

# **KS - 6812 / KS-6812A**

## **Fan Free Touch Terminal**

### **User's Manual**

**POSIFLEX**



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.
- 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.

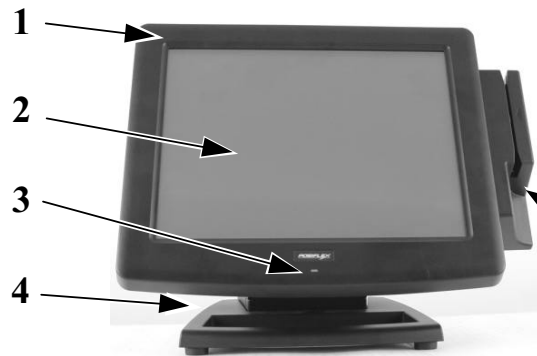
## **CAUTION**

**Risk Of Explosion If Battery Is Replaced By An Incorrect Type  
Dispose Of Used Batteries According To Local Regulations**

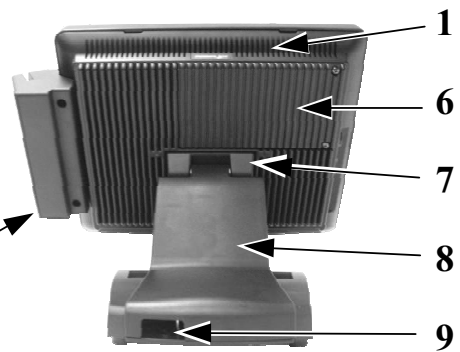
# INTRODUCTION

## PRODUCT PICTURES

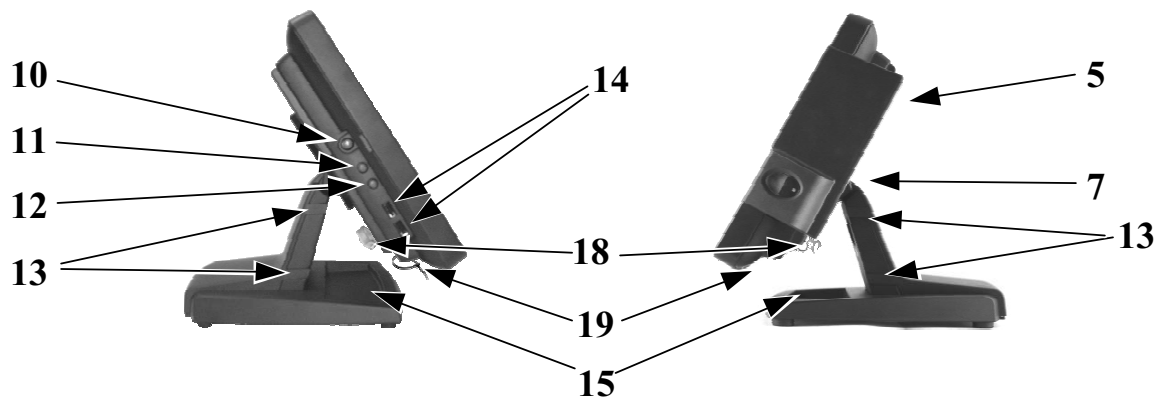
Front View



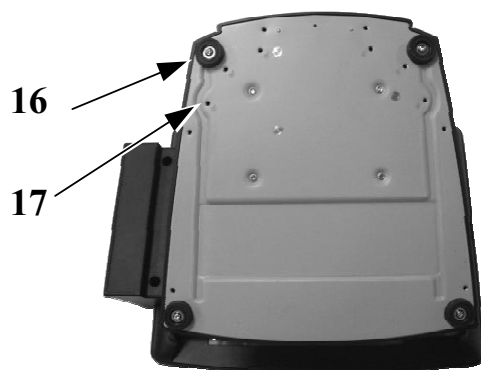
Rear View



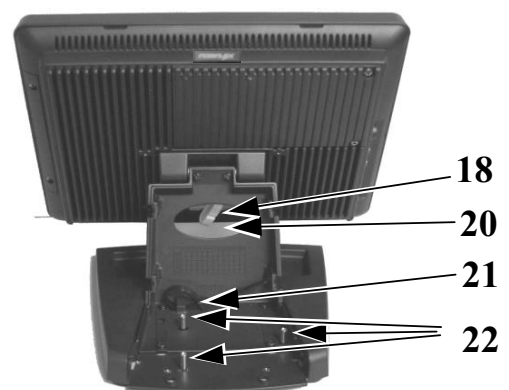
Side Views



Bottom View



Inside Base



## PARTS IDENTIFICATION

1. Main unit
2. Touch panel / LCD panel
3. Power indicator
4. Base stand
5. Optional side mount kit
6. HDD cover
7. Hinge cover
8. Base back cover
9. Cable exit
10. Power switch
11. LCD brightness up button
12. LCD brightness down button
13. Base back cover hook
14. USB ports on left side
15. Sundries trough for pencils, paper clips etc.
16. Rubber feet with fixing screws
17. Screw holes for base mount pole display kit
18. Cable tie (in the terminal's back cover for desktop use only)
19. Cable tie (in the I/O plate for wall mount use only)
20. Oval cable passage on cast base trunk
21. Cable tie for all cables
22. Screw posts for optional HDD in base

