GeoVision Inc.
The Vision of Security

Quick Start Guide

GV-IP Speed Dome

- GV-SD220 Indoor IP Speed Dome
- GV-SD220-S / 2300 / 2301 / 2411 Outdoor IP Speed Dome
- GV-SD2723-IR / 2733-IR Outdoor IR IP Speed Dome

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

ISD-QG-K

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Contents

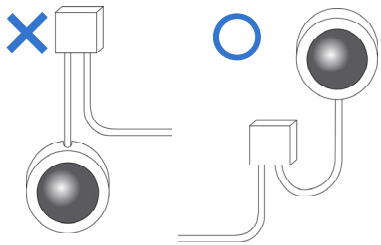
Note for Recording

1. By default, the images are recorded to the memory card inserted in the GV-IP Speed Dome camera.
2. 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 recommended to apply a battery backup (UPS).
   - For better performance, it is highly recommended to use Micro SD card or 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.

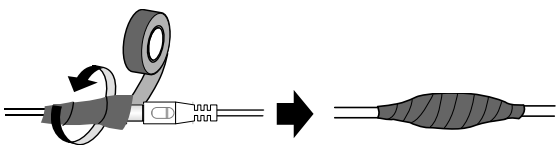
Note for Installing Camera Outdoor

When installing GV-IP Speed Dome 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.

Note for Water Resistant Coating on Camera Cover

The camera cover of **GV-SD2301** / **2411** is treated with a water resistant coating that prevents droplets from forming on the surface. The water resistant coating will slowly wear off after approximately one year depending on the operating environment.

Proper care and precautions can prolong the life of the water resistant coating. Store the camera in a dry area before installation. Avoid touching the camera cover once you remove the protective film on the camera cover.

Rinsing the Camera Cover

You can clean the camera cover using one of the methods below:

- Rinse with water
- Use an ultrasonic cleaner
- Rinse with pH-neutral cleaning solution (5% diluted)

If there are grease or fingerprints on the camera cover that cannot be removed by rinsing, you can gently wipe the cover with a clean cotton cloth.

- Only wipe the camera cover after it is dried.
- Make sure the surface is free of dust or debris before wiping to avoid scratching the cover.

IMPORTANT:

1. Do not wipe the camera cover while it's wet. Wiping a wet camera cover will damage the hydrophilic water resistant coating.
2. Do not clean the camera cover with cleaning agents containing organic solvent.

Options

Optional devices can expand the capabilities and versatility of your GV-IP Speed Dome. Contact your dealer for more information.

Name	Details
GV-Mount Accessories	The GV-Mount Accessories provide a comprehensive lineup of accessories for installing the **outdoor GV-IP Speed Dome** on ceiling, wall corner and pole. For details, refer to *GV-Mount Accessories Installation Guide* from our website.
In-Ceiling Installation Package	The in-ceiling package is used to install the **indoor GV-IP Speed Dome** by embedding the camera to the ceiling.
Power Adapter	The 24V DC power adapter is designed to convert AC 100V ~ 240V 2.5A to DC 24V 3.75A and supply the power to **indoor** and **outdoor GV-IP Speed Dome**. Contact our sales representatives for the countries and areas supported.
GV-PA901 PoE Adapter	The GV-PA901 is a Power over Ethernet (PoE) adapter designed to provide power and network connection for **outdoor GV-IP Speed Dome** through a single Ethernet cable.
GV-POE Switch	The GV-POE Switch is designed to provide power along with network connection for IP devices. The GV-POE Switch is available in various models with different types and numbers of ports.

1. Introduction

Welcome to the *GV-IP Speed Dome Quick Start Guide*. In the following sections, you will be guided through the basic installations and configurations of the GV-IP Speed Dome. For detailed information, refer to *GV-IP Speed Dome User's Manual*, available on our website.

Model	Application	Description
GV-SD220 (PoE)	Indoor	2 MP H.264, 20x / 30x optical zoom, 12x digital zoom, WDR Pro
GV-SD220-S (PoE)	Outdoor	
GV-SD200	Indoor	2 MP H.264, 18x optical zoom, 8x digital zoom, WDR Pro
GV-SD200-S	Outdoor	
GV-SD2300 (PoE)	Outdoor	2 MP H.264, 20x optical zoom, 12x digital zoom, WDR Pro
GV-SD2301 (PoE)		
GV-SD2411 (PoE)	Outdoor	2 MP H.264, 30x optical zoom, 12x digital zoom, WDR Pro
GV-SD2723-IR (PoE)	Outdoor	2 MP H.265, 20x optical zoom, 32x digital zoom, WDR Pro
GV-SD2733-IR (PoE)	Outdoor	2 MP H.265, 30x optical zoom, 32x digital zoom, WDR Pro

2. GV-SD220 / 220-S / 2300 / 2301 / 2411 / 2723-IR / 2733-IR

2.1 Packing List

2.1.1 GV-SD220 (PoE) Indoor IP Speed Dome

- Indoor GV-IP Speed Dome

- Hard-Ceiling Cover

- Mounting Plate

- Download Guide
- Warranty Card

2.1.2 GV-SD220-S (PoE) / 2300 Outdoor IP Speed Dome

- Outdoor GV-IP Speed Dome

- Pendant Tube

- Hex Key x 2

- M6 Screw x 4

- Desiccant Pack x 4
- Download Guide
- Warranty Card

2.1.3 GV-SD2301 / 2411 Outdoor IP Speed Dome

- Outdoor GV-IP Speed Dome

- Pendant Tube

- Hex Key x 2

- Rubber ring

- RJ-45 Connector

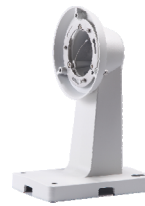
- Desiccant Pack x 2
- Data Cable

- Download Guide
- Warranty Card

2.1.4 GV-SD2723-IR / 2733-IR Outdoor IP Speed Dome

- Outdoor GV-IP Speed Dome

- Pendant Tube



- Hex Key x 2

- Rubber ring

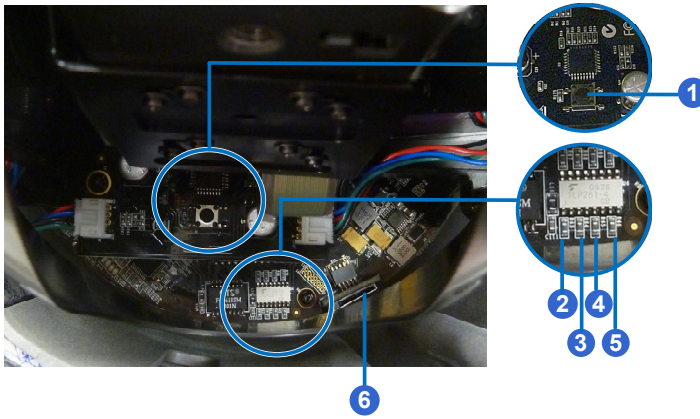
- RJ-45 Connector

- Data Cable

- Download Guide
- Warranty Card

2.2 Overview

2.2.1 GV-SD220 / 220-S / 2300



No.	Name	Description
1.	Default	Restores all the settings back to factory default. For details, see *2.14 Restoring Default Settings.*
2.	Status	The status LED turns green when the power is on and fades when the camera is ready for use.
3.	Power	The power LED turns green when the power is on.
4.	ACT	The ACT LED flashes orange light upon data transmission.
5.	Link	The Link LED turns green with Internet connectivity.
6.	Memory Card Slot	Insert a micro SD card to store recording data.

2.2.2 GV-SD2301 / 2411

No.	Name	Function
1.	Default	Restores all the settings back to factory default. For details see *2.14 Restoring Default Settings*.
2.	Memory Card Slot	Insert a micro SD / SD card to store the recording data for GV-SD2301 / 2411.

2.2.3 GV-SD2723-IR / 2733-IR

No.	Name	Function
1.	Memory Card Slot	Insert a micro SD / SDHC card to store recording data.
2.	Default	Restores all the settings back to factory default. For details see *2.14 Restoring Default Settings*.

IMPORTANT: Make sure the SD card cover is sealed after loading default, or the cover may conflict with the camera's automatic pan and tilt movements during reboot.

2.3 Installation

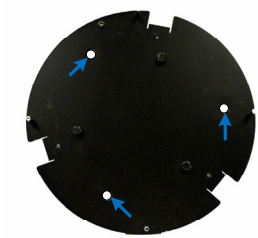
There are multiple ways to install the GV-IP Speed Dome. Only the standard installation methods are introduced in the *Quick Start Guide*. For details on optional installations, see *Chapter 6 Installing the GV-IP Speed Dome*, *GV-Mount Installation Guide*.

