BBK

DV923HD(RU)

Service Manual

Model version:SI2.00 SI2.10

Catalog

Caution :

This Service Manual is only applicable to DV923DH(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-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 II 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

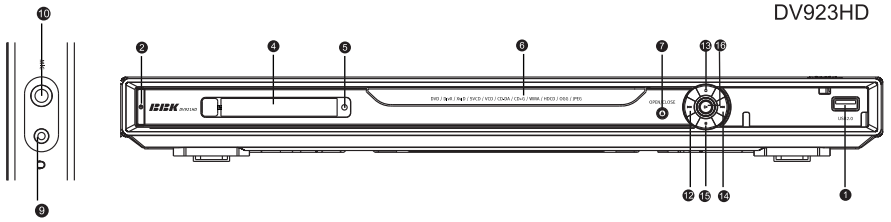
Others:

#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

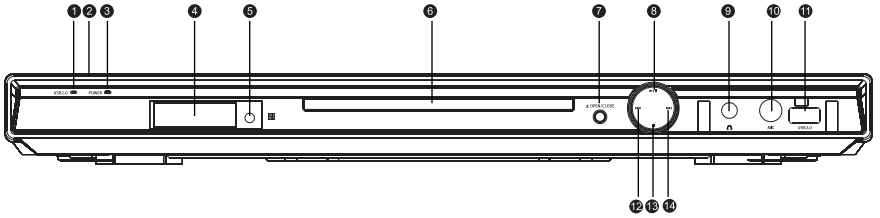
2.2 Controls and functions

2.2.1 Front and side panels control

DV923HD



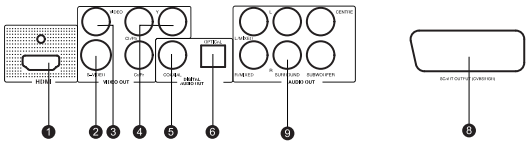
DV925HD



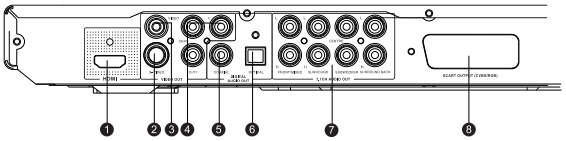
1. USB indicator
2. POWER button
3. Power indicator
4. LED display
5. Sensor of infrared beams
6. Disc tray
7. OPEN/CLOSE button
8. PLAY/PAUSE button
9. Headphones input
10. Microphone input
11. USB port
12. PREV button
13. STOP button
14. NEXT button
15. PAUSE button
16. PLAY button

2.2.2 Rear panel general view

DV923HD

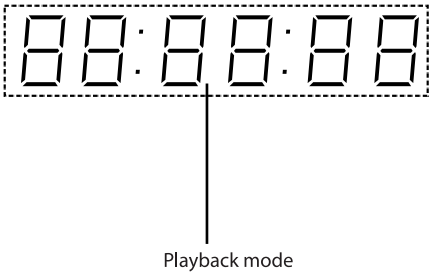


DV925HD



1. HDMI Out jack
2. S-VIDEO Out jack
3. VIDEO Out jac
4. Video Component/Y Pb Pr out jacks
5. Digital Audio Coaxial Out jack
6. Digital Audio Optical Out jack
7. 7.1CH Audio Out jack
8. SCART Out jack
9. 5.1CH Audio Out jack

2.2.3 LED display general view



2.2.4 Remote control general view

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.

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.

2.3 Set list

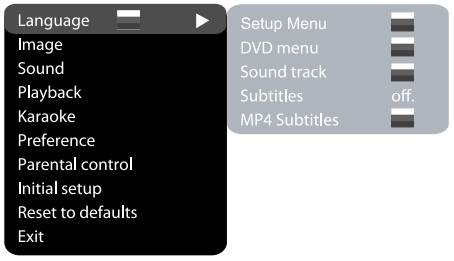
DVD player 1PCS
Audio cord 2xRCA-2xRCA 1PCS
Video cord RCA-RCA 1PCS
Video cord HDMI-HDMI 1PCS
Remote control 1PCS
Battery AAA 2PCS
Warranty card 1PCS
User's manual 1PCS
Karaoke disc 1PCS

2.4 FUNCTION SETTINGS

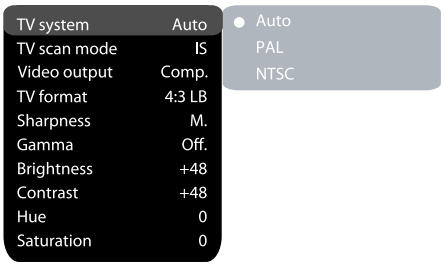
2.4.1 Function selection and change

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.



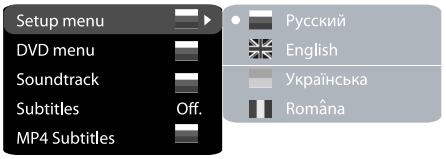
1.For example, if you wish to change the image settings, you have to select the Image item and press the OK.



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.

2.4.2 Language settings

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

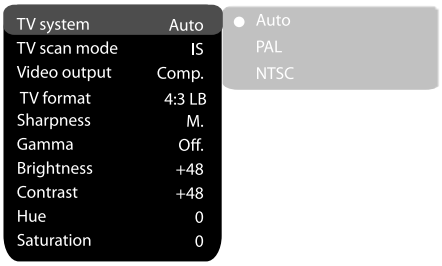


2.DVD menu :selection of disc menu language
3.Soundtrack: selection of translation language
#Options: Russian, English, Estonian, Latvian, Kazakh, Romanian, Belarusian, Ukrainian, Chinese.
#Default: English.
#Selection of other languages: select the OTHERS item using the UP and DOWN buttons and press 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.

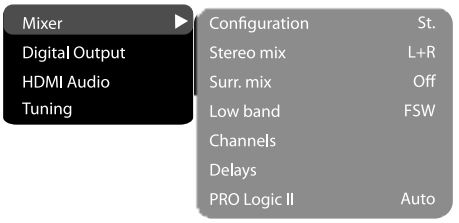
#Default option: interlaced.
#Progressive scan is transferred only via a component video output.
#Before switching to progressive scan, make sure that your TV set supports this operation mode.
3.Video output: selection of video signal
#Options: Comp, SCART.
#Default option: Comp.
4. TV Format: image 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.



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.

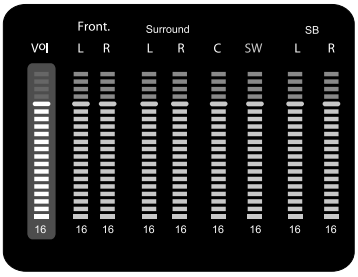
2.4.4 Sound settings menu

1. Mixer
A) Configuration: setting of the mode for conversion of the 5-channel signal to stereo signal
#Options: Stereo, 5.1;7.1(Only for DV925HD)
#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.

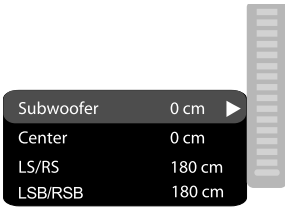


B). Stereo mix: playback set-up while playing the disc with two independent audio channels.
#Options: L+R, L, R.
#Default option: L+R.
C) Surr. Mix: set-up of surround options while playing the stereo disc.
#Options: Off, sum, Virt. Surr.
#Default options: Off.
D). Low band: distribution of low frequencies through channels.
#Options: Front F, Center C, Surround Sr, Subwoofer SW.
#Default options: Front F, Subwoofer SW,Surround Back.
#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.
#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 DV923HD in right menu.



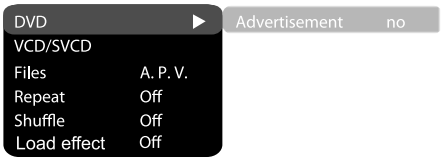
F) Delay of the channel: set-up of signal delay in speaker channels(central, rear and subwoofer).
#Using the Up and Down buttons, select the channel, for which you want to set up the delay, and press OK for confirmation.
#Using the Up and Down buttons set up the desired distance from the listener to 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 DV923HD in right menu.
G). PRO Logic II: 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 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 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 extermal 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 amplifiers and receivers.
#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

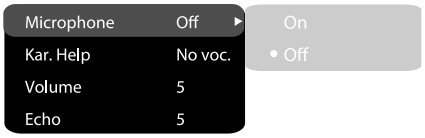


2. VCD/SVCD
PBS menu: PBC menu on/off
#Options: On, Off.
#Default option: On.
#If on option is set, while reproducing discs, a menu will appear, in which you can select the order of playing the disc content. If the off option is set, the reproducing of content is performed in the order, in which it is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

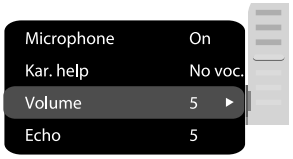
3. Files: selection fo reproduced files on the disc.
#Options: Audio, Pictures, Video.
#Default option: A.P.V
4.Repeat: file repeat mode
#Options: Off, Single, All.
#Default option: Off.
5.Shuffle: shuffle files from the playlist
#Options: Off, On.
#Default option: Off.
6.Laad effect: Loading mode for JPEG or Paeture col.
#Options: Off, from top, from bottom.
#Default option: Off.

2.4.6 Karaoke settings menu

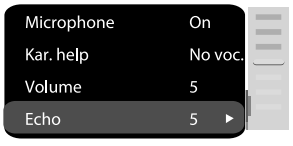
1.Microphone: microphone on/off
#Options: Off, On.
#Default option: Off.
2.Kar. Help :karaoke disc playback mode
#Options:L Channel, R Channel, No ast, No voc.
#Default option: No vocal mode.



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.

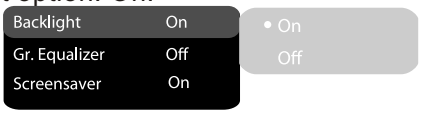


4. Echo: echo level while playing the karaoke-disc
#Adjust the echo level Using the UP/DOWN buttons.
#Press LEFT key of the UP/DOWN buttons to return to karaoke settings menu.



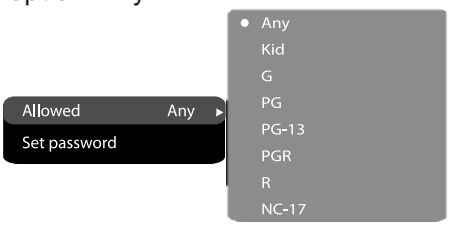
2.4.7 Preference settings

1.Backlight: set color of led on the front panel.
#Options: On, Off.
#Default option: On.
2. Gr.Equalizer: spectrum analyzer
#Options: On, Off.
#Default option: Off.
3.Screensaver: screen saver on/off
#Options: On, Off.
#Default option: 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.



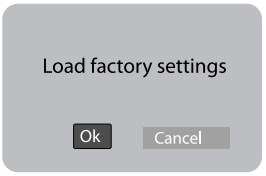
2.Set password: setup of a four-digit password to change the level of age restrictions.
#Default option: 7890.

2.4.9 Initial setup menu

#Press the RIGHT key 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.

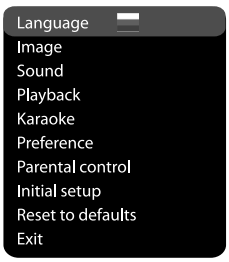
2.4.10 Reset to defaults

#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 Up and Down buttons 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.

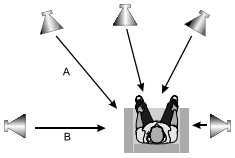


Fig.1. Take into account the A-B distance; use both figures for setting the desired time delay.

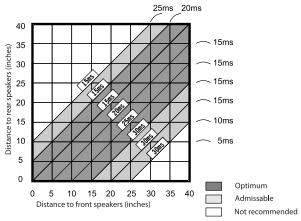


Fig.2. Determine delay value as to Dolby Pro Logic mode.

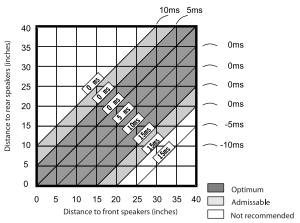


Fig.3. Determine delay value as to Dolby Digital mode.

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".

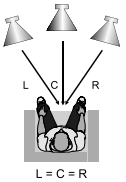


Fig.1. Delay of central channel=0
L=R=C

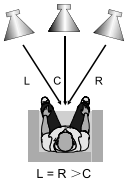


Fig.2. Small area
Delay of central channel
=L=(or R)-C

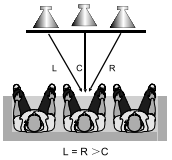
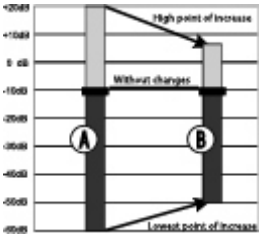


Fig.3. Small area
Delay of central channel=0
L= R>C

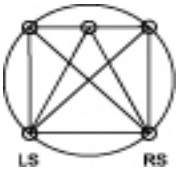
"Night" mode

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.
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.
	Allows adjusting the decompression degree of sound infromation("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 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 Picture 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, 7.1CH output(only for DV925HD), 5.1CH output.(only for DV923HD) Digital outputs: Coaxial audio output, Optical output.
	Video Outputs	S-Video output, composite output, component Y Cb Cr output, progressive scanning Y Pb Pr output, RGB/SCART output.
	HDMI interface, microphone 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 : 20-20000Hz(±1 dB) Signel-to-noise ratio >100(dB) Common distortion harmonic: <0.01%	
Voltage range	~110-250V, 50/60Hz	
Temperature requirement	5-35℃	
Moisture requirement	15-75%(not condensate)	

Model	Dimensions(mm)	Weight(kg)	Power consumption(watt)
DV925HD	420* 246.5 * 435	2.0	14
DV923HD	420* 236.5 * 39	2.3	

#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

3.1 OVERALL WIRING DIAGRAM FOR PLAYER

Overall wiring diagram of DV923HD(RU) player is shown in figure 3.1.1.

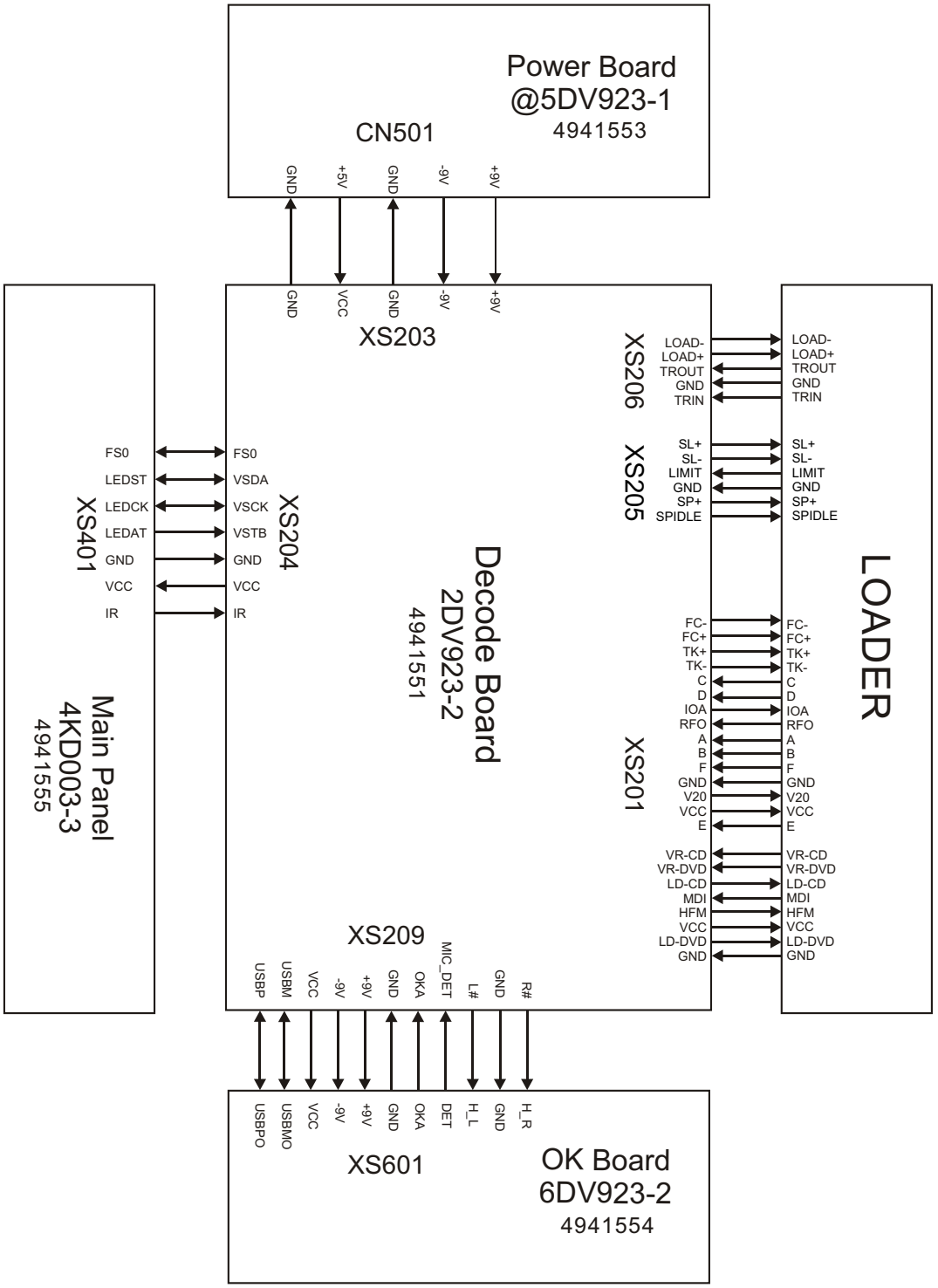


Figure 3.1.1 Overall Wiring Diagram of DV923DH(RU)

3.2 BLOCK DIAGRAM FOR PLAYER

Block diagram for DV923HD(RU) player is shown in figure 3.2.1.

