

# **XP-2000 Series Fan Free Touch Terminal User's Manual**

Rev.: A0



## **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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# **ALERT TO OUR HONORABLE CUSTOMERS:**

Please always read thoroughly all the instructions and documents delivered with the product before you do anything about it. Don't take any premature action before you have a full understanding of the consequences.

## **DAILY MAINTENANCE GUIDE**

For regular cleaning of the XP systems, please use only soft haired brush or dry soft cloth. You may use moist soft cloth to remove stains when necessary. Apply only suitable amount of mild neutral cleaner for obstinate stains. Please note that never use Acryl dissolving solvent or Polycarbonate dissolving solvent. You may apply ammonia-based glass cleaner only on the screen surface.

## **ABOUT THIS PRODUCT**

Posiflex XP-2000 series presents a whole new generation POS terminal, which is a combination of touch screen, printer, MSR, and the most reliable FanFree structure. This integrated solution of XP-2000 series not only less cable connection, but also carrying a brilliant performance to user in order to face the busiest situation.

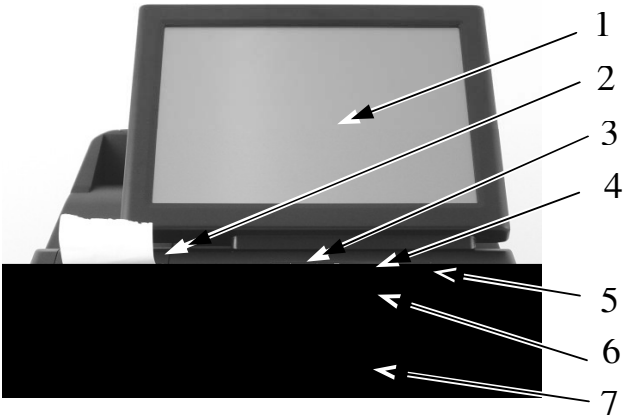
XP-2000 Series applies Intel Celeron M technology; fast speed Ethernet as well as plenty of connects ports of USB, Serial, VGA and CR ports. It also integrated with thermal printer, touch screen and MSR, as well as designed with gorgeous appearance and small footprint for counter space saving. The small and fully integrated system is suitable for many kinds of segments, such as general retailer, hospitality and restaurant. In addition, XP-2000 series terminal assist small and medium business to serve customer effectively, speedy and precise.

- All-in-one integrated system including touch screen, thermal printer and MSR which is the best choice of ECR Replacement.
- Integrated thermal printer with paper jams easy to fix design.
- One touch power ON/OFF design provides convenience control for terminal and printer.
- The most reliable Fanfree structure for harsh environment.
- Support Win XP Pro, POSReady, WEPOS, Windows CE and Linux environment
- Vertical type LCD panel with easy tilt angle adjustment
- Supports SSD (Solid-State Drive) Data Storage Device or HDD

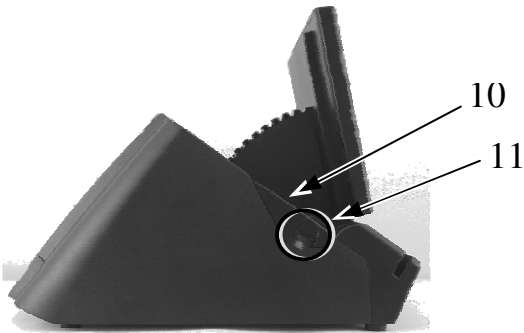
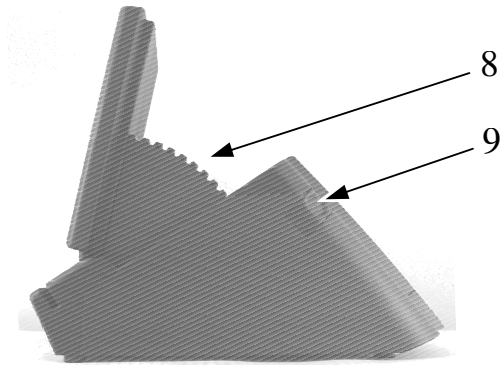
# INTRODUCTION