2.3.1 GV-SD220: Hard-Ceiling Mount

Required Items

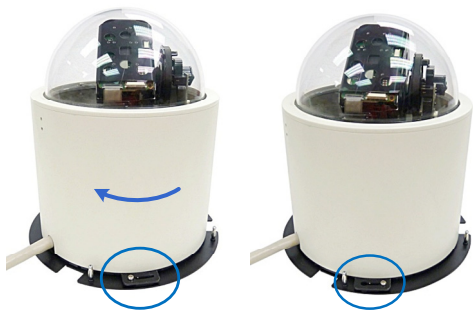
- Indoor packing (supplied)
- Ceiling screws x 3 (user-prepared)

1. Secure the mounting plate to the ceiling with self-prepared screws.



2. Secure the indoor GV-IP Speed Dome to the mounting plate.
   A. Loosen the screw on the mounting plate

   B. Align the camera to the mounting plate and rotate the camera body to the right.



   C. Tighten the screw.

3. Put on the hard-ceiling cover.

Note: Cut away a side of the cover if you want to run the cable through.

2.3.2 GV-SD220 / 220-S / 2300: Wall Pendant Mount

Required Items

- Outdoor packing (supplied)
- Ceiling screws x 4 (user-prepared)

1. Insert the desiccants to the camera.

IMPORTANT: Be sure to conceal the desiccants in the GV-IP Speed Dome within 2 minutes of opening the desiccant pack.

A. Remove the camera cover using the supplied hex key.

B. Insert two desiccant packs to the places indicated.

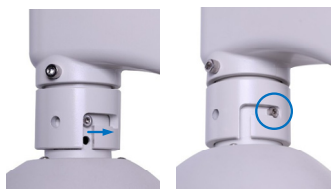
C. Insert your micro SD card into the memory card slot. See *2.2.1 GV-SD220 / 220-S / 2300*.

D. Follow step 1-A to secure the camera cover with the supplied hex key. Make sure the first two screws to be tightened are diagonal to each other.

2. Assemble the camera with the pendant tube.

A. Thread the camera cable through the pendant tube.

B. Rotate the camera and lock it to the pendant tube.



C. Secure the camera to the pendant tube with the supplied M6 screws.

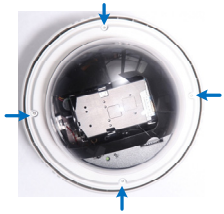
2.3.3 GV-SD2301 / 2411: Wall Pendant Mount

Required Items

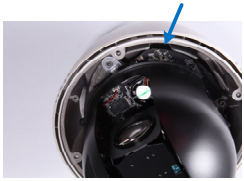
- Outdoor packing (supplied)
- Ceiling screws x 4 (user-prepared)

1. Insert the desiccants to the camera.

   A. Remove the camera cover using the supplied hex key.



   B. Insert one desiccant pack to the place indicated.



IMPORTANT: Be sure to conceal the desiccants in the GV-SD2301 / 2411 within 2 minutes of opening the desiccant pack.

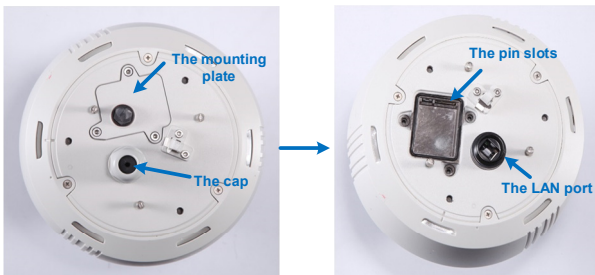
C. Insert your SD card into the SD card slot. See *2.2.2 GV-SD2301 / 2411*.

D. Secure the camera cover with the supplied hex key. Make sure the first two screws to be tightened are diagonal to each other.

2. Connect the cables to the camera.

A. Thread the Ethernet cable and the data cable through the pendant tube.

B. Remove the cap and the mounting plate at the back of the camera with the supplied hex key.

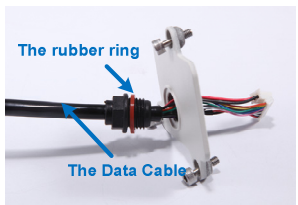


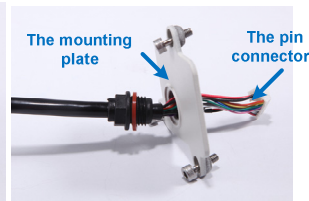
C. Slide the cap and components through the Ethernet cable as shown below. It is recommended to use the supplied RJ-45 connector.

D. Move the cap and the components toward the LAN port.

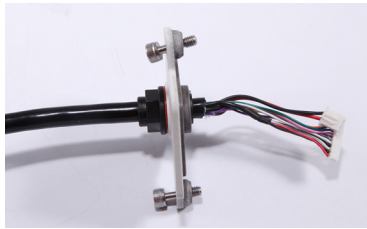
E. Secure the cap tightly.

F. Slip the rubber ring on the Data Cable and pass the pin connectors of the Data Cable through the mounting plate.

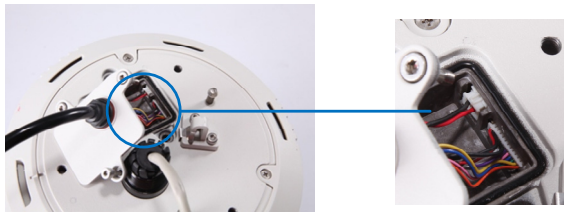




G. Fasten the data cable with the mounting plate and the rubber ring.



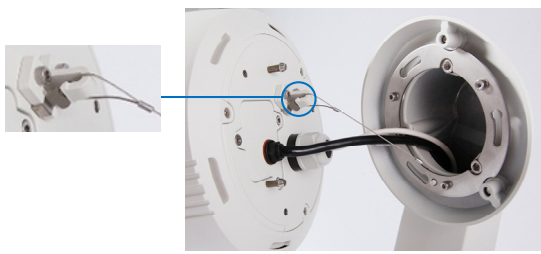
H. Insert the pin connectors of the data cable to the indicated area.



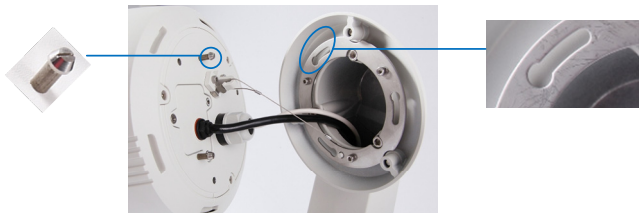
I. Secure the mounting plate with the supplied hex key.

3. Assemble the camera with the pendant tube.

A. Secure the safety lock.



B. Push the rivets into the holes on the pendant tube and rotate clockwise to lock the position.



C. Tighten the screws with the supplied hex key.

D. Secure the pendant tube to the wall with self-prepared screws.

2.3.4 GV-SD2723-IR / 2733-IR: Wall Pendant Mount

Required Items

- Outdoor packing (supplied)
- Ceiling screws x 4 (user-prepared)

1. Insert your SD card into the camera.

   A. Remove the memory card cover by loosening the two screws on the rear side of the camera.

   B. Insert your SD card into the SD card slot. See *2.2.3 GV-SD2723-IR / 2733-IR*,

   C. Secure the memory card cover.

2. Connect the cables to and assemble the pendant tube with the camera as specified in *Step 2* and *3* of *2.3.3 GV-SD2301 / 2411: Wall Pendant Mount*.

2.4 Connecting the Camera

Connect power to the camera using one of the following methods.

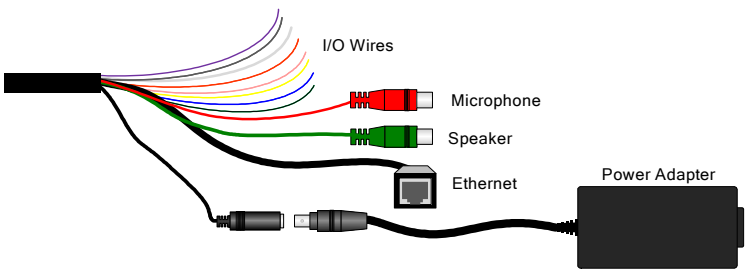
- Connect the Power Adapter to the data cable.
- Use the Power over Ethernet (PoE) function and the power will be provided over the network cable.

