VZ-IP-PVM-N SERIES

10",23",27",32" & 43" IP PUBLIC VIEW MONITOR

WEB BASED IP-PVM-N USER MANUAL

ViewZ®

www.viewzusa.com

This device complies with NDAA (National Defense Authorization Act).

Please read this manual thoroughly before use, and keep it handy for future reference.

02282023-Rev. A

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WARNING STATEMENTS

Important Safety Instructions

This manual describes how to use IP PVM's web management system, including network access, network configuration and troubleshooting.

This manual is intended for:
- Technical support engineers
- Maintenance engineers
- IP camera operators

Important Safety Instructions

DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
NOTICE	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.
NOTE	Calls attention to important information, best practices and tips. **NOTE** is used to address information not related to personal injury, equipment damage, and environment deterioration.

QUICK REFERENCE GUIDE

1. Login and Logout

CAUTION

We recommend to use **Google Chrome, Mozilla Firefox or Microsoft Edge** latest version to access the ViewZ web management system. **To run the full function of ViewZ web management system,** you should **run the browser as administrator**. The detailed method is described at page 10.

Login

Step 1 Open the web browser. Enter the IP address of the PVM IP camera (default value: 192.168.0.120) in the address box and then press Enter.
The login page is displayed, as shown in Figure 1-1.

Figure 1-1 Login Page

Factory Default IP address : 192.168.0.120
Factory Default Subnet Mask : 255.255.255.0
Factory Default Gateway : 192.168.0.1
Factory Default DNS 1 : 192.168.0.1
Factory Default DNS 2 : 192.168.0.2

Caution: IP address and gateway address should be set with the same IP parameters. For example, if IP address is "A.B.C.0 ~ 255", then gateway address should be set as "A.B.C.0 ~ 255" (however, IP and gateway address cannot be the same.)

Step 2 Enter the user name, and password

Note

- The default user name is **admin** and the default password is **admin**. Change the password when you log in to the system for the first time to ensure system security.
- You can change the system display language on the login page.

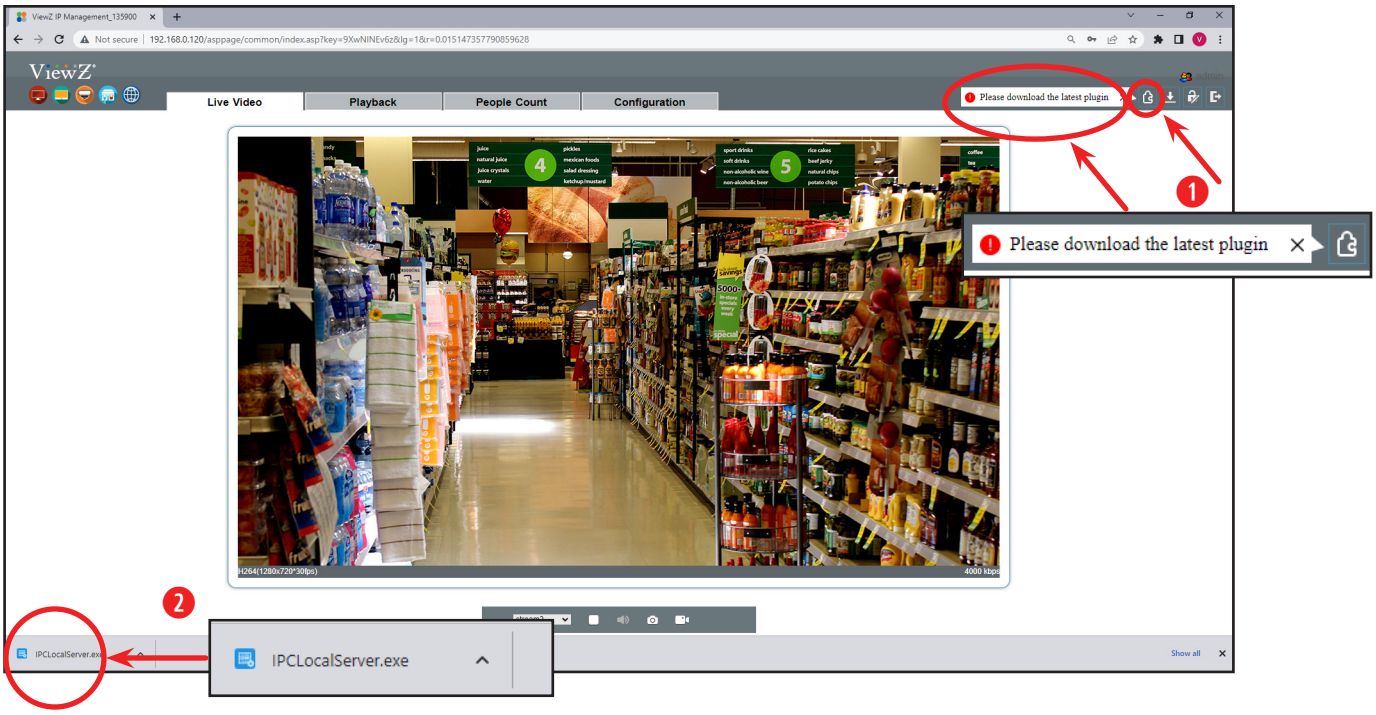
Step 3 Click Login. The main page will be displayed.

Logout

To log out of the system, click the icon in the upper right corner of the main page.
The login page is displayed after you log out of the system.

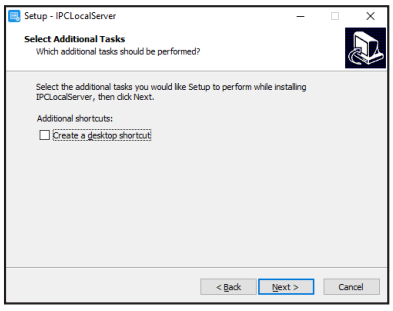
QUICK REFERENCE GUIDE

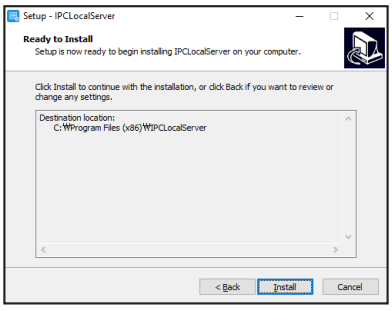
1. Login and Logout

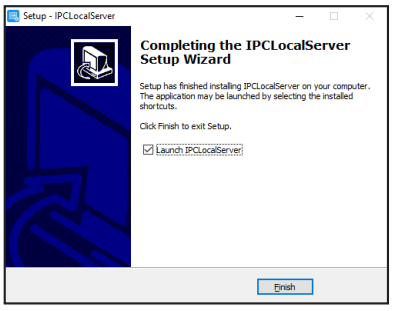


Step 4 When you log in, you now see the main page. Before using this software, you need to install a plugin program which named '**IPCLocalServer**' to use '**Playback**' function correctly.

1) Click the icon to download a plugin
2) Double click the left bottom tab to run '**IPCLocalServer.exe**' plugin program
3) After the installation of '**IPCLocalServer.exe**' plugin program, you can now use '**Playback**' function







QUICK REFERENCE GUIDE

2. Main Page Layout

On the main page, you can see real-time video, receive alarm and fault notifications, set parameters, change the password, and log out of the system. Figure 1-2 shows the main page layout. Table 1-1 describes the features on the main page.

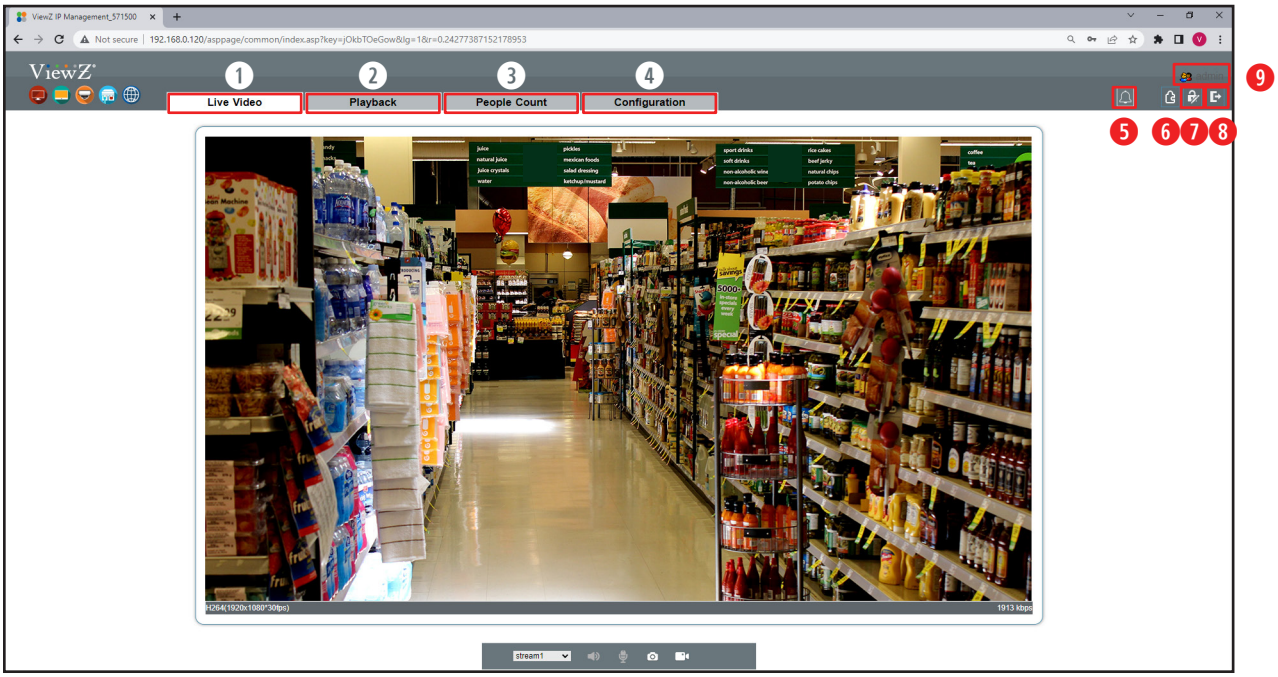


Figure 1-2 Main Page Layout

Table 1-1 Interface parameters

No.	ELEMENT	DESCRIPTION
1	LIVE VIDEO	Real-time video stream is displayed in this area. You can also set sensor parameters.
2	CONFIGURATION	You can select options to set device configuration, including the device information, audio and video streams, alarm setting, and privacy mask function.
3	PLAYBACK	You can select options to play recorded video by using Micro SD card (MAX 256GB).
4	PEOPLE COUNT	You can select options to count the number of people - in & out.
5	ALARM	When the device generates an alarm, the alarm icon is displayed. You can click to view the alarm information. NOTE : When the device accepts an alarm signal, the alarm icon will display within 10s in the web management system.
6	CHANGE PASSWORD	You can click to download 'IPCLocalServer' program.
7	CHANGE PASSWORD	You can click to change the password.
8	LOG OUT	You can click to return to the login page.
9	ACCOUNT INFO.	Logged in user account will be displayed.

QUICK REFERENCE GUIDE

2. Main Page Layout

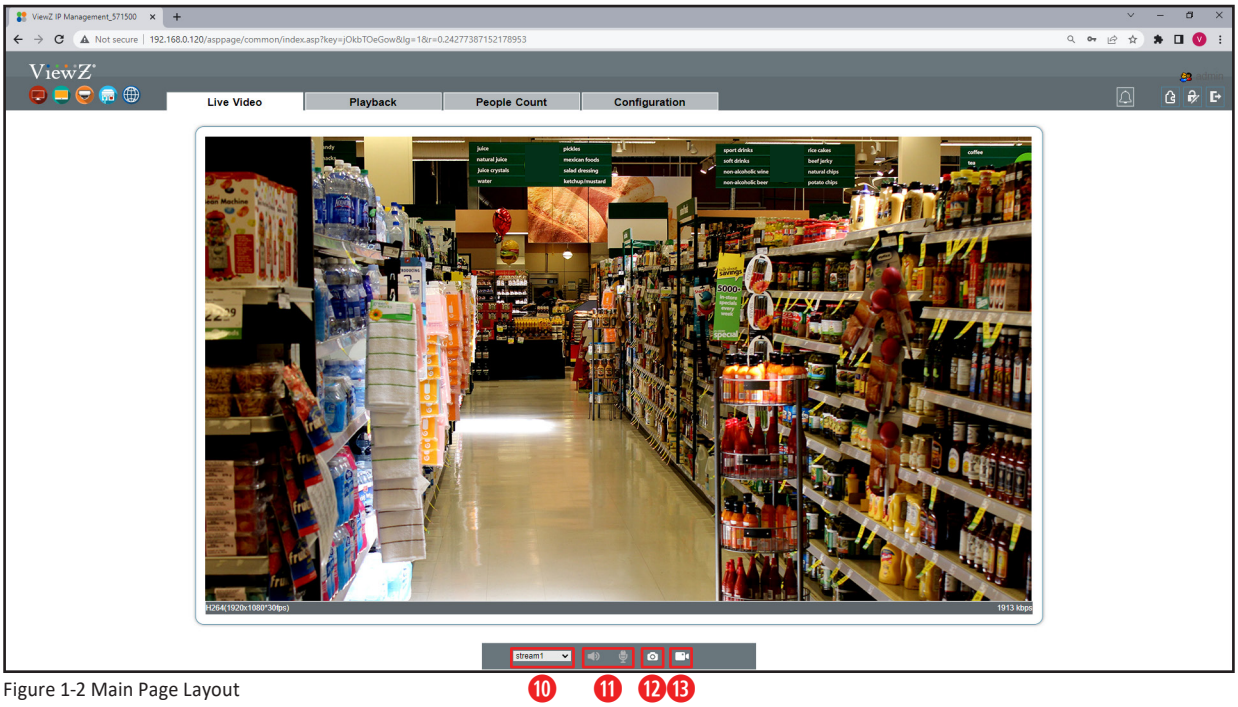


Figure 1-2 Main Page Layout

Table 1-1 Interface parameters

No.	ELEMENT	DESCRIPTION
10	STREAM	You can select options to show the stream of camera.
11	MIC / AUDIO	Not working
12	SCREEN SHOT	You can click this icon to take a screenshot of live video.
13	LOCAL RECORD	You can click this icon to record the live video.

QUICK REFERENCE GUIDE

3. Change the Password

Description

You can click to change the password for logging in to the system.

Procedure

Step 1 Click in the upper right corner of the main page.
The **Change Password** dialog box is displayed, as shown in Figure 1-3 and Figure 1-3-1.

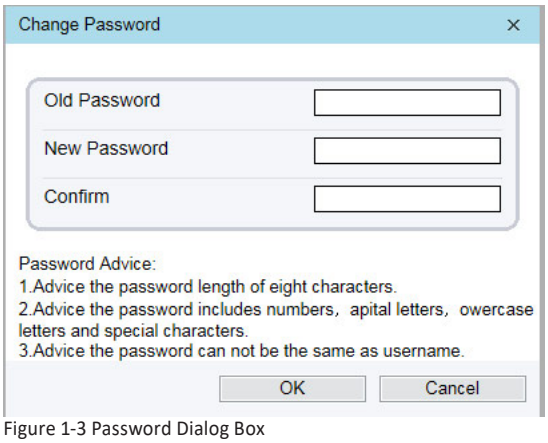


Figure 1-3 Password Dialog Box

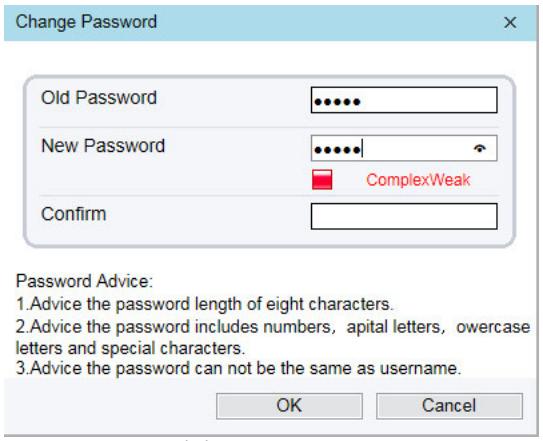


Figure 1-3-1 Password Change

Step 2 Enter the old password, new password, and confirm the new password.

Step 3 Click OK.
If the message "Change own password success" is displayed, the password has been successfully changed. If the password change fails, the cause will be displayed. (For example, the new password length couldn't be less than eight.)

Step 4 Enter the old password, new password, and confirm the new password.

SEARCHING IP CAMERA

1. Searching Real Time IP Camera

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

Preparation

Step 1 To ensure that real-time video can be played properly, you must perform the following operations when you log in to the web management system for the first time:
Open **Control Panel > Internet Options(Properties) > Security > Trusted sites > Sites**.
In the displayed dialog box, type "**http://192.168.0.120**" or **desired IP address** and then click Add, as shown in Figure 2-1.

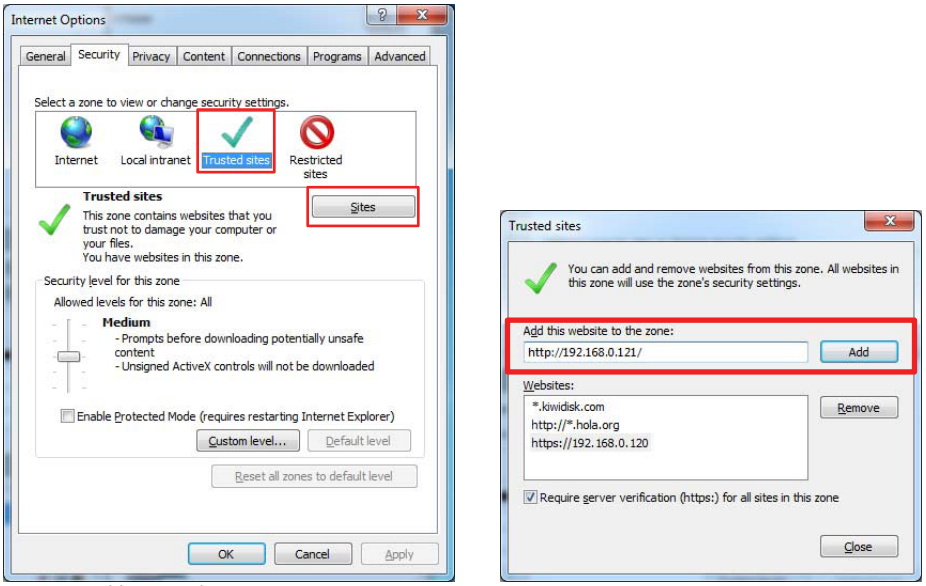


Figure 2-1 Add a trusted site

Note

- If your network security limit the network access, you might not see the live video. In this case, you need to do this step.
- If you can see the live video without this step, you do not need to do this step.

SEARCHING IP CAMERA

1. Searching Real Time IP Camera

Note

- If you use the Internet Explorer or Internet Explorer mode on Microsoft Edge and try to access our web management system, you will see Figure 2-2 with error message. ViewZ web management system only support Chrome, Firefox and Edge.

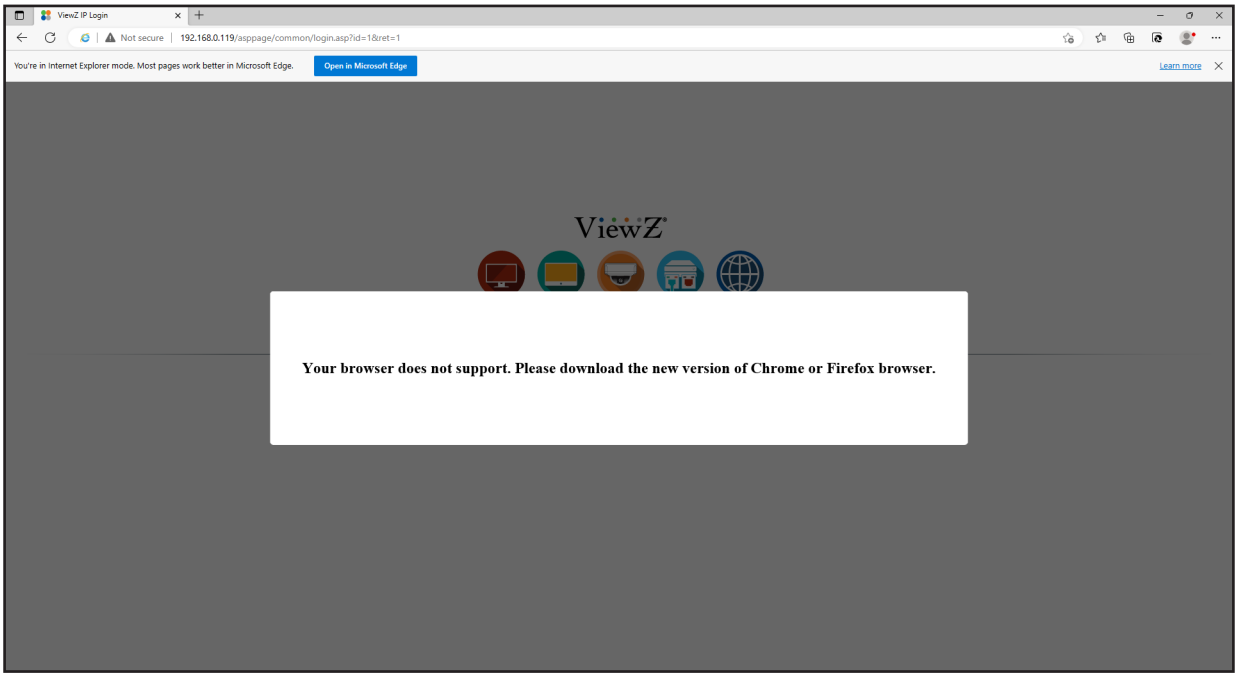


Figure 2-2 Error Message on Internet Explorer

SEARCHING IP CAMERA

1. Searching Real Time IP Camera

Description

To browse real-time videos, click **Live Video**. The **Live Video** page will be displayed, as shown in Figure 2-3.

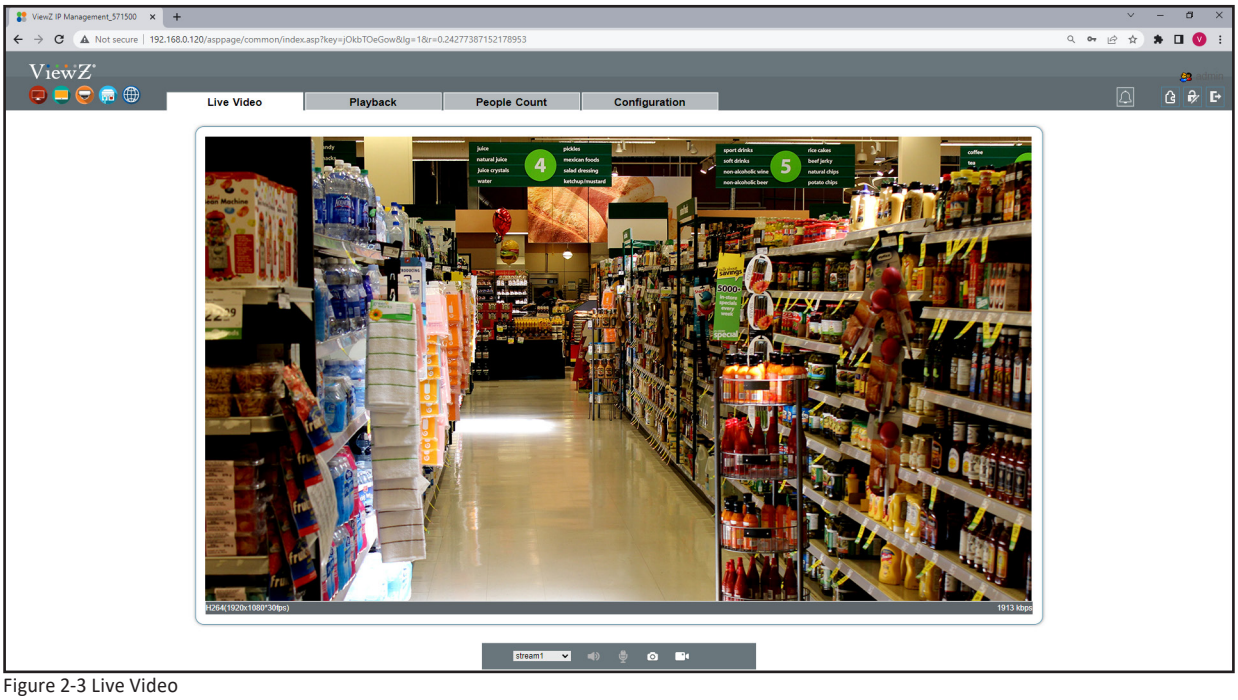


Figure 2-3 Live Video

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

- Double-click in the video area to enter the full-screen mode, and double-click again to exit.
- Switch among preset streams 1, 2, and 3. For details about how to configure streams,
- See 3.2 Setting Video and Audio Stream Parameters.

PLAYBACK

1. Review the recorded video

Description

Click **Playback** at the main page to review recorded video. This function require the SD card and the SD card is option. User can see recorded video, take a snapshot and backup.

