

# GV-Keyboard

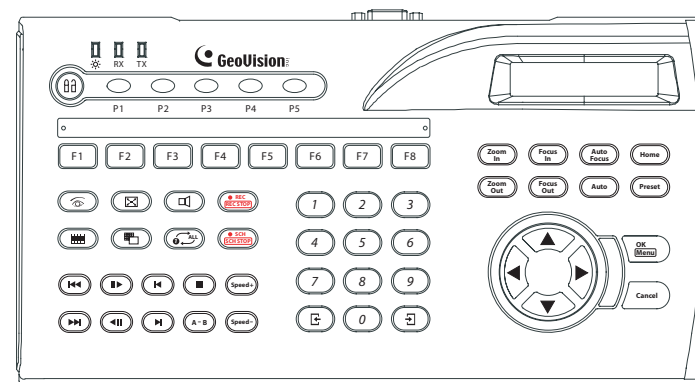
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## Instruction Manual



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## Introduction

The GV-Keyboard is used to program and operate GV-Systems. Through RS-485 configuration, it can control up to 16 additional GV-Systems.

## Packing List

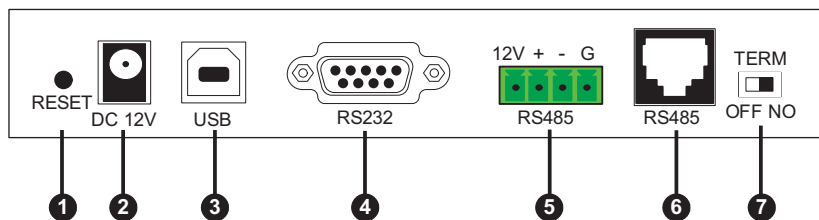
- GV-Keyboard x 1
- USB Cable (300 cm) x 1
- RS-232 Cable (300 cm) x1
- RJ-11 (RS-485) Cable (100 cm) x 1
- AC Adapter (Input 100-240 V) x 1
- Wall Terminal Block x 1

## System Requirements

- Windows 2000 or XP
- GV-System V7.0 or above

## System Connections

### Rear Panel Overview

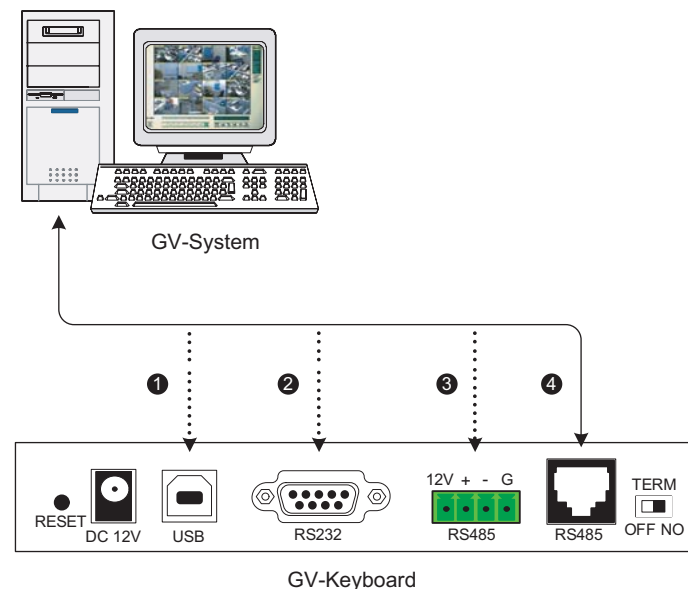


1	Reset	Resets the keyboard when it does not respond to commands.
2	DC IN 12V Power	Connects to the AC adaptor's DC output plug.
3	USB Port	Connects to GV-System.
4	RS-232 Port	Connects to GV-System.
5	Terminal Block	The terminal block carries RS-485 signals. It can connect up to 16 additional GV-Systems.
6	RJ-11 Port	The RJ-11 port carries RS-485 signals. Through the wall terminal block, it can connect up to 16 additional GV-Systems.
7	Terminal Resistance	Used in the last daisy-chained GV-System.

