



# GV-Data Capture V2E

## *User's Manual*



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

# Table of Contents

|                                       |    |
|---------------------------------------|----|
| <b>1. Getting Started</b> .....       | 2  |
| 1.1 Introduction .....                | 2  |
| 1.2 Unpacking .....                   | 3  |
| 1.3 System Requirements .....         | 3  |
| <br>                                  |    |
| <b>2. V2E Overview</b> .....          | 4  |
| <br>                                  |    |
| <b>3. Configuring V2E</b> .....       | 5  |
| 3.1 Fixed IP .....                    | 5  |
| 3.2 DHCP .....                        | 7  |
| <br>                                  |    |
| <b>4. Configuring GV-System</b> ..... | 9  |
| 4.1 Fixed IP .....                    | 9  |
| 4.2 DHCP .....                        | 11 |
| <br>                                  |    |
| <b>5. Setup and Password</b> .....    | 12 |
| 5.1 System Setup .....                | 12 |
| 5.2 Updating Firmware .....           | 13 |
| 5.3 Changing Password .....           | 14 |
| <br>                                  |    |
| <b>6. Specifications</b> .....        | 15 |
| <br>                                  |    |
| <b>7. Troubleshooting</b> .....       | 16 |

# 1. Getting Started

## 1.1 Introduction

The GV-Data Capture V2E is the network version of GV-Data Capture V2. With an Ethernet jack, the V2E allows you to integrate POS systems (cash registers) and GV-System through LAN. The V2E features:

- Provide a greater range of POS deployments, overcoming the distance limit of RS-232 or RS-485 cables.
- Connect up to 16 POS systems (cash registers) to one GV-System.

