

For N2 "SD" Series IP Camera Models:

N2IP4BSD, N2IP4TSD, N2IP4DSD, N2IP4D4MMSD, N2IP4WSD, N2IP4AFBSD, N2IP4AFDSD, N2IPPTZ30XSD



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 between different models. Please refer to the actual products.

Update Version

Version	Update Time	Description
V1.1	04/2022	Update some functions and pictures. Remark the special functions.

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1 Quick Start

1.1 Activation

Please access web interface through Internet Explorer 8 or above; Otherwise, some functions may be unavailable.

Activation

Step 1 Open Internet Explorer, enter the IP address of the IP camera (DHCP is on by default) in the address box, and press **Enter**.

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

Figure 1-1	Activation page
------------	-----------------

User	Name adı	nin		
Pas	ssword		0	
Co	onfirm			

Step 2 Set a password, confirm password, and then hit OK.

Logout and Logout

Login the camera, as shown in Figure 1-2.

Figure 1-2 Figure 1-2 Login page

Noch	
NOL	nen
	English
User Name	
Password	

To log out of the system, click 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 1-3.

Figure 1-3 Change the default password page

New Passwo	ord		0	
Confir	m			
	Ormal	01/		
	Cancel	OK		

Or click it to change the password to login the system, as show in Figure 1-4.

Figure 1-4 Change password dialog box

Old Password	
New Password	
Confirm	
ssword Advice: dvice the password len- dvice the password incl rercase letters and spec dvice the password can	gth of eight characters. ludes numbers, capital letters, ial characters. n 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

You can browse real-time videos in the web management system.

Preparation

To ensure that real-time videos can be played normally, you must perform the following operations when you log into 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 1-5.



Figure 1-5 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 1-6.

elect a zone to view or change security settings.	Settings
🔮 😼 🗸 🛇	ActiveX controls and plug-ins
Internet Local intranet Trusted sites Restricted	Allow previously unused ActiveX controls to run without pror
sites	Disable Disable Disable
Internet Site	5 Allow Scriptlets
except those listed in trusted and	O Disable
restricted zones.	Enable
	O Prompt
Security level for this zone	Automatic prompting for ActiveX controls
Custom	Enable Disput and excipt hologuing
Custom settings.	
 To change the settings, click Custom level. 	O Disable
- To use the recommended seconds, dick behauld	evel. O Enable
	Display video and animation on a webpage that does not use
Custom Jourd Dofault J	*Takes effect after you restart Internet Explorer
	Peset custom settings
Reset all zones to default	level Reset to: Under bick (default)
	Reset

Figure 1-6 Configure ActiveX controls and plug-ins

Step 3 Download and install the player control as prompted.

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

```
----End
```

Select the play mode

You can select VLC player to play the video, or select the plugin to play the video as shown in Figure 1-7 when you login to the web management system for the first time.

Figure 1-7 Download the plugin page

Selecting a play mode, please
 Continue to use the old plugin.
Use the VLC to play
- Dependenced and install the same charin (71) of the control of t

If plugin is selected, please install player control at first.

Step 1 Click "download and install the new plugin", download the plugin as shown in Figure 1-8.

F	igure 1-8 Run	the plugin		
NetworkSurveilla	nce.exe (3.23 le could harn	3 MB) n your com	192.1 puter.	68. 0.120
	Run	Save	•	Cancel

.

Step 2 Click "Run", select destination location as shown in Figure 1-9.

Figure 1-9 Sciect destination location	Figure 1-9	Select destination location
---	------------	-----------------------------

elect Destination Location	
Where should iWebLive be installed?	0
Setup will install iWebLive into the following folde	r.
To continue, dick Next. If you would like to select a different	ent folder, click Browse.
C:\Program Files (x86)\iWebLive	Browse

Step 3 Click "Next", ready to install the plugin, as shown in Figure 1-10.

Figure 1-10 Ready to	install
tup - iWebLive	
ady to Install	1111111111
Setup is now ready to begin installing iWebLive on	your computer.
Click Install to continue with the installation, or clic change any settings.	k Back <mark>if</mark> you want to review or
Destination location: C:\Program Files (x86)\WebLive	^
	~

Step 4 Click "Install" to install the plugin, as shown in Figure 1-11.

Figure 1-11 Installing

🔀 Setup - iWebLive	<u>1995</u> 5		×
Installing			
Please wait while Setup installs iWebLive on your computer.		6	
Extracting files			
C:\Program Files (x86)\WebLive\sdks_rjb.dll			
			ř –
			2
		_	_
		Can	cel

Step 5 Click "Finish", complete complete plugin installation, as shown in Figure 1-12.



Figure 1-12 Complete to install the plugin

Step 6 Reopen the browser after installing.

- If the repair tips displayed when installing the control, please ignore the prompt, and continue the installation.
- During installing the plugin, 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 1-13.

Figure 1-13 Live Video page

Northern*					gg adr	nin
	Live Video	Playback	Configurat	tion		E
2000-01-01 00:	25:07 Sat					
Note: ActiveX is being used to play liv	re video now				3990 Rbps	
	Swite	h to VI C then play the video	Switch to Plugin then play the video)	
St	ream stream1 V PTZ 3					

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

- Click **I** 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 details about how to configure streams, see 3.2 Video and Audio Stream .
- Click 🔲 to switch the video to smooth mode.
- Click 🔟 to snapshot and save the photos.
- Click **[11]** to enable the local record.
- Configure the sensor.

You can right-click in the video area. A shortcut menu is displayed and allows you to enter the full-screen mode, set sensor parameters, zoom in or out, and return to the default view.

To set sensor parameters, click to open the **Sensor Setting** page. On the **Sensor Setting** page, you can adjust the image, mirror, camera mode, focus setting, Iris setting, white balance, and noise filter as prompted.

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 1-14 shows the main page layout. Table 1-1 describes the elements on the main page.



Figure 1-14 Main page layout

No.	Element	Description
1	Real-time video area	Real-time videos are played in this area. You can also set sensor parameters, right click on the real-time video display.
2	Playback	You can query the playback videos in this area. NOTE Only when the SD card or NAS has videos that you can query the playback videos.
3	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.
4	Change password	You can click it to change the password.
5	Logout	You can click I to return to the login page.

 Table 1-1
 Elements on the main page

No.	Element	Description
6	Stream	Choose stream mode from drop-list. Set the parameters in "Configuration > Streams > Basic Streams".
7	PTZ	Only used for dome cameras, set parameters. Only for Some Models.
8	3D	Only used for dome cameras, locate the exact location on the live video screen. Only for Some Models.
9	Pause/play	Pause the live video or play the video.
10	Live/smooth	Switch the resolution of live video automatically.
11	Audio	Open/close the audio.
12	Microphone	Open/close the microphone.
13	Sensor	Set the sensor parameters.
14	Snapshot	Click the icon to snapshot the video and save the images to the specified location.
15	Local record	Record the video and save the file to the specified location.
16	Mode	Only used for fisheye camera, click the icon to choose mode to play video.
17	Intelligent analysis	Open/close the intelligent analysis. Open the intelligent, choose the stream to stream 2, click to open the intelligent analysis, it will show target information and video stream draw line after you have turned on the function in IVS settings.

- 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 is displayed. You can click when the device is abnormal, the fault icon is displayed. You can click to view the
- 1.5 Playback

information.

Click "Playback" at IE web interface, if user installs SD card, and there are video in SD card, click "Playback" and the playback video will show as in Figure 1-15.



 All Tasks ↓ Being Backup ✓ Copy Finished 	– Configu	Path File Size File Type	128 (10-4096 TS ~)M Directory	Type Device I	+ Save P ✓ Refres
	Status	Percent	Device IP	Device ID	Camera ID	Pat
	Start	Paus	e Delete	Directory		

Figure 1-16 Record backup

Drag the mouse to choose backup time, right-click to save, as shown in the figure.





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

quickly.

2 Sensor Setting

2.1 Control and Configure the PTZ (Only for Some Models)

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 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.
- Click [*] or [**] 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.

PTZ								X
+ 4	Preset	Track	Scan	Tour	Idle	Timer	Exten	
	Pre	set i	Preset1	×	Add Pr ID Name	eset 6	>	
[≉]₩Ø@⊡□								
A E3								

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.

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. Set the preset ID and name.

2. Click + to finish the preset position setting.

Step 2 Invoke a preset position.

Select a preset position from the Preset drop-down list box to invoke the preset position.

----End

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 **I** to finish the track setting.

Step 2 Invoke a track.

Select a track name from the Track drop-down list box to invoke the track.

A maximum of six tracks can be configured.

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 2-3.

Figure 2-3 Scan configuration

	(¢
Preset Track Scan Tour	Idle Timer Exten	
Scan 12345 -	Add Scan ID 2 Value	

- 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 drop-down list box to invoke the scan.

A maximum of twelve scans can be configured.

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 2-4.

Figure 2-4	Tour configuration
------------	--------------------

eset Track	Scan	Tour	Idle Tin	ner Exten	•••	
			Add Tour			
Tour	Tour1	~	ID	2	~	
Preset	Preset1	~	Name Preset	Preset1	~	
Wait Time	5		Wait Time	0		~

- 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 drop-down list box to invoke the tour.

A maximum of twelve tours can be configured.

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 2-5.

