

PD – 2600 / 2601 / 2602 / 2603 Series

POSIFLEX

User's Manual

Rev. D0

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.



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P/N: 19460901150

Part 1

BRIEF INTRODUCTION

THE PRODUCT

The PD-2600 is a stand alone pole mount customer display designed for discrete POS applications. The PD-2601 is a pole mount customer display option designed for Posiflex HT series POS terminals and also the PB series discrete systems. The PD-2602 is a pole mount customer display option designed for Posiflex KS or TP series touch POS terminals. The PD-2603 is a pole mount customer display option designed for Posiflex FT series touch POS terminals. It is delivered in separate carton for HT / PB / KS / TP / FT series and shall be installed per instruction in this manual.

FEATURES

- Bright VFD (vacuum fluorescent display) with green or blue filter
- Rear mount Pole Display for Posiflex HT series hybrid terminals or PB series discrete systems or KS or FT series fan free touch POS terminals or TP series touch POS terminals
- Two-line display with 20 characters per line
- Adequately large characters for easy viewing (9.03 mm by 5.25 mm)
- Long life and trouble free operation
- 15°, 30° and 45° adjustable viewing angles
- Total height 410 mm (Stand alone)
- Total height 392 mm (PD-2601 on base of HT and PB series)
- Total height 325 mm (PD-2602 on base of KS and TP series)
- Total height 375 mm (PD-2603 on base of FT series)
- Display frame can rotate horizontally 270° freely
- Various command emulation modes selectable by DIP switch
- Support 12 Code Pages of 128 characters each
- Support 12 international character sets of 12 characters each
- Simple installation
- Selectable between Serial (RS232) interface model and USB interface model
- Supports UPOS 1.8 and is WEPOS ready
- Case color choices: ivory, black for HT terminals or black for FT, KS and TP terminals

INSTALLATION GUIDES

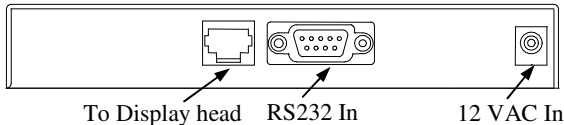
HOST SYSTEM PREPARAION

For serial interface (RS232) PD-2601 or PD-2602 or PD-2603 to be used in HT or PB or KS or TP or FT 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 pole display. This adjustment has to be done by a qualified electronic technician following guide from relevant technical manual. The default communication protocol should be set to 9600 bps, none parity, 8 data bits, 1 stop bit with hardware handshaking on CTS. The power for the USB interface type pole display is supported through the USB connection. However, should these customer displays are to be connected through an USB HUB instead of a direct USB port of the system, the HUB must be powered by a separate power adaptor otherwise there could be the power shortage problem.

INSTALLING PD-2600

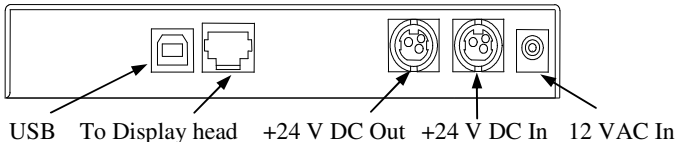
In base of stand alone models (PD-2600 models only), looking from rear side of the bottom, the connector area will look like below:

For serial (RS232) interface models:



The RJ45 type modular connector is for internal use and is already occupied. The RS232 input port is a DB9 female connector. Connect the attached RS-232 signal cable to this port and one of the COM port in the host system. Set the RS-232 communication protocol for this port to 9600 bps, no parity, 8 bits, 1 stop bit with hardware handshaking. Connect the power adaptor to the rightmost power connector. Turn on the switch in the front side of the base.

For USB interface models:



The RJ45 type modular connector is for internal use and is also already occupied. Connect the “B” type connector of the interface cable to “USB” in connector area and the “A” type end to USB port of the host. Insert the 2 pin or

3 pin power connector from either 12 V AC or +24 V DC power adaptor to the “12 V DC In” or “+24 V DC In” jack in the connector area. Insert either end of the power cable to “+24 V DC Out” jack in the connector area and insert the other end to the power connector of Posiflex POS printer if needed. Be sure to hear a click at each connection to obtain a firm contact. You may now place the base on a horizontal surface and prepare to power on and adjust the direction of the display head for best viewing effect in application.

INSTALLING PD-2600

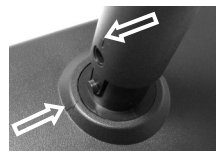
Stand Alone Model:

This instruction is for stand alone model only. Please unpack the inner box of pole display and it easy to find the base, display unit with tube and adaptor separately. Please remove the PE foam and bring out the components carefully.

Firstly, place the display head and tube on a flat surface and find the cable which in the end of tube. Let this cable pass through the short tube which on the base stand and it shows in the picture at right.