### Connecting GV-Keyboard to One GV-System

There are four ways to connect the keyboard and one GV-System, using:

- ① USB Port,
- ② RS-232 Port (DC power required),
- ③ Terminal Block (DC power required), or
- ④ RJ-11 Port (DC power required)

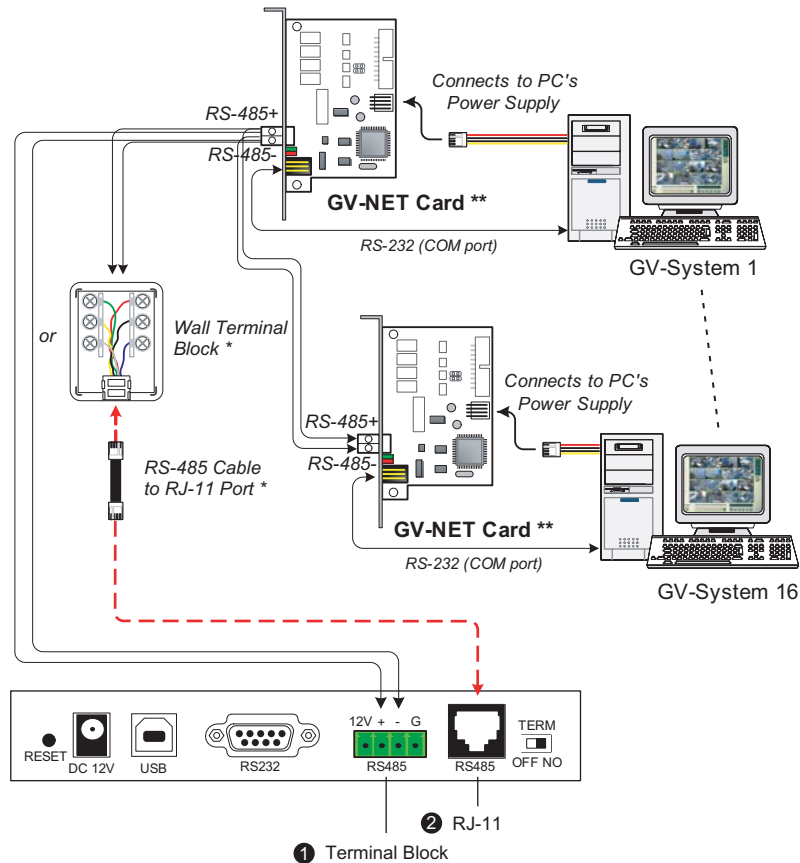


\* ① USB cable, ② RS-232 cable, and ④ RJ-11(RS-485) cable are supplied with the GV-Keyboard.

### Connecting GV-Keyboard to Multiple GV-Systems

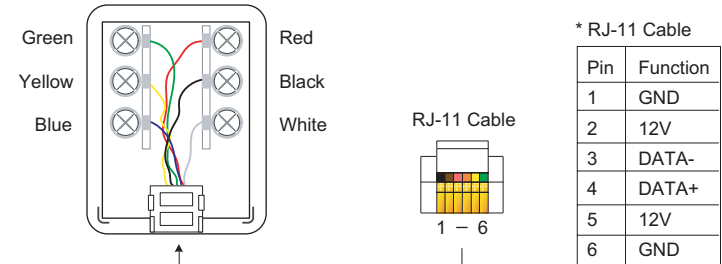
There are two ways to connect the keyboard and up to 16 additional GV-Systems within 600 meters, using:

- ❶ Terminal Block, or
- ❷ RJ-11 Port



- \* The RJ-11(RS-485) cable and Wall Terminal Block are supplied with the GV-Keyboard.
- \*\* The GV-Net card can be replaced with other GV products, such as GV-Net, GV-Net I/O card, and GV-Hub.

