VP-8-V2 and VP-16-V2 Series Encoder

User Manual

About this Manual

This Manual is applicable to VP-8-V2 AND VP-16-V2 Series Encoder.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website

Please use this user manual under the guidance of professionals.

Legal Disclaimer

REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. OUR COMPANY SHALL NOT TAKE ANY RESPONSIBILITES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, OUR COMPANY WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. OUR COMPANY SHALL NOT BE LIABLE IN THE EVENT THAT THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

Regulatory Information

FCC Information

FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into “Warnings” and “Cautions”

Warnings: Serious injury or death may occur if any of the warnings are neglected.

Cautions: Injury or equipment damage may occur if any of the cautions are neglected.

	
Warnings Follow these safeguards to prevent serious injury or death.	**Cautions** Follow these precautions to prevent potential injury or material damage.

 **Warnings**

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100 to 240 VAC or 12 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

Preventive and Cautionary Tips

Before connecting and operating your device, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Unit is designed for indoor use only.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

TABLE OF CONTENTS

Product Key Features

General

- Connectable to HD-TVI and analog cameras
- Connectable to the Coax camera/dome with long transmission distance
- Each channel supports dual-stream with up to 1080p resolution
- Independent configuration for each channel, including resolution, frame rate, bit rate, image quality, etc
- Encoding for both video stream and video and audio stream; audio and video synchronization during composite stream encoding
- Watermark technology

Monitoring

- Motion detection, video-tampering detection, video exception alarm, video loss alarm and VCA alarm functions
- Privacy mask
- Several PTZ protocols supported; PTZ preset, patrol and pattern

Alarm and Exception

- Configurable arming time of alarm input/output
- Alarm triggers, audio alarm, notifying surveillance center, sending email and alarm output
- VCA detection alarm (line crossing detection and intrusion detection) is supported by client software
- Support coaxial alarm.

Network Functions

- 1 self-adaptive 10M/100M/1000M network interface
- IPv6 is supported
- TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, SNMP, NFS, iSCSI, UPnP™ and HTTPS are supported
- Extranet access by HiDDNS
- TCP, UDP and RTP for unicast
- Auto/Manual port mapping by UPnP™
- Remote search, playback, download, locking and unlocking the record files, and downloading files broken transfer resume
- Remote parameters setup; remote import/export of device parameters
- Remote viewing of the device status, system logs and alarm status
- Remote keyboard operation
- Remote program upgrading
- Remote system restart and shutdown
- Alarm and exception information can be sent to the remote host

- Remotely start/stop recording
- Remotely start/stop alarm output
- Remote PTZ control
- Remote JPEG capture
- Two-way audio and voice broadcasting
- Embedded WEB server

Chapter 1 Introduction

1.1 Front Panel

VP-8-V2/VP-16-V2:

Figure 1. 1 VP-8-V2/VP-16-V2 Front Panel

Table 1. 1 Indicator Description

	Indicator	Description
1	POWER	Lights in green when the device is powered on.
2		Not Used
3	Tx/Rx	1. Does not light when the network is not connected; 2. Blinks in green when the data is transmitting / receiving; 3. Blinks at higher frequency when the data for transmitting / receiving is larger.

1.2 Rear Panel

VP-8-V2:

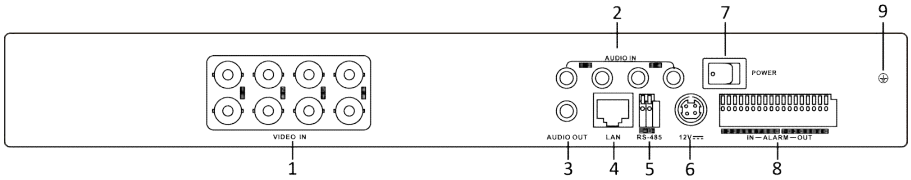


Figure 1. 2 VP-8-V2 Rear Panel

VP-16-V2:

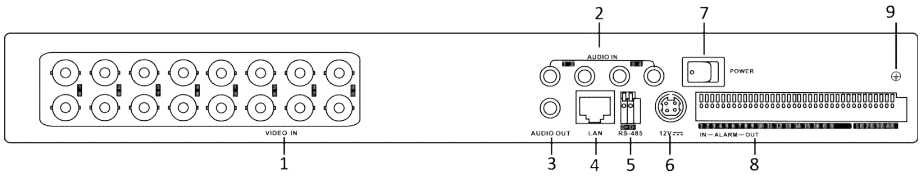


Figure 1. 3 VP-16-V2

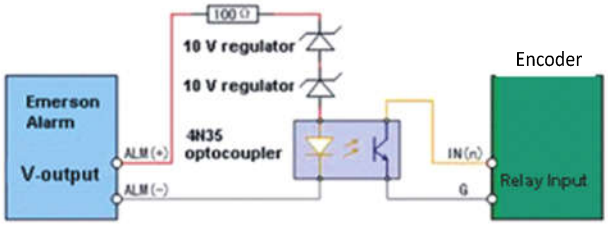
Table 1. 2 Interface Description

	Description
1	VIDEO IN
2	AUDIO IN, RCA Connector
3	AUDIO OUT, RCA Connector
4	LAN Network Interface
5	RS-485 Serial Interface
6	12 VDC Power Input
7	Power Switch
8	ALARM IN and ALARM OUT
9	GND

1.3 Alarm Connections

1.3.1 Alarm Input Connections

VP-8-V2 AND VP-16-V2 supports the open/close relay input as the alarm input mode. For the alarm input signal not in open/close relay signal mode, please follow the connections shown as below:
Alarm input connections for Emerson Alarm:



Note: The relay input port of the Encoder should be set to NC mode.

Figure 1. 4 Alarm Input Connections for Emerson Alarm

Alarm input connections for Normal Alarm:

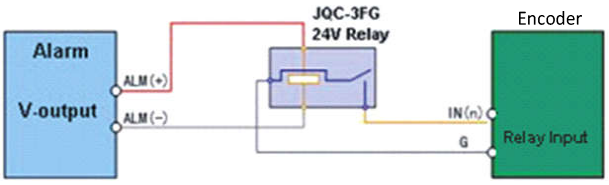


Figure 1. 5 Alarm Input Connections for Normal Alarm

1.3.2 Alarm Output Connections

VP-8-V2 AND VP-16-V2 supports the open/close relay input as the alarm output mode. The alarm input can be selected to *NO* or *NC*. Different alarm output connection methods are applied to the AC or DC load. Please refer to the following diagram:

Alarm output connections diagram:

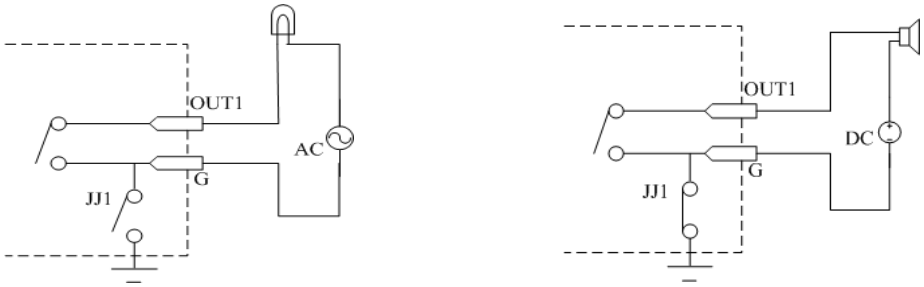


Figure 1. 6 Alarm Output Connections

Please note the different connections of JJ1 shown above.

For DC load, JJ1can be safely used both in *NC* and *NO* methods, and it is recommended to use within the limit of 12V/1A. For external AC input, JJ1 must be open. The motherboard provides two jumpers, each corresponding to one alarm output. And both of two jumpers are factory set to be connected.

Chapter 2 Access to V2 Encoder via Web Browser

Steps:

1. Power on the encoder, and connect the encoder to the network.
2. Input the IP address into the address bar of the web browser, and click Enter to enter the activation interface.

NOTE

The default IP address of the network encoder is 192.0.0.64. You are recommended to change the default IP address after your access.

3. Default username is **admin** Default password is **12345**.

The VP-8-V2 AND VP-16-V2 can also be accessed by WEB Browser for configuration and operation. The supported WEB browsers include: Internet Explorer 6/7/8/9, Firefox 3.5 and above, Chrome 8 and above, Safari 5.0.2 and above, Windows XP SP1 and above (32-bit).

Before you start:

- Before access, you need to configure the network settings of device according to *Chapter 3*.
- Connect the device to the LAN, and prepare a PC connected to the same LAN with the device.
- The factory default IP address of the device is *192.0.0.64*.

2.1 Installing Web Components

Steps:

1. Open WEB browser, input the IP address of VP-8-V2 AND VP-16-V2 (e.g., http://192.0.0.64) and then press the **Enter** key on PC. The system will display the login interface.

NOTE

When the HTTPS feature is enabled, the system uses the HTTPS login mode (e.g., https://192.0.0.64) by default. You can also input http://IP address/index.asp (e.g., http://192.0.0.64/index.asp) if you want to use HTTP mode to log into the device.

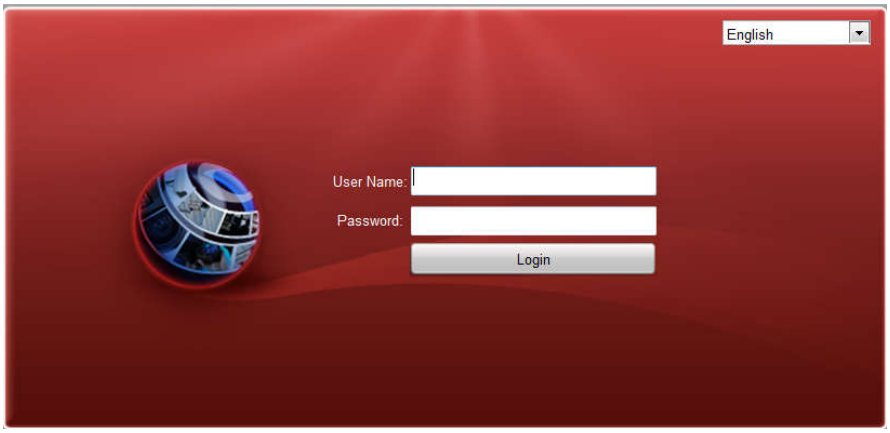


Figure 2. 1 Login Page

Input the user name and the password to log into the system.

NOTE

In the Login dialog box, if you have entered the wrong password for 7 times for the admin user or 5 times for the normal user, the current user account will be locked for30 seconds.

2. On the main page of VP-8-V2 AND VP-16-V2, you need to download and install the plug-in.

(1) Click on the live view panel by following the hints on the screen.

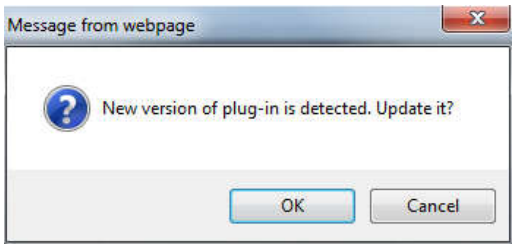


Figure 2. 2 Download and Install Plug-in

(2) Click **Run** or **Save** on the pop-up warning message box.

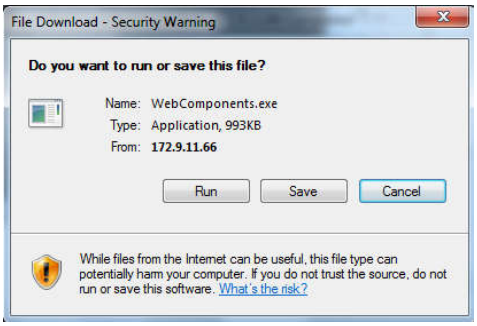


Figure 2. 3 Run Web Components

(3) Click **Next** on the pop-up Setup dialog box.

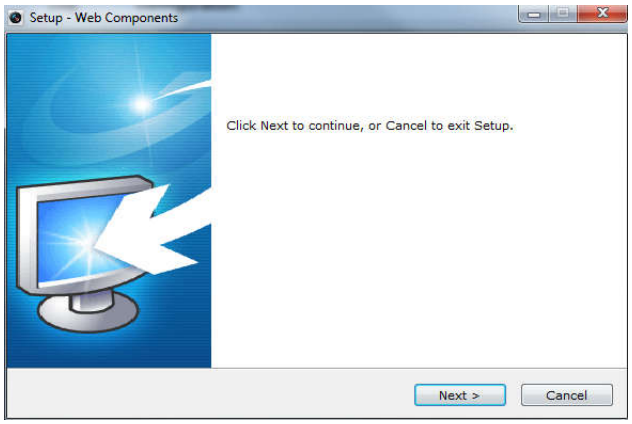


Figure 2. 4 Click Next

(4) When the installation completes, click **Finish** to finish the installation of Web Components.

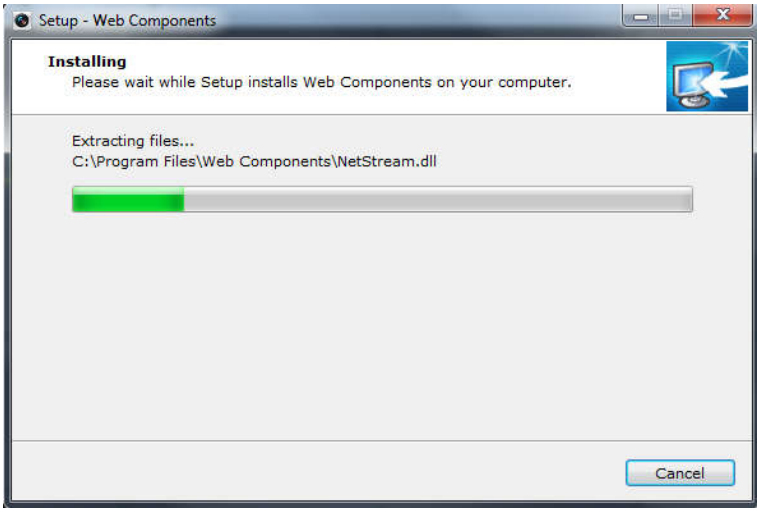


Figure 2. 5 Install the Web Components

2.2 Main Page

After successful login, you will enter the main page automatically.

