# Network Video Recorder User manual

Version 7.1.33.1

#### **Declaration:**

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# **Safety Precautions**



- Please do not place and install equipment directly under the sunlight or near heating device.
- Please do not install equipment at moist place or place with dust or soot.
- Please keep equipment installed horizontally, or install equipment in a stable place, avoid the equipment falling down.
- Please avoid liquid dropping on the equipment, make sure no objects filled with liquid on the equipment and prevent liquid from leaking.
- Please install the device in a well-ventilated place, do not block the vents of the equipment.
- Please only use equipment within rated input/output.
- Please do not disassembly at liberty.
- Please transport, use and reserve the equipment within allowing humidity and temperature.



#### Warning

- Please do use the battery as requested, or it may lead to a battery fire, explosion or risk of burning!
- Please use the same type of battery when changing it.
- Please do use recommended cord sets (power cords), do use within the rated specifications.

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# 1 Outline and Feature

#### 1.1 Outline

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

#### 1.2 Function Features

- H.264 video condense format, Support 1080P/720P/D1 resolution network camera input.
- Some models support H.265 video compression format, support 4K / 6M / 5M / 4M / 3M / 2M / 720P / D1 resolution network camera input;
- G.711U audio condense format.
- Windows-style user interface embedded real-time Linux3.0 operating system.
- Support preview, recording, play back, backup.
- Supports dual stream.
- USB2.0, support backup, software upgrading & mouse operating.
- Supports Chinese, Polish, Czech, Russian, Thai language, Hebrew, Persian, Bulgarian, Arabic, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Roman, Korean, Dutch and Greek switch.

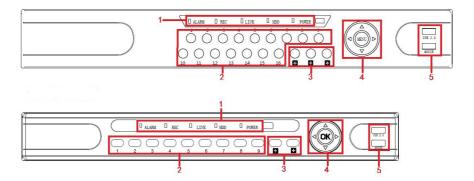
| Function             | Function Brief Introduction                                                                                                                                   |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Real-time            | Two video output, with VGA and HDMI interface, through the monitor, monitor to achieve monitoring, some models support TV, VGA, HDMI at the same time output. |
| Record               | H.264 standard compression, timing recording. Some models support H.265 video compression standard.                                                           |
| Storage              | Support SATA interface maximum capacity of 6T hard drive, video recording can be realized on the hard disk real-time storage function.                        |
| Paly back            | Support 1~4 channel playback and network multi-channel play back.                                                                                             |
| Backup               | Support NVR backup to USB memory sticks, portable hard drive or network backup.                                                                               |
| Network<br>Operating | Support for remote client access, improve system safety.                                                                                                      |
| Mouse<br>Operating   | Support USB mouse operating, easily and quickly set system parameters.                                                                                        |
| Pan-tilt<br>Control  | Though Onvif protocol, fulfill control functions of network dome camera. PTZ preset point, automatic cruise.                                                  |

# 2 NVR Appearance

# 2.1 The Front Panel

#### 2.1.1 The Front Panel

(For informational purposes only, subject to object)

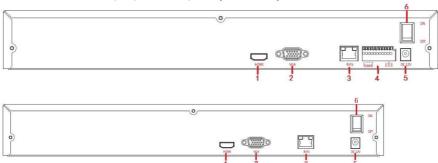


| No. | Button or indicator<br>light | Function                                                      |
|-----|------------------------------|---------------------------------------------------------------|
| 1   | I Indicator liant            | Normal working hours, the corresponding indicator light turns |
| 2   | Channel button               | Select single channel full screen display                     |
| 3   | Multi-channel preview        | Switch and display 4,9,16 channel                             |
| 4   | L DIFECTION DUTTON           | Move the button up or down, right or left to select menu      |
| 5   | L USB2 ()                    | Connect mouse or USB memory stick<br>backup                   |

# 2.2 Rear Panel

#### 2.2.1 Rear Panel

(For informational purposes only, subject to object)



|     |                        | 1 2 0 0                                                    |
|-----|------------------------|------------------------------------------------------------|
| No. | Interface              | Connection instruction                                     |
| 1   | 1080P                  | Connect 1080P display device                               |
| 2   | VGA                    | Connect VGA display device, like computer displayer        |
| 3   | RJ-45                  | Ethernet interface, connect network cable                  |
| 4   | Alarm<br>terminals     | Three sets of alarm input, a set of alarm output interface |
| 5   | Power supply interface | DC12V, NVR with power supply                               |
| 6   | Power switch           | On/off power                                               |

# 2.3 Mouse Instructions

Mouse instruction

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

| Mouse actions               | Function                                                                                                                                                                                                                                                                                                          |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Click left                  | 1. Select one of the options; 2. Insertion cursor, enter or                                                                                                                                                                                                                                                       |
| mouse button                | modify the value of a parameter.                                                                                                                                                                                                                                                                                  |
| Click right<br>mouse button | 1. When interface not locking, click right mouse button, system menu pops up; 2. When interface locking, click right button on real-time preview interface, login interface pop up; 3. Entered to main menu, to a submenu of PTZ control, click right mouse button on the menu interface, return to previous menu |

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

# 2.4 Input Method Introduction

Input method includes lowercase and uppercase English letters. Clicking "button on the left can switch the input method and the symbol "represents deleting incorrect input."



Uppercase English input



Lowercase English input

# 3 Connecting NVR

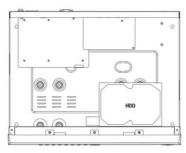
## 3.1 Hard Disk Installation

Hard Disk Installation:

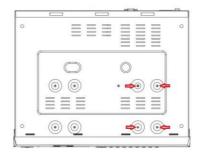
(1) Loosen the fixing screw on the cover, open the cover.



(2) Align the four holes of hard disk button with hard disk mounting hole at the button of chassis.



 $^{(3)}$  Hold the hard disk with hand, turn over the chassis, fix the hard disk with screw at the indicated position.



(4) After hard disk installed, turn over the chassis, fix the cover with screw.



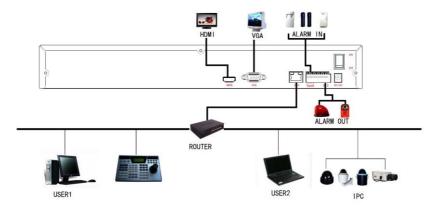


#### Notice

- If user requires high performance of hard disk, we recommend the dedicated security hard disk.
- Before replacing the hard disk, please shut off the power first and then
  open the case.

### 3.2 Device Connection

Use VGA cable or 1080P cable to transmit the NVR signal to the display. If it is a controllable PTZ, use wire to connect RS485 A cable and RS485 B cable to the corresponding RS485 interface on NVR.



# **4** NVR Startup

# 4.1 System Initialization

After connecting the device to the display, plug in the mouse, power cable and turn on the power switch on the rear panel, then start up the NVR. The system initialization interface is as shown in Figure 4-1.



Figure 4-1



 The insert figures in this user manual may not be the same as what you see on display. All figures here are just for reference.

#### 4.2 Boot wizard

After device successfully booted up, it goes to startup wizard, see Figure 4-2. Click Cancel/Next button, you can see system goes to login interface, see Figure 4-2.



Figure 4-2

Click Next button, system goes to login interface. Then select a user name, enter the user password, select the system language and click on the login button to login the system (the default username is admin, password is 12345). See Figure 4-3.



Figure 4-3

After logging in, you can go to Common interface; the basic configuration of the device can be set. See Figure 4-4. For detailed information, please refer to chapter 5.8.1.



Figure 4-4

Click Next button, you can go to Network interface; you can configure the network parameters of the device. See Figure 4-5. For detailed information, please refer to chapter 5.8.2.

| Network       |                                     |  |
|---------------|-------------------------------------|--|
| IP Address    | 172 • 18 • 195 • 94                 |  |
| Enable DHCP   | 172 • 10 • 195 • 94                 |  |
| Network Mask  | 255 • 255 • 248 • 0                 |  |
| Gageway       | 172 • 18 • 192 • 2                  |  |
| Primary DNS   | 202 • 96 • 134 • 133                |  |
| Secondary DNS |                                     |  |
| Broadcast IP  |                                     |  |
| Device MAC    | 44:43:3A:33:33:3A                   |  |
| TCP Port      | 5000                                |  |
| HTTP Port     | 80                                  |  |
| RTSP Port     | 554                                 |  |
|               |                                     |  |
| 11            |                                     |  |
| Refresh Defa  | ault Cancel Previous Step Next Step |  |

Figure 4-5

Click Next button, you can go to Add Camera interface; you can search for and add the IPC devices. See Figure 4-6. For detailed information, please refer to chapter 5.7.1.

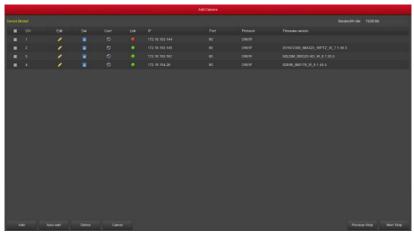


Figure 4-6

Click Next button, you can go to Rec Setup interface; you can configure the record schedule. See Figure 4-7. For detailed information, please refer to chapter 5.6.1.

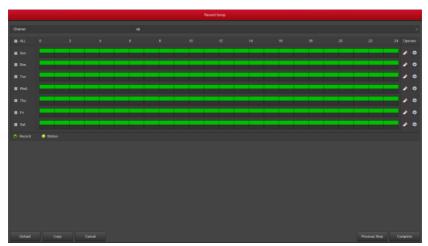


Figure 4-7

Click the OK button, the boot wizard is complete.

