

# Quick Start Guide

## *GV-Panoramic PTZ Camera*



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

PPTZV10-QG-A



© 2016 GeoVision, Inc. All rights reserved.

Under the copyright laws, this manual may not be copied, in whole or in part, without the written consent of GeoVision.

Every effort has been made to ensure that the information in this manual is accurate. GeoVision, Inc. makes no expressed or implied warranty of any kind and assumes no responsibility for errors or omissions. No liability is assumed for incidental or consequential damages arising from the use of the information or products contained herein. Features and specifications are subject to change without notice.

**Note:** No memory card slot or local storage function for Argentina.

GeoVision, Inc.  
9F, No. 246, Sec. 1, Neihu Rd.,  
Neihu District, Taipei, Taiwan  
Tel: +886-2-8797-8377  
Fax: +886-2-8797-8335  
<http://www.geovision.com.tw>

Trademarks used in this manual: *GeoVision*, the *GeoVision* logo and GV series products are trademarks of GeoVision, Inc. *Windows* is the registered trademark of Microsoft Corporation.

February 2016

# Contents

<b>Note for Connecting to GV-VMS .....</b>	<b>ii</b>
<b>Note for Recording.....</b>	<b>iii</b>
<b>Note for Installing Camera.....</b>	<b>iv</b>
<b>Optional Accessories.....</b>	<b>v</b>
<b>1. Introduction.....</b>	<b>1</b>
1.1 Packing List .....	2
1.2 Overview.....	3
<b>2. Installation.....</b>	<b>4</b>
<b>3. Connecting the Camera .....</b>	<b>10</b>
<b>4. Accessing the GV-Fisheye Camera .....</b>	<b>12</b>
4.1 Web Browser .....	12
4.2 Looking Up the Dynamic IP Address.....	13
4.3 Configuring the IP Address.....	15
<b>5. The Integrated Web Interface .....</b>	<b>17</b>
5.1 Fisheye View .....	19
5.1 Speed Dome View.....	21
<b>6. Upgrading System Firmware .....</b>	<b>23</b>
<b>7. Restoring to Factory Default .....</b>	<b>24</b>

## Note for Connecting to GV-VMS

The GV-Panoramic PTZ IP Camera is designed to work with GV-VMS, a video management system. Note the following when the camera is connected to GV-VMS:

1. By default, the images are recorded to the memory card inserted in the GV- Panoramic PTZ IP Camera.
2. Once the camera is connected to the GV-VMS, the resolution set on the GV-VMS 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 is interrupted.

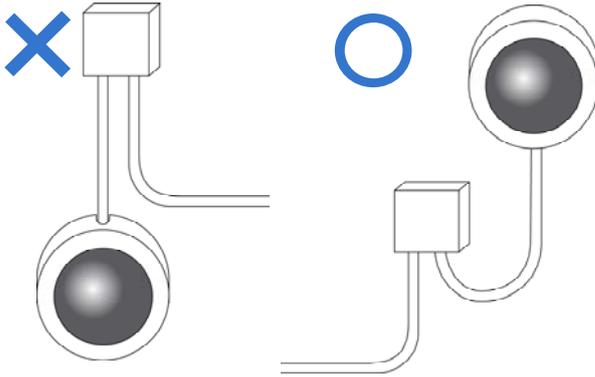
## Note for Recording

1. By default, the images are recorded to the memory cards inserted in the GV-PPTZ Camera. Make sure the **Write recording data into local storage** option (see *4.1.1 Video Settings*, Chapter 4, *GV-Panoramic PTZ Camera User's Manual*) is enabled. If this option is disabled, the camera will stop recording to the memory card while the live view is accessed through Web browsers or other applications.
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 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.
3. 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.

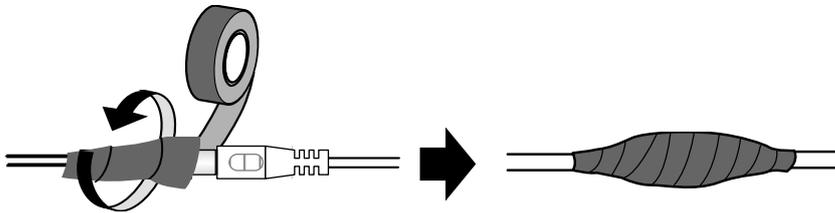
## Note for Installing Camera

When installing **GV-Panoramic PTZ IP Camera**, 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 PoE, 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.
4. The silica gel bag loses its effectiveness when the dry camera is opened. To prevent the lens from fogging up, use the supplied adhesive tap and replace the silica gel bag every time you open the camera, and conceal the gel bag in camera within 2 minutes of exposing to open air.

