Hard Disk Video Recorder Installation Manual V1.2

Statement:

Thanks for purchasing from us. Please feel free to contact our service whenever you need help.

This manual is applicable for DVR products. Features and functions are various with different products, please refer to our physical commodity and the fast manual.

This manual is your reference for operations and encodings. Related functions, specific orders, detailed menu-tree as well as fast manual are included. Please read it before installation or use.

This manual might contain some technical or print errors. Any enhancement in product features shall be added into the manual consistently without further notice.

Safety Instruction

This manual is intended to ensure that user can use the product properly without danger or any property loss. Please read it carefully and take care of it for further reference.

Precaution measures are divided into “warnings” and “cautions”,as below:

Warnings: Neglecting any of the warnings may cause death or serious injury.

Cautions: Neglecting any of the cautions may cause injury or equipment damage.

Warning Follow these safeguards to avoid death or serious injury	Caution Follow these precautions to prevent potential injury or property loss

Warnings

1. Electrical safety regulations of the nation and the region must be strictly followed during installation or use.
2. Please use the matched power adapter from standard company.
3. Do not connect multiple DVRs with one single power adapter (Overload for adapter may lead to over-heat or fire hazard.
4. Shut down the power while connecting or dismounting the speed dome. Do not operate with power on.
5. Shut down the power and unplug the power cable immediately when there is smoke, odor or noise rising from the DVR. Then contact the dealer or service center.
6. Please contact the local dealer or latest service center when DVR works abnormally. Do not attempt to disassemble or modify the device yourself.(We shall shoulder no responsibility for problems caused by unauthorized repair or maintenance.

Cautions

1. Do not drop anything onto the dome, avoid it from physical strike. Keep it away from high electromagnetism radiation surroundings. Do not install it at vibration surface or places subjecting to strike. (Ignorance can cause equipment damage)
2. Keep it away from rain and moisture
3. Avoid exposing to direct sunlight, poor-ventilation or heat source such as heater, radiator.

(Ignorance can cause fire hazard)

4. To avoid physical damage, extreme environment such as lampblack, water vapor, too hot or dusty are not allowed.

5. Please use soft and dry cloth to clean the shell. Use neutral cleaner instead of alkaline when the dirt is difficult to get rid of.

Directory

1 Product Introduction

1.1 Product overview

The series DVR is designed specially for security and defence field which is an outstanding digital surveillance product. It introduces embedded LINUX operating system which is more stable. It introduces standard H.264mp video compressed format and G.711A audio compressed format which insures the high quality image, low error coding ratio and single frame playing. It introduces TCP/IP network technology which achieves the strong network communication ability and telecommunication ability.

The series DVR can be used individually or online applied as a part of a safety surveillance network. With the professional network video surveillance software it achieves the strong network communication ability and telecommunication ability.

The series DVR can be applied in the bank, telecom, electric power system, judicial system, transportation, intelligent housing, factory, storehouse, water conservancy and so on.

1.2 Main functions

Real-time surveillance

·spot interface、analog interface、VGA interface and HDMI interface，surveillance function through monitor or display

Storage

·non-working hard disk dormancy processing which is convenient to radiate heat, reduce power and extend the life-span

·special storage format which insures the data safety

Compression

·real-time compression by individual hard disk which insures the audio and video signal stable synchronization

Backup

·through SATA interface and USB interface such as USB equipment, removable hard disk and so on

·through net download the files in the hard disk

Playback

·individual real-time video recording as well as searching, playback, network surveillance, recording check, downloading and so on

·multi-playback mode

·zoom at arbitrary region

Net operating

·through net tele-surveillance in the real time

·tele-PTZ control

·tele-recording check and real-time playback

Alarm linkage

·Alarm activated video record, tour, message, buzzer, e-mail, ftp

Communication interface

·RS485 interface which fulfills the alarm input and PTZ control

·RS232 interface which can extend keyboard connection to realize master, as well as with computer serial port connection for system maintenance and upgrade, and matrix control and so on.

·standard ethernet network interface which fulfills the telecommuting function

Intelligent operating

·mouse action function

fast copy and paste operating for the same setting

2 Open-package check and cable connections

2.1 Open-package check

When you receive the DVR,

Firstly, please check whether there is any visible damage to the DVR appearance. Materials used for the package of the DVR can protect most accidental clashes during transportation.

Then, please open the box and get rid of the plastic protective materials.

At last, please open the machine crust and check the data wire in the front panel, power wire, the connection between the fan power and the main board.

1. Front panel and rear panel

- The key function specification in the front panel and the interface specification in the real panel

are in the specification.

- ♦ Please check the product type in the front panel whether is accordant with the product type you order.
- ♦ The label in the real panel is very important for the after service. Please protect it carefully. When you contact us for after service, please provide the product type and serial number in the label.

2. Check

After open the cover, you should check if it has obvious damage trace, also please check the front panel data cable, power cord and motherboard's connection are loose or not.

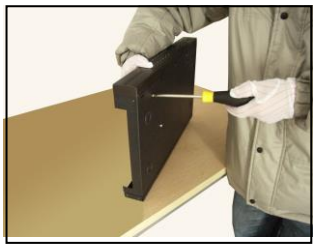
2.2 Hard disk installation

For the first use, please install the hard disk, this machine box can install two hard disks (no limited capacity).

①disassemble the screw

②disassemble the cover

③fix the screw of hard disk



④fix the screw of hard disk

⑤connect the data wire

⑥connect the power wire

⑦cover the machine

⑧fix the cover

2.3 Shelf installation

This product chassis specification for the standard 1u,so it can be installed in the standard shelf.

Installation steps and attention items:

1、Make sure the temperature in the room lower than 35℃ (95°f).

2、Keep the equipment have 15cm(6 inches)space around in order to air's circulation.

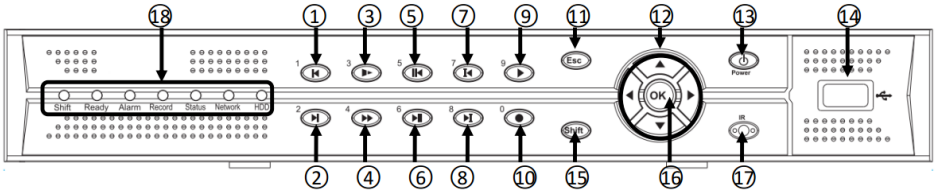
3、From bottom to shelf installation.

4、When multiple components install in the frame，please take preventive measures to avoid power socket overload..

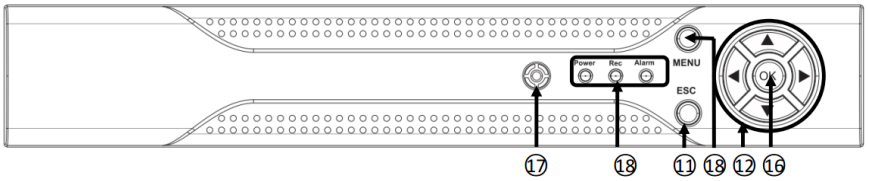
2.4 Front panel

2.4.1The front panel of T series

1. Front panel (1)



2. Front panel (2)

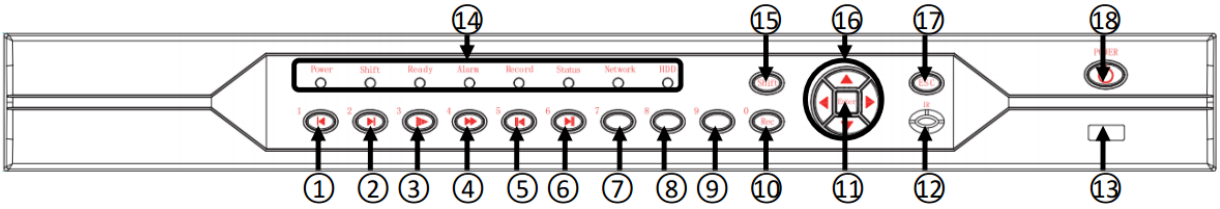


3. Function Introduction

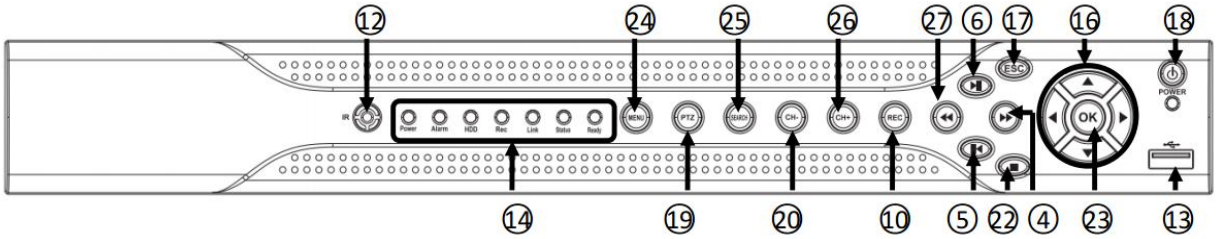
(1)	Previous File	(9)	Play	(17)	IR remote receiver
(2)	Next File	(10)	Record	(18)	Shift indicator light
(3)	Slow Play	(11)	ESC		System indicator light
(4)	Fast Play	(12)	Direction		Alarm indicator light
(5)	Backwards Pause	(13)	Power switch		Record indicator light
(6)	Play Pause	(14)	USB		Status indicator light
(7)	Previous Frame	(15)	Function Switching		Network indicator light
(8)	Next Frame	(16)	OK		Keyboard indicator light

2.4.2The front panel of A series

1. Front panel (1)



2. Front panel (2)

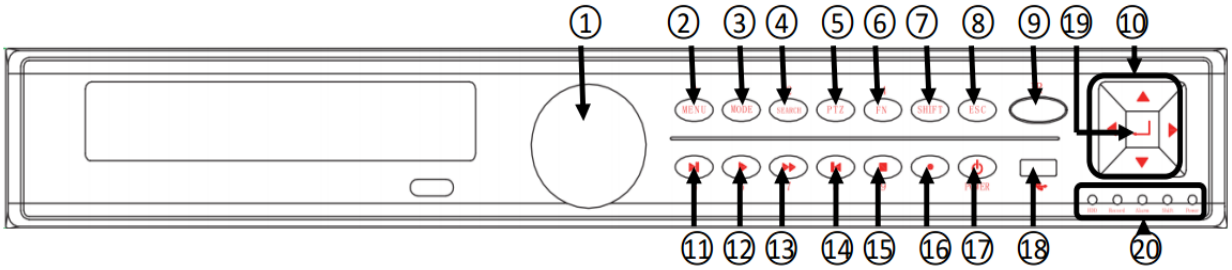


3. Function Introduction

(1)	Previous File	(12)	IR remote receiver	(25)	SEARCH
(2)	Next File	(13)	USB	(26)	Next Channel
(3)	Slow Play	(15)	Function Switching	(27)	Fast Backward
(4)	Fast Play	(16)	Direction	(14)	Power indicator light
(5)	Backwards Pause	(17)	ESC		Shift indicator light
(6)	Play Pause	(18)	Power		System indicator light
(7)	Previous Frame	(19)	PTZ		Alarm indicator light
(8)	Next Frame	(20)	Previous Channel		Record indicator light
(9)	Playback	(22)	Stop		Status indicator light
(10)	Record	(23)	OK		Network indicator light
(11)	ENTER	(24)	MENU		Keyboard indicator light

2.4.3 The front panel of D series

1. Front panel



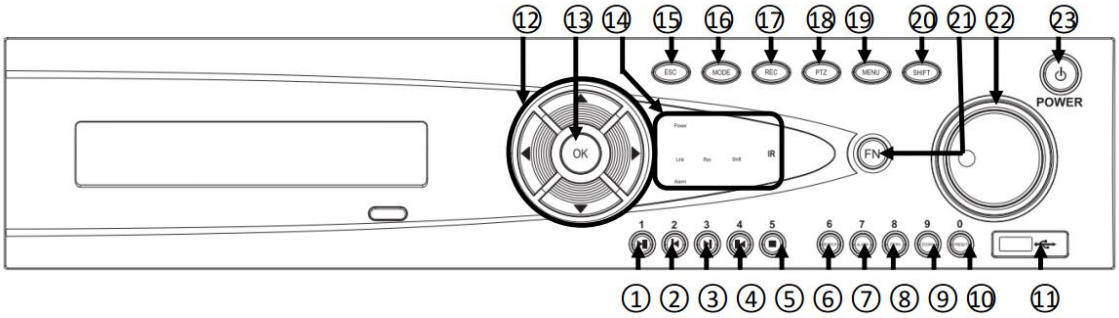
2. Function Introduction

(1)	Fraxel	(9)	IR remote receiver	(17)	Power Switching

(2)	MENU	(10)	Direction	(18)	USB
(3)	MODE	(11)	Play Pause	(19)	OK
(4)	SEARCH	(12)	Slow Play	(20)	Keyboard indicator light
(5)	PTZ	(13)	Fast Play		Record indicator light
(6)	FN	(14)	Backward Pause		Alarm indicator light
(7)	Function Switching	(15)	Stop Backward		Shift indicator light
(8)	ESC	(16)	Record Switching		Power indicator light

2.4.4 The front panel of H series

1. Front panel



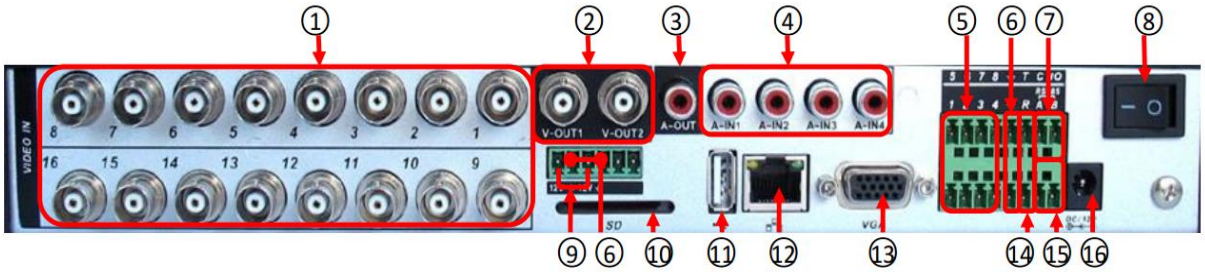
2. Function Introduction

(1)	Play Pause	(10)	PRESET	(20)	Function Switching
(2)	Previous File	(11)	USB	(21)	FN
(3)	Next File	(12)	Direction	(22)	Fraxel
(4)	Play Backward Pause	(13)	OK	(23)	Power Switching
(5)	Stop Playback	(15)	ESC	(14)	Power indicator light
(6)	SEARCH	(16)	MODE		Network indicator light
(7)	ALARM	(17)	Record		Record indicator light
(8)	ZOOM-	(18)	PTZ		Shift indicator light
(9)	ZOOM+	(19)	MENU		Alarm indicator light

2.5 Rear panel

2.5.1 The rear panel of T series

The installation manual takes 16 channels of T series DVR as an example to introduce.



(1)	Video Input	(7)	Alarm Output	(13)	Video Output
(2)	Video Output	(8)	Power Switching	(14)	Serial Port
(3)	Audio Output	(9)	Power Interface +12/-12V	(15)	RS485A/B
(4)	Audio Input	(10)	SD Card	(16)	Power DC/12V
(5)	Alarm Input	(11)	USB		
(6)	GND	(12)	Network		

4 channels of T series DVR:

8 channels of T series DVR (A):

8 channels of T series DVR (B):

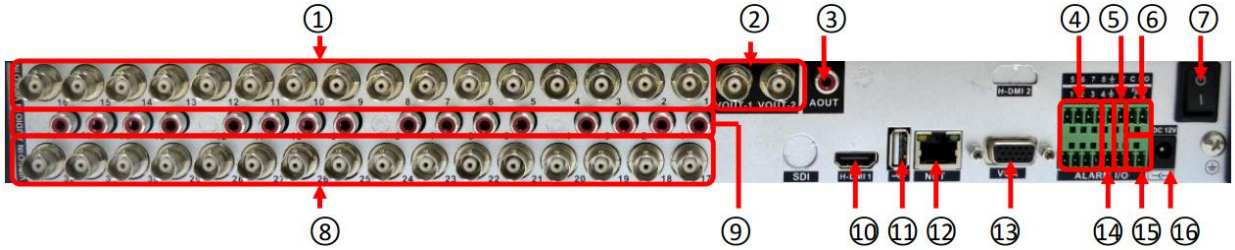
8 channels of T series DVR (C):

16 channels of T series DVR (A):

16 channels of T series DVR (B):

2.5.2 The rear panel of A series

The installation manual takes 32 channels of A series DVR as an example to introduce.



(1)	Video Input	(7)	Power Switching	(13)	Video Output
(2)	Video Output	(8)	Video Input	(14)	GND
(3)	Audio Output	(9)	Audio Input	(15)	RS485A/B
(4)	Alarm Input	(10)	HDMI	(16)	Power DC/12V
(5)	Serial Port	(11)	USB		
(6)	Alarm Output	(12)	Network		

4 channels of A series DVR:

8 channels of A series DVR (A):

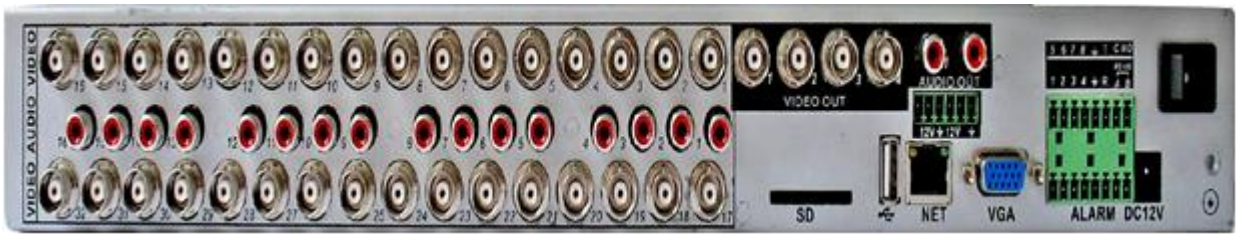
8 channels of A series DVR (B):

8 channels of A series DVR (C):

16 channels of A series DVR (A):

16 channels of A series DVR (B):

32 channels of A series DVR:



2.5.3 The rear panel of D series

The installation manual takes 16 channels of D series DVR as an example to introduce.

(1)	Video Input	(7)	External Interface
(2)	Audio Input	(8)	Power DC/12V
(3)	Video Output (VGA)	(9)	Video Output (BNC)
(4)	HDMI	(10)	Audio Output
(5)	Network	(11)	Power Switching
(6)	USB		

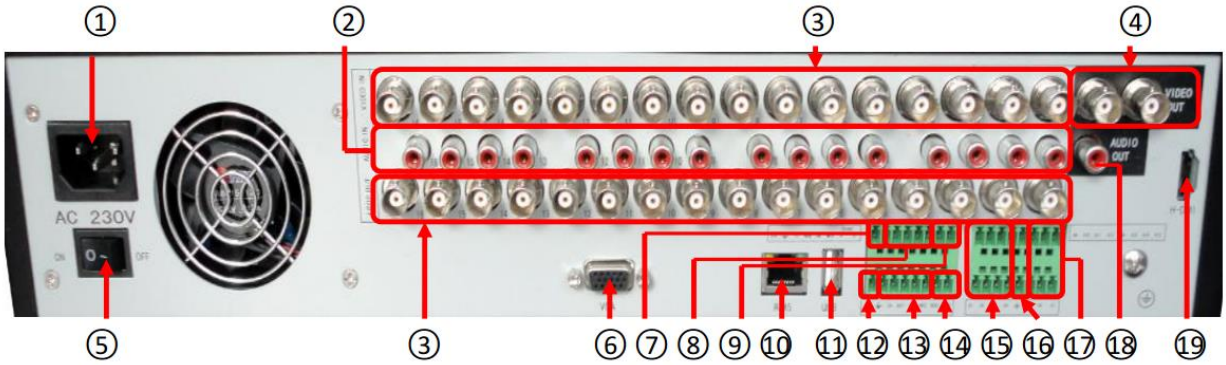
4 channels of D series DVR:

8 channels of D series DVR:

16 channels of D series DVR:

32 channels of D series DVR:

2.5.4 The rear panel of H series



(1)	Power AC/230V	(8)	Alarm Output	(15)	Alarm Input
(2)	Audio Input	(9)	RS485	(16)	GND
(3)	Video Input	(10)	Network	(17)	Alarm Input
(4)	Video Output	(11)	USB	(18)	Audio Output
(5)	Power Switching	(12)	Alarm Input	(19)	HDMI
(6)	Video Interface (VGA)	(13)	Alarm Output		
(7)	Alarm Input	(14)	RS232		

4 channels of H series DVR:

8 channels of H series DVR:

16 channels of H series DVR:

2.6 Audio and video input and output connections

2.6.1 Video input connections and options

The video input port is BNC connector plug. The demand of input signal is PAL/NTSC BNC(1.0V_{P-P},75Ω).

The video signal must be accorded with the state standard which has the high signal to noise ratio, low aberration and low interference. The image must be clear and has natural color in the appropriate brightness.

Insure the vidicon signal stable and credible

The vidicon should be installed in the appropriate location where is away from backlighting and low illumination or adopts the better backlighting and low illumination compensation.

The ground and power supply of the vidicon and the DVR should be shared and stable.

Insure the transmission line stable and credible

The video transmission line should adopt high quality coaxial pair which is chosen by the transmission distance. If the transmission distance is too far, it should adopt shielded twisted pair, video compensation equipment and transmit by fiber to insure the signal quality.

The video signal line should be away from the electro magnetic Interference and other equipments signal lines. The high voltage current should be avoided especially.

Insure the connection stable and credible

The signal and shield lines should be firm and connected credible which avoid false and joint welding and oxidation.

2.6.2 Video output connections and options

The video output is divided into PAL/NTSC BNC(1.0V_{P-P},75Ω) and VGA output(selective configuration).

When replace the monitor by the computer display, there are some issues to notice

1、Do not stay in the turn-on state for a long time.

2、Keep the computer display normal working by demagnetizing regularly.

3、Stay away from the electrical magnetic Interference.

TV is not a credible replacement as a video output. It demands reducing the use time and control the power supply and the interference introduced by the nearby equipments strictly. The creepage of low quality TV can lead to the damage of other equipment.

2.6.3 Video input

Most models of our company DVR in support of our company's production of camera, and also compatible with the camera of Hai Kang, Dahua and other companies in AHD-L, AHD-M, AHD-H and other channel modes.. But some models only support of our company's cameras.

2.6.4 Audio signal input

Audio port is BNC connection.

The input impedance is high so the tone arm must be active.

The audio signal line should be firm and away from the electrical magnetic Interference and connected credible which avoid false and joint welding and oxidation. The high voltage current should be avoided especially.

2.6.5 Audio output

Commonly the output parameter of DVR audio signal is greater than 200mv 1KΩ(BNC) which can connect the low impedance earphone and active sound box or other audio output equipments through power amplifier. If the sound box and the tone arm can not be isolated, howling phenomena is often existed. There are some methods to deal with the above phenomena.

1、Adopt better directional tone arm.

2、Adjust the sound box volume to be under the threshold that produces the howling phenomena.

3、Use fitment materials that absorb the sound to reduce reflection of the sound.

4、Adjust the layout of the sound box and the tone arm.

2.7 Alarm input and output connections

Before connecting the device,please pay attention to follow situations:

***note:T series have no alarm input/output functions.**

1 **.Alarm input**

A. Alarm input is grounding alarm input.

B. Alarm input demand is the grounding voltage signal.

C. When the alarm is connected with two DVRs or connected with DVR and other equipments, it should be isolated by relay.

2.Alarm output

Alarm output can not be connected with high-power load(no more than 1A).When forming the output loop it must prevent the big current from relay damage. Use the contact isolator when there is a high-power load

3.PTZ decoder connections

A. The grounding of the PTZ decoder and DVR must be shared otherwise the common-mode voltage will lead to the PTZ control failure. The shielded twisted pair is recommended.

B. Avoid the entrance of high voltage. Make the layout reasonably. Take precaution from the thunder.

C. In the outlying end connect 120Ω resistance paralleled to reduce the inflection and insure the signal quality.

D. The 485 AB lines of DVR can not connected with other 485 output equipments paralleled.

E. The voltage between the AB lines of the decoder must be less than 5V.

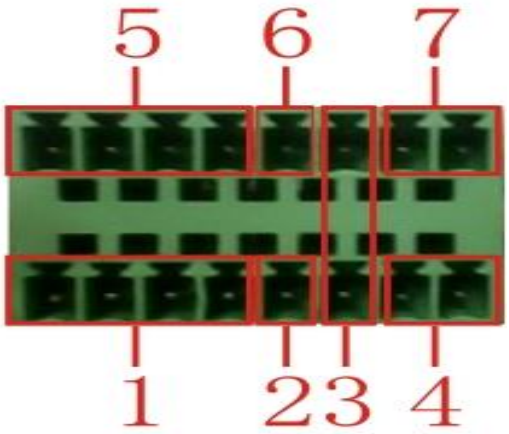
4.Front equipment grounding note

Bad grounding can lead to the burnout of the chip.

5.Alarm input type unlimited

The DVR alarm output port is constant opening type.

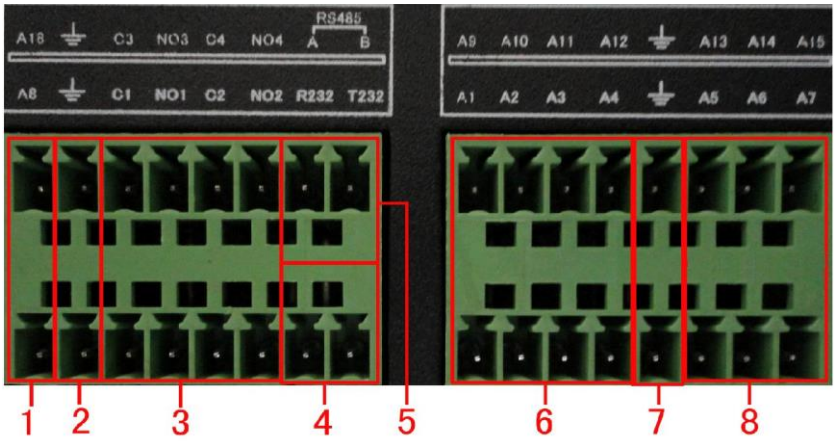
eight external alarm interface



(1) alarm input 1,2,3,4 (2) ground (3) RS232 (4) RS485 (5) alarm input 5,6,7,8

(6) ground (7) alarm output

sixteen external alarm interface



①⑥⑧alarm input ②⑦ground ③alarm output ⑤RS485 ④RS232

Parameter	meaning
G	grounding
R,T	RS232 port
A,B	485communciate interface which is connected with the recording control equipments such as the decoder

2.7.1 Alarm input port specification

8 channels alarm input. Alarm input type unlimited.

The grounding and the com port of the alarm sensor are parallel (The alarm sensor is external power supply) .

The grounding of the alarm and the DVR should be shared.

The NC port of the alarm sensor must be connected with the DVR alarm input port.

The grounding of the power supply and the alarm sensor must be shared when used in external power supply.

2.7.2 Alarm output port specification

2 channels alarm output. There is external power supply when using the external alarm equipment.

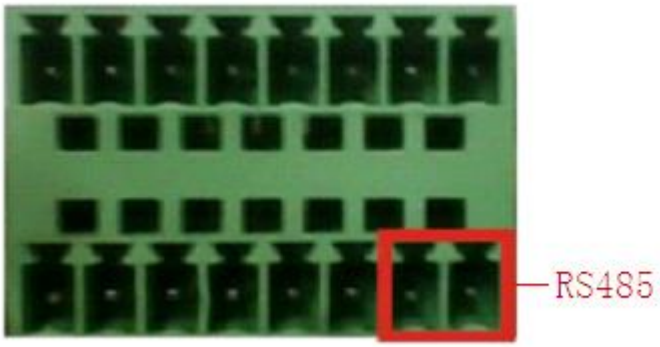
Please refer to the relay relevant parameters to avoid the overload that damages main machine.

2.7.3 Alarm output port relay parameters

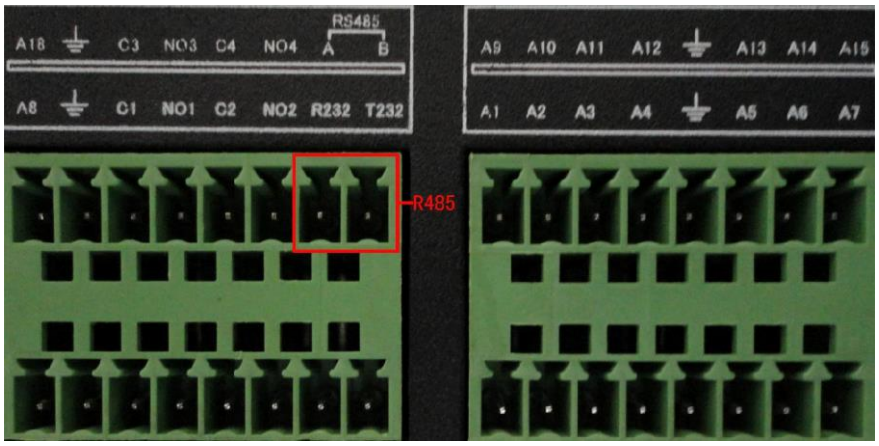
Type：JRC-27F		
Interface material	silver	
rating (resistance load)	Rating switch capacity	30VDC 2A, 125VAC 1A
	maximal switch power	125VA 160W
	maximal switch voltage	250VAC, 220VDC
	maximal switch current	1A
isolation	Homo-polarity interface	1000VAC 1minute
	Inhomo-polarity	1000VAC 1 minute
	Interface and winding	1000VAC 1 minute
Surge voltage	Homo-polarity interface	1500VAC (10×160us)
Turn-on time	3ms max	
Turn-off time	3ms max	
longevity	mechanical	50×106 MIN（3Hz)
	electric	200×103 MIN (0.5Hz)
Environment	-40~+70℃	

2.8 485 device connections

1. Connect the 485 lines of the device with the DVR 485 interface.



the 485 interface of eight external alarm



the 485 interface of sixteen external alarm

2. Connect the video line with the DVR video input.

3. Electrify the device.

3 Basic operation

Note: The button in gray display indicates nonsupport.

3.1 Turn on

Plug the power supply and turn on the power supply switch. Power supply indicator light shining indicates turning on the video recorder. After the startup you will hear a beep. The default setting of video output is multiple-window output mode. If the startup time is within the video setting time, the timing video recording function will start up automatically. Then the video indicator light of corresponding channel is shining and the DVR is working normally.

Note:1. Make sure that the input voltage corresponds with the switch of the DVR power supply.

2. Power supply demands: 220V±10% /50Hz.

Suggest using the UPS to protect the power supply under allowable conditions.

3.2 Turn off

There are two methods to turn off the DVR. Entering [main menu] and choosing [turn off] in the [turn off the system] option is called soft switch. Pressing the power supply switch is called hard switch.

Illumination:

1、Auto resume after power failure

If the DVR is shut down abnormally, it can automatically backup video and resume previous working status after power failure.

2、Replace the hard disk

Before replacing the hard disk, the power supply switch in the real panel must be turned off.

