

**KEDACOM**

**NVR1822      and  
NVR1825      User  
Guide**

**Version 02**

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### Intended Audience

This document is intended for the personnel who:

- Work with the NVR1822 and NVR1825
- Know video surveillance basics

### Document Versions

#### Version 02 (2015-08-04)

Compared with Version 01 (2014-12-12), Version 02 (2015-08-04) includes the changes described in the following table.

Change Type	Description
Feature change	-
Editorial change	Updated screenshots. Changed the document name from "1820 Series NVR User Guide" to "NVR1822 and NVR1825 User Guide." Deleted the specifications of the NVR1821.

#### Version 01 (2014-12-12)

Compared with Version 00 (2014-06-30), Version 01 (2014-12-12) includes the changes described in the following table.

Change Type	Description
Feature change	Replaced the Auto Networking feature with the Automatically Adding Devices feature. Deleted the Intelligent Search feature.

Editorial change	Updated screenshots.
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### Version 00 (2014-06-30)

This is a draft.

## Compatibility

The following table provides the products and NVR software version to which this document applies.

<b>Product</b>	<ul style="list-style-type: none"><li>• NVR1822-HD/HDA</li><li>• NVR1825-HD/HDA</li><li>• NVR1825-HP</li></ul>
<b>NVR Software Version</b>	NVR V5R1B2

# 1 About the NVR1822 and NVR1825

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## 1.1 Product Introduction

Kedacom NVR1822/NVR1825 (hereinafter referred to as the NVR) is a turnkey solution for video surveillance and video recording. The NVR supports Open Network Video Interface Forum (ONVIF) and Real Time Streaming Protocol (RTSP) interoperability standards. Additionally, it features native integration to cameras and encoders from third party manufacturers, therefore making it an open system.

The advanced system capabilities make the NVR easy to use with functions like Automatically Adding Devices and One-Click Partition and Initialization and meet various customer needs with functions like Image Flip and Privacy Mask for every day security users to advanced video surveillance users.

The NVR works with the following management system and applications:

- NVR Station: is a complete system for device management, video surveillance, and video recording.
- NVR Station Web: is a web-based application of the NVR Station.
- Mobile NVR Client: is an iOS/Andriod-compatible mobile application of the NVR Station.

For details about the NVR appearance and specifications, see chapter 8 "Specifications."

## 1.2 Key Features

The following table lists key features provided by the NVR to meet vairous customer needs.

Item	Feature	Description
Adding devices	Automatically Adding Devices	This feature allows you to quickly add cameras to your NVR.  For details on how to use this feature, see section 3.1 "Automatically Adding the Target Camera."
Disk management	One-Click Partition and Formatting	Before starting a recording, you must partition and format disks. With this feature, you can complete the two operations with one click.  For details on how to use this feature, see section 4.1 of <i>NVR1822 and NVR1825 Administrator Guide</i> .

Viewing	Dual-Stream and Audio	The NVR offers the ability to record the main and secondary streams for each camera. Along with exceptional image quality, the NVR can also record audio.
	Dual-Monitor Live Viewing	The NVR can connect to two monitors, allowing for dual-monitor live viewing.  For feature details, see section 3.8 "Enabling Dual-Monitor Viewing."
	Privacy Mask	This feature prevents a camera from monitoring sensitive objects or areas in a scene. When privacy masks are created in a scene, you cannot track objects if the objects move to a masked area. You can create up to 4 privacy masks (24 privacy blocks) for a camera.  For details on how to use this feature, see section 3.5 "Setting Privacy Masks."
	Image Flip	This feature allows you to track an object continuously as it passes beneath a camera.  For details on how to use this feature, see section 3.3.2 "Advanced PTZ Controls."
Playback	9-Channel 720p Video Playback	A spectacular 1280-by-720 resolution lets you see more of your high-resolution images with pixel-for-pixel accuracy. When you play back videos on a screen, the solution allows you to capture more details.  The following NVRs support 9-channel 720p video playback: <ul style="list-style-type: none"> <li>• NVR1822-HD/HDA</li> <li>• NVR1825-HD/HDA</li> </ul> The NVR1825-HP supports 4-channel 720p video playback.
Alarming	Motion Detection	With this feature, an NVR can detect a change in the position of an object relative to its surroundings.  For details on how to use this feature, see section 6.1 "Motion Detection."



	E-Mail Notification	Alarm notification via an e-mail alert is offered as a standard feature with all Kedacom NVRs. You can program an NVR to send a message to a designated address whenever an alarm is triggered.  For feature details, see section 7.5 "E-Mail Notification."
Power	PoE	This standard uses a single cable to provide both data connection and electrical power to devices such as wireless access points and IP cameras. Unlike standards such as the Universal Serial Bus which also powers devices over data cables, PoE allows long cable lengths.  The following NVRs support this standard: <ul style="list-style-type: none"> <li>• NVR1825-4HP</li> <li>• NVR1825-9HP</li> </ul>

## 1.3 Major Specifications

### Homing

From a single NVR, you can view and control up to 64 cameras.

### WDR

This feature allows you to record greater scene details, from shadows to highlights than normal.

### IR

Infrared cameras can capture objects when there is insufficient visible light to see.

### Three-Megapixel Lens

The NVR can work with three-megapixel lenses so that you can capture stunning and high-resolution digital images.

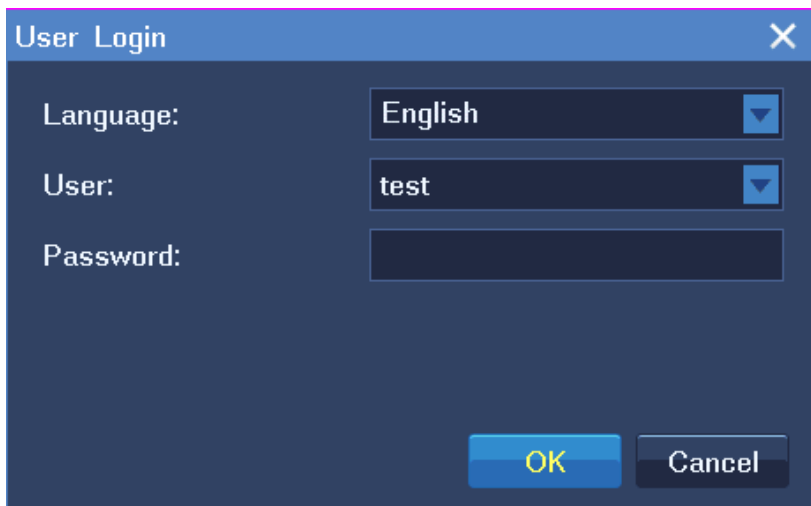
## 2 Logging In to the NVR

---

Before logging in to the NVR, ensure that your system administrator has assigned you a user account.

To log in to the NVR:

1. Click any button on the control panel located at the bottom of the main screen of the NVR.
2. In the displayed **User Login** dialog box, specify **User** and **Password**.



The screenshot shows a 'User Login' dialog box with a blue header and a dark blue body. It features three input fields: 'Language:' with a dropdown menu set to 'English', 'User:' with a dropdown menu set to 'test', and 'Password:' with an empty text box. At the bottom, there are two buttons: 'OK' and 'Cancel'.

In this step, you can select a display language.

3. Click **OK**.

If you enter an incorrect password three times in succession, your account will be locked for 10 minutes.

If you forget your password, contact your system administrator to retrieve the default password of your account.



The graphical user interface (GUI) of the NVR is continuously changed. Therefore, do not be alarmed when you find the screenshots in this document are different from actual ones. We greatly appreciate your understanding.

All the screenshots in this document are taken from the NVR1825-16HDA and NVR1825-9HD. If you find some options are missing, contact the NVR system administrator to check whether your NVR supports these options. If so, contact the local authorized Kedacom agent.

### 3.1 Automatically Adding the Target Camera

You can use the Automatically Adding Devices feature to add the target camera that is monitoring the target site to your NVR.

#### Working principle of the feature

This feature automatically adds a camera to an NVR when the following conditions are true:

- The registration address of the camera is 224.1.1.1 (the default registration address).
- The camera is located on the same subnet as the NVR.
- The Auto Networking feature is enabled on the camera side.

For details on how to enable this feature on the camera side, see the related document of the camera.

Alternatively, this feature can add the camera to the NVR when the following conditions are true:

- The registration address of the camera is one IP address of the NVR. (This indicates that the camera has registered with the NVR.)
- The camera can reach the NVR.

This feature can also retrieve a camera that registered with the NVR but was preempted by another NVR later if the following conditions are true:

- The camera is still on the camera list of the NVR.
- The camera is located on the same subnet as the NVR.

After the target camera is added to your NVR, you can find the camera on the camera list. Then, drag the target camera to a view window on the main screen of your NVR to monitor the target site.



#### Note

The registration address of a camera is one IP address of the NVR to which the camera registers.

#### Querying the registration address of a camera

You can use IPCSearch to query the registration address of a camera. The following is an example.

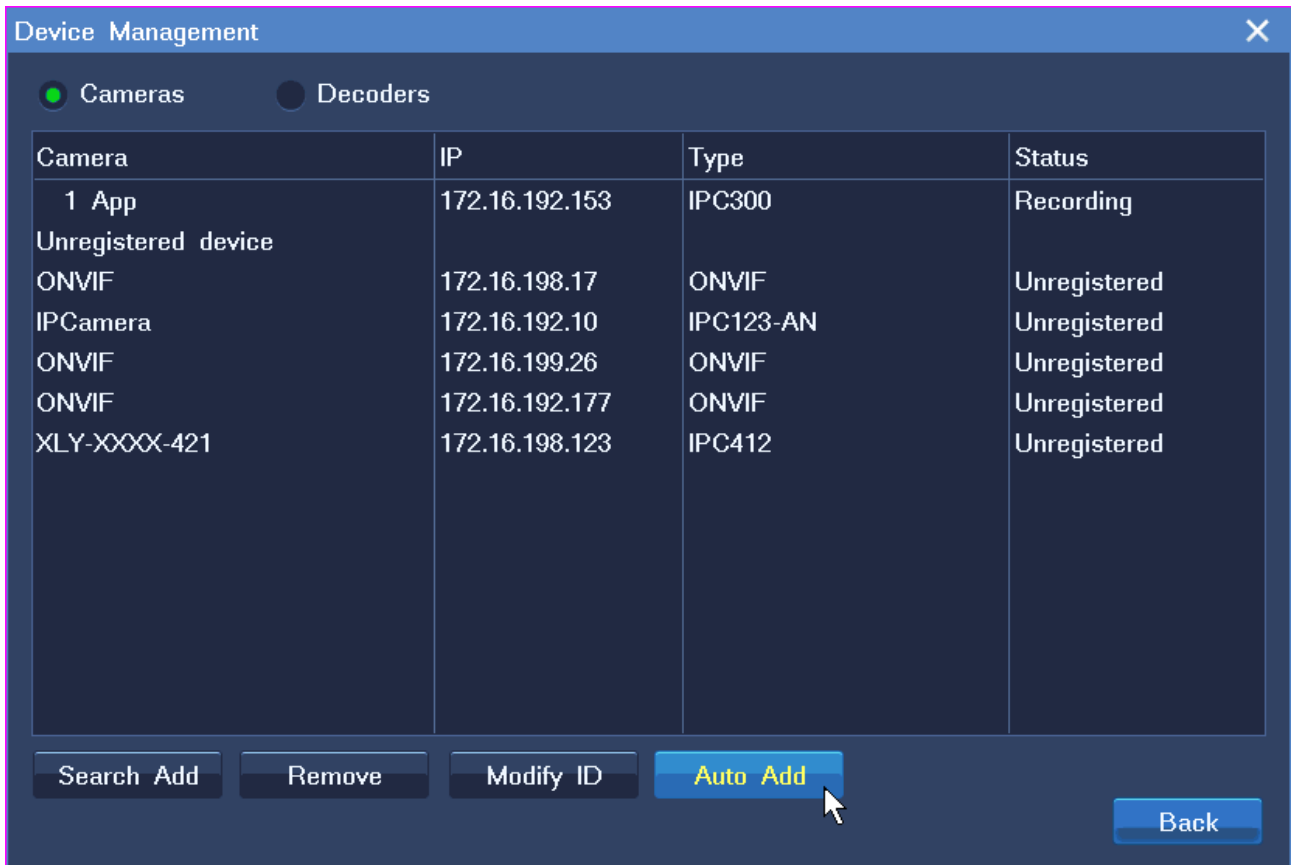
The screenshot shows the IPCSearch application window. At the top, there are buttons for Search, BroadSet, Modify Params, Reboot, Login, and Upgrade. Below these is a table with columns: No., Alias, IP, Gateway, DHCP, Device Type, MAC, and Runtime. A 'Modify Params' dialog box is open over the table, showing configuration for an IPCamera. The dialog includes fields for Device, MAC, Type, Device Address (with radio buttons for Auto-obtain and Custom device address), IP Address, Netmask, Gateway, a checked checkbox for 'Modify address of register server', an unchecked checkbox for 'Enable LDS', radio buttons for IP Address (selected) and Domain, and a Port field. A tip at the bottom of the dialog states: 'Once save changed, The device would be reboot to bring into operation.' The IP Address field in the dialog is highlighted with a red box and contains the value '224 . 1 . 1 . 1'.

No.	Alias	IP	Gateway	DHCP	Device Type	MAC	Runtime
49	IPC-120-76.103	192.168.1.119	0.0.0.0				144 hr. 23 min. 5 sec.
13	IPC185-AN	172.16.193.150	0.0.0.0				1 hr. 49 min. 33 sec.
21	ipc421	172.16.193.151	0.0.0.0				0 hr. 50 min. 14 sec.
17	IPCamera	172.16.192.201	172.16.199.150				0 hr. 45 min. 57 sec.
24	IPCamera	172.16.192.195	172.16.192.254				8 hr. 3 min. 9 sec.
25	IPCamera	172.16.198.155	172.16.192.254				1 hr. 7 min. 20 sec.
27	IPCamera	172.16.198.227	172.16.192.254				46 hr. 33 min. 46 sec.
29	IPCamera	172.16.193.144	172.16.192.254				7 hr. 2 min. 13 sec.
30	IPCamera	172.16.193.168	172.16.192.254				0 hr. 7 min. 33 sec.
35	IPCamera	172.16.198.2	0.0.0.0				0 hr. 1 min. 55 sec.
38	IPCamera	172.16.192.41	172.16.192.1				3 hr. 27 min. 55 sec.
44	IPCamera	172.16.192.33	172.16.192.1				2 hr. 53 min. 6 sec.
45	IPCamera	172.16.192.5	172.16.192.1				3 hr. 17 min. 44 sec.
46	IPCamera	172.16.192.12	172.16.192.1				6 hr. 45 min. 57 sec.
48	IPCamera	172.16.192.34	172.16.192.1				3 hr. 28 min. 31 sec.
50	IPCamera	172.16.198.151	172.16.192.254				0 hr. 48 min. 33 sec.
51	IPCamera	172.16.192.10	0.0.0.0				1 hr. 15 min. 54 sec.
52	IPCamera	172.16.192.6	172.16.192.254				6 hr. 10 min. 6 sec.
53	IPCamera	172.16.199.66	172.16.192.254				4 hr. 4 min. 15 sec.
54	IPCamera	172.16.197.182	172.16.192.254				23 hr. 48 min. 20 sec.
55	IPCamera	172.16.199.3	172.16.192.254				2 hr. 30 min. 32 sec.
56	IPCamera	172.16.198.25	172.16.198.254				2 hr. 18 min. 21 sec.
57	IPCamera	172.16.192.165	172.16.192.254				24 hr. 41 min. 5 sec.
59	IPCamera	172.16.199.50	172.16.192.254				24 hr. 1 min. 27 sec.
60	IPCamera	172.16.197.181	172.16.192.254				164 hr. 57 min. 23 sec.
43	IPCamera21	172.16.198.21	172.16.192.254				71 hr. 52 min. 22 sec.
61	KDM2410M-V21	192.168.1.20	192.168.1.1				24 hr. 50 min. 34 sec.
64	KDM2410M-V21	2.2.2.2	192.168.1.1				24 hr. 50 min. 31 sec.
28	kedacom	172.16.193.154	172.16.192.254				0 hr. 58 min. 56 sec.
58	kedacom	172.16.193.153	172.16.192.254				2215 hr. 4 min. 25 sec.
62	kedacom	192.168.11.99	172.16.192.254				0 hr. 58 min. 56 sec.
65	kedacom	172.16.198.206	172.16.192.254				201 hr. 4 min. 52 sec.
36	MA_tzx_ipc120	172.16.199.11	172.16.192.254				3022 hr. 45 min. 21 sec.
26	Maipc423-A_16	172.16.199.16	172.16.192.254				1584 hr. 15 min. 37 sec.
39	MA-tzx-ipc300-10	172.16.199.10	172.16.192.254				549 hr. 10 min. 3 sec.
1	NVR	172.16.198.190	0.0.0.0				3 hr. 39 min. 59 sec.
2	NVR	172.16.192.168	172.16.192.254				0 hr. 28 min. 30 sec.
3	NVR	172.16.192.183	172.16.192.254				200 hr. 59 min. 26 sec.

IPCSearch is incorporated into the NVR Station which comes with your NVR. IPCSearch can find cameras, encoders, and decoders that are located in the same broadcast domain as your personal computer (PC).

### How to use this feature

To use this feature, choose **Main Menu > Devices > Auto Add**, as shown in the following figure.