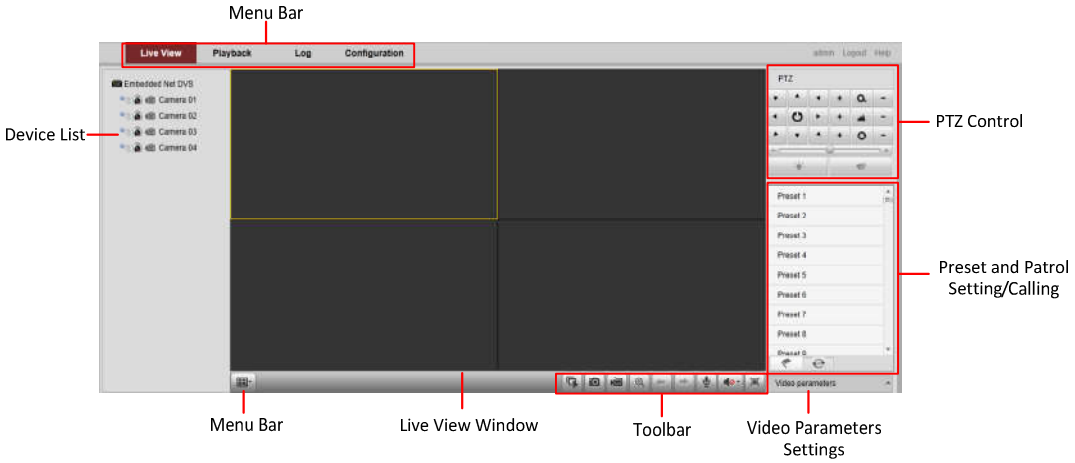


Figure 2. 6 Main Page

Description of the live view page:

Menu Bar: Enter the Live View, Playback, Log and Configuration page respectively.

Device List: Display the connected encoder and its channels.

Window-division: 1/4/9/16split screen modes.

Live Video Window: Display the live video of the current camera.

Toolbar: Realize functions in live view mode, e.g., live view, capture, recording, audio on/off, two-way audio, etc.

PTZ Control: Realize PTZ control of the camera (supports PTZ function), and the lighter and wiper control.

Preset Setting/Calling: Set and call the preset for the camera (supports PTZ function).

Video Parameters Settings: Configure the brightness, contrast, hue and saturation of the live video.

Chapter 3 Live View

Live view shows you the video image getting from the connected camera in real time. After successful login, the system will enter the live view page automatically.

3.1 Starting Live View

Steps:

1. In the live view window, select a playing window by clicking the mouse.
2. Double click a camera from the device list to start the live view.

Figure 3. 1 Start Live View

3. You can click the button on the toolbar to start the live view of all cameras on the device list.

Refer to the following table for the description of buttons on the live view window:

Table 3. 1 Description of Toolbar

Icon	Description
	Select the window-division mode with 1/4/9 split screens available
/	Start/Stop live view
	Capture pictures in live view mode
/	Manually start/stop recording
	Enable e-PTZ

Icon	Description
	Previous page
	Next page
/	Audio on/off
/	Start/Stop two-way audio
	Switch to full-screen live view mode.

NOTE

Before using two-way audio function or recording with audio, please select the **Video Type** to **Video & Audio** on *Section Configuring Video Settings.*

3.1.1 Main/Sub Stream Live View

You can select the main stream or sub stream for live view by clicking the corresponding icon as shown below:

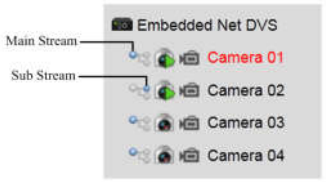


Figure 3. 2 Main Stream/Sub Stream for Live View

The main stream gets higher video quality while the sub stream requires lower bandwidth.

3.1.2 Full-screen Mode

You can click the button on the toolbar or double click on the live video to switch to the full-screen view mode. To switch back to the normal mode, click the or double click on the live video again.

Please refer to the following section for more information:

1. Capturing pictures on *Section Capturing the Picture.* .
2. Configuring recording on
3. .
4. Setting the image quality of live view on *Section Local Configuration.*
5. Setting the saving path for the recorded video files and captured pictures on *Section Local Configuration.*
6. Setting the OSD text on live video on *Section Configuring OSD Settings*.

3.2 Capturing the Picture

In live view mode, click the  button on the toolbar to capture the live pictures.

When the picture is captured, the following pop-up message box will appear at the lower right corner.

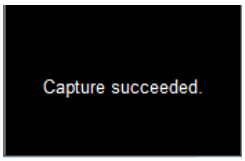


Figure 3. 3 Picture Capture Succeeded

- The saving path for the captured pictures can be set at the **Configuration > Local Configuration** page.
- The image is saved as a JPEG file on your computer.

3.3 Operating PTZ Control

Before you start:

1. Make sure the encoder is connected with the camera/dome which supports PTZ function. Connect the *R+* and *R-* terminals of the pan/tilt unit or speed dome to RS-485 D+ and RS-485 D- terminals of the VP-8-V2 AND VP-16-V2 respectively.
2. The baud rate, PTZ control and address configured in the **RS-485 Settings** interface (**Remote Configuration > Serial Port Settings > 485 Serial Port**), as shown in Figure 6.3, must be the same with the parameters of the connected pan/tilt unit or speed dome.

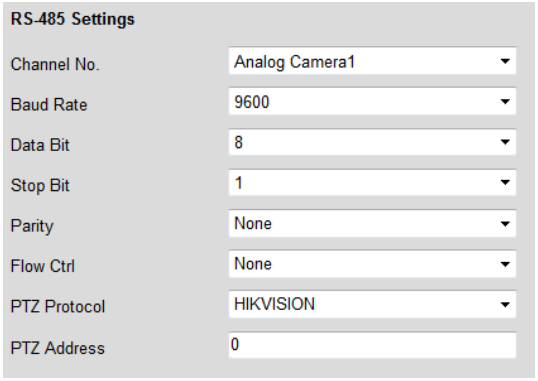


Figure 3. 4 RS-485 Settings

3.3.3 Operating PTZ Movement

In live view mode, you can use the PTZ control buttons to realize pan/tilt/zoom control of the camera lens.

There are 8 directional buttons (up, down, left, right, upper left, upper right, bottom left, bottom right) on the display window when the mouse is located in the relative positions.

Click on the directional buttons to control the pan/tilt movement.

Figure 3. 5 PTZ Control Panel

Click the zoom/iris/focus buttons to realize lens control.

Refer to the following table for description of PTZ control buttons:

Table 3. 2 Description of PTZ Control Buttons

Button	Description
	Zoom in/out
	Focus near/far
	Iris open/close
	Light
	Wiper
	Adjust speed of pan/tilt movement

3.3.4 Setting/Calling a Preset

Setting a Preset:

1. In live view mode, click the  from the PTZ control area to enter the preset settings interface.
2. Select a preset number from the preset list.

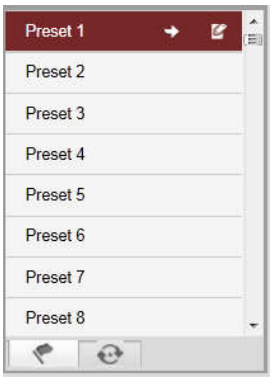


Figure 3. 6 Set a Preset

3. Use the PTZ control buttons to move the lens in the desired position. You can use any of the following commands:
   - Pan the camera to the right or left.
   - Tilt the camera up or down.
   - Zoom in or out.
   - Refocus the lens.
4. Click the icon to finish the setting of current preset.

NOTE

Up to 256 presets are configurable depending on the PTZ protocol applied.

Calling a Preset:

This feature enables the camera to point to a specified preset scene when an event takes place.

For the pre-defined preset, you can call it at any time to the desired preset scene.

In live view mode, select a predefined preset from the list and click the icon to call a preset.

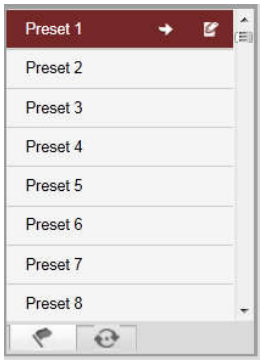


Figure 3. 7 Call a Preset

Linking to Alarm:

The preset can also be used to link to the alarm input when there is an alarm event occurring.

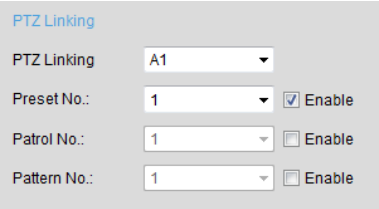


Figure 3. 8 PTZ Linking

Please refer to *Chapter Configuring and Handling Alarms* for the PTZ Linking settings (Remote Configuration>Alarm Settings>Alarm Input>Linkage Method).

3.3.5 Setting/Calling a Patrol

Setting a Patrol:

1. In live view mode, click the  from the PTZ control area to enter the patrol settings interface.
2. Select a patrol number from the patrol list for setting.

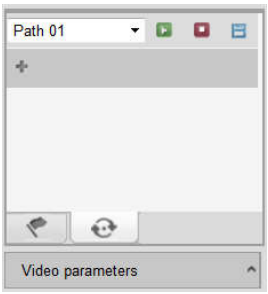


Figure 3. 9 Patrol Setting

3. Click the  button to enter the Add Patrol Path interface.

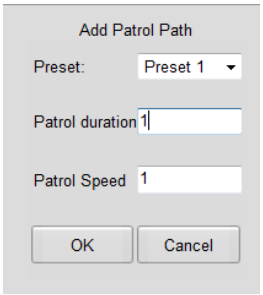


Figure 3. 10 Add Patrol Path

4. Configure patrol parameters, including the preset No., duration of staying for one preset and speed of patrol.
   Preset: determines the order at which the PTZ will follow while cycling through the patrol.
   Patrol Duration: refers to the time span to stay at the corresponding key point. The duration can be set

from 1 to 30 sec.

Patrol Speed: defines the speed at which the PTZ will move from one key point to the next. The speed can be set from 1 to 40.

NOTE

Hold the **backspace** in the keyboard while changing the number in the text fields of Patrol Duration and Patrol Speed.

5. Click **OK** to save the path to the current patrol.

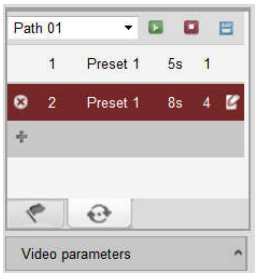


Figure 3. 11 Added Patrol Path

6. Repeat the above step 3 to 5 to add more patrol paths.
   You can also click to edit the existing patrol path, or click to delete it.
7. Click to save the patrol settings.
   Repeat the above steps to configure other patrols.

Calling a Patrol:

The PTZ camera will move according to the predefined patrol path when you call a patrol.

In live view mode, select a predefined patrol from the list and click the icon to start calling a patrol, and click to stop the calling.

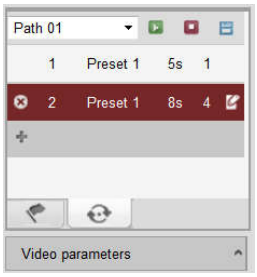


Figure 3. 12 Call a Patrol

3.4 Configuring Video Parameters

Purpose:

You can configure the video parameters, including the brightness, contrast, saturation and hue.

Steps:

1. In the live view interface, click the Video parameters button on the bottom right corner to spread the Video Parameters Setting interface:

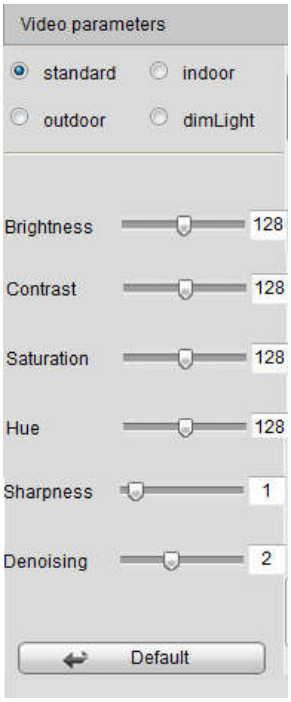


Figure 3. 13 Video Parameters Settings

2. Select the mode according to different light conditions. Four modes are selectable:
   - **Standard**: in general lighting conditions (default).
   - **Indoor:** the image is relatively smoother.
   - **Outdoor:** the image is relatively clearer and sharper. The degree of contrast and saturation is high.
   - **Dim Light:** the image is smoother than the other three modes.
3. Move the slider to set the brightness, contrast, saturation and hue from 0 to 255. The default value is 128 for the brightness, contrast and hue is 128 and 136 for the saturation.
4. Move the slider to set the sharpness from 0 to 15 and the denoising level from 0 to 3. The default value is 3 for the sharpness, and 1 for the denoising level.

NOTE

You can click the Default button to restore the default settings.

Chapter 4 Device Configuration

4.1 Local Configuration

Click **Configuration > Local Configuration** to enter the Local Configuration interface.

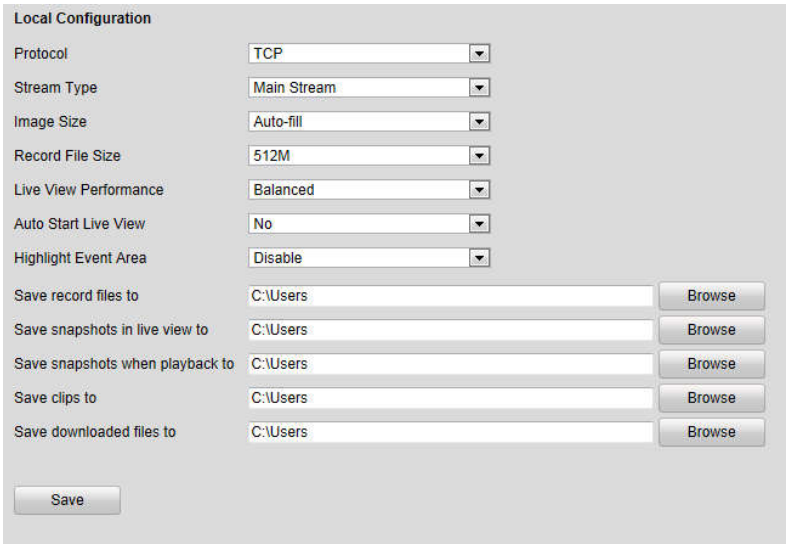


Figure 4. 1 Local Configuration

Configure the following settings:

Protocol Type: Set the protocol type of stream transmission to TCP or UDP.

