

# USER MANUAL

## SDVR-9004EVH/9004EVTS



Design and specification will be occurred subject to change without notice!

### CATALOGUE

CHAPTER 1 Introduction.....	3
CHAPTER 2 Features.....	4
CHAPTER 3 Instruction.....	6

3.0 Menu.....7

3.1 Network.....9

3.2 HDD.....11

3.3 Record.....12

3.4 Playback.....13

3.5 Alarm.....17

3.6 PTZ.....18

3.7 PTZ Ctrl.....18

3.8Log.....19

3.9 System .....19

**CHAPTER 4 Screen .....20**

**CHAPTER 5 IE Operations.....23**

5.1 Requirements.....23

5.2 Login .....23

5.3 Real Monitor.....24

5.4 Remote Search.....26

5.5 PTZ .....26

5.6 PTZ Setting.....27

5.7 IE direct X Remote Tool.....27

**Chapter 6 Upgrade.....27**

Appendix 1 DVR Back panel .....33

Appendix 2 Alarm. Relay. PTZ Ports Contents .....34

Appendix 3 9004 CBR Stat. ....35

Appendix 4 Panel Illumination.....35

A p p e n d i x 5 R e m o t e C o n t r o l  
I l l u m i n a t i o n ... .. 3 7

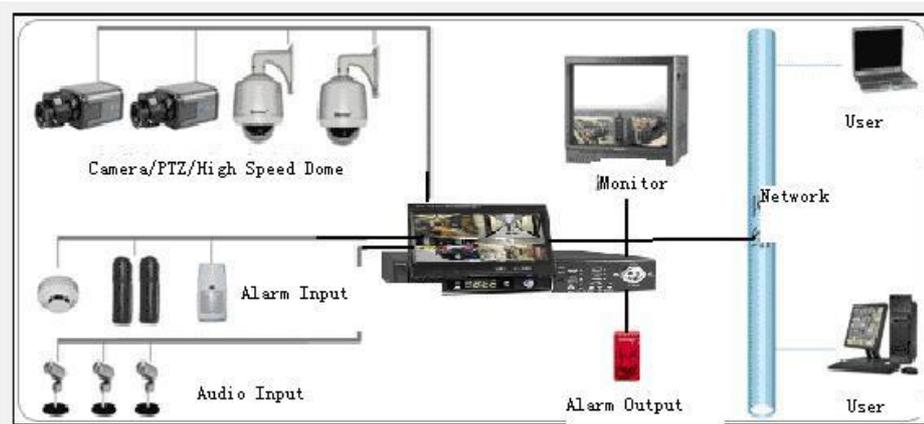
Solution to DVR’S Problems.....39

## Chapter 1 Introduction

Embedded DVR is designed into embedded structure, possess characteristic of high definition, low cost, steady capability, simple operation ect. Support 4ch audio/video real time

detection and kinescope, is use in the public and diversified private houses of super market. Park. High way . Flat. Town street ect. And will your high-tech security electronic products with buy and use in setting heart free.

There into, the model of 9004EVH/9004EVTS even has the 7inch TFT LCD, user can watch without any outside monitor. LCD can hide free by himself, possess super transferring. Additionally, LCD has the detection and entertainment function of the PAL/NTSC, audio control (speaker inside), games ect.



### Features:

- PAL/NTSC
- 4ch RT Audio/Video Input/Output
- Mouse control: PS/2
- 4ch Alarm input, 1ch alarm output.
- Simplified/traditional Chinese, English are selectable, H.264/MJPEG compression, support Half-D1. CIF;
- Network: Support PPPoE, DDNS
- USB to Upgrade
- Recording Mode: Manual, Schedule, Alarm, Motion and Detection;
- Perfect alarm and operation log for convenient analyses and detection
- Resolution: NTSC: 640\*480, PAL: 720\*576  
NTSC: 640\*240, PAL: 640\*272
- Watch-dog built-in;
- Multi-languages support
- Built -in 7 inch hidden LCD monitor, convenient for using

## Chapter 2 Features

## DVR-9004EVH/9004EVTS



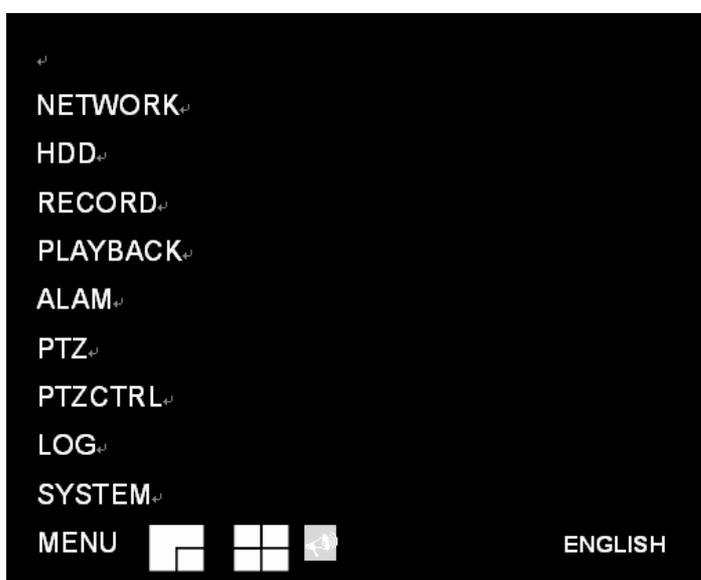
-SPECIFICATION	9004EVH	9004EVTS
Operation System	Embedded Linux	
Compression	H.264	MJPEG
Video I/O	NTSC: 4CH BNC Input/1CH BNC output. 1CH S-video output	
	PAL: 4CH BNC Input/1CH BNC output. 1CH S-video output	
Audio I/O	4CH BNC input/ 1CH BNC output	
Displaying Speed	NTSC:120 FPS(4*30 FPS )	
	PAL: 100 FPS(4*25 FPS )	
Recording Speed	NTSC:30 FPS 4*30=120FPS	
	PAL: 25 FPS 4*25=100FPS	
Recording Mode	Manual, Scheduling, Alarm, Motion &Detection	
Image Quality	High, Middle, Low are selectable	
Recording Resolution	704*240,352*240(NTSC) 704*288, 352*288(PAL)	
Playing Mode	1CH or 4 CH (Dualplex)	
Search Mode	By Time/ Event /Channel	
HDD	> 200G,ATA-100(Without HDD)	
Alarm I/O	4CH Input/1CH Output	
Network	IE/PPPOE/DDNS	
Remote Control	YES	
Mouse Control	PS/2	
USB Backup	USB2.0	
PTZ Control	PELCO-D,PELCO-P,B01,SAMSUNG	
Language Support	Simplified Chinese, Traditional Chinese, English	
monitor	7 inch hidden LCD monitor	
SATA Backup	YES	
Software Upgrade	USB	
Power Supply	12V/ 4A DC	
Temperature	-10℃~+50℃	
Humidity	10%-90%	
G.W/N.W:	6.1KG/3.5KG	
Size(L*W*H)	360*330*60mm	

## Chapter 3 Instructions

Windows is the Host Computer's style, the system will display the menu related information when you move the mouse to operation interface, but if the mouse left, the menu will hide them.

**Special Note: All the DVR we sell is with PS/2, which is convenient for you to operate.**

### 3.0 Menu



**Note: All the menu will be in English, → the right menu was the left menu's submenu .We will mostly introduce the panel/remote control operation menu in simple way as follow:**

- **1CH/4 CH interchange**
  - ∅ When mouse is in the 4CH, if you click one channel, it will show full screen; if you click left mouse, and then will be back.
  - ∅ Panel/Remote control for 4 CH, press CH4 to show full screen of related channel, press QUAD back to 4CH.
- **Forcedly shut down**

Turn "NO/OFF" button at the back of host computer can meet your will.

**Note: forbidden to forcedly shut down in usual time to protect the hard disk!**
- **Soft shut down**

Shut up in Menu: System **Shutdown** to shut down operation, choose **Shutdown** or **Reset**,

and then press “**OK**”, system will shut down or reset.

● **Multi-languages**

- Ø The system support multi- languages in display, it support English, simplified/traditional Chinese. Right button of the screen displays the currently using language; use the mouse to click Change to other languages.
- Ø Panel/remote control operation: in the browse time, press “**menu**” to back to the main menu, press right and left directions keys to dynamic page to the languages place, and then use the up and down direction keys to interchange languages versions.

● **MAC address setup**

- Ø System support setting up the MAC address of net card in the SATA, see the setting mode as below:

1) After system opening, input “**abc**”, then press the “**OK**”, you will see the DOS prompt “**abc**”: Bad command or file name”, then press “**OK**” several times until you can see the “9004>”

2) Input MAC address(if were 00:16:17:30:C9:3A), operation as follows:

Input the order after DOS prompt “9004>” as below:

```
9004>setmac00:16:17:30:C9:3A
```

Then will see the following information:

```
Command String: SETMAC 00:16:17:30:C9:3A
```

```
Set MAC to: 00:16:17:30:C9:3A
```

```
Success to set mac.
```