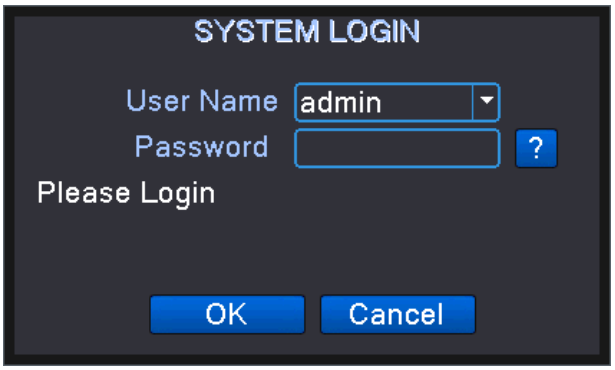
3、Replace the battery

Before replacing the battery, the setting information must be saved and the power supply switch in the real panel must be turned off. The DVR uses button battery. The system time must be checked regularly. If the time is not correct you must replace the battery, we recommend replacing the battery every year and using the same battery type.

Note: The setting information must be saved before replacing the battery otherwise information will lose.

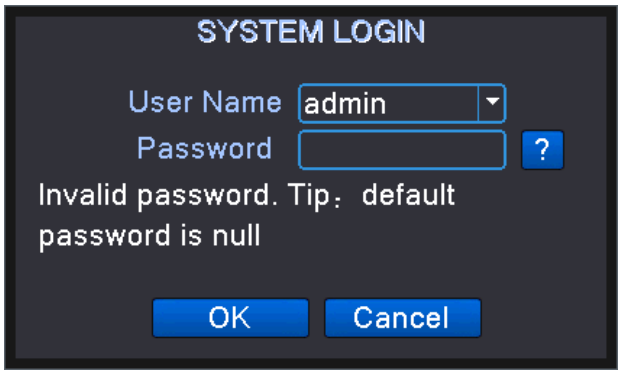
3.3 System Login

When the DVR boots up, the user must login and the system provides the corresponding functions with the user purview. There are two user settings. The names are **admin**, and **default** and these names have no password. **Admin** is the super user purview; **default**'s permissions are preview and video playback. User **admin**'s password can be revised, while their permissions can't be revised; user **default** is the default login user whose permission can be revised but not its password.



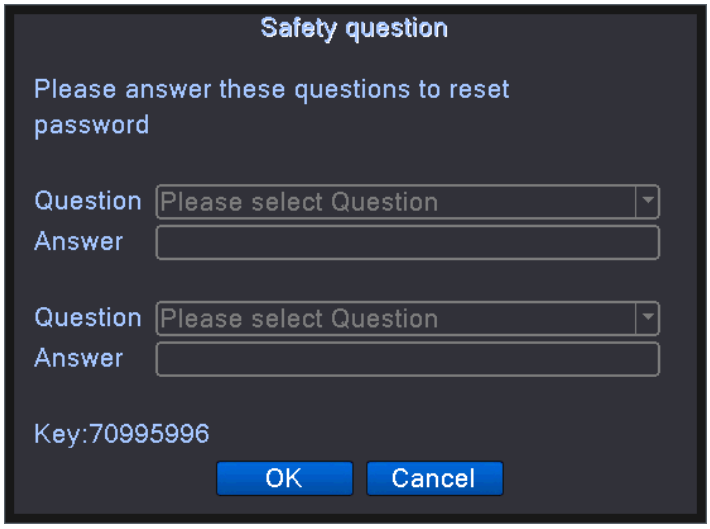
System Login

Password protection: If the password is continuous wrong three times, the alarm will start. If the password is continuous wrong five times, the account will be locked. (Through reboot or after half an hour, the account will be unlocked automatically).



Password error

Security issues: When you forget the password, you can click the "?" on the right and enter the reset interface to modify the password. Reminder: The default security question is not set, you need to enter the user management interface and set effectively. If you input the answer of error question 6 times continuously, password reset interface will be locked (the password reset interface will automatically unlock after restarting the system).

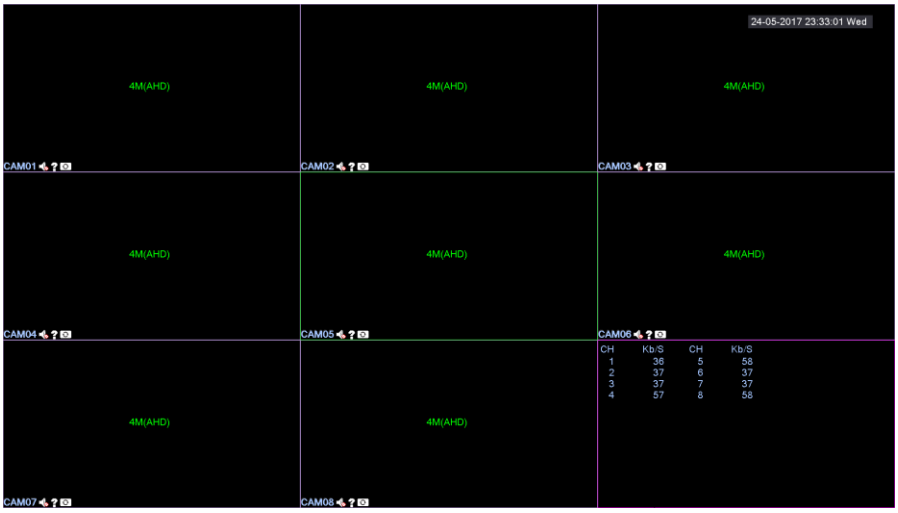


Security issues

For safety's sake, please change the user name, password, and security issue in User Management (see Section 4.5.2 User Management) immediately after the user first logs in.

3.4 Preview

You can enter the preview status after the device log in normally.



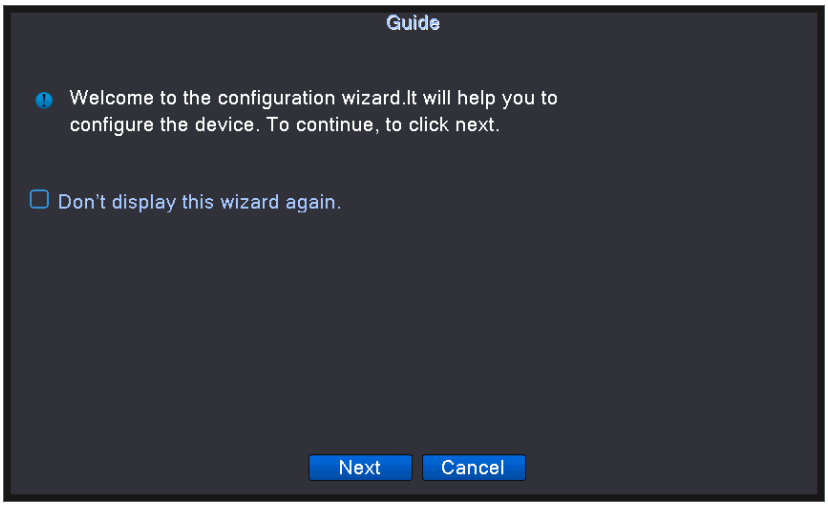
Preview status

The system date, time, channel name, bit value, channel resolution, and signal mode of each channel (most devices support) are shown in each viewing window. The surveillance video and the alarm status are shown in each window.

1		Channel video symbol	4		Channel video loss alarm symbol
2		Channel motion detect alarm symbol	5		Channel video blind alarm symbol
3		Channel audio button	6		Channel monitor locked status symbol
7		The maximum resolution channel support	8		Signal switch button between AHD&TVI＆CVI
9		Bit value of each channel (some devices support)			

3.5 Boot wizard

Boot wizard is used to guide the user in basic operation and configuration, there is slightly different between full analog channel mode and mixed / full network mode.

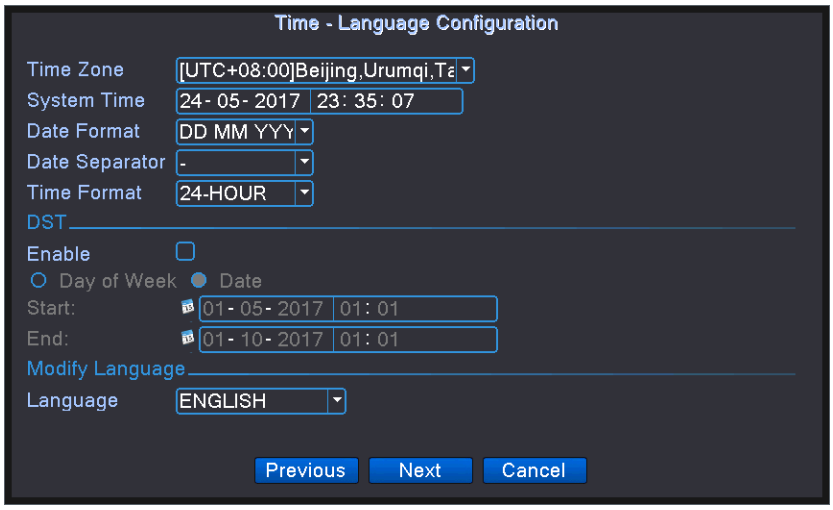


Boot wizard

【Don't display this wizard again】Reverse selection☑ means that it will no longer automatically start the boot wizard when start-up the device next time;

【Next】Click on the next step in time language, network test, network settings, mobile client download, mobile client to add equipment and other shortcuts;

【Cancel】Exit the boot wizard.



Time-language setting

【Time Zone】Configure the time zone for the DVR system time;

【System Time】Configure the system time of the DVR;

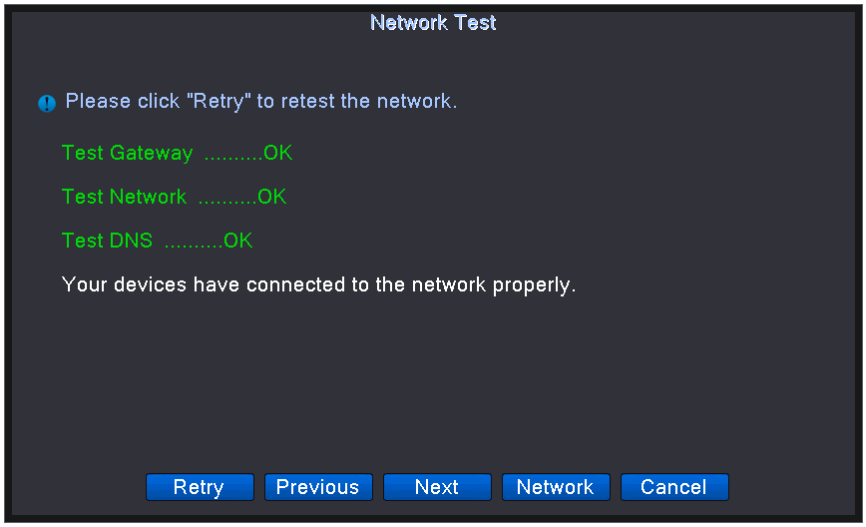
【Date Format, Date Separator】Configure the format of the DVR system time which was displayed on the preview interface;

【Time Format】Configure the display time in 12 or 24 hours system for DVR preview interface;

【DST】Configure whether using the daylight savings time or not and the usage time for DVR system time;

【Language】Configure the DVR system language;

【Next】Click Next to test the network configuration of DVR.



Network test

【Test Result】Show default gateway, network setting and DDNS test results, all show green color means OK and red color means ERR;

【Retry】Click “Retry”, you can restart network test;

【Network】Configure the IP address, gateway, DNS and so on of DVR;

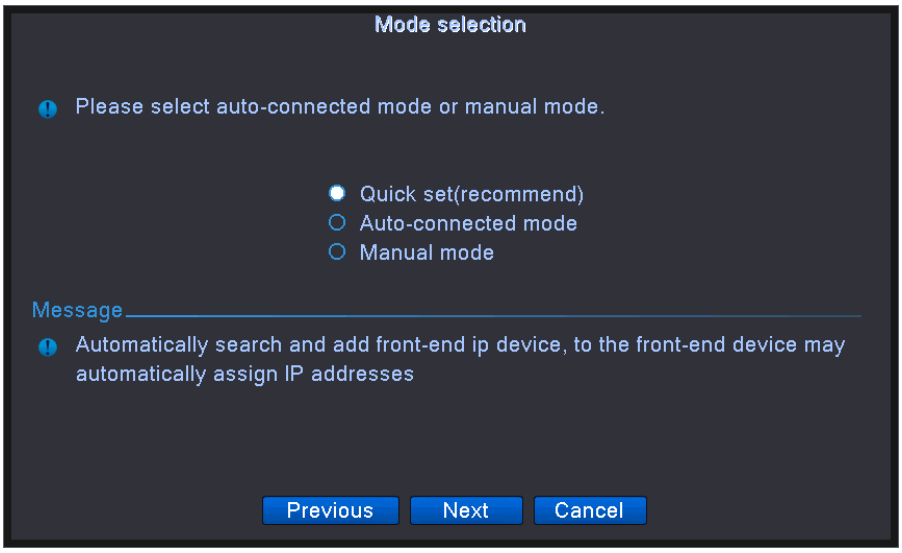
【Skip】A skip button appears after the test fails, and the user can skip the network test by clicking the button.

Install mobile software

Andrews or IOS mobile phone / flatbed scan "install the phone software map" in the corresponding two-dimensional code download and install the dedicated mobile client.

Open the phone client and enter the function of add device, scan the QR code to add a DVR to the mobile client. Refer to "Mobile Client User's Guide" for the use of the mobile client.

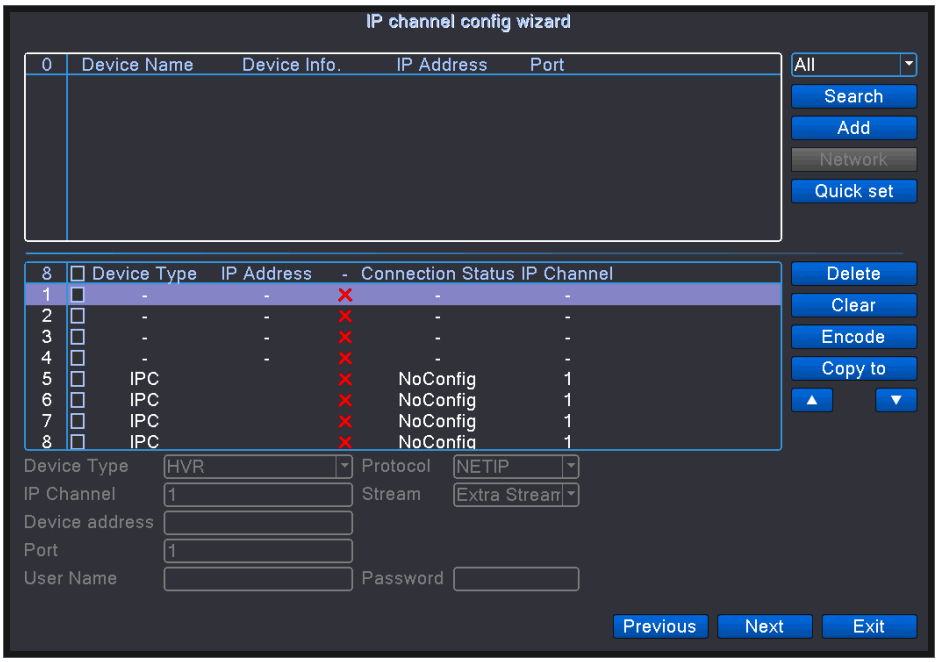
Above is the boot wizard for full analog channel mode, the boot wizard of mixed and full network mode add two steps which are mode selection and digital channel configuration.



【Quick set (recommend)】Select quick set mode and click Next, go directly to the digital channel configuration wizard and start automatically search the same local area network within the remote device IP, in accordance with the order of search to add to the video recorder in the channel, no longer need to add, add process You can manually cancel a key to set the process;

【Auto-connected mode】The DVR can automatically modifies the IP of the remote device within the same LAN to the same network segment and automatically completes the addition; when the function is enabled, the boot wizard ends;

【Manual mode】Select manual mode and click Next, enter Digital Channel Configuration Wizard;



Digital Channel Configuration Wizard

【Search】Click the search button, DVR search the same LAN within the network of remote devices, you have three protocol can be selected which are whole, NETIP and ONVIF and use one mode to search.

【Add】Select the search in the directory bar in the remote device, click add button to add to the DVR channel, you can also double-click the search to complete the device to complete;

【Network】When the IP address and the IP address of the DVR are different, the IP address, subnet mask, gateway and other settings of the remote device are modified by the network setting function;

【Quick set】According to the order of the search displayed, you can add the DVR to each channel in order, no longer need to add one by one, in the process of automatically add, you can manually cancel quick set process;

【Delete】Check the check box before the device type, click the delete button, and delete the selected remote device;

【Clear】Delete all remote devices that have been added;

【Encode】Set the resolution of the remote device;

【Copy to】Copies the remote device channel information that has been added to another channel, copying information, including user name, password, IP address, and so on;

【Device Type】There are three type of device, IPC, DVR and HVR three kinds of equipment optional, the user make the choice according to the actual demand, default is IPC;

【Protocol】Support NETIP and ONVIF two protocols, the system default is NETIP used to connect our

company's network camera, ONVIF used to connect third-party support ONVIF protocol network camera;

【IP Channel】When the user selects the DVR or HVR in the device type, the channel number to be added to the VCR;

【Stream】DVR connects to the front-end equipment using the main stream or auxiliary stream, the default for the main stream;

【Device Address】The IP address of the remote device added to the DVR, the system defaults to 192.168.1.20;

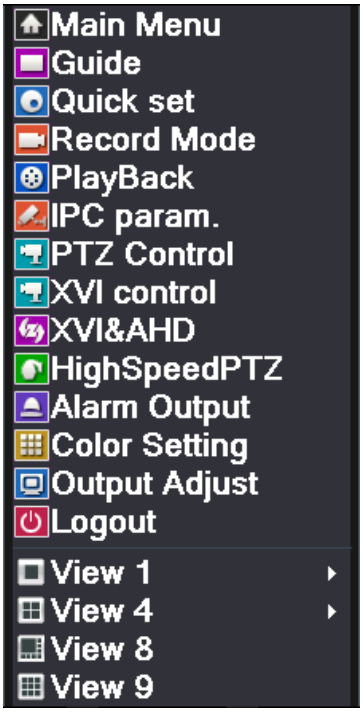
【Port】The TCP port of the remote device added to the DVR, the system defaults to 34567; ONVIF is connected to ONVIF port;

【User Name, Password】The login user name and password of the remote device added to the VCR.

3.6 Desktop shortcut menu

In preview mode you can right click mouse to get a desktop shortcut menu,as the picture 3.2 shows. The menu includes: **main menu, record mode, playback, PTZ control, High Speed PTZ, Alarm Output, color Setting, Output adjust, Logout, view mode shift ,spot.**

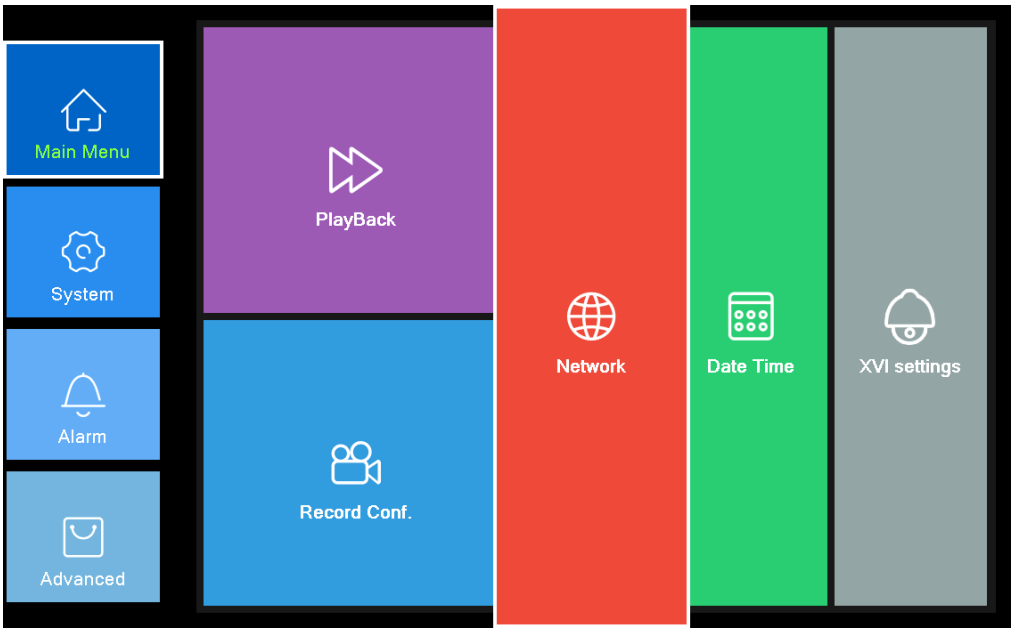
***Only partial model of 6000 series support Spot.**



Shortcut Menu

3.6.1 Main menu

The main menu includes the configuration of the function parameters of the DVR. For details, please refer to Chapter 4.



Main Menu

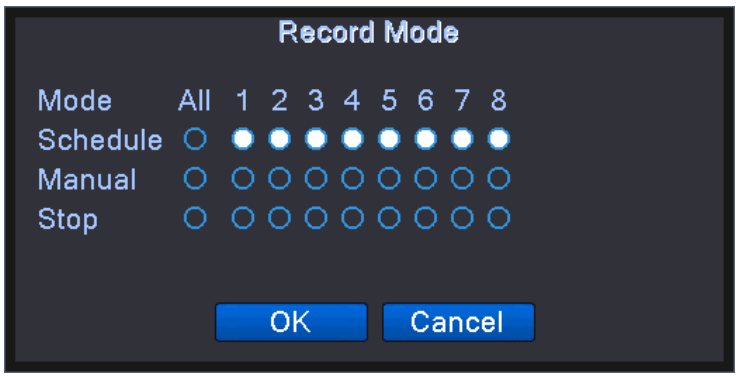
3.6.2 Boot wizard

Please refer to Section 3.5 Boot Wizard for the detail of boot wizard function.

3.6.3 Record control

Please check current channel status: "●" means it is not in recording status, "•" means it is in recording status.

You can use desktop shortcut menu or click [main menu]> [recording function]> [recording set] to enter the recording control interface.



Record control

【Schedule】Record according to the configuration.

【Manual】Click the all button and the according channel is recording no matter the channel in any state.

【Stop】Click the stop button and the according channel stops recording no matter the channel in any state.

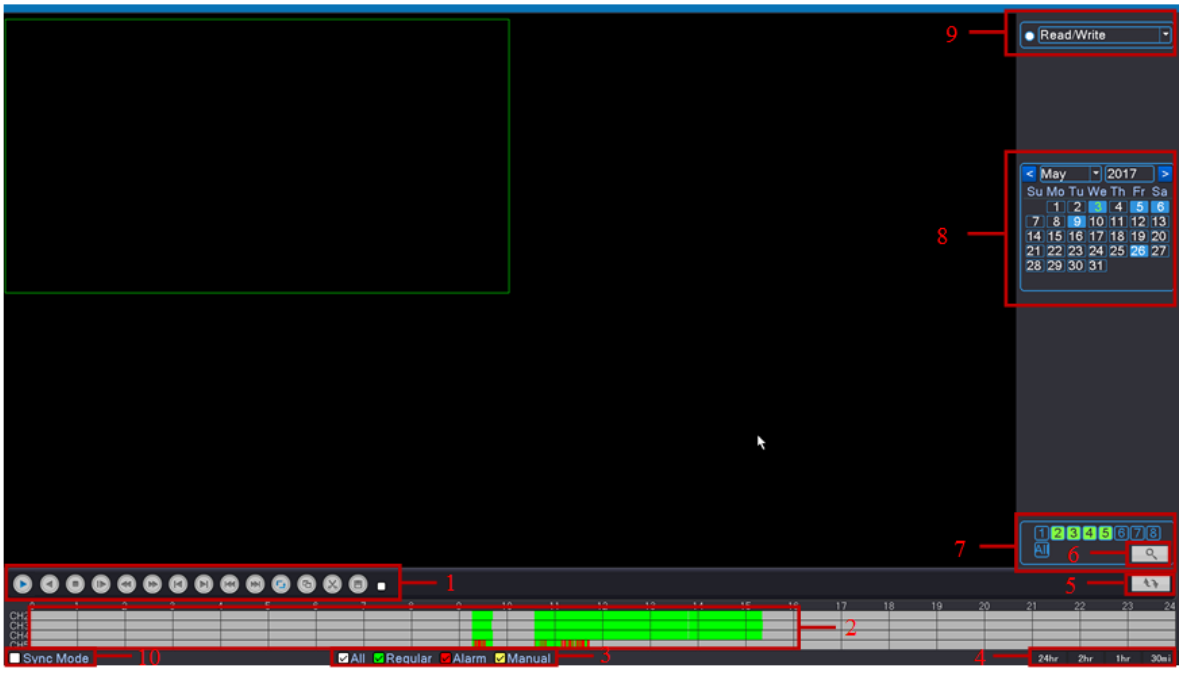
3.6.4 Playback

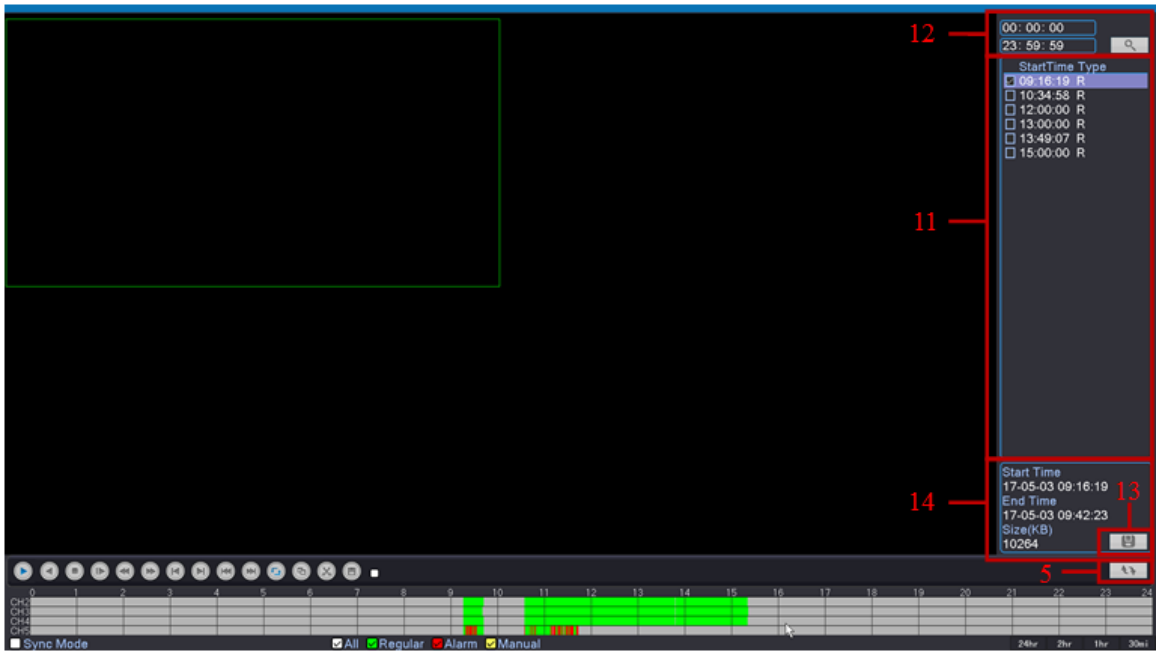
There are two methods for you to play the video files in the hard disk.

1、 In the desktop shortcut menu.

2、 Main menu>Record->Playback

Note: The hard disk that saves the video files must be set as read-write or read-only state.(4.5.1).





video playback

1. Playback control	2. Time display	3. Video type	4. Time schedule options
5. Switch by time/file/mode	6. File search	7. Selected by channel	8. Selected by time
9. search by storage location	11. Listed files	12.search by time	13.File backup channel
14.Files information			

【Playback control】See detail in below chart

Button	Function	Button	Function
/	Play/Pause		Backward
	Stop playback		Slow play
	Fast backward		Fast play
	Previous frame		Next frame
	Previous file		Next file
	Round play		Full screen
	Begin/end to edit		Backup

Table Playback control key

Note: play under frame by frame, the playback status should be paused firstly.

【Listed files】Look up the listed files that accord with the searching criteria.

【File Attributes】Look up the found file information.

【Operation tips】show function of the key that cursor placed.

Special functions：

Accurate playback： Input time (h/m/s) in the time column and then click play  button. The system can operate accurate playback according to the searching time.

Local zoom： When the system is in single-window full-screen playback mode, you can drag your mouse in the screen to select a section and then left click mouse to realize local zoom. You can right click mouse to exit.

Note: When current resolution of the channel is over Max resolution, to playback this channel, will show a Red "X".

3.6.5 Thumbnails

Note: Support for storing and playing back thumbnails only in full analog channels or mixed mode.

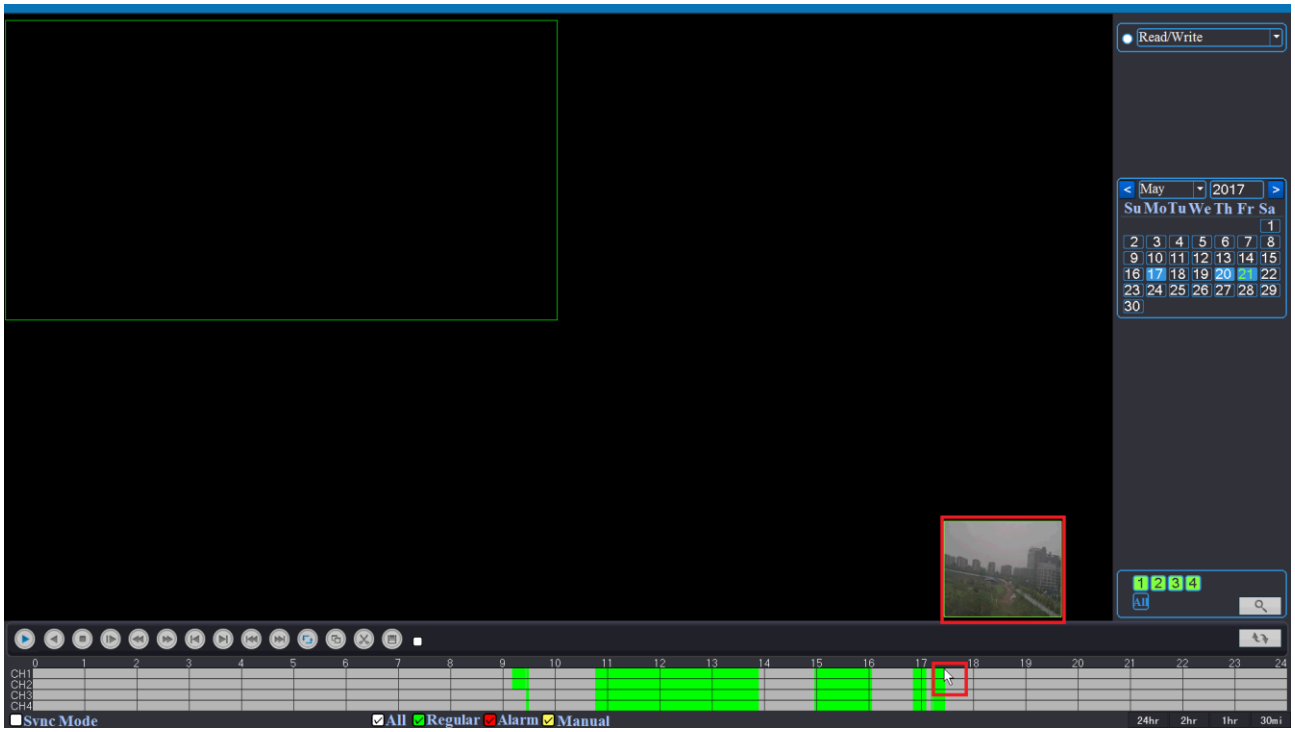
Thumbnail switch position:

1、Record function ->Image storage -> thumbnail.