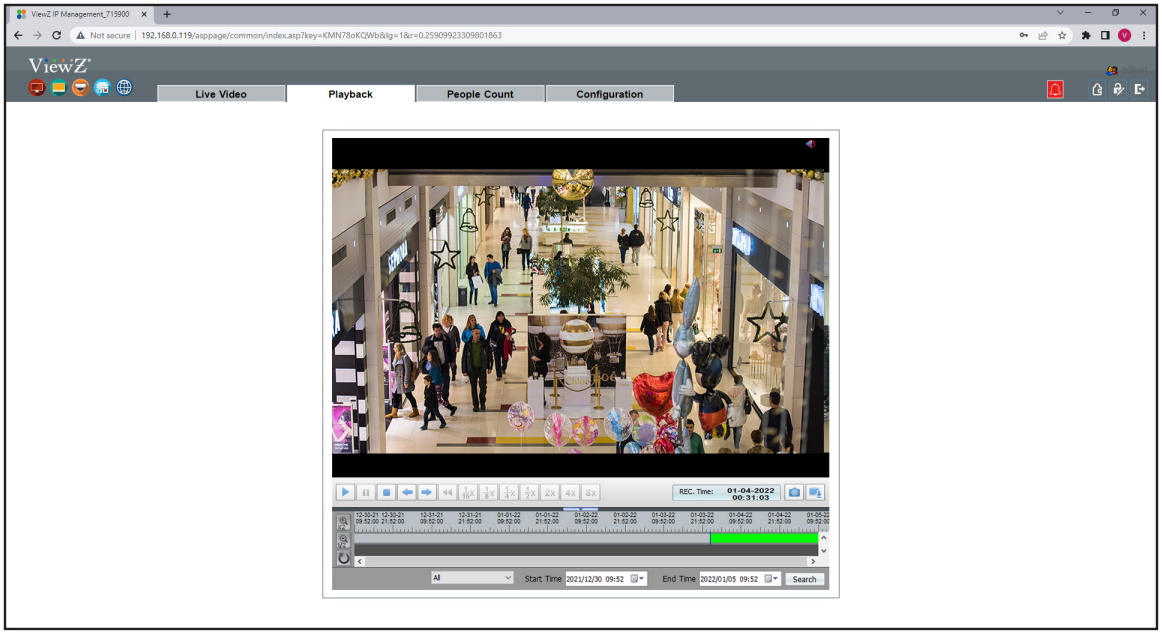


Figure 2-4 Playback Video

On the **Playback** page, you can perform the following operations:

- Click ▶ to play the recorded video.
- Click ⏸ to pause the playing video.
- Click ■ to stop the playing video.
- Click ◀ ▶ to see the frame of playing video.
- Click 1/16x 1/8x 1/4x 1/2x 2x 4x 8x to set the speed of playing video.
- Click 📷 to take a snapshot of playing video. The saved snapshot will be saved on the selected location on backup setting. See Figure 2-6.
- Click 💾 to make a backup and set the location of backup & snapshot. See Figure 2-6.

PLAYBACK

2. Set the location of backup & snapshot

Description

User can set the location of backup, file type (MP4), directory name (PVM's IP or ID) and file size. When your setup is done, click START to make a backup file.

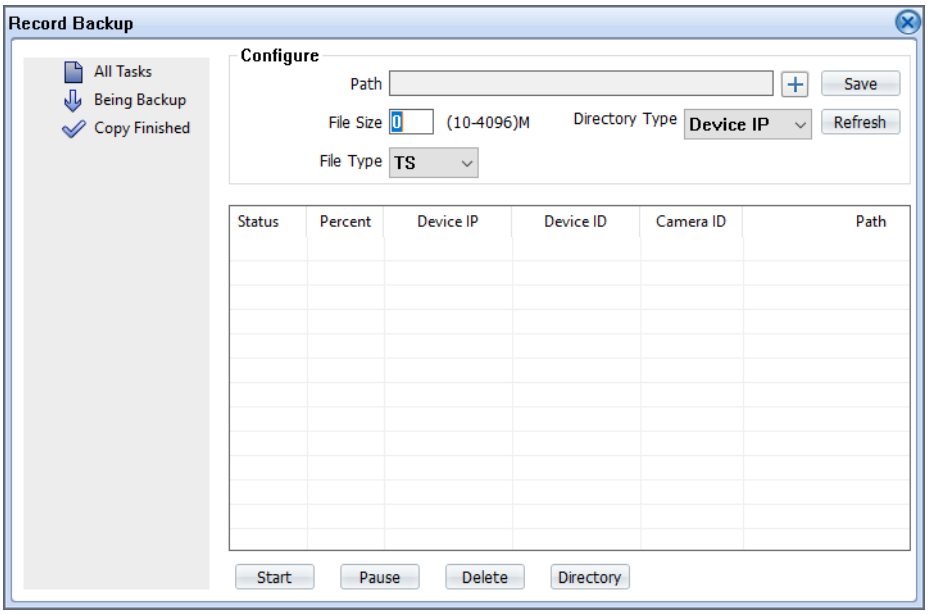
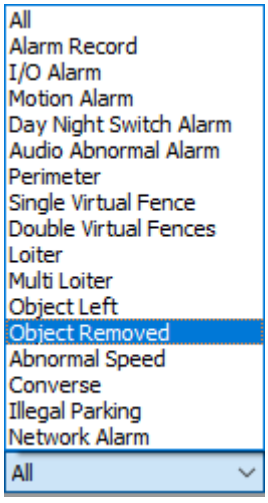
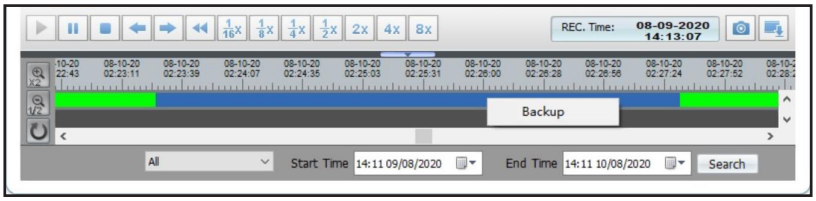


Figure 2-5 Backup setting





PEOPLE COUNT

1. Count the number of pedestrian

Description

Click **People Count** at the main page to count people who pass through PVM's camera. This function will provide the information about how many people move in and out.

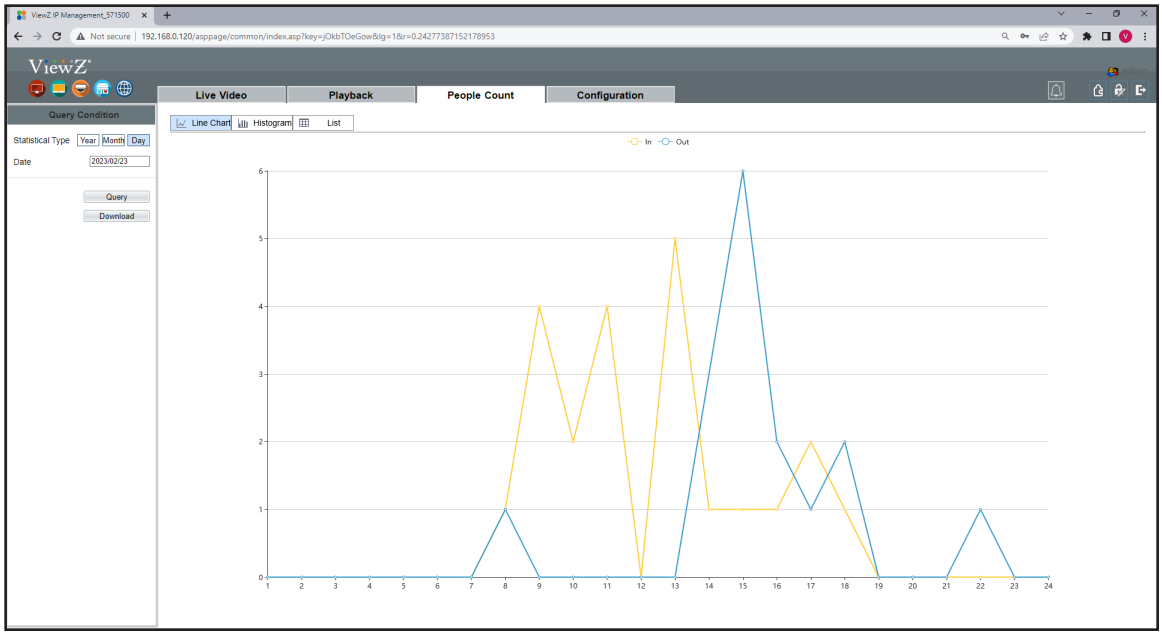


Figure 2-6 People Count

User can see the chart as line, histogram and list type. Also, user can download this data as a file.

CONFIGURATION / DEVICE INFO

1. Configuration of IP PVM's Information

Description

The device information includes:

- Device ID, name, type, model, 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.

Note

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

Procedure

Step 1 Click **Configuration > Device Info**.
The **Configuration > Device Info** page is displayed, as shown in Figure 3-1.

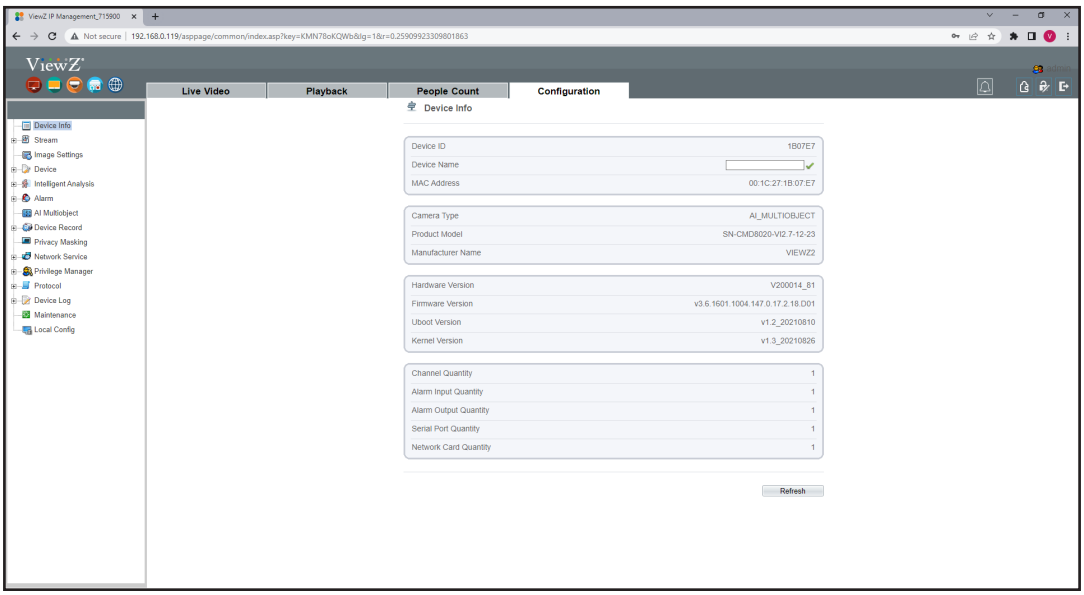


Figure 3-1 Device Info page

CONFIGURATION / DEVICE INFO

1. Configuration of IP PVM's Information

Procedure

Step 2 View the device information, set the device ID and name as shown in 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. NOTE The device name cannot exceed 32 bytes or 10 simplified characters; otherwise, the modification fails.	[Setting method] Enter a value manually.
MAC Address Camera Type Manufacturer ID Manufacturer Name Hardware Version Software Version Video Channel(s) Alarm Input(s) Alarm Output(s) Serial Port(s) Network Card	N/A	[Setting method] These parameters cannot be modified.

Step 3 Click the icon ✔
- If the message "Apply success!" is displayed, click **Confirm** to save the settings.
- If the message "Apply failed!" is displayed, you must apply for the Parameter Configure permission from an administrator. For details, see **10.1 Configuration of Permission for Group**.

CONFIGURATION / STREAM

1. Setup Video and Audio Parameters

Procedure

Step 1 Click **Stream Configuration > Stream > Base Stream**.
The **Base Stream Configuration** page is displayed, as shown in Figure 4-1.

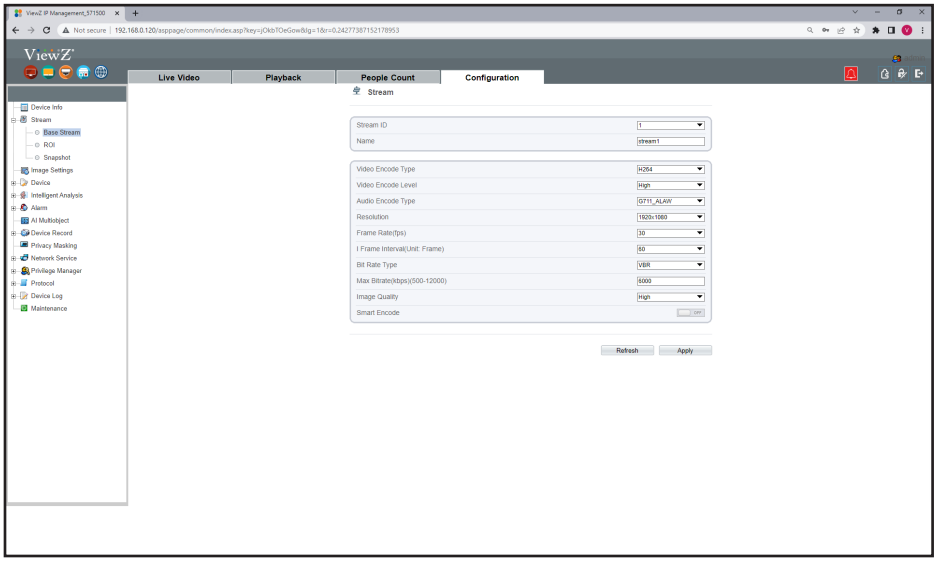
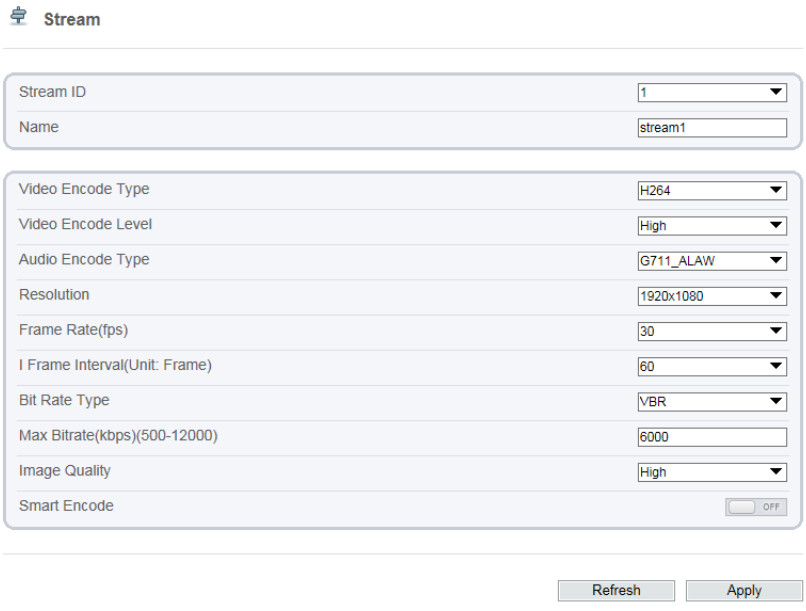


Figure 4-1 Stream Configuration page



CONFIGURATION / STREAM

1. Setup Video and Audio Parameters

Procedure

Step 2 Set the parameters as shown below in Table 4-1.

Table 4-1 Stream configuration parameters

Parameter	DESCRIPTION	Setting
Channel	ID of the video output channel. **NOTE** An IP camera has only one video output channel. Therefore, only the default value 1 is available.	**[Setting method]** Select a value from the drop-down list box. **[Default value]** 1
Stream ID	The device supports two streams. • Streams 1 and 2 use the H.264 Codec • The maximum resolution can be set for streams 1 • Only a low resolution can be set for stream 2.	**[Setting method]** Select a value from the drop-down list box.
Name	Stream name **NOTE** The stream name is combined with character, number, character and underline.	**[Setting method]** Enter a value manually. The value cannot exceed 32 bytes. **[Default value]** stream1
Video Encode Type	The video codec determines the image quality and network bandwidth required by a video. Currently, the following codec standards are supported: • **MJPEG** MJPEG is a standard intra-frame compression codec. The compressed image quality is good. No mosaic is displayed on motion images. MJPEG does not support proportional compression and requires large storage space. Recording and network transmission occupy large hard disk space and bandwidth. MJPEG is not applicable to continuous recording for a long period of time or network transmission of videos. It can be used to send alarm images.	**[Setting method]** Select a value from the drop-down list box. **[Default value]** H.264 High Profile **NOTE** The H.264 High Profile codec means high requirements on the hardware. If the hard decoding capability is low, use H.264 Main Profile or H.264 Base Profile.

CONFIGURATION / STREAM

1. Setup Video and Audio Parameters

Procedure

Table 4-1 Stream configuration parameters

Parameter	DESCRIPTION	Setting
Video Encode Type	• **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 Base Profile. If a hardware decoding device is used, select the appropriate codec based on the decoding performance of the device. H.264 High Profile has the highest requirements on the hardware performance, and H.264 Base Profile has the lowest requirements on the hardware performance. • **H.265** H.265 is the new 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.	**[Setting method]** Select a value from the drop-down list box. **[Default value]** H.264 High Profile **NOTE** The H.264 High Profile codec means high requirements on the hardware. If the hard decoding capability is low, use H.264 Main Profile or H.264 Base Profile.
Audio Encode Type	ID of the video output channel. • 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.

CONFIGURATION / STREAM

1. Setup Video and Audio Parameters

Procedure

Table 4-1 Stream configuration parameters

Parameter	DESCRIPTION	Setting
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)	The frame rate is used to measure displayed frames. A higher frame rate means smoother videos. 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 rate is 12 frames per second.	**[Setting method]** Select a value from the drop-down list box. **[Setting method]** Select a value from the drop-down list box.
I Frame Interval (f)	I frames do not require other frames to decode. A smaller I frame interval means better video quality but higher bandwidth.	**[Setting method]** Select a value from the drop-down list box.
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.

CONFIGURATION / STREAM

1. Setup Video and Audio Parameters

Procedure

Table 4-1 Stream configuration parameters

Parameter	DESCRIPTION	Setting
Max Bit Rate (500-12000)	Indicates the maximum value of the bit rate.	**[Setting method]** Enter a value manually.
Quality (500-12000)	The video quality on the camera output.	**[Setting method]** Slide the slider left or right **[Default value]** 5

Step 3 Click Apply

- If the message "Apply success!" is displayed, click Confirm. 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 **10.1 Configuration of Permission for Group**.
- If a message indicating that the bit rate is out of range is displayed, enter a new bit rate value.

CONFIGURATION / STREAM

2. Setup ROI Parameters

*** ROI - Region of Interest**

Procedure

Step 1 Click Stream **Configuration > Stream > ROI**.
The **ROI Stream** page is displayed, as shown in Figure 4-2.

Figure 4-2 ROI Stream Configuration page

CONFIGURATION / STREAM

2. Setup ROI Parameters

Procedure

Step 2 Set ROI parameters as below in Table 4-2.

Table 4-2 ROI configuration parameters

Parameter	DESCRIPTION	Setting
Stream	Stream name	**[Setting method]** Pull-down and select **[Default value]** Stream 1
Enable	Enable ROI function	**[Setting method]** Click to ON/OFF **[Default value]** OFF
Area ID	ROI Area ID number	**[Setting method]** Pull-down and select **[Default value]** 1
Level	Refers to ROI Area image quality. Higher the level, clearer the image within the ROI area and blurrier the image outside the ROI area.	**[Setting method]** Pull-down and select **[Default value]** 5
Area Name	User can name the Area ID with special name	**[Setting method]** Name length should be less than 32 Bytes

CONFIGURATION / STREAM

3. Snapshot

Description

Setup the snapshot resolution & quality level.

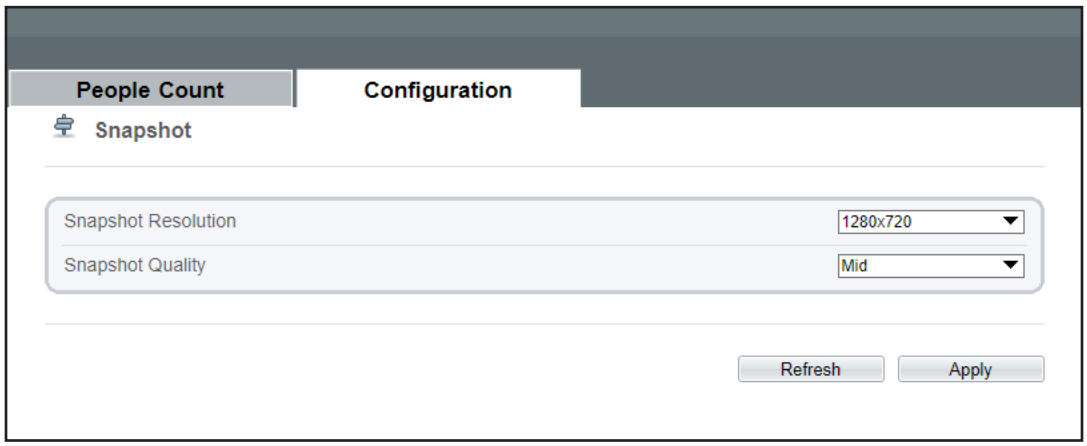


Figure 4-3 Snapshot configuration

CONFIGURATION / IMAGE (SENSOR)

1. Image Setting (Sensor Setting)

Description

You can adjust the **Image Setting** (Sensor Setting) on here.

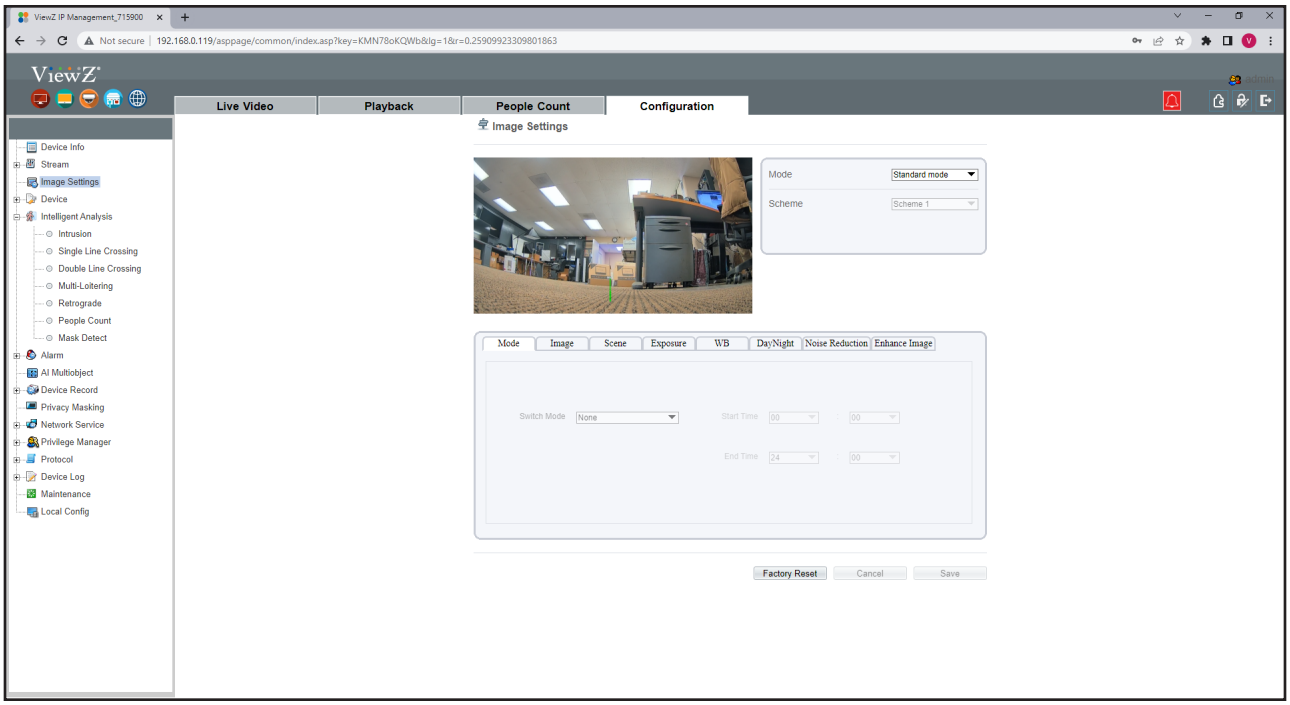


Figure 4-4 Image (Sensor) setting

Step 1 Click 'Standard Mode' box on the right bottom corner.

Step 2 Choose 'Debug mode' to activate the image(sensor) setting.

Step 3 Now you can edit image (sensor) setting.

Step 4 After setup, you can save or reset the value.