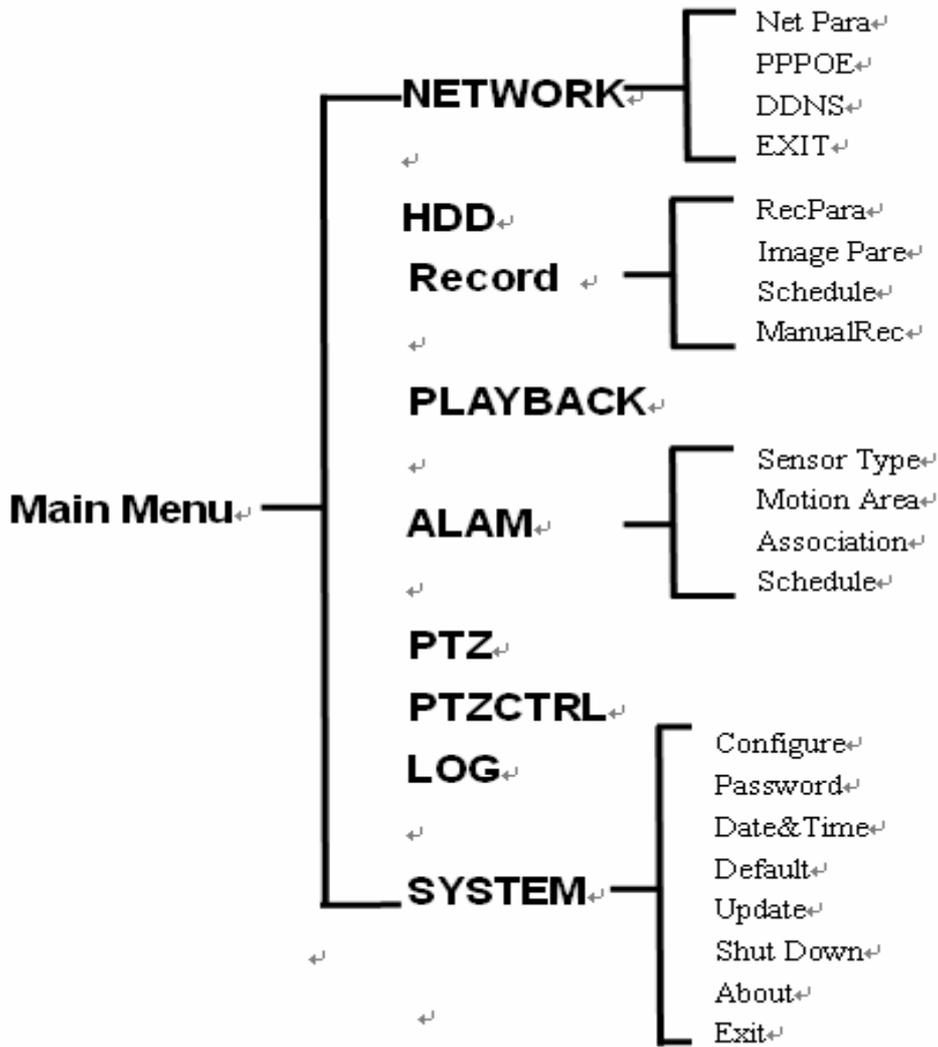
So it means setup ok, or failure.

3) Mac inure when system restart.

- Ø Into menu mode

In the preview mode, press menu key to come back the shortcut menu; press again the menu key to come back main menu list; press play key, into play back the inquiry page layout; press rec key, into the operation by man page layout; press the ptz shortcut key, into PTZ operation control page layout.

- Ø **Menu form instruction**



There is a little rectangle in the menu page layout, call it “shift cube”, use the fluctuate key can make the “shift cube” from this link to the other link, when the “shift cube” go to one link, you can press the panel/remote control key into this menu of link. Such as move the “shift cube” to “record” icon, press the panel/remote control key into “record” second grade menu.

Each menu include sorts of setting, thereinto “shift cube” mean that setting are operated. Use the right and left key can move the “shift cube” mentioned. The main parts form cells are like these:

- (1) Check box: offer up to 2 options, “V” means availability, “X” means shield, use the enter key or fluctuation key to interchange.
- (2) Combo box: offer over 2 options, but just can choose one, use the fluctuation key can choose one item from the menu list. Such as at the right of “channel” were your gate combo boxes.

- (3) List box: display the search result in the menu list, use the fluctuation key can choose one item from the list, if you press the enter key to play the file information in the playback search result list.
- (4) Edit box: offer one character to input rectangle, use the right and left key to move or go to this edit box, press the enter key go into the fettle of edit. You can do like this:
  - a) Can use the fluctuation key to rejigger content in cursor or press the mouse right and left key to rejigger it.
  - b) Use the right and left key can move the position of sensor.
  - c) Use the mouse's mid-key can cancel cursor's character.
  - d) Press enter key can exit the fettle of edit.
- (5) Button: use for carry out a special function or go into next grade menu list, such as "manual Rec" can go into next grade menu. In the next grade menu, interchange to "OK" shift button and press the enter key to post the parameter of setting to go back last menu at the same time.

#### Ø **Shortcut menu instruction**

The system offer the PIP, QUAD, audio adjust and languages select shortcut menu in the screen last line. Use the right and left key interchange "shift cube" to the correspond icon, press the enter key can realize correspond functions. Otherwise, panel/remote control have the PIP and QUAD shortcut key in the preview menu, this can directly go into the PZP and full screen gate interchange; in other page layout, you can press the QUAD shortcut key directly come back the QUAD preview.

#### Ø **Exit menu mode**

Press quad key can exit menu mode and interchange to the preview mode.

#### ● **User validating**

Input the code when the system start, after validating just can go to the menu list interface. The original system code is 888888.

(IE users must input the user name and code at the same time, login the system after validating, the user name fix up admin)

#### ● **Logout**

- Ø Automatism logout: set the password as enable in the menu of System → Configure, if after the system starting, in the System →Comfiture's lock time over, the system will automate to logout.

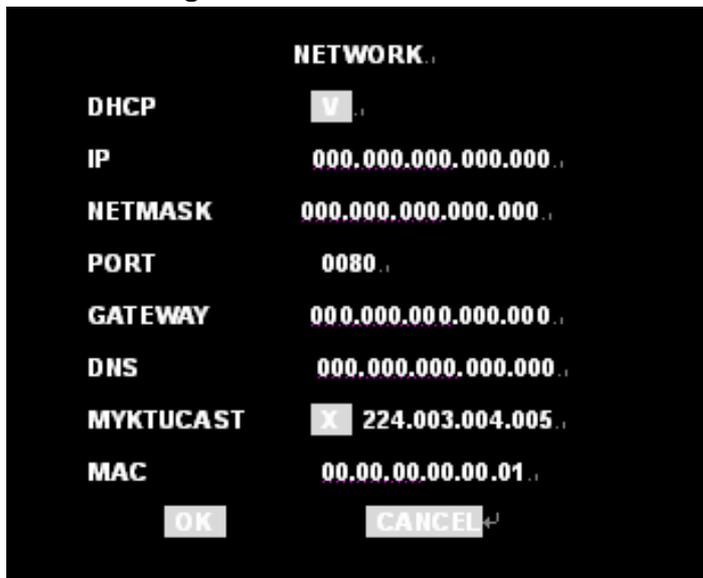
- Ø Logout by man: in the page layout of System →shutdown choose logout can logout the user at once.
- Ø The users have to relogining the system after system shutdown.

● **Configuration copy function**

The system offer “Apply to” button press this to have configuration copy function. Support copies the configuration of current page to the option place. For example: Record → After setting relative configuration of Channel 1 in RecParam menu interface, select Channel2 on right side of “Apply to” CH2, Click “Apply to” to realize copy configuration information from Channel 1 to Channel 2.

### 3.1 Network

#### 3.1.1 Network Parameter Setting



Network → NetPara menu use for setting basic network information contain: Ip address, Netmask , Gateway , Web server Port, DNS and MAC address of display system mainframe .

DHCP Function: Select DHCP check box, then press OK .When religion the menu, System will show relative information from DHCP like IP address, Netmask, Gateway. If IP address, Netmask and Gateway showed 0, means system failed to attain information from DHCP server temporarily.

After setting network parameter successfully, input <http://IP:Port> in client server IE browser to view the system long-distance. For example, supervise real time, long-distance playback etc.

● **Setting Net Frame Rate**

Setting Net Frame Rate by Record → RecPara. The actual Net FrameRate calculates as follow:

$$\text{Actual Net FrameRate} = (\text{FrameRate}) \times (\text{Net FrameRate})$$

**Note:** To assure not to lose wrap when network busy and avoid DVR mainframe data transferring abnormal The user shall setting right Net FrameRate and image quality according to their difference Network for DVR and Long-distance Network for PC. CBR. Data please refer to Appendix 3

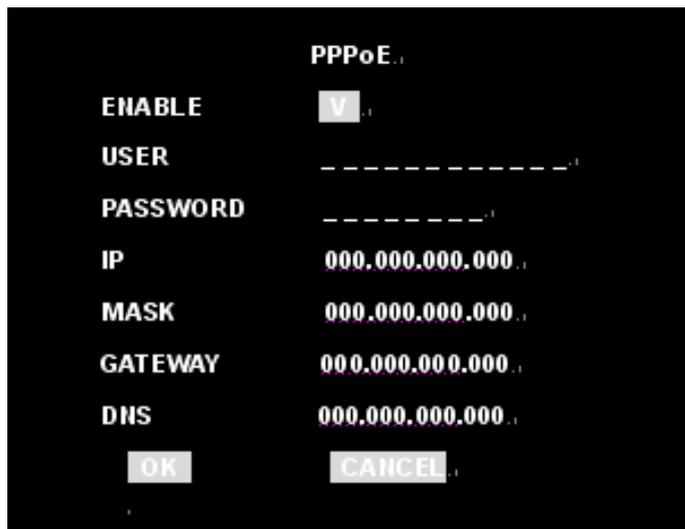
● **Support more client server (Multicast)**

This DVR can support many client servers through Multicast. No limited for user use this function. Can open Multicast in menu: Network → NetPara and input opposite Multicast address, then can support connecting more users.

**Note:**

1. Pls make sure to input the right Multicast address. Multicast address range: 224.0.0.0 – 239.255.255.255. Suggest setting: 224.3.4.5
2. After open Multicast, the formerly connected client server will cut automatically. Have to reconnect to view surveillance image.
3. System would not support public browse if open Multicast.
4. Be likely to induce local area network busy.

**3.1.2 PPPoE**



Network → PPPoE use for setting PPPoE Dial connect. Input user and Password, then press OK. Max User name and domain name is 31 characters. Max Password 16

characters. After Dial successfully, you can see relative connecting information on the button of menu.

**3.1.3 DDNS**



DDNS (Dynamic Domain Name Server)! DDNS is to mapping the user’s dynamic IP address to a fixed domain name resolution server. The client server program will transfer the dynamic IP address to server program of client’s host computer when the users connect to network. The server item program will offer DNS service and realize dynamic domain name resolution.

Function for DDNS: The broad band server almost only offer dynamic IP address, DDNS can capture client’s variation IP address and correspond the relative domain name . Then clients can communicate with each other by different domain name.

