

Quick Start Guide

GV-SD2322-IR Speed Dome



Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

ISD2322IR-QG-A



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Note for Connecting to GV-VMS / DVR / NVR

The GV-IP Speed Dome is designed to work with GV-VMS / DVR / NVR, a video management system. Note the following when the camera is connected to GV-VMS / DVR / NVR:

1. By default, the images are recorded to the memory card inserted in the camera.
2. Once the camera is connected to the GV-VMS / DVR / NVR, the resolution set on the GV-VMS / DVR / NVR will override the resolution set on the camera's Web interface. You can only change the resolution settings through the Web interface when the connection to the GV-VMS / DVR / NVR is interrupted.

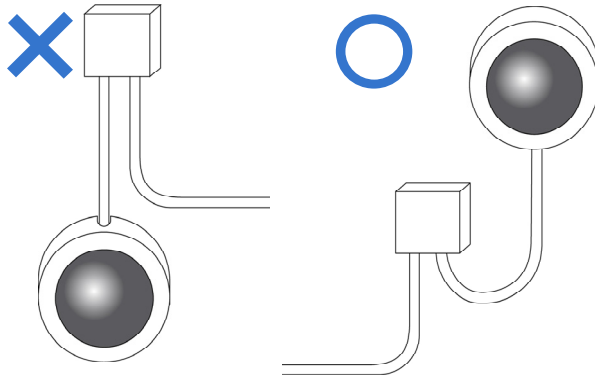
Note for Recording

1. Mind the following when using a memory card for recording:
 - Recorded data on the memory card can be damaged or lost if the data are accessed while the camera is under physical shock, power interruption, memory card detachment or when the memory card reaches the end of its lifespan. No guarantee is provided for such causes.
 - The stored data can be lost if the memory card is not accessed for a long period of time. Back up your data periodically if you seldom access the memory card.
 - Memory cards are expendable and their durability varies according to the conditions of the installed site and how they are used. Back up your data regularly and replace the memory card annually.
 - To avoid power outage, it is highly suggested to apply a battery backup (UPS).
 - For better performance, it is highly suggested to use Micro SD card of MLC NAND flash, Class 10.
 - Replace the memory card when its read/write speed is lower than 6 MB/s or when the memory card is frequently undetected by the camera.
2. It is recommended to use memory cards of the following setting and specifications:
 - Apply a battery backup (UPS) to avoid power outage.
 - Use Micro SD card of MLC NAND flash, Class 10 for better performance.

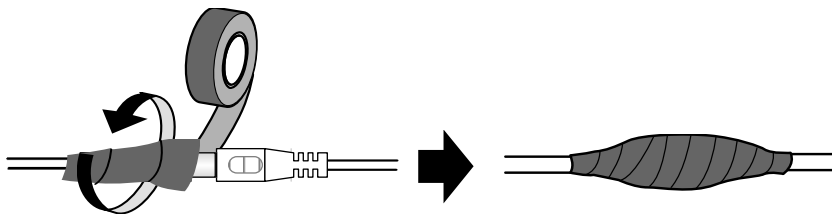
Note for Installing Camera Outdoor

When installing the camera outdoor, be sure that:

1. The camera is set up above the junction box to prevent water from entering the camera along the cables.



2. Any power, audio and I/O cables are waterproofed using waterproof silicon rubber or the like.



3. The screws are tightened and the cover is in place after opening the camera cover.

1. Introduction

Welcome to the *GV-SD2322-IR Speed Dome Quick Start Guide*. In the following sections, you will learn the basic installations and configurations. For a detailed user manual, see the *GV-SD2322-IR Speed Dome User's Manual* on the Software DVD.