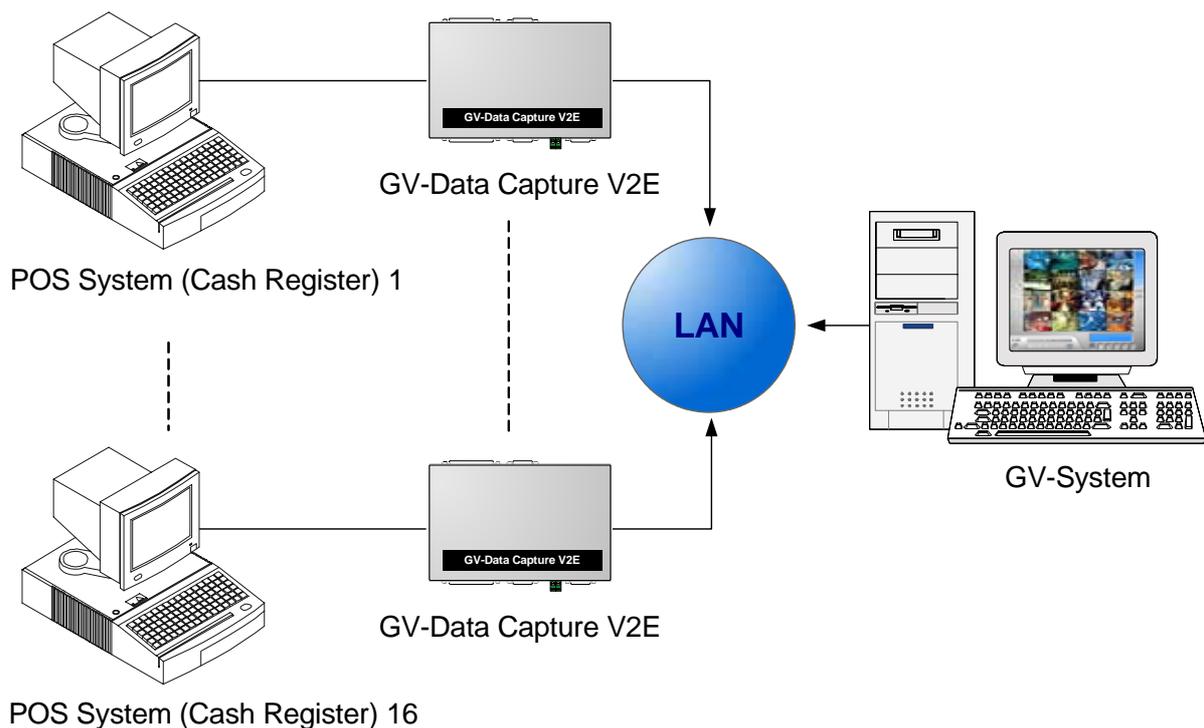


Figure 1

## 1.2 Unpacking

- 1 x GV-Data Capture V2E box
- 1 x DB9 RS-232 cable (1.8 meters)
- 1 x DB9 RS-232 cable (3 meters)
- 1 x DB25 RS-232 cable (1.8 meters)
- 1 x Power Adaptor DC 5V
- 1 x DB9 Male to DB9 Male (Gender Changer) No. 4
- 1 x DB9 Female to DB9 Female (Gender Changer) No. 5
- 2 x Wall Hook

## 1.3 System Requirements

GV-System version 8.0 or later

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### **IMPORTANT:**

1. The GV-Data Capture V2E is exclusively designed to support serial POS systems (cash registers). For graphic or parallel mode, see other documentation at <http://www.geovision.com.tw/english/faq/POSflowchart/graphic/posflow-3.htm>
  2. The GV-Data Capture V2E can work with both POS systems and cash registers. In the following chapters, we use POS systems to cover the two types of applications.
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## 2. V2E Overview

This chapter identifies the various components of GV-Data Capture V2E.

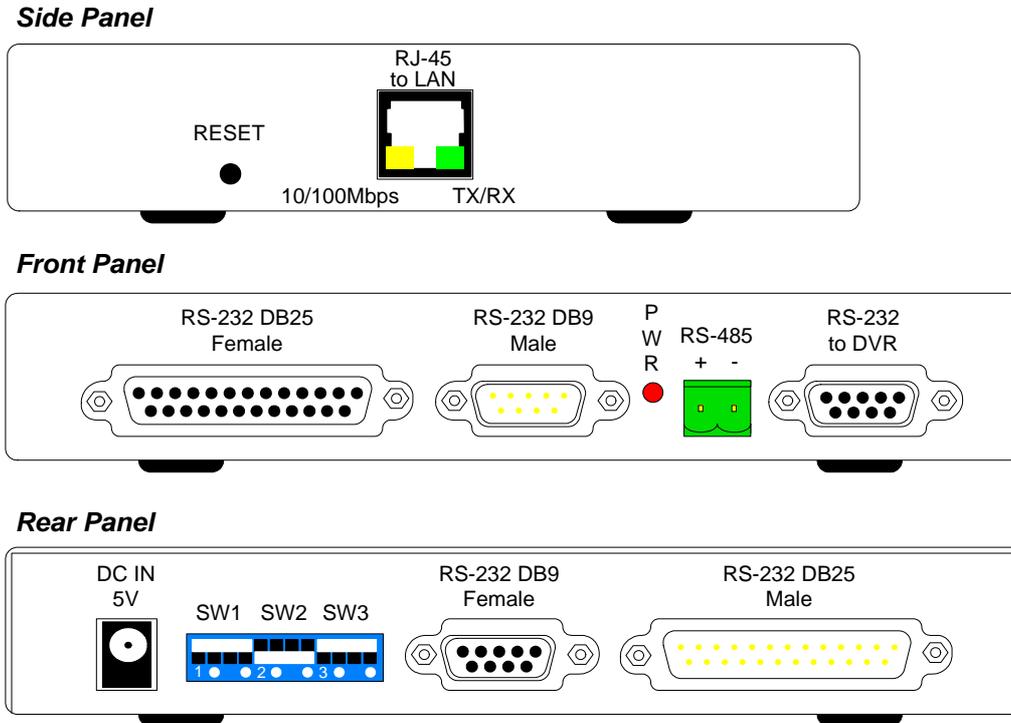
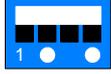
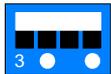


Figure 2

### DIP Switch

|     |   |   |   |
|-----|---|---|---|
| SW1 | On: Debug Mode<br>Off: Normal Mode (Default)  |  |  |
| SW2 | On: DB9 Mode (Default)<br>Off: DB25 Mode      |  |  |
| SW3 | On: Crossover<br>Off: Non-crossover (Default) |  |  |

## 3. Configuring V2E

The GV-Data Capture V2E provides two solutions to connect your POS system to GV-System through LAN:

1. Fixed IP
2. DHCP

Depending on your POS system's network, you can choose **Fixed IP** for static IP addresses, or **DHCP** for dynamic IP addresses such as those assigned by an ISP or other DHCP server.

