



POS Transaction Text Inserter System Operation Manual

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About this guide

Conventions used in this guide

To make sure that you perform certain tasks properly, take note of the following symbols used throughout this manual.



WARNING: Information to prevent injury to yourself when trying to complete a task.



CAUTION: Information to prevent damage to the components when trying to complete a task.



IMPORTANT: Information that you must follow to complete a task.

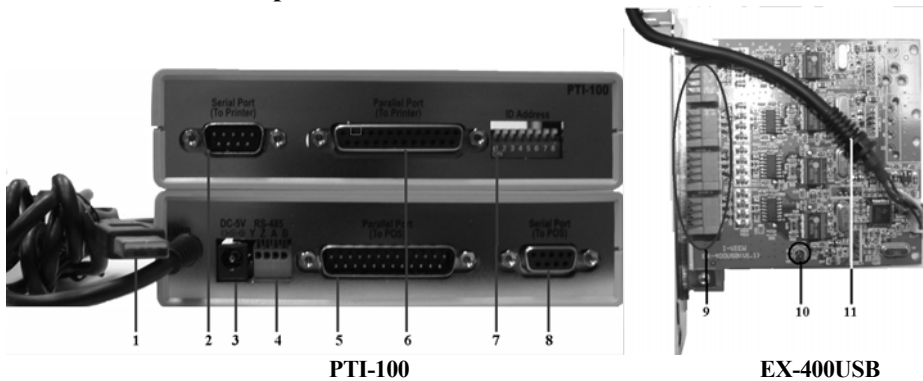


NOTE: Tips and additional information to aid in completing a task.

1. POS Text Inserter hardware installation

This chapter will show function, specification and configuration of POS Text Inserter system.

1-1. Hardware Description:



- 1: USB Cable** – Connect to POS machine for POS text transmits to DVR via TCP/IP and provides the power for PTI-100 operation.
- 2: Serial Port (Male)** – Connect to printer **3: Power Jack** – Connect to DC5V power
- 4: RS-485 Port** – Connect to EX-400USB device for POS text transmits to DVR via RS-485.
- 5: Parallel Port (Male)** – Connect to POS **6: Parallel Port (Female)** – Connect to Printer
- 7: Dip Switch** – Setup ID address & printer type **8: Serial Port (Female)** – Connect to POS
- 9: RS-485 Port** – Connect to PTI-100 to receive the POS transaction text via RS-485.
- 10. LED** – Power indicator **11: USB Cable** – Connect to USB port of DVR.



1. Plug the USB cable into POS machine and the PTI-100 can share power from USB port.

If you do not want to share the power from POS machine, please use DC 5V/250mA power adapter for PTI-100 operation.

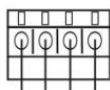
2. The POS system will display “**New Hardware**” when the USB cable is plugged in. You can install the driver from the Driver1603_3213USB folder on the supplied CD or ignore the driver request if the POS text transmission is not through TCP/IP.

1-2. Specification:

Item \ Model	PTI-100	EX-400USB
Function	POS text inserter	Transaction text data
Communication	RS-485 full duplex up to 1.2Km using twisted pair cable	
Baud Rate	19200/ 9600/ 4800/ 2400 BPS	
Interface	Series, Parallel and RS-485	4 ports RS-485 interface
Dimension	135 x 110 x 35 mm	120 x 100 mm
Power	DC 5V/250mA	DC 5V/500mA
Temperature	Operation: 0-70°C, Storage: -10-80°C (Non- Condensing)	

1-3. Pin assignment:

PTI-100 POS Text Inserter

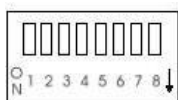


- **RS-485 Y Z A B**

Y: Transmitter (+) **Z:** Transmitter (-) **A:** Receiver (+) **B:** Receiver (-)

- **USB Cable**

Black: Ground **Green:** Data (+) **White:** Data (-) **Red:** DC5V (+)



- **8 Pin dipswitch**

S1— ↑**OFF**: Using serial port printer ↓**ON**: Using parallel port printer.

S2— ↑**OFF**: Transmit POS transaction text via TCP/IP.

↓**ON**: Transmit POS transaction text via RS-485.

