

# VZ-D2IP-L SERIES

## 21.5" IP OUTPUT MONITOR

---

WEB BASED D2IP-L USER MANUAL



**ViewZ®**  
[www.viewzusa.com](http://www.viewzusa.com)

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

# CONTENTS

<b>WARNING STATEMENTS</b>	5
<b>Quick Reference Guide</b>	6
1. Login and Logout	6
2. Main Page	7
3. Change Password	8
<b>Searching IP Encoder</b>	9
1. Searching Real Time IP Encoder	9
<b>Configuration / Device Info</b>	12
1. Configuration of D2IP-L's Information	12
<b>Configuration / Stream</b>	14
1. Setup Video and Audio Parameters	14
2. Setup ROI Parameters	19
<b>Configuration / Device</b>	21
1. Setup Local Network Parameters	21
2. Configuration of Device Ports	24
3. Configuration of Date and Time	25
4. Setup Channel Name, Video & Source Resolution	28
5. Setup OSD Parameters	30
6. Configuration of Analog Output (CVBS)	33
7. Configuration of System Language & Webmode	34
<b>Configuration / Intelligent Analysis</b>	35
1. Perimeter	36
2. Signal Virtual Fence	40
3. Double Virtual Fence	44
4. Loiter	48
5. Multiple Loiter	52
6. Object Left	56

# CONTENTS

7. Object Removed .....	60
8. Abnormal Speed .....	64
9. Converse .....	68
10. Illegal Parking .....	72
11. Single Bad .....	76
12. Advanced .....	78
<b>Configuration / Alarm .....</b>	<b>80</b>
1. Setup Alarm Output Parameters .....	80
2. Setup Network Alarm Parameters .....	82
3. Setup Motion Detection Alarm Parameters .....	83
<b>Configuration / Privacy Mask .....</b>	<b>85</b>
<b>Configuration / Network Service .....</b>	<b>87</b>
1. Setup 802.1x Parameters .....	87
2. Setup DDNS Parameters .....	88
3. Setup PPPoE Parameters .....	90
4. Setup Port Mapping Parameters .....	92
5. Setup SMTP Parameters .....	94
6. Setup FTP Parameters .....	96
7. Setup IP Filter Parameters .....	98
8. Setup CGI Alarm Service Center Parameters .....	100
9. Setup SNMP Parameters .....	103
<b>Configuration / Privilege Manager .....</b>	<b>106</b>
1. Configuration of Permission for User .....	106
<b>Configuration / Protocol .....</b>	<b>110</b>
1. Protocol Info .....	110
2. Setup Security Authentication .....	111
3. Setup Multicast Parameters .....	112

# CONTENTS

**Configuration / Device Logs** ..... 113

    1. Operation Logs ..... 113

    2. Alarm Logs ..... 115

    3. Collect All Logs ..... 117

**Maintenance** ..... 118

    1. Restart a Device ..... 118

    2. Restore a Device to Factory Settings ..... 119

# WARNING STATEMENTS

## Important Safety Instructions

This manual describes how to use D2IP-L's web management system, including network access, network configuration and troubleshooting.

This manual is intended for:

- Technical support engineers
- Maintenance engineers
- IP encoder 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 **Internet Explorer 7** or latest version to access the ViewZ web management system. **Firefox** will work with ViewZ web management system, but some function and layout might not work perfectly.

**Windows Edge** and **Chrome** are currently not supported by ViewZ web management system.

### Login



**Step 1** Open Internet Explorer. Enter the IP address of the D2IP-L IP encoder (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

## 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.

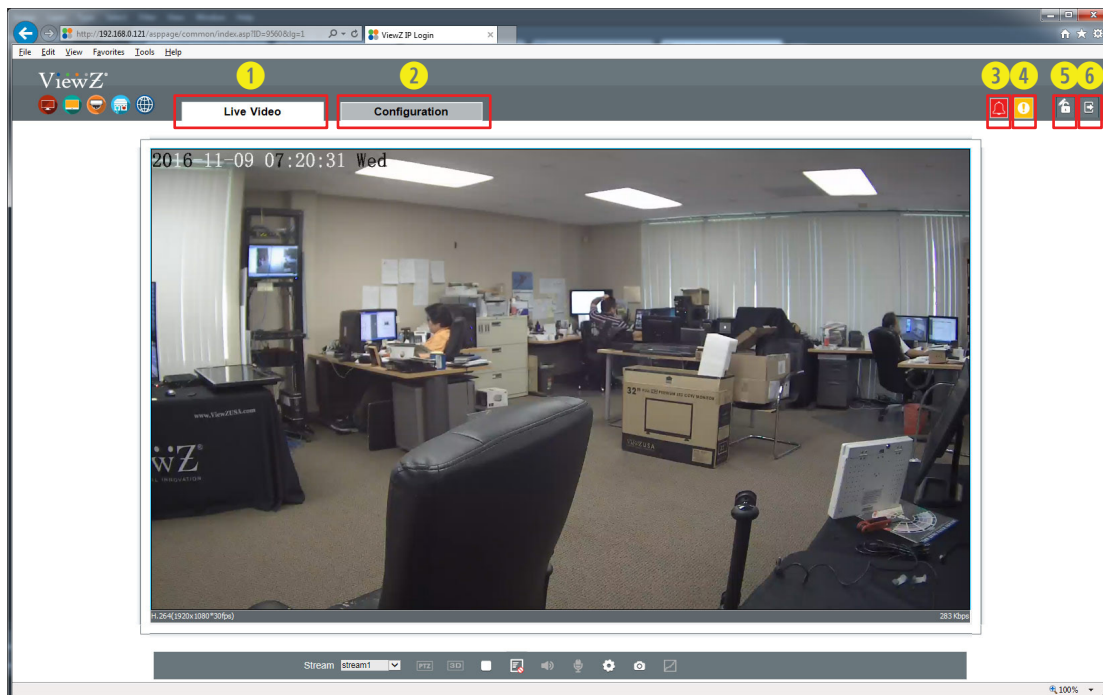








Figure 1-2 Main Page Layout

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	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.
4	FAULT	When the device encounters an exception, the fault icon  is displayed. You can click  to view the fault information.
5	CHANGE PASSWORD	You can click  to change the password.
6	LOG OUT	You can click  to return to the login page.

# 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.

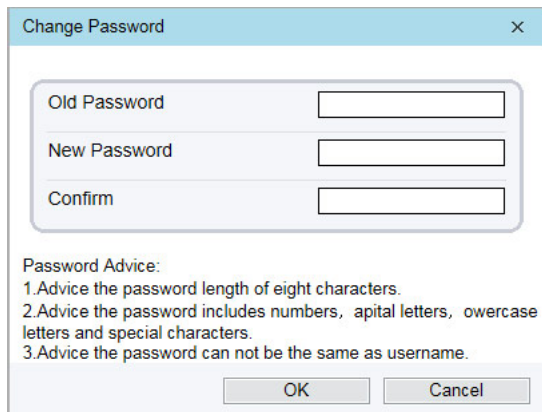


Figure 1-3 Password Dialog Box

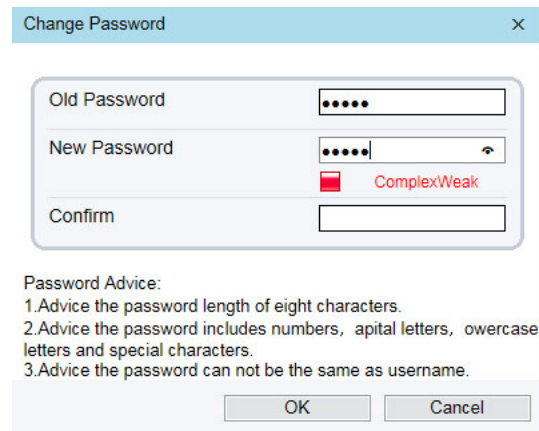


Figure 1-3-1 Password Change



**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 ENCODER

## 1. Searching Real Time IP Encoder

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 Internet Explorer. Choose **Tools > Internet Options > Security > Trusted sites > Sites**.

In the displayed dialog box, click Add, as shown in Figure 2-1.

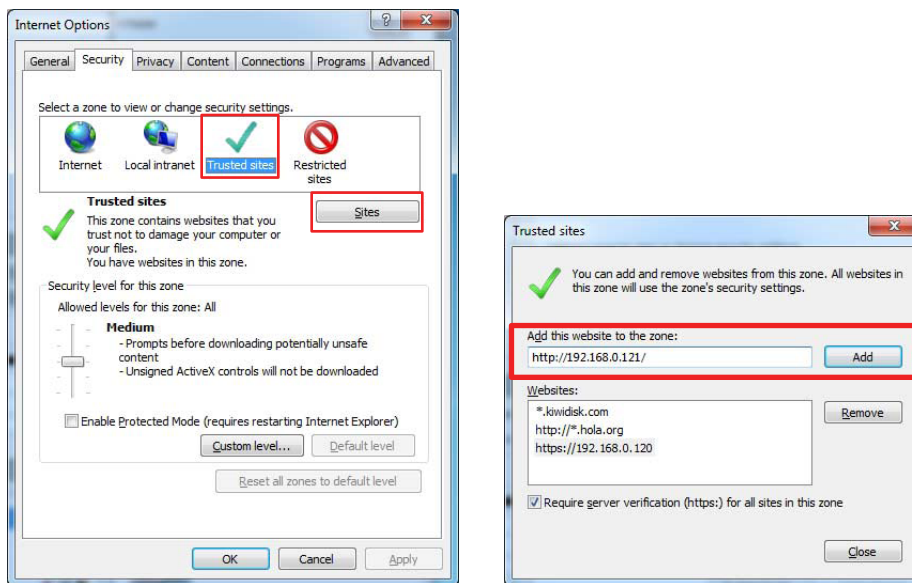


Figure 2-1 Add a trusted site

# SEARCHING IP ENCODER

## 1. Searching Real Time IP Encoder

- Step 2** In Internet Explorer, choose **Tools > Internet Options > Security > Customer level**, and set **Download unsigned ActiveX controls and Initialize and script ActiveX controls not marked as safe for scripting** under **ActiveX controls and plug-ins** to **Enable**, as shown in Figure 2-2.

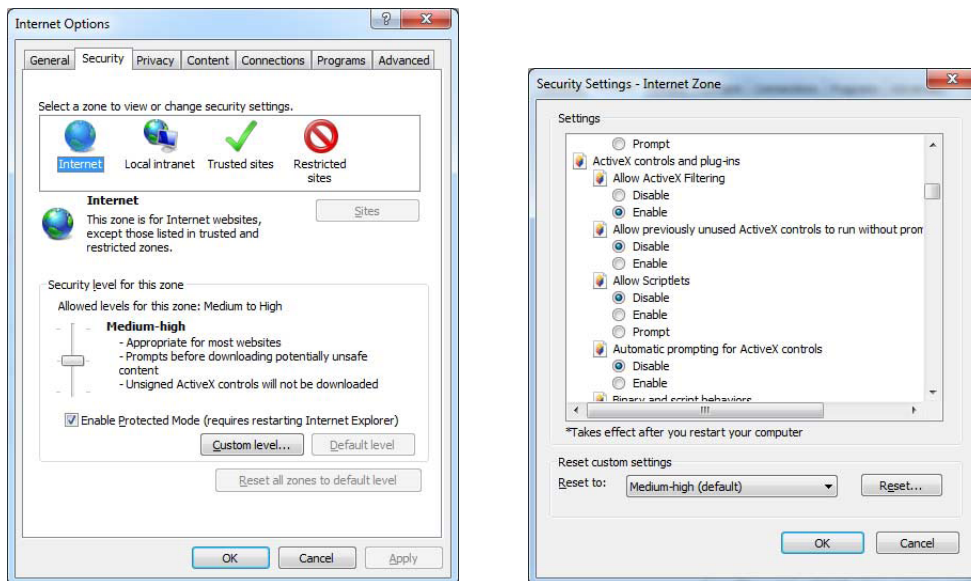


Figure 2-2 Configure ActiveX controls and plug-ins

- Step 3** Download and install the player control as prompted.



### Note

- If the **repair tips** is prompted while installing the control, ignore the prompt and continue the installation. The login page is displayed when the control is loaded.

