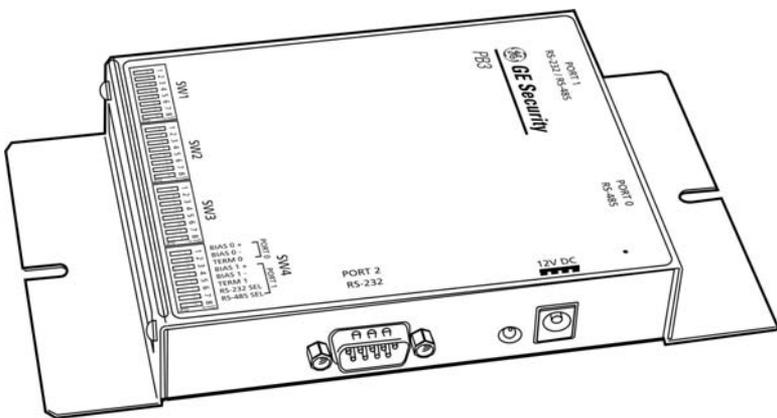


# PB3-POS-RP ProBridge User Manual



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<b>Regulatory</b>	<p>Operation of this equipment in a residential area may cause interference, in which case the user is required to take all measures that are necessary, at the user's expense, to correct the interference</p>



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## Before You Begin

Read these instructions before installing or operating this product.

**Note:** This installation should be made by a qualified service person and should conform to local codes.

This manual provides installation and operation information. To use this document, you must have the following minimum qualifications:

- A basic knowledge of CCTV systems and components
- A basic knowledge of electrical wiring and low-voltage electrical hookups

Use this product only for the purpose for which it was designed.

### Customer Support

For assistance in installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, contact Technical Support:

#### **GE Security**

Call: 888-437-3287

**Note:** You should be at the equipment, ready with details before calling Technical Support.

### Conventions Used in this Manual

**Boldface** or button icons highlight command entries. The following **WARNING**, **CAUTION**, and **Note** statements identify potential hazards:

**\* WARNING:**

Improper use of this equipment can cause severe bodily injury or equipment damage.

---

**\*\* CAUTION:**

Improper use of this equipment can cause equipment damage.

---

**Note:** Notes contain important information about a product or procedure.

\* This symbol indicates electrical warnings and cautions.

\*\* This symbol indicates general warnings and cautions.

## Introduction

This manual provides all the information necessary to properly install this product.

---



**\*\* CAUTION:**

Your system's layout, camera assignment, PB3 termination, and serial device model should all be selected before starting the installation.

---

### PB3-POS-RP Overview

The GE PB3-POS-RP (PB3) is a specific model of ProBridge that interfaces the DVMRe family of digital video multiplexer/recorders to retail point-of-sale (POS) devices often identified as electronic cash registers (ECRs) and some ATM's.

One PB3 is required per device. Where multiple devices are connected to a single DVMRe unit, the individual PB3's are interconnected through its built-in RS485 network.

A list of the supported serial devices associated with the devices can be found in the DIP switch settings section on page 24.

## Compatibility

The PB3 is compatible with the following GE DVMRe products:

DVMRe Type	Software Version	PPC Version
DVMRe-CD/CS	V 3.07 (and above)	V 3.07 (and above)
DVMRe-eZ	V 3.20 (and above)	V 3.14 (and above)
DVMRe-CT and DVMRe-CT II	V 4.0 (and above)	N/A
DVMRe-eZT (Triplex)	V 4.03 (and above)	N/A
StoreSafe and StoreSafe Pro II	V 4.06 (and above)	N/A

To verify the software version in your DVMRe, note the display which identifies the version when the unit boots-up or you can click the **About** box in the **Main Menu**.

## Additional Equipment

The installer will need to provide suitable length RS485 cable terminated with RJ-45 connectors on installations requiring multiple PB3 units that are interconnected via the unit's built-in RS485 network.

## Disclaimer

The GE ProBridge components identified within this document provide means of capturing transaction text/data for use by the DVMRe family of digital video recording/transmission products. The ProBridge components translate the data into a usable format by the DVMRe and permits associating transaction data

with specific cameras. GE assumes no responsibility for the amount and type of information available, the operation, non-operation or erroneous operation of the customer provided equipment that interfaces with the ProBridge.

## PB3 System Components

You should find the following PB3 system components when the product is unboxed.



Figure 1-1. PB3-POS-RP Box Contents.

**PB3-POS-RP ProBridge includes:**

- (1) PB3-POS-RP ProBridge unit.
- (1) P/N 4310-0034B: RJ45 to RJ45 cable. Connects the PB3 to RS485 Network. This cable is 6' in length.
- (1) P/N 4310-0068A: serial device Interconnect Cable. This cable is 14" in length.
- (1) P/N 4310-0047B: RJ45 to DB9F cable. Connects the PB3 to the DVMRe. This cable is 6' in length.
- (1) P/N 4310-0069A: serial device to PB3 Cable. This cable is 6' in length.
- (1) P/N 0900-0176: Triport Cable. This cable is 6' in length.
- (1) P/N 4010-0007: 12VDC 120VAC Power Supply or (1) P/N 4010-0008: 12VDC 220VAC Power Supply.
- (1) P/N 0150-0231C: PB3-POS-RP User Manual.

## Installation Environment

**Power:** Ensure that the installation site's AC power is stable and within the rated voltage of the external power supply. If the site's AC power is likely to have spikes or dips, use power line conditioning or an Uninterruptible Power Supply.

**Temperature:** Observe the unit's ambient temperature specifications when choosing a location for the unit. Extremes of heat or cold beyond the specified operating temperature limits may cause the unit to fail. Do not install this unit on top of other hot equipment.

**Moisture:** Do not expose the unit to rain or moisture. Moisture can damage internal components. Do not install this unit near sources of water.

**RS232 Limitations:** Cable length between the POS device and the PB3 is limited to 50'. Cable length between the PB3 unit and the DVMRe is also limited to 50'. If the supplied cables are replaced by custom made cables to address distances between components, ensure the cable is manufactured to ANSI standards for RS232 communication.