S3-S4: Baud rate setting, (Default is 9600BPS). Please refer to the Table 1.1:



1. Please ignore the baud rate setting if the POS uses the parallel port printer.

2. Please reboot the power of PTI-100 when you setup the Dip switch.

Table 1.1

Baud rate Switch	2400	4800	9600	19200
S3	↓	↑	↓	↑
S4	↓	↓	↑	↑

S5-S8: For ID address setting; the table of ID address show as below: **Table 1.2**

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
S5	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↑	↑	↑	↑	↑	↑
S6	↓	↓	↓	↓	↑	↑	↑	↑	↓	↓	↓	↓	↑	↑	↑	↑
S7	↓	↓	↑	↑	↓	↓	↑	↑	↓	↓	↑	↑	↓	↓	↑	↑
S8	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑

● **4 Pin dipswitch (Inside):** For printer model setting, please refer to the below table: **Table 1.3**

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
S1	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↑	↑	↑	↑	↑	↑
S2	↓	↓	↓	↓	↑	↑	↑	↑	↓	↓	↓	↓	↑	↑	↑	↑
S3	↓	↓	↑	↑	↓	↓	↑	↑	↓	↓	↑	↑	↓	↓	↑	↑
S4	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑

P 1: Setup for Serial/Parallel dot matrix printer; such as TP-3688 / TP-7688.

P 2: Setup for Parallel thermal printer; such as TM-88II, TM-88III.

P 3-P16: No use.

EX-400USB 4 ports RS-485 Interface

● **RS-485:** Each EX-400USB can connect 4 sets PTI-100.

Y: Transmitter (+) **Z:** Transmitter (-) **A:** Receiver (+) **B:** Receiver (-)

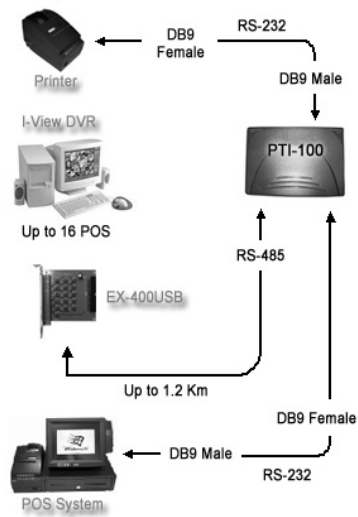


To avoid the interference problems, each twisted pair cable must be connected to Y&Z or

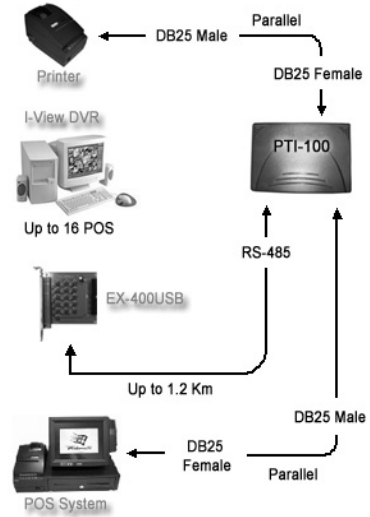
A&B port. i.e. Y and A (Z and B) port can not use a twisted pair cable.

1-4. System Configuration:

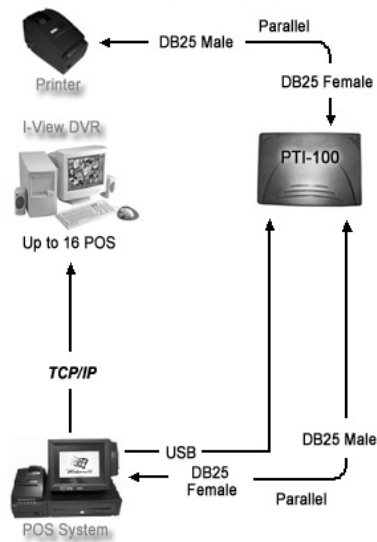
Serial port connection:



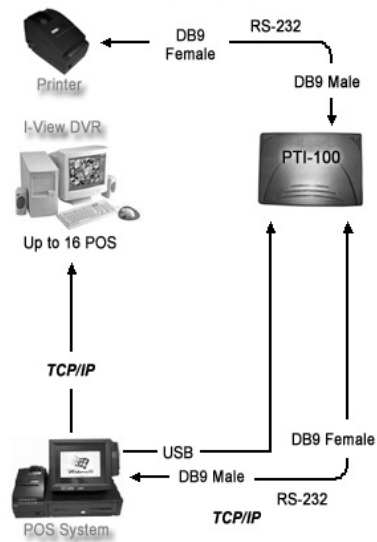
Parallel port connection:



TCP/IP connection (Parallel port):



TCP/IP connection (Com port):



1-5. How to configure the POS Text Inserter System?