#### ► Wall Terminal Block



#### Note:

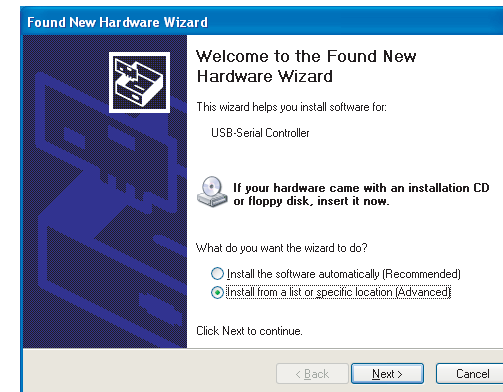
1. When you are using the wall terminal block for connection, the RS-485 + and RS-485 - cables should be attached to the appropriate terminal screws.
2. It's not necessary to use extra power for RS-485 connection if the keyboard adaptor is connected.

### Installation

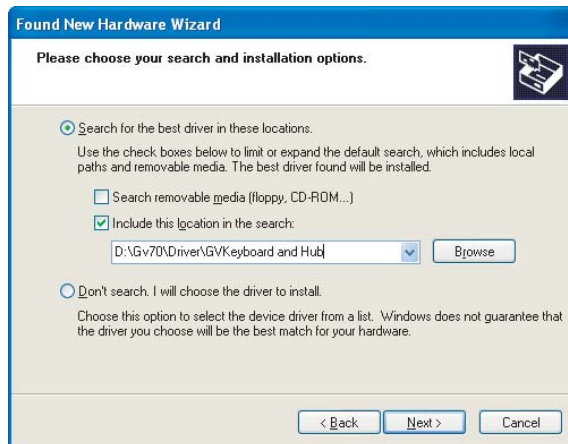
#### USB Driver

If you are using the USB port to connect the keyboard and GV-System, it's necessary to install the USB driver. These instructions are for Windows XP. Installation under Windows 2000 is similar, but not necessarily identical.

1. Use the USB cable to attach the keyboard to GV-System.
2. The Found New Hardware Wizard detects the keyboard and pops up.



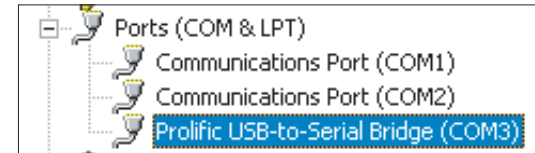
3. Select **Install from a list of specific location (Advanced)**, and then click **Next**.
4. Check **Include this location in the search**, and then click the **Browse** button to locate the folder that contains the driver. The driver is located at the installation CD:\GV7.0\Driver\GV Keyboard and Hub.



5. Click **Next** to display this warning window, and then click **Continue Anyway**.



6. To verify that the driver is installed correctly, go to Windows Device Manager. In the **Ports (COM & LPT)** field, you should see the entry for **Prolific USB-to-Serial Bridge**.

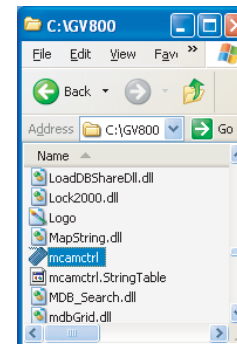


**Note:** Remember the COM port showing in the Prolific USB-to-Serial Bridge entry. It indicates the port number that the keyboard is using.

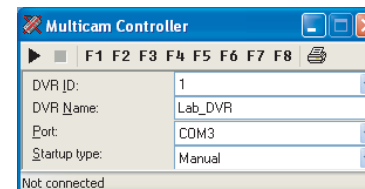
## GV-Keyboard Application

To run the GV-Keyboard application, follow these steps:

1. Execute **mcamctrl.exe** from the GV-System folder.



2. The Multicam Controller window should display.



- The controls in the Multicam Controller window:

