

Point-Of-Sale (POS) Application

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 a video footage, by either live viewing or playing back.

POS System Connection

POS systems vary in different forms, with a receipt printer attached internally or externally (also called cash register), with the serial or parallel port, and with the text or graphic mode.

For the information on attaching the text-mode POS system to GV-system, visit the related links below.

To access	Visit
Serial POS System	http://www.geovision.com.tw/002/en/faq/pos/pdf/Serial_POS.pdf
Parallel POS System	http://www.geovision.com.tw/002/en/faq/pos/pdf/Parallel_POS.pdf
Serial Cash Register	http://www.geovision.com.tw/002/en/faq/pos/pdf/Seria1_Cash.pdf
Parallel Cash Register	http://www.geovision.com.tw/002/en/faq/pos/pdf/Parallel_Cash.pdf

To attach the graphic-mode POS system to GV-system, first check if your POS system has these two characteristics:

- Windows operation system
- Serial port (COM port) for output

For the application of the graphic-mode POS system, you need:

- Additional USB keypro
- *POS Data Sender* program. (Included in the installation CD)

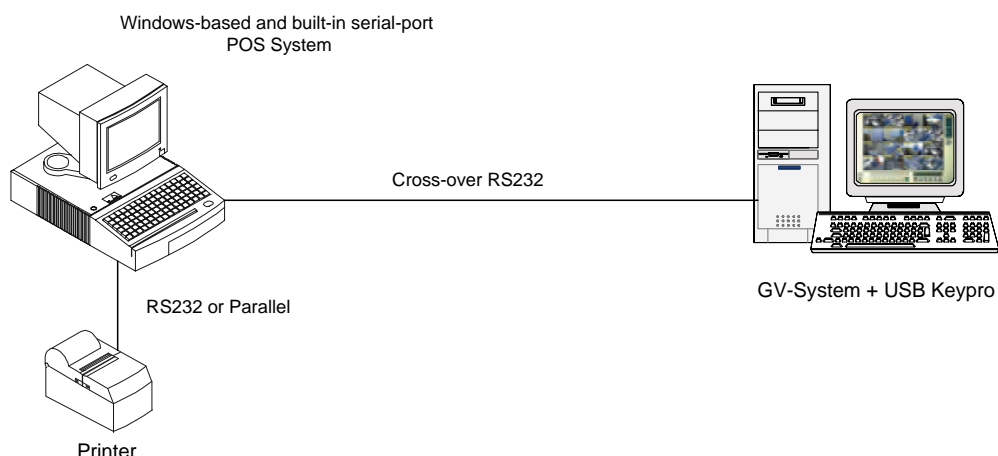
If you are not sure the printing mode of your POS system, refer to *The Printing Mode of POS System/Cash Register* at this link:

http://www.geovision.com.tw/002/en/faq/pos/pdf/The_printing_mode_of_POS_system_cash_register.pdf

POS Data Sender

To attach the graphic-mode POS system with the Windows operation system and serial output to GV-system, follow these steps:

1. Connect the POS system as illustrated below.



2. Insert the Installation CD to the POS system. It will run automatically and pop up a window.
3. Select the item of Install Version 7.0 system.
4. Select the item of Software POS Driver (Only for Graphic mode POS System) in the Install Program 2nd menu. Refer to Figure 1-15.
5. Follow the on-screen instructions to complete the installation.
6. Go to Windows Startup, point to Programs, select DVR-POS, and then click DVR POS Driver. This displays the following window.

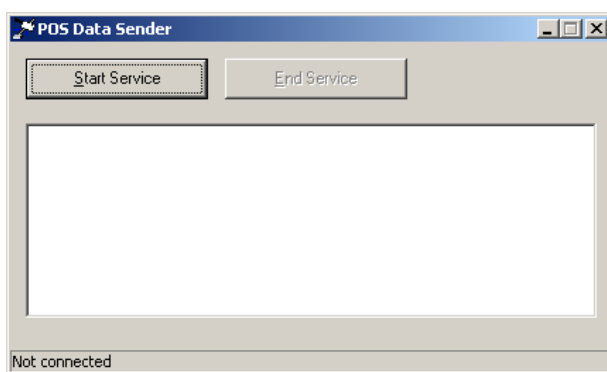


Figure 3-1 POS Data Sender

7. Click Start Service, and then select the COM port to send graphic data to the GV-system.

Note: The GV-system must be configured and ready for this application. To set up the GV-system, see the *Setting a POS System* section below.