The POS text Inserter System allows you to insert text into the video clips, of up to 16 POS systems within 1.2 km by means of twisted pair cable. Using the POS text Inserter System will allow the transaction text of POS to be inserted into the video clips through I-View's DVR. Please follow instructions below to complete hardware settings.

Step 1. Check the printer type (Serial or Parallel) of POS system.

Let **S1** ↑**OFF** when using Serial port printer; S1 ↓**ON** when using Serial port printer.

Step 2. Setup the ID address of PTI-100; please refer to ID address setting table.

Step 3. There are two ways of communication in transmitting POS text transaction data.

Via RS-485:

- a. Plug the EX-400USB 4 ports RS-485 Interface into the DVR and connect the USB cable into USB port of DVR. The Windows O.S. will show “**New hardware found**” and request a driver. You can install the drivers from **C:/XPDevice** (For AS and ASE series), **C:/HSDevice** (HS series) and **C:/RDDevice** (RD series).
- b. Plug USB cable of PTI-100 into the USB port of POS system for power; or use the DC5V power adapter into PTI-100.
- c. Let **S2** switch (8 Pin dip switch) ↓**ON**.
- d. Using 4-wire/twisted pair cable to connect the RS-485 port between PTI-100 and EX-400USB. Please make sure the port connection must be **Y to Y; Z to Z; A to A; B to B**.



You can ignore the driver request of POS system when you use the RS-485 text transmission.

Via TCP/IP:


- a. Repeat the same setup as for **Via RS-485** in step “a”.
- b. Plug USB cable of PTI-100 into the USB port of POS and then install the driver to POS system from CD.
- c. Let **S2** switch (8 Pin dip switch) ↑**OFF**.
- d. Install EZNetPOS.exe program into POS system from CD.

2. Operate POS Text Inserter System

While working in conjunction with PTI-100 POS text Inserter, the Witness XP surveillance system can turn into a POS-DVR surveillance system, which helps you with tools to remotely monitor cashier area, associate POS transaction data with videos, record videos for retroactive analysis. I-View's POS-DVR system could allow 16 POS systems to insert POS text transaction data into video clips.

2-1. Setup the configuration of POS text inserter

After completing the hardware installation of POS text inserter system, follow the instructions below to setup the software.

Click on  and then select on the “POS” tab, and you should see the following image as **Fig 2-1.1**. Follow the instructions below to set your desired parameter settings.

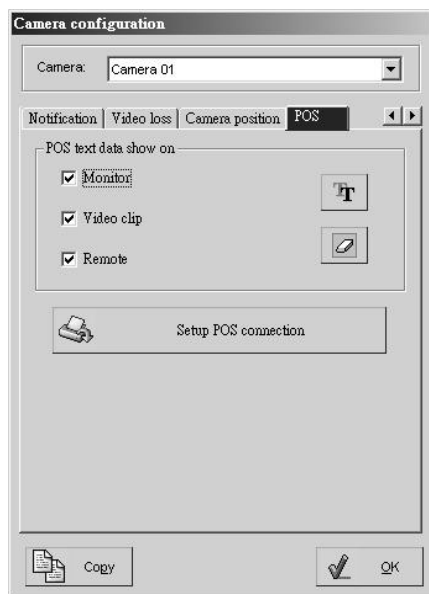


Fig 2-1.1

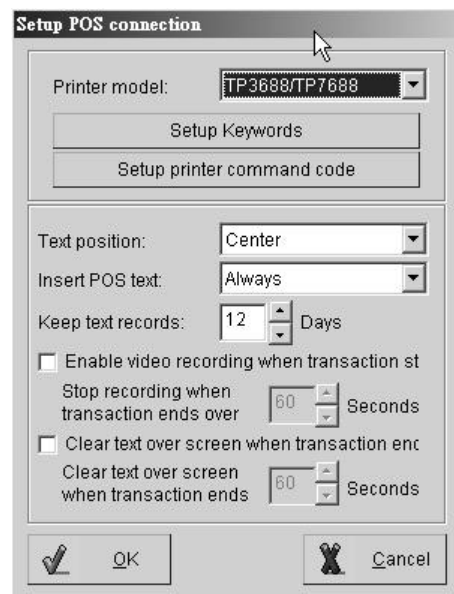




Fig 2-1.2

- **Font** Click  icon, you could specify the font size of POS text to past on the video clips.
- **Delete** Click  icon and you could delete the POS text of motor.

