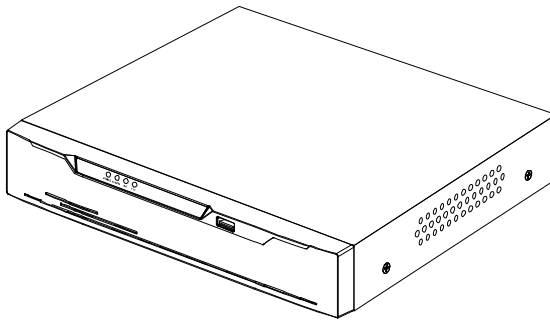


Hybrid Digital Video Recorder (HDVR) User Manual



Issue

V1.0

Date

2017-09-10

About This Document

Purpose

This document describes the hybrid digital video recorder (HDVR) 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 Manger System operators

Symbol conventions

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

Symbol	Description
 DANGER	Alerts you to a high risk hazard that could, if not avoided.
 WARNING	Alerts you to a medium or low risk hazard that could, if not avoided, result in moderate or minor injury.
 CAUTION	Alerts you to a potentially hazardous situation that could, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.
 TIP	Provides a tip that may help you solve a problem or save time.
 NOTE	Provides additional information to emphasize or supplement important points in the main text.

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..

Contents

About This Document	i
Contents.....	iii
1 Preface.....	1
1.1 Important Notes.....	1
1.2 About This User Manual	1
1.3 Installation Environment and Precautions	2
2 Basic Operations	3
2.1 Powering on the Device	3
2.2 Powering off the Device	4
2.3 Logging In to the System	4
2.4 Adding Cameras	5
3 Quick Navigation.....	6
3.1 PTZ Operations	8
3.1.1 PTZ	8
3.1.2 UTC	10
3.2 Playback	10
3.3 Search.....	11
3.4 Picture Grid	13
3.5 Event	14
3.6 Main Menu	14
4 Camera Management	15
4.1 Camera Management.....	16
4.1.1 Lock a Camera	16
4.1.2 Unlock a Camera.....	16
4.2 Picture Parameter	17
4.3 Encode Parameter	18
4.4 Video loss	19
4.5 Motion Detection.....	23
4.6 Privacy Area	25
4.7 Camera tamper	25

4.8 OSD settings.....	26
4.9 Alarm Setup.....	27
5 System setting.....	29
5.2 Basic.....	29
5.2.1 System.....	30
5.2.2 Time	30
5.2.3 Time zone.....	31
5.2.4 DST.....	32
5.3 Network.....	33
5.3.1 Ipv4.....	33
5.3.2 Port.....	35
5.3.3 Port mapping.....	36
5.3.4 SMTP.....	37
5.3.5 DDNS.....	38
5.3.6 Blacklist.....	39
5.4 Record.....	41
5.5 Output.....	42
5.6 Alarm Manager.....	45
5.6.1 Surveillance.....	45
5.6.2 Alarm in	46
5.7 Disk.....	47
5.7.1 Viewing Disk Information.....	48
5.7.2 Clearing Disk Data.....	48
5.8 Privilege manager.....	49
5.8.1 User manager	49
5.8.2 Modify Password	50
5.9 Privacy	51
5.10 Advanced setting	52
5.11 App.....	53
6 Log Center	55
7 Alarm.....	57
7.1 Event	57
7.2 Timeline	58
7.3 Clear alarm.....	59

1 Preface

1.1 Important Notes

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

The HDVR is a complex system-based device. To avoid misoperations 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 HDVR 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 enclosure 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 HDVR.
- The information in this user manual applies to the full series HDVR, here uses 4ch,1HDD HDVR as an example for description.
- Read this user manual carefully before using the HDVR and follow the methods described in this manual when using the HDVR.
- If you have any doubts when using the HDVR, 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 HDVR.

Table 1-1 Installation environment

Item	Description
Electromagnetism	The HDVR meets the national standards of electromagnetic radiation and does not cause harm to the human body.
Temperature	-10°C to +45°C
Humidity	20% to 80%
Atmospheric pressure	86 kPa to 106 kPa
Power supply	12V 2A(1 HDD)或 12V 4A(2 HDDs)
Power consumption	<15W (excluding the hard disk)

Installation precautions

Note the following points when installing and operating the HDVR:

- The power adapter of the HDVR uses DC12V \pm 20% input. Do not use the HDVR when voltage is too high or too low.
- Install the HDVR horizontally.
- Avoid direct sunlight on the HDVR and keep away from any heat sources and hot environments.
- Connect the HDVR to other devices correctly during installation.
- The HDVR is not configured with any hard disk upon delivery. Install one or more hard disks when using the HDVR for the first time.
- The HDVR identifies hard disk capacity automatically and supports mainstream hard disk models. You are advised to use good brands of hard disk so that the HDVR can operate stably and reliably.

Other precautions

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

The HDVR meets the national standards of electromagnetic radiation and does not cause electromagnetic radiation to the human body.

2 Basic Operations

2.1 Powering on the Device



CAUTION

- Ensure that the HDVR is correctly connected to a power supply, and a display is correctly connected to the high definition multimedia interface (HDMI) or video graphics array (VGA) port of the HDVR before power-on.
- In some environments, abnormal power supply may cause the failure of the HDVR to work properly and even damage the HDVR in severe cases. It is recommended to use a regulated power supply to power the HDVR in such environments.

After the HDVR is connected to a power supply, the power indicator is steadily on. Start the HDVR. 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 HDVR. 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 HDVR. Format the hard disk.
- The hard disk is damaged.

2.2 Powering off the Device

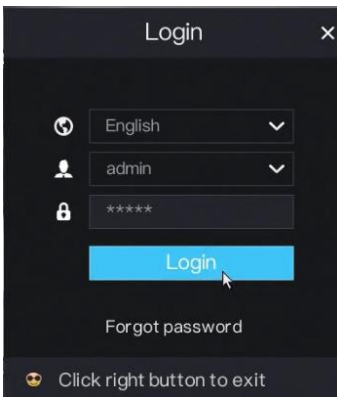
Click the main menu and choose **System setting > Advanced setting**, the advanced setting page is displayed, click shutdown to power off the HDVR. If there is a power switch on the rear panel of the HDVR, you can turn off the power switch to disconnect the HDVR from the power supply.

2.3 Logging In to the System

Logging In to the Device

Step 1 On the HDVR login page, select the language, as shown in Figure 2-2.

Figure 2-2 Login page



Step 2 Enter 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 you E-mail**. A password retrieval email will be sent to your email address (for details, see 5.3.4 Step 5). Then, you can retrieve password by following operations described in the email.

Step 3 Click Login to access the main User Interface (UI).

----End

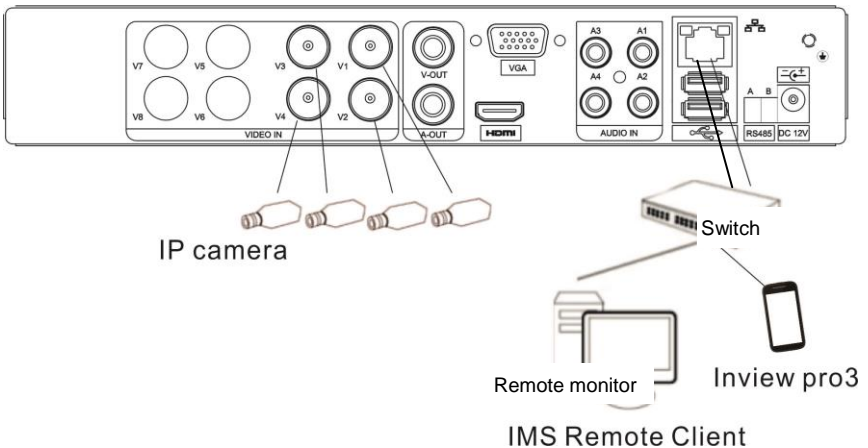
2.4 Adding Cameras

This HDVR can be connected to both analog cameras and network cameras. The HDVR gives preference to the access of the analog camera by default.

The HDVR can be directly connected to analog cameras through bayonet nut connector (BNC) cables.

Figure 2-3 shows the topology of the HDVR.

Figure 2-3 HDVR topology



----End

3 Quick Navigation

After the HDVR operation screen is displayed, move the cursor to the downmost position of the HDVR screen. The HDVR floating menu bar is displayed.


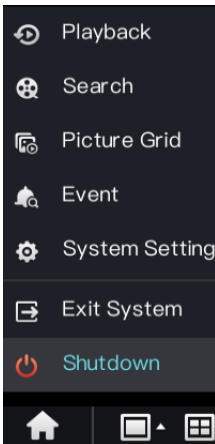
Click  in the left of HDVR floating menu bar. a quick main menu is displayed. The quick main menu provides **Playback, Search, Picture Grid, Event, System Setting, Exit System and Shutdown**, as shown in Figure 3-1.

Figure 3-1 Quick main menu






In the middle of HDVR floating menu bar, the video tool bar provides **video window switching, Dwell on, pan-tilt-zoom (PTZ) control, audio, and video signal**, as shown in Figure 3-2.


Figure 3-2 Real-time video toolbar




The real-time video toolbar is described as follows:

: layout button. After this button is clicked, 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.

: Dwell on. After this button is clicked, the layout dwell on screen is enable, for how to set the dwell on, please see 5.5 Step 2.

: PTZ button. After this button is clicked, the PTZ operation screen is displayed, where you can adjust the PTZ to control cameras.

: Audio button. After this button is clicked, the audio setting screen is displayed, where you can choose the channel and adjust the volume.


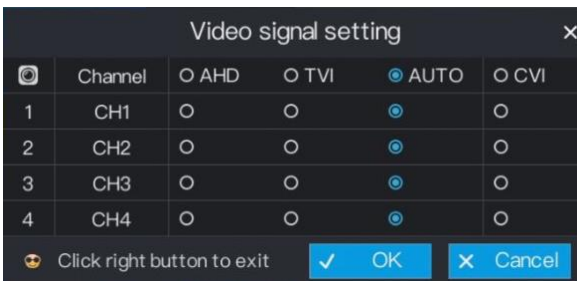
: Video signal button. After this button is clicked, the video signal setting screen is displayed, as show in Figure 3-3.

Figure 3-3 Video signal setting



Normally, HDVR video signal setting is **auto** by default, the HDVR obtains the video signal of analog camera automatically.

When the video is displayed incorrectly, choose the same video signal according to the video signal of analog camera and click **OK** to save the signal setting.

A main menu quick toolbar is display on the right of HDVR floating menu bar. The main menu quick toolbar provides **Playback, Search, Picture grid, Event, System setting**, as shown in Figure 3-4.

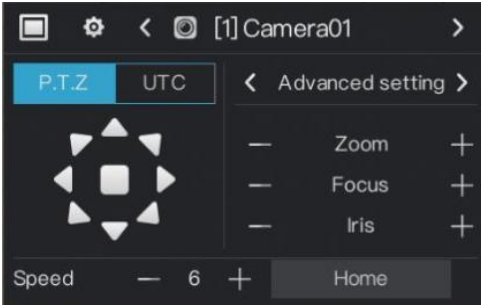
Figure 3-4 Main menu quick toolbar



3.1 PTZ Operations

Click the PTZ button on the real-time video toolbar. The PTZ control page is displayed, as shown in Figure 3-5.

Figure 3-5 PTZ control



3.1.1 PTZ

The PTZ control and function settings are applicable only to high-speed dome, PTZ cameras and cameras externally connected to PTZs,

The function in the PTZ control screen is described as follows:

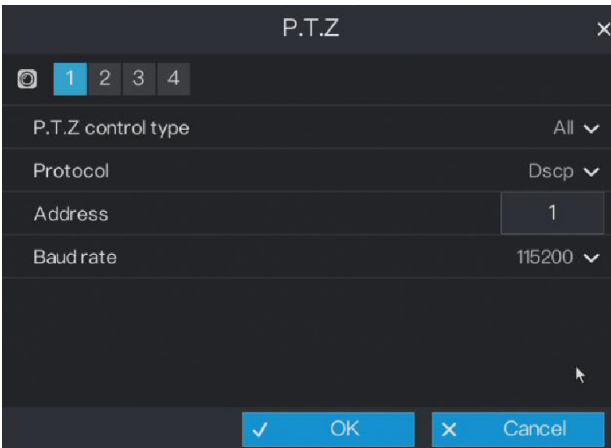


: layout button. After this button is clicked, the real-time video window is switched.