- **UDP:** provides more real-time audio and video streams.
- **TCP:** ensures complete deliver of streaming data and better video quality, yet its real-time effect is not so good.

Stream Type: Select the stream type to main stream or sub stream used for live view by Web browser. Please refer to *Section Configuring Video Settings* for the parameters settings of the main stream and sub stream respectively.

Image Size: Select the split screen view mode to 4:3, 16:9 or Auto-fill.

Record File Size: Select the size of packed video files during manual recording to 256M, 512M or 1G.

Live View Performance: Set the live viewing performance to Shortest Delay, Real Time, Balanced or Fluency.

Auto Start Live View: Enable or disable the auto-start of live view once you open the Web browser.

Highlight Event Area: Enable or disable the Highlight Event Area. When this feature is enabled, the motion detection triggered frame for the moving targets in the motion detection area will be highlighted in green color. Please refer to *Chapter 8.4.1 Configuring Motion Detection*.

Save record files to: Set the saving path for the manually recorded video files.

Save snapshots in live view to: Set the saving path for the manually captured pictures in live view mode.

Save snapshots when playback to: Set the saving path for the captured pictures in playback mode.

Save clips to: Set the saving path for the clipped video files in playback mode.

Save downloaded files to: Set the saving path for the downloaded video files or pictures.

NOTE

You can click the **Browse** button to change the directory for saving the video files and pictures.

4.2 Device Parameters

4.2.1 Configuring Time Settings

Steps:

1. Click **Remote Configuration > Device Parameters > Time Settings** to enter the Time Settings interface:

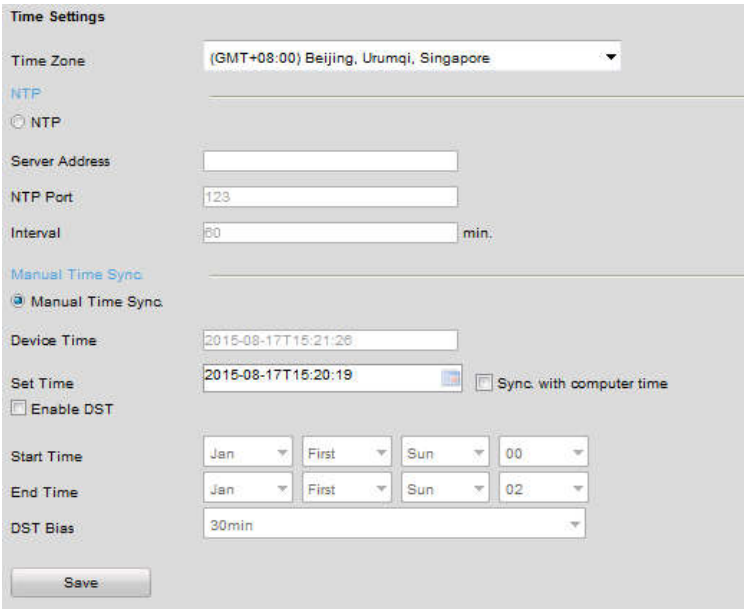


Figure 4. 2 Time Settings

2. Select the Time Zone.

Select the Time Zone that is closest to the device's location from the drop-down menu.

Figure 4. 3 Time Zone Settings

3. Configure the time synchronization by NTP server or by manually.

- **Configuring Time Sync by NTP Server**

A Network Time Protocol (NTP) Server can be configured on your device to ensure the accuracy of system date/time.

If the device is connected to a Dynamic Host Configuration Protocol (DHCP) network that has time server

properties configured, the camera will synchronize automatically with the time server.

Enable the **NTP** function by checking the checkbox, and configure the following settings:

NTP Server: IP address of NTP server.

NTP Port: Port of NTP server.

Interval: The time interval between the two synchronizing actions with NTP server. It can be set from 1 to 10080 minutes.

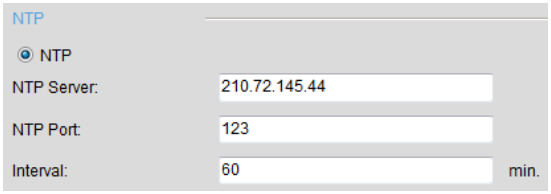


Figure 4. 4 Time Sync by NTP Server

NOTE

If the device is connected to a public network, you should use a NTP server that has a time synchronization function, such as the server at the National Time Center (IP Address: 210.72.145.44). If the device is set up in a more customized network, NTP software can be used to establish a NTP server used for time synchronization.

- Configuring Time Synchronization Manually

Enable the **Manual Time Sync** function and then click the icon to set the system time from the pop-up calendar. You can click the icon to quickly select the time.

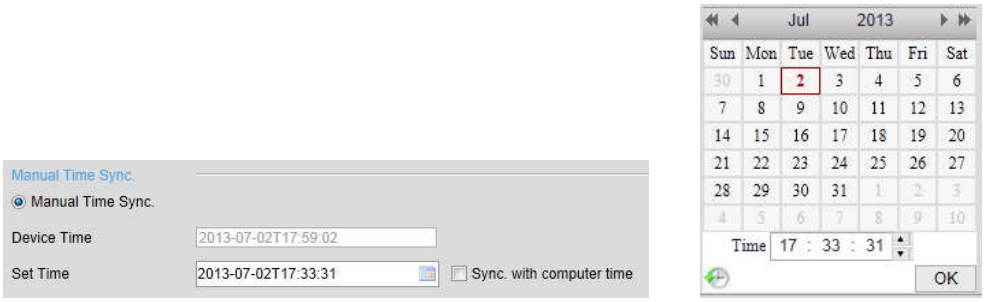


Figure 4. 5 Manual Time Sync

You can also check the checkbox of **Sync. with computer time** to synchronize the time with the local PC.

- Click the **DST** tab page to enable the DST function and set the date of the DST period.

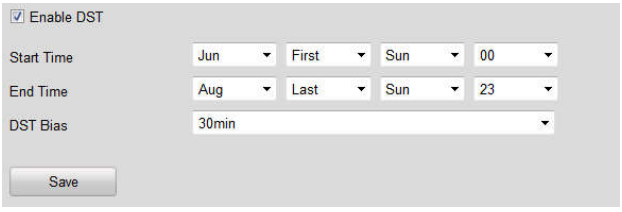


Figure 4. 6 DST Settings

4. Click the **Save** button to save the settings.

4.2.2 Configuring Packet Time of Recording

The recorded file is packed in 1G by default. You can also customize the packet time in the advanced settings page.

Steps:

1. Click **Remote Configuration> Device Parameters> Advanced** to enter the advanced settings interface.

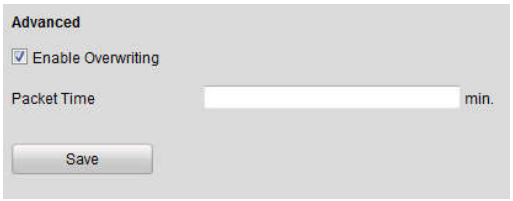


Figure 4. 7 Packet Time of Recording

2. Set the packet time of the recorded file.

NOTE

The packet time can be set from 1to 300 minutes.

3. Click **Save** to save the settings.

4.3 Network Settings

4.3.1 Configuring TCP/IP Settings

Network settings must be properly configured before operating device over network.

Steps:

1. Click **Remote Configuration > Network Settings > TCP/IP** to enter the TCP/IP Settings interface:

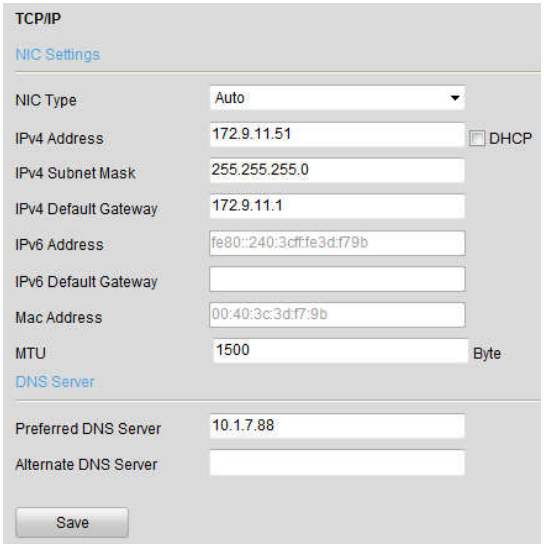


Figure 4. 8 TCP/IP Settings

2. Configure the NIC settings, including the NIC Type, IPv4 Address, IPv4 Subnet Mask, IPv4 Default Gateway, and MTU settings.

NOTE

The valid value range of MTU is 500 to 1500.

3. If the DHCP server is available, you can click the checkbox of DHCP to automatically obtain an IP address and other network settings from that server.
4. If the DNS server settings are required for some applications (e.g., sending email), you should properly configure the Preferred DNS Server and Alternate DNS Sever here.

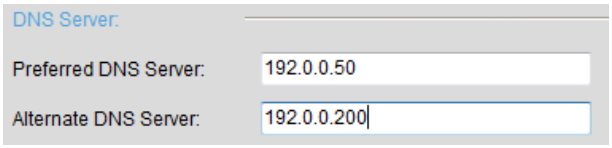


Figure 4. 9 DNS Server Settings

5. Click the **Save** button to save the above settings.

4.3.2 Configuring Port Settings

Purpose:

You can set the port No. of the encoder, e.g., HTTP port, RTSP port and HTTPS port.

Steps:

1. Click **Remote Configuration > Network Settings > Port** to enter the Port Settings interface:

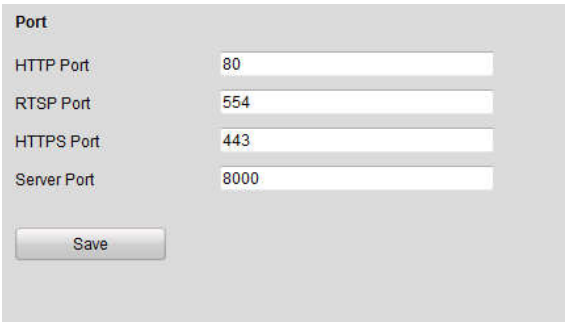


Figure 4. 10 Port Settings

2. Set the HTTP port, RTSP port, HTTPS port, and Server Port 8000 of the camera.

HTTP Port: The default port number is 80.

RTSP Port: The default port number is 554.

HTTPS Port: The default port number is 443.

Server Port: The default port number is 8000.

3. Click **Save** to save the settings.

It will ask you to reboot the device to activate the settings.

4.3.3 Configuring DDNS Settings

If your device is set to use PPPoE as its default network connection, you may set Dynamic DNS (DDNS) to be used for network access.

Prior registration with your DDNS Provider is required before configuring the system to use DDNS.

Steps:

1. Click the **Remote Configuration > Network Settings > DDNS Settings** to enter the DDNS Settings interface:

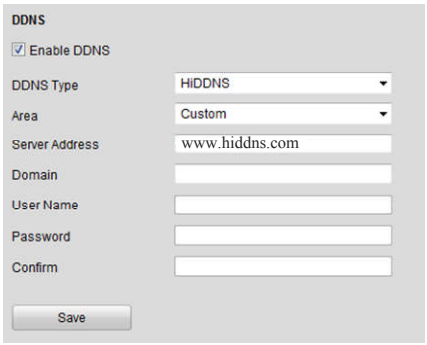


Figure 4. 11 DDNS Settings

2. Check the **Enable DDNS** checkbox to enable this feature.
3. Select **DDNS Type**. Five different DDNS types are selectable: IPServer, DynDNS, PeanutHull, HiDDNS, and NO-IP.

- **DynDNS:**

(1) Enter **Server Address** for DynDNS (e.g., members.dyndns.org).

(2) In the **Device Domain Name** text field, enter the domain obtained from the DynDNS website.

(3) Enter the **User Name** and **Password** registered in the DynDNS website.

(4) Click **Save** to save the settings.

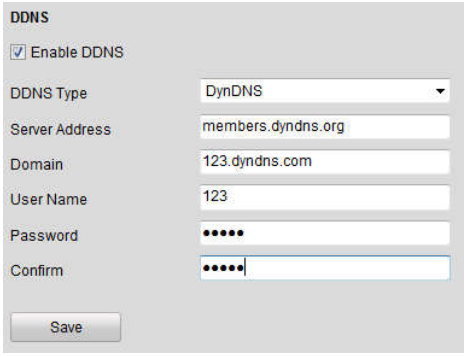


Figure 4. 12 DynDNS Settings

- **IPServer:**

(1) Enter Server Address for IPServer.

(2) Click **Save** to save the settings.

NOTE

For the IP Server, You have to apply a static IP, subnet mask, gateway and primary DNS from the ISP. The **Server IP** should be entered with the static IP address of the PC that runs IPServer software.

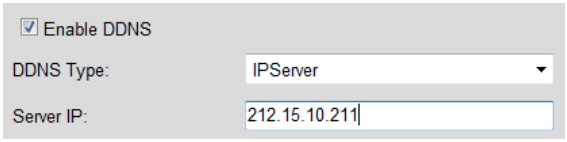


Figure 4. 13 IPServer Settings

- **HiDDNS:**

  (1) Enter the **Server Address** of the HiDDNS server: www.hiddns.com.

  (2) Enter the **Domain** name of the device. You can register the alias of the device domain name in the HiDDNS server first and then enter the alias to the domain name in the encoder; you can also enter the domain name directly on the encoder to create a new one.

  NOTE

  If a new alias of the device domain name is defined in the encoder, it will replace the old one registered on the server.

  (3) Click **Save** to save the settings.

