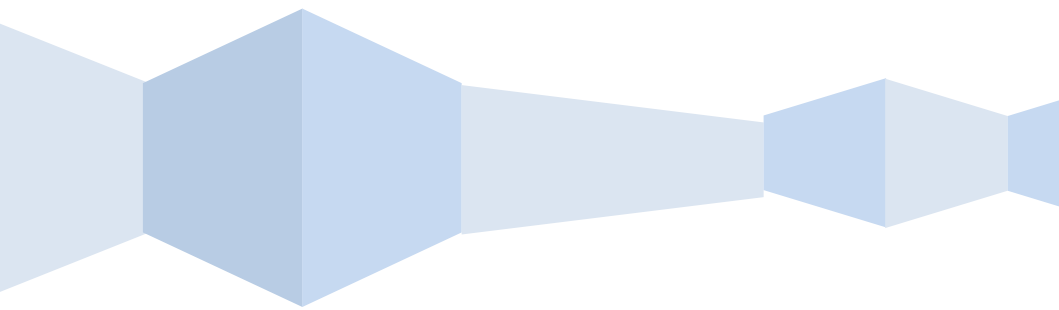




# **Network Video Recorder User Manual**

Version 8.1.30.3



# Declaration

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Photographs, graphics, charts, and illustrations provided in the manual are for explanation and illustration purposes only, and may differ from specific products. Please prevail in kind.

## Safety Precautions



### Notice

Please do not place and install equipment directly under the sunlight or near heating device.

Please do not install equipment at moist place or place with dust or soot.

Please keep equipment installed horizontally, or install equipment in a stable place, avoid the equipment falling down.

Please avoid liquid dropping on the equipment, make sure no objects filled (eg cups) with liquid on the equipment and prevent liquid from leaking.

Please install the device in a well-ventilated place, do not block the vents of the equipment.

Please only use equipment within rated input/output.

Please do not disassembly at liberty.

Please transport, use and reserve the equipment within allowing humidity

(10%~90%) and temperature (-10°C~+55°C) .

When cleaning the device, unplug the power cord and completely shut off the power.

The dust on the circuit board inside the NVR may cause a short circuit after being exposed to moisture. Regularly clean the circuit board, connectors, chassis, and chassis fan with a soft brush. If dirt is difficult to remove, wipe it off with a neutral detergent diluted in water and wipe it dry.

Do not use volatile solvents such as alcohol, benzene, or thinner when cleaning the device. Do not use strong or abrasive cleaning agents. This can damage the surface coating.

Please purchase the NVR dedicated hard drive recommended by the equipment manufacturer from the formal channels to ensure the quality and usage requirements of the hard drive.

Make sure that there is no threat due to uneven mechanical load.

Make sure that the video and audio cables have enough controls to install the cable. The bend radius of the cable should not be less than 5 times the cable diameter.

Make sure that the alarm cable is firmly installed and the contact is good.

Make sure that the NVR is reliably grounded.



### **Warning**

Please do use the battery as requested, or it may lead to a battery fire, explosion or risk of burning!

Please use the same type of battery when changing it.

Please do use recommended cord sets (power cords), do use within the rated specifications.

If you connect the product to the Internet at your own risk, including but not limited to products that may be subject to cyber attacks, hacking attacks, virus infections, etc., the company will not be responsible for product abnormality, information leakage, etc., but the company will timely to provide you with product-related technical support.



### **Instruction**

After receiving the product, please open the packing box, take out the equipment, and confirm the packing product and accessories according to the packing list in the box.

If you find any damage to the contents of the box or any missing parts, please contact your dealer promptly.

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# Chapter 1 Outline and Feature

## 1.1 Outline

The item is a high-performance network NVR, characterizing local previewing, and multi-picture division displaying & local real-time storage of recorded files. It supports shortcut operating of mouse and remote managing and controlling. It has two ways of storage--Front storage & client-side storage. Front-end monitoring points can be located anywhere on the network without geographical restrictions. Combined with other front-end equipment such as network cameras, network video server network, professional video surveillance system software to form a powerful safety monitoring network, in its network deployment system, focal point and monitoring points simply connect a network cable, no need to lay monitor video cable, audio cable etc. from center to monitoring points, easy construction, low cabling costs and low maintenance costs.

## 1.2 Default

- The factory default super administrator account is admin and the password is 12345.
- NVR and PoE NVR factory default IPv4 address: 192.168.1.88.
- WiFi NVR factory default IPv4 address: 172.20.17.88 or 172.136.123.88.

## 1.3 Descriptive content agreement

- In order to simplify the description in this manual, the following conventions are made:
- The "device" mentioned in this manual mainly refers to the NVR.
- The "IP device" mentioned in this manual mainly refers to IPC, IP DOME, or DVS.
- The "channel" mentioned in this manual refers to the NVR's IP channel.
- Click the "X" or "Cancel" button to return to the previous screen.
- Click All Interfaces Default to restore the current factory default settings.
- Click "Apply" and "Save" on all screens to save the current settings.

## 1.4 Function Features

- H.264 videos condense format, support 4K/6M/5M/4M/3M/2M/1080P
- /720P/D1 resolution network camera input.
- Some models support H.265 video compression format, support 4K / 6M / 5M / 4M / 3M / 2M / 1080P/720P / D1 resolution network camera input.
- G.711U and G711a audio condense format.
- Windows-style user interface embedded real-time Linux3.0 operating system.
- Support preview, recording, play back, backup.
- Supports dual stream.
- USB2.0 or USB3.0, support backup, software upgrading & mouse operating.
- The device only supports FAT32 and NTFS format U disk.
- Supports Chinese, Polish, Czech, Russian, Thai language, Hebrew, Persian, Bulgarian, Arabic, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Roman, Korean, Dutch and Greek switch.
- Some NVRs support fisheye correction, dual-screen preview, and PoE, whichever is the case.
- Only one USB interface NVR needs to use USB interface such as Configuration import, Configuration export, backup, IPC Update, Manual Update, first select the corresponding function, such as click "Config import", pop-up "Please insert the usb disk" 60 When the second countdown prompts, unplug the mouse and plug it into the USB device before the countdown ends. After the NVR recognizes the USB device, it automatically proceeds to the next step.

Function	Function Brief Introduction
Real-time	Two video output, with VGA and HD interface, through the monitor, monitor to achieve monitoring, some models support TV, VGA, HD at the same time output.
Record	H.264 standard compression, timing recording. Some models support H.265 video compression standard.
Storage	Support SATA interface maximum capacity of 8T hard drive, video recording can be realized on the hard disk real-time storage function.
Playback	Support 1~4 channel playback and network multi-channel play back.
Backup	Support NVR backup to USB memory sticks, portable hard drive or network backup; Support for VMS clip-by-clip backups
Network Operating	Support for remote client access, improve system safety.
Mouse Operating	Support USB mouse operating, easily and quickly set system parameters.
Pan-tilt Control	Though Onvif protocol, fulfill control functions of network dome camera. PTZ preset point, automatic cruise.
Motion Detection	By analyzing the video image, when the system detects that there is a movement signal that reaches the preset sensitivity, the motion detection alarm is started and the linkage function is started.



# Chapter 2 NVR Appearance

## 2.1 The Front Panel

### 2.1.1 The Front Panel

(For informational purposes only, subject to object)



No.	Button or indicator light	Function
1	Switch	Turn on / off the device
2	Hard disk indicator	Shows whether the hard drive is connected properly
3	Power Indicator	The device is powered on normally
4	Network Indicator	Shows whether the device is properly connected to the network
5	USB2.0	Connect mouse or USB memory stick backup



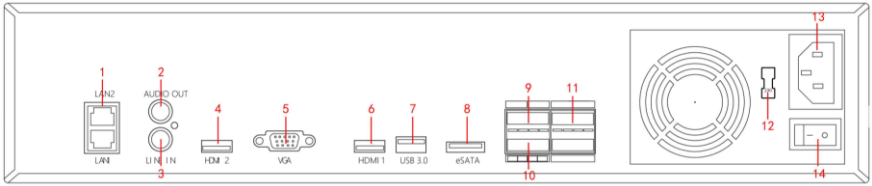
#### Instruction

- The panel diagram does not reflect the product size and ratio. Please refer to the actual product for details.

## 2.2 Rear Panel

### 2.2.1 General equipment rear panel introduction

The schematic diagram of the rear panel of the common equipment is as follows:



The corresponding description of each interface in Figure 2-2 is shown in the following table:

No.	Interface	Connection instruction
1	Ethernet port 1/2	Connect Network
2	Audio output	Equipment audio output interface
3	Audio Input	Equipment audio input interface
4	HD Video Output 2	Connect HD display devices such as computer monitors
5	VGA	Connect VGA display devices such as computer monitors
6	HD Video Output 1	Connect HD display devices such as computer monitors
7	USB3.0	Connect the mouse or U disk backup
8	eSATA	External hard drive interface
9	Ground 485	Alarm when equipment is grounded
10	Alarm Output	Equipment alarm output interface
11	Alarm Input	Equipment alarm input interface
12	Power toggle switch	115V/230V Switch
13	Power Connector	Device power connector
14	Switch	Equipment switch

Table 2-1

## 2.2.2 Built-in PoE device rear panel introduction

The schematic diagram of the rear panel of the built-in PoE device is as follows:

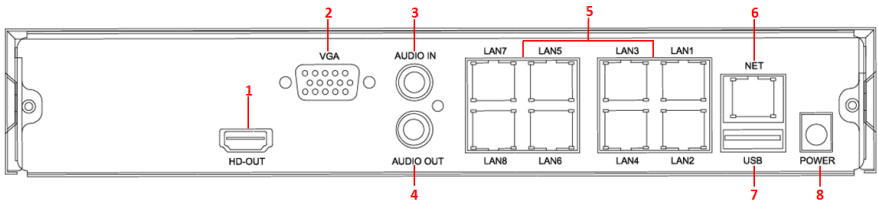


Figure 2-3

The corresponding description of each interface in Figure 2-3 is shown in the following table:

No.	Interface	Connection instruction
1	HD Video Output	Connect HD display devices such as computer monitors
2	VGA	Connect VGA display devices such as computer monitors
3	Audio Input	Equipment audio input interface
4	Audio output	Equipment audio output interface
5	PoE network port	Connect IP devices and power IP devices and networks
6	Ethernet port	Connect Network
7	USB port	Connect the mouse, U disk or removable hard disk
8	Power Connector	Device power connector



### Instruction

- The panel diagram does not reflect the product size and ratio. Please refer to the actual product for details.

## 2.3 Mouse Instructions

Mouse instruction



Operate NVR through mouse left button, right button & scroll wheel.

Mouse actions	Function
Click left mouse button	1. Select one of the options; 2. Insertion cursor, enter or modify the value of a parameter.
Click right mouse button	1. When interface not locking, click right mouse button, system menu pops up; 2. When interface locking, click right button on real-time preview

	interface, login interface pop up; 3. Entered to main menu, to a submenu of PTZ control, click right mouse button on the menu interface, return to previous menu (except video playback interface); 4. Entered to close system interface, click mouse right button on the interface, return to preview interface.
Single, double-click the mouse left button	1. When real-time preview multiple channels interface, double-click maximized channel display of one channel and return to the original state; 2. Single click the password input field on the login interface; 3. Single click setting parameters (date, time, IP address, port number, bit stream value and user password) or user names.
mouse movements	Select the menu or menu item.
Mouse drag	Drag progress bar to playback video.
Slide mouse scroll wheel	1.Time setting; 2.Select the drop-down menu values;

## 2.4 Input Method Introduction

Input method includes lowercase and uppercase English letters. Clicking

“” button on the left can switch the input method and the symbol “” represents deleting incorrect input.



Uppercase English input



Lowercase English input

# Chapter 3 Connecting NVR

## 3.1 Hard Disk Installation



### Notice

- Before installation, please confirm that the power has been disconnected.
- Please use the NVR dedicated monitor hard drive recommended by the device manufacturer.

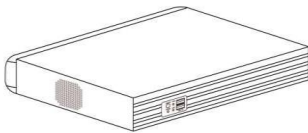
### Installation tools

A Phillips screwdriver

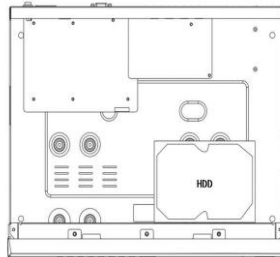
### Hard disk installation

The hard disk is installed as shown in Figure 3-1.

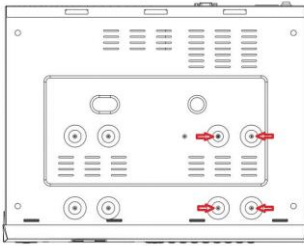
- ① Loosen the fixing screw on the cover, open the cover.
- ② Connect one end of the hard disk data cable and power cable to the motherboard, and connect the other end to the hard disk. Align the four positioning screw holes at the bottom of the hard disk with the hard disk positioning holes at the bottom of the chassis.
- ③ Hold the hard disk with hand, turn over the chassis, and fix the hard disk with screw at the indicated position.
- ④ After hard disk installed, turn over the chassis, fix the cover with screw.



①



②



③



④

Figure 3-1

### 3.2 Device Connection

Use VGA cable or HD cable to transmit the NVR signal to the display. If it is a controllable PTZ, use wire to connect RS485 A cable and RS485 B cable to the corresponding RS485 interface on NVR. As show in Figure3-2.

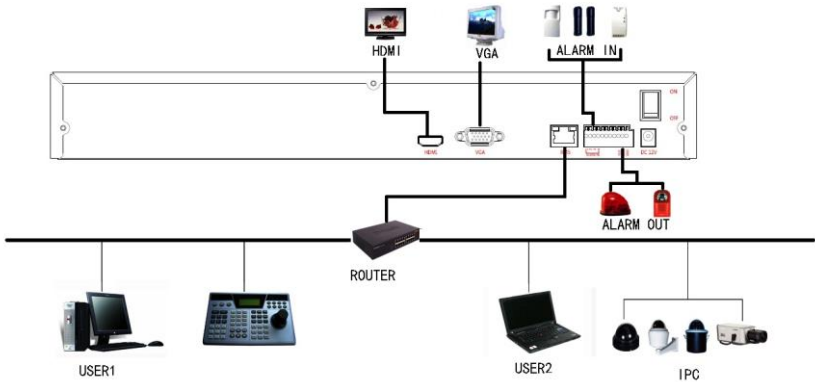


Figure3-2



#### Notice

- Devices with built-in PoE network ports support IPC plug-and-play functionality. When adding IP devices using the PoE network port plug-and-play method, make sure that the IP devices also support the PoE standard.

## Chapter 4 NVR Startup

### 4.1 System Initialization

The steps to turn on NVR are as follows:

- ① Connect the device to the monitor and plug in the mouse and power cord.
- ② Turn on the power switch on the rear panel to start the device. The system initialization screen appears, as shown in Figure 4-1.



Figure 4-1



#### Instruction

- Please confirm that the voltage to be connected matches the NVR requirements and ensure that the NVR ground is well grounded.
- If the power supply is abnormal, the NVR may not work properly or even damage the NVR. It is recommended to use a regulated power supply for power supply.
- The illustrations that appear in the operation manual may not be exactly the same as the menu interface displayed on your monitor, so all illustrations are for user's reference only.
- After the device starts up, it can be simply configured through the boot wizard, which is the normal operation of the device.

## 4.2 Boot wizard

### 4.2.1 Quick Startup Wizard

Quickly configuration the NVR as shown in Figure 4-2:

- ① After the device starts, enter the "Boot Wizard" and click "Next Step".



Figure 4-2 ①

- ② Then select a user name, enter the user password, select the system language and click "Login" to login the system (the default username is admin, password is 12345).

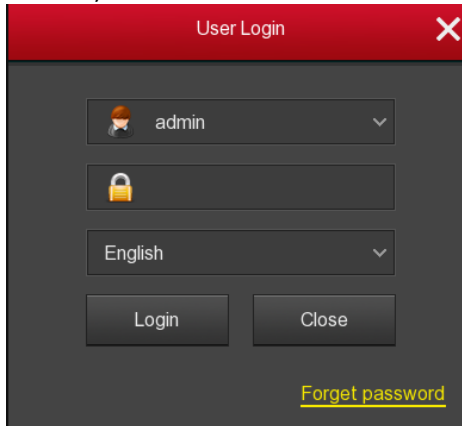


Figure 4-2 ②



③ When the login password is too simple, a security password prompt will pop up. Click "Modify".

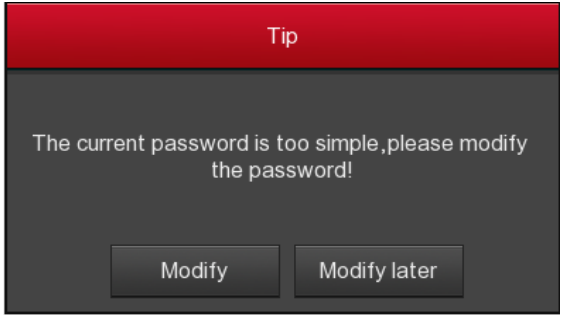
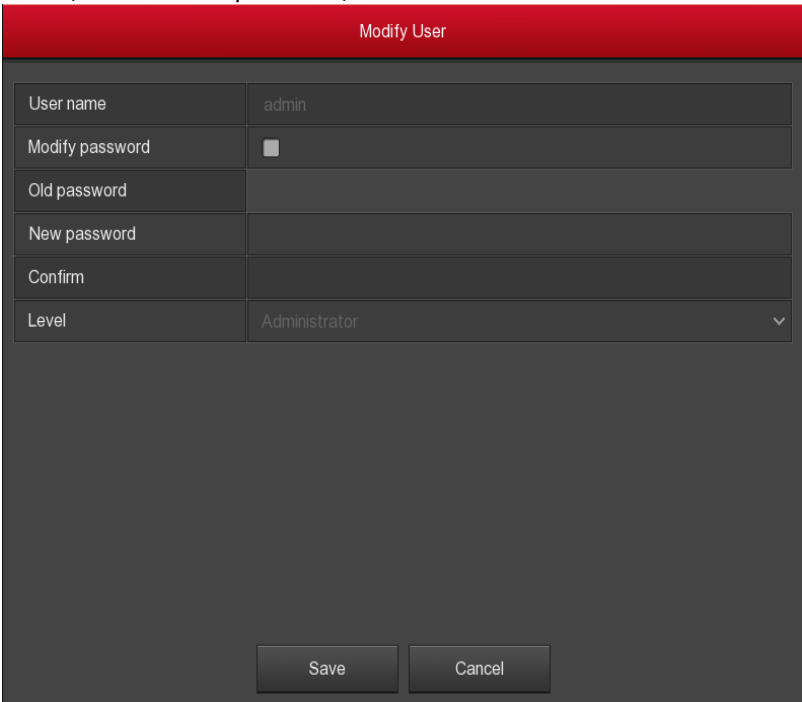


Figure 4-2 ③

④ Click the Modify password check box, enter the old password, new password, confirm new password, and click "Save".



The image shows a "Modify User" form with a red title bar. The form contains several input fields and a dropdown menu. The "User name" field is filled with "admin". The "Modify password" field has a checked checkbox. The "Old password", "New password", and "Confirm" fields are empty. The "Level" dropdown menu is set to "Administrator". At the bottom of the form, there are "Save" and "Cancel" buttons.

Modify User	
User name	admin
Modify password	<input checked="" type="checkbox"/>
Old password	
New password	
Confirm	
Level	Administrator

Figure 4-2 ④

⑤ Go to the "General" interface, configure the Device setting and date, and click "Next Step". For details, see "5.3.6.1 General".

General	
Device setting	
Language	English
Record mode	Overwrite
Record days	No limit
Video standard	NTSC
Standby time(min)	10
Device name	NVR

Buttons: Defaults, Apply, Cancel, Next step

Figure 4-2 ⑤

⑥ Go to the "Network" interface, configure the network parameters of the device. Click "Next Step". For details, see "5.3.6.2 Network".

Network	
IP Address	192 • 168 • 1 • 33
Enable DHCP	<input type="checkbox"/>
Network Mask	255 • 255 • 254 • 0
Gateway	192 • 168 • 1 • 1
Primary DNS	192 • 168 • 1 • 1
Secondary DNS	202 • 96 • 128 • 68
Device MAC	1E:48:32:13:29:62
TCP Port	5000
HTTP Port	80
RTSP Port	554
Network rate	100Mb/s

Buttons: Refresh, Default, Cancel, Previous Step, Next Step

Figure 4-2 ⑥

⑦ Go to the "Add Camera" interface, you can search for and add devices and click "Next Step". For details, see "5.3.5.1 Add Camera".

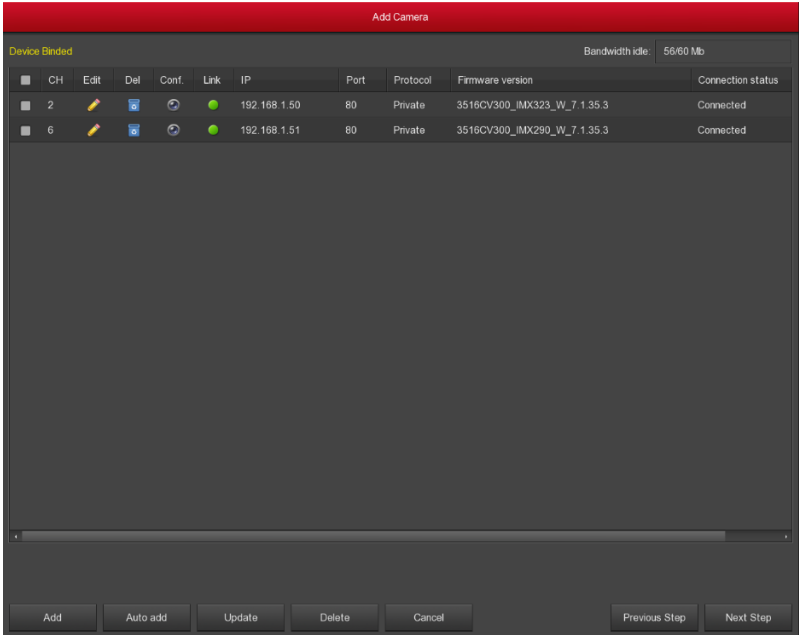


Figure 4-2 ⑦

⑧ Go to the "Record Setup" interface, set the video plan, support the manual drawing schedule, click "Complete", the boot wizard is set up. For details, see section "5.3.4.1 Schedule".



Figure 4-2 ⑧



### Instruction

- On the startup wizard screen, click Cancel to exit the startup wizard.
- When the password is too simple, after the login, a password strength security interface will pop up. You can click "Do not modify" to continue using the existing password.

## 4.2.2 Forget Password

If you forget your password, you can click "Forgot password" on the login page to enter the password retrieval interface, as shown in Figure 4-3 below:

The screenshot shows a 'Forget Password' dialog box with a red header. The form is organized into a table-like structure with three rows for security questions. Each row has a label on the left and a dropdown menu on the right. Below the questions are three corresponding answer input fields. At the bottom, there are three buttons: 'Next step', 'Clear', and 'Cancel'.

Forget Password	
Verification mode	Answer the question
Security issue1	Please select issue
Answer1	
Security issue2	Please select issue
Answer2	
Security issue3	Please select issue
Answer3	
<input type="button" value="Next step"/> <input type="button" value="Clear"/> <input type="button" value="Cancel"/>	

Figure 4-3

**Two kinds of verification methods are as follows:**

- **Security verification:** Select three security questions and enter the answer to the corresponding question to enter the new password setting interface, as shown in Figure 4-4.

Modify User

User name	admin
Modify password	<input type="checkbox"/>
Old password	
New password	
Confirm	
Level	Administrator <span>▼</span>

Figure 4-4

➤ **secure mail verification:**

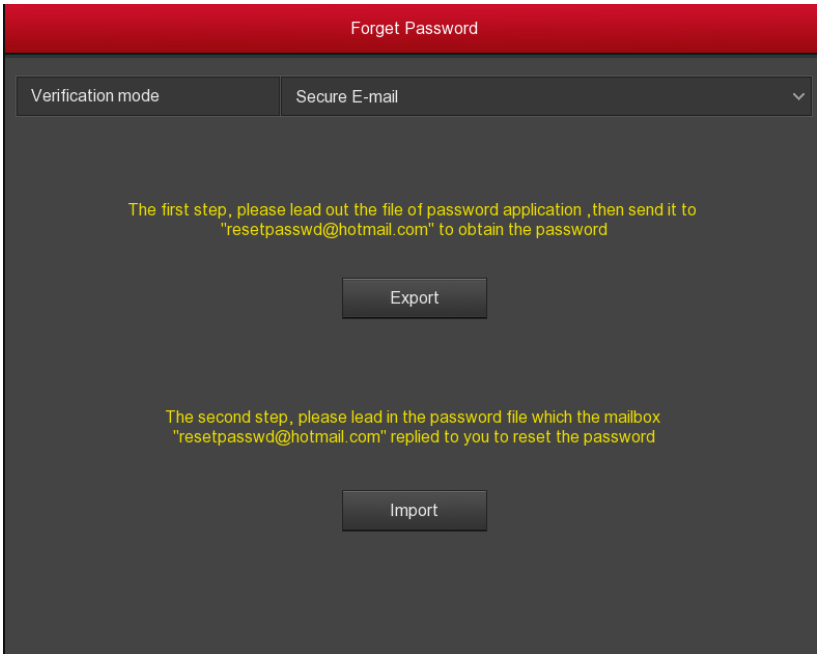


Figure4-5

- ① Insert a USB flash drive into the device and click Export to export the key application file to the U disk.
- ② Send the exported key file to mailbox at resetpassword@hotmail.com and wait for the mailbox to reply to the key file;
- ③ Save the key file to the U disk, insert the U disk into the device, and click Import.
- ④ On the new password setting interface, enter the new password, confirm the password, and click "Save", as shown in Figure 4-6.

Modify User	
User name	admin
Modify password	<input type="checkbox"/>
Old password	
New password	
Confirm	
Level	Administrator

Save Cancel

Figure4-6



### Instruction

- The password recovery can only be achieved after the "Security Settings" is completed in the user management interface.
- When selecting "Answer the question", the questions and answers must be exactly the same as the settings in the "Security Settings" before entering the "Next Step".
- When "Secure E-mail" is selected, the message to be sent to obtain the key must be "Security Settings" to fill in the mail.

## 4.3 Preview Interface

After the system is fully booted, it will enter into the default preview interface, as shown in Figure 4-7.



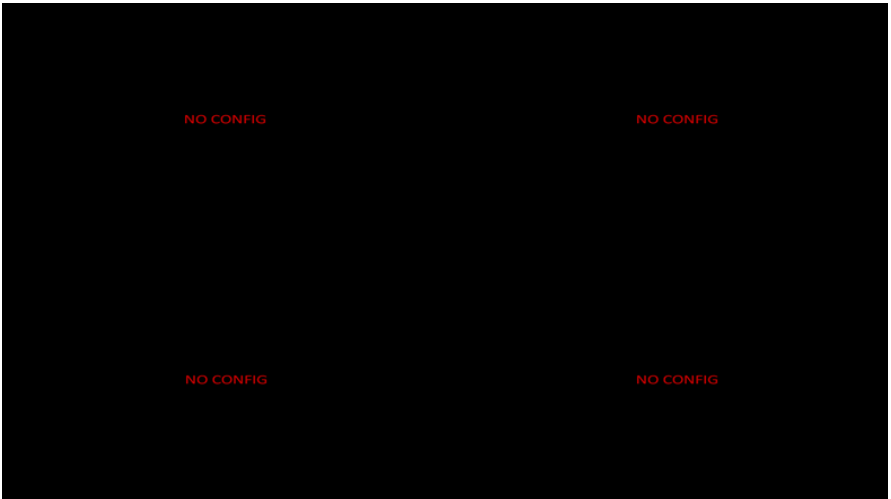


Figure 4-7

After the device normally starts up, the default setting is to preview in multi-screen display mode. Products with different channels has different amount of split screens to display. On the preview interface, you can set the appropriate date and time. On the bottom left of the screen, it shows the recording status of each video channel or alarm status icon.