		0			0			
							2	×
Preset	Track	Scan	Tour	Idle	Timer	Exten		
		Enable		ON				
		Type	Tou	ır	•			
		Name	Tou	ır1	•			
		Wait Tin	ne 2					
				~	•			

Figure 2-5 Idle configuration

Step 2 Enable the Idle button.

Step 3 Set the idle type and name from the drop-down list box.

Step 4 Set the wait time($1 \min \sim 240 \min$).

Step 5 Click which the idle setting.

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 2-6.

Enabl	e				-	
er Mod	e ®E	veryday	Onc	e	Time 0-	-0-0
Timer	Begin	Time E	Ind Time	PTZ Type	Name	Clear
1	0:30	-	•	•	▼	×
2		•	•	•	•	×
3		•	•	•	•	×
	ſ				n	

Figure 2-6 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 *local* to finish the timer setting.

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 2-7.

Figure 2-7 Extension

Preset	Track	Scan	Tour	Idle	Timer	Exten	
Ĵ		*		Reboo PTZ T Name	ype Pr	on v eset1 v	

• Light function

Click to enable the light.

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

• Brush function

Click 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 to finish the reboot setting.

----End

2.2 Sensor Setting

2.2.1 Access the Sensor Setting Interface

Operation procedure:

Step 1 On the web interface or client interface, move the cursor to the real-time video page and right-click. A shortcut menu is displayed, as shown in Figure 2-8. Or enter **Configuration > Sensor Setting** interface. Table 2-1 describes the sensor setting interface.

Figure 2-8 Sensor Setting	interface
---------------------------	-----------

	Full Screen	
	Sensor	
	ZoomIn	
	ZoomOut Restore Panorama	
Northern*	Live Video Playheek Configuration	🥵 admin
	Live Video Playback Configuration 호 Sensor Setting	
	Mode Blanda Scheme Schem	id mode V e 1 V
🗃 Maintenance	Switch Mode None Start Time 00	
	End Time (24	
	FactorySetting Reset	Save

Table 2-1 Sensor parameters description

Parameter	Description
Full Screen	It enlarges and displays the image in full screen.
Sensor	It is used for configure the parameter set of front-end images.
Zoom In/Out	It zooms in/out images by electronic means. This function may also be used with the mouse wheel.
Restore Panorama	Only apply for screen is zooming, the default state is unavailable.

Step 2 Choose Sensor Configure and the Sensor Setting dialog box appears.

----End

2.2.2 Mode

Operation procedure:

Step 1 Click Mode tag on sensor setting interface, the Mode page is displayed, as shown in Figure 2-9.

Figure 2-9 Mode page

									nice mag	
Switch	Mode N	Vone	2	Start Time	00	~	1	00	~	
				End Time	24	~	£.	00	~	

🖻 Sensor Setting

	Mod Sche	e eme	Debug Mod	le
Mode Image Scene Exposure	WB DayNigl	nt Noise Reduction	n Enhance Image	Zoc < >
Switch Mode None	Start Time 00 End Time 24	 . 00 . 00 . 00 	*	

Step 2 Choose Debug Model in the lower left corner to activate the sensor setting page.

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

Step 4 Click Save to save the setting.

2.2.3 Image Setting

Figure 2-10 shows the image setting interface.

lode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	n Enhance Imag	e Zoc
Brig	htness	0		50 100	Saturat	tion 0	50 100	
Sha	rpness	0	•	62 100	Contr	ast 0	50 100	
ahua	Modi v	Schame	1 4	Facto	rySetting		Reset	Save

Figure 2-10 Image setting interface

Scheme Scheme 1	•
	•

Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoc <
Brigh	ntness —		+ 50		Saturation —		+ 50	
Sharj	pness —		+ 50		Contrast —		+ 50	
					Easton/So	tting De	sat	Save

Table 2-2 describes the image setting parameters.

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
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

 Table 2-2
 Image setting parameters description

2.2.4 Scene Mode

Figure 2-11 shows the **scene mode** interface.

Figure 2-11 Scene mode interface for IP camera

Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	
		Scene	Outdoor		~	Aisle Mo	de	
						L		
			-			i.		
		Mirror	Normal		~			
				10000	e reserve as	STOR ON LODG		
			Tin: Diagon	undata t	he MetionD	station Drive avella	ak Intelligent	
			Tip: Please	update t	he MotionDe	etection, PrivacyMa	sk,Intelligent	

		Sch	eme	Scheme 1
Mode Image Scene	Scene Exposure	WB DayNig	ght Noise Reduct	tion Enhance Image Zoc <
Mirro	r Normal	•	ntallicant	

Table 2-3 describes the FFC mode parameters.

Table 2-3 FFC mode parameters of	description
----------------------------------	-------------

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
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.	[Setting method] Tick the Aisle mode. [Default value] Disable

2.2.5 Exposure

Figure 2-12 and Figure 2-13 shows the **Exposure** interface.

Figure 2-12 Exposure interface for IP camera

Scene Expos	WB	DayNight	Noise R	teduction	Enha	nce Image	Zoom Focus	
xposure Mode	Auto		~	Max Sh	utter	1/25		~
Meter area	Whole		~	Max	Gain	0		— 50 100
					Iris	Auto		~
				Iris S	peed	0		50
Debug Mode v	Scheme 1	~	FactoryS	etting			Reset	Save



Mode	Debug Mode 💌
Scheme	Scheme 1

Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoc <
Exposure Mode	Auto		•		Max Shutter	1/30		-
Meter area	Whole		•		Max Gair		+ 50	

Mode	Image	Scene	Exposure	WB	DayNight	Noise	Reduction	Enhance Image	Zoc	•
xposure	Mode	Auto		~	Max S	Shutter	1/25	~		
Meter	rarea	Whole		~	Ma	x Gain Iris	0 [']	100	50	

Figure 2-13 Exposure interface for high-speed dome

Table 2-4 describes Exposure parameters.

 Table 2-4
 Exposure parameters description

Parameter	Meaning	Configuration Method
Exposure Mode	 The exposure modes include: Auto: The system performs auto exposure based on the monitoring environment. Manual: You can adjust the brightness of an image by setting the following three items: Shutter Setting, Iris Setting and Gain Setting. Shutter Priority: You can set Shutter Setting to fixed values. The iris and gain are automatically adjusted by the system. Iris Priority (for high-speed dome): You can set fund values. 	[Setting method] Select a value from the drop-down list. [Default value] Auto
	The shutter and gain are automatically adjusted by the system.	
Meter area	 It is used to select the metering area. Whole: During metering, all areas of an image have an equal weight, that is, all areas are involved in the metering. Center spot: During metering, the central spot of an image has the highest weight. Center Area: During metering, the middle area (1/2 of the total area) of an 	[Setting method] Select a value from the drop-down list. [Default value] Whole
	middle area (1/2 of the total area) of an image has the highest weight, and other areas have the lowest weight.	
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	[Setting method] Select a value from

Parameter	Meaning	Configuration Method
	of this parameter.	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: Auto The iris is automatically adjusted to control the light admitted to the lens. Open fully 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.	[Setting method] Drag the slider. [Default value] 50
Fixed Gain	When the exposure Mode is Manual, you can set the fixed gain.	[Setting method] Drag the slider. [Default value] 50

2.2.6 WB Setting

Figure 2-14 shows the **WB Setting** interface.

•

•

Mode	Image	Scene	Exposure	WB DayNi	ght Noise Reduction	Enhance Image	Zoc 4
			Mode	Auto	~		
			Red Gain		0		
			Blue Gain	0 I	100		

Figure 2-14 WB Setting interface

🚖 Sensor Setting



Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoc < 3
		ļ	Mode Auto			T		
		F	ted Gain — 🍟		+ 0			
		В	lue Gain — 🌗		+ 0			
					FactorySe	etting Re	sot	Save

Table 2-5 describes **WB Setting** parameters.

 Table 2-5 WB Setting parameters description

Parameter	Meaning	Configuration Method
Mode	Select WB mode according to different scenes for better image color reproduction.Auto: In automatic white	[Setting method] Select a value from the drop- down list.

Parameter	Meaning	Configuration Method
	balance (WB) mode, the system automatically performs white balance based on the monitoring environment.	[Default value] Auto
	• Tungsten	
	• Fluorescent	
	• Daylight	
	Shadow	
	• Manual : 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.	[Setting method] Drag the slider. [Default value] 0
	Manual Mode is set to Customized.	
Blue Gain	It indicates the gain applied to blue channels. As the value increases, the color temperature becomes higher.	[Setting method] Drag the slider. [Default value]
	III NOTE	U
	This parameter is valid when Manual Mode is set to Customized .	

2.2.7 Daynight

The day night mode settings vary based on device models. For details, see the following sections. Figure 2-15 to Figure 2-18 shows the **DayNight Mode** interface.

