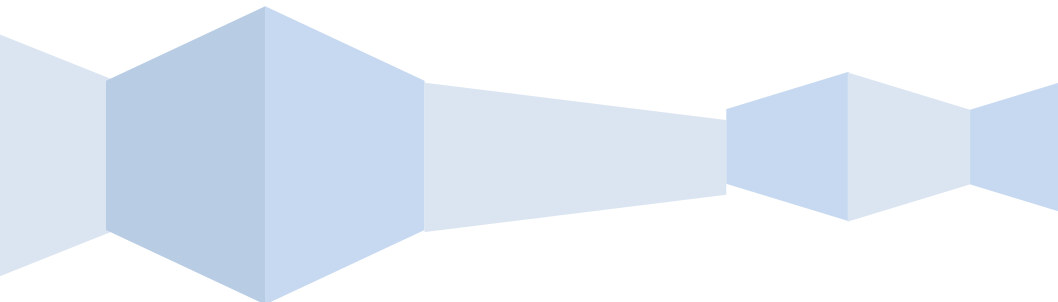




Network Video Recorder User Manual

Version 20.1.39.3



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 products.

Safety Precautions



CAUTION

- Do not place or install equipment directly in sunlight or near heating devices.
- Keep equipment installed correctly and fully.
- Install the equipment in a well-ventilated place, do not block vents.
- Only use equipment within rated input/output.
- Transport, use, and reserve the equipment within the proper humidity range (10 to 90%) and temperature range (14 to 131°F, -10 to 55°C).
- When cleaning the device, unplug the power cord and completely shut off the power.
- 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.
- Purchase the NVR dedicated hard drive recommended by the equipment manufacturer from the correct channels to ensure the quality and usage requirements of the hard drive.
- Make sure that the alarm cable is firmly installed with a solid contact.
- Make sure that the NVR is properly grounded.



WARNING

- Use recommended cord sets (power cords) with the correct specifications.

NOTE

After receiving the product, verify the contents of the package according to the packing list in the box.

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Chapter 1 Outline

1.1 Outline

This product is a new generation of high-performance NVR (Network Video Recorder) independently developed by the company. It adopts several technologies, such as video and audio codec technology, embedded system technology, storage technology, network technology, and intelligent technology. The NVRs provide local preview, video multi-screen split display, local real-time storage of video files, support for mouse shortcuts, and remote management and control.

This product supports two storage methods: front-end storage and client-side storage. The front-end monitoring point can be located anywhere on the network, regardless of geographical location. It is combined with other front-end devices such as network cameras and network video servers, forming a powerful security monitoring network with professional video surveillance system software.

Only one network cable can be used for the central and monitoring point. Connection requires no need to lay video lines, audio lines, etc., construction is simple, wiring and maintenance costs are low.

This product can be used in security and other fields.

1.2 Default

- The factory default username is admin and the password is the first six digits of the UUID.
- NVR and PoE NVR factory default is DHCP.

1.3 Descriptive content agreement

To simplify the descriptions in this manual, the following conventions are used:

- The "device" mentioned in this manual mainly refers to the NVR.
- The "IP device" mentioned in this manual mainly refers to the IP Camera.
- 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", "Confirm", and "Save" on all screens to save the current settings.
- Click "Copy" on all interfaces to enter the copy channel interface. Select the channel in which to copy the current channel.

1.4 Function Features

- H.264 videos condense format, support 4K/6M/5M/4M/3M/2M/1080P/720P/D1 resolution network camera input.
- G.711U, G711a, ADPCM_DVI4, AAC audio condense format.
- Voice call support.
- Each channel supports three-stream encoding, including an MJPEG stream.
- Windows-style user interface embedded real-time Linux3.0 operating system.
- Support for independent adjustment of coding parameters for each channel, including coding type, resolution, frame rate, and bitrate.
- Manual capture and image playback.
- Preview, recording, play back, and backup.
- Languages: Chinese simplified, Chinese Traditional, English, Polish, Czech, Russian, Thai, Hebrew, Arabic, Bulgarian, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Roman, Korean, Dutch, Greek, Vietnamese, and Japanese.
- Select NVRs support fisheye correction, dual-screen preview, PoE, face detection, crossover detection, regional intrusion, people stay detection, and people gathering.
- Only one USB interface: The NVR needs to use USB interface for task such as Configuration import, Configuration export, backup, IPC Update, Manual Update. You must first select the corresponding function, such as click "Config import", and then you receive a pop-up "Please insert the usb disk". Follow the prompt within the 60 second countdown, and then 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.

➤ **Local monitoring**

- Supports local VGA and HD output, with HD supporting up to 4K resolution output.
- Screen previews:
 - 4-channel NVRs support 1/4
 - 8-channel NVRs support 1/4/8
 - 16-channel NVRs support 1/4/8/9/16
 - 32-channel NVRs support 1/4/8/9/ 6/25/32
- Adjustable preview channel position (drag them to the desired position using the mouse).
- Set manual or auto-tour preview with an automatic polling cycle.
- Supports video motion detection, video loss detection, and intelligent detection.
- Achieve IP PTZ camera control through the ONVIF protocol.

➤ **Hard disk management**

- Each SATA interface supports up to an 8T hard drive.
- Hard disk formatting.
- Hard disk loss and hard disk abnormal alarm.

➤ **Video Record and Playback**

- Video compression standard is H.264/H.264+/H.265/H.265+, with timed recording function.
- Supports recording schedules using drawing and editing methods.
- Supports simultaneous main and sub-stream recording.
- Supports cyclic writing.
- A maximum of 6 recording times can be set each day. The recording trigger mode can be set independently for different time periods.
- Recording trigger modes include Normal, Motion, Alarm, M&A, Intelligent.
- Supports video data retrieval and playback by channel, video type, and date.
- Multiple playback modes (adjustable with mouse): Play/Pause, Reverse, Stop, Single Back, Single Forward, Speed Down, and Speed Up.
- Select the screen area for local zoom.
- Supports multi-channel simultaneous playback of video.

➤ **User Management**

- Three-level user management: Administrators can create multiple operation users and set their rights, rights can be refined by channel.

➤ **Data backup**

- Support for backup via USB2.0 or USB3.0 interface.
- Support for U disk or mobile hard disk in FAT32, NTFS, exFAT and other formats.
- Support for batch backup by file and time.
- Support for iVMS320 clip-by-clip backups.
- Support for webpage clip and download video files by time.

➤ **Alarm and exception management**

- Select models support multi-channel external alarm input and output.
- Support for video loss alarm, motion alarm, network disconnection alarm, IP conflict alarm, hard disk error, and no disk alarm.
- Support our smart IPC face detection, Crossover, Regional intrusion, people stay, people gathering, and other intelligent detection access and linkage.
- Various alarms can be set to trigger the buzzing alarm, sending mail and screen display.
- Various alarms can be set to trigger pop-up alarm prompts, voice warnings, and send emails notifying users.

➤ **Other Local Functions**

- Users can quickly and easily set the system parameters using the NVR buttons and USB mouse.
- Complete operations: alarms, exceptions, information logging and retrieval.
- Select models support local alarms and upgrades for front-end features.
- Supports gesture password function.

➤ **Network Function**

- 3536D series devices support a 10M/100M adaptive network interface and the 3536/3536C series devices support 10M/100M/1000M adaptive network interface.
- Support for remote client privileged access helps improve system security.

- Supported protocols: TCP/IP protocol cluster, DHCP, DNS, HTTP, SMTP, RTSP, UPnP, HTTPS and other protocols.
- Embedded WEB SERVER and support for ONVIF protocol access to platform.
- Remote access to: playback, download, parameter configuration, FTP server configuration, running status, systems log, alarm status, manual trigger & stop recording, manual trigger & stop alarm output, alarm pushes, PTZ control, remote formatting of hard disk, upgrading the program, restart, and other operations for system maintenance.



NOTE

- For more detailed information on NVR functions refer to the following user manual.
- Functionality differs by model, use the manual to better understand the features available on your NVR.

Chapter 2 NVR Appearance

2.1 The Front Panel

2.1.1 The Front Panel

(This image is for informational purposes only and subject to change.)

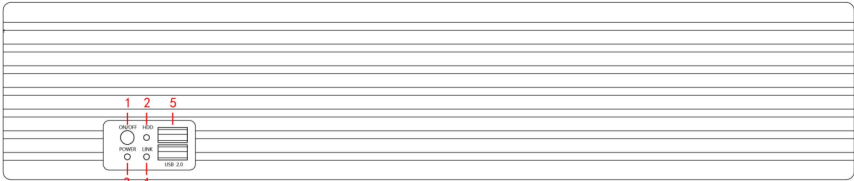


Figure 2-1

No.	Name	Description
1	Switch	Turn the device on/off.
2	Hard disk indicator	Displays hard drive connection status.
3	Power Indicator	Illuminates when powered on.
4	Network Indicator	Displays network connection.
5	USB2.0	Allows connection for mouse or USB memory stick backup.

- The panel diagram does not reflect the product size/ratio. Refer to the specific device's product for details.

2.2 Rear Panel

2.2.1 General equipment rear panel introduction

Rear panel diagram for common equipment: **Put model number here**

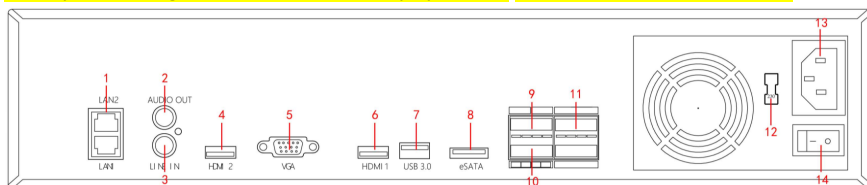


Figure 2-2

No.	Name	Description
1	Ethernet port 1/2	Connect Ethernet to the network ports
2	Audio output	Equipment audio output interface
3	Audio Input	Equipment audio input interface
4	HD Video Output 2	Connects to HD display devices such as computer monitors
5	VGA	Connects to VGA display devices such as computer monitors
6	HD Video Output 1	Connects to HD display devices such as computer monitors
7	USB3.0	Used for mouse connection 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

Rear panel diagram for PoE devices: Put model number here

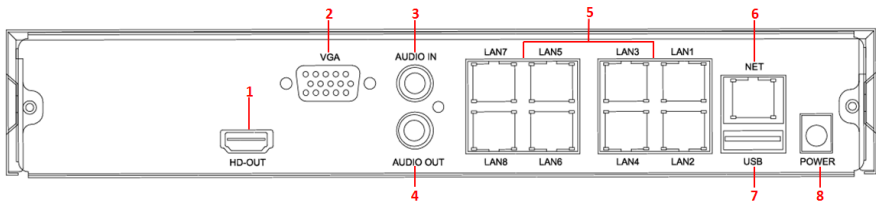


Figure 2-3

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

No.	Name	Description
1	HD Video Output	Connects to HD display devices such as computer monitors
2	VGA	Connect to 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	Connects IP devices and power IP devices and networks
6	Ethernet port	Connects Ethernet to the network
7	USB port	Allows connection to the mouse or U disk or removable hard disk
8	Power Connector	Device power connector



NOTE

- The panel diagram does not reflect the product size/ratio. Refer to the specific device’s product for details.


2.3 Mouse Description

Operate the NVR using the mouse (left button, right button, and scroll wheel).

Mouse actions	Function
Left click	<ol style="list-style-type: none">1. Selects an option2. Inserts the cursor to enter or modify the value of a parameter3. Click the timeline during playback to switch the playback progress
Right click	<ol style="list-style-type: none">1. Interface not locking - accesses the system menu pop-up2. Interface locking on a real-time preview interface - login interface pop up3. When on the submenu returns the user to the previous menu
Double left click	Switches between single and multi-screen when in the preview and playback state
Mouse drag	<ol style="list-style-type: none">1. Rotates the direction when in the pan/tilt control state2. Sets the area range when in the video occlusion alarm and motion detection alarm area settings3. Select the area for electronic zoom4. Selections a channel and switches to other channel locations when in the preview interface5. Switches the playing video file in the progress bar
Scroll wheel	<ol style="list-style-type: none">1. Allows time setting modification2. Selects drop-down menu values3. Switches preview channels4. Zooms in and out of a video image

2.4 Input Method Introduction

Input method includes lowercase and uppercase English letters.

Click  on the left to switch the input method and the symbol.


Click  to backspace and delete incorrect/accidental input.



Figure 2-4 Uppercase English input



Figure 2-5 Lowercase English input

Chapter 3 Connecting NVR

3.1 Hard Disk Installation



CAUTION

- Disconnect power before installation.
- Use the NVR dedicated monitor hard drive recommended by the device manufacturer.

Installation tools

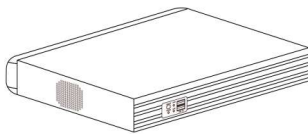
1. A Phillips screwdriver

Hard disk installation

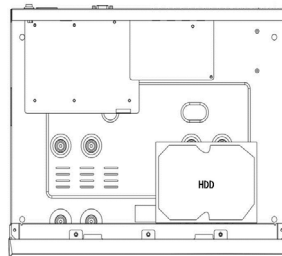
The hard disk is installed is shown in Figure 3-1.

To install the hard disk:

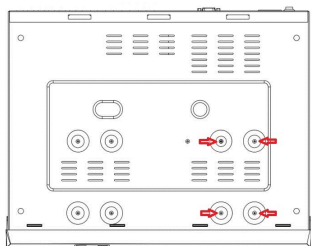
- (1) Loosen the securing screw on the cover, and then open the cover.
- (2) Connect one end of the hard disk data cable and power cable to the motherboard, and then connect the other end of the cables to the hard disk.
- (3) Hold the hard disk in place, turn over the chassis, and then secure the hard disk with the screw at the indicated position.
- (4) Turn over the chassis, and then secure the cover with screw.



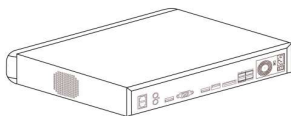
(1)



(2)



(3)



(4)

Figure 3-1

3.2 Device Connection

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

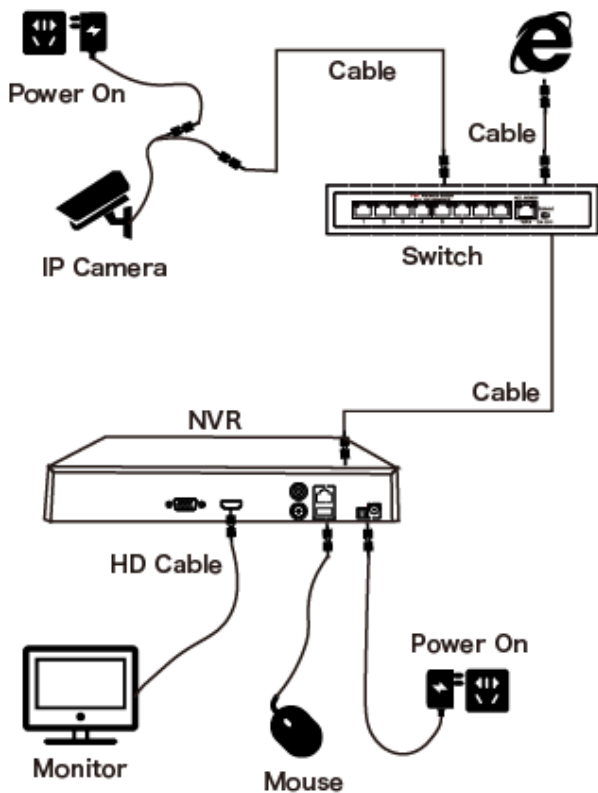


Figure3-2



CAUTION

- 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 support PoE.

Chapter 4 NVR Startup

4.1 System Initialization

To turn on the NVR:

1. Connect the device to the monitor, and then plug in the mouse and power cord.
2. Turn the rear power switch to On. The system initialization screen appears.



Figure 4-1



CAUTION

- Confirm that the connected voltage matches the NVR requirements and that the NVR ground is well grounded.
- If not using the correct power supply, the NVR may experience damage or not work correctly. Use a regulated power supply.



NOTE

- After the device starts up, it is configured through the boot wizard.

4.2 Boot wizard

4.2.1 Quick Startup Wizard

To quickly configure the NVR:

1. Select the system language and click "Apply".

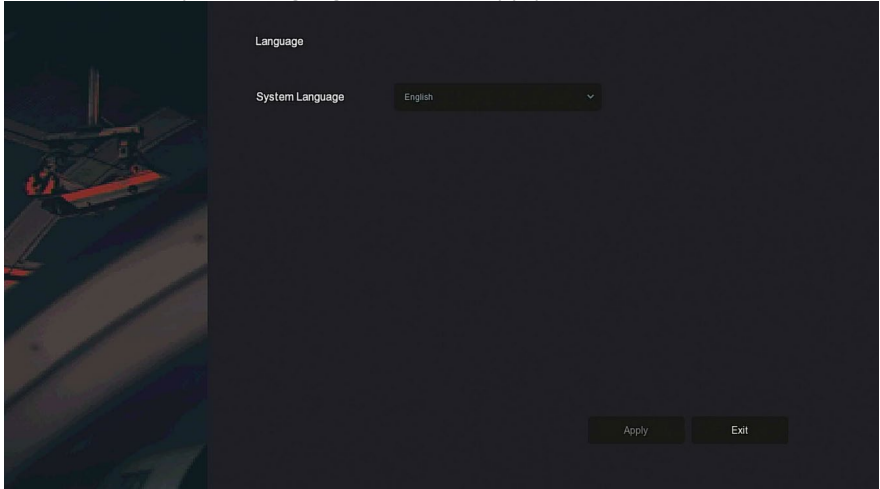


Figure 4-2-1

2. Select a user, enter the password, select the system language, and then click "Login".

The default username is **admin**, password is **12345**.



Figure 4-2-2

3. If the login password is too simple, a security password prompt displays. Click "Modify".
We recommend that you modify the password, but you can click "Modify later" to continue using the existing password.

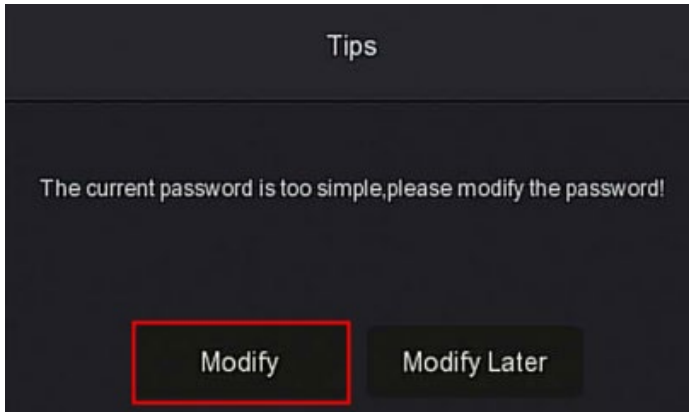


Figure 4-2-3

4. Click the "New password" box, enter a new password, confirm the new password, select the security question, enter the corresponding answer, click "Save"; insert a USB flash drive on the device, and then click "Export Key".

Forget Password

User Name

admin

New Password

Confirm

Unlock Pattern

☐

Warning: The password must not be less than 8 bytes and contain at least one digit and letter!

Please set security issue

Security Issue1

Please select issue

Answer1

Security Issue2

Please select issue

Answer2

Security Issue3

Please select issue

Answer3

Save

Clear

Export Key

Cancel

Figure 4-2-4

Unlock Pattern: Check "Unlock Pattern", draw the unlock pattern with at least 4 points, and then confirm it to complete the unlock pattern setting.

- Go to the "Date and Time" interface, configure the Device date and time, and then click "Next".

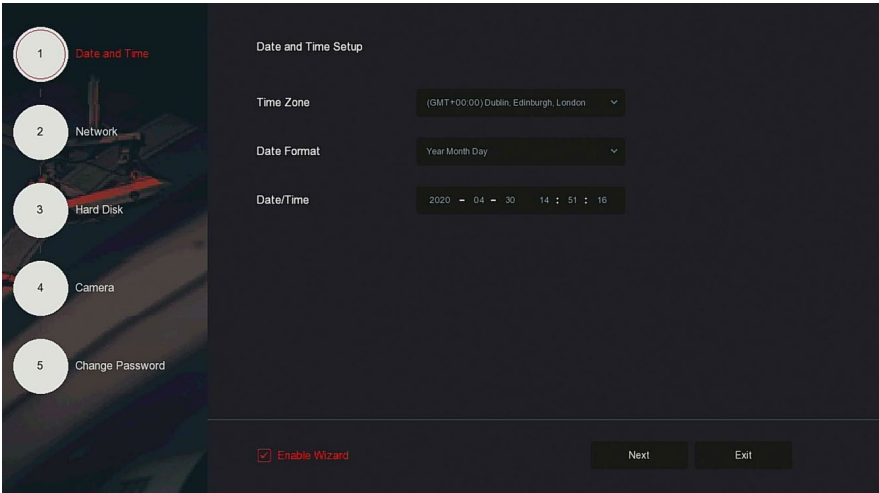


Figure 4-2-5

6. Go to the "Network" interface, configure the network parameters of the device, and then click "Next".

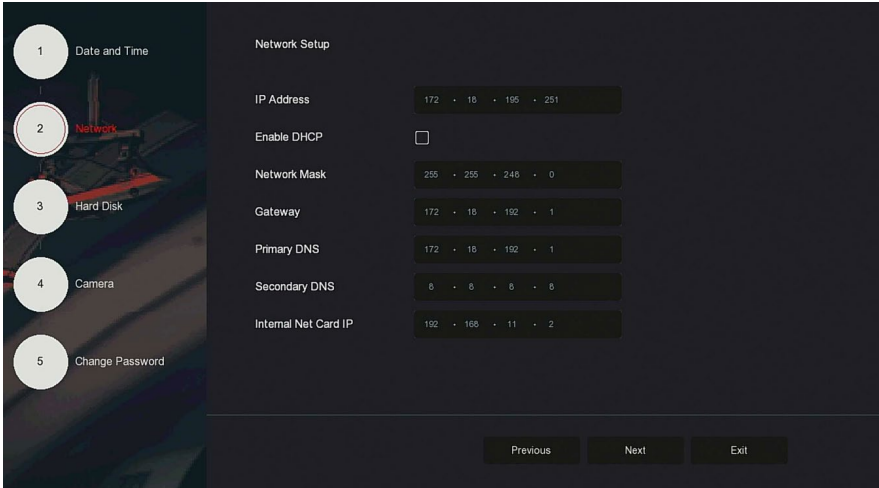


Figure 4-2-6

7. Go to the "Hard Disk" interface, select the hard disk usage status: When the status shows "In Use", click "Next". When the status shows "not mounted", select the hard disk, click "Format → Confirm", the device restarts, and the hard disk is formatted.

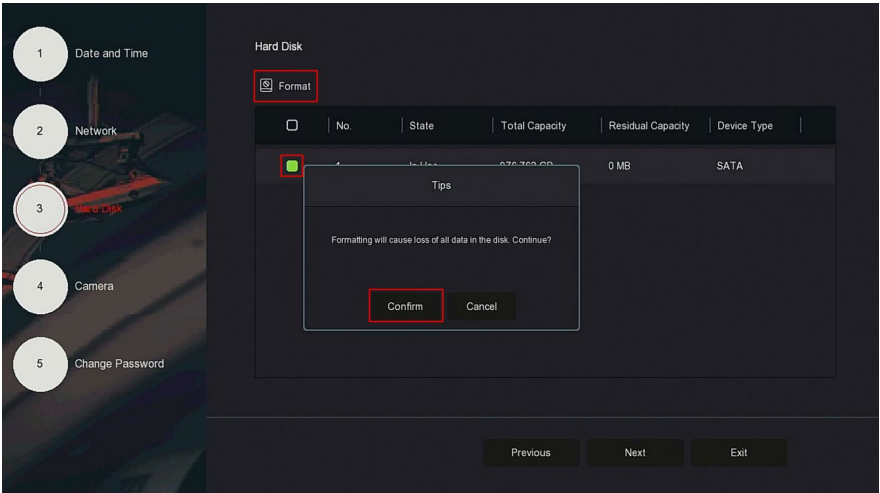


Figure 4-2-7

8. Go to the "Camera" interface, search for and add devices, and then click "Next".

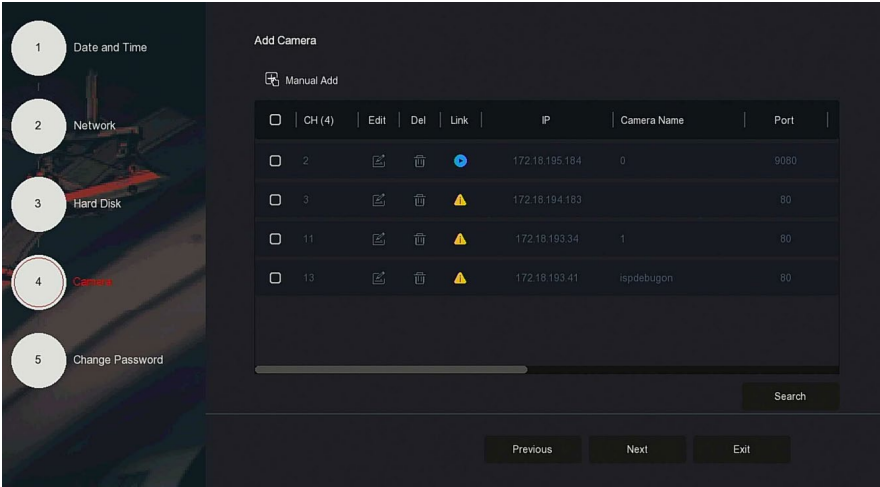


Figure 4-2-8

9. Go to the "Change Password" interface, setting system password and security questions, and then click "Complete". The wizard is complete.

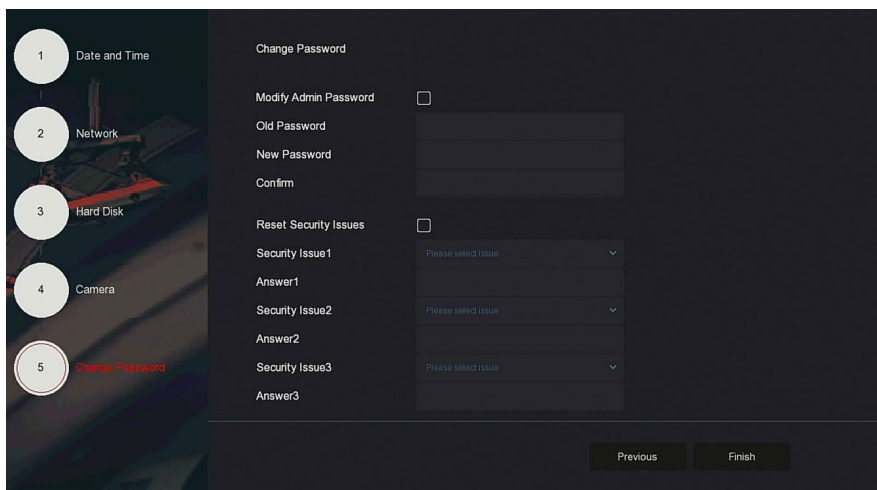


Figure 4-2-9



NOTE

- To exit the startup wizard, click "Exit→Confirm".
- In the Date and Time setting interface, uncheck "Enable Wizard", the system no longer display the "Boot Wizard" interface on the next boot.
- When not modifying settings in the boot wizard, click "Next" to enter the next interface.
- Confirm that the NVR device is properly connected to the network before setting up the network parameters.
- The hard disk needs to be formatted when it is first installed on the device.

4.2.2 Forget Password

If you forget your password, click "Forget password" on the login page to enter the Forget Password interface to reset the password (shown in Figure 4-3).

There are three ways to reset the password: "Answer the question", "Import Key" and "Dynamic Password".

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

Next Step

Clear

Cancel

Figure 4-3

- **Answer The Question:** Select the three security questions when setting the password and enter the answer to the corresponding question, click "Next Step" to enter the new password setting interface, shown in Figure 4-4.

Modify User

User Name: admin

Modify Password: ☐

New Password:

Confirm:

Unlock Pattern: ☒

Level: Administrator

Save

Figure 4-4

- **Import Key:** Select the authentication method as "Import Key", shown in Figure 4-5.

Forget Password

Verification Mode: Import Key

Import

Figure4-5

1. Insert the USB disk (the key file exported when the device setting password is stored) in the device, and then click "Import".
2. In the modification user interface, select "Change Password", enter a new password, confirm the password, and then click "Save". Figure 4-6.

Modify User

User Name: admin

Modify Password: ☐

New Password:

Confirm:

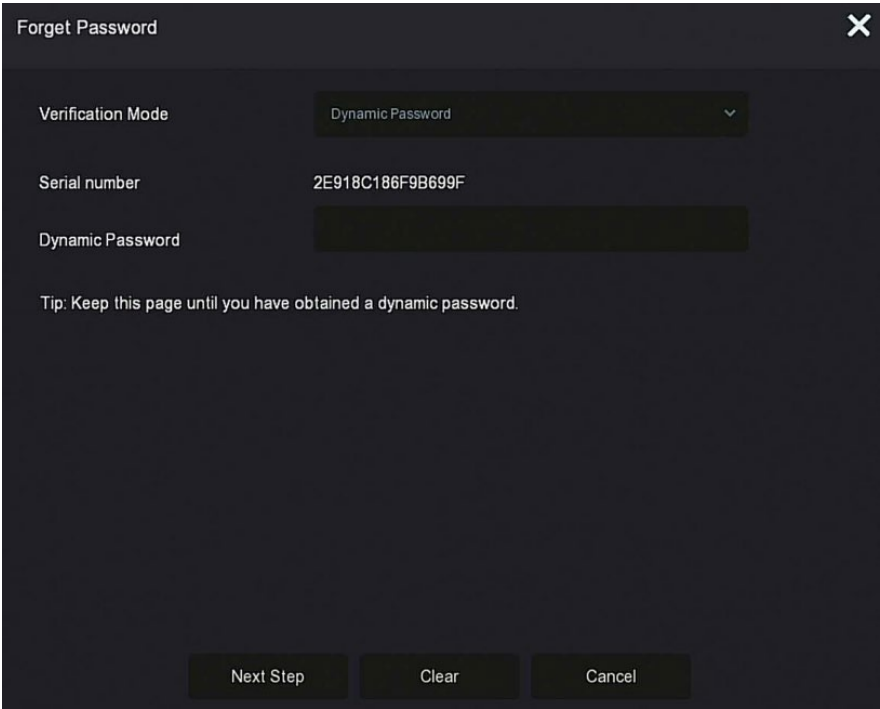
Unlock Pattern: ☒

Level: Administrator

Save

Figure4-6

- **Dynamic Password:** Select the authentication method as "Dynamic Password", shown in Figure 4-7.



Forget Password

Verification Mode: Dynamic Password

Serial number: 2E918C186F9B699F

Dynamic Password: [Redacted]

Tip: Keep this page until you have obtained a dynamic password.

Next Step Clear Cancel

Figure 4-7

1. Contact the supplier to get the security code, enter the security code, and then click "Next Step".
2. In the modify user interface, select "Change Password", enter a new password, confirm the password, and then click "Save".



NOTE

- When selecting "Answer The Question", you must answer at least 2 questions, the answers are case sensitive and must match what has been entered.
- When selecting "Import Key", the key file in the USB flash drive must be the key file exported by this device.

4.3 Preview Interface

After the system is fully booted, it will enter the default preview interface.

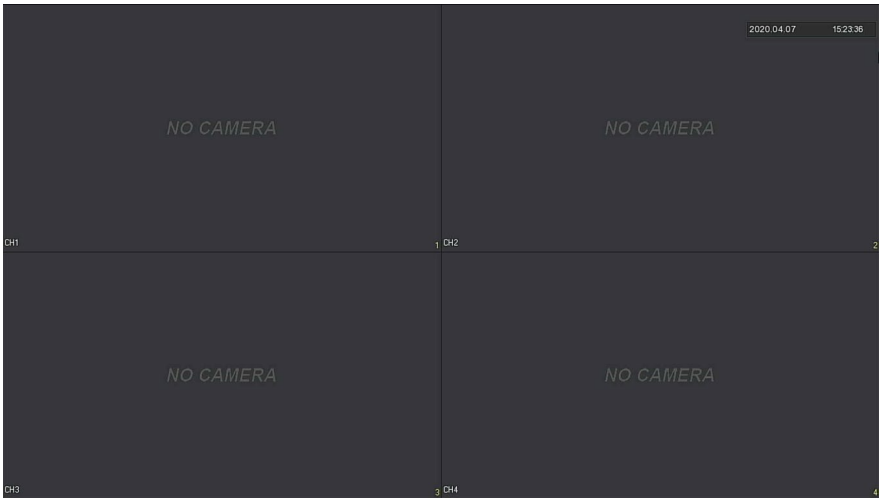


Figure 4-8

When the device starts up, the preview display defaults to multi-screen display. Display depends on number of device channels. On the preview interface, set the appropriate date and time and view the recording/alarm status of each video channel.

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




Icon	Channel State
	Recording
	Motion detection
	Intelligent alarm

Table 4-1

4.4 Quick add device

Quick add device is shown in Figure 4-9:

- 1. In the preview menu, click  to add an IP camera.

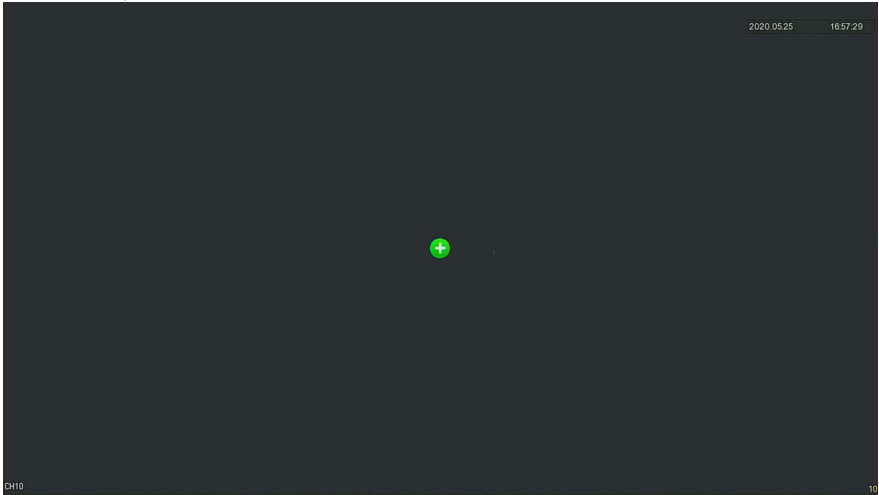



Figure 4-9-1

- 2. Locate the device in the list and click  .

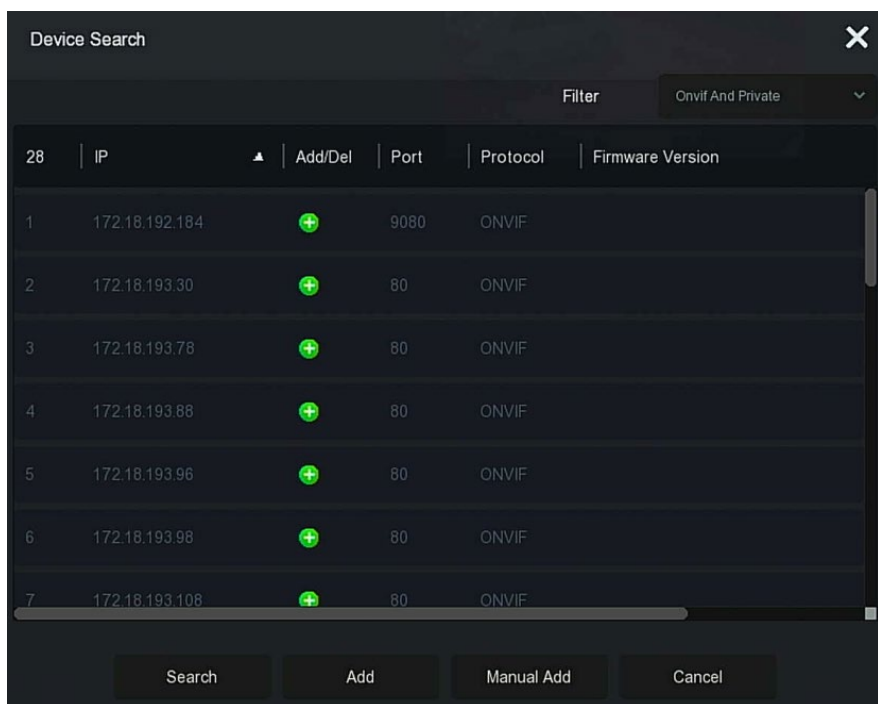


Figure 4-9-2

- **Search:** Click to search for all online IP devices in the local area network (LAN) according to the protocol in the "Filter" box.
- **Add:** Add selected device.
- **Manual Add:** For details on how to manually enter device information, see 5.3.5.1.
- **Filter:** Select the display filter conditions, and then click "Search", the device searches and displays all IPC in the LAN that meet the conditions.



NOTE

- Filter Search Add Device: In the Add Device interface, select the corresponding protocol in the "Filter" column → "Search" → Select Device → Click " + ".
- Manual Add: On the Device Search interface, click "Manual add" → Click "Enable" → Select Protocol, Enter Password, IP, Port → 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 4-10.

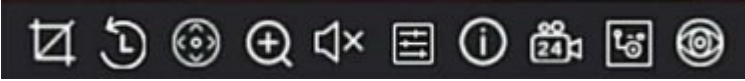





Figure 4-10

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

Icon	Function
	Manual capture: Click the button to capture the current video pictures. Search, view, and backup pictures can be carried out in "  File Management" → "All Files".
	Instant playback: Click the button, the channel playback 5 minutes before the video.
	PTZ: Click into the PTZ interface.
	Audio output control: Click to set the channel output volume and mute.
	Electronic zoom: Click to enter the full-screen zoom mode, display the unmagnified image of the channel in the lower right corner of the screen, and drag the red frame of the unmagnified image by mouse to switch the position of the enlarged image. Click "  " and "  " or scroll using the mouse wheel to adjust the zoom. Click the right mouse button to exit electronic zoom and restore the live preview interface.
	Image color: Click the image interface, you can set the channel brightness, contrast, saturation, sharpness, fill light, exposure setting, white balance, and video adjustment of the parameter values.
	Bit stream information: When the mouse moves to the icon position, the channel shows the current stream and other related parameters.
	Turns on/off all-day timing recording for the selected channel.




	Switches between the main and sub stream.
	Fisheye unfold function.

Table 4-2

4.5.1 PTZ



Click  on the PTZ channel to enter the PTZ setting interface. The PTZ interface provides access to PTZ speed, direction, and zoom, Figure 4-11-1.

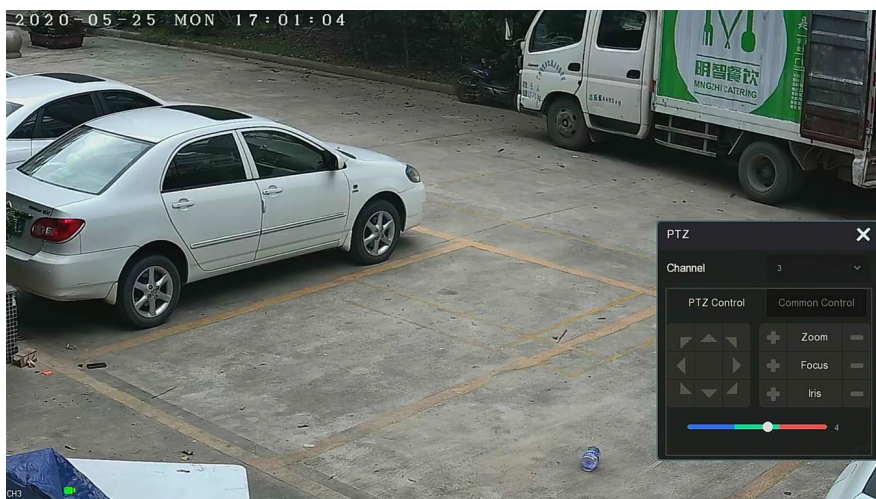


Figure 4-11-1

The PTZ setup interface is divided into PTZ Control and Common Control.

■ PTZ Control

The PTZ control interface is used to set the PTZ direction rotation (including upper, lower, left, right, upper left, lower left, upper right and lower right) of the gimbal equipment, focusing, zooming, aperture, rapid positioning, cruising, etc. Use the direction keys when setting, Figure 4-11-2.



Figure 4-11-2

- **Channel:** Select the PTZ device's channel.
- **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 of 7 is much greater than the rotation speed of 1.
- **Direction:** Use / / / to adjust the direction of the PTZ camera.

■ Common Control

On the PTZ setup interface, click "Common Control" to enter the common control interface. Common control allows calling preset points and turning cruise on/off, Figure 4-11-3.