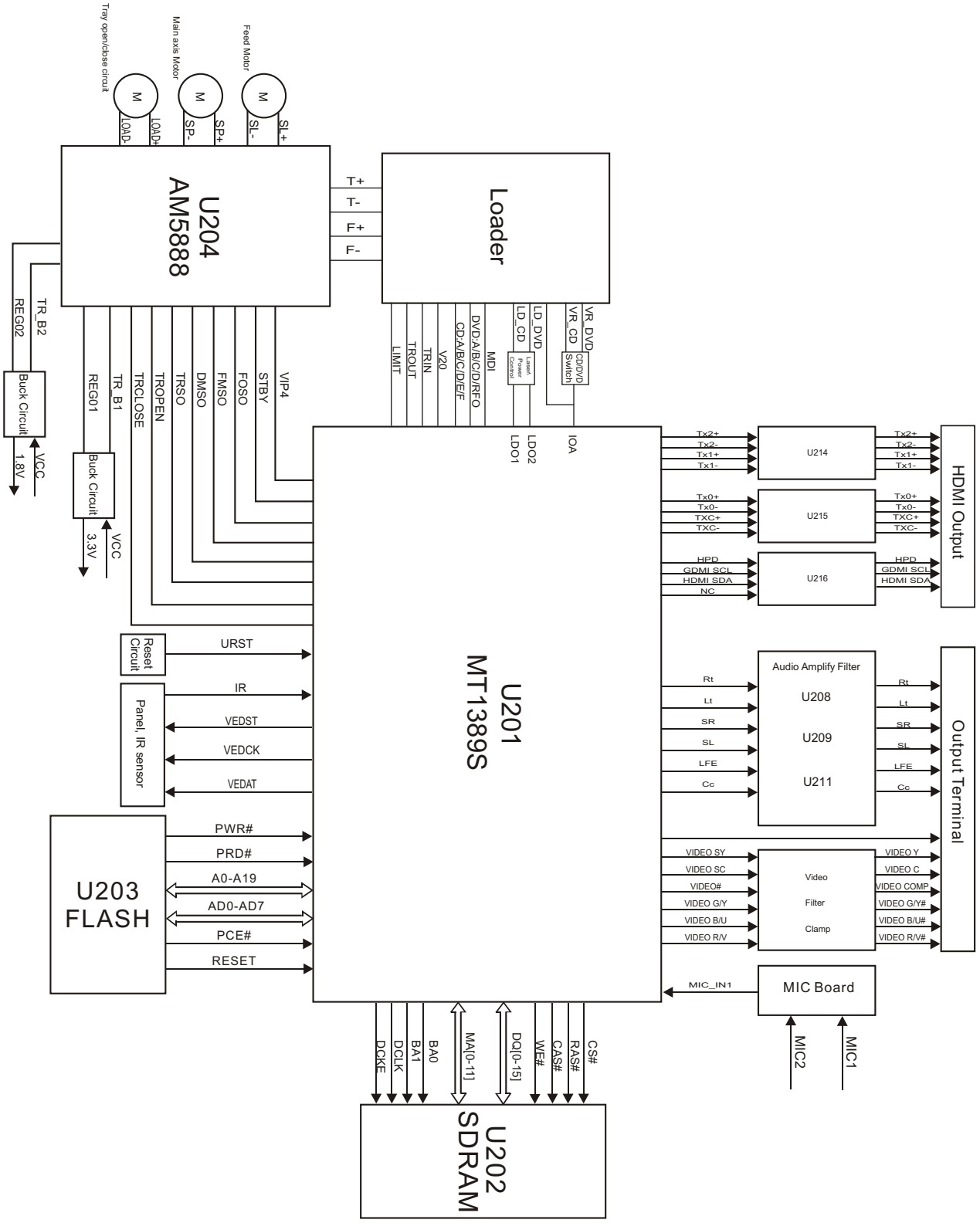


Figure 3.2.1 Block diagram of DV923HD(RU)

Chapter Four

Block Diagram of Unit Circuit

4.1 Servo Circuit

This player adopts SONY HD62 loader and MTK decode scheme. Servo circuit is mainly composed of front signal processing, digital servo processing, digital signal processing chip Mt1389 and driving circuit chip AM5888. Mt1389 is also a main part of decode circuit. Block diagram of servo circuit is shown in figure 4.1.1：

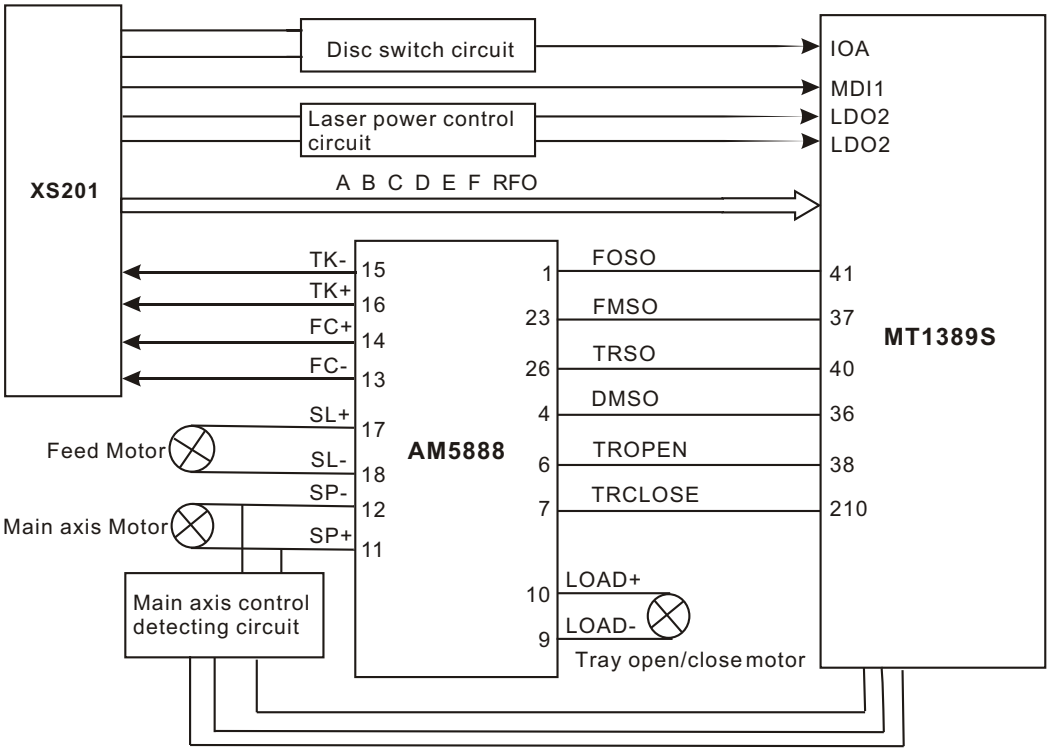


Figure 4.1.1 Block diagram of servo circuit

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：

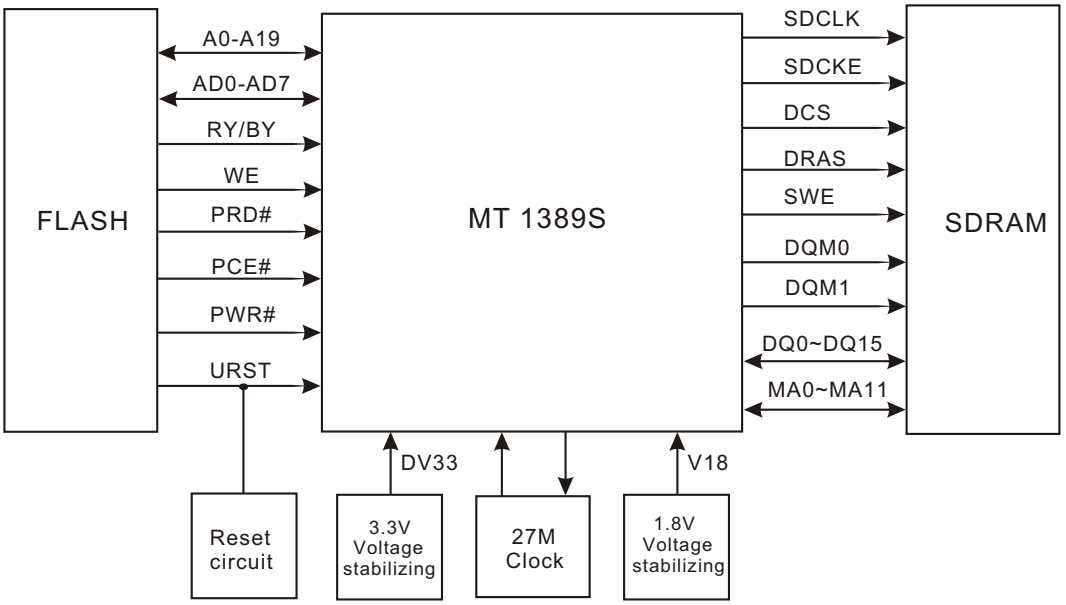


Figure 4.2.1 Block diagram of decode circuit

4.3 Audio Circuit

Block diagram of audio circuit is shown in figure 4.3.1：

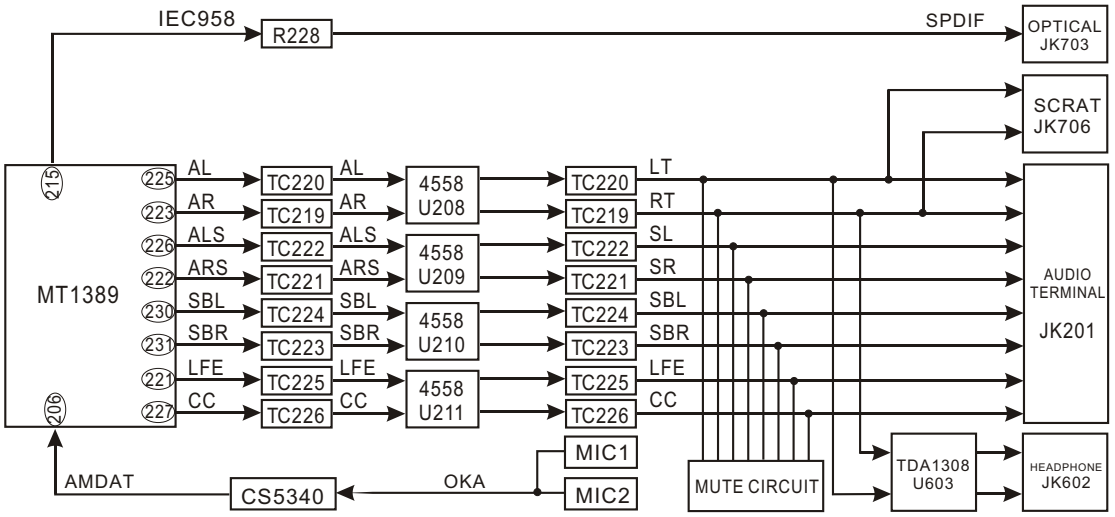


Figure 4.3.1 Block diagram of audio circuit

4.4 Video circuit

MT1389S has built in video D/A converting circuit. And video output has SCART, Y/Pb/Pr, CVBS and Y/C output modes. 6 channel video signal outputted from MT1389S output to each terminal after video filter and clamp. Block diagram of video signal is shown in figure 4.4.1：