## PRODUCT PICTURES

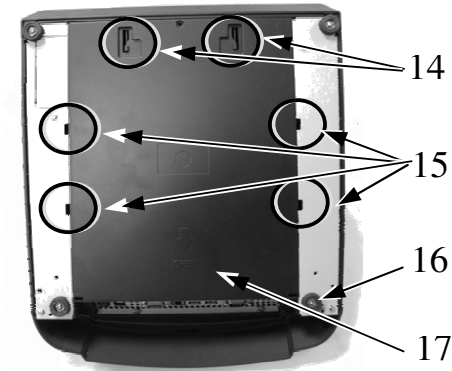
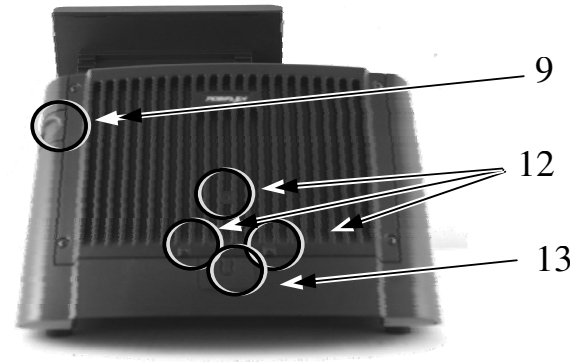
### Front Views



### Side Views



### Rear & Bottom Views



## PARTS IDENTIFICATION

1. LCD display with or without touch panel
2. Printed paper exit
3. LED indicator for power and printer status
4. Paper feed button
5. Power switch
6. Magnetic Stripe Reader(Optional)
7. Base Stand
8. LCD adjustable Holder
9. Lock/Release button for tilt angle adjust
10. Printer cover
11. Printer cover release button
12. Three screw holes in back cover for customer pole display integration
13. Cable Exit
14. Bottom plate compression lock
15. Bottom plate tenon
16. Rubber foot with bottom plate fixing screw
17. Bottom plate

## PRODUCT FEATURES

### Standard Features:

Models	XP-2007	XP-2008H	XP-2010H	XP-2012H
Item				
CPU	Intel Celeron M 600Mhz			
VGA port	D-SUB 15Pin			
LCD DISPLAY(TFT LCD Panel )	Digital 7" (800x600 resolution)	Digital 8" (800x600 resolution)	Digital 10. 4" ( 800x600 resolution)	Digital 12.1" ( 1024x768 resolution)
DRAM Memory	DDR-II(SO-DIMM X 1)			
Serial port	1, DB9 X 1 on the I/O Plate			
CR PORT	X1			
Standard USB PORT	4 port on the I/O plate			
AUDIO PORT	buzzer only			
ETHERNET port	10/100 MB			
TOUCH function	N/A	USB Interface		
TOUCH SENSOR	N/A	5 Wire Touch Pad		

Storage device	DOM (Optional SSD HDD or SATA HDD)	
Power switch	On the front bezel	
Power saving	Suspension mode	
Power supply	power adaptor, 60W	
Indicator LED and Control panel switch	Power ON/ standby, Printer Error /Paper Out (RED), paper feed and power ON switch.	
Fan-Free system	Yes	
OS support	Linux, Window CE. WEPOS. POSReady	
Printer build in	2" thermal printer (60mm/sec, MAX)	
Printer auto cutter	Option (Upgradeable auto cutter)	Yes
Paper Width	58mm	
LCD panel tilt angle	14~55 (degree)	

Table: Summary of features

### Option Items:

**Note:** The underlined items in the following list means that option must be set prior to shipment from the factory. The rest items can be set by the dealers.

- a) DDR2 SODIMM memory expansion up to 2GB max.
- b) HDD kit or SSD kit (SSD can't coexist with HDD in main unit).
- c) Integrated upgrade kit:
  - 2 or 3 track MSR.
  - PD-330, 2x20 LCD customer display.
  - PD-2606, 2x20 VFD customer display.
  - PD-7630, LCD pole display.
- d) Integrated 2<sup>nd</sup> LCD monitor 8"(LM-2208)
- e) Preload OS Windows XP Pro WEPOS, POS Ready, Windows CE or Linux
- f) Wireless LAN adaptor in USB interface

# INSTALLATION GUIDES

## Hardware Power Switch and printer paper feed

The power switch located in the front bezel of main unit. It is a pushbutton switch and controls the power on/off of the system. Also, next to the power switch is the paper feed button for integrated printer.