**The function of each icon is shown in the following table:**



Icon	Function
	The monitoring channel is in video.
	The monitoring channel is in the motion detection state.

Table 4-1

## 4.4 Quick add device

**Quick add device is shown in Figure 4-8:**

① At the preview menu, for the channel of unconnected IP Camera, click anywhere in the channel interface, the lower left corner of the channel display “+” icon.

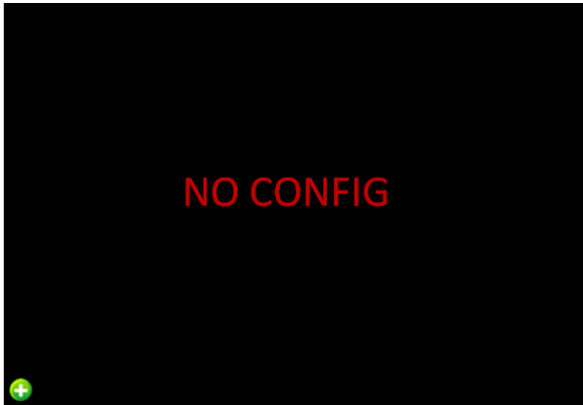


Figure 4-8 ①

- ② Select the device to add and click “Add”.

Device Search				
				Filter
				Onvif and Private
40	IP	Port	Protocol	Firmware version
1	172.18.190.94	8004	Private	3516C_IMX322_W_6.1.26.1
2	172.18.190.117	8817	Private	S2L33M_IMX322_PTZ_W_6.1.46.3
3	172.18.190.118	8818	Private	S2L55M_IMX123_W_7.1.3.2
4	172.18.190.155	8855	Private	S2L33M_IMX323-SD_W_6.1.38.1
5	172.18.190.157	8857	Private	S3L33M_IMX290_W_7.1.3.2
6	172.18.190.163	8863	Private	S2E66_IMX178_W_7.1.3.2
7	172.18.190.173	8973	Private	3519V100_IMX274_W_7.1.3.2
8	172.18.190.174	8874	Private	3516CV200_OV2718_W_7.1.3.3
9	172.18.192.5	8899	ONVIF	
10	172.18.190.216	88	Private	3516CV200_OV2718_W_7.1.3.3

Figure 4-8 ②

- **Search:** Search the IP address, port, protocol, etc. of the IPC client device.
- **Add:** Click “search”, the NVR can search the IPC devices which support the ONVIF and Private protocol in the same LAN (local area network), the searched IPC devices can be displayed at the list. And select any IPC

device in the list, click “Add”, the selected IPC information can be automated add to the particular channel, then click “Save” to complete.

- **Manual Add:** please refer to Manual Add in section 5.3.5.1.
- **Filter:** Filter the display of the searched device list.



### Instruction

Filter Search Add Device: In the Add Device interface, select the corresponding protocol in the "Display Filter" column →Search →Select Add Device → Click Add.

Manual Add: On the Add Device screen, click Manually Add → Click Open→ Select Protocol, Preview Stream, Enter Password, IP, Port, and other information → click Save.





## 4.5 Channel shortcut menu

After adding a device to a channel, click the channel. The shortcut menu appears as shown in Figure 4-9.



Figure 4-9

The function of each icon is shown in the following table:

Icon	Function
	Screen rotation button, click the button, the screen clockwise 90 ° rotation, click the button again, the screen clockwise 90 ° again.
	Instant playback button, click the button, the channel playback 5 minutes before the video.
	Audio output control button, click to set the channel output volume and mute.
	Electronic zoom button, click to open the electronic zoom function, hold down the left mouse button to select a certain area, let go of the mouse, the preview interface is displayed as the selected zoom area, hold down the left mouse button and drag the mouse to the channel In one position, view other enlarged positions of the channel; click the right mouse button to exit the electronic zoom and restore the real-time preview interface.




	<p>Image color button, click into the image interface, you can set the channel brightness, contrast, saturation, sharpness of the parameter values.</p>
	<p>Bit stream information icon, when the mouse moves to the icon position, the channel shows the current stream and other related parameters.</p>
	<p>Image channel shortcut menu close button, click to close the image channel menu.</p>

Table 4-2



**Instruction**

The image shortcut menu appears only if you click Channel after adding the device to the channel.

# Chapter 5 NVR Menu

## 5.1 Shortcut menu

Log in system, right-click it to pop up the NVR shortcut menu. As shown in Figure 5-1, you can enter the main menu, preview screen, round robin, video settings; add device, video playback, PTZ settings, NVR image color, etc. Interface settings.

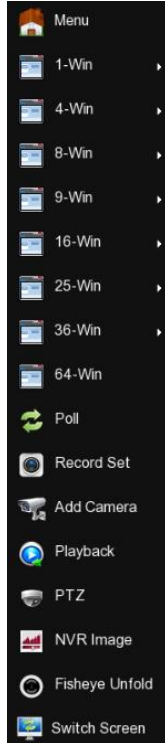


Figure 5-1

- **Menu:** Click and enter the main menu.
- **Win:** First, 4 groups of CH1-CH16, CH17-CH32, CH33-CH48, and CH49-CH64 are selected, and one channel of one group is selected for display.
- **4-Win:** Divided into 16 groups to display (CH1-CH4、CH5-CH8、CH9-CH12、CH13-CH16、CH17-CH20、CH21-CH24、CH25-CH28、CH29-CH32、CH33-CH36、CH37-CH40、CH41-CH44...).

- **8-Win:** Divided into 8 groups to display (CH1-CH8、CH9-CH16、CH17-CH24、CH25-CH32、CH33-CH40...).
- **9-Win:** Divided into 8 groups to display (CH1-CH9、CH10-CH18、CH19-CH27、CH28-CH36、CH37-CH45...).
- **16-Win:** Divided into 4 groups to display (CH1-CH16、CH17-CH32、CH33-CH48、CH49-CH64).
- **25-Win:** Divided into 3 groups to display (CH1-CH25、CH26-CH50、CH40-CH64).
- **36-Win:** Divided into 2 groups to display (CH1-CH36、CH29-CH64).
- **64-Win:** Display all channels CH1-CH64.
- **Poll:** Click into the poll setup interface (Detailed operation as 5.1.1).
- **Record Set:** Click into the record setup interface (Detailed operation as 5.3.4).
- **Add Camera:** Click and enter the add camera configuration menu (Detailed operation as 5.3.5.1).
- **Playback:** Click into the Playback interface.(Detailed operation as 5.3.1).
- **PTZ:** NVR supports PTZ control, allowing users to remotely control the camera.(Detailed operation as 5.1.2).
- **NVR Image:** Click into the image color configuration interface. (Detailed operation as 5.1.3)
- **Fisheye Unfold:** Enter the fisheye expansion interface. (This menu is only available for fisheye expansion function devices. For details, see 5.1.4)
- **Switch Screen:** Click OK to switch between the primary and secondary screens. At this time, the mouse can operate on the screen (only supports dual-screen devices with this menu).



### Instruction

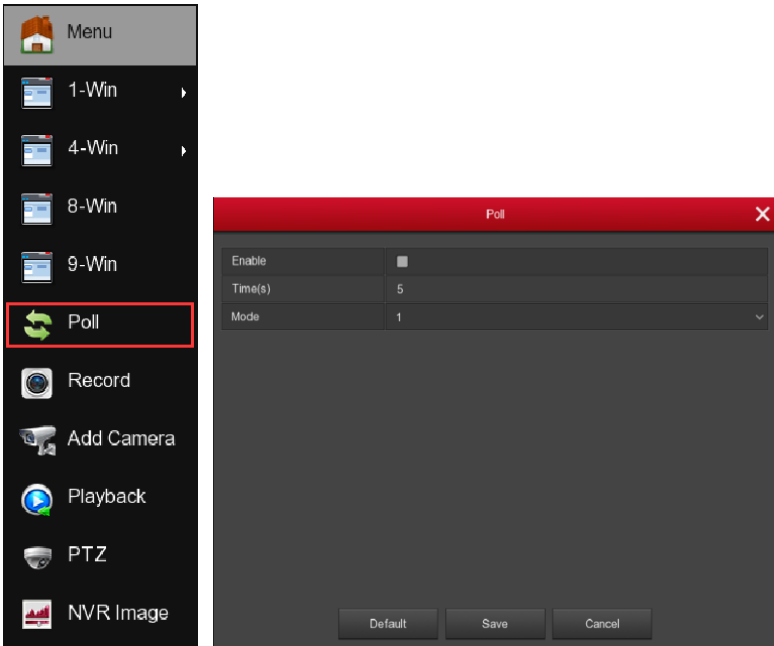
- At present, only some equipment of the company supports fisheye correction.
- Multi-screen display depends on the maximum number of channels supported by the device. For example, there are 9 screens in the shortcut menu of the 9-channel device and 16 screens in the 16-channel device shortcut menu...
- The 64-channel NVR supports dual-screen preview device real-time video, in which interface HD1 and VGA are the main screen interfaces, and HD2 is the auxiliary screen interface. In the main screen, you can

set the system to preview 64 channel video. Add the channel added to the main screen to the sub screen by adding the device interface. The sub screen can add up to 32 channels of the main screen. In the sub screen, you can preview the real time video, set PTZ, playback.

### 5.1.1 Poll

The poll settings are as shown in Figure 5-2 below:

- ① In the preview interface, right-click and select "Poll".
- ② Enable round robin, set polling interval and polling mode, click "Save".



①

②

Figure 5-2

- **Enable:** Turn on/off poll function, default is off.
- **Time(s):** Round trip interface time, default 10 seconds.
- **Mode:** The screen number of split screen, the default single channel display.

### 5.1.2 PTZ Setup

In the preview channel, right click mouse, select "PTZ", the preview will switch to the corresponding channel single-screen display, and the

emergence of PTZ control interface. PTZ setup interface is divided into PTZ control and Common control.

■ **PTZ control interface**

PTZ control interface is used to set the PTZ direction, speed and lens zoom, focus and aperture settings and cruise settings shortcut button.




Figure 5-3

- **Channel:** Select the channel where the PTZ device is located.
- **Zoom:** Click / to adjust camera zoom in/out.
- **Focus:** Click / to adjust camera focusing.
- **Iris:** Click / to adjust camera brightness.
- **Speed:** To control the speed of the pan/tilt, for example, the rotation speed in steps of 7 is much greater than the rotation speed in steps of 1.
- **Direction:** Use to adjust the direction of the PTZ camera.
- : Click to enter the Patrol setup interface.



## ■ Patrol Setup interface

In the PTZ control interface, click on the “” icon to enter the cruise setup interface. You can set related presets and cruise line settings, including dwell time and cruise speed, as shown in Figure 5-4 ① ②.

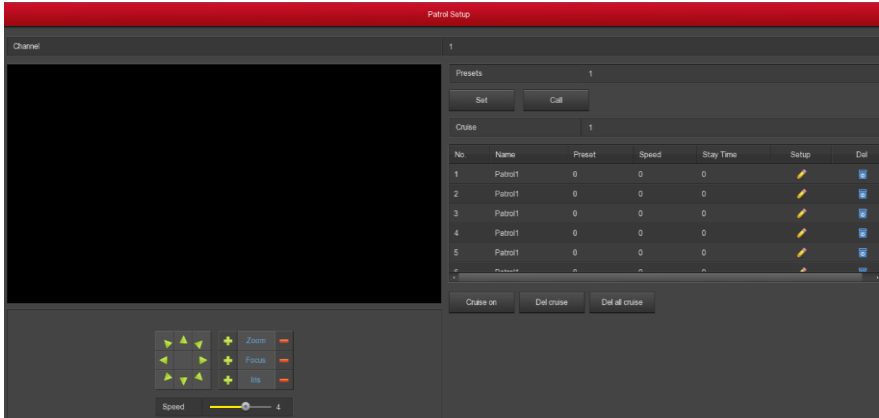


Figure 5-4 ①

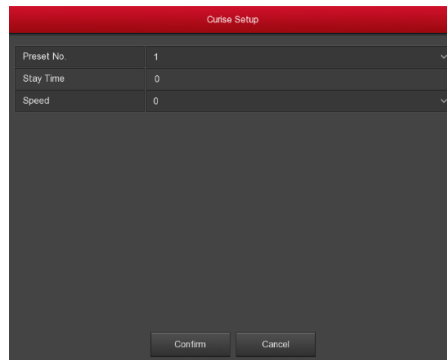




Figure 5-4 ②

- **Preset setup:** In the Patrol Setup interface, use the direction button to rotate the head to the position where it stays when cruising, and then click the “set” button below the preset point to complete the preset point setting.
- **Set:** Use the direction button to turn the head to cruise and you need to stop. Click the “Settings” button to complete the preset point setting.
- **Call:** Click “Call” and the PTZ will jump to the currently selected preset position.

- **Cruise setting:** In the Patrol Setup interface, select the cruise line and click the “” button. In the pop-up cruise setting interface, select the preset number, stay time (seconds) and speed, click “Confirm” button, return to the cruise setting interface and click again. "Cruise on" saves settings and the device starts cruising. The cruise settings are detailed in 5.3.5.5.
- **Cruise on:** Follow the cruise line to start cruising.
- **Cruise off:** Close the current cruise line.
- **Del cruise :** Select the cruise line, click " " or "Del cruise" to complete the cruise line to remove.
- **Del all cruise:** After clicking, delete all the set cruise lines.
- **Stay Time:** PTZ stays at the preset position.
- **Patrol speed:** PTZ speed when cruising.
- **Common control**

Common control for calling preset points, Select the cruise line to turn on / off the cruise, as shown in Figure 5-5:

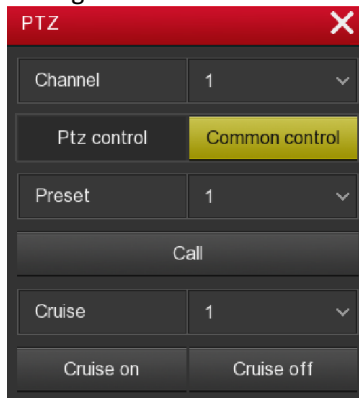


Figure 5-5

- **Preset:** After setting the preset point, select the preset point in the common interface; click "Call", PTZ jump to the location.
- **Cruise:** After the cruise line is set, select the cruise line in the common control interface and click Cruise on / off.
- **Cruise on:** Follow the cruise line to start cruising.
- **Cruise off:** Close the current cruise line.



### Instruction

- The NVR supports up to 128 preset points, but the actual number of preset positions is limited by the number of preset points that can be set by the camera. The maximum number of preset points supported by different PTZ is not necessarily the same.

### 5.1.3 NVR Image

On the preview interface, right click mouse, select the “NVR Image” to enter the NVR Image interface, and then can configure the video properties of IPC. As shown in Figure 5-6.

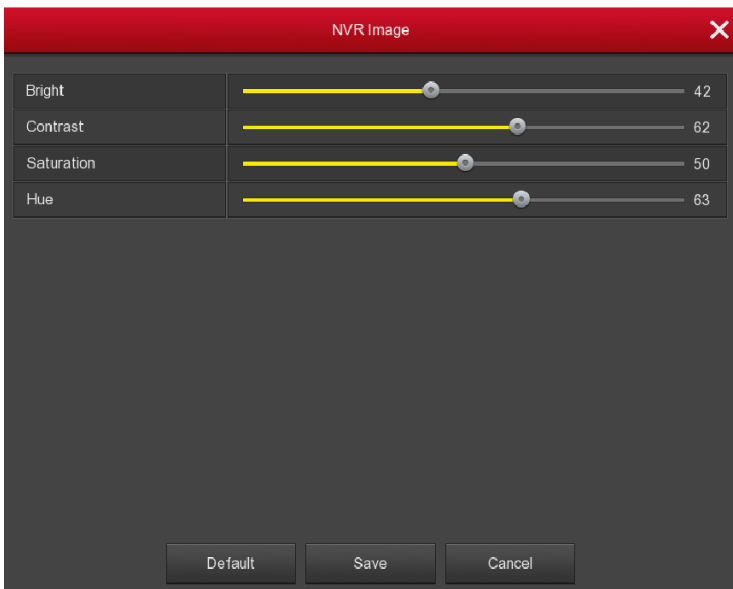


Figure 5-6

- **Bright:** It is to adjust monitor window bright.
- **Contrast:** It is to adjust monitor window contrast.
- **Saturation:** It is to adjust monitor window saturation.
- **Hue:** It is to adjust the overall color of the NVR image.

### 5.1.4 Fisheye Unfold

In the preview interface, right-click the fish-eye channel → select Fisheye Unfold, and the system displays the fish-eye expansion interface, as shown in Figure 5-7. Here you can set the fisheye installation mode and deployment mode. The fisheye installation modes are divided into top mounted mode,

wall mounted mode and ground mounted mode, as shown in Table 5-1 below.

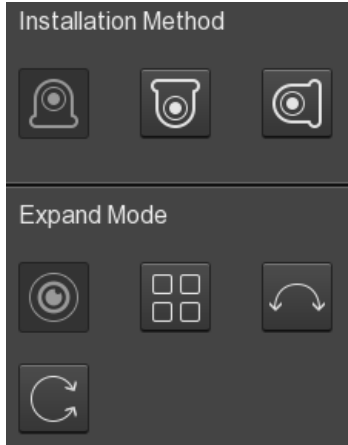


Figure 5-7









icon	Instructions
	Desktop
	Top suspend
	Wall hanging
	Fisheye, panorama original
	Four expansion
	180 degree panorama
	360 degree panorama, hold down the left mouse button and drag the red box in the lower right corner of the video to switch the magnification angle
	Full screen, right click to exit full screen

Table 5-1



### Instruction

- Only some models support the fish-eye function. Please refer to the actual function of the device.
- If the channel in the shortcut menu is not connected to the fisheye camera, the system prompts "The non-fisheye channel does not support this function".

## 5.2 Main Menu

Main Menu includes Playback, Export, HDD, Record, Camera, Configuration, Maintenance, and Shutdown as shown in Figure 5-8. Select one and click the left mouse button to open the next menu options.

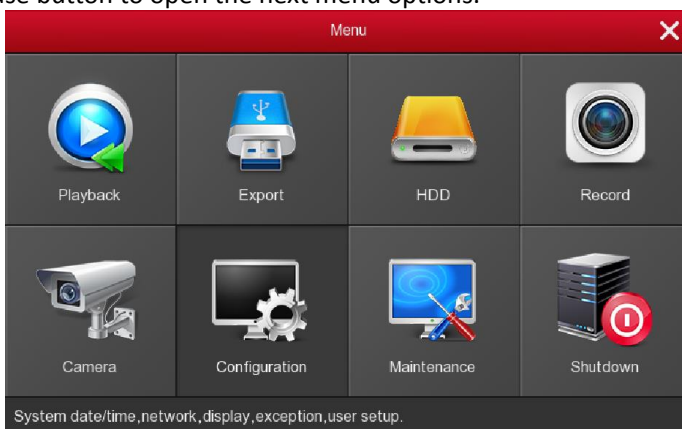


Figure 5-8

## 5.3 Operation

### 5.3.1 Playback

After entering the main menu, open the "Playback" menu or right-click to choose select "Playback" menu in the preview interface, switch to playback interface, shown in Figure 5-9 ① ②.








Figure 5-9 ①



Figure 5-9 ②

No.	Function	Description
1	Display window	Display searched video, according to different systems, support 1,4,8,16 screen playback at the same time, multi-screen playback, double-click a screen, video playback interface into a single screen playback, right-click at this time, return Screen playback.

2	Playback control area 1	Playback control keys: play/pause, stop, fast-forward (speeds are 1x, 2x, 4x, 8x, 16x, where 1x is played at normal speed; continuously click “ ” button to switch playback speed )
3	Time axis	Shows the recording type under the current conditions and the time period in which it is located. In the four-screen playback mode, four playback time axes corresponding to the selected four channels can be displayed. In other single-screen playback modes, only one time axis is displayed. Click on a point in the green area with the mouse to start playback from that point in time.
4	Playback control area 2	 : Click full-screen playback, full-screen playback, click the right mouse button to exit 24H, 6H, 2H, 1H, 30M: Time axis unit. If 6H is selected, only 6 hours of video will be displayed on the time axis. You can hold down the left mouse button and drag the time axis left and right. The smaller the time unit, the smaller the time. The greater the proportion.   : When the timeline zooms in, click to move the timeline left or right in the direction of the arrow.
5	Video mode selection area	Select the check box to select the type of recording to be queried, All, Record, Motion.
6	Page turning area	 1/2  : NVR channel page "More operation": Click to enter the video file list interface
7	Channel	Select the channel number to be queried (multiple channels can be selected at the same time, depending on device performance)

8	Calendar	The green highlighted date means there is file. Otherwise, there is no file. In any play mode, click the date you want to see, you can see the corresponding record file trace in the time bar.
9	Save/Return	Save: Enter the video backup interface. In the 11 file list box, select the file that the user needs to back up. In the list box, select it and check it. Click the Save button to enter the backup interface for backup. Return: Exit the file list interface
10	Video file details	Displays the start time, end time, and file size of the selected file in the 11 file list.
11	Video file list	The channel recording files are displayed in chronological order. You can view the other channel recording files by switching the recording channels above 1, 2, 3, and 4.

Table 5-1

In the file list bar, you can see the start time of the video file, video type(“R”: Record; “A”: Motion record), select a video file, you can view the video of recording start time, end time and file size, as shown in Figure 5-10.





Figure 5-10

In the file list box, check the “” icon to back up the file, click "Save" to enter the Record backup interface, as shown in Figure 5-11:

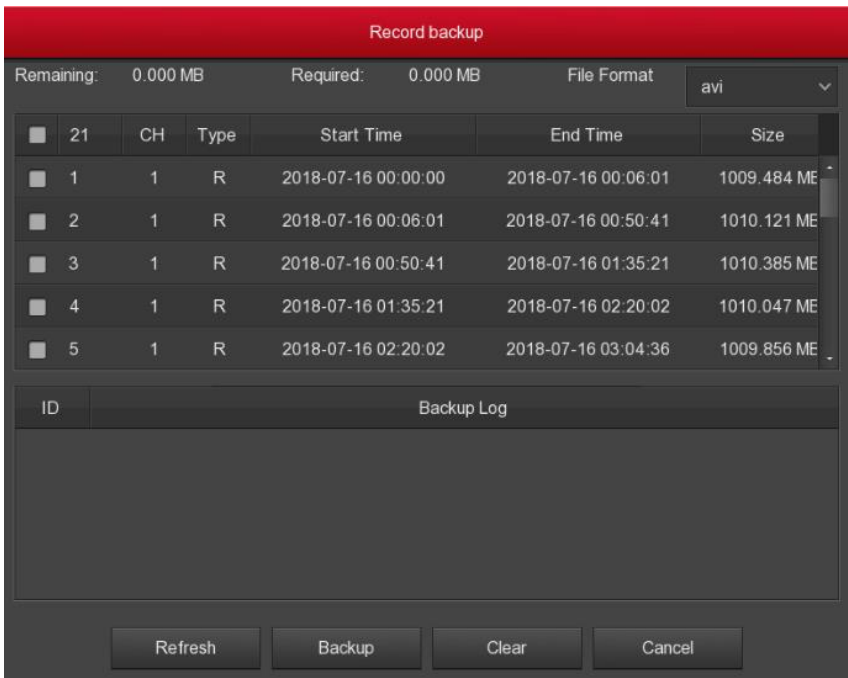


Figure 5-11

In the video backup interface, select the file to backup to an external USB device, backup video file for the avi format. At the same time can choose multiple video files for backup, the user can also in the backup menu to cancel the file list box "" icon, delete the file does not want to back up.

- **Remaining:** The external capacity of the device U disk capacity space.
- **Required:** Select the total capacity of the backup file.
- **File Format:** Backup video file format.
- **CH:** Video channel to which the video file belongs.
- **Type:** Video type, with common record and motion record selection.
- **Start Time / End Time:** The time range of the video file.
- **Refresh:** Click to update the interface data.
- **Backup:** Select the file to be backed up, click Backup, start the backup.
- **Clear:** Clear all the video files in the file list.



### Instruction

- In the right-click menu of the preview interface, click the "video playback" menu to enter the video playback interface.

- Previewing the right-click menu and selecting "Playback" will select the channel where the mouse is to be played by default.
- The interface shown in Figure 5-9 ① ② is for reference only. The number of channels supported by different models for simultaneous playback is different and the functions are different. Please refer to the actual interface.

### 5.3.2 File backup

Click "Export" button in the main menu, enter the file backup interface, you can backup the video file to an external USB device, as shown in Figure 5-12:

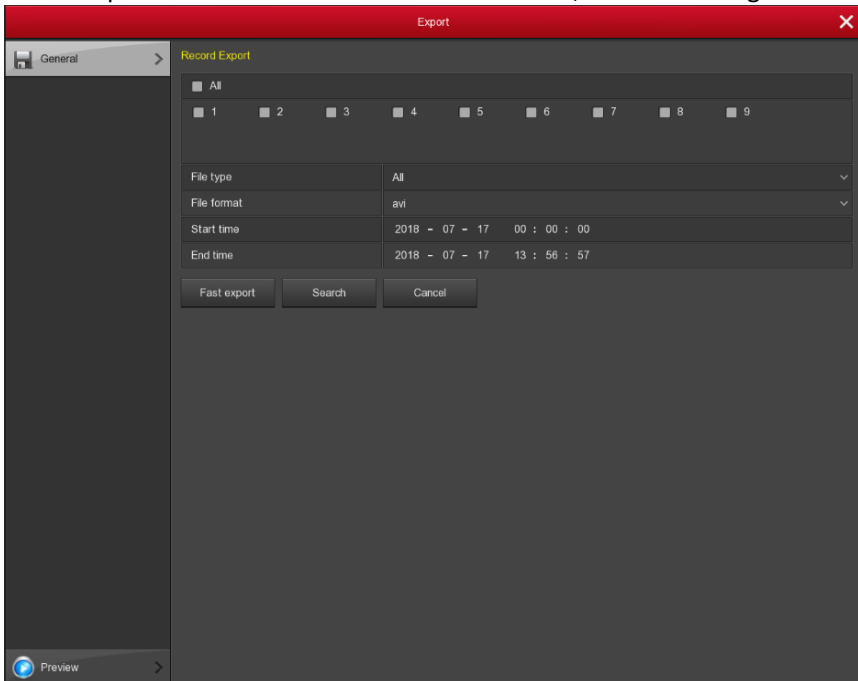


Figure 5-12

Insert the USB device into the NVR USB interface before backup. Select the backup file type, channel, file format, time range, and click "Search", the list shows the search to the video file, click "Start", the device began to backup.

- **File type:** Video type, with All, common record and motion record selection.
- **Channel:** Video channel to which the video file belongs.
- **File Format:** Backup video file format.
- **Start Time / End Time:** The time range of the video file.

- **Required capacity:** Select the total capacity of the backup file.
- **Available/Total capacity:** The external capacity of the device U disk capacity space.
- **Fast export:** Set the recording type, channel, file format, and the time range for 30 minutes to automatically cut.
- **Search:** According to set the video type, channel, file format and time range to the corresponding video file, and displayed in the file list.