### 3.1 Fixed IP

If your POS system supports a static IP address, the wiring is illustrated as below:

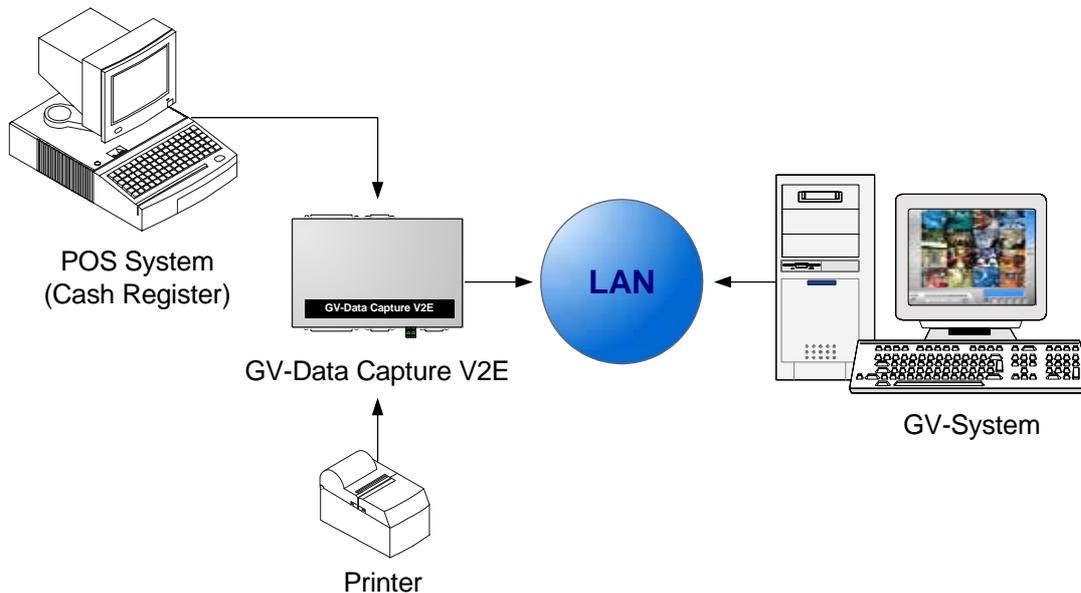


Figure 3

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**Note:** For connections among the POS system, printer and GV-Data Capture V2E, see other documentation at

<http://www.geovision.com.tw/english/faq/GV-DataCaptureV2.pdf>

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After wiring work is complete, configure the GV-Data Capture V2E to match your network requirements:

1. Open an Internet browser, and type the web address: <http://192.168.0.100:3999> . This page appears.

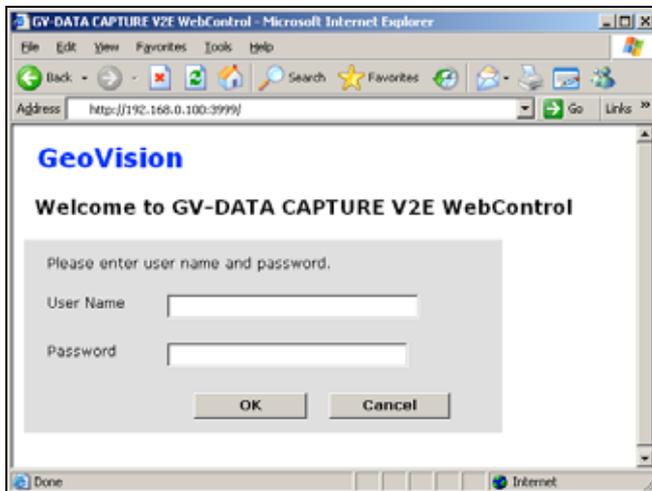


Figure 4

2. In the User Name and Password fields, type default value **admin** and **1234** respectively, and then click **OK**. This page appears.