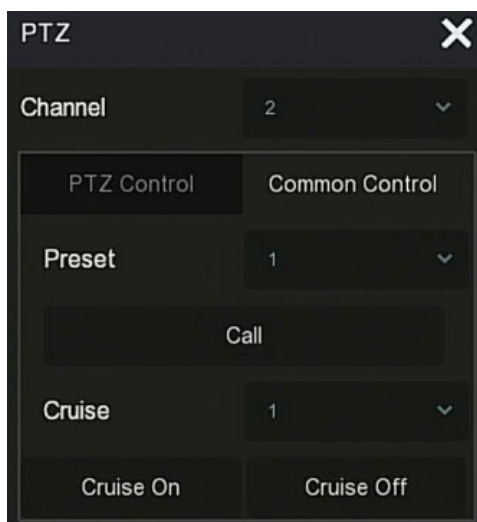


Figure 4-11-3

- **Preset:** Selects a preset point.
- **Call:** Click on the desired PTZ to go to the preset point position.
- **Cruise:** Select the set cruise route, and then click to turn cruise on/off.
- **Cruise on:** Start and follow the cruise line.
- **Cruise off:** Stop the current cruise line.

4.5.2 Image

In the image color setting interface, you can set the image parameters of the IPC channel, such as brightness, contrast, IRcut, and white balance.

The steps for image setup are as follows:



Step 1: On the IPC channel, click [Icon]. The channel image color setting interface displays, Figure 4-12.



Figure 4-12

Steps 2: Select the configuration channel.

Steps 3: Set the image adjustment, fill light, exposure, backlight, white balance, and video adjustment as desired.

Steps 4: Click "Apply" to save the settings.

- **Image adjustment:** According to the actual environment, you can adjust the brightness, contrast, saturation, and sharpness of the preview screen by dragging the progress bar.
You can also set specific values for "Brightness", "Contrast", "Saturation", "Sharpness". Valid values range from 0-255 with a default value of 128.
- **Fill light:** The default is auto, sensitivity is 3, filtering time is 3, and light brightness is 100. When the fill light mode is "Auto", the device turns on the fill light according to the actual environment. The user can switch the fill mode to "Day", "Night", and "Scheduled switch" according to the actual video scene. They can adjust sensitivity and filtering time of the device according to the fill mode. When the fill light mode is "Scheduled switch", you can set the daylight and dark time (ie, start and end fill time) and fill light brightness.
 - ✓ When the fill mode is "Day", the device monitor video is added to the daytime effect.
 - ✓ When the fill mode is "Night", the device monitor video is patched into a night effect.


- ✓ **Filtering time:** Is used to prevent ambient light disturbance, the light is frequently turned on and off, and the filtering time is set. During this time, the camera is not disturbed by ambient light.
- ✓ **Light brightness:** Is used to adjust the brightness of fill light with an adjustable range of 0 to 100.
- **Exposure setting:** The default is Auto, which switches the Manual mode according to actual needs. When "Manual" is selected, exposure time and gain control are activated.
- **Backlight:** It is used to set backlight compensation and strong light suppression. The default is off, it can be turned on manually, and the backlight can be set.
- **White balance:** The default is auto and can be switched to "Manual".
 - ✓ **Manual white balance:** Support R, G, B gain adjustable, adjustment range is (0 to 255), click "Save" after setting.
- **Video adjustment:** Allows the user to turn on and set 2D/3D digital noise reduction.
- **Image enhancement:** Selects the flicker control mode, turns on and sets the wide dynamic intensity.
 - ✓ **Flicker control:** The flicker control mode is selected according to the IPC installation environment and the flicker standard. The PAL standard is 50HZ and the NTSC standard is 60HZ. When the device is installed outdoors, it can be set to outdoor. The default setting is PAL.
 - ✓ **Sensor linear WDR:** The default is "Shutdown", you can switch the wide dynamic strength (Automatic, Weak, Moderate, Strong, Super) in the drop-down menu.
- **Defog mode:** Used to set the defogging mode and strength.
 - ✓ **Defog mode:** The default is off, you can select On or Auto from the drop-down menu.
 - ✓ **Defog strength:** The default is 0. When the defogging mode is on, defogging intensity can be set. The range of values can be set from 0 to 255.



NOTE

- The camera image interface only displays the specific devices supported functions. Not all devices have the same features.

4.5.3 Fisheye Unfold

Select the channel connected to the fisheye IPC and click  to enter the fisheye expansion interface, Figure 4-13. Here you can set the installation and deployment modes of the fisheye.

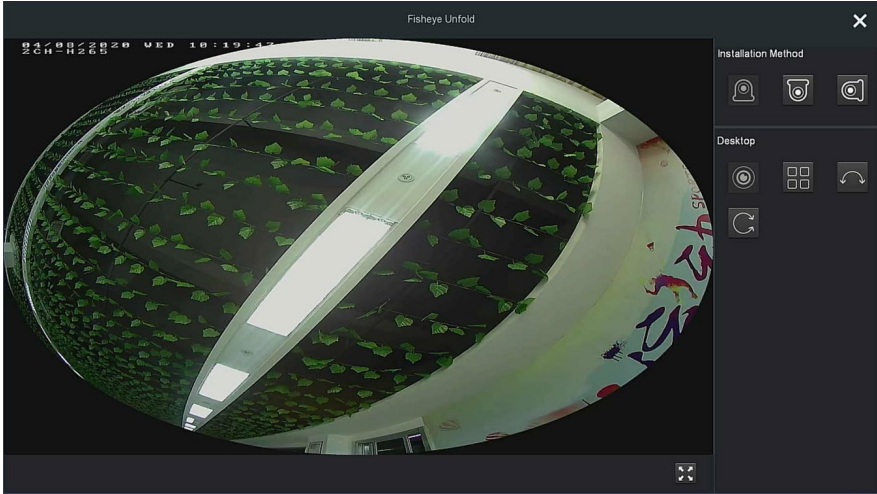







Figure 4-13

The fisheye installation modes are divided into top mounted mode, wall mounted mode, and ground mounted mode.

Icon	Description
	Desktop
	Top-suspend
	Wall hanging
	Fisheye, panorama original
	Four expansion On the four-screen interface, hold down the left mouse button to drag the screen up and down.




	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



NOTE

- Only some models support fisheye function. Refer to the specific functions of the device.
- If the channel in the shortcut menu is not connected to the fisheye camera, the system prompts "This channel is not fisheye channel!".
- The NVR only supports the fisheye expansion function when the fisheye device is added through a private protocol.

Chapter 5 NVR Menu

5.1 Shortcut menu

After logging in to the system, move the mouse to the bottom of the preview interface. A shortcut menu displays, Figure 5-1. This interface allows the user to access common settings; start (file management, system settings, logout, shutdown), playback, alarm, recording status, alarm status, hard disk status, network status, system information, poll setup interface, turn on/off OSD, turn on/off all-day recording, screen split (1 screen, 4 screens, 8 screens, 9 screens), and exit full screen (enter main menu mode).



Figure 5-1

Table 5-1: Shortcut menu icons and functions

Icons	Functions
	Alarm output status interface (Detailed operation as 5.1.1)
	Recording status interface View the channel recording status, stream type, bit rate, and other related information.
	Alarm status interface View the alarm name, type, status, and other related information of each alarm input channel.
	HDD interface View the hard disk status, capacity, and other related information.
	Network status interface View the device's IP address, subnet mask, gateway, and other network information.
	System information interface (Detailed operation as 5.1.2)
	Poll setup interface (Detailed operation as 5.1.3)





	Turn on/off the channel name and number of each channel.
	Turn on/off all-day timing recording for all channels.
Screen split 	Screen splitting Divides the screen into 1, 4, 9, 16, etc. according to the number of devices supported by the NVR.
	Main menu Exits full screen.

Table 5-1



NOTE

- Currently, only select equipment 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 a 9-channel device and 16 screens in the 16-channel device shortcut menu.
- The 64-channel NVR supports dual-screen preview in 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. The sub screen can add up to 32 channels of the main screen. The sub-screen interface supports functions such as previewing real-time video, setting PTZ, electronic zoom, image setting, stream information, turning on/off all-day recording, and switching main/sub stream.

5.1.1 Alarm Status



Click in the shortcut menu to enter the alarm output interface. Here you can view the alarm output status of the device, and you can manually trigger/turn off the alarm output, Figure 5-2.

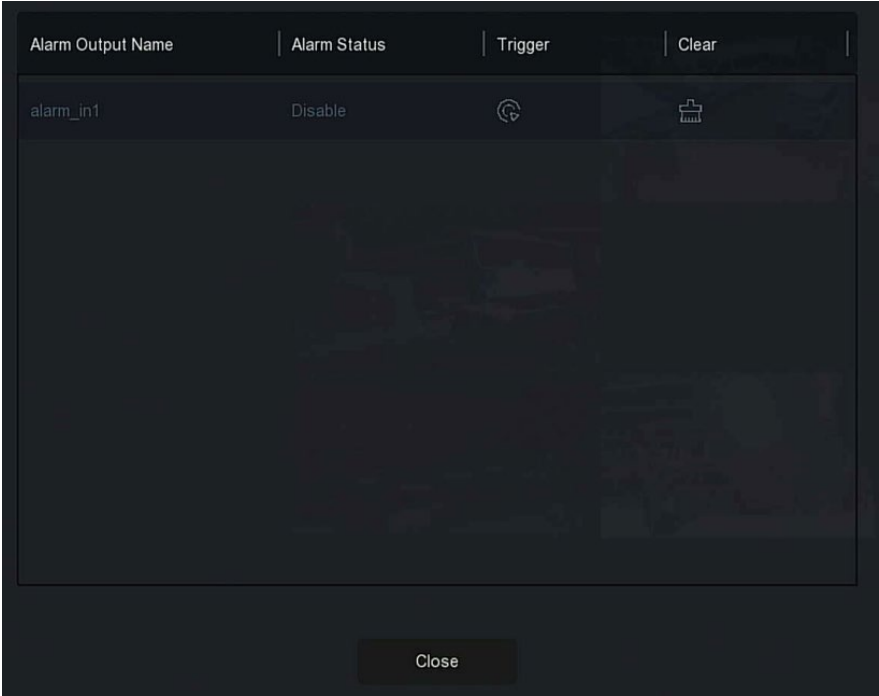


Figure 5-2

5.1.2 System Info



Click in the shortcut menu to enter the version information interface. Here you can view the device name, Model No., number of supported channels, serial number, and other information, Figure 5-3.




Figure 5-3

5.1.3 Poll

The device supports the poll function. After setting the poll function, the system plays video frames in turn according to the split screen. After each group of pictures is displayed for a certain time, it automatically jumps to the next group of pictures, Figure 5-4.

To set polling:



Step 1: Click  in the shortcut menu to enter the poll setting interface.

Steps 2: Check "Enable" to set polling interval and mode.

Steps 3: Click "Save".

The image shows a dark-themed configuration window. It contains three settings:

- Enable:** A checkbox that is currently unchecked.
- Time(s):** A text input field containing the value "10".
- Mode:** A dropdown menu showing the value "1".

At the bottom of the window, there are three buttons: "Default", "Save", and "Close".

Figure 5-4

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

5.2 Main Menu

Click the right mouse button on the preview interface to enter the main menu interface. The main menu includes the upper and lower (shortcut) menu bars.

Main Menu includes Preview, Playback, File Management, Smart Analysis, Channel, Storage, System, and Maintenance, Figure 5-5.

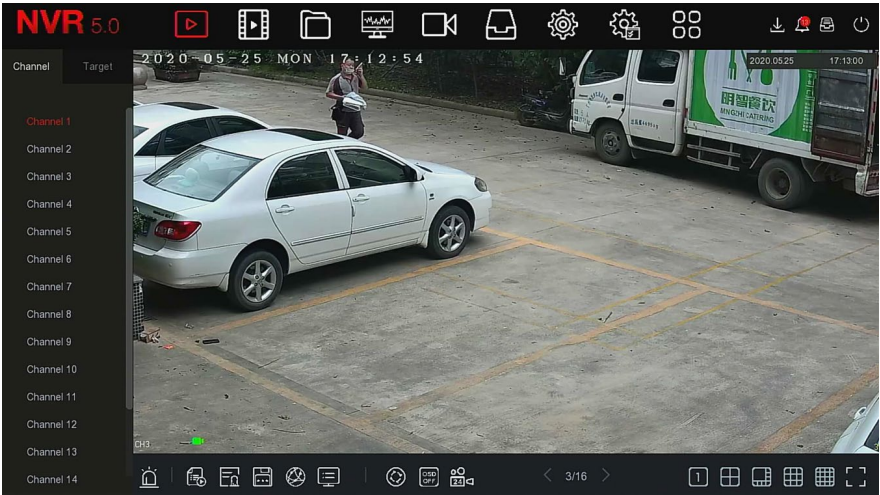









Figure 5-5

The main menu icons and specific functions are shown in Table 5-2 below:

Icons	Functions
	Preview interface (Detailed operation as 5.3.1)
	Playback interface (Detailed operation as 5.3.2)
	File management interface (Detailed operation as 5.3.3)
	Smart analysis interface (Detailed operation as 5.3.4)
	Channel management interface (Detailed operation as 5.3.5)
	Hard disk management interface (Detailed operation as 5.3.6)
	System interface (Detailed operation as 5.3.7)






	System maintenance interface (Detailed operation as 5.3.8)
	Alarm information interface (Detailed operation as 5.3.9)
	Backup progress interface (Detailed operation as 5.3.10)
	Logout interface (Detailed operation as 5.3.11)

Table 5-2

5.3 Operation

5.3.1Preview

In the main menu, click  to enter the preview interface, Figure 5-6.

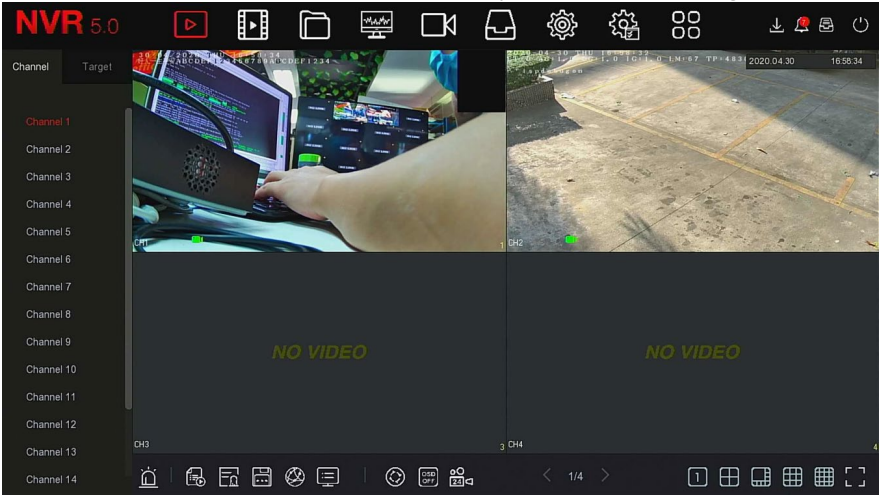



Figure 5-6

- **Channel:** Displays all system channels.
Double-click a channel, and the real-time picture of the channel displays in the current preview box (red box).
- **Target:** To view the snapshot results, select the options ("Face Detection", "Person Detection", "Smart Detection", "Vehicle Recognition") to view real-time snapshots.

5.3.2 Playback

5.3.2.1 Playback channel video

In the main menu, click  to enter the video playback interface, as shown in Figure 5-7.

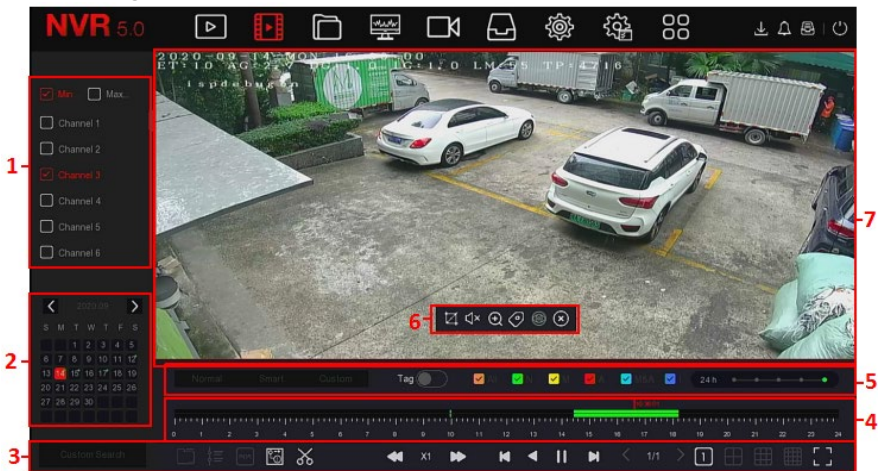






































Figure 5-7

The interface description is shown in the following table:

No.	Function	Description
1	Channel	Min/Max Ch: Intelligently select the number of playback channels. The minimum number of channels selects one channel at a time by default. The maximum number of channels selects the maximum channels supported by the device at a time, such as 4 channels. Channel: Select the channel number (multiple channels can be selected at the same time, depending on the device).
2	Calendar	Dates with colored dots on the calendar indicate video recording on that day. In any playback mode, select the recording type and channel, click the date you want to view. The timeline is updated to the recording track of the day.

3	Playback control area 1	 : External file  : Playback by time  : Switch to main/sub stream  : POS overlay switch  /  : Edit/Exit Edit  : Clip time setting  : Export Clip, select the clip file, and then click "OK" to backup the selected file to the USB flash drive  /  : Deceleration/Acceleration  /  : Frame rewind/Frame advance  : Reverse video  /  : play/pause  /  : Previous page/Next page  /  /  /  : 1/4/9/16 split screen  : Full-screen playback
4	Play bar	<p>Displays the recording type and the time period under the current conditions.</p> <p>When the device is in multi-split screen, click the playback interface and select a channel. The first time axis is the recording time axis of the selected channel.</p>


		Using the mouse, click a point in the colored area to start playback.
5	Playback control area 2	 : Tab off/on Video Types:  All: All videos  N: Normal record  M: Motion detection record  A: Alarm record  M&A: Motion detection & alarm record  I: Intelligent record  : Zoom in/out play bar
6	Menu hide	Click the play interface to view the hidden menu  : Capture  : Turn volume on/off  : Electronic zoom  : Add tags, intercept playback files, and add 5 seconds before and after recording  : Fisheye  : Close hidden menu
7	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.
--	--	--

Table 5-3

- **Playback:** Retrieve the corresponding video files according to the channel, date, and video type. Play the video files in sequence from the playback bar that meets the conditions.

To use playback:

1. Access the main menu, and then click  to enter the playback interface.
2. Select the video playback channel(s).
The calendar displays the current month's video recording.

Single channel Playback

- a. Select the desired channel from the channel list.
- b. Double-click the date.

The display interface begins playback, Figure 5-8.

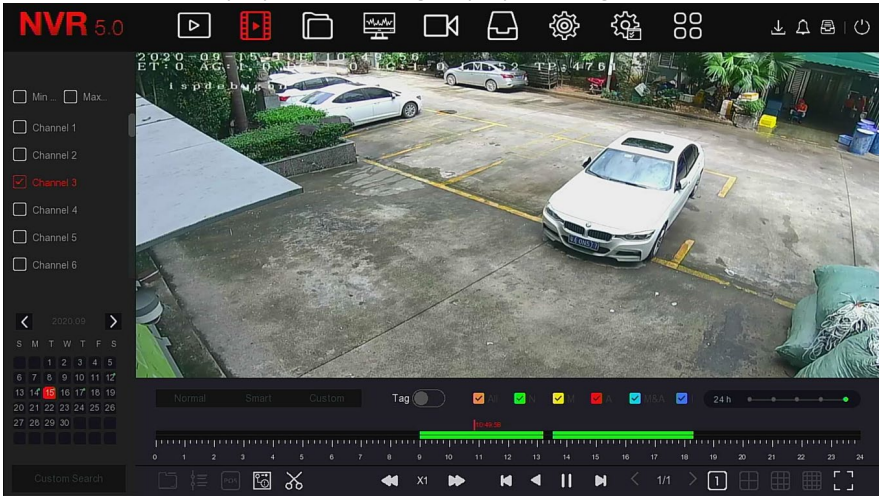


Figure 5-8

Multi-channel playback

- a. Select each desired channel from the channel list.
- b. Double-click the date.

The display interface starts multi-channel synchronous playback, Figure 5-9.

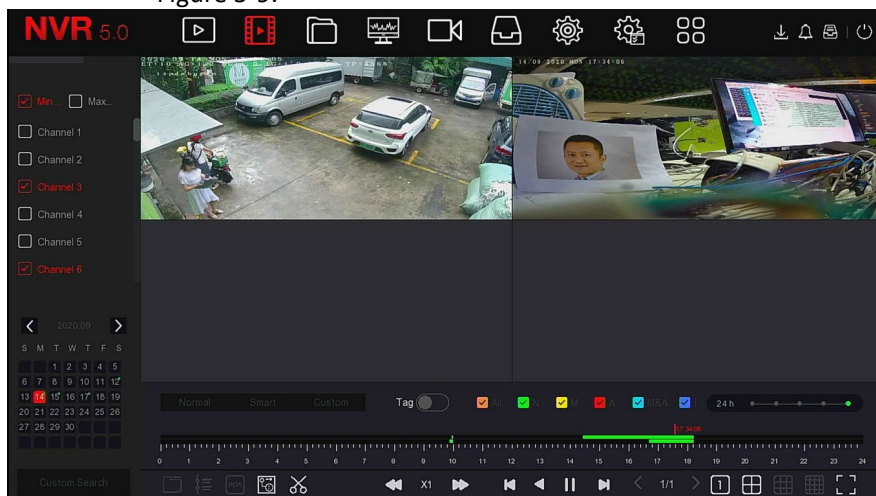


Figure 5-9





NOTE

- Multi-channel playback supports MAX speed playback.
- The interface shown in Figure 5-7 is for reference only. Display and channel support vary per device.
- The channel's recording information can be selected in the first progress bar display box, with intelligent search recording information available in the second progress bar display box.

■ Tag playback

The tag playback function allows users to mark, or tag, a specific moment in playback.

To use tag playback:

1. Access the main menu, and then click  to enter the video playback interface.
2. Select the desired channel and date for recorded video, and the searched video displays in the progress bar.
3. Toggle the Tag button to .

Once the custom tag is added, the playback progress bar displays a white label point, indicating a tag at the current position.



Figure 5-10






NOTE

- After adding the tag, the system automatically clips and saves 5 seconds of video before and after the tagging time.

5.3.2.2 Playback assistance function

■ Electronic zoom

To use electronic zoom:

1. Access the main menu, and then click  to enter the video playback interface.
2. Select the channel and date for the video recording.
The searched video will be displayed on the progress bar.
3. Click  to start playback on the display interface.
4. Click the playback interface to view the hidden menu, and then click  to enter Electronic zoom interface, Figure 5-11.

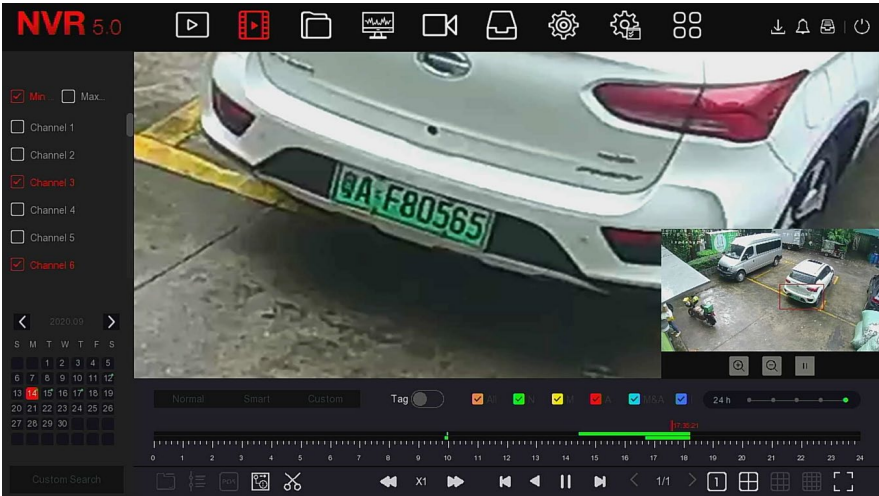


Figure 5-11



NOTE

- Electronic zoom interface supports a maximum magnification of 16.
- When enlarging an image, the center of the image is focused on by default. Hold down the left mouse button and drag the image to switch to select a different focus area.
- Use the mouse wheel to zoom in and zoom out the image. Sliding up to enlarge and down to reduce the image.

■ Clip

It supports clipping video files during video playback.

To clip the video:




1. Access the main menu, and then click  to enter the video playback interface.
2. Select the channel and date.
The searched video displays in the progress bar.
3. Click  .
The start and stop icons appear on the progress bar. Manually adjust them to select the desired length of the video file, Figure 5-12.



Figure 5-12

4. Click  to export clips to a USB flash drive, Figure 5-13.

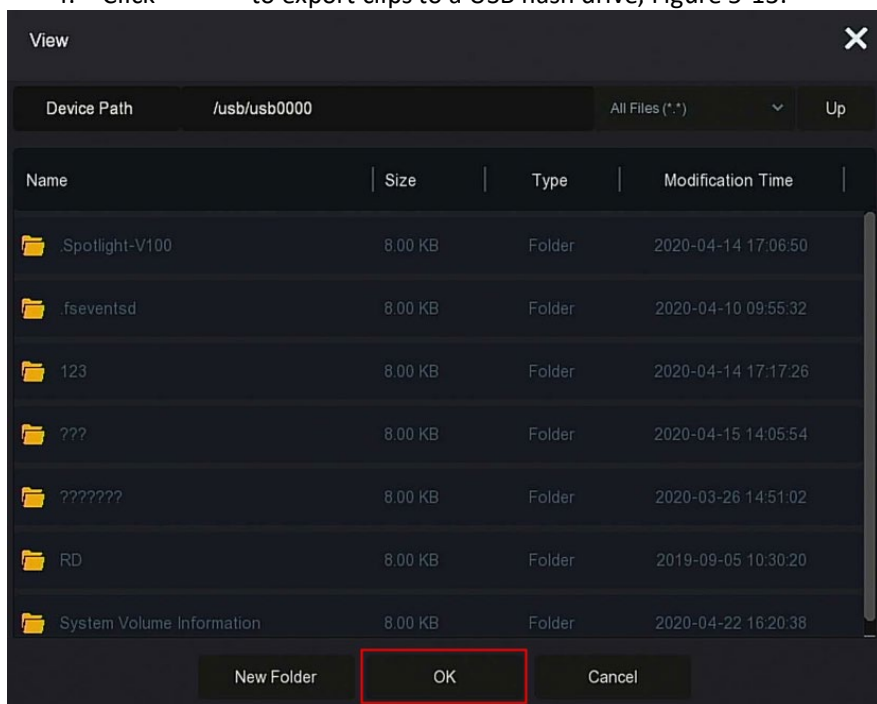


Figure 5-13



NOTE

- For direct file export, click  to set start and end time, Figure 5-14.

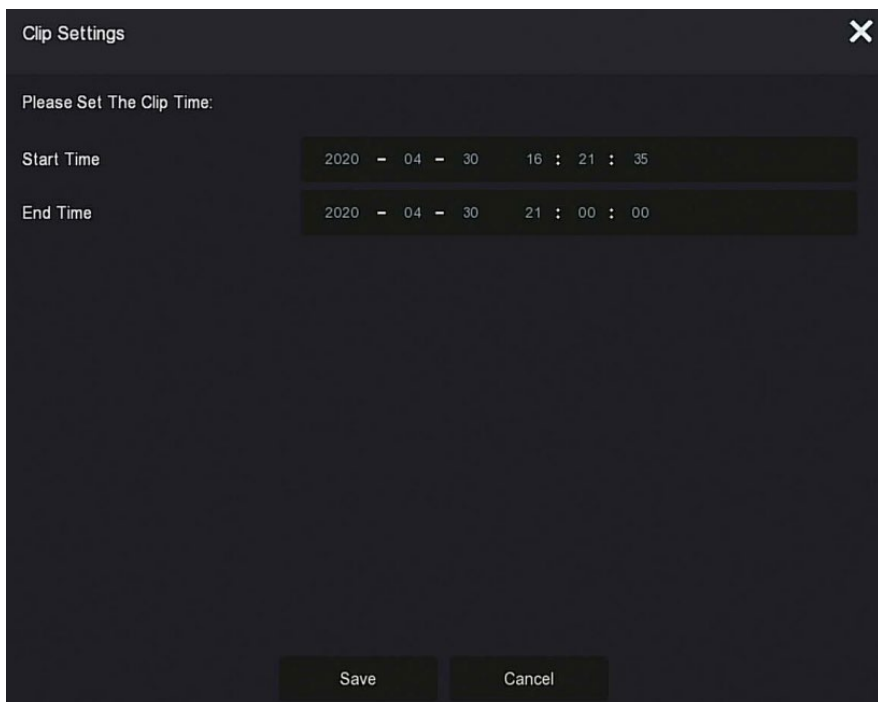



Figure 5-14

5.3.3 File Management

5.3.3.1 All Files

Here you can retrieve all file in the device according to user-defined retrieval conditions, and then display them by category.

To access the files:

1. Access the main menu, and then click  to enter the file management interface, Figure 5-15.

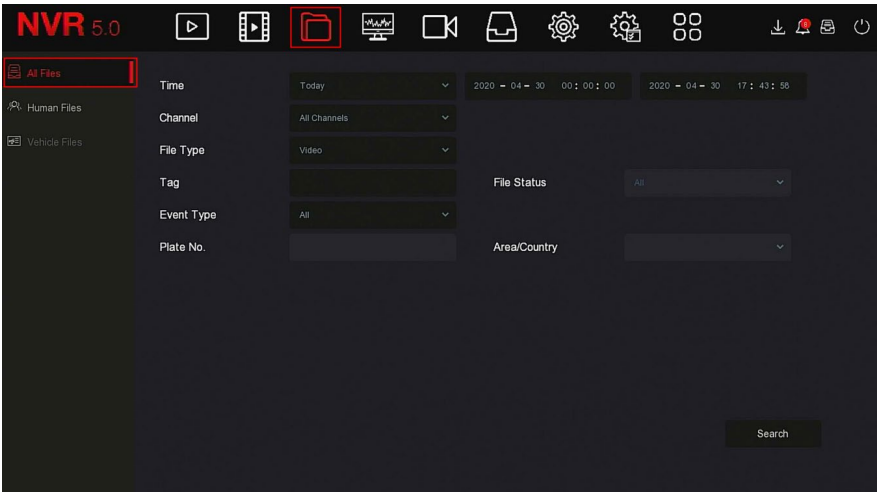


Figure 5-15

2. Set the search conditions (time, channel, file type, label, and event type), and then click "Search".

The search results display files that meet the selected conditions, Figure 5-16.

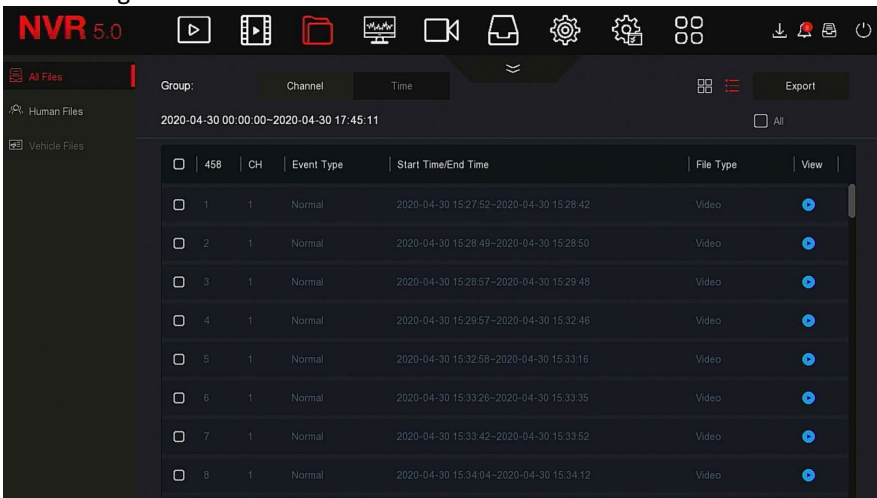













Figure 5-16

- **Channel:** Search results are displayed grouped by channel.
- **Time:** Search results are displayed in groups by time.
- **All:** Search results show video and picture files that meet the criteria.

- **Video:** Search results only show video files that meet the criteria.
 - **Picture:** Search results only show the image files that meet the conditions.
 - : Search results are displayed by thumbnail.
 - : Search results are displayed by list.
 - : Jump to the first page of search results.
 - : 1 page forward
 - : 1 page backward
 - : Jump to the last page of search results.
 - : Collapse the search results and return to the search condition page.
 - : Enter the search results page to view the results of the previous search.
3. Related operations such as backup, viewing videos/pictures can be performed from the search results.
- **View Video:** Click the  corresponding to the desired video file to view the video clip.
 - **View Picture:** Click the  corresponding to the desired picture file to view the pictures.

5.3.3.2 Human Files

The Human Files function retrieves and displays personnel pictures and videos.

1. Access the main menu, click  → Human Files to enter the human files interface, Figure 5-17.

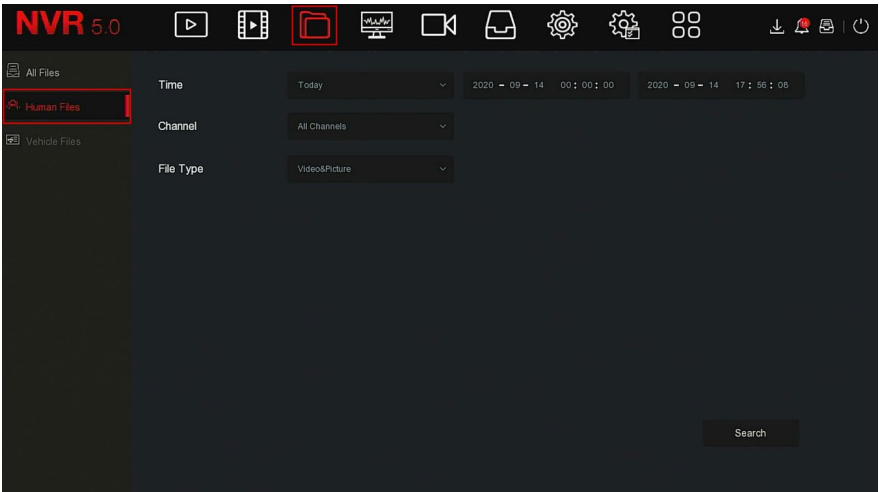


Figure 5-17

2. Set the search conditions (time, channel, file type), and then click "Search".

Files meeting the selected conditions are displayed, Figure 5-18.

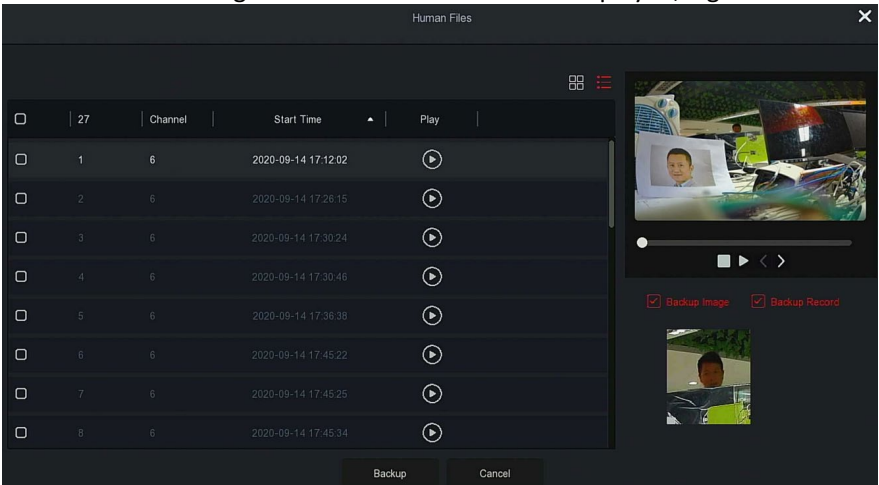


Figure 5-18

3. Related operations such as backup and viewing videos/pictures can be performed using the search results.

5.3.3.3 Vehicle Files

Coming soon!


5.3.3.4 Export

File management supports backing up video/picture files with a USB device, such as U disk and mobile hard disk.

Prerequisites:

The NVR has must be correctly connected to the backup storage device.

To export video/pictures:

1. Access the main menu, and then click  to enter the document management interface.
2. Set the desired search conditions, and then select video/picture files, Figure 5-19.

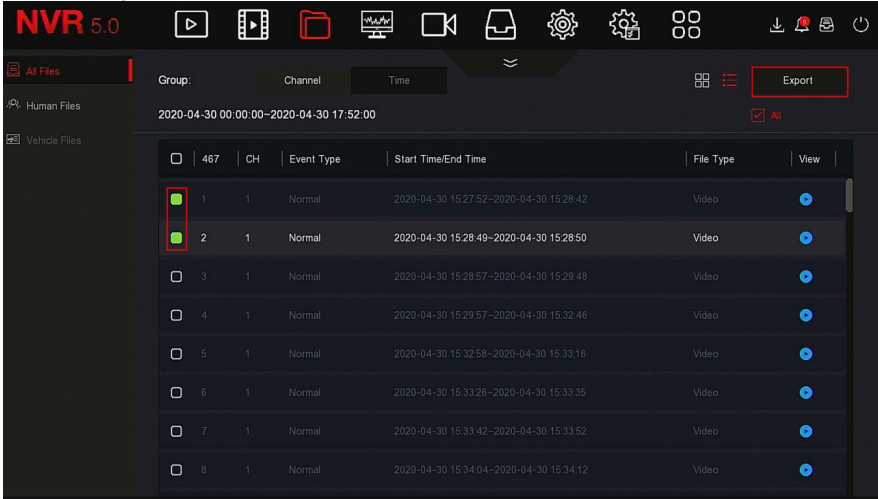


Figure 5-19

3. Click Backup → New Folder, enter the file name, and then click OK, Figure 5-20.

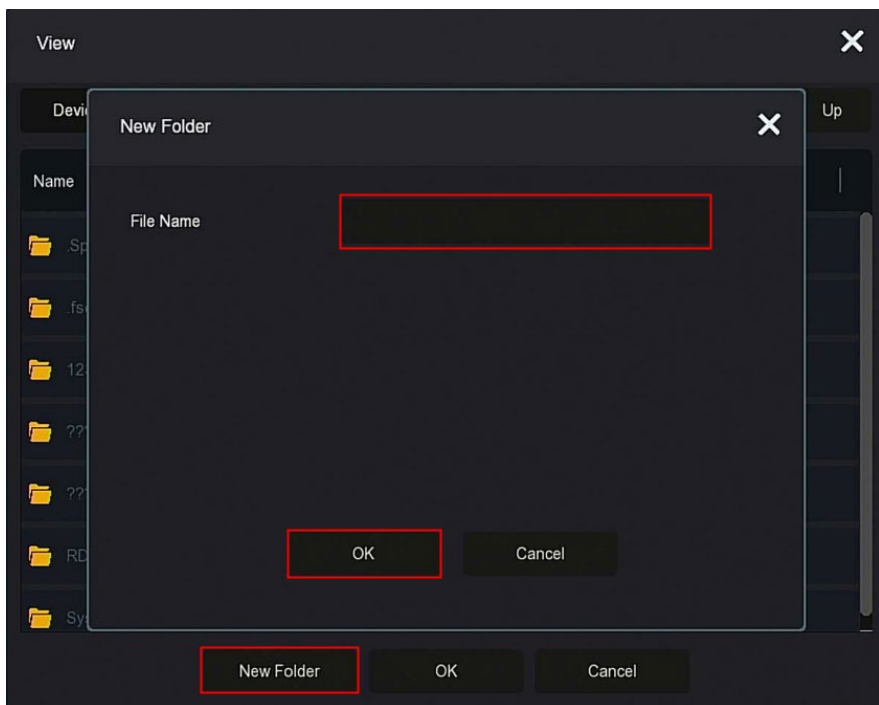



Figure 5-20

4. Click OK → OK, backup starts.
5. Click  to view the backup download progress, Figure 5-21.

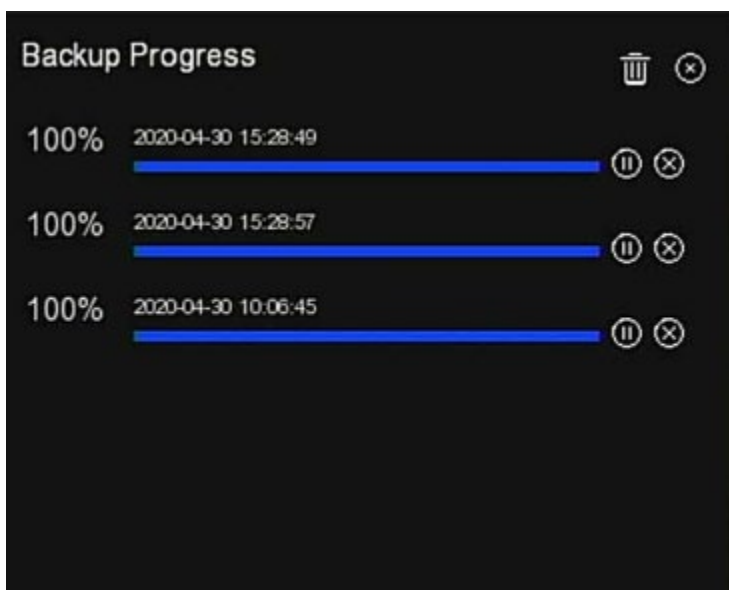





Figure 5-21



NOTE

- Once files are exported, use delete , close , and pause  the files.