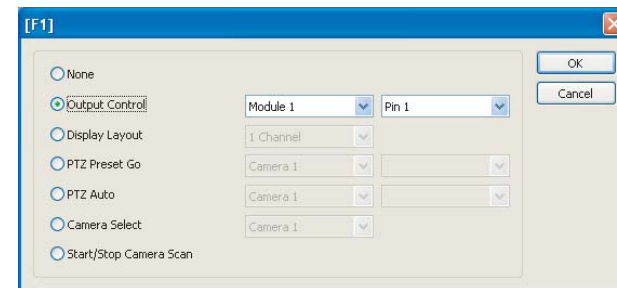
Name	Description
DVR ID	Selects the desired DVR ID for connection.
DVR Name	Gives the login DVR a descriptive name.
Port	Selects the port connecting to the keyboard.
Startup type	Selects Manual or Automatic to run Multicam Controller at next startup.
▶	Starts the service.
■	Stops the service.
F1 - F8	Defines eight function keys on the keyboard to control output modules, display layout, PTZs, and cameras.
Print Icon	Prints out a label for the eight function keys.

▶ **Defining Eight Function Keys**

F1 - F8 options allow you to assign these features to the eight function keys on the keyboard:

- Output Control
- Display Layout
- PTZ Preset Go
- PTZ Auto
- Camera Select
- Start/Stop Camera Scan

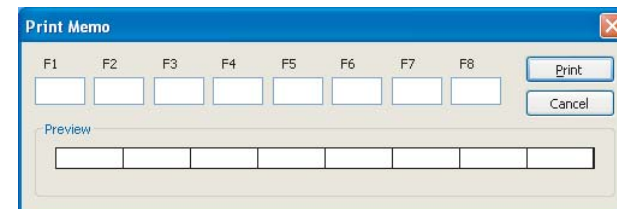
**Note:** For the PTZ Preset Go and PTZ Auto functions, you must map the PTZ camera first in Main System.



▶ **Printing Function Key Labels**

The Print Memo allows you to print out the label for the eight function keys (F1 - F8) so that you can attach it on the keyboard for instant reference.

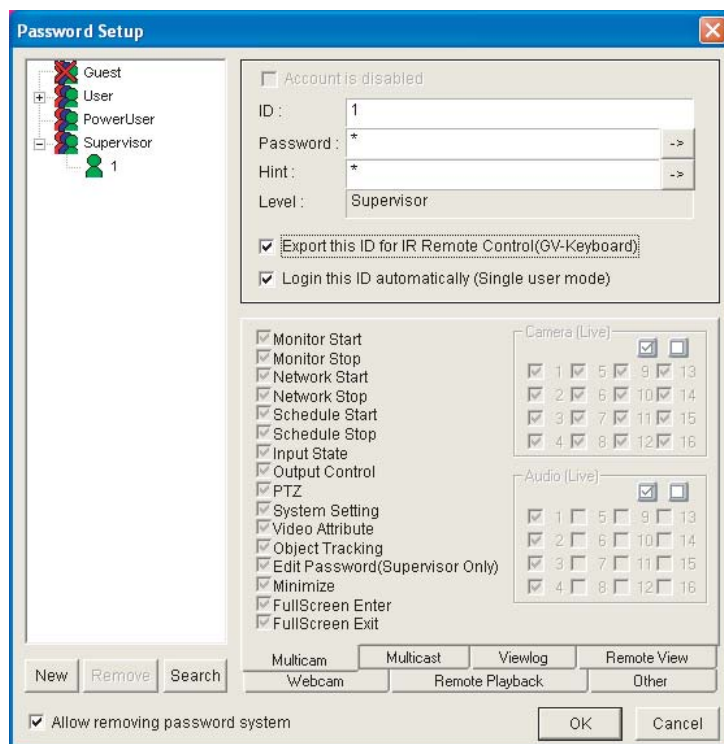
1. Click the **Printer** icon. This displays the Printer Memo window.
2. Under every field from F1 to F8, type the information that you want to print on the label. The words you type will also appear on Preview fields for print preview.
3. Click **Print**.



## ID & Password Settings in DVRs

For the keyboard operation, you must export IDs and Passwords from GV-Systems first. And these settings are restricted for digits.

