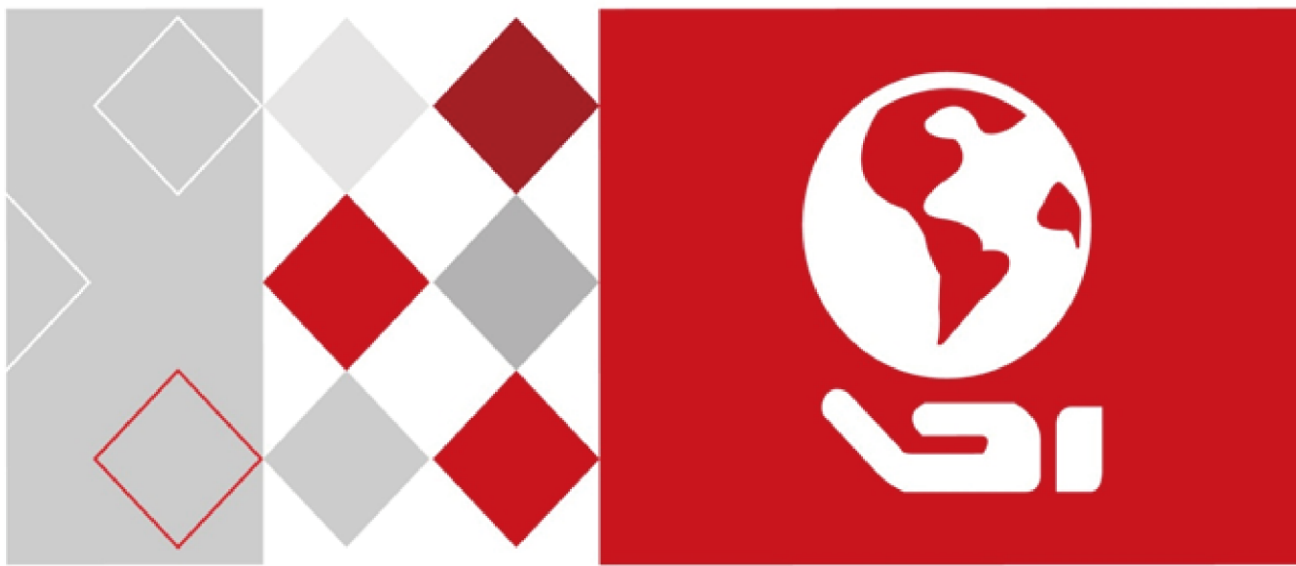


***HIKVISION***



# **Network Portable IR Speed Dome**

## **User Manual**

## **User Manual**

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### **About this Manual**

This Manual is applicable to Network Portable IR Speed Dome.

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 (<http://overseas.hikvision.com/en/>).

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### FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**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



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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](http://www.recyclethis.info).



## Safety Instruction

These instructions are intended to ensure that the 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 be caused if any of these warnings are neglected.

**Cautions:** Injury or equipment damage may be caused if any of these cautions are neglected.

	
<b>Warnings</b> Follow these safeguards to prevent serious injury or death.	<b>Cautions</b> Follow these precautions to prevent potential injury or material damage.



### Warnings:

- Adopt the power adapter which can meet the safety extra low voltage (SELV) standard. The power consumption cannot be less than the required value.
- Do not connect several devices to one power adapter as an adapter overload may cause over-heating and can be a fire hazard.
- When the product is installed on a wall or ceiling, the device should be firmly fixed.
- To reduce the risk of fire or electrical shock, do not expose the indoor used product to rain or moisture.
- This installation should be made by a qualified service person and should conform to all the local codes.
- Install blackouts equipment into the power supply circuit for convenient supply interruption.
- If the product does not work properly, contact your dealer or the nearest service center. Never attempt to disassemble the product yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)



### Cautions:

- Make sure the power supply voltage is correct before using the product.
- Do not drop the product or subject it to physical shock. Do not install the product

on vibratory surface or places.

- Do not expose it to high electromagnetic radiating environment.
- Do not aim the lens at the strong light such as sun or incandescent lamp. The strong light can cause fatal damage to the product.
- The sensor may be burned out by a laser beam, so when any laser equipment is being used, make sure that the surface of the sensor not be exposed to the laser beam.
- To avoid heat accumulation, good ventilation is required for a proper operating environment.
- While shipping, the product should be packed in its original packing.
- Use the provided glove when open up the product cover. Do not touch the product cover with fingers directly, because the acidic sweat of the fingers may erode the surface coating of the product cover.
- Use a soft and dry cloth when clean inside and outside surfaces of the product cover. Do not use alkaline detergents.
- Improper use or replacement of the battery may result in hazard of explosion. Use the manufacturer recommended battery type.

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# Chapter 1 Overview

## 1.1 Application Environment

The Network Portable IR Speed Dome is easy for installing and disassembling. It is widely used in moving vehicles and similar environments.

## 1.2 Functions



The functions vary depending on different speed dome models.

- **Limit Stops**

The speed dome can be programmed to move within the limit stops (left/right, up/down).

- **Scan Modes**

The speed dome provides 5 scan modes: auto scan, tilt scan, frame scan, random scan and panorama scan.

- **Preset Freezing**

This feature freezes the scene on the monitor when the speed dome is moving to a preset. This allows for smooth transition from one preset scene to another. It also guarantees that masked area will not be revealed when the speed dome is moving to a preset.

- **Presets**

A preset is a predefined image position. When the preset is called, the dome will automatically move to the defined position. The presets can be added, modified, deleted and called.

- **Label Display**

The on-screen label of the preset title, azimuth/elevation, zoom, time and speed dome name can be displayed on the monitor. The displays of time and speed dome name can be programmed.

- **Privacy Mask**

This function allows you to block or mask certain area of a scene, for preventing the personal privacy from recording or live viewing. A masked area will move with pan and tilt functions and automatically adjust in size as the lens zooms telephoto and wide.

- **3D Positioning**

In the client software, use the left key of mouse to click on the desired position in the video image and drag a rectangle area in the lower right direction, then the speed dome system will move the position to the center and allow the rectangle area to zoom in. Use the left key of mouse to drag a rectangle area in the upper left direction

to move the position to the center and allow the rectangle area to zoom out.

- **Proportional Pan/Tilt**

Proportional pan/tilt automatically reduces or increases the pan and tilt speeds according to the amount of zoom. At telephoto zoom settings, the pan and tilt speeds will be slower than at wide zoom settings. This keeps the image from moving too fast on the live view image when there is a large amount of zoom.

- **Auto Focus**

The auto focus enables the speed dome to focus automatically to maintain clear video images.

- **Day/Night Auto Switch**

The speed dome delivers color images during the day. And as light diminishes at night, the speed dome switches to night mode and deliver black and white images with high quality.

- **Slow Shutter**

In slow shutter mode, the shutter speed will automatically slow down in low illumination conditions to maintain clear video images by extending the exposure time. The feature can be enabled or disabled.

- **Backlight Compensation (BLC)**

If you focus on an object against strong backlight, the object will be too dark to be seen clearly. The BLC (Backlight Compensation) function can compensate light to the object in the front to make it clear, but this causes the over-exposure of the background where the light is strong.

- **Wide Dynamic Range (WDR)**

The wide dynamic range (WDR) function helps the speed dome provide clear images even under back light circumstances. When there are both very bright and very dark areas simultaneously in the field of view, WDR balances the brightness level of the whole image and provide clear images with details.

- **White Balance (WB)**

White balance can remove the unrealistic color casts. White balance is the white rendition function of the camera to adjust the color temperature according to the environment automatically.

- **Patrol**

A patrol is a memorized series of pre-defined preset function. The scanning speed between two presets and the dwell time at the preset are programmable.

- **Pattern**

A pattern is a memorized series of pan, tilt, zoom, and preset functions. By default the focus and iris are in auto status during the pattern is being memorized.

- **Power Off Memory**

The speed dome supports the power off memory capability with the predefined resume time. It allows the speed dome to resume its previous position after power is restored.

- **Scheduled Task**

A time task is a preconfigured action that can be performed automatically at a specific date and time. The programmable actions include: auto scan, random scan,

patrol 1-8 ,pattern 1-4, preset 1-8, frame scan, panorama scan, tilt scan, day, night, reboot, PT adjust, Aux Output, etc.

- **Park Action**

This feature allows the speed dome to start a predefined action automatically after a period of inactivity.

- **User Management**

The speed dome allows you to edit users with different levels of permission, in the admin login status. Multiple users are allowed to access and control the same network speed dome via network simultaneously.

- **3D Digital Noise Reduction**

Comparing with the general 2D digital noise reduction, the 3D digital noise reduction function processes the noise between two frames besides processing the noise in one frame. The noise will be much less and the video will be clearer.

- **VCA Detection**

The speed dome allows you to do intelligent analysis such as behavior analysis and face capture, etc. Multiple rules can be configured for different requirements.

## Chapter 2 Network Connection



You shall acknowledge that the use of the product with Internet access might be under network security risks. For avoidance of any network attacks and information leakage, strengthen your own protection. If the product does not work properly, contact with your dealer or the nearest service center.

**Before you start:**

- If you want to set the network speed dome via a LAN (Local Area Network), please refer to **Section 2.1 Setting the Network Speed Dome over the LAN**.
- If you want to set the network speed dome via a WAN (Wide Area Network), please refer to **Section 2.2 Setting the Network Speed Dome over the WAN**.

### 2.1 Setting the Network Speed Dome over the LAN

**Purpose:**

To view and configure the speed dome via a LAN, you need to connect the network speed dome in the same subnet with your computer, and install the SADP or client software to search and change the IP of the network speed dome.



For detailed introduction of SADP, refer to Appendix 1.

#### 2.1.1 Wiring over the LAN

The following figures show the two ways of cable connection of a network speed dome and a computer:

**Purpose:**

- To test the network speed dome, you can directly connect the network speed dome to the computer with a network cable as shown in Figure 2-1.
- Refer to Figure 2-2 to set the network speed dome over the LAN via a switch or a router.

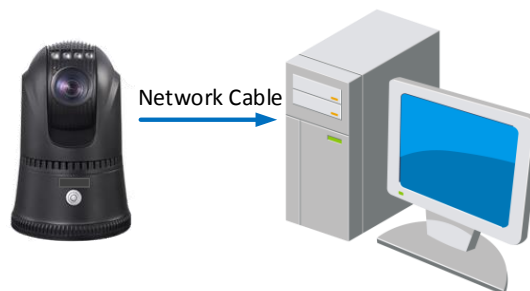
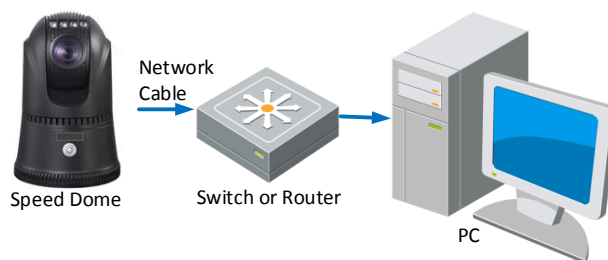


Figure 2-1 Connecting Directly



### Figure 2-2 Connecting via a Switch or a Router

### 2.1.2 Detecting and Changing the IP Address

**Purpose:**

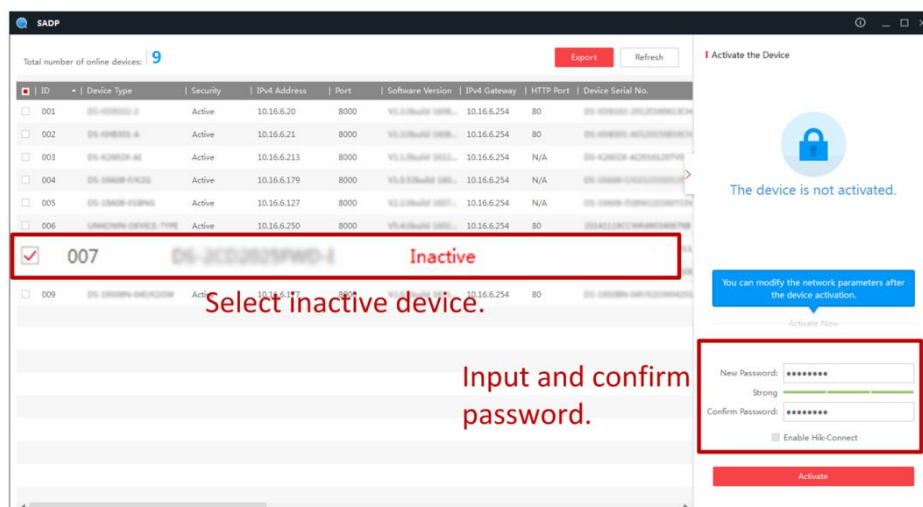
You should use the IP address to visit the network speed dome.

**Steps:**

1. To get the IP address, you can choose either of the following methods:
  - ◆ Use SADP, a software tool which can automatically detect the online network speed domes in the LAN and list the device information including IP address, subnet mask, port number, device serial number, device version, etc., shown in Figure 2-3.
  - ◆ Use the client software to list the online devices. Refer to the user manual of the client software for detailed information.
2. Change the IP address and subnet mask to the same subnet as that of your computer.
3. Enter the IP address of network speed dome in the address field of the web browser to view the live video.



For accessing the network speed dome from different subnets, set the gateway refer to **Section 8.4.1 Configuring TCP/IP Settings**.



### Figure 2-3 SADP Interface

## 2.2 Setting the Network Speed Dome over the WAN

### **Purpose:**

This section explains how to connect the network speed dome to the WAN with a static IP or a dynamic IP.

### 2.2.1 Wi-Fi AP Mode

#### **Purpose:**

You can connect the device with your PC by Wi-Fi AP (Access Point) network and transmit the data via the Wi-Fi.

#### **Steps:**

1. Search the Wi-Fi with your PC or phone that supports Wi-Fi function.
2. Connect the device hot spot. The default hot spot name is **Dome\_XXXXXX** (Device Serial No.), and the default password is **abcd1234**.
3. (Optional) For the first time you log in the speed dome, create a password and input the password into the password field and confirm the password.



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

4. If multiple speed domes are connected, edit the IP address of speed dome in case of the IP address conflict.



- For further information about Wi-Fi AP parameters configuration, refer to **Section 8.4.2 Configuring Wi-Fi Settings**.
- Figure 2-4 shows cable connection of the network speed dome.

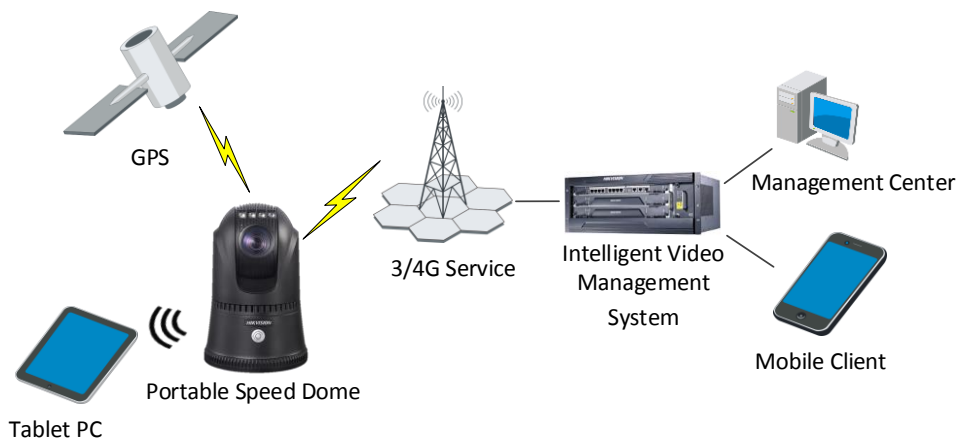


Figure 2-4 Wi-Fi AP Mode of Speed Dome

## 2.2.2 Static IP Connection

### **Before you start:**

Apply a static IP from an ISP (Internet Service Provider). With the static IP address, you can connect the network speed dome via a router or connect it to the WAN directly.

#### ● **Connecting the network speed dome via a router**

##### **Steps:**

1. Connect the network speed dome to the router.
2. Assign a LAN IP address, the subnet mask and the gateway. Refer to **Section 2.1.2 Detecting and Changing the IP Address** for detailed IP address configuration.
3. Save the static IP in the router.
4. Set port mapping, E.g., 80, 8000 and 554 ports. The steps for port mapping vary depending on different routers. Call the router manufacturer for assistance with port mapping.



Refer to Appendix 2 for detailed information about port mapping.

5. Visit the network speed dome through a web browser or the client software over the internet.

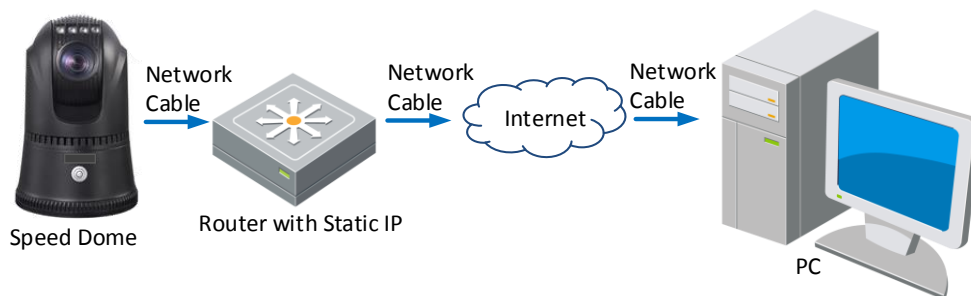


Figure 2-5 Accessing the Speed Dome through Router with Static IP

#### ● **Connecting the network speed dome with static IP directly**

You can also save the static IP in the speed dome and directly connect it to the internet without using a router. Refer to **Section 2.1.2 Detecting and Changing the IP Address** for detailed IP address configuration.

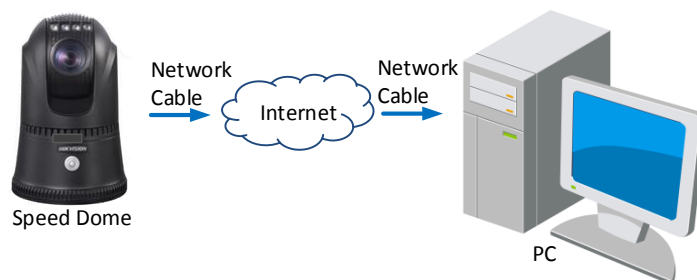


Figure 2-6 Accessing the Speed Dome with Static IP Directly



### 2.2.3 Dynamic IP Connection

**Before you start:**

Apply a dynamic IP from an ISP. With the dynamic IP address, you can connect the network speed dome to a modem or a router.

- **Connecting the network speed dome via a router**

**Steps:**

1. Connect the network speed dome to the router.
2. In the speed dome, assign a LAN IP address, the subnet mask and the gateway. Refer to **Section 2.1.2 Detecting and Changing the IP Address** for detailed IP address configuration.
3. In the router, set the PPPoE user name, password, and then confirm the password.
4. Set port mapping. E.g. 80, 8000 and 554 ports. The steps for port mapping vary depending on different routers. Call the router manufacturer for assistance with port mapping.



Refer to Appendix 2 for detailed information about port mapping.

5. Apply a domain name from a domain name provider.
6. Configure the DDNS settings in the setting interface of the router.
7. Visit the speed dome via the applied domain name.

