



## **B-Series Touchcomputer User Guide**

B-Series LCD Multi-function Touchcomputer

[15" and 17" model shown]



**Tyco Electronics**

**B-Series Touchcomputer User Guide**

**Multi-function Touchcomputer**

**Revision C**

**P/N E610125**

**Tyco Electronics**

**1-800-ELOTOUCH (1-800-356-8682)**  
**[www.elotouch.com](http://www.elotouch.com)**

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**SETUP**

This chapter discusses how to set up and test your touchcomputer. For information on peripheral options, refer to Chapter 3, "Options and Upgrades."

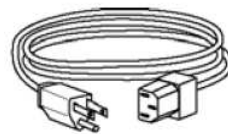
**Unpacking Your Touchcomputer**

---

Check that the following items are present and in good condition:

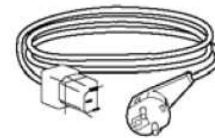


Touchcomputer



Power cable US/Canada

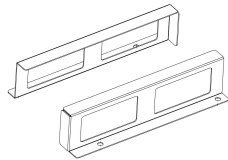
← AND →



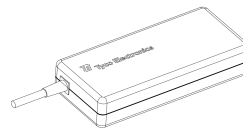
Power cable Europe



Recovery DVD and Quick Install Guide



Power Adapter Mounting Brackets



Power Adapter

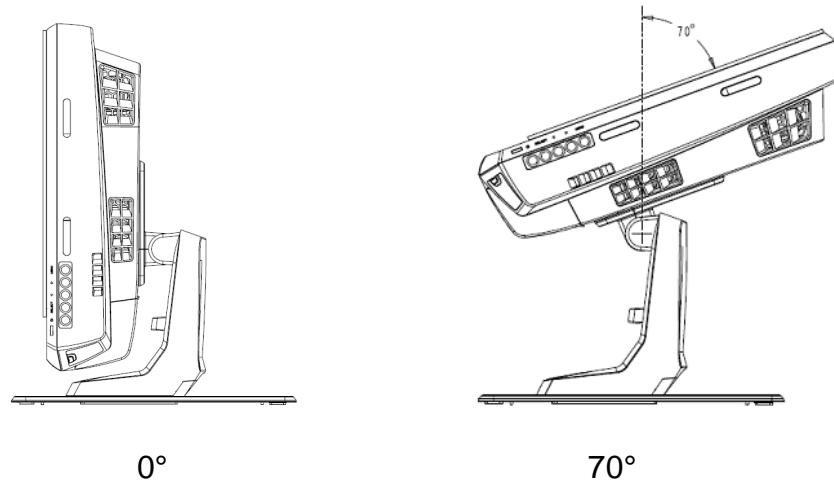


Base Plate

## Adjusting the Display

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The display screen can be adjusted from 0 to 70 degrees, as shown below.



**CAUTION:** To prevent tipping or dropping, be sure to hold the base when adjusting the display.

## Setting Up the Operating System

---

If configured with an operating system, the initial setup of the operating system takes approximately 5-10 minutes. Additional time may be needed depending on touchcomputer hardware configurations and connected devices.

To set up the Microsoft® Windows® Operating System for the touchcomputer, turn on the touchcomputer by pressing the power button, and then follow the instructions on the screen.

### Selecting the Language (For Windows XP and POSReady 2009 Only)

Microsoft Windows® uses English as the default language in menus and dialog boxes. You can change this language to suit your preferences at the screen below.

Note: If you choose to change the language after initial setup, you can follow steps 1-2 to arrive at the same screen below:

1. From the desktop, click **Start > Control Panel**
2. In the Control Panel screen, select **Regional and Language Options**.

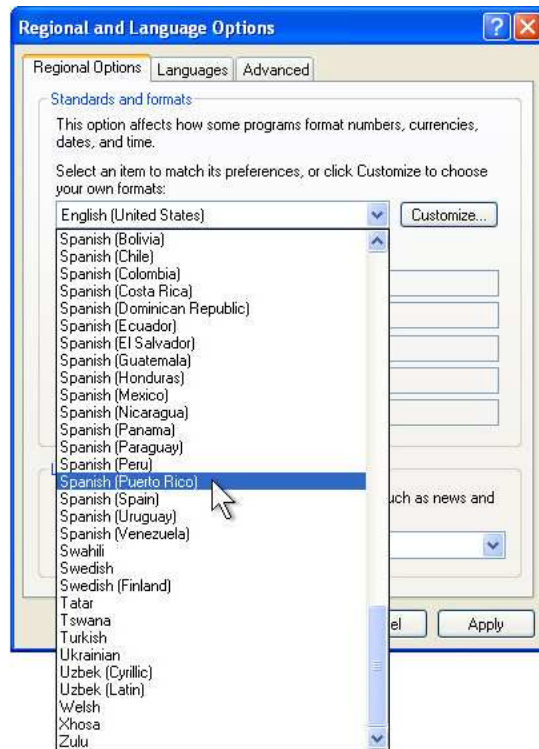


3. Click **Customize**. The Regional and Language Options window appears. Select the **Languages** tab.



4. If required, check the boxes for “Install files for complex script and right-to-left languages” and “Install files for East Asian languages.”
5. Select the **Regional Options** tab.
6. Select your preferred language from the drop-down list in the Standards and formats pane.





7. Click **Apply**.
8. Select your location from the drop-down list in the Locations pane.



9. Click **OK**.

## Selecting the Time Zone (For Windows XP and POSReady 2009 Only)

When the following window appears, you can change the time zone, date, and time of the touchcomputer.