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting)

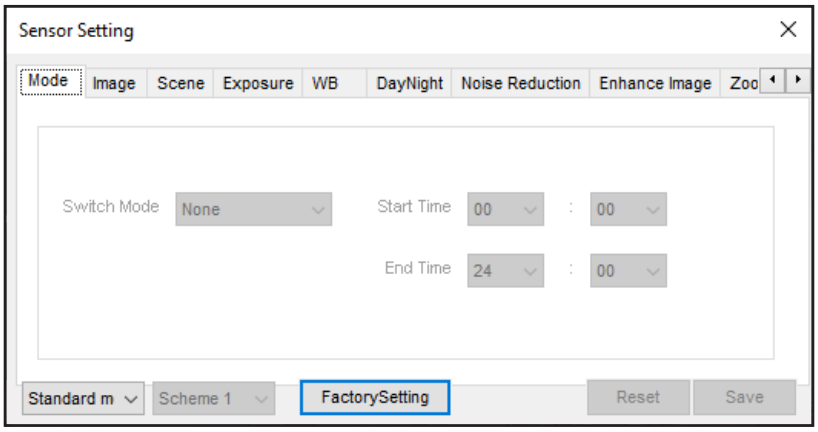


Figure 4-5 Sensor Setting

Parameter	DESCRIPTION	Setting
Switch Mode	Turn on/off the image(sensor) mode **None**: Turn on the image(sensor) mode on 24/7 **TimeMode**: Setup the image(sensor) mode based on time schedule **DNLinkageMode**: Setup the image(sensor) mode based on day & night	[Setting method] Select a value from drop-down list box. [Default value] None

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting) - Image

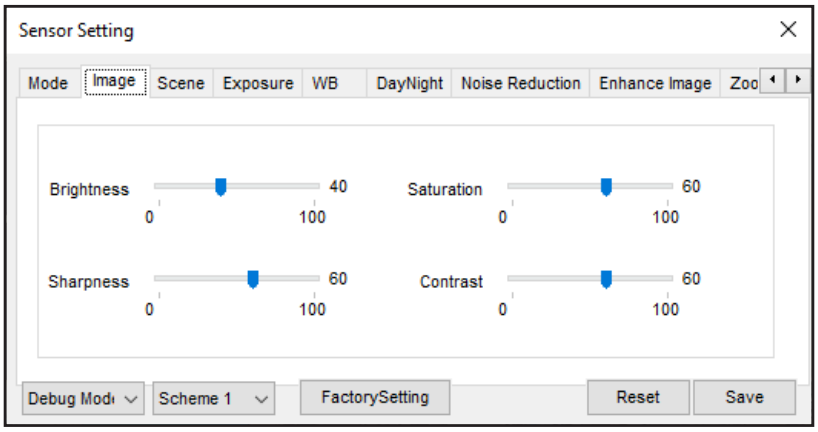


Figure 4-6 Sensor Setting - Image

Parameter	DESCRIPTION	Setting
Brightness	Adjust the brightness * To adjust this value, you should turn off **WDR** at **Enhance Image**	[Setting method] Drag the slider [Default value] 50
Saturation	Adjust the color saturation	[Setting method] Drag the slider [Default value] 50
Sharpness	Adjust the sharpness	[Setting method] Drag the slider
Contrast	Adjust the contrast	[Default value] 50 [Setting method] Drag the slider [Default value] 50

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting) - Scene

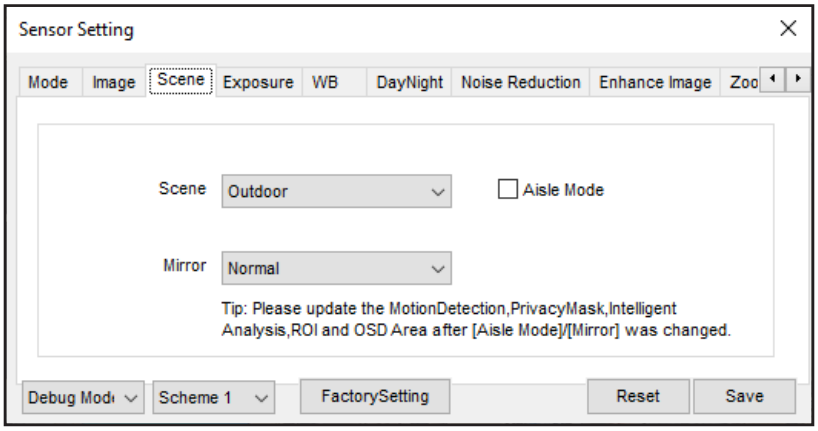


Figure 4-7 Sensor Setting - Scene

Parameter	DESCRIPTION	Setting
Scene	Select the location of PVM's camera **Outdoor**: Setup the PVM's camera to outdoor **Indoor**: Setup the PVM's camera to indoor	[Setting method] Select a value from drop-down list box. [Default value] Outdoor
Mirror	Select the pixel location of video **Normal**: The video does not flip **Horizontal**: The video flips to the left and right **Vertical**: The video flips up and down. **Horizontal and vertical**: The video rotates at 180 degrees	[Setting method] Select a value from drop-down list box. [Default value] Normal
Aisle Mode	The image rotates 90 degrees clockwise when aisle mode is enabled.	[Setting method] Check a box drop-down list box. [Default value] Disable

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting) - Exposure

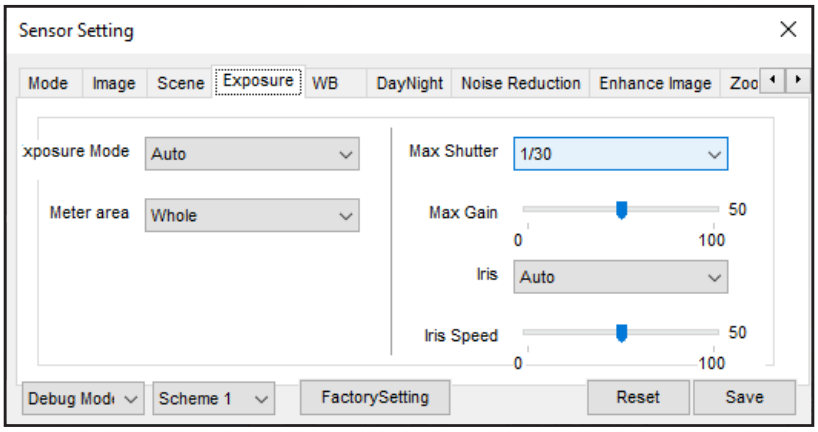


Figure 4-8 Sensor Setting - Exposure

Parameter	DESCRIPTION	Setting
Exposure Mode	Select the exposure mode **Auto**: System will make auto exposure mode 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.	[Setting method] Select a value from drop-down list box. [Default value] Auto
Metering Mode	Select the metering area **Full**: During metering, all areas of an image have an equal weight, that is, all areas are involved in the metering. **Spot**: During metering, spotted area of an image have an equal weight, that is, spotted areas are involved in the metering. **Partial**: During metering, a partial area of an image have an equal weight, that is, partial areas are involved in the metering.	[Setting method] Select a value from drop-down list box. [Default value] Full

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting) - Exposure

Parameter	DESCRIPTION	Setting
Max Shutter	The device automatically adjusts the shutter time based on the ambient brightness. The shutter time is less than or equal to the value of this parameter.	[Setting method] Select a value from drop-down list box. [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	Adjust 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 drop-down list box. [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. **NOTE** This parameter is valid when the auto iris is enabled.	[Setting method] Drag the slider [Default value] 50

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting) - WB

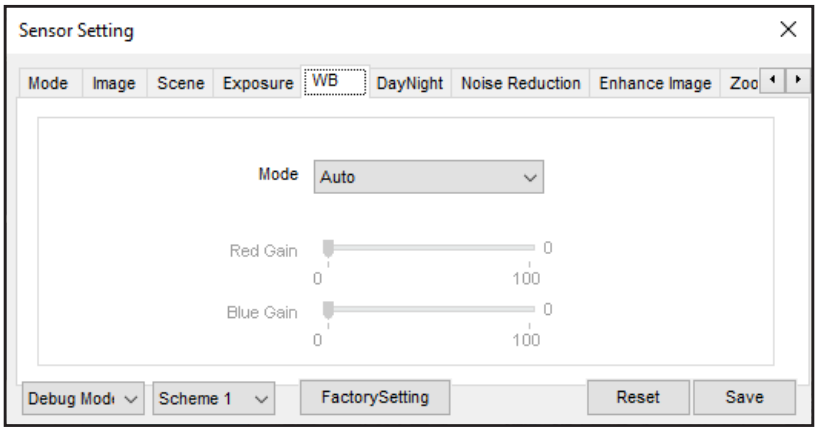


Figure 4-9 Sensor Setting - WB

Parameter	DESCRIPTION	Setting
Mode	Adjust based on application scenarios to improve improve the fidelity of the image color **Auto**: In automatic white balance (WB) mode, the system automatically performs white balance based on the monitoring environment. **Tungsten, Fluorescent, Daylight, Shadow** **Manual**: In manual WB mode, you can manually select a WB mode based on the monitoring environment.	[Setting method] Select a value from drop-down list box. [Default value] Auto
Red Gain	It indicates the gain applied to red channels. As the value increases, the color temperature becomes lower. **NOTE** This parameter is valid when Manual Mode is set to Customized.	[Setting method] Drag the slider [Default value] 0
Blue Gain	It indicates the gain applied to blue channels. As the value increases, the color temperature becomes higher. **NOTE** This parameter is valid when Manual Mode is set to Customized.	[Setting method] Drag the slider [Default value] 0

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting) - DayNight

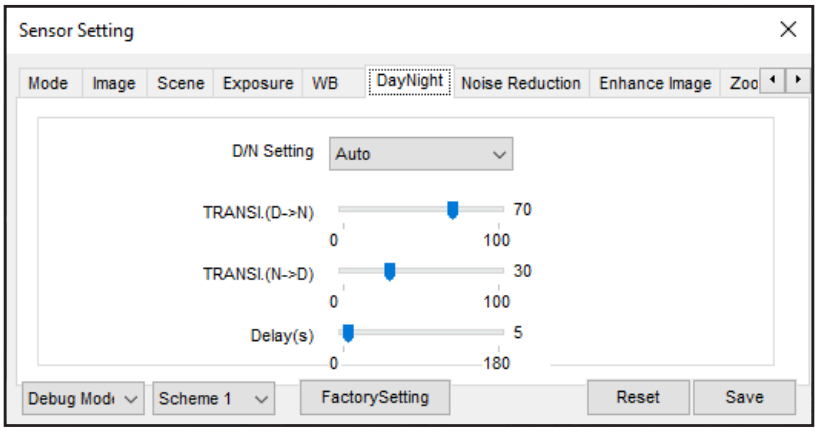


Figure 4-10 Sensor Setting - DayNight

Parameter	DESCRIPTION	Setting
D/N Setting Mode	Adjust day & night mode improve the fidelity of the image color **Auto**: The image color and filter status are automatically switched based on the ambient brightness. The filter prevents infrared light from entering the sensor in the day state and allows all types of light to enter the sensor in the night state. **Day & Night Mode** **Timing:** Set the time period of day & night mode.	[Setting method] Select a value from drop-down list box. [Default value] Auto
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. **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] 70
TRANSI.(N->D) (dB)	It determines the night-to-day switching in auto mode. When the system gain is smaller than the value of this parameter, the system enters the day mode. **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. **NOTE** - This parameter is valid in auto mode.	[Setting method] Drag the slider [Default value] 0

CONFIGURATION / IMAGE (SENSOR)

2. Image Setting (Sensor Setting) - Noise Reduction

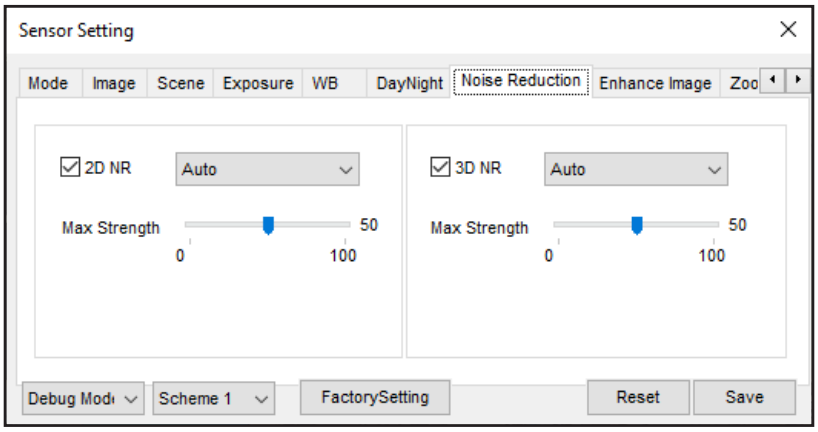


Figure 4-11 Sensor Setting - Noise Reduction

Parameter	DESCRIPTION	Setting
2D NR	Reduce noise of image.	[Setting method] Select a value from drop-down list box. [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 When the parameter value is greater than 0, the noise filter is enabled, and the system automatically adjusts the the noise filter level based on the ambient brightness without exceeding the value of this parameter.	[Setting method] Drag the slider [Default value] 50
3D NR	Reduce noise of image.	[Setting method] Select a value from drop-down list box. [Default value] Auto
Fixed Strength	It is valid in a manual noise filter mode.	[Setting method] Drag the slider [Default value] 50

CONFIGURATION / IMAGE (SENSOR)

2.Image Setting (Sensor Setting) - Enhance Image

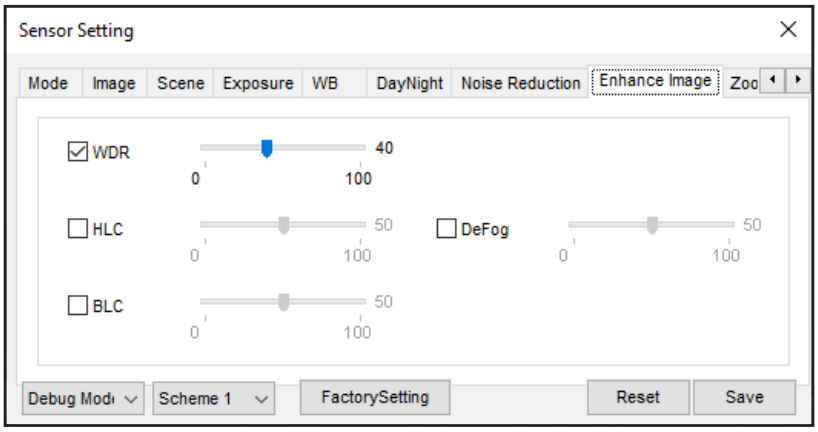


Figure 4-12 Sensor Setting - Inhance Image

Parameter	DESCRIPTION	Setting
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] Check, Drag the slider [Default value] 20
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] Check, 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] Check, Drag the slider [Default value] 50
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] Check, Drag the slider [Default value] 50

CONFIGURATION / DEVICE

1. Setup Local Network Parameters

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 Device **Configuration > Device > Local Network**.
The **Local Network** page is displayed, as shown in Figure 5-1.

Figure 5-1 Local Network page

CONFIGURATION / DEVICE

1. Setup Local Network Parameters

Procedure

Step 2 Set the parameters according to Table 5-1.

Table 5-1 Local network parameters

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 **obtaining 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 assigns to the device.	**N/A**
IP Address	Device IP address that can be set as required.	**[Setting method]** Enter a value manually. **[Default value]** 192.168.0.120
Subnet Mask	Subnet mask of the network adapter.	**[Setting method]** Enter a value manually. **[Default value]** 255.255.255.0
Default Gateway	This parameter must be set if the client accesses the device through a gateway.	**[Setting method]** Enter a value manually. **[Default value]** 192.168.0.1
Preferred DNS Server	IP address of a DNS server.	**[Setting method]** Enter a value manually. **[Default value]** 192.168.0.1
Alternate DNS Server	IP address of a domain server. If the preferred DNS server is faulty, the device uses the alternate DNS server to resolve domain names.	**[Setting method]** Enter a value manually. **[Default value]** 192.168.0.2
MTU	Set the maximum value of network transmission data packets.	**[Setting method]** Enter a value manually. **NOTE** The MTU value ranges from 1280to1500, with the default value at 1500. Please do not change it arbitrarily.

CONFIGURATION / DEVICE

1. Setup Local Network Streaming

Procedure

Step 3 Click Apply.

- If the message "Apply success!" is displayed, click Confirm. The system saves the settings. The message "Set network parameter success, Please login system again" is displayed. Use the new IP address to log in 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.

CONFIGURATION / DEVICE

2. Configuration of Device Ports

Description

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

Procedure

Step 1 Choose Device **Configuration > Device > Device Port.**
The Device Port page is displayed, as shown in Figure 5-2.

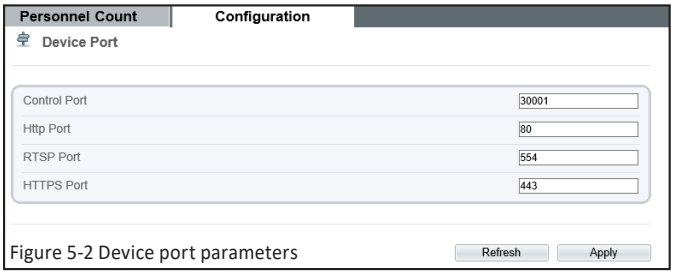


Figure 5-2 Device port parameters

Step 2 Set the parameters according to Table 5-2

Table 5-2 Device port parameters

Parameter	DESCRIPTION	Setting
Control Port	Port used for audio and video transfer and signaling interaction	**[Setting method]** Enter a value manually **[Default value]** 30001
HTTP Port	Port used in web access	**[Setting method]** Enter a value manually **[Default value]** 80
RTSP Port	RTSP protocol port	**[Setting method]** Enter a value manually **[Default value]** 554
HTTPS Port	Hyper Text Transfer Protocol over Secure Socket Layer	**[Setting method]** Enter a value manually **[Default value]** 443

Note
It's not recommended to modify the control port, f or 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.

CONFIGURATION / DEVICE

3. Configuration of the Date and Time

Description

On the **Date & Time** page, you can modify the date and time.

Procedure

Step 1 Choose Device **Configuration > Device > Date and Time**.
The **Date** page is displayed, as shown in Figure 5-3. Table 5-3 describes the parameters.

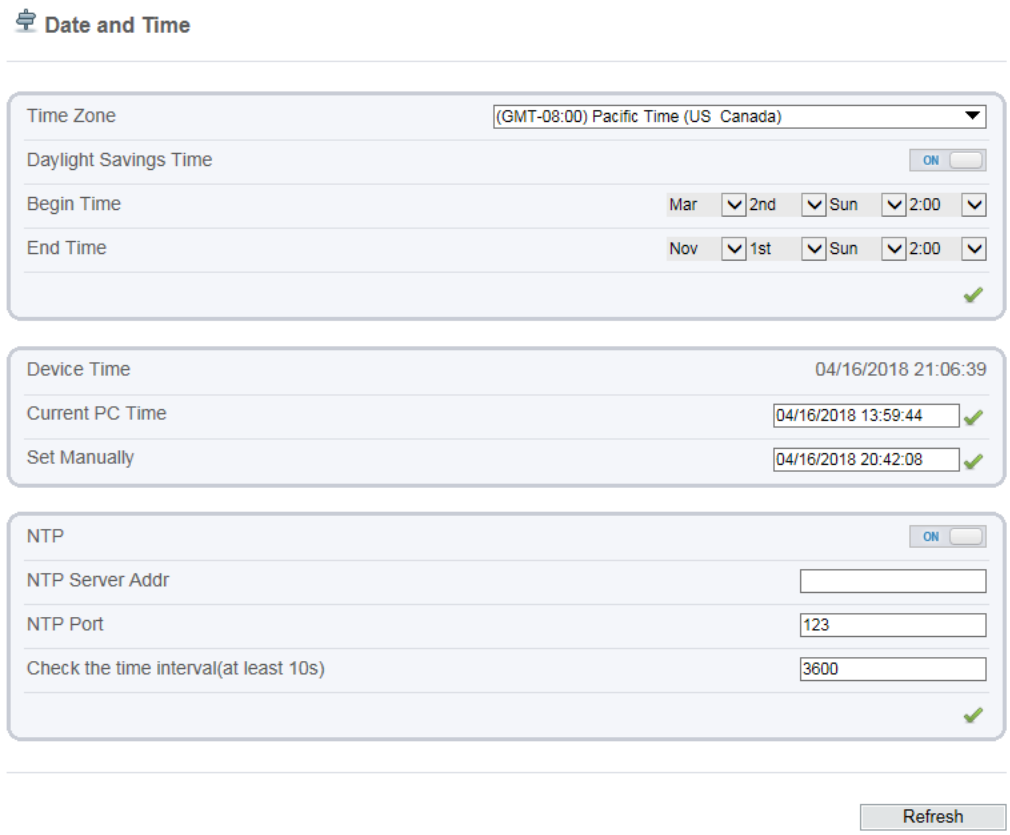


Figure 5-3 Date and Time page

CONFIGURATION / DEVICE

3. Configuration of the Date and Time

Procedure

Table 5-3 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 Adjust clock for daylight saving changes.
Device Time	Device display time.	**[Setting method]** • Synchronize the time from the PC. • Enter a value manually.
Current PC Time	Time on the current PC.	**N / A**
Set Manually	Enables you to manually set the device time.	**[Setting method]** Click Set Manually and set the date and time in the format YYYY-MM-DD HH:MM:SS.
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 10s)	Set time interval to check if the device time synchronizes with the NTP server time.	**[Setting method]** Enter a value manually. **[Default value]** 3600

CONFIGURATION / DEVICE

3. Configuration of the Date and Time

Procedure

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

Step 3 (Optional) Click the button on to enable **Adjust clock for daylight saving changes** 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 and the port number.

Step 6 Click the icon ✔
The message "Apply success!" is displayed.

Step 7 Click **Confirm**
The system saves the settings.

CONFIGURATION / DEVICE

4. Camera

Procedure

Step 1 Choose **Device Configuration > Device > Camera**.
The **Camera** page is displayed, as shown in Figure 5-4. Table 5-4 describes the parameters.

Figure 5-4 Camera page

Table 5-4 Camera parameters

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

CONFIGURATION / DEVICE

4. Camera

Procedure

Step 2 Enter a channel name

Note : 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 icon ✔
The message "Apply success!" is displayed.

Step 4 Click Confirm. The system saves the settings.

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

CONFIGURATION / DEVICE

5. Setup OSD Parameters

Description

The on-screen display (OSD) function allows you to display the device name, channel ID and name, time, and other customized content on videos.

- When the resolution is D1 and CIF, the maximum number of words that can be displayed is 22 words
- The OSD supports English, digital and some special characters only.

Procedure

Step 1 Choose Device **Configuration > Device > OSD**.
The OSD page is displayed, as shown in Figure 5-5.

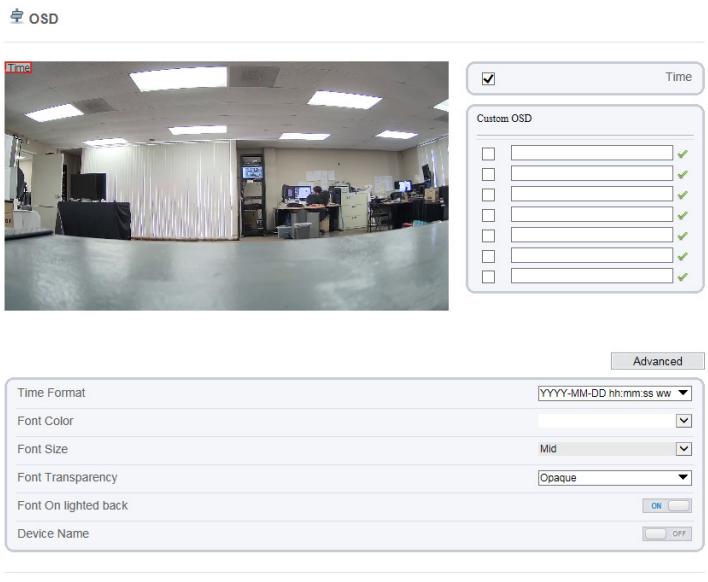


Figure 5-5 OSD page

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

The size of characters that can be displayed in a row or column varies according to the resolution. When the OSD font is auto:

- If the resolution is 1920 x 1080 and the size of each character is 48 x 48, then the maximum row of OSD is 22 (1080/48), and the maximum column is 40 (1920/48);
- If the resolution is 704 x 576 and the size of each character is 32 x 32, then the maximum row of OSD is 18 (576/32), and the maximum column is 22 (704/32);
- If the resolution is 640 x 360 and the size of each character is 16 x 16, the maximum row of OSD is 22(360/16) characters, and a maximum column is 40(640/16).

CONFIGURATION / DEVICE

5. Setup OSD Parameters

Procedure

Table 5-5 OSD parameters

Parameter	DESCRIPTION	Setting
Time	Indicates whether to display the time	**[Setting method]** Check the blank box to display the time.
Device Name	Indicates whether to display the device name on videos.	**[Setting method]** Check the blank box to display the device name. **[Default value]** Off
Custom OSD	Create the message box	**[Setting method]** Check one of the blank boxes and write a value within the lengh of 0 to 32 characters in custom OSD. Click the icon ✔ to apply custom OSD value. **[Default value]** Blank
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 on lighted back.	**[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**. **[Default value]** Off

CONFIGURATION / DEVICE

5. Setup OSD Parameters

Procedure

Table 5-5 OSD parameters

Parameter	DESCRIPTION	Setting
Twelve-hour System	Set the time as 12 hour interval	**[Setting method]** Click the button on to enable **Twelve Hour System**. **[Default value]** Off
Display Week	Turn on the message box for 24/7	**[Setting method]** Click the button on to enable **Display Week**. **[Default value]** Off

Step 3 Click **Apply**
The message "Apply success!" is displayed.

Step 4 Click **Confirm**. The system saves the settings.

CONFIGURATION / DEVICE

6. Configuration of Analog Output (CVBS)

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 **Device Configuration > Device > CVBS**
The **BNC Video Output page** is displayed, as shown in Figure 5-6.

Figure 5-6 BNC config page

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

Step 3 Click **Apply**. The message "**Apply success!**" is displayed.

Step 4 Click Confirm. The system saves the settings.

CONFIGURATION / DEVICE

7. Configuration of System Language & Webmode

Description

On the **System Configuration** page, you can configure the language used by the time displayed in the video window and alarm emails and web mode.

Procedure

Step 1 Choose Device **Configuration > Device > System**.
The **System** page is displayed, as shown in Figure 5-7

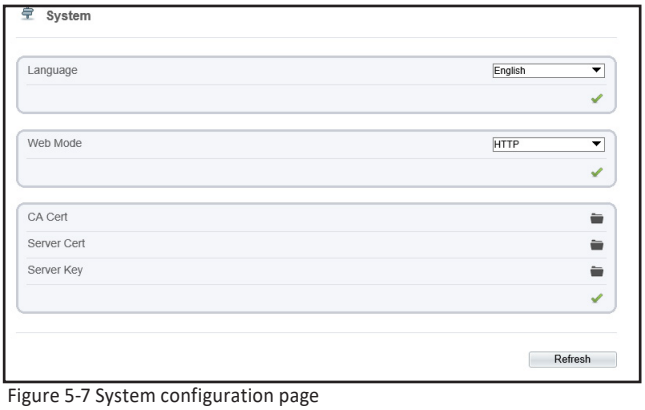


Figure 5-7 System configuration page

Step 2 Select a language from the language drop-down list box. The default language is English.