### 4.3 Preview Interface

After the system is fully booted, it will enter into the default preview interface, shown in Figure 4-8.



Figure 4-8

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

- : This icon means monitoring channel is recording;
- This icon means monitoring channel is in motion detection.

  NVR connection IPC channel shortcut menu as shown in Figure 4-9:



Figure 4-9

Screen rotation button, click the button, the screen clockwise 90° rotation, click the button again, the screen clockwise 90° again.

Instant playback button, click the button, the channel playback 5 minutes before the video.

Audio output control button, click to set the channel output

volume and mute.

Electronic zoom button, click to open the electronic zoom function, hold down the left mouse button to select a region, release the mouse, preview interface display as the selected zoom area, this time you can drag the mouse to any location preview interface, that is, NVR electronic zoom can be the entire channel interface unified amplification; click the right mouse button to exit the electronic zoom, restore the real-time preview interface.

Image color button, click into the image interface, you can set the channel brightness, contrast, saturation, sharpness of the parameter values.

Bit stream information icon, when the mouse moves to the icon position, the channel shows the current stream and other related parameters.

Image channel shortcut menu Close button, click to close the image channel menu.

# 4.4 Quick adding function

At the preview menu, for the channel of unconnected IP Camera, click anywhere in the channel interface, the lower left corner of the channel display "+" icon. Click "+" into the "Device Search" interface, automatically search all devices within the LAN, select the device, click Add to complete. You can also select the appropriate protocol in the Show Filter bar  $\rightarrow$  Search  $\rightarrow$  Select Add Device  $\rightarrow$  Add. As shown in Figure 4-10 and Figure 4-11.



Figure 4-10

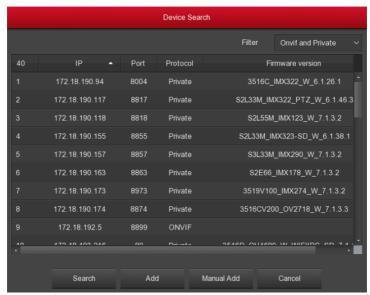


Figure 4-11

- Search: Search the IP address, port, protocol, etc. of the IPC client device.
- Add: Click "search", the NVR can search the IPC devices which support the ONVIF and Private protocol in the same LAN (local area network), the searched IPC devices can be displayed at the list. And select any IPC device in the list, click "Add", the selected IPC information can be automated add to the particular channel, then click "Save" to complete.
- Manual Add: please refer to Manual Add in section 5.7.1.
- Filter: Filter the display of the searched device list.
- > Cancel: Return to the previous menu.

# **5** NVR Menu

# 5.1 Right click mouse

After login the system and back on the preview interface, click the right mouse button and it will pop up the Menu Options, shown in Figure 5-1. Then you can select options of the Main Menu, the Main Screen Switching, Playback, PTZ and NVR Image, etc. In addition, you can set the channel display as follows: single-screen display, four-screen display, eight-screen display, night-screen display, sixteen-screen display. It needs to set a specific number of channels to achieve single-screen display, four-screen display, etc. The corresponding operation of the Main Menu Options will be illustrated in details in later chapters.



Figure 5-1

- Menu: Click and enter the main menu.
- Single-screen Display: Select one channel to display from CH1~CH16.
- Four-screen Display: Divided into four groups to display (CH1~CH4、CH5~CH8、CH9~CH12、CH13~CH16).

- Eight-screen Display: Divided into two groups to display (CH1~CH8、CH9~CH16).
- Night-screen Display: Divided into two groups to display (CH1~CH9、CH10~CH16).
- ➤ Sixteen-screen Display: Display all channels CH1 ~CH16.
- > Twenty five-screen Display: Display all channels CH1 ~CH25.
- **Poll:** Click into the poll setup interface (Detailed operation as 5.1.1)
- Record: Click into the record setup interface (Detailed operation as 5.5.4.1)
- Add Camera: Click and enter the add camera configuration menu. (Detailed operation as 5.7.1)
- Playback: Click into the Playback interface. (Detailed operation as 5.3.1)
- PTZ Setup: NVR supports PTZ control, allowing users to remotely control the camera. (Detailed operation as 5.1.2)
- > NVR Image: Click into the image color configuration interface. (Detailed operation as 5.1.3)



#### Notice

 Multi-screen display depends on the maximum number of channels supported by the device. For example, there are 9 screens in the shortcut menu of the 9-channel device and 16 screens in the 16-channel device shortcut menu...

#### 5.1.1 Poll

In the preview channel, right click mouse, select "Poll", the poll configuration interface is displayed, and then turn on patrol, set the polling interval and polling mode. As shown in Figure 5-2:



Figure 5-2

#### 5.1.2 PTZ Setup

In the preview channel, right click mouse, select "PTZ", the preview will switch to the corresponding channel single-screen display, and the emergence of PTZ control interface, shown in Figure 5-3:



Figure 5-3

PTZ control interface is divided into PTZ control and Common control, PTZ control interface is used to set the PTZ direction, speed and lens zoom, focus and aperture settings and cruise settings shortcut button; common control for calling preset points, Select the cruise line to turn on / off the cruise. In the PTZ control interface, you can switch the other channels, can adjust the moving speed of PTZ, PTZ can control the direction of movement.

- > **Zoom:** You can click \_\_\_\_ / \_\_\_ to adjust camera zoom in/out.
- Focus: You can click / to adjust camera focusing.
- > Iris: You can click / to adjust camera brightness.
- > **Speed:** Speed is to control PTZ movement speed. The value ranges from 1 to 8.The speed 7 is faster than speed 1.
- Patrol Setup: Click to enter the cruise settings interface, you can set the relevant preset points, cruise line settings, including the dwell time and cruising speed. Shown in Figure 5-4 and Figure 5-5;

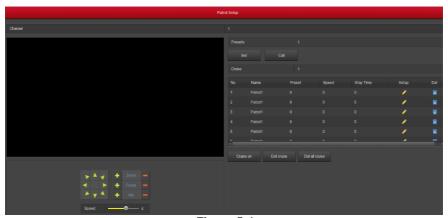


Figure 5-4



Figure 5-5

- Preset setting: In the Patrol Setup interface, through the direction of the button to turn the PTZ to the desired location, and then click the preset button below the "set" button to complete the preset point settings.
- Cruise setting: In the Patrol Setup interface, select the cruise line and click the Set button to select the preset number, dwell time (seconds) and cruise speed in the "Curise Setup" interface. Click the "OK" button to return to the cruise settings interface and click "Open Cruise" again to save the settings and make the device start cruising.
- Del cruise: Select the cruise line, click to delete the cruise, complete the cruise line to remove.
- **Del all cruise:** After clicking, delete all the set cruise lines.
- > **Stay Time:** Stay time on the Preset.
- Patrol speed: Speed for Cruise.

The Common control interface is shown in Figure 5-6:

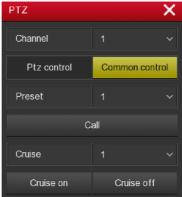


Figure 5-6

- Presets call: After setting the preset point, select the preset point in the common interface; click the call, PTZ jump to the location.
- Cruise call: After the cruise line is set, select the cruise line in the normal control interface and click on / off the cruise.
- **Cruise on:** Follow the cruise line to start cruising.
- > Cruise off: Close the current cruise line.
- **Enabled:** Start patrol, and patrol in fixed path.



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

#### 5.1.3 NVR Image

On the preview interface, right click mouse, select the "Image Color", the Image Color interface is displayed, and then can configure the video properties of IPC. As shown in Figure 5-7.



Figure 5-7

- Bright: It is to adjust monitor window bright.
- Contrast: It is to adjust monitor window contrast.
- Saturation: It is to adjust monitor window saturation.
- Hue: It is to adjust the overall color of the NVR image.
- > **Default:** Recover all the Image Color parameters to default value.
- Save: Save the parameters and return to the previous screen.
- Cancel: Return to the previous interface.

#### 5.2 Main Menu

Main Menu includes Record Playback, System Info, Camera, Network, Event, Storage, and System Setup, as shown in Figure 5-8. Select one and click the left mouse button to open the corresponding next menu options.



Figure 5-8

# 5.3 Playback

After entering the main menu, open the "Playback" menu or right-click to choose select "Playback" menu in the preview interface, switch to video playback interface, shown in Figure 5-9 and 5-10.



Figure 5-9



Figure 5-10

| rigule 3-10 |                               |                                                                                                                                                                                                                                        |
|-------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.         | Name                          | Function Specification                                                                                                                                                                                                                 |
| 1           | Calendar                      | The green highlighted date means there is file. Otherwise, there is no file.                                                                                                                                                           |
|             |                               | In any play mode, click the date you want to see, you can see the corresponding record file trace in the time bar.                                                                                                                     |
| 2           | Channel<br>Selection<br>Pane  | Select the channel number to query. (Up to four channels simultaneously selected)                                                                                                                                                      |
| 3           | File List<br>switch<br>button | Select the date, channel number and record type, click into the video file list. Select the desired video file; double-click the left mouse button to start playing the video file.                                                    |
| 4           | Save                          | Select the file(s) you want to backup from the file list. Then click the backup button, now you can see the backup menu. Click the backup button to begin the backup operation. Check the file again you can cancel current selection. |
| 5           | Playback<br>Control<br>Area   | On the playback control bar, you can normally play, pause, fast forward, fast forward playback mode, you can select 1x, 2x, 4x, 8x, 16x, 1xwhich is played at normal speed;                                                            |

| 6 | Timeline                      | Query to the video file, updated for the day that recording tracks on the timeline. Under the four-frame playback mode, display the selected four channels corresponding to four playback time line, other playback mode displays only one playback timeline. Click on the green area to start from that point of time for playback. |
|---|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7 | Select<br>video type          | Select the type of video, you can choose the type for all types of video, timed recording, alarm recording and detection recording.                                                                                                                                                                                                  |
| 8 | Timeline<br>unit<br>selection | Including zoom in and out, the smaller units of time the greater the proportion of time zoom, you can adjust the exact point in time to play back video on the timeline.                                                                                                                                                             |

In the file list bar, you can see the start time of the video file, video type, select a video file, you can view the video of recording start time, end time and file size, as shown in Figure 5-11.