## Optional Accessories

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

Name	Details
<b>GV-PA901</b> Power over Ethernet (PoE) Adapter	The GV-PA901 is a Power over Ethernet (PoE) adapter designed to provide power to the IP device through a single Ethernet cable to GV-PPTZ7300.
<b>GV-Mount Accessories</b>	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.
<b>GV-POE Switch</b>	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 numbers and types of ports.
<b>Power Adapter</b>	Contact your sales representative for the countries and areas supported.

# 1. Introduction

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

## 1.1 Packing List

- Panoramic PTZ Camera



- Data Cable



- Mounting Bracket



- Mounting Cap



- Tube



- 2 mm Hex Key



- 3 mm Hex Key



- 5 mm Hex Key



- Rubber ring



- RJ-45 Connector



- Desiccant Pack x 2
- GV-IPCAM H.264 Software DVD
- GV-NVR Software DVD
- Warranty Card

## 1.2 Overview



No.	Name	Function
1	Status LED	Flashes when the camera is powering on and loading default settings.
2	Default Button	Resets all configurations to default factory settings.
3	Speed Dome SD Card Slot	Inserts a micro SD card (SD/SDHC, version 2.0, Class 10) to store recording data from the speed dome.
4	Fisheye Lens	Receives image inputs.
5	Speed Dome Lens	Receives image inputs.
6	Desiccant Pack	Keeps the camera housing dry.
7	Fisheye SD Card Slot	Inserts a micro SD card (SD/SDHC, version 2.0, Class 10) to store recording data from the fisheye camera.

**Note:** The desiccant pack loses effectiveness after you open the camera cover. To prevent the lens from fogging up, it is highly recommended to replace the desiccant pack every time you open the camera. Ensure to insert a new desiccant pack and fasten the camera cover within 2 minutes of opening the desiccant pack.

## 2. Installation

GV-Panoramic PTZ Camera can be mounted on the ceiling using the supplied Straight Tube Mount. Make sure the ceiling has enough strength to support the camera and the mount.



**Required items:**

- Screws for ceiling x 4 (Self-prepared)

**Optionally extend with:**

- GV-Mount702

### Recommended Installation Height

It is recommended to install the camera at a height of 6.5 m (21 ft), which allows the camera to monitor a radius of up to 25 m (82 ft).

Installation Height	Max. Horizontal Distance (Radius)
6.5 m (21 ft)	25 m (82 ft)
5 m (16 ft)	20 m (66 ft)
4 m (13 ft)	17 m (56 ft)
3 m (10 ft)	13 m (43 ft)

1. Insert the desiccants to the camera.

A. Remove the camera cover using the 3 mm hex key.



B. Insert your SD cards into the SD card slots for the fisheye camera and the speed dome.

Speed Dome SD Card Slot



Fisheye SD Card Slot



C. Insert one desiccant pack to the indicated place.



---

**IMPORTANT:** Be sure the desiccant is concealed in the camera within 2 minutes of opening the desiccant pack.

---

D. Secure the camera cover with the 3 mm hex key. Make sure the first two screws to be tightened are diagonal to each other.

2. Assemble the supplied mounting bracket, tube and mounting cap by rotating the parts together.

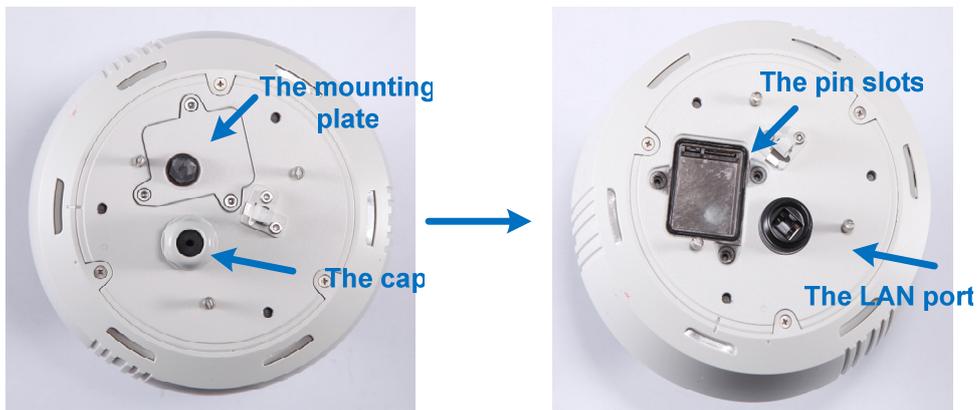


3. Make sure the tubes are properly screwed. Tighten the screws using the 2 mm hex key.



4. Connect the cables to the camera.

- A. At the back of the camera, remove the cap and use the 3 mm hex key to remove the mounting plate.