- **Connecting the network speed dome via a modem**

**Purpose:**

This speed dome supports the PPPoE auto dial-up function. The speed dome gets a public IP address by ADSL dial-up after the speed dome is connected to a modem.

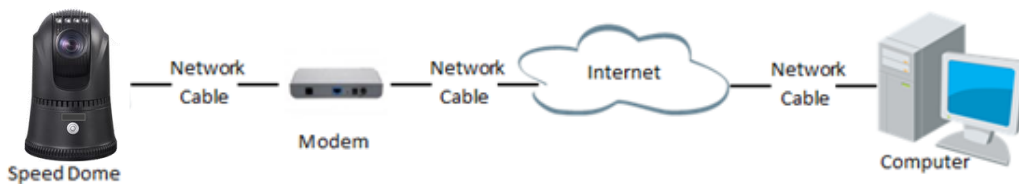


Figure 2-7 Accessing the Speed Dome with Dynamic IP



The obtained IP address is dynamically assigned via PPPoE, so the IP address always changes after rebooting the speed dome.

### 2.2.4 Dialing Settings

Two SIM cards can be installed on the portable speed dome, including Main SIM Card and Slave SIM Card. You can configure the dialing settings for each SIM card.

For detailed information, refer to ***Section 8.4.4 Configuring Dial*** Settings.

## Chapter 3 Activating the Speed Dome

### Purpose:

Activate the speed dome first by setting a strong password before you can use the speed dome.

Activation via web browser, activation via SADP, and activation via client software are supported.

### 3.1 Activation via Web Browser

#### Steps:

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



The default IP address of the speed dome is 192.0.0.64.

A screenshot of the web-based activation interface. It has a title bar "Activation". Below it, there are three input fields: "User Name" with the value "admin", "Password" (empty), and "Confirm" (empty). To the right of the password field, there is a text box with the following text: "Valid password range [8-16]. You can use a combination of numbers, lowercase, uppercase and special character for your password with at least two kinds of them contained." At the bottom right, there is an "OK" button.

Figure 3-1 Activation Interface (Web)

3. Create a password and input the password into the password field.



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

4. Confirm the password.
5. Click **OK** to activate the speed dome and enter the live view interface.



To activate the speed dome under Wi-Fi AP mode, refer to **Section 2.2.1 Wi-Fi AP Mode**.

## 3.2 Activation via SADP Software

SADP software is used for detecting the online device, activating the device, and resetting the password.

Get the SADP software from the supplied disk or the official website, and install the SADP according to the prompts. Follow the steps to activate the speed dome.

### Steps:

1. Run the SADP software to search the online devices.
2. Check the device status from the device list, and select an inactive device.

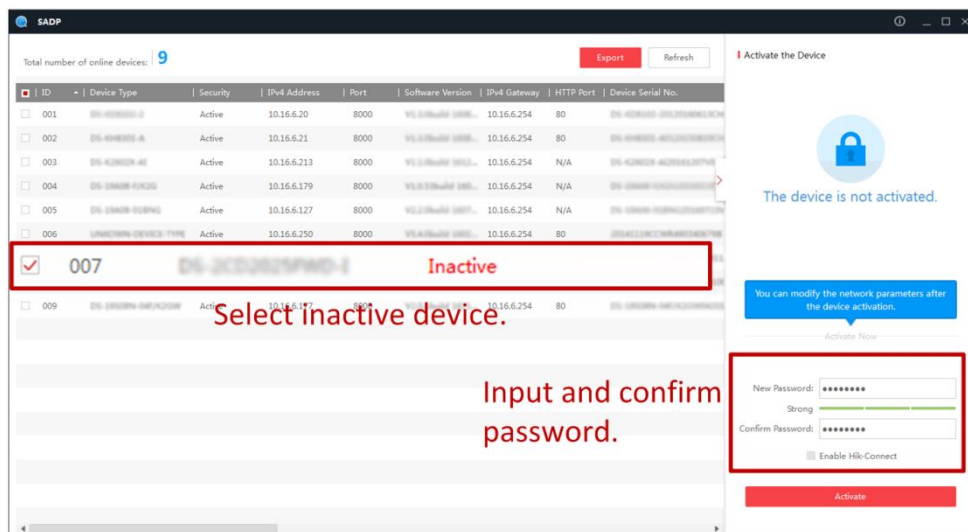


Figure 3-2 SADP Interface



The SADP software supports activating the speed dome in batch. Refer to the user manual of SADP software for details.

3. Create a password and input the password in the password field, and confirm the password.



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

4. Click **Activate** to start activation. You can check whether the activation is completed on the popup window. If activation failed, make sure that the password meets the requirement and then try again.
5. Change the device IP address to the same subnet with your computer by either modifying the IP address manually or checking the **Enable DHCP** checkbox.

**Modify Network Parameters**

☐ Enable DHCP  
☒ Enable Hik-Connect

Device Serial No.:

IP Address:

Port:

Subnet Mask:

Gateway:

IPv6 Address:

IPv6 Gateway:

IPv6 Prefix Length:

HTTP Port:

Security Verification

Admin Password:

**Modify**

[Forgot Password](#)

Figure 3-3 Modify the IP Address

6. Input the password and click **Modify** to activate your IP address modification.  
The batch IP address modification is supported by the SADP. Refer to the user manual of SADP for details.

### 3.3 Activation via Client Software

The client software is versatile video management software for multiple kinds of devices.

Get the client software from the supplied disk or the official website, and install the software according to the prompts. Follow the steps to activate the speed dome

#### **Steps:**

1. Run the client software and the control panel of the software pops up, as shown in Figure 3-4.

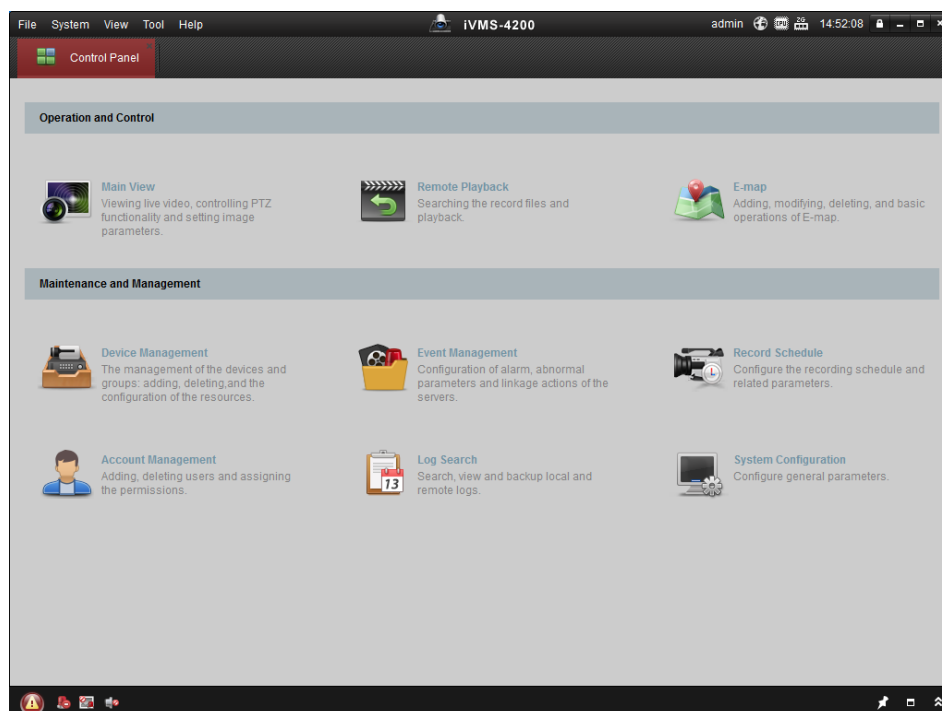


Figure 3-4 Control Panel

2. Click **Device Management** to enter the Device Management interface, as shown in Figure 3-5.

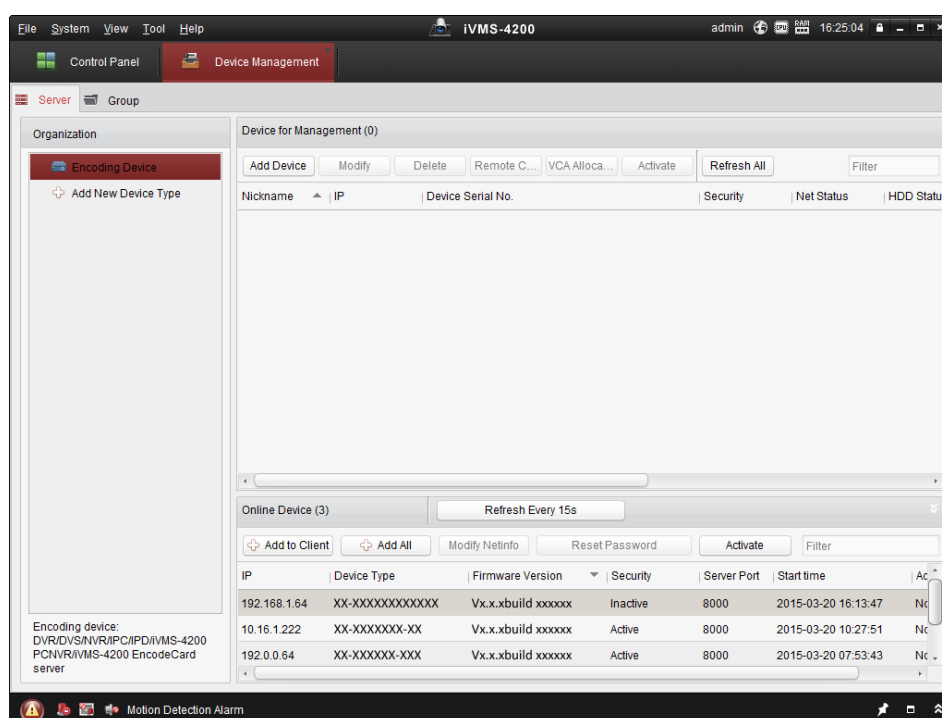


Figure 3-5 Device Management Interface

3. Check the device status from the device list, and select an inactive device.
4. Click **Activate** to pop up the Activation interface.
5. Create a password and input the password in the password field, and confirm the

password.



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

Figure 3-6 Activation Interface

6. Click **OK** to start activation.
7. Click **Modify Netinfo** to pop up the Network Parameter Modification interface, as shown in Figure 3-7.


Figure 3-7 Modifying the Network Parameters

8. Change the device IP address to the same subnet with your computer by either modifying the IP address manually or checking the checkbox of **Enable DHCP**.
9. Input the password to activate your IP address modification.

# Chapter 4 Accessing to the Network Speed Dome

## 4.1 Accessing by Web Browsers

### Steps:

1. Open the web browser.
2. In the address field, input the IP address of the network speed dome, e.g., 192.0.0.64 and enter the login interface.
3. To activate the camera for the first time using, refer to **Chapter 3 Activating the Speed Dome**.
4. Select English as the interface language on the top-right of login interface.
5. Input the user name and password and click .



The device IP address gets locked if the admin user performs 7 failed password attempts (5 attempts for the user/operator).

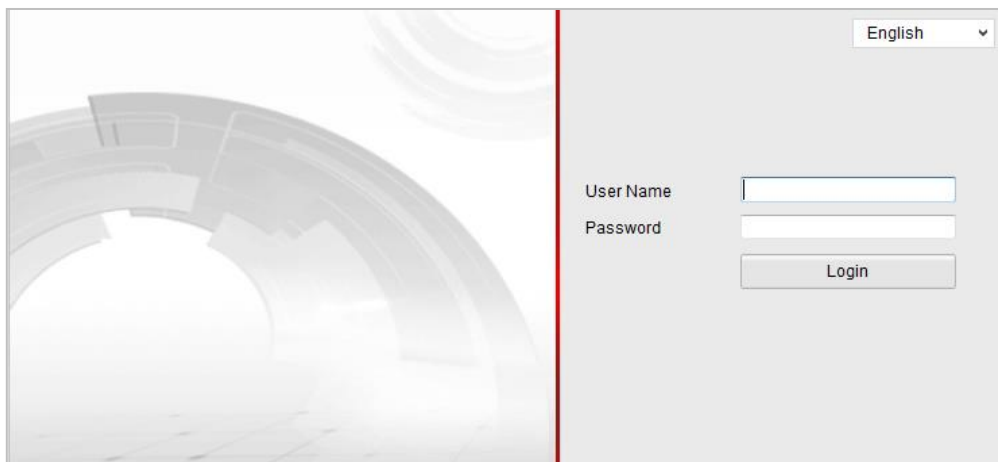


Figure 4-1 Login Interface

6. Install the plug-in before viewing the live video and operating the speed dome. Follow the installation prompts to install the plug-in.



You may have to close the web browser to install the plug-in. Reopen the web browser and log in again after installing the plug-in.



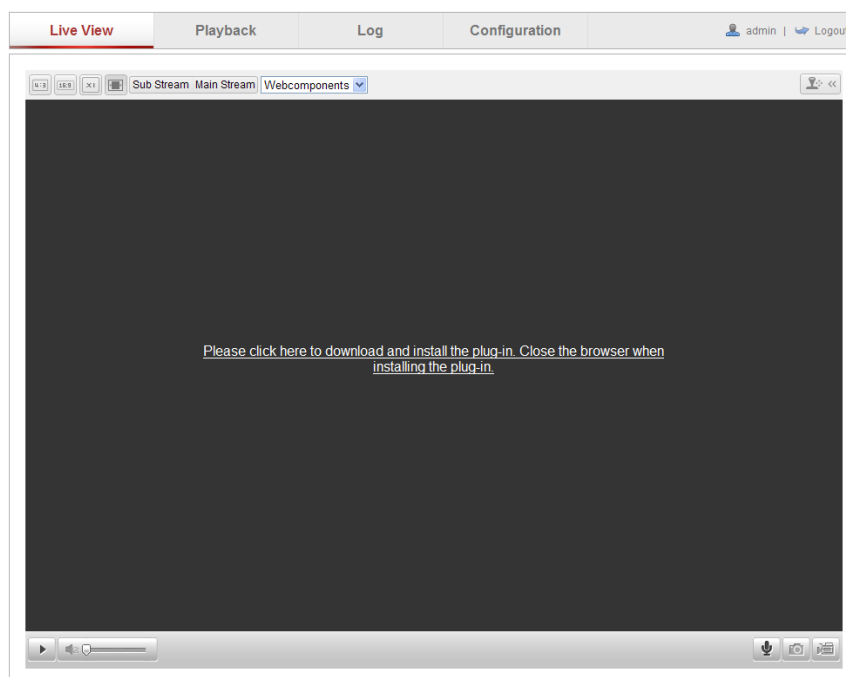


Figure 4-2 Download and Install Plug-in

## 4.2 Accessing by Client Software

The product CD contains the client software. You can view the live video and manage the speed dome with the client software.

Follow the installation prompts to install the client software and WinPcap. The configuration interface and live view interface of client software are shown in Figure 4-3.

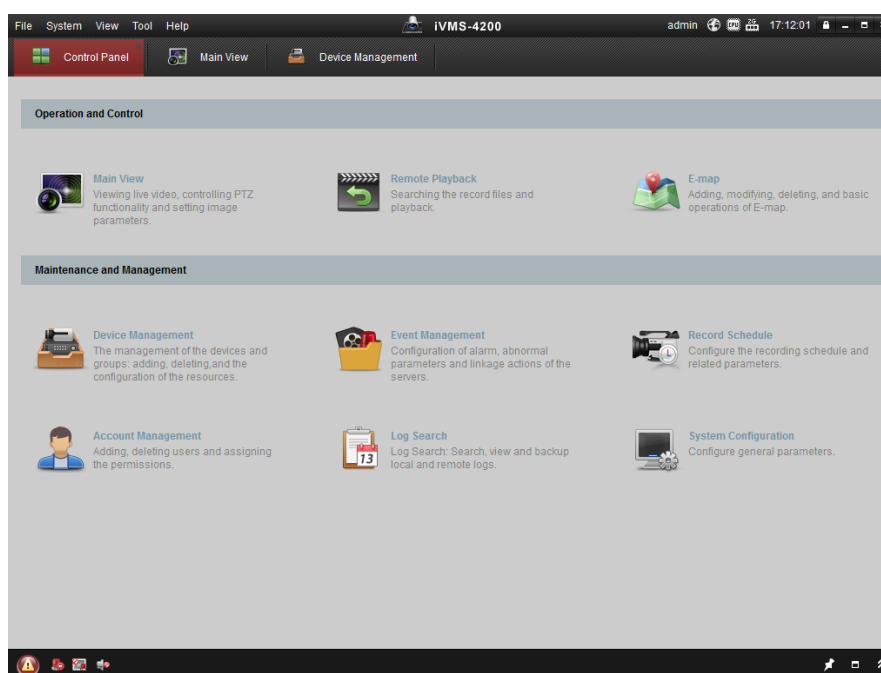


Figure 4-3 iVMS-4200 Control Panel

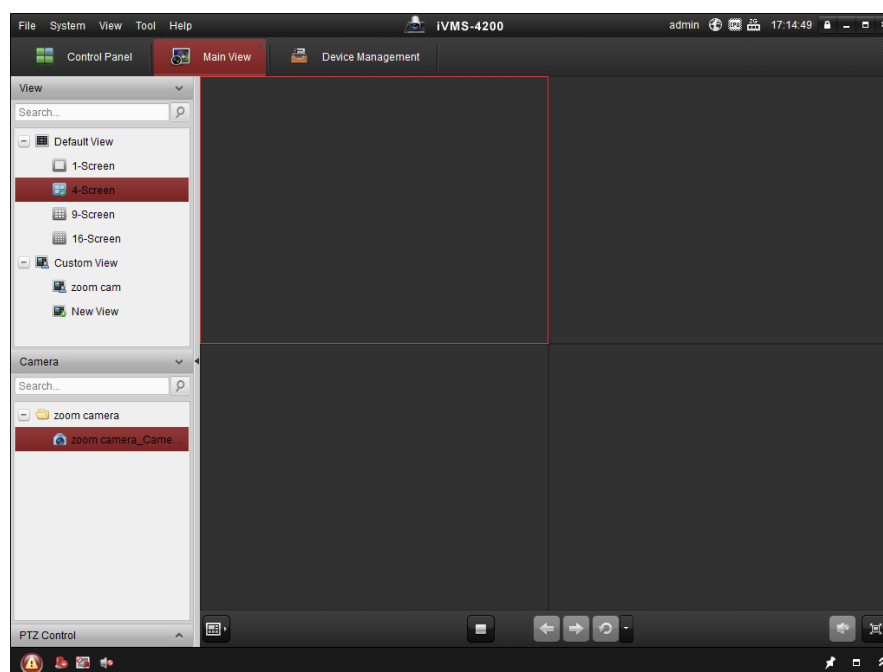


Figure 4-4 iVMS-4200 Live View Interface



- If you use third party VMS software, contact technical support of our branch for speed dome firmware.
- For detailed information about client software of our company, refer to the user manual of the software. This manual mainly introduces accessing to the network speed dome by web browser.

# Chapter 5 Live View

## 5.1 Power-up Action

After the power is applied, the speed dome will perform self-test actions. It begins with lens actions and then pan and tilt movement. After the power-up self-test actions, the information as shown in Figure 5-1 will be displayed on screen for 40 seconds.

