Network Video Recorder (NVR)
User Manual

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About This Document

Purpose

This document describes the network video recorder (NVR) in terms of product features, hardware installation, network access, network configuration, routine maintenance, and common fault analysis.

Intended Audience

This document is intended for:

- Technical support engineers.
- Maintenance engineers.
- Network video manager system operators.

Symbol Conventions

The symbols that can be found in this document are defined as follows:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![DANGER]</td>
<td>Alerts you to a high risk hazard that could, if not avoided, result in death or serious injury.</td>
</tr>
<tr>
<td>![WARNING]</td>
<td>Alerts you to a medium or low risk hazard that could, if not avoided, result in moderate or minor injury.</td>
</tr>
<tr>
<td>![CAUTION]</td>
<td>Alerts you to a potentially hazardous situation which, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.</td>
</tr>
<tr>
<td>![TIP]</td>
<td>Provides a tip that may help in solving a problem or saving time.</td>
</tr>
<tr>
<td>![NOTE]</td>
<td>Provides additional information to emphasize or supplement important points in the main text.</td>
</tr>
</tbody>
</table>

Important Statement

Users are required to enable and maintain the lawful interception (LI) interfaces of video surveillance products in strict compliance with relevant laws and regulations. Installation of surveillance devices in an office area by an enterprise or individual to monitor employee behavior and working efficiency outside the permitted scope of the
local law and use of video surveillance devices for eavesdropping of illegal purposes constitute behaviors of unlawful interception.
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1.1 Important Notes

Thank you for choosing the NVR. Please read the user manual carefully before using this product.

The NVR is a complex system-based device. To avoid disoperation and malfunctions caused by environmental factors and human factors during installation, commissioning, and application, note the following points when installing and using this product:

Read the user manual carefully before installing and using this product.

- Use Seagate or Western Digital hard disks as the storage devices of the NVR with high stability and competitive price/performance ratios (the quality of hard disks sold on markets varies greatly with different brands and models).
- Do not open the outer case of this product unless performed by a professional person to avoid damage and electric shock.
- We are not liable for any video data loss caused by improper installation, configuration, operation, and hard disk errors.

1.2 About This User Manual

Please note the following points before using this user manual:

- This user manual is intended for persons who operate and use the NVR.
- The information in this user manual applies to the full series NVR, here uses 16ch1HDD NVR as an example for description.
- Read this user manual carefully before using the NVR and follow the methods described in this manual when using the NVR.
- If you have any doubts when using the NVR, contact your product seller.
- In the case of product upgrade, the information in this document is subject to change without notice.

1.3 Installation Environment and Precautions

Installation environment

Table 1-1 defines the installation environment of the NVR.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electromagnetism</td>
<td>The NVR meets the national standards of electromagnetic radiation and does not cause harm to the human body.</td>
</tr>
<tr>
<td>Temperature</td>
<td>–10°C to +45°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>20% to 80%</td>
</tr>
<tr>
<td>Atmospheric pressure</td>
<td>86 Kpa to 106 Kpa</td>
</tr>
<tr>
<td>Power supply</td>
<td>48V 2A(1 HDD) or 220V 4A(2 HDDs or more)</td>
</tr>
<tr>
<td>Power consumption</td>
<td>&lt;15W (excluding the hard disk)</td>
</tr>
</tbody>
</table>

**Installation precautions**

Note the following points when installing and operating the NVR:

- The power adapter of the NVR uses 48V ± 20% input. Do not use the NVR when voltage is too high or too low.
- Install the NVR horizontally.
- Avoid direct sunlight on the NVR and keep away from any heat sources and hot environments.
- Connect the NVR to other devices correctly during installation.
- The NVR is not configured with any hard disk upon delivery. Install one or more hard disks when using the NVR for the first time.
- The NVR identifies hard disk capacity automatically and supports mainstream hard disk models. You are advised to use good brands of hard disk so that the NVR can operate stably and reliably.

**Other precautions**

- Clean the NVR with a piece of soft and dry cloth. Do not use chemical solvents.
- Do not place objects on the NVR.

The NVR meets the national standards of electromagnetic radiation and does not cause electromagnetic radiation to the human body.
2 Basic Operations

2.1 Power on the Device

⚠️ CAUTION

Ensure that the NVR is correctly connected to a power supply, and a display is correctly connected to the high definition multimedia interface (HD-OUT) or video graphics array (VGA) port of the NVR before power-on.

In some environments, abnormal power supply may cause the failure of the NVR to work properly and even damage the NVR in severe cases. It is recommended to use a regulated power supply to power the NVR in such environments.

After the NVR is connected to a power supply, the power indicator is steadily on. Start the NVR. The real-time video screen is displayed, as shown in Figure 2-1.