# SEARCHING IP Encoder

## 1. Searching Real Time IP Encoder

### Description

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

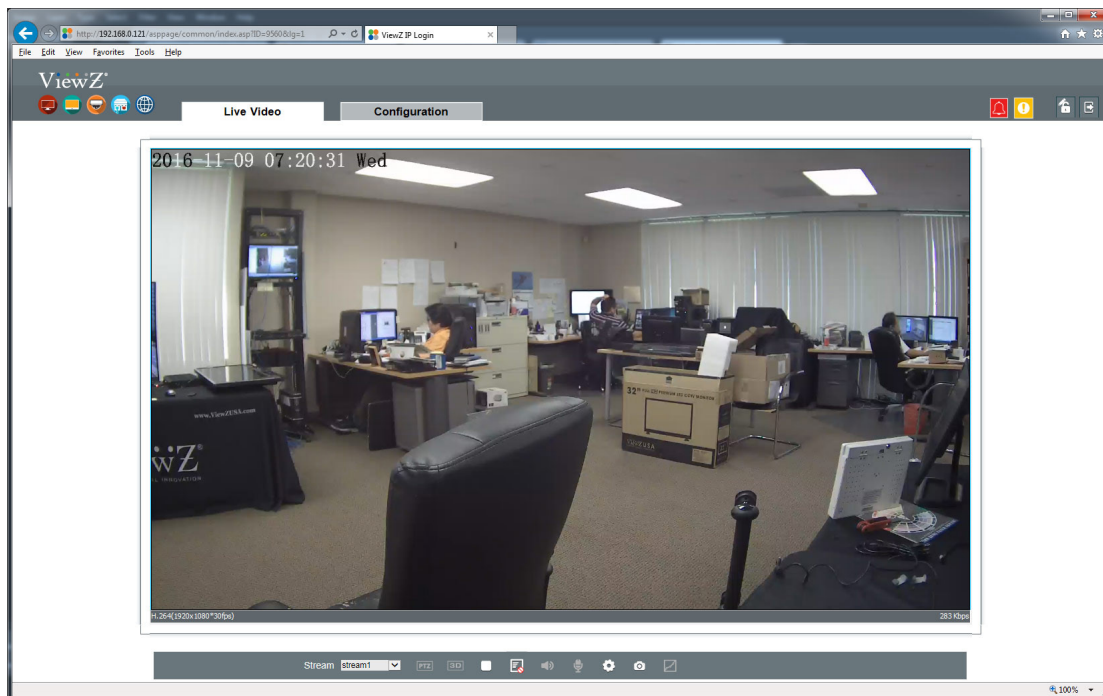





Figure 2-3 Live Video

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

- Click  to stop the video.
- Click  to play the video.
- 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.
- Configure the sensor.

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

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

# CONFIGURATION / DEVICE INFO

## 1. Configuration of D2IP-L'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.

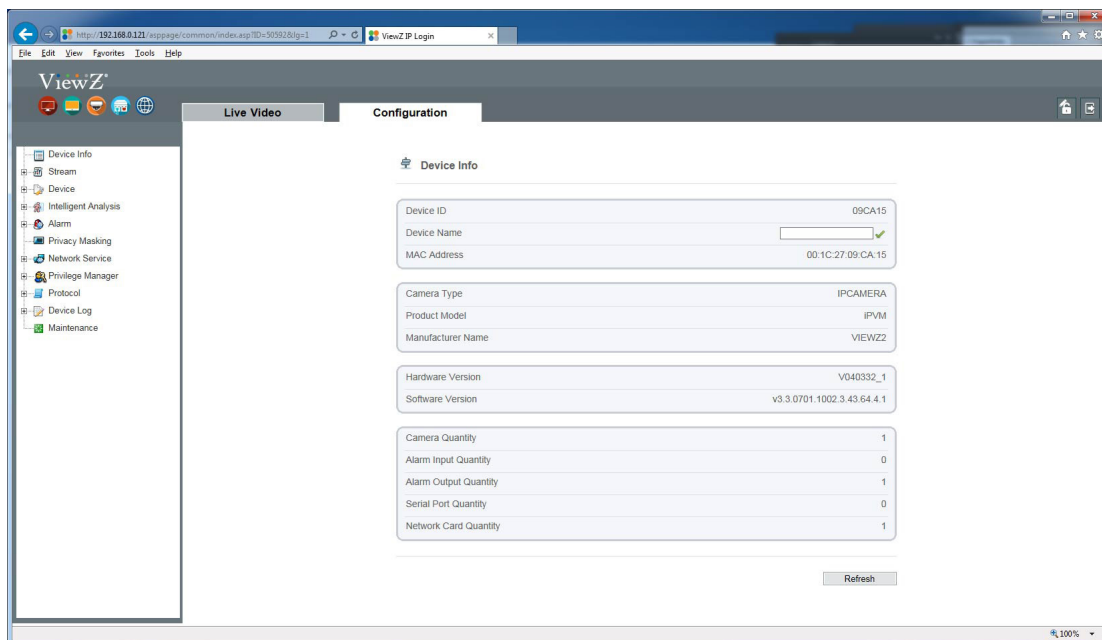


Figure 3-1 Device Info page

# CONFIGURATION / DEVICE INFO


## 1. Configuration of D2IP-L'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.  <b>NOTE</b> The device name cannot exceed 32 bytes or 10 simplified characters; otherwise, the modification fails.	[Setting method] Enter a value manually.
MAC Address	N/A	[Setting method]
Camera Type		These parameters cannot be modified.
Manufacturer ID		
Manufacturer Name		
Hardware Version		
Software Version		
Video Channel(s)		
Alarm Input(s)		
Alarm Output(s)		
Serial Port(s)		
Network Card		



**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.

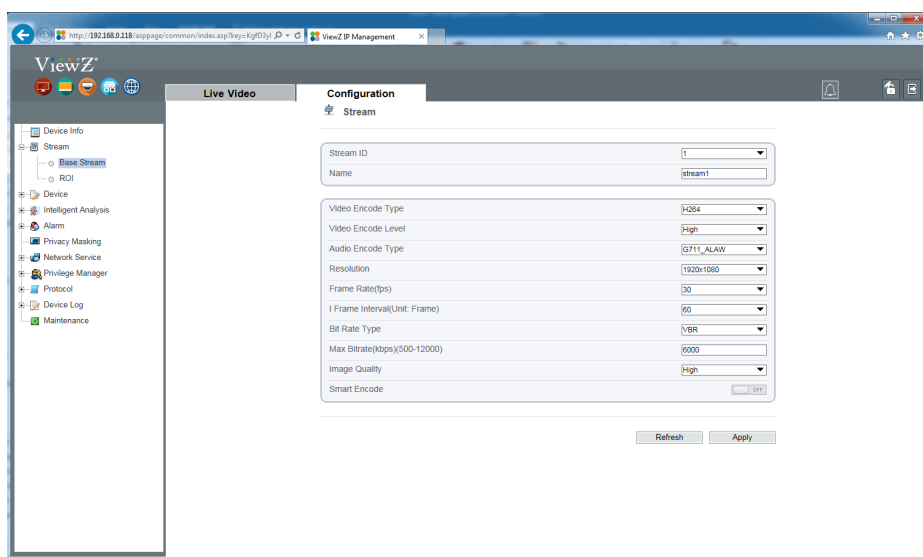


Figure 4-1 Stream Configuration page

**Stream**

---

Stream ID	1
Name	stream1

---

Video Encode Type	H264
Video Encode Level	High
Audio Encode Type	G711_ALAW
Resolution	1920x1080
Frame Rate(fps)	30
I Frame Interval(Unit: Frame)	60
Bit Rate Type	VBR
Max Bitrate(kbps)(500-12000)	6000
Image Quality	High
Smart Encode	<input type="checkbox"/> OFF

---

# 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.  <b>NOTE</b> An IP camera has only one video output channel. Therefore, only the default value 1 is available.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> 1
Stream ID	The device supports two streams. <ul style="list-style-type: none"> <li>Streams 1 and 2 use the H.264 Codec</li> <li>The maximum resolution can be set for streams 1</li> <li>Only a low resolution can be set for stream 2.</li> </ul>	<b>[Setting method]</b> Select a value from the drop-down list box.
Name	Stream name  <b>NOTE</b> The stream name is combined with character, number, character and underline.	<b>[Setting method]</b> Enter a value manually. The value cannot exceed 32 bytes. <b>[Default value]</b> 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: <ul style="list-style-type: none"> <li><b>MJPEG</b>                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.</li> </ul>	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> H.264 High Profile  <b>NOTE</b> 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	<ul style="list-style-type: none"> <li> <b>H.264</b>  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. </li> <li> <b>H.265</b>  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. </li> </ul>	<p><b>[Setting method]</b> Select a value from the drop-down list box.</p> <p><b>[Default value]</b> H.264 High Profile</p> <p> <b>NOTE</b> 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.</p>
Audio Encode Type	<p>ID of the video output channel.</p> <ul style="list-style-type: none"> <li>G711_ULAW: mainly used in North America and Japan.</li> <li>G711_ALAW: mainly used in Europe and other areas.</li> <li>RAW_PCM: codec of the original audio data. This codec is often used for platform data</li> </ul>	<p><b>[Setting method]</b> Select a value from the drop-down list box.</p>





# CONFIGURATION / STREAM

## 1. Setup Video and Audio Parameters

### Procedure

Table 4-1 Stream configuration parameters

Parameter	DESCRIPTION	Setting
Resolution	<p>A higher resolution means better image quality</p> <p> <b>NOTE</b> IP cameras support the different resolutions based on the model.</p>	<p><b>[Setting method]</b> Select a value from the drop-down list box.</p>
Frame Rate (fps)	<p>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.</p> <p>Frame rates for different frequencies are as follows:</p> <ul style="list-style-type: none"> <li>• 50 Hz: 1–25 f/s</li> <li>• 60 Hz: 1–30 f/s</li> </ul> <p> <b>NOTE</b> The frequency is set on the <b>Device Configuration &gt; Camera</b> page. The biggest MJPEG coding format frame rate is 12 frames per second.</p>	<p><b>[Setting method]</b> Select a value from the drop-down list box.</p> <p><b>[Setting method]</b> Select a value from the drop-down list box.</p>
I Frame Interval (f)	<p>I frames do not require other frames to decode. A smaller I frame interval means better video quality but higher bandwidth.</p>	<p><b>[Setting method]</b> Select a value from the drop-down list box.</p>
Bit Rate Type	<p>The bit rate is the number of bits transmitted per unit of time. The following bit rate types are supported:</p> <ul style="list-style-type: none"> <li>• <b>Constant bit rate (CBR)</b> The compression speed is fast; however, improper bit rate may cause vague motion images.</li> <li>• <b>Variable bit rate (VBR)</b> The bit rate changes according to the image complexity. The encoding efficiency is high and the definition of motion images can be ensured.</li> </ul>	<p><b>[Setting method]</b> Select a value from the drop-down list box.</p>

# 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.	<b>[Setting method]</b> Enter a value manually.
Quality (500-12000)	The video quality on the camera output.	<b>[Setting method]</b> Slide the slider left or right <b>[Default value]</b> 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.

ROI

Stream

stream1

Enable

☐ OFF

Area ID

1


Level

1

Area Name

Note: Max size50% ;Right click to remove the zones drawn

2017-01-03 23:29:45 Tues



Refresh

Apply

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	<b>[Setting method]</b> Pull-down and select <b>[Default value]</b> Stream 1
Enable	Enable ROI function	<b>[Setting method]</b> Click to ON/OFF <b>[Default value]</b> OFF
Area ID	ROI Area ID number	<b>[Setting method]</b> Pull-down and select <b>[Default value]</b> 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.	<b>[Setting method]</b> Pull-down and select <b>[Default value]</b> 5
Area Name	User can name the Area ID with special name	<b>[Setting method]</b> Name length should be less than 32 Bytes

# 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.

 **Local Network**

---

Network Card ID	1
IP Protocol	IPv4

---

DHCP <input type="checkbox"/> OFF	
IP Address	192.168.0.121
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1

---

Preferred DNS Server	192.168.0.1
Alternate DNS Server	192.168.0.2
MTU(800-1500)	1500

---

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.	<p><b>[Setting method]</b> Select a value from the drop-down list box.</p> <p><b>[Default value]</b> IPv4</p>
Obtain IP address automatically	The device automatically obtains the IP address from the DHCP server.	<p><b>[Setting method]</b></p> <p>Click the button on to enable <b>obtaining IP address automatically</b></p> <p> <b>NOTE :</b> To query the current IP address of the device, you must query it on the platform based on the device name.</p>
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.	<p><b>[Setting method]</b> Enter a value manually.</p> <p><b>[Default value]</b> 192.168.0.120</p>
Subnet Mask	Subnet mask of the network adapter.	<p><b>[Setting method]</b> Enter a value manually.</p> <p><b>[Default value]</b> 255.255.255.0</p>
Default Gateway	This parameter must be set if the client accesses the device through a gateway.	<p><b>[Setting method]</b> Enter a value manually.</p> <p><b>[Default value]</b> 192.168.0.1</p>
Preferred DNS Server	IP address of a DNS server.	<p><b>[Setting method]</b> Enter a value manually.</p> <p><b>[Default value]</b> 192.168.0.1</p>
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.	<p><b>[Setting method]</b> Enter a value manually.</p> <p><b>[Default value]</b> 192.168.0.2</p>
MTU	Set the maximum value of network transmission data packets.	<p><b>[Setting method]</b> Enter a value manually.</p> <p> <b>NOTE</b> The MTU value ranges from 800 to 1500, with the default value at 1500. Please do not change it arbitrarily.</p>

# 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.

 Device Port

Control Port	<input type="text" value="30001"/>
Http Port	<input type="text" value="80"/>
RTSP Port	<input type="text" value="554"/>

Table 5-2 Device port parameters

Refresh

Apply



**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	<b>[Setting method]</b> Enter a value manually <b>[Default value]</b> 30001
HTTP Port	Port used in web access	<b>[Setting method]</b> Enter a value manually <b>[Default value]</b> 80
RTSP Port	RTSP protocol port	<b>[Setting method]</b> Enter a value manually <b>[Default value]</b> 554



### Note

It's not recommended to modify the control port. For details about the value ranges of the control port, HTTP port, RTSP port and RTMP port, see the communication matrix.



