

PD – 201 Low Profile Customer Display User's Manual

POSIFLEX



Rev. Original

FCC Notes:

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class A digital device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures to correct the interference.

Warranty Limits:

Warranty terminates automatically when any person other than the authorized technicians opens the machine. The user should consult his/her dealer for the problem happened. Warranty voids if the user does not follow the instructions in application of this merchandise. The manufacturer is by no means responsible for any damage or hazard caused by improper application.

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BRIEF INTRODUCTION

THE PRODUCT

The PD-201 is a low profile customer display option designed for Posiflex DT-20X POS terminals. It is delivered in separate carton for the host system and shall be installed per instructions in the DT system user's manual.

FEATURES

- LCD (Liquid crystal display) with yellow green back-light
- One-line display with 16 characters
- Easy viewing characters (4.85 mm by 9.66 mm)
- Long life and trouble free operation
- Selectable command emulation modes including PST and EPSON command emulation modes
- Simple installation
- Supports Serial (RS232) interface
- Support European, Japanese, Russian in separate models

INSTALLATION GUIDES

HOST SYSTEM PREPARAION

For serial interface (RS232) PD-201 to be used in DT-20X series, you have to adjust during power off the internal jumper of the host system to **supply 5 V DC** to the COM port selected for the serial interface customer display. This adjustment has to be done by a qualified electronic technician following guide from relevant technical manual.

INSTALLATION

For PD-201 installation, please refer to the detailed instructions given in the user's manual delivered with the DT POS system and follow the steps A to F below sequentially.

- Step A:** Open the jumper setting service window and set DC + 5V support to the COM port.
- Step B:** Open the cable cover and push at the 2 latches toward the system to remove the UPS battery cover.
- Step C:** Take off UPS battery cover and remove the customer display cover by pushing at the 2 latches down.
- Step D:** Pass PD-201 interface cable to go through the square opening in the UPS battery cover and insert the 2 lugs at front bottom of PD-201 into the correspondent positions of UPS battery cover then press down the 2 latches on rear bottom of PD-201 down till they firmly click in.
- Step E:** Before installing the PD-201 + UPS battery cover assembly back into the DT system top cover, check the bottom side of the PD-201 + UPS battery cover assembly to route the interface cable in between the guide posts on the UPS battery cover.
- Step F:** Raise the UPS battery in the UPS battery cavity for a while if it is installed for passing the PD-201 interface cable through the passage in the UPS battery cavity to enter the connection area. Pull the cables gently while installing the PD-201 + UPS battery cover assembly back onto the system top cover with the 3 lugs going in first to minimize the excessive cable length inside the battery cavity. Connect the PD-201 cable to the COM port settled. Settle all excessive cable length in connection area with some cable ties then close back the cable cover.

POWER ON SIGN

With interface cable connection well installed (and with COM port power in DT system set), turn on the Posiflex POS system, a firmware identifier as power on sign will appear on the pole display screen for a while to indicate that pole display is self-tested O.K. and ready to work.

USING THE CUSTOMER DISPLAY

COM PORT SELECTION

This series of customer display is designed to serve in Posiflex POS systems with RS232 interface. It is advisable to well study the I/O port availability of the host system before determining which COM port to be used.

When a RS232 (serial) interface model of PD-201 is used, the jumper on main board of the host system must be modified to supply power to the COM port designated for PD-201. Whenever the RS232 interface PD-201 is to be removed from the host system, consequently the jumper has to be changed back to neutralize the power support in the COM port, **otherwise damage could occur!**

COMMAND MODE SELECTION

The PD-201 will always be in the Epson command mode at power on. It can enter or exit the PST command mode through software command.

DRIVER INSTALLATION

FOR RS-232 INTERFACE APPLICATION:

For direct I/O control over the serial interface (RS232), you have to send all commands (listed later in this manual) under communication protocol 9600 bps, none parity, 8 data bits, 1 stop bit with hardware handshaking on CTS signal to the COM port used. No other driver installation is required.