The System Information displayed on the screen includes the speed dome model, address, version, language, and other information. The COMMUNICATION refers to the baud rate, parity, data bit and stop bit of the dome. e.g., "2400, N, 8, 1" indicates the speed dome is configured with the baud rate of 2400, no parity, 8 data bits and 1 stop bit.

Model	XX-2XXXXX-X
Address	0
Communication	0000,0,0,0
Soft Version	V000
Camera Software Ver	V000
Language	English

Figure 5-1 Power-up information

## 5.2 Live View Page

### **Purpose:**

The live video page allows you to view live video, capture images, realize PTZ control, set/call presets and configure video parameters.

Log in the network speed dome to enter the live view page, or you can click



on the menu bar of the main page to enter the live view page.

### Descriptions of the live view page:



Figure 5-2 Live View Page

#### Menu Bar:

Click each tab to enter Live View, Playback, Picture, Configuration, and Capture page respectively.

#### Live View Window:

Display the live video.

#### Toolbar:

Operations on the live view page, e.g., live view, capture, record, audio on/off, two-way audio, etc.

#### PTZ Control:

Panning, tilting, focusing and zooming actions of the speed dome. The lighter, wiper, one-touch focus and lens initialization control.

#### Preset/patrol/pattern:

Set and call the preset/patrol/pattern for the speed dome.

#### Live View Parameters:

Configure the image size and stream type of the live video.

## 5.3 Starting Live View













In the live view window as shown in Figure 5-3, click  on the toolbar to start the live view of the speed dome.



Figure 5-3 Start Live View

Table 5-1 Descriptions of the Toolbar

Icon	Description	Icon	Description
	Start live view		Stop live view
	Start manually recording		Stop manually recording
	Audio on and adjust volume		Mute
	Start two-way audio		Stop two-way audio
	Start 3D positioning		Stop 3D positioning
	Manually capture the pictures		




Before using the two-way audio or recording with audio functions, set the **Stream Type** to **Video & Audio** referring to **Section 9.3.1 Configuring Video Settings**.

◆ **Full-screen Mode:**

You can double-click on the live video to switch the current live view into full-screen or return to normal mode from the full-screen.

◆ **3D Positioning:**

**Steps:**

1. Click  on the tool bar of live view interface.
2. Operate the 3D positioning function:
  - Left click a position of the live video. The corresponding position will be

moved to the center of the live video.



- Hold down the left mouse button and drag the mouse to the lower right on the live video. The corresponding position will be moved to the center of the live video and zoomed in.
- Hold down the left mouse button and drag the mouse to the upper left on the live video. The corresponding position will be moved to the center of the live video and zoomed out.



Refer to the following sections for more information:

- Configuring remote recording in **Section 8.5.1 Configuring Recording Schedule**.
- Setting the image quality of the live video in **Section 8.1 Configuring Local Parameters** and **Section 9.3.1 Configuring Video Settings**.
- Setting the OSD text on live video in **Section 9.2.2 Configuring OSD Settings**.

## 5.4 Recording and Capturing Pictures Manually

In the live view interface, click  on the toolbar to capture the live pictures or click  to record the live video. The local saving paths of the captured pictures and clips can be set in the **Configuration > Local Configuration** interface. To configure remote automatic recording, refer to **Section 8.5.1 Configuring Recording Schedule**.

## 5.5 Operating PTZ Control



### **Purpose:**

In the live view interface, you can use the PTZ control buttons to control panning, tilting, and zooming, etc.



PTZ functions vary depending on different speed dome models.

### 5.5.1 PTZ Control Panel

On the live view page, click  to show the PTZ control panel or click  to hide it.

Click the direction buttons to control the pan/tilt movements.

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



Figure 5-4 PTZ Control Panel

Table 5-2 Descriptions of PTZ Control Panel

Button	Description
	Zoom in/out
	Focus near/far
	Iris +/-
	Adjust speed of pan/tilt movements

## 5.5.2 Setting/Calling a Preset

### **Purpose:**

A preset is a predefined image position. For the defined preset, you can click the calling button to quickly view the desired image position.

### ● **Setting a Preset:**

#### **Steps:**

1. In the PTZ control panel, select a preset number from the preset list.

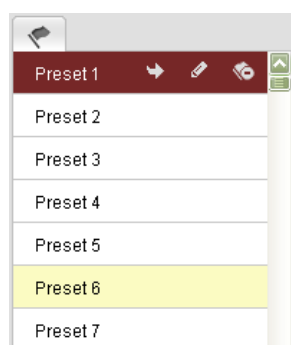



Figure 5-5 Setting a Preset

2. Use the PTZ control buttons to move the lens to the desired position.
  - Pan the speed dome to the right or left.
  - Tilt the speed dome up or down.
  - Zoom in or out.
  - Refocus the lens.
3. Click to finish the setting of the current preset.
4. You can click to delete the preset.

### ● Calling a Preset:

In the PTZ control panel, select a defined preset from the list and click  to call the preset.

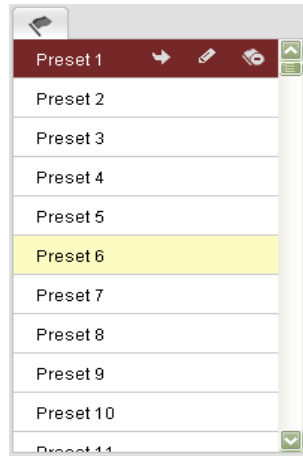


Figure 5-6 Calling a Preset

For convenient preset selection, refer to the following steps to navigate to the preset you want.

#### **Steps:**

1. Select any preset from the list.
2. Click the preset number you need on the keyboard.



The following presets are predefined with special commands. You can only call them but not configure them. For instance, preset 99 is “Start auto scan”. If you call the preset 99, the speed dome starts auto scan function.

Table 5-3 Special Presets

Special Preset	Function	Special Preset	Function
34	Back to origin	46	High beam OFF
35	Call patrol 1	47	Low beam ON
36	Call patrol 2	48	Low beam OFF
37	Call patrol 3	94	Remote reboot
38	Call patrol 4	95	Call OSD menu
39	Day mode	96	Stop a scan
40	Night mode	99	Start auto scan
41	Call pattern 1	102	Call patrol 5
42	Call pattern 2	103	Call patrol 6
43	Call pattern 3	104	Call patrol 7
44	Call pattern 4	105	Call patrol 8
45	High beam ON		



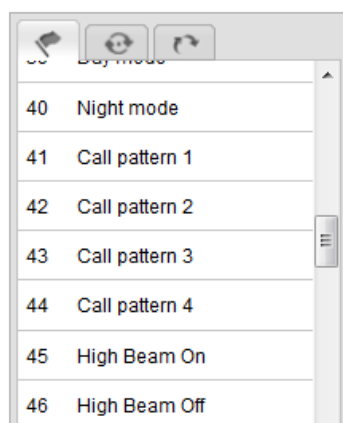


Figure 5-7 Special Preset



You may need to use the OSD (On Screen Display) menu when controlling the speed dome remotely. To display the OSD menu on the live view screen, you can call the preset number 95.

### 5.5.3 Setting/Calling a Patrol

#### **Purpose:**


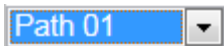

A patrol is a memorized series of preset function. It can be configured and called on the patrol settings interface. There are up to 8 patrols for customizing. A patrol can be configured with 32 presets.

#### **Before you start:**

Make sure that the presets you want to add into a patrol have been defined.

#### ● **Setting a Patrol:**

##### **Steps:**

1. In the PTZ control panel, click  to enter the patrol settings interface.
2. Select a patrol number from .
3. Click  to enter the adding interface of preset as shown in Figure 5-8.

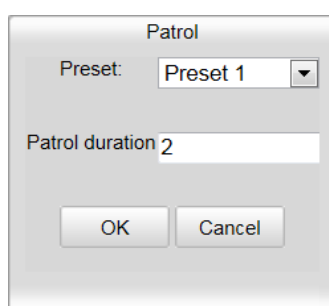
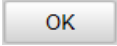



Figure 5-8 Adding Presets

4. Select the preset number and set the patrol duration.  
Patrol duration is the duration staying on one patrol point. The speed dome moves to another patrol point after the patrol duration.
5. Click  to save a preset into the patrol.
6. Repeat the steps from 3 to 5 to add more presets.
7. Click  to save all the patrol settings.
- **Calling a Patrol:**










In the PTZ control panel, select a defined patrol from  and click  to call the patrol as shown in Figure 5-9.



Figure 5-9 Calling a Preset

- **Buttons on the Patrols interface:**

Buttons	Description
	Save a patrol
	Call a patrol
	Stop a patrol
	Enter the adding interface of preset
	Modify a preset
	Delete a preset
	Delete all the presets in one patrol


## 5.5.4 Setting/Calling a Pattern

### **Purpose:**

A pattern is a memorized series of pan, tilt, zoom, and preset functions. It can be called on the pattern settings interface. There are up to 4 patterns for customizing.

- **Setting a Pattern:**

**Steps:**

1. In the PTZ control panel, click  to enter the pattern settings interface.
2. Select a pattern number from the list as shown in Figure 5-10.

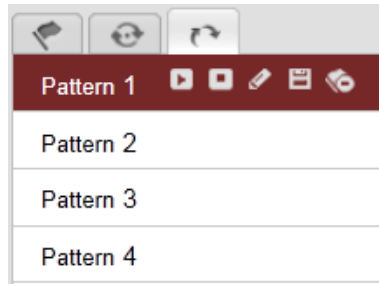









Figure 5-10 Patterns Settings Interface

3. Click  to enable recording the panning, tilting and zooming actions.
4. Use the PTZ control buttons to move the lens to the desired position after the information of **PROGRAM PATTERN REMAINNING MEMORY (%)** is displayed on the screen.
  - Pan the speed dome to right or left.
  - Tilt the speed dome up or down.
  - Zoom in or out.
  - Refocus the lens.
5. Click  to save all the pattern settings.

● **Buttons on the Patterns interface:**

Buttons	Description
	Start to record a pattern.
	Stop recording a pattern.
	Call the current pattern.
	Stop the current pattern.
	Delete the current pattern.



- These four patterns can be operated separately and with no priority level.
- When configuring and calling the pattern, proportional pan is valid; the limit stops and auto flip will be invalid; and the 3D positioning operation is not supported.

## 5.6 Configuring Live View Parameters

● **Main Stream/Sub-Stream:**

You can select Main Stream or Sub-Stream as the stream type of live view. The main

stream is with a relatively high resolution and needs much bandwidth. The sub-stream is with a lower resolution and needs less bandwidth. The default stream type is main stream.



Refer to **Section 9.3.1 Configuring Video Settings** for detailed information.

- **Image Size:**

You can scale up/down the live view image by clicking



The image size can be 4:3, 16:9, original or self-adaptive.

## Chapter 6 Playback

### Purpose:

This section explains how to view the remotely recorded video files stored in the network disks or memory cards.


### Task 1: To play back the video files

#### Steps:

1. Click  on the menu bar to enter playback interface.



Figure 6-1 Playback Interface

2. Select the date and click .

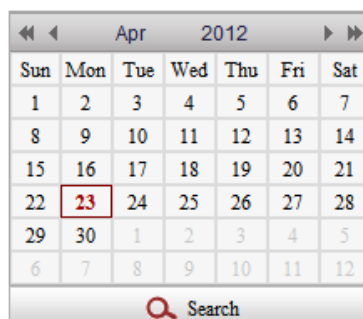



Figure 6-2 Search Video

3. Click  to play the video files found on this date.

The toolbar on the bottom of Playback interface can be used to control playing process.



Figure 6-3 Playback Toolbar

Table 6-1 Description of the buttons

Button	Operation	Button	Operation
	Play/Pause		Stop
	Speed down		Speed up
	Playback by frame		Audio on and adjust volume/Mute
	Capture a picture		Start/Stop clipping video files
	Download video files		Display playback status



You can choose the file paths locally for downloaded playback video files and pictures in Local Configuration interface. Refer to **Section 8.1 Configuring Local Parameters for details.**

Drag the progress bar with the mouse to locate the exact playback point. You can also input the time and click to locate the playback point in the **Set playback time** field. You can also click to zoom out/in the progress bar.

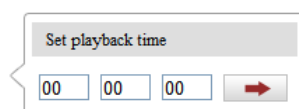


Figure 6-4 Set Playback Time



Figure 6-5 Progress Bar

The different colors of the video on the progress bar stand for the different video types as shown in Figure 6-6.

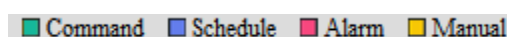



Figure 6-6 Video Types

## Task 2: To download the video files

### Steps:


1. Click  on the playback interface. The pop-up menu is shown in Figure 6-7.
2. Set the start time and end time. Click **Search**. The corresponding video files are listed on the left.


<input type="checkbox"/>	No.	File Name	File Date	File Size	Progress


File Type  
All Types

Start Time  
2017-08-23 00:00:00

End Time  
2017-08-23 23:59:59


 Search

 Download

 Download All

Total 0 Items [First Page](#) [Prev Page 0/0](#) [Next Page](#) [Last Page](#)

Figure 6-7 Video Downloading Interface

3. Check the  checkbox in front of the video files that you need to download.
4. Click **Download** to download the files you select.
5. (Optional) You can click **Download All** to download all the files listed.

## Chapter 7 Searching Picture

### **Purpose:**

This section explains how to view the captured picture files stored in the network disks or the memory cards and download the captured pictures.

### **Before you start:**

Configure network storage for the speed dome or insert a memory card in the speed dome.

### **Steps:**

1. Click **Picture** on the menu bar to enter picture searching interface.

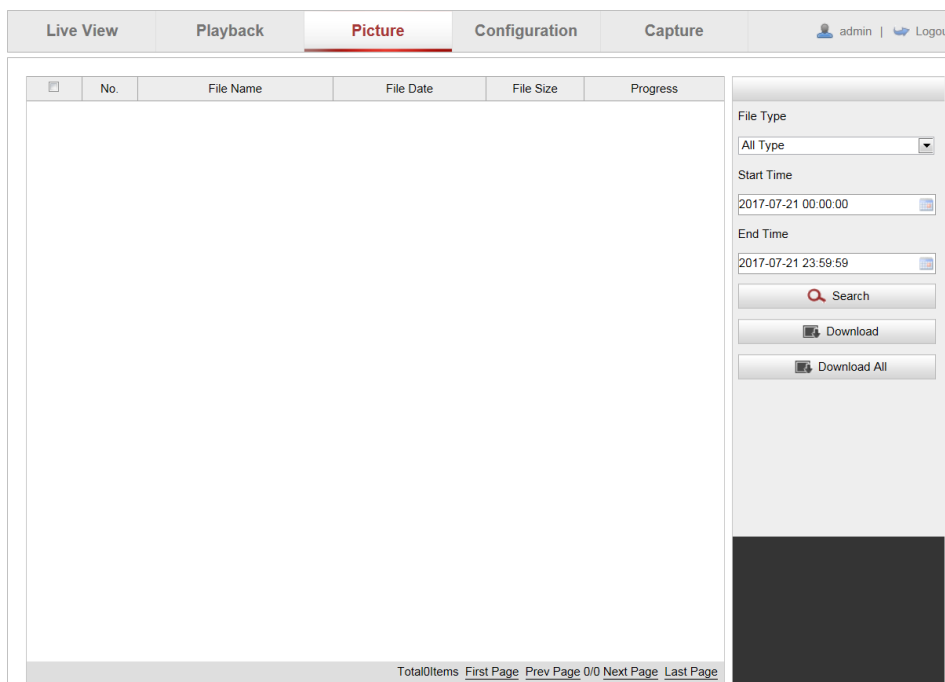
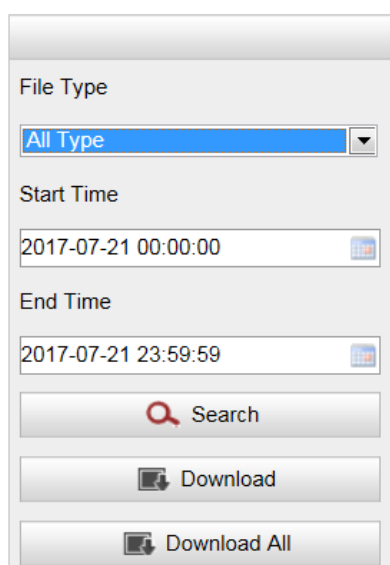


Figure 7-1 Picture Searching Interface

2. Select the file type of the pictures from the list as timing, alarm, motion, checkpoint, black list.
3. Set the start time and end time. Click **Search**. The corresponding picture files will be listed.
4. (Optional) Check the checkbox in front of the files that you need to download, and click **Download** to download the files
5. (Optional) You can click **Download All** to download all the files listed on the interface.





The image shows a vertical search interface. At the top is a 'File Type' section with a dropdown menu currently showing 'All Type'. Below this is a 'Start Time' section with a text input field containing '2017-07-21 00:00:00' and a small calendar icon to its right. The next section is 'End Time' with a text input field containing '2017-07-21 23:59:59' and a similar calendar icon. At the bottom are three buttons: 'Search' with a magnifying glass icon, 'Download' with a download icon, and 'Download All' with a download icon.

File Type

All Type

Start Time

2017-07-21 00:00:00

End Time

2017-07-21 23:59:59

Search

Download

Download All

Figure 7-2 Searching File

# Chapter 8 System Configuration

## 8.1 Configuring Local Parameters



The local configuration refers to the parameters of the live view and other operations using the web browser.

### Steps:

1. Enter the Local Configuration interface:

**Configuration > Local Configuration > Local Configuration**

The screenshot shows the 'Local Configuration' web interface. It has a title bar 'Local Configuration' and three main sections:

- Live View Parameters:**
  - Protocol: Radio buttons for TCP (selected), UDP, MULTICAST, and HTTP.
  - Live View Performance: Radio buttons for Shortest Delay and Self-adaptive (selected).
  - Rules: Radio buttons for Enable and Disable (selected).
  - Image Format: Radio buttons for JPEG (selected) and BMP.
- Record File Settings:**
  - Record File Size: Radio buttons for 256M, 512M (selected), and 1G.
  - Save record files to: A text input field followed by a 'Browse' button.
  - Save downloaded files to: A text input field followed by a 'Browse' button.
- Picture and Clip Settings:**
  - Save snapshots in live view to: A text input field followed by a 'Browse' button.
  - Save snapshots when playback to: A text input field followed by a 'Browse' button.
  - Save clips to: A text input field followed by a 'Browse' button.
  - Saving Path of Scene Picture: A text input field followed by a 'Browse' button.

Figure 8-1 Local Configuration Interface

2. Configure the following settings:

- **Live View Parameters:** Set the protocol type, live view performance, rules, and image format.

◆ **Protocol Type:** TCP, UDP, MULTICAST and HTTP are selectable.

**TCP:** Ensures complete delivery of streaming data and better video quality, yet the real-time transmission will be affected.

**UDP:** Provides real-time audio and video streams.

**HTTP:** Allows the same quality as of TCP without setting specific ports for streaming under some network environments.


**MULTICAST:** It's recommended to select the protocol type to  **MULTICAST**


when using the Multicast function. For other information about Multicast, refer to **Section 8.4.1 Configuring TCP/IP Settings**.