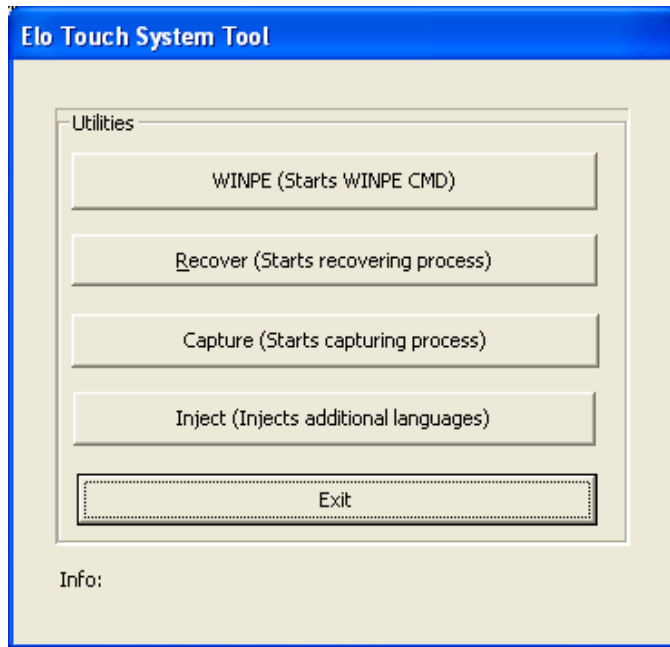


After making any changes, click **Next** to finish. Windows Setup completes the installation of the touchcomputer.

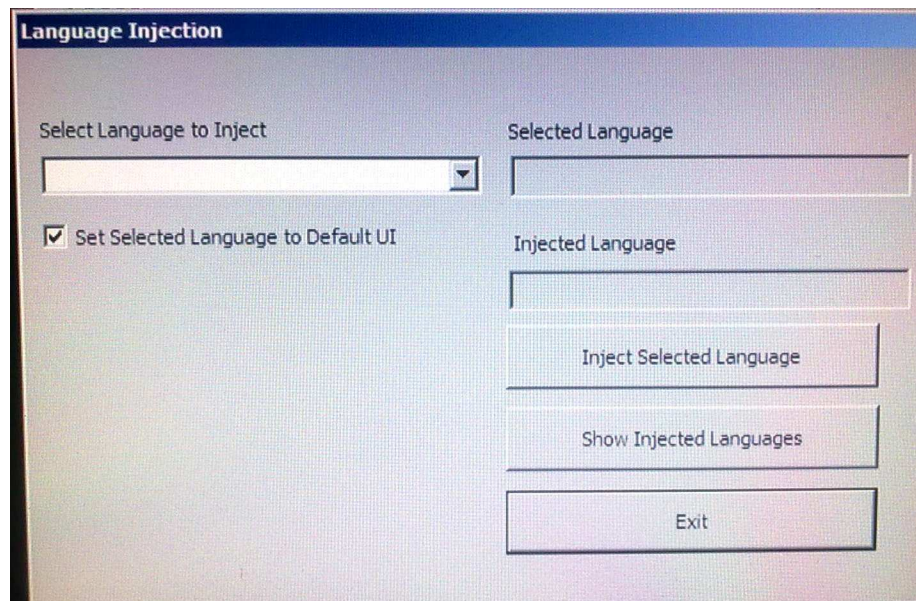
## Injecting the Languages (For Windows 7 Only)

Windows 7 Professional only allows the use of one language at one time. But you can use the Elo TouchSystems language injection tool to update your language preference. English is set as the default language, but you can change this language to suit your preferences.

1. After the TE logo shows up, press **F8** (frequently) to enter Advanced Boot Options.
2. Select **Repair your computer**.
3. Click **Next** → **OK** (Shall not have password) → Click **Elo Touch System Tool**.
4. The following UI shall be presented.



5. Click **Inject**, and the following window will pop out.



6. Click the drop-down list and select the preference language.
7. Click **Inject Selected Language**
8. The following window shall be presented.

```
X:\windows\system32\cmd.exe
A subdirectory or file D:\scratch already exists.
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385

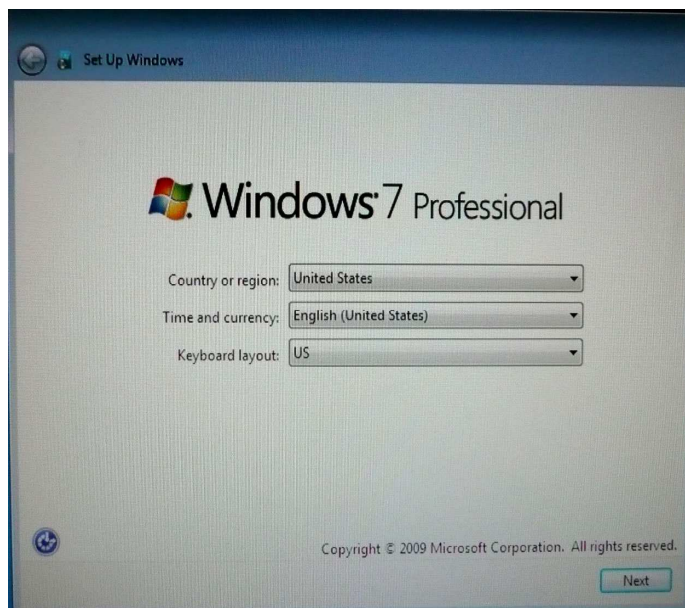
Image Version: 6.1.7600.16385

Processing 1 of 1 - Adding package Microsoft-Windows-Cl
~31bf3856ad364e35~x86~zh-TW~6.1.7600.16385
[=====
33.3%
```

9. After the language package is installed correctly, press any key to exit this window.
10. Click **Exit** → **Exit** → **Restart**

### Selecting the Region (For Windows 7 Only)

When the following window appears, you can change the country, time and currency, and keyboard layout of the touchcomputer.

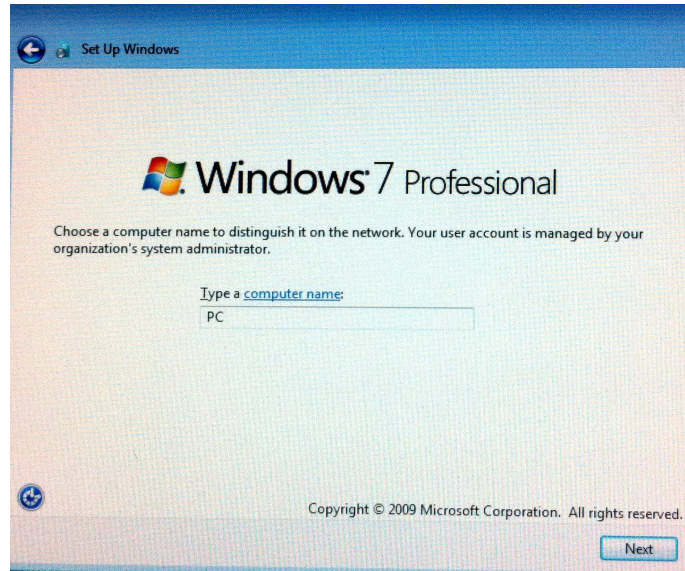


After making any changes, click **Next** to continue.