2、Record function -> Record configure -> thumbnail.

Note: The reason for the inconsistencies in location is that some devices do not support capturing picture storage

The way for View: move the mouse on the progress of the bar, if it shows" there is no thumbnail" means that there is no thumbnail at this point in time.



Thumbnails playback

3.6.6 PTZ control

PTZ control is a little different between hybrid mode & full digital mode:

Digital channel – the digital channel need link PTZ, the remote device should connect with PTZ and with protocol correctly set also.

Analog channel –The analog channel as long as the DVR access PTZ and set the correct agreement, you can use.

Before use, please note

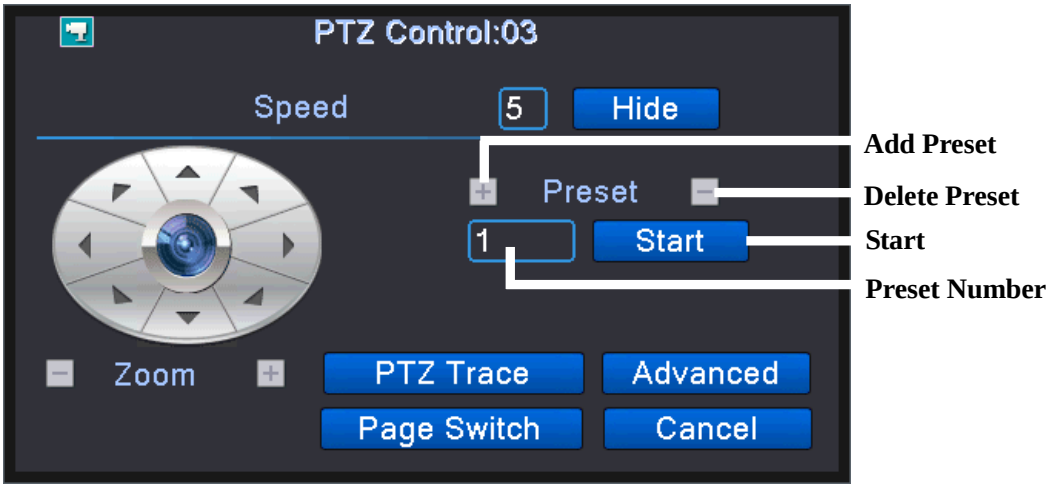
①. Decoder A(B)line connects with DVR A(B)line. The connection is right.

②. Click [main menu] >[system configuration] >[PTZ setup] to set the PTZ parameters.

③. The PTZ functions are decided by the PTZ protocols.

1、PTZ control

Operation interface is as followed. The functions include: PTZ direction control, step, zoom, focus, iris, setup operation, patrol between spots, trail patrol, boundary scan, assistant switch, light switch, level rotation and so on.



Picture 3.8 PTZ setup

【**Speed**】Set the PTZ rotation range. Default range: 1 ~ 8.

【**Zoom**】Click / button to adjust the zoom multiple of the camera.

【**Focus**】Click / button to adjust the focus of the camera .

【**Iris**】Click / button to adjust the iris of the camera.

【**Hide**】Current interface will be temporarily hidden after click it.

【**Direction control**】Control the PTZ rotation. 8 directions control is supportive.(4 directions in Front panel is supportive)

【**High speed PTZ**】Full-screen show channel image. Left press mouse and control PTZ to rotate orientation. Left press mouse and then rotate the mouse to adjust the zoom multiple of the camera.

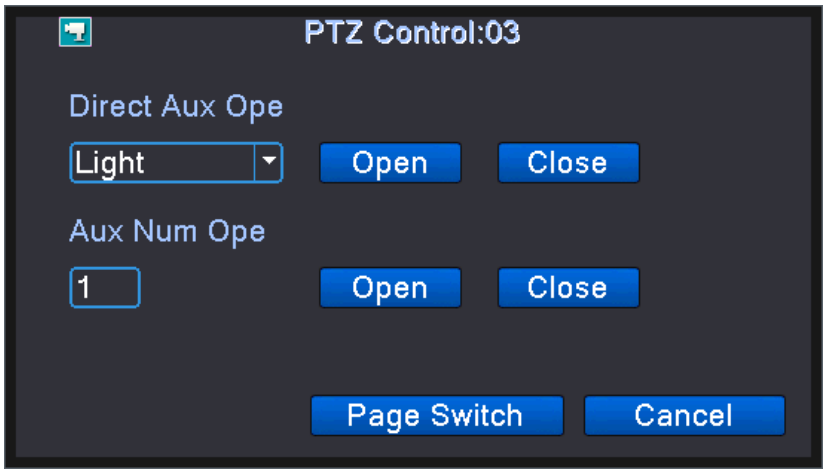
【**Set**】Enter the function operation menu.

【**Page switch**】Switch between different pages.

【**Cancel**】Exit PTZ control function.

2、Page switch

Click on the page switch to enter the accessibility page, this page allows you to set up the intuitive auxiliary operation and the auxiliary number operation function. Intuitive auxiliary operation can turn on and off the light, the auxiliary number corresponds to the auxiliary switch on the decoder.

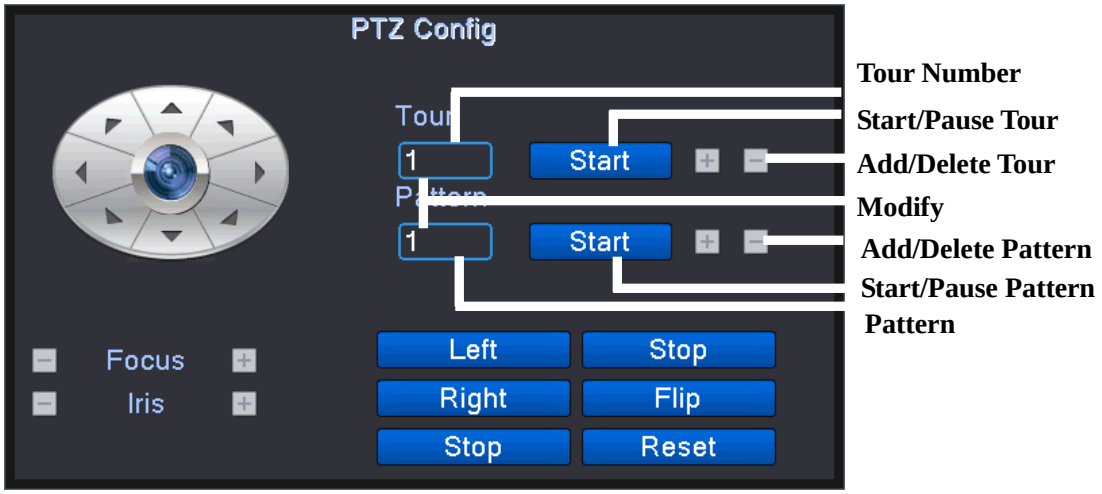


Auxiliary function operation

Click the Page switch button on the auxiliary function operation interface, enter the PTZ menu control page. In this page you can control the PTZ itself menu through the control keys of menu.

PTZ menu control

3、Advanced



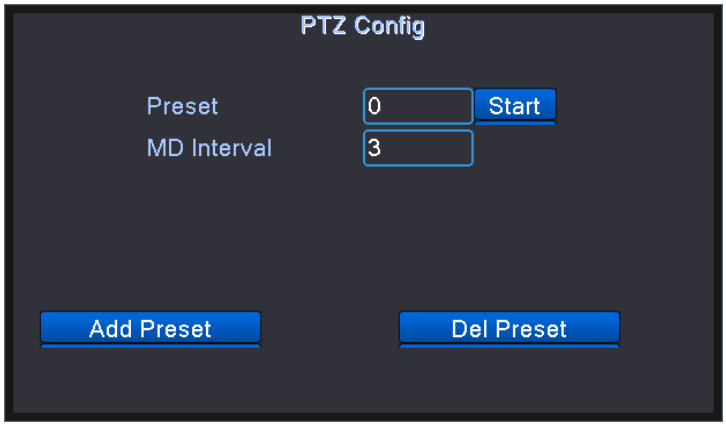
Advanced PTZ settings

【**Resume**】Restart the pan head to restore the factory settings;

【**Focus**】Use the - / + key to adjust the camera focal length, need camera lens support auto focus;

【**Iris**】 Use the - / + key to adjust the camera aperture size, need to support the camera lens aperture;

【**Cruise between Points**】Multiple preset points connected cruise lines, call cruise between points, the PTZ run around on the line. The first time you add a point between the cruise route, you should click on the add between the cruise button to enter the cruise route settings page:



Cruise between Points

In the Presets drop-down box, select the preset points that you want to add to the cruise route, set the interval (between 3 and 255 seconds), and then click the Add Preset button to complete the addition of the preset.

Click the Start button to call the selected preset point, Click Clear the preset point to delete the selected preset point in the cruise route; Use the Preset Point drop-down menu to view the preset number that has been added to the current cruise route.

You can modify the cruise routes that have been added by clicking the Set point Cruise button.

In the Dot Cruise Serial Number drop-down menu, select the cruise route you want to call. Click the Start button to call the cruise route and click the Stop button to stop cruising.

【**Patrol**】Through the operation of the head, the recorder will be recorded in the trajectory of the operation, and then call the patrol, the pan / tilt head will run repeatedly according to the recorded track. The first time you add a track, click the Add Track button to enter the track setup page:

Patrol setting

Through the track settings page PTZ arrow keys, zoom, focus and aperture control PTZ movement, complete the route recording and click the button to complete the record to save the route.

Click the Start button to call the patrol route, click the Stop button to stop the call, and click the Delete Track button to delete the patrol route.

【Line sweep】Set the left and right borders in the horizontal direction, and call the head of the head to run between the left and right borders in the horizontal direction.

Click on the left border button and then through the PTZ horizontal key to control the PTZ rotation, reach the location and click the right border button to complete the border settings. Click the line sweep button to call the line sweep path, click the stop button to stop the call.

【Horizontal rotation】Click the horizontal rotation button, horizontal rotation (relative to the camera's original position for horizontal rotation). Click the stop button to stop the horizontal rotation.

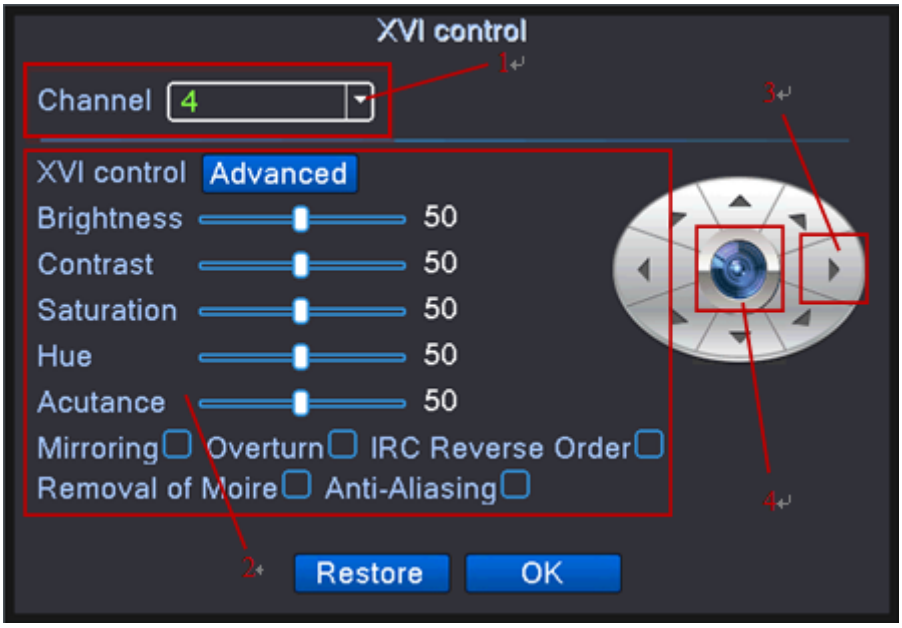
【Flip】 Click the horizontal rotation button, PTZ to flip.

【Reset】 PTZ restart, all set of data set to zero.

3.6.7 XVI control

The coaxial control function allows the DVR to transmit the control signal to the front end camera through the coaxial cable. Through these control signals, the DVR can control the PTZ, menu and other functions of the front camera.

Coaxial control functions require front-end cameras support coaxial control also.



XVI control

【1、Channel selection】Click the drop-down menu, select the need to control the channel;

【2 、Front-end parameter adjustment】 By dragging the mouse button to adjust the front-end screen parameters or check the function to adjust the image;

【3、OK】 Enter the OSD menu of the front camera or confirm the function.

【4、direction keys】 Use the four arrow keys to control the front-end camera's OSD menu;

3.6.8 High speed PTZ

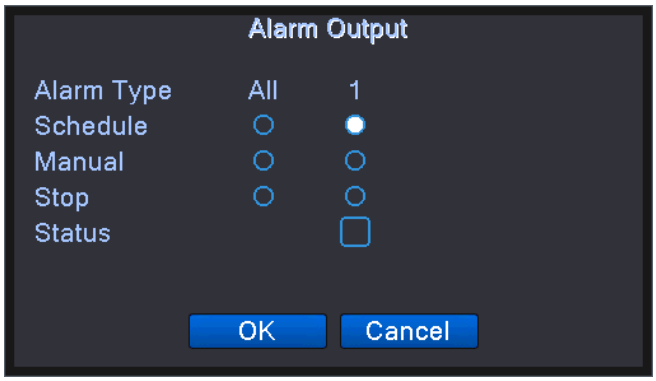
You can quickly call the PTZ to reach the designated location through the high-speed PTZ function, the specific operation, please read 3.6.5 PTZ control

3.6.9 Alarm output

Please check current channel status: "○" means it is not in alarming status, "●" means it is in alarming status.

You can use desktop shortcut menu or click [main menu]> [alarm function]> [alarm output] to enter the alarm output interface.

Note: Some models have no alarm output function



Alarm output

【Configuration】Alarm is on according to the configuration.

【Manual】Click the all button and the according channel is alarming no matter the channel in any state.

【Stop】 Click the stop button and the according channel stops alarming no matter the channel in any state.

【Status】 Selected that the current alarm signal output, no check that there is no alarm signal output.

3.6.10 Color setting

***Color config:analog channel can config its own color,digital channel can config front-end image(only NETIP-conformed device is supported,ONVIF-conformed device is not supported)**

Set the selective image parameters (current channel for single window display and cursor place for multi-window display). You can use the desktop shortcut menu and enter the interface. The image parameters include: tonality, brightness, contrast, saturation. You can set different parameters at different time sections.

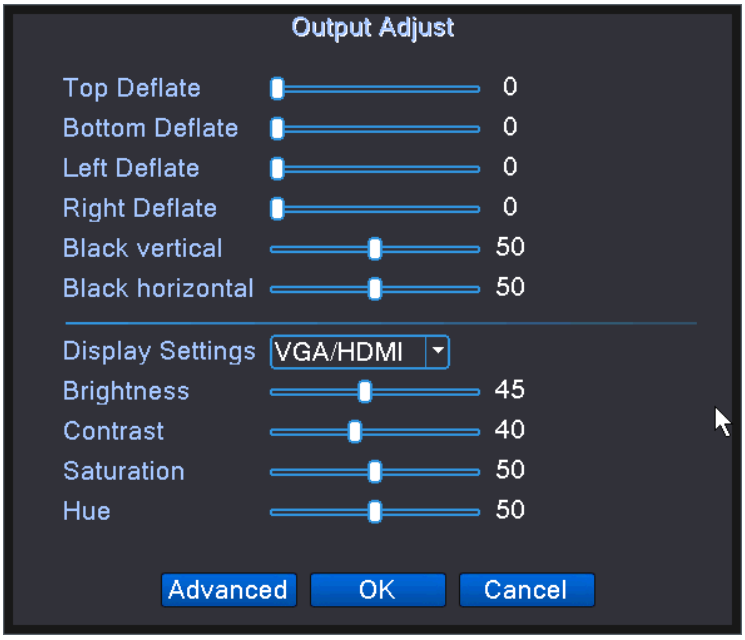
Color Setting

3.6.11 Output Adjust

The user can adjust the output side edge saturation, color tone, etc in VGA, HDMI through this function. So the output of the DVR is more suitable for the use of the display.

***Hybrid mode is with black margin vertical & horizontal, while full digital mode without.**

Adjust TV output area parameters. You can use the desktop shortcut menu or enter [main menu]> [management tools]> [Output adjust].



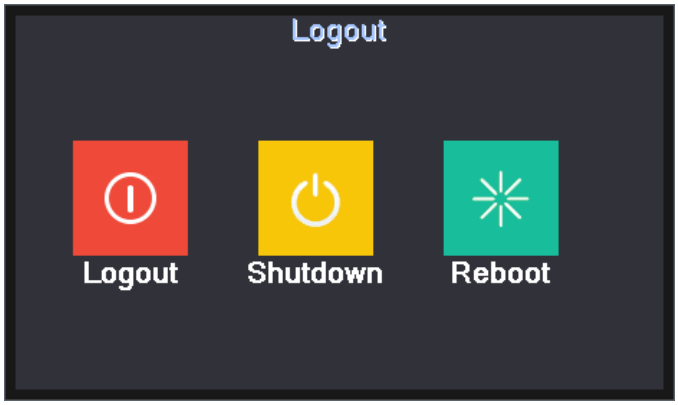
Output Adjust

Note: The black margin vertical & horizontal at output adjust of hybrid mode is only effect to analog channel.

3.6.12 Logout

By turning off the system function, the user can log off the current user login, close and restart the recorder.

Logout, shut down the system or reboot up. You can use the desktop shortcut menu or enter [main menu], enter the close system interface.



Logout/Shutdown/Reboot the system

【**logout**】Quit the menu. Offer password next entrance.

【**shut down**】Quit the system. Turn off the power supply.

When press the shut down button, there is schedule hint. After three seconds, the system is shut down. Cancel midway is of no effect.

【**reboot**】Quit the system. Reboot up the system.

3.6.13 Window switch

Preview in single window/four windows/eight windows/nine windows/sixteen windows according to your choice.

Note：Different video input number have different switchable preview picture.

3.6.14 Quick set

Quick addition exists only in the network channel, which allows you to quickly add remote devices to the recorder network channel.

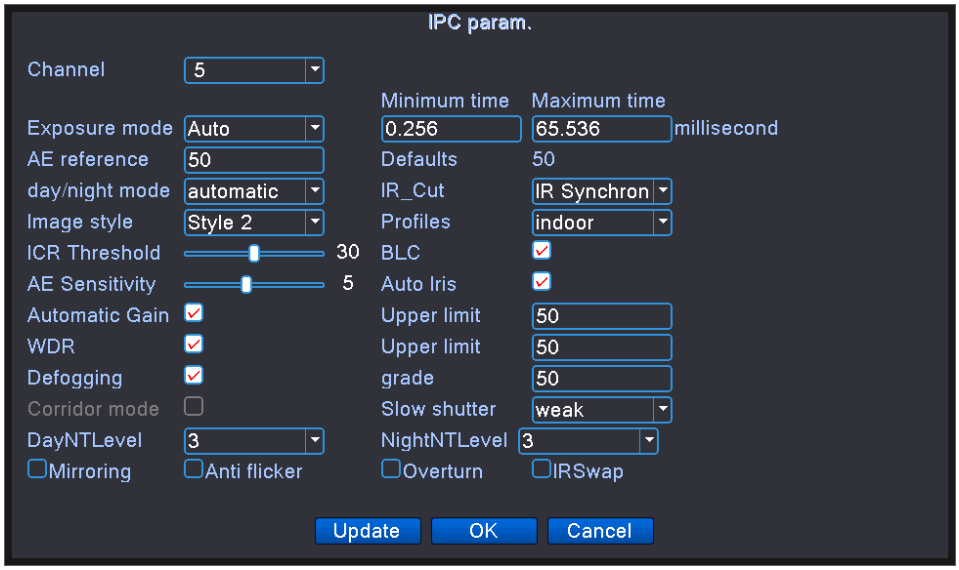
Click the "+" icon in the preview screen to bring up the Digital Channel Configuration Wizard page, where you can add the remote device to the VCR network channel. The add operation, please read "3.5 Boot Wizard".

3.6.15 Camera parameter

The function is only available in all digital and mixed channel mode, it is used to set the remote IPC camera parameters, the gray character indicates that the remote device does not support this function. Use the function to adjust the various front-end parameters of the connected IPC, such as exposure

mode, day / night mode, image style, day and night switching threshold, AE sensitivity, automatic gain, wide dynamic, de-fog, corridor mode Support), electronic speed door, day / night noise level, mirror, fluorescent light flash, flip, IR lens sequence and so on.

Note: The network recorder successfully connects the company's IPC (ie, the NETIP protocol connection) and supports this function only under a single connection. If the IPC connected to the third party (ONVIF protocol connection) is not supported.



【Exposure Mode】 Set the exposure time of the camera to switch between automatic and manual 1/50 to 1 / 10000S. The shorter the exposure time, the darker the preview screen.

【Day and night mode】By manually setting the camera to modify the day and night mode:

Automatic: The camera according to the actual ambient light, automatic control preview screen color or black and white;

Color: The ambient light is insufficient, the camera still keep the color preview screen, do not turn black and white;

Black and white: When the ambient light is sufficient, the camera preview screen shows black and white.

【Backlight compensation】Turn off or turn on the backlight compensation function, backlight compensation open in the bright background environment is still able to see the main scene of the scene.

【Auto iris】 Turn off or turn on the auto iris function, this function requires the camera to install the lens that supports the auto iris.

【Scene mode】 provides automatic, indoor and outdoor three modes for the camera to use in different environments.

【**Auto Exposure Reference**】Set the exposure of the camera, between 0 and 100, the greater the reference value, the brighter the preview screen, and the darker the other.

【**Day and night conversion threshold**】Related to IR_CUT switching mode:

In the IR_CUT automatic switching mode: The mode of day and night is the critical point when switch automatically between color and black and white. The greater day and night conversion threshold, the higher brightness of color to black, and vice versa lower.

In the IR_CUT infrared synchronous switching mode: Day and night conversion threshold 10-20 means turn off the anti-shake function, 21-30 anti-shake time is 3S, 31-40 anti-shake time for the 4S, 41-50 anti-shake time of 5S.

【**AE Sensitivity**】 When the ambient light changes drastically, the camera adapts to the length of time with changing light. The higher of the AE sensitivity, the shorter of the adaptation time, the smaller of the adaptation time.

【**Automatic Gain**】 Set the automatic gain off or on, When the light is turned on automatically adjusts the sensitivity of the camera to adjust the brightness of the screen.

【**Wide Dynamic**】 Set wide dynamic off or open, wide dynamic open in the bright background environment to adjust the "upper limit" to enable clear to see the center of the main scene.

【**To the fog**】 set fog off or open, to fog open when the fog or haze weather picture permeability improved, with the level to improve the fog effect the better.

【**Corridor Mode**】 Set the fog to close or open the corridor mode when the camera screen is displayed in corridor mode (this function is only partially supported by the camera).

【**Electronic slow shutter**】 Set the electronic slow shutter off or strength, you can set the electronic slow shutter off, weak, and strong, through the frame to increase the way to increase the brightness, extend the exposure time to enhance the low light intensity of the image The

【**IR_CUT**】 Can be set automatically switch or infrared synchronization switch:

Automatic switching: ICUT according to the actual environment of the camera in which the degree of light and shade to switch;

Infrared synchronization switch: ICUT switch by the infrared light state decision.

【**Day noise reduction level**】 When the light is enough to eliminate the preview screen noise level, the higher the level the better the noise reduction effect.

【**Night noise level**】When the light is not enough to eliminate the preview screen noise level, the higher

the level the better the effect of noise reduction.

【**Mirror**】Enable the preview screen to turn around 90 °.

【**Flip**】 Enable the preview screen up and down 90 °.

【**Fluorescent light flash**】In the fluorescent environment to get rid of the preview screen in the horizontal scroll stripes.

【**IR lens reverse order**】IR_CUT reverse order, preview screen appears IR_CUT reverse order when used.

3.6.16 AHD&TVI&CVI signal switching

This function is only support part of the model analog channel, controlling the signal mode of each channel. You can click the right to enter through the shortcut menu. You can also directly through the left mouse button double-click the channel at the bottom of the signal switch icon  to achieve the signal AHD & TVI & CVI signal switching.

4 Main menu

4.1 Main menu navigation

Main menu	Sub menu	Function
Main menu	playback	Set recording search, recording play, video file storage
	Configure	Set the recording configuration, recording type, recording time section
	Network	Set the basic network parameters, and set the DHCP, DNS parameters, network high-speed download, network transmission strategy.
	NetService	PPPOE, NTP, Email, IP rights, DDNS parameters, PMS, FTP, alarm center, cloud services, RTSP, wireless dialing, WIFI, etc.
	Date and Time	Set the system time, date format, date separator, time format, daylight saving time

	XVI setting	XVI control, image enhancement, XVI upgrade
Alarm	Motion detection	Set motion detect alarm channel, sensitivity, area, linkage parameters: defending time section, alarm output, screen hint, recording, screen shot, PTZ, patrol, buzz, email ， PMS and FTP upload
	Video blind	Set camera mask alarm channel, sensitivity, linkage parameters: defending time section, alarm output, screen hint, recording, screen shot , PTZ, patrol, buzz, email ， PMS and FTP upload
	Video loss	Set video loss alarm channel, linkage parameters: defending time section, alarm output, screen hint, recording, screen shot , PTZ, patrol, buzz, email ， PMS and FTP upload
	Alarm input	Set alarm input channel, equipment type, linkage parameters: defending time section, alarm output, screen hint, recording, screen shot , PTZ, patrol, buzz, email ， PMS and FTP upload **Note：T series have no this function**
	Alarm output	Set alarm mode: configuration, manual, shut down **Note：T series have no this function**
	Exception handling	No HDD, HDD error, HDD capacity not enough, network cut, IP Conflict, linkage parameters, screen hint or buzz.
	Intelligent analysis	Set algorithm rule: trajectory display、sensitivity、minimum pixel、alert mode，and setting linkage parameters:period、alarm output、the screen prompt、record、PTZ、tour、buzzer、EMAIL、FTP upload. **Note: 6000 series support this function**
System configuration	General configuration	Set system time, data format, language, hard disk full time operation, machine number, video format, output mode, summertime, stay time
	Encode configuration	Set main (extra) coding parameter: code mode, resolving ability, frame rate, code stream control, image quality type, code stream value, frame between value, video/audio enable, **Note：only Hybrid mode and full analog mode have encode configuration.**

	Backup	Detect backup device, format device, back the selective files
	Image storage	Set each channel capture configuration, capture type, capture time period and so on Note: Some models are supported in some mode
	Output mode	Set the channel name of the front end, preview the prompt icon status, transparency, area overlay, time header and channel header overlay; Note: The channel name setting, area coverage, time header, and channel header overlay settings are only available for analog channels.
	Tour	Set patrol mode and interval time
	User Management	Modify users, modify groups, modify passwords, add users, add groups, delete users, delete groups, , security issues
	Serial port Configuration (RS232)	Set serial port function, baud rate, date bit, stop bit, check **Note：T series have no this function**
	PTZ configuration	Set channel, PTZ protocol, address, baud rate, date bit, stop bit, check **Note：Hybrid mode shows PTZ configuration,T series have no this function.**
	RS485 Device	Set serial port function, baud rate, date bit, stop bit, check **Note：Full digital mode shows : RS485 Device**
	Channel Mode	Set the channel mode, view the channel status, and set the parameters of the digital channel Note: only part of the product support
	IPC Parameter	Set the front-end IPC parameters such as exposure mode, day / night mode, image style, day and night switching threshold Note: The front end of the ONVIF connection is not supported
Management tools	Hard disk management	Set appointed hard disk as read-write disc, read-only disc or redundant disc, clear data, resume date and so on

	Output adjust	Adjust upside, downside, nearside, starboard distance, black margin vertical & horizontal **Note：only analog channel have black margin vertical & horizontal**
	Automatic maintenance	Set automatic reboot system and automatic deleting files.
	Restore	Resume setup state: common setup, code setup, recording setup, alarm setup, network setup, network service, preview playback, serial port setup, user management
	Upgrade	upgrade with external device(like USB)
	Import/Export	Export the device's log or configuration to external device(like USB flash disk);Input the configuration with external device(like USB flash disk).
	Device Info	device hardware configuration and message
	Log information	Clear all log information according to the log video and time
	Stream statistics	show stream information
	Version information	Show stream information
Shut down		Logout, shut down or reboot

4.2 Record

User can set the DVR, including playback, video settings, capture function, network settings, network services, date and time, XVI.

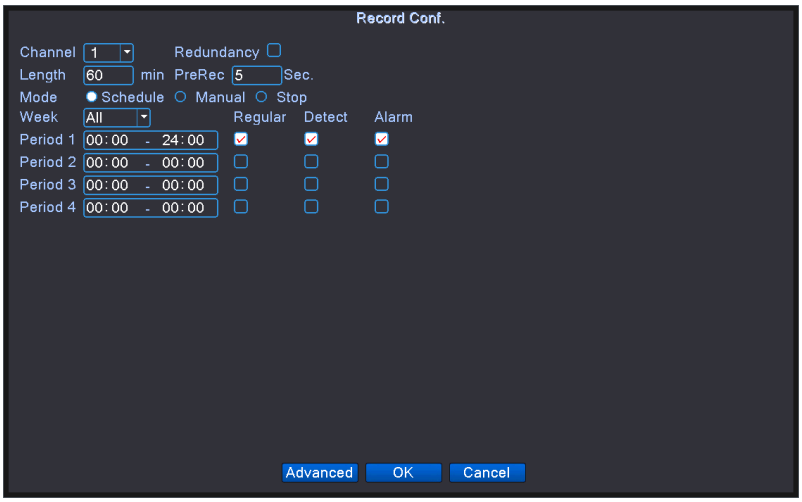
4.2.1Playback

Refer to chapter 3.6.4.

4.2.1Record setup

Set the recording parameters in the surveillance channel. The system is set 24 hours consecutive recording in the first startup.

Note: There is at least one read-write hard disk.（refer to chapter 4.5.1）



Record setup

【**Channel**】Choose the corresponding channel number to set the channel. Choose the all option to set the entire channels.

【**Redundancy**】Choose the redundancy function option to implement the file double backup function. Double backup is writing the video files in two hard disks. When you do the double backup, make sure that there are two hard disks installed. One is read-write disk and the other is redundant disk. (refer to 4.5.1)

【**SD card video**】 VCR installed SD card, open the SD recording function, the video recorder can be stored in the video file SD card.

Note: Some models support SD card video.

【**Length**】Set the time length of each video file. 60minutes is default value.

【**Pre-Record**】Record 1-30 seconds before the action. (time length is decided by the code stream)

【**Record mode**】Set video state: schedule, manual or stop.

Schedule: Record according to the set video type (common, detection and alarm)and time section.

Manual: Click the button and the according channel is recording no matter the channel in any state.

Stop: Click the stop button and the according channel stops recording no matter the channel in any state.

【**Period**】Set the time section of common recording, The recording will start only in the set range.

【**Record type**】Set recording type: regular, detection or alarm.

