BBK

Model version:SI2.00

DV911HD(RU)

Service Manual

BBK DV911HD   DVD / DivX / XviD / SVCD / VCD / CD-DA / CD+G / HDCD / WMA / JPEG

POWER   OPEN/CLOSE   1—MIC—2   STOP   PLAY/PAUSE
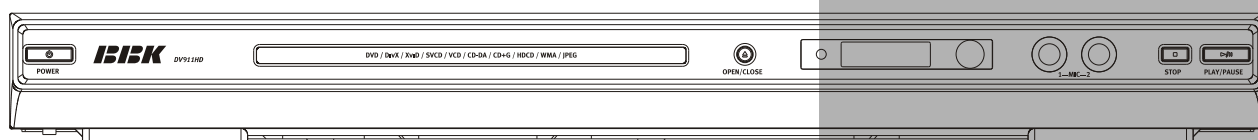
Model version:SI2.00

Catalog

Caution :

This Service Manual is applicable to DV911HD(RU)SI2.00.

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-scaleintegrated 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 de 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 (≥100MHE)

◆ TV set

◆ SMD rework station

◆ Multimeter

◆ Soldering iron

◆ Pointed-month pincers

◆ Cutting nippers

◆ Forceps

◆ Electric screw driver

◆ Terminals 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, DivX4, DivX5, DivXPro, XviD compressed
 video files
#Digital audio playback: DVD-Audio, Super Audio CD , CD-DA and HDCD compatibility
#Fully compatible with compressed audio files such as Mp3, WMA and OGG Vorbis fomats
#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
#Digital multi-channel decoders, providing Dolby Digital/DTS audio stream playing
#Built-in Dolby Pro Logic ll decoder makes available to convert stereo signal into multi-channel
#MIC input for karaoke function
#Headphones output

Video:
#108 MHz/12 bit Video Digital/Analog converter
#HDMI interface provides high-definition image(720p/1080) and digital audio
#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
#Capable of playing NTSC/PAL discs
#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/DVD+RW
#USB interface to connect Mp3 player, flash card or digital camera
#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, 50/60Hz), automatic short circuit
protection

2.2 Controls and functions

2.2.1 Front and side panels control

DV911HD
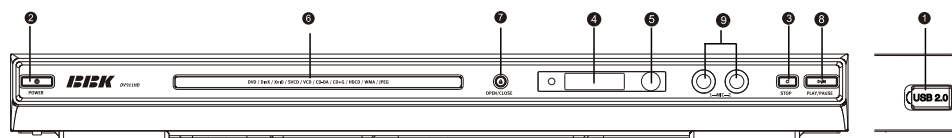
DV915HD
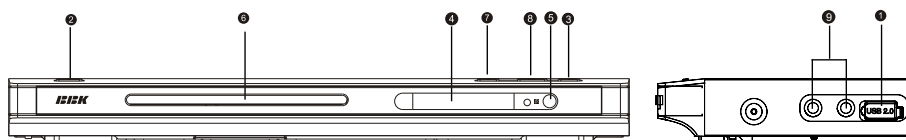
①	USB indicator	⑥	Disc tray
②	POWER button	⑦	OPEN/CLOSE button
③	STOP button	⑧	PLAY/PAUSE button
④	LED display	⑨	Microphone input
⑤	Sensor of infrared beams		

2.2.2 Rear panel general view

DV911HD
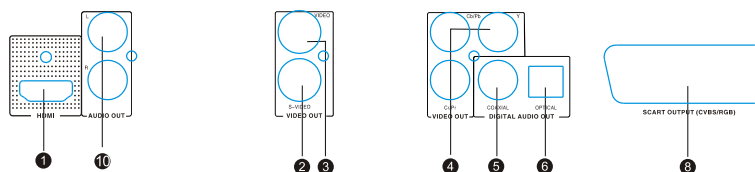
DV915HD
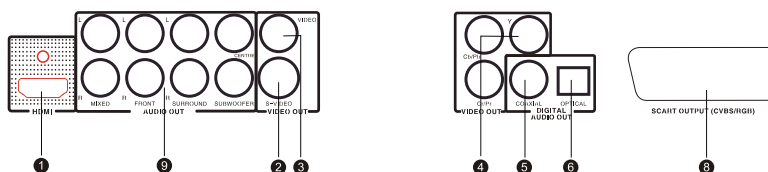
①	HDMI Out jack	⑤	Digital Audio Coaxial Out jack
②	S-VIDEO Out jack	⑥	Digital Audio Optical Out jack
③	VIDEO Out jac	⑧	SCART Out jack
④	Video Component/Y Pb Pr out jacks	⑨	5.1CH Audio Out jack
		⑩	Stereophonic audio output

2.2.3 LED display general view

DV911HD,DV915HD

Playback mode

- 5 -
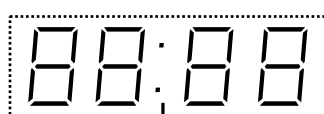
2.2.4 Remote control general view
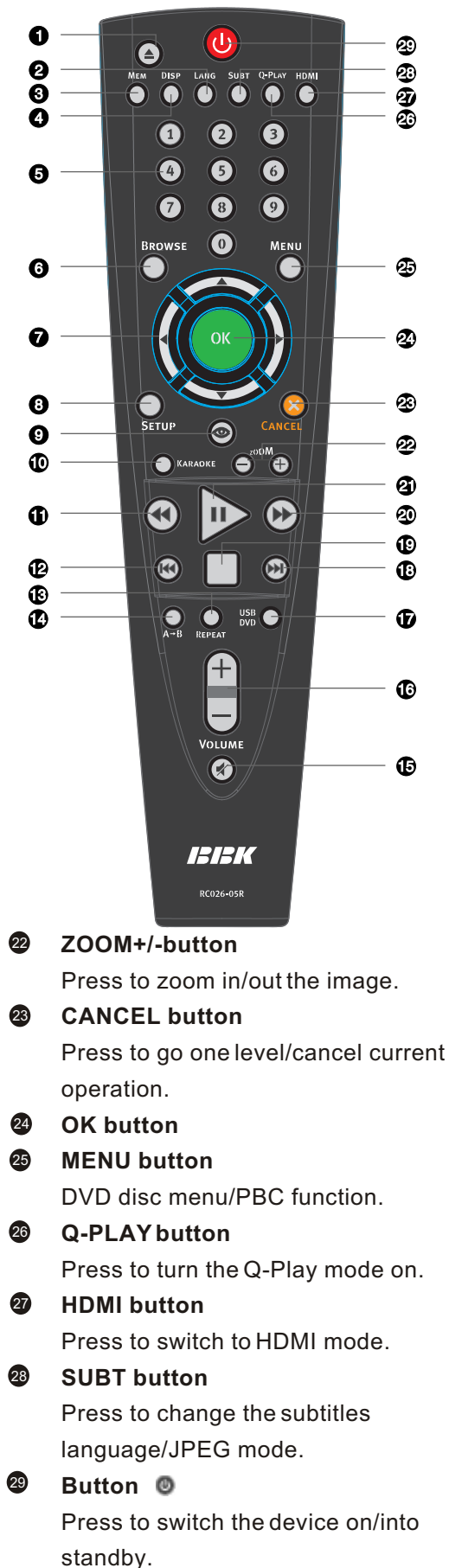
① **Button ⏏**

Press to open/close the disc tray.

② **LANG button**

Press to change the 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 **Sense buttons**

⑧ **SETUP button**

Press to switch to setup mode.

⑨ **Button 👁**

Press to turn on/off the "Vitual Keyboard" function.

⑩ **KARAOKE button**

Press to set karaoke function.

⑪ **Button ◀◀**

Press to reverse scanning.

⑫ **Button ⏮**

Press to playback from the previously point.

⑬ **REPEAT button**

Press to repeat playback.

⑭ **A-B buttons**

Press to repeat the selected portion.

⑮ **Button 🔇**

Press to turn on/off the sound.

⑯ **VOLUME+/-button**

Press to adjust the volume.

⑰ **USB/DVD button**

Press to switch USB/DVD modes.

⑱ **Button ⏭**

Press to playback from the following point.

⑲ **Button ◻**

Press to stop playback.

⑳ **Button ▶▶**

Press to forward scanning.

㉑ **Button ▶**

Press to play/pause the playback.

㉒ **ZOOM+/-button**

Press to zoom in/out the image.

㉓ **CANCEL button**

Press to go one level/cancel current operation.

㉔ **OK button**

㉕ **MENU button**

DVD disc menu/PBC function.

㉖ **Q-PLAY button**

Press to turn the Q-Play mode on.

㉗ **HDMI button**

Press to switch to HDMI mode.

㉘ **SUBT button**

Press to change the subtitles language/JPEG mode.

㉙ **Button ⏻**

Press to switch the device on/into standby.

2.3 Set list

DVD player ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯ 1PCS
Audio cord 2xRCA-2xRCA ⋯⋯⋯⋯⋯ 1PCS
Video cord RCA-RCA ⋯⋯⋯⋯⋯⋯⋯ 1PCS
Remote control ⋯⋯⋯⋯⋯⋯⋯⋯⋯ 1PCS
Battery AAA ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯ 2PCS
Warranty card ⋯⋯⋯⋯⋯⋯⋯⋯⋯ 1PCS
User's manual ⋯⋯⋯⋯⋯⋯⋯⋯⋯ 1PCS
Karaoke disc ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯ 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 and DOWN buttons; press OK for confirmation.

Language ▬ ▶	Setup Menu ▬
Image	DVD menu ▬
Sound	Sound track ▬
Playback	Subtitles off.
Karaoke	MP4 Subtitles ▬
Preference	
Parental control	
Initial setup	
Reset to defaults	
Exit	
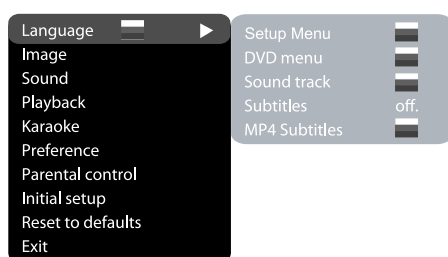
1. For example, if you wish to change the image settings, you have to select the Image item and press the OK.

TV system	Auto	● Auto
TV scan mode	IS	PAL
Video output	Comp.	NTSC
TV format	4:3 LB	
Sharpness	M.	
Gamma	Off.	
Brightness	+48	
Contrast	+48	
Hue	0	
Saturation	0	

2. Using the UP and Down buttons, select the desired item and press OK
   For example, select the Sharpness item.Settings will appear on the screen. Then select the desired sharpness level and press OK for confirmation.
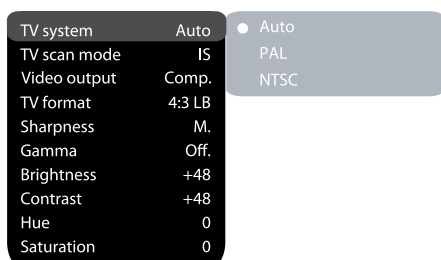3. Press LEFT key of the UP and DOWN buttons for exit to previous menu level.
4. Press SETUP to exit setup menu.

TV system	Auto	
TV scan mode	IS	
Video output	Comp.	
TV format	4:3 LB	
Sharpness	M.▶	High
Gamma	off.	● Medium
Brightness	+48	Low
Contrast	+48	
Hue	0	
Saturation	0	
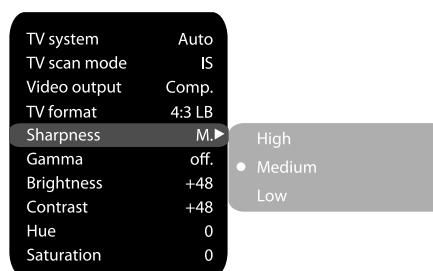
2.4.2 Language settings

1.Menu: interface language setup
#Options: Russian, English, Ukrainian, Romanian.
#Default option: Russian.

Setup menu	▬ ▶	● Русский
DVD menu	▬	English
Soundtrack	▬	Українська
Subtitles	Off.	Româna
MP4 Subtitles	▬	
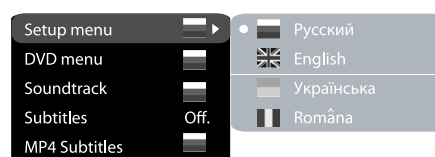
2.DVD menu :selection of disc menu language
3.Soundtrack: selection of translation language
#Options: Russian, English, Estonian, Latvian, Kazakh, Romanian, Belarusian, Ukrainian, Chinese.
#Default: English.
#Selection of other languages: select the OTHERS item using the UP and DOWN buttons and press 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.DVD/MP4 Subtitles: 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 Up and DOWN buttons 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: PAL
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.Video output: selection of video signal

#Options: S-Video,Comp, SCART.

#Default option: Comp.

4. TV Format: image ratio settings

#Options: 4:3 pan&scan, 4:3 letterbox, 16:9 TV, Wide/SQZ.

#Default option: 16:9

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

TV system	Auto	● Auto
TV scan mode	IS	PAL
Video output	Comp.	NTSC
TV format	4:3 LB	
Sharpness	M.	
Gamma	Off.	
Brightness	+48	
Contrast	+48	
Hue	0	
Saturation	0	

5.Sharpness: image sharpness adjustment

#Options: High, Medium, Low.

#Default option: Medium.

6.Gamma: adjustment of image color temperature

#Options: High, Medium, Low, Off.

#Default option: Off.

7.Brightness: adjustment of image brightness.

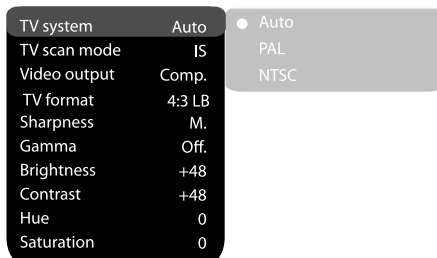8.Contrast: adjustment of image contrast

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 and Down buttons. Press OK or RIGHT key to start adjusting the relevant option.

#Change the option value using the Up and Down buttons.

#Upon completion press the LEFT key of the UP and 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, 5.1

#Default option: Stereo.

#5.1 mode must be supported by the disc Number of muic 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.

Mixer	▶	Configuration	St.
Digital Output		Stereo mix	L+R
HDMI Audio		Surr. mix	Off
Tuning		Low band	FSW
		Channels	
		Delays	
		PRO Logic II	Auto
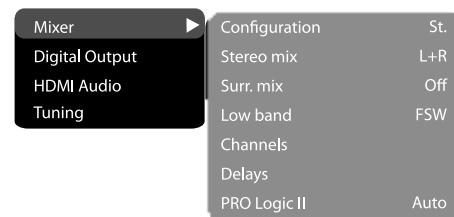
B). Stereo mix: playback set-up while playing the disc with two independent audio channels. (DV911HD only has this function.)

#Options: L+R, L, R.

#Default option: L+R.

C) Surr. Mix: set-up of surround options while playing the stereo disc.(DV911HD only has this function.)

#Options: Off, sum, Virt. Surr.

#Default options: Off.

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.

Configuration	St. ▶	● Stereo
Stereo mix	L+R	5.1
Surr. mix	Off	7.1
Low band	FSW	
Channels		
Delays		
PRO Logic II	Auto	
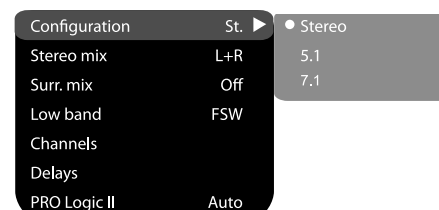
E). Channel settings: separate adjusting of volume by channels.

#Select the channel you want.

#Adjust the sound volume of each channel using the UP and DOWN buttons.

#Press the OK or Cancel to return to sound settings menu.