This power switch turns the system on when pushed only. This switch turns the system off when pushed again during power on status. However, if the system hangs due to any reason such as software resource conflict, a simple push on the switch in 10 sec may turn off the power.

For build-in auto-cutter model, it will cut paper once when the top cover closed. For manual cutter model, please press FEED button and rip the unnecessary paper manually after paper loading. For more information about printer operation, please refer to following chapter “Printer operation”.

**Note:** There must always be at least 10 seconds waiting before switching on again once the system is powered off successfully.

## Indicators of power and status

There is an indicator LED module serving for several purposes at front bezel. The relationship between the indicator status and other conditions is summarized in following table:



Indicator	Terminal Status	LED colour
Power Status	Standby	Orange
	Power On	Blue
Printer Error	Error	Red
Printer Paper Out	Paper Out	Red

**CAUTION:** Before any installation or cable connection to the set, please always make sure that the system is turned off and the external power source to the set is removed to prevent electric

**hazard! Never touch any metal pin in the connectors or circuits to avoid high voltage hazard or electrostatic discharge damage unless the operator is well grounded. Failure to do the above will void the product warranty!**

## **Display Issues**

### **Main LCD Display**

For best viewing result, please set your display resolution at 800 x 600 for 7", 8" and 10" LCD, as well as for XP-2012H is 1024 x 768. The system Video Memory is shared from system memory. XP-2000 series support DVMT Function and the video memory size is default in 128 MB and can be set to be 64 MB.

### **VGA Port**

The VGA port in the XP-2000 system supports either a rear mount 2<sup>nd</sup> display or a separately connected LCD monitor or touch monitor. To support the DC power to the 2<sup>nd</sup> display monitor, it required a qualified technician to set an internal jumper in XP main unit. To supply the necessary power through the VGA connector, please refer to the Posiflex technical information. **Do not connect other monitor to this port before the power in this port is disabled.**

### **Posiflex USB Touch Manager**

A program named "Posiflex USB Touch Manager" and a right-click sticky button tool in the program group "Posiflex USB Touch Tools" is installed in the preloaded Windows system with a USB interface touch panel controller. This program can also be obtained by download from the POSIFLEX web site.

### **Mouse Emulation**

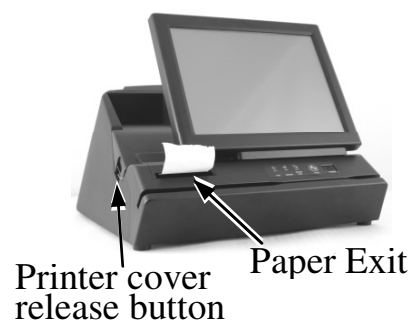
The touch panel in XP-2000 system uses internal USB interface as standard and occupies no external port. When the touch driver is properly installed, this touch panel works exactly like a standard mouse for each interface. Nevertheless, if the system is running under safe mode, the touch panel calibration may become unsatisfactory due to disabled drivers. It is recommended to use a standard USB mouse or keyboard in this mode.



All the mentioned mouse emulation functions can be manipulated through relevant software. The system can give a beep and a click on the left button of a mouse at the point when the touch panel is touched. If the point touched is dragged across the screen surface, it works as the mouse drag and drop feature. If the point is touched, released and touched within a short time interval, it is double-clicking left button of the mouse. To obtain the effect like clicking on the right button of a mouse, touching any point on the screen surface after touching the right-click sticky button results as a click on the right button of the mouse at that point.

## Printer Operation

In the left side of XP-2000 series' main unit, there is a 2" printer integrated. For XP-2007/2008, it built-in printer with manual cutter and could be option an auto-cutter. The printer with auto cutter is integrated in XP-2010/2012.



For loading paper, please follow step A to F sequentially with refer to pictures to use the printer.