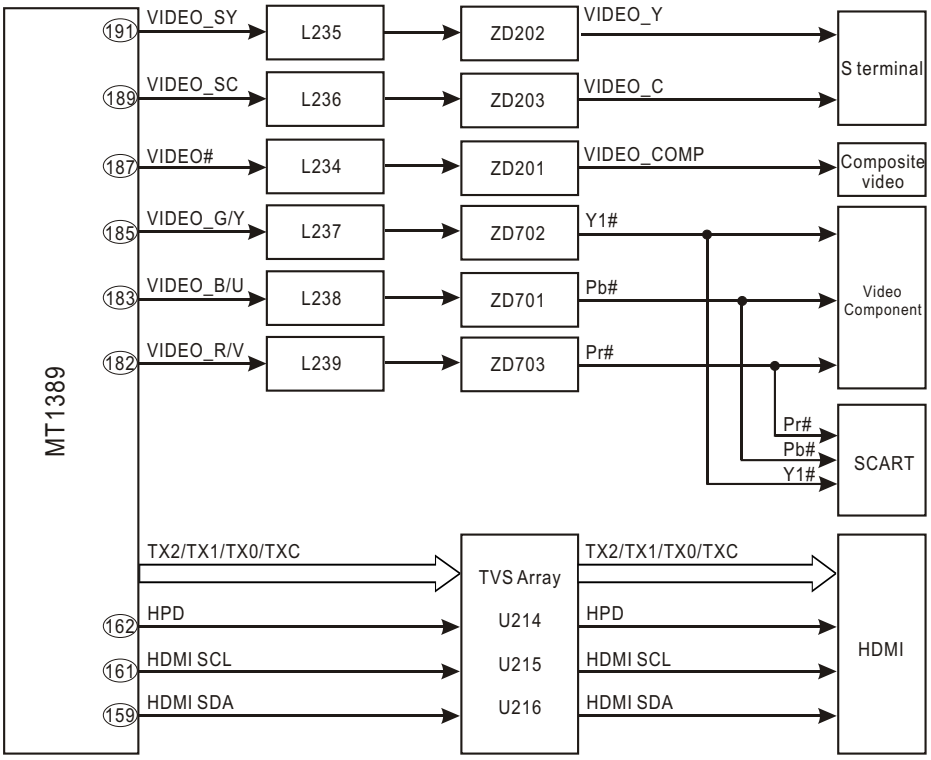


Figure 4.4.1 Block diagram of video signal flow

4.5 Power circuit

Block diagram of power circuit is shown in figure 4.5.1：

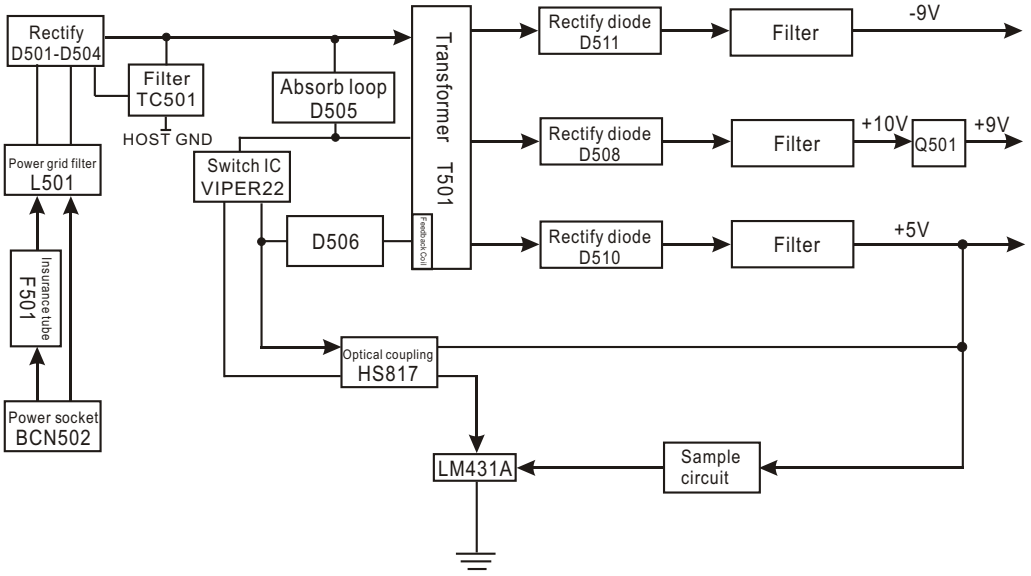
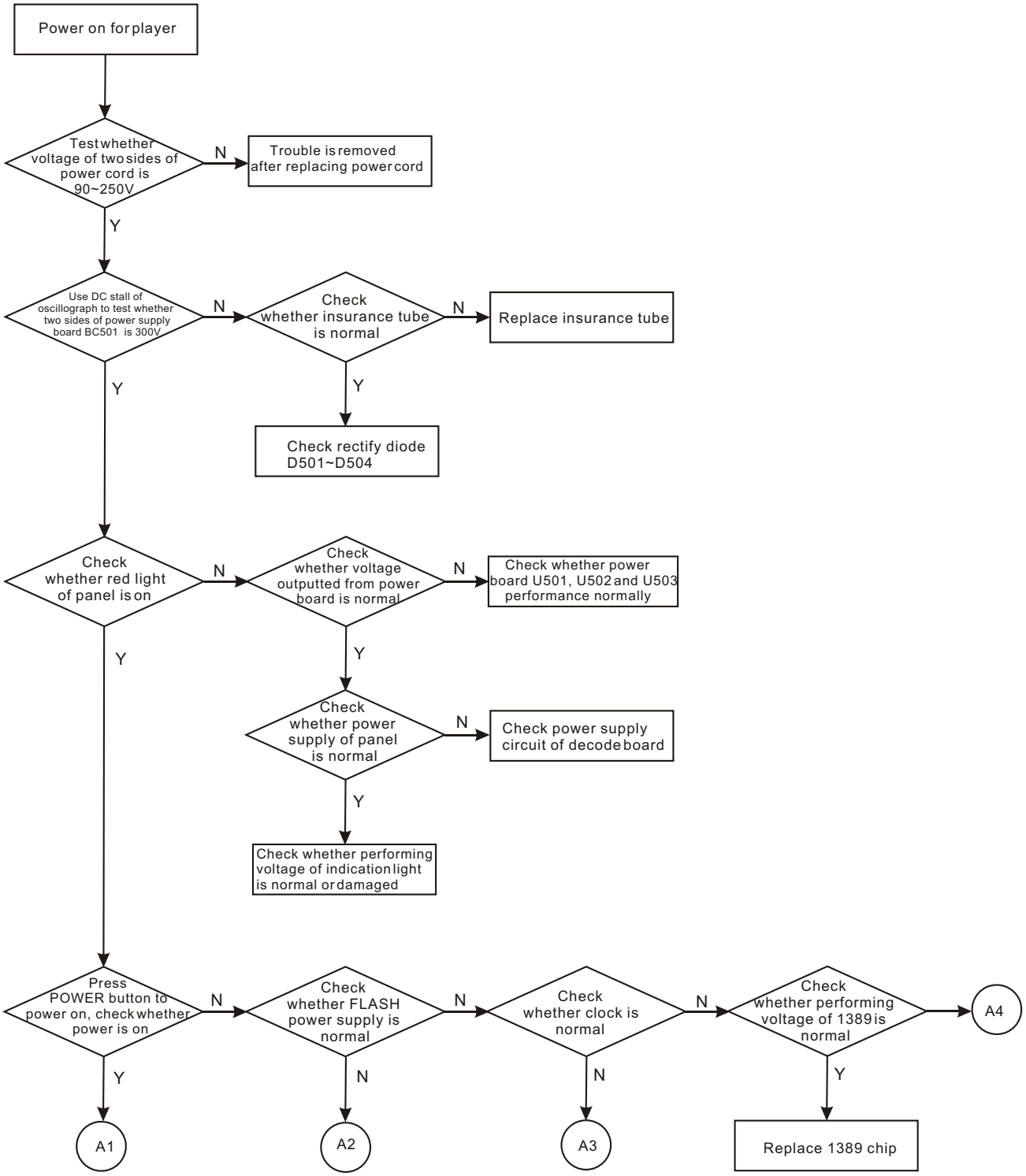
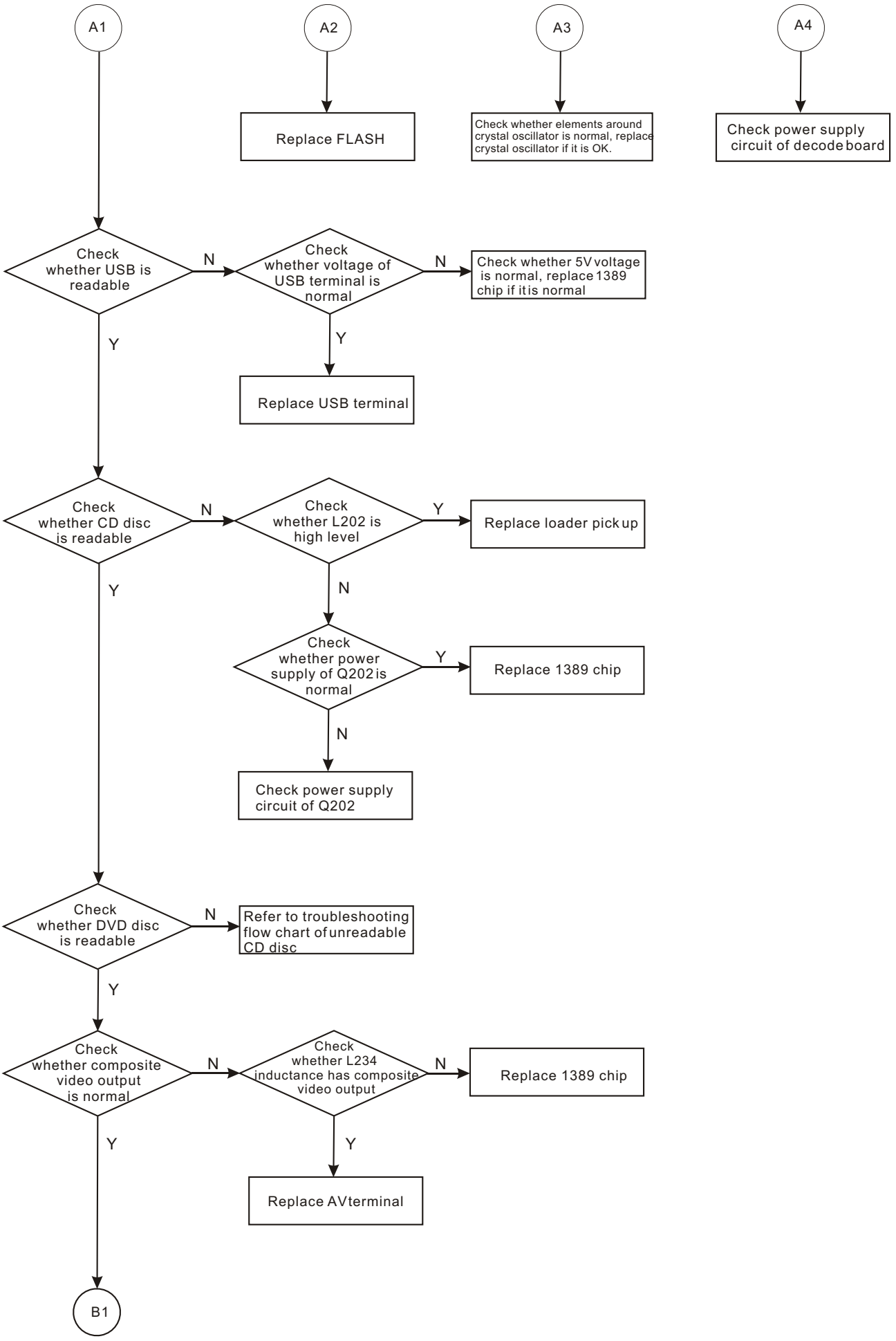


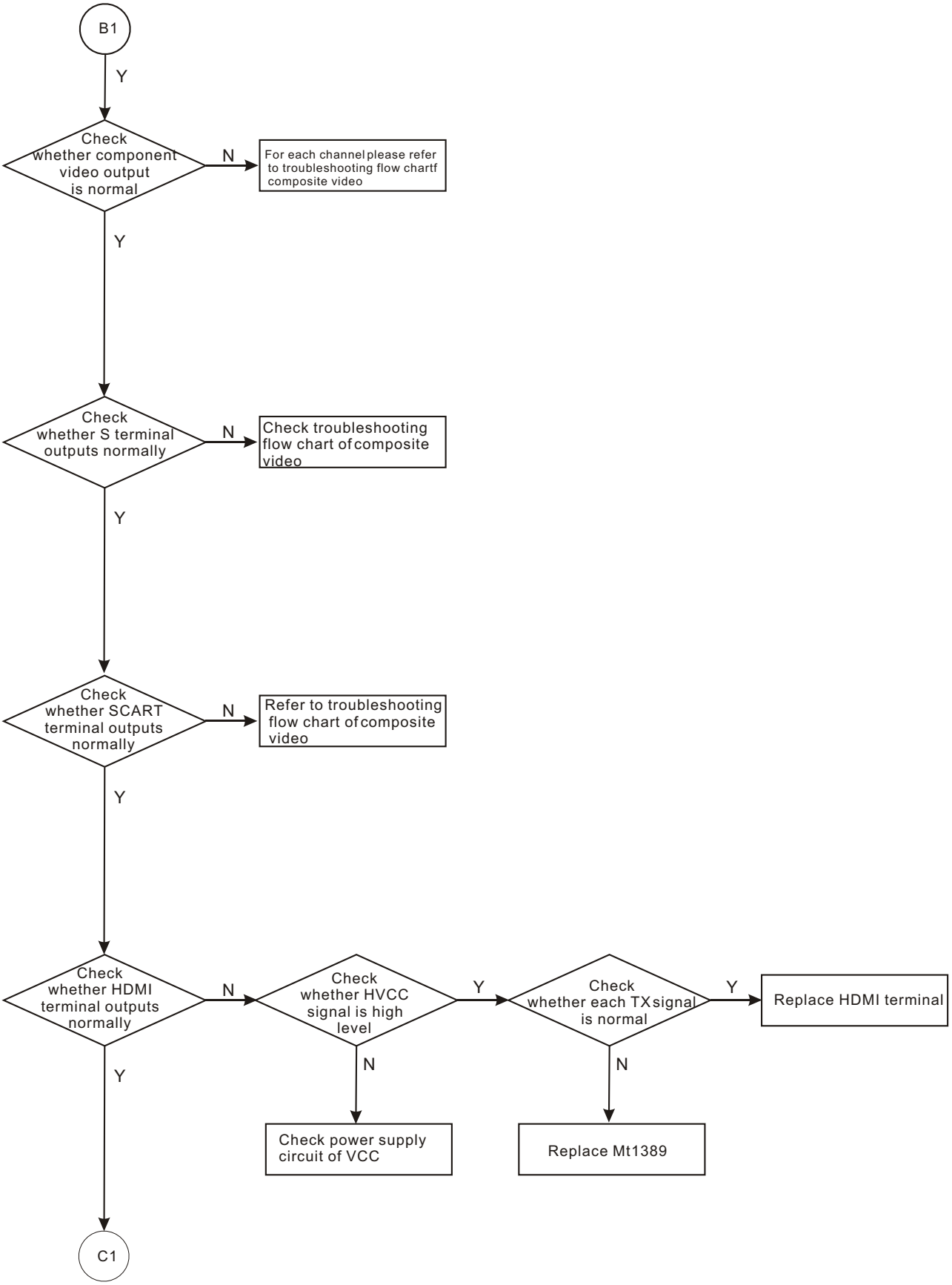
Figure 4.5.1 Block diagram of power circuit