Note:

1. The Power Adapter is an optional device.
2. The optional GV-PA901 PoE Adapter is required for applying the PoE function.

The Data Cable

With the Data Cable, you can connect the power, microphone, speaker, and I/O devices to the GV-IP Speed Dome. The Data Cable is illustrated as below.



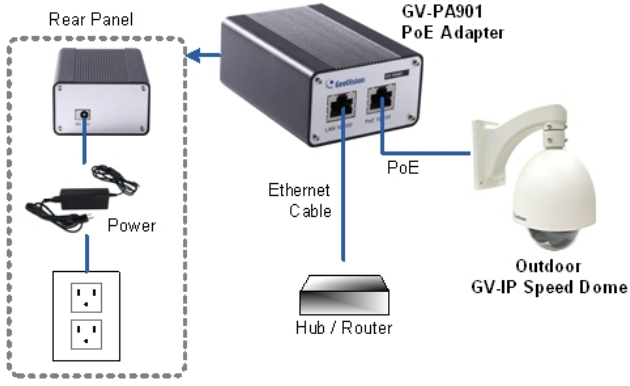
No.	Wire	Definition
1	Orange	Alarm In 1
2	Yellow	Alarm In 2
3	Green	Alarm In 3
4	Blue	Alarm In 4
5	Pink	Ground
6	Purple	Alarm Out
7	White	Alarm Out Open
8	Gray	Alarm Out Close

GV-PA901 PoE Adapter

The GV-PA901 PoE Adapter is only for the Outdoor GV-IP Speed Dome. Prepare two Ethernet cables for the connection.

Note: PoE function is available for the outdoor GV-IP Speed Dome only when GV-PA901 PoE Adapter (optional device) is applied for connection.

1. Connect one end of an Ethernet cable to the **LAN 10 / 100** Port on the GV-PA901 and the other end to the LAN port on a Hub / Router.
2. Connect one end of an Ethernet cable to the **PoE 10 / 100** port on the GV-PA901 and the other end to the Outdoor GV-IP Speed Dome.
3. Connect the connector end of the GV-PA901 Power Adapter to the GV-PA901 PoE Adapter and the plug end to the power outlet.



2.5 Accessing the Camera

2.5.1 System Requirements

To access GV-IP Speed Dome through a Web browser, ensure your PC is in good network connection and use one of the following web browsers:

- Microsoft Internet Explorer 11.0 or later
- Google Chrome
- Mozilla Firefox
- Safari

Note:

1. Some functions are not available on non-IE browsers
2. With non-IE browsers,
   A. Motion Detection, Text Overlay and two-way audio settings are not supported.
   B. The **Play** function is only available on the live view window.
   C. RTSP streaming must be kept as enabled. See *5.3.8 RTSP / ONVIF*, *GV-IP Speed Dome User's Manual*.

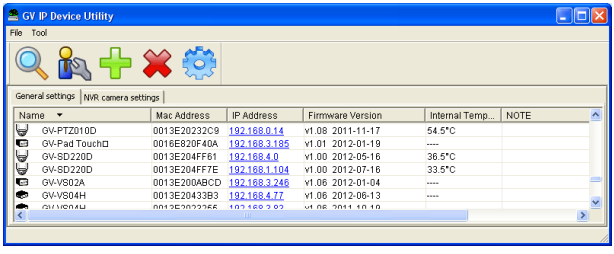
2.5.2 Looking Up the IP Address and Logging In

By default, the IP address of your GV-IP Speed Dome is assigned with an unused IP by the DHCP server unless your router does not support DHCP. In this case, the default IP address will be **192.168.0.10**. Follow the steps below to look up the dynamic IP address.

1. Download and install the GV-IP Device Utility program from the website.

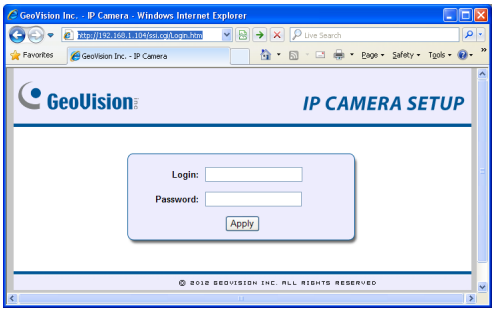
Note: The PC installed with GV-IP Device Utility must be under the same LAN as the camera you wish to configure.

2. On the PC desktop, select **Start**, select **Programs** and select **GV-IP Device Utility** to execute the program. Upon launching, the program automatically searches for IP devices on the same LAN.
3. Click the **Name** or **Mac Address** column to sort.



4. Find the Mac Address of the camera to see its IP address.

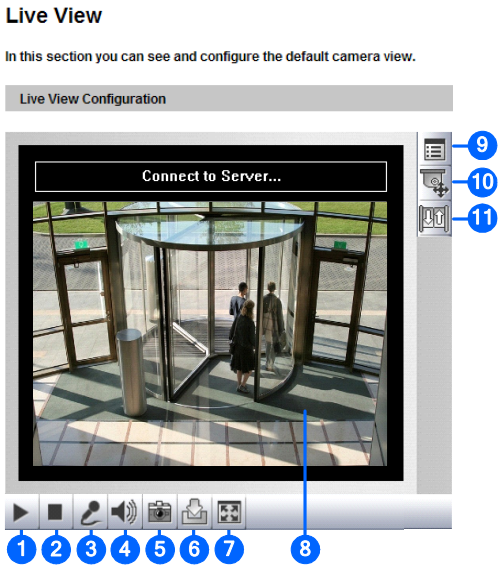
5. To login, type the IP address in a Web browser. The login page appears.



6. Type the default ID and password **admin** and click **Apply** to log in.
7. When accessing the GV-IP Speed Dome for the first time, you must set your browser to allow a one-time installation of GeoVision ActiveX component onto your computer.

Note: If your router does not support DHCP, the default IP address will be **192.168.0.10.** In this case, it is strongly suggested to modify the IP address to avoid IP address conflict with other GeoVision IP device on the same LAN. For details, see *2.1.1 Assigning an IP Address, GV-IP Speed Dome User's Manual*.

2.6 The Web Interface



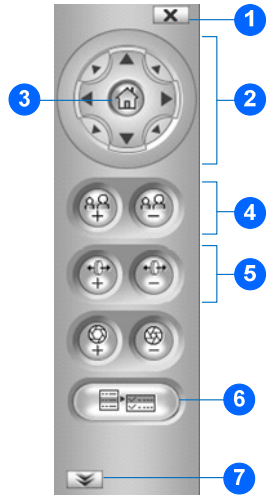
No.	Name	Description
1	Play	Play live video.
2	Stop	Stop playing live video or recording to the local PC.
3	Microphone	Talk to the surveillance area from the local PC.
4	Speaker	Listen to the audio around the camera.

No.	Name	Description
5	Snapshot	Take a snapshot of the live video.
6	File Save	Record live video to the local PC.
7	Full Screen	Display in full screen mode.
8	Advanced Options	Right-click the live image to access the following options: **Snapshot**, **Full Screen**, **Resolution**, **Visual PTZ**, **PIP** and **PAP**.
8	Visual PTZ	Clicks to switch to one of the three visual PTZ control modes: **Fixed Direction Move**, **Random Move** or **Center Move**.
9	Show System Menu	Brings up these functions: **Alarm Notify**, **Video and Audio Configuration, Remote Config**, **Show Camera Name** and **Image Enhance**.
10	PTZ Control	Access the PTZ Control Panel and the Visual PTZ.
11	I/O Control	Access the I/O Control Panel.

For detail, see *3.1 The Live View Window*, *GV-IP Speed Dome User's Manual*.

2.7 The PTZ Control Panel

Click the **PTZ Control** button on the Live View window and select **PTZ Control Panel**. The PTZ Control Panel appears.



