



# **E-Touch Magnum 12" / 15"**

User Manual

## Company Profile

E-PoS is a pioneer in the field of Retail Technology Products operating in Middle East & South East Asian markets. The success story of E-PoS started five years ago when the core focus was to meet burgeoning market share of the mid level segment. Since then E-PoS has built a substantial market share in Retail Technology Products with an average growth of 10-15% per year.

E-PoS not only offers total hardware solution for the Retail business but also for Banks, Government Organizations, Filling Stations, Hospitality Industry, Recreation, Hospitals etc

E-PoS has a long list of satisfied customers over the Middle East, Africa & Indian Subcontinent. A dedicated channel of Resellers, Dealers and System Integrators back up the efficient & timely distribution and After sales service

### Objective

The objective is to create reliable, viable & affordable retail hardware solution provider and to have maximum satisfied customer base in the Middle East and there onwards to neighboring countries like India, Africa & Russia.

### Distribution Rights

E-PoS represents some of the leading brands as their authorized distributor for Middle East & South East Asia viz.:

#### Point of Sale

Star Micronics, U.K – for their range of Retail Technology products.  
Metrologic, Germany- for Barcode scanners & Data collectors.  
Godex, Taiwan – for Barcode Printers.  
Cash bases U.K – for Cash Drawers.  
Denso, Germany – For Auto ID Solutions  
Ring, Japan – For Industrial Barcode Printers

#### Banking & Security

Evolis, France – For ID Card Printing solutions  
Magtek, USA – For Banking products

&

A huge range of E-PoS OEM products for POS, Banking & Security Products

## Product Range

### Point of Sale Products

- Point of Sale PCs & Web terminals
- Touch Screen Systems
- Printers-Line, Dot matrix, Label, Card and Point of Sale
- Displays-Customer, CRT, Flat Panels, Touch Screen
- Bar Code Scanners
- Bar Code Printers
- Cash drawers
- Magnetic and Bar Code Swipe Readers
- Programmable and Miniature Keyboards
- Kiosk Terminals
- Portable Data Terminals
- Radio Frequency terminals

### Banking and Security Products

- Visual Card Systems
- ID Card printing solutions
- MICR Check Readers & Encoders
- Check book, Passbook & Passport Printers
- Counterfeit detection units
- Note bundling and binding machines
- Cheque printers
- Magnetic and Bar Code Swipe Readers
- Smart Card Readers

## Target Market

- Hospitality Industry
- Banks
- Government Organizations
- Shopping Malls
- Filling Stations
- Retail Business

## Target Customers

- Dealers
- Resellers
- Corporate Customers
- Overseas/Export Customers
- System Integrators
- Value Added Resellers

## Customer Network & Marketing

E-PoS has existing network of dealers in the Middle East, East Africa and India. The Y2003-04 Expansion plans include Africa and Russian continent being the emerging markets for Retail Technology Products.

Being the only dedicated Regional distribution company for Retail technology Products, E-PoS have always been very aggressive in terms of marketing and promotions. Advertisements are inserted in the local press, trade journals every month. Product brochures, leaflets & promotion schemes are distributed through mail, Fax & Electronic mail thus offering continuous updation about EPoS product range to its business partners. E-PoS participation in International trade exhibitions & Promotions offers more insight to the dealers and corporate end users about Retail technology

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## LOCATIONS

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### Corporate Head Quarters

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Middle East	E-PoS LLC P.O.Box 12608 Dubai, UAE	International	Tel: +9714-3523288 / 3512861 Fax: +9714-3513396 Email: eposintl@emirates.net.ae
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### South East Asia Head Quarters

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South East Asia	E-PoS International Nasik-Pune Road Ayodhya Nagri Nasik, Maharashtra India		Tel: +91-253-2411806 Fax: +91-252-2415295 Email: pradeepw@sancharnet.in
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## DO'S & DON'TS

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*(Integrated circuits on All E-PoS System boards are sensitive to static electricity. To avoid damaging any Components on the computer board, before getting started, read these following precautions and other instructions and save them for later reference).*

- i. Do not remove the computer from the anti-static Packaging until you are ready for installation.
- ii. Make sure the voltage of the power source is correct before connecting the computer to the power outlet, (110~220 volts).
- iii. Connect Rubber Legs provided to avoid damaging Cabinet Cover and Door, (where provided).
- iv. Do not change any Hardware Devices online when System or the device is on and running, because the sudden surge of power may ruin any sensitive components. Also make sure the computer is properly grounded.
- v. Turn off the computer before cleaning. Always clean with a damp or dry cloth only. Do not spray any liquid cleaner on screen directly.
- vi. The power outlet socket used to plug in the computer power cord must be located near the system and easily accessible. Do not use outlets on the same circuit of the system that regularly switch on and off.
- vii. If the computer is sharing an extension cord with other devices, make sure the total ampere rating of the devices plugged into the extension cord does not exceed the cord's ampere rating.
- viii. Do not expose the power cord, extension cord and power outlet to moisture.
- ix. The openings on the computer enclosure are for the cabin ventilation to prevent the computer from overheating. **DO NOT COVER THE OPENINGS.**
- x. Do not connect any devices to Powered COM Ports (5V/12V), other than the devices that take power from Powered COM Ports to avoid damaging the Device.
- xi. Any Hardware upgrades or changes to be made are to be informed, and do not tamper with Serial Nos. and Warranty Seals, to avoid Warranty Void.
- xii. If the computer is not equipped with an operating system. An operating system must be loaded first before installing any software into the computer.
- xiii. If the computer is equipped with a touch panel, avoid using sharp objects to operate the touch panel. Scratches on the touch panel may cause mal-calibration or non-function to the panel.
- xiv. The LCD panel display is not subject to shock or vibration. When assembling the computer, make sure it is securely installed.
- xv. Choose an Ideal dust free location and reliable surface for the System with proper ventilations.

## **ACCESSORIES**

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1. Warranty Card.
2. Power Cable.
3. Driver Bank CD.
4. External IDE Connection Cable.
5. Wireless Antenna. (Optional)
6. Modem Cable. 2 Nos. (Optional)

## General Information

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The **E-Touch Magnum** is a series of 12.1"/15" multimedia Intel Celeron or Pentium® III panel PCs designed to serve as a friendly POS-machine for easy integration into any space-constricted retail and information applications.

In terms of panel size, the E-Touch Magnum has 12.1" and 15" Models.

Onboard features include super I/Os, XGA, 12.1"/15" TFT flat Panel, touch screen, Ethernet and multimedia functions. The full PC functionality coupled with its multi-I/Os stand ready to accommodate a wide range of PC peripherals. Special industrial features not commonly seen in commercial systems such as watchdog timer and water/dust proof front panel make it a best choice for the operation in any hostile environments.

Fully configurable and with its sleek outlook, the **E-Touch Magnum** is an ideal platform for any retail and information applications.

## Specifications

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This handbook contains most information you need to set up and use the E-Touch Magnum system. You do not need to read everything in this handbook to use the system.