## 5.5 HDD

In the Menu interface, click "HDD" to enter the disk management interface. You can see the hard disk information and format the hard disk. As shown in Figure 5-13:

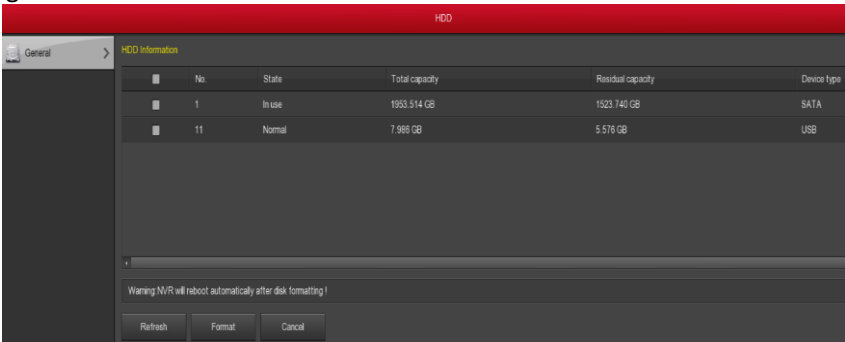


Figure 5-13

- **No.:** The number of HDD that connect the system.
- **State:** Detect the current working status of HDD, you could use only that displays "In use"; after formatting is completed, you need to restart NVR, the status displays "In use".
- **Total Capacity:** The total available HDD capacity, the single HDD capacity can not exceed the maximum capacity: 6TB.
- **Residual Capacity:** Display the residual capacity of the current HDD;
- Device Type: SATA.
- **Refresh:** Click update disk list information.
- **Format:** Formatting the HDD, select the HDD → click the "Format" button → click the "Confirm" button.



### Instruction

- "Not connecting disk" indicates that the device is not connected or the hard disk is not detected.

- The hard disk information is displayed on the HDD interface when the hard disk is used normally.
- The hard disk must be formatted first when the hard disk is connected to the NVR for the first time or when "Not formatted" is displayed.
- The device does not need to format the hard disk when the hard disk status shows "In use".
- After formatting the hard disk, restart the NVR to takes effect.

## 5.3.4 Record

### 5.3.4.1 Schedule

In the Menu interface, click "Record → Schedule" to enter the Record setting interface. The system will automatically perform the corresponding type of recording according to the set planned time after setting the recording plan, as shown in Figure 5-14:

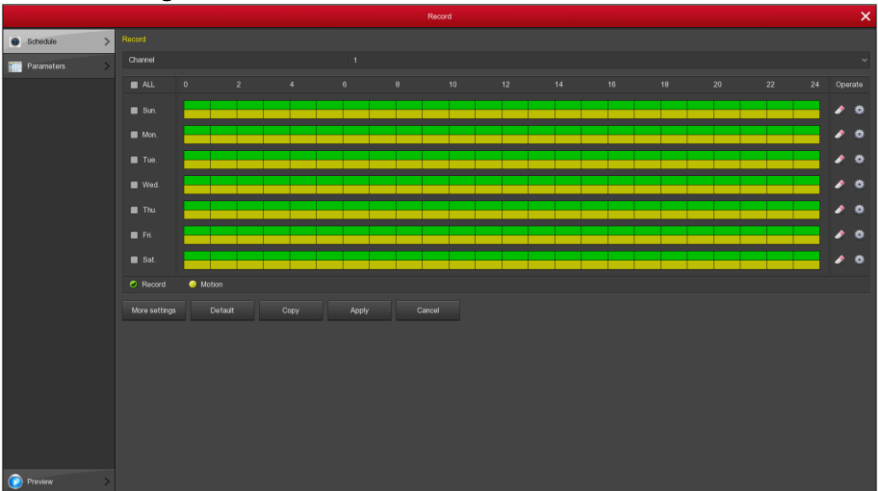




Figure 5-14

- **Channel:** Please select the channel number first. You can select "all" if you want to set for the whole channels.
- **Record Type:** Select check the box to select corresponding record type. There are Record and Motion.
- **Week day:** Select the week number. If you select "All", it means to the entire week, or you can select "☐" in front of the number of days to set individual days.
- **More Settings:** Support motion detection pre-recording, pre-recorded time is 0S, 5S, 10S, 15S, 20S, 25S, and 30S.

-  : Delete the time period for the currently selected recording type.
-  : Click to enter the Record Schedule.
- **Copy:** After complete the setup, you can click “Copy” button to copy current setup to other channel(s).

■ **Drawing schedule record**

**Step 1:** Select the recording channel to be set (as shown in Figure 5-15 1).

**Step 2:** Select the recording type to be set. Green is normal recording, and yellow is motion detection recording (as shown in Figure 5-15 2).

**Step 3:** Hold down the left mouse button and drag the mouse to draw the time period in the time period diagram (as shown in Figure 5-15 3).

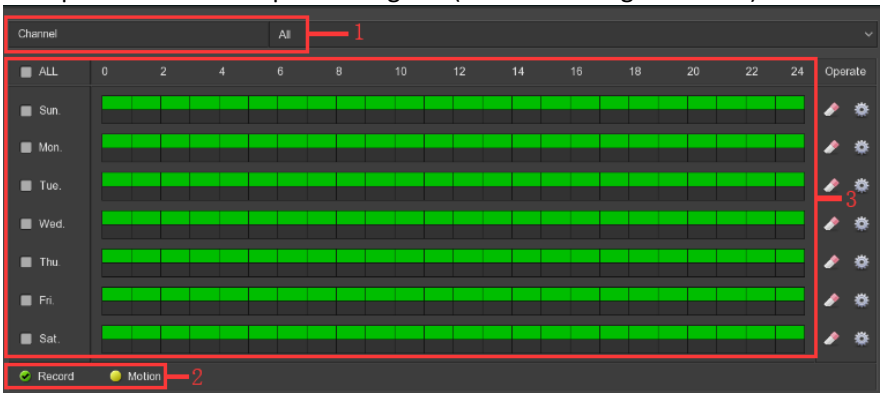


Figure 5-15



**Instruction**

- There are 6 time periods available for each day, and the device will start the corresponding type of recording within the set time range.
- Select “All” to edit the time period of all week.
- You can select "☐" multiple times a week to synchronize editing and draw time periods for multiple weeks. When the box before the week is “v”, it means that you can edit simultaneously.

■ **Input data to set the schedule record**

**Step 1:** Click “” to enter the Record Schedule interface, as shown in Figure 5-16.

**Step 2:** Set the "recording type" for each time period. There are 6 time periods for setting each day. Select the week of "Use to" and apply to the corresponding week.

**Step 3:** Click "Save" to complete the settings. The system returns to the "Record" interface.

Schedule	Record	Motion	Time Range
Schedule 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	00 : 00 - 24 : 00
Schedule 2	<input type="checkbox"/>	<input type="checkbox"/>	00 : 00 - 00 : 00
Schedule 3	<input type="checkbox"/>	<input type="checkbox"/>	00 : 00 - 00 : 00
Schedule 4	<input type="checkbox"/>	<input type="checkbox"/>	00 : 00 - 00 : 00
Schedule 5	<input type="checkbox"/>	<input type="checkbox"/>	00 : 00 - 00 : 00
Schedule 6	<input type="checkbox"/>	<input type="checkbox"/>	00 : 00 - 00 : 00

Use to:

ALL

Sun.  Mon.  Tue.  Wed.  Thu.  Fri.  Sat.

Save Cancel

Figure 5-16



### Instruction

- At the same time, normal recording and motion detection recording are motion detection recording are enabled at the same time. When motion detection occurs, the device only has motion detection recording and no ordinary recording.

#### 5.3.4.2 Parameters

According to the actual network bandwidth, set the video stream parameters, including the encoding type, resolution, and so on.

**Step 1:** In the Menu interface click "Record→Parameters" to enter the Encoding parameters interface, as shown in Figure 5-17.

**Step 2:** According to the actual network bandwidth condition, the video stream parameter settings include resolution, stream type, frame rate, and corresponding channel substreams.

**Step 3:** Click "Apply" to save the settings.

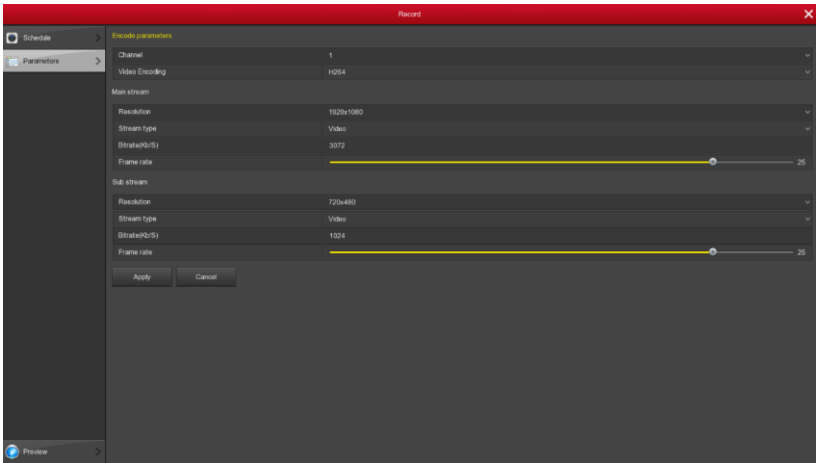


Figure 5-17

- **Channel:** Select to configure the channel.
- **Video Encoding:** System supports H.264, H264+, H265, H265+ according to device performance; some devices only support H.264 and H.264+.
- **Resolution:** Read and set the main and substream resolution. The system supports various resolutions. You can select from the drop-down list. Different types of IPC support different resolutions please refer to the actual interface.
- **Stream type:** Select video and A/V.
- **Bitrate (Kb/S):** Setting bit rate can change the picture quality, the larger the bit rate and the better the picture quality.
- **Frame Rate:** The number of frames per second that the video displays. The higher the frame rate, the more realistic and smooth the image. The frame rate varies with the resolution. PAL system: 1 frame/sec - 25 frames / sec; NTSC system: 1 frame / sec - 30 frames / sec.

## 5.3.5 Camera

### 5.3.5.1 Add Camera

#### ■ Add Camera

After adding a remote device, you can view the video screen of the remote device directly on the NVR, and perform operations such as storage and management. Different devices support different numbers of remote devices. You can add required remote devices based on actual conditions. Add the device as follows:



**Step 1:** In the Menu interface, click “Camera → Add Camera”, or right-click in preview interface and select “Add Camera” to enter the Add Camera interface, as shown in Figure 5-18.

**Step2:** Click “Add → select device to Add → Add → Cancel”, complete to add device, as shown in Figure 5-19.



Figure 5-18

- **Bandwidth idle:** Displays the NVR remaining bandwidth in real time.
- **Add to vice:** Select the added device channel and click "Add to vice" to add the channel device to the sub-screen channel.
- **Delete from vice:** Select the sub-screen to add the device channel, click "delete from vice", the channel device is removed from the sub-screen.
- **Add:** Click to enter the “Device Search” interface.

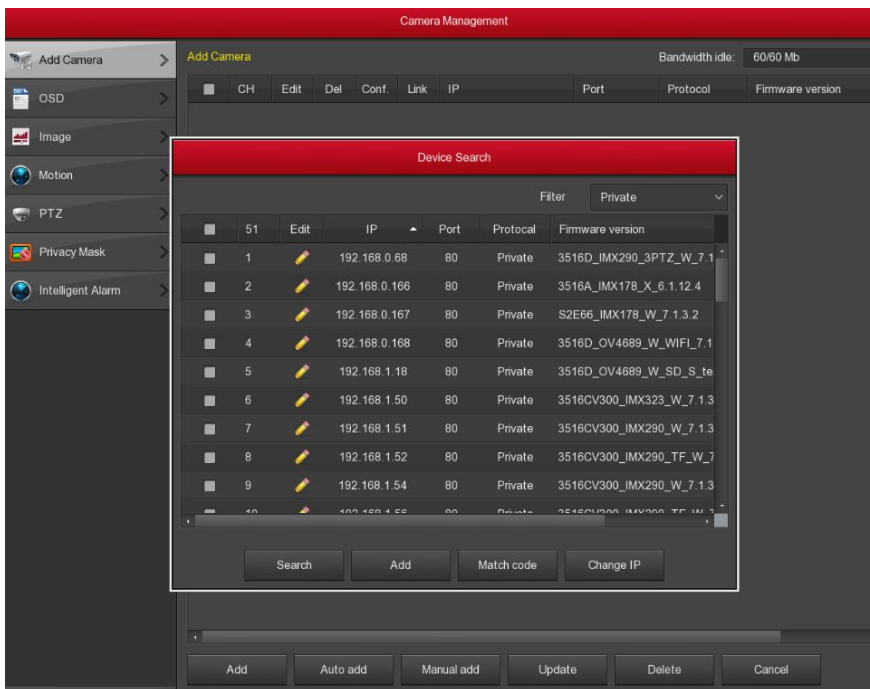



Figure 5-19


- ✓ **Filter:** Filter search device type. On the Add Device interface, the NVR automatically searches for all devices in the LAN that comply with the Onvif and Private protocol. Select the protocol or network segment device according to the need to display the filter location. Click "Device Search" to search for the corresponding device in the LAN.
- ✓ **Search:** Click it to search IP address. It includes device IP address, port, and protocol.
- ✓ **Sorting:** Click "IP" in the search list menu bar, the system displays "IP" from small to large will search the device to sort. Click "IP" again and the system displays the order of the IP addresses from big to small. You can also click on other items to sort them for easier viewing.
- ✓ **Add:** Add a selection device to the system.
- ✓ **Match code:** Apply to the WiFi IPC in the WiFi NVR Quick Add Kit. The steps are as follows:

**Step 1:** Connect the WiFi IPC and WiFi NVR LAN ports in the package to the same switch with the network cable;

**Step 2:** On the NVR main menu page, select "Camera → Add Camera", or right click on the preview interface and select "Add Camera" to enter the Add Device Management interface.

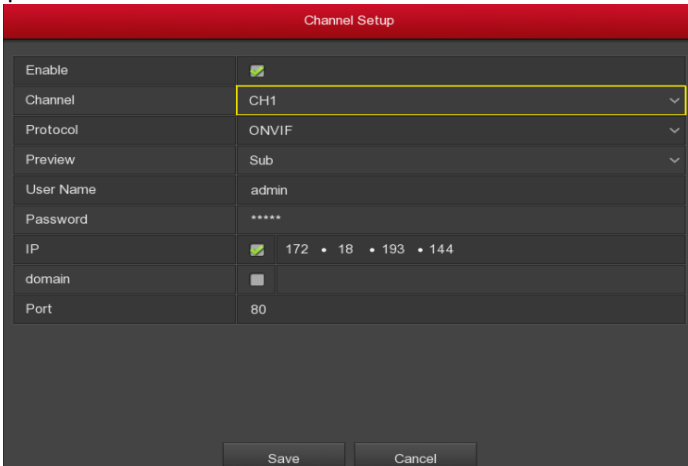
**Step 3:** Click " " to delete the added device;

**Step 4:** Click "Add" →select add device → Match code → Cancel to complete the addition.

✓ **Change IP:** Select " " before one or more searched IPs, click "Batch to IP", enter "IP Address", "Subnet Mask", "Default Gateway", "Port", and "User Password" ", click "OK" to select the device IP will be modified incrementally.

➤ **Auto add:** All LANs in the LAN to reconfigure the network, automatically added to the NVR.

➤ **Manual add:** Click to enter the "Channel Setup" interface. You can add devices by closing channels, switching channels, modifying protocols, switching preview streams, or manually inputting device-related information, as shown in Figure 5-20. There are two methods of manually adding IP and domain name addition. When adding IPC through a domain name, only Private and ONVIF protocols are supported.



The screenshot shows the "Channel Setup" interface with the following configuration:








Field	Value
Enable	<input checked="" type="checkbox"/>
Channel	CH1
Protocol	ONVIF
Preview	Sub
User Name	admin
Password	*****
IP	<input checked="" type="checkbox"/> 172 • 18 • 193 • 144
domain	<input type="checkbox"/>
Port	80

Buttons: Save, Cancel

Figure 5-20

➤ **Enable:** The channel enable on/off, defaulting to be off. Tick "Enable" then the related channels can be previewed and recorded normally.

➤ **Channel:** Select Set Channel.

- **Protocol:** Select Add Device Protocol with Onvif, Private, and RTSP options.
- **Preview:** The default is sub-stream preview, IPC side to be set to dual-stream, and is H264, H264+ encoding format to normal preview (support H265, H265+ encoding format NVR can also be a normal preview stream), sub-stream resolution can be D1 or CIF format.
- **User name:** The login user name of IPC (if the defaulted user name is not admin, please change it to be valid user name).
- **Password:** Login password of IPC (if the defaulted login password is not admin, please change it to be valid password).
- **IP:** Need to add IPC IP address.
- **Domain:** Need to add IPC domain name address, such as peanut shell address, DDNS address.
- **Port:** Access to the port used by IPC, the default is 80.
- **Update:** Click the button "upgrade" to search for IPC, check "" before one or more searched IPC s, and click "Upgrade " to batch upgrade IPC.
- **Delete:** Delete the added device. In the list of added devices, click the " " icon to delete the channel quickly. You can also click the " " icon to select multiple devices and click the "Delete" button to delete all selected devices.
- **Status:** " " indicates that the connection is successful, and " " indicates that the connection fails. If the connection fails, the connection status will indicate the cause of the failure. If the password is incorrect, the user password will be incorrect.
- **Conf.:** Configuration. Click " " icon to enter the "Encode" interface, you can modify the encoding type, resolution, bit rate, frame rate and other coding-related information.
- **Edit:** Click the " " icon to enter the channel setting interface. The function is the same as "Manually add".



### Instruction

- If remote devices have been added to all digital channels, add them again and the device will prompt that the add fails.
- When modifying IPs in batches, ensure that the user name and password of all selected devices are the same.
- If you modify IPs in batches, if the IP addresses conflict, the system automatically skips conflicting IPs and re-assigns them incrementally.

- After modifying the IP in batches, search for the remote device again. The new IP address will be displayed in the list.
- After you select a device to add a button, all devices will re-assign the IP address. Use caution.
- Before using the upgrade function, copy the upgrade package corresponding to the device to be upgraded to a USB flash drive and insert the USB flash drive into the NVR.
- When you upgrade multiple IP devices, you can only select the same IP device. During the upgrade, all IP devices cannot be powered off. Otherwise, the upgrade fails or the device cannot start.
- Only supports dual screen systems with "Add to Sub Screen" and "Delete from vice" functions.
- The WiFi NVR only supports the code function and is only valid for IPC in the WiFi package.

#### ■ PoE

After adding a PoE device, you can view the status and power of each PoE port on the PoE configuration page.

##### **The step as follows:**

**Step 1:** On the menu page, select "Camera → Add Camera → PoE" to enter the PoE configuration interface, as shown in Figure 5-21.

**Step 2:** Check the PoE device connection status, actual power, and remaining power.

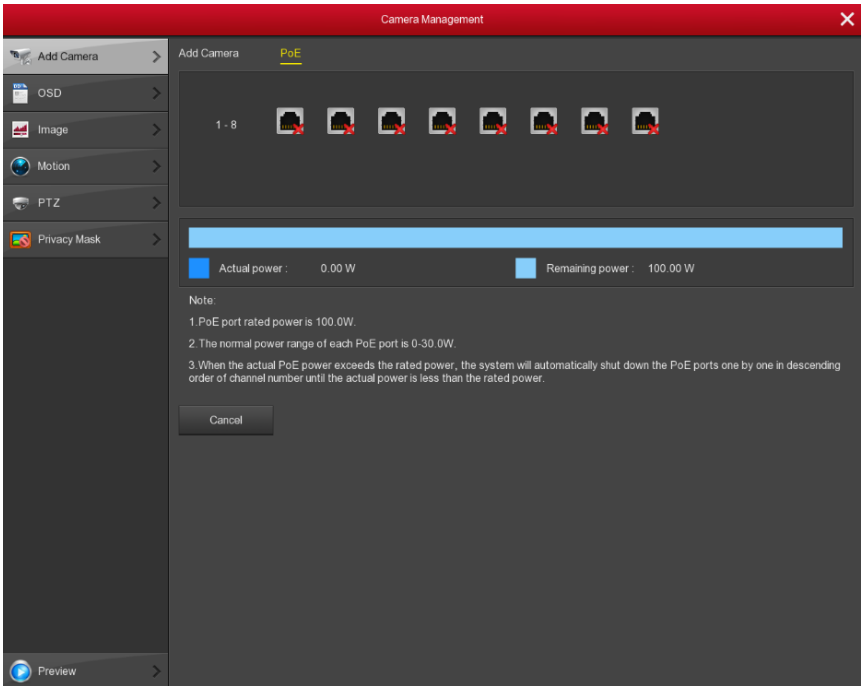


Figure 5-21



### Instruction

- Only PoE-capable devices have a PoE configuration interface. Please refer to the actual one.
- According to the performance of the device, each interface is labeled with the rated power and normal power range of each PoE port. When the actual PoE power exceeds the rated power, the system automatically shuts down the PoE port one by one according to the channel number. Until the actual power is less than the rated power.

#### 5.3.5.2 OSD

On the menu page, choose "Camera → OSD" Settings to enter the OSD management interface, as shown in Figure 5-22. Here you can get and set the IPC OSD text, time and other device related information.

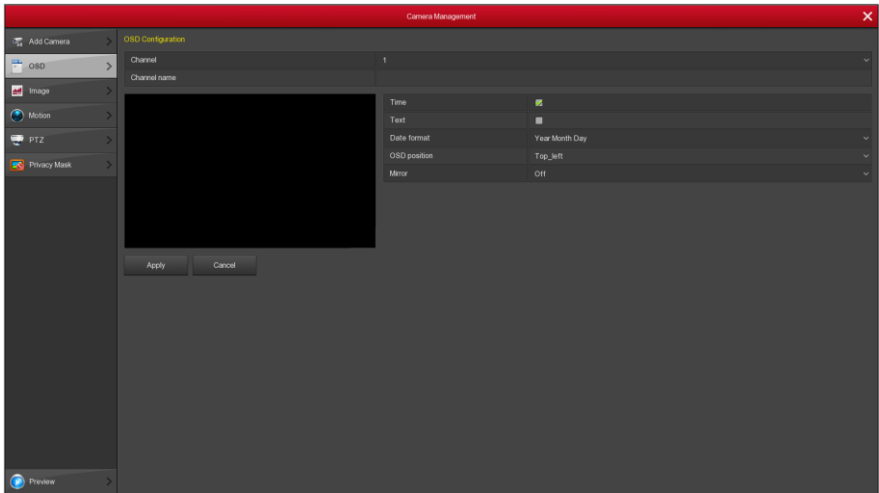


Figure 5-22

**Channel:** Select to set the channel.

**Channel name:** Displays the OSD text information obtained to the IPC.

**Time:** Turn on / off the IPC display interface time information.

**Text:** Turn on / off the IPC display interface text message.

**Date format:** Set the IPC display interface date format, drop-down menu "Year Month Day", "Month Day Year", "Day Month Year" option.

**OSD position:** Set the time and OSD text location, drop-down menu with the "Top\_ left, Bottom\_ left" options.

**Mirror:** Set the IPC mirror to flip the direction, drop-down menu with "Off, Horizontal, Vertical, Both" options.



### Instruction

- The current OSD function only supports the private protocol to add the device to obtain and set.

### 5.3.5.3 Image

On the menu page, select "Camera→ Image Color" to enter the NVR image color setting interface. You can view and set the brightness, contrast, saturation, and sharpness values of the IPC channel, as shown in Figure 5-23:

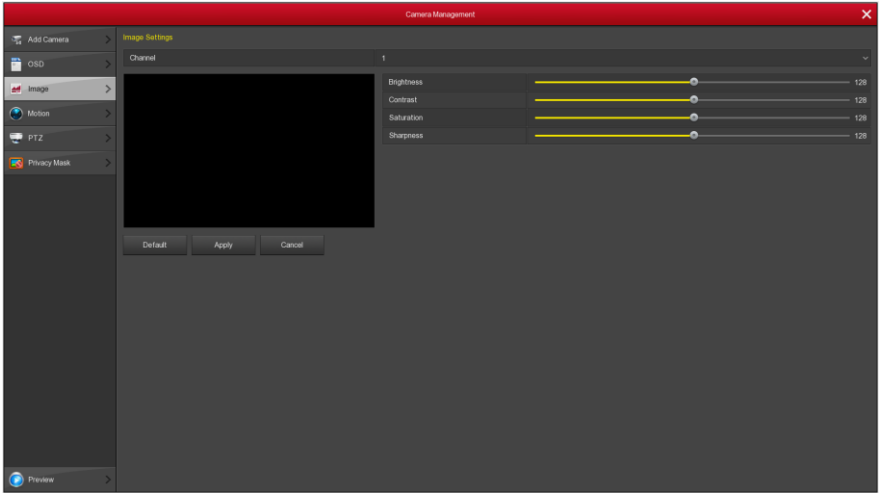


Figure 5-23

- **Channel:** Select to set the channel.
- **Brightness:** Get and set the brightness of the IPC.
- **Contrast:** Get and set the contrast of the IPC.
- **Saturation:** Get and set the saturation of the IPC.
- **Sharpness:** Get and set the sharpness of the IPC.

### 5.3.5.4 Motion

Motion detection uses computer vision and image processing techniques to analyze the video images to see if there are enough changes in the images. When the moving target appears on the monitoring screen and the moving speed reaches the preset sensitivity, the system performs an alarm linkage action.

**Step 1:** On the menu page, select "Camera → Motion" to enter the motion detection interface, as shown in Figure 5-24 below.

**Step 2:** Enable motion detection and configure parameters such as channel, zone, sensitivity, video, and email.

**Step 3:** Click "Apply" to save the settings.





Figure 5-24

- **Channel:** Select to set the channel..
- **Set area:** Click to enter the regional settings interface, hold down the left mouse button to select the alarm area, select, the alarm area is gray, select the gray again to cancel the alarm area settings.
- **Sensitivity:** According to the need, can be set 0,1,2,3,4,5,6,7,8,9,10 eleven file sensitivity, the higher the value, the more sensitive the device.
- **Enable detection:** Check "" to turn on / off motion detection alarm.
- **Buzzer alarm:** Check "" to turn on / off the buzzer alarm function.
- **Record channel:** Check "" to turn on / off the channel recording function.
- **Record time (sec):** Set the duration of each recording when the alarm is triggered.
- **Week:** Select "All" or "X" according to the day of the week to set the time for sending alarm emails. Up to two time periods can be set each day.
- **Time period1/Time period2:** Set the time for sending alarm emails.
- **Copy:** After the channel has been set up, click "Copy" to apply the setting to another channel.



### Instruction

- After setting motion detection to open email notification, click "Main Menu → Configuration → Network → Email" to enter the email setup interface to set up the email. When the system sends a linkage alarm within the set time period, the recipient receives the alarm e-mail.

- After e-mail notification is enabled, and the specific week and time period is set, the NVR can send an e-mail to the set e-mail box to notify the user only if the alarm is triggered within the time period of the week.

### 5.3.5.5 PTZ

On the menu page, click "Camera → PTZ" to enter the PTZ setup interface, as shown in Figure 5-25 below. In the PTZ setup interface, other channels can be switched to adjust the pan/tilt movement speed and control the pan/tilt movement direction.

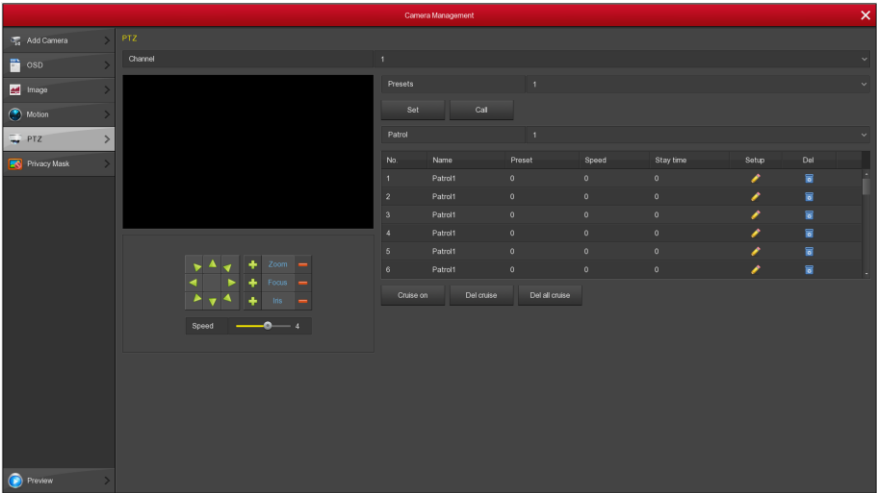








Figure 5-25

PTZ setup interface is used to set the PTZ direction, speed and lens zoom, focus and aperture settings and cruise settings shortcut button.