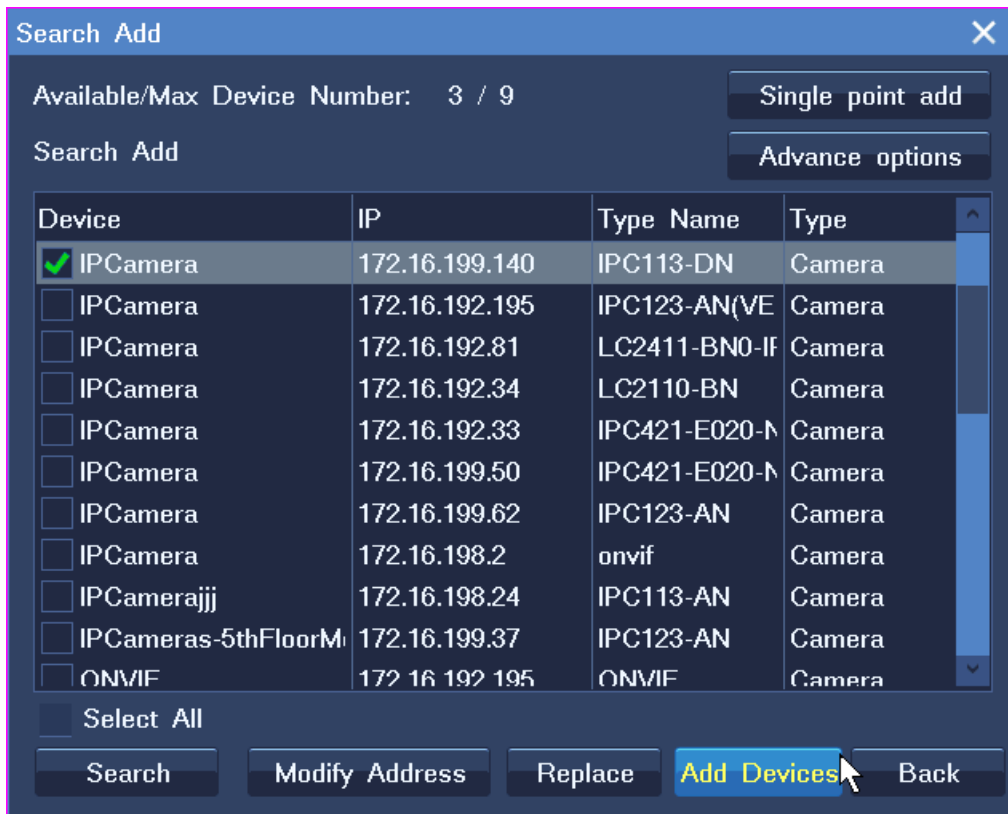
If you do not want use this feature, you can manually search for and add the target camera. For details, see section 3.2.1 "Adding Cameras."

## 3.2 Manually Adding, Editing, Replacing, and Deleting Cameras

### 3.2.1 Adding Cameras

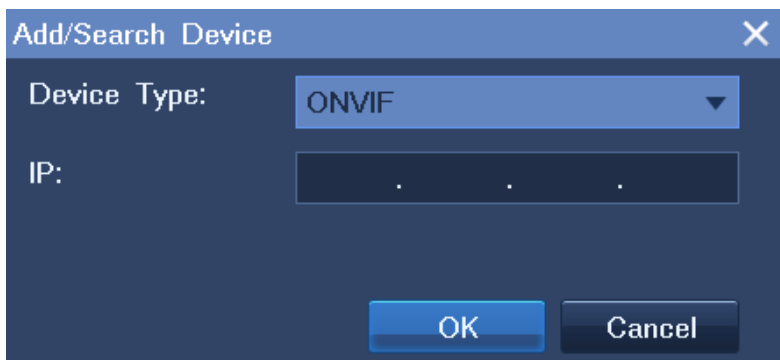
To manually add a camera:

1. Choose **Main Menu > Devices > Search Add**.
2. Select the camera from the search results and click **Add Devices**, as shown in the following figure.



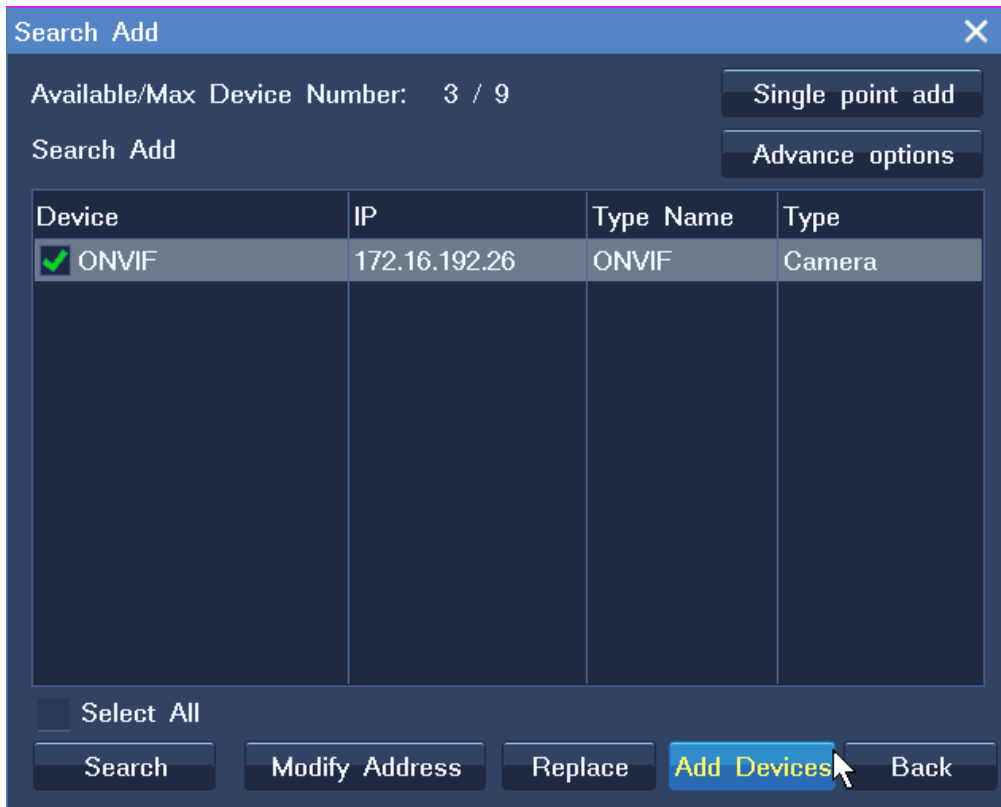
3. (Optional) Add an RTSP or ONVIF camera.

1) Click **Single point add** and specify parameters displayed, as shown in the following figure.

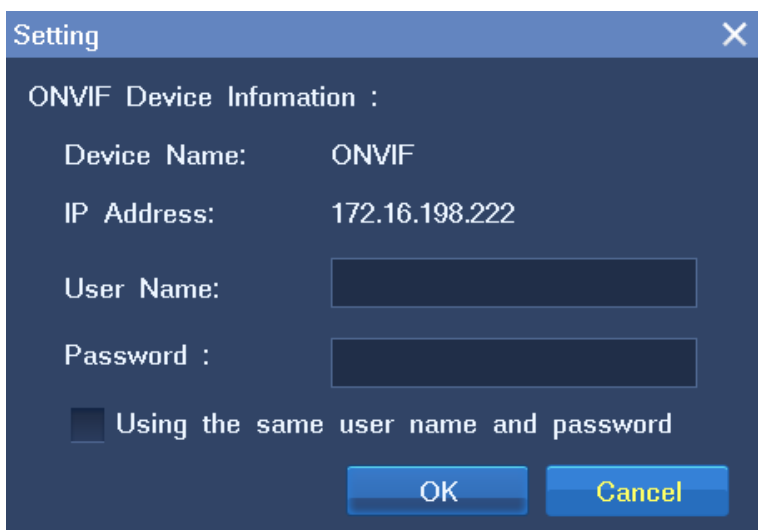


2) Click **OK**.

3) Select the camera from the search results and click **Add Devices**, as shown in the following figure.

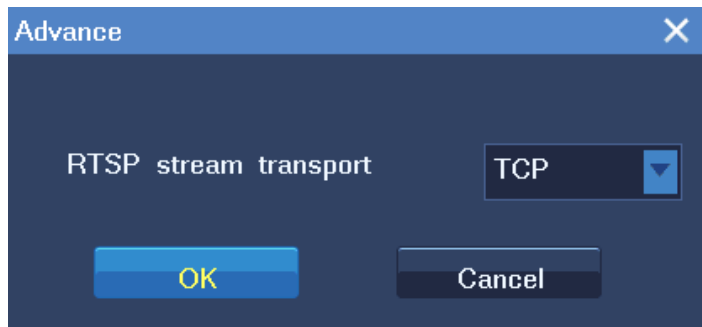


- 4) In the displayed dialog box, specify **User Name** and **Password**, as shown in the following figure.



If you want to add a number of ONVIF cameras that use the same user name and password, select **Using the same user name and password**. Then, all these cameras can be added at a time.

- 5) Click **OK**.
4. (Optional) Click **Advance options** to configure the RTSP stream transport mode, as shown in the following figure.



After the preceding operations are performed, the camera is added to the camera list of the NVR. Then, move your cursor to the left edge of the main screen and drag the camera to a view window to monitor the corresponding area.

### 3.2.2 Editing Cameras

To change the network settings of a camera:

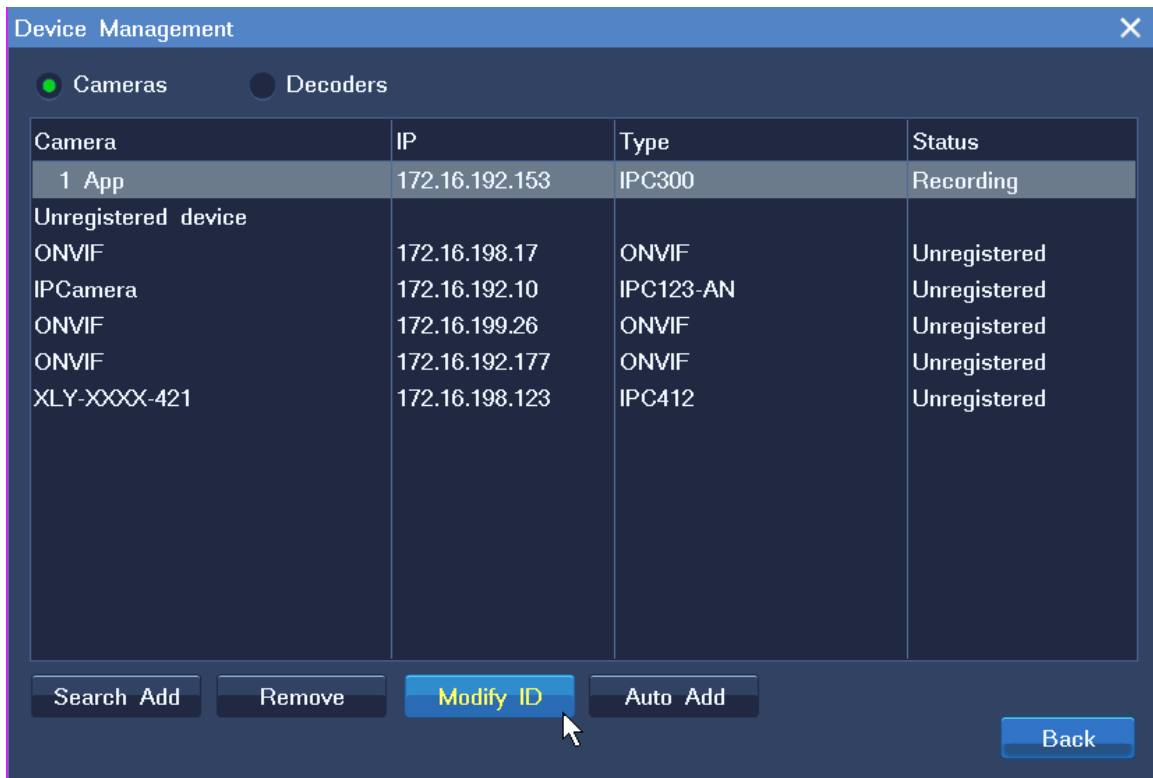
1. Choose **Main Menu > Devices > Search Add**.
2. Select the camera from the search results and click **Modify Address**.
3. Change parameter values as required.
4. Click **OK**.

Note that you can change the network settings only for cameras that use the factory defaults.

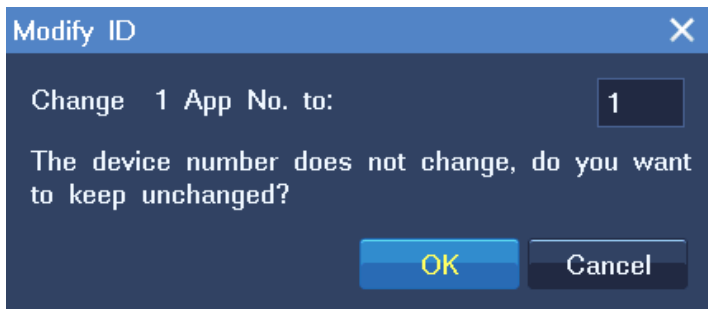
To change the sequence of a camera on the camera list of the NVR:

1. Choose **Main Menu > Devices > Modify ID**.





- In the displayed dialog box, enter a digit in the text box, as shown in the following figure.

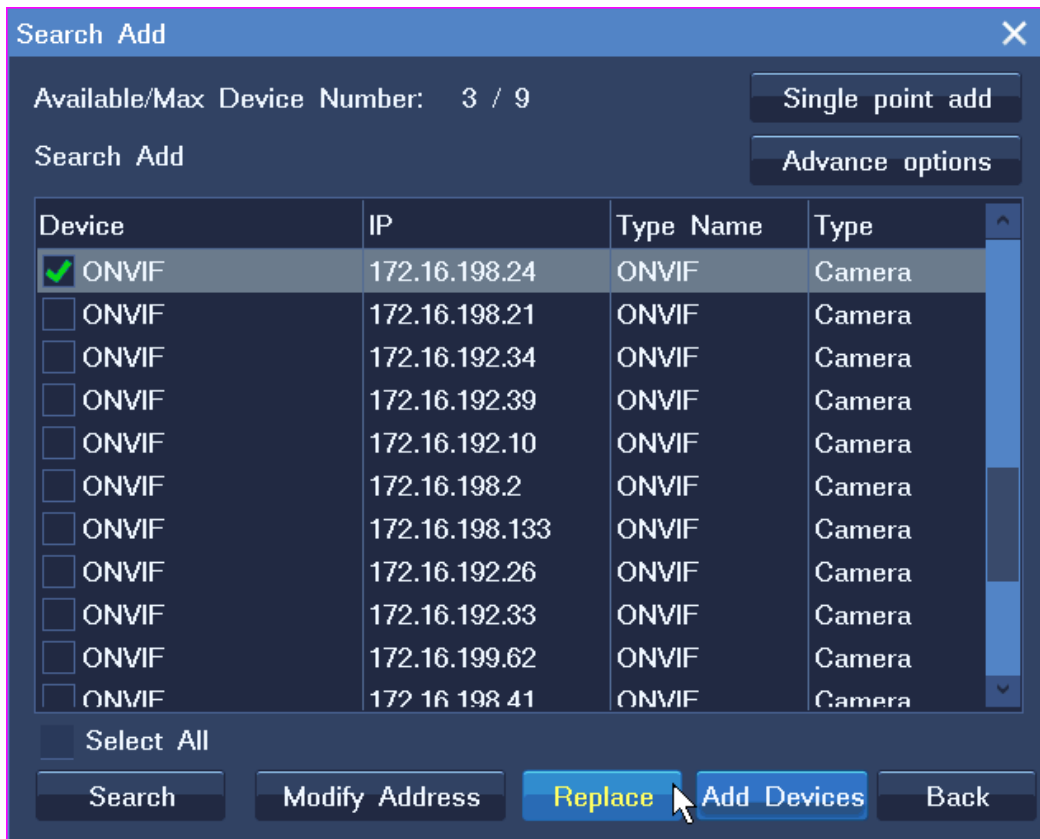


- Click **OK**.

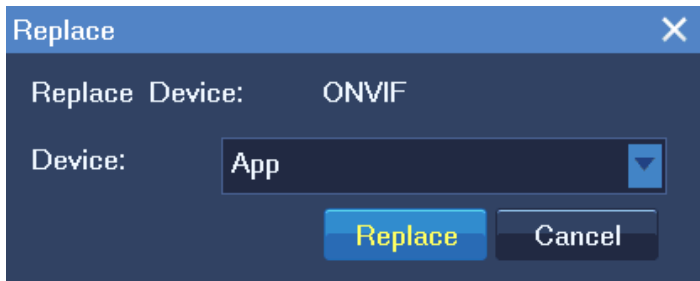
### 3.2.3 Replacing Cameras

To replace an existing camera with a new camera:

- Choose **Main Menu > Devices > Search Add**.
- In the displayed **Search Add** dialog box, select the camera from the search results and click **Replace**, as shown in the following figure.



- In the displayed **Replace** dialog box, select a device to be replaced.



- Click **Replace**.

### 3.2.4 Deleting Cameras

To delete a camera:


















- Choose **Main Menu > Devices**.
- In the **Device Management** dialog box, select the camera from the camera list and click **Remove**.
- In the **Remove Devices** dialog box, select the camera and click **Delete**.
- Click **Close**.

### 3.3 PTZ Controls

When you are monitoring a site, you can use PTZ controls to look around your surveillance site.