### SYSTEM

#### Flat Panel

⌘ **E-Touch Magnum 120:** 12.1" color TFT, 800\*600  
Viewing angle 100  
Luminance (cd/m<sup>2</sup>) 150 nits  
Simultaneous mode yes

⌘ **E-Touch Magnum 150:** 15" color TFT, 1024\*768  
Viewing angle 100  
Luminance (cd/m<sup>2</sup>) 250 or above  
Simultaneous mode yes

⌘ **CPU** (Socket 370)  
Intel Tualatin FCPGA2 up to 1.5GHz  
Intel Pentium III FCPGA 100/133 up to 1GHz  
Celeron FCPGA 66/100 up to 1.5GHz

⌘ **System BIOS**  
Award PnP Flash BIOS

⌘ **System Memory**  
2\* 168pin DIMM socket supporting SDRAM up to 1 GB

⌘ **L2 Cache**  
CPU built-in

⌘ **Standard I/O**  
4 x Serial Ports (COM1, COM 4, COM 5, COM6) with +5V/12V power output on pin 9; 3 x RS-232, 1 x RS-232/422/485 (COM4), 1 x reserved for IrDA(COM 2) & 1 x reserved for Touch screen(COM3)

- 1 x Parallel Port supports SPP/EPP/ECP
- 3 x USB ports
- 1 x VGA port
- 1 x RJ-45 LAN port
- 2 x RJ-11 modem phone jack
- 1 x PS/2 Keyboard connector
- 1 x PS/2 Mouse connector
- 1 x RJ-12 6 pin cash drawer connector
- 1 x External IDE port
- 1 x DC Jack for 24VDC input Cash Drawer
- 1 x Compact Flash Slot

#### ⌘ Ethernet

100/10 Base-T Ethernet with RJ-45 phone jack  
Wireless 100/10 Base-T Ethernet (option)

#### ⌘ Watchdog Timer

64 level time intervals

#### ⌘ Display

Integrating VGA/LCD/Controller, advance hardware  
2D/3D GUI engine

Share System Memory Architecture, which can flexibly  
utilize the frame buffer size up to 64MB

#### ⌘ Front Bezel

- 1 x IrDA Data transmission SIR
- 1 x Power On/Off Switch
- 1 x Floppy Disk Drive Bay
- 3 x LED for HDD, LAN, Power

## PERIPHERAL & STORAGE DEVICES

#### ⌘ Touch screen (optional, sharing COM3)

12.1"/15" analog resistive type with RS -232 Controller

#### ⌘ Optional devices

- Wireless LAN 802.11b with Antenna
- VFD, 20 columns x 2 lines
- LCD, 30 columns x 4 lines
- Internal 56K Modem Module

Compact Flash  
MSR 2 tracks or 3 tracks  
USB port for USB ID key for security control

⌘ **Power Supply**

AC 150W, input range: 100~230VAC @47~63Hz

⌘ **Speakers**

Speakers\*2

## **MECHANICAL & ENVIRONMENTAL**

⌘ **Construction**

Inside: heavy-duty steel  
Outside: fire-proof resilient plastic

⌘ **Color** (standard)

Black: Pantone 3x2X

⌘ **Dimension**

E-Touch Magnum 120 / 150: 368\*321.7\*107.5 mm (This does not include the dimension of the stand.)

⌘ **Mounting**

Wall mount with mounting kits

⌘ **Versatile Stand**

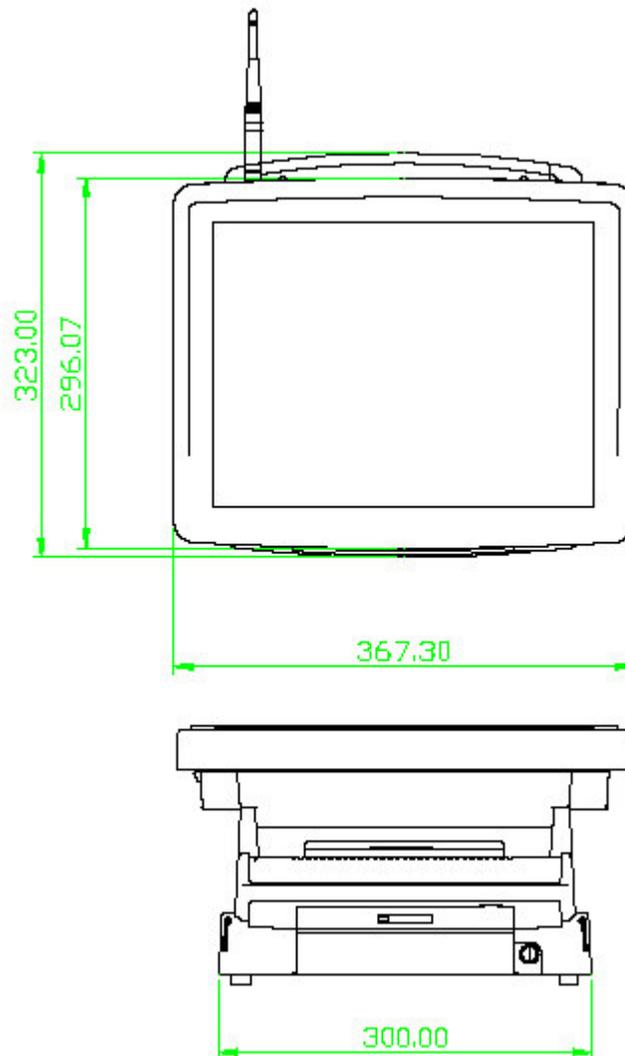
STAND: -10~85'

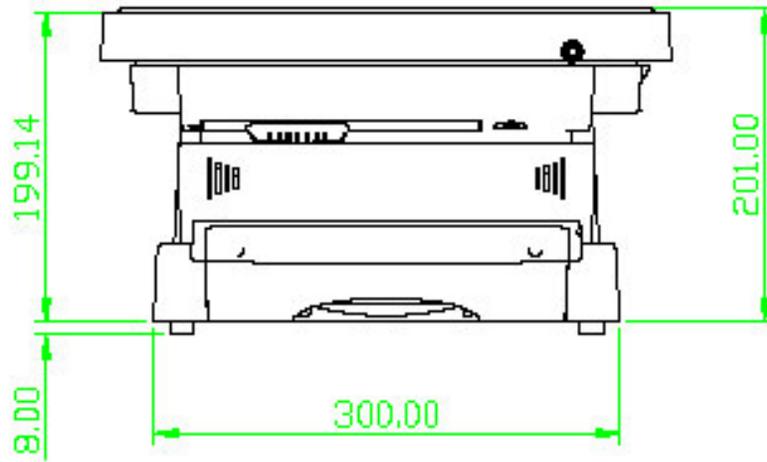
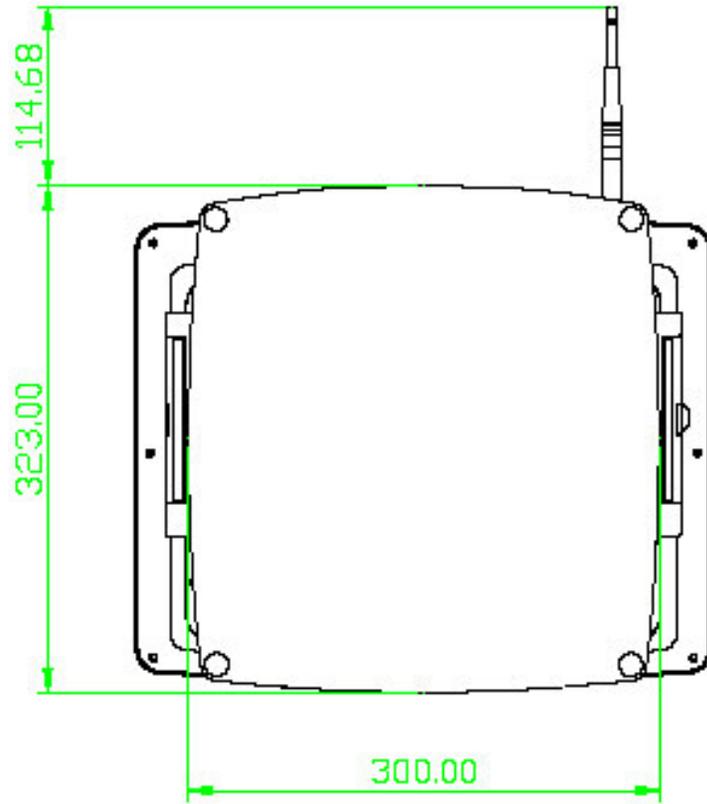
*\*Specifications are subject to change without notice.*

## Dimensions

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The E-Touch Magnum 150 and E-Touch Magnum 120 shares the same chassis but differ in the cut window size of the front bezel. It's chassis size shown below (E-Touch Magnum 150).