## 2 Installation

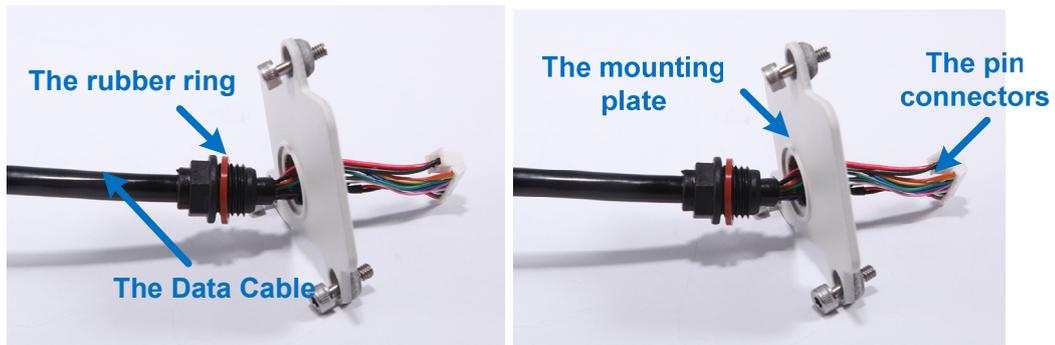
- B. Slide the cap and components through the Ethernet cable as shown below, and attach the supplied RJ-45 connector to the cable.



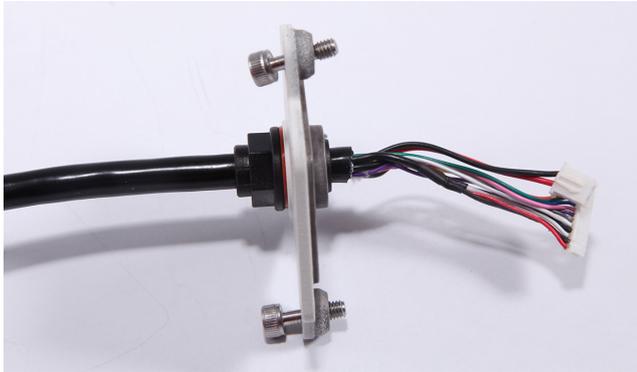
- C. Insert the Ethernet cable to the LAN port, move the cap and the components toward the LAN port, and secure the cap tightly.



- D. Slip the rubber ring on the data cable and then pass the pin connectors of the data cable through the mounting plate.



- E. Fasten the data cable with the mounting plate and the rubber ring.

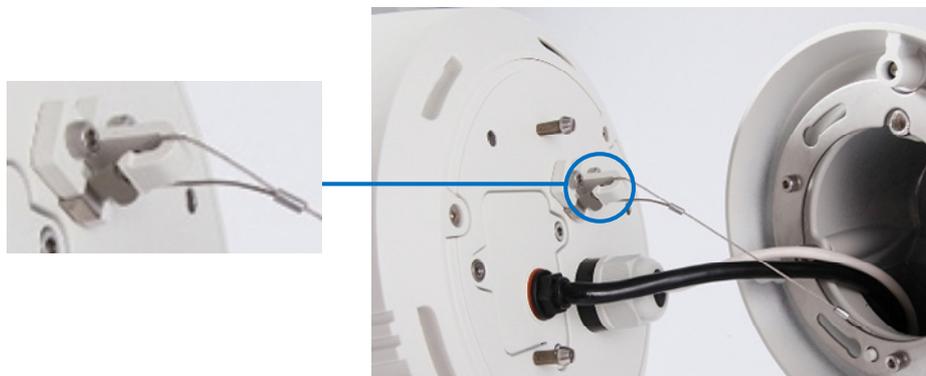


- F. Insert the pin connectors of the data cable to the indicated area.