1.1 Packing List

- GV-SD2322-IR Speed Dome
- 24V AC Power Adapter



- M4 Hex Key
- Waterproof Rubber Set



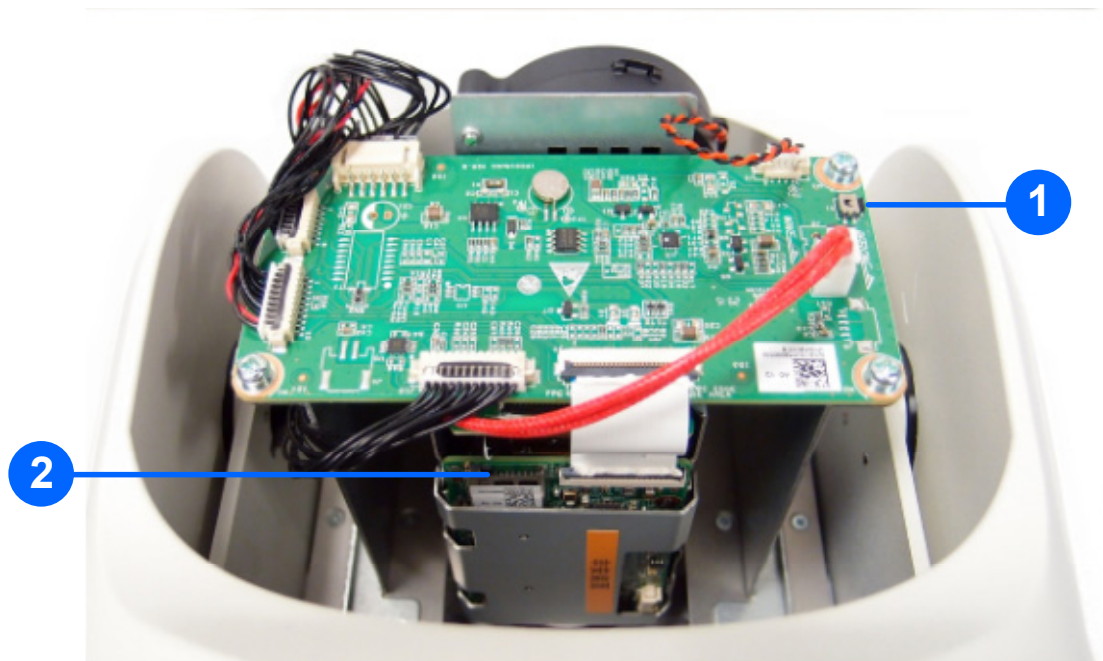
- Waterproof Requirements
- GV-IP Speed Dome Software DVD
- GV-Software DVD
- Warranty Card

1.2 Optional Accessories

Optional devices can expand the capabilities and versatility of your camera. Contact your dealer for more information.

Name	Details
GV-Mount Accessories	The GV-Mount Accessories provides a comprehensive lineup of accessories for installation on ceiling, wall and pole. For details, see <i>GV-Mount Accessories Installation Guide</i> on the software DVD.

1.3 Overview



No.	Name	Function
1.	Default Button	Resets all configurations to default factory settings. See 7. <i>Restoring to Factory Default</i> .
2.	Micro SD Card Slot	Inserts a micro SD card (SD/SDHC, version 2.0, Class 10) to store recording data.

2. Installation

You can separately purchase optional mounting accessories to mount GV-SD2322-IR on a wall, ceiling or pole. Make sure the wall has enough strength to support the camera and the mount. For details, see *GV-Mount Accessories Installation Guide*.

Below are the instructions for **Wall Pendant Mount**, which requires the accessory **GV-Mount210**. The pendant tube and screws are not included in the standard packing list of GV-SD2322-IR.

1. Unscrew the back cover of the camera.



2. Insert the micro SD card into the slot, and secure the back cover of the camera.



Note: Be sure to format the memory card on the camera's Web interface (**Setup > Storage > Storage**).

3. Place the pendant tube on the wall, and mark the position of the screw holes.



4. Drill holes on the wall, and secure the pendant tube to the wall with 4 self-prepared screws.
5. Attach the safety lock of the camera to the pendant tube.



6. Thread the data cable through the pendant tube.

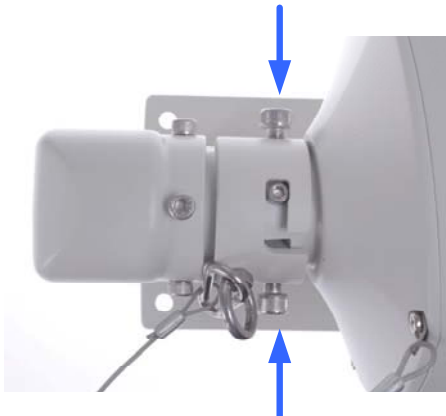


2 Installation

7. Attach the camera to the pendant tube, rotate the camera until it is locked into position, and secure the indicated screws.



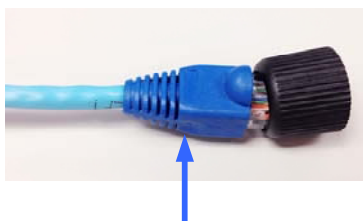
8. Insert the pendant mount screws and tighten with the supplied M4 hex key.



9. Thread the Ethernet cable through the waterproof rubber set as shown below.



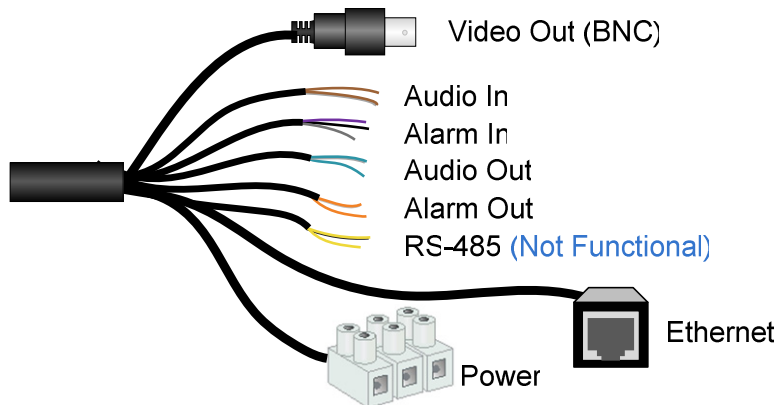
Note: The size of RJ-45 connector must be within 14 mm to go through the waterproof rubber set.