## Choosing the Computer Name (For Windows 7 Only)

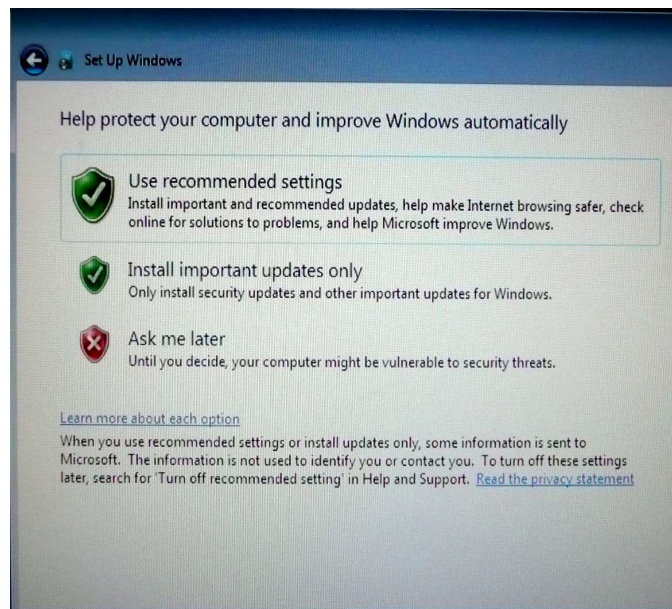
When the following window appears, you can choose a computer name of the touchcomputer.



After making any changes, click **Next** to continue.

## Selecting the Update Options (For Windows 7 Only)

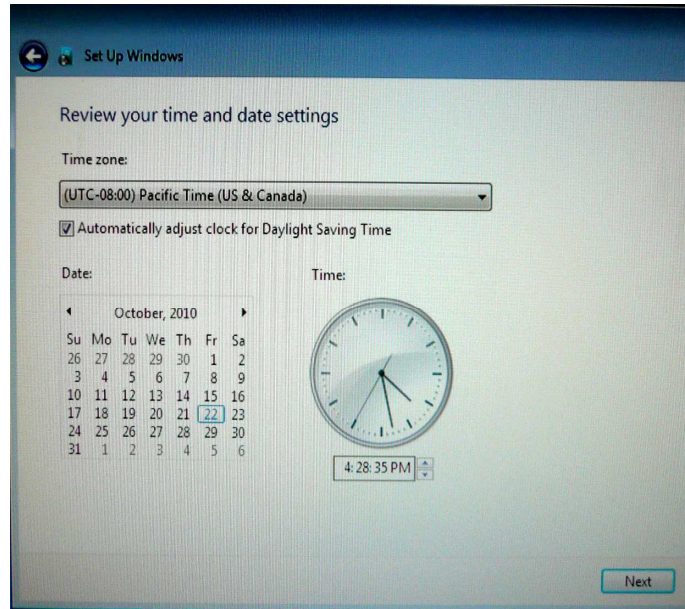
When the following window appears, you can select one of the update options of the touchcomputer. In general, you can choose **Use recommended settings** as your default option.



After making any changes, click **Next** to continue.

## Reviewing the Time and Date Settings (For Windows 7 Only)

When the following window appears, you can set up the time and date of the touchcomputer.



After making any changes, click **Next** to finish. Windows Setup completes the installation of the touchcomputer.

## Calibrating the Touchscreen

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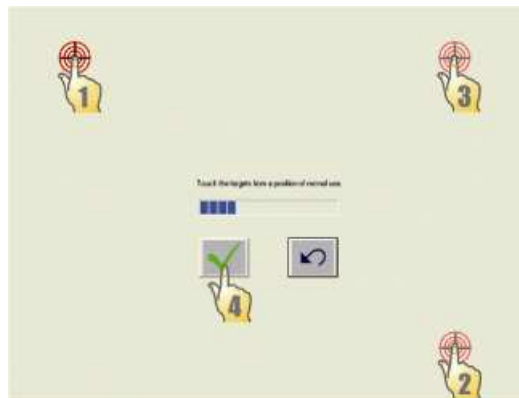
The touchscreen is pre-calibrated for accurate touch response.

If for any reason the touchscreen needs to be recalibrated, right-click the Elo icon in the Taskbar and then click "Properties." The following window opens.

**NOTE:** *Calibration is not applicable on APR touchscreen models.*



Click the **Align** button. This launches the calibration program. The window shown below opens. Follow the instructions to calibrate the touchscreen.