## Identifying the System

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Before getting started, take a moment to familiarize yourself with the system and the I/O arrangement of the E-Touch Magnum 120/150.

### Front View

When the E-Touch Magnum 120/150 is put upright on the desktop with the provided pedestal, its front view appears as below. The illustrations of the E-Touch Magnum 120/150 may differ slightly because the E-Touch Magnum system series has two different LCD size: 12.1" & 15".



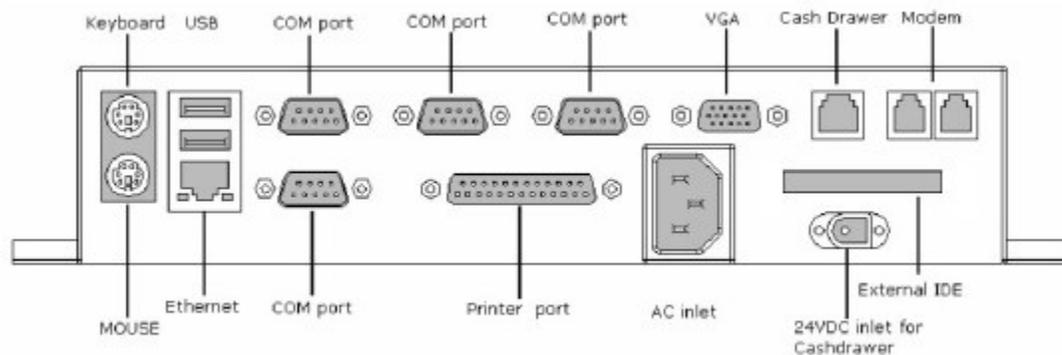
## Side Views

The left side of the panel PC appears as below:



## I/O Outlets

When you turn around the E-Touch Magnum system, you will find the power switch and all the I/O ports are located at the rear cover of the stand.



## Operating System and Driver Installation

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The E-Touch Magnum system is not equipped with an operating System when delivered. So you need to install an Operating System and configure the driver before starting. There are several ways to load an OS and software into the system.

1. Via the external FDD or internal FDD
2. Via the external CD-ROM
3. Via Ethernet: You can boot up the system via Ethernet boot ROM and download system OS or software from the network.

Recent releases of operating systems always include setup programs that load automatically and guide you through the installation. You can also refer to your OS user manual for instructions, by default Hard Disk is formatted and partitioned by the Manufacturer and necessary System files loaded.

The E-Touch Magnum system provides the following utility drivers  
Stored in the CD-ROM diskette;

**Ethernet utilities**  
**Wireless utilities**  
**VGA utilities**  
**Touch screen drivers**  
**USB ID Key**  
**MMR / VFD**

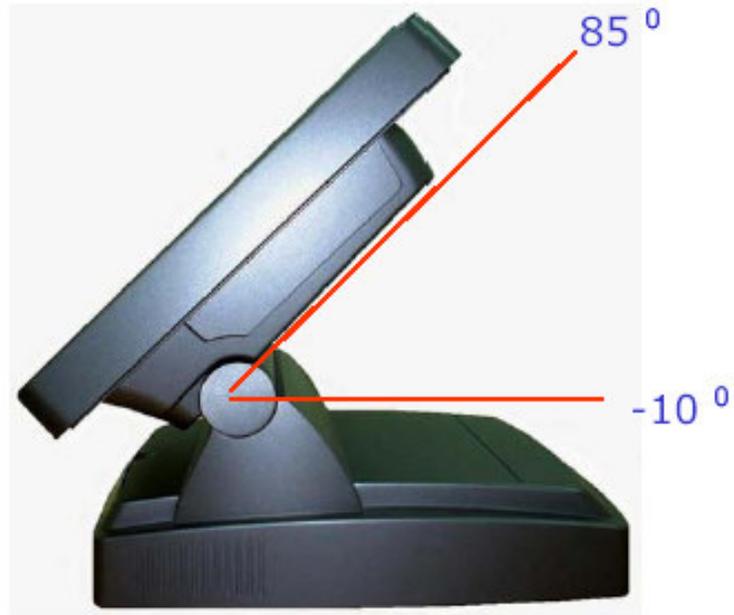
## **VERSATILE STAND & MOUNTING**

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- : Angle free Desktop standing
- : Wall Mounting

### **-10 to 85° Desktop Standing**

The sleek and stable pedestal assembled with the base enables the E-Touch Magnum system to endure the long-time operation in any public sectors. The 2 side hinges pulling the base up and down, the angle can be adjusted from -10 to 85°.



Versatile stand design for (-10° to 85°) desktop standing

### **Wall Mounting Applications**

For setup Wall mounting applications.

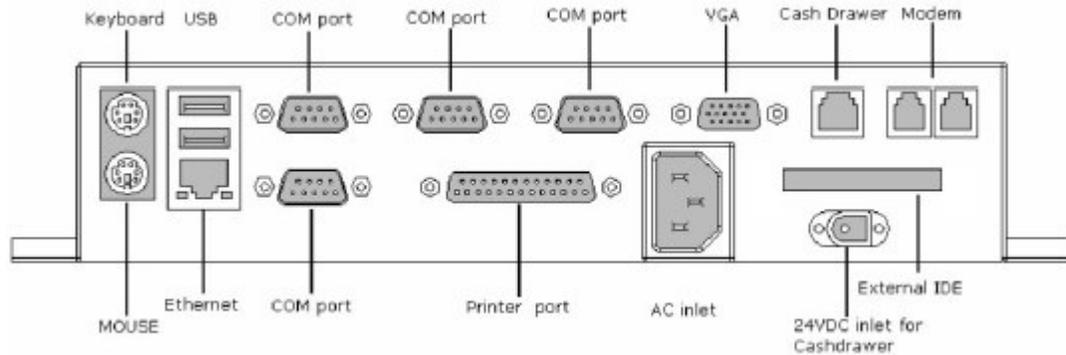


## **Input Output CONNECTION**

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This chapter describes the E-Touch Magnum system I/O ports and how to use the I/O interface to connect to external devices.

The I/O interfaces located at the backside of the chassis are used to connect external peripheral devices, such as a mouse, a keyboard, a monitor, serial devices or parallel printer...etc. Before any connection, make sure that the computer and the peripheral devices are turned off.



## Parallel Port

The E-Touch Magnum 120/150 can support the latest EPP and ECP parallel port protocols. It can be used to connect to a wide array of printers, ZIP drive, parallel scanner and any other parallel devices. The printer interface on the E-Touch Magnum 120/150 is a 25-pin female D-SUB connector. To connect any parallel device, follow the steps below:

1. Turn off the system and the parallel devices.
2. Plug in the male connector of the parallel device to the 25-pin female D-SUB connector and fasten the retaining screws.
3. Turn on the system and the attached parallel devices.
4. Refer to the parallel device's manual for instruction to configure the operation environment to recognize the new attached devices.
5. You may need to run the CMOS setup to change the hardware device setup.