Network → DDNS Menu to setting DDNS .This DVR only support 3322.org DDNS server .User should register to become a member on [www.3322.org](http://www.3322.org), and apply a domain name. It will begin to work after then setting relative information on this DVR.

Setting method for this DVR: Open DDNS, Input user name, password and domain name. Max User name and domain name is 31 characters. Max Password 16 characters. User can visit this DVR directly after setting successfully.

**Note: Have to use DDNS and assure the DVR can visit exterior network. Configure right DNS or open PPPoE.**

● **Support public view DVR (Use Port mapping)**

Currently, This DVR only supports connecting to public network by other Router. It has to use Port mapping to make long-distance user view DVR9004 system.

Suppose there’s a board with network setting as follow:

IP: 192.168.1.73

Netmask: 255.255.255.0

Gateway: 192.168.1.1

IE Port: 3180

Then the Router should setting as follow:

ID	port	IP ADDRESS	Protocol	ON
1	54000-54030	192.168.1.73	ALL	<input checked="" type="checkbox"/>
2	6610	192.168.1.73	ALL	<input checked="" type="checkbox"/>
3	3180	192.168.1.73	ALL	<input checked="" type="checkbox"/>
4		192.168.1.	ALL	<input type="checkbox"/>
5		192.168.1.	ALL	<input type="checkbox"/>
6		192.168.1.	ALL	<input type="checkbox"/>
7		192.168.1.	ALL	<input type="checkbox"/>
8		192.168.1.	ALL	<input type="checkbox"/>

Common Port: DNS (53) select ID 1

First End Reset Save Help

Thereinto,

54000 – 54030 is data transfer Port

6610 is command communication Port

3180 is IE Port

The 3 all needed.

Suppose Router address is 211.1.91.114.

After setting, outside network visit 2700 board as follow: <http://211.1.91.114:3180>

**Note: Can not open PPPoE if use Port mapping, or it work abnormally.**

As the streaming of the system very big, when using public network, pls adjust the image quality of Channel to to low, Frame: 1/4, resolution: CIF. In addition, we suggest visit one channel at a time, do not visit more channel same time to make sure the image quality fluent. ,

## 3.2 HDD



HDD menu support checking installed HDD capacity and format HDD. HDD Capacity include: status, capacity, free. One system can support 2 HDD with max to 500G each.

Be sure to install same type HDD. 48bit or 28bit .System can only recognize the main HDD when 2 HDD installed not matching.

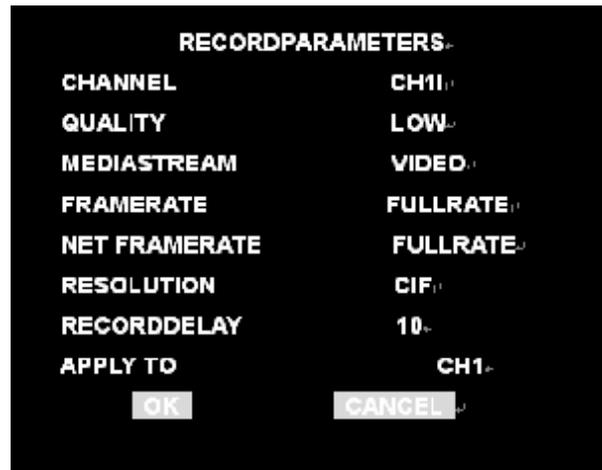
**Note: When recording, can not format HDD. Have to stop recording by hand and then format.**

One system only support install 2 same types HDD. That is the 2 HDD is 28bit or 48bit. System can only recognize the main HDD when 2 HDD installed not matching.

## 3.3 Record:

The System contains 4 recording mode: Recording by hand, Schedule recording, recording parameter and image parameter. The following is guide for how to use each recording mode.

4 recording mode use same image setting: Record → RecPara. The parameter description as follow:



### 3.3.1 Rec Parameter setting:

- Channel:
- Quality:
- Media Stream:
- Frame Rate:
- Net Frame Rate:
- Resolution:
- Record Delay:

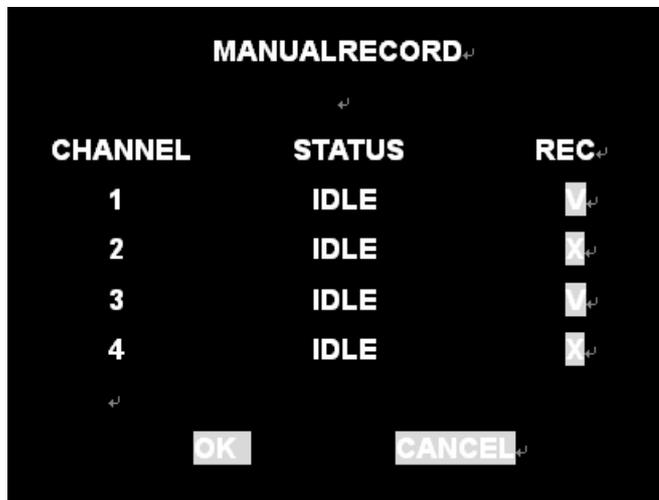
**Note: when one of the channels is recording, don't revise the picture parameter, and need to close all recording, then revise the relative picture parameter.**

### 3.3.2 Image parameter



Record---Image Para it is available to set brightness, contrast, and saturation and channel name of the picture.

### 3.3.3 Manual Rec

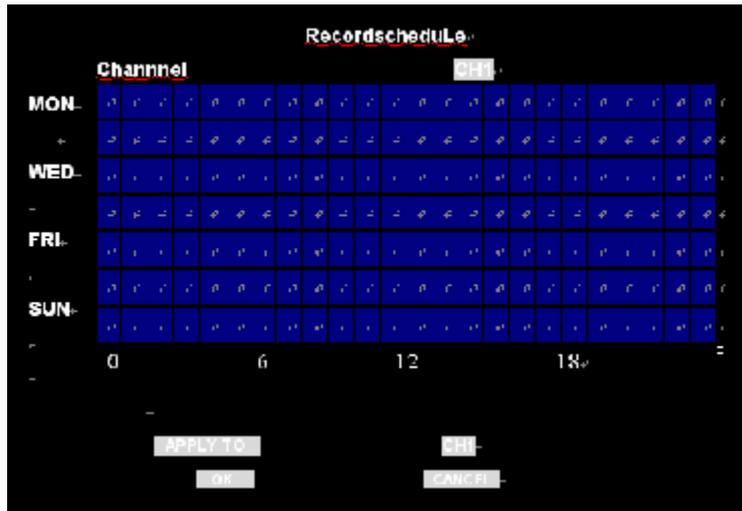


- Ø Starting Rec: Record---Manual Rec, choosing the record channel as “V”, press the key OK and the relative channel start to record. On the preview page, you can see the record sign of the relative channel, on the Record---Manual Rec interface you can see the channel has changed to Rec or RETR.

**Note: setting “V”, show the user use Manual Rec, whether starting to record or not, HD play a key role. When the HD is out of using, being not formatted or being saturation and the covering isn’t settled, system will not start to Manual Rec.**

- Ø Stopping Rec: Record---Manual Rec, choosing the relative record channel as “X”, press the key OK, the relative channel will stop Manual Rec at once, on the Record---Manual Rec interface you can see the channel has changed to IDLE or TRAN separately.
- Ø REC States: Record---Manual Rec interface can display States and system four states, they are IDLE, REC, TRAN and RETR .and respect leisure, and recording, cyber sending and recording add cyber sending.

### 3.3.4 Schedule Rec:



- Ø Starting to record: Record---Schedule, choosing the need setting channel number, then setting the schedule time, gridding respect seven days and twenty-four hours, red respects recording will start in the setting time.
- Ø Stopping Rec: Record---Schedule, choosing the need setting channel number, then setting the schedule time, gridding respect seven days and twenty-four hours, green respects recording will not start in the setting time.

Mouse operation: press the left key of the mouse you can do choosing/cancelling scheduling. Press OK key you can save the setting.

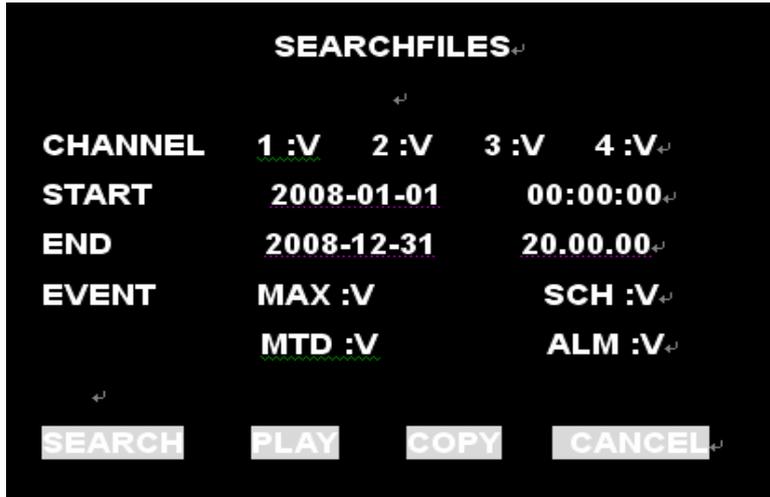
Board and Remote Control operation: when changing motion frame to time list, the key menu of Board or Remote Control can do choosing/cancelling schedule in the gridding. Up, Down, Left and Right key can choose gridding in motion. Press Enter key back from time list .when back to OK key, press OK key to save setting.

**Note: you can set time from starting time to end time by pressing mouse left key to draw between starting time and end time and then release the mouse.**

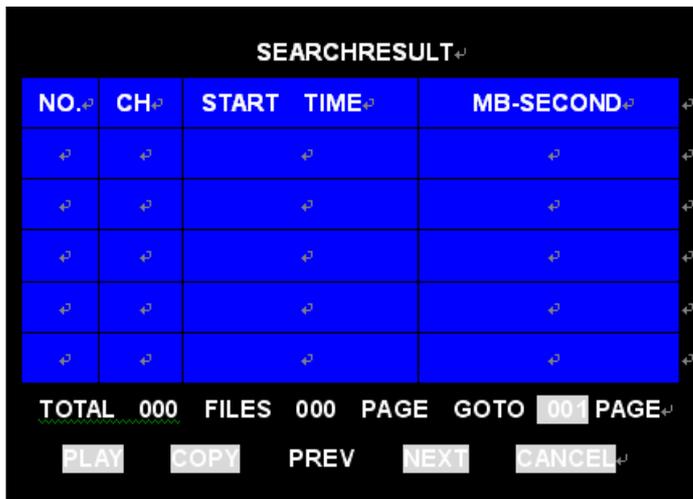
When channel message is settled, you can use Apply to key to copy the message to others channels.