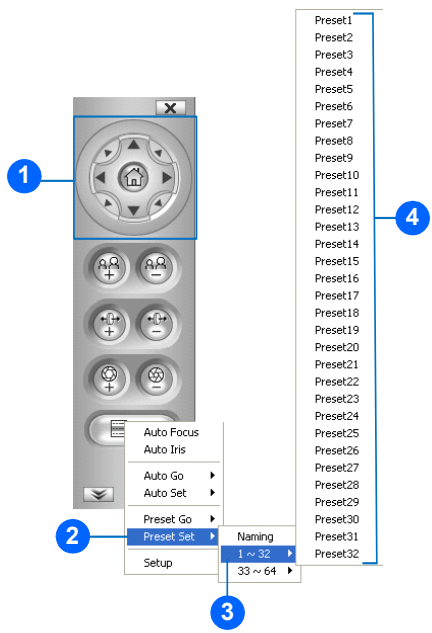
No.	Name	Description
1	Exit	Closes the PTZ control panel.
2	Pan / Tilt Control	Moves the PTZ Camera in 8 directions: up, down, left, right, upper left, down left, upper right and down right.
3	Home	Brings the camera view back to its home position.
4	Zoom In / Out	Shortens (zoom in) or lengthens (zoom out) the apparent distance between the camera and the surveillance area.
5	Focus In / Out	Adjusts the sharpness of the camera view.
6	Option	Brings up these functions: • Dome movement settings (Preset, Sequence, Auto Pan, Cruise and Tour) • Image settings • PTZ settings • System settings For detail, see *Chapter 4 PTZ Control Panel*, *GV-IP Speed Dome User's Manual*.
7	Show Preset	Opens and closes the number pad.

2.8 Setting Presets

You can set up a preset position toward which the dome view moves. Up to **255** preset points can be configured and saved.

Setting a Preset

1. Use the direction keys on the PTZ Control Panel to move the dome to a desired position in Live View.
2. Click **Option** on the PTZ Control Panel, click **Preset Set**, and select the desired preset number to save the preset.
3. To create another preset position, repeat Steps 1 and 2 and select a different preset number to save.



Going to a Preset

To move the dome view to a previously defined preset position, click **Option** on the PTZ Control Panel, click **Preset Go** and select a **Preset** number that has been set up.

2.9 Setting Cruise

You can set up a route consisting of different pan, tilt and zoom movements for the GV-IP Speed Dome to follow. Up to **4** Cruises can be created.

Setting a Cruise

1. Click **Option** on the PTZ Control Panel, click **Auto Set** and select a desired **Set Cruise number**.
2. Use the Pan/Tilt and Zoom control keys to set the desired route path and zoom.
3. When you are finished with setting up a Cruise route, click **Option**, click **Auto Set** and select **Set Cruise Stop**.
4. To set up another Cruise route, repeat Steps 1 to 3 and select a different Cruise number.

Starting and Stopping a Cruise

To start the GV-IP Speed Dome on a previously defined Cruise route, click **Option** on the PTZ Control Panel, click **Auto Go** and select a **Go Cruise** number which has been set up. The Cruise will repeat endlessly.

To stop a Cruise, click any one of the following control keys on the PTZ Control Panel: Pan/Tilt, Home, Zoom in/out or Focus.

2.10 Setting Auto Pan

The GV-IP Speed Dome can pan up to 360° endlessly to survey the horizontal view between 2 user-defined positions. Up to **8** sets of Auto Pan can be configured.

Setting an Auto Pan

1. Set the vertical position of your GV-IP Speed Dome first. Vertical movements during or after the Auto Pan settings will not be effective.
2. Set the start position of the Auto Pan.
   A. Use the control buttons on the PTZ control panel to move to a desired start position.
   B. Click **Option** on the PTZ Control Panel, click **Auto Set** and select a desired **Set Auto Pan Number Start Position**.
3. Set the end position of the Auto Pan.
   A. Use the control buttons on the PTZ control panel to move to a desired end position.
   B. Click **Option**, click **Auto Set** and select a desired **Set Auto Pan Number Stop Position**.
4. To set another Auto Pan route, repeat Steps 1 to 3 and select a different Auto Pan number.

For details on pan speed and the duration of dome view at the start/stop positions, see *4.5.4 PTZ Settings*, *GV-IP Speed Dome User's Manual*.

Note: The zoom ratio of an Auto Pan's Start Point will persist throughout the whole path.

Starting and Stopping an Auto Pan

To start the GV-IP Speed Dome on an Auto Pan mode, click **Option** on the PTZ Control Panel, click **Auto Go** and select an **Auto Pan** number that has been previously set. The Auto Pan will repeat endlessly.

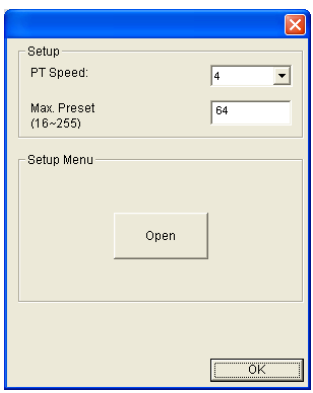
To stop an Auto Pan, click any one of the following control keys on the PTZ Control Panel: Pan/Tilt, Home, Zoom in/out or Focus.

2.11 Setting Sequence

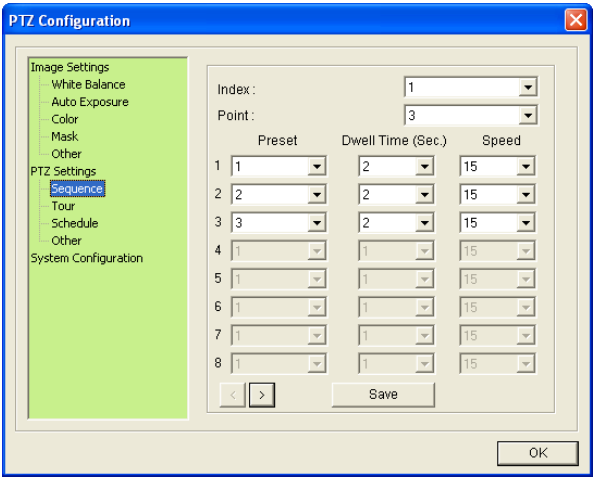
You can have the dome view move through a number of predefined Presets, called a **Sequence**. Create a Sequence by linking the desired presets. Up to **8** Sequences can be created and a minimum of 2 preset points must be selected for a Sequence route to work.

Setting a Sequence

1. From the PTZ Control Panel, click **Option**, select **Setup** and click **Open**.



2. Select **Sequence** under **PTZ Setting**.



3. Use the **Index** drop-down list to select the Sequence number to be configured.
4. One Sequence can include up to 16 Presets. Use the **Point** drop-down list to select the number of Presets desired for the Sequence.
5. Use the **Preset** drop-down list to select the Presets for the Sequence.
6. Use the **Dwell Time** drop-down list to set the duration time, from 1 to 255 seconds, in which the dome stays at the corresponding Preset.
7. Use the **Speed** drop-down list to set the speed, from 1 to 15, at which the dome travels to a Preset.
8. To create another Sequence, repeat Steps 3 to7, and select a different Index number.
9. Click **Save**.

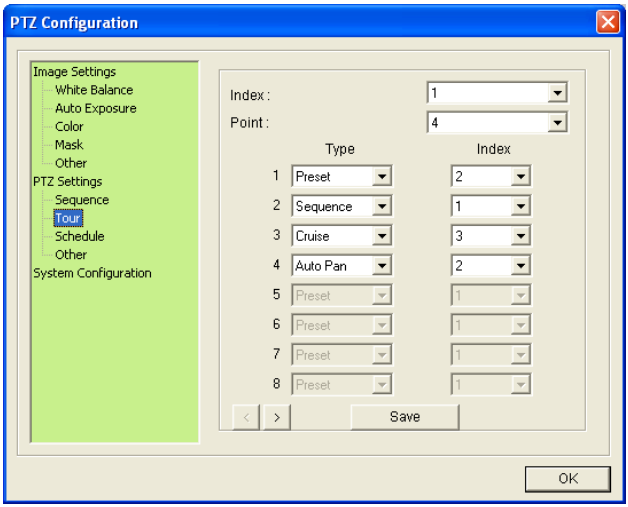
Starting and Stopping a Sequence

To start the dome view on a Sequence route, click **Option** on the PTZ Control Panel, click **Auto Go** and select a **Go Sequence** number that has been previously set. The Sequence will repeat endlessly.

To stop a Sequence, click any one of the following control keys on the PTZ Control Panel: Pan/Tilt, Home, Zoom in/out, or Focus

2.12 Setting Tour

You can set up your GV-IP Speed Dome to move in a combination of Presets, Cruises, Auto Pan and Sequences, called a **Tour**. Up to 8 Tour routes can be defined.