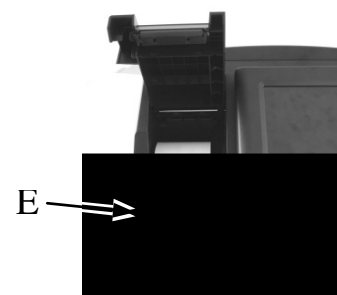
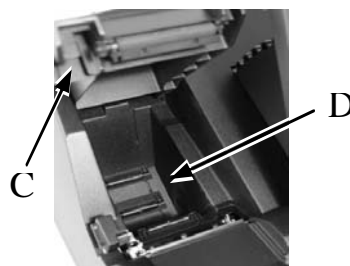
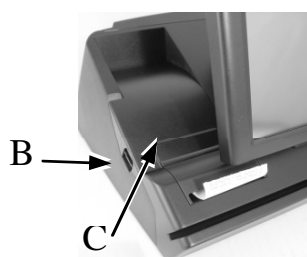
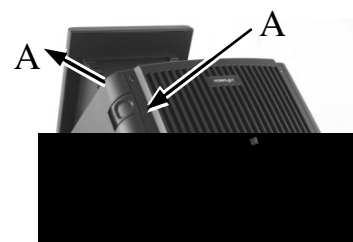
**Step A:** Please hold the LCD panel and push lock/release lever for tilt angle adjust forward. Turn the panel forward to most vertical position

**Step B:** Push the printer cover release button.

**Step C:** Pull up the printer cover.

**Step D:** Loading the paper roll and please notice that the paper roll's orientation should be face the printer head.

**Step E:** Please pull the paper longer then paper exit and press the front of paper by using index finger. Then close the printer cover at the centre of front and please watch your finger during this step in order to reduce hurt occur.





After finished steps A to E, please notice that the dissimilarity of manual cutter and auto cutter. For auto cutter, the printer will cut the excess paper automatically after the paper cover closed. For Manual cutter, user can choose to rip the unnecessary paper by hand or not to rip.

## Self Test

For XP-2000 series printer's test mode, please turn off the terminal first. After the system power off, please press and hold down the feed button while turning on the system power switch. The printer will then perform a self-test mode. A sample slip of self-test result is printed as in the sample at right.

The header is printed in text mode and the rest part of this slip is printed in page mode. If FEED button is pressed at this moment, a font table will be printed in text mode again. To exit the test printing, please turn the printer off and on again.



## Paper Cutting

Generally, after paper printed and automatically cut or manually rip every time, printer will retract the paper roll in order to reduce the paper loss (adjustable function, please see following chapter “**Printer setup**”).

**For build-in auto-cut models** such as XP-2010 or XP-2012, once the auto-cut function enable, the printer will leave the advance paper in 4.8 mm long. It is highly suggested to print the logo and necessary paper feeding to make 4.8 mm paper advance right after each cut to prevent curling up and jamming of paper front edge inside the paper exit slot. Another important issue is please set every receipt length at least **6cm** for every auto-cut model in order to let the receipt pass through the paper exit channel and easily to take.

**For build-in manual cutter models** such as XP-2007 or XP-2008, in order to prevent curling up and paper jam, it highly recommend to reserve 4.8 mm paper advance for logo and necessary paper feeding length. For the printed receipts, please rip them right after each print finished.

## Printer setup

There are two difference way to setup XP-2000's printer. Firstly, one is the DIP Switch inside of terminal for setup the function such as baud rate, Full-cut mode and others. Another switch is setup trough software to adjust not only the hardware switch function but also add printer density and others. Following explanation is going to descript each function of these two switches.

**The SW1 Hardware DIP switch 1 or Software switch 1 works as following:**

Switch position	Function description
<b>1</b>	Baud rate definition. There are four speed can be choose which are 19200 bps, 115200 bps, 9600 bps and 38400 bps.
<b>2</b>	
<b>3</b>	Control paper auto-cut when cover close and switch on the printer (For auto-cutter models only).
<b>4</b>	Full-cut mode or Partial-cut mode choice (For auto-cutter models only).
<b>5</b>	Busy on "buffer full" and/or "off line" control
<b>6</b>	Cut with or without paper feed.
<b>7</b>	Enable or disable auto Cutter. (For auto-cutter models only).
<b>8</b>	Enable or disable back feed 6mm before print (For manual-cutter models, auto-cutter models disable auto-cut function and when enable partial cut function only).