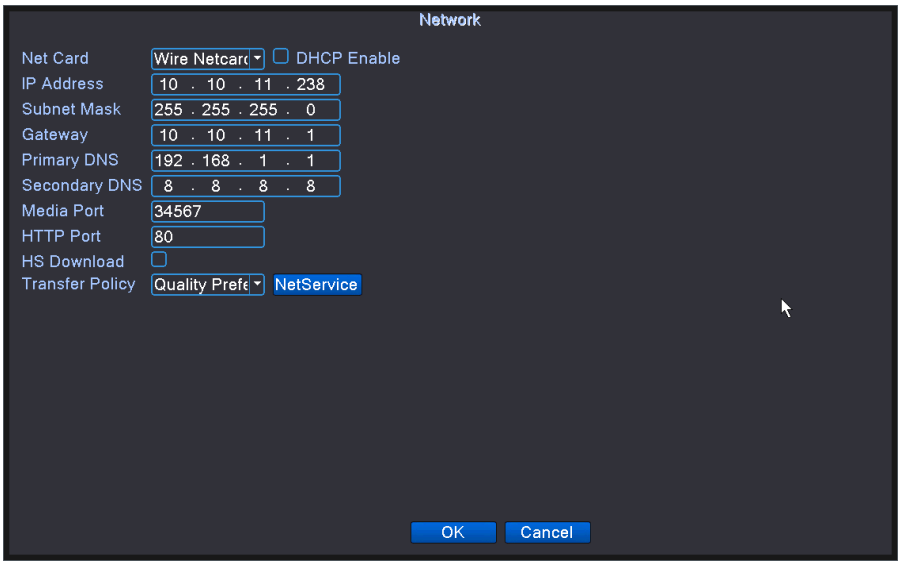
Regular: Perform the regular recording in the set time section. The video file type is “R”.

Detection: Trigger the “motion detect”, “camera mask” or “video loss” signal. When above alarm is set as opening recording, the “detection recording” state is on. The video file type is “M”.

Alarm: Trigger the external alarm signal in the set time section. When above alarm is set as opening recording, the “detection recording” state is on. The video file type is “A”.

Note: Refer to chapter 4.3 to set corresponding alarm function.

4.2.3 Network



Network

【**Net Card**】You can choose cable network card or wireless network card.

【**IP address**】Set the IP address. Default: 192.168.1.10.

【**Subnet mask**】Set the subnet mask code. Default: 255.255.255.0.

【**Gateway**】Set the default gateway. Default: 192.168.1.1.

【**DNS setup**】Domain Name Server. It translates the domain name into IP address. The IP address is offered by network provider. The address must be set and reboot then it works.

【**Media port**】Default: 34567.

【**HTTP port**】Default: 80.

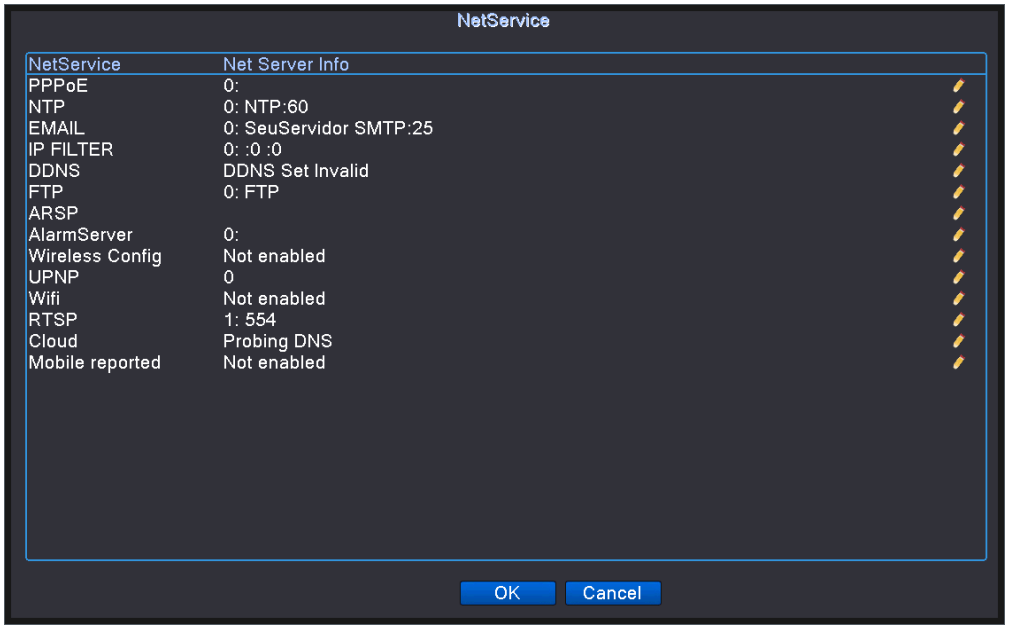
【**HS Download**】Enabled it, the network can increase the speed of video files;

【**Transfer Policy**】There are three strategies: self-adaption, image quality precedence and fluency

precedence. The code stream will adjust according to the setup. Self-adaption is the tradeoff between the image quality precedence and fluency precedence. Fluency precedence and self-adaption are valid only when the assistant code stream is turned on. Otherwise image quality precedence is valid.

【Network Service】 Set the advanced network functions such as PPPOE, Email and mobile phone, select the network service item and click the setting key or double-click the service item for parameter configuration.

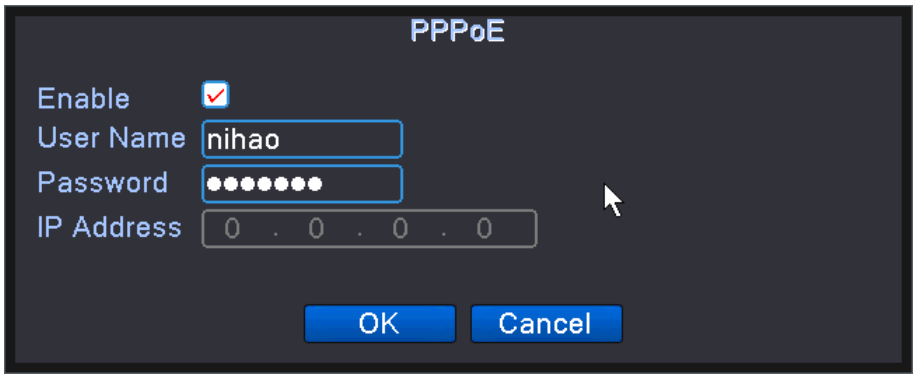
Part of the movement only supports some of these functions.



NetService

1、PPPOE setup

The DVR is connected to the WAN via the PPPOE function for remote access, which requires a dedicated PPPOE dial-up network.



PPP0E

【Enable】: Reverse■ means choose,setting can become effective.

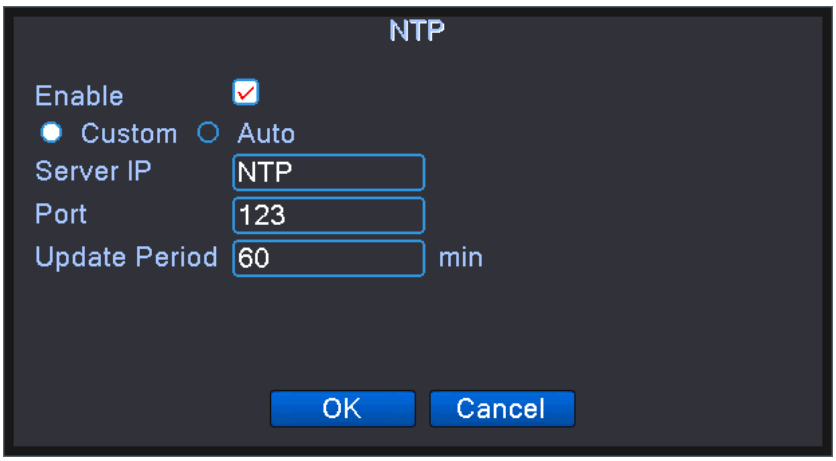
【User name, Password】 Input the user name and password that ISP（Internet service provider）

provides. After saving it reboot up your system. Then the DVR will build a network connection based on PPPoE. The IP address will change into dynamic IP address after above operation is well done.

Operation：After PPPoE dialing successfully look up the IP address in the [IP address] and obtain the current IP address. Then use this IP address to visit the DVR through user port.

2、NTP setup

The NTP function enables the DVR to synchronize with the specified time server in the set time interval.



NTP setting

【**Enable**】Reverse ■ mean choose，setting can become effective.

【**Custom**】 Adjusts the device time according to the connected server time.

【Server Address】 Enter the IP address of the time server, if you use the Windows system computer as a time server needs to install and enable the NTP service function;

【**Port**】Default: 123. You can set the port according to NTP server.

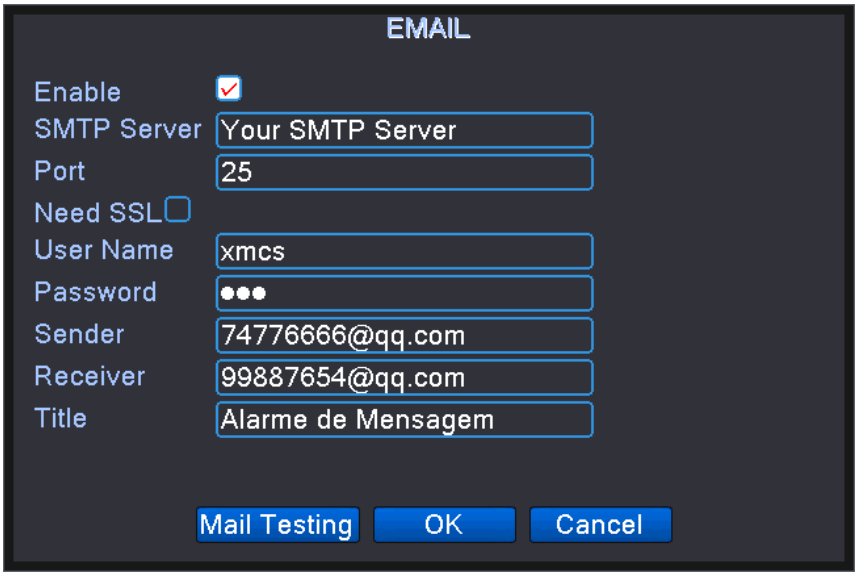
【**Update Period**】The same with the NTP server check interval. Default: 10minutes.

【**Auto**】Networked state, according to the network time automatically adjust the equipment time.

3、EMAIL setup

If the alarm is turned on or the alarm linkage photos are taken, send an email about the alarm information and the photos t

o appointed address.



EMAIL setting

【**SMTP server**】Email server address. It could be an IP address or domain name. Domain name can be translated only it is the correct DNS configuration.

【**Port**】Email server port number.

【**SSL**】Decide whether using Secure Socket Layer protocol to login.

【**User Name**】Apply the email server user name.

【**Password**】Input the password corresponding to the user.

【**Sender**】Set the email sender address.

【**Receiver**】Send the email to appointed receivers when the alarm is turned on. You can set three receivers at most.

【**Title**】You can set as you wish.

【**Email Test**】After filling in the above information, click the mail test button, set the information and the recorder network environment to test, if the test successful inbox will be tested mail, or prompted the test failed, test failed Please check the configuration information and network conditions normal.

4、IP Filter setup

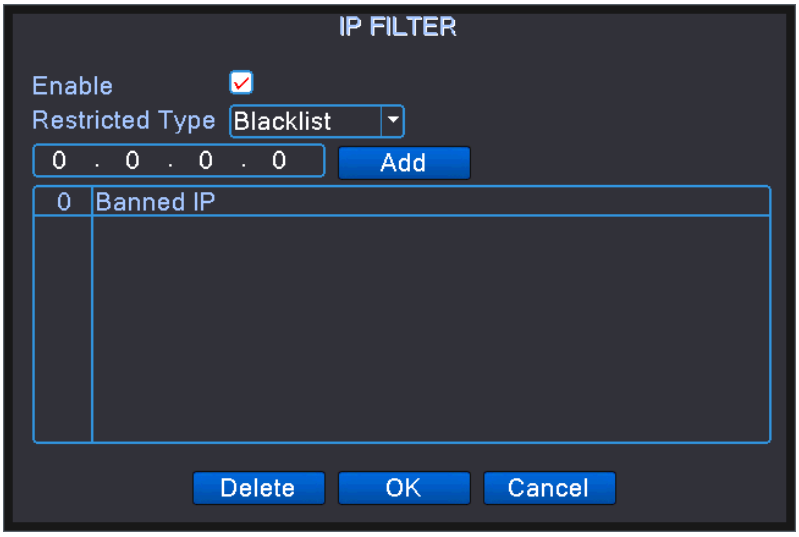
The IP filter setup function restricts the IP address of the DVR that is accessed over the network.

When choosing the white list, only the listed IP address can connect the DVR. The 64 IP addressed are supportive in the list.

When choosing the black list, the listed IP address can not connect the DVR. The 64 IP addressed are supportive in the list.

Note：When the same IP address is in the white and black list at the same time, the black list precedence

is higher.



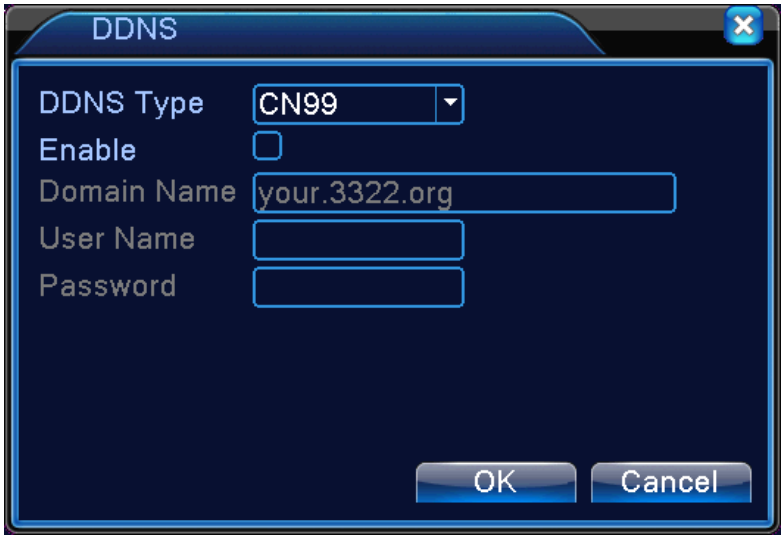
IP filter setting

【**Restricted Type**】 Click the drop-down menu to select the currently set limit type, white or blacklist;

【**Add**】After entering the IP address in the IP address box, click the Add button to add the IP address to the restricted directory.

【**Delete**】In the directory display column has been selected the added IP address, click Delete, the IP address will be deleted in the directory;

5、DDNS



DDNS setting

It is the abbreviation of dynamic domain name server.

【**Local domain name**】Provide the domain name registered by DDNS.

【**User name**】Provide the account registered by DDNS.

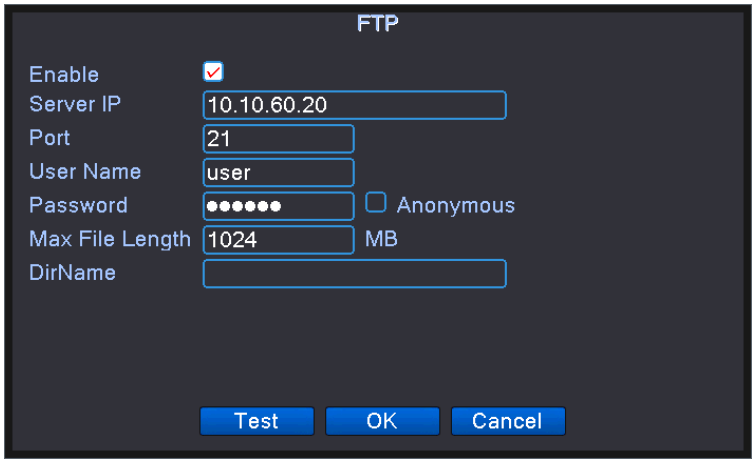
【**Password**】Provide the password registered by DDNS.

When the DDNS is successfully configured and start, you can connect the domain name in the IE address column to visit.

Note：The DNS setup must be configured correctly in the network setup.

6、FTP setup

FTP is available only when alarm happens, or alarm activates record and snapshot, it will upload related record and snapshot pictures to FTP server.



FTP setting

【Enable】Click Enable,then all settings will be available

【Server IP】IP address for FTP server

【Port】Domain Port of FTP, default 21

【User Name】User name of FTP

【Password】Password of user

【Anonymous】: Enable anonymous, no need setting user name and password

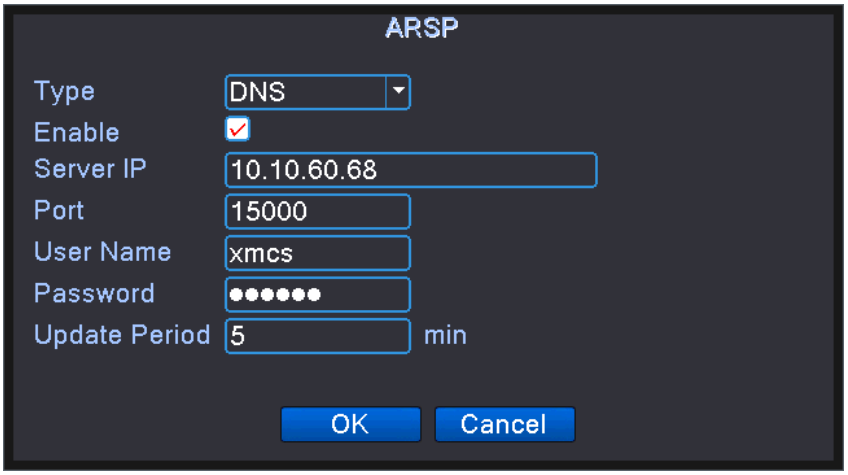
【Max File Length】Max length for upload files at every packed, default 128M

【Dir Name】: The directory of upload file.

Note: The user should be with authority to upload files.

7、ARSP

Startup DDNS server to add devices and manage it in the DDNS server



ARSP setting

【Sever IP]】IP address of DDNS server

【Port】 Port No. of device, related DDNS server listen port

【User name】 the user name that device can log in DDNS server

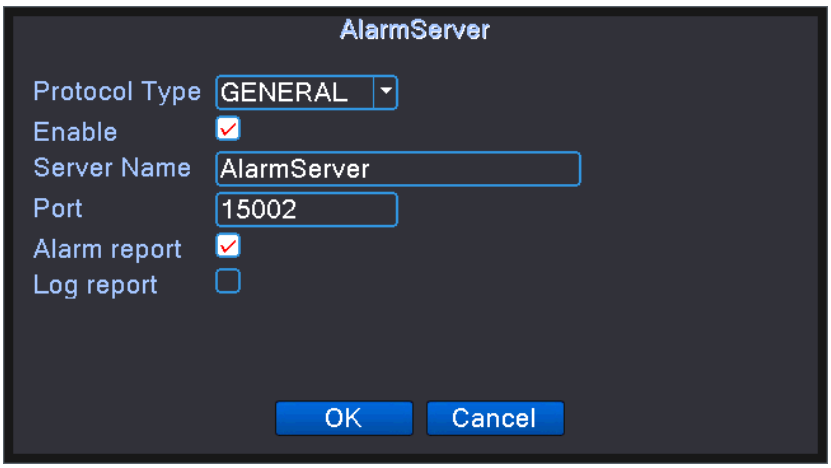
【Password】 the password related to the user name.

【Refresh cycle】Time interval between device and DDNS when chynchronously.

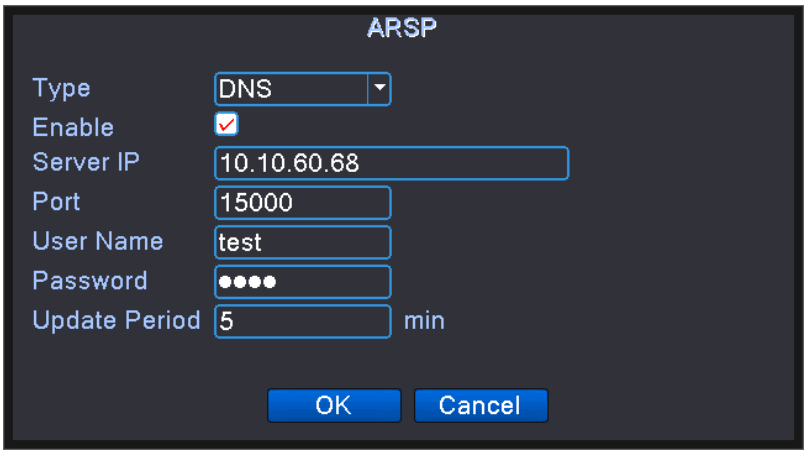
Note: Please set up server before using DDNS.

8、Alarm center

Alarm information is uploaded to the specified alarm server after the alarm generating. Before using this function, you need to install the AlarmCenter Alarm Center service software on the specified server.



Alarm center software



Alarm center setting

【Server Name】IP address of Alarm Server

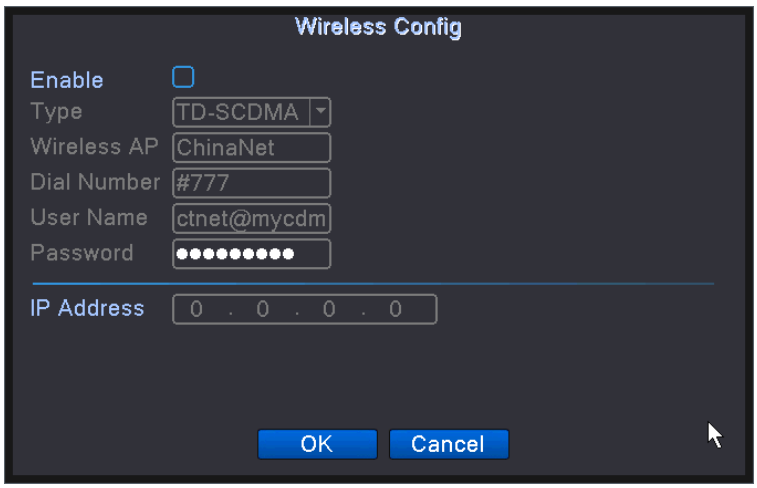
【Port】Device Port No.

【Alarm Report】Tick it means to report alarm information to server.

【Log Report】Tick it, means to report log to server.

9、Wireless setup

DVR through 3G or 4G network card dial-up Internet, so it has remote access function.



Wireless setting

【Enable】Choose Enable to make all settings available

【Type】Dial type,default AUTO

【Wireless AP】3G access point

【Dial Number】3G Dial Number

【User Name】User name of 3G

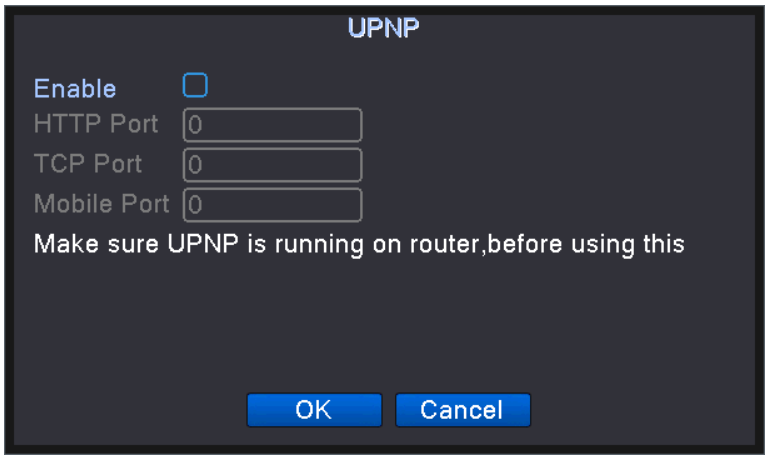
【Password】Password of dial user

【IP Address】IP address,got from dial

Note：parts of A series and T series don't support this function.

10、UPNP

UPNP protocol is to realize auto port forwarding on router, precondition of using this function is to make sure the UPNP function of router is enabled.



UPNP setting

【Enable】Choose Enable to make sure all UPNP settings available

【HTTP】Route will automatically distribute HTTP port for the device,when IE viewing,it need this port

【TCP】Router will automatically distribute TCP port for the device,when monitoring via CMS,it need this port.

【Mobile Port】Router will automatically distribute Mobile Port for the device,when mobile monitor,it need this port.

11、Wifi

DVR connect to wireless router via WIFI module, then to visit it through IP address, the precondition of using this function is to make sure the DVR have connected with WIFI modern.

Wifi setting

【**Search**】Click【search】to search all the available wireless device in current range.

【**enable**】Tick it to enable firstly, then go for further setting.

【**auto obtain IP address**】Tick it to enable, device will auto obtain a WIFI IP.

【**SSID**】Wireless LAN name, auto match to the wireless device u connected.

【**Password**】Wireless network password of router；

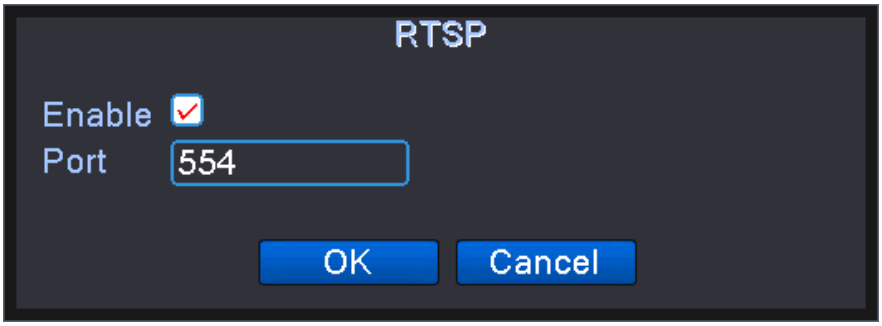
【**IP address**】To set the IP address of device, default is 192.168.1.12

【**subnet mask**】Set subnet mask of device, default is 255.255.255.0

【**gateway**】Set gateway of device, default is 192.168.1.1

12、RTSP

To do surveillance via cross-browser (Safari, Firefox, Google chrome) and VLC software. **This function only for monitor, it can't control the device.**



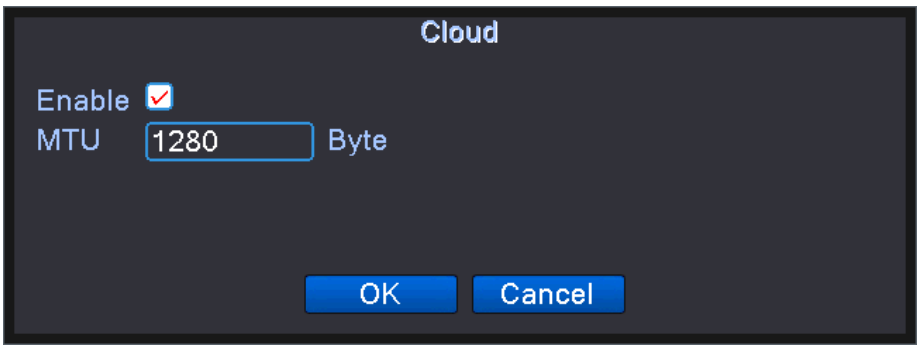
RTSP setting

【**Enable**】: ■ means enable, tick it firstly before setting.

【**Port**】: the default port is 554

13、Cloud service

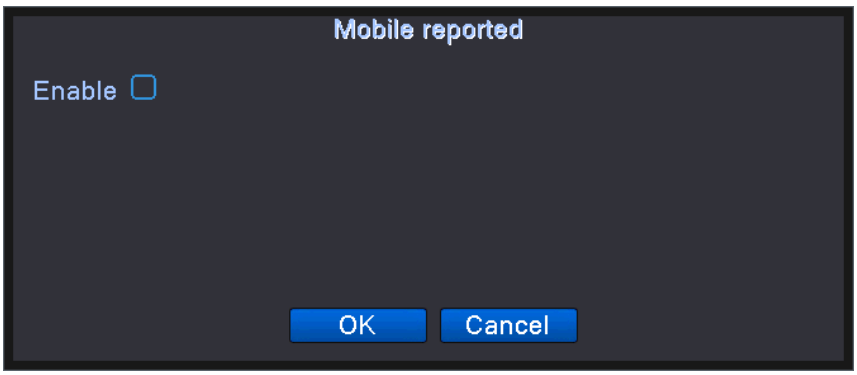
Check the cloud services, male cloud service is enabled, the user can visit http://www.xmeye.net. The serial number can be found in the [Main Menu]> [System Information]> [Version Information].



Cloud service

14、PMS/Mobile report

Enable this function, at the same time open the function in the mobile end, exit the application, when the alarm occurs, check the cell phone to report, will send information to cell phones.



PMS setting

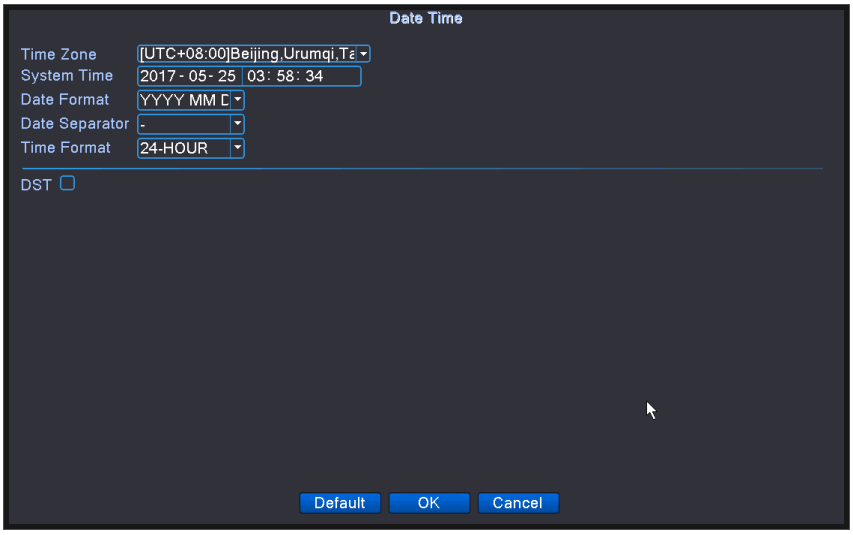
【**Enable**】 Select it to make sure abnormal function workable

【**Server Name**】 default：push.umeye.cn

【**Port**】 Equipment set the default port is 80

【**Clear**】 Delete the maximum number of subscriptions and used records.

4.2.4 Date and time



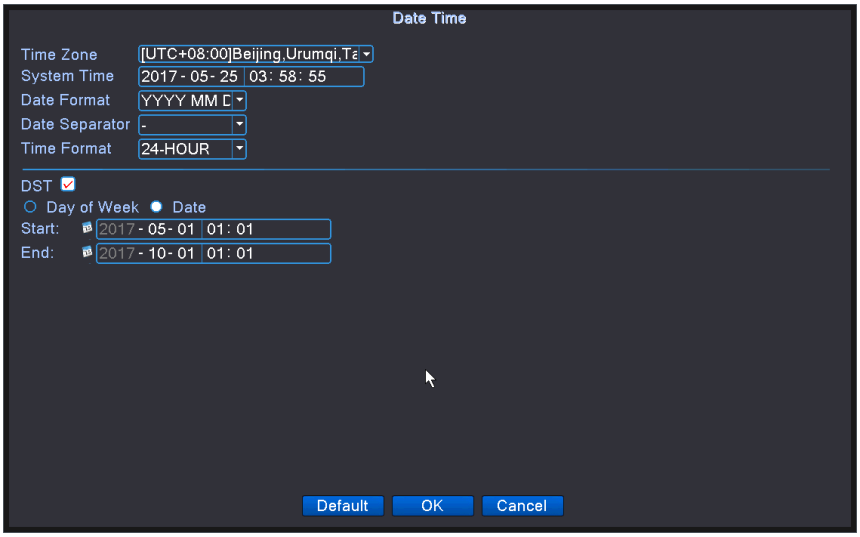
【**Time Zone**】set the time zone for the DVR system time;

【**System Time**】set the system time of the DVR;

【**Date Format, Date Separator**】set the format of the DVR system time which was displayed on the preview interface;

【**Time Format**】set the display time in 12 or 24 hours system for DVR preview interface;

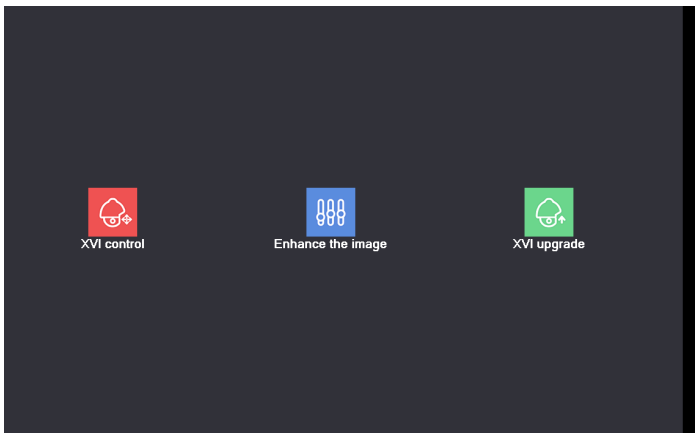
【**DST**】set whether using the daylight savings time or not and the usage time for DVR system time;



DST date setting

DST week setting

4.2.5 XVI setup



【XVI control】XVI control function, please read "3.6.7 XVI control".