Setting a Tour

1. Follow Step 1 in *2.11 Setting Sequence*.
2. Select **Sequence** under **PTZ Setting**.
3. Use the **Index** drop-down list to select the Tour number to be configured.
4. One Tour can include up to 16 sets of Presets, Sequences, Cruises and Auto Pan. Use the **Point** drop-down list to select the number of movements desired for the Tour.
5. Use the **Type** and **Index** drop-down lists to select the movement type and the corresponding movement number.
6. To create another Tour, repeat Steps 3 to 5 and select a different Index (Tour) number.
7. Click **Save**.

Starting and Stopping a Tour

To start the GV-IP Speed Dome on a Tour route, click **Option** on the PTZ Control Panel, click **Auto Go** and select a **Go Tour** number that has been previously set. The Tour will repeat endlessly.

To stop a Tour, click any one of the following control keys on the PTZ Control Panel: Pan/Tilt, Home, Zoom in/out or Focus.

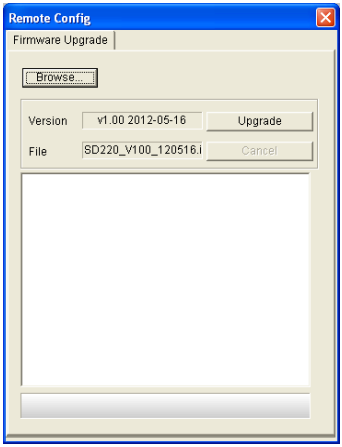
2.13 Upgrading System Firmware

GeoVision periodically releases the latest firmware to the company website. You can update your GV-IP Speed Dome firmware through the Web interface or **GV-IP Device Utility**, which can also be downloaded from the website. For details on firmware upgrade using GV-IP Device Utility, see *7.1.2 Using GV IP Device Utility*, *GV-IP Speed Dome User's Manual*.

IMPORTANT:

1. While the firmware is being upgraded,
   A. the power supply must not be interrupted, and
   B. do not unplug the Ethernet cable if the cable is the source of power supply.
2. The interruption of power supply during upgrading causes not only upgrade failure but also damages to the camera. In this case, contact our sales representatives and send your device back to GeoVision for repair.
3. Do not turn the power off within 10 minutes after the firmware is updated.
4. If firmware upgrade fails, you will need to restore the camera to its factory default settings.

1. In the Live View window, click the **Show System Menu** button and select **Remote Config**. This dialog box appears.



2. Click the **Browser** button to locate the firmware file (.img) saved at your local computer.
3. Click the **Upgrade** button to start upgrading.

2.14 Restoring Default Settings

If for any reason the camera is not responding correctly, you can reset it to its factory default settings either directly on the camera or through its Web interface.

There are two parts to the GV-IP Speed Dome settings:

- System settings: this refers to all the settings except for the PTZ settings
- PTZ configuration settings: this refers to settings within the PTZ configuration dialog box

2.14.1 Restoring System Settings

Pressing the Default Button

- **GV-SD220 / 220S / 2300 / 2301 / 2411**

  1. Press and hold the **Default** button.
  2. When the **status LED** flashes twice, release the **Default** button. This shall take about 6 seconds.
  3. The default loading is completed when the status LED fades.

- **GV-SD2723-IR / 2733-IR**

  1. Press and hold the **Default** button.
  2. Hold for 3 seconds and release the **Default** button. Then wait for about 45 seconds.
  3. The speed dome automatically reboots after loading default is completed.

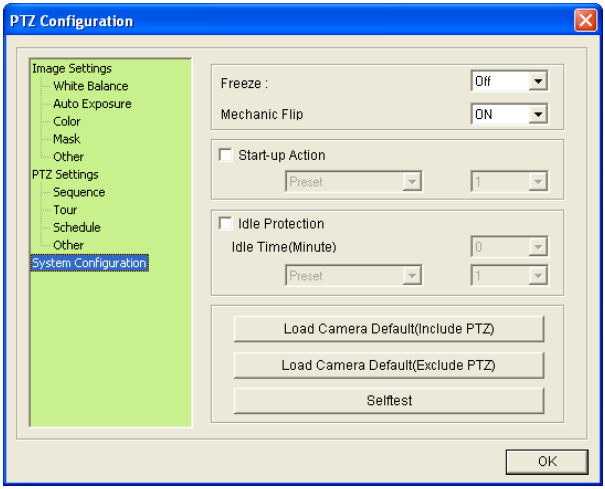
IMPORTANT: Make sure the SD card cover of GV-SD2723-IR / 2733-IR is sealed after loading default, or the cover may conflict with the camera's automatic pan and tilt movements during reboot.

Through the Web Interface

On the Web interface, select **Tools** and click the **Load Default** button. The default loading will start shortly.

2.14.2 Restoring PTZ Configuration Settings

1. Access the PTZ Configuration dialog box (Step 1 in *2.11 Setting Sequence*).
2. In the left menu, select **System Configuration**.



3. To restore all settings within PTZ Configuration back to default, click **Load Camera Default (Include PTZ)**. To restore only the Image Settings, click **Load Camera Default (Exclude PTZ).**

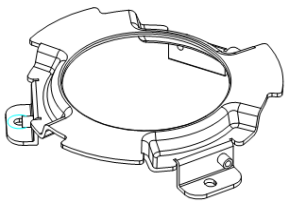
3. GV-SD200 / 200-S

3.1 Packing List

3.1.1 GV-SD200 Indoor IP Speed Dome

- Indoor GV-IP Speed Dome

- Hard Ceiling Mount (GV-MountD603)



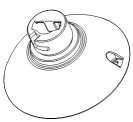
- Terminal Block
- GV-IP Speed Dome Software CD
- GV-NVR Software DVD
- M3 Standard Screw (x1)
- M4 Screw (x5)
- Plastic Anchor (x5)
- Warranty Card

3.1.2 GV-SD200-S Outdoor IP Speed Dome

- Outdoor GV-IP Speed Dome

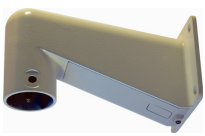
- M3 Standard Screw (x1)
- M3 Security Screw (x1)
- M5 Standard Screw (x1)
- M5 Security Screw (x1)

- Outdoor Mounting Kit (GV-MountD902)



- Waterproof Rubber

- Mini Pendent Mount (GV-MountD202)

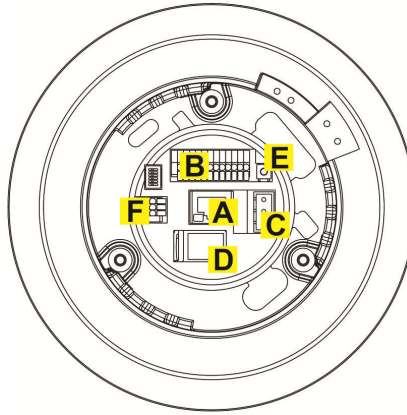


- Lubricant

- Torx Wrench

- GV-IP Speed Dome Software CD
- GV-NVR Software DVD
- Warranty Card

3.2 Overview



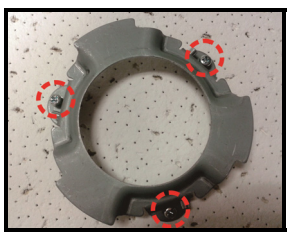
No.	Name	Description
A	LAN / High Power PoE	Connects to a 10/100 Ethernet or High Power PoE (for GV-SD200 only).
B	I/O Terminal Block	Connects to I/O devices. For details, see *3.4 Connecting the Cables.*
C	Power Port	Connects to power of AC 24V.
D	Memory Card Slot	Inserts a micro SD / SDHC card to store recording data.
E	Reset Button	Resets to factory default. For details, see *3.14 Restoring Default Settings*.
F	Two Way Audio	Connects audio input and output. For details, see *3.4 Connect the Cables*.

3.3 Installation

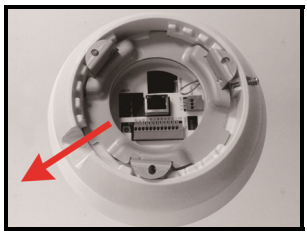
There are several mounting methods for GV-IP Speed Dome. In this *Quick Start Guide*, we only show you the standard mounting methods. For other mounting methods, refer to *GV-IP Speed Dome GV-SD200 User's Manual*.

3.3.1 GV-SD200: Surface Mount

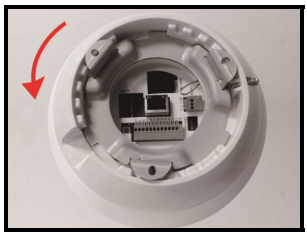
1. Mark the positions of the three screw holes on the Hard Ceiling Mount at the chosen installation location.
2. In the marked locations, drill each hole slightly smaller than the supplied Screw Anchors, and put supplied Anchors into these drilled holes.