- ◆ **Live View Performance:** Set the live view performance as Shortest Delay or Self-adaptive.
- ◆ **Rules:** You can enable or disable the rules of dynamic analysis for motion here.
- ◆ **Image Format:** The captured pictures can be saved as different format. JPEG and BMP are selectable.
- **Record File Settings:** Set the saving path of the video files.
  - ◆ **Record File Size:** Select the packed size of manually recorded and downloaded video files. The size can be set to 256M, 512M or 1G.
  - ◆ **Save record files to:** Set the saving path for the manually recorded video files.
  - ◆ **Save downloaded files to:** Set the saving path for the downloaded video files

in  interface.

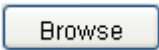
- **Picture and Clip Settings:** Set the saving paths of the captured pictures and clipped video files.

- ◆ **Save snapshots in live view to:** Set the saving path of the manually captured pictures in  interface.

- ◆ **Save snapshots when playback to:** Set the saving path of the captured pictures in  interface.

- ◆ **Save clips to:** Set the saving path of the clipped video files in  interface.



You can click  to change the directory for saving video files, clips and pictures.

3. Click  to save the settings.

## 8.2 System Settings

### 8.2.1 Viewing Device Information

Enter the Device Information interface:

**Configuration > Parameters Settings > System > Device Information**

In the **Device Information** interface, you can edit the Device Name and Device No.

Other information of the network speed dome cannot be changed, including Model, Serial No., Firmware Version, Encoding Version, Number of Channels, Number of HDDs, Number of Alarm Input, and Number of Alarm Output.

Basic Information	
Device Name	<input type="text"/>
Device No.	<input type="text"/>
Model	
Serial No.	
Firmware Version	
Encoding Version	
Number of Channels	
Number of HDDs	
Number of Alarm Input	
Number of Alarm Output	

Figure 8-2 Device Information

## 8.2.2 Configuring Time Settings

### **Purpose:**

You can follow the instructions in this section to configure the time displayed on the video. You can set Time Zone, Time Synchronization, and Daylight Saving Time. Time Synchronization consists of auto mode by Network Time Protocol (NTP) server and manual mode.

Enter the Time Settings interface:

**Configuration > Parameters Settings > System > Time Settings**

Time Zone	(GMT+08:00) Beijing, Urumqi, Singapore
<b>Time Sync.</b>	
<input checked="" type="radio"/> NTP	
Server Address	time.windows.com
NTP Port	123
Interval	1440 min.
<input type="button" value="Test"/>	
<input type="radio"/> Manual Time Sync.	
Device Time	2014-05-15T17:07:01
Set Time	2014-05-16T17:07:25 <input type="checkbox"/> Sync. with computer time

Figure 8-3 Time Settings

### ● Configuring Time Synchronization by NTP Server

#### **Steps:**

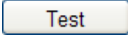
- (1) Check the radio button to enable the **NTP** function.
- (2) Configure the following settings:

**Server Address:** IP address of NTP server.

**NTP Port:** Port of NTP server.

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

Figure 8-4 Time Sync by NTP Server


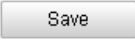
- (3) You can click the  button to check whether the configuration is succeeded.



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

### ● Configuring Time Synchronization Manually

#### Steps:

- (1) Check the **Manual Time Sync** radio button.
- (2) Click  to set the system time from the pop-up calendar.
- (3) Click  to save the settings.



You can also check the **Sync with computer time** checkbox to synchronize the time of the speed dome with the time of your computer.

Figure 8-5 Time Sync Manually

### ● Select the Time Zone

#### Purpose:

When the speed dome is taken to another time zone, you can use the **Time Zone** function to adjust the time. The time will be adjusted according to the original

time and the time difference between the two time zones.

From the **Time Zone** drop-down menu as shown in Figure 8-6, select the Time Zone in which the speed dome locates.

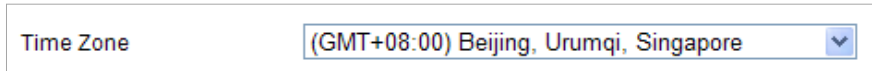
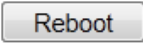


Figure 8-6 Time Zone Settings

### 8.2.3 Maintenance

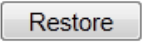
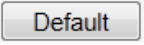
#### Rebooting the Speed Dome

**Steps:**

1. Enter the Maintenance interface:  
**Configuration > Parameters Settings > System > Maintenance**
2. Click  to reboot the network speed dome.

#### Restoring Default Settings

**Steps:**

1. Enter the Maintenance interface:  
**Configuration > Parameters Settings > System > Maintenance**
2. Click  or  to restore the default settings.

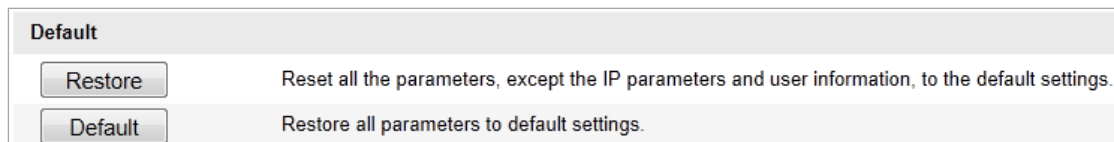


Figure 8-7 Restoring Default Settings

#### Searching Log

**Purpose:**

The operation, alarm, exception and information of the speed dome can be stored in log files. You can also export the log files on your demand.

**Steps:**

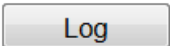
1. Enter the Maintenance interface:  
**Configuration > Parameters Settings > System > Maintenance**
2. Click , and the searching log pops up.

Figure 8-8 Searching Log

- Set the log search conditions to specify the search, including the Major Type, Minor Type, Start Time and End Time.
- (Optional) You can click Save Log to save the log files to your PC.

## Importing/Exporting Configuration File

### Steps:

- Enter the Maintenance interface:

**Configuration > Parameters Settings > System > Maintenance**

- Click to select the local configuration file and then click to start importing configuration file.



You need to reboot the speed dome after importing configuration file.

- Click and set the saving path to save the configuration file in local storage.
- You can click to export the debugging information.

Figure 8-9 Importing/Exporting Configuration File

## Upgrading the System

### Steps:

1. Enter the Maintenance interface:  
**Configuration > Parameters Settings > System > Maintenance**
2. Select Firmware or Firmware Directory.
  - **Firmware:** when you select **Firmware**, you need to find the firmware in your computer to upgrade the device.
  - **Firmware Directory:** You need to find the directory where the firmware locates. The device can find the firmware in the directory automatically.
3. Click **Browse** to select the local upgrade file and then click **Upgrade** to start remote upgrade.

Figure 8-10 Remote Upgrade

## 8.2.4 RS-232 Settings

### Purpose:

The RS-232 serial port is used to control the PTZ of the camera. The configuration of the PTZ parameters should be done before you control the PTZ unit.


### Steps:

1. Enter RS-485 Port Setting interface:  
**Configuration> Parameters Settings > System > RS-232**



Baud Rate	115200 bps
Data Bit	8
Stop Bit	1
Parity	None
Flow Ctrl	None
Control Mode	Control Panel

Figure 8-11 RS-232 Settings

- Set the RS-232 parameters and click  to save the settings.

By default, the Baud Rate is set as 115200 bps, the Data Bit is 8, the Stop Bit is 1 and the Parity and Flow Control is None.



The Baud Rate, PTZ Protocol and PTZ Address parameters of the speed dome should be exactly the same as those of the remote control device.

## 8.2.5 RS-485 Settings

### **Purpose:**

The RS-485 serial port is used to control the PTZ of the camera. The configuration of the PTZ parameters should be done before you control the PTZ unit.


### **Steps:**

- Enter RS-485 Port Setting interface:

**Configuration> Parameters Settings> System > RS-485**

Baud Rate	9600 bps
Data Bit	8
Stop Bit	1
Parity	None
Flow Ctrl	None
PTZ Decoder Type	PELCO-D
PTZ Address	0
Configure Baud Rate	Software

Figure 8-12 RS-485 Settings

- Set the RS-485 parameters and click  to save the settings.

By default, the Baud Rate is set as 9600 bps, the Data Bit is 8, the Stop Bit is 1 and the Parity and Flow Control is None.



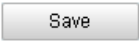
The Baud Rate, PTZ Protocol and PTZ Address parameters of the speed dome should be exactly the same as those of the remote control device.

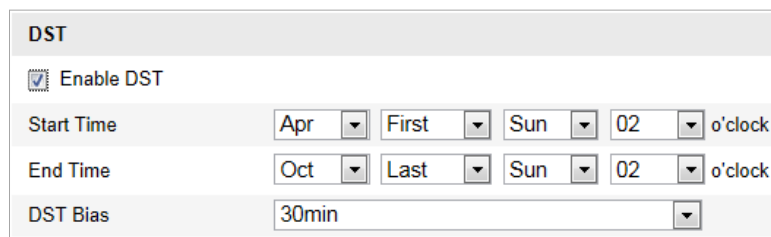
## 8.2.6 DST (Daylight Saving Time) Settings

### **Purpose:**

If there is the habit of adjusting clocks forward in your country in certain time period of a year, you can turn this function on. The time will be adjusted automatically when the Daylight Saving Time (DST) comes.

### **Steps:**

1. Enter the DST settings interface:  
**Configuration > Parameters Settings > System > DST**
2. Check ☐ Enable DST to enable the DST function.
3. Set the date of the DST period.
4. Click  to save the settings.




DST					
<input checked="" type="checkbox"/> Enable DST					
Start Time	Apr	First	Sun	02	o'clock
End Time	Oct	Last	Sun	02	o'clock
DST Bias	30min				

Figure 8-13 DST Settings

## 8.2.7 Service

You can enable User Lock in the service interface. After enabling user lock, the device IP address gets locked if the admin user performs 7 failed password attempts (5 attempts for the user/operator).



Software
<input checked="" type="checkbox"/> Enable User Lock

Figure 8-14 Enable User Lock

## 8.3 Configuring Network Settings

### 8.3.1 Configuring Access Platform

### **Purpose:**

The device can be connected to iVMS-5200 system, providing functions including live

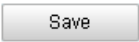
view, two-way audio, and alarm, etc.

**Steps:**

1. Enter the Access Platform settings interface:

**Configuration > Parameters Settings > Network Settings > Access Platform**

Figure 8-15 Access Platform Settings

2. Check the **Enable** checkbox to enable the access platform interface.
3. Input the required information.
  - **Access Server IP:** the IP address of the computer running the platform server.
  - **Access Server Port:** the network communication port of the platform. The default value is 7660.
  - **Device ID:** the identification name of the device. The device ID should be registered on the platform first.
4. Click  to save the settings.

### 8.3.2 Configuring Port Settings

**Purpose:**

If there is a router and you want to access the speed dome through Wide Area Network (WAN), you need to set the four ports for the speed dome.

**Steps:**

1. Enter the Port settings interface:

**Configuration > Parameters Settings > Network Settings > Port**

Figure 8-16 Port Settings

2. Set the HTTP port, RTSP port and port of the speed dome.

**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  to save the settings.

### 8.3.3 Configuring QoS Settings

**Purpose:**

QoS (Quality of Service) can help solve the network delay and network congestion by configuring the priority of data sending.

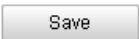
**Steps:**

1. Enter the QoS Settings interface:

**Configuration > Parameters Settings > Network Settings > QoS**

Video/Audio DSCP	<input type="text" value="0"/>
Event/Alarm DSCP	<input type="text" value="0"/>
Management DSCP	<input type="text" value="0"/>

Figure 8-17 QoS Settings

2. Configure the QoS settings, including Video/Audio DSCP, Event/Alarm DSCP and Management DSCP.  
The valid DSCP value ranges from 0 to 63. The DSCP value is bigger, the priority is higher.
3. Click  to save the settings.



- Make sure that you enable the QoS function of your network device (such as a router).
- It will ask for a reboot for the settings to take effect.

### 8.3.4 Configuring FTP Settings

**Purpose:**

You can set a FTP server and configure the following parameters for uploading captured pictures.

**Steps:**

1. Enter the FTP Settings interface:

**Configuration > Parameters Settings > Network Settings > FTP**

Server Address	<input type="text" value="0.0.0.0"/>
Port	<input type="text" value="21"/>
User Name	<input type="text"/> <input type="checkbox"/> Anonymous
Password	<input type="password"/>
Confirm	<input type="password"/>
Directory Structure	<input type="text" value="Save in the root directory."/> ▼
Parent Directory	<input type="text" value="Use Device Name"/> ▼
Child Directory	<input type="text" value="Use Camera Name"/> ▼
Upload Type	<input type="checkbox"/> Upload Picture
<input type="button" value="Test"/>	

Figure 8-18 FTP Settings

- Configure the FTP settings, including server address, port, user name, password, directory, and upload type.

- **Setting the directory in FTP server for saving files:**

In the **Directory Structure** field, you can select the root directory, parent directory and child directory.

- ◆ **Root directory:** The files will be saved in the root of FTP server.
- ◆ **Parent directory:** The files will be saved in a folder in FTP server. The name of folder can be defined as shown in Figure 8-19.

Use Device Name	▼
Use Device Name	
Use Device Number	
Use Device IP address	

Figure 8-19 Parent Directory

- ◆ **Child directory:** It is a sub-folder which can be created in the parent directory. The files will be saved in a sub-folder in FTP server. The name of folder can be defined as shown in Figure 8-20.

Use Camera Name	▼
Use Camera Name	
Use Camera Number	

Figure 8-20 Child Directory

- **Upload type:** To enable uploading the captured picture to the FTP server.

- Click  to save the settings.



If you want to upload the captured pictures to FTP server, you also have to enable the continuous snapshot or event-triggered snapshot in **Snapshot** interface. For detailed information, refer to the **Section 8.5.3 Configuring Snapshot Settings**.

### 8.3.5 Configuring Email

**Purpose:**

The system 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, video-tampering, and blacklist, etc.

**Steps:**

1. Enter the Email settings interface:

**Configuration> Parameters Settings > Network Settings > Email**

Sender	
Sender	<input type="text"/>
Sender's Address	<input type="text"/>
SMTP Server	<input type="text"/>
SMTP Port	<input type="text" value="25"/>
<input checked="" type="checkbox"/> Enable SSL	
Interval	<input type="text" value="2s"/> <input type="button" value="v"/>
<input type="checkbox"/> Attached Image	
<input type="checkbox"/> Authentication	
User Name	<input type="text"/>
Password	<input type="text"/>
Confirm	<input type="text"/>
Receiver	
Receiver1	<input type="text"/>
Receiver1's Address	<input type="text"/> <input type="button" value="Test"/>
Receiver2	<input type="text"/>
Receiver2's Address	<input type="text"/>
Receiver3	<input type="text"/>
Receiver3's Address	<input type="text"/>

Figure 8-21 Email Settings

2. Configure the following settings:

● **Sender**

**Sender:** The name of the email sender.

**Sender's Address:** The email address of the sender.

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

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

**Enable SSL:** When you enable SSL, e-mails will be sent after encrypted by SSL. The SMTP port should be set as 465.




The email server must support STARTTLS protocol for e-mail encryption with STARTTLS. If the email server does not support STARTTLS protocol, but the Enable STARTTLS is checked, the email will not be encrypted.

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

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

**Authentication** (optional): If your email server required authentication, check this checkbox to authenticate when logging in the server. You should input the login user name and the password.

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

● **Receiver**

**Receiver:** Select the receiver to which the email is sent. Up to three receivers can be configured.

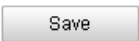
**Receiver:** The name of the user to be notified.

**Receiver's Address:** The email address of user to be notified. (Optional: click **Test** to make sure that the email server can send email out.)

3. Click  to save the settings.

### 8.3.6 Configuring Hik-Connect

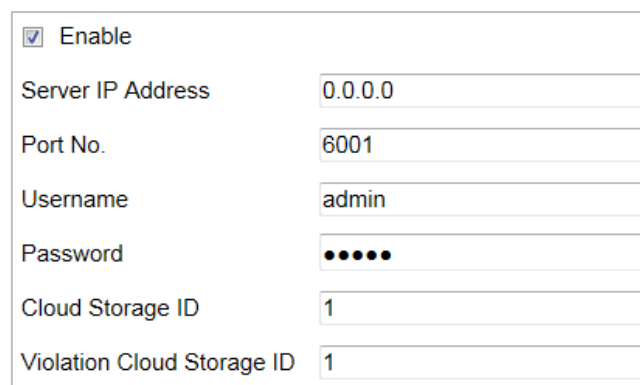
**Steps:**

1. Enter Hik-Connect settings interface:  
**Configuration > Parameters Settings > Network Settings > Hik-Connect**
2. Check the **Enable Hik-Connect** checkbox to enable the function.
3. Click  to save the settings.

### 8.3.7 Configuring Cloud Storage

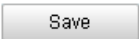
**Steps:**

1. Enter Cloud Storage settings interface:  
**Configuration > Parameters Settings > Network Settings > Cloud Storage**



<input checked="" type="checkbox"/> Enable	
Server IP Address	0.0.0.0
Port No.	6001
Username	admin
Password	•••••
Cloud Storage ID	1
Violation Cloud Storage ID	1

Figure 8-22 Cloud Storage

2. Check the **Enable** checkbox.
3. Input server IP address, port No., user name, password, cloud storage ID, and violation cloud storage ID, etc.
4. Click  to save the settings.

## 8.4 Network Connection Settings

### 8.4.1 Configuring TCP/IP Settings

**Purpose:**

TCP/IP settings must be properly configured before you operate the speed dome over network. IPv4 and IPv6 are both supported.

**Steps:**

1. Enter TCP/IP settings interface:  
**Configuration > Parameters Settings > Network Connection > TCP/IP**



NIC Settings	
Select NIC	lan
NIC Type	Self-adaptive
<input type="checkbox"/> DHCP	
IPv4 Address	<input type="text"/> <span>Test</span>
IPv4 Subnet Mask	<input type="text"/>
IPv4 Default Gateway	<input type="text"/>
Mac Address	<input type="text"/>
MTU	1500
Multicast Address	<input type="text"/>
DNS Server	
Preferred DNS Server	8.8.8.8
Alternate DNS Server	<input type="text"/>
Wired Hotspots Setting	
<input type="checkbox"/> Enable Wired Hotspot	

Figure 8-23 TCP/IP Settings

2. Configure the basic network settings, including the NIC Type, IPv4 or IPv6 Address, IPv4 or IPv6 Subnet Mask, IPv4 or IPv6 Default Gateway, MTU settings and Multicast Address.



- If the DHCP is available, you can check ☐ DHCP to automatically obtain an IP address and other network settings from that server.
  - The Multicast sends a stream to the multicast group address and allows multiple clients to acquire the stream at the same time by requesting a copy from the multicast group address. Before utilizing this function, you have to enable the Multicast function of your router and configure the gateway of the network speed dome.
3. If the DNS server settings are required for some applications (e.g., sending email), configure the DNS server. Input the preferred DNS server, and alternate DNS server.
  4. (Optional) Check the **Enable Wired Hotspot** checkbox to enable wired hotspot function.
  5. Click Save to save the settings.

## 8.4.2 Configuring Wi-Fi Settings

### Steps:

1. Enter the Wi-Fi Settings interface.

**Configuration > Parameters Settings > Network Connection > Wi-Fi**



The Wi-Fi hotspot is enabled by default.