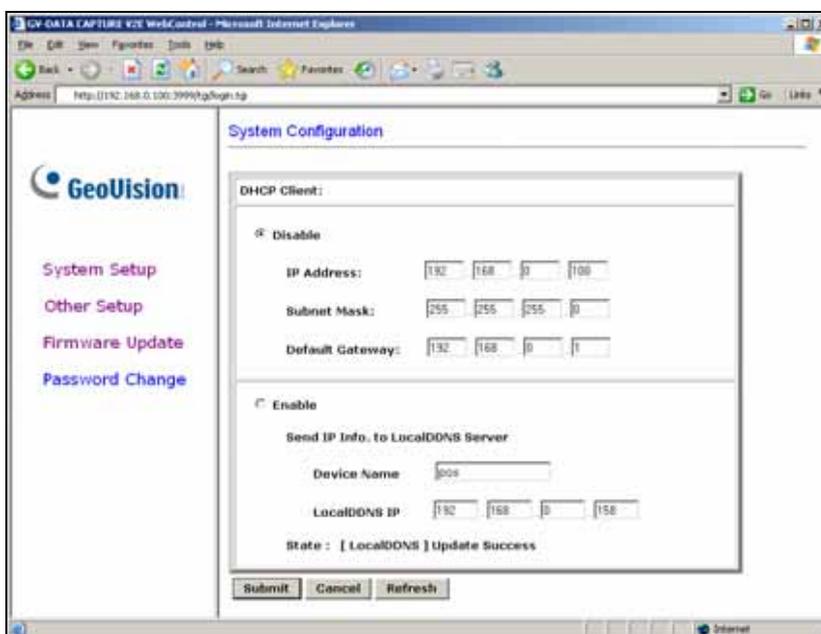


Figure 5

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**Note:** User Name is fixed, but Password is changeable. See [5.3 Changing Password](#).

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3. Click **Disable**. Type the static IP address information, including IP Address, Subnet Mask and Default Gateway.
4. Click **Submit**.

## 3.2 DHCP

If your POS system is using a dynamic IP address, the GV-developed “LocalDDNS Server” can map a device name to your POS system’s varying IP address, by which GV-System can access your POS system by the device name.

The Local DDNS Server can be installed in either GV-System or a separate computer. The wiring of the LocalDDNS application is illustrated as below.