**RS485 Limitations:** If multiple PB3 units are connected to a single DVMRe unit, the distance between the first and last PB3 unit is limited to 3,000 feet (RS485 communication standards).

## Power

The PB3 is furnished with a power supply (110 or 240 VAC). Do not use any other power supply with this product. The manufacturer accepts no responsibility for damage caused by the use of any other power supply.

Make sure installation is complete and all connections are made before applying power to the unit.

**4310-0007 120VAC Power Supply**

Power Supply Input
<b>Voltage:</b> 120 VAC <b>Tolerance:</b> $\pm 10\%$ <b>Frequency:</b> 60 Hz
Power Supply Output
<b>Voltage:</b> 12 VDC <b>Current:</b> 110 mA <b>Power:</b> 1.3 Watts <b>Connector:</b> 2.1mm female barrel. Center Positive

**4310-0008 220VAC Power Supply**

Power Supply Input
<b>Voltage:</b> 220 Volt AC <b>Tolerance:</b> $\pm 10\%$ <b>Frequency:</b> 50 Hz
Power Supply Output
<b>Voltage:</b> 12 Volt DC <b>Current:</b> 110mA <b>Power:</b> 1.3 Watts <b>Connector:</b> 2.1mm female barrel. Center Positive

## Installation

Before installation please familiarize yourself with the PB3 and its typical system layout.

### PB3 Components

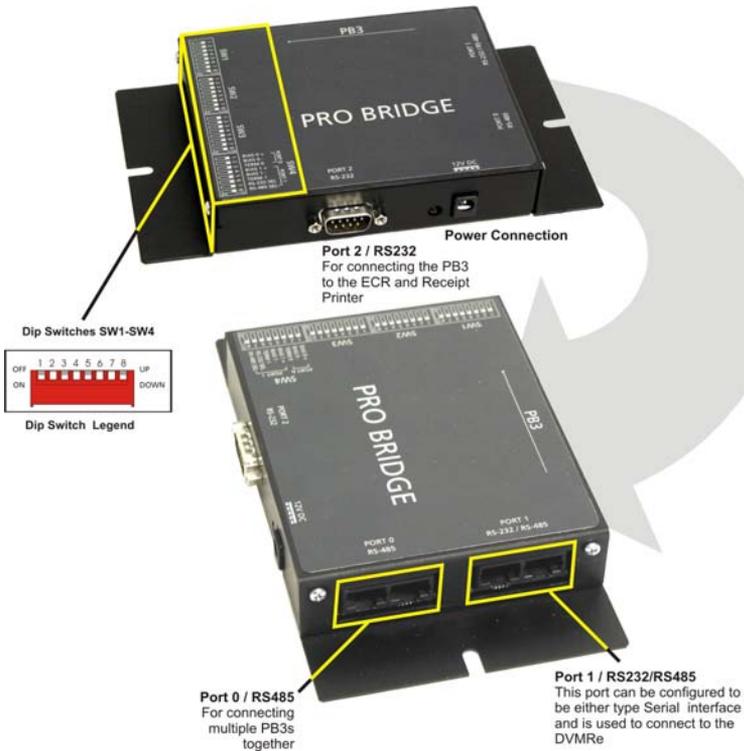


Figure 2-1. ProBridge Components.

## Typical System Layout

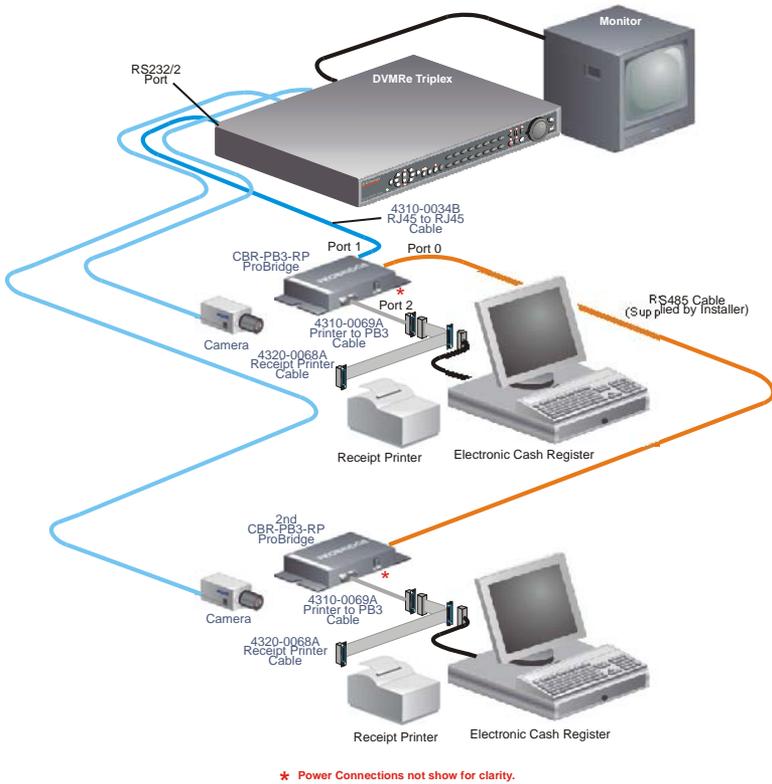


Figure 2-2. Typical System Layout.



### \*\* IMPORTANT:

Your system's layout, camera assignment, PB3 termination, and serial device model should all be selected before starting the installation.

## Required Dip Switch Information

**SW1**                      Dipswitch 1-4    Special Functions (See Section 3)

Dipswitch 5-8    Camera Assignment\*

**SW2**                      Dipswitch 1        Reserved

Dipswitch 2-4    Baud Rate

Dipswitch 5-8    Protocol

**SW3**                      Dipswitch 1-8    serial device Device Select\*

**SW4**                      Dipswitch 3        ProBridge Termination\*

\*These settings should be set before beginning the installation.