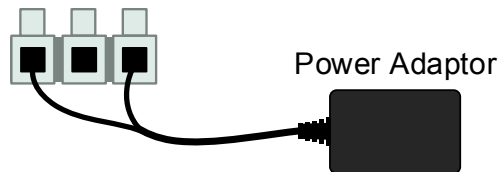
Unfit size of RJ45 Connector

3. Connecting the Camera

The camera comes with a data cable that allows you to connect the camera to the power adapter, microphone, speaker, and I/O devices.



1. Connect the supplied power adapter to the 3-pin terminal block. Either of the red and black cables can be used for anode (+) and the cathode (-).



2. Connect a standard network cable to the Ethernet cable of the camera.
3. Optionally connect the TV-out (BNC) cable to a monitor. The TV-out function can be used during installation to adjust the camera image.
4. Optionally connect I/O devices, speaker and microphone to the camera. You can connect up to 2 alarm inputs and 1 output device. See *Wire Definition* section below.

Each time the camera is powered on, it will perform a self-test to check the Pan/Tilt/Zoom (PTZ) function. After the self-test, you can operate the camera.

Note:

1. When the working temperature is below zero degree Celsius, it may take up to 30 minutes for the camera to finish the pre-heating process.
 2. If you are using your own power adapter, you may need to ground the camera using the yellow cable (GND) on the 3-pin terminal block.
-

Wire Definition

No.	Wire	Definition
1	Brown	Audio in
2	Brown / White	GND
3	Green	Audio out
4	Green / White	GND
5	Gray	Alarm IN 1
6	Purple	Alarm IN 2
7	Black	GND
8	Orange	Alarm In -
9	Orange / White	Alarm Out +
10	Yellow	RS-485 – (Currently not functional)
11	Yellow / Black	RS-485 + (Currently not functional)

4. Accessing the Camera

4.1 Web Browser


Once installed, your camera is accessible over the network. Make sure your PC has good network connection, and meet the following requirement.

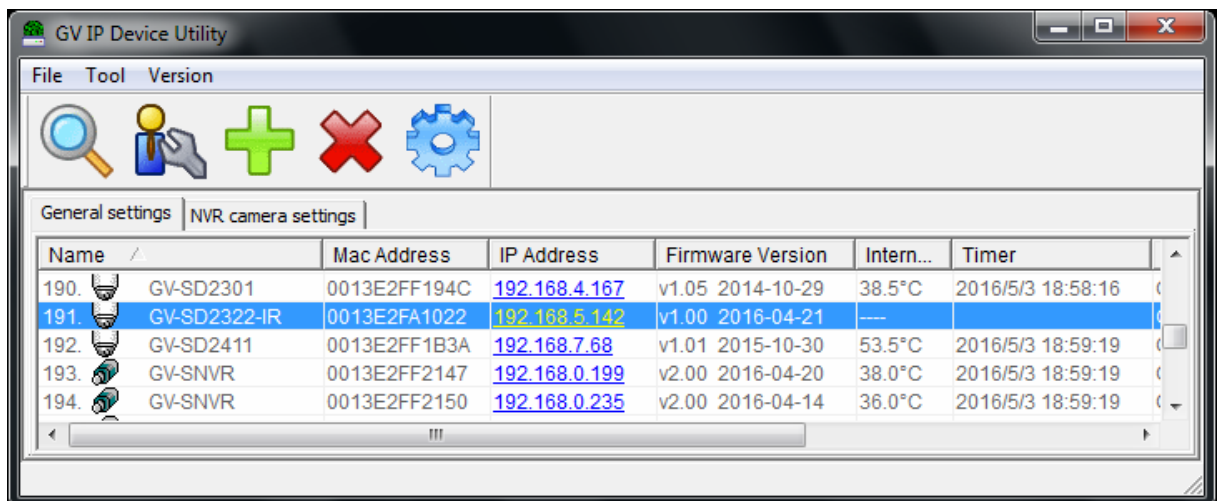
CPU	Dual-Core, 2.0 GHz or higher
Memory	At least 1 GB
Graphic Card	At least 128 MB display memory
Web Browsers	<ul style="list-style-type: none">● Internet Explorer 11.0 or above● Mozilla Firefox● Safari
Note: Some functions are not available on non-IE browsers.	

