

**KS - 6810**  
**Fan Free Touch Terminal**  
**w/ Mini Slim Base**  
**User's Manual**

**POSIFLEX**



**FCC Notes:**

Rev.: A0

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.
- This product contains inside a Lithium battery. Please always follow local environmental protection laws / regulations for disposal of used batteries and always replace only with battery of same type.

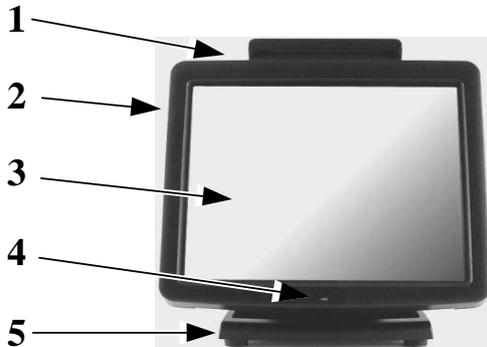
### **DAILY MAINTENANCE GUIDE**

For regular cleaning of the KS systems, please use only soft haired brush or dry soft cloth. You may use moist soft cloth to remove stains when necessary. Apply only proper amount of mild neutral detergent 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.

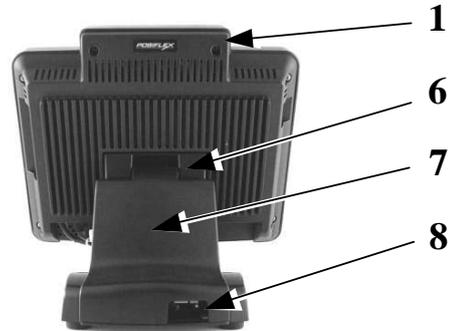
# INTRODUCTION

## PRODUCT PICTURES

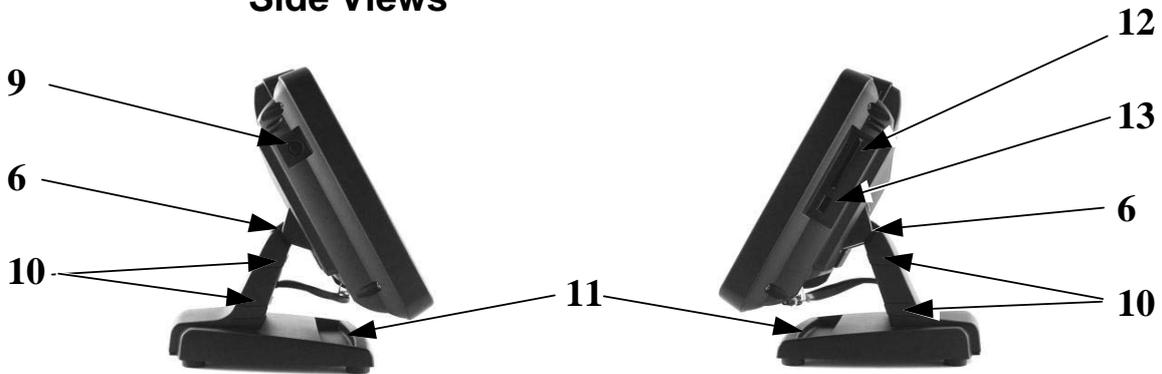
Front View



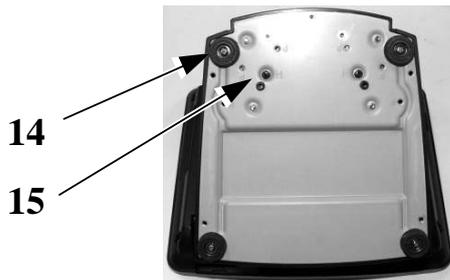
Rear View



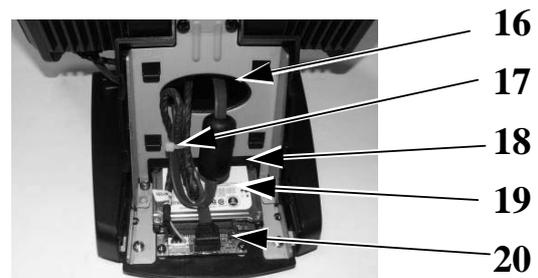
Side Views



Bottom View



Inside Base



## PARTS IDENTIFICATION

1. Optional MSR kit
2. Main unit
3. Touch panel / LCD panel
4. Power indicator
5. Undetachable mini Slim base stand
6. Hinge