Step 3 Click the icon ✔
The message "Apply success!" is displayed.

Step 4 Click **Confirm**. The system saves the settings.

Step 5 Select a web mode from the web mode drop-down list box.

Step 6 Click the icon ✔
The message "This operation will lead to the device to restart, continue?".

Step 7 Click **Confirm**. The message "**Apply success!**" is displayed, the system restart.

CONFIGURATION / DEVICE

8. Software License

Description

Show the software license of control program

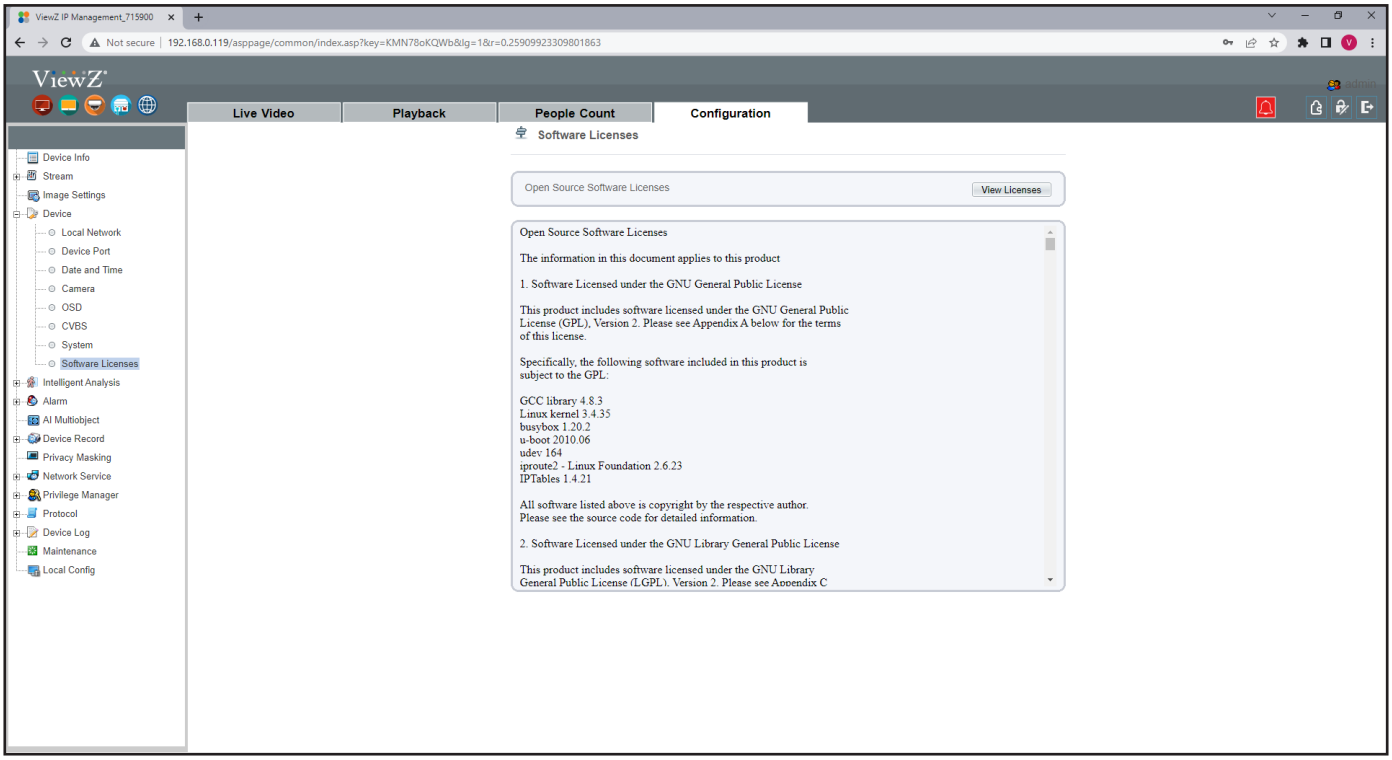


Figure 5-8 Software license page

CONFIG. /INTELLIGENT ANALYSIS

Overview

Terminology

- Field of View: the whole screen that a camera is capable of displaying.
- Deployment Area: the still area with any shape in the field of view set by a user.
- Target: the moving object of a certain type (human, vehicle, human or vehicle) appearing in the field of view.
- False Alarm: a false alarm generated because of interference sources (such as illumination change, leaf waggle and shadow).
- Alarm missing: an alarm meeting user-defined target trigger settings but not alarm.

Operating Environment

- Intelligent analysis available only on Hisilicon currently
- Operating system: Microsoft Windows 7/Windows XP (32/64-bit operating system supported)
- CPU: Intel core i3 and above / Memory: 1 GB and above / Display: resolution 1024*768 or above

Note : The software does not support pure 64-bit system. The 64-bit system mentioned above supports 32-bit software.

Precautions

Precautions for Installation

- The camera stays level with the horizon, without inclination.
- The installation height is more than 2 m indoors and within 5-8 m outdoors. If climbing over the wall needs to be monitored, the camera height can be 2 m higher than the wall.
- The angle of depression is larger than 150 & Do not install the device against the light.
- Try to install the device in a place where the light reflection from ground is weak in case of indoor installation.
- Try to keep the sky out of the field of view, because false alarms may be generated due to illumination changes or cloud movement.

Other Precautions

- Try to disable automatic white balance, the switch of which tends to cause alarm missing.
- Set the camera to be fixed focus.
- Do not switch from color mode to black&white mode frequently, otherwise, alarm missing occurs.
- Try not to use the Infrared all-in-one machine outdoors, which attracts insects and causes false alarms.
- The target cannot be oversized or undersized. The minimum target detectability is 8*8 pixels. The target takes up 1/20-1/2 of the screen in height, excess of which leads to alarm missing.
- The background modeling after parameter setting needs 4-8 seconds, during which a triggered alarm is not reported.
- A certain period of time is required from target appearance to recognition, so the duration of a target appearing in the field of view normally needs to be more than 2 seconds.
- Avoid too many moving targets in the field of view, which may lead to alarm missing.
- The fill-in light at night needs to be uniform.
- The wide-angle lens with short focal length (less than 4 mm) is recommended for small indoor space.

CONFIG. /INTELLIGENT ANALYSIS

1. Perimeter

Description

The perimeter function refers the alarm that is generated when the targets of specified types (such as human, vehicle and both) enter the deployment area.

Settings

Step 1 Select **Configuration > Intelligent Analysis > Perimeter** to access the Perimeter interface, as shown in Figure 6-1

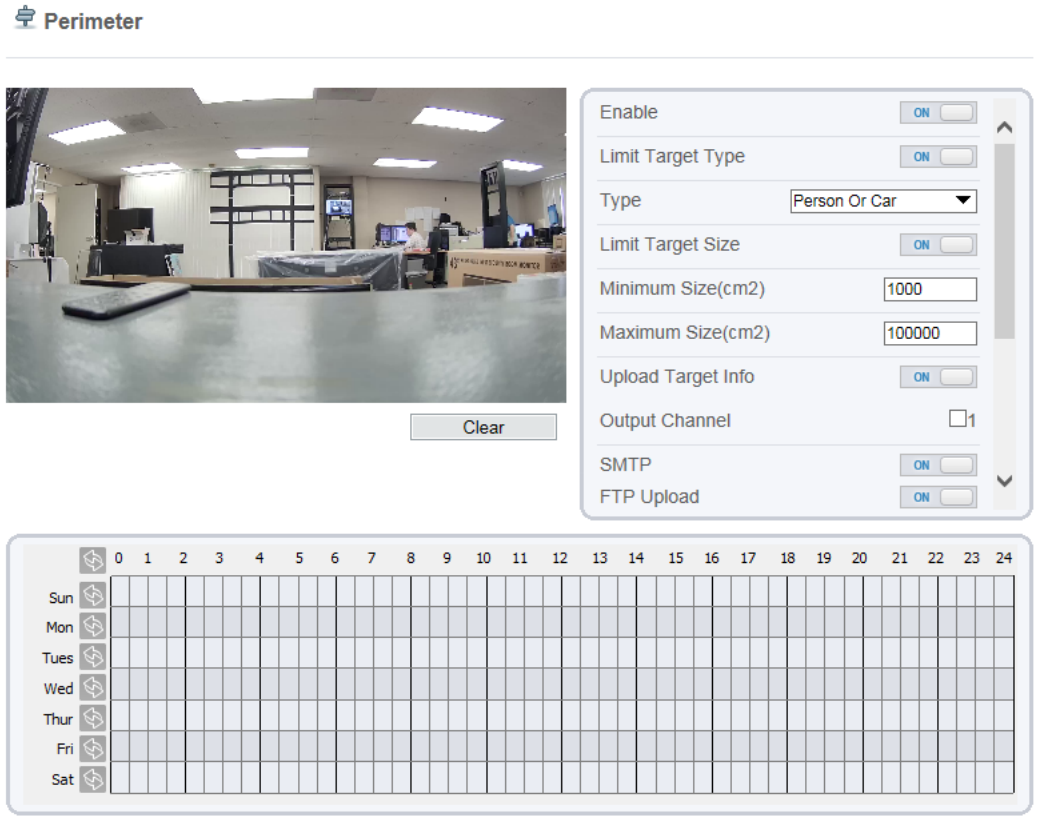


Figure 6-1 Perimeter Setting Interface

Step 2 Set all parameters for perimeter. Table 6-1 describes the specific parameters

CONFIG. /INTELLIGENT ANALYSIS

1. Perimeter

Settings

Table 6-1 Perimeter Parameter Description

Parameter	DESCRIPTION	Setting
Enable	Enable the button to enable the alarm.	**[How to set]** Click 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 Target Type	Effective alarms are set based on target type, with options of human, vehicle, or both. When the device is used indoors, because of small space and large targets, alarms are triggered by human sometimes even if vehicle is selected, leading to false alarms. It is recommended to set the target type to human for indoor use.	**[How to set]** Click to enable Limit Target Type. **[Default Value]** Off
Type	When limit target type is enabled, you can select which type of objects will be scanned. You can select among car, person or car/person.	**[How to set]** Choose from the drop-down list **[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]** Check the box **[Default Value]** Off
Alarm Record	Enable the button to enable the alarm record	**[How to set]** Click to enable **[Default Value]** Off
SMTP	Enable the button to enable SMTP sever.	**[How to set]** Click to enable **[Default Value]** Off
FTP Upload	Enable the button to enable File Transfer Protocol.	**[How to set]** Click to enable **[Default Value]** Off

CONFIG. /INTELLIGENT ANALYSIS

1. Perimeter

Deployment Time Settings

Setting deployment time: Click to select any time point within 0:00-24:00 from Monday to Sunday; or hold down the left mouse button, drag and release the mouse to select the deployment time within 0:00-24:00 from Monday to Sunday, and then click Apply to successfully set the time. Note: When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

Deleting deployment time: Select the week on the left of set time which becomes red after selection, as shown in Figure 6-2, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

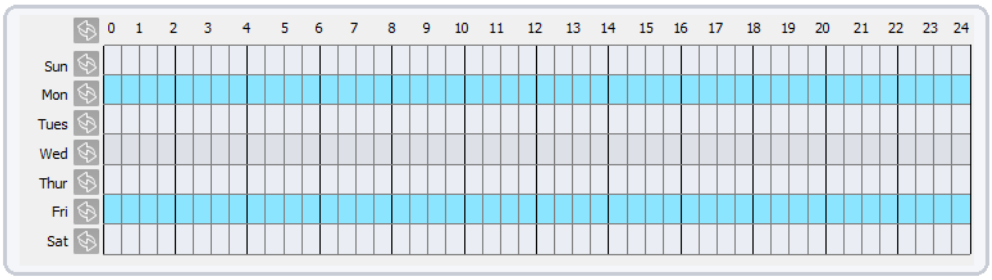


Figure 6-2 Deployment Time Setting Interface

Method 1: Click left mouse button to select any time point within 0:00-24:00 from Monday to Sunday as shown in Figure 6-2.
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.

Note

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

Method 3: Click in the schedule page to select the whole day or whole week.
Deleting deployment time: Click again or inverse selection to delete the selected schedule.

CONFIG. /INTELLIGENT ANALYSIS

1. Perimeter

Deployment Area Settings

Draw 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 6-3.

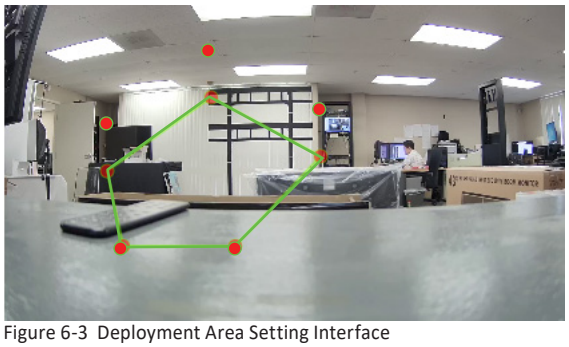


Figure 6-3 Deployment Area Setting Interface

Note

- A drawn line cannot cross another one, or the line drawing fails.
- Any shape with 32 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.

CONFIG. /INTELLIGENT ANALYSIS

2. Single Virtual Fence

Function Definition

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 the specified types of targets (such as human or vehicle) cross this line.

Function Settings

Step 1 Select **Configuration > Intelligent Analysis** > **Single Virtual Fence** to access the Single Virtual Fence setting interface, as shown in Figure 6-4

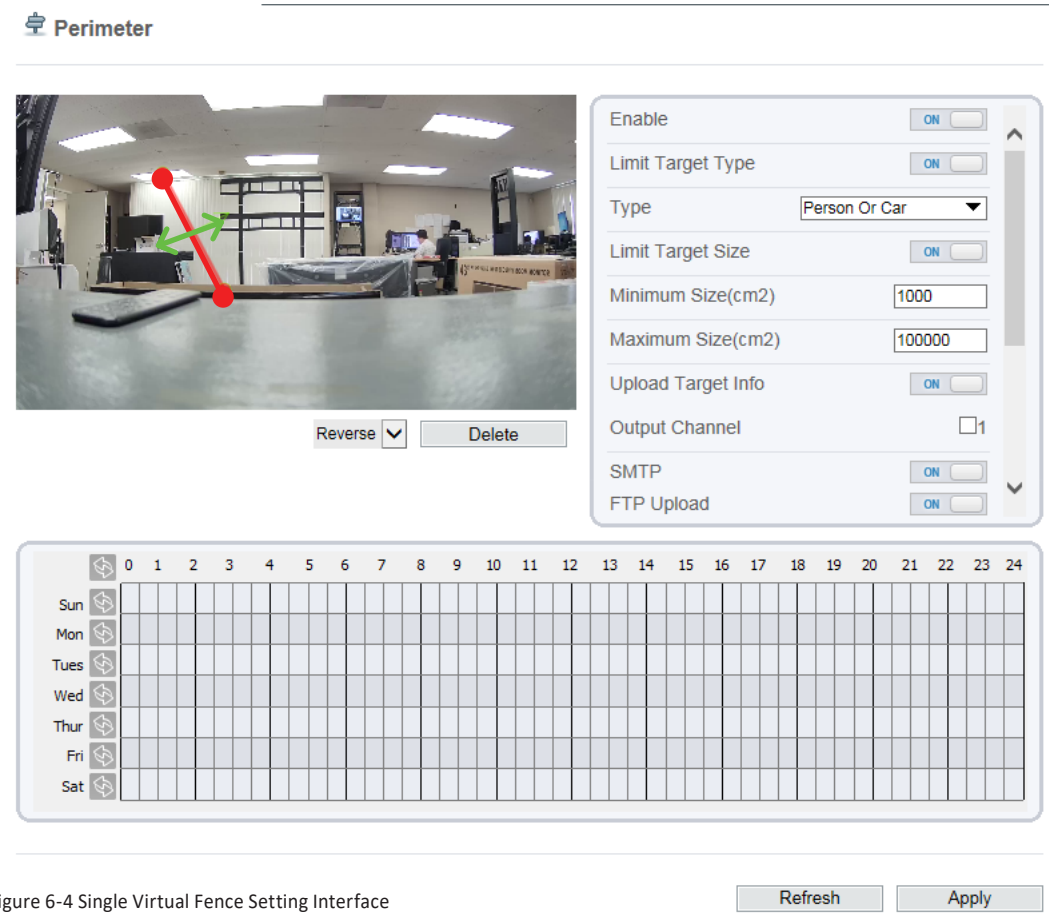


Figure 6-4 Single Virtual Fence Setting Interface

Step 2 Set all parameters for the single virtual fence. Table 6-2 describes the specific parameters.

CONFIG. /INTELLIGENT ANALYSIS

2. Single Virtual Fence

Settings

Table 6-2 Single Virtual Fence Parameter Description

Parameter	DESCRIPTION	Setting
Enable	Enable the button to enable the alarm.	**[How to set]** Click to enable **[Default Value]** Off
Limit Target Type	Effective alarms are set based on target type, with options of human, vehicle, or both. When the device is used indoors, because of small space and large targets, alarms are triggered by human sometimes even if vehicle is selected, leading to false alarms. It is recommended to set the target type to human for indoor use.	**[How to set]** Click to enable Limit Target Type. **[Default Value]** Off
Type	When limit target type is enabled, you can select which type of objects will be scanned. You can select among car, person or car/person.	**[How to set]** Choose from the drop-down list **[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]** Check the box **[Default Value]** Off
Alarm Record	Enable the button to enable the alarm record	**[How to set]** Click to enable **[Default Value]** Off
SMTP	Enable the button to enable SMTP sever.	**[How to set]** Click to enable **[Default Value]** Off
FTP Upload	Enable the button to enable File Transfer Protocol.	**[How to set]** Click to enable **[Default Value]** Off

CONFIG. /INTELLIGENT ANALYSIS

2. Single Virtual Fence

Deployment Time Settings

Setting deployment time: Click to select any time point within 0:00-24:00 from Monday to Sunday; or hold down the left mouse button, drag and release the mouse to select the deployment time within 0:00-24:00 from Monday to Sunday, and then click Apply to successfully set the time. Note: When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

Deleting deployment time: Select the week on the left of set time which becomes red after selection, as shown in Figure 6-5, and then click Delete to delete the deployment time. You can also delete selected deployment time by means of inverse selection.

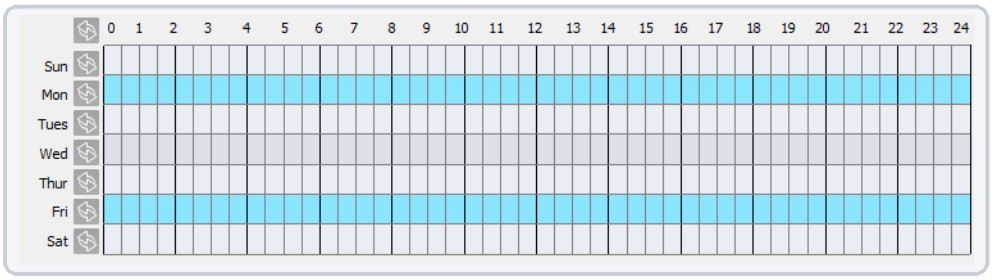


Figure 6-5 Deployment Time Setting Interface

CONFIG. /INTELLIGENT ANALYSIS

2. Single Virtual Fence

Deployment Area Settings

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 6-6

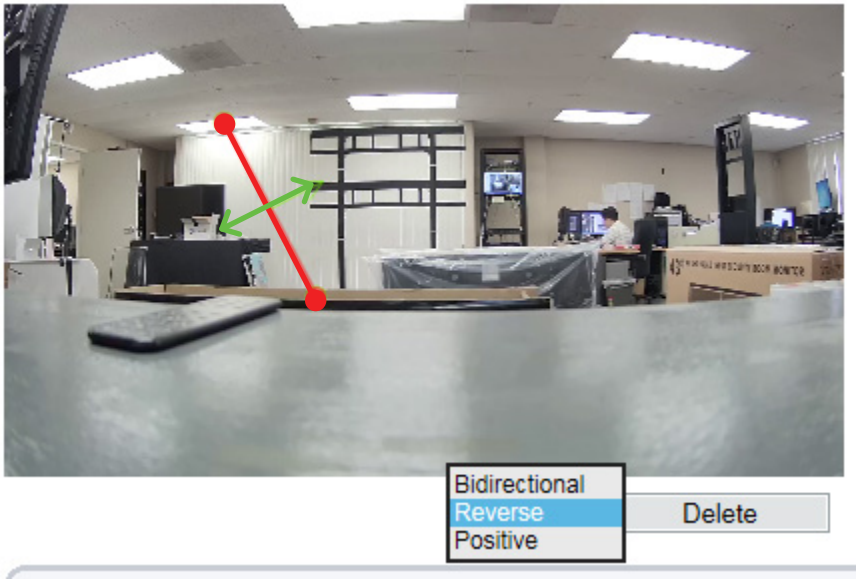


Figure 6-6 Deployment Area Setting Interface

Note

- 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 human foot as the recognition target cannot be too short, because a short single virtual fence tends to miss targets.

CONFIG. /INTELLIGENT ANALYSIS

3. Double Virtual Fence

Function Definition

Double virtual fence refers to two lines that are set at a concerned special position within the field of view and specify the forbidden travel diretion. When the targets of specified types (such as human or vehicle) move along the set travel direction and cross these lines in a certain order (line 1 folled by line 2) in pass max time, an alarm is generated.

Function Settings

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

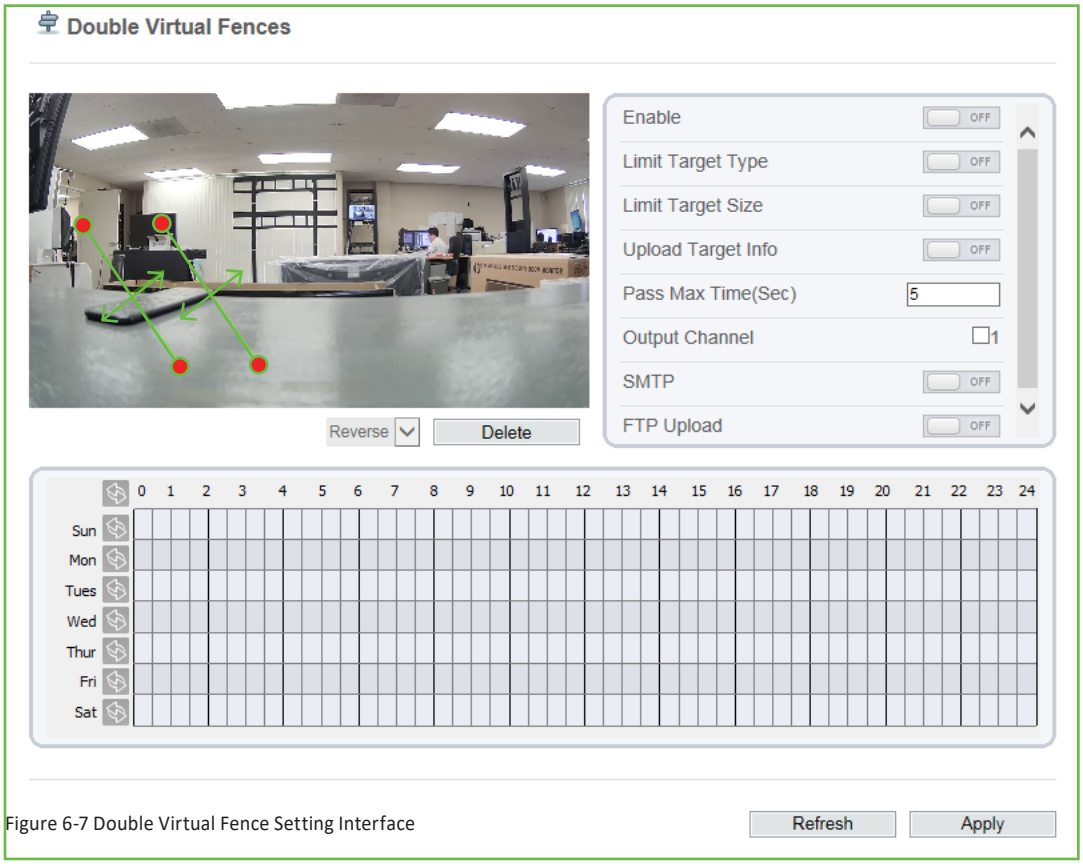


Figure 6-7 Double Virtual Fence Setting Interface

Step 2 Set all parameters for the double virtual fence. Table 6-3 describes the specific parameters.

CONFIG. /INTELLIGENT ANALYSIS

3. Double Virtual Fence

Settings

Table 6-3 Double Virtual Fence Parameter Description

Parameter	DESCRIPTION	Setting
Enable	Enable the button to enable the alarm.	**[How to set]** Click to enable **[Default Value]** Off
Limit Target Type	Effective alarms are set based on target type, with options of human, vehicle, or both. When the device is used indoors, because of small space and large targets, alarms are triggered by human sometimes even if vehicle is selected, leading to false alarms. It is recommended to set the target type to human for indoor use.	**[How to set]** Click to enable Limit Target Type. **[Default Value]** Off
Type	When limit target type is enabled, you can select which type of objects will be scanned. You can select among car, person or car/person.	**[How to set]** Choose from the drop-down list **[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]** Check the box **[Default Value]** Off
Alarm Record	Enable the button to enable the alarm record	**[How to set]** Click to enable **[Default Value]** Off
SMTP	Enable the button to enable SMTP sever.	**[How to set]** Click to enable **[Default Value]** Off
FTP Upload	Enable the button to enable File Transfer Protocol.	**[How to set]** Click to enable **[Default Value]** Off

CONFIG. /INTELLIGENT ANALYSIS

3. Double Virtual Fence

Deployment Time Settings

Setting deployment time: Click to select any time point within 0:00-24:00 from Monday to Sunday; or hold down the left mouse button, drag and release the mouse to select the deployment time within 0:00-24:00 from Monday to Sunday, and then click Apply to successfully set the time. Note: When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

Deleting deployment time: Select the week on the left of set time which becomes red after selection, as shown in Figure 6-8, and then click Delete to delete the deployment time. You can also delete selected deployment time by means of inverse selection.