- **Channel:** Select the channel where the dome camera is connected to the NVR.
- **Zoom:** Adjust the camera magnification by  /  key, long-range / wide-angle function.
- **Focus:** Use the  /  key, zoom in/out function, adjust the camera to focus.
- **Iris:** Use the  /  key, zoom in / out the aperture function, adjust the aperture of the camera.
- **Speed:** It is mainly used to set the pan/tilt rotation speed operation. For example, the rotation speed in step 7 is much greater than the rotation speed in step size 1.

- **Preset setting:** Through the direction of the button to turn the PTZ to the desired location, and then click the preset button below the "set" button to complete the preset point settings.
- **Cruise setting:** After selecting the cruise line, click the setting button, select the preset number, dwell time (seconds) and cruise speed in the pop-up cruise line setting interface, as shown in Figure 5-26, click "OK" button, Return to the cruise settings screen and click "Cruise on" again to save the settings and make the device start cruising.

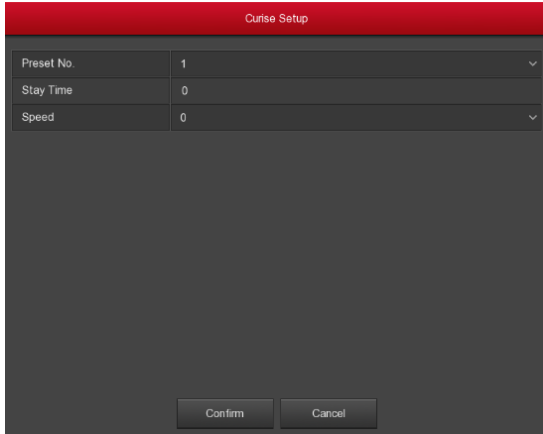


Figure 5-26

- **Preset No.:** Select preset points.
- **Stay Time:** Stay time on the Preset.
- **Speed:** Speed for Cruise.
- **Del cruise:** Select the cruise line, click to "del cruise", and complete the cruise line to remove.
- **Del all cruise:** After clicking, delete all the set cruise lines.



### Instruction

- The NVR supports up to 128 preset points, but the actual number of preset positions is limited by the number of preset points that can be set by the camera. The maximum number of preset points supported by different PTZs is not necessarily the same.

### 5.3.5.6 Privacy Mask

On the Menu interface, click "Camera → Privacy Mask" to enter the Privacy Mask interface, as shown in Figure 5-27. Here you can get and set IPC privacy mask related information. After setting, click "Apply" to save the settings.

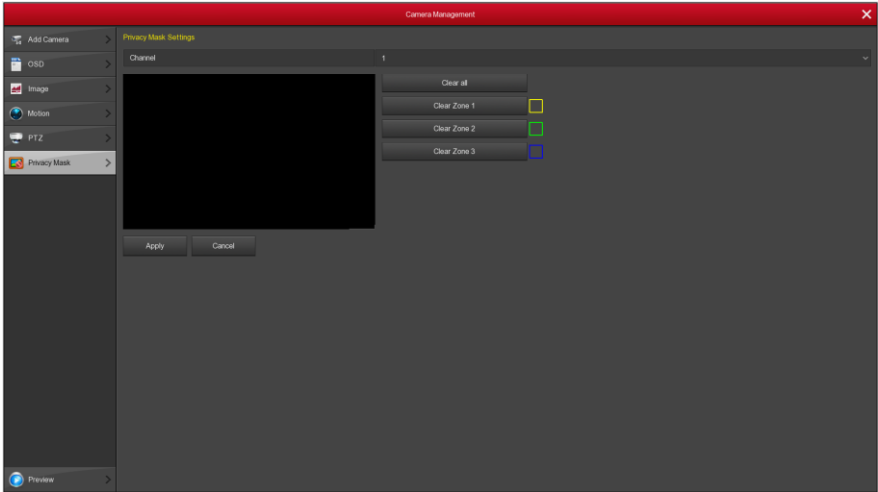


Figure 5-27

- **Channel:** Select the channel to set the privacy mask device on.
- **Privacy area selection:** In the left video window, hold down the left mouse button to select the area to be blocked.
- **Clear all:** Clear all selected areas masks.
- **Clear Zoom1, 2, 3:** Clear the selected occlusion area 1, 2, 3.

## 5.3.6 Configuration

### 5.3.6.1 General

General settings are divided into two parts: Device settings and Date settings. Here you can get and set the NVR language, video mode, video days, video standards, standby time and date settings and other related information.

#### Device Settings

On the Menu interface, click "Configuration → General" to enter the Device settings interface, as shown in Figure 5-28.

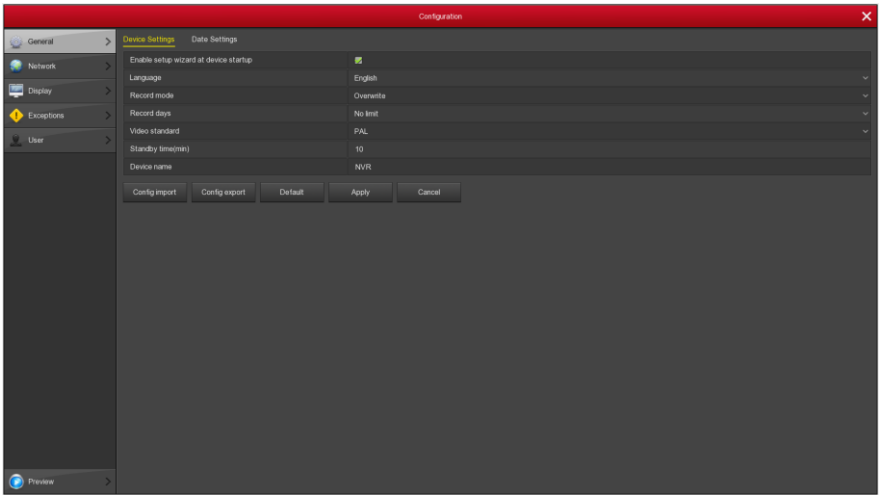


Figure 5-28

- **Enable setup Wizard at device startup:** Click the "🔧", open the startup wizards, and then directly enter the "Startup Wizard" selection interface each time you boot.
- **Language :** Set the system's default language, currently supports Chinese, English, Polish, Czech, Russian, Thai, Hebrew, Persian, Bulgarian, Arabic, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Roman, Korean, Dutch and Greek, the default is English.
- **Record Mode:** For "Overwrite", when the disk is full, it will automatically overwrite the oldest video; when the disk is not full, but the number of video days reaches the user setting, the oldest video will be automatically overwritten.
- **Record days:** Set the number of days for NVR to record automatically. There are no restrictions in the drop-down menu, 30, 15, 7, 6, 5, 4, 3, 2, 1 option.
- **Video Standard:** According to the local standard selection PAL or NTSC.
- **Standby Time ( min ) :** The default is 10 minutes, can be set range: 0-120 minutes, where "0" for the permanent standby.
- **Device name:** Fill in the name of the device according to actual needs, the default is NVR.
- **Config import:** Insert the U disk that stores the .ini format NVR configuration file into the NVR. Click "Config import → Confirm". The NVR automatically starts data import and waits for the NVR to start importing the data.

- **Config export:** Insert the USB flash drive into the NVR, and click "Config Export → Confirm ", the configuration file will be stored in the USB flash drive. The configuration file format is ".ini".

## ■ Date Settings

On the Menu interface, click "Configuration → General → Date Settings" to enter the Date Settings interface, as Figure 5-29 shows. After setting the device time, click "Apply" to save the settings.

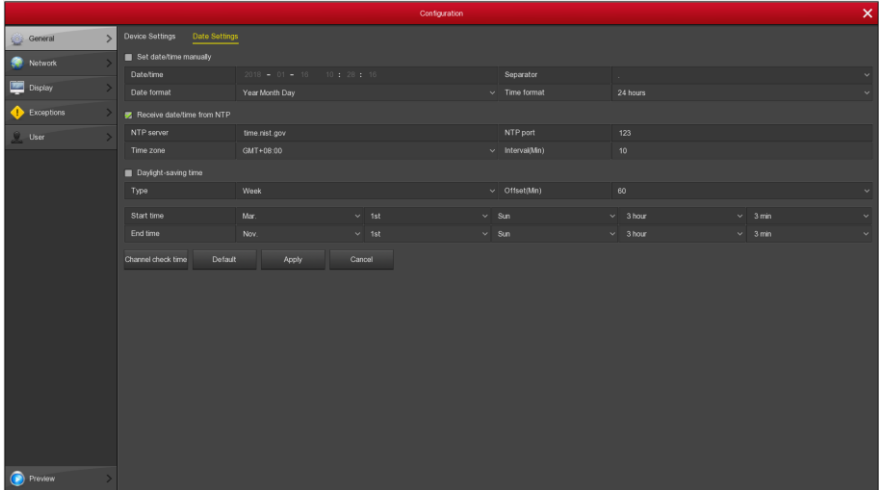


Figure 5-29

- **Set date/time manually:** When checked , adjust the date / time, date separator, date format, and time format to set the local time.
- **Date/time:** Click on the need to modify the location, pop-up keyboard, enter the date and time through the keyboard.
- **Date format:** Select the date display format, including "Date Month Year", "Month Day Year" and "Year Month Day".
- **Separator:** Select the separator for the date format.
- **Time format:** Choose a 24-hour or 12-hour format.
- **Receive date/time from NTP:** Check  to enable NTP time update function. You can also reset the NTP server by setting the server, port, and selecting the time zone and NTP update interval.
- **NTP Server:** Enter the IP address or domain name where the NTP server is installed.
- **Time Zone:** Select the time zone of the device from the drop-down box. For example: Beijing is GMT+8.
- **NTP Port:** Set the port of the NTP server.

- **Interval (Min):** The interval between two time intervals can be set to 0-255 minutes for the NTP update interval.
- **Daylight-saving time:** Check "", open the daylight saving time function, set the relevant parameters, such as type, date, start time, end time and so on.
- **Channel check time:** Select the channel and click Save to set the time of the channel to be consistent with the NVR time.

### 5.3.6.2 Network

#### ■ IP/Port

On the Menu interface, click "Configuration → Network → IP/Port" to enter the IP/Port interface, as Figure 5-30 shows.

Configuration	
General	IP/Port DDNS E-mail P2P FTP UPnP Cloud Storage
Network	IP address 192 • 168 • 1 • 17
	Enable DHCP <input type="checkbox"/>
	Network mask 255 • 255 • 255 • 0
	Gateway 192 • 168 • 1 • 1
	Primary DNS 192 • 168 • 1 • 1
	Secondary DNS 8 • 8 • 8 • 8
	Device MAC 00:00:1B:00:00:2D
	TCP port 5000
	HTTP port 80
	RTSP port 554
	Network rate 100Mb/s
	Internal net card IP 192 • 168 • 11 • 2
	Refresh Default Apply Cancel

Figure 5-30

- **IP Address:** Enter the IP address of NVR.
- **Enable DHCP:** Enable / disable DHCP (Dynamic Host Configuration Protocol) function. "IP address", "subnet mask", and "default gateway" can not be set when DHCP is enabled.
- **Network Mask:** According to the actual situation set.
- **Gateway:** According to the actual situation set, with the IP address in the same network segment.

- **Primary DNS:** This is the DNS server IP address, which is usually provided by the local access point service provider (ISP). Enter the IP address of your domain name server here.
- **Secondary DNS:** Start secondary DNS when the primary one does not work.
- **Device MAC:** Displays the physical address of the NVR.
- **TCP Port:** Default value is 5000, according to the actual needs of users to set the port.
- **HTTP Port:** Default value is 80, according to the actual needs of users to set the port.
- **RTSP Port:** Default value is 554, according to the actual needs of users to set the port.
- **Network rate:** Displays the network transmission rate.
- **Internal net card IP:** Set the intranet IP address for connecting the POE device of the device.
- **Refresh:** Click to refresh the interface.



### **Instruction**

- The IP address and the default gateway must be in the same network segment.
- If NVR enabled DHCP is in effect and you turn off DHCP, you cannot display the original IP information. You need to reset the IP address and other parameters.
- Only PoE-capable devices have an internal network card function. Please refer to the actual product.
- The internal network adapter IP and NVR IP address cannot be on the same network segment.
- The device with WiFi module corresponding to the interface does not support settings.

### **DDNS**

After the DDNS (Dynamic Domain Name Server) parameter is set, when the IP address of the NVR device changes frequently, the system can dynamically update the relationship between the domain name and the IP address on the DNS server. You can use the domain name to access the NVR directly without recording the constantly changing IP address.

#### Prerequisites

Before configuring DDNS, make sure that the device supports the type of domain name resolution server, and log in to the DDNS service provider's



website to register user name, password, domain name, and other information on the WAN PC.

**Configure DDNS as follows:**

**Step 1:** On the menu page, select " Configuration →Network →DDNS " to enter the DDNS interface, as shown in Figure 5-31.

**Step 2:** Enable DDNS, select the DDNS type, and enter the refresh time (seconds), username, and password.

**Step 3:** Click "Apply" to save the DDNS configuration.

**Step 4:** Enter the domain name in the PC web browser and press [Enter]. If you can display the web interface of the device, the configuration is successful. If it is not displayed, the configuration fails.

Enter the domain name in the PC web browser and press [Enter]. If you can display the device WEB login page, the configuration succeeds. If it is not displayed, the configuration fails.

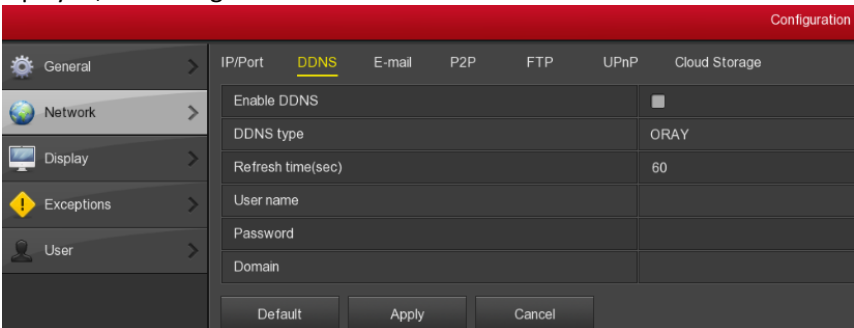


Figure 5-31

- **Enable DDNS:** Enabling DDNS domain resolving function.
- **DDNS type:** Select the DDNS type by dynamic domain name resolution server. (At present, the device supports multiple DDNS, including ORAY, NO-IP, DYN, CHANGEIP, A-PRESS, MYQSEE, SKDDNS, SMART-EYES. These multiple DDNSs can coexist at the same time, and the user can select and set them as needed).
- **Refresh Time (sec):** Do not register frequently. The interval between two registrations shall be more than 60 seconds. Too many registration requests may result in server attack.
- **User name:** The account registered in the DNS service provider.
- **Password:** The password to the account registered in the DNS service provider.
- **Domain:** The domain name registered in the DNS service provider.



## Instruction

After setting up DDNS, ensure that the NVR is connected to the WAN to access the device through the DDNS domain name.

### ■ E-mail

After setting the email information and enabling the alarm linkage email function, the system automatically sends an email to inform the user when an alarm event occurs on the NVR device.

The configuration email operation steps are as follows:

**Step 1:** On the main menu page, click "Configuration → Network → E-mail" to enter the E-mail setting interface, as shown in Figure 5-32 below.

**Step 2:** Enable e-mail alarm notifications, configure SMTP server, SMTP port, user name, password, sender, subject, message interval, and select encryption type, attach file and other parameters.

**Step 3:** Click "E-mail test" and the message "Success. Check the inbox." is displayed. Then the mail configuration is successful. If the message "E-mail can't be delivered!" is displayed, the mail configuration fails.

**Step 4:** After the email is sent successfully, click "Apply" to save the email configuration.

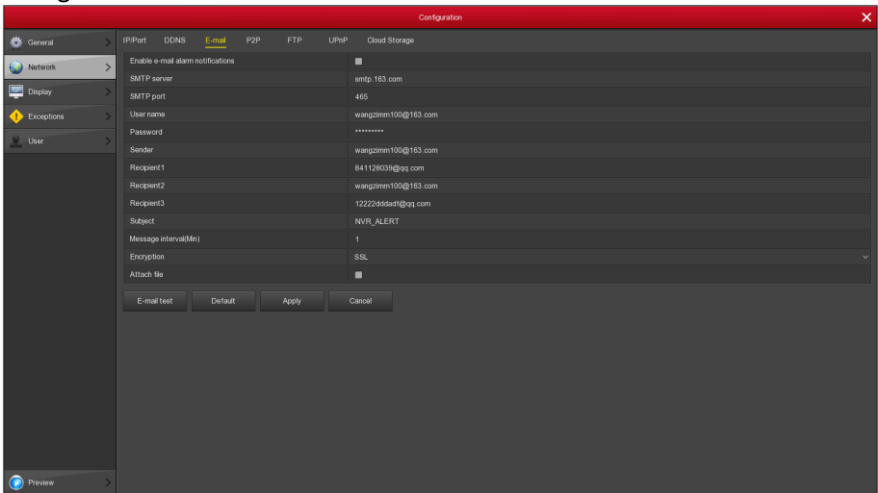


Figure 5-32

Enable e-mail alarm notifications: Enable / disable mail sending.

- **SMTP server:** Please input your email SMTP server IP or server domain name (if the domain name requires confirmation that the DNS settings are correct, the domain name can be parsed correctly).

- **SMTP port:** Please input corresponding port value here.
- **User name:** Please input the user name to login the sender email box.
- **Password:** Please input the corresponding password here.
- **Sender:** Please input sender email box here.
- **Recipient 1 / 2 / 3:** Please input receiver email address here. System max supports 3 email boxes. System automatically filters same addresses if you input one receiver repeatedly.
- **Subject:** Please input email subject here. System support English character and Arabic number, default "NVR\_ALERT".
- **Message interval (Min):** The interval between sending emails. After the email sending interval is set, when the alarm is triggered, the system does not trigger the immediate sending of the email according to the alarm signal. Instead, the email is sent according to the interval time of the same type of event email. Avoid frequent alarms and generate a lot of mail, causing the mail server to be overstressed. The time range is 0~600 points, 0 points means that the mail is sent without intervals.
- **Encryption:** Select the Mailbox server encryption, including NONE, SSL, TLS, and default "SSL".
- **Attach File:** Turn on/off the email attachment function. After the alarm is turned on, the system can send snap shots when the alarm is sent.
- **E-mail test:** Test email sending and receiving functions are normal. In the correct configuration, the receiving email will receive a test email. Before the email test, you must click Apply to save the email configuration information.

## ■ P2P

P2P is a private network penetration technology. It does not need to apply for a dynamic domain name, perform port mapping, or deploy a transit server. You can directly scan the QR code to download a mobile client. After registering an account, you can add and manage multiple NVR devices simultaneously on the mobile client.

You can add devices in the following two ways to manage multiple devices.

- 1) Scan the QR code for the mobile phone system, download the App and register the account. For details, see Chapter 7.
- 2) Log on to the P2P platform, register an account, and add the device via the serial number.



### Instruction

- With this function, the device must be connected to an external network; otherwise it will not work properly.

## P2P steps are as follows:

**Step1:** On the main menu page, click "Configuration → Network → P2P" to enter the P2P interface, as shown in Figure 5-33 below.

**Step2:** Make sure that the NVR accesses the external network and click "Enable P2P".

**Step 3:** Click "Apply" to save the configuration.

**Step 4:** Click "Refresh" and the status shows "Online". This indicates that P2P is enabled and can be used normally.

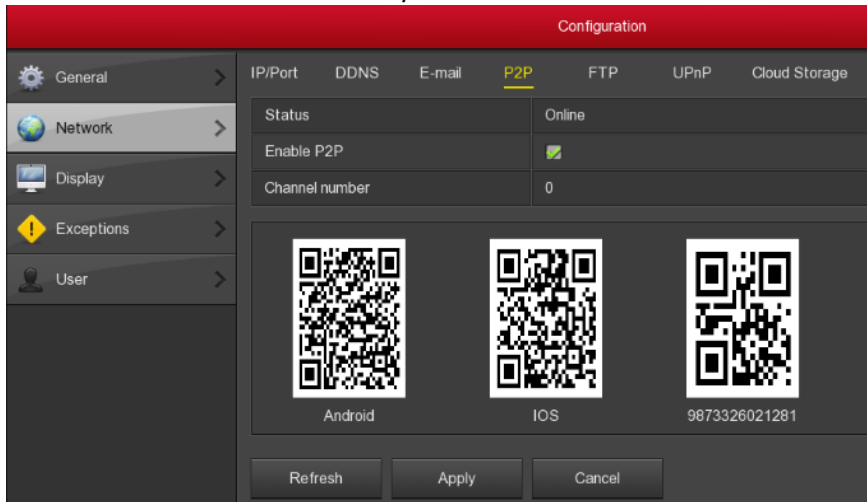


Figure 5-33

- **Status:** Display device P2P online status.
- **Enable P2P:** Turn on / off device P2P function.
- **Channel number:** Displays the current user viewing the NVR channel video number on the App client.
- **Android:** Download Link of P2P client for Android system.
- **iOS:** Download Link of P2P client for iOS system.
- **SN:** Displays the serial number of the device P2P. This serial number is unique.
- **Refresh:** Refresh the P2P interface related information.
- **FTP**

With FTP (File Transfer Protocol) server, you can store alarm pictures on the FTP server.

### Prerequisites

You need to purchase or download the FTP service tool and install the software on your PC.



### Instruction

- To create an FTP user, you must set FTP folder write permission. Otherwise, the picture will not be uploaded successfully.

### Configure FTP operations as follows:

**Step1:** On the main menu page, click "Configuration → Network → FTP" to enter the FTP interface, as shown in Figure 5-34 below.

**Step2:** Select "Enable FTP" and enter parameters such as the FTP server, port, user name, password, and the FTP file upload path.

**Step 3:** Click "Apply" to save the configuration.

**Step 4:** Click "Test" to determine whether the network connection and FTP configuration are correct.



### Instruction

- If the test fails, recheck the network or FTP configuration.

Configuration							
General	IP/Port	DDNS	E-mail	P2P	<u>FTP</u>	UPnP	Cloud Storage
Network	Enable FTP				<input type="checkbox"/>		
Display	FTP server				0 . 0 . 0 . 0		
Exceptions	FTP port				21		
User	User name						
	Password						
	File upload						
	Channel				1		
	Week				Wed		
	Time period1				<input type="checkbox"/> 00 : 00 - 00 : 00		
	Time period2				<input type="checkbox"/> 00 : 00 - 00 : 00		
	Test		Default		Apply		Cancel

Figure 5-34

- **Enable FTP:** Turn on / off the device FTP function.
- **FTP Server:** Host IP address of the FTP server.
- **FTP Port:** The default FTP port is 21, if your FTP server is different; you need to use the same port name with your FTP server.
- **User Name:** Please input the user name to login the FTP server.
- **Password:** Please input the corresponding password here.
- **File Upload:** Create folders according to the rules in the FTP account directory.

When the remote directory is empty, the system automatically creates different folders according to IP and time.

Enter the name of the remote directory, the system will create a folder with the corresponding name in the FTP root directory, and then press IP, time to create a different folder.

- **Channel:** For uploading video file settings, the week, time period, and video type of the uploaded video can be set separately for each channel.
- **Week:** Select the time to upload the FTP file according to the week. You can set two time periods each week.
- **Time period 1& 2:** Set the time period for uploading FTP files in one day.
- **Test:** Click "Test", test NVR can successfully upload files to the FTP server

#### ■ UPnP

After the mapping between the internal network and the external network is established through the UPnP protocol, the external network user can use the external network IP address to directly access the NVR device on the intranet.

Prerequisites

- 1) Log in to the router and set the IP address of the router's WAN port to access the external network.
- 2) Make sure that the router is a first-level router (or virtual first-level router) and turn on the UPnP function.
- 3) Connect the device to the LAN port of the router and access the private network.
- 4) In the main menu, select "Configuration → Network → IP/Port", set "IP address" as the router's private IP (for example: 192.168.1.101) or select "DHCP" to obtain the IP address automatically.

**The steps are as follows:**

**Step 1:** On the main menu page, click "Configuration → Network → UPnP" to enter the UPnP interface, as shown in Figure 5-35 below.

**Step 2:** Enable the UPnP function and configure related parameters such as intranet IP, external IP, and port mapping information of the UPnP route.

**Step 3:** Click "Apply" to save the configuration.

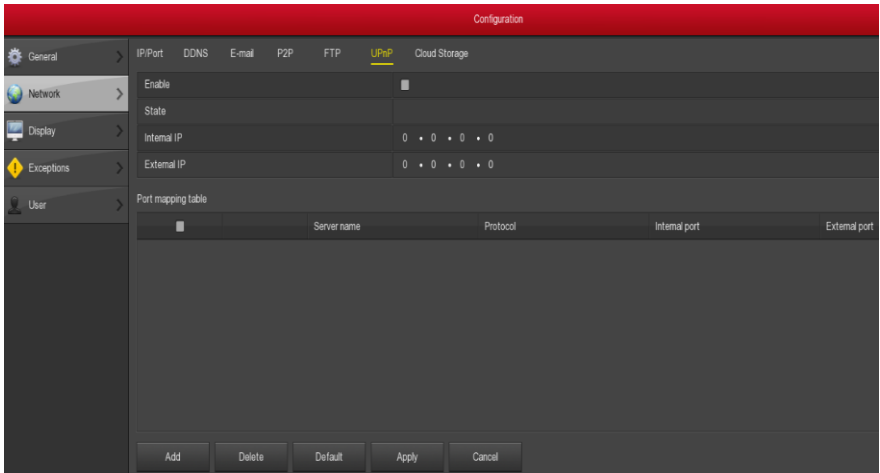


Figure 5-35

- **Enable:** Turn on/off the device UPnP function.
- **State:** Displays the mapping status of UPnP.
- **Internal IP:** Enter the router's LAN port address. After the mapping is successful, the IP address will be automatically obtained without setting.
- **External IP:** Enter the router's WAN port address. After the mapping is successful, the IP address will be automatically obtained without setting.
- **Port mapping table:** This corresponds to the UPnP mapping table information on the router.
  - Service Name: The web server name.
  - Protocol: The type of agreement.
  - Internal port: The port that the local machine needs to map.
  - External port: The port mapped on the router.
  - **Add:** Click "Add" to increase the mapping, enter the service name, internal port, and external port.
  - **Server Name:** Enter the service name and define it yourself.
  - **Internal Port:** You need to enter the corresponding HTTP port, RTSP port, TCP port.
  - **External Port:** Can be self-defined, and the internal port can be the same, but can not and NVR other ports repeat.
  - **Delete:** Select the mapping information in the port mapping table and delete the mapping relationship.



### Instruction

- When setting the external port of the router mapping port, try to use the port between 1024 and 65535. Avoid using the well-known port 1~255 and the system port 256~1023 to avoid conflict.
- When deploying multiple devices in the same LAN, plan the port mapping to avoid mapping multiple devices to the same external port.
- When performing port mapping, ensure that the mapped port is not occupied or restricted.
- TCP internal and external ports must be consistent and cannot be modified.

### ■ Cloud storage

Set cloud storage. When the device triggers an alarm, it can store the captured alarm image of the device on the cloud server.

Prerequisites

- 1) You need to have a Dropbox or Google Cloud Storage account.
- 2) Using this function, the device must be connected to an external network; otherwise it will not work properly.

### Set up cloud storage as follows:

**Step 1:** On the main menu page, select “Configuration → Network → Cloud Storage” to enter the cloud storage setting interface, as shown in Figure 5-36 below.