Figure 2-1 Real-time video screen


NOTE

Users need to provide a hard disk for the NVR. The hard disk is strictly detected during device startup. If the detection result failed, the possible causes are as follows:

- The hard disk is new and is not formatted. Log in to the system and format the hard disk.
- The hard disk is formatted, but the file system is inconsistent with the file system supported by the NVR. Format the hard disk.
- The hard disk is damaged.

2.2 Power off the Device

Click the main menu and choose System > Maintenance, the maintenance page is displayed. Click Shutdown to power off the NVR. You can choose quick main menu’s shutdown. If there is a power switch on the real panel of the NVR, you can turn off the power switch to disconnect the NVR from the power supply.

2.3 Log into the System

Log into the device

Step 1 On the NVR login screen, select the language, as shown in Figure 2-2.

Figure 2-2 Login screen

Step 2 Input the username and password.

NOTE

The username and password are both admin.

If you forget password, click Forgot password. You can choose a way to find previous password:
1. Scan the QR code and send the QR code to your seller.
2. Click Send Password to your E-mail. A password retrieval email will be sent to your email (for details, see 8.3 E-mail). Then, you can retrieve password by following operations described in the email.

**Step 3**  Modify the default password.

When you login the system for the first time, the screen is displayed, as shown in Figure 2-3.

**Figure 2-3 Modify the default password screen**

![Modify default password screen](image)

- Valid password range [6-32] characters.
- At least 2 kinds of numbers, lowercase, uppercase or special character contained.
- Only special characters are supported!#$%--

**Step 4**  Input new password and confirm password.

**Step 5**  Click **Modify password** to access the main User Interface (UI).

----End

2.4 Add Cameras

After the PoE network interfaces are connected to IP cameras, the NVR automatically adds the IP cameras.

Figure 2-4 shows the topology of NVR
Non-PoE

A free network includes other network devices in addition to IP cameras and NVRs. The topology of a free network can be organized freely so long as NVRs and IP cameras can communicate with each other smoothly.

When a free network is used, the user needs to manually search for and add IP cameras. For details, see Chapter 5.

Figure 2-5 shows the topology of a free network.

---End
**Start wizard** button is on the real-time video screen when you login the NVR, click **Start wizard** button, the wizard screen is displayed, as shown in Figure 3-1.

![Network setting wizard](image)

**Figure 3-1 Network setting wizard**

**Operation Steps**

1. Set the parameters according to Table 1-2.
Table 1-2 NVR network parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain IP address automatically</td>
<td>The device automatically obtains the IP address from the DHCP server.</td>
<td>[Setting method] Click the button on to enable <strong>DHCP</strong>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NOTE</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>To query the current IP address of the device, you must query it on the platform based on the device name.</td>
</tr>
<tr>
<td>DHCP IP</td>
<td>IP address that the DHCP server assigned to the device.</td>
<td>N/A</td>
</tr>
<tr>
<td>IP Address</td>
<td>Device IP address that can be set as required.</td>
<td>[Setting method] Enter a value manually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Default value] 192.168.0.121</td>
</tr>
<tr>
<td>Subnet Mask</td>
<td>Subnet mask of the network adapter.</td>
<td>[Setting method] Enter a value manually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Default value] 255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>This parameter must be set if the client accesses the device through a gateway.</td>
<td>[Setting method] Enter a value manually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Default value] 192.168.0.1</td>
</tr>
<tr>
<td>Obtain DNS automatically</td>
<td>The device automatically obtains the DNS address from the DHCP server.</td>
<td>[Setting method] Click the button on to enable Obtain DNS automatically.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NOTE</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>To query the current DNS address of the device, you must query it on the platform based on the device name.</td>
</tr>
<tr>
<td>DNS1</td>
<td>IP address of a DNS server.</td>
<td>[Setting method] Enter a value manually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Default value] 192.168.0.1</td>
</tr>
<tr>
<td><strong>DNS2</strong></td>
<td>IP address of a domain server. If the preferred DNS server is faulty, the device uses the alternate DNS server to resolve domain names.</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>UPnP</strong></td>
<td>The method of port mapping.</td>
<td></td>
</tr>
<tr>
<td><strong>Web Port</strong></td>
<td>HTTP port</td>
<td></td>
</tr>
<tr>
<td><strong>Data Port</strong></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Client Port</strong></td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

- **[Setting method]** Enter a value manually.
- **[Default value]** 8.8.8.8
- **[Setting method]** Select a value from the drop-down list.
- **[Default value]** Auto
- **[Setting method]** When UPnP is auto, the ports needn’t set.
- **[Setting method]** When UPnP is manually, Set the ports IP manually.