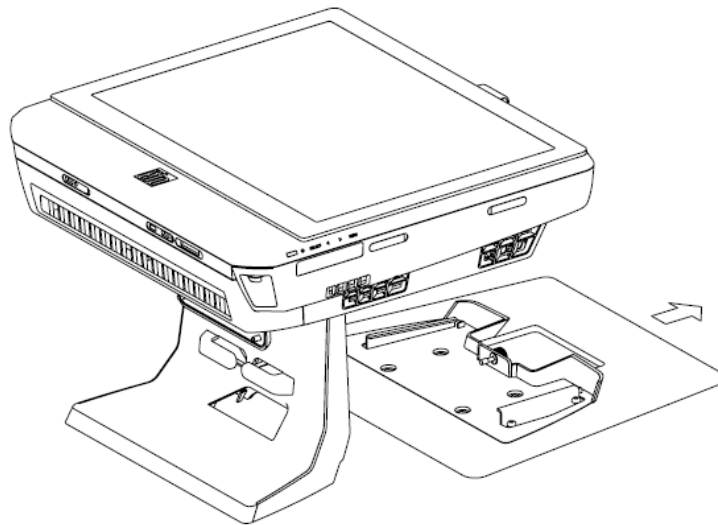


## Securing the Base

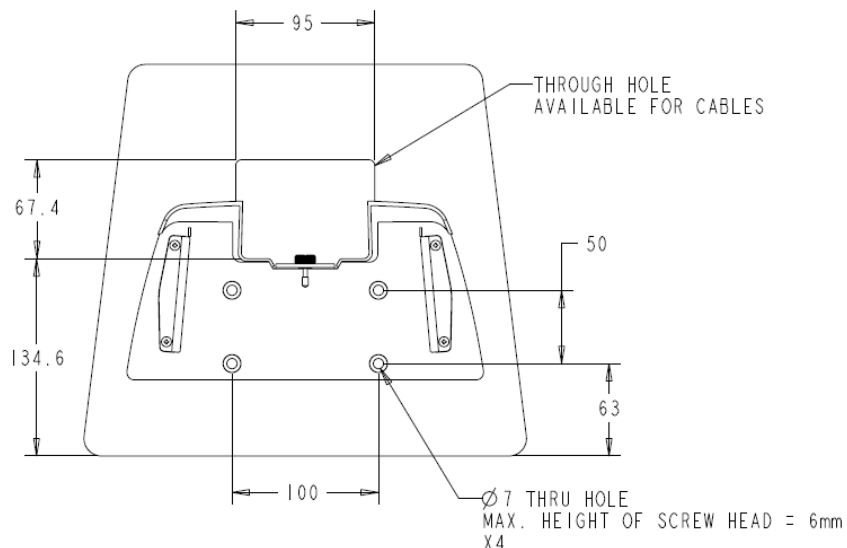
When mounting the B-Series touchcomputer, the baseplate must be removed and mounted on a flat surface. Use the four pre-tapped holes to secure the baseplate from below the mounting surface before reattaching the touchcomputer as shown below. The holes are designed to work with ISO metric M6 screws. Mounting screws are not included with the product. Refer to the figure below for the location of the holes. All dimensions are in millimeters.

### Mounting Diagram

1)



2)





# 2

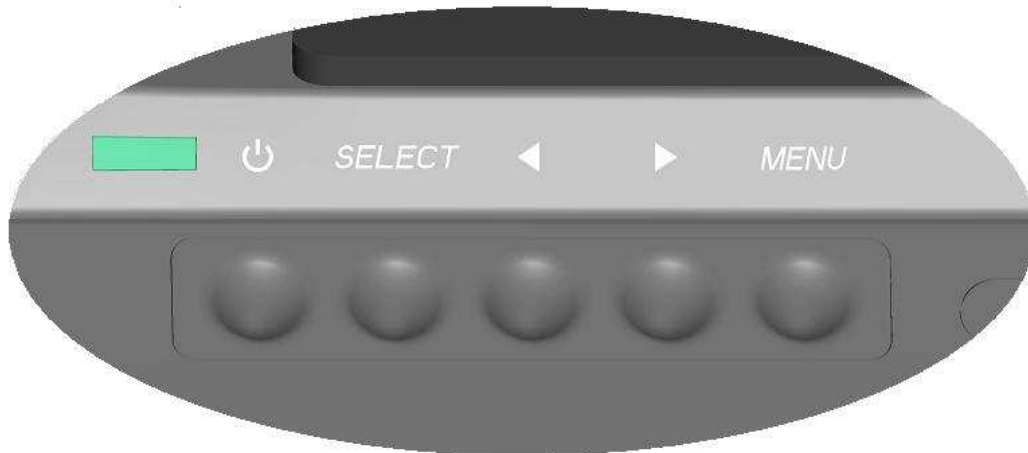
## **OPERATION**

This chapter describes how to control the On-Screen Display (OSD), power buttons, and I/O panel.

All adjustments made to the OSD and power controls are automatically saved. User settings remain unchanged after powering off/on or in the case of a power failure.

## On-Screen Display (OSD)

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### OSD Menu

1. To display the OSD Menu, press the Menu button.

Press the RIGHT button or LEFT button to toggle and the SELECT button to select from the different OSD sub-menus and functions.

2. When the function you want to change is shown, press the SELECT button.
3. To adjust the value of the function:
4. Pressing the RIGHT button increases the value of the selected OSD control option.
5. Pressing the LEFT button decreases the value of the selected OSD control option.

The OSD provides the following settings.

Feature	Description
Auto adjust	Automatically adjusts system clock.
Brightness	Adjust brightness and contrast. <ul style="list-style-type: none"><li>• Brightness: Adjusts the backlight of the monitor.</li><li>• Contrast: Adjusts the maximum luminance level of the monitor.</li></ul>

Feature	Description
Image setting	Adjusts H position, V position, clock, and phase. <ul style="list-style-type: none"> <li>• H position: Moves the screen horizontally right and left (1 pixel pitch increment).</li> <li>• V position: Moves the screen vertically up and down (1 line increment).</li> <li>• Clock: Adjusts the ratio of dividing frequency of the dot clock.</li> <li>• Phase: Adjusts the phase of the dot clock.</li> </ul>
Color	Sets color temperature (9300K, 7500K, 6500K, 5500K, or User Preset).
OSD	Adjusts H position, V position, and OSD timeout. <ul style="list-style-type: none"> <li>• H position: Adjusts the OSD menu screen position left or right.</li> <li>• V position: Adjusts the OSD menu screen position up or down.</li> <li>• Timeout: Adjusts the amount of time that the OSD menu is displayed.</li> </ul>
Language	Changes language to English, French, Italian, German, Spanish, Japanese, Simplified Chinese, or Traditional Chinese.
Recall	Sets color recall and recall defaults. Restores original factory settings.
Miscellaneous	Adjusts sharpness, enables/disables DDC/CI function.
Exit	Exits the OSD.

## OSD and Power Button Control

The OSD menu and power button are enabled by default.

### To enable or disable the OSD function:

1. Simultaneously press **Menu/Exit** and the Left (<-) key for two seconds. A window appears displaying **OSD ENABLE** or **OSD DISABLE**.
2. When the OSD is disabled, the OSD menu is not visible.