## COM Ports x 4

The E-Touch Magnum 12 / 15 features with four onboard COM ports located at the rear side of the chassis, ready to connect to a wide range of serial devices. COM1, COM5 & COM6 are RS-232 and COM4 is RS-232/422/485, selected via jumper setting. COM 2 reserved for IrDA & COM3 for Touch screen. Each COM port is with +5V/+12V power capabilities on pin 9, providing easy accommodation to a broad range of serial devices.

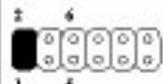
The COM port 5V/12 power is selected via jumper setting on the IO-TR board. The IO-TR is the IO board docked to the system motherboard to connect the onboard signal out to the external I/O ports.

Please refer to the following for the 5V/12 power selection.

**JP2: COM1 & COM4 PIN9 power selection**

COM1			COM4		
Normal	+12V	+5V	Normal	+12V	+5V
					
1-2	3-4	5-6	7-8	9-10	11-12

**JP3: COM5 & COM6 PIN9 power selection**

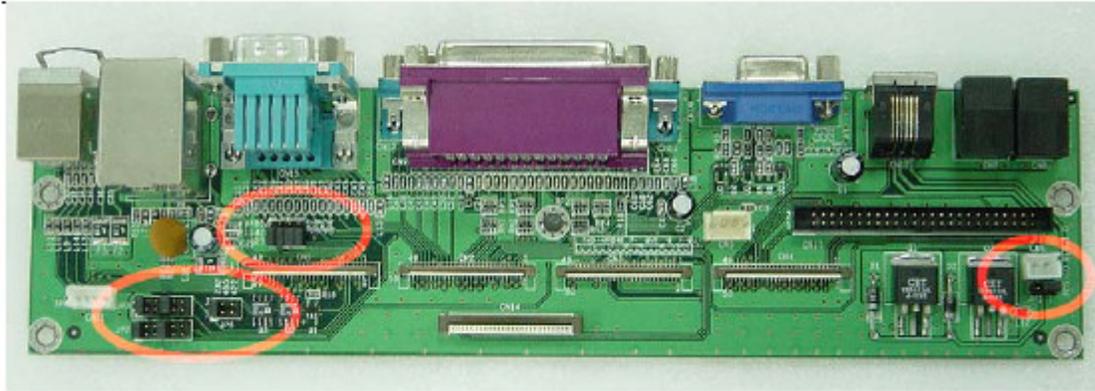
COM5			COM6		
Normal	+12V	+5V	Normal	+12V	+5V
					
1-2	3-4	5-6	7-8	9-10	11-12

**JP4,5,7,8 JP6: COM4 RS-232 & RS-485/RS422 selection**

RS-232		RS-485/422	
			
JP4,5, 7,8	JP6	JP4,5, 7,8	JP6

**JP1 : +12V & EXTANAL 24V IN selection**

JP1	
	
12V	24V



If a touch screen module is installed, for factory default setting, its controller will occupy COM3.

COM1 to COM6 are all D-SUB 9-pin connectors. To connect to any serial device; follow the procedures below;

1. Turn off the E-Touch Magnum system and the serial devices.
2. Attach the interface cable of the serial device to the 9-pin D-SUB serial connector. Be sure to fasten the retaining screws.
3. Turn on the computer and the attached serial devices.
4. Refer to the serial device's manual for instruction to configure the operation environment to recognize the new attached devices.
5. If the serial device needs specified IRQ or address, you may need to run the CMOS setup to change the hardware device setup.

**Notice:**

For using COM5 & COM 6, please check connecting peripherals and then setup IRQ in BIOS selection.

Example:

- a. Enable IRQ 12 for COM 5 use as PS/2 mouse not installed.
- b. Enable IRQ 15 for COM 6 use as 2<sup>nd</sup> IDE (external) not installed.

	IRQ Device	Manufacture setting
IRQ 6	Floppy	Default
IRQ 7	LPT1	Default
IRQ 3	COM2	Default
IRQ 4	COM1	Default
IRQ 5	COM3	Default
IRQ 10	COM4	Default
IRQ 11	USB device, Audio Networking, Compact flash	Default
IRQ 9		Default
IRQ 12	PS/2 Mouse	Default
IRQ 15	External IDE devices	Default

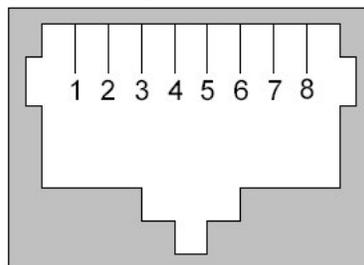
### **+24V DC-IN for Cash Drawer**

The E-Touch Magnum system provides a +24V DC-IN power. It is used to provide necessary power source for Cash Drawer external devices. The Cash Drawer power cable can be attached to +24V DC-IN connector to obtain power for the device directly. For other devices, you might need to make your own power cable for the connection.

### **100/10 Base-T Ethernet (RJ-45)**

The E-Touch Magnum 120/150 provides a 100/10 Base-T NE2000 compatible Ethernet (RJ-45) interface. For network connection, follow the instructions below.

1. Turn of the E-Touch Magnum system and the Ethernet hubs.
2. Plug in one end of cable of a 100/10 Base-T hub to the system's RJ-45 phone jack. The pin assignment of the RJ-45 is listed as follow;



RJ-45

## RJ-45 Connector Pin Assignment

Pin	Description
1	Tx+ (data transmission positive)
2	Tx- (data transmission negative)
3	Rx+ (data reception positive)
6	Rx- (data reception negative)
others	No use

## VGA Interface

The E-Touch Magnum 120/150 has a 15-pin analog RGB connector located at the rear side of the chassis. It can support its own LCD display and an expansion CRT or analog monitor at the same time. However, as the LCD panel used in the 15" system (E-Touch Magnum 150) is of the resolution of 1024 x 768 and in 12.1" system (E-Touch Magnum 120) is 800 x 600, therefore, to support a CRT or analog monitor simultaneously, the monitor's VGA resolution has to be set to 800 x 600 for E-Touch Magnum 120 and 1024 x 768 for E-Touch Magnum 150. The connection to an analog monitor is an easy plug-in of the VGA D-SUB 15-pin connector to the RGB interface.

There is some application software that is to be executed in 800\*600 resolution. When the software is running under E-Touch Magnum 150, only part of the screen will show on the LCD display. If the application has to run in full screen, you need to update the system VGA drivers with an auto expansion utility. However, due to resolution limitation, the text mode will look slightly distorted.

## PS/2 Keyboard Interface

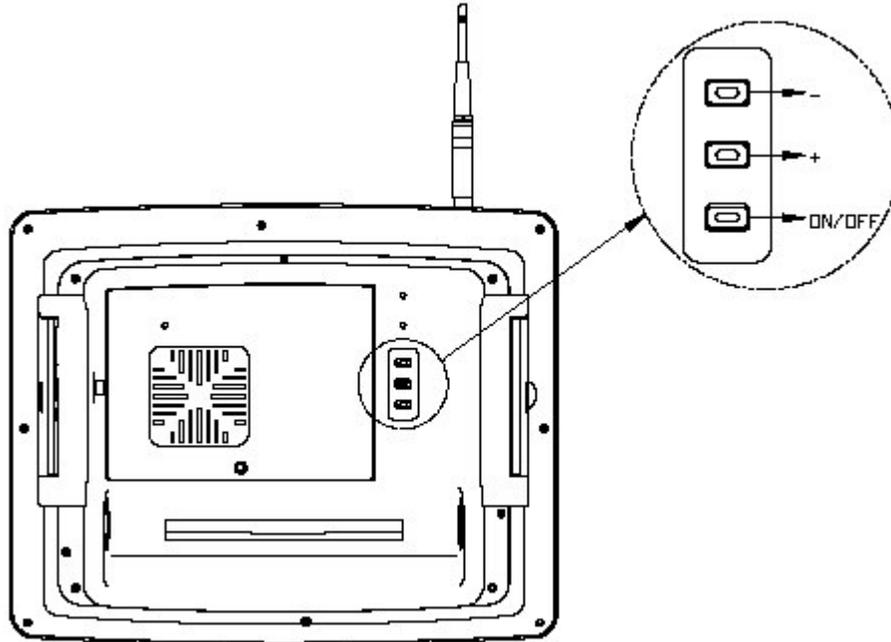
The E-Touch Magnum 120/150 provides a standard PS/2 keyboard connector located at the rear panel. If the user would like to use AT keyboard, then an adapter to connect the PS/2 KB to AT KB is needed.