**Note:** For SW1-7, if the printer build-in auto cutter, the default setting will be auto-cutter enable. If printer use manual cutter, it will default at disable.

**SW2 software switch works as following:**

Switch position	Function description
<b>1</b>	Set Hardware Switch 1 Valid or Invalid. (When hardware switches 1 invalid, software switch 1 can instead of hardware switch 1. <b>Note: Hardware switch can not co-work with software switch</b> )
<b>5</b>	Raster Bitmap Print by line print or by buffer batch.
<b>6</b>	Even parity or None parity

7	XON/XOFF handshaking or DSR/DTR handshaking
8	CR code (0Dh) effective or invalid

**CAUTION:** On doing any function's modification of switches, please contact authorized dealer or technicians. Failure to do this could damage the terminal.

## Paper Jam Problems

**When Paper is jammed inside the printer** – Push down the hood release button then the top hood can be released. Remove the jammed paper and reinstall the paper roll. Close the hood properly and firmly for operation.

## Magnetic Stripe Reader (Option)

For magnetic stripe card reading, please insert the card to the bottom and magnetic stripe facing the marked side of slot. In spite of the card's movement can be two-way of the slot, the reading process should be passing through whole slot horizontally. A non-standard card recorded without complete degaussing prior to recovery may accept only one direction in card reading.



The MSR in XP-2000 series reads the ISO or JIS-II magnetic stripe card without driver. Yet, there is a "Posiflex USB MSR Manager" program provided to control some parameter configuration for ISO MSR.

The controllable features in this program covered: each track enable/disable, Alt+Num approach for ASCII codes and Leading/Stop code enable/disable. The function for enabling each track comes in effect only when the track is physically available. Please find in the Product Information CD delivered with system "\Drivers\SD\_Series\USBMSR\_xxx" and "Set Up" this manager program or download the installation program from our official website <http://www.posiflex.com> or <http://www.posiflex.com.tw>.

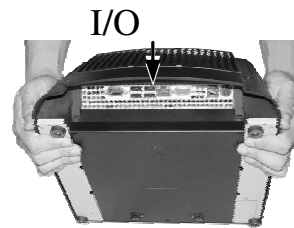
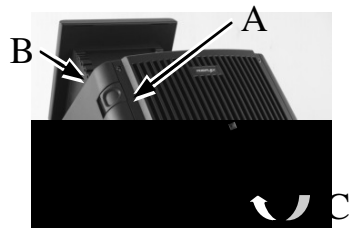
## I/O Plate

Please follow steps A to C sequentially with reference to pictures to use the I/O Plate.

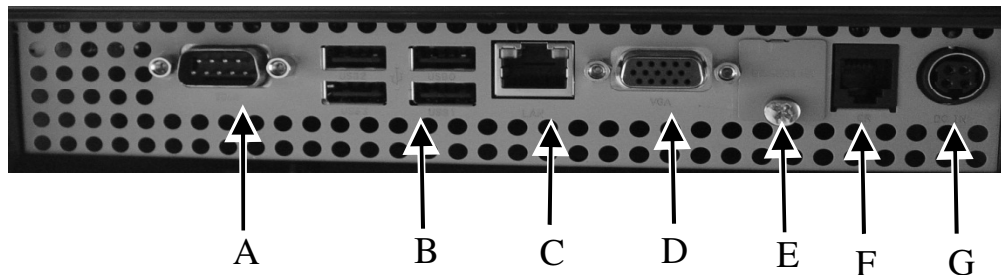
**Step A:** Please hold the LCD panel and push lock/release lever for tilt angle adjust backward.

**Step B:** Turn the panel backward to most horizontal position

**Step C:** Please hold the base and pull up the terminal **carefully** than you will see the I/O plate.



### I/O Plate View:



A: 1x Serial Port (RS-232).

B: 4x USB Ports.

C: 1x LAN Port.

D: 1x VGA Port (D-sub, 15 PIN).

E: Service Window.

F: 1x CR Ports.

G: DC Power connector.