Figure 5-11

In the file list box, check the icon to back up the file, click "Save" to enter the video backup interface, as shown in Figure 5-12:

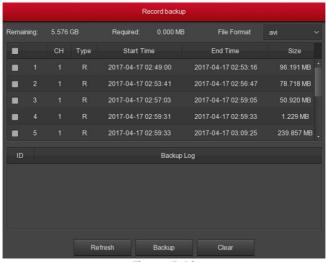


Figure 5-12

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

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

# 5.4 File backup

Click "Export" icon in the main menu, enter the file backup interface, you can copy the video file operation, as followed Figure 5-13 shows:

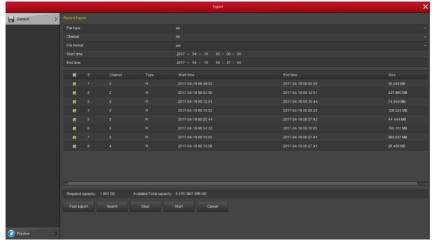


Figure 5-13

Select the backup file type, channel, file format, time range, click on the "Search", the list shows the search to the video file, click "Start", the device began to backup.

- > Required capacity: Select the total capacity of the backup file.
- Available/Total capacity: The external capacity of the device U disk capacity space.
- Fast export: Set the recording type, channel, file format, and the time range for 30 minutes to automatically cut.
- > **Search:** According to set the video type, channel, file format and time range to the corresponding video file, and displayed in the file list.
- Clear: Clear all files that have been queried in the list of video files.
- > **Start:** Start the backup.
- Cancel: Return to the previous interface.

#### 5.5 HDD

Choose" Menu→HDD" in the Menu interface, the HDD interface is displayed, as Figure 5-14 shows.



Figure 5-14

If the devices have connected the HDD successfully, the HDD manage list will show the information of HDD. You have to format the HDD if the HDD is the first time to connect; If the system detects that do not need to format the hard disk, the HDD status will displays "In use"; If do not connect successfully or could not detect hard disk, will displays the warning "Not connecting disk!".

- No.: The number of HDD that connect the system.
- State: Detect the current working status of HDD, you could use only that displays "In use"; after formatting is completed, you need to restart NVR, the status displays "In use".
- > **Total Capacity:** The total available HDD capacity, the single HDD capacity can not exceed the maximum capacity: 6TB.
- Residual Capacity: Display the residual capacity of the current HDD;
- > Device Type: SATA.
- Refresh: Refresh HDD information in the list;
- Format: Formatting the HDD, select the HDD that needs to be formatted firstly, and then click the "Format" button, pop-up warning dialog "Formatting will cause loss of all data in the disk. Continue?", If confirm to format then click on the "Confirm" button, otherwise click "Cancel".
- **Cancel:** Return to the former management interface.



• NVR will reboot automatically after disk formatting!

### 5.6 Record

#### 5.6.1 Schedule

Choose "Menu→Record" in the Menu interface, the Record interface is displayed, as Figure 5-15 shows.

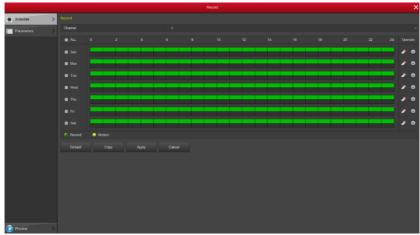


Figure 5-15

- Channel: Please select the channel number first. You can select "all" if you want to set for the whole channels.
- > **Record Type:** Select check the box to select corresponding record type. There are Record and Motion.
- Week day: Set the record schedule, and then the camera automatically starts/stops recording according to the configured Schedule. In the message box, you can choose the day to which you want to set schedule. If you need set schedule every day, choose "all". For the description of the color icon, Green icon stands for normal record, yellow icon stands for recording triggered by motion.
- Delete the time period for the currently selected recording type.
- Default: Restore parameters of record setup to be default ones.
- Copy: After complete the setup, you can click Copy button to copy current setup to other channel(s).
- > Apply: Save parameters of current interface.
- > Cancel: Return to the former management interface.

#### Drawing schedule record

Choose the channel (As shown in Figure 5-16 1 below) and the record type "record" or "motion" (As shown in Figure 5-16 2 below). Draw the schedule line (As shown in Figure 5-16 3 below) on the panel of the day you choose. Up to 6 periods can be configured for each day. And the time periods can't be overlapped each other.



Figure 5-16

#### Input data to set the schedule record

You can click button to set the accurate time of the schedule. Choose the record type you wanted and the start time and the end time, Up to 6 periods can be configured for each day. And the time periods can't be overlapped each other. Then can used to which day you wanted to use. See Figure 5-17.

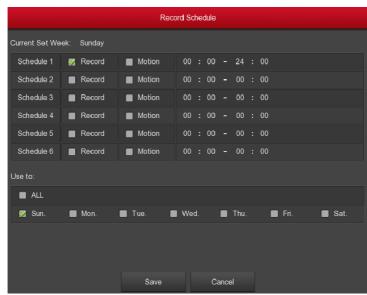


Figure 5-17

#### 5.6.2 Parameters

Choose "Menu→Record→Parameters" in the Menu interface, the Encoding Parameters interface is displayed, as Figure 5-18 shows. Resolution, Frame

Rate, Stream Type, Bit Rate, Sub-stream can be set under "Param" Interface.

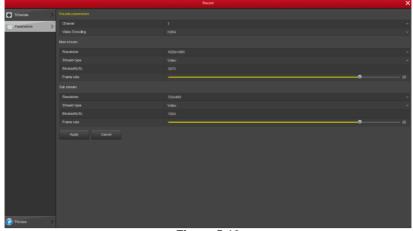


Figure 5-18

- > Channel: Select the channel you want.
- Video Encoding: System supports H.264, according to NVR performance, some devices support H.265.
- Resolution: Read and set the master and slave stream resolution here, the system supports various resolutions, you can select from the dropdown list. Please note the option may vary depending on the connection to the different series IPC.
- Stream type: Select video stream or audio stream.
- **Bitrate (Kb/S):** Setting bit rate can change the picture quality, the larger the bit rate and the better the picture quality.
- Frame Rate: PAL type: 1 frames / sec-25 frames / sec; NTSC type: 1 frames / sec-30 frames / sec.
- > **Apply:** Save the parameters on Encode configuration menu.
- **Cancel:** Return to the former management interface.

#### 5.7 Camera

#### 5.7.1 Add Camera

Choose "Menu → Camera → Add Camera" in the Menu interface, or right-click in live view mode and select "Add Camera" from the Shortcut Menu, the Camera Setup interface is displayed, as shown in Figure 5-19 Here you can add/delete remote IPC device and view its corresponding information.

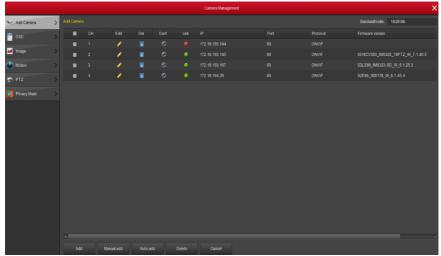


Figure 5-19

- **Bandwidth idle:** Real-time display XVR remaining bandwidth.
- Add: Click to enter the "Device Search" interface NVR automatically search all the devices in the LAN that conform to the "Onvif and

Private" protocol. Check " before clicking one or more of the searched IPs and click "Add" to add the selected device to the "Added Devices" list. Also in the display filter location according to the desired choice protocol, or multi-network equipment, click the "Search", search the corresponding device within the LAN, select Add.

- Filter: You can quickly search for the required device by "Filter".
- Search: Click it to search IP address. It includes device IP address, port, and protocol. Use your mouse to click the item name, you can refresh display order. Click IP address, system displays IP address from small to large. Click IP address again, you can see icon, system displays IP address from large to small. You can click other items to view information conveniently.
- > Cancel: Return to the former management interface.
- Auto add: All LANs in the LAN to reconfigure the network, automatically added to the NVR.
- Delete: In the list of added devices, click the channel " icon you want to delete to quickly delete the channel. You can also click the " icon to select multiple devices and click the "Delete" button to delete all selected devices.
- > Status: means connection is ok and means connection failed.

- Conf.: Configuration. Click " icon to enter the "Encode" interface, you can modify the encoding type, resolution, bit rate, frame rate and other coding-related information.
- Manual add: Click the "Manual Add" button into the "Channel Setup" interface, there are two ways to add IP and domain names manually. See Figure 5-20.



