GeoVision inc
The Vision of Security

GV-Joystick V2

User's Manual

JK2V10-A

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Regulatory Notices

FCC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

Class A

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

CE Notice

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

RoHS Compliance

The Restriction of Hazardous Substances (RoHS) Directive is to forbid the use of hazardous materials of production. To meet the RoHS Directive requirements, this product is made to be RoHS compliant.

WEEE Compliance

This product is subject to the Waste Electrical and Electronic Equipment (WEEE) Directive and made compliant with the WEEE requirements.

1. Introduction

GV-Joystick V2 is a plug-and-play device, used to pan, tilt, zoom and focus a PTZ camera. It can work with GeoVision software and hardware independently, and its compatibility with GV-Keyboard V3 empowers the operation of GV applications as well.

1.1 Packing List

- GV-Joystick V2
- USB Type A to Type B Cable
- RJ-45 Cable
- Software CD

1.2 System Requirements

OS	**32-bit**	Windows XP / Vista / 7 / 8 / Server 2008
	64-bit	Windows 7 / 8 / Server 2008 R2 / Server 2012

1.3 Compatible Software and Hardware

- GV-System V8.5.9 or later
- GV-Center V2 V8.5.9 or later
- GV-Control Center and GV-Video Wall V3.1.2 or later
- GV-SNVR
- GV-IP Decoder Box and GV-Pad firmware V1.06 or later
- GV-IP Decoder Box Plus firmware V1.00 or later
- GV-Keyboard V3 firmware V3.0.0.1 or later

Note:

1. The joystick is a HID device compatible with any third-party software supported HID protocol.
2. For how to use GV-Joystick V2 with GV-IP Decoder Box and GV-Pad, see *2.9 Controlling PTZ and Speed Dome Cameras Using GV-Joystick* on *GV-IP Decoder Box and GV-Pad User's Manual.*

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2. Overview

2.1 Front View

Figure 1

No	Name	Function
1	Power LED	Indicates power activity.
2	F1 (Focus In)	Adjusts focus near.
3	F3 (Focus Out)	Adjusts focus far.
4	F5 (Auto Focus)	Automatically focus the camera.
5	F2 (Previous Camera)	Controls the previous camera.
6	F4 (Next Camera)	Controls the next camera.
7	F6 (Home)	Brings the camera to a home position.
8	Handle	Controls PTZ movements (pan and tilt), zooms in and zooms out.

Note:

1. For GV-Joystick V2 connected directly to GV-Software, F1 ~ F6 keys described here are defaults. To customize the functions, see *4. Application*.
2. For GV-Joystick V2 connected to GV-Keyboard V3, the keys can not be customized, and the F5 and F6 keys are not functional.

Handle on GV-Joystick V2

No	Handle Movement	Function
1	Right	Pans the PTZ right
2	Left	Pans the PTZ left
3	Up	Tilts the PTZ up
4	Down	Tilts the PTZ down
5	Turn the handle right	Zooms in
6	Turn the handle left	Zooms out

2.2 Rear View

Figure 2

No	Name	Function
1	USB to DVR port	Connects to computer
2	To GV-Keyboard port	Connects to GV-Keyboard V3

3. Installation

There are two ways to connect GV-Joystick V2 to GV-Software:

1. Direct connection using the **USB to DVR port**
2. Indirect connection through GV-Keyboard V3 using the **To GV-Keyboard port**

Note:

1. These two ports can not be used at the same time.
2. For connecting GV-Joystick V2 to GV-Center V2, only the direct connection is supported.

3.1 Connecting to GV-Software

GV-Joystick V2 is a plug-and-play device that can work with the GV-Software directly. To directly connect GV-Joystick V2 to the GV-Software, use the supplied USB cable.

3.2 Connecting to GV-Keyboard V3

To connect GV-Joystick V2 to GV-Keyboard V3, use the supplied RJ-45 cable.

4. Application

When using GV-Joystick V2 to control the PTZ cameras, you need to run the following program in the background. Note that up to 8 GV-Joystick V2 can be connected, but only one GV-Joystick V2 can control one PTZ camera at one time.

Note: The following instructions guide you through how to set up GV-Joystick V2 with GV applications. For combining use with GV-Keyboard V3, see *GV-Keyboard V3 User's Manual*.

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1. For GV-System users, insert the Surveillance System Software DVD. Select **Install Supplement Utilities**, and select **GV-Mcamctrl Utility (Only for GV-Joystick).**

Figure 3

2. For GV-Control Center and GV-Center V2 users, run **mcamctrl.exe** from the GV-Control Center and GV-Center V2 folders.