【Image enhancement】Reduce the preview screen noise, **Note: Only analog channels support this function**

【XVI upgrade】Support XVI device coaxial upgrade program, **Note: This function is only valid for XM products that support XVI devices.**

4.3 System setup

Set the system parameters such as **General, Encode（under Hybrid/full analog mode）、backup、output mode、user management、serial configuration、PTZ configure/RS485 device、channel management and IPC parameter**。

4.3.1 General

General setting

【**Language**】support 28 language at present:

Simplified Chinese, Traditional Chinese, English, Persian / Islamic, French, Greek, Hungarian, Italian,Japanese, German, Polish, Portuguese, Russian, Spanish, Thai, Turkish, Vietnamese, Romanian, Brazilian, Indonesian, Swedish , Arabic, Bulgarian, Czech, Hebrew, etc .;

【**HDD full**】Choose stop record: Stop recording when the hard disk is full.

Choose overwrite: Cover the earliest recording files and continue recording when the hard disk is full.

【**DVR No**.】Only when the address button in the remote controller and the corresponding DVR number is matched, the remote operation is valid.

【**Video Standard**】PAL or NTSC.

【**Auto Logout**】Set the latency time in 0-60. 0 means no latency time.

【**Machine Name**】Can setting the device's name.

【**Boot wizard**】Can setting turn on/off the boot wizard.

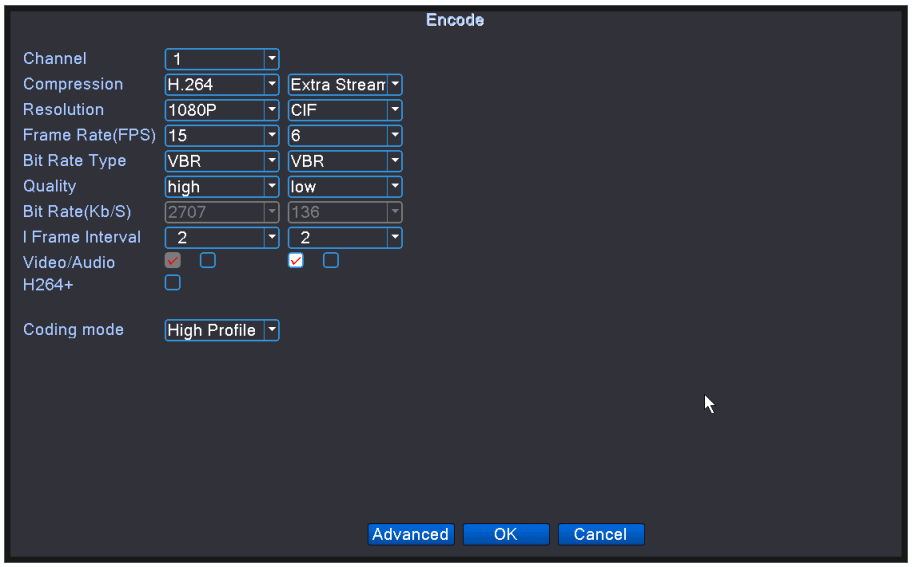
4.3.2 Encode

The encoding setting function is only valid for analog channels.

The main stream of each channel is set independently on the left side, the auxiliary stream of each channel is set on the right side, dual stream has both image quality and transmission quality under the bottleneck of existing network, and can break through the network bottleneck. It can be flexibly chosen the format of the stream according to the network bandwidth, and the local HD storage can be realized,

and the low bit stream network transmission of the back end can be realized.

The auxiliary stream is mainly used for multi-channel real-time monitoring and monitoring of mobile phones when the network environment is poor.



Encode setting

【**channel**】Click the drop down menu to select the channel number that needs to be set;

【**Encode format**】Standard H.264MP;

【**resolution**】Click on the drop-down menu, select the resolution of the display, 1080P/720P/960H and other resolutions are optional;

【**Frame rate**】Click the drop-down menu, you can choose to preview the frame rate, P system 1-25 frames / sec optional, N system 1-30 frames / sec optional;

Note: The frame rate becomes smaller and the fluency of the picture deteriorates, but the stream value is reduced.

【**Stream control**】 There are two kinds of code streams with limited code stream and variable code stream. In the variable stream, the picture quality is 6 files optional, in the limited stream, can be specified for the stream value, making it more suitable for the current network environment;

【**Frame interval**】The interval between the key frame, 2-12 optional, the smaller the key frame interval, the greater the value of the stream, the better picture quality;

【**Audio / Video**】 Audio check is enabled after the audio function, enable the preview screen after clicking on the audio logo can be audio monitoring, auxiliary code can be checked by the auxiliary stream before the preview screen;

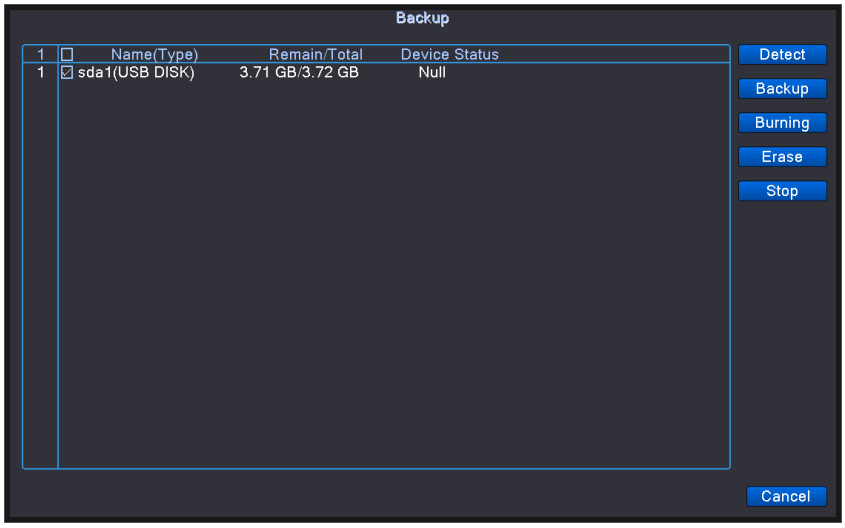
【**264 +**】In the static scene, the stream will be reduced, saving storage space;

【**Code mode**】 Click the drop-down menu to provide High Profile, Main Profile and Baseline three coding strategies to choose from, which High Profile encoding the highest quality, Baseline lowest.

4.3.3 Backup

You can backup the video files to external storage through setup.

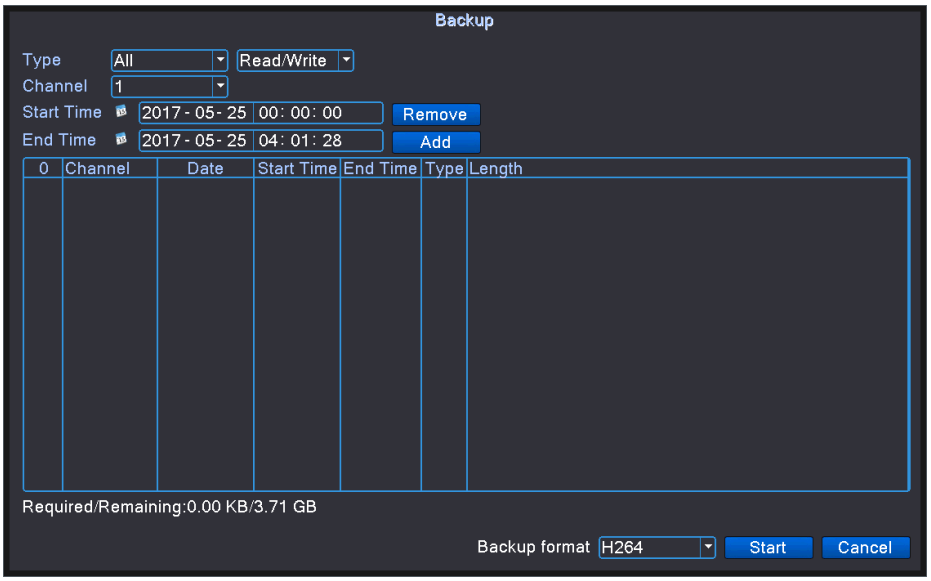
Note：The storage must be installed before the file backup. If the backup is terminated, the already backup can playback individually.



Detect storage

【**Detect**】Detect the storage connected with the DVR such as hard disk or universal disk.

【**Backup**】Click backup button and the dialog box is popped up. You can choose the backup file according to the type, channel and time.



Backup

【**Channel**】 Drop-down menu Select the channel number of the backup file you want to back up;

【**Add**】Show the file information satisfying the set file attributes.

【**Backup format**】configurate the backup file format,according to require,can choose H264 and AVI.

【**Start/pause**】Click the play button to start the backup and click the pause button to stop the backup.

Note：During backup you can exit the page layout to carry out other functions.

Burning

【**Burning**】the file will be burned synchronously after click it.

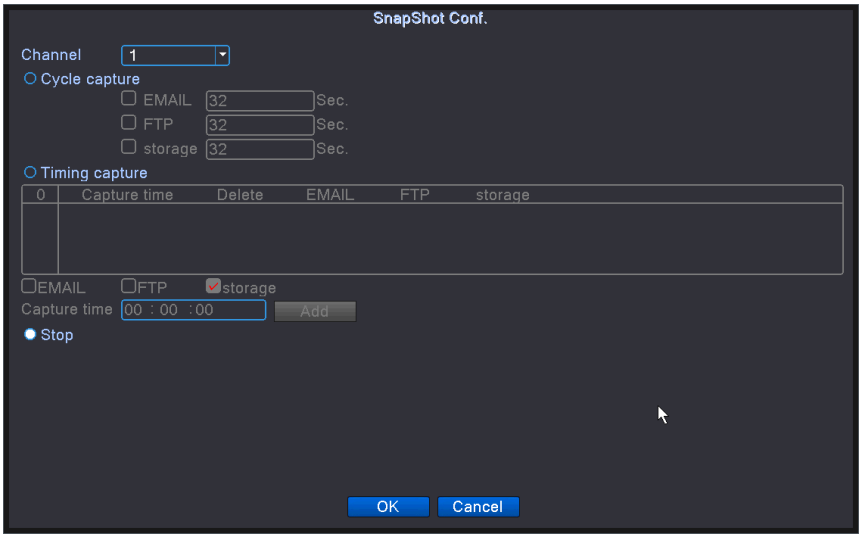
【**Erase**】Choose the file to delete and click erasure to delete the file.

【**Stop**】Stop the backup.

4.3.4 Snapshot Storage

Including cycle capture, timed capture, alarm capture.

***Note**：**Part products have this function.** Cycle capture, timed capture and close three buttons can be chosen.



Snapshot storage

【Thumbnail】 For details, please refer to “chapter 3.6.5 Thumbnail”

【Channel】Select the related channel to set, click "all" to set all channels.

【Cycle capture】When you open the cycle capture function, Email, FTP, storage three option can be chosen, the corresponding check box check to take effect. After selecting, you can configure the corresponding capture cycle. Determine the time period after which the configuration is installed.

【Timing Snapshot】After opening the timed capture function, Email, FTP, storage can be multi-election, the corresponding check box check to take effect. After selecting, you can configure the corresponding capture cycle. Determine the time period after which the configuration is installed.

Note: Email: If you want DVR to capture normally, you need to set Email (For details, please refer to chapter 4.2.3 network settings -> network services)

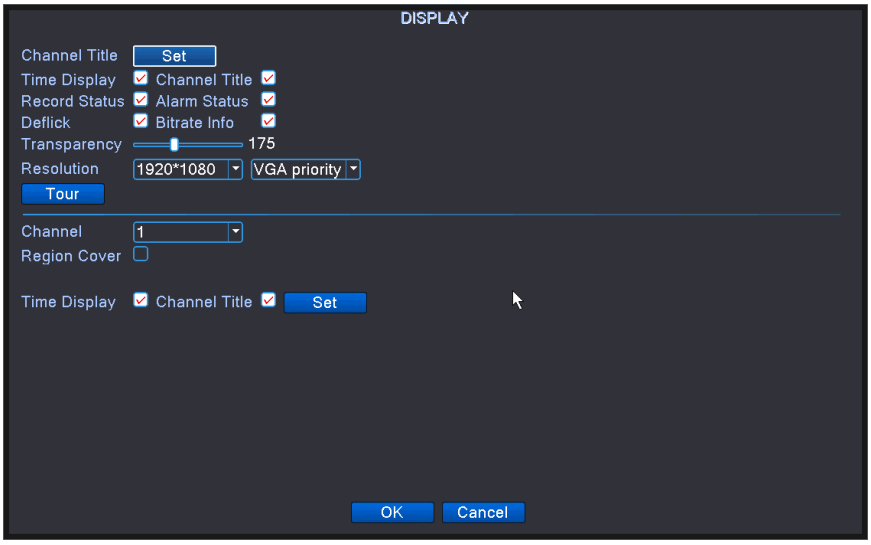
FTP: If you want DVR to capture normally, you need to set up FTP (for details, please refer to chapter 4.2.3 network settings -> network services)

Storage: If you want DVR to capture normally, you need to have at least one snapshot partition. (For details, refer to Section 4.5.1 Storage Management).

【Alarm Map】 The corresponding "alarm function" setting, please read the section "4.4 alarm function" section.

4.3.5 Output mode

Configure the channel name of each channel of DVR, whether the channel name, time header, channel title, video status, alarm status, etc., and the transparency of the menu are displayed on the preview screen.



Output mode setting

【Channel Title】Click the channel name modify button and enter the channel name menu. Modify the channel name. The 16 Chinese characters and 25 letters are supportive.

【Time Display】means the selective state. Display the system data and time in the surveillance window.

【Channel display】means the selective state. Display the system channel number in the surveillance window.

【Record Status】means the selective state. Display the system recording status in the surveillance window.

【Alarm Status】means the selective state. Display the system alarm status in the surveillance window.

【Transparency】Choose the background image transparency. The range is 128~255.

【Resolution】set display resolution.

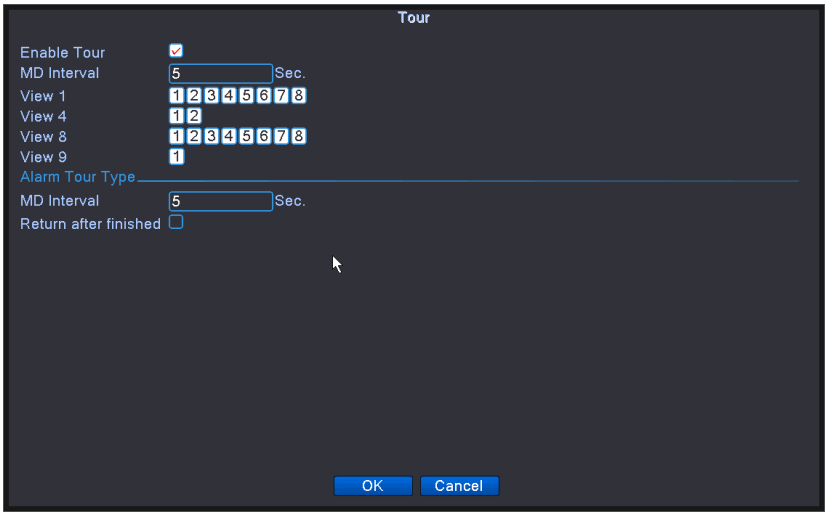
【Channel】Choose the set code output channel number.

【Region Cover】means the selective state. Click the cover area button and enter the corresponding channel window. You can cover the arbitrary using mouse. (Black region is for output)

【Time display】and **【Channel display】** set the display position of channel title and time title.

Note: The time title and channel title setting function exist at output mode only when the device is under hybrid(HVR) mode or full analog(DVR) mode.

【Tour】 Set the DVR preview interface to cycle display among each channel.



Tour setting

【**Interval**】 Set the interval of the round trip to set the interval to 5-120 seconds;

【**Picture**】 You can choose a few screen round tour and specify the specific round tour channel;

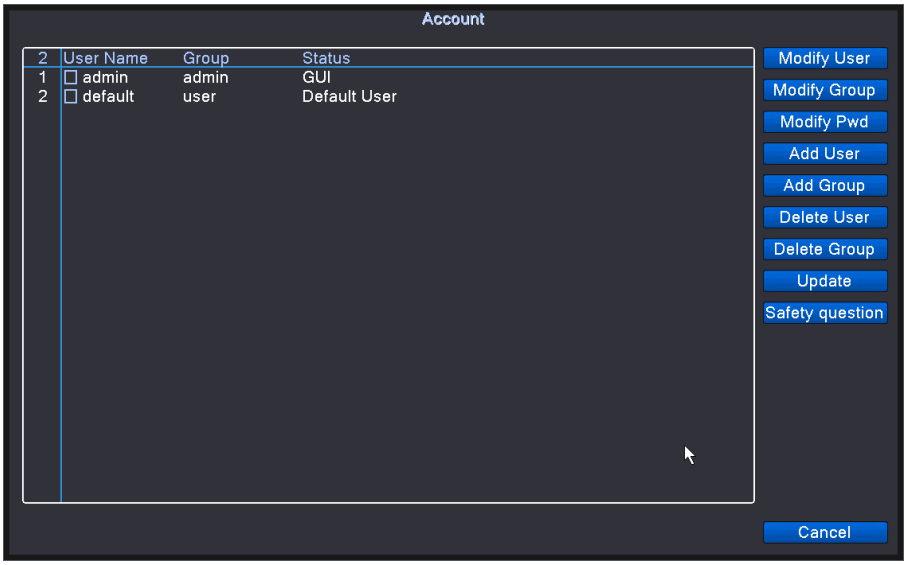
【**Alarm wheel patrol**】Alarm set in the linkage wheel patrol function, when triggered after the alarm will jump to the selected channel to display;

【Alarm end return】 After the alarm is over, the system will automatically stop the wheel tour back to the alarm before the preview screen;

Note: In the preview interface, click the icon in the upper right corner of the page to close the round patrol, click to open the round patrol.

4.3.6 User management

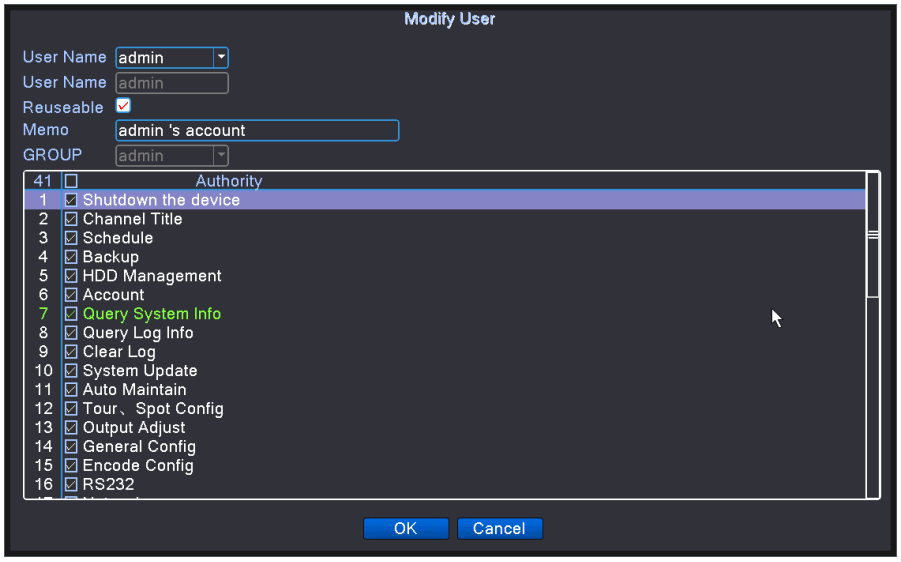
The user management function is to add, delete, modify, and so on to the user name, group, privilege, etc. of the login user.



User management

1、Modify user

To modify the user name, note, permission, etc.



Modify user

【User】 Click the drop-down menu to display all existing users, select a user from it;

Note: The admin user name is reserved for system users.

【User name】 To modify the user name of the selected user, enter up to 16 characters;

【Reuse】check enable multiplexing, user name reuse allows multiple users to use the user name login;

【Remarks】 Special note on the user name;

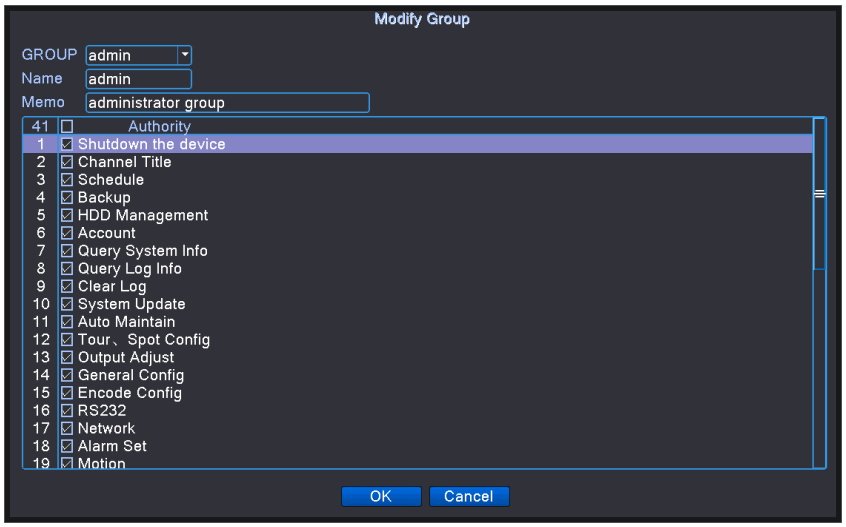
【Group】 Users belong to the group, the customer can set permissions on the group;

【Permission】to set the user's permissions, check the user has the authority, the user can not operate

on the authority without permission.

2、Modify group

Modify the group name, memo, permissions, etc. of the group.



Modify group

【Group】 Click the drop-down menu to display all existing groups, select a group from it;

Note: The admin group for system retention groups is not allowed to be modified.

【Group name】To modify the group name of the selected group, enter up to 8 characters;

【Remarks】 Special notes on the group;

【Permissions】Set the permissions of the group, check the reorganization of the user has the authority, the user can't operate on the authority without permission.

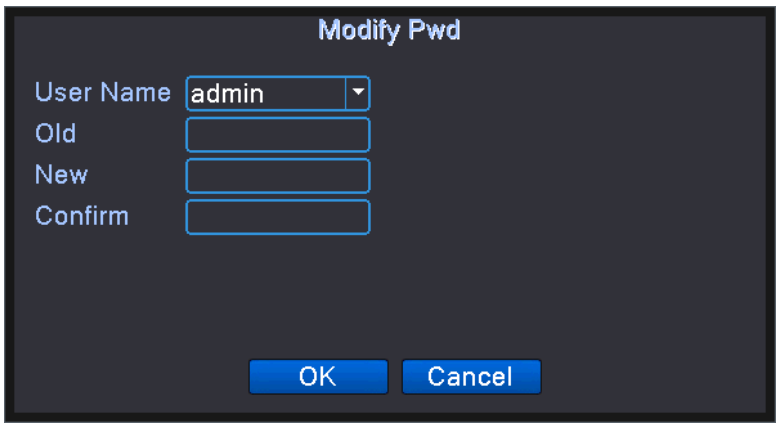
Note: When you add a user within a group, you can only select user rights within the group permissions.

3、Modify password

Modify the login password of the user.

【Modify password】The user account password modification, the password can be set to 1-6 number, the password at the end of the box is invalid, the middle can have spaces.

Note: The user with user account control permissions can modify their own password, in addition, can also modify other users password.



Modify password

【**User name**】 Click the drop-down menu to display the user who can change the password, select a user from it;

【**Old password**】 The original login password;

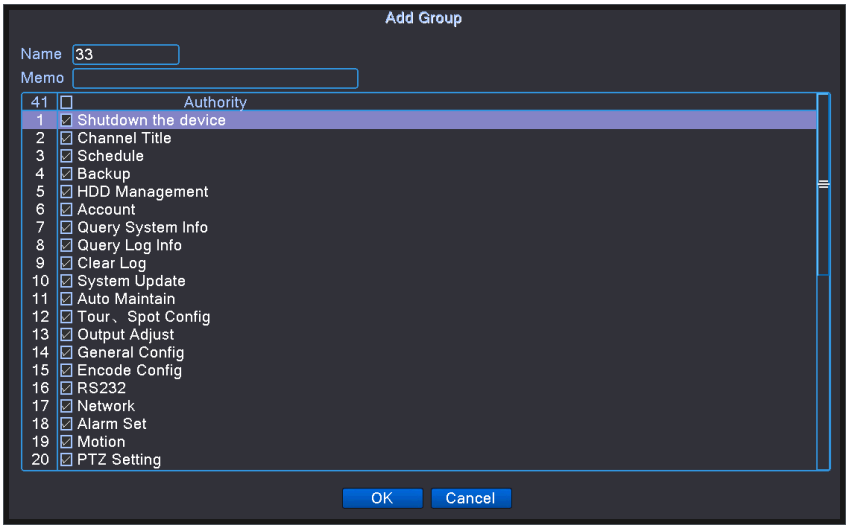
【**New password**】 new password;

【**Confirm Password**】 New password.

Note: If the old password is wrong, you can't modify the password.

4、Add group

Add new user and configure the group's permission.



Add group

【**Group name**】 New group name, up to 8 characters;

【**Remarks**】 Special notes on the new group added;

【**Permissions**】Set the permissions of the new group, check the reorganization of the user has the authority, the user can't function without permission to operate.

Note: When you add a user within a group, you can only select user rights within the group permissions.

6、Delete user

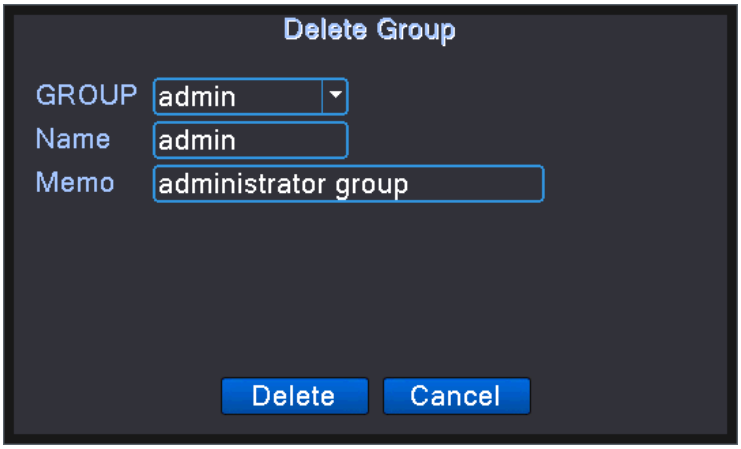
Delete an existing user name.

In the directory of the user management map, check the user name that you want to delete, click the Delete User button, confirming the deletion of the user.

Note: admin and default users can't delete users for system retention.

7、Delete group

Delete the existing user group.



Delete group

【Group】 Click the drop-down menu to select the group you want to delete;

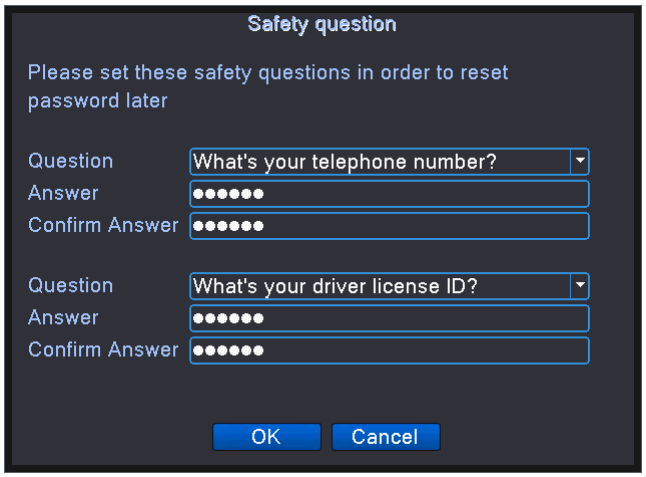
【Group name, note】 Delete group name and note description;

【Delete】 Delete the selected group.

Note: Admin and user groups the reserved group for system, can't be deleted; when the group exists when the user can't be deleted.

8、Security problem

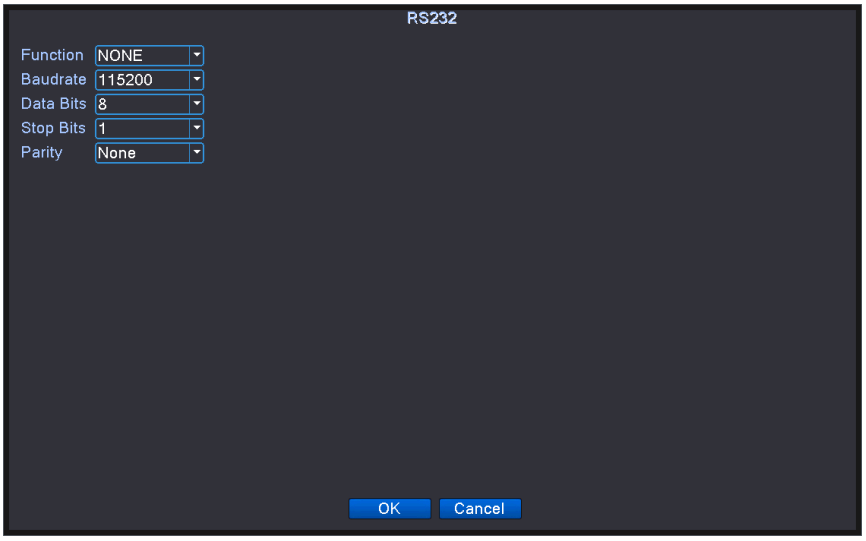
Set one or two different security questions as shown in the picture options, fill in the answers and fill in the correct answers, confirm and exit. You can reset the password by security when you forget your password.



Security problem

4.3.7 Serial port configuration

Some series DVR do NOT support this function.



Serial port configuration

【Serial Port Function】Common serial port is used to debug and update program or set up specific serial port.

【Baud rate】Choose the corresponding baud rate length.

【Data bits】Include 5-8 options.

【Stop bits】Include 2 options.