### To enable or disable the power button (PWR) lock function:

1. Simultaneously press **Menu/Exit** and the Right (->) key for two seconds. A window appears displaying **PWR ENABLE** or **PWR DISABLE**.
2. When the power button lock feature is activated, the power button is disabled.

## L.E.D. Functionality

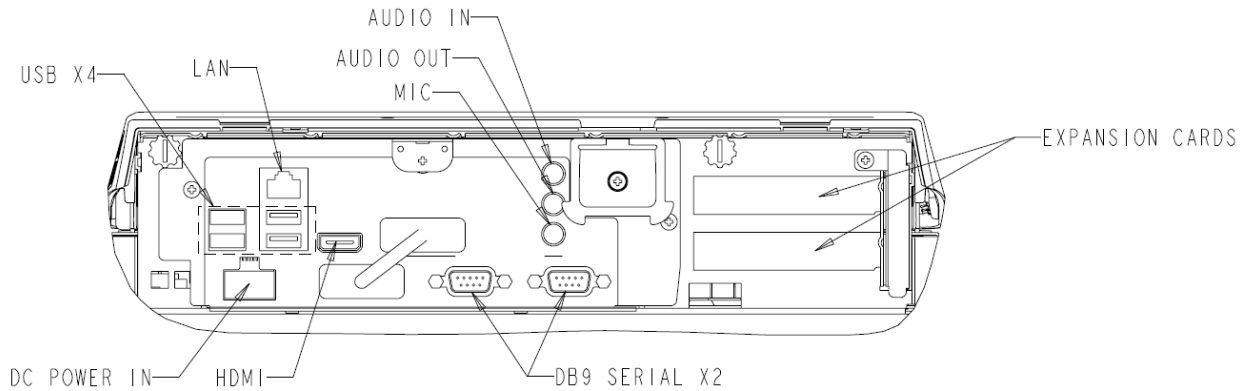
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The B-Series base has a LED indicating the state of the touchcomputer. The table below shows LED state and corresponding color.

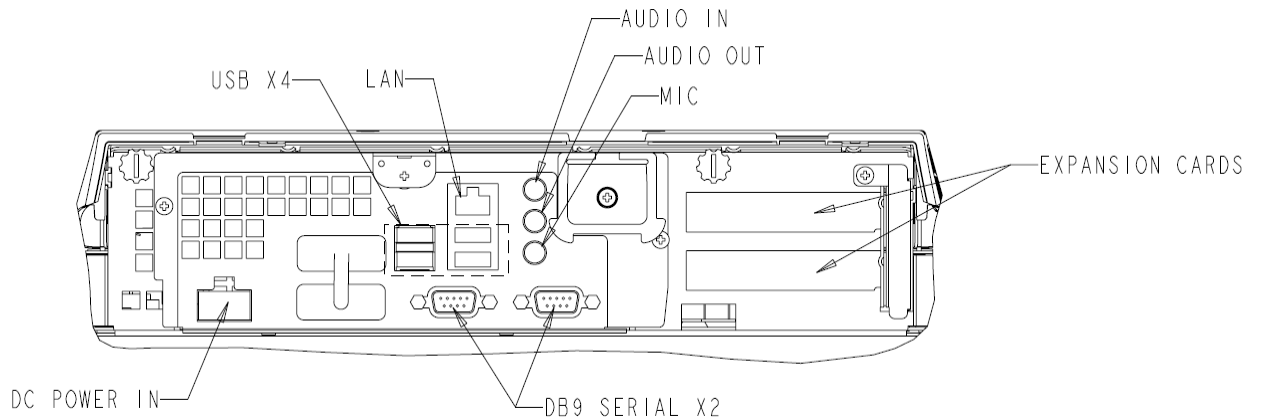
LED Color to Observer	State
Off	No input power — Off mode
Red	Input power present – Off mode or hibernation
Orange	Input power present — Standby
Green	Input power present — Power On

## Using the Input/Output Panel

To access the input/output (I/O) ports, remove the cable cover at the bottom of the unit. A security screw is included and may be used to secure the cable cover to the touchcomputer. Below are the I/O descriptions by model:



**B1 and B3 models**



**B2 models**

**Note:** The DB9 Serial (COM) ports are defaulted (from left to right) COM5 and COM6

**Note:** As a safety precaution, always leave the cable cover door attached when the system is powered on.

## OPTIONS AND UPGRADES

### Adding Optional Peripherals

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When adding a peripheral, complete installation and setup instructions are provided with the field-installable kits. The following peripherals are available for purchase separately as field-installable kits:

- Magnetic stripe reader (MSR)\*
- Customer display\*
- Fingerprint reader (FPR)\*
- Wireless adapter
- Powered USB + Cash drawer port expansion card\*\*
- Second VGA port expansion card\*\*
- Second hard disk drive (HDD)\*\*
- Solid State Drive\*\*
- RAID PCI-E\*\*\*
- Modem PCI-E\*\*\*
- Parallel Port PCI-E\*\*\*

\* External Elo Peripheral

\*\* Elo Expansion Card

\*\*\* Elo PCI-E Expansion Card

**Note:** Software drivers and applications for all peripherals are located in the C:\EloTouchSystems directory of the touchcomputer.

**Note:** Using the Powered USB + Cash Drawer Port Elo Expansion Card AND the Second VGA port Elo expansion card limits the External Elo Peripherals to a maximum of two (2).

