0090272	SMD RESISTOR	1/16W 1Ω±5% 0603	R481
0090002	SMD RESISTOR	1/16W 2.2Ω ±5% 0603	R480
0090616	SMD RESISTOR	1/16W 3.3Ω±5% 0603	R482
0090106	SMD RESISTOR	1/16W 4.7Ω±5% 0603	L124,R106,R107
0090232	SMD RESISTOR	1/16W 150Ω±5% 0603	R515,R516
0090239	SMD RESISTOR	1/16W 200Ω±5% 0603	R514,R520

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090014	SMD RESISTOR	1/16W 1K±5% 0603	R513
0090023	SMD RESISTOR	1/16W 10K±5% 0603	R430,R433,R434,R435,R437,R438
0090034	SMD RESISTOR	1/16W 100K±5% 0603	R431,R446~R451
0090324	SMD RESISTOR	1/16W 0Ω±5% 0402	R105,R134~R140,R175,R176,R178,R419,R420,R421,R424~R427,L143,L144
0090445	SMD RESISTOR	1/16W 1Ω±5% 0402	R114
0090314	SMD RESISTOR	1/16W 5.1Ω±5% 0603	R314
0090326	SMD RESISTOR	1/16W 10Ω±5% 0402	R418,R422,R423
0090330	SMD RESISTOR	1/16W 33Ω±5% 0402	R149~R156,R179~R185,R194,R337,R338,R339,R408~R417
0090336	SMD RESISTOR	1/1675Ω±5% 0402	R148,R503~R508
0090335	SMD RESISTOR	1/1668Ω±5% 0402	R519
0090339	SMD RESISTOR	1/16W 100Ω±5% 0402	R126~R129,R161,R190~R193,L105,L106,R517,C532
0090345	SMD RESISTOR	1/16W 200Ω±5% 0402	R331~R334,R401,R402
0090350	SMD RESISTOR	1/16330Ω±5% 0402	R212,R213
0090355	SMD RESISTOR	1/16W 510Ω±5% 0402	R157,R246
0090362	SMD RESISTOR	1/16W 1K±5% 0402	R160,R167,R208~R211,R241,R304,R472
0090369	SMD RESISTOR	1/16W 2.2K±5% 0402	R301,R302,R509,R510,R512
0090377	SMD RESISTOR	1/16W 4.7K±5% 0402	R158,R159,R170~R173,R189,R202~R205,R240,R305~R309,R312,R313,R321,R322,R404,R405
0090378	SMD RESISTOR	1/16W 5.1K±5% 0402	R130
0090381	SMD RESISTOR	1/1639Ω±5% 0402	R200,R201
0090385	SMD RESISTOR	1/16W 10K±5% 0402	R103,R104,R108,R109,R115,R116,R117,R132,R141,R162,R163,R165,R166,R168,R169,R242,R247,R310,R311,R317,R327~R330,R340,R249
0090387	SMD RESISTOR	1/1612K±5% 0402	R133
0090389	SMD RESISTOR	1/1615K±5% 0402	R142,R145