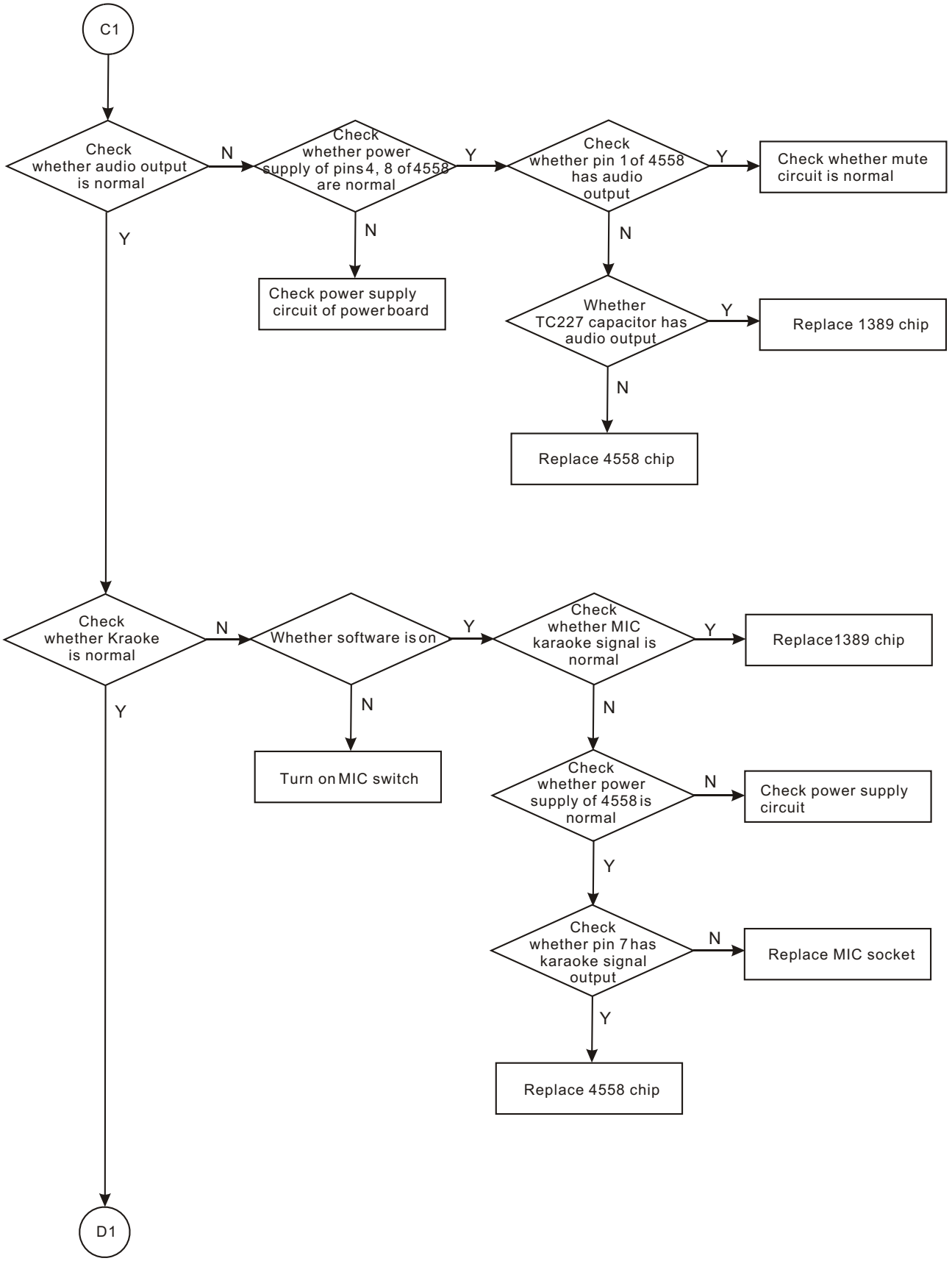
Chapter Five

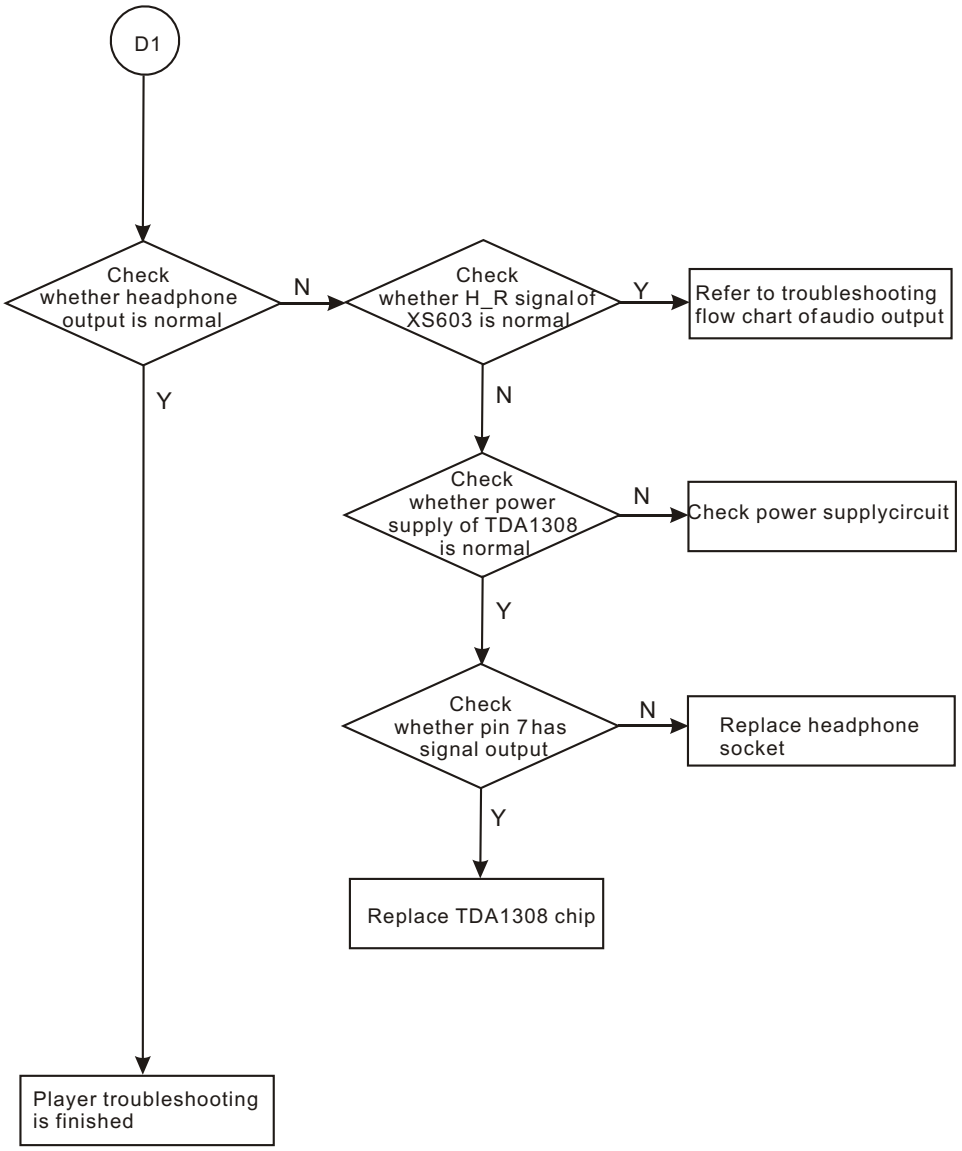
Troubleshooting Flow Chart




A1
A2
A3
A4
Replace FLASH
Check whether elements around crystal oscillator is normal, replace crystal oscillator if it is OK.
Check power supply circuit of decode board
Check whether USB is readable
N
Check whether voltage of USB terminal is normal
N
Check whether 5V voltage is normal, replace 1389 chip if it is normal
Y
Y
Replace USB terminal
Check whether CD disc is readable
N
Check whether L202 is high level
Y
Replace loader pick up
Y
N
Check whether power supply of Q202 is normal
Y
Replace 1389 chip
N
Check power supply circuit of Q202
Check whether DVD disc is readable
N
Refer to troubleshooting flow chart of unreadable CD disc
Y
Check whether composite video output is normal
N
Check whether L234 inductance has composite video output
N
Replace 1389 chip
Y
Y
Replace AV terminal
B1


B1
Y
Check whether component video output is normal
N
For each channel please refer to troubleshooting flow chartf composite video
Y
Check whether S terminal outputs normally
N
Check troubleshooting flow chart of composite video
Y
Check whether SCART terminal outputs normally
N
Refer to troubleshooting flow chart of composite video
Y
Check whether HDMI terminal outputs normally
N
Check whether HVCC signal is high level
Y
Check whether each TX signal is normal
Y
Replace HDMI terminal
N
Check power supply circuit of VCC
N
Replace Mt1389
Y
C1

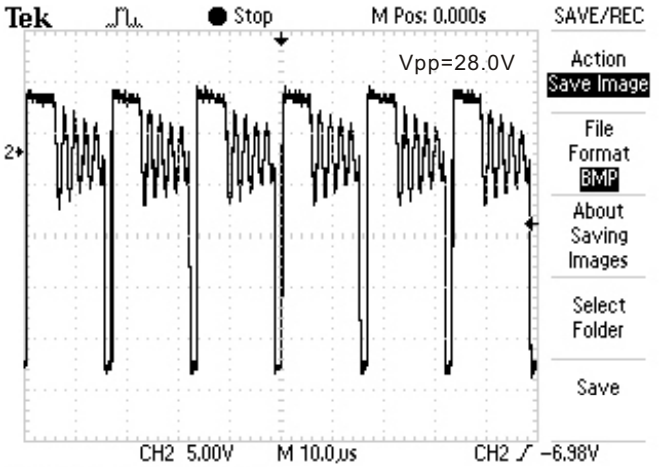

C1
Check whether audio output is normal
N
Check whether power supply of pins 4, 8 of 4558 are normal
Y
Check whether pin 1 of 4558 has audio output
Y
Check whether mute circuit is normal
Y
N
N
Check power supply circuit of power board
Whether TC227 capacitor has audio output
Y
Replace 1389 chip
N
Replace 4558 chip
Check whether Kraoke is normal
N
Whether software is on
Y
Check whether MIC karaoke signal is normal
Y
Replace1389 chip
Y
N
N
Turn on MIC switch
Check whether power supply of 4558 is normal
N
Check power supply circuit
Y
Check whether pin 7 has karaoke signal output
N
Replace MIC socket
Y
Replace 4558 chip
D1


D1
Check whether headphone output is normal
N
Check whether H_R signal of XS603 is normal
Y
Refer to troubleshooting flow chart of audio output
Y
N
Check whether power supply of TDA1308 is normal
N
Check power supplycircuit
Y
Check whether pin 7 has signal output
N
Replace headphone socket
Y
Replace TDA1308 chip
Player troubleshooting is finished

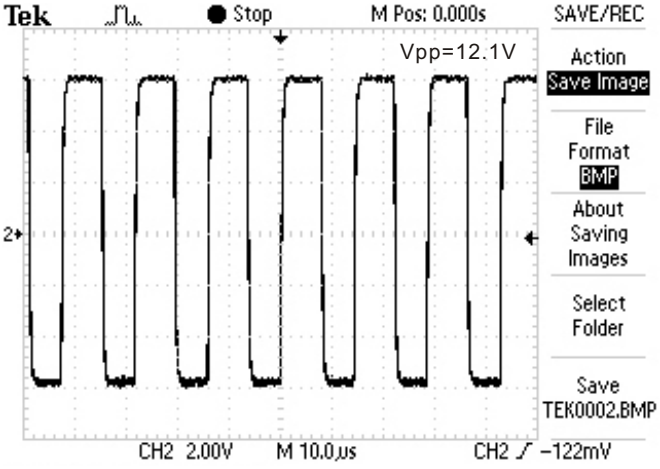
Chapter Six Waveform Diagram

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.

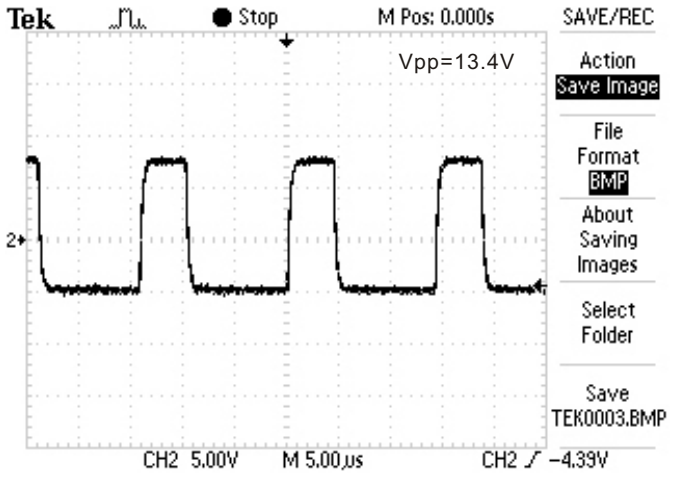
1. Waveform diagram for pulse DC of power board D513 anode.



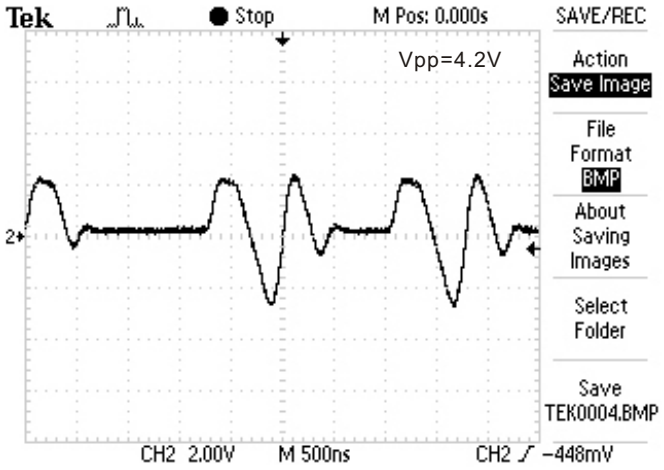
2. Waveform diagram for main axis signal DMO .（when there is main axis motion ）



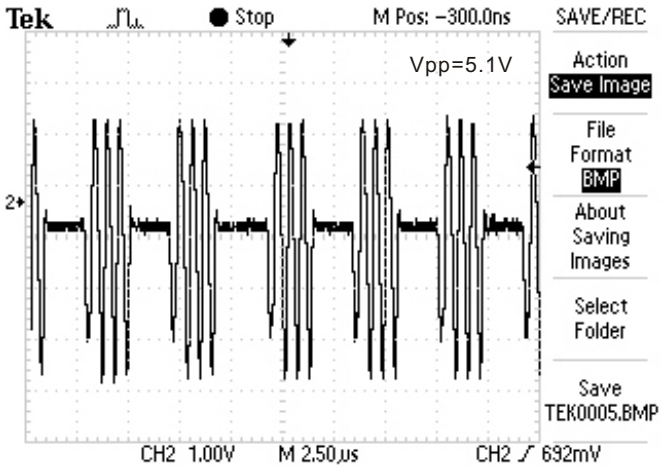
3. Waveform diagram for feed signal FMO.（when pick up has feed motion ）



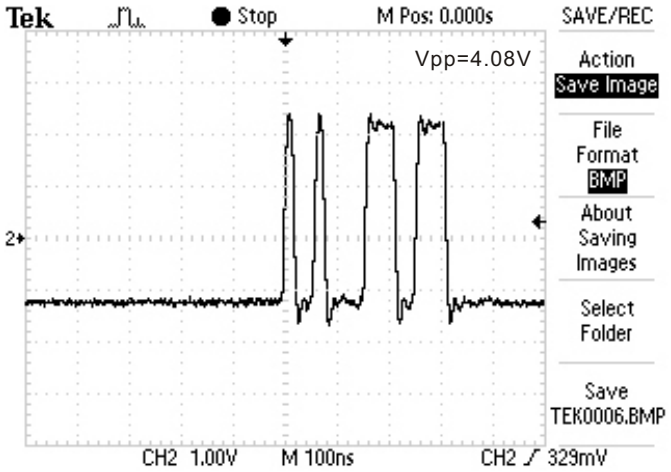
4. Waveform diagram for traction signal TRO.（when pick up has traction motion）



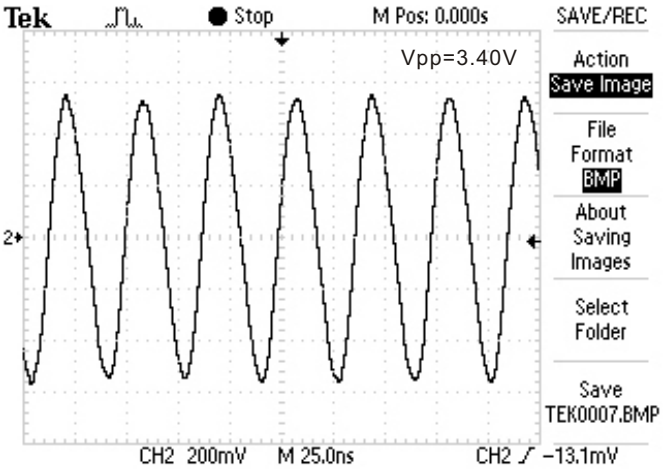
5. Waveform diagram for focus signal FOO.（when pick up has focus motion ）



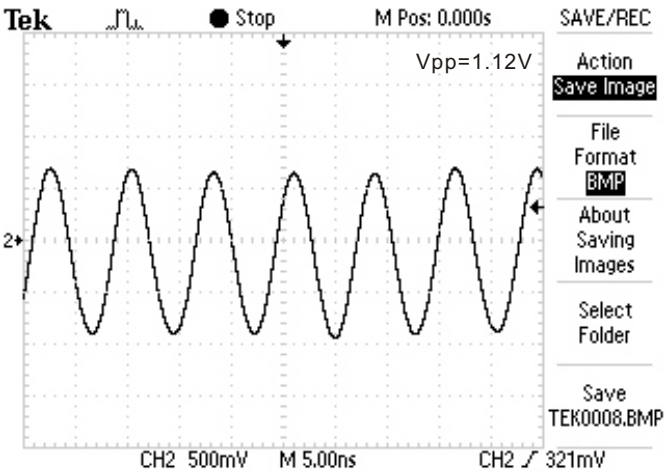
6. Waveform of A17.（pin 5 of U205）



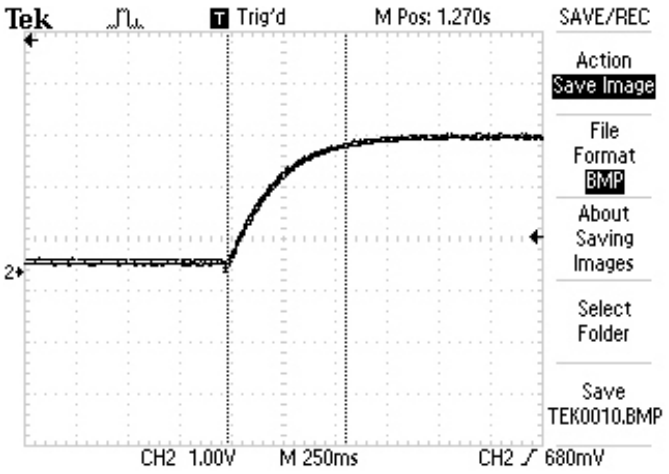
7. Waveform of A18.（pin 6 of U205）



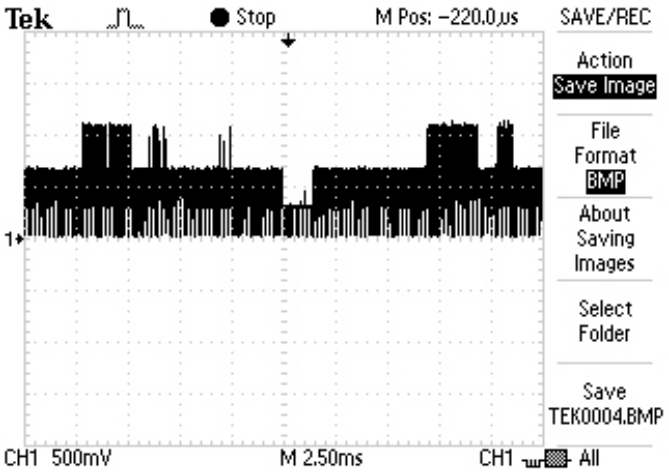
8. Clock waveform diagram of 27MHz.(X201)



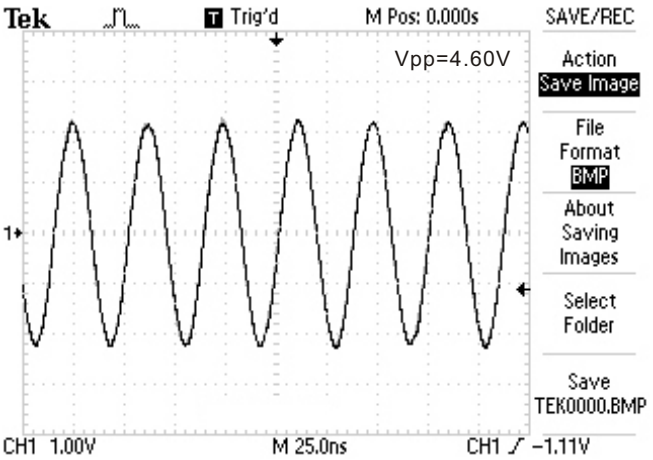
9. Waveform diagram of reset signal URST.