Setting a POS System

To connect a POS system to GV-system, follow these steps:

1. Click the Configure button, point to POS Application Setting, and then select POS Device Setup to display the POS Sever Setup window.

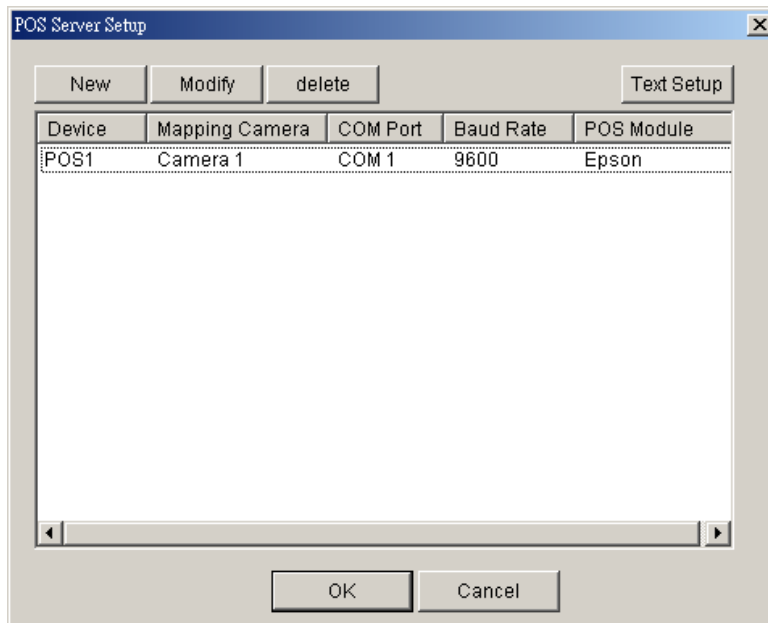


Figure 3-2 POS Server Setup

2. Click the New tab in the upper part of the window to display the following dialog box.

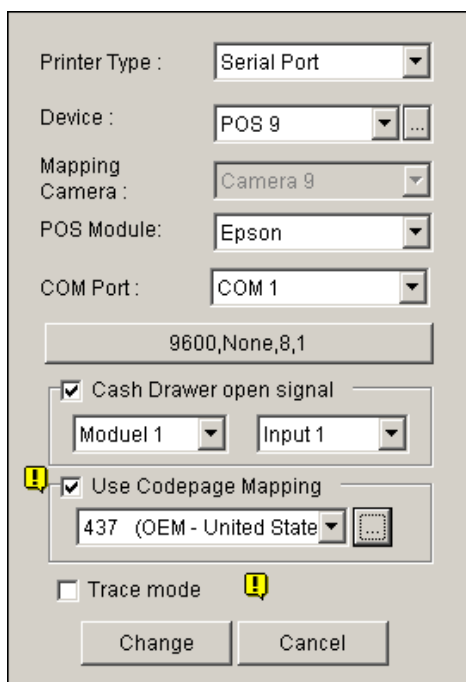


Figure 3-3 POS system settings

- **Printer Type:** Select Serial Port or Parallel Port that the POS system belongs to.
 - **Device:** Assign the POS system to a camera screen. POS 1 displays the images and data on the Camera 1 screen; POS 2 on the Camera 2 screen, and so on. Click the button [...] next to the item to rename the device.
 - **POS Module:** Select the printer attached to the POS system. If it's not Epson, select General for other brands. If the printing is in the graphic mode, choose GraphMode. For this application, an additional USB keypro and the *POS Data Sender* program are required. Refer to the *POS System Connection* section for details.
 - **COM Port:** Select the COM port that the POS system is connected to.
 - **The parameter button:** Click the button to configure Baud Rate, Data Bits, Parity, and/or Stop Bits to match those of the POS system, or keep them as defaults.
 - **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 opened, a signal will be sent to the main system and recorded in System Log for later retrieval.
 - **Use Codepage Mapping:** This feature is to support special characters and symbols display. See *Codepage Mapping* for further details.