**Step 2**  
Click **Next**, the basic parameters of NVR is displayed, as shown in Figure 3-2.

**Figure 3-2 Date and time setting wizard**
1. Select a required date format from the **Date Format** drop-down list.
2. Click drop-down list next to **24 Hour** to disable the 24-hour system. Then the 12-hour system is enabled. If **24 Hour** is set on, the 24-hour system is used and is enabled by default.

3. Click next to **NTP Sync** to disable time synchronization. Time synchronization is enabled by default. Time is synchronized with the PC time.
4. When **NTP Sync** is disabled, you can set the system time manually.
5. Click **Date** and scroll the mouse scroll wheel to select the year, month, and date.
6. Click **Time** and scroll the mouse scroll wheel to select the hour, minute, and second.
7. Click **Modify Time** to save the time settings.

Step 3 Go time zone page, select a required time zone from the **Time zone** drop-down list, as shown in Figure 3-3.

![Time zone wizard](image)

Figure 3-3 Time zone wizard

Step 4 Click next to **DST** to enable DST. And select start time, end time, offset time from the drop-down list respectively, as shown in Figure 3-4.
Step 5  Click **Next**, the camera setting screen is displayed, as shown in Figure 3-5.
Figure 3-5 Camera setting wizard

The details about camera setting, please view *chapter 5 Channel Management*.

Step 6    Click **Next**, the disk management screen is displayed, as shown in Figure 3-6.
You can view the disk capacity, used capacity, SN, disk model and status of disks, and format disk in disk management. Click **Next**, the resolution management screen is displayed, as shown in Figure 3-7.
Step 7 select an output resolution from the drop-down list.

Step 8 Click **Finish** to end the settings.

----End
4 Quick Navigation

After the NVR operation screen is displayed, move the cursor to the lowest point of the NVR screen. The NVR floating menu bar is displayed.

Click 🏡 in the left of NVR floating menu bar, a quick main menu is displayed. The quick main menu provides Admin, Search, Setup and Shutdown, as shown in Figure 4-1.

![Figure 4-1 Quick main menu](image)

In the middle of NVR floating menu bar, the real-time tool bar provides video window switching, auto SEQ, volume and playback, as shown in Figure 4-2.

![Figure 4-2 Real-time video toolbar](image)

The real-time video toolbar is described as follows:

- 🙌: Layout button. By clicking this button, the real-time video window is switched between the single-screen mode and multi-screen mode. Click 🙌 on the right of screen splitting format and choose the channels to view the video.
Auto SEQ. Click this button to enable/disable SEQ

Audio button. By clicking this button, the audio setting screen is displayed, where you can choose the channel and adjust the volume.

An alarm menu quick toolbar is displayed on the right of NVR floating menu bar. The alarm menu quick toolbar provides Manual Alarm, Alarm information, NVR information and Time, as shown in Figure 4-3.

![Figure 4-3 Alarm menu quick toolbar](image)

### 4.1 Playback

Playback means playing back a video.

Click Playback in the quick navigation bar to access the playback screen, as shown in Figure 4-4.

![Figure 4-4 Playback screen](image)

The toolbar at the bottom of the playback screen is described as follows:

Layout button. By clicking this button, the record playback window is switched between the single-screen mode and multi-screen mode. Click on the right of screen splitting format and choose the layouts to playback the record.

Previous video
4.1.1 Time Search

Time search means searching for a record by date and time.

Operation Description

Click Playback in the quick navigation bar to access the time search screen, as shown in Figure 4-4.

Operation Steps

Step 1 Select a camera in the camera list on the left side of the time search screen. The record view of the selected camera is displayed in the play window.

Step 2 Select a date in the calendar on the left side of the time search screen.

Step 3 Select the record type, all record types are selected by default. The different record types will be shown in different colors on the time axis (Blue: schedule record; Yellow: manual record; Orange: alarm record).

Step 4 Select a time segment on the right side of the time axis below the playback window to switch the time axis, and then select time. Next the playback window plays the record in the specified time range.
4.1.2 Picture Grid

Picture grid means evenly dividing the record of a channel and searching for a record based on thumbnails divided by time range.

Click Picture Grid page on playback screen, then access the picture grid screen, as shown in Figure 4-5.

![Figure 4-5 Picture grid screen](image)

Operation Steps

Step 1  Select a camera in the camera list on the left side of the picture grid screen. Records on the current day are displayed as 12 thumbnails at 2-hour intervals in the right window.

Step 2  Select a record.

1. Select the record you want to playback basing on the time segment and double-click the record, the record will be displayed as 12 thumbnails at 10-minutes intervals.

2. Double-click a record again; the record will be displayed as 12 thumbnails at 1 minute intervals.

3. Select a required thumbnail, click Play to play back the record.

4. Right-click the mouse and return to the previous picture grid.

---End
4.1.3 Event

Operation Steps

Step 1   Click **Event** on the page of the playback screen to access the alarm event screen, as shown in Figure 4-6.