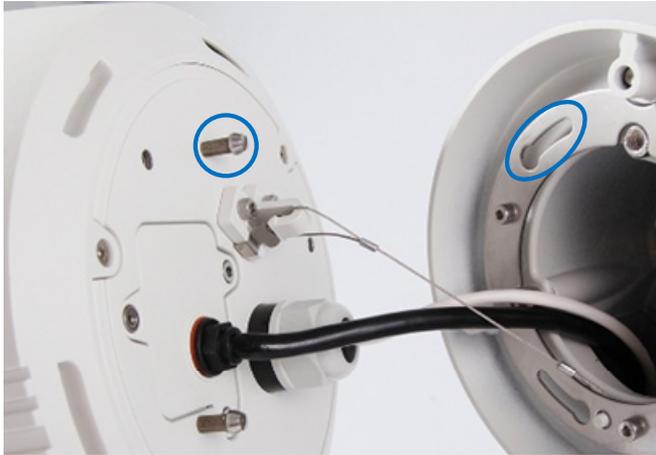
- G. Secure the mounting plate with the 3 mm hex key.

5. Thread the cables through the tube.
  6. Secure the camera with the mounting cap.
- A. Secure the safety lock.



## 2 Installation

- B. Push the rivets into the holes on the mounting cap and rotate clockwise to lock the position.



- C. Rotate the camera onto the mounting cap and secure using the 5 mm hex key.

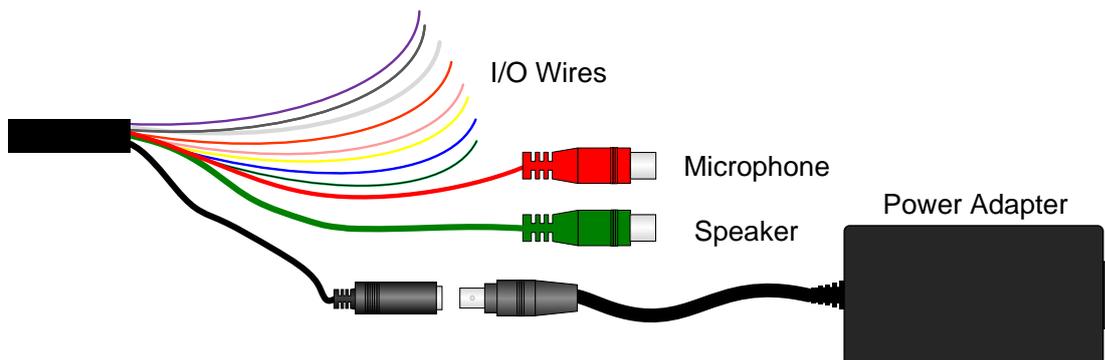


7. Secure the assembled camera to the ceiling with 4 self-prepared screws.

### 3. Connecting the Camera

The GV-PPTZ7300 comes with a data cable that allows you to connect to the power adapter, microphone, speaker, and any I/O devices. Follow the steps below to connect the camera.

1. Connect Power using one of the following methods:
  - Connect the Power Adapter to the camera.
  - Use the Power over Ethernet (PoE) function and the power will be provided over the network cable. See *Connecting the GV-PA901 PoE Adapter* section below.
2. Connect a standard network cable to the Ethernet cable of the camera. See the *Installation* section for details.
3. Optionally connect I/O devices, speaker and microphone to the camera. You can connect up to 4 alarm input and 1 output devices. See *I/O Wire Definition* section below.



---

**Note:**

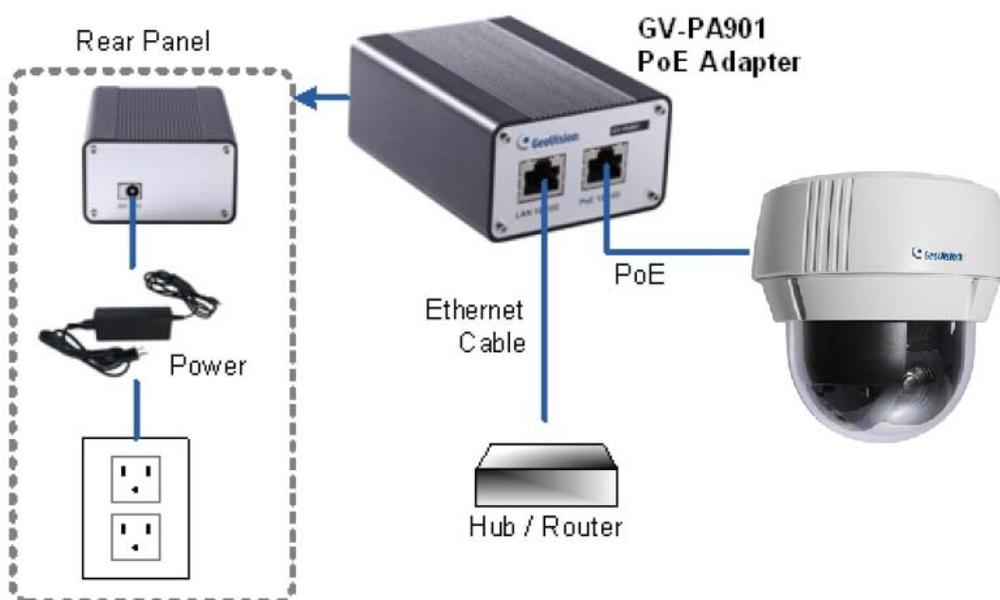
1. The Power Adapter is an optional device.
  2. Optional GV-PA901 PoE Adapter is required for applying PoE function.
-