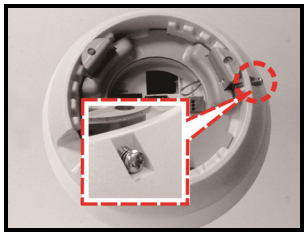
3. Fasten the Hard Ceiling Mount with the three supplied M4 Self-tapping Screws.
4. Thread the connected cables and wires through the center hole of the Mount and connect the cable to the camera body.
5. Users can choose to hide the cables and wires inside the ceiling, and put the rubber from the accessory package to fill the gap at the side of the Fixing Plate. Or let the cables out from the gap on the side of the Fixing Plate (as shown in the diagram).



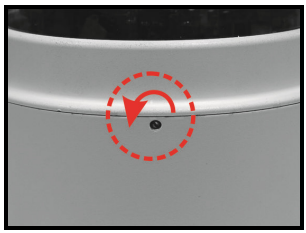
6. Install the Camera on the fixed Hard Ceiling Mount by turning the Camera clockwise.



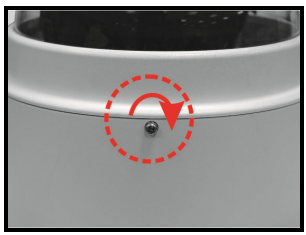
7. Fasten the screw at the side of the Fixing Plate.



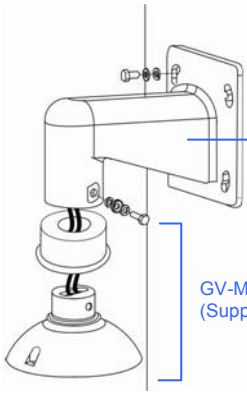
8. After installing the Camera on the Hard Ceiling Mount, put the Dome Cover back, and use a flat screw drive to fasten two supplied Flat Screws on the Dome Cover.



9. Fasten the supplied Standard Screw on the Dome Cover.



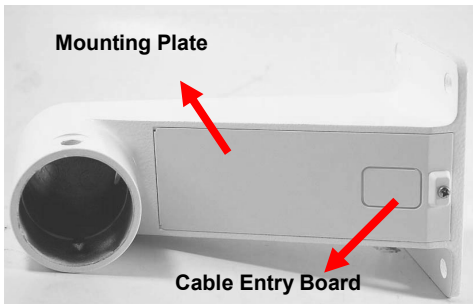
3.3.2 GV-SD200-S: Mini Pendent Mount



Required items:

- Outdoor packing (supplied)
- Wall screws x 4 (user-prepared)

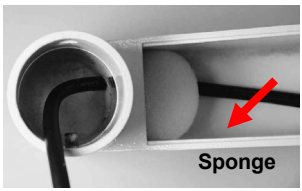
1. Make a cable entry hole on the wall to recess the cables. You can also push up the Cable Entry Board on the Mini Pendent Mount's Mounting Plate to place the cables, as shown in the photo below.

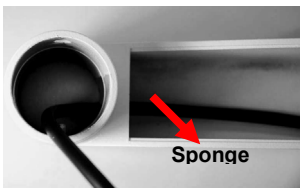


2. Fix the Mini Pendent Mount on the wall with suitable screws and screw anchors of your choice.
3. Attach the Waterproof Rubber to the Mini Pendent Mount.

4. Run the cable(s) through the Mini Pendent Mount.

Note: Block the cable entry hole with the supplied sponge to avoid insects entering the Pendent Mount. The sponge can be placed in two ways as shown in the illustrations below.



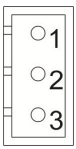


5. Thread the cable(s) through the Mounting Kit and join the Mounting Kit to the Mini Pendent Mount with the supplied screws and washers. Then adjust the Waterproof Rubber to the joint.
6. Connect the cable(s) to the Dome Camera.
7. Join the Dome Camera to the Mounting Kit with the supplied screw and washers.

3.4 Connecting the Cables

Connect your IP Speed Dome to power, network and other cables.

Connecting Power



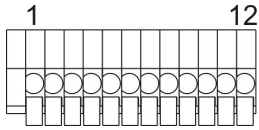
Pin	Definition
1	AC 24_1
2	GND
3	AC 24_2

Note: If you are using GeoVision's optional power adapters, connect the green or green/yellow wire to GND. The two remaining wires are interchangeable, and both wires can be connected to AC_2 or AC_1.

Connecting Ethernet Cable

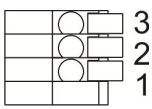
The High Power PoE function is only supported for **GV-SD200**.

Connecting Alarm I/O



Pin	Definition	Pin	Definition
1	Alarm_Out_NC_1	7	Alarm_Out_COM_2
2	Alarm_Out_NO_1	8	GND
3	Alarm_Out_COM_1	9	Alarm_In_4
4	GND	10	Alarm_In_3
5	Alarm_Out_NC_2	11	Alarm_In_2
6	Alarm_Out_NO_2	12	Alarm_In_1

Connecting Audio



Pin	Definition
1	Line_Out
2	GND
3	Line_In

3.5 Accessing the Camera

3.5.1 System Requirements

To perform the GV-IP Speed Dome via web browser, ensure your PC is in good network connection, and use one of the following web browsers.

- Internet Explorer 7.0 or later
- Firefox
- Google Chrome
- Safari

Note: With non-IE browsers, only the **Play** function is available on the live view window.

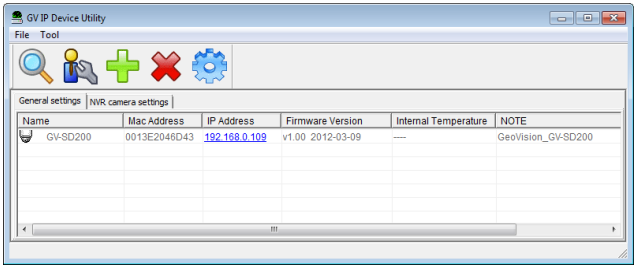
3.5.2 Looking up the IP Address and Logging in

By default, the IP address of your GV-IP Speed Dome is assigned by the DHCP server unless your router does not support DHCP. In this case, the default IP address will be **192.168.0.10**. Follow the steps below to look up the dynamic IP address.

1. Install the GV-IP Device Utility program from the Software CD.

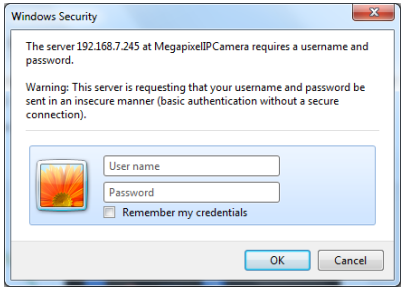
Note: The PC installed with GV-IP Device Utility must be under the same LAN as the camera you wish to configure.

2. On the GV-IP Utility window, click the button to search for the GV-IP Speed Dome. Click the **Name** or **Mac Address** column to sort.



3. Find the camera with its Mac Address to see the IP address.

4. To login, type the IP address in your web browser. A dialog box appears.

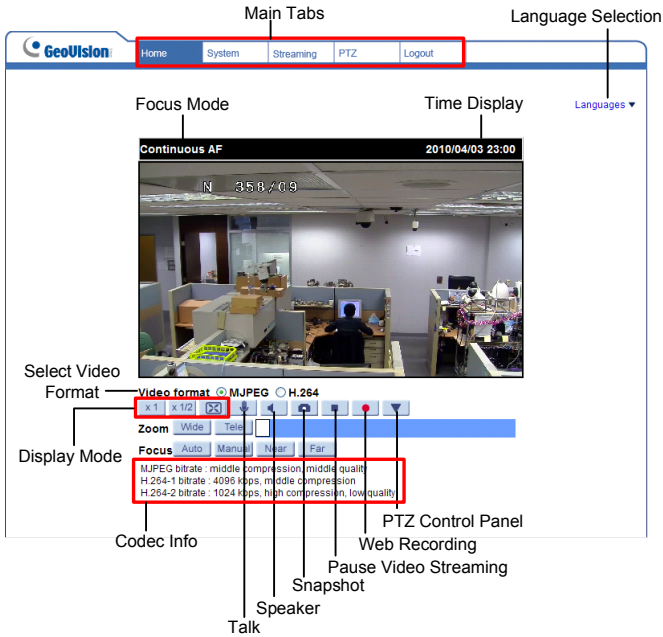


5. Type the default username and password **admin**.
6. Click **OK** to access the Web interface.
7. When accessing the GV-IP Speed Dome for the first time, you must set your browser to allow a one-time installation of DC Viewer onto your computer.