## PS/2 Mouse Interface

The E-Touch Magnum system has one PS/2 mouse connector located at the rear side. A simple plug-in will make the connection.

## VR Brightness Control

The E-Touch Magnum system provides a VR control to adjust the brightness of the LCD. The VR control is with two buttons and one on/off button as below.



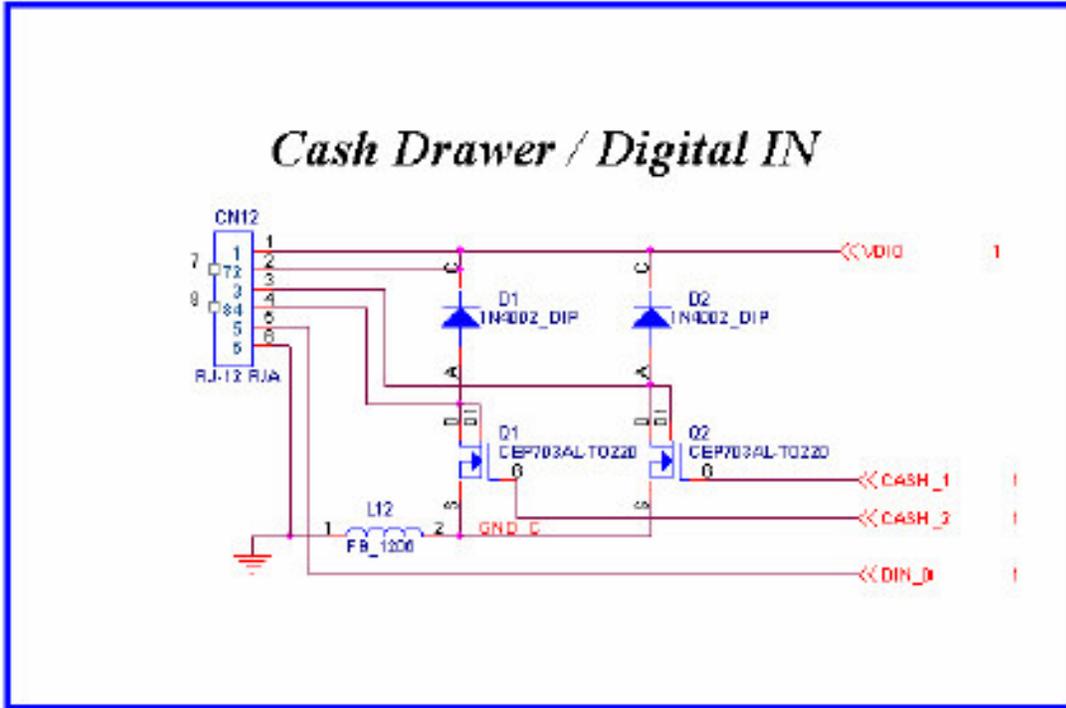
## DIO (Digital Input & Output) for Cash Drawers

The Magnum also equipped with a digital I/O that provide 2 digital in and digital out TTL level interface, easy to programming the external control board. The DIO port address and pin definition is listed below;

I/O Port address: 440

Read: DIN\_0

Write: CASH\_1, CASH\_2



For example ----- POS machine's cash-drawer Game  
Machine's Coin insert detection

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The following is the Digital I/O instruction:

- Digital in:

IOR 440(Hex)

Bit 0 & Bit 1 valid data (The two signals normally pull low)

- Digital out:

IOW 440(Hex), Data

Bit 0 & Bit 1 valid data (The two signals normally pull low)

## **USB Ports**

The E-Touch Magnum 120/150 also provides three USB ports to connect to external USB devices. A simple plug-in of the USB device interface cable to the USB port will make the connection. Before using the USB devices, remember to install the device driver first.

## TOUCH SCREEN

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For keyboard less operation, the E-Touch Magnum 120/150 provides an optional touch screen. The E-Touch Magnum system can use either ELO resistive type touch screen or 5 wires resistive touch screen. This chapter details the procedures to install the software drivers under DOS and Windows operation.

### Elo Touch screen Driver Installation

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The Elo resistive touch and Intelli touch will use the same drivers and utilities, which are stored in the Driver CD diskette.

#### System Requirements

The DOS drivers will run on any system with DOS 2.0 or later version. The Windows drivers will run on any system with Windows 3.1 or later versions. The DOS demonstration program requires a VGA color display. The touch screen calibration program for DOS supports standard and VESA-compatible display modes. Otherwise, all software is video independent. An Elo touch screen must be installed on the display and connected to a serial or bus controller.

#### About Elo Software

##### Software Included

The accompanying DOS and Windows Driver Disk contains the following Elo driver software:

##### **Elo DEV** Touch screen driver program for DOS :

This program makes all Elo touch screen controllers, including serial RS-232, PC-Bus, and Micro Channel versions look the same to other driver and application programs.

##### **Monitor Mouse for DOS** Mouse emulation driver for DOS :

This program combines touch input from EloDEV and mouse input from your mouse driver into a single MOUSE.COM-compatible application interface.

**Monitor Mouse for Windows** Mouse emulation driver for Microsoft Windows:

This program allows all Windows programs to be used with a touch screen. Your mouse may be used in conjunction with the touch screen. DOS mouse-driven programs run from Windows may also use the touch screen.

**TouchBack** Keystroke emulation driver for DOS;

Applications must be specially written for use with TouchBack. Your application documentation should specify if TouchBack is required. The DOS and Windows Driver Disk also contains the following software:

**EloDEMO** A VGA-graphics program for DOS, which demonstrates the capabilities of the touch screen hardware and many techniques for touch screen software.

**Utility and Diagnostic Programs** An assortment of programs are included to calibrate the touch screen and verify the operation of serial ports, touch screen controllers, and driver programs.

## **Installation**

This section details the installation procedures for the software on the DOS and Windows Driver Disk. Four steps are required:

Step 1 Configuring the touch screen controller

Step 2 Installing the controller

Step 3 Running the INSTALL program

Step 4 Calibrating the touch screen

### **STEP 1 - CONFIGURING THE TOUCH SCREEN CONTROLLER**

THE MANUFACTURER ships most touch screen controllers preconfigured for use with Elo software.

### **STEP 2 - INSTALLING THE CONTROLLER**

If you need help when installing the touch screen controller or making the connections, please contact the Manufacturer's Customer Service department.

### **STEP 3 - RUNNING THE INSTALL PROGRAM**

The DOS and Windows Driver Disk contains an installation program which will automatically transfer all necessary files to the hard disk.