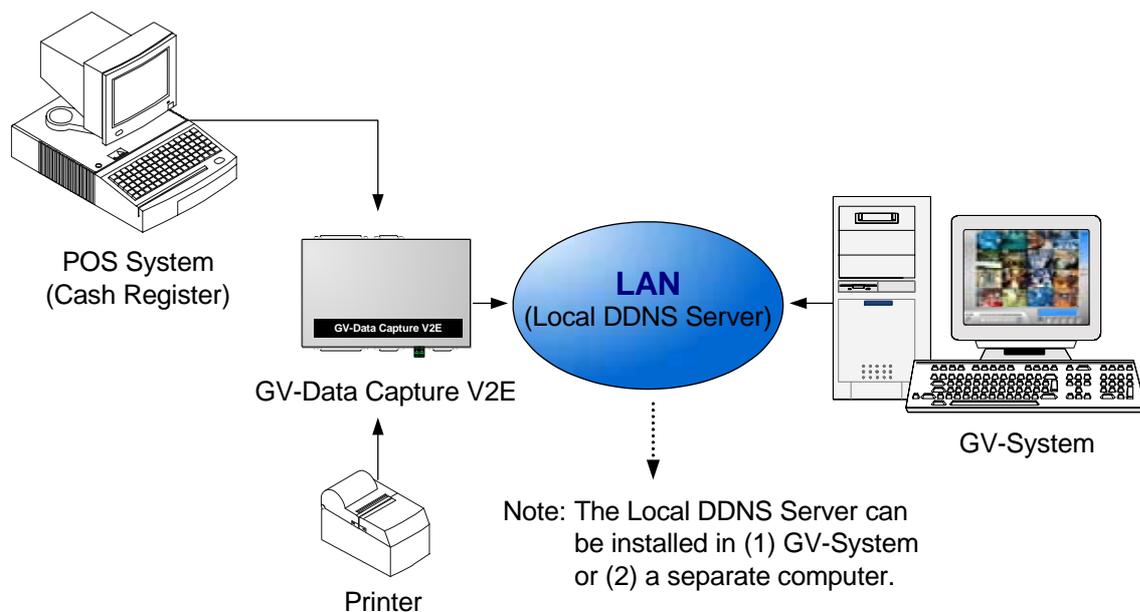


Figure 6

**Note:** For connections among the POS system, printer and GV-Data Capture V2E, see other documentation at:

<http://www.geovision.com.tw/english/faq/GV-DataCaptureV2.pdf>

## Installing LocalDDNS Server

1. Insert the Surveillance System Software CD to your computer. It will run automatically and pop up a window.
2. Select **Install GeoVision V 8.0.0.0 system**
3. Select **LocalDDNS Server**, and then follow on-screen instructions.
4. Run **LocalDDNS.exe**.

The program will be minimized to the system tray.



## Configuring V2E

After running LocalDDNS Server, configure the GV-Data Capture V2E to match your network requirements:

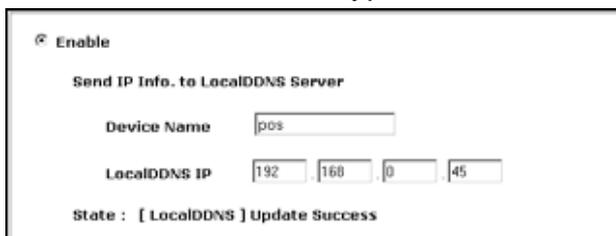
1. Open an Internet browser, and type the web address: <http://192.168.0.100:3999>  
*Figure 4* page appears.
2. In the User Name and Password fields, type default value **admin** and **1234** respectively, and then click **OK**. *Figure 5* page appears.

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**Note:** User Name is fixed, but Password is changeable. See [5.3 Changing Password](#).

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3. Click **Enable**, and then type the information of **Device Name** and **Local DDNS IP**.



*Figure 7*

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**Note:** If more than one POS system is connected to the GV-System, assign each device a different name.

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4. Click **Submit** to upload the information to the LocalDDNS Server.  
When the connection is established, you can see this line at the State field: *[Local DDNS] Update Success*.

## 4. Configuring GV-System

After configuring the GV-Data Capture V2E, you have to set the GV-System to match your POS system's network as well.

### 4.1 Fixed IP

To set the GV-System for a static IP address network:

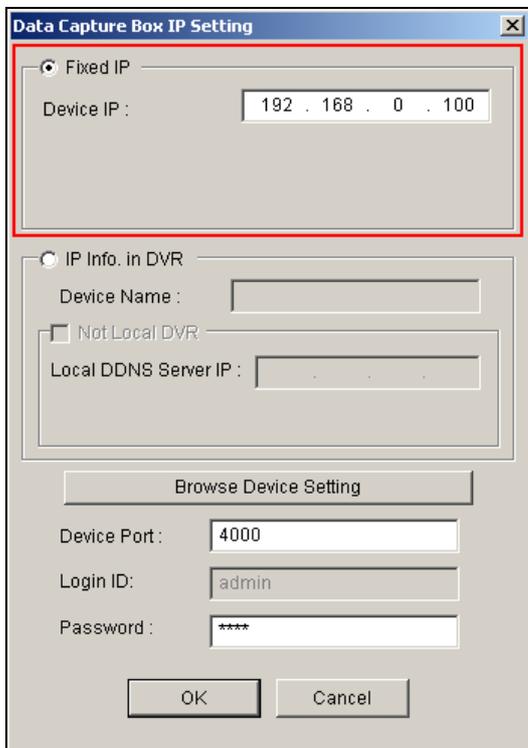
1. Click the **Configure** button on the main screen, point to **POS Application Setting**, and then select **POS Device Setup**. The POS Server Setup dialog box appears.
2. Click the **New** tab. This dialog box appears.

Figure 8

- **Printer Type:** Select **TCP/IP Port** from the drop-down list.
- **Device:** Assign the POS system to a channel. POS 1 displays images and data on the channel 1, POS 2 on the channel 2, and so on. Click the [...] button next to the item to rename the device.
- **POS Module:** Select the printer connected to the POS system. If it's not Epson, select **General** for other brands.