#No SB L/R selection for DV915HD   in right menu.
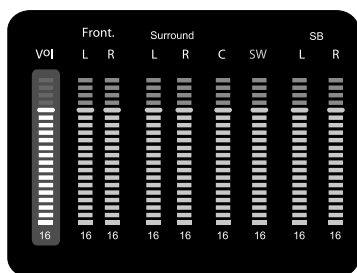
F) Delay of the channel: set-up of signal delay in speaker channels(central, rear and subwoofer).

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

#Using the Up and Down buttons set up the desired distance from the listener to each speaker(detailed description of this operation see on page30)

#Press LEFT key of the cursor to return to speaker configuration menu.

#No LSA/RSB selection for DV915HD in right menu.

G). PRO Logic ll: function of stereo sound conversion to 5-channels sound.

#Options: On, Off, Auto.

#Default option:Off.

#In Auto position, the DVD player determines itself, when to use the PRO Logic ll 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 player's digital outputs, the decoded signal is transferred to analog outputs. Decoding is performed by the built-in decoder of the DVD player.

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

#If you select the PCM option, a PCM coded signal will be transferred to the DVD player's digital outputs.
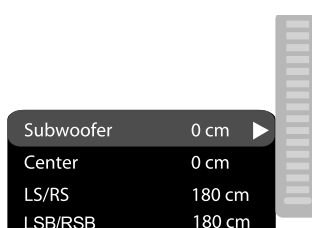
B)LPCM: set-up of digital audio output options to comply with different ampllfiers and recelvers.

#Options: 48 kHz 16 bit,96 kHz 24 bit, 192 kHz 24 bit.

#Default option: 48 kHz 16 bit.

3.HDMI audio: transfer digital sound by HDMI interface.

#Options: Spdif, Multi-channel, Off

#Default option: Multi-channel

4.Sound correction

A)Max volume: max volume limiting

#Using the Up and Down buttons, adjust the max volume level.

#Press the LEFT key of the Up and Down buttons to return to sound correction setup menu.

B)Equalizer: equalizer modes

#Options: Rock, Pop, Live, Dance, Techno, Classic, Soft.

#Default option: Off.

C)Echo:echo effects

#Options: Off, Concert, Living room, Hall, Bathroom, Cave, Arena, Church.

#Default option: Off.

D)Tone balance: adjustment of tone balance level.

#Adjust the tone balance level using the Up and Down buttons.

#Press the LEFT key of the Up and Down buttons to return to sound correction setup 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.Shuffle: shuffle files from the playlist
#Options: Off, On.
#Default option: Off.
6.Laad effect: Loading mode for JPEG or
Paeture col.
#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.Kar. Help :karaoke disc playback mode
#Options:L Channel, R Channel, No ast, No voc.
#Default option: No vocal mode.

Microphone	Off	▶	On
Kar. Help	No voc.		● Off
Volume	5		
Echo	5		
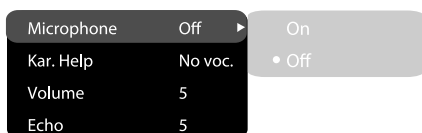
3. Volume:
Microphone: microphone sound volume level
#Using the UP/DOWN buttons adjust the
  microphone volume level.
#Press LEFT key of the UP/DOWN buttons to
  return to karaoke settings menu.

Microphone	On
Kar. help	No voc.
Volume	5	▶
Echo	5
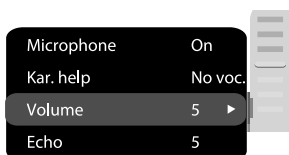
4. Echo: echo level while playing the karaoke-
  disc
#Adjust the echo level Using the UP/DOWN
  buttons.
#Press LEFT key of the UP/DOWN buttons to
  return to karaoke settings menu.

Microphone	On
Kar. help	No voc.
Volume	5
Echo	5	▶

2.4.7 Preference settings

1. Gr.Equalizer: spectrum analyzer
#Options: On, Off.
#Default option: Off.

2.Screensaver: screen saver on/off
#Options: On, Off.
#Default option: On.

Backlight	On		● On
Gr. Equalizer	Off		Off
Screensaver	On		
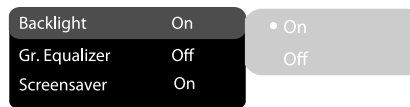
2.4.8 Parental Control

1.Allowed: setup of age restrictions to prevent
children from seeing undesirable discs.
#Options: Any, Kid, G, PG, PG-13, PGR, R, NC-
17.
#Default option: Any.

Allowed	Any	▶	● Any
Set password			Kid
			G
			PG
			PG-13
			PGR
			R
			NC-17
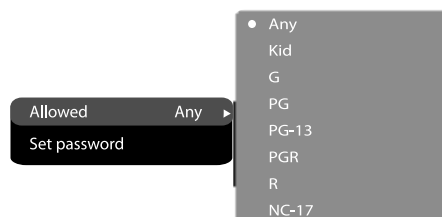
2. Set password: setup of a four-digit password
to change the level of age restrictions.
#Default option: 7890.

Old password	
New password	
Verify	
Ok	Cancel
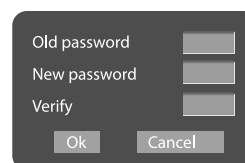
2.4.9 Initial setup menu

#Press the RIGHT key of the UP/DOWN buttons
  to enter the initial setup menu, then select the
  desired item using the buttons Up and Down
  and press OK key for confirmation.
#While being in this menu section, you cannot
  return to the previous level by pressing the
  LEFT key of the UP/DOWN buttons.

| ● Auto |
| PAL |
| NTSC |
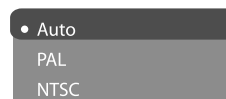
2.4.10 Reset to defaults

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

| Load factory settings |
| Ok | Cancel |
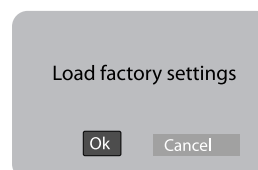
2.4.11 Exit settings menu

#Select the exit item using the Up and Down buttons and press the OK to exit the menu.

Language
Image
Sound
Playback
Karaoke
Preference
Parental control
Initial setup
Reset to defaults
Exit
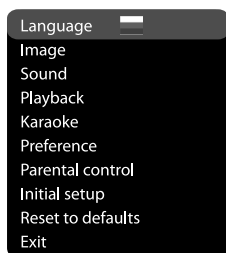
2.4.12 Channel delay set-up

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.
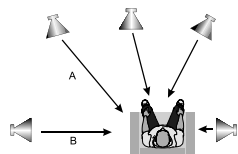
Fig.1. Take into account the A-B distance; use both figures for setting the desired time delay.
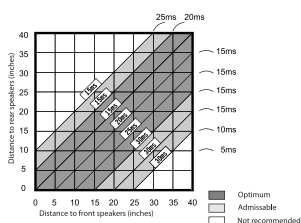
Fig.2. Determine delay value as to Dolby Pro Logic mode.
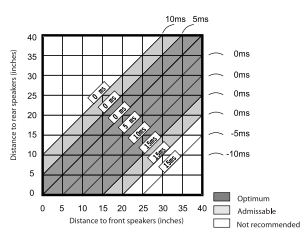
Fig.3. Determine delay value as to Dolby Digital mode.

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".
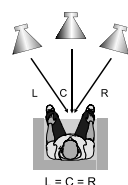
Fig.1. Delay of central channel=0
L=R=C
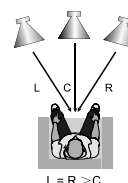
Fig.2. Small area Delay of central channel =L=(or R)-C
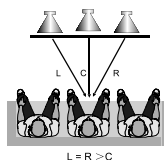
Fig.3. Small area Delay of central channel=0
L= R>C
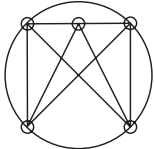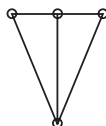
"Night" mode

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 near, e.g, dialogues as clear as you do at normal volume, and such sound effects as rustle, whisper etc. Have merely disappeared.To avold 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 and inverse transformation (volume expansion) takes place. This is called"night" mode. The regulation limits are restricted, however, to avoid distortions of resultant signal. This is called"night" mode. The regulation limits are restricted, however, to avoid distortions of resultant signal.
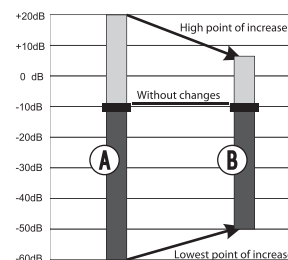
Principle of compressing the acoustic signal's dynamic range.

	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	Muitivariate	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.
	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.
	Allows adjusting the decompression degree of sound infromation("night" mode).	Surround sound may be received from any signal source.
Miscellaneous	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 existiing 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 player make pauses of not less than 30 seconds between switching off and repeatedly switching on the DVD player.

#Disconnect the DVD player from the wall outlet after shutdown.

#Some DVD player's functions may not be applied to some discs.

#Use supply sources of rated voltage, otherwise the DVD player may not function or be damaged.

#In case of the DVD player's occasional stops, please switch the power supply off and then on again.

2.5.2 Trouble shooting

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 player'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 players 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 approprlate color system vla 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 players's laser head.	1. Insert the disc. 2.Install the disc with the label side facing up. 3. Switch the DVD players 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 players 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 players. 3. Replace both batteries.
Some functions do not work	1. Disc is recorded incorrectly. 2.Incorrect key sequence. 3.Static voltage on the DVD players's housing.	1.Wait 5-10 seconds and the DVD players will automatically return to normal state. 2. Repeat the operation one more time. 3. Switch the DVD players off for 1-2 minutes and then switch it on again.
Unstable image	1.Incorrect TV set settings.	1.Correct the TV set settings.
Headphones do not operate	1.Headphones are not connected. 2. Low level of sound volume.	1.Connect the headphones. 2. Adjust the level of sound volume.
Not signal or incorrect signal from HDMI socket	1.Poor HDMI cable connection. 2.Display device don't support HDMI output mode. 3. Conditions of protection from copy not observed.	1. Make proper connection. 2. Select another HDMI output mode supported by display device . 3.Satisfy some details about conditions of signal recept to HDMI input in user manual.
Flutter echo during connection by HDMI socket	1.Result of incorrect frequency transformation posteriority frame from 50 Hz to 60 Hz.	1.Examine propriety of settings of DVD player and display device.

2.5.3 Specifications

Supported formats	DVD-Video,Super VCD,VCD,MPEG-4,DVD-Audio, CD-DA, CD+G,HDCD,MP3,WMA,Kodak Plcture CD,JPEG
Data medium	CD-R, CD-RW, DVD-R, DVD+R, DVD-RW, DVD+RW
Inputs	Microphone input USB port

Outputs	Audio Outputs	Analog outputs: Stereophonic output, 5.1CH output. (Only for DV915HD),2.1CH output(Only for DV911HD) DigItal outputs: Coaxlal audio output, Optlcal output.
	Video Outputs	S-Video output, composite output, component Y Cb Cr output, progressive scanning Y Pb Pr output, RGB/SCART output.

Video characteristics	Signal swing of composite video output:	1.0Vp-p(75Ω)
	Signal swing fo S-Video output:	1.0Vp-p(75Ω) C:0.286Vp-p(75Ω)
	Signal swing of component video output:	1.0Vp-p(75Ω) Cb/Cr:0.7Vp-p(75Ω)
Audio characteristics	Frequency : Signel-to-noise ratlo Common distortion harmonic:	20-20000Hz(±1 dB) >100(dB) <0.01%
Voltage range	~110-250V,50/60Hz	
Temperature requirement	5-35℃	
Moisture requirement	15-75%(not condensate)	

Model	Dimensions(mm)	Weight(kg)
DV911HD	380X 258 X39	1.9
DV915HD	380X 258.5 X41.5	2.5

Model	Power consumption(watt)
DV911HD DV915HD	14

#We improve quality of our production pemanently, that's why specification can change without notification.

#Some disks,was recording in different formats on different data mediums, can't playback or can playback incorrect over peculiarity of their record.

Chapter Three Block Diagram

Section One PCB

diagram and block diagram of player

3.1.1 Overall wiring diagram for player.
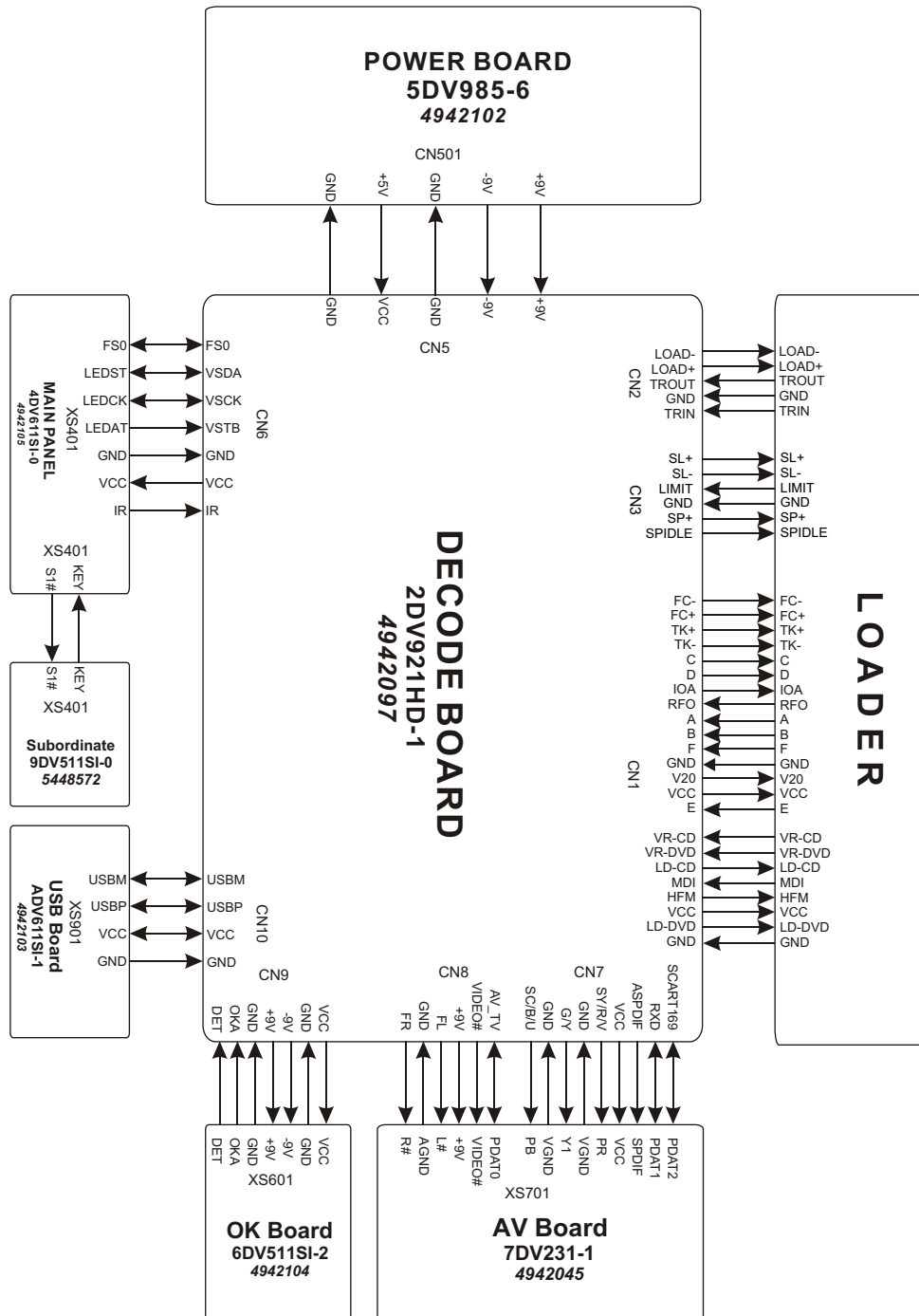
3.1.2 Block diagram for player.
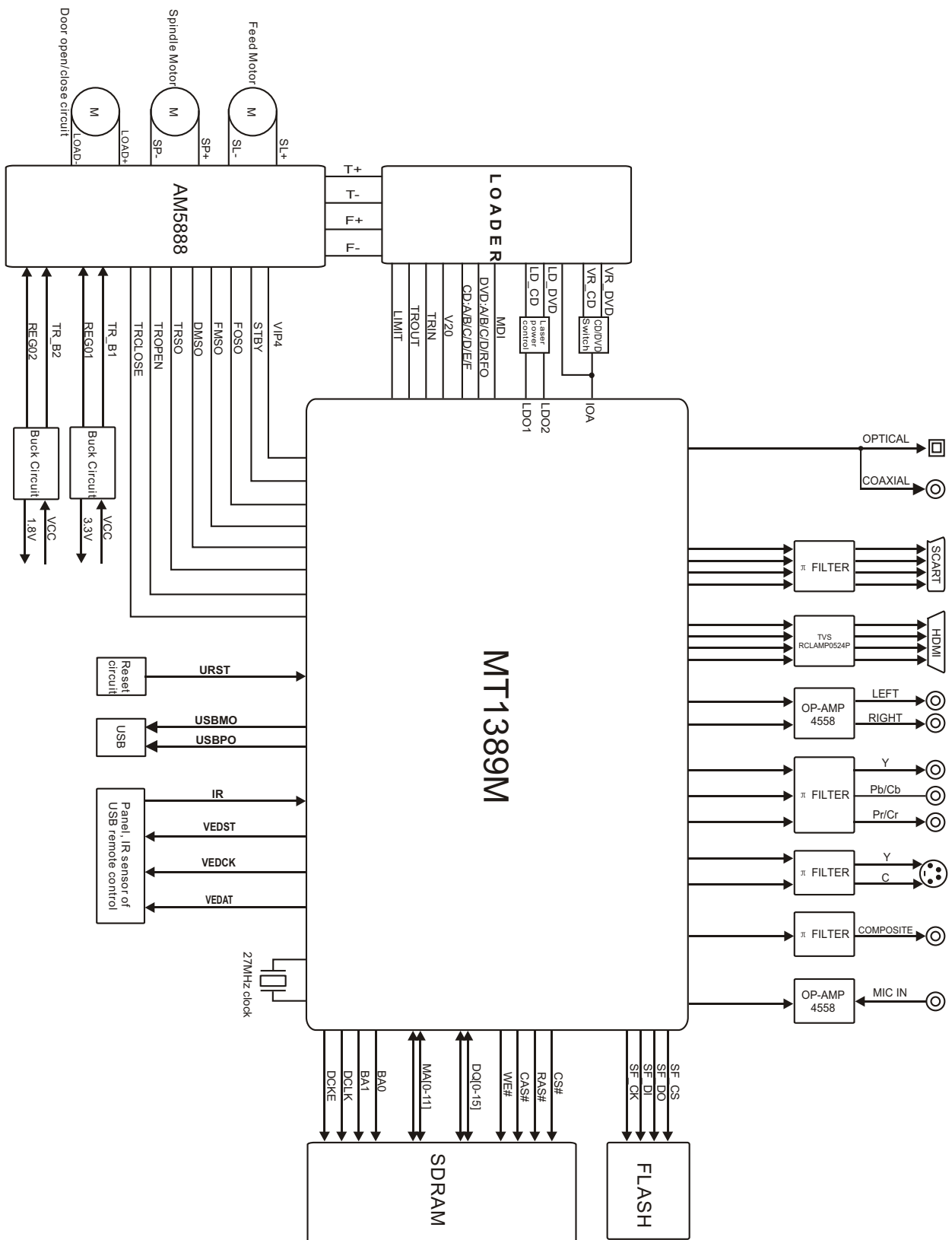
Section Two Unit circuit principle