#### 3.3.1 Common PTZ Controls


Common PTZ controls are described as follows:

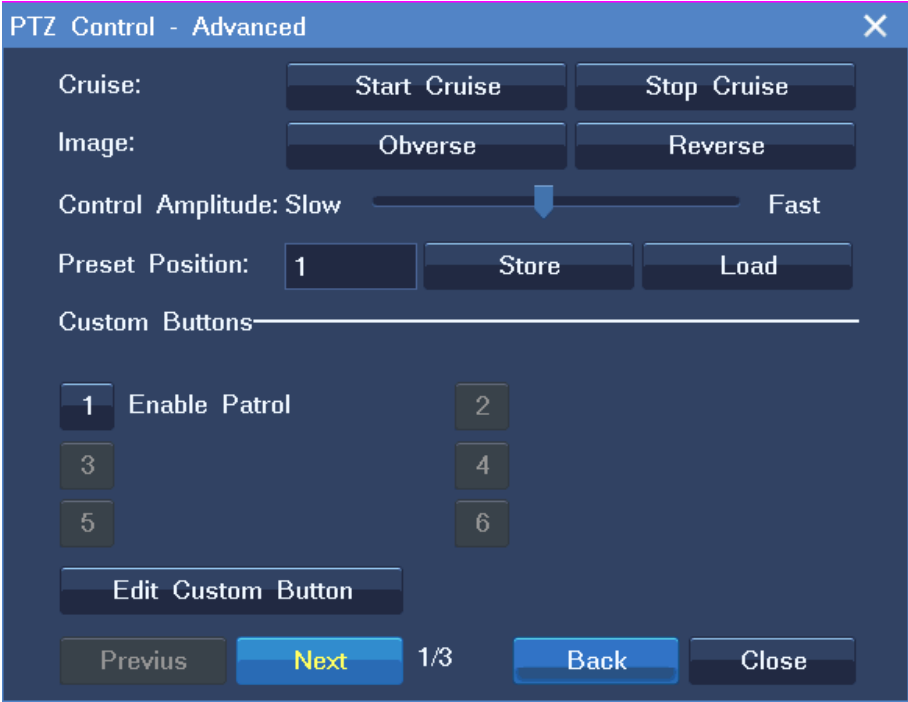
Option	Description
Zooming	Click  to zoom in and  to zoom out.
Adjusting the Brightness	Click  or  to increase or decrease the display brightness, respectively.
Adjusting the Focus	Click  or  for near or far focus, respectively.  Click  for autofocus.
Camera Control Menu	Click  ,  , and  to show, enter, and exit the camera control menu, respectively.  These buttons apply only to specific cameras.
Turning on or off the Backlight	Click  or  to turn on or off the backlight, respectively.
Day and Night Mode	Click  or  to enable or disable the day and night mode, respectively.  Click  to enable the automatic day and night mode.
Wide dynamic range (WDR)	Click  or  to enable or disable the WDR technique, respectively.

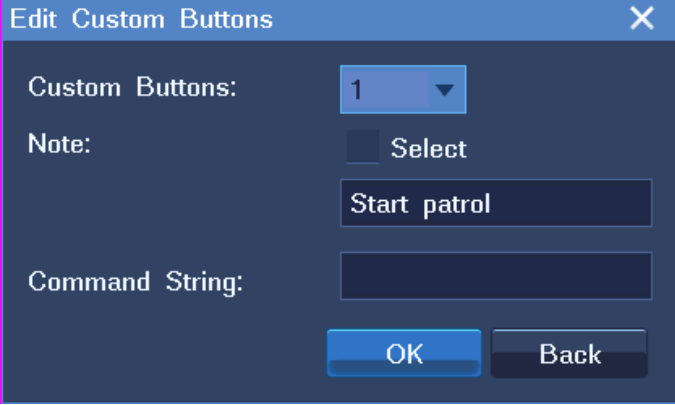




If you find an option does not take effect, contact the camera system administrator to check whether the camera in question supports the option. If so, contact the local authorized Kedacom agent.





### 3.3.2 Advanced PTZ Controls








Click the  **Advanced Tab** button to show advanced PTZ controls, which are described as follows.

Option	Operation
Patrol	<p>This option enables a camera to continuously pan.</p> <p>Click <b>Start Cruise</b> to start patrolling your surveillance site and <b>Stop Cruise</b> to stop the patrol.</p> 
Rotate Image	<p>Each time you click <b>Observe</b>, the image will be rotated 90° clockwise.</p> <p>Each time you click <b>Reverse</b>, the image will be rotated 90° counterclockwise.</p>
Preset Position	<p>Click <b>Save</b> to save the current position as a preset position. When the camera moves to another position, you can enter a preset position in the text box and click <b>Load</b> to move the camera to the preset position.</p>
Custom Button	<p>These buttons are for command strings.</p> <p>Clicking one button will enable the NVR to send a command to a camera and the camera will execute the command.</p> <p>To edit a custom button:</p> <ol style="list-style-type: none"> <li>1. Click <b>Edit Custom Button</b>.</li> </ol>

	<p>2. In the displayed dialog box, specify parameters displayed.</p>  <p>3. Click <b>OK</b>.</p> <p>Note that these commands are proprietary commands. Therefore, when specifying the <b>Command String</b> parameter, you must negotiate with the system administrator of the camera in question.</p>
Wiper	<p>You can use the wiper to clean a lens.</p> <p>This option requires that the corresponding camera be equipped with a wiper.</p>
IR	<p>Infrared cameras can capture objects when there is insufficient visible light to see.</p> <p>This option requires that the corresponding camera support IR.</p>
Auto Tilt 180°	<p>The Auto Tilt 180° feature works as follows:</p> <p>When you press and hold  to enable a camera to tilt down to the maximum tilt angle 90°, it quickly pans 180° and tilts upward. If you still hold , the camera can tilt upward to the maximum tilt angle 90° again. This achieves 180° tilting.</p> <p>Click <b>On</b> next to <b>AutoFlip</b> to enable this feature.</p>




<p>Manually Restrict Patrol Area</p>	<p>When two borders are configured through <b>Hor_Limit</b> and the <b>Manual Limit</b> option is selected, the corresponding camera pans between these borders. If the camera reaches either of these borders, clicking  or  cannot move the camera any further.</p> <p>This option requires that two borders on the horizontal plane have been configured through <b>Hor_Limit</b>.</p>
<p>Image Flip</p>	<p>Click <b>Hori</b> to horizontally flip the video image 180° and <b>Vert</b> to vertically flip the video image 180°.</p>
<p>Zoom Speed</p>	<p>Click <b>Fast</b> to accelerate the zoom speed and <b>Normal</b> to use the normal zoom speed.</p>
<p>Pan 180°</p>	<p>Click <b>Flip</b> to enable a camera to pan 180°.</p>
<p>Restrict Pan Range</p>	<p>The <b>Hor_Limit</b> option allows you to set two borders on the horizontal plane. Then, the camera cannot move beyond these borders.</p> <p>To set two borders on the horizontal plane:</p> <ol style="list-style-type: none"> <li>1. Right-click a view window and choose <b>PTZ Control</b>.</li> <li>2. Click and hold  to move the camera leftwards and stop at a position.</li> <li>3. Click  and go to the second page.</li> </ol>

	<ol style="list-style-type: none"> <li>4. Click <b>Left</b> next to <b>Hor_Limit</b> to save the previous position as the left border.</li> <li>5. Click <b>Back</b></li> <li>6. Click and hold  to move the camera rightwards and stop at a position.</li> <li>7. Click  and go to the second page.</li> <li>8. Click <b>Right</b> in the same row as <b>Hor_Limit</b> to save the previous position as the right border.</li> <li>9. Click <b>Close</b>.</li> </ol>
Set Pan/Tilt Zero	<p>With the <b>VZ</b> option, you can create a virtual zero point (the pan/tilt is zero).</p> <p>After you create a virtual zero point for a camera, the camera moves to the virtual zero point upon the power-on.</p> <p>To create a virtual zero point for a camera:</p> <ol style="list-style-type: none"> <li>1. Right-click the corresponding view window and choose <b>PTZ Control</b>.</li> <li>2. Select a position for the camera using , , , and .</li> <li>3. Click  and go to the second page.</li> <li>4. On the second page, click <b>Set</b> next to the <b>VZ</b> option, as shown in the following figure.</li> </ol>



To clear a virtual zero point for a camera:

1. Right-click the corresponding view window and choose **PTZ Control**.
2. Click  and go to the second page.
3. On the second page, click **Clear** next to the **VZ** option.

Adaptive Pan Speed	When you select the <b>DepthRate</b> option, the panning speed is adaptive.
Auto Restrict Patrol Area	<p>The <b>Scan Limit</b> option restricts the patrol area for a camera.</p> <p>Before selecting this option:</p> <ol style="list-style-type: none"> <li>1. Set two borders on the horizontal plane through <b>Hor_Limit</b>.</li> <li>2. Start a patrol through <b>Start Cruise</b>.</li> </ol> <p>After you select this option, the corresponding camera patrols the area with the previous borders.</p> <p>This option requires that two borders on the horizontal plane have been configured through <b>Hor_Limit</b>.</p>
Image Freeze	The <b>Starve</b> option freezes the last key frame received from a camera. In such a case, you can see the current image is frozen.



Tour Preset	The <b>Tour</b> option tours preset positions. By default, the dwell time for each preset position is 10s. Note that the dwell time is unconfigurable.  Note that this option requires that preset positions have been configured.
Pan/Tilt Zero Correction	The <b>Zero</b> option sets the pan/tilt setting to the mechanical zero point.
Restore Default Image Settings	Click <b>Auto</b> to restore the default image settings.
Hori_Scan_Speed	Pan patrol speed
Zoom Limit	Zooming limit
Shutter	Shutter speed
Plus	Gain
White Balance	Set the white balance mode
Red Plus	Red gain
Pan	Pan a camera
Tilt	Tilt a camera



#### Note

If you find an option does not take effect, contact the camera system administrator to check whether the camera in question supports the option. If so, contact the local authorized Kedacom agent.

### 3.4 e-PTZ

The electronic PTZ (e-PTZ) function allows you to digitally zoom in or out.

### 3.5 Setting Privacy Masks

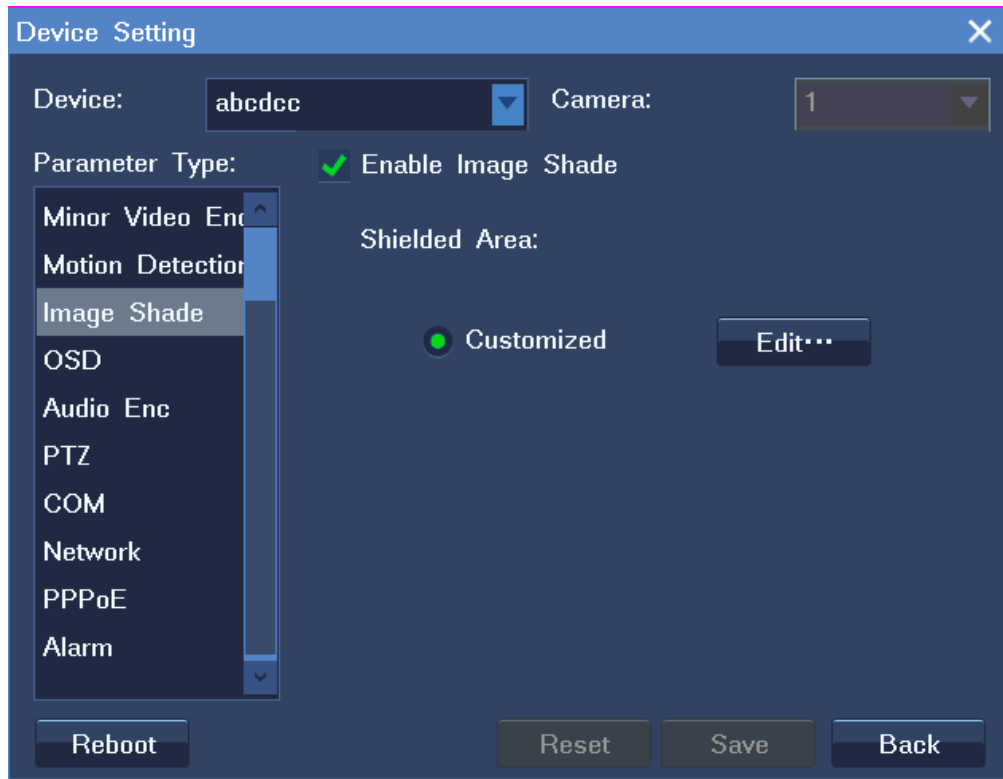
The privacy mask feature prevents a camera from monitoring sensitive objects or areas in a scene. When privacy masks are created in a scene, you cannot track objects if the objects move to a masked

area. Therefore, you are advised to disable this function when you are tracking moving objects.

You can create up to 4 privacy masks (24 privacy blocks) for a camera.

To create a privacy mask for a camera:

1. Right-click the corresponding view window and choose **Device Setting > Image Shade > Enable Image Shade**, as shown in the following figure.



2. Click **Edit** and then select privacy blocks.
3. Click the button in the bottom right corner of the window and confirm your operation.
4. Click **Save** and then **Back**.

After the preceding steps are performed, you will find that masked fields turn black.

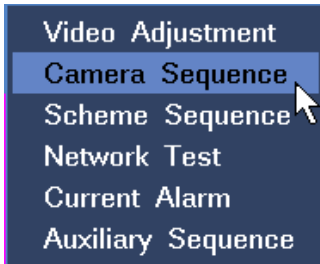
### 3.6 Changing and Touring Surveillance Sites

To change the surveillance site:

1. Right-click the current view window and choose **Camera Choice**.
2. Click the target camera and then **OK**.

To tour multiple surveillance sites on a view window:

1. Right-click a view window and choose **Advance > Camera Sequence**, as shown in the following figure.



2. Select a touring scheme.

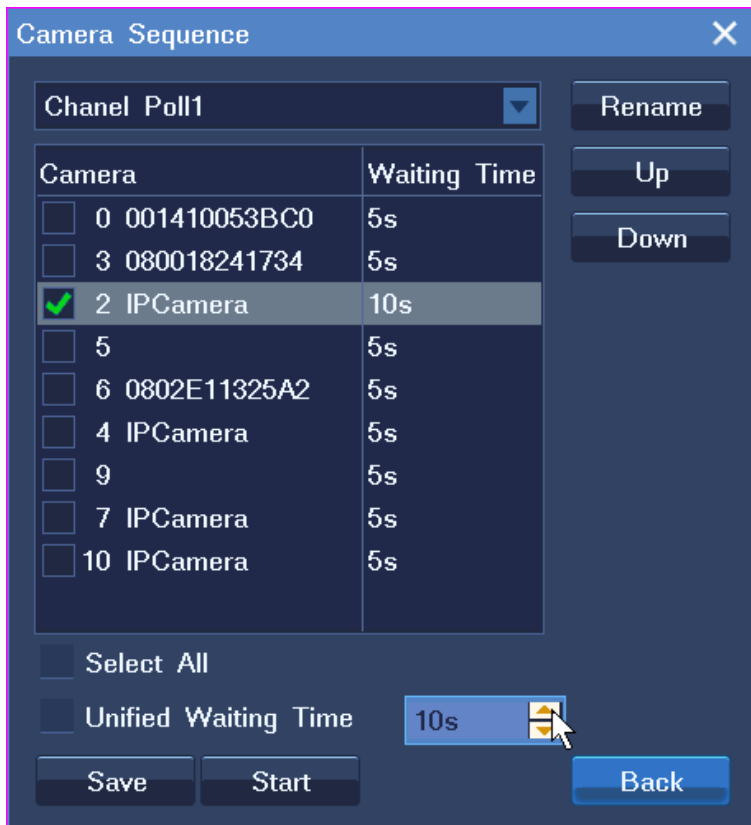
By default, the first touring scheme (Chanel Poll1) is selected, as shown in the following figure.



3. Select cameras for the touring scheme. These cameras are to be toured.
4. Enter a dwell time for cameras.

You can enter either a unique dwell time for a camera or a unified dwell time for several cameras.

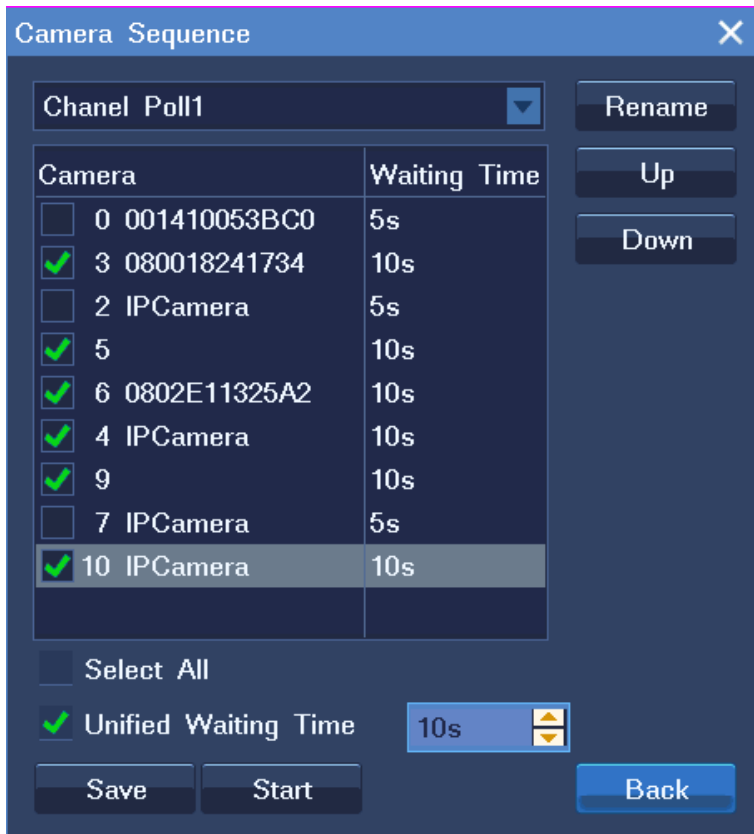
To enter a unique dwell time for a camera, select the camera and select a time length from the **Unified Waiting Time** drop-down list, as shown in the following figure.



