

GV-Data Capture V2

User's Manual



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Introduction

A POS system may be integrated to a GV-system through the GV-Data Capture box. Through the integration, you can investigate a transaction with transaction data overlaying on video footage, by either live viewing or playing back.

Unpacking

- 1 x GV-Data Capture V2 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

System Requirements

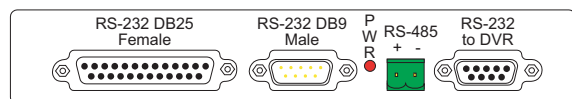
Version 6.0.2.0 or above

IMPORTANT: *The GV-Data Capture V2 is exclusively designed to support serial POS systems. For graphic mode or parallel POS systems, please refer to other documentation on our website:*

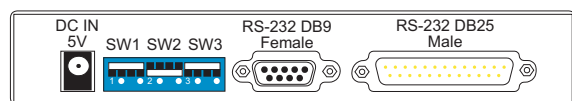
<http://www.geovision.com.tw/002/en/FAQ/pos/FAQ-pos-Q2-3-082004.htm>

GV-Data Capture Overview

The GV-Data Capture is a device that links a GV-System to an electronic POS system. It is designed to be installed between the GV-System and the POS system through PC COM ports.



Front Panel



Rear Panel

SW1	On: Debug Mode Off: Net Mode (Default)		
SW2	On: DB9 Mode (Default) Off: DB25 Mode		
SW3	On: Crossover Off: Non-crossover (Default)		

Note:

- Depending on your POS system/cash register output interface, find out RS-232 DB25 Male, DB25 Female, DB9 Male or DB9 Female on GV-Data Capture for connection.
- If your POS system/cash register is using the DB25 interface, set DIP switch SW2 to OFF; otherwise keep the default setting.
- If the cable, connecting your POS system/cash register to GV-Data Capture, is crossover, set DIP switch SW3 to ON; otherwise keep the default setting.
- RJ-45 module installed in GV-Data Capture is *optional*.

POS System Connection

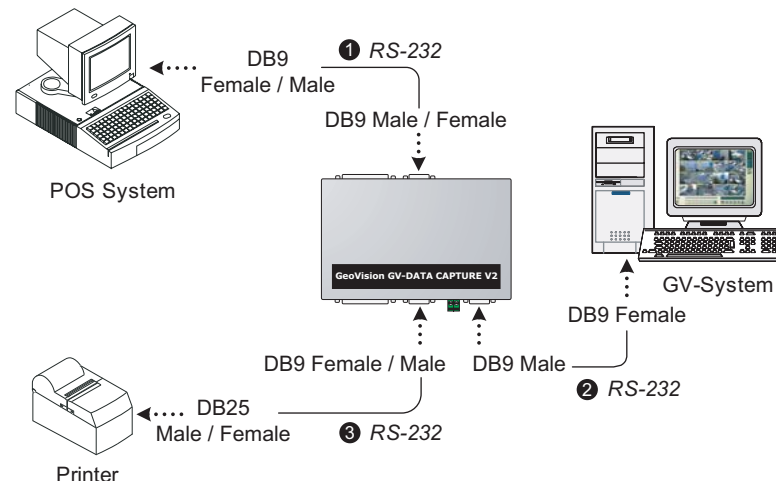
POS systems could come in different forms. In this manual, POS systems are referred to those with receipt printers externally connected.

It is also important to identify the interface on your POS system used to connect a receipt printer to the POS system. It should be either DB9 or DB25 interface. Following will introduce the two Interface connections.

DB9 Interface

For the diagram below, we use a **POS system using a DB9-DB25 cable** for example. Depending on the POS system interface, find out the **DB9 Female** or **DB9 Male** connector on the GV-Data Capture for connection.