If you intend to install the Windows drivers, make sure that the Windows has been installed and operating properly before proceeding. *You must have a DOS mouse driver (MOUSE.COM) installed for your mouse if you wish to continue using your mouse along with the touch screen in DOS or Windows.*

If you only want to change the configuration of your touch screen controller, see *changing Your Hardware Configuration with SETUP.*

Respond to the on-screen prompts and instructions. You will be asked to specify the model and configuration of your controller, then select between **DOS Express Installation, Windows Express Installation, or Selective Installation. The touch screen controller of the E-Touch Magnum 120/150 I is serial type. The model number is E271-2210 AccuTouch. Baud rate of the controller is "9600". The E-Touch Magnum 120/150 I uses onboard COM3 to drive this controller, IRQ is selected by BIOS setting. IRQ10 is the factory default setting for COM3.**

The software to be installed and disk space requirements will be displayed for each installation option. You may specify the drive and directory for the files you choose to install, or use the default (C:\TOUCH).

The INSTALL program will modify your AUTOEXEC.BAT file, (and SYSTEM.INI file for Windows installations). Copies of the original files will be saved as AUTOEXEC.OLD and SYSTEM.OLD.

## **Installing MonitorMouse for Windows system**

1. Turn on your computer.
2. To install the software, insert the Driver CD. The path as x:\Drivers\Elo Touch\ (X = your CD device number)
3. Open one folder which same as your operating system.
4. Double click the only one file in this folder and Unzip to a folder such as "c:\EloWin9X".
5. Chang to "c:\EloWin9X" double dick setup.exe.
6. Following the instructions on the screen.
7. The Touch screen Setup Wizard will appear. You will need to specify the type of touch screen controller you are using and how it is connected.

Control type: serial  
SmartSet: 2xx0  
COM port: COM3

8. Complete the Setup program.
9. Restart your system.
10. Click the Start button, then click Settings, and then click *Control Panel*.
11. Double-click *Elo Touch screen* to run the Touch screen Control panel.
12. Click the *Calibrate* button and touch each of the three targets as they appear on the screen. Click *Yes* when the cursor lines up correctly with your finger. Click *OK* to close the Touch screen Control panel.

## NOTES

Full-screen DOS mode is not supported. However, Windowed DOS mode is fully supported. A touch to a full-screen DOS session will cause your system to immediately return to your Windows desktop. A mouse can be used to access programs run in full-screen DOS mode.

Windows 95 may lock up during startup if the resource settings in the Setup dialog of the *Touch screen Control Panel* do not match the actual controller configuration. Use *Safe Mode* to start Windows 95 and change the resource settings to match the controller configuration, then restart Windows 95.

The touch screen driver may cause Windows 95 to lock up during Shutdown if the touch screen is activated after Shutdown is initiated.

## Removing the Mouse Pointer

If you wish to eliminate the mouse pointer, you may replace it with the null cursor file, *NULL.CUR*, supplied with *MonitorMouse* for Windows 95. Follow the following steps to install the null cursor file;

1. Open the *Control Panel* and select *Mouse*.
2. Select the *Pointers* tab.
3. Highlight the *Normal Select* cursor then select *Browse*.
4. Type "null.cur" in the space provided and select *Open*.
5. Select *OK* to select the option.
6. Exit from the *Mouse Control Panel*. You should notice that the arrow cursor has disappeared. Note that all other cursors will still function as before.

## MonitorMouse for Windows 95 Uninstall Procedure

1. Close the Windows *Control Panel* if it is open.

2. Delete the following files from your \Windows\System folder: MONMOUSE.VXD, MONMOUSE.HLP, and MONMOUSE.CPL.  
3. Start the REGEDIT.EXE program to edit the registry (click the *Start* button, click *Run*, type "regedit" and press <Enter>). Delete the following keys from the registry:

HKEY\_CURRENT\_USER\Control  
Panel\desktop\DoubleClickHeight  
HKEY\_CURRENT\_USER\Control  
Panel\desktop\DoubleClickWidth

Delete the following registry key folders and their contents:

HKEY\_LOCAL\_MACHINE\System\CurrentControlSet\Services\VxD\  
MonMouse  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Elo  
TouchSystems

4. Use Notepad to delete the following line from the (386Enh) section of the SYSTEM.INI file: device=monmouse.vxd  
5. Delete the directory C:\Elo to remove the touch screen diagnostic programs and sample Z-axis and calibration programs.  
Restart Windows.

## Getting More Information

For more information on installing the Elo software driver to the E-Touch Magnum system or to download Elo touch screen drivers, please visit Elo Touch system website

<http://www.elotouch.com>

Click the *Support* button and follow the instruction on the screen to download Elo software or documentation. If after consulting the documentation, you still need help with the setup of the Elo touch software to the system, you can click the *Technical* button to locate Elo global service points for help.

## Wires Resistive Touch screen Driver Installation

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### For Windows 98 / Me / NT4 / 2000

Touch Kit is software, which contains drivers of the touch panel controllers for the specified communication connectors, RS232, PS/2 and USB, and the other two utilities:

### **Touch Tray support**

This is utility for simulating the right and left button of your mouse through controlling touch panel. You can toggle between right or left mouse buttons by this utility. Also, you can toggle the mouse mode for click or drawing application.

### **Configuration support**

The calibration and draw test of touch panel are done by this utility. Besides, you can add or search for new RS-232 or PS/2 touch panel devices.

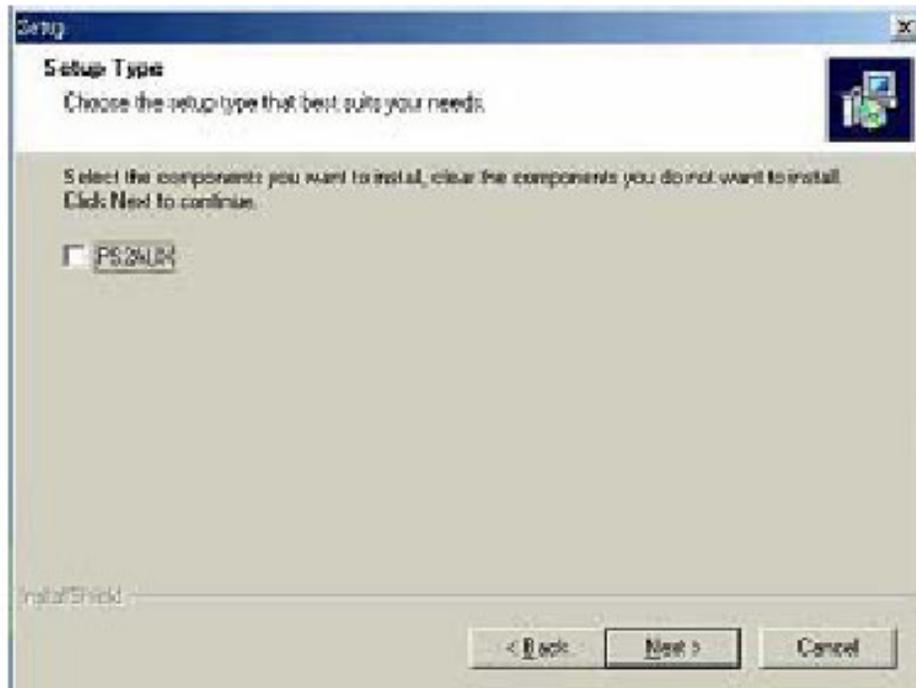
**FOLLOW THESE STEPS TO INSTALL *TOUCHKIT*.**