To enter a unified dwell time for several cameras:

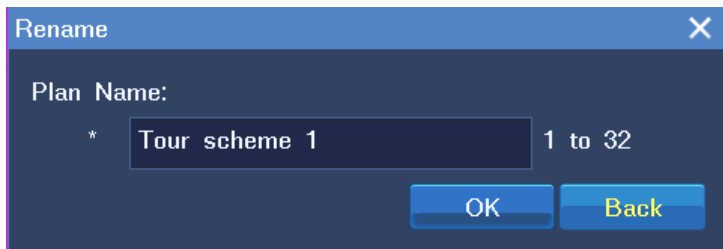
- 1) Select these cameras.
- 2) Select the **Unified Waiting Time** option.
- 3) Select a time length from the **Unified Waiting Time** drop-down list.

The following is an example.



- (Optional) Change the order for each camera using the **Up** and **Down** buttons.
- (Optional) Click **Rename** to rename the current touring scheme.

The following is an example.



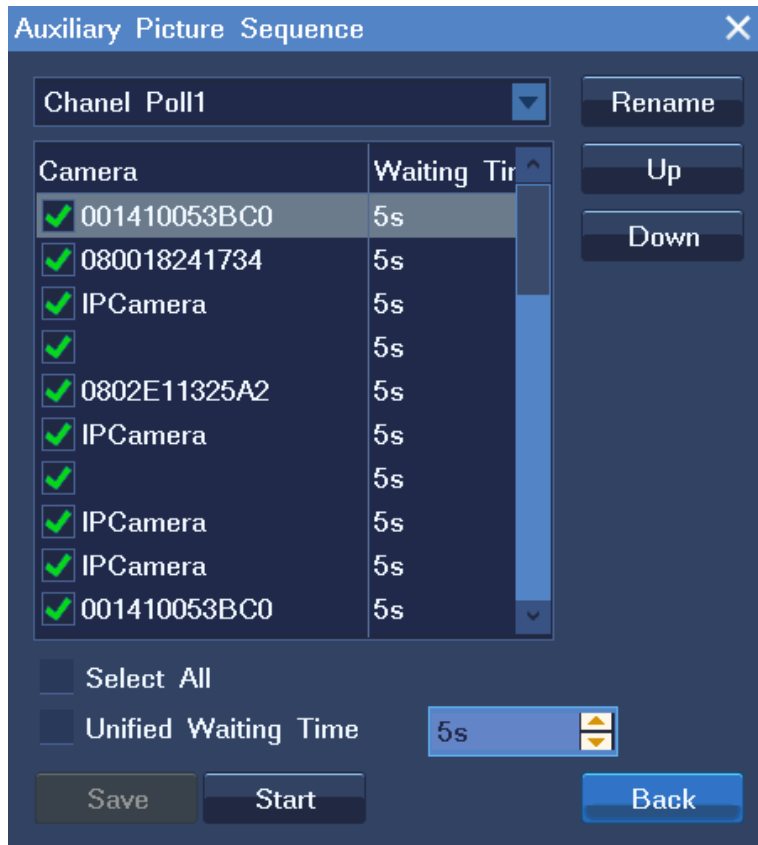
- Click **Start** and then **Back**.

After the preceding steps are performed, live videos from these surveillance sites are toured on the view window.

To tour multiple surveillance sites on a secondary screen:

- Right-click a view window and choose **Advance > Auxiliary Sequence**.
- In the displayed dialog box, select a touring scheme. By default, the Channel Poll1 scheme is

selected, as shown in the following figure.



3. Select cameras for the touring scheme. These cameras are to be toured.

4. Enter a dwell time for cameras.

You can enter either a unique dwell time for a camera or a unified dwell time for several cameras.

5. (Optional) Change the order for each camera using the **Up** and **Down** buttons.

6. (Optional) Click **Rename** to rename the current touring scheme.

7. Click **Start** and then **Back**.

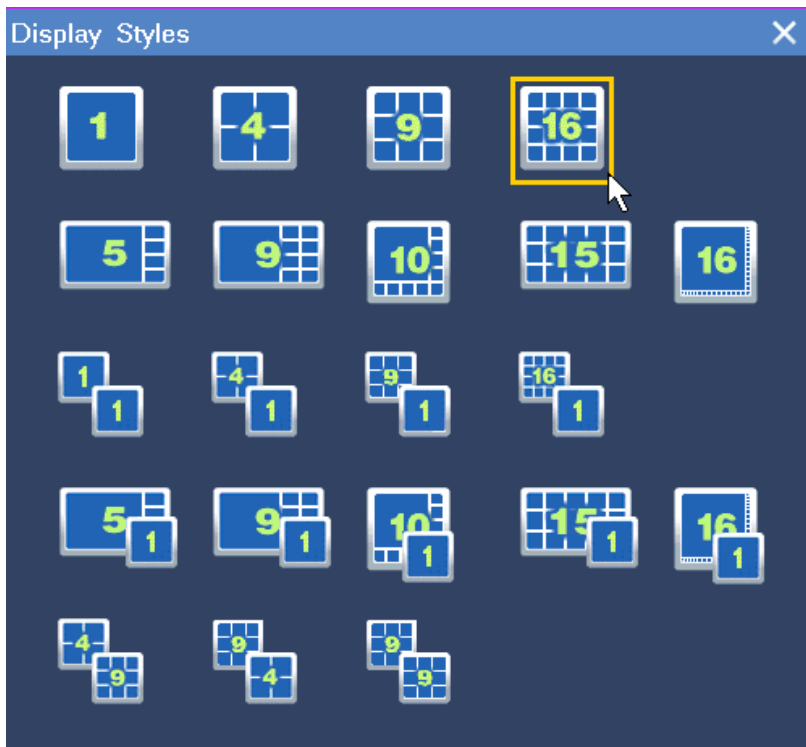
### 3.7 Setting and Touring Screen Layouts

When multiple view windows are displayed on the main screen, you can set the screen layout, create a screen layout scheme with cameras bound to view windows, and tour screen layout schemes.

To set the screen layout, do as follows:

1. Right-click a view window and choose **Display Styles**.

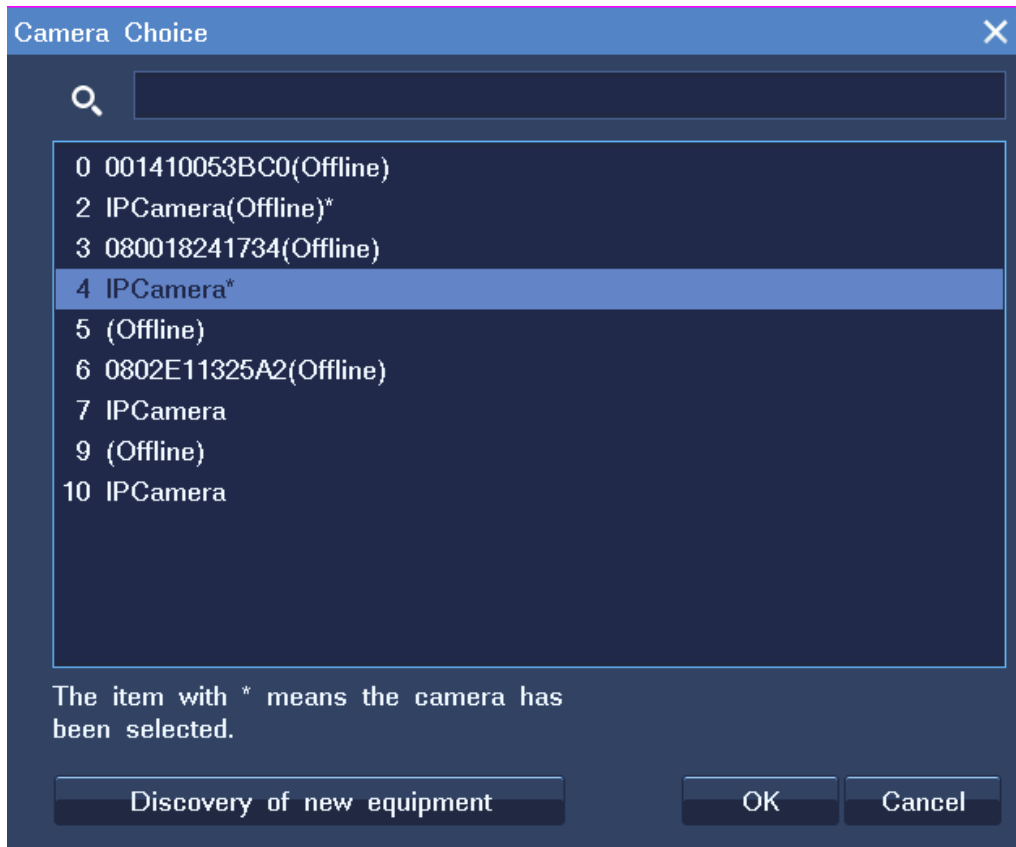
2. Choose a layout.



You can also set the screen layout for the secondary screen in this dialog box.

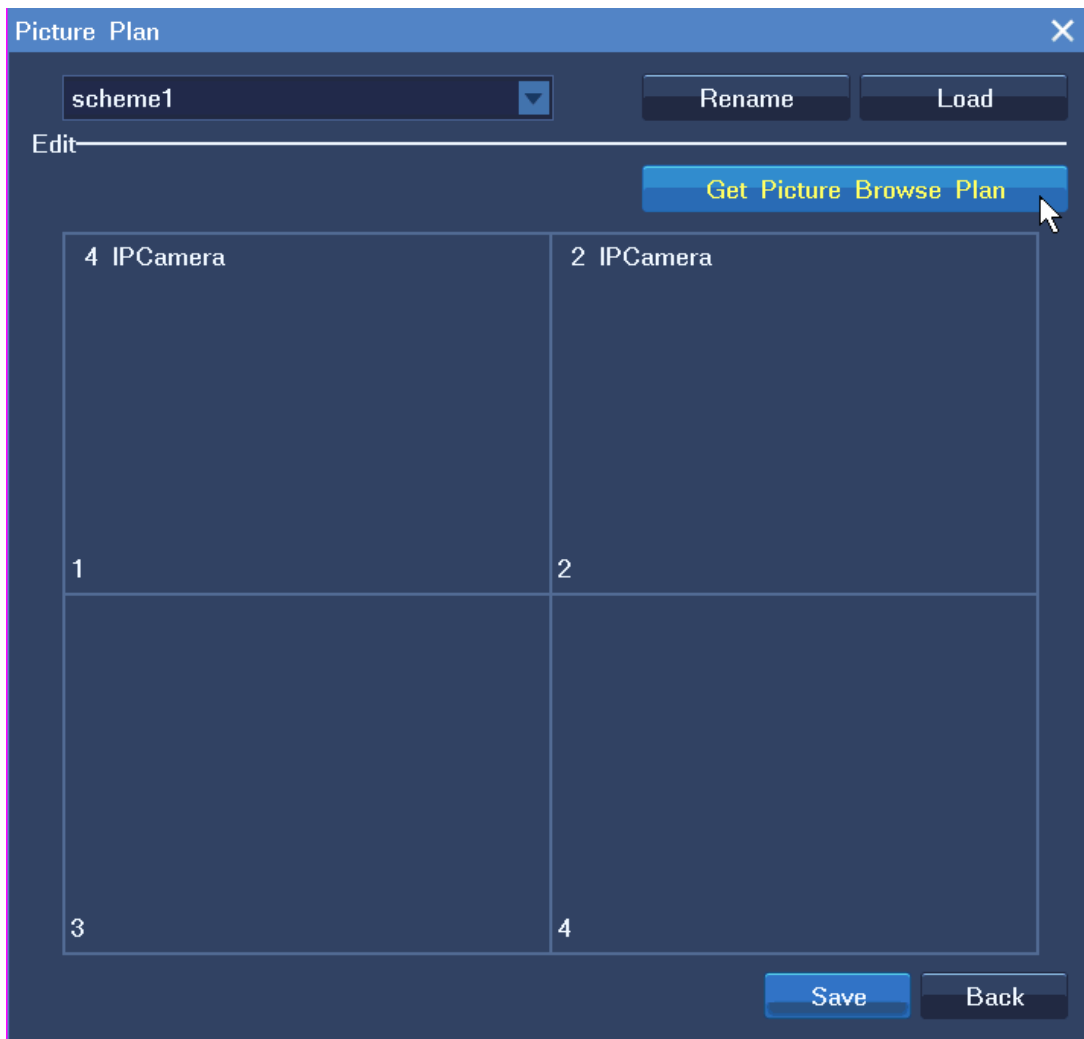
To create a screen layout scheme with cameras bound to view windows, do as follows:

1. Determine a screen layout by performing the previous two steps.
2. Bind cameras and view windows.
  - 1) Right-click a view window and choose **Camera Choice**.
  - 2) Click the target camera. Alternatively, click **Discovery of new equipment** to find the target camera, as shown in the following figure.



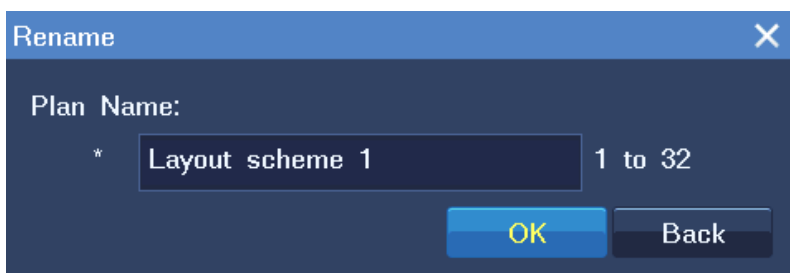
3. Right-click a view window and choose **Layout Scheme**.
4. In the displayed dialog box, click **Get Picture Browse Plan**, as shown in the following figure.





5. (Optional) Click **Rename** to rename the current layout scheme.

The following is an example.



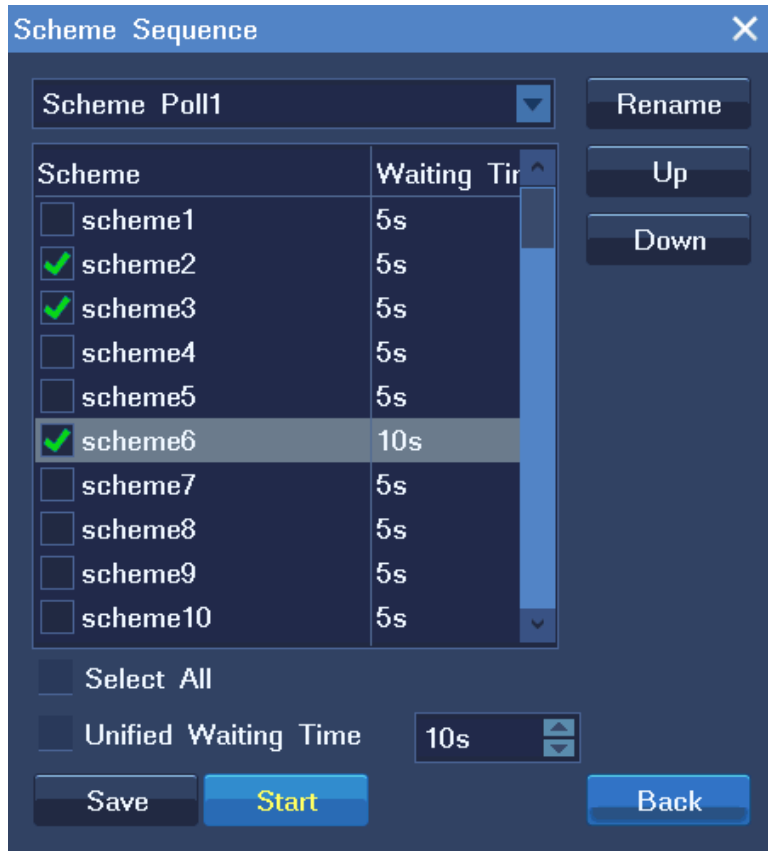
6. Click **Save**.

To tour screen layout schemes, do as follows:

1. Right-click a view window and choose **Advance > Scheme Sequence**.

2. Select layout schemes to be toured and enter a dwell time.

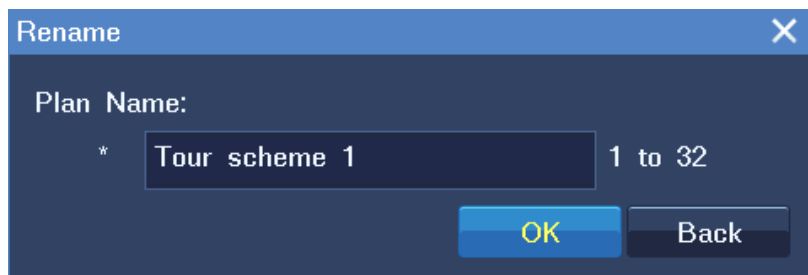
The following is an example.



You can change the order for each scheme using the **Up** and **Down** buttons.

3. (Optional) Click **Rename** to rename the current touring scheme.

The following is an example.