![Event screen](image)

Step 2   Select a camera or all cameras on the left side of the **Event Center** screen.

Step 3   Set the alarm start time and end time on the left side of the **Event Center** screen.

Step 4   Select the event type below event in the lower right part of the **Event Center** screen. All event types are selected by default. You can click one event type to deselect it.

Step 5   Click **Search** to query alarm events.

Step 6   Double-click an alarm event to play the alarm video, and double-click again to return to the event center again, as shown in Figure 4-7.
4.1.4 Backup

You need to use USB disk. Click **Backup** page on the playback screen to access the backup screen, as shown in Figure 4-8.

![Figure 4-8 Backup screen](image)

**Step 1**  Backup screen shows the backup record information, includes channel, start time, end time, size, path and progress. Click [ ] to delete the backup record information.

**Step 2**  Click the backup button and start to backup, drag the yellow line to choose video quickly, click the button again, the tip shows backup video’s information.
Step 3  Click **Save** button to backup video, the saving location shows as Figure 4-9

**Figure 4-9 Back up directory**

Step 4  Click **OK** button to end the operation.

---End

### 4.2 Main Menu

Right click on live video. The main menu is displayed, as shown in Figure 4-10. The main menu includes **Channel, Record, Network, Alarm and System Setting**. More detail please refers the later chapters
Figure 4-10 NVR main menu

----End
5 Channel Management

NVR automatically searches and adds network cameras in the same local area network (LAN).

Channel management includes adding and deleting cameras, image parameter, encode parameter, setup OSD and privacy zone.

Operation Description

Click **Channel** in the main menu (or click the channel page of any function screen in the main menu ) to access the channel management screen, as shown in Figure 5-1.

Figure 5-1 Channel management screen

5.1 Camera Management

5.1.1 Add a Camera Automatically

The NVR can add the online camera to the camera list automatically.
On the camera management screen, check the status of channel in the camera list. If the status of a channel is ![online status], this camera has been online. If the status of a channel is ![offline status], this camera has been offline.

Operation Methods

Method 1: Click **Refresh** button, the cameras show in list, check the need, click **Click to Add**, the cameras in the list will be added to the camera list.

Method 2: Select the cameras you wanted to add, and click **Add**; the selected cameras will be added to the camera list.

5.1.2 Add a Camera Manually

Operation Steps

Step 1  Click ![Modify devices screen], the screen to add devices manually is displayed, as shown in Figure 5-2.

![Figure 5-2 Modify device screen]

Step 2  Enter the device name, IP address, port, user name and password of camera,

Step 3  Select a protocol from the drop-down list.

Step 4  Click **OK**, the camera is added successfully.
NOTE
- If all channels of the NVR are connected by cameras, please delete the cameras that you don’t need, so that you can add more cameras.
- If a network camera is added manually, input the correct username and password of the camera below the online device list. The camera will be added successfully. If not the camera would be shown on list at offline.

5.1.3 Delete a Camera

Operation Steps

Step 1  Select a camera to delete in the camera list and click , the delete confirmation message screen is displayed, as shown in Figure 5-3.

![Delete confirmation message](image)

Figure 5-3 Delete confirmation message

Step 2  Click OK, the camera is deleted successfully.

5.2 Encode Parameter

The system allows to set the stream information, encode type, resolution, frame rate, bitrate type and bitrate size for cameras in a channel in Encode Parameter screen.

Operation Description

Click Encode in the main menu or Menu of the channel management screen and choose Encode to access the Encode screen, as shown in Figure 5-4.
Operation Steps

Step 1 Select a channel from the drop-down list of channel.
Step 2 Select stream information.
Step 3 Select encode type, resolution, frame rate, bitrate type and bitrate size from the drop-down lists.
Step 4 Click **Copy** and select channels, then click **OK** to apply the parameter settings to cameras in selected channels, click **Apply** to save encode parameter settings.

---End

5.3 Image Parameter

Image parameters refer to basic attributes of a picture, including the brightness, sharpness, contrast and saturation. You can set picture parameters for each channel based on scenarios.

Operation Description

Click **Image** in the main menu or click menu of the channel management screen and choose **Image** to access the image screen, as shown in Figure 5-5.
The image parameters are described as follows:

- **Brightness**: picture brightness.
- **Sharpness**: picture clarity.
- **Contrast**: picture transparency.
- **Saturation**: brilliance of the picture color.

**Operation Steps**

1. **Step 1** Select a channel from the drop-down list of channel.
2. **Step 2** Select scene from the drop-down list. The default values of picture parameters vary with scenarios.
3. **Step 3** Set the camera brightness, contrast, saturation, and sharpness.
4. **Step 4** Click **Copy** and select channels, then click **OK** to apply the image settings to cameras in selected channels, click **Apply** to save image settings.