I/O Wire Definition

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

Connecting the GV-PA901 PoE Adapter

1. Connect one end of an Ethernet cable to the **LAN 10 / 100 Port** on the GV-PA901 and the other end to 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 GV-PPTZ7300.
3. Connect the GV-PA901 Power Adapter to the power outlet.



## 4. Accessing GV-Panoramic PTZ 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.

<b>OS</b>	<b>64-bit</b>	Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2
<b>GV-VMS</b>		V15.10.1.0 with patch files or later versions
<b>Browser</b>		<ul style="list-style-type: none"> <li>• Internet Explorer 7.x or later</li> <li>• Firefox</li> <li>• Google Chrome</li> <li>• Safari</li> </ul>

---

**Note:**

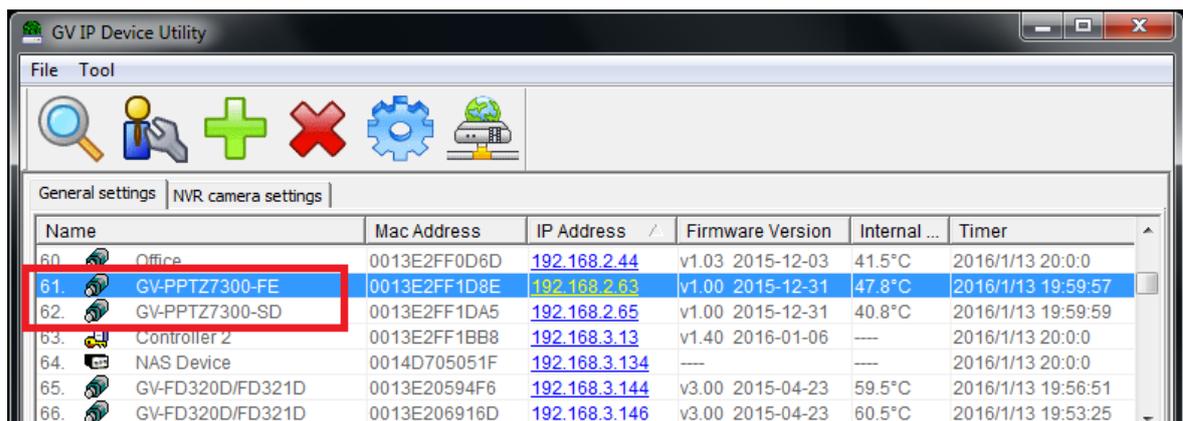
1. If you are using Microsoft Internet Explorer 8.0 or later, additional settings are required. Refer to *Settings for Internet Explorer 8 or later*, Appendix A, *GV-Panoramic PTZ Camera User's Manual*.
  2. When using non-IE browsers,
    - a. The following functions are not supported: Motion Detection, Tampering Alarm, Visual Automation, Text Overlay, and Two-Way Audio. To see the functions available on live view windows using non-IE browsers, see *Figure 3-11*, Chapter 3, *GV-Panoramic PTZ Camera User's Manual*.
    - b. RTSP streaming must be enabled. By default, RTSP streaming is enabled. See *4.3.8 RTSP/ONVIF* to see details on RTSP settings, Chapter 4, *GV-Panoramic PTZ Camera User's Manual*.
    - c. Only MJPEG codec is supported.
-