4.2 Looking Up the Dynamic IP Address

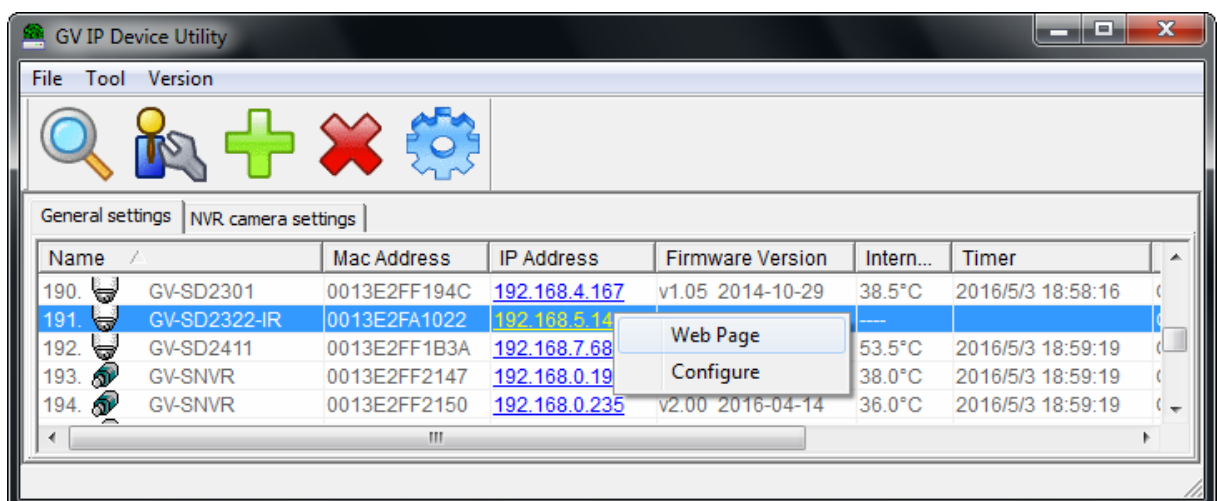
By default, when the camera is connected to LAN with a DHCP server, it is automatically assigned with a dynamic IP address. Follow the steps below to look up its IP address.

Note: The computer you use to configure the IP address must be under the same LAN with your camera.

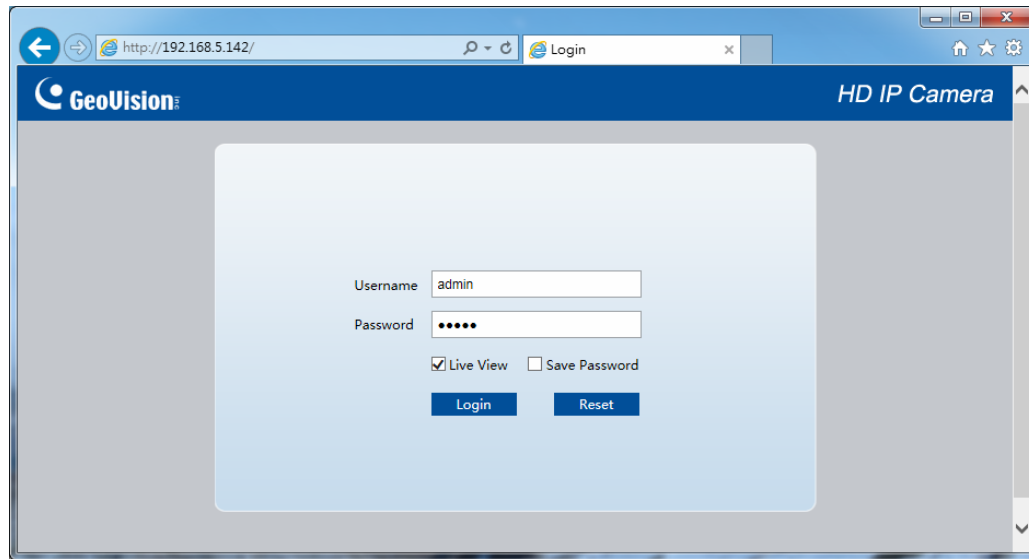
1. Install the GV-IP Device Utility program included on the Software DVD.
2. On the GV-IP Utility window, click the  button to search for the IP devices connected in the same LAN. Click the **Name** or **Mac Address** column to sort.



3. Find the camera with its Mac Address, click on its IP address and select **Web Page**.



4. The login page appears.



5. Type the default ID and password **admin** and click **Apply** to log in.

4.3 Configuring the IP Address

If the camera is connected to LAN without a DHCP server, the default IP address will be **192.168.0.10**. Follow the steps below to modify the IP address to avoid IP conflict with other GV-IP devices on the same LAN.

1. Open your web browser, and type the default IP address <http://192.168.0.10>.
2. In both Login and Password fields, type the default value **admin**. Click **Apply**.
3. Click **Setup**, select **Network** in the left menu and select **TCP/IP**.