### 3.4 Playback

- Ø Search Files



Input inquirment conditions on the Search Files page in Playback, search condition contains: channel number, record style, and starting and end time of record, press Search key to search relative record file, and the system will return the right record file note.



On searching result of file list, through Go to key you can switch to appointed page fast, and can switch free between revious and next pages through PREV and NEXT.

**Note: the maximum displaying of searching result is five hundreds, it will display the pioneer five hundreds search result according to relative condition if the searching result is beyond five thundreds.if you want to see the searching result behind the previous five thundreds,must revise the inquiry condition to search again.**

Mouse operation: choosing the recording file with left key of the mouse, then press PLAY key to display the file;

Board and Remote Control operation: when changing motion frame to recorded file list, the UP and DOWN key of Board and Remote Control can switch among the relative files. Playback files by pressing OK key or PLAY key.

### Ø File Playback operation:

You can control the displaying conditions when files are play backing.

Pausing/displayin speed/slow, fast retrea/slow retreat, stop.

Mouse operation: clicking the right key of mouse to display the control list, clicking the relative key to operate as following:

1. ">>"means adjust the speed, when you click it, the speed will cycle as following: normal---two times---four times---eight times---sixteen times---half time---one quarter time---one eighth time---one sixteenth time---one twenty-fifth time---normal.
2. "<<"means adjust the speed of the reverse direction, when you click it, the speed will cycle as following: normal---two times---four times---eight times---sixteen times---half time---one quarter time---one eighth time---one sixteenth time---one twenty-fifth time---normal.
3. "11" is used to pause/display file. When it is playing normally, clicking it will pause; when it is playing in innormally, click it will switch to play normally. When pause playing files, click it will switch to play normally.
4. "■"is used to retreat play backing files.
5. "▲"is used to increase volume.
6. "▼"is used to reduce volume.

Board and Remote Control operation: PLAY key is used to control speed, BACK key is used to control reverse speed, PAUSE key is used to pause/play files. STOP key is used to retreat play backing files.

When playback, D1 is default, clicking right key of mouse close control list. Then click the left key of mouse will reduce the picture to CIF.if click again, it will return to D1.through board operation, using menu key to close the play backing control bar at first, then pressing ENTER key to switch the size of picture.

### Ø Schedule playback

Input requirement conditions on the Search Files page in Playback, search condition contains:channel number,record style, and starting and end time of record, clicking Play key or switching motion frame to Play key then press OK key, all meeting condition record files will playback from starting time to end time.

Schedule play backing, you can choose any channels to playback, if the four channels are all choosed; the four channels will all playback at the same time.

### Ø Schedule playback operation

When it is play backing according to time sequence, four states are under control: pause/play, speed/low, fast retreat/slow retreat, stop.

Mouse operation: clicking the right key of mouse to display the control list, clicking the relative key to operate as following:

1. ">>" means adjust the speed, when you click it, the speed will cycle as following: normal---two times---four times---eight times---sixteen times---half time---one quarter time---one eighth time---one sixteenth time---one twenty-fifth time---normal
2. "<<" means adjust the speed of the reverse direction, when you click it, the speed will cycle as following: normal---two times---four times---eight times---sixteen times---half time---one quarter time---one eighth time---one sixteenth time---one twenty-fifth time---normal.
3. "11" is used to pause/display file. When it is playing normally, clicking it will pause, when it is playing in abnormally, click it will switch to play normally. When pause playing files, click it will switch to play normally.
4. " " is used to retreat play backing files.

Board and Remote Control operation: PLAY key is used to control speed, BACK key is used to control reverse speed, PAUSE key is used to pause/play files. STOP key is used to retreat play backing files.

When playback, If is defaulted by all channels, clicking the right key of mouse will close control list, if clicking the left key of mouse at relative channel place, it will increase the picture to D1, click it again, it will return to CIF. Through board operation, using menu key to close the play backing control bar, then click CH—4 key, it will magnify/reduce the appointed channel; press Quad key will return to play backing interface.

## ● USB Backup Record

Input requirement conditions on the Search Files page in Playback, search condition contains: channel number, record style, and starting and end time of record, press Search key to search relative record file, and the system will return the right record file note.

Mouse operation: using the left key of mouse to choose the relative record files, then click COPY key to save the appointed files to USB equipment;

Board and Remote Control operation: when changing motion frame to recorded file list, the UP and DOWN key of Board and Remote Control can switch among the relative files to choose the right file, then switch the motion frame to COPY key, press enter key to save the appointed files to USB equipment.

Attachment player can play the files saved successfully.

### ● Video supporting

Video monitor: when previewing multi-pictures interface, the voice messages from monitor channel 1 is defaulted; using the left key of mouse to click the relative channels or CH1-4 to choose relative channels. System will show the channel full screen and play the audio information of the channel.

- ∅ Full screen display this channel and play the audio
- ∅ Audio recording: Record→Parameters→Media Stream→AV,then all the recording file with audio and video
- ∅ Audio playback: select the “Media stream” AV file to playback .
- ∅ Volume control : The “speaker” can control the Volume : Mouse left/right can increase/reduce volume, the middle key control mute .Up/down key of the panel can adjust the volume too. Enter control the mute.

#### Notes:

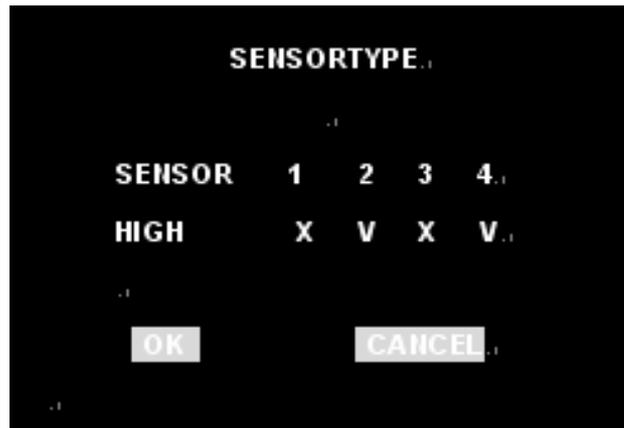
1. **Audio recording and playback can't process at the same time, when recording , the playback will stop automatically .So sometimes like this problem will be happened, Audio playback without audio output; or the audio disappear suddenly during playback, because audio recoding start at the same time**
2. **Only select file display then audio display can process, Time display can't support audio display**

### I System support

Switch turn right(close to the power)to select PAL; turn left(close to internet port)to select NTSC

**Note: NTSC file playback just can do under the NTSC system, otherwise it can't display the natural picture, the same with PAL**

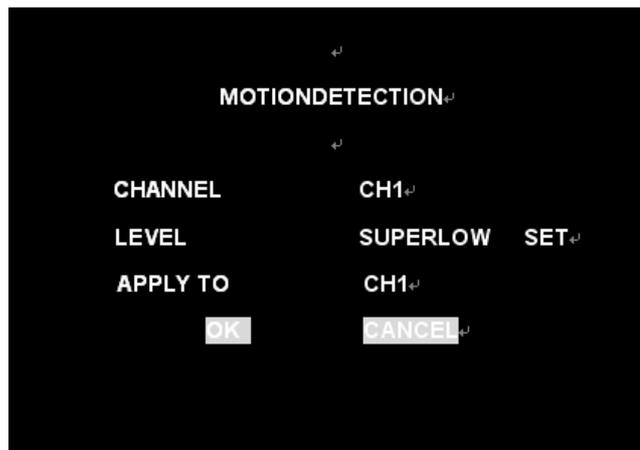
## 3.5 Alarm:



### 3.5.1 Alarm type:

- Ø Alarm type setting: Alarm → Sensor Type use for setting alarm input, select “X” means low-voltage alarm effective. “V” means high-voltage alarm effective, need corresponding with the actual connecting alarm

**Note:** When not connect alarm, the alarm system default for the high-voltage input signals



### 3.5.2 Motion detection recording:

- Ø Motion detection sensitivity and regional settings: Alarm → Motion Area, switch the channel need for setting, then select the sensitivity and enter sub-menu to set motion detection area, click the OK button to save configuration information after setting
- Ø Motion detection area setting: Alarm → Motion Area ,click set menu to enter area setting page, by mouse drag to select the motion detection area .The whole picture was divide up 16x12 small panes, red means that area need for checking motion detection, green means not need check  
 Mouse action .click the left mouse button to select / cancel the motion detection area, click right mouse button to save and exit after setting, click the middle

button to cancel the setting and exit.

Panel and remote operation: panel or remote menu button can select /cancel motion detection area, Top ,bottom, left, right button can shift to select grid, click enter button to save setting and exit, click stop button to cancel setting and exit.

After setting current channel, please use “apply to” to copy all the same setting to other channels.

**3.5.3 Alarm Association:**



Ø **Alarm Related:** Alarm à Alarm Related, use for setting alarm input when system needs to be done, Optional approach as follows

1. Spring the appointed channel recording, It will record when the trigger condition setting is ok, it will stop record if the settings expired
2. Trigger buzzer, and provide input trigger for alarm after the alarm output also continued to set the output time, the range is 1-99 seconds
3. Trigger alarm output, and provide input trigger for alarm after the alarm output also continued to set the output time, the range is 1-99 seconds

**Note:** Here also can set motion detection and video lost operation related.

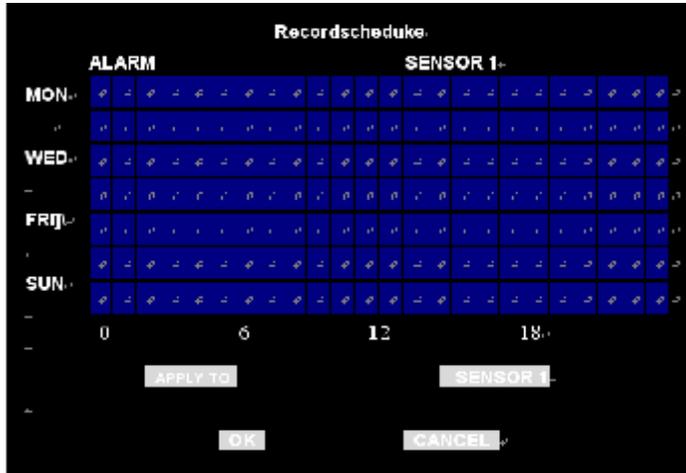
**Notes:** please test the alarm input by a wire to connect input port with the ground, please refer to the attachment of alarm input defines.