Note: If your router does not support DHCP, the default IP address will be 192.168.0.10. In this case, it is strongly suggested to modify the IP address to avoid IP address conflict with other GeoVision IP device on the same LAN. For details, see *3.1.2 Changing the IP Address, GV-IP Speed Dome GV-SD200 User's Manual* on the Software CD.

3.6 The Web Interface

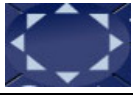
After logging onto the GV-IP Speed Dome, users will see the Home page as shown below:



Note: Refer to *Chapter 4 Administrator Mode*, *GV-IP Speed Dome GV-SD200 User's Manual* on the Software CD for details.

3.7 The PTZ Control Panel

Click the button on the home page. The PTZ Control Panel appears.

Button	Description
	Moves the camera to 8 directions.
	Zooms in. Shortens the apparent distance between the camera and the view.
	Zooms out. Lengthens the apparent distance between the camera and the view.

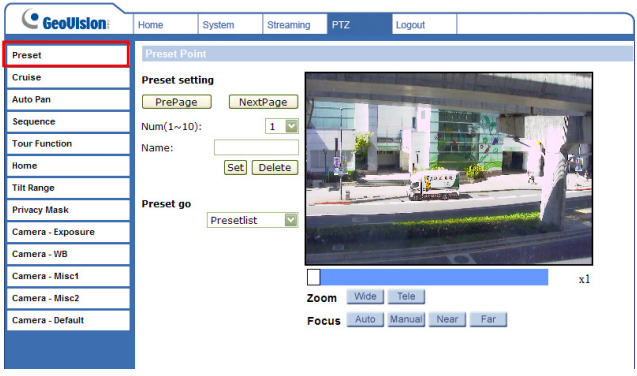
Button	Description
	Focuses in. Changes the sharpness of the view.
	Focuses out. Changes the sharpness of the view.
	Automatically adjusts the focus.
	Enlarges the aperture opening.
	Automatically adjusts the aperture opening.
	Reduces the aperture opening.
 Preset	Moves to a defined Preset point.
 Cruise	Starts a defined Cruise path.
 Sequence	Starts a defined Sequence route.
 PT Speed	Adjusts the pan/tilt speed.

3.8 Setting Presets

You can set up a preset position toward which the dome view moves. Up to **256** preset points can be configured and saved.

Setting a Preset

1. Click the **PTZ** tab and select **Preset** from the left menu of the Web interface.



2. Click the dome view and drag the cursor to a desired position.
3. Use the **Zoom** and **Focus** buttons to adjust the dome view.
4. Use the **Num** drop-down list to select a number to define a Preset point. Click **Pre page** or **Next Page** button to select numbers from 1 to 256.
5. Type a name to describe the selected number in the **Name** field.
6. To create another Preset point, repeat Steps 2 to 5 and select a different preset number.
7. Click **Set** to save the settings.
8. Use the **Preset Go** drop-down list to select a Preset point to test your settings.

Going to a Preset

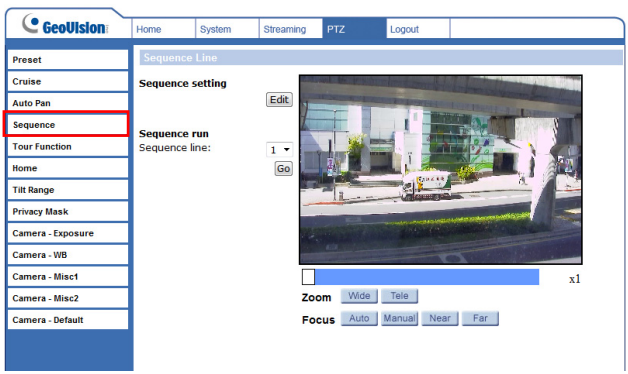
To move the dome view to a previously defined Preset point, click the **Home** tab and click on the **PTZ Control Panel** button. Select the defined number from the **Preset** drop-down list and click the button.

3.9 Setting Sequence

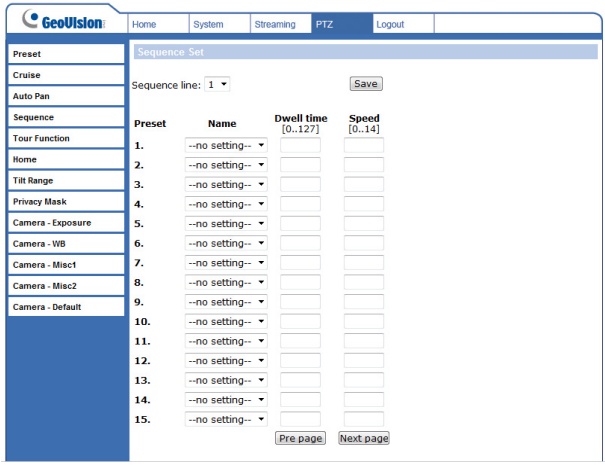
You can have the dome view move in a series of predefined movements. Create a Sequence by linking a number of presets points. Up to **8** Sequences can be created and a minimum of 2 Preset Points must be selected for a Sequence line to work.

Setting a Sequence

1. Click the **PTZ** tab and select **Sequence** from the left menu of the Web interface.



2. Click the **Edit** button under **Sequence Setting**.



3. Use the **Sequence Line** drop-down list to select a Sequence route number to be configured.
4. Use the **Name** drop-down list to select the desired Preset points for the Sequence route.
5. One Sequence line include up to 64 Preset points. Use the **Pre Page** and **Next Page** buttons to reach numbers1 to 64.
6. Type a number in the **Dwell Time** field to set the duration for the dome to stay at this Preset. The duration time ranges from 0 to 127 seconds.
7. Type a number in the **Speed** field to set the speed level at which the dome travels from one Preset to another. The speed level ranges from 0 to 14.
8. Click **Save** to complete the settings.
9. To create another Sequence, repeat Steps 3 to 8 and select a different Sequence line number.

10. Return to the Sequence page. Use the **Sequence Line** drop-down list to select a Sequence route number and click **Go** to test your settings.

Starting and Stopping a Sequence

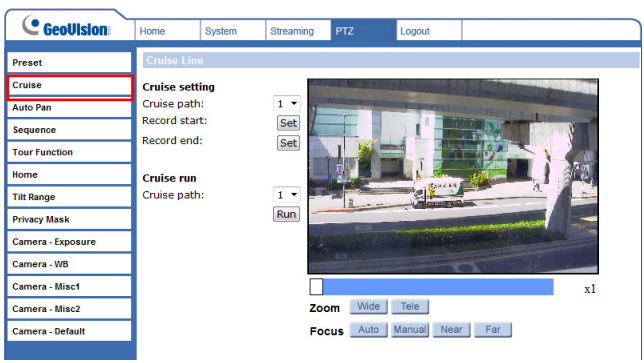
To start the dome view on a Sequence route, click the **Home** tab, click the **PTZ Control Panel** button  and select a **Sequence** number which has been previously set. The dome view will continue moving once a Sequence is started. To stop the movements, click any button on the PTZ Control Panel.

3.10 Setting Cruise

You can set up a path consisting of different directions, angles, and zooms for the GV-IP Speed Dome to follow. Up to **8** Cruises can be created.

Setting a Cruise

1. Click the **PTZ** tab and select **Cruise** from the left menu of the Web interface.



2. Use the **Cruise Path** drop-down list to select a Cruise path number to be configured.
3. Click the dome view and drag the cursor to a desired position as the Start Point of a Cruise path.
4. Click the **Set** button of **Record Start** and start programming the Cruise path by dragging the red cursor on the dome view.
5. Use the **Zoom** and **Focus** buttons to adjust the dome view.
6. Click the **Set** button of **Record End** to quit.
7. To create another Cruise, repeat Steps 2 to 6 and select a different Cruise path number.
8. Use the **Cruise Path** drop-down list to select a Cruise path number and click the **Run** button to test your settings.