---End

**5.4 OSD Settings**

Click **OSD** in the main menu or menu of the channel management screen and choose **OSD** to access the OSD screen, as shown in Figure 5-6.
Figure 5-6 OSD setting screen

Operation Steps

Step 1  Select a channel from the drop-down list of channel.

Step 2  Click next to Time to enable or disable OSD time setting.

Step 3  Click next to Name to enable or disable OSD channel setting.

Step 4  Set the channel name.

Step 5  In the video window, click and drag time or channel to move to a location.

Step 6  Click Copy and select channels, then click OK to apply the OSD settings to cameras in selected channels, click Apply to save OSD settings.

----End

5.5 Privacy Zone

The system allows you to mask images in a specified zone and this zone is called privacy zone.

Operation Description

Click Privacy Zone in the main menu or menu of the channel management screen and choose privacy zone to access the Privacy Zone screen, as shown in Figure 5-7.
Operation Steps

Step 1   Select a channel from the drop-down list of channel.

Step 2   In the video window, hold down and drag the left mouse button to draw a privacy area.

Step 3   Click Copy and select channels, then click OK to apply the privacy settings to cameras in selected channels, click Apply to save privacy settings.

Step 4   Double click privacy area to delete setting.

---End
6 Record Management

Set the record schedule and view the disk capacity in record screen.

6.1 Record Schedule

Operation Description

Click **Record** in the main menu or click the record page of any function screen in the main menu to access the record schedule screen, as shown in Figure 6-1.

![Figure 6-1 Record management screen](image)

Operation Steps

- **Step 1** Select a channel from the drop-down list of channel.
- **Step 2** Enable the record enable.
- **Step 3** Enable the record audio.
- **Step 4** Set the record schedule. Hold down the left mouse button, drag and release mouse to select the arming time within 00:00-24:00 from Monday to Sunday.
When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

**Method 2:** Click 🖱️ in the record schedule page to select the whole day or whole week.

**Step 5** Deleting record schedule: Click 🗑️ again or inverse selection to delete the selected record schedule.

**Step 6** Click **Copy** and select channels, then click **OK** to apply the record management settings to cameras in selected channels, click **Apply** to save settings.

---End

### 6.2 Disk

View the total capacity of disk, disk status, disk SN code and storage space of disk and format the disk.

**Operation Description**

Click **Record** in the main menu or menu of the record screen and choose **Disk** to access the disk screen, as shown in Figure 6-2.

**Figure 6-2 Disk screen**

Format disk:

1. Click **Format**. The message “Are you sure to format disk? Your data will be lost” is displayed.
2. Click OK, and the disk is formatted.

    Record expiration setting:
    
    Step 1  Select record expiration days from the drop-down list of record expiration.
    
    Step 2  Click Apply to save the settings.

    ----End
7 Alarm Management

Set the general alarm information, motion detection, camera tamper, video loss, alarm in and device malfunction in alarm management screen.

7.1 General

Operation Description

Click **Alarm** in the main menu (or click the alarm page of any function screen in the main menu) to access the alarm management screen, as shown in Figure 7-1.

Figure 7-1 Alarm management screen

<table>
<thead>
<tr>
<th>Operation Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
</tr>
<tr>
<td>Step 2</td>
</tr>
<tr>
<td>Step 3</td>
</tr>
</tbody>
</table>

----End
7.2 Motion Detection

Motion detection means that an alarm is triggered when an image in a specified area was changed.

Operation Description

Click **Motion Detection** in the main menu or menu of the alarm management screen and choose **Motion Detection** to access the Motion Detection screen, as shown in Figure 7-2.

![Motion Detection screen](image)

**Figure 7-2 Motion detection screen**

Operation Steps

1. **Step 1** Select a channel from the drop-down list of channel.
2. **Step 2** Click ![motion detection icon] to enable motion detection.
3. **Step 3** Enable the Event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.
4. **Step 4** Click **Area** page to access the motion detection area setting, as shown in Figure 7-23.
Figure 7-3 Motion detection area setting screen

1. Hold down and drag the left mouse button to draw a motion detection area.
2. Select a value from the drop-down list next to Sensitivity.

Step 5  Click Schedule page to access the schedule screen.
        For details, please see 6.1 Record Schedule Step 4 Set the record schedule.

Step 6  Click Copy and select channels, then click OK to apply the motion detection settings to cameras in selected channels, click Apply to save motion detection alarm settings.

**NOTE**
After a motion detection area is selected, double-click it to delete the selected area.

----End

7.3 Camera Tamper
Camera tamper means that an alarm is triggered when the image was tampered.
Operation Description

Click **Camera tamper** in the main menu or menu of the alarm management screen and choose **Camera tamper** to access the camera tamper screen, as shown in Figure 7-4.