4. Click **Start** and then **Back**.

## 3.8 Enabling Dual-Monitor Viewing

Enabling the feature

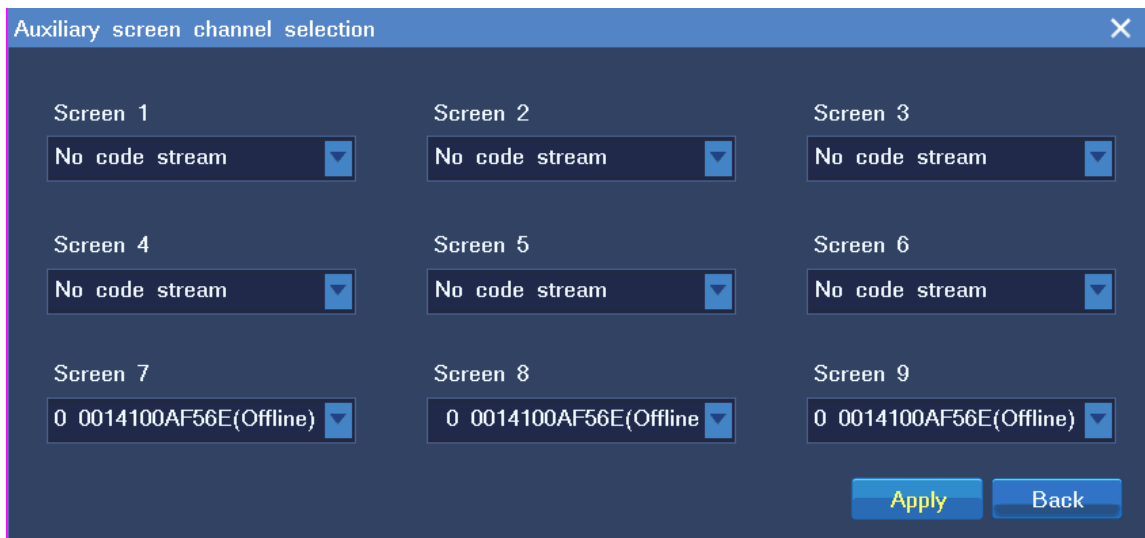
The NVR supports dual-monitor viewing using a VGA port and an HDMI port.

To enable dual-monitor viewing:

1. Right-click a view window and choose **Display Styles**, and then select a layout with two digits (for



2. Right-click a view window and choose **Auxiliary Video**.
3. In the displayed dialog box, select a camera for each view window or screen, as shown in the following figure.



4. Click **Apply**.

### Homologous and heterologous output

In homologous output mode, the output from the VGA and HDMI ports is the same. Only the NVR1825-4HD/HDA, NVR1825-9HD/HDA, and NVR1825-4/9HP support this mode.

In heterologous output mode, the output from the VGA and HDMI ports is different. All the NVR1822 and NVR1825 variants except the NVR1825-4HD/HDA and NVR1825-9HD/HDA support this mode.

## 3.9 Setting the Video Wall

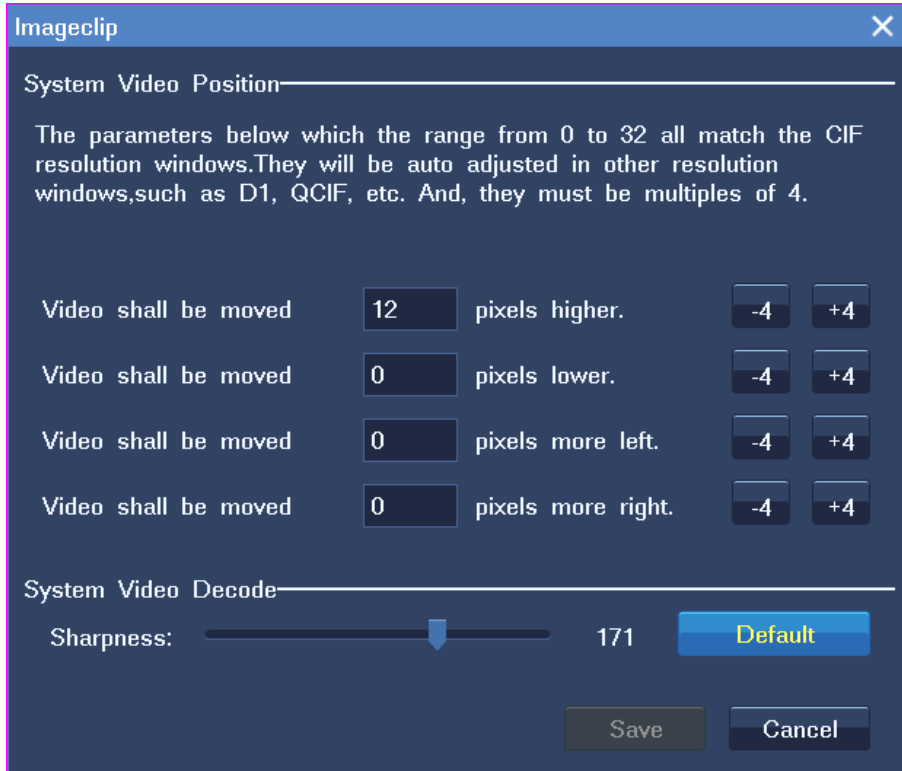
You can monitor sites on a video wall but you must get at least one decoder ready. If no decoders are configured, you cannot monitor sites on the video wall.

You must go to the NVR Station to manage the video wall. For details, see chapter 10 of the *NVR Station User Guide*.

### 3.10 Changing the Image Position

To change the image position for a camera:

1. Right-click the corresponding view window and choose **Main Menu > Settings > Imageclip**.
2. Change the image position, as shown in the following figure.



#### Note

If you find an option does not take effect, contact the camera system administrator to check whether the camera in question supports the option. If so, contact the local authorized Kedacom agent.

### 3.11 Configuring Image Settings

To configure image settings for a camera:

1. Right-click a view window and choose **Advance > Video Adjustment**.
2. Change parameter values according to onsite conditions, as shown in the following figure.




You can also click **Default** to apply the default settings.

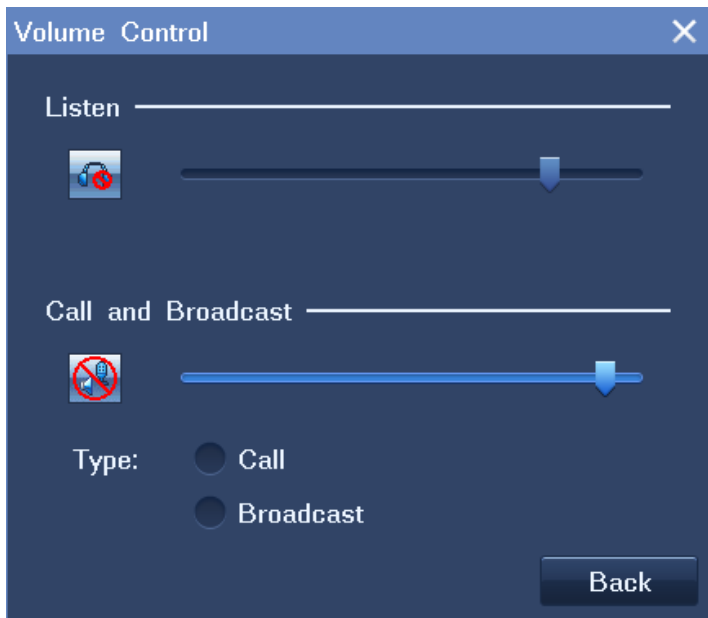
3. Click **Save**.

### 3.12 Listening, Calling, and Broadcasting

Along with exceptional image quality, the NVR can also record audio.

To listen to a camera:

1. Right-click the corresponding view window and choose **Volume Control**.
2. Click .




To call a camera:

1. Right-click the corresponding view window and choose **Volume Control**.
2. Select **Call**.

To start a broadcast:

1. Right-click the corresponding view window and choose **Volume Control**.
2. Select **Broadcast**.

To switch from a call to a broadcast, select **Broadcast**.

To switch from a broadcast to a call, stop the broadcast by clicking  and select **Call**.

### 4.1 Starting a Recording

You can start a recording by setting the recording mode for a camera.

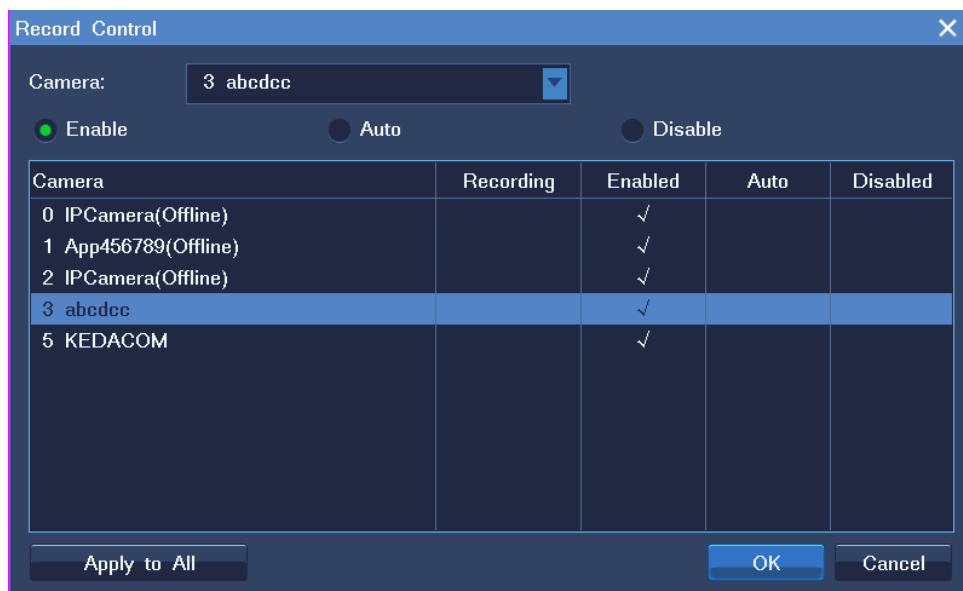
#### Method 1

Right-click a view window and choose **Recording Mode > Enable**.



#### Method 2

1. Right-click a view window and choose **Recording Mode > Record Control**. Alternatively, choose **Main Menu > Record > Record Control**.



2. Select a camera.

3. Select **Enable**.

If necessary, click **Apply to All** to start a recording for all cameras connected to the NVR.

## 4.2 Scheduling a Recording

You can schedule a recording by setting the alarm linkage or the recording scheduling function.

### By alarm linkage

Through alarm linkage, a recording can automatically start when an alarm is triggered.

To schedule a recording:

1. Choose **Main Menu > Alarm > Service Alarm**.
2. Select an alarm type from the **Type** drop-down list, for example, motion detection.
3. Select a source, day, and period.
4. Click **Linkage Edit**.
5. Select a linked camera from the **Linkage Device** drop-down list, as shown in the following figure.

	Period 1	Period 2	Period 3	Period 4
	00:00-00:00	00:00-00:00	00:00-00:00	00:00-00:00
Record	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Caption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Switch to Live	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preset Position	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
To TwWall	<input type="button" value="Cancel Linkage"/>	<input type="button" value="Cancel Linkage"/>	<input type="button" value="Cancel Linkage"/>	<input type="button" value="Cancel Linkage"/>
Linkage Client	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tips: the values range of preset position from 1 to 255, use 0(zero) to cancel linkage

6. Select **Record**.





## Note

The alarm linkage method applies only to cameras whose recording mode is Auto.

### By the recording scheduling function

To schedule a recording:

1. Choose **Main Menu > Record > Schedule**.
2. Select a camera from the **Camera** drop-down list, and select a day and period.

Schedule

Camera: 0 IPCamera Day: Mon.

Recording Periods

Period 1 00:00 - 05:59  Period 2 06:00 - 11:59

Period 3 12:00 - 17:59  Period 4 18:00 - 23:59

Tips: The Regular Recording will take effect, only if the recording mode is set to Auto. You can select the recording mode by use of the shortcut menu or the Record Control function.

Copy... Save Back

If necessary, click **Copy...** and specify parameters to copy the scheduling settings to all cameras or specific cameras.

3. Click **Save**.



## Note

This function applies only to cameras whose recording mode is Auto.

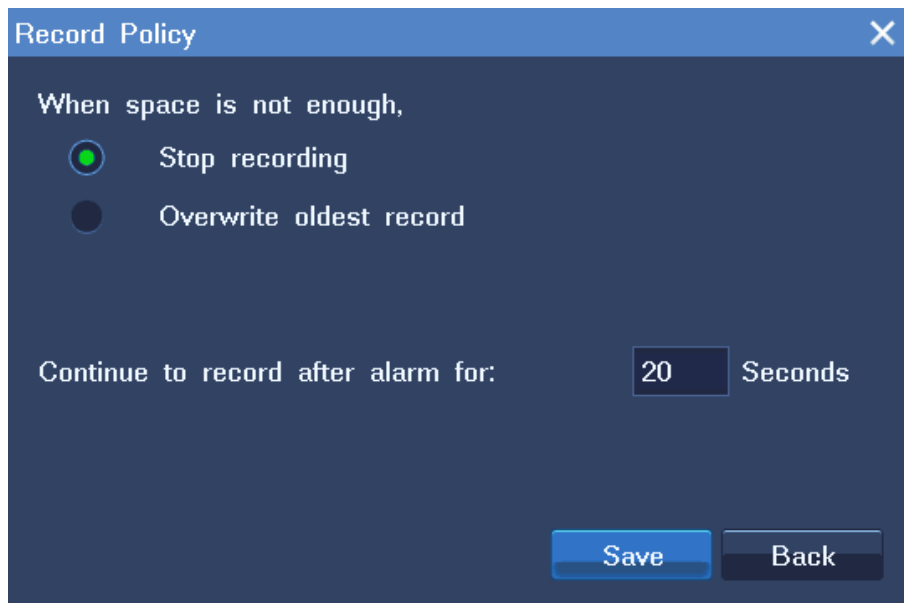
### 4.3 Setting the Recording Policy

The recording policy includes the following:

- What to do when storage space is insufficient
- When a recording will be resumed after an alarm is cleared

To configure the recording policy:

1. Choose **Main Menu > Record > Record Policy**.
2. Specify parameters and select options according to onsite conditions.

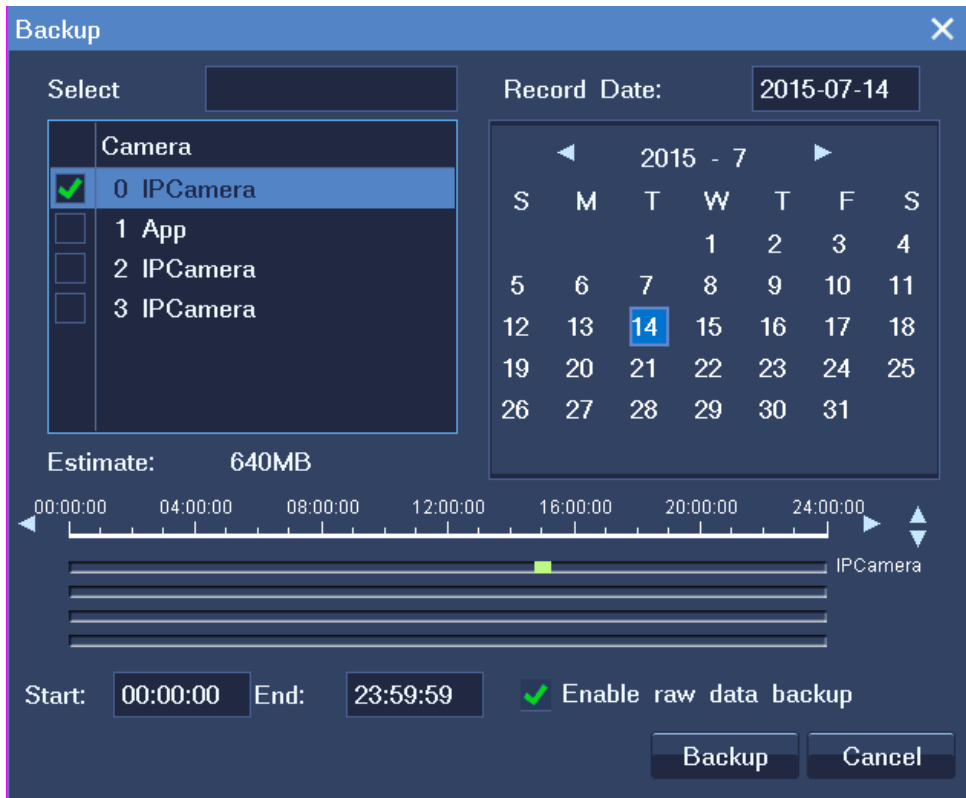


3. Click **Save**.

## 4.4 Backing Up Records

To back up records:

1. Choose **Main Menu > Record > Backup**.
2. (Optional) Enter a keyword in the text box next to **Select** to quickly find the target camera.
3. Select the target camera from the camera list.
4. Select a recording date, as shown in the following figure.



Note that a blue date indicates that records are available on this date.

On the time line, the green sections indicate that records are available.

5. Specify the **Start** and **End** parameters to configure a start time and end time.
6. (Optional) Select **Enable raw data backup** to back up the original data.

This option can accelerate the backup progress. However, the backups can be played back only by the nvrlocalplayer that comes with the NVR.

7. Click **Backup**.
8. In the displayed dialog box, select a disk and click **Backup**.

## 4.5 Querying Records

To query record backups:

1. Choose **Main Menu > Record > Backup Query**.
2. In the **Backup Query** dialog box, select a disk from the **Disk** drop-down list.
3. Click **Search**.

After you find a record backup, you can play it back on the NVR by clicking **Playback**. For playback

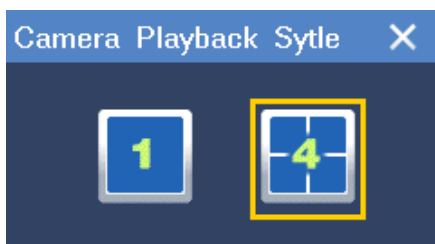
details, see chapter 5 "Playing Back."