## Default (Factory) Dipswitch Settings

SW1		SW2		SW3		SW4	
1	Up	1	Down	1	Down	1	Up
2	Up	2	Down	2	Down	2	Up
3	Up	3	Down	3	Down	3	Up
4	Up	4	Down	4	Down	4	Up
5	Up	5	Down	5	Down	5	Up
6	Up	6	Down	6	Down	6	Up
7	Up	7	Down	7	Down	7	Down
8	Up	8	Down	8	Down	8	Up

Switch Settings as shown above are:

- Camera Number 1 (SW1 5-8)
- Generic Printer (SW3 1-8)
- PB3 Termination OFF (SW4 3)

## Detailed Installation Steps

**Note:** Modify the DVMRe's default baud rate of 19200 to 57600.

- 1) At the minimum set or verify the DIP Switch settings for the Camera Number, PB3 Termination, and the type of serial device.
- 2) Disconnect the existing serial device cable from the Printer and install the ECR Interconnect Cable (multiple DB25 connectors) to the serial device as shown on page 14.

**Note:** If the existing connection is using a DB9 to DB9 connection, then use the supplied Triport cable in place of the ECR Interconnect cable. See the Triport cable specification on page 45.

- 3) Reconnect the serial device Cable to one of the DB25F connectors on the ECR Interconnect Cable as shown on page 14.
- 4) Connect the PB3 Interface Cable (DB25M to DB9F) to the remaining DB25F connector on the ECR Interconnect Cable as shown on page 14. Connect the other end (DB9F) to the DB9M connector on the PB3 unit (Port 2).
- 5) Connect the PB3 Power Supply to the unit, but do not plug in the power.

**Note:** If only one (1) PB3 unit (one cash register) is to be connected, skip to **Step 9** below.

- 6) If more than one cash register interface is to be installed repeat steps 1-4 above for each additional cash register.
- 7) Connect each PB3 unit together by using an RS485 cable with RJ-45 connectors on each end. Connect to either receptacle on Port 0 to interconnect the PB3 units using an “in” and “out” method. (For details on the RS485 cable, review the cable specifications).

**Note:** The installer shall provide this cable.

- 8) Confirm that each PB3 has the proper termination setting.
- 9) Connect the PB3 closest to the DVMRe using the supplied cable from Port 1 (RJ45 outer receptacle) of the PB3 to the RS232/2 port on the DVMRe unit.

**Note:** Modify the DVMRe's default baud rate of 19200 to 57600.

- 10) Supply power to the PB3.

## Verify Operation

**To verify proper operation process several transactions at the Cash Register.**

**To verify proper operation with a DVMRe-CT, eZT, or StoreSafe unit:**

Select full-screen on the Main Monitor (A) the camera associated with a PB3 unit. Press the camera button until the text box window appears in the display.

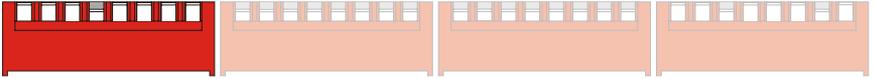
The text box will display any transaction data as it is passed to the PB3 unit from the POS device. Be aware that some POS devices only send transaction data until the end of the transaction (when the receipt is printed).

If the unit fails to display transaction text, please go to the troubleshooting section of this manual.

## Dip Switch Settings

This chapter deals in detail with the Dip Switch Settings. The PB3 must be re-initialized before any changes to the switch settings will be recognized.

### SW1 Settings



#### SW1 –Switches 1-4

The first four switch positions on SW1 are programmed to provide special functions on the PB3 for display and troubleshooting. Under normal installations these settings do not need to be changed from the defaults.

Switch Function	1	2	3	4
Display Memory	D	D	U	U
Demo Mode	D	D	U	D
Reset (Clear Memory)	D	D	D	D
Auto Line Feed	D	U	D	D

#### Display Mode

This setting displays all internal memory settings through Port 1 on the text box window of the selected camera on a DVMRe Triplex. This allows you to quickly check what settings are in your unit.

**Demo Mode (Simulated Message)**

This setting permits the PB3 to send a simulated POS transaction message to the DVMRe/Triplex. This is useful for troubleshooting or for demonstrating PB3 functionality without having a POS device connected. As a troubleshooting tool, this element allows you to verify that the PB3 is able to send messages and have the DVMRe correctly capture data coming from the PB3. In this mode, if text can be received and displayed, yet when attempting to process ECR data fails, then some other problem exists with respect to the ECR connection (cabling) or interface setup.

**Reset (Clear Memory)**

This is primarily a troubleshooting tool that allows the user to clear the non-volatile memory of all settings. This will restore all factory defaults as a first step to reconfiguring the unit.

**Auto Line Feed**

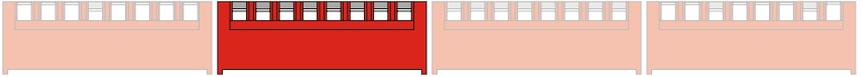
This option has been added to allow the insertion of Auto Line Feeds when a new line character is detected in Generic mode.

## SW1 - Switches 5-8

Dipswitches 5 thru 8 on **SW1** assigns transaction text for that cash register's PB3 unit to a specific camera on the DVMRe.

Camera Number	5	6	7	8
1	U	U	U	U
2	U	U	U	D
3	U	U	D	U
4	U	U	D	D
5	U	D	U	U
6	U	D	U	D
7	U	D	D	U
8	U	D	D	D
9	D	U	U	U
10	D	U	U	D
11	D	U	D	U
12	D	U	D	D
13	D	D	U	U
14	D	D	U	D
15	D	D	D	U
16	D	D	D	D

## SW2 Settings



### SW2 - Switch 1

Switch 1 on SW2 is reserved for Technical Support personnel. Do not use.

### SW2 - Switches 2-4

Switches 2-4 on SW2 are used to modify the baud rate on Port 2 of the PB3 should the POS device you are using require it.