Debug Mode

Scheme 1

•

▼

Sensor	Setting							×
Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoc
			D/N Settir	ng Au	to	~		
		т	ransi.(D->I	v)		70		
		т	Ransi.(N->I	0) = 0	•	36 100		
			Delay(s) 🖡		180		
Debug	Modi 🗸	Scheme	e 1 🗸	Fact	orySetting		Reset	Save

Figure 2-15 DayNight Mode (1) interface

🖻 Sensor Setting



Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoc <
D	/N Setting Aut	0	•		Light Mo	de IR LED		
D/N Swite	ch Sensitivity –		+ 50]	IR LI	ED Auto	<u> </u>	•
				1	Str	ength —	+ 50	
	Delay(s) -		+ 5]				

lode	Image	Scene	Exposure	WB Day	light Noise Rec	luction	Enhance In	mage Zoc 1
	inago	Coone	Lipouro			d otion	Linditoo	inge Loc
	D/M Cottin	Dave Dinave	Mode	~		LED	Manual	~
	Din Setti	Uay	mode				1998 (P. 1997)	1.1
	Din Setti	'9 Day	incuc					50
	un setti	ug Day	induc		Near		i i	50
	Din Setti	'y Day	in our		Near	0	ļ	50
	Dirik Setti	'y Day	indu		Near Centre	0	:	50 100 50
	Dini Setti	'y Day	incus		Near Centre	0	;	50 100 50 100
	Divid Settin				Near Centre	0	ł	50 100 50 100

Figure 2-16 DayNight Mode (2) interface



Mode Image Scene Exposure WB DayNigh	Noise Reduction Enhance Image Zoc							
D/N Setting Night Mode ~	🔽 IR LED Manual 🗸							
	Near 50 0 100 Centre 50 0 100 Far 50							
Debug Modi V Scheme 1 V FactorySetting	Reset Save							
ensor Setting								
inser octaining								
lode Image Scene Exposure WB DayNight	Noise Reduction Enhance Image Zoc							
Iode Image Scene Exposure WB DayNight	Noise Reduction Enhance Image Zoc							
Inde Image Scene Exposure WB DayNight D/N Setting Auto ~ Switch Sensitivity 50 0 100	Noise Reduction Enhance Image Zoc							
Ander Image Scene Exposure WB DayNight D/N Setting Auto ✓ Switch Sensitivity 50 Delay(s) 50 0 180	Noise Reduction Enhance Image Zoc							
Mode	Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoc 4
------	------------	---------	----------	-----------	-----------	-----------------	---------------	---------
	D/N Settir	ng Timi	ıg	``			Manual	~
	DTN Tin	ne 18	~ : O	0 ~		Near 0	10	50 0
	NTD Tin	ne 06	~ : O	0 ~		Centre 0	10	50 0
						Far	10	50 0
	Had w	Cabama	.1	Facto	rySetting		Reset	Save

Figure 2-18 DayNight Mode (4) interface

Table 2-6 describes **DayNight Mode** parameters.

Parameter	Meaning	Configuration Method
D/N Setting Mode	 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 state, preventing infrared light from entering the sensor. Night mode The image is black and white, and the filter is in the night state, allowing infrared light to enter the sensor. Timing Switching between day mode and night mode according to the set time. 	[Setting method] Select a value from the drop-down list. [Default value] Auto
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.	[Setting method] Drag the slider. [Default value] 70

 Table 2-6 DNR parameters description

Parameter	Meaning	Configuration Method
	This parameter is valid in auto mode. The value of TRANSI. (D->N) must be greater than the value of TRANSI. (N->D) .	
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. ID NOTE This parameter is valid in auto mode. The value of TRANSI.(D->N) must be greater than the value of TRANSI.(N->D) .	[Setting method] Drag the slider. [Default value] 30
Delay(s)	The delay time of day to night or night to day. Inote This parameter is valid in auto mode.	[Setting method] Drag the slider. [Default value] 0
IR LED	 Auto: The infrared lamp is enabled or disabled based on the external environment identified by the light dependent resistor (LDR). ON: The system enters the night mode forcibly. OFF: The infrared lamp is disabled. The filter and image color are switched based on the external environment identified by the LDR. INOTE This parameter is valid in auto mode. 	[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
DTN Time	Time of day to night.	[Setting method] Select a value from the drop-down list. [Default value] 18:00
NTD Time	Time of night to day.	[Setting method] Select a value from the drop-down list. [Default value] 6:00

Fill light settings

The camera fill light has four modes, there are 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).

The different camera can be set different fill light modes, please set 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 the 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.

2.2.8 Noise Reduction

Figure 2-19 shows the Noise Reduction interface.

Figure 2-19 Noise Reduction interface(manual)

☑ 2D NR Manual ✓ ☑ 3D NR Manual ✓	ode image	Scene I	Exposure	WB	DayNight	Noise Red	uction	Enhance Im	age	Zoc	•
Fixed Strength 50 Fixed Strength 50 100 100	2D NR	Manua th 0	al 🕴	> 100	50 Fix] 3D NR ed Strength	Manu 0	al	~ 100	50	

🚖 Sensor Setting 4 11 13:45:35 Debug Mode • Mode • Scheme 1 Scheme Image DayNight Noise Reduction Enhance Image Zoc < > Mode Scene Exposure WB 2D NR Auto • 3D NR Auto • Max Strength -Max Strength -+ 50 =+ 50 FactorySetting Reset Save

Figure 2-20Noise Reduction interface(auto)

Mode	Image	Scene	Exposure	WB	DayNight	Noise Red	uction	Enhance Image	Zoc 1
⊡ Ma	2D NR ax Streng	Auto th 0	•	پ د 100	50 Ma	3D NR x Strength	Auto	•	5 0

Table 2-7 describes DNR parameters.

 Table 2-7 DNR parameters description

Parameter	Meaning	Configuration Method
2D NR	Reduce noise of image.	[Configuration method] Select from the drop-down list [Default value]

Parameter	Meaning	Configuration Method
		Auto
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 0 , the noise filter is disabled. When the parameter value is greater than 0 , 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

2.2.9 Enhance Image

Figure 2-21 shows the enhance image interface and Table 2-8 shows the enhance image parameter.

Figure 2-21 Enhance image interface

lode	Image	Scene	Exposure	WB	DayNight	Noise Re	duction	Enhance In	nage Zoc
	WDR	0	1	100	50 🔲 /	Anti-shake			
C] HLC	0		100	50 🔲 🕻	DeFog	0	-	50 100
C	BLC	0		100	50				

🚔 Sensor Setting



Debug Mode	•
Scheme 1	•
	Scheme 1

Mode Im	age Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoc < >
WDR		+	50				
□hlc		+	50	DeFog	-	+	50
BLC		+	50				
				FactorySe	etting Re	set	Save

 Table 2-8
 Enhance image parameters description

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 HLC 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

2.2.10 Zoom Focus (Supplied for some model)

Figure 2-22 and Figure 2-23 shows the zoom focus interface and Table 2-8 shows the zoom focus parameter.

Figure 2-22 Zoom focus interface for IP camera

Cene	Exposure	WB	DayNight	Nois	e Reduction	Enhance Image	Zuomrocus	
	🗹 D/N Aut	o Focus	L.	i#i]	[#]	[+]Auto Focus	Once	
			(P	đ	Init		

🚖 Sensor Setting



Mode	Debug Mode	•
Scheme	Scheme 1	¥

Image	Scene	Exposure	WB	DayNight	Noise Reduction	Enhance Image	Zoom Focus <
	Auto Focus		[##4]	[#]	[+]Auto Foc	us Once	
			ð	ď	Lens Initia	lization	
					FactorySetting	Reset	Save

Figure 2-23 Zoom focus interface for high speed dome

cene	Exposure	WB	DayNight	Noise Reduction	Enhance Ima	ige Zoon	Focus	-
C] Digital Zoo	m		Focus Mode	e semi-auto	matic	~	
			A	uto Focus Sensitivity	0	•	50 100	
			the	least focus distance	e 6m		~	

 Table 2-9
 Zoom focus parameters description

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.

Parameter	Meaning	Configuration Method
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.
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	It indicates the sensitivity of auto focus. 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] 3 m

----End

3

Configure the Device

3.1 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 3-1.

Figure 3-1 Device Info page

🖻 Device Info

Device ID	003366
Device Name	v
MAC Address	00:1C:27:00:33:66
Camera Type	IPDOME
Product Model	N2IPPTZ30XSD
Manufacturer Name	Northern
Hardware Version	V060512_2
Firmware Version	v3.6.0804.1004.206.0.15.8.5
Jboot Version	v3.x_
Kernel Version	v4.3_11:11:57
Channel Quantity	1
Alarm Input Quantity	7
Alarm Output Quantity	2
Serial Port Quantity	1
Network Card Quantity	1

Step 2 View the device information, set the device name according to Table 3-1.

 Table 3-1
 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]
	NOTE The device name cannot exceed 32 bytes or 10 simplified characters; otherwise, the modification fails.	Enter a value manually.

Parameter	Description	Setting
MAC Address	N/A	[Setting method]
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 11.1 Configure a User.

----End

3.2 Video and Audio Stream

Procedure

Step 1 Click Configuration > Stream > Base Stream.

The Stream Configuration page is displayed, as shown in Figure 3-2.

Figure 3-2 Stream Configuration page

🖻 Stream

Stream ID	1
Name	stream1
Video Encode Type	H265
Video Encode Level	Mid
Audio Encode Type	G711_ALAW
Resolution	1920×1080
Frame Rate(fps)	30
Frame Interval(Unit: Frame)	60
Bit Rate Type	CBR
Bit Rate(kbps)(500-12000)	4096
Smart Encode	OF

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

Table 3-2	Stream	configuration	parameters
-----------	--------	---------------	------------

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 	[Setting method] Select a value from the drop- down list box. [Default value] H.264 High Profile

Parameter	Description	Setting
	 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 Base 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 Main 	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.
	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 on 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 as optimization.	
Audio Encode Type	 The following audio codec standards are supported: G711_ULAW: mainly used in North America and Japan. G711_ALAW: mainly used in Europe and other areas. RAW_PCM: codec of the original audio data. This codec is often used for platform data 	[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 Device Configuration > Camera page. The biggest MJPEG coding format frame 	[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	[Setting method] Select a value

Parameter	Description	Setting
	quality but higher bandwidth.	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.	[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.
Smart Encode	 Smart Encode. Smart encode includes H.264 & H.265. The storage space will be reduced fifty percent when smart encode is enabled. Only main stream supports smart encode. 	[Setting method] Click the button on to enable 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 11.1 Configure a User.