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090390	SMD RESISTOR	1/16W 18K±5% 0402	R403
0090391	SMD RESISTOR	1/16W 20K±5% 0402	R131,R428,R188
0090394	SMD RESISTOR	1/16W 27K±5% 0402	R143,R144
0090395	SMD RESISTOR	1/16W 30K±5% 0402	R206,R207,R248,R303
0090400	SMD RESISTOR	1/16W 47K±5% 0402	R501,R502
0090408	SMD RESISTOR	1/16W 100K±5% 0402	R100,R101,R102,R146,R164,R214,R215,R245,R518
0090412	SMD RESISTOR	1/16W 150K±5% 0402	R112,R113
0090420	SMD RESISTOR	1/16W 300K±5% 0402	R244
0090429	SMD RESISTOR	1/16W 680K±5% 0402	R110,R111
0090430	SMD RESISTOR	1/16W750K±5% 0402	R147
0090147	SMD RESISTOR	1/10W 1Ω±5% 0805	R436,R439,R458~R465,R467~R471
0090040	SMD RESISTOR	1/10W 15Ω±5% 0805	R429
0090053	SMD CAPACITOR	1/10W 2.7K±5% 0805	R452~R457
0310415	SMD CAPACITOR	50V 20P±5% NPO 0402	C138,C517~C528
0310420	SMD CAPACITOR	50V 33P±5% NPO 0402	C100,C101
0310424	SMD CAPACITOR	50V 47P±5% NPO 0402	C186,C187,C188,C191,C192,C193,C503~C514
0310432	SMD CAPACITOR	50V 101±5% NPO 0402	C143,C204,C205,C301,C306,C307,C412~C417
0310721	SMD CAPACITOR	50V 331±5% NPO 0402	C131,C132
0310392	SMD CAPACITOR	50V 102±10% 7R 0402	C111,C139,C202,C203,C312,C501,C502,C515,C516
0310843	SMD CAPACITOR	25V 122±10% 7R 0402	C200,C201
0310394	SMD CAPACITOR	50V 222±10% 7R 0402	C109,C110
0310728	SMD CAPACITOR	25V 103±20% 7R 0402	C404,C406,C424
0310454	SMD CAPACITOR	16V 153±10% 7R 0402	C129
0310570	SMD CAPACITOR	16V 333±10% 7R 0402	C136
0310482	SMD CAPACITOR	16V 473±10% 7R 0402	C140,C141

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0310737	SMD CAPACITOR	16V 104±10% 7R 0402	C125,C102~C108,C112~C118,C126~C128,C130,C133~C135,C137,C144~C148,C150~C171,C173~C184,C189,C190,C304,C305,C308~C311,C313,C400~C403,C405,C407,C408,C409,C411,C418,C419,C530,C531
0310072	SMD CAPACITOR	50V 103±10% 7R 0603	C420,C439,C441,C448~C471
0310207	SMD CAPACITOR	50V 104 ±20% 7R 0603	C302,C303,C422,C425~C429,C438,C440,C472,C480,C529
0310362	SMD CAPACITOR	16V474 +80%-20% Y5V 0603	C142,C533
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C119~C123,C172
0310033	SMD CAPACITOR	50V 103±10% 7R 0805	C430~C435
0310169	SMD MAGNETIC BEADS	50V 105 +80%-20% 0805	C421,C423
0390095	SMD MAGNETIC BEADS	FC160822105	L121~L123,L126~L134,L136,L137,L311
0390453	SMD INDUCTOR	GZ1005D221T 0402	L100,L102,L103,L107~L119,L146~L152,L306~L309,L310,L312,L313,L501,L502,L509~L516
0390096	SMD INDUCTOR	1.8UH±10% 1608	L503~L508
0390355	SMD INDUCTOR	4.7UH±10% 1608	L135,L301,L302
0390170	SMD DIODE	10UH±10% 1608	L101,L104,L125
0700007	SMD DOUBLE DIODE	14148	D201,VD200~VD204,VD301,VD302,VD403
0700056	SMD TRIODE	MMBD4148SE SO23	VD501~VD508
0780085	SMD TRIODE	8050D	V501~V504
0780062	SMD TRIODE	9014C	V302
0780198	SMD TRIODE	2S1015	V200,V201,V206,V401,V402,V403,V405
0780197	SMD TRIODE	C1815	V109,V202,V203,V404
0780040	SMD TRIODE	3904(100-300) SO23	V100
0780115	SMD TRIODE	2SB1132	V103,V104
0780193		2S3018	V101,V102
0882644	IC	MT1389FE/HD(HD EDITION) QFP	U100