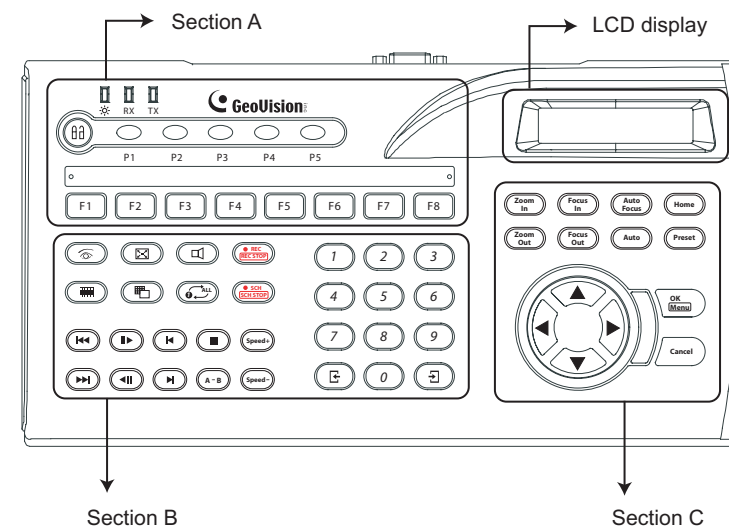
1. Click the **Configure** button, and select **Password Setup**. This displays the Password Setup dialog box.







2. Select a user from the user list, and then check **Export this ID for IR Remote Control (GV-Keyboard)**. This allows the export of its ID and Password.

When logging in the GV-System, you will see the exported ID in the ID drop-down list of the Login dialog box.

## Keyboard Overview


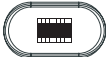




















### ► Section A

	Yellow POWER LED
	Red RX LED (Receive)
	Green TX LED (Transmit)
P1	Changes DVR ID
P2	Configures the keyboard parameters, including password, key beep and auto-lock period
P3	Displays the firmware version
P4-5	Reserved for future features
	Locks the keyboard

F1-F8 Function keys







### ► Section B

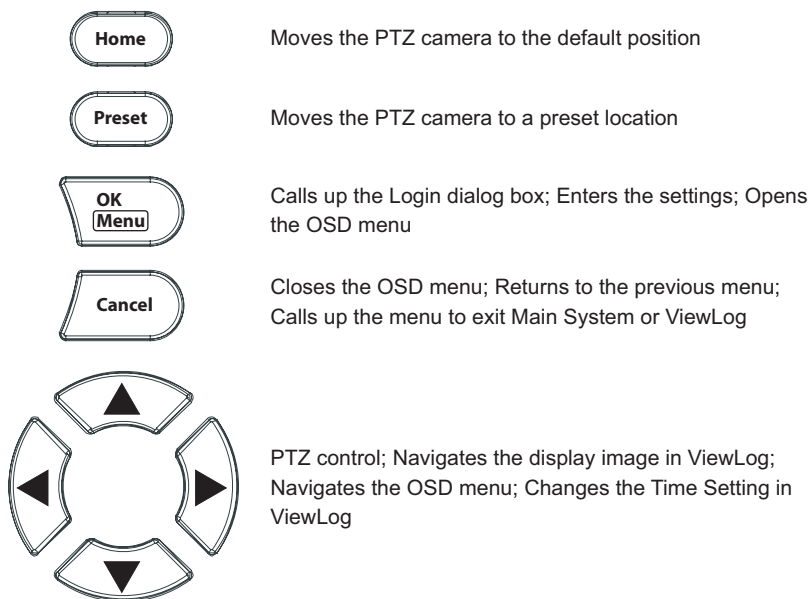
	Launches Multicam Surveillance System (Main System)
	Launches ViewLog
	Turns full screen view on/off
	Switches the screen divisions
	Turns the sound on/off
	Plays next events automatically
	Starts/Stops recording
	Starts/Stops the scheduled recording
	Goes to previous event
	Goes to next event
	Plays/Pauses a video event
	Rewinds/Pauses a video event
	Moves one frame back