**Note:** May install up to two (2) Elo Expansion Cards OR one (1) Elo Expansion Card + one (1) PCI-E Expansion Card.

## Magnetic Stripe Reader (MSR)

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You can add a magnetic stripe reader (MSR) to the B-Series touchcomputer to any of the 4 mounting locations located on the display head top, bottom, left, and right. Software application and drivers can be found in the following directory or on [www.elotouch.com](http://www.elotouch.com)

C:\EloTouchSystems\SetupFiles\Peripherals

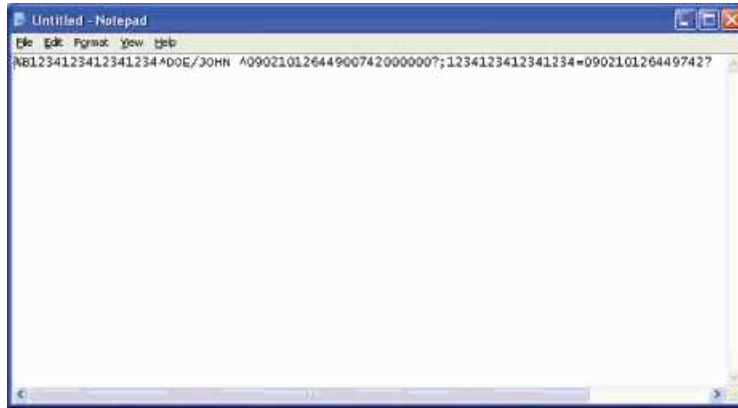
The MSR is a USB 2.0 device that reads all three data stripes on standard credit cards or driver's licenses conforming to ISO/ANSI standards. The MSR has foreign language capability. The credit card is read by sliding the credit card forward or backward through the MSR, stripe side toward the display. The MSR is powered from the USB port; no external power is needed. The MSR features are:

- Reads up to 3 tracks of information
- Bi-directional swipe reading
- Superior reading of high jitter, scratched, and worn MagStripe cards
- Reliable for over 1,000,000 card swipes
- Reads ISO7811, AAMVA, and most other card data formats
- PC software makes configuration changes easy
- Swipe speeds from 3 to 60 inches per second
- Interfaces: USB-KB and USB-HID
- Fully supports USB 2.0
- Part number: E545781

### Testing the MSR

#### Testing in USB MSR Keyboard (KB) Emulation Mode

1. Open the Notepad application (click **Start > Accessories > Notepad**).
2. Slide the card through the MSR and verify that the data is displayed in the application window.



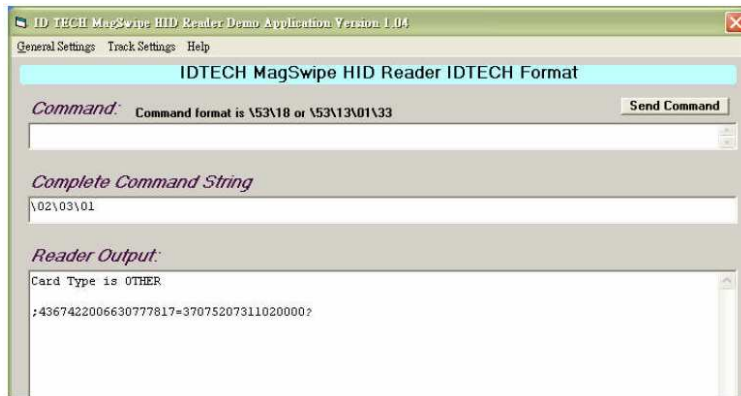
## Testing in USB MSR Human Interface Device (HID) Mode

1. Double-click the **MagSwipe HID Demo** icon to start the test application.



2. Slide a card through the MSR and verify that the data is displayed in the application window.





3. If the card ID appears in the Reader Output window, the reader is functioning.

## Customer Display

---

You can optionally add a customer display to the B-Series touchcomputer to any of the four mounting locations located on the display head top, bottom, left, and right of the touchcomputer. Software application and drivers can be found at the following location [www.elotouch.com](http://www.elotouch.com)

Feature	Description
Display type	Vacuum fluorescent display
Display color	Green
Display pattern	5 x 7 dot matrix
Brightness	350-600 cd/m <sup>2</sup>
Characters available	95 alphanumeric & 32 international characters
Dot size (X x Y)	0.86 x 1.2 mm
Font size	5.5(W) x 10.5(H)
Character number	20 characters by 2 lines, for a 5 x 7 dot matrix font
Interface	USB
Part number	E065040 or E879762

# Fingerprint Reader (FPR)

---

You can add a fingerprint reader to the B-Series touchcomputer to any of the four mounting locations located on the display head top, bottom, left, and right.

Software application and drivers can be found in the following directory or on [www.elotouch.com](http://www.elotouch.com)

C:\EloTouchSystems\SetupFiles\Peripherals

The fingerprint reader is powered by the USB bus. The reader optically scans the fingerprint when the user touches the glowing window. Optical technology gives the highest quality fingerprint scans and reliability.

Fingerprint reader specifications are shown in the table below.

Feature	Specification
Fingerprint reader	DigitalPersona U.are.U 4000B
Power supply	5.0VDC +/- 0.25V
Current draw – scanning mode	190 mA (typical)
Current draw – idle mode	140 mA (typical)
Current draw – suspend mode	1.5 mA (typical)
Image resolution	512 dpi
Image color	8-bit gray level
Scan capture size	14.6mm (nominal width) x 18.1mm (nominal length)
Image capture speed	100 ms
USB type	1.0, 1.1, or 2.0
Operating temperature	0 to 40°C
Electrostatic discharge (ESD)	Up to 15kV mounted in case
Part number	E375206

## Testing the FPR

1. Double-click the **Fingerprint Reader Test** icon to start the test application.
2. Place your finger on the fingerprint reader sensor and verify that the image of your fingerprint is displayed on the application window.



## Powered USB + Cash Drawer Port Card

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A Powered USB + Cash Drawer Port Card can be installed in any available expansion slot. This card provides:

- 2 x 12V Powered USB ports
- 1 x 12V or 24V selectable cash drawer RJ11 port. The voltage setting can be set via jumper on the card prior to installing into the touchcomputer.

Test applications can be found in the following directory or on [www.elotouch.com](http://www.elotouch.com) :

C:\EloTouchSystems\SetupFiles\Peripherals

Part number: E389690

## Second VGA Port Card

---

A second VGA video card can be added to any available expansion slot. This card provides a VGA port to drive another VGA display. Software application and drivers can be found in the following directory or on [www.elotouch.com](http://www.elotouch.com)

C:\EloTouchSystems\SetupFiles\Peripherals

Part number: E017487

## Wireless Card

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A wireless adapter can be installed as an option in the B-Series touchcomputer in the I/O area under the cable cover.