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0882802	IC	5888S HSOP	U101
0881079	IC	24C04 SOP	U104
0881226	IC	RC4558D SOP	U200,U301
0882953	IC	4641632UC60 TSOP	U103 ②
0883532	IC	HY57V641620FTP-7 SOP	U103 ②
0881693	IC	TL 74HC4052D SOP	U302
0882353	IC	C5340 TSSOP	U303
0883753	IC	TAS5086DBT TSSOP	U401
0883752	IC	TAS5176 HTSSOP	U402 ③
0883754	IC	TAS5186DDV HTSSOP	U402 ③
1940094	CABLE SOCKET	24P 0.5mm SMD SUBMIT MEET WITH CLASP	XS101
1634543	PCB	2 1510SI-1 FR4 D1.2 PX	

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POWER BOARD @5DK1510SI-1 4940973			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
2100003	CONNENTION CORDS	Φ0.6 SHAPED 7.5mm	JP1,JP2
2100006	CONNENTION CORDS	Φ0.6 SHAPED 12.5mm	JP5,JP6
2100007	CONNENTION CORDS	Φ0.6 SHAPEN 15mm	JP3,JP4
2100004	CONNENTION CORDS	Φ0.6 SHAPED 10mm	JP7,JP9
2100010	CONNENTION CORDS	Φ0.6 SHAPED 5mm	JP8
00001699	CARBON FILM RESISTOR	1/447Ω±5% BELT	R504
00004209	CARBON FILM RESISTOR	1/647Ω±5% BELT	R505
00001819	CARBON FILM RESISTOR	1/4220Ω±5% BELT	R522
00000119	CARBON FILM RESISTOR	1/6220Ω±5% BELT	R527,R533
00000139	CARBON FILM RESISTOR	1/6330Ω±5% BELT	R532
00001989	CARBON FILM RESISTOR	1/41.5K±5% BELT	R544,R517

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
00002089	CARBON FILM RESISTOR	1/44.7K±5% BELT	R506
00000229	CARBON FILM RESISTOR	1/61K±5% BELT	R521,R535,R542,R545
00000259	CARBON FILM RESISTOR	1/61.5K±5% BELT	R507
00000349	CARBON FILM RESISTOR	1/64.7K±5% BELT	R513,R537,R543
00000409	CARBON FILM RESISTOR	1/610K±5% BELT	R516,R526,R534,R536
00000479	CARBON FILM RESISTOR	1/624K±5% BELT	R514
00002579	CARBON FILM RESISTOR	1/41MΩ±5% BELT	R510
0010234	METAL FILM RESISTOR	1/6W 560Ω±1%	R528
0010254	METAL FILM RESISTOR	1/62.7K±1%	R519,R548
00100569	METAL FILM RESISTOR	1/42.2K±1% BELT	R523
00101299	METAL FILM RESISTOR	1/64.7K±1% BELT	R524,R525,R529,R530,R531
00100099	METAL FILM RESISTOR	1/610K±1% BELT	R518
00000489	CARBON FILM RESISTOR	1/627K±5% BELT	R547
00102289	METAL OXIDE FILM RESISTOR	1/41Ω±5% BELT	R549
0010233	METAL OXIDE FILM RESISTOR	1/247Ω±5% SHAPED 12.5	R539
0010370	RY	1/2430Ω±5% SHAPED 12.5	R538
0010279	METAL OXIDE FILM RESISTOR	1680K±5% SHAPED 15	R501
0010395	RY	3W0.33Ω±5% SHAPED VERTICAL 7.5	R508
0010275	METAL OXIDE FILM RESISTOR	133Ω±5% SHAPED VERTICAL 7.5	R511
0010288	METAL OXIDE FILM RESISTOR	1W 100Ω±5% SHAPED VERTICAL 7.5	R520
0010147	METAL OXIDE FILM RESISTOR	247K±5% SHAPED FLAT 15×7	R502
0010281	METAL OXIDE FILM RESISTOR	31K±5% SHAPED VERTICAL 7.5	R512
02001059	PORCELAIN CAPACITOR	50V 100P ±10% 5mm BELT	C503
02001239	PORCELAIN CAPACITOR	50V 102±10% 5mm BELT	C512,C513,C514,C515
02001329	PORCELAIN CAPACITOR	50V 103±20% 5mm BELT	C517
02001389	PORCELAIN CAPACITOR	50V 104±20% 5mm BELT	C504