: PTZ setting button. After this button is clicked, the PTZ setting page is displayed, as shown in Figure 3-6.

Figure 3-6 PTZ setting



Operation Steps

Step 1 Select a P.T.Z control type.

RS485: Use RS485 protocol to control analog high-speed domes and analog cameras with Motorized zoom lenses.

Coaxial: Use coaxial protocol to control analog high-speed domes and analog cameras with Motorized zoom lenses.

All: Math the RS485 or coaxial protocol automatically to control analog high-speed domes and analog cameras with Motorized zoom lenses.

Step 2 Select protocol.

Step 3 Set address.

Step 4 Select baud rate.

Step 5 Click **OK** to save P.T.Z setting or click cancel to cancel the P.T.Z setting.

Preset

You can configure preset positions and quickly rotate the camera to a preset position by invoking the preset position.



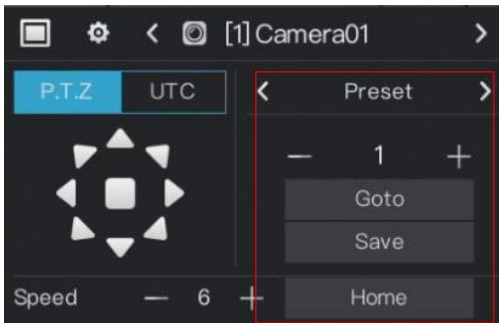


Click  or  of Advanced setting, the preset setting page is displayed, as the red frame shown in Figure 3-7.

Figure 3-7 . PTZ setting



Operation Steps

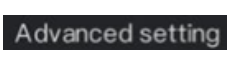


Step 1 Set preset.

1. Click  or  to set the preset ID.
2. Click direction button to rotate the camera to a position and click **Save** to save the preset.

Step 2 Invoke preset.

1. Select the preset ID.
2. Click **Goto** to invoke preset, the camera rotate the preset position.
Or click **Home** to rotate the camera to the first preset position.

: Channel button. Click  or  to select the P.T.Z control channel.

: Click  or  to enter the preset setting page.

: direction button. Click this button to rotate the position of camera..

: Click  or  to set the camera speed.

: Click  or  to zoom the lens in or out.

: Click  or  to adjust the focal length.

: Click  or  to adjust the aperture.

3.1.2 UTC

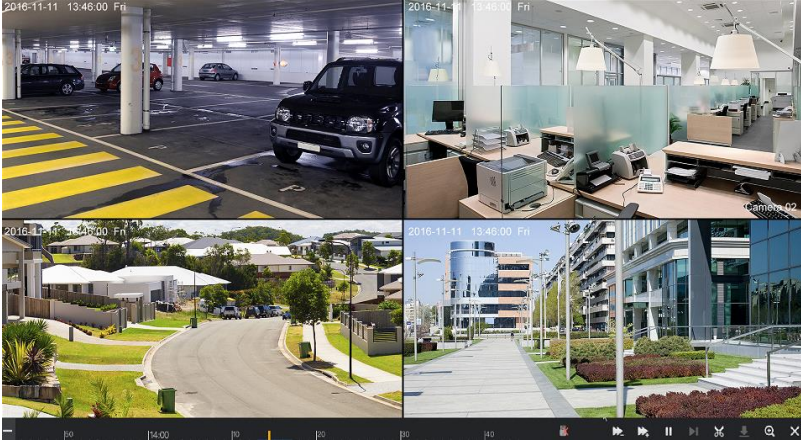
The UTC control and function settings are applicable only to OSD operation of front-end camera, for details, see *Camera OSD Operation Guide*.

3.2 Playback

Playback refers to playing back a video.

Click **Playback** in the quick navigation bar to access the playback screen, as shown in Figure 3-8.

Figure 3-8 Playback screen



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



: Slow play



: Fast forward



: Pause



: Backup. After this button is clicked, the video backup starts. This function is available after a USB flash drive is connected to the HDVR.



: Download. After this button is clicked, the backup ends. This function is available after the backup function is enabled.





: Magnify. Apply only to a single screen. After this button is clicked, the image magnified to 150%, click this button again to restore the original size.



: Full screen off. After this button is clicked, the device returns to the real-time video screen.



: Indicates whether to insert a USB flash drive.  indicates that a USB flash drive is inserted into the HDVR.  indicates that no USB flash drive is inserted into the HDVR.

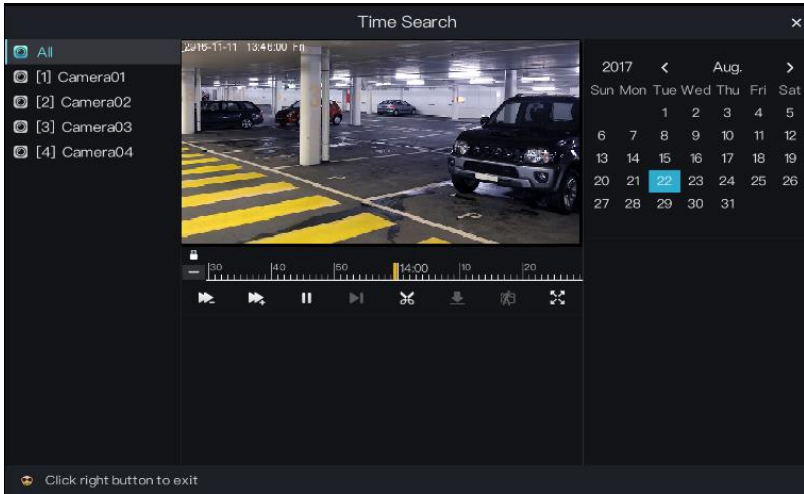
3.3 Search

Search refers to searching for a video by date and time.

Operation Description

Click **Search** in the quick navigation bar to access the search screen, as shown in Figure 3-9.

Figure 3-9 Search screen



The toolbar at the bottom of the play window is described as follows:



: Slow play



: Fast forward



: Pause



: Backup. After this button is clicked, the video backup starts. This function is available after a USB flash drive is connected to the HDVR.



: Download. After this button is clicked, the backup ends. This function is available after the backup function is enabled.



: Intelligent motion detection. After this button is clicked, the device automatically locates a moving target.



: Full screen. After this button is clicked, the device plays a video in full screen.

Operation Steps

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

- Step 2 Select a date in the calendar on the right side of the search screen.
- Step 3 Click **−** or **+** on the left side of the time axis below the play window to switch the time axis, and then select time. Then, the play window plays the video in the specified time range.



NOTE

−: Videos are searched on an hourly basis.

+: Videos are searched on 24 hourly basis.

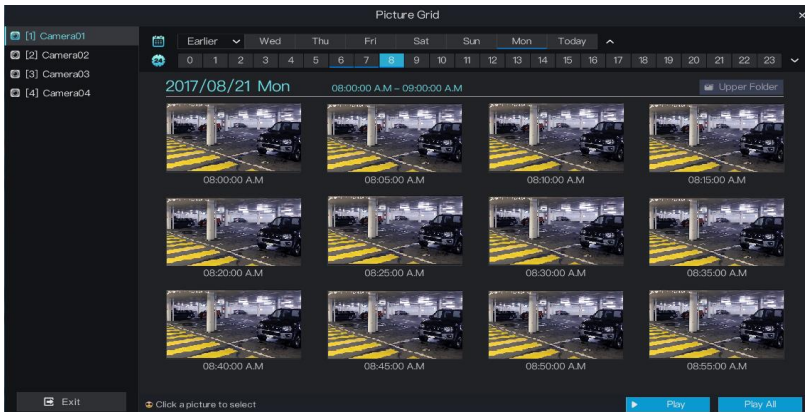
----End

3.4 Picture Grid

Picture grid refers to evenly dividing the video of a channel by time range and searching for a video based on thumbnails divided by time range.


Click **Picture Grid** on the quick navigation bar to access the picture grid screen, as shown in Figure 3-10.


Figure 3-10 Picture grid screen



Operation Steps

- Step 1 Select a camera in the camera list on the left side of the picture grid screen. Videos shot by the camera in the earliest time range on the current day are displayed as thumbnails in the window on the right side.

- Step 2 Select a day of a week on the right of .

- Step 3 Select a time range on the right of . For example, if you select **7**, it indicates that the selected time range is 07:00:00-08:00:00. Videos in this time range are displayed as 12 thumbnails at an interval of 5 minutes in the window on the right.
- Step 4 Select a required thumbnail, double-click it or right-click it and choose **Play** from the shortcut menu to play the video.

----End

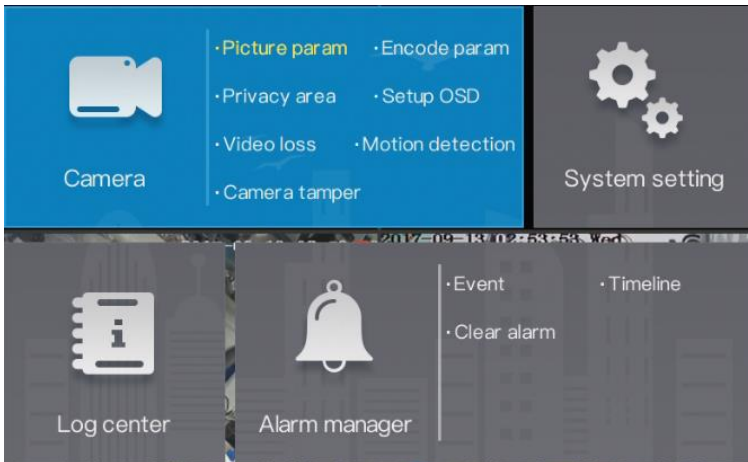
3.5 Event

Click **Event** on the quick navigation bar to access the alarm event screen. For details about the screen and operations on this screen, see 7.1 "Event".

3.6 Main Menu

Right-click on the main UI. The main menu as shown in Figure 3-11 is displayed. The main menu includes **Camera**, **Setting**, **Log Center**, and **Alarm**.

Figure 3-11 HDVR main menu



----End

4 Camera Management

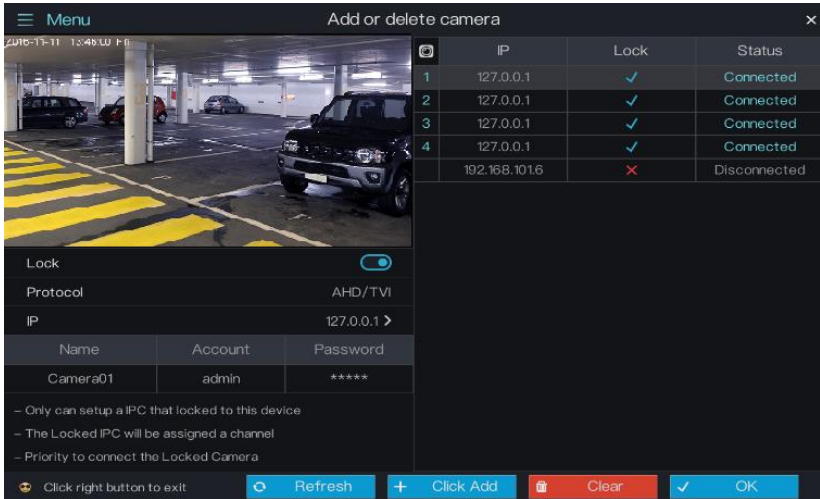
Camera management mainly involves analog cameras and network cameras. Analog cameras can be directly connected to input channels of the HDVR. When analog cameras are insufficient, the HDVR automatically searches for and adds network cameras in the same Local Area Network (LAN).

Camera management includes camera add or delete, picture parameter, encode parameter, video loss, motion detection, privacy area, camera tamper, and setup OSD.

Operation Description


Click **Camera** in the main menu to access the camera management screen, as shown in Figure 4-1.

Figure 4-1 Camera management screen




4.1 Camera Management

4.1.1 Lock a Camera

On the camera management screen, check the locking status of network cameras in the camera list on the right side. If the locking status of a network camera is , this camera needs to be locked.

Operation Steps

- Step 1 Select a network camera to be locked in the camera list on the right side. The real-time video and basic information of the network camera are displayed on the left side.
- Step 2 Click the button next to **Lock** below the play window. The button turns blue and the locking status is changed to  in the camera list on the right side, click **OK**, indicating that the camera is locked successfully.




NOTE

- Analog addresses directly connected to the HDVR are locked preferentially and are assigned the IP address 127.0.0.1. When channels of the HDVR are insufficient for the access of analog cameras, they automatically occupy the channels of network cameras.
- If all channels of the HDVR are bound to cameras, you need to unbind cameras that do not need to be bound.
- You can choose **Click Add** to automatically add cameras of all idle channels.
- If a network camera is added, enter the username and password of the camera below the play window. The video of the camera can be viewed only after successful login.