- **POS text data show on**

Enable/disable **Monitor**, **Video clips** and **Remote** to display the POS text on local monitor, video clips and/or remote PC.

- **Setup POS connection (Please refer to Fig 2-1.2)**

Enable/disable **Monitor**, **Video clips** and **Remote** to display the POS text on local monitor.

Printer model: Select printer model, which is to be used with your POS system.

Setup keywords: Allows you to setup Keywords for searching video clips. **(Fig 2-1.3)**

Text position: You can change the display position of POS text by working on the column of POS position.

Insert POS text: Determine the status of inserted POS text.

Keep text records: Setup the POS text keeping period.

Enable video recording when transaction starts: This enables video recording once the sale starts and specifies the time period of video recording once the sale stops

Clear text over screen when transaction ends: This would clear/clean up the text over the screen after the specified time period when sale stops.

Setup the printer command code: The DVR is able to process certain functions after receiving the printer command code, such as recording with the event of opening cash draw.

OK: Click this icon to complete setting.

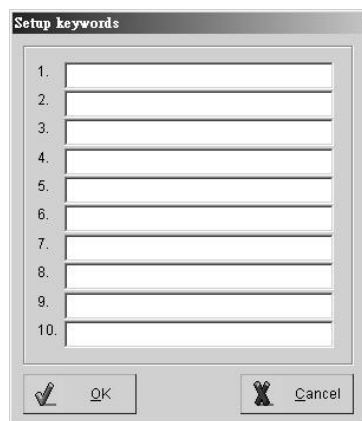


Fig 2-1.3



Fig 2-1.4

2-2. Setup the configuration of EZNetPOS program

You must install the EZNetPOS.exe program on the POS system/server when you want to use TCP/IP for the POS text transmission. Follow the instructions below to set your desired parameter settings.

Step 1. Run the EZNetPOS.exe program and you should see the following image as **Fig 2-2.1**.



Fig 2-2.1

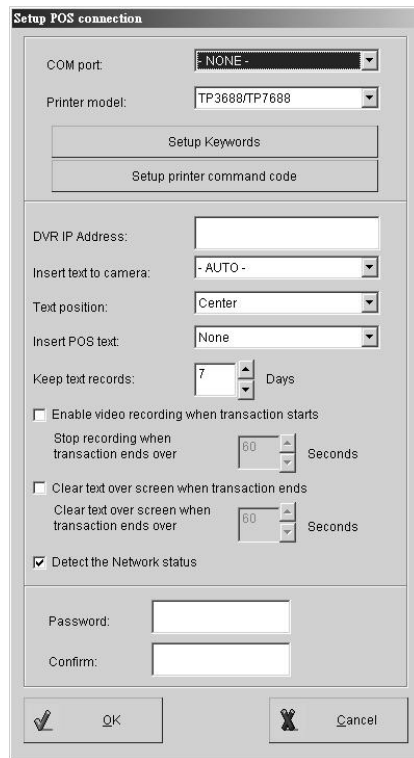
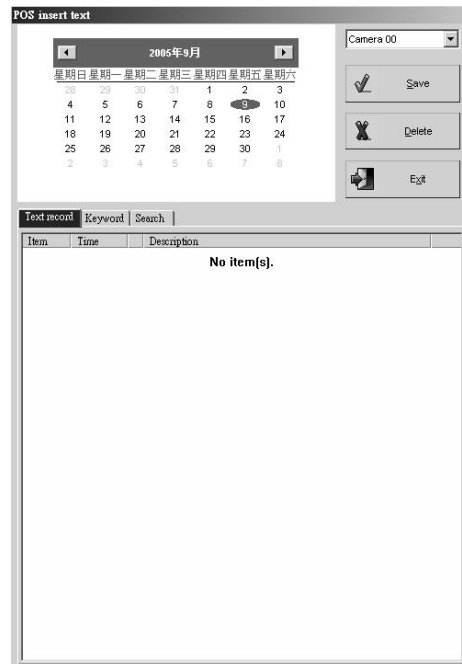


Fig 2-2.2

Step 2. Click “Setup POS connection” tab and you should see the following image as **Fig2-2.2**.