10. Video signal waveform diagram.

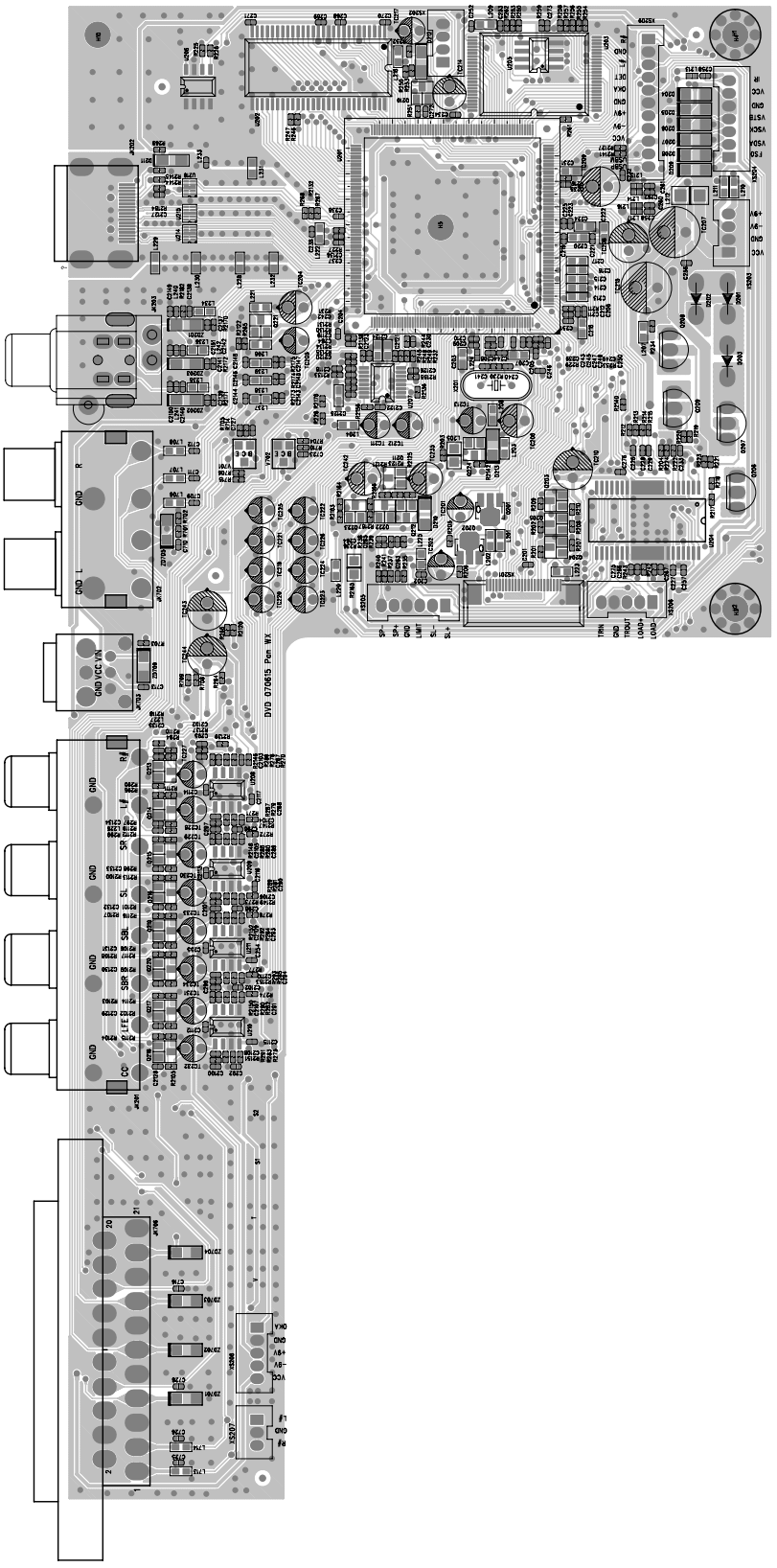


11. 1KHZ audio signaal output waveform diagram(it is suggested to use test disc,if not,waveform tested will change at any time,which will affect your judgment).

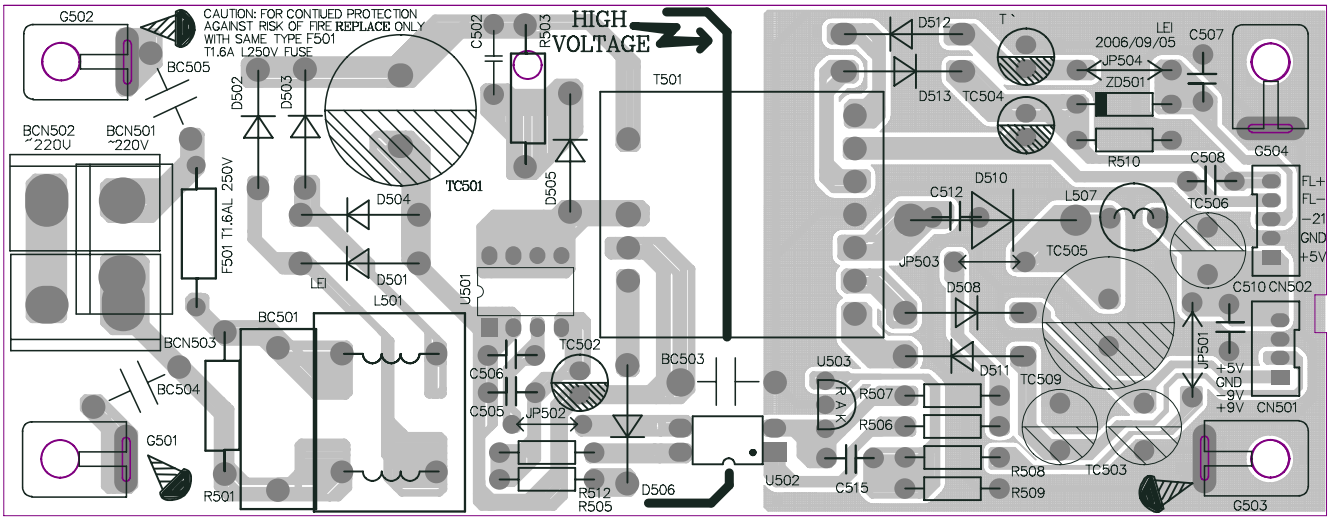


Chapter Seven PCB Board

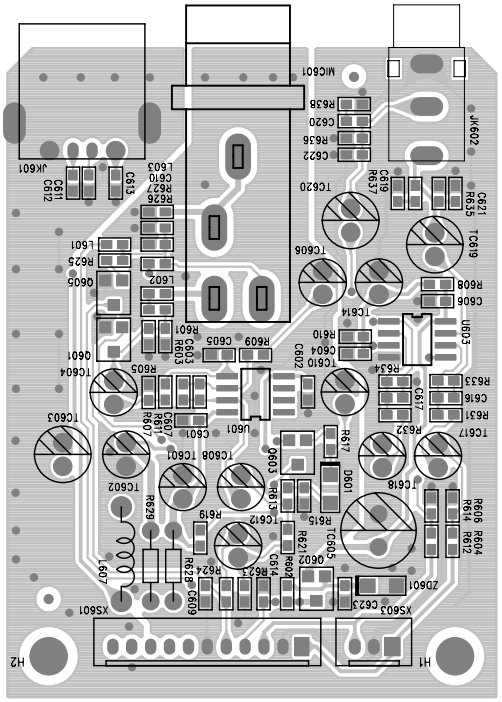
7.1 Surface layer of Decode Board(2DV923-2)4941551



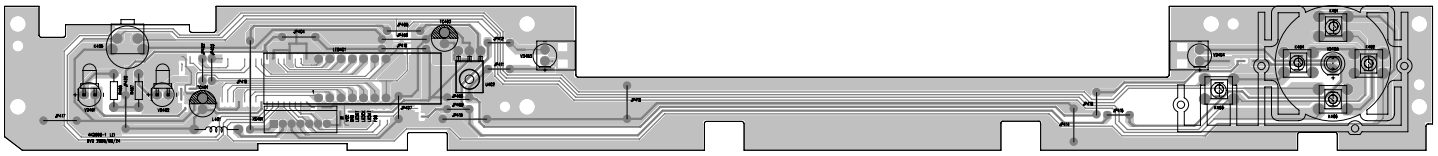
7.2 Power Board (@5DV923-1)4941553



7.3 OK Board (6DV923-2) 4941544



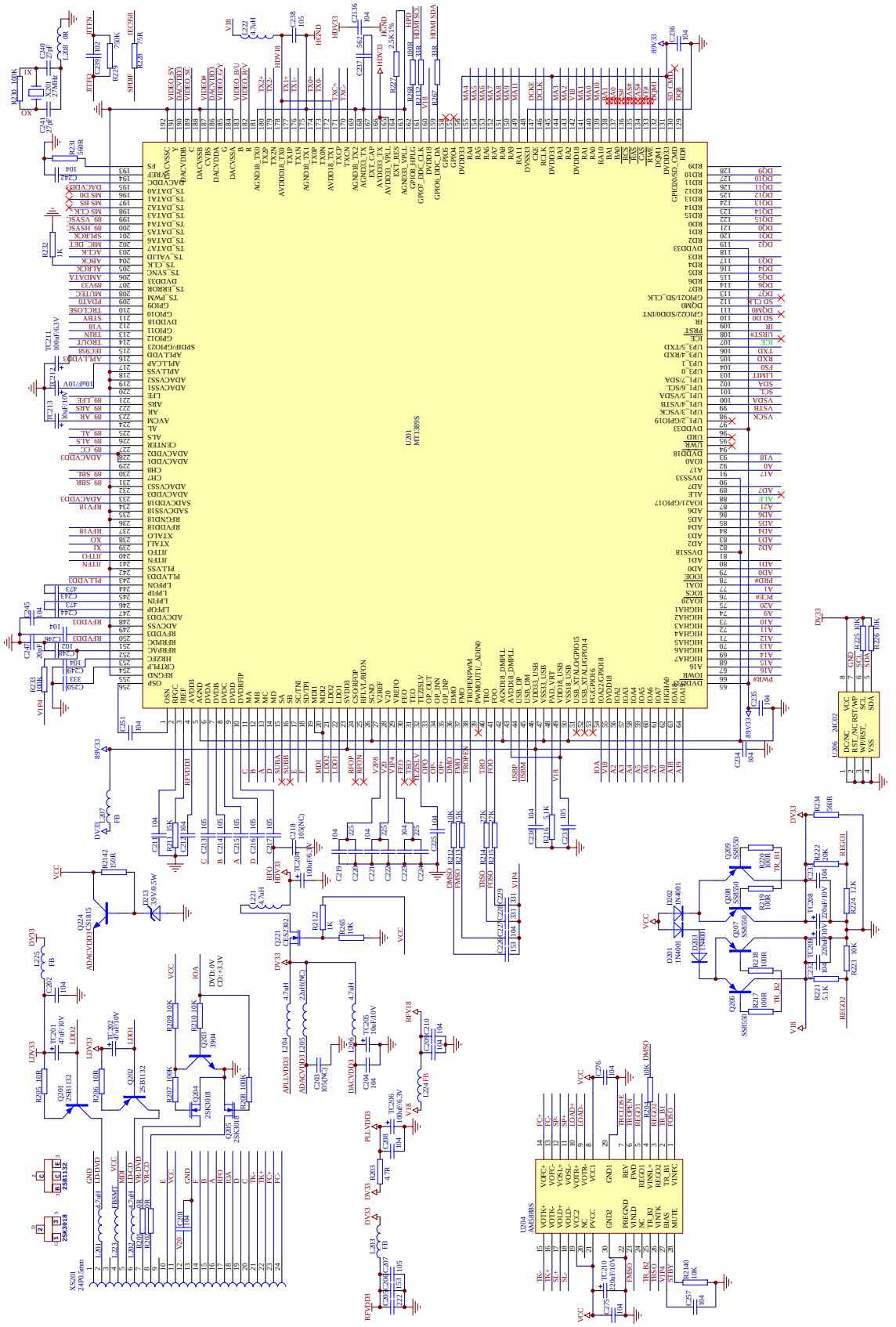
7.4 Surface layer of Main Panel (4KD003-3) 4941555

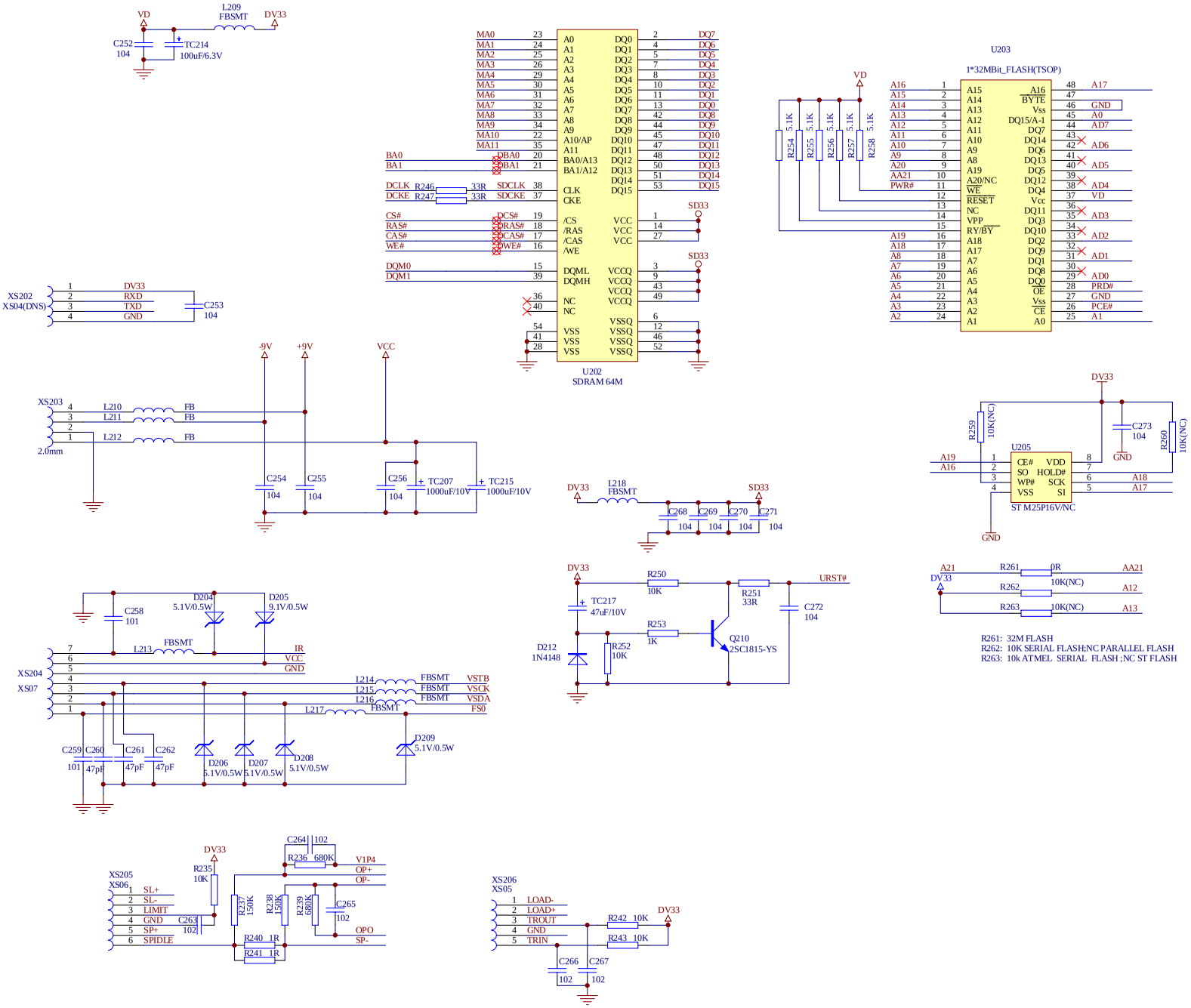


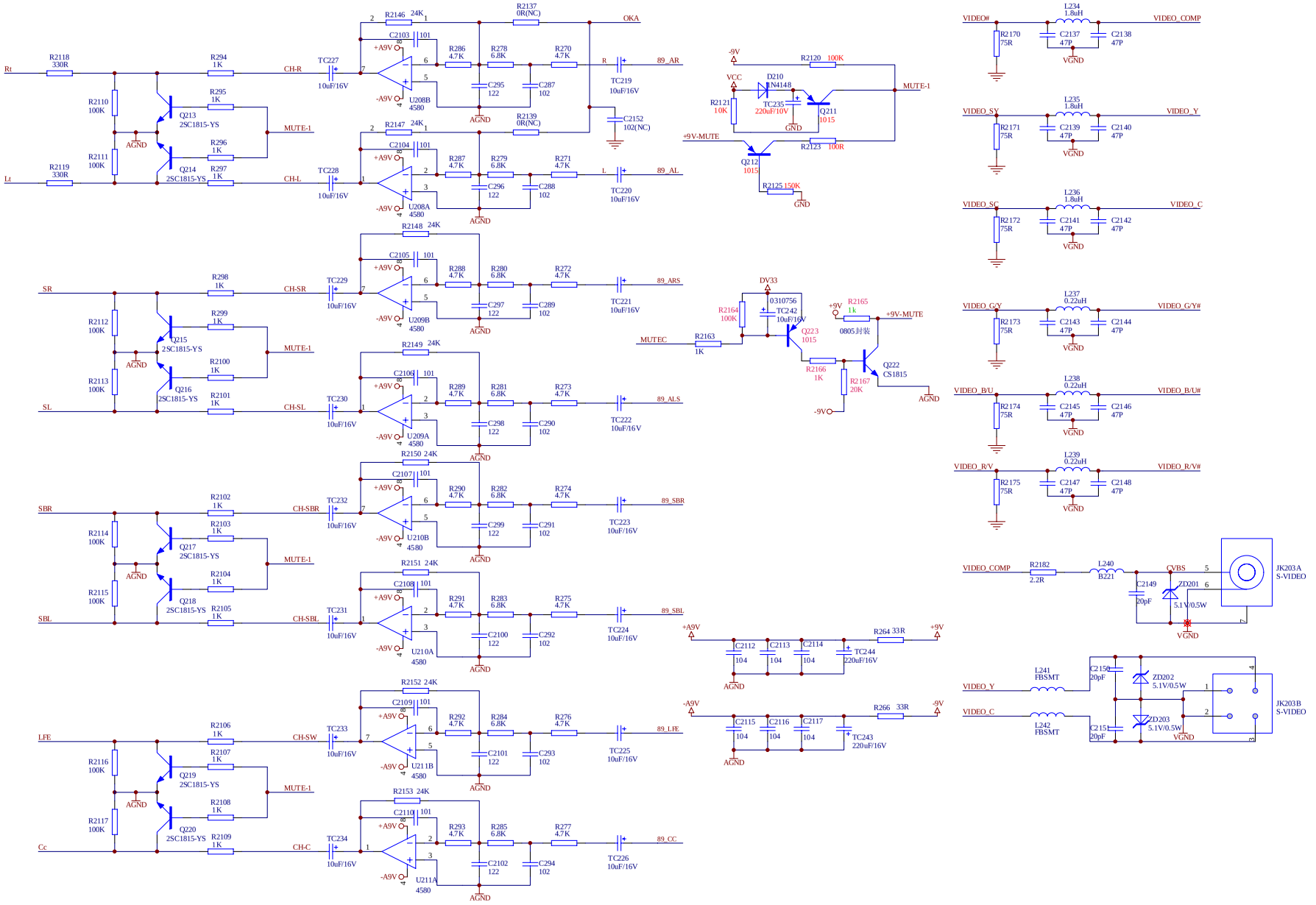
7.5 Bottom layer of Main Panel (4KD003-3)4941555

