

# User Manual for: L3 Series 4MP & 8MP AI IP Cameras



## **About This Document**

## Purpose

This document describes how to use the web management system, including network access, network configuration, and troubleshooting.

## **Intended Audience**

This document is intended for:

Technical support engineers

Maintenance engineers

IP camera operators

## **Symbol Conventions**

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

Symbol	Description
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.
	Calls attention to important information, best practices and tips. NOTE is used to address information not related to personal injury, equipment damage, and environmental deterioration.

## **Special Announcement**

This manual may contain misprints, technology information that is not accurate enough, and description of product function and operation that is slightly inconsistent with the actual product. The manufacturer will update this manual according to product function enhancement or changes and regularly update the software and hardware described in this manual. Updated information will be added to new versions of this manual without prior notice.

This manual is only for reference. There may be slight difference among different models. Please refer to the actual products.

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# 1 Quick Start

## 1.1 Login and Logout

## $\triangle$ caution

To access the web interface through Microsoft Edge, Chrome or Firefox browser; Otherwise some functions may be unavailable.

#### Login

Step 1 Open Microsoft Edge, enter the IP address of the IP camera (DHCP is on by default) in the address box, and click on the **Enter** button.

The login page is displayed, as shown in Figure 1-1.

Figure 1-1 Login Page

Lib	erty
	English 🔻
User Name	
Password	

Step 2 Enter the user name and password.

The default name and password are both admin. Modify the password when you login the system for first time to ensure system security.

After modifying password, you need to wait at least three minutes then power off to make sure modifying successfully. Or login the Web again to test the new password.

You can change the system display language on the login page.

Step 3 Click Login to enter the interface.

The main page is displayed.

----End

#### Logout

Click **I** in the upper right to return to login page.

## 1.2 Change the Password

#### Description

For the first login, the change default password page is as shown in Figure 1-2.

Figure 1-2 Change the Default Password Page

New Passwor	d		0	
Confirm				
Commi				
	Cancel	OK		
	ouncor	OR		

Or click to change the password to login the system, as show in Figure 1-3.

Figure 1-3 Change Password Dialog Box

Old Password	স্মূল্য
New Password	Pypyt
Confirm	
assword Advice	
Advice the password len	ngth of eight characters.
Advice the password inc wercase letters and spec Advice the password car	cludes numbers, capital letters, ecial characters. an not be the same as username.

#### Procedure

Step 1 Input the old password, new password, and confirmation password.

Step 2 Click OK.

If the message "Change own password success" pops up, the password is successfully changed. If the password fails to be changed, the password advice is displayed. (For example, the new password length couldn't be less than eight.).

It is advised to restarted the device three minutes later after modifying password.

Step 3 Click OK.

The login page is displayed.

## 1.3 Browse Real-Time Videos

#### Download IPC Local Server

If you want to play H.265 encoded video, you should download the latest IPC Local Server, as shown in Figure 1-4, when you login to the web management system for the first time.

Figure	1-4	Down	load	the	Plugi	n Page
I IGGIC	1 1	DOWIN	louu	uic .	I IGSI	n i uge

Liberty Live Video Playback Pr	eople Counting Configuration		😫 admin 🔓 🚖 🕏 🗗
Step 1 Click "Please downl	oad the latest plugin", download th	e IPCLocal Server plugin.	
Step 2 Open the download f	ile to complete installation.		
Step 3 Click "Run", select d	lestination location as shown in Fig	ure 1-5.	
Η	Figure 1-5 Select Destination Locati	ion	
📃 Setup - IPCLocalSe	erver	– 🗆 X	
Select Destination Where should IPCL	Location ocalServer be installed?		
Setup will To continue, dick N	install IPCLocalServer into the following f ext. If you would like to select a differen	older. t folder, click Browse.	
C:\Program Files ()	x86)\IPCLocalServer	Browse	
At least 7, 1 MB of f	free disk space is required.		
At least 7.1 MB of 1	ree disk space is required.		
		Next > Cancel	

Step 4 Click "Next", ready to install the plugin, as shown in Figure 1-6.

Figure 1-6 Select additional tasks			
📑 Setup - IPCLocalServer			$\times$
Select Additional Tasks Which additional tasks should be performed?			
Select the additional tasks you would like Setup to perform while in IPCLocalServer, then click Next.	istalling		
Additional shortcuts:			
✓ Create a desktop shortcut			
< Back Ni	exts	Can	cel
C DOCK	ALY	Carr	

Step 5 Tick "Create a desktop shortcut", Click "Next" to install the plugin, as shown in Figure 1-7.

Figure 1-7 Installing

Setup is now ready to begin installing I	PCLocalServer on your o	omputer.	
Click Install to continue with the installa change any settings.	tion, or <mark>cl</mark> ick Back if you	want to revie	ew or
Destination location: C:\Program Files (x86)\IPCLocalSe Additional tasks: Additional shortcuts: Create a desktop shortcut	rver		^
¢			~

Step 6 Click "Finish", complete plugin installation, as shown in Figure 1-8.



Step 7 Reopen the browser after installing.

#### 

If the repair tips displayed when installing the control, please ignore the prompt, and continue the installation.

During the plugin installing, the browser should be closed.

----End

#### Description

To browse real-time videos, click Live Video. The Live Video page is displayed, as shown in Figure 1-9.

Figure 1-9 Live Video Page



On the Live Video page, you can perform the following operations:

Click **L** to stop playing a video.

Click **I** to play a video.

Double-click in the video area to enter the full-screen mode, and double-click again to exit.

Configure the PTZ. For details, see Configure the PTZ.

Control the PTZ. For details, see Controlling the PTZ.

Switch between three modes. For more details about how to configure streams, see 4.2 Video and Audio Stream .

Click **l** to snapshot and save the photos.

Click **c** to enable the local record.

AI interface is supplied for some models.

## 1.4 Main Page Layout

On the main page, you can view real-time videos, receive alarm and fault notifications, set parameters, change the password, and log out of the system. Figure 1-10 shows the main page layout. Table 1-1 describes the elements on the main page.

Liberty	Live Video	Playback	People Counting	Configuration		5 🖸 6 2 2 P
2023-08-14 (5)	:18:22 Mon	2	3	4		(4) Zoom SeB © Iria © □ Focus □ > Preset > Track > Scan > Tour > Idle > Timer > Extension 6
4254(2922-1520°30fm)		steam1	* 1 0	7	4005 kbps	

#### Figure 1-10 Main page layout

Table 1-1	Elements of	on the ma	in page
-----------	-------------	-----------	---------

No.	Element	Description
1	Real-time Video Area	Real-time videos are played in this page.
2	Playback	You can query the playback videos in this area. NOTE Only when the SD card or NAS has videos can you query the playback videos.
3	People Counting	Set the query condition to query the personnel count, the statistical can be shown in different types, such as line chart, histogram, list, for more detail information please refer to chapter 1.6. Only for Some Models.
4	Device configuration	You can choose a menu to set device parameters, including the device information, audio and video streams, alarm setting, privacy mask function and so on.
5	Q	When the device accepts an alarm signal, the alarm icon will display within 10s in the web management system. The alarm icon is displayed. You can click to view the alarm information.

No.	Element	Description
	lõ	Help of intercom
		About the intercom function:
		Description: Configure only Chrome browser in the HTTP environment, compatible with all browsers in HTTPS environments HTTP Environment Chrome Opens the intercom step:
		<ol> <li>Chrome Enter 'chrome://flags #unsafely-treat-insecure-origin-as-secure' in the address bar</li> <li>Set 'INSECURE Origins Treated as Secure' to 'Enabled'</li> </ol>
		3 Fill in the device domain name in the input box, multiple devices named ',' separation; example 'http: //192.168.0.123, http: //192.168.0.123: 8045'
	G	Download the latest plugin IPC Local Server.
	€∕	Change password, you can click it to change the password.
	D	Sign Out, you can click <b>I</b> to return to the login page.
6	PTZ	Only used for dome cameras, set PTZ parameters. Such as zoom in/zoom out, iris +/iris-, focus in / focus out, Preset / Track / Scan / Tour / Idle / Timer / Extension.
7	Switch to No Plugin Play	Support two methods to play live video, plugin play and no plugin play. For no plugin play, the default stream is stream 1.
8	Stream	Choose stream mode from drop-list. Set the parameters in " <b>Configuration</b> > <b>Streams</b> > <b>Basic Streams</b> ".
	3D	The 3D positioning function quickly rotates the PTZ and changes the focal length in specific scenarios. You can also change the focus by drawing rectangle frames. Only for Some Models.
	Pause /Play video	Pause the live video or play the video.
	Audio	Open/close the audio.
	Microphone	Open/close the microphone.
	Snapshot	Click the icon to snapshot the video and save the images to the specified location.
	Local Record	Record the video and save the file to the specified location.
	AI Interface	Click the icon to switch to AI live video, you can view the snapshots of AI multi object, there are face, plate, car, human body, riding. Only for Some Models.
	Mode	Only used for fisheye camera, click the icon to choose mode to play video.

Figure 1-11 AI multi object interface

The face frame will show the snapshot of human face.

The plate frame will show the snapshot of license plate.

## 1.5 Playback

Click "Playback" at web interface, if users install SD card, and there are video in SD card, click "Playback" and the playback video will show as in Figure 1-12.

Liberty	Live Video Playback People Counting Configuration	🚑 admin
		النصا ليسب السيك ليتما المسا
	2023/8/14 00:00:00 • 1h O6h O12h O24h	
	All V Start Time 2023/08/13 15/29/57 End Time 2023/08/14 15/29/57 Search	
	Play, click "speaker" to switch sound on or off.	
	Pause.	
	Stop.	
-	Frame back / Frame play.	
1 16X	$\frac{1}{8}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}$	d to play.
	Snapshot, click the icon to snapshot current interface	
icon a	Backup, click the icon to start backup, drag the bar to download recording quickly	, click the save the

Figure 1-12 Playback interface

video. Click **Cancel** to abandon. g

Figure 1-13 Record backup tip

Media Type	M
Start Time	2023/02/09 17:44:29
End Time	2023/02/09 17:45:16

All	~	Start Tim	Choose
Network Al	arm		
Personnel	Count Thresh	nold Alarm	
Retrograde	÷		
Multi-Loiter	ing		
Double Lin	e Crossing		
Single Line	Crossing		
Smart Moti	on		
Intrusion			
Audio Abno	ormal Alarm		
Day Night S	Switch Alarm		
Motion Alar	m		
I/O Alarm			
Alarm Rec	ord		
All			

Choose the type of alarm, set the start time and end time to

search alarm record quickly.

## 1.6 People Counting (Only for Some Models)

At **people counting** interface, you can view the personnel count throughout setting query condition (choose the detail time at date's pop-up window).

There are three modes to show the data, such as line chart, histogram, and list, as shown in Figure 1-14

Liberty	Live Video	Disubash	Beenie Counting	Continuention	종 admin 지 않 수 없 다
Ourse Condition	Live video	Раураск	People Counting	Configuration	
Query Condition	📈 Line Chart 🛄 Histogr	am 🌐 List			
Statistical Type Year Month Day				In Out	
Date 2023/08/14					
Query					
Download					
	1	2 3 4 5 6	7 8 9 10	11 12 13 14	15 16 17 18 19 20 21 22 23 24

#### Figure 1-14 People counting interface

Click "Download" to download the query result.

Choose the mode of showing result, such as line chart, histogram and list.

Click "Query" to query the data of people counting.

The data result can be saved to local folder.

----End

# 2 Parameters of PTZ(Only for Some Models)

## 2.1 Control and Configure the PTZ

#### Description

All PTZ functions are only available for High Speed Network Dome and device connected to an external PTZ. The focus and zoom action can be used for motorized cameras

#### **Controlling the PTZ**

When browsing real-time videos shot by a dome camera or a camera connected to an external PTZ, you can control the PTZ to view videos shot in different directions.

Click **DIVI** below the **Live Video** page to open the **PTZ Control** page as shown in Figure 2-1, you can click the eight arrow keys to move the PTZ in eight directions. You can also zoom the lens and adjust the focal length.



In the PTZ control area, you can perform the following operations:

Slide the slider left or right beyond the PTZ rotation keys, you can adjust the PTZ rotation speed.

Click the arrows on the 💓 to move the PTZ in eight directions.

 $\operatorname{Click}^{[\bigstar]}$  or  $[\bigstar]$  to adjust the focal length.

Click  $\bigcirc$  or  $\bigotimes$  to adjust the aperture.

Click  $\Box$  or  $\Box$  to focus.

Click  $\triangle$  to set due north direction. You can define any direction as due north as the reference point of the PTZ rotation.

Click 🖸 to enable automatic focus.

#### **Configure the PTZ**

It is available for the cameras with PTZ or connected to PTZ. **PTZ Configure** interface is as shown in Figure 2-2.

#### + 4 [‡] 700m 444 0 0 Iris P D' Focus △ North Auto Focus > Preset > Track > Scan > Tour > Idle > Timer > Extension

Figure 2-2 PTZ Configure area

In the PTZ configure area, you can perform the following operations:

Add, delete, and invoke preset positions.

Add, delete, and invoke tracks.

Add, delete, and invoke scans.

Add, delete, and invoke tours.

Set the idle.

Set the timer.

Set the extension.

Set Light On/Off and Brush function.

Brush is used to clean the lens. Light On/Off is used to control the infrared camera shields on and off.

#### 

**Brush** is available only for a camera with a brush or a camera shield. **Light On/Off** is available only for specific camera shields.

#### **3D** Positioning

Click below the Live Video page to configure the 3D positioning function.

The 3D positioning function quickly rotates the PTZ and changes the focal length in specific scenarios. You can also change the focus by drawing rectangle frames.

#### 

The default value of 3D Positioning is ON.

## 2.2 Configure and Invoke Preset Positions

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

The procedure is as follows:

Step 1 Configure a preset position.

- 1. Choose the preset ID.
- 2. Adjust the direction of PTZ to finish the preset position setting.
- 3. Click 📕 to save, click to rename.
- Step 2 Invoke a preset position.

Select a preset position from the **Preset** list to invoke the preset position. Click *icon* to invoke.

#### 

The special presets: Set No.64 preset, the PTZ functions restore to factory settings .

Invoke No.92 preset, set the start point of scan.

Invoke No.93 preset, set the end point of scan.

Invoke No.97 preset, it will invoke the SCAN 1.

Set No.97 preset, view the version of MCU and chip.

Invoke No.99 preset, scan by rotating 360°.

Invoke No.250 preset, enable the MCU temperature.

Invoke No.251 preset, disenable the MCU temperature.

Set No.252 preset, the PTZ parameters will be restore to factory settings.

Invoke 103 preset, the brush works once, this function is only for PTZ cameras with brush.

----End

## 2.3 Configure and Invoke Tracks

You can record a track to allow the camera to repeatedly rotate based on the preset track.

Step 1 Configure a track.

- 1. Set the track ID and name.
- 2. Click 🕨 to set the starting position of the track.
- 3. Use arrow keys in the PTZ Control area to set a required a track.
- 4. Click 📕 to finish the track setting.

2 Track2 3 Track3	1	Track1	
3 Track3	2	Track2	
	3	Track3	
4 Track4	4	Track4	
5 Track5	5	Track5	
6 Track6	6	Track6	
Add Track		о гласк — 3	~
ID 3	N	lame [	

Step 2 Invoke a track.

Select a track name from the **Track** list, click *to invoke the track*.

A maximum of six tracks can be configured.

## 2.4 Configure and Invoke Scans

You can configure a starting point and end point to allow the camera to repeatedly rotate from the starting point to end point.

Step 1 Configure a scan.

1. Click Scan.

The Scan Add page is displayed as shown in Figure 2-4.

2		
	scan2	
3	Scan3	
4	Scan4	
5	Scan5	
6	Scan6	

- 2. Set the scan ID and name.
- 3. Click 🕨 .
- 4. Use arrow keys in the PTZ Control area to set a start point and an end point.
- 5. Click **to** finish the scan setting.

```
Step 2 Invoke a scan.
```

Select a scan value from the **Scan** list box, click *to invoke the scan*.

#### 

A maximum of twelve scans can be configured.

## 2.5 Configure and Invoke Tours

You can configure a tour to allow the camera to repeatedly rotate based the tours. Each tour includes presets and wait time should be set.

- Step 1 Configure a tour.
  - 1. Click Tour.

The Tour Add page is displayed as shown in Figure 2-5.

Figure 2-5 Tour configuration

#### ~ Tour

Tour		~	
Preset		~	
Wait Tir	me		
	×	*	
dd Tour-			
Add Tour-	1	~	
Add Tour- ID Name	1	×	
Add Tour – ID Name Preset	1 Preset	* 1 * [	~

- 2. Set the tour ID and name.
- 3. Select a preset and set the wait time and click .
- 4. Continue to select a preset and set the wait time and click .
- 5. Repeat the step 3 and step 4 to add more presets.
- 6. Click **to** finish the tour setting.

Step 2 Invoke a tour.

Select a tour value from the **tour** list box, click *to invoke the tour*.

#### 

A maximum of twelve tours can be configured.

## 2.6 Configure Idles

You can enable idle to allow the camera to run the preset, track, scan and tour automatically after the waiting time (1 minute  $\sim$  240 minutes).

Step 1 Click Idle.

The Idle Add page is displayed as shown in Figure 2-6.

Figure 2-6 Idle configuration

Enable	OFF
	~

Step 2 Enable the Idle button.

Step 3 Set the idle type and name from list.

- Step 4 Set the wait time( $1 \min \sim 240 \min$ ).
- Step 5 Click *to finish the idle setting.*

## 2.7 Configure Timer

You can set the PTZ timer to allow the camera to invoke the preset, track, scan and tour automatically in the setting time and the camera will restore to the operation and location after the end time.

```
Step 1 Click Timer.
```

The **Set the PTZ Timer** page is displayed and click \_\_\_\_\_, the **Timer** page is displayed as shown in Figure 2-7.

ner Mod	e O	nce 🗸	Tim	e 0-0-0	)
Timer	Begin Ti	me End Tin	ne PTZ Type	Name	Clear
1	00:00	00:00	~	~	×
2	00:00	00:00	v	~	×
3	00:00	00:00	~	~	×
					· · · · ·

Figure 2-7 Timer configuration

#### Step 2 Enable Timer.

- Step 3 Set the Timer Mode. Timer mode includes Everyday and Once. You should set the time when once mode is selected.
- Step 4 Choose Once, click Time to choose day from the pop-up calendar.
- Step 5 Set Timers.

Select the begin time, end time, PTZ type and name from the drop-down list box.

A maximum of eight timers can be configured. Click Clear to delete the setting.

Step 6 Click *step* to finish the timer setting.

## 2.8 Configure Extension

You can set light On/Off, brush function and reboot action in extension page.

Click Extension, the Extension page is displayed as shown in Figure 2-8.

# Extension Image: Reboot Action Image: Reboot Action

Figure 2-8 Extension

Light function

Click to enable the light.

Light On/Off is used to control the infrared camera shields on and off.

Brush function

Click kt to enable brush.

Brush is used to clean the lens.

**Brush** is available only to a camera with a brush or a camera shield. **Light On/Off** is available only to specific camera shields.

Reboot Action

The camera will perform the selected PTZ type and name when the camera reboots and the reboot action is enabling.

- Click the reboot action button to enable reboot action.

- Set the PTZ Type and name from the drop-down list box.
- Click **v** to finish the reboot setting.

----End

# **3** Image Settings

## 3.1.1 Access the Image Settings Interface

#### **Operation Procedure:**

Step 1 On the web interface, enter **Configuration > Image Settings** interface.

Figure 3	-1	Image	Settings	Interface
	-			

Intervice       Projection       Compariation         Image Settings         Image Setings         Image S	Liberty	Live Video	Playback	People Counting	Configuration		edm 8 adm
	Device Info     Steam     Stream     Stream     Device     Stream     Device     Stream     Device     Advance Intelligent Analysis     Lintelligent Analysis     Advance Intelligent Analysis     Advance Intelligent Analysis     Advance Record     Device Record     Protocol     Protocol     Protocol     Device Log     Maintenance	Live Video	Playback	People Counting Settings Id:20:556 Mm Id:20:556 Mm Image Scene Expos Switch Mode Mone	Configuration Mode Scheme Ure WB DayNight Noise Rec Ure Bert Time OO U IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Standard mode	

Step 2 Choose **Debug Mode** on Mode item to set the parameters. You can set four schems.

----End

### 3.1.2 Mode

#### **Operation procedure:**

Step 1 Click Mode tag on image settings interface, the Mode page is displayed, as shown in Figure 3-2.

🖻 Image Settings

Figure 3-2 Mode Page

	Mode Schen	ne	Debug Moo	le
Mode Image Scene Expo	ure WB DayNight	t Noise Reduction	Enhance Image	Zoc <
Switch Mode None	Start Time 00	▼ : 00 ▼ : 00	Y	
		Laboration in the second		

Step 2 Choose **Debug Model** in the middle left corner to activate the image settings page.

Step 3 Tick the **Enable**, then set the start time and end time.

Step 4 Click Save to save the setting.

## 3.1.3 Image Setting

Figure 3-3 shows the image setting interface.

Figure 3-3 Image Setting Interface

🖻 Image	Settings
---------	----------

2 10 09 16:39:57 5m	Mode	Debug Mode 💌
	Scheme	Scheme 1 <b>v</b>
Mode Image Scene Exposure	WB DayNight Noise R	eduction Enhance Image Zoc < >
Brightness — + 50	Saturation —	+ 50
Sharpness - + 50	Contrast –	+ 50

Table 3-1	describes	the	image	setting	parameters.
10010 0 1					p

Table 3-1	Parameters	of Image	Settings	Parameters
		0	0	

Parameter	Description	Configuration Method
Brightness	It indicates the total brightness of an image. As the value increases, the image becomes brighter.	[Setting method] Drag the slider. [Default value] 50
Saturation	It indicates the color saturation of an image. As the value increases, the image becomes more colorful.	[Setting method] Drag the slider. [Default value] 50
Sharpness	It indicates the definition of an image. As the value increases, the image becomes more definitional.	[Setting method] Drag the slider. [Default value] 50

Parameter	Description	Configuration Method
Contrast	It indicates the contrast between the bright part and the dark part of an image. As the value increases, the contrast increases.	[Setting method] Drag the slider. [Default value] 50

## 3.1.4 Scene Mode

Figure 3-4 shows the **scene mode** interface.

Figure 3-4 Scene Mode Interface for IP Camera

🚖 Image Settings

2022 10 09 16:38:27 Svn	Mode	Deb	ug Mode 🔻
	Schen	ie Sch	eme 1 🔻
Mode Image Scene	Exposure WB DayNight	Noise Reduction Enhance	Image Zoc < >
Mirror	iormal 🔻		
Tip: Plea Analysis, changed.	pdate Motion Detection, Privacy Mask, Intelli 91 and OSD area settings after [Aisle Mode]/[N	igent √firror] was	
	Factory	Reset Cancel	Save

Table 3-2 describes the FFC mode parameters.

Table 3-2 Parameters of FFC

Parameter	Description	Configuration Method
Scene	It indicates the working mode of a camera. Outdoor: It applies to outdoor scenarios. Indoor: It applies to indoor scenarios.	[Configuration method] Select from the drop-down list [Default value] Outdoor

Parameter	Description	Configuration Method
Mirror	It is used to select the pixel location of an image. Normal: The image does not flip. Horizontal: The image flips to the left and right. Vertical: The image flips up and down. Horizontal and vertical: The image rotates at 180 degrees.	[Setting method] Select a value from the drop- down list. [Default value] Normal
Aisle Mode	The image rotates 90 degrees clockwise when aisle mode is enabled. For some models, when you choose stream 2 / 3, H.265 or H.264 video encode type, resolution chosen CIF or QVGA, it maybe not to play the live video. Only apply for some models.	[Setting method] Tick the Aisle mode. [Default value] Disable

## 3.1.5 Exposure

Figure 3-5 and Figure 3-6 shows the **Exposure** interface.

```
Figure 3-5 Exposure Interface for IP Camera
```

🖻 Image Settings





Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Im	na <mark>g</mark> i <
Exposure N	lode Auto		•	•]	Max Shutter	1/25		•
					Max Gain		+ 50	
					Iris	Close		
					Factory R	Reset Cance	4	Save

Figure 3-6	Exposure Interface for High-speed Dome

🖻 Image Settings

23-02-28 10:21	:57 Tues	Mode	Debug Mode 🔻
A	- Contraction of the second se	Scheme	Scheme 1 🔻
Mode I Exposure Mode	mage Scene Expo	sure WB DayNight Noise Re Max Shutter 1/25	eduction Enhance Imag( < >
Metering Mode	Full Metering	Max Gain —	+ 50

Table 3-3 describes Exposure parameters.

Table 3-3 Parameters of Exposure

Parameter	Meaning	Configuration Method
Exposure Mode	<ul> <li>The exposure modes include:</li> <li>Auto: The system performs auto exposure based on the monitoring environment.</li> <li>Manual: You can adjust the brightness of an image by setting the following three items: Shutter Setting, Iris Setting and Gain Setting.</li> <li>Shutter Priority: You can set Shutter Setting to fixed values. The iris and gain are automatically adjusted by the system.</li> <li>Iris Priority (for high-speed dome): You can set Iris Setting to fixed values. The shutter and gain are automatically adjusted by the system.</li> </ul>	[Setting method] Select a value from the drop-down list. [Default value] Auto

Parameter	Meaning	Configuration Method
Meter Mode	<ul> <li>It is used to select the metering area.</li> <li>Fulling Metering: During metering, all areas of an image have equal weight, that is, all areas are involved in the metering.</li> <li>Spot Metering: During metering, the central spot of an image has the highest weight.</li> <li>Partial Metering: During metering, the middle area (1/2 of the total area) of an image has the highest weight, and other areas have the lowest weight.</li> </ul>	[Setting method] Select a value from the drop-down list. [Default value] Whole
Max Shutter	The device automatically adjusts the shutter time based on the ambient brightness. The shutter time is less than or equal to the value of this parameter.	[Setting method] Select a value from the drop-down list. [Default value] 1/25
Max Gain	The device automatically adjusts the gain based on the external light. The gain is less than or equal to the value of this parameter.	[Setting method] Drag the slider. [Default value] 50
Iris (for high speed dome)	It is valid in manual mode and iris priority mode. You can adjust the brightness of an image by setting the iris. As the value increases, the brightness increases (when the shutter and gain remain the same). However, the camera movement automatically adjusts the shutter and gain in this mode. Therefore, the brightness of an image may not increase when you increase the iris.	[Setting method] Select a value from the drop-down list. [Default value] F1.6
Iris (for IP camera)	It is used to control the light admitted to the lens. The auto iris can be set to either of the following states: <b>Auto</b> The iris is automatically adjusted to control the light admitted to the lens. <b>Open fully</b> The iris is fully open.	[Setting method] Select a value from the drop-down list. [Default value] Auto
Iris Speed	It indicates the auto adjustment speed of the iris. As the value increases, the speed increases. Excessive speed may cause instability. <b>NOTE</b> This parameter is valid when the auto iris is enabled.	[Setting method] Drag the slider. [Default value] 50

Parameter	Meaning	Configuration Method
Fixed Gain	When the exposure Mode is Manual, you can set the fixed gain.	[Setting method] Drag the slider. [Default value] 50

## 3.1.6 WB Setting

Figure 3-7 shows the **WB Setting** interface.

Figure 3-7 WB Setting Interface

🚖 Image Settings

2022 10 09 16:37:05 812	Mode	Debug Mode 💌
	Scheme	Scheme 1
Mode Image Scene Exposur	WB DayNight Noise Redu	iction Enhance Image Zoc < >
Mode Aut	•	
Red Gain —	+ 0	
Blue Gain —	+ 0	
	Factory Reset	Cancel Save

Table 3-4 describes **WB Setting** parameters.

Parameter	Meaning	Configuration Method
Mode	Select WB mode according to different scenes for better image color reproduction. <b>Auto</b> : In automatic white balance (WB) mode, the system automatically performs white balance based on the monitoring environment.	[Setting method] Select a value from the drop- down list. [Default value] Auto
	Tungsten	
	Fluorescent	
	Daylight	
	Shadow	
	<b>Manual</b> : In manual WB mode, you can manually select a WB mode based on the monitoring environment.	
Red Gain	It indicates the gain applied to red channels. As the value increases, the color temperature becomes lower. <b>INOTE</b> This parameter is valid when <b>Manual Mode</b> is set to <b>Customized</b> .	[Setting method] Drag the slider. [Default value] 0
Blue Gain	It indicates the gain applied to blue channels. As the value increases, the color temperature becomes higher. <b>NOTE</b> This parameter is valid when <b>Manual Mode</b> is set to <b>Customized</b> .	[Setting method] Drag the slider. [Default value] 0

Table 3-4 Parameters of WB Setting

## 3.1.7 DayNight

The day night mode settings vary based on device models. For details, see the following sections.

Figure 3-8 shows the **DayNight Mode** interface.

🚖 Image Settings

Figure 3-8	DayNight Mode Interface
Figure 5-6	Daynight whole interface

	1-1-	Mode		Debug Mode
		Scher	ne	Scheme 1
Mode Image	Scene Exposure	WB DayNigh Light M	t Noise Redu	ction Enhance Image Zoc
D/N Setting Tim	ning 👻			100 A
D/N Setting Tim	iing    ▼	IR	LED Auto	▼
D/N Setting Tim DTN Time 18 NTD Time 06	ning ▼ ▼ : 00 ▼ ▼ : 00 ▼	 	LED Auto Near —	▼
D/N Setting Tin DTN Time 18 NTD Time 06	ing ▼ ▼ : 00 ▼ ▼ : 00 ▼	 	LED Auto Near — Centre — Far —	<ul> <li>+ 50</li> <li>+ 50</li> <li>+ 50</li> </ul>

Table 3-5 describes **DayNight Mode** parameters.

Table 3-5 Paran	neters of DNR
-----------------	---------------

Parameter	Meaning	<b>Configuration Method</b>
Parameter D/N Setting Mode	Meaning         It can be set to Auto, Day, Night or Timing.         Auto mode         The image color and filter status are         automatically switched based on the ambient         brightness. The filter keeps infrared light from         reaching the sensor during the day; The filter         allows all light to reach the sensor at night.         Day mode         The image is colored, and the filter is in the day	Configuration Method [Setting method] Select a value from the drop-down list. [Default value] Auto
	<ul> <li>The image is colored, and the inter is in the day state, preventing infrared light from entering the sensor.</li> <li>Night mode</li> <li>The image is black and white, and the filter is in the night state, allowing infrared light to enter the sensor.</li> <li>Timing</li> <li>Switching between day mode and night mode according to the set time.</li> </ul>	

Parameter	Meaning	<b>Configuration Method</b>
Switch Sensitivity	The sensitivity of switching day and night. The higher value of sensitivity, and the lower light intensity will switch to day.	[Setting method] Drag the slider. [Default value] 50
TRANSI. (D- >N) (dB)	It determines the day-to-night switching in auto mode. When the system gain is greater than the value of this parameter, the system enters the night mode. <b>NOTE</b> This parameter is valid in auto mode. The value of <b>TRANSI. (D-&gt;N)</b> must be greater than the value of <b>TRANSI. (N-&gt;D)</b> .	[Setting method] Drag the slider. [Default value] 70
TRANSI. (N- >D) (dB)	It determines the night-to-day switching in auto mode. When the system gain is smaller than the value of this parameter, the system enters the day mode. <b>NOTE</b> This parameter is valid in auto mode. The value of <b>TRANSL(D-&gt;N)</b> must be greater than the value of <b>TRANSL(N-&gt;D)</b> .	[Setting method] Drag the slider. [Default value] <b>30</b>
Delay(s)	The delay time of day to night or night to day. <b>ID NOTE</b> This parameter is valid in auto mode.	[Setting method] Drag the slider. [Default value] <b>0</b>
Light Mode	For different models, you can choose the light modes, such as IR LED, White LED, Intelligent dual light (there are two lights in camera, IR LED and white LED), and none. It depends on performance of cameras.	[Setting method] Select a value from the drop-down list.
IR LED	<ul> <li>Auto: The infrared lamp is enabled or disabled based on the external environment identified by the light dependent resistor (LDR).</li> <li>ON: The system enters the night mode forcibly.</li> <li>OFF: The infrared lamp is disabled. The filter and image color are switched based on the external environment identified by the LDR.</li> <li>Image color are suit in auto mode.</li> </ul>	[Setting method] Select a value from the drop-down list. [Default value] Auto
Strength	Strength of IR LED, as the value increases, the image becomes brighter.	[Setting method] Drag the slider. [Default value] 50
Parameter	Meaning	Configuration Method
-----------	-----------------------	---
DTN Time	Time of day to night.	[Setting method] Select a value from the drop-down list. [Default value] <b>18:00</b>
NTD Time	Time of night to day.	[Setting method] Select a value from the drop-down list. [Default value] <b>6:00</b>

#### Fill light settings

The camera fill light has four modes, there is intelligent dual light (the current fill light will switch to warm light after an alarm is triggered, and switch back to the original fill light for fill light 30s after the alert is released.), warm light, infrared lamp and close (Choose to close the fill light and the color of image will stay in the previous mode).

Different cameras can be set in different fill light modes, please set them according to the actual scene.

Day mode: It can be used in the scene with sufficient ambient light for 24 hours, do not turn on the fill light, and the image is in color.

Night mode: it can be used in a scene where there is insufficient ambient light for 24 hours, turn on the fill light (it can be selected according to the four modes of the fill light).

Auto mode: Automatically switch the set fill light mode according to the brightness of the environment.

Timing mode: Set the start and end time of the day, this time period is in day mode.

The brightness of the fill light can be selected between automatic and manual, automatic mode is meaning it can be adjusted automatically according to the current environment; manual mode, you can scroll to check or set the value to control.

# 3.1.8 Noise Reduction

Figure 3-9 shows the Noise Reduction interface.

🖻 Image Settings

22 10 09 16:31:37 Sun	Mode	Debug Mode 💌
	Scheme	Scheme 1 <b>v</b>
Mode Image Scene Exposure WB	DayNight Noise Red	uction Enhance Image Zoc < >
Max Strength — <b>5</b> 0	Max Strength —	+ 50

Figure 3-10 Noise Reduction Interface (manual)

Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image
2D NR	t Ma	nual	•		3D NR	Manual	•
Fixe	ed Strength —		+ 50		Fixed Stre	ength —	+ 50

Table 3-6 describes DNR parameters.

Table 3-6 Parameters of DNR Parameters

Parameter	Meaning	Configuration Method
		[Configuration method]
2D NR	Reduce noise of image.	[Default value]
		Auto

Parameter	Meaning	Configuration Method
3D NR	Reduce noise of image.	[Configuration method] Select from the drop-down list [Default value] Auto
Max Strength	It is valid in auto noise filter mode. When the parameter value is <b>0</b> , the noise filter is disabled. When the parameter value is greater than <b>0</b> , the noise filter is enabled, and the system automatically adjusts the noise filter level based on the ambient brightness without exceeding the value of this parameter.	[Setting method] Drag the slider. [Default value] 50
Fixed Strength	It is valid in a manual noise filter mode.	[Setting method] Drag the slider. [Default value] 50

# 3.1.9 Enhance Image

Figure 3-11 shows the enhance image interface and Table 3-7 shows the enhance image parameters.

### Figure 3-11 Enhance Image Interface

🖻 Image Settings

10 09 16:33:50 Sum	1-	1	Mode		Debug Mode	• •
	1 au		Scheme	1	Scheme 1	•
Mode Ima	age Scene	Exposure WB	DayNight	Noise Reduction	Enhance Image	Zoc < >
WDR		+ 50	🗌 Anti-shake			
□hlc		+ 50	Defog	-	+	50
BLC		+ 50				

Table 3-7 Parameters of Enhance Image

Factory Reset

Cancel

Save

Parameter	Meaning	Configuration Method
WDR	It is used to display the foreground and background at the same time in the environment with a large brightness difference. When the brightness difference is larger, you can increase the WDR level to obtain better image effect.	[Setting method] Tick the WDR mode and drag the slider. [Default value] 50
HLC	It provides a clearer view of an image in the highlight environment. When HLC is enabled, the total brightness of an image is reduced, allowing you to view objects in front of the highlight.	[Setting method] Tick the HLC mode and drag the slider. [Default value] 50
BLC	It provides a clearer view of an image in the backlight environment. When BLC is enabled, the total brightness of an image increases, allowing you to view objects in front of the backlight. Meanwhile, the objects behind the backlight are exposed excessively.	[Setting method] Tick the BLC mode and drag the slider. [Default value] 50

Parameter	Meaning	Configuration Method
Anti-shake	The shakes and visual angle of image will reduce when the camera shakes slightly and the anti-shake is enable.	[Setting method] Tick the Anti- shake mode.
DeFog	It provides a clearer view of an image in the fogged environment when DeFog is enabled. As the value increases, the image becomes clearer.	[Setting method] Tick the Defog mode and drag the slider. [Default value] 50

# 3.1.10 Zoom Focus (Only for Some Models)

Figure 3-12 and Figure 3-13 shows the zoom focus interface and Table 3-7 shows the zoom focus parameters.



			Mode	Debug Mode
			Scheme	Scheme 1
ode Image Scer	ne Exposure	WB	DayNight Noise Reduc	tion Enhance Image Zo
D/N Auto Focus	[##]]	[ŧ]	[+]Auto Focus Or	nce
	đ	đ	Lens Initializatio	n

1 1	Mode	Debug Mode
	Scheme	Scheme 1
Mode Image Sce	ne Exposure WB DayNight Noise Re Focus Mode Auto	eduction Enhance Image Zoc <
	Auto Focus Sensitivity –	+ 54

### Figure 3-13 Zoom Focus Interface for High Speed Dome

### 🖻 Image Settings

23-02-28 15:16:13 Tues	Mode Scheme	Debug Mode
Image Scene Exposu	e WB DayNight Noise Reduction Ent	hance Image Zoom Foc < >
Digital Zoom	Focus Mode semi-automatic	+ 50
	the least focus distance 6m	<b></b>

Table 3-8 Parameters of Zoom Focus

Parameter	Meaning	Configuration Method
D/N Auto Focus	It is used to trigger auto focus when day to night or night to day.	[Setting method] Tick the Auto focus.
Auto Focus Once	Click to trigger once auto focus.	[Setting method] Click the button.
Init	The lens of camera returns to the initial position.	[Setting method] Click the button.
Digital	This function enables digital zoom after an image is zoomed in by 37 times in optical mode.	[Setting method] Tick the Digital.

Parameter	Meaning	Configuration Method
Focus Mode	It can be set to the auto, manual or semi- automatic mode. Auto focus mode: The system automatically triggers focus based on application scenarios. Manual focus mode: You can trigger focus by using the buttons on the client. Semi-automatic focus mode: The system only automatically trigger focus once when the PTZ move or zoom in a scene.	[Configuration method] Select from the drop-down list [Default value] Semi-automatic
Auto Focus Sensitivity	When the sensitivity is high, the camera movement is more likely to focus again at slight changes of an image.	[Setting method] Drag the slider. [Default value] 50
The Least Focus Distance	It indicates the minimum focus distance. A camera does not focus when the distance is smaller than this value. For example, if the minimum focus distance is set to 1.5 m, a camera focuses only on objects more than 1.5 m away, and the changes of objects less than 1.5 m away do not affect the focusing.	[Configuration method] Select from the drop-down list [Default value] <b>3 m</b>

----End

# **4** Configure the Device

# 4.1 Device Information

## Description

The device information includes:

Device ID, name, type, model, manufacturer name and MAC address.

Hardware and software versions.

Number of video channels, number of alarm input channels, number of alarm output channels, and number of serial ports, network cards.

### 

You can modify the device name. All other parameters can only be viewed. When the device is upgraded, the device information is updated automatically.

## Procedure

Step 1 Click Configuration > Device Info.

The **Device Info** page is displayed, as shown in Figure 4-1.

### Figure 4-1 Device Info Page

🖻 Device Info

Device ID	003336	
Device Name	v	
MAC Address	00:1C:27:00:33:36	
Camera Type	IPDOME	
Product Model	L3IP4PTZ30XS	
Manufacturer Name	Liberty	
Hardware Version	V220042_3	
Firmware Version	v3.6.1603.1006.206.1.18.12.10.D01	
Uboot Version	v1.5	
Kernel Version	v2.3_2023033	
Channel Quantity	1	
Alarm Input Quantity	7	
Alarm Output Quantity	2	
Serial Port Quantity	1	
Network Card Quantity	1	
	Refresh	

### Step 2 View the device information, set the device name according to Table 4-1.

Parameter	Description	Setting
Device ID	Unique device identifier used by the platform to distinguish the devices.	[Setting method] The parameter cannot be modified.
Device Name	Name of the device.	[Setting method]
	NOTE	Enter a value manually.
	The device name cannot exceed	
	32 bytes or 10 simplified characters; otherwise, the	
	modification fails.	
MAC Address	N/A	[Setting method]

Parameter	Description	Setting
Camera Type		These parameters cannot be modified.
Product Model		
Manufacturer Name		
Hardware Version		
Firmware Version		
Uboot version		
Kernel version		
Video Channel(s)		
Channel Quantity		
Alarm Input Quantity		
Alarm Output Quantity		
Serial Port Quantity		
Network card Quantity		

Step 3 Click 🗹.

If the message "Apply success!" is displayed, click OK. The system saves the settings.

If the message "Apply failed!" is displayed, you must apply for the Parameter Configure permission from an administrator. For details, see 14.1 Configure a User.

----End

# 4.2 Video and Audio Stream

### Procedure

Step 1 Click Configuration > Stream > Base Stream.

The Stream Configuration page is displayed, as shown in Figure 4-2.

Figure 4-2	Stream	Configuration	Page	(CBR)
0		0	0	< / /

#### 🖻 Stream

Stream ID	1
Name	stream1
Video Encode Type	H265 💌
Video Encode Level	Mid
Audio Encode Type	G711_ALAW
Resolution	3840x2160 <b>•</b>
Frame Rate(fps)	30 💌
Frame Interval(Unit: Frame)	60 🔻
Bit Rate Type	CBR
Bit Rate(kbps)(500-16000)	6000
Smart Encode	OFF.
	Refresh Apply

### 🚖 Stream

Stream ID	1
Name	stream1

Video Encode Type	H265	•
Video Encode Level	Mid	w
Audio Encode Type	G711_AL	AW 🔻
Resolution	1920x108	0 💌
Frame Rate(fps)	30	•
I Frame Interval(Unit: Frame)	60	T
Bit Rate Type	VBR	*
Max Bitrate(kbps)(500-12000)	4096	
Image Quality	Mid	Ŧ
Smart Encode		ON
	Refresh	Apply

Step 2 Set the parameters according to Table 4-2.

Parameter	Description	Setting
Stream ID	The device supports at most three main streams. Streams 1 and 2 adopt H.264 code. The maximum resolution can be set for streams 1. Only a low resolution can be set for stream 2. Stream 3 is the lowest resolution. Stream 4 is the sub stream.	[Setting method] Select a value from the drop- down list box.
Name	Stream name. NOTE The stream name consists of Chinese character, number, character and underline.	[Setting method] Enter a value manually. The value cannot exceed 32 bytes. [Default value] Stream 1
Video Encode Type	The video codec determines the image quality and network bandwidth required by a video. Currently, the following codec standards are supported: MJPEG MJPEG is a standard intra-frame compression codec. The compressed image quality is good. No mosaic is displayed on motion images. MJPEG does not support proportional compression and requires large storage space. Recording and network transmission occupy large hard disk space and bandwidth. MJPEG is not applicable to continuous recording for a long period of time or network transmission of videos. It can be used to send alarm images. H.264 H.264 consists of H.264 low Profile, H.264 Main Profile and H.264 High profile. The performance of H.264 High Profile is higher than that of H.264 Main Profile, and the performance of H.264 Main Profile is higher than that of H.264 Base Profile. If a hardware decoding device is used, select the appropriate codec based on the decoding performance of the device. H.264 High Profile has the highest requirements on the hardware performance, and H.264 Base Profile has the lowest requirements for the hardware performance. H.265 H.265 is the advanced video encoding standard. It's the improvement standard from H.264. H.265 improves the streams, encoding quality and algorithm complexity to make configuration optimization.	[Setting method] Select a value from the drop- down list box. [Default value] H.264 High Profile NOTE The H.264 High Profile codec means high requirements on the hardware. If the hard-decoding capability is low, use H.264 Main Profile or H.264 Base Profile. When users choose the MJPEG for Stream 1, some functions will be error, such as the videos of FTP upload may not be play correctly.

### Table 4-2 Parameters of Stream Configuration

Parameter	Description	Setting
Audio Encode Type	<ul> <li>The following audio codec standards are supported:</li> <li>G711_ULAW: mainly used in North America and Japan.</li> <li>G711_ALAW: mainly used in Europe and other areas.</li> <li>RAW_PCM: codec of the original audio data.</li> <li>This codec is often used for platform data.</li> </ul>	[Setting method] Select a value from the drop- down list box.
Resolution	A higher resolution means better image quality. NOTE IP cameras support the different resolutions based on the model.	[Setting method] Select a value from the drop- down list box.
Frame Rate(fps)	Frame rate is the number of images, shots, or frames that a camera can take per second. The frames per second determine the smoothness of a video. A video whose frame rate is higher than 22.5 f/s is considered as smooth by human eyes. Frame rates for different frequencies are as follows: 50 Hz: 1–25 f/s 60 Hz: 1–30 f/s NOTE The frequency is set on the <b>Device Configuration</b> > <b>Camera</b> page. The biggest MJPEG coding format frame rate is 12 frames per second.	[Setting method] Select a value from the drop- down list
I Frame Interval(f)	I frame do not require other frames to decode. A smaller I frame interval means better video quality but higher bandwidth.	[Setting method] Select a value from the drop- down list
Bit Rate Type	The bit rate is the number of bits transmitted per unit of time. The following bit rate types are supported: Constant bit rate (CBR) The compression speed is fast; however, improper bit rate may cause vague motion images. Variable bit rate (VBR) The bit rate changes according to the image complexity. The encoding efficiency is high and the definition of motion images can be ensured.	[Setting method] Select a value from the drop- down list box.
Max Bitrate (500-12000)	Indicates the maximal value of the bit rate. the different models may have different ranges, please refer to actual product.	[Setting method] Enter a value manually.
Image Quality	The video quality the camera output.	[Setting method] Select a value from the drop- down list box.