### 5.1 Multi-Record Playback

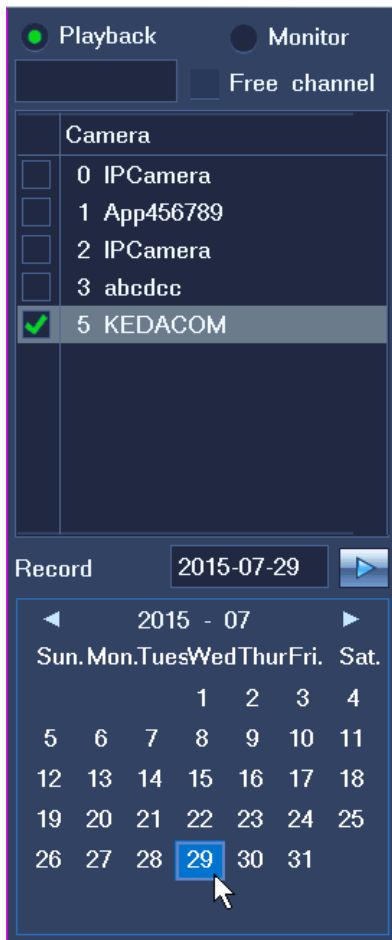
During a multi-record playback, you can play back multiple records and switch to live viewing anytime.


To start a multi-record playback:

1. Choose **Main Menu > Record > Multi Play**.
2. Select a layout, for example, the four-window screen layout.



3. Click one view window and select one camera from the camera list on the right panel to bind the camera and the view window together.
4. Select or enter a recording date under **Record Date**, and select a start time on the timeline.



Note that a blue date indicates that records are available on this date. You can click  to pin the control panel.

For the timeline, you can zoom in using your mouse wheel to select a start time accurate to the minute. If you do not select a recording date, the current date is selected by default.

If you do not select a start time, the earliest time point on the timeline is selected by default.

5. Repeat steps 3 and 4 for each target camera.

6. Click  or  for each view window.

Note that pink sections of the timeline indicate that alarms are generated during this period and that green sections of the timeline indicate that records are available during this period.

The following table describes playback options.

Option	Description
Pause	Stop a playback temporarily.

Option	Description
Stop	Stop a playback.
Slow	Slow the playback down.
Fast	Accelerate the playback.
Previous Time Slice	Fast backward or skip to an earlier time point.
Next Time Slice	Fast forward or skip to a later time point.
Play Previous Event	Skip to an earlier event.
Play Next Event	Skip to a later event.
Single frame play	Play back frame by frame.
Lag	Add tags to a recording.
Option	In the <b>Option</b> window, you can select events to display and configure intervals for fast backward and fast forward.
Electronic PTZ	Click the arrow button to draw a square to digitally zoom in. Click the hand button to move the image up, down, left, or right. Right-click the view window to return to the playback screen.
Layout	Select a layout.
Skip	Enter a start time and click the arrow to skip to the start time.
Exit	Exit the playback window.

To switch to live viewing, move your cursor to the right edge of the screen until a camera list is displayed and click **Monitor**.

## 5.2 Single-Record Playback

During a single-record playback, you can play back only one record and switch to live viewing anytime.

You can start a single-record playback in three ways.


## Method 1

1. Choose **Main Menu > Record > Multi Play**

2. Select the one-window screen layout .

3. Click one view window and select one camera from the camera list on the right panel to bind the camera and the view window together.

4. Select or enter a recording date under **Record Date**, and select a start time on the timeline.

Note that a blue date indicates that records are available on this date. You can click  to pin the control panel.

For the timeline, you can zoom in using your mouse wheel to select a start time accurate to the minute.

If you do not select a recording date, the current date is selected by default.

If you do not select a start time, the earliest time point on the timeline is selected by default.

5. Click  or .

## Method 2

1. Right-click a view window and choose **Record Query**.

2. Select a recording date under **Record Date**, and select a start time on the timeline.

3. Click  or .

## Method 3

1. On a view window, click .

2. Select a recording date under **Record Date**, and select a start time on the timeline.

3. Click  or .

Note that pink sections of the timeline indicate that alarms are generated during this period and that green sections of the timeline indicate that records are available during this period.

The following table describes playback options.

Option	Description
Pause	Stop a playback temporarily.



Option	Description
Stop	Stop a playback.
Slow	Slow the playback down.
Fast	Accelerate the playback.
Previous Time Slice	Fast backward or skip to an earlier time point.
Next Time Slice	Fast forward or skip to a later time point.
Play Previous Event	Skip to an earlier event.
Play Next Event	Skip to a later event.
Single frame play	Play back frame by frame.
Lag	Add tags to a recording.
Option	In the <b>Option</b> window, you can select events to display and configure intervals for fast backward and fast forward.
Electronic PTZ	<p>Click the arrow button to draw a square to digitally zoom in.</p> <p>Click the hand button to move the image up, down, left, or right.</p> <p>Right-click the view window to return to the playback screen.</p>
Cycle	Repeatedly play back a certain section of a record using the <b>Cycle</b> button.
Back Up	<p>Back up a certain period of a record.</p> <p>To back up a certain period of a record:</p> <ol style="list-style-type: none"> <li>1. Click <b>Backup</b>.</li> <li>2. Select a time length on the timeline.</li> <li>3. Double-click the time length.</li> <li>4. In the displayed dialog box, select a disk.</li> <li>5. Click <b>Backup</b>.</li> </ol>
Layout	Select a layout.

Option	Description
Skip	Enter a start time and click the arrow to skip to the start time.
Exit	Exit the playback window.

### 5.3 Synchronous Playback

During a synchronous playback, all records are played back at the same start time.

To start a synchronous playback:

1. Choose **Main Menu > Record > Sync Play**.

Then, a four-screen layout is selected by default and you have no other options.


2. Click one view window and select one camera from the camera list on the right panel to bind the camera and the view window together.
3. Repeat step 2 for each view window.
4. Select or enter a recording date under **Record Date**.

Note that a blue date indicates that records are available on this date.

From the view of the set theory, the displayed dates are the union of the selected cameras. For example, records are available on March 1 for camera 1 and records are available on March 2 for camera 2. In such a case, the dates March 1 and 2 are blue.

5. Click each view window to check for the time points when records are available.
6. On the control panel, select a start time on the timeline.

For the timeline, you can zoom in to select a start time accurate to the minute.

You can click  to pin the control panel.

7. Click  or .

8. (Optional) Enter a time at the end of the timeline and click  to skip to another start time.

Note that pink sections of the timeline indicate that alarms are generated during this period and that green sections of the timeline indicate that records are available during this period.

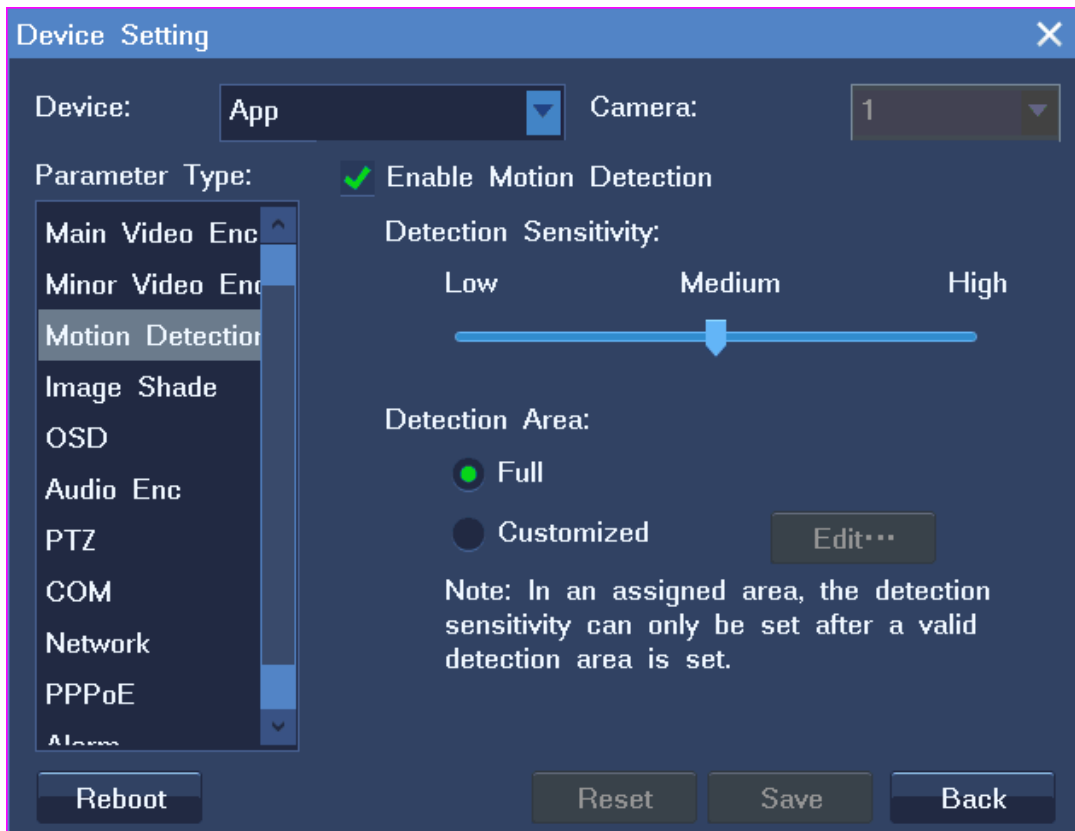
### 6.1 Motion Detection

The motion detection feature enables a camera to send an alarm notification to the NVR when a suspicious motion is detected in a preset area. An alarm is triggered when the NVR receives the notification. After this, the "Alarm: Moving" text is displayed on the main screen.

Note that this feature is available only to service alarms.

To enable this feature for a camera:

1. Right-click the corresponding view window and choose **Device Setting > Motion Detection**, as shown in the following figure.

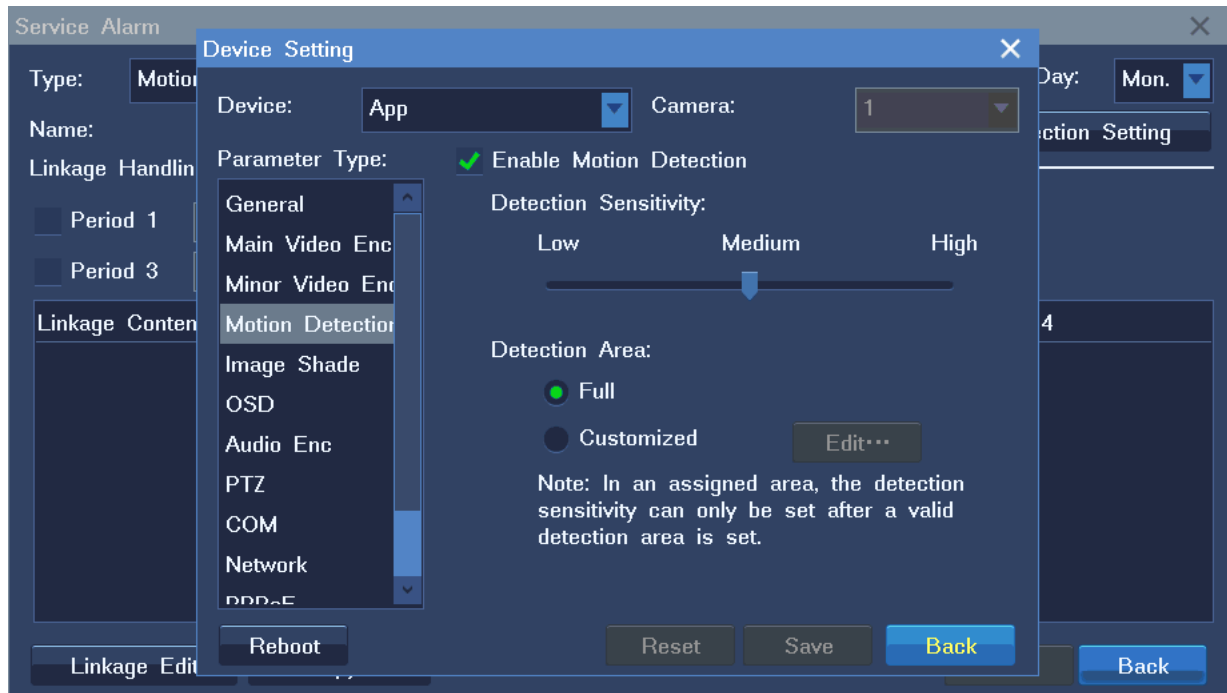


2. Select **Enable Motion Detection**.
3. Set the detection sensitivity.
4. Select a detection area.

5. Click **Save**.

Alternatively:

1. Choose **Main Menu > Alarm > Service Alarm**.
2. Set the **Type** parameter to **Motion Detection**.
3. Select the camera from the **Source** drop-down list.
4. Click **Detection Setting**.
5. Select **Enable Motion Detection**, as shown in the following figure.



6. Set the detection sensitivity.

7. Select a detection area.

8. Click **Save**.

## 6.2 Configuring Service Alarms

To configure a service alarm, do as follows:

1. Choose **Main Menu > Alarm > Service Alarm**.
2. In the displayed **Service Alarm** dialog box, configure parameters as required, as shown in the following figure.

Service Alarm

Type:  Source:  Day:

Name:

Linkage Handling

Period 1   Period 2

Period 3   Period 4

Linkage Content	Period 1	Period 2	Period 3	Period 4

1) Select an alarm type, for example, **Motion Detection**.

2) Select a source camera.

3) Select a day.

4) (Optional) Click **Rename** to add an alias to the source camera.

Note that the alias will be displayed together with the name of the source camera on the **Current Alarm** window.

5) Click **Detection Setting** to enable the motion detection function and configure function-related settings.

6) Click **Back**.

7) Select one or multiple duration options.

8) Click **Linkage Edit**.

9) In the displayed **Linkage Edit** dialog box, choose a device to be linked, for example, another camera.

The following is an example.

Linkage Edit X

Linkage Device: 0 IPCamera(Current Camera) Select All Copy...

---

	Period 1	Period 2	Period 3	Period 4
	00:00-00:00	00:00-00:00	00:00-00:00	00:00-00:00
Record	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Caption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Switch to Live	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preset Position	<input style="width: 40px;" type="text" value="0"/>	<input style="width: 40px;" type="text" value="0"/>	<input style="width: 40px;" type="text" value="0"/>	<input style="width: 40px;" type="text" value="0"/>
To TvWall	<span style="border: 1px solid black; padding: 2px;">Cancel Linkage ▼</span>	<span style="border: 1px solid black; padding: 2px;">Cancel Linkage ▼</span>	<span style="border: 1px solid black; padding: 2px;">Cancel Linkage ▼</span>	<span style="border: 1px solid black; padding: 2px;">Cancel Linkage ▼</span>
Linkage Client	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tips: the values range of preset position from 1 to 255, use 0(zero) to cancel linkage

OK Cancel

10) Select actions for each duration option. Note that actions vary according to the type of linked device.

The following table provides the description for each action.

Action	Description	Remarks
Record	Start a recording.	-
Caption	Display the duration the alarm persists.  When the alarm is cleared, regardless of whether manually or automatically, the duration disappears.	-
Switch to Live	When the one-picture screen layout is selected, the system displays the live video from the linked camera immediately after an alarm is generated.  When the live video from multiple cameras is displayed on the main screen:	-

Action	Description	Remarks
	<ul style="list-style-type: none"> <li>• If the linked camera is bound to one view window, a red square is added to the view window.</li> <li>• If the linked camera is not bound to any view window, the system assigns the top left view window to the linked camera, allowing you to view the live video from this camera immediately after an alarm is generated.</li> </ul>	
Preset Position	<p>Invoke a preset location, allowing you to point the linked camera at the preset location upon the generation of an alarm.</p> <p>To configure a preset location for a camera:</p> <ol style="list-style-type: none"> <li>1. Right-click the corresponding view window and choose <b>PTZ Control</b>.</li> <li>2. Choose a location for the camera by using PTZ controls, which are <b>Up</b>, <b>Down</b>, <b>Left</b>, and <b>Right</b>.</li> <li>3. Click <b>Advanced Tab</b>.</li> <li>4. On the first page, enter a digit in the text box next to the <b>Preset Position</b> parameter.</li> <li>5. Click <b>Save</b>.</li> </ol>	The numbers of preset locations supported by cameras vary according to the camera type.
To TvWall	Send the video from the linked camera to a view window on a video wall.	This option requires that a video wall be configured.
Auxiliary Picture	<p>Send the video from the linked camera to the monitor connected to the VGA or HDMI port of your NVR.</p> <p>This option is available to the NVR1822 and</p>	<p>This option requires that a secondary screen be configured.</p> <p>Note that you will view</p>

Action	Description	Remarks
	NVR1825 except the following: <ul style="list-style-type: none"> <li>NVR1825-4HD/HDA</li> <li>NVR1825-9HD/HDA</li> <li>NVR1825-4/9HP</li> </ul>	the video in full screen mode on the secondary screen.
Linkage Client	Display an alarm window on the NVR Station, allowing you to be aware of an alarm when you are not near the NVR and remotely clear the alarm.	-

If the linked device is the NVR itself, the actions are as follows.