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0200240	PORCELAIN CAPACITOR	500V 102±20% 5mm	C506,C507,C508,C509,C510,C516
0200228	PORCELAIN CAPACITOR	1000V 101 ±10% 7.5mm	C502
0210254	CBB	CBB13X 1000V 103 J 10	C501
02100229	TERYLENE CAPACITOR	100V 223±5% 5mm BELT	C505,C520
02101489	TERYLENE CAPACITOR	100V 473±10% SHAPED 5mm BELT	C511
0210204	ANTI-JAMMING CAPACITOR	@MKP61 2 275VAC 104M 15 UL	XC501,XC502
0200353	CERAMIC CAPACITOR	@Y1 400VAC 102±10% 10mm UL	YC500
0260584	CD	LT 400V100U±20%22×30 10	TC501
02606859	CD	C11T 16V100u±20%6×12 C5 BELT	TC517,TC510
02607359	CD	C11T 16V47U±20%5×11 C5 BELT	TC518
02606849	CD	C11T 50V47u±20%6×12 C5 BELT	TC502,TC508
02607139	CD	C11T 16V220U±20%6×12 C5 BELT	TC505,TC513
02607149	CD	C11T 25V100U±20%6×12 C5 BELT	TC516
02606879	CD	C11T 10V1000u±20%8×16 C5 BELT	TC512
0260661	CD	CD288H 16V2200U±20%13×20 5	TC511
0010368	RY	3100Ω±5% SHAPED VERTICAL 7.5	R515
0260663	CD	CD11K 35V220U±20% 8×12 3.5	TC514,TC515
0260723	CD	CD288H 25V1000U±20% 10×20 5	TC507
0260677	CD	CD11K 50V2200U±20% 16×30 7.5	TC503,TC506
0390154	MAGNETIC BEADS INDUCTOR	R357508	L503
0390340	VERTICAL INDUCTOR	10uH±10% 5A 12.5×26.5 10mm	L504
0410011	CHOKE COIL	VERTICAL 10UH 2A 5mm	L507,L505, L506
1000045	FILTER OF POWER NET	@U20 30mH+∞-0% UL	L501,L502
0460683	SWITCH POWER TRANSFORMER	@BCK-40-0433 100W @VDE	T501 ④
0460687	SWITCH POWER TRANSFORMER	@KB1249-9747 100W @SJ	T501 ④
07800329	TRIODE	9014C BELT	V502,V507,V509,V501

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
07803199	TRIODE	SS8550 TO-92 BELT	V503,V514
07800259	TRIODE	25401 BELT	V510
0780138	TRIODE	8050D	V505,V508
0780164	TRIODE	2882-P	V504,V506
05700059	DIODE	1N4007 BELT	D501,D502,D503,D504
05700069	DIODE	1N4148 BELT	D507,D508,D515
0570013	DIODE	HER105	D506,D510,D512,D513,D514
0570042	DIODE	HER207 SHAPED 12.5mm	D505
0570018	DIODE	HER303 SHAPED R 17.5×8mm	D511
0570083	DIODE	ER803 TO-220AC	D509
05800069	VOLTAGE REGULATOR DIODE	5.1V±5% 1/2W BELT	ZD503
05800339	VOLTAGE REGULATOR DIODE	5.6V±5% 1/2W BELT	ZD501
0580022	VOLTAGE REGULATOR DIODE	12V±5% 1W	ZD502
05800489	VOLTAGE REGULATOR DIODE	22V±5% 1/2W BELT	ZD504
0790092	FIELD EFFECT TRANSISTOR	FQP560C TO-220F	Q501
0790131	FIELD EFFECT TRANSISTOR	CEP20P06 P-CHANNEL TO-220	Q502
0881480	IC	NCP1200P60 DIP	U501
08824629	IC	AZ431AZ-A TO-92 BELT	U503,U504,U505,U506,U507
1030007	PRESS SENSITIVITY RESISTOR	7D 471±10% 5mm	RV501
1050002	HEAT SENSITIVITY RESISTOR	NTC SC104MS±20%	RT501
1080032	PHOTOELECTRIC COUPLER	@HS817 VDE	U502,U508
1940006	SOCKET	6P 2.5mm	XS502
2122800	FLAT CABLE	4P460 2.5/2.0 T2 WITH NEEDLE, TOGETHER DIRECTION 20#CORD	XP504
2122826	FLAT CABLE	8-6/2P390/80 2.5/2.0 T3 WITH NEEDLE, TOGETHER DIRECTION	XP503
1940074	SOCKET	2P 7.92mm	XS501
2300060	FUSE	@2AL 250V 3.6×10 WITH LEAD FEET VDE	F501