**Step 2:** Enable cloud storage, select the cloud storage type, Dropbox or Google, click Bind, follow the prompts to log in to the corresponding website using a browser on the computer, and enter the obtained “Authorization Code” as “Binding” In the "Authorization code" column of the interface, click "OK".

**Step 3:** Click “Apply” to save the settings.

**Step 4:** Click “Test” to test whether the NVR can successfully upload files to the cloud server. After the binding is successful, the cloud storage interface displays the "Dropbox" username, total capacity, and used space.





Figure 5-36

- **Enable:** Turn on/off the device cloud storage function.
- **Dropbox:** Select a cloud storage Type.
- **Google:** Select a cloud storage Type.
- **Upload folder:** Set the upload cloud space folder name.
- **Username:** Displays the user name for the corresponding cloud storage type.
- **Capacity:** After the cloud storage binding is successful, the total capacity of the cloud space is displayed.
- **Used:** Cloud storage binding is successful; the display of cloud space has been used capacity.
- **Test:** Bind and click "Test" to save whether the cloud storage binding is successful.

## ■ WIFI

The WiFi NVR WiFi function provides hotspots for the front-end WiFi IPC, connecting the WiFi IPC to the NVR, reducing the difficulty of front-end IPC wiring, and facilitating device movement.



### Instruction

Devices that only have a WiFi module support this feature, whichever comes first.

**The steps are as follows:**

**Step 1:** On the menu page, select "Configuration → Network → WIFI" to enter the WiFi configuration interface, as shown in Figure 5-37 ① below.

**Step 2:** Select "Show Password" to check the ESSID (NVR WiFi username) and password (NVR WiFi password). You can also modify the WiFi NVR ESSID and password as required. Click Apply to save the configuration.

**Step 3:** Click "Advanced", as shown in Figure 5-37 ②. Enable "SSID broadcast" (When the Wi-Fi channel is "Other" when using Wi-Fi to connect to our WiFi IPC, if the Wi-Fi IPC is not connected to the NVR hotspot, the wifi

NVR channel must be switched to the “non-other” channel) and click "Apply" to save the configuration.

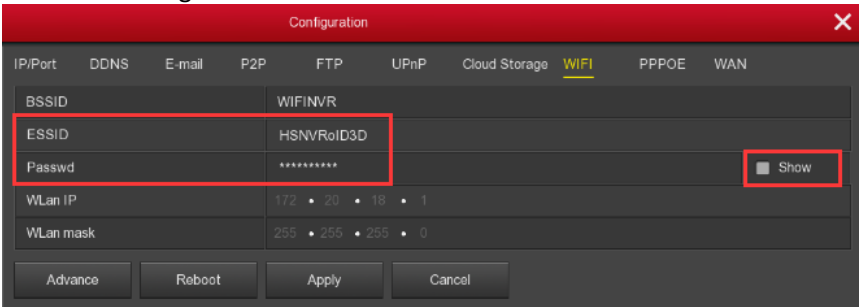


Figure 5-37 ①

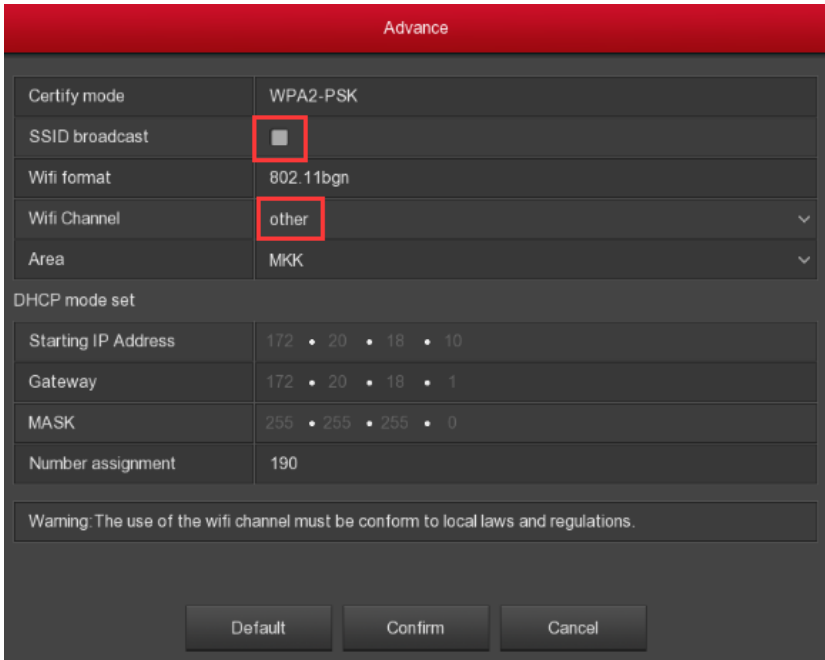


Figure 5-37 ②



### Instruction

- WiFi interface WLAN IP and WLAN mask are non-settable items.
- The IP address, gateway, subnet mask, and number assignment in the Advanced Settings screen are not settable.

## WiFi IPC connection NVR steps are as follows:

**Step 1:** Open the WiFi IPC web port, enter the WiFi configuration interface, and connect the WiFi IPC to the WiFi NVR hotspot through the NVR's WiFi username and password.

**Step 2:** Turn on the WiFi of the WiFi IPC, or set the IP of the WiFi IPC to the IP of the same network segment as the WiFi NVR, and the gateway is the IP address of the NVR WLAN.

**Step 3:** Add the WiFi IPC to the NVR. The NVR displays the IPC video, indicating that the IPC successfully connected to the NVR hotspot.

### ■ PPPOE

The steps are as follows:

**Step 1:** On the menu page, select "Configuration → Network → PPPOE" to enter the WiFi configuration interface, as shown in Figure 5-38 below.

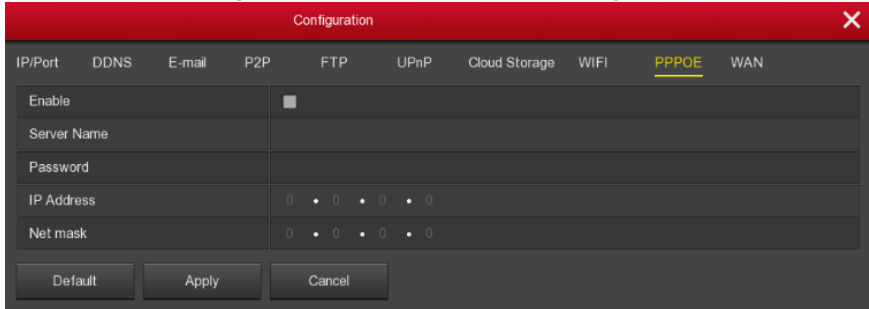


Figure 5-38

**Step 2:** Select "Enable", input the user name and password of the PPPoE.

**Step 3:** Click "Apply" to save the configuration.

After the PPPoE configuration is successful, the obtained public IP address is displayed in real time. Users can access the device through this IP address.

- **Enable:** Turn on/off the device PPPoE function.
- **Server Name:** The PPPoE user name provided by the ISP (Internet Service Provider).
- **Password:** The password corresponding to the user name.
- **IP Address:** After successful PPPoE dialing, you can check the current IP address of the device here.



### Instruction

- After the configuration is complete, the IP address of the TCP/IP interface cannot be modified.
- Devices that only have a WiFi module support this feature, whichever comes first.

- Modify the interface parameters; the system automatically closes the WAN interface setting parameters.

## ■ WAN

On the Menu interface, click "Configuration → Network → WAN" to enter the WAN interface, as Figure 5-39 shows.

IP/Port	DDNS	E-mail	P2P	FTP	UPnP	Cloud Storage	WIFI	PPPOE	WAN
Enable DHCP			<input checked="" type="checkbox"/>						
IP Address				.	.	.			
Network Mask				.	.	.			
Gateway				.	.	.			
Primary DNS				.	.	.			
Secondary DNS				.	.	.			
TCP Port				5000					
RTSP Port				554					
HTTP Port				80					

Warning:PPPOE will be closed when changing the parameters!

Apply Cancel

Figure 5-39

- **IP Address:** Enter the IP address of NVR.
- **Enable DHCP:** Enable / disable DHCP (Dynamic Host Configuration Protocol) function. "IP address", "subnet mask", and "default gateway" can not be set when DHCP is enabled.
- **Network Mask:** According to the actual situation set.
- **Gateway:** According to the actual situation set, with the IP address in the same network segment.
- **Primary DNS:** This is the DNS server IP address, which is usually provided by the local access point service provider (ISP). Enter the IP address of your domain name server here.
- **Secondary DNS:** Start secondary DNS when the primary one does not work.
- **Device MAC:** Displays the physical address of the NVR.
- **TCP Port:** Default value is 5000, according to the actual needs of users to set the port.
- **HTTP Port:** Default value is 80, according to the actual needs of users to set the port.

- **RTSP Port:** Default value is 554, according to the actual needs of users to set the port.
- **Network rate:** Displays the network transmission rate.
- **Internal net card IP:** Set the intranet IP address for connecting the POE device of the device.
- **Refresh:** Click to refresh the interface.



### Instruction

- The IP address and the default gateway must be in the same network segment.
- If NVR enabled DHCP is in effect and you turn off DHCP, you cannot display the original IP information. You need to reset the IP address and other parameters.
- Modify the interface parameters; the system automatically closes the PPPOE function.
- Devices that only have a WiFi module support this feature, whichever comes first.

### 5.3.6.3 Display

Set the display effect of the device preview interface, including image output resolution, transparency, display time, and preview configuration.

**The steps are as follows:**

**Step 1:** On the menu page, select "Configuration → Display" to enter the video display interface, as shown in Figure 5-40.

**Step 2:** Configure resolution, transparency, and other related parameters.

**Step 3:** Click Apply to save the configuration.

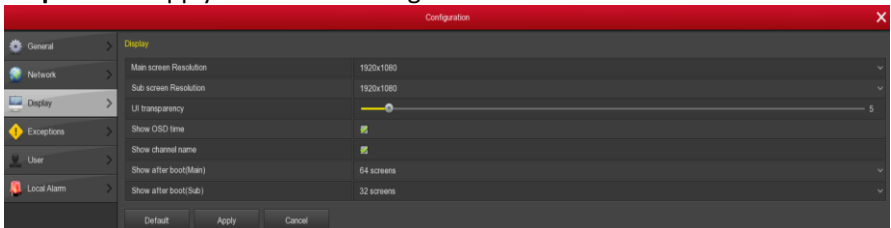


Figure 5-40

- **Main screen Resolution (Resolution):** The selectable values are 1024 x 768, 1280 x 720, 1280 x 1024, 1920 x 1080. The 4K NVR HD HD interface supports up to 4K resolution output.
- **Sub screen Resolution:** Set the sub screen preview resolution. The selectable values are 1280x720, 1280x1024, and 1920x1080.

- **UI Transparency:** The higher the percentage, the more transparent device local menu.
- **Show OSD Time:** Turns on / off the device time information displayed on the monitor screen.
- **Show channel name:** Turns on/off the device channel name displayed on the monitoring screen.
- **Show after boot (Main):** Select (Main Screen) to display the screen split screen number.
- **Show after boot (Sub):** Select the sub-screen boot display screen split screen number.



### Instruction

- After the configuration resolution is saved, restart the device to configure it successfully.
- Only systems that support dual screens have the ability to sub screen Resolutions and Show after boot (Sub) configurations.

#### 5.3.6.4 Exceptions

Set the alarm mode of abnormal events. When an abnormal event occurs during the operation of the NVR device, the system executes the alarm linkage action.

#### ■ Disk Exception

The steps are as follows:

**Step 1:** On the menu page, select "Configuration → Exceptions → Disk Exception" to enter the disk exception setting interface, as shown in Figure 5-41.

**Step 2:** Select the event type, click "Enable", and enable the sending of mail and buzzer alarm.

**Step 3:** Click "Apply" to save the configuration.

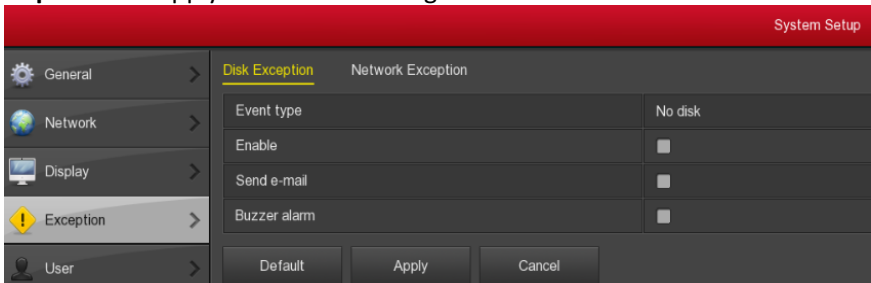


Figure 5-41

- **Event type:** Including No Disk and Disk Error in two cases.

- **Enable:** Turns on / off disk exception alarm.
- **Send e-mail:** Turns on / off the sending mail function that occurs when a disk exception, send mail to the specified mailbox.
- **Buzzer alarm:** Turns on / off the device buzzer alarm function that occurs when the disk buzzer sound occurs.
- **Network Exception**

The steps are as follows:

**Step 1: On the menu page,** select "Configuration → Exceptions → Network Exception" to enter the network exception setting interface, as shown in Figure 5-42.

**Step 2:** Select the event type, click "Enable", and enable the sending of mail and buzzer alarm.

**Step 3:** Click "Apply" to save the configuration.

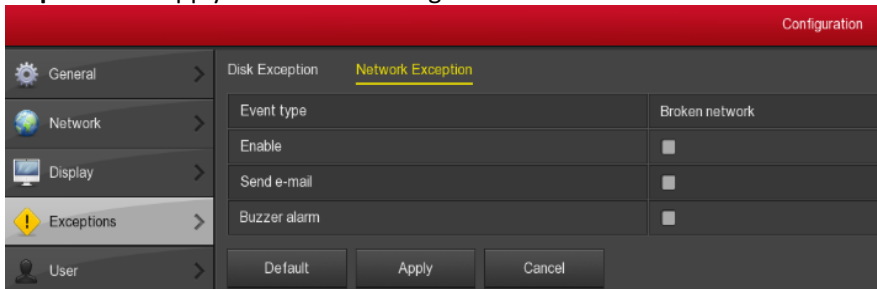


Figure 5-42

- **Event Type:** Including broken network and IP conflict in two cases.
- **Enable:** Turns on / off network exception alarm.
- **Send e-mail:** Turns on / off the sending mail function that occurs when a network exception, send mail to the specified mailbox.
- **Buzzer Alarm:** Turn on / off the device buzzer alarm function, that is, the buzzer sounds when a network error occurs.

### 5.3.6.5 User

In the menu page, select "Configuration → User" to enter the user management interface, as shown in Figure 5-43. The NVR user management can add, modify, and delete users.



#### Instruction

- The factory default administrator admin group, administrator user admin user, admin group and admin user can not delete or modify their permissions.
- Users in the group can modify permissions in this group of permissions.

- Each user must belong to only one group. When you select the group to which the user belongs, the user's authority can only be a subset of the group's authority. The authority attribute of the group cannot be exceeded.
- The default password of the admin administrator user is 12345. The administrator admin user can add, delete, or edit users, add users in the group, and set user rights control.
- The user level has two levels, the operator and the ordinary user. The default permissions of the two levels are different. ("Remote Permissions", the operator has default remote normal settings, remote network settings, remote display settings, remote exception settings permissions, ordinary users do not have).
- To facilitate user management, it is recommended to set the operator permission to be lower than the normal user permission.

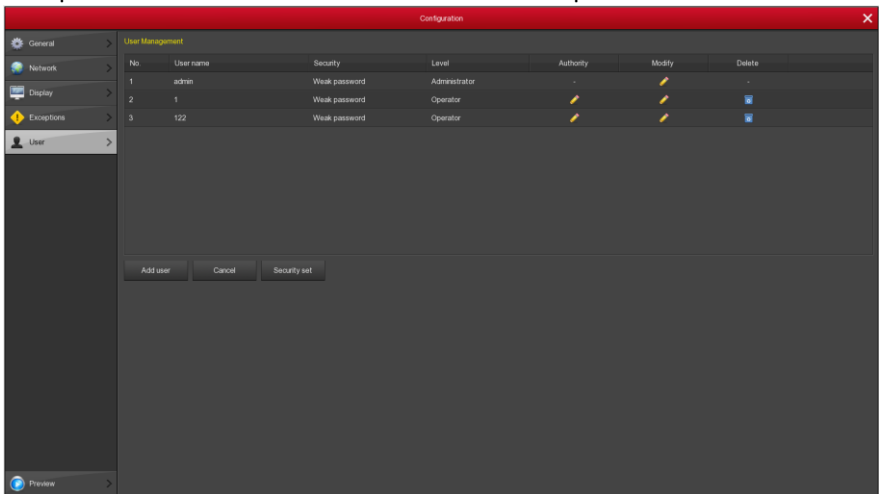


Figure 5-43

➤ **User list:** Displays all current users of the device; where admin is an administrator user and can only change its password and cannot modify its permissions.

➤ **Add user**


**The steps are as follows:**

**Step 1:** Click the "Add User" button to enter the Add User interface.

**Step 2:** Fill in the user information, select the level, click "Save".

**Step 3:** Setting authority.



Select the added user and click the corresponding "" button below the Authority to enter the permission setting interface and set the user authority.




### Authority Instruction

Authority are divided into local configuration, remote configuration, channel configuration,

- **"Local Config"**: Include All, Local Poll, Local HDD, Local Camera Setup, Local Configuration, Local Network, Local Display, Local Exceptions, Local User, Local System Information, Local Log, Local Manual Update, Local Online Update, Local Auto Maintain, Local Restore Default, Local Shutdown Reboot.
- **"Remote Config"**: Include All, Remote Poll, Remote HDD, Remote Camera Setup, Remote Configuration, Remote Network, Remote Display, Remote Exceptions, Remote User, Remote System Information, Remote Log, Remote Manual Update, Remote Online Update, Remote Auto Maintain, Remote Restore Default, Remote Shutdown Reboot.
- **"Channel Config"**: Local Preview, Local PTZ, Local Playback , Local Record, Local Encode Parameters, Local OSD, Local Image, Local Motion, Local Export, Local Privacy Mask, Remote Preview, Remote PTZ, Remote Playback, Remote Record, Remote Encode Parameters, Remote OSD, Remote Image, Remote Motion , Remote Export, Remote Privacy Mask for all channel.

### ■ Modify the user

The steps are as follows:


**Step1:** Select the user to click modify to correspond to the "" button to enter the Modify User interface.

**Step2:** Modify the user password or user level and click "Save" to complete the modification.

### ■ Delete the user

The steps are as follows:

**Step1:** To determine the login user for the administrator user, in the user management interface to select the user to delete, click delete below the

corresponding "" button, pop-up prompt.

**Step2:** Click "Confirm" to delete the user and return to the user management interface.

- **Safety Set:** Including security mail and security issues, select three security issues and set the corresponding answer, save it. As shown in Figure 5-44.

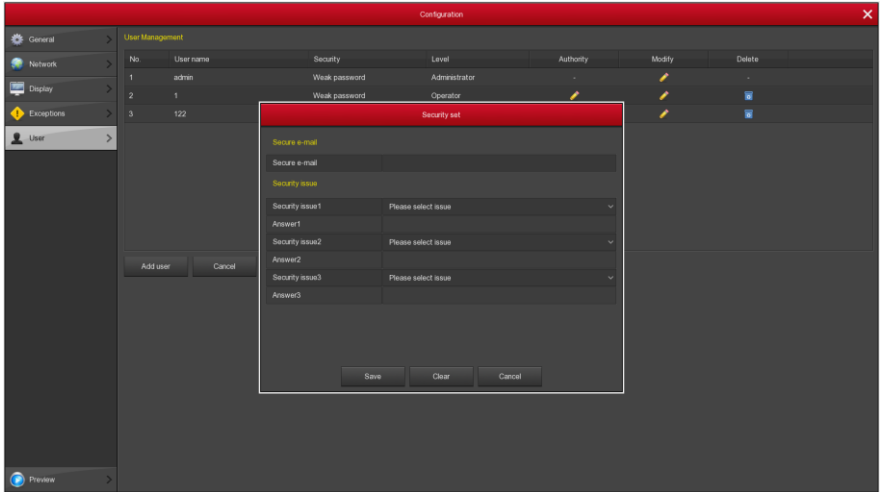


Figure5-44



### Instruction

- Operators and ordinary users do not add or delete user rights.

## 5.3.7 Maintenance

### 5.3.7.1 System

#### ■ Version Information

In the menu page, click "Maintenance → System → Version Info" to enter the Version Info interface, as shown in Figure 5-45. Here you can view the system version information, including product model, version and date.

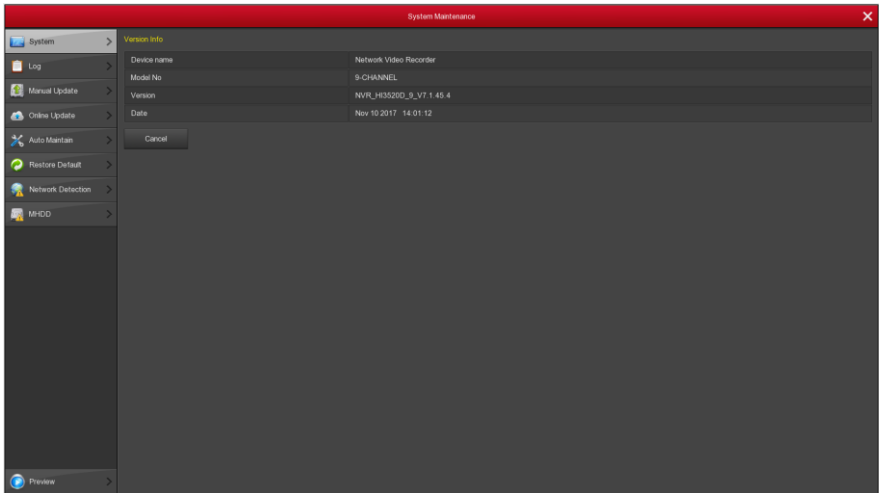


Figure5-45

- **Device name:** Display NVR full name, fixed to Network Video Recorder.
- **Model NO.:** Displays the maximum number of channels supported by the device.
- **Version:** Displays the version number of the program.
- **Date:** Show the date the program was created.



### Instruction

- The version information displayed on different model devices is different. Please refer to the actual interface display.

### 5.3.7.2 Log

Here you can view the system log.

#### The steps are as follows:

**Step1:** Select "Menu → Maintenance → Log" to enter the Log interface.

**Step2:** Select the log type; search time period (start time and end time) as required.

**Step 3:** Click the "Query" button to view the log.

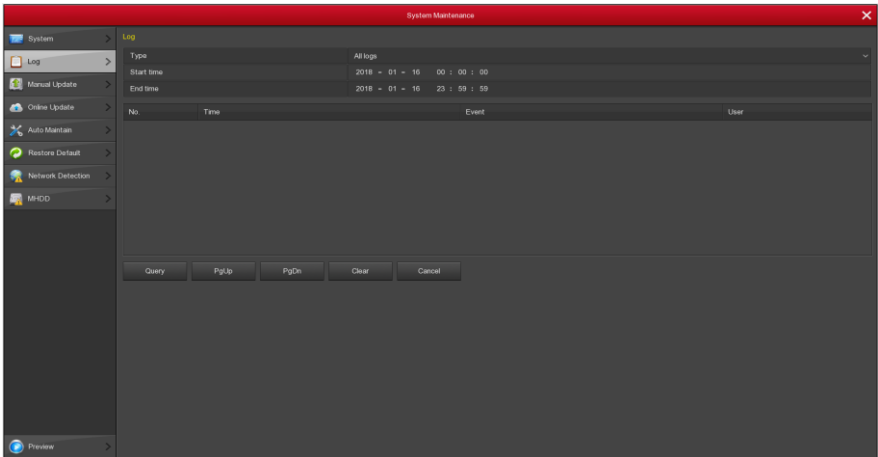


Figure 5-46

- **Type:** Select the type of information you request.
- **Start Time/End Time:** Enter the time range for the search log.
- **Query:** Click the query log.
- **PgUp / PgDn:** Flip function; click to view other log information.
- **Clear:** Clear all information.

### 5.3.7.3 Manual Update

Insert the USB device with the upgrade file into the NVR to upgrade the system version of the NVR. If the device detects the upgrade file in the U disk, the upgrade package information (number, name, size, date) will be displayed in the list.

**The upgrade steps are as follows:**

**Step 1:** Insert the USB device with the upgrade file (named xxxxx\_update\_x\_Vx.x.xx.x.bin) into the NVR.

**Step 2:** On the menu page, select "Menu → Maintenance → Manual Update" to enter the Manual Update interface, as shown in Figure 5-47.

**Step 3:** Click "Refresh". Select the upgrade file and click "Upgrade → Confirm". Wait for the interface to go through the progress bar and the device will restart automatically to complete the upgrade.

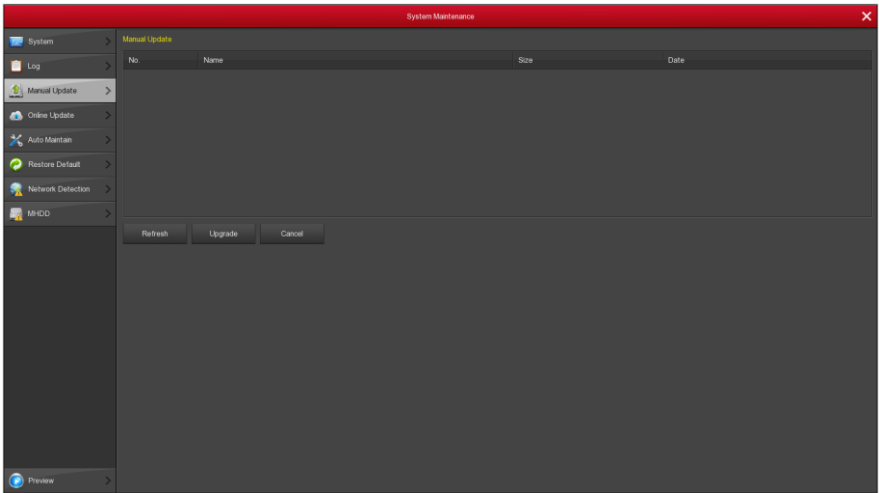


Figure 5-47

- **Refresh:** Refresh the current interface information.
- **Upgrade:** Click the device to start the upgrade.



### Instruction

- When you try to refresh or detect the upgrade package several times, check whether the U disk is in good contact with the USB port of the device and whether the upgrade file name is correct.
- During the upgrading process, please do not cut off the power or take off your U disk. After the upgrading, your system will restart automatically. (This process will take about 1 to 6 minutes.) Here, we advise you to restore factory Settings after the upgrading.

#### 5.3.7.4 Online update

After the NVR is connected to the public network, the system can be upgraded through an online upgrade. Online upgrade is divided into automatic upgrade and manual detection upgrade, and the current device system version is displayed.

**The automatic online upgrade procedure is as follows:**

**Step 1:** Select "Auto Update";

**Step 2:** Set the device upgrade time and click "Apply". When there is a new version in the cloud, the system will automatically detect the version to upgrade the device at the set time.

**The manual online upgrade steps are as follows:**

**Step 1:** On the menu page, select "Menu →Maintenance→ Online Update" to enter the device upgrade interface, as shown in Figure 5-48.

**Step 2:** Click "Check" to view the latest version of the device in the cloud in real time. If a new version is detected, the system will prompt to discover the relevant information of the new version.

**Step 3:** Click "Update". Wait for the device to download the upgrade file and upgrade it. After the upgrade, the device automatically restarts.