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

----End

3.3 ROI Parameter

Procedure

Step 1 Click Configuration > Stream > ROI.

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

Figure 3-3 ROI Configuration page

Channel	1
Stream	1 -
Enable	OFF
Area ID	1 🔻
Level	5 💌
Area Name	
Note: Max size50% ;Right click to remove the zones drawn	
2022-06-20 09:56:53 Mon	
Draw	Clear
Draw	Clear

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

 Table 3-3
 ROI configuration parameters

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.

Parameter	Description	Setting
		[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 Apply.

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

----End

3.4 Snapshot

Procedure

Step 1 Click Configuration > Stream > Snapshot.

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

Figure 3-4 ROI Configuration page

로 Snapshot

Snapshot Resolution	1280x72	20
Snapshot Quality	Mid	

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

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

 Table 3-4
 ROI configuration parameters

----End

3.5 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 3-5.

Figure 3-5 Local Network page

로 Local Network

Network Card ID	1 💌
P 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
	Pefresh Anniv

Step 2 Set the parameters according to Table 3-5.

Parameter	Description	Setting
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
Obtain IP address automatically	The device automatically obtains the IP address from the DHCP server.	[Setting method] Click the button on to enable obtain IP address automatically . 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.

 Table 3-5
 Local network parameters

Parameter	Description	Setting
		[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

3.6 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 3-6.

Figure 3-6 Device Port page

韋 Device Port

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

Refresh

Apply

皇 Device Port	
Control Port	30001
Http Port	80
RTSP Port	554
HTTPS Port	443

Refresh Apply

Step 2 Set the parameters according to Table 3-6.

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]

Table 3-6 Device port parameters

Parameter	Description	Setting
		443
SSL Control	Secure socket layer control port.	[Setting method]
Port	Only for Some Models.	Enter a value manually.
		[Default value]
		20001

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

3.7 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 3-7. Table 3-7 describes the parameters.

Figure 3-7 Date and Time page

🖻 Date and Time

	e : Dublin, E	dinburgh, L	isbon, Lond	lon▼
			ON	
Mar	✓ 5th	✓ Sun	✔ 1:00	~
Oct	✓ 5th	✓ Sun	✔ 2:00	~
				×
		02/27/	/2019 15:1	14:08
	0	2/27/2019 1	15:11:08	_
	0	2/27/2019 1	15:13:24	_
			ON	
		123		
		3600		
				1
	Mar Oct	Mar v 5th Oct v 5th	Mar ✓ 5th ✓ Sun Oct ✓ 5th ✓ Sun 02/27/ 02/27/2019 1 02/27/2019 1 02/27/2019 1 02/27/2019 1 02/27/2019 1 123 3600	Mar ✓ 5th ✓ Sun ✓ 1:00 Oct ✓ 5th ✓ Sun ✓ 2:00 02/27/2019 15:1 ✓ ✓ 02/27/2019 15:11:08 ✓ ✓ 02/27/2019 15:11:24 ✓ ✓ ○ ✓ ✓ ✓ ✓ ○ ✓ ✓ ✓ ✓ ○ ✓ ✓ ✓ ✓ ○ ✓ ✓ ✓ ✓ ○ ✓ ✓ ✓ ✓ ○ ✓ ✓ ✓ ✓ ✓ ○ ✓ ✓ ✓ ✓ ✓ ✓ ○ ✓

 Table 3-7
 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
Daylight Saving Time	 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. NOTE 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. 	[Setting method] Click the button on to enable Daylight Saving Time .
Device Time	Device display time.	[Setting method] • Synchronize the time from

Parameter	Description	Setting
		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 Set Manually 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 NTP 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] 3600

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

3.8 Camera

Procedure

Step 1 Choose Configuration > Device > Camera.

The Camera page is displayed, as shown in Figure 3-8. Table 3-8 describes the parameters.

Figure 3-8 Camera page

中 Camera	
Video System	NTSC V
Video Refresh Frequency	60 💌

Dofroch	
Reliesii	

Parameter	Description	Setting
Video System	The options are as follows:	[Setting method]
	• PAL: Used in Europe and China mainland, India, Pakistan, etc.	Select a value from the drop- down list box.
	• NTSC: Used in USA, Japan, South	[Default value]
	Korea, and Taiwan Province of	PAL
	China, etc.	NOTE
		Whether the video system can be changed depends on the device model.
Video Refresh	The options are as follows:	[Setting method]
Frequency	• 50 Hz: corresponds to the PAL system.	Follow the video standard.
	• 60 Hz: corresponds to NTSC system.	

 Table 3-8
 Camera parameters

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

3.9 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 3-9.

Figure 3-9 PTZ OSD page

🖻 OSD



	Advanced
Time Format	YYYY-MM-DD hh:mm:ss ww
Font Color	
Font Size	Mid
Font Transparency	Opaque 🔻
Font On lighted back	ON
Device Name	OFF
PTZ Position	ON
PTZ Action	ON
PTZ Temperature	ON

Step 2 Set the parameters according to Table 3-9.

• There are at most six OSD display areas..

Table 3-9 C	SD 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.	 [Setting method] 1. Tick the custom OSD list. 2. Enter the characters. Click to save the value.
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
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 Font on lighted back .
Device Name	Indicates whether to display the device name.	[Setting method] Click the button on to enable Device Name

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

```
Step 4 Click Apply.
```

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

----End

3.10 Microphone (Only for Some Models)

Description

On the Microphone page, you can set the microphone input mode and volume.

Procedure

Step 1 Choose Configuration > Device > Microphone.

The Microphone page is displayed, as shown in Figure 3-10. Table 3-10 describes the parameters.

Figure 3-10 Microphone page

🖻 Microphone

Microphone	ON
Microphone Type	Internal
Microphone Volume	+ 50

Refresh

Apply

Table 3-10	Microphone parameters
------------	-----------------------

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.

Step 2 Click Apply.

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

----End

3.11 Audio Output (Only for Some Models)

Description

On the Microphone page, you can set the microphone input mode and volume.

Procedure

Step 1 Choose Configuration > Device > Audio Output.

The Audio Output page is displayed, as shown in Figure 3-11. Table 3-11 describes the parameters.

Figure 3-11 Audio output page

🚖 Audio Output

Audio Output	ON
Audio Output Type	External
Audio Output Volume	

Refresh Apply

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

Table 3-11	Audio	output	parameters
------------	-------	--------	------------

Step 2 Click Apply.

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

----End

3.12 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 3-12.

Figure 3-12 BNC Video Output page

	BNC	Video	Output
---------	-----	-------	--------

BNC Video Output		ON ()
IP Show		ON (
	Refr	esh Apply

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

3.13 System Service

Procedure

Step 1 Choose Configuration > Device > System.

The System Service page is displayed, as shown in Figure 3-13.

Figure 3-13 System Service page

🖻 System

Language	English
	4
Web Mode	HTTP 🔻
CA Cert	
Server Cert	-
Server Key	-
	4
	Refresh

- Step 2 Select an language from the Language drop-down list box.
- Step 3 Click *M*, 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 *mail Step 6* Click *step 6* Step 6 S
- 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 **v** to update the certificate.

3.14 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 3-14.

Figure 3-14 Voice Denoise page

Voice Denoise	OF

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

3.15 Software Licenses

Procedure

Step 1 Click Configuration > Device > Software Licenses.

The Software Licenses page is displayed, as shown in Figure 3-15.

Figure 3-15 Software licenses page

```
😤 Software Licenses
```

Open Source Software Licenses

View Licenses

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

----End

4 Configure External Devices

4.1 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**.



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.

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

Figure 4-1 PTZ page

PTZ

Camera	1 -
PTZ	ON
PTZ Protocol	PELCO_D ▼
PTZ Address	0
Serial Port	COM1 💌
Baud Rate	9600 🔻
Data Bits	8 🔻
Stop Bits	1 🔻
Parity Verification	None 🔻
	Refresh Apply

Step 2 Set the parameters according to Table 4-1.

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. NOTE	
Serial Port	The default value is COM1 .		
Baud Rate	Baud rate used by the external PTZ. The value ranges from 300 bit/s to 115200 bit/s. The default value is 4800 bit/s.	When configure the external PTZ parameters, 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 4-1
 PTZ parameters

Step 3 Click Apply.

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

----End

5

Configure Intelligent Analysis

5.1 Perimeter

Description

The perimeter 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 5-1

Figure 5-1 Perimeter Setting Interface

🖻 Perimeter

Enable OFF Sensitivity 5 -Limit Target Type OFF Output Channel Audio Detect Alarm OFF Flashlight Alarm) OFF Alarm Record OFF SMTP OFF Clear 0 3 21 2 9 10 11 12 13 14 15 16 17 18 19 20 22 23 24 3 6 7 8 5 Sun 3 Mon Tues 3 Wed 5 Thur Fri Sat 🔣 Refresh Apply

Step 2 Set all parameters for perimeter. Table 5-1 describes the specific parameters.