► **POS system using a DB9-DB25 cable**

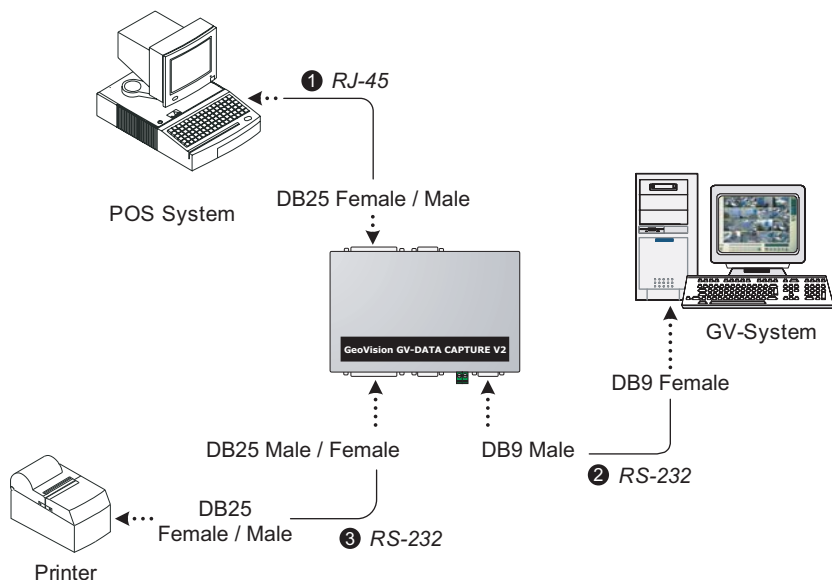


- The RS-232 cables ① ② are supplied with the GV-Data Capture box.
- The RS-232 cable ③ is supplied with the POS system.
- The physical distance between the POS system and GV-System should be less than 10 meters (32 ft).

DB25 Interface

For the diagram below, we use a **POS system using an RJ45-DB25 cable** for example. Depending on the POS system interface, find out the **DB25 Female or DB25 Male** connector on the GV-Data Capture for connection.

► **POS system using an RJ45-DB25 cable**

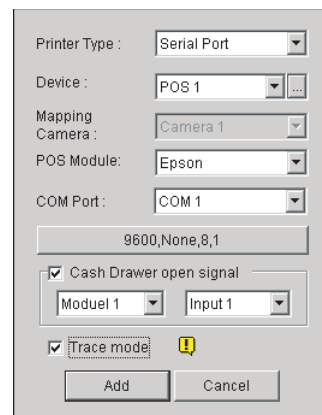


- The RJ-45 cable ① is supplied with the POS system.
- The RS-232 cables ② ③ are supplied with the GV-Data Capture box.
- The physical distance between the POS system and GV-System should be less than 10 meters (32 ft).

System Configuration

You must configure the GV-System before it will be overlaying transaction data on video footage.

1. Run the GV-System.
2. Click the **Configure** button, point to **POS Application Setting**, and select **POS Device Setup**. This displays the POS Server Setup dialog box.
3. Click the **New** button to display the COM setting dialog box as shown below.



- **Printer Type:** Select **Serial Port** for this application.
- **Device:** Assign the POS system to a camera channel. POS 1 displays images and data on the Camera 1 channel; POS 2 on the Camera 2 channel, 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.
- **COM Port:** Select the COM port connected to the POS system.

- ▶ **The parameter button:** Click this button to configure the following parameters or keep default settings.
 - Baud Rate:** Select the baud rate corresponding to that of the POS system.
 - Data Bits:** Select the data bit corresponding to that of the printer.
 - Parity:** Select **None** for the serial POS system.
 - Stop Bits:** Select the stop bit corresponding to that of the printer.
 - ▶ **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.
 - ▶ **Trace Mode:** Check this option only after getting the recommendation from our technical support staff.
4. After above settings, click **Add** to add the POS system to the GV-System.

Cash Register Connection

In this manual, cash registers refer to those with receipt printers internally connected. Cash registers may not be integrated to GV-Systems, unless with the following characteristics. Please check these characteristics before actually connecting your cash register to the GV-System.