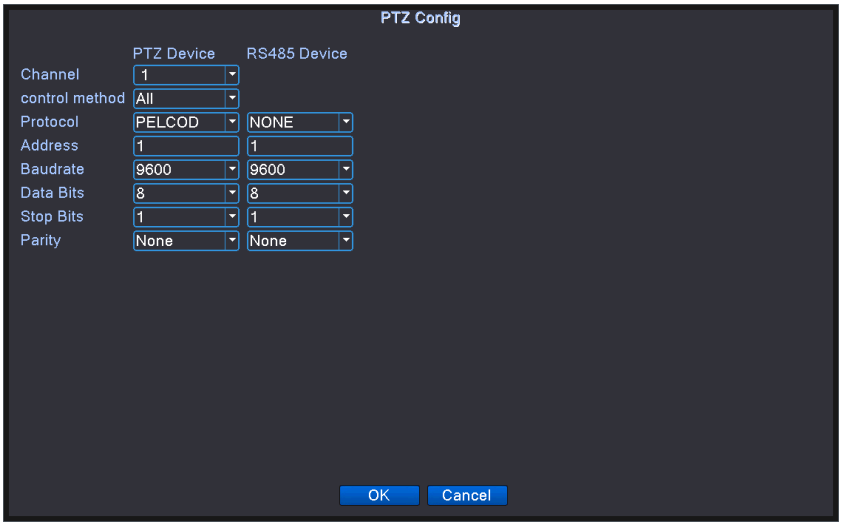
【Parity】Include odd, even, mark, space, default is none.

4.3.8 PTZ configuration/RS485 device

PTZ parameter settings and the front PTZ parameters can only control the PTZ, the same configuration parameters only consistent 485 equipment can control the video recorder.

When the DVR is in mixed / full analog channel mode, it is displayed as PTZ device, including PTZ device and RS485 device. The DVR displays RS485 device for full network channel time.

Some models do not support this feature.



PTZ configuration

【**Channel**】Choose the dome camera input channel.

【**Protocol**】Choose the corresponding dome protocol. (PELCOD as an example)

【**Address**】Set as the corresponding dome address. Default: 1.（Note：The address must be consistent with the dome address.）

【**Baud rate**】Choose the corresponding dome baud rate length. You can control the PTZ and vidicion. Default: 115200.

【**Data bits**】Include 5-8 options. Default: 8.

【**Stop bits**】Include 2 options. Default: 1.

【**Parity**】Include odd check, even check, sign check, blank check. Default: void.

Note: The protocol, address and baud rate of the VCR must be consistent with the PTZ of the front end, otherwise it will not be controlled.

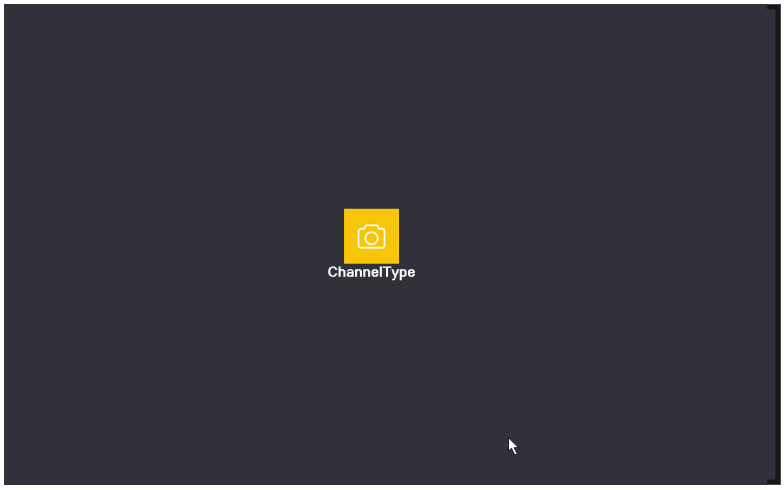
4.3.9 Channel management

Set the channel mode for the DVR, and the channel mode is divided into full analog mode, mixed

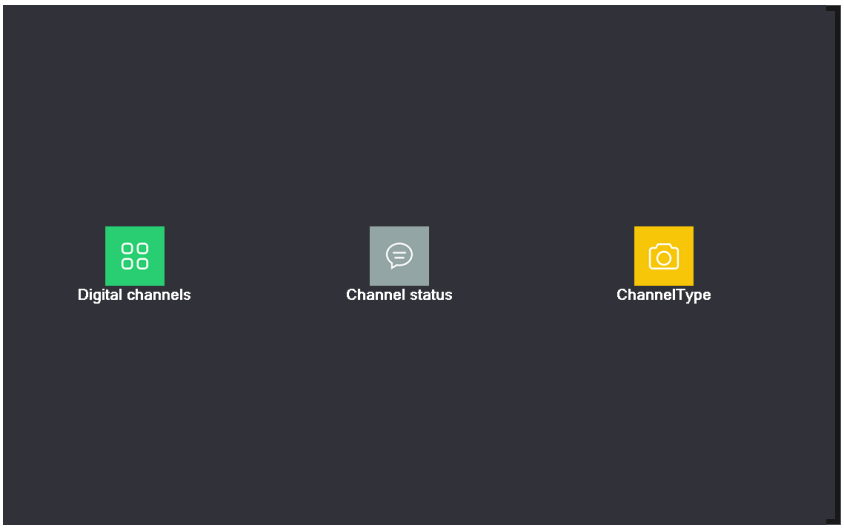
mode and full network mode.

Some models do not support this feature.

Digital manage including digital channel, channel status, and channel mode **(Remark: there is only analog mode if device is under full analog mode)**:



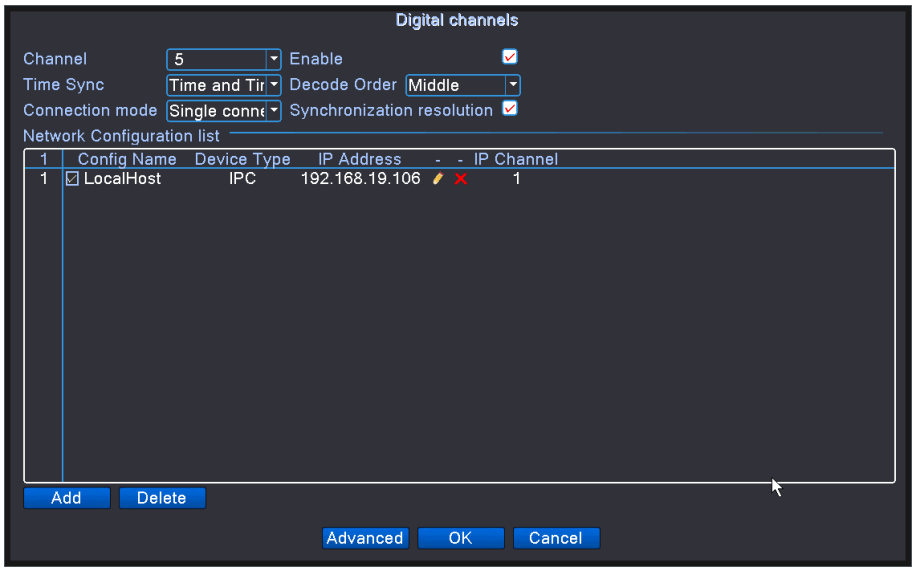
Channel manage page under all analog(DVR) mode



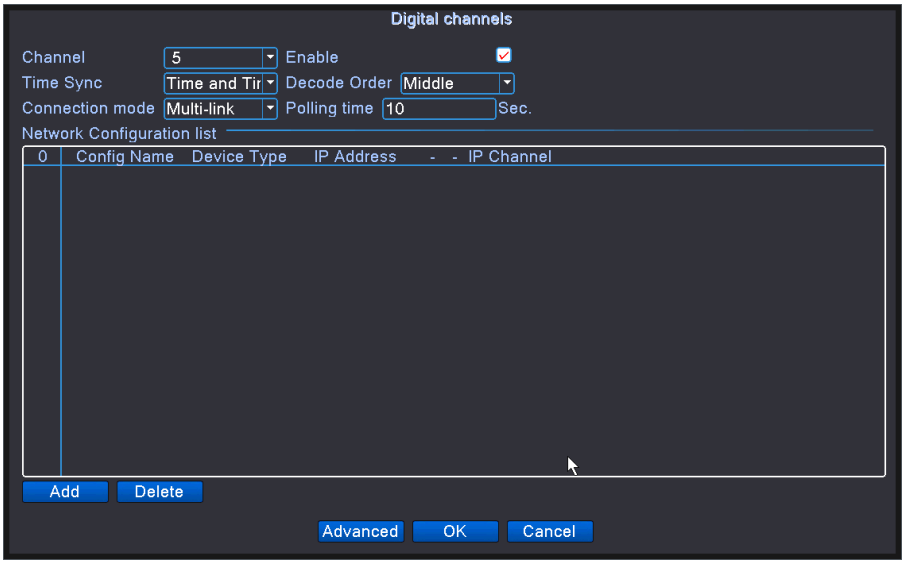
Channel manage page under Hybrid(HVR) mode / full digital(NVR) mode

channel manage interface

1、Digital channel:



Single link page of digital channel



Multi-linkage page of Digital channel

digital channel interface

【**Channel**】select channel title

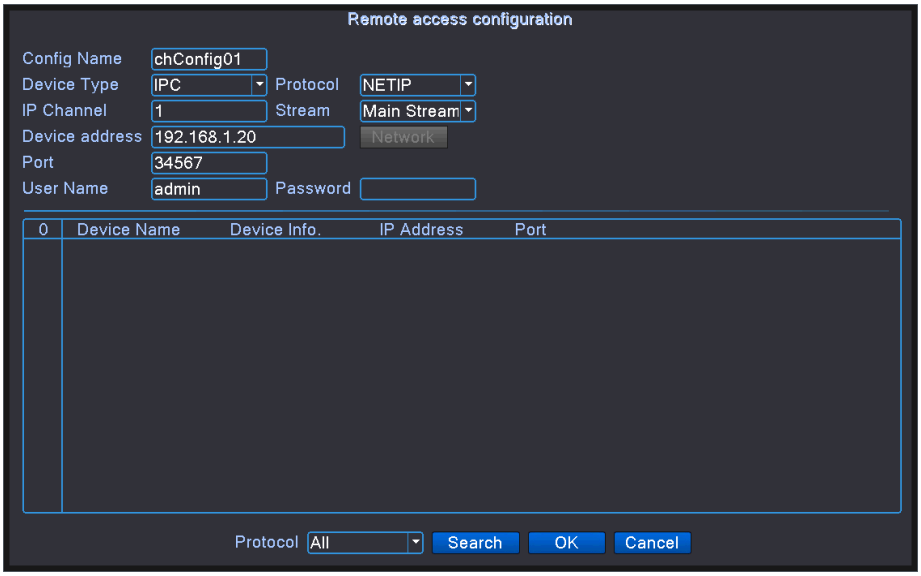
【**Enable**】Open digital channel, tick enable, then can do related settings

【**Time Synchronization**】Tick it means the time of this channel and device is the same.

【**Connection Mode**】can be singe connect or multi-ink, multi-link modes can connect to several devices, device will be tour displayed one by one, tour interval can be set, no less then 10s;

【**Delete**】If the user want to change device, select the existing device, click delete will be ok.

【**Add**】click add will come out below page to add new device



remote channel configure page

【**Configure Name**】device is with default configure title, user can revise it if necessary；

【**Device Type**】3 types: IPC、DVR、HVR，user can choose as what you like, default is IPC；

【**Protocol**】Default is TCP

【**Remote channel**】User can input remote channel title from the device that you want to connect remotely

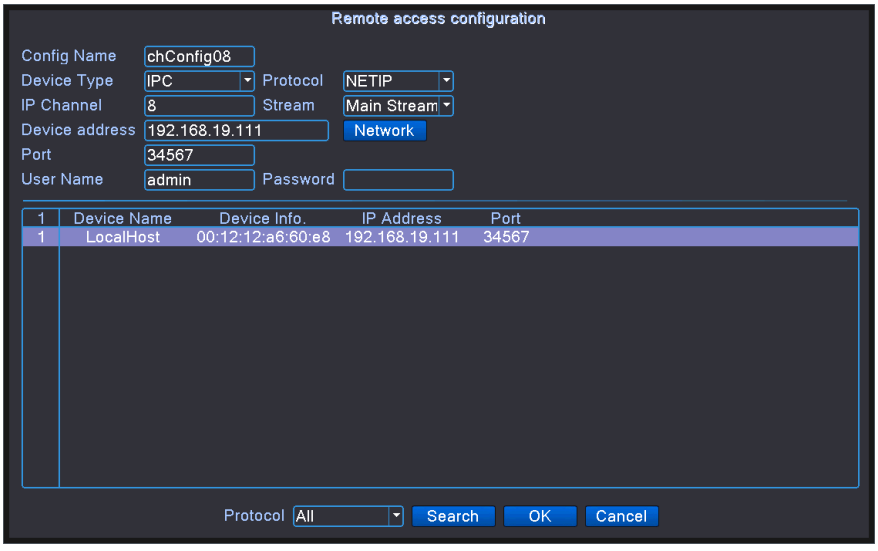
【**Stream**】Default is main stream, do not support extra-stream at present；

【**Device address**】IP address of device.

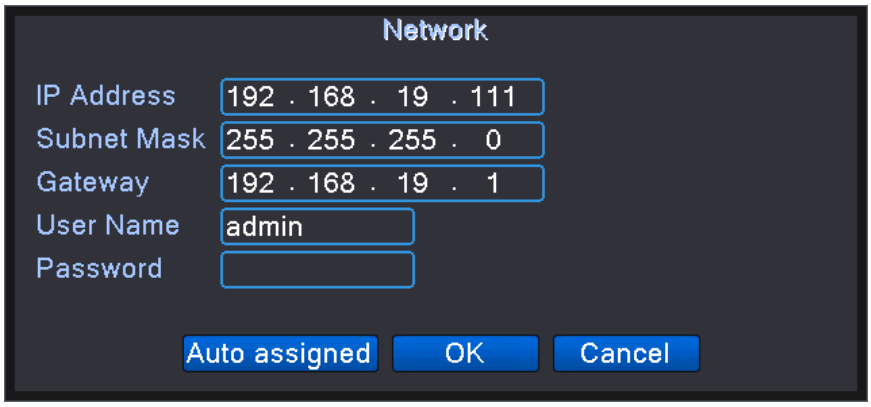
【**Port**】Default is 34567

【**User name**】Default is admin

Remark: click 【search】will show all the devices that searched out, user can choose any of the device that you like.



the device list searched under remote channel setting

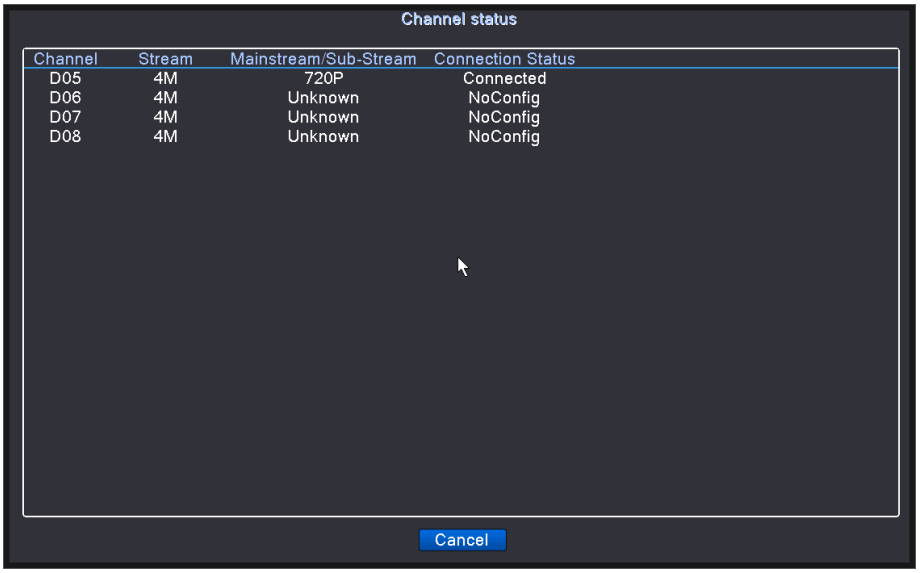


Network setting

【Network setting】You can modify the selected remote IP address, subnet mask and default gateway; click on the automatic allocation of LAN router will assign an IP to the remote device;

2、Channel Status:

Channel status is to show the status of all the digital channel When there is what existing, status including Max Resolution, This Resolution, Connection Status.

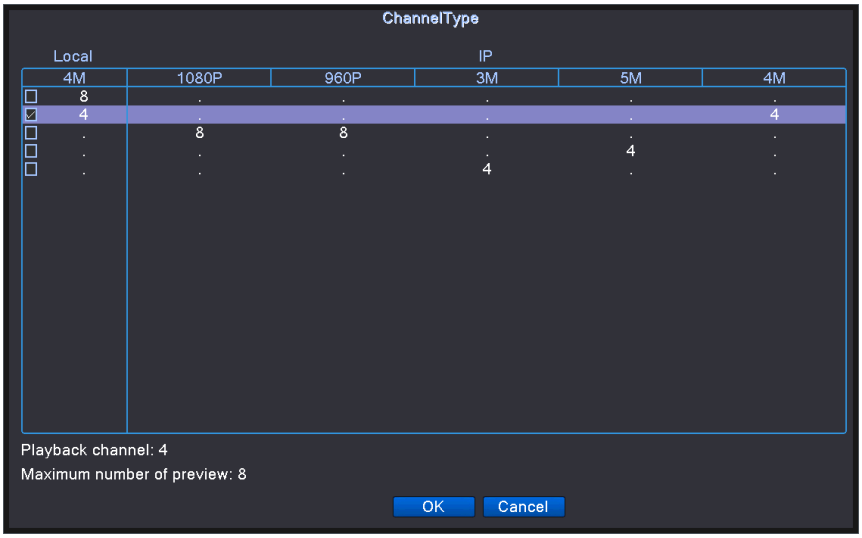


D05 channel does not add remote device, D06 channel added successfully

When the current resolution of a channel exceeds the maximum resolution, the channel preview screen is displayed as red "X".

3、Channel mode

Channel mode, display and set the channel mode that the DVR supported, and display the maximum number of playback channels for each channel mode.

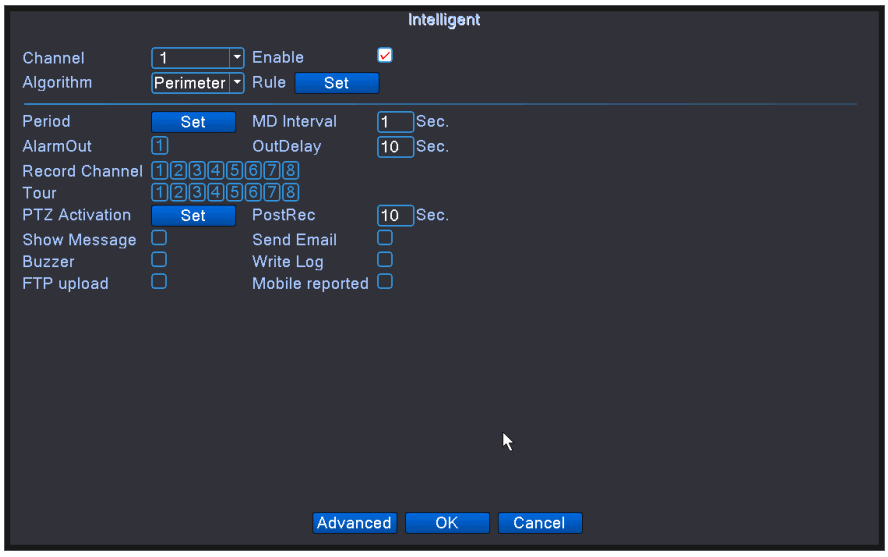


4.3.10 Camera parameter

Please refer to "3.6.15 Camera Parameters" for camera parameters.

4.4 Alarm Function

Alarm functions include: motion detect,video blind, video loss, alarm input and alarm output, abnormality、intelligent analysis.



Alarm function

4.4.1 Motion Detect

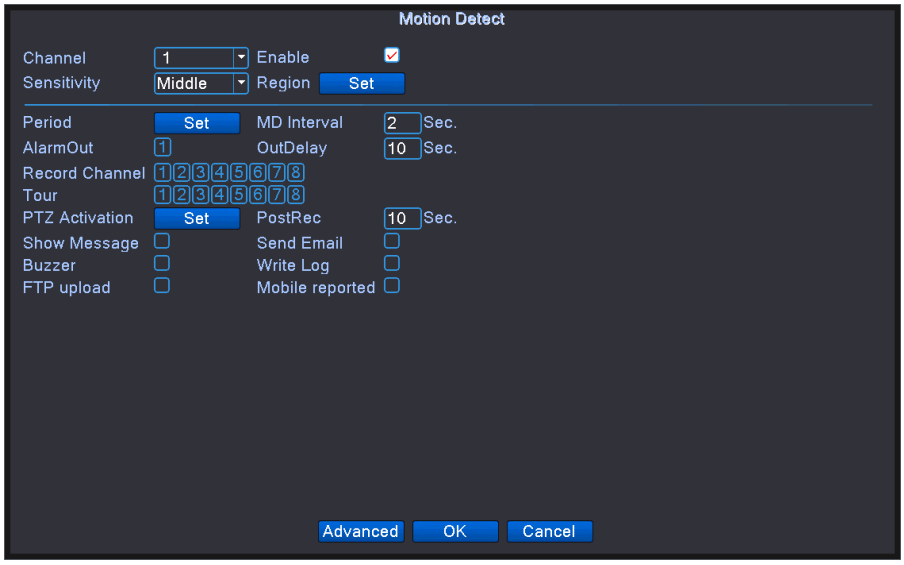
When system detects the motion signal that reaches the set sensitivity, the motion detect alarm is on and the linkage function is turned on.

Note: "Advanced" button is the same as right click.

***Motion detect function is different between Hybrid mode & Full digital mode:**

Digital channel: not only to enable motion detect function at local side, but also to enable the remote device that was connected. When remote device detect motion movement, local side will start alarm recording, otherwise this function is not enable.

Hybrid mode: Only need you to enable motion detect function at local side.



Motion Detect

【**Channel**】Choose the set motion detect channel.

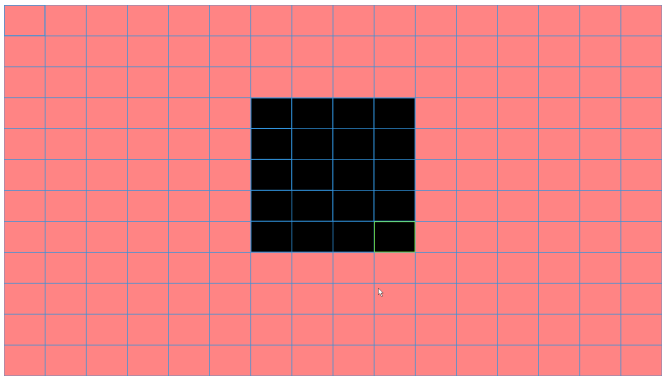
【**Enable**】■ means that the motion detect function is on.

【**Sensitivity**】Choose in the six options according to the sensitivity, Lowest, Lower, Middle, High, Higher and Highest.

Note: Only the motion detect under hybrid mode/ full analog mode have this function of setting sensitivity, and also only the analog channel can set re**gion.**

【**Region**】Click [set] to enter the set area. The area is divided into PAL22X18. Red block means the motion detect defensive area. White block means the unfenced area. You can set the area as followed, Drag the mouse and draw the area. Default: all selected blocks are detection area.

Note: Only the motion detect under hybrid mode/full analog mode have this function of setting region, and also only the analog channel can set region.



Region setting

【**Period**】Trigger the motion detect signal in the set time section. You can set according to week or set uniformly. Each day is divided into four time sections.■ means the set valid.

set the time section

【**Interval**】Only one alarm signal is turned on even there are several motion detect signals in the set interval.

【**Alarm output**】Start the external equipment of corresponding linkage alarm when the motion detect alarm is turned on.

【**Delay**】Delay a few moments and stop when the alarm state is turned off. The range is 10~300 seconds.

【**Record channel**】Choose the recording channel (multiple option supportive). Trigger the video signal when the alarm is turned on.

Note: Set in the [recording setup] and perform the linkage recording. Start detecting video files in the corresponding time section.

【**Tour**】■ means that the selective channel is single window alternate patrol preview. The interval is set in the [Main Menu]>[System] > [Tour].

【**PTZ Activation**】Set the PTZ activation when the alarm is turned on.

***Hybrid mode, PTZ link to the related PTZ information of analog channel, While digital channel model, the PTZ is link to the related PTZ information on the remote device connected.**

Note：to link PTZ, need go [Shortcut menu]->[PTZ control] to set preset point, cruise between points & interval time, etc.

PTZ Activation under hybrid mode

【**Delay**】When alarm is over,recording will last some seconds(10~300sec),then stop.

【**Show message**】Pop the alarm information dialog box in the local host computer screen.

【**Send EMAIL**】■ means sending an email to user when the alarm is turned on.

Note: Set in the 【NetService】and send email.

【**FTP upload**】to tick it, the video & picture of related record channel & snapshot channel will be uploaded to assigned position.

Note：FTP upload need be set at 【Netservice】

【**Buzz**】When alarm happens, device will come out with buzz.

【**Write log**】 When this function is enabled, the alarm information will be written into the system log information. The user can query the alarm log information in 【Main menu】> 【System information】> 【Log information】

【**Mobile report**】 When the recorder triggers an alarm, the alarm message is automatically pushed to the mobile device on which the mobile client is installed.

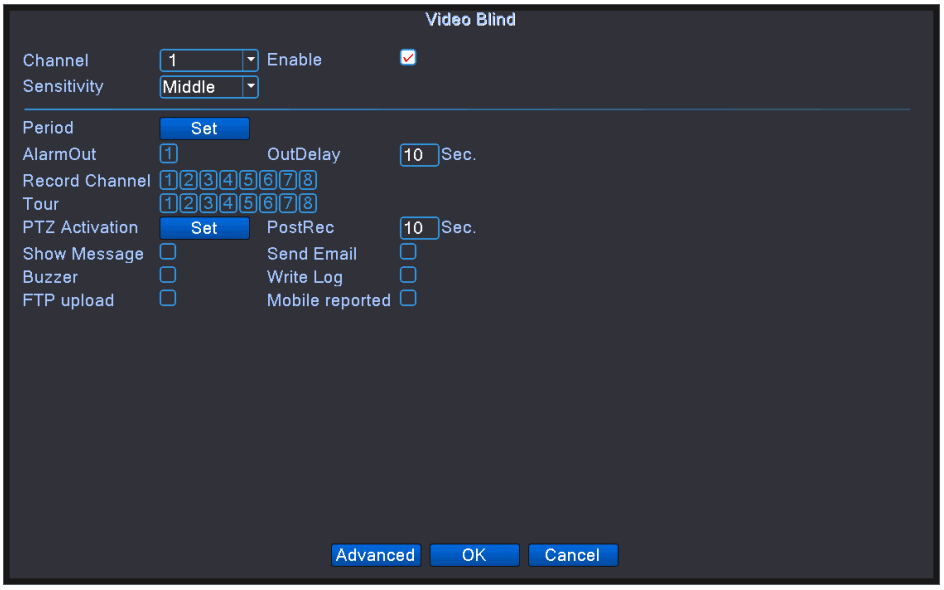
4.4.2 Video Blind

When the video image is influenced by the environment such as bad brightness or reaching the set sensitivity parameter, the camera mask function is turned on and the linkage function is turned on.

***Same as motion detect function, video blind is different between Hybrid mode & Full digital mode:**

Digital channel: not only to enable video blind function at local side, but also to enable the remote device that was connected. When remote device with video blind, local side will start alarm recording, otherwise this function is not enable.
Hybrid mode: only need to enable video loss function at local side.

Note: "Advanced" button is the same as right click.



Video blind

Mixed mode and full analog mode analog channel can set the sensitivity, the network channel can't set the trigger sensitivity; The sensitivity level include lowest, lower, medium, higher, high, highest.

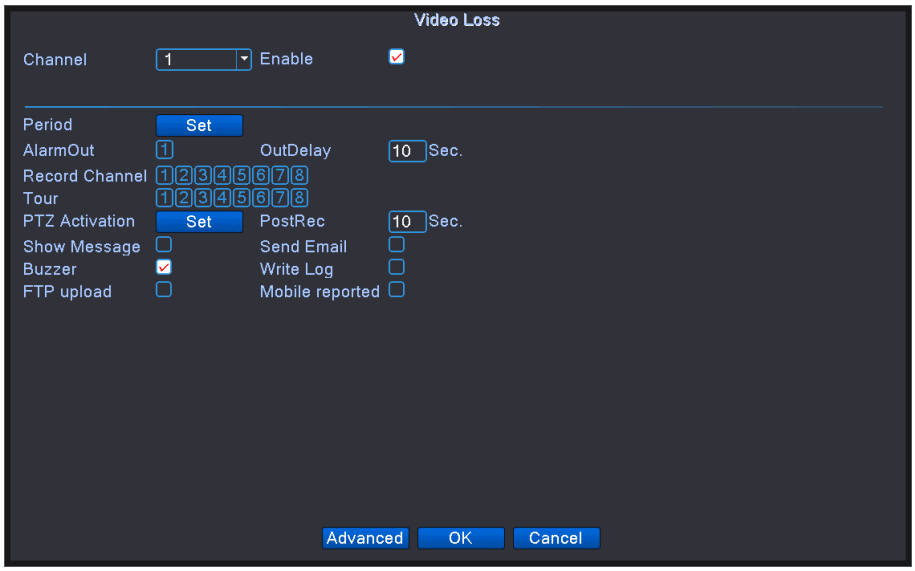
Set method: refer to chapter 4.3.1. Motion detect

4.4.3 Video Loss

When the equipment can not obtain the channel video signal, the video loss alarm is turned on and the linkage function is turned on.

***Same as motion detect function, video loss is different between Hybrid mode & Full digital mode:**
Digital channel: Not only to enable video loss function at local side, but also to enable the remote device that was connected. When remote device with video loss, local side will start alarm recording, otherwise this function is not enable.
Hybrid mode: Only need to enable video loss function at local side.

Note: "Advanced" button is the same as right click.



