Quick Start Guide

GV-Video Server

2012/09
English

VS04111214-QG-A

1 Introduction

Welcome to the *GV-Video Server Quick Start Guide*. In the following sections, you will learn about the basic installations and configurations of the GV-Video Server (GV-VS04H / VS11 / VS12 / VS14). For a detailed user's manual, see *GV-Video Server User's Manual* on the GV-Video Server software CD/DVD.

Packing List

GV-VS04H / GV-VS14

- 3.5 mm Stereo to RCA Cable x 2
- DC Male-to-Male Cable x 1

- AC Power Cord x 1
- Power Adaptor x 1
- Conical Anchor x 4
- Wall Hook x 1
- Screw x 4
- GV-Video Server Software CD/DVD x 1
- GV-NVR Software CD/DVD x 1

Note: The DC Male-to-Male Cable is used to power on the camera through the GV-Video Server. You can also optionally purchase three more DC Male-to-Male Cables and one DC 1-Male to 4-Female Cable to power on four cameras through the GV-Video Server.

DC 1-Male to 4-Female Cable   DC Male-to-Male Cable

GV-VS11

- Power Adaptor x 1
- GV-Video Server Software CD/DVD x 1
- GV- NVR Software CD/DVD x 1

GV-VS12

- I/O Cable with RJ-45 Connector x 1

- Sticker (for positioning conical anchors) x 1
- AC Power Cord x 1
- Power Adaptor x 1
- Wall Hook x 1
- Screw x 4
- Conical Anchor x 4
- GV-Video Server Software CD/DVD x 1
- GV-NVR Software CD/DVD x 1

Options

GV-GPS Receiver	The GV-GPS Receiver is a Global Position System receiver. With the GV-GPS Receiver, you can perform GPS tracking and location verification of the GV-Video Server. Two types of interfaces are available: UART (for GV-VS04H / GV-VS14) and RS-232 (for GV-VS12).
GV-Relay V2	Working with the GV-Relay V2, the GV-Video Server is capable of driving the loads of relay outputs over 5 volts.
GV-Storage System	The iSCSI storage system allows you to record files over the Internet.
GV-WiFi USB Adaptor	The WiFi USB Adaptor is designed to connect the GV IP devices, such as GV-Video Server or GV-Compact DVR, to the wireless network.
GV-PA191 PoE Adaptor	The GV-PA191 is designed to provide power to the IP device through a single Ethernet cable. The GV-PA191 is only supported by GV-VS04H, GV-VS12 and GV-VS14.
GV-VR605A DC Voltage Regulator	With the GV-VR605A, you can install GV-Video Server in the car. The GV-Video Server will supply and maintain a 12V voltage to the GV-Video Server and its connected cameras.

GV-VS04H / GV-VS14

Access Control Series

The GV-Video Server can work with the Wiegand-interface card reader to send cardholder data to the central monitoring stations Center V2 and VSM, as well as GV-System (DVR). The following devices are only supported by GV-VS04H and GV-VS14.
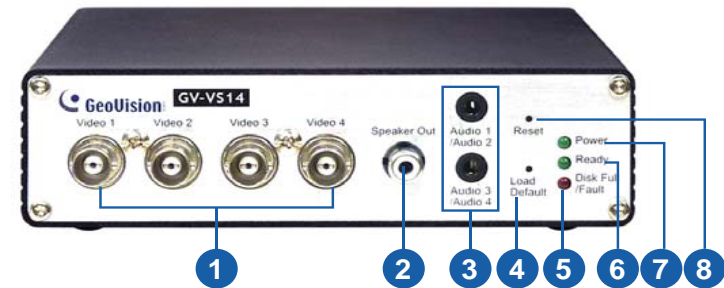
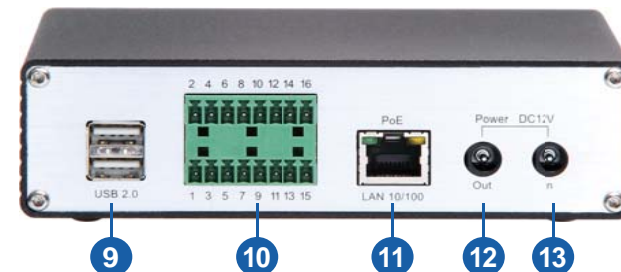|	
GV-Reader	GV-Reader includes transmit-receive antenna and electronics. Featured with both Wiegand and RS-485 outputs, the unit is compatible with any standard access control panel.
GV-R1352 Card Reader	The GV-R1352 is a card reader designed to recognize identification cards. Featured with the Wiegand and RS-485 outputs, the unit can be connected to any standard access control panel. The GV-R1352 comes with a weather sealed and IP66 compliant housing for outdoor use.