Ø **Motion detection linkage :** Alarm à Alarm Related, use for setting alarm input, Optional approach as follows

1. Spring the appointed channel recording, It will record when the trigger condition setting is ok, it will stop record if the settings expired.
2. Trigger buzzer, and provide motion detection trigger conditions after the buzzer also continued to set the output time, a range of 1-99 seconds.

3. Trigger alarm output, and provide motion detection trigger conditions after the alarm output also continued to set the output time, a range of 1-99 seconds.

**3.5.4 Alarm setting:**

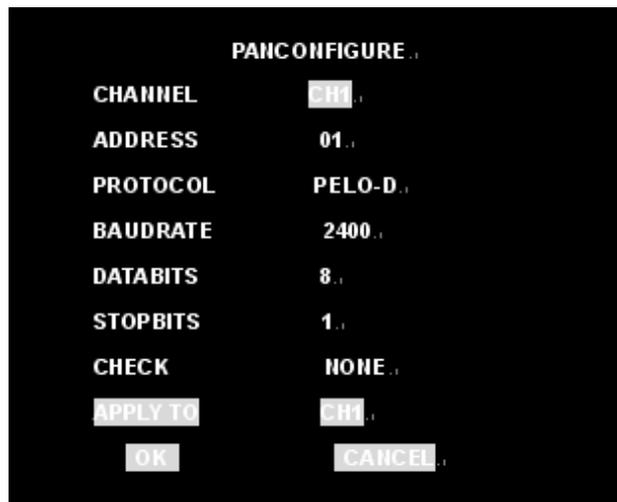


Ø **Alarm time setting:** Alarm → Schedule, switch the alarm which need for setting, then set the valid time range, grip marks 7days 24 hours, blue mark it can't timing recording at the corresponding time . Blue means the alarm is invalid, red means valid. Click ok button to save when finish it  
 Panel and remote operation: Switch the shift

**Note:**

1. The default time of alarm is 24 hours each day
2. Can also set the time of motion detection and video loss

**3.6 PTZ**



PTZ menu use for setting as 485 parameter, there are 4 protocols are available: b01, Samsung, pelco -d and pelco-p

Please refer to the attachment of ptz connection method.

### 3.7 PTZ Ctrl

PTZCtrl use for ptz controlling.

Control method: aspect . Focus. Lens .And supports the speed adjustment function.

Mouse operation: by the mouse right button to click the corresponding button

Panel and remote operation: Switch the shift cube by the left and right button, press the enter button to make these function work .Click the stop button to exit directly

### 3.8 Log



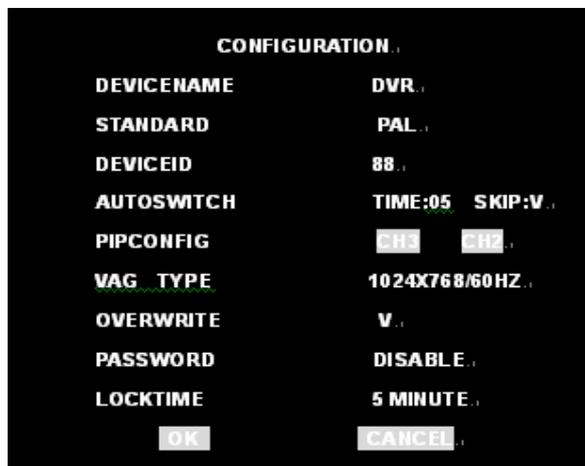
Click log menu to enter log page, Select the relevant log type and start-end time, click search button, then the system will get back to the relevant log information page

Logo Type : Alarms and Operation .

Support max 1024 piece log, it will cover the first log to record when exceeding.

### 3.9 System

#### 3.9.1 Configure



Systemà Config provide the system config information, config including: Device ID, AUTO switch, PIP config, VGA type. HDD overwrite etc.

- Ø **Device ID:** Choice for remote operation of equipment .
- Ø **AUTO switch:** Auto Switch with Time and Skip parameter, after setting ,Through mouse clicks Auto switch shortcut icon button or by panel, QUAD button of remote to start/stop the auto switch function .Auto switches is the corresponding picture switch full screen automatically in the Time interval, choice skip button to skip the no video input channel or not, select V to skip the no video input channel, select X to display all channels pictures whatever video input or not
- Ø **VGA resolution:** select the corresponding resolution of monitor to set .
- Ø **PIP Config:** PIP Config is picture in picture function, with setting of background and foreground access .The first selection frame is the foreground access number, the second is the back ground access number Through mouse clicks PIP shortcut icon button or by the PIP button of remote and panel to start PIP function .Click the mouse right button or the Ch1~Ch4, QUAD button to exit PIP function
- Ø **HDD overwrite:** cover and not cover. Cover means it can continue to record when HDD be full

### 3.9.2 Password



- Ø **setting:** Enable . Disable .Enable setting means to use password, disable setting means to cancel password.
- Ø **Time setting:** if enable choosed, time is also need to setup, if disable choosed, the settled time is invalid.

Ø **Modify password:** to modify password as per the instruction System → Password

### 3.9.3 Date & Time Setting

To setup date time as per the instruction System → Date Time

**Note:** it is not permit to modify time and date for recording(include manual . Schedule. Motion detection and alarm).

### 3.9.4 Default

Default configuration: to default all Para as per the instruction System → Default,

### 3.9.5 Upgrade



To upgrade software as per the instruction System → Update, main board and panel board are selectable.

Ø main board

Copy [update.img](#) to USB:\,insert device USB into the port, then choose main board from target.

Ø panel board

Copy AP.bin to USB: \,insert device USB into the port, then choose panel board from target.

Ø Logo

To upgrade logo by providing two photos for PAL and NTSC, setup names and sizes as logo\_p.jpg & logo\_n.jpg and 720x576&720x480, copy them to USB:\,insert device USB into the port, then choose logo from target.

### 3.9.6 Shutdown

u Operation: to shutdown . reset and logout as per the instruction System → Shutdown

### 3.9.7 About

u System version: to find system version as per the instruction System → About

# Chapter 4 Monitor

7 inch LCD monitor (16:9TFT LCD)

**Note:** only press “” to start



1.direction(M)stands for menu;	4. <a href="#">function setup</a>	7.time
2.power;	5. <a href="#">function setup</a>	8.time setting
3.LED;	6. <a href="#">function setup</a>	9. .time setting

● **MENU:**

Menu settings as below:

Image ⇨ volume ⇨ function ⇨ system ⇨ time

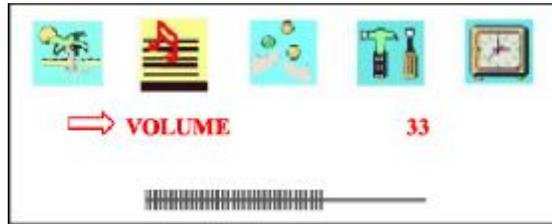


Description	Suggested value
1. BRIGHT	1 ~ 100
2. COLOR	1 ~ 100
3. CONTRAST	1 ~ 100
4. SHARPNESS	1 ~ 100

1. Press “MENU” to enter into setup interface
2. Press “←” “→” to select contents

3. Press up and down can choose the segment;

### I Voice



1. Press Menu to choose Voice setting;
2. Press left and right to choose operation item;

Description	Suggested Value
VOLUME	1 ~ 100

### I Function setting



1. Press Menu to setting: Language . Calendar. Game;
2. Press up and down to choose segment;
3. Press left and right to choose operation item;

Item	Content
1. LANGVAGE	CHINESE. ENGLISH. DEUTSCH. FRANC. PORTUG ETC.
2. CALENDAR	
3. GAME	16 : 9                      4 : 3

### I System setting



1. Press Menu to choose system setting: color system . Voice system. Game
2. Press up and down to choose segment;
3. Press left and right to choose operation item;
4. Press Menu to sign out system setting;

Item	Description
1. C.SYS	AUTO. PAL. PALN. NTSC. SECAM
2. CALENDAR	BG. DK. I. M. L
3. GAME	

## I Time



1. Press Menu to choose time setting: Sleep . Time. Off time. On time
2. Press up and down to choose segment ;
3. Press left and right to choose operation item;
4. Press Menu to sign out system setting;
5. Menu will quit out automatically if without operation for 10 seconds.

Item	Description
1. SLEEP	0~240
2. TIME	-- : -- 24 hours
3. OFF TIME	-- : -- 24 hours

4. ON TIME	-- : --	24 hours
------------	---------	----------

**Note: LCD Monitor is an extractable high-tech precise product. Not allow you to touch screen when it's working. In order to keep long life-time that It's better to close when there is no need for it over one hour.**

## Chapter 5 IE Operations

Please input server's address to IE, after verification, and then go to main interface. Real monitor, remote search, remote PTZ are only for you for setting in IE.

### 5.1 Requirements:

- Please install DirectX9.0, then run it(It can be downloaded from internet)
- Please select low rank for security level from IE options, and complete it.

### 5.2 Login

Please input IP address with port to IE(<http://IP:Port>), System will back to login menu, and then insert user name: admin, and password(it's the same password with server).It will back to main screen after verification.(See picture as below) Real monitor and remote search are only for you for setting in IE. If default port is 80, then only input IP address (<http://IP>).