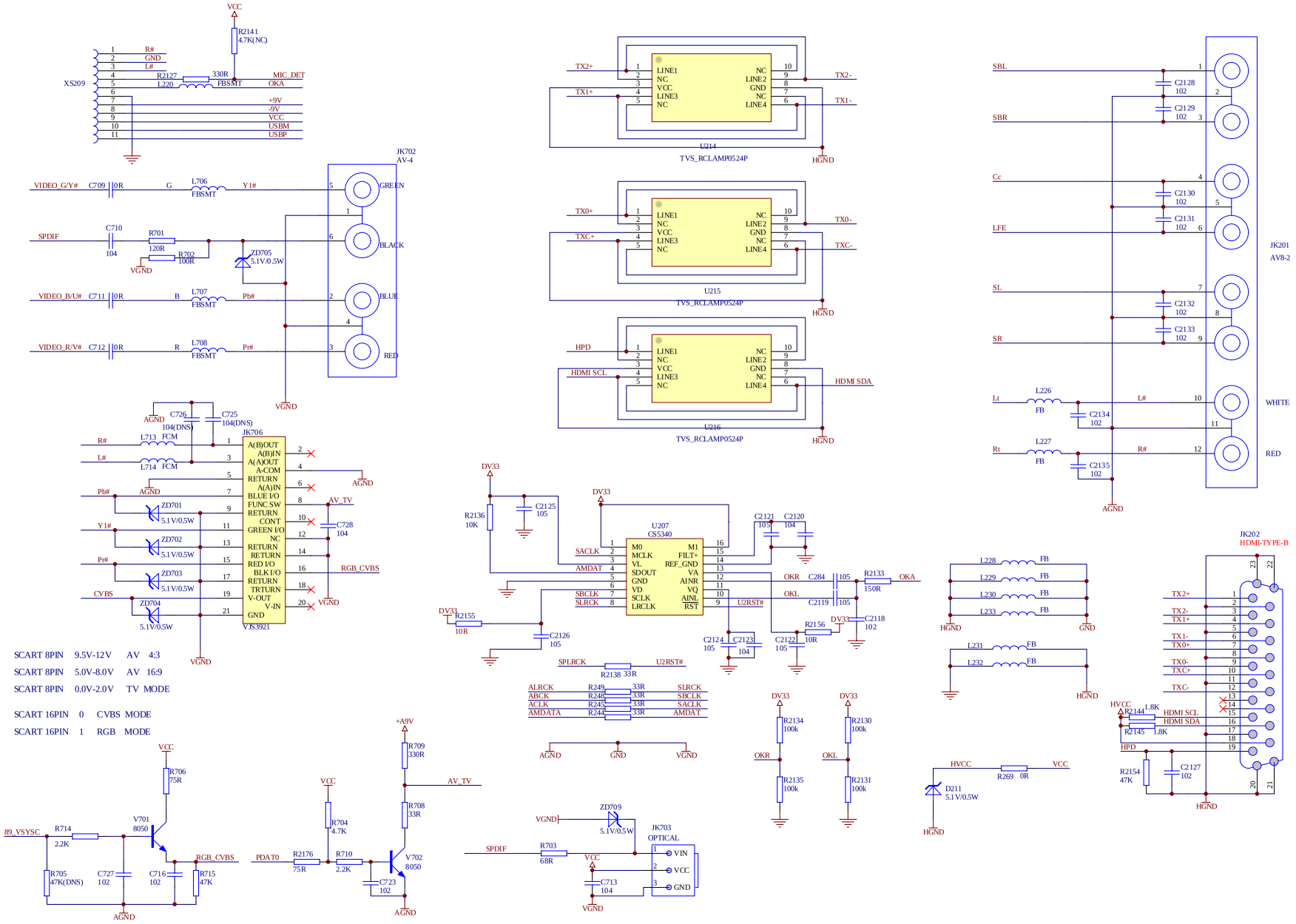
Chapter Eight Circuit Diagram

8.1 Decode Board(2DV923-2)

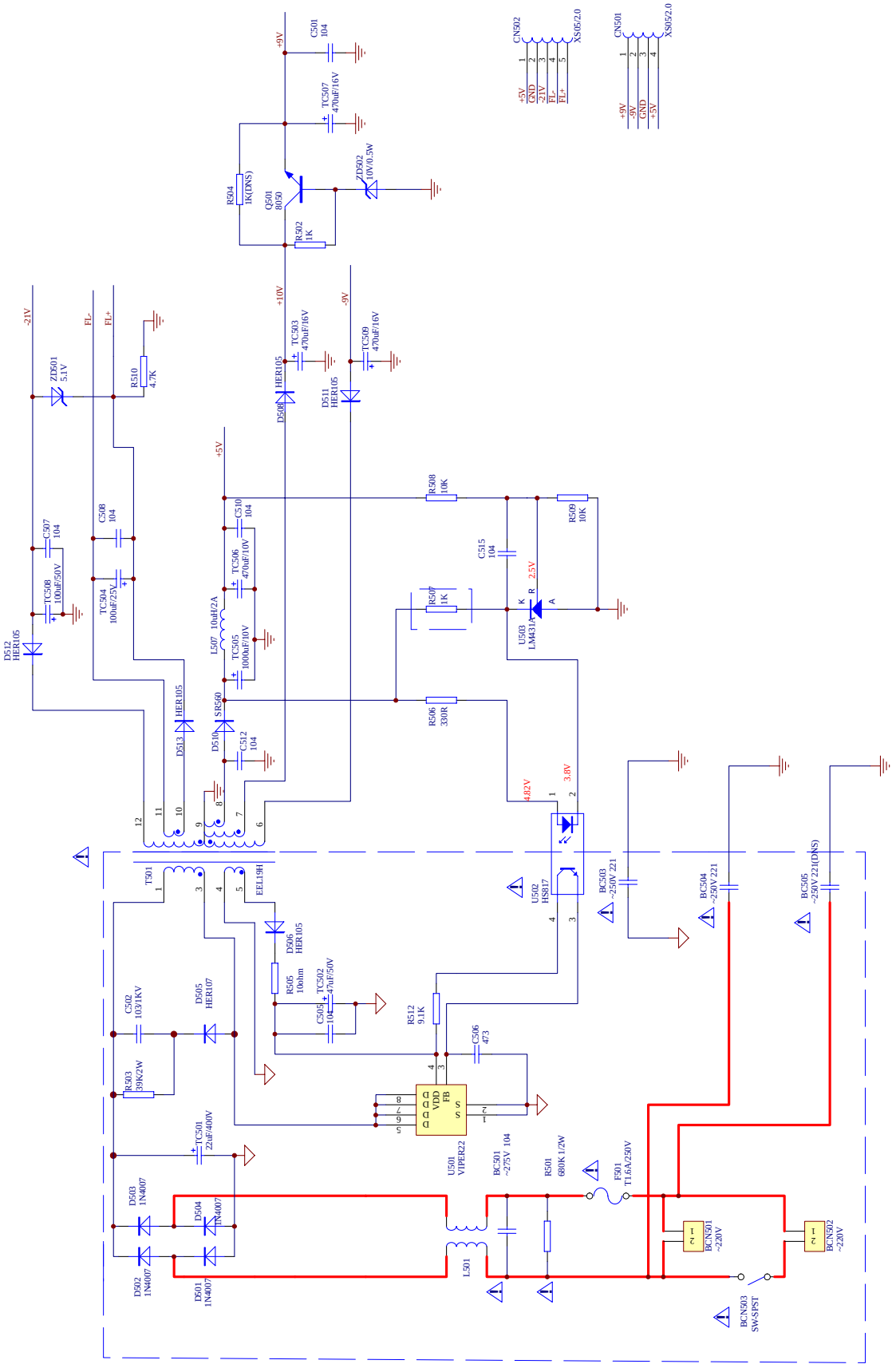



L209
FBSMT
VD
DV33
C252
104
TC214
100uF/6.3V
U202
SDRAM 64M
MA0
MA1
MA2
MA3
MA4
MA5
MA6
MA7
MA8
MA9
MA10
MA11
BA0
BA1
DCLK
DCKE
R246
R247
33R
SDCLK
SDCKE
CS#
RAS#
CAS#
WE#
DQM0
DQM1
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10/AP
A11
BA0/A13
BA1/A12
CLK
CKE
/CS
/RAS
/CAS
/WE
DQML
DQMH
NC
VSS
DQ0
DQ1
DQ2
DQ3
DQ4
DQ5
DQ6
DQ7
DQ8
DQ9
DQ10
DQ11
DQ12
DQ13
DQ14
DQ15
VCC
VCCQ
VSSQ
SD33
U203
1*32MBit_FLASH(TSOP)
R254
R255
R256
R257
R258
5.1K
A15
A14
A13
A12
A11
A10
A9
A8
A20
A21
PWR#
A19
A18
A17
A7
A6
A5
A4
A3
A2
A1
A16
BYTE
Vss
DQ15/A-1
DQ7
DQ14
DQ6
DQ13
DQ5
A20/NC
DQ12
DQ4
WE
RESET
Vcc
NC
DQ11
VPP
DQ3
RY/BY
DQ10
DQ2
DQ9
DQ1
DQ8
DQ0
OE
Vss
CE
A0
GND
AD7
AD6
AD5
AD4
VD
AD3
AD2
AD1
AD0
PRD#
PCE#
A17
A0
XS202
XS04(DNS)
DV33
RXD
TXD
GND
C253
104
XS203
2.0mm
L210
L211
L212
FB
-9V
+9V
VCC
C254
C255
C256
104
TC207
1000uF/10V
TC215
1000uF/10V
DV33
L218
FBSMT
SD33
C268
C269
C270
C271
104
U205
ST M25P16V/NC
CE#
SO
WP#
VSS
VDD
HOLD#
SCK
SI
R259
R260
10K(NC)
C273
104
GND
A19
A16
A18
A17
XS204
XS07
L213
L214
L215
L216
L217
FBSMT
IR
VCC
GND
VSTB
VSCK
VSDA
FS0
D204
D205
5.1V/0.5W
9.1V/0.5W
C258
101
C259
C260
C261
C262
101
47pF
D206
D207
D208
D209
DV33
R250
10K
R251
33R
R252
10K
R253
1K
TC217
47uF/10V
Q210
2SC1815-YS
D212
1N4148
URST#
C272
104
A21
AA21
R261
0R
R262
10K(NC)
A12
R263
A13
R261: 32M FLASH
R262: 10K SERIAL FLASH;NC PARALLEL FLASH
R263: 10k ATMEL SERIAL FLASH ;NC ST FLASH
XS205
XS06
SL+
SL-
LIMIT
GND
SP+
SPIDLE
C263
102
R235
10K
C264
102
R236
680K
V1P4
OP+
OP-
R237
150K
R238
150K
R239
680K
C265
102
OPO
SP-
R240
1R
R241
1R
XS206
XS05
LOAD-
LOAD+
TROUT
GND
TRIN
R242
10K
R243
10K
C266
C267
102

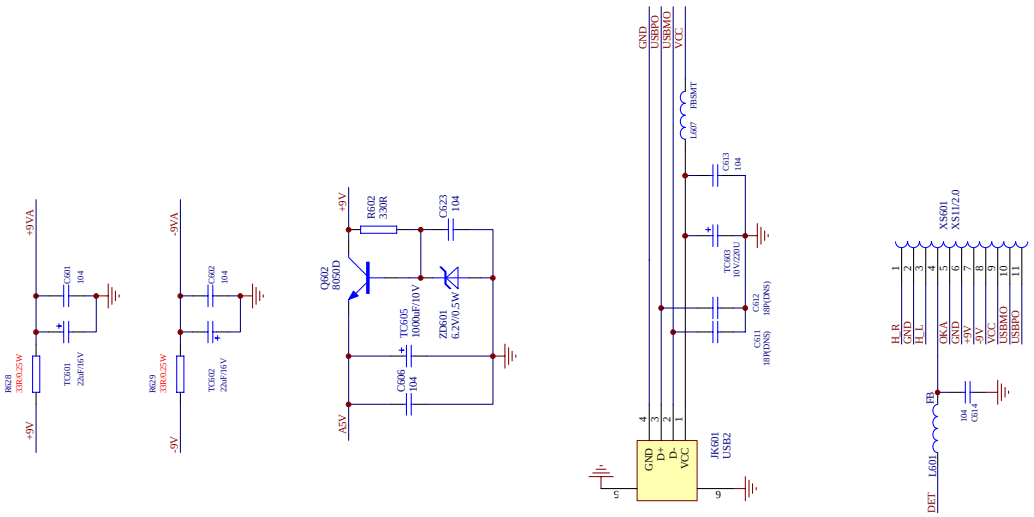

Rt
Lt
SR
SL
SBR
SBL
LFE
Cc
CH-R
CH-L
CH-SR
CH-SL
CH-SBR
CH-SBL
CH-SW
CH-C
MUTE-1
AGND
OKA
89_AR
89_AL
89_ARS
89_ALS
89_SBR
89_SBL
89_LFE
89_CC
MUTEC
+9V-MUTE
VIDEO_COMP
VIDEO_Y
VIDEO_C
VIDEO_G/Y
VIDEO_B/U
VIDEO_R/V
VGND
CVBS
JK203A S-VIDEO
JK203B S-VIDEO
U208B 4580
U208A 4580
U209B 4580
U209A 4580
U210B 4580
U210A 4580
U211B 4580
U211A 4580
Q213 2SC1815-YS
Q214 2SC1815-YS
Q215 2SC1815-YS
Q216 2SC1815-YS
Q217 2SC1815-YS
Q218 2SC1815-YS
Q219 2SC1815-YS
Q220 2SC1815-YS
Q211 1015
Q212 1015
Q223 1015
Q222 CS1815
D210 IN4148
DV33
0310756
0805封装