Parameter	Description	Setting
Smart Encode	Smart Encode.	[Setting method]
	Smart encode includes H.264 & H.265. The storage space will be reduced fifty percent when smart encode is enabled.	on to enable Smart Encode.
	Only main stream supports smart encode.	

Step 3 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings.

If the message "Apply failed!" is displayed, you must apply for the Parameter Configure permission from an administrator. For details, see 14.1 Configure a User.

If a message indicating that the bit rate invalid is displayed, enter a new bit rate value.

----End

# 4.3 ROI Parameter

### Procedure

Step 1 Click Configuration > Stream > ROI.

The **ROI** page is displayed, as shown in Figure 4-3.

### Figure 4-3 ROI Configuration Page

# 🖻 ROI

	1
level	5
Area Name	2515
	raw Clear

Step 2 Set the parameters according to Table 4-3.

Table 4-3	Parameters of ROI
-----------	-------------------

Parameter	Description	Setting
Stream	Stream ID.	[Setting method]
		Select a value from the drop- down list box.
		[Default value]
		Stream 1

Parameter	Description	Setting
Enable	Enable the ROI	[Setting method] Click the button. [Default value] OFF
Area ID	ROI area ID	[Setting method] Select a value from the drop- down list box. [Default value] 1
Level	The visual effect of ROI. The higher the level is, the clearer the area is; the more blurred outside the area.	[Setting method] Select a value from the drop- down list box. [Default value] 5
Area Name	The marked name used for areas.	[Setting method] Enter a value manually. The value cannot exceed 32 bytes.

Step 3 Click **Draw** to show the red frame, drag the four corners of rectangle to adjust the position.Step 4 Click **Apply**.

The message "Apply success!" is displayed, and the system saves the settings.

----End

# 4.4 Snapshot

### Procedure

```
Step 1 Click Configuration > Stream > Snapshot.
```

The ROI page is displayed, as shown in Figure 4-4.

Figure 4-4 Snapshot Configuration Page

```
🚖 Snapshot
```

Snapshot Resolution	1280x720	
Snapshot Quality	Mid	÷

Step 2 Set the parameters according to Table 4-3.

Parameter	Description	Setting
Snapshot Resolution	Choose resolution of snapshot.	[Setting method] Select a value from the drop- down list box. [Default value] <b>1280*720</b>
Snapshot Quality	Choose the quality of snapshot.	[Setting method] Click the button. [Default value] <b>Mid</b>

 Table 4-4
 Parameters of Snapshot Configuration

----End

# 4.5 Local Network

## Description

Local network parameters include:

IP protocol IP address Subnet mask Default gateway Dynamic Host Configuration Protocol (DHCP) Preferred Domain Name System (DNS) server Alternate DNS server MTU

### Procedure

Step 1 Choose Configuration > Device > Local Network.

The Local Network page is displayed, as shown in Figure 4-5.

#### Figure 4-5 Local Network Page

### 🚖 Local Network

Network Card ID	1 🔻
IP Protocol	IPv4 ▼
DHCP	ON
DHCP IP	192.168.0.120
Preferred DNS Server	192.168.0.1
Alternate DNS Server	192.168.0.2
MTU(1280-1500)	1500
	Refresh Apply
Local Network	
letwork Card ID	1
P Protocol	IPv4
НСР	OFF
P Address	192.168.0.180
ubnet Mask	255.255.255.0
Default Gateway	192.168.0.1
Preferred DNS Server	192.168.0.1
Iternate DNS Server	192.168.0.2
ITU(1280-1500)	1500
	Refresh Apply

Step 2 Set the parameters according to Table 4-5.

Table 4-5 Local Network Parameters

Parameter	Description	Setting
Network Card ID		[Default value] 1
IP Protocol	IPv4 is the IP protocol that uses an address length of 32 bits.	[Setting method] Select a value from the drop-down list box. [Default value] IPv4

Parameter	Description	Setting
Obtain IP address automatically	The device automatically obtains the IP address from the DHCP server.	[Setting method] Click the button on to enable <b>obtain IP</b> <b>address automatically</b> . NOTE To query the current IP address of the device, you must query it on the platform based on the device name.
DHCP IP	IP address that the DHCP server assigned to the device.	N/A
IP Address	Device IP address that can be set as required.	[Setting method] Enter a value manually. [Default value] 192.168.0.120
Subnet Mask	Subnet mask of the network adapter.	[Setting method] Enter a value manually. [Default value] 255.255.255.0
Default Gateway	This parameter must be set if the client accesses the device through a gateway.	[Setting method] Enter a value manually. [Default value] 192.168.0.1
Preferred DNS Server	IP address of a DNS server.	[Setting method] Enter a value manually. [Default value] 192.168.0.1
Alternate DNS Server	IP address of a domain server. If the preferred DNS server is faulty, the device uses the alternate DNS server to resolve domain names.	[Setting method] Enter a value manually. [Default value] 192.168.0.2
MTU	Set the maximum value of network transmission data packets.	[Setting method] Enter a value manually. NOTE The MTU value is range from 1280 to 1500, the default value is 1500, Please do not change it arbitrarily.

Step 3 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings. The message "Set network parameter success, Please login system again" is displayed. Use the new IP address to login to the web management system.

If the message "Invalid IP Address", "Invalid Subnet Mask", "Invalid default gateway", "Invalid primary DNS", or "Invalid space DNS" is displayed, set the parameters correctly.

----End

# 4.6 Device Port

### Description

You must configure the HTTP port, control port, Real Time Streaming Protocol (RTSP) port and SSL Control port for device route mapping in a LAN.

### Procedure

Step 1 Choose **Configuration > Device > Device Port**.

The Device Port page is displayed, as shown in Figure 4-6.

Figure 4-6 Device Port Page

🖻 Device Port

Control Port	30001
Http Port	80
RTSP Port	554
HTTPS Port	443
SSL Control Port	20001

Refresh	Apply
---------	-------

### Device Port

Control Port(1025-65535)	30001
HTTP Port(1-65535)	80
RTSP Port(1-65535)	554
HTTPS Port(1-65535)	443

Refresh Apply

#### Step 2 Set the parameters according to Table 4-6.

Parameter	Description	Setting	
Control Port	Port used for audio and video transfer and signaling interaction.	[Setting method] Enter a value manually. [Default value] 30001	
HTTP Port	Port used in web access.	[Setting method] Enter a value manually. [Default value] 80	
RTSP Port	RTSP protocol port.	[Setting method] Enter a value manually. [Default value] 554	
HTTPS Port	Hyper Text Transfer Protocol over Secure Socket Layer	[Setting method] Enter a value manually. [Default value] 443	
SSL Control Port	Secure socket layer control port. Only for Some Models.	[Setting method] Enter a value manually. [Default value] 20001	

 Table 4-6
 Device Port Parameters

### 

It's not recommended to modify the control port, for details about the value ranges of the control port, HTTP port and SSL Control port, see the communication matrix.

### Step 3 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings.

If the message "Invalid Control Port, please input an integer between 1025 and 65535" is displayed, enter correct port numbers.

----End

# 4.7 Date and Time

### Description

On the Date and Time page, you can modify the date and time. Parameters that can be set include:

Time zone and daylight-saving time (DST)

Date and time

Network Time Protocol (NTP) server

# Procedure

Step 1 Choose **Configuration > Device > Date and Time**.

The **Date and Time** page is displayed, as shown in Figure 4-7. Table 4-7 describes the parameters.

### Figure 4-7 Date and Time Page

### Date and Time

l ime Zone	(GWT) Greenwich weart time : Dublin, Lumburgh, Lisbon, London •		
Daylight Savings Time	ON		
Begin Time	Mar 🗸 5th 💙 Sun 💙 1:00 🗸		
End Time	Oct ♥ 5th ♥ Sun ♥ 2:00 ♥		
	4		
Device Time	02/27/2019 15:14:08		
Current PC Time	02/27/2019 15:11:08		
Set Manually	02/27/2019 15:13:24		
NTP	ON		
NTP Server Addr			
NTP Port	123		
Check the time interval(greater than 10s)	3600		
	1		

Table 4-7	Date and Time Parameters
-----------	--------------------------

Parameter	Description	Setting	
Time Zone	N/A	[Setting method] Select a value from the drop- down list box. [Default value] Greenwich mean time	

Parameter	Description	Setting	
Daylight Saving Time	<ul> <li>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.</li> <li>NOTE</li> <li>DST is the practice of advancing clocks so that evenings have more daylight and mornings have less. Currently, about 110 countries in the world use DST. Different countries have different DST provisions. Since March 27, 2011, Russia has started to use permanent DST.</li> </ul>	[Setting method] Click the button on to enable <b>Daylight Saving Time</b> .	
Device Time	Device display time.	[Setting method] Synchronize the time from the PC. Enter a value manually.	
Current PC Time	Time on the current PC.	N/A	
Set Manually	Enables you to manually set the device time.	[Setting method] Click <b>Set Manually</b> and set the date and time in the format <i>YYYY-MM-DD</i> <i>HH:MM: SS</i> .	
NTP	IP address or domain name of the NTP server.	[Setting method] Click the button on to enable <b>NTP</b> and enter a value manually.	
NTP Server Addr	The NTP server IP.	[Setting method] Enter a value manually.	
NTP Port	Port number of the NTP server.	[Setting method] Enter a value manually. [Default value] 123	
Check the time interval (at least 10 s)	Set time interval to check if the device time synchronizes with the NTP server time.	[Setting method] Enter a value manually. [Default value] <b>3600</b>	

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

- Step 3 (Optional) Click the button on to enable **Daylight Saving Time** and specify the DST start time and end time.
- Step 4 Modify the device time.

Synchronizing time from the PC

#### Click Current PC Time.

Manually setting the device time

- Click Set Manually.
- A time setting control is displayed.
- Set the date and time.

### Step 5 Configure the NTP.

- 1. Click the button on to enable **NTP**.
- 2. Enter the IP address or domain name of the NTP server, the port number and the time interval.

Step 6 Click .

The message "Apply success!" is displayed and the system saves the settings.

----End

# 4.8 Camera

### Procedure

```
Step 1 Choose Configuration > Device > Camera.
```

The Camera page is displayed, as shown in Figure 4-8. Table 4-8 describes the parameters.

Figure 4-8 Camera Page

Camera	
Video System	NTSC
Video Defresh Frequency	60

Refresh

Table 4-8 Camera parameters

Parameter	Description	Setting
Video System	The options are as follows: PAL: Used in Europe and China mainland, India, Pakistan, etc. NTSC: Used in USA, Japan, South Korea, and Taiwan Province of China, etc.	[Setting method] Select a value from the drop- down list box. [Default value] PAL NOTE Whether the video system can be changed depends on the device model.

Parameter	Description	Setting
Video Refresh Frequency	The options are as follows: 50 Hz: corresponds to the PAL system. 60 Hz: corresponds to NTSC system.	[Setting method] Follow the video standard.

Step 2 Enter a channel name.

### 

The channel name must be within the length of 0 to 32 bytes, it is combined with digital and character (except for some special character, such as  $< > \% \& \, =+|$ ).

### Step 3 Click .

The message "Apply success!" is displayed.

### 

If the video system is modified, the message "The device will be restart, are you sure to modify?" is displayed, and the system automatically saves the settings. The settings take effect after the device restarts.

----End

# 4.9 **OSD**

## Description

The on-screen display (OSD) function allows you to display the device name, channel ID and name, time, and other customized contents on videos. You can drag the OSD frames to anywhere you want to put.

When the resolution is D1 and CIF, the OSD customized in web interface can show at most 22 words normally.

The OSD support simplified Chinese, English, digital and some special character only.

### Procedure

Step 1 Choose Configuration > Device > OSD.

The OSD page is displayed, as shown in Figure 4-9.

### Figure 4-9 PTZ OSD Page

### 🖻 OSD

2003-01-01 01:16:46 Sat	Align Left     Time       Align Left     Focusing on the state
	Custom OSD         Align Left▼         Align Left▼

	Advanced
Time Format	YYYY-MM-DD hh:mm:ss ww 💌
Font Color	~
Font Size	Mid 🗸
Font Transparency	Opaque 🔻
Font On lighted back	OFF
Device Name	OFF
Focusing on the state	ON
Twelve-hour System	OFF
Display Week	ON
	Refresh Apply

🖻 OSD

Time3-02-28 11:44:16 Tues	PTZ Position	Align Left	Time
	PTZ Temperatoke	Align Left	PTZ Position
	Status display of locus	Align Left	PTZ Action
And a second sec	and the second	Align Left	PTZ Temperature
	1 10	Align Left	Status display of focus
		Custom OSD	
		Align Left▼       [         Align Left▼       [         Align Left▼       [	

		Advanced
Time Format	YYYY-MM-DD h	nh:mm:ss ww 🔻
Font Color		v
Font Size	Mid	v
Font Transparency	Opaque	•
Font On lighted back		OFF
Device Name		OFF
PTZ Position		ON
PTZ Action		ON
PTZ Temperature		ON
Status display of focus		ON
Twelve-hour System		OFF
Display Week		ON

Step 2 Set the parameters according to Table 4-9.

# 

There are at most seven OSD display areas..

Table 4-9 OSD Parameters

Parameter	Description	Setting
Time	Indicates whether to display the time.	[Setting method] Tick the time.
Focusing on the State	Displays the state of focusing on. NOTE: Only Supplied for camera of auto focusing lens.	[Setting method] Tick the Focusing on the state.
Custom OSD	Enables you to enter a line of characters.	<ul> <li>[Setting method]</li> <li>1. Tick the custom OSD list.</li> <li>2. Enter the characters.</li> <li>Click  to save the value.</li> </ul>
Time Format	Format in which the time is displayed.	[Setting method] Select a value from the drop- down list box. [Default value] YYYY-MM-DD hh:mm:ss ww

Parameter	Description	Setting
Font Color	Set the font color.	[Setting method] Select a value from the drop- down list box. [Default value] Blank
Font Size	Set the font size.	[Setting method] Select a value from the drop- down list box. [Default value] Mid
Font Transparency	Set the font transparency.	[Setting method] Select a value from the drop- down list box. [Default value] Opaque
Font on Lighted Back	Enable the font on lighted back.	[Setting method] Click the button on to enable <b>Font on lighted back</b> .
Device Name	Indicates whether to display the device name.	[Setting method] Click the button on to enable <b>Device Name</b>
PTZ Position	Only used for PTZ cameras	[Setting method] Click the button on to enable
PTZ Action		[Setting method] Click the button on to enable
PTZ Temperature		[Setting method] Click the button on to enable
Status Display of Focus	The status of focusing will be showing on live video.	[Setting method] Click the button on to enable
Twelve-hour System	The time format shows at twelve-hour system.	[Setting method] Click the button on to enable
Display Week	The week will show.	[Setting method] Click the button on to enable

Step 3 Click **Advanced**, set the parameter of "Time Format", "Font Color", "Font Transparency", "Font on lighted back", and so on.

Step 4 Click Apply.

The message "Apply success!" is displayed And the system saves the settings.

----End

# 4.10 Audio Input

### Description

On the Audio Input page, you can set the audio input mode and volume.

### Procedure

### Step 1 Choose Configuration > Device > Audio Input.

The Audio Input page is displayed, as shown in Figure 4-10. Table 4-10 describes the parameters.

Figure 4-10 Audio Input Page

### 🛱 Audio Input



Refresh

Apply

Parameter	Description	Setting
Enable Audio Input	Indicates whether to enable the audio input function.	[Setting method] Click the button on to enable audio input.
Audio Input Type	Audio input types include: Line In / Internal An active audio input is required.	[Setting method] Select a value from the drop- down list box.
Audio Input Volume	Allows you to adjust the audio input volume.	[Setting method] Slide the slider left or right. [Default value] 50 NOTE The value ranges from 0 to 100.

#### Table 4-10 Audio Input Parameters

### Step 2 Click Apply.

The message "Apply success!" is displayed. And the system saves the settings.

----End

# 4.11 Audio Output

## Description

On the Audio Output page, you can set the audio input mode and volume.

### Procedure

### Step 1 Choose Configuration > Device > Audio Output.

The Audio Output page is displayed, as shown in Figure 4-11. Table 4-11 describes the parameters.

Figure 4-11 Audio Output Page

# 🚖 Audio Output

Audio Output Volume

Audio Output	ON (
Audio Output Type	External
Audio Output Volume	
Audio Output	Refresh Apply
Audio Output	ON (
Audio Outout Type	Internal

- -

Refresh

Apply

+ 7

Table 4-11	Audio	Output	Parameters
------------	-------	--------	------------

Parameter	Description	Setting
Enable Audio Output	Indicates whether to enable the audio output function.	[Setting method] Click the button on to enable audio output.
Audio Output Type	Microphone types include: External An active audio output is required. Internal means the camera own speaker.	[Setting method] Select a value from the drop- down list box.

Parameter	Description	Setting
Audio output Volume	Allows you to adjust the audio output volume.	[Setting method] Slide the slider left or right. [Default value] 50 NOTE The value ranges from 0 to 100.

Step 2 Click Apply.

The message "Apply success!" is displayed. And the system saves the settings.

----End

# 4.12 Dome PTZ (Only for Some Models)

### Description

The high speed dome cameras are connected to 485 keyboards, users can use the keyboard to control the cameras' PTZ menu.

### Procedure

```
Step 1 Choose Configuration > Device > Dome PTZ.
```

The **Dome PTZ** page is displayed, as shown in Figure 4-12.

Figure 4-12 Dome PTZ Page



Step 2 Input the PTZ address, the default is 1.

Step 3 Click Apply.

The message "Apply success!" is displayed. And the system saves the settings.

----End

# 4.13 CVBS Function (Only for Some Models)

## Preparation

Connect a display device to the VIDEO OUT port.

### Description

When the analog output function is enabled, the IP camera can send analog signals to a video server or display device through the VIDEO OUT port.

### Procedure

```
Step 1 Choose Configuration > Device > CVBS.
```

The BNC Video Output page is displayed, as shown in Figure 4-13.

Figure 4-13 BNC Video Output Page

Ţ	BNC	Video	Output	

IP Show	ON

Step 2 Click the button on to enable BNC Video Output.

### Step 3 Click Apply.

The message "Apply success!" is displayed. And the system saves the settings.

----End

# 4.14 System Service

### Procedure

Step 1 Choose Configuration > Device > System.

The System page is displayed, as shown in Figure 4-14.

#### Figure 4-14 System Service Page

#### 🝷 System

Language	English
	4
Web Mode	HTTP 🔻
	×
CA Cert	
Server Cert	÷
Server Key	
	4
	Defeat

Step 2 Select an language from the Language drop-down list box.

- Step 3 Click *(K)*, the message "Apply success" is displayed.
- Step 4 Click **OK**, the system saves the settings.
- Step 5 Select a Web Mode from the Web Mode drop-down list box.
- Step 6 Click *step* (1), the message "This operation will lead to the device to restart, continue?" is displayed.
- Step 7 Click OK, the device restarts and saves the settings automatically.
- Step 8 Choose the CA cert, server cert, server cert, server key from the local folder,
- Step 9 Click *step* to update the certificate.
  - ----End

# 4.15 Voice Denoise (Only for Some Models)

### Description

On the **Voice Denoise** page, you can enable the Voice Denoise to reduce the effect of external environmental noise on the built-in MIC.

### Procedure

Step 1 Choose Configuration > Device > Voice Denoise

The Voice Denoise page is displayed, as shown in Figure 4-15.

.

Figure 4-15 Voice Denoise Page

/oice Denoise	T	0

Step 2 Click the Voice Denoise button to enable the Voice Denoise.

Step 3 Click Apply.

The message "Apply success" is displayed, the system saves the setting.

----End

# 4.16 Software Licenses

### Procedure

```
Step 1 Click Configuration > Device > Software Licenses.
```

The Software Licenses page is displayed, as shown in Figure 4-16.

Figure 4-16 Software Licenses Page

```
😤 Software Licenses
```

Open Source Software Licenses

Step 2 Click View Licenses, you can view the open source software licenses.

----End

View Licenses

# **5** Configure External Devices

Refresh

Apply

# 5.1 External PTZ Parameters (Only for Some Models)

### Description

When the IP camera is connected to an external PTZ, you can set external PTZ parameters, such as **PTZ Protocol**, **PTZ Address**, **Baud Rate**, and **Data Bits**.

# $\triangle$ caution

This function is available only for a camera connected to an external PTZ. The PTZ address must be set to the address of the external PTZ; otherwise, the external PTZ cannot be used.

### Procedure

#### Step 1 Choose Configuration > External Device > PTZ keyboard.

The PTZ page is displayed, as shown in Figure 5-1.

Figure 5-1 PTZ Page

#### PTZ Keyboard

Enable	ON
Protocol Type	PECOL_D
nterface Type	RS485
Serial Port	COM1
Baud Rate(bps)	9600
Data Bits(bit)	8
Stop Bits(bit)	1
Parity Verification	None

Step 2 Set the parameters according to Table 5-1.
Parameter	Description	Setting
PTZ	Enable this function if the device connects to an external PTZ. NOTE This check box is dimmed for an IP dome camera.	[Setting method] Click the button on to enable PTZ configuration.
PTZ Protocol	Protocol used by the external PTZ, such as PELCO_D and PELCO_P.	[Setting method] Select a value from
PTZ Address	Address of the external PTZ.	the drop-down list box.
Serial Port	The default value is <b>COM1</b> .	NOTE
Baud Rate	Baud rate used by the external PTZ. The value ranges from 300 bit/s to 115200 bit/s. The default value is <b>4800</b> bit/s.	When external PTZ parameters are configured, these parameters must match
Data Bits	The value must match the setting used by the external PTZ. It can be set to a value ranging from 4 to 8. Generally, the value is 8.	the settings on the external PTZ.
Stop Bits	N/A	
Parity Verification	N/A	

Table 5-1 PTZ Keyboard Parameters

### Step 3 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

# **6** Configure Intelligent Analysis

### 6.1 Perimeter

### Description

The intrusion function refers to that an alarm is generated when target objects (such as person, car, and both person and car) enter the deployment area.

### Procedure

Step 1 Select Intelligent Analysis > Perimeter to access the perimeter interface, as shown in Figure 7-1

2023-08-15 15:09:38 Tues Mode Normal Mode • Enable OFF Sensitivity 5 • Limit Type OFF **Output Channel** 0102 Audible Alarm OFF Alarm Record OFF SMTP Off. Clear UnArmed Armed 0 3 4 5 10 14 15 17 18 19 20 22 23 24 2 11 12 13 16 21 Sun Mon Tue Wed Thu Fri Set Refresh Apply

Figure 6-1 perimeter Setting Interface

Perimeter



Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop- down list [Default value] Normal mode
Enable	Enable the button to enable the alarm.	[How to set] Click the button on. [Default value] <b>OFF</b>
Sensitivity	The sensitivity of detecting the target, when the value is high, the target can be detected easily, but the accuracy will be lower.	[How to set] Choose from the drop- down list [Default value] 5
Limit Type	Enable to choose the limit type (person or car / person / car) from type drop-down list.	[How to set] Click the button on. [Default value] <b>OFF</b>
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered. Only for Some Models.	[How to set] Click to select an ID.
Audible alarm	Enable, when the alarm happens, it will be play audio to alarm. Choose the audible alarm file (set at the "Configuration > Alarm > Audible Alarm Output").	[How to set] Click to enable Audio Detection Alarm [Default value] <b>OFF</b>
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only for some models.	[How to set] Click the button on. [Default value] <b>OFF</b>
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] <b>OFF</b>
SMTP	Enable the button to enable SMTP sever. More details please refer to chapter 13.5	[How to set] Click to enable SMTP. [Default value] <b>OFF</b>

Table 6-1 perimeter Parameter Description

Parameter	Description	Setting
FTP Upload	Enable the button to enable File Transfer Protocol. More details please refer to chapter 13.6.	[How to set] Click to enable FTP Upload. [Default value] <b>OFF</b>
Whitelight Alarm	When the <b>DayNight</b> mode is chosen <b>Night</b> mode, and the light is <b>IR LED</b> or <b>NONE</b> , this linkage action is valid. Enable to whitelight alarm when it triggers the alarm, the whitelight will be on. Only for Some Models.	[How to set] Click the button on. [Default value] OFF

Move the cursor to the drawing interface and click to generate a point, move the cursor to draw a line, and then click to generate another point. This is how a line is generated. In this way, continue to draw lines to form any shape, and right-click to finish line drawing, as shown in Figure 7-2.

#### Figure 6-2 Deployment Area Setting Interface

### 

A drawn line cannot cross another one, or the line drawing fails. Any shape with 8 sides at most can be drawn. The quantity of deployment areas is up to 8.

#### Step 4 Set deployment time

Click the armed icon Armed to set the arming time. Click the Unarmed icon UnArmed to set the unarming time.

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 deployment time within 0:00-24:00 from Monday to Sunday.

**Deleting deployment time:** Click UnArmed to delete the selected deployment time. The methods are same as set deployment time.

### 

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





----End

### 6.2 Single Virtual Fence

### Description

A single virtual fence is a line that is set at a concerned position within the monitored field of view and specifies the forbidden travel direction, an alarm is generated when target objects (such as person or car) cross this line.

### Procedure

Step 1 Select Intelligent Analysis > Single Virtual Fence to access the Single Virtual Fence setting interface, as shown in Figure 7-4.



🖻 Single Virtual Fence

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							Ala	arm R	ecord	ł						OFF
							SN	ITP								OFF
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Armed	] UnArme	ed														
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Armed 0 1 2 3	UnArme	ed 6 7	8	9 10	11	12 13	14	15	16	17	18	19	20	21	22	23 2
Armed Arme	UnArme	ed 6 7	8	9 10	11	12 13	14	15	16	17	18	19	20	21	22	23 2
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🚖 Single Virtual Fence

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Step 2 Set all parameters of the single line crossing. Table 7-2 describes the specific parameters.

Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop- down list [Default value]
		Normal mode
Enable	Enable the button to enable the alarm.	[How to set] Click the button on . [Default value] <b>OFF</b>
Sensitivity	The sensitivity of detecting the target, when the value is high, the target can be detected easily, but the accuracy will be lower.	[How to set] Choose from the drop- down list [Default value] 5
Limit Type	Enable to choose the limit type (person or car / person / car) from type drop-down list.	[How to set] Click the button on. [Default value] <b>OFF</b>

Parameter	Description	Setting
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered. Only for some models.	[How to set] Click to select an ID.
Audible Alarm	Enable, when the alarm happens, it will be play audio to alarm. Choose the audible alarm file (set at the "Configuration > Alarm > Audible Alarm Output"). Only for some models.	[How to set] Click the button on. [Default value] OFF
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only for some models.	[How to set] Click the button on. [Default value] <b>OFF</b>
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] <b>OFF</b>
SMTP	Enable the button to enable SMTP sever. Details please refer to chapter 10.5.	[How to set] Click to enable SMTP. [Default value] <b>OFF</b>
FTP Upload	Enable the button to enable File Transfer Protocol. Details please refer to chapter 10.6.	[How to set] Click to enable FTP. [Default value] <b>OFF</b>
Whitelight Alarm	When the <b>DayNight</b> mode is chosen <b>Night</b> mode, and the light is <b>IR LED</b> or <b>NONE</b> , this linkage action is valid. Enable to whitelight alarm when it triggers the alarm, the whitelight will be on. Only for Some Models.	[How to set] Click the button on. [Default value] OFF

**Drawing a line:** Move the cursor to the drawing interface, hold down the left mouse button, and move the cursor to draw a line. When you release the left mouse button, a Single Virtual Fence is generated.

**Setting a single line crossing:** Click a line (and the trip line turns red) to select the single line crossing and set its direction as **positive**, **reverse** or **bidirectional**, or **delete the selected** line. You can also press and hold left mouse button at the endpoint of a single line crossing and move the mouse to modify the position and length of this single line crossing. You can right-click to delete the single line crossing, as shown in Figure 7-5.



#### Figure 6-5 Deployment Area Setting Interface

### 

Try to draw the single line crossing in the middle, because the recognition of a target takes time after target appearance on the screen and an alarm is generated only when the object is recognized to have crossed the single line crossing.

The single line crossing which detects person foot as the recognition target cannot be too short, because a short single line crossing tends to miss targets.

Step 4 Set deployment time.

For more details, please refer to 7.1 Step 4.

----End

### 6.3 Double Virtual Fences

### Description

Double virtual fences refer to two lines that are set at a concerned special position within the field of view and specify the forbidden travel direction. when target objects (such as person or car) move along the set travel direction and cross these lines in a certain order (line 1 followed by line 2) in pass max time, an alarm is generated.

### Procedure

Step 1 Select Intelligent Analysis > Double Virtual Fences to access the Double Virtual Fences setting interface, as shown in Figure 7-6.

#### Figure 6-6 Double Virtual Fences Setting Interface





Step 2 Set all parameters of the double line crossing. Table 7-3 describes the specific parameters.

Table 6-3	Parameters	of Double	Virtual Fence
-----------	------------	-----------	---------------

Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop- down list [Default value] Normal mode
Enable	Enable the button to enable the alarm.	[How to set] Click to enable. [Default value] <b>OFF</b>

Parameter	Description	Setting
Limit Type	Enable to choose the limit type (person or car / person / car) from type drop-down list.	[How to set] Click the button on. [Default value] OFF
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered. Only for some models.	[How to set] Click to select an ID.
Audible Alarm	Enable, when the alarm happens, it will be play audio to alarm. Choose the audible alarm file (set at the "Configuration > Alarm > Audible Alarm Output"). Only for some models.	[How to set] Click the button on. [Default value] OFF
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only for some models.	[How to set] Click the button on. [Default value] <b>OFF</b>
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] <b>OFF</b>
SMTP	Enable the button to enable SMTP sever. For more details, please refer to chapter 13.5	[How to set] Click to enable SMTP. [Default value] OFF
FTP Upload	Enable the button to enable File Transfer Protocol. For more details, please refer to chapter 13.6.	[How to set] Click to enable FTP. [Default value] <b>OFF</b>
Whitelight Alarm	When the <b>DayNight</b> mode is chosen <b>Night</b> mode, and the light is <b>IR LED</b> or <b>NONE</b> , this linkage action is valid. Enable to whitelight alarm when it triggers the alarm, the whitelight will be on. Only for Some Models.	[How to set] Click the button on. [Default value] OFF

**Drawing a line:** Move the cursor to the drawing interface, hold down the left mouse button, and move the cursor to draw two lines. When you release the left mouse button, two numbered virtual fences are generated. Choose either of the double line crossing to set the direction to Positive or Reverse.

Setting double line crossing: Click one of the double line crossing (and the virtual fence turns red) to select this virtual fence and set the direction to **Positive** or **Reverse**, or delete the selected line. You can

also press and hold left mouse button at the endpoint of a virtual fence and move the mouse to modify the position and length of this virtual fence. You can right-click to delete the double line crossing, as shown in Figure 7-7.





### 

The two virtual fences are in sequential order. An alarm is generated only when a target crosses virtual fence 1 and then virtual fence 2 within the set maximum passing time.

Try to draw double line crossing in the middle, because the recognition of a target takes time after target appearance on the screen and an alarm is generated only when the object is recognized to have crossed the double line crossing.

The double line crossing which detect person foot as the recognition target cannot be too short, because short double line crossing tend to miss targets.

The double line crossing is not supported to modify the direction manually, you can change the dierection by choosing **Reverse**.

Step 4 Set deployment time.

More details please refer to 7.1 Step 4

----End

### 6.4 Multi-Loitering

### Description

Multi-Loitering allows setting the shortest loitering time for multiple targets of specified type (such as person or car) within the deployment area in the field of view. When the loitering time of the multiple targets within this area meets the set shortest loitering time, an alarm is generated.

### Procedure

Step 1 Select Intelligent Analysis > Multi-Loitering to access the Multi-Loitering setting interface, as shown in Figure 7-8.

### Figure 6-8 Multi-Loitering Setting Interface

### 🖻 Multi-Loitering

3 4 5 6 7	Clear	Limit Nu Minimu Maximu The Shu Output Audible Alarm F	umbers m Number im Number ortest Time(5-60s) Channel Alarm Record	ON 1 5 10 10 11 0FF	
3 4 5 6 7	Clear	Minimu Maximu The Sh Output Audible Alarm F	m Number Im Number ortest Time(5-60s) Channel Alarm Record	1 5 10 112 0FF	~
3 4 5 6 7	Clear	Maximu The Sh Output Audible Alarm F	im Number ortest Time(5-60s) Channel Alarm Record	5 10 102 0FF	~
3 4 5 6 7	Clear	The Sh Output Audible Alarm F	ortest Time(5-60s) Channel Alarm Record		~
3 4 5 6 7	Clear	Output Audible Alarm F	Channel Alarm Record		~
3 4 5 6 7	Clear	Audible Alarm F	Alarm Record	OFF	~
3 4 5 6 7	Clear	Alarm F	Record	OFF	~
3 4 5 6 7	8 9 10 11				-
3 4 5 6 7	8 9 10 11				
		1 12 13 14	15 16 17 18 19	20 21 22 23	24

Step 2 Set all parameters of multi-loitering. Table 7-4 describes the specific parameters.

Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop-down list [Default value] Normal mode
Enable	Enable the button to enable the alarm.	[How to set] Click the button on. [Default value] <b>OFF</b>
Limit Numbers	When Limit Numbers is set to OFF, an alarm is generated no matter how many people loiter. When Limit Numbers is set to ON, if the minimum number is set to 2 alarm is generated for more than 2 people loitering.	[How to set] Click to enable Limit Numbers.

Table 6-4 Multi-Loitering Parameter Description

Parameter	Description	Setting
The Shortest Time (Sec)	The time that a target object spends in loitering cannot be less than the shortest loitering time. Setting range: 5-60 seconds.	[How to set] Input a value in the area box. [Default value] 10 s
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered. Only for some models	[How to set] Click to select an ID.
Audible Alarm	Enable, when the alarm happens, it will be play audio to alarm. Choose the audible alarm file (set at the "Configuration > Alarm > Audible Alarm Output"). Only for some models.	[How to set] Click the button on. [Default value] OFF
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only for some models.	[How to set] Click the button on. [Default value] <b>OFF</b>
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] <b>OFF</b>
SMTP	Enable the button to enable SMTP sever. For more details, please refer to chapter 13.5	[How to set] Click to enable SMTP. [Default value] <b>OFF</b>
FTP Upload	Enable the button to enable File Transfer Protocol. For more details please refer to chapter 13.6	[How to set] Click to enable FTP Upload. [Default value] <b>OFF</b>
Whitelight Alarm	When the <b>DayNight</b> mode is chosen <b>Night</b> mode, and the light is <b>IR LED</b> or <b>NONE</b> , this linkage action is valid. Enable to whitelight alarm when it triggers the alarm, the whitelight will be on. Only for Some Models.	[How to set] Click the button on. [Default value] <b>OFF</b>

Move the cursor to the drawing interface and click to generate a point, move the cursor to draw a line, and then click to generate another point. This is how a line is generated. In this way, continue to draw lines to form any shape, and right-click to finish line drawing, as shown in Figure 7-9.



Figure 6-9 Deployment Area Setting Interface

### 

A drawn line cannot cross another one, or the line drawing fails. Any shape with 8 sides at most can be drawn . The quantity of deployment areas is up to 8.

### Step 4 Set deployment time

For more details please refer to 7.1 Step 4.

----End

## 6.5 Wrong Way

### Description

Wrong Way allows setting the travel direction criteria for a target within an area on the video screen. When a target of specified type (such as people or car) within this area moves in the set travel direction, an alarm is generated.

### Procedure

Step 1 Select Intelligent Analysis > Wrong Way to access the Wrong Way setting interface, as shown in Figure 7-10.

#### Figure 6-10 Wrong Way Setting Interface

### 🖻 Wrong Way

		Enable	OFF
		Output Channel	0102
		Audible Alarm	OFF .
		Alarm Record	CPF
		SMTP	J OFF
		FTP Upload	OFF
	Clear		
0 1 2 3 4 5 8 7	8 9 10 11 12 1	3 14 15 16 17 18 19	20 21 22 23 24
on and a second s			
88			
bd			
	이 아무지는 친 아무지 못하는 것		

Step 2 Set all parameters of Retrograde . Table 7-5 describes the specific parameters.

Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop-down list [Default value] <b>Normal mode</b>
Enable	Enable the button to enable the alarm.	[How to set] Click the button on. [Default value] <b>OFF</b>
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered. Only for Some Models.	[How to set] Click to select an ID.

 Table 6-5
 Wrong Way Parameter Description

Parameter	Description	Setting
Audible Alarm	Enable, when the alarm happens, it will be play audio to alarm. Choose the audible alarm file (set at the "Configuration > Alarm > Audible Alarm Output"). Only for some models.	[How to set] Click the button on. [Default value] OFF
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only for Some Models.	[How to set] Click the button on. [Default value] OFF
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] <b>OFF</b>
SMTP	Enable the button to enable SMTP sever. More details, please refer to chapter 13.5	[How to set] Click to enable SMTP. [Default value] <b>OFF</b>
FTP Upload	Enable the button to enable File Transfer Protocol. For more details, please refer to chapter 13.6	[How to set] Click to enable FTP Upload. [Default value] <b>OFF</b>
Whitelight Alarm	When the <b>DayNight</b> mode is chosen <b>Night</b> mode, and the light is <b>IR LED</b> or <b>NONE</b> , this linkage action is valid. Enable to whitelight alarm when it triggers the alarm, the whitelight will be on. Only for Some Models.	[How to set] Click the button on. [Default value] OFF

Move the cursor to the drawing interface and click to generate a point, move the cursor to draw a line, and then click to generate another point. This is how a line is generated. In this way, continue to draw lines to form any shape, and right-click to finish line drawing, move the arrow in the field can set the direction of converse. as shown in Figure 7-11.



#### Figure 6-11 Deployment Area Setting Interface

### 

A drawn line cannot cross another one, or the line drawing fails. Any shape with 8 sides at most can be drawn . The quantity of deployment areas is up to 8.

#### Step 4 Set deployment time

For more details, please refer to 7.1 Step 4.

----End

### 6.6 Illegal Parking

### Description

Illegal parking allows setting the dwelling time criteria for a target within the deployment area on the video screen. When the dwelling time of a target of specified type (car) within this area meets the set allowed parking time, an alarm is generated.

### Procedure

Step 1 Select Intelligent Analysis > Illegal Parking to access the Illegal Parking setting interface, as shown in Figure 7-12.

### Figure 6-12 Illegal Parking Setting Interface

### 🚖 Illegal Parking



Step 2 Set all parameters for illegal parking. Figure 7-13 describes the specific parameters.

Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop-down list [Default value] <b>Normal mode</b>
Enable	Enable the button to enable the alarm.	[How to set] Click Enable to enable. [Default value] OFF

Figure 6-13 Description of Parameters for Illegal Parking

Parameter	Description	Setting
Allowed Parking Time (Sec)	An alarm is generated when the object left time is longer than the shortest dwelling time. Setting range: 5-60 seconds.	[How to set] Input a value in the area box. [Default value] 5
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered.	[How to set] Click to select an ID.
Audio Detect Alarm	Enable to choose the sound alarm file from type drop-down list. When it alarms the device will play alarm sound file. Supplied for some models.	[How to set] Click Enable to enable. [Default value] OFF
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] OFF
SMTP	Enable the button to enable SMTP sever. Details please refer to <i>chapter 10.5</i> .	[How to set] Click to enable SMTP. [Default value] OFF
FTP Upload	Enable the button to enable File Transfer Protocol. Details please refer to <i>chapter 10.6</i> .	[How to set] Click to enable FTP Upload. [Default value] OFF
Trace Linkage	ace Linkage Enable the button to enable trace linkage, when the relevant behaviors are detected, the camera will trace the car or person until the object is disappear, then the camera come back the original position. Supplied for some models	
Video Stream Draw Line	Enable the button, the draw line will show at live video when the stream is stream 2.	[How to set] Click to enable Video Stream Draw Line. [Default value] OFF

Move the cursor to the drawing interface and click to generate a point, move the cursor to draw a line, and then click to generate another point. This is how a line is generated. In this way, continue to draw lines to form any shape, and right-click to finish line drawing, as shown in Figure 7-14



Figure 6-14 Deployment Area Setting Interface

### 

A drawn line cannot cross another one, or the line drawing fails. Any shape with 8 sides at most can be drawn . The quantity of deployment areas is up to 8.

Step 4 Set deployment time.

----End

### 6.7 People Counting

User can draw line to count the number of people at the special area.

### Procedure

Step 1 Select Intelligent Analysis > People Counting to access the People Counting setting interface, as shown in Figure 7-15.

### Figure 6-15 People counting

### 🖻 People Counting



Enable	ON (	~
OSD Enable	ON	
Counting Clear Interval	1Day 🔻	
	Clear Counting	
Area Type	Line 🔻	
A->B	Out	
B->A	In	
Set Correction Value	OFF	~



Over People Number Al	arm
Alarm Threshold	1000
Output Channel	□1
Audible Alarm	OFF
Alarm Record	OFF
SMTP	OFF
FTP Upload	OFF
Whitelight Alarm	OFF V

#### Figure 6-16 People counting for PTZ cameras.

### 🚖 People Counting

	1								•					Mo	ode				N	orma	Mod	le	•	
										A	1	-	2	En	able								OFF	
7												1		08	SD EI	nable	Э					(	OFF	
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						-	-				1										Clea	r Cou	nting	
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Step 2 Set all parameters of illegal parking. Table 7-6 describes the specific parameters.

Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop- down list [Default value] Normal mode
Enable	Enable the button to enable the alarm.	[How to set] Click the button on. [Default value] <b>OFF</b>

 Table 6-6 Description of Parameters for People Counting

Refresh

Apply

Parameter	Description	Setting
OSD Enable	Enable the OSD, the count data will show on live video screen.	[How to set] Click the button on. [Default value] <b>OFF</b>
Counting Clear Interval	The camera will clear counting data at the setting interval. 10 min /half- hour /1 hour /2 hours /12 hours /1 day /custom time(hh : mm) Click the "Clear Counting", clearing the data immediately.	[How to set] Choose from drop-down list. [Default value] <b>12 hours</b>
Area Type	Draw a line on live video screen. The label of A and B indicate out and in.	[How to set] Choose from drop-down list. [Default value] Line
Set Correction Value	Enable, set the count correction value, it can be positive or negative. For example, if there are 30 people enter the area before counting, input 30 to correct. If 30 people go out the area, input -30.	[How to set] Enable /Input a value in the area box. [Default value] <b>0</b>
Over People Number Alarm	Enable, if the counting number is ovwe the threshold, it will alarm.	[How to set] Click the button on. [Default value] <b>OFF</b>
Alarm Threshold	The threshold of activating alarm.	[How to set] Enable /Input a value in the area box. [Default value] 1000
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered. Only for Some Models.	[How to set] Click to select an ID.
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only for Some Models.	[How to set] Click the button on. [Default value] <b>OFF</b>
Audible Alarm	Enable, when the alarm happens, it will be play audio to alarm. Choose the audible alarm file (set at the "Configuration > Alarm > Audible Alarm Output"). Only for some models.	[How to set] Click the button on. [Default value] OFF

Parameter	Description	Setting
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] <b>OFF</b>
SMTP	Enable the button to enable SMTP sever. The parameters of SMTP can be set at <b>Configuration &gt; Network Service &gt;</b> <b>SMTP</b> interface.	[How to set] Click to enable SMTP. [Default value] OFF
FTP Upload	Enable the button to enable File Transfer Protocol. The parameters of FTP can be set at <b>Configuration &gt; Network Service &gt; FTP</b> interface.	[How to set] Click to enable FTP Upload. [Default value] <b>OFF</b>
Whitelight Alarm	When the <b>Day Night</b> mode is chosen <b>Night</b> mode, and the light is <b>IR LED</b> or <b>NONE</b> , this linkage action is valid. Enable to whitelight alarm when it triggers the alarm, the whitelight will be on. Only for Some Models.	[How to set] Click the button on. [Default value] <b>OFF</b>

Move the cursor to the drawing interface and click to generate a point, move the cursor to draw a line, and then click to generate another point. This is how a line is generated. In this way, continue to draw lines to form any shape, and right-click to finish line drawing.

Step 4 Set deployment time

For more details please refer to 7.1 Step 4..

----End

### 6.8 Smart Motion

### Description

The smart motion function refers to that an alarm is generated when target objects (such as person, car, and both person and car) move at the deployment area.

### Procedure

Step 1 Select Intelligent Analysis > Smart Motion, as shown in Figure 7-17.

### Figure 6-17 Smart Motion Setting Interface

### 🚖 Smart Motion

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0 Sun Mon Tues Wed Thur Ft	Arm 1	ed [	3	UnA 4	5	ed	8	7	8	9	1	0 11	1 12	: 13	14	15	16	17	7 1	8 1	9	20	21	22	23	24	
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0 Sun Mon Tuee Wed Thur Fri Sat	Arm 1	ed [	3	UnA 4	5	ed ; (		7	8	9	1(	D 11	1 12	: 13	14	15	16	11		8 1	9	20	21	22	23	24	

### 🚖 Smart Motion



Step 2 Set all parameters of smart motion. Table 7-7 describes the specific parameters.