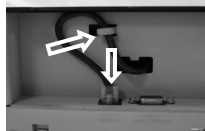
Next, please assemble the display head with tube to the base stand which shows in the right picture. Please pay more attention during the process since there is a hole and a compression lock which are in the two side of tube and marked arrow signs. Aim these two arrow signs nearby compression lock to the holes and push the tube to the end. After hear the “click” sound, the assembly is complete.



Once combine the display head with tube and base stand, please place the pole display as a horizontal position which can easily to check the bottom plate.



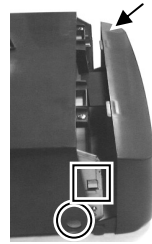
Please plug the cable to the connector which showing “To Display” and route the cable as arrowed in the right picture.



INSTALLING PD-2601

Opening the back cover on system

For ease of PD-2601 installation operation, the HT main unit or PB system has to be opened with sufficient precautions. First push in the circled knobs on both sides as in **Pix. 1** to remove the back cover. Take out the arrow pointed pole cover from it.

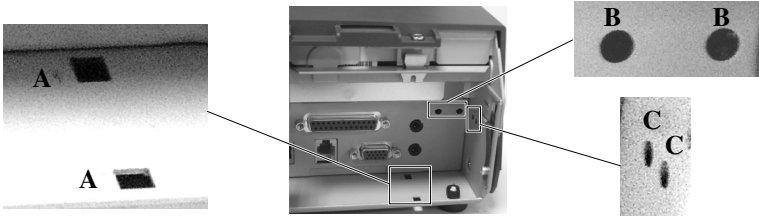


Pix. 1

Opening the top cover of system

Prepare a piece of clean soft clothe of appropriate size in front of the HT system to prevent damage. Turn the display panel to straight up position. For both HT and PB system, push in the rectangular marked spring button in **Pix. 1** on both sides of chassis and raise the rear edge of the top cover. The COM port DC support can be set at this moment.

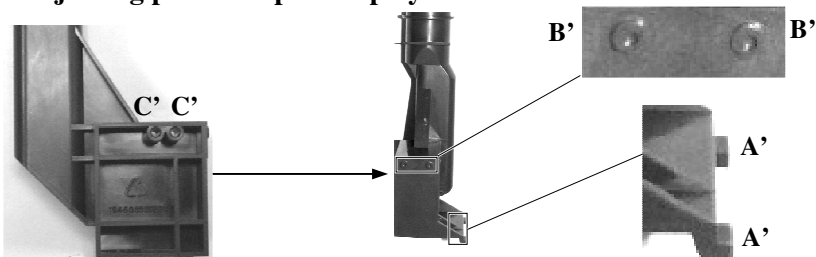
Find joining points on system



Pix. 2

Refer to **Pix. 2** that is a picture of the HT or PB chassis near the right bottom corner (as you are facing the HT or PB system from its back) with several portions enlarged around, please find 2 rectangular PD installation holes **A** on the bottom chassis; 2 circular locating holes **B** on I/O plate; and 2 circular screw holes **C** on metal sidewall.

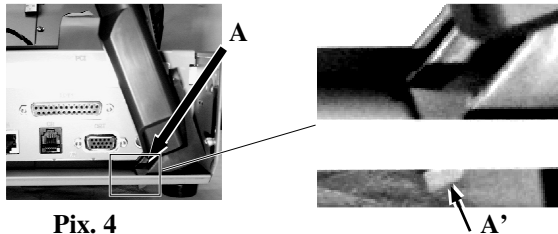
Find joining points on pole display base



Pix. 3

Take PD-2601 out of its box and refer to **Pix. 3** that is a picture of the pole display base unit (lowest part of the PD) with 2 enlarged portions to the right and a slightly enlarged side view picture to the left to find 2 bottom locking lugs **A'**; 2 short cylindrical locating bosses **B'** to fit into I/O plate; and 2 plastic screw bosses **C'** on side. Please note that the PD cable comes out of the bottom end of the base tube yet in the illustration pictures the cable is eliminated for sake of minimum visual confusion.

Insert bottom locking lugs

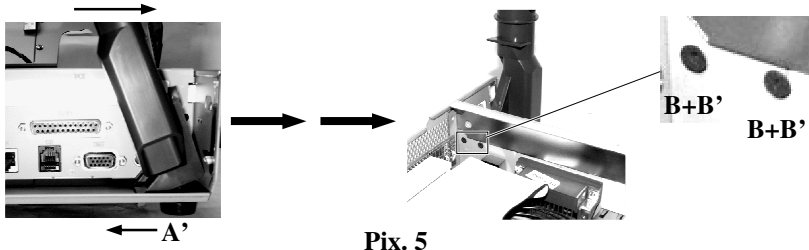


Pix. 4

Turn the pole display base unit opposite to have the bottom locking lugs **A'** in **Pix. 3** facing left and now insert the 2 bottom locking lugs **A'** on base unit into the 2 rectangular installation holes **A** on bottom of HT or PB chassis from the right corner with the pole display slightly inclined to the left as in **Pix. 4**. Please note that both bottom locking lugs **A'** should be completely inserted and come out of the bottom plate of HT or PB system as emphasized by an arrow in the enlarged portion.