3.2.1 Servo circuit.

Servo circuit of this circuit adopts SONY chip and MTK decoding programme, and it is mainly composed of front-end signal processing, digital servo processing, digital signal processing chip MT1389M and driving circuit chip AM5888. Of which MT1389M is also main composition of decoding circuit. Block diagram of servo circuit is shown in figure 3.2.1.1:
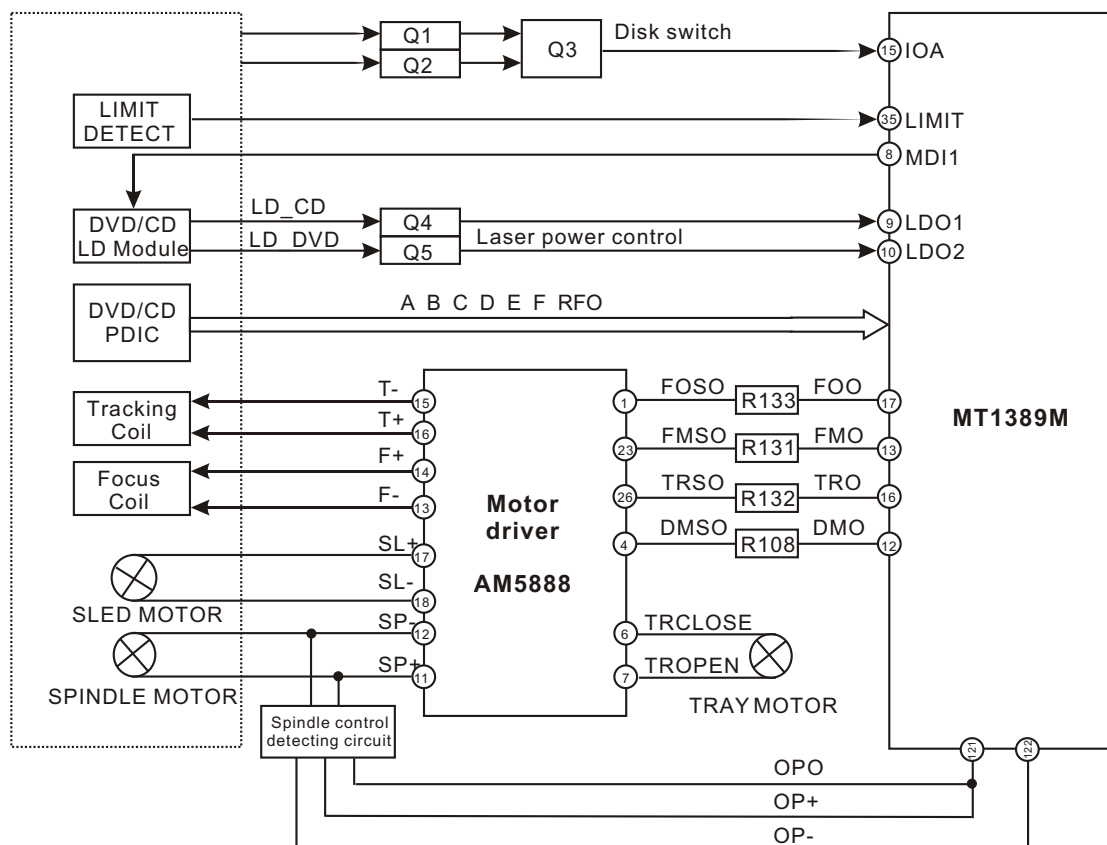
Figure 3.2.1.1 Block diagram of servo circuit

3.2.2 Decoding circuit.

Decoding circuit is mainly composed by MT1389M, SDRAM and FLASH, block diagram of circuit is shown in figure 3.2.2.1:
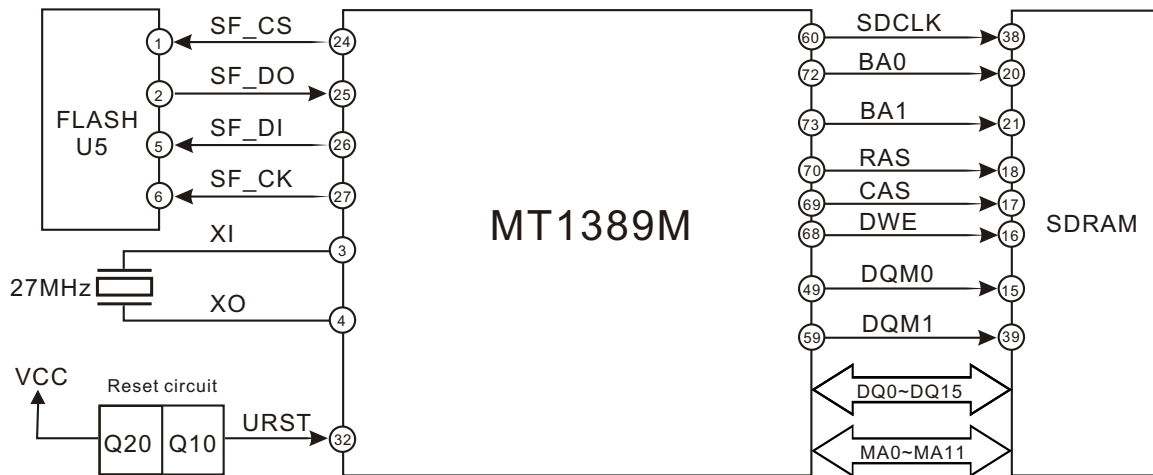
Figure 3.2.2.1 Block diagram of decoding circuit

3.2.3 Audio Circuit.

Block diagram for audio circuit is shown in figure 3.2.3.1.
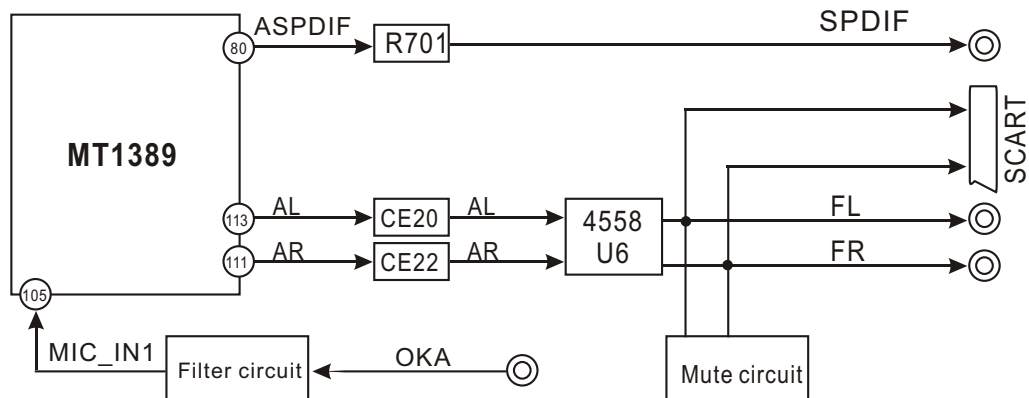
Figure 3.2.3.1 Block diagram of audio circuit

3.2.4 Video circuit .

MT1389M has built-in video D/A conversion circuit. Video output has R/B/G, Y/Pb/Pr, Y/Cb/Cr, CVBS and Y/C modes. However, R/B/G, Y/Pb/Pr, Y/Cb/Cr and Y/C can not output simultaneously, they need software to switch. CVBS is a individual output mode. And four channel video signal outputted by MT1389M outputs to corresponding terminals after video filtering and clamping. Block diagram of video signal is shown in figure 3.2.4.1:

Figure 3.2.4.1 Block diagram of video signal route

3.2.5 Power Circuit.

Block diagram of power circuit is shown in figure 3.2.5.1:

Figure 3.2.5.1 Block diagram of power circuit

Section Three Troubleshooting flow chart

```
┌─────────────────────┐
│   Power on player   │
└─────────────────────┘
           │
           ▼
      ◇ Use            ──N──▶ ┌──────────────────────┐
    multimeter to            │ Replace power cord and│
  test whether voltages      │  trouble is removed  │
 on two sides of power cord  └──────────────────────┘
    is between 90~250V
           │Y
           ▼
      ◇ Use                ──N──▶  ◇ Check            ──N──▶ ┌──────────────┐
   DC of multimeter               whether fuse is normal     │ Replace fuse │
 to test whether voltages                                    └──────────────┘
 on two sides of power                  │Y
   board Bc501 is 300V                   ▼
           │Y            ┌──────────────────────┐
           │            │  Check rectifying     │
           │            │  diode D501~D504      │
           ▼            └──────────────────────┘
      ◇ Check            ──N──▶  ◇ Check              ──N──▶ ┌──────────────────┐
  whether red                   whether output             │ Check whether power│
 indication light of          voltage of power board       │ boards U501, U502  │
    panel is on                   is normal                │ and U503 work      │
           │Y                        │Y                    │ normally           │
           │                         ▼                     └──────────────────┘
           │                    ◇ Check               ──N──▶ ┌──────────────────┐
           │                   whether power                │ Check power supply │
           │                  supply of panel               │ circuit of decode  │
           │                    is normal                   │ board              │
           │                        │Y                      └──────────────────┘
           │                        ▼
           │            ┌──────────────────────────┐
           │            │Check whether working voltage│
           │            │ of indication light is     │        ┌──────────────────┐
           │            │ normal or whether it is    │        │ Check power supply │
           │            │ damaged                    │        │ circuit of decode  │
           │            └──────────────────────────┘        │ board              │
           │                                                 └──────────────────┘
           ▼                                                          ▲
      ◇ Press           ──N──▶  ◇ Check      ──N──▶  ◇ Check   ──N──▶  ◇ Check
  POWER button                 whether power         whether clock    whether working
 to power on and check        supply of FLASH        is normal        voltage of 1389
  whether it is                  normal                               is normal
    power-on                        │N                   │N               │Y
       │Y                           ▼                    ▼                ▼
       ▼                  ┌──────────────┐    ┌──────────────────┐  ┌──────────────────┐
      (A)                 │Replace FLASH │    │Check whether       │  │ Replace 1389 chip │
                          └──────────────┘    │surrounding elements│  └──────────────────┘
                                              │of crystal oscillator│
                                              │is normal , and if it│
                                              │is OK, replace      │
                                              │crystal oscillator  │
                                              └──────────────────┘
```

A1

Check whether it reads USB
- N → Check whether terminal voltage of USB is normal
  - N → Check whether 5V voltage is normal, replace 1389 chip if it is normal
  - Y → Replace USB terminal
- Y ↓

Check whether it reads CD disk
- N → Check whether L3 is high level
  - Y → Replace pick-up of loader
  - N → Check whether power supply of Q4 is normal
    - Y → Replace 1389 chip
    - N → Check power supply circuit of Q4
- Y ↓

Check whether it reads DVD disc
- N → Refer to troubleshooting flow of unavailable CD disc reading
- Y ↓

Check whether composite video output is normal
- N → Check whether L16 inductance has composite video output
  - N → Replace 1389 chip
  - Y → Replace AV terminal
- Y ↓