Table 6-7	Smart Motion Parameter Description
10010 0 /	

Parameter	Description	Setting
Mode (only for PTZ camera)	There are two modes can be chosen, normal mode and preset point mode. When you choose the preset point mode, please choose one which is set in advanced.	[How to set] Choose from the drop- down list [Default value] Normal mode
Enable	Enable the button to enable the alarm.	[How to set] Click the button on. [Default value] <b>OFF</b>
Sensitivity	The sensitivity of detecting the target, when the value is high, the target can be detected easily, but the accuracy will be lower.	[How to set] Choose from the drop- down list [Default value] 5

Parameter	Description	Setting
Limit Type	Enable to choose the limit type (person or car / person / car) from type drop-down list.	[How to set] Click the button on. [Default value] <b>OFF</b>
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered. Only for Some Models.	[How to set] Click to select an ID.
Audible Alarm	Enable, when the alarm happens, it will be play audio to alarm. Choose the audible alarm file (set at the "Configuration > Alarm > Audible Alarm Output").	[How to set] Click to enable Audio Detection Alarm [Default value] <b>OFF</b>
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only for some models.	[How to set] Click the button on. [Default value] <b>OFF</b>
Alarm Record	Enable the button to enable the alarm record.	[How to set] Click to enable Alarm Record. [Default value] <b>OFF</b>
SMTP	Enable the button to enable SMTP sever. More details please refer to chapter 13.5	[How to set] Click to enable SMTP. [Default value] OFF
FTP Upload	Enable the button to enable File Transfer Protocol. More details please refer to chapter 13.6.	[How to set] Click to enable FTP Upload. [Default value] <b>OFF</b>
Whitelight Alarm	When the <b>DayNight</b> mode is chosen <b>Night</b> mode, and the light is <b>IR LED</b> or <b>NONE</b> , this linkage action is valid. Enable to whitelight alarm when it triggers the alarm, the whitelight will be on. Only for Some Models.	[How to set] Click the button on. [Default value] OFF

Move the cursor to the drawing interface and click to generate a point, move the cursor to draw a line, and then click to generate another point. This is how a line is generated. In this way, continue to draw lines to form any shape, and right-click to finish line drawing.

### 

A drawn line cannot cross another one, or the line drawing fails. Any shape with 8 sides at most can be drawn. The quantity of deployment areas is up to 8.

Step 4 Set deployment time

Click the armed icon Armed to set the arming time. Click the Unarmed icon UnArmed to set the unarming time.

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 deployment time within 0:00-24:00 from Monday to Sunday.

**Deleting deployment time:** Click UnArmed to delete the selected deployment time. The methods are same as set deployment time.

### 

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



Figure 6-18 Deployment Time Setting Interface

----End

# 7 Configure Intelligent Tracking (Only for Some Models)

## 7.1 Intelligent Tracking

### Description

This function is only used for high speed dome.

Intelligent tracking is able to recognize the basic features such as the position, shape, contour and color of the target with a special algorithm. After comparing and matching with images for each frame, the positions of the target in each frame of the video image are generated, and the motion track of the target is generated. The method performs a real-time monitoring of targets and automatically controls the gimbal to track moving objects. The automatic target tracking function is that the dome camera can continuously track the moving target of the pre-made scene, and automatically adjusts the camera zoom focus according to a moving target distance, and the dome automatically returns to the preset scene when the moving target disappears.

### Procedure

Step 5 Select **Configuration > Intelligent Tracking** to access the Intelligent Tracking setting interface, as shown in Figure 8-1.

Figure 7-1 Intelligent Tracking Interface

### 🖻 Intelligent Tracking

Intelligent Tracking	OFF
Calibration Coefficient	+ 1
Trace Magnify	+ 1
Time Of Duration(sec.)	+ 120
Start Point	None
Tracking Type	Person

Refresh

Apply

Step 6 Set all parameters for intelligent tracking. Table 8-1 describes the specific parameters.

Parameter	Description	Setting
Enable	Click the button on to enable the intelligent tracking	[How to set] Click the button on. [Default value] OFF

 Table 7-1
 Description of Parameters for Intelligent Tracking

Calibration Coefficient	It is equivalent to a control coefficient, and real-time tracking doubling rate nonlinear positive correlation; Usually the higher the installation height, the greater the calibration coefficient value; it ranges from 1 to 30.	[Setting method] Drag the slider. [Default value] 1
Trace Magnify	It is the value of lens zoom, which has a large influence on the real-time tracking magnification; it ranges from 0 to 30.	[Setting method] Drag the slider. [Default value] 7
Time of Duration (sec.)	The maximum time of a tracking period, it ranges from 0 to 300 s.	[Setting method] Drag the slider. [Default value] 120
Start Point	Start point of the tracking, you can choose the preset or none. The preset should be set in advanced.	[Setting method] Choose from drop- down list. [Default value] None
Tracking Type	Choose the tracking type, person or car.	[Setting method] Choose from drop- down list. [Default value] <b>Person</b>

----End

# **8** Configure the Alarm Function

Different cameras may have different alarm linkage actions. It depends on the performance of cameras, please refer to actual products.

### 8.1 Alarm Output

### Procedure

Step 1 Choose Configuration > Alarm > Alarm Output.

The Alarm Output page is displayed, as shown in Figure 9-1.

Figure 8-1 Alarm Output Page

### 🛱 Alarm Output

Alarm Output	1
Valid Signal	
Alarm Output Mode	Switch Mode
Alarm Time(ms)(0:Continuous)	0
Timing Alarm Output	OFF
Manual control	Start Stop
	Refresh Apply

Step 2 Set the parameters according to Table 9-1.

Table 8-1	Alarm I/O	Parameters
-----------	-----------	------------

Parameter	Description	Setting
Alarm Output	ID of the alarm output channel. NOTE The number of alarm output channels depends on the device model.	[Setting method] Select a value from the drop-down list box. [Default value] 1
Name	Alarm output channel name.	[Value range] 0 to 32 bytes

Parameter	Description	Setting
Valid Signal	The options are as follows: <b>Close</b> : An alarm is generated when an external alarm signal is received. <b>Open</b> : An alarm is generated when no external alarm signal is received.	[Setting method] Select a value from the drop-down list box. [Default value] Close
Alarm Output Mode	<ul> <li>When the device receives I/O alarm signals, the device sends the alarm information to an external alarm device in the mode specified by this parameter. The options include the switch mode and pulse mode.</li> <li>NOTE If the switch mode is used, the alarm frequency of the device must be the same as that of the external alarm device. If the pulse mode is used, the alarm frequency of the external alarm device. If the pulse mode is used, the alarm frequency of the external alarm device. If the pulse mode is used, the alarm frequency of the external alarm device. If the pulse mode is used, the alarm frequency of the external alarm device can be configured.</li></ul>	[Setting method] Select a value from the drop-down list box. [Default value] Switch Mode
Alarm Time (ms) (0: Continuous)	Alarm output duration. The value <b>0</b> indicates that the alarm remains valid.	[Setting method] Enter a value manually. [Default value] 0 [Value range] 0 to 86400 seconds
Timing Alarm Output	Enable timing alarm output, set the schedule to time alarm. NOTE If there are two alarm outputs, this setting is only valid for Alarm output 1.	[Setting method] Enable [Default value] OFF
Manual Control	Control the alarm output.	N/A

Step 3 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

### 8.2 Disk Alarm

### Procedure

Step 1 Choose Configuration > Alarm > Disk Alarm.

The **Disk Alarm** page is displayed, as shown in Figure 9-2.

Apply

Refresh

#### Figure 8-2 Disk Alarm Page

### 🖻 Disk Alarm

Disk Full Alarm	OFF
Alarm Interval(10-86400S)	10
Output Channel	

Step 2 Click the button on to enable disk alarm.

Step 3 Configure the Alarm Interval parameters.

Step 4 Select Out Channel number (Please refer to the actual product).

Step 5 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

### 8.3 Network Alarm

### Procedure

Step 1 Choose Configuration > Alarm > Network Alarm.

The Network Alarm page is displayed, as shown in Figure 9-3.

Figure 8-3 Network Alarm Page

Network Alarm

Network Card ID	1	•
Abnormal Alarm		ON
Alarm Interval(10-86400S)	10	
Output Channel		□1
Alarm Record		OFF
	Refresh	Apply

- Step 2 Click the button on to enable Abnormal alarm.
- Step 3 Configure the network alarm interval.
- Step 4 Select **Output Channel** number. You can enable alarm record when you install SD card in advance.
- Step 5 Click Apply.

The message "Apply success!" is displayed, the system saves the settings.

----End

### 8.4 Day Night Switch Alarm

### Description

At the setting time, enable the day night switch alarm, when it happens day night switched, it will send alarm signal.

### Procedure

Step 1 Choose Configuration > Alarm > Day Night Switch Alarm.

The Day Night Switch Alarm page is displayed, as shown in Figure 9-4.

Figure 8-4 Day Night Switch Alarm

#### 🖻 Day Night Switch Alarm

Enable	ON
Output Channel	□1□2
Alarm Record	OFF
SMTP	OFF
FTP Upload	OFF



Step 2 Click the button to enable day night switch alarm.

Step 3 Configure the day night switch alarm schedule.

Click the armed icon Armed to set the arming time. Click the Unarmed icon UnArmed to set the unarming time.

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 deployment time within 0:00-24:00 from Monday to Sunday.

**Deleting deployment time:** Click UnArmed to delete the selected deployment time. The methods are same as set deployment time.

### 

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

Step 4 Click the button on to enable Alarm Record.

Step 5 Click the button on to enable SMTP.

Step 6 Click the button on to enable FTP Upload.

Step 7 Click Apply.

The message "Apply success!" is displayed, the system saves the settings

----End

### 8.5 I/O Alarm Linkage

### Description

Alarm linkage refers to linkage alarm output. When receiving an alarm from the alarm input port, the camera performs linkage alarm output, and operate based on the linkage policy.

On the I/O Alarm Linkage page, you can perform the following operations:

Enable the I/O alarm function.

Configure the I/O alarm schedule.

Configure the alarm output channel.

### Procedure

Step 1 Choose Configuration > Alarm > I/O Alarm Linkage.

The I/O Alarm Linkage page is displayed, as shown in Figure 9-5.
#### Figure 8-5 I/O Alarm Linkage Page

#### 🛱 I/O Alarm Linkage

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ame																								
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rz Link	age																					0	N	)
rz Type	е																		È				•	•
																			_					_
auc																			1				-	•
nuc								_															•	-
0	Arm 1	ned 2	3	UnA 4	rmee 5	d 8	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 2	24
0 Sun	Arm 1	ned 2	3	UnA	rmec 5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 2	24
0 Sun Mon	Arm 1	ned 2	3	UnA 4	rme 5	8 0	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 2	24
0 Sun Tuea	Arm 1	ned 2	3	UnA 4	rmed 5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 2	24
0 Sun Tues Wed Thur	Arm 1	ned 2	3	UnA 4	rmec 5	6 0	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 2	24
0 Sun Mon Tuea Wed Thur Fri	Arm 1	ned 2	3	UnA 4	5	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 2	24
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Step 2 Select the Alarm Input value from the drop-down list box.

- Step 3 Enter alarm input channel name.
- Step 4 Select the Trigger Mode from the drop-down list box.
- Step 5 Click the button on to enable I/O Alarm.

Step 6 Configure the I/O alarm schedule.

Click the armed icon Armed to set the arming time. Click the Unarmed icon UnArmed to set the unarming time.

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 deployment time within 0:00-24:00 from Monday to Sunday.

**Deleting deployment time:** Click UnArmed to delete the selected deployment time. The methods are same as set deployment time.

### 

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





- Step 7 Select the **Out Channel** from the drop-down list box.
- Step 8 Select the PTZ Type from the drop-down list box. The PTZ type includes preset, scan, track, tour.
- Step 9 Select Value. The value is the ID of PTZ type.
- Step 10 Click the button on to enable Alarm Record.
- Step 11 Click the button on to enable SMTP.
- Step 12 Click the button on to enable FTP Upload.
- Step 13 Click the button on to enable IR Cut.
- Step 14 Click Apply.

The message "Apply succeed!" is displayed, and the system saves the settings.

----End

## 8.6 Motion Alarm Linkage

#### Description

On the Motion Alarm page, you can perform the following operations:

Enable the motion detection function.

Set the motion detection alarming time.

Set the motion detection area.

Configure the motion alarm output channel.

When the alarm output function is enabled and the camera detects that an object moves into the motion detection area within the schedule time, the camera generates an alarm and triggers linkage alarm output.

#### Procedure

Step 1 Choose Configuration >Alarm > Motion Alarm.

The Motion Alarm page is displayed, as shown in Figure 9-7.

#### Figure 8-7 Motion Alarm Page

🖻 Motion Alarm



- Step 2 Click the button on to enable motion alarm.
- Step 3 Configure the motion alarm interval.
- Step 4 Configure the **Sensitivity**. Tick the output channel when the camera is connected to the external alarm device.
- Step 5 Enable Audible Alarm, Flashlight Alarm, Whitelight Alarm. (these linkage actions are only applicable for some models, it depends on the performance of cameras.)
- Step 6 Enable Motion Detect Stream, when camera detects the motion, it will show tracking of object.
- Step 7 Configure the schedule time setting.

For more details about how to set Schedule, see 9.5 Step 6.

- Step 8 Configure the detection area.
  - 1. Press and hold the left mouse button, and drag in the video area to draw a detection area, as shown in Figure 9-8.



2. Press and hold the left mouse button, and drag in the video area to draw a detection area.

Click Clear to delete a detection area. Click the red block to disarm this area.

----End

# 8.7 Push Message

## Description

The alarm notification will be pushed to the mobile app if the devices are managed by app.

#### Procedure

```
Step 1 Choose Configuration > Alarm > Push Message.
```

The Push Message page is displayed, as shown in Figure 9-9.

Figure 8-9 Push Message Page

🖻 Push Message

Push Message		OF
e alarm notifications will be pushed to the mobile app if	the device is managed by app.	

The message "Apply succeed!" is displayed, and the system saves the settings.

----End

# 8.8 Audible Alarm Output (Only for Some Models)

At **Configuration > Alarm > Audible Alarm Output** interface, set the audio detect alarm, as shown in Figure 9-10. The volume can be set at **Configuration > Device > Audio Output** interface, as shown in Figure 4-11.

Figure 8-10 Audible Alarm Output Interface

Audible Alarm Output



There are 13 default files, users can set the cycle number, click 🔹 to test listen.

			Ple	ease	seled	t aud	lio file
			Ple	ease	s	elec	elect aud

Click  $\triangle$  to upload a new audio.

The type should be WAV, size must be less than 250 Kb, the bit rate should be 128 kbps.

Click "Apply" to save the settings.

----End

# 8.9 Abnormal Sound Detection (Only for Some Models)

#### Description

The camera has mic or support the line in. On the Audio Abnormal Detection page, you can perform the following operations:

Enable the Audio Abnormal Detection function.

Set the Audio Abnormal Detection alarming time.

Configure the Audio Abnormal Detection output channel.

When the alarm output function is enabled and the camera detects abnormal audio (sudden rise or sudden drop) within the schedule time, the camera generates an alarm and triggers linkage alarm output.

#### Procedure

Step 1 Choose Configuration >Alarm > Audio Abnormal Detection.

The Audio Abnormal Detection page is displayed, as shown in Figure 9-11.

Tue We Thu Fri Sat

#### Figure 8-11 Audio abnormal detection

#### 🖻 Abnormal Sound Detection

Enable																			0	N (
Sudden Rise																				OF
Sudden Drop																				OF
Dutput Channel																			C	]1
Alarm Record																			C	OF
SMTP																				OF
TP Upload																			6	) OF
Armed 🗌 Un	Arme	d																		
0 1 2 3	1 5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sup								T	TT		TT		TT		TT			T		



- Step 3 Enable Sudden Rise, and Sudden Drop.
- Step 4 Select the **Output Channel**.
- Step 5 Click the button on to enable Alarm Record.
- Step 6 Click the button on to enable SMTP.
- Step 7 Click the button on to enable FTP Upload.
- Step 8 Configure the schedule time setting.

For details about how to set Schedule, see 9.5 Step 6.

```
----End
```

# 8.10 Whitelight Alarm Output (Only for Some Models)

Refresh

Apply

The **DayNight** mode is chosen **Night** mode, and the light is **IR LED** or **NONE**, Which is the Prerequisite, so that this linkage action is valid.

Enable to whitelight alarm when it triggers the alarm, the whitelight will be on.

At **Configuration > Alarm > Whitelight Alarm Output** interface, set the duration of alarm, as shown in Figure 9-13.

#### Figure 8-12 Whitelight alarm interface

## 🚖 Whitelight Alarm Output



Set the alarm duration, it determines the duration of the whitelight on.

Configure the schedule time setting.

Click "Apply" to save the settings.

----End

# 9 AI Multiobject

# 9.1 AI Configuration

Choose **Configuration > AI Multiobject** to set parameter of detected face, and vehicle plate.

Figure 9-1 AI Multiobject interface

## 🚖 Al Multiobject





Table 10-1 lists the AI multiobject parameters.

Parameter	Description	How to set
Face Detection	The camera will snap the face when someone appears in live video.	Enable
Fullbody Detection	The camera will snap the whole body when someone appears in live video.	Enable
Vehicle Detection	The camera will snap the vehicle when the vehicle appears in live video.	Enable
Box Display Mode	Choose one to a trace box will show at live video. There three mode can be chosen. Mode 1: Mode 2: Mode 3 is Mosic.	Choose from drop list.
Detection Area	Enable to show the detection area on live video.	
Confidence Coefficient	The range of snap image, there are three types, such as high, mid and low. The higher the confidence, the better the snap quality and the fewer snapshots.	Choose from drop list.
Face Pixel Min (30-300)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken.	Input a value ranges 30 to 300
Body Pixel Min (30-300)	30-300 pixels, the smaller the pixel be set, the more body will be captured, but it may be mistaken.	Input a value range 30 to 300
Vehicle Pixel Min (30- 300)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken.	Input a value ranges 30 to 300

Parameter	Description	How to set
Image Matting Quality	The quality of snap image, There are three mode can be chosen, such as low, mid and high.	Choose from drop list.
Snapshot Mode	There are three mode can be chosen, such as timing, and optimal.	Choose from drop list.
Upload Image Interval (1-10 s)	At timing mode, set the interval of upload image.	Input a value ranges 1 to 10
FTP Upload Image Matting	<b>Configuration &gt; Network Service &gt; FTP</b> , set FTP related parameters, the captured picture will be sent to the set FTP location	Enable
FTP Upload Whole Image	Capture a picture and send a whole image.	Enable

# **10 Configure the Recording Function**

Some models may not support SD card, and the recording function is disable, please refer to actual product.

# 10.1 Record Policy

You can configure the scheduled recording function, alarm recording function, recording quality, and recording rules.

### Procedure

#### Step 1 Choose Configuration > Device Record > Record Policy.

The Record Policy page is displayed, as shown in Figure 11-1.

Figure 10-1 Record policy page

#### 🖻 Record Policy

Schedule Record	ON []
Alarm Post Record(0-86400s)	*10
Record Audio	OFF
Record Rule	Overwrite
Stream Name	stream1 💌



Step 2 Set the parameters according to Table 11-1.

Parameter	Description	Setting
Schedule Record	Enables schedule record that you can configure the time policy.	[Setting method] Click the button on to enable schedule record. [Default value] OFF
Alarm Post Record (0- 86400s)	Recording duration (in seconds) after an alarm is generated.	[Setting method] Enter a value manually.
Record Audio	Indicates whether to record audios together with videos.	[Setting method] Click the button on to enable record audio.
Record Rule	<ul> <li>Rule for saving recordings. The options are as follows:</li> <li>Cycle Store: Saves recordings in cycles.</li> <li>Save Days: Duration (in days) for saving a recording. The duration can be a maximum of 99999 days.</li> <li>NOTE The value 0 indicates that recordings are not overwritten.</li> </ul>	[Setting method] Select a value from the drop- down list box.
Stream Name	Name of the stream.	[Setting method] Select a value from the drop- down list box.

Table 10-1 Recording policy parameters

Step 3 Configure a recording plan.

You can configure the system to record videos around the clock or in schedule.

For details about how to set Schedule, see 9.5 Step 6.

Step 4 Click Apply.

If the message "Apply success!" is displayed, the system saves the settings. If other information is displayed, set the parameters correctly.

-----End

# 10.2 Record Directory

## Description

Recordings can be stored in an SD card, FTP, or NSA.

## Procedure

Step 1 Choose Configuration > Device Record > Record Directory.

The **Record Directory** page is displayed, there are three types to action disk, such as SD card, FTP, and NAS, as shown in Figure 11-2..

Figure 10-2 Record Directory page

## 🖻 Record Directory

Disk Type	Disk ID	Group ID	Enable	Total Space(MB)	Free Space (MB)	Alarm Threshold(%)	Status
SD Card	1	1	Yes	0	0	100	N/A
FTP	2	1	No	0	0	100	N/A
NAS	3	1	No	0	0	100	N/A
						(	Modify

Step 2 Set the parameters according to Table 11-2.

Table 10-2 Record directory parameters

Parameter	Description	Setting		
Disk Type	Recording directory type, which can be an SD card.	[Setting method] The parameter cannot be set		
Disk ID	Indicates the Disk ID.	manually.		
Group ID	Indicates the group HID.			
Enable	Indicates whether to enable the recording directory.			
Total Space (MB)	Total disk space.			
Free Space (MB)	Maximum disk space read automatically.			

Parameter	Description	Setting
Alarm Threshold (%)	The camera will alarm when used Space achieves the alarm threshold.	
Status	Status of the connection between the current camera and recording directory detected automatically.	

Step 3 Click **Modify** to modify the parameters of recording path.

Figure 1	10-3	Record	path	modify
----------	------	--------	------	--------

SD Card	ON []
Disk ID	1
Total Space(MB)	30144
Alarm Threshold(1-100)	100
	Modify

<b>F</b>
Format

----End

# 10.2.1 Configure the SD Card

## Procedure

- Step 1 Choose **Configuration > Device Record > Record Directory**.
- Step 2 Choose SD Card, click Modify.

The SD card Record Path Modify page is displayed, as shown in Figure 11-4.

SD Card	ON ()
Disk Id	1
Total Space(MB)	58880
Alarm Threshold(1-100)	100
	Modify

Figure 10-4 SD card Record Path Modify page

Step 3 Set the parameters according to Table 11-3.

Table 10-3	SD card recording parameters
------------	------------------------------

Parameter	Description	Setting
SD Card	Enable SD card to enable record.	[Setting method] Click button to enable SD card.
Disk ID	ID of SD card.	N/A
Total Space(MB)	Total disk space read automatically.	[Setting method] The parameter cannot be set manually.
Alarm Threshold (1-100)	The camera will alarm when used Space achieves the alarm threshold.	[Setting method] Enter a value from 1-100.

Step 4 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

# **10.2.2** Configure the FTP

#### Procedure

Step 1 Choose **Configuration > Device Record > Record Directory**.

Step 2 Choose FTP, click Modify.

The FTP Record Path Modify page is displayed, as shown in Figure 11-5.

FTP		OFF
IP Address		
Port		
Path		
User Name		
Password		
Confirm		
Free Space (MB)	0	
FTP over SSL/TLS(F	TPS)	

Step 3 Set the parameters according to Table 11-4.

Table 10-4 FTP recording parameters

Parameter	Description	Setting
FTP	Enable to use FTP (File Transfer Protocol) to record the video.	[Setting method] Enable
IP Address	IP address of FTP server.	[Setting method] Enter a value manually.
Port	Port of FTP server.	[Setting method] Enter a value manually.
Path	FTP Path to save the recording.	[Setting method] Enter a value manually.
User Name	FTP server account.	[Setting method] Enter a value manually.
Password	FTP server password.	[Setting method] Enter a value manually.
Confirm	Confirm the password.	[Setting method] Enter a value manually.
Free Space (MB)	The free space of FTP server	[Setting method] Enter a value.
FTP over SSL / TLS (FTPS)	Transfer the recording by encryption.	[Setting method] Tick

Step 4 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

-----End

## 10.2.3 Configure the NAS

#### Procedure

Step 1 Choose **Configuration > Device Record > Record Directory**.

Step 2 Choose NAS, click Modify.

The NAS Record Path Modify page is displayed, as shown in Figure 11-6.

Figure 10-6 NAS Record Path Modify page

NAS	OFF
P Address	
<sup>o</sup> ath	
Jser Name	
Password	
Confirm	
File System	cifs

Step 3 Set the parameters according to Table 11-5.

Table 10-5 NAS recording parameters

Parameter	Description	Setting
NAS	Enable to use NAS (Network Attached Storage) to record the video.	[Setting method] Enable
IP Address	IP address of NAS server.	[Setting method] Enter a value manually.
Path	IP address of NAS device.	[Setting method] Enter a value manually.
User Name	NAS device account.	[Setting method] Enter a value manually.
Password	NAS device Password.	[Setting method] Enter a value manually.

Parameter	Description	Setting
Confirm	Confirm the password.	[Setting method]
File System	There are two types can be chosen, cifs and nfs	[Setting method] Choose from drop-down list. [Default value] cifs

Step 4 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

-----End

# **11 Configure the Privacy Mask Function**

#### Procedure

Step 1 Choose Configuration > Privacy Masking.

The Privacy Masking page is displayed, as shown in Figure 12-1.

Figure 11-1 Privacy Masking page

Privacy Masking

Privacy Masking List     Delete     Modify       D     Name     Type     Color     Enable       1     Privacy Mask 1     Color Block     Yes		4.0. "			Class	
ID     Name     Type     Color     Enable       1     Privacy Mask 1     Color Block     Yes	Priv	1/201	Macking List	Diaw		lata Madife
1     Privacy Mask 1     Color Block     Yes		ID	Name	Туре	Color	Enable
		1	Privacy Mask 1	Color Block		Yes

Step 2 Click **Draw** to show the red frame, drag the four corners of rectangle to adjust the position.

Step 3 Click **Clear** to delete the chosen frame.

#### 

The maximum percentage of an image that can be masked depends on the device model. Read the tip displayed on the page.

A maximum of four areas can be masked.

Tick the ID of mask area and click Delete to delete the masking.

Step 4 Set the parameters according to Table 12-1.

Parameter	Description	Setting
ID	ID of Privacy Masking.	N/A
Name	Name of privacy Masking.	[Setting method] Click the name and enter a value manually. [Default value] <b>Blank</b>
Туре	Type of privacy masking.	[Setting method] Select a value from the drop-down list box. [Default value] <b>Color Block</b>
Color	Color of privacy masking.	[Setting method] Select a value from the drop-down list box. [Default value] <b>Black</b>
Enable	Indicates whether to enable the privacy masking.	[Setting method] Select a value from the drop-down list box. [Default value] Yes
Delete	Delete a privacy masking.	<ul> <li>[Setting method]</li> <li>1. Select a privacy masking from the Privacy Masking List.</li> <li>2. Click <b>Delete</b>, the privacy masking is deleted successfully</li> </ul>
Modify	Modify a privacy masking.	<ul> <li>[Setting method]</li> <li>3. Select a privacy masking from the Privacy Masking List.</li> <li>4. Click a parameter and modify it.</li> <li>5. Click Modify, the privacy masking is modified successfully</li> </ul>

Table 11-1 Privacy Masking parameters

Step 5 Click Add to add privacy masking.

----End

# **12** Configure the Network Service

# 12.1 **802.1x**

## Preparation

802.1x authentication must be configured on the access port, which controls to access network resources for the connected users' devices on the port.

### Procedure

#### Step 1 Choose Configuration > Network Service > 802.1x.

The **802.1x** page is displayed, as shown in Figure 13-1.

Figure 12-1 802.1x page

#### 802.1x

802.1x	ON
EAP Method	EAP-MD5
Account	admin
Password	•••••
ConfirmPassword	

- Step 2 Click the button on to enable **802.1x**.
- Step 3 Choose the EAP Method (Extensible Authentication Protocol ) from drop-down list. EAP-MD5 and EAP-TLS can be chosen.

Refresh

Apply

- Step 4 Enter the account name.
- Step 5 Enter the password and confirm password..
- Step 6 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

# 12.2 DDNS

### Preparation

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

## Procedure

Step 1 Choose Configuration > Network Service > DDNS.

The **DDNS** page is displayed, as shown in Figure 13-2.

Figure	12-2	DDNS	page
--------	------	------	------

#### 🖻 DDNS

DDNS		ON
Provider	3322_0	ldns .
Network Card Name	eth0	,
Host Name		
Account		
Password		
		Test DDNS
	Refresh	Apply

Step 2 Click the button on to enable **DDNS**.

Step 3 Set the parameters according to Table 13-1.

Parameter	Description	Setting
DDNS	Indicates whether to enable the DDNS service.	[Setting method] Click the button on to enable DDNS. [Default value] OFF
Provider	DDNS service provider. Currently, only 3322 and dyndns are supported.	[Setting method] Select a value from the drop-down list box. [Default value] 3322 NOTE Set this parameter based on the site requirements.
Network Card Name	Name of network card	[Setting method] Select a value from the drop-down list box. [Default value] Eth0

Parameter	Description	Setting
Host Name	Host name is customized by a user.	[Setting method] Enter a value manually. [Default value] Blank
Accounts	User name for logging in to the DDNS server.	[Setting method] Enter a value manually. [Default value] Blank
Password	Password for logging in to the DDNS server.	[Setting method] Enter a value manually. [Default value] Blank

#### Step 4 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings. If other information is displayed, set the parameters correctly.

----End

# 12.3 **PPPoE**

## Preparation

Obtain the PPPoE user name and password from the network carrier.

## Description

If a PPPoE connection is used, you need to enter the user name and password on the **PPPoE** page. After you restart the device, the PPPoE settings take effect and the device obtains a public IP address.

### Procedure

Step 1 Choose Configuration > Network Service > PPPoE.

The **PPPoE** page is displayed, as shown in Figure 13-3.

#### Figure 12-3 PPPoE page

로 PPPoE		
PPPoE		ON
Account		
Password		
IP Address		Empty
	Refresh	Apply

Step 2 Click the button on to enable **PPPoE**.

Step 3 Set the parameters according to Table 13-2.

Parameter	Description	Setting
PPPoE	Click to enable PPPoE dialing.	[Setting method] Click the button on. [Default value] OFF
Accounts	User name of PPPoE provided by the network carrier.	[Setting method] Enter a value manually.
Password	Password of PPPoE provided by the network carrier.	[Setting method] Enter a value manually.

Table 12-2	PPPoE parameters
------------	------------------

Step 4 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings. If other information is displayed, set the parameters correctly.

----End

# 12.4 Port Mapping

### Description

Port mapping helps establish a mapping relationship between the private network and the external network. Port mapping allows outside computers to access intranet devices so that the network works efficiently.

#### Procedure

Step 1 Choose Configuration > Network Service > Port Mapping.

The **Port Mapping** page is displayed, as shown in Figure 13-4.

#### Figure 12-4 Port Mapping page

## 🚖 Port Mapping

Port Mapping	ON
Map Mode	Auto

Enable	PortType	OutsidePort	OutsidelP Address	State
✓	SSLCONTROL	20001	0.0.0.0	Ineffective
✓	HTTP	80	0.0.0.0	Ineffective
~	RTSP	554	0.0.0.0	Ineffective
~	CONTROL	30001	0.0.0.0	Ineffective
<b>~</b>	HTTPS	443	0.0.0.0	Ineffective

Step 2 Click the button on to enable **Port Mapping**.

Step 3 Set the parameters according to Table 13-3.

Parameter	Description	Setting
Port Mapping	Indicates whether to enable the Port Mapping service.	[Setting method] Click the button on. [Default value] OFF
Map Mode	Mode of port mapping, includes auto and manual.	[[Setting method] Select a value from the drop-down list box. [Default value] Auto
Port Type	Port Type includes: SSLCONTROL HTTP, RTSP, Control and HTTPS.	N/A
Outside Port	Port of outside network.	[Setting method] Enter a value manually in map mode.
Outside IP Address	IP address of outside network.	N/A
State	Mapping status	N/A

Step 4 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings. If other information is displayed, set the parameters correctly.

----End

## 12.5 **SMTP**

#### Description

If the Simple Mail Transfer Protocol (SMTP) function is enabled, the device automatically sends JPG images and alarm information to specified email addresses when an alarm is generated.

#### Procedure

#### Step 1 Choose Configuration > Network Service > SMTP.

The **SMTP** page is displayed, as shown in Figure 13-5.

#### Figure 12-5 SMTP page

#### 🖻 SMTP

SMTP Server Address	*
SMTP Server Port	* 25
User Name	*
Password	*
Sender E-mail Address	*
Recipient_E-mail_Address1	*
Recipient_E-mail_Address2	
Recipient_E-mail_Address3	
Recipient_E-mail_Address4	
Recipient_E-mail_Address5	
Attachment Image Quality	Mid
Transport Mode	No Encrypt
	Email Test

Step 2 Set the parameters according to Table 13-4.

#### 

Parameters marked with *t* are mandatory.

Table 12-4 SMTP parameters

Parameter	Description	Setting
SMTP Server Address	IP address of the SMTP server.	[Setting method] Enter a value manually.

Parameter	Description	Setting
SMTP Server Port	Port number of the SMTP server.	[Setting method] Enter a value manually. [Default value] 25
User Name	User name of the mailbox for sending emails.	[Setting method] Enter a value manually.
Password	Password of the mailbox for sending emails.	[Setting method] Enter a value manually.
Sender E-mail Address	Mailbox for sending emails.	[Setting method] Enter a value manually.
Recipient_E- mail_Address 1	(Mandatory) Email address of recipient 1.	[Setting method] Enter a value manually.
Recipient_E- mail_Address 2	(Optional) Email address of recipient 2.	
Recipient_E- mail_Address3	(Optional) Email address of recipient 3.	
Recipient_E- mail_Address 4	(Optional) Email address of recipient 4.	
Recipient_E- mail_Address 5	(Optional) Email address of recipient 5.	
Attachment Image Quality	A higher-quality image means more storage space. Set this parameter based on the site requirement.	N/A
Transport Mode	Email encryption mode. Set this parameter based on the encryption modes supported by the SMTP server.	[Setting method] Select a value from the drop-down list box. [Default value] No Encrypted

Step 3 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings. If other information is displayed, set the parameters correctly.

----End

# 12.6 FTP

## Description

If the File Transfer Protocol (FTP) button is enabled, the device automatically sends the snapped alarm JPG images to specified FTP server.

## Procedure

Step 1 Choose Configuration > Network Service > FTP.

The **FTP** page is displayed, as shown in Figure 13-6.

Figure 12-6 FTP page

## 皇 FTP

FTP Upload	ON
FTP Address	
FTP Port	0
Account	
Password	
FTP Path	
Media Type	Snapshot 💌
FTP over SSL/TLS(FTPS)	
	Test FTP
	Refresh Apply

Step 2 Click the button on to enable FTP.

Step 3 Set the parameters according to Table 13-5.

Parameter	Description	Setting
FTP Upload	Indicates whether to enable the FTP service.	[Setting method] Click the button on. [Default value] OFF
FTP Address	IP address of FTP server.	[Setting method] Enter a value manually.
FTP Port	Port of FTP server.	[Setting method] N/A [Default value] 21
Account	FTP server account.	[Setting method] Enter a value manually.
Password	FTP server password.	[Setting method] Enter a value manually.

#### Table 12-5FTP parameters

Parameter	Description	Setting
FTP Path	FTP Path to save the JPG image.	[Setting method] Enter a value manually.
Media Type	The media type of sending to FTP, snapshot or video clip.	[Setting method] Select a value from the drop-down list box. [Default value] Snapshot
FTP over SSL/TLS (FTPS)	Encrypt the files by SSL/TLS when they are be transferred.	[Setting method] Tick

Step 4 Click Test FTP to verify the parameter, shows "Test succeed ", the parameters are right. If it shows "Test failed", you need modify the information correctly.

Step 5 Click Apply.

If the message "Apply success!" is displayed, and the system saves the settings. If other information is displayed, set the parameters correctly.

----End

# 12.7 IP Filter

## Description

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

### Procedure

Step 1 Choose Configuration > Network Service > IP Filter.

The IP Filter page is displayed, as shown in Figure 13-7.

## Figure 12-7 IP Filter page

## 🖻 IP Filter

Filter				ON	
ule Typ	е Туре		Black	Black List	
ack Lis	(banned IP segments)			+	
	Begin IP Address	End IP Address	Description	Edit	

#### Step 2 Click the button on to enable **IP Filter**.

Step 3 Set the parameters according to Table 13-6

Table 12-6	IP Filter parameters
------------	----------------------

Parameter	Description	Setting
IP Filter	Indicates whether to enable the IP Filter.	[Setting method] Click the button on. [Default value] OFF
Rule Type	IP filter type, includes black list and white list.	[Setting method] Select a value from the drop-down list box. [Default value] Black List

Parameter	Description	Setting
Black List	Specified network segment should be banned.	<ul> <li>[Setting method]</li> <li>6. Click to enter the add black/white list page, as shown in Figure 13-8</li> <li>7. Enter Begin IP Address.</li> <li>8. Enter End IP Address.</li> <li>9. Enter Description.</li> <li>10. Click OK, the black list added successfully.</li> </ul>
White List	Allow specified network segment to access.	<ol> <li>[Setting method]</li> <li>Click to enter the add black/white list page, as shown in Figure 13-8.</li> <li>Enter Begin IP Address.</li> <li>Enter End IP Address.</li> <li>Enter Description.</li> <li>Click OK, add the white list successfully.</li> </ol>

#### Figure 12-8 Add IP Filter page

	Begin IP Address		
	End IP Address		19
	Description		
		ОК	Cancel
E			

Step 4 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

# 12.8 CGI Alarm Service Center

## Description

Device will push the alarm message by CGI with Start URL and End URL, and send to data to CGI Server by HTTP protocol. CGI alarm message is the head of User-Agent of HTTP. Use HTTP protocol

get and send to CGI Server. When need to integrate the CGI alarm message, need to resolve the HTTP Head "User-Agent" to get the data of CGI alarm message.

#### Procedure

Step 1 Choose Configuration > Network Service > CGI Alarm Service Center.

The CGI Alarm Service Center page is displayed, as shown in Figure 13-9.

Figure 12-9 CGI Alarm Service Center page

#### 🖻 CGI Alarm Service Center

CGI Alarm	ON
Alarm Type	All
Name	
Туре	HTTP <b>V</b>
URL Start	
URL End	

Proxy Setting		ON (
Address		
Port		
Platform User Name		
Platform Password		
Test the connection to the specifield HTTP server		Test
	Pofrosh	Apply

#### Step 2 Click the button on to enable CGI Alarm.

Step 3 Set the parameters according to Table 13-7.

Table 12-7 CGI Alarm Service Center parameters

Parameter	Description	Setting
CGI Alarm	Indicates whether to enable the CGI Alarm.	[Setting method] Click the button on.
		[Default value] OFF

Parameter	Description	Setting
Alarm Type	All alarm types can be chosen, users can choose one to alarm, or choose all.	[Setting method] Select a value from the drop-down list box. [Default value] All
Name	Name of CGI Alarm.	[Setting method] Enter a value manually.
Туре	Type of CGI Alarm.	[Setting method] Select a value from the drop-down list box. [Default value] HTTP
URL Start	Push the alarm message by CGI with start URL	[Setting method] Enter a value manually. For example: http://192.168.35.74:80/MajorAlarmType& MinorAlarmType&SourceName&DeviceID &DeviceIP&AlarmTime&Description
URL End	Push the alarm message by CGI with end URL	[Setting method] Enter a value manually. For example: http://192.168.35.74:80/MajorAlarmType& MinorAlarmType&SourceName&DeviceID &DeviceIP&AlarmTime&Description
Proxy Setting	Indicates whether to enable the Proxy. Forwarder server of CGI alarm to forward the CGI alarm.	[Setting method] Click the button on. [Default value] OFF
Address	IP address of Forwarder server.	[Setting method] Enter a value manually.
Port	Port of Forwarder server.	[Setting method] Enter a value manually.
Platform User Name	User name of forwarder server.	[Setting method] Enter a value manually.
Platform Password	Password of forwarder server.	[Setting method] Enter a value manually.
Test the connection to the specified HTTP server	Test if the device connects to the proxy successfully.	[Setting method] Click Test, if the device connects to the proxy successfully, the message "Test CGI alarm success" is displayed.

Step 4 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings. If the message is "Parameter is invalid", you should check if the parameters are correct.

----End

# 12.9 **SNMP**

## Description

Simple Network Management Protocol (SNMP) is an Internet Standard protocol, supports SNMP v1, SNMPv2c and SNMPv3 network protocol. Choose the proper SNMP protocol version and set the SNMP protocol parameter to collect and organize information about managed devices on IP networks.

## Procedure

Step 1 Choose Configuration > Network Service > SNMP.

The **SNMP** page is displayed, as shown in Figure 13-10.

#### Figure 12-10 SNMP page

🖻 SNMP

SNMPv1	ON
SNMPv2c	ON CON
Write Community	
Read Community	
Trap Address	
Trap Port	162
Trap Community	

SNMPv3		ON	
Read Security Name			
Security Level			
Auth Algorithm		•	
Auth Password			
Encry Algorithm		•	
Encry Password			
Write Security Name			
Security Level		•	
Auth Algorithm		•	
Auth Password			
Encry Algorithm		<b>_</b>	
Encry Password			
SNMP Port	161		
	Refresh	Apply	

Step 2 Click the button on to enable SNMPv1, SNMPv2C and SNMPv3.

Set the parameters according to Table 13-8.
Parameter	Description	Setting		
SNMPv1 SNMPv2c	Version of SNMP. SNMPv1 and SNMPv2c use communities to establish trust between managers and agents. Agents support three community names, write community, read community and trap.	[Setting method] Click the button on. [Default value] OFF		
Write Community Read Community Trap Address Trap Port	Name of write community.         The write community only can modify data.         Name of read community.         The write community only can read data.         IP address of the trap.         Management port of accepting message from trap.         community string of trap	[Setting method] Enter a value manually.		
SNMPv3	<ul> <li>community string of trap.</li> <li>The trap community string allows the manager to receive asynchronous information from the agent.</li> <li>Version of SNMP.</li> <li>SNMPv3 uses community strings, but allows for secure authentication and communication between SNMP manager and agent.</li> </ul>	[Setting method] Click the button on. [Default value] OFF		
Read Security Name Write Security Name	Name of read security. Name of write security.	[Setting method] Enter a value manually.		
Security Level	Security Level between SNMP manager and agent, includes three levels: No auth: No authentication and no encryption Auth: Authentication but no encryption Priv: Authentication and encryption	[Setting method] Select a value from the drop-down list box. [Default value] Blank		
Auth Algorithm	Authentication Algorithm, includes MD5and SHA.	[Setting method] Select a value from the drop-down list box. [Default value] Blank		
Auth Password	Authentication password.	[Setting method] Enter a value manually.		

Table 12-8	SNMP parameters

Parameter	Description	Setting
Encrypt Algorithm	Encryption Algorithm, includes DES and AES.	[Setting method] Select a value from the drop-down list box. [Default value] Blank
Encrypt Password	Encryption password.	[Setting method] Enter a value manually.
SNMP Port	Port of SNMP.	[Setting method] Enter a value manually. [Default value] 161

### Step 3 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

## 12.10 **QOS**

## Description

If the device is connected to a router or switch with a QOS function, and the priority rule of the corresponding mark is configured on the network device, the network device will preferentially pass the data packet of the corresponding mark.

## Procedure

### Step 1 Choose Configuration > Network Service > QOS.

The **QOS** page is displayed, as shown in Figure 13-11.

### Figure 12-11 QOS page

皇

Alarm Dscp(0-63)	0	
Command Dscp(0-63)	0	

Step 2 Input the value range from 0 to 63( audio/video dscp, alarm dscp and command dscp).

### Step 3 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

## 12.11 Platform Access

## Description

If the device and platform system are not at the same local network, you can connect device and platform system to the external server. You should build a server for platform in advance, platform's remote IP/Port and IP camera are mapping port to external network.

### Procedure

Step 1 Choose Configuration > Network Service > Platform Access.

The Platform Access page is displayed, as shown in Figure 13-12

Figure 12-12 Platform Access page

🖻 Platform Access

Platform Access		ON
Host Name		
Port	0	
User Name		
Password		
Encrypt		OFF
	Refresh	Apply

Step 2 Input the parameters. The host name and port are same as the platform, as shown in figure. It is the IP or domain of external network server. The user name and password are same as platform login.

Basic Infor	nation			Q	Refresh 📚 Bac	k 🏷 Restore 🗶 Edit 🗙 Delete
Server Name :	CMU_127.0.0.1	Type : CMU	IP:Port :	127.0.0.1 : 10086	Start-up Tim	e: 2022-04-11 15:15:51
Running State :	Online	Version : V1.7.1.0.1.0.0_20220331	Remote IP:Port :		Online Time	: 4Hrs 15Min 56Sec
Log Type :	Error	P2P status : Offline	Device registration port :	17888	SSL port :	15680
Domain :	Default Domain	P2P UUID :	Remote device registration port :			

Step 3 Add the IPC to platform, you should input the following information

- 1: IP/ID/Domain name is device ID of IPC.
- 2: The connection mode should be chosen **Device active registration**.

Device Name		
Device Type	IPC •	
Protocol	Private Protocol	
IP/ID/ domain name		
Port	30001	Ī
Group	Default group	
	Advanced setting	
Connection mode	Device active registration	
IAU	Not Support	
MDU	Auto	

### 🖻 Device Info

Device ID	158888
Device Name	· · · · · · · · · · · · · · · · · · ·
MAC Address	00:1C:27:15:88:88

Step 4 If you want to encrypt the access, you can enable the Encrypt.

### Step 5 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

# 13 Privilege Manager

## 13.1 Configure a User

## Description

You can add, modify, and delete a user in privilege manager page.

## Procedure

### Step 1 Choose Configuration > Privilege Manager > User.

The User page is displayed, as shown in Figure 14-1. Table 14-1 describes the parameters.