### SW2

Baud Rate Port 2	2	3	4
1200	U	U	U
2400	U	U	D
4800	U	D	U
9600	U	D	D
14.4k	D	U	U
19.2k	D	U	D
38.4k	D	D	U

## SW2 - Switches 5-8

Switches 5-8 on SW2 are used to modify the communication transfer protocol on Port 2 of the PB3 should the POS device you are using require it. The protocol listed here consists of 3 user definable settings: The Start Bit, The Stop Bit, and Parity. These can be expressed as follows:

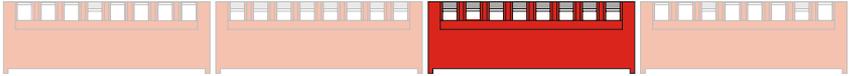
- Stop Bit: **7** or **8**-bit ASCII
- Stop Bit: **1** or **2**-Stop bits
- Parity: **Odd**, **Even**, or **None**

In the following table 8,1,E would translate to **8**-start bits, **1**-stop bit, and **Even** parity.

### SW2

Protocol	5	6	7	8
7,1,N	U	U	U	U
7,1,O	U	U	U	D
7,1,E	U	U	D	U
8,1,N	U	U	D	D
8,1,O	U	D	U	U
8,1,E	U	D	U	D
7,2,N	U	D	D	U
7,2,O	U	D	D	D
7,2,E	D	U	U	U
8,2,N	D	U	U	D
8,2,O	D	U	D	U
8,2,E	D	U	D	D

## SW3 Settings



### SW3 - Switches 1-8

Switches 1 thru 8 on **SW3** define the serial device used for the interface. The selection predetermines the Baud Rate and Protocol for the target serial device.

Baud Rate and Protocol can be manually overridden using the dipswitches for these elements.

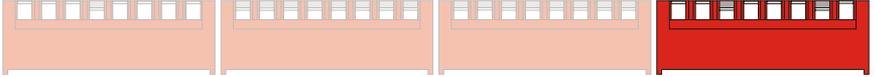
#### Included Interfaces:

Serial data analyzer	Generic interface
Citizen POS printer	Epson TM88
Pinnacle POS	Radiant systems POS
Speedway POS	Gilbarco PC/G-site journal
Wayne/Dresser	Epson TM-300A
Axhiom printer 7158	UTC model PD1100S-11345
VeriFone CR terminal	NCR 7156
POS server output	Teller line printer
Fujitsu pole display	Samsung 5215 pole
XAPCOM	Positouch 1
Positouch 2	MICROS Eclipse POS
Axhiom printer A758	Challenger Printer Port

### SW3

Printer	1	2	3	4	5	6	7	8
Serial DA	U	U	U	U	U	U	U	U
Generic	U	U	U	U	U	U	U	D
Citizen POS	U	U	U	U	U	U	D	U
Epson TM88	U	U	U	U	U	U	D	D
Pinnacle	U	U	U	U	U	D	U	U
Radiant	U	U	U	U	U	D	U	D
Speedway	U	U	U	U	U	D	D	U
Gilbarco	U	U	U	U	U	D	D	D
Wayne Dresser	U	U	U	U	D	U	U	U
Epson TM300A	U	U	U	U	D	U	U	D
Axhiom 7158	U	U	U	U	D	U	D	U
UTC	U	U	U	U	D	U	D	D
VeriFone	U	U	U	U	D	D	U	U
NCR 7156	U	U	U	U	D	D	U	D
POS server	U	U	U	U	D	D	D	U
Teller LP	U	U	U	U	D	D	D	D
Fujitsu Pole	U	U	U	D	U	U	U	U
Samsung 5215	U	U	U	D	U	U	U	D
XAPCOM	U	U	U	D	U	U	D	U
Positouch 1	U	U	U	D	U	U	D	D
Positouch 2	U	U	U	D	U	D	U	U
MICROS POS	U	U	U	D	U	D	U	D
Axiohm A758	U	U	U	D	U	D	D	U
Challenger	U	U	U	D	U	D	D	D

## SW4 Settings



### SW4 – Switches 1,2, 4-6

These switches are reserved for Technical Support personnel. Do not use.

### SW4 - Switch 3

Switch 3 on SW4 is used for signal termination for Port 0 on the PB3. Termination is important whenever multiple PB3 units are interconnected via the unit's built-in RS485 network and the length between the PB3's is **more than 2000 feet**. The default termination setting on the ProBridge 3 unit is with termination set to **OFF**. Whenever there are more than two PB3's, termination on some of the PB3 units will change. The first PB3 and the last PB3 on the RS485 network will have termination set to **ON (Down)**, all others between these two units will have their termination set to **OFF (Up)**.

### SW4 - Switches 7-8

Switches 7 and 8 on SW4 controls the Network protocol of Port 1 on the PB3. In other words, Port 1 on the PB3 can communicate as an RS232 or RS485 port depending on the needs on the Network environment.

### SW4

Network Protocol	7	8
RS232	D	U
RS485	U	D

# Troubleshooting

<b>Problem</b>	<b>Probable Cause</b>	<b>Solution</b>
*Unable to verify capture of text.	<ol style="list-style-type: none"><li>1. No power.</li><li>2. Incorrect cabling.</li><li>3. Incorrect switch settings.</li></ol>	<ol style="list-style-type: none"><li>1. Check power.</li><li>2. Check cables.</li><li>3. Verify settings with Display Memory mode on page 18.</li></ol>
Garbled text.	Incorrect baud rate	Check baud rate for POS device, set DIP switches to match.

\* Use Demo mode to verify that the PB3 is passing data to the DVMRe.

## Hyperterminal Setup

Manual configuration can also be completed using Windows HyperTerminal in stead of the DIP switches. Manual configuration should only be used if the “POS Device Selection” does not conform to your specific device because baud rates or protocols are slightly different than the default values for the selected device.

### Equipment Required

You will need the following equipment to program the PB3 using HyperTerminal:

- A PC or Laptop Computer with a COM port and Windows 98/NT/200/XP installed and operational.
- The supplied 4310-0047B PB3 to PC (DB9F to RJ45) cable.