Action	Description	Remarks
EMail	Send an alarm notification to the preset email address.	To configure mail settings, choose <b>Main Menu &gt; Settings &gt; Mail Service</b> .
Buzzer	Enable the beeper on the NVR.	-

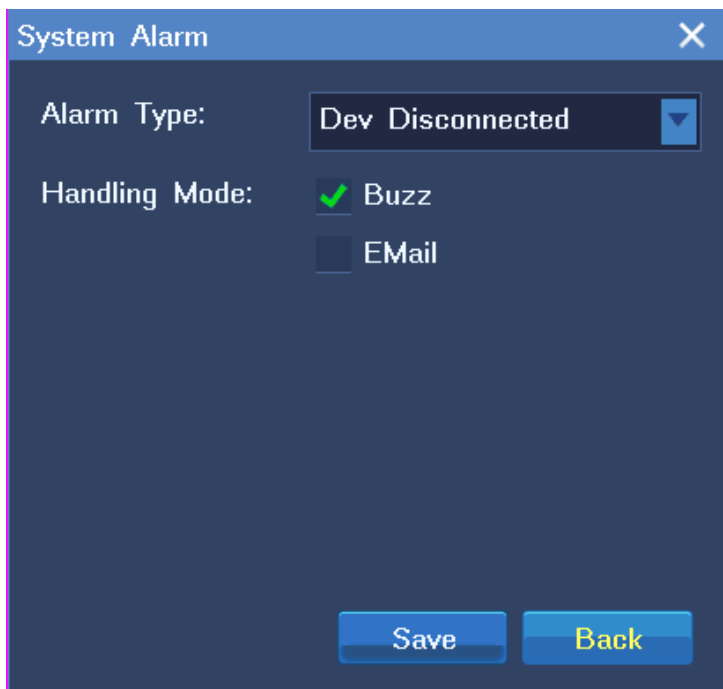
3. Click **Save**.

## 6.3 Configuring System Alarms

To configure system alarms:

1. Choose **Main Menu > Alarm > System Alarm**.
2. In the displayed **System Alarm** dialog box, specify parameters according to onsite conditions, as shown in the following figure.





For different types of system alarms, you can choose different ways to alert yourself.

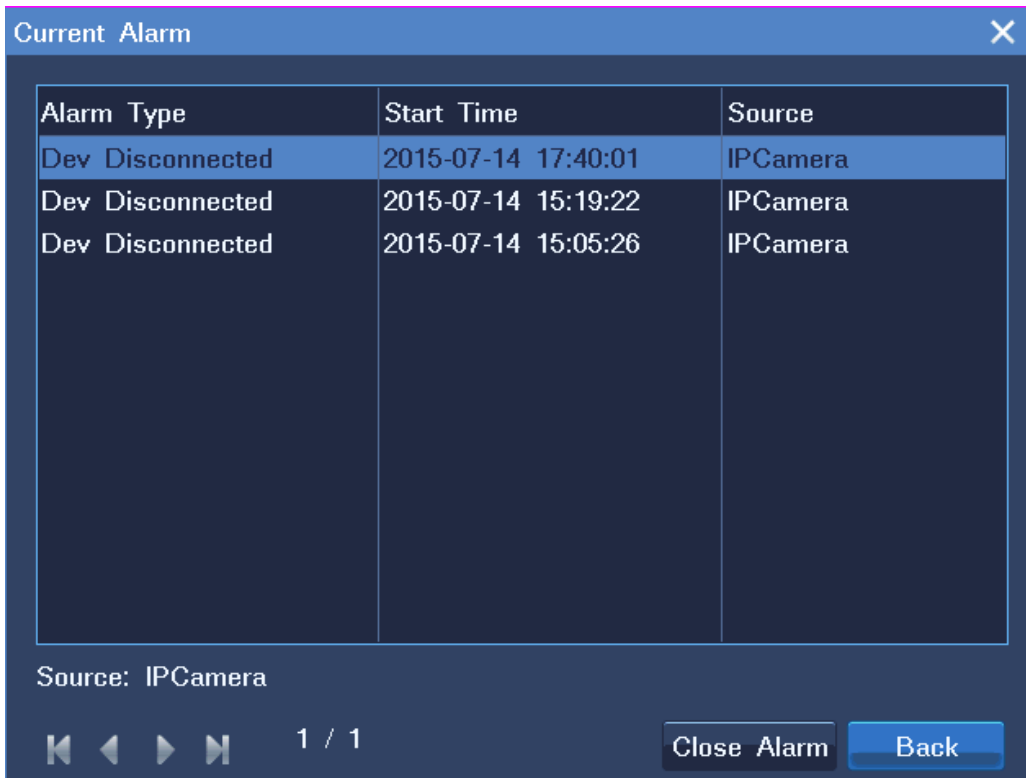
The following table provides the description for each alarm type.

Action	Description
Dev Disconnected	A device is disconnected from the NVR.
No Disk	No storage disk is found.
Disk Fault	A faulty storage disk is found.
IP Conflict	An IP address of the NVR is in duplicate.
Net Broken	The network cable is disconnected.
Lower Speed	The network speed is low.
Recording Space Full	No space is available for records.
MAC address conflict	An MAC address of the NVR is in duplicate.

3. Click **Save**.

## 6.4 Querying Active Alarms

To query active alarms, choose **Main Menu > Alarm > Current Alarm**, as shown in the following figure.



Alternatively, right-click a view window and choose **Advance > Current Alarm**.

When viewing active alarms, you can clear them by clicking **Close Alarm**.

When an alarm is triggered, you can manually clear the alarm. If you do not manually clear the alarm:

- The alarm is automatically cleared when the exception or motion that triggers the alarm no longer exists.
- The alarm persists if the exception or motion persists.

## 6.5 Querying History Alarms

To query a specific type of history alarms generated on all cameras connected to the NVR:

1. Choose **Main Menu > Alarm > History Alarm**.
2. Select a general alarm type, for example, service alarm.
3. Select a service alarm type, for example, alarm input.
4. Specify **Device** and **Time** to configure the alarm generation time and the alarm generator.
5. Click **Search**.
6. (Optional) Click **Playback** to play back the recording that is started immediately after the alarm is

triggered. Note that the recording is stopped as soon as the exception or motion that triggers the alarm no longer exists.

The following is an example.

The screenshot shows a software window titled "History Alarm" with a close button (X) in the top right corner. The window contains the following elements:

- Search Filters:**
  - Alarm: Service Alarm (dropdown menu)
  - Type: Alarm Input (dropdown menu)
  - Device: All (dropdown menu)
- Time Range:** 2015-07-13 19:14:33 - 2015-07-14 19:14:33
- Search Button:** A blue button labeled "Search".
- Table:** A table with four columns: "Alarm Type", "Start Time", "End Time", and "Source". The table is currently empty.
- Playback Controls:** Located at the bottom left, including play/pause, stop, and back icons, and a counter "0 / 0".
- Buttons:** "Playback" and "Back" buttons are located at the bottom right.

### 7.1 Basic System Information

Choose **Main Menu > Settings > General** to configure the basic system settings, as shown in the following figure.

The following table provides the descriptions for all parameters or options displayed.

Parameter or Option	Description
Device Name	Name of the NVR
NVR No.	Number of the NVR. The default value for this parameter is <b>8</b> . You must enter an NVR number before you can use a monitoring keyboard to control the corresponding NVR. However, the NVR1822 and NVR1825 do not support monitoring keyboards.
System Language	Display language

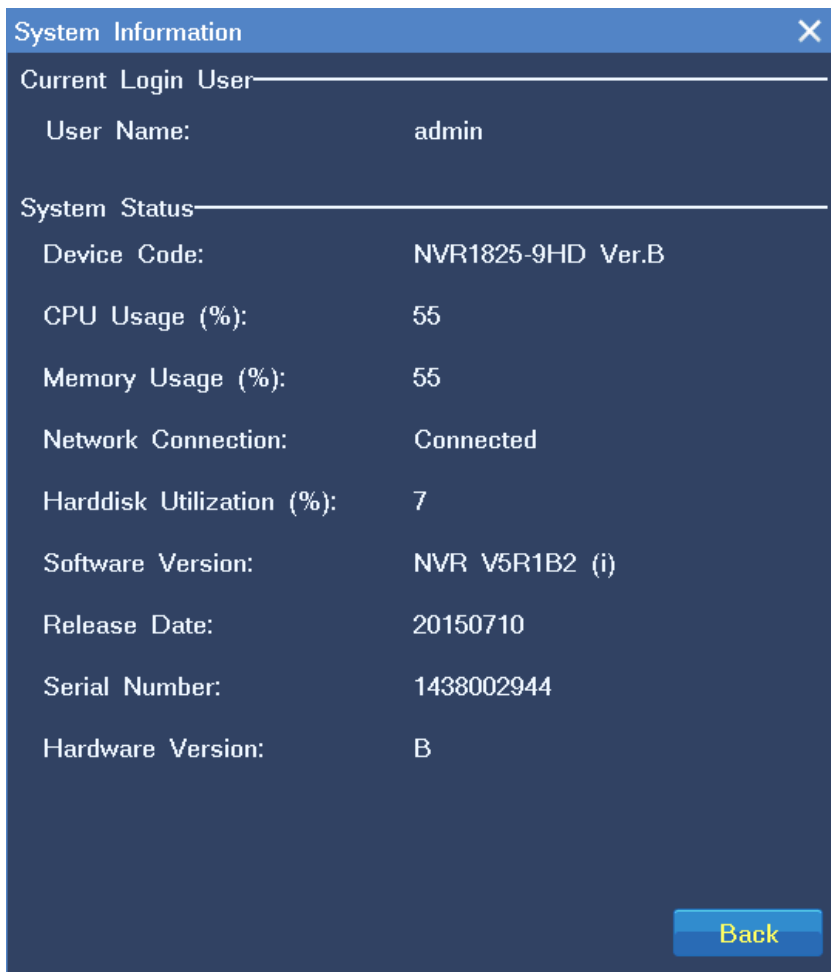
Time Zone Information	Time zone
System Current Time	System time
System Run Time	Time elapsed since the last startup of an NVR
Auto Logout	Period after which the current account logs out from an NVR
Monitor Mode	<p>Way of viewing live video.</p> <p>This parameter can be configured as follows:</p> <ul style="list-style-type: none"> <li>• <b>Free Mode:</b> You can choose a screen layout.</li> <li>• <b>Page Mode:</b> The screen layout is unconfigurable.</li> </ul>
Record Length	<p>Size of a record unit. Each record consists of multiple record units.</p> <p>This parameter can be configured as follows:</p> <ul style="list-style-type: none"> <li>• <b>1:</b> 64 MB</li> <li>• <b>2:</b> 128 MB</li> <li>• <b>3:</b> 256 MB</li> <li>• <b>4:</b> 512 MB</li> <li>• <b>5:</b> 1024 MB</li> <li>• <b>6:</b> 2048 MB</li> </ul>
Record Download Speed	Rate at which records are downloaded
Enable the operation password	When this option is selected, the password is required if you want to manage disks.
Setup Wizard	When this option is selected, the Setup Wizard is evoked every time the NVR restarts.
Auxiliary stream resolution adaptive	When this option is selected, the resolution of the secondary stream is adaptive.
ONVIF front-end allows for time synchronization	Whether to allow ONVIF cameras to synchronize the time with the NVR

Supporting ONVIF device	Whether to allow ONVIF cameras to work with the NVR
ONVIF Secondary Video Stream Resolution	Resolution of the secondary stream on an ONVIF camera

## 7.2 Querying the System Information

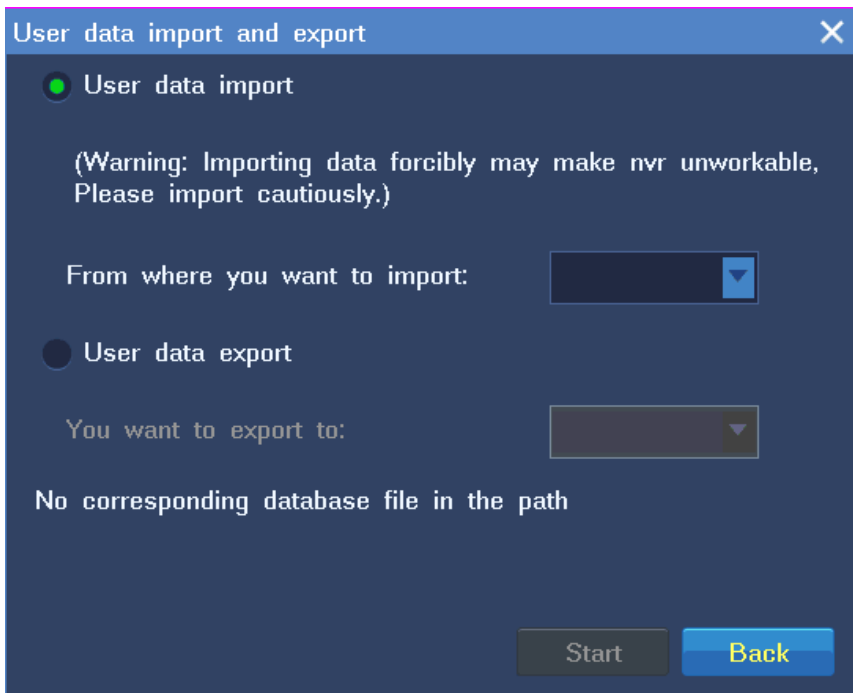
Choose **Main Menu > Settings > System Information** to query the system information.

The following is an example.



## 7.3 Importing or Exporting User Data

Choose **Main Menu > Settings > Import Export** to import or export user data, as shown in the following figure.



The user data includes the following:

- NVR configurations
- Alarm data
- Tag data



You must insert a USB flash drive before you can import or export user data. The software upgrade package must be saved in the root directory of the USB flash drive.

Only the system administrator is allowed to import or export user data.

## 7.4 User Authorization

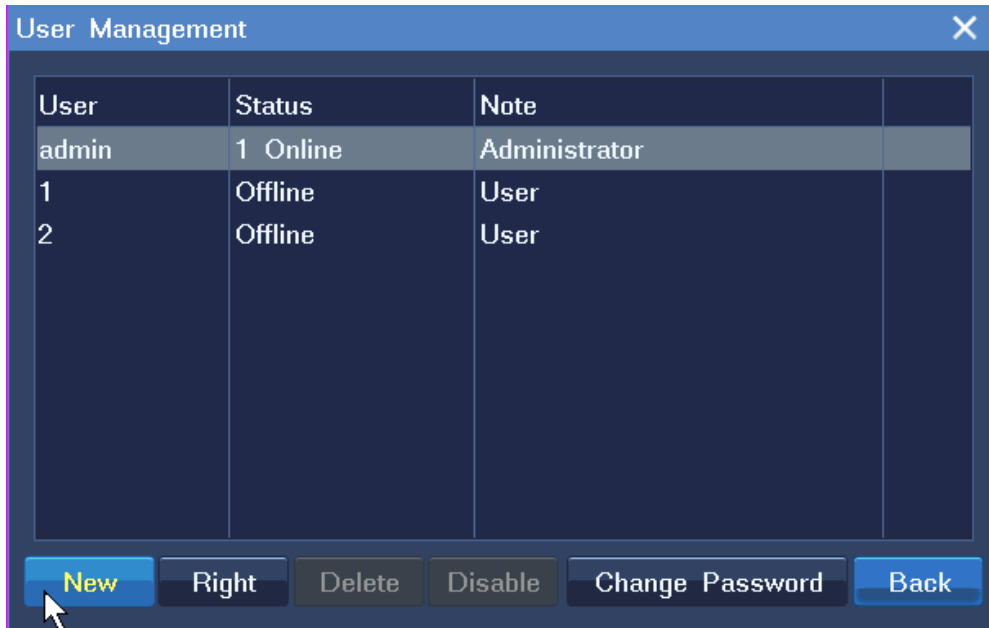
When you are authorized to manage user accounts, you can add, edit, delete, and disable standard users.

When you are not authorized to manage user accounts, you can only query your account's user authorization information and change your account's password.