Figure 13-1 User Page

🖻 User

D	User Name	Groups	Notes	Operate	
	admin	SuperAdmin	admin	Q	

Table 13-1	<b>User Parameters</b>
------------	------------------------

Parameter	Description	Setting
ID	User ID	N/A
User Name	User name for logging in to the camera.	[Setting method] Select a value from the drop-down list box.

Parameter	Description	Setting
Groups	Permission group where a user belongs. The default permission groups are <b>Super Admin</b> , <b>Administrators</b> , <b>Operator</b> , and <b>Media user</b> . Their permissions are described as follows: Super Admin: Includes all privileges.	[Setting method] Click <b>Add</b> , then select a value from the drop- down list box.
	Administrators: Live Video, Video Control, PTZ control, Audio, Playback, Backup, Record Policy, Disk Configure, Privilege Manage, Parameter Configure, System Maintenance and Log,	
	Operator: System Maintenance, Parameter Configure, playback, Live Video and Video Control.	
	Media user: Live Video	
Notes	Notes of the User.	[Setting method] Click <b>Add</b> , then enter a value manually.
Operate	The operation of the user, includes view user, modify user and delete user. NOTE Super Admin can be viewed only.	[Setting method] Click the icon as required.

Step 2 Add, modify, or delete a user as required.

Table 14-2 are specific operations.

Table 13-2	Operation	Description
------------	-----------	-------------

Function	Procedure	Description
Add	<ol> <li>Click Add.</li> <li>The Add User page is displayed, as shown in Figure 14-2.</li> </ol>	Add an administrator or a common user as shown in Figure 14-2.
	2. Enter a user name, password, confirm password.	
	3. Select a group from the drop-down list box.	
	4. Enter the notes (Optional).	
	5. Check the privilege.	
	6. Click <b>OK</b> .	
	The user is added successfully.	

Function	Procedure	Description
Modify	<ol> <li>Click .</li> <li>The Modify User page is displayed.</li> </ol>	Modify the user name, password, group or privilege.
	<ol> <li>Modify the user name, password, group or privilege.</li> <li>Click OK</li> </ol>	
	The user is modified successfully. The User page is displayed.	
Delete	Select the user from the User list. Click , the message "Confirm to delete?" is displayed, click <b>OK</b> , then the group is deleted successfully.	Delete a user.

User Name		
Password		2755
ConfirmPassword		זיקל
Group		Administrators
Notes		
Privilege Live Video	^	Privilege Description Live view and stream switch.
Live Video Video Control	^	Live view and stream switch.
PTZ Control		
Audio		
Playback		
Backup		
Record Policy		
	~	

## 

Click the privilege to view the detailed description of function.

# 14 Configure Protocol Parameters

## 14.1 Protocol Information

## Description

You can view the existing protocol name and version number of the current device on the **Configuration** > **Protocol** > **Protocol Info** page, as shown in Figure 15-1. Table 15-1 describes the protocol-related parameters.

Figure 14-1 Protocol Info page

🖻 Protocol Info

v17.06	
v17.06_build000040	
rtsp://ip:port/snl/live/cameraid/streamic	
rtsp://192.168.99.14:554/snl/live/1/	
014a5ca0-35c9-11e9-9b0	

Parameter	Description
Protocol Name	Type of the access protocol.
Protocol Version	Version number of the access protocol.
Protocol Software Version	Software version number of the access protocol.
RTSP Format	URL rule of Real Time Streaming Protocol.
RTSP Example	URL example of Real Time Streaming Protocol.
Onvif UUID	Universally Unique Identifier.

Table 14-1 Protocol-related parameters

## 14.2 Security Authentication

## Description

When an ONVIF-compliant device connects to the platform, you must authenticate the user name and password to ensure the connection security.

## Procedure

Step 1 Choose Configuration > Protocol > Security.

The **Security** page is displayed as shown in Figure 15-2. Table 15-2 describes the parameters on the **Security** page.

#### Figure 14-2 Security Page

皇 Security	
User Verification	
	Refresh Apply

Parameter	Description	Setting
User Verification	When you select the User Verification check box, the user name and password must be the same as those for logging in to the device web page. NOTE The default user name is admin, and the default password is admin.	[Setting method] Click the button on to enable User Verification.

Table 14-2	Parameter Description
------------	-----------------------

### Step 2 Click Apply.

A dialog box is displayed, indicating the parameter configuration success. To make the configuration take effect, click **Confirm** to restart the device.

----End

## 14.3 **Onvif Configuration**

## Description

You can view the existing protocol name and version number of the current device on the **Configuration** > **Protocol** > **Onvif Configuration** page, as shown in Figure 15-3. Table 15-3 describes the protocol-related parameters.

## Figure 14-3 Onvif Configuration page

## 🖻 Onvif Configuration

Protocol Name	ONVIF	
Protocol Version	v22.06	
Protocol Software Version	v17.06_build000392	

Media2	OFF
Image Event	OFF
Intelligent Analysis Switch	OFF OFF
Onvif Only Https	OFF
Stream Only Https	OFF

Parameter	Description
Protocol Name	Type of the access protocol.
Protocol Version	Version number of the access protocol.
Protocol Software Version	Software version number of the access protocol.
Profile G	Enable ONVFI Profile G
Intelligent Analysis Switch	Enable Intelligent Analysis Switch
Media 2	Enable Media 2
Image Event	Enable image event
Intelligent Analysis Switch	Enable active onvif
Onvif only Https	Onvif can use a more secure HTTPS mode for connection,
Stream only https	command interaction and video data transmission, which are transmitted in an encrypted way to enhance network security.

### Table 14-3 Protocol-related parameters

## 14.4 Multicast Parameters

## Description

You can set multicast IP, video port, audio port and source port in multicast parameter page.

## Procedure

### Step 1 Choose Configuration > Protocol > Multicast Param.

The **Multicast Param** page is displayed as shown in Figure 15-4. Table 15-4 describes the parameters on the **Multicast Param** page.

Figure 14-4 Multicast Param page

🛱 Multicast Param

Stream ID	1
/ideo Port	25330
Video Address	238.255.255.255
Audio Port	25430
Audio Address	238.255.255.255
Source Port	25530
Source Address	238.255.255.255

Refresh Apply

### 🖻 Multicast Param

Stream ID	1
IP	238.255.255.255
Video Port	25330
Audio Port	25430
Source Port	25530

Refresh Apply

Parameter	Description	Setting
Stream ID	ID of stream.	[Setting method]
		Select a value from the drop-list box.
		[Default value]
		1

Table 14-4	Parameter description
------------	-----------------------

Parameter	Description	Setting
Video address	IP address that receive multicast data.	[Setting method] Enter a value manually. [Default value] 238.255.255.255
Video Port	Port that receive video data.	[Setting method] Enter a value manually. [Default value] 25330
Audio Port	Port that receive audio data.	[Setting method] Enter a value manually. [Default value] 25430
Source Port	Port that receive source data.	[Setting method] Enter a value manually. [Default value] 25530

Step 2 Click Apply.

It shows that parameters are set successfully and take effect after restarting., the system will save the settings.

# **15 Query Device Logs**

## 15.1 Query Operation Logs

## Description

Operation logs record user operations and scheduled task commands during the running of the device. Operation logs can be classified into the following types: permission management, system maintenance, device configuration, recording operation, video control, and real-time video.

### Procedure

Step 1 Choose Configuration > Device Log > Operation Log.

The Operation Log page is displayed, as shown in Figure 16-1.

Figure 15-1 Operation Log page

🖻 Operation Log

eration Log		All Type
egin Time		2022-04-11 09:43:47
End Time		2022-04-12 09:43:47
		Download Query
Time	User Name	Log Info
2022-04-12 09:34:04	admin	Stop video
2022-04-12 09:34:04	admin	Stop IntelligenceAnalyse Stream
2022-04-12 08:37:01	admin	Start IntelligenceAnalyse Stream
2022-04-12 08:37:01	admin	Start video
2022-04-12 08:36:58	admin	Login succeed
2022-04-12 06:14:46		Startup Device
2022-04-11 20:28:25	admin	Start Al Multiobject Detect Stream
2022-04-11 20:28:25	admin	Start video
2022-04-11 20:04:02	admin	Start Al Multiobject Detect Stream
		Olertvidee

Step 2 Set the search criteria.

- 1. Select the type of operation logs to be queried from the System Log drop-down list box.
- 2. Click the **Begin Time** and **End Time** text boxes respectively.

A time setting control is displayed.

- 3. Set the start time and end time as required.
- 4. Enter the corresponding user name that is registered with the device from the User Name dropdown list box.

Step 3 Click Query.

The operation logs related to the specified users are displayed.

- Step 4 Download the operation logs.
  - 1. Set the start time, end time and log type.
  - 2. Click **Download** on the right of the page.
    - The log link and the message "Please download log by 'save as 'in the right key" are displayed.
  - 3. Right-click the link and save the logs.

### 

An operation log is named as **Operation Log** by default and in the following format: *Operation time* user(*User name*) *Operation information* For example: 2012-06-20 13:40:39 user() Start Up Device 2012-06-20 13:42:46 user(admin) Configure Device Name 2012-06-20 13:43:16 user(admin) Configure Alarm In

----End

## 15.2 Query Alarm Logs

## Description

An alarm log records information about an alarm generated on a device, including the security, disk, and recording alarms.

### Procedure

Step 1 Choose Configuration > Device Log > Alarm Log.

The Alarm Log page is displayed, as shown in Figure 16-2.

### Figure 15-2 Alarm Log Page

🖻 Alarm Log

larm Type		All	•
egin Time		2022-04-	11 09:45:36
ind Time		2022-04-	12 09:45:36
		Download	Query
Alarm Begin Time	Alarm End Time	Log Info	Source I
2022-04-12 06:14:49	2022-04-12 06:14:59	Record storage failed	1
2022-04-11 10:13:36	2022-04-11 10:13:46	Record storage failed	1

Step 2 Set the search criteria.

1. Click the Begin Time and End Time text boxes respectively.

A time setting control is displayed.

- 2. Set the start time and end time as required.
- 3. Select the type of the alarm logs to be queried from the Alarm Type drop-down list box.

### Step 3 Click Query.

The alarm logs of the specified type are displayed.

Step 4 Download the alarm logs.

- 1. Set the start time and end time.
- 2. Select a log type.
- 3. Click **Download** on the right of the page.

The log link and the message "Please download log by 'save as 'in the right key" are displayed.

4. Right-click the link and save the logs.

### 🛄 ΝΟΤΕ

An alarm log is named as **Alarm Info** by default and in the following format: *Alarm start time -> Alarm end time Alarm information Source ID* For example: 2012-03-17 16:31:17 -> 2012-03-17 16:32:29 occur motion detect alarm Source Id(1:1) 2012-03-17 16:35:31 -> 2012-03-17 16:35:41 occur motion detect alarm Source Id(1:1)

## 15.3 Collect All Logs

## Description

You can collect logs about a device, which help you analyze and solve possible problems occurring on the device. The logs include overview information, key parameters, operation logs, alarm logs, upgrade logs, and debugging logs.

## Procedure

Step 1 Choose Configuration > Device Log > Collect all Log.

The Collect all log page is displayed, as shown in Figure 16-3.

🖻 Collect all log		
	Collect	

Step 2 Collect logs with one click.

- 1. Click Collect, the download page is displayed.
- 2. Select the path to save the logs.

```
----End
```

# 16 Maintain the Device

## 16.1 Restart a Device

## Description

Restart a device including but not limited to the following situations:

The device parameters are set incorrectly, and the device cannot work properly.

A user needs to reset device parameters and make it to take effect.

A device needs to be restarted remotely.

## Procedure

Step 1 Choose Configuration > Maintenance.

The Camera Maintenance page is as shown in Figure 17-1.

Figure 16-1 Camera Restart Page

### 🚖 Camera Maintenance

Restart 쏬 Auto Restart OFF Upgrade Please select firmware file -Reserve IP Setting ON Restore to Factory Default 3 Export Configuration Download Import Configuration Please select file -

Step 2 Click 🌞.

The message "Are you sure to restart?" is displayed.

Step 3 Click OK.

The device is restarted successfully five minutes later.

## 16.2 Auto Restart

Step 1 Choose Configuration > Maintenance.

The Camera Maintenance page is displayed, as shown in Figure 17-1.

Step 2 Enable the auto restart, choose the reboot interval from drop-down list.

There are three option, every day/every week/every month.

Figure 16-2 Camera auto restart

Auto Restart	ON
Reboot Interval	Everyday 🔻
Time	
	4

Step 3 Click OK.

The device is restarted successfully five minutes later.

----End

## 16.3 Upgrade the Software Package

## Description

You can upgrade the software package from web.

### Procedure

Step 1 Choose **Configuration > Maintenance**.

The **Device Maintenance** page is displayed.

Step 2 Click **m** to select the upgrade file.

Step 3 Click Update.

If the message "Upgrade success! The device is rebooting, please login later!" is displayed, the program updated successfully and the device is rebooted.

If other information is displayed, select the upgrade package correctly.

# 

Don't lose power during the upgrade, if the power off, the camera maybe malfunction.

## 16.4 Restore Device to Factory Settings

## Description

You can restore a device to factory settings including but not limited to the following situations:

The device parameters are set incorrectly, and the device cannot work properly.

A user needs to reset device parameters.

All parameters must be restored to the factory settings.

## 

After you clicking <sup>2</sup>, all parameters (you can choose whether to reserve the IP address) will be restored to the factory settings. Use this function carefully.

## Procedure

Step 1 Choose Maintenance.

The Device Maintenance page is displayed.

Step 2 Click<sup>2</sup>.

The message "Are you sure to restore?" is displayed.

Step 3 Click OK.

The device is restored to the factory settings.

----End

## 16.5 Export / Inport Configuration

## Description

You can export configuration to local hard driver, when you configurate the same model cameras or the current camera, import the configuration file (config.bin) directly

## Procedure

Step 1 Choose Maintenance.

The Device Maintenance page is displayed.

Step 2 Click Download to download the configuration file.

Save the file to local hard driver follow the prompts.

Export configuration Download Please download Config by save as in the right key

Step 3 Import configuration: choose the file on local hard driver, click Upload to upload file.

The tip will show after the configuration file uploading finish.

Tip Upload config file succeeded, The device is rebooting,please login later!

OK

Step 4 Click OK to finish.

# **17 Local Configuration**

Refresh

Apply

## Description

When users download the latest IPC LocalSever, you can set folder to save the snapshots and records to local. If users use no plugin version, this function is invalid.

## Procedure

Step 1 Choose Configuration > Local Config.

The Local Config page is displayed, as shown in Figure 18-1.

Figure 17-1 Local Config page

🖻 Local Config

SnapShot Save Path	C:\Users\Administrator\Downloads	
Local Record Save Path	C:\Users\Administrator\Downloads	
Playback performance	real time	-

Step 2 Set snapshot save path.

Step 3 Set local record save path

Step 4 Choose the playback performance, real time or fluent.

Step 5 Click Apply. The message "Apply success!" is displayed, and the system saves the settings.

# 18 Troubleshooting

Table 19-1 d	lescribes the	e common	faults	and solutions.
--------------	---------------	----------	--------	----------------

Common Fault	Possible Cause	Solution
When you enter the device IP address in the address box of Internet Explorer and press <b>Enter</b> , the message "There is a problem with this website's security certificate." is displayed.	The certificate is not installed.	Click Continue to this website (not recommended).
The web management system cannot be accessed.	The network is disconnected.	Connect the PC directly to the camera, and verify that the web management system can be accessed. Run the <b>ping</b> command to verify that the camera is reachable.
	The IP address is used by another device.	Connect the PC directly to the camera and configure the IP address of the camera.
	The IP addresses of the PC and IP camera are on different networks.	Check the IP address, subnet mask, and gateway settings on the IP camera, and change the settings as required.
The PTZ or dome cannot be controlled.	The protocol, baud rate, or address is incorrect.	Change the protocol, baud rate, and address in the web management system to those used by the PTZ or dome.
	The signal cable is not properly connected.	Check the signal strength and connect the signal cable properly.
After the IP camera is upgraded, the web management system cannot be accessed.	The browser cache is not deleted.	<ol> <li>To delete the browser cache, proceed as follows:</li> <li>Open browser.</li> <li>Press Ctrl + Shift +Delete.         <ul> <li>The Delete Browsing History dialog box is displayed.</li> <li>Select all check boxes.</li> <li>Click Delete.             <ul> <li>Login to the web management system again.</li> </ul> </li> </ul> </li> </ol>
The IP camera cannot be upgraded.	The network is disconnected. The network settings are incorrect.	Confirm that the upgrade network is connected. Check the network settings.
	The upgrade package is incorrect.	Obtain the correct upgrade package and upgrade the IP camera again.

 Table 18-1
 Common faults and solutions

# A Acronyms and Abbreviations

Α	
ADSL	Asymmetric Digital Subscriber Line
С	
CBR	Constant Bit Rate
CGI	Common Gateway Interface
CMS	Central Management System
D	
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name Server
DDNS	Dynamic Domain Name Server
EAP	Extensible Authentication Protocol
F	
FTP	File Transfer Protocol
G	
GAMA	Graphics Assisted Management Application
Н	
HTTP	Hyper Text Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
Ι	
ID	Identity
ISO	International Standard Organization
IP	Internet Protocol
IPC	Internet Protocol Camera
L	
LPS	Limited Power Source
Μ	
MJPEG	Motion Joint Photographic Experts Group
MAC	Media Access Control
MTU	Media Transmission Unit
N	
NAS	Network Attached Storage
NTP	Network Time Protocol
NTSC	National Television Standards Committee
_	

0

OSD	On Screen Display	
Р		
PAL	Phase Alteration Line	
РоЕ	Power over Ethernet	
PPPoE	Point-to-Point Protocol over Ethernet	
PTZ	Pan/Tilt/Zoom	
R		
ROI	Region of Interest	
RSTP	Rapid Spanning Tree Protocol	
S		
SMTP	Simple Mail Transfer Protocol	
SSL	Secure Sockets Layer	
V		
VBR	Variable Bit Rate	

Liberty	L3NV	RPOE Series	es AI NVRs	
4 Libert	Liberty			
16 Liberty	y miles			
32				

# User Manual for: L3NVR4POE, L3NVR8POE, L3NVR16POE, L3NVR3216POE



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## **Network Security Advice**

#### Required measures to ensure basic network security of equipment:

Modify the password regularly and set a strong password.

Devices that do not change the password regularly or use a weak password are the easiest to be hacked. Users are advised to modify the default password and use strong passwords whenever possible (minimum of 6 characters, including uppercase, lowercase, number, and symbol).

#### Update firmware

According to the standard operating specifications of the technology industry, the firmware of NVR, DVR and IP cameras should be updated to the latest version to ensure the latest features and security of the device.

The following recommendations can enhance your device's network security:

#### 1. Change your password regularly

Regularly modifying the login credentials ensures that authorized users can log in to the device.

#### 2. Modify the default HTTP and data ports

Modify the device's default HTTP and data ports, which are used for remote communication and video browsing.

These two ports can be set to any number between 1025 and 65535. Changing the default port reduces the risk of the intruder guessing which port you are using.

#### 3. Use HTTPS/SSL encryption

Set up an SSL certificate to enable HTTPS encrypted transmission. The information transmission between the front-end device and the recording device is fully encrypted.

#### 4. Enable IP filtering

After IP filtering is enabled, only devices with the specified IP address can access the system.

#### 5. Change the ONVIF password

For some old versions of the IP camera firmware, after the system's master password is changed, the ONVIF password will not be automatically changed. You must update the camera's firmware or manually update the ONIVF password.

#### 6. Only forward the ports that must be used

Only forward the network ports that must be used. Avoid forwarding a long port area. Do not set the device's IP to DMZ.

If the camera is connected locally to the NVR, you do not need to forward the port for each camera. Only the ports of the NVR need to be forwarded.

#### 7. Use a different username and password on the video surveillance system.

In the unlikely event that your social media account, bank, email, etc. account information is leaked, the person who obtained the account information will not be able to invade your video surveillance system.

#### 8. Restrict the permissions of the ordinary account

If your system is serving multiple users, make sure that each user has permission to access only its permissions.

#### UPNP

When the UPnP protocol is enabled, the router will automatically map the intranet ports. Functionally, this is user-friendly, but it causes the system to automatically forward the data of the corresponding port, causing the data that should be restricted to be stolen by others. If you have manually opened HTTP and TCP port mappings on your router, we strongly recommend that you turn this feature off. In actual usage scenarios, we strongly recommend that you do not turn this feature on.

#### SNMP

If you do not use the SNMP, we strongly recommend that you turn it off. The SNMP function is limited to temporary use for testing purposes.

#### Multicast

Multicast technology is suitable for the technical means of transmitting video data in multiple video storage devices. There have been no known vulnerabilities involving multicast technology so far, but if you are not using this feature, we recommend that you turn off multicast playback on your network.

#### 12. Check logs

If you want to know if your device is secure, you can check the logs to find some unusual access operations. The device log will tell you which IP address you have tried to log in or what the user has done.

#### Physically protect your device

For the safety of your device, we strongly recommend that you physically protect your device from unauthorized boring operations. We recommend that you place the device in a locked room and place it in a locked cabinet with a locked box.

It is highly recommended that you use PoE to connect IP cameras to NVR.

IP cameras connected to the NVR using PoE will be isolated from other networks so that they cannot be accessed directly.

#### Network isolation between NVR and IP cameras

We recommend isolating your NVR and IP cameras from your computer network. This will protect unauthorized users on your computer network from having access to these devices.

## **About This Document**

### Purpose

This document describes in detail the installation, use, and interface operation of the NVR (Network Video Recorder) device.

### Symbol Conventions

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

Symbol	Description
	It's for warning when a hazard or a hazardous condition is likely to be life-threatening.
	Alerts you to a medium or low risk hazard that, if not avoided, could result in moderate or minor injury.
	Alerts you to a potentially hazardous situation that, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results.
<b>G</b> ≕" TIP	Provides a tip that may help you solve a problem or save time.
	Provides additional information to emphasize or supplement important points in the main text.

## Safety instructions

The following are the correct use of the product. In order to prevent danger and prevent property damage, please read this manual carefully before using the device and strictly comply that when using it. Please save the manual after reading.

### Requirements

The front-end devices of POE are required to be installed indoors.

The NVR device does not support wall mounting.

Do not place and install the device in direct sunlight or near heat-generating equipment.

Do not install the device in a place subject to high humidity, dust or soot.

Please keep the equipment installed horizontally or install the equipment in a stable place, taking care to prevent the product from falling.

Do not drop or spill liquid into the device and ensure that no liquid-filled items are placed on the device to prevent liquid from flowing into the device.

Install the device in a well-ventilated area, and do not block the ventilation openings of the device.

Use the device only within the rated input and output range.

Do not disassemble the device at will.

Please transport, use and store the device within the permissible humidity and temperature range.

### Power Requirement

Be sure to use the specified manufacturer's model battery, otherwise there is a danger of explosion!

Be sure to use the battery as required, otherwise there is a danger of the battery catching fire, exploding or burning!

Only use the same model of battery when replacing the battery!

Be sure to dispose of the used battery as the instruction of battery!

Be sure to use the power adapter that meets standard with the device, otherwise the personal injury or equipment damage caused by the user will be borne by the user.

Use a power supply that meets the SELV (Safety Extra Low Voltage) requirements and supply power according to the rated voltage of IEC60950-1 in accordance with the Limited Power Source. The specific power supply requirements are based on the equipment label. Connect the Class I product to the power outlet with a protective ground connection. The appliance is coupled to the port unit. Keep it at a proper angle for normal use.

### 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.

This manual is only for reference and does not ensure that the information is totally consistent with the actual products. For consistency, see the actual products.

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## **1** Preface

## 1.1 Product Description

This product is a high-performance NVR device. The product has local preview, video multiscreen split display, local real-time storage function of video files, add support for mouse shortcut operation, remote management and control.

This product supports three storage methods: central storage, front-end storage, and client storage. The front-end monitoring point can be located anywhere in the network without geographical restrictions. It is combined with other front-end devices such as network cameras, network construction of network video server, and professional video surveillance systems to form a powerful security monitoring network. In the networked deployment system of this product, the central point and the monitoring point need only one network cable to connect. There is no need to connect video and audio cables. The operation is simple, and the cost of wiring and maintenance cost is low.

This product is widely used in public security, transportation, electric power, education and other industries.

### 1.2 Product Features

## 1.2.1 Cloud Upgrade

For devices that have access to the public network, you can update the software of the devices online.

1

### 1.2.2 Real-time Monitoring

It has a VGA (Video Graphics Array) port and an HDMI (High Definition Media Interface) port. It can realize monitoring function through monitor and display, and support VGA and HDMI output at the same time.

### 1.2.3 Playback

Each channel has independent real-time recordings and multi functions, such as retrieval, playback, network monitoring, video query, and download. Please refer to chapter Playback

Multiple playback modes: slow release, fast release, reverse playback, and frame-by-frame playback.

The exact time when the event occurred can be displayed during playback of the recording. You can select any area of the screen for partial magnification.

### 1.2.4 User Management

Each user group has a rights management set, which can be selected autonomously. The total rights set is a subset, and the user rights in the group cannot exceed the rights management set of the user group.

### 1.2.5 Storage Function

According to the user's configuration and policies (alarm or time settings), the corresponding audio and video data transmitted by the remote device is stored in the NVR device. For details, please refer to chapter Storage Management.

Users can record by WEB mode as needed. The video files are stored on the computer where the client is located. Please refer to chapter Storage.

## 1.2.6 Alarm Function

Real-time response to external alarm input, correct processing according to the user's preset linkage settings and give corresponding prompts.

The setting options of the central alarm receiving server are provided, so that the alarm information can be actively and remotely notified, and the alarm input can come from various external devices connected.

The alarm information can be notified to the user by mail or APP push information.

## 1.2.7 Network Monitoring

Through the network, the audio and video data of the IP camera or NVS (Network Video Server) of the NVR device is transmitted to the network terminal for decompression and reproduction. The device supports 8 (or 4) simultaneous online users to perform streaming operations. The audio and video data is transmitted using protocols such as HTTP (Hyper Text Transfer Protocol), TCP (Transmission Control Protocol), UDF (User Datagram Protocol), MULTICAST, RTP (Real-time Transport Protocol), and RTCP (Real Time Streaming Protocol). Use SNMP (Simple Network Management Protocol) for some alarm data or information Support WEB mode access system, applied to WAN, LAN environment.

## 1.2.8 Split Screen

Image compression and digitization are used to compress several images in the same scale and display them on the display of a monitor. 1/4/8/9/16/32 screen splitting is supported during preview; 1/4/9/16 screen splitting is supported during playback.

## 1.2.9 Recording Function

The device supports regular recording, motion detection recording, alarm recording, and intelligent recording. The recording file is placed on the hard disk device, USB (Universal Serial Bus) device, and client PC (personal computer). It can be connected to the WEB terminal, USB device, or local device. Query and play back the stored video files.

## 1.2.10 Backup Function

Support USB2.0 and eSATA video backup.

## 1.2.11 External Device Control

The peripheral control function is supported, and the control protocol and connection interface of each peripheral can be set as you need.

Support transparent data transmission of multiple interfaces, such as: RS232, RS485.

## 1.2.12 Accessibility

Supports video NTSL (Nation Television Standards Committee) system and PAL (Phase

Alteration Line) system.

Supports system resource information and real-time display of running status.

Supports for logging recording.

Supports local GUI (Graphical User Interface) output and quick menu operation via mouse.

Supports playback of audio and video from remote IPC or NVS devices.



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For other functions, please see the following text.

### **2** Product Structure

### 2.1 Front Panel

Figure 2-1 One disk/four disks model



Table 2-1 Front panel function

Port	Description
PWR	When the NVR is operating, the PWR indicator is steady on. When the NVR is shut down, the PWR indicator is turned off.
HDD	Hard disk status indicator. This indicator flashes when data is transmitted.
POE	PoE network status indicator. This indicator flashes when data is transmitted.
KB/MOUSE	Only connected to an USB mouse.
BACKUP	Only connected to U disk.

### 2.2 Back Panel

#### Figure 2-2 L3NVR4POE



#### Figure 2-3 L3NVR8POE



#### Table 2-2 Real panel function

Port	Description
POE	POE network interfaces
LAN	RJ 45 10/100/1000 Mbps adaptive Ethernet interface
AUDIO OUT / AUDIO IN	Audio output / Audio input
VGA	Video output interface
HDMI	
Alarm I/O	Alarm input/Alarm output
-	GND
DC48V	Connected to an external power adapter

#### Figure 2-4 L3NVR16POE







Table 2-3 Real panel function

Port	Description		
POE	POE network interfaces		
LAN	RJ 45 10/100/1000 Mbps adaptive Ethernet interface		
AUDIO OUT / AUDIO IN	Audio output / Audio input		
VGA	Video output interface		
HDMI			
USB 3.0	Only connected to 3.0 U disk		
Alarm I/O	Alarm input/Alarm output		
(¢	GND		
DC48V	Connected to an external power adapter		







## 2.3 Important Notes

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

The NVR is a complex system-based device. To avoid misoperations and malfunctions caused by environmental factors and human factors during installation, commission, and application, note the following points when installing and using this product: Read the user manual carefully before installing and using this product.

Use Monitoring dedicated hard disks as the storage devices of the NVR with high stability and competitive price/performance ratios (the quality of hard disks sold on markets varies greatly with different brands and models).

Do not open the 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.

All images in the document are for reference only, please subject to the actual products.

### 2.4 About This User Manual

Please note the following points before using this user manual:

This user manual is intended for persons who operate and use the NVR.

The information in this user manual applies to the full series NVR, NVR as an example for description.

Read this user manual carefully before using the NVR and follow the methods described in this manual when using the NVR.

If you have any doubts when using the NVR, contact your product seller.

As our products are subject to continuous improvement, we reserve the right to modify product manual, without notice and without incurring any obligation.

### 2.5 Installation Environment and Precautions

#### Installation environment

Table 2-10 defines the installation environment of the NVR.

Item	Description
Electromagnetism	The NVR conforms to 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	DC 12V, DC 48V 2A(1 HDD) or AC110/ 220V 4A(2 HDDs or more), please refer to actual products.
Power consumption	<15W (not including the hard disk)

Table 2-4 Installation environment

#### **Installation precautions**

Note the following points when installing and operating the NVR:

The power adapter of the NVR uses DC48V  $\pm 20\%$  input. Do not use the NVR when voltage is too high or too low.

Install the NVR horizontally.

Avoid direct sunlight on the NVR and keep away from any heat sources and hot environments.

Connect the NVR to other devices correctly during installation.

The NVR is not configured with any hard disk upon delivery. Install one or more hard disks when using the NVR for the first time.

The NVR identifies hard disk capacity automatically and supports mainstream hard disk models.

You'd better use high-quality hard disk so that the NVR can work stably and reliably. Please

refer to chapter 10 Disk Compatibility

#### Other precautions

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

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

#### Series of NVR

## 3 Install device

3.1 Process



Step 1 Check the appearance, packaging, and laber or the device to make sure there is no damage.

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Step 2 Install the hard disk and fix it to the device bracket.

- Step 3 Connect the device cable.
- Step 4 Make sure the device is properly connected. Power up and turn on the device.
- Step 5 Configure the initial parameters of the device. The boot wizard contains network configuration, add cameras, and manage disks. For details, please refer to the chapter of Wizard .

## 3.2 Unpacking Inspection

When you receive the video recorder, please check it against the following table.

Should you have any issues, please don't hesitate to contact our after-sales support.

No	Item		Check content	
1	Overall	Appearance	Is there any obvious damage	
	packaging	Package	Is there accidental impact	
		Accessories	Is it complete	
2	Label	Label of device	Is the equipment model consistent with the order contract? Whether the label is torn <b>Do not tear or discard, otherwise warranty service is not</b> guaranteed. When you call the company for sales personnel calls, you need to provide the serial number of the product on the label.	
3	Cabinet	Package	Is there any obvious damage	
		Data cable, power cable, fan power supply, and motherboard	Is the connection loose? Image: NOTE If it is loose, please contact the company's after-sales personnel.	

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## 3.3 Install Hard Disk

Check if the hard disk is installed during the first installation. Please use the recommended hard disk model. For more details, see *10 Disk Compatibility*.

It is not recommended to use a PC dedicated hard disk.

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# 

When replacing the hard disk, please turn off the power and then open the device to replace the hard disk.

Please use the monitoring dedicated SATA hard disk recommended by the hard disk manufacturer.

Choose the hard disk capacity according to the recording requirements.

### 3.3.1 Install One or Two Hard disks

Step 1 Remove the screws for fixing the upper cover and take down the cover.

Step 2 Take out the screws and silicone cushion, pass the screws through the silicone cushion,

and secure it to the screw holes, as show in Figure 3-1..

Figure 3-2 Installing the hard disk screws



Step 3 Pass the screws through the holes on the base and put the hard disk in place, as shown in Figure 3-2.

Figure 3-3 Install hard disk



Step 4 Turn the device over, and fasten the fixing the rest 2 screws, as shown in Figure 3-3.



Step 5 Insert the hard disk data cable and power cable, then put back the upper cover and fasten the fixing screws.

## **4** Basic Operations

### 4.1 Power on the Device



Ensure that the NVR 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 NVR before power-on.

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

After connecting the NVR to a power supply, the power indicator is always on. Start the NVR. The real-time video screen is displayed as shown in Figure 4-1.

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#### Figure 4-1 Real-time video screen

Liberty	Acti	Liberty		
	Language	English		
	Username	admin		
Liberty	Confirm the new password			
	Enter channel default password			Liberty
	- Valid password range [6-32]	characters.		
	- At least 2 kinds of numbers,lo	wercase,uppercase o	or special .	
	- Only these special characters	are supported 1@#\$*	⁺=_%&**.	
	- Channel default password lim	t is not empty		1 the sectors
1 de euter		ж		Liberty

#### 

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. Login to the system and format the hard disk.

The hard disk is formatted, but the file system is inconsistent with the file system supported by the

NVR. Format the hard disk.

The hard disk is damaged.

### 4.2 Activation

When users log in the device at first time, or reset the NVR, you need to activate the device and set login and channel default password, as shown in Figure 4-2.

#### **Basic Operations**

#### Figure 4-2 Activation

Activa	ation	
Language	English 🗸	
Username	admin	
Enter a new password		
Confirm the new password		
Enter channel default password		
- Valid password range [6-32] ch - At least 2 kinds of numbers,low	naracters. ercase,uppercase or specia	al.
- Only these special characters a	re supported !@#\$*+-=_%8	£"".
- Channel default password limit	is not empty	
OF		

Table 4-1 Description of activation

Name	Description
Username	The default username is admin, and "admin" is super administrator.
Password	Valid password range 6-32 characters.
Confirm password	At least 2 kinds of numbers, lower case, upper case or special characters contained.
	Only these special characters are supported ! @#&*+=- %&```(),/`.:;<>?^ ~[]{}. Channel default password limit is not empty.
Channel password	The NVR channel connection password is the camera login password.

Users can set the pattern unlock to login the device, as shown in Figure 4-3.





### 

After setting pattern unlock, the system default login will be pattern unlock login. If pattern unlock is not set, you need enter the password to log in.

If you don't need to set the pattern to unlock, click "Skip this step".

Allow the Mailbox to receive verification code. The password will be reset when you forget it, as shown in Figure 4-4.

#### **Basic Operations**

#### Figure 4-4 Set Email

Email for recover	y user password
Email Address	
ОК	Skip this step

### 

Set the email address, if you forget the password, you can though the email address to receive the verification, and reset the password.

If the email address is not set, you can reply to the secure question or send the QR code to the seller to get the temporary password to login to the device.

If you don't need to set the email, click "Skip this step".

Set the secure questions to create a new password in case the user forgets the password.



### 

The user can set three questions, and if they forget the password, they can answer the question and enter the reset password interface.

Questions one can be set: Your favorite animal

Company name of your first job

The name of the first boy/girl you like

The worst security question you have ever seen

The funniest worst design you have ever seen

Your favorite team

Your favorite city

The three question options cannot be set to the same issue.

The answer requires a minimum of four characters and a maximum of 32 characters.

If you do not want to set a password question, you can click Skip this step.

### 4.3 Power off the Device

Click the main menu and choose **System** > **Maintenance**, the maintenance setting page is displaying, click **Shutdown** to power off the NVR. If there is a power switch on the rear panel of the NVR, you can power off the power switch to disconnect the NVR from the power supply.

## 4.4 Login to the System

Step 1 Login to the device (two modes to login). The pattern unlock is as shown in Figure 4-6. Figure 4-6 Pattern unlock login page



Step 2 On the NVR login page, click "Password" to enter pattern unlock interface. If users don't set the pattern unlock it will show password to login interface directly, select the language, as shown in Figure 4-7.

3	English	~	
	admin	×	
8	Password		Æ
	Login		

#### Element 4 7 December 11 - element

Step 3 Input the username and password.

### 

The password incorrect more than 3 times, please login again after 5 minutes. You can also power off, and power on to start on the device, input the correct password to avoid waiting five minutes. If user forget password, click Forgot password. User can choose a way to create new password:

1. Scan the QR code and send the QR code to your seller, the seller will send you the

verification code to create a new password.

2. Answer the secure question to create new password.

Step 4 Click Login to access the main User Interface (UI).Modify the default password, as shown

in Figure 4-8

#### Basic Operations

#### Figure 4-8 Modify default password

	Modify default pass	sword	
New password Confirm password			
		Modify password	
– Valid password range	e [6-32] characters.		
– At least 2 kinds of nu	mbers,lowercase,upperca	ase or special character conta	ained.
– Only special characte	ers are supported !@#\$*+:		

----End

## 5 Wizard

Login the NVR, the wizard is showing on live video, click **Start Wizard**, the pop-up window will show as Figure 5-1.



Figure 5-1 Wizard

#### Figure 5-2 Wizard of network

DHCP	
PAddress	192 . 168 . 0 . 121
Subnet Mask	255 . 255 . 255 . 0
efault Gateway	192 . 168 . 0 . 1
Obtain DNS Automatically	
Preferred DNS Server	
Alternate DNS Server	
Enable Port Mapping	
Node	Auto 🗸
ITTP Port	
HTTPS Port	
RTSP Port	
Control Port	

Step 1 Contains he parameter, the details please refer to Table 5-1.

Table 5-1 Network parameter
-----------------------------

Parameter	Description	Configuration
DHCP	Enable DHCP, the device will obtain the IP address from the DHCP server.	[Setting method] Enable
IP Address	Set the IP of device when DHCP is disable	[Setting method] Manual
Subnet mask	Set the subnet mask of device	[Setting method] Manual [Default value] 255.255.255.0
Gateway	If the user wants to access device, he must set that	[Setting method] Manual [Default value] 192.168.0.1
Obtain DNS	N/A	[Setting method]

Parameter	Description	Configuration
automatically		Enable
Preferred DNS Server	N/A	[Setting method] Manual [Default value] 192.168.0.1
Alternate DNS Server	N/A	[Setting method] Manual [Default value] 8.8.8.8
Enable Port Mapping	Enable to set the ports of HTTP, HTTPS, RSTP, Control. Auto: device to obtain Web port, data port and client port. Manual: user set the port manually.	[Setting method] Choose type from drop-down list [Default value] Auto
HTTP Port	N/A	[Setting method]
HTTPS Port	N/A	When Port Mapping
RTSP Port	N/A	set these.
Control Port	N/A	

Step 2 Click Next to view the basic information about device, as shown in Figure 5-3.

#### Figure 5-3 Wizard of date and time

te And Time Time Zon	ie DST	
Date Format	DD/MM/YY hhammass 🗸	
Time Format	24H 🗸	
Enable NTP	0	
NTP Server	time.windows.com 🗸	
Sync Time Frequency (sec)	86400	
Date		
Time		

Choose date format and time format from drop-down list.

Click to synchrony time from network.

Disable the NTP-Sync, set time manually.

Roll the mouse to choose year, month and day when clicking the date.

Roll the mouse to choose hour, minute and second when clicking the date.

Click Modify Time to save the time.

Step 3 Click **Time Zone**, choose the current time zone from drop-down list, as shown in Figure 5-4.



Figure 5-4 Wizard of time zone

Step 4 Click **DST**, enable the DST, set start and end time. Select offset time from drop-down list. Step 5 Click **Next** to enter the adding camera wizard, as shown in Figure 5-5.
#### Figure 5-5 Wizard of adding camera

	Channel	I I	P	Model	Protocol	Ope	rate
	● CH1 🖾 169.254		4.10.2:3000.	10.2:3000.		∠	ŵ
	CH2						
						+	
	💿 CH4						
			Delete	Add	Devices	Stop Sea	rch(13s)
		P	Model	Protocol	Firmv	vare Versi	on
	192.168.1	17.116:4433	ONVIF ONVIF ONVIF				
	192.168.7	.200:8888					
	192.168	3.7.98:80					
	192.168	8.7.95:80		ONVIF			
Jse	ername	admin	Par	ssword 4			Add

The details of adding camera please refer to *chapter 7.1*.

Step 6 Click Next to enter wizard of disk, as shown in Figure 5-6.

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Normal
Normal
Format

Figure 5-6 Wizard of disk

You can view the general information of disk. You can also format the disk.

Step 7 Click Next to enter wizard of P2P, as shown in Figure 5-7

Figure 5-7 P2P



- Step 8 Enable the P2P, user can use mobile devices to manage the NVR by scanning the P2P ID, if the mobile phone has loaded the Liberty-View (search the APP at App Store or Google Play).
- Step 9 Click Next to enter the wizard of resolution, as shown in Figure 5-8. Choose resolution from drop-down list. (the highest resolution is 3840\*2160)



Figure 5-8 Wizard of resolution

Step 10 Click **Finish** to end the wizard, tick the **Don't show setup wizard next time**, it would not show at next time. Reopen wizard at **system > User > Advance setting**.

## 6.1 Quick Bar

After the NVR operation screen is displaying, move the cursor to the far bottom of the NVR screen. The NVR floating menu bar is displaying.

Click in the left of NVR floating menu bar. The quick home menu is showing. The quick home menu contains **Playback**, **System and Power (Shutdown, Reboot and Logout)** as shown in Figure 6-1.





In the middle of NVR floating menu bar, the video tool bar provides video window switching, auto SEQ, volume, playback, and channel information, as shown in Figure 6-2.

Figure 6-2 Real-time video toolbar



The real-time video toolbar is as follows:



E: Layout. Users can choose layout and add new layout strategies as shown in

Figure 6-3. Click on the right of screen splitting format and choose the channels to view the video. Click + to add a new layout.

Figure 6-3 Add layout

Input the layout name, choose the dwell time, choose the splitting format. Choose one channel or several channels to add on screen.

Auto SEQ. click icon, the layout dwell on screen is enabled, for how to set the dwell on,

please see chapter 7.5.5.

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Audio. Click on the icon, the audio setting screen is displaying, where you can choose the channel and adjust the volume.

□ Charnel □ Ercode

Channel information, tick the channel or encode, the live video will show the channel information.



Preview strategy, users can switch the real-time preview mode according to the network.

There are three modes: fluency, balanced and real-time.

A main menu quick toolbar is on the right of NVR floating menu bar. The main menu quick toolbar provides **Manual alarm, Alarm information, Clean alarm, Information** and **time**, as shown in Figure 6-4.

Figure 6-4 Main menu quick toolbar



## 1

: Manual alarm, click the icon, users can set different channels, choose alarm out, the

window shows in Figure 6-5.



Figure 6-5 Manual alarm

: Alarm message, click on the icon for more details as shown in Figure 6-6.

	Pop up message	to monitor 🛛 🗙
Channel	Туре	Start Time
	IP Conflict	24/04/2022 11:26:25
Channel4	Video Loss	24/04/2022 11:26:16
Channel3	Video Loss	24/04/2022 11:26:07
Channel4	Line Crossing	24/04/2022 06:08:41
Channel4	Line Crossing	24/04/2022 06:08:17
Channel4	Line Crossing	24/04/2022 06:08:03
Channel4	Line Crossing	24/04/2022 06:07:18
Channel4	Double Virtual Fe.	24/04/2022 06:07:07
Channel4	Intrusion	24/04/2022 06:06:50
Channel4	Double Virtual Fe.	24/04/2022 06:05:56
Channel4	Line Crossing	24/04/2022 06:05:54
Channel4	Line Crossing	24/04/2022 06:05:39

Figure 6-6 Alarm message



Clean alarm, click icon and clean the current alarm actions like voice and external alarm

#### out.

information, click icon and the general information would show, like network, system,

channel, disk and alarm, as shown in Figure 6-7.

#### Figure 6-7 Information

Network	System	Channel	Disk	Alarm	×
Status		Online			
IP Address		92.168.32.149			
Subnet Mask		255.255.0.0			
Default Gatewa		92.168.0.1			
MAC Address		00:1C:27:16:F5			
DHCP		DFF			
Preferred DNS	Server 1	92.168.32.254			
Alternate DNS S	Gerver 8	3.8.8.8			
Total Bandwidth		000.00 Mbps			
Received Packe	ets 5	544.92 Kbps			

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# 6.2 Real Time Video Bar

Right click at realtime image, the quick setting will show as figure.



Record: click the icon and start to record video. Click again to end record.

Instant playback: click the icon, the window will be recording video five minutes ago.

 $\sim$  is the time bar of playback.

Audio: open or close the audio.

PTZ: This function is only applied for speed dome cameras. The monitored camera can focus,

zoom or iris at this pop-up window. You can adjust every parameter as shown in Figure 6-8.



Figure 6-8 PTZ adjust screen

#### γ A q 4 Ξ A 4 ↓ 4

adjust direction of camera.

At this part, perform Advanced, Scan and Tour settings.

: 3D, this function can only be used for high speed dome camera. Click the icon to enter the camera live video screen, use the mouse to move the camera or zoom in or out the lens. Click the point to zoom in. Drag and draw the area, zoom in the drawing area, Reverse drag to zoom out.

# Q.

Zoom in, click zoom in, roll the mouse wheel to zoom in and zoom out. Right-click to

exit the zooming.