The screenshot shows the 'Wi-Fi Settings' configuration page. At the top, there is a 'Select Wi-Fi Mode' dropdown menu currently set to 'Wi-Fi Hotspot'. Below this is a section titled 'Wi-Fi Hotspot Settings'. Inside this section, there are several checkboxes: 'Enable Wi-Fi AP', 'Enable AP Broadcast', and 'Enable WLAN Hotspot'. Below these are fields for 'SSID', 'Security Mode' (set to 'not-encrypted'), and 'Encryption Type' (set to 'TKIP/AES'). There are also radio buttons for 'Authentication Type' (set to 'Open Mode'), 'Key Length' (set to '64bit'), and 'Key Type' (set to 'Hex'). Below these are four text input fields for 'Key 1', 'Key 2', 'Key 3', and 'Key 4'. Further down are fields for 'IP Address' and 'Subnet Mask'. A section titled 'DHCP' follows, with a checkbox for 'Enable DHCP' and several text input fields for 'Start IP Address', 'End IP Address', 'Preferred DNS Server', 'Alternate DNS Server', and 'Gateway'.

Figure 8-24 Wi-Fi Settings

2. Select the WIFI mode or select **Disable** to disable the Wi-Fi function.

- **In Wi-Fi Hotspot Mode:**

- (1) Select WIFI Mode as **Wi-Fi Hotspot**.

- (2) Optionally, check the checkbox of **Enable Wi-Fi AP**, **Enable AP Broadcast**, and

**Enable WLAN Hotspot.**

- (3) Input the network SSID (Service Set Identifier).
- (4) Configure the Security Mode, Encryption Type, and Authentication Type, etc.
- (5) You can check the **Enable DHCP** checkbox to enable DHCP function and configure the DHCP parameters.

● **In Wi-Fi Mode:**

- (1) Select **Wi-Fi Mode** as **Wi-Fi**.
- (2) Click **Search** to search the Wi-Fi. (Optional)
- (3) Click to select the Wi-Fi from the Wireless List (Wi-Fi List), or input the Wi-Fi SSID in the text field, and then configure the security mode.

Select Wi-Fi Mode: Wi-Fi

### Wi-Fi Configuration

Wireless List Search

No.	SSID	Working Mode	Security Mode	Channel	Signal Intensity	Speed(Mbps)
2		infrastructure	WPA2-personal	1	83	150
3		infrastructure	WPA2-personal	6	83	150
4		infrastructure	WPA2-personal	6	80	150
5		infrastructure	WPA-personal	1	79	54
6		infrastructure	NONE	1	79	150

### Wi-Fi

SSID:

Network Mode: ☒ Manage ☐ Ad-Hoc

Security Mode: not-encrypted

### WPS

☐ Enable WPS

PIN Code:  Generate

☒ PBC connection Connect

☐ Use router PIN code Connect

SSID:

Router PIN code:

Figure 8-25 Wi-Fi Configuration

- (4) Check the **Enable WPS** checkbox to enable WPS (Wi-Fi Protected Setup) function. (Optional)
3. Click Save to save the Wi-Fi settings.



Wi-Fi Protected Setup (WPS) is a computing standard that attempts to allow easy establishment of a secure wireless network. With the WPS function, the device can be connected to the Wi-Fi networks, with no need of password. After enabling WPS function, the device will be connected to the available WPS networks automatically without the password.

### 8.4.3 Configuring Location Settings

**Purpose:**

The longitude, latitude, time, positioning accuracy and speed of the device will be displayed automatically when the positioning signal is available.

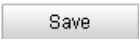
**Steps:**

1. Enter the Location Settings interface.

**Configuration > Parameters Settings > Network Connection > Location Setting**

Positioning Module	GPS
Synchronization	<input type="checkbox"/> Enable
Speed Unit	Km/h
Alarm Speed Limit	100
Memory Uploaded (Day)	0
GPS Upload Interval (s)	10
Display Positioning Info.	<input type="checkbox"/> Channel 1

Figure 8-26 Location Settings

2. Check the **Enable** checkbox to enable the location synchronization by satellite. (Optional)
3. Select the speed unit between Km/h and Mile/h and set the Alarm Speed Limit. When the vehicle speed exceeds the value, the device alarms.
4. Set the memory uploaded day.
5. Set the GPS Upload Interval, and the device uploads GPS information by the GPS upload interval.
6. Check the **Channel 1** checkbox for Display Positioning Information to display information of longitude and latitude on the live view interface.
7. Click  to save the local settings.

### 8.4.4 Configuring Dial Settings

**Purpose:**

The device can work under 2G/3G/4G network.

**Steps:**

1. Enter the Dial settings interface.

**Configuration > Parameters Settings > Network Connection > Dial Setting**

### Dial Parameters

Module 1

☐ Enable
 Network Mode Auto
Dial Number 
User Name 
Password 
APN 
MTU 1500
Verification Protocol Auto
[Default Bearer](#)



Save

### Dial Status

Real-time Mode	Unkown
UIM Status	No Card
Signal Intensity	Unkown
Dial Status	Waiting to dial.
IP Address	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
DNS Address	0.0.0.0
Flow Count	0KB

Refresh

Figure 8-27 Dial Settings

- Check the **Enable** checkbox to enable the dialing function after installing the Main SIM Card. Then, the device will connect to the mobile networks and the information including the dialing status, SIM card status, network standard and IP address will be displayed automatically.
- Select the Network Mode from Auto, 2G, 3G, and 4G. The auto mode is enabled by default.
- Configure the default bearer parameters when your VPN network requires a default bearer. (Optional)
- Click  to save the local settings.
- You can click  view the Dial Status.



When 3G dialing and Wi-Fi networks are both available, give priority selection to the Wi-Fi networks.

## 8.4.5 Configuring Bluetooth Settings

### **Purpose:**

You can use the speed dome with Bluetooth devices, such as Bluetooth headsets, Bluetooth printer, etc.

Before using the speed dome with Bluetooth devices, you should match them first.

### **Steps:**

1. Enter the Bluetooth Settings interface.  
**Configuration > Parameters Settings > Network Connection > Bluetooth Setting**
2. Check the **Enable** checkbox to enable the Bluetooth function.
3. Turn on your Bluetooth device and place it close to the portable speed dome, the available Bluetooth devices nearby will be searched and displayed on the list.
4. Click **Match** to match the devices.
5. When the Bluetooth icon shows on the left down corner of live view interface, the Bluetooth function is properly enabled.

<input checked="" type="checkbox"/> Enable	
<b>Configuration</b>	
Customize PIN	XXXXXXX
Save	
<b>History Device</b>	
<b>Online Device</b>	
Refresh	
1	XXXXXXX Match
<b>Device Status</b>	
Connection Status	None Matched
Connected Device	

Figure 8-28 Bluetooth

## 8.5 Storage Settings

### **Before you start:**

To configure record settings, make sure that you have the network storage device within the network or the memory card inserted in your speed dome.

### 8.5.1 Configuring Recording Schedule

#### **Purpose:**

There are two kinds of recording for the speed domes: manual recording and scheduled recording. For the manual recording, refer to **Section 5.4 Recording and**

**Capturing Pictures Manually.** In this section, you can follow the instructions to configure the scheduled recording. By default, the record files of scheduled recording are stored in the memory card (if supported) or in the network disk.

**Steps:**

1. Enter the Record Schedule settings interface:

**Configuration > Parameters Settings > Storage > Record Schedule**

Figure 8-29 Recording Schedule Interface

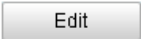
2. Check the **Enable Record Schedule** checkbox to enable scheduled recording.
3. Set the record parameters of the speed dome.

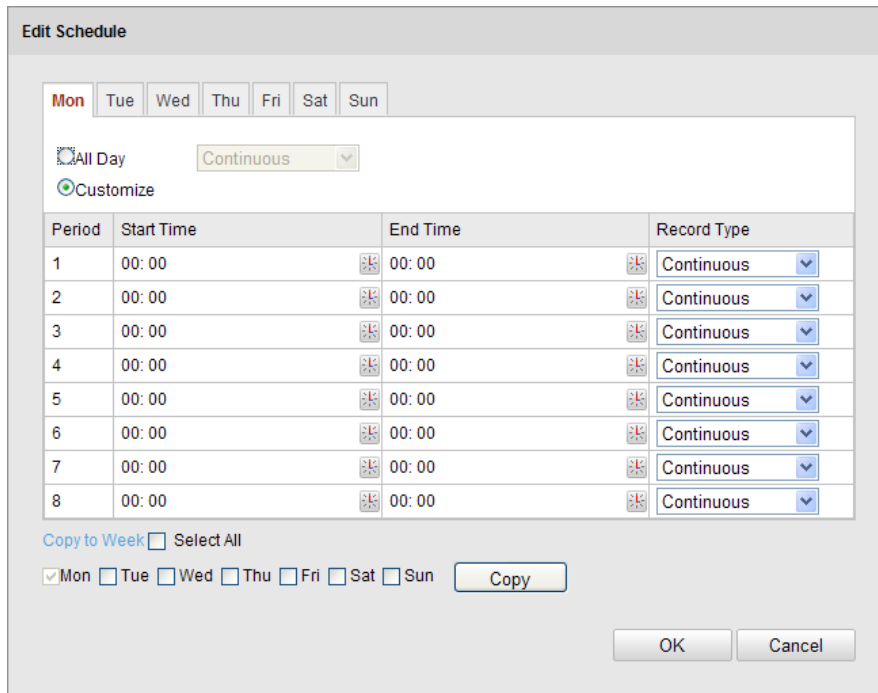
Figure 8-30 Record Parameters

- **Pre-record:** The time you set to start recording before the scheduled time or the event. For example, if an alarm triggers recording at 10:00, and the pre-record time is set as 5 seconds, the speed dome starts to record at 9:59:55.
- **Post-record:** The time you set to stop recording after the scheduled time or the event. For example, if the alarm triggered recording ends at 11:00, and the post-record time is set as 5 seconds, the speed dome will record until 11:00:05.
- **Overwrite:** If you enable this function and the HDD is full, the new record files overwrite the oldest record files automatically.



The Pre-record and Post-record parameters vary depending on different speed dome models.

4. Click  to edit the record schedule.



The 'Edit Schedule' dialog box contains the following elements:

- Day selection tabs: Mon (selected), Tue, Wed, Thu, Fri, Sat, Sun.
- Recording mode: ☒ All Day (with a 'Continuous' dropdown) and ☒ Customize.
- A table with 8 rows for recording periods. Each row has columns for Period, Start Time, End Time, and Record Type. All times are currently set to 00:00, and all Record Types are set to 'Continuous'.
- Copy to Week: ☐ Select All.
- Day checkboxes: ☒ Mon, ☐ Tue, ☐ Wed, ☐ Thu, ☐ Fri, ☐ Sat, ☐ Sun. A 'Copy' button is next to these.
- OK and Cancel buttons at the bottom right.

Figure 8-31 Record Schedule

5. Choose the day to set the record schedule.

- (1) Set all-day record or segment record:

- ◆ If you want to configure the all-day recording, check the **All Day** checkbox.
- ◆ If you want to record in different time sections, check the **Customize** checkbox. Set the Start Time and End Time.



The time of each segment can't be overlapped.

- (2) Select a Record Type. The record type can be Continuous, Motion Detection, Alarm, Motion | Alarm, Motion & Alarm.

- ◆ **Continuous**  
If you select **Continuous**, the video will be recorded automatically according to the schedule.

- ◆ **Record Triggered by Motion Detection**

If you select **Motion Detection**, the video will be recorded when the motion is detected.

Besides configuring the recording schedule, you have to set the motion detection area and check the **Trigger Channel** checkbox in the Linkage Method of Motion Detection settings interface. For detailed information, refer to **Step 1 Set the Motion Detection Area.** in **Section 9.5.1 Configuring Motion Detection.**

- ◆ **Record Triggered by Alarm**



If you select **Alarm**, the video will be recorded when the alarm is triggered via the external alarm input channels.

Besides configuring the recording schedule, you have to set the Alarm Type and check the **Trigger Channel** checkbox in the Linkage Method of Alarm Input settings interface. For detailed information, refer to **Section 9.5.3 Configuring Alarm Input**.

◆ **Record Triggered by Motion & Alarm**

If you select **Motion & Alarm**, the video will be recorded when the motion and alarm are triggered at the same time.

Besides configuring the recording schedule, you have to configure Motion Detection and Alarm Input. Refer to **Section 9.5.1 Configuring Motion Detection** and **Section 9.5.3 Configuring Alarm Input** for detailed information.

◆ **Record Triggered by Motion | Alarm**

If you select **Motion | Alarm**, the video will be recorded when the external alarm is triggered or the motion is detected.

Besides configuring the recording schedule, you have to configure Motion Detection and Alarm Input. Refer to **Section 9.5.1 Configuring Motion Detection** and **Section 9.5.3 Configuring Alarm Input** for detailed information.

- (3) Check the checkbox ☐ Select All and click  to copy settings of this day to the whole week. You can also check any of the checkboxes before the date and click .

- (4) Click  to save the settings.

6. Click  to save the settings.

## 8.5.2 Storage Management

### **Before you start:**

Make sure that the HDD has already been installed. If not, install the HDD and initialize it.

### **Steps:**

1. The installed HDDs will be listed in the device list below.
2. Check the checkbox to select the HDD and click **Format** to format the selected HDD. (Optional)
3. Set the quota parameters of selected HDD.

**Max. Picture Capacity:** the storage capacity of pictures.

**Free Size for Picture:** the free size in the HDD for pictures.

**Max. Record Capacity:** the storage capacity of pictures.

**Free Size for Record:** the free size in the HDD of records.

**Percentage of Picture:** the percentage of pictures' storage capacity.

**Percentage of Record:** the percentage of record capacity.

HDD Device List							Format
<input type="checkbox"/> HDD No.	Capacity	Free space	Status	Type	Property	Progress	
<input checked="" type="checkbox"/> 1	120.87GB	88.25GB	Normal	Local	R/W		

Quota	
Max. Picture Capacity	<input type="text" value="30.00GB"/>
Free Size for Picture	<input type="text" value="29.75GB"/>
Max. Record Capacity	<input type="text" value="90.00GB"/>
Free Size for Record	<input type="text" value="58.50GB"/>
Percentage of Picture	<input type="text" value="25"/> %
Percentage of Record	<input type="text" value="75"/> %

Figure 8-32 Storage Management

### 8.5.3 Configuring Snapshot Settings

**Purpose:**

You can configure the scheduled snapshot and event-triggered snapshot. You can upload the captured pictures to a FTP server.

● **Basic Settings**

**Steps:**

1. Enter the Snapshot settings interface:  
**Configuration > Parameters Settings > Storage > Snapshot**

**Timing**

☒ Enable Timing Snapshot

Format: JPEG

Resolution: 1920\*1080

Quality: High

Interval: 0 milliseconds

Edit

	0	2	4	6	8	10	12	14	16	18	20	22	24
Mon													
Tue													
Wed													
Thu													
Fri													
Sat													
Sun													

**Event-Triggered**

☒ Enable Event-Triggered Snapshot

Format: JPEG

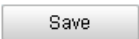
Resolution: 1920\*1080

Quality: High

Interval: 0 milliseconds

Capture Number: 4

Figure 8-33 Snapshot Settings

2. Check the **Enable Timing Snapshot** checkbox to enable continuous snapshot, and configure the schedule of timing snapshot. Check the **Enable Event-triggered Snapshot** checkbox to check event-triggered snapshot.
3. Select the quality of the snapshot.
4. Set the time interval between two snapshots.
5. Click  to save the settings.

### ● Uploading to FTP

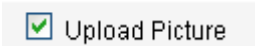


Make sure that the FTP server is online.

- Upload continuous snapshots to FTP



#### Steps:

- (1) Check the **Enable Timing Snapshot** checkbox.

- (2) Configure the FTP settings and check  checkbox in FTP Settings interface. Refer to **Section 8.3.4 Configuring FTP Settings** for more details to configure FTP parameters.

- Upload event-triggered snapshots to FTP

#### Steps:

- (1) Check the **Enable Event-triggered Snapshot** checkbox.
- (2) Configure the FTP settings and check  Upload Picture checkbox in FTP Settings interface. Refer to **Section 8.3.4 Configuring FTP Settings** for more details to configure FTP parameters.
6. Check  Upload to FTP checkbox in Motion Detection Settings or Alarm Input interface. Refer to **Section 9.5.1 Configuring Motion Detection** and **Section 9.5.3 Configuring Alarm Input** for detailed information.

# Chapter 9 Speed Dome Configuration

## 9.1 PTZ Configuration

### 9.1.1 Configuring Basic PTZ Parameters

**Purpose:**

You can configure the basic PTZ parameters, including proportional pan, preset freezing, keyboard control speed, and zooming speed, etc.

1. Enter the Basic PTZ parameter configuration interface:

**Configuration > Parameters Settings > PTZ > Basic**

Basic Parameter	
<input checked="" type="checkbox"/>	Enable Proportional Pan
<input type="checkbox"/>	Enable Preset Freezing
Keyboard Control Speed	Normal
Zooming Speed	3
PTZ OSD	
Zoom Status	2s
PT Status	2s
Preset Status	2s

Figure 9-1 Basic PTZ Configuration Interface

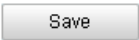
2. Configure the following settings:
  - **Basic Parameters:** Enable/disable proportional pan and preset freezing, set the keyboard control speed and zooming speed.
    - ◆ **Proportional Pan:** If you enable this function, the pan/tilt speeds change according to the amount of zoom. When there is a large amount of zoom, the pan/tilt speed will be slower for keeping the image from moving too fast on the live view image.
    - ◆ **Preset Freezing:** This function enables the live view to switch directly from one scene defined by a preset to another, without showing the middle areas between these two, to ensure the surveillance efficiency. It can also reduce the use of bandwidth in a digital network system.



Preset freezing function is invalid when you calling a pattern.

- ◆ **Keyboard Control Speed:** Define the speed of PTZ control by a keyboard as Low, Normal or High.
- ◆ **Zooming Speed:** The zoom speed is adjustable from level 1 to 3.
- **PTZ OSD:** Set the on-screen display duration of the PTZ status.

- ◆ **Zoom Status:** Set the OSD duration of zooming status as 2 seconds, 5 seconds, 10 seconds, Always Close, or Always Open.
- ◆ **PT Status:** Set the azimuth angle display duration while panning and tilting as 2 seconds, 5 seconds, 10 seconds, Always Close, or Always Open.
- ◆ **Preset Status:** Set the preset name display duration while calling the preset as 2 seconds, 5 seconds, 10 seconds, Always Close, or Always Open.

3. Click  to save the settings.

## 9.1.2 Configuring Park Actions

### **Purpose:**

This feature allows the dome to start a predefined park action (scan, preset, pattern and etc.) automatically after a period of inactivity (park time).



**Scheduled Tasks** function is prior to **Park Action** function. When these two functions are set at the same time, only the **Scheduled Tasks** function takes effect.

### **Steps:**

1. Enter the Park Action settings interface:

**Configuration > Parameters Settings > PTZ > Park Action**

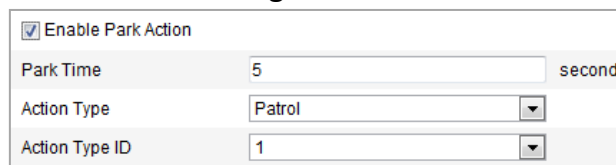


Figure 9-2 Set the Park Action

2. Check the **Enable Park Action** checkbox.
3. Set the **Park Time** as the inactivity time of the dome before it starts the park actions.
4. Choose **Action Type** the from the dropdown list.