- **Cash Drawer Open Signal:** This option is only available when an input module is configured in the Main System. Assign the input module connected to the cash drawer. Every time when the cash drawer is open, it will be recorded in System Log for later retrieval.
- **Use Codepage Mapping:** This option is to support special character and symbol display. For details, see *Codepage Mapping, Chapter 3, User's Manual* on the Surveillance System Software CD.
- **Trace Mode:** Check this option only after getting the recommendation from our technical support staff.

3. Click the **Data Capture IP Address Setting** tab. This dialog box appears.



*Figure 9*

4. Select **Fixed IP**, and type the IP address of the POS system.
5. In the Device Port field, keep default value **4000**. Or modify it to match that of the POS system. See *Figure 11*.
6. In the Password field, type default value **1234**.
7. If you need to change or view the configurations of GV-Data Capture V2E, click **Browse Device Setting**, and *Figure 4* page will appear.
8. Click **OK** to add the POS system to GV-System.

## 4.2 DHCP

To set the GV-System for a dynamic IP address network:

1. Follow the steps 1 to 3 described in *4.1 Fixed IP*.
2. When the Data Capture Box IP Setting dialog box appears, select **IP Info. In DVR**.

The screenshot shows a dialog box titled "Data Capture Box IP Setting". It has two main sections. The top section is for "Fixed IP" and is currently disabled. The bottom section is for "IP Info. in DVR" and is selected, highlighted with a red border. In this section, the "Device Name" field contains the text "pos". Below it, the "Not Local DVR" checkbox is unchecked. The "DVR IP" field is empty. At the bottom of the dialog, there is a "Browse Device Setting" button. Below the dialog, there are three input fields: "Device Port" with the value "4000", "Login ID" with the value "admin", and "Password" with the value "\*\*\*\*". At the very bottom are "OK" and "Cancel" buttons.

Figure 10

3. If the LocalDDNS Server is installed in the GV-System, type default value **pos**. Or modify it to match that of the POS system. See *Figure 7*.

If the LocalDDNS Server is installed in a separate computer, select **Not Local DVR**, and type its IP address.

4. In the Device Port field, keep default value **4000**. Or modify it to match that of the POS system. See *Figure 11*.
5. In the Password field, type default value **1234**.
6. If you need to change or view the configurations of GV-Data Capture V2E, click **Browse Device Setting**, and *Figure 4* page will appear.
7. Click **OK** to add the POS system to GV-System.

## 5. Setup and Password

You can execute certain system operations, change login password and view the version information of the firmware.

### 5.1 System Setup

On the System Configuration page, you can execute the following operations:

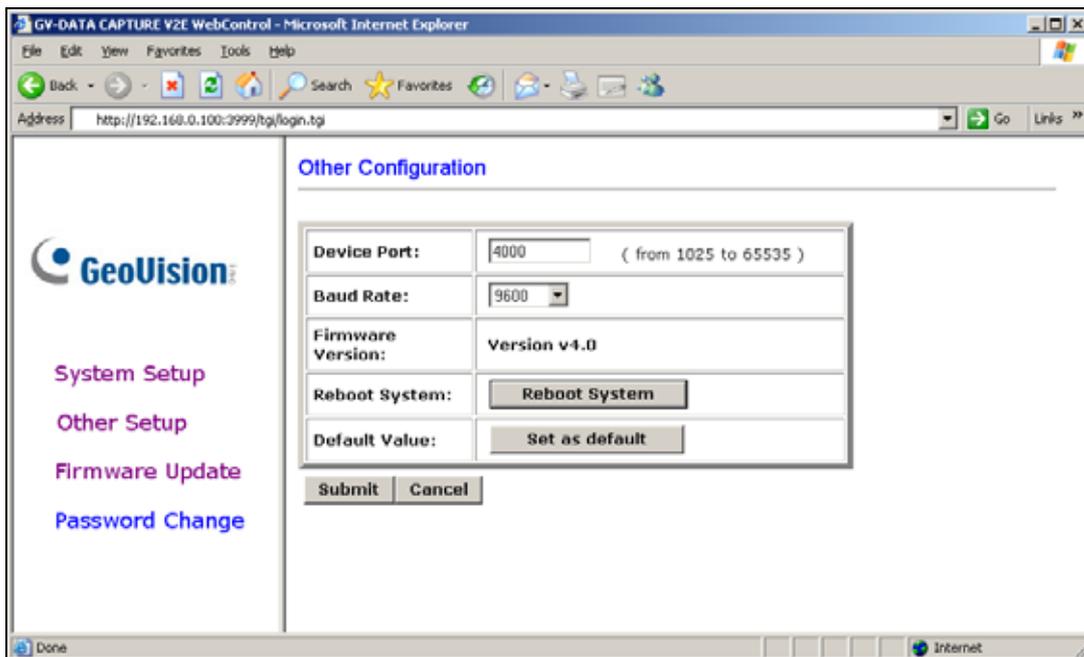


Figure 11

- **Device Port:** Keeps default value **4000**. Or modify it to match that of GV-System. See Figure 9.
- **Baud Rate:** Sets the one matching that of the POS system.
- **Firmware Version:** Indicates the version of firmware.
- **Reboot System:** Performs a warm boot of the GV-Data Capture V2E. This operation will keep the current configuration.
- **Default Value:** Resets all configuration parameters to their factory settings. This may take 5 seconds to complete.

## 5.2 Updating Firmware

To update the firmware over the Internet:

1. On the System Configuration page, click **Firmware Update** in the left menu. When this page appears, click **Update**.

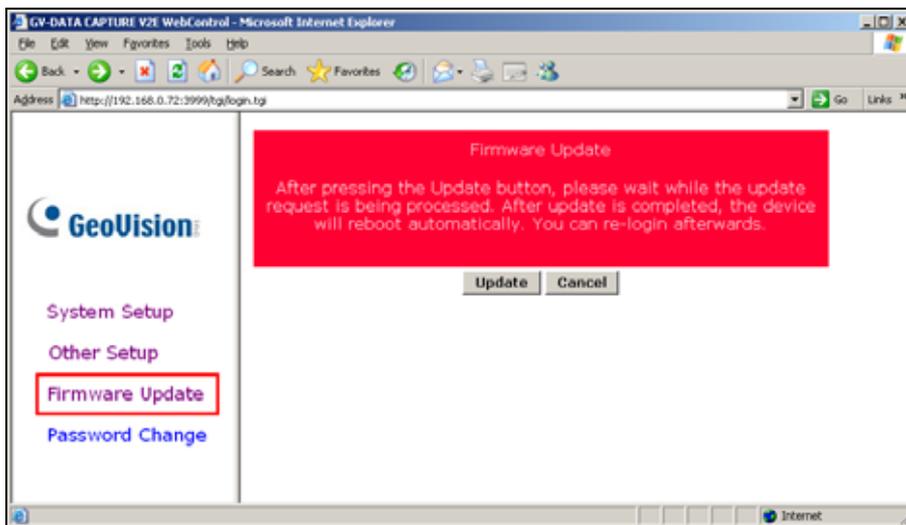


Figure 12

2. When this Upgrade Firmware page appears, click **Browse** to open the firmware file (\*.bin)

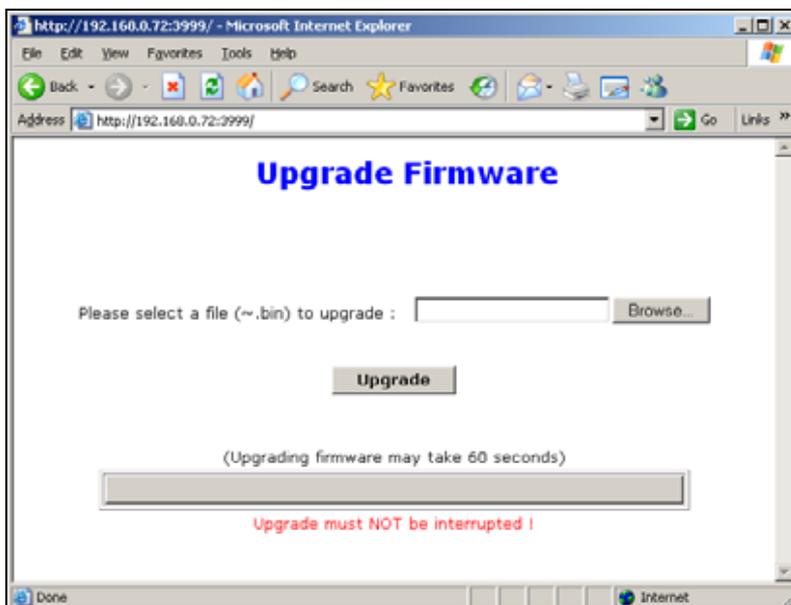


Figure 13

3. Click **Upgrade**. This update procedure may take 60 seconds to complete.

## 5.3 Changing Password

To change the login password:

1. On the System Configuration page, click **Password Change** in the left menu.
2. On the Change Password page, type a four-digit or four-letter password. Note that the password setting is case sensitive.