Figure 4. 14 HiDDNS Settings

4.3.4 Configuring PPPoE Settings

Your device also allows access by Point-to-Point Protocol over Ethernet (PPPoE).

Steps:

1. Click the **Remote Configuration > Network Settings > PPPoE Settings** to enter the PPPoE settings interface:

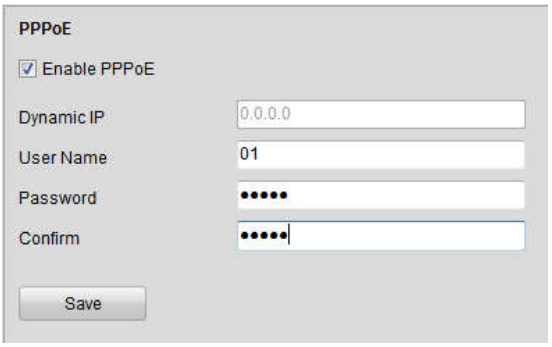


Figure 4. 15 PPPoE Settings

2. Check the **PPPoE** checkbox to enable this feature.
3. Enter **User Name**, **Password**, and **Confirm Password** for PPPoE access.

NOTE

The User Name and Password should be assigned by your ISP.

4. Click the **Save** button to save and exit.

4.3.5 Configuring Email Settings

Purpose:

The device can be configured to send an Email notification to all designated receivers if an alarm event is detected, e.g., motion detection event, video loss, tamper-proof, etc.

Before you start

1. Before configuring the Email settings, the device must be connected to a local area network (LAN) that maintains an SMTP mail server. The network must also be connected to either an intranet or the Internet depending on the location of the e-mail accounts to which you want to send notification.
2. Please configure the DNS Server settings under **Remote Settings>Network Settings>TCP/IP** before using the Email function.

Steps:

1. Enter the Basic Network Settings (**Remote Configuration > Network Settings > TCP/IP)** to set the IPv4 Address, IPv4 Subnet Mask, IPv4 Default Gateway and the Preferred DNS Server.
2. Click the **Remote Configuration > Network Settings > Email** to enter the Email settings interface:

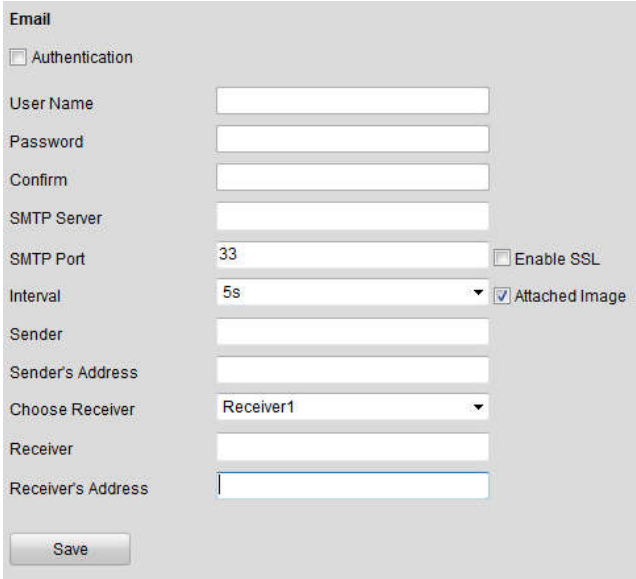


Figure 4. 16 Email Settings (1)

3. Configure the following Email settings:

Authentication (optional): If your mail server requires authentication, check this checkbox to use authentication to log in to this server and enter the login User Name and Password.

SMTP Server: The SMTP Server IP address or host name (e.g., smtp.263xmail.com).

SMTP Port: The SMTP port. The default TCP/IP port used for SMTP is 25.

- **Enable SSL**: Click the checkbox to enable SSL if required by the SMTP server. When the SSL is enabled, the default TCP/IP port used for SMTP is 465.

Interval: The interval refers to the time between two actions of sending attached pictures.

- **Attached Image**: Check the checkbox of **Attached Image** if you want to send email with attached alarm images.

Sender: The name of sender.

Sender's Address: The Email address of sender.

Choose Receiver: Select the receiver to which the Email is sent. Up to 3 receivers can be configured.

Receiver: The name of user to be notified.

Receiver's Address: The Email address of user to be notified.

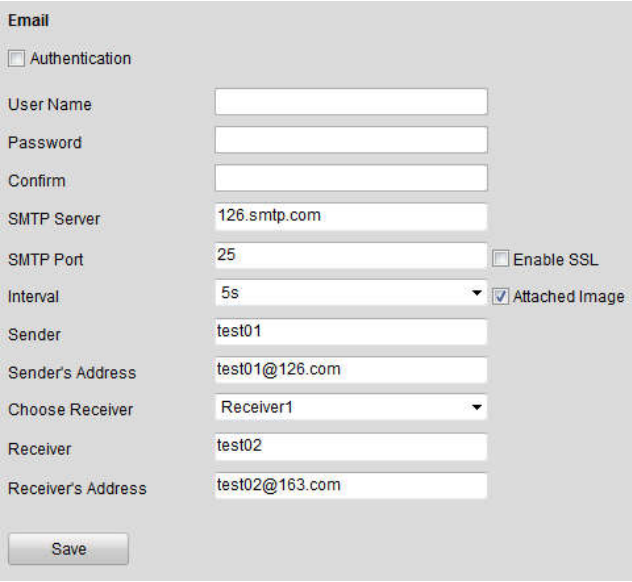


Figure 4. 17 Email Settings (2)

4. Click **Save** to save the Email settings.

Please refer to the following sections for more information:

Configure alarm linking methods with **Send Email** on *Section Configuring Motion Detection*, *Section Configuring External Alarm Input, Section Configuring Video Loss Alarm, Section Configuring Video Tempering* Alarm and *Section Handling Exception.*

4.3.6 Configuring SNMP Settings

Simple Network Management Protocol (SNMP) is an Internet-standard protocol for managing devices on IP networks. You can use SNMP to get camera status, parameters and alarm related information.

Before you start:

Before setting the SNMP, please download the SNMP software and manage to receive the device information via SNMP port. By setting the Trap Address, the device can send the alarm event and exception messages to the surveillance center.

NOTE

The SNMP version you select should be the same as that of the SNMP software.

Steps:

1. Click **Remote Configuration > Network Settings >SNMP** to enter the SNMP settings interface.
2. Check the checkbox to enable SNMP v2c, and configure the read SNMP community (default: public), write SNMP community (default: private), tap address (default: empty) and trap port (default: 162).

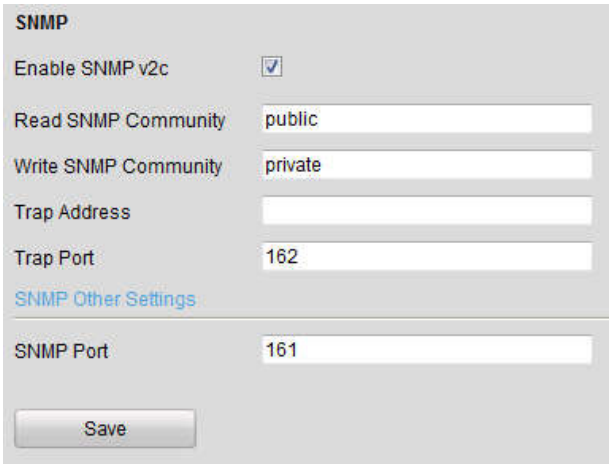


Figure 4. 18 SNMP Settings (1)

3. Set the SNMP port (default: 161).
4. Click **Save** to save the above settings.

4.3.7 Configuring UPnP™ Settings

Purpose:

UPnP™ can permit the device seamlessly discover the presence of other network devices on the network and establish functional network services for data sharing, communications, etc. If you want to use the UPnP™ function to enable the fast connection of the device to the WAN via a router, you should configure the UPnP™ parameters of the device.

Before you start:

If you want to enable the UPnP™ function of the device, you must enable the UPnP™ function of the router to which your device is connected. When the network working mode of the device is set as multi-address, the Default Route of the device should be in the same network segment as that of the LAN IP address of the router.

Steps:

1. Click **Remote Configuration > Network Settings > NAT** to enter the NAT settings interface.
2. Check the checkbox to enable the UPnP™ function.
3. Select the Port Mapping Mode to Auto or Manual.

   When you select **Auto**, the mapping ports can be automatically assigned by the router.

   When you select **Manual**, you should continue Step4 to edit the mapping ports.

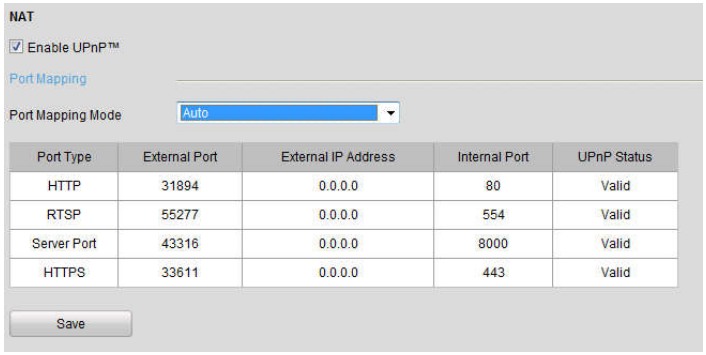


Figure 4. 19 UPnPTM Settings-Auto

4. Configure the HTTP Port (for access by WEB browser), SDK Port Mapping (for access by client software), RTSP Port and HTTPS Port respectively.

NOTE

- You can use the default port No., or change it according to actual requirements.
- The Ports indicate the port No. for mapping in the router.

5. Click **Save** to save the settings.

After port mapping is successful, you can view the status of the port mapping on the Port Status area.

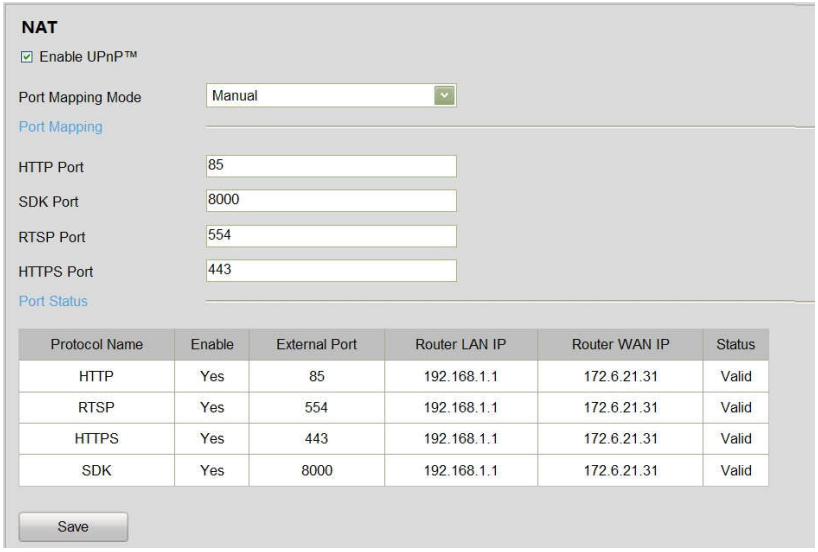


Figure 4. 20 UPnPTM Settings-Manual

4.3.8 Configuring HTTPS Settings

Purpose:

HTTPS (Hyper Text Transfer Protocol Secure) ensures the data transferred is encrypted using Secure Socket Layer (SSL) or Transport Layer Security (TLS). HTTPS provides authentication of the web site and associated web server that one is communicating with and create a secure channel over an insecure network.

HTTPS URLs begin with "https://" and use port 443 by default.

Steps:

1. Click **Remote Configuration > Network Settings > HTTPS** to enter the HTTPS settings interface.
2. Create the self-signed certificate or authorized certificate.

Figure 4. 21 HTTPS Settings

Task1: Create the self-signed certificate

(1) Click the **Create** button to create the following dialog box.

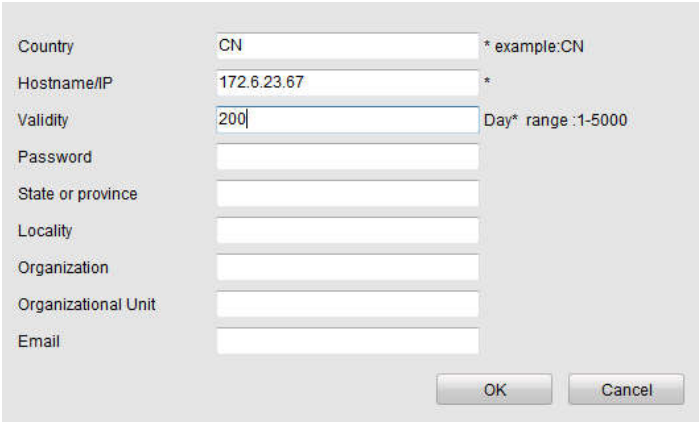


Figure 4. 22 Create Self-signed Certificate

(2) Enter the country, host name/IP, validity and other information.

(3) Click **OK** to save the settings.

Task2: Create the authorized certificate

(1) Click the **Create** button to create the certificate request.

(2) Download the certificate request and submit it to the trusted certificate authority for signature.

(3) After receiving the signed valid certificate, import the certificate to the device.

3. When you have successfully created and installed the certificate, check the checkbox to enable the HTTPS

function.

NOTE

After the HTTPS feature is enabled, the system will use the HTTPS login mode by default when you input the IP address (e.g., https://192.0.0.64). You can also input http://IP address/index.asp (e.g., http://192.0.0.64/index.asp) if you want to use HTTP mode to log into the device.

4.3.9 Configuring Multicast Address

Purpose:

The multicast address can be configured to realize live view for more than the maximum number of cameras through network.

A multicast address spans the Class-D IP range of 224.0.0.0 to 239.255.255.255. It is recommended to use the IP address ranging from 239.252.0.0 to 239.255.255.255.