**Step 3** Click Apply.

- If the "This operation will lead to the device to restart, continue?" dialog box is displayed, click Confirm. The system automatically restarts and 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. Table5-3 describes the parameters.

#### Date and Time

Time Zone	(GMT-08:00) Pacific Time (US Canada)				▼				
Daylight Savings Time					ON <input type="checkbox"/>				
Begin Time	Mar	▼	2nd	▼	Sun	▼	2:00	▼	
End Time	Nov	▼	1st	▼	Sun	▼	2:00	▼	
									✓

Device Time	04/16/2018 21:06:39	
Current PC Time	04/16/2018 13:59:44	✓
Set Manually	04/16/2018 20:42:08	✓

NTP	ON <input type="checkbox"/>		
NTP Server Addr			
NTP Port	123		
Check the time interval(at least 10s)	3600		
			✓

Refresh


Figure 5-3 Time and Date page

# CONFIGURATION / Device

## 3. Configuration of the Date and Time

### Procedure








Table 5-3 Time parameters

Parameter	DESCRIPTION	Setting
Time Zone	N / A	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> Greenwich mean time
Adjust clock for daylight saving changes	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.  <b>NOTE</b> 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.	<b>[Setting method]</b> Click the button on to enable Adjust clock for daylight saving changes.
Device Time	Device display time.	<b>[Setting method]</b> <ul style="list-style-type: none"> <li>Synchronize the time from the PC.</li> <li>Enter a value manually.</li> </ul>
Current PC Time	Time on the current PC.	N / A
Set Manually	Enables you to manually set the device time.	<b>[Setting method]</b> 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.	<b>[Setting method]</b> Click the button on to enable NTP and enter a value manually.
NTP Port	Port number of the NTP server.	<b>[Setting method]</b> Enter a value manually. <b>[Default value]</b> 123
Check the time interval( at least 10s)	Set time interval to check if the device time synchronizes with the NTP server time.	<b>[Setting method]</b> Enter a value manually. <b>[Default value]</b> 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. Setup Channel Name, Video and Source Resolution

### 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.

Camera

Figure 5-4 Camera page

Table 5-4 Camera parameters

Parameter	DESCRIPTION	Setting
Camera	ID of the video output channel.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> 1
Channel Name	Channel name within the length of 0 to 32 bytes.	<b>[Setting method]</b> Enter a value manually.
Video System	The options are as follows: <ul style="list-style-type: none"> <li>• PAL: Used in Europe and China mainland.</li> <li>• NTSC: Used in USA and Japan.</li> </ul>	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> PAL <b>NOTE</b> Whether the video system can be changed depends on the device model
Video Refresh Frequency	The options are as follows: <ul style="list-style-type: none"> <li>• 50 Hz: corresponds to the PAL system.</li> <li>• 60 Hz: corresponds to NTSC system.</li> </ul>	<b>[Setting method]</b> Corresponds to the video system.

# CONFIGURATION / DEVICE

## 4. Setup Channel Name, Video and Source Resolution

### 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).



**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.

OSD

Time

Custom OSD

Advanced

Time Format: YYYY-MM-DD hh:mm:ss ww

Font Color: [dropdown]

Font Size: Mid

Font Transparency: Opaque

Font On lighted back: ON

Device Name: OFF

Refresh Apply

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	<b>[Setting method]</b> Check the blank box to display the time.
Device Name	Indicates whether to display the device name on videos.	<b>[Setting method]</b> Check the blank box to display the device name. <b>[Default value]</b> Off
Custom OSD	Create the message box	<b>[Setting method]</b> Check one of the blank boxes and write a value within the length of 0 to 32 characters in custom OSD. Click the icon  to apply custom OSD value. <b>[Default value]</b> Blank
Time Format	Format in which the time is displayed.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> YYYY-MM-DD hh:mm:ss ww
Font Color	Set the font color.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> Blank
Font Size	Set the font size	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> Mid
Font Transparency	Set the font transparency on lighted back.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default value]</b> Opaque
Font on lighted back	Enable the font on lighted back.	<b>[Setting method]</b> Click the button on to enable Font <b>on lighted back</b> . <b>[Default value]</b> Off

# CONFIGURATION / DEVICE

## 5. Setup OSD Parameters

### Procedure

**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.

BNC Video Output

BNC Video Output ☒ ON

IP Show ☐ OFF

Refresh Apply

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.

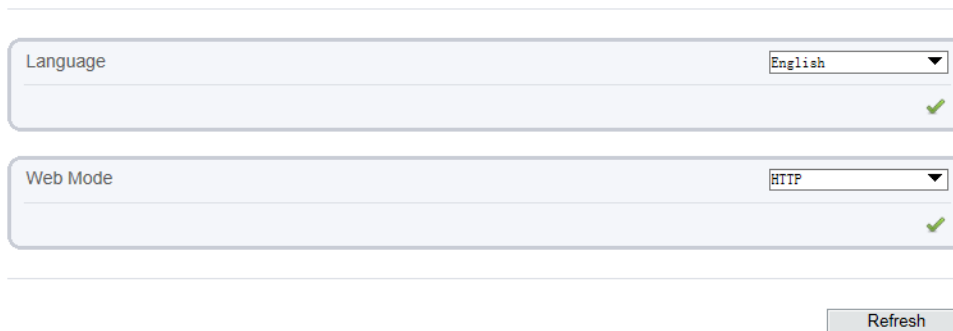
### Procedure



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

The **System** page is displayed, as shown in Figure 5-7

 System



Language	English	✓
Web Mode	HTTP	✓

Refresh

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.

# 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

**Perimeter**

The interface includes a 'Clear' button below the video feed and a settings panel with the following options:

- Enable: ☒ ON
- Limit Target Type: ☒ ON
- Type: Person Or Car
- Limit Target Size: ☒ ON
- Minimum Size(cm2): 1000
- Maximum Size(cm2): 100000
- Upload Target Info: ☒ ON
- Output Channel: ☐ 1
- SMTP: ☒ ON
- FTP Upload: ☒ ON

Below the settings panel is a calendar grid with days of the week (Sun-Sat) and hours (0-24).

Figure 6-1 Perimeter Setting Interface

Refresh

Apply






**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
Alarm Interval (1-1800s)	An alarm is generated when objects enter the deployment area, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
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.	<b>[How to set]</b> Click to enable Limit Target Type. <b>[Default Value]</b> Off
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> Off
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> OFF

# CONFIG. /INTELLIGENT ANALYSIS

## 1. Perimeter

### Settings

Table 6-1 Perimeter Parameter Description

Parameter	DESCRIPTION	Setting
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-2, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

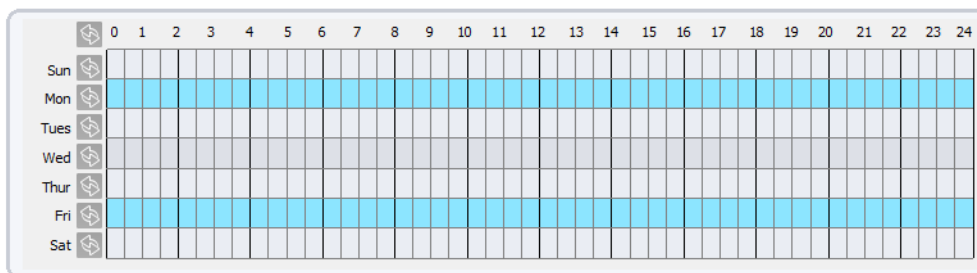



Figure 6-2 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 1. Perimeter

### Deployment Area Settings

 **Draw a deployment area:** Move the cursor to the drawing interface, click the left mouse button and drag the mouse to generate a green rectangle, which forms a deployment area. **You can also click the square grid in the interface to set the deployment area.** Click "clear" to delete the deployment area, as shown in Figure 6-3.

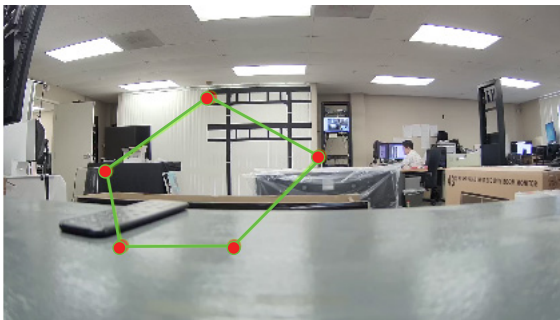


Figure 6-3 Deployment Area Setting Interface



#### 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

 Perimeter



Reverse 

Delete

Enable ☐

Limit Target Type ☐

Type Person Or Car

Limit Target Size ☐

Minimum Size(cm2)

Maximum Size(cm2)

Upload Target Info ☐

Output Channel ☐ 1

SMTP ☐

FTP Upload ☐

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

Figure 6-4 Single Virtual Fence Setting Interface

Refresh

Apply

**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
Alarm Interval (1-1800s)	An alarm is generated when target cross the single virtual fence, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
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.	<b>[How to set]</b> Click to enable Limit Target Type. <b>[Default Value]</b> Off
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to well set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> Off
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> OFF

# CONFIG. /INTELLIGENT ANALYSIS

## 2. Single Virtual Fence

### Settings

Table 6-2 Single Virtual Fence Parameter Description

Parameter	DESCRIPTION	Setting
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-5, and then click Delete to delete the deployment time. You can also delete selected deployment time by means of inverse selection.

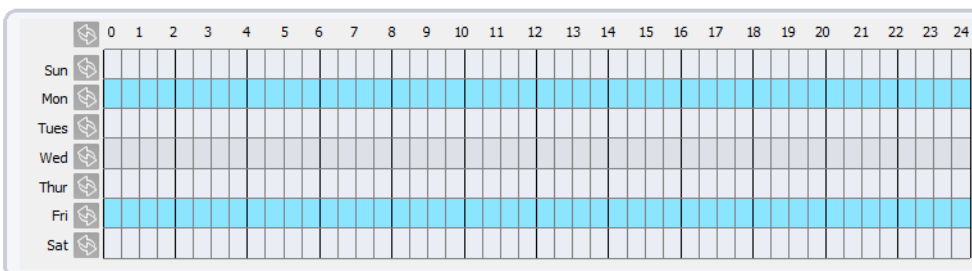


Figure 6-5 Deployment Time Setting Interface

# 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

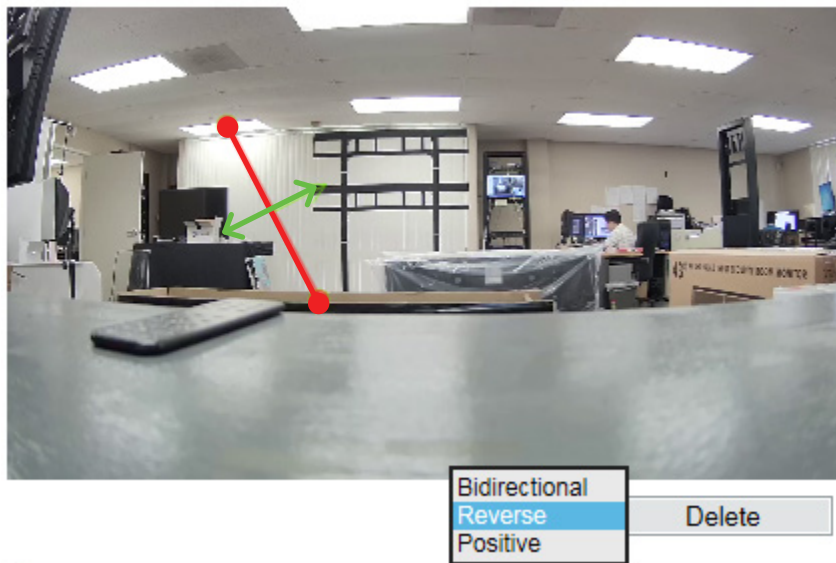


Figure 6-6 Deployment Area Setting Interface



#### 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 direction. 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.

**Double Virtual Fences**

Enable ☐ OFF

Limit Target Type ☐ OFF

Limit Target Size ☐ OFF

Upload Target Info ☐ OFF

Pass Max Time(Sec)

Output Channel ☐ 1

SMTP ☐ OFF

FTP Upload ☐ OFF

Reverse

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

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
Alarm Interval (1-1800s)	An alarm is generated when targets cross the double virtual fences in a certain order (line 1 followed by line 2), it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
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.	<b>[How to set]</b> Click to enable Limit Target Type. <b>[Default Value]</b> Off
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to well set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> Off
Pass Max Time (Sec)	An alarm is generated only when the time taken to cross the double virtual fences is less than the value. The default value is 10 seconds and the setting range is 1-60 seconds.	<b>[How to set]</b> Enter a value in the area box.