Front View

Rear View

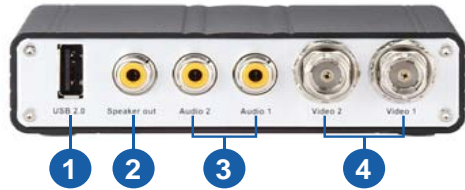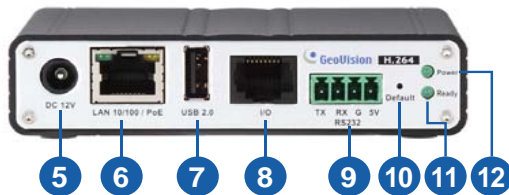| No.	Name	Function
1	Video Input	4 plugs for video inputs.
2	Speaker Output	A plug for the speaker device.
3	Audio Input	Each plug is for 2 audio inputs.
4	Default Button	It resets all configurations to their factory settings. See *7 Restoring to Default Settings* in the *Quick Start Guide*.
5	Disk Full/Fault LED	This LED is on, indicating the hard drive is full or faulty.
6	Ready LED	This LED is on, indicating the GV-Video Server is ready for connection.
7	Power LED	This LED is on, indicating the power is supplied.
8	Reset	It reboots the GV-Video Server, and keeps all current configurations.
9	USB Port	2 USB ports for installing portable storage devices.
10	Terminal Block	The connectors for digital input, relay output, PTZ camera, Wiegand device and GPS module control.
11	Ethernet Port	A plug for a 10/100 Ethernet or PoE.
12	Power Out	A plug to power on the camera, by using a DC Male-to-Male Cable, directly through the GV-Video Server. Note: When PoE is applied, you cannot power on the camera through the GV-Video Server.
13	Power In	A plug to power on the GV-Video Server.

GV-VS11

Front View   Rear View
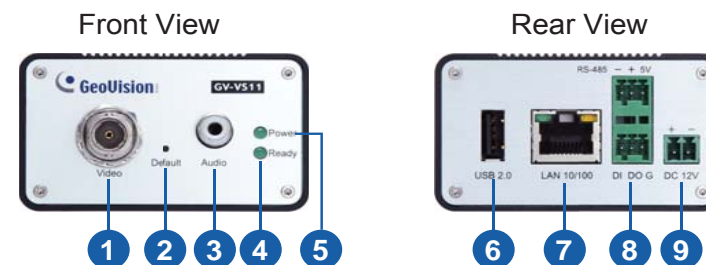
| No.	Name	Function
1	Video Input	1 plug for video input.
2	Default Button	It resets all configurations to their factory settings. See *7 Restoring to Default Settings* in the *Quick Start Guide*.
3	Audio Input	1 plug for audio input.
4	Ready LED	This LED is on, indicating the GV-Video Server is ready for connection.
5	Power LED	This LED is on, indicating the power is supplied.
6	USB Port	1 USB port for installing portable storage device.
7	Ethernet Port	A plug for inserting an Ethernet cable to build the network connection.
8	Terminal Block	The connectors for digital input, digital output and PTZ camera control.
9	Power In	A plug to power on the GV-Video Server.

GV-VS12

Front View

Rear View

No.	Name	Function
1	USB Port	1 USB port for installing the portable storage device.
2	Speaker Output	A plug for the speaker device.
3	Audio Input	2 plugs for audio inputs.
4	Video Input	2 plugs for video inputs.
5	Power In	A plug to power on the GV-Video Server.
6	Ethernet Port	A plug for inserting an Ethernet cable to build the network connection.
7	USB Port	1 USB port for installing the portable storage device.
8	I/O / PTZ Port	A port for digital input, relay output and PTZ camera control. Insert the I/O Cable with RJ-45 Connector to this port.
9	RS-232 Terminal Block	The connectors for GPS module control.
10	Default Button	It resets all configurations to their factory settings. See *7 Restoring to Default Settings* in the *Quick Start Guide*.
11	Ready LED	This LED is on, indicating the GV-Video Server is ready for connection.
12	Power LED	This LED is on, indicating the power is supplied.