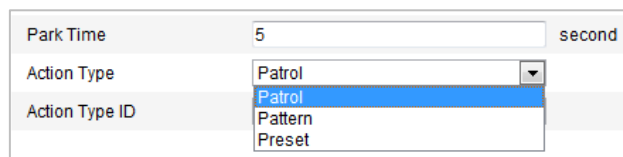
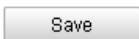


Figure 9-3 Action Types

5. Set the action type ID.
6. Click  to save the settings.

## 9.1.3 Configuring Scheduled Task

### **Purpose:**

You can configure the network dome to perform a certain action automatically in a user-defined time period.

**Steps:**

1. Enter the Scheduled Task settings interface:

**Configuration > Parameters Settings > PTZ > Scheduled Tasks**

☐ Enable Scheduled Task

Park Time  second

Timing Tasks Edit Tasks

Note: Red and green colors are used to distinguish the neighboring scheduled tasks.

Figure 9-4 Configure Scheduled Tasks

2. Check the **Enable Scheduled Task** checkbox.
3. Set the **Park Time**. You can set the park time (a period of inactivity) before the dome starts the scheduled tasks.
4. Set the schedule and task details.

- (1) Click Edit Tasks to edit the task schedule.

Timing Tasks

Mon Tue Wed Thu Fri Sat Sun

☐ All Day Close

☒ Customize

Period	Start Time	End Time	Task Type	Task Type ID
1	00:00	00:00	Close	
2	10:30		Close	
3	00:00	00:00	Close	
4	00:00	00:00	Close	
5	00:00	00:00	Close	
6	00:00	00:00	Close	
7	00:00	00:00	Close	
8	00:00	00:00	Close	
9	00:00	00:00	Close	
10	00:00	00:00	Close	

Copy to Week ☐ Select All

☒ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun Copy

OK Cancel

Figure 9-5 Edit the Schedule and Task Type

- (2) Choose the day you want to set the task schedule.
- (3) Click **All Day** to set the schedule as all day; or click **Customize** and input the **Start Time** and **End Time** for each task, and click **Enter** on your keyboard to enter the time.
- (4) Choose the task type from the drop-down list. You can choose scan, preset, pattern and etc.

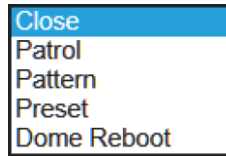



Figure 9-6 Task Types

- (5) After you set the scheduled task, you can copy the task to other days (Optional).
- (6) Click  to save the settings.



The time of each task cannot be overlapped.

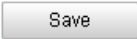
5. Click  to save the settings.

## 9.1.4 Clearing PTZ Configurations

### **Purpose:**

You can clear PTZ configurations in this interface, including all presets, patrols, patterns, scheduled tasks, and park actions.

### **Steps:**

1. Enter the Clearing Configuration interface:  
**Configuration > Parameters Settings > PTZ > Clear Config.**
2. Check the checkbox of the items you want to clear.
3. Click  to clear the settings.

## 9.2 Configuring Image Settings

### 9.2.1 Configuring Display Settings



- The parameters in **Display Settings** interface vary depending on different speed dome models.
- You can double click the live view to enter full screen mode and double click it



again to exit.

- The function varies depending on different speed dome models.

**Steps:**

1. Enter the Display settings interface:  
**Configuration > Parameters Settings> Image> Display Settings**
2. Set the image parameters of the speed dome.

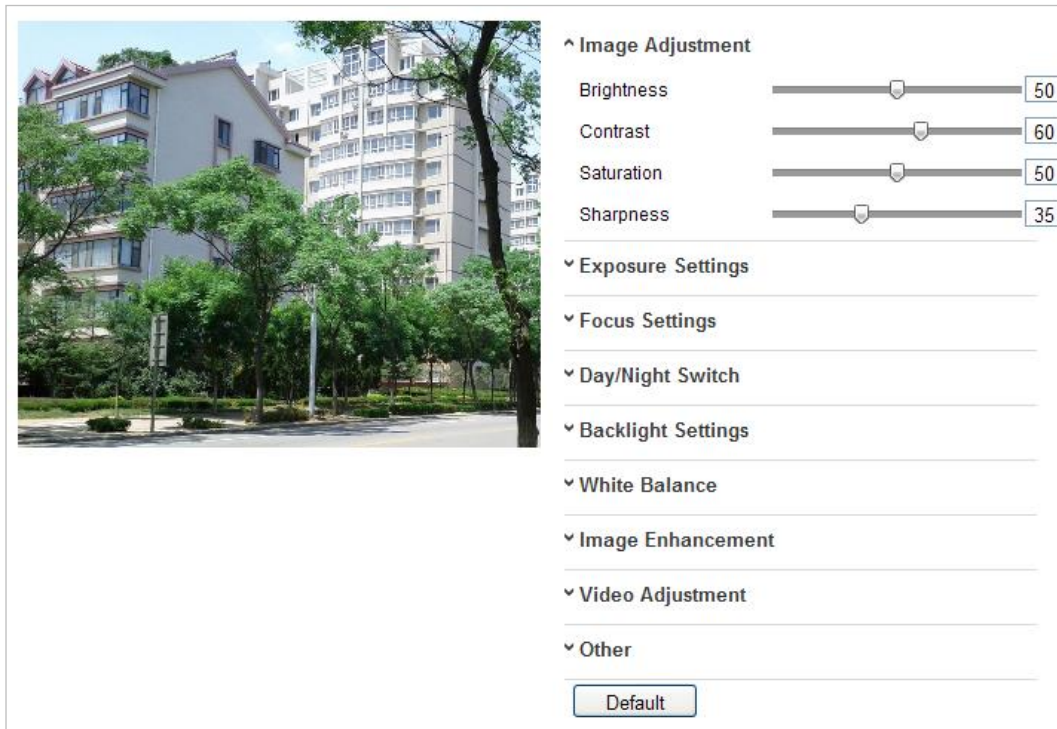


Figure 9-7 Display Settings

## Image Adjustment

- **Brightness**

This feature is used to adjust brightness of the image. The value ranges from 0 to 100.

- **Contrast**

This feature enhances the difference in color and light between parts of an image. The value ranges from 0 to 100.

- **Saturation**

This feature is used to adjust color saturation of the image. The value ranges from 0 to 100.

- **Sharpness**

Sharpness function enhances the detail of the image by sharpening the edges in the image. The value ranges from 0 to 100.

## Exposure Settings

- **Exposure Mode**

The **Exposure Mode** can be set to **Auto**, **Iris Priority**, **Shutter Priority**, and **Manual**.

◆ **Auto:**

The iris, shutter and gain values will be adjusted automatically according to the brightness of the environment.

◆ **Iris Priority:**

The value of iris needs to be adjusted manually. The shutter and gain values will be adjusted automatically according to the brightness of the environment.

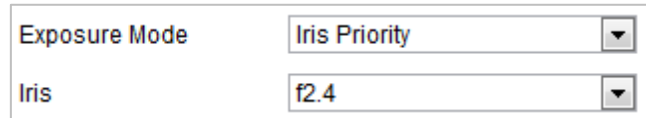


Figure 9-8 Manual Iris

◆ **Shutter Priority:**

The value of shutter needs to be adjusted manually. The iris and gain values will be adjusted automatically according to the brightness of the environment.



Figure 9-9 Manual Shutter

◆ **Manual:**

In **Manual** mode, you can adjust the values of **Gain**, **Shutter**, and **Iris** manually.

● **Limit Gain**

This feature is used to adjust gain of the image. The value ranges from 0 to 100.

● **Slow Shutter**

This function can be used in underexposure condition. It lengthens the shutter time to ensure full exposure.

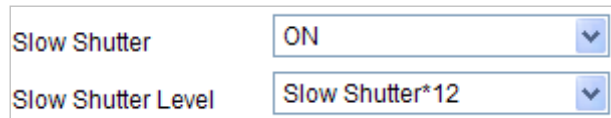


Figure 9-10 Slow Shutter

## Focus Settings

● **Focus Mode**

The **Focus Mode** can be set to **Auto**, **Manual**, and **Semi-auto**.

◆ **Auto:**

The speed dome focuses automatically at any time according to objects in the scene.

◆ **Semi-auto:**

The speed dome focuses automatically only once after panning, tilting and zooming.

◆ **Manual:**

In **Manual** mode, you need to use  on the control panel to focus manually.

### ● Min. Focus Distance

This function is used to limit the minimum focus distance.



The minimum focus value varies depending on different speed dome models.

## Day/Night Switch

### ● Day/Night Switch

The **Day/Night Switch** mode can be set to **Auto**, **Day**, **Night**, and **Scheduled-Switch**.

#### ◆ Auto:

In **Auto** mode, the day mode and night mode can switch automatically according to the light condition of environment. The switching sensitivity can be set to **Low**, **Normal**, **High**.



Figure 9-11 Auto Mode Sensitivity

#### ◆ Day:

In **Day** mode, the speed dome displays color image. It is used for normal lighting conditions.

#### ◆ Night:

In **Night** mode, the image is black and white. **Night** mode can increase the sensitivity in low light conditions.

#### ◆ Schedule-Switch

In **Schedule** mode, you can set the time schedule for day mode as shown in Figure 9-12. The rest time out of the schedule is for night mode.

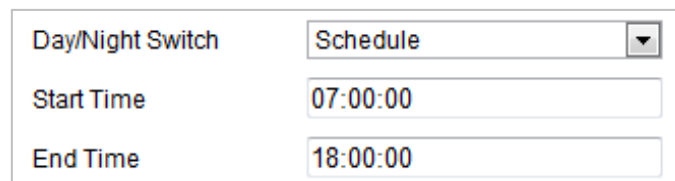


Figure 9-12 Day Night Schedule

## Backlight Settings

### ● BLC (Back Light Compensation)

If there's a bright backlight, the subject in front of the backlight appears silhouetted or dark. Enabling **BLC** (back light compensation) function can correct the exposure of the subject. But the backlight environment is washed out to white.

### ● WDR (Wide Dynamic Range)

The wide dynamic range (WDR) function helps the camera provide clear images even under back light circumstances. When there are both very bright and very dark areas

simultaneously in the field of view, WDR balances the brightness level of the whole image and provide clear images with details.

- **HLC (High Light Compensation)**

HLC (High Light Compensation) makes the camera identify and suppress the strong light sources that usually flare across a scene. This makes it possible to see the detail of the image that would normally be hidden.

## White Balance

The **White Balance** mode can be set to **Auto**, **MWB**, **Outdoor**, **Indoor**, **Fluorescent Lamp**, **Sodium Lamp**, and **Auto-Tracking**.

- ◆ **Auto:**

In **Auto** mode, the camera retains color balance automatically according to the current color temperature.

- ◆ **Manual White Balance:**

In **MWB** mode, you can adjust the color temperature manually to meet your own demand as shown in Figure 9-13.



Figure 9-13 Manual White Balance

- ◆ **Outdoor**

You can select this mode when the speed dome is installed in outdoor environment.

- ◆ **Indoor**

You can select this mode when the speed dome is installed in indoor environment.

- ◆ **Fluorescent Lamp**

You can select this mode when there are fluorescent lamps installed near the speed dome.

- ◆ **Sodium Lamp**

You can select this mode when there are sodium lamps installed near the speed dome.

- ◆ **Auto-Tracking**

In **Auto-Track** mode, white balance is continuously being adjusted in real-time according to the color temperature of the scene illumination.

## Image Enhancement

- **Digital Noise Reduction**

The digital noise reduce function processes the noise in the video signal.

You can set **Digital Noise Reduction** function between **Expert Mode**, **Normal Mode**, and **OFF**.

Under normal mode, you can adjust the **Noise Reduction Level**, as shown in Figure 9-14.

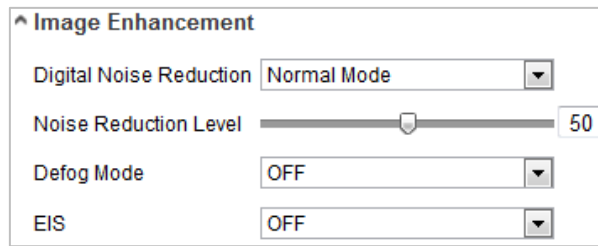


Figure 9-14 Digital Noise Reduction (Normal Mode)

Under expert mode, you can adjust the **Space DNR Level** and **Time DNR Level**, as shown in Figure 9-15. The level ranges from 0 to 100.

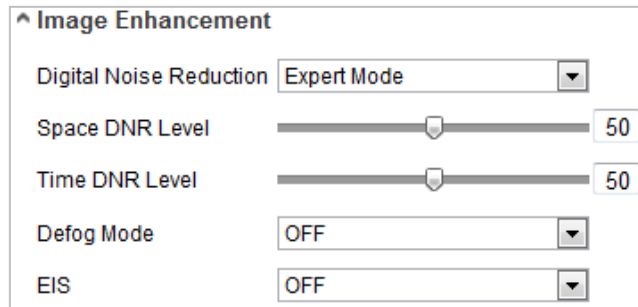


Figure 9-15 Digital Noise Reduction (Expert Mode)

- **Defog Mode**

When there is fog in the image, you can enable this function to get clear image.

- **EIS**

The live view image would be trembled and dim when the camera is shocked slightly in some monitoring conditions. And the electronic image stabilization (EIS) function is used to overcome this problem to ensure a steady and clear image.

## Video Adjustment

- **Mirror**

If you turn the **MIRROR** function on, the image will be flipped. It is like the image in the mirror. The flip direction can be set to **OFF** or **CENTER**.

- **Video Standard**

You can set the **Video Standard** to 50 Hz (PAL) or 60 Hz (NTSC) according to the video system in your country.

- **Capture Mode**

You can set the capture mode to 1920\*1080@25fps or OFF.

## Other

- **Lens Initialization**

The lens operates the movements for initialization when you check the **Lens Initialization** checkbox.

- **Zoom Limit**

You can set **Zoom Limit** value to limit the maximum value of zooming.

## ● Local Output

You can select the output mode to ON or OFF.



The functions vary depending on different speed dome models.

## 9.2.2 Configuring OSD Settings

### **Purpose:**

The speed dome supports following on screen displays:

**Zoom:** Identifies the amount of magnification.

**Direction:** Displays panning and tilting direction, with the format of PXXX TXXX. The XXX following P indicates the degrees in pan direction, while the XXX following T indicates the degrees in tilt position.

**Time:** Supports for time display.

**Preset Title:** Identifies preset being called.

**Camera Name:** Identifies the name of speed dome.

You can customize the on screen display of time.

### **Steps:**

1. Enter the OSD settings interface:

**Configuration > Parameters Settings > Image > OSD Settings**

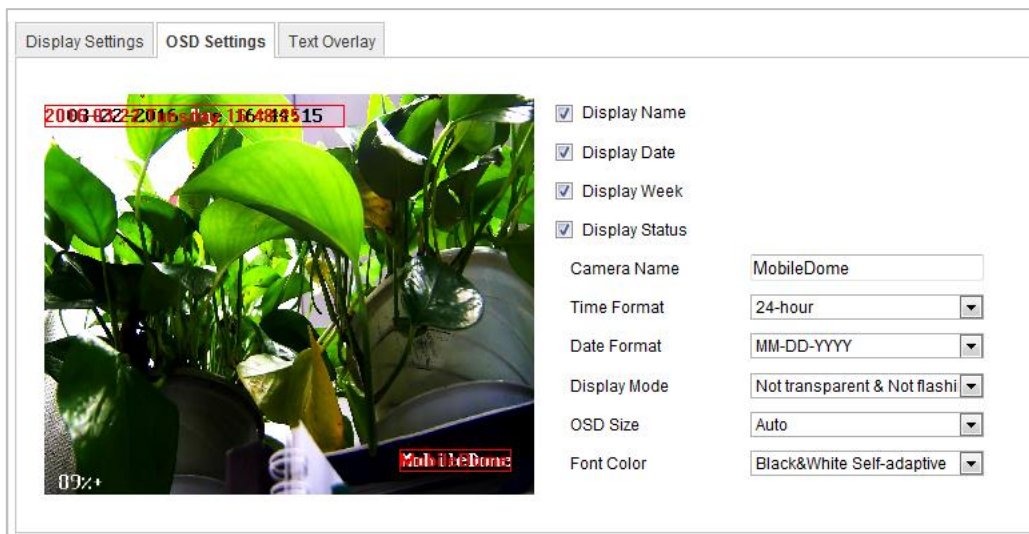
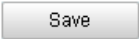


Figure 9-16 OSD Settings

2. Check the corresponding checkbox to select the display of speed dome name, date week or Status if required.
3. Edit the speed dome name in the text field of **Camera Name**.
4. Select from the drop-down list to set the time format, date format and display mode.
5. You can use the mouse to click and drag the text frame **IP Dome2** in the live view window to adjust the OSD position.



Figure 9-17 Adjust OSD Location



6. The font color can also be customized, select the Custom in the drop down list and select the font color on your demand.
7. Click  to activate above settings.

### 9.2.3 Configuring Text Overlay Settings

**Purpose:**

You can customize the text overlay.

**Steps:**

1. Enter the Text Overlay settings interface:  
**Configuration > Parameters Settings > Image > Text Overlay**
2. Check the checkbox in front of textbox to enable the on-screen display.
3. Input the characters in the textbox.
4. Use the mouse to click and drag the red text frame  in the live view window to adjust the text overlay position.
5. Click  to save the settings.

## 9.3 Configuring Video and Audio Settings

### 9.3.1 Configuring Video Settings

**Steps:**

1. Enter the Video settings interface:





**Configuration > Parameters Settings > Video/Audio > Video**

Stream Type	Main Stream(Normal)	▼
Video Type	Video&Audio	▼
Resolution	1920*1080P	▼
Bitrate Type	Variable	▼
Video Quality	Medium	▼
Frame Rate	25	▼ fps
Max. Bitrate	4096	Kbps
Video Encoding	H.264	▼
Profile	High Profile	▼
I Frame Interval	50	

Figure 9-18 Configure Video Settings

2. Select the **Stream Type** of the speed dome. 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 limited.
3. You can customize the following parameters for the selected stream.

**Video Type:**

Select the stream 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 output.

**Bitrate Type:**

Select the bitrate type to constant or variable.

**Video Quality:**

When bitrate type is selected as **Variable**, 6 levels of video quality are selectable.

**Frame Rate:**

The frame rate is to describe the frequency at which the video stream is updated and it is measured by 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. The higher value corresponds to the higher video quality, but the higher bandwidth is required.

**Video Encoding:**

Select the **Video Encoding** standard for the selected stream.

**Profile:**

You can set the profile level to **High Profile**, **Main Profile** or **Basic Profile**.

**I Frame Interval:**


Set the I-Frame interval from 1 to 400.

4. Click  to save the settings.



### 9.3.2 Configuring Audio Settings

**Steps:**

1. Enter the Audio Settings interface  
**Configuration > Parameters Settings > Video/Audio > Audio**
2. Select the **Audio Encoding** from the dropdown list: G.711ulaw, G.711alaw, and G.722.1 are selectable.
3. Click  to save the settings.