# CONFIG. /INTELLIGENT ANALYSIS

## 3. Double Virtual Fence

### Settings

Table 6-3 Double Virtual Fence Parameter Description

Parameter	DESCRIPTION	Setting
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-8, and then click Delete to delete the deployment time. You can also delete selected deployment time by means of inverse selection.

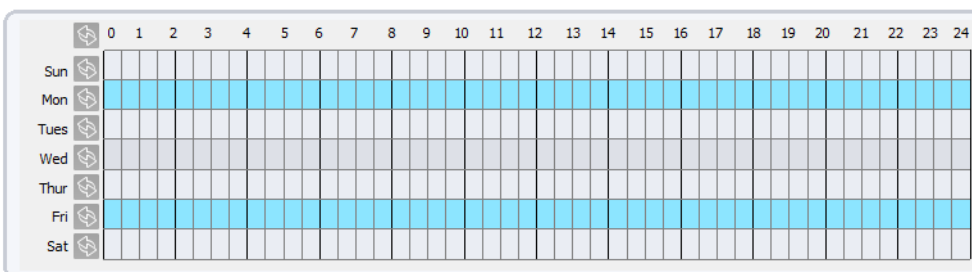


Figure 6-8 Deployment Time Setting Interface

# 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 Positive 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 delete the selected line. You can also press and hold left mouse button at the endpoint of a virtual fence and move the mouse to modify the position and length of the virtual fence. You can do right-click to delete the double virtual fences as shown in Figure 6-9

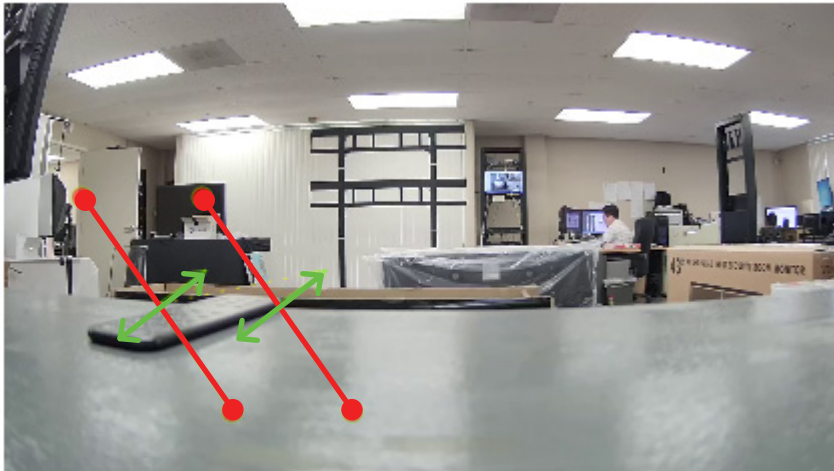


Figure 6-9 Deployment Area Setting Interface



#### 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. Loiter

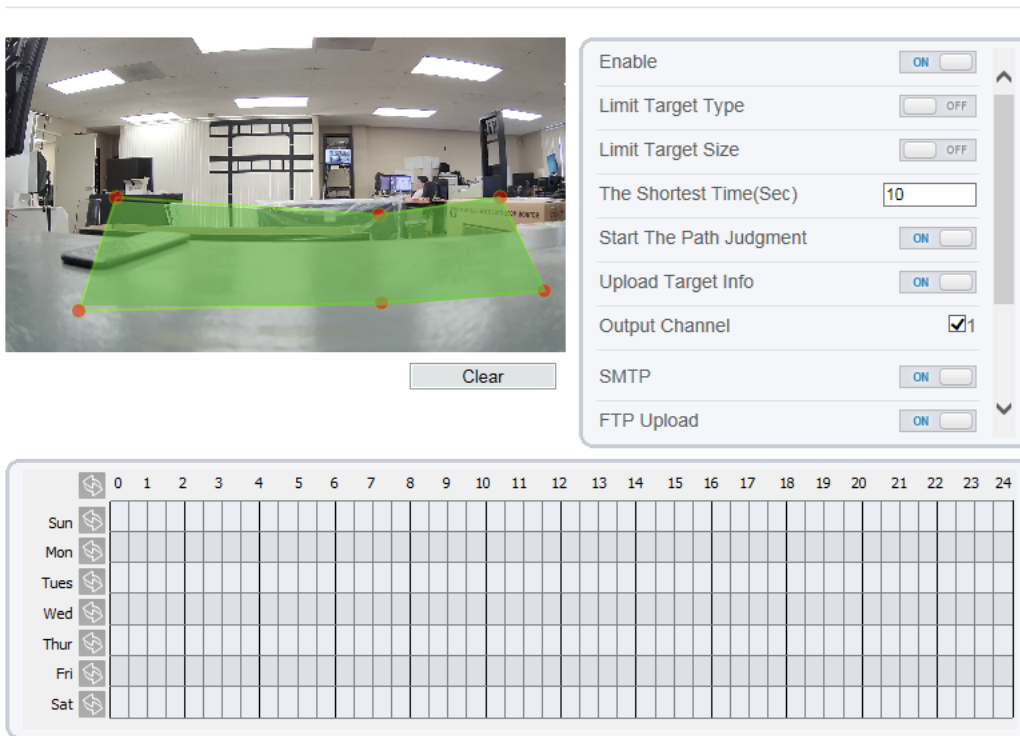
### Function Definition

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

### Function Settings

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

#### Loiter



The interface displays a live video feed of a room with a green loitering area overlaid. To the right of the video is a settings panel with the following options:

- Enable: ☒ ON
- Limit Target Type: ☐ OFF
- Limit Target Size: ☐ OFF
- The Shortest Time(Sec):
- Start The Path Judgment: ☒ ON
- Upload Target Info: ☒ ON
- Output Channel: ☒ 1
- SMTP: ☐ ON
- FTP Upload: ☐ ON

Below the settings panel is a calendar grid for scheduling. The grid has columns for hours (0-24) and rows for days of the week (Sun-Sat). Each cell in the grid contains a small icon representing a target.

Figure 6-10 Loiter Interface

Refresh

Apply



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



# CONFIG. /INTELLIGENT ANALYSIS

## 4. Loiter

### Settings

Table 6-4 Loiter Parameter Description




Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated when the loitering time of a (single) target meets the set shortest loitering time, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
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.	<b>[How to set]</b> Click to enable Limit Target Type. <b>[Default Value]</b> Off
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> Off
The Shortest Time (Sec)	The time that a targeted object spends in loitering cannot be less than the shortest loitering time. Setting range: 5-60 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
Start the Path Judgment	The enabling of path analysis makes loitering judgment accurate by using the software algorithm, for example, no alarm is generated when a person walks along a straight line if the function is set to ON.	<b>[How to set]</b> Click to enable Start the Path Judgment and enable path analysis.

# CONFIG. /INTELLIGENT ANALYSIS

## 4. Loiter

### Settings

Table 6-4 Loiter Parameter Description

Parameter	DESCRIPTION	Setting
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-11, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

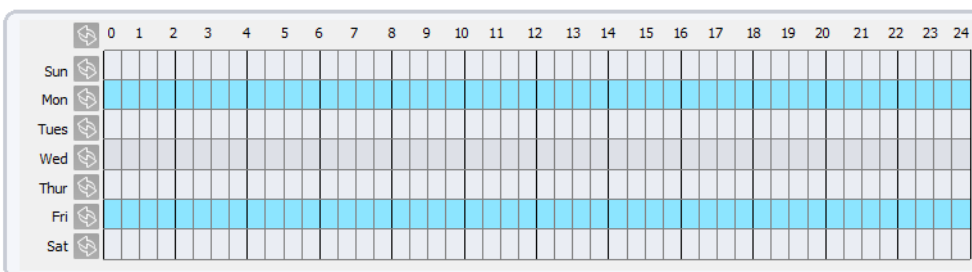


Figure 6-11 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 4. 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

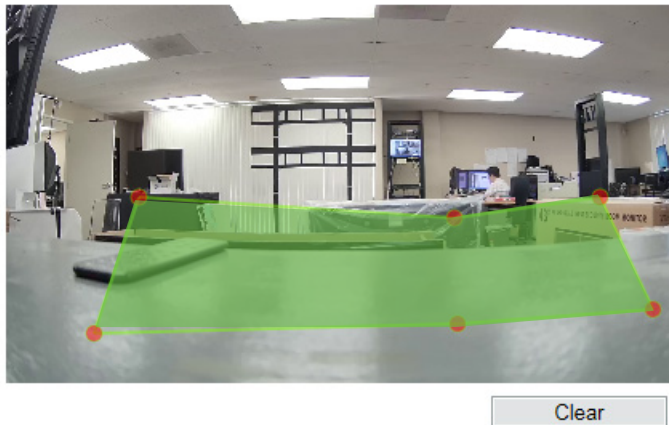


Figure 6-12 Deployment Area Setting Interface



#### 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. 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 6-13.

Multi Loiter

Clear

Enable	<input type="checkbox"/> OFF
Limit Target Size	<input checked="" type="checkbox"/> ON
Minimum Size(cm2)	<input type="text" value="1000"/>
Maximum Size(cm2)	<input type="text" value="100000"/>
Limit Numbers	<input checked="" type="checkbox"/> ON
Minimum Number	<input type="text" value="1"/>
Maximum Number	<input type="text" value="5"/>
The Shortest Time(Sec)	<input type="text" value="10"/>
Output Channel	<input type="checkbox"/> 1
SMTP	<input type="checkbox"/> OFF
FTP Upload	<input type="checkbox"/> OFF

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

Refresh Apply

Figure 6-13 Loiter Interface



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

# CONFIG. /INTELLIGENT ANALYSIS

## 5. Multiple Loiter

### Settings

Table 6-5 Multiple Loiter Parameter Description

Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated when the loitering time of multiple targets meet the set shortest loitering time, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> 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.	<b>[How to set]</b> 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.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> OFF

# CONFIG. /INTELLIGENT ANALYSIS

## 5. 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 6-14, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

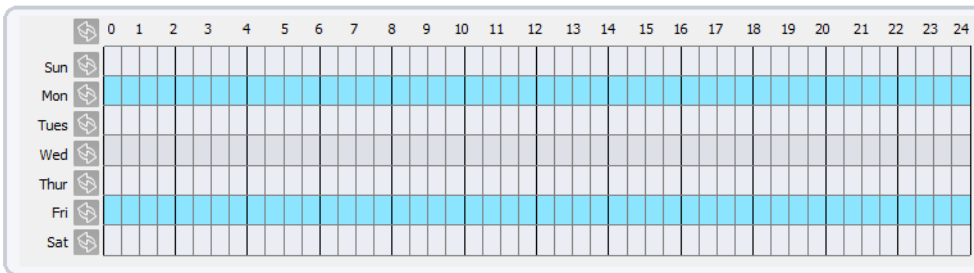


Figure 6-14 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 5. 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 6-15

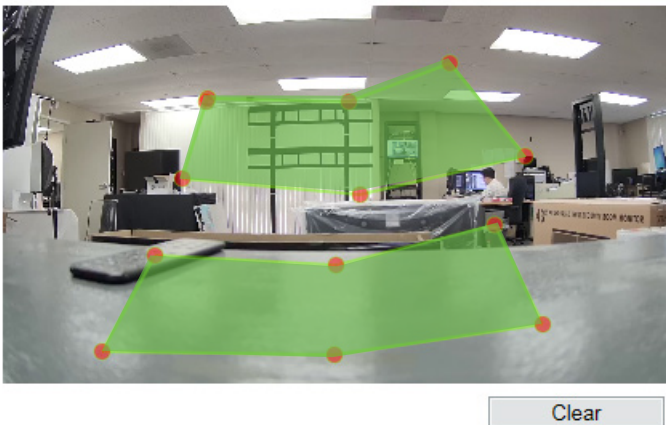


Figure 6-15 Deployment Area Setting Interface



#### 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. Object Left

### Function Definition

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

### Function Settings

**Step 1** Select **Configuration > Intelligent Analysis > Object Left** to access the Object Left setting interface, as shown in Figure 6-16.