P

: Image, click the icon, as shown in Figure 6-9. Select scene, and drag cursor to adjust value

of brightness, sharpness, contrast and saturation.

Figure 6-9 Camera picture parameter



5

Two way audio. The NVR and camera can talk to each other.

Snapshot panorama. If an USB storage device is connected to the NVR device, click to save the panorama snapshot directly.

E fisheye (only used for fisheye cameras), click to switch the fisheye modes, as shown in

Figure 6-10.

Figure 6-10 Fisheye



# 6.3 Playback

Playback refers to playing back a video, fixed-point playback, playback the search type.

Click finite quick navigation bar to access the playback screen, as shown in Figure 6-11. Figure 6-11 Playback screen

Choose the channels from the channels list, click one day to play (the date has blue line, it means

there is recording video at this day, it doesn't mean for all channels has video.)

It maybe has three color bars on the time bar, the blue one is schedule record, the yellow one is manual record, and the red one is alarm record.

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



(Q) : Zoom. Roll the roller of mouse to zoom in or out.

🔹 : Audio.

Start and end backup. Click the icon, the video backup starts, select the video and click the

icon again.

The backup type appears. Click **save**. And **saving the file** pop ups as Figure 6-12. Click **OK** to save.

This function is available after an USB disk is plugging in the device.

Figure 6-12 Select directory

	Select Directory		×
Device List O			<b>t</b> 🗊 🛱
/dev/sdb1		Modify Date	
/dev/sdb2	<b>—</b> -		
	kernel-3520D-V200		2.0 MB
	➡ u-boot-3520DV200		
		٢	
Remain/Total			
0.7 GB/0.7 GB			
		OK	Cancel

Batch backup, click the icon to backup multi-channels, as shown in Figure 6-13.

Choose the folder to save, select the stream information from drop-down list, set the start time and end time, select the channels, Click **OK** to backup. The backup videos are marked by watermark, you can view it by our player.

: Snapshot panorama. Click to save it to USB storage device on NVR.

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Figure 6-13 Batch backup

	Save to			1
	Video Type			
	Stream Information	Main Stream		
	Start Time	2019/05/28	21:45:16	
	End Time	2019/05/29	21:45:16	
	Channel	□ Select All		
			OK	Cancel
			ОК	Cancel

### : Type of time bar, recording video can show

## 6.3.1 Time Search

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

**Operation Description** 

Click On in the quick navigation bar to access the search screen, as shown in Figure 6-14.



#### Figure 6-14 Time Search screen

#### **Operation Steps**

Step 1 Select a camera or cameras in the camera list on the left side of the search screen. The

video view of the selected camera is displaying in the play window.

Step 2 Select a date in the calendar on the light-down side of the search screen.

Step 3 Choose record type, and search the video quickly.

Step 4 Choose proper button to adjust video.

----End

## 6.3.2 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 6-15.

Figure 6-15 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 date from calendar.
- Step 3 A day are dividend to 12 grids, every two hours is a grid. Click the image to change the interval.
- Step 4 Select a required thumbnail, double-click it or right-click it and choose Play from the shortcut menu to play the video.

Step 5 Click Step

### Figure 6-16 Replay



----End

# 6.3.3 Event Recording

Click On the quick navigation bar; choose **Event** at title to access the alarm event screen, as shown in Figure 6-17

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#### Figure 6-17 Event screen

• Playback		Event Recording				
🗾 🞯 Select All	Start Time	Channel			Opera	
[1] Channel01     ^	24/04/2022 11:47:38	Channel05	Motion Detection	Channel05	Ð	٢
👿 🞯 [2] Channel02	24/04/2022 11:46:44	Channel03	Video Loss	Channel03	Ð	٩
🗹 🛞 [3] Channel03	24/04/2022 11:46:43	Channel04	Video Loss	Channel04	Ð	٩
[4] Channel04	24/04/2022 11:46:05	Channel04	Video Loss	Channel04	Ð	٩
[5] Channel05	24/04/2022 11:45:41	Channel03	Video Loss	Channel03	Ð	٩
[6] [6] Chameluo	24/04/2022 11:45:17	Channel05	Motion Detection	Channel05	Ð	٢
M C 1/1 Cultantianov	24/04/2022 11:44:38	Channel03	Video Loss	Channel03	Ð	٩
Start Time	24/04/2022 11:43:57	Channel05	Motion Detection	Channel05	Ð	٩
23/04/2022 11:47:38	24/04/2022 11:43:50	Channel03	Video Loss	Channel03	Ð	٩
24/04/2022 11:47:38	24/04/2022 11:36:45	Channel05		Channel05	Ð	٩
🗹 Alarm In	24/04/2022 11:26:25		IP Conflict	IP Conflict		
🗹 Camera Alarm In	24/04/2022 11:26:16	Channel04	Video Loss	Channel04		
Motion Detection	24/04/2022 11:26:07	Channel03	Video Loss	Channel03		
Camera Tamper	24/04/2022 06:08:41	Channel04	Line Crossing		Ð	Φ
Video Loss	24/04/2022 06:08:17	Channel04	Line Crossing		Ð	Ø
+ 🗹 Abnormal Alarm	24/04/2022 06:08:03	Channel04	Line Crossing		Ð	Ģ
Search			I< 1/105 <b>X</b>	Double c	lick to play	video

### **Operation Steps**

Step 1 Select cameras in the camera list on the left.

- Step 2 Set start and end time.
- Step 3 Tick the alarm type, such as alarm in, camera alarm in, motion alarm, video loss, intelligent analysis and abnormal alarm
- Step 4 Click Search to query the event, the result would show at window.
- Step 5 Double click to play video about event. It will play recording video.



• play the recording video.



Solution: backup the recording video.



the type of intelligent analysis and abnormal alarm are subdivided,

users can tick Detail Alarm to show.

Intelligent analysis includes perimeter, single virtual fence, double virtual fences, loiter, multi loiter, object left, object removed, abnormal speed, converse, illegal parking, signal bad, register, stranger, registered license plate, over temperature, low temperature, abnormal temperature, threshold warning, threshold alarm, temperature difference warning, temperature difference alarm, temperature section alarm, face temperature, wear mask, no mask, personnel count threshold alarm, personnel count threshold alarm(IPC).

Abnormal alarm includes disk error, IP conflict, network disconnected.

User can choose the accurate alarm events to search.

----End

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## 6.3.4 Backup List

Click on the quick navigation bar, choose Backup at title to access the backup screen, as shown in Figure 6-18.

#### Figure 6-18 Backup screen

Search					
	End Time				
			m /nfsroot/usbbk_b	25%	位

View detailed information of backup. Click on Delete to quit the download.

# 6.4 AI Recognition (Only for Some Models)

At AI recognition interface, we can set the **Real time Comparison**, **Smart search**, **Archives library**, **Comparison configuration**.

The all snapshots is able to be added to the libraries according the real needs

# 6.4.1 Real Time Comparison

Real time comparison can compare human faces, vehicle license plate, and AI(include riding, vehicle, full body)

### 6.4.1.1 Human Face

At real time comparison interface, click the solution to enter the human face comparison interface, choose the cameras with face recognition function to play live video, the snapshots of camera will be compared with the templates which have been registered in libraries, the result shows as in Figure 6-19.



#### Figure 6-19 Human face comparison

Click the "+" to add the snapshot to face library immediately.

Snapshot in real time video, put the cursor on picture such as **\* D**, you can add it to face

library, or face search. The cursor on area and the pictures are not update, move the mouse so that the pictures can be shown in time.

----End

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### 6.4.1.2 Vehicle and Full Body

At real time comparison interface, click the **No** to enter the vehicle license plate comparison interface, choose the AI recognition cameras to play live video, the snapshot of camera will be compared in libraries, the snapshot to vehicle and full body will show at the bottom of page, the result shows as in Figure 6-20.

### Figure 6-20 Full body





## 6.4.2 Smart Search

At smart search interface, user can search the human face, vehicle license plate, full body, car, body temperature.

Up to 1000 pictures can be displayed. Click to see more details and export search result.

### 6.4.2.1 Human Face Search



Figure 6-21 Human face search

- Step 1 Choose human face search at smart search interface.
- Step 2 Tick the face recognition camera channels, set the start and end time.
- Step 3 Choose the condition (by picture or by feature), the picture can be selected from the file folder.
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 The pictures can be added to library or used to search.
- Step 7 Click play button of video to play the recording of snapshot, click "Backup" to back up the recording videos.

### Figure 6-22 Back up

Backup							
Stream:	Main Stream 🗸						
Video Type:	Mp4						
Channel:	CH9						
Size:	30.0 MB						
Start Time:	27/04/2020 14:09:37						
End Time:	27/04/2020 14:10:07						
Save	Cancel						

Step 8 Click "Export" to export the result, choose export type pictures or videos.

Export Type	Export Pictures 🗸 🗸	
Save to	Export Pictures Export video	1

Figure 6-23 Export

Play video of snapshot, it will play a 30-seconds video before and after the snapshot.

Snapshot in real time video, put the cursor on picture such as + 2, you can add it to face



library, or face search. The cursor on area 6 and the pictures is not update, move the mouse so that the pictures can be shown in time.

----End

### 6.4.2.2 Full Body Search





Step 1 Choose full body search at smart search interface.

Step 2 Tick the AI recognition camera channels, set the start time and end time.

Step 3 Set the gender, click cycling or no cycling.

Step 4 Click "Search" to search the snapshot of human face.

Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.

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Step 6 Click play button of video to play the recording of snapshot, click "backup" to back up the video.

Step 7 Click "Export" to export the result.

----End

### 6.4.2.3 Vehicle Search

Figure 6-25 Vehicle search



- Step 1 Choose vehicle search at smart search interface.
- Step 2 Tick the AI recognition camera channels, set the start time and end time.
- Step 3 Tick the color.
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will be showed at the middle of page, click the picture and the detail information show at the top right of page.
- Step 6 Click play button of video to play the recording of snapshot, click "backup" to back up the video
- Step 7 Click "Export" to export the result.

----End

# 6.4.3 Archives Library

At archives library, users can add or edit the face library , license plate library.

The license plate libraries can be imported to and exported from IP cameras.

### 6.4.3.1 Face Library

Figure	6-26	Face	librarv	
i igui e	0 20	1 ucc	norary	

(iii) Al Recognition			arison			Archives Library			
👤 Face Library	+ Add	X Dele		Import	企 Export	Q Refresh	Filter		≡ 88
□ Select All		Name	Gender	Birthday		Face Library		Expire date	Operate
💆 Default Lib	٥		Male	28/11/2019		unknow	Student	Never expire	∠∎ Q
🗆 app			Male	28/11/2019		unknow	Student	Never expire	∠∎ Q
Drvr			Male	28/11/2019		unknow	Student	Never expire	∠∎ Q
🛃 technology			Male	28/11/2019		unknow	Student	Never expire	∠ 🖬 Q
🖬 image			Male	28/11/2019		unknow	Teacher	Never expire	∠ 🖬 Q
engineering			Male	28/11/2019		unknow	Student	Nover expire	∠ 🗈 Q
<b>platform</b>			Male	28/11/2019		unknow	Student	Never expire	∠∎ Q
			Male	28/11/2019		unknow	Student	Never expire	∠ 🖬 Q
<b>z</b> unknow			Male	28/11/2019		unknow	Student	Never expire	∠ 🖬 Q
💆 test			Male	28/11/2019		unknow	Student	Never expire	∠∎Q
hardware			Male	28/11/2019		unknow	Student	Never expire	∠ 🖬 Q
download			Male	28/11/2019		unknow	Student	Never expire	∠∎ Q
			Male	28/11/2019		unknow	Student	Never expire	∠ <b>1</b> Q
			Male	28/11/2019		unknow	Student	Never expire	<u>∠</u> ∎ Q
			Male	28/11/2019		unknow	Student	Never expire	∠∎q
			Male	28/11/2019		unknow	Student	Never expire	∠ 🖬 Q
			Male	28/11/2019		unknow	Student	Never expire	2 🖬 Q
			Male	28/11/2019		unknow	Student	Never expire	∠∎ Q
						K 3/12	Ж		

Click "+" to add a new face library.

Click "Add" to add person face.

Tick the person, click "Delete" to delete the person.

Click "Import" to add the person batch.

Click "Export" to export the all person in library.

Click "Filter" to filter the all persons in library, as shown in Figure 6-27.

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#### Figure 6-27 Filter

Gender	All	
ID		
Туре	All	~
Picture	All	1

Click operate icon to edit or delete the chosen person.

----End

# 6.4.4 Comparison Configuration

### 

The comparison function is only for AI cameras, please refer to actual cameras.

At comparison configuration interface, user can set the comparison of human face/ license

plate/temperature/ mask detection configuration/ personnel count configuration.

### 6.4.4.1 Face Comparison

At face comparison interface, users can set different channels' strategy, such as similarity, display comparison result, face library, enable alarming, event action, arming time, as shown in Figure 6-28.

	AlRecognition			Comparison Configuration		
1		Register Detect Library	Stranger Detec	Similarity	Op	
	Channel 11	Dofault Lib	Default Lib	80%		
	Channel 12	DefaultLib	DefaultLib		۷	
	Channel13	DefaultLib	Default Lib			
	Channel14	Default Lib	Default Lib			
	Channel 15	Default Lib	Default Lib			
	Channel 16	Default Lib	Default Lib			
	Channel 17	Default Lib	Default Lib		۷	
	Channel 18	Default Lib	Default Lib		۷	
	Channel 19	DefaultLib	Default Lib			
	Channel20	Default Lib	Default Lib			
	Channel21	Default Lib	Default Lib			
	Channel22	Default Lib	Default Lib			
	Channel23	Default Lib	Default Lib			
	Channel24	Default Lib	Default Lib			
	Channel25	Dofault Lib	Default Lib		۷	
	Chamel26	DetaultLib	DetaultLib		۷	
	Channel27	Default Lib	Default Lib			
	Chame!28	Default Lib	Default Lib			
	Channel29	Default Lib	Default Lib	80%	∠	~

#### Figure 6-28 Face comparison

Figure 6-29 Strategy



#### ----End

# 6.4.5 Attendance Management

In attendance management, users can set attendance rule, library and check point, as shown in Figure 6-30.



Attendance	Attendance Data Attendance Management	×
▷ Attendance Rule Settings	Attendance Rule Settings	
> Attendance Library	Working Time: Start-work time 09:30 End-work time 1100	
▷ Attendance Check Point S.	WorkdaySetting: ⊡Sun naMun naTue naWed naThu naFri ⊡Sat	
	Check-in valid time: Before start-work time 10 min to After start-work time 30 min Check-out valid time: Before end-work time 10 min to After end-work time 30 min	
	-If employee does not check in when starting work, mark as absent -If employee does not check out when ending work, mark as absent	
	Apply	Ì

**Operation Steps** 

Step 1 Set start work time and end work time.

Step 2 Tick the workday

Step 3 Set valid time of check in and check out.

Step 4 Click Save to save the setting.

#### Attendance library

Step 1 Click **Attendance Library** to add library, the attendance library can call the face database directly.

Attendance	Attendance Data Attendance Managem	ent		Х
▷ Attendance Rule Settings	Attendance Library			
> Attendance Library	Face Library 👌 Library Management		Attendance Library	
Attendance Check Point S.	☐ 12 Items R Defraint Ib 2 app 2 nor 2 technology 2 technology 2 technology 2 technology 2 technology 2 test 2 test	» Add « Delete		
h.				Apply

Figure 6-31 Attendance library

Step 2 Tick the library and click Add to add to attendance library. If you want to modify the library.

Step 3 click O Database management to enter the face database management to modify

parameter.

Step 4 Click Save to save the setting.

#### Attendance check point settings:

Step 1 Click Attendance check point settings to set point, as shown in Figure 6-32.

Attendance					
▷ Attendance Rule Settings	Attendance Check Po	vint Settings			
▷ Attendance Library	Channel	Attendance Library	Similarity	Enabled	Operate
	Channel01	Default Lib;app,nvr;technology;image;engineering;platform;ipc;unknow;test;hardw.	80%	Start	۷.
	Channel02		80%	Start	۷
	Channel03		80%	Start	2
	Channel04		80%	Start	۷
	Channel05			Start	۷
	Channel06	Default Lib;app;nvr;technology;image;engineering;platform;ipc;unknow;test;hardw.			۷
	Channel07			Start	۷
	Channel08	Default Lib, app, nvr, technology, image, engineering, platform, ipc, unknow, test, hardw.		Start	۷
	Channel09			Start	2
	Channel10		80%	Start	۷
	Channel11		80%	Start	۷
	Channel12		80%	Start	۷
	Channel13			Start	۷
	Channel14			Start	۷
	Channel15		80%	Start	۷
	Channel 16		80%	Start	2

### Figure 6-32 Attendance check point setting

Step 2 Click Lo edit check point setting, as shown in Figure 6-33



Figure 6-33 Check point

- Step 3 Enable the function, set similarity and tick the library, all face detection cameras can be set the check points
- Step 4 Click **OK** to save the setting.

---End

# 6.5 Channel Information

Click the B will show as Figure 6-34, tick the Channel or Encode, the information will show in

live video screen.





----End

## 6.6 Main Menu

Right-click on the UI screen, the main menu as shown in Figure 6-35. The main menu includes

### Channel, Record, Network, Alarm and System.

Figure 6-35 NVR main menu

	Channel			Reco	rd			Networ	k
R	Camera Sensor Setting Privacy Zone Microphone Smart	Encode OSD ROI Intelligent Tracking		Record Storage Disk Del	Schedule Mode lection	Disk S.M.A.R.T Disk Calculatio.	\$	Network DDNS Email IP Filter	802.1X Port Mapping P2P SNIMP
	Alarm					System			
الم م	General Video Loss Alarm In Alarm Out	Motion Deter Intelligent Am Abnormal Ala Local Intellige	otion alysis rm ant Analysis		<u></u>	Information Securily Center Logs	Gener Layou Mainte	al It enance	User Account Auxiliary Screen Auto Reboot

----End

# 7 UI System Setting

### 

Different devices may have different functions, please refer to actual products.

## 7.1 Channel Management

IP cameras can directly be connected to input channels of the NVR by plugging in POE port. When IP cameras are insufficient, the NVR can automatically search for and add IP cameras or manually add cameras in the same Local Area Network (LAN).

Channel management includes Add or Delete Camera, Encode, Sensor Setting, OSD, Privacy Zone, ROI, Microphone, Human Thermometer, Smart, and Intelligent Tracking.

## 7.1.1 Camera

### **Operation Description**

Click **Channel** in the main menu to access the camera management screen, as shown in Figure 7-1 There are four modes for adding cameras, manually add, batch add, search to add, POE add, and automatic add.

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<b>∧</b> oystenn		Record	Alarm Netwo	rk System				
	Camera	Protocol	Management					
⊳ Encode		Channel		Model			vare Version	Operate
		• CH1	192.168.32.74:30001		Private	v3.6.080	1.1004.278.0.11.9.1	∠ @ …
> Sensor Setting					Private	v3.6.080		∠ ₪ …
> OSD		• CH3	169.254.10.4:30001			t3.6.082		∠ ∎ …
								∠ ∎ …
Microphone						Deuteen	Delata	Potok Hodoto
> Microphone	Online I	Device	Start Search		Add	Devices	Delete	Batch Update
> Microphone	Online I	Device P	Start Search	Model	Add	Devices	Delete Firmware Version	Batch Update Modify IP
> Microphone > Smart		Device P 192 168 32 15	Start Search	Model	Add Protocol ONVIF	Devices	Delete Firmware Version	Batch Update Modify IP
⊳ Microphone ⊳ Smart ⊳ Intelligent Tracking	Online I	Device P 192.168.32.15 192.168.32.15	Start Search	Model	Add Protocol ONVIF Private	Devices	Delete Firmware Version v3.6.0804.1004.3.0.11.9.0	Batch Update Modify IP
> Microphone > Smart > Intelligent Tracking		Device P 192.168.32.15 192.168.32.13 192.168.32.13	Start Search 4.8888 8:30001 2:30001	Model	Add Protocol ONVIF Private Private	Devices	Delete Firmware Version v3.6.0804.1004.3.0.11.9.0 t3.6.0821.1004.3.0.5.10	Batch Update Modify IP
> Microphone > Smart > Intelligent Tracking		Device P 1921683215 1921683215 1921683213 1921683290	Start Search 48888 830001 830001 830001	Model	Add Protocol OWVF Private Private Private	Devices	Delete Firmware Version v3.6.0804.1004.3.0.11.9.0 t3.6.0821.1004.3.0.5.10 v3.6.1304.1004.3.0.4.10	Batch Update Modify IP
⊳ Microphone ⊳ Smart ⊳ Intelligent Tracking		Device 192.168.32.15 192.168.32.15 192.168.32.13 192.168.32.90 192.168.32.90 192.168.32.79	Start Search 48888 830001 330001 330001	Model	Add Protocol ONVIF Private Private Private Private	Devices	Delete Firmware Version v36.0604.1004.3.0.119.0 t36.0621.1004.3.0.5.10 v36.1304.1004.3.0.3.10 v36.1304.1004.3.0.3.0.0	Batch Update
> Microphone > Smart > Intelligent Tracking		Device 1921683215 1921883215 1921883213 1921683290 19216832.79 19216832.79	Start Search 48888 800001 200001 200001 200001 200001	Model	Add Protocol ONVIF Private Private Private Private Private	Devices	Delete Firmware Version v3.6.0604.1004.3.0.119.0 13.6.0621.1004.3.0.5.10 v3.6.1304.1004.3.0.4.10 v3.5.0606.1004.3.0.23.0.0 v3.6.0625.1004.3.0.25.10	Batch Update

: Modify device parameters, remote channel is based on cameras (human body

temperature has two remote channels, fisheye cameras have four remote channels) as shown in Figure 7-2.

Channel Name	Channel10
PAddress	192 . 168 . 1 . 83
Protocol	Private 🗸
Port	30001
Jsername	admin
assword	****
lemote Channel	CH-1 v

Figure 7-2 Modify device parameter

----End

### 7.1.1.1 Add Camera Automatically

The NVR can add automatically cameras to the camera list.

### **Operation Methods**

Method 1: Click Start Search button, the cameras in the same network as your recorder will show in list, the search will be lasting for 20 seconds. Input username and password (the default value both are admin) click Add Devices, the cameras in the list would be added to channels directly. Method 2: Select the cameras you want to add, and click Add Devices, the selected cameras would be added to the camera list.

Tick the online non-onvif channels at list and click BatchUpdate to access the directory of software; it would to update the channels at once.

### 🛄 ΝΟΤΕ

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On the camera management screen, check the status of channels in the camera list. If the status of a

channel is this camera is online. If the status of a channel is this camera is offline.

The added cameras should be the same network as NVR.

#### ----End

## 7.1.1.2 Add Camera Manually

### **Operation Steps**

Step 1 Click to add devices as shown in Figure 7-3.

Channel		Р	Protocol	
CH1	169.254.	10.2:30001	Private	^
CH2	192.168.99	9.146:30001	Private	-
СНЗ	192.168.99	9.145:30001	Private	~
Channel				
P Address				
Protocol		ONVIF		~
Port		80		
Jsername				
assword				
Remote Chan	inel			

#### Figure 7-3 Add camera screen

- Step 2 Input IP address, port, user name and password of this camera. Double click the online camera IP to copy its configuration. Quick change of other channel's parameters can be done.
- Step 3 Select a protocol from the drop-down list(ONVIF, Private, custom protocols). Remote channel is only used for multi channels cameras, such as human temperature cameras, fisheye cameras, and so on.

Step 4 Click OK, the camera is added successfully.

## 

If all channels of the NVR are connected by cameras, please delete the cameras that you don't need, so that you can add more cameras.

If an IP camera is added manually, input the correct username and password of the camera below the online device list. The camera will be added successfully. If not the camera would be shown on list at offline.

The protocol can be chosen the custom protocols these are set at protocol interface.

The user can click the added channel to copy the information to save the time, you can just need to modify difference information, such as the remote channel.

----End

## 7.1.1.3 Add Camera by RSTP

If the user wants to add the different protocol cameras to NVR, you can set the protocol

management, and add cameras one by one, as shown in Figure 7-4.

Figure 7-4 Protocol management

🛠 System	Channel Record Alarm Network System	×
▶ Camera	Camera Protocol Management	
<ul> <li>Carnera</li> <li>Encode</li> <li>Sensor Setting</li> <li>OSD</li> <li>Privacy Zone</li> <li>ROI</li> <li>Microphone</li> <li>Smart</li> <li>Intelligent Tracking</li> </ul>	Cartorn       Protocol Management         Custom Protocol       Custom Protocol 1         Protocol Name       Custom 1         Stream Type       Main Stream         Protocol Type       RTSP         Port       D64         Path       Example:[Type];/[[P Address]{Port]/[Path];	
		Apply

Step 1 Click Channel > Camera > Protocol Management.

Step 2 Choose the custom protocol from the drop-down list, there are 16 kinds of protocols can be set.

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Step 3 Input the protocol name.

- Step 4 Tick main stream and sub stream. The main stream shows image on full screen live video. The sub stream shows image on split screen. If you just tick main stream and the channel will not show image on split screen.
- Step 5 Choose the type of protocol, the default value is RTSP.
- Step 6 Input the port of the IP camera.
- Step 7 Input the path (it may vary with different camera models).
- Step 8 Click Apply to save the settings.

Choose the protocol from the drop-down list, the protocol is set at protocol management interface. The cameras should be confirmed to the protocols.

----End

## 7.1.1.4 Delete Camera

#### **Operation Steps**

Step 1 Select a camera to delete in the camera list and click un, the delete confirmation

message screen is displaying, as shown in Figure 7-5.

Figure 7-5 Delete confirmation message



Step 2 Click OK, the camera will be deleted successfully.

## 7.1.1.5 Operate Camera

At camera list, click **camera** to operate camera as shown in Figure 7-6, users can update, reboot and reset the camera immediately.

#### Figure 7-6 More operation

① Update
Reboot
[] Reset
🖌 Modify IP

Step 1 Click Update, pop-up window to select software, as shown in Figure 7-7.

Step 2 Set the directory click OK to update camera. Figure 7-7 Select directory of software

		+ 🛯 🖬
🖿		
B 02_1920x1080_20181229100554.mp4		
	OK	

Step 3 Click **Reboot**, message "**Are you sure to reboot**? " would show, click OK to reboot the camera.

- Step 4 Click **Reset**, message "**Are you sure to reset?**" would show, users can enable the retain IP address function. Click OK to reboot the camera.
- Step 5 Tick the cameras with non-onvif protocol and cameras are online, click **Update** to update all cameras at once.
- Step 6 IP address of the online camera can be modified, click **Modify IP** to modify as shown in following figure, input the new IP address and subnet mask.

Update need upload the firmware by flash driver.

----End

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# 7.1.2 Encode Parameter

The system allows setting the stream information, encoding type, resolution, frame rate, bitrate control, bitrate and quality for cameras in a channel in **Encode Parameter** screen.

#### **Operation Description**

Click **Encode** in the main menu or **Menu** of the channel management screen and choose **Encode** to access the **Encode** screen, as shown in Figure 7-8.

🛪 System	Channel Record Alarm	Network System		×
⊳ Camera	Encode			
	Channel	[1]Channel01		
▷ Sensor Setting				
⊳ OSD	Stream Information	Main Stream	Sub Stream	
▷ Privacy Zone	Video Format	H265 🗸	H265 🗸	
⊳ ROI	Audio Encode Type			
▷ Microphone	Resolution	1920x1080 🗸	704x576 🗸	
	Frame Rate(fps)			
▹ Smart	l Frame Interval(Frame)			
Intelligent Tracking	Bitrate Type	CBR 🗸	CBR 🗸	
	Bitrate(kbps)	4096 🗸	1024 🗸	
	Quality			
	Smart Encode			
			Сору Ар	Ply

#### Figure 7-8 Encode screen

### **Operation Steps**

- Step 1 Select a channel from the drop-down list of channel.
- Step 2 Set video format, audio encode type, resolution, frame rate, bitrate type, bitrate size and quality from the drop-down lists.
- Step 3 Click Copy and select channels or tick **all**, then click OK to apply the parameter settings to cameras in selected channels , click Apply to save encode parameter settings.

#### ----End

# 7.1.3 Sensor Setting

Sensor setting refers to basic attributes of pictures, it includes the brightness, sharpness, contrast and saturation. You can set picture parameters for each channel based on scene.

**Operation Description** 

Click **Sensor Setting** in the main menu or click menu of the channel management screen and choose **Sensor Setting** to access the Sensor Setting screen, as shown in Figure 7-9.

Figure 7-9 Sensor setting screen

🛠 System	Channel Record Alarm Network System	×
⊳ Camera	Sensor Setting	
▷ Encode	2022-04-24 12:54:48 Sun -	
	Channel [1]Channel01 V	
⊳ OSD		
▹ Privacy Zone		
⊳ ROI	A-Dice-istance pr.	
▷ Microphone		
	9	
⊳ Smart	Image Scene Exposure White Balance DayNight Noise Reduction Enhance Image	
▷ Intelligent Tracking		
	Scene Detaur V	
	Brightness – – – 9 + 50	
	Sharpness – – – + 50	
	Contrast – — 9 + 50	
	Saturation – – – + 50	
	Default Apply	

The Sensor Setting are as follows:

Brightness: it indicates brightness or darkness of an image.

Sharpness: it indicates picture's clarity.

Contrast: it refers to the brightest white and darkest black in an image.

Saturation: it indicates brilliance of the picture color.

Other parameters are sensor settings of IP cameras, like scene, exposure, white balance, day-

night, noise reduction, enhance image, zoom focus, etc.

Scene: it includes indoor, outdoor, default. Mirror includes normal, horizontal, vertical, horizontal + vertical.

Exposure: it includes mode, max shutter, meter area and max gain.

White balance: it includes tungsten, fluorescent, daylight, shadow, manual, etc.

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Day-night: users can transit day to night, or switch mode. Noise reduction: it includes 2D NR and 3D NR. Enhance image: it includes WDR, HLC, BLC, defog and anti-shake. Zoom focus: users can zoom and focus.

#### **Operation Steps**

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

Step 2 Select scene from the drop-down list. The default values of picture parameters vary with scenarios.

Step 3 Set parameters.

Step 4 Click Default to reset to factory settings, click Apply to save image settings. ----End

# 7.1.4 OSD Settings

Click **OSD** in the main menu or menu of the channel management screen and choose **OSD** to access the OSD screen, as shown in Figure 7-10.





### Operation Steps

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

- Step 2 Click next to Time to enable or disable OSD time setting.
- Step 3 Click next to Name to enable or disable OSD channel setting.
- Step 4 Set the channel name.
- Step 5 In the video window, click and drag time or channel to move to a location.
- Step 6 Click Copy and select channels, then click OK to apply the OSD settings to cameras in selected channels , click Apply to save OSD settings.

#### ----End

# 7.1.5 Privacy Zone

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

### **Operation Description**

Click **Privacy Zone** in the main menu or menu of the channel management screen and choose privacy zone to access the **Privacy Zone** screen, as shown in Figure 7-11.

Figure 7-11 Privacy zone screen



### **Operation Steps**

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

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

 Step 3 Click
 Copy

 and select channels or tick all, then click
 OK

 to apply the privacy settings to cameras in selected channels , click
 Apply

 to save privacy settings.

 Step 4 Double click privacy area to delete setting.

 ----End

# 7.1.6 ROI

Click **ROI** in the main menu or menu of the channel management screen and choose **ROI** to access the ROI screen, as shown in Figure 7-12.



Figure 7-12 ROI

Table 7-2 RIO parameter

Parameter	Description	Setting
Stream	Stream ID.	[Setting method] Select a value from the drop-down list box. [Default value] Stream 1
Enable	Enable the ROI	[Setting method] Click the button. [Default value] OFF

Parameter	Description	Setting
Area ID	ROI area ID, there are 8 area	[Setting method] Select a value from the drop-down list box. [Default value] 1
Level	The measure result of ROI. The higher the grade, the clearer the area inside and the more vaguer the area outside. There are five levels.	[Setting method] Select a value from the drop-down list box. [Default value] 5
Area Name	The marked name used for areas.	[Setting method] Enter a value manually. The value cannot exceed 32 bytes.

----End

# 7.1.7 Microphone

Click **Microphone** in the main menu or menu of the channel management screen and choose **Microphone** to access the Microphone screen, as shown in Figure 7-13.

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## Figure 7-13 Microphone

🛠 System	Channel Record Alarm	Network System	×
⊳ Camera			
▷ Encode▷ Sensor Setting	Channel	[1]Channel01	
⊳ OSD	Microphone Type	Line In	
▹ Privacy Zone ▷ ROI	Microphone Volume	®	
▹ Smart Intelligent Tracking			
			Apply

### Table 7-3 Microphone

Parameter	Description	Setting
Enable Microphone	Indicates whether to enable the microphone function.	[Setting method] Click the button on to enable microphone.
Microphone Type	Microphone types include: Line In An active audio input is required.	[Setting method] Select a value from the drop- down list box.
Microphone Volume	Allows you to adjust the microphone volume.	[Setting method] Slide the slider left or right. [Default value] 50 NOTE The value ranges from 0 to 100.

----End

# 7.1.8 Smart

# 

It is only available for cameras with AI function.

The comparison function is only for AI multiobject cameras, please refer to actual cameras.

## 7.1.8.1 AI Multiobject

🛪 System	Channel Record Alarm	Network Sy	ystem			×
⊳ Camera	Al Multiobject License Plate	Recognition				
⊳ Encode	2022-04-24 16:27:02 Se					
▷ Sensor Setting				Channel [3]Channel03		
⊳ OSD						
Privacy Zone		THE	20.07			
⊳ ROI						
▷ Microphone			Re	emove All		
	Parameter Configure	Schedule				
	Face Detection			Image Matting Quility	Highest	
▹ Intelligent Tracking	Fullbody Detection			Snapshot Mode	Timina	~
	Vehicle Detection	•		Upload Image Interval(1–10s)		
	Display Trace Info	OFF		FTP upload image matting	•	
	Show Detection Area	•		FTP upload whole image	•	
	Confidence Degree	Medium		Algorithms Library Version	v1.0.0_20220107	
						Apply

#### Figure 7-14 AI multiobject

Table 7-4 AI multiobject

Parameter	Description	How to set
Face detection	The camera will snap the face when someone appears in live video.	Enable
Full body detection	The camera will snap the whole body when someone appears in live video.	Enable
Licence plate detection	The camera will snap the licence when the vehicle's licence appears in live video.	Enable
Vehicle detection	The camera will snap the licence when the vehicle appears in live video.	Enable
Display trace info	Enable the function and a trace frame will show at live video.	Choose from drop list.

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Parameter	Description	How to set
	Mode 1:	
Show detection area	Enable to set a detection area, and the frame will show at live video	Enable
Confidence coefficient	The range of snap image, there are three type, such as high, mid and low. The higher the confidence, the better the snap quality and the fewer snapshots.	Choose from drop- down list.
Face pixel min(30-300)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken.	Input a value ranges 30 to 300
Body pixel min(30-300)	30-300 pixels, the smaller the pixel be set, the more body will be captured, but it may be mistaken.	Input a value range 30 to 300
Vehicle pixel min(30-800)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken.	Input a value range 30 to 800
Image matting quality	The quality of snap images, There are three modes can be chosen, such as low, mid and high.	Choose from drop list.
Snapshot mode	There are three modes can be chosen, such as timing, and optimal.	Choose from drop list.
Upload image interval(1-10 s)	At timing mode, set the interval of upload image.	Input a value ranges 1 to 10
FTP upload image matting	<b>Configuration &gt; Network Service &gt; FTP</b> , set FTP related parameters, the captured picture will be sent to the set FTP location	Enable
FTP upload whole image	Capture a picture and send a whole image.	Enable

Figure 7-15 Schedule



----End

# 7.1.9 Intelligent Tracking

## 

This function is available for high speed camera.

The automatic target tracking function is that the dome camera can continuously track the moving target of the pre-made scene, and automatically adjusts the camera zoom focus according to the moving target distance, and the dome automatically returns to the preset scene when the moving target disappears.

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## Figure 7-16 Intelligent tracking

🛠 System	Channel Record Alarm	Network System	×
⊳ Camera	Intelligent Tracking		
▷ Encode	Channel		
▷ Sensor Setting	Intelligent Tracking	0	
⊳ OSD	Calibration Coefficient	- 0 + 1	
▷ Privacy Zone	Trace Magnify	+ 17	
⊳ ROI	Time Of Duration(s)	+ 212	
▹ Microphone			
▶ Human Thermometer			
⊳ Smart			
► Intelligent Tracking			
			Apply

### Table 7-5 Intelligent tracking parameters

Parameter	Description	Setting
Enable	Enable the button to enable the intelligent tracking	[How to set] Click Enable to enable. [Default value] OFF
Calibration Coefficient	It is equivalent to a control coefficient, and real-time tracking doubling rate nonlinear positive correlation, usually the higher the installation height, the greater the calibration coefficient value; it ranges from 1 to 30	[Setting method] Drag the slider. [Default value] 1
Trace Magnify	It is the value of lens zoom, it has a large influence on the real-time tracking magnification,	[Setting method] Drag the slider. [Default value] 7

Time of Duration	The maximum time of a tracking period, it ranges from 0 to 300 s.	[Setting method] Drag the slider. [Default value] 120
------------------	---	--

----End

# 7.2 Record Setting

Set the Record Schedule, Disk, Storage Mode, S.M.A.R.T, Disk Detection, Disk Calculation, FTP and so on.

# 7.2.1 Record Schedule

### **Operation Description**

Click **Record** in the main menu or click the record page of any function screen in the main menu to access the record schedule screen, as shown in Figure 7-17.

Figure /-1/ Record management screen
--------------------------------------

🛠 System	Channel	Record	Alarm	Network	System						×
► Record Schedule	Record So	chedule									
⊳ Disk	Chann	el		[1]Ch	annel01						
⊳ Storage Mode	Enable	Record		0							
⊳ S.M.A.R.T	Enable	Record Audic									
Disk Detection	Enable	ANR									
▷ Disk Calculation		<b>t</b> 2		8 1		4 16	20	24			
▷ FTP	Sun								Continuous		
	Mon Tue	11 11							Alarm Motion		
	Wed	-							<b>I/O</b>		
	Thu Fri								■ M I/O ■ M&I/O		
	Sat	\$									
									Сору	Apply	

**Operation Steps** 

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

Step 2 Enable the record.

Step 3 Enable the record audio.

Step 4 Enable ANR, the camera is installed with SD card, if the camera is disconnected from the network, when the network is recovered, the NVR can read the recording of camera and copy the loss video form the SD card.

Step 5 Set the record schedule.

**Method 1**: Hold down the left mouse button, drag and release mouse to select the arming time within 00:00-24:00 from Monday to Sunday.

## 

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

The selected area is blue. The default is all week.

Users can choose alarm type to record, if the chosen alarm is happening at the setting time, it will record. So that it will using the disk effectively to avoid repeating useless recording.

The ANR function can be used only for the cameras with supplementary recording function.

Users can set different alarms to record.

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

Step 6 Deleting record schedule: Click again or inverse selection to delete the selected

record schedule.

Step 7 Click Copy and select channels or tick all, then click OK to apply the record management settings to selected channels, click Apply to save settings.

----End

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## 7.2.2 Disk

View the total capacity of disk, disk status, disk SN code and storage space of disk. You can format the disk and set record expiration time.

### UI System Setting Operation Description

Step 1 Click Record in the main menu or menu of the record screen and choose Disk to access

the disk screen, as shown in Figure 7-18.

Figure 7-18 Disk screen												
🗙 System	Channel Record Alarm Net	work System	×									
▷ Record Schedule												
▶ Disk												
<ul> <li>&gt; Storage Mode</li> <li>&gt; S.M.A.R.T</li> <li>&gt; Disk Detection</li> </ul>	Capacity 12TB	Disk2 Capacity 3TB										
Disk Calculation		Format										
> FTP	Disk Status Disk SN Used Space Disk Group	Normal 5QJSVD98 149G8 1 v										
	Recording Overwrite Expired Time(Day) *Some records may be deleted if th	o     expiration time is not 0*	Арріу									

Step 2 Click **Format**. The message "Are you sure to format disk? Your data will be lost" is displaying.

Step 3 Choose the disk group, there are four groups.

Step 4 Click OK, and the disk would be formatted.

Step 5 Enable recording overwrite, the disk will be overwrote automatically.

Step 6 Record expiration setting. Select record expiration days from the drop-down list of record expiration. The expired time is not 0, the records will be deleted when the time is over the setting value.

Step 7 Click Apply to save the settings.

# 

The disk groups can keep the recording of channels at different disks, it will improve the storage efficiency.

The expired time is 0, it means the disk will be rewrite only when the disk is full .

----End

# 7.2.3 RAID (Only for Some Models)

The NVR support to build/ edit/ delete the RAID. Users can choose the type of RAID according to the importance of recording.

## 

RAID is only used for the device with 4 disks or more. And the disks must be enterprise level disks. The capacity of disks is the same for efficient using.

The maximum capacity of RAID cannot exceed 100T.

RAID5 at least 3 disks can be created. RAID6 at least 4 disks can be created. RAID10 at least 4

disks can be created. Create hot spare disk need more one disk or double basic disks.

The capacity of disks is the same for efficient using

Figure	7-1	9	RAIE	)
--------	-----	---	------	---

🛠 System	Channel		larm Netwo	rk System				
Record Schedule								
⊳ Disk		Create RAID				x	HDD Members	Operate
▶ S.MA.R.T			Name	Capacity	Hotspare Disk			
			Disk1	1TB				
			Disk3					
			Disk4					
					UK Cancel			Create

**Operation Steps** 

Step 1 Click **RAID** to create the RAID.

Step 2 Click **Create** to choose a disk to create a new RAID.

Step 3 Tick **Hot-spare Disk** to back up in case the disk is broken. The number of disk must be more than one.

Step 4 Click OK to save the creation, format the new RAID.

# 7.2.4 Storage Mode

Users need to distribute the channels to different disk groups, and use disk capacity reasonably, as shown in Figure 7-20

Figure 7-20 Storage mode

		Alarm Network System		
Record Schedule				
Disk				
	Mode Selection	() Group		
S.M.A.R.T	Disk Group			
Disk Detection	Channel	1 2 3 4 5 6 7 8		
Disk Calculation				
Disk Calculation				
Disk Calculation				Apply
Disk Calculation	The default Channel he	ves to Grain 1		Apply
Disk Calculation	The default Channel be	igs to Group 1		Apply
: Disk Calculation	The default Channel bei	ige to Group 1 c Channel	Used Space	Apply
Disk Calculation	The default Channel bei	ige to Group 1 c Channel 1 1-4	Used Space 149GB	Apply Capacity 12.0TB
Disk Calculation	The default Channel bei Group D 1 Di 2 Di	ige to Group 1 Channel 1 1-4 2 5-8	Used Space 149GB 16TB	Apply Capacity 12.0TB 3.0TB
Disk Calculation FTP	The default Channel bei Group D 1 Di 2 Di 3	ige to Group 1 Channel 1 1-4 2 5-8	Used Space 149GB 16TB 0MB	Apply Capacity 12.0TB 3.0TB 0MB

**Operation Steps** 

Step 1 Choose the disk group.

Step 2 Select the channel to record to disk group.

Step 3 Click Apply to save the settings.

Step 4 The group list will show the detail information.

## 

If the channels are not in list, it means NVR will not record these channels, please make sure that all channels are in list.

Choose number of channel number you should consider the capacity of disk group.

----End

# 7.2.5 S.M.A.R.T

## 7.2.5.1 S.M.A.R.T

S.M.A.R.T is Self-Monitoring Analysis and Reporting Technology, u which is able to check the disk as shown in Figure 7-21.

### UI System Setting

### Figure 7-21 S.M.A.R.T

🛪 System	Channel		d Alarm	Network	System					×
▷ Record Schedule	S.M.A.R.T	WD	DA							
⊳ Disk	Disk		Disk1							
⊳ Storage Mode	Disk SN		5QJ8VD9B		Disk Model					
	Temper	ature	41.0°C		Working Time	2.9 Month				
▷ Disk Detection	Disk He	alth	GOOD							
Disk Calculation			bute Name	Status	Value	Worst	Threshold	Туре	Raw Value	
L ETD		raw-rea	id–error–rate	ОК	100	100	16	prefail	0x0000000000000	
prir		through	out-performa.				54	old-age	0x600000000000	
		spin-up	-time					prefail	0x95019e010800	
		start-st	op-count		100	100		old-age	0x240000000000	
		realloca	ted-sector-c.			100		prefail	0x0000000000000	
		seek-e	rror-rate	ОК		100		old-age	0x00000000000000	
		seek-ti	me-performa.			140		old-age	0x0f0000000000	
			on-hours	OK				old-age	0x270800000000	

----End

## 7.2.5.2 WDDA

The western digital disk has the WDDA function, the NVR can read the information of disk, so that users can view the status of disk, as shown in Figure 7-22.

### Figure 7-22 WDDA

🛠 System	Channel		Alarm	Network	System			×
▷ Record Schedule	S.M.A.R.T	WDDA						
⊳ Disk	Disk	Dist	k1					
⊳ Storage Mode	Disk SN	Dis	k1		Disk Model			
	Warning				Advisory			
Disk Detection								
Disk Calculation			Attribute	Name		Status	Raw Value	
. ETD		Lifetime Pow	ver On Res	ət Alert		Normal	22.00	
PLE		Power On Ho	ours Alert			Normal 2087.00		
		Head Load Li	ifetime Cou	nt Alert		Normal	79.00	
		Current Tem	perature Al	ert		Normal	41.00	
		Total Lifetim	e Workload	Alert		Normal	27.33	
		Total Worklo	ad Rate Ale	art		Normal	114.72	
		Power On Re	esel Rate A	lert		Normal	0.01	
		Head Load R	ate Alert			Normal	0.04	

----End

# 7.2.6 Disk Detection

Detect the disk before recording videos so that the data are secure as shown in Figure 7-23.