B

```
        ┌───┐
        │ B │
        └───┘
          │ Y
          ▼
      ╱Check╲
     ╱whether  ╲      N    ┌──────────────────────┐
    ╱ component ╲──────────▶│ Each channel can refer│
    ╲video output╱          │ to troubleshooting    │
     ╲ is normal╱           │ flow of composite video│
       ╲    ╱               └──────────────────────┘
          │ Y
          ▼
      ╱Check╲
     ╱whether  ╲      N    ┌──────────────────────┐
    ╱ Sterminal ╲──────────▶│ Refer to troubleshooting│
    ╲  outputs  ╱           │ flow of composite video │
     ╲normally ╱            └──────────────────────┘
       ╲    ╱
          │ Y
          ▼
      ╱Check╲
     ╱whether  ╲      N    ┌──────────────────────┐
    ╱  SCART    ╲──────────▶│ Refer to troubleshooting│
    ╲ terminal  ╱           │ flow of composite video │
     ╲ outputs ╱            └──────────────────────┘
     ╲normally╱
       ╲   ╱
          │ Y
          ▼
   ╱Check ╲          ╱Check ╲          ╱Check ╲
  ╱whether  ╲   N   ╱whether  ╲   Y   ╱whether  ╲   Y   ┌──────────────────┐
 ╱  HDMI     ╲─────▶╱HVCC signal╲─────▶╱ each TX  ╲─────▶│Replace HDMI terminal│
 ╲ terminal  ╱      ╲is high level╱    ╲signal is ╱      └──────────────────┘
  ╲ outputs ╱        ╲        ╱         ╲normally╱
   ╲normally╱          ╲   ╱              ╲   ╱
     ╲  ╱                │ N                │ N
      │ Y                ▼                  ▼
      ▼           ┌──────────────┐   ┌──────────────┐
   ┌───┐          │Check VCC power│   │Replace MT1389 │
   │ C │          │supply circuit │   └──────────────┘
   └───┘          └──────────────┘
```

```
                    ( C )
                      │
                      ▼
         ┌──────────────┐      N      ┌──────────────┐      Y      ┌──────────────┐      Y      ┌────────────────────┐
         │    Check     │────────────▶│    Check     │────────────▶│    Check     │────────────▶│ Check whether mute │
         │ whether audio│             │whether power │             │whether pin 1 │             │ circuit is normal  │
         │   outputs    │             │supplies of pin 4, 8│        │of 4558 has   │             │                    │
         │   normally   │             │ of 4558 are  │             │ audio output │             └────────────────────┘
         └──────────────┘             │    normal    │             └──────────────┘
                │                      └──────────────┘                    │
                │ Y                           │ N                          │ N
                │                             ▼                            ▼
                │                    ┌──────────────┐             ┌──────────────┐      Y      ┌────────────────────┐
                │                    │Check power supply│          │   Whether    │────────────▶│ Replace 1389 chip  │
                │                    │circuit of power board│      │CE21 capacitance│           │                    │
                │                    └──────────────┘             │has audio output│           └────────────────────┘
                │                                                  └──────────────┘
                │                                                         │ N
                │                                                         ▼
                │                                                ┌──────────────┐
                │                                                │Replace 4558 chip│
                │                                                └──────────────┘
                │
                ▼
         ┌──────────────┐      N      ┌──────────────┐      Y      ┌──────────────┐      Y      ┌────────────────────┐
         │    Check     │────────────▶│   Whether    │────────────▶│    Check     │────────────▶│ Replace 1389 chip  │
         │whether karaoke│            │ software can │             │whether karaoke│            │                    │
         │  is normal   │             │  be opened   │             │signal of MIC board is│      └────────────────────┘
         └──────────────┘             └──────────────┘             │    normal    │
                │                             │ N                   └──────────────┘
                │ Y                           ▼                            │ N
                │                    ┌──────────────┐                      ▼
                │                    │Turn on MIC switch│          ┌──────────────┐      N      ┌────────────────────┐
                │                    └──────────────┘             │    Check     │────────────▶│ Check power supply │
                │                                                  │whether power │             │     circuit        │
                │                                                  │supply of 4558 is│          └────────────────────┘
                │                                                  │    normal    │
                │                                                  └──────────────┘
                │                                                         │ Y
                │                                                         ▼
                │                                                  ┌──────────────┐      N      ┌────────────────────┐
                ▼                                                  │    Check     │────────────▶│ Replace MIC socket │
         ┌──────────────┐                                         │whether pin 7 │             │                    │
         │     END      │                                         │has karaoke signal│          └────────────────────┘
         └──────────────┘                                         │   output     │
                                                                   └──────────────┘
                                                                          │ Y
                                                                          ▼
                                                                   ┌──────────────┐
                                                                   │Replace 4558 chip│
                                                                   └──────────────┘
```

Section Four 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.
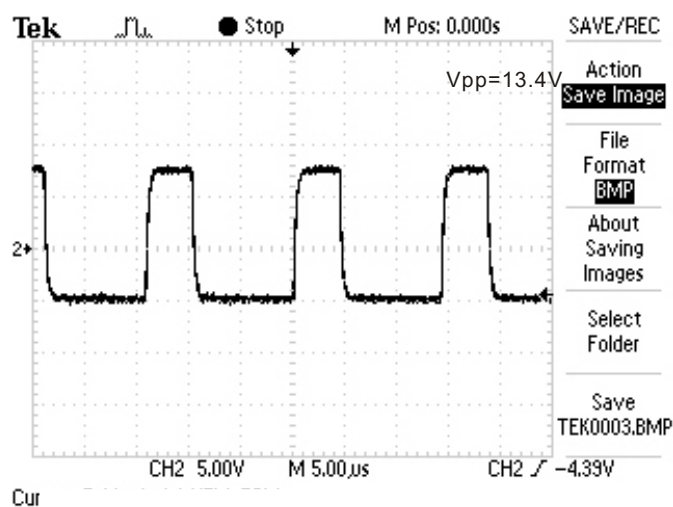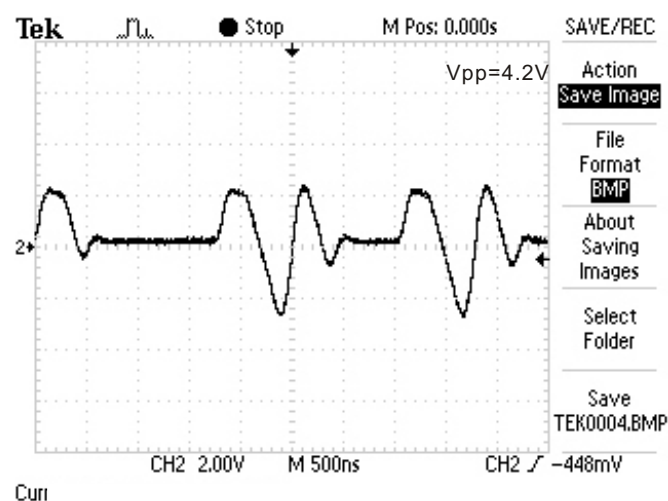
1. Waveform diagram for pulse DC of power board D510 anode.
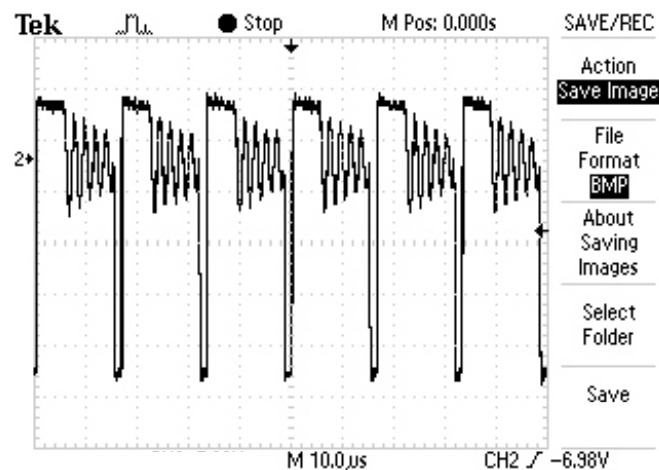
2. DMO waveform diagram （when there is DMSO motion）
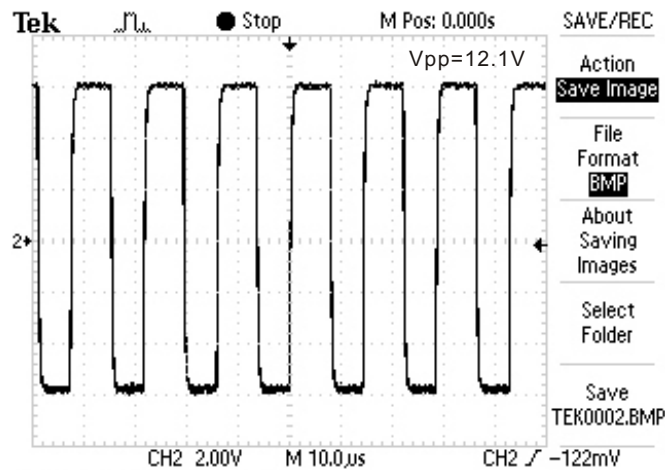
3. FMO waveform diagram（when pick-up has FMSO motion).

4.TRO waveform diagram（when pick-up has TRSO motion）

5.FOO waveform diagram（when pick-up has FOSO motion）.
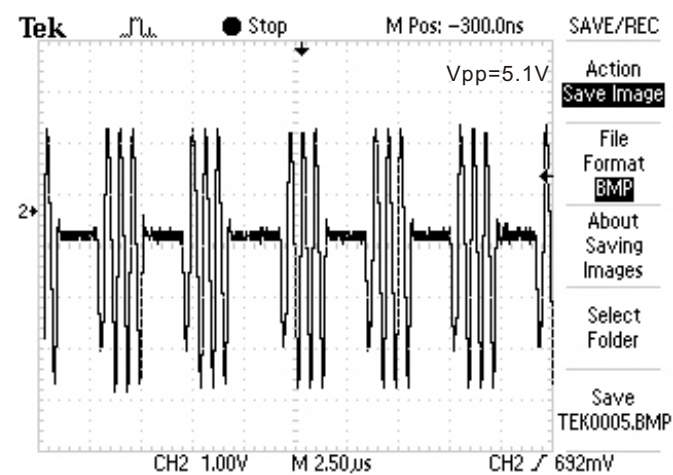
6. Video signal waveform diagram.
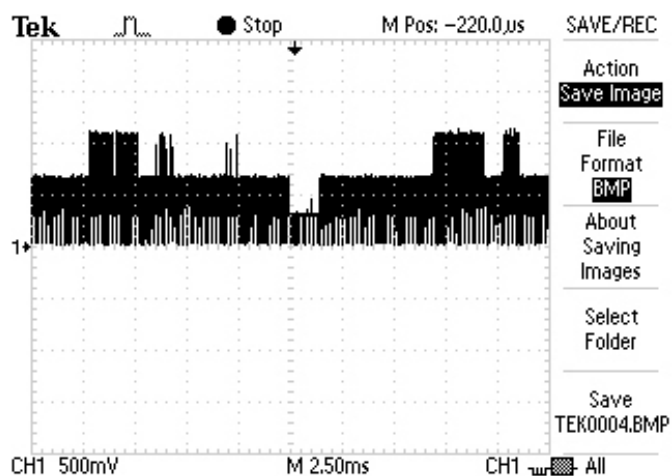
7. 1KHZ audio signaal output waveform diagram(it is suggested to use test disc,if not,waveform tested will change at any time,which will affect your judgment).
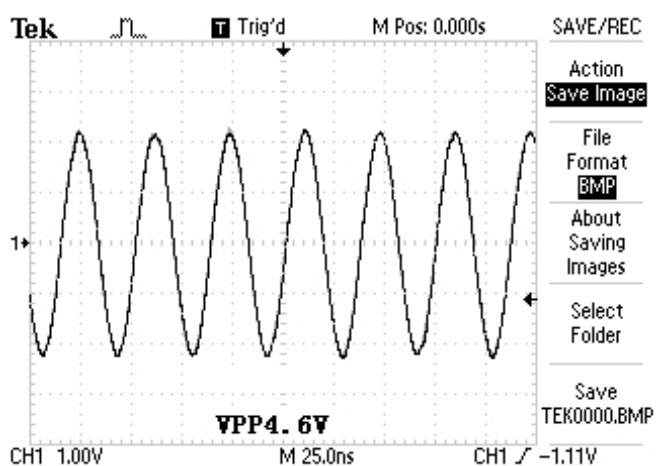
8. Waveform diagram of 27MHz(X1) clock.
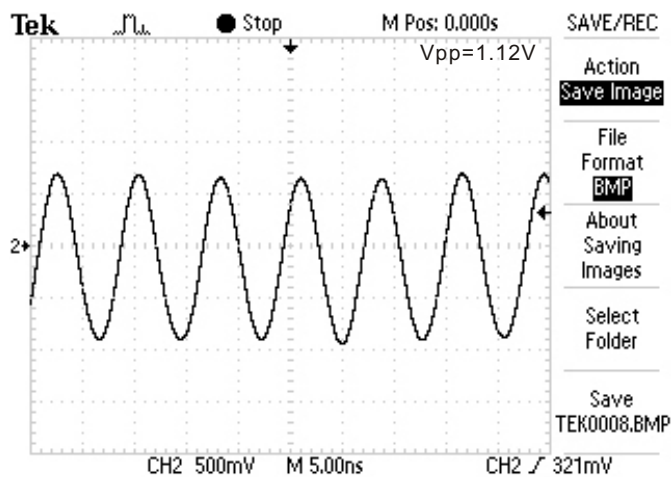
9. URST waveform diagram.
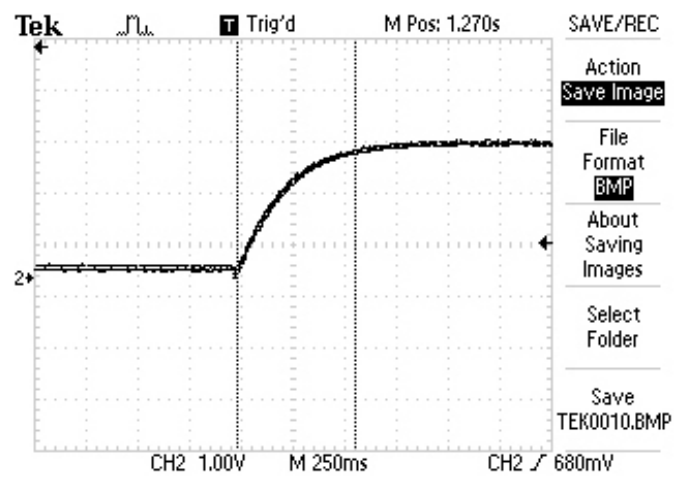
Chapter Four Explosion Chart
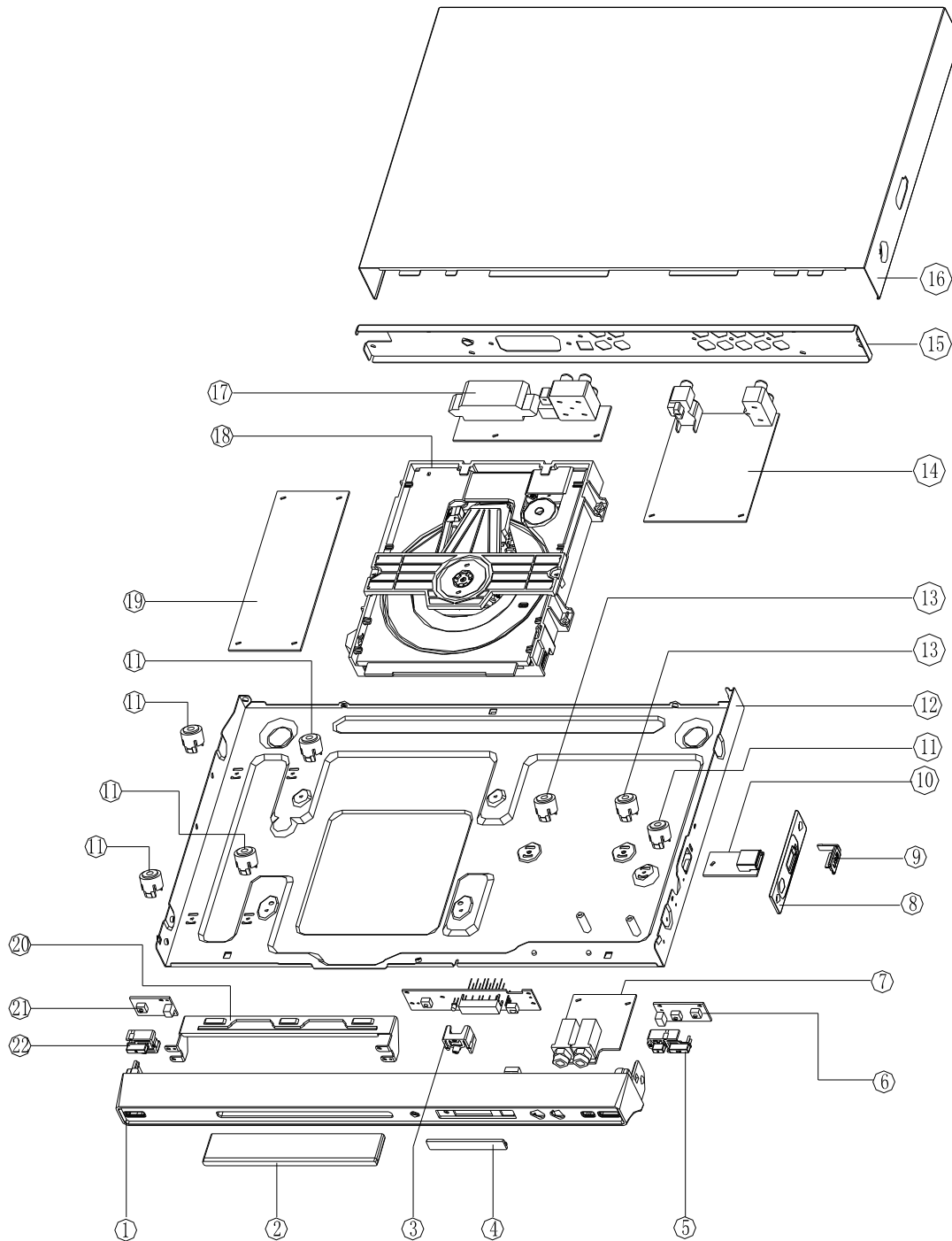
SERIAL NUMBER	MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	QUANTITY
1	3005937	PANEL	911HD(RU) BLACK	1
2	3076823	DOOR	911HD(RU) BLACK	1
3	3076825	OPEN/CLOSE PRESS BUTTON	911HD(RU) BLACK	1
4	3072596	GLASS	511SI(RU)LENS COVER	1
5	3076828	FUNCTION BUTTON	911HD(RU) BLACK	1
6	4940954	PCB SEMI-FINISHED PRODUCT	B 511SI-0 611SI(RU)	1
7	4942104	PCB SEMI-FINISHED PRODUCT	6 511SI-2 911HD(RU)	1
8	3076822	USB COVER BOARD	911HD(RU) BLACK	1
9	3076832	USB RUBBER PLUG	911HD(RU) BLACK	1
10	4942103	PCB SEMI-FINISHED PRODUCT	A 611SI-1 911HD(RU)	1
11	3023884	PLASTIC BRACKET	8.0mm WITH CLASP	5
12	3103096	LOWER COVER	911HD(RU) GREY	1
13	3028725	PLASTIC BRACKET	H=5.5mm WITH CLASP	2
14	4942097	PCB SEMI-FINISHED PRODUCT	2 921HD-1 911HD(RU)	1
15	3103093	REAR COVER	911HD(RU) GREY	1
16	3103094	TOP COVER	911HD(RU) BLACK, WITH PVC PIECE	1
17	4942045	PCB SEMI-FINISHED PRODUCT	7 231-1 611SI(RU)	1
18	3060591	DVD LOADER FRAME	028-SONY BLACK	1
19	4942102	PCB SEMI-FINISHED PRODUCT	5 985-6 911HD(RU)	1
20	3872004	IRON BRACKET OF LOADER	511SI(RU)	1
21	4940954	PCB SEMI-FINISHED PRODUCT	B 511SI-0 611SI(RU)	1
22	3076827	POWER BUTTON	911HD(RU) BLACK	1