- a. Select the “Auto ” from “COM Port” tab.
- b. Select printer model that is to be used with POS system from “ **Printer model** “ tab.
- c. Enter IP address of DVR into “ **DVR IP address** “ tab. The POS transaction text will transmit to the assigned DVR.
- d. Select the “Auto ” from “ **Insert text to camera**” tab.

- e. Enable “**Detect the network status**” function, you will receive the notification when the network connection has failed.
 - f. Enter the password from “**Password**” tab, It needs to have the password when you want to change the parameter of “**Setup POS connection**”.
 - g. The others setting same as Chapter 2-1.
- Step 3.** Enable “**Enable auto run system**” tab, the EZNetPOS program will be enable when you turn on the POS machine.
- Step 4.** Click “**POS insert text**” tab and you search the detail information of POS insert text on each camera. You can refer to the detail description from Chapter 2-3.
- Step 5.** Click “**OK**” icon to complete the setting.



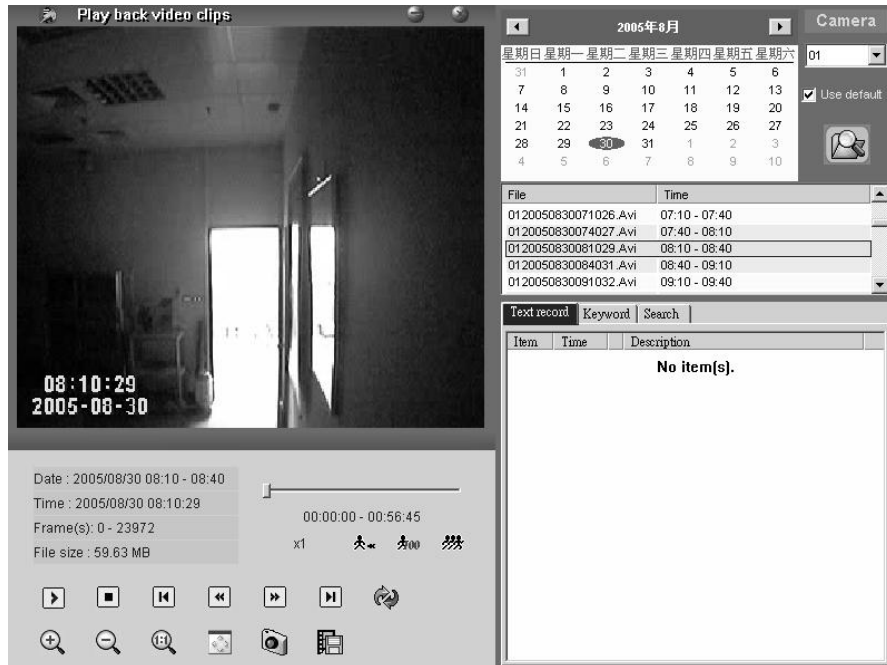
- Step 4.** Click “**POS insert text**” tab and you can search for detailed information of POS inserted text on each camera. You can refer to the detail description from Chapter 2-3.

2-3. Playback Video Clips of POS Transaction Text

This chapter will show how to play back video files which has inserted POS text from the saved database of the DVR. You can playback the video clips by clicking on the “Start” button and then choosing “Programs”. Move onto “Witness AS (ASE/DX/HS/RD/U) XP” and click on EZPOSPlayback program. This will allow you to search for the video clip via POS text.

Follow the steps below to play back videos:

Step 1. Run EZPOSPlayback program and you will see window below.



Step 2. Select the camera which you want playback.

Step 3. Select the recording date and all video clips will be listed on the table.

Step 4. Enable “Use default” icon. If you want to playback the video clips of POS transaction text via LAN, please refer to **Witness software operation manual Chapter 6-10** for detailed operation.

Step 5. Select video clips from video list table to playback.

Step 6. There are three ways to select video clips via POS transaction text to playback.

- a. **Text record:** Select “**Text record**” tab and the POS transaction text that has been recorded into video clips will be listed on the table. Select the POS text, which you want to check with video. The video should jump to the video frame containing the inserted text.
- b. **Keyword:** Select “**Keyword**” tab and choose one of the listed keywords, the video clips containing the selected keyword in the inserted text will be listed.
- c. **Search:** Select “**Search**” tab and then enter a text that you want to check with video. The video clips containing the selected text will be listed.

Step 7. For each icon function of playback, please refer to the **Witness software operation manual Chapter 6-10** for detail operation.