Parameter	Description	Setting
Enable	Enable the button to enable the alarm.	[How to set]

Parameter	Description	Setting
		Click Enable to enable. [Default value] OFF
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 Enable to enable. [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.
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. Only for some models.	[How to set] Click Enable to enable. [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 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. More details please refer to chapter 10.5	[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 10.6.	[How to set] Click to enable FTP Upload. [Default value] OFF
Step 3 Set a deployment 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, as shown in Figure 5-2.



Figure 5-2 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 not limited yet and will be described in future when a limit is applied.

Step 4 Set deployment time

Method 1: Click left mouse button to select any time point within 0:00-24:00 from Monday to Sunday as shown in Figure 5-3.

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.

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 deployment time page to select the whole day or whole week.

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

Figure 5-3 Deployment Time Setting Interface



----End

5.2 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 5-4.

Figure 5-4 Single Virtual Fence Setting Interface

🖻 Single Virtual Fence



Step 2 Set all parameters for the single virtual fence. Table 5-2 describes the specific parameters.

 Table 5-2
 Description of Parameters for Single Virtual Fence

Parameter	Description	Setting
Enable	Enable the button to enable the alarm.	[How to set] Click Enable to enable .

Parameter	Description	Setting
		[Default value] OFF
Sensitivity	The sensitivity of detecting the target, when the	[How to set]
	but the accuracy will be lower.	Choose from the drop- down list
		[Default value]
Limit type	Enable to choose the limit type (person or car /	[How to set]
	person / car) from type drop-down list.	Click Enable to enable.
		[Default value]
		OFF
Output	If you check to set the Output Channel and the device is connected to an external alarm	[How to set]
Channel	indicator, the alarm indicator signals when an alarm is triggered. Only for some models.	Click to select an ID.
Audio Detect	Enable to choose the sound alarm file from type	[How to set]
Alarm	play alarm sound file. Only for some models.	Click Enable to enable.
		[Default value]
		OFF
Flashlight	Enable to flashlight alarm when it triggers the	[How to set]
Alalin	models.	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]
SMTP	Enable the button to enable SMTP sever.	[How to set]
	Details please refer to chapter 10.5	Click to enable SMTP.
		OFF
FTP Upload	Enable the button to enable File Transfer Protocol. Details please refer to chapter 10.6.	[How to set] Click to enable FTP.
		OFF

Step 3 Set a deployment area

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 virtual fence: Click a line (and the trip line turns red) to select the single virtual fence 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 virtual fence and move the mouse to modify the position and length of this single virtual fence. You can right-click to delete the single virtual fence, as shown in Figure 5-5.



Figure 5-5 Deployment Area Setting Interface

- A single virtual fence is not within any deployment area, therefore, when an alarm is generated, the trace always exists. Only when the target object moves out of the field of view, the trace disappears.
- Try to draw the single virtual fence 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 virtual fence.
- The single virtual fence which detects person foot as the recognition target cannot be too short, because a short single virtual fence tends to miss targets.

Step 4 Set deployment time

For more details, please refer to 5.1 Step 4

----End

5.3 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 5-6.

Figure 5-6 Double Virtual Fences Setting Interface

🚖 Double Virtual Fences

	1 18:30		Alam		W	5	1	•		25	2.0			E			E	nab mit ype	le Ta	rget	: Ty	pe		Pers	son (Or C	Car	ON		^
-12]			-		2				0	utp	ut C	cha	nne	l					17		1	
		/	1	Ĩ	7					-	-			Ý	1	ſ	A	larn	n R	eco	rd	am					1	_	OFF	
	E.		-		-		b.	-	K						1		S	MT	Р								1	j	OFF	
							F	Rever	se	~		0	Dele	te	Ĵ		F	TΡ	Upl	oad	í.						[OFF	~
	6) 1	L. 3	2	3	4	5	6	7	8	3	9	10	1:	1 1	2	13	14	1	5	16	17	18	19	9 2	20	21	22	23	24
Sun	100	2 - C. L.	100 A						1.1											1				-			124			
	150																													
Mon	6	-									5																			
Mon Tues	\$ \$ \$																									5.				
Mon Tues Wed	\$ \$ \$ \$																													
Mon Tues Wed Thur	\$ \$ \$ \$ \$																													
Mon Tues Wed Thur Fri	ବ ବ ବ ବ ବ ବ																													
Mon Tues Wed Thur Fri Sat	\$ \$ \$ \$ \$ \$ \$ \$ \$																													
Mon Tues Wed Thur Fri Sat	\$ \$ \$ \$ \$ \$ \$ \$ \$																													

Step 2 Set all parameters for the double virtual fences. Table 5-3 describes the specific parameters.

Parameter	Description	Setting
Enable	Enable the button to enable the alarm.	[How to set] Click to enable. [Default value] OFF
Limit type	Enable to choose the limit type (person or car / person / car) from type drop-down list.	[How to set] Click Enable to enable. [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.
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. Only for some models.	[How to set] Click Enable to enable. [Default value]

 Table 5-3 Description of Parameters for Double Virtual Fence

Parameter	Description	Setting
		OFF
Flashlight Alarm	Enable to flashlight alarm when it triggers the alarm, the flashlight will flash. Only 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. For more details, please refer to chapter 10.5	[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 10.6.	[How to set] Click to enable FTP. [Default value] OFF

Step 3 Set a deployment area

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 virtual fences to set the direction to Positive or Reverse.

Setting double virtual fences: Click one of the double virtual fences (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 virtual fences, as shown in Figure 5-7.





- 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.
- The double virtual fences are not within any deployment area, therefore, when an alarm is generated, the trace always exists. Only when the target object moves out of the field of view, the trace disappears.
- Try to draw double virtual fences 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 virtual fences.
- The double virtual fences which detect person foot as the recognition target cannot be too short, because short double virtual fences tend to miss targets.
- Step 4 Set deployment time

More details please refer to 5.1 Step 4

----End

5.4 Object Left

Description

The object left function refers to that an alarm is generated when the dwelling time of an object within the deployment area meets the set shortest dwelling time.

Procedure

Step 1 Select Intelligent Analysis > Object Left to access the Object Left setting interface, as shown in Figure 5-8.

Figure 5-8 Object Left Setting Interface

韋 Object Left



Step 2 Set all parameters for object left. Table 5-4 describes the specific parameters.

Parameter	Description	Setting
Enable	Enable the button to enable the alarm.	[How to set] Click Enable to enable . [Default value] OFF
Minimum (Maximum) Size(cm ²)	The target size for triggering an effective alarm is set based on the actual target size. The minimum size is 100 square centimeters and the maximum 10000 square centimeters. When setting the target size, you need to well set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	[How to set] Input a value in the area box.
Shortest Dwelling 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] 5s
Upload Target	Enable the function of uploading target	[How to set]

Table 5-4	Description	of Parameters	for Object Le	eft

Info	information by clicking below the real- time video in a browser to turn with into . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area).	Click to enable Upload Target Info. [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.	[How to set] Click to select an ID.
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 chapter 10.5	[How to set] Click to enable SMTP. [Default value] OFF
FTP Upload	Enable the button to enable File Transfer Protocol. Details please refer to chapter 10.6.	[How to set] Click to enable FTP Upload. [Default value] OFF
Trace 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.	[How to set] Click to enable Trace Linkage. [Default value] OFF
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

Step 3 Set a deployment 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, as shown in Figure 5-9.



Figure 5-9 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 not limited yet and will be described in future when a limit is applied.

Step 4 Set deployment time

Details please refer to 5.1 Step 4.

----End

5.5 Object Removed

Description

The object removed function refers to that an alarm is generated when the removing time of an object within the deployment area meets the set shortest removing time.

Procedure

Step 1 Select Intelligent Analysis > Object Removed to access the Object Removed setting interface, as shown in Figure 5-10.



Figure 5-10 Object Removed Setting Interface Setting Interface

🚖 Object Removed

Step 2	Set all parameters	for object removed.	Table 5-5	describes the	e specific	parameters.
--------	--------------------	---------------------	-----------	---------------	------------	-------------

Parameter	Description	Setting
Enable	Enable the button to enable the alarm.	[How to set] Click Enable to enable . [Default value] OFF
Minimum (Maximum) Size(cm ²)	The target size for triggering an effective alarm is set based on the actual target size. The minimum size is 100 square centimeters and the maximum 10000 square centimeters. When setting the target size, you need to well set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	[How to set] Input a value in the area box.
Shortest Removing Time (Sec)	An alarm is generated when the object removed time is longer than the shortest removing time. Setting range: 5-60 seconds.	[How to set] Input a value in the area box. [Default value] 5s
Upload Target Info	Enable the function of uploading target information	[How to set] Click to enable

	Table 5-5	Description	of Parameters	for Ob	ject Removed
--	-----------	-------------	---------------	--------	--------------

Parameter	Description	Setting
	by clicking below the real-time video in a browser to turn into into when an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area).	Upload Target Info. [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.	[How to set] Click to select an ID.
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 chapter 10.5	[How to set] Click to enable SMTP. [Default value] OFF
FTP Upload	Enable the button to enable File Transfer Protocol. Details please refer to chapter 10.6.	[How to set] Click to enable FTP Upload. [Default value] OFF
Trace 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.	[How to set] Click to enable Trace Linkage. [Default value] OFF
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

Step 3 Set a deployment 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, as shown in Figure 5-11



Figure 5-11 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 not limited yet and will be described in future when a limit is applied.