## 4.2 Looking Up the Dynamic IP Address

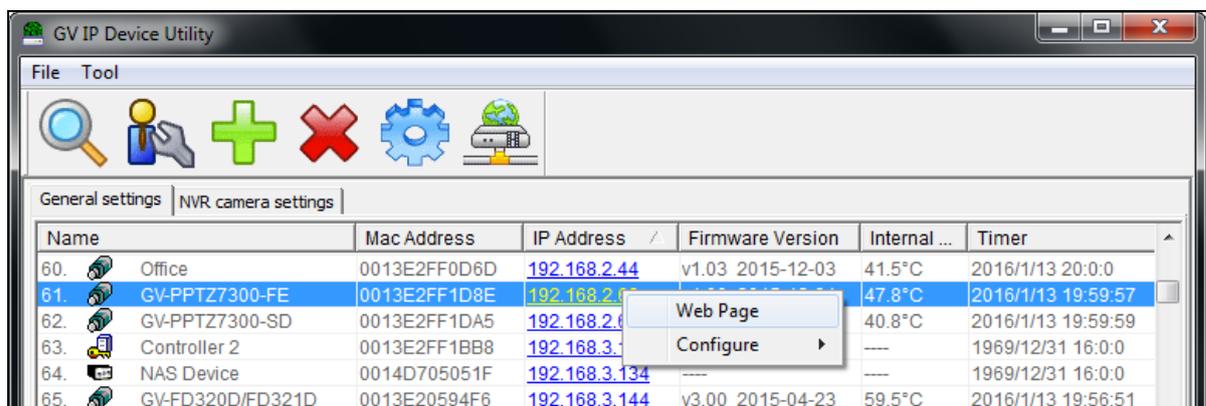
By default, when GV-Panoramic PTZ camera is connected to LAN with a DHCP server, it is automatically assigned with a dynamic IP address. Follow the steps below to look up its IP address.

**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. You will see two devices listed: **GV-PPTZ7300-FE** and **GV-PPTZ7300-SD**.



3. Click on the IP address of **GV-PPTZ7300-FE** and select **Web Page**.



4. The login page appears.



GeoVision *IP CAMERA SETUP*

Login:

Password:

Apply

© 2015 GEOVISION INC. ALL RIGHTS RESERVED

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

### 4.3 Configuring the IP Address

By default, GV-Panoramic PTZ Camera, connected to LAN without a DHCP server, is assigned with the following static IP addresses.

- Integrated interface and fisheye interface: **192.168.0.10**
- Speed dome interface: **192.168.0.11**

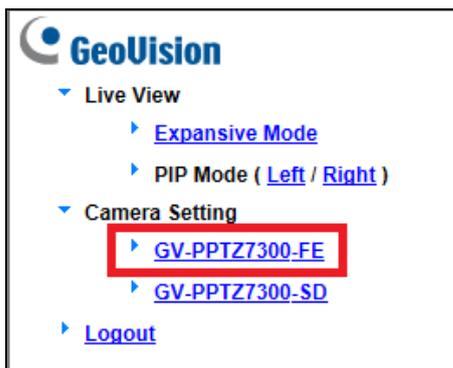
Follow the steps below to assign a new IP address for both the fisheye and speed dome interfaces to avoid IP conflict with other GeoVision devices.