Figure 5-20

- Enable: The channel enable on/off, defaulting to be off. Tick "Enable" then the related channels can be previewed and recorded normally.
- Channel: Users can type in the channel number that needs to be connected to the remote device according to their needs.
- Protocol: Select Add Device Protocol with Onvif, Private, and RTSP options.
- Preview: The default is sub-stream preview, IPC side to be set to dual-stream, and is H264 encoding format to normal preview (support H265 encoding format NVR can also be a normal preview stream), sub-stream resolution can be D1 or CIF format.
- > **User name:** The login user name of IPC (if the defaulted user name is not admin, please change it to be valid user name).
- Password: Login password of IPC (if the defaulted login password is not admin, please change it to be valid password).
- > IP: Need to add IPC IP address.
- Domain: Need to add IPC domain name address, such as peanut shell address, DDNS address.
- **Port:** Access to the port used by IPC, the default is 80.
- > Save: Saving the setup parameters of current channels
- > Cancel: Return to the former management interface.

**Remark:** If all the digital channels have been added to the remote device, then add, the device will prompt to add a failure.

#### 5.7.2 OSD

Choose "Menu→Camera→ OSD" in the Menu interface, the OSD setup interface is displayed, as shown in Figure 5-21. Here you can get and set the IPC OSD text, time and other device related information.

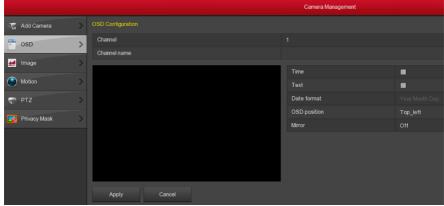


Figure 5-21

- Channel: Users can type in the channel number that needs to be connected to the remote device according to their needs.
- Channel name: Displays the OSD text information obtained to the IPC.
- > Time: Turn on / off the IPC display interface time information.
- > **Text:** Turn on / off the IPC display interface text message.
- ➤ **Date format:** Set the IPC display interface date format, drop-down menu "Year Month Day", "Month Day Year", "Day Month Year" option.
- ➤ **OSD position:** Set the time and OSD text location, drop-down menu with the" Top\_left, Bottom\_left "options.
- Mirror: Set the IPC mirror to flip the direction, drop-down menu with "Off, Horizontal, Vertical, Both" options.
- Apply: Save the parameters on the current interface configuration parameters.
- > Cancel: Return to the former management interface.



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

# 5.7.3 Image

Choose "Menu→Camera→ Image" in the Menu interface, the image setup interface is displayed, as shown in Figure 5-22. Here you can get and set the IPC Brightness, Contrast, Saturation and sharpness.

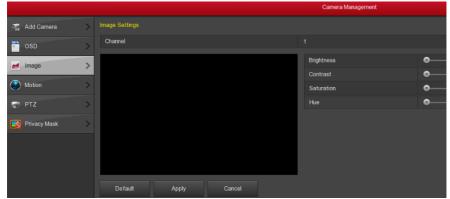


Figure 5-22

- Channel: Users can type in the channel number that needs to be connected to the remote device according to their needs.
- Brightness: Gets and sets the brightness of the IPC.
- > Contrast: Gets and sets the contrast of the IPC.
- Saturation: Gets and sets the saturation of the IPC.
- **Sharpness:** Gets and sets the sharpness of the IPC.
- Default: Click to restore IPC brightness, contrast, and saturation and sharpness values to factory defaults.
- Apply: Save the parameters on the current interface configuration parameters.
- Cancel: Return to the former management interface.

#### 5.7.4 Motion

Choose "Menu→Camera→ Motion" in the Menu interface, the motion setup interface is displayed, as shown in Figure 5-23. Here you can get and set information about IPC motion detection.



Figure 5-23

> Channel: Select the channel.

- > **Set area:** Click to enter the regional settings interface, hold down the left mouse button to select the alarm area, select, the alarm area is gray, select the gray again to cancel the alarm area settings.
- Sensitivity: According to the need, can be set 0,1,2,3,4,5,6,7,8,9,10 eleven file sensitivity.
- Enable detection: Check To turn on / off motion detection alarm.
- **Buzzer alarm:** Check" to turn on / off the buzzer alarm function.
- **Buzzer time (sec):** Set the duration of the alarm each time the buzzer is triggered.
- Record channel: Check " to turn on / off the channel recording function.
- Record time (sec): Set the duration of each recording when the alarm is triggered.
- Default: Click to restore all the parameters set by the alarm to the default.
- > Copy: After the channel has been set up, click Copy to apply the setting to another channel.
- > Save: Save the current interface settings and return to the previous level interface.
- > **Apply:** Save the parameters on the current interface configuration parameters.
- **Cancel:** Return to the former management interface.

#### 5.7.5 PTZ

Choose "Menu→Camera→ PTZ" in the Menu interface, the PTZ setup interface is displayed, as shown in Figure 5-24. In the PTZ control interface, you can switch the other channels, can adjust the moving speed of PTZ, PTZ can control the direction of movement.



Figure 5-24

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

- Zoom: You can click / E to adjust camera zoom in/out.
- Focus: You can click \_\_\_\_\_ / \_\_\_\_ to adjust camera focusing.
- Iris: You can click / To adjust camera brightness.
- > **Speed:** Speed is to control PTZ movement speed. The value ranges from 0 to 7.The speed 7 is faster than speed 1.
- Preset setting: Through the direction of the button to turn the PTZ to the desired location, and then click the preset button below the "set" button to complete the preset point settings.
- Cruise setting: Select the cruise line and click the Set button to select the preset number, dwell time (seconds) and cruise speed in the "Curise Setup" interface, Shown in Figure 5-25, Click the "OK" button to return to the cruise settings interface and click "Open Cruise" again to save the settings and make the device start cruising.



Figure 5-25

- **Del cruise:** Select the cruise line, click to delete the cruise, complete the cruise line to remove.
- **Del all cruise:** After clicking, delete all the set cruise lines.
- > Stay Time: Stay time on the Preset.
- Patrol speed: Speed for Cruise.



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

# 5.7.6 Privacy Mask

Choose "Menu→Camera→Privacy Mask" in the Menu interface, the privacy mask settings interface is displayed, as shown in Figure 5-26. Here you can

get and set information about IPC privacy mask.

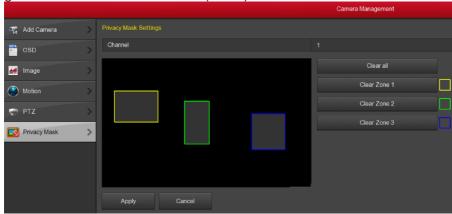


Figure 5-26

- > Channel: Select the channel.
- Privacy area selection: In the left video window, hold down the left mouse button to select the area to be blocked.
- Clear all: Clear all selected areas.
- Clear Zoom1, 2, 3: Clear the selected occlusion area 1, 2, 3.
- Apply: Save the parameters on the current interface configuration parameters.
- Cancel: Return to the former management interface.

# 5.8 Configuration

#### 5.8.1 General

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

# 5.8.1.1 Device Settings

Choose "Menu → Configuration → General" in the Menu interface, the Device settings interface is displayed, as Figure 5-27 shows.

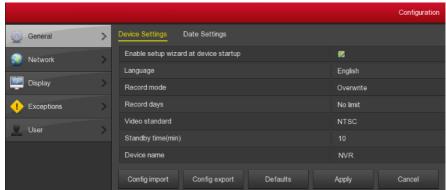


Figure 5-27

- ➤ Enable setup Wizard at device startup: Click the "□", open boot wizards function.
- Language: Set the default language of the system, currently supports Chinese, English, Polish, Czech, Russian, Thai, Hebrew, Persian, Bulgarian, Arabic, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Roman, Korean, Dutch and Greek, the default is English.
- Record Mode: When the disk is full, it will automatically overwrite the oldest video; when the disk is not full, but the number of recording days to reach the user settings, automatically cover the earliest video.
- > **Record days:** Set the number of days for NVR automatic recording. There are no restrictions on the menu, 15,10,7,5,1 option
- Video Standard: According to the local standard selection PAL or NTSC.
- > Standby Time (min): The default is 10 minutes, can be set range: 0-120 minutes, where "0" for the permanent standby.
- Device name: Fill in the name of the device according to actual needs.
- Config import: Will be stored in .ini format NVR configuration file U disk into the NVR, click on the data import, OK, NVR automatically start the data import; wait for NVR boot to complete the data import.
- Config export: Insert the U disk to the NVR, click on the data export, suggesting that "data export success!" To determine the configuration file is stored to the U disk. The configuration file format is ".ini".
- > **Default:** Restore all parameter values of the device settings interface to the default values.
- Apply: Save the parameters on the current interface configuration parameters.
- Cancel: Return to the former management interface.

# 5.8.1.2 Date Settings

Choose "Menu → Configuration → General → Date Settings" in the Menu interface, the Date Settings interface is displayed, as Figure 5-28 shows.



Figure 5-28

- > **Set date/time manually:** When checked "", adjust the date / time, date separator, date format, and time format to set the local time.
- Date/time: Click on the need to modify the location, pop-up keyboard, enter the date and time through the keyboard.
- > **Date format:** Select the date display format, including date, month, year, year and year.
- > Separator: Select the separator for the date format.
- > Time format: Choose a 24-hour or 12-hour format.
- > Receive date/time from NTP: When checked """, open the update time when NTP function of the school.
- > NTP Server: Domain or IP address of NTP server.
- > Time Zone: Select the Time Zone of your location from the drop-down menu.
- > NTP Port: Set the port of the NTP server.
- Interval (Min): The interval between two time intervals can be set to 0-255 minutes for the NTP update interval.
- ➤ **Daylight-saving time:** Check "□", open the daylight saving time function, set the relevant parameters, such as type, date, start time, end time and so on.
- Channel check time: Select the channel, click Save, set the channel time and NVR time consistent.
- Default: Restore the value of the date setting interface to the default value.
- Apply: Save parameters of current interface.
- > Cancel: Return to the former interface.