In XP-2000 system, there is a serial port in form of DB 9 pin male connectors available in the I/O plate. It can supply a +5 V DC through pin 9 of serial port and +12V DC through VGA port after jumper setting. **However, except Posiflex peripheral device, do not connect any other device to this port before the power in this port is disabled.**

**CAUTION: Please turn off the system power first! Then hold the base and move the terminal carefully.**

## **Connecting Cables**

To have the terminal ready for operation, please connect all required cables to the appropriate connectors. Please make sure that each connector is connected to the correct port with the correct orientation. **Damages due to incorrect connection or orientation are not covered by product warranty!**

Some connectors like the LAN or CR connector have to be gently inserted until a click is heard. It is recommended that connectors such as the COM port and VGA connector be screwed into place once seated. Please make sure that each connector has to be connected to the right device in the right way.

**CAUTION: On doing any insertion or extraction of any connector, please always hold the connector head itself instead of pulling on the cable wire. Failure to do this could damage the cable and jack that is considered as an artificial destruction and is not covered by the warranty.**

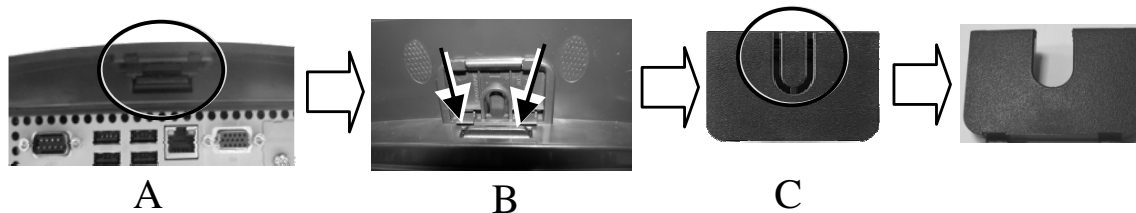
## **Preparing the Main Unit**

On the back of the I/O Plate, there is a service window among the 1 matching screw. Remove the service window lock screw to find several jumpers. The jumpers in this window are designated for USB Touch, VGA & COM port power and hardware reset functions. Please consult your dealer for technical support on setup of these jumpers. Please notice that only those qualified technicians may adjust in the service window with information from Posiflex and the contents in the service window may change without notice as time develops. Before install the rear mount upgrade kits such as customer display, there is one step needs to do. Please release the cable exit cover as following steps:

A: Please find the back of cable cover which just near the I/O plate.

B: Please use the Fingertip to release compression lock.

C: after the cable cover released, please cut the circle part which show in the picture C.



After finish this step, the cable cover can be fixed back when the rear mount upgrade kits fixed.

## Rear Mount Upgrade Kit

There are plenty of upgrade kits of XP-2000 series for choice. To install these upgrade kits, please refer the installation guide of each kit. For some interface such as serial ports and VGA ports, please remember to enable the power supply of the main unit for the upgrade kit if the serial or VGA interface model is used.

The power supply in the I/O port must be disabled if it is no longer to support these intended devices otherwise **any damage or loss caused consequently shall be out of product warranty!**

## Customer Display

In order to communicate the transaction total to the customer conveniently, there are optional upgrades kits such as PD-330 and PD-2606 are the rear mount customer display kits for XP-2000 series. Counter space saving design with 2\*20 VFD (PD-2606) and 2\*20 LCD (PD-330) provides the clearest view for customers. In addition, real base mount graphic STN LCD pole display PD-7614/7624/PD7634 which support traditional/simplify Chinese and Arabic language can be integrate to the XP-2000 series for more applications. To install these pole displays, please refer the installation guide of each kit.



## 2<sup>nd</sup> LCD Panel

There are two sizes of 2<sup>nd</sup> monitor can integrate into XP-2000 series which are 12" 2<sup>nd</sup> LCD LM/TM-2212(screen resolution is 1024 x 768) or 8" 2<sup>nd</sup> LCD

LM-2208 (screen resolution is 800 x 600). TM-2212 is a 12" LCD touch monitor which can mount a magnetic stripe reader for customer use to.

The VGA port in the XP-2000 system supports either a base mount 2<sup>nd</sup> display or a separately connected LCD monitor or touch monitor. To support the DC power to the 2<sup>nd</sup> display, it required a qualified technician to set the power supply in XP main unit through the VGA connector according to Posiflex technical information.