4.1.2 Unlock a Camera

Operation Steps

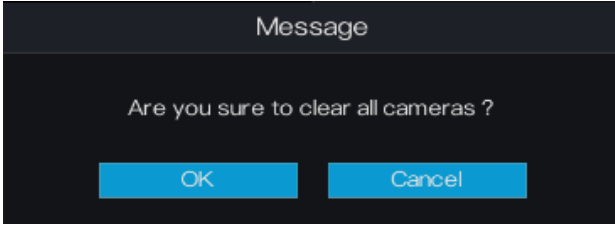
- Step 1 Select a camera to be unlocked in the camera list on the right side. Information about the camera is displayed below the play window.
- Step 2 Click the button next to **Lock** below the play window. The button turns white and the locking status is changed to  in the camera list on the right side, indicating that the camera is unlocked successfully.



NOTE

If you click **Clear**, a message as shown in Figure 4-2 is displayed. Click **OK** to unbind network cameras of all channels of the HDVR.

Figure 4-2 Unlock confirmation message



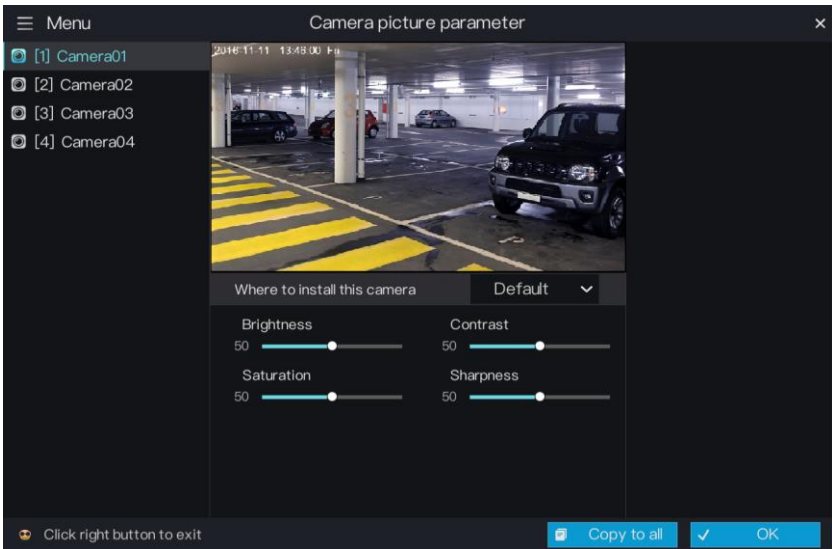
4.2 Picture Parameter

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

Operation Description

Click **Picture Param** next to **Camera** in the main menu or click **Menu** in the upper left corner of the camera management screen and choose **Picture Param** to access the **Picture Parameter** screen, as shown in Figure 4-3.

Figure 4-3 Picture Parameter screen



The picture parameters are described as follows:

Brightness: picture brightness.

Saturation: brilliance of the picture color.

Sharpness: picture clarity.

Contrast: picture transparency.

Operation Steps

- Step 1 Select a camera in the camera list on the left side of the Picture Parameter screen.
- Step 2 Select **where to install this camera** from the drop-down list. The default values of picture parameters vary with scenarios.
- Step 3 Set the camera brightness, contrast, saturation, and sharpness.
- Step 4 Click **OK** to save picture parameter settings or click **Apply to all**, then click **OK** to apply the parameter settings to cameras of all channels.

----End

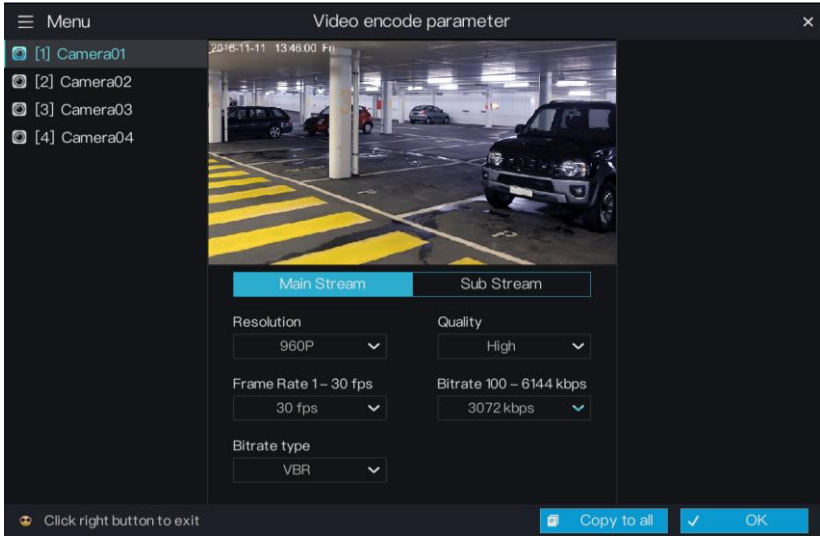
4.3 Encode Parameter

The system allows you to set the main video resolution, sub video resolution, and image quality (low-quality, medium-quality, high-quality, or best-quality) for cameras in a channel, and view the frame rate and stream size in **Encode Parameter**.

Operation Description

Click **Menu** in the upper left corner of the camera management screen and choose **Encode Param** to access the **Encode Parameter** screen, as shown in Figure 4-4.

Figure 4-4 Encode Parameter screen



Operation Steps

- Step 1 Select a camera in the camera list on the left side of the **Encode Parameter** screen.
- Step 2 Select Main Video or Sub Video.
- Step 3 Set Resolution, Quality, and Bitrate type.
- Step 4 Click **OK** to save encode parameter settings or click **Apply to all** , then click **OK** to apply the parameter settings to cameras of all channels.

----End

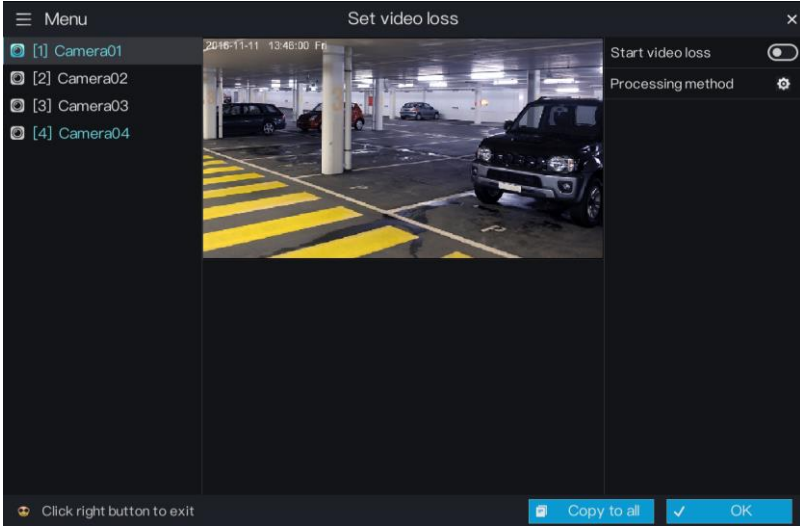
4.4 Video loss

If a camera was disconnected, it will show video loss.

Operation Description


Click **Menu** in the upper left corner of the camera management screen and choose **Video loss** to access the **video loss** screen, as shown in Figure 4-5.

Figure 4-5 Encode Parameter screen



Operation Steps

Step 1 Enable video loss.

Click  next to Start video loss to enable video loss.

Step 2 Set arming time.


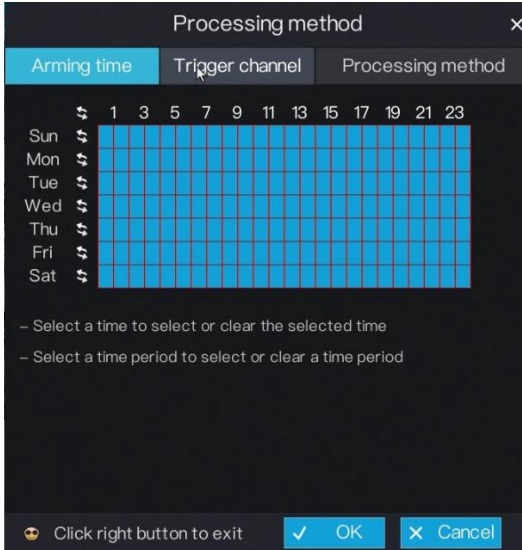
Click  on the right of Processing method to access arming time setting screen of processing method, as shown in Figure 4-6.

Figure 4-6 Arming time screen




Arming time setting:


Method 1: Click left mouse button to select any time point within 0:00-24:00 from Monday to Sunday.

Method 2: Hold down the left mouse button, drag and release mouse to select the arming time within 0:00-24:00 from Monday to Sunday.

NOTE

When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

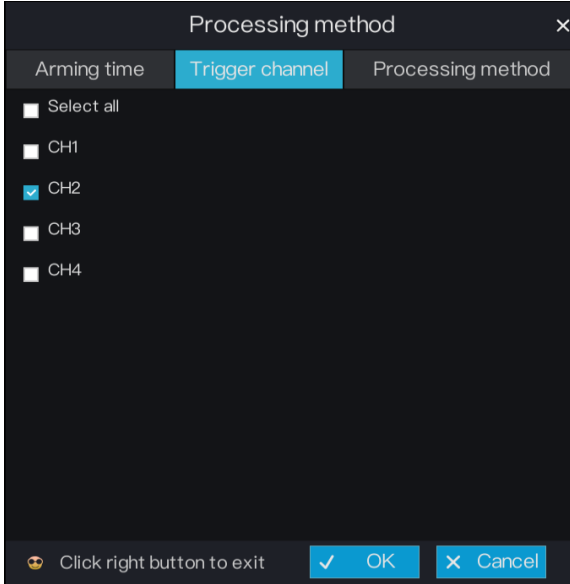
Method 3: Click  in the arming time page to select the whole day or whole week.

Deleting arming time: Click  again or inverse selection to delete the selected arming time.

Step 3 Set trigger channel.

1. Click **Trigger channel** tag to access trigger channel screen, as shown in Figure 4-7.

Figure 4-7 Trigger channel screen

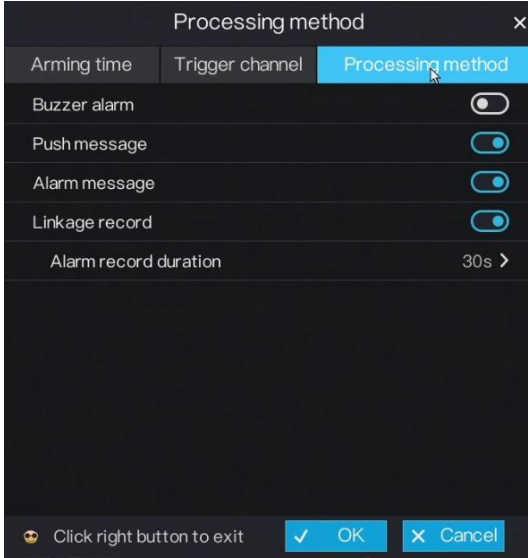



2. Select the trigger channel of current channel.
3. Click **OK** to save trigger channel settings or click **Cancel** to cancel the settings.

Step 4 Processing method setting

1. Click **Processing method** tag to access processing method screen, as shown in Figure 4-8.

Figure 4-8 Processing method screen



2. Click  of “Buzzer alarm”, “Push message”, “Alarm message”, “Linkage record” respectively to enable or disable these function.
3. Click **OK** to save processing method settings or click **Cancel** to cancel the settings.

Step 5 Click **OK** to save video loss settings or click **Apply to all** , then click **OK** to apply the video loss settings to cameras of all channels.