**(AN EXAMPLE FOR WINDOWS 98.)**

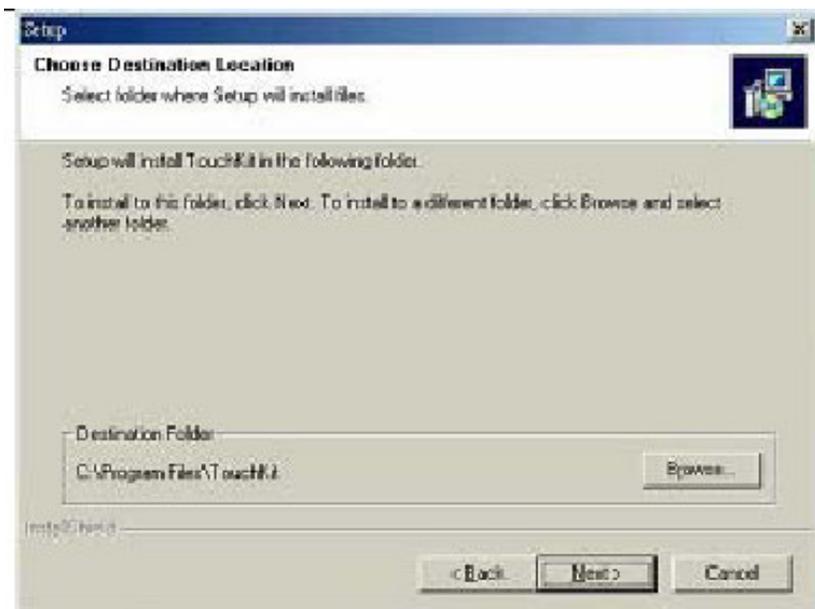
- 1. PUT THE *TOUCHKIT* CD TO YOUR CD-ROM.**
- 2. CHANGE DIRECTORY TO “WIN98ME.” (OR CHANGE TO “NT\_4.0”, “WINXP2000” RESPECTIVELY)**
- 3. DOUBLE CLICK THE SETUP.EXE, THEN WINDOWS STARTS TO RUN THE INSTALLATION PROGRAM.**
- 4. JUST CLICK [NEXT>] BUTTON TO CONTINUE INSTALLATION.**



**5. THEN CHECK THE CHECK BOX IF PS/2 TOUCH CONTROLLER IS TO BE INSTALLED. THE DEFAULT IS UNCHECKED. THEN PRESS [ NEXT > ] TO CONTINUE INSTALLATION.**

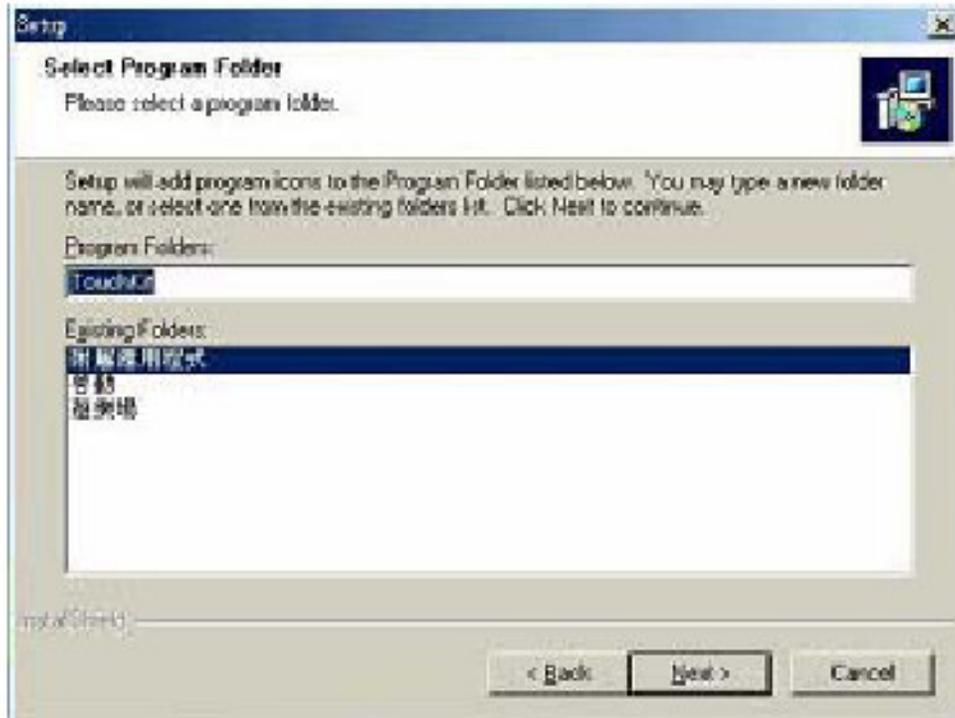


**6. SELECT APPROPRIATE FOLDER WHERE SET UP WILL INSTALL FILES.**

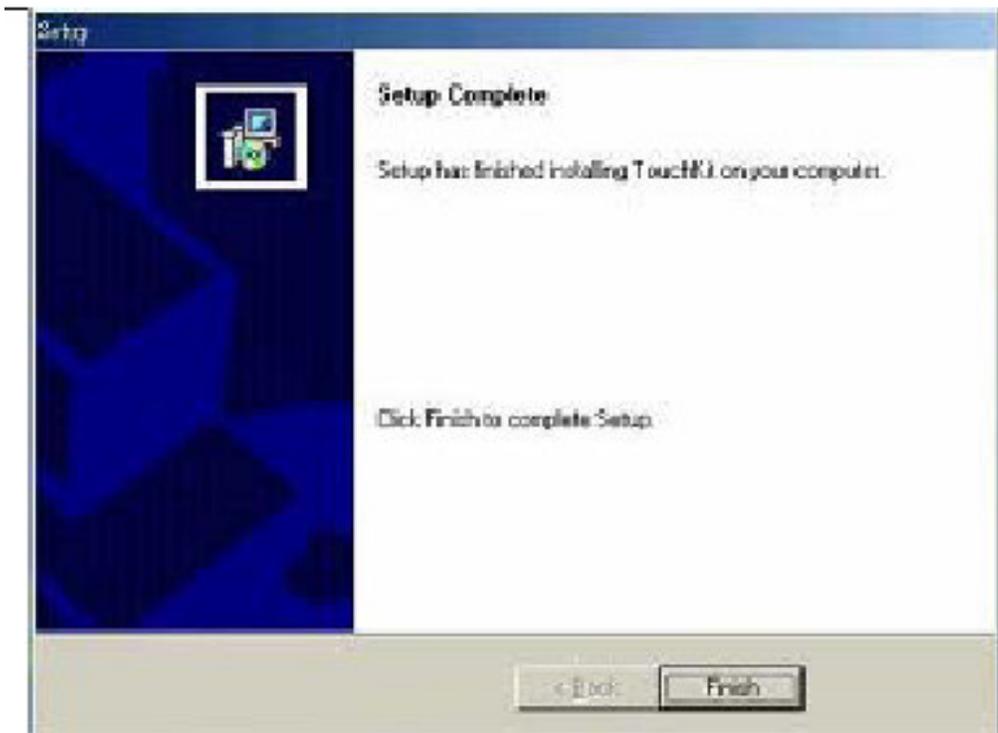


**PRESS ON THE [NEXT>] BUTTON TO CONTINUE.**

**7. THEN TYPE IN YOUR PROGRAM FOLDER'S NAME FOR TOUCHKIT OR PRESS ON [NEXT>] TO CONTINUE. THERE WILL BE A DEFAULT NAME FOR IT.**



**8. WINDOWS IS COPYING FILES TO DISK AND THE SETUP IS COMPLETE. CLICK [FINISH>] TO TERMINATE.**



**9. WINDOWS WILL REQUEST YOU TO RE-BOOT YOUR COMPUTER. PRESS [YES>] OR [NO>] TO RE-BOOT AND THE INSTALLATION IS FINISHED.**