Fit in locating bosses

Please always keep a gentle pressure at the bottom end of pole base (bottom locking lugs **A'**) to the left (away from the sidewall of system chassis) when moving the upper part of pole toward sidewall and matching the 2 short cylindrical locating bosses **B'** into 2 round holes **B** in the I/O plate. Please refer to **Pix. 5** to see the 2 locating bosses **B'** from inside of HT or PB system.

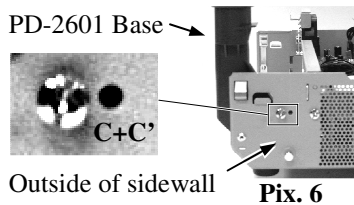


Pix. 5

Please note the importance of keeping the leftward pressure on bottom end of pole display during the process of turning the pole upright and inserting the locating bosses **B'** or even when you want to release the locating bosses **B'** away from I/O plate **B** and turn the upper end of pole display to left to remove the locking lugs **A'** from bottom chassis **A**. Ignorance of this point may damage or even break off the locking lugs **A'** due to improper torque applied.

Apply sidewall screw

The screw bosses of PD-2601 base should now align with the screw holes on sidewall of system chassis. Only 1 screw needs to be applied. Use the self-tapping screw that comes with PD-2601 to fix from external side of sidewall as demonstrated in **Pix. 6**.



Pix. 6

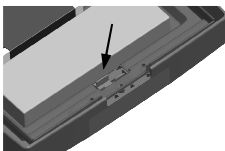
Connect interface cable

Carefully close back the top cover of HT or PB system and connect the interface cable of PD-2601 to appropriate port in system connector area. Then close the back cover of the system.

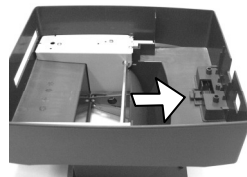
INSTALLING PD-2602

Opening the rear connect cover on system

To install PD-2602 to the base of KS or TP systems, the rear connect cover on its base has to be removed as described in the user's manual. The plastic hook plate to remove the rear connect cover in slim base is indicated in **Pix. 7** and that for universal base is indicated in **Pix. 8**.



Pix. 7



Pix. 8

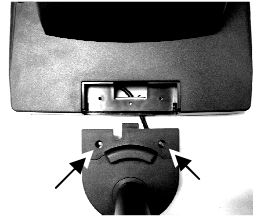
Fixing pole display base to system

To fix the PD-2602 to base of KS or TP systems, please connect the interface cable of PD-2602 through the cable exit in base as in **Pix. 9** a peeping view of pole display joint base bottom to the appropriate port in main unit passing the inside of system base



Pix. 9

as indicated in the top-view picture **Pix. 10**. Match the pole base (joint mechanism) to the system rear connect area Fit 2 screws **through washers** at arrowed points to hold the joint tight.



Pix. 10

INSTALLING PD-2603

Open back cover on system

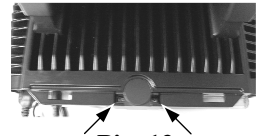
First push in the circled knobs on both sides as in **Pix. 11** to remove the back cover.



Pix. 11

Remove pole cover

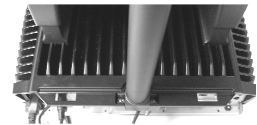
Remove the pole cover on rear edge of the base top cover of FT system by first removing the 2 arrowed screws in **Pix. 12** and then pushing the wedge shaped pole cover up.



Pix. 12

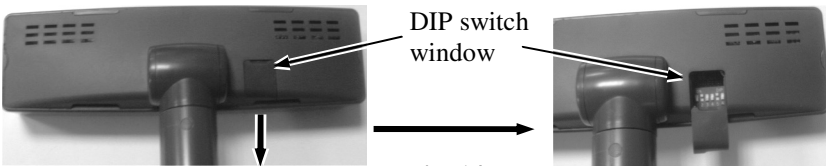
Install PD and connect interface cable

Insert the base of PD-2603 / PD-2603U from top of FT system base with the flat side of the pole base facing the back cover direction and screw back the 2 screws as in **Pix. 13**. Connect the interface cable to appropriate port.