**Do not connect other monitor to this port before the power in this port is disabled.**



**Note: When 2<sup>nd</sup> display is connected, the screen display of system boot up stage and application in some OS will be smaller than usual in both 1<sup>st</sup> and 2<sup>nd</sup> displays.**

## **Connecting Cash Drawer (Option)**

The RJ11 connector in I/O area of a XP-2000 system can be used for controlling most of the common cash drawers available on the market.

However, it is most recommended to use Posiflex CR-2000 or CR-2200 or CR-3100 or CR-3200 or CR-4000 or CR-4100 or CR-4210 or CR-6310 for best compliance to operate the opening mechanism and to monitor the drawer open status.

Use the cable supplied with the cash drawer for connection to the CR port in XP system. This cable has a 6-pole plug at one end and an 8-pole plug at the other. The 8-pole plug should be inserted into the connector marked: "signal cable from POS Printer" at the rear of the cash drawer. The 6-pole plug should be inserted in the connector marked "CR" found in the main connection area in the system.

## **System Recovery**

For XP systems preloaded with Windows WEPOS / POS Ready / Windows CE / Linux on DOM, HDD or Solid State Drive, Posiflex provides recovery DVD delivered with the terminal for the preloaded operating system. **The System Integrator shall take care of software restoration after OS recovered.** A Posiflex supplied USB interface DVD drive will be required for

such action. Other brand DVD-ROM drive may require its own driver different from what supported in the recovery DVD.

**Please use the recovery DVD in rescue operation only. Using it otherwise may wipe out whatever stored in the storage device!** All upgrade devices drivers needed for manual installation in usual way are available in the subfolder “\drivers” in OS recovered HDD and the latest versions of these required drivers will be available on our web: <http://www.posiflex.com>. Then follow instructions from your system integrator for software recovery.

## **Operating System Installation**

This product is highly professionalized equipment. The installation of an OS into a machine without any preloaded OS could be a major difficulty for average user or obstacle by possibly unintentional negligence even for PC veterans to accomplish such a task. Therefore, OS installation into a system without preloaded OS is highly discouraged. Posiflex Technology, Inc. shall not be responsible for any technical support to questions on this aspect.

## **APPLICATION ENVIRONMENT**

It is **very** important that you check the following operational guidelines:

### **Ventilation**

This terminal must **NOT** be operated in an environment with restricted ventilation. There must be at least 25 mm air clearance around any top or side ventilation holes with a free flow of air around the unit at **ALL** times for the installation.

### **Operating Environment**

The equipment must not be operated or stored in extremes of both temperature and humidity/moisture. (Operating range 0°C to 40°C and up to 80% humidity – none condensing, max. wet bulb 26°C)



## Power Supply

The operating voltage range of the power adaptor should cover the local power supply for proper operation. The power cable, the power outlet and any power fusing arrangements must conform to local safety regulations.

Please never do any connection / disconnection when system is still powered on. Please always keep the external power adaptor in a free air circulation.

## Automatic Power on Control

The system may also turn on according to some preset conditions such as Modem Ring Up and Alarm Clock Wake Up or LAN Wake Up.

When the XP system is turned off after a successful boot up, the preset automatic power on functions will keep monitoring for the preset conditions and turn on the system when the preset conditions are met.

Please note that if the XP system is improperly turned off before a complete boot up procedure, the above preset power on control functions will be disabled until next turning off after a complete boot up.

## Storage Device

The standard system storage device is a DOM (Disk on Module) in the main unit. This device can be replaced with an option SSD HDD or 2.5" SATA HDD.

## TECHNICAL MANEUVERS

Some technical maneuver in XP-2000 series such as serial COM port +5V power supply settings is supported in system jumper setting. However, such support is limited to the application of specific Posiflex peripherals and must be disabled when the Posiflex peripherals are disconnected. **Failure to follow the discipline would result in electric or fire hazard and such consequences are not covered by product warranty!**

The rest applicable technical maneuvers include system CMOS data reset, system reset, DRAM upgrades and installation of optional SATA HDD. All these technical maneuver operations require purchase of applicable Technical

Manual from Posiflex or consultation from Posiflex authorized dealers and should be handled only by a **qualified technician**.