----End

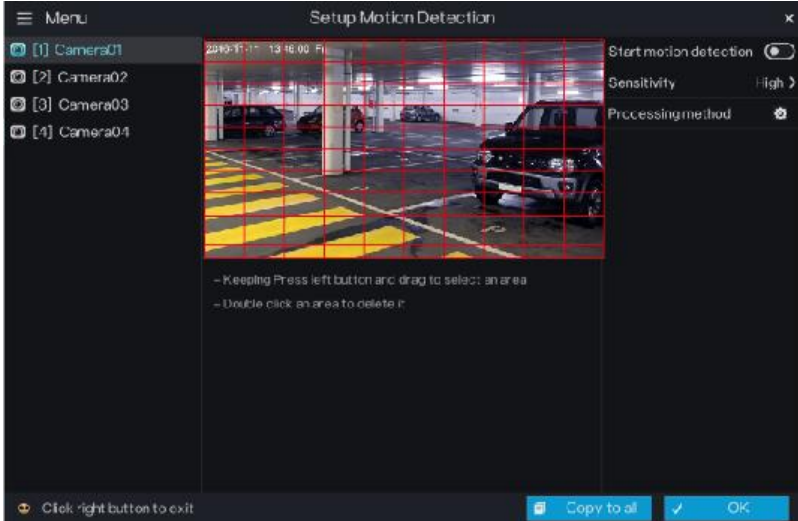
4.5 Motion Detection

Motion detection refers that an alarm is triggered when an image in a specified area changes.



Operation Description

Click **Menu** in the upper left corner of the camera management screen and choose **Motion Detection** to access the **Motion Detection** screen, as shown in Figure 4-9.

Figure 4-9 Motion Detection screen



Operation Steps

- Step 1 Select a camera in the camera list on the left side of the **Motion Detection** screen.
- Step 2 Click  next to **Start Motion Detection** to enable motion detection.
- Step 3 In the video window, hold down and drag the left mouse button to draw a motion detection area.
- Step 4 Select a value from the drop-down list next to **Sensitivity**.
- Step 5 Click  next to Processing method to access processing method screen.
For details, please see *4.4 Step 2~4.4 Step 4*.
- Step 6 Click **OK** to save motion detection settings or click **Apply to all**, then click **OK** to apply the motion detection settings to cameras of all channels.

NOTE

- After a motion detection area is selected, you can double-click it to delete the selected area.
- A maximum of four areas can be configured.

----End

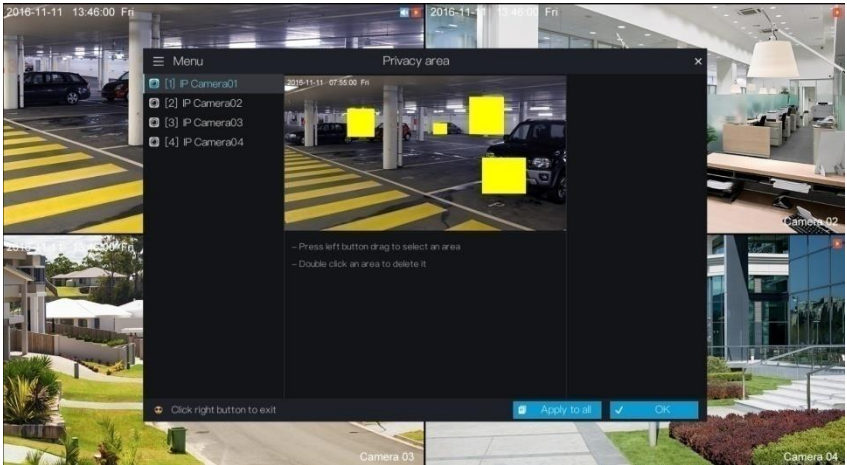
4.6 Privacy Area

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

Operation Description

Click **Menu** in the upper left corner of the camera management screen and choose **Privacy area** to access the **Privacy area** screen, as shown in Figure 4-10.

Figure 4-10 Privacy Area screen



Operation Steps

- Step 1 Select a camera in the camera list on the left side of the **Privacy area** screen.
- Step 2 In the video window, hold down and drag the left mouse button to draw a privacy area.
- Step 3 Click **OK** to save privacy area settings or click **Apply to all**, then click **OK** to apply the privacy area settings to cameras of all channels.

----End

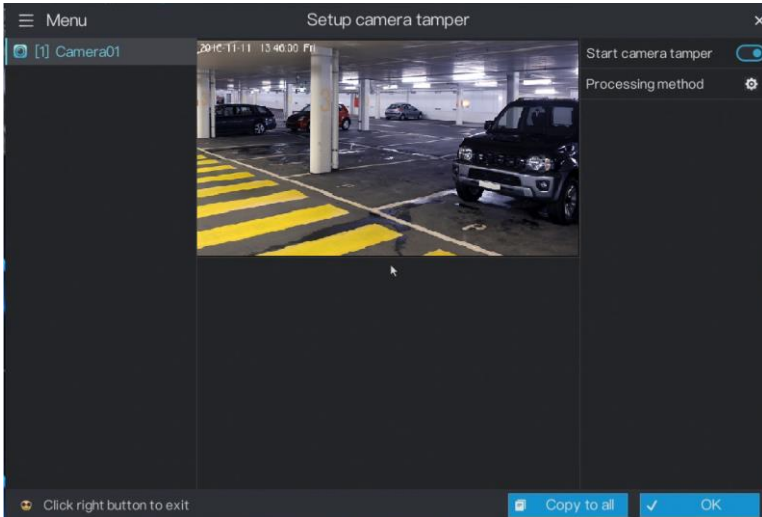
4.7 Camera tamper

Camera Tamper refers to the occurrence of tampered or shifted in video image. An alarm is generated if such an event occurs.



Operation Description

Click **Menu** in the upper left corner of the camera management screen and choose **Camera tamper** to access the **Camera tamper** screen, as shown in Figure 4-11.

Figure 4-11 Camera tamper screen



Operation Steps

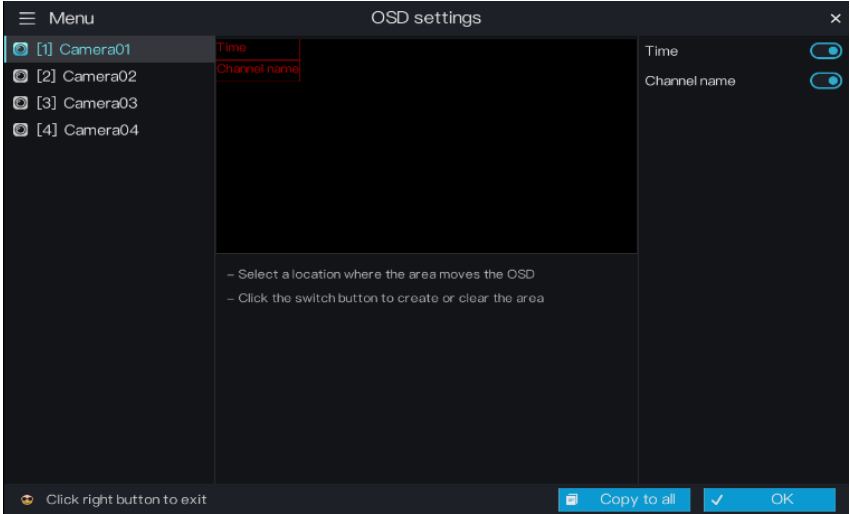
- Step 1 Select a camera in the camera list on the left side of the **camera tamper** screen.
- Step 2 Click  next to **Start camera tamper** to enable camera tamper.
- Step 3 Click  next to **Processing method** to access processing method screen.
For details, please see *4.4 Step 2~4.4 Step 4*.
- Step 4 Click **OK** to save camera tamper settings or click **Apply to all**, then click **OK** to apply the camera tamper settings to cameras of all channels.

----End



4.8 OSD settings

Click **Menu** in the upper left corner of the camera management screen and choose **Setup OSD** to access the **OSD setting** screen, as shown in Figure 4-12.

Figure 4-12 OSD setting screen



Operation Steps

- Step 1 Select a camera in the camera list on the left side of the **OSD setting** screen.
- Step 2 Click  next to **Time** to enable or disable OSD time setting.
- Step 3 Click  next to **Channel** to enable or disable OSD channel setting.
- Step 4 In the video window, click and drag time or channel to move to a location.
- Step 5 Click **OK** to save OSD settings or click **Apply to all**, then click **OK** to apply the OSD settings to cameras of all channels.

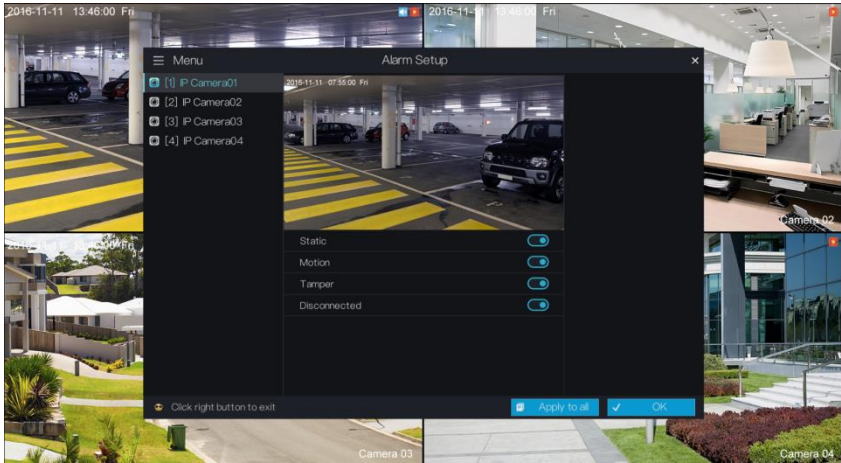
4.9 Alarm Setup

The system allows you to set alarm types for cameras of channels in **Alarm Setup**.

Operation Description

Click **Menu** in the upper left corner of the camera management screen and choose **Alarm Setup** to access the **Alarm Setup** screen, as shown in Figure 4-13.

Figure 4-13 Alarm Setup screen



The alarm setup parameters are described as follows:

Motion: An alarm is triggered when an image in a specified area changes.

Tamper: An alarm is triggered when the lens of a camera is covered.

Disconnected: An alarm is triggered when a camera is disconnected from the HDVR.

Operation Steps

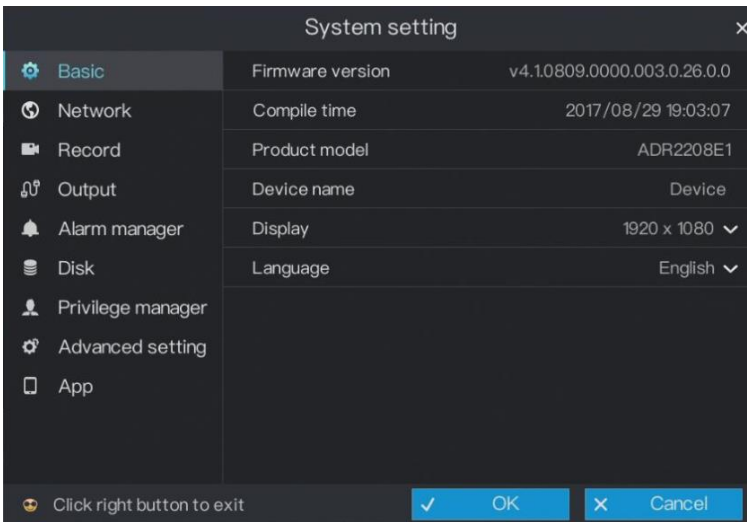
- Step 1 Select a camera in the camera list on the left side of the **Alarm Setup** screen.
- Step 2 Click buttons next to **Static**, **Motion**, **Tamper**, and **Disconnected** to enable or disable the alarm function according to alarm requirements.
- Step 3 Click **OK** to save alarm settings or click **Apply to all** to apply the parameter settings to cameras of all channels.

----End

5 System setting

The system setting allows you to set basic information, network, record, output, alarms manager, disk, privacy manager, advanced setting, and App for the system in **Setting**. Figure 5-1 shows the system setting screen.

Figure 5-1 System setting screen



5.2 Basic

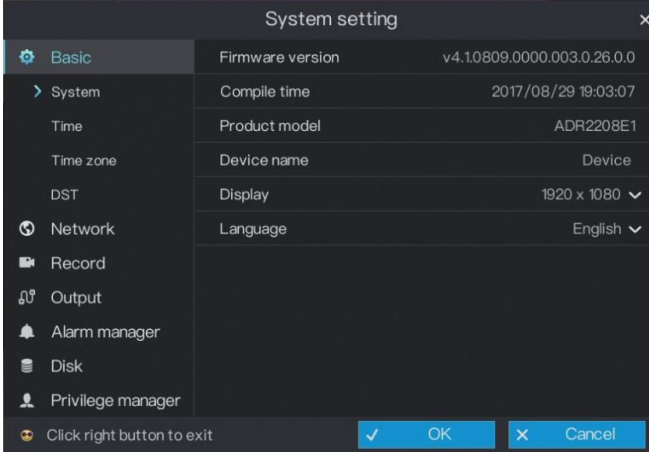
The system allows you to view the firmware version, compile time and product model, set the device name, display resolution, system language, time zone, time and date and DST in **Basic**.