#### Object Left

Enable ☐ OFF

Minimum Size(cm2)

Maximum Size(cm2)

Shortest Dwelling Time(Sec)

Upload Target Info ☐ OFF

Output Channel ☐ 1

SMTP ☐ OFF

FTP Upload ☐ OFF

Clear

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

Figure 6-16 Object Left Interface

Refresh

Apply

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






# CONFIG. /INTELLIGENT ANALYSIS

## 6. Object Left

### Settings

Table 6-6 Object Left Parameter Description

Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated when the dwelling time of an object within the deployment area meets the set shortest dwelling time, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
Minimum (Maximum) Size(cm <sup>2</sup> )	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Enter a value in the area box.
Shortest Dwelling Time (Sec)	An alarm is generated when the object left time is longer than the shortest dwelling time. Setting range: 5-60 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 5s
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> OFF

# CONFIG. /INTELLIGENT ANALYSIS

## 6. Object Left

### 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 6-17, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

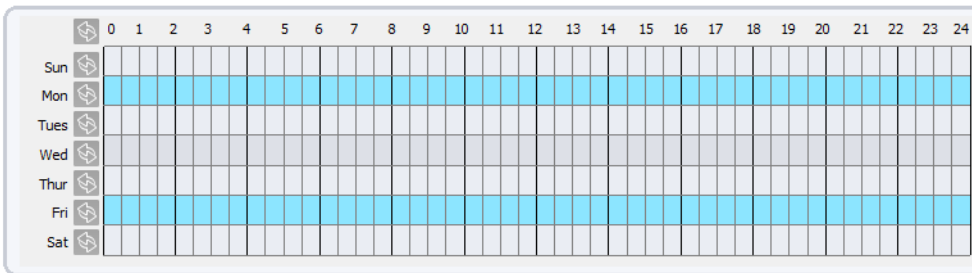


Figure 6-17 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 6. Object Left

### 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 6-18.

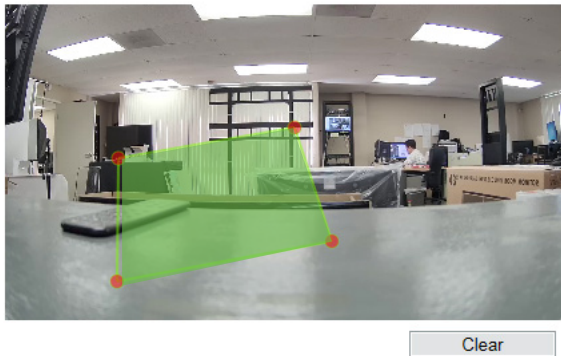


Figure 6-18 Deployment Area Setting Interface



#### 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

## 7. Object Removed

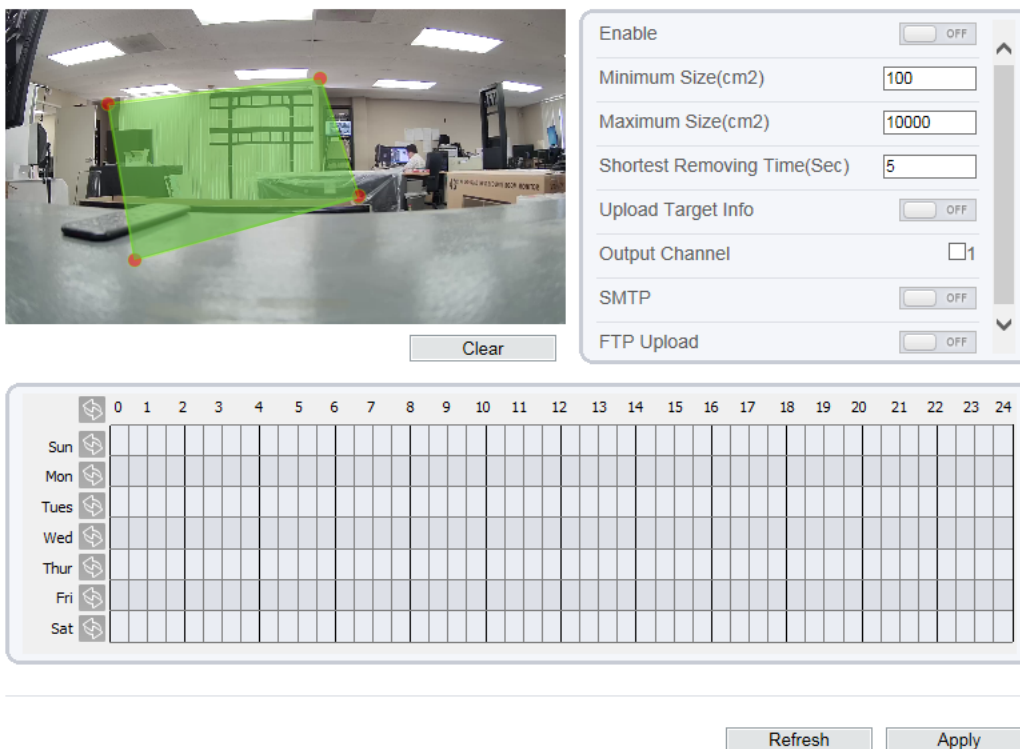
### Function Definition

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 6-19.

### Function Settings

**Step 1** Select **Configuration > Intelligent Analysis > Object Removed** to access the Object Removed setting interface, as shown in Figure 6-19.

#### Object Removed



Enable ☐ OFF

Minimum Size(cm2)

Maximum Size(cm2)

Shortest Removing Time(Sec)

Upload Target Info ☐ OFF

Output Channel ☐ 1

SMTP ☐ OFF

FTP Upload ☐ OFF

Clear

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

Refresh Apply

Figure 6-19 Object Removed Interface




**Step 2** Set all parameters for the Loiter. Table 6-7 describes the specific parameters.

# CONFIG. /INTELLIGENT ANALYSIS

## 7. Object Removed

### Settings

Table 6-7 Object Removed Parameter Description

Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated when the removing time of an object within the deployment area meets the set shortest removing time, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
Minimum (Maximum) Size(cm <sup>2</sup> )	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Enter a value in the area box.
The Shortest Time (Sec)	An alarm is generated when the object removed time is longer than the shortest removing time. Setting range: 5-60 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 5s
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> OFF

# CONFIG. /INTELLIGENT ANALYSIS

## 7. Object Removed

### 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 6-20, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

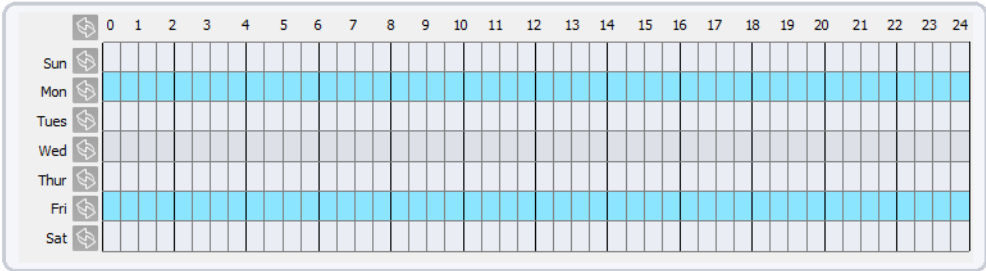


Figure 6-20 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 7. Object Removed

### 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 6-21

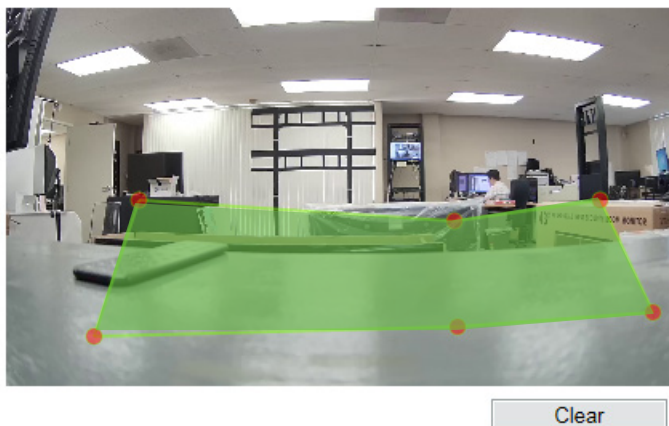


Figure 6-21 Deployment Area Setting Interface



#### 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

## 8. Abnormal Speed

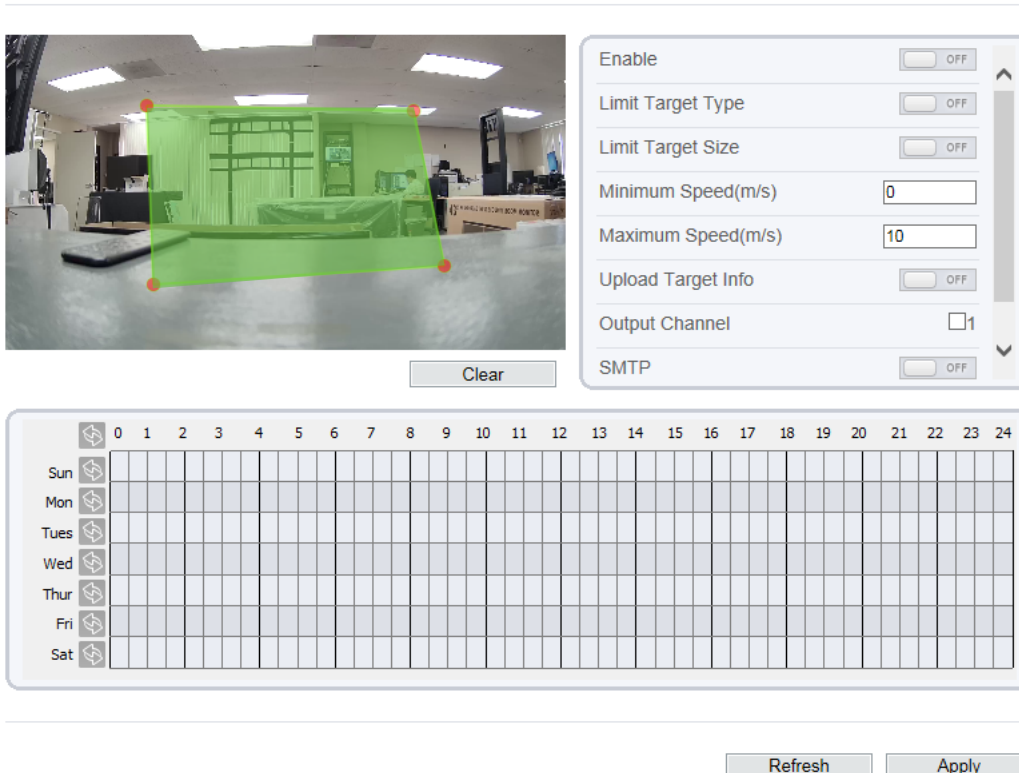
### Function Definition

Abnormal speed allows setting the travel speed criteria for a target within the deployment area on the video screen. When the travel speed of a target of specified type (such as human or vehicle) within this area meets the alarm condition, an alarm is generated.

### Function Settings

**Step 1** Select **Configuration > Intelligent Analysis > Abnormal Speed** to access the Abnormal Speed setting interface, as shown in Figure 6-22.

#### Abnormal Speed



The interface displays a video feed on the left with a green rectangular region of interest. To the right is a settings panel with the following options:

- Enable: ☐ OFF
- Limit Target Type: ☐ OFF
- Limit Target Size: ☐ OFF
- Minimum Speed(m/s):
- Maximum Speed(m/s):
- Upload Target Info: ☐ OFF
- Output Channel: ☐ 1
- SMTP: ☐ OFF

Below the settings panel is a calendar grid for selecting specific days and times. The grid has columns for hours (0-24) and rows for days of the week (Sun-Sat). Each cell in the grid contains a small icon representing a target.

Buttons at the bottom include "Clear", "Refresh", and "Apply".

Figure 6-22 Abnormal Speed Interface

**Step 2** Set all parameters for the Loiter. Table 6-8 describes the specific parameters.



# CONFIG. /INTELLIGENT ANALYSIS

## 8. Abnormal Speed

### Settings

Table 6-8 Abnormal Speed Parameter Description




Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated when the travel speed of a target of specified type meets the alarm condition, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
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.	<b>[How to set]</b> Click to enable Limit Target Type. <b>[Default Value]</b> Off
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> Off
Minimum (Maximum) Speed (m/s)	Set prohibited speeds. When a target object crosses an area at a speed between the minimum and maximum speeds, an alarm is generated. Setting range: 5-60 seconds.	<b>[How to set]</b> Enter a value in the area box.