Steps:

1. Click **Remote Configuration > Network Settings > Advanced** to enter the multicast address settings interface.

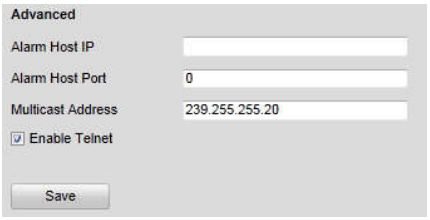


Figure 4. 23 Multicast Address Settings

2. Enter the multicast address in the text filed.
3. Click **Save** to save the settings.

NOTE

The device will reboot automatically to activate the multicast address settings.

4.3.10 Configuring Remote Alarm Host

Purpose:

With a remote alarm host configured, the device will send the alarm event or exception message to the host when an alarm is triggered. The remote alarm host must have the CMS (Client Management System) software installed.

Steps:

1. Click **Remote Configuration > Network Settings > Advanced** to enter the alarm host settings interface.

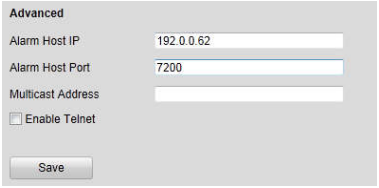


Figure 4. 24 Remote Alarm Host

2. Enter **Alarm Host IP** and **Alarm Host Port** in the text fields.
   The **Alarm Host IP** refers to the IP address of the remote PC on which the CMS (Client Management System) software (e.g., iVMS-4200) is installed, and the **Alarm Host Port** must be the same as the alarm monitoring port configured in the software (default port is 7200).
3. Click Save to save the setting.

Chapter 5 Camera Settings

5.1 Configuring OSD Settings

5.1.1 Configuring Display Settings

Purpose:

You can customize the camera name and time on the screen.

Steps:

1. Click the **Remote Configuration >Camera Settings > Display Settings** to enter the Display Settings interface:

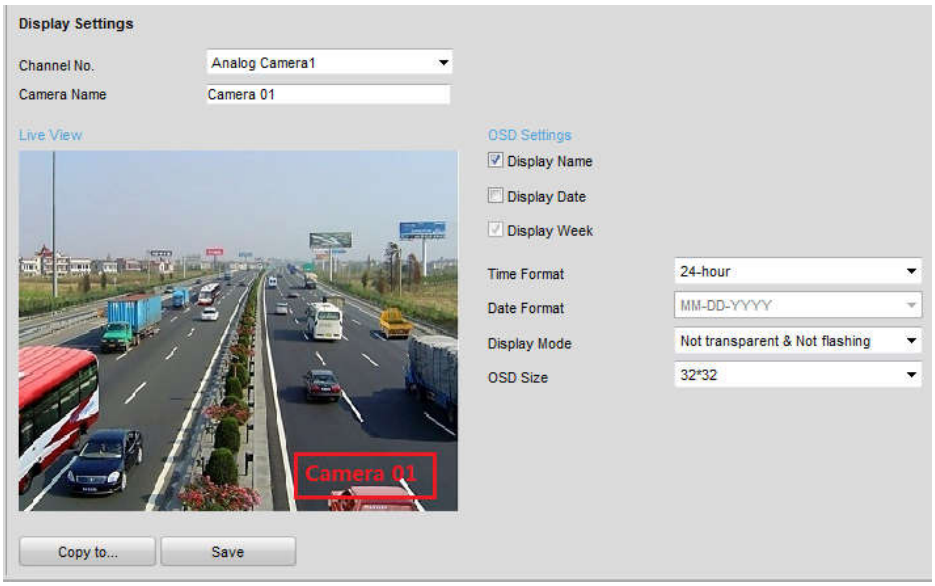


Figure 5. 1 Display Settings

2. Select the camera from the drop-down list.
3. Edit the camera name in the text field of Camera Name.

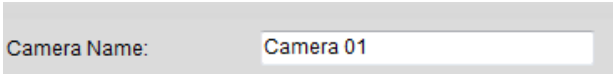


Figure 5. 2 Edit Camera Name

4. Select the display of camera name, date or week by checking the checkboxes if required.
5. Set the time format, date format and OSD display mode by selecting option from the drop-down list.
6. On the live view image, you can adjust the OSD location on the screen by moving the text frame.

Figure 5. 3 Adjust OSD Location

7. If you want to copy the display settings of the current camera to other cameras, spread the **Copy to Camera** panel and select the camera(s) to copy, or click **Select All** to select all cameras.

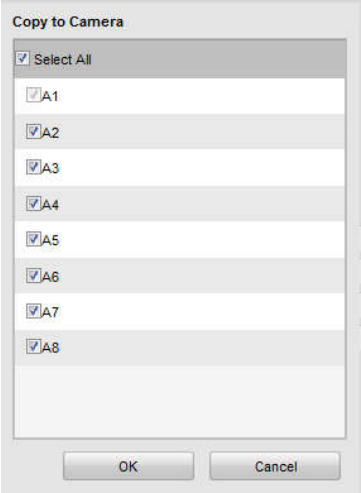


Figure 5. 4 Copy to Camera

8. Click **OK** to validate the above settings.

5.1.2 Configuring Text Overlay

Steps:

1. Click the **Remote Configuration >Camera Settings > Text Overlay Settings** to enter the Text Overlay Settings interface.
2. Select the camera from the drop-down list.
3. Edit the user-defined text content.
   Click the checkbox in the text box below and then input the characters. Up to 8 character strings can be edited.
4. Click **Save**, and the edited text is shown on the image.
5. On the preview image, you can adjust the Text location on the screen by moving the text frame.

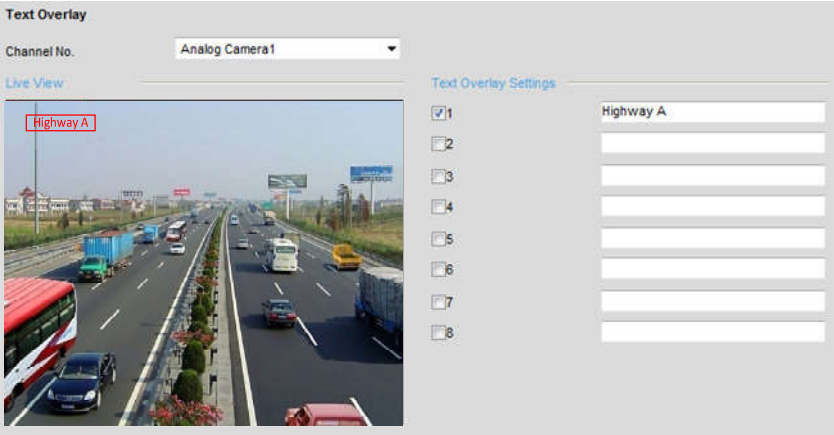


Figure 5. 5 Text Overlay Settings

6. If you want to copy the text overlay settings of the current camera to other cameras, spread the **Copy to Camera** panel and select the camera(s) to copy, or click **Select All** to select all cameras.

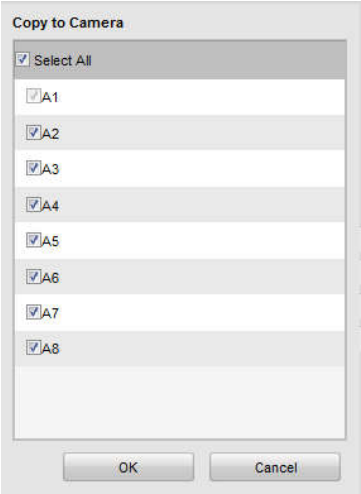


Figure 5. 6 Text Overlay Settings

7. Click **OK** to validate the above settings.

5.2 Configuring Video Settings

Steps:

1. Click **Remote Configuration > Camera Settings >Video Settings** to enter the Video Settings interface.

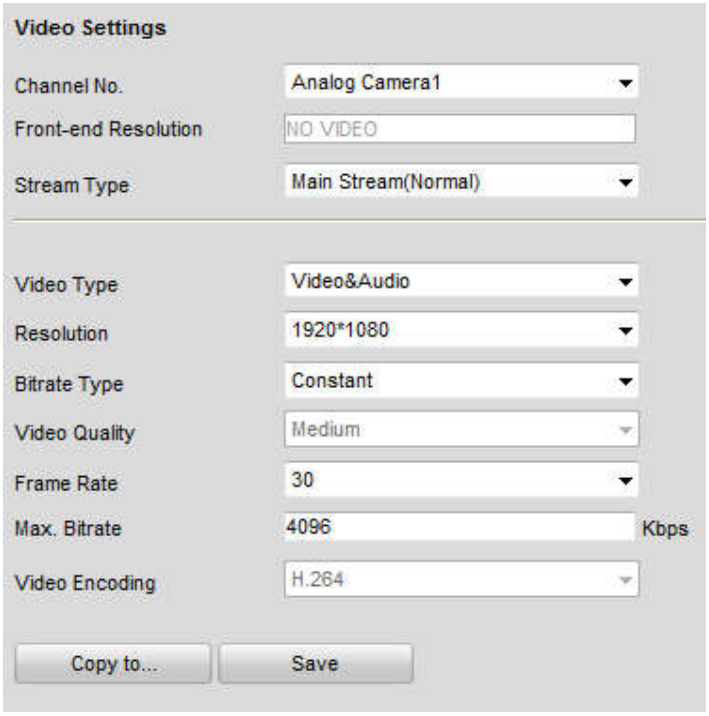


Figure 5. 7 Video Settings

2. Select the camera from the drop-down list to configure.
3. Select the **Stream Type** of the camera to Main Stream (Normal), Main Stream (Event) or Sub Stream.

   The main stream is usually for recording and live view with good bandwidth, and the sub stream can be used for live view when the bandwidth is low. Refer to the *Chapter Local Configuration* on changing the main stream to sub stream for live view.
4. You can customize the following parameters for the selected Main Stream or Sub Stream:

   Video Type: Select the video type to video stream, or video & audio composite stream. The audio signal will be recorded only when the **Video Type** is **Video & Audio**.

   Resolution: Select the resolution of the video input.

   Bitrate Type: Select the bitrate type to constant or variable.

   Video Quality: When bitrate type is selected to **Variable**, 6 levels of video quality can be configured.

   Frame Rate: Set the frame rate to 1 to 30 fps.

   The frame rate used to describe the frequency at which a video stream is updated is measured in frames per second (fps). A higher frame rate is advantageous when there is movement in the video stream, as it maintains image quality throughout.

   Max. Bitrate: Set the Max. bitrate from 32 to 8192 Kbps.

I Frame Interval: Set the I frame interval from 1 to 400 (frames). The higher value results in lower video quality.

Video Encoding: Select the video encoding standard.

NOTE

When the MJPEG video encoding standard is selected, the frame rate can be set to 1~15fps and the max. bitrate is not configurable.

5. If you want to copy the display settings of the current camera to other cameras, spread the **Copy to Camera** panel and select the camera(s) to copy, or click **Select All** to select all cameras.

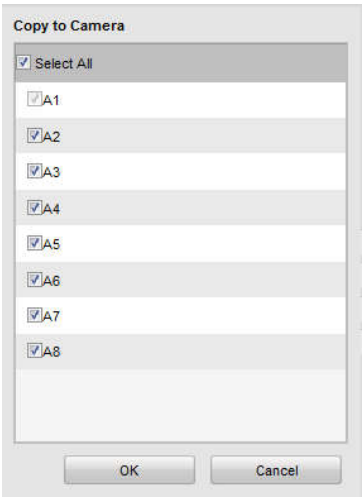


Figure 5. 8 Copy to Camera

6. Click **OK** to validate the above settings.

5.3 Configuring and Handling Alarms

Purpose:

This section explains how to configure the network camera to respond to alarm events, including Motion Detection, External Alarm Input, Video Loss, Tamper-proof and Exception. And the alarm events can trigger the alarm actions, such as Notify Surveillance Center, Send Email and Trigger Alarm Output.

5.3.3 Configuring Motion Detection

Motion detection is a feature which can alert the personnel and record the video for the motion occurred in the surveillance scene.

Steps:

1. **Set the Motion Detection Area**

   Steps:

   (1) Click **Remote Configuration> Camera Settings> Motion Detection** to enter the motion detection settings interface.

(2) Select the camera to configure the motion detection.

(3) Check the checkbox of **Enable Motion Detection**.

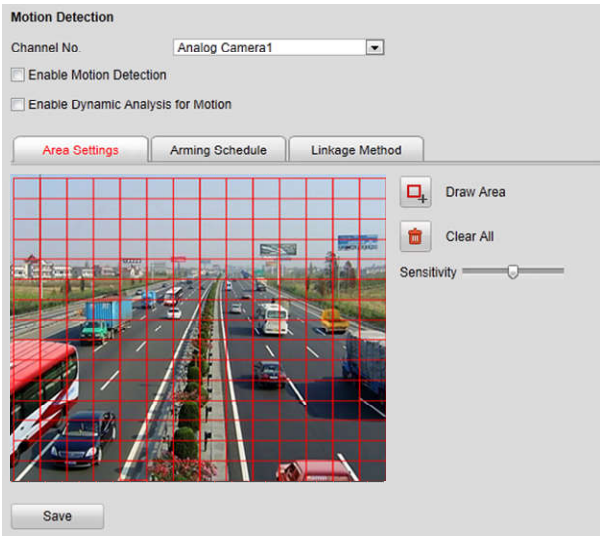
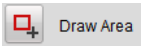


Figure 5. 9 Motion Detection Settings

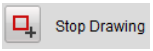
(4) You can check the checkbox of **Enable Dynamic Analysis for Motion**. When this feature is enabled, the motion detection triggered frame (green) for the moving targets in the motion detection area will be displayed on the live video.

(5) Click the 

button. Draw motion detection area by clicking and dragging the mouse in the live video image.

NOTE

By default, the full screen motion detection is configured.

(6) Click the 

button to finish drawing.

You can click the 

button to clear all areas.

(7) Move the slide bar 

to set the camera's sensitivity.