5.2.1 System

Operation Steps

- Step 1 On the **System setting** screen, choose **Basic > System** to access the **System setting** screen, as shown in Figure 5-2.

Figure 5-2 System setting screen



- Step 2 Enter Device name for selected device.
- Step 3 Select a proper resolution from the **Display** drop-down list based on the adopted monitor.
- Step 4 Select a required language from the **Language** drop-down list.
- Step 5 Click **OK** to save system settings or click **Cancel** to cancel settings.

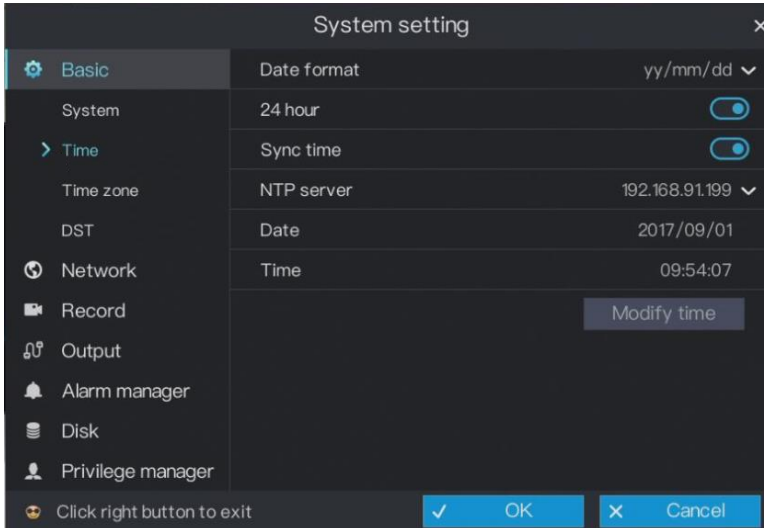
----End



5.2.2 Time

Operation Steps

- Step 1 On the **System setting** screen, choose **Basic > Time** to access the time setting screen, as shown in Figure 5-3.

Figure 5-3 Time setting screen



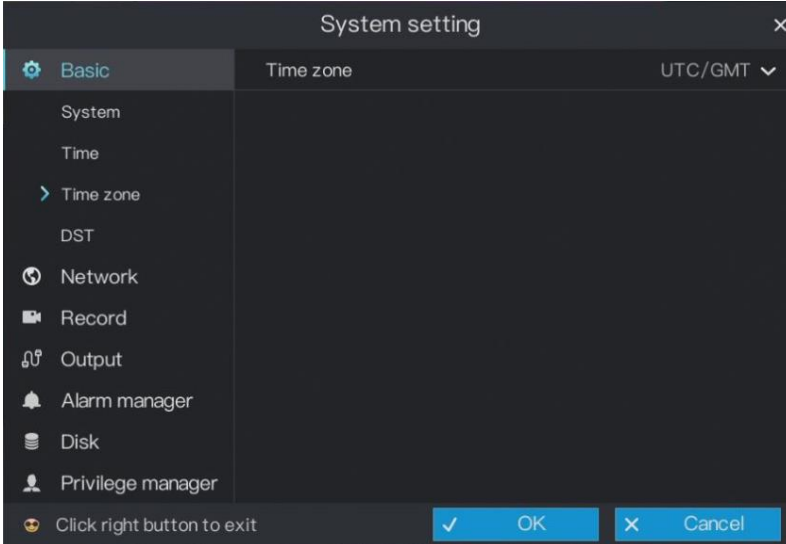
- Step 2 Select a required date format from the **Date Format** drop-down list.
- Step 3 Click  next to **24 Hour** to disable the 24-hour system. Then, the 12-hour system is enabled. If **24 Hour** is set to On, the 24-hour system is used and is enabled by default.
- Step 4 Click  next to **Sync Time** to disable time synchronization. Time synchronization is enabled by default. Time is synchronized with the PC time.
- Step 5 After **Sync Time** is disabled, you can manually set the system time:
Click **Date** and scroll the mouse scroll wheel to select the year, month, and date.
1. Click **Time** and scroll the mouse scroll wheel to select the hour, minute, and second.
 2. Click **Modify Time** to save the time settings.
- Step 6 Click **OK** to save settings or click **Cancel** to cancel settings.
- End

5.2.3 Time zone

Operation Steps

- Step 1 On the **System setting** screen, choose **Basic > Time zone** to access the time zone setting screen, as shown in Figure 5-4.

Figure 5-4 Time zone setting screen



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

Step 3 Click **OK** to save settings or click **Cancel** to cancel settings.

----End

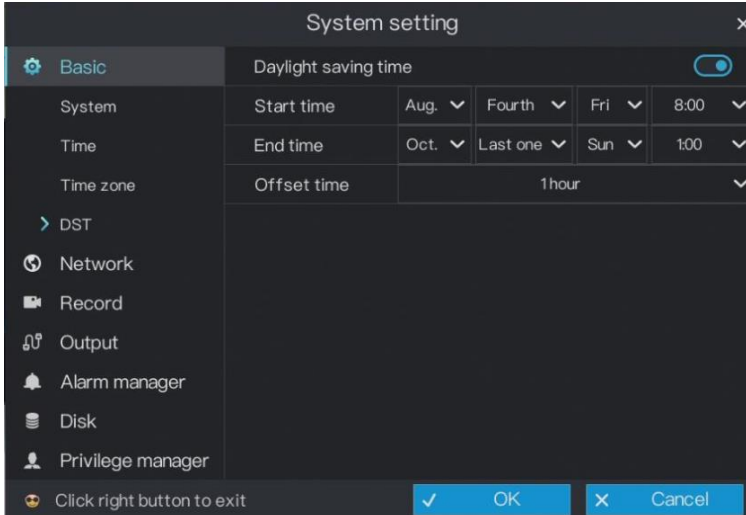
5.2.4 DST


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 On the **System setting** screen, choose **Basic > DST** to access the DST setting screen, as shown in Figure 5-5.

Figure 5-5 DST setting screen



- Step 2 Click  next to **Daylight saving time** to enable DST.
- Step 3 Select start time, end time, offset time from the drop-down list respectively.
- Step 4 Click **OK** to save settings or click **Cancel** to cancel settings.
- End

5.3 Network

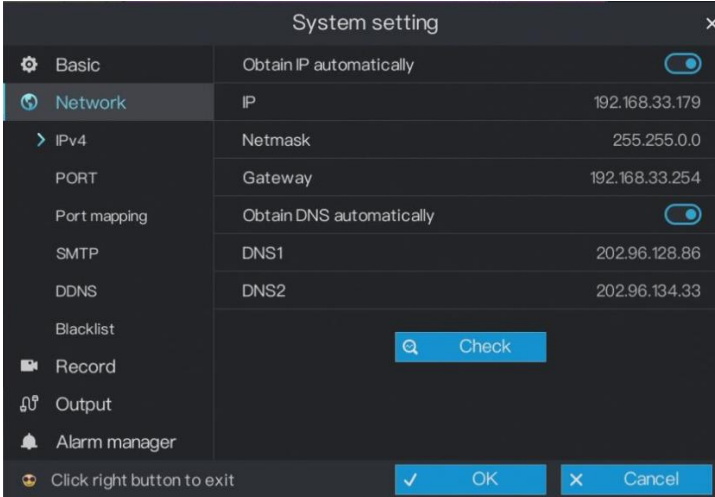
5.3.1 Ipv4

IPv4 is the IP protocol that uses an address length of 32 bits.

Operation Steps

- Step 1 On the **System setting** screen, choose **Network** > **IPv4** to access the Ipv4 setting screen, as shown in Figure 5-6.

Figure 5-6 Ipv4 setting screen





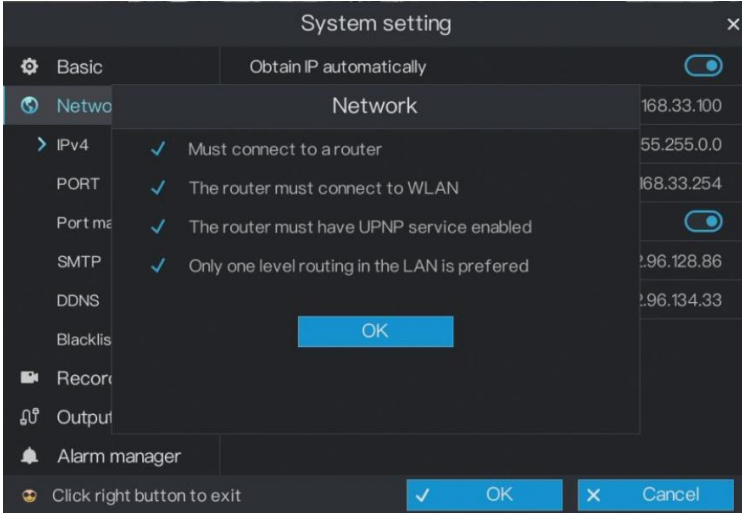
- Step 2 Click  next to **Obtain IP automatically** to enable or disable the function of automatically getting an IP address. The function is enabled by default.
If the function is disabled, click input boxes next to **IP**, **Netmask**, and **Gateway** to set the parameters as required.
- Step 3 Click  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** and **DNS2**, delete original addresses, and enter new addresses.
- Step 4 Click **Check**. The system automatically checks network settings and the dialog box as shown in Figure 5-7 is displayed. Check and connect the network based on network check results.

Figure 5-7 Network check screen



Step 5 Click **OK** to save IPv4 network settings or click **Cancel** to cancel settings.

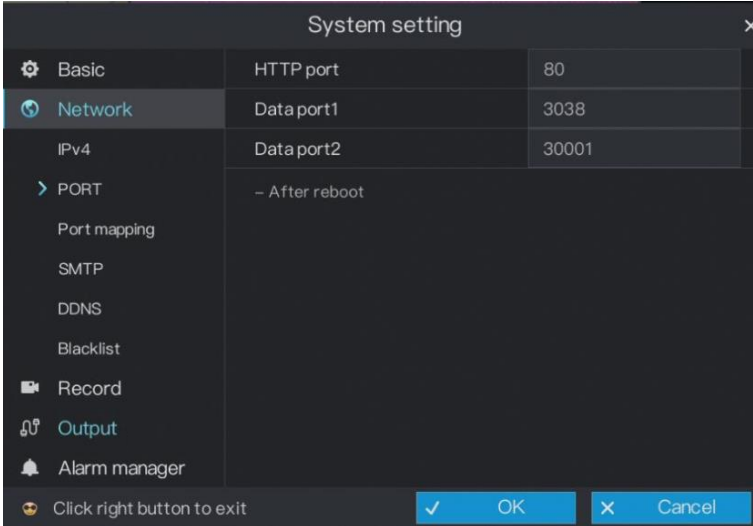
----End

5.3.2 Port

Operation Steps

Step 1 On the **System setting** screen, choose **Network > PORT** to access the port setting screen, as shown in Figure 5-8.

Figure 5-8 Port setting screen



Step 2 Set HTTP port, Data port1 and Data port2 respectively.

Step 3 Click **OK** to save settings or click **Cancel** to cancel settings.

 **NOTE**

- Data Port1 used as RTSP port
- Data Port2 used as video control port
- After Ports is set and saved ,please click OK and Reboot. the port is set successfully.

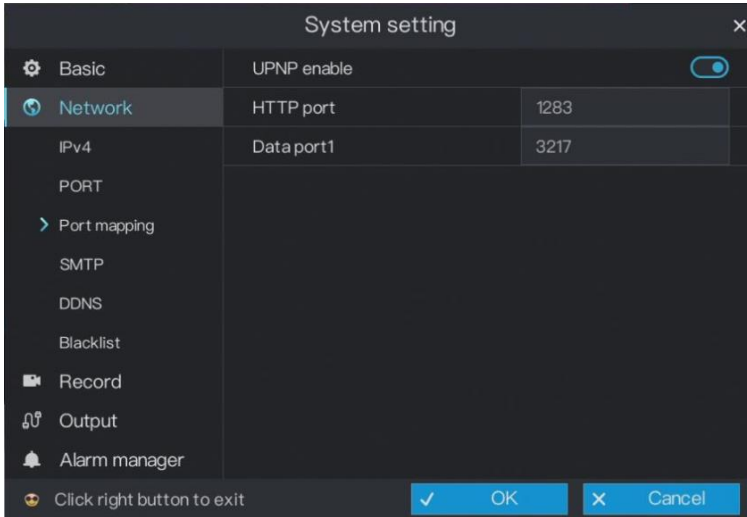
----End


5.3.3 Port mapping

Operation Steps

Step 1 On the **System setting** screen, choose **Network > Port mapping** to access the port mapping setting screen, as shown in Figure 5-9.