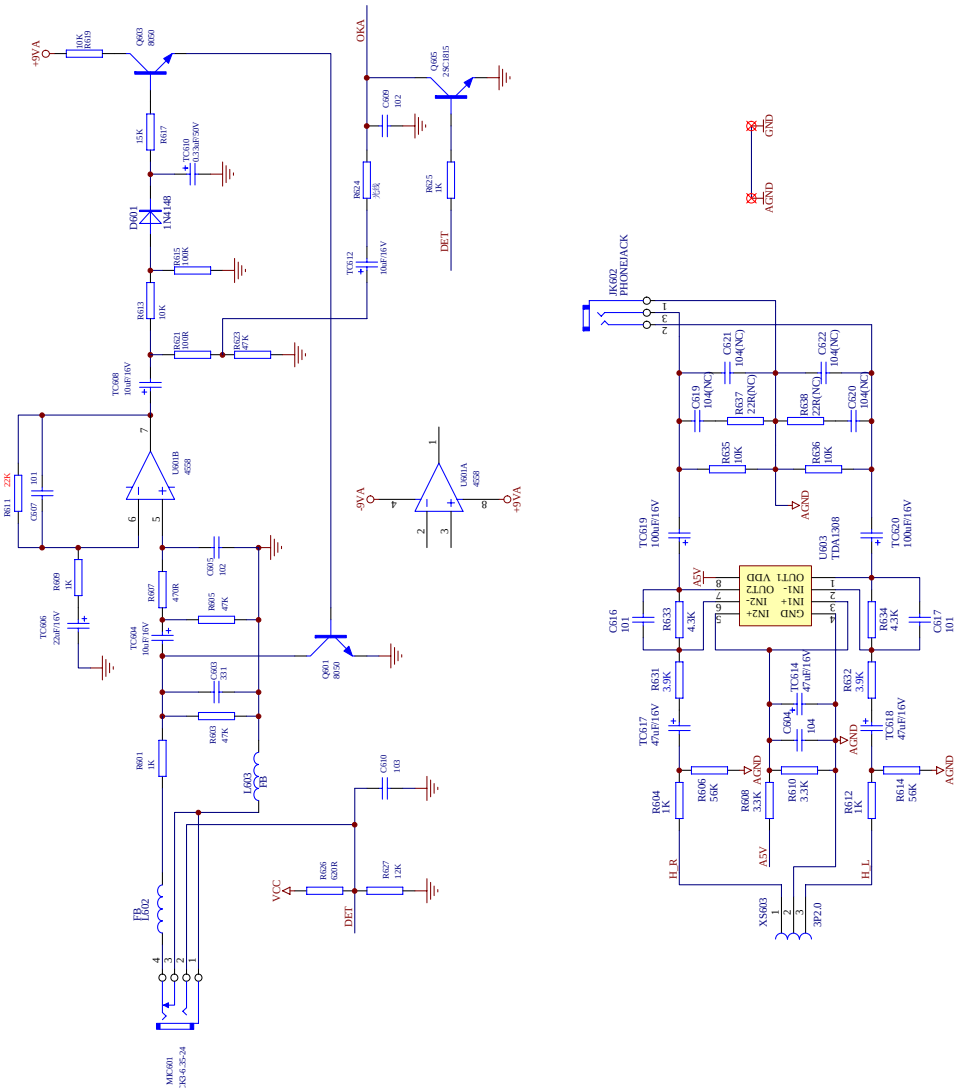

VCC
R2141
4.7K(NC)
XS209
R#
GND
L#
R2127
330R
L220
FBSMT
MIC_DET
OKA
+9V
-9V
VCC
USBM
USBP
JK702
AV-4
VIDEO_G/Y#
C709
0R
G
L706
FBSMT
Y1#
GREEN
SPDIF
C710
104
R701
120R
R702
100R
VGND
ZD705
5.1V.0.5W
BLACK
VIDEO_B/U#
C711
B
L707
Pb#
BLUE
VIDEO_R/V#
C712
R
L708
Pr#
RED
AGND
C726
104(DNS)
C725
L713
FCM
L714
JK706
A(B)OUT
A(B)IN
A(A)OUT
A-COM
RETURN
A(A)IN
BLUE I/O
FUNC SW
RETURN
CONT
GREEN I/O
NC
RETURN
RETURN
RED I/O
BLK I/O
RETURN
TRTURN
V-OUT
V-IN
GND
VJS3921
AV_TV
C728
RGB_CVBS
ZD701
ZD702
ZD703
ZD704
5.1 V/0.5W
CVBS
SCART 8PIN 9.5V-12V AV 4:3
SCART 8PIN 5.0V-8.0V AV 16:9
SCART 8PIN 0.0V-2.0V TV MODE
SCART 16PIN 0 CVBS MODE
SCART 16PIN 1 RGB MODE
R706
75R
V701
8050
89_VSYSC
R714
2.2K
R705
47K(DNS)
C727
102
C716
R715
47K
+A9V
R709
330R
R708
33R
R704
4.7K
PDAT0
R2176
75R
R710
2.2K
V702
C723
TX2+
TX1+
U214
TVS_RCLAMP0524P
TX2-
TX1-
TX0+
TXC+
U215
TX0-
TXC-
HPD
HDMI SCL
U216
HDMI SDA
U207
CS5340
SACLK
AMDAT
SBCLK
SLRCK
SDOUT
SCLK
LRCLK
M0
MCLK
VL
GND
VD
M1
FILT+
REF_GND
VA
AINR
VQ
AINL
RST
U2RST#
R2136
10K
C2125
105
R2155
C2126
C2121
C2120
C284
C2119
R2133
150R
OKR
OKL
R2156
C2118
C2124
C2123
C2122
SPLRCK
R2138
33R
ALRCK
ABCK
ACLK
AMDATA
R249
R248
R247
R246
SLRCK
SBCLK
SACLK
AMDAT
R2134
100k
R2135
R2130
R2131
ZD709
JK703
OPTICAL
VIN
VCC
GND
R703
68R
C713
104
SBL
SBR
Cc
LFE
SL
SR
Lt
Rt
L226
L227
FB
C2128
C2129
C2130
C2131
C2132
C2133
C2134
C2135
L#
R#
JK201
AV8-2
WHITE
RED
L228
L229
L230
L233
L231
L232
HVCC
R269
0R
D211
5.1V/0.5W
JK202
HDMI-TYPE-B
R2144
1.8K
R2145
1.8K
R2154
47K
C2127

8.2 Power Board (@5DV923-1)

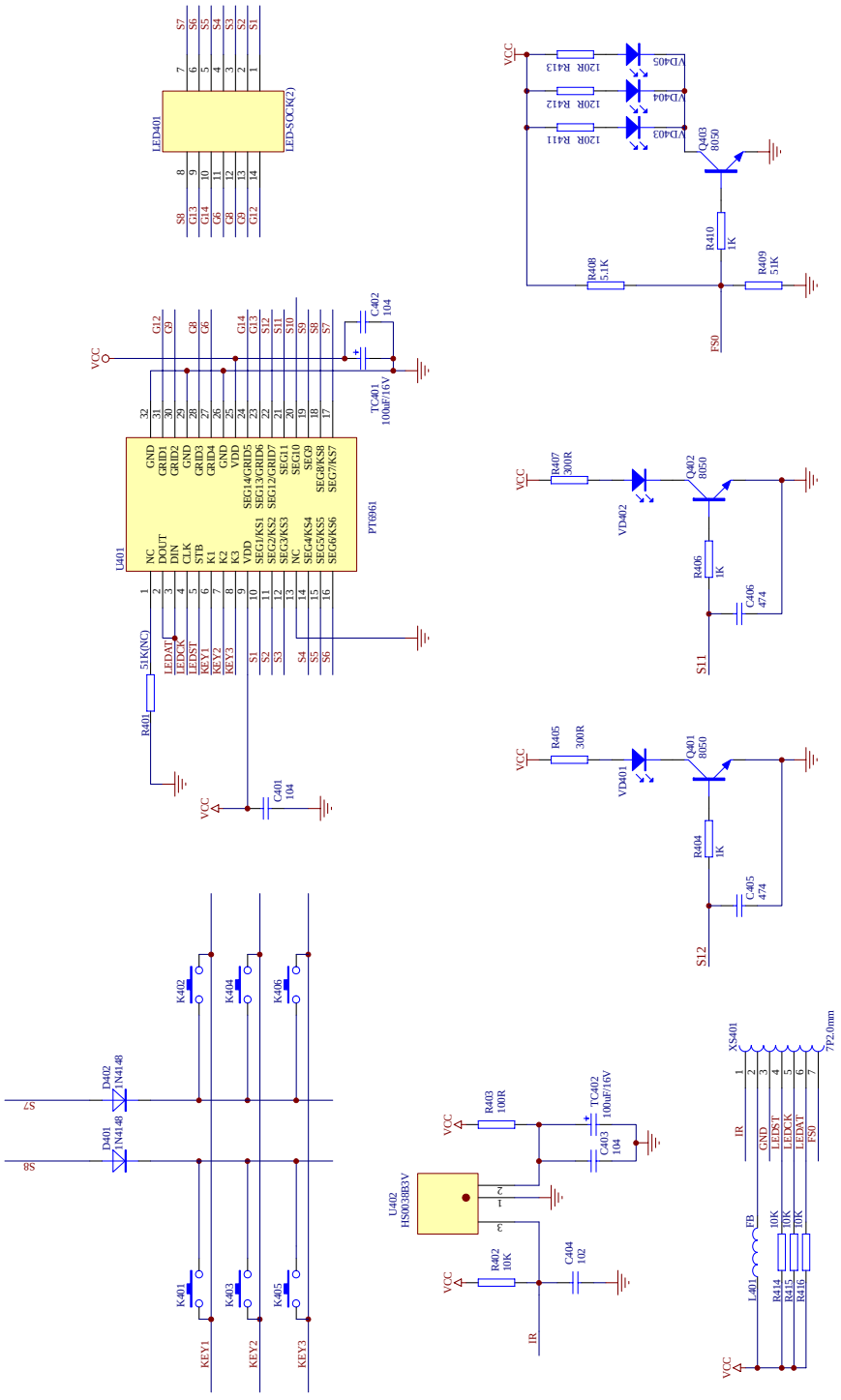


8.3 OK Board(6DV923-2)





8.4 Main Panel Board(4KD003-3)



Chapter Nine BOM List

DV923HD(RU)SILVER WHITE(1389S)

REMOTE CONTROL 5471742			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0970003	CERAMIC RESONATOR	455E	X801
0880220	IC	P2222 SOP	U801
0700007	SMD DIODE	14148	D801~D803 ①
0700001	SMD DIODE	LS4148	D801~D803 ①
0700001	SMD DIODE	LS4148	D801~D803 ①
0700001	SMD DIODE	LS4148	D801~D803 ①
0310048	SMD CAPACITOR	50V 151±5% NPO 0603	C802,C803
0090272	SMD RESISTOR	1/16W 1Ω±5% 0603	R801
0630009	EMISSION PIPE	TSAL4400	LED801 ②
0630010	EMISSION PIPE	LTE-4206	LED801 ②
0780130	SMD TRIODE	STC3265	Q801
5070070	PLASTIC BAG	85×250	
4000038	SELF-TAPPING SCREW	PB 2.3×6 COLOR ZINC	FOR CONNECTING UPPER AND LOWER COVER
3850126	ANODE/CATHODE SPRING	RC026	
3051273	GLASS OF REMOTE CONTROLLER	026 MING PURPLE	
3850124	ANODE SPRING	RC026	
3850125	CATHODE SPRING	RC026	
3041399	BOTTOM CASING OF REMOTE CONTROL	026 BLACK 2#	
3051319	BATTERY CASE DOOR OF REMOTE CONTROL	026 BLACK 2#	
4631052	CONDUCT GLUE OF REMOTE CONTROL	RC026-01R 4#	
3031856	REMOTE CONTROLLERSURFACE CASING	RC026-05R BLACK	
1564324	PCB	8516SI-3	

DV923HD(RU)SILVER WHITE(1389S)

USB BOARD ADVD99-1 4941552

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0200138	PORCELAIN CAPACITOR	50V 104±20% 5mm	C901
0390057	MAGNETIC BEADS INDUCTOR	RH354708	L901
1940022	SOCKET	4P 2.0mm	XS901
0260222	CD	CD11C 10V220U±20%6×7 2.5	TC901
1860047	USB SOCKET	CAB85-4Pin	JK901
5141825	VERSION LABEL	3.00 SQUARE WHITE	
1634643	PCB	A 99-1 FR4 D1.6 PX	

DV923HD(RU)SILVER WHITE(1389S)

DECODE BOARD 2DV923-3 4941551			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0960020	CRYSTAL OSCILLATOR	27.00MHz 49-S	X201
0780085	SMD TRIODE	8050D	V701,V702
0090050	SMD RESISTOR	1/10W 1K±5% 0805	R2165
0700007	SMD DIODE	14148	D212,D210,D301,D302 ③
0700001	SMD DIODE	LS4148	D212,D210,D301,D302 ③
0700001	SMD DIODE	LS4148	D212,D210,D301,D302 ③
0700001	SMD DIODE	LS4148	D212,D210,D301,D302 ③
1940023	SOCKET	7P 2.0mm	XS204
0700004	SMD VOLTAGE REGULATOR DIODE	5.1V±5% 1/2W	D204,D206~D209,D211,ZD201,ZD202,ZD203,ZD701~ZD705,ZD709
0090507	SMD RESISTOR	1/16W 4.7Ω±5% 0402	R203
0310482	SMD CAPACITOR	16V 473±10% 7R 0402	C243,C244
0310570	SMD CAPACITOR	16V 333±10% 7R 0402	C250
0310392	SMD CAPACITOR	50V 102±10% 7R 0402	C287~C290,C293,C294,C2130~C2135,C2118,C248,C263,C264,C265,C266,C267,C239,C727,C716,C723, C2127
0310394	SMD CAPACITOR	50V 222±10% 7R 0402	C205
0580002	VOLTAGE REGULATOR DIODE	3.9V±5% 1/2W	D213
1940022	SOCKET	4P 2.0mm	XS203
1940077	SOCKET	11P 2.0mm	XS209

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1940005	SOCKET	6P 2.0mm	XS205
1940024	SOCKET	5P 2.0mm	XS206
0881031	IC	24C02N SOP	U206 ④
08829088	IC	TU24C02 SOP$	U206 ④
0882749	IC	24C02 SOP	U206 ④
0780129	SMD TRIODE	8550D	Q301,Q302
0390095	SMD MAGNETIC BEADS	FC160822105	L228,L229,L230,L231,L203,L207,L208,L209,L210,L211,L218,L220,L223,L232,L225,L713,L714
0090462	PRECISION SMD RESISTOR	1/16W 10K±1% 0402	R223
0780040	SMD TRIODE	3904(100-300) SO23	Q203
0090457	SMD RESISTOR	1/162.2Ω±5% 0402	R2182
0090453	PRECISION SMD RESISTOR	1/16W 12K±1% 0402	R224
0880768	IC	C4558 SOP	U208,U209,U211
0390096	SMD INDUCTOR	1.8UH±10% 1608	L234,L235,L236
0570011	DIODE	RL202	D214
0780115	SMD TRIODE	2SB1132	Q201,Q202
0090339	SMD RESISTOR	1/16W 100Ω±5% 0402	R217,R218,R219,R220,R2123,R268,R702,R201,R202
0090326	SMD RESISTOR	1/16W 10Ω±5% 0402	R2155,R2156
0090330	SMD RESISTOR	1/16W 33Ω±5% 0402	R244,R245,R246,R247,R248,R249,R264,R266,R2138,R267,R2132,R708,R251
0090335	SMD RESISTOR	1/1668Ω±5% 0402	R703
0090336	SMD RESISTOR	1/1675Ω±5% 0402	R2170,R2171,R2172,R2173,R2174,R2175,R228,R2176,R706
0090324	SMD RESISTOR	1/16W 0Ω±5% 0402	R261,R305,MR306,R269,C709,C711,C712
0090367	SMD RESISTOR	1/16W1.8K±5% 0402	R2144,R2145
0090356	SMD RESISTOR	1/16560Ω±5% 0402	R231,R234
0090362	SMD RESISTOR	1/16W 1K±5% 0402	R294~R299,R2100~R2101,R232,R253,R2163,R2166,R2122,R2106~R2109
0090340	SMD RESISTOR	1/16W120Ω±5% 0402	R701
0090342	SMD RESISTOR	1/16W150Ω±5% 0402	R2133,R2142