	Moves one frame forward
	Stops a video event
	Sets the starting and ending frames for auto playing
	Increases playback speed
	Decreases playback speed
	Switches to previous screen
	Switches to next screen






Numeric buttons Enters the login password; Selects a specific camera; Changes the Time Setting in ViewLog











### ► Section C

	Zooms in the display image of PTZ camera in Main System; Zooms in the display image in ViewLog
	Zooms out the display image of PTZ camera in Main System; Zooms out the display image in ViewLog
	Increases the focus of PTZ camera in Main System
	Decreases the focus of PTZ camera in Main System
	Auto Focus
	Sets the PTZ camera for auto mode




## Programming and Operation

Function	Procedure
Getting started	Press any key, and enter a password. (The default password is <b>0000</b> .)
Launching Main System	<ol style="list-style-type: none"> <li>1. Press .</li> <li>2. When the message "Multicam System-Please Login!" appears on the screen, press  to open the Login dialog box.</li> <li>3. Select a valid ID, enter a password, and press .</li> </ol>
Launching ViewLog	<ol style="list-style-type: none"> <li>1. Press .</li> <li>2. When the Privilege Confirmation dialog box appears, select a valid ID, enter a password, and press .</li> </ol>

Changing DVR ID	Press P1, and enter a two-digit DVR ID.
Changing password	<ol style="list-style-type: none"> <li>1. Press P2, enter a password, and press  to browse LCD displays.</li> <li>2. When "Password Change" appears, press  and enter a four-digit password.</li> </ol>
Disabling/Enabling key beep	<ol style="list-style-type: none"> <li>1. Press P2, enter a password, and press  to browse LCD displays.</li> <li>2. When "Audio Setting" appears, press  and press  to enable/disable the key beep.</li> </ol>
Setting auto-lock period	<ol style="list-style-type: none"> <li>1. Press P2, enter a password, and press  to browse LCD displays.</li> <li>2. When "Auto Time Lock" appears, press  and enter an idle period after which the keyboard is automatically locked. * The keyboard can be used only if the correct password is entered.</li> </ol>
Setting A to B frame for auto-playing	<ol style="list-style-type: none"> <li>1. Press . The message "A To B Mode (Set A)" appears on the screen.</li> <li>2. Press  again. The message "A To B Mode (Set B)" appears. ViewLog starts playing the set frames A to B repeatedly. * To stop the playing, press . The message "A To B Mode (Cancelled)" will appear.</li> </ol>

## On-Screen Display Menus

In Main System and Viewlog modes, you can press  to call up the on-screen display (OSD) menus.

## The OSD in Main System

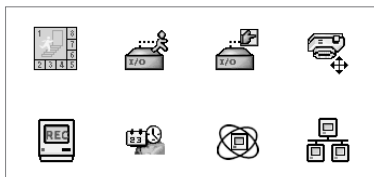


Figure 1 The OSD menus in Main System



### Screen Division

Changes the screen divisions



### Input Device

Displays all or several input module panels



### Output Device

Forces output devices



### PTZ Camera

Enables/Disables PTZ camera, Preset Go, Auto (Auto Pan), AF (Auto Focus) and Hide PTZ Panel



### Monitor

Starts/Stops all or several cameras for monitoring



### Schedule

Enables/Disables the schedule



### Camera Scan

Enables/Disables the rotation through screen divisions



### Network

Enables/Disables remote applications, including Modem Server, TCP Server, Multicast Server, Connect to VSM, Twin Server, WebCam Server and Connect to Center V2

## ► Changing the Main System OSD Options

To change the Main System OSD options with the keyboard, follow the steps below:

1. Press the **OK/Menu** button to open the OSD (see Figure 1).
2. Use the **direction** buttons to select a menu you want.
3. Press the **OK/Menu** button to open the menu.
4. Use the **direction** buttons to select a menu option, and then press the **OK/Menu** button to change the setting.  
OR  
Simply press the **OK/Menu** button to enable or disable an option in the case of **Schedule** and **Camera Scan**.