Video loss

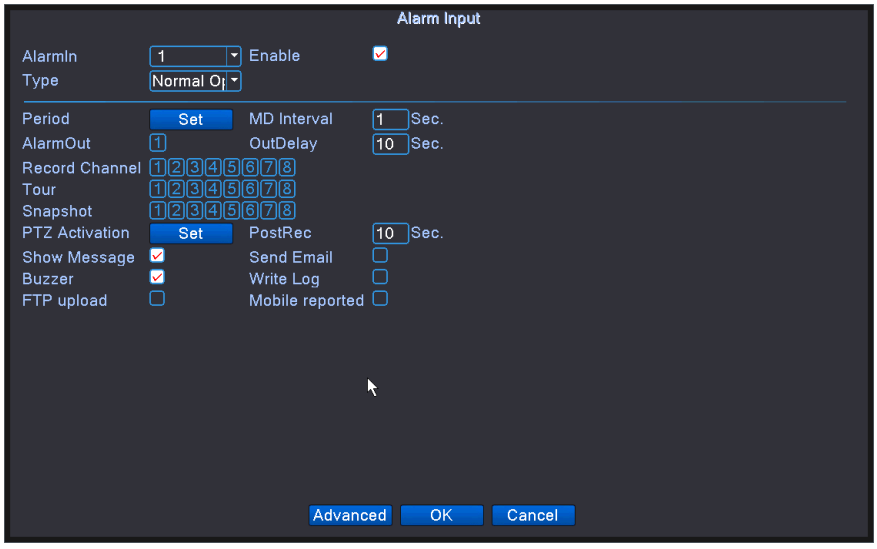
Set method: refer to chapter 4.3.1. Motion detect

4.4.4 Alarm input

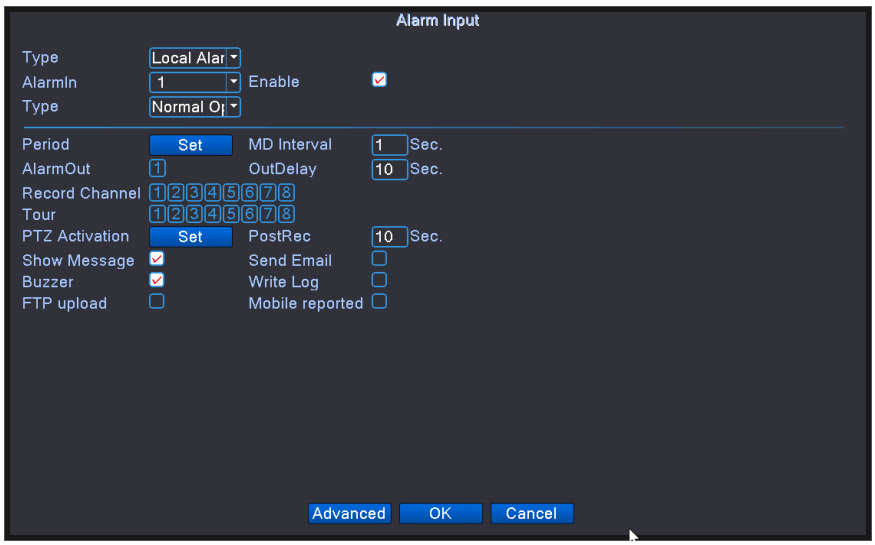
When the equipment obtains the external alarm signal, the alarm function is turned on.

***Alarm input is the same between hybrid mode & full digital mode, function enable, when it was set normal, only need to connect alarm sensor at alarm input port on local side, the alarm information is occurring, and will link to related setting functions at the same time.**

Note: "Advanced" button is the same as right click.



Full analog mode alarm input



Mixed / full network mode alarm input

【Type】 Click the drop-down menu with local alarm and IPC alarm two types of optional;

Local alarm: Through the DVR's alarm input interface access alarm signal;

IPC alarm: The video recorder to accept the network camera to send the alarm signal to alarm.

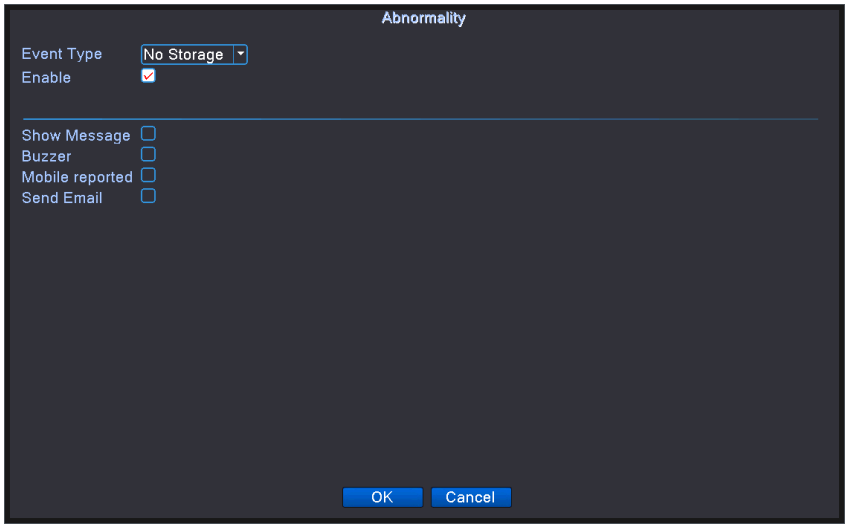
Set method: Refer to chapter 4.3.1. Motion detect

4.3.5 Alarm output

Refer to chapter “3.6.9 Alarm output” .

4.4.6 Abnormal

Detect the storage of DVR and the status of the network, an alarm will happen when an abnormal condition is detected.

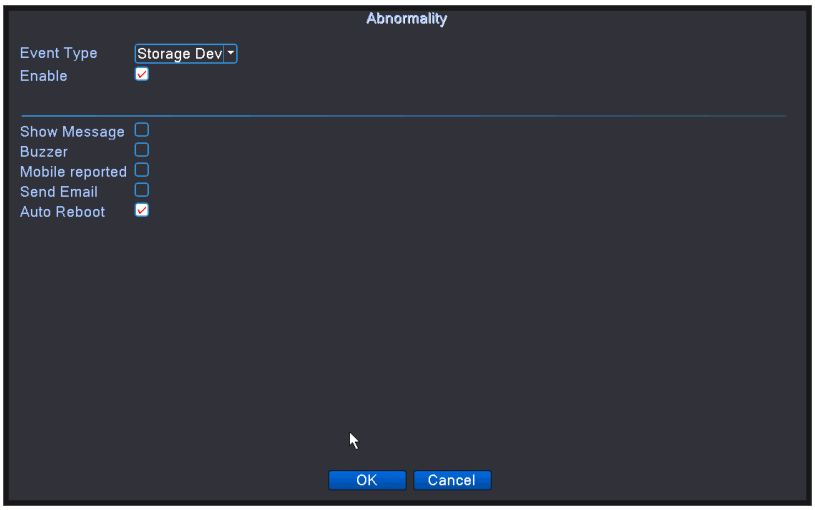


No storage device

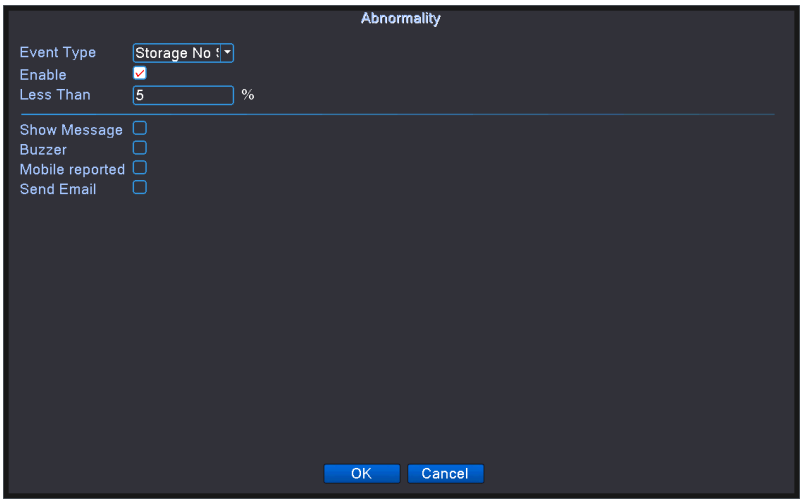
【**Event Type**】Selecting abnormity you want to inspect, No Storage, Storage Error, Storage No Space, Net Disconnection and IP Conflict.

No Storage: The DVR does not detect the hard disk and other storage devices, the reasons for the detection may be loose cable, cable bad or hard disk damage;

Storage error: DVR can detect hard disk and other storage devices but the storage device is damaged;



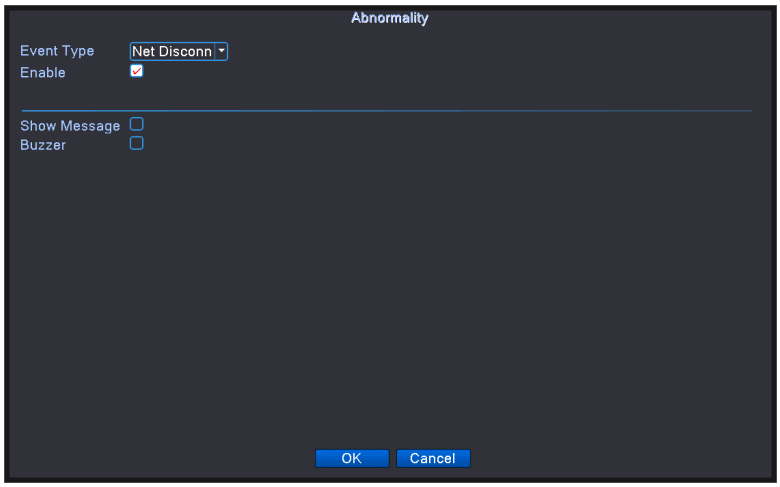
Storage Error



Storage No Space

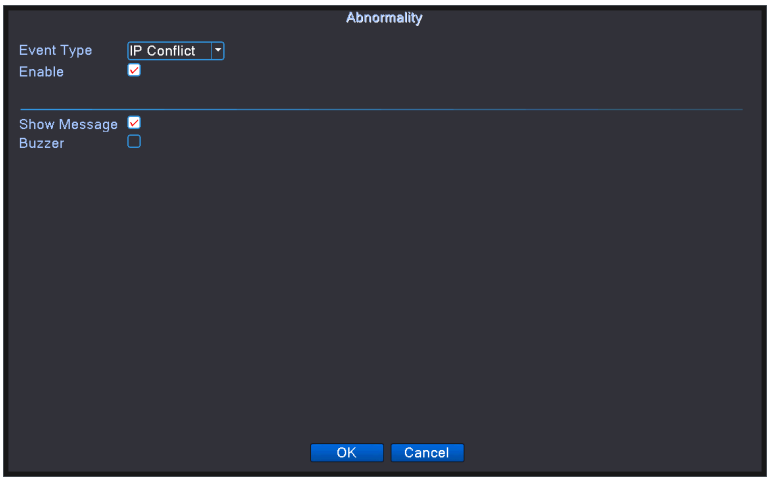
Storage No Space: You can set a lower limit of the remaining memory space, when the remaining storage space is lower than the set value to trigger the alarm;

Net Disconnection: The recorder triggers an alarm when the network connection is disconnected;



Net Disconnection

IP conflict: DVR detects the same local area network with other video recorder and its own IP when the same trigger alarm.



IP conflict

【**Enable**】Select it to make sure abnormal function workable

【**Lower limit**】Sets the value of the remaining space in the storage space shortage event;

【**Show message**】Automatically alarm cue dialog box come out of the main screen

【**Buzzer**】Device will have one long noisy “di” while alarm is happening

【**Mobile report**】 When the recorder triggers an alarm, the alarm message is automatically pushed to the mobile device on which the mobile client is installed.

Note: Before using this function, you need to install the mobile client APP of the company on the mobile device such as PMS function, mobile phone / tablet, etc., and add the DVR to the client in [Main menu]> [System Settings]> [Network Service].

【**Send EMAIL**】When this function is enabled, the DVR sends an alarm message to the specified

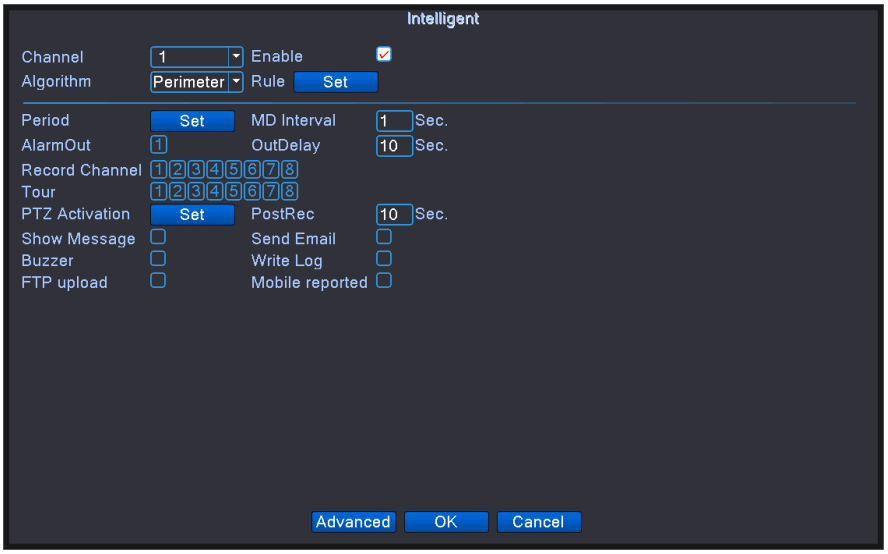
mailbox when the motion detection alarm is triggered;

Note: Before using this function, you need to set the Outbox and the Inbox in the [Main Menu]> [System Settings]> [Network Service]> [Email] and ask the DVR to connect to the Outbox Server.

4.4.7 Intelligent analysis

***Note: only part of product support this function at present。**

To analyze the video image, when system detect object that meet pre-set algorithm rules and fit set flexibility and minimum image distance, will trigger video analysis alarm, and enable the linkage function.



Intelligent analysis setting page

【**Channel No.**】only shows by “1”，at present, only the 1st channel with maximum resolution of 1080P in the full analog(DVR) mode and hybrid(HVR) mode

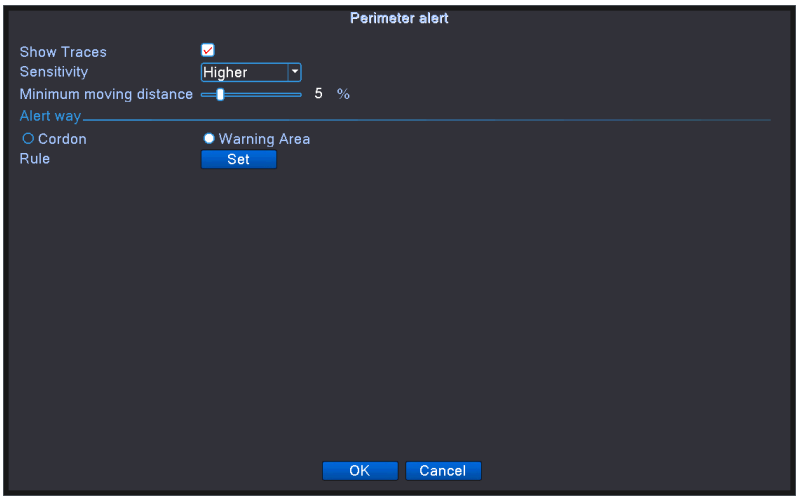
【**Enable**】tick it to enable the video analysis function, then can go for further setting,

【**Algorithm rule**】at drop-down box, Perimeter alert, Items care and Video Diagnosis to choose the algorithm rule of detection,

【**Rule**】choose different algorithm rules, the related setting page is different.

1、Perimeter alert

Alert a region through a cordon or alert area.

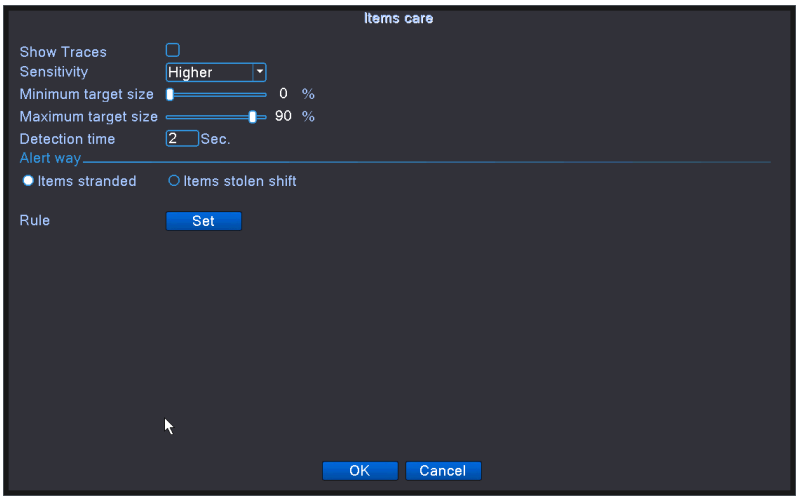


Perimeter alert

- **Show traces** tick it to enable, when alarm triggers, there will be red box around moving objects.;
- **Sensitivity** , base on different requirement, there are 3 options in the drop-down box, Higher, Middle and Lower;
- **Minimum image distance** range between 0~30 %，the more flexible the less image distance.;
- **Alert way** there are 2 kinds：cordon and warning area. **Cordon**：Can set 3 prohibited directions: bidirectional prohibited, from top to bottom (from left to right), from bottom to top (from right to left), when the setting cordon is too slope, show with from left to right / from right to left, otherwise will be from top to bottom / from bottom to top, when the moving object meet preset cordon rules, the alarm will be triggered; **Warning area:** can set 3 kinds of prohibited directions: bidirectional prohibited, enter and leave, when the moving object meet preset warning area rules, alarm will be triggered.
- **Rules** click **setting**，enter rule setting page, right click mouse, choose add, use mouse to fix two or more point, and then connect them to form a line or a irregular region, after that a box of prohibited direction options will come out, choose one of them, right click mouse, click Yes, return to previous page, click Yes, alarm rules setting is finished.

2、Items care:

Take care of the items within the screen, when the object position changes to trigger the alarm.

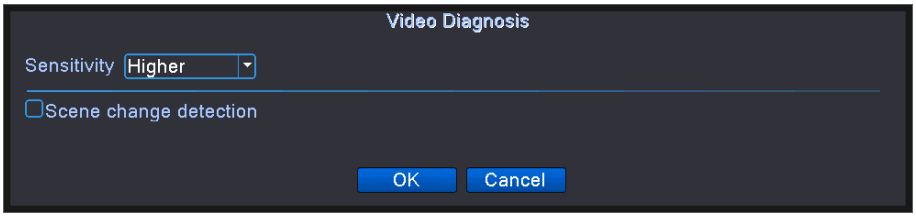


Items care

- **Show traces** tick it to enable, when this function is triggered, there will be read box shows around the moving object
- **Sensitivity** , base on different requirement, there are 3 options in the drop-down box Higher,Middle and Lower.
- **Minimum image distance** range between 0~30 %，the more flexible the less image distance.
- **Alert way:** three modes: Items stranded、Items stolen、Illegal parking.Items stranded:object appears within warning area, and the size of object meet the rules of minimum image distance, alarm will be triggered. Items stolen:object disappears within warning area, and the size of object meet the rules of minimum image distance, alarm will be triggered；Illegal parking:this way is similar with Items stranded.
- **Rules** click **setting,**enter the setting page of rule, right click mouse, choose add, use mouse to fix several points and then connect them to form a irregular region, right click mouse, click Yes, return to previous page, click Yes, alarm rule setting if finished.

3、Video diagnosis:

When the front-end camera transmits an error to the video recorder, the cause of the abnormality is diagnosed.



Video diagnosis

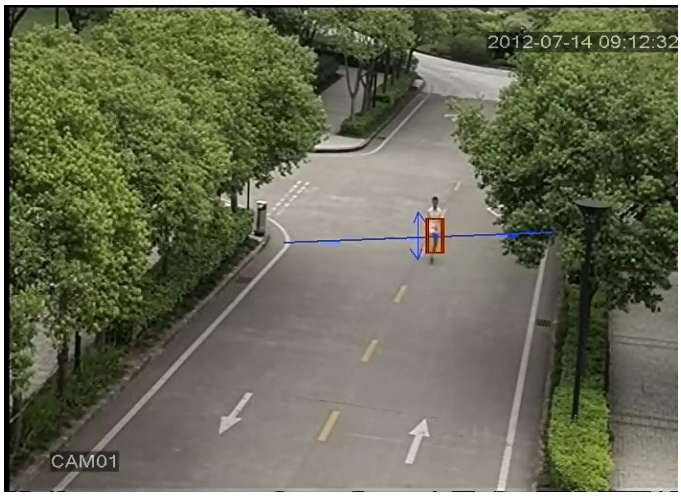
- **Sensitivity** , base on different requirement, there are 3 options in the drop-down box Higher,Middle

and Lower;

- **Detection type:** there are 8 kinds of detection type: Brightness anomaly detection、Sharpness detection、Noise detection、Color cast detection、Screen freezes detection、Scene change detection、Anthropogenic interference and PTZ runway detection.Can choose one or more types if necessary, when video detect selected type, the alarm will be triggered.

The setting way of set / withdraw garrison time period and linkage parameter, please refer to chapter“4.3.1 motion detection”

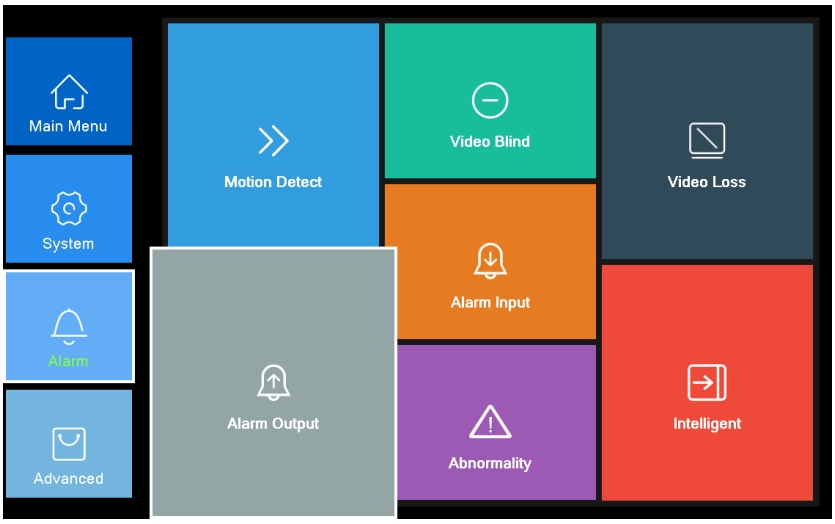
For example：enable video analysis function, algorithm rules is **PEA**, the alert way in the rule is **Cordon**, prohibited direction is bidirectional, when a moving object across this warning line, alarm is triggered, see below pic4.16



Alarm image regarding one of the video analysis

4.5 Management tools

Manage tools menu including: HDD info, output adjust, auto maintain, restore default, upgrade, import and export, LOG info, BPS, version info.

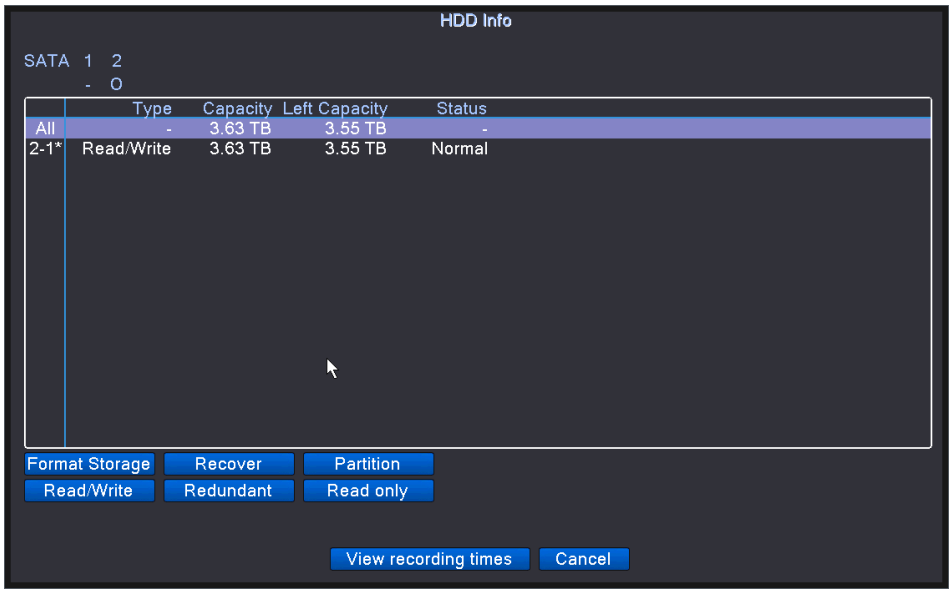


Management tools

4.5.1 HDD Info

Configure and manage the hard disk.

Some models that supporting the capture function set another button.



HDD management

【**Format Storage**】Select a hard disk or partition in the directory bar, click the format storage button will format the selected disk;

Note: Formatting the disk will empty all contents of the disk. Please exercise caution.

【**Recovery**】 Select the wrong disk shows in the status bar, click the recovery error button on the selected disk to restore the error;

【**Partition**】Partition the selected disk;

Note: The disk will be formatted before the partition, please be careful.

【**Read and write**】 Select a hard disk or partition in the directory bar, click read and write button to set the hard disk or partition for the video partition;

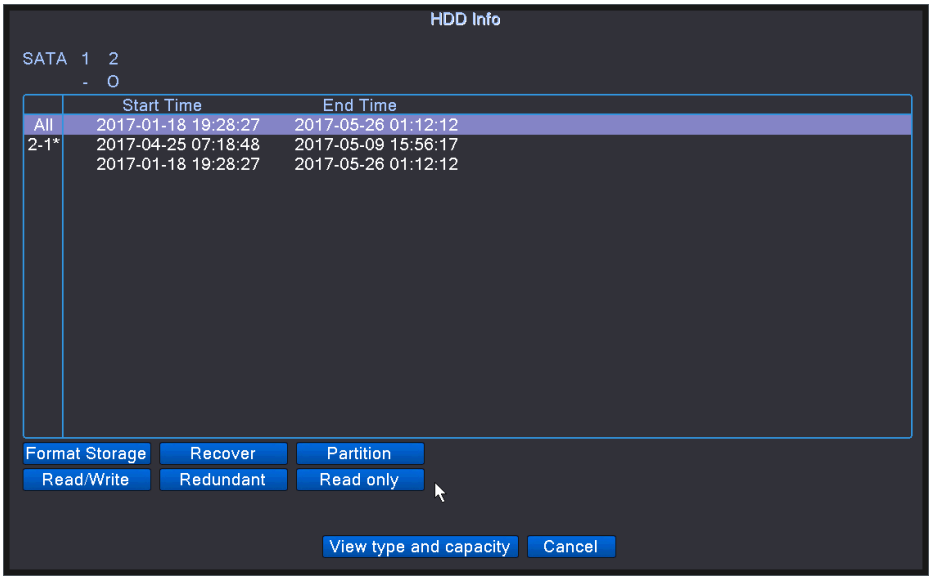
【**Redundant**】 Select a hard disk or partition in the directory box, click set the read-only disk can be set to the hard disk or partition, video recording file written to the reader while writing Redundant disk, to achieve a dual backup video files;

【**Read**】 In the directory bar, select a hard disk or partition, click to set the read-only disk can be set to read-only disk or partition, the user can only play back the video or capture files can not Enter new documents;

【**Storage information**】 Show the status of the installed hard disk, including all the hard disk type, total capacity, remaining capacity, status, hard disk video time and other information.

【**Serial number**】 In the hard disk information ○ indicates that the hard disk is normal, X is faulty, - indicates that no hard disk is installed, "*" indicates the current working plate (such as 1-1 *). If the corresponding hard disk is bad disk, only "?" is displayed.

【**View video time**】 Click to view the hard disk video time button, you can view the hard disk video file start time and end time.



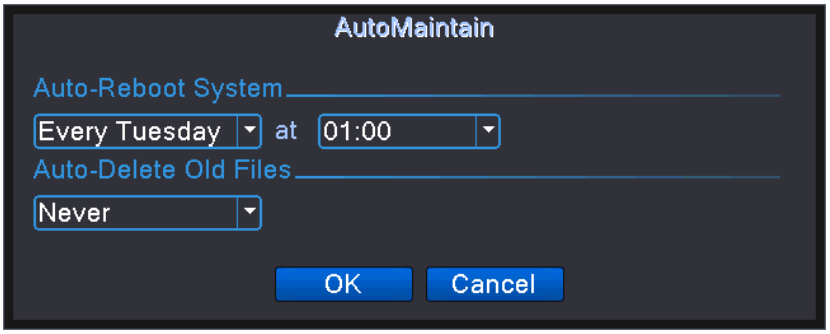
View video time

4.5.2 Output adjust

Please read "3.6.11 Output adjust".

4.5.3 Auto maintain

The user can set the time to auto reboot and auto delete file.



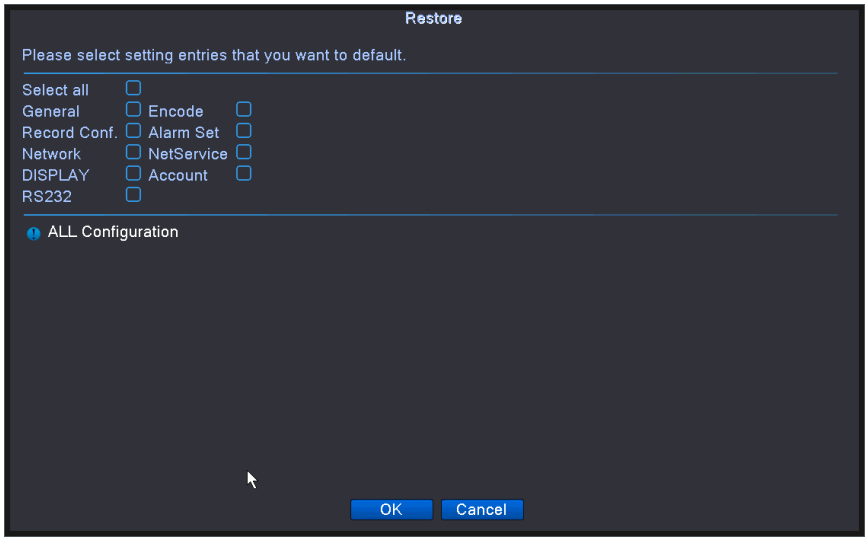
Auto maintain

【Automatically restart system】 User settings any point of the video recorder to restart for automatic maintenance in a week, you can choose never to automatically maintain;

【Automatically delete files】 User set the DVR automatically delete the file 1-255 days ago, you can also choose never delete;

4.5.4 Restore

The system restore to the default. You can choose the items according to the menu.

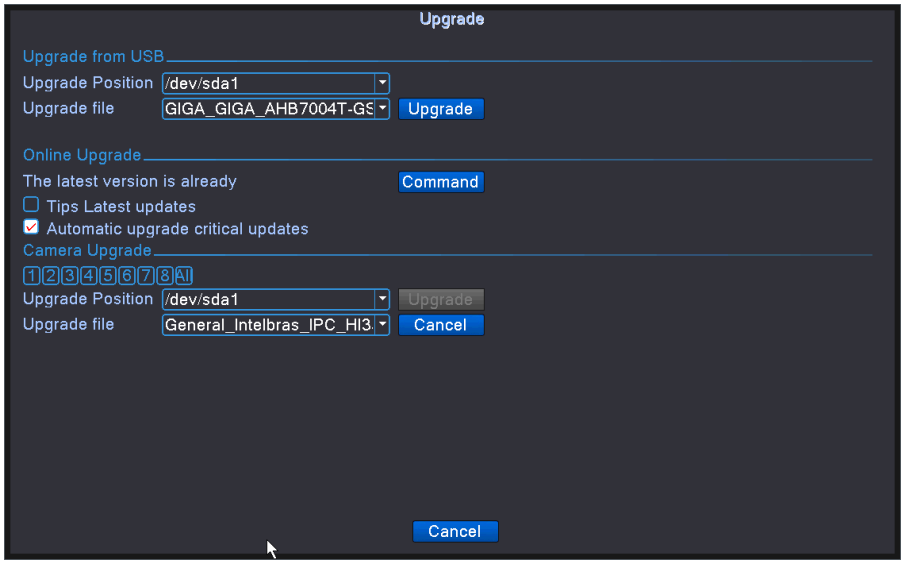


Restore

【Select All】 Check and click the OK button to restore the default for all configurations;

【Item selection】 After checking, click the OK button to restore the selected configuration by default.