![Camera tamper screen](image)

Figure 7-4 Camera tamper screen

Operation Steps

Step 1  Select a channel from the drop-down list of channel.

Step 2  Click ![Camera tamper icon](image) to enable camera tamper.

Step 3  Enable the event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.

Step 4  Click **Schedule** page to access the schedule screen.

For details, please see 6.1 Record Schedule Step 4 Set the record schedule.

Step 5  Click **Copy** and select a channel, then click **OK** to apply the parameter settings to cameras of selected channels, click **Apply** to save camera tamper alarm settings.

----End

7.4 Video Loss

If a camera is disconnected, it will trigger video loss alarm.
Operation Description

Click **Video loss** in the main menu or menu of the alarm management screen and choose **video loss** to access the video loss screen, as shown in Figure 7-5.

![Figure 7-5 Video loss screen](image)

Operation Steps

**Step 1** Select a channel from the drop-down list of channel.

**Step 2** Click to enable video loss alarm.

**Step 3** Enable the Event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.

**Step 4** Click **Schedule** page to access the schedule screen. For details, please see 6.1 Record Schedule Step 4 Set the record schedule.

**Step 5** Click **Copy** and select a channel, then click **OK** to apply the parameter settings to cameras in selected channels, click **Apply** to save video loss settings.

----End
7.5 Intelligent Analysis

Operation Description

- Click **Intelligent Analysis** in the main menu or menu of the alarm management screen and choose **Intelligent Analysis** to access the 1.1 Intelligent Analysis screen, as shown in Figure 7-6.

![Intelligent Analysis screen](image)

**Figure 7-6 Intelligent Analysis screen**

---

**Step 6** Select a channel from the drop-down list of channel.

**Step 7** Click 🔄 to enable intelligent analysis alarm.

**Step 8** Enable the event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.

**Step 9** Click **Schedule** page to access the schedule screen.

For details, please see 6.1 Record Schedule Step 4 Set the record schedule.

**Step 10** **Click Copy** and select a channel, then click **OK** to apply the parameter settings to cameras in selected channels, click **Apply** to save video loss settings.

----End
7.6 Alarm in

Operation Description

Click Alarm in in the main menu or menu of the alarm management screen and choose Alarm in to access the alarm in screen, as shown in Figure 7-7.

Figure 7-7 Alarm in screen

Operation Steps

Step 1 Select a channel in alarm in.

Step 2 Click to enable or disable the functions.

Step 3 Select Alarm type from the drop-down list.

NOTE

- NC: Normal close the alarm
- NO: Normal open the alarm

Step 4 Set name.

Step 5 Enable the event actions include: buzzer, alarm out, push message, pop up message, send E-mail and post recording.

Step 6 Click Schedule page to access the schedule screen.

For details, please see 6.1 Record Schedule Step 4 Set the record schedule.

Step 7 Click Apply to save alarm in settings.
7.7 Device Malfunction

Operation Description

Click **Device malfunction** in the main menu or menu of the alarm management screen and choose **Device malfunction** to access the device malfunction screen, as shown in Figure 7-8.

![Device malfunction screen](image)

**Figure 7-8 Device malfunction screen**

Operation Steps

- **Step 1**  Click to enable or disable the functions.
- **Step 2**  Click **Event type**.
- **Step 3**  Enable the event actions include: buzzer, alarm out, push message, pop up message and send E-mail.
- **Step 4**  Click **Schedule** page to access the schedule screen.
  For details, please see *6.1 Record Schedule Step 4* Set the record schedule.
- **Step 5**  Click **Apply** to save device malfunction settings.

--- End
Set the network parameter, port, DDNS, E-mail, four P, P2P and IP filter in the network management screen.

Operation Description

Click **Network** in the main menu (or click the network page of any function screen in the main menu) to access the network management screen, as shown in Figure 8-1.

![Figure 8-1 Network management screen](image)

### 8.1 Network

Set DHCP and DNS manually or automatically.
8.1.1 IP

Operation Steps

Step 1  Click next to DHCP to enable or disable the function of automatically getting an IP address. The function is disabled by default.
If the function is disabled, click input boxes next to IP, Subnet mask, and Gateway to set the parameters as required.

Step 2  Click next to Obtain DNS Automatically to enable or disable the function of automatically getting a DNS address. The function is enabled by default.
If the function is disabled, click input boxes next to DNS1 (default 192.168.0.1) and DNS2 (default 8.8.8.8), delete original address, and enter new address.

Step 3  Click Apply to save IP settings.

---End

8.1.2 Port

Operation Steps

Step 1  Click Port page to access the port setting screen, as shown in Figure 8-2.

Figure 8-2  Port setting screen

Step 2  Set the web port, data port and client port.