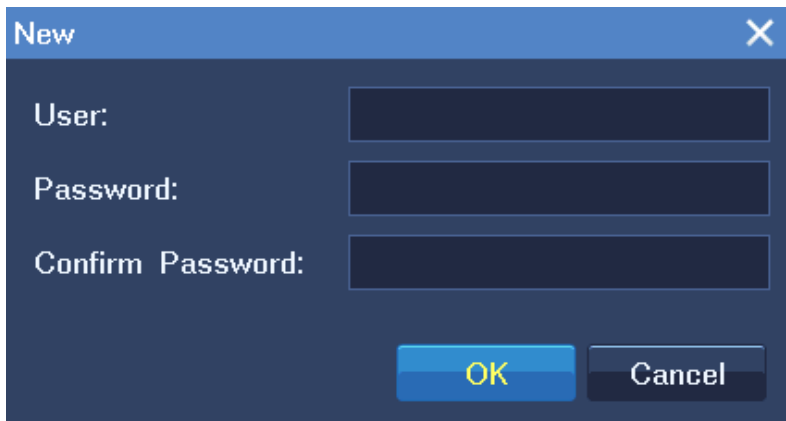
### 7.4.1 Adding a User Account

To add a standard user:

1. Choose **Main Menu > Settings > User > New**, as shown in the following figure.



2. In the displayed **New** dialog box, specify parameters displayed, as shown in the following figure.



3. Click **OK**.

By default, a standard user is allowed to perform the following operations:

- System:
  - Recording and Capturing
  - Configuring System Settings
  - Managing Devices
  - Managing Alarms
  - Configuring Video Wall



- Camera:
  - PTZ Control
  - Live View
  - Playback and Backup

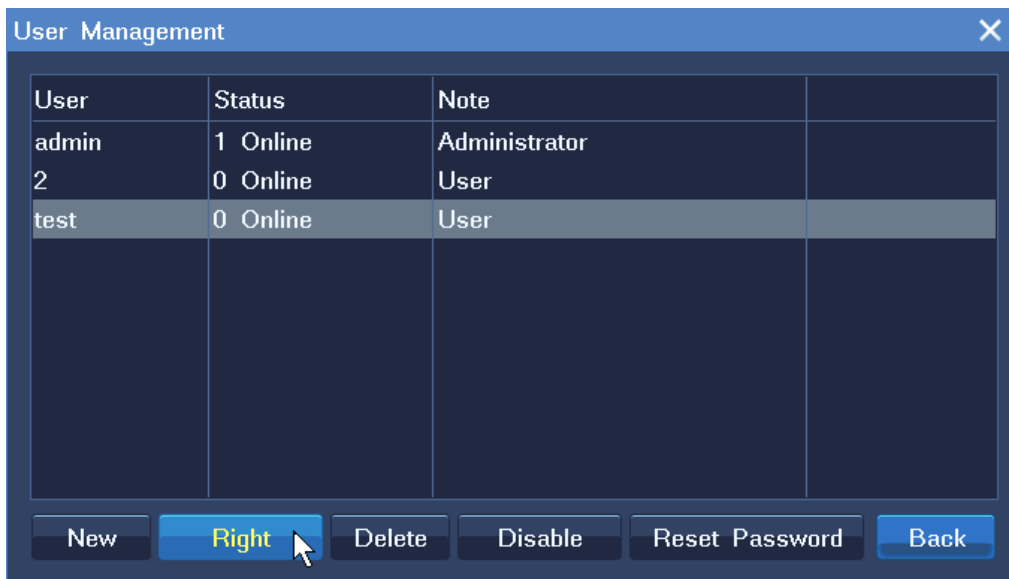
Only the administrator is allowed to perform the following operations:

- Restoring factory defaults
- Import or exporting user data
- Managing disks and configuring IP SAN settings
- Switching off the system
- Rebooting the system

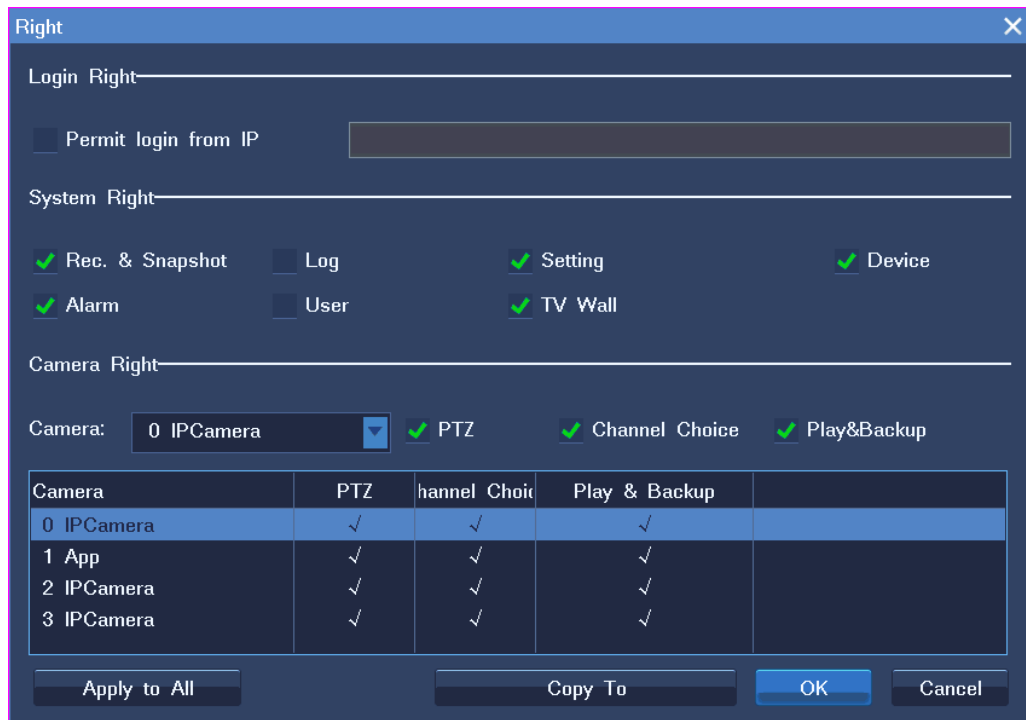
### 7.4.2 Editing a User Account

To change the user authorization for a standard user:

1. Choose **Main Menu > Settings > User**.
2. Select the user from the user account list and click **Right**, as shown in the following figure.



3. Specify parameters displayed according to onsite conditions.



You can copy the user authorization of this user to another user by clicking **Copy To** or to all users by clicking **Apply to All**.

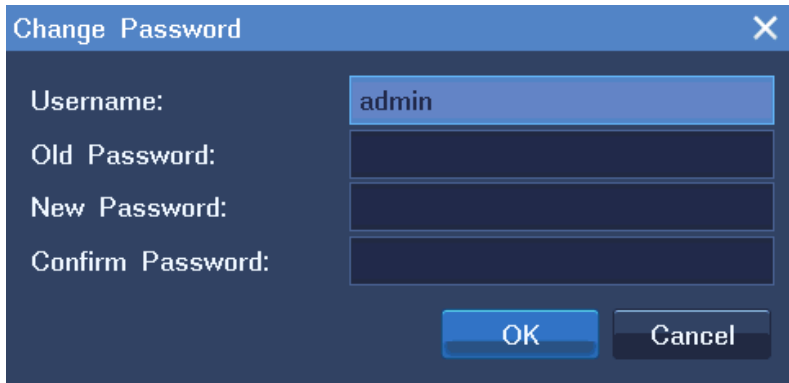
4. Click **OK**.

To retrieve the default password (admin123) for a standard user:

1. Choose **Main Menu > Settings > User**.
2. Select the user from the user account list and click **Reset Password**.
3. In the displayed dialog box, click **Yes** to confirm your operation.

To change the password of your own account:

1. Choose **Main Menu > Settings > User**.
2. Select your account from the user account list and click **Change Password**.
3. In the displayed **Change Password** dialog box, specify parameters displayed, as shown in the following figure.



A dialog box titled "Change Password" with a close button (X) in the top right corner. It contains four text input fields: "Username:" with the value "admin", "Old Password:", "New Password:", and "Confirm Password:". At the bottom, there are two buttons: "OK" and "Cancel".

4. Click **OK**.

### 7.4.3 Deleting a User Account

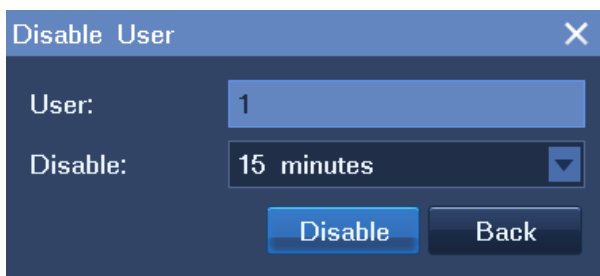
To delete a standard user:

1. Choose **Main Menu > Settings > User**.
2. Select the user from the user account list and click **Delete**.
3. In the displayed dialog box, click **Yes** to confirm your operation.

### 7.4.4 Disabling a User Account

To disable a standard user for a certain period:

1. Choose **Main Menu > Settings > User**.
2. Select the user from the user account list and click **Disable**.
3. In the displayed **Disable User** dialog box, select a time length from the drop-down list next to the **Disable** parameter.



A dialog box titled "Disable User" with a close button (X) in the top right corner. It contains two text input fields: "User:" with the value "1" and "Disable:" with a drop-down menu showing "15 minutes". At the bottom, there are two buttons: "Disable" and "Back".

4. Click **Disable**.

## 7.5 E-Mail Notification

Choose **Main Menu > Settings > Mail Service** to configure settings for the E-Mail Notification feature, as shown in the following figure.



The screenshot shows a dialog box titled "Email Service" with a close button (X) in the top right corner. The dialog is divided into two main sections: "Sender Address" and "Receiver Address".

**Sender Address section:**

- Sender Address: [Text Field] \*
- User Name: [Text Field] \*
- Password: [Text Field] \*
- SMTP Address: 0.0.0.0 \*
- SMTP Port: 0 \*
- Sender Name: [Text Field]
- Enable SSL

**Receiver Address section:**

- Address 1: [Text Field]
- Address 2: [Text Field]
- Address 3: [Text Field]
- Address 4: [Text Field] abc
- Address 5: [Text Field]
- Address 6: [Text Field]
- Address 7: [Text Field]
- Address 8: [Text Field]

At the bottom of the dialog, there is a "Check Mail" button, a note "(with \* required)", and "Save" and "Cancel" buttons.



### Note

Parameters tagged with \* are mandatory.

## 7.6 Rebooting the System

To reboot the NVR:

1. Choose **Main Menu > Shutdown > Restart**.
2. In the displayed dialog box, click **Yes** to confirm your operation.

## 7.7 Shutting Down the System

To shut down the system:

1. Choose **Main Menu > Shutdown > Shutdown**.
2. In the displayed dialog box, click **Yes** to confirm your operation.


## 7.8 Logging Out from the System

To log out from the system:

1. Choose **Main Menu > Shutdown > User Logout**.
2. In the displayed dialog box, click **Yes** to confirm your operation.


## 8 Specifications

The following table lists NVR1822 variants.

<b>Front Panel</b>		
<b>Model</b>	NVR1822-HD	NVR1822-HDA
<b>Sub-model</b>	NVR1822-9HD, NVR1822-16HD, NVR1822-32HD	NVR1822-9HDA, NVR1822-16HDA, NVR1822-32HDA
<b>Channel</b>	9/16/32 channels, each of which occupies a bandwidth of 5 Mbit/s	
<b>Resolution</b>	1080P, UXGA, 960P, 720P, XGA, SVGA, D1, CIF, QCIF	
<b>Number of disks allowed to be installed</b>	8	4
<b>Maximum number of view windows</b>	16	16
<b>Video decoding</b>	H.264 (baseline/main/high profile)	
<b>Audio</b>	RCA line in and RCA line out (support for bidirectional audio transmit)	
<b>Audio encoding and decoding</b>	Encoding: ADPCM Decoding: ADPCM, AACLC, G.711U, G.711A, AMR	
<b>Network protocols</b>	TCP/IP, UDP, HTTP, DHCP, DNS/DDNS, RTP/RTCP/RTSP, PPPoE, FTP, SNTP, VSIP	
<b>Video out</b>	1 HDMI (maximum resolution 1920 x 1080), 1 VGA (maximum resolution 1920 x 1080)	
<b>Alarm in/out</b>	-	-

<b>Control ports</b>	-	-
<b>Disk ports</b>	8 SATA ports	4 SATA ports
<b>Network ports</b>	1 RJ45 port, 100Base-TX/1000Base-T, adaptive	
<b>USB ports</b>	2 USB2.0 ports	
<b>Power</b>	100 V AC to 240 V AC	
<b>Operating frequency</b>	50 Hz to 60 Hz	
<b>Rated power</b>	<15 W (excluding disks)	
<b>Operating temperature</b>	-10°C to 55°C	
<b>Relative humidity</b>	10% to 90% (non-condensing)	
<b>Atmospheric pressure</b>	70 kPa to 106 kPa	
<b>Altitude</b>	-60 m to 3000 m	
<b>Size (height x width x depth)</b>	88 mm x 443 mm x 461 mm	
<b>Weight</b>	6.9 kg (excluding disks)	
<b>Connection</b>	128 such NVRs can connect to the NVR Station.	

The following table lists NVR1825-HD variants.


<b>Front Panel</b>		
<b>Sub-model</b>	NVR1825-4/9HD	NVR1825-16/32HD
<b>Channel</b>	4/9 channels, each of which occupies	16/32 channels, each of which

	a bandwidth of 5 Mbit/s	occupies a bandwidth of 5 Mbit/s
<b>Resolution</b>	1080P, UXGA, 960P, 720P, XGA, SVGA, D1, CIF, QCIF	
<b>Number of disks allowed to be installed</b>	2	2
<b>Maximum number of view windows</b>	9	16
<b>Video decoding</b>	H.264 (baseline/main/high profile)	
<b>Audio</b>	RCA line in and RCA line out (support for bidirectional audio transmit)	
<b>Audio encoding and decoding</b>	Encoding: ADPCM Decoding: ADPCM, AACLC, G.711U, G.711A, AMR	
<b>Network protocols</b>	TCP/IP, UDP, HTTP, DHCP, DNS/DDNS, RTP/RTCP/RTSP, PPPoE, FTP, SNTP, VSIP	
<b>Video out</b>	1 HDMI (maximum resolution 1920 x 1080), 1 VGA (maximum resolution 1920 x 1080)	
<b>Alarm in/out</b>	-	
<b>Control ports</b>	-	
<b>Disk ports</b>	2 SATA ports	2 SATA ports
<b>Network ports</b>	1 RJ45 port, 10Base-TX/100Base-T, adaptive	1 RJ45 port, 100Base-TX/1000Base-T, adaptive
<b>USB ports</b>	2 USB2.0 ports	2 USB2.0 ports
<b>Power</b>	12 V DC	
<b>Operating frequency</b>	-	
<b>Rated power</b>	<15 W (excluding disks)	
<b>Operating temperature</b>	-10°C to 55°C	



<b>Relative humidity</b>	10% to 90% (non-condensing)
<b>Atmospheric pressure</b>	70 kPa to 106 kPa
<b>Altitude</b>	-60 m to 3000 m
<b>Size (height x width x depth)</b>	40 mm x 350 mm x 240 mm
<b>Weight</b>	1.6 kg (excluding disks)
<b>Connection</b>	128 such NVRs can connect to the NVR Station.

The following table lists NVR1825-HDA variants.

<b>Front Panel</b>		
<b>Sub-model</b>	NVR1825-4/9HDA	NVR1825-16HDA
<b>Channel</b>	4/9 channels, each of which occupies a bandwidth of 5 Mbit/s	16 channels, each of which occupies a bandwidth of 5 Mbit/s
<b>Resolution</b>	1080P, UXGA, 960P, 720P, XGA, SVGA, D1, CIF, QCIF	
<b>Number of disks allowed to be installed</b>	1	1
<b>Maximum number of view windows</b>	9	16
<b>Video decoding</b>	H.264 (baseline/main/high profile)	
<b>Audio</b>	RCA line in and RCA line out (support for bidirectional audio transmit)	
<b>Audio encoding and decoding</b>	Encoding: ADPCM Decoding: ADPCM, AACLC, G.711U, G.711A, AMR	

<b>Network protocols</b>	TCP/IP, UDP, HTTP, DHCP, DNS/DDNS, RTP/RTCP/RTSP, PPPoE, FTP, SNMP, VSIP	
<b>Video out</b>	1 HDMI (maximum resolution 1920 x 1080), 1 VGA (maximum resolution 1920 x 1080)	
<b>Alarm in/out</b>	-	
<b>Control ports</b>	-	
<b>Disk ports</b>	1 SATA port	1 SATA port
<b>Network ports</b>	1 RJ45 port, 10Base-TX/100Base-T, adaptive	1 RJ45 port, 100Base-TX/1000Base-T, adaptive
<b>USB ports</b>	2 USB2.0 ports	2 USB2.0 ports
<b>Power</b>	12 V DC	
<b>Operating frequency</b>	-	
<b>Rated power</b>	<15 W (excluding disks)	
<b>Operating temperature</b>	-10°C to 55°C	
<b>Relative humidity</b>	10% to 90% (non-condensing)	
<b>Atmospheric pressure</b>	70 kPa to 106 kPa	
<b>Altitude</b>	-60 m to 3000 m	
<b>Size (height x width x depth)</b>	40 mm x 350 mm x 240 mm	
<b>Weight</b>	1.6 kg (excluding disks)	
<b>Connection</b>	128 such NVRs can connect to the NVR Station.	

The following table lists NVR1825-HP variants.

<b>Front Panel</b>	
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<b>Sub-model</b>	NVR1825-4HP	NVR1825-9HP
<b>Channel</b>	4 channels, each of which occupies a bandwidth of 5 Mbit/s	9 channels, each of which occupies a bandwidth of 5 Mbit/s
<b>Resolution</b>	1080P, UXGA, 960P, 720P, XGA, SVGA, D1, CIF, QCIF	
<b>Number of disks allowed to be installed</b>	2	
<b>Maximum number of view windows</b>	9	
<b>Video decoding</b>	H.264 (baseline/main/high profile)	
<b>Audio</b>	RCA line in and RCA line out  (support for bidirectional audio transmit)	
<b>Audio encoding and decoding</b>	Encoding: ADPCM  Decoding: ADPCM, AACLC, G.711U, G.711A, AMR	
<b>Network protocols</b>	TCP/IP, UDP, HTTP, DHCP, DNS/DDNS, RTP/RTCP/RTSP, PPPoE, FTP, SNMP, VSIP	
<b>Video out</b>	1 HDMI (maximum resolution 1920 x 1080), 1 VGA (maximum resolution 1920 x 1080)	
<b>Alarm in/out</b>	2 alarm inputs and 2 alarm outputs	
<b>Control ports</b>	1 RS485	
<b>Disk ports</b>	2 SATA ports	
<b>Network ports</b>	1 RJ45 port, 10Base-TX/100Base-T, adaptive  4 POE ports (each: 12 V DC, 0.8 A), 10Base-TX/100Base-T, adaptive	
<b>USB ports</b>	2 USB2.0 ports	
<b>Power</b>	12 V DC	
<b>Operating frequency</b>	50 Hz to 60 Hz	

<b>Rated power</b>	< 40 W (excluding disks)
<b>Operating temperature</b>	-10°C to 55°C
<b>Relative humidity</b>	10% to 90% (non-condensing)
<b>Atmospheric pressure</b>	70 kPa to 106 kPa
<b>Altitude</b>	-60 m to 3000 m
<b>Size (height x width x depth)</b>	40 mm x 350 mm x 240 mm
<b>Weight</b>	1.6 kg (excluding disks)
<b>Connection</b>	128 such NVRs can connect to the NVR Station.

## 9 Abbreviations and Acronyms

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ANR	automatic network replenishment
NVR	Network Video Recorder
ONVIF	Open Network Video Interface Forum
OSD	on-screen display
RTSP	Real Time Streaming Protocol
WDR	wide dynamic range