These instructions describe the basic connections to install the GV-Video Server on the network. Here we use **GV-VS04H** as an example to demonstrate the steps.
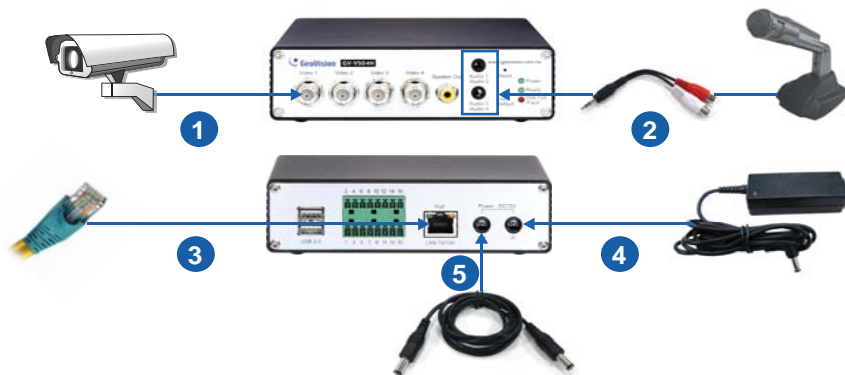
1. Connect your camera's video output to the BNC video input.
2. Connect the microphone to the RCA audio input using the 3.5 mm Stereo to RCA Cable.
3. Connect the hub or switch on the LAN to the unit's 10/100 Mbps port.
4. Connect power using one of the following methods:
   - Use the supplied power adapter, connect to power.
   - Use the Power over Ethernet (PoE) function. The power is provided over the network cable.
5. Optionally connect the DC Male-to-Male Cable to power on the camera through the GV-Video Server.
6. Wait until both Power and Ready LEDs are on and then you can access its Web interface. See *4. Accessing the Camera* later in the *Quick Start Guide*.

> Note: 1. The GV-VS11 does not support PoE function.
> 2. The DC Male-to-Male Cable and 3.5 mm Stereo to RCA Cable are only supplied for GV-VS04H and GV-VS14.
> 3. The GV-Video Server cannot work with the microphone requiring power from the unit. Use the microphone that has external power supply.
> 4. When PoE is applied, you cannot power on the camera through the GV-Video Server.

System Requirement

To access the Web interface of the GV-Video Server, it is required to use Microsoft Internet Explorer 7.x or later.

> **Note:** For the users of **Internet Explorer 8**, additional settings are required. For details, see *Appendix C* in *GV-Video Server User's Manual* on the software DVD.

Checking the IP Address and Logging In

By default, the IP address of your GV-Video Sever 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 IP address and access the Web interface.

1. Install the GV-IP Device Utility program included on the Software DVD.

> **Note:** The PC installed with GV-IP Device Utility must be under the same LAN with the GV-Video Server you wish to configure.

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.
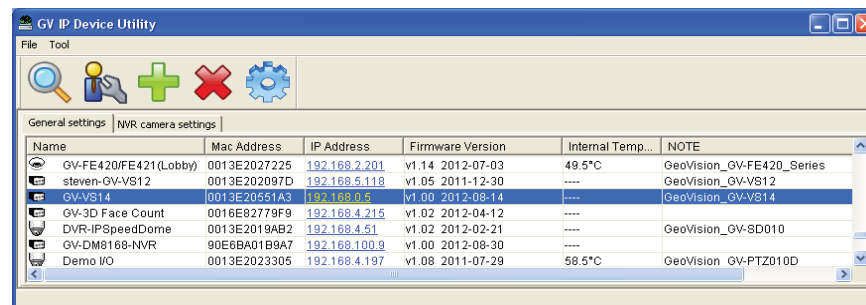
3. Find the GV-Video Server with its Mac Address to see the IP address.

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-Video Server for the first time, you must set your browser to allow a one-time installation of GeoVision's 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 2.3 Changing the IP Address, GV-Video Server User's Manual on the Software DVD.

Live View

In this section you can see and configure the default camera view.