# CONFIG. /INTELLIGENT ANALYSIS

## 8. Abnormal Speed

### Settings

Table 6-8 Abnormal Speed Parameter Description

Parameter	DESCRIPTION	Setting
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-23, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

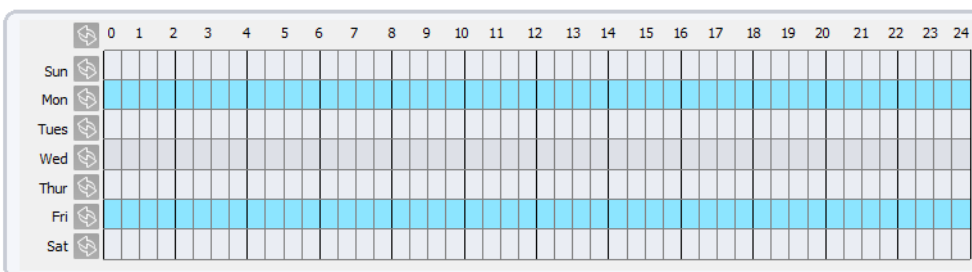


Figure 6-23 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 8. Abnormal Speed

### 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 6-24.



Figure 6-24 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

## 9. 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 6-25.

#### Converse

**Enable** ☐ OFF

**Limit Target Type** ☐ OFF

**Limit Target Size** ☐ OFF

**Upload Target Info** ☐ OFF

**Output Channel** ☐ 1

**SMTP** ☐ OFF

**FTP Upload** ☐ OFF

**Calendar**

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

Figure 6-25 Converse Interface






**Step 2** Set all parameters for the Loiter. Table 6-9 describes the specific parameters.

# CONFIG. /INTELLIGENT ANALYSIS

## 9. Converse

### Settings

Table 6-9 Converse Parameter Description

Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated when a target within the deployment area moves in the set travel direction, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
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.	<b>[How to set]</b> Click to enable Limit Target Type. <b>[Default Value]</b> Off
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> Off
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> OFF

# CONFIG. /INTELLIGENT ANALYSIS

## 9. Converse

### Settings

Table 6-9 Converse Parameter Description

Parameter	DESCRIPTION	Setting
Output Channel	If you check to set the Output Channel and the device is connected to an external alarm indicator, the alarm indicator signals when an alarm is triggered.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-26, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

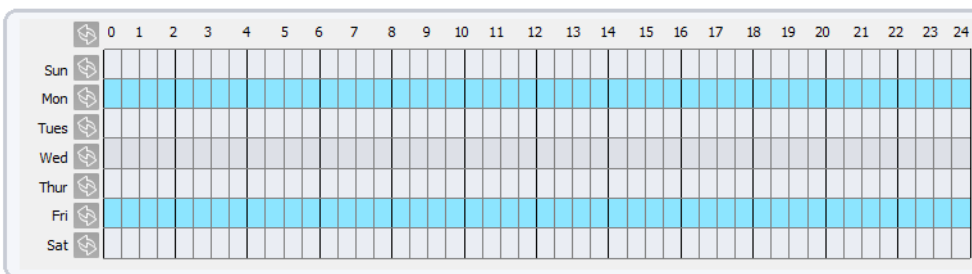


Figure 6-26 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 9. 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 6-27.



Figure 6-27 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


## 10. Illegal Parking

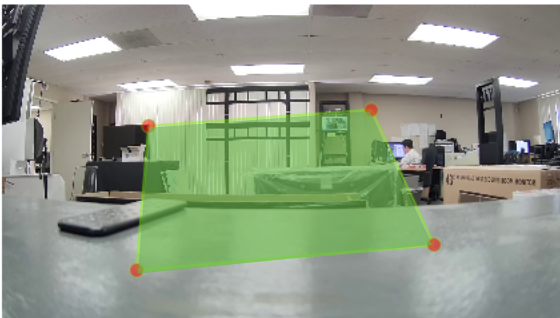
### Function Definition

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

### Function Settings

 **Step 1** Select **Configuration > Intelligent Analysis > Illegal Parking** to access the Illegal Parking setting interface, as shown in Figure 6-28.

 **Illegal Parking**



Enable ☐ OFF

Minimum Size(cm2)

Maximum Size(cm2)

Allowed Parking Time(Sec)

Upload Target Info ☐ OFF

Output Channel ☐ 1

SMTTP ☐ OFF

FTP Upload ☐ OFF

Clear

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

Refresh Apply

Figure 6-28 Illegal Parking Interface

 **Step 2** Set all parameters for the Loiter. Table 6-10 describes the specific parameters.



# CONFIG. /INTELLIGENT ANALYSIS

## 10. Illegal Parking

### Settings

Table 6-10 Illegal Parking Parameter Description




Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated when the dwelling time of a target (vehicle) within the deployment area meets the set allowed parking time, it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 10
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.	<b>[How to set]</b> Click to enable Limit Target Type. <b>[Default Value]</b> Off
Limit Target Size	The target size for triggering an effective alarm is set based on the actual target size. The default value is 1000-100000 square centimeters and the setting range is 0-1000000 square centimeters. When setting the target size, you need to accurately set "Real size in scene" in advanced parameters, otherwise no alarms may be generated.	<b>[How to set]</b> Click to enable Limit Target Size. <b>[Default Value]</b> Off
Allowed parking time(Sec)	An alarm is generated when the object left time is longer than the shortest dwelling time. Setting range: 5-60 seconds.	<b>[How to set]</b> Enter a value in the area box.

# CONFIG. /INTELLIGENT ANALYSIS

## 10. Illegal Parking

### Settings

Table 6-10 Illegal Parking Parameter Description

Parameter	DESCRIPTION	Setting
Upload Target Info	Enable the function of uploading target information by clicking  below the Live video in a flash browser to turn  into  . When an alarm is triggered, the target movement trace can be displayed (The trace can be seen only within the deployment area and disappears after the target leaves the deployment area)	<b>[How to set]</b> Click to enable Upload Target Info. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-29, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

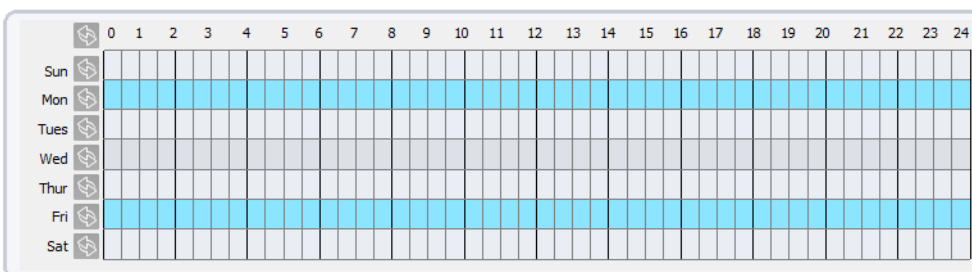


Figure 6-29 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 10. Illegal Parking

### 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 6-30.

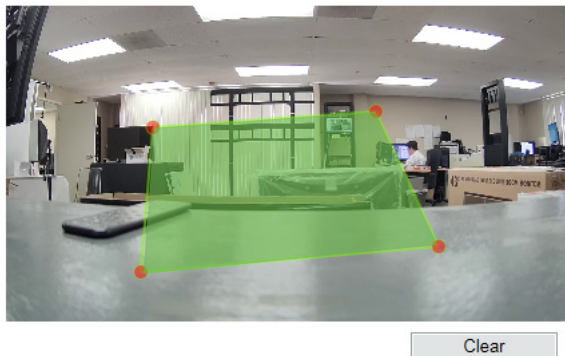


Figure 6-30 Deployment Area Setting Interface



#### 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

## 11. Single Bad

### Function Definition

Signal bad refers to that an alarm is generated if an event such as tampered or shifted occurs .



#### Note

- Currently, An alarm is generated only when more than 75% area of a video is obscured.
- When the ambient is dark and the gray average is less than 40, an alarm of Signal Bad is generated.

### Function Settings



**Step 1** Select **Configuration > Intelligent Analysis > Single Bad** to access the Single Bad setting interface, as shown in Figure 6-31.

#### Signal Bad

The interface displays the following settings:

- Enable: ☒ ON
- Output Channel: ☐ 1
- SMTP: ☒ ON
- FTP Upload: ☒ ON

The calendar grid shows days of the week (Sun to Sat) and hours (0 to 24). Each cell contains a small icon representing the alarm status for that time slot.

Buttons: Refresh, Apply

Figure 6-31 Single Bad Interface



**Step 2** Set all parameters for the Loiter. Table 6-11 describes the specific parameters.

# CONFIG. /INTELLIGENT ANALYSIS

## 11. Single Bad

### Settings

Table 6-11 Single Bad Parameter Description

Parameter	DESCRIPTION	Setting
Alarm Interval (1-1800s)	An alarm is generated if an event such as tampered or shifted occurs it is generated again in next intervals (alarm interval) until the end of event. Setting range: 1-1,800 seconds.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 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.	<b>[How to set]</b> Click the parameter and input an ID.
SMTP	If you turn on, system will send a notice email. You can set the email on <b>Network Service / SMTP</b> .	<b>[Default Value]</b> 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 6-32, and then click Delete to erase the deployment time. You can also delete selected deployment time by means of inverse selection.

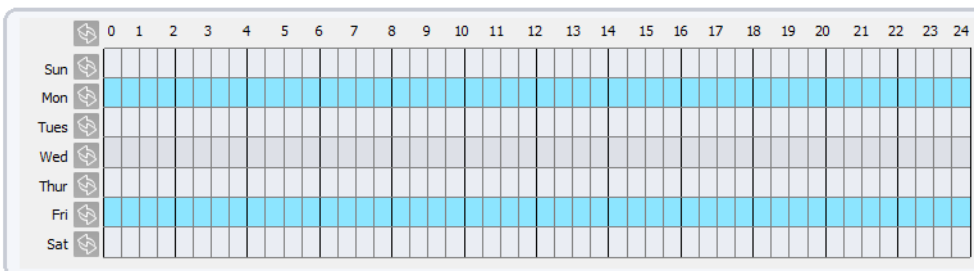


Figure 6-32 Deployment Time Setting Interface

# CONFIG. /INTELLIGENT ANALYSIS

## 12. Advanced

### Function Settings



**Caution !** This function is only applicable to camera with intelligent analysis function.



**Step 1** Select **Configuration > Intelligent Analysis > Advanced** to access the Illegal Parking setting interface, as shown in Figure 6-33.

**Advanced**

Scene

Outdoor

ID

Real Size In Scene(cm)

0

☒ Depth of field validate proportion 1000 cm2
 

Delete

Refresh

Apply

Figure 5-33 Illegal Parking Interface



**Step 2** You can enable/disable Camera Shake, High Noise, Low Contrast and Period Motion based on Scene settings. Table 6-12 describes the specific parameters.

# CONFIG. /INTELLIGENT ANALYSIS

## 12. Advanced

### Settings

Table 6-12 Advanced Parameter Description

Parameter	DESCRIPTION	Setting
Scene	The scene which camera installed Select indoor/outdoor base on the Environment.	<b>[How to set]</b> Select from the drop-down list. <b>[Default Value]</b> Outdoor
ID	Mark the line base on the ID of line, select the according line by the ID.	<b>[How to set]</b> Select from the drop-down list.
Real Size in scene (cm)	Length of line according to the real size in scene. The default value is 0 and the setting value is 0-99999 centimeters.	<b>[How to set]</b> Enter a value in the area box. <b>[Default Value]</b> 0

### Setting methods and rules

Set Advanced parameters before setting function parameters. Draw lines in advanced parameters interface so that the true object has a mapping relation with the image object. The method and rules for drawing line as below:

- 2-4 vertical lines or 2 vertical lines and 2 ground lines need to be entered.
- In the case of low marking requirement, two vertical lines can meet most scene requirements. Normally, the vertical line is marked based on human height.
- The lines are distributed near and far. Two vertical lines are in the scene, one near and the other far. On the screen, draw a vertical line along the target object height, measure the actual length of this target, and enter the actual length in Real size in Scene box for saving. Similarly, two horizontal lines on the ground are in the scene, one near and the other far. Measure and enter the actual length.
- Click a marking line (turning red after clicking) and click Delete to delete the marking line.
- Click a marking line (turning red after clicking), to modify the marking line data. You can also modify the line parameters by selecting a number and enter the actual size in Real size in Scene box on the advanced parameter interface

# 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.

#### Alarm Output

Alarm Output	1
Name	1
Valid Signal	Close
Alarm Output Mode	Switch Mode
Alarm Time(ms)(0:Continuous)	0

Manual control

Start

Stop

Refresh

Apply

Figure 6-1 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.  <b>NOTE</b> The number of alarm output channels depends on the device model.	<b>[How to set]</b> Select a value from the drop-down list box <b>[Default Value]</b> 1
Name	Alarm output channel name.	<b>[Value range]</b> 0 to 32 bytes
Valid Signal	The options are as follows: <ul style="list-style-type: none"> <li>• <b>Close:</b> An alarm is generated when an external alarm signal is received.</li> <li>• <b>Open:</b> An alarm is generated when no external alarm signal is received.</li> </ul>	<b>[How to set]</b> Select a value from the drop-down list box <b>[Default Value]</b> 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.  <b>NOTE</b> <ul style="list-style-type: none"> <li>• If the switch mode is used, the alarm frequency of the device must be the same as that of the external alarm device.</li> <li>• If the pulse mode is used, the alarm frequency of the external alarm device can be configured.</li> </ul>	<b>[How to set]</b> Select a value from the drop-down list box <b>[Default Value]</b> Switch Mode
Alarm Time (ms) (0:Continuous)	Alarm output duration. The value <b>0</b> indicates that the alarm remains valid.	<b>[How to set]</b> Select a value from the drop-down list box <b>[Default Value]</b> 0 <b>[Value range]</b> 0 to 86400 seconds
Manual Control	Control the alarm output.	



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

# CONFIGURATION / ALARM

## 2. Setup Network Alarm Parameters

### Procedure



**Step 1** Choose **Configuration > Alarm > Network Alarm**.  
The **Network Alarm** page is displayed, as shown in Figure 7-2.