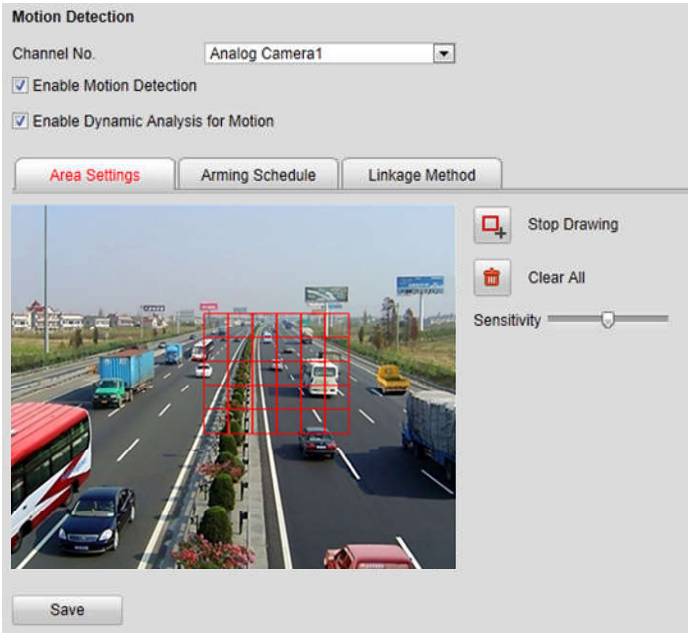


Figure 5. 10 Motion Detection-Area Settings

(8) Click **Save** button to save the settings.

2. **Set the Arming Schedule for Motion Detection**

Steps:

(1) Click the **Arming Time** tab.

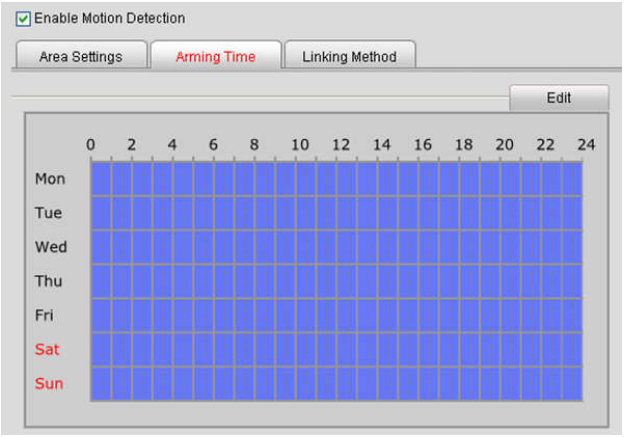


Figure 5. 11 Motion Detection-Arming Time Settings

(2) Click the **Edit** button to edit the arming schedule.

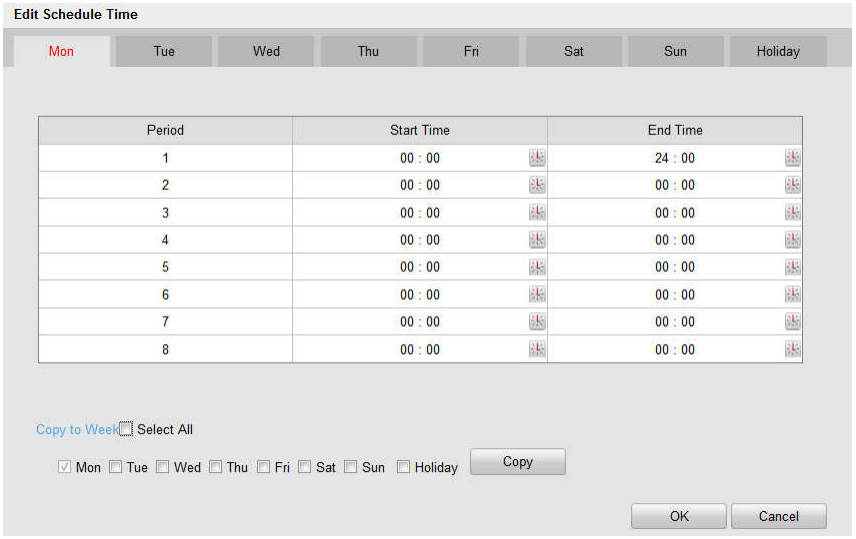


Figure 5. 12 Motion Detection-Edit Arming Schedule

NOTE

- The time of each segment can't be overlapped. Up to 8 segments can be configured for each day.
- The **Holiday** option is available in the Schedule dropdown list when you have enabled holiday schedule in **Holiday settings**.

(3) Choose the day you want to set the arming schedule.

(4) Click the button to set the time period for the arming schedule.

(5) After you set the arming schedule, you can copy the schedule to other days.(Optional)

(6) Click **OK** button to save the settings.

3. **Set the Alarm Actions Taken for Motion Detection**

Purpose:

You can specify the alarm type when an event is triggered.

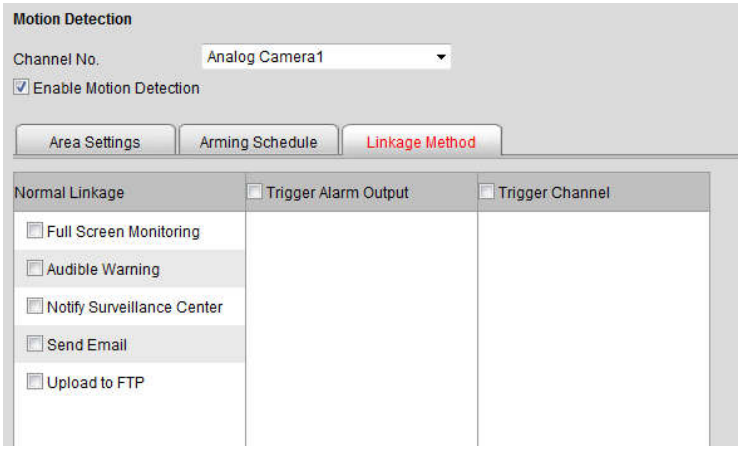


Figure 5. 13 Motion Detection-Linking Method

Steps:

(1) Click the **Linkage Method** tab to enter the setting interface.

(2) Select the alarming linkage method(s) including Audible Warning, Notify Surveillance Center, Send Email and Upload to FTP.

- **Audible Warning**

Trigger an audible beep when an alarm is detected.

- **Notify Surveillance Center**

Send an exception or alarm signal to remote alarm host when an event occurs. The alarm host refers to the PC installed with Remote Client.

- **Send Email**

Send an email with alarm information to a user or users when an event occurs.

NOTE

To send the Email when an event occurs, you need to go to the network setting interface to set the related parameters. Refer to *Section Configuring Email Settings.*

- **Upload to FTP**

Capture the image when an alarm is triggered and upload the picture to a FTP server.

(3) Select the channel you want to trigger an external alarm output when a motion detection event occurs.

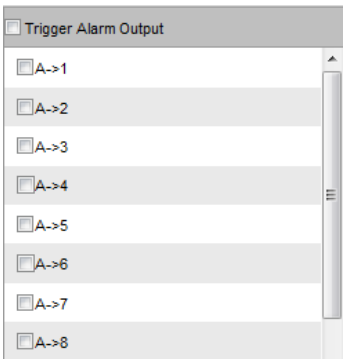


Figure 5. 14 Motion Detection-Trigger Alarm Output

NOTE

To trigger an external alarm output when an event occurs, you need to go to the Alarm Output Settings interface to set the related parameters.

1) Click **Remote Configuration> Alarm Settings> Alarm Output** to enter the Alarm Output Settings interface.

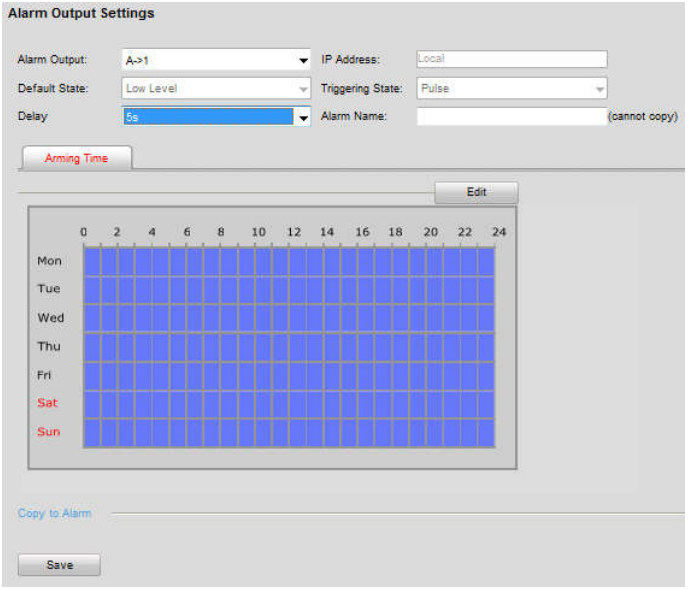


Figure 5. 15 Motion Detection-Alarm Output Settings

2) Select one alarm output channel in the **Alarm Output** drop-down list.

3) The D**elay** time can be set to **5sec**, **10sec**, **30sec**, **1min**, **2min**, **5min, 10min** or **Manual**. The **Delay** refers to the time duration that the alarm output remains in effect after alarm occurs.

NOTE

If you choose **Manual**, you need to manually disable the alarm output.

4) Click **Edit** to enter the **Edit Schedule Time** interface. The time schedule configuration is the same as the Setting of the Arming Schedule for Motion Detection. Refer to *Step 2* ***Set the Arming Schedule for Motion Detection*** in *Section Configuring Motion Detection.*

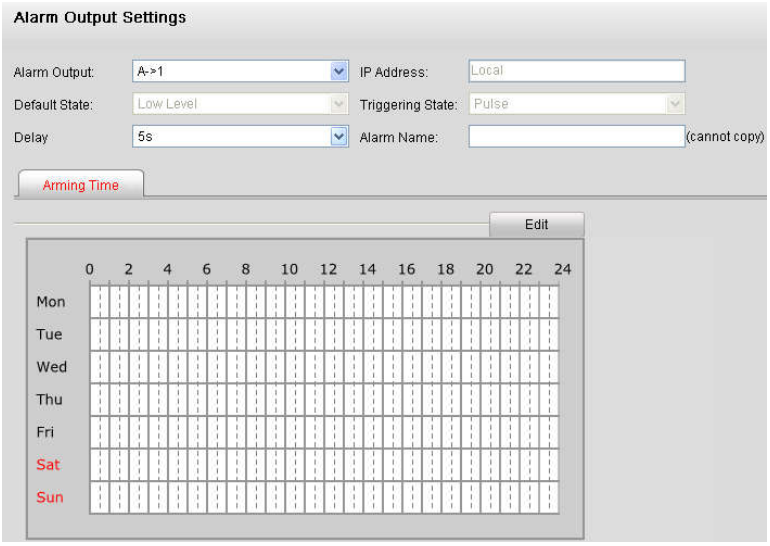


Figure 5. 16 Motion Detection-Alarm Output Settings

5) Return to the Alarm Output Settings interface and click **Save** to save the settings.

(4) Select the channel you want to trigger recording when a motion detection event occurs.

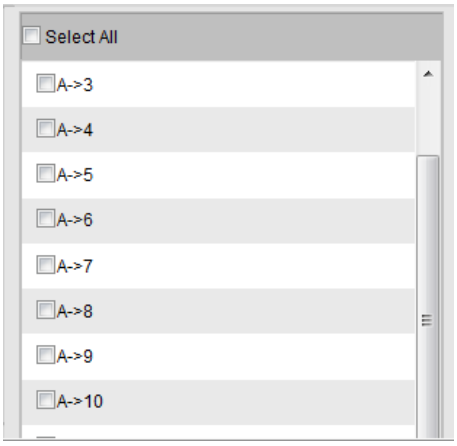


Figure 5. 17 Motion Detection-Alarm Linked Recording

(5) Click **OK** to save the settings of linking method motion detection.

5.3.4 Configuring External Alarm Input

Steps:

1. Click **Remote Configuration> Alarm Settings> Alarm Input** to enter the Alarm Settings interface.
2. Choose the alarm input number and the Alarm Type. The alarm type can be NO (Normally Open) and NC (Normally Closed).

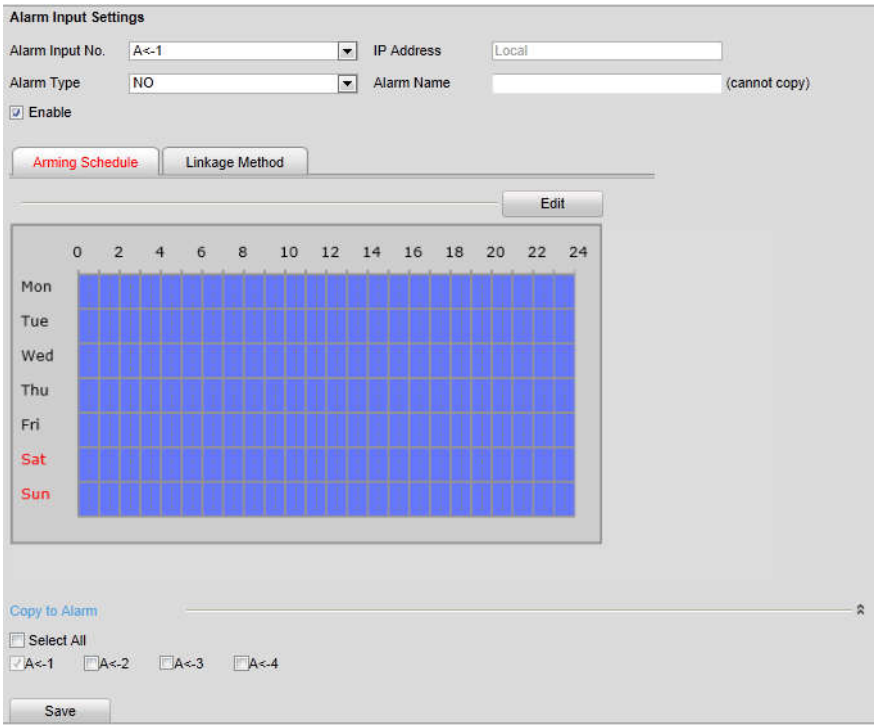


Figure 5. 18 Alarm Input Settings-Arming Time

3. Check the checkbox of **Enable** to enable the alarm input.
4. Set the arming schedule for the alarm input. Refer to *Step 2* ***Set the Arming Schedule for Motion Detection*** in *Section Configuring Motion Detection.*
5. Click the **Linkage Metho**d tab to set the actions taken for the alarm input. Refer to *Step 3* ***Set the Alarm Actions Taken for Motion Detection*** in *Section Configuring Motion Detection*.