Typical specifications for the wireless card are:

- USB dongle module
- Compliant to USB 2.0 industry standards
- IEEE 802.11b/g/n compliant
- Two UFL connectors
- Support for Windows XP, Windows POSReady 2009 and Windows 7
- RoHS compliant
- Part number: E249774

## Testing the Wireless Card

To test the wireless card:

1. From the desktop, click **Start > Control Panel > Network Connections**.
2. Double-click the **Wireless Network Connections** icon to display available networks and verify that the wireless network is detected.

**NOTE:** *If a wireless network needs to be initialized, please see your system administrator.*



## Second Hard Disk Drive

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A second hard disk drive can be added via the second hard drive mounting kit. This addition provides extra data storage or can be used in conjunction with the RAID controller card for RAID functionality. This option occupies a single expansion slot.

Part number: E109611

## Solid State Drive

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A solid state drive can be added to (or used to replace) the original hard disk drive. This addition provides additional performance and more mechanical reliability in harsh environments.

Part number: E561164

## Modem Card

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A modem card can be added to any expansion slot. This provides modem/fax functionality. Software drivers can be found in the following directory or on [www.elotouch.com](http://www.elotouch.com) :

C:\EloTouchSystems\SetupFiles\Peripherals

Part number: E763313

Note: To use this option ALSO requires the purchase and installation of the Elo PCI-E Expansion Card Option Kit. Part number: E827958

## Parallel Port Card

---

A parallel port card can be added to any Expansion slot. This option provides a parallel port for printer interfaces only. Software drivers can be found in the following directory or on [www.elotouch.com](http://www.elotouch.com) :

C:\EloTouchSystems\SetupFiles\Peripherals

Part number: E368899

Note: To use this option ALSO requires the purchase and installation of the Elo PCI-E Expansion Card Option Kit. Part number: E827958

## RAID Controller Card

---

A RAID controller card can be added when used in conjunction with a second HDD kit to provide RAID 0 and 1 functionality. Software drivers can be found in the following directory or on [www.elotouch.com](http://www.elotouch.com):

C:\EloTouchSystems\SetupFiles\Peripherals

Part number: E383216

Note: To use this option ALSO requires the purchase and installation of the Elo PCI-E Expansion Card Option Kit. Part number: E827958

## 4

**SAFETY AND MAINTENANCE****Safety**

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Important information regarding the proper setup and maintenance of your touchcomputer:

- To reduce the risk of electric shock, follow all safety notices and never open the touchcomputer case.
- Turn off the product before cleaning (refer to “Care and Handling” on page 30 for proper cleaning methods).
- Your touchcomputer is equipped with a 3-wire, grounding power cord. The power cord plug only fits into a grounded outlet. Do not attempt to fit the plug into an outlet that has not been configured for this purpose. Do not use a damaged power cord. Only use the power cord that comes with your Elo TouchSystems touchcomputer. Use of an unauthorized power cord might invalidate your warranty.
- The slots located on the sides and top of the touchcomputer case are for ventilation. Do not block or insert anything inside the ventilation slots.
- It is important that your touchcomputer remains dry. Do not pour liquid into or onto your touchcomputer. If your touchcomputer becomes wet, do not attempt to repair it yourself. Contact Elo Customer Service for instructions.

## Care and Handling

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The following tips help keep your touchcomputer functioning at the optimal level.

To avoid risk of electric shock, do not disassemble the power adapter or display unit cabinet. The unit is not user serviceable. Remember to unplug the display unit from the power outlet before cleaning.

Do not use alcohol (methyl, ethyl, or isopropyl) or any strong solvent. Do not use thinner or benzene, abrasive cleaners, or compressed air.

To clean the display unit cabinet, use a cloth lightly dampened with a mild detergent.

Avoid getting liquids inside your touchcomputer. If liquid does get inside, have a qualified service technician check it before you power it on again.

Do not wipe the screen with a cloth or sponge that could scratch the surface.

To clean the touchscreen, use window or glass cleaner. Put the cleaner on the rag and wipe the touchscreen. Never apply the cleaner directly on the touchscreen.



## Warning

This product consists of devices that might contain mercury, which must be recycled or disposed of in accordance with local, state, or federal laws. (Within this system, the backlight lamps in the monitor display contain mercury.)



## WEEE Directive



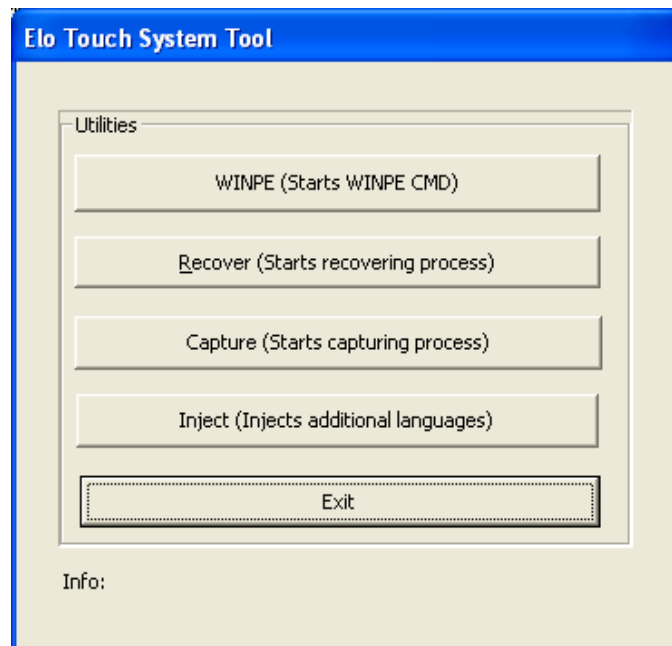
In the European Union, the Waste Electrical and Electronic Equipment (WEEE) directive label shown to the left indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility for recovery and recycling.