Starting and Stopping a Cruise

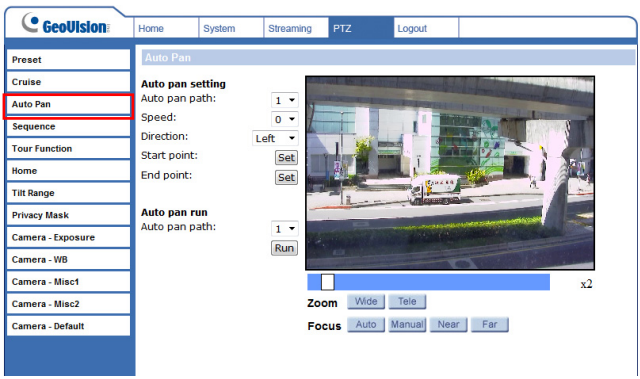
To start the dome view on a Cruise path, click the **Home** tab, click the **PTZ Control Panel** button  and select a **Cruise** number which has been previously set. The dome view will continue moving once a Cruise is started. To stop the movements, click any buttons on the PTZ Control Panel.

3.11 Setting Auto Pan

The GV-IP Speed Dome can pan up to 360° endlessly to survey the horizontal view between 2 pre-defined positions. You can configure up to **4** sets of Auto Pan paths.

Setting an Auto Pan

1. Click the **PTZ** tab and select **Auto Pan** from the left menu of the Web interface.



2. Use the **Auto Pan Path** drop-down list to select an Auto Pan path number to be configured.
3. Use the **Speed** drop-down list to set the speed level from 0 to 3 at which the dome travels from the Start Point to the End Point.
4. Click the dome view and drag the cursor to a desired position. Click the **Set** button of Start Point to save the setting.
5. Click the dome view and drag the cursor to a desired position. Click the **Set** button of End Point to complete the setting.
6. To create another Auto Pan path, repeat Steps 2 to 5 and select a different path number.

Note: The zoom ratio of an Auto Pan's Start Point will persist throughout the whole path.

Starting and Stopping a Auto Pan

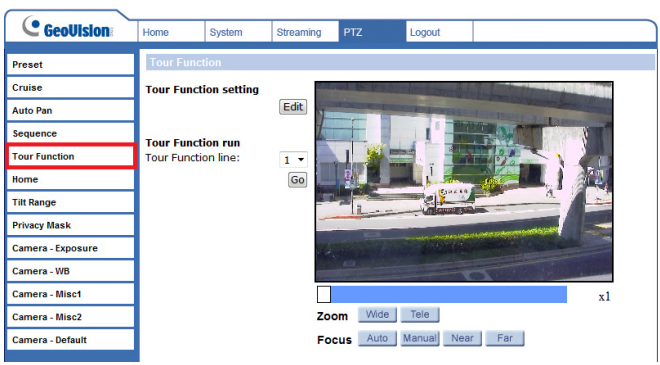
To start the dome view on an Auto Pan path, click the **Run** button on the Auto Pan page. The dome view will continue moving once an Auto Pan is started. To stop the movements, move the cursor on the dome view and drag it to any directions.

3.12 Setting Tour

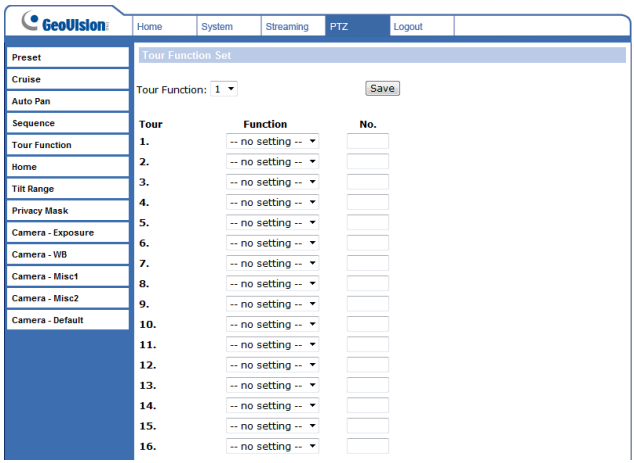
You can set up your GV-IP Speed Dome to move in a combination of Preset, Sequence, Cruise and Auto Pan. You can configure up to **16** Tour routes.

Setting a Tour

1. Click the **PTZ** tab and select **Tour Function** from the left menu of the Web interface.



2. Click the **Edit** button under **Tour Function Setting**.



3. Use the **Tour Function** drop-down list to select a number to be configured.
4. Use the **Function** drop-down list to select a Preset, Sequence, Cruise or Auto Pan.
5. Type a number in the **No.** field to specify the Preset, Sequence, Cruise, and Auto Pan.
6. Click the **Save** button to complete the setting.
7. To create another Tour route, repeat Steps 3 to 6 and select a different Tour Function number.
8. Return to the Tour Function page. Use the **Tour Function Line** drop-down list to select a Tour route number and click **Go** to test your settings.

Starting and Stopping a Tour

To start the dome view on a Tour path, click the **Run** button on the Tour Function page. The dome view will continue moving once a Tour is started. To stop the movements, move the cursor on the dome view and drag it to any directions.

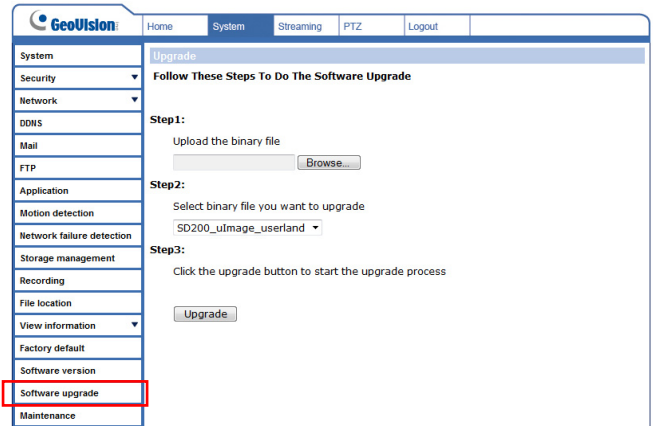
3.13 Upgrading System Firmware

GeoVision periodically releases the updated firmware on the website. Update your camera to the latest firmware through its Web interface.

IMPORTANT:

1. Stop monitoring of the camera.
2. Stop the connection to GV-System.
3. While the firmware is being updated,
   A. the power supply must not be interrupted, and
   B. do not unplug the Ethernet cable if the cable is the source of power supply (Power over Ethernet or PoE supported).
4. The interruption of power supply during updating causes not only update failures but also damages to your camera. In this case, please contact your sales representative and send your device back to GeoVision for repair.
5. Do not turn the power off for 10 minutes after the firmware is updated.

1. Click the **System** tab and select **Software Upgrade** from the left menu.



2. Click the **Browse** button and select one firmware file to be uploaded.

Note: Do not change the upgrade file name, or the system will fail to find the file.

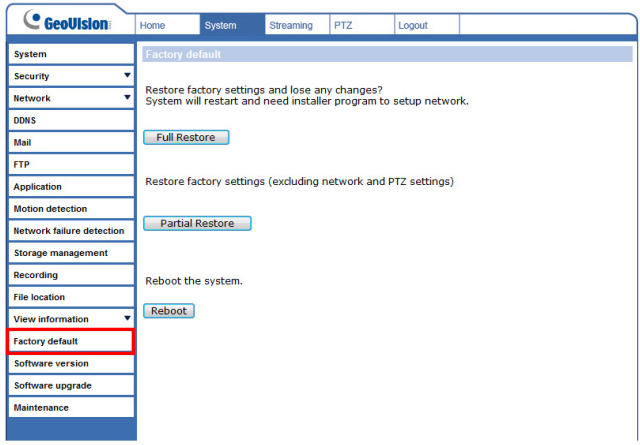
3. Use the drop-down list to select the corresponding type of file you want to upgrade. For example, if the file you uploaded is **GV-SD200_switch_V103_130115**, select **SD200_switch** from the drop-down list.
4. Click the **Upgrade** button.
5. Repeat the above steps for all remaining firmware files. All four firmware files must be upgraded for the camera to function properly.

3.14 Restoring Default Settings

If for any reason the camera is not responding correctly, you can reset it to its factory default settings either directly on the camera or through its Web interface.

Using the Web Interface

1. Click the **System** tab and select **Factory Default** from the left menu.



2. To restore all settings to factory default, click the **Full Restore** button. The system will restart in 30 seconds. Note that the IP address will be restored to default.
3. To restore all settings to factory default except for the network and the PTZ settings, click the **Partial Restore** button. The system will restart in 30 seconds.

Directly on the Camera

To restore to default settings directly on the camera, use a pointy object, such as the tip of a pen to hold down the **Load default** button (Button E below) for about 30 seconds while the power is on. The lens will rotate briefly when load default is completed.