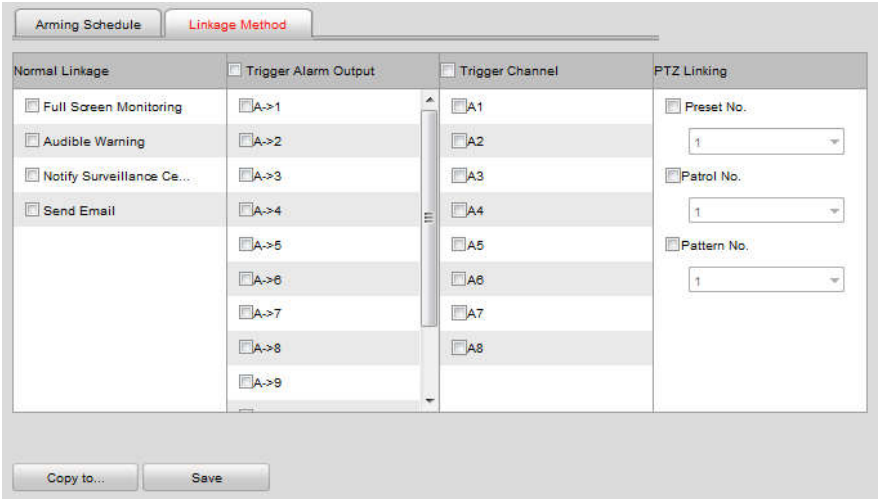


Figure 5. 19 Alarm Input Settings-Linking Method

6. You can also choose the PTZ linking for the alarm input if your camera is installed with a pan/tilt unit.
   (1) Choose the PTZ Linking channel.
   (2) Check the relative checkbox to enable Preset Calling, Patrol Calling or Pattern Calling.
7. You can copy your settings to other alarm inputs.
8. Click **Save** to save the settings.

5.3.5 Configuring Video Loss Alarm

Steps:

1. Click **Remote Configuration> Camera Settings> Video Loss** to enter the video loss alarm setting interface.

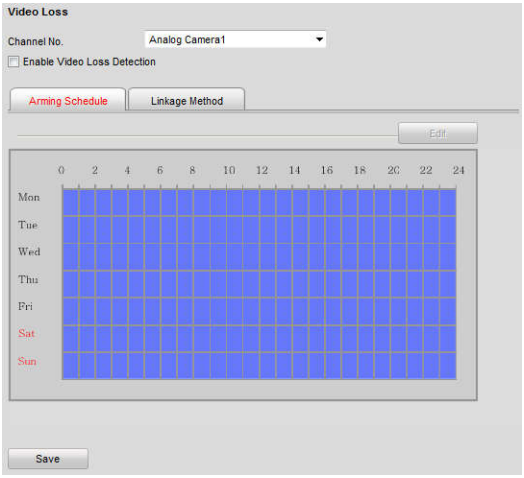


Figure 5. 20 Video Loss Alarm Settings

2. Select the camera to configure the video loss alarm.
3. Check the checkbox of **Enable Video Loss**.
4. Click **Edit** to edit the arming schedule for video loss detection. The arming schedule configuration is the same as the Setting of the Arming Schedule for Motion Detection. Please refer to *Step 2* **Set the Arming Schedule for Motion Detection** in *Section Configuring Motion Detection.*
5. Click the **Linkage Method** tab to set the actions taken for the video loss alarm. Please refer to *Step 3* **Set the Alarm Actions Taken for Motion Detection** in *Section Configuring Motion Detection*.

5.3.6 Configuring Video Tempering Alarm

Purpose:

If you enable this function, an alarm will be triggered when the image of camera is tampered with.

Steps:

1. Click **Remote Configuration> Camera Settings> Video Tempering** to enter the Tamper-proof Settings interface.
2. Select the camera to configure the video tampering detection alarm.

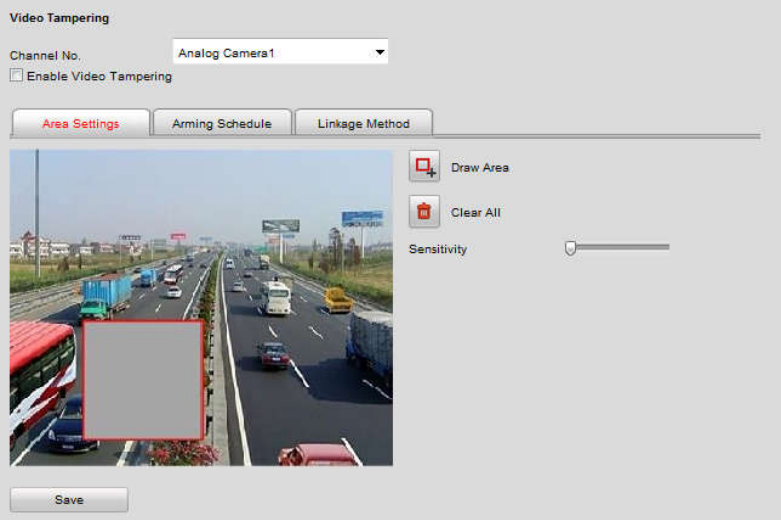


Figure 5. 21 Video Tempering Alarm Settings

3. Click checkbox of **Enable Video Tempering**.
4. Set the tamper-Proof area. Please refer to *Step 1 Set the Motion Detection Area* in *Chapter 8.3.1.*
5. Click **Edit** to edit the arming schedule for tamper-proof. The arming schedule configuration is the same as the Setting of the Arming Schedule for Motion Detection. Please refer to *Step 2 Set the Arming Schedule for Motion Detection* in *Section Configuring Motion Detection.*
6. Click the **Linkage Method** tab to set the actions taken for the tamper-proof alarm. Please refer to *Step 3* **Set the Alarm Actions Taken for Motion Detection** in *Section Configuring Motion Detection*.

5.3.7 Handling Exception

The exception type can be HDD full, HDD error, network disconnected, IP address conflict, illegal access, video standard mismatch, video signal exception, record/capture exception and video resolution mismatch.

NOTE

When the selected resolution under **Remote Configuration > Camera Settings >Video Settings** and the actual video input resolution are mismatched, the exception alarm will occur. Please refer to *Section Configuring Video Settings.*

Steps:

1. Click **Remote Configuration > Alarm Settings > Exception** to enter the Exception Settings interface.
2. Check the checkbox to set the actions taken for the Exception alarm. Please refer to *Step 3* ***Set the Alarm Actions Taken for Motion Detection*** in *Section Configuring Motion Detection*.

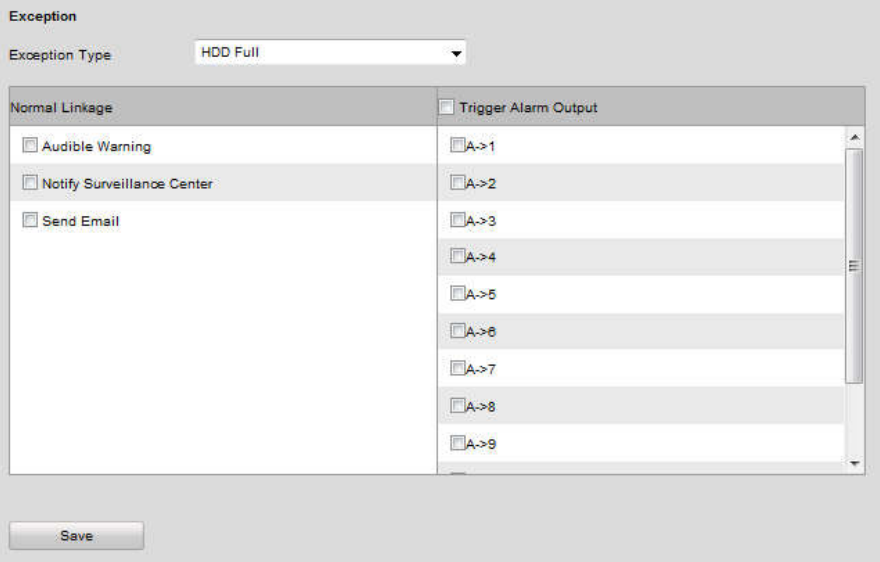


Figure 5. 22 Handling Exceptions

3. Click **Save** to save the settings.

5.4 Configuring Privacy Mask

Purpose:

Privacy Mask enables you to cover certain areas on the video of the channel to prevent your privacy from live viewing and recording.

Steps:

1. Click **Configuration>Remote Configuration>Camera Settings>Privacy Mask** to enter the privacy mask settings interface.
2. Select the camera to configure privacy mask.
3. Check the checkbox of **Enable Privacy Mask** to enable this function.

Figure 5. 23 Privacy Mask Settings Interface

4. Click the Draw Area button.

5. Draw the mask area by clicking and dragging the mouse in the live video image.

NOTE

Up to four privacy mask areas can be configured.

6. When finishing the area setting, click the Stop Drawing button to finish drawing.

   You can click the Clear All button to clear all of the areas you set without saving it.

7. Click Save to save the settings

Chapter 6 Managing User Accounts

Click **Remote Configuration**>**Remote Configuration**>**User Management** to enter the User Information interface:

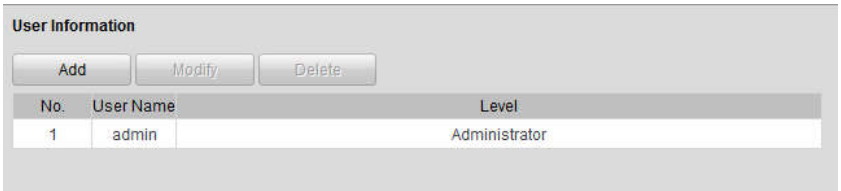


Figure 6. 1 User Information Interface

The **admin** user is allowed to create normal users. And up to 31 users can be created. .

1.1 Adding a User

Steps:

1. Click **Add** to enter the Add user interface.
2. Edit the **User Name**.
3. Select the **Level** to **Operator** or **User**.
4. Set the **Password**, and confirm the same password.

STRONG PASSWORD RECOMMENDED– We highly recommend that you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We recommend that you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

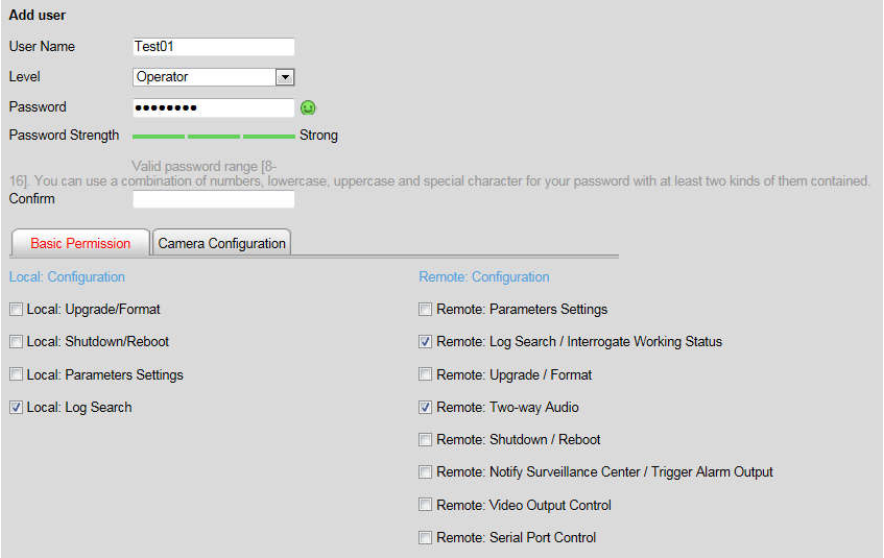


Figure 6. 2 Add a User

Different user level is given different permissions:

- **Operator:** The *Operator* user level has permission of Local Log Search in Local Configuration, Remote Log Search and Two-way Audio in Remote Configuration and all operating permission in Camera Configuration.
- **User:** The Guest user has permission of Local Log Search in Local Configuration, Remote Log Search in Remote Configuration and only has the local/remote playback in the Camera Configuration.

5. Configure the user permissions for the created user account, including the Basic Permission and Camera Operation.
6. Click **OK** to finish the user addition.

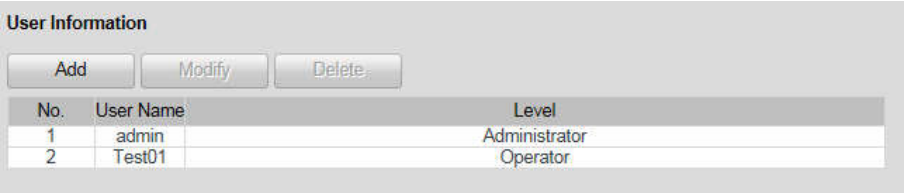


Figure 6. 3 User Information

6.2 Modifying a User

Steps:

1. Select a user account from the list on the User Information interface to be modified.

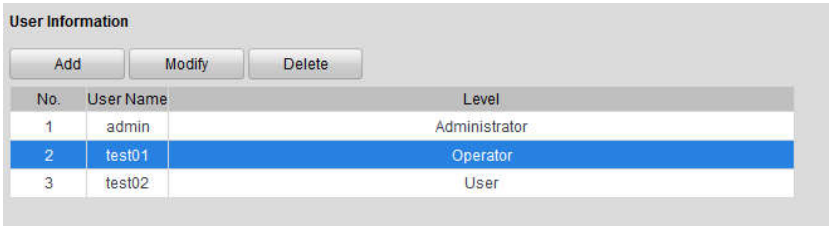


Figure 6. 4 Select a User

2. Click **Modify** to enter the modification interface.

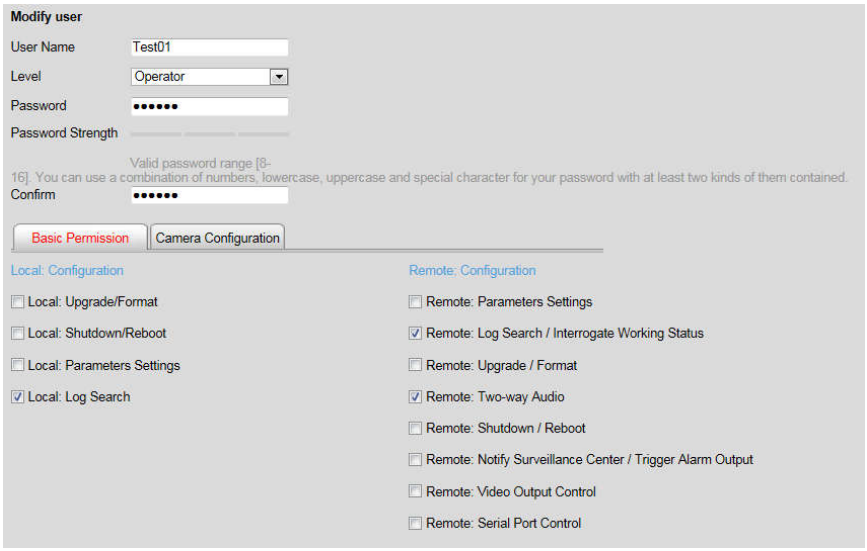


Figure 6. 5 Modify a User

3. Modify the **User Name**, **Password** and then select **User type**. You are highly recommended to use the strong password.
4. Configure the user permission for the user, including the Basic Permission and Camera Operation.
5. Click **OK** to finish the user modification.