## PRODUCT FEATURES

### Standard Features:

- a) CPU: Intel Atom N270 1.6G
- b) Fan free structure for harsh environment
- c) Data storage device: SATA HDD 2.5" 80 GB or optional CF card reader adaptor & CF card in main unit or SSD HDD.
- d) An advanced mini slim base design that supports storage room for optional 2.5" SATA HDD.
- e) Support WinXP Pro, WEPOS, POSReady and Linux OS
- f) High quality 12" TFT active matrix LCD panel
- g) **Vertical type LCD panel with easy tilt** angle adjustment from 20° to 90°
- h) LCD brightness adjust buttons at side of main unit
- i) Durable resistive type touch panel that endures 35 million touches min. at same spot

- j) 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 connector. All are with capability for +5V DC support.
  2. 6 standard USB ports with 2 at side and 4 in I/O area below panel
  3. two internal proprietary USB ports for touch function and optional side mount kit
  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 VGA port
  6. one SATA data port plus one HDD power connector for optional SATA HDD in base
  7. one audio jack for stereo line output
  8. one CR port capable of controlling 2 cash drawers max.
  9. one 2 pin type DC 12 V power input connector
  10. reserved one LPT interface through use of optional special cable in service window
- k) Built-in 1 internal 2W speaker
- l) **Touch control functions:** left/right button, double click, drag & draw
- m) Dynamic video memory technology up to 224 MB
- n) Support high performance **DDR2 SDRAM** with maximum memory size **2GB in two SODIMM**
- o) Integrated structure for side mount upgrade kit with software programmable MSR parameters for Win XP WEPOS or POSReady.
- p) **Accidental power off protection** – The power switch located at a recessed side of main unit is unlikely to be activated in normal operation.
- q) **Preconditioned power up function** – by alarm clock or COM port MODEM ring or LAN
- r) Supports power saving by suspension mode

### 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) CF card reader in HDD bay (HDD in main unit will not be applicable)
- c) Base installation kit for HDD and SDD HDD.
- d) Integrated side mount upgrade kit:

- ✧ SD-500 with options of MSR and optical fingerprint sensor in USB interface
- e) Integrated base mount upgrade kit:  
LCD Pole display PD-309U or  
VFD Pole display PD-2605U
- f) Integrated rear top mount upgrade kit:  
LCD Pole display PD-310 or  
VFD Pole display PD-2604
- g) Wireless LAN adaptor in USB interface
- h) Preload OS Win XP Pro, WEPOS, POSReady or Linux
- i) RJ45 to DB9 serial port conversion cable (for COM 3 port)
- j) Split cable for 2 cash drawer control
- k) LPT interface conversion cable
- l) Wall mount kit.

## 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!

## TECHNICAL MANEUVERS

Applicable technical maneuvers in KS-6812/6812A series include serial COM port power supply settings, VGA port power supply setting, system CMOS data reset, DRAM upgrades, physical access to CF memory card if the CF card reader option is installed and installation of optional SATA HDD in base. 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**.

## TILTING LCD PANEL

The tilting mechanism in KS-6812/6812A 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 / disconnection.

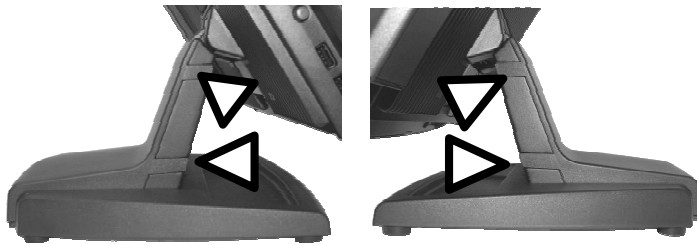


## DISCONNECTING ALL CABLES

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 CR port or the alternate RJ45 form COM3 port. Please also note that the fixing screws have to be loosened free prior to disconnection such as the 2 regular DB9 form COM ports or the VGA port. 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

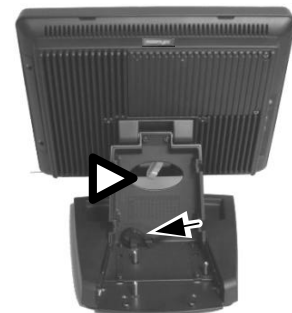


In order to settle the touch terminal properly in a point of sale system, all the cable connections have to be routed through its base.