5.3.4 Smart Analysis

Smart Analysis includes Face Database, Face Comparison Search, People Count, and Heat Map option.

5.3.4.1 Face Database

Face Database stores face pictures, and can be used for face/alarm comparison. Users can add, delete, and edit the face database, Figure 5-22.

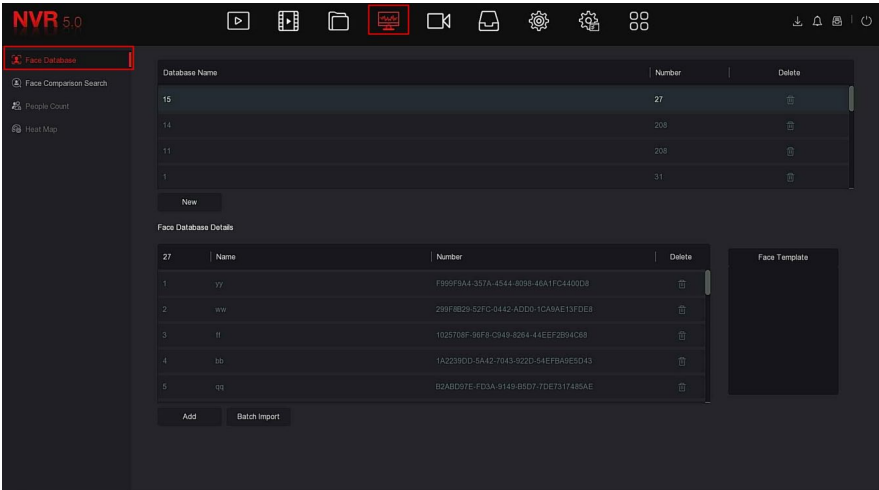



Figure 5-22

■ To add entries to the face database:

Access the main menu, and then click  → Face Database to enter the Face Database interface.

1. Click "Add", Figure 5-23.

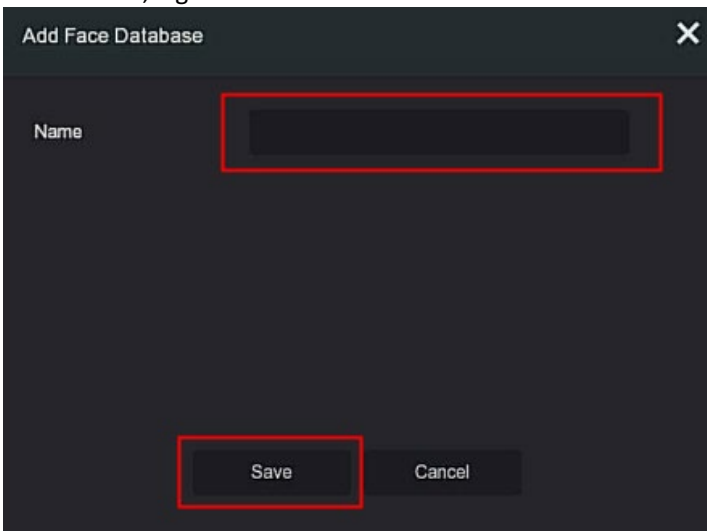






Figure 5-23

2. Enter the name of the new face database entry, and then click "Save".
The new face database entry is added to the face database list.

■ To delete Face Database entries:

1. Access the main menu, and then click  → Face Database to enter the Face Database interface.
2. Select the desired face database in the list, and then click .


■ To view the Face Database:

1. Access the main menu, and then click  → Face Database to enter the Face Database interface.
2. Select the face database, and then click .
The face database displays all picture numbers in a detailed list.

■ Add A Face List

Add a face list allows only one picture to be uploaded to the face database at a time. There are 2 ways to import the pictures: local image and taking picture.

◆ To import the local image:

1. Insert the U disk containing the new face image into the device.
2. Access the main menu, and then click  → Face Database to enter face database interface.
3. Select the face database.
4. Click "Add → Local Image ", select "Name" to enter the name of the imported picture, as shown in Figure 5-24-1 below.

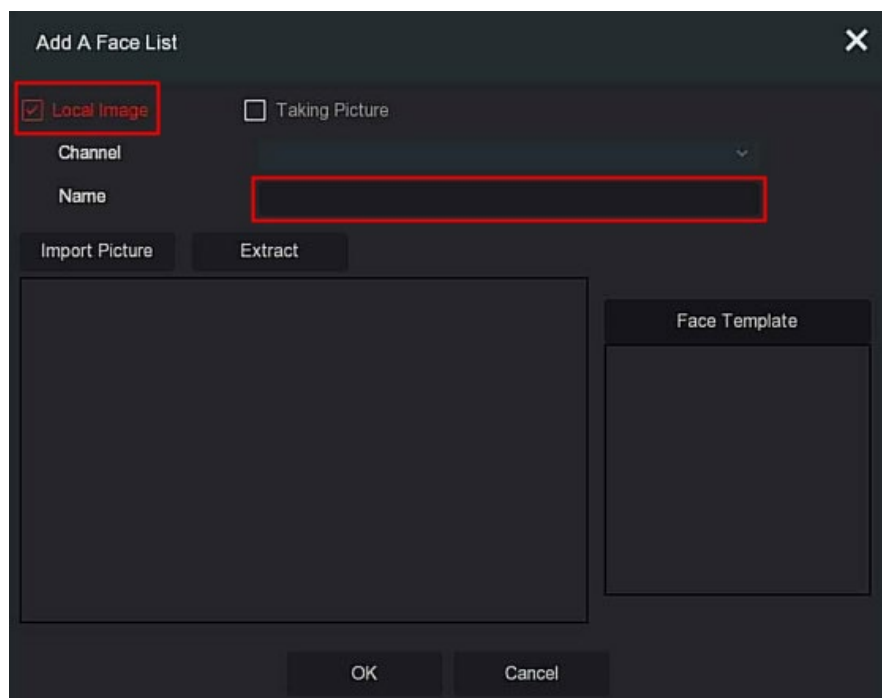


Figure 5-24-1

5. Click " Import Pictures", and then select the picture from U disk, Figure 5-24-2.

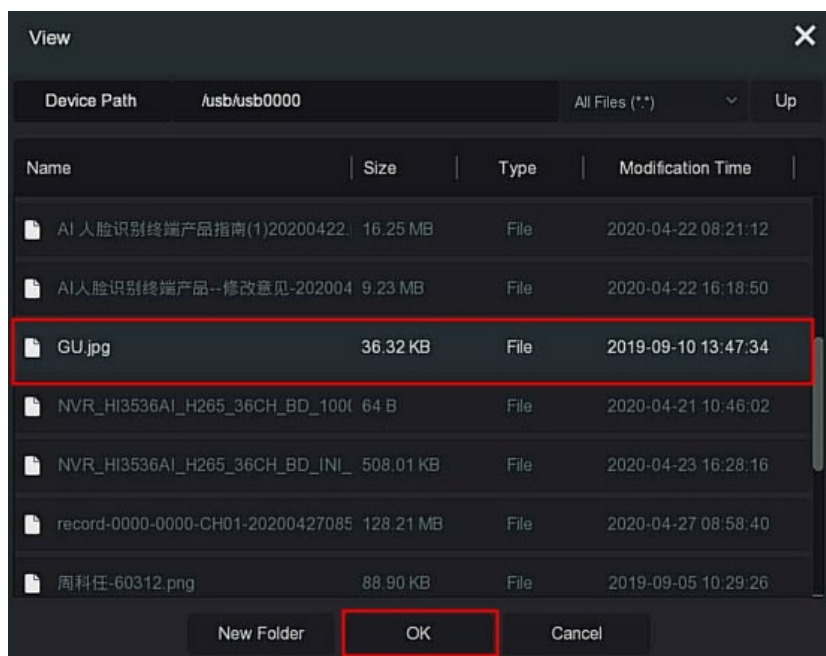


Figure 5-24-2

6. **Steps 6:** Click "OK → Extract", Figure 5-24-3.

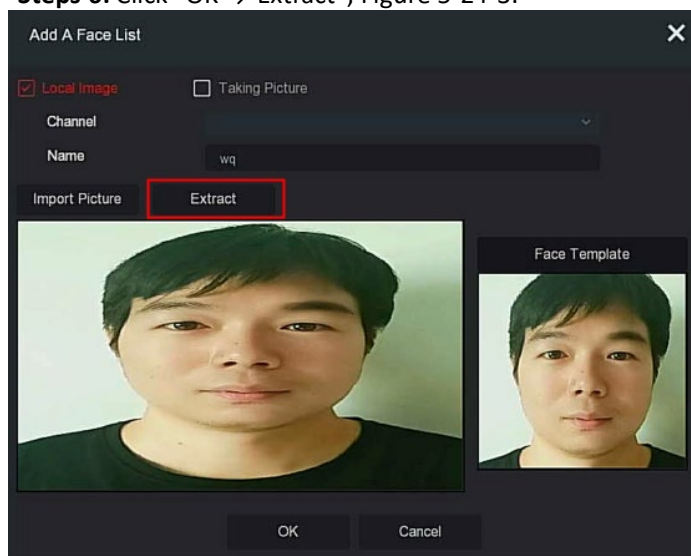


Figure 5-24-3

7. Click "OK" to finish adding a single face list, Figure 5-24-4.

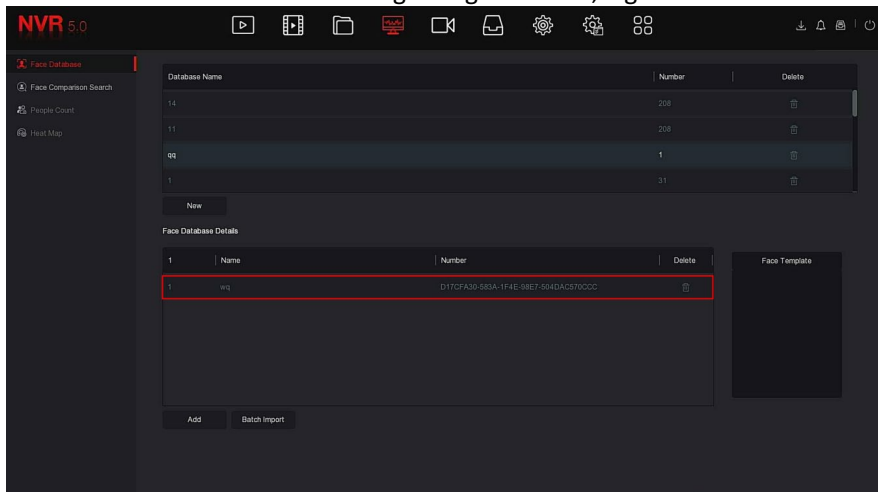



Figure 5-24-4

◆ **Importing captured pictures:**

1. Access the main menu, and then click  → Face Database to enter Face Database interface.
2. Select the face database.
3. Click "Add → Taking Picture", and then select the shooting channel.
4. Click "Shooting" → Extract", Figure 5-25.

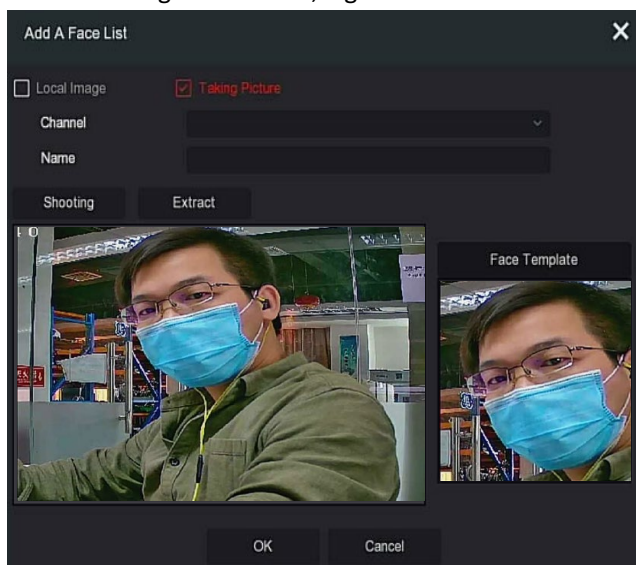



Figure 5-25


5. Enter the name of the imported picture in "Name", and then click "OK" to finish adding a single face list.

■ **To delete picture from face database:**

In the details of the face database interface, select the picture , and then click  to delete it from the current face database.

■ **To add multiple face lists:**

Adding multiples to the list is a "Batch Import", they are uploaded to the face database at one time.

1. Store multiple face pictures in a folder on the U disk, and then insert the U disk into the device.
2. Access the main menu, and then click  → Face Database to enter Face Database interface.
3. Click "Batch added".
4. Select a folder to store pictures, and then click "OK", Figure 5-26.

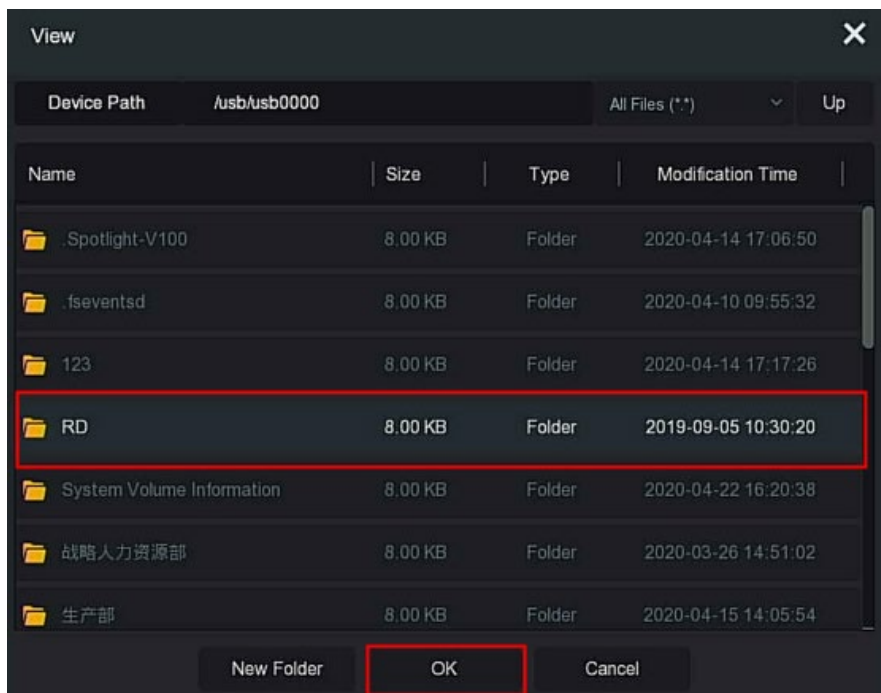



Figure 5-26

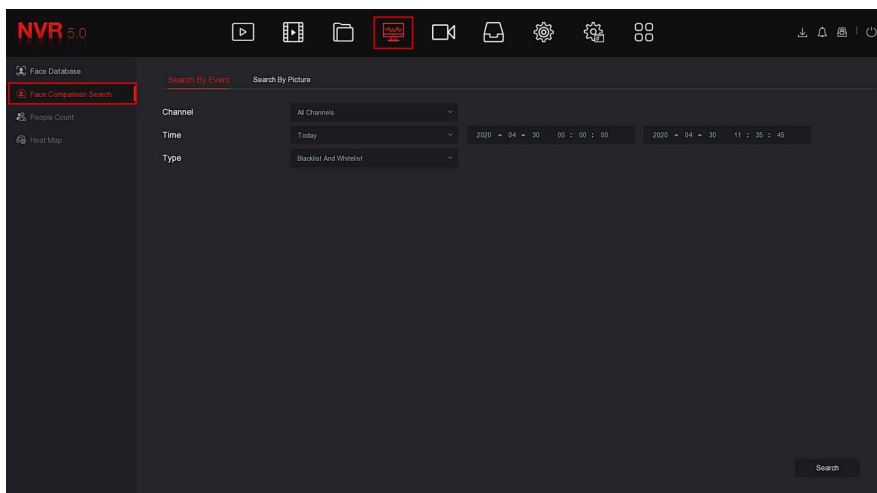
5. Wait for the prompt image import progress completion.
6. Click "OK" to finish adding a multiple face list.

5.3.4.2 Face Comparison Search

Face comparison search is based on image retrieval of face detection events, and playback of the first 5 seconds and last 10 seconds when the picture is captured. At present, the device supports two retrieval methods: search by event and search by picture.

■ To search by event:

1. Before backup, insert the USB device into the NVR USB port.
2. Access the main menu, and then click  → Face Comparison Search to enter Face Comparison Search interface, Figure 5-27-1.



5-27-1

3. Set search criteria (channel, time, type), and then click "Search ", Figure 5-27-2.

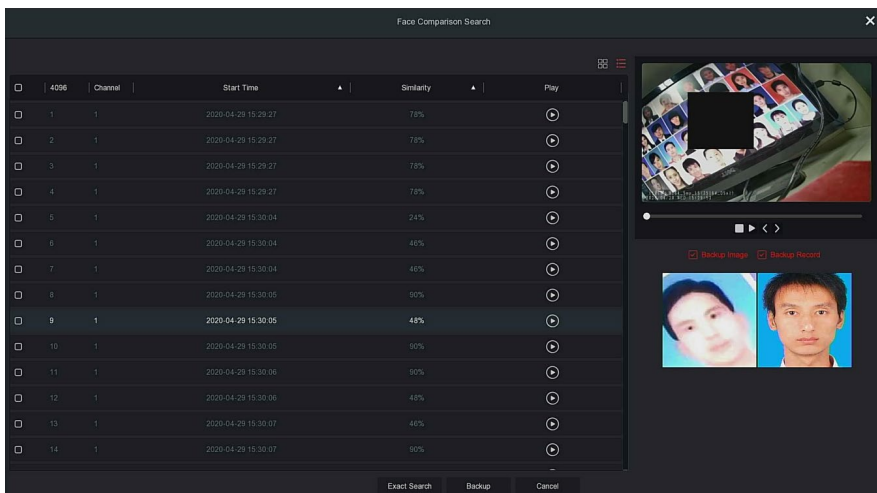









Figure 5-27-2

- **Channel:** Channel where the search results are located.
- **Time:** Search results within a set time frame.
- **Similarity:** Similarity between the search results and the sample.
- **Backup Picture:** Backs up the searched pictures to the U disk.

- **Backup Record:** Backs up the video corresponding to with the searched picture to the U disk.
-  : Playback of the first 5 seconds and last 10 seconds when the picture is captured.
-  : Search results are displayed by thumbnail.
-  : Search results are displayed by list.
-  : 1 page forward.
-  : 1 page backward.
-  : Play 5 seconds of video before and after the searched image.
-  : Stops the video.
- **Exact Search:** Select an event from the search, and find results using the set conditions in the database. Set search conditions (start time, end time, channel), and then click "Confirm" to narrow down the search results, Figure 5-27-3.

Exact Search

Start Time 2020 - 04 - 30 00 : 00 : 00

End Time 2020 - 04 - 30 11 : 38 : 13


☐ All

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	<input type="checkbox"/> 11
<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15	<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18	<input type="checkbox"/> 19	<input type="checkbox"/> 20	<input type="checkbox"/> 21	<input type="checkbox"/> 22
<input type="checkbox"/> 23	<input type="checkbox"/> 24	<input type="checkbox"/> 25	<input type="checkbox"/> 26	<input type="checkbox"/> 27	<input type="checkbox"/> 28	<input type="checkbox"/> 29	<input type="checkbox"/> 30	<input type="checkbox"/> 31	<input type="checkbox"/> 32	<input type="checkbox"/> 33
<input type="checkbox"/> 34	<input type="checkbox"/> 35	<input type="checkbox"/> 36								

Confirm **Cancel**

Figure 5-27-3


4. Select the picture in the search results > select "Backup Picture" or "Backup Record", and then click "Backup".

5. The file starts the backup process, click  in the upper right corner to view the backup progress.

■ Search By Picture

Search By Picture uses uploaded image samples and searches for images meeting the requirements in the hard disk according to similarity, supporting local uploading of samples, and face database uploading samples. The samples upload 1 image at a time.

To view and backup results:

1. Insert the USB device with the sample pictures into the NVR USB interface.
2. Access the main menu, and then click  → Face Comparison Search → Search by Picture" to enter face comparison search by picture interface, Figure 5-28-1.

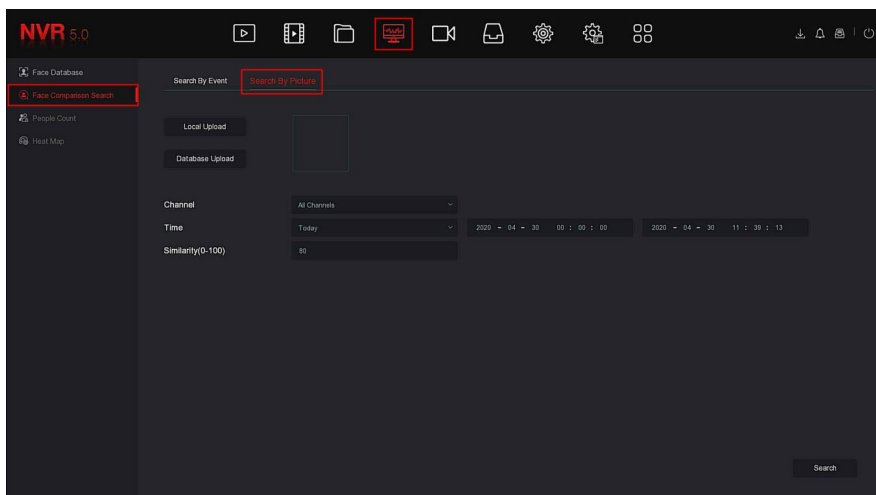


Figure 5-28-1

3. Upload the images using local upload or database upload.

Local Upload

- a. Click "Local Upload" to enter USB to choose the sample, and then click "Save", Figure 5-28-2.

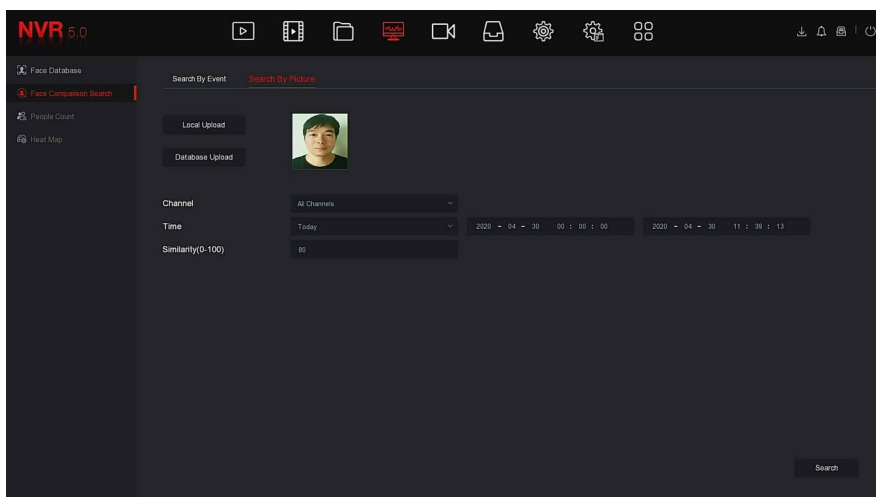


Figure 5-28-2

Database Upload

a. Click "Database Upload", select face database → sample picture → confirm, the picture uploaded successfully, Figure 5-28-3.

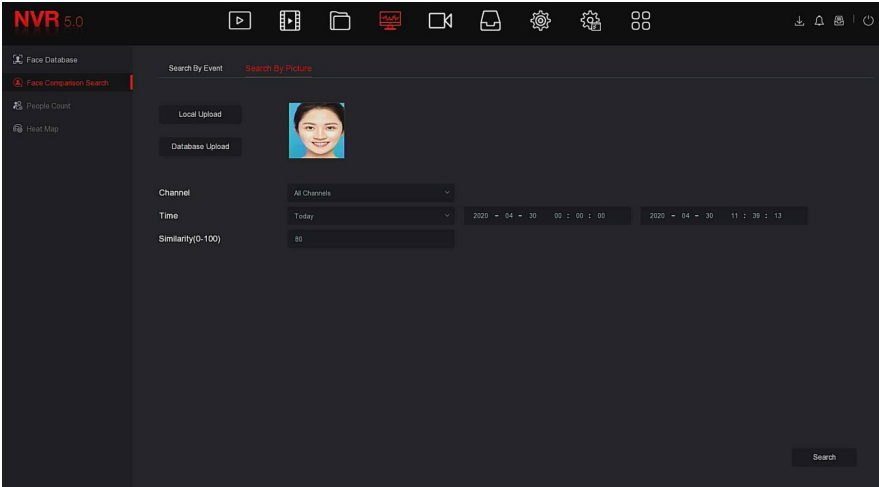


Figure 5-28-3

4. Set search criteria (channel, time, similarity), and then click "Search". The retrieved face comparison results display, Figure 5-28-4.

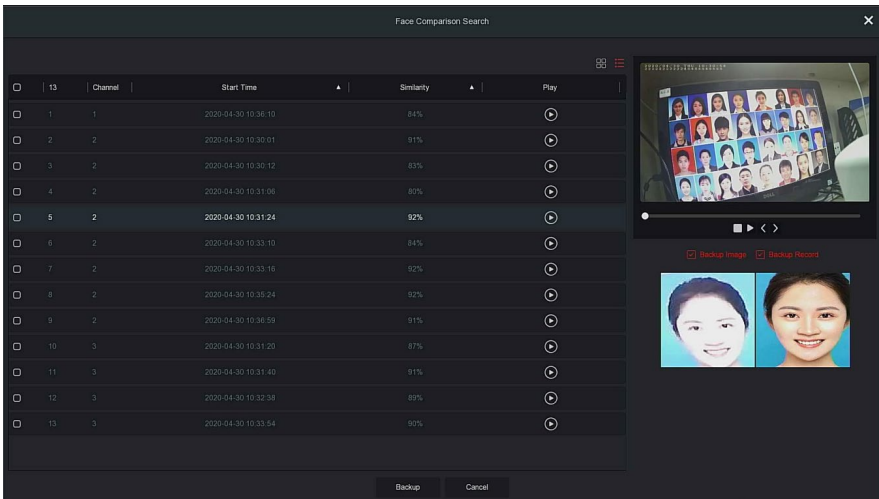



Figure 5-28-4

5. Select the picture in the search results, select "Backup Picture" or "Backup Record", and then click "Backup".
6. The file begins the backup process, click  in the upper right corner to view the backup progress.

5.3.4.3 People Count

Coming soon!

5.3.4.4 Heat Map

Coming soon!

5.3.5 Channel

The channel is composed of device and encode parameters, and can operate Camera, POE, OSD, Image, PTZ, Privacy, Change Name, and the Main/Sub Stream on NVR.

5.3.5.1 Camera

After adding a remote device, you can view and manage the video screen of the remote device directly on the NVR. Each device supports different numbers of remote devices. Use the correct device based on camera needs.

Prerequisites:


Before adding the device, confirm whether the IP camera is connected to the same network as the.



NOTES

- When connecting the device to the internet, it is vulnerable to network security. Always use a secure network and take steps to protect your personal information. It is recommended that you conduct a periodic network security assessment of the device and your network.
- Please understand that you are responsible for properly configuring all passwords and other related product security settings and keeping your username and password secure.

■ To add a camera:

1. In the Access the main menu, and then click  → Camera to enter Camera interface, Figure 5-29-1.

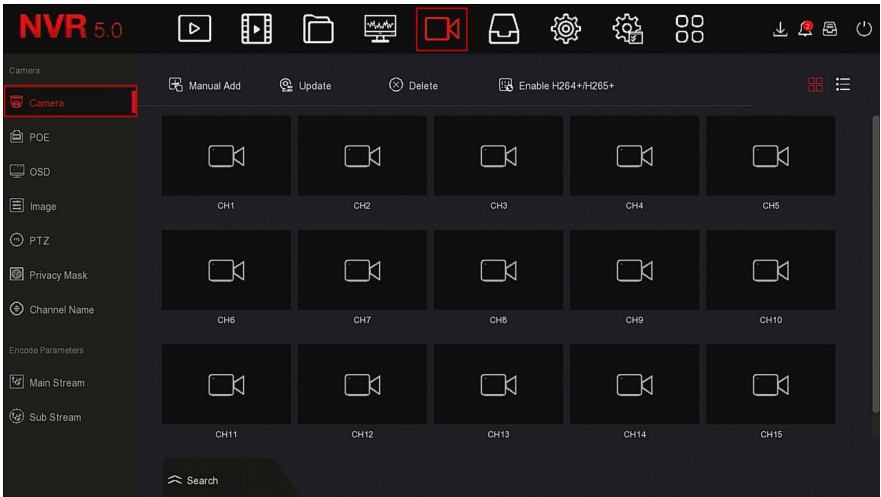



Figure 5-29-1

2. Click  the NVR searches all IP cameras in the LAN according to the filter criteria "Onvif and Private", Figure 5-29-2.

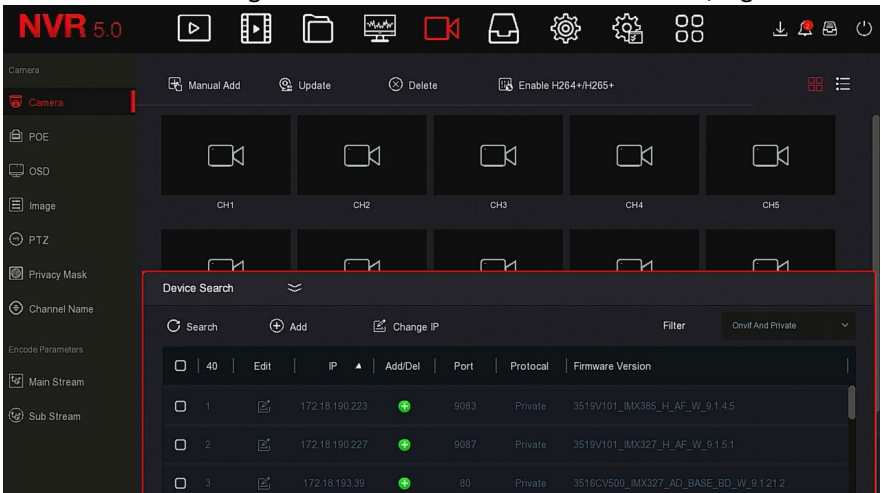








Figure 5-29-2

- : Click the drop-down icon to hide the "Search Device" list.
- : Add the selected camera to device list.
- : Delete the current camera from the device list.
- : Click to modify the IP interface of the camera, modify the IP address, port, and other network information. Enter the camera administrator password, and then click "OK" to complete the modification.
-  **Search**: Search for and displays cameras that meet the filtering conditions in the LAN.
-  **Add**: Add a selection camera to the system.
- **Filter**: Filters the search camera type.
Select from Onvif, Private, Onvif And Private, and Multi Net Segment protocols.



3. Select the device to add, and then click  Add → ,

Figure 5-29-3.

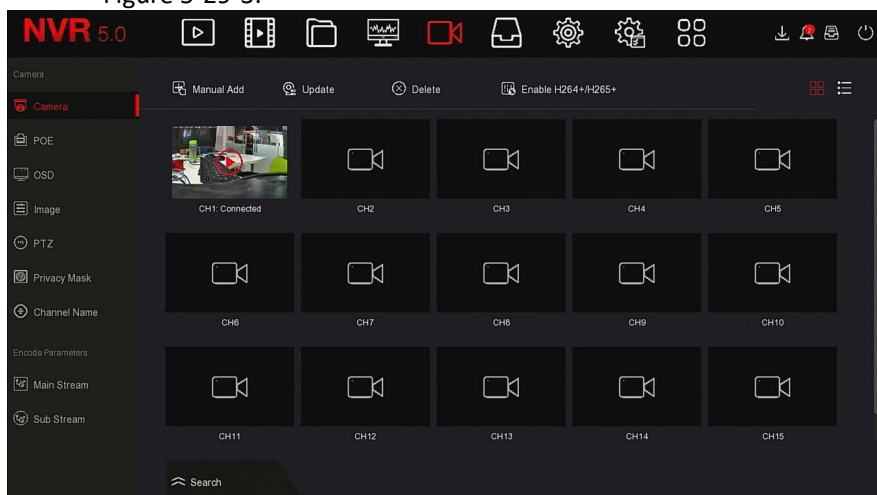



Figure 5-29-3



NOTE

- Click  in the upper right corner to switch to list display, Figure 5-29-4.

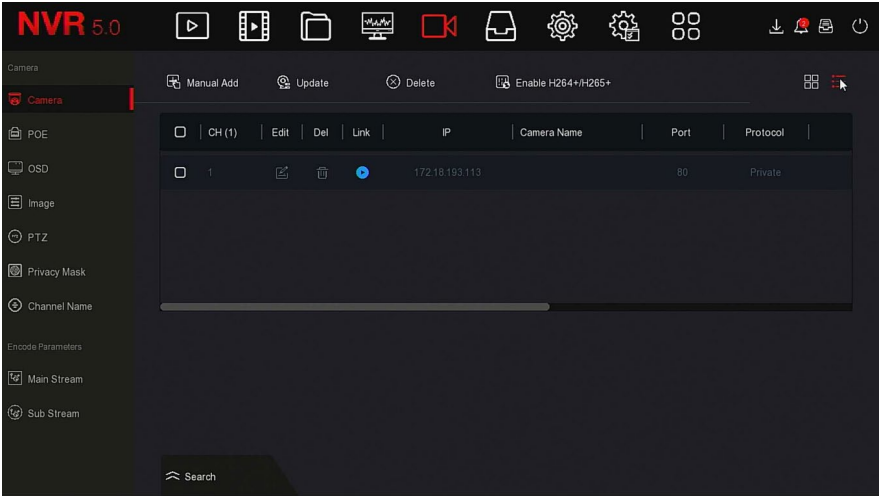


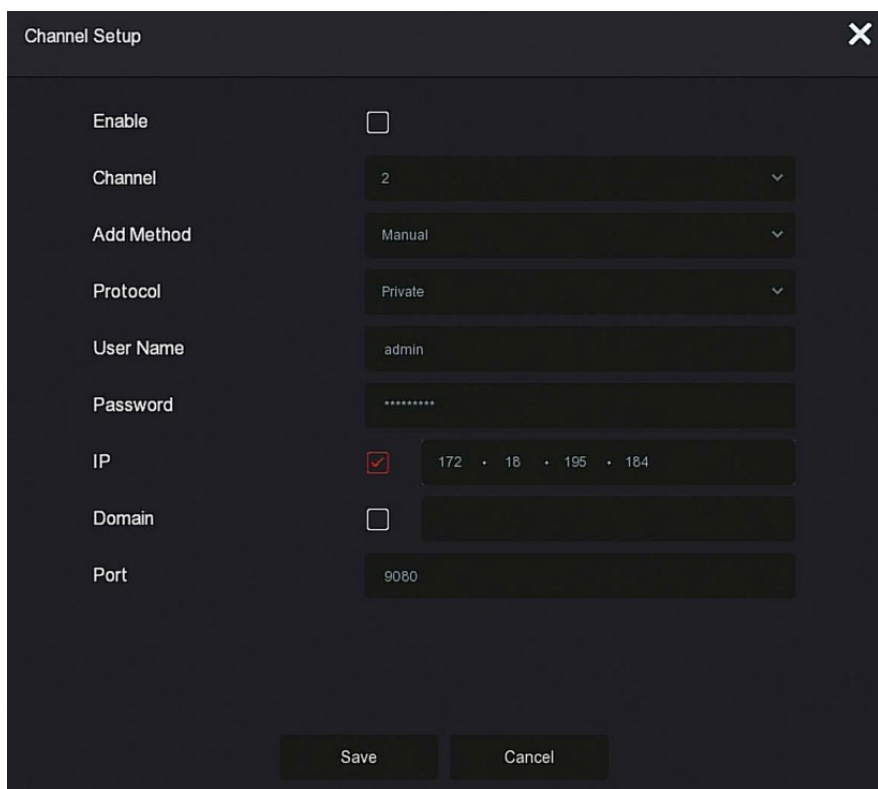


Figure 5-29-4


- network parameters in the LAN, and connect it to NVR.
-  **Manual Add:** Click to enter the "Channel Setup" interface. You can close the channel, modify the protocol, switch the preview code stream, or manually enter device related information to add the device, Figure 5-29-5.
There are two methods of manually adding: IP and domain name. When adding IPC through a domain name, only Private and ONVIF protocols are supported.
-  **Auto Add:** Click NVR to modify all cameras, IP and other.









The image shows a 'Channel Setup' dialog box with a dark theme. It contains several configuration fields: 'Enable' (checkbox), 'Channel' (dropdown menu showing '2'), 'Add Method' (dropdown menu showing 'Manual'), 'Protocol' (dropdown menu showing 'Private'), 'User Name' (text field showing 'admin'), 'Password' (text field with masked characters '*****'), 'IP' (checkbox and text field showing '172 · 18 · 195 · 184'), 'Domain' (checkbox and text field), and 'Port' (text field showing '9080'). At the bottom are 'Save' and 'Cancel' buttons.

Figure 5-29-5

- ✓ **Enable:** The channel enable on/off, defaulted to off. Select "Enable", related channels can be previewed and recorded normally.
- ✓ **Channel:** Select the channel.
- ✓ **Add Method:** Displays how the selected channel was added.
- ✓ **Protocol:** Select the Add Device Protocol (Onvif, Private, or RTSP).
- ✓ **User Name:** The login user name of IPC.
- ✓ **Password:** Login password of IPC.
- ✓ **IP:** Enter the IPC IP address.
- ✓ **Domain:** Add the IPC domain name address, such as shell address and DDNS address.
- ✓ **Port:** Access to the port used by IPC, the default is 80.

➤  **Update:** Select one or more devices of the same type, insert the U disk with the update package of the device into the NVR, click "Upgrade", the system will find the update package in the U disk and

display it, select the upgrade package, click "Upgrade ", Upgrade IPC in batches at the same time.

-  **Delete:** In the list of added devices, select the desired channel, and then click the "Delete" button.
-  **Enable H264+/H265+:** Click to turn on H264 +/H265 + encoding for all channels. To turn off H264 +/H265 + encoding, you can turn off the channel H264 +/H265 + in the Parameters interface.
-  : Click and enter the channel setting interface, this function is the same as "manual add".
-  : Delete the current IPC from the device list.
- **Link:** A  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.



NOTE


- An IPC can only be added once by the NVR.
- When modifying IPs in batches, ensure that the username 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 is displayed in the list.
- After you select a device to add a button, all devices re-assign the IP address.
- Adding mode can be set to "Manual" or "Plug and play" in the POE NVR, which is not settable in the normal NVR.
- Before using the upgrade function, copy the upgrade package corresponding to the device to a USB flash drive, and then 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, the IP devices cannot be powered off. If they are powered off, the upgrade fails and the device cannot start.

5.3.5.2 POE

POE is used to view and set the power supply of each POE NVR channel. It consists of PoE Power and Bonding Configuration.

PoE Power Configuration

To setup PoE power configuration:

- 1. Access the main menu, click  → POE → PoE Power Configuration to enter PoE Power Configuration interface, Figure 5-30.

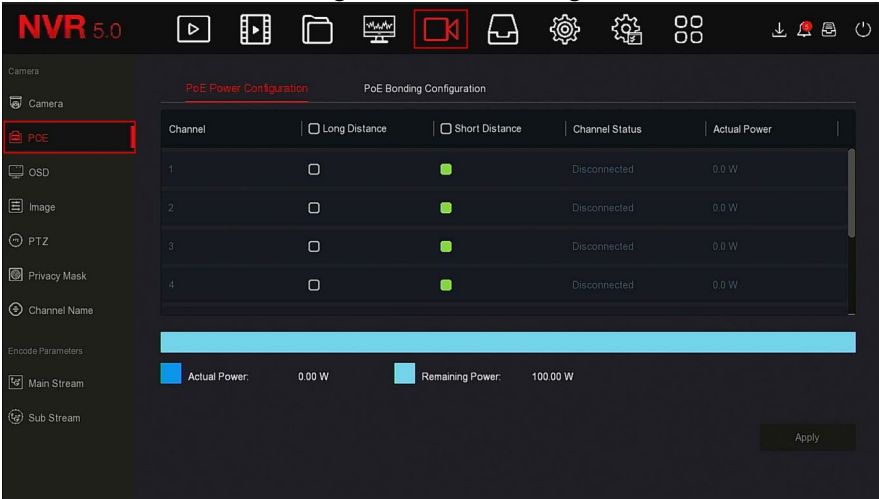



Figure 5-30

- 2. Check the connection status and power usage of each port of POE device, and then select "long distance" or "short distance" according to the connection distance.
- 3. Click "Apply" to save the settings.