DVR9004 Sever Default IP: 192.168.1.163, port: 80 like <http://192.168.1.163>

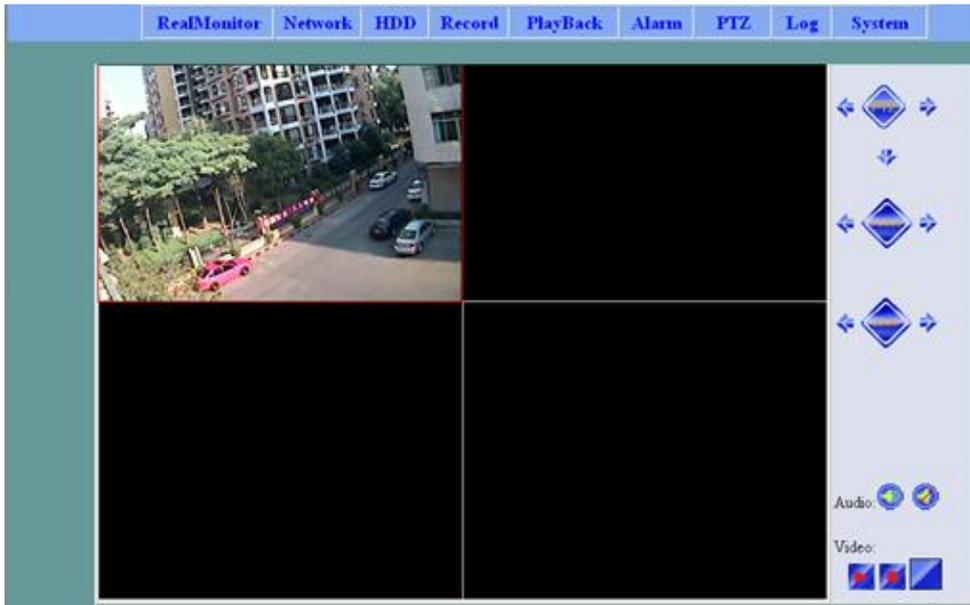


Picture 1 IE Main Screen

### 5.3 Real Monitor:

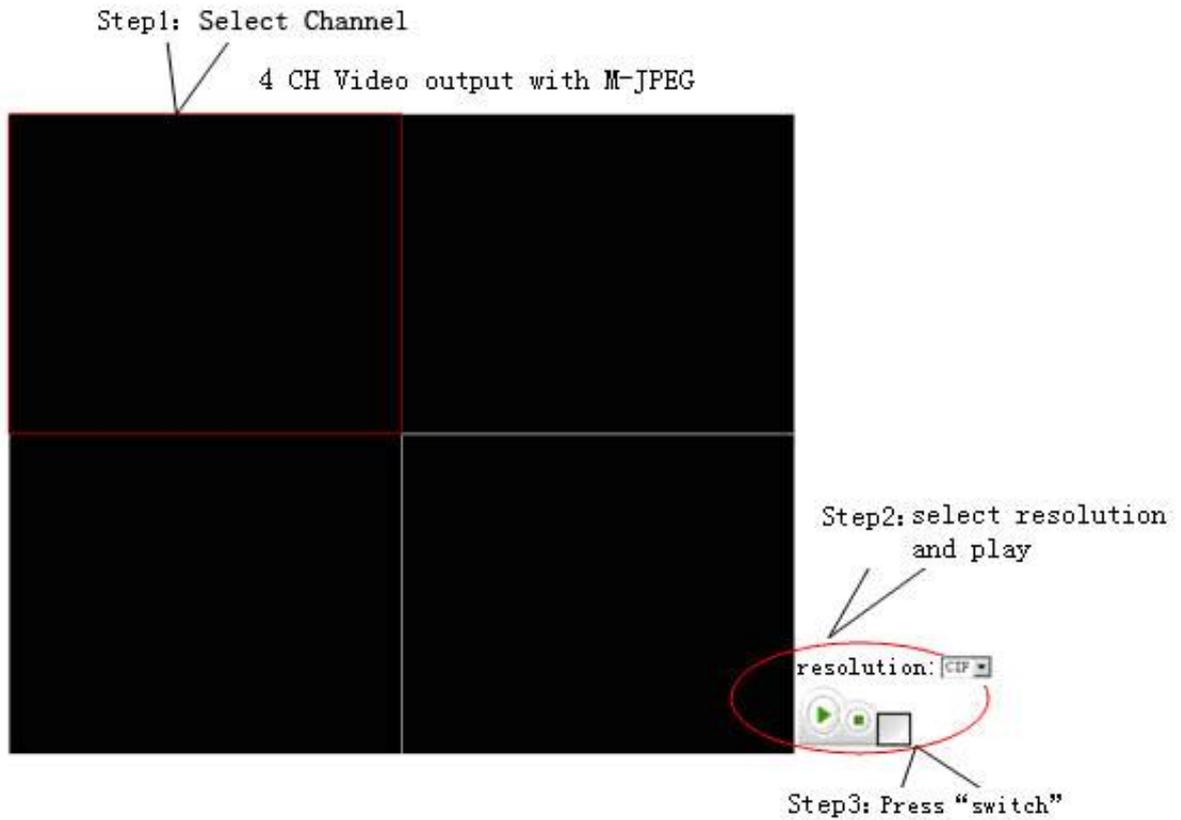
Click "Real-monitor" to enter main interface. It will remind you to install DirectX when first entering the real time recording. (Pleas allow program pop up when system is going to block)  
 IE security level is available to set default after IE's installation.

Real Monitor Main Interface



Picture 2 Real Monitor Main Screen

Ø Monitor:



### Picture 3 Real Monitor Operation

From the picture 3, we can select the above channel by mouse, and then you can select CIF or Half D1 from resolution settings, and complete it at last.

**Notice: Please keep the same resolution between server and IE, or the picture will be abnormal.(Like as: server is CIF, client is Half D1, it will only have half picture, or server is Half D1, client is CIF, it will have no picture, but only have data transmission)**

Ø **Stop:**

Please select required channel, and click “stop” to stop it.

Ø **Zoom:**

Please select required channel, and click “switch” to enlarge or minimize it. .

Ø **Monitor after resolution settings:**

If your server’s resolution changes, IE’s resolution also need to change, then it will work properly. Please check the following steps:

1. Select required channel
2. Click “stop”
3. Click “resolution” to choose same resolution with server
4. Click “play” to start monitor

Notice: All the operations in this menu are only for selected channel.

## 5.4 Remote Search

Click “Remote Search” to enter main interface, as picture 4 in the following. Input search requirements, then click “search”, system will find your required record files. Search requirements are: Channel No., Start Time, End Time, Record Type.

15 record files will be in one page, you are able to revise page number. Click “search” to back to required page and click” playback” to play required record files.

**Notice: Only can playback one record file in a time. Please close the current playback window before starting a new record file.**



Picture 4 Remote Search

## 5.5 PTZ

PTZ is able to control in IE. Please do the settings in the selected channel. (Like direction arrow, camera zoom and focus control)

You can press button continually to control PTZ until release mouse

**Notice: Only with required PTZ parameters to control PTZ.**

## 5.6 PTZ Setting

Click "PTZ Setting" to enter main screen as picture 5 as below:

Please select required channel number, then do the settings as required, and click "Ok" to complete it.



Picture 5 PTZ Setting

## 5.7 IE DirectX Remove Tool

# Chapter 6 Update

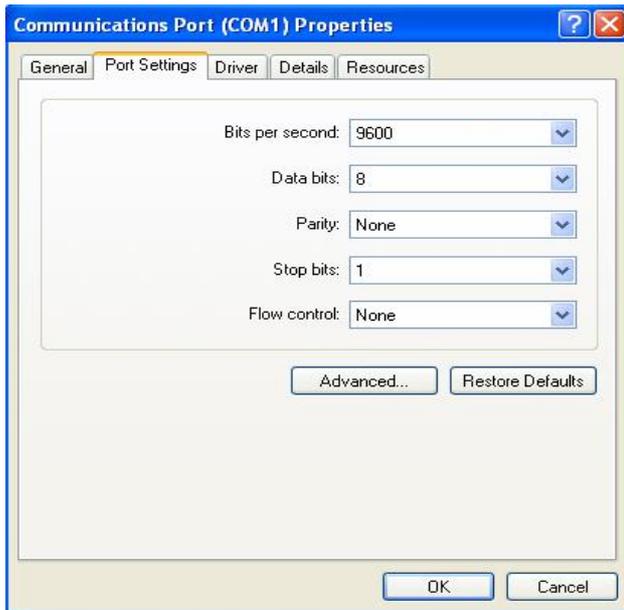
They are two ways for DVR update: SATA and USB. It's recommended to choosing USB. SATA is only for system errors that it can't open operation menu.

### I Requirement:

1. 422/232 Converter, which support 115200 Baud rate
2. SATA and Cable
3. PC
4. Sever Default IP Add: 192.168.1.166

### I Operations:

1. Default Baud rate is 115200, Data digits is 8, Odd and Even is No, Stop digits is 1, Database is No, please check the details as the following picture:



2. Please according the following messages press “STOP” will enter boot loader alternation interface as follows:
3. Files for SATA Upgrade:



Put the upgrade files “update.img” in U: / & split tool “SplitImage.exe” in a same content. Then running “SplitImage.exe”, there will be two files “fs.zip” & “linux2.zip” for SATA upgrade.

4. Downloading “fs.zip” file.
  - Ø Delete primary file: under “boot loader” input command: del 6
  - Ø Under “boot loader” input command: ft 6 romps 0x7f0C0000 0xd00000 -acz

- Ø Switch to upgraded files under PC end command model, then input command: tftp  
-i 192.168.1.166 put fs.zip

**Notice: Please confirm DVR Board connected with PC.**

5. Download files “kernel”:

- Ø Delete primary file “kernel”: under “bootloader” input command: del 7
- Ø Under “boot loader” input command: ft 7 Linux 0x7f020000 0x8000 -aczx
- Ø Switch to upgraded files under PC end command model, then input command: tftp  
-i 192.168.1.166 put linux2.zip

**Notice: Usually only upgrade “fs.zip”.**

6. Upgrade “boot loader” (usually no need upgrade)

- Ø Under “boot loader” input command: mt
- Ø Switch to upgraded files under PC end command model, then input command: tftp -i 192.168.1.166 put **bootloader.bin**
- Ø After files transfer done, Under “boot loader” input command: g.
- Ø Then according SATA prompt operate.