 - **Trace Mode:** Check this item only after getting the recommendation from our technical support staff.
3. After above settings, click Add to add the POS system to the main system.

Superimposing POS Data onto Camera Screen

Follow these steps to set camera screens with POS text data:

1. Open the POS Device Setup window. Refer to Figure 3-1.
2. Click the Text Setup tab to set text font and position of the data.

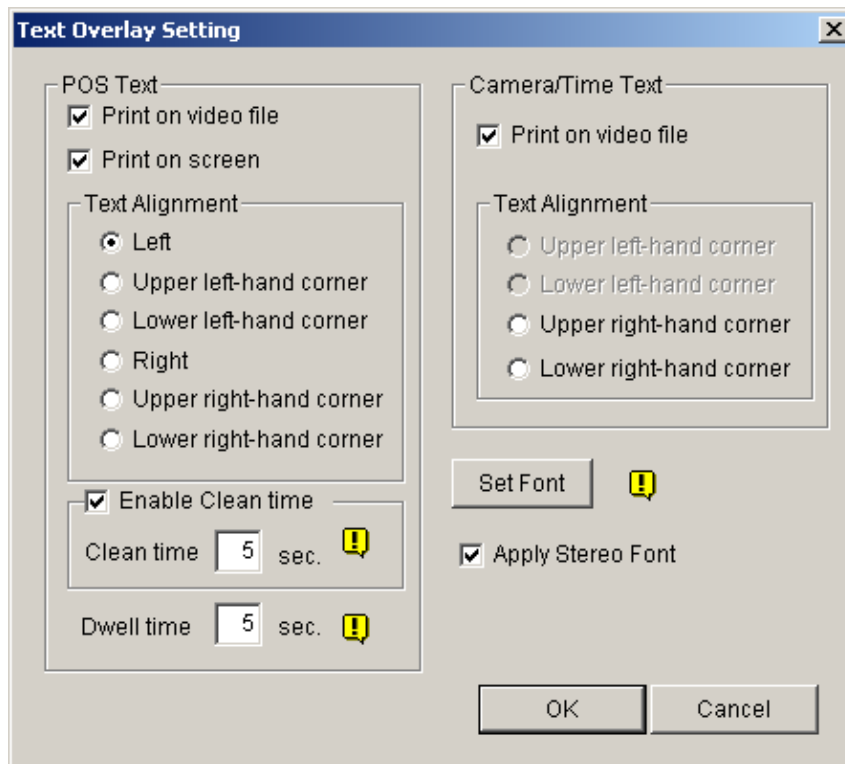


Figure 3-4 Text Overlay Settings

[POS Text]

- **Print on video file:** When this option is enabled, POS data will be overlaid on the recorded video file.
- **Print on screen:** When the option is enabled, POS data will be overlaid on the transaction scene.
- **Text Alignment:** Select how you want the POS text data to be aligned on a view screen.
- **Enable clean time:** When the item is checked, after the specified time in seconds that if GV-system hasn't received the transaction data from your POS system, the already-displayed text data will disappear from the camera screen, i.e. in case the cashier stops entering the transaction data.
- **Dwell time:** Specify the amount of time in seconds that the text stays on a view screen before the next transaction.

[Camera/Time Text]

- **Print on video file:** When this option is enabled, camera ID and location name will be overlaid on the recorded video file.
- **Text Alignment:** Select how you want the camera information to be aligned on a view screen.

[Set Font] Click the Set Font button to setup the font for POS and Camera/Time text. The option Apply Stereo Font makes texts stand out from the background by giving white-edge to the texts.