■ PoE Bonding Configuration

To setup PoE Bonding:

- 1. Access the main menu, and then click  → POE → PoE Bonding Configuration to enter PoE Bonding Configuration interface, Figure 5-31.

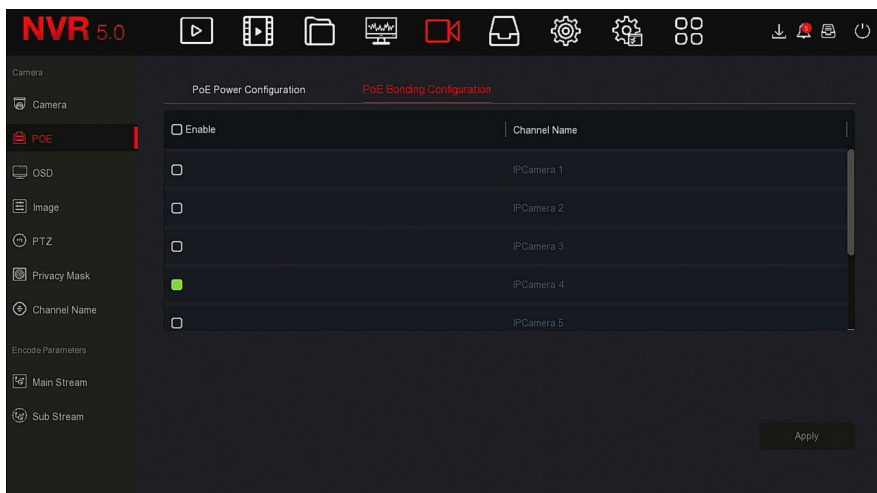



Figure 5-31

2. Select the bound channel and the channel powered by PoE.
3. Click "Apply" to save the settings.

5.3.5.3 OSD

OSD is the abbreviation of "On Screen Display", the OSD of local preview mainly includes time and channel name.

To set the OSD:

1. Access the main menu, and then click  → OSD to enter OSD setting interface, Figure 5-32.

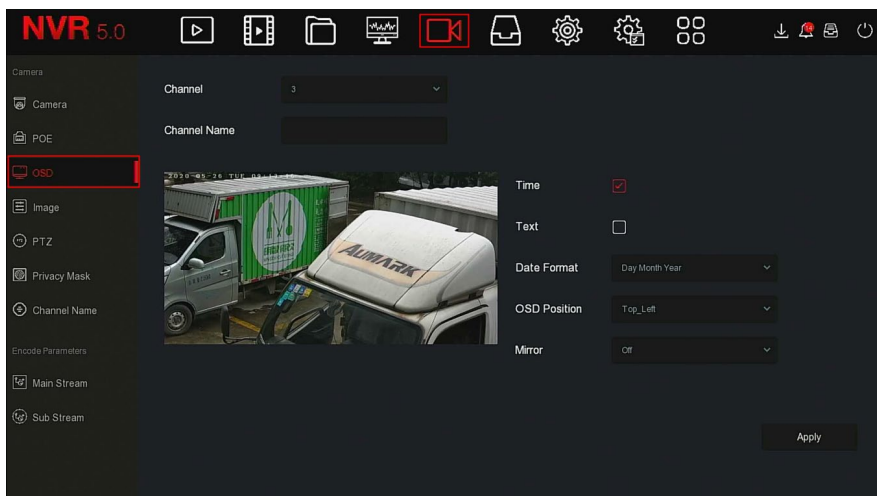


Figure 5-32

2. Select the channel to set the OSD.
3. Set the OSD of the channel.



NOTE


- OSD includes channel name, time, text, date format, OSD position, and mirror.
- The OSD function only supports addition through private protocol.

4. Click Apply to save the settings.

5.3.5.4 Image

In the Image Color interface, the brightness, contrast, saturation, sharpness, fill light, exposure, backlight, white balance, video adjustment, and image enhancement of IP channel video can be adjusted.

To access and adjust parameters in the Image Color interface:

1. Access the main menu, and then click  → Image to enter Image configuration interface, Figure 5-33.

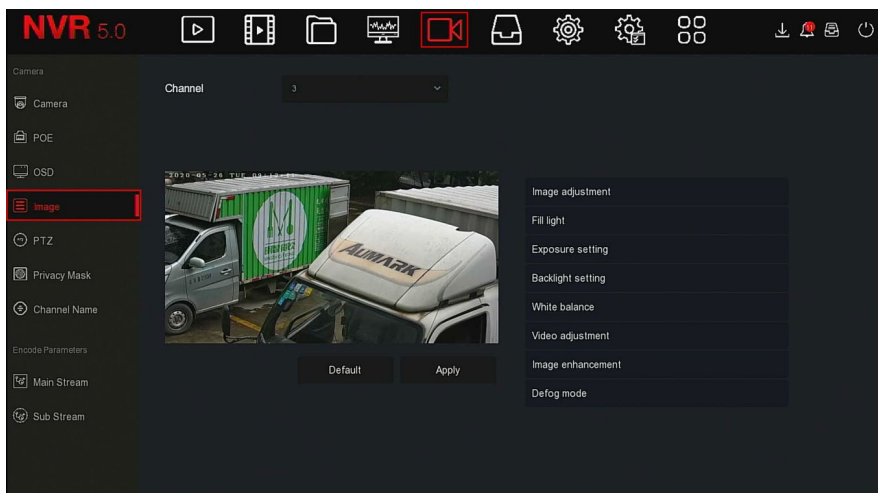


Figure 5-33

2. Select the desired channel, and then adjust the image parameters of the channel.



NOTE

- The user can drag the slider to adjust the parameters.
- Adjusting the parameters of the video will not only change the preview effect of the image, but also the video quality of the image.

3. Click Apply to save the settings.

- **Image adjustment:** According to the actual environment, you can adjust the brightness, contrast, saturation, and sharpness of the preview screen by dragging the progress bar. You can also set the value behind the progress bar, "Brightness", "Contrast", "Saturation", "Sharpness". Valid values range from 0-255 and the default value is 128.
- **Fill light:** The default is auto, the sensitivity is 3, the filtering time is 3, the light brightness is 100. When the fill light mode is set to auto, the device turns on the fill light according to the environment. The user can switch the fill mode to Day, Night, and Scheduled switch according to the video scene, and switch the sensitivity/filtering time of the device according to the fill mode. When the fill light mode is set to Scheduled switch, you can set the daylight and dark time (ie, start and end fill time) and fill light brightness.


- ✓ When the fill mode is set to Day, the device monitor video is added to the daytime effect.
- ✓ When the fill mode is set to Night, the device monitor video is patched into a night effect.
- ✓ **Filtering time:** It is used to prevent the ambient light from getting better and the light is frequently turned on and off, and the filtering time is set. During this time-period, the camera is not disturbed by ambient light.
- ✓ **Light brightness:** It is used to adjust the brightness of fill light, and has an adjustable range of 0 to 100.
- **Exposure setting:** The default is Auto, switching the Manual mode according to need. When Manual is selected, the exposure time and gain control are activated.
- **Backlight:** Is used to set backlight compensation and strong light suppression. The default is off, it can be turned on manually, and the backlight can be set.
- **White balance:** The default is auto and can be switched to "Manual".
 - ✓ **Manual white balance:** Support for R, G, B gain adjustable, adjustment range is 0 to 255, click "Save" after setting.
- **Video adjustment:** Here you can turn on and set 2D/3D digital noise reduction.
- **Image enhancement:** Here you can select the flicker control mode, turn on and set the wide dynamic intensity.
 - ✓ **Flicker control:** The flicker control mode is selected according to the IPC installation environment and the flicker standard. The PAL standard is 50HZ and the NTSC standard is 60HZ. When the device is installed outdoors, select outdoor. The default setting is PAL.
 - ✓ **Sensor linear WDR:** The default is "Shutdown", you can switch the wide dynamic strength (Automatic, Weak, Moderate, Strong, and Super) in the drop-down menu.
- **Defog mode:** Sets the defogging mode and strength.
 - ✓ **Defog mode:** The default is off, and you can select On or Auto from the drop-down menu.
 - ✓ **Defog strength:** The default is 0. When defogging mode is on, the defogging intensity can be set. The range can be set from 0 to 255.



NOTE

- The camera image interface only displays the devices supported functions.

5.3.5.5 PTZ

On the menu page, click  → PTZ to enter the PTZ setup interface, Figure 5-34-1. In the PTZ setup interface, channels can be switched to adjust the pan/tilt movement speed and control the pan/tilt movement direction.

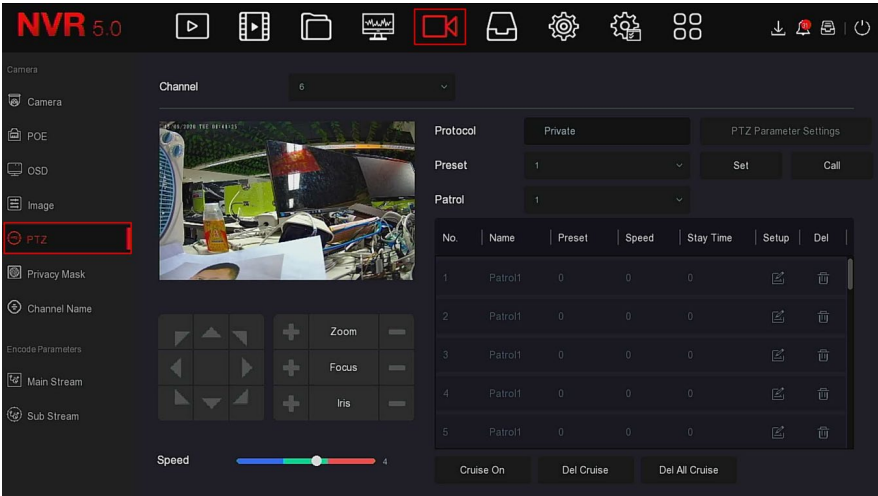






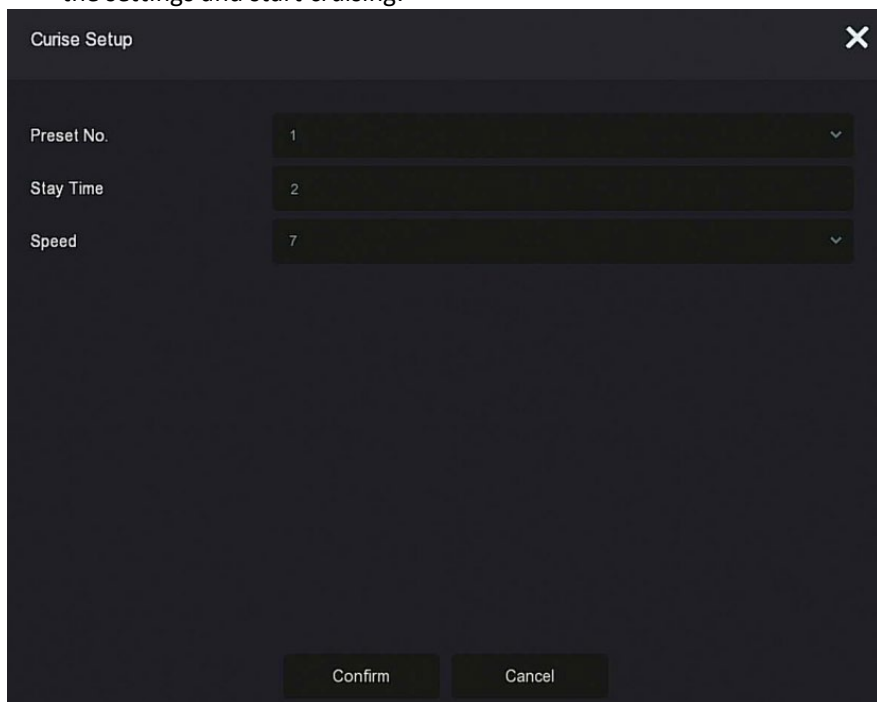


Figure 5-34-1

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

- **Channel:** Select the dome camera's channel.
- **Zoom:** Adjust the camera magnification by  / , to adjust the long-range/wide-angle function.
- **Focus:** Use the  / , zoom in/out function to adjust the camera to focus.
- **Iris:** Use the  / , zoom in/out to adjust the aperture of the camera.
- **Speed:** Is used to set the pan/tilt rotation speed operation. For example, the rotation speed of 7 is much greater than the rotation speed of 1.
- **Preset setting:** Through the direction of the button 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, Figure 5-30-2. Click "OK" to return to the cruise settings screen, and then click "Cruise on" again to save the settings and start cruising.



Cruise Setup

Preset No. 1

Stay Time 2

Speed 7

Confirm Cancel

Figure 5-34-2

- ✓ **Preset No.:** Select the preset points.
- ✓ **Stay Time:** Stay time on the Preset.
- ✓ **Speed:** Speed for Cruise.
- **Cruise On:** After clicking, the device cruises according to the selected cruise route.
- **Del Cruise:** Deletes a cruise line. Select the cruise line, click to "Del Cruise", and complete the cruise line to remove.
- **Del All Cruise:** Deletes all cruise lines.




NOTE

- The NVR supports up to 256 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 vary.

- Some NVRs support the setting of dome or pan/tilt parameters for analog channels. Before controlling the dome or pan/tilt, confirm that the RS-485 control line between the pan/tilt decoder and the hard disk video recorder is connected correctly and configure the parameters of the pan/tilt decoder in the device.

To configure the PTZ parameters:

1. Access the main menu, and then click  → PTZ to enter PTZ configuration interface, Figure 5-34-3.

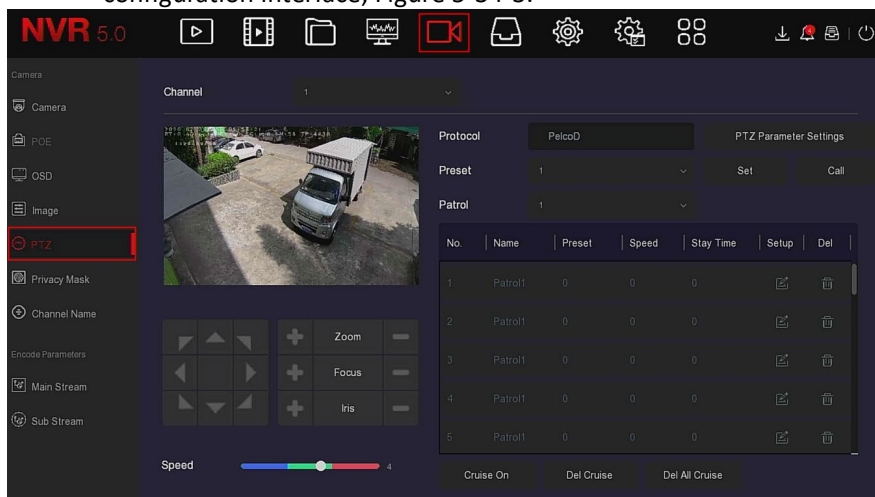


Figure 5-34-3

2. Select the PTZ channel, and then click "PTZ parameter setting" to enter the PTZ parameter setting interface, Figure 5-34-4.

PTZ Parameter Settings

Protocol	PelcoD
Baud Rate	9600
Data Bit	8
Stop Bit	2
Check	EVEN
Address(0-255)	0

Confirm Cancel

Figure 5-34-4

- Set the relevant parameters (protocol, baud rate, data bit, stop bit, parity bit, etc.) of the connected camera, and then click "Confirm" to complete.

- **Channel:** Select the PTZ camera.
- **Protocol:** Select the pan/tilt protocol of the brand/model of the access device (if the channel is connected to a network pan/tilt, select "Private", if the channel is connected to an RS485 pan/tilt, select other options).
- **Baud Rate:** Select the baud rate used to access the PTZ to control the PTZ and camera of the corresponding channel. The default is 2400.
- **Data Bit:** The default value is 8.
- **Stop Bit:** The default value is 2.
- **Check:** The default value is EVEN.
- **Address (0-255):** Set the address to access the PTZ. The default is 0.




NOTE

- The PTZ setting is used to set the PTZ camera added to the analog channel. All parameters (protocol, address, baud rate, data bit, stop bit, parity bit) must be consistent with the parameters of the PTZ decoder.

5.3.5.6 Privacy Mask

Privacy mask blocks sensitive or privacy-related areas in the monitoring scene image.

To set the privacy mask:

1. Access the main menu, and then click  → Privacy Mask to enter Privacy Mask interface, Figure 5-35-1.

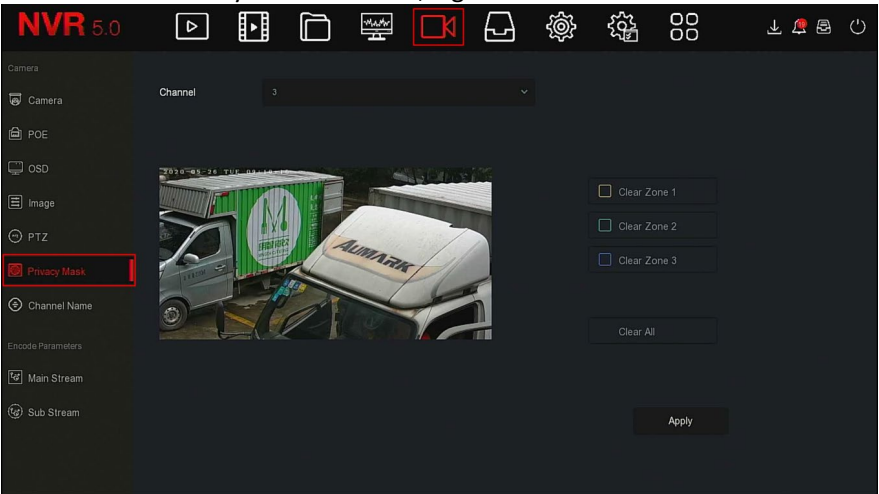


Figure 5-35-1

2. Select the channel, and then use the mouse to define the occlusion area in the video, Figure 5-35-2.

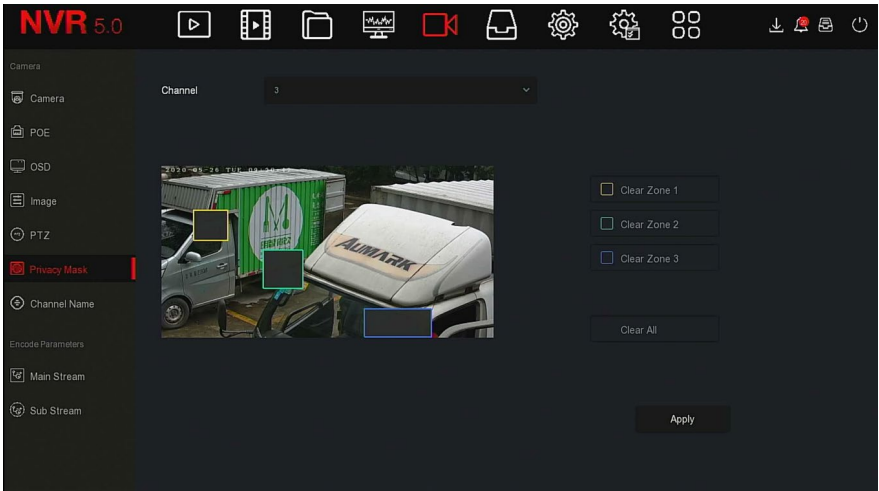


Figure 5-35-2

3. Click "Apply" to save the settings.
 - **Channel:** Select the Channel.
 - **Clear All:** Clears all selected area masks.
 - **Clear Zoom1, 2, 3:** Clears the selected occlusion area 1, 2, 3.




NOTE

- Up to 3 occlusion areas can be set. Click clear area X to delete this area setting.

5.3.5.7 Channel Name

To change the channel name:

1. Access the main menu, and then click  → Channel Name to enter Channel Name interface, Figure 5-36.

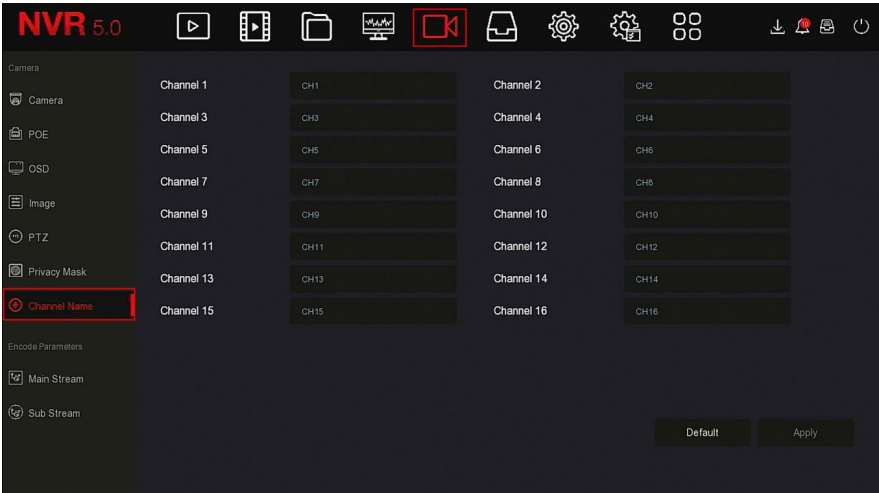



Figure 5-36

2. Select the channel, and then modify the channel name.
3. Click "Apply" to save the settings.

5.3.5.8 Main Stream

To adjust the main stream parameters:

1. Access the main menu, and then click  → Main Stream to enter main stream param setup interface, Figure 5-37.

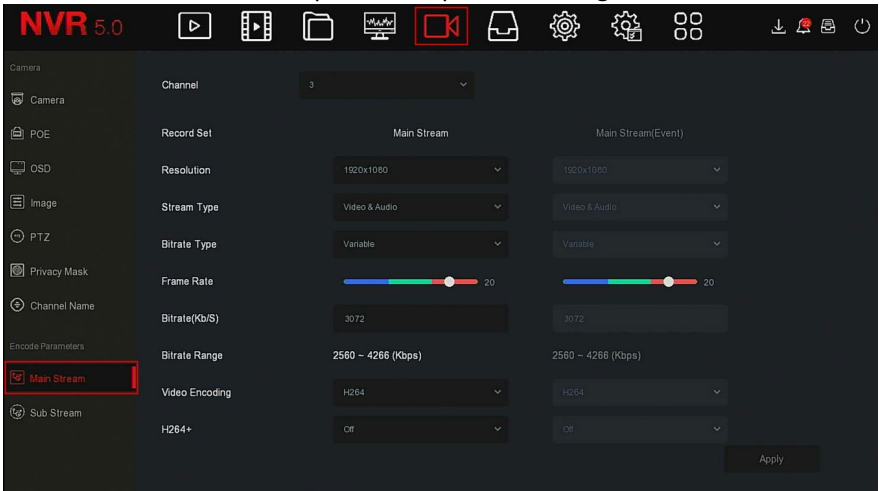


Figure 5-37

2. Set the recording parameters, refer to table.

Name	Details	Setting
Channel	Select the channel.	Select using`` the drop-down box.
Record Set	<p>There are two types of video compression parameters: Main Stream (timing) and Main Stream (Event).</p> <p>Main Stream (timing): Encoding parameters for ordinary recording.</p> <p>Main Stream (Event): encoding parameters for events such as motion detection, alarm input, and smart detection</p>	<p>NOTE: The event parameters cannot be set and are consistent with the timing parameters.</p>
Resolution	Resolution refers to the number of pixels contained in a unit length.	<p>Select using the drop-down box.</p> <p>NOTE: The encoding resolution is related to the IP device.</p>
Stream Type	The stream type is Video & Audio (composite stream).	Select using the drop-down box.
Bitrate Type	<p>The code stream mode is divided into variable code rate and constant code rate.</p> <p>Variable bit rate: The bit rate changes according to the scene.</p> <p>Constant bit rate: The bit rate should be encoded according to the upper limit of the bit rate, and the video quality cannot be</p>	<p>Select using the drop-down box.</p> <p>NOTE: The bitrate type is related to the IP device.</p>

	adjusted.	
Frame Rate	Video frame rate refers to the number of video frames per second.	Adjust via slider.
Bitrate (Kb/S)	Set the code stream value to change the quality of the image. The larger the code stream, the better the image quality.	Modify it directly in the input box.
Bitrate Range	6000 to 12000 (Kbps)	
Video Encoding	H264, H265	Select using the drop-down box. NOTE: The encoding type is related to the IP device.
H265+	Enable/Off	


Table 5-4

3. Click "Apply" to save the settings.

5.3.5.9 Sub Stream

Sub stream parameters are used for network transmission. When the network environment is poor, users can use sub streams for network previews to reduce the transmission bandwidth. Sub streams are also used for mobile phone monitoring.

To use the sub stream:

1. Access the main menu, and then click  → Sub Stream to enter sub stream param setup interface, Figure 5-38.

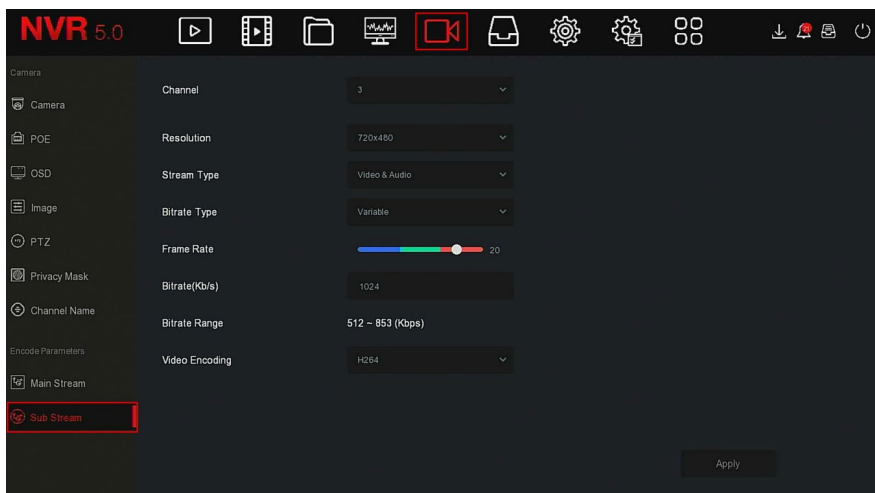


Figure 5-38

2. Set recording parameters, refer to Table 5-4.
3. Click “Apply” to save the settings.


5.3.6 Storage

Storage is composed of Record, Storage Device, Storage Mode, Auto Backup, and Advanced.

5.3.6.1 Record

NVR supports two recording plans, drawing method and editing method.

■ To set the recording plan by drawing method:

1. Access the main menu, and then click  → Record to enter Record Setup interface, Figure 5-39-1.

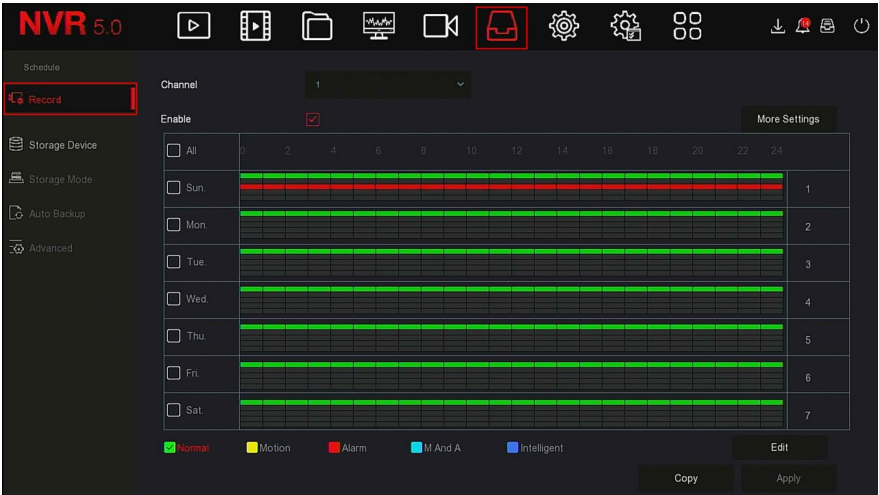


Figure 5-39-1

2. Set the recording parameters (enable, select channel, recording type (Normal, Motion, Alarm, M And A, Intelligent), week, and other options).
3. Left click the mouse button to locate the starting point of the drawing area, drag the mouse to determine the time of the recording plan, release the mouse button to save as a recording plan, Figure 5-37-2.



Figure 5-39-2

4. Repeat steps 3 to set up a complete recording plan.
5. After the recording plan is set, the channel displays the recording plan by type (color), Figure 5-39-3.




Figure 5-39-3



NOTE

- There are 6 time periods available for each day. The device starts the corresponding type of recording within the set time range.
- The smallest unit of the drawing area is 1 hour.
- Select "All" to edit the time period of all week.
- You can select the " ☐ " in front of several days of a week at the same time, edit the selected days simultaneously, and draw the time period.
- In the same period of time, either motion video or M&A video can be selected, they cannot be used together.

■ To set the recording plan by editing method:

1. In Access the main menu, and then click  → Record to enter Record setup interface.
2. Click "Edit" to enter "Record Schedule" setting interface, Figure 5-39-4.

Record Schedule

Current Set Week: Sun.

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

Use To:

☐ All
☒ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☐ Fri. ☐ Sat.

Apply Save Cancel

Figure 5-39-4

3. Select the "recording type" of each time period. There are six time periods for setting each day. Select the corresponding week in "Apply" to apply to the corresponding week.
4. Click "Save" to complete the setting, the system returns to "Record" interface.

- **Channel:** Select the channel number.
- **Record Type:** Select the checkbox to select corresponding record type (Normal, Motion, Alarm, M And A, Intelligent).
- **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:** You can set the prerecord time(s) and post-record(s), Figure 5-39-5.

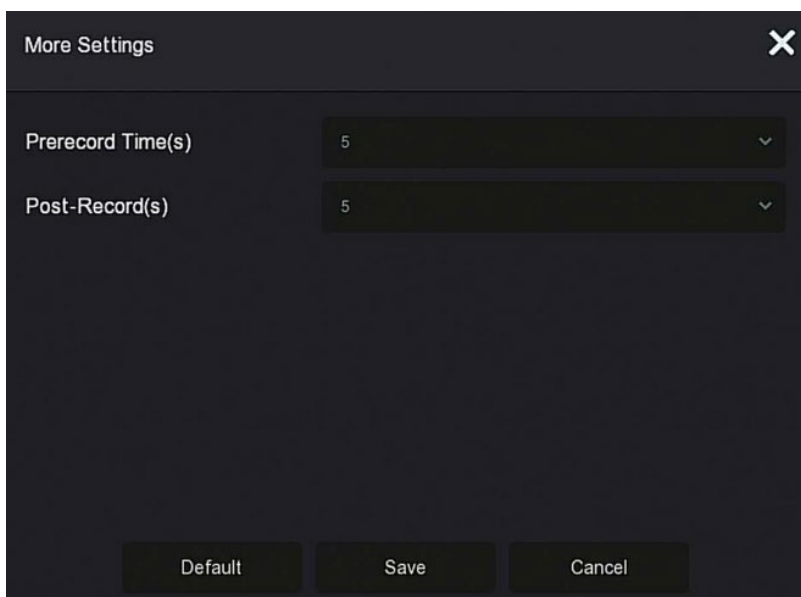


Figure 5-39-5

- **Copy:** After completing the setup, you can click "Copy" to copy the current setup to other channel(s), Figure 5-39-6.

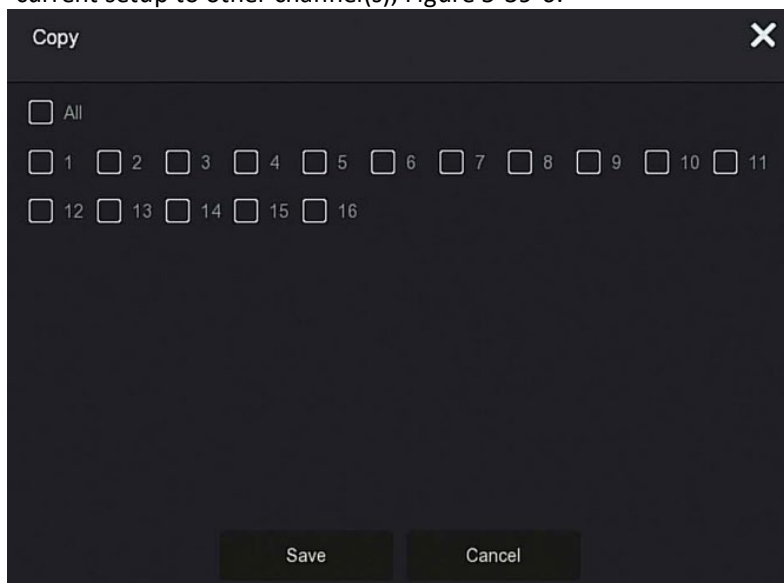


Figure 5-39-6

5.3.6.2 Storage Device


The storage device is used to format the hard disk and view the hard disk's applicable status and capacity.

■ Formatting the hard drive

Prerequisites:

Install the hard disk correctly. Refer to the "NVR Quick Start Guide" section of the manual.

To format the hard disk:

1. Access the main menu, and then click  → Storage Device to enter storage device interface, Figure 5-40-1.

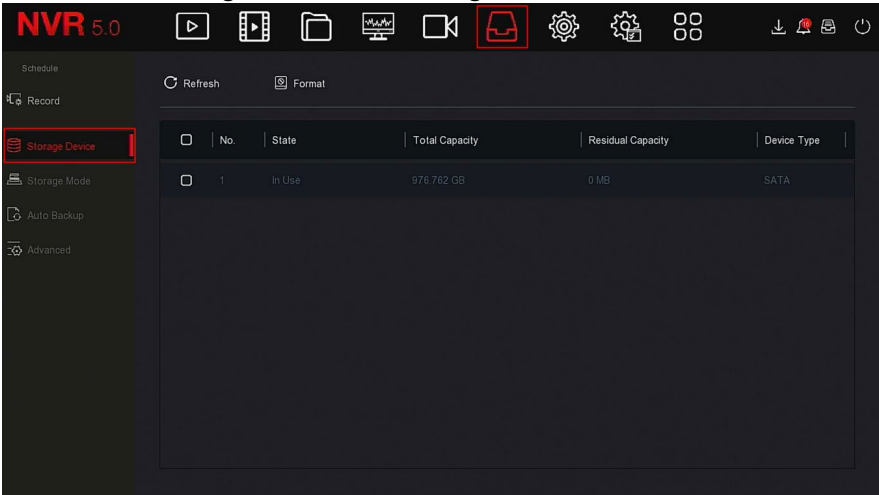


Figure 5-40-1

2. Select the hard drive, and then click Format → Confirm, Figure 5-40-2.

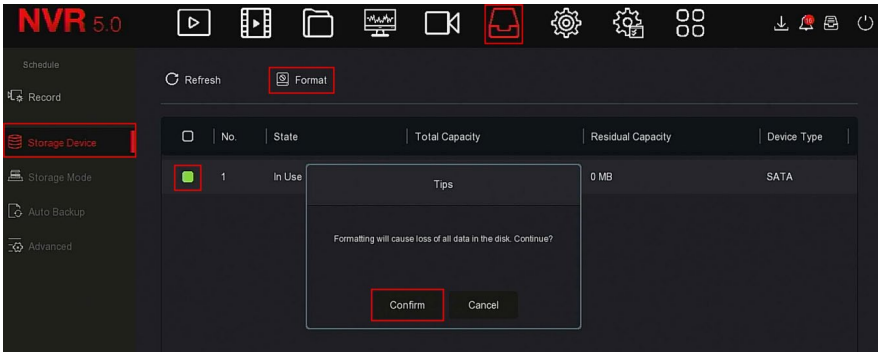


Figure 5-40-2

3. Wait for the formatting progress bar to finish, and then click "Confirm". The NVR restarts and completes formatting. The status of the hard disk is "In Use" at this time.

- **No.:** The number of HDD that connect the system.
- **State:** Detects the current working status of HDD. It can only be used when it displays "In use"; after formatting is completed.
- **Total Capacity:** The total available HDD capacity. The single HDD capacity cannot exceed the maximum capacity of 8TB.
- **Residual Capacity:** Displays the residual capacity of the current HDD.
- **Device Type:** SATA.
- **Refresh:** Updates the listed information.



NOTE

- "No Disk" indicates that the device is not connected, or the hard disk is not detected.
- The hard disk must be formatted once it 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, the NVR restarts.

5.3.6.3 Storage Mode

Coming soon!

5.3.6.4 Auto Backup

Coming soon!

5.3.6.5 Advanced

Coming soon!

5.3.7 System

5.3.7.1 General

In the general interface, you can view and set the NVR language, recording mode, recording days, video standards, standby time, and date settings.

To view/set the general settings:

1. Access the main menu, click  → General to enter the general setup interface, Figure 5-41.

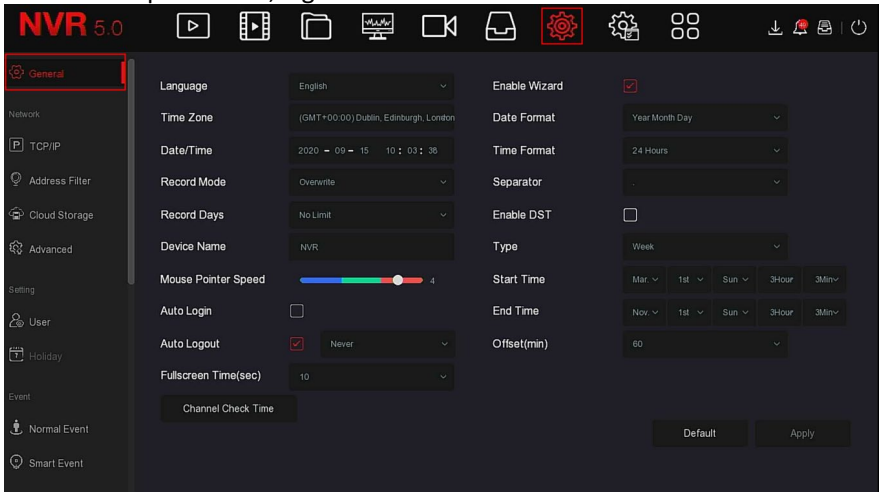


Figure 5-41

2. **Steps 2:** Set the language, time zone, recording mode, recording days and other information of the device as needed.
 - **Language:** Set the default language of the system, currently supports Simplified Chinese, Traditional Chinese, English, Polish, Czech, Russian, Thai, Hebrew, Bulgarian, Arabic, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Roman, Korean, Dutch, Greek, Vietnamese, Japanese, the default is English.
 - **Time Zone:** Select the time zone of the device from the drop-down box. For example: Beijing is GMT+8:00.
 - **Date/Time:** Click on the need to modify the location, pop-up keyboard, enter the date and time through the keyboard.
 - **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 is automatically overwritten.
 - **Record Days:** Sets the number of days for NVR recording storage (no Limit, 30, 15, 7, 6, 5, 4, 3, 2, 1).
 - **Device Name:** Fill in the name of the device, the default is NVR.

- **Mouse Pointer Speed:** Set the mouse movement speed 0 to 5. The higher the value, the faster the mouse response, and the lower the value, the slower the mouse response.
- **Auto Login:** The default is off, and it automatically logs in to the system when the device is turned on.
- **Auto Log Out:** The default is 10 minutes. The range can be set 1, 2, 5, 10, 20, 30, 60, and Never, with "Never" for the permanent standby.
- **Fullscreen Time(sec):** Sets the "Fullscreen Display" time of the alarm linkage, the default is 10 seconds, and it can be set to 5, 10, 15, and 20 seconds.
- **Enable Wizard:** Click the ☐, open the startup wizard each time it is booted.
- **Date Format:** Select the date display format ("Day Month Year", "Month Day Year", and "Year Month Day").
- **Time Format:** Choose a 24 or 12-Hour format.
- **Separator:** Select the separator for the date format.
- **Enable DST:** Check ☐, to open the daylight savings time function and set the parameters (Type, Date, Start Time, End Time, and so on).
- **Type:** Daylight savings time setting.
- **Start Time:** The start time for daylight savings time.
- **End Time:** The end time for daylight savings time.
- **Offset(min):** The offset time for daylight savings time.
- **Channel Check Time:** Select the channel whose time needs to be checked, set the update interval, and then click "Save" to set the channel time to be consistent with the NVR time.

3. Click "Apply" to save the settings.

5.3.7.2 TCP/IP

The network is composed of the TCP/IP, Address Filter, Cloud Storage, and Advanced.

■ TCP/IP

TCP/IP is composed of TCP/IP, DDNS, PPPOE, NTP, FTP, and UPNP, Figure 5-42.