NOTE

You need the admin password to modify the admin user.

6.3 Deleting a User

Steps:

1. Select a user account from the list on the User Information interface to be deleted.
2. Click **Delete,** and the information box will pop up:

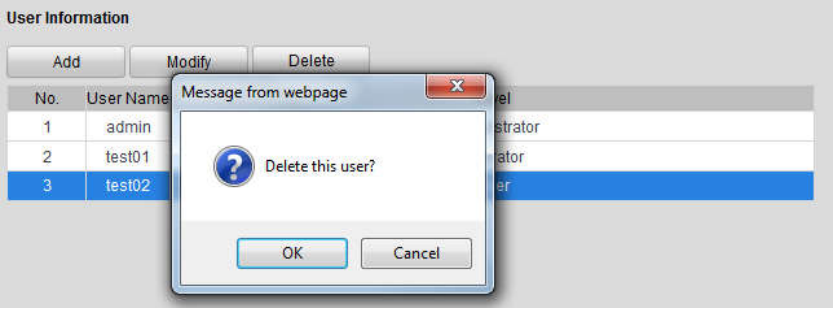


Figure 6. 6 Delete a User

1. Click **OK** to delete the selected user account.

Chapter 7 Maintenance

7.1 Viewing Device Information

Click **Remote Configuration > Device Parameters > Device Information** to enter the Device Information interface of the encoder:

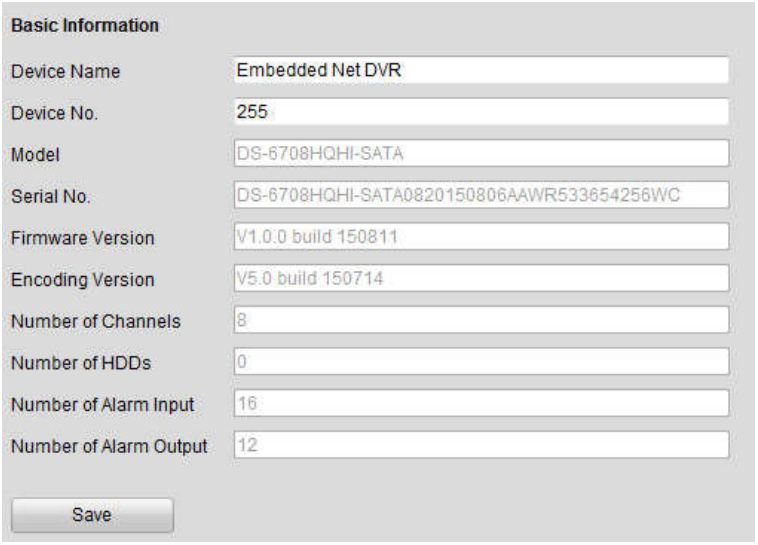


Figure 7. 1 1 Device Information

You can edit the Device Name and Device No., and view the device information, including Model, Serial No., Firmware/Encoding Version, Number of Channels, Number of HDDs, and Number of Alarm Input/Output.

7.2 Maintenance

Click **Remote Configuration >Maintenance** to enter the Maintenance interface of the encoder:

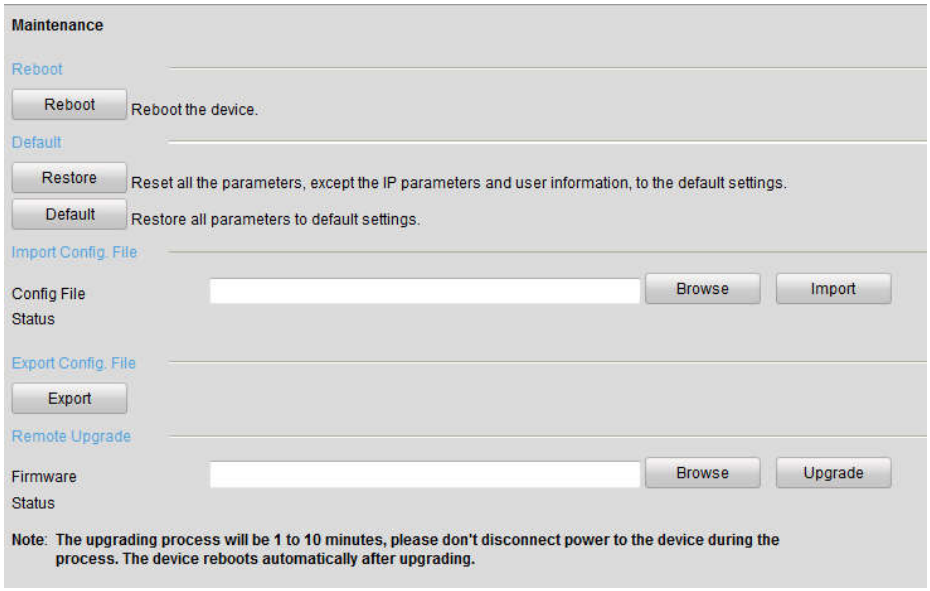


Figure 7. 2 Maintenance Page

7.2.1 Restarting the Device

On the **Maintenance> Reboot** interface, click **Reboot** to enter the following message box:

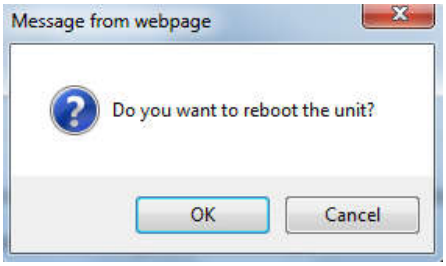


Figure 7. 3 Reboot the Device

Click **OK** to reboot the device or **Cancel** to cancel the operation.

7.2.2 Restoring Default Settings

On the **Maintenance > Default** interface, click **Restore or Default** to restore device parameters to the factory settings.

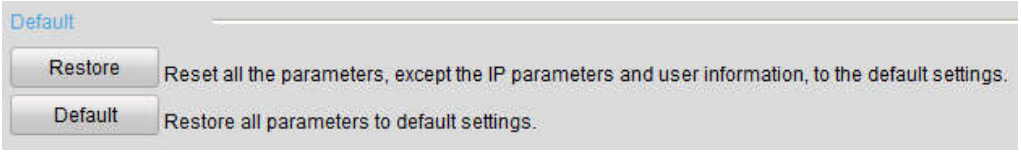


Figure 7. 4 Restore Default Settings

- By selecting the **Restore** button, the device restores the default settings for the parameters except the IP address, subnet mask, gateway and port.
- By selecting the **Default** button, the device restores the default settings for all parameters.

On the pop-up message box, click **OK** to restore and reboot the device to validate the settings.

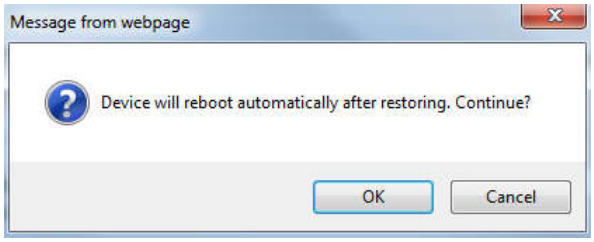


Figure 7. 5 Pop-up Message Box

7.2.3 Importing/Exporting Configuration Files

The configuration files of the device can be exported to local device for backup, and the configuration files of one device can be imported to multiple devices if they are to be configured with the same parameters.

- On the **Maintenance> Import Config File** interface, click **Browse** to select the file from the selected backup device and then click the **Import** button to import a configuration file.

NOTE

After having finished the import of configuration files, the device will reboot automatically.

- On the **Maintenance> Export Config File** interface, click the **Export** button to export configuration files to the selected local backup device.

Figure 7. 6 Import/Export Config Files

7.2.4 Upgrading the System

On the **Maintenance> Remote Upgrade** interface, click **Browse** to select the local update file and then click **Upgrade** to start remote upgrade.

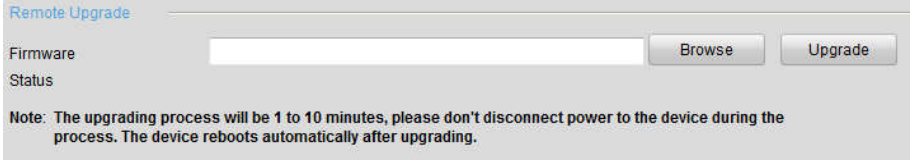


Figure 7. 7 Remote Upgrade

Chapter 8 Specification

Table 8. 1 Specification

Model		VP-8-V2	VP-16-V2
Video/Audio Input/Output	Video Input	8-ch	16-ch
		BNC interface	
	HDTVI Video	720p/25, 720p/30, 720p/50, 720p/60, 1080p/25, 1080p/30, CVBS	
	Audio Input	4-ch	4-ch
		RCA (2.0 Vp-p, 1 KΩ)	
	Audio Output	1-ch, RCA (Linear, 1 KΩ)	
Video/Audio Encoding	Video Compression	H.264	
	Audio Compression	G.711u	
	Frame Rate	1/16 fps to real-time frame rate	
	Video Bitrate	32 Kbps to 10 Mbps	
	Audio Bitrate	64 Kbps	
	Stream Type	Video, Video & Audio	
	Main Stream	1080P/720P/WD1/4CIF/VGA/CIF	
	Dual-Stream	Support, sub-stream: WD1/4CIF (12fps), CIF/QVGA/QCIF(real-time)	
Storage	Type	SATA, NAS, ISCSI, IPSAN	
	Number	2	
	Capacity	Up to 6 TB for each disk	
External Interface	Two-Way Audio Input	1-ch, RCA (2.0 Vp-p, 1 KΩ) (using the 1st channel of audio input)	
	Network Interface	1, RJ45 10M/100M/1000M self-adaptive Ethernet Interface	
	Series Interface	1, RS-485; half-duplex	
	Alarm in	8-ch input, 4-ch output	16-ch input, 4-ch output
	Alarm out		
General	Power Supply	12 VDC	
	Power Consumption (without HDD)	≤ 30 W	≤ 45 W
	Working Temperature	-10º C to 55º C (14º F to 131º F)	
	Working Humidity	10% to 90%	
	Chassis	380 mm 1U chassis	
	Dimensions	380 mm × 290 mm × 48 mm (14.96" × 11.42" × 1.89")	
	Weight (without HDD)	≤ 2 Kg (4.41 lb)	

Chapter 9 FAQ

- **Why cannot ping the Encoder?**

  Please refer to Chapter 3 to configure the device's IP being in the same segment as your PC, and check the cable and switch.

- **Why the transparent channel has been set, but the encoder still cannot receive data?**

  1. Check if RS-232 has been set as transparent channel first.
  2. Check the connection of encoder.

- **Why cannot add encoder with software?**

  1. Check the encoder IP.
  2. Make sure the cable is connected.
  3. User name and password of encoder are correct.

- **Why cannot control the connected PTZ camera or speed dome through the encoder?**

  1. Check the RS-485 connection of the device with the PTZ camera or dome.
  2. Check whether the PTZ address, protocol and baud rate of the device are set to be the same with the connected camera or speed dome.

- **Why cannot view the video image through IE browser?**

  1. Check the network connection.
  2. Check the user name and password of encoder are entered correctly.
  3. Check the port of encoder is entered correctly.

- Supported PTZ Protocols
  - 1602-Protocol
  - 3609hd
  - A-01
  - AB-D
  - AB-P
  - ACES
  - ALSON
  - ANTEN
  - BBV-RS422
  - Bewator-Pelco-D
  - Dragon
  - DSCP
  - Hikvision
  - Hikvision-C

- Honeywell
- HY
- Infinova
- Infinovadcp001a
- IntegrativeP
- Kalatel
- KC3360S
- Kony
- KTD-348
- LC-D2104
- LG Multix
- Lilin
- Maowang
- Naijie
- Nitro
- Panasonic_CS850
- Pelco-D
- Pelco-P
- Pelco-RS422TY
- Philips
- Philips-3
- PIH-1016
- PLD
- RedApple
- RM110
- SAE
- Samsung
- Shinei
- Siemens
- Sony-EVI-D100/P
- Sony-EVI-D30/31
- Sony-EVI-D70
- SPD-2200
- Sunell
- TCL-Pelco-D
- TCL-Pelco-P
- TC-Pelco-D
- TC-Pelco-P
- Techwin
- Tiandy
- Tiandy-Pelco-D
- Tiandy-Pelco-P
- Tianmin-Pelco-D

- Tianmin-Pelco-P
- TL-HHX2000
- TL-Pelco-P
- TL-V1200
- VC-2000PTC-C
- VCL
- Vicon
- VIDO B-01
- VIDO B-02
- YAAN-1
- YAAN-2
- YF-06
- YOULI