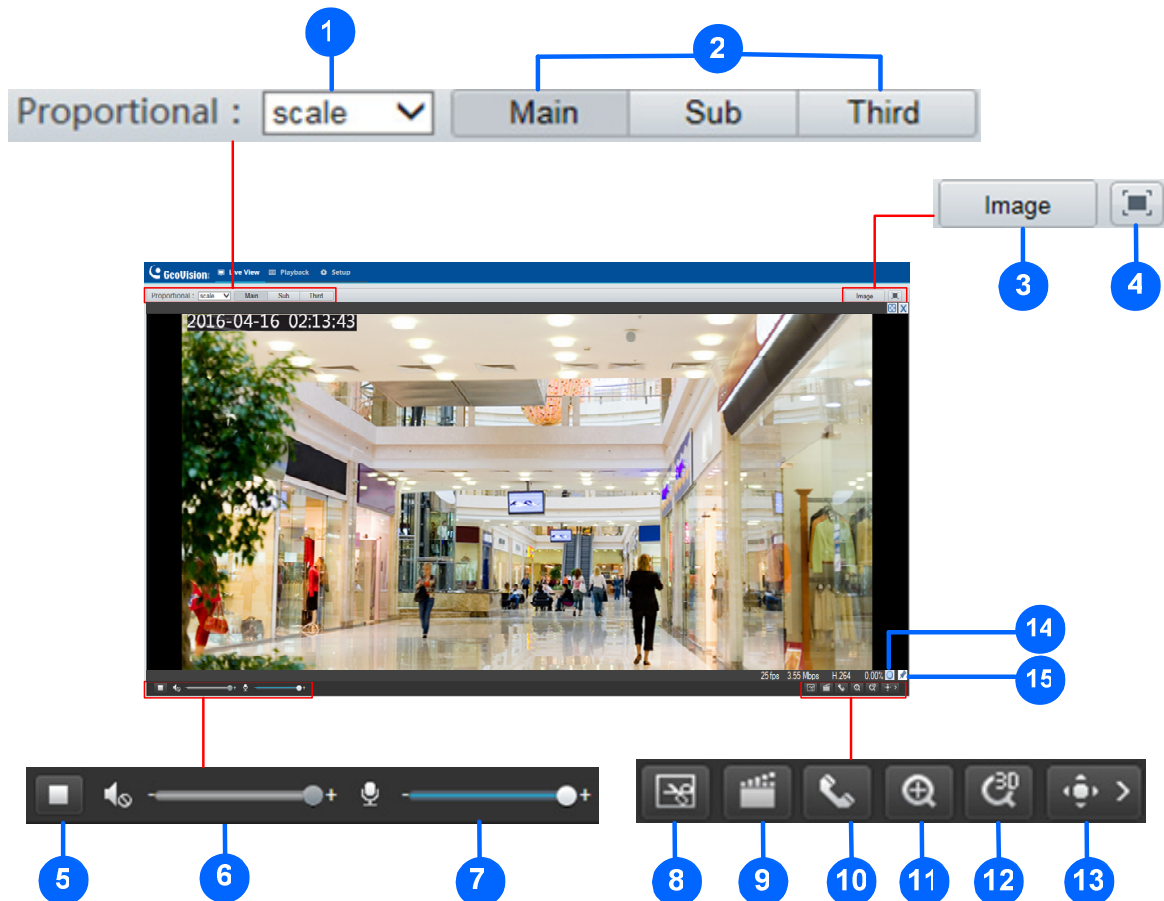
The screenshot displays the GeoVision web interface. At the top, there's a navigation bar with 'Live View', 'Playback', and 'Setup' (highlighted with a red box). On the left, a sidebar menu shows 'Common', 'Network' (selected), 'Video & Audio', 'PTZ', 'Image', 'Events', 'Storage', and 'System'. Under 'Network', 'TCP/IP' is highlighted with a red box. The main panel is titled 'TCP/IP' and contains the following configuration fields:

- IP Obtain Mode:** Static IP (dropdown menu)
- IP Address:** 192.168.2.63
- Subnet Mask:** 255.255.255.0
- Default Gateway:** 0.0.0.0
- MTU:** 1500
- DNS Section:**
 - Preferred DNS Server:** 8.8.8.8
 - Alternate DNS Server:** 8.8.4.4
- Port Type:** FE Port (dropdown menu)
- Operating Mode:** Auto-negotiation (dropdown menu)
- Save:** A blue button at the bottom of the configuration area.













4. Select **Static IP** from the IP Obtain Mode drop-down list.
5. Enter the IP address, subnet mask, and default gateway address. Make sure that the IP address of the camera is unique in the network.
6. Click **Save**.

5. The Web Interface

Once you log in the Web interface, you will see the live view as shown below.



No.	Name	Function
1	Proportional	Set the display ratio of the image. <ul style="list-style-type: none"> Scale: display images by 16:9. Stretch: display images by window size. Original: display images in its original size.
2	Live Stream	Select a live video stream: main stream, sub stream or third stream.
3	Image	Open the image setting page.
4	Full Screen Mode	Display in full screen mode.
5	Play/Stop	Play or stop live video.