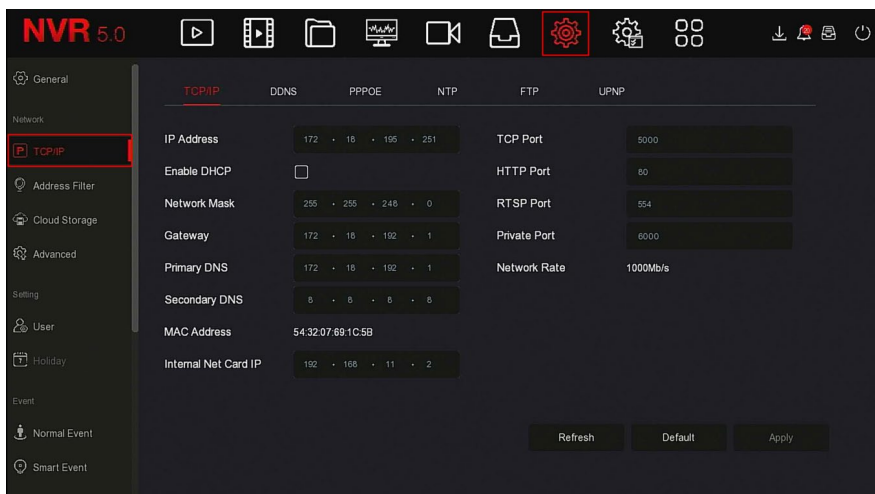


Figure 5-42

❖ TCP/IP


Set the IP address, DNS server, and other NVR information to ensure that it can communicate with other devices in the network.



NOTE

- If the device is used for network monitoring, the network must be set up for normal use.
- Factory default IP: 192.168.1.88.

To configure network parameters:

1. Access the main menu, and then click  → TCP/IP → TCP/IP to enter TCP/IP to set the interface, Figure 5-43.

TCP/IP	DDNS	PPPOE	NTP	FTP	UPNP
IP Address				TCP Port	5000
Enable DHCP	<input type="checkbox"/>			HTTP Port	80
Network Mask				RTSP Port	554
Gateway				Private Port	6000
Primary DNS				Network Rate	1000Mb/s
Secondary DNS					
MAC Address	54:32:07:69:1C:5B				
Internal Net Card IP					
				Refresh	Default
					Apply

Figure 5-43

2. Configure the IP Address, Network Mask, Gateway, Primary DNS, and other related network parameters.
3. Click "Apply" to save the settings.
 - **IP Address:** Enter the IP address of NVR.
 - **Enable DHCP:** Enable/disable DHCP (Dynamic Host Configuration Protocol) function. "IP Address", "Network Mask", and "Gateway" cannot be set when DHCP is enabled.
 - **Network Mask:** According to the situation set.
 - **Gateway:** According to the situation set, with the IP address in the same network segment.
 - **Primary DNS:** This is the DNS server IP address, 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.
 - **MAC Address:** Displays the physical address of the NVR.
 - **TCP Port:** Default value is 5000, set according to the port.
 - **HTTP Port:** Default value is 80, set according to the port.
 - **RTSP Port:** Default value is 554, set according to the port.
 - **Private Port:** Default value is 6000, set according to 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.



NOTE

- 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 must reset the IP address and other parameters.
- Only PoE-capable devices have an internal network card function.
- The internal network adapter IP and NVR IP address cannot be on the same network segment.


❖ 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, verify the device supports the type of domain name resolution server, and log in to the DDNS service provider's website to register username, password, domain name, and other information on the WAN PC.

To configure DDNS:

1. Access the menu page, and then select  → TCP/IP → DDNS to enter the DDNS interface, Figure 5-44.

TCP/IP **DDNS** PPPOE NTP FTP UPNP

DDNS Type: ORAY

Enable DDNS: ☐

Refresh Time(Sec): 60

User Name:

Password:

Domain:

Default Apply

Figure 5-44

2. Enable DDNS, select the DDNS type, enter the refresh time (Sec), username, and password.
3. Click "Apply" to save the DDNS settings.
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 failed.

- **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, ZEBEYE. Multiple DDNSs can co-exist and the user can select and set them as needed.
- **Refresh Time (Sec):** Do not register too quickly, the interval between registrations must be greater than 60 seconds. Too many registration requests may result in a server attack report.
- **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.




NOTE

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

❖ PPPOE

PPPoE(Point-to-Point Protocol over Ethernet) is one of the ways in which XVR devices access the network. After obtaining the PPPoE username and password provided by the ISP, you can establish a network connection through PPPoE dialup. After the connection is successful, the XVR device automatically obtains the dynamic IP address of the WAN.

To configure PPPoE:

1. Access the main menu, and then click  → TCP/IP → PPPOE to enter PPPOE to set the interface, Figure 5-45.

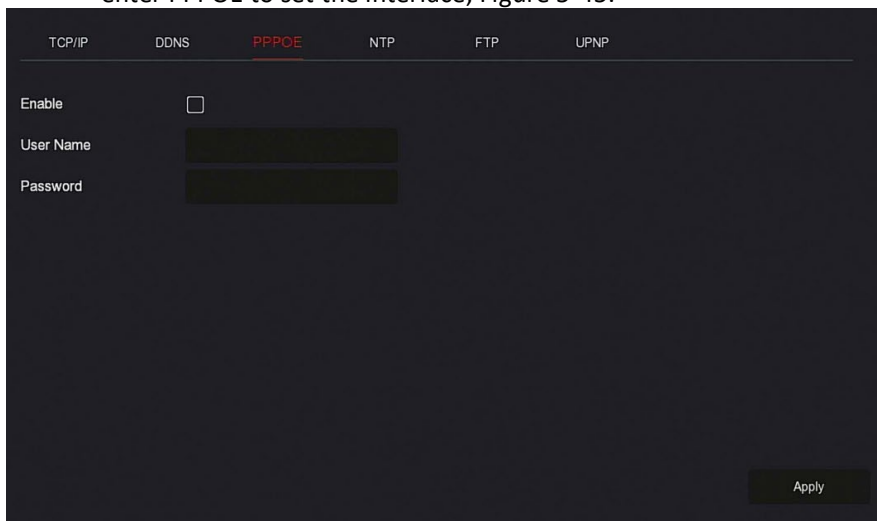



Figure 5-45

2. Select "Enable", and then enter the username and password of the PPPoE.
3. Click "Apply" to save the configuration.
 - **Enable:** Turn on/off the device's PPPoE function.
 - **User Name:** The PPPoE username provided by the ISP.
 - **Password:** The password corresponding to the username.




NOTE

- After successfully setting the PPPoE, check the status of the PPPOE from  Maintenance → Network.
- After completing the PPPoE settings, the device automatically dials after restarting. After successful dialing, the network information can be displayed in the network status, and users can access the device through the IP address.
- After the configuration is complete, the IP address of the TCP/IP interface cannot be modified.

❖ NTP

After enabling NTP (Network Time Protocol), the system can periodically adjust the device time through the NTP server to ensure accurate device system time.

To configure NTP:

1. Access the main menu, and then click  → TCP/IP → NTP to enter NTP to set the interface, Figure 5-46.

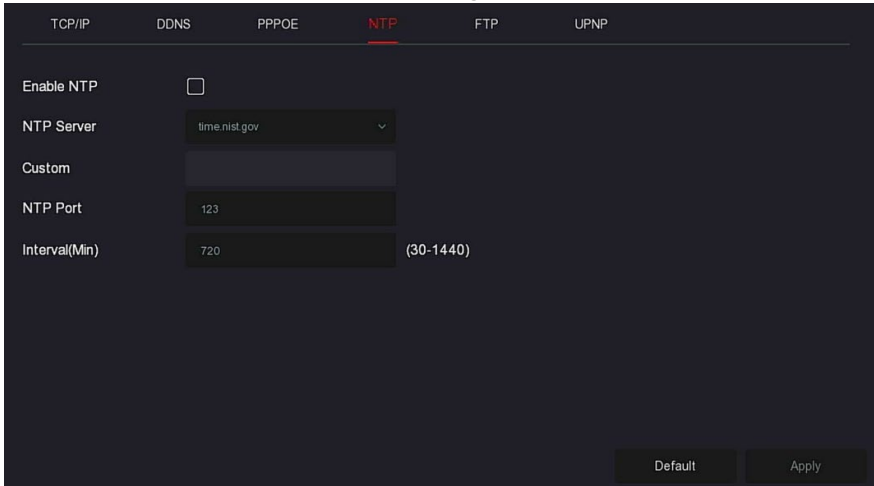


Figure 5-46

2. Select "Enable NTP" to set NTP related parameters.
 - **NTP Server:** Select the domain name of the NTP server.
 - **Custom:** When the NTP server selects "Custom", enter the NTP server domain name manually.

- **NTP Port:** Select the port corresponding to the NTP server.
- **Interval (Min):** The interval of NTP time correction, the default is 720 minutes, and the settable range is 30 to 1440 minutes.

3. Click "Apply" to save the settings.

❖ FTP

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

Prerequisites

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



NOTE

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

To set the FTP server:


1. Access the main menu page, and then click  → Network → FTP to enter the FTP interface, Figure 5-47.

Figure 5-47

2. Select "Enable FTP", and then enter parameters such as the FTP Server, FTP Port, User Name, Password, and the File Upload path.

3. Click "Apply" to save the configuration.
4. Click "Test" to determine whether the network connection and FTP configuration are correct.



NOTE

- If the test fails, recheck the network or FTP configuration.
- **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 FT server.
- **User Name:** Enter the username to login the FTP server.
- **Password:** Enter 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 saves the uploaded image in the root directory of the FTP server.
 - ✓ Enter the name of the remote directory, the system creates a folder with the corresponding name under the FTP root directory and saves the uploaded pictures in this folder.
- **Channel:** Select the channel to upload the capture file.
- **Week:** Select the time to upload the FTP file according to the week. You can set 2 time periods each week.
- **Time period 1& 2:** Set the time period for uploading FTP files in one day.
- **Test:** Click "Test" to verify the 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) Access the main menu, and then select  → TCP/IP → 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.

To configure UPnP:

1. Access the main menu page, and then click  → TCP/IP → UPnP to enter the UPnP interface, Figure 5-48.

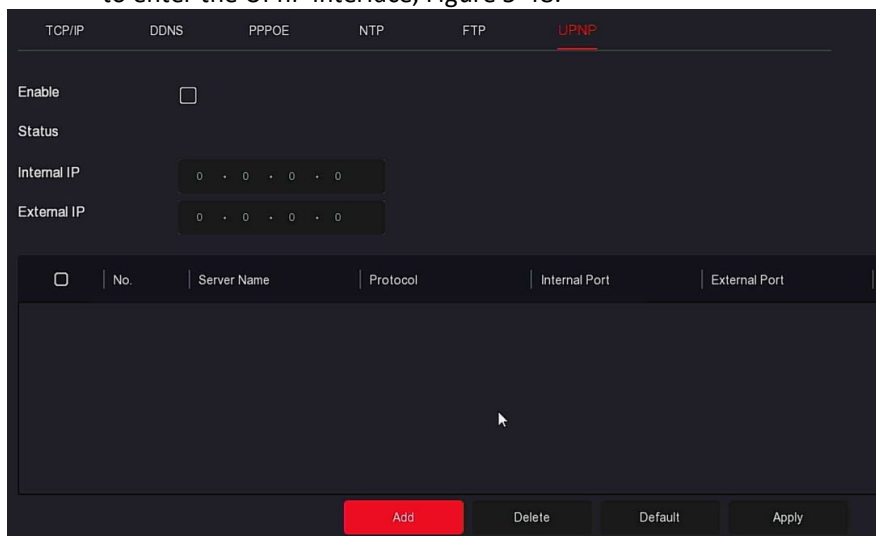


Figure 5-48

2. Enable the UPnP function and configure related parameters such as Internal IP, External IP, and port mapping information of the UPnP route.
3. Click "Apply" to save the configuration.

- **Enable:** Turn on/off the device UPnP function.
- **Status:** Displays the mapping status of UPnP.
- **Internal IP:** Enter the router's LAN port address. After the mapping is successful, the IP address is automatically obtained without setting.
- **External IP:** Enter the router's WAN port address. After the mapping is successful, the IP address is automatically obtained without setting.

- **Port Mapping Table:** This corresponds to the UPnP mapping table information on the router.
 - ✓ **Servername:** 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.
- **Delete:** Select the mapping information in the port mapping table and delete the mapping relationship.



NOTE


- When setting the external port of the router mapping port, try to use ports between 1024 and 65535. Avoid using the well-known port 1 to 255 and the system port 256 to 1023 to avoid conflict.
- When deploying multiple devices in the same LAN, plan 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.

■ Address Filter

The black and whitelists restrict the PC to log in to the NVR web client by filtering the IP address or MAC address. There are two types: blacklist and whitelist.

- **Blacklist:**
 - 1.The NVR cannot connect to IPC's IP address or MAC address in the blacklist.
 - 2.The computer with the IP or MAC address in the blacklist will not be able to log in to the NVR web page.
- **Whitelist:**
 1. The device can only connect to the IPC in whitelist.
 2. Only IPCs in the whitelist can access the NVR.

To add blacklist/whitelist:

1. Access the main menu, and then click  → Address Filter to enter Address Filter setting interface, Figure 5-49.

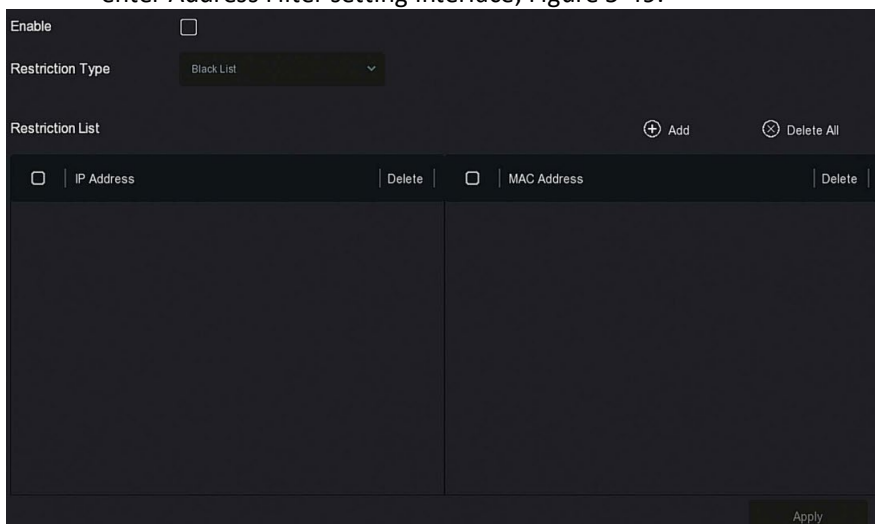






Figure 5-49

2. Choose "Restriction Type ", such as "Blacklist ".
3. Click "Add ", select the IP/MAC address, and then input IP address.
4. Click "Apply", the IP/MAC address is added to the device's blacklist.

To filter the IP/MAC address:

1. Access the main menu, and then click  → Address Filter to enter Address Filter setting interface.
2. Select enable → Restriction Type.
3. Click "Apply" to save the settings.
 - ◆ **Enable:** Enable/Disable the filtering function of NVR.
 - ◆ **Restriction Type:** Blacklist and Whitelist.
 - ◆ **Restriction List:** Corresponding to the list of the currently selected type list, displays all the added IP address, MAC address, and status (Enable/Disable) in the list.
 - ◆  **Add:** Add blacklist and whitelist.
 - ◆  **Delete:** Delete the list selected in the filter list.

-  **Delete All:** Delete all added lists in the filter list.



CAUTION

- The device supports adding up to 128 whitelists and 128 blacklists.
- Double-click a list in the filter list to enter the add interface, you can modify the IP/MAC address.
- When you add the blacklist/whitelist, the letters in MAC address can be uppercase or lowercase, and are separated by ":", such as 00:bb:f2:00:15.
- When the IP Restriction Type is blacklist/whitelist, only one list is in effect at a time.

■ Cloud Storage


❖ Google

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

Prerequisites

- 1) You must have Dropbox or a Google Cloud Storage account.
- 2) Using this function, the device must be connected to an external network.

To set cloud storage:

1. On Access the main menu page, and then click  → Cloud Storage → Google to enter the Google setting interface, Figure 5-50.

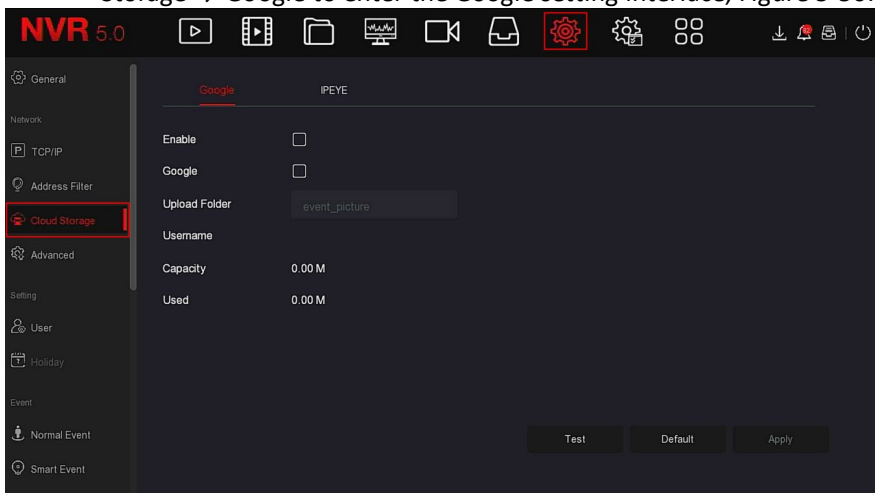


Figure 5-50


2. Select Enable → Google to obtain the "Authorization Code". Follow the prompts to log in to the website on the computer and enter the "Authorization Code" to bind the Google server cloud service.
3. Click "Apply".
4. Click "Test" to test whether the XVR can successfully upload files to the cloud server. After the binding is successful, the cloud storage interface displays the "Google" username, total capacity, and used space.

- **Enable:** Turn on/off the device cloud storage function.
- **Google:** Select a cloud storage type and enter the binding interface.
- **Upload Folder:** Set the upload cloud space folder name.
- **Username:** Displays the username for Google.
- **Capacity:** Once the cloud storage binding is successful, the total capacity of the cloud space is displayed.
- **Used:** Once cloud storage binding is successful, amount of used cloud space displays.
- **Test:** After binding, click "Test" to confirm whether the binding is successful. If the test fails, check whether the device is properly connected to the network and check the cloud storage configuration.

❖ IPEYE

- After enabling the IPEYE for a channel of NVR, you can add the device to the IPEYE account and view real-time audio/video of the NVR channel.

To configure IPEYE:

1. Access the main menu, and then click  → Cloud Storage → IPEYE to enter IPEYE setting interface, Figure 5-51-1.

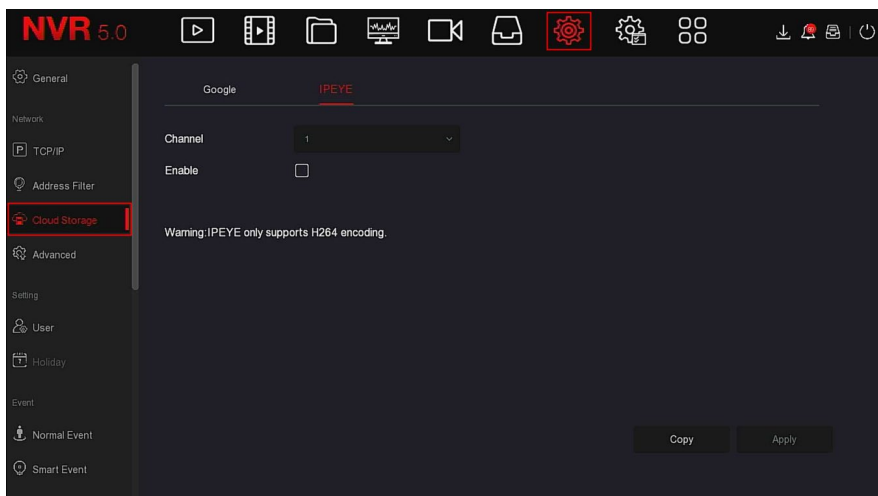


Figure 5-51-1

2. Click Configure channel → Enable, and then click Apply. The IPEYE client IP address displays on the interface, Figure 5-51-2.

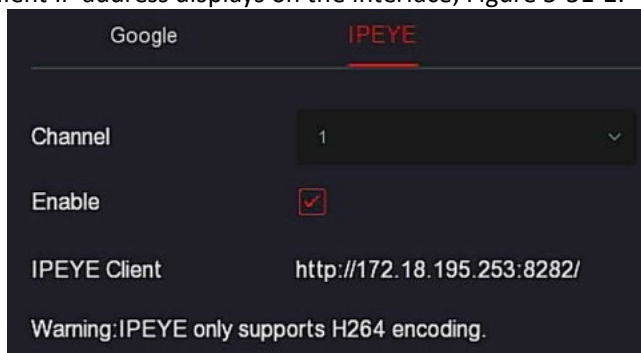


Figure 5-51-12

3. Log in to IPEYE client <http://182.18.195.253:8282>, enter the IPEYE and XVR usernames and passwords, select the devices to enable IPEYE, and then click "Add to Cloud" to add the device to the IPEYE account, Figure 5-51-3.

Add NVR to the Cloud

Cloud Login	Cloud Password
summer	*****

If you do not have a username and password, you must register at: <http://ipeye.ru>


NVR Login	NVR Password
admin	*****

#	Real Channel	Cloud Channel	Cloud Status	Action
1	30	Main: db0ecf91-af04-425a-9305-e75d610d836f/30	Wait	<button>Add to Cloud</button>
	31	Second: db0ecf91-af04-425a-9305-e75d610d836f/31		
2	00	Main: db0ecf91-af04-425a-9305-e75d610d836f/00	Wait	<button>Add to Cloud</button>
	01	Second: db0ecf91-af04-425a-9305-e75d610d836f/01		
3	10	Main: db0ecf91-af04-425a-9305-e75d610d836f/10	Wait	Success
	11	Second: db0ecf91-af04-425a-9305-e75d610d836f/11		
4	20	Main: db0ecf91-af04-425a-9305-e75d610d836f/20	Wait	<button>Add to Cloud</button>
	21	Second: db0ecf91-af04-425a-9305-e75d610d836f/21		

Figure 5-51-3



NOTE

- New users can register an account at: <http://www.ipeye.ru/>.
4. Log in to <http://www.ipeye.ru/>, enter the IPEYE device list to view the newly added device name as "cloud_xxxxx", and then click  to view the device real-time video.



NOTE


- The IPEYE function only supports H264-encoded video streams. When the device channel is not H264-encoded, the real-time video of the channel cannot be previewed through IPEYE.

■ Advanced

❖ E-mail

After setting the email information and enabling the alarm linkage email function, when the NVR triggers an alarm, the system sends an alarm email to the user mailbox.

To configure email settings:

1. Access the main menu page, and then click  → Advanced → E-mail to enter the E-mail setting interface, Figure 5-52.

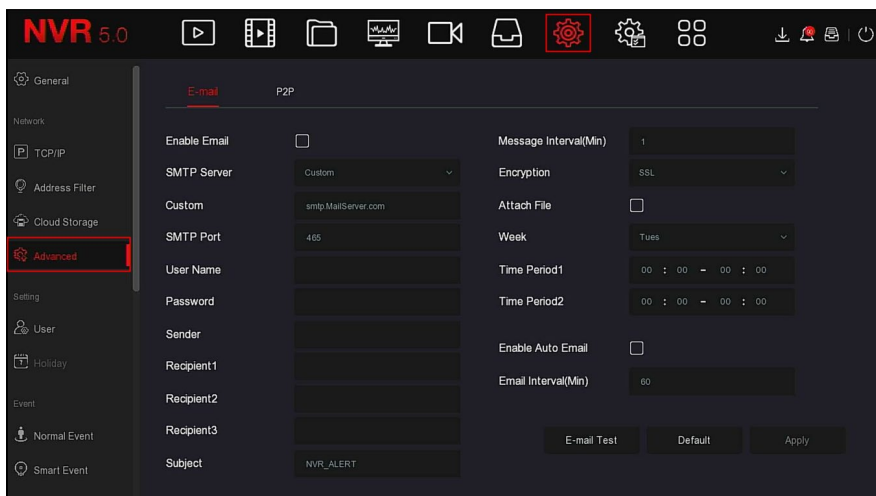


Figure 5-52

2. Enable e-mail alarm notifications, configure SMTP server, SMTP port, username, password, sender, subject, message interval, select encryption type, attach file, and other parameters.
3. Click E-mail test and the message "Success. Check the inbox." displays. If the message "E-mail can't be delivered!" is displayed, the mail configuration failed.
4. After the email is sent successfully, click Apply to save the email configuration.

- **Enable Email:** Enable/disable mail sending.
- **SMTP Server:** Select the SMTP sever type.
- **SMTP Port:** Input corresponding port value here.
- **User Name:** Input the username to login the sender email box.
- **Password:** Input the corresponding password here.
- **Sender:** Input sender email box here.
- **Recipient 1/2/3:** Recipient e-mail address 1/2/3.
- **Subject:** Input email subject here. System support English character and Arabic number, default "XNVR_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 mail spam,

causing the mail server to be overstressed. The time range is 0 to 600 minutes, 0 minutes means that the mail is sent without interval.

- **Encryption:** Select the mailbox server encryption, including NONE, SSL, TLS, the default being "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.
- **Week:** Select the time to send emails according to the week, 2 time periods can set per day.
- **Time period (1/2):** Set the time range for sending mail. After setting, send the alarm message at that time; do not send mail at other times.
- **Enable Auto Email:** Enable/disable automatic email sending.
- **Email interval (Min):** Mail sending interval.
- **E-mail Test:** Test email sending and receiving functions are normal. In the correct configuration, the receiving email receives a test email. If the test fails, check the parameters or network status.

❖ 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 the mobile client. After registering an account, you can add and manage multiple IPC, NVR, XVR 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 then register the account.
- 2) Log on to the P2P platform, register an account, and then add the device via the serial number.



NOTE

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

To configure P2P:

1. Access the main menu page, and then click  → Advanced → P2P to enter the P2P interface, Figure 5-53.

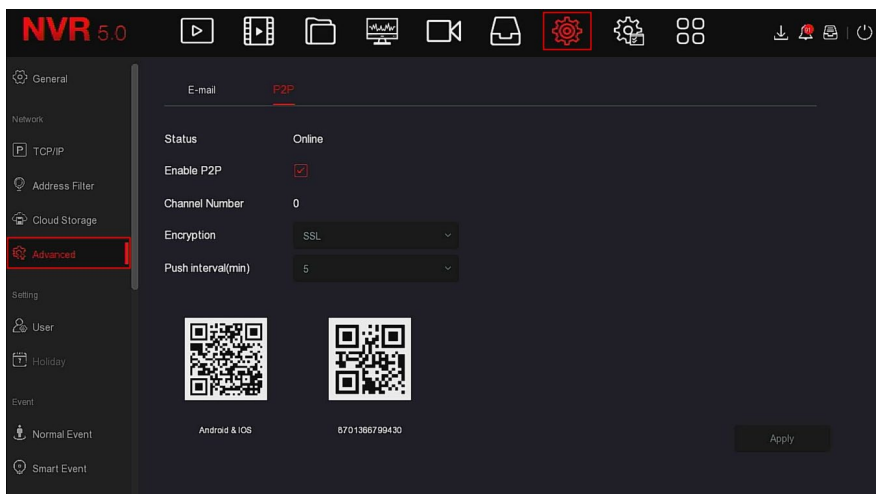


Figure 5-53

2. Make sure that the NVR accesses the external network, selecting Enable P2P → Encryption .
3. Click Apply to save the configuration.
4. Click Refresh and the status shows "Online " indicating that P2P is enabled and can be used normally.

- **Status:** Displays device P2P online status.
- **Enable P2P:** Turn on/off device P2P function. The default is "Online".
- **Channel Number:** Shows the current user viewing the number of NVR channel videos on the app client.
- **Encryption:** Select the encryption type. After the device is enabled, all signaling communication between the device and the server is encrypted.
- **Push interval(min):** Set the time interval for the device to snap the alarm picture to the mobile client, and you can also select "Turn off the push" to stop the device from pushing the picture to the mobile terminal.
- **Android & iOS:** P2P client download link.
- **SN:** Displays the serial number of the device P2P. This serial number is unique.
- **Refresh:** Refresh the P2P interface related information.

5.3.7.4 Event

Event is composed of Normal Event and Intelligent Event.

■ Normal Event

Normal Event is composed of Motion Detection, Video Tampering, Video Loss, Alarm Input, Alarm Output, Exception and Buzzer, Figure 5-58.

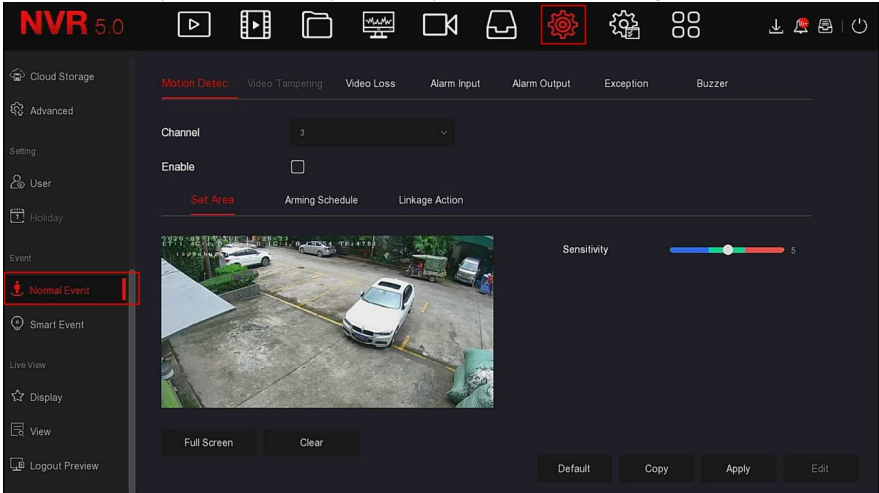



Figure 5-58

❖ Motion Detection

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

To configure motion detection:

1. Access the main menu, and then click  → Normal Event → Motion Detection to enter Motion Detection interface, Figure 5-59-1.

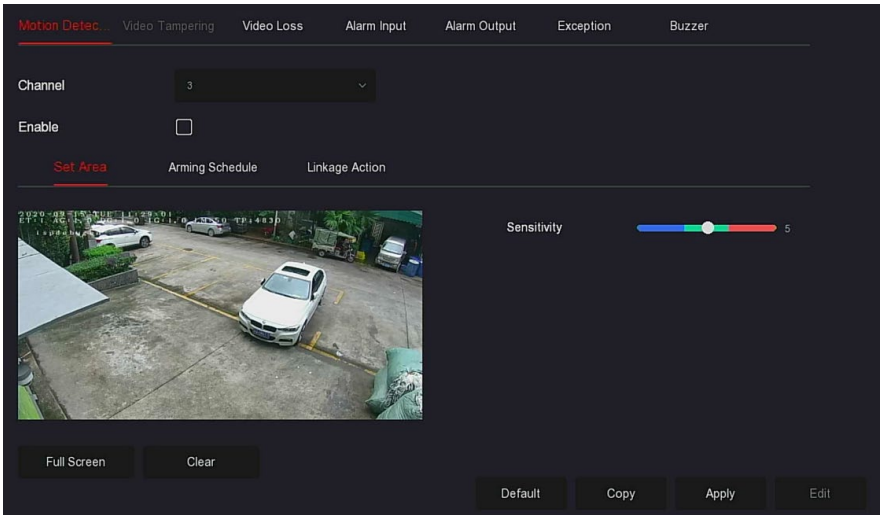


Figure 5-59-1

2. Turn on motion detection, and then select a channel.
3. Set area sensitivity.
 - ✓ Use the mouse to draw the motion detection area on the channel video, Figure 5-59-2.

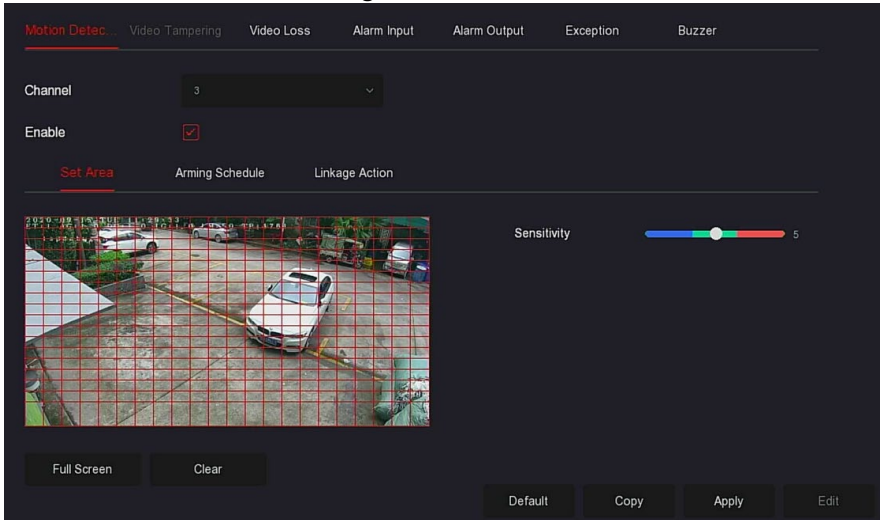


Figure 5-59-2

- ✓ Slide the sensitivity slider to select the appropriate motion detection sensitivity.

- Click "Arming Schedule" to enter Arming Schedule interface, Figure 5-59-3. Draw the arming time in the drawing area or click "Edit Time" to set the day of the week and time period 1&6.

Figure 5-59-3

- Click "Linkage Action" to enter Linkage interface, Set normal linkage and alarm output as required, Figure 5-59-4.

Figure 5-59-4

- Click "Apply" to save the settings.






NOTE

- If you need to set motion detection for other channels, repeat the above steps.

After enabling email notification for motion detection, click Main menu →



→ Advanced → E-mail to enter E-mail setting 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 enabling email notification and setting the specific week/time period, the NVR only sends emails to the set mailbox when the alarm is triggered in the set time period.
 - If the other channels have the same motion detection settings as that channel, click "Copy", select another channel, and copy the settings of this channel to other channels.
- **Channel:** Select to set the channel.
 - **Enable:** Check ☐ to turn on/off motion detection alarm.
 - **Set Area:** Select all areas by default, click to enter the area setting interface, set the range of the dynamic detection area, press and hold the left mouse button to select the alarm area. After selection, the alarm area is replaced by the red grid. Select the red grid again to cancel the alarm area setting.
 - **Sensitivity:** Can be set 0 to 10, the higher the value, the more sensitive the device.
 - **Week:** Select "All Week" or "X" according to the day of the week to set the time for sending alarm emails. Up to 2 time periods can be set per day.
 - : When "All" is selected, click  to set no recording at any time. When "All" is not selected, click  to set the corresponding date not to record.
 - **Edit:** Click to enter the Record Schedule interface, you can manually set 6 time periods for recording every day and copy the settings to other times through "Used To".
 - **Buzzer Alarm:** Check ☐ to turn on/off the buzzer alarm function.

- **E-mail Notification:** Check ☐ to turn on/off when the device alerts the mail function.
- **Channel Recording:** Check ☐ to turn on/off the channel recording function.
- **Full Screen Monitoring:** When an alarm is triggered on the preview interface, the real-time video of the device channel is displayed in full screen.
- **Alarm Output:** Select the alarm output port, it is connected to the alarm device, within the set alarm time range, when the device motion detection alarm, it will trigger an external alarm device to alarm.
- **Copy:** After the channel has been set up, click Copy to apply the setting to another channel.


❖ **Video Tampering**

Coming soon!

❖ **Video Loss**

When there is a channel losing video signal, the device will alarm and notify the user.

To configure video loss settings:

1. Access the main menu, and then click  → Normal Event → Video Loss to enter Video Loss interface, Figure 5-60.

Motion Detection Video Tempering **Video Loss** Alarm Input Alarm Output Exception Buzzer

Channel 1

Enable ☐

Linkage Action

Normal Linkage	Alarm Output
<input type="checkbox"/> Screen Display	<input type="checkbox"/> 1
<input type="checkbox"/> E-mail Notification	
<input type="checkbox"/> Buzzer Alarm	

Default Copy Apply

Figure 5-60

2. Select a channel and enable the video loss.
3. Set normal linkage and alarm output as required.
4. Click "Apply" to save the setting.

- **Channel:** Select the channel.
- **Enable:** Check ☐ to turn on/off video loss alarm.
- **Screen Display:** When an alarm occurs, the device pops up an alarm screen to show a warning.
- **E-mail Notification:** When an alarm occurs, the device sends an email as a warning.
- **Buzzer Alarm:** When an alarm occurs, the device beeps to give a warning.
- **Copy:** After the channel has been set up, click Copy to apply the setting to another channel.


❖ Alarm Input

The alarm input is the NVR alarm input port connected to the alarm device. When the alarm signal is transmitted to the NVR through the alarm input port, the system performs the alarm linkage action.

Prerequisites

Make sure the NVR alarm input port is connected to the alarm device.

To configure the alarm input:

1. Access the main menu, and then click  → Normal Event → Alarm Input to enter Alarm Input interface, Figure 5-61-1.






Motion Detection	Video Tampering	Video Loss	Alarm Input	Alarm Output	Exception	Buzzer
Alarm Input No.	Alarm Name	Alarm Type	Enable	Edit		
1	alarm_in1	NO	Disable			
2	alarm_in2	NO	Disable			
3	alarm_in3	NO	Disable			
4	alarm_in4	NO	Disable			

Figure 5-61-1

2. Select an alarm input channel, and then click  to enter the Alarm Input edit interface, Figure 5-61-2.

Edit

Alarm Input

1

Type

N.O

Alarm Name

alarm_in1

Enable

☒

Arming Schedule

Linkage Action

<input type="checkbox"/> All	0	2	4	6	8	10	12	14	16	18	20	22	24	
<input type="checkbox"/> Sun.														
<input type="checkbox"/> Mon.														
<input type="checkbox"/> Tue.														
<input type="checkbox"/> Wed.														
<input type="checkbox"/> Thu.														
<input type="checkbox"/> Fri.														
<input type="checkbox"/> Sat.														

☒ Normal

Copy

Apply

Edit

Figure 5-61-2

3. Select the number, name, and type of the alarm input, and then enable it.
4. Draw the alarm time in the drawing area, or set the alarm time through "Edit", Figure 5-61-3.

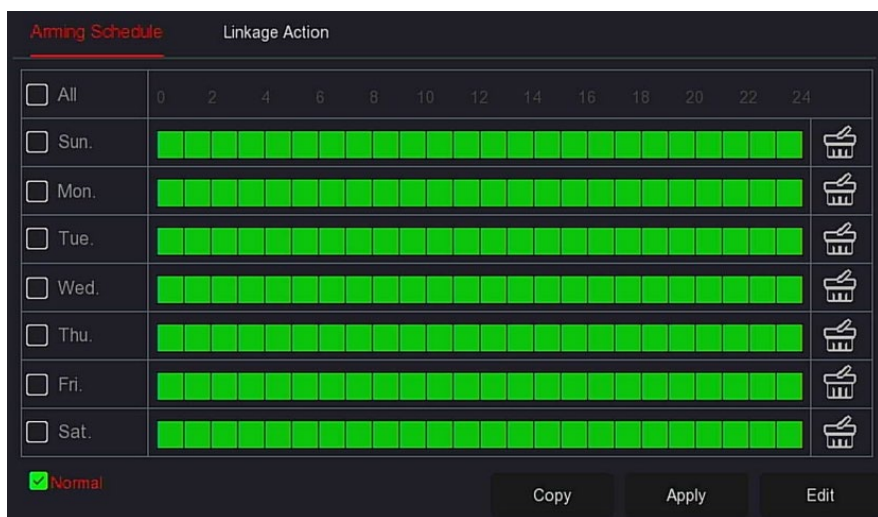


Figure 5-61-3

- Click "Linkage Action" to set alarm linkage (normal linkage, channel recording, trigger alarm output, full screen display), Figure 5-61-4.