7. Base back cover
8. Cable exit
9. Power switch in recessed side
10. Base back cover hook
11. Sundries trough for pencils, paper clips etc.
12. CF memory card reader slot in recessed side
13. USB port in recessed side
14. Rubber feet with fixing screw
15. HDD fixing screw
16. Oval cable passage on base trunk
17. Cable tie holder for HDD cables
18. Cable tie holder for external cables
19. HDD
20. HDD conversion card

## **PRODUCT FEATURES**

### **Standard Features:**

- a) CPU: Intel Atom CPU, N270 1.6G, FSB 533MHz, Cache 512K
- b) Fan free structure for harsh environment
- c) Data storage device: SATA HDD in base stand, CF card or SSD HDD in main unit.
- d) An advanced mini slim base design that supports storage room for 2.5" HDD.
- e) Support WEPOS, POSReady, Windows XP Pro and Linux OS
- f) High quality 10.4" TFT active matrix LCD panel
- g) **Vertical type LCD panel with easy tilt** angle adjustment from 20° to 90°
- h) Durable resistive type touch panel that endures 35 million touches min. at same spot
- i) Various I/O ports supported, including:
  1. 3 serial ports with 2 in form of DB9 connectors and 1 in form of 10 pin RJ45 type modular connectors. COM1/2 are with capability for +5V DC support through software setting.
  2. 5 standard USB 2.0 ports
  3. One SATA data port plus one HDD power connector for SATA HDD in base stand.
  4. One LAN port Ethernet 10/100/1000 Base T with LAN status indicators on jack (green for link, orange for data transmission)
  5. One 2 pin type DC 12 V power input connector
  6. One CR Port supports control 2 Cash Drawers
- j) **Touch control functions:** left/right button, double click, drag & draw

- k) Shared video memory (max. 128 MB)
- l) Support high performance **DDR2 DRAM** with maximum memory size **2GB in one SODIMM**
- m) Integrated structure for top mount upgrade kit with software programmable MSR parameters for WEPOS, POSReady or Windows XP Pro.
- n) **Accidental power off protection** – The power switch located at a recessed side of main unit is unlikely to be activated in normal operation.
- o) **Preconditioned power up function** – by COM port MODEM ring or LAN.
- p) Supports power saving by suspension mode
- q) Extremely low power consumption in system off as well as perfectly meet EUP LOT 6 standard.

#### **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) Integrated top mount upgrade kit(can add by dealer):
  - ✧ MSR in USB interface
- c) Integrated base mount upgrade kit:
  - ✧ LCD Pole display or
  - ✧ VFD Pole display
- d) Wireless LAN adaptor in USB interface
- e) Preload OS: WEPOS, Win XP Pro, POSReady, Windows Embedded or Linux
- f) RJ45 to DB9 serial port conversion cable
- g) LPT interface conversion cable
- h) Split cable for 2 cash drawer control

## INSTALLATION GUIDES

**CAUTION:** Before any installation or cable connection to the set, please always make certain 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!

### TILTING LCD PANEL

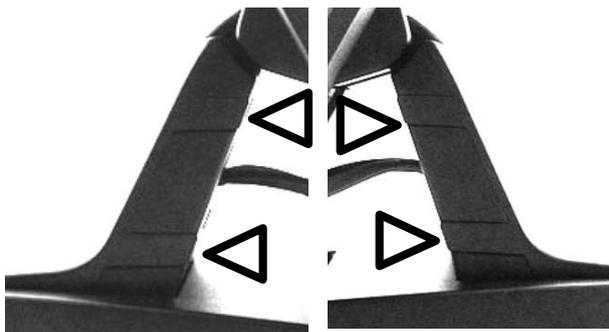


The tilting mechanism in KS-6810 series utilizes hinges and there is no particular skill to turn the LCD panel to most suitable angle for either viewing or convenience in cable connection.

### DISCONNECTING ALL CABLES

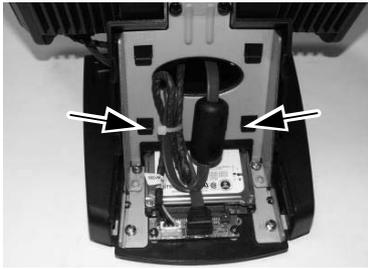
With the LCD panel turned to most backward position, the main I/O connector area will be easily accessible at bottom side of the main unit. Please **first note orientations of every existing cable connection** and then disconnect every cable properly before any further reconfiguration of cable connections. Please note that the click lock spring has to be pressed down prior to pulling out the connector such as the LAN port or the 2 alternate RJ45 form COM ports. Please also note that the fixing screws have to be loosened free prior to disconnection such as the 2 regular DB9 form COM ports. Please **always hold the connector head** instead of pulling on the cable wire when disconnecting any connector. Failure to do this could damage the cable and jack that is considered as an **artificial destruction**. **Damages due to incorrect disconnection operation are not covered by product warranty!**

### OPENING BASE BACK COVER



In order to settle the touch terminal properly in a point of sale system, all the cable connections have to be routed through its base. Therefore, please observe the side view pictures of the base trunk at the left and release the triangle marked hooks to remove the back cover.