---

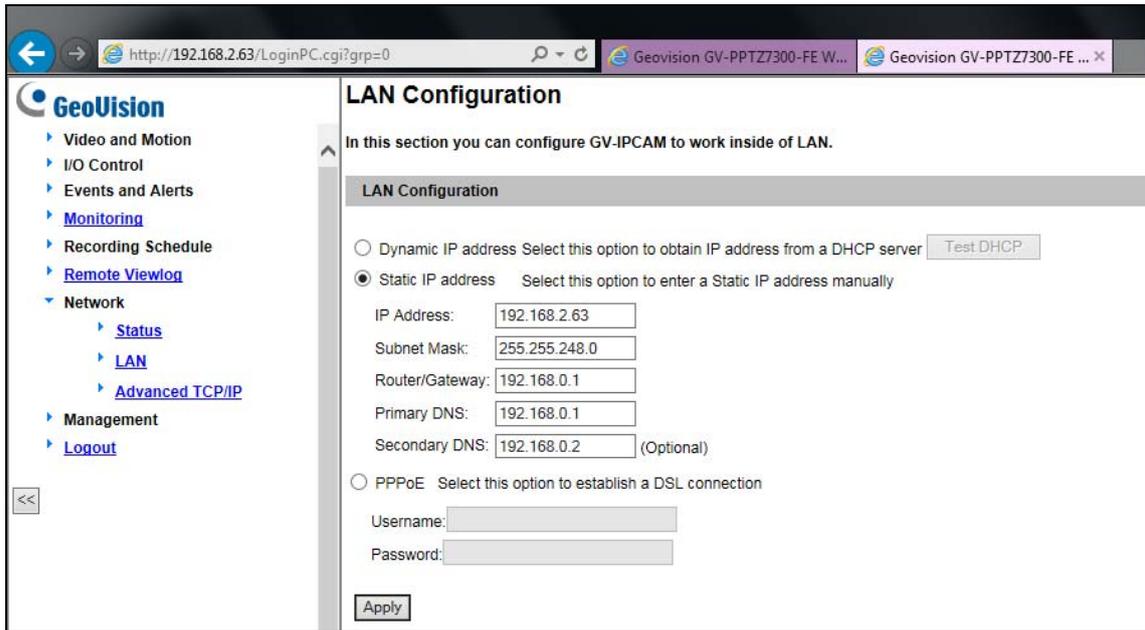
**Note:**

1. The computer used to set the IP address must be under the same network with the camera.
  2. If your router supports the DHCP server, the camera will obtain a dynamic IP address from the DHCP server each time it connects to the LAN, instead of using 192.168.0.10 or 192.168.0.11.
- 

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. In the left menu, select **GV-PPTZ7300 – FE** under Camera Setting. You will be directed to the Web interface of the fisheye camera.



4. Type the default value **admin** again and click **Apply**



5. Select **Static IP address**. Type IP Address, Subnet Mask, Router/Gateway, Primary DNS and Secondary DNS in the **Configure connection parameters** section.
6. Click **Apply**. The integrated interface and fisheye interface are now accessible by entering the assigned IP address on the Web browser.
7. Open another web browser, and type the default IP address of the speed dome interface <http://192.168.0.11>.
8. Repeat steps 4 to 7 to assign a new IP address.

---

### Important:

1. If **Dynamic IP Address** or **PPPoE** is enabled, you need to know which IP address the camera will get from the DHCP server or ISP to log in. If your camera is installed in a LAN, use the GV-IP Device Utility to look up its current dynamic address. See *Checking the Dynamic IP Address, Chapter 2, GV-Panoramic PTZ IP Camera's User Manual*.  
If your camera uses a public dynamic IP address, via PPPoE, use the Dynamic DNS service to obtain a domain name linked to the camera's changing IP address first. For details on Dynamic DNS Server settings, see *Advanced TCP/IP, Chapter 4, GV-Panoramic PTZ IP Camera's User Manual*.
  2. If **Dynamic IP Address** and **PPPoE** is enabled and you cannot access the unit, you may have to reset it to the factory default settings and then perform the network settings again. Refer to section 7 to see how to restore to factory default settings
-

## 5. The Integrated Web Interface

Once you log in the Web interface, you will see the live views of both the fisheye and the speed dome.

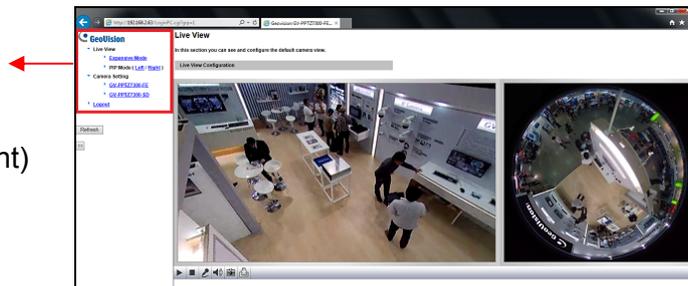
To access the individual Web interface of the fisheye camera and the speed dome, select **GV-PPTZ7300-FE** or **GV-PPTZ7300-SD** under Camera Setting. You will be guided to its login page.

### ▼ Live View

- ▶ Expansive Mode
- ▶ PIP Mode (Left / Right)

### ▼ Camera Setting

- ▶ GV-PPTZ7300 – FE
- ▶ GV-PPTZ7300 - SD



### Expansive Mode

Under the Expansive Mode, the speed dome live view is placed on the right and the fisheye live view is placed on the left.



2 MP Speed Dome

5 MP Fisheye Camera

### PIP Mode (Left / Right)

Under the PIP Mode, the fisheye live view appears as an inset window inside the speed dome live view. You can select **Left** to place the fisheye inset window on the lower-left corner or select **Right** to place it on the lower-right corner.