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
3580218	HEAT RADIATION BOARD	24×11×25 9918K	Q501,V506
3580195	HEAT RADIATION BOARD	11×15×25 SINGLE HOLE,NOT OXIDATION	D509,Q502,V504
3870115	GROUND CHIP OF POWER BOARD	903	GND1,GND2
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
4000453	SELF-TAPPING SCREW	BT 3×8H WHITE NICKEL	D509,Q502,V504,Q501,V506 AND RADIATOR
1565133	PCB	@5 1510SI-1 VO D1.6 SX @UL	

DVD HOME THEATER DK1515SI(RU)SILVER

REMOTE CONTROL 5471769			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0310048	SMD CAPACITOR	50V 151±5% NPO 0603	C802,C803
0630009	EMISSION PIPE	TSAL4400	LED801
0700007	SMD DIODE	14148	D801~D803 ⑤
0700001	SMD DIODE	LS4148	D801~D803 ⑤
0700002	SMD DIODE	LL4148	D801~D803 ⑤
0780130	SMD TRIODE	STC3265	Q801
0970003	CERAMIC RESONATOR	455E	X801
0090272	SMD RESISTOR	1/16W 1Ω±5% 0603	R801
0880220	IC	P2222 SOP	U801 ⑥
0882379	IC	S0102B SOP	U801 ⑥
4000038	SELF-TAPPING SCREW	PB 2.3×6 COLOR ZINC	FOR CONNECTING UPPER AND LOWER COVER
1564324	PCB	8516SI-3	
3031876	SURFACE CASING O REMOTE CONTROL	RC026-06R BLACK	
3051319	BATTERY CASE DOOR OF REMOTE CONTROL	026 BLACK 2#	
3041399	BOTTOM CASING OF REMOTE CONTROL	026 BLACK 2#	
3051273	GLASS OF REMOTE CONTROLLER	026 MING PURPLE	
3850124	ANODE SPRING	RC026	

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
3850125	CATHODE SPRING	RC026	
3850126	ANODE/CATHODE SPRING	RC026	
4631052	CONDUCT GLUE OF REMOTE CONTROL	RC026-01R 4#	
5070070	PLASTIC BAG	85×250	