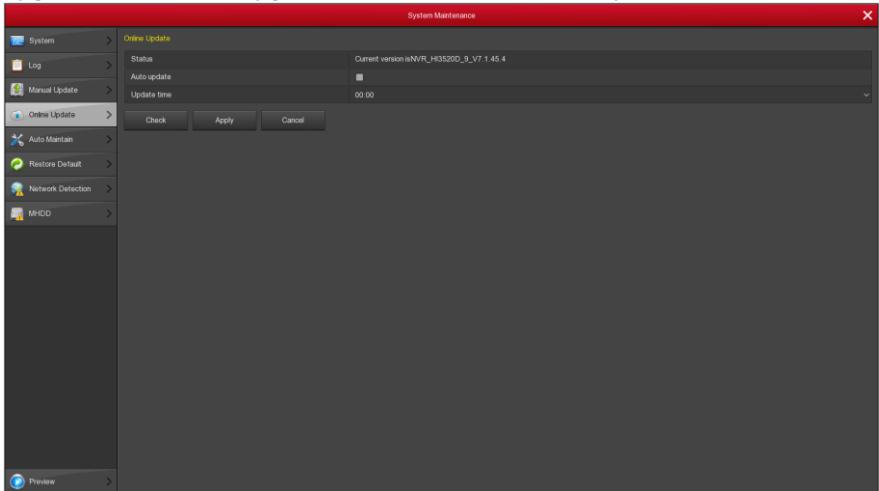


Figure 5-48

- **Status:** The current version of device.
- **Auto update:** Enable / disable automatic update. When the device detects an online new version, it automatically upgrades according to the set upgrade time.
- **Update time:** Set the automatic update time.
- **Check:** Click check latest online version.



### Instruction

- Before testing a new online version, make sure that the NVR is properly connected to the network.
- During the upgrading process, please do not cut off the power or take off your U disk. After the upgrading, your system will restart automatically. (This process will take about 1 to 6 minutes.) Here, we advise you to restore factory Settings after the upgrading.

### 5.3.7.5 Auto Maintain

When the device runs for a long time, you can set the device to restart during idle time to increase the speed of the device.

**The Auto Maintain procedure is as follows:**

**Step 1:** On the menu page, select "Menu → Maintenance → Auto Maintain" to enter the automatic maintenance interface, as shown in Figure 5-49.

**Step 2:** Select the time of "Reboot device automatically".

**Step 3:** Click "Apply" to complete the auto maintain setup.

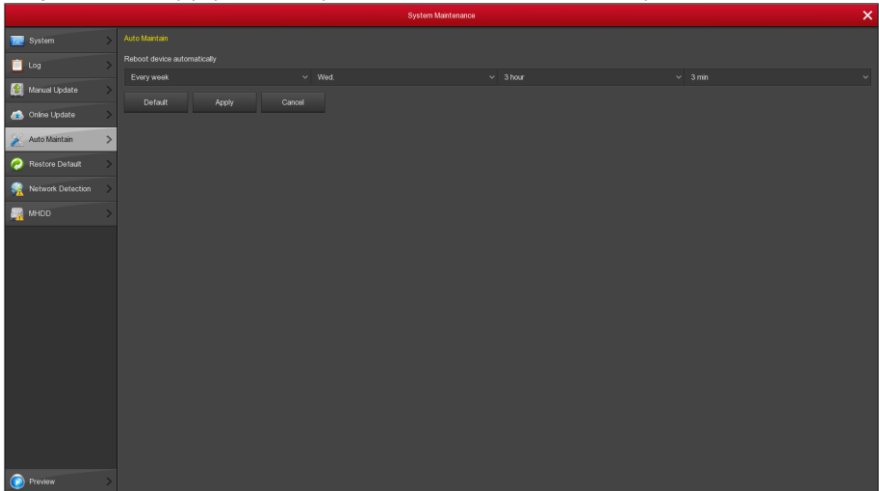


Figure 5-49



### Instruction

- Automatic restart the system can be in accordance with the cycle at a fixed time (Every month, Every week, Every day) set to restart the device, you can also choose "Never", do not do automatic maintenance equipment.

#### 5.3.7.6 Restore Default

When the NVR device runs slowly, configuration errors, etc., you can try to solve the problem by restoring the default.

The default procedure for recovery is as follows:

**Step 1:** On the menu page, select "Maintenance → Restore Default" to enter the default interface, as shown in Figure 5-50.

**Step 2:** Select the configuration item that needs to be restored to factory settings.

**Step 3:** Click "Apply → Confirm". The NVR device selects and configures the system parameters to restore to the factory default settings.

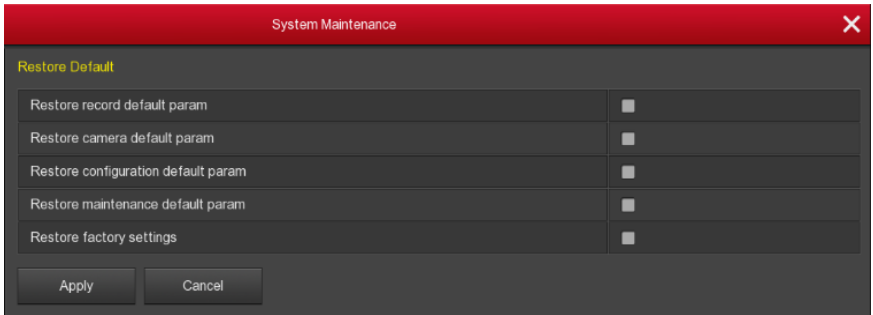


Figure 5-50

- **Restore record default param:** Select / Cancel Resume Record all interface configuration parameters to the default values.
- **Restore camera default param:** Select / Cancel Resume Camera all interface configuration parameters to the default values.
- **Restore configuration default param:** Select / Cancel Resume Configuration all interface configuration parameters to the default values.
- **Restore system maintenance default param:** Select / Cancel Resume Maintenance all interface configuration parameters to the default values.
- **Restore factory settings:** Select / Cancel all NVR configuration parameters to the default.



### Instruction

- After the factory settings are restored, the corresponding functions will be restored to the factory settings. The existing configuration of the user may be lost. Exercise caution.

### 5.3.7.7 Network Detection

Network detection is divided into Stream Info and Net Test.

#### ■ Stream Info

The code stream refers to the data traffic used by the video file in unit time. You can view the real-time stream and the waveform change chart of each channel.

**The steps to check the stream information are as follows:**

**Step 1:** In the menu page, select "Maintenance → Network Detection → Stream Info" to enter the "Stream Info" interface, as shown in Figure 5-51.

**Step 2:** Select the channel to view the real-time stream (Kb/s-kbit/s), resolution, received bit rate, and send bit rate of the channel picture.



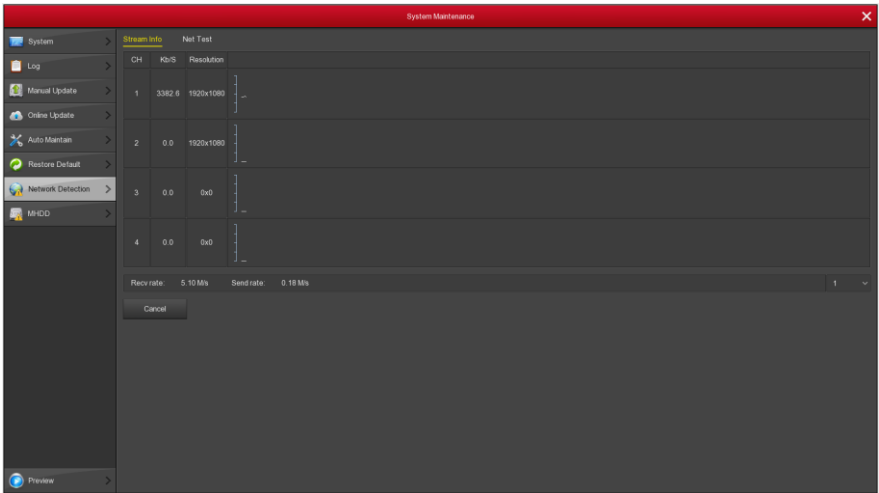


Figure5-51

## ■ Network Detection

Network detection can test network delay, packet loss and network packet capture backup.

**Test network delay and packet loss steps are as follows:**

**Step 1:** On the menu page, select "Maintenance → Network Detection → Network Detection" to enter the Network Detection interface, as shown in Figure 5-49 below.

**Step 2:** Enter the destination address and click "Test". The system displays the test results, including the overall rating of "average delay" and packet loss rate.

**The network capture packet backup steps are as follows:**

**Step 1:** In the menu page, select "Maintenance → Network Detection → Network Detection" to enter the Network Detection interface, as shown in Figure 5-52 below.

**Step 2:** Insert the USB flash drive into the NVR.

**Step 3:** Click "Packet capture", wait for the device to complete the capture backup, and click "Confirm".

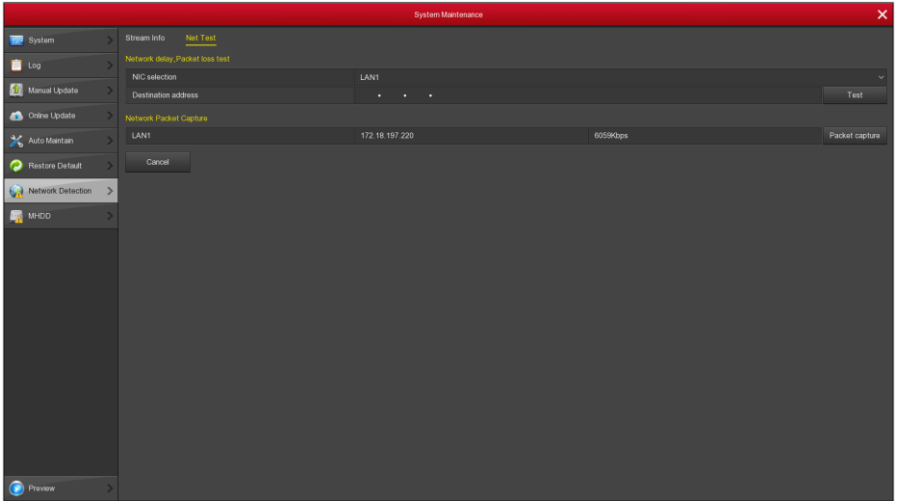


Figure5-52

### 5.3.7.8 MHDD

Hard disk detection is used to detect the current status of the hard disk so that users can keep abreast of the hard disk performance and update the hard disk in question.

**Hard disk detection steps are as follows:**

**Step 1:** On the menu page, select "Maintenance→ MHDD" to enter the MHDD interface, as shown in Figure 5-53.

**Step 2:** Select the hard disk to be detected by setting the hard disk number and set the "Test type"

**Step 3:** Click "Self test → Confirm" and the device starts to detect the hard disk.

**Step 4:** After the hard disk is detected, the hard disk related information is displayed in the S.M.A.R.T. information list.

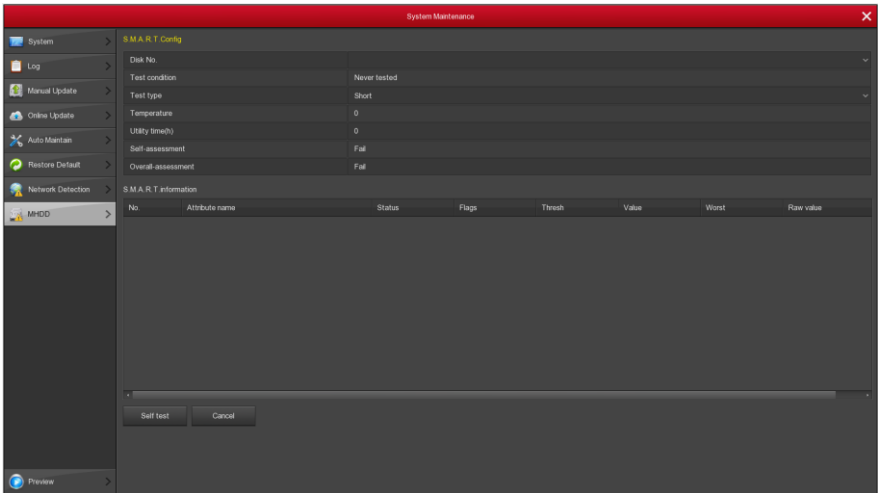


Figure5-53

➤ **S.M.A.R.T Configuration:**

- ✓ Disk No: Pull down to select the drive number.
- ✓ Test condition: Shows whether the hard disk has been detected.
- ✓ Test type: Short and extended.
- ✓ Temperature: Display hard disk temperature.
- ✓ Utility time(h): Shows how long the hard disk is used (hours).
- ✓ Self-assessment: Show whether the hard disk is passed.
- ✓ Overall-assessment: Show whether the whole hard disk through.

➤ **S.M.A.R.T information:** Display the hard disk information.

➤ **Self test:** Click "Self test" to detect the hard disk information.



**Instruction**

- Only some devices support hard disk detection. Please refer to the actual situation.
- When the self-assessment or overall evaluation results are "not passed", the hard disk must be replaced to avoid data loss.

### 5.3.8 Shutdown

In the menu page, select "Shutdown" to enter the shutdown system interface, you can log off the system, restart the system, shutdown operation. As shown in Figure 5-54:

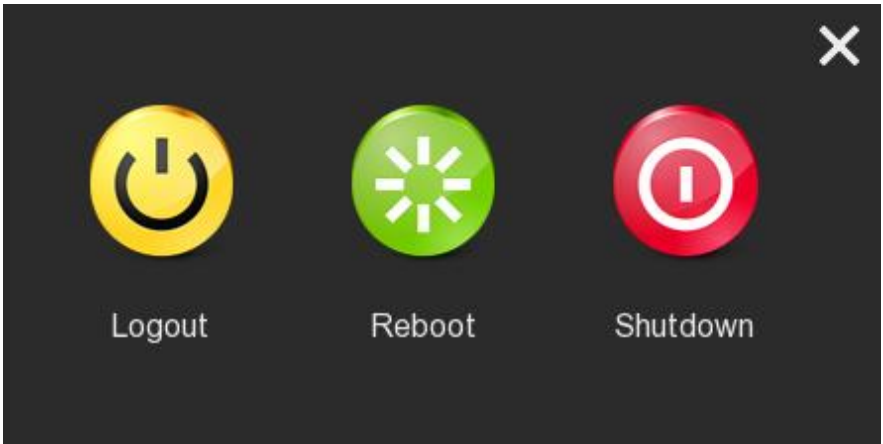


Figure 5-54

- **Logout:** Logout the current user, switch to user login interface.
- **Reboot:** Reboot the device.
- **Shutdown:** Shut down the device, just like computer safe shutdown mode.

# Chapter 6 WEB Operation



## Instruction

- Different types of devices have different interface displays. The following screenshots are for reference only. Please refer to the actual ones.
- The NVR supports accessing and managing devices on the PC through the Web.
- The WEB page provides application modules such as real-time preview, playback, configuration, and logout.
- The device supports a variety of browser monitoring, such as IE browser, 360 browser, Firefox browser (52 or less version), Google Chrome (Chrome45 or less version).

## 6.1 Internet connection

Before using the browser to log in to the web interface, check whether the network between the PC and the NVR is normal.

**Step 1:** Confirm that the NVR device is properly connected to the network.

**Step 2:** Set the IP address, subnet mask, and gateway for the PC and NVR devices, respectively.

- ✓ If there is no routing device on the network, allocate the IP address of the same network segment: If there is a routing device on the network, you need to set the corresponding network, you need to set the corresponding network management and subnet mask.
- ✓ The default IP address of the NVR device is 192.168.1.88.

**Step 3:** Check whether the network between the PC and the NVR device is normal. The method is as follows. When the network between the PC and the NVR device is normal, you can log in to the web interface of the NVR through the PC.

- ✓ On the PC, ping\*\*\*.\*\*\*.\*\*\*.\*\*\* (NVR IP address) verifies that the network is disconnected and the returned TTL value is generally equal to 255.
- ✓ Log in to the local interface of the NVR device, and fill in the IP address of the PC on the “Network Test” interface to test whether the network is connected. For details, see 5.3.7.7 Network Detection.

## 6.2 Browser Login

To make sure NVR connects to Internet successfully, open Browser, input required IP address, the default setting is 192.168.1.88, and enter the login interface, as below Figure 6-1.



Figure 6-1

Select the system language in the upper right corner of the interface (currently supports Chinese, English, Polish, Czech, Russian, Thai, Hebrew, Persian, Bulgarian, Arabic, German, French, Portuguese, Turkish, Spanish, In Italian, Hungarian, Roman, Korean, Dutch, and Greek, the default is English). Enter the user name and password. The default user name is **admin** and the password is **12345**. Click "Login" to log in remotely.



### Instruction

- If you forget the password, you need to go to the local login page of the device, click "Forgot Password", follow the prompts to recover the password, and return to the WEB interface to log in again.

## 6.2 Active X download, installation

The first time you log in to the device, you need to download and install the browser plug-in for the first time, as shown in Figure 6-2, click Install and follow the prompts to complete the installation.

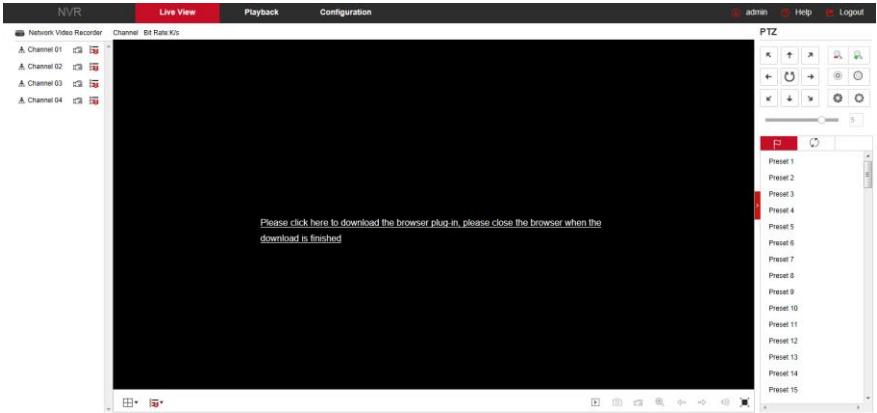
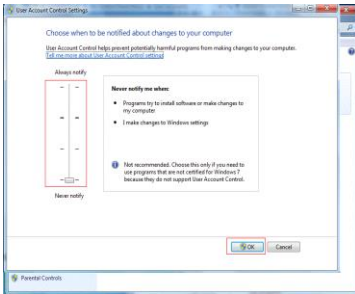


Figure 6-2

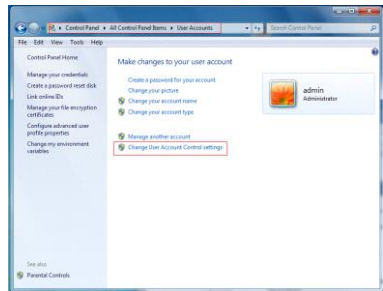


### Instruction

- After the NVR upgrades to a new version, you need to delete the original control and download and install the control again.
- For WIN 7 could have problems for backup and recording, if so, please check the Admin setting, procedure as follows:



WIN7-1



WIN7-2

- The Active X can't be loaded. Please adjust the security level and firewall setting to the lowest, and make some adjustment to IE as well: Tool-Internet Option- Custom level-ActiveX- enables all the options below ActiveX and click OK! Finally, the Active X will be downloaded and installed automatically, please refer to the Figure 6-3.



Figure 6-3

## 6.3 Live View

After login the client successfully, entering live preview interface. The interface as below Figure 6-4:

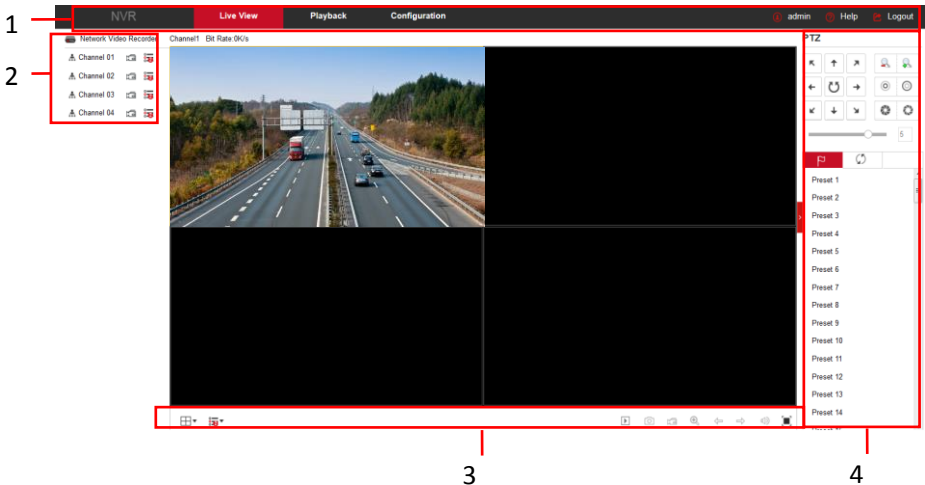





Figure 6-4










1. **System Menu.** Including Live View, Playback, Configuration, Help, Logout, and show login user name.
2. **Real-time Monitoring Channel.** Open/Close Preview, record and stream switching.

Mark	Specification
------	---------------



 Channel 01	Open / close corresponding preview channel.
	Start/stop recording, save video on local computer hard drive.
	Main and sub bit stream switching

### 3. Preview channel shortcut button

Mark	Specification
	Preview window toggle. From left to right are: 1 split screen, 4 split screen, 9 split screen. According to the number of channels supported by the device, the preview window will be different. Please refer to the actual situation.
	Switch all preview channel master, sub streams, and open preview
	Open / Close all preview channels.
	Click this icon to take a picture. The default storage path of the picture is C:\Record. You can enter the Configuration → Local Config interface to modify it.
	Click this icon to start recording on all channels; click the icon again to stop recording. The default storage path of the recording is C:\Record. You can enter the Configuration → Local Config interface to modify it.
	Local electronic zoom, click this icon to open the electronic zoom function, select to enlarge the channel, hold down the left mouse button to select the area to be zoomed in, release the left button, and select the area to be enlarged; in the zoom channel, click the right mouse button to restore the original status.
	1 Split screen preview, click to switch channels
	Turn on / off the speaker. If the audio is not turned on, there is no sound when listening.
	Full-screen playback, press the keyboard Esc to exit the full screen.

#### 4. PTZ setting operation window

Mark	Specification
	PTZ control direction button
	PTZ self-test
	Zoom button
	Focus button
	Aperture control button
	The step size is mainly used for speed control. The larger the value, the faster the rotation speed. For example, the rotational speed of step 7 is much larger than the rotational speed of step 1.
	Preset point setting
	Call presets
	Settings
	Delete settings
	Cruise path setting
	Turn on / off cruise

## 6.5 Configuration

### 6.5.1 Local Config

In the main interface, click "Configuration → Local Config" to enter the local configuration interface, as shown in Figure 6-5 below. Here you can set the device video file, capture and clip corresponding to the local computer's save path, click "Browse" to select the path to save, click "Save" to complete the path settings.

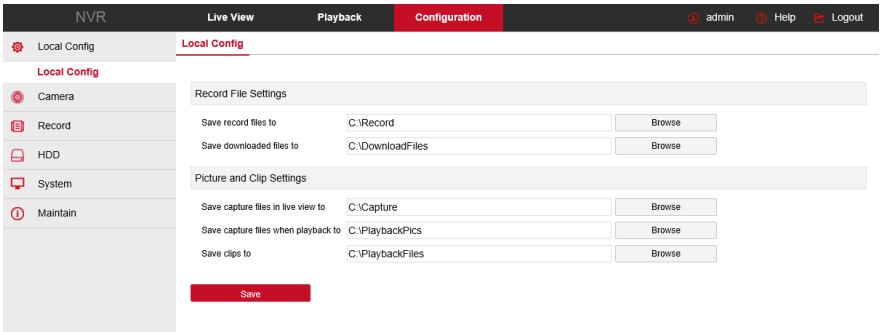


Figure 6-5

## 6.5.2 Camera

### 6.5.2.1 Add Camera

#### ■ Add Camera

In the main interface, click "Configuration → Camera → Add Camera" to enter the add camera interface, as shown in Figure 6-6 below. Here you can add, edit, and delete devices to the device as needed. The relevant parameters are consistent with the NVR settings.

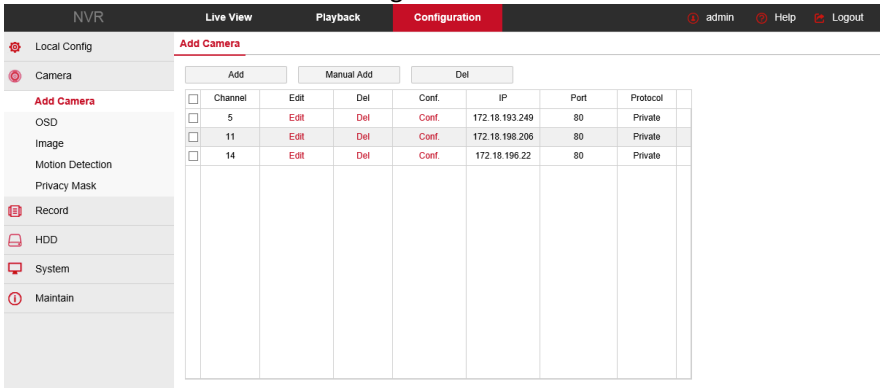


Figure 6-6

#### ■ PoE

In the main interface, click "Configuration → Camera → Add Camera → PoE" to enter the PoE interface, as shown in Figure 6-7 below. Here you can view the connection status and power of each PoE port in the PoE configuration interface.

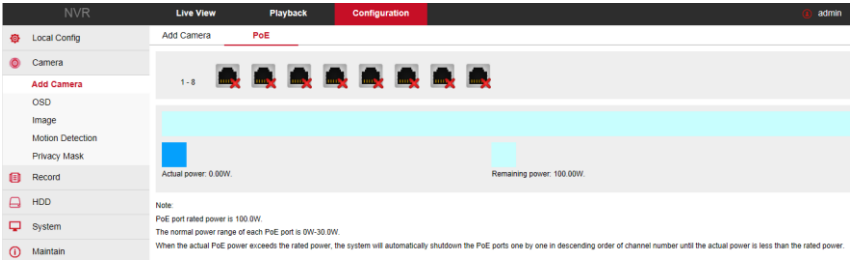


Figure 6-7

### 6.5.2.2 OSD

In the main interface, click "Configuration → Camera → OSD" to enter the OSD setting interface, as shown in Figure 6-8 below. Here you can view and set the device text, date and other related information, the relevant parameters and NVR-side settings consistent.

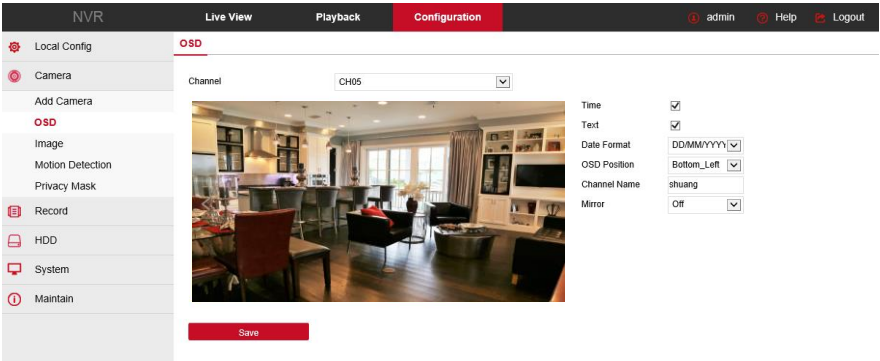


Figure 6-8

### 6.5.2.3 Image

In the main interface, click "Configuration → Camera → Image" to enter the motion detection setting interface, as shown in Figure 6-9 below. Here you can view and set the device's image information, the relevant parameters and NVR-side settings consistent.