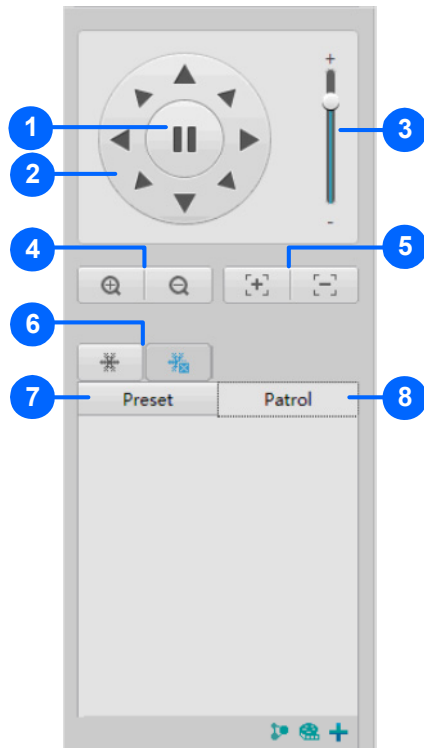
6	Volume	Adjust the audio output volume on the PC.
7	Microphone	Adjust the microphone volume on the PC during audio communication between the PC and the camera.
8	Snapshot	Take a snapshot of the current image displayed on the PC.
9	Local Recording	Start  or stop  local recording.
10	Audio Communication	Start  or stop  audio communication between the PC and the camera.
11	Digital Zoom	Start  or stop  digital zoom.
12	3D Positioning	Start  or stop  3D positioning (optical zoom).
13	PTZ control panel	Show  or hide  the PTZ control panel. -- See 5.1 PTZ Control Panel.
14		Reset the packet loss rate to zero.
15		Display packet loss rate and bit rate information in the bottom.

Note:

1. The paths for saving snapshots and local recordings are set in System Configuration.
2. The buttons (No. 14 and No. 15) will appear on the floating toolbar after you move the mouse cursor on a live view window.

5.1 PTZ Control Panel

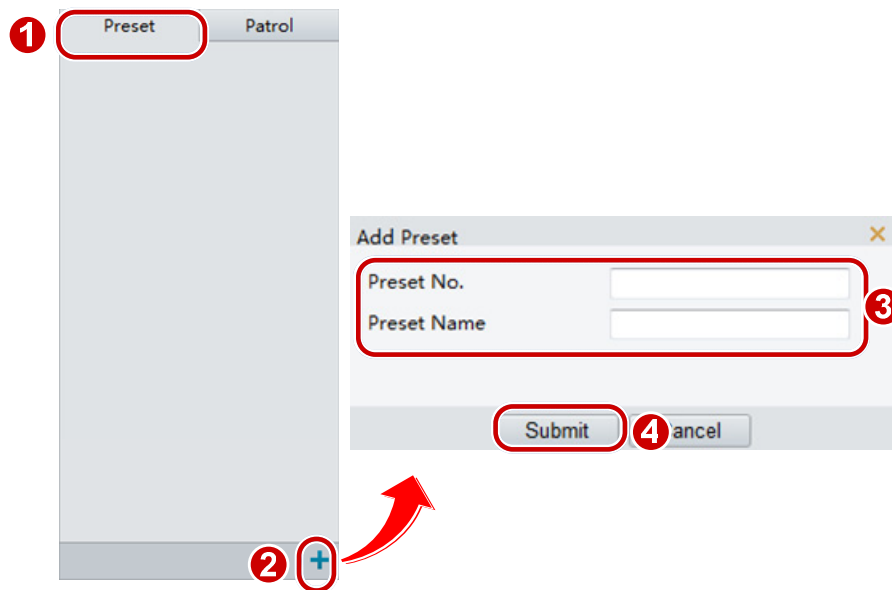
You can find the PTZ control panel to the right of the live view.




No.	Item	Function
1	Auto Pan	Start or stop auto panning of the camera.
2	PTZ Control Panel	Control the direction of the camera and release the control.
3	PTZ Speed	Adjust the moving speed of the PTZ camera.
4	Zoom	Adjust the camera's zoom (optical).
5	Focus	Adjust the camera's focus.
6	Snow	Turn on or off the snow control. When enabled, the camera will rotate to remove accumulated snow if detected by the camera.
7	Preset	Select a preset and the camera goes to the selected preset. -- See <i>Adding a Preset Point</i> section below.
8	Patrol	Select a patrol route. -- See <i>Adding a Patrol Route</i> section below.