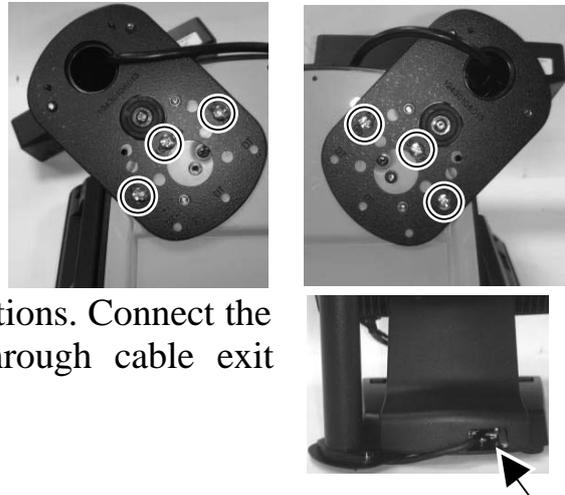
## CABLE ROUTING IN BASE



For cable routing in the undetachable mini slim base, please refer to the picture at left. There are 2 cable tie holder slits on the metal bracket for the trunk as arrowed in the picture. Hold all the external cables with a cable tie through the right cable tie holder slit and leave the cables for the HDD tied to the left holder slit. Have all cables to pass through the oval hole on the trunk to come out of the front side of trunk. Connect all the cable ends to main unit. Be sure not to damage any cable during this operation.

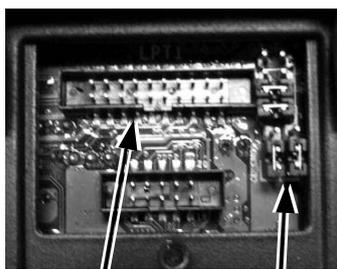
## BASE MOUNT UPGRADE KIT (OPTION)

For the KS-6810 series with mini slim base, the LCD customer display PD-309/U or the VFD PD-2605/U can be attached to either rear corner of base bottom. Refer to the pictures at right. Use the 3 attached screws to fix the metal base plate of the PD to bottom plate of mini slim base at the circled positions. Connect the interface cable to go into the base through cable exit arrowed at right to the main unit.

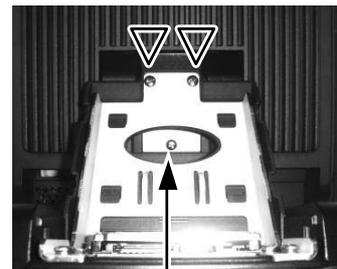


## PREPARING THE MAIN UNIT

On the back of the main unit, there is a service window visible through the oval cable passage when the base back cover is removed. It is recommended to Remove the 2 hinge fixing screws as triangle pointed in the upper right picture and remove the arrowed service window lock screw to open the cover plate and find several jumpers and a reserved



LPT Connector      Jumpers



Service Window  
Lock Screw

LPT port as illustrated the lower right picture. Please consult your dealer for technical support on setup of these jumpers. Please note 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. The option LPT conversion

cable should be applied to the connector as arrowed in left picture below. Route the conversion cable from bottom side of the service window plate to connect the usual cable for parallel device. **Please notice that when using the LPT conversion cable, the metal plate of service windows can not be use and the service windows will be open!**

## **CONNECTING CASH DRAWER (OPTION)**

The RJ11 connector in I/O area of a KS-6810 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-2200, CR-3100, CR-4000, CR-4100 or CR-6300 for best compliance to operate the opening mechanism and to monitor the drawer open status.

The user may also purchase the optional 2-in-1 cash drawer control cable to control 2 cash drawers in 1 port. It has a 6-pole plug at one end and two 8-pole plugs at the other. The 6-pole plug should be inserted in the connector marked “CR” found in the I/O area in the system. Each 8-pole plug should be inserted into the connector marked “signal cable from POS Printer” at the rear of one of the cash drawers.