FOR OPOS APPLICATION:

Find the subfolder \Drivers\UPOS\OPOS of the Posiflex Product Information CD or DVD or download it from our web site http://www.posiflex.com.tw/Download%20list.asp?Status=1&Series_Name=UPOS&Model_Name=OPOS and execute the file "SETUP.EXE" to install the OPOS Control Manager. To add the customer display under OPOS control please set in OPOS Control Manager device name "PD20x-Line Display" in the top row. Please then select the COM port in the 3rd row and set baud rate to "9600" in 4th row.

SPECIFICATIONS

OPTICAL

| | |
|------------------|-------------------------------|
| Number of digits | 16 digits/row, 1 row |
| Dot matrix | 5 X 7 dots |
| Digit height | 8.07 mm |
| Digit width | 4.85 mm |
| Display type | STN positive transfective LCD |
| Display color | Yellow Green |

MECHANICAL

| | |
|---------------------------|-------------------|
| Height | 51.7 mm |
| Width | 138.9 mm |
| Depth | 44.2 mm |
| Display Window Height | 11.4 mm |
| Display Window Width | 96.8 mm |
| Display Inclination Angle | 45° |
| Case color | Same as DT system |

ELECTRICAL

Power from interface port of DT system: + 5VDC 1A

ENVIRONMENTAL

| | |
|-----------------------|----------------------------|
| Operating temperature | 0° to + 40°C |
| Storage temperature | -10° to + 60°C |
| Operating humidity | 20% to 85%, non-condensing |
| Storage humidity | 5% to 90%, non-condensing |

WARNING: If the user opens the customer display housing to make any modification, all the product warranty will be voided.

NOTE: Please refer to Posiflex Product Information CD or DVD or visit our web <http://www.posiflex.com.tw> for further information when needed.

COMMAND LIST

EPSON COMMAND MODE (POWER ON DEFAULT MODE):

| NAME | HEX CODES | FUNCTION |
|--------|-----------------|--|
| BS | <08> | Move cursor left |
| HT | <09> | Move cursor right |
| HOM | <0B> | Move cursor to home position |
| CLR | <0C> | Clear display screen |
| CR | <0D> | Move cursor to left most position |
| CAN | <18> | Clear cursor line |
| ESC = | <1B><3D><04> | Switch to PST command mode |
| ESC @ | <1B><40> | Initialize display |
| ESC t | <1B><74><n> | Disable / Enable Euro sign (D5h), n = 0, 19 |
| US MD1 | <1F><01> | Specify Overwrite Mode |
| US MD3 | <1F><03> | Specify Horizontal Scroll Mode |
| US CR | <1F><0D> | Move cursor to right most position |
| US \$ | <1F><24><n><01> | Move cursor to specified position, n = 1 ~ 16D |
| US @ | <1F><40> | Show Version |
| US B | <1F><42> | Move cursor to last position |
| US C | <1F><43><n> | Cursor On / Off, n = 1, 0 |
| US E | <1F><45><n> | Blink display screen, n = 0 ~ 255 |

PST COMMAND MODE:

| HEX CODES | FUNCTION |
|---------------|-------------------------------------|
| <14> <03> | Insert Mode |
| <14> <04> | Overwrite Mode (Default) |
| <14> <08> | Back space |
| <14> <09> | Move cursor right |
| <14> <0B> | Move cursor left |
| <14> <0C> | Delete character |
| <14> <0D> | Move cursor to left most position |
| <14> <0E> | Clear display |
| <14> <10> | Clear line |
| <14> <12> | Cursor Block Mode |
| <14> <13> | Cursor Under Line Mode |
| <14> <16> | Switch to Epson Mode |
| <14> <17> | Cursor On |
| <14> <18> | Cursor Off |
| <14> <19> | Reset |
| <14> <1A> <P> | Move cursor to position P (P=0~15D) |
| <14> <1B> | Move cursor to rightmost position |

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警告使用者
這是卑利的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。