## The OSD in ViewLog



Figure 2 The OSD menus in ViewLog



### Video Event Search

Locates a video event.

1. Press the ◀ and ▶ buttons to move back and forward on an OSD time. (Month/Date/Year Hr.:Min.:Sec.)
2. Use the numeric buttons to enter a desired time or press ▲ and ▼ to change the display time.
3. Press the **OK/Menu** button to view the search result.

If the specified time can't be located, you will be prompted for previous or next video event available.



### View Mode

Changes the view modes, including Single View, Thumbnail View, Quad View and Multi View.

### ► Changing the ViewLog OSD options

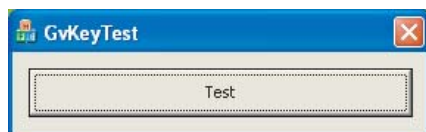
To change the ViewLog OSD options with the keyboard, follow the steps below:

1. Press the **OK/Menu** button to open the OSD. See Figure 2.
2. Use the **direction** buttons to select a menu you want.
3. Press the **OK/Menu** button to open the menu.
4. Use the **direction** buttons to select a menu option, and then press the **OK/Menu** button to change the setting.

### Shortcut key Conflict Test

This test checks whether the keyboard keys are conflicting with certain shortcut keys of other applications.

1. Execute **GvKeyTest.exe** from the GV-System folder. This displays the following window.



2. Click the Test button. If there are shortcut key conflicts, you will see the similar window as below.



3. Disable the shortcut key settings of another application.

## Troubleshooting

Problem	Checklist
No power to Keyboard	<ul style="list-style-type: none"> <li>► Check USB connection.</li> <li>► If you are using the RS-232 port for connection, make sure to connect the AC adaptor.</li> </ul>
Keyboard has power but does not respond to any buttons pressed	<ul style="list-style-type: none"> <li>► Check that Keyboard is not locked. See <i>Getting Started, Programming and Operation</i> on page 14.</li> </ul>
Keyboard responds to some, but not all buttons	<ul style="list-style-type: none"> <li>► Check if Keyboard keys are conflicting with other applications. See <i>Shortcut key Conflict Test</i> on page 18.</li> </ul>
Message "Connect fail" displays on LCD	<ul style="list-style-type: none"> <li>► Verify that the selected ID in Multicam Controller is consistent with the DVR ID. See <i>Changing DVR ID, Programming and Operation</i> on page 15.</li> <li>► Check that the COM port setting in Multicam Controller is correct. See <i>USB Driver Step 6</i> on page 7.</li> <li>► If multiple GV-Systems are daisy-chained together,               <ol style="list-style-type: none"> <li>(1) check connections among GV-Systems, and</li> <li>(2) turn on Terminal Resistance to increase frequency response.</li> </ol> </li> <li>► If you are using the wall terminal block, check               <ol style="list-style-type: none"> <li>(1) terminal screws are not loose,</li> <li>(2) the RS-485 + and RS-485 - cables are attached to the appropriate terminal screws. See <i>Wall Terminal Block</i> on page 5.</li> </ol> </li> </ul>
Keyboard LEDs not visible	<ul style="list-style-type: none"> <li>► Yellow POWER LED: check the power source. When pressing any key, can't see the RX or TX LEDs.</li> <li>► Red RX LED: check the connection between Keyboard and GV-System.</li> <li>► Green TX LED: check if Keyboard is malfunctioning.</li> </ul>

## Specifications

<b>Output</b>	RS-232 to PC	DB9 Female
	USB	USB 1.1
	RS-485+	Connects to GV-NET or GV-NET card RS-485+
	RS-485-	Connects to GV-NET or GV-NET card RS-485-
<b>Communication</b>	RS-232	9,600 bps
	RS-485	9,600 bps
<b>Power</b>	DC IN	DC 12V 1A
	RS-485	DC 12V
<b>Environmental Conditions</b>	Operation temperature	0~50 degree C
	Humidity	5%~95% (non-condensing)
<b>Dimensions</b>	300 (W) x 45 (H) x 161 (D) mm	