Figure 5-9 Port mapping setting screen



- 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, you can manually set the HTTP port and Data port1.
- Step 4 Click **OK** to save settings or click **Cancel** to cancel settings.

NOTE

- After UPNP button is enabled, System perform port mapping automatically.
- If UPNP is set OFF, you need to forward the ports by manually on router.

----End

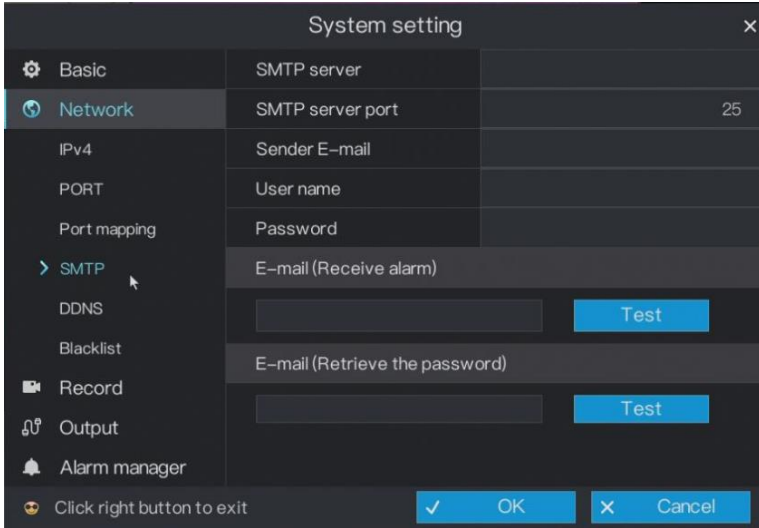
5.3.4 SMTP

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 On the **System setting** screen, choose **Network > SMTP** to access the SMTP setting screen, as shown in Figure 5-10.

Figure 5-10 SMTP 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,
- Step 6 if the verification code is received, that shows the E-mail is set successfully.
- Step 7 Click **OK** to save settings or click **Cancel** to cancel settings.

----End

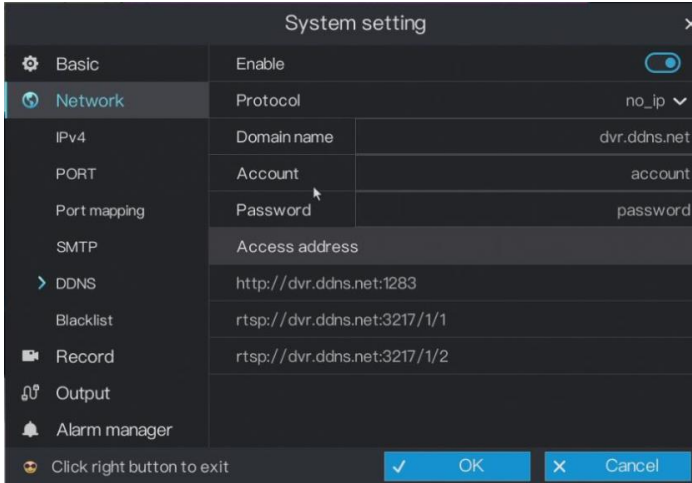
5.3.5 DDNS

Connect the specified camera to the Internet, and obtain the user name and password for logging into the Dynamic Domain Name System (DDNS) server.

Operation Steps

- Step 1 On the **System setting** screen, choose **Network > DDNS** to access the DDNS network setting screen, as shown in Figure 5-11.

Figure 5-11 DDNS setting screen



- Step 2 Click the button 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, Account, and Password.
- Step 5 Click **OK** to save DDNS network settings or click **Cancel** to cancel settings.

**NOTE**

An external network can access an address specified in the DDNS settings to access the HDVR.

----End

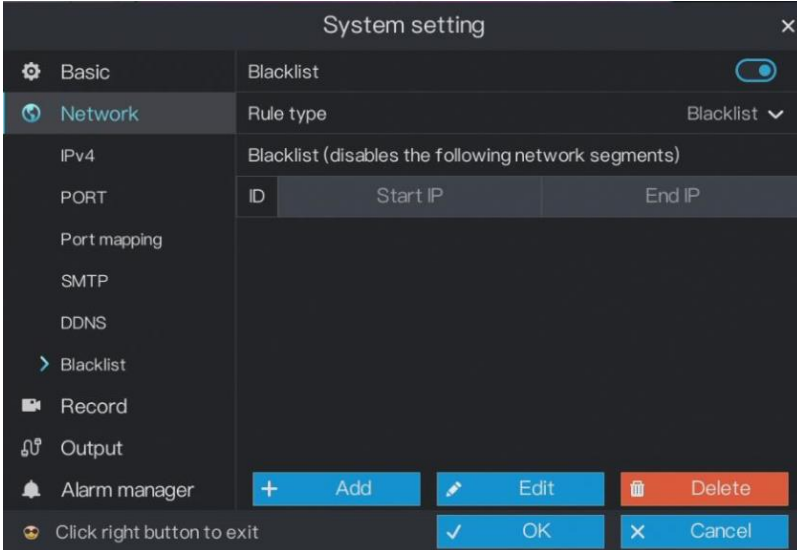
5.3.6 Blacklist

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

Operation Steps

- Step 1 On the **System setting** screen, choose **Network** > **Blacklist** to access the blacklist setting screen, as shown in Figure 5-12.

Figure 5-12 Blacklist screen




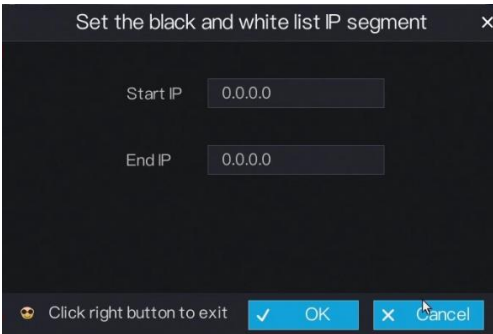
- Step 2 Click  next to **Blacklist** to enable or disable the function of blacklist. The function is disabled by default.
- Step 3 Select a required value from the **rule type** drop-down list.
- Step 4 Click **Add**, the set the black and white list IP segment screen is displayed, as show in Figure 5-13

Figure 5-13 IP Address Segment screen



- 2. Enter value manually for Start IP address, end IP address.
- 3. Click **OK**. The system saves the settings. And the black and white list IP segment listed in the black (white) list.

 **NOTE**

- Blacklist: IP address in specified network segment to prohibit access.
- Whitelist: 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.

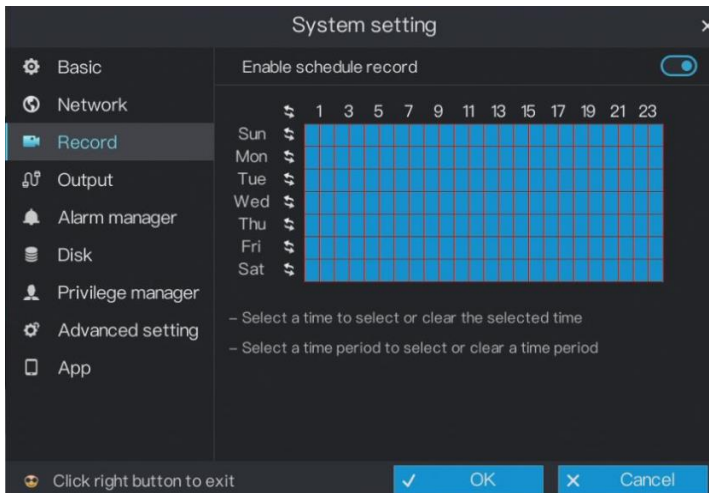
----End


5.4 Record

Operation Steps

- Step 1 On the **System setting** screen, choose **Record** to access the record screen, as shown in Figure 5-14.

Figure 5-14 Record setting screen



- Step 2 Click  next to **Enable schedule record** to enable or disable the function of schedule record. The function is enabled 7*24 recording by default.
- Step 3 Set Schedule.
For details, please see *4.4 Step 2~4.4 Step 4*.
- Step 4 Click **OK** to save record settings or click **Cancel** to cancel settings.

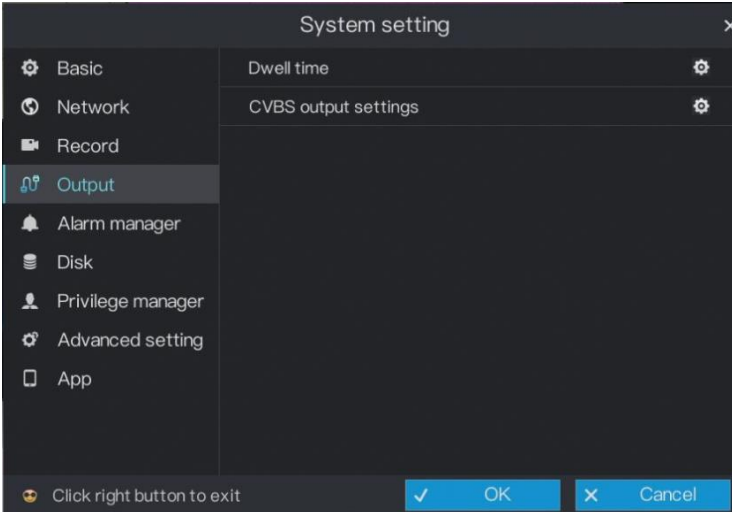
----End

5.5 Output

Operation Steps

- Step 1 On the **System setting** screen, choose **Output** to access the output setting screen, as shown in Figure 5-15.

Figure 5-15 Output setting screen




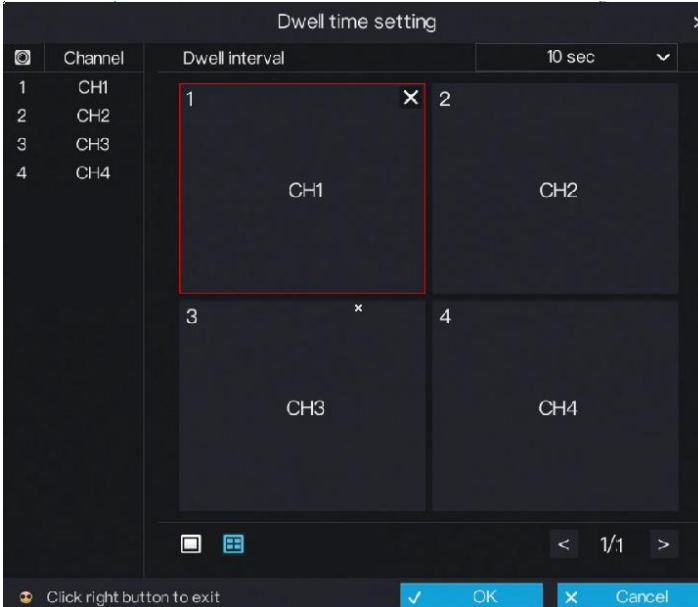
- Step 2 Click  next to **Dwell time** to access the dwell time screen, as shown in Figure 5-16.