Chapter Cinque

PCB Board&Circuit Diagram

Section One PCB Board

5.1.1 Surface layer of Decode Board(2DV921HD-1)*4942097*.

5.1.2 Surface layer of Main Panel (4DV611SI-0)*4942105*.

5.1.3 Bottom layer of Main Panel (4DV611SI-0)*4942105*.

5.1.4 Power Board (@5DV985-6)*4942102* .
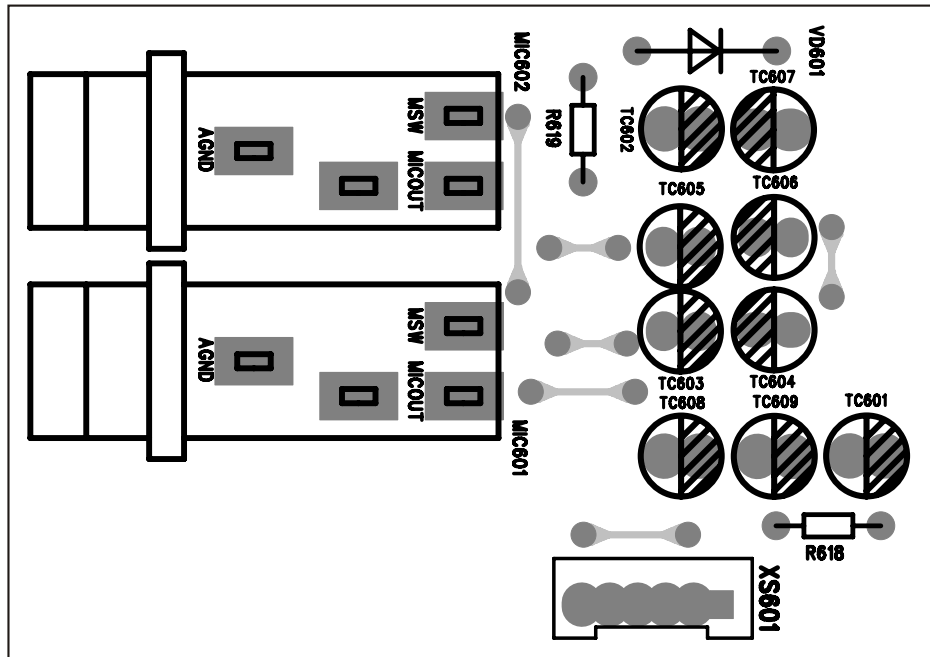
5.1.5 Surface layer of Output Board (7DV231-1)*4942045*.
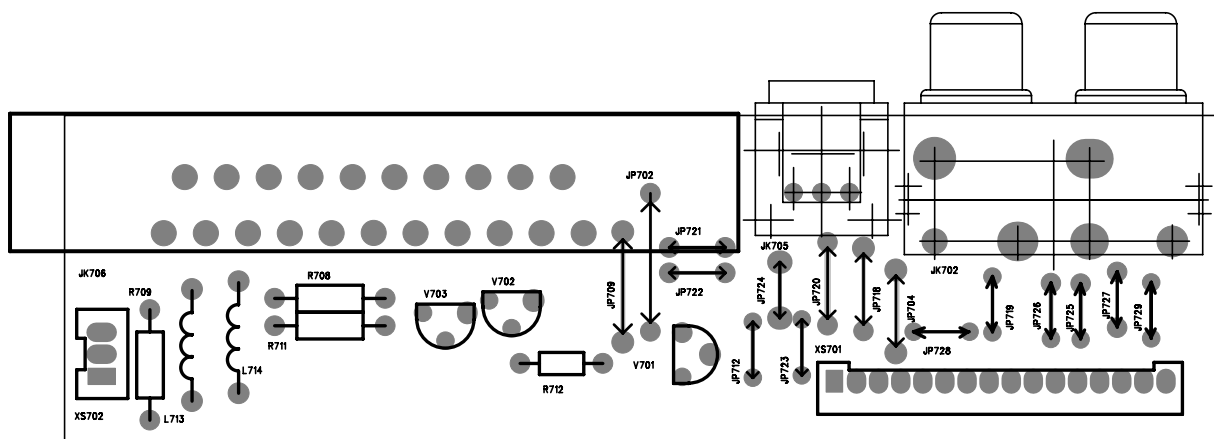
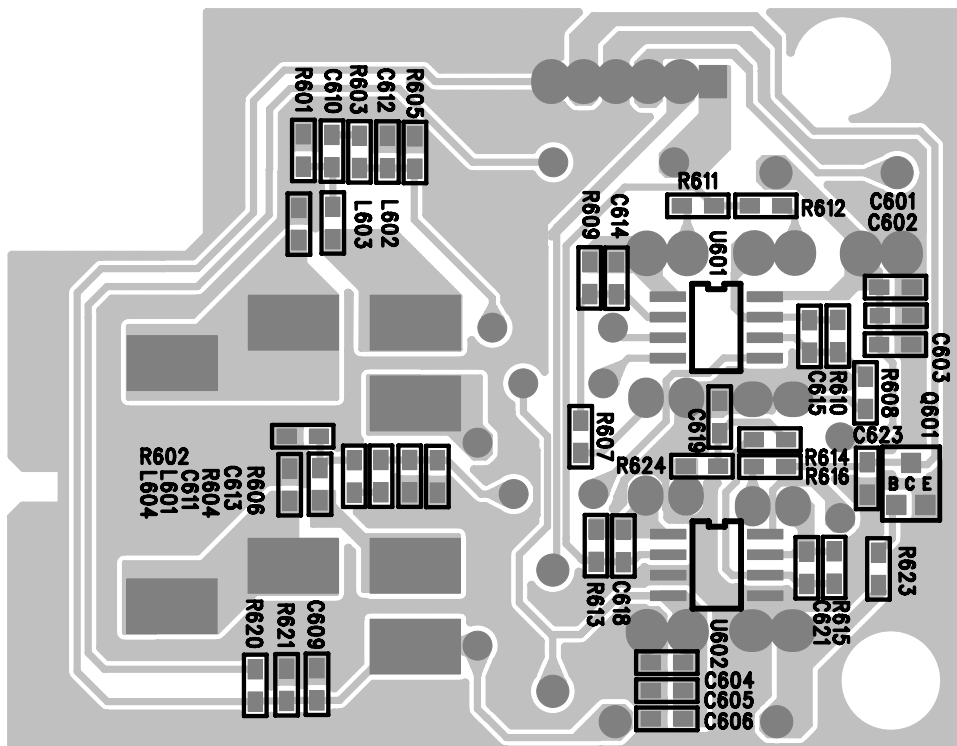## 5.1.6 Bottom layer of Output Board (7DV231-1)*4942045*.
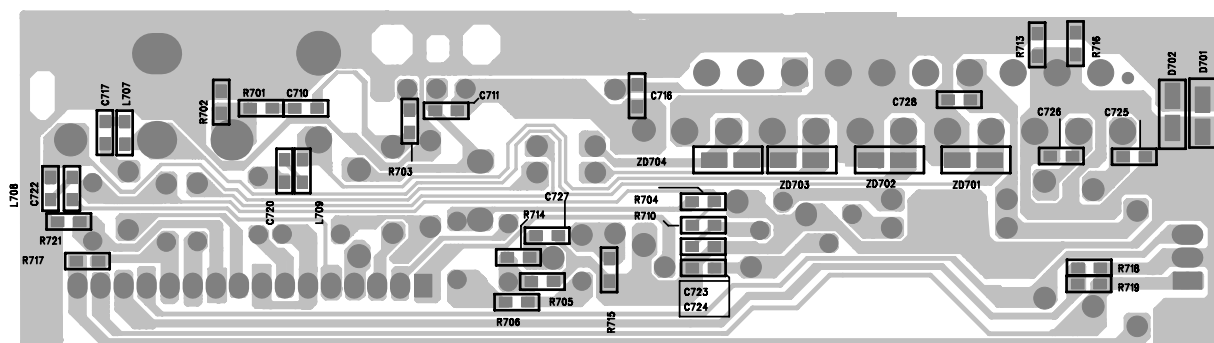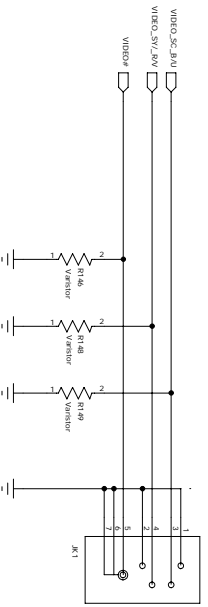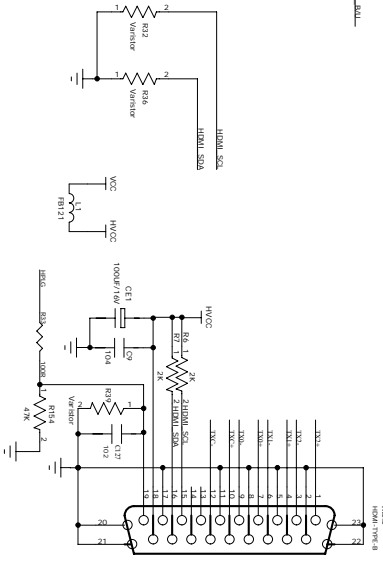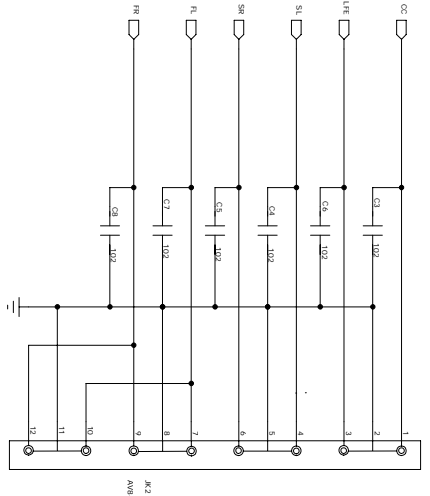

5.1.7 USB Board (ADV611SI-1)*4942103*.
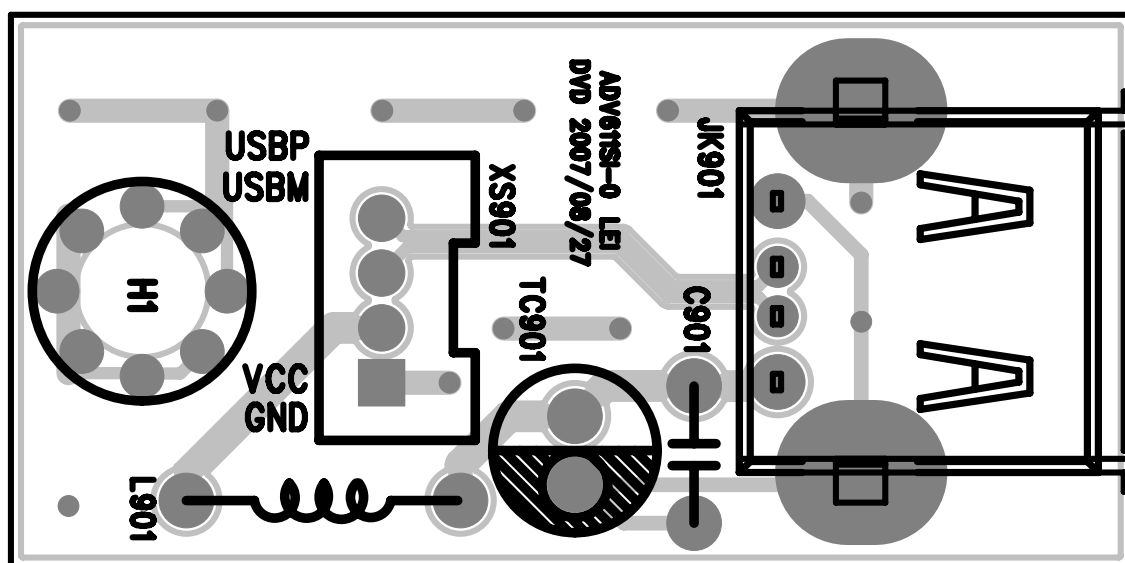
5.1.8 Surface layer of OK Board (6DV511SI-2) *4942104*.