**Network Alarm**

Network Card ID 1

Exceptional Alarm ☒ ON

Alarm Interval(10-86400S) 10

Output Channel 1

Refresh Apply

Figure 7-2 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

## 3. 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 7-3.

Motion Alarm

Enable ☐ ON

Alarm Interval(1-1800S)

Sensitivity

Output Channel ☒ 1

SMTP ☐ OFF

FTP Upload ☐ OFF

2010-04-12 00:01:10 Test

Clear

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sun																									
Mon																									
Tues																									
Wed																									
Thur																									
Fri																									
Sat																									

Figure 7-3 Motion Alarm page

Refresh

Apply



**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 **output channel**.

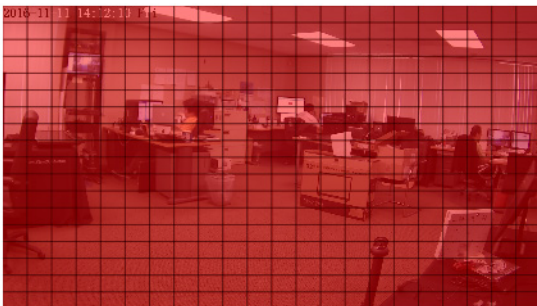
# CONFIGURATION / ALARM

## 3. Setup Motion Detection Alarm Parameters

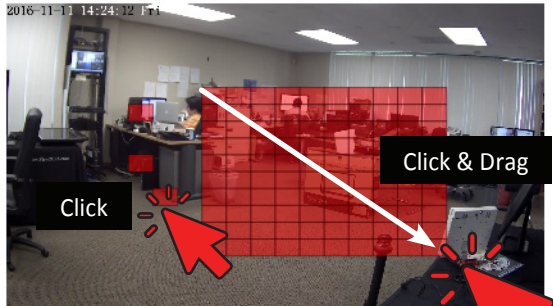
### Procedure

**Step 7** Turn on the **SMTP** notice. If you turn on, system will send an email about motion detection alarm.

**Step 8** Configure the detection area.  
Press and hold the left mouse button, and drag in the video area to draw a detection area.



Clear



Clear

Figure 7-4 Motion Area Setting page - Setup motion 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 9** Click Apply.  
The message "Apply success!" is displayed.

**Step 10** Click Confirm.  
The system saves the settings.

# CONFIGURATION / PRIVACY MASK

## Configuration of the Privacy Mask Function

### Procedure



Choose **Configuration > Privacy Masking**.

The **Privacy Masking** page is displayed, as shown in Figure 8-1.

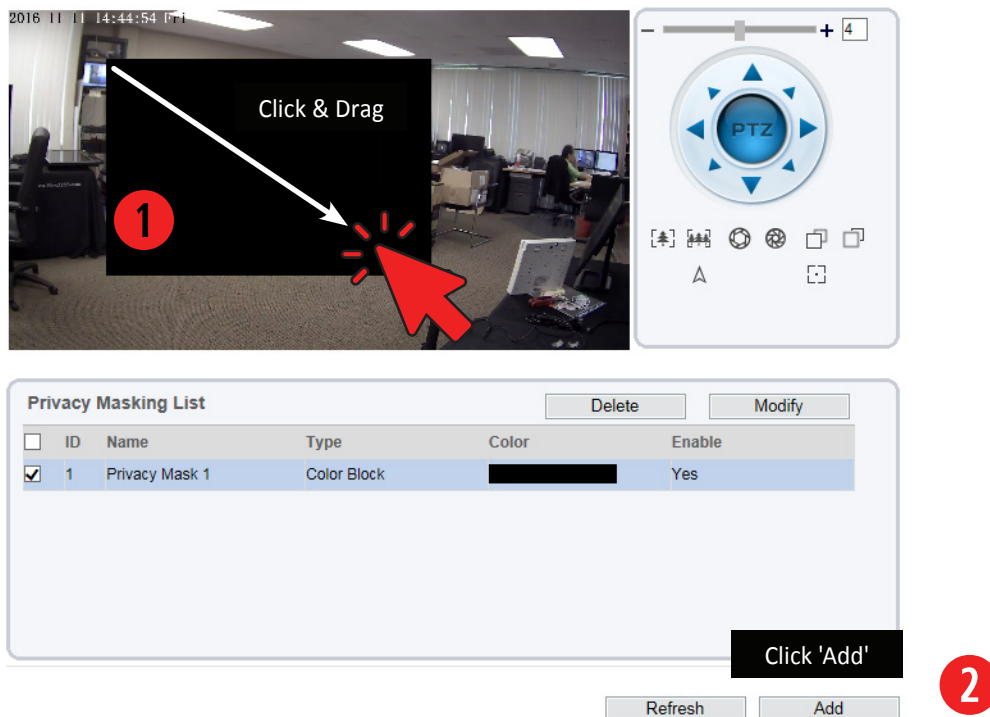


Figure 8-1 Privacy Masking Page



**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 8-1 Privacy Mask parameters

Parameter	DESCRIPTION	Setting
ID	ID of Privacy Masking.	N/A
Name	Name of privacy Masking.	<b>[Setting method]</b> Click the name and the drop-down list box. <b>[Default Value]</b> Blank
Type	Type of privacy masking	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Color Block
Color	Color of privacy masking.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Black
Enable	Indicates whether to enable the privacy masking.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Yes
Delete	Delete a privacy masking.	<b>[Setting method]</b> 1. Select a privacy masking from the Privacy Masking List. 2. Click <b>Delete</b> , 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 <b>Modify</b> , 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 9-1.



**802.1x**

802.1x	
Account	<input type="text"/>
Password	<input type="password"/>
ConfirmPassword	<input type="password"/>

Figure 9-1 802.1x page

Refresh

Apply



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



**Step 3** Enter the account name.



**Step 4** Enter the password and confirm password.



**Step 2** 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 9-2.

DDNS	
Provider	3322_ddns
Network Card Name	eth0
Host Name	
Account	
Password	
Test DDNS	

Refresh

Apply

Figure 9-2 DDNS page



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




# CONFIG. / NETWORK SERVICE

## 2. Setup DDNS Parameters

### Procedure

Table 9-1 DDNS parameters

Parameter	DESCRIPTION	Setting
DDNS	Indicates whether to enable the DDNS service.	<b>[Setting method]</b> Click the button <b>ON</b> . <b>[Default Value]</b> OFF
Provider	DDNS service provider. Currently, only 3322 and DynDns are supported.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> 3322  <b>NOTE</b> Set this parameter based on the site requirements.
Network Card Name	Installed network card name	
Host Name	Host name customized by a user	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Account	User name to login into the DDNS server	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Password	Password to login into the DDNS server	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> 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 9-3.

PPPoE ON

Account

Password

IP Address Empty

Refresh Apply

Figure 9-3 PPPoE page



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



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

# CONFIG. / NETWORK SERVICE

## 3. Setup PPPoE Parameters

### Procedure

Table 9-2 PPPoE parameters

Parameter	DESCRIPTION	Setting
PPPoE	Indicates whether to enable the PPPoE service.	<b>[Setting method]</b> Click the button <b>ON</b> . <b>[Default Value]</b> OFF
Account	PPPoE user name provided by the network carrier.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Password	Password provided by the network carrier.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> 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 9-4.

**Port Mapping**

Enable	PortType	OutsidePort	OutsideIP Address	State
<input checked="" type="checkbox"/>	HTTP	80	0.0.0.0	Ineffective
<input checked="" type="checkbox"/>	RTSP	554	0.0.0.0	Ineffective
<input checked="" type="checkbox"/>	CONTROL	30001	0.0.0.0	Ineffective

Figure 9-4 Port Mapping page



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




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

# CONFIG. / NETWORK SERVICE

## 4. Setup Port Mapping Parameters

### Procedure

Table 9-3 Port Mapping parameters

Parameter	DESCRIPTION	Setting
Port Mapping	Indicates whether to enable the Port Mapping service.	<b>[Setting method]</b> Click the button <b>ON</b> . <b>[Default Value]</b> OFF
Map Mode	Mode of port mapping, includes auto and manual.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Auto  <b>NOTE</b> Set this parameter as manual to set custom port number
Port Type	Port Type includes: HTTP, RTSP and Control	N / A
Outside Port	Port of outside network.	<b>[Setting method]</b> Enter a value manually in map mode. <b>[Default Value]</b> 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 9-5.

SMTP Server Address	*	<input type="text"/>
SMTP Server Port	*	<input type="text" value="25"/>
User Name	*	<input type="text"/>
Password	*	<input type="password"/>
Sender E-mail Address	*	<input type="text"/>
Recipient_E-mail_Address1	*	<input type="text"/>
Recipient_E-mail_Address2		<input type="text"/>
Recipient_E-mail_Address3		<input type="text"/>
Recipient_E-mail_Address4		<input type="text"/>
Recipient_E-mail_Address5		<input type="text"/>
Attachment Image Quality		<div>Mid</div>
Transport Mode		<div>No Encrypt</div>
<div>Email Test</div>		

Refresh

Apply

Figure 9-5 SMTP page

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

# CONFIG. / NETWORK SERVICE

## 5. Setup SMTP Parameters

### Procedure

Table 9-4 SMTP parameters

Parameter	DESCRIPTION	Setting
SMTP Server Address	Email SMTP address * Required to type	<b>[Setting method]</b> IP address or web address <b>[Default Value]</b> Blank
SMTP Server Port	SMTP Server port number is provided by hosting company. * Required to type	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> 25
User Name	Main recipient Email address or user-name * Required to type	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Password	Main recipient Email address password * Required to type	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Sender E-mail Address	Sender email address * Required to type	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Recipient E-mail Address1	Main Recipient Email address * Required to type * This one can be same as 'User Name'	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Recipient E-mail Address 2-5	Extra Recipient Email addresses	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Attachment Image Quality	Setup the quality of capture image quality	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Mid
Transport Mode	Setup Email transfer mode	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> No Encrypt



#### 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 9-6.

 **FTP**

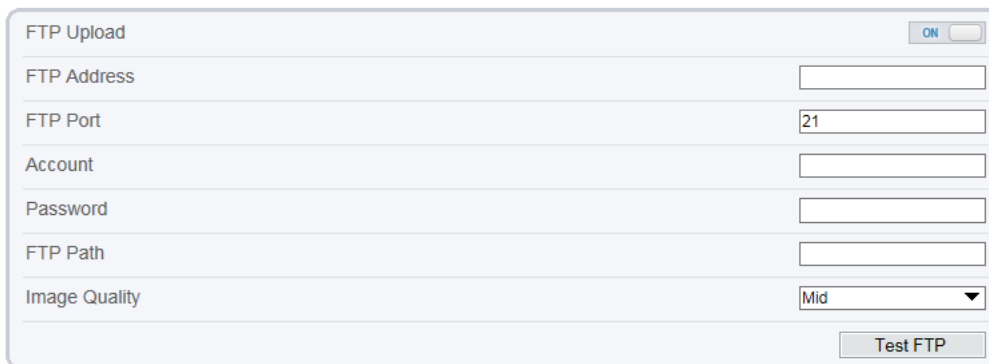


Figure 7-6 FTP page

Refresh

Apply



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



**Step 3** Set the parameters according to Table 9-5.



# CONFIG. / NETWORK SERVICE

## 6. Setup FTP Parameters

### Procedure

Table 9-5 FTP parameters

Parameter	DESCRIPTION	Setting
FTP Upload	Indicates whether to enable the FTP service.	<b>[Setting method]</b> Click the button <b>ON</b> . <b>[Default Value]</b> OFF
FTP Address	IP address of FTP server.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
FTP Port	Port of FTP server.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> 21
Account	FTP server account.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Password	FTP server password.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
FTP Path	FTP Path to save the JPG image.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> Blank
Image Quality	A higher-quality image means more storage space. Set this parameter based on the site requirement.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Mid



#### 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 9-7.

IP Filter

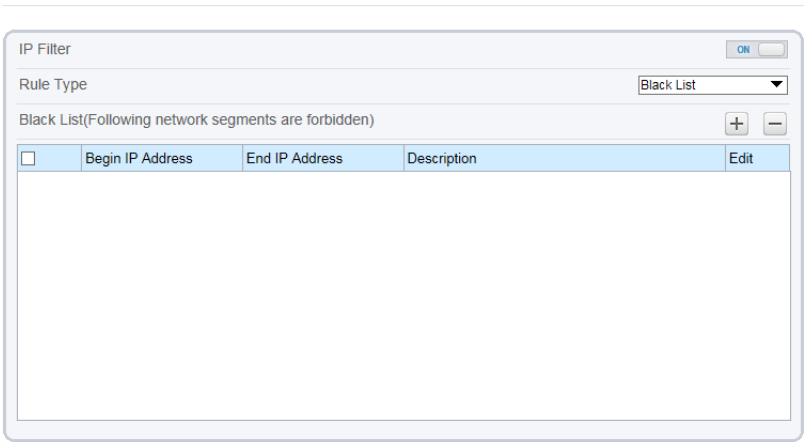


Figure 9-7 IP Filter page

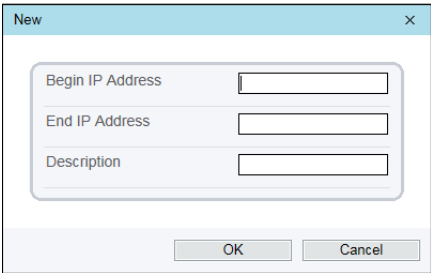




Figure 9-8 IP Filter page - add white/black IP list



-  **Step 2** Click the button on to enable **IP Filter**.
-  **Step 3** Set the parameters according to Table 9-6.