4.5.5 System upgrade



System upgrade

【U disk upgrade】 Insert U disk, with the upgrade file to download the U disk to upgrade the device

【Where to upgrade】Put the upgrade program U disk external DVR USB interface, click the drop-down menu to select U disk upgrade;

【Upgrade File】 Click the drop-down menu to select the upgrade program, select and click the upgrade button to start the upgrade;

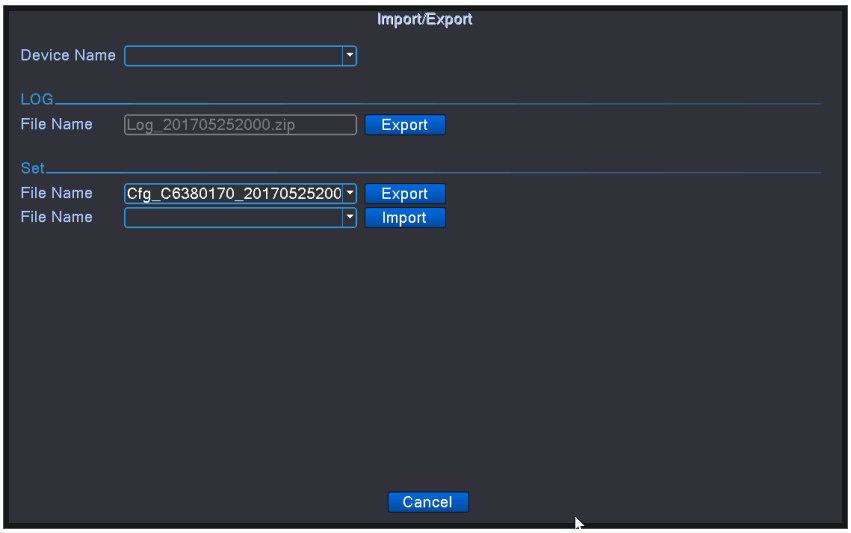
【Online Upgrade】 After the DVR being connected to the WAN, the current software version will be compared with the software version of the remote server. If the new version is found, it will be upgraded;

【Camera upgrade】Insert the U disk, with the upgrade file downloaded to the U disk to upgrade the analog front end (part of the model support) / digital channel or mixed mode can be used to upgrade the front-end IPC program.

Note: Do not power off during the upgrade process, otherwise it will cause serious consequences. If the upgrade fails, please check whether the upgrade program is consistent with the product model.

4.5.6 Import/Export

Users can export the log info and the configure file from device to connected flash stick, and also can import related configure file from flash stick to settings, which greatly bring convenience to the customers.



Import/Export

【**Device Name**】 Click the drop-down menu to select the external storage device;

【**Log Information - File Name**】Click the Export button to export the log to the external storage device;

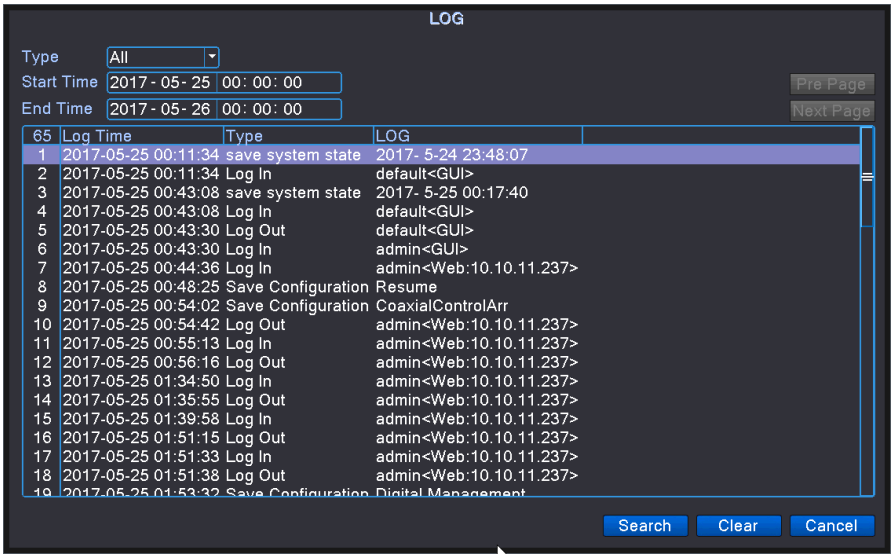
【**Settings - Export**】 Click the Export button to export the current profile of the VCR to the external storage device;

【**Settings - Import**】 Click the drop-down menu, select the configuration file to be imported in the external storage device, and click the Import button to complete the import.

Note: Profiles between different models can't be interoperable.

4.5.7 LOG

Check the DVR system log.



Log info

【**Type**】 Search log type in the drop-down menu include, all, system operation, configuration operation, data management, alarm events, video operations and other eight types;

【**Start / End Time**】 Set the start and end times of the query log;

【**Search**】 Click the search button to query the log that satisfies the set type and start / end time;

【**Contents**】 Shows the results of the query, including the time, type and log content and other

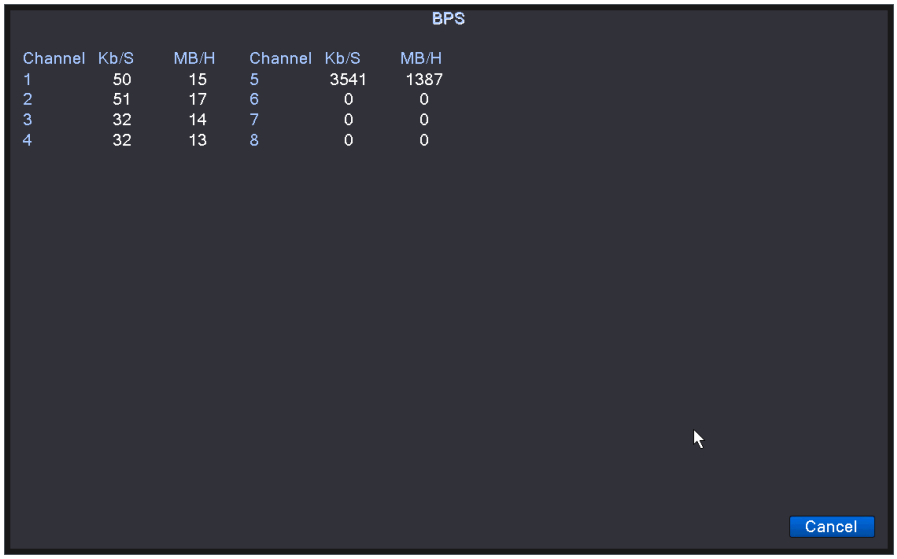
information;

【Up / Next】 More information on the log, one page can't be displayed through the up / down page to page;

【Clear】 Empty all log information.

4.5.8 BPS

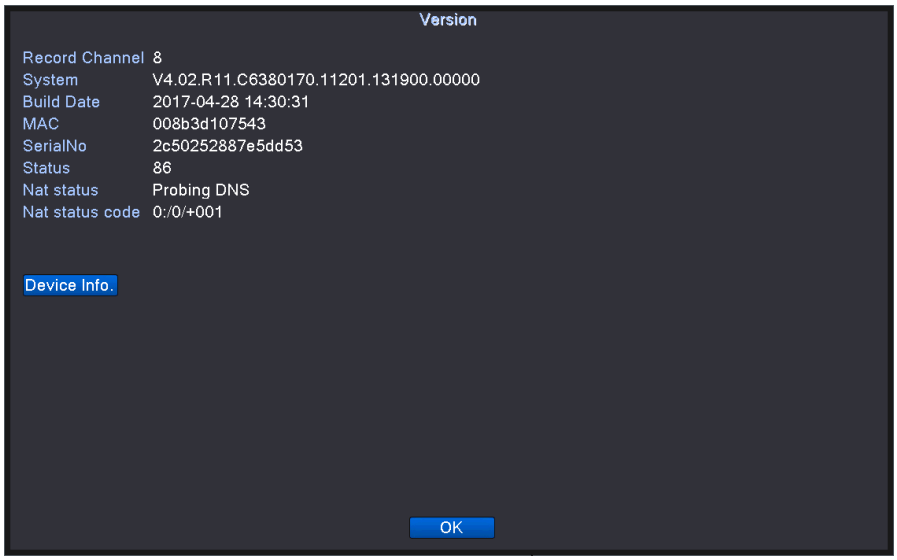
Display the code stream（Kb/S）and hard disk capability （MB/H）in real time. It displays as the wave sketch map.



BPS

4.5.9 Version

Display the system version of the recorder, MAC, NAT status and other information.



Version information

【**Video channel**】 Number of video channels supported by the current channel mode of the recorder;

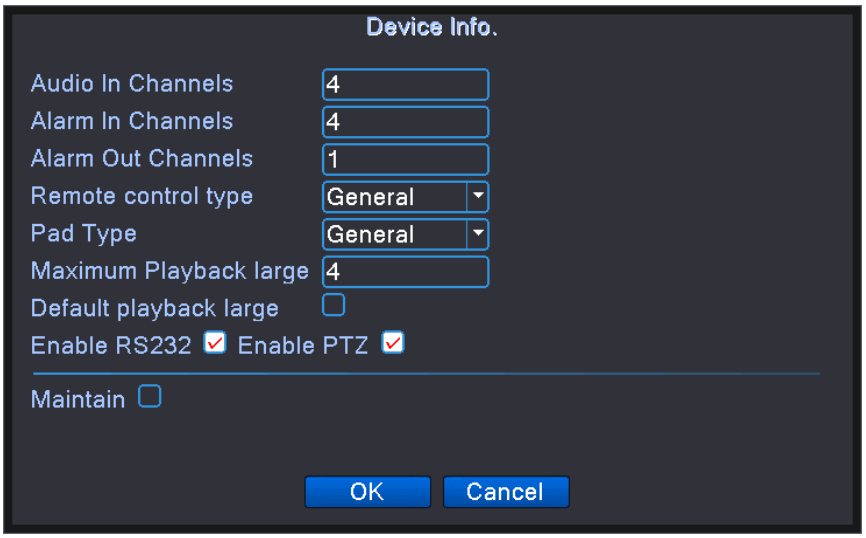
【**System version**】 A string of the product model, support the function and other information serial number;

【**Release Date**】 The date of the current software version of the DVR;

【**MAC / serial number**】The unique identification number of the recorder;

【**Nat status**】 The status of the video server connected to the cloud server, the success of the connection means that the cloud function of the video recorder is available.

【**Equipment information**】Provide the video recorder hardware interface, software performance and other information.



Device information

【**Audio / Alarm Input Channel**】The number of audio and alarm input channels supported by the DVR;

【**Alarm output channel**】 The number of channels that the recorder supports the alarm input;

【**Remote control type**】 The type of remote control that DVR applicable, if the remote control type and the selected type does not match the remote control can't operate the video recorder;

【**Maximum / Default Playback Number**】 The maximum number of playback channels supported by the VCR and the default number of playback channels;

【**Enable serial port / PTZ function**】 After checking the serial port and PTZ function, users can use the serial port and PTZ function.

4.7 Shut down system

Refer to chapter 3.6.12"Shut down system".

5 Cloud Technology Basic Operation

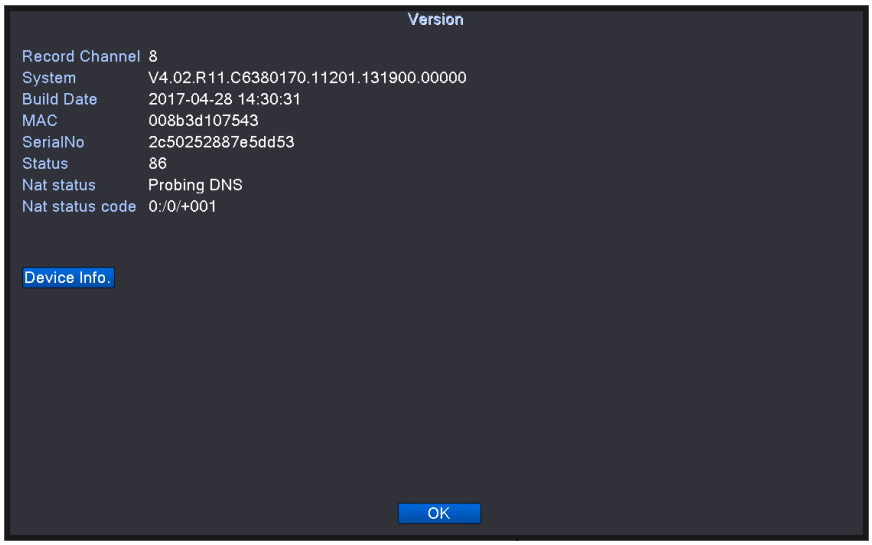
5.1 Cloud technology monitor

Cloud technology make the device one step on net, greatly bring convenience for customer to monitor via wide area network, this technology is using the serial no to visit device.

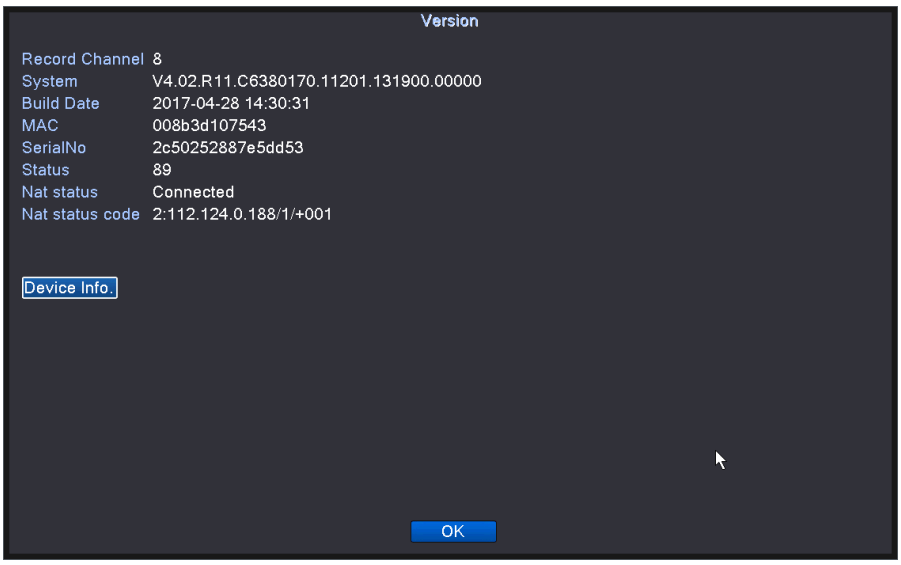
***Remark：the device that using cloud technology should be in the WAN(Wide Area Network)firstly.**

- **Check the connecting status of cloud technology**

  Connect device to WAN firstly, then enter【Main menu】>【Info】>【Version】to check whether the device successfully connect to the cloud server or not.



Connect failed interface

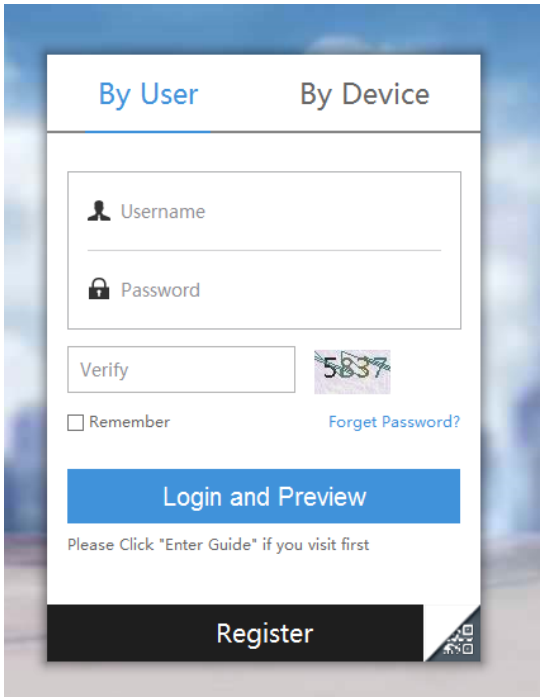


successfully connect interface

Cloud technology server connection status

- **Log in cloud server**

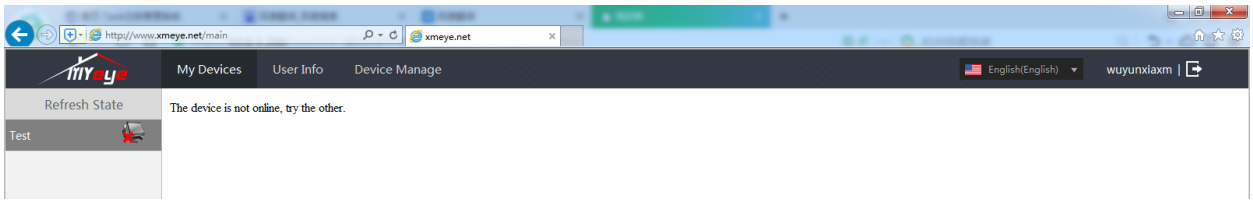
Visit http://www.xmeye.net to see below log in page,. First login, please click on the new wizard to follow the instructions to complete the user registration and other operations and complete the IE plug-in installation or will lead to access exceptions.



Cloud technology login interface

1、Log in by user

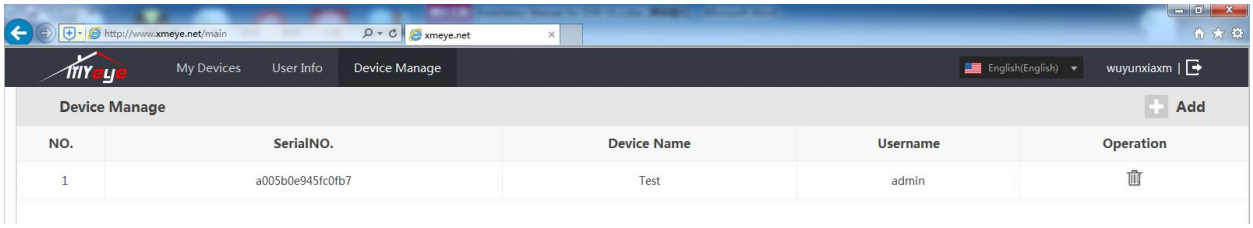
Use the registered user name and password to log in, one user can add to manage multiple DVR or network cameras.



Log in by user

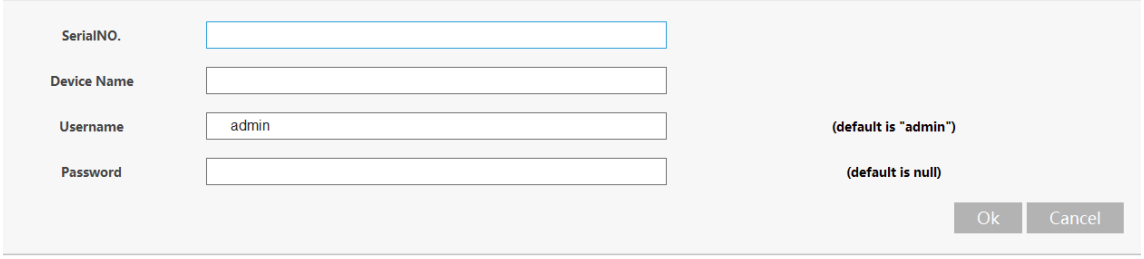
【Device】 The device information which has been added to the management of login user, with a red X that the current device is not online, without the device that is online, double-click to access; can refresh the state function to obtain the latest equipment status;

【**Device manage**】You can add, modify, and delete devices;



Device manage interface

Add device: Input the serial number getting form the "Version information" into the "Device serial number". The device name is determined by the user according to the actual situation. The device user name and password are the user name and password of the login recorder.



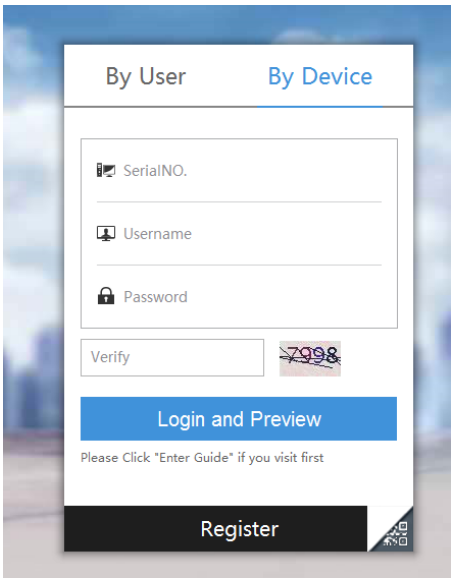
Add device

Modify a device: Click the Modify Device button to add the device's serial number, device name, device user name, and password.

Delete a device: Click the Delete Device button to delete a device that has already been added.

2、Log in by device

Use the device serial number to log in directly to the device. The login mode can’t manage multiple devices at the same time.



Log in by device

6 FAQ and maintenance

6.1 FAQ

If the problems are not listed, please contact the local service or call the HQ service. We are willing to offer the service.

1、 The DVR can not boot up normally.

Possible reasons are as followed:

1 The power supply is not correct.

2 Switch power supply line is not in good connection.

3 Switch power supply is damaged.

4 The program updating is wrong.

5 The hard disk is damaged or the hard disk lines are broken.

6 The front panel is damaged.

7 The main board of the DVR is damaged.

2、 **The DVR reboots automatically or stops working after boot up a few minutes.**

Possible reasons are as followed:

1 The input voltage is not stable or too low.

2 The hard disk is damaged or the hard disk lines are broken.

3 The power of the switch power supply is low.

4 Frontal video signal is not stable.

5 Bad heat radiator or too much dust or bad running circumstance for the DVR.

6 The hardware of the DVR is damaged.

3、 System can not detect hard disk.

Possible reasons are as followed:

1 The hard disk power supply line is not connected.

2 The cables of the hard disk are damaged.

3 The hard disk is damaged.

4 The SATA port of main board is damaged.

4、 **There are no video outputs in single channel, multiple channels and all channels.**

Possible reasons are as followed:

1 The program is not matched. Please update the program.

2 The image brightness is all 0. Please restore the default setup.

3 There is no video input signal or the signal is too weak.

4 The channel protection or the screen protection is set.

5 The hardware of the DVR is damaged.

5、 **Real-time image problems such as the image color or the brightness distortion.**

Possible reasons are as followed:

1 When using the BNC output, the option between the N mode or PAL mode is wrong and the image becomes black and white.

2 The DVR is not matched the monitor impedance.

3 The video transmission distance is too far or the loss of the video transmission line is too large.

4 The color and brightness setting of the DVR is wrong.

6、 I can not find the video files in local playback mode.

Possible reasons are as followed:

1 The data line of the hard disk is damaged.

2 The hard disk is damaged.

3 Update the different program with the origin program files.

4 The video files to look up are covered.

5 The recording is not on.

7、 The local video is not clear.

Possible reasons are as followed:

1 The image quality is too bad.

2 The reading program is wrong. Reboot up the DVR.

3 The data line of the hard disk is damaged.

4 The hard disk is damaged.

5 The hardware of the DVR is damaged.

8、 There is no audio signal in the surveillance window.

Possible reasons are as followed:

1 It is not an active tone arm.

2 It is not an active sound box.

3 The audio lines are damaged.

4 The hardware of the DVR is damaged.

9、 **There is audio signal in the surveillance window but mo audio signal in the playback state.**

Possible reasons are as followed:

1 Setting issues: the audio option is not chosen.

2 The according channel is not connected with the video.

10、 The time is wrong.

Possible reasons are as followed:

1 Setting is wrong..

2 The battery is in bad connection or the voltage is too low.

3 The oscillation is damaged.

11、 The DVR can not control the PTZ.

Possible reasons are as followed:

1 There is something wrong with the frontal PTZ.

2 The setting, connection or the installation of the PTZ decoder is not correct.

3 The connections are not correct.

4 The PTZ setting of the DVR is not correct.

5 The protocols of the PTZ decoder and the DVR are not matched.

6 The address of the PTZ decoder and the DVR are not matched.

7 When multiple decoders are connected, the far port of the PTZ decoder line A(B) must connect a 120Ω resistance to reduce the reflection otherwise the PTZ control is not stable.

8 The distance is too far.

12、 The motion detect is not working,

Possible reasons are as followed:

1 The time range set is not correct.

2 The motion detect area set is not correct.

3 The sensitivity is too low.

4 Limited by some hardware edition.

13、 I can not login via web or CMS.

Possible reasons are as followed:

1 The system is windows 98 or win me. We recommend updating to windows 2000sp4 or higher Version or installing the software for low edition.

2 ActiveX is hold back.

3 The version is not exceeded dx8.1. Update the display card driver.

4 Network connection failure.

5 Network setting issues.

6 Invalid password or user name.

7 The CMS is not matched the DVR program version.

14、 The image is not clear or there is no image in network preview state or video file playback state.

Possible reasons are as followed:

1 Network is not stable.

2 The user machine is resource limited.

3 Choose the play-in-team mode in the network setup of DVR.

4 The region shelter or channel protection is set.

5 The user has no surveillance purview.

6 The real-time image of the hard disk recording machine itself is not clear.

15、 Network connection is not stable.

Possible reasons are as followed:

1 Network is not stable.

2 IP address is conflicted.

3 MAC address is conflicted.

4 The net card of the DVR is bad.

16、 There is something wrong with the USB backup or writing a CD.

Possible reasons are as followed:

1 The rewritable machine and the hard disk are shared the same data lines.

2 The data is too much. Please stop recording and backup.

3 The data exceeds the backup storage.

4 The backup equipment is not compatible.

5 The backup equipment is damaged.

17、 The keyboard can not control the DVR.

Possible reasons are as followed:

1 The serial port of the DVR is not set correctly.

2 The address is not correct.

3 When multiple transformers are connected, the power supply is not large enough. Please give each transformer individual power supply.

4 The distance is too far.

18、 Alarm can not be recessional.

Possible reasons are as followed:

1 The setting of the alarm is not correct.

2 The alarm output is turned on manually.

3 The input machine is damaged or the connections are not correct.

4 There are some problems for specific program edition, Please update the program.

19、 Alarm is not working.

Possible reasons are as followed:

1 The setting of the alarm is not correct.

2 The connection of the alarm is not correct.

3 The alarm input signal is not correct.

4 A alarm is connected with two loops synchronously.

20、 The remote controller is not working,

Possible reasons are as followed:

1 The remote control address is not correct.

2 The remote control distance is too far or the angle is too large.

3 The battery is used up.

4 The remote controller or the front panel of the recording machine is damaged.

21、 The storage time is not enough.

Possible reasons are as followed:

1 Front vidicon quality is bad. The lens is too dirty. The vidicon is in backlighting installation.

2 The hard disk capability is not enough.

3 The hard disk is damaged.

22、 The downloading files can not play.

Possible reasons are as followed:

1 There is no media player.

2 There is no DX8.1 software or higher edition.

3 There is no DivX503Bundle.exe file to play AVI video files.

4 The DivX503Bundle.exe and ffdshow-2004 1012 .exe files must be installed in the windows xp system.

23、 **I can not remember the advanced password or network code in the local menu operation.**

Please contact the local service or call the HQ service. We will offer the service according the machine type and the program edition.

24、 Can not see the preview picture the digital channel

Possible reasons are as followed:

1 Did not add device

2 The device of related channel was not enable

3 The device of related channel was not selected.

4 The selected device did not connect to video sources

5 The channel title of selected remote device is not exist.

6 Stream for remote channel was set by extra stream.

7 User name & password not matched

8 directly input with IP address or port No. incorrectly when adding device.

9 The resolution of added device is too large to display by the monitor.

25、 Click “search” why not search out any of the device.

Possible reasons are as followed:

1 There is no other device exist in the Local area network

2 The subnet mask setting incorrectly on Network settings.

26、 The snapshot at alarm function was enable, why not catch picture

Possible reasons are as followed:

1 HDD manage without partition for snapshot.

2 Partition for snapshot is 0

3 The snapshot function is not enable on record-> storage of related channel.

27、 The time shows on digital channel is not the same as local side:

Enable the time synchronous function of digital channel.

28、 Can not see preview picture of analog channel

Possible reasons are as followed:

1 The camera did not connect to video interface

2 The device did not connect to video source

3 Video source is broken.

29、Picture will be frozen when multi-connection and shift devices.

Picture come out from digital channel need few seconds, shift device means to show new picture, so it needs several seconds to buffer.

6.2 Maintenance

1 Please brush printed circuit boards, connectors, fans, machine box and so on regularly.

2 Please keep the grounding well done to prevent the video or audio signal interfered and the DVR from static or inductive electricity.

3 Do not pull out the video signal line or RS-232 port or RS-485 port with the power on.

4 Do not use the TV in the local video output port(VOUT) of DVR. It will damage the video output circuit easily.

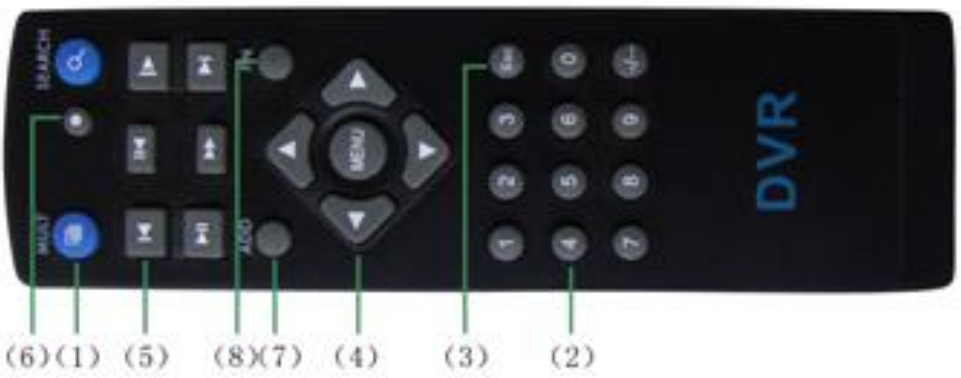
5 Do not turn off the switch directly. Please use the turn-off function in the menu or press the turn-off button in the panel (3 seconds or longer) to protect the hard disk.

6 Please keep the DVR away from heat resource.

7 Please keep the DVR ventilated for better heat radiator.

Please check the system and maintain regularly.

Appendix 1.Remote controller operation



Serial number	Name	Function
1	Multi-window button	Same function as Multi-window button in the front panel
2	Numeric button	Code input/number input/channel switch
3	【Esc】	Same function as【Esc】button in the front panel
4	Direction button	Same function as direction button in the front panel
5	Record control	Control the record
6	Record mode	Same function as “Record mode”
7	ADD	Input the number of DVR to control it
8	FN	Assistant function

Appendix 2.Mouse operation

***Take right hand as an example**

The mouse in USB connection is supported.

Operation	Function
Double left click	Double click one item in the file list to playback the video Double click the playback video to zoom in or out the screen
	Double click the channel to make it full screen display double click again to resume the multi-window display
Left click	Choose the according function in the menu
Right click	Pop desktop shortcut menu in preview state
	Current shortcut menu in the menu
Press middle button	Add or subtract number in the number setting
	Switch the items in the combo box
	Page up or down in the list
Move mouse	Choose the widget or move the item in the widget
Drag mouse	Set the motion detect area
	Set the cover area

Appendix 3.Hard disk capability calculation

Make sure the hard disk installed to the DVR for the first time. Pay attention to the IDE hard disk lines connection.

1、 Hard disk capability

There is no limit for recording machine. We recommend 120G~250G size to keep better stability.

2、 Overall capability option

The hard disk capability formula is:

Overall capability（M）=channel number*time（hour）*capability in an hour（M/hour）

The recording time formula is:

$$\text{Recording time（hour）} = \frac{\text{overall capability（M）}}{\text{Capability in an hour（M/hour）*channel number}}$$

The DVR introduces the H.264 compression technology. Its dynamic range is very large so the hard disk capability calculation is based on the estimation values of each channel creating files in an hour.

Example:

For one piece 500G HDD,real time CIF for recording,it will keep recording for about 25 days.HDD spaces per channel is 200M/H,if 4channels real time CIF at 24hours recording uninterrupted,it can last:500G/(200M/H*24H*4ch)=26 days