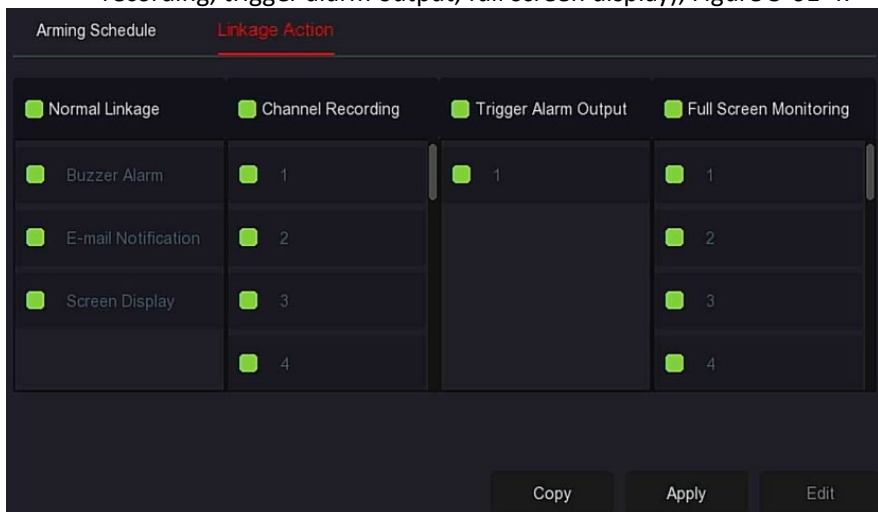


Figure 5-61-4

- Click "Apply" to save the settings.

- **Buzzer Alarm:** When an alarm occurs, the device beeps to show a warning.
- **E-mail Notification:** When an alarm occurs, the device sends an email as a warning.

- **Screen Display:** When an alarm occurs, the device pops up an alarm screen to show a warning.
- **Channel Recording:** When an alarm occurs, alarm channels 1, 2, 3, and 4 record.
- **Trigger Alarm Output:** When an alarm occurs, the alarm output port of the equipment is linked to alarm.
- **Full Screen Monitoring:** An alarm is triggered on the preview interface, and real-time video is displayed on the full screen. When multiple channels are selected, the real-time video is displayed in turn in the order of channel number.
- **Copy:** After the channel is set up, click "Copy" to apply the settings to another channel.


❖ **Alarm Output**

The alarm output is what the NVR connects to the alarm device (such as lights, sirens, etc.) through the alarm output port. When an alarm occurs, the NVR transmits the alarm information to the alarm device.

Prerequisites

Make sure the NVR alarm output port is connected to the alarm.

To configure the alarm output:

1. Access the main menu, and then click  → Normal Event → Alarm Output to enter Alarm Output interface, Figure 5-62-1.

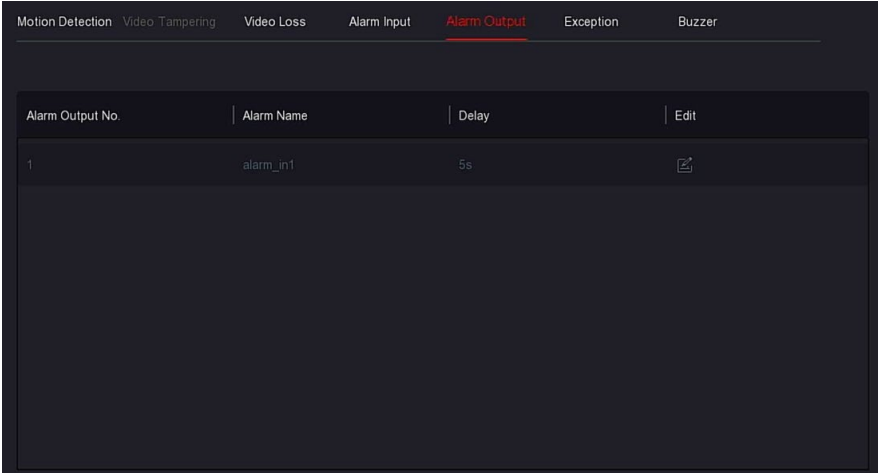

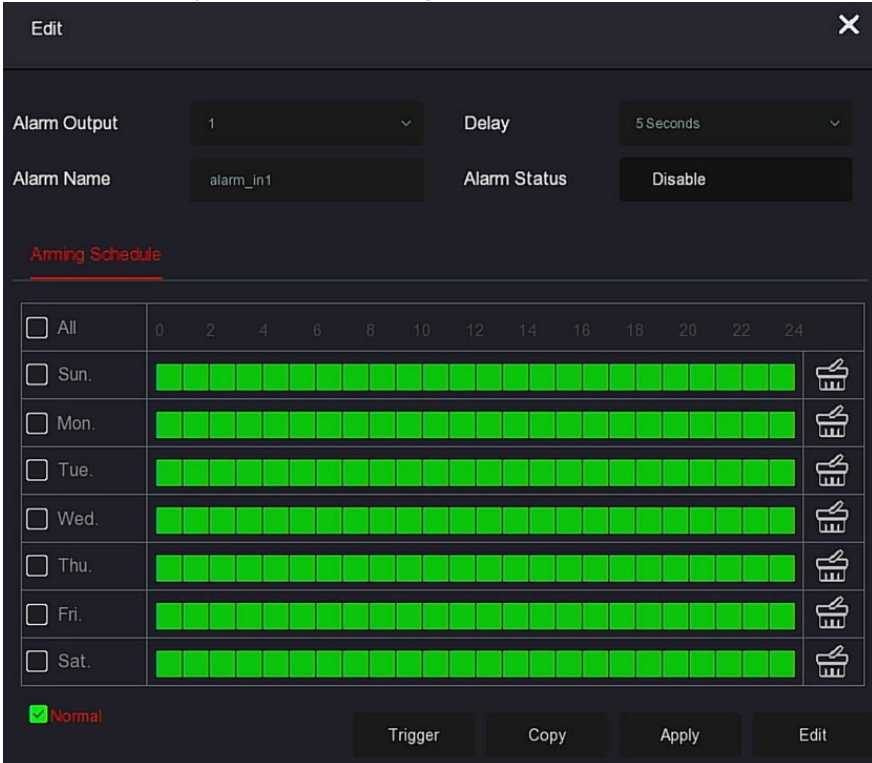


Figure 5-62-1

2. Select an alarm input channel, and then click  to enter the Alarm Input edit interface, Figure 5-62-2.










Edit

Alarm Output: 1 Delay: 5Seconds

Alarm Name: alarm_in1 Alarm Status: Disable

Arming Schedule

	0	2	4	6	8	10	12	14	16	18	20	22	24	
<input type="checkbox"/> All														
<input type="checkbox"/> Sun.														
<input type="checkbox"/> Mon.														
<input type="checkbox"/> Tue.														
<input type="checkbox"/> Wed.														
<input type="checkbox"/> Thu.														
<input type="checkbox"/> Fri.														
<input type="checkbox"/> Sat.														

☒ Normal

Trigger Copy Apply Edit

Figure 5-62-2

3. Select the Alarm Output number, Delay time, Alarm Name, and Alarm Status.
4. Draw the arming schedule in the drawing area, or set the alarm time through Edit.
5. Click "Apply" to save the settings.


➤ **Copy:** Click Copy to apply the alarm output port settings to other alarm output ports.

Trigger: Click Trigger to start the alarm corresponding to the device connected to the alarm output port. The alarm output device connected to the current channel alarms.

❖ Exception

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. Supported event types include "No Disk", "Disk Error", "Broken Network", and "IP Conflict".

To configure exceptions:

1. Access the main menu, and then click  → Normal → Exception to enter Exception setting interface, Figure 5-63.

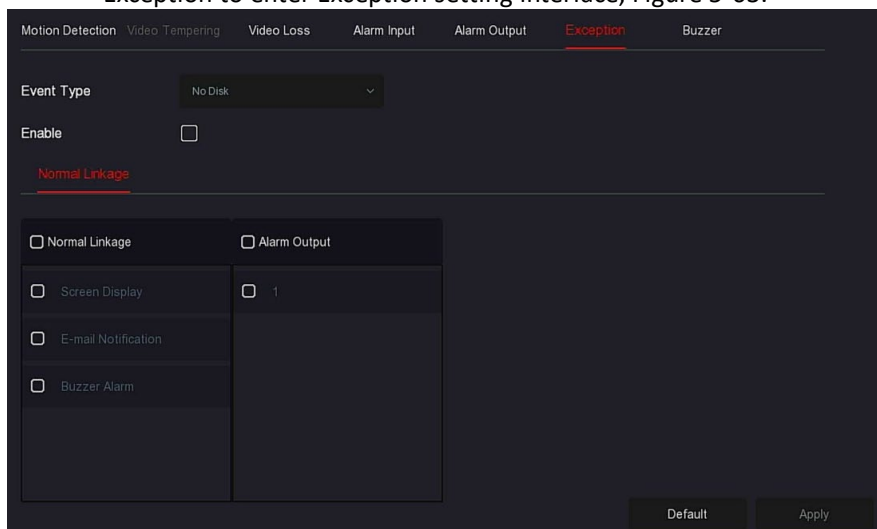



Figure 5-63

2. Select the event type, and then click ☐ to enable the exception alarm function, select linkage (Screen Display, E-mail Notification, Buzzer Alarm), and then select the alarm output port.
3. Click "Apply" to save the settings.

- **Screen Display:** When an alarm occurs, the device pops up an alarm screen to show a warning.
- **E-mail Notification:** When an alarm occurs, the device sends an email as a warning.
- **Buzzer Alarm:** When an alarm occurs, the device beeps to give a warning.

❖ Buzzer

To configure the buzzer:

1. Access the main menu, and then click  → Normal Event → Buzzer to enter Buzzer setting interface, Figure 5-64.

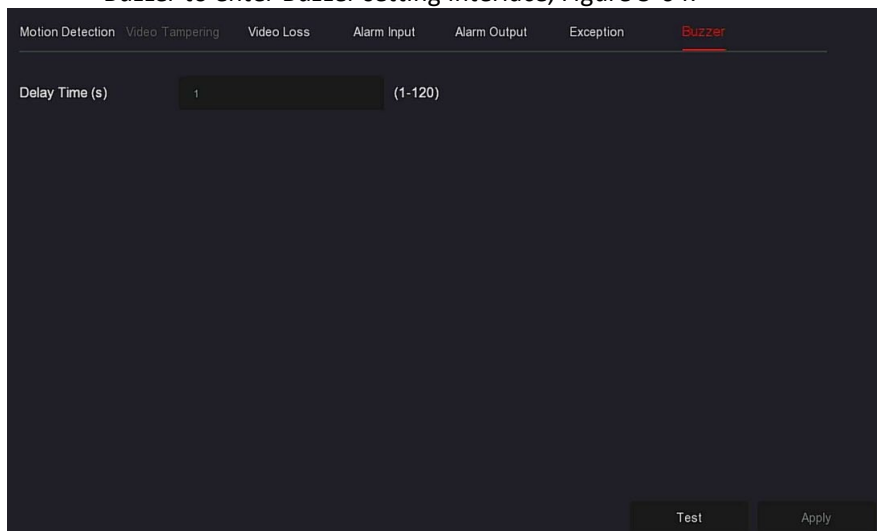



Figure 5-64

2. Set the buzzer time for the alarm.
3. Click "Apply" to save the settings.

➤ **Test:** Click Test to confirm the volume and duration of the buzzer alarm.

❖ Smart Event

To configure smart events:

1. Access the main menu, and then click  → Smart Event to enter Smart Event setting interface, Figure 5-65.

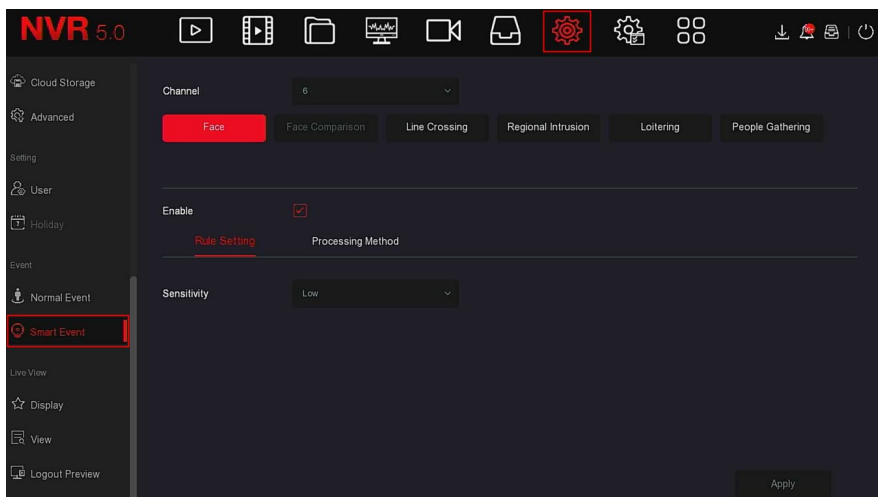


Figure 5-65

- Set the intelligent detection and alarm mode of the channel.
Detection alarms supported by the device include face detection, face comparison, line crossing detection, regional intrusion, loitering, and people gathering.




NOTE

- All smart detection modes can only be set if the camera supports it.
- Cameras that support smart detection can set up to 1 face detection rule, 4 line crossing detection rules, 4 area intrusion rules, 4 loitering rules, and 4 personnel gathering rules per channel.

❖ Face

- The face detection function can be used to detect faces that appear in the scene.

To configure face detection settings:

- Access the main menu, and then click  → Smart Event to enter the Smart Event setting interface.
- Select the channel, and then click Face to enter face detection configuration mode.
- Click Enable → Rule Setting to set the sensibility.

- Click Processing Method to set the alarm linkage as required (Buzzer Alarm, E-mail Notification, Channel Recording, Full Screen Monitoring) and Trigger Alarm Output, Figure 5-66 .

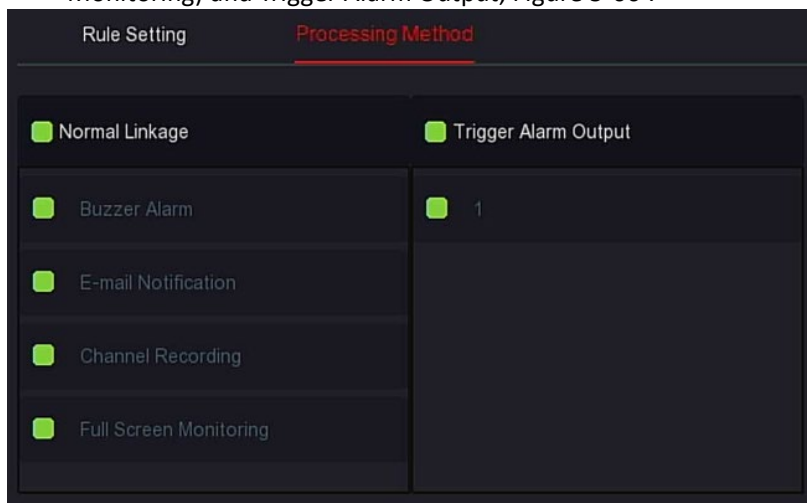


Figure 5-66

- Click "Apply" to save the settings.




NOTE

- There are 4 sensitivity options: low, medium, high, and highest. The lower the sensitivity, the harder it is to detect a side face or a face that is not clear enough. The user can adjust it according to the environment.

❖ Face Comparison

Face comparison is used to compare detected faces. When a face that has been stored in the face database appears in a channel, the corresponding alarm is triggered.

To configure face comparison:

- Access the main menu, and then click  → Smart Event to enter Smart Event setting interface.
- Choose the channel, and then click face comparison to enter face comparison setting mode, Figure 5-67-1.

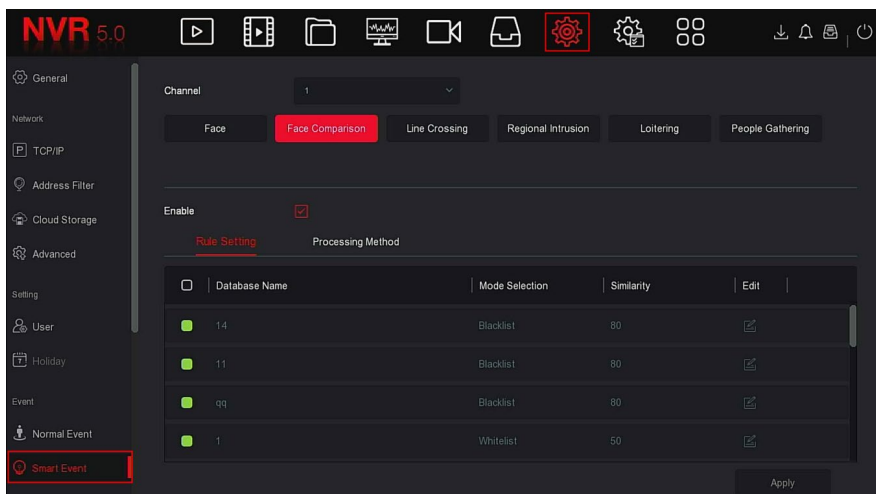



Figure 5-67-1

- Click Enable → Rule Setting, select the face database, and then click  to enter the similarity setting interface, Figure 5-67-2.

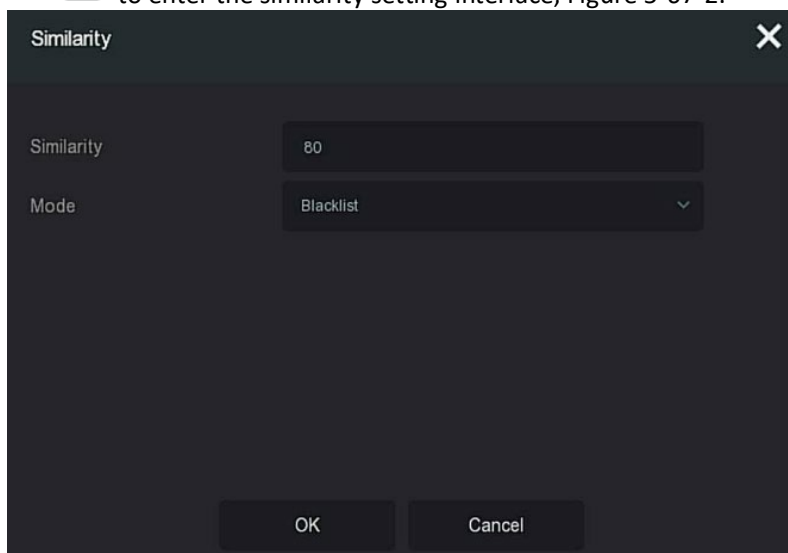



Figure 5-67-2

- Click OK → Processing Method, and then set alarm linkage as required (Buzzer Alarm, E-mail Notification, Channel Recording, Trigger Alarm Output, and Full Screen Monitoring), Figure 5-67-3.



Figure 5-67-3

5. Click "Apply" to save the settings.

- **Face Database List:** Used to display and configure all faces in the database of the current device.
- **Database Name:** To display the name of database.
- **Mode:** To display the type of database, blacklist, or whitelist.
- **Similarity:** The similarity between the face recognized by the device and the face stored in the face database.
- : Editing, used to set the similarity and mode of the corresponding face database. The higher the similarity value, the more the captured face image looks like the face stored in the face database, and the more accurate the face recognition in the face database. However, fewer comparison results are displayed.




NOTE

- The 1st to 4th channels of some NVRs support the face comparison function. The 4 channels can be connected to any model and IPC accessed through any protocol.

❖ Line Crossing

Line crossing detection can detect whether there is an object crossing the set warning surface in the video and perform linkage alarms according to the result.

To configure line crossing:

1. Access the main menu, and then click  → Smart Event to enter Smart Event setting interface.
2. Choose the channel, and then click Line Crossing to enter line crossing detection setting mode, Figure 5-68-1.

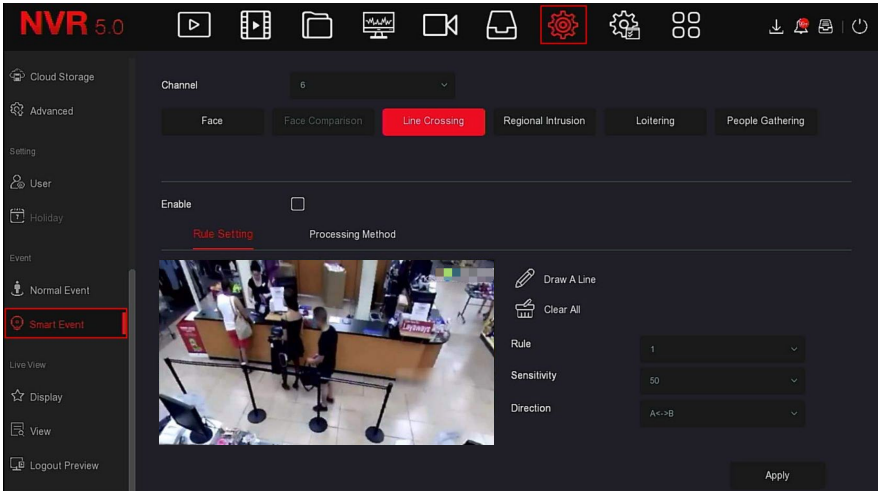


Figure 5-68-1


3. Click Enable → Rule Setting, to set the rule of line crossing detection, the specific steps are shown as below:
 1. In the "Rules" drop-down list, select rules as needed.



NOTE



- Line crossing detection can set 4 rules.
 2. Set the Time Threshold (Seconds) and sensitivity of the rule.
 - **Sensitivity:** It is used to set the size of the control target object. The higher the sensitivity, the easier the object is judged to be the target object. The lower the sensitivity, the larger the object will be judged as the target object. The sensitivity can be set in the range of 0 to 100.
 - **Direction:** There are three options: "A <-> B (bidirectional)", "A-> B", "B-> A", which refers to the direction in which an object passes through the warning area to trigger an alarm.
 - ✓ "A<->B" (Bidirectional) Indicates that the alarm is triggered in both directions.

- ✓ "A->B" Indicates that the object will trigger an alarm when it crosses from A to B.
- ✓ "B->A" Indicates that the object will trigger an alarm when it crosses from B to A.

3. Click  Draw A Line, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the two endpoints of the warning line.



NOTE

- Modify the drawn warning line through the  Clear All and  Draw A Line.
4. Click "Processing Method", and then set alarm linkage as required (Buzzer Alarm, E-mail Notification, Channel Recording and Trigger Alarm Output), Figure 5-68-2.



Rule Setting		Processing Method	
<input checked="" type="checkbox"/> Normal Linkage		<input checked="" type="checkbox"/> Trigger Alarm Output	
<input checked="" type="checkbox"/> Buzzer Alarm		<input checked="" type="checkbox"/> 1	
<input checked="" type="checkbox"/> E-mail Notification			
<input checked="" type="checkbox"/> Channel Recording			
<input checked="" type="checkbox"/> Full Screen Monitoring			


Figure 5-68-2

5. Click "Apply" to save the settings.

❖ Regional Intrusion

The regional intrusion function detects whether an object in the video enters the set area, and then conducts a linkage alarm based on the result.

To configure regional intrusion:

1. Access the main menu, and then click  → Smart Event to enter Smart Event setting interface.
2. Select the channel to set the regional intrusion, and then click "Regional Intrusion" to enter regional intrusion setting mode, Figure 5-69-1.

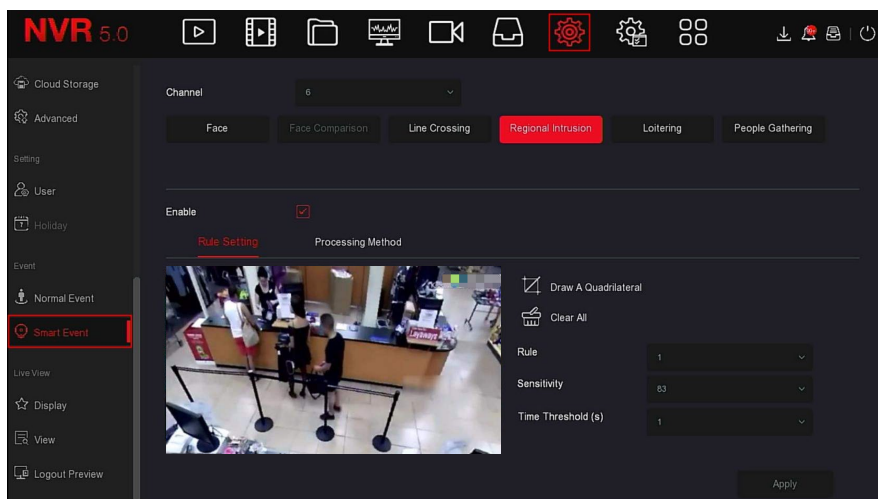



Figure 5-69-1

3. Click Enable → Rule Setting to set the rule of regional intrusion.

To set regional intrusion:

- a. In the "Rules" drop-down list, select any rule as you need.
- b. Regional intrusion can set any 4 rules.
- c. Set the Time Threshold (Seconds) and sensitivity of the rule.
Sensitivity: Set the size of the control target object. The higher the sensitivity, the easier the object is judged to be the target object. The lower the sensitivity, the larger the object will be judged as the target object. The sensitivity can be set in the range of 0 to 100.
Time Threshold (s): An alarm is generated after the target enters the warning zone for a continuous dwell time. If the time

threshold is set to 5 seconds, the target intrusion zone is triggered for 5 seconds. The range is 1 to 10 (seconds).

- d. Click  Draw A Quadrilateral, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the endpoints of the quadrilateral warning zone to complete the zone drawing.



NOTE



- You can modify the drawn warning line using  Clear All and  Draw A Quadrilateral.
4. Click "Processing Method", set the alarm linkage (Buzzer, E-mail Notification, Channel Recording, Full Screen Monitoring), and then Trigger Alarm Output, as shown in Figure 5-69-2.




Figure 5-69-2

5. Click "Apply" to save the settings.

■ Loitering

The loitering function can detect the dwell time of the target in the set area. When the dwell time exceeds the set time threshold, an alarm linkage is triggered.

To configure loitering:

1. Access the main menu, and then click  → Smart Event to enter Smart Event setting interface.
2. Select the channel you need to set the loitering, and then click "Loitering" to enter the loitering setting mode, Figure 5-70-1.

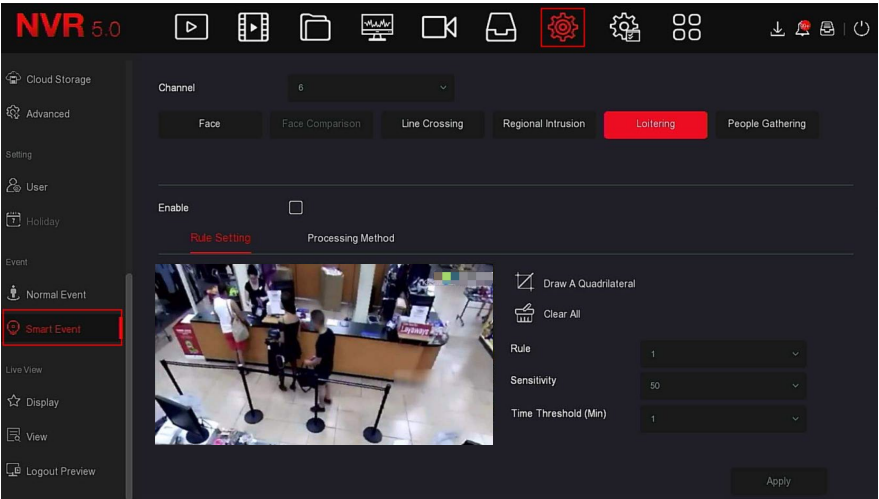



Figure 5-70-1

3. Click Enable → Rule Setting, to set the rule of loitering, the specific steps are shown as below:
 - a. Loitering can set any 4 rules.
 - b. Set the Time Threshold (Seconds) and sensitivity of the rule.

Sensitivity: It is used to set the size of the control target object. The higher the sensitivity, the easier the object is judged to be the target object. The lower the sensitivity, the larger the object will be judged as the target object. The sensitivity can be set in the range of 0 to 100.

Time Threshold (Min): An alarm is generated after the target enters the warning zone for a continuous dwell time. If the time threshold is set to 5 seconds, the target intrusion zone is triggered for 5 seconds. The range is 1 to 10 (seconds).

- c. Click  Draw A Quadrilateral, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the endpoints of the quadrilateral warning zone to complete the zone drawing.



NOTE



- You can modify the drawn warning line using  Clear All and  Draw A Quadrilateral.
4. Click "Processing Method", set alarm linkage (Buzzer, E-mail Notification, Channel Recording, Full Screen Monitoring), and Trigger Alarm Output as required, Figure 5-70-2.




Figure 5-70-2

5. Click "Apply" to save the settings.

■ **People Gathering**

The people gathering function can detect the density of the human body in the set area, if it exceeds the set threshold, it will trigger an alarm linkage.

To configure people gathering:

- 1. Access the main menu, and then click  → Smart Event to enter Smart Event setting interface.
- 2. Select the channel you need to set the people gathering, and then click people gathering to enter people gathering setting mode, Figure 5-71-1.

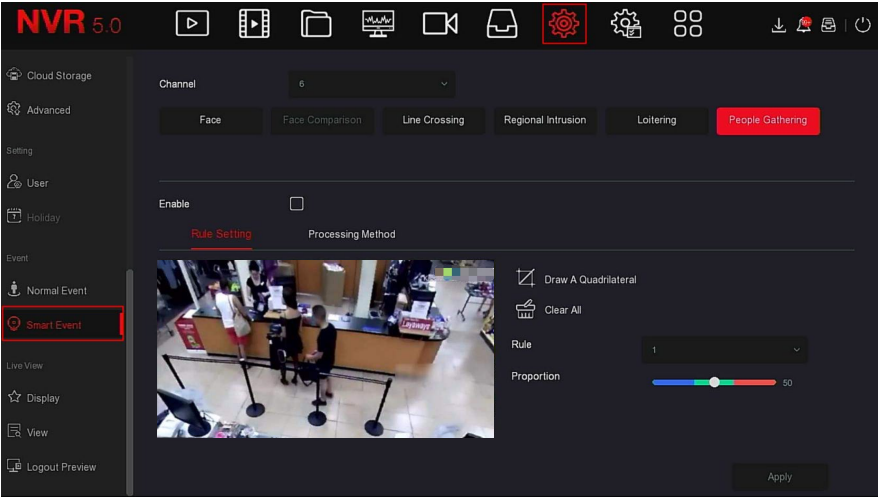





Figure 5-71-1

- 3. Click Enable → Rule Setting, to set the rule of people gathering, the specific steps are shown as below:
 - a. People gathering can set 4 rules, you can choose any rule.
 - b. Set the proportion of rules.

Proportion: Represents the proportion of personnel in the entire warning area, when the proportion of personnel exceeds the set proportion value, the system alarm is triggered, otherwise the system does not alarm.
 - c. Click  Draw A Quadrilateral, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the endpoints of the quadrilateral warning zone to complete the zone drawing.



NOTE

- You can modify the drawn warning line using  Clear All and  Draw A Quadrilateral buttons

- Click "Processing Method", set alarm linkage as required (Buzzer, E-mail Notification, Channel Recording, Full Screen Monitoring), and then Trigger Alarm Output, Figure 5-71-2.



Figure 5-71-2

- Click "Apply" to save the settings.



NOTE

- When the device supports an external alarm device, the alarm processing method can trigger the alarm output.


5.3.7.5 Live View

The Live View is composed of Display and View.

■ Display

The display output is used to set the display effect of the device preview interface; including resolution, UI Transparency, Show OSD Time ,and Show After Boot.

To configure display settings:

1. Access the main menu, and then click  → Display to enter display setting interface, Figure 5-72.

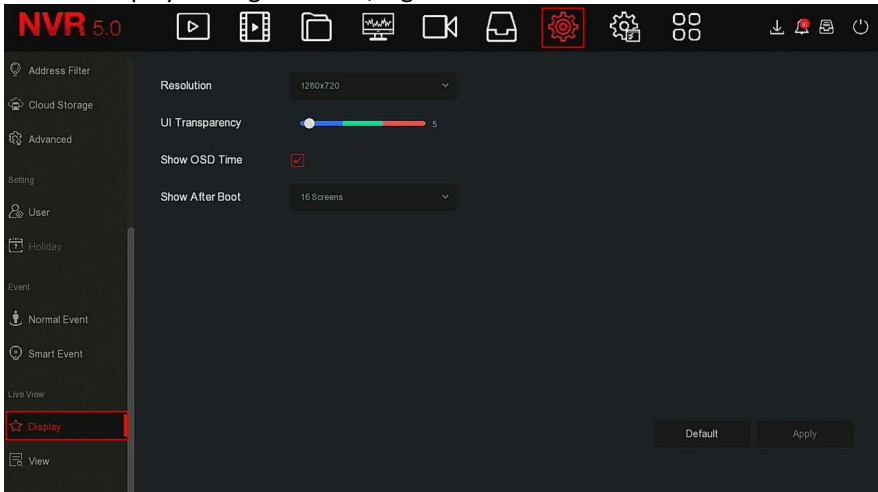


Figure 5-72

2. Set the Configure resolution, transparency, and other related parameters.
 3. Click "Apply" to save the settings.
- **Resolution:** Selectable values are 1024x768, 1280x720, 1280x1024, 1920x1080. The 4K NVR 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 After Boot:** Select (Main Screen) to display the screen split screen number.
 - **Show After Boot (Sub):** Select the sub-screen boot display screen split screen number.




NOTE

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

View

Some devices support simultaneous access to multiple monitors.

To configure the view:

1. Access the main menu, and then click  → View to enter the view setting interface, Figure 5-73.

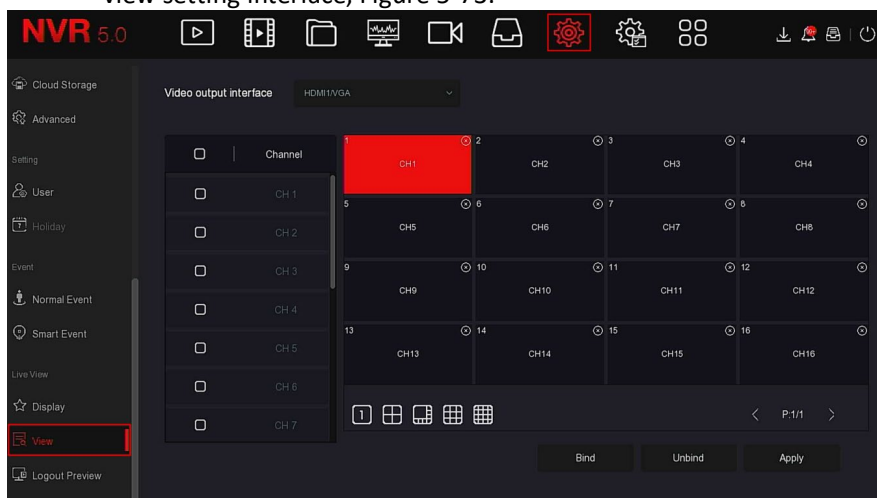


Figure 5-73

2. Select video output interface, channel, and then the picture split icon.

3. Click Bind → Apply, and then save the settings.

- **Video output interface:** NVR external monitor port.
- **Channel:** Show all channels of the NVR for user configuration.
- **Picture Segmentation:** According to the number of channels supported by the NVR, there are generally 1, 4, 6, 8, 9, 16, and 36 screens.

- **Bind:** Once clicked, the existing configuration can be bound to the device video output port.
- **Unbind:** Click to unbind the bound video output port.




NOTE

- The number of monitors that can be accessed by different devices varies.

■ Logout Preview

After enabling the logout preview, you can preview the real-time video of the corresponding channel when the device logs out.

To configure the logout preview:

1. Access the main menu, and then click  → Logout preview to enter the logout preview setting interface, Figure 5-74.

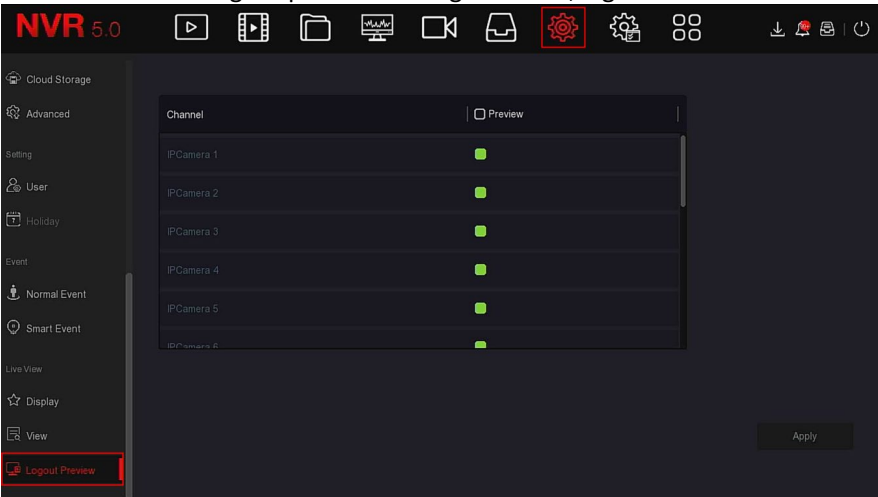


Figure 5-74

2. Select the preview channel.
3. Click Apply to save the settings.


5.3.8 Maintenance

The Maintenance is composed of System Information, Upgrade, Network Information, System Service, and HDD Operation.

5.3.8.1 System Information

■ Device

To configure the system information:

- 
1. Access the main menu, and then click → Device to enter device interface, Figure 5-75.


Device Name	Network Video Recorder
Model No	36C08-POE-PNP
Device Version	1.0.3.42
GUI Version	20.36.31918
WEB Version	20.1.36.200904
System Version	NVR_HI3536C_H265_16CH_8POE_PNP3_BD_V5_V20.1.36.4
Date	Sep 4 2020 13:47:46
Total Number Of Channels	16
Total Number Of POE Channels	8

Figure 5-75

2. View NVR Model No., Device Version, System Version, release date, and other information.

■ Camera

To configure the camera settings:

- 
1. Access the main menu, and then click → Camera to enter camera interface, Figure 5-76.


CH	Channel name	Status	Motion Detection	Video Loss
1	IPCamera 1	Disconnected	Disable	Disable
2	IPCamera 2	Disconnected	Disable	Disable
3	IPCamera 3	Connected	Enable	Disable
4	IPCamera 4	Connected	Disable	Disable
5	IPCamera 5	Disconnected	Disable	Disable
6	IPCamera 6	Connected	Disable	Disable
7	IPCamera 7	Disconnected	Disable	Disable
8	IPCamera 8	Disconnected	Enable	Disable
9	IPCamera 9	Disconnected	Disable	Disable

Figure 5-76

2. View the status information of NVR channels.

■ Record

To configure record settings:

1. Access the main menu, and then click  → Record to enter record interface, Figure 5-77.


CH	Record Status	Stream Type	Bitrate(Mbps)	Record Type	Disk No.
3	Enable	Video Stream	1.57	Record	1
4	Enable	Video Stream	4.19	Record	1
6	Enable	Video Stream	2.78	Record	1
10	Enable	Video Stream	1.17	Record	1
11	Enable	Video Stream	2.37	Record	1

Figure 5-77

2. View the recording status and encoding parameters of each NVR channel.

■ Alarm Record

To configure the alarm record:

1. Access the main menu, and then click  → Alarm Record to enter alarm record interface, Figure 5-78.


Alarm Input No.	Alarm Name	Alarm Type	Alarm Status	Trigger Record Channel
1	alarm_in1	N.O	Disable	
2	alarm_in2	N.O	Disable	
3	alarm_in3	N.O	Disable	
4	alarm_in4	N.O	Disable	

Figure 5-78

2. View the alarm input status of each NVR channel.

■ Network

To configure network settings:

1. Access the main menu, and then click  → Network to enter network interface, Figure 5-79.


NIC		LAN 1
IP Address		172.18.195.253
Network Mask		255.255.248.0
Gateway		172.18.192.1
Primary DNS		172.18.192.1
Secondary DNS		8.8.8.8
MAC Address		2C:6F:51:05:97:E0
Enable DHCP		Disable
PPPoE Address		
PPPoE Subnet Mask		

Figure 5-79

2. Check the network connection and configuration of the NVR.

■ HDD

To configure the HDD:

1. Access the main menu, and then click  → HDD to enter HDD interface, Figure 5-80.


No.	Status	Total Capacity	Residual Capacity	Device Type
1	In Use	1953.514 GB	0 MB	SATA
<div> <div>Total Capacity:</div> <div>1953.514 GB</div> </div> <div> <div>Remain Capacity:</div> <div>0 MB</div> </div>				

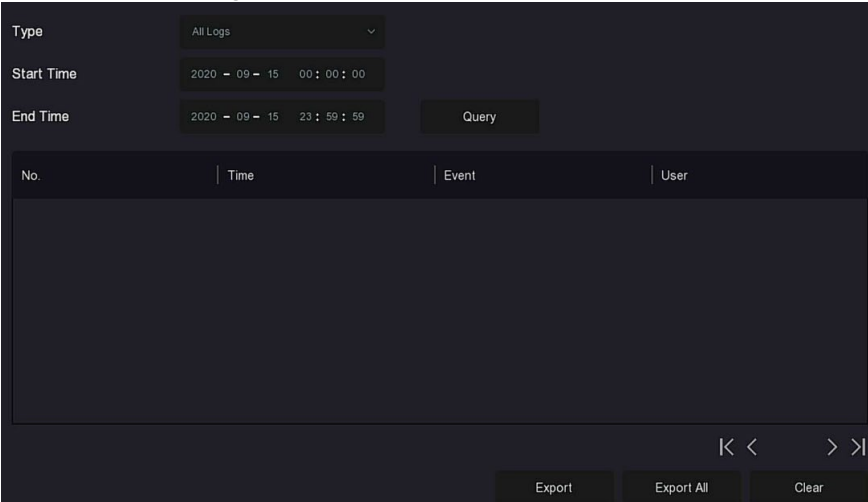
Figure 5-80

2. View the status and attribute information of the hard disk connected to the device.

■ Log

To configure the log:

1. Access the main menu, and then click  → Log to enter log interface, Figure 5-81.



The screenshot shows a web interface for viewing logs. At the top, there are three input fields: 'Type' with a dropdown menu showing 'All Logs', 'Start Time' with a date and time picker set to '2020 - 09 - 15 00:00:00', and 'End Time' with a date and time picker set to '2020 - 09 - 15 23:59:59'. To the right of the 'End Time' field is a 'Query' button. Below these fields is a table with four columns: 'No.', 'Time', 'Event', and 'User'. The table is currently empty. At the bottom right of the interface, there are three buttons: 'Export', 'Export All', and 'Clear'. Above the 'Export' and 'Export All' buttons are navigation arrows: '<<', '<', '>', and '>>'.