# CONFIG. / NETWORK SERVICE

## 7. Setup IP Filter Parameters

### Procedure

Table 9-6 IP Filter parameters

Parameter	DESCRIPTION	Setting
IP Filter	Indicates whether to enable the IP Filter.	<b>[Setting method]</b> Click the button <b>ON</b> . <b>[Default Value]</b> OFF
Rule Type	IP filter type, includes black list and white list.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Black List
Black List	Specified network segment to allow access	<b>[Setting method]</b> 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	<b>[Setting method]</b> 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 9-9.

 **CGI Alarm Service Center**

CGIAlarm

ON

Name

Type

HTTP

URL Start

URL End

User Name

Password

Proxy Setting

ON

Address

Port

platform

User Name

platform

Password

Test the connection to the specifield HTTP server

Test

Refresh

Apply

Figure 9-9 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 9-7.

# CONFIG. / NETWORK SERVICE

## 8. Setup CGI Alarm Service Center Parameters

### Procedure

Table 9-7 CGI Alarm Service Center parameters

Parameter	DESCRIPTION	Setting
CGI Alarm	Indicates whether to enable the IP Filter.	<b>[Setting method]</b> Click the button <b>ON</b> . <b>[Default Value]</b> OFF
Name	Name of CGI Alarm	<b>[Setting method]</b> Enter a value manually.
Type	Type of CGI Alarm	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> HTTP
URL Start	Push the alarm message by CGI with start URL	<b>[Setting method]</b> Enter a value manually. <b>For example:</b> http://192.168.35.74:80/MajorAlarmType&MinorAlarmType&SourceName&DeviceID&DeviceIP&AlarmTime&Description
URL End	Push the alarm message by CGI with end URL	<b>[Setting method]</b> Enter a value manually. <b>For example:</b> http://192.168.35.74:80/MajorAlarmType&MinorAlarmType&SourceName&DeviceID&DeviceIP&AlarmTime&Description
User Name	User name of device	<b>[Setting method]</b> Enter a value manually.
Password	Password of device	<b>[Setting method]</b> Enter a value manually.
Proxy Setting	Indicates whether to enable the Proxy. Forwarder server of CGI alarm to forward the CGI alarm.	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> OFF

# CONFIG. / NETWORK SERVICE

## 8. Setup CGI Alarm Service Center Parameters

### Procedure

Table 9-7 CGI Alarm Service Center parameters

Parameter	DESCRIPTION	Setting
Address	IP address of Forwarder server.	<b>[Setting method]</b> Enter a value manually.
Port	Port of Forwarder server	<b>[Setting method]</b> Enter a value manually.
platform User Name	User name of forwarder server	<b>[Setting method]</b> Enter a value manually.
platform Password	Password of forwarder server	<b>[Setting method]</b> Enter a value manually.
Test the connection to the specified HTTP server	Test if the device connects to the proxy successfully	<b>[Setting method]</b> 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 9-10.

SNMP

SNMPv1 ☐ ON

SNMPv2c ☐ ON

Write Community

Read Community

Trap Address

Trap Port

Trap Community

SNMPv3 ☐ ON

Read Security Name

Security Level

Auth Algorithm

Auth Password

Encry Algorithm

Encry Password

Write Security Name

Security Level

Auth Algorithm

Auth Password

Encry Algorithm

Encry Password

SNMP Port

Figure 9-10 **SNMP** page

Refresh

Apply



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



**Step 3** Set the parameters according to Table 9-8.

# CONFIG. / NETWORK SERVICE

## 9. Setup SNMP Parameters

### Procedure

Table 9-8 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.	<b>[Setting method]</b> Click the button <b>ON</b> . <b>[Default Value]</b> OFF
Write Community	Name of write community The write community only can modify data.	<b>[Setting method]</b> 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	Name of read security	<b>[Setting method]</b> Enter a value manually.
Write Security Name	Name of write security	
Security Level	Security Level between SNMP manager and agent, includes three levels: <b>Noauth:</b> No authentication and no encryption <b>Auth:</b> Authentication but no encryption <b>Priv:</b> Authentication and encryption	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Blank
Auth Algorithm	Authentication Algorithm, includes MD5and SHA.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Blank



# CONFIG. / NETWORK SERVICE

## 9. Setup SNMP Parameters

### Procedure

Table 9-8 SNMP parameters

Parameter	DESCRIPTION	Setting
Auth Password	Authentication password	<b>[Setting method]</b> Enter a value manually.
Encry Algorithm	Encryption Algorithm, includes DES and AES.	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> Blank
Encry Password	Encryption password	<b>[Setting method]</b> Enter a value manually.
SNMP Port	Port of SNMP	<b>[Setting method]</b> Enter a value manually. <b>[Default Value]</b> 16



**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. / 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 10-1 User/Group Definition

Parameter	Description	Setting
User	User name for log-in to the IP camera	<b>[Setting method]</b> Click <b>Add</b> 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 <b>Administrators</b> , <b>Operator</b> , and <b>Media user</b> . Their permissions are described as follows:	<b>[Setting method]</b> Click <b>Add</b> 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 10-2. Table 10-2 describes the parameters.

User

ID	User Name	Groups	Notes	Operate
0	admin	SuperAdmin	admin	
1	subadmin	Administrators	Sub	

Figure 10-1 User page

**Add User**

User Name:

Password:

ConfirmPassword:

Group:

Notes:

**Privilege**

- ☒ Live Video
- ☒ Video Control
- ☒ PTZ Control
- ☒ Audio
- ☒ Playback
- ☒ Backup
- ☒ Record Policy
- ☒ Disk Config

**Live VideoPrivilege Detail**

Watching real-time video and switch stream.

OK Cancel

Figure 10-2 User page / Add User

**Add User**

User Name:

Password:

ConfirmPassword:

Group:

Notes:

**Privilege**

- ☒ Live Video
- ☒ Video Control
- ☒ PTZ Control
- ☒ Audio
- ☒ Playback
- ☒ Backup
- ☒ Record Policy
- ☒ Disk Config

**Live VideoPrivilege Detail**

Watching real-time video and switch stream.

OK Cancel

Figure 10-3 User page / Add User by Role

**Modify User**

User Name:

Password:

ConfirmPassword:

Group:

Notes:

**Privilege**

- ☒ Playback
- ☒ Backup
- ☒ Record Policy
- ☒ Disk Config
- ☒ Privilege Manager
- ☒ Parameter Configure
- ☒ System maintenance
- ☒ Log

**Live VideoPrivilege Detail**

Watching real-time video and switch stream.

OK Cancel

Figure 10-4 User page / Modify User



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






Table 10-2 and 10-3 describes the operations.

# CONFIG. / PRIVILEGE MANAGER

## 1. Configuration of Permission for User

### Procedure

Table 10-2 User parameters



Function	Procedure	Description
ID	User ID	N / A
User Name	User name for logging in to the camera.	<b>[Setting method]</b> Select a value from the drop-down list box.
Groups	<p>Permission group where a user belongs. The default permission groups are <b>Super Admin</b>, <b>Administrators</b>, <b>Operator</b>, and <b>Media user</b>. Their permissions are described as follows:</p> <ul style="list-style-type: none"> <li>• <b>SuperAdmin</b> : Includes all privileges</li> <li>• <b>Administrators</b> : Live Video, Video Control, Audio, Playback, Backup, Record Policy, Disk Configure, Privilege Manage, Parameter Configure, System Maintenance and Log</li> <li>• <b>Operator</b> : System Maintenance, Parameter Configure, playback, Live Video and Video Control</li> <li>• <b>Media user</b> : Live Video</li> </ul>	<p><b>[Setting method]</b> Click <b>Add</b> button, then select a value from the drop down list box.</p> <p> <b>NOTE</b> Super Admin account cannot be selected on new user registration</p>
Notes	Notes of the User.	<b>[Setting method]</b> Click <b>Add</b> button, then enter a value manually.
Operate	<p>The operation of the user, includes view user, modify user and delete user.</p> <p> <b>NOTE</b> Super Admin cannot be editable</p>	<p><b>[Setting method]</b> Click the icon to</p> <p> edit new user,  delete user and</p> <p> view SuperAdmin.</p>

# CONFIG. / PRIVILEGE MANAGER

## 1. Configuration of Permission for User

### Procedure

Table 10-3 User Add, Modify.Delete parameters

Function	Procedure	Description
Add	<ol style="list-style-type: none"> <li>1. Click Add. The Add User page is displayed, as shown in Figure 8-2.</li> <li>2. Enter a user name, password, confirm password.</li> <li>3. Select a group from the drop down list box.</li> <li>4. Enter the notes (Optional).</li> <li>5. Check the privilege.</li> <li>6. Click OK. The user is added successfully.</li> </ol>	Add an administrator or a common user as shown in Figure 8-2 the drop-down list box.
Modify	<ol style="list-style-type: none"> <li>1. Click  icon &amp; modify-User-page is displayed.</li> <li>2. Modify the user name, password, group or privilege.</li> <li>3. Click OK. The user is modified successfully. The User page is displayed.</li> </ol>	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 11-1. Table 11-1 describes the protocol-related parameters.

 **Protocol Info**

Protocol Name

ONVIF

Protocol Version

v2.6

Protocol Software Version

v2.6\_build000051

RTSP Rule

rtsp://ip:port/sn/live/cameraid/streamid

RTSP Example

rtsp://192.168.0.118:554/sn/live/1/1

Refresh

Figure 11-1 Protocol Info page

Table 11-1 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.

# CONFIGURATION / PROTOCOL

## 2. Setup Security Authentication

### Description




#### Step 1 Choose **Protocol > Security**.

The Security page is displayed as shown in Figure 11-2. Table 11-2 describes the parameters on the Security page.

The screenshot shows a web interface for the Security page. At the top, there is a toggle switch labeled 'User Verification' which is currently turned 'ON'. Below this, there are two buttons: 'Refresh' and 'Apply'.

Figure 11-2 Security page

Table 11-2 Security parameter

Function	Procedure	Description
User Verification	<p>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.</p> <p> <b>NOTE</b></p> <ul style="list-style-type: none"> <li>The default user name is admin, and the default password is admin.</li> </ul>	<p><b>[Setting method]</b> Click the button on to enable <b>User Verification</b>.</p>



#### 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. 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 11-3. Table 11-3 describes the parameters on the Multicast parameter page.

 Multicast Parameter


Stream ID	1
IP	238.255.255.255
Video Port	25330
Source Port	25530

Figure 11-3 Multicast page

Table 11-3 Multicast parameters

Function	Procedure	Description
Stream ID	ID of stream	<b>[Setting method]</b> Select a value from the drop-down list box. <b>[Default Value]</b> 1
IP	IP address that receive multicast data	<b>[Setting method]</b> Enter a value manually <b>[Default Value]</b> 238.255.255.255
Video Port	Port that receive video data	<b>[Setting method]</b> Enter a value manually <b>[Default Value]</b> 25330
Source Port	Port that receive source data	<b>[Setting method]</b> Enter a value manually <b>[Default Value]</b> 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 12-1.

Time	User Name	Log Info

Figure 12-1 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 12-2.

Alarm Type

All

Begin Time

2016-11-15 8:2:34

End Time

2016-11-16 8:2:34

Download

Query

Alarm Begin Time	Alarm End Time	Log Info	Source ID

<

>

<

>

>

Figure 12-2 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 12-3.



**Collect all log**

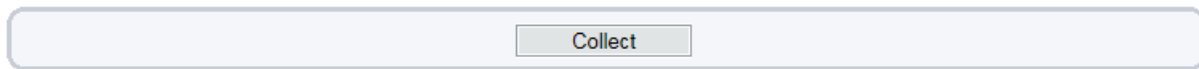


Figure 12-3 Collect All Log page



**Step 2** Collect logs

1. Click the **Collect**, then the download page will be displayed.
2. 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 13-1.

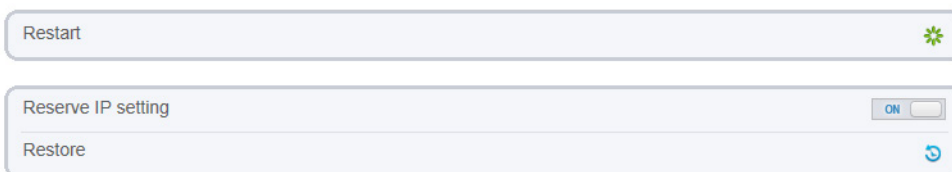


Figure 13-1 Maintenance page



**Step 2** Click  icon.

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



**Step 3** Click **OK**.

The device is restarted successfully five minutes later.

# MAINTENANCE (RESET & RESTORE)

## 2. 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.

The Device Maintenance page is displayed.



**Step 2** Click  icon.

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



**Step 3** Click **OK**.

The device will be restored to the factory settings.

## NOTE

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing. There are no margins, text, or other markings on the page.