### Change Password

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Old Password:

New Password:

Confirm New Password:

Note : The password is restricted to four digits, and must be one of following characters:(0~9,A~Z,a~z)

*Figure 14*

## 6. Specifications

| Specifications           |                                       |  |
|--------------------------|---------------------------------------|--|
| Input                    | DB9 Female                            | RS-232 from POS                              |
|                          | DB25 Female                           | RS-232 from POS                              |
| Output                   | DB9 Male                              | RS-232 to Printer                            |
|                          | DB25 Male                             | RS-232 to Printer                            |
|                          | DB9 Female                            | RS-232 to DVR                                |
|                          | RJ-45                                 | RJ-45 to DVR                                 |
|                          | RS-485+                               | Connect to GV-NET /<br>GV-Hub/GV-Com RS-485+ |
|                          | RS-485-                               | Connect to GV-NET /<br>GV-Hub/GV-Com RS-485- |
| Communication            | RS-232 from POS                       | 1,200 bps~115,200 bps                        |
|                          | RJ-45 to DVR                          | 10 / 100 Mbps                                |
|                          | RS-232 to DVR                         | 1,200 bps~115,200 bps                        |
|                          | RS-485 to GV-NET                      | 1,200 bps~19,200 bps                         |
|                          | RS-485 to GV-Hub / GV-Com             | 600 bps~115,200 bps                          |
| DC IN                    | Power Adapter DC5V, 2A Inner Positive |  |
| Environmental Conditions | Operation Temperature                 | 0 ~ 50° C                                    |
|                          | Humidity                              | 5%~95% (non-condensing)                      |
| Dimensions               | 161 (W) x 34 (H) x 123 (D) mm         |  |

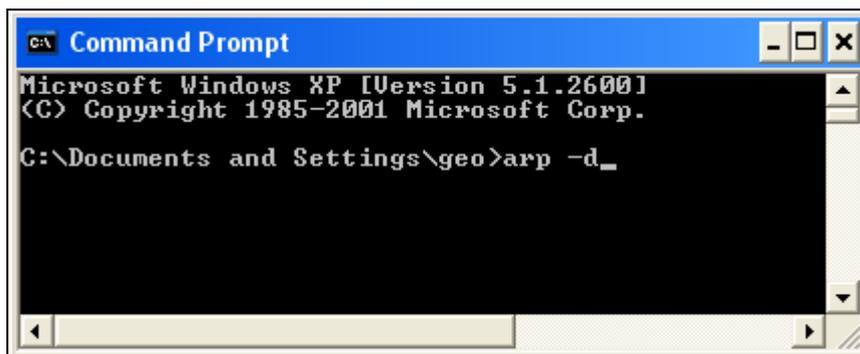
## 7. Troubleshooting

### Forgotten password or V2E IP address.

Press the **Reset** button for 5 seconds. All the previous settings will be reset to defaults.

### Unable to configure when connecting more than one GV-Data Capture V2E to the same PC during first-time setup.

1. Complete the configuration of a V2E (see *3.1 Fixed IP* or *3.2 DHCP*).
2. After the settings are complete, go to Windows **Start**, point to **Programs**, select **Accessories**, and then click **Command Prompt**. This window appears.



3. In the command line, type **arp -d** to clear ARP cache. This should help you avoid the IP address conflict in the next setup of V2E.
4. Return to the GV-Data Capture V2E WebControl page (see *Figure 4*) to configure another V2E.
5. Repeat Steps 2 to 4 to complete all setups.

### No POS data is transferred to GV-System after the setup is complete.

1. At the GV-System, make sure the IP address, Device Port and password information are correctly typed (see *4. Configuring GV-System*).
2. Check if the baud rate of GV-Data Capture V2E (see *Figure 11*) is set the same as in the POS device.