### Setup

1. Remove power and disconnect the PB3 from the DVMRe.
2. Plug the 4310-0047B cable into Port 1 of the PB3 and a free COM port on your PC, typically COM1.
3. Launch HyperTerminal, found in Start/Programs/Accessories/Communications/HyperTerminal.



Figure 5-1. Laptop connected to PB3 running HyperTerminal.

Open a new Connection (FILE>NEW):



Give the connection a name and select an Icon.

Click **OK**.

Under “Connect Using” option select “COM1”.



The Com1 Properties menu will appear. Select the following settings to complete the setup:

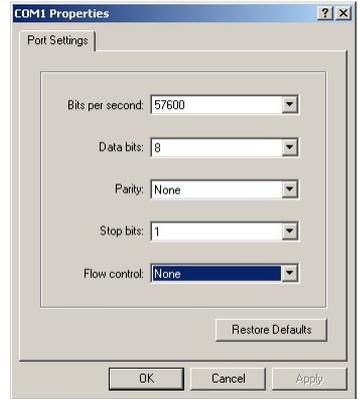
Bits per Second = 57600

Data Bits = 8

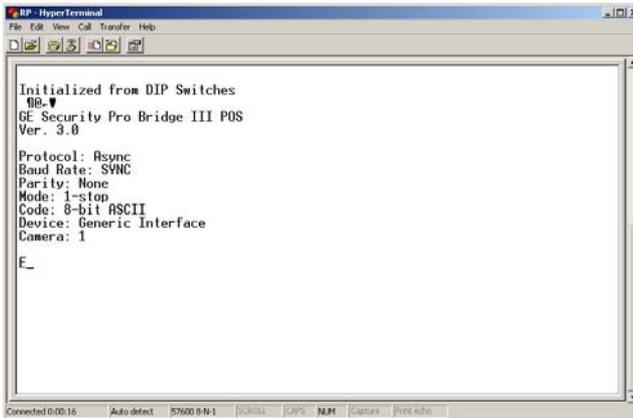
Parity = None

Stop Bits = 1

Flow Control = None



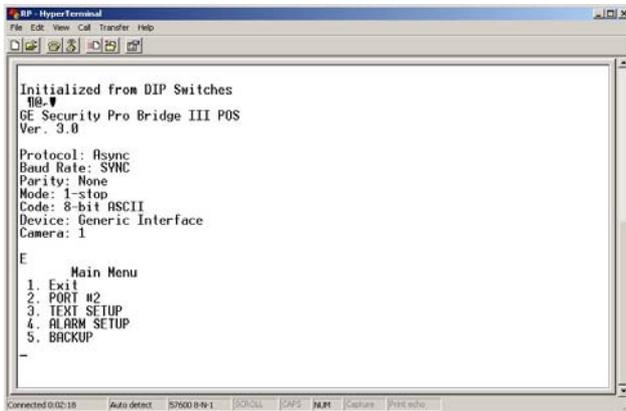
Power up the PB3 unit by plugging in the power supply. The following screen (or similar) will confirm that you are in HyperTerminal programming mode.



The configurable settings are:

- Protocol
- Baud Rate
- Parity
- # of Stop Bits
- Character Set
- POS Device Type

Once HyperTerminal mode is set up, press the “Enter” key twice. The following menu will appear:



To make a menu selection, enter the number of the element and press “Enter”.

For example:

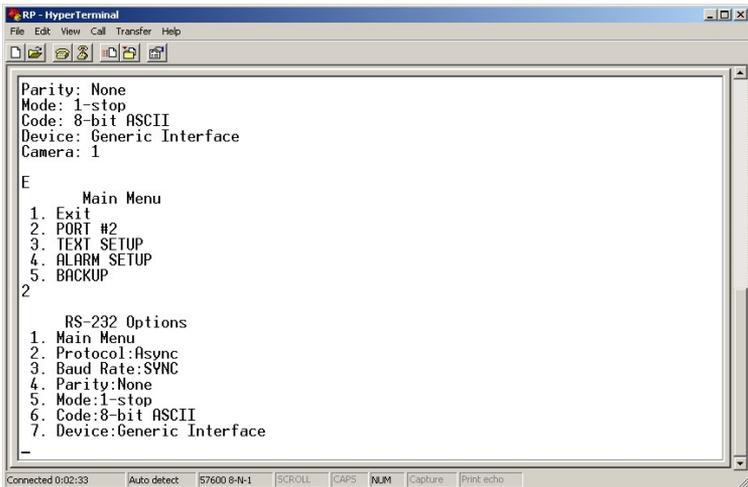
Input the following      **2**      **ENTER**      (Port #2)

## Main Menu Option 2 (Port #2)

Port #2 is an RS-232 port that connects the PB3 unit to the serial device Interconnect Cable. The settings will vary based upon the type of serial device in use.

Once you have selected this option, there will be multiple selections available for each element. Entering the number for the element will switch to the next option for that element. Continue to enter the same element number until the desired entry appears.

The menu options are presented similar to the following screen:



```
RP - HyperTerminal
File Edit View Call Transfer Help
[Icons]
Parity: None
Mode: 1-stop
Code: 8-bit ASCII
Device: Generic Interface
Camera: 1
E
  Main Menu
  1. Exit
  2. PORT #2
  3. TEXT SETUP
  4. ALARM SETUP
  5. BACKUP
2
  RS-232 Options
  1. Main Menu
  2. Protocol:Async
  3. Baud Rate:SYNC
  4. Parity:None
  5. Mode:l-stop
  6. Code:8-bit ASCII
  7. Device:Generic Interface
-
Connected 9:02:33  Auto detect  57600 8-N-1  SCROLL  CAPS  NUM  Capture  Print echo
```

**Note:** To return to the Main Menu at any time press “1” and hit “Enter”.

### **Menu Selection 2 – Protocol Options**

- Asynchronous

### **Menu Selection 3 – Baud Rate**

Baud Rate is only used if Protocol option selected is Asynchronous.