Figure 5-16 Dwell time screen





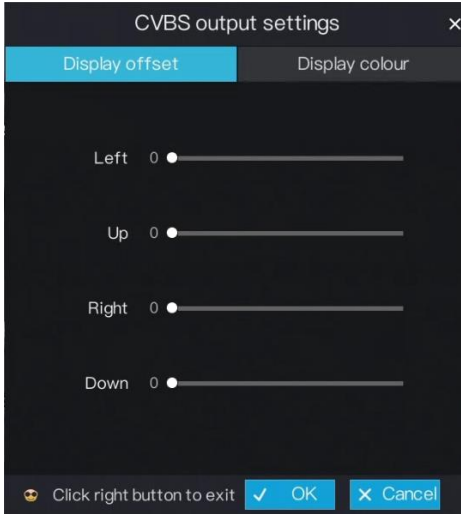
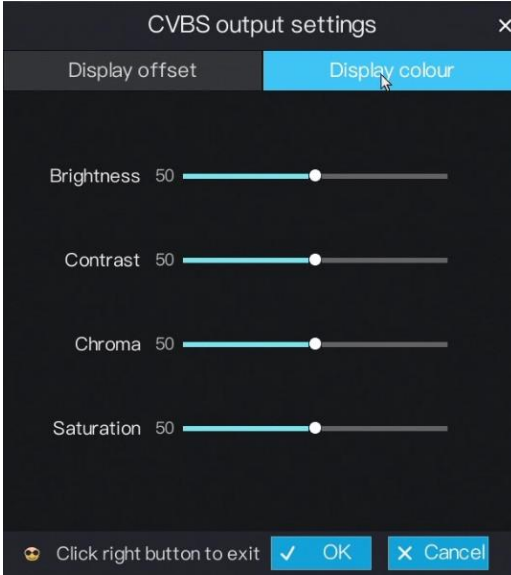
1. Select a required value from the **Dwell interval** drop-down list.
 2. Set layout. Click  to choose layout.
 3. Select dwell channel. Click the video window and select a channel from the channel list to set the dwell channel.
 4. Click OK to save dwell settings or click **Cancel** to cancel settings.
- Step 3 Click  next to **CVBS output settings** to access CVBS output settings screen, as shown in Figure 5-17.

Figure 5-17 CVBS output settings screen



2. Set the display offset. Press and hold the left mouse button and drag the value bar to set the left, up, right, down display offset of the CVBS monitor.
3. Set the display colour. Click **Display colour** tag to access the display colour screen, as shown in Figure 5-18.

Figure 5-18 Display colour settings screen



4. Press and hold the left mouse button and drag the value bar to set the brightness, contrast, chroma, saturation of the CVBS monitor.
5. Click **OK** to save CVBS output settings or click **Cancel** to cancel settings.

5.6 Alarm Manager

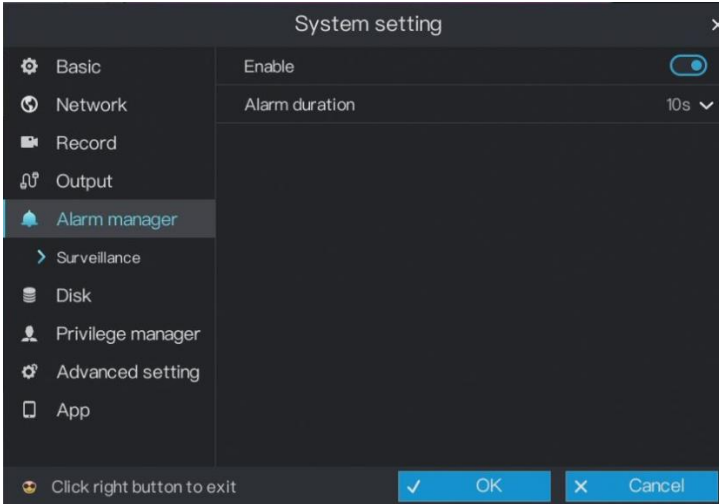
The system allows you to set alarm surveillance and alarm in in **Alarm manager**.


5.6.1 Surveillance

Operation Steps

- Step 1 On the System setting screen, choose **Alarm > Surveillance** to access the surveillance setting screen, as shown in Figure 5-19.

Figure 5-19 Surveillance setting screen



- Step 2 Click  next to **Enable** to enable the surveillance function.
- Step 3 Select **alarm duration** from the drop-down list.
- Step 4 Click **OK** to save surveillance settings or click **Cancel** to cancel settings.

 **NOTE**

Alarm Manager setting is not applied for 4ch/1HDD and 8ch/1HDD HDVR.

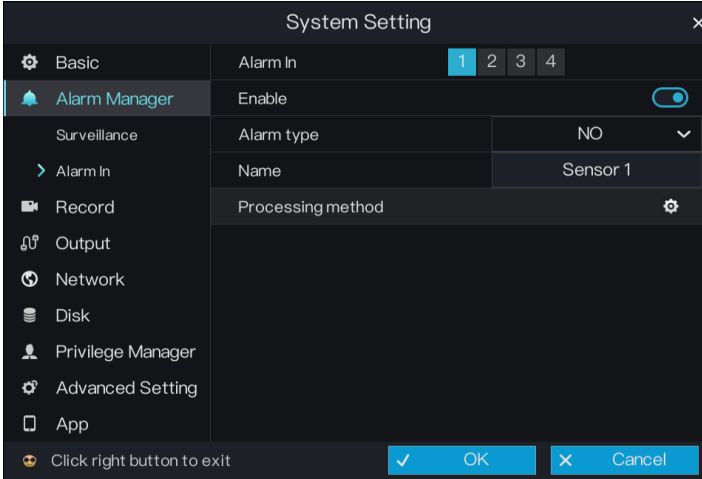
----End

5.6.2 Alarm in

Operation Steps

- Step 1 On the System setting screen, choose **Alarm** > **Alarm in** to access the alarm in setting screen, as shown in Figure 5-20.

Figure 5-20 Alarm in setting screen



Step 2 Select a channel in **alarm in**.

Step 3 Click  next to **Enable** to enable or disable the functions.

Step 4 Select **Alarm type** from the drop-down list.

NOTE

- **NC:** Closed alarm circuit
- **NO:** Opened alarm circuit

Step 5 Set **name**.

Step 6 Set Processing method.

For details, please see 4.4 Step 2~4.4 Step 4.

Step 7 Click **OK** to save alarm in settings or click **Cancel** to cancel settings.

----End

5.7 Disk

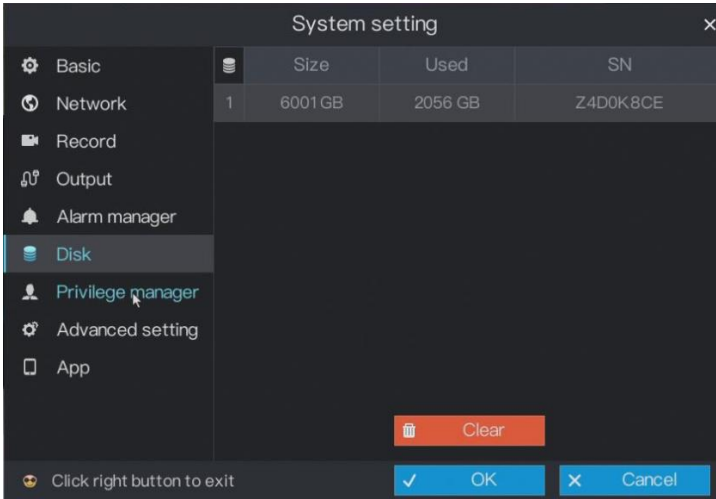
The system allows you to view the total capacity, used capacity, and SNs of disks, and clear all video data in a disk in disk management.

5.7.1 Viewing Disk Information

Operation Steps

- Step 1 On the System setting screen, choose **Disk** to access the disk management screen, as shown in Figure 5-21.

Figure 5-21 Disk management screen



- Step 2 You can view the total capacity, used capacity, and SN of a disk on the disk management screen.

----End

5.7.2 Clearing Disk Data

Click **Clear** in the lower part of the disk management screen. A message, indicating that all video data will be cleared and asking you whether to continue the operation, is displayed. Click **OK** to delete all video data on the disks.

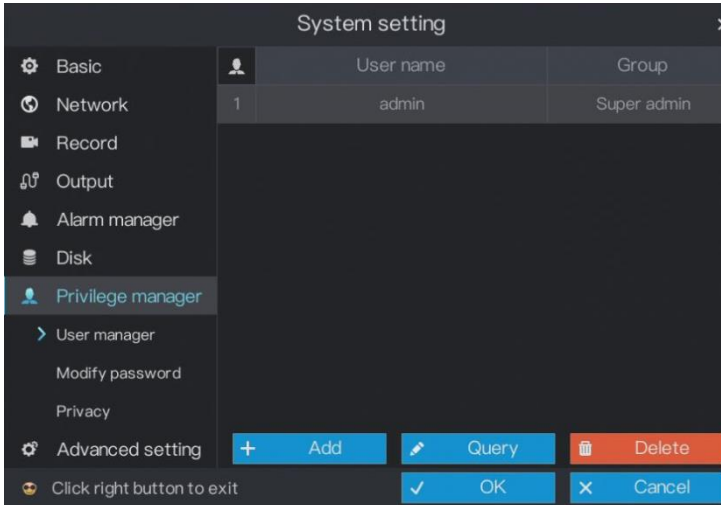
5.8 Privilege manager

5.8.1 User manager

Operation Steps

- Step 1 On the System setting screen, choose **Privilege manager** > **User manager** to access the user management screen, as shown in Figure 5-22.

Figure 5-22 User manager screen

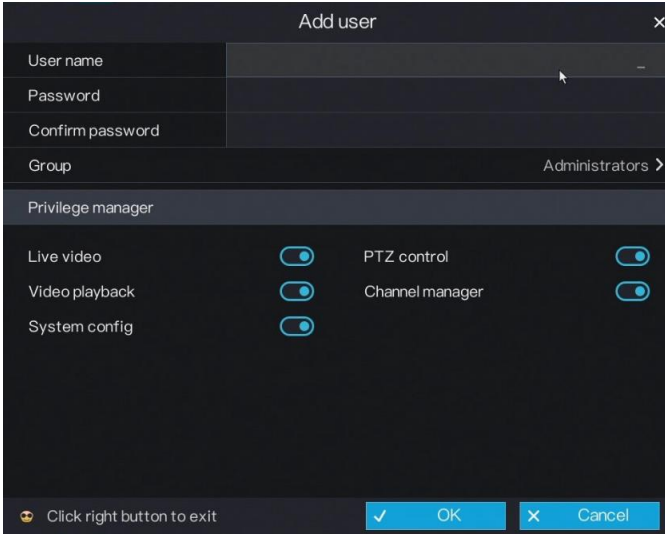


- Step 2 Add or delete a user.

- Adding a user
 1. Click **Add**.

The **Add User** dialog box appears, as shown in Figure 5-23.

Figure 5-23 Add user screen



2. Enter a username, password and confirm password.

 **NOTE**

- The password should include letter, character and number.
- The password should be 6~32.

3. Select a **Group** from the drop-down list box.
4. Select the operation privileges in the list of the add user screen.
5. 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 to edit or delete user.

- Step 3 Click **OK** to save user manager settings or click **Cancel** to cancel settings.

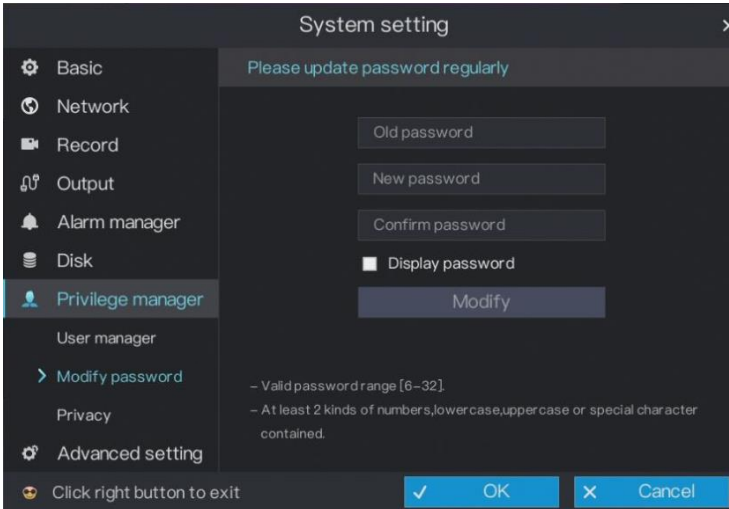
-----End

5.8.2 Modify Password

Operation Steps

- Step 1 On the System setting screen, choose **Privilege manager** > **Modify password** to access the modify password screen, as shown in Figure 5-24.

Figure 5-24 Password modification screen



Step 2 Enter the correct old password, new password, and confirm password, and click **Modify**. The password is modified successfully.

NOTE

- The password should include at least two kinds of letter, character and number.
- The password should be 6~32.

Step 3 Click **OK** to save modify password settings or click **Cancel** to cancel settings.