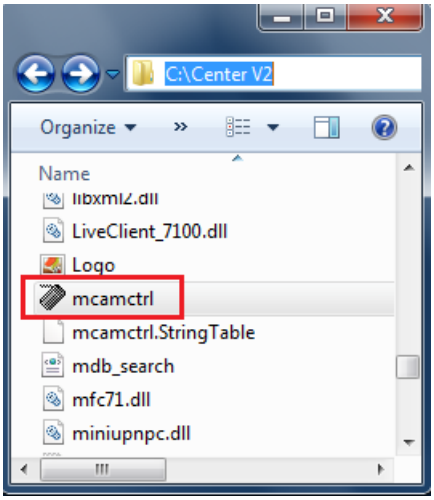

Figure 4

3. The Keyboard & Joystick controller dialog box appears.

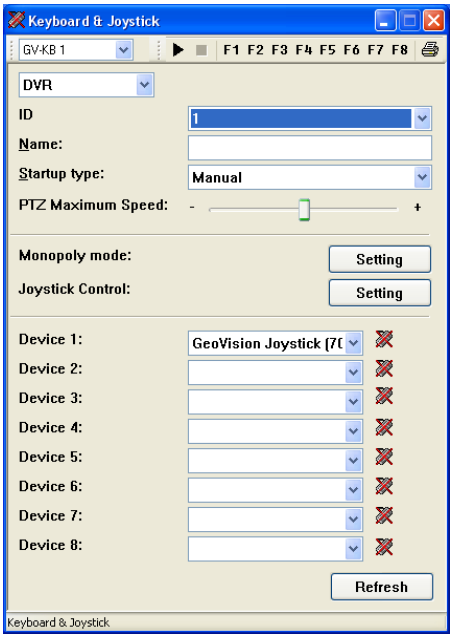

Figure 5

4. For the GV-Joystick V2 connected directly to GV-Software, select **GeoVision Joystick** from the port drop-down list.

Tip: If you can not find the **GeoVision Joystick** option, make sure your GV-Joystick device is properly connected and then click the **Refresh** button from Keyboard & Joystick controller dialog box to scan for the device again.

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5. Leave both DVR ID and DVR Name fields blank.
6. In the Startup Type field, select **Manual** or **Automatic** to run Keyboard & Joystick controller at next startup.
7. To adjust the speed of PTZ camera, use the slide bar of PTZ Maximum Speed.
8. To customize the functional keys, follow the steps below. For details on default functions of the keys, see *2.1 Front View*.

   A. Click the **Setting** button next to Joystick Control, this dialog box appears.

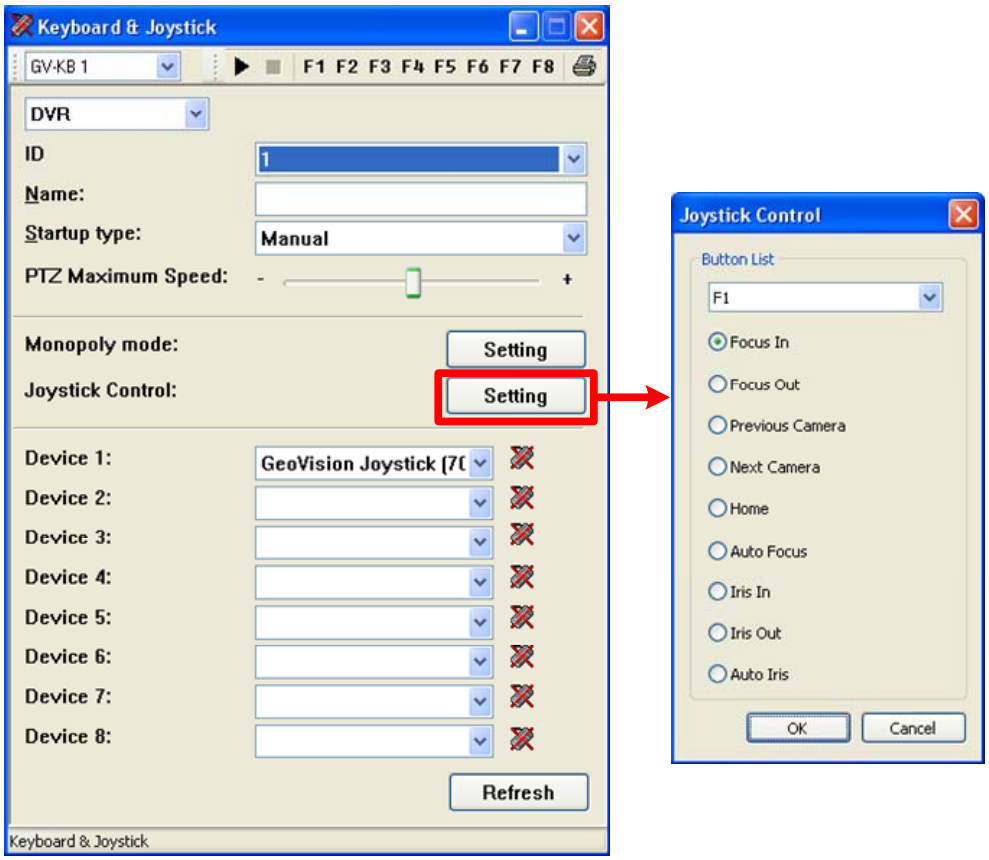

Figure 6

   B. Select the functional key using the drop-down list and select a function.

9. To add another GV-Joystick V2, repeat step 3 and select **GeoVision Joystick** with a different serial number from the Device drop-down list.