5.1.9 Surface layer of OK Board (6DV511SI-2) *4942104*.

Section Two circuit diagram

5.2.1 Decode Board.
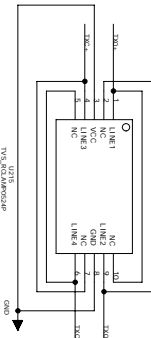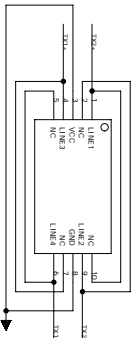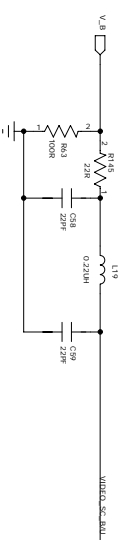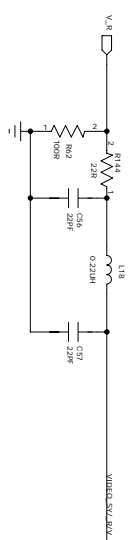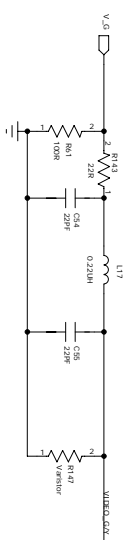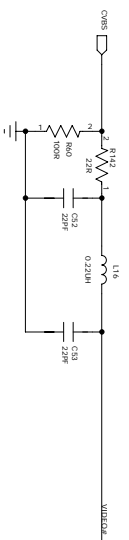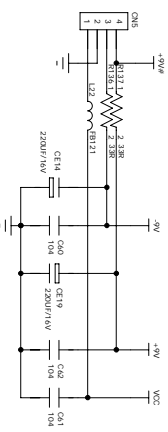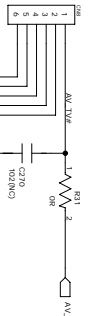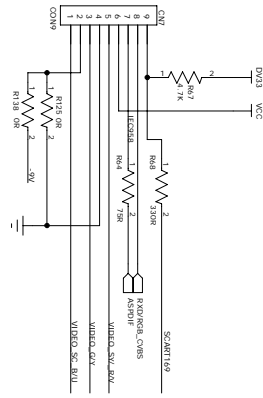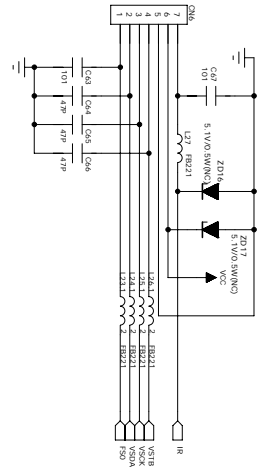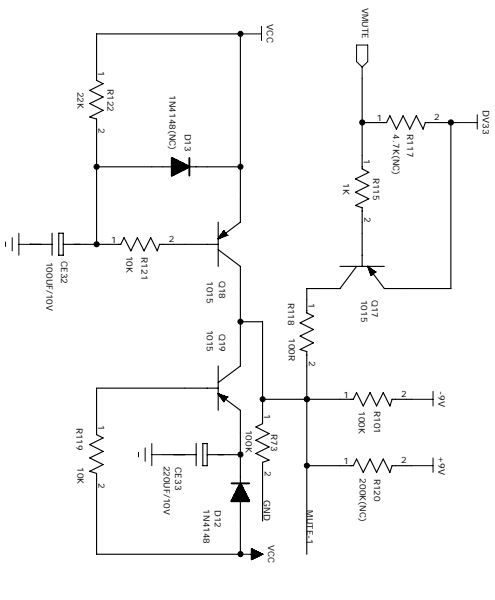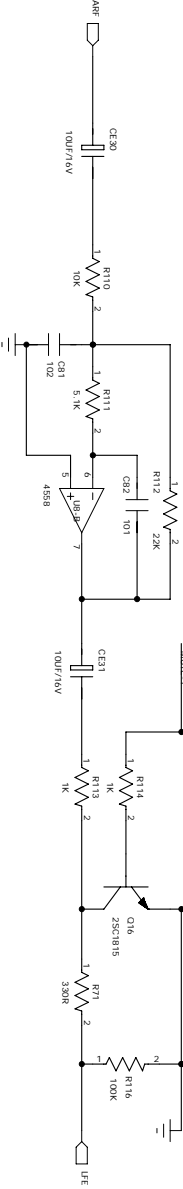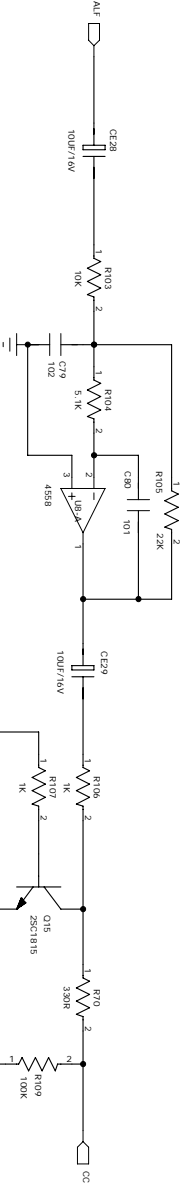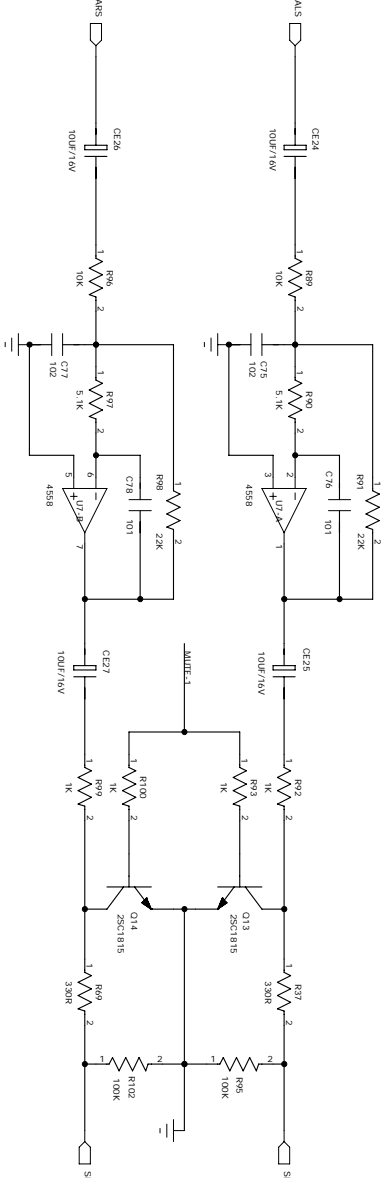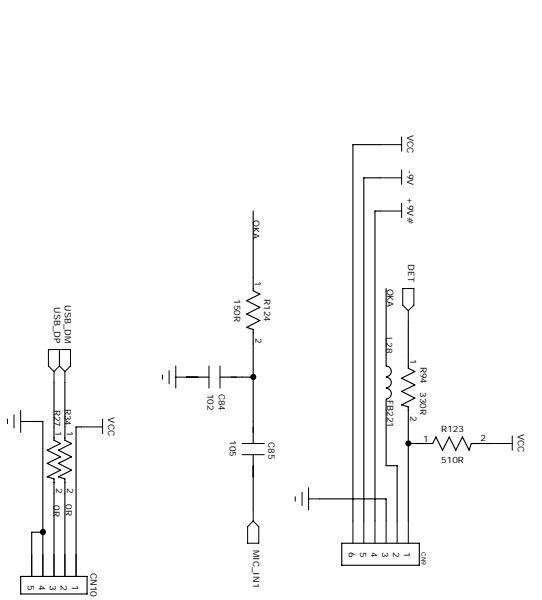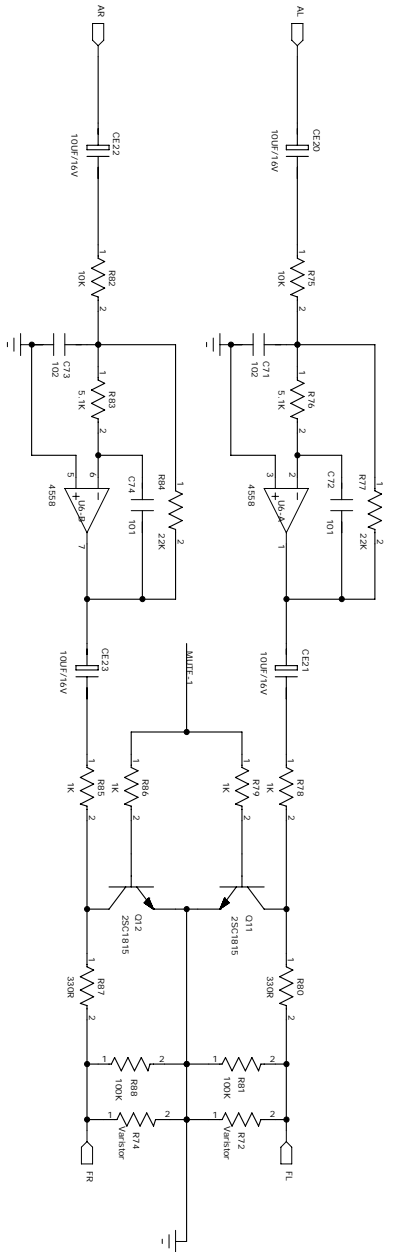
5.2.2 Main Panel.
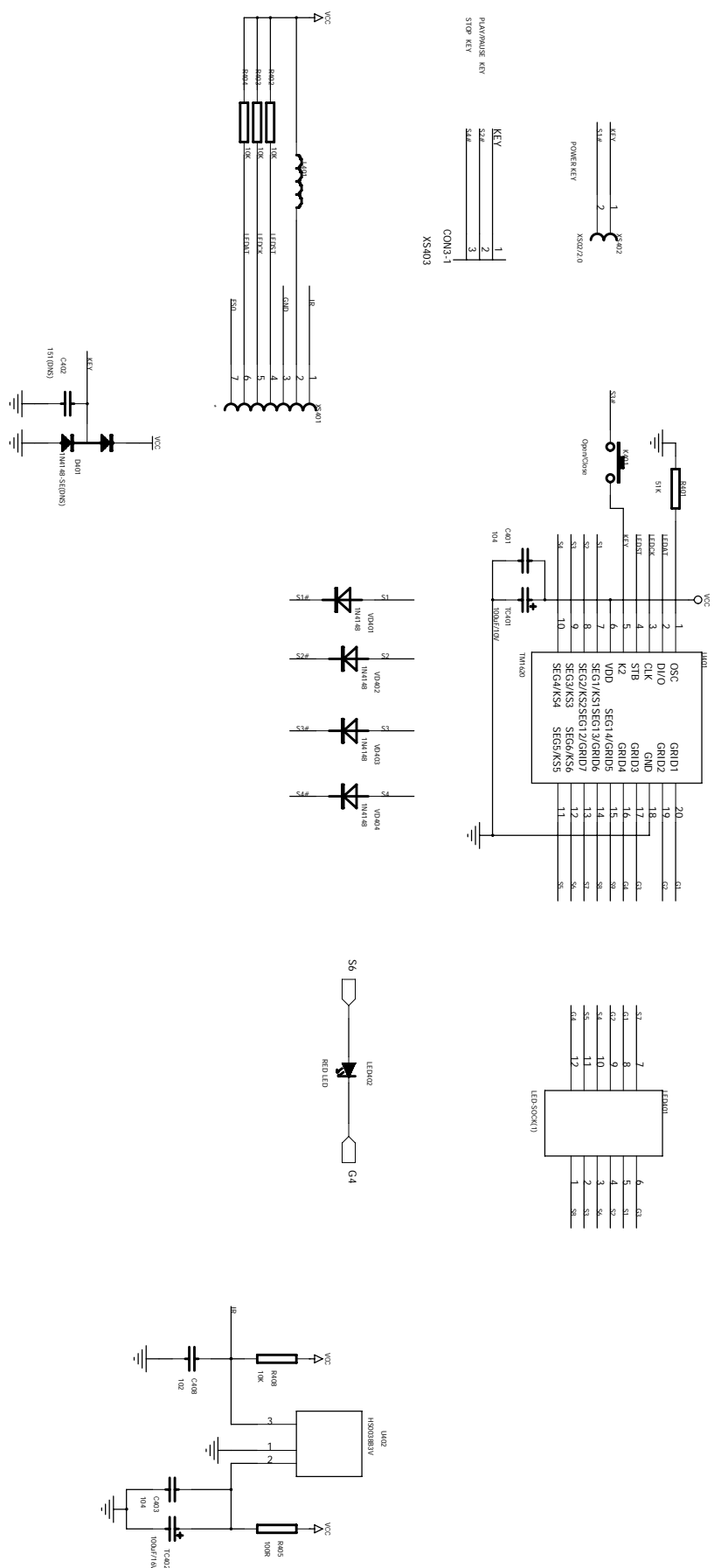
5.2.3 Power Board.
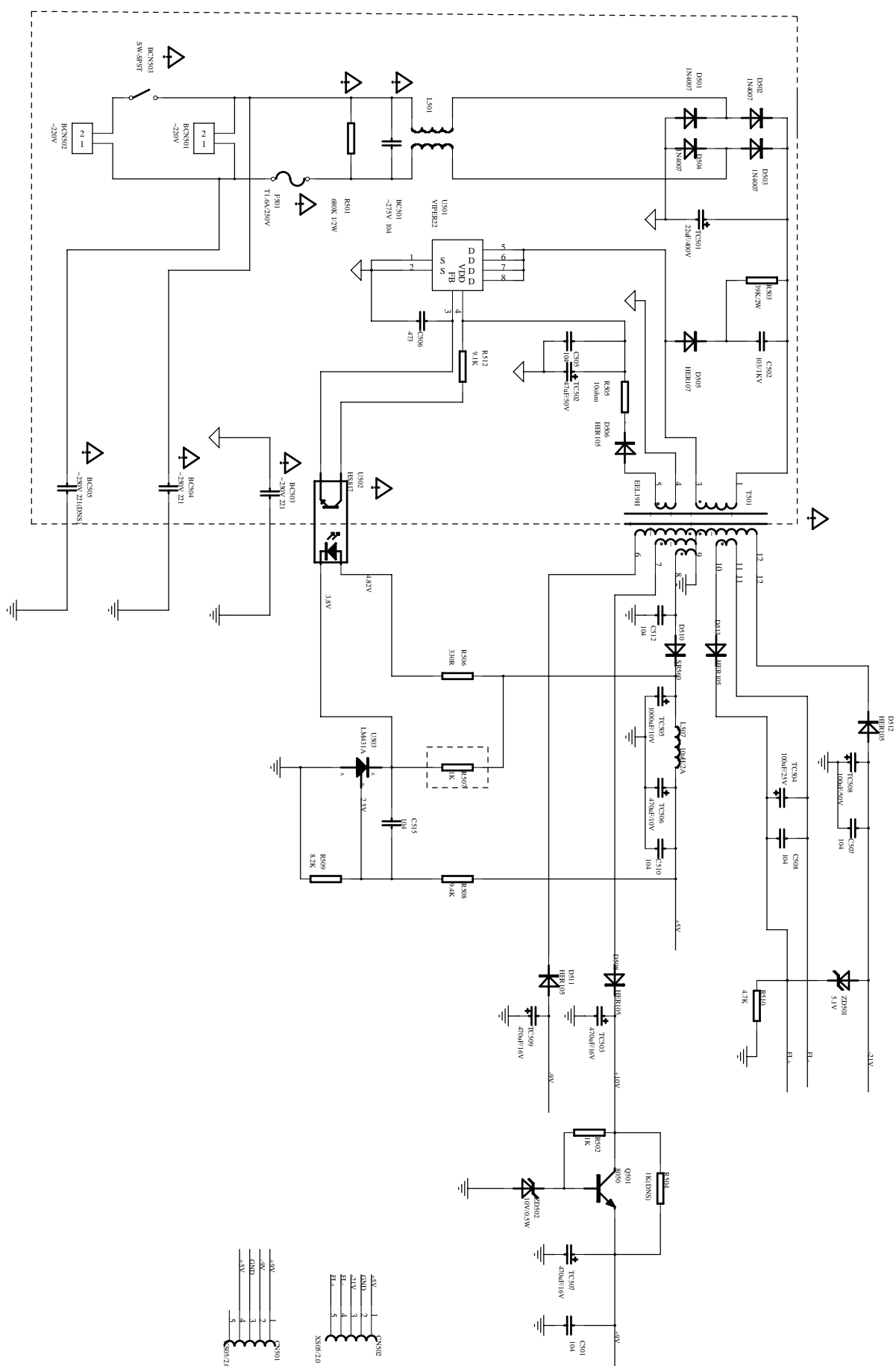
5.2.4 OK Board.
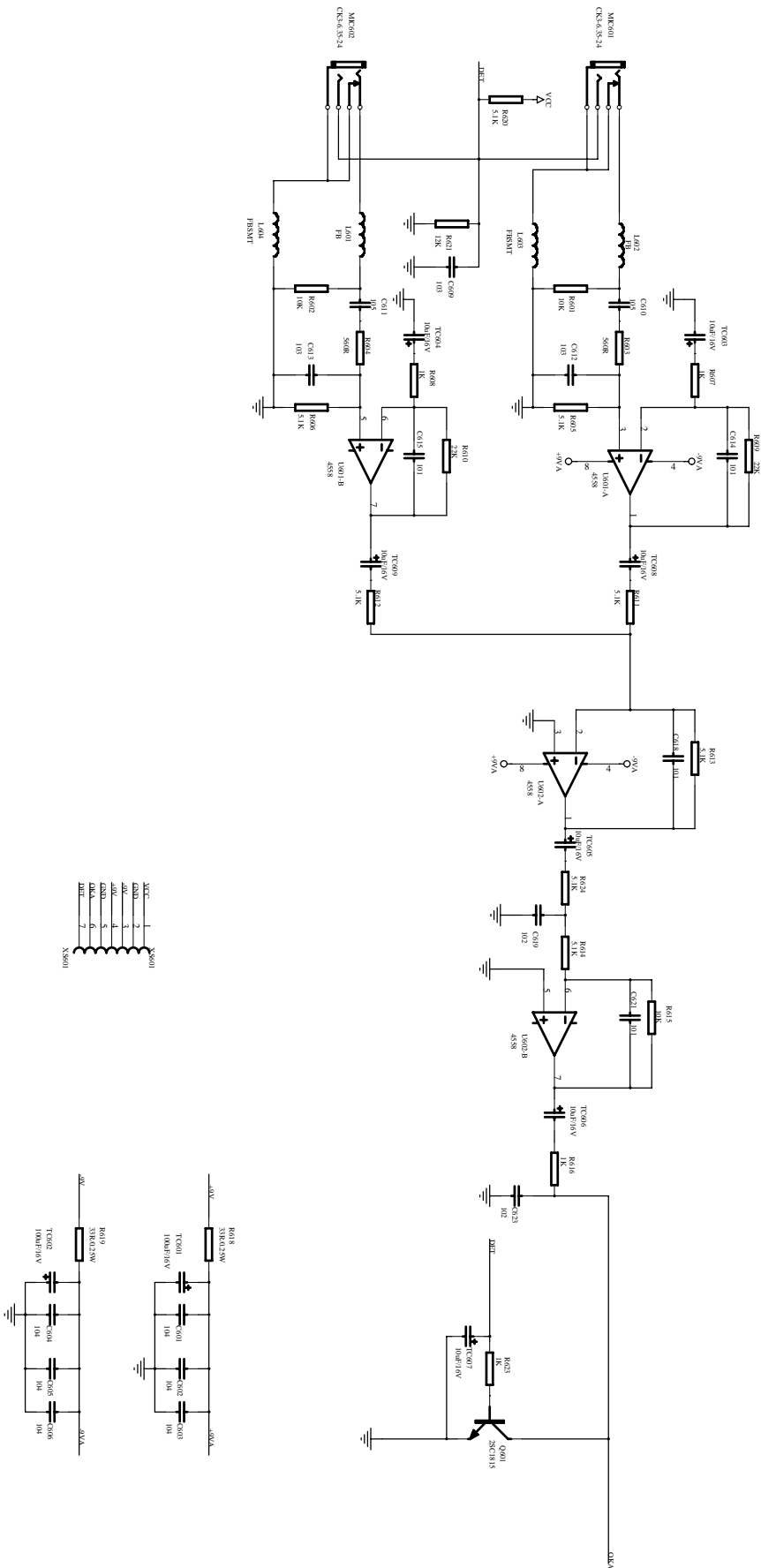
5.2.5 Output Board.