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SURFACE CONTROL BOARD: 4DK1510SI-1 4940974			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
2100010	CONNENTION CORDS	Φ0.6 SHAPED 5mm	JP1,JP2,JP3,JP11~JP14
2100003	CONNENTION CORDS	Φ0.6 SHAPED 7.5mm	JP4~JP7
2100004	CONNENTION CORDS	Φ0.6 SHAPED 10mm	JP8,JP9,JP15,JP16
0570006	DIODE	1N4148	VD101~VD104
0780025	TRIODE	25401	V101
0000133	CARBON FILM RESISTOR	1/6W4.7K±5% SHAPED 7.5	R101~R104,R203,R204
0000137	CARBON FILM RESISTOR	1/6W10K±5% SHAPED 7.5	R110~R114,R117,R201,R202
0000142	CARBON FILM RESISTOR	1/6W33K±5% SHAPED 7.5	R115
0000556	CARBON FILM RESISTOR	1/6W47Ω±5% SHAPED 7.5	R116
0000122	CARBON FILM RESISTOR	1/6W100Ω±5% SHAPED 7.5	R105~R109
0000488	CARBON FILM RESISTOR	1/6W220Ω±5% SHAPED 7.5	R118,R119
0010335	METAL OXIDE FILM RESISTOR	1/4W 0.47Ω±5% SHAPED 10	R206
0260076	CD	CD11C 50V22U±20%6×7 2.5	TC101
0260780	CD	CD11C 10V47U±20%4×7 C2.5	TC102,TC201,TC202
0200138	PORCELAIN CAPACITOR	50V 104±20% 5mm	C102~C105,C202
0200108	PORCELAIN CAPACITOR	50V 221±5% 5mm	C106~C108
0200123	PORCELAIN CAPACITOR	50V 102±10% 5mm	C203,C204
0620025	LIGHT-EMITTING DIODE	3R 4SD RED	VD105,VD106
1340064	LIGHT TOUCH RESTORE SWITCH	KFC-06-2WB L3.8	S101,S201~S206

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0160227	DIGITAL POTENTIOMETER	ED200120-A20-100-G77	RP101
2360021	IR SENSOR	138BV3	N102
0882414	IC	TP6317 LQFP44	N101
1200653	FLAT SCREEN	HL-D593	DS101
5236518	SOFT SPONGE ACER	14×10×6.5 DOUBLE-FACED,HARD(50 DEGREE)	2PCS FOR DISPLAY SCREEN/SURFACE CONTROL BOARD
5236982	SOFT SPONGE SPACER	7 ×6×10 DOUBLE-FACED,HARD	1PCS FOR IR SENSOR/SURFACE CONTROL BOARD
2122803	FLAT CABLE	6P180 2.0 T2 WITH NEEDLE, TOGETHER DIRECTION SEPARATE CORD	XP106
2122802	FLAT CABLE	6P90 2.5/2.0 T2 WITH NEEDLE, TOGETHER DIRECTION SEPARATE CORD	XP102
1565136	PCB	4 1510SI-1 HB D1.6 SX	

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PROGRAM FLASH ROMDK1510SIRU-0A(16M) 0912054			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0881998	IC	49BV162A 70TI TSOP	U102 ⑦
0881754	IC	29LV160BE-70NC TSOP	U102 ⑦
MICROPHONE HOLDER BOARD 6DK1510SI-1 4940975			
0260824	CD	CD11 16V10U±20%5×11 C2.5	TC100
0000140	CARBON FILM RESISTOR	1/6W22K±5% SHAPED 7.5	R104,R105
0000481	CARBON FILM RESISTOR	1/6W33Ω±5% SHAPED 7.5	R100,R101
0000142	CARBON FILM RESISTOR	1/6W33K±5% SHAPED 7.5	R102,R103
0200227	PORCELAIN CAPACITOR	50V 104±10% 5mm	C102
0200131	PORCELAIN CAPACITOR	50V 103±10% 5mm	C103
0200033	PORCELAIN CAPACITOR	50V 22P±10% NPO 5mm	C100,C101
03900579	MAGNETIC BEADS INDUCTOR	RH354708 BELT	L100,L101,L102

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
3870115	GROUND CHIP OF POWER BOARD	903	GND1
1860047	USB SOCKET	CAB85-4Pin	JK1
1980030	MICROPHONE SOCKET	C3-6.35-19	MIC1,MIC2
2150344	FLAT CABLE	7P280 2.0 T2 3PB WITH NEEDLE, TOGETHER DIRECTION	XS105