Step 4 Set deployment time.

Details please refer to 5.1 Step 4.

----End

5.6 Loiter

Description

Loiter allows setting the shortest loitering time for a (single) target of specified type (such as person or car) within the deployment area in the field of view. When the loitering time of a (single) target within this area meets the set shortest loitering time, an alarm is generated.

Procedure

Step 1 Select Intelligent Analysis > Loiter to access the Loiter setting interface, as shown in Figure 5-12.

Figure 5-12 Loiter Setting Interface

🖻 Loiter



Step 2 Set all parameters for loitering. Table 5-6 describes the specific parameters.

Parameter	Description	Setting
Enable	Enable the button to enable the alarm.	[How to set] Click Enable to enable . [Default value] OFF
Limit Target Type	Effective alarms are set based on target type, with options of Person or Car, person, car. When the device is used indoors, because of small space and large targets, alarms are triggered by person sometimes even if car is selected, leading to false alarms. It is recommended to set the target type to person for indoor use.	[How to set] Click to enable Limit Target Type. [Default value] OFF
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The minimum size is 1000 square centimeters and the maximum size is 100000 square centimeters. When setting the target size, you need to well set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	[How to set] Click to enable Limit Target Size. [Default configuration] OFF
The Shortest	The time that a target object spends in loitering	[How to set]

· · · · · · · · · · · · · · · · · · ·

Parameter	Description	Setting
Time (Sec)	cannot be less than the shortest loitering time. Setting range: 5-60 seconds.	Input a value in the area box. [Default value] 10 s
Start the Path Judgment	The enabling of path analysis makes loitering judgment accurate by using the software algorithm, for example, no alarm is generated when a person walks along a straight line if the button set ON .	[How to set] Click to enable Start the Path Judgment and enable path analysis.
Upload Target Info	Enable the function of uploading target information by clicking below the real- time video in a browser to turn into into When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area).	[How to set] Click to enable Upload Target Info. [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.	[How to set] Click to select an ID.
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 chapter 10.5	[How to set] Click to enable SMTP. [Default value] OFF
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] OFF
Trace 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.	[How to set] Click to enable Trace Linkage. [Default value] OFF
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

Step 3 Set a deployment 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, as shown in Figure 5-13.



Figure 5-13 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 not limited yet and will be described in future when a limit is applied.

Step 4 Set deployment time

Details please refer to 5.1 Step 4.

----End

6 Configure the Alarm Function

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

6.1 Alarm Output (Only for Some Models)

Procedure

Step 1 Choose Configuration > Alarm > Alarm Output.

The Alarm Output page is displayed, as shown in Figure 6-1.

Figure 6-1 Alarm Output page

🖻 Alarm Output



	\$0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
Sun	\$		Π		Π																				Γ
Mon	\$	200				201				- C.S.		2010				600 S				2010		201		600 s	
Tues	6																								T
Ned	6	-		2011						6.1		-				-				-		é.:		-C.S 5	1
Thur	6																								T
Fri	6	-				-				C						C.1								C.1	
Sat	5																								T
anua	al con	trol																	Start				Sto	p	1

Step 2 Set the parameters according to Table 6-1.

 Table 6-1
 Alarm I/O parameters

Parameter	Description	Setting
Alarm Output	ID of the alarm output channel.	[Setting method]
	NOTE	Select a value from the
	The number of alarm output channels depends on	drop-down list box.

Parameter	Description	Setting
	the device model.	[Default value] 1
Name	Alarm output channel name.	[Value range] 0 to 32 bytes
Valid Signal	 The options are as follows: Close: An alarm is generated when an external alarm signal is received. Open: 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	 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. 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. 	[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 0 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	[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

6.2 Disk Alarm

Procedure

Step 1 Choose Configuration > Alarm > Disk Alarm.

The Disk Alarm page is displayed, as shown in Figure 6-2.

Apply

Figure 6-2 Disk Alarm page

🛱 Disk Alarm

Disk Full Alarm	OFF
Alarm Interval(10-86400S)	10
Output Channel	1 1 2

Refresh

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

6.3 Network Alarm

Procedure

Step 1 Choose Configuration > Alarm > Network Alarm.

The Network Alarm page is displayed, as shown in Figure 6-3.

```
Figure 6-3 Network Alarm page
```

	Ŧ	Network	Alarm
--	---	---------	-------

Network Card ID	1
Exceptional Alarm	ON
Alarm Interval(10-86400S)	10
Output Channel	1 _
Alarm Record	OF
	Refresh Apply

Step 2 Click the button on to enable exceptional alarm.

Step 3 Configure the network exceptional alarm interval.

Step 4 Select Out Channel number.

Step 5 Click Apply.

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

----End

6.4 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 6-4.

Figure 6-4 Day night switch alarm

🚊 Day Night Switch Alarm





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

Step 3 Configure the day night switch alarm 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 6-7.

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 Sin the schedule page to select the whole day or whole week.

Deleting deployment time: Click Sagain or inverse selection to delete the selected schedule.



Figure 6-5 Schedule Setting page

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

6.5 I/O Alarm Linkage (Only for Some Models)

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 6-6.

Figure 6-6 I/O Alarm Linkage page

荦 I/O Alarm Linkage



- 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.

Method 1: Click left mouse button to select any time point within 0:00-24:00 from Monday to Sunday as shown in Figure 6-7.

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 deployment time: Click 🚳 again or inverse selection to delete the selected schedule.



Figure 6-7 Schedule Setting page

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 Apply.

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

----End

6.6 Motion Detection 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.

• Configure the PTZ linkage policy

Procedure

Step 1 Choose Configuration >Alarm > Motion Alarm.

The Motion Alarm page is displayed, as shown in Figure 6-8.

Figure 6-8 Motion Alarm page

🖻 Motion Alarm



- Step 2 Click the button on to enable motion alarm.
- Step 3 Configure the motion interval.
- Step 4 Configure the sensitivity. Tick the output channel when the camera is connected to the external alarm device.
- Step 5 Enable audio detect alarm, flashlight alarm, alarm record. (sound detection alarm is only applicable for some models)
- Step 6 Configure the schedule time setting.

For more details about how to set Schedule, see 6.5 Step 6.

- Step 7 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 6-9.

Figure 6-9 Motion Area Setting page

🖻 Motion Alarm



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 **Reverse** to select the area out of specified frames as the detection area.

- Step 8 Select the Out Channel.
- Step 9 Click the button on to enable alarm record.
- Step 10 Click the button on to enable audio detect alarm / flashlight alarm (supplied for some models)
- Step 11 Click the button on to enable SMTP.
- Step 12 Click the button on to enable FTP Upload.
- Step 13 Select the PTZ Type from the drop-down list box. The PTZ type includes preset, scan, track, tour.
- Step 14 Select Value. The value is the ID of PTZ type.
- Step 15 Click Apply.

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

----End

6.7 Push Message

Description

When enable push message button, the alarm information will be pushed to app if the device is managed by app.

Procedure

Step 1 Choose Configuration >Alarm > Push Message.

The Push Message page is displayed, as shown in Figure 6-10.

Figure 6-10 Pus	sh Message page	
Push Message		OFF.
At the beginning, the alarm information will be pushed to app	if the device is managed by app.	
	Refresh	Apply

Step 2 Click Apply.

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

----End

6.8 Audio Abnormal Detection (Only for Some Models)

Description

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 6-11.

Figure 6-11 Audio abnormal detection

🚖 Audio Abnormal Detection

Enable	OFF
Sudden Rise	OFF
Sudden Drop	OFF
Output Channel	□1
Alarm Record	OFF
SMTP	OFF
FTP Upload	OFF

Real Time Volume





Step 2 Click the button on to enable audio abnormal detection.

- Step 3 Enable Sudden Rise, and Sudden Drop.
- Step 4 Select the **Out Channel**.
- Step 5 Select Value. The value is the ID of PTZ type (Only for Some Models).
- Step 6 Click the button on to enable Alarm Record.
- Step 7 Click the button on to enable SMTP.
- Step 8 Click the button on to enable FTP Upload.
- Step 9 Configure the schedule time setting.

For details about how to set Schedule, see 6.5 Step 6.

----End

6.9 Sound Alarm Output (Only for Some Models)

At **Configuration > Alarm > Sound Alarm Output** interface, set the audio detect alarm, as shown in Figure 6-12.



Figure 6-12 Audio alarm interface

There are six default files, user can set the cycle number, click 🔦 to test listen.

Click 🛆 to upload a new audio.

The file should be less than 300 kb, and the type is wav.

Click "Apply" to save the settings.

----End

6.10 Flashlight Alarm Output (Only for Some Models)

At **Configuration > Alarm > Flashlight Alarm Output** interface, set the schedule to enable flashlight alarm, as shown in Figure 6-13.