5.2.6 USB Board.

JK901

USB_JACK

GND	1	GND
D+	2	USBP
D-	3	USBM
VCC	4	L901 FBSMT VCC

TC901
10V100U

C902
104

4	USBM	
3	USBP	
2	VCC	
1	GND	

XS901
XS04
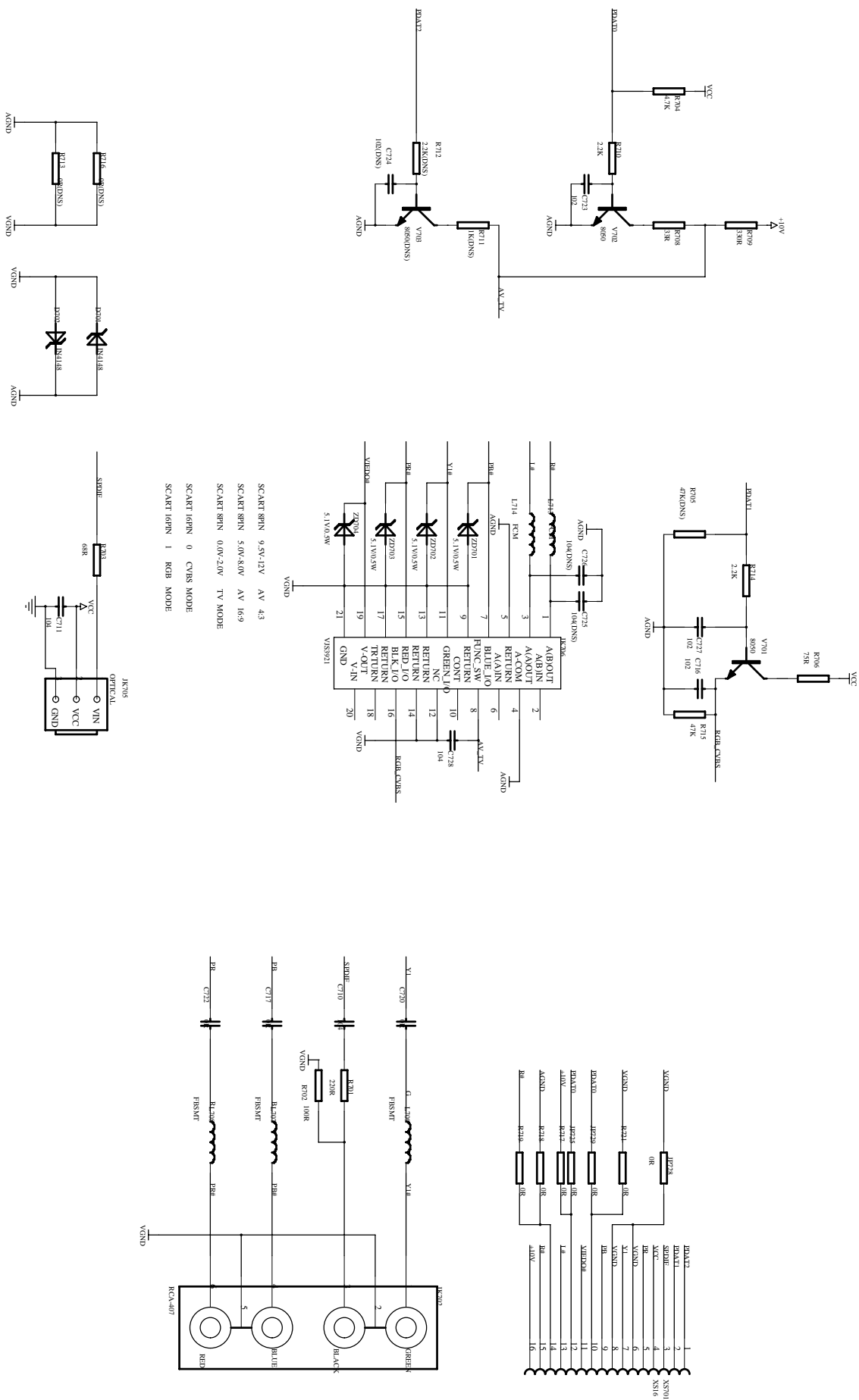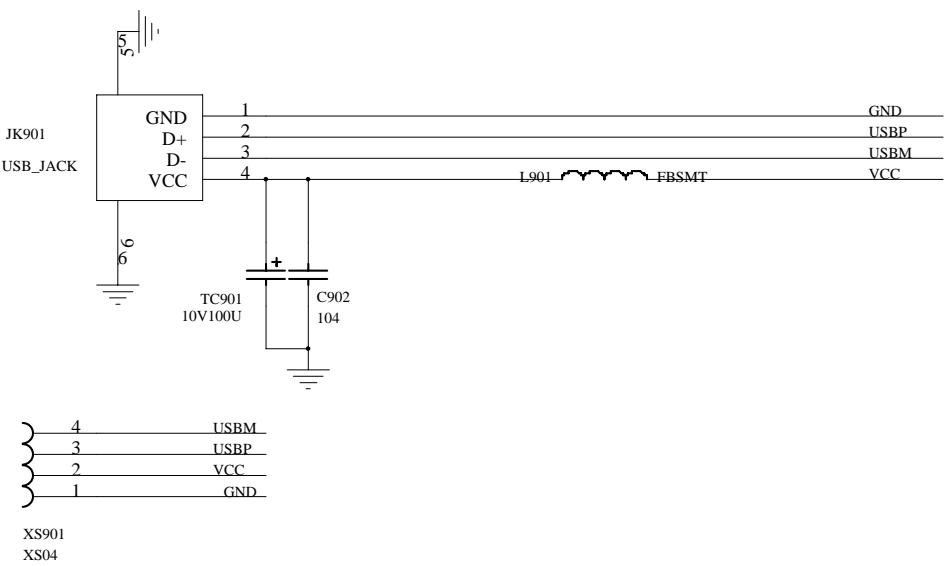
Chapter Six BOM List

DV911HD(RU)BLACK(1389S)

REMOTE CONTROL   5471742

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090272	SMD RESISTOR	1/16W 1Ω±5% 0603	R801
0310048	SMD CAPACITOR	50V 151±5% NPO 0603	C802,C803
0630010	EMISSION PIPE	LTE-4206	LED801 ①
0630009	EMISSION PIPE	TSAL4400	LED801 ①
0700001	SMD DIODE	LS4148	D801~D803
0780130	SMD TRIODE	STC3265	Q801
0880220	IC	P2222 SOP	U801
0970003	CERAMIC RESONATOR	455E	X801
1564324	PCB	8516SI-3	
3031856	REMOTE CONTROLLERSURFACE CASING	RC026-05R BLACK	
3041399	BOTTOM CASING OF REMOTE CONTROL	026 BLACK 2#	
3051273	GLASS OF REMOTE CONTROLLER	026 MING PURPLE	
3051319	BATTERY CASE DOOR OF REMOTE CONTROL	026 BLACK 2#	
3850124	ANODE SPRING	RC026	
3850125	CATHODE SPRING	RC026	
3850126	ANODE/CATHODE SPRING	RC026	
4000038	SELF-TAPPING SCREW	PB 2.3×6 COLOR ZINC	FOR CONNECTING TOP AND LOWER COVER
4631052	CONDUCT GLUE OF REMOTE CONTROL	RC026-01R 4#	
5070070	PLASTIC BAG	85×250	

DV911HD(RU)BLACK(1389S)

OUTPUT BOARD   7DV231-1 4942045

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090001	SMD RESISTOR	1/16W 0Ω±5% 0603	C717,C720,C722,R713,R716,
0090005	SMD RESISTOR	1/16W 33Ω±5% 0603	R708
0090008	SMD RESISTOR	1/16W 220Ω±5% 0603	R701

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090016	SMD RESISTOR	1/16W 1.5K±5% 0603	R709,R722,R723
0090017	SMD RESISTOR	1/16W 2.2K±5% 0603	R710,R714
0090024	SMD RESISTOR	1/16W 15K±5% 0603	R704
0090029	SMD RESISTOR	1/16W 47K±5% 0603	R715
0090181	SMD RESISTOR	1/16W 100Ω±5% 0603	R702
0090230	SMD RESISTOR	1/16W 47Ω±5% 0603	R706
0090238	SMD RESISTOR	1/16W 68Ω±5% 0603	R703
0310207	SMD CAPACITOR	50V 104 ±20% 7R 0603	C710,C728 ②
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C710,C728 ②
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C711
0310598	SMD CAPACITOR	50V 102±20% 7R 0603	C716,C723,C727
0390095	SMD MAGNETIC BEADS	FC160822105	L707,L708,L709
0390095	SMD MAGNETIC BEADS	FC160822105	L713,L714
0700001	SMD DIODE	LS4148	D701, D702
0700004	SMD VOLTAGE REGULATOR DIODE	5.1V±5% 1/2W	ZD701,ZD702,ZD703,ZD704
0780085	SMD TRIODE	8050D	Q701,Q702
1090045	ELECTRO-OPTIC TRANSFORMER	179ATW	JK705
1565310	PCB	7 231-1 HB D1.6 SX	
1860029	SCART SOCKET	SCAR01	JK706
1910078	TERMINAL SOCKET	4-8.4-6G-3	JK702
2100004	CONNETION CORDS	Φ0.6 SHAPED 10mm	J703, J705, J706,J710
2100010	CONNETION CORDS	Φ0.6 SHAPED 5mm	J701,J702,J704, J707, J708, J709
2122924	FLAT CABLE	15-6/9P130×2 2.0 T3 WITH NEEDLE, THE SAME DIRECTION	CN701
5141755	VERSION LABEL	2.00SQUARENESS WHITE	

DV911HD(RU)BLACK(1389S)

SUBSIDIARY PANEL(1) 9511SI-0 5448572

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1340003	LIGHT TOUCH RESTORE SWITCH	HORIZONTAL 6×6×1	KA01

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1564341	PCB	9511SI-0	
1940027	SOCKET	2P 2.0mm	XS402

DV911HD(RU)BLACK(1389S)

SUBSIDIARY PANEL(2) BDV511SI-0   4940954

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1340003	LIGHT TOUCH RESTORE SWITCH	HORIZONTAL 6×6×1	K402,K403
1564342	PCB	B511SI-0	
2122820	FLAT CABLE	3P100 2.0 T2 WITH NEEDLE，THE SAME DIRECTION，CHIASMA	XS403

DV911HD(RU)BLACK(1389S)