## **CONNECTING CABLES**

To have the re-assembled main unit with stand assembly 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, COM or CR connector have to be gently inserted until a click is heard. It is recommended that connectors such as the COM1/2 connector be screwed into place once seated. Please note that the SATA cable for HDD in base should be connected with the eSATA end of the cable to the main unit. Adjust the slack of each cable. Re-adjust the tilt angle of the screen for best viewing. Connect the cables to appropriate external devices through the cable exit at the bottom of stand assembly. 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.

## **OPERATING SYSTEM RECOVERY**

For KS-6810 systems with operating system in the Compact Flash Card, once the Compact Flash is damaged for any reason, the thin client may fail to boot. **A bootable new Compact Flash Card will be required to have the workstation back to work.** Please follow instructions given by the System Integrator to deal with situations like that. One more advice for CF Card application is that in spite of the fact that it is used in the way like an ordinary HDD, usual utilities such as **FDISK.EXE** or **FORMAT.COM** shall never be used on CF Card otherwise the boot sector of operating system itself may be damaged and causing the CF Card no longer bootable.

For KS-6810 systems preloaded with WEPOS/POSReady/Windows Embedded on HDD, Posiflex provides recovery DVD delivered with the touch terminal for the preloaded operating system. The System Integrator shall take care of software restoration after OS recovered. A Posiflex supplied USB interface COMBO drive will be required for such action. Other brand COMBO drive may require its specific 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 HDD!** 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.tw>. Then follow instructions from your system integrator for software recovery.

## **OPERATING SYSTEM INSTALLATION**

This product is a highly professionalized equipment. The installation of an OS into a machine without any preloaded OS could constitute 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 shall not be responsible for any technical support to questions arisen due to non-preloaded OS.

# USING THE TOUCH TERMINAL

## 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 5°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.**

## POWER ON/OFF CONTROL

### Power Indicator

There is a power indicator LED at center of lower rim of LCD panel. This LED lights up yellow when external power is ready and turns to blue when system power is turned ON.

### Hardware Power Switch

The power switch located at side of the main unit is a tactile pushbutton switch. This switch controls the power on/off of the system. This switch turns the system on when pushed only when external power is present. 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 may fail to turn off the power. In this case, please utilize the **forced power off feature** by pressing the switch and holding for within 10 seconds.

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

### **Automatic Power On Control**

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

To utilize Modem Ring Up function, the user should enter the BIOS setup by pressing “Del” key at system boot up, choose in “Power Management Setup” and make the “Power On by Ring” enabled for Modem Ring Up. Save the configuration and exit the BIOS setup program. The Preset Power On Control will then be ready. For LAN wakeup, the item “Power On by LAN” must be enabled in “Power Management Setup” and an operating caller system connected through LAN to the system is required. It also requires a qualified networking technician to check the LAN chip ID of the system for the caller system to wake up.

When the KS-6810 system is turned off after a successful boot up with external power continuously supplied, 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 KS-6810 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.

### **CUSTOMER DISPLAY**

Please follow the instructions on the manual that comes along with the customer display when it is installed.

## **DISPLAY ISSUES**

### **Main LCD Display**

For best viewing result please set your display resolution at 800 x 600 with high color.

The system Video Memory is shared from system memory. The video memory size can be set to 128 MB max.

### **SERIAL PORTS – COM1/2/3**

In KS-6810 system, there are 3 serial ports available. COM 1/2 can supply a +5 V DC through pin 9. COM1/2 ports are standard RS232 serial ports as status at delivery. COM3 port is a RJ45 connector as status at delivery if the option conversion cables are applied.

### **AUDIO OUTPUT SPEAKER**

The audio port in KS-6810 system is arranged to have an internal audio speaker with maximum audio power of 2 W at lower right corner of the main unit.

### **CF MEMORY CARD READER**

The CF memory card reader slot at right side of main unit accepts a type I CF memory card.

### **USB PORTS**

There are in total 5 USB ports for external connection: 1 at right side below CF slot; 4 in I/O area.



### **TOUCH PANEL**

All paragraphs below are applicable for models with touch panel only. The user of those models without touch panel can ignore them and consider this user's manual ends here.

## Mouse Emulation

The touch panel in KS system uses USB interface. When the touch driver is properly installed, this touch panel works exactly like a standard mouse for both interfaces. However, if the system is running under safe mode, most drivers are disabled in this mode and the touch panel calibration is therefore not guaranteed. It is recommended to use a standard USB mouse or keyboard in this mode.

All the below 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.

## 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.

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