#### UI System Setting

### Figure 7-23 Disk Detection

🛠 System	Channel		Alarm	Network	System		×
▷ Record Schedule	Disk Dete	stion					
⊳ Disk	Disk						
⊳ Storage Mode							
▶ RAID						Detecting Process	5.52%
⊳ S.M.A.R.T						HDD Capacity	ЗТВ
➤ Disk Detection						Pad Soctor	
▹ Cloud Storage					8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Dau Goolo	
					8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Good	Bad
					2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
				2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
					I     I <td></td> <td></td>		
	Please	turn off the ve	adio recordino	before the dis	kis detected.		
				<b>, a c i c i c i c i c</b> i c			

**Operation Steps** 

Step 1 Choose the disk from the drop-down list.

Step 2 Tick All or key Area to detect the disk. It will take some several minutes.

Step 3 Click Scan to scan the disk.

Step 4 The result of disk will show in interface

## 

The green block means good, the red block means bad, if the red blocks are too much or at key section, please change the disk immediately.

Please turn off the video recording before the disk is detected, otherwise the recording of video maybe lost.

----End

# 7.2.7 Disk Calculation

Users can calculate the usage of disk, so that he can set the storage strategy reasonably, as shown in Figure 7-24.

There are two modes can be set, computing capacity and computing time

Figure 7-24 Disk calculation of capacity

🛠 System	Channel Record Alarm N	Network System	×
⊳ Record Schedule ⊳ Disk	Disk Calculation		
⊳ Storage Mode	Currently total camera(s) bitrate Calculation Mode	32.45 Mbps Computing Capacity V	
<ul> <li>▷ S.M.A.R.T</li> <li>▷ Disk Detection</li> </ul>	Expect to save time	10 Day v	
	The required disk space		

#### Network Video Recorder User Manual

### UI System Setting

### Figure 7-25 Disk calculation of time

🗙 System	Channel Record Alarm	Network System	×
▹ Record Schedule	Disk Calculation		
⊳ Disk	Currently total camera(s) bitrate	32.45 Mbps	
▷ Storage Mode	Calculation Mode	Computation time 🗸	
⊳ S.M.A.R.T	Disk Capacity		
Disk Detection	Recording time per day	● 24 h	
	The recording time for 10TB disk cap	pacity is :	



## 7.2.8 FTP

Enable FTP upload, when the alarm happens, users can linkage the FTP upload to save the alarm recordings.

### Figure 7-26 FTP

🗙 System	Channel Record Alarm N	etwork System		×
▶ Record Schedule				
⊳ Disk	Enable FTP Upload			
▷ Storage Mode	FTP Address			
⊳ S.M.A.R.T	FTP Port			
Disk Detection	Account			
Disk Calculation	Password			
	FTP Path			
	Upload File Size(0–64MB)			
		Test		
			Apply	

Step 1 Enable the FTP upload.

Step 2 Input the FTP address and port.

Step 3 Input the account, password and FTP path.

Step 4 Set the upload file size, it ranges from 0 to 64 MB.

Step 5 Click "Test" to test the parameters. After the test is successful, click "Apply" to save the settings

----End

# 7.3 Alarm Management

Set the General alarm information, Motion Detection, Video Loss, Intelligent Analysis,

Alarm In, Abnormal Alarm, Alarm out and Local intelligent analysis in alarm management screen.

# 7.3.1 General

## 7.3.1.1 General

Step 1 Click **Alarm** in the main menu (or click the alarm page of any function screen in the main menu) to access the alarm management screen, as shown in Figure 7-27.

Figure 7-27 Alarm management screen

🛠 System	Channel Record Alarm Network System	×
	General IO Control Push	
<ul> <li>&gt; Motion Detection</li> <li>&gt; Video Loss</li> <li>&gt; Intelligent Analysis</li> </ul>	Enable Alarm C Alarm Duration Time (sec) 10 ~ Buzzer Duration Time (sec) 30 ~	
⊳ Alarm In ⊳ Abnormal Alarm ⊳ Alarm Out		
▷ Local Intelligent Analysis		
	Apply	

Step 2 Click to enable the alarm function.

Step 3 Select a value from the drop-down list of duration time.

Step 4 Click Apply to save alarm settings.

Issue: V4.6.5(2022-11-11)

## 7.3.1.2 IO control push

If you select normally open and tick the disabled items, the alarm input 1 will not push message.

Only when the alarm in 1 is in the normally closed, it can push alarm message.

Step 1 Enable the IO control push.



🛠 System	Channel Record Alarm	Network System	×
➤ General	General IO Control Push		
<ul> <li>&gt; Motion Detection</li> <li>&gt; Video Loss</li> <li>&gt; Intelligent Analysis</li> <li>&gt; Alarm In</li> <li>&gt; Abnormal Alarm</li> <li>&gt; Alarm Out</li> </ul>	Enable IO Control Alarm in Normal State Disabled Items	C 1 N/O Push message to APP ≇ Email	
> Local Intelligent Analysis		Apply	

Step 2 Choose one alarm in and mode(N/C, N/O).

Step 3 Tick the disable items, click "Apply" to save settings.

----End

# 7.3.2 Motion Detection

The NVR will send motion detection alarm while something moving in the specific view of camera.

**Operation Description** 

Step 1 Click Motion Detection in the main menu or menu of the alarm management screen and choose Motion Detection to access the Motion Detection screen, as shown in Figure 7-29.

🛪 System	Channel Record Alarm N	etwork System	×
> General > Motion Detection			
	Channel Enable Video Loss Alarm	[1]Channel01 v 3	
▷ Advanced Intelligent Analy.▷ Intelligent Analysis	Event Actions 🛗 Schedule		
⊳ Alarm In ⊳ Abnormal Alarm	Push message to APP Pop up message to monitor		
⊳ Alarm Out	Email Buzzer	© 3	
▷ ADAM▷ Local Intelligent Analysis	PTZ Enable Alarm Out		
	Enable Remote IO Enable Event Recording		
		Сору Аррі	Ŷ

Figure 7-29 Motion detection screen

## 

For Email, FTP, you should set the parameters of these in advance.

Enable Remote IO, the users connect the ADAM (data acquisition modules) to NVR in advanced. Alarm time, the alarm will be duration. Remote ID, the ADAM is connected to NVR'S ID.

Port number, the alarm device is plugged to ADAM's ID. elation Steps

- Step 1 Select a channel from the drop-down list of channel.
- Step 2 Click **O** to enable motion detection.
- Step 3 Enable motion analysis if the camera detects the motion action, the area will be block as shown in Figure 7-30.
- Step 4 Enable the Event actions include: push messages to App, pop up messages to monitor, send Email, buzzer, FTP, PTZ, full screen, alarm out, camera alarm out, enable remote IO, event recordings and so on.





Figure 7-30 Motion detection area setting screen

Area :

1. Hold down and drag the left mouse button to draw a motion detection area.

2. Select a value from the drop-down list next to Sensitivity.

Step 6 Click Schedule page to access the schedule screen. For details, please see 7.2.1 Record

Schedule Figure 7-23Step 5 Set the record schedule.

Step 7 Click Copy and select channels or tick **all**, then click OK to apply the motion detection settings to cameras in selected channels, click Apply to save motion detection alarm settings.

### 

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Double click to delete the selected area.

The default area is whole area.

If you leave the page without applying, the tip "Do you want to save?" would show. Click save to

save the settings. Click cancel to quit the settings.

Enable the alarm out, users need to set alarm time and output ID, four ID are corresponding to back panel's alarm out, 1 A and 1 B, 2 A and 2 B, 3 A and 3 B, 4 A and 4 B.

Channel alarm out is corresponding to alarm port of camera.



Figure 7-31 Alarm schedule

----End

# 7.3.3 Video Loss

If a camera is disconnected to NVR, it will trigger video loss alarm.

#### **Operation Description**

Click **Video Loss** in the main menu or menu of the alarm management screen and choose **video Loss** to access the video loss screen, as shown in Figure 7-32.

🛠 System	Channel Record Alarm N	etwork System	×
<ul> <li>&gt; General</li> <li>&gt; Motion Detection</li> <li>&gt; Video Loss</li> </ul>	Video Loss Chamel	[1]Chame01 ~	
⊳ Intelligent Analysis	Enable Video Loss Alarm		
<ul> <li>&gt; Alarm In</li> <li>&gt; Abnormal Alarm</li> <li>&gt; Alarm Out</li> </ul>	Push message to APP Pop up message to monitor Email	© ©	
<ul> <li>Local Intelligent Analysis</li> </ul>	Buzzer PTZ Enable Alarm Out	ି ତ ତ	
	Enable Remote IO Enable Event Recording	© ©	
		Сору Арру	

Figure 7-32 Video loss screen

#### **Operation Steps**

- Step 1 Select a channel from the drop-down list of channel.
- Step 2 Click to enable video loss alarm.
- Step 3 Enable the Event actions include: push message to App, pop up message to monitor, send Email, buzzer, FTP, PTZ, alarm out, enable remote IO, event recording and so on.
- Step 4 Click Schedule page to access the schedule screen.
- Step 5 For details, please see 7.2.1 Record Schedule Figure 7-23Step 5 Set the record schedule.
- Step 6 Click Copy and select a channel, then click OK to apply the parameter settings to cameras in selected channels, click Apply to save video loss settings.
- ----End

# 7.3.4 Intelligent Analysis

## 

The channel camera can set the intelligent analysis which are depended on the performance of cameras.

### **Operation Description**

Step 1 Click Intelligent Analysis in the main menu or menu of the alarm management screen and choose Intelligent Analysis to access intelligent analysis screen, as shown in Figure 7-33.

🛪 System	Channel Record Alarm Ne	twork System	×
⊳ General	Perimeter Single Virtual Fence Doubl	e Virtual Fences Multi Loitering Wrong Way People Counting	~
Motion Detection	Channel	[1]Channel01 v	
▷ Video Loss	Enable		
	Event Actions EDetection Area	🛗 Schedule	
⊳ Alarm In	Push message to APP		
⊳ Abnormal Alarm		lacksquare	
<ul> <li>Alorea Out</li> </ul>			
≱ Alam Out	Buzzer	lacksquare	
Local Intelligent Analysis			
	Full Screen		
	Enable Alarm Out		
	Enable Camera Alarm Out		
	Enable Remote IO		
	Enable Event Recording	•	
		Apply	

Figure 7-33 Intelligent Analysis screen

Step 2 Select one action to set the alarm.(Intrusion, Line crossing, Single virtual fence, Double virtual fences, Object left, Object removed, Signal bad, Loiter, Multi loiter, Abnormal speed, Converse, Illegal parking, Personnel count, Fence, Enter area, Leave area, Advanced).

Step 3 Select a channel from the drop-down list of channel.

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Step 4 Click **(** to enable intelligent analysis alarm.

Step 5 Enable the event actions include: push message to App, pop up message to monitor, send Email, buzzer, FTP, PTZ, full screen, alarm out, camera alarm out, enable remote IO, event recording and so on.

Step 6 Click Schedule page to access the schedule screen.

Step 7 For details, please see Figure 7-23Step 5 Set the record schedule.

Step 8 Click Copy and select a channel, then click OK to apply the parameter settings to cameras in selected channels, click Apply to save video loss settings.

🛠 System	Channel Record A	larm Network System		×
⊳ General	Perimeter Single Virtual Fen	ce Double Virtual Fences Multi Loitering	Wrong Way People Counting	~
Motion Detection	Channel	[3]Channel03		
▷ Video Loss	Enable	©		
⊳ Alarm In	Event Actions	etection Area 🛗 Schedule		
Abnormal Alarm	2022-04-25 11:05.44		Enable OSD	۲
▷ Alarm Out	The second second		Counting Clear Interval	1Day 🗸
Local Intelligent Analysis			Area Type	Line 🗸
			Set Correction Value	
			Over Perple Number Alarm	lacksquare
			Alarm Threshold	1000
			<u>N</u> .	
	A->B is out			
	– B–>A is in			
				Apply

#### Figure 7-34 Personnel count

Table 7-6 Personnel count parameters

Parameter	Description	Setting
Enable	Click the button to enable personnel count.	[How to set] Click Enable to enable. [Default value] <b>OFF</b>
OSD enable	Enable, the statistical data of personnel count will show on OSD	[How to set] Click Enable to enable. [Default value] <b>OFF</b>
----------------------------	--	---
Counting clear interval	There are five modes can be chosen, such as 10 min, half-hour, 1 hour, 12-hour, 1 day.	[Setting method] Choose from drop-down list [Default value] 7
Area type	The area to distinguish entry and exit.	[Default value] Line

# 7.3.5 Alarm In



This function requires access to a camera that supports external alarm in.

There are two types alarm in, one is the NVR's alarm in, another is the camera channel's alarm in.

**Operation Description** 

Click **Alarm in** in the main menu or menu of the alarm management screen and choose **Alarm** in to access the alarm in screen, as shown in Figure 7-35.

🛪 System	Channel Record Alarm	Network System	×
⊳ General	Alarm In Camera Alarm In		
▷ Motion Detection	Alarmin		
⊳ Video Loss	Enable Alarm In	•	
	Normal State		
▹ Intelligent Analysis	Port Name	Sensor 1	
⊳ Abnormal Alarm	event Actions Schedule		
⊳ Alarm Out	Push message to APP	0	
	Pop up message to monitor		
N Local Intelligent Analysis			
	Enable Alarm Out		
	Enable Event Recording		
			Apply

### Figure 7-35 Alarm in screen

#### Figure 7-36 Camera alarm in

🛠 System	Channel Record Alarm N	etwork System	×
<ul> <li>&gt; General</li> <li>&gt; Motion Detection</li> <li>&gt; Video Loss</li> </ul>	Alarm In <u>Camora Alarm In</u> Channel Alarm In	[1]Chame01	
⊳ Intelligent Analysis ► Alarm In	Normal State Enable Alarm In Ge Event Actions 🛗 Schedule	N/0 V	
⊳ Abnormal Alarm ⊳ Alarm Out	Emall Buzzer	e e	
▹ Local Intelligent Analysis			
	Enable Alarm Out Enable Camera Alarm Out Enable Remote IO	© © ©	
	Enable Event Recording		v Apply

### **Operation Steps**

Step 1 Select a channel in alarm in.

Step 2 Click to enable or disable the functions.

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

NC: Normal close the alarm

NO: Normal open the alarm

Step 4 Set name.

- Step 5 Enable the event actions include: push message to App, pop up message to monitor, send Email, buzzer, FTP, PTZ, full screen, alarm out, camera alarm out, enable remote IO, event recording and so on.
- Step 6 Click **Schedule** page to access the schedule screen. For details, please see 7.2.1 Record Schedule Figure 7-17Step 5 Set the record schedule.

Step 7 Click Apply to save settings of Alarm in.

# 7.3.6 Abnormal Alarm

Abnormal alarm includes disk alarm, IP conflict and network disconnected.

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**Operation Description** 

Step 1 Click **Abnormal Alarm** in the main menu or menu of the alarm management screen and choose **Abnormal Alarm** to access the abnormal alarm screen, as shown in Figure 7-39.

🛪 System	Channel Record Alarm	Network System	×
⊳ General	Abnormal Alarm		
▷ Motion Detection	Enable Abnormal Alarm	a	
⊳ Video Loss	Abnormal Type		
▹ Intelligent Analysis			
⊳ Alarm In			
	Push message to APP		
⊳ Alarm Out	Pop up message to monitor	0	
▹ Local Intelligent Analysis		lacksquare	
	Enable Alarm Out		
	Enable Remote IO		
			Apply

Figure 7-37 Abnormal alarm screen

Step 2 Tick the abnormal actions.

Step 3 Enable the event actions include: push message to App, pop up message to monitor, send

Email, buzzer, alarm out, enable remote IO and so on.

Step 4 Click Apply to save abnormal alarm settings.

# 7.3.7 Alarm Out

### 7.3.7.1 Alarm Out

Choose one output ID as the output interface.

Figure 7-38 Alarm out

# 7.3.7.2 Camera Alarm out

This function requires access to a camera that connected to an external alarm out device.

🛠 System	Channel Record Alarm	Network System	×
⊳ General	Alarm Out Camera Alarm Out	Flashlight Alarm Out	
<ul> <li>&gt; General</li> <li>&gt; Motion Detection</li> <li>&gt; Video Loss</li> <li>&gt; Intelligent Analysis</li> <li>&gt; Alarm Ih</li> <li>&gt; Abnormal Alarm</li> <li>&gt; Alarm Out</li> <li>&gt; Locel Intelligent Analysis</li> </ul>	Abrm Out Connor Abrm Out Channel Port Number Valid Signal Alarm Output Mode Alarm Time(ms)(0:Continuous)	Flashlight Alarm Out [1]Channel01 1 Nome Close Switch Mode 0	
			Apply

Figure 7-39 Camera alarm out

Table 7-7	Camera a	larm out
-----------	----------	----------

Parameter	Description	Setting
Alarm Output	ID of the alarm output channel. NOTE The number of alarm output channels depends on the device model.	[Setting method] Select a value from the drop-down list box. [Default value] 1
Name	Alarm output channel name.	[Value range] 0 to 32 bytes
Valid Signal	The options are as follows: <b>Close</b> : An alarm is generated when an external alarm signal is received. <b>Open</b> : An alarm is generated when no external alarm signal is received.	[Setting method] Select a value from the drop-down list box. [Default value] Close

Parameter	Description	Setting
Alarm Output Mode	When the device receives I/O alarm signals, it will send the alarm information to an external alarm device in the mode specified by this parameter. The options include the switch mode and pulse mode.	[Setting method] Select a value from the drop-down list box. [Default value] Switch Mode
	NOTE If the switch mode is used, the alarm frequency of the device must be the same as that of the external alarm device.	
	If the pulse mode is used, the alarm frequency of the external alarm device can be configured.	
Alarm Time(ms) (0: Continuous)	Alarm output duration. The value <b>0</b> indicates that the alarm remains continuous valid.	[Setting method] Enter a value manually. [Default value] 0 [Value range] 0 to 86400 seconds
Manual Control	Control the alarm output.	N/A

# 7.3.8 Local Intelligent Analysis

### 7.3.8.1 General

At "Alarm > Local Intelligent Analysis > General" interface, enable the local intelligent analysis to set the local intrusion, as shown in Figure 7-40.

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🛠 System	Channel Record Alarm	Network System	×
⊳ General	General Perimeter		
<ul> <li>&gt; Motion Detection</li> <li>&gt; Video Loss</li> </ul>	Enable Enable Draw Rect	•	
⊳ Intelligent Analysis ⊳ Alarm In	Mode Channel	Detection mode	
<ul><li>▷ Abnormal Alarm</li><li>▷ Alarm Out</li></ul>			
			Apply

Figure 7-40 Local intelligent analysis - General

Enable the alarm function.

Enable Draw Rectangle, the detection rectangle will be shown on the live video of intrusion.

Choose the channels, support up to 4 channels.

Enable or disable the intrusion, modify the channels, click the "Apply" and the device will be rebooted.

### 7.3.8.2 Intrusion

At "Alarm > Local Intelligent Analysis > Intrusion" interface to set the parameter of local intrusion.

The "Intrusion" refers to that an alarm is generated when the targets of specified types (such as person, car, and both person and car) enter the detection area.

Figure 7-41 Intrusion

🗙 System	Channel Record Alarm Ne	twork System	×
▷ General ▷ Motion Detection	General Intrusion	[t]Chamel01 V	
> Video Loss	Enable	E	
<ul> <li>&gt; Intelligent Analysis</li> <li>&gt; Alarm In</li> <li>&gt; Abnormal Alarm</li> <li>&gt; Alarm Out</li> </ul>	Push message to APP Pop up message to monitor Email		
Alem Out     Local Intelligent Analysis	Buzzer FTP PT7	ତ ତ ତ	
	Full Screen Enable Alarm Out		
	Enable Camera Alarm Out Enable Remote IO Enable Event Recording	U O O	
		Apply	

#### **Event action:**

Choose the channel to enable the intrusion, enable the event actions (such as push message to App, Pop up message to monitor, Email, Buzzer, FTP, PTZ, Full screen, Alarm out, Camera alarm out, enable remote IO, Event recording, and so on). Click "Apply" to save the settings. Figure 7-42 Detection area



#### **Detection area:**

Move the cursor to the drawing interface and click to generate a point, move the cursor to draw a

line, and then click to generate another point. This is how a line is generated. In this way,

continue to draw lines to form any shape, and right-click to finish line drawing.



A drawn line cannot cross another one, or the line drawing fails.

Any shape with 8 sides at most can be drawn.

The quantity of detection areas is not limited yet and will be described in future when a limit is applied.

Choose Limit target from the drop-down list, person/ person or car / car.

Chan	el					1]Channe					
Enabli						D					
θEv	ent	Actions	[]]Dete	ction Ar	ea						
	13									24	
Sun	44										
Mon	13		يد موم								
Tue	14										
Wed	44										
Thu	43										
	13		و و و و و								
Sat	44										
											Apply

Figure 7-43 Set schedule

#### Set schedule:

**Method 1:** Click left mouse button to select any time point within 0:00-24:00 from Monday to Sunday as shown in Figure 7-63.

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

### 

When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected. Method 3: Click in the schedule page to select the whole day or whole week. Deleting schedule: Click again or inverse selection to delete the selected schedule. ----End

### 7.4 Network Management

Set the Network Parameter, 802.1X, DDNS, E-mail, Port Mapping, P2P, IP Filter, SNMP 3G/4G and PPPOE, Network Traffic in the network management screen.

#### **Operation Description**

Step 1 Click **Network** in the main menu (or click the network page of any function screen in the main menu) to access the network management screen, as shown in Figure 7-44.

Figure 7-44 Network management screen

🗙 System	Channel Record Alarm	Network System	×
	P Port POE		
⊳ 802.1X	DHCP	Ð	
▷ DDNS	IP Address	192 . 168 . 32 . 149	
▷ Port Mapping	Subnet Mask		
⊳ Email	Default Gateway	192 . 168 . 0 . 1	
⊳ P2P	Obtain DNS Automatically		
⊳ IP Filter	Preferred DNS Server		
⊳ SNMP	Alternate DNS Server		
▷ POE Status			
> Network Traffic			
> Platform Access			
			Apply

# 7.4.1 Network

Set DHCP and DNS manually or automatically.

### 7.4.1.1 IP

### **Operation Steps**

- Step 1 Click next to **DHCP** to enable or disable the function of automatically getting an IP address. The function is disabled by default.
- Step 2 If the function is disabled, click input boxes next to **IP**, **Subnet mask**, 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.
- Step 4 If the function is disabled, click input boxes next to DNS 1(default 192.168.0.1) and DNS 2(default 8.8.8.8), delete original address, and enter a new address.

Step 5 Click Apply to save IP settings.

### 7.4.1.2 Port

**Operation Steps** 

Step 1 Click Port page to access the port setting screen, as shown in Figure 7-45.

Figure 7-45 Port setting screen

🗙 System	Channel Record Alarm	Network System	×
➤ Network	IP Port POE		
⊳ 802.1X	HTTPPort		
⊳ DDNS	HTTPS Port	443	
▷ Port Mapping	RTSP Port	554	
⊳ Email	Control Port	30001	
⊳ P2P			
⊳ IP Filter			
⊳ SNMP			
š			
▷ POE Status			
▷ Network Traffic			
▷ Platform Access			
			Apply

Step 2 Set the HTTP port, HTTPS port, RTSP port and Control port.

Step 3 Click Apply to save port settings.

### 7.4.1.3 POE

**Operation Steps** 

Step 1 Click POE page to access the POE setting screen, as shown in Figure 7-46.

🛪 System	Channel Record Alarm	Network System	×
	IP Port <u>POE</u>		
<ul> <li>&gt; 802.1X</li> <li>&gt; DDNS</li> <li>&gt; Port Mapping</li> <li>&gt; Email</li> <li>&gt; P2P</li> <li>&gt; IP Filter</li> <li>&gt; SNMP</li> </ul>	Auto Manage For PoE Camera IP Address Subnet Masik Default Gateway *The POE parameters are modified	169.254.10.121         255.255.0         169.254.10.1         169.254.10.1         189.254.10.1         1and the device will reboot*	
<ul> <li>POE Status</li> <li>Network Traffic</li> <li>Platform Access</li> </ul>			Apply

Figure 7-46 POE screen

Step 2 The NVR will deploy IP addresses to the cameras connected to POE immediately.

Step 3 Click Apply to set POE camera IP address successfully.

----End

### 7.4.2 802.1 X

**Operation Steps** 

Step 1 Click next to 802.1 X to enable or disable the function . The default is disabled.

Figure 7	7-47	802.1	Х
----------	------	-------	---

🛠 System	Channel Record Alarm	Network System	×
⊳ Network			
	Enable 802 1X		
⊳ DDNS	User		
▷ Port Mapping	Password		
⊳ Email			
▷ P2P			
⊳ IP Filter			
⊳ SNMP			
▷ POE Status			
Network Traffic			
▷ Platform Access			
		Apply	

Step 2 Input the user and password of 802.1X, the account is created by user.

Step 3 Click Apply to save the settings. The visitor to view the NVR need to input account to certify.

----End

# 7.4.3 DDNS

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

### **Operation Steps**

- Step 1 Click **DDNS** in the main menu or menu of the network management screen and choose **DDNS** to access the DDNS screen.
- Step 2 Click next to **Enable** to enable the DDNS function. It is disabled by default, as shown in Figure 7-48.

🗙 System	Channel Record Alarm	Network System	×
▷ Network	DDNS		
⊳ 802.1X	Enable DDNS	(D)	
► DDNS	Protocol	no_ip v	
▷ Port Mapping	Domain Name		
⊳ Email	User		
⊳ P2P	Password		
⊳ IP Filter		Test	
⊳ SNMP			
▷ POE Status			
▷ Network Traffic			
▷ Platform Access			
			Apply

Figure 7-48 DDNS setting screen

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

Step 4 Set domain name, input user and password.

Step 5 Click Test to check the domain name.

Step 6 Click Apply to save DDNS network settings

### 

An external network can access the NVR via an address that is set in the DDNS settings.

#### ----End

# 7.4.4 Port Mapping

### 7.4.4.1 Port Mapping

#### **Operation Steps**

Step 1 Click **Port Mapping** in the main menu or menu of the network management screen and choose **Port Mapping** to access the port mapping screen, as shown in Figure 7-49.

	8	11 8 8	
🛠 System	Channel Record Alarm	Network System	×
▶ Network	Port Mapping NAT Port		
⊳ 802.1X	Enable Port Mapping	<b>O</b>	
▷ DDNS	Mode	Auto 🗸	
	HTTP Port		
⊳ Email	HTTPS Port		
▶ P2P	RTSP Port		
⊳ IP Filter	Control Port		
⊳ SNMP	Port range [1025-65534]		
▷ POE Status			
▷ Network Traffic			
Platform Access			
			Apply

Figure 7-49 Port manning setting screen

Step 2 Select UPnP enable type.

Step 3 Manual UPnP: input http port, data port and client port manually.

Step 4 Auto UPnP: device obtain the port automatically.

Step 5 Click Apply to save settings. ----End

### 7.4.4.2 NAT Port

NAT Port (Network Address Translation). Access the NVR channels through the NAT port. Users can set the start port, and it will generate the end port automatically. We will view the NAT port

when we access the channel through clicking  $\angle \mathcal{E}^{\cdots}$  icon at Web interface.

Figure 7-50 NAT port	
----------------------	--

🛠 System	Channel Record Alarm Ne	twork System	×
▶ Network	Port Mapping NAT Port		
⊳ 802.1X	Start Port	40001	
⊳ DDNS	End Port		
➤ Port Mapping			
⊳ Email	Port range [40001-65534]		
▶ P2P			
⊳ IP Filter			
⊳ SNMP			
▷ POE Status			
▷ Network Traffic			
▷ Platform Access			
		Apply	

### 7.4.5 Email

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. Two mailboxes can be set as receivers.

#### **Operation Steps**

Step 1 Click **E-mail** in the main menu or menu of the network management screen and choose **E-mail** to access the E-mail screen, as shown in Figure 7-51.

🛪 System	Channel Record Alarm	Network System		×
▶ Network	Email Server 1 Email Server 2			
⊳ 802.1X	SMTP Server			
⊳ DDNS	SMTP Server Port			
▷ Port Mapping	Username			
▶ Email	Bassword			
⊳ P2P	Fassil Pandar			
⊳ IP Filter	Email Sender			
⊳ SNMP	Alarm Receiver 1			
	Alarm Receiver 2			
	Alarm Receiver 3			
▷ POE Status	SSL Encryption	OFF		
▷ Network Traffic	Sending interval(0-600s)			
> Platform Access		Test		
a 1990 (All Child Child And Children An Anna An An An				
			Apply	

Figure 7-51 E-mail setting screen



SMTP Server		
SMTP Server Port		
Jsername		
Password		
Email Sender		
Alarm Receiver 1		
Jarm Receiver 2		
Alarm Receiver 3		
SL Encryption	OFF	
Gending interval(0–600s)		
	Test	

Step 2 Set SMTP server address and SMTP server port manually.

Step 3 Input E-mail sender, user name and password manually.

- Step 4 Set E-mail for receiving alarm. the message "**Mail has been sent, please check**" is displaying. 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 displaying. Open the mail, if the verification code is received, E-mail is set successfully.

Step 6 Set SSL encryption for encrypting mail or not, set sending interval.

Step 7 Click Apply to save settings. ----End

# 7.4.6 P2P

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

#### **Operation Steps**

Step 1 Click **P2P** in the main menu or menu of the network management screen and choose **P2P** to access the P2P screen, as shown in Figure 7-53.

Figure 7-53 P2P screen



Step 2 Click to enable the P2P function.

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

Step 4 After the **Liberty-View** is installed in mobile phone, run the APP and scan the QR to add and access the NVR when the device is online.

----End

# 7.4.7 IP Filter

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

### **Operation Steps**

Step 1 Click IP Filter in the main menu or menu of the network management screen and choose

IP Filter to access the IP filter screen, as shown in Figure 7-54.

Figure 7-54 IP Filter setting screen

🛠 System	Channel Record Alarm	Network System	×
▶ Network	IP Filter		
⊳ 802.1X	Enable IP Filter	٦	
▷ DDNS ▷ Port Mapping	Rule Type	Black List 🗸 🗸	
⊳ Email	Black List(Following network see	gments are forbidden)	Edit
⊳ P2P			
⊳ SNMP			
b POE Status			
▷ Network Traffic			
▷ Platform Access			
	+ -		
			Apply

Step 2 Click next to IP Filter to enable the function of IP Filter.

Step 3 Select black list or white list drop-down list.

Step 4 Click **Step** to set black & white list IP segment screen is displaying, as show in Figure 7-

55.

#### Figure 7-55 IP Address Segment screen

Start IP		
End IP		

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

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

### 

Black list: A list of IP addresses in specified network segment that are regarded as unacceptable or untrustworthy and should be excluded or avoided.

White list: a list of addresses in specified network segment considered to be acceptable or trustworthy.

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

### 7.4.8 SNMP

There are three versions of simple network management protocols at interface.

#### **Operation Steps**

Step 1 Click **IP Filter** in the main menu or menu of the network management screen and choose **IP Filter** to access the IP filter screen, as shown in Figure 7-56.

	8	8	
🗙 System	Channel Record Alarm	Network System	×
▷ Network	SNMPv1/2 SNMPV3		
⊳ 802.1X	SNMPV1	<b>(</b>	
⊳ DDNS	SNMPV2C	0	
▷ Port Mapping	Write Community		
⊳ Email	Read Community		
⊳ P2P	Trap Address		
⊳ IP Filter	Tran Port		
	Trap Community		
▷ POE Status			
Network Traffic			
> Platform Access			
			Apply
	-		

Figure 7-56 SNMP settings screen

Step 2 Click next to **SNMPV 1** to enable the function . The interface is shown as Figure 7-59.

MPv1/2 SNMPV3	
SNMPV1	
SNMPV2C	
Write Community	
Read Community	
Trap Address	
Trap Port	
Trap Community	

#### Figure 7-57 SNMPV 1/2 interface

Step 3 Input the parameters of protocol.



# 7.4.9 POE Status

Users can view the status of POE intuitively, as shown in Figure 7-58.





# 7.4.10 Network Traffic

Users can view the network traffic immediately, as shown in Figure 7-59





There are two rates, transmit rate and receive rate. The status of LAN(s) show on list.

----End

# 7.4.11 Platform Access

If the NVR and platform system are not at the same local network, ensure the NVR is connected to the same external server as the platform system. You should build a server for platform in advanced, platform's remote IP/Port and NVR are mapping port to external network.

Step 1 Choose Configuration > Network Service > Platform Access.

The Platform Access page is displayed, as shown in Figure 7-60

🛪 System	Channel Record Alarm	Network System	×
▶ Network	Platform Access		
> DDNS	Enable		
▷ Port Mapping ▷ Email	Port		
⊳ P2P	User Password		
<ul> <li>▷ IP Filter</li> <li>&gt; SNMP</li> </ul>	Encrypt	Đ	
▷ Network Traffic			
► Platform Access			
		Αηρίγ	

Figure 7-60 Platform Access page

Step 2 Input the parameters. The URL and port are the platform server IP address and port

Step 3 The name and port are the platform's login name and password.

Step 4 Add the NVR to platform, you should input the following information.

1: IP/ID/Domain name is Device ID of NVR.

#### 🛠 System Channel Record Alarm Network Disk Device Name Device Device Type NVR Model L3NVR8POE v4.6.1604.0000.003.0.1.36.0 1504010C0F18 U-boot Version ▷ Maintenance HDD Number Channels Supported Alarm In Alarm Out Audio Out

Figure 7-61 IP/ID/Domain

### 2: The connection mode should be chosen **Device active registration**.

Figure 7-62 Connect NVR to platform

Device Name		
Device Hame		
Device Type	NVR	
Protocol	Private Protocol	
IP/ID/ domain name		
Port	30001	
Group	Default group	
	Advanced set	ting
Connection mode	Device active registration	
IAU	Not configured	
MDU	Auto	

3: the CMU, MDU and IAU servers of platform should be mapped to the ports to external network in advanced.

#### Figure 7-63 URL address / port

Basic Inform	nation			Ω Refresh 📚 Back 🏷 Restore 🗹 Edit 🗙 Delete
Server Name :				Start-up Time : 2022-04-11 15:15:51
Running State :		Remote IP:Port :		Online Time : 4Hrs 15Min 56Sec
Log Type :		Device registration port :	17888	SSL port : 15680
Domain :	Default Domain	Remote device registration port :		

Step 5 If you want to encrypt the access, you can enable the Encrypt.

#### Step 6 Click Apply.

The message "Apply success!" is displayed, and the system saves the settings.

----End

# 7.5 System Management

View the device **Information** and set **General** information, **User Account**, **Security Center**, **Layout**, **Logs**, **Maintenance** and **Auto Reboot** for the system setting.

#### **Operation Description**

Click **System** in the main menu (or click the system page of any function screen in the main menu) to access the system setting screen, as shown in Figure 7-64.

🛠 System	Channel	Record	Alarm	Network		×
	System	Network	Channel	Disk	Alarm	
⊳ General	Device I	D		B01100	03AFEK 109U62	
▷ User Account	Device I	Name		Devic	e	
▷ Security Center	Device	Туре		NVR		
▶ Layout	Model			L3NVF	R8POE	
▷ Auxiliary Screen	Firmwar	e Version		v4.6.1	604.0000.003.0.1.36.0	
⊳ Logs	U-boot	Version		15040	10C0F18	
▷ Maintenance	Kernel V	ersion		15060	1511183A	
▶ Auto Reboot	HDD Nu	nber				
	Channel	s Supported				
	Alarm In					
	Alarm O	ut				
	Audio In					
	Audio O	ut				

Figure 7-64 System setting screen

# 7.5.1 Information

View the device ID, device name, device type, model, firmware version, kernel version, face detection version, HDD volume, channel support, alarm in, and alarm out, audio in, audio out in **information** screen, as shown in Figure 7-65.

stem Network Channel	Disk Alarm
Device ID	B011003AFEK109U62
Device Name	Device
Device Type	NVR
Model	
Firmware Version	v4.6.1604.0000.003.0.1.36.0
U-boot Version	1504010C0F18
Kernel Version	15060511183A
HDD Number	
Channels Supported	
Alarm In	
Alarm Out	
Audio In	
Audio Out	

Figure 7-65 Information-system interface

Network: status, IP address, subnet mask, default gateway, MAC address, DHCP, preferred DNS server, Alternate DNS server, total band width, received packets, and so on, as shown in Figure 7-66.

System	Network	Channel	Disk	Alarm
Status			Onl	ine
IP Addre	ss		192	.168.32.149
Subnet	Mask			5.255.0.0
Default (	Gateway		192	.168.0.1
MAC Ad	dress			1C:27:16:F5:7A
DHCP			OF	
Preferre	d DNS Server		192	.168.32.254
Alternat	e DNS Server			
Total Ba	ndwidth		100	0.00 Mbps
Receive	d Packets			3 Mbps

Figure 7-66 Information-network interface

Channel: channel, name, status, video format, resolution, bitrate (kbps), and so on, as shown in Figure 7-67.

System	Network	Channel Disk	Alarm		
					Bitrate(kbps)
	Channel01	Online		1920*1080/704*576	4096/1024
	Channel05			1920+1080/704+480	
	Channel06			704*480/352*240	
	Channel08				

Figure 7-67 Information-channel interface

Disk: disk name, capacity, used, SN, disk model, status, and so on, as shown in Figure 7-68

System Netw	ork Channel	Disk Alarm		
Disk1	12 TB		5QJ8VD9B	Normal
Disk2		1678 GB	Z6A0RABD	Normal

Alarm: channel, name, mode, enable, recording channel, and so on, as shown in Figure 7-69.

 System
 Natwork
 Channel
 Disk
 Alarm

 Channel
 Name
 Mode
 Enable
 Recording Channel

 Locak-1
 Sonsor 1
 N/O
 On
 Image: Constraint of the sonsor 1

 Locak-2
 Sensor 2
 N/O
 On
 Image: Constraint of the sonsor 3
 N/O

 Locak-4
 Sensor 4
 N/O
 On
 Image: Constraint of the sonsor 3
 Image: Constraint of the sonsor 3

 Locak-4
 Sensor 4
 N/O
 On
 Image: Constraint of the sonsor 3
 Image: Constraint of the sonsor 3

 Locak-4
 Sensor 4
 N/O
 On
 Image: Constraint of the sonsor 4
 Image: Constraint of the sonsor 4

 Local-31
 Close
 Image: Constraint of the sonsor 4
 Image: Consor 4
 Image: Co

Figure 7-69 Information-alarm interface

# 7.5.2 General

### 7.5.2.1 System

### **Operation Steps**

Step 1 Click **General** in the main menu or menu of the system management screen and choose **General** to access the system screen, as shown in Figure 7-70.

🛠 System	Channel Record Alarm	Network System		×
▷ Information	System Date And Time Tin	ne Zone DST Sync Ca	amera Time	
▶ General	Device Name	Device		
⊳ User Account	Output Resolution	1920x1080		
▹ Security Center	Language	English		
⊳ Layout	Temperature Unit	Celsius		
⊳ Logs				
▶ Maintenance				
▷ Auto Reboot				
				Apply

#### Figure 7-70 system setting screen

Step 2 Enter the name of the selected device.

Step 3 Select a proper resolution from the output resolution drop-down list.

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

Step 5 Set the temperature unit.

Step 6 Click Apply to save settings. ----End

### 7.5.2.2 Date and Time

**Operation Steps** 

Step 1 Click **Date and Time** page to access the date and time setting screen, as shown in Figure

7-71.

🛪 System	Channel Record Alarm	Network System	>
▷ Information	System Date And Time Tin	ne Zone DST Sync Came	era Time
> General	Date Format	DD/MM/YY hh:mm:ss	
▹ User Account	Time Format	24H	
Security Center	Enable NTP	0	
b Lavout	NTP Server	time.windows.com	
	Sync Time Frequency (sec)	86400	
⊳ Logs	Date		
▶ Maintenance	Time		
▷ Auto Reboot			
	- Time modification will cause the o	shannel to reconnect	
	- Time modification will affect vide	so query	
			Apply

Figure 7-71 Date and Time setting screen

Step 2 Select required format from the Date Format and time format drop-down list.

Step 3 Click next to NTP Sync to disable time synchronization. Time synchronization is enabled by default. Time is synchronized with the NTP.

Step 4 After NTP Sync is disabled, you can manually set the system time:

Click Date and use the scroll wheel to select the year, month, and date.

Click Time and use the scroll wheel to select the hour, minute, and second.

Click Modify Time to save the time settings.

Step 5 Click Apply to save settings.

----End

### 7.5.2.3 Time Zone

### **Operation Steps**

Step 1 Click Time zone page to access the time zone setting screen, as shown in Figure 7-72.

🛠 System	Channel Record Alarm Network System	×
> Information	System Date And Time Time Zone DST Sync Camera Time	
▶ General	Time Zone (GMT+00:00) Dublin, Edinburgh, Lo. ↓	
⊳ User Account		
<ul> <li>Security Center</li> </ul>		
⊳ Layout		
⊳ Logs		
» Maintenance		
⊳ Auto Reboot		
	A	ooly

#### Figure 7-72 Time zone setting screen

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

Step 3 Click Apply to save settings.

### 7.5.2.4 DST

When the DST start time arrives, the device time automatically goes forward one hour (offset time). When the DST end time arrives, the device time automatically goes backward one hour. The offset time can change if the local rule is different.

#### **Operation Steps**

Step 1 Click DST page to access the DST setting screen, as shown in Figure 7-73.

X System	Channel Record Alari	n Network System	X
▶ Information	System Date And Time	Time Zone D <u>ST</u> Sync Camera Time	
▶ General	Enable Daylight Saving Time	•	
▹ User Account	Start Time	Mar v Last one v Sun v 100 v	
<ul> <li>Security Center</li> </ul>	End Time	Oct v Last one v Sun v 100 v	
⊳ Layout	Offset Time		
⊳ Logs			
⊳ Maintenance			
> Auto Reboot			
			Apply

#### Figure 7-73 DST setting screen

Step 2 Click next to **DST** to enable DST.

Step 3 Select start time, end time, offset time from the drop-down list respectively, that basis on

the local rules.

Step 4 Click Apply to save settings.

----End

### 7.5.2.5 Sync Camera Time

Enable the sync camera time, the channels will show the sync time, and set the frequency of check

System	Date And Time	Time Zone	DST	Sync Camera Time
Enable	Sync	٦		
Sumo 7		260		
Sync	ime Frequency (sec)	300		

# 7.5.3 User Account

Add, modify, and delete a user and privilege in user screen, admin user can dispose privilege to different users.

7.5.3.1 User

**Operation Steps** 

Step 1 Click User in the main menu or menu of the system management screen and choose User to access the user screen, as shown in Figure 7-74.
🛠 System	Channel Reco	ord Alarm Network	System		×
▶ Information	User Adv.Se	tting App Verification			
⊳ General		Username	Group	Operate	
		admin	Super admin	<u> </u>	
▷ Security Center					
⊳ Layout					
▹ Auxiliary Screen					
⊳ Logs					
⊳ Maintenance					
⊳ Auto Reboot					
				Add	

#### Figure 7-74 User management screen

Step 2 Add or delete a user.

#### Add a user

Click **Add**, the **Add User** dialog box appears, as shown in Figure 7-75. Figure 7-75 Add user screen

Username		
Password		
Confirm Password		
	Administrators	
Change Password Frequency	Never	
Password Expire Date	O	
🐷 Live Preview	Channe	
PT7	CH1	
	CH2	
Playback	CH3	
🛃 Channel Management		
	CH5	
Device Management		
System Management		
👿 Backup	Live Preview	

Input a username, password and confirm password, choose group and change password reminder, set the expire date.

### 

The password should include at least two types of letters, characters and numbers.

The password should be 6~32 characters long.

- Step 3 Select a Group from the drop-down list box.
- Step 4 Select a Change password reminder value from the drop-down list box.
- Step 5 Enable the expire date to set the new user's authority time.
- Step 6 Select the operation privileges and channels in the list of the add user screen.
- Step 7 Click OK. The user is set successfully.

### 

The default user is Administrator and cannot be deleted or modified.

Select a user from user list and click for edit, or click to delete a user.

----End

### 7.5.3.2 Advance Setting

**Operation Steps** 

Step 1 Click User in the main menu or menu of the system management screen and choose Adv Setting to access the user screen, as shown in Figure 7-76.

	119440 ( ) ( ) 11	8	
🛠 System	Channel Record Alarm	Network System	×
▶ Information	User <u>Adv.Setting</u> App Verifi	cation	
▷ General	Enable Double Authentication	D	
► User Account	Enable Satur Wizard		
▷ Security Center	Enable Auto Login		
▶ Layout	Auto Logout Time (min)		
▷ Auxiliary Screen	Monitor channel(s) when logout	1 2 3 4 5 6 7 8	
⊳ Logs			
▷ Maintenance			
> Auto Reboot			
			Apply

Figure 7-76 Advance setting screen

Step 2 Enable or disable Double Authentication, Auto login, Setup Wizard. Set the logout time if the user disables the auto login.

Step 3 Choose monitor channels when logout, the default is all channels.

Step 4 Click Apply to save settings.

-----End

### 7.5.3.3 App Verification

Add the digital number to whitelist, When log in to the mobile app to manage the NVR, enter a series of numbers in the whitelist for testing and verifying to ensure security.

🗙 System	Channel Record Alarm Network System	×
▷ Information	User Adv.Setting APP Verification	
⊳ General	Enable White List	
	Phone Number Status Remark Edit	
<ul> <li>Security Center</li> </ul>		
⊳ Layout		
⊳ Logs	Phone Number	
▹ Maintenance	Romark(optiona)	
▹ Auto Reboot		
	Carcel	
	+ -	
		Apply

Figure 7-77 App verification

Up to 20 groups of security codes can be added and notes can be modified for them.