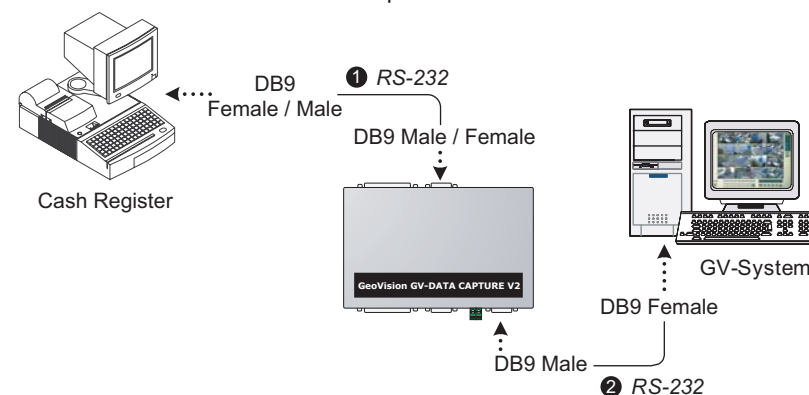
- Check if your cash register has an output port for a printer.
- Connect a receipt printer to the output port and see if it functions well. If it does, the integration is then possible.

Note: If display errors happen when connecting the receipt printer to the cash register (e.g. drop caps, character display errors), the same problems would remain when the GV-System overlays data on video footage.

As POS systems, cash registers also have two types of interfaces: DB9 and DB25. Following will introduce the two interface connections.

DB9 Interface

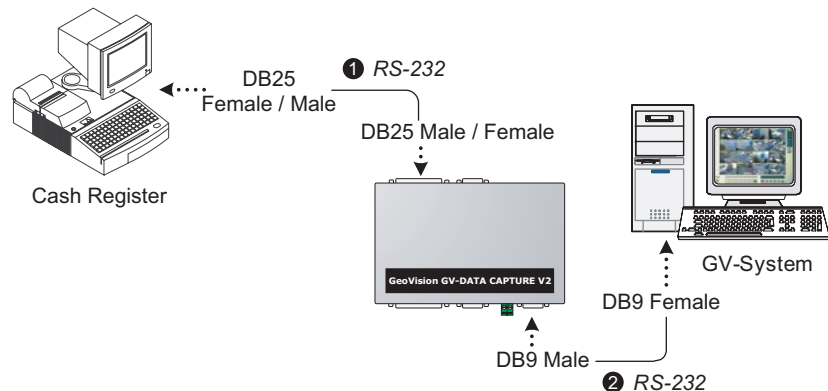
Depending on the cash register interface, find out the **DB9 Female** or **DB9 Male** connector on the GV-Data Capture for connection.



- The RS-232 cables ① ② are supplied with the GV-Data Capture box.
- The physical distance between the POS system and GV-System should be less than 10 meters (32 ft).

DB25 Interface

Depending on the cash register interface, find out the **DB25 Female** or **DB25 Male** connector on the GV-Data Capture for connection.



- The RS-232 cables ① ② are supplied with the GV-Data Capture box.
- The physical distance between the POS system and GV-System should be less than 10 meters (32 ft).

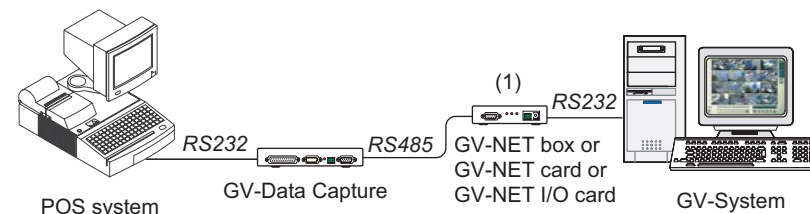
System Configuration

You must configure the GV-System before it will be overlaying transaction data on video footage. Follow the same settings as previously described in the *POS System Connection* section.

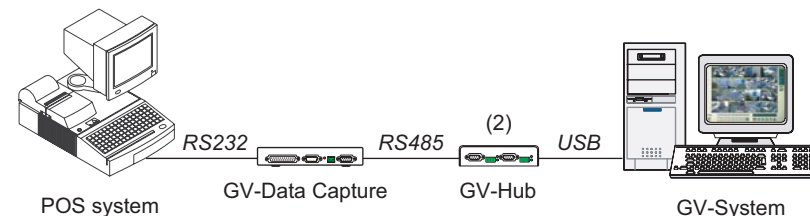
Extending Distance

The previous diagrams assume that the physical distance between the POS system and GV-System is within 10 meters (32 ft). If the distance between the two devices is greater than 10 meters, it is required to use (1) GV-NET series or (2) GV-Hub in the connection.