**Notice: The system can't off line after administer command “g”, otherwise can't start-up.**

7. Input boot under the command boot loader
8. Operation step as follows::

```

RT      TFTP download
FT      Program the flash by TFTP. FT -? for help
FX      Program the flash by Xmodem. FX -? for help
CP      Memory copy
LS      List the images in the flash
SET     Setting boot loader configuration. SET -? for help
CHK     Check the flash
RUN     Execute image
DEL     DEL the image or flash block
MSFT   Call memory
TEHM   Change the terminal output port
BOOT   Reboot the system
CACHE  Cache setting
UNZIP  Unzip image

HTIRIB Change the image attribution

bootloader >
bootloader > del 6
Deleting Image 6 ....
.....
bootloader >
bootloader > ft 6 romfs 0x7f0C0000 0xd00000 -acz
0 0 0 0:0:1
192.168.1.166
call SetMacAddr
call mac 0 initialize mac-h 0 mac-l 10000
Wait for auto negotiation complete...OK
r13=0B11_19-62B
100MB - Full duplex
call SetMacAddr
Waiting for download
TFTP client: 192.168.1.166
Download OK, file size:1111665

Flash programming ...
.....
bootloader >
bootloader > boot

```

## I SATA upgrade system

```

D:\C:\WINNT\system32\cmd.exe
2007-02-13 15:56          1,233,694 linux.bin
2007-02-13 15:56          1,671,168 pen.img
2007-02-14 10:32          <DIR>          w5

D:\tu2700>cd w4
D:\tu2700\w4>dir
.
.

D:\tu2700\w4 |
.
.
2007-02-09 10:22          <DIR>          .
2007-02-09 10:22          <DIR>          ..
2007-02-09 15:45          1,111,145 fs_0209.zip
2007-02-10 14:48          1,111,665 fs.zip

D:\tu2700\w4>tftp -i 192.168.1.166 put fs.zip
Transfer successful: 1111665 bytes in 2 seconds, 555832 bytes/s

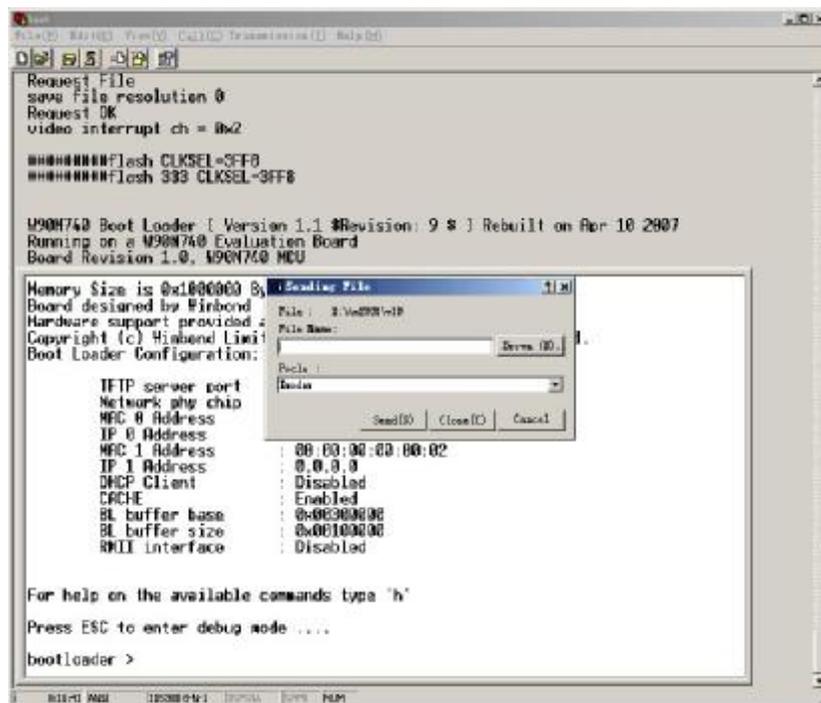
D:\tu2700\w4>

```

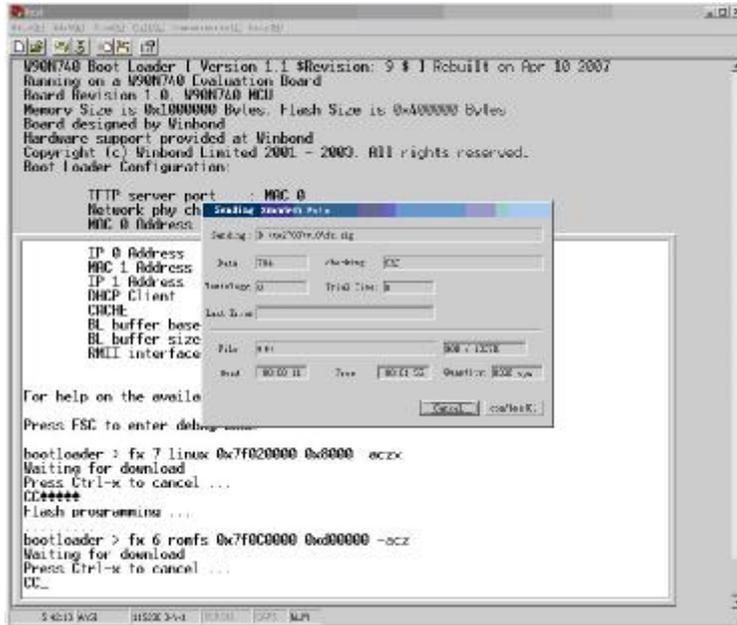
1. Download "fs.zip":
  - Ø Delete primary file: under "bootloader" input command: del 6
  - Ø under "bootloader" input command: fx 6 romfs 0x7f0C0000 0xd00000 -acz
  - Ø According super terminal TXD: select: "send" à "send files" choose files "fs.zip", then choose "Xmodem" protocol, then press send.
2. Download files "kernel":
  - Ø Delete primary file "kernel": under "bootloader" input command: del 7
  - Ø under "bootloader" input command: fx 7 Linux 0x7f020000 0x8000 -acz

- Ø According super terminal TXD: select: “send” à “send files”choose files “linux2.zip” ,then choose “Xmodem”protocol, then press send.
3. Upgrade “bootloader”: ( usually no need upgrade)
- Ø Under “bootloader” input command: mx
  - Ø According super terminal TXD: select: “send” à “send files”choose files “bootloader.bin”, then choose “Xmodem”protocol, then press send.
  - Ø After files transfer done, Under “bootloader” input command: g
  - Ø Then according SATA prompt operate.
- Notice: The system can't off line after administer command “g”, otherwise can't start-up.**
4. Key in boot at bootloader.
5. Operate step as follows:
- Notice: sending the files need relatively with the flash command otherwise will be error.**

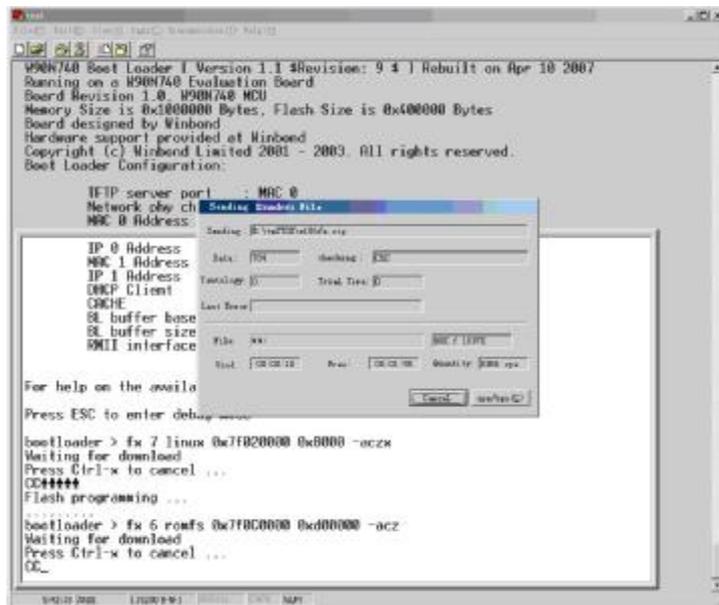
Send files sketch map:



Download “Kernel” sketch map:

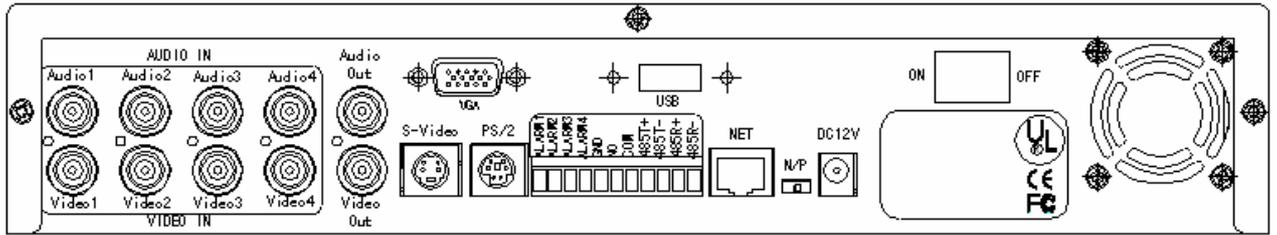


### Steps of FS Download



Close all the IE, it can uninstall ActiveX file when run CAB-Uninstall.exe, open "IE---internet---attribute" and delete the temporary files

## Appendix 1. DVR Back panel

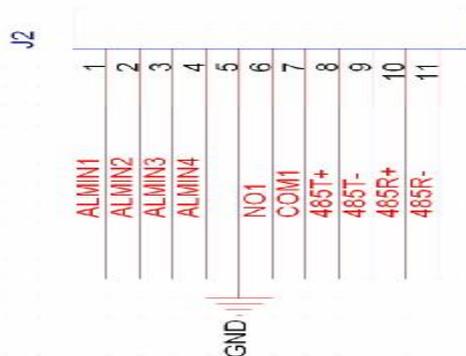


**Illumination:**

1. Audio in: audio sign input ( audio1,2,3,4);
2. Video in: video sign input( video1, 2,3,4);
3. Audio out: audio sign output, can connect with all kind of audio equipments;
4. Video out: video sign output, can connect with TV, MONIOTR and so on;
5. VGA: VGA port system: such as MONITOR( 9004/9004EVH/9004EVTS have no VGA function);
6. S-VIDEO: can connect with S port output system;
7. PS/2: support PS/2 mouse;
8. USB: support USB2.0, to backup and upgrade;
9. NET: internet port;
10. N/P : Means PAL or NTST ;
11. DC 12V: for adaptor;
12. ON/OFF: the power switch.