POS Field Filter

POS Field Filter allows you to create a column of a transaction item in System Log. It further filters the transaction conditions based on your criteria, and displays the results under the created column.

To set up the function, follow these steps:

1. Click the Configure button, point to POS Application Setting, and then select POS Field Filter to display the following window.

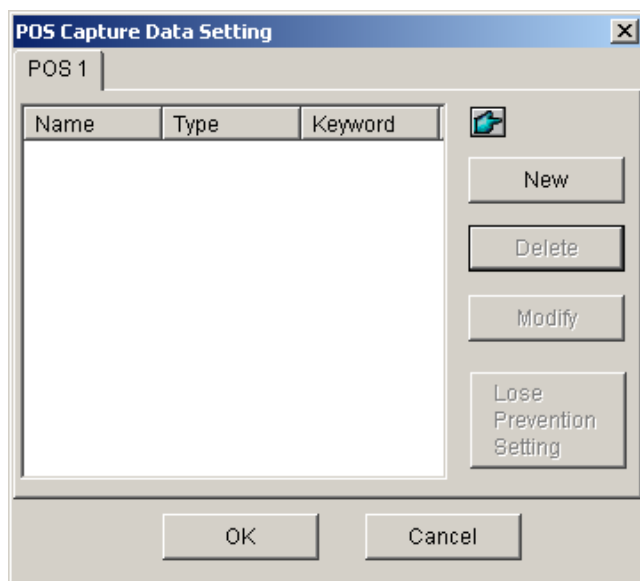


Figure 3-5 POS Capture Data Setting

2. Click the New button to display the following dialog box.

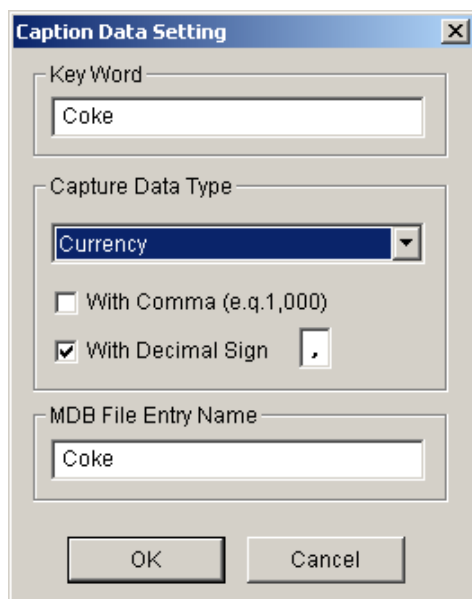


Figure 3-6 Setting search criteria

[Key Word] Enter a meaningful keyword that matches exactly one of transaction items/texts in the receipt. The field is case sensitive. Suppose we enter Coke. Every ext matching to Coke will be screened out.

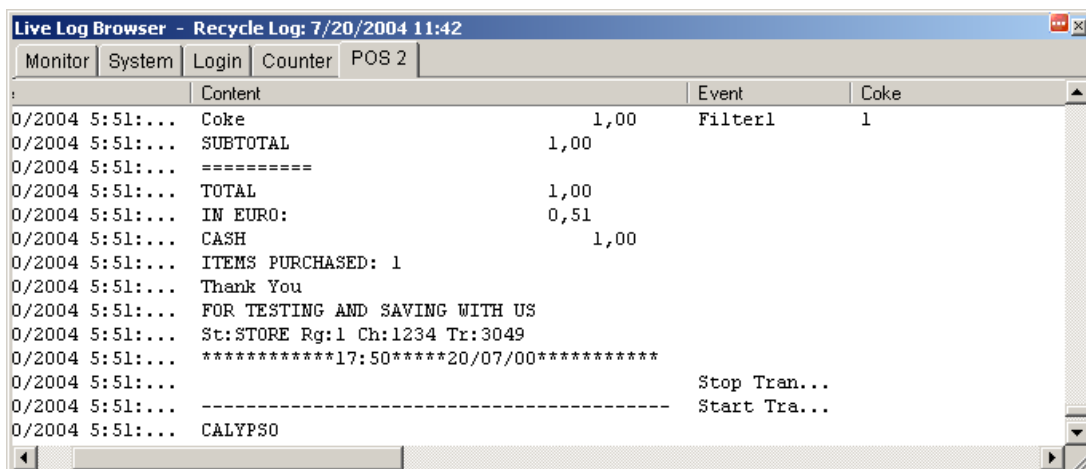
[Capture Data Type] Select the type of data followed by the specified transaction item/word: **Numeric, Currency or Alphabetic**. If the specified transaction item/text is followed by a price amount, choose Numeric or Currency. If it is followed by alphabets, choose Alphabetic.