► Using GV-NET series in the connection



► Using GV-Hub in the connection



Note: The maximum distance of RS-485 is 1200 meters (4000 ft)

Troubleshooting

■ Display errors in transaction data

Display errors may include garbage text, drop caps, and malfunction in printing.

1. If the printer used by your POS system/cash register is not supported by Epson, select **General** in the POS Module field. Refer to the *System Configuration* section.
2. Make sure your POS system/cash register and GV-system are using the same language in their respective operation systems.

If none of the above solution solves your problem, send us the following information. We will analyze your case and offer you a possible solution.

- The **txt** file created by HyperTerminal. For more information about HyperTerminal, see the documentation:
The Printing Mode of POS System/Cash Register
(http://www.geovision.com.tw/002/en/faq/pos/pdf/The_printing_mode_of_POS_system_cash_register.pdf)
- One copy of the transaction receipt. Refer to Figure 2 on page 11.
- A desired file name that will be used as **POS Module** name. Refer to Figure 3 on page 12.
- The POS system/cash register type and model.
- The printer type and model.

■ Transaction events did not stop properly

This problem happens when GV-system cannot identify specific commands from your POS system/cash register.

To solve this problem:

1. Download the program **TranStopEdit.exe** from the link <http://geo-support.dipmap.com:100/POS/TranStopEdit.exe> to the system folder.

2. Execute the program to display the following TranStopEdit window.

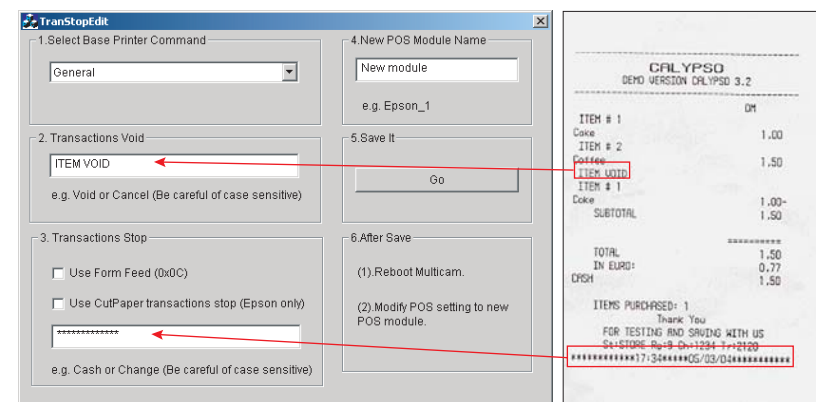


Figure 1 The TranStopEdit window



Figure 2 Receipt copy

3. Under Select Base Printer Command, select the printer command used by your POS system/cash register.
4. Under Transactions Void, enter the exact transaction text used to identify "void". In this example, we find the exact text is ITEM VOID.
5. Under Transactions Stop, enter the stop command used by your printer. If your printer does not support the Form Feed or CutPaper command, enter the exact transaction text used to identify "stop". In this example, *****17:34***05/03/04***** indicates the transaction stops. However, since the time and date varies with each transaction, only enter ***** as the stop command.
6. Under New POS Module Name, enter a module name for the new settings.
7. Click **Go** to apply all settings.

8. Run POS Server Setup. (Look under GV-System/Configure/POS Application Setting/POS Device Setup)
9. Click the **New** button in the POS Server Setup window.
10. In the POS Module drop-down list, select the POS module you created in TranStopEdit.