Tick the numbers, click "-" to delete the numbers.

Click Apply to save the setting. ----End

## 7.5.4 Security Center

### 7.5.4.1 Password

#### **Operation Steps**

Step 1 Click **Security Center** in the main menu or menu of the system management screen and choose **Password** to access the modify password screen, as shown in Figure 7-78.

🛪 System	Channel Record Alarm	Network System	×
▶ Information	Password Pattern Unlock S	acure Email Secure Question	
⊳ General ⊳ User Account	Old Password		
<ul> <li>▶ Security Center</li> <li>▶ Layout</li> </ul>	Confirm Password		
⊳ Auxiliary Screen ⊳ Logs ⊳ Maintenance	– Valid password range [6–32] char – At least 2 kinds of numbers,lower – Only these special characters are	xeters. ase,uppercase or special character contained. supported %#\$*+−%&*(),/::,<>?![-[]]	
⊳ Auto Reboot			
		Apply	

Figure 7-78 Password modification screen

Step 2 Input the correct old password, new password, and confirm password.



The password should include at least two kinds of letter, character and number.

The password should be  $6 \sim 32$  characters.

Only special characters (! @#&\*+=-%&``(),/'.:;<>?^|~[]{}) are supported,

Step 3 Click Apply to save modified password settings.

----End

### 7.5.4.2 Pattern Unlock

#### **Operation Steps**

Step 1 Click Security Center in the main menu or menu of the system management screen and choose Pattern Unlock to access the modify pattern unlock screen, as shown in Figure 7-79.

🗙 System	Channel Record Alarm Ne	stwork System	×
▶ Information	Password Pattern Unlock Secu	re Email Secure Question	
⊳ General	Password		
⊳ User Account	Enable Pattern Unlock		
	Pattern Unlock	Pattern Setting	
▹ Layout			
▷ Auxiliary Screen			
⊳ Logs			
⊳ Maintenance			
▷ Auto Reboot			
		Apply	

Figure 7-79 Pattern unlock screen

Step 2 Input the password, enable pattern unlock.

Step 3 Click Setting Pattern to set an new pattern unlock.

Step 4 Draw the pattern, then it will remind to draw the confirmation pattern again.

Step 5 Click OK to save the pattern unlock.

----End

### 7.5.4.3 Secure Email

Set the email to receive the verification code to create new password, as shown in Figure 7-80.

🛠 System	Channel	Record	Alarm	Network	System	2
▶ Information	Password	Pattern	Unlock		Secure Question	
⊳ General	Verify P	assword		Passwo		
▷ User Account	Email Ac	idress				
» Layout						
▹ Auxiliary Screen						
⊳ Logs						
▷ Maintenance						
> Auto Reboot						
						Apply

#### Figure 7-80 Secure Email

Step 1 Input the password of NVR.

Step 2 Set the Email address to receive verification code.

Step 3 Click Apply to save setting.

----End

### 7.5.4.4 Secure Question

Set the questions to create new password, as shown in Figure 7-80.

🛪 System	Channel Record Alarm Ne	twork System	×
▶ Information	Password Pattern Unlock Secu	re Email Secure Question	
⊳ General	Password		
⊳ User Account	Question one	The brand and model of your favoria	
	Question one answar		
⊳ Layout		Very favority low	
▷ Auxiliary Screen	Question two		
⊳ Logs	Question two answer		
▷ Maintenance	Question three		
⊳ Auto Reboot	Question three answer		
	<ul> <li>Please enter at least 1 characters for</li> </ul>	the answer	
	<ul> <li>Please enter up to 32 characters for the second seco</li></ul>	he answer	
		Apply	
		white	

Figure 7-81 Secure question

Step 1 Input the password of NVR.

Step 2 Choose the question from drop-down list.

Step 3 Input the answer, click Apply to save setting.

----End

## 7.5.5 Layout

Set viewing video mode, dwell time in display screen. The layout is set as auto sequence multiple screen.

#### **Operation Steps**

Step 1 Click Layout in the main menu or menu of the system management screen and choose Layout to access the display screen, as shown in Figure 7-82.

🛠 System	Channel	Record	Alarm	Network	System	×
▶ Information	Layout					
<ul> <li>Information</li> <li>General</li> <li>User Account</li> <li>Security Center</li> <li>Layout</li> <li>Layout</li> <li>Auxiliary Screen</li> <li>Logs</li> <li>Maintenance</li> <li>Auxto Roboot</li> </ul>	Layout LayoutLis Ix1 2x2 1+7 3x3		Layou	tt Name: 1x1	1. Channai01 2. Channai01 2. Channai02 3. Channai04 5. Channai04 5. Channai05 6. Channai06 7. Channai07 8. Channai08	∠ Edit 👘 Delete

Figure 7-82 Auto Sequence screen

Step 2 Click "+" to add a new layout. The default layout is one splitting screen.

Figure 7-83 Add a new layout

+ Add Layout				×
Channel	Layout Name	Dwell Time(sec) 5		
[1]Channel01 [2]Channel02 [3]Channel03 [4]Channel04 [5]Channel05 [6]Channel06 [7]Channel07 [8]Channel07				
L-JEmpty				
				Cancel

Step 3 Input the layout name, select dwell time from the **SEQ** Dwell time drop-down list(the display screen will loop play the real time video according to setting time).

Step 4 Select split screen mode at the bottom of the page. Set the channel display by dragging the channel to specific position, or select the position first, then click the channel. A split screen can play multiple channels. Auto sequence means it will play according to the setting. For example, the first split screen is set as two pages (channel 1 and 2), the second split screen is set as one page (channel 3). When auto sequence is enabled, channel 1 and channel 3 are displayed, then channel 2 and channel 3 are displayed. Figure 7-84 Auto sequence





User can add up to 16 layouts.

#### ----End

## 7.5.6 Auxiliary Screen (Only for Some Models)

### 

This function only can be used for the devices with 8 or more than channels. The main screen is connected by HDMI (HD-OUT 2), auxiliary screen is connected by VGA.

#### **Operation Steps**

Step 1 Click Auxiliary Screen in the main menu or menu of the system management screen.

Step 2 Enable the auxiliary screen, as shown in Figure 7-87

🛠 System	Channel Record Alarm Ne	atwork System		×
▶ Information	Auxiliary Screen Layout			
⊳ General	Enable Auxiliary Screen	0		
⊳ User Account	VGA Output Resolution	1920x1080		
▷ Security Center	Maximum Channel for HDMI and VGA			
⊳ Layout	Lavout Mode	1x1	~	
	Display Page		×	
⊳ Logs	Enable Auto Secuence	•		
⊳ Maintenance	Turn on or off the auxiliary screen, the c			
⊳ Auto Reboot				
				Apply

Figure 7-85 Auxiliary screen

Step 3 Set the Output Resolution, Decoding Ability(main + auxiliary), Layout Mode, Display Channel.

Step 4 Enable tour to set Auto Sequence of auxiliary screen as shown in.

Layout List	Layout Name: 1x1	Dwell Time(sec): 5	👱 Edit 🏾 🛅 Delete
		1. Channabí 2. Channel02 3. Channel03 3. Channel04 5. Channel06 6. Channel06 7. Channel07 8. Channel08	

Figure 7-86 Auto sequence of auxiliary screen

Step 5 Click Apply to save settings.

The auxiliary screen shows different channels with main screen, and the auto sequence show all channels.

The auxiliary screen will show the personnel counting information if it is enabling.

#### ----End

## 7.5.7 Logs

### 7.5.7.1 System Log

Search for logs information and export the information of logs.

#### **Operation Steps**

Step 1 Click **Logs** in the main menu or menu of the system management screen and choose **Logs** to access the log screen, as shown in Figure 7-87.

🗙 System	Channel Re	cord Alarm	Network Sys					
Information	System Log Ev	vent Log						
> General	Start Date	24/04/2022		Star	t Time	15:21:16		
<ul> <li>User Account</li> </ul>	End Date	25/04/2022		End	Time	15:21:16		
Security Center	Туре	Operation Log			Searcl		Export	
Layout		Start Time	Channel	Log 1	Гуре		Information	
Auxiliary Screen	1 25/0	04/2022 15:02:40		Login		[admin] 1	127.0.0.1 login	
	2 25/0	14/2022 15:02:00		Logout		[admin] 1	127.0.0.1 logout	
	3 25/0	4/2022 14:40:35		Login		[admin] 1	27.0.0.1 login	
Maintenance	4 25/0	04/2022 13:10:17		Logout		[admin] 1	127.0.0.1 logout	
- Widin Ref Ell KGG	5 25/0	4/2022 12:56:10		Login		[admin] 1	127.0.0.1 login	
Auto Reboot	6 25/0	4/2022 12:39:20		Logout		[admin] 1	127.0.0.1 logout	
	7 25/0	4/2022 12:32:43		Login		[admin] 1	127.0.0.1 login	
	8 25/0	4/2022 12:32:00		Logout		[admin] 1	192.168.0.157 logout	
	9 25/0	04/2022 12:29:30		Logout		[admin] 1	127.0.0.1 logout	
	10 25/0	4/2022 12:14:25		Login		[admin] 1	192.168.0.157 login	
	11 25/0	4/2022 12:13:41		Login		[admin]1	127.0.0.1 login	
		4/2022 12:07:03		Logout		[admin] 1	127.0.0.1 logout	
	13 25/0	4/2022 11:41:55		Login		[admin]1	127.0.0.1 login	
	14 25/0	4/2022 11:41:50		Logout		[admin]	127.0.0.1 logout	
	15 25/0	4/2022 11:41:49		Power On		system		

Figure 7-87 Log screen

Step 2 Set start date, end date, start time and end time of the logs on log screen.

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

Step 4 Click Search to query logs.

Step 5 Click Export to export logs to flash disk.

Step 6 the logs can be saved to flash disk and hard disk at the same time, the newest logs is saved

to flash disk, and the old logs will be transferred to hard disk.

#### ----End

### 7.5.7.2 Event Log

Event logs are divided into more detailed types, which can be found quickly. Its operation is the same as the system log, please refer to chapter 7.5.7.1.

🗙 System	Channel Re	cord Alarm	Network Sy	stem			
Information	System Log	vent Log					
⊳ General	Start Date	24/04/2022		Start Time	15:22:32		
> User Account	End Date	25/04/2022		End Time	15:22:32		
Security Center	Туре	All		Search	n	Export	
⊳ Layout		Start Time	Channel	Log Type		Information	
Auxiliary Screen	1 25/0	04/2022 15:20:18	Channel05 Channel05	Motion Detection	Channel05 Channel05		
	3 25/0	04/2022 15:19:43	Channel05	Motion Detection	Channel05		
> Maintenance		04/2022 15:19:27	Channel05	Motion Detection	Channel05		
	5 25/0	04/2022 15:19:15	Channel05	Motion Detection	Channel05		
> Auto Reboot	6 25/0	04/2022 15:18:25	Channel05	Motion Detection	Channel05		
	7 25/0	04/2022 15:17:40	Channel05	Motion Detection	Channel05		
	8 25/0	04/2022 15:17:26	Channel05	Motion Detection	Channel05		
	9 25/0	04/2022 15:17:02	Channel05	Motion Detection	Channel05		
	10 25/0	04/2022 15:16:37	Channel05	Motion Detection	Channel05		
	11 25/0	04/2022 15:16:24	Channel05	Motion Detection	Channel05		
		04/2022 15:15:53	Channel05	Motion Detection	Channel05		
	13 25/0	04/2022 15:14:46	Channel05	Motion Detection	Channel05		
	14 25/0	04/2022 15:12:11	Channel05	Motion Detection	Channel05		
	15 25/0	04/2022 15:11:00	Channel05	Motion Detection	Channel05		

Figure 7-88 Event

### 7.5.8 Maintenance

#### **Operation Steps**

Step 1 Click **Maintenance** in the main menu or menu of the system management screen and choose **Maintenance** to access the maintenance screen, as shown in Figure 7-89.

🛠 System	Channel	Record	Alarm	Network				×
▹ Information	Maintenance	9						
⊳ General								
⊳ User Account	(			$ \rightarrow $	Ð	ſ⊒Ľ	E	
▷ Security Center	Shute	down	Reboot	Logout	Reset	Import Configur.	Export Configur.	
▶ Layout								
▷ Auxiliary Screen	6	9	(On	11	-~~			
⊳ Logs	4	ن <u>ہ</u>	لاليك	L⊕	L₩			
➤ Maintenance	FW Up	odate	Cloud Update	Save running	glog Network Pack	et.		
> Auto Reboot								

Figure 7-89 Maintenance screen

Step 2 Click Shutdown, Reboot, Logout, Exit system, Reset or update to operate NVR if you need.

		Update		Х
USB Flash Name	0			<b>⊷</b> ີ∂ 🛍
	Name		Modify Date	Size
	Location			
	Selected Directory :			
			ОК	Cancel

#### Figure 7-90 Firmware update

Step 3 Click import configuration or export configuration to view the message " Are you sure to import the configuration?" Make sure the flash driver is working.

Step 4 The tips will show on screen, click ok to ensure choice.

Step 5 Click Import Config to import the configuration to flash drive.

Step 6 Import the configuration, the device would restart immediately.

Step 7 Click Export Config to export the configuration from flash drive.

### 

When the NVR finishes updating, the device would restart.

Network packet capture: the NVR is plugged into the USB disk, click the network packet capture,

and set the relevant parameters of the packet capture. The captured data can be downloaded and used for device problem analysis.

FW Update, firmware update; Plug in the U disk with the update software, choose the file to update.

Save running log: In the U disk to save the running log.

----End

### 7.5.9 Auto Reboot

#### **Operation Steps**

Step 1 Click **Auto reboot** in the main menu or menu of the system management screen and choose **Auto reboot** to access the maintenance screen, as shown in Figure 7-91.

🛠 System	Channel	Record	Alarm	Network	System			×
▷ Information	Auto Reboot	t						
⊳ General	Enable A	uto Reboot		0				
⊳ User Account	Reboot 7	Time		PerDay	✔ 0:00			
▹ Security Center								
⊳ Layout								
⊳ Logs								
> Maintenance								
							Αρρίγ	

Figure 7-91 Auto restart screen

Step 2 Enable the function, restart time is showing as figure Restart Time

Step 3 Restart the NVR per day, week or month.

Step 4 Select the restart time from the drop-down list.

----End

## 8 WEB Quick Start

The functions of Web are the same as those of UI system, all functions can be referred to chapter 7 UI system setting.

## 8.1 Activation

If you don't set the password at UI interface, user need activate the device, as shown in Figure 8-1 Activation



Step 1 Set the password, and confirm the password.

Step 2 Input the channel password.

Step 3 Set the email to recovery the password.

#### Figure 8-2 Email

Email for recovery user password					
Enter email addres	S				

Step 4 Set the question to recovery the password.

Figure 8-3 Question

← Question (Recovery the passwor	d)
The brand and model of your favorite car	
Your favorite team	
Your favorite city	
Finish	

If you don't set the email or question, you can skip the steps.

## 8.2 Login and Logout

# 

You must use Firefox 53, Chrome 45 or Edge to access the Web interface. Otherwise, the interface functions cannot be used normally.

The win 7/ win 10 system supports Firefox/Chrome, but the XP system does not.

Brower supports 32 bits systems.

Descriptions of browser:

To access the client by using Chrome 42-44, you need to enable manually Npapi in the browser according to following steps:

In the Chrome address bar, enter chrome://flag/#enable-npapi.

Go to the experimental features' management page.

Enable NAPAPI Mac, Windows.

Click Enable (NPAPI plugin is enabled).

Re-launch Chrome.

Here we take IE 10 as an example for videos viewing.

Login

Step 1 Open IE browser, enter the IP address of the NVR (DHCP is on by default) in the address box, and press **Enter**.

The login page is displayed, as shown in Figure 8-4.

#### Figure 8-4 Login page interface



Step 2 Input the user name and password.

#### 

The default user name and password both are admin. The password is incorrect more than 3 times, please log in again after 5 minutes.

User can change the system display language on the login page.

The modify password page pop-up window would show when login the NVR for the first time.

Step 3 Click Login to access the homepage, as shown in Figure 8-5.



#### Figure 8-5 Homepage interface 1

#### Figure 8-6 Homepage interface 2



#### Logout

To logout of the system, click G in the upper right corner of the homepage. The pop-up
message shows "Would you like to exit?" Click OK and the login page will display.
Homepage Layout

NVR allows you to use the Web interface in a PC for implementation of such functions as live video, playback, retrieval, setting, image parameters access, configuration, PTZ control and so on. Figure 6-8 shows the overall layout of the interface. For descriptions of the interface, please refer to Table 8-1.

Figure 8-7 Homepage layout

Liberty	۲	Ð	Q	1	÷::	₫	1					
Device Channel01 Channel02 Channel03 Channel04	5		Loo Are	10 VIDEO				N	0-VIDEO		8	234
				10-VIDE0				N	0-VIDE0	6	C × ↓ C × ↓ C = ⊕ E = ⊕	
			11							12		

No.	Function	Description
1	Function navigation bar	Main functions navigation bar of the device, it includes Live Video, Playback, Alarm Search, Face Recognition, Attendance and System Setting.
2	Alarm	Alarm notification. User can tick pop-up message to monitor, system alarm and channel alarm.
3	Logout button	User can click <b>Logout</b> to exit the current account and return to the login interface.
4	Help	Help for running environment, plug-in installation and activation.
5	Device's list	Display a list of the channels of the managed NVR and the channels managed by NVR.
6	Real-time video	Display the real-time videos of the channels managed by NVR.
7	Channel Operation	Include snapshot, record, stream switch and audio on/off.
8	PTZ control button	Click to show PTZ control buttons in zone 10, you can control the PTZ equipment in the current channels. That function only uses for IP dome camera.
9	Color parameter button	Click to show color parameter setting buttons in zone 9, you can set and adjust the color parameters, for example, brightness, contrast, saturation, and sharpness. Click <b>More</b> to access image settings.
10	Operation zone	The operation zone of PTZ control and image parameter setting.
11	Layouts	Select the one-screen, four-screen, nine-screen or sixteen- screen to switch the layout.
12	Manual alarm	Trigger and close the external alarm device manually.

Table 8-2 Descriptions of homepage
------------------------------------

----End

## 8.3 Browsing Videos

### 8.3.1 Browsing Real-Time Videos

You can browse real-time videos in the web management system.

Preparation

To ensure that real-time videos can be played properly, perform the following operations when

you log in to the web management system for the first time:

Step 1 Open Internet Explorer. Choose Tools > Internet Options > Security > Trusted sites >

Sites. In the displayed dialog box, click Add, as shown in Figure 8-8.

Figure 8-8 Adding a trusted site



Step 2 In Internet Explorer, choose **Tools > Internet Options > Security > Customer level**, and set Download unsigned ActiveX controls and Initialize and script ActiveX controls not

marked as safe for scripting under ActiveX controls and plug-ins to Enable, as shown in Figure 8-9.



Figure 8-9 Configuring ActiveX controls and plug-ins

Step 3 Download and install the player control as prompted. During installing, you need to close

the browser.

### 

If the repair tips displayed when installing the control, close the browser and continue the installation, reopen the login page when the control is installed.

## 8.3.2 Live Video

Descriptions

After login the device, click online channel, you can view the real-time videos, as shown in Figure 8-10.

#### Figure 8-10 Real-time videos interface



----End

## 8.3.3 Channel Operation

#### Descriptions

Channel operation includes snapshot, record, stream switch and audio on/off. Table 8-3 describes the operations.

Buttons	Button description	How to operate
0	Snapshot	Click button to take snapshots of the current image.
	Record	Click button to start recording and click button again to stop recording.
2::	Switch stream	Click button to switch stream 1 (main stream) and stream 2(sub stream).
•	Enable/Disable video	Click button to enable the audio and click again to disenable the video.

Table 8-3 Descriptions of homepage

----End

## 8.3.4 PTZ Control and Setting

Descriptions

The PTZ control and setting function applies only to Network Dome or camera connected to an external PTZ.

PTZ Setting

If a Network Dome or a camera connected to PTZ had been added to the NVR channel, users can control the PTZ rotation to adjust their shooting angle when you are viewing the video. This allows you to perform Omni-directional video surveillance.

Click Click the PTZ operation and setting interface is as shown in Figure 8-11. Table 8-4 describes the operations.



Figure 8-11 PTZ control interface

Table 8-4 Device parameters

Buttons	Button description	How to operate
F A 7 C > L > 1	Direction key	Click button to control omni-directional movement of the PTZ.
5	Speed slider	Drag the slider to adjust the value of PTZ rotation speed.

Buttons	Button description	How to operate
[‡]	Zoom in	Click buttons to adjust the focal length.
[ <b>**</b> *]	Zoom out	
$\bigcirc$	Iris+	Click buttons to adjust the aperture.
$\otimes$	Iris-	
þ	Far focus	Click buttons to adjust the focal length.
围	Near focus	
	Auto focus	Click button to focus automatically.
۲	Home preset	N/A
•	Preset	The camera is set the tour, click the button and dome camera rotate as the setting.
	More	More settings, scan and tour

## 8.3.5 Sensor Setting

Descriptions

The sensor setting can adjust scene, brightness, sharpness, contrast and saturation, click to access image setting, as shown in Figure 8-12. Table 8-5 describes the operations.



Figure 8-12 Image parameter interface

Table 8-5 Device	parameters
------------------	------------

Buttons	Button description	How to operate
0	Brightness	Click button to adjust the image brightness.
	Sharpness	Click button to adjust the image definition.
$\odot$	Contrast	Click button to adjust the transparency of the image.
	Saturation	Click button to adjust the chromatic purity of the image.

Click more will be access to system sensor setting. As shown in Figure 8-13, for more detail please refer to *chapter Figure 4-7*.





----End

### 8.3.6 Layout



at the bottom left conner of real-time videos interface, the buttons

indicate 1 screen, 4 screens and 9 screens from left to right. The device with more POE ports can support 16 screens layout.

#### ----End

## 8.4 Playback

## 8.4.1 Video Playback

Video playback refers to playing of videos stored in local hard disks.

Procedure

Step 1 Click in the function navigation bar, the video playback interface is displayed, as

shown in Figure 8-14.



Figure 8-14 Video playback

Step 2 Select a channel. Click a device in the device list. A selected device is marked with

The unselected device is marked with

Step 3 Select a date from calendar at left bottom, the date will be colored if it has record as shown in upper figure.

Step 4 Tick the type of record, such as schedule record, manual record and alarm record. Step 5 Display videos. After a device and date are selected, video information is displayed below the video pane. The time scale above the file axis shows the different time points of video recording. The time in blue in the middle is the time of the video playing.

The file axis displays videos. The blue file axis indicates a video exits, grey file axis indicates no video exits.

You can drag the axis to play recording quickly.

Step 6 Play a video.

You can play a video after selecting a device and date. Figure 8-15 shows the control bar of video playback.



Figure 8-15 Control bar

play different time period record



types of time bar.



: user can operate the record as same as live video.

----End

## 8.5 Alarm Search

You can search for channel alarm and system alarm in the alarm search interface.

## 8.5.1 Channel Alarm

Procedure

Step 1 Click in the function navigation bar, the channel alarm interface is displayed, as

shown in Figure 8-16.



Figure 8-16 Channel alarm interface

Step 2 Choose the alarm type to search.

Step 3 Click Search, the result will be displayed as shown in Figure 8-17.
Liberty	۲	Ð	Q (	<b>آء</b> ] آ	ø		ٹ ک	G 6
모 Liberty	ß	ID		Start time		Channel	Туре	
[1] Channel01	×							
[2] Channel02	M							
[3] Channel03	×							
[4] Channel04	N							
<b>A</b> ID 06100								
Start Time								
08/01/2023 05:59:5								
End Time								
08/02/2023 05:59:5								
<ul> <li>✓ Alarm In</li> <li>✓ Camera Alarm</li> <li>✓ Motion Detection</li> <li>✓ Video Loss</li> <li>+ ✓ Intelligent Analy</li> <li>+ ✓ Abnormal Alarm</li> </ul>	In on ysis n							
Search			/>>/ To	otal Number : 0				
	TE							
Clic	k  <	< 1 /	6 <b>&gt;&gt; </b>	to select the	e page of a	alarm list.		
Ev	ery pa	age sho	w 20	•	shows the	rows shown in every page.		
End								

#### Figure 8-17 Channel alarm result

## 8.6 Attendance

## 8.6.1 Attendance Data

Click to enter attendance data interface, as shown in Figure 8-18.

175

Figure 8-18 Attendance data

Liberty Attendance	Data Attendance Manage	ement Back						· 소 · 다 다
Attendance Library	Attendance Summary							
	Job Number	Name	Department	Required Times	Actual Times	Absence	Late	Early Leave
Time								
loday								
Custom time period								
Start Date 08/02/2023								
End Date								
08/02/2023								
Search Type								
Attendance Summary *								
Reset Search	<< 0 /0 >>	Every page sh	ow 20 ·					

**Operation Steps** 

Step 1 Tick the attendance library.

Step 2 Choose time mode, such as today, this week, this month and custom time.

Step 3 Choose search type, such as attendance summary and attendance details.

Step 4 Click search, the result will show in interface.

Step 5 Click Export to export the query result.

----End

## 8.6.2 Attendance Management

In attendance management, user can set attendance rule, library and check point, as shown in Figure 8-19.

Figure 8-19 Attendance rule settings



#### **Operation Steps**

Step 1 Set start work time and end work time.

Step 2 Tick the workdays.

Step 3 Set valid time of check in and check out.

Step 4 Click Save to save the setting.

#### Attendance library

Step 1 Click **Attendance Library** to add library, the attendance library can call the face database directly.

Figure 8-20	Attendance librar	У
-------------	-------------------	---

Liberty Attendance	Data Attendance Management Back		▲ 스   단 G
<ul> <li>&gt; Attendance Rule Set</li> <li>&gt; Attendance Library</li> <li>&gt; Attendance Check P</li> </ul>	Attendance Library Face Library © Library Management	Attendance Library	
			Save

Step 2 Tick the library and click **Add** to add to attendance library. If you want to modify the library, please enter to library interface to change parameters..

Step 3 click Database management to enter the face database management to modify

parameter.

Step 4 Click Save to save the setting.

#### Attendance check point settings:

Step 1 Click Attendance check point settings to set point, as shown in Figure 8-21.

Liberty Attendance	Data Attendance Management Bac	k				▲ 스 단 Q
▷ Attendance Rule Set	Attendance Check Point Settings					
Attendance Check P	Channel	Attendance	Similarity	Enabled	Operate	
Sector and the sector sector	Channel01	Tinrary	80%	Start	2	
	Channel02		80%	Start	۷	
	Channel03		80%	Start	۷	
	Channel04		80%	Start	۷	
	Channel05		80%	Start	۷	
	Channel06		80%	Start	۷	
	Channel07		80%	Start	۷.	
	Channel08		80%	Start	۷.	
	Channel09		80%	Start	۷	
	Channel10		80%	Start	۷.	
	Channel11		80%	Start	۷	
	Channel12		80%	Start	۷	
	Channel13		80%	Start	۷	

Figure 8-21 Attendance check point setting

Step 2 Click Lo edit check point setting, as shown in Figure 8-22



Step 3 Enable the function, set similarity and tick the library, all face detection cameras can be set the check points.

Step 4 Click OK to save the setting.

----End

## 8.7 AI Recognition

At AI recognition interface, we can set the **Real time Comparison**, **Smart search**, **Archives library**, **Comparison configuration**.

# 8.7.1 Real Time Comparison

Real time comparison can compare human face, vehicle license plate, and AI(include riding,

vehicle, full body )

### 8.7.1.1 Human Face

At real time comparison interface, click the **L** to enter the human face comparison interface, choose the cameras with face recognition function to play live video, the snapshot of camera will be compared with libraries, the result shows as in Figure 8-23.



Figure 8-23 Human face comparison

Click the "+" to add the snapshot to face library immediately.

----End

## 8.7.1.2 Vehicle and Full Body

At real time comparison interface, click the **NO** to enter the vehicle license plate comparison interface, choose the AI recognition cameras to play live video, the snapshot of camera will compare with libraries, the snapshot to vehicle and full body will show at the bottom of page, the result shows as in Figure 8-25.

#### Figure 8-24 Full body



## 8.7.1.3 Real Time Body Temperature Filter

The real time body temperature will show the snapshot of device, it shows the over temperature and snapshot to human face.

Snapshot will show the characteristic such as no mask (the mask detection configuration can be set at comparison configuration interface )



### Figure 8-25 Body temperature

# 8.7.2 Smart Search

At smart search interface, users can search the human face, vehicle license plate, full body, car,

body temperature.

### 8.7.2.1 Human Face Search

Figure 8-26 Human face search



Step 1 Choose human face search at smart search interface.

Step 2 Tick the face recognition camera channels, set the start time and end time.

- Step 3 Choose the condition (by picture or by feature), the picture can be chosen from the file folder.
- Step 4 Click "Search" to search the snapshot of human face.
- Step 5 The result will show at the middle of page, click the picture and detailed information at the top right of page.

Step 6 Detailed picture can be used to search or add to library.

Step 7 Click play button of video to play the recordings of snapshot.

### 8.7.2.2 Full Body Search



Figure 8-27 Full body search

Step 1 Choose full body search at smart search interface.

Step 2 Tick the AI recognition camera channels, set the start time and end time.

Step 3 Set the gender, click cycling or no cycling.

Step 4 Click "Search" to search the snapshot of human face.

Step 5 The result will show at the middle of page, click the picture and the detail information show at the top right of page.

Step 6 Click play button of video to play the recording of snapshot.

### 8.7.2.3 Vehicle Search

Figure	8-28	Vehicl	e search
--------	------	--------	----------

Libe	rty	Real-time co	mparison	Smart Search Archive	es Library Compariso	n Configuration Ba	ick				1 202 A	e
Ł	😐 192	2 168.8.184								Details		
NO.	Cha	annel01										1
*/8	🖸 Cha	annel02						-		and the second second	1-1-1	State of
	Cha	annel03	2		Contraction of the local division of the loc	1000				100		
•°	Cha	annel04	2		100	201		100	A RECEIPTION OF	- Distant		
1	Cha	annel05								Time	2020/03/09 11:5	50:56
	Cha	annel06	2	2020/03/09 11:50:56 Channel08	2020/03/09 11 50:56 Channel08	2020/03/09 11:50:57 Channel08	2020/03/09 11:50:57 Channel08	2020/03/09 11:50:57 Channel08	2020/03/09 11:51:53 Channel08	Channel	Chann	nel08
	🗈 Cha	annel07								Car color		Blue
	Cha	annel08		10000			In the second second					
	🕃 Cha	annel09		41	COLUMN TO	41		270	-			
	Cha	annel10	2	C reing	Service of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	mar Al	-Com	=0-			
	Start Tim	0		Aug. 10		STREET, STREET						
	2020/03	/09 09:54:42		2020/03/09 11:52:09	2020/03/09 11:52:52	2020/03/09 11:53:32	2020/03/09 11:54:00	2020/03/09 11:54:00	2020/03/09 11:54:01			
	2020/03	/13 10:24:42		Channel08	Channel08	Channel08	Channel08	Channel08	Channel08			
	Car color											
	White	Black		THE OWNER WHEN	THE REAL PROPERTY.	and the second s	The rest of the local division of the local		1000	Note-		
	Red	Gray		and the	1	Contraction in	and the second		100	VIGEO		
	Other			1000		the second second		- CENT	and the second se			
										N	D-VIDEO	
				2020/03/09 11:54:01 Channel08	2020/03/09 11:54:02 Channel08	2020/03/09 11:54:03 Channel08	2020/03/09 11:54:03 Channel08	2020/03/09 11:54:04 Channel08	2020/03/09 11:54:23 Channel08			
	Rese	t Search										
				1 /56 >>  Total	Number: 1000					<b>FERN</b>		

Step 1 Choose vehicle search at smart search interface.

Step 2 Tick the AI recognition camera channels, set the start time and end time.

Step 3 Tick the color.

Step 4 Click "Search" to search the snapshot of human face.

Step 5 The result will show at the middle of page, click the picture and detailed information at the top right of page.

Step 6 Click play button of video to play the recordings of snapshot.

----End

# 8.7.3 Archives Library

At archives library, users can add or edit the face library, license plate library.

### 8.7.3.1 Face Library

Lib	erty	Real-time	comparison	Smart	Search	Archives Library	Comparison Configuration	Back			4 2020/03/16 10:32:03 Registered personnel alarm		e e
1	Face Librar			+ Add	× Delete	O Refresh							00
NO.	Select.	All											
	Default	t Lib			Name	Gender	Birthday		Face Library	Туре	Expire date	Operate	
	d technol	logy		•		Male	2020/03/14	1111	download	Teacher	Never expire	∠₩	
	🖬 image			•		Male	2020/03/14		download	Teacher	Never expire	∠₩	
	🖬 engine	ering		•		Female	2020/03/14		download	Teacher	Never expire	∠⊞	
	🖬 app			•		Female	2020/03/14	444	download	Teacher	Never expire	∠℃	
	🛙 nvr			•	555	Female	2020/03/14	555	download	Teacher	Never expire	∠ @	
	☑ platform	m			666	Female	2020/03/14	666	download	Teacher	Never expire	∠ @	
	🖬 ipc					Male	2020/03/14		download	Teacher	Never expire	∠ @	
	unknow	w		•	888	Male	2020/03/14	888	download	Student	Never expire	∠ @	
	🖬 test			•	999	Female	2020/03/14	999	download	Student	Never expire	∠ŵ	
	🛛 hardwa	are		•		Male	2020/03/14	000	download	Student	Never expire	∠ŵ	
	🖬 downlo	bood											
				1< < 1	44 /144	>>  Total Numl	ber : 2584						

Figure 8-29 Face library

Click "+" to add face library.

Click "Add" to add person enroll.

Tick the person, click "Delete" to delete the person.

Click "Import" to add the person batch.

Click "Export" to export all people in library.

Click operate icon to edit or delete the chosen person.

To get snapshot in real time video, put the cursor on picture such as  $+ \sum_{\alpha} \alpha$ , you can add it to

face library, or face search. The cursor on area 6 and the pictures are not update, move the mouse so that the pictures show in time.

----End

# 8.7.4 Comparison Configuration

At comparison configuration interface, users can set the comparison of human face/ license plate/temperature.

#### Figure 8-30 Face comparison

Liberty						
<b>1</b>		Edit Strategy		×		
		Channel	Channel01		Similarity	
		Enable Comparison				
		Enable Companion				
		Similarity		<b>0</b> 8 + <b>—</b>		
		Register Stra	nger			
		Display comparison re	esults			
		Face Library	Face Library			
		Enable Alarm				
		Event Actions	Setting			
		Arming Time	Setting			
			ОК	Cancel		
		Default Lib		Default Lib		
	0h140	Pha. Ear. ah 1 Ha		D	0.087	

Event Actions		×
Buzzer		
Push message to APP		
Pop up message to monitor		
Email		
Full Screen		
Cloud Storage	•	
Alarm Out		
Alarm Time(s)(0:Continuous)		
Output ID		
Camera Alarm Out		
Alarm Record		
	OK Cancel	Ð

At face comparison interface, users can set different channels' strategy, such as similarity, display comparison result, face library, enable alarming, event action, schedule, as shown in Figure 6-35.

Liberty	Real-time comparison	Smart Search Archives L	ibrary Comparison Configuration	Back	Registered personnel alarm	•	G
1	channel12		A EU;EUA;Default Lib	L EU;EUA;D	fault Lib	∠	
10	channel13		LU;EUA;Default Lib	🛦 EU;EUA;DR	fault Lib	2	
	channel14		LU;EUA;Default Lib	▲ EU;EUA;D	fault Lib	∠	
-	channel15		LU;EUA;Default Lib	🔺 EU;EUA;Da	fault Lib	∠	
	channel16		LU;EUA;Default Lib	🔺 EU;EUA;Da	fault Lib	∠	
	channel17		Default Lib	Default L	ь	2	
	channel18		Default Lib	Default L	ib	∠	
	channel19		Default Lib	Default L	ib	∠	
	channel20		Default Lib	Default L	b		
	channel21		Default Lib	Default L	ib	2	
	channel22		Default Lib	Default L	ib	∠	
	channel23		Default Lib	Default L	b	∠	
	channel24		Default Lib	Default L	ib		
	channel25		Default Lib	Default L	ib	∠	
	channel26		Default Lib	Default L	ib	∠	
	channel27		Default Lib	Default L	ib	∠	
	channel28		Default Lib	Default L	b	∠	
	channel29		Default Lib	Default L	b	2	
	channel30		Default Lib	Default L	b	∠	
	channel31		Default Lib	Default L	b	2	
	channel32		Default Lib	Default L	b		

Figure 8-31 License comparison

At license plate interface, users can set strategies of different channels of license plate recognition cameras, such as register and unregister, enable alarming, event action, schedule, as shown in Figure 8-31.

means the library is deleted.

Figure 8-32 Temperature comparison

Libe	rty Real-time comparison Smart Sea	rch Archives Library	Comparison Configuration	Back		2 2020/03/16 10.42:30 Stranger alarm	
Ł	Temperature Configuration						
NO.	Low temperature threshold(0.1-99.9)						
х.	High temperature threshold(0.1-99.9)						
	Normal temperature(0.1-99.9)						
					Refresh Apply		

At temperature comparison interface, users can set low temperature threshold, high temperature threshold, normal temperature, as shown in Figure 8-33.

		Figure 8-	-33 Strategy		
2	Edit Strategy	×			
	Channel	Channel11	🗾 Edit Strategy		x
	Similarity	- <u> </u>	Channel	Channel 13	
	Register Stranger		Registered Unregister		
	Display comparison resul	٢	License Plate Lib	License Plate Lib	
		Face Library		EU EU	
	Face Library	Default Lib		D EUA	
				🛛 🛛 Default Lib	
			Enable Alarm		
	Enable Alarm		Event Actions	Setting	
	Event Actions	Setting	Arming Time	Setting	
	Arming Time	Setting			
		OK Cancel		OK Cance	I

Mask detection configuration: enable mask detection, set the mode (wear mask, no mask). Set confidence degree, the default value is 90. Click "apply" to save the settings.

Figure 8-34 Mask detection configuration

Liber	ty	Real-time comparison	Smart Search	Archives Library	Comparison Configuration	Back			
<b>⊥</b>	Mask	Detection Configuratio	n Schedule	Linkage					
		Mask Detection Enable		-					
<b>[</b> ]		Mode Confidence Degree		No —	Mask -	- 90			
							Refresh	Apply	

Enable mask alarm linkage, set the event action and schedule.

Figure 8-35 Schedule linkage



The alarm information is relevant to mask detection configuration.

# 9 System Setting

The system setting allows you to set system, channel, record, alarm, network and local setting.

### 9.1 Channel

User can set parameter about camera, encode, sensor setting, OSD and privacy zone.

### 9.1.1 Camera

Step 0 On the System Setting screen, choose Channel > Camera to access the camera interface,

as shown in Figure 9-1.

Liberty	$\odot$	Ð	Q		Ci (= 1	ø				
Channel										
			Camara	DISD C	annection					
Encode				KIOP C	onnocuon					
OSD				Channe	I IP Address	Port	Model	Protocol	Firmware Version	Operate
Privacy Zone				CH1	192.168.32.19	6 30001		Private	t3.6.0804.1004.3.0.10.0.0_AD_IVSTest2	∠ø…
ROI				CH2	192.168.32.22	2 30001		Private	V3.0SimulateSoftWare_30001	∠.©
Microphone				CH3	192.168.32.5	30001		Private	v3.6.0804.1004.3.0.10.7.0	∠.e…
				CH4	192.168.32.17	5 30001		Private	13.6.0804 1004 3.0 10 10 0	∠.©
Smart				CH5	192.168.32.16	6 30001		Private	v3.5.0807.1004.1.0.32.3.1	∠.©
D Bacard				<ul> <li>CH6</li> </ul>	192 168 32 17	1 30001		Private	v3.6.0804.1004.3.0.10.11.0	∠.e…
				CH7	192.168.32.16	2 30001		Private	13.6.0804.1004.3.0.11.0.0	∠.©
Alarm				CH8	192.168.32.16	1 30001		Private	v3.5.0812.1004.3.0.33.0.0	∠.e
S Network				CH9	192.168.32.14	5 30001		Private	13.6.0819.1004.3.0.10.8.0	∠.©
O System				CH10	192.168.32.13	1 30001		Private	v3.6.0804.1004.3.0.10.11.0.D05	∠.e…
				CH11	192.168.32.15	7 30001		Private	v3.4.0702.1003.3.0.102.0.0	∠.e
				CH12	192.168.32.15			ONVIF	v3.5.0804.1004.88.1.33.7.14	∠.e
				<ul> <li>OH13</li> </ul>						

Figure 9-1 Camera interface

Step 1 Input username and password (the default username and password both are admin), and

click

Click To Add add cameras automatically.

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Search

Step 2 Click

to search cameras at the same LAN as NVR, as shown in Figure 9-2.

Choose the cameras, input username and password, click **Add** to add new cameras. Figure 9-2 Device search

Camer	a Protoc	col Management							
	∎ ID	IP Address	Port	Model	Protocol	F	irmware Version	1	
	1	192.168.99.14	30001	IPS57/30BDR/ZSD30/28	Private	t3.6.	0804.1004.3.0.8.1	12.0	
	2	192.168.70.177	30001	C81031-W	Private	v3.5.0819.3900.172.0.31.0.1		.0.105	
	<b>3</b>	192.168.70.176	30001	C81041-W	Private	v3.5.08	19.3900.172.0.31	.0.105	
	<b>4</b>	192.168.10.249	30044	IPR57/08ALDN/Z3.3-12/23	Private	v3.5.	0819.1004.3.0.33	.3.0	
	<b>5</b>	192.168.10.208	30001		Private	t3.6.	0825.1004.3.0.13	.4.0	
	<b>6</b>	192.168.10.127	80		ONVIF				
	<b>7</b>	192.168.10.126	80		ONVIF				
	8	192.168.10.8	30001		Private	t3.6.	0804.1004.3.0.6.9	90.0	
		Username ad	min	Password	Stop Search(2s)	Add	Refresh	Back	
Step 3	Click	Back to	back to	camera interface.					
Step 4	Click	Refresh to t	refresh c	ameras status.					
Step 5	Step 5 Choose the cameras and click Delete to delete.								
Step 6	Click E	Batch Update to t	update al	l selected cameras at	once, the pop	-up wii	ndow wou	ld	
	show	to select softwar	e.						
Step 7	Click	L to modify	the info	rmation of device pa	rameters, as s	hown iı	n Figure 9	-3.	

Figure 9-3 Modify device parameters							
Modify device parameters		)					
Channel Name	Channel06						
IP Address	192.168.0.232						
Protocol	Private_SSL •						
Port	20001						
Username	admin						
Password	••••••						
Remote Channel	CH-1						

Step 8 Click

to add camera manually, click the added channel to copy information to add,

Cancel

so that user just modify some information quickly, as shown in Figure 9-4.

Figure 9-4 Add camera manually

Manually Add Devices		×
Channel	IP	Protocol
CH1	192.168.32.196:30001	Private
CH2	192.168.32.222:30001	Private
СНЗ	192.168.32.5:30001	Private
CH4	192.168.32.175:30001	Private
Channel	32	]
IP Address	192.168.32.5	
Protocol	Private *	]
Port	30001	]
Username	admin	
Password		<b>`</b> '
Remote Channel	CH-1 *	
		OK Cancel

Step 9 Click **C** to access web immediately.

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The pop-up message "Are you sure to restart the device?" "Are you sure to reset?

Reserve IP Address" would respectively show.

Figure 9-5 Modify IP

IP Address		
Subnet Mask		
	ОК	Cancel

### 

it indicates the camera is online, users can view the live video immediately.

: it indicates the camera is offline, it maybe not connected to the network, or the password is incorrect. Access to the modify device parameters interface to change.

### 9.1.1.1 Protocol Management

Set the protocol management, users can add different protocol cameras to NVR

Figure 9-6 Protocol management

Custom Protocol	Custom Protocol 1 •		
Protocol Name	Custom 1		
Stream Type	Jain Stream ∎Sub Stream		
Туре	RTSP * RTSP *		
Port	554 554		
Path			

#### Step 1 Click Channel > Camera > RTSP Connection.

Step 2 Choose the custom protocol from the drop-down list, there are 16 kinds of protocols can be set.

Step 3 Input the protocol name.

Step 4 Tick main stream and sub stream. The main stream shows image on full screen live video. The sub stream shows image on split screen. If you just tick main stream and the channel will not show image on split screen.

Step 5 Choose the type of protocol, the default value is RTSP.

Step 6 Input the port of the IP camera.

Step 7 Input the path, which decided by the manufacturer of cameras.

Step 8 Click Apply to save the settings.

## 9.1.2 Encode

Step 1 On the **System Setting** screen, choose **Channel > Encode** to access the encode interface, as shown in Figure 9-7.

Encode		
	Channel	[1]Channel01 •
	Stream Information	Main Stream
	Video Format	H265 •
	Audio Encode Type	G711A •
	Resolution	1920x1080 ·
	Frame Rate(fps)	25 *
	I Frame Interval(Frame)	50 •
	Bitrate Type	CBR •
	Bitrate(kbps)(500-6144)	4096 🔹
	Smart Encode	
		Copy Apply

```
Figure 9-7 Encode interface
```

Step 2 Select a channel from drop-down list.

Step 3 Select stream information, encode type, resolution, frame rate, bitrate control and bitrate from drop-down list.



## 9.1.3 Sensor Setting

Step 1 On the System Setting screen, choose Channel >Sensor Setting to access the sensor

setting interface, as shown in Figure 9-8.