#### 5.8.2 Network

#### 5.8.2.1 IP/Port

Choose "Menu→Configuration→Network→IP/Port" in the Menu interface, the IP/Port interface is displayed, as Figure 5-29 shows.



Figure 5-29

- > IP Address: Here you can input IP address of NVR.
- Enable DHCP: Enable / disable DHCP function. "IP address", "subnet mask", and "default gateway" can not be set when DHCP is enabled.
- > **Network Mask:** According to the actual situation set.
- Gateway: According to the actual situation set, with the IP address in the same network segment.
- Primary DNS: It is usually offered by local ISP. Your IP address of domain name server is entered here.
- Secondary DNS: Start secondary DNS when the primary one does not work.
- Broadcast IP: Reserved.
- Device MAC: Displays the physical address of the NVR.
- > **TCP Port:** Default value is 5000, according to the actual needs of users to set the port.
- ➤ HTTP Port: Default value is 80, according to the actual needs of users to set the port.
- RTSP Port: Default value is 554, according to the actual needs of users to set the port.
- > **Network rate:** Displays the network transmission rate.
- Refresh: Click the refresh interface.
- Default: Restore all parameters in the network settings to their default values.
- Apply: Save parameters of current interface.
- **Cancel:** Return to the former interface.

#### 5.8.2.2 DDNS

Choose "Menu→Configuration→Network→DDNS" in the Menu interface, the DDNS interface is displayed, as Figure 5-30 shows. You need a PC of fixed IP in the internet and there is the DDNS software running in this PC. In other words, this PC is a DNS (domain name server).



Figure 5-30

- Enable DDNS: Enabling DDNS domain resolving function.
- DDNS type: Select the DDNS type by dynamic domain name resolution server. (This device supports multiple DDNS, including ORAY, NO-IP, DYN, CHANGEIP, A-PRESS, MYQSEE, SKDDNS, SMART-EYES, which can coexist at the same time.
- Refresh Time (sec): Do not register frequently. The interval between two registrations shall be more than 60 seconds. Too many registration requests may result in server attack.
- > **User name:** The account registered in the DNS service provider.
- Password: The password to the account registered in the DNS service provider.
- **Domain:** The domain name registered in the DNS service provider.
- Default: Restore all parameters in the DDNS settings to their default values.
- Apply: Save parameters of current interface.
- > Cancel: Return to the former interface.

When DDNS is successfully configured and enabled, you can type in the registered domain name in the IE address bar directly to link the Web page of the device.

#### 5.8.2.3 Email

Choose "Menu→Configuration→Network→Email" in the Menu interface, the Email interface is displayed, as Figure 5-31 shows. When an alarm occurs, you can send mail to the specified e-mail address.

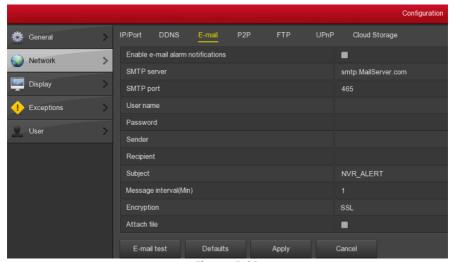


Figure 5-31

- **Enable e-mail alarm notifications:** Enable / disable mail sending.
- > SMTP server: The address of the mail server, which can be an IP address and a domain name (Domain name need to confirm the DNS settings are correct, the domain name to correctly resolve).
- SMTP port: Port number of the mail server.
- > User name: User name of the sender's mail.
- Password: Mailbox password.
- Sender: Outbox address.
- Recipient: Inbox address.
- **Subject:** Send the subject of the message.
- Message interval (Min): Interval for sending the alarm mail.
- **Encryption:** Select the Mailbox server encryption type.
- Attach File: Turn on / off mail attachment function, open, the device sends an alarm message with attachments.
- **E-mail test:** After completing the mail settings, open the mail test to ensure that the mail settings are correct.
- Default: Restore all parameters in the email settings to their default values.
- Apply: Save parameters of current interface.
- **Cancel:** Return to the former interface.

#### 5.8.2.4 P2P

Choose "Menu→Configuration→Network→P2P" in the Menu interface, the P2P interface is displayed, as Figure 5-32 shows. P2P is used for remote monitoring of the mobile phone client, by scanning the two-dimensional code can add NVR to the mobile phone client, convenient monitoring.



Figure 5-32

- > Status: Display device P2P online status.
- **Enable P2P:** Turn on / off device P2P function.
- > **User number:** Displays the current number of statistics users.
- Android: Download Link of P2P client for Android system.
- ▶ **iOS:** Download Link of P2P client for iOS system.
- SN: Displays the serial number of the device P2P. This serial number is unique.
- **Refresh:** Refresh the P2P interface related information.
- > Apply: Save parameters of current interface.
- **Cancel:** Return to the former interface.

#### 5.8.2.5 FTP

Choose "Menu→Configuration→Network→FTP" in the Menu interface, the FTP interface is displayed, as Figure 5-33 shows. You need to download or buy FTP service tool (such as Ser-U FTP SERVER) to establish FTP service.



Figure 5-33

- **Enable FTP:** Turn on / off the device FTP function.
- **FTP Server:** IP address or HTTP network address of FTP server.
- FTP Port: The default FTP port is 21, if your FTP server is different; you need to use the same port name with your FTP server.
- > **User Name:** Your FTP server account user name.
- Password: Your FTP server account password.
- File Upload: You can use NVR FTP upload video file to FTP server.
- Channel: Choose to upload FTP file channel.
- > Week: Upload FTP file time.
- > Time period 1& 2: Set the time period for uploading FTP files in one day.
- Test: Click on the test, test NVR can successfully upload files to the FTP server
- > **Default:** Restore all parameters in the FTP settings to their default values.
- Apply: Save parameters of current interface.
- > Cancel: Return to the former interface.

# 5.8.2.6 UPnP

Choose "Menu→Configuration→Network→UPnP" in the Menu interface, the UPnP interface is displayed, as Figure 5-34 shows.



Figure 5-34

- **Enable:** Turn on/off the device UPnP function.
- > **State:** Displays the mapping status of UPnP.
- Internal IP: Status displays the internal network IP of the current NVR connection router when the connection is successful.
- External IP: Status displays the external network IP of the current NVR connection router when the connection is successful.
- Port mapping table: Displays information when NVR UPnP adds a mapping, such as service name, protocol, internal port, and so on.
- > Add: Click Add to increase the mapping, enter the service name, internal port, and external port.
- > Server Name: Enter the service name and define it yourself.
- Internal Port: You need to enter the corresponding HTTP port, RTSP port, TCP port.
- External Port: Can be self-defined, and the internal port can be the same, but can not and NVR other ports repeat.
- > **Delete:** Select the mapping information in the port mapping table and delete the mapping relationship.
- Default: Restore all parameters in the UPnP settings to their default values.
- > **Apply:** Save parameters of current interface.
- > Cancel: Return to the former interface.



 Before NVR turns on UPnP, ensure that the router connecting the NVR is the first-level router (or virtual first-level router) and the UPnP function is enabled.  When setting the router mapping port, it is recommended to use the port between 1024 ~ 65535, to avoid the use of well-known ports 1 to 255 and system ports 256 ~ 1023, in order to avoid conflict.

# 5.8.2.7 Cloud storage

Choose "Menu→Configuration→Network→Cloud storage" in the Menu interface, the cloud storage interface is displayed, as Figure 5-35 shows.



Figure 5-35

- **Enable:** Turn on/off the device cloud storage function.
- Dropbox: Select a cloud storage Type.
- Google: Select a cloud storage Type.
- > **Upload folder:** Set the upload cloud space folder name.
- Username: Displays the user name for the corresponding cloud storage type.
- Capacity: After the cloud storage binding is successful, the total capacity of the cloud space is displayed.
- Used: Cloud storage binding is successful, the display of cloud space has been used capacity.
- > **Test:** Bind and click on the test to save whether the cloud storage binding is successful.
- Default: Restore all parameters in the cloud storage settings to their default values.
- > Apply: Save parameters of current interface.
- **Cancel:** Return to the former interface.

Select the cloud storage type, fill in the verification code, click on the "Bind" after the success, "user name", "capacity" and "Used capacity" that information will be automatically displayed.

# 5.8.3 Display

Choose "Menu→Configuration→Display" in the Menu interface, the Display Setup interface is displayed, could modify the display resolution and channel names, as Figure 5-36 shows.



Figure 5-36

- ➤ **Resolution**: It means the resolution of video output of NVR. Optional resolution: 1024×768、1280×720、1280×1024、1920×1080. Default resolution is 1280×1024. It will be valid only after NVR is re-started with all specifications saved.
- > **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 the number of split screen display screen.
- Default: Restore all parameters in the display settings to their default values.
- > Apply: Save parameters of current interface.
- **Cancel:** Return to the former interface.

# 5.8.4 Exceptions

# 5.8.4.1 Disk Exception

Choose "Menu→Configuration→Exception" in the Menu interface, the exception Setup interface is displayed, divided into disk exception and network exception, disk exception as Figure 5-37 shows.



Figure 5-37

- **Event type:** Including No Disk and Disk Error in two cases.
- **Enable:** Turns on / off disk exception alarm.
- Send e-mail: Turns on / off the sending mail function that occurs when a disk exception, send mail to the specified mailbox.
- > **Buzzer alarm:** Turns on / off the device buzzer alarm function that occurs when the disk buzzer sound occurs.