Adding a Preset Point

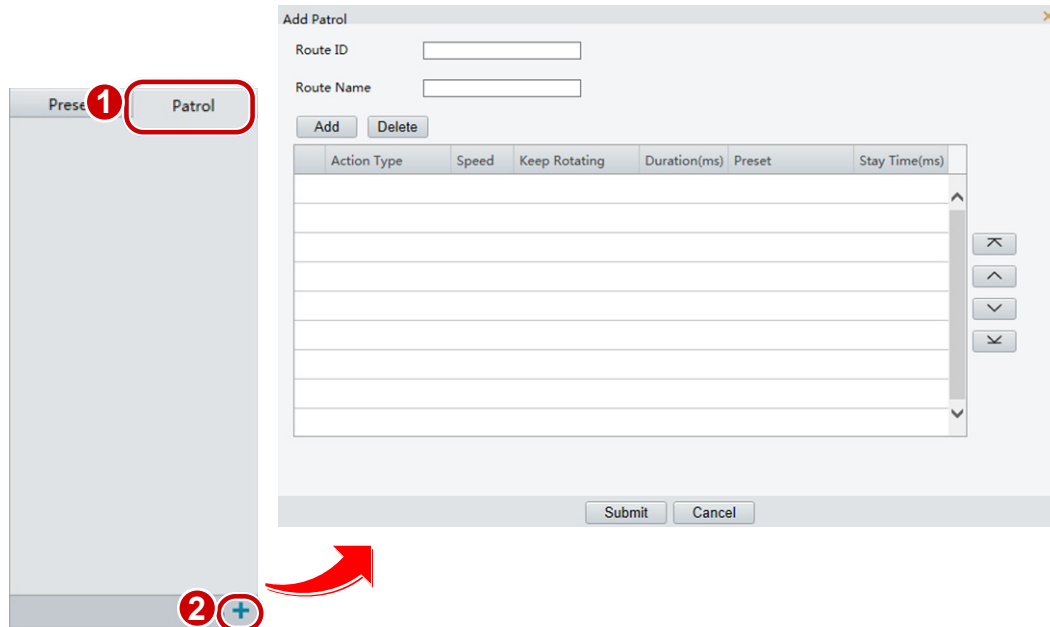
1. On the **Live View** page, click **Preset** on the control panel.



2. Adjust the camera until it points toward the desired direction.
3. Adjust zoom and focus as needed to obtain the optimal image.
4. Click the **Add** button  to add it as a preset.
5. Enter a number and name for the preset and then click **Submit**.

Adding a Patrol Route

1. On the **Live View** page, click **Patrol** on the control panel.
2. Click the **Add** button  to add a patrol route.



3. On the **Add Patrol** page, enter the route ID and name.
4. Click **Add** to add a patrol action. Use the buttons to adjust the sequence of the actions.

Note: Patrol actions include

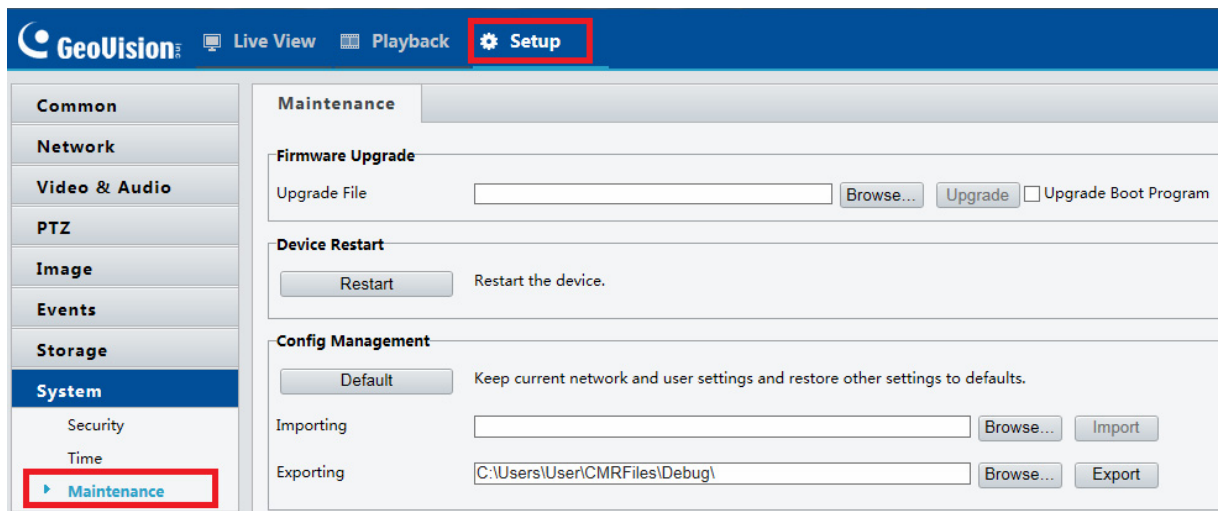
- It is recommended that the first action type is **Go to Preset**.
 - Rotate at the set speed in the set direction for a certain amount of time, zoom, stay at a set position for a certain amount of time, or patrol repeatedly if **Keep Rotating** is selected.
-

5. Click **Submit**.

6. Upgrading System Firmware

GeoVision periodically releases the updated firmware on the website. To load the new firmware into the camera, follow the instructions below.