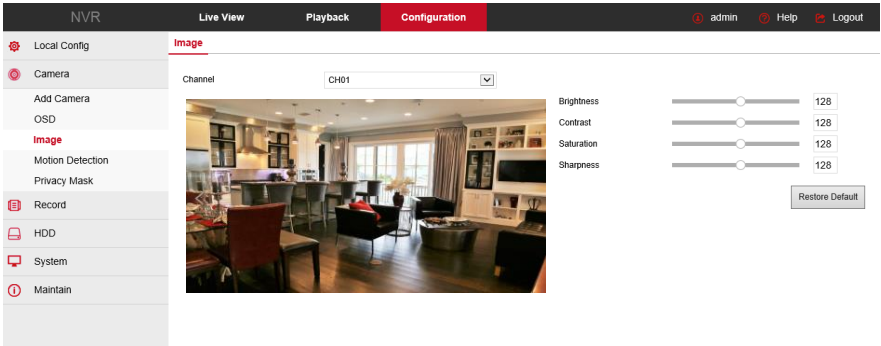


Figure6-9

### 6.5.2.4 Motion Detection

In the main interface, click "Configuration →Camera →Motion Detection" to enter the motion detection setting interface, as shown in Figure 6-10 below. Here you can view and set the device's motion detection related information, the relevant parameters and NVR-side settings consistent.

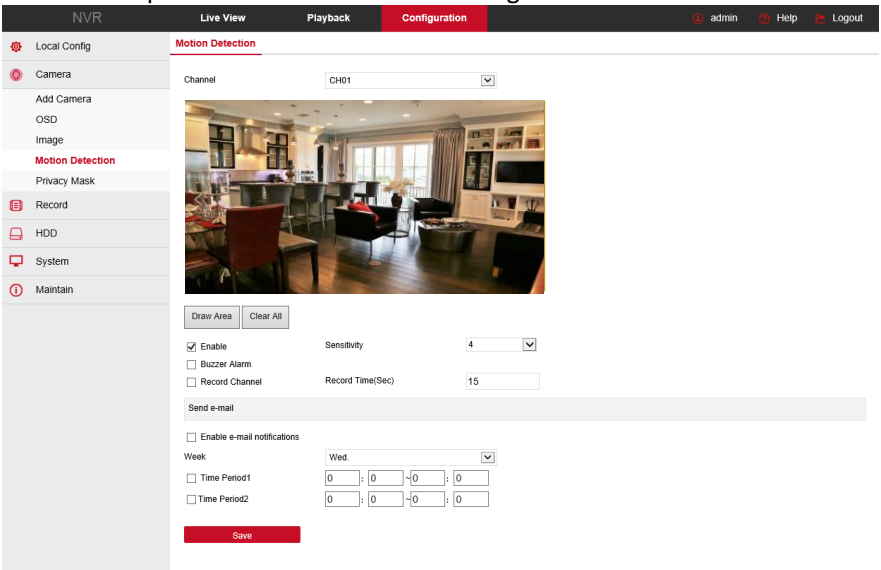


Figure 6-10

### 6.5.2.5 Privacy Mask

In the main interface, click "Configuration →Camera →Privacy Mask" to enter the privacy mask setting interface, as shown in Figure 6-11 below. Here you can set the mask area; you can set three areas, the relevant parameters and NVR-side settings consistent.

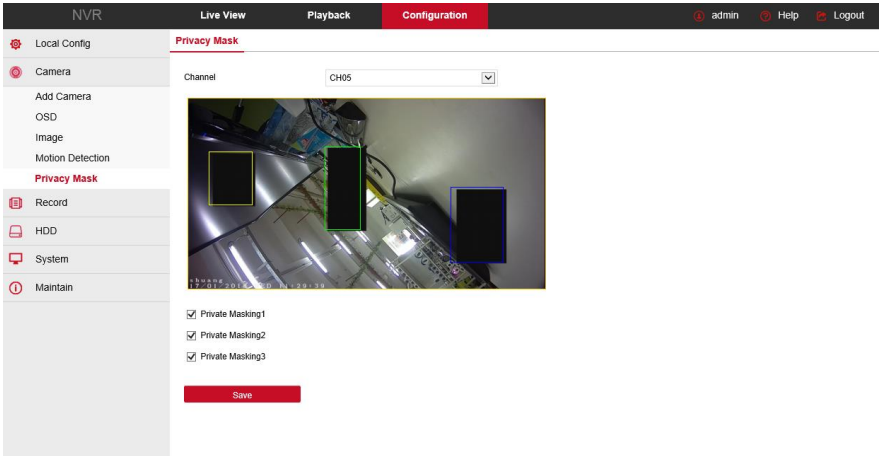


Figure6-11

## 6.5.3 Record

### 6.5.3.1 Record

The video setting steps are as follows:

**Step 1:** In the main interface, click "Configuration → Record → Record" to enter the record setting interface, as shown in Figure 6-12 below.

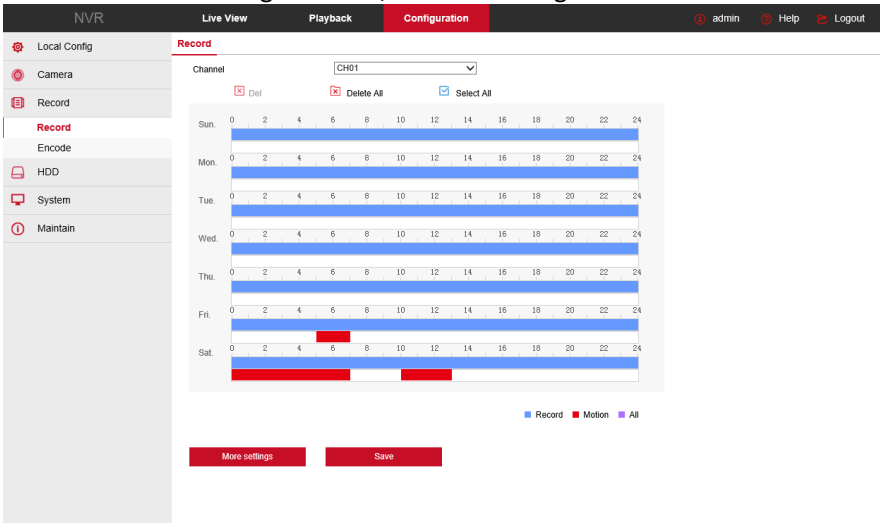


Figure 6-12

**Step2:** Set parameters, see the table below.

Parameter	Description
-----------	-------------

Channel	Select the channel number for setting the recording, and you can set different recording plans for different channels. If you set the same for all channels, select "All".
Del	Delete the selected recording time period.
Delete All	Click to delete all recording settings.
Selected All	Click to set all channels to normal video and motion detection recording from Monday to Sunday.
Copy to	After you set a day, you can click "Copy to" to apply the day's settings to other times of the week.
Time period setting	Click one of the set recording time periods, pop up the time period setting, select the recording type, set the time period, and click "Save" to complete the setting. When you click "Del", the selected time period is deleted.
More Settings	Click to enter the pre-record setting interface, set the pre-recorded action status 0 seconds to 30 seconds before the recording, click "Ok".

Table 6-1

**Step 3:** Click "Save" to complete setting.

### 6.4.3.2 Encode

In the main interface, click "Configuration → Record → Encode" to enter the encoding setting interface, as shown in Figure 6-13 below. Here you can view and set the channel parameters of the IPC device and the relevant parameters are consistent with the NVR settings.

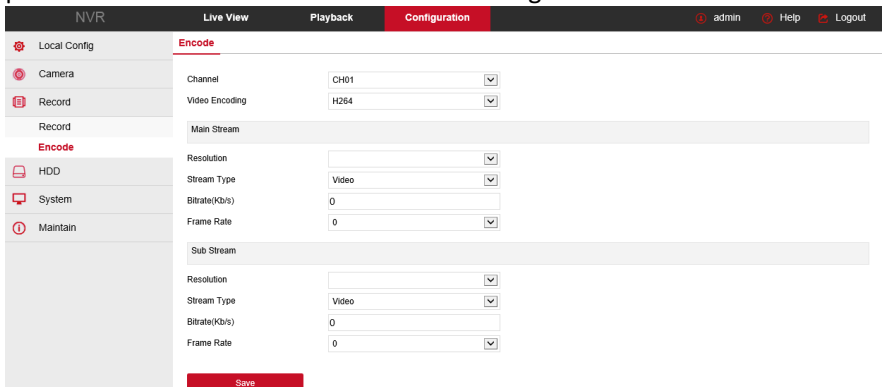


Figure 6-13

## 6.5.4 HDD

In the main interface, click "Configuration →HDD" to enter the disk management interface, as shown in Figure 6-14 below. Here you can view the connection device disk information, but also format the hard disk, hard disk format and NVR settings consistent.

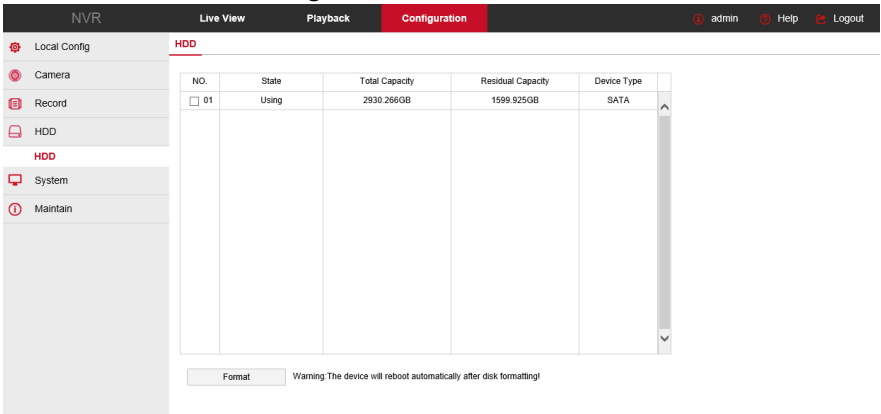


Figure 6-14

## 6.5.5 System

### 6.5.5.1 General

#### ■ Device Setting

In the main interface, click "Configuration →System →General →Device Setting" to enter the device setting interface, as shown in Figure 6-15 below. Here you can view and set the device language, record mode, record days, resolution and other information, and click "Save" to complete the configuration.

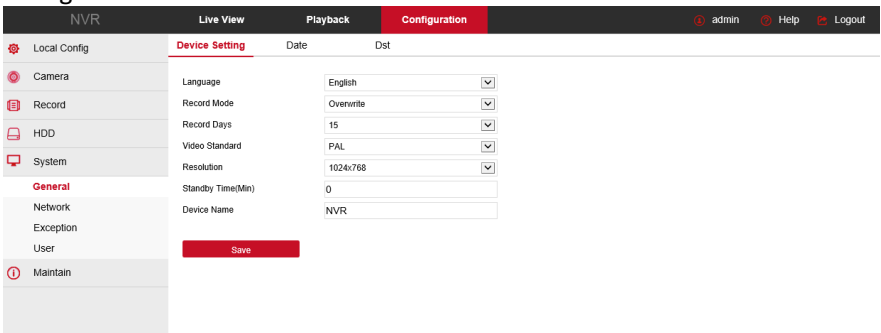


Figure 6-15

#### ■ Date



Set the system date of the device, and manually set the system time, synchronize with the computer, or set the system date using the Network Time Protocol (NTP) function as required.

Set the system date as follows:

**Step 1:** In the main interface, click "Configuration →System →General →Date" to enter the date setting interface, as shown in Figure 6-16 below.

**Step 2:** Select the setting date type, there are the following three ways.

- ✓ Turn on the Set date/time manually; manually select the date and time, click "Save", the system automatically synchronizes with the manual setting time.
- ✓ Turn on synchronization with the computer, click "Save", the system automatically synchronizes the time to the computer that logs in to the WEB page.
- ✓ Turn on the Receive date/time from NTP, select NTP server (or select custom server, enter custom server domain name), select the device's time zone, enter NTP port, set NTP interval, date format, date separator, time format, single Click "Save" to synchronize the system time with the NTP server time.

**The date setting parameters are described in the following table:**

Parameter	Description
NTP Server	Select the server domain name where the NTP service is installed.
Custom NTP server	When the NTP server selects "Custom", enter the NTP server domain name.
NTP Port	Enter NTP server port.
Date Format	Set the date display format for NVR devices, including year, month, day, day and month.
Time Format	Set the time format of NVR devices, including 24-hour and 12-hour.
Date Separator	Set the separator between year, month, and day.
Time Zone	Set the time zone of the NVR device.
Channel Check Time	Select the NVR channel.

Table 6-2

**Set the channel check time as follows:**

**Step 1:** In the main interface, click "Configuration →System →General →Date" to enter the date setting interface, as shown in Figure 6-15 below.

**Step 2:** Select the channel you want to use, or select “All” and click “Save” to complete the configuration.

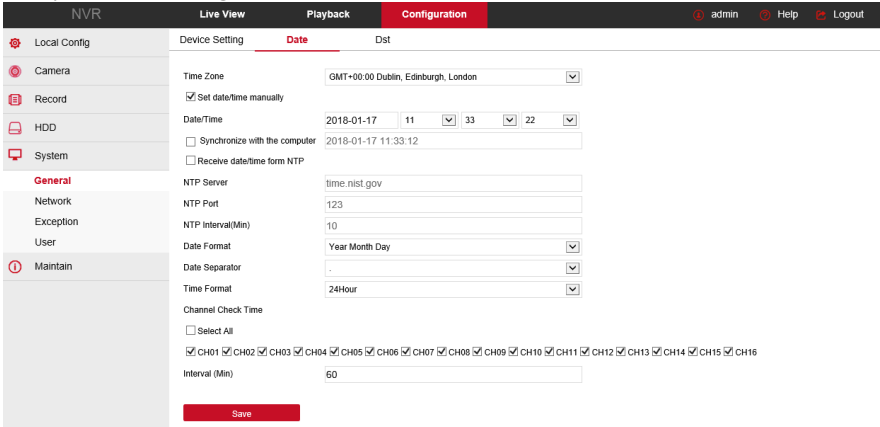


Figure 6-16

■ **Dst**

**Set the Dst as follow:**

**Step 1:** In the main interface, click "Configuration →System →General →Dst" to enter the Dst setting interface, as shown in Figure 6-17 below.

**Step 2:** Turn on daylight saving time, set the type, start time, end time, and offset.

**Step 3:** Click "Save" to complete the configuration.

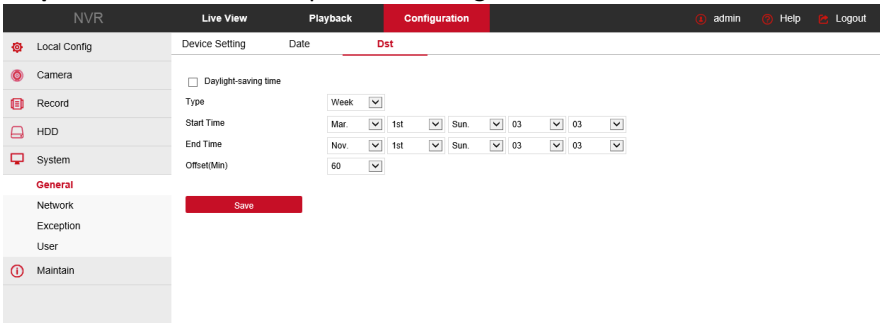


Figure 6-17

**6.5.5.2 Network**

■ **IP/Port**

In the main interface, click "Configuration →System →Network →IP/Port" to enter the IP/Port setting interface, as shown in Figure 6-18 below. Here you can set the IP address of the device, subnet mask, gateway, port, DNS and other network information, IP / Port and NVR settings consistent.

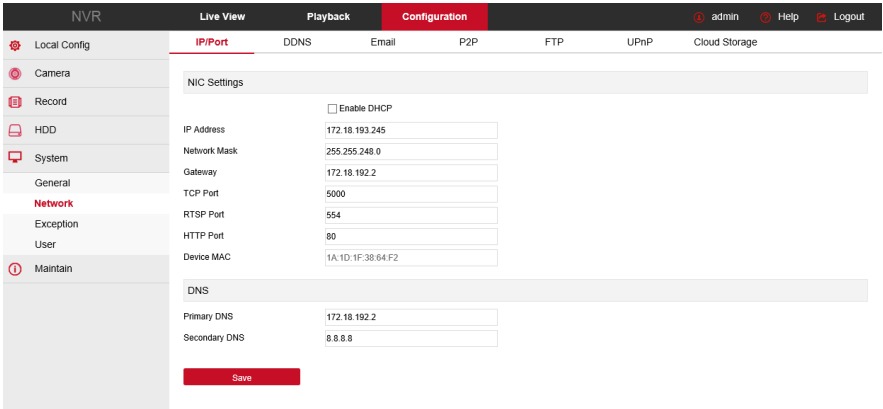


Figure 6-18

## ■ DDNS

In the main interface, click "Configuration →System →Network →DDNS" to enter the DDNS setting interface, as shown in Figure 6-19 below. Here you can open and set the DDNS function, DDNS and NVR settings consistent.

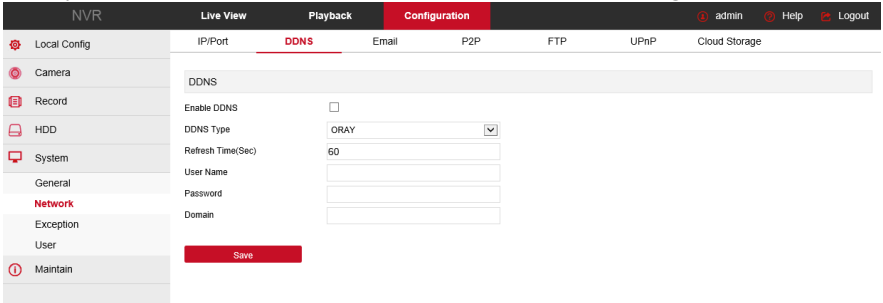


Figure 6-19

## ■ Email

In the main interface, click "Configuration →System →Network →Email" to enter the email setting interface, as shown in Figure 6-20 below. Here you can open and set the mail function, mail settings and NVR settings consistent.

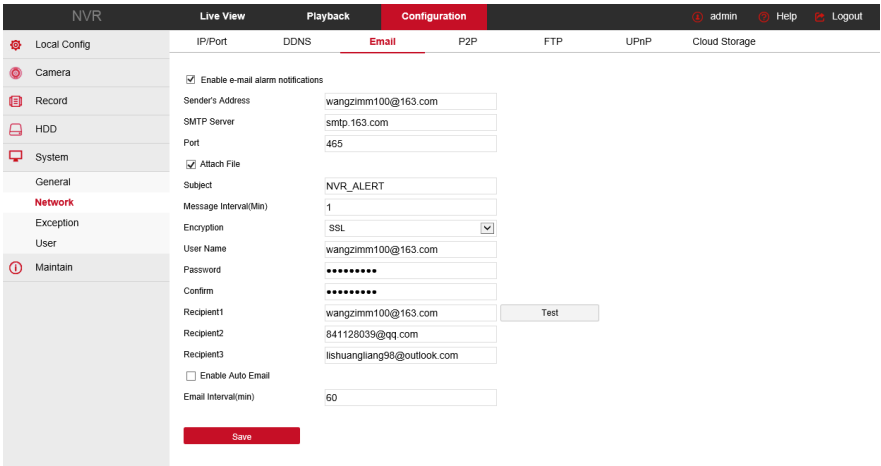


Figure 6-20

## ■ P2P

In the main interface, click "Configuration→System→Network→P2P" to enter the P2P setting interface, as shown in Figure 6-21 below. Here you can turn on / off P2P function, P2P and NVR side set the same.

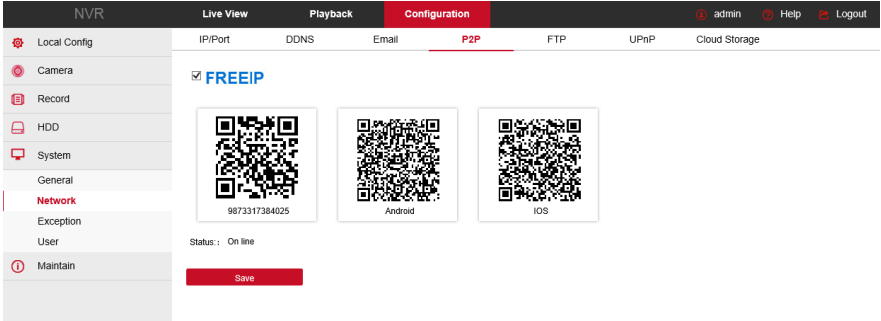


Figure 6-21

## ■ FTP

In the main interface, click "Configuration →System →Network →FTP" to enter the FTP setting interface, as shown in Figure 6-22 below. Here you can open and set the FTP server function, FTP and NVR settings consistent.

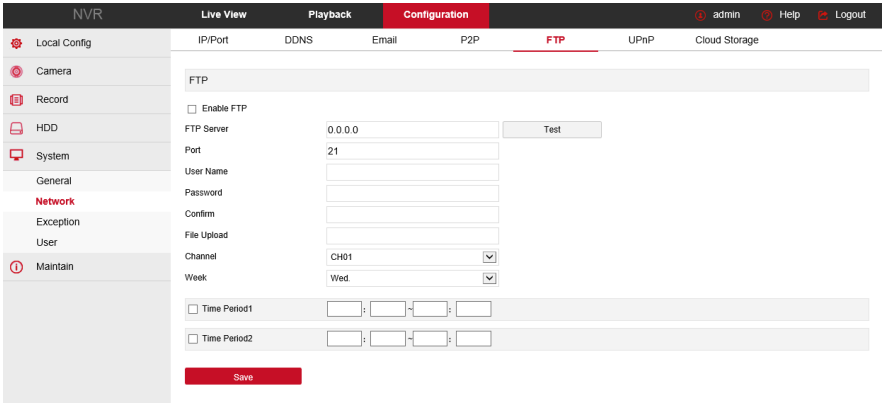


Figure 6-22

### ■ UPnP

In the main interface, click "Configuration → System → Network → UPnP" to enter the UPnP setting interface, as shown in Figure 6-23 below. Here you can turn on and set UPnP function, UPnP and NVR settings consistent.

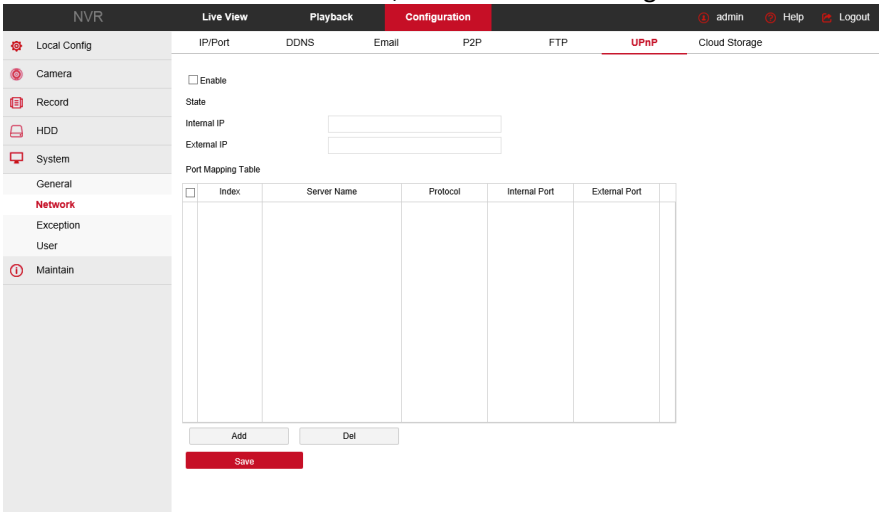


Figure 6-23

### ■ Cloud Storage

In the main interface, click "Configuration → System → Network → Cloud Storage" to enter the Cloud Storage setting interface, as shown in Figure 6-24 below.

Here you can turn on and set Cloud Storage function, Cloud Storage and NVR settings consistent.

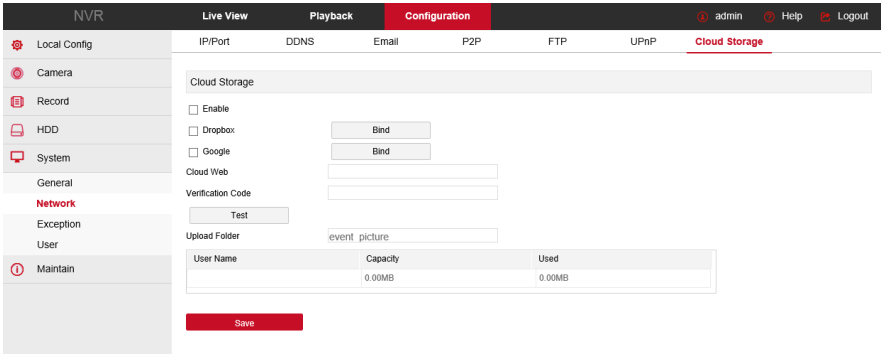


Figure 6-24

## ■ Wifi

In the main interface, click "Configuration → System → Network → Wifi" to enter the Wifi setting interface, as shown in Figure 6-25 below. Here you can view or set the NVR WiFi information, restart the NVR routing module, enter the advanced settings interface for related settings, and the Wifi configuration is consistent with the NVR local settings.

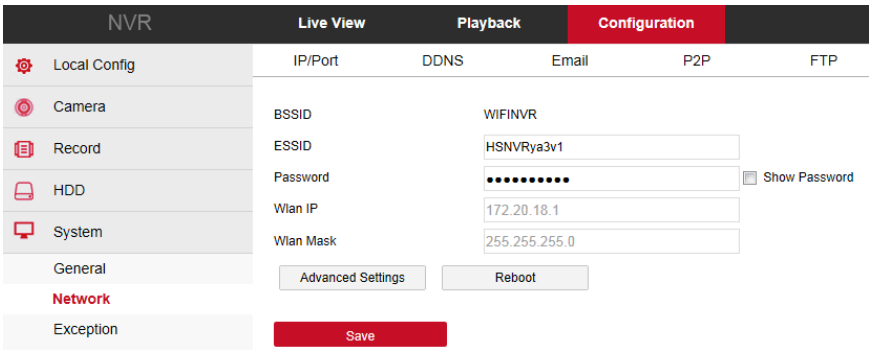


Figure 6-25



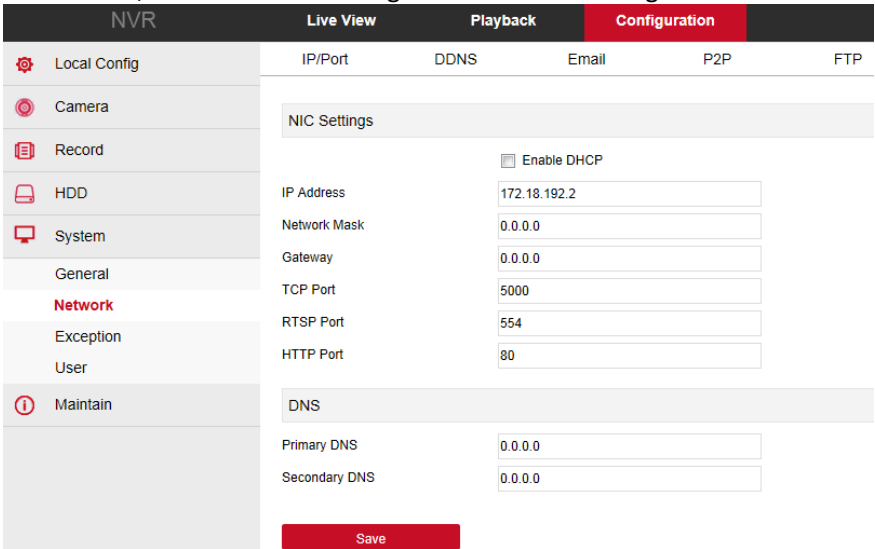
## Instruction

- This feature is only supported on WiFi-only devices, whichever is the case.

## ■ WAN

In the main interface, click "Configuration → System → Network → WAN" to enter the WAN setting interface, as shown in Figure 6-26 below. Here you

can set the NVR WiFi module's IP address, subnet mask and other information, WAN interface settings and NVR local settings.