Note:

1. If you add or remove a GV-Joystick V2, the corresponding GV-IP device may be automatically adjusted. In this case, click the **Refresh** button (Figure 4) and check the mapping order of your GV-Joystick V2.
2. The serial number is randomly generated by Windows and may change if GV-Joystick V2 is re-installed.

10. Click the **Start Service** button ► to start the service. If you want to stop the service, click the **Stop Service** button ■.

Note:

1. If you connect GV-Joystick V2 to the GV-Keyboard V3, assign the port given to the connected GV-Keyboard when running the Keyboard & Joystick controller. Up to 8 sets of GV-Joystick V2 connecting to GV-Keyboard V3 can be used.
2. The buttons **F1** to **F8** and **Print** on the Keyboard & Joystick controller toolbar are only available when the GV-Keyboard V3 is in use.
3. To add a PTZ camera to the GV-System, click the **Configure** button, point to **General Setting** and select **System Configure**. Then check **PTZ Device Setup** to enable the settings. For details, see “PTZ Control Panel” on *Surveillance System Software DVD*.

5. Controlling Multiple PTZ Cameras on GV-System

GV-Joystick V2 allows you to control more than one PTZ camera at a time. For this, you need to assign the PTZ cameras to their corresponding camera channels on the GV-System first.

1. Click the **Configure** button, point to **Accessories**, select **PTZ Device** and select **Camera Mapping PTZ Dome**. This dialog box appears.

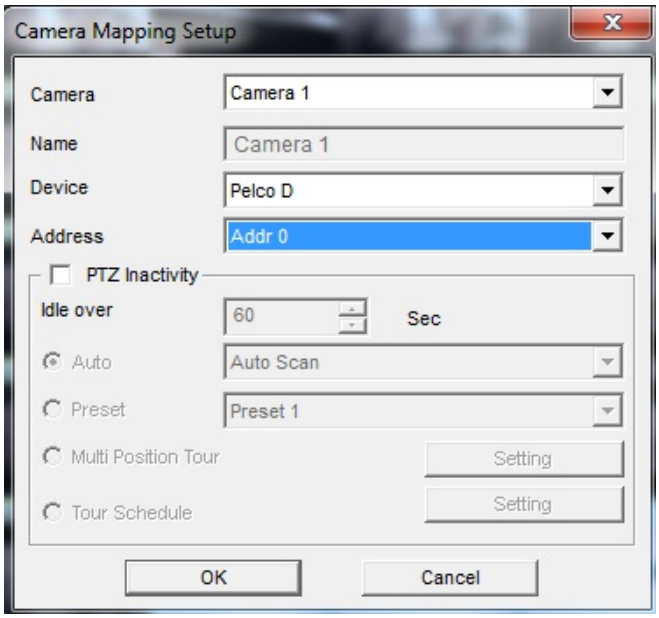

Figure 7

2. Select a camera channel from the Camera drop-down list.
3. To map a PTZ camera to the selected camera channel, use the **Device** drop-down list.
4. If you have two identical PTZ cameras set in the system, you may sue the **Address** drop-down list to choose the correct address.
5. Click **OK** to apply the settings.
6. To control multiple PTZ cameras using GV-Joystick V2, click the **Previous Camera** and **Next Camera** buttons on the joystick.

For details on mapping the PTZ cameras, see *Mapping PTZ Cameras*, *Chapter 1 Configuring Main System*, *GV-DVR User's Manual* on Surveillance System Software DVD.

6. Calibrating GV-Joystick V2

The internal settings may deviate and the control can become less accurate after a period of time. Follow the steps below to calibrate your GV-Joystick V2.

1. Press and hold the **F1**, **F2**, **F3** and **F4** buttons on the GV-Joystick for 3 seconds. The Power LED blinks red.
2. Release the buttons. The Power LED turns green to indicate that the settings are calibrated.

Figure 8

7. Specifications

OS Supported	**32-bit**	Windows XP / Vista / 7 / 8 / Server 2008
	64-bit	Windows 7 / 8 / Server 2008 R2 / Server 2012
Communication	**USB 2.0**	Connects to PC
	RJ-45	Connects to GV-Keyboard V3
Power	**DC IN**	DC 5V 50mA
Environmental Conditions	**Operating Temperature**	0˚C ~ 50˚C / 32˚F ~ 122˚F
	Humidity	5%~95% (non-condensing)
Dimensions (W X H X D)		160 x 90 x 118 mm / 6.3 x 3.54 x 4.65 in
Weight		500 g / 1.1 lb

All specifications are subject to change without notice.