- Default: Restore all parameters in the disk exception settings to their default values.
- > Apply: Save parameters of current interface.
- Cancel: Return to the former interface.

# 5.8.4.2 Network Exception

Choose "Menu→Configuration→Exception→Network Exception" in the Menu interface, the network exception setup interface is displayed, as Figure 5-38 shows.



Figure 5-38

- **Event Type:** Including broken network and IP conflict in two cases.
- **Enable:** Turns on / off network exception alarm.
- Send e-mail: Turns on / off the sending mail function that occurs when a network exception, send mail to the specified mailbox.
- **Buzzer Alarm:** Turn on / off the device buzzer alarm function, that is, the buzzer sounds when a network error occurs.
- Default: Restore all parameters in the network exception settings to their default values.
- Apply: Save parameters of current interface.
- Cancel: Return to the former interface.

#### 5.8.5 User

Choose "Menu→Configuration→User" in the Menu interface, the User Setup interface is displayed, as Figure 5-39 shows. Here you can add, modify, and delete users.



Figure 5-39



- The default factory administrator name is admin and the password is 12345. Administrators can add, delete, or edit user parameters.
- User: List added users. "admin" is super user/administrator, and we cannot change its privilege, but only its password.
- > Cancel: Return to former interface.

#### 5.8.5.1 Add user

**Step1:** Click the Add User button to enter the user interface.

**Step2:** Fill in the user information, select the level, save the parameters can be.



 User level has two levels of operator and general; two levels of default permissions are different. ("Remote Config", the operator defaults to Remote Configuration, Remote Network, Remote Display, Remote Exceptions, and general do not).

**Step3:** Setting authority. Select the user to add a successful click on the corresponding button below, enter the authority settings interface, and set the user authority.



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

**"Local Config":** Include All, Local Poll, Local HDD, Local Camera Setup, Local Configuration, Local Network, Local Display, Local Exceptions, Local User, Local System Information, Local Log, Local Manual Update, Local Online Update, Local Auto Maintain, Local Restore Default, Local Shutdown Reboot.

**"Remote Config":** Include All, Remote Poll, Remote HDD, Remote Camera Setup, Remote Configuration, Remote Network, Remote Display, Remote Exceptions, Remote User, Remote System Information, Remote Log, Remote Manual Update, Remote Online Update, Remote Auto Maintain, Remote Restore Default, Remote Shutdown Reboot.

"Channel Config": Local Preview, Local PTZ, Local Playback, Local Record, Local Encode Parameters, Local OSD, Local Image, Local Motion, Local Export, Local Privacy Mask, Remote Preview, Remote PTZ, Remote Playback, Remote Record, Remote Encode Parameters, Remote OSD, Remote Image, Remote Motion, Remote Export, Remote Privacy Mask for all channel.

# 5.8.5.2 Modify the user

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

**Step2:** Edit user information. Support to modify the user name, password, user level, click Save.

#### 5.8.5.3 Delete the user

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

corresponding button, pop-up prompt.

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



- The administrator can be modified by the password but can not be deleted.
- Operators and general users do not have to add, remove user rights.

# 5.9 Maintenance

# 5.9.1 System

#### 5.9.1.1 Stream Information

Choose "Menu  $\rightarrow$  Maintenance  $\rightarrow$  System  $\rightarrow$  Stream Info" in the Menu interface, the Stream Information interface is displayed, as Figure 5-40 shows. Here you can view the real-time code stream (Kb / s-kilobits per second) of the channel image and the resolution information.

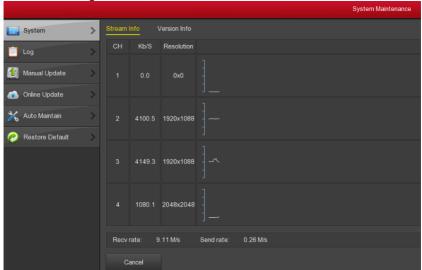


Figure 5-40

## 5.9.1.2 Version Information

Choose "Menu → Maintenance → System → Version Info" in the Menu interface, the Version Information interface is displayed, as Figure 5-41 shows. Here you can view the system version information, including product model, version number and version date.



Figure 5-41

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

# 5.9.2 Log

Choose "Menu→Maintenance→Log" in the Menu interface, the device log interface is displayed, as Figure 5-42 shows. Here you can view some sort of log for some time in the system.



Figure 5-42

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

# 5.9.3 Manual Update

Choose "Menu→Maintenance→Manual upgrade" in the Menu interface, the manual upgrade Setup interface is displayed, as Figure 5-43 shows.



Figure 5-43

- **Refresh:** Refresh the current interface information.
- > **Upgrade**: Click the device to start the upgrade.
- **Cancel:** Return to the former interface.

If the device has detected upgrade files in the U disk, the related information of upgrade package (number, name, size, date) will be displayed.

**U disk Upgrade steps:** Copy the upgrade file (named should be the format xxxxx\_update\_x\_Vx.x.xx.x.bin) to the root directory of U disk, connect this U disk to the device's USB port, if did not display the upgrade file in the list, please refresh the interface (If the upgrade package still cannot be searched out, please check whether the USB port connect well with the U disk, and also check whether the upgrade file name is correct). After the upgrade file appears, select the upgrade file, click the "upgrading" and begin to upgrade; If you want to cancel the upgrade, click cancel to return.



 During the upgrading process, please do not cut off the power or take off your U disk. After the upgrading, your system will restart automatically. (This process will take about 1 to 6 minutes.) Here, we advise you to restore factory Settings after the upgrading.

# 5.9.4 Online update

Choose "Menu→Maintenance→Online update" in the Menu interface, the Upgrade Setup interface is displayed, as Figure 5-44 shows.



Figure 5-44

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

#### 5.9.5 Auto Maintain

Choose "Menu→Maintenance→Auto Maintain" in the Menu interface, the Auto Maintain interface is displayed, as Figure 5-45 shows.



Figure 5-45

- Default: Restore all parameters in the auto maintain settings to their default values.
- Apply: Save parameters of current interface.
- > Cancel: Return to the former interface.

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

#### 5.9.6 Restore Default

Choose "Menu→Maintenance→Restore Default" in the Menu interface, the Restore Default setup interface is displayed, as Figure 5-46 shows.



Figure 5-46

- Restore record default param: Select / Cancel Resume Record all interface configuration parameters to the default values.
- Restore channel default param: Select / Cancel Resume Camera all interface configuration parameters to the default values.
- Restore configuration default param: Select / Cancel Resume Configuration all interface configuration parameters to the default values.
- Restore system maintenance default param: Select / Cancel Resume Maintenance all interface configuration parameters to the default values.
- Restore factory settings: Select / Cancel all NVR configuration parameters to the default.
- > **Apply:** Save parameters of current interface.
- **Cancel:** Return to the former interface.

# 5.10 Shutdown

Choose "Shutdown" in the Menu interface, the Shutdown interface is displayed, as Figure 5-47 shows.

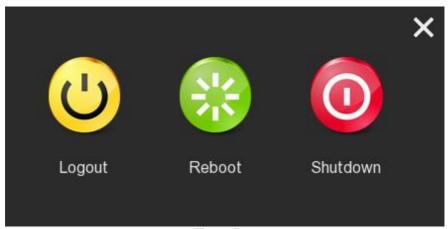


Figure 5-47

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

# **6** WEB Operation

# 6.1 Browser Login

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



Figure 6-1

In the upper right corner of the interface, select the system language (currently supports Chinese, English, German, French, Portuguese, Turkish, Spanish, Italian, Hungarian, Roman, Korean, Dutch and Greek, the default is English), enter the user name and password, the default user name is admin, password is 12345, click "login" to log on remotely.

# 6.2 Active X install

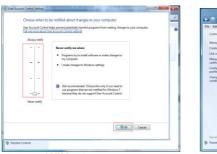
The first time you log in to the device, you need to download and install the browser plug-in for the first time, as shown in Figure 6-2, click Install and follow the prompts to complete the installation.

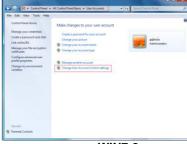


Figure 6-2



 For WIN 7 could have problems for backup and recording, if so, please check the Admin setting, procedure as follows:





WIN7-1 WIN7-2

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

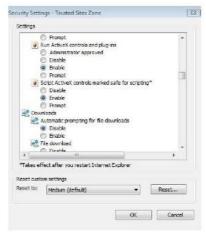


Figure 6-3

# 6.3 Live View

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

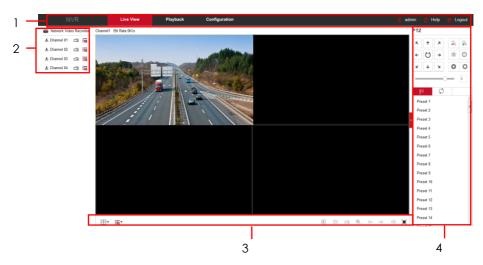


Figure 6-4

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

| <u></u> |      |               |
|---------|------|---------------|
|         | Mark | Specification |

| CH1-CH4      | Display all channels of the device.                                       |
|--------------|---------------------------------------------------------------------------|
| ★ Channel 01 | Open or close corresponding preview channel.                              |
| 59           | Click the button, begin recording, the video saves in computer hard disk. |
|              | Main and sub bit stream switching                                         |