- 1200
- 2400
- 4800
- 9600
- 14.4K
- 19.2K
- 38.4K

### **Menu Selection 4 – Parity**

- None
- Odd
- Even

### **Menu Selection 5 – Mode**

The available selections are:

- 1-Stop (bit)
- 2-Stop (bit)

**Menu Selection 6 – Code (Character)**

The available selections are:

- 7-Bit ASCII
- 8-Bit ASCII

**Menus Selection 7 – Device Type**

Serial data analyzer	Generic interface
Citizen POS printer	Epson TM88
Pinnacle POS	Radiant systems POS
Speedway POS	Gilbarco PC/G-site journal
Wayne/Dresser	Epson TM-300A
Axhiom printer 7158	UTC model PD1100s-11345
VeriFone CR terminal	NCR 7156
POS server output	Teller line printer
Fujitsu pole display	Samsung 5215 pole
XAPCOM	Positouch 1
Positouch 2	MICROS Eclipse POS
Axhiom printer A758	Challenger Printer Port

**IMPORTANT:** You must BACKUP (Save) the program information via the BACKUP option so that everytime the unit is powered up, the settings you configured will be used. Go back to the Main Menu and select element #3 BACKUP and select the option to Save the settings.

## Main Menu Option 3 (Text Setup)

The Text Setup menus allow the user to use some text filtering options. These options allow the user to filter out excess data. Select the Text Setup option from the Main Menu.

Once you have selected this option, there will be multiple selections available for each element. Entering the number for the element will switch to the next option for that element. Continue to enter the same element number until the desired entry appears.

The menu options are presented similar to the following screen:

```

RP - HyperTerminal
File Edit View Call Transfer Help
[Icons]
1. Main Menu
2. Protocol: Async
3. Baud Rate: SVNC
4. Parity: None
5. Mode: 1-stop
6. Code: 8-bit ASCII
7. Device: Generic Interface
1
  Main Menu
  1. Exit
  2. PORT #2
  3. TEXT SETUP
  4. ALARM SETUP
  5. BACKUP
3
  Text Setup
  1. Main Menu
  2. Compare: Disabled
  3. Bypass Count: 10
  4. Text String: **
  5. Append Line Feed: Disabled
-
Connected 0:03:40  Auto detect  57600 8-N-1  SCROLL  CAPS  NUM  Capture  Print echo
  
```

## Compare

**Use this command to enable or disable Text filtering.**

Toggle the Compare option by entering the number '2' followed by the Enter key.

2 > Enter

## Bypass Count

The Bypass Count is the number of characters to bypass or ignore excluding the characters in the Text String.

The Bypass Count can be entered when you enter the sequence: 3 > Enter.

Enter Count: \_

The range of the Bypass Count is 0 to 255. Entry will auto-terminate after the 3rd number input. You may terminate input by using the Enter key. The Backspace key may also be used for correction.

Enter Count: 200 (auto-terminates)

Enter Count: 50 > Enter (manual termination)

## Text String

The Text String option allows entering characters (up to 20) in a string to be ignored or bypassed. When you enter the option '4' followed by the Enter key, you will be prompted to enter a string.

Enter String: \_

The maximum number of characters you can enter (including the space character) is 20. The entered string of characters will be converted to all UPPER CASE because the Text Filter is not case sensitive.

## Append Line Feed

This allows the Append Line Feed option to be enabled or disabled. When the Append Line Feed option is enabled, each time the PB3 receives a new line Character (Carriage Return or

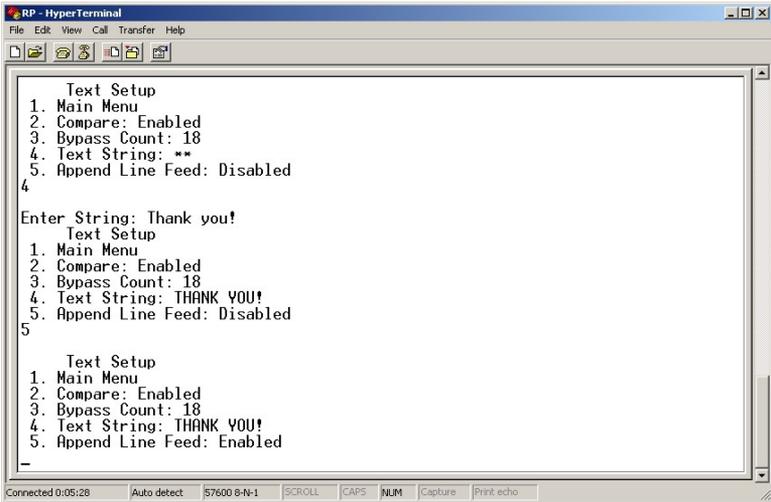
Linefeed), the PB3 will output both a Carriage Return and a Line Feed. If this option is disabled then, the PB3 will not append any extra characters.

Toggle the Append Line Feed option by entering the number '5' followed by the Enter key.

5 > Enter

**Example of setting Text Setup Menu options:**

1. Access the Text Setup Menu (Enter, Enter, 3, Enter).
2. Enable the String Compare (2, Enter) Compare: Enabled.
3. Set Bypass Count to 18 (3, Enter) and enter the number 18 followed by the Enter key.
4. Enter a text string (4, Enter) Thank you! > Enter.
5. Enable the Append option (5, Enter) Append Line Feed: Enabled.
6. Exit the menus (1, Enter) repeat 2 times.



An example of the setup above is shown in the following illustration.