**Appendix 2. Alarm, Relay, PTZ ports contents**

**Illumination:**



1. GND: grounding wire;
2. ALMIN 1—4: 1-4CH alarm in;
3. NO1. COM1: Relay port, it will turn-on when working;
4. 485T+. 485T-: 422/485 sending port;

5. 485R+. 485R-: 422/485 receiving port;
6. If connect With PTZ, then only need connect with 485T+. 485T-;
7. If connect with cluster port, then need to connect with 485R+. 485R- .  
485T+ and 485T-.

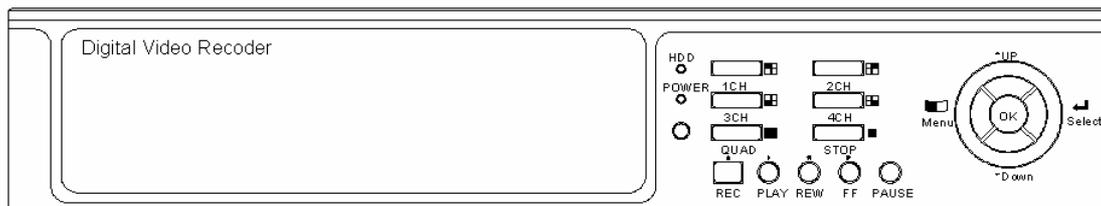
## Appendix 3. 9004 CBR Stat.

Stat. way:

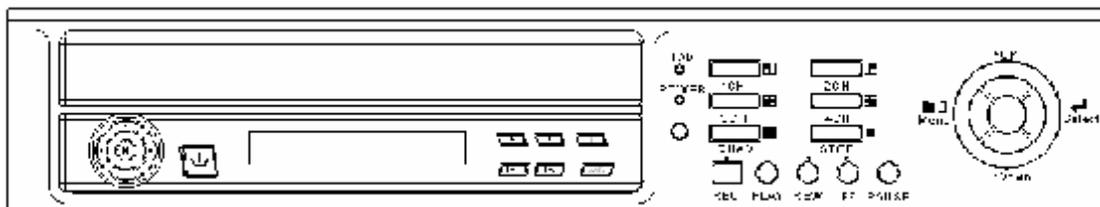
Choose one more complex but quiet picture, and then do the pictures setup that on the server. And can browse each channel through IE browser, Stat. the CBR through DU Meter. Choose one channel to count the yard speed under the condition of full frames.

Picture quantity	Media types	Resolution	CBR(mbps)
Low	Video	CIF	2.0
Low	AV	CIF	2.1
Middle	Video	CIF	2.47
Middle	AV	CIF	2.53
High	Video	CIF	2.7
High	AV	CIF	2.72
Low	Video	HD1	3.2
Low	AV	HD1	3.3
Middle	Video	HD1	3.98
Middle	AV	HD1	4.01
High	Video	HD1	4.4
High	AV	HD1	4.5

## Appendix 4. Panel illumination



**DVR-9004/9004V/ 9004SV**

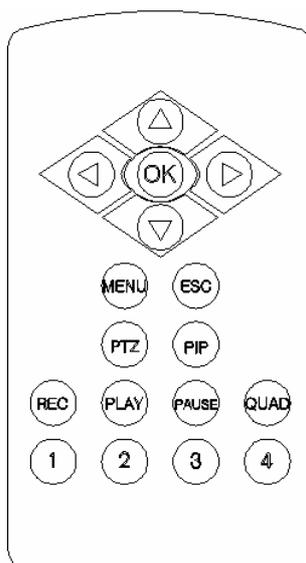


**DVR-9004EVH/9004EVTS**

Number	Key name	Appellation	Function illumination
1	CH 1-4	Figure bond 1-4	<ol style="list-style-type: none"> <li>1. it shows four channels on the screen</li> <li>2. when backup by time, it shows four channels backup,</li> </ol>
2	QUAD	Four picture	<ol style="list-style-type: none"> <li>1. to switch to QUAD</li> <li>2. to start-up picture switch automatically</li> <li>3. when backup by time, it used to resume to QUAD</li> </ol>
3	MENU	Main menu	<ol style="list-style-type: none"> <li>1. enter the menu</li> <li>2. When motion detects setup, it means pitch on or cancels the area.</li> <li>3. When time setup condition, it means pitch on or cancel the area.</li> <li>4. when backup, it means display /cancel "control bar function"</li> </ol>
4	REC	Recording	means enter" manual recording interface"
5	PLAY	Play/Forward	<ol style="list-style-type: none"> <li>1. Start-up backup searches function</li> <li>2. when backup, it's to adjust displaying speed</li> </ol>
6	REW		<ol style="list-style-type: none"> <li>1. when backup, it's to adjust reverse displaying speed</li> <li>2. when edit, it used to delete current character</li> </ol>
7	PAUSE	Pause	when backup, it's used to pause / resume display
8	STOP		key to stop
9	OK	Ok	<ol style="list-style-type: none"> <li>1. means OK</li> <li>2. Means pitch on or cancel check box</li> <li>3. Means display the recording files that choosed.</li> <li>4. Means finished edit</li> <li>5. Means SAVE and EXIT when MOTION DETECTS SETUP.</li> <li>6. Means EXIT, when do the TIME SETUP.</li> </ol>
10	Direction key	UP	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 1 when browse the website or backup by time.</li> </ol>

11		DOWN	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 2 when browse the website or backup by time.</li> </ol>
12		LEFT	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 3 when browse the website or backup by time.</li> </ol>
13		RIGHT	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 4 when browse the website or backup by time.</li> </ol>

## Appendix 5 Remote controller illumination



Number	Key name	Appellation	Function illumination
1	Direction	UP	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 2 when browse the website or backup by time.</li> </ol>
2		DOWN	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 2 when browse the website or backup by time.</li> </ol>
3		LEFT	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 3 when browse the website or backup by time.</li> </ol>
4		RIGHT	<ol style="list-style-type: none"> <li>1. to switch functions setup in the menu</li> <li>2. can edit different numerical value</li> <li>3. change password</li> <li>4. choose documents when searching</li> <li>5. move cursor position when motion detect setup or time setup</li> <li>6. Used to switch to channel 4 when browse the website or backup by time.</li> </ol>
5	OK	OK	<ol style="list-style-type: none"> <li>1. means OK</li> <li>2. Means pitch on or cancel</li> <li>3. means display the recording files that choosed</li> <li>4. Means finished edit</li> <li>5. Means SAVE and EXIT when MOTION DETECTS SETUP.</li> <li>6. Means EXIT, when do the TIME SETUP.</li> </ol>

6	MENU	Menu	<ol style="list-style-type: none"> <li>1. enter the menu</li> <li>2. When motion detects setup, it means pitch on or cancels the area.</li> <li>3. When time setup condition, it means pitch on or cancel the area.</li> <li>4. when backup, it means display /cancel "control bar function"</li> </ol>
7	ESC	Cancel	<ol style="list-style-type: none"> <li>1. Means EXIT from the menu</li> <li>2. means EXIT from backup</li> <li>3. when MOTION DETECT SETUP, it means cancel area that choosed and EXIT</li> <li>4. To switch to QUAD when preview one picture</li> <li>5. to START-UP "automatically picture switch" when browse QUAD</li> </ol>
8	PTZ	PTZ	<ol style="list-style-type: none"> <li>1. start-up PTZ function</li> <li>2. To choose / cancel area when motion detect area setup.</li> <li>3. To choose /cancel area when time setup..</li> </ol>
9	PIP	Two pictures	star-up PIP function
10	REC	Recording	means enter" manual recording interface"
11	PLAY	Play/Forward	<ol style="list-style-type: none"> <li>1. Start-up backup searches function</li> <li>2. when backup, it's to adjust displaying speed</li> </ol>
12	PAUSE	Pause	when backup, it's used to pause / resume display
13	QUAD	Four picture	<ol style="list-style-type: none"> <li>1. to switch to QUAD</li> <li>2. to start-up picture switch automatically</li> <li>3. when backup by time, it used to resume to QUAD</li> </ol>
14	CH 1-4	Figure bond 1-4	<ol style="list-style-type: none"> <li>1. it shows four channels on the screen</li> <li>2. when backup by time, it shows four channels backup,</li> </ol>

## Solution to DVR's problem

Question: why no pictures display on the monitor?

Answer:

**U** Check the video output line, does it well-connected? And does the monitor is AV input?

**U** If the monitor is well-connected, please check whether the main control board is with power, if not, please checks the adaptor (power) output.

Question: why it shows no signal on the monitor of some channel?

Answer:

U Check the video output line; you can try to insert the line twice. And rectify the video line

U If sometimes there have video, sometimes have no video, that is the problem of the video output line, you can change another video output line

Question: why have no audio signal

Answer

U Check the audio line; you can try to insert the line twice. And rectify the audio line

U If sometimes there have audio, sometimes have no audio, that is the problem of the audio output line, you can change another audio output line

U check does the audio output switch is " ON"

U Check does the video port that corresponding to audio is switch to single picture display.

Question: why client software can not use

Answer:

U check does the INTERNET SETUP is correct: for example if you choose multi display protocol, then the IP address of client software and server is using the same subnet mask and net sect; if you choose UDP protocol, must make sure the Gateway setup is correct and active.

U make sure the IP address is the unique one that on the internet

Question: why the remote controller can not control the menu, while the picture is ok but can control through the panel menu?

Answer:

U That is because the battery with weak electricity, you can change another new battery.

Question: after long time working, the LCD has no pictures or maybe other problems. Why?

Answer:

U Please you can renew system and re- startup the DVR.

**If with other questions or problems, please contact with our company directly, we will try our best to help you.**