2 MP Speed Dome

5 MP Fisheye Camera

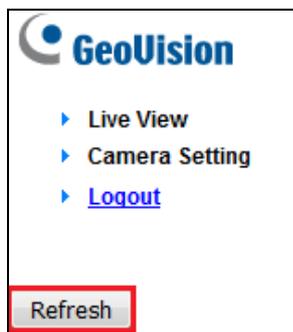
### Camera Settings

You can link to the individual Web interface of the fisheye camera and the speed dome camera.

- **GV-PPTZ7300-FE:** Refer to 3.2 *The Fisheye and Speed Dome Interface*, Chapter 3 and 4, *GV-Panoramic PTZ Camera User's Manual*, to see instructions on the fisheye Web interface.
- **GV-PPTZ7300-SD:** Refer to 3.2 *The Fisheye and Speed Dome Interface*, Chapter 3 to 5, *GV-Panoramic PTZ Camera User's Manual*, to see instructions on the speed dome Web interface.

---

**Tip:** After making changes to the individual Web interfaces of the fisheye camera or speed dome, be sure to click the Refresh button for the changes to be applied to the integrated interface immediately without having to re-login.



## 5.1 Fisheye View

To enable the fisheye options, right-click the fisheye live view and select **Geo Fisheye**. Once enabled, you can click on the fisheye live view, and the camera will turn toward the selected location.



Right-click the image again and select **Fisheye Option** to see the following options.

- **Image Alignment:** By default, the image should be properly aligned already. If not, drag the dotted **circle** to adjust the image alignment.
- **Camera Mode:** You can choose among two view modes.
  - **Fisheye View:** Shows the circular source image.



- **360 View:** Composed of one 360° panoramic view.



- **Camera Position:** This option is only available under 360 View. You can temporarily set the camera position to **Ground** instead of the default **Ceiling** if you want to test the camera view prior to installing the camera on the ceiling.

## 5.2 Speed Dome View



No.	Name	Function
1	Play	Plays the live video of the fisheye camera and the speed dome.
2	Stop	Stops playing video from the fisheye camera and the speed dome.
3	Microphone	Talks to the surveillance area from the local computer.
4	Speaker	Listens to the audio around the camera.
5	Snapshot	Takes a snapshot of the <b>speed dome</b> live view.
6	File Save	Records live video of the <b>speed dome</b> to the local computer.

## 6. Upgrading System Firmware

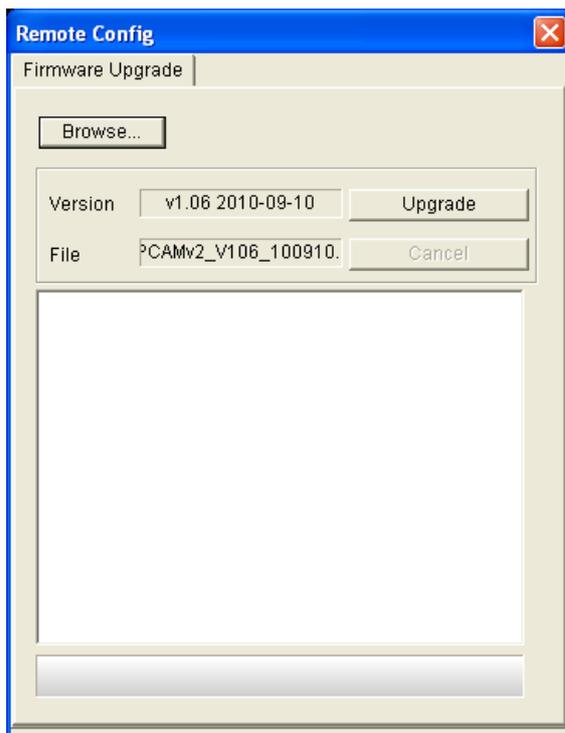
GeoVision periodically releases the updated firmware on the website. To load the new firmware into the GV-Panoramic PTZ Camera, follow the instructions below.

---

**Important:** For GV-PPTZ7300, you need to go through the firmware update process twice: once for the fisheye camera and once for speed dome.

---

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



2. Click the **Browse** button to locate the firmware file (.img) saved at your local computer.
3. 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

1. In the left menu, select **Management** and select **Tools**.
2. Under the **System Settings** section, click the **Load Default** button.

---

**Note:** Clicking the **Load Default** button on either the fisheye or speed dome interface will cause the entire camera to return to the factory settings.

---

### 7.2 Directly on the Camera

1. Use the supplied torx wrench to unscrew and remove the camera cover.
2. Hold down the **Load Default** button.



3. Release the default button when the status LED blinks.
4. When the status LED fades, the process of loading default settings is completed and the camera reboots automatically.