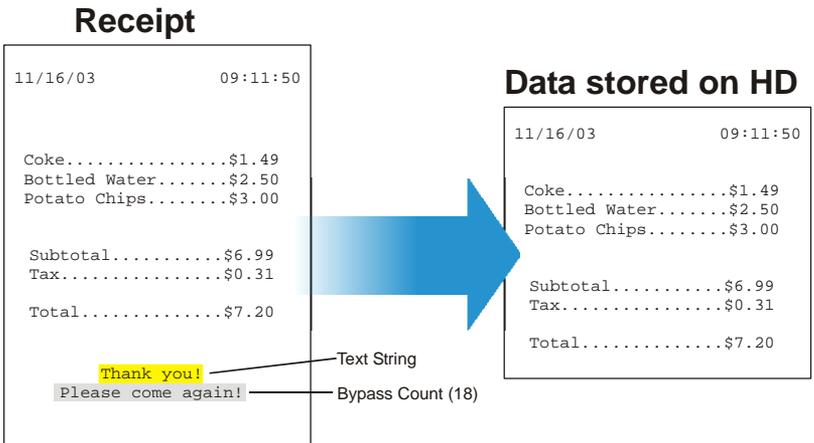
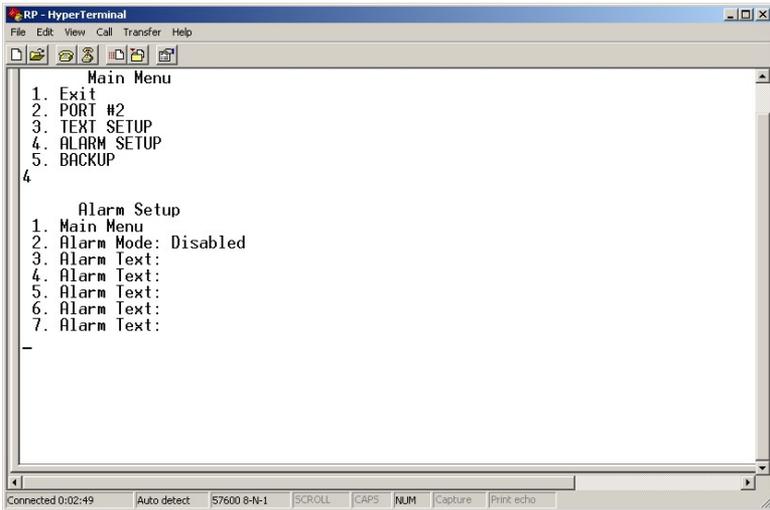


Figure 5-2. Example of Text Filtering and Bypass Count options.

## Main Menu Option 4 (Alarm Setup)

Use this option to enable or disable alarm mode and to customize the text to display for each alarm. Select option #4 to display the following screen



```
RP - HyperTerminal
File Edit View Call Transfer Help
Main Menu
1. Exit
2. PORT #2
3. TEXT SETUP
4. ALARM SETUP
5. BACKUP
4
Alarm Setup
1. Main Menu
2. Alarm Mode: Disabled
3. Alarm Text:
4. Alarm Text:
5. Alarm Text:
6. Alarm Text:
7. Alarm Text:
-
Connected 0:02:49 Auto detect 57600 8-N-1 SCROLL CAPS NUM Capture Print echo
```

To change the alarm mode select option #2 and press the enter button. The alarm mode will toggle between enabled or disabled.

You can enter customized alarm text by selecting options 3 through 7 and entering your text. Your text string can be up to 15 characters. Make sure you save your changes before exiting HyperTerminal.

## Main Menu Option 4 (Backup)

Use the Backup menu (Main Menu Option 5), to save the settings that you have modified.

## PB3 Specifications

Physical	
<b>Housing</b>	Metal enclosure.
<b>Dimensions (W x L x H)</b>	4.0 x 7.0 x 1.0" (100 x 175 x 25 mm)
<b>Nominal Weight</b>	4.8 oz (136 g)
<b>Shipping Weight</b>	1 lb (453 g) packaged, including the external AC power supply and manual.
<b>Color</b>	Black.

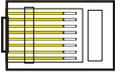
Environmental	
<b>Temperature</b>	0 to 40 °C, operating.
<b>Relative Humidity</b>	90%, non-condensing.

Electrical	
<b>AC Power</b>	External AC power supply included.
<b>Voltage Range:</b>	110 to 240 VAC $\pm$ 10%
<b>Current:</b>	200 mA
<b>DC Power</b>	DC jack, positive center.
<b>Power Supply Voltage:</b>	12 VDC
<b>Current:</b>	110 mA
<b>Power:</b>	1.5 W

**Note:** All specifications are subject to change without notice. GE believes that all specifications are correct, however no liability is assumed for omissions or errors.

## Cable Specifications

### ProBridge to Triplex (DVMRe-CT)



RJ45 Connector



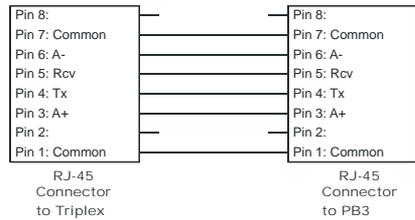
RJ45 Connector

**Part Number :** 4310-0034B

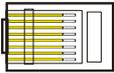
**Communication Type:** RS232

**Connector Type:** RJ-45, RJ-45

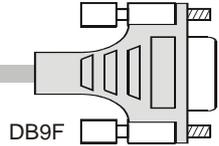
**Cable Required:** 5 Foot RJ-45 to RJ-45 Triplex RS232 Cable (Supplied). Connects ProBridge to DVMRe-CT.