Step 3  Click Apply to save port settings.

---End
8.1.3 PoE

Operation Steps

Step 1  Click **POE** page to access the poe setting screen, as shown in Figure 8-3.

![Figure 8-3  POE setting screen](image)

Step 2  Set the IP address, subnet mask and gateway manually.

Step 3  Click **Apply** to save port settings.

----End

8.2 DDNS

Please make sure of connecting the specified camera to the Internet, and obtain the user name and password for logging into the dynamic domain name system (DDNS) from the server.

Operation Steps

Step 1  Click **DDNS** in the main menu or menu of the network management screen and choose **DDNS** to access the DDNS screen, as shown in Figure 8-4.
Step 2  Click next to **Enable** to enable the DDNS function. It is disabled by default.

Step 3  Select a required value from the protocol drop-down list.

Step 4  Set domain name.

Step 5  Set the DDNS account and password.

Step 6  Click **Apply** to save DDNS network settings

---

8.3 E-mail

If the simple mail transfer protocol (SMTP) function is enabled, the device automatically sends alarm information to specified email addresses when an alarm is generated.

**Operation Steps**

Step 1  Click **E-mail** in the main menu or menu of the network management screen and choose **E-mail** to access the E-mail screen, as shown in Figure 8-5.
Figure 8-5 E-mail setting screen

Step 2  Set SMTP server and SMTP server port manually.
Step 3  Set sender E-mail, user name and password manually.
Step 4  Set E-mail for receive alarm. the message “Mail has been sent, please check” is displayed. Open the mail, if the verification code is received, that shows the E-mail is set successfully.
Step 5  Set E-mail for retrieve the password. the message “Mail has been sent, please check” is displayed. Open the mail, if the verification code is received, that shows the E-mail is set successfully.
Step 6  Set SSL encryption for encrypting mail or not.
Step 7  Click **Apply** to save settings.

----End

8.4 UPnP

Operation Steps

Step 1  Click **UPnP** in the main menu or menu of the network management screen and choose **UPnP** to access the UPnP screen, as shown in Figure 8-6.
Step 2  Click next to UPnP to enable or disable the function of UPnP. The function is enabled by default.

Step 3  After UPnP is disabled, set the web port, data port and client port manually.

Step 4  Click Apply to save settings.

**NOTE**
- After UPNP button is enabled, system perform UPnP automatically.
- If UPnP is disable, need to forward the ports by manually on router.

---End

**8.5 P2P**

Show the UUID code and set the P2P status of the device.

**Operation Steps**

Step 1  Click P2P in the main menu or menu of the network management screen and choose P2P to access the P2P screen, as shown in Figure 8-7.
Step 2  Click the **Enable** button to enable the P2P function.

Step 3  Click **Apply** to save P2P network settings or click **Cancel** to cancel settings.

Step 4  After the **Inview Pro4** is installed in mobile phone, run the APP and scan the UUID QR code to add and access the NVR when the device is online.

----End

### 8.6 IP Filter

Set the IP address in specified network segment to allow access or prohibit access.

**Operation Steps**

Step 1  Click **IP Filter** in the main menu or menu of the network management screen and choose **IP Filter** to access the IP filter screen, as shown in Figure 8-8.
Step 2 Click ✅ next to **IP Filter** to enable the function of IP Filter.

Step 3 Select a required value from the **Rule Type** drop-down list.

Step 4 Click + to set black &white list IP segment screen is displayed, as show in Figure 8-9.

Step 5 Enter value manually for start IP address, end IP address.

Step 6 Click **OK**. The system saves the settings. The black and white lists IP segment listed in the black (white) list.

📖 **NOTE**
- Black list: IP address in specified network segment to prohibit access.
- White list: IP address in specified network segment to allow access
- Select a name in the list and click **Delete** to delete the name from the list.
- Select a name in the list and click **Edit** to edit the name in the list.
- Only one rule type is available, and the last rule type set is efficient.

---End
9 System Setting

View the device information and set general information, user, password, display, logs and maintenance for the system setting.

Operation Description

Click **System** in the main menu (or click the system page of any function screen in the main menu) to access the system setting screen, as shown in Figure 9-1.

Figure 9-1 System setting screen

9.1 Information

View the device ID, device name, device type, model, firmware version, HDD volume, channel support, alarm in, and alarm out, audio in, audio out in **information** screen, as shown in Figure 9-1.
9.2 General

9.2.1 System

Operation Steps

Step 1  Click **General** in the main menu or menu of the system management screen and choose **General** to access the system screen, as shown in Figure 9-2.

![Figure 9-2 system setting screen](image)

Step 2  Enter device name for selected device.

Step 3  Select a proper resolution from the **output resolution** drop-down list based on the adopted monitor.

Step 4  Select a required language from the **Language** drop-down list.