- **With Comma:** If there are commas in a price amount, check the option.
- **With Decimal Sign:** If there are decimal signs in a price amount, check the option.
- **With Space:** The option is only available when you choose Alphabetic. If there is space among a series of characters, check the option.

[MDB File Entry Name] Enter a file name to store the data.

3. Click OK to apply the above settings.
4. Open System Log.

In System Log, for this example, you can see the last column created for the transaction item Coke. The transactions matching the search criteria will be displayed under the created column.



The screenshot shows a window titled "Live Log Browser - Recycle Log: 7/20/2004 11:42". It has tabs for Monitor, System, Login, Counter, and POS 2. The "System" tab is active, displaying a log table with columns: Content, Event, and Coke. The log entries include transaction details for a purchase of Coke, with amounts in Euros and a total. The "Coke" column shows a value of 1 for the first entry.

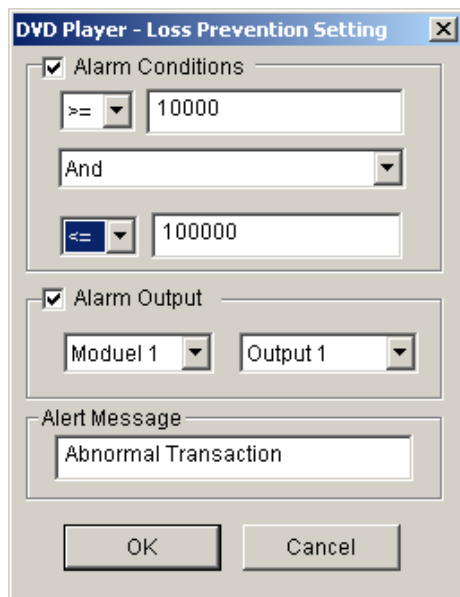
Content	Event	Coke
0/2004 5:51:... Coke	1,00	Filter1 1
0/2004 5:51:... SUBTOTAL	1,00	
0/2004 5:51:... =====		
0/2004 5:51:... TOTAL	1,00	
0/2004 5:51:... IN EURO:	0,51	
0/2004 5:51:... CASH	1,00	
0/2004 5:51:... ITEMS PURCHASED: 1		
0/2004 5:51:... Thank You		
0/2004 5:51:... FOR TESTING AND SAVING WITH US		
0/2004 5:51:... St:STORE Rg:1 Ch:1234 Tr:3049		
0/2004 5:51:... *****17:50*****20/07/00*****		
0/2004 5:51:... Stop Tran...		
0/2004 5:51:... Start Tra...		
0/2004 5:51:... CALYPSO		

Figure 3-7 A created column in System Log

Abnormal Transaction Alerts

When an abnormal transaction of the specified transaction item occurs, this function can automatically activate the output device and send out assigned E-Mail/SMS/Pager alerts. To set up this function, follow these steps:

1. Click the Configure button, point to POS Application Setting, and then select POS Field Filter to display the POS Capture Data Setting window. See Figure 3-5.
2. Click the Loss Prevention Setting button to display the following dialogue box.