## ProBridge to DVMRe (DVMRe-CD/S)



RJ45 Connector



DB9F

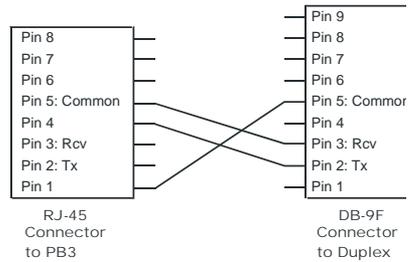
**Part Number :** 4310-0047B

**Communication Type:** RS232

**Connector Type:** RJ-45 ,DB9F

**Cable Required:** 6 Foot RJ-45 to DB9F RS232 Cable (Supplied).  
Connects ProBridge to DVMRe-CD/CS.

**NOTE:** This cable also used for Programming ProBridge via Windows HyperTerminal





### ProBridge to Printer Interconnect Cable

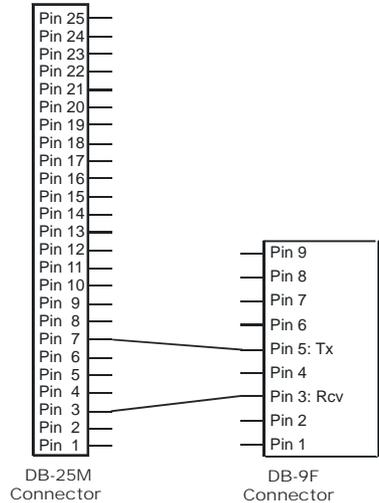


**Part Number :** 4310-0069A

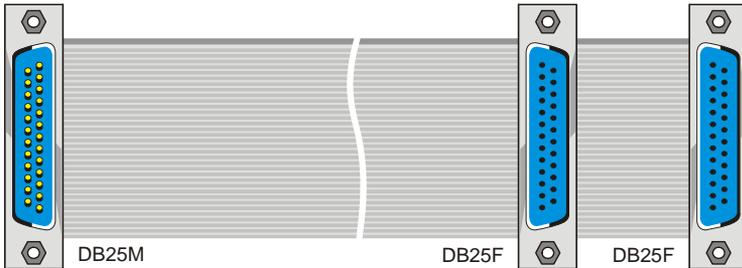
**Communication Type:** RS232

**Connector Type:** DB25M, DB9F

**Cable Required:** 6 Foot DB25M to DB9F RS232 Cable (Supplied).  
Connects PB3 to the Printer Interconnect Cable.



## ProBridge Interconnect Cable to serial device

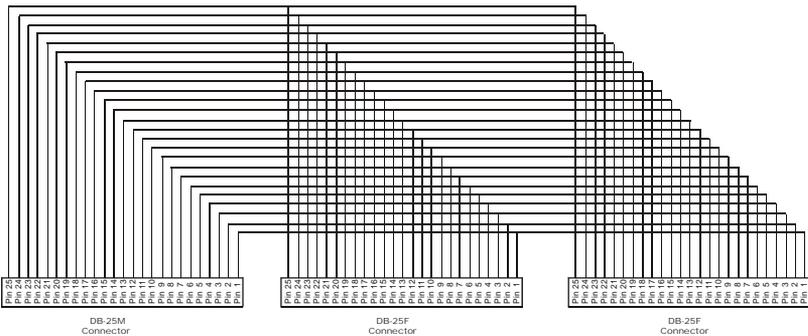


**Part Number :** 4310-0068A

**Communication Type:** RS232

**Connector Type:** DB25M, DB25F, DB25F

**Cable Required:** 6 Foot DB25M to DB25F to DB25F cable (Supplied).  
Connects PB3 Interconnect cable to the serial device.



## Triport Cable

The Triport cable is used for tapping serial RS-232 ports available on most POS cash registers. The Tri-Port does not interfere with any signals between the POS and the printer (if there is an external printer connected).

For installation, do the following:

1. Remove the DB9 printer connector at the POS (if an external printer is connected).
2. Install the Triport connector (printed circuit board) into the vacated POS connector.
3. Connect the DB9 printer connector to the Triport.
4. Connect the Triport cable (gray cable w/DB-9S) to the PB3.

**NOTE1:** If a printer was not attached to the POS, it may be necessary to enable the serial port on the POS. Program the POS for a printer setting.

**NOTE2:** If the POS uses a DB-25 serial connector, use two “DB-25 to DB-9” adaptors. These adaptors are readily available most electronic stores.

## Hardware Handshake Jumpers JP1 and JP2

For a POS system with an external printer connected, remove the JP1 and JP2 jumpers.

For a POS system without a printer, it may be necessary to jumper one or both JP1/JP2.

- JP1 shorts pins 7 and 8 (RTS/CTS)
- JP2 shorts pins 4 and 6 (DTR/DSR)

## Triport Cable Modifications

In some cases, it may become necessary to modify the wiring of the Triport cable. It is recommended that only trained technicians modify the Triport. Modifications are limited to only the removal of the orange or blue wire. Removing both wires or re-attaching these wires to other solder points may disrupt communications between the POS device, printer, and/or the PB3.

Ref: The *orange wire* carries signals from the transmit signal of the cash register.

Ref: The *blue wire* carries signals from the transmit signal of the printer.

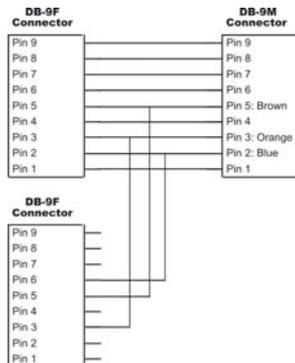


**Part Number :** 0900-0176

**Communication Type:** RS232

**Connector Type:** DB9M, DB9F, DB9F

**Cable Required:** 6 Foot DB29F to DB9F and DB9M RS232 Cable (Supplied). Connects PB3 to the POS device and printer.



## Contacting technical support

For assistance installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, you may contact technical support during normal business hours (Monday through Friday, excluding holidays, between 6 a.m. and 5 p.m. Pacific Time).

Table 1. Sales and support contact information

	Sales	Technical support
<b>Phone:</b>	<b>Toll-free:</b> 888.GESECURity (888.437.3287 in the US, including Alaska and Hawaii; Puerto Rico; Canada). Outside the toll-free area: 503.885.5700.	
<b>E-mail</b>	cvovideosales@ge.com	generaltech@ge.com
<b>Fax</b>	800.483.2495	<b>541.752.9096</b> (24 hours/day)

**Note:** Be ready at the equipment before calling for technical support.

## Online publication library

Another great resource for assistance with your GE Security products is our online publication library, available to all of our customers on our website. To access our publication library, go to our website at the following location:

<http://www.gesecurity.com/>

In the **Tools** area at the top, click the *Publication Library* link. After you register and log on, you may search through our online library for the documentation you need.<sup>1</sup>

<sup>1</sup> Many GE Security documents are provided as PDFs (portable document format). To read these documents, you will need Adobe Acrobat Reader, which can be downloaded free from Adobe's website at [www.adobe.com](http://www.adobe.com).