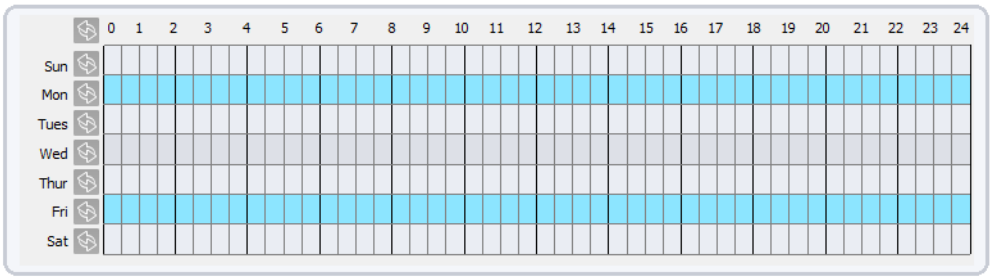


Figure 6-8 Deployment Time Setting Interface

CONFIG. /INTELLIGENT ANALYSIS

3. Double Virtual Fence

Deployment Area Settings

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, two virtual fences are generated. Choose one to set the direction to Positve or Reverse.

Setting double virtual fence: 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 delte 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 the virtual fence. You can do right-click to delete the double virtual fences as shown in Figure 6-9

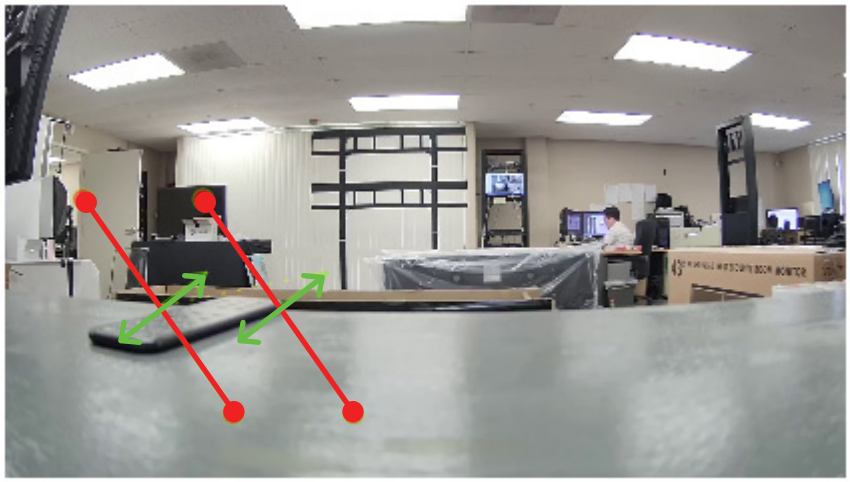


Figure 6-9 Deployment Area Setting Interface

Note

- 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 human shapes as the recognition target cannot be too short, because short double virtual fences tend to miss targets.

CONFIG. /INTELLIGENT ANALYSIS

4. Multiple Loiter

Function Definition

Multiple loiter allows setting the shortest loitering time for multiple targets of specified type (such as human or vehicle) within the deployment area in the field of view. When the loitering time of the multiple targets within this area meets the set shortest loitering time, an alarm is generated.

Function Settings

Step 1 Select **Configuration > Intelligent Analysis > Multiple Loiter** to access the Multiple Loiter setting interface, as shown in Figure 6-10.

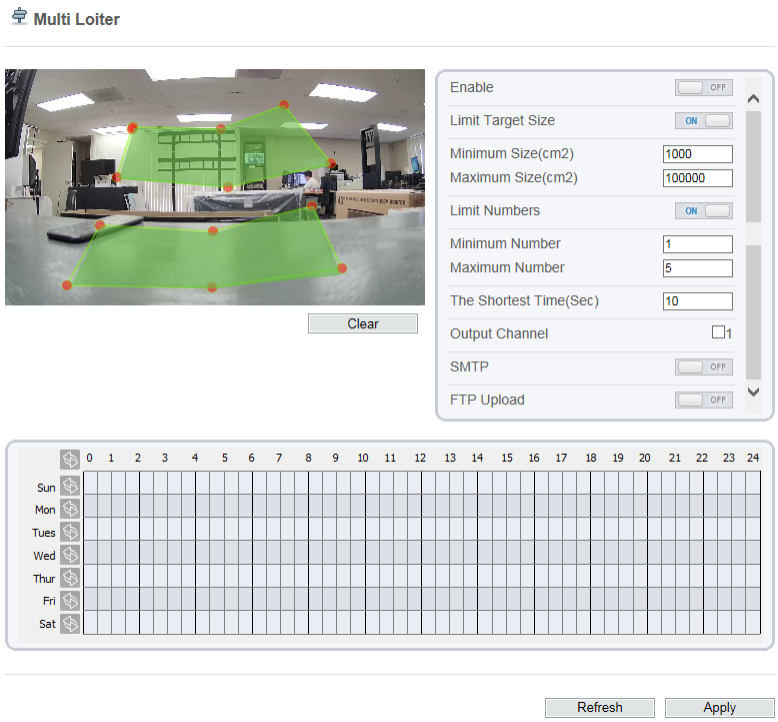


Figure 6-10 Loiter Interface

Step 2 Set all parameters for the Multiple Loiter. Table 6-4 describes the specific parameters.

CONFIG. /INTELLIGENT ANALYSIS

4. Multiple Loiter

Settings

Table 6-4 Multiple Loiter Parameter Description

Parameter	DESCRIPTION	Setting
Enable	Enable the button to enable the alarm.	**[How to set]** Click to enable **[Default Value]** Off
Limit Numbers	When Limit Numbers is set to OFF, an alarm is generated no matter how many people loiter. When Limit Numbers is set to ON, if the minimum number is set to 2 and the maximum number is set to 3, an alarm is generated for 2-3 people loitering. Other settings are the same as loitering.	**[How to set]** Click to enable Limit Numbers
The Shortest Time (Sec)	The time that a target object spends in loitering cannot be less than the shortest loitering time. Setting range: 5-60 seconds.	**[How to set]** Enter a value in the area box. **[Default Value]** 10
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]** Check the box **[Default Value]** Off
Alarm Record	Enable the button to enable the alarm record	**[How to set]** Click to enable **[Default Value]** Off
SMTP	Enable the button to enable SMTP sever.	**[How to set]** Click to enable **[Default Value]** Off
FTP Upload	Enable the button to enable File Transfer Protocol.	**[How to set]** Click to enable **[Default Value]** Off

CONFIG. /INTELLIGENT ANALYSIS

4. Multiple Loiter

Deployment Time Settings

Setting deployment time: Click to select any time point within 0:00-24:00 from Monday to Sunday; or hold down the left mouse button, drag and release the mouse to select the deployment time within 0:00-24:00 from Monday to Sunday, and then click Apply to successfully set the time. Note: When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

Deleting deployment time: Select the week on the left of set time which becomes red after selection, as shown in Figure 6-11, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

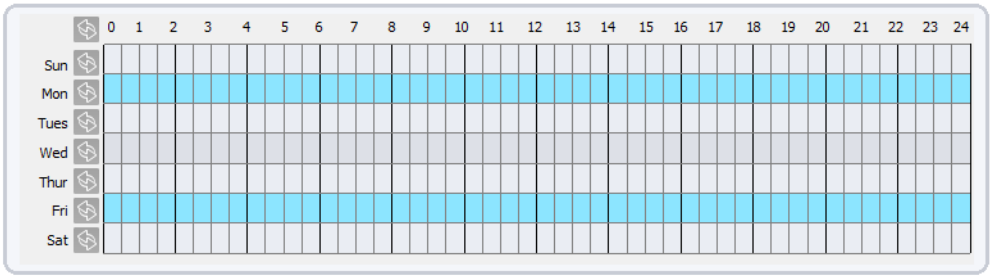


Figure 6-11 Deployment Time Setting Interface

CONFIG. /INTELLIGENT ANALYSIS

4. Multiple Loiter

Deployment Area Settings

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 6-12

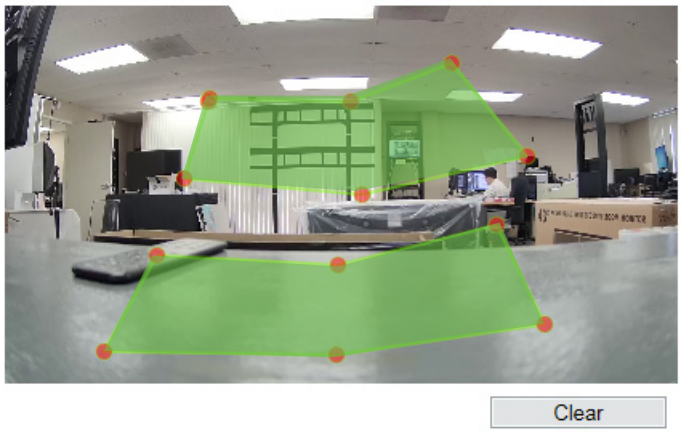


Figure 6-12 Deployment Area Setting Interface

Note

- A drawn line cannot cross another one, or the line drawing fails.
- Any shape with 32 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.

CONFIG. /INTELLIGENT ANALYSIS

5. Converse

Function Definition

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

Function Settings

Step 1 Select **Configuration > Intelligent Analysis** > **Converse** to access the Converse setting interface, as shown in Figure 6-13.

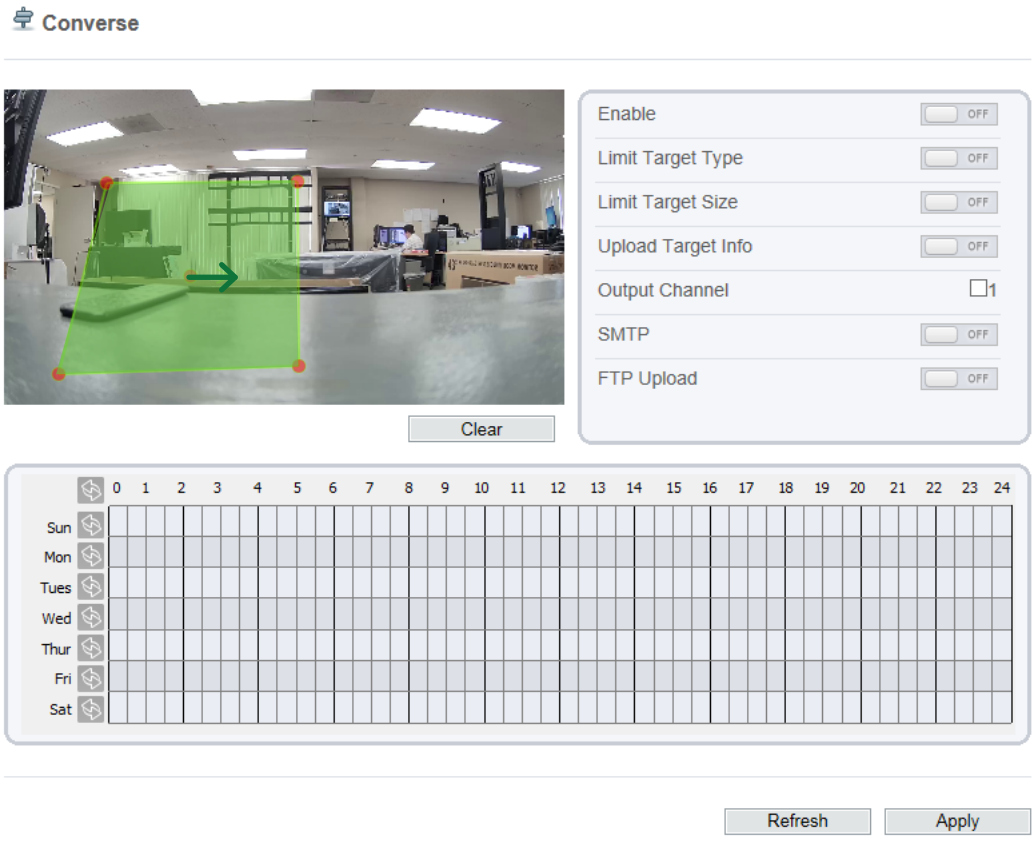


Figure 6-13 Converse Interface

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

CONFIG. /INTELLIGENT ANALYSIS

5. Converse

Settings

Table 6-5 Converse Parameter Description

Parameter	DESCRIPTION	Setting
Enable	Enable the button to enable the alarm.	**[How to set]** Click 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.	**[How to set]** Check the box **[Default Value]** Off
Alarm Record	Enable the button to enable the alarm record	**[How to set]** Click to enable **[Default Value]** Off
SMTP	Enable the button to enable SMTP sever.	**[How to set]** Click to enable **[Default Value]** Off
FTP Upload	Enable the button to enable File Transfer Protocol.	**[How to set]** Click to enable **[Default Value]** Off

Deployment Time Settings

Setting deployment time: Click to select any time point within 0:00-24:00 from Monday to Sunday; or hold down the left mouse button, drag and release the mouse to select the deployment time within 0:00-24:00 from Monday to Sunday, and then click Apply to successfully set the time. Note: When you select time by dragging the cursor, the cursor cannot be moved out of the time area. Otherwise, no time can be selected.

Deleting deployment time: Select the week on the left of set time which becomes red after selection, as shown in Figure 6-14, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

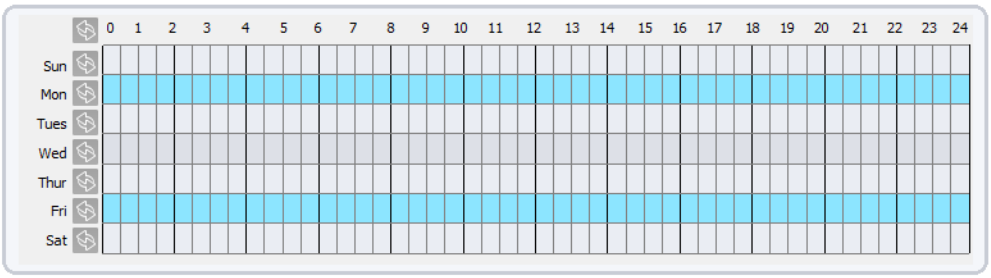


Figure 6-14 Deployment Time Setting Interface

CONFIG. /INTELLIGENT ANALYSIS

5. Converse

Deployment Area Settings

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 6-15.

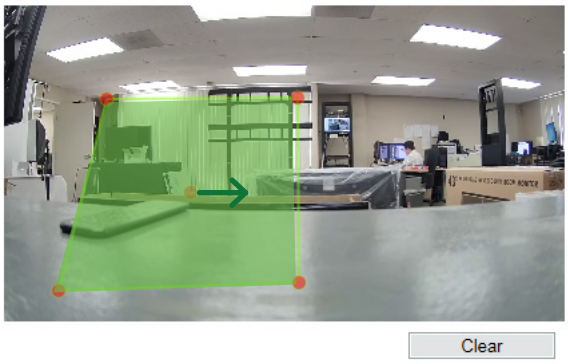


Figure 6-15 Deployment Area Setting Interface

Note

- A drawn line cannot cross another one, or the line drawing fails.
- Any shape with 32 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.

CONFIG. /INTELLIGENT ANALYSIS

6. People Count

Function Settings

Caution ! This function will be available soon.

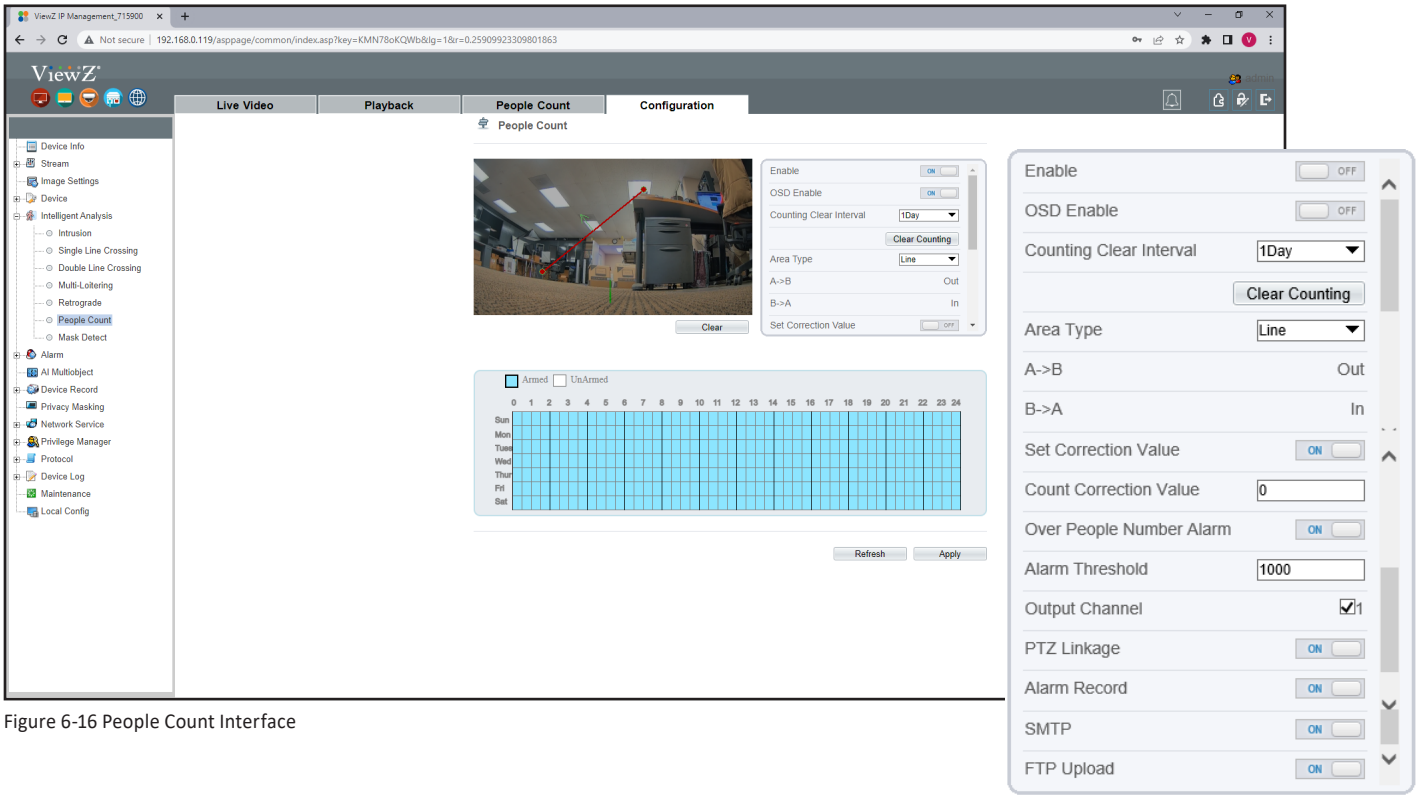


Figure 6-16 People Count Interface

Step 1 Select **Configuration > Intelligent Analysis** > **People Count** to access the people count setting. The **People count** page is displayed, as shown in Figure 6-16.

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

CONFIG. /INTELLIGENT ANALYSIS

6. People Count

Settings

Table 6-6 People Count Parameter Description

Parameter	DESCRIPTION	Setting
Enable	Enable the button to enable the people count.	**[How to set]** Click the button **[Default Value]** Off
OSD Enable	Enable the OSD, the count data will show on live video screen.	**[How to set]** Click the button **[Default Value]** Off
Counting Clear Interval	The camera will clear counting data at the setting interval. Click the ”Clear Counting”, clearing the data immediately.	**[How to set]** Select from the drop-down list. **[Default Value]** 12 hours
Area Type	Draw a line on live video screen. The label of A and B indicate out and in.	**[How to set]** Select from the drop-down list. **[Default Value]** Line
Set Correction Value	Enable, set the count correction value, it can be positive or negative. For example, if there are 30 people enter the area before counting, input 30 to to correct. If 30 people go out the area, input -30.	**[How to set]** Enter a value in the area box. **[Default Value]** 0
Over People Number Alarm	Enable, if the counting number is pass the threshold, it will alarm.	**[How to set]** Click the button **[Default Value]** Off
Alarm Threshold	The threshold of enable alarm.	**[How to set]** Click the button Enter a value in the area box. **[Default Value]** 1000
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered.	**[How to set]** Click the button **[Default Value]** Off
Alarm Record	Enable the button to enable the alarm record.	**[How to set]** Click the button **[Default Value]** Off
SMTP	Enable the button to enable SMTP sever. The parameters of SMTP can be set at Configuration > Network Service > SMTP interface	**[How to set]** Click the button **[Default Value]** Off
FTP Upload	Enable the button to enable File Transfer Protocol. The parameters of FTP can be set at Configuration > Network Service > FTP interface.	**[How to set]** Click the button **[Default Value]** Off

CONFIG. /INTELLIGENT ANALYSIS

7. Mask Detection

Function Definition

Mask detection let user to catch unmasked person and when detecting unmasked person, PVM can show the message or make a sound to alert.

Function Settings

Step 1 Select **Configuration > Intelligent Analysis** > **Mast Detect** to access the mask detect interface, as shown in Figure 5-35.

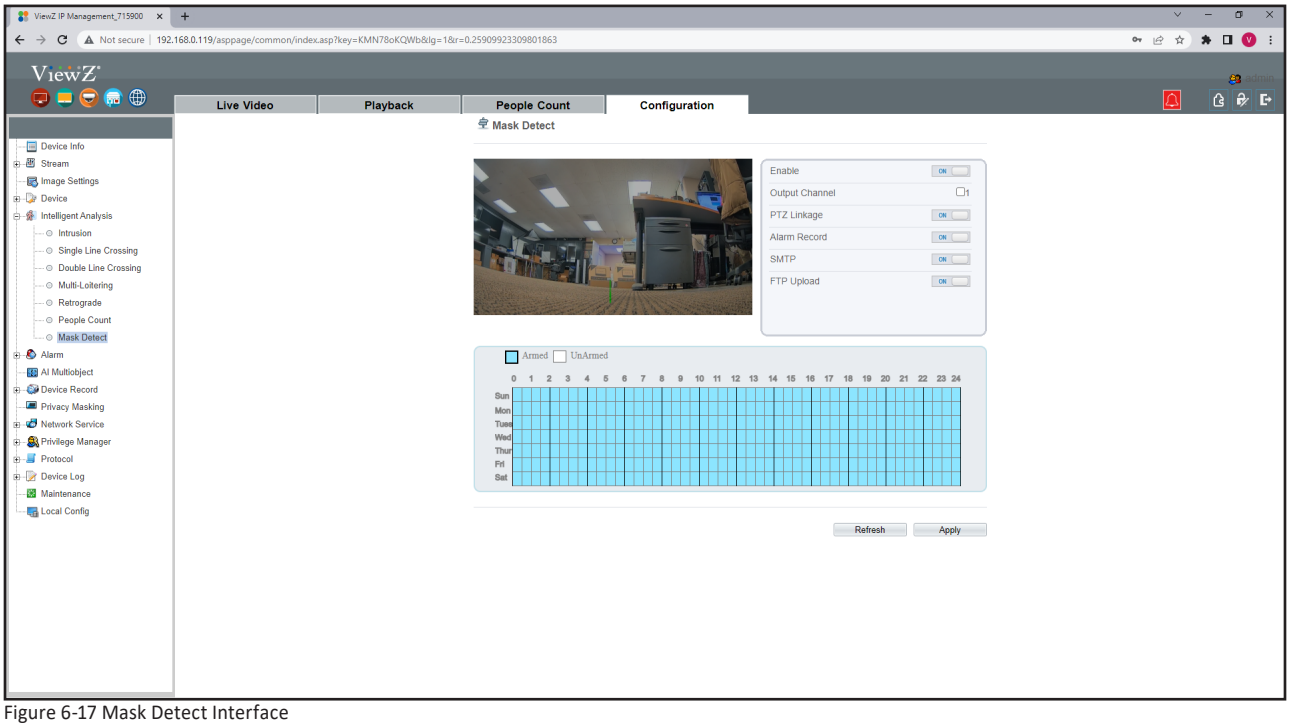


Figure 6-17 Mask Detect Interface

Step 2 Set the parameters according to Table 6-7.

CONFIG. /INTELLIGENT ANALYSIS

7. Mask Detection

Settings

Table 6-7 Mask Detect Parameter Description

Parameter	DESCRIPTION	Setting
Enable	Enable the button to enable the mask detect.	**[How to set]** Click the button **[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 the button **[Default Value]** Off
PTZ Linkage	Enable the button to enable the ptz setup.	**[How to set]** Click the button **[Default Value]** Off
Alarm Record	Enable the button to enable the alarm record.	**[How to set]** Click the button **[Default Value]** Off
SMTP	Enable the button to enable SMTP sever. The parameters of SMTP can be set at Configuration > Network Service > SMTP interface	**[How to set]** Click the button **[Default Value]** Off
FTP Upload	Enable the button to enable File Transfer Protocol. The parameters of FTP can be set at Configuration > Network Service > FTP interface.	**[How to set]** Click the button **[Default Value]** Off

CONFIGURATION / ALARM

1. Setup Alarm Output Parameters

Procedure

Step 1 Choose Alarm **Configuration > Alarm > Alarm Output**.
The **Alarm Output** page is displayed, as shown in Figure 7-1.