Figure 9-8 Image interface

Sensor Setting		
4/05/2021 09:45:	25 Pret	[3]Channel29 •
Image Scene Exposure	e White Balance DayNight Noise Re	eduction Enhance Image
Scene	Default •	
Brightness	÷	
Sharpness	A50	
Contrast	050	
Saturation	<b>50</b>	

Step 2 Select a channel and scene from drop-down list.

- Step 3 Set image parameters, like scene, brightness, sharpness, contrast and saturation.
- Step 4 Other parameters are camera's senor setting, please refer IP cameras' settings.



the settings.

#### 

**Brightness**: It indicates the total brightness of an image. As the value increases, the image becomes brighter.

**Sharpness**: It indicates the border sharpness of an image. As the value increases, the borders become clearer, and the number of noise points increases.

Saturation: It indicates the color saturation of an image. As the value increases, the image becomes more colorful.

**Contrast**: It indicates the measurement of different brightness levels between the brightest white and darkest black in an image. The larger the difference range is, the greater the contrast is the smaller the difference range is, the smaller the contrast is.

**Scene**: it includes indoor, outdoor, default. Mirror includes normal, horizontal, vertical, horizontal + vertical.

Exposure: it includes mode, max shutter, meter area and max gain.

White balance: it includes tungsten, fluorescent, daylight, shadow, manual, etc.

Day-night: it transit day to night, or switch mode.

Noise reduction: it includes 2D NR and 3D NR.

Enhance image: it includes WDR, HLC, BLC, defog and anti-shake.

Zoom focus: zoom and focus.

----End

## 9.1.4 OSD

Step 1 On the System Setting screen, choose Channel >OSD to access the OSD interface, as

shown in Figure 5-4

OSD				
	Channel	[1]Channel01 ·		
	Time	<b></b>		
	Channel Name	Channel01		
	2022-04-25 10:25:20 Mon			
	Name			
	and a			
			Сору	Apply

Figure 9-9 OSD interface

Step 2 Select a channel and scene from drop down list.

Step 3 Enable time and channel name. You can set channel name. Drag the icon of Channel Name or Date and Time to move, select the location.

Step 4 Click Copy to choose other cameras to copy settings. Click Apply to

save the settings.

----End

# 9.1.5 Privacy Zone

Step 1 On the System Setting screen, choose Channel >Privacy Zone to access the privacy

zone interface, as shown in Figure 9-10.

Figure 9-10 Privacy interface

Liberty 💿	⊕ Q <u>\\$</u>	
🚅 Channel		
Camera Encode	Privacy Zone	
Sensor Setting OSD	66/14/2021 92:49:50 Pri / Channel [2]Channel12 •	
Privacy Zone ROI		
Microphone		
Smart Intelligent Tracking	<     Cick and hold left buffon and drag to select an area	
Record	Double click an area to delete it     Apply     Supports up to 4 zones	<u>/</u>
🚊 Alarm		
S Network		
O System		

Step 2 Select a channel from drop-down list.

Step 3 Drag the mouse to select area to cover with rectangle frame. You can set less than four areas to be covered. Double click would delete the area.

Step 4 PTZ can be used for adjusting the IP dome cameras.



save the settings.

# 9.1.6 ROI

ROI(Region of interest), choose channel, stream, area ID and draw the area. Set the level, there are five levels can be chosen. Set area name, click "Apply" to save the settings.

Figure 9-11 ROI



# 9.1.7 Microphone

Users can set the microphone parameters of channel.

#### Figure 9-12 Microphone

👥 Channel			
Camera	Micro	onhone	
Encode			
OSD Setting		Channel	[1]Channel01 •
Privacy Zone		Microphone	
ROI		Microphone Type	Line In *
		Microphone Volume	
Smart			Apply
Record	<		
🖻 Alarm			
S Network			
System			

## 9.1.8 Smart

At smart interface, users can set AI multiobject, license plate recognition, face detection.

#### Figure 9-13 Smart interface

📑 Channel						
Camera						
Encode	Al Multiobject	License Plate Reco	gnition Face Detection			
Sensor Setting	E 20 0 1/202 0 0			Channel	[3]Channel03	
OSD		4410				
Privacy Zone						
ROI						
wicrophone						
Smart						
Record			Clear			
🚊 Alarm	Parameter Co	nfigure Schedule				
S Network		atection	-	Image Matting Qulit	ty	Medium -
🗿 System	Fullbod	/ Detection	-	Attribute		
	License	Plate Detection		Snapshot Mode		Optimal -
	Vehicle	Detection	-	Yaw Degree(0-90)		
	Display	Trace Info	Mode1 *	Tilt Degree(0-90)		
	Show [	etection Area		Pitch Degree(0-90)		
	Confide	nce Degree	Medium -	FTP upload image i	matting	
	Face P	xel Min(30-300)		FTP upload whole i	mage	
	Body P	xel Min(30-300)	30	Algorithms Library	Version	V0104010101040101

# 9.1.9 Intelligent Tracking (Only for Some Models)

This function can only be used for high speed dome camera. It works with PTZ function.

Figure 9-14 Intelligent tracking

Liberty	$\odot$	Ð	Q	É	[ <b>=</b> ]	¢					۵ ک	G D
👥 Channel												
Camera			Intelligent	Tracking								
Encode Sensor Setting				Channel								
OSD									Apply			
Privacy Zone												
ROI												
Microphone												
Smart												
Intelligent Tracking												
Record												
🖻 Alarm												
S Network												
😳 System												

The detailed information please refer to UI configuration setting.

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## 9.2 Record

Users can set record policy in storage interface.

# 9.2.1 Record Schedule

Procedure

Step 1 On the System Setting screen, choose Record > Record schedule to access the record

schedule interface, as shown in Figure 9-15.

Figure 9-15 Record schedule interface

晃 Channel	
Record	
Record Schedule	Record Schedule
Disk	Channel [1]uit •
Storage Mode	Enable Record
S.M.A.R.T	
Disk Calculation	Enable Record Audio
FTP	Enable ANR C
🙆 Alarm	All 😫 2 4 6 8 10 12 14 16 18 20 22 24 Sun S
S Network	Mon t
System	Wed to
	Thu t
	Fri S Sat 5
	Copy Refresh Apply

Step 2 Select a channel.

Step 3 Enable the record, then enable record audio.

Step 4 Enable ANR, when the IP cameras support the ANR, if the cameras are disconnected to NVR, the NVR can copy the loss video recordings from SD card installed in cameras.

Step 5 Set the record schedule, you can drag the mouse to choose area, click **set to choose all** 

day or all week, you can also click one by one to set the schedule. Or dray the mouse cursor to choose. Users can set the alarm recording to save the space of disk.

Step 6 Click Refresh to return the previous settings.



# 9.2.2 Disk

shown in Figure 9-16.

Figure 9-16	Disk interface
-------------	----------------

Disk			
	HDD- Capacity 2TB		
			Format
	Disk Status	Normal	
	Disk SN	WD-WXE1A791JKF4	
	Used Space	434GB	
	Disk Group		
	Recording Overwrite	-	
	Expired Time(Day)		
			Apply

Step 2 You can view the information like capacity, disk status, disk SN code and used space.

Step 3 Click Format to delete all data. Before deleting data users will view pop-up window

"Are you sure to format disk? Your data will be lost". Click OK to delete, click

Cancel to quit.

Step 4 Choose the disk group from drop-down list, there are four disk groups.

Step 5 Enable the recording overwrite, set the expired time. (If the expired time is 0, it means the disk is full, then the recording will be rewrite. It the expired time is 5 days, the recording video will be rewrite when it reaches the expiration date..)

Step 6 If the recording overwrite is disable, set the expired time, it is up to 90 days.

Step 1 On the System Setting screen, choose Record >Disk to access the disk interface, as

# 9.2.3 Storage Mode

Distribute channels to different disk groups as needed for efficient use of the disk capacity.

Storage	Mode			
	Mode Selection	O Group		
	Disk Group			
	Channel	1 2 3 4 5	6 7 8	
		9 10 11 12 13	14 15 16	
		17 18 10 20 21		
				Apply
				r they
Group	Disk	Channel	Used Space	Capacity
	Disk1	1-16	985GB	1000GB
2	Disk2	17-32	733GB	4.0TB
3	Disk3	33-48	753GB	4.0TB
4	Disk4	49-64	2.9TB	3.0TB

Figure 9-17 Storage Mode

#### **Operation Steps**

- Step 1 Choose the disk group.
- Step 2 Select the channel to record to disk group.
- Step 3 Click Apply to save the settings.
- Step 4 The group list will show the detail information.

# 9.2.4 RAID (Only for Some Models)

## 

RAID is only used for the device with 4 disks or more. And the disks must be enterprise level disks. It is recommended to choose the same capacity for efficient use.

For Raid5, at least 3 disks can be created. For RAID6, at least 4 disks can be created. For RAID10, at least 4 disks can be created. Creating a hot spare disk requires more disks.

It is recommended to choose the same capacity for efficient use. The RAID with less than 100T capacity can be built.

Liberty	$\odot$	€	Q	É	[ <b>=</b> †]	¢					ك 🌲	G• Ge
👥 Channel												
Record			DAID									
Record Schedule		-	RAID									
Disk			ID	RA	ID Name	Capacity	Status	Туре	HDD Members	Operate		
Storage Mode												
RAID												
S.M.A.R.T												
Disk Calculation												
<u>a</u> Alarm												
S Network												
System												
										Create		



**Operation Steps** 

Step 1 Click **RAID** to create the RAID.

Create RAID				×
RAID Type		RAID 5 +		
	Name	Capacity	Hotsp	are Disk
	Disk1	2TB		
	Disk2	6TB		
	Disk3	6TB		
	Disk4	3TB		
	Disk5	2TB		
	Disk6	2TB		
	Disk7	1TB		
	Disk8	2TB		
			ОК	Cancel

Step 2 Click Create to choose disk to create a new RAID.

Step 3 Tick the **Hot-spare Disk** to back up the broken disk in case, the number of disk must be more than basic disks.



Figure 9-19 Modify the RAID

RA	JD-md0							×
	RAID Nam	e	RAID-md0		Туре	RAID 5		
	Capacity		6TB		Members	Disk1,2,3,4,5		
	ID	Name	Capacity	Status	Туре	Hotspare Disk	Operate	
		Disk1	2TB	Active	RAID 5	No		
		Disk2		Active	RAID 5			
		Disk3	6TB	Active	RAID 5	No		
		Disk4		Active	RAID 5			
		Disk5		Spare	RAID 5	Yes	₩	
		Disk6			HDD		+	
		Disk7			HDD		+	
		Disk8			HDD			
L								

## 9.2.5 S.M.A.R.T

S.M.A.R.T is Self-Monitoring Analysis and Reporting Technology, users can view the health of disk, as shown in Figure 9-20.

Figure	9-20	S.M.	A.R.T
1.9		~	

Liberty (	۲	Ð	Q	¢							
🚅 Channel											
Record											
Desered Columbula			S.M.A.R	.T WDDA							
Dick											
Storane Mode				Disk							
SMART				Disk SN	WD-WXE1A791JKF4			Disk Mo	lel	WDC WD21	PSRX-89AHTY0
Disk Calculation				Temperature	32.0 C			Working	Time	2.1 Month	
FTP				Disk Health	6000						
Alarm					Attribute Name	Status	Value	Worst	Thresh	Туре	Raw value
S Network					raw-read-error-rate		200	200		prefail	0x00000000000
System					spin-up-time					prefail	0xfc080000000
					start-stop-count					old-age	0x620100000000
					reallocated-sector-count					prefail	0x00000000000000
					seek-error-rate					old-age	0x00000000000
					power-on-hours					old-age	0xc90500000000
					spin-retry-count					old-age	0x00000000000
					calibration-retry-count					old-age	0x00000000000
					power-cycle-count					old-age	0x62010000000
				192	power-off-retract-count	ок	200	200		old-age	0x600100000000
				193	load-cycle-count	ок	200	200		old-age	0x01000000000
				194	temperature-celsius-2	ок	111	103		old-age	0x20000000000

The disk of Western Digital can be viewed by WDDA, as shown in Figure 9-21.

Liberty (	۲	€	Q	Ę	<u>≯</u>					
🚅 Channel										
Record										
Decord Schodula			S.M.A.R	.т и	/DDA					
Dick				-						
Storage Mode				Disk		Disk1 *				
SMART				Disk Sl	N	WD-WXE1A791JKF4	Di	isk Model	WDC WD21PS	SRX-89AHTY0
Disk Calculation				Warnin	g		Ad	dvisory		
FTP										
Alarm				ID	Attribute Name	•		Statu	s	Raw value
S Network					Lifetime Power	On Reset Alert		Norma	al	354
System					Power On Hour	rs Alert		Norma	al	1481
					Head Load Life	time Count Alert		Norma	al	354
					Current Temper	rature Alert		Norma	al	
					Total Lifetime V	Vorkload Alert		Norma	al	3.2302463
					Total Workload	Rate Alert		Norma	al	19.106655
					Power On Rese	et Rate Alert		Norma	al	0.23902768
					Head Load Rat	e Alert		Norma	al	0.23902768
					Soft Reset Aler			Norma	al	
					Hard Reset Ale			Norma	al	
					Mechanical Fai	lure Alert		Norma	al	
					Interface CRC	Alert		Norm	al	

#### Figure 9-21 WDDA (Supplied for Some Model)

## 9.2.6 Disk Calculation

Figure 9-22 Disk calculation

Liberty	۲	Ð	Q	÷	[ <b>=</b> 1]	<u>\$</u>	ه ک ات G
🛒 Channel							
Record							
Record Schedule			Disk Calc	ulation Currently tot	I camera(s)	nitrate 0.00 Mbps	
Disk Storage Mode				Calculation I	lode	Computing *	
RAID				Expect to sa	ve time	0 Day -	
S.M.A.R.T Disk Calculation				Recording ti	ne per day	24 h	
FTP				The required	disk space	$\frown$	
🚊 Alarm							
S Network						$\bigcirc$ ·	
O System							

Liberty	۲	€	Q	<b>.</b>	[ <b>;</b> ]	¢		۵ 🌲	G• <table-cell></table-cell>
🛒 Channel									
Record									
Record Schedule Disk Storage Mode RAID S.M.A.R.T Disk Calculation ETP				IATION Currently tota Calculation M Expect to sav Recording tin The required	Il camera(s) Iode ve time ne per day disk space	rate 0.00 Misps Computing • 0 Day • 24 h			
<ul> <li>Alarm</li> <li>Network</li> <li>System</li> </ul>						0 66			

## 9.2.7 FTP

Set the FTP path to receive the alarm information, as shown in Figure 9-23. More detail information please refer to UI interface parameters.

Figure 9-23 FTP

Enable FTP Upload			
FTP Address			
FTP Port			
Account			
Password			
FTP Path			
Upload File Size(0-64MB)			
	Test		

# 9.3 Alarm

Users can set general, motion detection, video loss, intelligent analysis and alarm in on alarm interface.

## 9.3.1 General

### 9.3.1.1 General

#### Procedure

Step 1 On the **System Setting** screen, choose **Alarm > General** to access the general interface. Step 2 Enable alarm to set duration time and buzzer duration time, as shown in Figure 9-24.



Enable Alarm				
Alarm Duration Time (sec)				
Buzzer Duration Time (sec)	30s •			
			Refresh	Apply
		-		

### 9.3.1.2 IO Control Push

#### Procedure

Step

- Step 1 On the **System Setting** screen, choose **Alarm > General > IO Control Push** to access the general interface.
- Step 2 Enable the IO control push, as shown in Figure 9-25.
Figure 9-25 IO control push interface

Record       Alarm       General     IO Control Push       Motion Detection       Alarm In       Camera       Alarm In       Camera       Mode       No	🛒 Channel	hannel				
Airm     General     IO Control Push       Ceneral     Enable     Enable       Motion Detection     Alarm In     1       Camera Tamper     Alarm In     1       Video Loss     Mode     NO	Record	ecord				
Central     Enable       Motion Detection     Alarm In       Camera Tamper     Alarm In       Video Loss     Mode       Intelligent Analysis     Disabled Items	🙆 Alarm	larm	General	IO Control Push		
Intelligent Analysis Disabled Items	General Motion Detection Camera Tamper Video Loss	eral on Detection era Tamper o Loss		Enable Alarm In Mode	1 * N/0 *	
Alarm nu Push message to APP  Abnormal Alarm  Aarm Out Email	Intelligent Analysis Alarm In Abnormal Alarm Alarm Out	igent Analysis n In xrmal Alarm < n Out		Disabled Items Push message to APP Email	-	
Network         Refresh         Apply           System <td< td=""><td>System</td><td>etwork ystem</td><td></td><td></td><td></td><td>Refresh Apply</td></td<>	System	etwork ystem				Refresh Apply

Step 3 Choose one alarm in and mode (N/C, N/O).

Step 4 Tick the disable items, click "Apply" to save settings.

----End

## 9.3.2 Motion Detection

### Procedure

Step 1 On the **System Setting** screen, choose **Alarm > Motion Detection** to access the motion detection interface, as shown in Figure 9-26.

Motior	n Dete	ction	
		Channel	[1]Channel01 ·
		Enable Motion Detection	
		Event Actions	Area 🛗 Schedule
		Buzzer	
		Push message to APP	
		Pop up message to monitor	
		Full Screen	
		Email	
		FTP	
		PTZ	
		Enable Alarm Out	
		Enable Camera Alarm Out	
		Enable Event Recording	
			Copy Apply

Figure 9-26 Motion detection interface

Step 2 Click channel drop-down list to choose channel.

- Step 3 Enable motion detection alarm.
- Step 4 Set **Event Activity**, includes buzzer, push message to APP, pop-up message to monitor, full screen, Email, cloud storage, alarm out (the back panel), channel alarm out (the port of cameras), and alarm record.
- Step 5 Click Area to access the motion detection area setting, as shown in Figure 9-27.

Motion Dete	ection		
	Channel	[1]Channel01 ·	
	Enable Motion Detection	•	
Ð	Event Actions	Area 🛗 Schedule	
	VVZ-01-20 10189.40 Mos	Medum •	
			Copy Apply

Figure 9-27 Motion detection area interface

- 1. Hold down and drag the left mouse button to draw a motion detection area.
- 2. Select a value from the drop-down list next to Sensitivity.
- 3. Double -click the chosen area to delete.
- Step 6 Click **Schedule** to access schedule settings, drag and release mouse to select the alarming time within 00:00-24:00 from Monday to Sunday. Click the chosen area can cancel. The settings of alarm schedule are same as disk schedule.

Step 7 Click Copy to choose other cameras to copy settings. Click Apply to

save the settings.

---End

# 9.3.3 Video Loss

### Procedure

Step 1 On the **System Setting** screen, choose **Alarm** > **Video Loss** to access the video loss interface, as shown in Figure 9-28.

Figure 9-28 Video loss interface

Video Loss	
Channel	[1]Channel01 ·
Enable Video Loss Alarm	
Event Actions 🛗 Sched	tule
Buzzer	
Push message to APP	-
Pop up message to monitor	
Email	
PTZ	
Enable Alarm Out	
	Copy Apply

Step 2 Click drop-down list to choose channel.

Step 3 Enable the video loss alarm.

Step 4 Set event activity and schedule please refer to Figure 5-1 motion detection settings.

Step 5 Click	Сору	to choose other camera to copy settings. Click	Apply	to save

the settings.

----End

# 9.3.4 Intelligent Analysis (Only for Some Models)

#### Procedure

Please refer to chapter 7.4.1 video loss settings, interface displayed as shown in Figure 9-29.



Figure 9-29 Intelligent analysis interface

# 9.3.5 Alarm In

### Procedure

Step 1 On the **System Setting** screen, choose **Alarm > Alarm In** to access the alarm in interface, as shown in Figure 9-30.

Alarm In		
Alarm In	[1]Alarm In 🔹	
Enable		
Alarm Type	N/O •	
Name	Sensor 1	
Event Acti		
Buzzer		
Push message to APP		
Pop up message to monitor		
Email		
Alarm Out		
Alarm Time(s)(0:Continuous)		
Output ID		
Alarm Record		
		Apply

Figure 9-30 Alarm in interface

Step 2 Click drop-down list to choose alarm in.

Step 3 Enable the button, choose alarm type.

Step 4 Set name, default as Sensor 1.

Step 5 Set event activity and schedule please refer to motion detection settings.

Step 6 Click Apply to save settings.

----End

## 9.3.6 Abnormal Alarm

Procedure

Step 1 On the System Setting screen, choose Alarm > Abnormal Alarm to access the abnormal alarm interface, as shown in Figure 6-12.



Abnorm	nal A	larm						
		Enable Abnormal Alarm						
		Abnormal Type	Ø 🤣	P.	- F&			
		Buzzer						
		Push message to APP						
		Pop up message to monitor						
		Email						
		Enable Alarm Out						
		Alarm Time (sec) (0:Always Alarm)						
		Port Number						
							Refresh	Apply

Step 2 Enable the button, tick alarm type.

Step 3 Set event activity and schedule please refer to motion detection settings.

Step 4 Click Apply to save settings.

----End

## 9.3.7 Alarm out

Set the alarm out, the camera alarm out.

Figure 9-32 Alarm out

Alarm Out	Camera Alarm Out			
	Port Number	[1]Alarm Out 🔹		
	Port Name Valid Signal	Close -		
	Alarm Output Mode	Switch Mode -		
			Refresh	Apply

Figure 9-33 Camera alarm out

Alarm Out	Camera Alarm Out	
	Channel	[1]Channel01 *
	Port Number	
	Port Name	
	Valid Signal	Close +
	Alarm Output Mode	Switch Mode *
	Alarm Time(ms)(0:Continuous)	
		Refresh App

## 9.4 Network

Users can set Network, DDNS, E-mail, UPnP, P2P, IP Filter, 802.1X, SNMP and Web Mode.

# 9.4.1 Network

Procedure

Step 1 On the **System Setting** screen, choose **Network > Network** to access the network interface, as shown in Figure 9-34.

#### Figure 9-34 Network interface

IF	5	POR	Л		
			Network Card Name	Network Ca *	
			DHCP		
			IP Address	192.168.32.163	
			Subnet Mask	255.255.255.0	
			Default Gateway	192.168.0.1	
			Obtain DNS Automatically		
			Preferred DNS Server	144.144.144	
			Altenate DNS Server	192.168.1.1	
				Refresh Apply	

Step 2 Choose network card from the drop-down list. Network card I is LAN1, network card II is LAN2, as shown in Figure 9-35.

### Figure 9-35 Network card II

IP PORT			
Network Card Nam	e Network Ca 🔻		
IP Address	192.168.10.253		
Subnet Mask	255.255.255.0		
Default Gateway	192.168.10.254		
		Refresh	Apply

Step 3 Click next to IP 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**, **Subnet mask**, and **Gateway** to set the parameters as required.

Step 4 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 5 Set PORT and POE manually, input the information about these.

Figure 9-36 POE

IP Por	t POE		
	Auto Manage For PoE Camera	-	
	IP Address	169.254.10.121	
	Subnet Mask	255.255.0.0	
	Default Gateway	169.254.10.1	
*The POE pa	irameters are modified and the device will rebri	ot <sup>,</sup>	Refresh Apply
Step 6 Click	Refresh to restor	e previous settings. Click	to save the settings
End			

## 9.4.2 DDNS

Procedure

Step 1 Click **DDNS** in the network interface, choose **Network > DDNS** to access the DDNS

interface as shown in Figure 9-37.

### Figure 9-37 DDNS interface

💻 Channel				
Record	DDNS			
🚊 Alarm				
S Network		Enable	-	
Network		Protocol	no_ip +	
DDNS		Domain Name	dvr.ddns.net	
l Email		User		
Port Mapping		Password		
P2P	c -		Test	
IP Filter				
802.1X				Refresh Apply
SNMP				
Web Mode				
System				
G Local				

Step 2 Click the button 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, user, and password.

Step 5 Click Refresh to restore previous settings. Click Apply to save the settings.

# 

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

----End

# 9.4.3 Email

Procedure

Step 1 Click Email in the network interface, choose Network > Email to access the E-mail

interface, as shown in Figure 9-38



🕎 Channel				
Record	Email			
🚊 Alarm				
S Network	SMTP Server			
Nahwark	SMTP Server Port			
DDNS	Username			
Email	Password			
Port Mapping	Email Sender			
P2P	Email for password reco			
IP Filter	Alarm Receiver 1			
802.1X	Alarm Receiver 2			
SNMP				
Web Mode	Alarm Receiver 3			
System	SSL Encryption	OFF *		
G Local		Test		
			Refresh Apply	

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 receiving the alarm message.

Step 5 Set E-mail for retrieving the password.

Step 6 Click SSL Encryption drop-down list to enable safeguard of email.

Step 7 Click Refresh to restore previous settings. Click Apply to save the settings.

Issue: V4.6.5(2022-11-11)

System Setting

----End

# 9.4.4 Port Mapping

## 9.4.4.1 Port Mapping

Procedure

Step 1 Click Port Mapping in the network interface, choose Network > Port Mapping to

access the UPnP interface as shown in Figure 9-39.

Figure 9-39 Port Mapping interface

Liberty 💿	• Q	÷	[ <b>=!</b> ]	ø						6	د	G	G
💻 Channel													
Record													
🚊 Alarm	Port Map	Ding NAT	Port										
S Network		Enable Port	Mapping										
Network		Mode		Auto									
DDNS		HTTP Port											
Email		HTTPS Port											
Port Mapping		RTSP Port											
P2P		Control Port											
IP Hiter							Defreeh	Analy					
SNMP							Reliesh	Афру					
Web Mode													
POE Status													
Platform Access													
System													

Step 2 Select manner from UPnP enable drop list. The default value is auto.

Step 3 After UPnP is manual, set the Web port, data port and client port manually.

Step 4 Click	Refresh	to restore previous settings	Click	Apply	to save the settings.
--------------	---------	------------------------------	-------	-------	-----------------------

### 

Auto: System perform UPnP automatically. Manual: The ports are distributed by the router. Input them according to the router.

## 9.4.4.2 NAT port

NAT (Network Address Translation), users can browse the web of camera by NAT port. There are five ports can be assigned to each camera. Input the start port, the system will compute the end port automatically.

### Figure 9-40 NAT port

👥 Channel			
Record			
🙆 Alarm	Port Mapping NAT Port		
S Network	Start Port	60000	
Network	End Port	50161	
DDNS	LINTON		
Email	Port range [4000	1-65534]	
Port Mapping			Refresh Ap
P2P			
IP Filter			
8U2.1X			
Web Mode			
3G/4G			
PPPOE			
System			

#### ----End

## 9.4.5 P2P

### Procedure

Step 1 Click P2P in the network interface, choose Network > P2P to access the P2P interface, as shown in Figure 9-41.

	P2P				
	Enabl	le P2P			
	Status	s	Online		
×			B011003AGHS1729NA		
	Арр М	Vame	Liberty-View		
	- It is available on App	Store and Google Play.		Refresh	Apply

Step 2 Click Enable to enable the P2P function.

Step 3 Click Refresh to restore previous settings. Click Apply to save the settings.

Step 4 After installing **Liberty-View** in mobile phone, run the app and scan the UUID QR code to add it. And then access the NVR while the device is online.

----End

## 9.4.6 IP Filter

### Procedure

Step 1 Click **IP Filter** in the network interface, choose **Network > IP Filter** to access the IP filter interface, as shown in Figure 9-42.

### Figure 9-42 IP filter interface

IP I	Filter						
		IP Filter			_		
		Rule Type			Black List 🔻		
		Black List(Following netwo	rk segments are forbidden)		+ -		
			Start IP	End IP		Edit	
						Refresh	Apply
						Relicion	Арру

Step 2 Click Enable to enable the IP filter function.

Step 3 Click drop-down list of rule type to choose black list or white list.

Step 4 Click ,view the pop-up windows to set black list or white list, as shown in 7.5.5.

Click to delete the list.



Add Ip Segment		×
Start IP		
End IP		
	Cancel	ок
Step 5 Set start IP and end IP.		
Step 6 Click Cancel to deny settings,	click OK	to save the settings.



## 

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

----End

## 9.4.7 802.1X

### Procedure

Step 1 Click **802.1X** in the network interface, 802.1X interface is displayed, enable the button, as shown in Figure 9-44.

802.1X				
	Enable	-		
	User			
	Password	hard a		
			Refresh	Apply

Figure 9-44 802.1X interface

Step 2 Input the user and password of 802.1X authentication.



## 9.4.8 SNMP

### Procedure

Step 1 Click **SNMP** in the network interface, SNMP interface is displayed, enable the button

next to SNMPV1, as shown in Figure 9-45.

SNMP		
SNMPV1	-	
SNMPV2C		
Write Community		
	a	
Trap Address	192.168.32.79	
Trap Port	16222	
Trap Community		
SNMPV3		
Read Security Name	a	
Security Level	priv *	
Auth Algorithm	MD5 T	
Auth Password		
Encry Algorithm	AES	
Encry Password		
Write Security Name	b	
Security Level	priv •	
Auth Algorithm	SHA •	
Auth Password	••••••	
Encry Algorithm	AES *	
Encry Password	•••••••••	
		Refresh Apply

Step 2 Input the information of SNMP (simple network management protocol). there are three types of that function. Users can apply that if need.

Parameter	Description	Setting
SMTP Server Address	IP address of the SMTP server.	[Setting method] Enter a value manually.
SMTP Server Port	Port number of the SMTP server.	[Setting method] Enter a value manually. [Default value] 25
User Name	User name of the mailbox for sending emails.	[Setting method] Enter a value manually.
Password	Password of the mailbox for sending emails.	[Setting method] Enter a value manually.
Sender E-mail Address	Mailbox for sending emails.	[Setting method] Enter a value manually.
Recipient_E- mail_Address1	(Mandatory) Email address of recipient 1.	[Setting method] Enter a value manually.
Recipient_E- mail_Address2	(Optional) Email address of recipient 2.	
Recipient_E- mail_Address3	(Optional) Email address of recipient 3.	
Recipient_E- mail_Address4	(Optional) Email address of recipient 4.	
Recipient_E- mail_Address5	(Optional) Email address of recipient 5.	
Attachment Image Quality	A higher-quality image means more storage space. Set this parameter based on the site requirement.	N/A
Transport Mode	Email encryption mode. Set this parameter based on the encryption modes supported by the SMTP server.	[Setting method] Select a value from the drop-down list box. [Default value] No Encrypted

Table 9-2 SNMP	parameters
----------------	------------

Step 3 Click

Refresh

to restore previous settings. Click Apply

to save the settings.

----End

# 9.4.9 Web Mode

Step 1 Click Web Mode in the network interface, Web mode interface is displayed, as shown in

Figure 9-46.

Figure 9-46 Web mode interface

🛒 Channel	
Record	Web Mode
🙍 Alarm	
S Network	нттря
Network	Modifying the settings device will restart? Refresh Apply
DDNS	
Email	
Port Mapping	
< P2P	
IP Filter	
802.1X	
SNMP	
Web Mode	
System	
G Local	

Step 2 Enable the https, the device will restart and start https secure.



## 9.4.10 POE Status

Users can view the POE status at this interface, as shown in Figure 9-47.

229

Figure	9-47	POE	status
--------	------	-----	--------

Liberty	$\odot$	€	Q	Ø	8		ĺ
💻 Channel							
Record							
🚊 Alarm			POE Stat	us			
S Network							
Network DDNS Email Port Mapping P2P IP Filter 802.1X SNMP Web Mode				ernet	Router Connected Disconnected Powering		
POE Status			PO	E Power Con	Connecting sumption Sum: 1.6W /	W / Max: 40W	
System							

## 9.4.11 Platform Access

For more detail, please refer to UI interface parameter setting 7.4.13 Platform Access. Figure 9-48 Platform access

Enable	
URL	
Port	
User	
Password	
Encrypt	
	Refresh Appl

# 9.5 System

Users can set parameters about information, general, user, password, logs, maintenance and auto restart.

# 9.5.1 Device Information

### Procedure

Step 1 Click



on the navigation bar, the device information interface is displayed, as

shown in Figure 9-49.

System Network Channel Dis	sk Alarm
Device ID	B011003AFEK109U62
Device Name	Device
Device Type	NVR
Model	L3NVR8POE
Firmware Version	v4.6.1604.0000.003.0.1.36.0
U-boot Version	1504010C0F18
Kernel Version	15060511183A
HDD Number	2
Channels Supported	8
Alarm In	8
Alarm Out	1
Audio In	1
Audio Out	1

Figure 9-49 Device information interface

step 2 set the define hand deterang to factor j	Step 2	2 Set t	he device	name	according	to	Table	9-2
---	--------	---------	-----------	------	-----------	----	-------	-----

Table 9-3 Device	parameters
------------------	------------

Parameter	Description	Setting
Device ID	Unique device identifier used by the platform to distinguish the devices.	[Setting method] The parameter cannot be modified.
Device Name	Name of the device.	[Setting method] System Setting > General Modify the device name.
Device Type Model	N/A	[Setting method] These parameters cannot be modified.
Firmware version		
HDD volume		
Channel support		

Parameter	Description	Setting
Alarm in		
Alarm out		
Audio in		
Audio out		

### Figure 9-50 Network

System Network Channel Disk Alarm	
Status	Online
IP Address	192.168.0.51
Subnet Mask	255.255.0.0
Default Gateway	192.168.0.1
MAC Address	00:1E:A4:00:42:85
DHCP	OFF
Preferred DNS Server	192.168.0.1
Alternate DNS Server	8.8.8.8
Total Bandwidth	100 00 Mbps

Figure 9-51 Channel

System	Network Channel	Disk Alarm			
Channel	Name	Status	Video Format	Resolution	Bitrate(kbps)
CH1	Device	Offline	H265/H265	2560*1440/704*576	4096/1024
CH2	Channel12	Online	H265/H265	1920*1080/704*480	4096/1024
CH3	Channel29	Online	H265/H265	1920*1080/704*576	4096/1024
CH4	Device	Online	H264/H264	1920*1080/704*576	2048/1024

Figure 9-52 Disk

System	Network	Channel	Disk	Alarm		
Dis	k Capacity	Used		SN	Disk Model	Status
Disl	1 2ТВ	901GB				Normal

Figure 9-53 Alarm

System	Network	Channel	Disk	Alarm			
	Channel			Name	Mode	Enable	Recording Channel
	Local<-1			Sensor 1	N/O		
	Local<-2			Sensor 2	N/O		
	Local<-3			Sensor 3	N/O		
	Local<-4			Sensor 4	N/O		
	Local->1				Close		

----End

# 9.5.2 General

You can set system, date and time, time zone and DST general interface.

Procedure

Step 1 On the **System Setting** screen, choose **System >General** to access the general interface, as shown in Figure 9-54.

#### Figure 9-54 Basic setting interface

🛒 Channel				
Record				
🖻 Alarm	System Da	ate And Time Time Zone	DST Sync Camera Time	
S Network		Device Name	Device	
System				
		Output Resolution	1920x1080 ·	
Information		Language		
General		T		
User Account		Temperature Unit	Celsius	
Security Center				Refresh Apply
Logs				
Maintenance				
Auto Reboot				



- 1. Input the device name.
- 2. Choose output resolution from drop list.
- 3. Click Apply to save the system setting.

Step 3 Set date and time.

- 1. Synchronize the time from the NTP server.
- 2. Click NTP Sync button to enable synchronize time. The default value is enabling.

Figure 9-55 System interface

System	Date And Time Time Zone	DST Sync Camera Time		
	Device Name	Device		
	Output Resolution	1920x1080 +		
	Language			
	Temperature Unit	Celsius *		
*Modify the o			Refresh	Apply

3. Select NTP server, date format and time format from drop list.

4. Click Apply to save date and time setting. The device time will synchronize with NTP server time.

- 5. Set the device time manually, as shown in Figure 9-56.
- 6. Click NTP Sync button to disable synchronize time.

7. Async date and time interface

Figure 9-56 Date and time

System	Date And Time Time Zone	DST Sync Camera Time	
	Date Format	DD/MM/YY hh:mm:ss *	
	Time Format	24H *	
	Enable NTP		
	NTP Server	time.windows.com *	
	Sync Time Frequency (sec)	86400s	
	Time	25/04/2022 17:41:50	
- Time modifi			Refresh Apply
- tine moun			

Step 4 Set the time zone.

1. Select date format and time format from the drop-down list.

2. Click	Apply	to save the device time setting. Click	Refresh	to return to
previous	setting.			

### Step 5 Set time zone.

Click **Time Zone** to enter the time zone setting interface, as shown in Figure 9-57. Time zone setting interface

Figure 9-57 Time zone

System	Date And Time	Time Zone	DST	Sync	Camera Tim	e			
	Time Zone		(GMT	+00:00) [	Dublin, Edinburg	ph, London			
								Refresh	Apply

Select a time zone from the drop-down list.

Click Apply to save the time zone setting. Click Refresh to return to previous setting.

Step 6 Set DST.

1. Click DST to enter the DST setting interface, click DST button to enable, as shown in Figure 9-60. The button is disabled by default.

Figure 9-58 DST	setting	interface
-----------------	---------	-----------

System	Date And Time Time 2	Zone DS	ST	Sync (	Can	nera Tim	e				
	Enable Daylight Saving Time			•							
	Start Time	Mar		Last one		Sun		1:00			
	End Time	Oct		Last one		Sun		1:00			
	Offset Time	1 Hour									
<u>.</u>										Refresh	Apply

Select a start time from the drop-down list.

Select an end time from the drop-down list.

Select an offset time from the drop-down list.

Figure 9-59 Sync camera time

System	Date And Time	Time Zone	DST	Sync Camera Time		
	Enable Sync					
	Sync Time Frequency (sec)		3600s			
					Refresh	Apply

Enable sync camera time, the cameras of NVR management will be showing the same time. Set the frequency of checks (minimum 10s).

Step 7 Click	Apply	to save the DST setting. Click	Refresh	to return to previous
setting.				
End				

# 9.5.3 User Account

You can create new user accounts to manage the device.

### 9.5.3.1 Add User

Procedure

Step 1 On the System Setting screen, choose System >User to access the User interface, as shown in Figure 9-60.

#### Figure 9-60 User interface

Ef Channel					
Record					
🚊 Alarm	User	Adv.Setting	Phone Number Allowed		
S Network					
System			Username	Group	Operate
		1			
Information					
General					
User Account					
Security Center					
Logs					
Maintenance					
Auto Reboot					
					Add

Step 2 Click Add to add a new user, as shown in Figure 9-61. Figure 9-61 Add user



Step 3 Input username, password and confirm password.

Step 4 Select a group and change password reminder from drop-down list.

Step 5 Assign the privilege to the user.

Step 6 Enable the expire date to set the new user's authority time.

Step 7 Select channels to manage.



## 9.5.3.2 Adv.Setting

### Procedure

Step 1 On the System Setting screen, choose System > User > Adv. Setting to access interface,

as shown in Figure 9-62.



🛒 Channel				
Record				
🚊 Alarm	User	Adv.Setting	Phone Number Allowed	
S Network		Enable Do	wikle Authentication	
System		Chase Do		
had a second second			Refresh	Apply
Information				
General				
User Account				
Security Center				
Logs				
Maintenance				
Auto Reboot				

Step 2 Enable the **Password double authentication**. If the user want to playback video, he need input another username and password to authenticate.



## 9.5.3.3 App Verification

Add the digital number to white list, when the user logins the cellphone App to manage the NVR, A series of numbers must be added in the whitelist for testing and verification to ensure the security.



User	Adv.Setting	App Verification				
			ode	Status	Remark	
					×	
			Security Code			
			Remark(optional)	ок	Cancel	

# 9.5.4 Security Center

## 9.5.4.1 Password

Procedure

Step 1 On the System Setting screen, choose System >Security Center to access password

interface, as shown in Figure 9-64.

Figure 9-64 Password interface

Password	Secure Email	Secure (	Question				
	Old Password						
	New Password			0			
	Confirm Password						
						Refresh	Apply

Step 2 Input old password, new password and confirm password.

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## 

Valid password range [6-32] characters.

At least 2 kinds of numbers, lowercase, uppercase or special character contained.

Only special characters are support ! @#&\*+=-%&``(),/`.:;<>?^|~[]{}.

----End

## 9.5.4.2 Secure Email

The secure email can receive the verification code of NVR, if user forgot the password accidentally.

Password	Secure Email	Secure Ques	tion			
	Password Email Address					
-					Refresh	Apply

----End

## 9.5.4.3 Secure Question

If the user forgets the password and answers the security question correctly, the user can change the password to log in to the NVR..

Password	Secure Email	Secure C	Question			
	Password	ļ				
	Question one		The brand and model of your favorite car			
	Question one answer					
	Question two		Your favorite team			
	Question two answer					
	Question three		Your favorite city			
	Question three answe	er				
- Please enter a - Please enter u	t least 1 characters for the p to 32 characters for the	e answer answer			Refresh	Apply

----End

# 9.5.5 Logs

### 9.5.5.1 System Logs

### Procedure

Step 1 On the System Setting screen, choose System > Logs to access logs interface, as shown

in Figure 9-66.

🚅 Channel						
Record						
🚊 Alarm	System Log Event	Log				
S Network						
O System	Start 24/04/2022 1	7:49:39 End 25/04/2022 17:49:39	Type Operation	Log 🔻	Search Export	
Information	ID	Start Time	Channel	Log Type	Information	
General		25/04/2022 17:06:53		Logout	[admin] 192.168.32.199 logout	ĺ
User Account		25/04/2022 17:05:19		Login	[admin] 192.168.32.199 login	
Security Center		25/04/2022 17:05:18		Logout	[admin] 192.168.32.199 logout	
		25/04/2022 17:05:18		Login	[admin] 192.168.32.199 login	
Maintenance		25/04/2022 15:53:25		Login	[admin] 192.168.0.157 login	
Auto Rehoot		25/04/2022 15:32:03		Logout	[admin] 127.0.0.1 logout	
		25/04/2022 15:02:40		Login	(admin) 127.0.0.1 login	
		25/04/2022 15:02:00		Logout	[admin] 127.0.0.1 logout	
		25/04/2022 14:40:35		Login	[admin] 127.0.0.1 login	
		25/04/2022 13:10:17		Logout	[admin] 127.0.0.1 logout	
		25/04/2022 12:56:10		Login	[admin] 127.0.0.1 login	
		25/04/2022 12:39:20		Logout	(admin) 127.0.0.1 logout	
		25/04/2022 12:32:43		Login	[admin] 127.0.0.1 login	
	< < 1_/2 <b>&gt;</b>				Every	page show 20 ×

Figure 9-66 System log interface

Step 2 Set start and end time from calendar.

Step 3 Select log type from drop-down list.

Step 4 Click Search to acquire log information.

Step 5 Click Export to export the logs.

----End

### 9.5.5.2 Event

### Procedure

Step 1 On the System Setting screen, choose System >Logs > Event to access logs interface, as shown in Figure 9-67.

Figure	9-67	Event	log	inter	face
1 15010	/ 0/	Liene	105	muu	ince

🛒 Channel					
Record					
🙆 Alarm	System Log Event L	og			
S Network	-				
😧 System	Start 24/04/2022 17:5	60:26 End 25/04/2022 17:50:26	Type All *	All	Search Export
Information	ID	Start Time	Channel	Log Type	Information
General		25/04/2022 17:50:23	Channel05	Motion Detection	Channel05
User Account		25/04/2022 17:49:09	Channel05	Motion Detection	Channel05
Security Center		25/04/2022 17:48:47	Channel05	Motion Detection	Channel05
		25/04/2022 17:41:03	Channel05	Motion Detection	Channel05
Maintenance		25/04/2022 17:37:29	Channel05	Motion Detection	Channel05
Auto Reboot		25/04/2022 17:37:02	Channel05	Motion Detection	Channel05
Auto Rebool		25/04/2022 17:33:55	Channel05	Motion Detection	Channel05
		25/04/2022 17:32:07	Channel05	Motion Detection	Channel05
		25/04/2022 17:31:06	Channel05	Motion Detection	Channel05
		25/04/2022 17:29:06	Channel05	Motion Detection	Channel05
		25/04/2022 17:28:16	Channel05	Motion Detection	Channel05
		25/04/2022 17:28:01	Channel05	Motion Detection	Channel05
		25/04/2022 17:25:15	Channel05	Motion Detection	Channel05
	<< 1 /92 >	>			Every page show 20 *

Step 2 Set start and end time from calendar.

Step 3 Select event type from drop-down list.

Step 4 Click Search to acquire log information.

Step 5 Click **Export** to export the event logs.

----End

## 9.5.6 Maintenance

#### Procedure

Step 1 On the **System Setting** screen, choose **System >Maintenance** to access maintenance interface, as shown in Figure 9-68.

#### Figure 9-68 Maintenance interface

shows 'make sure to update', click OK to update.

----End

# 9.5.7 Auto Reboot

### Procedure

Step 1 On the **System Setting** screen, choose **System > Auto Reboot** to access auto restart enable the auto restart, the screen as shown in Figure 9-69. Figure 9-69 Auto restart

P Channel	
Record	
🚊 Alarm	Auto Reboot
S Network	Enable Auto Reboot
System	Reboot Time Per Day V 0.00 V
Information	
General	Refresh Apply
User Account	
Security Center	
Logs	
Maintenance	
Auto Reboot	

Step 2 Select one type of restart time from drop-down list.

Step 3 Click	Apply	to save settings.	Click	Refresh	to return to previous	setting.
End						

# 9.6 Local (Supplied for IE Browser)

Set the image download path for snapshot and the record download path for record files in the download configuration interface.

### 

This function is only used for IE browser.

### Procedure

Step 1 Click Local Download Config in local interface, as shown in Figure 9-70.

### Figure 9-70 Local interface

M Channel				
Record	Download Config			
<u>à</u> Alarm				
Network	Image download path	C:\Users\Public\Docur	Browse	
System	Video download path	C:\Users\Public\Docur	Browse	
C Local				Refresh Apply
Download Config				
<				

Step 2 Enter the image download path.

Step 3 Enter the record download path.

Step 4 Click Refresh to return the previous settings. Click Apply to save the settings.

----End