UP OAUNENA	Live Video	Playback	Configuration		
		🚊 Flashlight Alarm O	utput		
Device Info					
🔠 Stream		1231			
🔯 Device		Sun 1 2 3	4 5 6 7 8 9 10 11	12 13 14 15 1	16 17 18 19 20 21 22 23 2
+ External Device		Mon 🚳			
- 🏀 Intelligent Analysis		Tues			
🔊 Alarm		Wed 🕥			
O Alarm Output		Thur 🕥			
Disk Alarm		Fri 💽			
O Network Alarm		Sat 🛐			
O Day Night Switch Alarm		(
I/O Alarm Linkage					
····· O Motion Alarm					Refresh Apply
O Push Message					
Sound Alarm Output					
o Sound Alarm Output					
O Flashlight Alarm Output					
O Flashlight Alarm Output O Audio Abnormal Detection					
Gound Hann Output Glashlight Alarm Output Audio Abnormal Detection Al Multiobject					
Guind Haim Output Giashlight Alarm Output Audio Abnormal Detection Aldio bect Audio Detector Audio Detector					
Orlandight Alarm Output Orlandight Alarm Output Audio Abnormal Detection Al Multiobject Device Record Privacy Masking					
Orlandight Alarm Output Orlandight Alarm Output Audio Abnormal Detection Al Multiobject Device Record Privacy Masking Network Service					
Sound saint Output Standight Alarm Output Audio Abnormal Detection Al Multiobject Privacy Masking Privacy Masking Sprivlege Manager					
Sound Paint Output Standy Alarm Output Aldon Detection Al Multiobject Povice Record Privacy Masking Network Service Privilege Manager Protocol					
Sound Faint Output Sound Faint Output Sudio Abnormal Detection Al Multiobject Privacy Masking Privacy Masking Privacy Masking Privacy Masking Privacy Masking Protocol Protocol Power Device Log					
Sound Yaini Output Sound Yaini Output Gathight Alarm Output Auto Abnormal Detection Al Multiobject Privacy Masking Privacy Masking Privilege Manager Protocol Protocol Device Log Maintenance					

Figure 6-13 Flashlight alarm interface

The mouse to drag choose the time, or click one by one to choose.

Click 🔝 to choose one day or whole week. Click again to quit the choose.

Click "Apply" to save the settings.

----End

Configure the Recording Function

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

7.1 Record Policy

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 8-1.

Figure 7-1 Record policy page

Schedule Record OFF Post Record(0-86400s) *10 Record Audio Record Rule Cycle Store • Stream Name stream1 ▼ 12 13 14 15 16 17 19 20 21 22 23 24 (b) 0 3 10 11 18 1 2 9 Sun Mon Tues Wed Thur Fri 🔄 Sat 🔄 Refresh Apply

Step 2 Set the parameters according to Table 8-1.

Table 7-1 Recording policy parameters

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

Parameter	Description	Setting
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	 Rule for saving recordings. The options are as follows: Cycle Store: Saves recordings in cycles. Save Days: Duration (in days) for saving a recording. The duration can be a maximum of 99999 days. NOTE The value 0 indicates that recordings are not overwritten. 	[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.

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 6.5 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

7.2 Record Directory

Description

Recordings can be stored in an SD card.

Procedure

Step 1 Choose Configuration > Device Record > Record Directory.

The **Record Directory** page is displayed, as shown in Figure 8-2.

Figure 7-2 Record Directory page

🚖 Record Directory

Disk Type	Disk Id	Group ID	Enable	Total Space(MB)	Usable Space (MB)	Alarm Threshold(%)	State
SD Card	1	1	Yes	58880	0	100	Usable
							Modify
							Modify
						(Modify

Step 2 Set the parameters according to Table 8-2.

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	Total disk space.	
Usable Space	Maximum disk space read automatically.	
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.

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

----End

7.2.1 Configure the SD Card

Procedure

Step 1 Choose Configuration > Device Record > Record Directory.

Step 2 Click Modify.

The Record Path Modify page is displayed, as shown in Figure 8-4.

Figure 7-4 SD card Record Path Modify page

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

Step 3 Set the parameters according to Table 8-3.

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.

 Table 7-3
 SD card recording parameters

Step 4 Click Apply.

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

-----End

8 Configure the Privacy Mask Function

Procedure

Step 1 Choose Configuration > Privacy Masking.

The Privacy Masking page is displayed, as shown in Figure 9-1.

Figure 8-1 Privacy Masking page



Step 2 Press and hold the left mouse button, and drag on the preview image to cover the part to be masked.

- 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 area. .

Step 3 Set the parameters according to Table 9-1.

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] Blank
Туре	Type of privacy masking.	[Setting method] Select a value from the drop-down list box. [Default value] Color Block
Color	Color of privacy masking.	[Setting method] Select a value from the drop-down list box. [Default value] Black
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.	 [Setting method] 1. Select a privacy masking from the Privacy Masking List. 2. Click Delete, the privacy masking is deleted successfully
Modify	Modify a privacy masking.	 [Setting method] 3. Select a privacy masking from the Privacy Masking List. 4. Click a parameter and modify it. 5. Click Modify, the privacy masking is modified successfully

 Table 8-1
 Privacy Masking parameters

Step 4 Click Apply.

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

----End
9 Configure the Network Service

9.1 802.1x

Preparation

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

Procedure

Step 1 Choose Configuration > Network Service > 802.1x.

The **802.1x** page is displayed, as shown in Figure 10-1.

Figure 9-1 802.1x page

```
🛱 802.1x
```

802.1x	ON ()
Account	
Password	
ConfirmPassword	

Refresh

Apply

Step 2 Click the button on to enable **802.1x**.

```
Step 3 Enter the account name.
```

Step 4 Enter the password and confirm password..

Step 5 Click Apply.

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

----End

9.2 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 10-2.

П

Figure 9-2 DDNS page

🖻 DDNS

DDNS		ON
Provider	[3322_do	ins 🗖
letwork Card Name	eth0	•
lost Name		
ccount		
Password		
		Test DDNS
	Refresh	Apply

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

Step 3 Set the parameters according to Table 10-1.

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
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]

 Table 9-1
 DDNS parameters

Parameter	Description	Setting
		Blank
Password	Password for logging in to the DDNS server.	[Setting method]
		[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

9.3 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 10-3.

Figure 9-3 PPPoE page

PPPoE

PPP0E	ON
Account	
Password	
P Address	Emp
	Defreeh

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

Step 3 Set the parameters according to Table 10-2.

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 9-2
 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

9.4 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 10-4.

Figure 9-4 Port Mapping page

🖻 Port Mapping

Port Mapping	ON
Map Mode	[Auto 💌

Enable	PortType	OutsidePort	OutsideIP 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	
✓	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 10-3.

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

9.5 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 10-5.

Figure 9-5 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	Ì
Attachment Image Quality	Mid
Transport Mode	No Encrypt
	Email Test

Step 2 Set the parameters according to Table 10-4.

Parameters marked with are mandatory.

 Table 9-4
 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

9.6 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 10-6.

Figure 9-6 FTP page

皇 FTP

	Defeat	Annh
		Test FTP
Media Type	Sna	apshot 🔻
TP Path		
Password		
Account		
TP Port	0	
TP Address		
TP Upload		ON

Step 2 Click the button on to enable FTP.

Step 3 Set the parameters according to Table 10-5.

 Table 9-5
 FTP parameters

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.
FTP Path	FTP Path to save the JPG image.	[Setting method] Enter a value manually.

Parameter	Description	Setting
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

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

9.7 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 10-7.

Figure 9-7 IP Filter page

🖻 IP Filter



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

Step 3 Set the parameters according to Table 10-6

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

 Table 9-6
 IP Filter parameters

Figure 9-8 Add IP Filter page

Begin IP Address		
End IP Address		10
Description		
	OK	Cancel

Click 🕅 to modify the parameters of setting black list or white.

Click **to** delete the setting black list or white.

Step 4 Click Apply.

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

----End

9.8 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 10-9.

Figure 9-9 CGI Alarm Service Center page

🖻 CGI Alarm Service Center

CGIAlarm	ON
Alarm Type	All
Name	
Туре	HTTP
URL Start	
URL End	
Proxy Setting	ON
Address	
Port	
Platform User Name	
Platform Password	
Test the connection to the specifield HTTP server	Test
	Retresh Apply

Step 2 Click the button on to enable CGI Alarm.

Step 3 Set the parameters according to Table 10-7.

Parameter	Description	Setting
CGI Alarm	Indicates whether to enable the CGI Alarm.	[Setting method] Click the button on. [Default value] OFF
Alarm Type	All alarm types can be chosen, user 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
User Name	User name of device.	[Setting method] Enter a value manually.
Password	Password of device.	[Setting method] Enter a value manually.
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	[Setting method]

 Table 9-7
 CGI Alarm Service Center parameters

Parameter	Description	Setting
	server.	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

9.9 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 10-10.

Figure 9-10 SNMP page

🖻 SNMP

SNMPv1	ON
SNMPv2c	ON
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		•
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 10-8.

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	Name of write community. The write community only can modify data. Name of read community. The write community only can read data.	[Setting method] Enter a value manually.	
Trap Port	Management port of accepting message from trap.		
Trap Community	community string of trap. The trap community string allows the manager to receive asynchronous information from the agent.		
SNMPv3	Version of SNMP. SNMPv3 uses community strings, but allows for secure authentication and communication between SNMP manager and agent.	[Setting method] Click the button on. [Default value] OFF	
Read Security Name	Name of read security.	[Setting method] Enter a value	
Write Security Name	Name of write security.	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.	
Encrypt Algorithm	Encryption Algorithm, includes DES and AES.	[Setting method] Select a value from the drop-down list	

Table 9-8	SNMP	parameters
-----------	------	------------

Parameter	Description	Setting
		box.
		[Default value]
		Blank
Encrypt	Encryption password.	[Setting method]
Password		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

9.10 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 10-11.