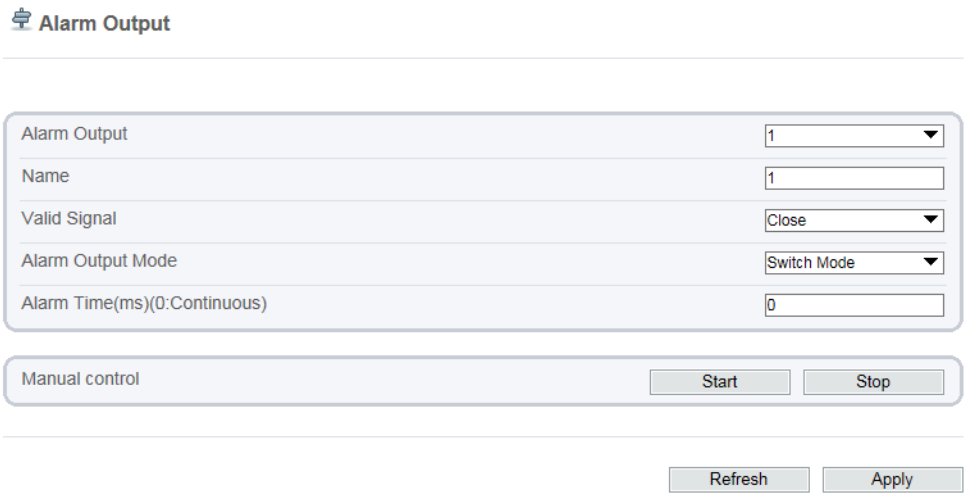


Figure 7-1 Alarm Output page

Step 2 Set the parameters according to Table 7-1.

CONFIGURATION / ALARM

1. Setup Alarm Output Parameters

Procedure

Table 7-1 Alarm Output parameters

Parameter	DESCRIPTION	Setting
Alarm Output	ID of the alarm output channel. **NOTE** The number of alarm output channels depends on the device model.	**[How to set]** Select a value from the drop-down list box **[Default Value]** 1
Name	Alarm output channel name.	**[Value range]** 0 to 32 bytes
Valid Signal	The options are as follows: • **Close**: An alarm is generated when an external alarm signal is received. • **Open**: An alarm is generated when no external alarm signal is received.	**[How to set]** 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 can be configured.	**[How to set]** 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.	**[How to set]** Select a value from the drop-down list box **[Default Value]** 0 **[Value range]** 0 to 86400 seconds
Manual Control	Control the alarm output.	

Step 3 Click **Apply**. The message "**Apply success!**" is displayed.

CONFIGURATION / ALARM

2. Setup Disk Alarm Parameters

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 > Disk Alarm**. The **Disk Alarm** page is displayed, as shown in Figure 7-2.

Figure 7-2 Disk Alarm page

Step 2 Click the button on to enable **Disk alarm**.

Step 3 Configure the **Alarm Interval**.

Step 4 Select **Output Channel** number.

Step 5 Click **Apply**. The message "Apply success!" is displayed.

Step 6 Click **Confirm**. The system saves the settings.

CONFIGURATION / ALARM

3. Setup Network Alarm Parameters

Procedure

Step 1 Choose **Configuration > Alarm > Network Alarm**.
The **Network Alarm** page is displayed, as shown in Figure 7-3.

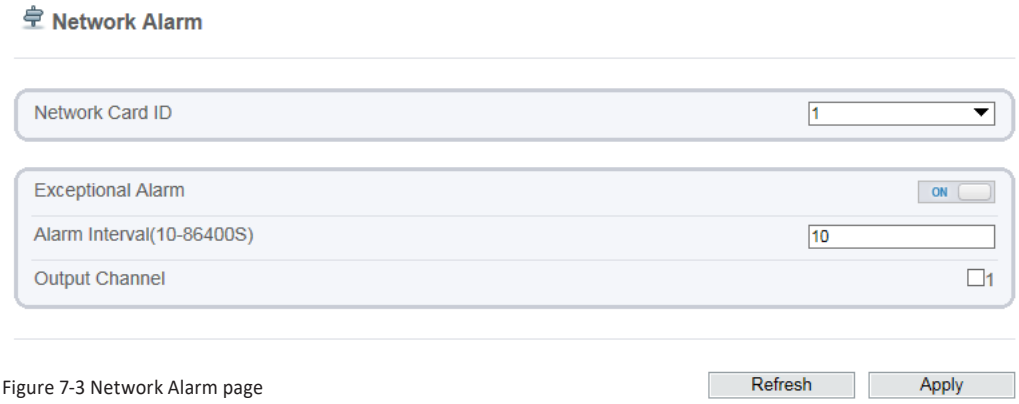


Figure 7-3 Network Alarm page

Step 2 Click the button on to enable exceptional alarm

Step 3 Configure the **alarm interval**.

Step 4 Select **Output Channel** number.

Step 5 Click **Apply**. The message "Apply success!" is displayed.

Step 6 Click **Confirm**. The system saves the settings.

CONFIGURATION / ALARM

4. Setup Day Night Switch Alarm Parameters

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 7-4.

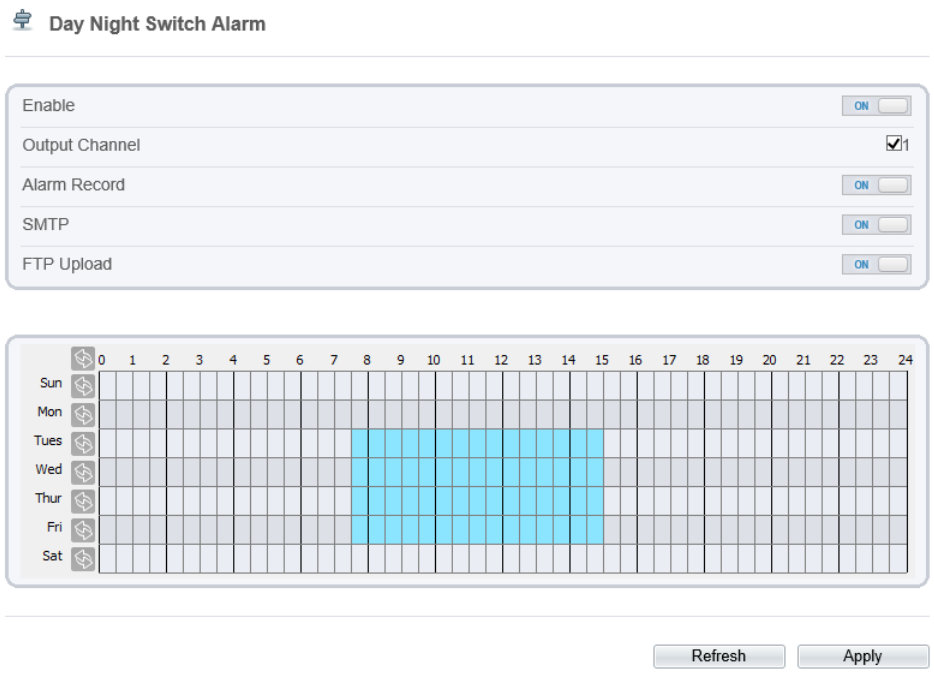


Figure 7-4 Day Night Switch Alarm page

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

CONFIGURATION / ALARM

4. Setup Day Night Switch Alarm Parameters

Procedure

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 7-5.
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.

Note

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

Method 3: Click in the schedule page to select the whole day or whole week.
Deleting deployment time: Click again or inverse selection to delete the selected schedule.

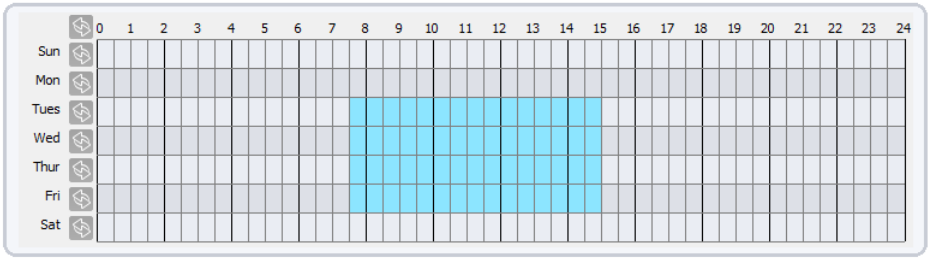


Figure 7-5 Schedule setting page

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.

CONFIGURATION / ALARM

5. Setup I/O Alarm Linkage Parameters

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 7-6.

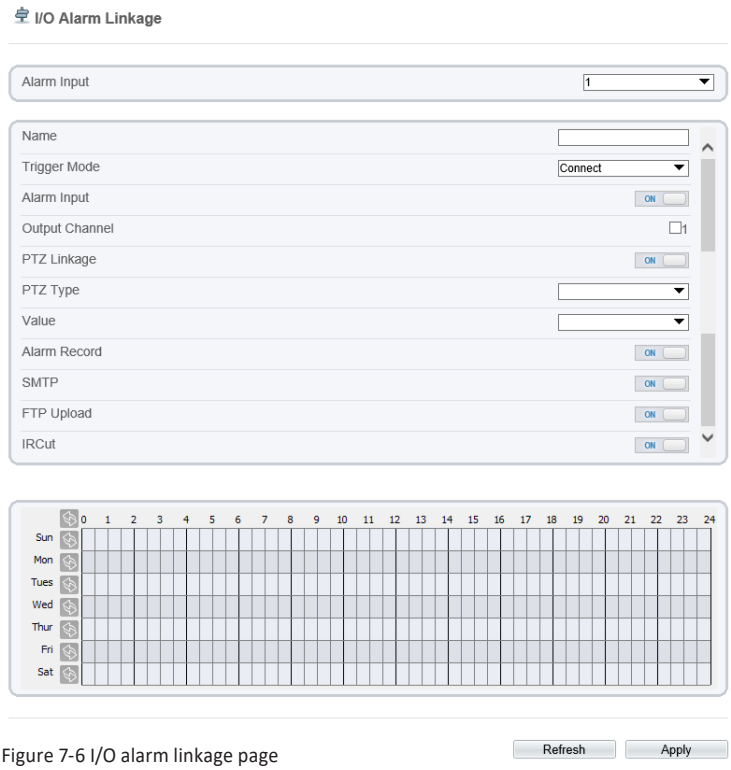


Figure 7-6 I/O alarm linkage page

Step 2 Select the **Alarm Input** value from the drop-down list box.

Step 3 Type the **Alarm Input Channel Name**.

Step 4 Select the **Trigger Mode** from the drop-down list box.

CONFIGURATION / ALARM

5. Setup I/O Alarm Linkage Parameters

Procedure

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 7-7.
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.

Note

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

Method 3: Click in the schedule page to select the whole day or whole week.
Deleting deployment time: Click again or inverse selection to delete the selected schedule.

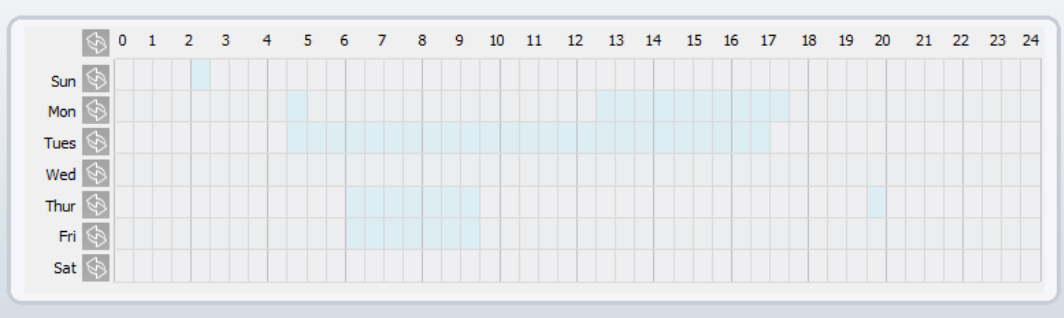


Figure 7-7 Schedule setting page

Step 7 Select **Output channel** from the drop-down list box.

Step 8 Select **PTZ Type** from the drop-down list box - it is not supported

Step 9 Click the button on to enable **Alarm Record**.

Step 10 Click the button on to enable **SMTP**.

Step 11 Click the button on to enable **FTP Upload**.

Step 12 Click Apply.
The message "Apply success!" is displayed.

CONFIGURATION / ALARM

6. Setup Motion Detection Alarm Parameters

Description

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

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

Procedure

Step 1 Choose **Configuration > Alarm > Motion Alarm**. The **Motion Alarm** page is displayed, as shown in Figure 7-8.

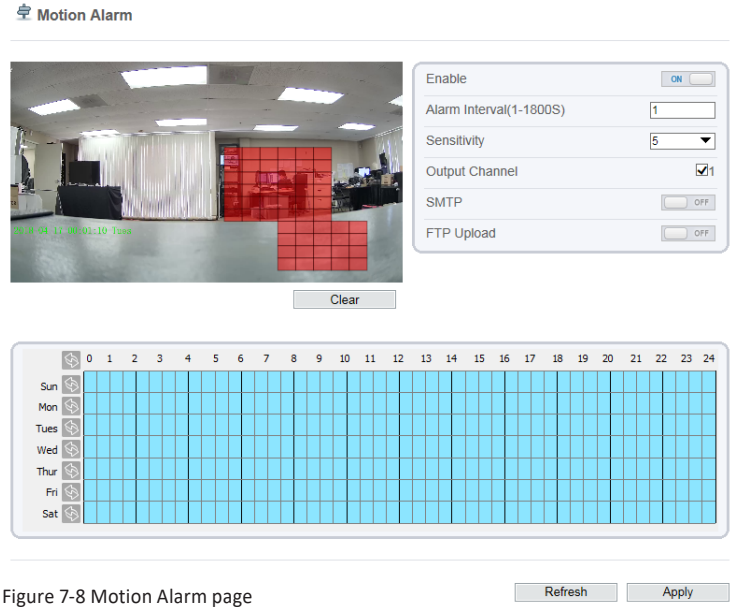


Figure 7-8 Motion Alarm page

Step 2 Click the button **ON** to enable **motion alarm**.

Step 3 Configure the **motion interval** (1-1800 seconds).

Step 4 Configure **sensitivity**. The **1** is the minimum and & **10** is the maximum detection sensitivity.

Step 5 Configure the **schedule time setting.**

CONFIGURATION / ALARM

6. Setup Motion Detection Alarm Parameters

Procedure

Step 6 Configure the detection area.

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

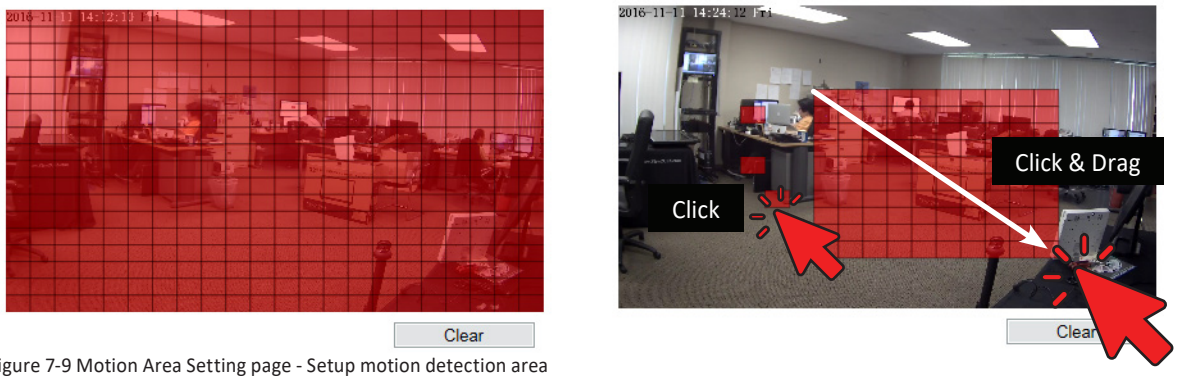


Figure 7-9 Motion Area Setting page - Setup motion detection area

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

Note

- Click **Clear** to delete a detection area.
- Click **Reverse** to select the area out of specified frames as the detection area.

Step 7 Select **output channel**.

Step 8 Turn on **Alarm record**.

Step 9 Turn on the **SMTP** notice. If you turn on, system will send an email about motion detection alarm.

Step 9 Turn on the **FTP Upload**.

Step 10 Turn on the **Motion Detect Stream**.

Step 11 Click Apply.
The message "Apply success!" is displayed.

CONFIGURATION / AI MULTIOBJECT

1. Setup AI Multiobject Parameters

Description

Caution ! This function will be available soon.

On the AI Multiobject page, you can perform the following operations:

- Set the face detection area.
- Set the detected face image uploading interval.
- Set the detected face image quality.
- Configure the face detection mark display.

Procedure

Step 1 Choose **Configuration > AI Multiobject**. The **AI Multiobject** page is displayed, as shown in Figure 8-1.

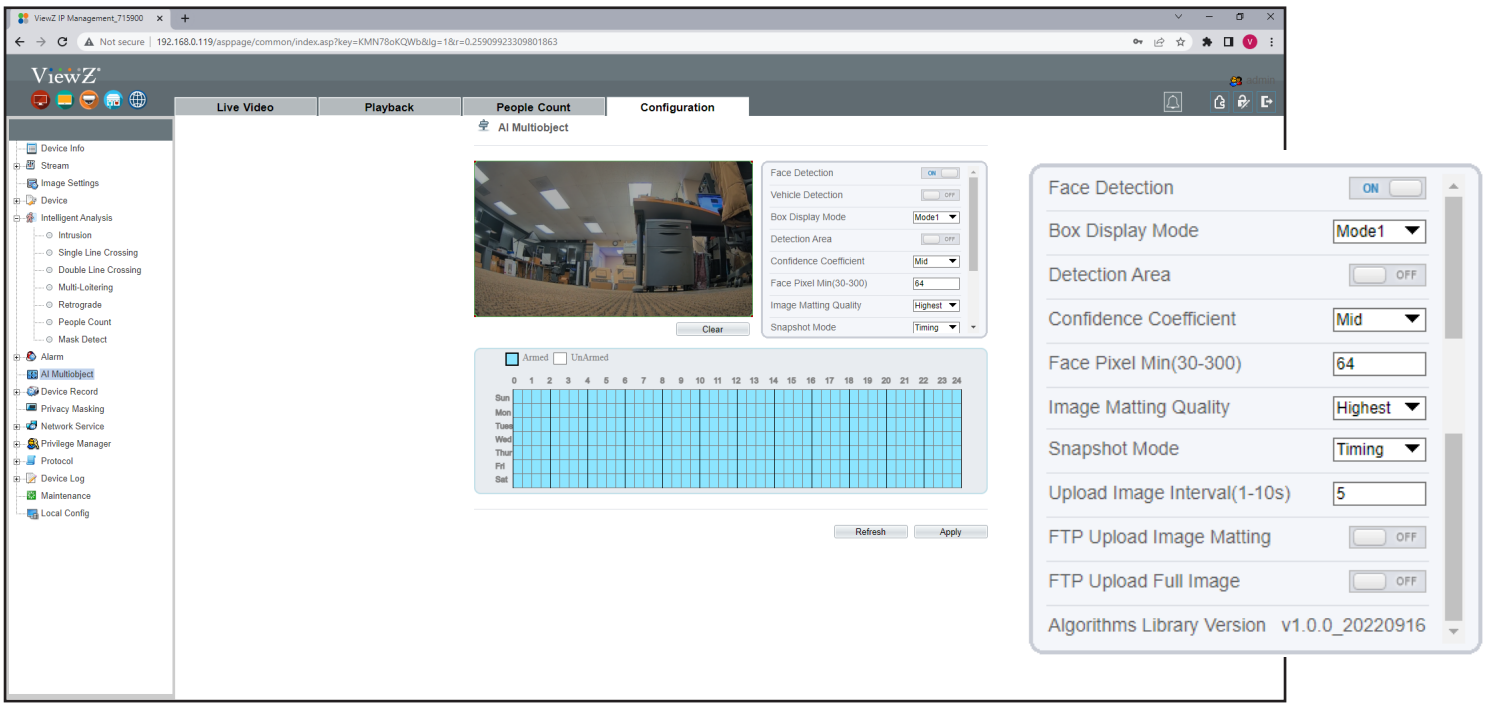


Figure 8-1 AI Multiobject page

Step 2 Click the button **ON** to enable **Face Detevction**.

Step 3 Set the parameters according to Table 8-1.

CONFIGURATION / AI MULTIOBJECT

1. Setup AI Multiobject Parameters

Procedure

Table 8-1 AI Multiobject parameters

Parameter	DESCRIPTION	Setting
Face Detection	The camera will snap the face when someone appear in live video.	**[How to set]** Click the button **[Default Value]** Off
Box Display Mode	Enable the function and a trace frame will show at live video. • **Mode 1**: The rectangle box will display at scanned person. • **Mode 2**: The corner edge will display at scanned person.	**[How to set]** Select a value from the drop-down list box **[Default Value]** Off
Detection Area	Enable to set a detection area, and the frame will show at live video.	**[How to set]** Click the button **[Default Value]** Off
ConfidenceCoefficient	The range of snap image, there are three type, such as high, mid and low. The higher the confidence, the better the snap quality and the fewer snapshots.	**[How to set]** Select a value from the drop-down list box **[Default Value]** Mid
Face Pixel Min (30-300)	30-300 pixels, the smaller the pixel be set, the more face will be captured, but it may be mistaken.	**[How to set]** Enter a value manually. **[Default Value]** 30
ImageMattingQuality	The quality of scanned image, There are four modes can be chosen, such as low, mid,high and highest.	**[How to set]** Select a value from the drop-down list box **[Default Value]** Mid
Snapshot Mode	There are two modes can be chosen, such as timing, and optimal	**[How to set]** Select a value from the drop-down list box **[Default Value]** Timing
Upload Image Interval(1-10s)	At timing mode, set the interval of upload image.	**[How to set]** Enter a value manually. **[Default Value]** 5

Step 3 Click **Apply**. The message "**Apply success!**" is displayed.

CONFIGURATION / DEVICE RECORD

1. Setup Record Policy Parameters

Description

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 9-1.

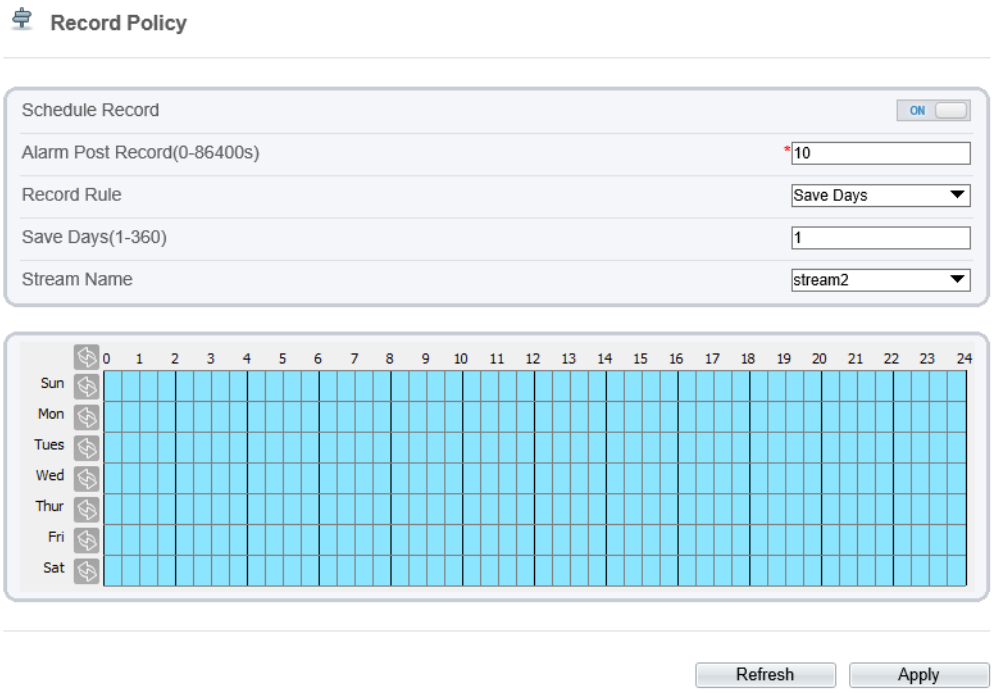


Figure 9-1 Record policy page

Step 2 Click the button **ON** to enable **Record Policy**.

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

CONFIGURATION / DEVICE RECORD

1. Setup Record Policy Parameters

Procedure

Table 9-1 Record policy parameters

Parameter	DESCRIPTION	Setting
Schedule Record	Enables schedule record that you can configure the time policy.	**[How to set]** Click the button **[Default Value]** Off
Alarm Post Record(0-86400s)	Recording duration (in seconds) after an alarm is generated.	**[How to set]** Enter a value manually. **[Default Value]** 10
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.	**[How to set]** Select a value from the drop-down list box **[Default Value]** Cycle store
Stream Name	Name of the stream.	**[How to set]** Select a value from the drop-down list box **[Default Value]** Stream 1

Step 3 Configure a recording plan on time table.
You can configure the system to record videos around the clock or in schedule.

Step 4 Click **Apply**.

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

CONFIGURATION / DEVICE RECORD

2. Setup Record Directory Parameters

Description

Recordings can be stored in an SD card or NAS.

Procedure

Step 1 Choose **Configuration > Device Record > Record Directory**. The **Record Directory** page is displayed, as shown in Figure 9-2.