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 mini slim base, please refer to the picture at left. There is a cable tie inside the base trunk as arrowed in the picture. Hold all the external cables with the cable tie. Have all cables to pass through the oval



hole on the trunk as triangle marked to come out of the front side of trunk. Connect all the cable ends to main unit. Should there is the option SATA HDD in base installed, please double check that the HDD cables must be still secured.

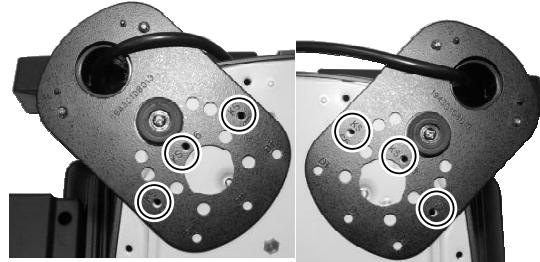
## CUSTOMER DISPLAY UPGRADE KIT (OPTION)

### Base Mount Pole Display

For the KS-6812/6812A 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 (the holes marked with “KS” on bottom plate of PD against the holes marked “P” on bottom plate of KS system). Connect the interface cable to go into the base through cable exit arrowed at right to the main unit.

### Rear Top Mount Customer Display

To mount the rear top mount upgrade kit like PD-310 or PD-2604 on the back of KS-6812/6812A series, please apply carefully the 2 small fixation shoulder screws that come along with PD-310 or PD-2604 to the back of KS-6812/6812A series at the screw hole circled in the right pictures. Please do not screw them to the bottom. Hook the rear bracket of the upgrade kit onto the shoulder screws.



Slide down the upgrade kit and gently tighten the shoulder screws.

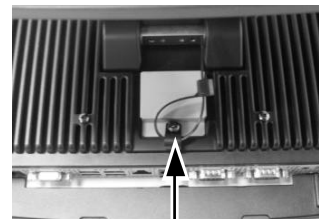


**Do not overdo the tightening or unrecoverable thread damage will occur.** If the customer display used is the USB interface model, the DC supply in COM port is not required, it will be powered through the USB port.

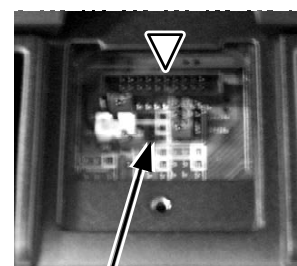


## PREPARING THE MAIN UNIT

On the back of the main unit, there is a service window facing the base trunk in most of application. It is recommended to tilt the LCD panel to most backward position and rest the surface of LCD panel over a piece of soft clean cloth on a desktop to access the service window. Use a screw driver of adequate length to remove the service window lock screw to open the cover plate and find several jumpers as illustrated in the lower right picture.



Service Window  
Lock Screw



Jumpers

The jumpers in this window are mainly designated for COM port power supply function. 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 triangle marked in the picture. Route the other end of the conversion cable through the oval opening in base trunk and have the usual cable for parallel device connected.

## SIDE MOUNT UPGRADE KIT (OPTION)



Remove the 2 screws circled in the left picture to remove the cover for side mount upgrade kit. Take out the cable inside this cover and connect it to the white connector inside the side mount upgrade kit like SD-500 as arrowed in the right picture. Gently arrange the excessive length of this cable back in the hole and screw-fit it back to the position



originally occupied by the cover. Please reserve the cover if there is chance to have the side mount kit removed in the future.

## CONNECTING CASH DRAWER (OPTION)

The RJ11 connector in main connection area of a KS-6812/6812A system can be used for controlling most of the common cash drawers available on the market. However, it is most recommended that the Posiflex CR-2000 or CR-2200 or CR-3100 or CR-3200 or CR-4000 or CR-4100 or CR-4210 or CR-6310 be used for best compliance.

The KS system will directly control the cash drawer using the cash drawer port (CR) both to operate the opening mechanism and to monitor the drawer open status. Both functions may be accomplished under software control of the COM1 serial port.

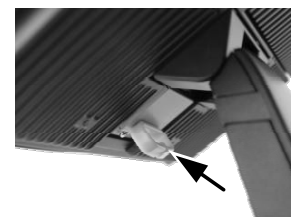
Use the cable supplied with the cash drawer for connection to the CR port in KS system. This cable has a 6-pole plug at one end and an 8-pole plug at the other. The 8-pole plug should be inserted into the connector marked: “signal cable from POS Printer” at the rear of the cash drawer. The 6-pole plug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

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 main connection 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. The cable lengths for the two 8-pole plugs are different. Use the shorter one for the original cash drawer “CR1” and use the longer one for the extended cash drawer “CR2” that will be distinguished by the software command.