# 3. Preview channel shortcut button

| Mark                | Specification                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------|
| ⊞▼                  | Preview window toggle. From left to right are: 1 split screen, 4 split screen, 9 split screen. |
| : <b>1</b>          | Switch all preview channel master, sub code streams, and open preview                          |
| <b>)</b> / <b>(</b> | Open / Close all preview channels.                                                             |
| Ô                   | Capture                                                                                        |
|                     | Turn on / off channel recording of all open videos                                             |
| ⊕                   | Electronic zoom                                                                                |
| $\Rightarrow$       | 1 split screen preview, switch the channel                                                     |
| <b>(1)</b>          | Turn on / off the speaker                                                                      |
|                     | Full-screen playback, press the keyboard Esc to exit the full screen                           |

# 4. PTZ setting operation window

| Mark                      | Specification                |
|---------------------------|------------------------------|
| K   T   X   C   X   U   X | PTZ control direction button |
| ਲ                         | PTZ self-test                |
| <u>Q</u> <u>Q</u>         | Zoom button                  |
| 0 0                       | Focus button                 |
| 0                         | Aperture control button      |
|                           | PTZ rotation speed control   |
| <u>p_</u>                 | Preset settings              |
| $\Box$                    | Call preset point            |

| ❖                                 | Set up               |
|-----------------------------------|----------------------|
| ×                                 | Delete the settings  |
| <b>(5)</b>                        | Cruise path settings |
| • • • • • • • • • • • • • • • • • | Turn on / off cruise |

# **6.4 Configuration**

## 6.4.1 Local Config

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

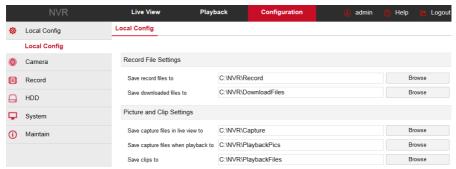


Figure 6-5

#### 6.4.2 Camera

#### 6.4.2.1 Add Camera

In the main interface, click "Configuration—Camera—Add Camera" to enter the add camera interface, as shown in Figure 6-5 below. Here you can add, edit, and delete devices to the device as needed. The relevant parameters are consistent with the NVR settings.

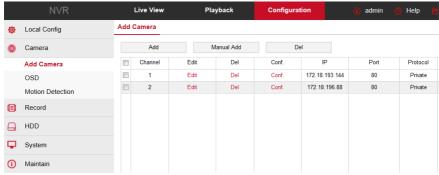


Figure 6-6

#### 6.4.2.2 OSD

In the main interface, click "Configuration→Camera→OSD" to enter the OSD setting interface, as shown in Figure 6-7 below. Here you can view and set the device text, date and other related information, the relevant parameters and NVR-side settings consistent.



Figure 6-7

#### 6.4.2.3 Motion Detection

In the main interface, click "Configuration→Camera→Motion Detection" to enter the motion detection setting interface, as shown in Figure 6-8 below. Here you can view and set the device's motion detection related information, the relevant parameters and NVR-side settings consistent.

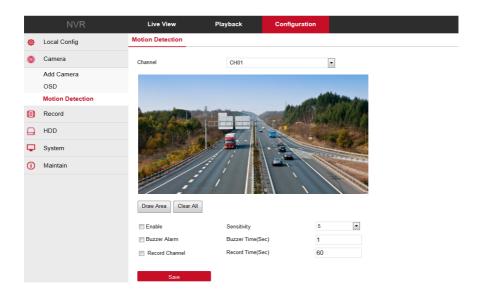


Figure 6-8

## 6.4.3 Record

# 6.4.3.1 Record

In the main interface, click "Configuration—Record—Record" to enter the record setting interface, as shown in Figure 6-9 below. Here you can set the channel to record according to the schedule, the relevant parameters and NVR side of the same set.

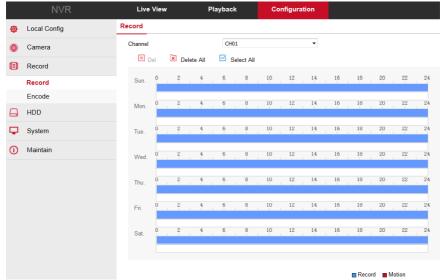


Figure 6-9

#### 6.4.3.2 Encode

In the main interface, click "Configuration—Record—Encode" to enter the encode setting interface, as shown in Figure 6-10 below. Here you can view and set the channel parameters of the IPC device and the relevant parameters are consistent with the NVR settings.

Live View **Playback** Configuration Encode Local Config Camera Channel CH01 Record Video Encoding H264 Record Main Stream Encode Resolution HDD Video Stream Type System Bitrate(Kb/s) Frame Rate 0 Maintain Sub Stream Resolution Stream Type Video Bitrate(Kb/s) 0 Frame Rate

Figure 6-10

#### 6.4.4 HDD

In the main interface, click "Configuration—HDD—HDD" to enter the disk management interface, as shown in Figure 6-11 below. Here you can view the connection device disk information, but also format the hard disk, hard disk format and NVR settings consistent.

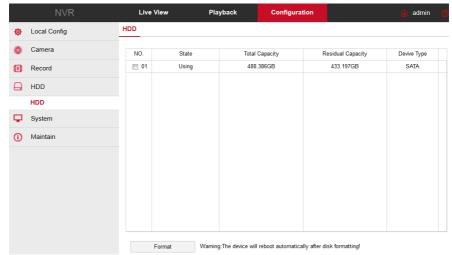


Figure 6-11

# 6.4.5 System

## 6.4.5.1 General

#### ■ Device Setting

In the main interface, click "Configuration→System→General→Device Setting" to enter the device setting interface, as shown in Figure 6-12 below. Here you can view and set the device language, record mode, record days, resolution and other information.

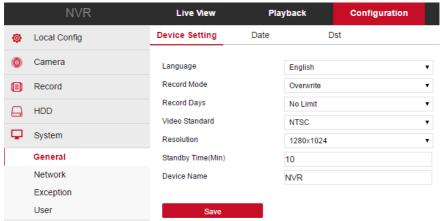


Figure 6-12

#### ■ Date

In the main interface, click "Configuration→System→General→Date" to enter the date setting interface, as shown in Figure 6-13 below. Here you can set the device time and select the channel to synchronize the IPC time with the NVR time.

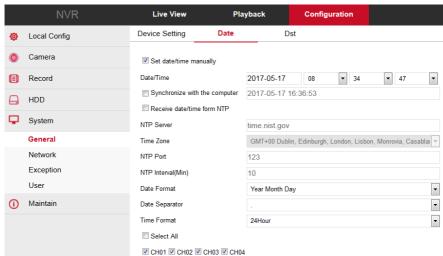


Figure 6-13

#### ■ Dst

In the main interface, click "Configuration→System→General→Dst" to enter the Dst setting interface, as shown in Figure 6-14 below. Here you can set the daylight saving time and daylight saving time of the device to be consistent with the NVR settings.



Figure 6-14

#### 6.4.5.2 Network

#### ■ IP/Port

In the main interface, click "Configure→System→Network→IP/Port" to enter the IP/Port setting interface, as shown in Figure 6-15 below. Here you can set the IP address of the device, subnet mask, gateway, port, DNS and other network information, IP / Port and NVR settings consistent.

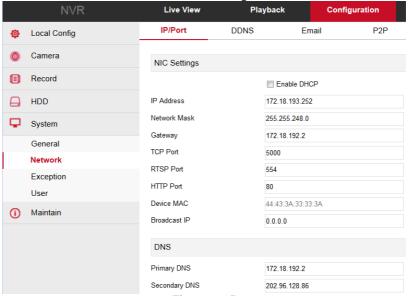


Figure 6-15

#### DDNS

In the main interface, click "Configure—System—Network—DDNS" to enter the DDNS setting interface, as shown in Figure 6-16 below. Here you can open and set the DDNS function, DDNS and NVR settings consistent.

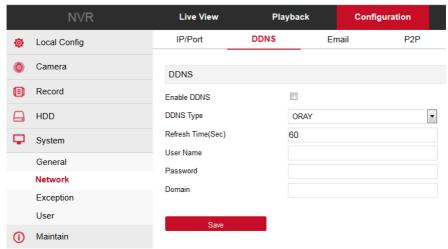


Figure 6-16

#### ■ Email

In the main interface, click "Configure—System—Network—Email" to enter the email setting interface, as shown in Figure 6-17 below. Here you can open and set the mail function, mail settings and NVR settings consistent.

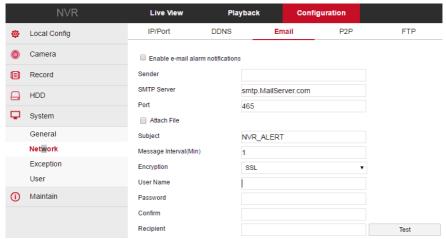


Figure 6-17

#### ■ P2P

In the main interface, click "Configure→System→Network→P2P" to enter the P2P setting interface, as shown in Figure 6-18 below. Here you can turn on / off P2P function, P2P and NVR side set the same.

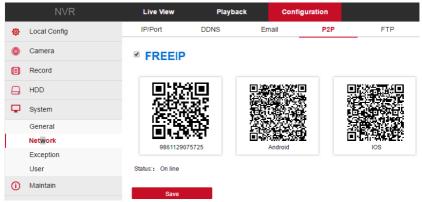


Figure 6-18

#### ■ FTP

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

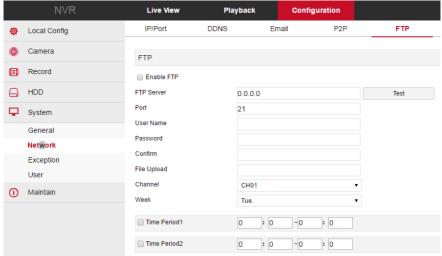


Figure 6-19

#### ■ UPnP

In the main interface, click "Configure—System—Network—UPnP" to enter the UPnP setting interface, as shown in Figure 6-20 below. Here you can turn on and set UPnP function, UPnP and NVR settings consistent.