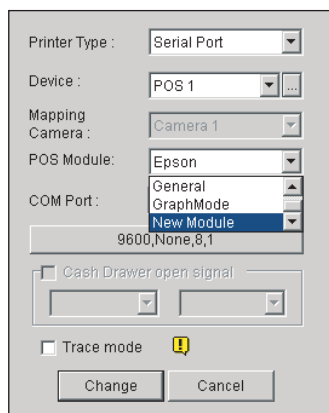


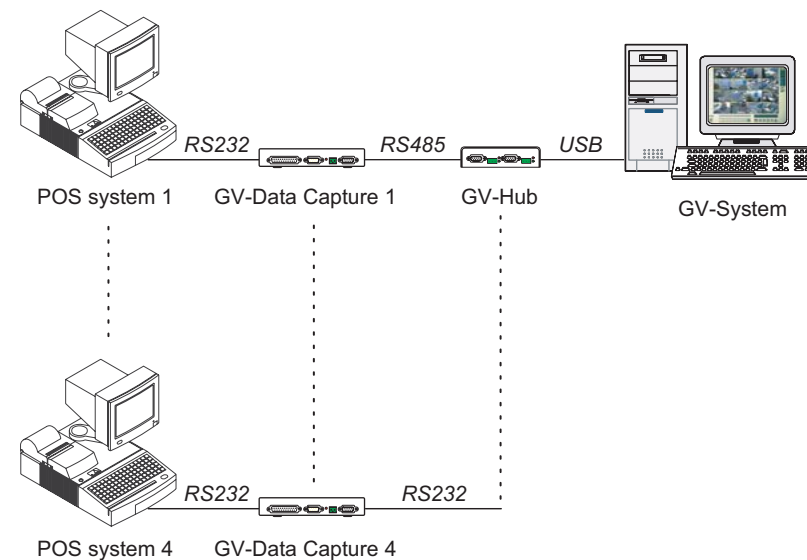
Figure 3 Selecting the created POS module

11. Click **Add**, and test this setting.

■ Connecting more than 2 POS systems/cash registers

Normally, one PC comes with 2 COM ports so that only 2 POS systems/cash registers may be supported without COM port extension. Now the extension is possible by using **GV-Hub**.

One GV-Hub can connect up to 4 GV-Data Capture boxes, as illustrated below.



■ The displayed transaction item did not match that entered at the POS system/cash register

1. Run POS Server Setup. (Look under GV-System/Configure/POS Application Setting/POS Device Setup)
2. Click the **New** button in the POS Server Setup window.

3. Select **Epson** in the POS Module field.

The screenshot shows a configuration window with the following fields and settings:

- Printer Type: Serial Port
- Device: POS 1
- Mapping Camera: Camera 1
- POS Module: **Epson** (highlighted)
- COM Port: COM 1
- 9600,None,8,1
- Cash Drawer open signal
- Trace mode
- Buttons: Add, Cancel

Figure 6 Selecting Epson in the POS Module field

4. Click **Add**, and test this setting

If the above setting doesn't work, send us the following information. We will analyze your case and offer you a possible solution.

- The **txt** file created by HyperTerminal. For more information about HyperTerminal, see the documentation:
The Printing Mode of POS System/Cash Register.
(http://www.geovision.com.tw/002/en/faq/pos/pdf/The_printing_mode_of_POS_system_cash_register.pdf)
- One copy of the transaction receipt. Refer to Figure 2 on page 11.
- A desired file name that will be used as **POS Module** name. Refer to Figure 3 on page 12.
- The POS system/cash register type and model.
- The printer type and model.

Specifications

Connector Rear	DB9 Female	RS-232
	DB25 Male	RS-232
Connector Front	DB9 Male	RS-232
	DB25 Female	RS-232
	DB9 Female	RS-232 to DVR
	RS-485+	Connect to GV-NET / GV-Hub RS-485+
	RS-485-	Connect to GV-NET / GV-Hub RS-485-
Communication	RS-232 from POS	1,200 bps~115,200 bps
	RS-232 to DVR	1,200 bps~115,200 bps
	RS-485 to GV-NET / GV-Hub	1,200 bps~19,200 bps
DC IN	Power Adapter DC 5V, 2A Inner Positive	
Environmental Conditions	Operation temperature	0~50 degree C
	Humidity	5%~95% (non-condensing)
Dimensions	161 (W) x 34 (H) x 123 (D) mm	