Live View Configuration

| No.	Name	Function
1	Play	Plays live video.
2	Stop	Stops playing video.
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 live video.
6	File Save	Records live video to the local computer.
7	Full Screen	Switches to full screen view. Right-click the image to have these options: **Snapshot**, **PIP**, **PAP**, **Zoom In** and **Zoom Out**.
8	Control Panel	Displays the camera information, video settings, audio data rate, I/O device status, images captured upon alarm, and GPS location of the camera.
9	I/O Control	Starts the **I/O Control Panel** or the **Visual Automation**.
10	PTZ Control	Starts the **PTZ Control Panel** and the **Visual PTZ**.
11	Change Camera	Sets the desired camera for display.
12	Show System Menu	Brings up these functions: **Alarm Notify**, **Video and Audio Configuration**, **Remote Config**, **Show Camera Name** and **Image Enhance**.

For detailed operations, see *Accessing the GV-Video Server, Chapter 3, GV-Video Server User's Manual* on the software DVD.

GeoVision will periodically release the updated firmware on the website. To load the new firmware into the GV-Video Server, read the important notes below and then follow the instructions.

Important:

1. 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).

2. Do not turn the power off within 10 minutes after the firmware is updated.

3. If you use the IP Device Utility for firmware upgrade, the computer used to upgrade firmware must be under the same network of the GV-Video Server.

1. In the Live View window, click the **Show System Menu** button and select **Remote Config**. This dialog box appears.
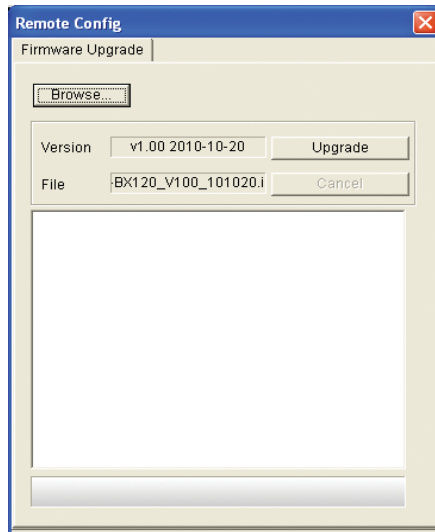
2. Click the **Browse** button to locate the firmware file (.img) saved at your local computer.

3. Click the **Upgrade** button to start the upgrade.

WARNING: The interruption of power supply during updating causes not only update failures but also damages to the camera. In this case, please contact your sales representative and send your device back to GeoVision for repair.

For details on upgrading system firmware, see *Advanced Applications, Chapter 6, GV-Video Server User's Manual* on the software DVD.

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

Using the Web Interface:

1. On the left menu of Web interface, select **Management** and select **Tools**. The Additional Tools dialog appears.

2. Click the **Load Default** button in the System Settings section.
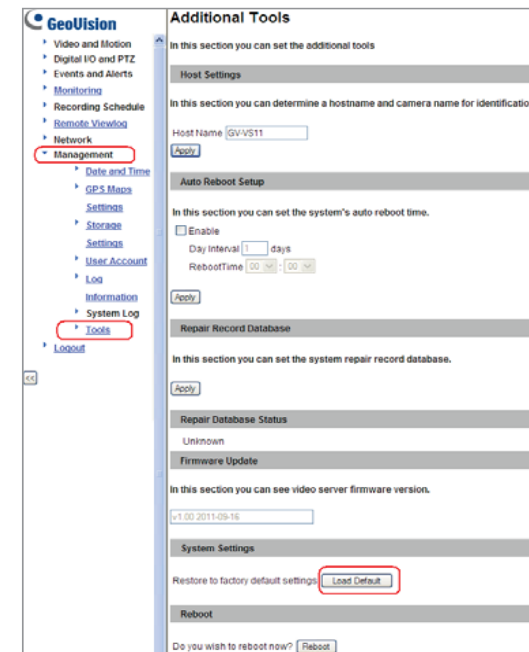
Directly on the GV-Video Server:

GV-VS04H / GV-VS14

1. Press and then release the **Reset** button immediately.

2. Press and hold the **Load Default** button until all 3 LEDs (Power, Ready and Disk Full/Fault) are on. This may take about 30 seconds.

3. Release the **Load Default** button. The process of loading default values is complete, and the GV-Video Server starts rebooting itself with all 3 LEDs turning off.