Figure 9-11 QOS page

皇

Audio/Video Dscp(0-03)	52	
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

9.11 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 10-12

Figure 9-12 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				ତ Refresh 📚 Back	D Restore ∠ Edit X Delete
Server Name :	CMU_127.0.0.1	Type : CMU	IP:Port :	127.0.0.1 : 10086	Start-up Time :	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
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.

----End

10 Privilege Manager

10.1 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 11-1. Table 11-1 describes the parameters.

Figure 10-1 User page

🖻 User

D	User Name	Groups	Notes	Operate
	admin	SuperAdmin	admin	Q

Table 10-1	User parameters
------------	-----------------

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.
Groups	 Permission group where a user belongs. The default permission groups are Super Admin, Administrators, Operator, and Media user. Their permissions are described as follows: Super Admin: Includes all privileges. 	[Setting method] Click Add , 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 	

Parameter	Description	Setting
	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 Add , then enter a value manually.
Operate	The operation of the user, includes view user,	[Setting method]
	modify user and delete user.	Click the icon as
	NOTE	required.
	Super Admin can be viewed only.	

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

Table 11-2 are specific operations.

Function	Procedure	Description
Add	 Click Add. The Add User page is displayed, as shown in Figure 11-2. 	Add an administrator or a common user as shown in Figure 11-2.
	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 OK .	
	The user is added successfully.	
Modify	1. Click 🥕.	Modify the user name, password, group or privilege.
	The Modify User page is displayed.	r
	 Modify the user name, password, group or privilege. 	
	3. Click OK.	
	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 OK , then the group is deleted successfully.	Delete a user.

 Table 10-2
 Operation description

l User		
User Name		
Password		
ConfirmPassword		
Group		Administrators
Notes		
Privilege		Live VideoPrivilege Detail
Privilege Live Video Video Control	^	Live VideoPrivilege Detail Watching real-time video and switch stream.
Privilege Live Video Video Control PTZ Control	^	Live VideoPrivilege Detail Watching real-time video and switch stream.
Privilege I Live Video Video Control PTZ Control Audio	^	Live VideoPrivilege Detail Watching real-time video and switch stream.
Privilege I Live Video Video Control PTZ Control Audio Playback	^	Live VideoPrivilege Detail Watching real-time video and switch stream.
Privilege I Live Video Video Control PTZ Control Audio Playback Backup	^	Live VideoPrivilege Detail Watching real-time video and switch stream.
Privilege Live Video Video Control PTZ Control Audio Playback Backup Record Policy Disk Config	<	Live VideoPrivilege Detail Watching real-time video and switch stream.

Click the privilege to view the detailed description of function.

----End

11 Configure Protocol Parameters

11.1 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 12-1. Table 12-1 describes the protocol-related parameters.

Figure 11-1 Protocol Info page

🖻 Protocol Info

Protocol Name	ONVIF
Protocol Version	v17.06
Protocol Software Version	v17.06_build00004(
RTSP Rule	rtsp://ip:port/snl/live/cameraid/streamid
RTSP Example	rtsp://192.168.99.14:554/snl/live/1/
Onvif UUID	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 Rule	URL rule of Real Time Streaming Protocol.
RTSP Example	URL example of Real Time Streaming Protocol.
Onvif UUID	Universally Unique Identifier.

Table II-I Protocol-related barameters	Table 11-1	Protocol-related	parameters
---	------------	------------------	------------

11.2 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 12-2. Table 12-2 describes the parameters on the **Security** page.

Figure 11-2 S	ecurity page
---------------	--------------

User Verification	- L OFF
	 L. D. OFF.

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 11-2
 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

11.3 CMS Configuration

Description

You can view the existing protocol name and version number of the current device on the **Configuration** > **Protocol** >**CMS Configuration** page, as shown in Figure 12-3. Table 12-3 describes the protocol-related parameters.

Figure 11-3 CMS Configuration page

🖻 CMS Configuration

Protocol Name	ONVIF
Protocol Version	v17.06
Protocol Software Version	v17.06_build000276

Profile G		OFF
Profile Q		OFF
IVA Switch		ON
Media2		OFF.
ImageEvent		OFF
active onvif		ON
	Defreeh	Apply
	Refresh	Арріу

Table 11-3 Protocol-related parameters

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
IVA Switch	Enable IVA Switch
Media 2	Enable Media 2
Image Event	Enable image event
Active onvif	Enable active onvif

11.4 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 12-4. Table 12-4 describes the parameters on the **Multicast Param** page.

Figure 11-4 Multicast Param page

🖻 Multicast Param

Stream ID	1
Video 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
IP	IP address that receive	[Setting method]
	multicast data.	Enter a value manually.
		[Default value]
		238.255.255.255
Video Port	Port that receive video	[Setting method]
	data.	Enter a value manually.
		[Default value]
		25330
Audio Port	Port that receive audio	[Setting method]
	data.	Enter a value manually.

Table 11-4 Parameter description

Parameter	Description	Setting
		[Default value]
		25430
Source Port	Port that receive source	[Setting method]
	data.	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.

----End

12 Query Device Logs

12.1 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 13-1.

Figure 12-1 Operation Log page		
Dperation Log		
Operation Log		All Type
Begin Time		2022-06-19 11:44:29
End Time		2022-06-20 11:44:29
		Download Query
Time	User Name	Log Info
2022-06-20 11:39:49	admin	Configure blind area
2022-06-20 09:46:05	admin	Login succeed

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 user 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

12.2 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 13-2.

Figure 12-2 Alarm Log page

🖻 Alarm Log

Alarm Type	All	
Begin Time	2022	-04-11 09:45:36
End Time	2022	-04-12 09:45:36
	Download	Query

Alarm Begin Time	Alarm End Time	Log Info	Source ID
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)

```
----End
```

12.3 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 13-3.

Figure 12-3	Collect L	.og page
-------------	-----------	----------

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.

13 Maintain the Device

13.1 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.

🚖 Camera Maintenance

The Camera Maintenance page is as shown in Figure 14-1.

Figure 13-1 Camera Restart page

Restart	*
Auto Reboot	OFF
Update	Please select upgrade file 🍵 Update
Reserve IP setting	ON
Restore To Factory Default	3
Export configuration	Download
Import configuration	Please choose file 🍵 Upload

Step 2 Click **.

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

Step 3 Click OK.

The device is restarted successfully five minutes later.

----End

13.2 Auto Reboot

Step 1 Choose Configuration > Maintenance.

The Camera Maintenance page is displayed, as shown in Figure 14-1.

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

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

Figure 13-2 Camera auto reboot

🖻 Camera Maintenance

Restart	
Auto Reboot	ON
Reboot Interval	Everyday 🔻
Time	0 - : 0 -

Step 3 Click OK.

The device is restarted successfully five minutes later.

----End

13.3 Update the Software Package

Description

You can update 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.

----End

13.4 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.

\triangle caution

After you clicking ²², 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 Click³.

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

Step 3 Click OK.

The device is restored to the factory settings.

----End

13.5 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	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.

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

OK

Step 4 Click OK to finish.

----End

Tip

14 Local Configuration

Refresh

Apply

Description

You can set folder to save the snapshots and records to local. This function only can be used in IE browser.

Procedure

Step 1 Choose Configuration > Local Config.

The Local Config page is displayed, as shown in Figure 15-1.

Figure 14-1 Local Config page

荦 Local Config

Snapshot picture format	ipg	▼
SnapShot Save Path	D:\LocalStorage\	6
Local Record Save Path	D:\LocalStorage\	6
Local Record File Size(8-128M)	64	

🖻 Local Config

Snapshot picture format	įpg	▼
SnapShot Save Path	C:\Users\Administrator\Downloads	<u></u>
Local Record Save Path	C:\Users\Administrator\Downloads	6
Local Record File Size(8-128M)	128	
Hardware Decode		OFF
	Defrech	Apply

Step 2 Select picture format from the drop-down box.

- Step 3 Set snapshot save path.
- Step 4 Set local record save path
- Step 5 Set local record file size(8-128 M), the default value is 64. Or enable the Hardware Decode.
- Step 6 The message "Apply success!" is displayed, and the system saves the settings.

----End

15 Troubleshooting

Table 16-1 describes the 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 Enter , 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 ping 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.	 To delete the browser cache, proceed as follows: (Internet Explorer 8 is used as an example.) 1. Open Internet Explorer. 2. Choose Tools > Internet Options > Normal. 3. Click Delete. The Delete Browsing History dialog box is displayed. 4. Select all check boxes. 5. Click Delete. Login to the web management system again.
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.

 Table 15-1
 Common faults and solutions
Common Fault	Possible Cause	Solution
	The upgrade package is incorrect.	Obtain the correct upgrade package and upgrade the IP camera again.

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	
F		
FTP	File Transfer Protocol	
G		
GAMA	Graphics Assisted Management Application	
Н		
НТТР	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	
М		
MJPEG	Motion Joint Photographic Experts Group	
MAC	Media Access Control	
MTU	Media Transmission Unit	
Ν		
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