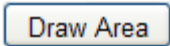
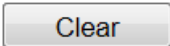
### 9.3.3 Configuring ROI Settings

**Purpose:**


ROI (Region of Interest) encoding is used to enhance the quality of images which are specified in advance. There are two different ROI methods: **Fixed Region** and **Dynamic Region**. When **Fixed Region** is enabled, image quality of ROI area will be enhanced and image quality of other areas will be reduced. When **Dynamic Region** is enabled, the device can automatically calculate the region with motion..

● **ROI for Fixed Region**

**Steps:**

1. Check **Enable** checkbox to enable the **Fixed Region** function.
2. Select a stream type.
3. Click  and then drag the mouse to draw a red frame in the live view image. You can click  to clear it.
4. Select the **Region No.** from the dropdown list.
5. Adjust the **ROI level** from 1 to 6. The higher the value, the better image quality in the red frame.
6. Enter a **Region Name**.

● **ROI for Dynamic Region**

1. Check the **Enable** check box of under **Dynamic Region**.
2. Adjust the **ROI level** from 1 to 6. The higher the value, the better image quality in the red frame.
3. Click  to save the settings.

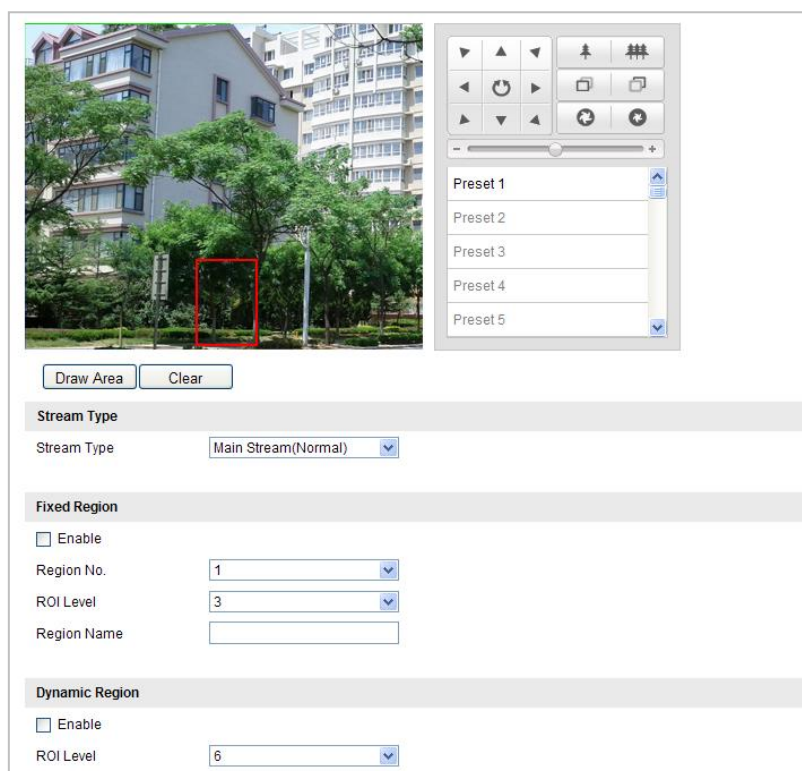


Figure 9-19 Region of Interest

## 9.4 Configuring Security Parameters

### 9.4.1 Managing User Accounts

Enter the user management interface:

**Configuration > Parameters Settings > Security > User**

The **admin** user can create, modify or delete other accounts. Up to 32 user accounts can be created.

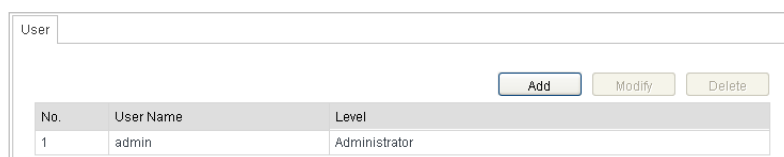



Figure 9-20 User Information

#### ● Add a User


##### Steps:

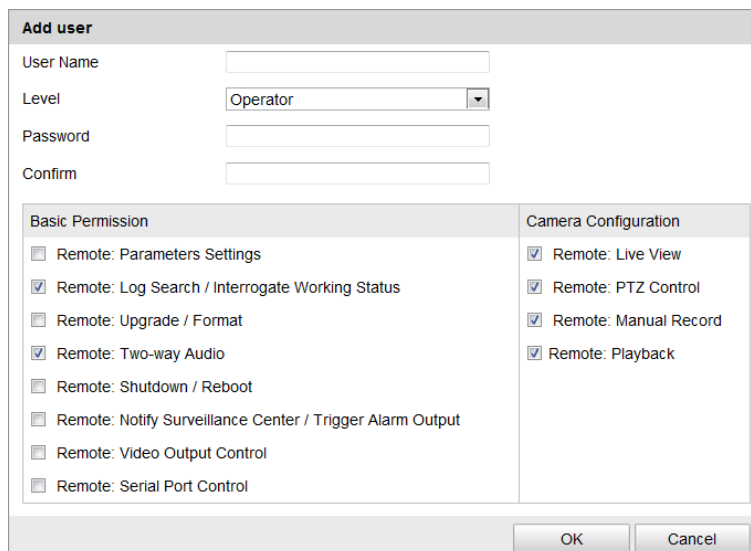
1. Click  to add a user.
2. Input the new **User Name**, select **Level** and input **Password**.



The level indicates the permissions you give to the user. You can define the user

as **Operator** or **User**.

3. In the **Basic Permission** field and **Camera Configuration** field, you can check or uncheck the permissions for the new user.
4. Click  to finish the user addition.



The 'Add user' dialog box contains the following fields and sections:

- User Name:** A text input field.
- Level:** A dropdown menu with 'Operator' selected.
- Password:** A text input field.
- Confirm:** A text input field.
- Basic Permission:** A list of permissions with checkboxes:
  - ☐ Remote: Parameters Settings
  - ☒ Remote: Log Search / Interrogate Working Status
  - ☐ Remote: Upgrade / Format
  - ☒ Remote: Two-way Audio
  - ☐ Remote: Shutdown / Reboot
  - ☐ Remote: Notify Surveillance Center / Trigger Alarm Output
  - ☐ Remote: Video Output Control
  - ☐ Remote: Serial Port Control
- Camera Configuration:** A list of permissions with checkboxes:
  - ☒ Remote: Live View
  - ☒ Remote: PTZ Control
  - ☒ Remote: Manual Record
  - ☒ Remote: Playback

At the bottom right, there are 'OK' and 'Cancel' buttons.

Figure 9-21 Add a User

## ● Modify a User

### Steps:

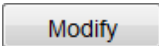
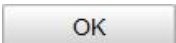

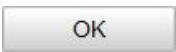
1. Left-click to select the user from the list and click .
2. Modify the **User Name**, **Level** or **Password**.
3. In the **Basic Permission** field and **Camera Configuration** field, you can check or uncheck the permissions.
4. Click  to finish the user modification.

Figure 9-22 Modify a User

### ● Delete a User

#### Steps:

1. Left-click the user name you want to delete and click .
2. Click  on the pop-up dialogue box to delete the user.

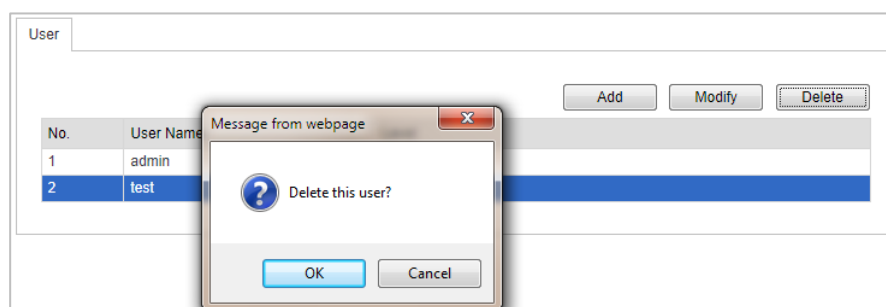


Figure 9-23 Delete a User

## 9.4.2 Configuring RTSP Authentication


### Purpose:

You can specifically secure the stream data of live view.

### Steps:

1. Enter the RTSP Authentication settings interface:  
**Configuration > Parameters Settings > Security > RTSP Authentication**

Figure 9-24 RTSP Authentication

2. Select the Authentication type, or you can disable Authentication from the dropdown list.
3. Click  to save the settings.

### 9.4.3 Configuring IP Address Filter

With this function on, the speed dome allows certain IP addresses whether to log in or not.

Filter Type	Description
Forbidden	Forbid the IP addresses added in the <b>IP Address Filter</b> interface to log in.
Allowed	Allow only the IP addresses added in the <b>IP Address Filter</b> interface to log in.

Figure 9-25 IP Address Filter

## 9.5 Configuring and Handling Alarms

### **Purpose:**

This section explains how to configure the network speed dome to respond to alarm events, including motion detection, video tampering, external alarm input, external alarm output, and other exceptions. These events can trigger the alarm actions, such as Notify Surveillance Center, Send Email, Trigger Alarm Output, etc.

For example, when an external alarm is triggered, the network speed dome sends a notification to an Email address.

### 9.5.1 Configuring Motion Detection

**Purpose:**

Motion detection is a feature which can trigger alarm actions and actions of recording videos when the motion occurred in the surveillance scene.

**Steps:**

1. Set the Motion Detection Area.
  - (1) Enter the Motion Detection settings interface  
**Configuration > Parameters Settings > Events > Motion Detection**
  - (2) Check the **Enable Motion Detection** checkbox.

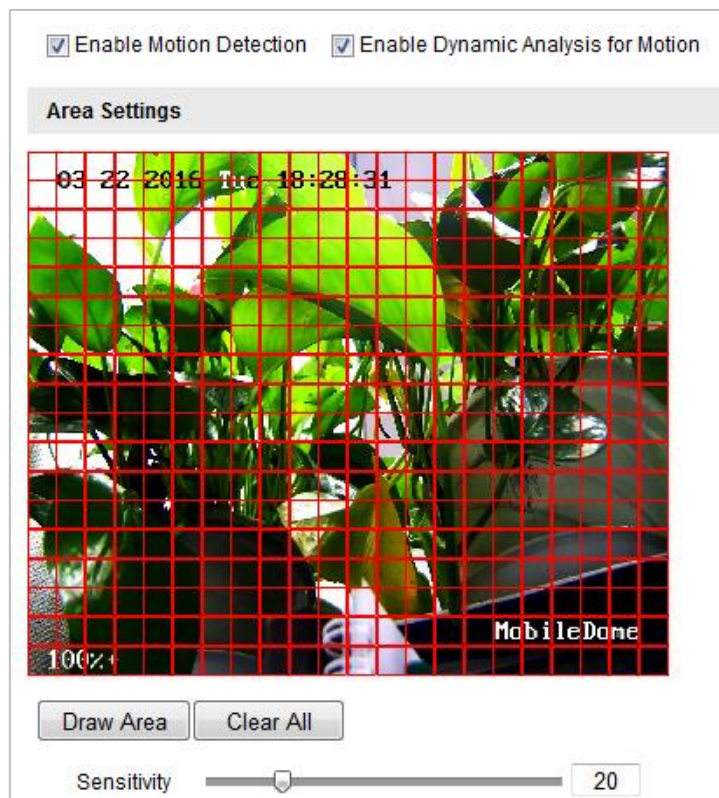


Figure 9-26 Enable Motion Detection


- (3) Click **Draw Area**. Drag the mouse on the live video image to draw a motion detection area.
- (4) Click **Stop Drawing** to finish drawing.



You can click **Clear All** to clear all of the areas.

- (5) Move the slider **Sensitivity** to set the sensitivity of the detection.

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

- (1) To edit the arming schedule as shown in Figure 9-28, click  in Figure 9-27.

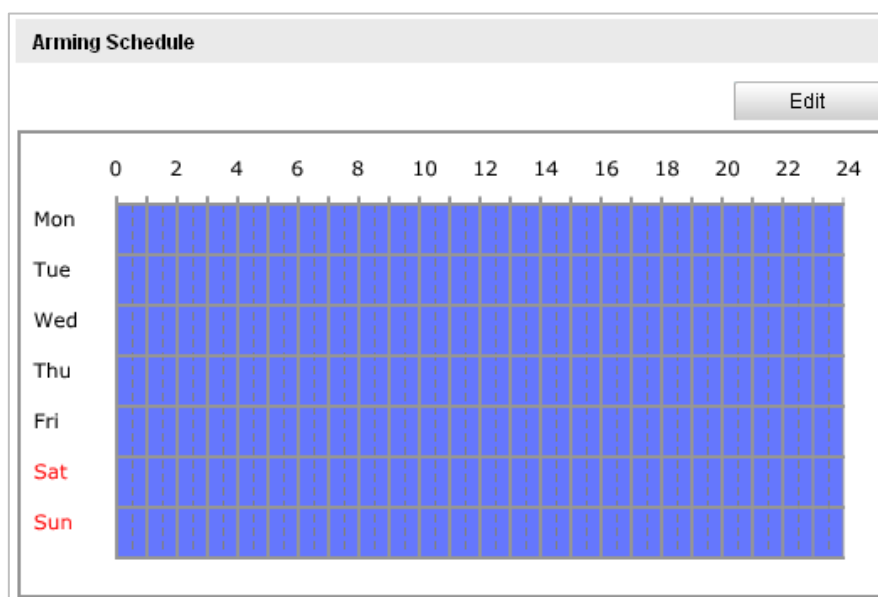

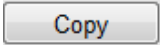
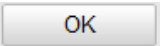


Figure 9-27 Arming Schedule

- (2) Choose the day you want to set the arming schedule as shown in Figure 9-28.
- (3) Click  to set the time period for the arming schedule.
- (4) After you set the arming schedule, you can click  to copy the schedule to other days (Optional).
- (5) Click  to save the settings.



The time of each period can't be overlapped.

**Edit Schedule Time**

Mon Tue Wed Thu Fri Sat Sun

Period	Start Time	End Time
1	00: 00	24: 00
2	00: 00	00: 00
3	00: 00	00: 00
4	00: 00	00: 00
5	00: 00	00: 00
6	00: 00	00: 00
7	00: 00	00: 00
8	00: 00	00: 00

Copy to Week ☐ Select All

☒ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun

Figure 9-28 Arming Time Schedule

### 3. Set the Alarm Actions for Motion Detection.

You can specify the linkage method when an event occurs. The following contents are about how to configure the different types of linkage method.

**Linkage Method**

Normal Linkage	Other Linkage
<input type="checkbox"/> Audible Warning	Trigger Alarm Output <input type="checkbox"/> Select All
<input type="checkbox"/> Notify Surveillance Center	<input type="checkbox"/> A->1
<input type="checkbox"/> Send Email	
<input type="checkbox"/> Capture and Upload to FTP	
<input type="checkbox"/> Trigger Channel	

Figure 9-29 Linkage Method

Check the checkbox to select the linkage method.

- **Audible Warning**

The device sends audio warning when an event occurs.

- **Notify Surveillance Center**

Send an exception or alarm signal to remote management software when an event occurs.

- **Send Email**

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



To send the Email when an event occurs, you need to refer to **Section 8.3.5 Configuring Email** to set the Email parameters.

- **Upload to FTP**

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





You need a FTP server and set FTP parameters first. Refer to **Section 8.3.4 Configuring FTP Settings** for setting FTP parameters.

- **Trigger Channel**

Record a video when an event occurs.



You have to set the recording schedule to realize this function. Refer to **Section 8.5.1 Configuring Recording Schedule** for settings the recording schedule.

- **Trigger Alarm Output**

Trigger one or more external alarm outputs when an event occurs.



To trigger an alarm output when an event occurs, refer to **Section 9.5.4 Configuring Alarm Output** to set the alarm output parameters.

## 9.5.2 Configuring Video Tampering Alarm

### **Purpose:**

You can configure the speed dome to trigger the alarm actions when the lens is covered.

### **Steps:**

1. Enter the video tampering settings interface:

**Configuration > Parameters Settings > Events > Video Tampering**

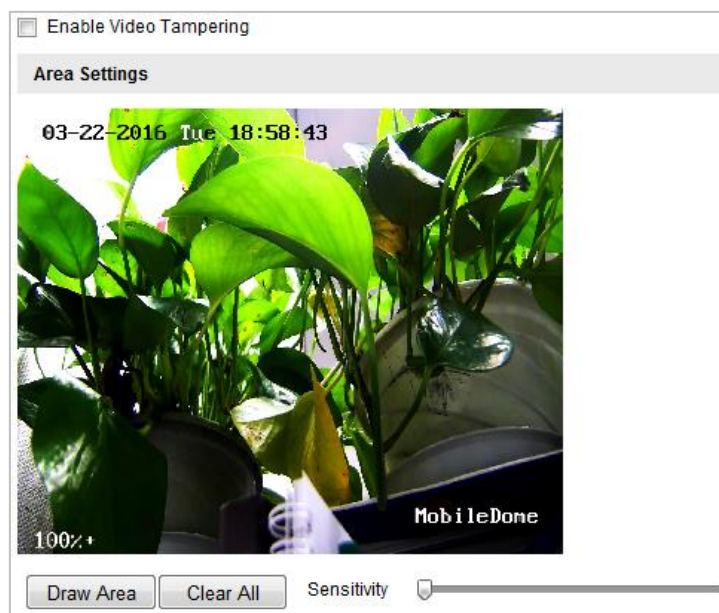


Figure 9-30 Tampering Alarm

2. Check the **Enable Video Tampering** checkbox to enable the tampering detection.

3. Set the tampering area. Refer to **Step 1 Set the Motion Detection Area.** in **Section 9.5.1 Configuring Motion Detection.**
4. Click  to edit the arming schedule for tampering. The arming 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 9.5.1 Configuring Motion Detection.**
5. Check the checkbox to select the linkage method taken for the tampering. Notify surveillance center, send email and trigger alarm output are selectable. Refer to **Step 3 Set the Alarm Actions for Motion Detection.** in **Section 9.5.1 Configuring Motion Detection.**
6. Click  to save the settings.

### 9.5.3 Configuring Alarm Input

#### Steps:

1. Enter the Alarm Input settings interface:  
**Configuration > Parameters Settings > Events > Alarm Input:**
2. Choose the alarm input No. and the Alarm Type. The alarm type can be NO (Normally Open) and NC (Normally Closed).
3. Edit the name in  to set a name for the alarm input (optional).

Alarm Input No.


Alarm Name  (cannot copy)

Alarm Type

**Arming Schedule**

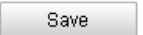
	0	2	4	6	8	10	12	14	16	18	20	22	24
Mon													
Tue													
Wed													
Thu													
Fri													
Sat													
Sun													

Figure 9-31 Alarm Input Settings

4. Click  to set the arming schedule for the alarm input. Refer to **Step 2 Set the Arming Schedule for Motion Detection.** in **Section 9.5.1 Configuring Motion Detection.**
5. Check the checkbox to select the linkage method taken for the alarm input. Refer to **Step 3 Set the Alarm Actions for Motion Detection.** in **Section 9.5.1 Configuring Motion Detection.**
6. You can also choose the PTZ linkage for the alarm input. Check the relative checkbox and select the No. to enable Preset Calling, Patrol Calling or Pattern Calling.