4. Wait until the Power and Ready LEDs turn on again. After this, all the settings are returned to default values.

GV-VS11

GV-VS12

1. Unplug and plug the power cable to start.

2. Press and hold the **Default** button until the Ready LED blinks. This may take about 30 seconds. The Ready LED will blink twice.

3. Release the **Default** button. The process of loading default values is complete, and the GV-Video Server starts rebooting itself with the 2 LEDs turning off.

4. Wait until the Power and Ready LEDs turn on again. After this, all the settings are returned to default values.

Note: Before the **Ready LED** is on again, do not unplug the power cable; otherwise the loading of default values will fail.

GV-VS04H / GV-VS14

The 16-pin terminal block, located on the rear panel, can be used to develop applications for motion detection, event alerts via E-mail and FTP, center monitoring through Center V2 and VSM, PTZ control, Wiegand-interface card reader and a variety of other functions.
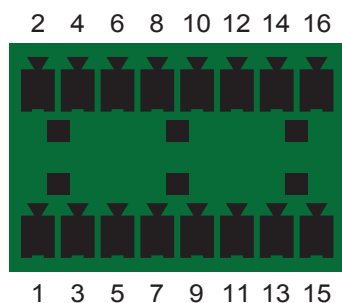
Pin Assignment

The table below lists the pin assignment for the terminal block.

Pin	Function	Pin	Function
1	Relay Output 1	9	DC 5V Out for GV-Relay Module, or GPS Module
2	Digital Input 1	10	Ground, or GPS Ground
3	Relay Output 2	11	RS 485+
4	Digital Input 2	12	Wiegand D0, or GPS RX
5	Relay Output 3	13	RS 485-
6	Digital Input 3	14	Wiegand D1, or GPS TX
7	Relay Output 4	15	Ground
8	Digital Input 4	16	DC 12V Out for Wiegand Card Reader

Note: To connect the GPS module, use the Pin 9 for power supply, Pin 10 for ground, Pin 12 for GPS RX and Pin 14 for GPS TX.

GV-VS11

The terminal block on the rear panel of GV-VS11 provides one digital input and output, an RS-485 interface and auxiliary power.
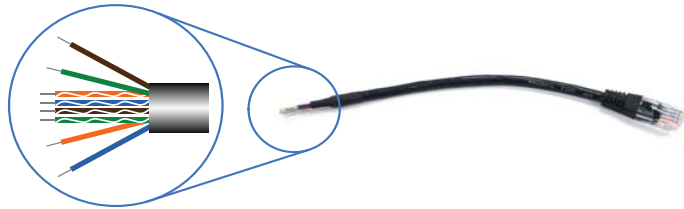
Pin Assignment

The table below lists the pin assignment for the terminal block.

Pin	Function
RS-485-	RS-485-
RS-485+	RS-485+
5V	DC 5V Out
DI	Digital Input
DO	Digital Output
G	Ground

GV-VS12

GV-VS12 provides the **I/O Cable with RJ-45 Connector** for the extensible connection to I/O devices and PTZ cameras. A RJ-45 connector and a bundle of shielded wires are on the each end of the cable.

Pin Assignment

The table below lists the pin assignment for the shielded wires of the I/O Cable with RJ-45 Connector.

Pin	Wire	Function
1	Brown	Digital Out 1
2	White with Brown Stripe	Digital Out 2
3	White with Green Stripe	Ground
4	White with Blue Stripe	Digital In 1
5	Blue	Digital In 2
6	Green	Ground
7	Orange	RS-485 -
8	White with Orange Stripe	RS-485 +

RS-232 Terminal Block

The RS-232 terminal block on GV-VS12 is mainly used for the connection to a GPS module.

RS232

TX RX G 5V
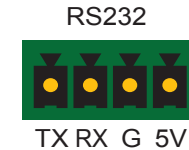
Pin	Function
TX	GPS RX (Receive)
RX	GPS TX (Transmit)
G	Ground
5V	DC 5V Out

Note: To ensure the connection to the GV-VS12, the GPS RX must be connected to the TX pin, and the GPS TX must be connected to the RX pin.

For details, see *Auxiliary Device Connectors*, *Chapter 9*, *GV-Video Server User's Manual* on the software DVD.

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