Step 5  Click **Apply** to save settings.

---End

9.2.2 Date and Time

Operation Steps

Step 1  Click **Date and Time** page to access the date and time setting screen, as shown in Figure 9-3.
Step 2  Select a required date format from the **Date Format** drop-down list.

Step 3  Click next to **24 Hour** to disable the 24-hour system. Then, the 12-hour system is enabled. If **24 Hour** is set to On, the 24-hour system is used and is enabled by default.

Step 4  Click next to **NTP Sync** to disable time synchronization. Time synchronization is enabled by default. Time is synchronized with the PC time.

Step 5  After **NTP Sync** is disabled, you can manually set the system time:

1. Click **Date** and scroll the mouse scroll wheel to select the year, month, and date.
2. Click **Time** and scroll the mouse scroll wheel to select the hour, minute, and second.
3. Click **Modify Time** to save the time settings.

Step 6  Click **Apply** to save settings.

----End

### 9.2.3 Time Zone

**Operation Steps**

Step 1  Click **Time zone** page to access the time zone setting screen, as shown in Figure 9-4.
Figure 9-4 Time zone setting screen

Step 2  Select a required time zone from the **Time Zone** drop-down list.

Step 3  Click **Apply** to save settings.

----End

9.2.4 DST

When the DST start time arrives, the device time automatically goes forward one hour. When the DST end time arrives, the device time automatically goes backward one hour.

Operation Steps

Step 1  Click **DST** page to access the DST setting screen, as shown in Figure 9-5.
Step 2  Click  next to DST to enable DST.

Step 3  Select start time, end time, offset time from the drop-down list respectively.

Step 4  Click Apply to save settings.

----End

9.3 User

Add, modify, and delete a user and privilege in user screen.

9.3.1 User

Operation Steps

Step 1  Click User in the main menu or menu of the system management screen and choose User to access the user screen, as shown in Figure 9-6.
Step 2  Add or delete a user.
  - Add a user
    1. Click Add, the Add User dialog box appears, as shown in Figure 9-7.
2. Enter a username, password and confirm password.

   **NOTE**
   - The password should include letter, character and number, at least two types.
   - The password should be 6~32.

3. Select a **Group** from the drop-down list box.
4. Select a **Change password reminder** value from the drop-down list box.
5. Select the operation privileges in the list of the add user screen.
6. Click **OK**. The user is set successfully.

   **NOTE**
   - The default user is **Administrator** and cannot be deleted or modified.
   - Select a user from user list and click **edit** to edit, or click **delete** to delete a user.

-----End
9.3.2 Advance Setting

Operation Steps

Step 1  Click **User** in the main menu or menu of the system management screen and choose **Adv Setting** to access the user screen, as shown in Figure 9-8.

Figure 9-8 Advance setting screen

```
---End
```

Step 2  Enable or disable **Auto login**, **Password double authentication**, **Boot Wizard**.

Step 3  Click **Apply** to save settings.

9.4 Password

Modify the old password.

Operation Steps

Step 1  Click **Password** in the main menu or menu of the system management screen and choose **Password** to access the modify password screen, as shown in Figure 9-9.
Step 2  Enter the correct old password, new password, and confirm password.

**NOTE**

- The password should include at least two kinds of letter, character and number.
- The password should be 6~32 characters.
- Only special characters (!@#$*+=-) are supported.

Step 3  Click **Apply** to save modify password settings.

----End

9.5 Display

Set video mode, dwell time in display screen.

Operation Steps

Step 1  Click **Display** in the main menu or menu of the system management screen and choose **display** to access the display screen, as shown in Figure 9-10.
Figure 9-10 Display screen

Step 2  Set layout. Select a layout mode from the SEQ drop-down list.

Step 3  Select dwell time from the SEQ Dwell time drop-down list.

Step 4  Click Apply to save dwell settings.

----End

9.6 Logs

Search for logs information and export the information.

Operation Steps

Step 1  Click Logs in the main menu or menu of the system management screen and choose Logs to access the log screen, as shown in Figure 9-11.
Step 2 Set the logs start date, end date, start time and end time on log screen.

Step 3 Select logs type from the drop-down list.

Step 4 Click **Search** to query logs.

Step 5 Click **Export** to export logs to local disk or USB storage.

---End

9.7 Maintenance

Operation Steps

Step 1 Click **Maintenance** in the main menu or menu of the system management screen and choose **Maintenance** to access the maintenance screen, as shown in Figure 9-12.
Step 2  Click **Shutdown**, **Reboot**, **Exit system** or **Reset** to operate NVR if you need.
Step 3  The tip will show on screen, click **ok** to ensure choice.
Step 4  Click **Import Config** to import the configuration.
Step 5  Click **Export Config** to export the configuration.

----End