Figure 5-81

2. Set search criteria (Type, time range).
3. Click "Query" to check the log.
4. Export the log, insert U disk into NVR, click "Export", and then wait for the export progress to complete.


You can export the searched logs to a USB flash drive.

- **Type:** Select the type of log to find.
- **Start/End Time:** Enter the time range of the log.
- **Export:** Export the searched log information and store it on the U disk of the connected device.
- **Export All:** Export and store all log information on the U disk connected to the device.
- **Query:** Search logs by setting search criteria and display them in the log list.
- **Prev Page/Next Page:** Page turning function, when there are multiple logs in the query period, click to view other log information.
- **Clear:** Clear all the information for the log.

■ Export/Import

If multiple devices need to adopt the same configuration, one device can be configured first, and the configuration file of the device can be "exported" and backed up, and then through the "import" operation, the configuration can be applied to other devices to save more Configure the time.

To configure export/import:

1. Access the main menu, and then click  → Export/Import to enter export/import interface, Figure 5-82.

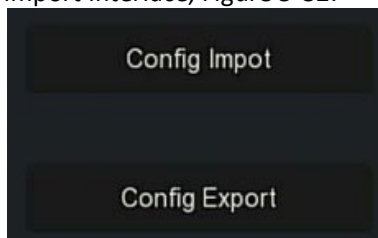


Figure 5-82


2. Export/ import the configuration files.
Config Export: Insert the U disk into NVR, click Config Export, wait for the export progress to complete, and then click Confirm.
Config Import: Insert the U disk that stores the configuration file into the NVR, click Config Import → Confirm, wait for the import progress to complete, and then the device restarts.

5.3.8.2 Upgrade

■ Manual Upgrade

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

To configure the manual upgrade:

1. Insert the USB device with the upgrade file (named xx_BD_V5_update_Vx.x.x.x.bin) into the NVR.
2. Access the main menu, and then click  → Manual Upgrade to enter manual upgrade interface, Figure 5-83.

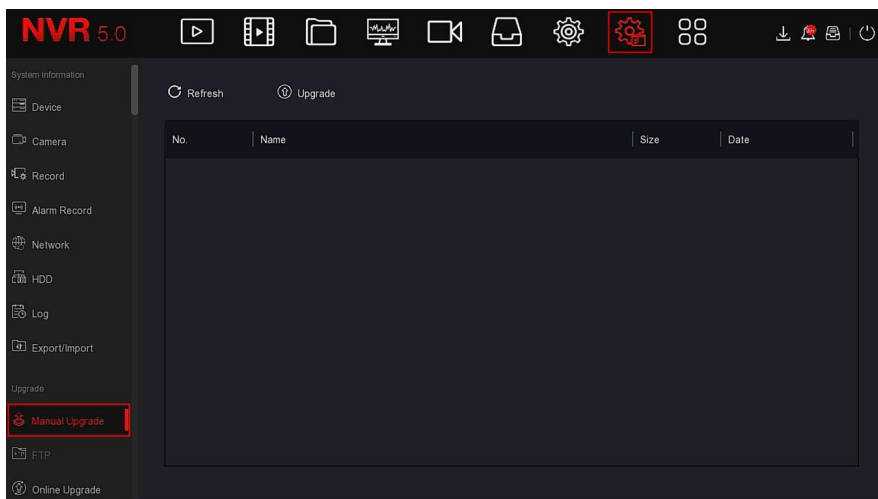




Figure 5-83

3. Click  Refresh, choose the upgrade file, click  Upgrade → Confirm, wait for the interface to finish the progress bar, and then the device restarts completing the upgrade.



NOTE

- If after several attempts to refresh, the device still cannot detect the upgrade package, check the USB disk contact with the USB interface of the device, and then verify that the upgrade file name is correct.
- NVR During the upgrade process, do not disconnect the power supply or unplug the USB drive. The system automatically restarts after the upgrade is completed. This process takes about 1 to 6 minutes. It is recommended to restore the factory settings after the upgrade is completed.

■ FTP


Coming soon!

■ Online Upgrade

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.

❖ Automatic Online Upgrade

To configure the automatic online upgrade:

1. Access the main menu, and then click  → Online Upgrade to enter automatic online upgrade interface, Figure 5-84.

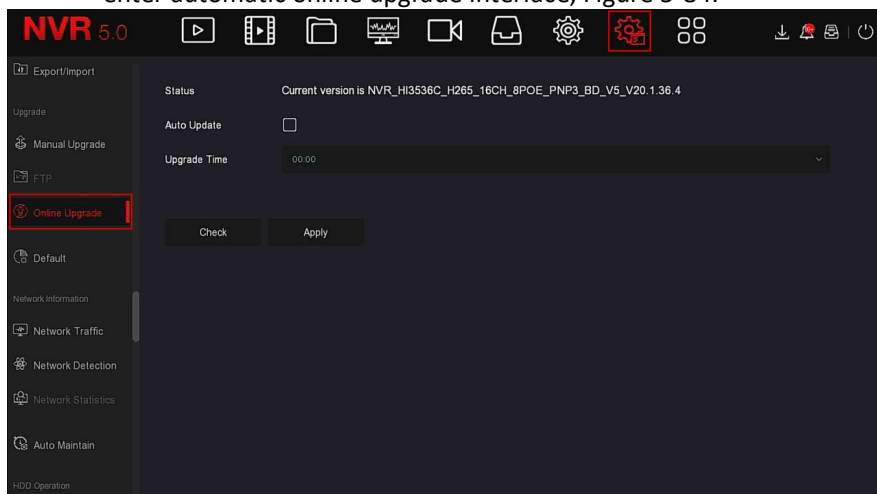



Figure 5-84

2. Select Auto Update.
3. Set the device upgrade time, and then click Apply.
When there is a new version in the cloud, the system automatically detects the version and upgrades the device at the set time.

❖ Manual Online Upgrade

To configure the manual upgrade:

1. Access the main menu, and then click  → Online Upgrade to enter manual online upgrade interface.
 2. Click Check.
A prompt interface pops up. If a new version is detected, the system displays information about the new version.
 3. Click Update and wait for the device to download the upgraded file.
After the device is upgraded, the device will automatically restart.
- **Status:** The current version of device.

- **Auto update:** Click ☐ to enable the system automatic upgrade function. When the device detects the new online version, it automatically upgrades according to the set upgrade time.
- **Update time:** Set the automatic update time.
- **Check:** Detect the latest online version.




NOTE

- Before testing a new online version, make sure that the NVR is properly connected to the network.
- During the upgrading process, do not remove power or take off the U disk. After the upgrade, your system restarts automatically. (This process takes 1 to 6 minutes). It is recommended that you restore factory settings after the upgrade.

■ Default

When the NVR device runs slowly or the configuration is wrong, you can try to solve the problem by restoring the default.

To restore the defaults:

1. Access the main menu, and then click  → Default to enter default interface, Figure 5-85.

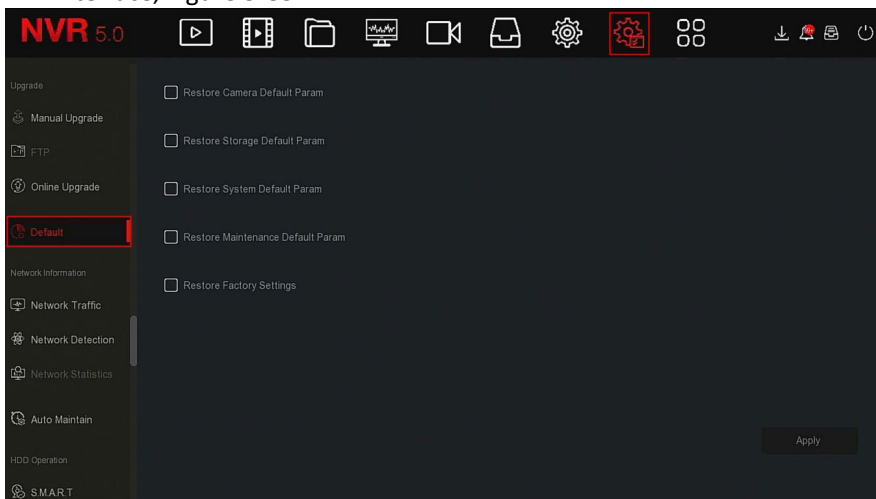


Figure 5-85

2. Select the configuration items that need to be restored to factory settings.
 3. Click Apply → OK.
- **Restore Storage Default Param:** Select/Cancel to restore all storage configuration parameters to default values.
 - **Restore Camera Default Param:** Select/Cancel to restore all cameras configuration parameters to default values.
 - **Restore System Default Param:** Select/Cancel to restore all system configuration parameters to default values.
 - **Restore 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.



NOTE


- After restoring the factory settings, the corresponding functions are restored to the factory settings. The user's existing configuration may be lost.

5.3.8.3 Network Information

■ Network Traffic

Network traffic refers to the data traffic used by video files in a unit of time. Using network traffic monitoring, you can view the real-time code stream and code stream waveform changes of each channel in real time.

To configure network traffic settings:

1. Access the main menu, and then click  → Network Traffic to enter network traffic interface, Figure 5-86.

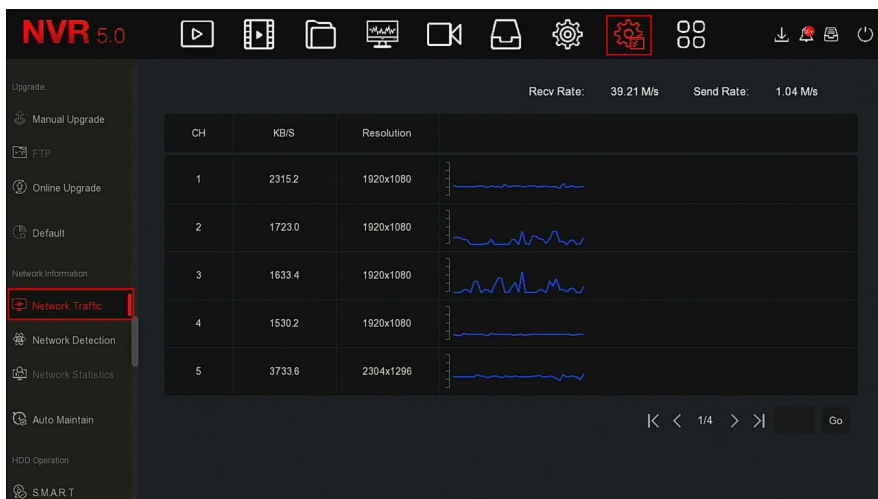



Figure 5-86

2. View the network traffic of each channel in real time.

■ Network Detection

Network Detection tests network delay and packet loss.

To configure network detection:

1. Access the main menu, and then click  → Network Detection to enter network detection interface, Figure 5-87.

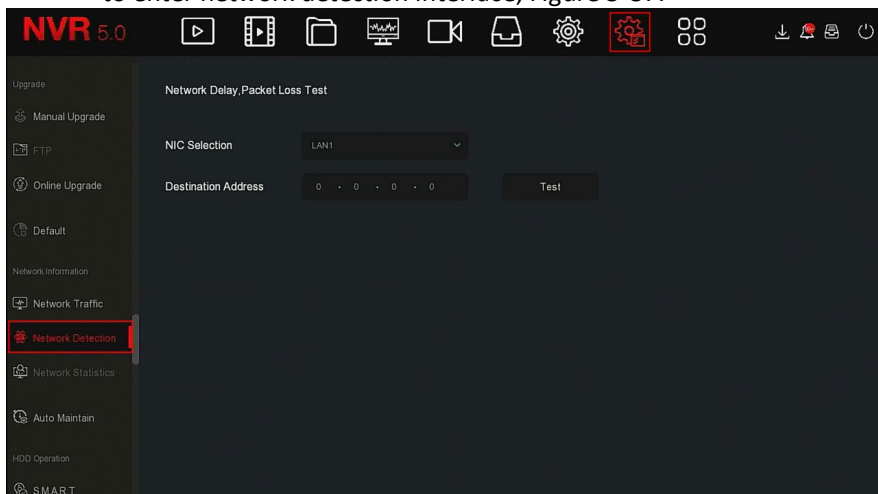


Figure 5-87

2. Select the NIC, and then enter the test address in the destination address bar.
3. Click Test to do the Network Delay and Packet Loss test.
After the test, the system displays the test results, including packet loss rate and average delay.


■ Network Statistics

Coming soon!

■ Auto Maintain

When the device runs for a long time, you can set the device to restart within an idle time to increase the device's running speed.

To configure auto maintain:

1. Access the main menu, and then click  → Auto Maintain to enter auto maintain interface, Figure 5-88.

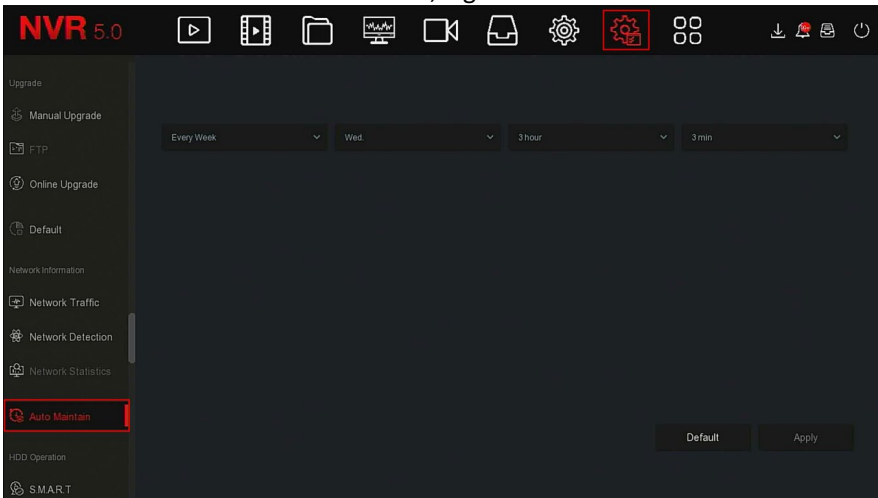


Figure 5-88

2. Select the time for Auto Maintain.
3. Click Apply to save the settings.



NOTE


- Automatic restart of 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 select "Never". Equipment is not automatically maintained.

5.3.8.4 HDD Operation

■ S.M.A.R.T

S.M.A.R.T is used to monitor the temperature of the hard disk, the surface material of the disk, the motor and its drive system, and analyze and predict the possible problems of the hard disk.

To configure S.M.A.R.T settings:

1. Access the main menu, and then click  → S.M.A.R.T to enter S.M.A.R.T interface, Figure 5-89.

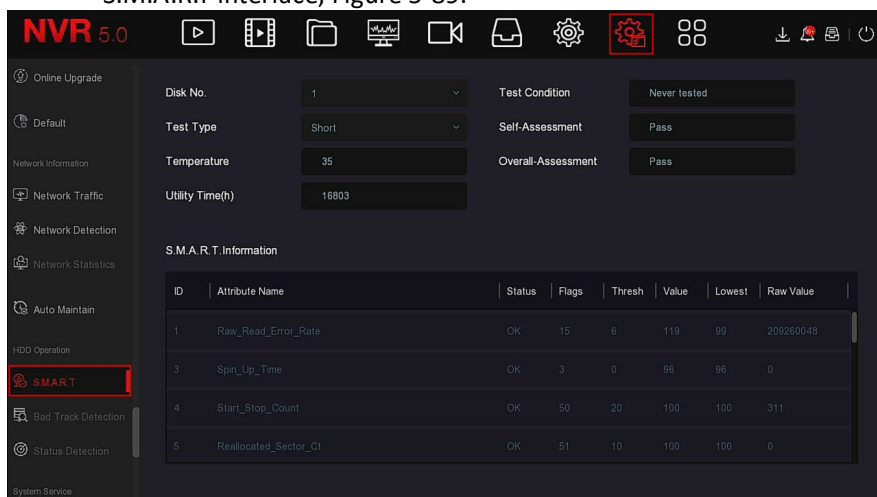


Figure 5-89

2. Select the hard disk, and then set "Test Type".
The device starts to detect the hard disk.
3. After the hard disk is detected, the hard disk details display in the S.M.A.R.T. information list.

➤ **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 passed.
- ✓ Overall-assessment: Shows overall hard disk status.

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

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



NOTE

- Only some devices support hard disk detection.
- When the self-assessment or overall evaluation results are "not passed", replace the hard disk to avoid data loss.
- Through the S.M.A.R.T self test function, the user can use the S.M.A.R.T command to perform a self-test on the hard disk to detect the overall status of the hard disk.

■ **Bad Track Detection**

Coming soon!

■ **Status Detection**

Coming soon!


5.3.8.5 System Service

■ **Stream Encryption**

Coming soon!

5.3.9 Alarm Information

To access alarm information:

1. Access the main menu, and then click  to enter Alarm Information interface, Figure 5-90.

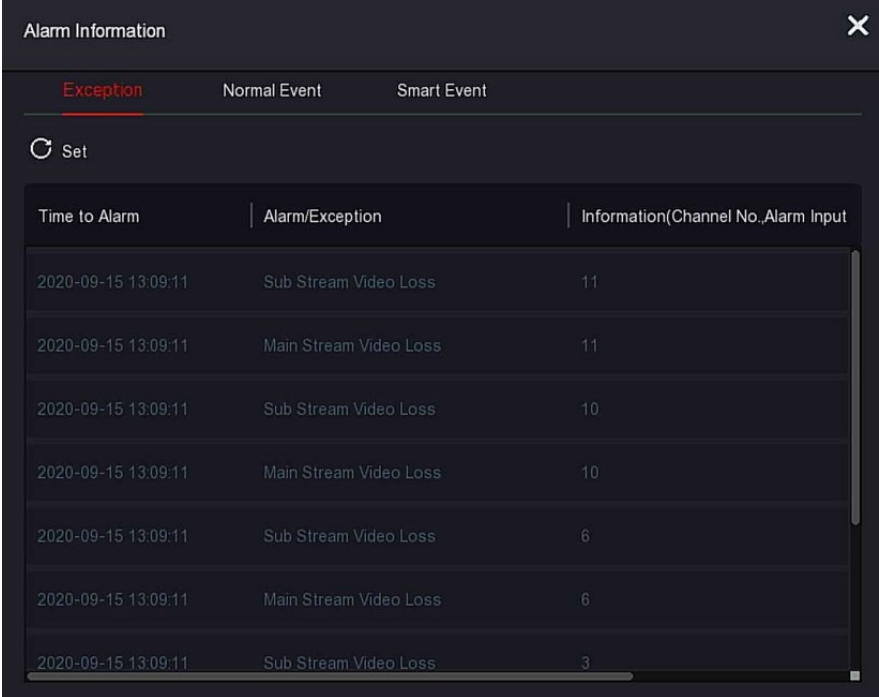



Figure 5-90

2. View abnormal information and various alarms of the device.
3. Click  Set to enter Event Hint Setting interface, abnormal event information, and various alarms displayed on the interface, Figure 5-91.

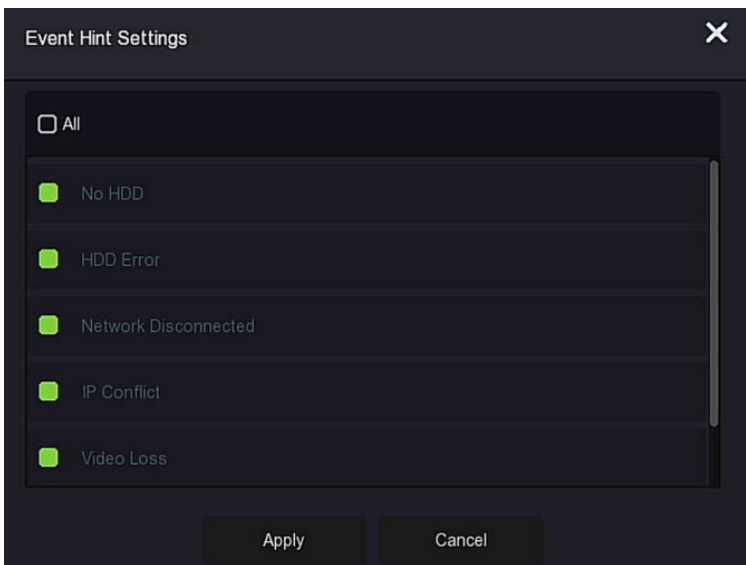




Figure 5-91

4. Click Apply to save the settings.

5.3.10 Backup Process

In the main menu, click  to enter the backup process interface. During file backup, you can view the backup progress of the file, pause, and delete the backup file, Figure 5-7.

To configure the backup process:

1. Access the main menu, and then click  to enter the Backup process interface, Figure 5-92.

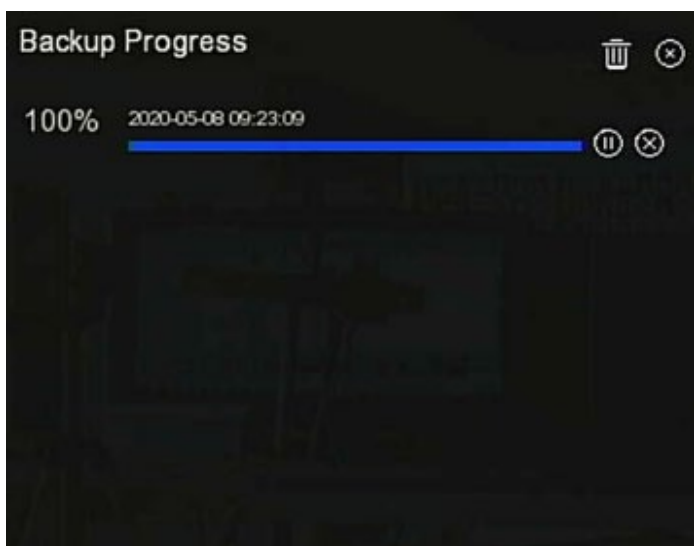



Figure 5-92

2. View the backup progress of the file, pause, and delete the backup file.

5.3.11 Shutdown

To configure shutdown settings:

1. Access the main menu, and then click  to enter the shutdown interface, Figure 5-93.

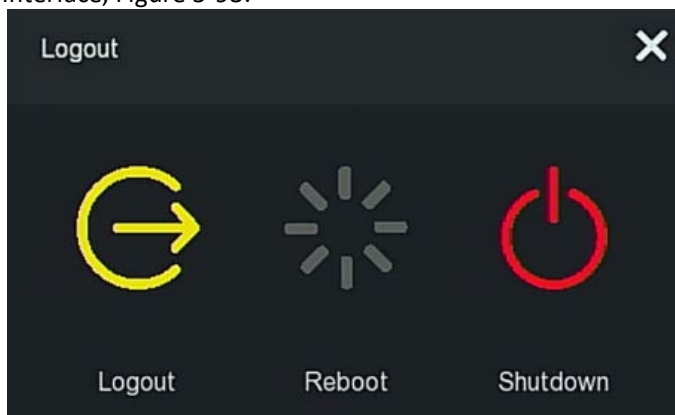


Figure 5-93

2. Do the corresponding operation as needed (Logout, Reboot, Shutdown).

Chapter 6 WEB Operation



NOTE

- Different types of devices have different interface displays. The following pictures are for reference only.
- 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).
- Users can access the device's WEB control interface through multiple PCs at the same time.

6.1 Internet connection

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

1. Confirm that the NVR device is properly connected to the network.
2. Set the IP address, subnet mask, and gateway for the PC and NVR devices.

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 gateway and subnet mask.

The default IP address of the NVR device is 192.168.1.88.

3. Verify that 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 connected 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 the Browser, input required IP address, the default setting is 192.168.1.88, and then enter the login interface, Figure 6-1.

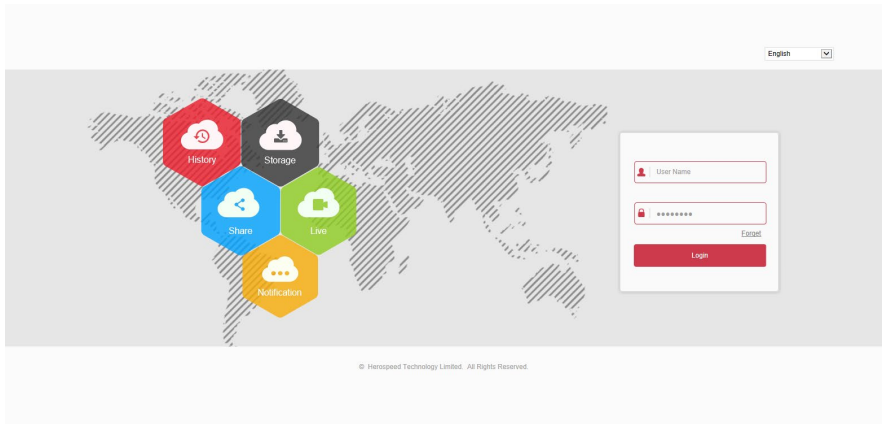


Figure 6-1

Select the system language in the upper right corner of the interface, enter the username and password (the default user name is "admin" and the password is "**12345**"), and then click **Login** Remote login.



NOTE

- **Modify Password:** After logging in to the webpage, the system prompts the user to change their password. Click Modify, enter the new password, confirm the password, set the security question, export the key, click "OK", and then complete the password modification.
- **Forgot password:** On the WEB login interface, click "Forget", select a verification method such as "Answer the question", select the question set when changing the password, enter the corresponding answer, and then click "Next" to reset the password as prompted. Click "Re-login" to return to the login interface.
- If the HTTP port is set to a port other than 80, enter "http://IP address + :(colon) + port number" in the address bar of your browser, such as "http://192.168.1.88:96".

6.3 Active X download, installation

The browser plug-in needs to be downloaded and installed when logging in to the device for the first time, Figure 6-2. Click "Please click here to download the browser plug-in, please close the browser when the download is finished", install it, and then follow the prompts to complete the installation.

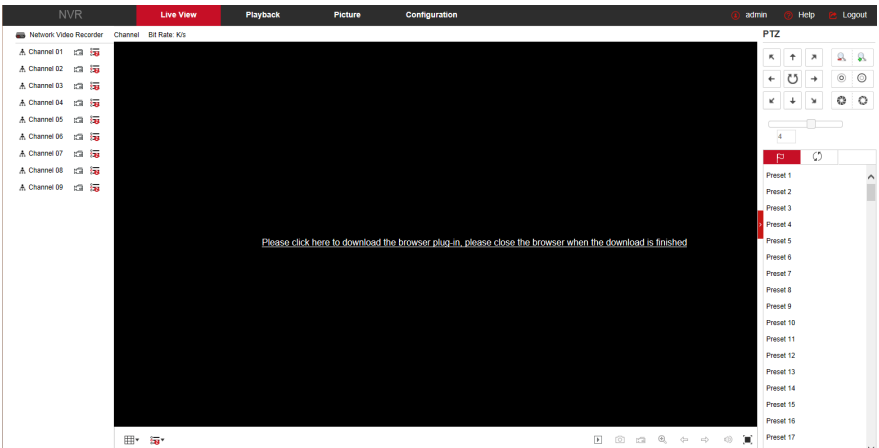
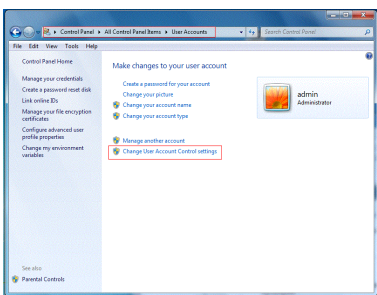
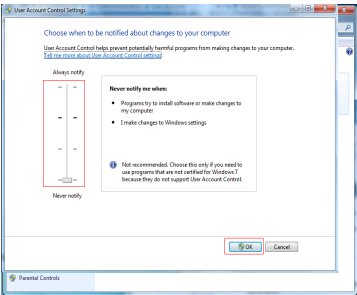


Figure 6-2



NOTE

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



WIN7-1 WIN7-2

- The Active X cannot 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 then click "OK". The Active X is downloaded and installed automatically, Figure 6-3.

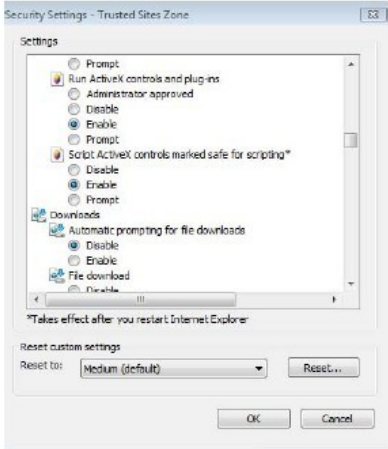


Figure 6-3

6.4 Live View

After logging the live preview interface displays, Figure 6-4.

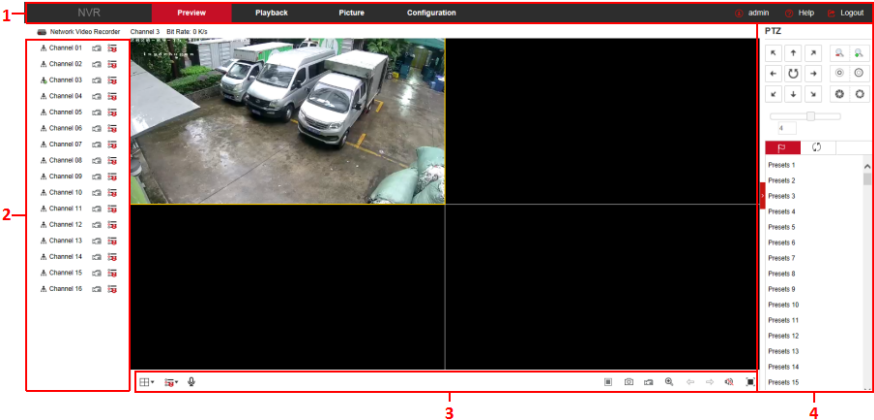


Figure 6-4

1. System Menu. Including Live View, Playback, Picture, Configuration, Help, Logout, and show login username.

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/sub bit stream switching.
	For voice calls, click to automatically connect to the device to make a real-time call. Prerequisites for local device calls: There are audio input/audio output interfaces on the local device, and both mic and speakers have been connected. Note: The app and web interfaces cannot talk to the local device at the same time.

Table 6-1

3. Preview channel shortcut button

Mark	Specification
	Preview window toggle. From left to right are: 1 split screen, 4 split screen, and 9 split screen. The preview number varies per device.
	Switch all preview channel master, sub streams, and open previews.
	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 the storage path.
	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 between 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.

Table 6-2

4. PTZ setting operation window













Mark	Specification
	PTZ directional control
	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 7 is much larger than the rotational speed 1.
	Preset point setting
	Call presets
	Settings
	Delete settings
	Cruise path setting
	Turn on / off cruise

Table 6-3

6.5 Configuration

6.5.1 Local Config

In the main interface, click Configuration → Local Config → Local Config to enter the local configuration interface, Figure 6-5. 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, and click Save to complete the path settings.

Local Config

Record File Settings

Save record files to

C:\NVR\Record

Browse

Save downloaded files to

C:\NVR\DownloadFiles

Browse

Picture and Clip Settings

Save capture files in live view to

C:\NVR\Capture

Browse

Save capture files when playback to

C:\NVR\PlaybackPics

Browse

Save clips to

C:\NVR\PlaybackFiles

Browse

Figure 6-5

6.5.2 Camera

6.5.2.1 Camera

■ Camera

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

Camera

PoE Power Configuration

PoE Bonding Configuration

Add

Manual Add

Delete

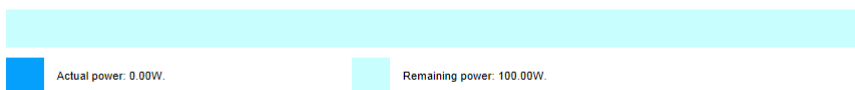
<input type="checkbox"/>	Channel(5)	Edit	Del	Conf.	IP	Port	Protocol
<input type="checkbox"/>	3	Edit	Del	Conf.	172.18.192.184	9080	Private
<input type="checkbox"/>	4	Edit	Del	Conf.	172.18.193.75	80	Private
<input type="checkbox"/>	6	Edit	Del	Conf.	172.18.193.107	80	Private
<input type="checkbox"/>	10	Edit	Del	Conf.	172.18.194.167	80	Private
<input type="checkbox"/>	11	Edit	Del	Conf.	172.18.194.168	80	Private

Figure 6-6

■ PoE Power Configuration

In the main interface, click Configuration → Camera → Add Camera → PoE Power Configuration to enter the PoE Power Configuration interface. Here you can set according to the distance of the network camera connected to the actual PoE channel, and check the connection status of the channel, Figure 6-7.

Channel	<input type="checkbox"/> Long Distance	<input type="checkbox"/> Short Distance	Channel Status	Actual Power
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w
5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w
6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w
8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disconnected	0.00w



Note:

1. PoE port rated power is 100.0W.

2. The normal power range of each PoE port is 0W-30.0W.

Figure 6-7

■ PoE Bonding Configuration

In the main interface, click Configuration → Camera → Add Camera → PoE Binding Configuration to enter the PoE Power Configuration interface. Here you can set each PoE port to bind with the camera.

<input type="checkbox"/> Enable	Channel name
<input type="checkbox"/>	IPCamera 1
<input type="checkbox"/>	IPCamera 2
<input type="checkbox"/>	IPCamera 3
<input type="checkbox"/>	IPCamera 4
<input type="checkbox"/>	IPCamera 5
<input type="checkbox"/>	IPCamera 6
<input type="checkbox"/>	IPCamera 7
<input type="checkbox"/>	IPCamera 8

Figure 6-8

6.5.2.2 OSD

In the main interface, and then click Configuration → Camera → OSD to enter the OSD setting interface, Figure 6-9. Here you can view and set the device text, date and other related information, the relevant parameters are consistent with the NVR-side settings.

OSD

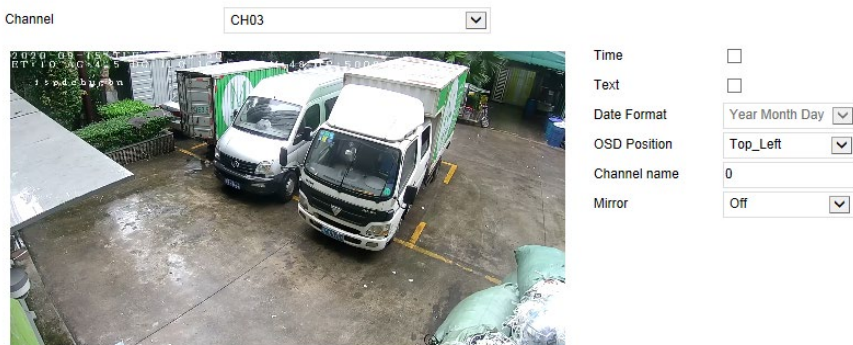


Figure 6-9

6.5.2.3 Image

In the main interface, click Configuration → Camera → Image to enter the Image setting interface, Figure 6-10. Here you can view and set the channel image (brightness, contrast, saturation, and sharpness), fill light, exposure, backlight, white balance, video adjustment, image enhancement, defogging, etc. The relevant parameters are consistent with the local settings of the NVR.

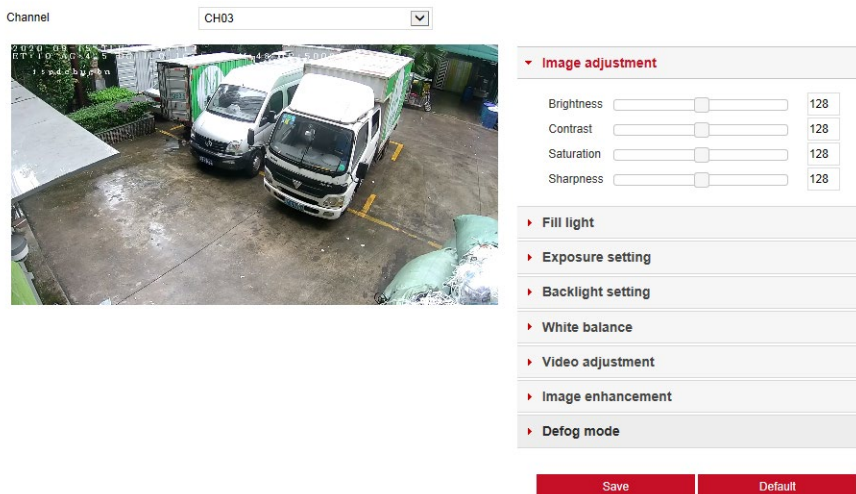


Figure 6-10

6.5.2.4 PTZ Setup

In the main interface, click Configuration → Channel → PTZ Setup to enter the video PTZ Setup interface, Figure 6-11. Here you can view and set the PTZ channel connected to RS485 such as protocol, address, baud rate, etc. of the PTZ channel connected to RS485. All parameters (baud rate, data bit, stop bit, check, protocol, address) should be connected to the cloud. The parameters of the decoders are the same. The relevant parameters are consistent with the NVR-side settings.

PTZ

Channel	CH01	▼
Protocol	PelcoD	▼
Address	0	
Baud Rate	9600	▼
Data Bit	8	▼
Stop Bit	2	▼
Check	EVEN	▼

Save

Figure 6-11



NOTE

- When setting the protocol, if the connection is a network PTZ, select "Private", and the connection is an RS485 PTZ, select other options.

6.5.2.5 Privacy Mask

In the main interface, click Configuration → Camera → Privacy Mask to enter the privacy mask setting interface, Figure 6-12. Here you can set three shielding areas, and the relevant parameters are consistent with the NVR-side settings.

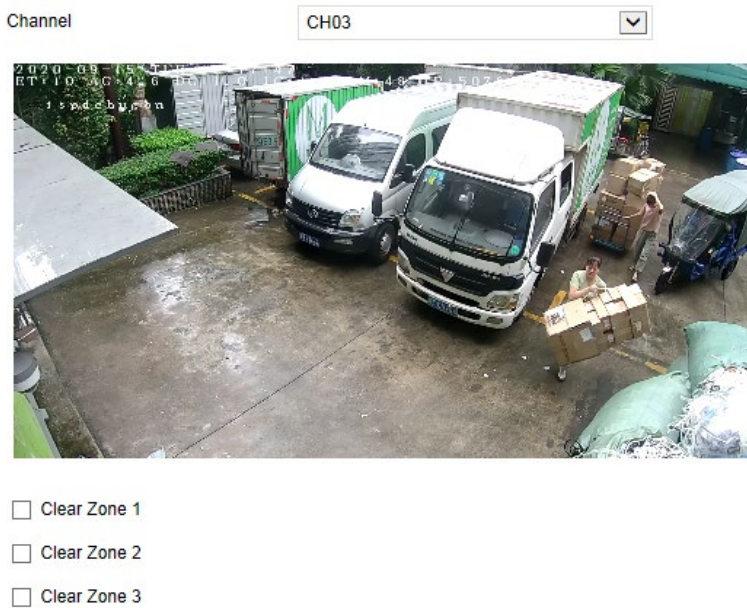


Figure 6-12

6.5.2.6 Channel Name

In the main interface, click Configuration → Camera → Channel Name to enter the channel name setting interface, Figure 6-13. Here you can view and modify the names of all channels of the NVR. The relevant parameters and NVR-side settings consistent.

Channel name

Channel1	CH1
Channel2	CH2
Channel3	CH3
Channel4	CH4
Channel5	CH5
Channel6	CH6
Channel7	CH7
Channel8	CH8
Channel9	CH9
Channel10	CH10
Channel11	CH11
Channel12	CH12
Channel13	CH13
Channel14	CH14

Save

Restore Default

Figure 6-13

6.5.3 Storage

6.5.3.1 Record

■ Record

To configure video settings:

1. Access the main interface, click Configuration → Storage → Record → Record to enter the recording setting interface, Figure 6-14.