The screenshot shows the NVR configuration interface. The top navigation bar includes 'NVR', 'Live View', 'Playback', and 'Configuration' (which is highlighted in red). Below this is a sub-menu with 'IP/Port', 'DDNS', 'Email', 'P2P', and 'FTP'. The left sidebar contains a menu with 'Local Config', 'Camera', 'Record', 'HDD', 'System', 'General', 'Network' (highlighted in red), 'Exception', 'User', and 'Maintain'. The main content area is titled 'NIC Settings' and includes a checkbox for 'Enable DHCP'. Below this are input fields for 'IP Address' (172.18.192.2), 'Network Mask' (0.0.0.0), 'Gateway' (0.0.0.0), 'TCP Port' (5000), 'RTSP Port' (554), and 'HTTP Port' (80). A 'DNS' section follows with 'Primary DNS' and 'Secondary DNS' both set to 0.0.0.0. A red 'Save' button is located at the bottom of the configuration area.

Figure 6-26



### Instruction

- This feature is supported on devices that only have a WiFi module, whichever is the case.

### ■ PPPOE

In the main interface, click "Configuration →System →Network →PPPOE" to enter the PPPOE setting interface, as shown in Figure 6-27 below. Here you can establish a network connection through PPPoE dial-up mode. After the connection is successful, the NVR device automatically obtains a dynamic IP address of the WAN. The PPPOE interface settings are consistent with the NVR local settings.

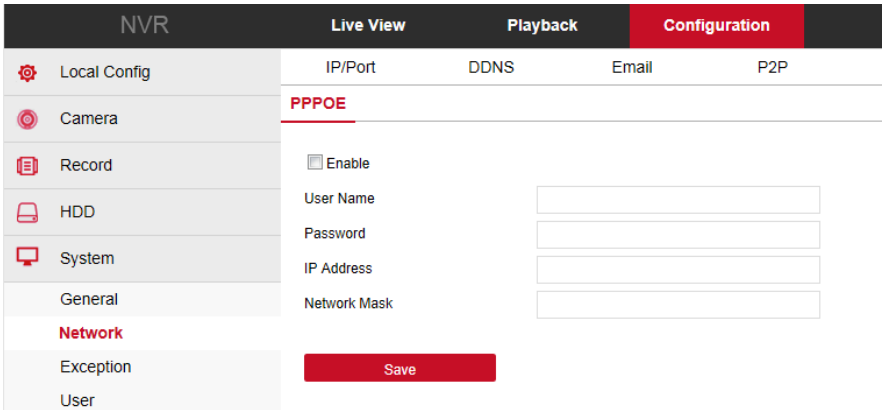


Figure 6-27



### Instruction

- This feature is only supported on WiFi-only devices, whichever is the case.

### 6.5.5.3 Exception

In the main interface, click "Configuration →System →Exception" to enter the exception setting interface, as shown in Figure 6-28 below. Here you can set the abnormal alarm, abnormal alarm and NVR settings consistent.

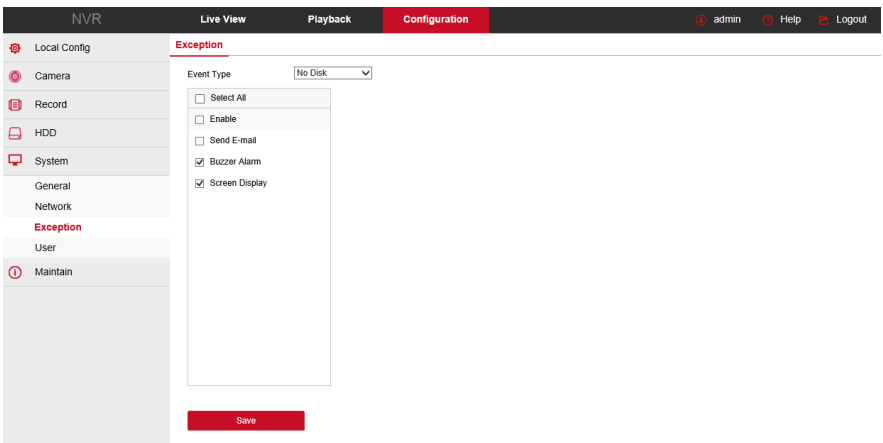


Figure 6-28

### 6.5.5.4 User



In the main interface, click "Configuration →System →User" to enter the user management interface, as shown in Figure 6-29 below. Here you can add, delete, edit the user, the user settings and NVR settings consistent.

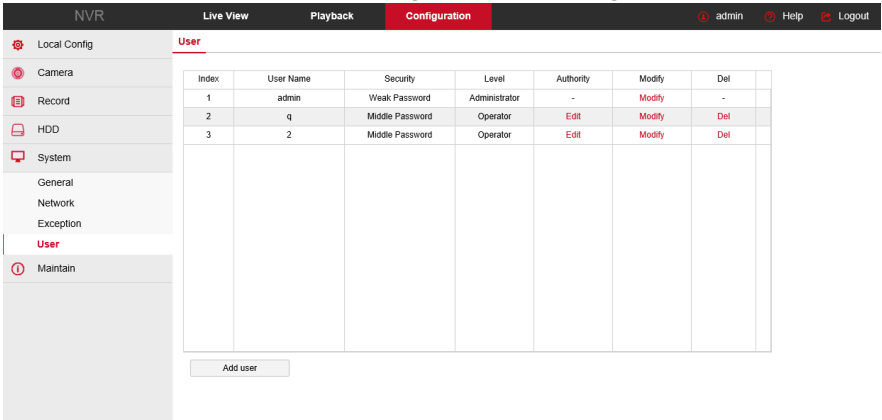


Figure 6-29

## 6.5.6 Maintain

### 6.5.6.1 Version Info

In the main interface, click "Configuration →Maintain →Version Info" to enter the version information interface, as shown in Figure 6-30 below. Here you can see information about the device version.

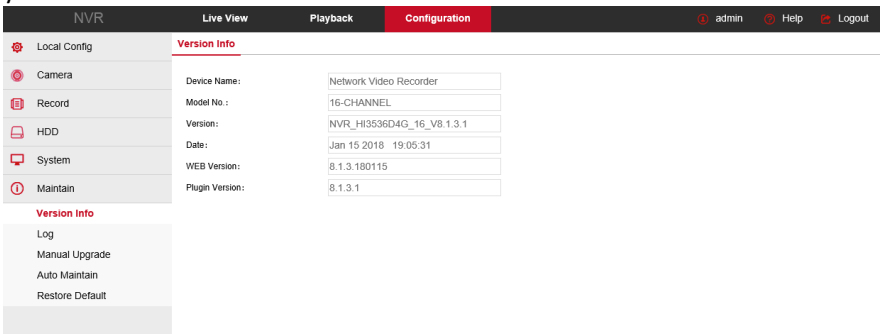


Figure 6-30

### 6.5.6.2 Log

In the main interface, click "Configuration →Maintain →Log" to enter the log interface, as shown in Figure 6-31 below. Here you can search and clear the device log, the log search settings are consistent with the NVR local settings.

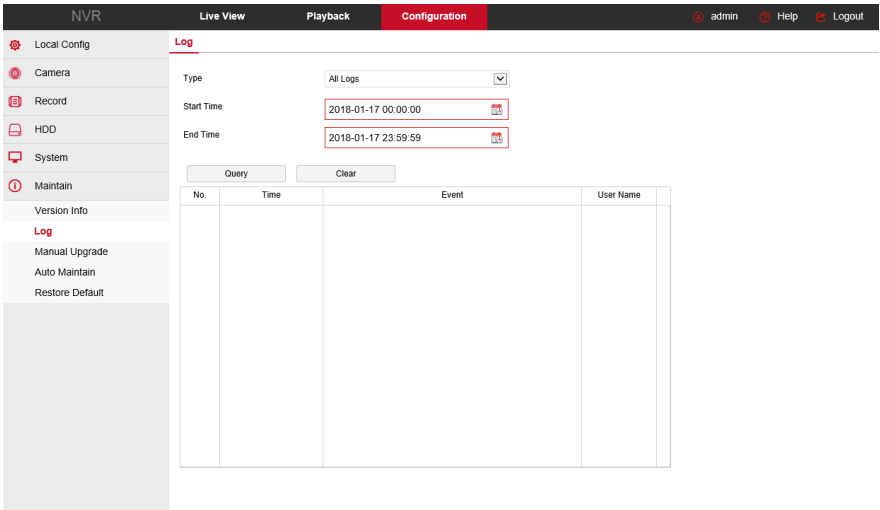


Figure 6-31

### 6.5.6.3 Manual Upgrade

In the manual upgrade interface, you can reboot and upgrade your device.

**The device system restart and upgrade steps are as follows:**

**Step 1:** In the main interface, click "Configuration → Maintain → Manual Upgrade" to enter the manual upgrade interface, as shown in Figure 6-32 below.

**Step 2:**

- ✓ **System restart:** Click "Restart → OK", WEB enters the device restart interface, wait for the device to restart, enter the login interface and log in again.
- ✓ **System upgrade:** Click "Browse" to open the folder where the device upgrade file is located, select the upgrade file, click "Upgrade", the device starts to upgrade, and the WEB enters the device upgrade interface. After the device is upgraded and restarted, log in to the login page.

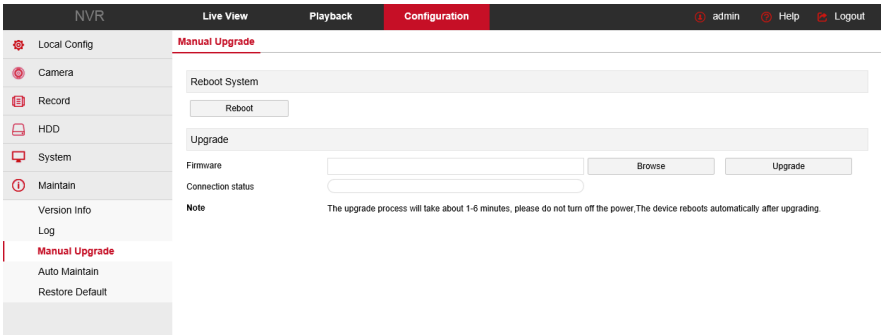


Figure 6-32

### 6.5.6.4 Auto Maintain

In the main interface, click "Configuration → Maintain → Auto Maintain" to enter the auto maintain interface, as shown in Figure 6-33 below. Here you can set the device reboot time, the auto maintenance settings and NVR settings consistent.

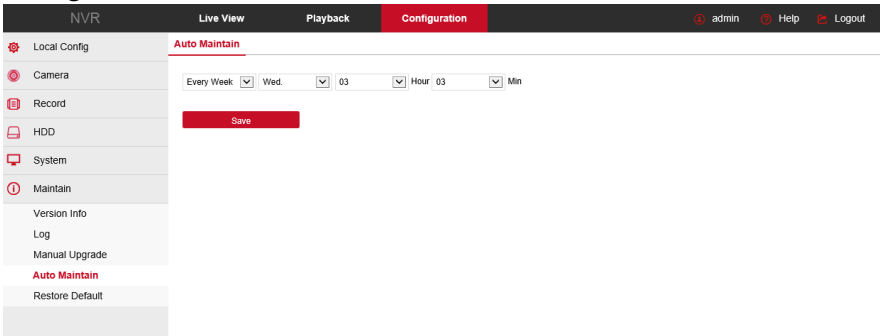


Figure 6-33

### 6.5.6.5 Restore Default

Set the restore default to restore the device default parameters to the factory defaults.

**The default steps to restore are as follows:**

**Step 1:** In the main interface, click "Configuration → Maintain → Restore Default" to enter the restore default interface, as shown in Figure 6-34 below.

**Step 2:** Select the parameters you want to restore, such as "Record".

**Step 3:** Click "Save" and the selected parameters are restored to the factory defaults.

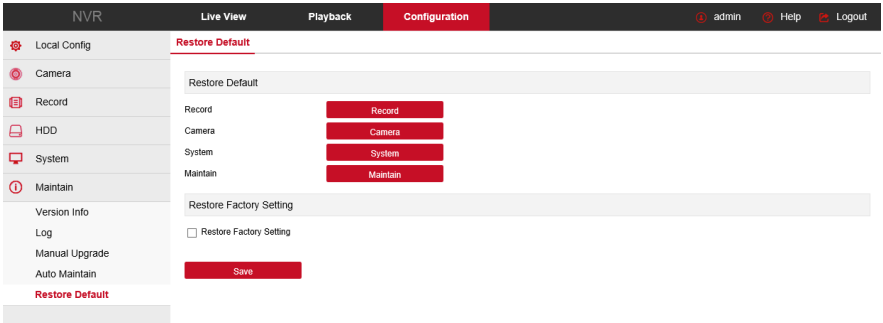


Figure 6-34

## 6.6 Playback

In the main interface, click “Playback” to enter the playback interface, as shown in Figure 6-35 below. Here you can view the equipment, video capture, download and other actions, video query and NVR side of the same set.

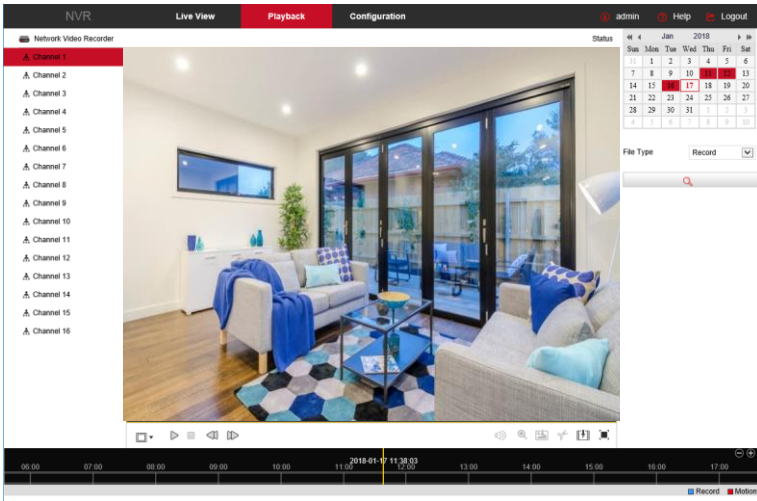















Figure 6-35

- **Layout:** Click “/ ” to toggle the video playback window.
- **Play/Pause:** After querying the video file, click “/ ” to start / pause playback of the searched video.
- **Stop:** When the video is played, press “” to stop playing the video.

- **Slow Forward:** When the video is played, click "  " video will play slowly, the specific speed of choice 1/2, 1/4, 1/8.
- **Fast Forward:** When the video is played, click "  " video will be slow to play, the specific speed of choice 2, 4, 8.
- **Mute/Open the Sound:** When the video is played, click "  " to turn on / off the sound of the recorded video.
- **Enable Electronic Zoom:** When the video is played, click "  " to turn on / off the electronic zoom function of the recorded video. Turn on the electronic zoom function, hold down the left mouse button, select the position to zoom in on the playback screen, release the mouse, select the location screen is placed, click "  ", the magnification screen is restored.
- **Snapshot:** When the video is played, click "  " to capture the settings to the local configuration settings.
- **clip:** When the video is played, click "  " to start recording, and then click Save Clip File again, which is stored in the local configuration settings.
- **Download:** After querying the video file, click "  " to enter the video file list, select the download file, click "Download", the video file starts to download in order, stored in the local configuration settings location. The file download interface is shown in Figure 6-36. The "First Page", "Prev Page", "Next Page" and "Last Page" are used to scroll through all video files. The video file can be re-searched by the right calendar, file type, and channel location.

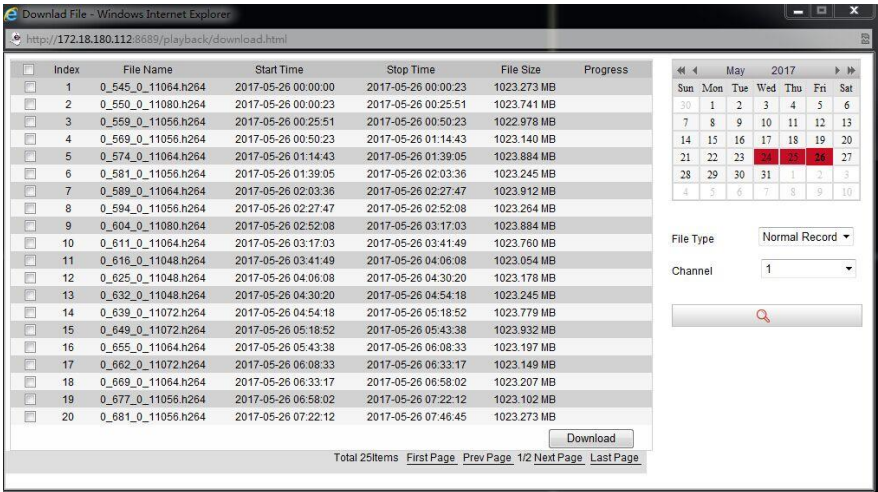



Figure 6-36

- **Full Screen:** When the video is played, click “” the full-screen playback video. Press "Esc" on the keyboard to exit the full-screen playback interface.
- **Drag and drop:** the video playback, the left mouse button click on the time axis to play the position, drag left and right, drag it to the middle of the yellow time point position, playback channel to play the point in time recording.



### Instruction

Playback When fast forward or slow forward, the current status position in the upper right corner of the interface shows the playback rate.

# Chapter 7 Mobile APP Configuration: FreeIP

## 7.1 Installation & Register

**FreeIP Service Procedure:** register-->Log in-->Devices Added--> Service Application

**Step 1:** Download and install on your smart phone by following way: Android user, search for "FreeIP" in the Google App Store, iOS user, just search for "FreeIP" in the App Store.

2) Scan the following QR codes to download and install the App.

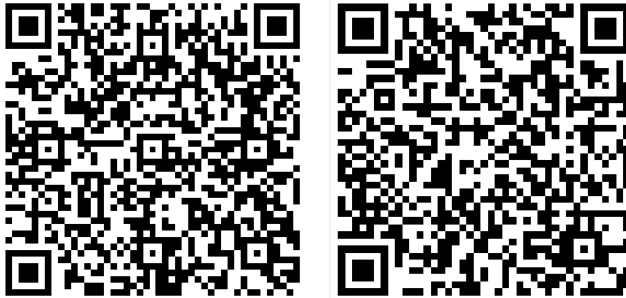


Figure7-1 Android Download                      iOS download

3) Download from the following websites.

Android application downloads address:

<https://play.google.com/store/apps/details?id=com.xc.hdscreen>

iOS application download address:

<https://itunes.apple.com/cn/app/freeip/id898690336?mt=8>



### Instruction

Mobile client currently supports only iOS and Android.

**Step 2:** After installation, run "FreeIP", register an account according to the interface prompts.

## 7.2 Add Devices

**Step 1:** Make sure that NVR is connected to the Internet, P2P is on, and is online.

**Step 2:** Set up the phone network; connect the phone to the wireless network.

**Step 3:** Log into the mobile client and select "Device" from the sliding sidebar. The sliding sidebar is shown in Figure 7-2. After entering, click "(+) Add Device" at the bottom of the interface, select "SN Add" to scan the QR code of the device body or P2P interface, as shown in Figure 7-3.

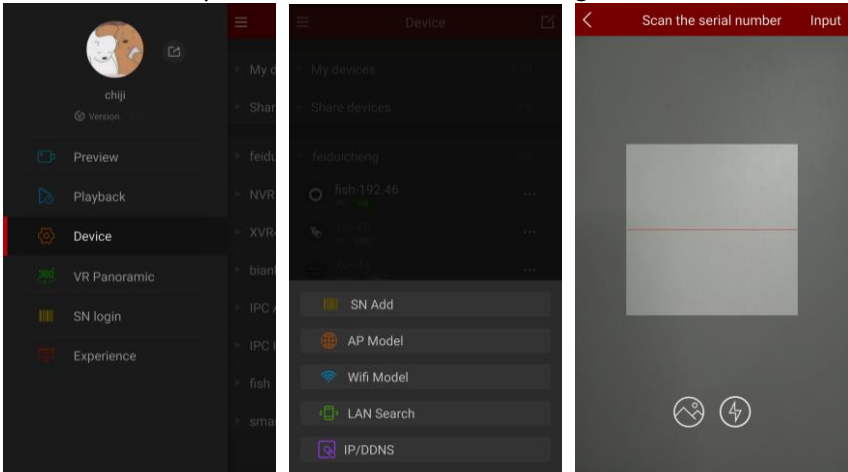


Figure 7-2

FREEIP

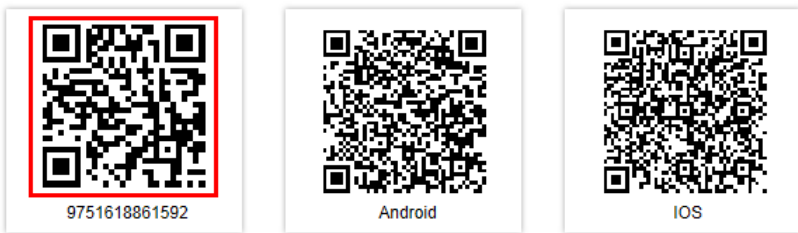


Figure 7-3

**Step 4:** The phone will automatically recognize the QR code, enter the NVR user name, password and verification code, verification code printed on the random shipping standard label, click "Submit", then set the camera note and the camera groups, after clicking "Send", prompt "Add successful" will show up.

### 7.3 Live Preview



**Step 1:** Select "Preview" from the App toolbar, then comes to the preview interface, as Figure 7-4.

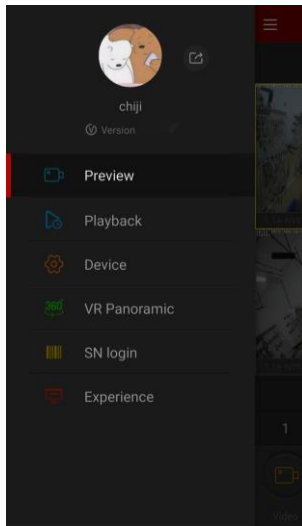


Figure 7-4

**Step 2:** Click "+" in the preview window as shown in Figure 7-5.

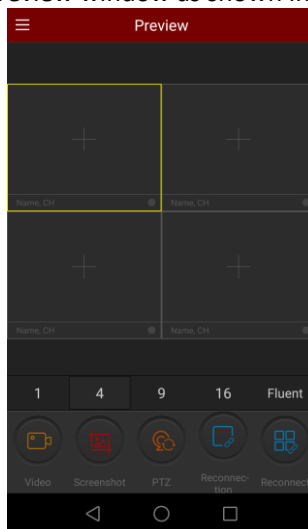


Figure 7-5

**Step 3:** Select the device preview channel in the device list group, then click "Preview" as shown in Figure 7-6.

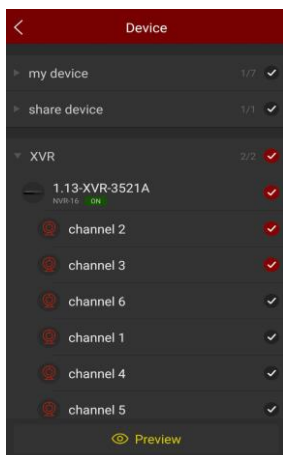


Figure 7-6

**Step 4:** Preview real-time video as shown in Figure 7-7 below

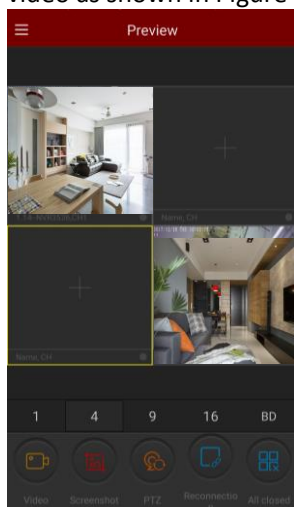


Figure 7-7



### Instruction

- In the real-time preview interface in addition to switch preview mode, you can also do video, capture, set the sound and other operations, if the channel has PTZ function, but also do control PTZ, focus and other actions.

## 7.4 Playback

**Step 1:** Select “Playback” from the App toolbar, as Figure 7-8.

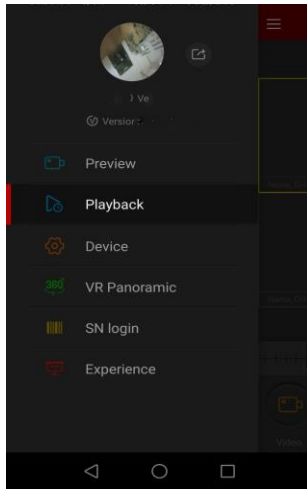


Figure 7-8

**Step 2:** Click "+" in the preview window, as shown in Figure 7-9.



Figure 7-9

**Step 3:** Select the device playback channel in the device list group, then click "Playback" as shown in Figure 7-10.

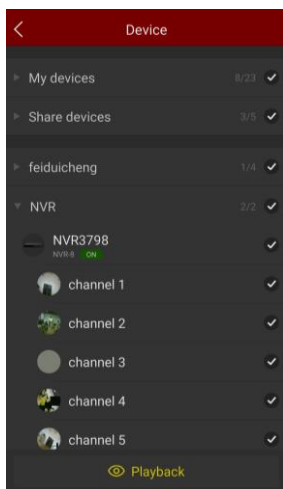


Figure 7-10

**Step 4** The recording of the playback device is shown in Figure 7-11 below.

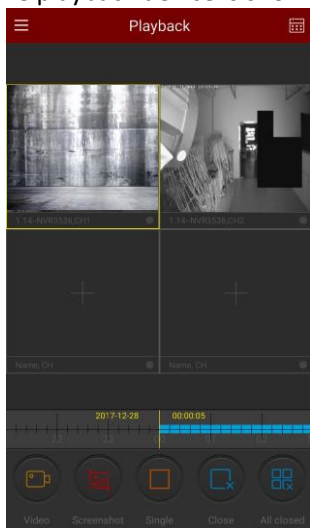


Figure 7-11

## Chapter 8 Appendixes

### 8.1 Q&A

1. How to do when can't detect the hard disk?

**Answer:** If the system does not detect the hard disk, kindly please check the data line and the power line of hard disk whether are connected well, whether there is a problem about the interface of hard disk on the motherboard, or kindly please check hard disk whether is supported by the NVR in specification.

2. After modifying password, what can you do when you forget the password?

**Answer:** When the administrator forget password, kindly please get in touch with our technical staff. The easy to remember and relatively safe password is recommended when you set the password (if you have security needs, kindly please don't try to set simple passwords such as 123).

3. What results will maybe happen due to the heat when NVR is working?

**Answer:** It will produce some heat when NVR is working, kindly please put the NVR in the place where is safe and ventilated to stop the stability and life of the system be affected due to long-term high temperature of NVR.

4. Whether can use if i install the hard disk drive of computer to NVR ?

**Answer:** If the hard disk you use can be supported by the system of NVR, it can work, but you need note, if the NVR begins to work, all data in your hard disk will loss.

5. Whether can playback when recording?

**Answer:** Yes.

6. Whether can remove a part of video recordings of hard disk of NVR?

**Answer:** Considering the security of document, you can't remove a part of video recording, if you need remove all video recordings, you can format the hard disk.

7. Why can't login to NVR client ?

**Answer:** Kindly please check configuration of network connection whether is right, connection of RJ-45 interface whether is fine, if also can't work, kindly please check whether the user name and password are right.

8. Why can't find any recording information when playback?

**Answer:** Kindly please check whether the connection of data line of hard disk is good, whether the time of system is changed, whether the query condition that is not set to save video files. If also have the question after restarting, kindly please check whether the hard disk is damaged.

## 8.2 Maintenance

1. When NVR shutdowns, kindly please don't turn off the power switch directly, should use the shutdown button of system to avoid data loss or damage of the hard disk.

Ensure NVR away from high temperature heat source and place.

Remove the dust deposited in the body timing, keep the good ventilation around chassis, it is good for radiating.

4. About the audio/video signal line and RS-485 interfaces, kindly please don't hot swap, or these port will be damaged easily.

5. Check the HDD power cable and data cable of the NVR regularly and look whether they are aging.

6. Avoid the audio/video signal affected by other circuits and devices as much as possible, prevent the hard disk damaged by electrostatic or induced voltage.