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090350	SMD RESISTOR	1/16330Ω±5% 0402	R2118,R2119,R2127,R709
0090394	SMD RESISTOR	1/16W 27K±5% 0402	R214,R215
0090395	SMD RESISTOR	1/16W 30K±5% 0402	R2148,R2149,R2152~R2153
0090397	SMD RESISTOR	1/1636K±5% 0402	R2146,R2147
0090385	SMD RESISTOR	1/16W 10K±5% 0402	R209,R210,R212,R250,R252,R243,R204,R2121,R235,R242,R265,R225,R226,R301~R304,R2140,R2136
0090389	SMD RESISTOR	1/1615K±5% 0402	R211,R213,R704
0090391	SMD RESISTOR	1/16W 20K±5% 0402	R2167
0090369	SMD RESISTOR	1/16W 2.2K±5% 0402	R714,R710
0090377	SMD RESISTOR	1/16W 4.7K±5% 0402	R286~R289,R278~R281,R284,R285,R292,R293
0090378	SMD RESISTOR	1/16W 5.1K±5% 0402	R254~R258,R216,R270~R273,R276,R277
0090412	SMD RESISTOR	1/16W 150K±5% 0402	R237,R238,R2125
0090400	SMD RESISTOR	1/16W 47K±5% 0402	R2154,R715
0090408	SMD RESISTOR	1/16W 100K±5% 0402	R2110~R2113,R207,R208,R230,R233,R2120,R2130,R2134,R2135,R2164,R2131,R2116,R2117
0090429	SMD RESISTOR	1/16W 680K±5% 0402	R236,R239
0090445	SMD RESISTOR	1/16W 1Ω±5% 0402	R241
0090001	SMD RESISTOR	1/16W 0Ω±5% 0603	L706~L708
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C215,C231,C217,C216,C214,C213,C207,C203,C2125,C2121,C2124
0780198	SMD TRIODE	2S1015	Q211,Q212,Q223
1910078	TERMINAL SOCKET	4-8.4-6G-3	JK702
1860029	SCART SOCKET	SCAR01	JK706
0780197	SMD TRIODE	C1815	Q213~Q216,Q210,Q222,Q224,Q219,Q220
1090045	ELECTRO-OPTIC TRANSFORMER	179ATW	JK703
0780193	SMD TRIODE	2S3018	Q204,Q205
1940094	CABLE SOCKET	24P 0.5mm SMD SUBMIT MEET WITH CLASP	XS201
1910129	TERMINAL SOCKET	S001-012 BLACK IRON PIECE,SCREESHIELDED	JK203
1910139	TERMINAL SOCKET	6-8.4-13/PB	JK201

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0570072	DIODE	HER207	D202
0310726	SMD CAPACITOR	16V 104±10% 5R 0402	C269,C268,C273,C210,C230,C255,C254,C256,C209,C2117,C270,C2113,C2112,C208,C271,C252,C2115,C2114,C2116,C2136,C223,C219,C272,C204,C221,C245,C202,C249,C233,C201,C246,C236,C212,C251,C211,C275,C234,C276,C242,C225,C235,C227,C232,C257,C2120,C2123,C710,C728,C713
0700113	SMD VOLTAGE REGULATOR DIODE	9.1V±5% 1/2W	D205
0090668	PRECISION SMD RESISTOR	1/16W 750K±1% 0402	R229
0310415	SMD CAPACITOR	50V 20P±5% NPO 0402	C247
0390355	SMD INDUCTOR	4.7UH±10% 1608	L201,L202,L204,L221,L222,L206
0310454	SMD CAPACITOR	16V 153±10% 7R 0402	C206,C226
0090672	PRECISION SMD RESISTOR	1/16W 20K±1% 0402	R222
0310418	SMD CAPACITOR	50V 27P±5% NPO 0402	C240,C241
0310714	SMD CAPACITOR	10V 225±20% Y5V 0603	C220,C222,C224
0310424	SMD CAPACITOR	50V 47P±5% NPO 0402	C260,C261,C262,C2137~C2148
0310432	SMD CAPACITOR	50V 101±5% NPO 0402	C2103~C2106,C258,C259,C2109,C2110
0260560	CD	CD11T 10V1000u±20%8×16 3.5	TC207,TC215
0882353	IC	C5340 TSSOP	U207
5141755	VERSION LABEL	2.00 SQUARE WHITE	
0310757	SMD CAPACITOR	10V 105±10% 5R 0402	C238,C2126,C284,C2119,C2122
1860102	HDMI SOCKET	51U019S-333A	JK202
07803199	TRIODE	SS8550 TO-92 BELT	Q206,Q207,Q208,Q209
05700039	DIODE	1N4001 BELT	D201,D203
08828028	IC	A5888S L/ HSOP$	U204
0310794	SMD CAPACITOR	16V 331±5% NPO 0402	C228,C229
02607799	CD	C11C 16V10U±20%4×7 C2.5 BELT	TC219~TC222,TC225~TC230,TC233,TC234,TC205,TC212,TC213
02607819	CD	C11C 10V100U±20%5×11 C2.5 BELT	TC204,TC206,TC301,TC302,TC211,TC214,TC242
02607809	CD	C11C 10V47U±20%4×7 C2.5 BELT	TC201,TC202,TC217
0390452	SMD MAGNETIC BEADS	PZ3216D121	L212

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0390453	SMD MAGNETIC BEADS	GZ1005D221T 0402	L233,L213,L214,L215,L216,L217,L224,L240,L241,L242,L226,L227
02602229	CD	C11C 10V220U±20%6×7 2.5 BELT	TC208,TC209,TC210,TC235
0310843	SMD CAPACITOR	25V 122±10% 7R 0402	C295~C298,C2101~C2102
02600289	CD	C11 16V220U±20%6×12 2.5 BELT	TC243,TC244
0090834	PRECISION SMD RESISTOR	1/16W 5.1K±1% 0402	R221
0090845	PRECISION SMD RESISTOR	1/16W2.49K±1% 0402	R227
0310857	SMD CAPACITOR	50V 562 ±10% 7R 0402	C237
0780353	SMD TRIODE	CES2302 SOT-23	Q221
0883532	IC	HY57V641620FTP-7 SOP	U202
0390568	SMD INDUCTOR	0.22UH ±10% 50mA 1608	L237~L239
0883614	IC	MT1389FE/S QFP	U201
0912025	PROGRAM FLASH	ROM925HDRU-0A(16M)	
0090869	SMD RESISTOR	1/16W6.8Ω±5% 0402	R205,R206
1634814	PCB	2 923-3 FR4 D1.2 PX	

DV923HD(RU)SILVER WHITE(1389S)

,PROGRAM FLASH 0912025			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0881650	IC	29LV160BE-70PFTN TSOP	U203 ⑤
0882923	IC	EN29LV160AB-70TCP TSOP	U203 ⑤
08828378	IC	KH29LV160CBTC-70 TSOP$	U203 ⑤

DV923HD(RU)SILVER WHITE(1389S)

POWER BOARD @5DV923-1 4941553			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
2100003	CONNETION CORDS	Φ0.6 SHAPED 7.5mm	JP502,JP503
2100004	CONNETION CORDS	Φ0.6 SHAPED 10mm	JP501
1940045	SOCKET	2P 8.0mm 2#	BCN501
0260341	CD	ZT 400V22μ±20%φ16×20 7.5	TC501
0410011	CHOKE COIL	VERTICAL 10UH 2A 5mm	L507

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1940022	SOCKET	4P 2.0mm	CN501
0010159	METAL OXIDE FILM RESISTOR	239K±5%SHAPED FLAT 15×7	R503
0680046	SCHOTTKY DIODE	SR560 DO-27 SHAPED R 17.5×8	D510
0881933	IC	VIPER22A DIP8	U501
3870115	GROUND CHIP OF POWER BOARD	903	G501,G504
0882462	IC	AZ431AZ-A TO-92	U503 ⑥
08824629	IC	AZ431AZ-A TO-92 BELT	U503 ⑥
0260559	CD	CD11T 50V47u±20%6×12 2.5	TC502
5141825	VERSION LABEL	3.00 SQUARE WHITE	
1080032	PHOTOELECTRIC COUPLER	@HS817 VDE	U502
0200359	CERAMIC CAPACITOR	@250V 221±10% 10mm VDE	BC503,BC504
0210207	TERYLENE CAPACITOR	@275V 104±20% 15mm VDE	BC501
00002159	CARBON FILM RESISTOR	1/49.1K±5% BELT	R512
05700139	DIODE	HER105 BELT	D506,D508,D511
05700149	DIODE	HER107 BELT	D505
00001859	CARBON FILM RESISTOR	1/4330Ω±5% BELT	R506
00001959	CARBON FILM RESISTOR	1/41K±5% BELT	R507
02001389	PORCELAIN CAPACITOR	50V 104±20% 5mm BELT	C505,C510,C515
02607269	CD	CD288H 10V1000U±20%8×16 C5 BELT	TC506
02001369	PORCELAIN CAPACITOR	50V 473±20% 5mm BELT	C506
00001729	CARBON FILM RESISTOR	1/475Ω±5% BELT	R505
05700059	DIODE	1N4007 BELT	D501~D504
02002249	PORCELAIN CAPACITOR	1000V 103 +80%-20% 7.5MM BELT	C502
2300049	FUSE	@1.6AL 250V 3.6×10 VDE	F501
1000062	POWER GRID FILTER	@JLB1153 33MH +∞-0% SJ	L501
0460623	SWITCH POWER TRANSFORMER	@BC19-0348 SJ	T501
00700169	HIGH PRESSURE RESISTOR	@1/2680K±5% VDE BELT	R501
02607989	CD	C11T 16V470U±20%8×12 C5 BELT	TC509,TC503

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0260821	CD	CD288H 16V1500U±20%10×20 5	TC505
00100979	METAL FILM RESISTOR	1/4W9.4KΩ±1%BELT	R508
00103799	METAL FILM RESISTOR	1/4W8.2KΩ±1%BELT	R509
1565030	PCB	@5 923-1 VO D1.6 SX @UL	

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OK BOARD 6977K-0 4941554			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1980006	MICROPHONE SOCKET	C3-6.35-106	MIC601
2100010	CONNETION CORDS	Φ0.6 SHAPED 5mm	JP601 ~ JP608
0000339	CARBON FILM RESISTOR	1/6W3.3K±5% SHAPED 7.5	R629
0000134	CARBON FILM RESISTOR	1/6W5.1K±5% SHAPED 7.5	R611
0780085	SMD TRIODE	8050D	Q601
0880124	IC	NJ4558D DIP	U601
0260021	CD	CD11 16V22U±20%5×11 2	TC605
0260094	CD	CD110 16V47U±20%5×11 2	TC614 ~ TC618
0090184	SMD RESISTOR	1/16W 4.3K±5% 0603	R633, R634
1940026	SOCKET	3P 2.0mm	XS603
0090034	SMD RESISTOR	1/16W 100K±5% 0603	R617
0090020	SMD RESISTOR	1/16W 5.1K±5% 0603	R602, R613, R623
0090018	SMD RESISTOR	1/16W 3.3K±5% 0603	R630
0090014	SMD RESISTOR	1/16W 1K±5% 0603	R608,R625,R626
0090009	SMD RESISTOR	1/16W 330Ω±5% 0603	R601
0310047	SMD CAPACITOR	50V 101±5% NPO 0603	C606, C607, C616, C617
0090003	SMD RESISTOR	1/16W 10Ω±5% 0603	R621,R622
0090030	SMD RESISTOR	1/16W 56K±5% 0603	R627,R628
0310072	SMD CAPACITOR	50V 103±10% 7R 0603	C603,C608
0090026	SMD RESISTOR	1/16W 22K±5% 0603	R603,R610
0090023	SMD RESISTOR	1/16W 10K±5% 0603	R606,R635,R636

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
1940024	SOCKET	5P 2.0mm	XS601
0090012	SMD RESISTOR	1/16W 560Ω±5% 0603	R604
0390095	SMD MAGNETIC BEADS	FC160822105	L601, L604
0700020	SMD VOLTAGE REGULATOR DIODE	6.2V±5% 1/2W	ZD601
0090224	SMD RESISTOR	1/16W 3.9K±5% 0603	R631, R632
0310207	SMD CAPACITOR	50V 104 ±20% 7R 0603	C601,C602,C604,C605,C623 ⑦
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C601,C602,C604,C605,C623 ⑦
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C601,C602,C604,C605,C623 ⑦
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C601,C602,C604,C605,C623 ⑦
0310234	SMD CAPACITOR	16V 105 +80%-20% Y5V 0603	C609,C611,C612
0260327	CD	GZ16V100U±20%6×12 2.5	TC619, TC620
0881537	IC	1308 SOP	U603
1980046	EARPHONE SOCKET	S301-030-100	JK601
3870115	GROUND CHIP OF POWER BOARD	903	G601, G602
1563391	PCB	6977K-0	
0260560	CD	CD11T 10V1000u±20%8×16 3.5	TC601
5142597	VERSION LABEL	5.00 SQUARE WHITE	

DV923HD(RU)SILVER WHITE(1389S)

SUBSIDIARY PANEL 9DV726SI-0 4940586			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0700007	CERAMIC CAPACITOR	14148	D901~D903 ⑧
0700001	CERAMIC CAPACITOR	LS4148	D901~D903 ⑧
0700001	CERAMIC CAPACITOR	LS4148	D901~D903 ⑧
0700001	CERAMIC CAPACITOR	LS4148	D901~D903 ⑧
1340003	CERAMICTRANSFORMER	HORIZONTAL 6×6×1	K901~K906
1940008	SPEAKER	8P2.0mm	XS901
0700004	CERAMIC CAPACITOR	5.1V±5% 1/2W	DZ901,DZ902
0310072	CERAMIC CAPACITOR	50V 103±10% 7R 0603	C905,C906

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0090023	CEMENT RESISTOR	1/16W 10K±5% 0603	R905,R906
0090181	CEMENT RESISTOR	1/16W 100Ω±5% 0603	R902~R904
0310207	CERAMIC CAPACITOR	50V 104 ±20% 7R 0603	C903,C904 ⑨
0310543	CERAMIC CAPACITOR	50V 104±10% 7R 0603	C903,C904 ⑨
0310543	CERAMIC CAPACITOR	50V 104±10% 7R 0603	C903,C904 ⑨
0310543	CERAMIC CAPACITOR	50V 104±10% 7R 0603	C903,C904 ⑨
0620040	CERAMIC CAPACITOR	3B 4SC WHITE ISSUE BLUE	LED901,LED902,LED903
5141756	USB TRANSFER HEAD	2.01 SQUARE WHITE	
5233237	SPEAKER	18×10×4 SINGLE-FACED,HARD	UNDERLAY ON PIN OF SUBSIDIARY PANEL
1634231	PCB	9 726SI-0 FR4 D1.6 PX	
3075870	LED BRACKET	H=4mm Φ=4mm	2PCS IN ALL FOR LED901 AND LED902
3075886	LED BRACKET	H=10.5mm Φ=4mm	1PCS IN ALL FOR LED903

DV923HD(RU)SILVER WHITE(1389S)

MAIN PANEL 4DV726SI-0 4941555			
MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0620002	LIGHT-EMITTING DIODE	Φ3 RED	LED401
1340003	LIGHT TOUCH RESTORE SWITCH	HORIZONTAL 6×6×1	K401
0260254	CD	CD11C 10V100U±20%6×5 2.5	TC401,TC402
0090020	SMD RESISTOR	1/16W 5.1K±5% 0603	R412
0090014	SMD RESISTOR	1/16W 1K±5% 0603	R408~R410
0090192	SMD RESISTOR	1/16W 51K±5% 0603	R405,R413
0090006	SMD RESISTOR	1/16W 75Ω±5% 0603	R404
0090023	SMD RESISTOR	1/16W 10K±5% 0603	R401~R403, R406,R415~R417
0090249	SMD RESISTOR	1/16W 510Ω±5% 0603	R414,R418,R419
0390095	SMD MAGNETIC BEADS	FC160822105	L401
0780040	SMD TRIODE	3904(100-300) SO23	Q401
0090181	SMD RESISTOR	1/16W 100Ω±5% 0603	R407,R411

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	LOCATION
0310207	SMD CAPACITOR	50V 104 ±20% 7R 0603	C405,C406,C408 ⑩
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C405,C406,C408 ⑩
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C405,C406,C408 ⑩
0310543	SMD CAPACITOR	50V 104±10% 7R 0603	C405,C406,C408 ⑩
0881426	IC	6961 SOP	U401
0620076	LIGHT-EMITTING DIODE	3B3HC COLORLESS WITH BLUE	LED402
0700056	SMD DOUBLE DIODE	MMBD4148SE SO23	DZ401~DZ409
2360021	IR SENSOR	138BV3	U402
1200686	LED DIAY SCREEN	ZDC-G0602BB BLUE	LED403
2121717	SOFT FLAT CABLE	8P250 2.0 2 PIN,WITH L NEEDLE,TOGETHER DIRECTION	XS402
0310597	SMD CAPACITOR	50V 151±20% 7R 0603	C409~C411
0310598	SMD CAPACITOR	50V 102±20% 7R 0603	C407
5141826	VERSION LABEL	3.01 SQUARE WHITE	
5233349	SOFT SPONGE SPACER	8×8×8 DOUBLE-FACED,HARD	UNDERLAY 1PC BETWEEN IR REMOTE SENSOR AND PANEL
5233465	SOFT SPONGE SPACER	12.5×4.5×6.5 DOUBLE-FACED,HARD 50 DEGREE	UNDERLAY 2PCS BETWEEN LED DISPLAY SCREEN AND PCB
2122753	SOFT FLAT CABLE	7P420 2.0 2PIN, WITH L NEEDLE, TOGETHER DIRECTION	XS401
1634230	PCB	4 726SI-0 FR4 D1.6 PX	
3075883	LED BRACKET	H=8.5mm Φ=4mm	1PCS IN ALL FOR LED401
3075886	LED BRACKET	H=10.5mm Φ=4mm	1PCS IN ALL FOR LED402