## 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 COM3 or LAN or CR connector have to be gently inserted until a click is heard. It is recommended that connectors such as the COM1/2 and VGA connector be screwed into place once seated.



Adjust the slack of each cable. Use the cable tie arrowed in the right picture to hold all the cables together. 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-6812/6812A systems with operating system in the Compact Flash Card if the system is installed with the CF card reader, 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-6812/6812A systems preloaded with Windows XP Pro, WEPOS or POSReady 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 0°C to 40°C and up to 80% humidity – non 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 orange when external power is ready and turns to blue when system power is turned ON.

## Hardware Power Switch

The power switch located at left side of the main unit is a tactile pushbutton switch. This switch controls the power on/off of the system. After external power is preset, this 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 power switch may fail to turn off the power. In this case, please utilize the **forced power off feature** by pressing the power switch and holding for more than 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 or Alarm Clock Wake Up or LAN Wake Up.

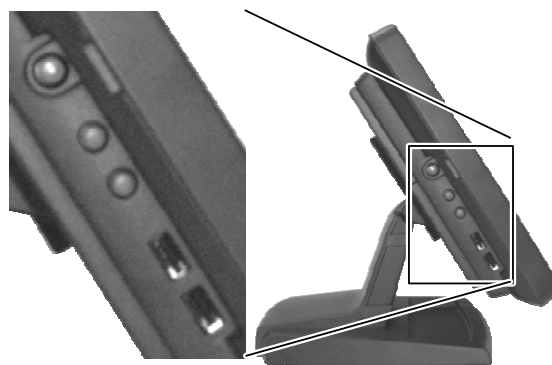
To utilize Modem Ring Up or Alarm Clock Wake Up function, the user should enter the BIOS setup by pressing “Del” key at system boot up, choose in “Power Management Setup” and make the “Power On by Ring” enabled for Modem Ring Up or enable the “Resume by Alarm” for Alarm Clock Wake Up. Save the configuration and exit the BIOS setup program.

The Preset Power On Control will then be ready. For LAN wakeup, the item “PCI Express PM Function” 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-6812/6812A 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-6812/6812A 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.

## BRIGHTNESS CONTROL

At left side of the main unit below the power switch, there are brightness adjust push button switches and two USB connectors. Each single press on the + or – button changes the LCD panel display brightness by a small amount. When you press and hold the button the change will keep on until release or extreme condition matched.



## USB PORTS

There are in total 6 USB ports for external connection: 2 at left side below power switch and LCD brightness adjust buttons; 4 in I/O area. All of them comply to USB 2.0 standard.

## 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 1024 x 768 with high color.

The system Video Memory is shared from system memory. The video memory size is default 8 MB and can be set to be 1 MB.

### VGA Port

The VGA port in the KS-6812/6812A 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 monitor, have a qualified technician to set an internal jumper in KS main unit to supply the required power 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.**

## **SERIAL PORTS – COM1/2/3**

In KS-6812/6812A system, there are 3 serial ports available. All can supply a +5 V DC through pin 9 after proper jumper setting change. COM1/2 ports are standard RS232 serial ports as status at delivery. COM3 is also set to standard RS232 serial port as status at delivery if the option conversion cable is applied.

## **PARALLEL PORT**

In KS-6812/6812A system, the parallel port can be available only through use of the optional conversion cable. It should be connected to the special connector inside the service window as described earlier. The other end of the cable is the normal 25 pin D sub female LPT connector.

## **AUDIO OUTPUT SPEAKER**

The audio port in KS-6812/6812A system is arranged to have an internal audio speaker with maximum audio power of 2 W at lower left corner of the main unit. The internal speaker will be automatically disconnected when a plug is inserted in the line output jack.

## **CF MEMORY CARD READER**

If the CF card reader is installed and the CF card is used for system data storage device, it is recognized by the system as the IDE channel 1 Master device. The CF memory card reader inside main unit accepts a type II CF memory card. Please note that usual utilities such as **FDISK.EXE** or **FORMAT.COM** **must never be used on CF card or permanent damage can occur**. If this option is installed, the standard SATA HDD in main unit is not applicable.

## **HDD & SATA PORT**

The 2.5” HDD in the main unit is connected to the system through internal Serial ATA (SATA) connector. The optional HDD in the base unit if installed is connected to the system through SATA port. The internal SATA HDD will



be detected as “Ch. 0 M.” and the HDD in the base stand connected to the SATA port will be detected as “Ch. 0 S.” in “Advanced BIOS Features” → “Hard Disk Boot Priority” of BIOS setup. Both IDE or SATA controller can be set to “Disabled” in “Integrated Peripherals” → “OnChip IDE Device” of BIOS setup when required.

## 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 of USB interface. 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.

**警告**  
本電池如果更換不正確會有爆炸的危險  
請依製造商說明書處理用過之電池