**SETUP IS COMPLETE.**

## PERIPHERAL DEVICES

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- ⊗ Wireless LAN
- ⊗ Compact Flash Slot
- ⊗ Customer Display
- ⊗ Magnetic stripe reader

### Wireless LAN

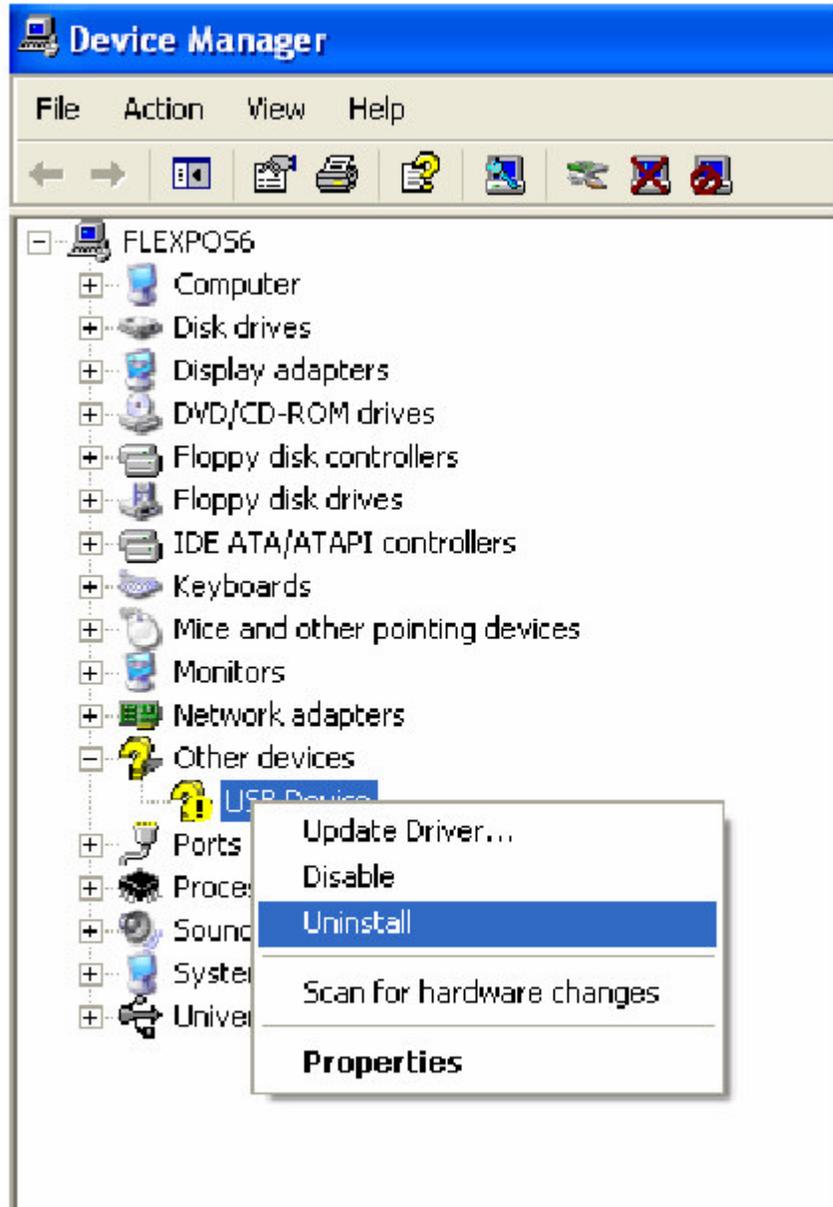
A wireless LAN (WLAN) is a flexible data communication system implemented as an extension to or as an alternative for, a wired LAN within a building or campus. Using electromagnetic waves, WLANs transmit and receive data over the air, minimizing the need for wired connections. Thus, WLANs combine data connectivity with user mobility, and, through simplified configuration, enable movable LANs.



For more information please turn to same folder as this manual location. Named "Wireless User Manual.pdf"

**\*\*Notice:** Please follow our procession to enable your Wireless LAN device as next page.

1. Please remove the wireless device after installed Windows system.



2. Insert the E-Touch Magnum CD into external CD-ROM and run X:\Drivers\Wireless LAN\Setup.exe.
3. Reboot your system

## Compact Flash Slot

E-Touch Magnum Supporting Compact Flash Type I/II. Compact Flash cards are designed with flash technology, a nonvolatile storage solution that does not require a battery to retain data indefinitely.

The only difference between CF Type I and CF Type II cards is the card thickness. CF Type I is 3.3 mm thick and CF Type II cards are 5mm thick. A CF Type I card will operate in a CF Type I or CF Type II slot. A CF Type II card will only fit in a CF Type II slot. The electrical interfaces are identical. Compact Flash is available in both CF Type I and CF Type II cards, though predominantly in CF Type I cards. The Microdrive is a CF Type II card. Most CF I/O cards are CF Type I, but there are some CF Type II I/O cards.



## Customer Display

The Customer Display is an artistic design POS system peripheral device. It is for use with POS system to display the purchased prices and the amount of change to customers. Also it is capable to display the advertising Message.



RS-232 interface Customer Display connecting with either one COM port for operating.

### **Magnetic stripe reader (MSR)**

The built-in magnetic stripe readers (MSR) are designed to read high or low coercive magnetic cards. They decode and verify the data tracks simultaneously. It is able to read magnetic data from any available track encoded per ISO 7810-7813 standards and is designed for use in access control, retail and time attendance

applications, etc. The TTL output allows the reader to be universally accepted by most decoders.

Press the button as red circle as blew in E-Touch Magnum rear side.



MSR will rise from right side as picture.



## Programming the Watchdog Timer

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The *Magnum* features a watchdog timer that can generate a system reset if the CPU processing comes to a halt. This feature ensures the system dependability during unattended operation.

The following is the Watchdog Timer instruction:

- IOW 444(Hex),Timer(Hex) -----  
Enable/Setting/refresh Watchdog Timer  
Timer: 64 levels setting (1 ~ 64 seconds, tolerance +-20%)
- IOR 441(Hex) -----

### Disable Watchdog Timer

If you want to use the watchdog timer, you must write a program which writes I/O port address 444(Hex) at timer setting intervals. The first time your program writes the port, it sets and enables the watchdog timer. Program must write the port at time intervals. Otherwise the watchdog timer will activate and reset the CPU. When you want to disable the watchdog timer, your program should read I/O port 441(Hex).

If CPU processing come to a stands till because of a software bug or EMI, program's signals to I/O port address 444(Hex) to the timer will be interrupted. The watchdog timer will automatically reset the CPU, and data processing will continue normally.

### Example program

```
5 REM Watchdog timer
10 X=OUTP(&H444)Timer REM Enable / Setting the Watchdog timer
15 GOSUB 500
20 X=OUTP(&H444)Timer REM Refresh the Watchdog timer
25 GOSUB 600
30 X=OUTP(&H444)Timer REM Refresh the Watchdog timer
35 GOSUB 800
X=INP(&H441) REM Disable Watchdog timer
45 END
500 REM Subroutine takes shorter than setting level to complete
.
.
550 RETURN
600 REM Subroutine takes shorter than setting level to complete
.
.
680 RETURN
800 REM Subroutine takes shorter than setting level to complete
.
.
870 RETURN
```

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E-Pos International L.L.C, P.O .Box No.12608, Dubai, U .A .E,  
Tel.No. (+9714) 3523288, Fax.No. (+9714) 3513396,  
E-M ail: [eposintl@emirates.net.ae](mailto:eposintl@emirates.net.ae)