The screenshot shows a dialog box titled "DVD Player - Loss Prevention Setting". It contains three main sections. The first section, "Alarm Conditions", is checked and contains two dropdown menus with values ">=" and "<=", and two text input fields with values "10000" and "100000". Between these two conditions is a dropdown menu with the value "And". The second section, "Alarm Output", is also checked and contains two dropdown menus with values "Moduel 1" and "Output 1". The third section, "Alert Message", contains a text input field with the value "Abnormal Transaction". At the bottom of the dialog are two buttons: "OK" and "Cancel".

Figure 3-8 Loss Prevention Setting

[Alarm Conditions] Click this option and define the price range for an alarm condition. For this example, when the price amount in a transaction is *great than or equal to* (\geq) 10000 and *less than or equal to* (\leq) 100000, the assigned alarm will be activated.

[Alarm Output] Assign an installed output module for the application.

[Alert Message] Enter a desired alert message. To set up a notification type (E-Mail/Hotline/SMS), refer to *Send Alerts Approach* in Chapter 2 on page 23.

Codepage Mapping

This feature is to support special characters and symbols display. When your transaction text appears on the screen incorrectly, your POS system may use different character code from GV-system's. To change a character code, follow these steps:

1. In Figure 3-3, enable Use Codepage Mapping, and then select a character code from the drop-down list.

Note: The codepage is related to the Script in Font Setting (see Figure 3-4). When this option is disabled, it means there are no codepages matching your script setting.

- To verify the character code you selected, click the [...] button to preview its codepage.

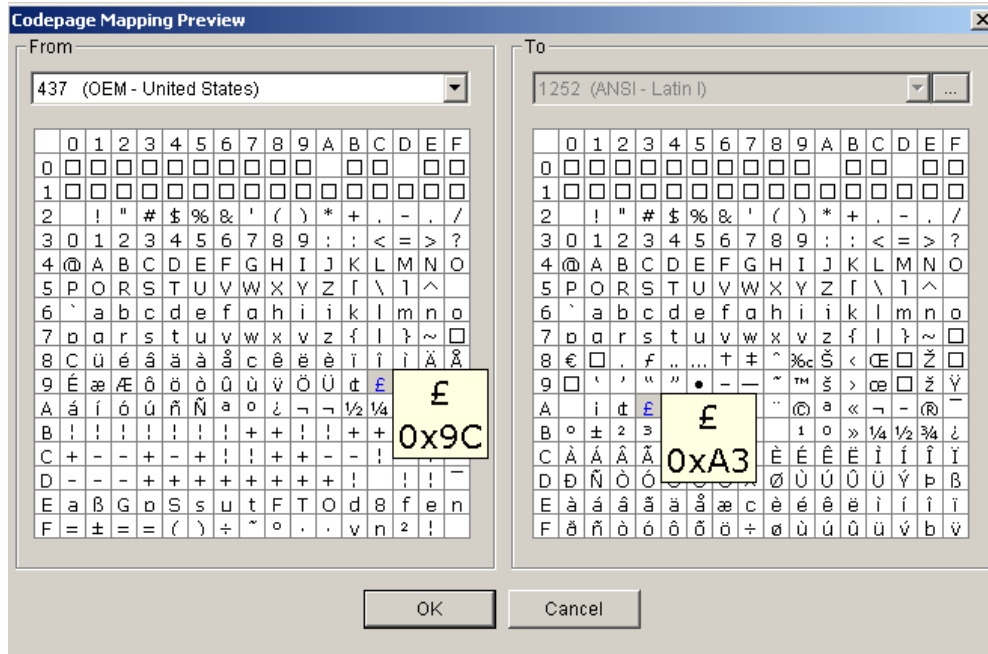


Figure 3-9 Codepage Mapping Preview

- At the From side, locate and click one of the symbols or characters that cannot display correctly. For this example, you will see its previous character code (From side: 0x9C) has been transferred to the default equivalent (To side: 0xA3).

Searching POS Data

You can locate any desired POS data and videos during a transaction. In the main system, click the ViewLog button and then select Search POS Data to display the Quick Search window. When the Quick Search starts, the latest transaction video and data will always be displayed. For the Quick Search function, refer to Figure 4-6 on page 99.