Linkage Method	
Normal Linkage	Other Linkage
<input type="checkbox"/> Audible Warning <input type="checkbox"/> Notify Surveillance Center <input type="checkbox"/> Send Email <input type="checkbox"/> Capture and Upload to FTP <input type="checkbox"/> Video linkage	Trigger Alarm Output <input type="checkbox"/> Select All <input type="checkbox"/> A->1 PTZ Linkage Channel <input type="checkbox"/> Preset No. <input type="text" value="1"/> <input type="button" value="v"/> <input type="checkbox"/> Patrol No. <input type="text" value="1"/> <input type="button" value="v"/> <input type="checkbox"/> Pattern <input type="text" value="1"/> <input type="button" value="v"/>
Copy to Alarm	
<input type="checkbox"/> Select All <input checked="" type="checkbox"/> A<-1	

Figure 9-32 Linkage Method

7. You can copy your settings to other alarm inputs.
8. Click  to save the settings.

## 9.5.4 Configuring Alarm Output

### Steps:

1. Enter the Alarm Output settings interface:  
**Configuration > Parameters Settings > Events > Alarm Output**
2. Select one alarm output channel in the **Alarm Output** drop-down list.
3. Set a name in  for the alarm output (optional).
4. The **Delay** time can be set to **5sec, 10sec, 30sec, 1min, 2min, 5min, 10min** or **Manual**. The delay time refers to the time duration that the alarm output remains in effect after alarm occurs.



Exception Type		HDD Full	▼
Normal Linkage		Other Linkage	
<input type="checkbox"/> Audible Warning	Trigger Alarm Output <input type="checkbox"/> Select All		
<input type="checkbox"/> Notify Surveillance Center	<input type="checkbox"/> A->1		

Figure 9-34 Exception Settings

3. Click  to save the settings.

## 9.6 Configuring Capture Settings

### 9.6.1 Camera Position Parameter

You can configure camera position parameters including Camera No., Camera Position No., Camera Position Information, and Direction, etc.

Enter Camera Position Parameter settings interface:

**Configuration > Capture Parameter > Capture Config.> Camera Position Parameter**

Camera No.	camera 01
Camera Position No.	1
Camera Position Informat...	
Direction	Upward ▼

Figure 9-35 Camera Position Parameters

### 9.6.2 Image Settings

You can configure the captured image in this interface.

**Steps:**

1. Enter Image settings interface:  
**Configuration > Capture Parameter > Capture Config.> Image**



<input type="checkbox"/> <b>Compose</b>	
2 Figure synthesis method	2 pic, Rank Arranged(201)
3 Figure synthesis method	3 pic, Rank Arranged(301)
4 Figure synthesis method	4 pic, 2*2(403)
5 Figure synthesis method	5 pic, Rank Arranged(501)
6 Figure synthesis method	6 pic, 3*2(604)
<b>Picture Quality</b>	
<input checked="" type="radio"/> Image Quality[30-95]	80
<input type="radio"/> Image Size[64-8196k]	1024
<input checked="" type="checkbox"/> <b>Enable</b>	
Overlay Type	For single picture, overlay on the ▾
Content	Camera Position No. Direction Descr
Top Margin[0-80%]	10
Left Margin[0-60%]	0
Font Size	32Pixel ▾
Font Color	#ffffff 
Background Color	#000000 
Element Separation Dista...	0
Line break when the text l...	90

Figure 9-36 Image Settings

2. Check the **Compose** checkbox, and you can set the picture composing method.
3. Set the picture quality including image quality and image size.
4. Check the **Enable** checkbox and configure the overlay parameters, including overlay type, content, font size, font color, etc.

### 9.6.3 Blacklist

You can configure blacklist in this interface.

**Steps:**

1. Enter the Blacklist settings interface:  
**Configuration > Capture Parameter > Capture Config.> Blacklist**

Figure 9-37 Blacklist Settings

## 2. Import blacklist.

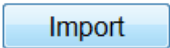


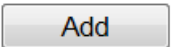
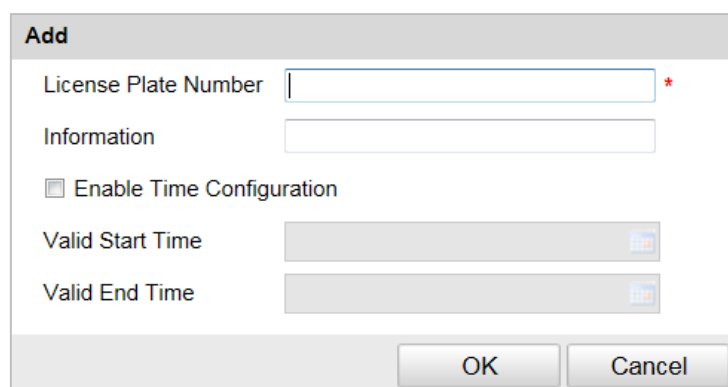
- (1) Click  and the Import Blacklist window pops up.

Figure 9-38 Import Blacklist

- (2) Click [Download Template\(template.xls\)](#) and download the template. Fill in the blacklist information in the template and save the file.
- (3) Click  to select the file you have saved and click  to import the blacklist.
3. Click  to add a license plate number to the blacklist.



**Add**

License Plate Number  \*

Information

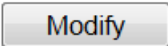
☐ Enable Time Configuration

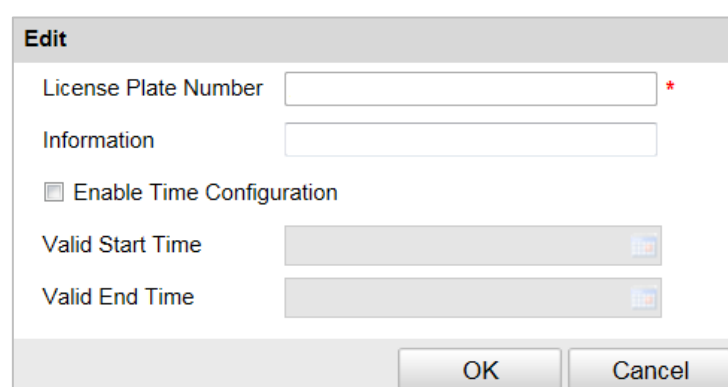
Valid Start Time

Valid End Time

OK Cancel

Figure 9-39 Add a License Plate Number

4. You can select a license plate number in the table, and click  to modify the configuration for the license plate number.



**Edit**

License Plate Number  \*

Information

☐ Enable Time Configuration

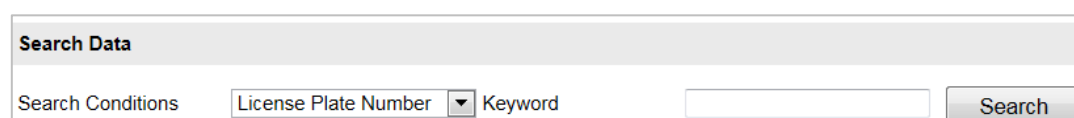
Valid Start Time

Valid End Time

OK Cancel

Figure 9-40 Modify the Configuration

5. Search the blacklist data. After the blacklist data is imported to the speed dome, you can select the search condition from the dropdown, and set the keyword to search the blacklist data.




**Search Data**

Search Conditions  License Plate Number  Keyword

Search

Figure 9-41 Search Blacklist Data

6. Delete the blacklist data. You can select the condition from the dropdown list and set the keyword, and click  to delete the license plate number in the blacklist.

## 9.7 VCA Configuration

### **Purpose:**

You can do intelligent analysis such as traffic arm with the speed dome.

### **Steps:**



1. Enter VCA Configuration interface:  
**Configuration > VCA Configuration > VCA Configuration**
2. Select VCA mode from the dropdown list or you can select **Closed** to disable the function.
3. If you select **Traffic Arm** as VCA mode, configure the parameters in Traffic Arm interface.

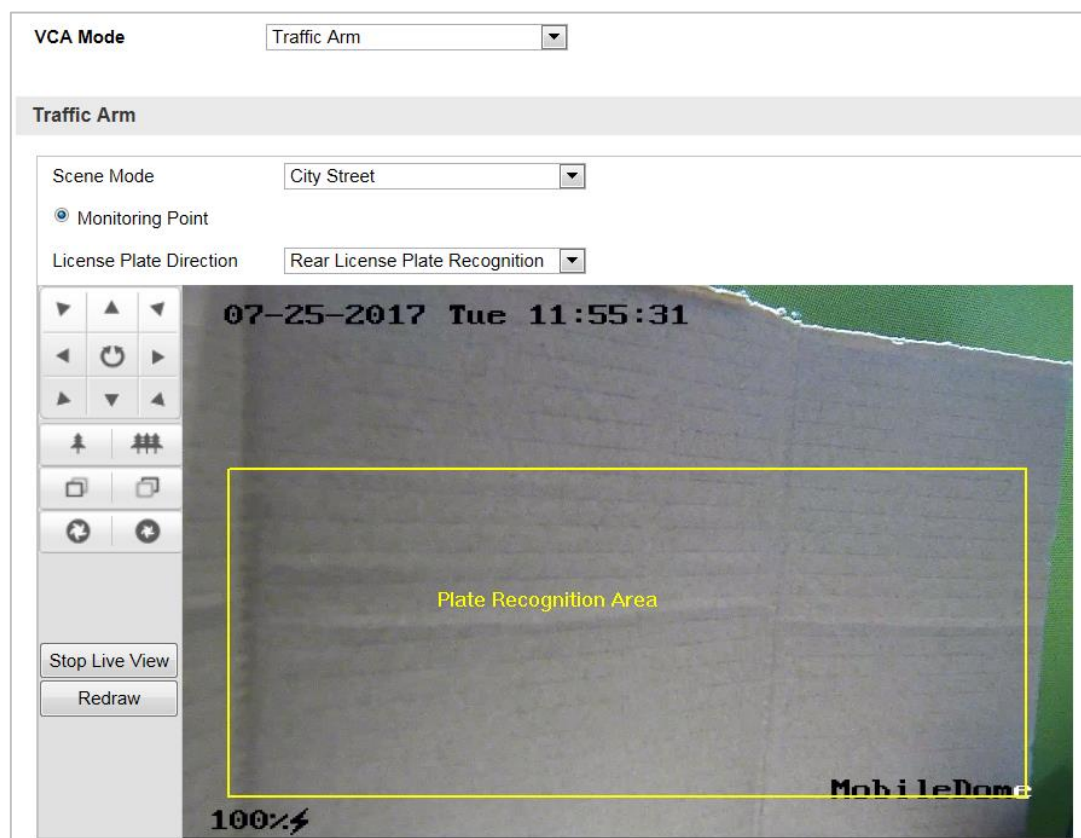

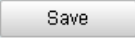


Figure 9-42 Traffic Arm

- (1) Select the scene mode from the dropdown list.
  - (2) Select the license plate direction from the dropdown list.
  - (3) Draw the plate recognition area in Live View window.
  - (4) You can click  to redraw the plate recognition area.
4. Click  to save the settings.

# Chapter 10 Other Configuration

## 10.1 Viewing Status

Enter View Status interface:

**Configuration > View Status**

You can view status including Wi-Fi status, Wi-Fi Hot Spot Status, Bluetooth Status, Dial Status, Memory Card Status, and Recording Status, etc.

## 10.2 Viewing Capture

Enter Capture interface, you can view the details of traffic violation.

Select **Arm** from the dropdown list, the picture on the left shows the license plate and the picture on the right shows the arming scene.

You can click on the list to view the details of traffic violation, including the vehicle color, vehicle speed, and capture time, etc.

# Appendix

## Appendix 1 SADP Software Introduction

### ● SADP Description

SADP (Search Active Devices Protocol) is a kind of user-friendly and installation-free online device search tool. It searches the active online devices within your subnet and displays the information of the devices. You can also modify the basic network information of the devices using this software.

### ● Searching Active Devices Online

#### ◆ Searching Online Devices Automatically

After launch the SADP software, it automatically searches the online devices every 15 seconds from the subnet where your computer locates. It displays the total number and information of the searched devices in the Online Devices interface. Device information including the device type, IP address and port number, etc. will be displayed.

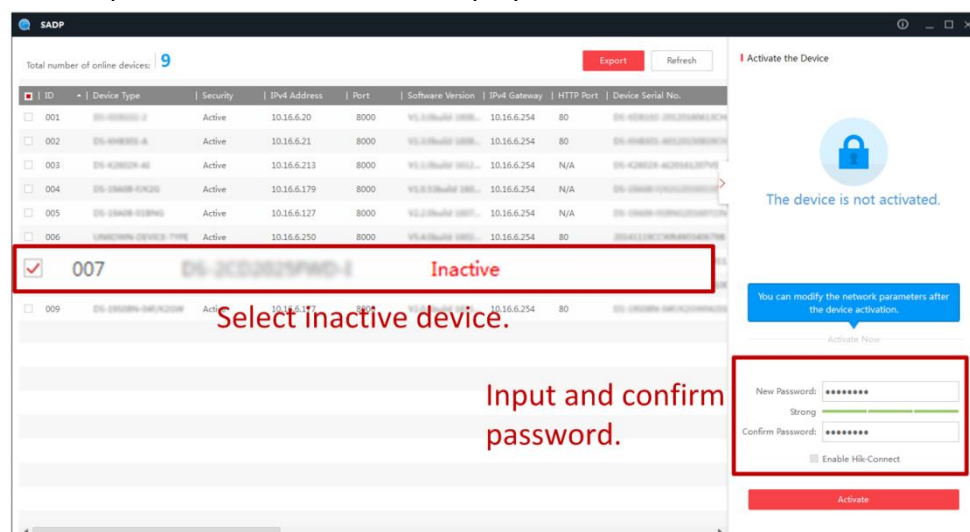



Figure A.1.1 Searching Online Devices





Device can be searched and displayed in the list in 15 seconds after it went online; it will be removed from the list in 45 seconds after it went offline.

#### ◆ Searching Online Devices Manually

You can also click  to refresh the online device list manually. The newly searched devices will be added to the list.

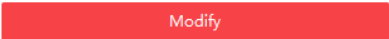



You can click  or  on each column heading to order the information;

you can click  to expand the device table and hide the network parameter panel on the right side, or click  to show the network parameter panel.

## ● Modifying Network Parameters

### Steps:

1. Select the device to be modified in the device list and the network parameters of the device will be displayed in the **Modify Network Parameters** panel on the right side.
2. Edit the modifiable network parameters, e.g. IP address and port number.
3. Enter the password of the admin account of the device in the **Password** field and click  to save the changes.



**Modify Network Parameters**

☐ Enable DHCP

Device Serial No.: XX-XXXXXX-XXXXXXXXXXXXXXXXXX

IP Address: 10.16.5.106

Port: 8003

Subnet Mask: 255.255.255.0

Gateway: 0.0.0.0

IPv6 Address:

IPv6 Gateway:

IPv6 Prefix Length:

HTTP Port: 0

Security Verification

Admin Password: .....

**Modify**

[Forgot Password](#)

Figure A.1.2 Modify Network Parameters

## Appendix 2 Port Mapping

The following settings are for TP-LINK router (TL-R410). The settings vary depending on different routers.

### Steps:

1. Select the **WAN Connection Type**, as shown below.

Figure A.2.1 Select the WAN Connection Type

2. Set the **LAN** parameters of the router as shown below, including IP address and subnet mask settings.

Figure A.2.2 Set the LAN parameters

3. Set the port mapping in the virtual servers of **Forwarding**. You need to forward ports 80, 8000, 8200 to 8210 and 554 for a speed dome.

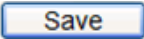


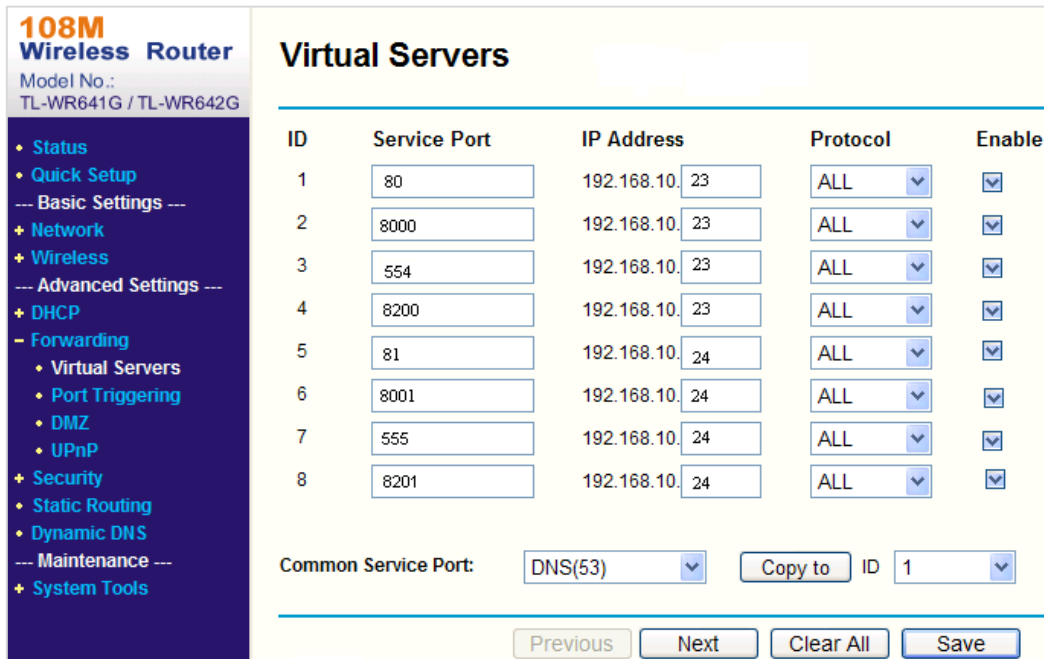
- You can change 80, 8000 and 554 ports value in the speed dome with web browser or client software.
- In the speed dome, the 8200 to 8210 ports change with the 8000 port with a constant value of 200. E.g. if the 8000 port is changed to 8005, then the 8200~8210 ports should be changed to 8205 to 8215.

### Example:

When the speed domes are connected to the same router, you can forward the ports of a speed dome as 80, 8000, 8200 to 8210 and 554 with IP address 192.168.1.23, and the ports of another speed dome as 81, 8001, 8201 to 8211 and 555 with IP 192.168.1.24. Refer to the steps as below:

**Steps:**

1. As the settings mentioned above, forward the port 80, 8000, 8200 to 8210 and 554 for the network speed dome at 192.168.1.23
2. Forward the port 81, 8001, 8201~8211 and 555 for the network speed dome at 192.168.1.24.
3. Enable **ALL** or **TCP** protocols.
4. Check the **Enable** checkbox and click .



ID	Service Port	IP Address	Protocol	Enable
1	80	192.168.10.23	ALL	<input checked="" type="checkbox"/>
2	8000	192.168.10.23	ALL	<input checked="" type="checkbox"/>
3	554	192.168.10.23	ALL	<input checked="" type="checkbox"/>
4	8200	192.168.10.23	ALL	<input checked="" type="checkbox"/>
5	81	192.168.10.24	ALL	<input checked="" type="checkbox"/>
6	8001	192.168.10.24	ALL	<input checked="" type="checkbox"/>
7	555	192.168.10.24	ALL	<input checked="" type="checkbox"/>
8	8201	192.168.10.24	ALL	<input checked="" type="checkbox"/>

Common Service Port:   ID

Figure A.2.3 Port Mapping



The port of the network speed dome cannot conflict with other ports. For example, some web management port of the router is 80. Change the speed dome port if it is the same as the management port.