MAIN PANEL   4DV611SI-0   4942105

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090023	SMD RESISTOR	1/16W 10K±5% 0603	R402~R404, R408
0090181	SMD RESISTOR	1/16W 100Ω±5% 0603	R405
0090192	SMD RESISTOR	1/16W 51K±5% 0603	R401
02607809	CD	C11C 10V47U±20%4×7 C2.5 BELT	TC401,TC402
0310207	SMD CAPACITOR	50V 104 ±20% 7R 0603	C401,C403 ③
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C401,C403 ③
0310598	SMD CAPACITOR	50V 102±20% 7R 0603	C408
0390095	SMD MAGNETIC BEADS	FC160822105	L401
0620002	LIGHT-EMITTING DIODE	Φ3 RED	LED402
0700001	SMD DIODE	LS4148	VD401,VD402,VD403,VD404
0883140	IC	1620B SOP	U401 ④
0883257	IC	PNX0103ET/N101 TFBGA	U401 ④
1200771	LED DIAY SCREEN	4MG20205B18	LED401
1340003	LIGHT TOUCH RESTORE SWITCH	HORIZONTAL 6×6×1	K401
1634428	PCB	4 611SI-0 FR4 D1.2 PX	
1940026	SOCKET	3P 2.0mm	XS403
2122244	FLAT CABLE	2P250 2.0 2 PIN,WITH NEEDLE,THE SAME DIRECTION	XS402

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
2122585	FLAT CABLE	6P170 2.0 2 PIN,WITH NEEDLE,THE SAME DIRECTION	XS401
2360016	IR SENSOR	HS0038B3V	U402
3075698	LED BRACKET	H=7.5mm Φ=4mm	LED402
5141895	VERSION LABEL	4.00 SQUARE WHITE	
5233704	SOFT SPONGE SPACER	8×7×7 DOUBLE-FACED,HARD(50 DEGREE)	BETWEEN IR RECEIVING HEAD AND PANEL
5238027	SOFT SPONGE SPACER	31×4.5×5 DOUBLE-FACED,HARD(50 RIGIDITY)	BETWEEN LED DISPLAY SCREEN AND MAIN PANEL

DV911HD(RU)BLACK(1389S)

USB BOARD   ADV611SI-1   4942103

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0200138	PORCELAIN CAPACITOR	50V 104±20% 5mm	C901
02602229	CD	C11C 10V220U±20%6×7 2.5 BELT	TC901
03900579	MAGNETIC BEADS INDUCTOR	RH354708 BELT	L901
1634574	PCB	A 611SI-1 FR4 D1.6 PX	
1860047	USB SOCKET	CAB85-4Pin	JK901
1940022	SOCKET	4P 2.0mm	XS901

DV911HD(RU)BLACK(1389S)

POWER BOARD   @5DV985-6   4942102

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
00001639	CARBON FILM RESISTOR	1/410Ω±5% BELT	R505
00001859	CARBON FILM RESISTOR	1/4330Ω±5% BELT	R506
00001959	CARBON FILM RESISTOR	1/41K±5% BELT	R507
00002159	CARBON FILM RESISTOR	1/49.1K±5% BELT	R512
00100979	METAL FILM RESISTOR	1/4W9.4KΩ±1%BELT	R508
0010159	METAL OXIDE FILM RESISTOR	239K±5%SHAPED FLAT 15×7	R503
00103799	METAL FILM RESISTOR	1/4W8.2KΩ±1%BELT	R509
00700169	HIGH PRESSURE RESISTOR	@1/2680K±5% VDE BELT	R501
02001369	PORCELAIN CAPACITOR	50V 473±20% 5mm BELT	C506

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
02001389	PORCELAIN CAPACITOR	50V 104±20% 5mm BELT	C505,C510,C515
02002249	PORCELAIN CAPACITOR	1000V 103 +80%-20% 7.5MM BELT	C502
0200359	CERAMIC CAPACITOR	@250V 221±10% 10mm VDE	BC503,BC504
02003809	PORCELAIN CAPACITOR	100V 152±10%5MM BELT	C512
0210207	TERYLENE CAPACITOR	@275V 104±20% 15mm VDE	BC501
0260341	CD	ZT 400V22μ±20%φ16×20 7.5	TC501
0260559	CD	CD11T 50V47u±20%6×12 2.5	TC502
0260690	CD	CD288H 10V1000U±20%8×16 3.5	TC506
0260772	CD	CD288Z 16V470U±20%8×12 3.5	TC509,TC503
0260821	CD	CD288H 16V1500U±20%10×20 5	TC505
0410011	CHOKE COIL	VERTICAL 10UH 2A 5mm	L507
0460623	SWITCH POWER TRANSFORMER	@BC19-0348 SJ	T501
05700059	DIODE	1N4007 BELT	D501~D504
05700139	DIODE	HER105 BELT	D506
05700149	DIODE	HER107 BELT	D505,D508,D511
0680046	SCHOTTKY DIODE	SR560 DO-27 SHAPED R 17.5×8	D510
0881933	IC	VIPER22A DIP8	U501
08824629	IC	AZ431AZ-A TO-92 BELT	U503
1000062	POWER GRID FILTER	@JLB1153 33MH +∞-0% SJ	L501
1080032	PHOTOELECTRIC COUPLER	@HS817 VDE	U502
1565296	PCB	@5 985-6 VO D1.6 SX C043	
1940022	SOCKET	4P 2.0mm	CN501
1940045	SOCKET	2P 8.0mm 2#	BCN501
2100003	CONNETION CORDS	Φ0.6 SHAPED 7.5mm	JP502,JP503,JP505
2100004	CONNETION CORDS	Φ0.6 SHAPED 10mm	JP501
2300049	FUSE	@1.6AL 250V 3.6×10 VDE	F501
3870115	GROUND CHIP OF POWER BOARD	903	G501,G503,G504
5141755	VERSION LABEL	2.00SQUARENESS WHITE	

DV911HD(RU)BLACK(1389S)

OK BOARD   6DV511SI-2   4942104

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
00000059	CARBON FILM RESISTOR	1/633Ω±5% BELT	R618,R619
0090012	SMD RESISTOR	1/16W 560Ω±5% 0603	R603,R604
0090014	SMD RESISTOR	1/16W 1K±5% 0603	R607,R608,R616,R623
0090020	SMD RESISTOR	1/16W 5.1K±5% 0603	R606,R605,R611,R612,R614,R624
0090023	SMD RESISTOR	1/16W 10K±5% 0603	R601,R602,R615
0090026	SMD RESISTOR	1/16W 22K±5% 0603	R609,R610
0090187	SMD RESISTOR	1/16W 12K±5% 0603	R621,R613
02608249	CD	C11 16V10U±20%5×11 C2.5 BELT	TC605,TC606,TC608,TC609
02608699	CD	CD11 16V22 ±20% 5×11 C 2.5 BELT	TC603,TC604
02608839	CD	CD110 16V100U M 5×11 C2.5 BELT	TC601,TC602
0310047	SMD CAPACITOR	50V 101±5% NPO 0603	C614,C615,C618,C621
0310066	SMD CAPACITOR	50V 102±10% 7R 0603	C619,C623
0310072	SMD CAPACITOR	50V 103±10% 7R 0603	C612,C613,C609
0310207	SMD CAPACITOR	50V 104 ±20% 7R 0603	C601~C606 ⑤
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C601~C606 ⑤
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C610,C611
0390095	SMD MAGNETIC BEADS	FC160822105	L601~L604
0780085	SMD TRIODE	8050D	Q601
0880768	IC	C4558 SOP	U601,U602
1564614	PCB	6 511SI-2	
1980018	MICROPHONE SOCKET	C3-6.35-24	MIC601,MIC602
2100003	CONNETION CORDS	Φ0.6 SHAPED 7.5mm	J604
2100004	CONNETION CORDS	Φ0.6 SHAPED 10mm	VD601
2100006	CONNETION CORDS	Φ0.6 SHAPED 12.5mm	J601
2100010	CONNETION CORDS	Φ0.6 SHAPED 5mm	J602,J603,J605
2122799	FLAT CABLE	5P160 2.0 T2 WITH NEEDLE, REVERSE	XS601

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
5143106	VERSION LABEL	9.00 SQUARENESS,WHITE	

DV911HD(RU)BLACK(1389S)

DECODE BOARD 2DV921HD-1   4942097

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090036	SMD RESISTOR	1/10W 0Ω±5% 0805	L10
0090324	SMD RESISTOR	1/16W 0Ω±5% 0402	R27,R125,R31,R34,R44,R46,R47,R48,R51,R52,R53,R130,R55
0090330	SMD RESISTOR	1/16W 33Ω±5% 0402	R65,R66,R50,R136,R137
0090336	SMD RESISTOR	1/1675Ω±5% 0402	R64
0090339	SMD RESISTOR	1/16W 100Ω±5% 0402	R8,R9,R60,R61,R62,R63,R118,R18,R19,R20,R21,R33
0090342	SMD RESISTOR	1/16W150Ω±5% 0402	R124
0090350	SMD RESISTOR	1/16330Ω±5% 0402	R80,R87,R94,R68
0090355	SMD RESISTOR	1/16W 510Ω±5% 0402	R123
0090356	SMD RESISTOR	1/16560Ω±5% 0402	R5
0090362	SMD RESISTOR	1/16W 1K±5% 0402	R78,R139,R79,R85,R86,R115
0090367	SMD RESISTOR	1/16W1.8K±5% 0402	R40
0090368	SMD RESISTOR	1/16W 2K±5% 0402	R6,R7
0090377	SMD RESISTOR	1/16W 4.7K±5% 0402	R67
0090378	SMD RESISTOR	1/16W 5.1K±5% 0402	R22,R76,R83
0090385	SMD RESISTOR	1/16W 10K±5% 0402	R2,R3,R11,R12,R16,R17,R23,R28,R30,R41,R42,R43,R45,R49,R56,R57,R58,R75,R82,R108,R119,R121,R126,R127
0090387	SMD RESISTOR	1/1612K±5% 0402	R24
0090389	SMD RESISTOR	1/1615K±5% 0402	R131
0090391	SMD RESISTOR	1/16W 20K±5% 0402	R25,R135
0090392	SMD RESISTOR	1/16W 22K±5% 0402	R122,R77,R84
0090394	SMD RESISTOR	1/16W 27K±5% 0402	R132,R133
0090396	SMD RESISTOR	1/16W 33K±5% 0402	R54
0090400	SMD RESISTOR	1/16W 47K±5% 0402	R154,R29
0090408	SMD RESISTOR	1/16W 100K±5% 0402	R10,R73,R13,R35,R81,R88,R101
0090445	SMD RESISTOR	1/16W 1Ω±5% 0402	R128

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090447	SMD RESISTOR	1/16W 22Ω±5% 0402	R134,R142,R143,R144,R145
0090834	PRECISION SMD RESISTOR	1/16W 5.1K±1% 0402	R1
0090845	PRECISION SMD RESISTOR	1/16W2.49K±1% 0402	R4
0090869	SMD RESISTOR	1/16W6.8Ω±5% 0402	R14,R15
02600289	CD	C11 16V220U±20%6×12 2.5 BELT	CE14,CE19,CE33
0260687	CD	CD11T 10V1000u±20%8×16 C5	CE11
02607819	CD	C11C 10V100U±20%5×11 C2.5 BELT	CE1,CE3,CE6,CE12,CE32,CE35,CE10,CE16
02607869	CD	C11C 16V22U±20%4×7 C2.5 BELT	CE17
02607879	CD	C11C 16V47U±20%5×7 C2.5 BELT	CE7,CE8,CE9,CE15
02607989	CD	C11T 16V470U±20%8×12 C5 BELT	CE4
02608249	CD	C11 16V10U±20%5×11 C2.5 BELT	CE5,CE13,CE20~CE23
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C1,C10,C12,C14,C27,C85,C90,C91
0310392	SMD CAPACITOR	50V 102±10% 7R 0402	C3,C4,C5,C6,C71,C73,C84,C127,L33
0310394	SMD CAPACITOR	50V 222±10% 7R 0402	C7,C8
0310416	SMD CAPACITOR	50V 22P±5% NPO 0402	C52,C53,C54,C55,C56,C57,C58,C59
0310420	SMD CAPACITOR	50V 33P±5% NPO 0402	C29,C30
0310424	SMD CAPACITOR	50V 47P±5% NPO 0402	C64,C65,C66
0310432	SMD CAPACITOR	50V 101±5% NPO 0402	C67,C72,C74
0310435	SMD CAPACITOR	50V 221±5% NPO 0402	C2
0310446	SMD CAPACITOR	50V 152±10% 7R 0402	C86
0310454	SMD CAPACITOR	16V 153±10% 7R 0402	C93
0310493	SMD CAPACITOR	50V 121±5% NPO 0402	C19
0310566	SMD CAPACITOR	10V 225 +80%-20% Y5V 0603	C38,C39,C136
0310726	SMD CAPACITOR	16V 104±10% 5R 0402	C9,C11,C13,C15,C16,C17,C18,C20,C21,C22,C23,C24,C25,C26,C28,C32,C33,C34,C35,C36,C37,C40,C41,C43,C45,C46,C47,C48,C49,C50,C51,C60,C61,C62,C68,C69,C70,C83,C88,C92,C98,C99
0310794	SMD CAPACITOR	16V 331±5% NPO 0402	C87,C89
0310853	SMD CAPACITOR	16V 682 ±10% 7R 0402	C31

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0390095	SMD MAGNETIC BEADS	FC160822105	L1,L2,L7,L8,L12,L15,L21,L39
0390355	SMD INDUCTOR	4.7UH±10% 1608	L3,L4,L32,L20,C94
0390385	SMD INDUCTOR	22uH±10% 2012	L6,L11
0390444	SMD MAGNETIC BEADS	PZ2012U121	L5,L14,L22
0390453	SMD MAGNETIC BEADS	GZ1005D221T 0402	L9,L24,L25,L26,L27,L28,L29,L13,L30,L31
0390568	SMD INDUCTOR	0.22UH ±10% 50mA 1608	L16,L17,L18,L19
05700039	DIODE	1N4001 BELT	D1,D2,D3
0700001	SMD DIODE	LS4148	D12,D15
0700057	SMD DUAL DIODE	MMBD4148CC SO23	D19
0780040	SMD TRIODE	3904(100-300) SO23	Q3
0780115	SMD TRIODE	2SB1132	Q4,Q5
0780129	SMD TRIODE	8550D	Q22,Q23
0780193	SMD TRIODE	2S3018	V1,V2
0780197	SMD TRIODE	C1815	Q10,Q11,Q12,Q20
0780198	SMD TRIODE	2S1015	Q17,Q18,Q19
07803199	TRIODE	SS8550 TO-92 BELT	Q6~Q9
0780353	SMD TRIODE	CES2302 SOT-23	V21
0880768	IC	C4558 SOP	U6
08828028	IC	A5888S L/ HSOP$	U2 ⑥
08837508	IC	CD5888CB HSOP$	U2 ⑥
0883532	IC	HY57V641620FTP-7 SOP	U3
0884051	IC	MT1389FE/M(M EDITION) LQFP	U1
0912159	PROGRAM FLASH	ROM911HDRU-0A(16M)	
0960020	CRYSTAL OSCILLATOR	27.00MHz 49-S	X1
1030048	SMD PRESS SENSITIVITY RESISTOR	SDV1005E5R5C400NPT 0402	R72,R74,R146,R147,R148,R149
1635003	PCB	2 921HD-1 FR4 D1.2 PX	
1860102	HDMI SOCKET	51U019S-333A	JK202
1910129	TERMINAL SOCKET	S001-012 BLACK IRON PIECE,SCREESHIELDED	JK1

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1910247	TERMINAL SOCKET	2-8.4-13B/PB-1	JK2
1940005	SOCKET	6P 2.0mm	CN3,CN8,CN6
1940022	SOCKET	4P 2.0mm	CN5
1940024	SOCKET	5P 2.0mm	CN2,CN10,CN9
1940044	SOCKET	9P 2.0mm	CN7
1940094	CABLE SOCKET	24P 0.5mm SMD SUBMIT MEET WITH CLASP	CN1
5141825	VERSION LABEL	3.00 SQUARE WHITE	

DV911HD(RU)BLACK(1389S)

PROGRAM FLASH   0912159

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0883713	IC	AT26DF161-SU SOIC	U5