Pix. 13

COMMAND EMULATION MODE SETUP



Pix. 14

Now please check the back of PD-260X display head as in the left picture in **Pix. 14**. There is a small piece of plastic cover for the “DIP switch window”. Slide the cover downward but don’t pull it off otherwise you may have to practice for inserting it back. You can find 6 positions of DIP switches in this window. Adjust for the appropriate command mode used by the application program according to below table. Switch position counts from left to right and “ON” means pushed up as indicated in the right part in **Pix. 14**.

Switch Position						Command Mode
1	2	3	4	5	6	
ON	OFF	OFF	ON	OFF	OFF	ADM
ON	OFF	ON	ON	OFF	OFF	Aedex
ON	OFF	ON	OFF	OFF	OFF	Epson
ON	OFF	OFF	ON	ON	OFF	Futaba
ON	OFF	ON	OFF	ON	OFF	Noritake
ON	OFF	ON	ON	ON	OFF	UTC

The factory default command mode is set to Noritake mode for normal delivery. Please change it to Epson mode if OPOS or UPOS driver is used for the application program.

POWER ON SIGN

With interface cable connection well installed (and with COM port power set for serial models), turn on the HT or KS or TP 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

INTERFACE SELECTION

This series of customer display is designed to serve in HT / KS / TP / FT series Posiflex POS systems with RS232 interface models and with USB interface models. It is advisable to well study the I/O port availability of the host system before determining which interface model to be used.

When a RS232 (serial) interface model of PD-2601 / 2602 / 2603 is used, the jumper on main board of HT / KS / TP / FT system must be modified to supply power to the COM port designated for PD-2601 / 2602 / 2603. Whenever the RS232 interface PD-2601 / 2602 / 2603 is to be removed from the HT / KS / TP / FT system, consequently the jumper has to be changed back to neutralize the COM port, **otherwise damage could occur!**

The USB interface model of PD-2601 / 2602 / 2603 should be connected directly to an USB port and **must not be through any non-self-powered USB HUB** to get power through the USB port itself and there is no need for other special arrangement.

COMMAND MODE SELECTION GUIDE

The below table provides some comparison for selection on command mode to be used in the application program if it is not yet determined.

Mode	ADM	Aedex	Epson	Futaba	Noritake	UTC
Cursor	N.A.	N.A.	Invisible	Blinking Block	Blinking Block	Blinking Block (DP)
Default mode	N.A.	N.A.	Over/W	V. scroll	Over/W	PT
User defined font	N.A.	N.A.	2 chars	N.A.	2 chars	2 chars (PT)
Brightness control	NO	NO	YES	YES	YES	YES (DP)
Leading code change	NO	YES	NO	YES	YES	YES (PT)
Code page select	NO	NO	YES	YES	YES	YES
Auto scroll message	NO	NO	NO	YES	YES	YES (PT)
Timer clock	NO	NO	YES	NO	NO	YES (PT)

DRIVER INSTALLATION

For application software to use RS232 interfaced PD-260X, there is no direct need for any driver. The OPOS (OLE POS) driver or the JPOS (Java POS) driver would be required for OPOS or JPOS programs and the PD-260X would have to be set to “Epson” command mode. These drivers are available from our [web page:](http://www.posiflex.com.tw/Download%20list.asp?Status=1&Series_Name=UPOS&Model_Name=OPOS) 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 “PD2x-Line Display” in the top row. For RS-232 models, select the COM port in the 3rd row and set baud rate to “9600” in 4th row as in the left sample screen below. Select “USB” in 3rd row for USB interface models as in the right sample picture below.

For USB interfaced PD-260X, please visit our web site and find the driver from the class “PD23_26U”. The guidance for each function call in the library “USBPD.dll” is covered in the “ReadMe” file in that class.

SPECIFICATION

OPTICAL

Number of digits	20 digits/row, 2 rows
Dot matrix	5 X 7 dots
Digit height	9.03 mm
Digit width	5.25 mm
Display color	Blue or Green

MECHANICAL

Total Height (PD-2600)	410 mm
Total Width (PD-2600)	220 mm
Total Depth (PD-2600)	110 mm
Total Height (PD-2601)	392 mm
Total Height (PD-2602)	325 mm
Total Height (PD-2603)	375 mm
Display Head Height	57.5 mm
Display Head Width	196.6 mm
Display Head Depth	39.5 mm
Case color	Black or Ivory

ELECTRICAL

Power from interface port of FT / HT / KS / TP system:
+ 5VDC 1A

ENVIRONMENTAL

Operating temperature	0° to + 40°C
Storage temperature	-20° to + 70°C
Operating humidity	20% to 85%, non-condensing
Storage humidity	5% to 90%, non-condensing

WARNING: If the user opens the pole 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.