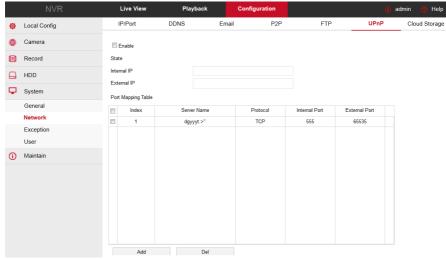


Figure 6-20

#### ■ Cloud Storage

In the main interface, click "Configure—System—Network—Cloud Storage" to enter the Cloud Storage setting interface, as shown in Figure 6-21 below. Here you can turn on and set Cloud Storage function, Cloud Storage and NVR settings consistent.

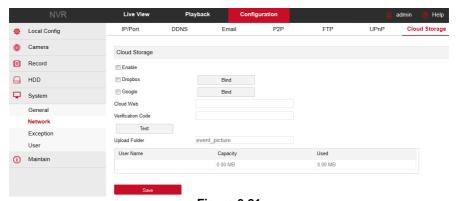


Figure 6-21

#### 6.4.5.3 Exception

In the main interface, click "Configure—System—Exception" to enter the exception setting interface, as shown in Figure 6-22 below. Here you can set the abnormal alarm, abnormal alarm and NVR settings consistent.

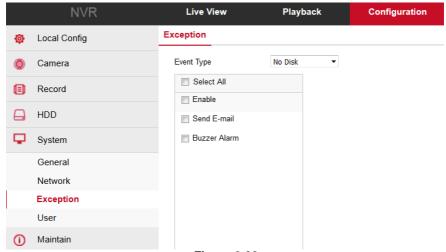


Figure 6-22

#### 6.4.5.4 User

In the main interface, click "Configure—System—User" to enter the user management interface, as shown in Figure 6-23 below. Here you can add, delete, edit the user, the user settings and NVR settings consistent.

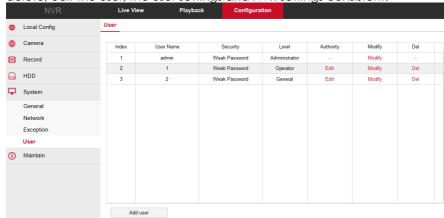


Figure 6-23

#### 6.4.6 Maintain

#### 6.4.6.1 Version Info

In the main interface, click "Configure—Maintain—Version Info" to enter the version information interface, as shown in Figure 6-24 below. Here you can see information about the device version.



Figure 6-24

#### 6.4.6.2 Log

In the main interface, click "Configure—Maintain—Log" to enter the log interface, as shown in Figure 6-25 below. Here you can search the device log; log search is consistent with NVR search.

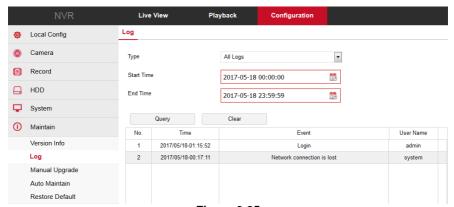


Figure 6-25

## 6.4.6.3 Manual Upgrade

In the main interface, click "Configure→Maintain→Manual Upgrade" to enter the manual upgrade interface, as shown in Figure 6-26 below. Here you can reboot the device and upgrade the device.



Figure 6-26

To manually upgrade the device, the step as follows:

- **Step 1:** In the manual upgrade interface, click the "Browse" button to select the upgrade file stored in the local host;
- Step 2: Click "upgrade";
- **Step 3:** Waiting for the progress of the progress bar, the interface can resume normal operation, upgrade is complete.

#### 6.4.6.4 Auto Maintain

In the main interface, click "Configure—Maintain—Auto Maintain" to enter the auto maintain interface, as shown in Figure 6-27 below. 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

Figure 6-27

#### 6.4.6.5 Restore Default

In the main interface, click "Configure  $\rightarrow$  Maintain  $\rightarrow$  Restore Default" to enter the restore default interface, as shown in Figure 6-28 below. Here you can restore the default value to the device, and the default settings and NVR settings consistent.

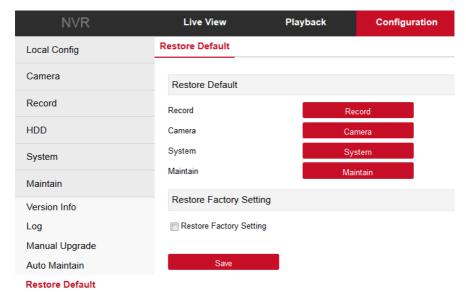


Figure 6-28

# 6.5 Playback

In the main interface, click "Playback" to enter the playback interface, as shown in Figure 6-29 below. Here you can view the equipment, video capture, download and other actions, video query and XVR side of the same set.



Figure 6-29

➤ Window Switch: Click " ☐ / ☐ " to toggle the video playback window.

- > **Stop:** When the video is played, press " " " to stop playing the video.
- Slow forward: When the video is played, click " video will play slowly, the specific speed of choice 1/2, 1/4, 1/8.
- Fast forward: When the video is played, click " video will be slow to play, the specific speed of choice 2, 4, 8.
- > **Audio:** When the video is played, click " (1) " to turn on / off the sound of the recorded video.
- ➤ **Electronic zoom:** When the video is played, click " → / → " to turn on / off the electronic zoom function of the recorded video. Turn on the electronic zoom function, hold down the left mouse button, select the position to zoom in on the playback screen, release the mouse, select the location screen is placed, click " → ", the magnification screen is restored.
- > Capture: When the video is played, click " to capture the settings to the local configuration settings.
- Video clip: When the video is played, click " " to start recording, and then click Save Clip File again, which is stored in the local configuration settings.
- Download: After querying the video file, click " " to enter the video file list, select the download file, click "Download", the video file starts to download in order, stored in the local configuration settings location. The file download interface is shown in Figure 6-30. The "First Page", "Prev Page", "Next Page" and "Last Page" are used to scroll through all video files. The video file can be re-searched by the right calendar, file type, and channel location.

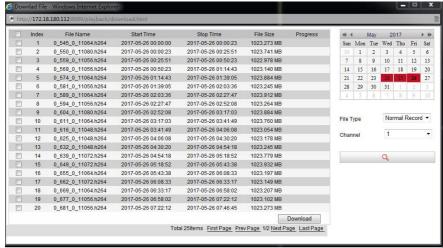


Figure 6-30

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

# 7 Mobile APP Configuration: FreeIP

# 7.1 Installation & Register

FreeIP process: register→login→add device→service application

Step 1 Download and install on your smart phone by following way:

- 1) Android user, search for "FreelP" in the Google App Store, iOS user, just search for "FreelP" in the App Store.
- 2) Scan the following QR codes to download and install the App.



Figure 7-1 Android

ios

3) Download from the following websites.
Android application downloads address:
https://play.google.com/store/apps/details?id=com.xc.hdscreen

iOS application download address: https://itunes.apple.com/cn/app/freeip/id898690336?mt=8



#### Notice

Mobile client currently supports only iOS and Android.
 Step 2 After installation, run "FreerIP", register an account according to the interface prompts.

## 7.2 Add Devices

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

Step 2 Set up the phone network; connect the phone to the wireless

network.

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

Figure 7-3.

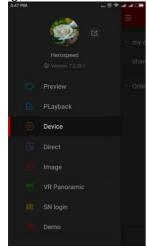






Figure 7-2









Figure 7-3

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

# 7.3 Live Preview

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

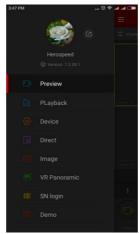


Figure 7-4

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



Figure 7-5

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

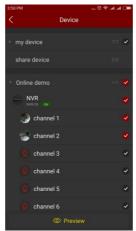


Figure 7-6

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



Figure 7-7



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

# 7.4 Playback

**Step 1** Select "Playback" from the App toolbar, then comes to the video playback interface, as Figure 7-8.

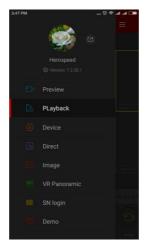


Figure 7-8

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

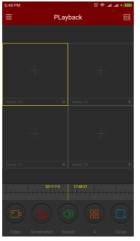


Figure 7-9

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

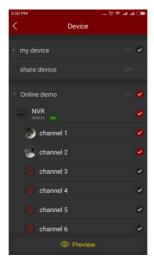


Figure 7-10

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



Figure 7-11

# 8 Appendixes

## 8.1 Q&A

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

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

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

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

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

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

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

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

#### 5. Whether can playback when recording?

Answer: Yes

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

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

#### 7. Why can't login to NVR client?

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

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

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

# 8.2 Maintenance

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

Ensure NVR away from high temperature heat source and place.

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

- 4. About the audio/video signal line and RS-485 interfaces, kindly please don't hot swap, or these port will be damaged easily.
- 5. Check the HDD power cable and data cable of the NVR regularly and look whether they are aging.
- 6. Avoid the audio/video signal affected by other circuits and devices as much as possible, prevent the hard disk damaged by electrostatic or induced voltage.