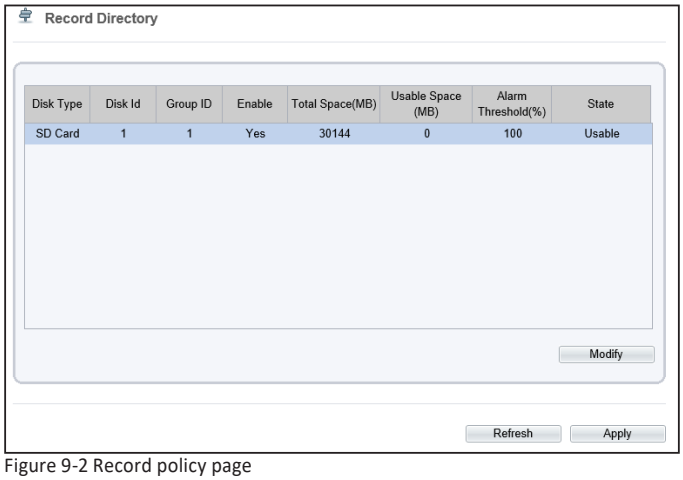


Figure 9-2 Record policy page

Table 9-2 Record directory parameters

Parameter	DESCRIPTION	Setting
Disk Type	Recording directory type, which can be an SD card or a NAS.	**[How to set]** The parameter can be set manually
Disk ID	Indicates the Disk ID.	
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.	

CONFIGURATION / DEVICE RECORD

2. Setup Record Directory Parameters

Procedure

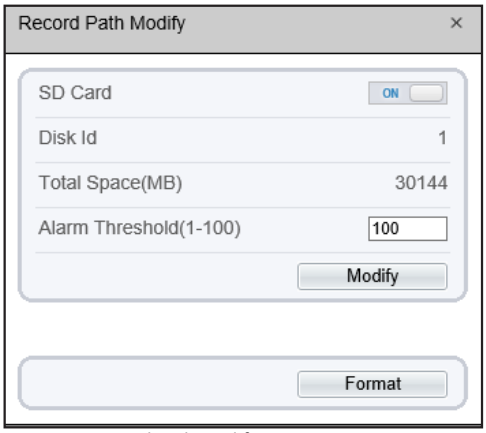


Figure 9-3 Record path modify page

Step 1 Choose **Configuration > Device Record > Record Directory**. Click **Modify**, then **Record Path Modify** page is displayed, as shown in Figure 9-3.

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

Table 9-3 Record path modify parameters

Parameter	DESCRIPTION	Setting
SD Card	Enable SD card to enable record.	**[How to set]** Click the button **[Default Value]** Off
Disk ID	ID of SD card.	**N / A**
Total Space(MB)	Total disk space read automatically.	SD Card size will be displayed
Alarm Threshold (1-100)	The camera will alarm when used Space achieves the alarm threshold.	**[How to set]** Enter a value manually. **[Default Value]** 100
Format	Erase the SD card	

Step 4 Click **Apply**.

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

CONFIGURATION / PRIVACY MASK

Configuration of the Privacy Mask Function

Procedure

Choose **Configuration > Privacy Masking**.
The **Privacy Masking** page is displayed, as shown in Figure 10-1.

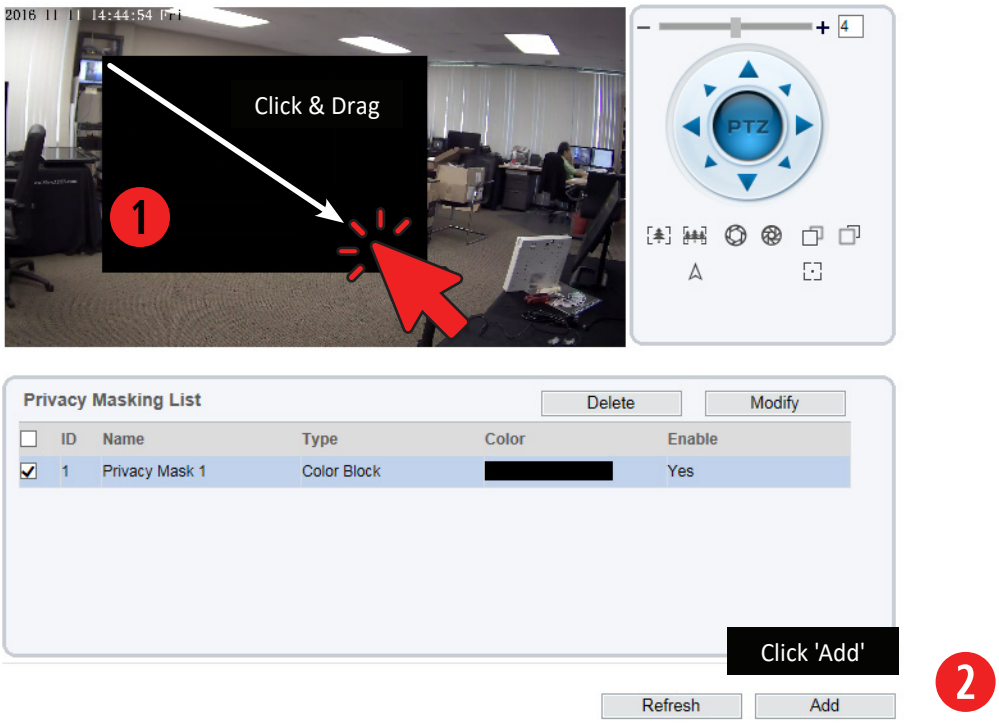


Figure 10-1 Privacy Masking Page

Step 2 Click the button on to enable Privacy Masking, and configure the privacy mask type, color and alpha parameters.

Step 3 Press and hold the left mouse button, and drag on the preview image to cover the part to be masked.

Note

- 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 five areas can be masked.
- You can click **Refresh** to configure the masked areas again.
- **Delete** button is to delete Masking area. **Modify** button is to redraw the masking area of current masking.

CONFIGURATION / PRIVACY MASK

Configuration of the Privacy Mask Function

Procedure

Table 10-1 Privacy Mask parameters

Parameter	DESCRIPTION	Setting
ID	ID of Privacy Masking.	N/A
Name	Name of privacy Masking.	**[Setting method]** Click the name and the drop-down list box. **[Default Value]** Blank
Type	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.	1. Select a privacy masking from the Privacy Masking List. 2. Click a parameter and modify it. 3. Click Modify, the privacy masking is modified successfully.

Step 4 Click **Apply**. The message "Apply success!" is displayed.

CONFIG. / NETWORK SERVICE

1. Setup 802.1x Parameters

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 **Network Service > 802.1x**.
The **802.1 page** is displayed, as shown in Figure 11-1.

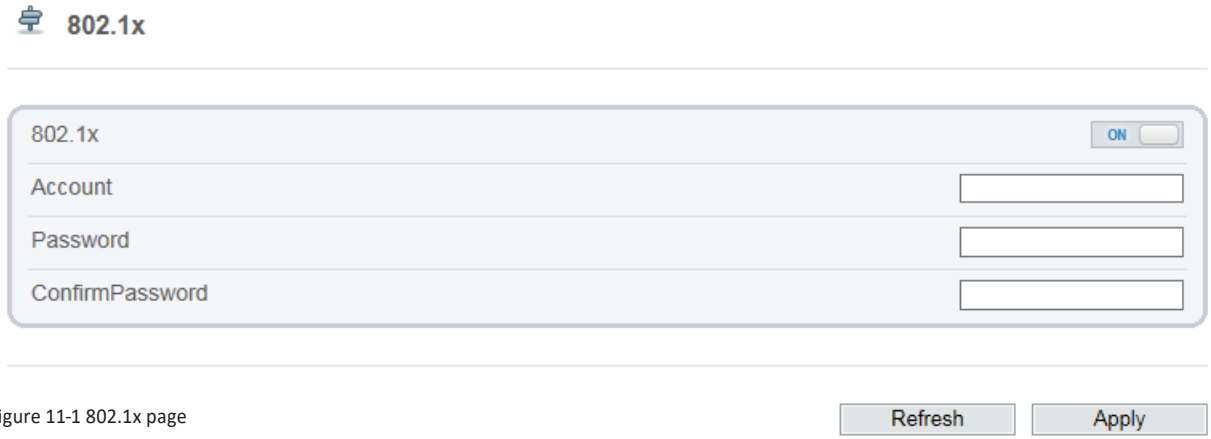


Figure 11-1 802.1x page

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.

CONFIG. / NETWORK SERVICE

2. Setup DDNS Parameters

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 **Network Service > DDNS**.
The **DDNS page** is displayed, as shown in Figure 11-2.

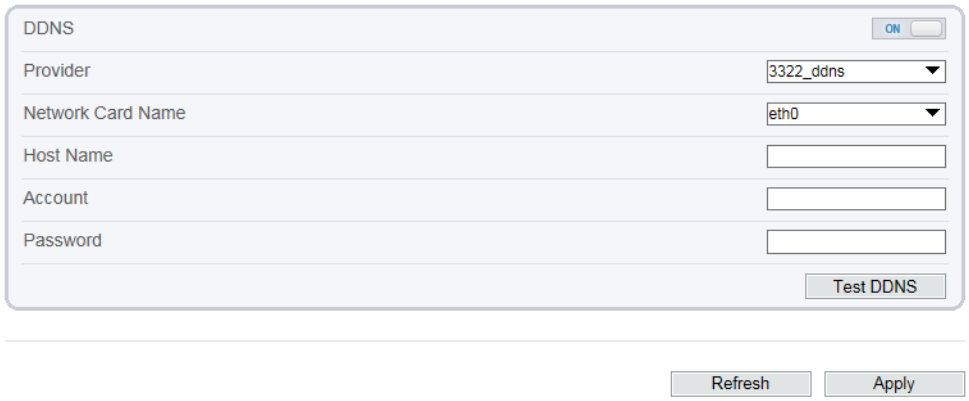


Figure 11-2 DDNS page

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

CONFIG. / NETWORK SERVICE

2. Setup DDNS Parameters

Procedure

Table 11-1 DDNS parameters

Parameter	DESCRIPTION	Setting
DDNS	Indicates whether to enable the DDNS service.	**[Setting method]** Click the button **ON**. **[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	Installed network card name	
Host Name	Host name customized by a user	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Account	User name to login into the DDNS server	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Password	Password to login into the DDNS server	**[Setting method]** Enter a value manually. **[Default Value]** Blank

Step 3 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

3. Setup PPPoE Parameters

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 **Network Service > PPPoE**.
The **PPPoE page** is displayed, as shown in Figure 11-3.

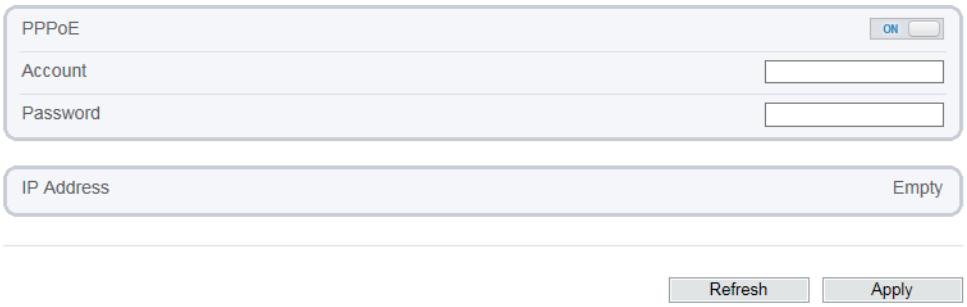


Figure 11-3 PPPoE page

Step 2 Click the button on to enable PPPoE.

Step 3 Set the parameters according to Table 11-2.

CONFIG. / NETWORK SERVICE

3. Setup PPPoE Parameters

Procedure

Table 11-2 PPPoE parameters

Parameter	DESCRIPTION	Setting
PPPoE	Indicates whether to enable the PPPoE service.	**[Setting method]** Click the button **ON**. **[Default Value]** OFF
Account	PPPoE user name provided by the network carrier.	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Password	Password provided by the network carrier.	**[Setting method]** Enter a value manually. **[Default Value]** Blank
IP Address	The parameter is automatically filled by network.	

Step 3 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

4. Setup Port Mapping Parameters

Preparation

With port forwarding can setup the connection between privacy network and public network. Enable the port forwarding to access the privacy network devices from public network.

Procedure

Step 1 Choose **Network Service > Port Mapping**.
The **Port Mapping page** is displayed, as shown in Figure 11-4.

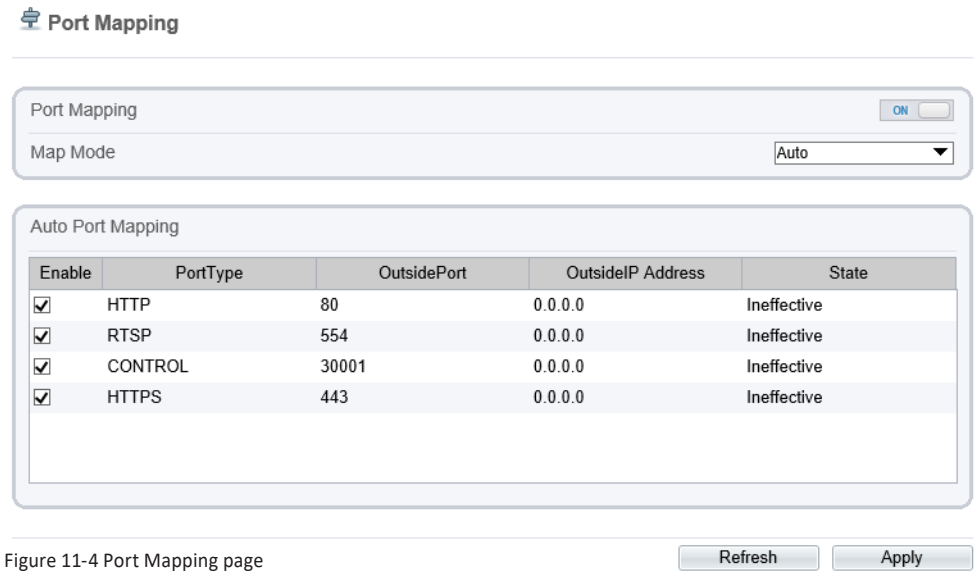


Figure 11-4 Port Mapping page

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

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

CONFIG. / NETWORK SERVICE

4. Setup Port Mapping Parameters

Procedure

Table 11-3 Port Mapping parameters

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 **NOTE** Set this parameter as manual to set custom port number
Port Type	Port Type includes: SSL,(HTTPS) HTTP, RTSP and Control	N / A
Outside Port	Port of outside network.	**[Setting method]** Enter a value manually in map mode. **[Default Value]** HTTP : 80, RTSP : 554, CONTROL : 30001
Outside IP Address	IP address of outside network.	N / A
State	Mapping status	N / A

Step 3 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

5. Setup SMTP Parameters

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 **Network Service > SMTP**.
The **SMTP page** is displayed, as shown in Figure 11-5.

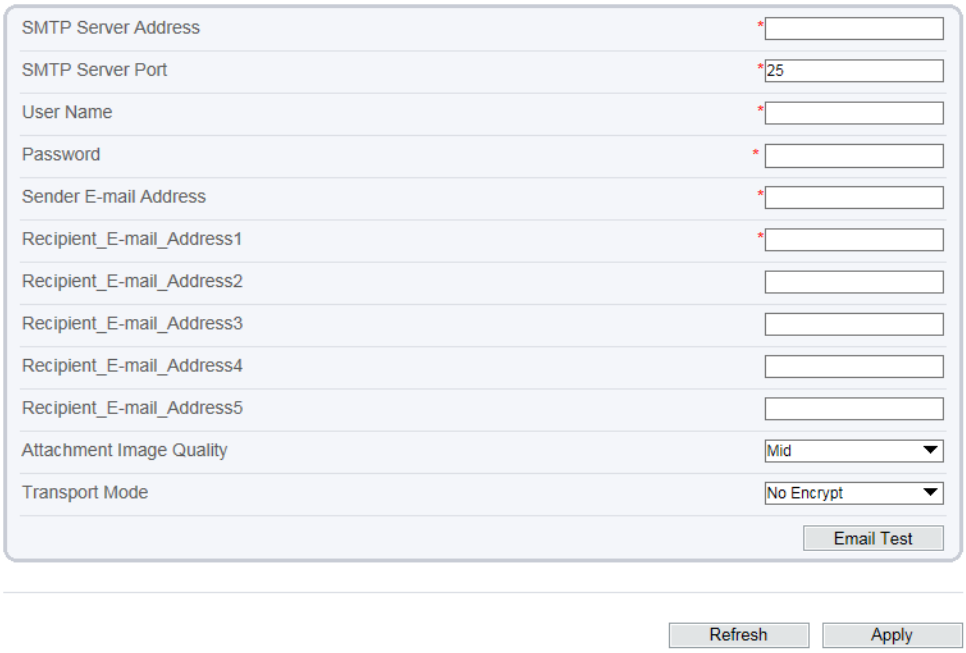


Figure 11-5 SMTP page

Step 2 Set the parameters according to Table 11-4.

CONFIG. / NETWORK SERVICE

5. Setup SMTP Parameters

Procedure

Table 11-4 SMTP parameters

Parameter	DESCRIPTION	Setting
SMTP Server Address	IP address of the SMTP server * Required to type	**[Setting method]** IP address or web address **[Default Value]** Blank
SMTP Server Port	Port number of the SMTP server * Required to type	**[Setting method]** Enter a value manually. **[Default Value]** 25
User Name	User name of the mailbox for sending emails. * Required to type	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Password	Password of the mailbox for sending emails * Required to type	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Send Anonymously	Send the email without sender info	**[Setting method]** Check the box **[Default Value]** Off
Sender E-mail Address	Sender email address * Required to type	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Recipient E-mail Address1	Main Recipient Email address * Required to type * This one can be same as 'User Name'	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Recipient E-mail Address 2-5	Optional Recipient Email addresses	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Transport Mode	Setup Email transfer mode	**[Setting method]** Select a value from the drop-down list box. **[Default Value]** No Encrypt
Send Interval (0-60S)	Setup the interval of Email send	**[Setting method]** Enter a value manually. **[Default Value]** 0

Step 3 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

6. Setup FTP Parameters

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 **Network Service > FTP**.
The **FTP page** is displayed, as shown in Figure 11-6.

Figure 11-6 FTP page

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

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

CONFIG. / NETWORK SERVICE

6. Setup FTP Parameters

Procedure

Table 11-5 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. **[Default Value]** Blank
FTP Port	Port of FTP server.	**[Setting method]** Enter a value manually. **[Default Value]** 21
Account	FTP server account.	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Password	FTP server password.	**[Setting method]** Enter a value manually. **[Default Value]** Blank
FTP Path	FTP Path to save the JPG image.	**[Setting method]** Enter a value manually. **[Default Value]** Blank
Image Quality	Select the media type to send	**[Setting method]** Select a value from the drop-down list box. **[Default Value]** Snapshot

Step 4 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

7. Setup IP Filter Parameters

Description

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

Procedure

Step 1 Choose **Network Service > IP Filter**.
The **FTP page** is displayed, as shown in Figure 11-7.

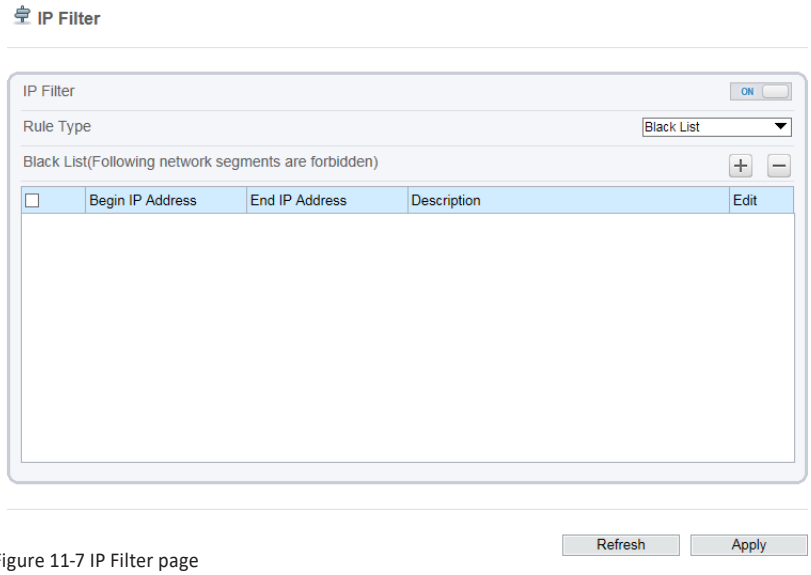


Figure 11-7 IP Filter page

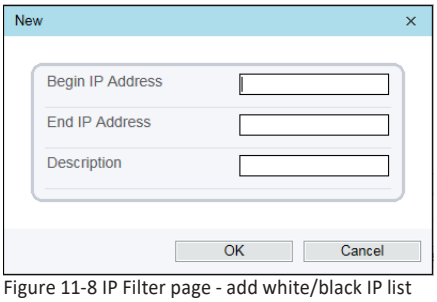


Figure 11-8 IP Filter page - add white/black IP list

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

Step 3 Set the parameters according to Table 11-6.

CONFIG. / NETWORK SERVICE

7. Setup IP Filter Parameters

Procedure

Table 11-6 IP Filter parameters

Parameter	DESCRIPTION	Setting
IP Filter	Indicates whether to enable the IP Filter.	**[Setting method]** Click the button **ON**. **[Default Value]** OFF
Rule Type	IP filter type, includes black list and white list.	**[Setting method]** Select a value from the drop-down list box. **[Default Value]** Black List
Black List	Specified network segment to allow access	**[Setting method]** 1. Click + to enter the add black/white list page, as shown in Fig. 7-8 2. Enter Begin IP Address 3. Enter End IP Address 4. Enter Descrtption 5. Click OK, the black list added successfully.
White List	Specified network segment to prohibit access	**[Setting method]** 1. Click + to enter the add black/white list page, as shown in Fig. 7-8 2. Enter Begin IP Address 3. Enter End IP Address 4. Enter Descrtption 5. Click OK, the black list added successfully.

Step 4 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

8. Setup CGI Alarm Service Center Parameters

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 **Network Service > CGI Alarm Service Center**.
The **FTP page** is displayed, as shown in Figure 11-9.

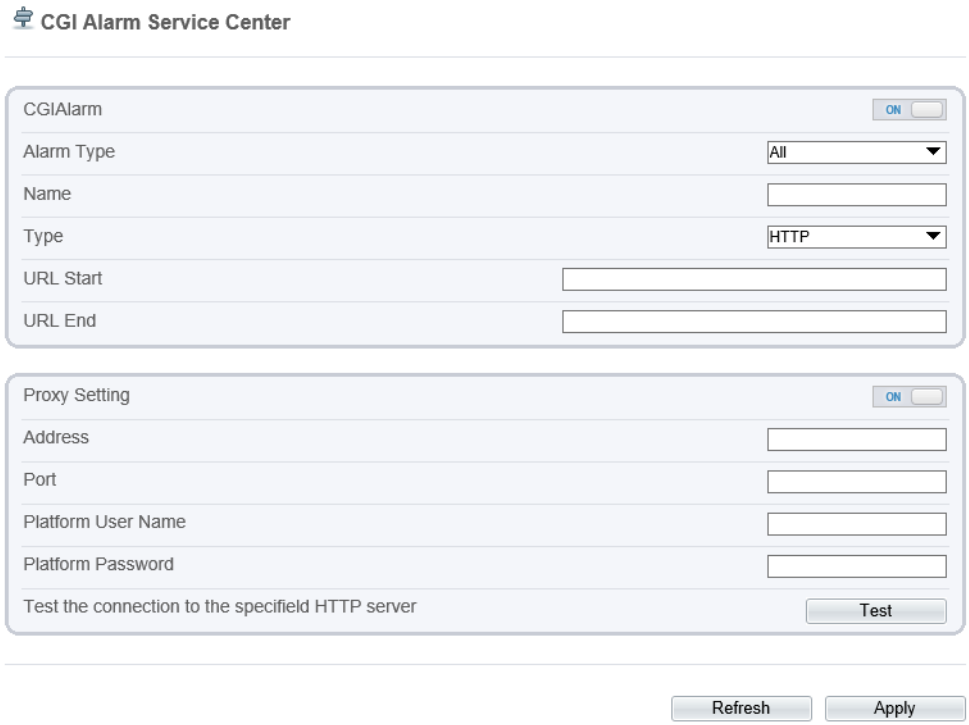


Figure 11-9 **CGI Alarm Service Center** page

Step 2 Click the button on to enable **CGI Alarm Service Center**.

Step 3 Set the parameters according to Table 11-7.

CONFIG. / NETWORK SERVICE

8. Setup CGI Alarm Service Center Parameters

Procedure

Table 11-7 CGI Alarm Service Center parameters

Parameter	DESCRIPTION	Setting
CGI Alarm	Indicates whether to enable the IP Filter.	**[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.
Name	Name of CGI Alarm	**[Default Value]** All **[Setting method]** Enter a value manually.
Type	Type of CGI Alarm.	**[Setting method]** Enter a value manually. **[Default Value]** HTTP
URL Start	Push the alarm message by CGI with start URL	**[Setting method]** Enter a value manually. **For example:** http://192.168.35.74:80/MajorAlarmType & MinorAlarmType & SourceName & DeviceID & DeviceIP & AlarmTime & Description
URL End	Push the alarm message by CGI with end URL	**[Setting method]** Enter a value manually. **For example:** http://192.168.35.74:80/MajorAlarmType&MinorAlarmType& SourceName&DeviceID&DeviceIP& AlarmTime&Description
Proxy Setting	Indicates whether to enable the Proxy. Forwarder server of CGI alarm to forward the CGI alarm.	**[Setting method]** Enter a value manually. **[Default Value]** OFF

CONFIG. / NETWORK SERVICE

8. Setup CGI Alarm Service Center Parameters

Procedure

Table 11-7 CGI Alarm Service Center parameters

Parameter	DESCRIPTION	Setting
Address	IP address of Forwarder server.	**[Setting method]** Enter a value manually.
Port	Port of Forwarder server	**[Setting method]** Enter a value manually.
Platform User Name	User name of forwarder server	**[Setting method]** Enter a value manually.
Platform Password	Password of forwarder server	**[Setting method]** Enter a value manually.
Test the connection to the specified HTTP server	Test if the device connects to the proxy successfully	**[Setting method]** Click Test, if the device connects to the proxy successfully, the message “Test CGI alarm success” is displayed.