1. In the Live View window, click the **Show System Menu** button and select **Remote Config**. At the top, click **Setup**.
2. In the left menu, select **System** and select **Maintenance**. This page appears.



3. Click the **Browse** button to locate the firmware file (.zip) saved at your local computer.
4. Click the **Upgrade** button to process the upgrade.

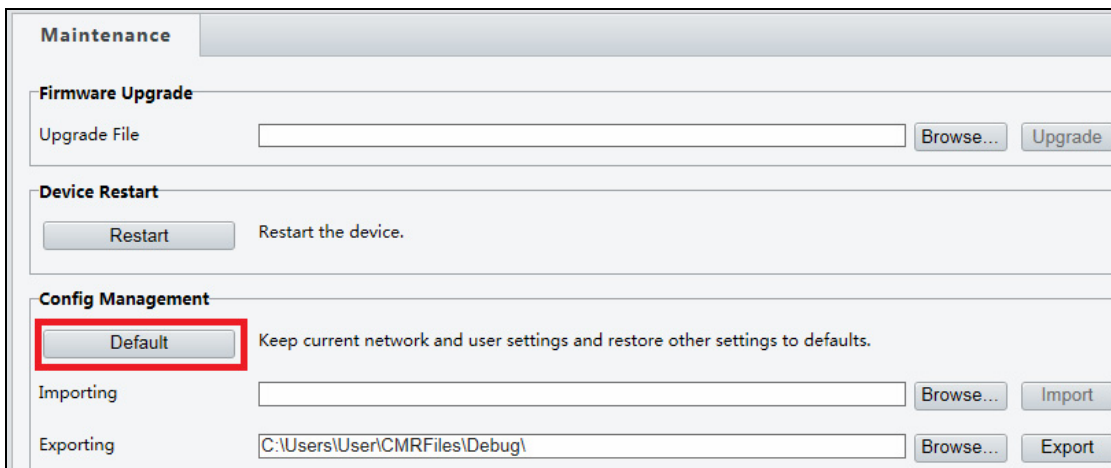
7. Restoring to Factory Default

You can restore the camera to factory default settings using the Web interface or directly on the camera.

7.1 Using the Web Interface

To restore to default settings using the Web interface:

1. At the top, click **Setup**.
2. In the left menu, select **System** and select **Maintenance**.
3. Under the **Config Management** section, click the **Default** button.



The screenshot displays the 'Maintenance' web interface. It features three main sections: 'Firmware Upgrade', 'Device Restart', and 'Config Management'. The 'Config Management' section is expanded, showing a 'Default' button highlighted with a red rectangle. Below this button, there are fields for 'Importing' and 'Exporting' configurations, each with a 'Browse...' button and an action button ('Import' and 'Export' respectively).

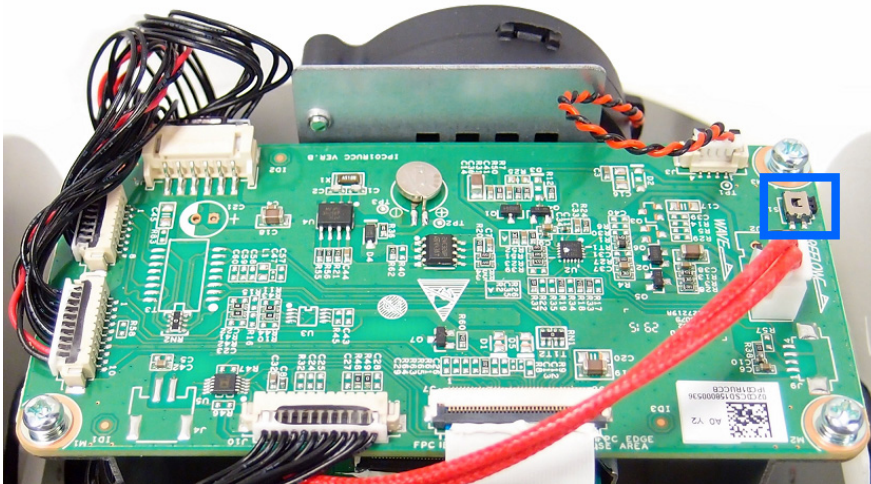
Maintenance	
Firmware Upgrade	
Upgrade File	<input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Upgrade"/>
Device Restart	
<input type="button" value="Restart"/>	Restart the device.
Config Management	
<input type="button" value="Default"/>	Keep current network and user settings and restore other settings to defaults.
Importing	<input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Import"/>
Exporting	<input type="text" value="C:\Users\User\CMRFiles\Debug\"/> <input type="button" value="Browse..."/> <input type="button" value="Export"/>

7.2 Directly on the Camera

1. Unscrew the back cover of the camera.



2. Press and hold the **default** button for about 30 seconds.



3. When the camera rotates twice, the process of loading default is completed and the camera robots automatically.