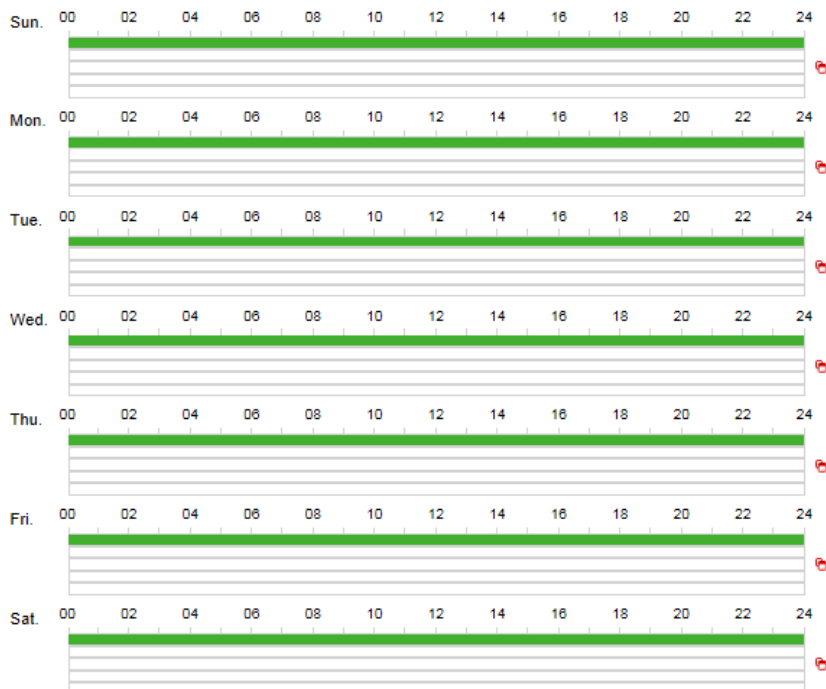
Channel CH01 Enable ☒

Figure 6-14

2. Set parameters using 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".
Enable	Enable/Disable the current channel recording function.
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 setting the video for a certain day, click  to apply the settings of that day to other times.
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 time setting interface, set the prerecord action status 0 seconds to 30 seconds before the recording, click OK.

Table 6-1

3. Click Save to complete configuration.

■ Encode

In the main interface, click Configuration → Record → Encode to enter the encoding setting interface Figure 6-15. Here you can view and set the encoding parameter values for accessing the IPC. The relevant parameters and NVR-side settings consistent.

Record

Encode

Channel

CH01

Stream Type

Main Stream

Video Encoding

H264

Main Stream

Resolution

Stream Type

Video&Audio

Bitrate Type

Variable

Bitrate(Kb/S)

0

Bitrate Range(Kbps)

Frame Rate

0

H264+/H265+

H264+

Disable

Figure 6-15

6.5.3.2 Storage Device

■ HDD

In the main interface, click Configuration → Storage → Storage Device → HDD to enter the HDD interface, Figure 6-16. Here you can view the HDD information of the connected device and format the hard disk. The operation steps of formatting the hard disk are consistent with the local settings of the NVR.

Cloud Storage

☐ Enable

☐ Google

Bind

Cloud Web

Authorization Code

Test

Upload Folder

event picture

Username	Capacity	Used
	0.00MB	0.00MB

IPEYE

Enable☐

Channel

CH01

IPEYE Client

IPEYE only supports H264 encoding.

Figure 6-17

6.5.4 System

6.5.4.1 General

■ Device Setting

In the main interface, click Configuration → System → General to enter the device setting interface, Figure 6-18. Here you could view and check the language, record mode, record days, video standard, resolution, and other information. Click Save to complete the setting.

Device Setting	Date	Dst
Language	English <input type="button" value="v"/>	
Record Mode	Overwrite <input type="button" value="v"/>	
Record Days	No Limit <input type="button" value="v"/>	
Video Standard	PAL <input type="button" value="v"/>	
Resolution	1280x720 <input type="button" value="v"/>	
Auto Login	<input type="checkbox"/>	
Auto Logout	<input checked="" type="checkbox"/>	Never <input type="button" value="v"/>
Device Name	NVR	
Fullscreen Time(sec)	10 <input type="button" value="v"/>	

Figure 6-18

■ 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:

1. Access the main interface, click Configuration → System → General → Date to enter the date setting interface, Figure 6-19.
2. Select the setting date type (3 ways):
 - ✓ **Enable Set Date/Time Manually:** Select the date and time manually, and then click Save, the system automatically synchronizes with the manually set time.
 - ✓ **Enable Synchronize with the computer:** Click Save, the system automatically synchronizes the time to the computer that logs into the WEB page.
 - ✓ **Enable Receive Date/Time from NTP:** Select the NTP server (or select a custom server, enter the custom server domain name), select the time zone where the device is located, enter the NTP port, set the NTP update interval, date format, date separator, time format, click "Save", system time, and then the NTP server time is synchronized.

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, Month Day Year, Day Month Year, Day Month Year.
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:

1. Access the main interface, click Configuration → System → General → Date to enter the date setting interface, Figure 6-19.
2. Select the channel or select "All", and then click Save to complete the configuration.

Device Setting
Date
Dst

Time Zone

GMT+00:00 Dublin, Edinburgh, London

☒ Set Date/Time Manually

Date/Time

2020-09-15

17

25

33

☐ Synchronize with the computer

2020/9/15 17:23:52

☐ Enable NTP

NTP Server

time.nist.gov

Custom

NTP Port

123

Interval(Min)

720

(30-1440)

Date Format

Year Month Day

Separator

.

Time Format

24 Hours

Channel Check Time

☐ Select All

☒ CH01
☒ CH02
☒ CH03
☒ CH04
☒ CH05
☒ CH06
☒ CH07
☒ CH08
☒ CH09
☒ CH10
☒ CH11
☒ CH12
☒ CH13
☒ CH14
☒ CH15
☒ CH16

Interval(Min)

60

Figure 6-19

Dst

Set the Dst as follow:

1. Access the main interface, click Configuration → System → General → Dst to enter the Dst setting interface, Figure 6-20.
2. Turn on daylight-saving time, set the type, start time, end time, and offset.
3. Click Save to complete the configuration.

Device Setting
Date
Dst

☐ Enable DST

Type

Week

Start Time

Mar.

1st

Sun.

03

03

End Time

Nov.

1st

Sun.

03

03

Offset(min)

60

Figure 6-20

6.5.4.2 Network

■ IP/Port

In the main interface, click Configuration → System → Network to enter the IP/Port setting interface, Figure 6-21. Here you can set the IP Address, Network Mask, Gateway, Port, DNS, and other network information, IP/Port and NVR settings consistent.

TCP/IP	DDNS	E-mail	P2P
NIC Settings			
Enable DHCP <input type="checkbox"/>			
IP Address	172.18.195.253		
Network Mask	255.255.248.0		
Gateway	172.18.192.1		
TCP Port	5000		
RTSP Port	554		
HTTP Port	80		
Private Port	6000		
MAC Address	2C:6F:51:05:97:E0		
DNS			
Primary DNS	172.18.192.1		
Secondary DNS	8.8.8.8		
Internal Net Card IP			
Internal Net Card IP	192.168.11.2		

Figure 6-21

■ DDNS

In the main interface, click Configuration → System → Network → DDNS to enter the DDNS setting interface, Figure 6-22. Here you can enable and set the DDNS function, the DDNS setting is consistent with the NVR local setting.

TCP/IP	DDNS	E-mail	P2P
--------	-------------	--------	-----

DDNS

Enable DDNS	<input type="checkbox"/>
DDNS Type	ORAY <input type="button" value="v"/>
Refresh Time(Sec)	60
Username	<input type="text"/>
Password	<input type="password"/>
Domain	<input type="text"/>

Figure 6-22

■ E-mail

In the main interface, click Configuration → System → Network → E-mail to enter the email setting interface, Figure 6-23. Here you can open and set the mail function, mail settings and NVR settings consistent.

☐ Enable Email

Sender's Address

SMTP Server

Custom

Custom

smtp.MailServer.com

SMTP Port

465

☐ Attach File

Subject

NVR_ALERT

Message Interval(Min)

1

Encryption

SSL

Username

Password

Confirm

Recipient1

Recipient2

Recipient3

E-mail Test

Time Period

Week

Tue.

Time Period1

00 : 00 ~ 00 : 00

Time Period2

00 : 00 ~ 00 : 00

☐ Enable Auto Email

Email Interval(Min)

60

Figure 6-23

■ P2P

In the main interface, click Configuration → System → Network → P2P to enter the P2P setting interface, Figure 6-24. Here you can enable/disable the P2P function, check the serial number of the device, use the mobile phone to scan the QR code to download the app, and the settings of the P2P are consistent with the local settings of the NVR.

☒ **BitVision**

	
8701366799430	Android & IOS
Status	Online
Encryption	SSL <input type="button" value="v"/>
Push interval(min)	5 <input type="button" value="v"/>

Figure 6-24

■ FTP

In the main interface, click Configuration → System → Network → FTP to enter the FTP setting interface, Figure 6-25. Here you can enable and set the FTP server function. The FTP settings are the same as the NVR local settings.

FTP

☐ Enable FTP

FTP Server

0.0.0.0

Test

FTP Port

21

Username

Password

Confirm

File Upload

Channel

CH01

Week

Tue.

Time Period1 ☐

0 : 0 ~ 0 : 0

Time Period2 ☐

0 : 0 ~ 0 : 0

Figure 6-25

■ UPNP

In the main interface, click Configuration → System → Network → UPNP to enter the UPNP setting interface, Figure 6-26. Here you can enable and set the UPNP function, UPNP settings are consistent with the NVR local settings.

■ **Address Filter**

In the main interface, click Configuration → System → Network → Address Filter to enter the Address Filter setting interface, Figure 6-28. Here you can enable and set the Address Filter function of the NVR, the specific Address Filter settings are consistent with the NVR's local settings.

TCP/IP DDNS E-mail P2P FTP UPNP PPPOE **Address Filter**

☒ Enable

Restriction Type

Blacklist

Add

Delete All

Enable ▲	IP/MACAddress	Edit	Delete
<input checked="" type="checkbox"/>	172.18.194.186	Edit	Delete

Figure 6-28

6.5.4.3 User

In the main interface, click Configuration → System → User to enter the User management interface, Figure 6-29. Here you can add, delete, edit users, user settings are consistent with the local settings of NVR.

[illegible]

Figure 6-29

6.5.4.4 Local Alarm

■ Alarm Input

In the main interface, click Configuration → System → Local Alarm → Alarm Input to enter the Alarm Input interface, Figure 6-30. Here you can set the alarm input of the device to the alarm of the external alarm device. The alarm input setting is consistent with the local setting of the NVR.

Alarm Input

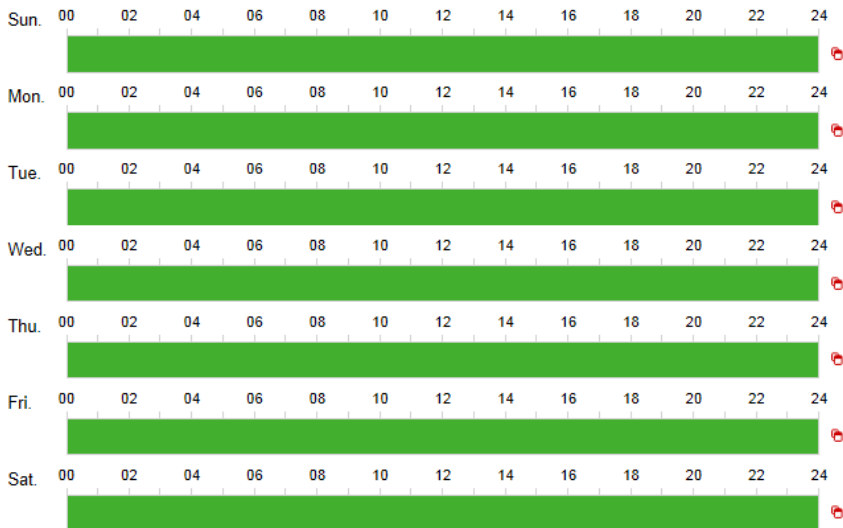
1

Arming Schedule

Delete

Delete All

Select All



Normal

☐ Enable

Alarm Name

alarm_in1

Type

Normally open

Trigger Alarm Output

☐ 1☐ Channel Recording☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16☐ Full Screen Monitoring☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16☒ Screen Display☒ E-mail Notification☐ Buzzer Alarm

Save

Figure 6-30

■ Alarm Output

In the main interface, click Configuration → System → Local Alarm → Alarm Output to enter the Alarm Output interface, Figure 6-31. Here you can set the alarm output of the device to the alarm of the external alarm device. The alarm output setting is consistent with the local setting of the NVR.

Alarm Input

Alarm Output

Channel

1

Arming Schedule

Delete

Delete All

Select All

Sun.	00	02	04	06	08	10	12	14	16	18	20	22	24	
Mon.	00	02	04	06	08	10	12	14	16	18	20	22	24	
Tue.	00	02	04	06	08	10	12	14	16	18	20	22	24	
Wed.	00	02	04	06	08	10	12	14	16	18	20	22	24	
Thu.	00	02	04	06	08	10	12	14	16	18	20	22	24	
Fri.	00	02	04	06	08	10	12	14	16	18	20	22	24	
Sat.	00	02	04	06	08	10	12	14	16	18	20	22	24	

Normal

☐ Enable

Alarm Name

alarm_in1

Delay

5s

Save

Figure 6-31

6.5.4.5 Normal Event


■ Motion Detection

In the main interface, click Configuration → System → Normal Event → Motion Detection to enter the motion detection setting interface, Figure 6-32. Here you can view and set device motion detection related information. The relevant parameters are consistent with the local settings of the NVR.

Motion Detection Exception Video Loss Buzzer

Channel CH03

Regional Settings Arming Schedule



Draw Area Clear

☒ Enable Sensitivity 5

☐ Buzzer Alarm

☐ Channel Recording

☐ Full Screen Monitoring

☐ E-mail Notification

Trigger Alarm Output ☒ 1

Figure 6-32

■ Exception

In the main interface, click Configuration → System → Normal Event → Exception to enter the exception setting interface, Figure 6-33. Here you could set the abnormal alarm (No Disk, Disk Error, Broken Network, IP Conflict). The abnormal alarm is consistent with the local setting of NVR.

Motion Detection Exception Video Loss Buzzer	
Event Type: No Disk ▼	
<input type="checkbox"/> Select All	<input type="checkbox"/> Alarm Output
<input type="checkbox"/> Enable	<input type="checkbox"/> 1
<input type="checkbox"/> E-mail Notification	
<input type="checkbox"/> Buzzer Alarm	
<input type="checkbox"/> Screen Display	

Figure 6-33

■ Video Loss

In the main interface, click Configuration → System → Normal Event → Video Loss to enter the video loss setting interface, Figure 6-34. Here you could enable channel video loss and set the corresponding alarm when the video is lost. The relevant parameters are consistent with the local settings of the NVR.

Motion Detection Exception Video Loss Buzzer	
Channel: CH01 ▼	
<input type="checkbox"/> Select All	<input type="checkbox"/> Alarm Output
<input type="checkbox"/> Enable	<input type="checkbox"/> 1
<input type="checkbox"/> Screen Display	
<input type="checkbox"/> E-mail Notification	
<input type="checkbox"/> Buzzer Alarm	

Figure 6-34

■ **Buzzer**

In the main interface, click Configuration → System → Normal Event → Buzzer to enter the buzzer alarm setting interface, Figure 6-35. Here you could set the duration of the buzzer alarm. The related parameters are consistent with the local settings of the NVR.

Motion Detection

Exception

Video Loss

Buzzer

Delay Time (s)

1

(1-120)

Save

Figure 6-35

6.5.4.6 Intelligent

Intelligent detection includes face detection, crossover detection, regional intrusion detection, people stay and people gathering detection.


■ **Face detection**

In the main interface, click Configuration → System → Smart Event → Face to enter the Face detection setting interface, Figure 6-36. Here you could set the alarm for face detection. The relevant parameters are consistent with the local settings of the NVR.

Intelligent

Channel

CH06



Face

Line Crossing

Regional Intrusion

Loitering

People Gathering

Enable

☒

Processing Method

Buzzer Alarm

E-mail Notification

Channel Recording

Full Screen Monitoring

Trigger Alarm Output

☐

☐

☐

☐

☐ 1

Rule Setting

Save

Figure 6-36

■ Line Crossing

In the main interface, click Configuration → System → Smart Event → Line Crossing to enter the Crossover detection setting interface, Figure 6-37. Here you could set the alarm for crossover detection. The relevant parameters are consistent with the local settings of the NVR.

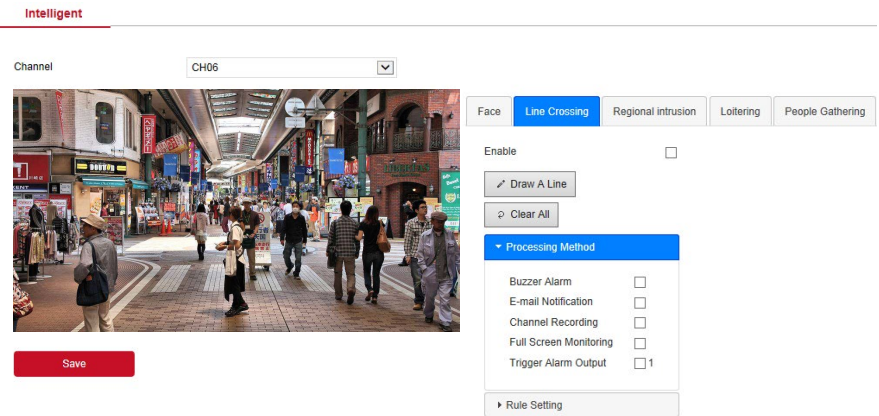


Figure 6-37

■ Regional Intrusion

In the main interface, click Configuration → System → Smart Event → Regional Intrusion to enter the regional intrusion detection setting interface, Figure 6-38. Here you could set the alarm for regional intrusion detection. The relevant parameters are consistent with the local settings of the NVR.

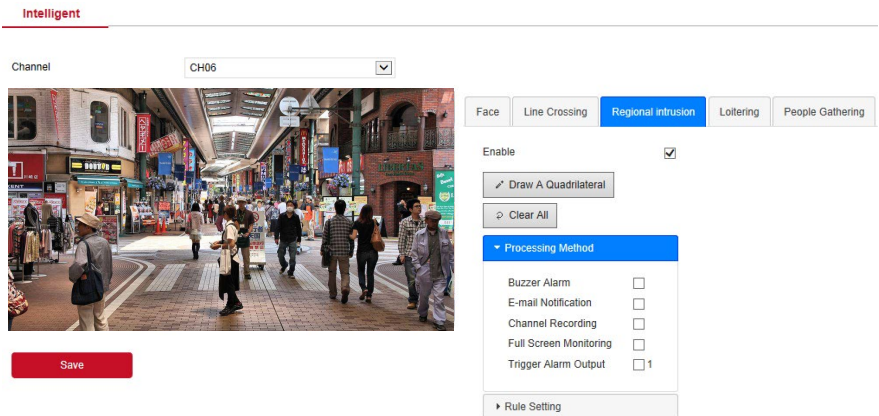


Figure 6-38

Loitering

In the main interface, click Configuration → System → Smart Event → Loitering to enter the Wandering detection setting interface, Figure 6-39. Here you could set the alarm for people stay detection. The relevant parameters are consistent with the local settings of the NVR.

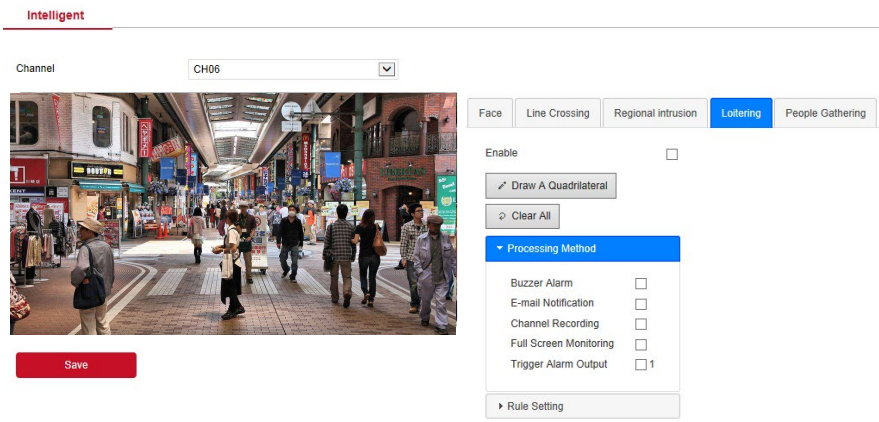


Figure 6-39

People Gathering

In the main interface, click Configuration → System → Smart Event → People Gathering to enter the people gathering detection setting interface, Figure 6-40. Here you could set the personnel gathering detection alarm, the relevant parameters are consistent with the local settings of the NVR.

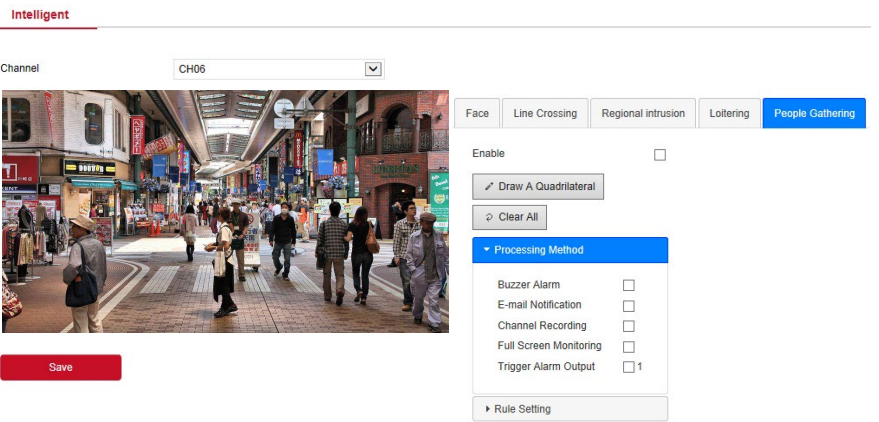


Figure 6-40

■ Face Comparison

Face comparison is used to set the face comparison function of NVR CH01-CH04.

To configure face comparison:

1. Access the main interface, and then click Configuration → System → Smart Event → Face Comparison to enter the face comparison setting interface, Figure 6-41.

Intelligent
Face Comparison
Face Database

Channel
CH01

☐ Enable

Processing Method

<input type="checkbox"/> Enable ↕	Database Name ↕	Mode Selection ↕	Similarity ↕
<input type="checkbox"/>	15	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	14	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	11	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	1	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	3	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	16	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	2	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	12	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	4	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	6	Blacklist ▼	<input type="range"/> 80
<input type="checkbox"/>	7	Blacklist ▼	<input type="range"/> 80

Save

Figure 6-41

2. Select the configuration channel, enable the face comparison function, set the comparison face database, and then select the processing method.
 - ✓ Face comparison library settings: Select face library and mode, set similarity.
 - ✓ Processing method settings: Click to enter the processing method interface, select "buzzer alarm", "email notification", "channel recording" and "alarm output" ports as required.

3. Click Save to save the settings.

■ Face Database

In the main interface, click Configuration → System → Smart Event → Face Database to enter the face database setting interface, Figure 6-42. Here you can add and delete the face database, and the related operation steps are the same as the local NVR.

Here you can perform operations such as adding, deleting, and ice machine face database. The relevant operation steps are the same as those of the NVR.

Intelligent

Face Comparison

Face Database

Database Name ▲	Number ↕	Event	Delete
1	31		
2	33		
3	208		
4	209		
5	31		
6	31		
7	31		
8	31		

Add

Face Database Details

No. ▲	Name ↕	Coding ↕	Delete
1	444	205DB11B-6862-9D45-A51E-EB810ABCACAF	
2	ww	D9F9D5FB-59AF-4E4A-A50C-C02D8014ECD1	
3	vv	F4A279CF-CFBC-0F41-9F4E-0FAE50B84863	
4	tt	FE87E2BE-3ED0-6944-96BC-D39D9D1865C1	
5	ss	E88667E5-7620-8A40-9928-72BB298B47EF	
6	ad - 副本	C4460C94-B6F8-3245-AD56-AE854857645B	
7	nn	A9B368E1-54EE-2142-99E5-E3574803AFC4	
8	vv	E407AADA-1ADA-0A4E-0A54-7D07E1D5ED30	

Face Template

Figure 6-42

6.5.5 Maintain

6.5.5.1 Device

In the main interface, click Configuration → Maintain → Device to enter the version information interface, Figure 6-43. You can view the system's hardware features, software version, and release date on the version information interface.

Device	
Device Name:	Network Video Recorder
Model No:	36C08-POE-PNP
Version:	NVR_HI3536C_H265_16CH_8POE_PNP3_BD_V5_V20.1.36.4
Device Version:	1.0.3.42
Date:	Sep 4 2020 13:47:46
WEB Version:	20.1.36.200904
Plugin Version:	20.1.36.5
Total Number Of Channels:	16
Total Number Of POE Channels:	8

Figure 6-43

6.5.5.2 Log

In the main interface, click Configuration → Maintain → Log to enter the log interface, Figure 6-44. Here you can search and clear the device logs. The log search settings are consistent with the NVR local settings.

Type

Start Time

End Time

No.	Time	Event	Username
1	2020/09/15-18:01:10	CH[3]Motion detection alarm	system
2	2020/09/15-18:00:39	CH[3]Motion detection alarm	system
3	2020/09/15-17:58:51	CH[3]Motion detection alarm	system
4	2020/09/15-17:58:27	CH[3]Motion detection alarm	system
5	2020/09/15-17:57:48	CH[3]Motion detection alarm	system
6	2020/09/15-17:57:12	CH[3]Motion detection alarm	system
7	2020/09/15-17:56:27	CH[3]Motion detection alarm	system
8	2020/09/15-17:55:40	CH[3]Motion detection alarm	system
9	2020/09/15-17:54:31	CH[6]Regional Intrusion Alarm	system
10	2020/09/15-17:54:16	CH[6]Regional Intrusion Alarm	system
11	2020/09/15-17:53:57	CH[6]Regional Intrusion Alarm	system
12	2020/09/15-17:53:48	CH[6]Regional Intrusion Alarm	system
13	2020/09/15-17:53:18	CH[6]Regional Intrusion Alarm	system
14	2020/09/15-17:53:00	CH[6]Regional Intrusion Alarm	system

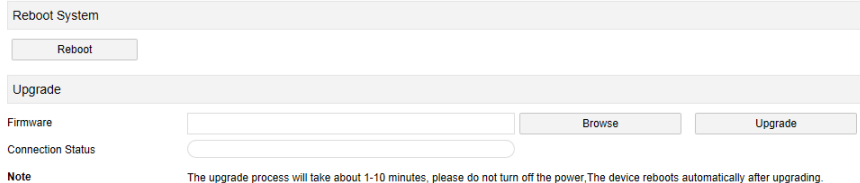
Figure 6-44

6.5.5.3 Manual Upgrade

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

The device system restart and upgrade steps are as follows:

1. Access the main interface, and then click Configuration → Maintain → Manual Upgrade to enter the manual upgrade interface, Figure 6-45.
2. **Steps 2:**
 - ✓ **System Reboot:** Click Reboot → OK, WEB enters the device restart interface, wait for the device to restart, enter the login interface, and then log in again.
 - ✓ **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.



Reboot System

Reboot

Upgrade

Firmware Browse Upgrade

Connection Status

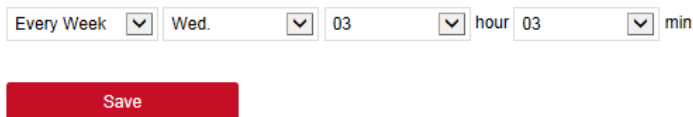
Note The upgrade process will take about 1-10 minutes, please do not turn off the power, The device reboots automatically after upgrading.

Figure 6-45

6.5.5.4 Auto Maintain

In the main interface, click Configuration → Maintain → Auto Maintain to enter the auto maintain interface, Figure 6-46. Here you can set the device reboot time, the auto maintenance settings and NVR settings consistent.

Auto Maintain



Every Week Wed. 03 hour 03 min

Save

Figure 6-46

6.5.5.5 Restore Default

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

The default steps to restore are as follows:

1. Access the main interface, click Configuration → Maintain → Restore Default to enter the restore default interface, Figure 6-47.
2. Select the parameters to restore, such as "Record".
3. Click Save and the selected parameters are restored to the factory defaults.

Restore Default

Restore Default

Channel Recording

Channel Recording

Camera

Camera

System

System

Maintain

Maintain

Restore Factory Setting

☐ Restore Factory Setting

Save

Figure 6-47

6.6 Playback

In the main interface, click Playback to enter the playback interface, Figure 6-48. Here you can view the equipment video, capture, download and other actions, the settings and NVR settings consistent.

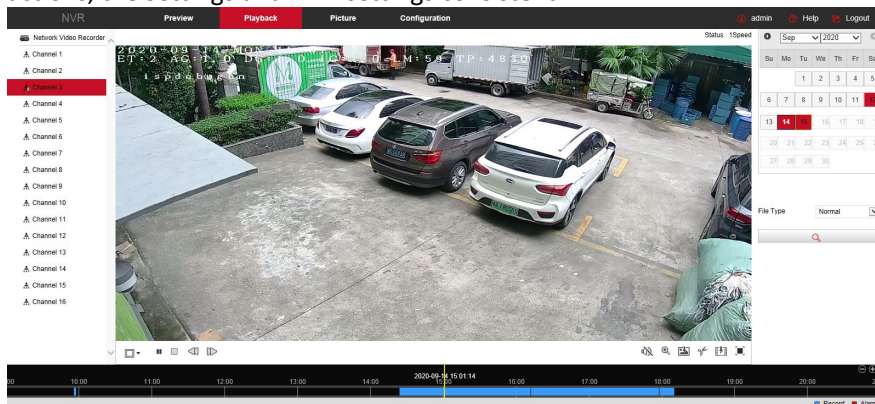

















Figure 6-48

- **Timeline:** Displays the type of recording under the current conditions and the time period in which it is located. In the 4-picture playback mode, 4 playback time corresponding to the selected four channels can be displayed. In the other single-screen playback modes, only one time axis is displayed. Use the mouse to

click a point in the blue area and drag to the yellow line position, that is, playback from that point in time.

- **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 . The video plays slowly, the specific speed of choice 1/2, 1/4, 1/8. After switching, you can check the playback speed in the status of the upper right corner of the preview interface.
- **Fast Forward:** When the video is played, click . The video will be slow to play, the specific speed of choice 2, 4, 8. After switching, you can check the current playback speed in the status of the upper right corner of the preview interface.
- **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 by holding down the left mouse button, and then select the position to zoom in on the playback screen. Release the mouse, select the location screen is placed, and then 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, storing the clip in the local configuration settings.
- **Download:** After querying the video file, click  to enter the video file list, select the download file, click Download, and then the video file starts to download. The file download interface is shown in Figure 6-49. The "First Page", "Prev Page", "Next Page", and "Last Page" are used to scroll through all video files. You can use "Edit" under "Set date/time manually" to intercept and download the video file.

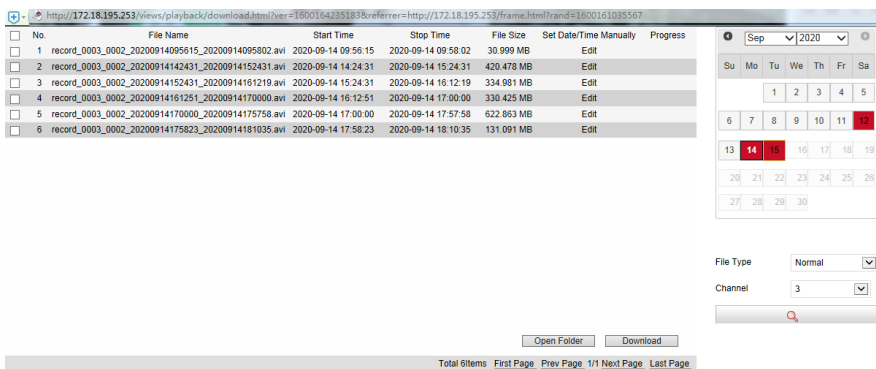



Figure 6-49

- **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:** Drop and drag the video playback, using 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, and playback channel to play the point in time recording.

6.7 Picture

In the picture interface, you can view and download all the pictures captured on the device side.

To view and download captured pictures:

1. Access the main interface, and then click Picture to enter the picture interface, Figure 6-50.

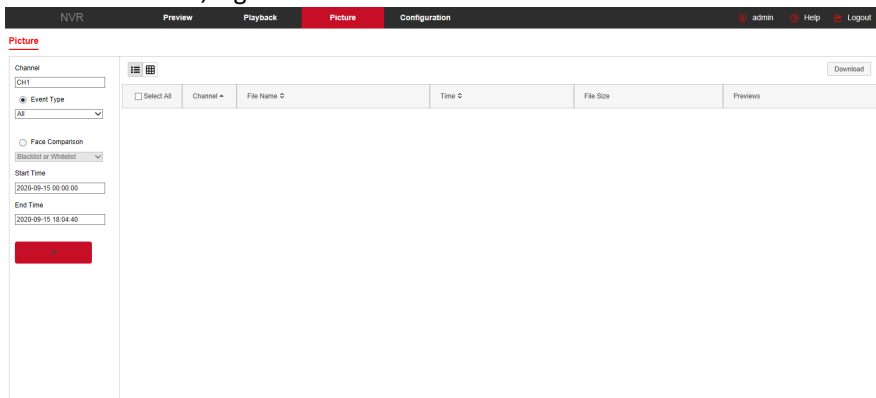




Figure 6-50

2. Select the channel, click OK, select the event type, and then set the search time range.
3. Click  , the searched image is displayed on the right side of the interface, Figure 6-51.

















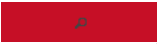

<input type="checkbox"/> Select All	Channel	File Name	Time	File Size	Previews
<input type="checkbox"/> 1	3	03_0002_2020-09-15_09-00-49.jpg	2020-09-15 09:00:49	37.01Kb	
<input type="checkbox"/> 2	3	03_0002_2020-09-15_09-01-13.jpg	2020-09-15 09:01:13	36.99Kb	
<input type="checkbox"/> 3	3	03_0002_2020-09-15_09-04-08.jpg	2020-09-15 09:04:08	36.81Kb	
<input type="checkbox"/> 4	3	03_0002_2020-09-15_09-04-31.jpg	2020-09-15 09:04:31	36.59Kb	
<input type="checkbox"/> 5	3	03_0002_2020-09-15_09-05-15.jpg	2020-09-15 09:05:15	36.59Kb	
<input type="checkbox"/> 6	3	03_0002_2020-09-15_09-06-44.jpg	2020-09-15 09:06:44	36.51Kb	
<input type="checkbox"/> 7	3	03_0002_2020-09-15_09-13-05.jpg	2020-09-15 09:13:05	35.69Kb	
<input type="checkbox"/> 8	3	03_0002_2020-09-15_09-13-34.jpg	2020-09-15 09:13:34	35.58Kb	
<input type="checkbox"/> 9	3	03_0002_2020-09-15_09-14-28.jpg	2020-09-15 09:14:28	35.63Kb	
<input type="checkbox"/> 10	3	03_0002_2020-09-15_09-15-42.jpg	2020-09-15 09:15:42	35.48Kb	
<input type="checkbox"/> 11	3	03_0002_2020-09-15_09-18-18.jpg	2020-09-15 09:18:18	36.08Kb	
<input type="checkbox"/> 12	3	03_0002_2020-09-15_09-23-35.jpg	2020-09-15 09:23:35	36.19Kb	
<input type="checkbox"/> 13	3	03_0002_2020-09-15_09-24-40.jpg	2020-09-15 09:24:40	35.82Kb	
<input type="checkbox"/> 14	3	03_0002_2020-09-15_09-25-42.jpg	2020-09-15 09:25:42	35.67Kb	

Figure 6-51

4. Select the picture, click Download to select the storage path, click OK, and then select the image to download to the specified folder.

Click  corresponding to the preview position to view the image.

- **Channel:** Select the channel to search for image files. Select one channel individually or multiple channels or Select All at the same time.
- **Event Type:** Capture image type, the drop-down box option consists of All, Manual capture, Motion capture, Face detection, Regional Intrusion, Crossover, Wandering, and Staff Gathering.
- **Start/End Time:** The time range for capturing image files.
- **Query:** Click  , the system will query the corresponding picture file according to the set channel, event type and time range, and display it in the file list.
- **Details:** The image searched by clicking  is displayed in the list as detailed information, Figure 6-52:
















<div> <div> <div></div> <div></div> </div> <div>Download</div> </div>					
<input type="checkbox"/> Select All	Channel	File Name	Time	File Size	Previews
<input type="checkbox"/> 1	3	03_0002_2020-09-15_09-00-49.jpg	2020-09-15 09:00:49	37.01Kb	
<input type="checkbox"/> 2	3	03_0002_2020-09-15_09-01-13.jpg	2020-09-15 09:01:13	36.99Kb	
<input type="checkbox"/> 3	3	03_0002_2020-09-15_09-04-08.jpg	2020-09-15 09:04:08	36.81Kb	
<input type="checkbox"/> 4	3	03_0002_2020-09-15_09-04-31.jpg	2020-09-15 09:04:31	36.59Kb	
<input type="checkbox"/> 5	3	03_0002_2020-09-15_09-05-15.jpg	2020-09-15 09:05:15	36.59Kb	
<input type="checkbox"/> 6	3	03_0002_2020-09-15_09-06-44.jpg	2020-09-15 09:06:44	36.51Kb	
<input type="checkbox"/> 7	3	03_0002_2020-09-15_09-13-05.jpg	2020-09-15 09:13:05	35.65Kb	
<input type="checkbox"/> 8	3	03_0002_2020-09-15_09-13-34.jpg	2020-09-15 09:13:34	35.58Kb	
<input type="checkbox"/> 9	3	03_0002_2020-09-15_09-14-28.jpg	2020-09-15 09:14:28	35.63Kb	
<input type="checkbox"/> 10	3	03_0002_2020-09-15_09-15-42.jpg	2020-09-15 09:15:42	35.46Kb	
<input type="checkbox"/> 11	3	03_0002_2020-09-15_09-16-18.jpg	2020-09-15 09:16:18	36.06Kb	
<input type="checkbox"/> 12	3	03_0002_2020-09-15_09-23-35.jpg	2020-09-15 09:23:35	36.19Kb	
<input type="checkbox"/> 13	3	03_0002_2020-09-15_09-24-40.jpg	2020-09-15 09:24:40	35.82Kb	
<input type="checkbox"/> 14	3	03_0002_2020-09-15_09-25-42.jpg	2020-09-15 09:25:42	35.87Kb	


Figure 6-52

➤ **Big icon:** The image searched by clicking  is displayed in the list as a large icon, Figure 6-53:

Download

☐ Select All

1.




File Size: 37.01Kb

Time: 2020-09-15 09:00:49

File Name: 03_0002_2020-09-15_09-00-49.jpg

2.




File Size: 36.99Kb

Time: 2020-09-15 09:01:13

File Name: 03_0002_2020-09-15_09-01-13.jpg

3.




File Size: 36.81Kb

Time: 2020-09-15 09:04:08


File Name: 03_0002_2020-09-15_09-04-08.jpg

4.




File Size: 36.59Kb

5.



File Size: 36.59Kb

6.



File Size: 36.51Kb

Figure 6-53

➤ **Download:** Select the picture, click Download, select the storage path, click OK, and then select the picture to download to the specified folder.

Chapter 7 Appendixes

7.1 Q&A

1. What to do when the hard disk is not detected?

Answer: If the system does not detect the hard disk, check the data and power lines of the hard disk. Verify that they are properly connected, and then check that the hard disk is supported by the NVR.

2. I modified the password but do not remember it, what can I do?

Answer: When the administrator forgets the password, get in contact with Clare Care.

3. What can I do when the NVR is hot?

Answer: The NVR produces some heat when working, put the NVR in a safe and ventilated place. Stability and life of the system may be affected due to long-term high temperature of NVR.

4. Can I install the hard disk drive of computer to NVR?

Answer: If the hard disk you use is supported by the system of NVR, it can work, if the NVR begins to work, all data in your hard disk will be lost.

5. Can I use playback when recording?

Answer: Yes.

6. Why can't I login to NVR client?

Answer: Check the configuration of the network connection and verify the username and password are correct.

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

Answer: Check whether the connection of data line of the hard disk is good, whether the time of system is changed, whether the query condition that is not set to save video files.

7.2 Maintenance

1. When NVR shutdowns, don't turn off the power switch directly. Use the shutdown button of system to avoid data loss or damage of the hard disk.
2. Ensure that the NVR is away from high temperature heat sources.
3. Keep the NVR free of dust and in an area of good ventilation.
4. Do not hot swap the audio/video signal line and RS-485 interfaces, or these ports will be damaged.
5. Check the HDD power cable and data cable of the NVR regularly and check for damage.
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.