Step 4 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

9. Setup SNMP Parameters

Description

Simple Network Management Protocol (SNMP) is an Internet Standard protocol, supports SNMP v1, SNMP v2c and SNMP v3 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 **Network Service > SNMP**.
The **SNMP page** is displayed, as shown in Figure 11-10.

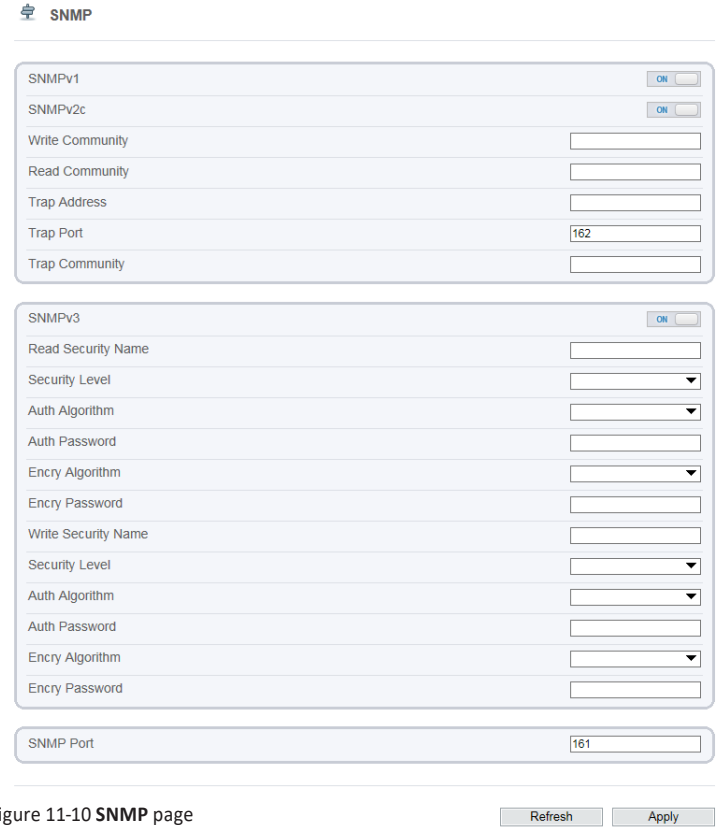


Figure 11-10 **SNMP** page

Step 2 Click the button on to enable **SNMP v1, SNMP v2C** and **SNMP v3**.

Step 3 Set the parameters according to Table 11-8.

CONFIG. / NETWORK SERVICE

9. Setup SNMP Parameters

Procedure

Table 11-8 SNMP parameters

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	Name of write community The write community only can modify data.	**[Setting method]** Enter a value manually.
Read Community	Name of read community The write community only can read data.	
Trap Address	IP address of the trap.	
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.	
Read Security Name Write Security Name	Name of read security Name of write security	**[Setting method]** Enter a value manually.
Security Level	Security Level between SNMP manager and agent, includes three levels: **Noauth**: 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

CONFIG. / NETWORK SERVICE

9. Setup SNMP Parameters

Procedure

Table 11-8 SNMP parameters

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

Step 4 Click **Apply**.

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

CONFIG. / NETWORK SERVICE

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 **Network Service > QOS**.
The **QOS page** is displayed, as shown in Figure 11-11.

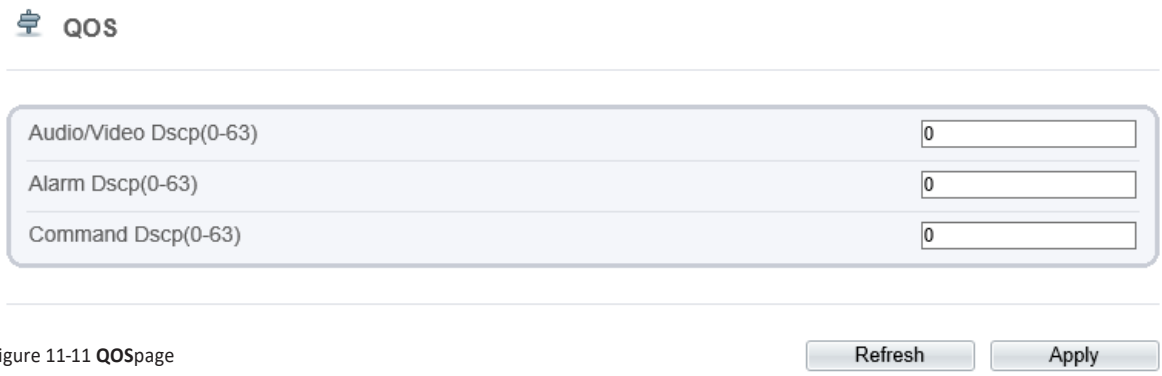


Figure 11-11 **QOS**page

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. Then, the system saves the setting.

CONFIG. / PRIVILEGE MANAGER

Definition of Permission for Group & User

Description

NOTE

User can setup or create an User under the Group Role. The Group permission is based on 3 categories which are **Administrators, Operator**, and **Media user**, where the **Administrators (default)** group cannot be deleted. Their permissions are described as follows:

- **USER Name** : Login ID
- **Administrators**: Privilege Manage, System Maintenance, Parameter Configure, Record Operation, Video Control, and Live Video
- **Operator**: System Maintenance, Parameter Configure, Record Operation, Video Control, and Live Video
- **Media user**: Video Control and Live Video

Table 12-1 User/Group Definition

Parameter	Description	Setting
User	User name for log-in to the IP camera	**[Setting method]** Click **Add** button on Figure 8-1 and then type the User Name (login ID) and Password like Figure 8-2. After typing User Name & Password, user need to assign a role like Figure 8-3.
Group	Permission group where a user belongs. The default permission groups are **Administrators**, **Operator**, and **Media user**. Their permissions are described as follows:	**[Setting method]** Click **Add** button or icon on Figure 8-1 and then make or edit a Group name. After creating a Group, edit a parameter on Figure 8-1.

CONFIG. / PRIVILEGE MANAGER

1. Configuration of Permission for User

Description

You can add, modify, and delete a user and unlock a user that is locked after entering an incorrect password for specified number of times. The **Privilege Manage** permission is required to unlock a user.

Note

- Only the users with the **Privilege Manage permission** can access the **Group** and **User** pages.

Procedure

Step 1 Choose **Privilege Manager > User.**
The **User page** is displayed, as shown in Figure 12-2. Table 12-2 describes the parameters.

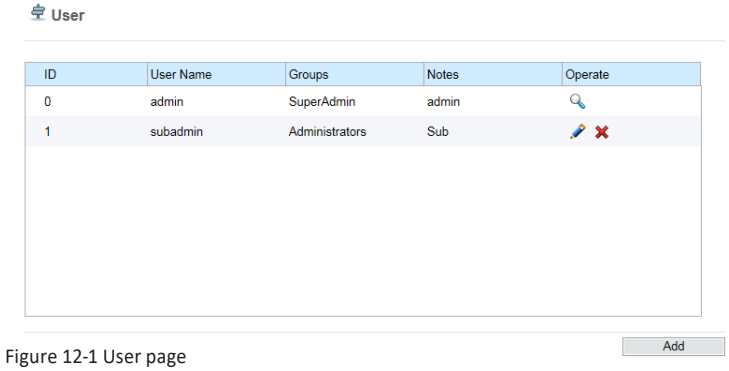


Figure 12-1 User page

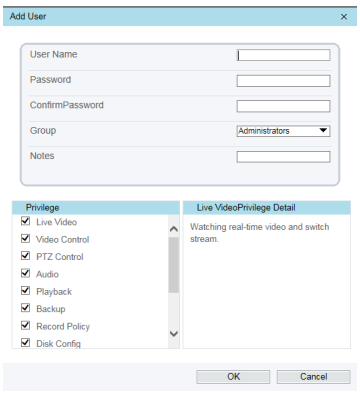


Figure 12-2 User page / Add User

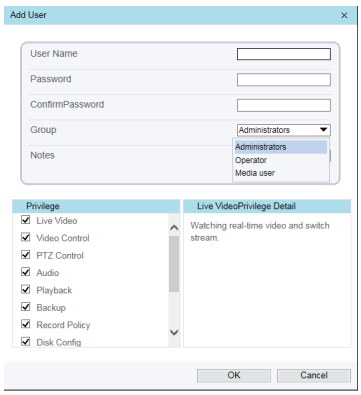


Figure 12-3 User page / Add User by Role

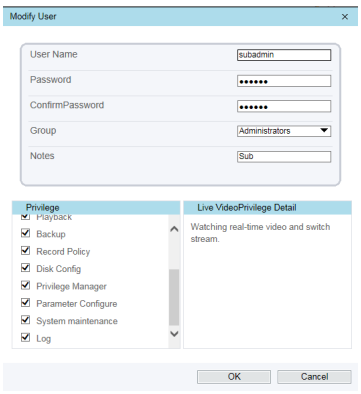


Figure 12-4 User page / Modify User

Step 2 Add, modify, or delete a user as required.
Table 12-2 and 12-3 describes the operations.

CONFIG. / PRIVILEGE MANAGER

1. Configuration of Permission for User

Procedure

Table 12-2 User parameters

Function	Procedure	Description
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: • **SuperAdmin :** Includes all privileges • **Administrators :** Live Video, Video Control, Audio, Playback, Backup, Record Policy, Disk Configure, Privilege Manage, Parameter Configure, System Maintenance and Log • **Operator :** System Maintenance, Parameter Configure, playback, Live Video and Video Control • **Media user** : Live Video	**[Setting method]** Click **Add** button, then select a value from the drop down list box. **NOTE** Super Admin account cannot be selected on new user registration
Notes	Notes of the User.	**[Setting method]** Click **Add** button, then enter a value manually.
Operate	The operation of the user, includes view user, modify user and delete user. **NOTE** Super Admin cannot be editable	**[Setting method]** Click the icon to edit new user, delete user and view SuperAdmin.

CONFIG. / PRIVILEGE MANAGER

1. Configuration of Permission for User

Procedure

Table 12-3 User Add, Modify.Delete parameters

Function	Procedure	Description
Add	1. Click Add. The Add User page is displayed, as shown in Figure 8-2. 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.	Add an administrator or a common user as shown in Figure 8-2 the drop-down list box.
Modify	1. Click  icon & modify-User-page is displayed. 2. Modify the user name, password, group or privilege. 3. Click OK. The user is modified successfully. The User page is displayed.	Modify the user name, password, group or privilege.
Delete	Select the user from the User list. Click  icon, the message “Confirm to delete?” is displayed, click OK, then the group is deleted successfully.	Delete a user.

CONFIGURATION / PROTOCOL

1. Check up Protocol

Description

You can view the existing protocol name and version number of the current device on the **Protocol** > **Protocol Info** page, as shown in Figure 13-1. Table 13-1 describes the protocol-related parameters.

Figure 13-1 Protocol Info page

Table 13-1 Protocol-related parameters

Parameter	DESCRIPTION
Protocol Name	Type of access protocol.
Protocol Version	Version number of the access protocol.
Protocol SW 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.

CONFIGURATION / PROTOCOL

2. Setup Security Authentification

Description

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

Step 1 Choose **Protocol > Security**.
The Security page is displayed as shown in Figure 13-2. Table 13-2 describes the parameters on the Security page.

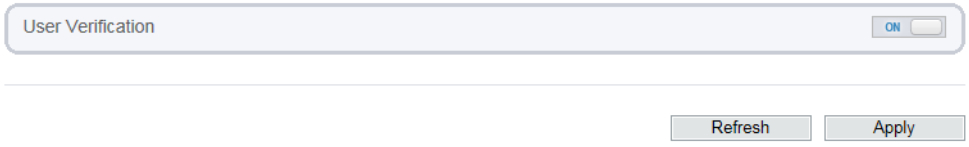


Figure 13-2 Security page

Table 13-2 Security parameter

Function	Procedure	Description
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**.

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.

CONFIGURATION / PROTOCOL

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 13-3. Table 13-3 describes the protocol-related parameters.

Figure 13-3 CMS configuration page

Table 13-3 CMS configuration parameters

Parameter	DESCRIPTION
Protocol Name	Type of the access protocol
Protocol Version	Version number of the access protocol
Protocol SW Version	Software version number of the access protocol
Profile G	Enable Onvif Profile G
Profile Q	Enable Onvif Profile Q
IVA Switch	Enable IVA Switch
Media 2	Enable Media 2
ImageEvent	Enable Image Event
Active Onvif	Enable Onvif protocol

CONFIGURATION / PROTOCOL

4. Setup Multicast Parameter

Description

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

Step 1 Choose **Configuration > Protocol > Multicast Parameter**.
The Security page is displayed as shown in Figure 13-4. Table 13-4 describes the parameters on the Multicast parameter page.

Figure 13-4 Multicast page

Table 13-4 Mutlticast parameters

Function	Procedure	Description
Stream ID	ID of stream	**[Setting method]** Select a value from the drop-down list box. **[Default Value]** 1
Video Port	Port that receive video data	**[Setting method]** Enter a value manually **[Default Value]** 25330
Video Address	IP address that receive video data	**[Setting method]** Enter a value manually **[Default Value]** 238.255.255.255
Source Port	Port that receive source data	**[Setting method]** Enter a value manually **[Default Value]** 25530
Source Address	IP address that receive source data	**[Setting method]** Enter a value manually **[Default Value]** 25530

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.

CONFIGURATION / DEVICE LOGS

1. Querying 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 14-1.

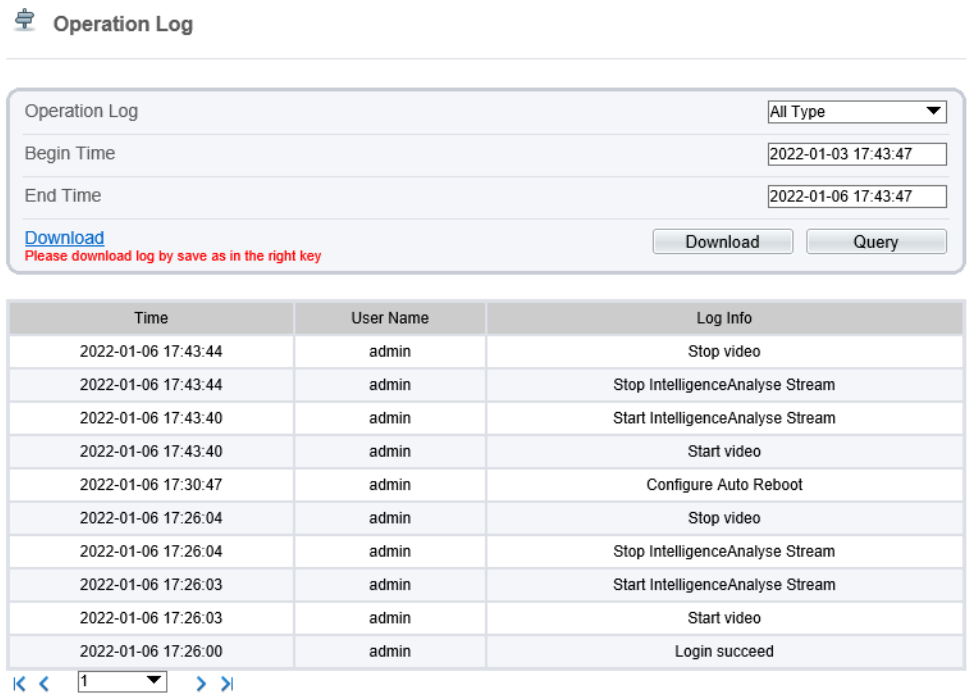


Figure 14-1 Operation Log page

CONFIGURATION / DEVICE LOGS

1. Querying Operation Logs

Procedure

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 operation logs to be queried from the **System Log** drop-down list box.
4. Enter the corresponding user name that is registered with the device from the **User Name** drop-down 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.

NOTE

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() StartUpDevice
2012-06-20 13:42:46 user(admin) ConfigureDeviceName
2012-06-20 13:43:16 user(admin) ConfigureAlarmIn

CONFIGURATION / DEVICE LOGS

2. Querying 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 14-2.

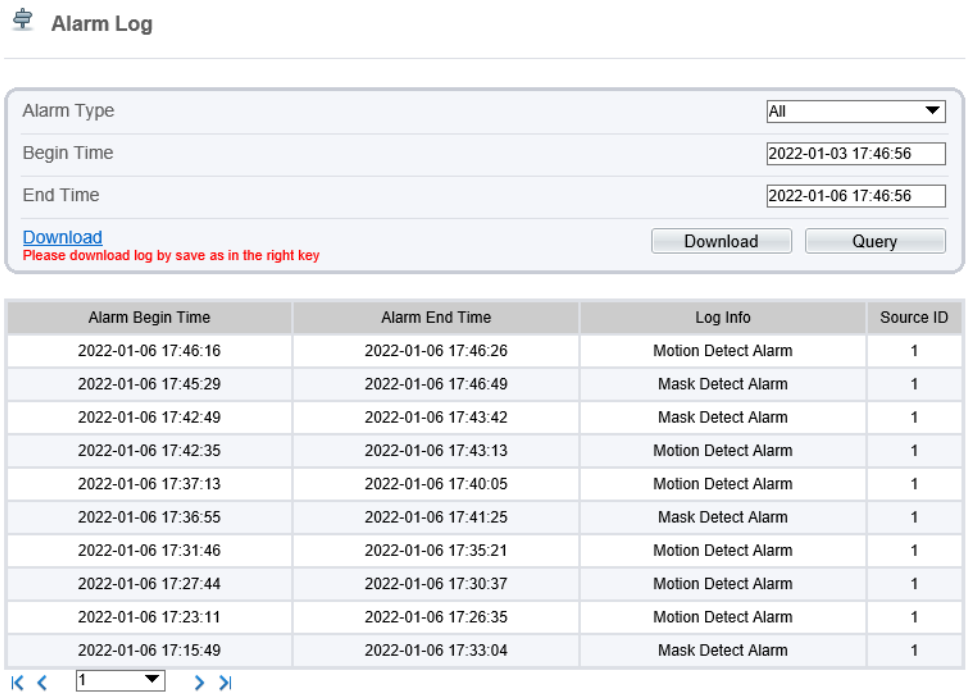


Figure 14-2 Alarm Log page

CONFIGURATION / DEVICE LOGS

2. Querying Alarm Logs

Procedure

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.
4. The log link and the message "Please download log by ’save as ‘in the right key" are displayed.
5. Right-click the link and save the logs.

NOTE
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 SourceId(1:1)
2012-03-17 16:35:31 -> 2012-03-17 16:35:41 occur motion detect alarm SourceId(1:1)

CONFIGURATION / DEVICE LOGS

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 14-3.

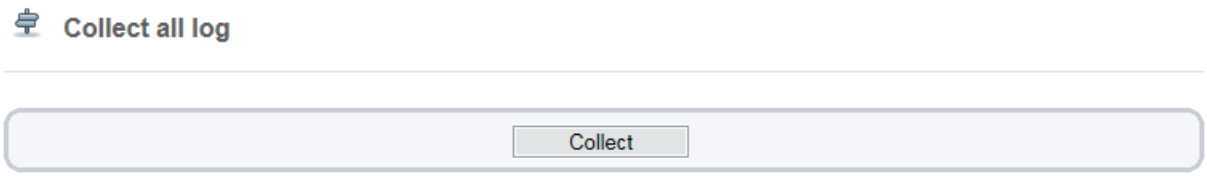


Figure 14-3 Collect All Log page

Step 2 Collect logs

1. Click the **Collect**, then the download alert will be displayed on the browser.
2. You can directly **open**, **cancel** download or **select the path to save** the log file.

MAINTENANCE (RESET & RESTORE)

1. Restart a Device

Description

You can restart a device in situations including the following:

- The device parameters are set incorrectly, and the device cannot work properly.
- A user needs to reset device parameters and make the settings to take effect.
- A device needs to be restarted remotely.

Procedure

Step 1 Choose **Configuration > Maintenance**.
The **Device Maintenance** page is displayed, as shown in Figure 15-1.

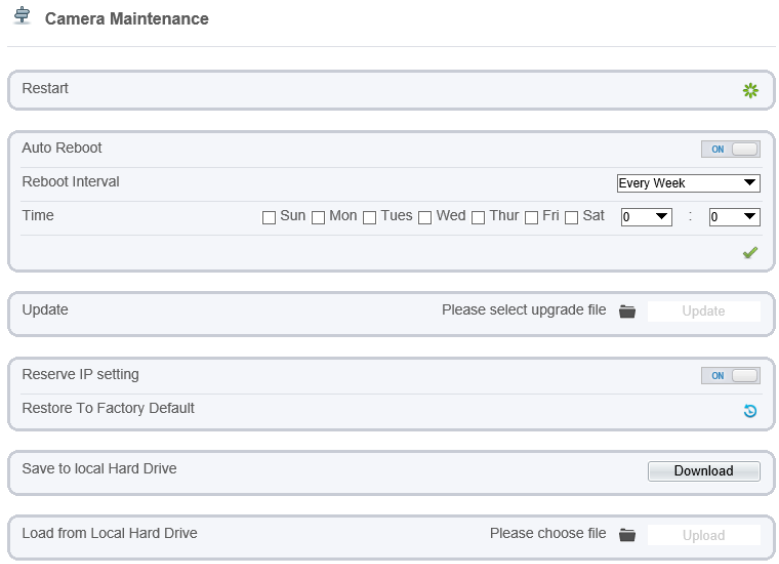


Figure 15-1 Maintenance page

Step 2 Click icon.
The message "Are you sure to restart?" is displayed.

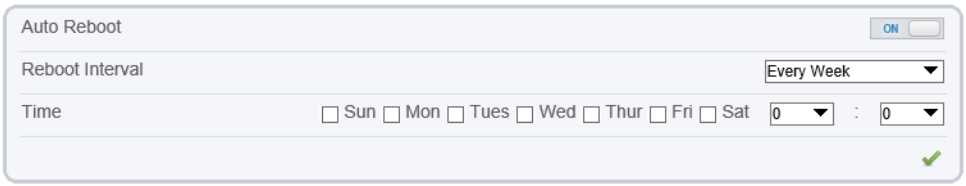
Step 3 Click **OK**.
The device is restarted successfully minutes later.

MAINTENANCE (RESET & RESTORE)

2. Auto Reboot

Description

You can setup the automatic restart time per every day, week or month.



Procedure

Step 1 Click **Auto Reboot** button. The reboot interval option page is displayed.

Step 2 Select 'Everyday, week or month' and 'Time'.

Step 3 Click **OK**.
The device will show 'Apply success' message.

3. Update Software

Description

You can update firmware of PVM. Select icon to find a file on local computer. After selection, click 'Update' button and confirm it. It will take a time to apply & restart PVM.

MAINTENANCE (RESET & RESTORE)

4. Restore a Device to Factory Settings

Description

You can restore a device to factory settings in situations including the following:

- 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.

CAUTION

After you click icon, 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 Click **Maintenance > Restore to Factory Default**.

Step 2 Click icon.
The message "Are you sure to restore ?" is displayed.

Step 3 Click **OK**.
The device will be restored to the factory settings.

5. Save to Local Hard Drive

Description

You can save and download all setup configuration data to local hard drive. You can use this file for backup setting.

LOCAL CONFIG

1. Setup the Path

Description

You can assign the local computer path of snapshot and video. Also, you can

- Setup the image type of snapshot
- Setup the local computer path of snapshot & video
- Setup the file size of recording video.

Procedure

Step 1 Choose **Configuration > Local Config**.
The **Local Config** page is displayed as shown in Figure 16-1. Table 16-1 describes the parameters on the Multicast parameter page.

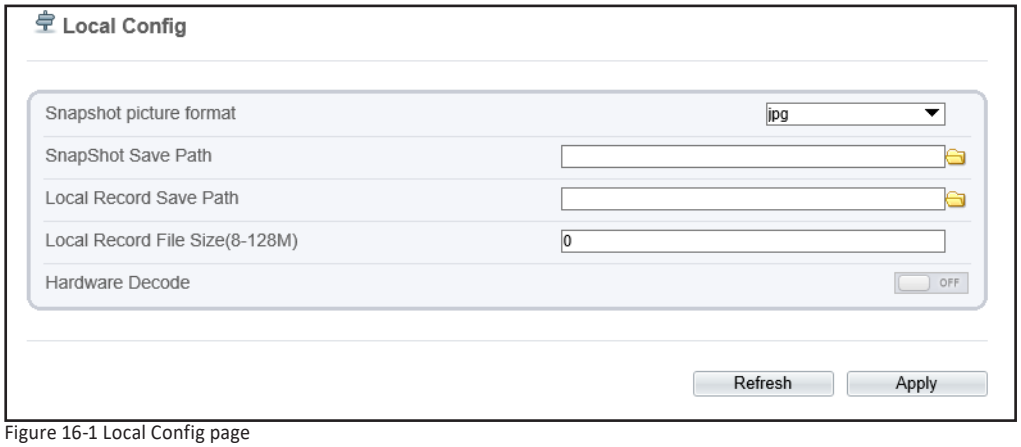


Figure 16-1 Local Config page

LOCAL CONFIG

1. Setup the Path

Table 16-1 Local Config parameters

Function	Procedure	Description
Snapshot Picture Format	Set the saving image file type - JPG or BMP	**[Setting method]** Select a value from the drop-down list box. **[Default Value]** JPG
SnapShot Save Path	Set the local computer location of saving snapshot	**[Setting method]** Select the location on the local computer
Local Record Save Path	Set the local computer location of saving file	**[Setting method]** Select the location on the local computer
Local Record File Size(8-128M)	Set the saving file size	**[Setting method]** Enter a value manually **[Default Value]** 0
Hardware Decode	Enable or disable hardware decoding	**[Setting method]** Click the button

Step 2 Click **Apply**.
A dialog box is displayed, indicating the parameter configuration success. To make the configuration take effect, click **Apply** button to finish the setup.

NOTE