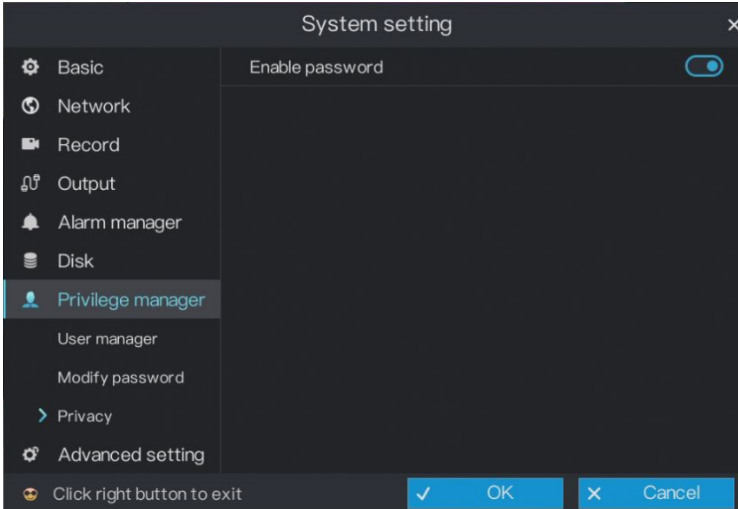
----End


5.9 Privacy

Operation Steps

Step 1 On the System setting screen, choose **Privilege manager** > **privacy** to access the privacy screen, as shown in Figure 5-25.

Figure 5-25 Privacy screen



- Step 2 Click  next to **Enable password** to enable or disable the function. The function is enabled by default.
- Step 3 Click **OK** to save enable password settings or click **Cancel** to cancel settings.

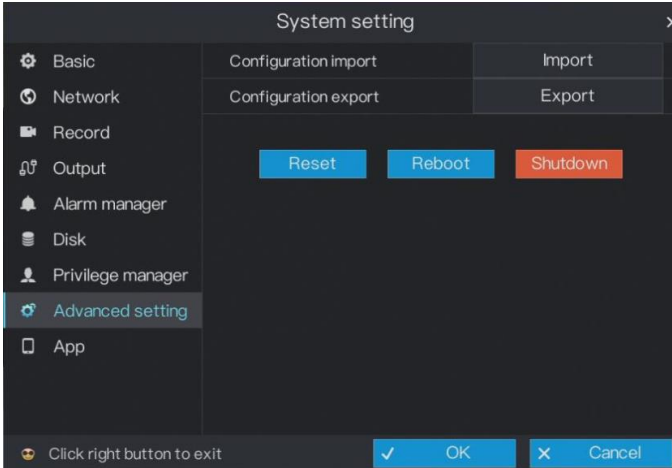
----End

5.10 Advanced setting

Operation Steps

- Step 1 On the System setting screen, choose **Advanced setting** to access the advanced setting screen, as shown in Figure 5-26.

Figure 5-26 Advanced setting screen



- Step 2 Click **Import** to import the configuration.
- Step 3 Click **Export** to export the configuration.
- Step 4 Click **Reset**, **Reboot**, **Shutdown** to reset the HDVR, reboot the HDVR or Shutdown the HDVR if you need.
- Step 5 Click **OK** to save enable password settings or click **Cancel** to cancel settings.

----End

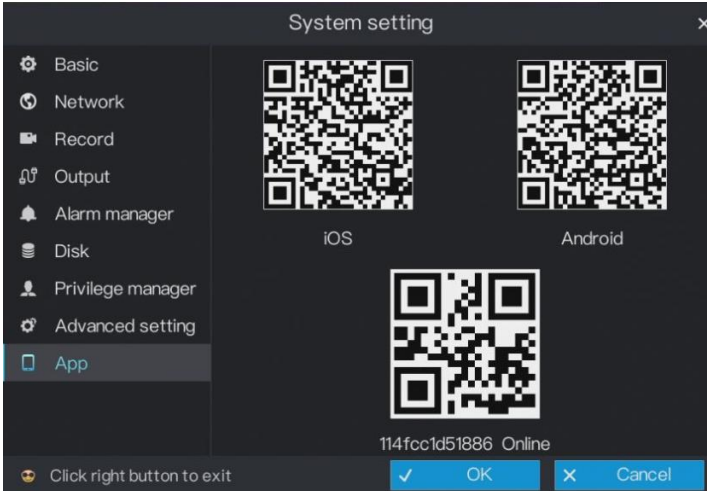
5.11 App

You can use application software that supports QR code scanning to scan the QR code in **App** to download the application for mobile phones. Then, you can perform operations on the HDVR by using the App.

Operation Description

On the System setting screen, choose **App** to access the mobile phone App screen, as shown in Figure 5-27.

Figure 5-27 Mobile phone App screen



QR codes are described as follows:

iOS QR code: used by iOS-based devices to download the App client.

Android QR code: used by Android-based devices to download the App client.

UUID QR code: After the mobile phone App is installed, you can scan the UUID QR code to add an HDVR.

----End

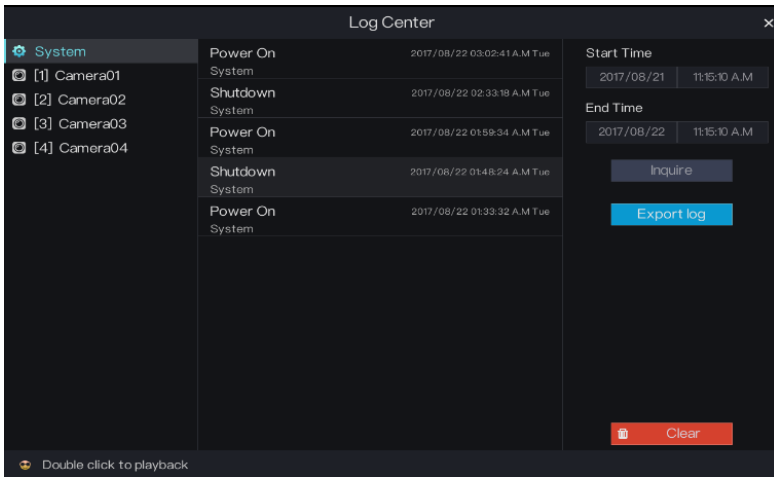
6 Log Center

The system allows you to set and view records of any operations performed on the HDVR in **Log Center**, including power-on, parameter settings, and camera management.

Operation Steps

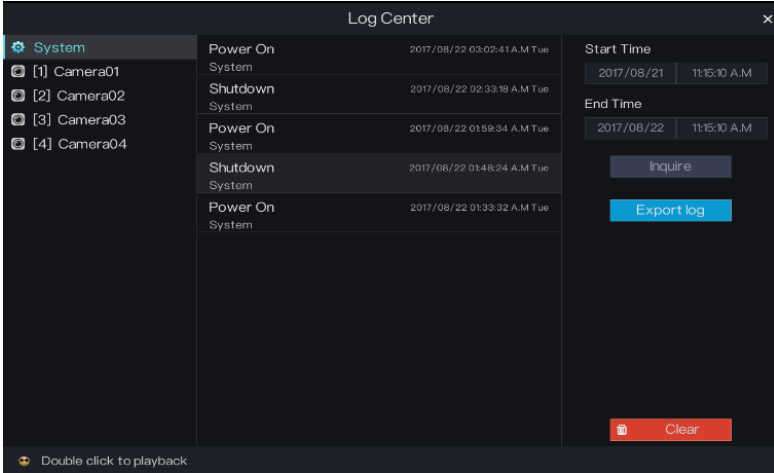
- Step 1 Click **Log Center** in the main menu to access the **Log Center** screen, as shown in Figure 6-1.

Figure 6-1 Log Center screen



- Step 2 Select an object whose logs need to be queried on the left side of the **Log Center** screen. The logs include system logs and logs of a camera in a channel.
- Step 3 Set the log start time and end time on the right side of the **Log Center** screen.
- Step 4 Click **Inquire** to query logs.
- Step 5 Double-click a log to play the video generated at the log time point, as shown in Figure 6-2.

Figure 6-2 Log play screen



Step 6 Click **Export log** to export logs to USB storage..

----End

7 Alarm

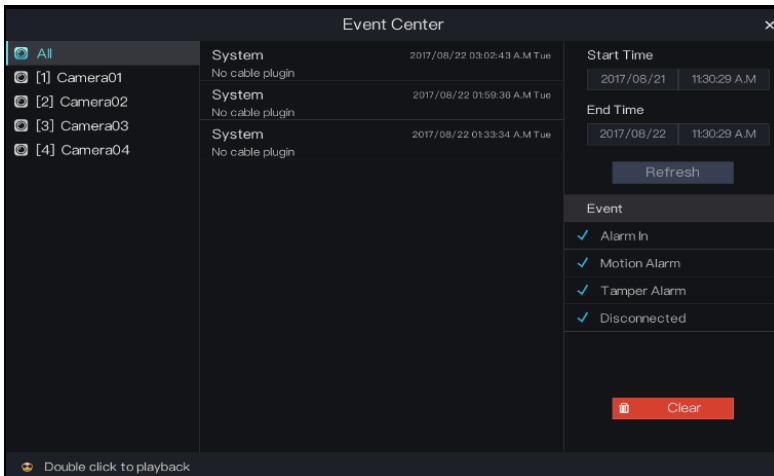
The system allows you to view alarm events, set the timeline, and clear alarms in **Alarm**.

7.1 Event

Operation Steps

- Step 1 Click **Alarm** in the main menu to access the **Event Center** screen, as shown in Figure 7-1.

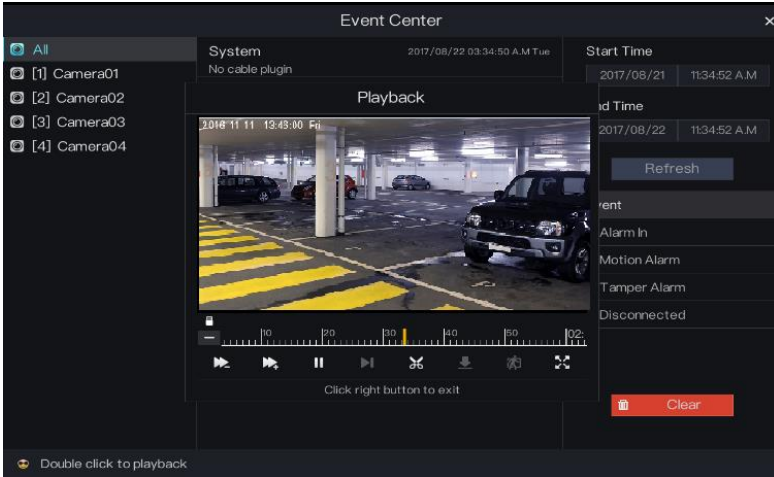
Figure 7-1 Event Center screen



- Step 2 Select a camera or all cameras on the left side of the **Event Center** screen.
- Step 3 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 4 Set the alarm start time and end time in the upper right part of the **Event Center** screen.

- Step 5 Click **Refresh** to query alarm events.
- Step 6 Double-click an alarm event to play the alarm video, as shown in Figure 7-2.

Figure 7-2 Alarm video play screen



----End

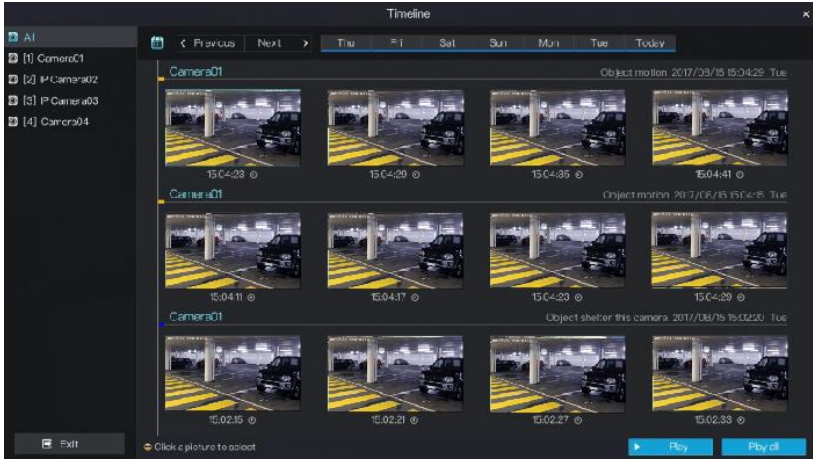
7.2 Timeline

The system allows you to set the timeline to play alarm videos presented by time on each day of a week.

Operation Steps

- Step 1 Choose **Alarm > Timeline** in the main menu to access the **Timeline** screen, as shown in Figure 7-3.

Figure 7-3 Timeline screen



Step 2 Select the alarm time to view the alarm records on that day.

Step 3 Double-click an alarm picture to play the alarm video.

----End

7.3 Clear alarm

Step 1 When the buzzer beeps, click **Clear alarm** in the main menu to clear the alarm.

----End