## Recovering the Operating System

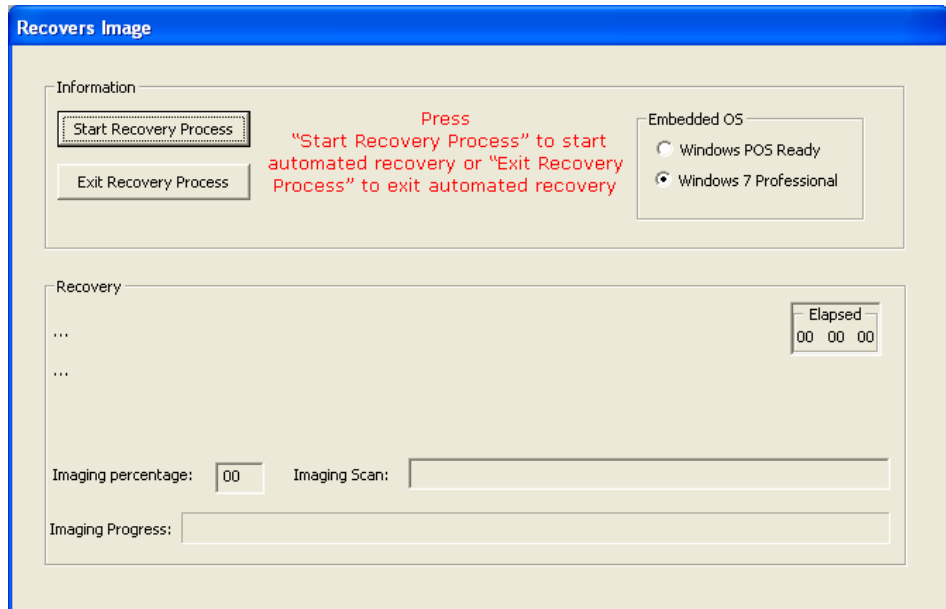
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If for any reason the touchcomputer's operating system and software need to be recovered, there are two ways you can recover your system:

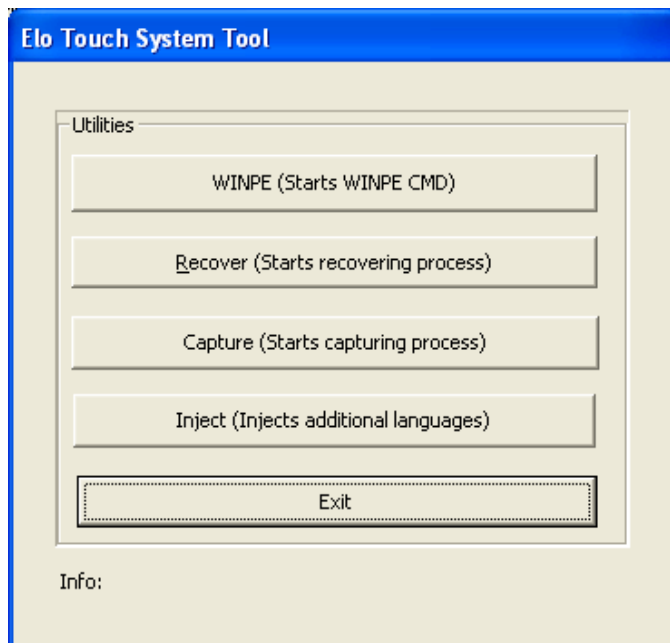
- i. Insert the recovery disk into an external DVD-ROM drive and reboot the touchcomputer. Follow the on-screen instructions to complete recovery.
- ii. Use the included image to recover the touchcomputer (For **POSReady 2009** Only.)
  1. After the TE logo shows up, press **DOWN** (frequently) to enter Windows Boot Manager.
  2. Select **OS Recovery**
  3. The following UI shall be presented



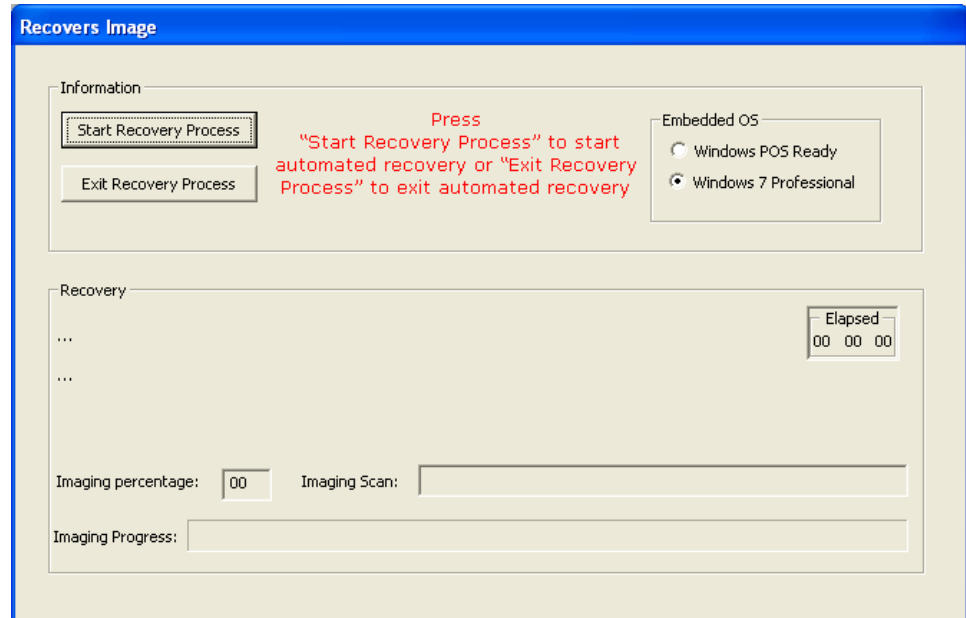
4. Click **Recover** → **Start Recovery Process**



5. After finished, click **Exit** → **Exit** → System will restart automatically
- iii. Use the included image to recover the touchcomputer (For **Windows 7** Only.)
1. After the TE logo shows up, press **F8** (frequently) to enter Advanced Boot Options.
  2. Select **Repair your computer**
  3. **Click Next** → **OK** (Shall not have password) → **Elo Touch System Tool**
  4. The following UI shall be presented



## 5. Click Recover → Start Recovery Process



## 6. After finished, click Exit → Exit → Restart

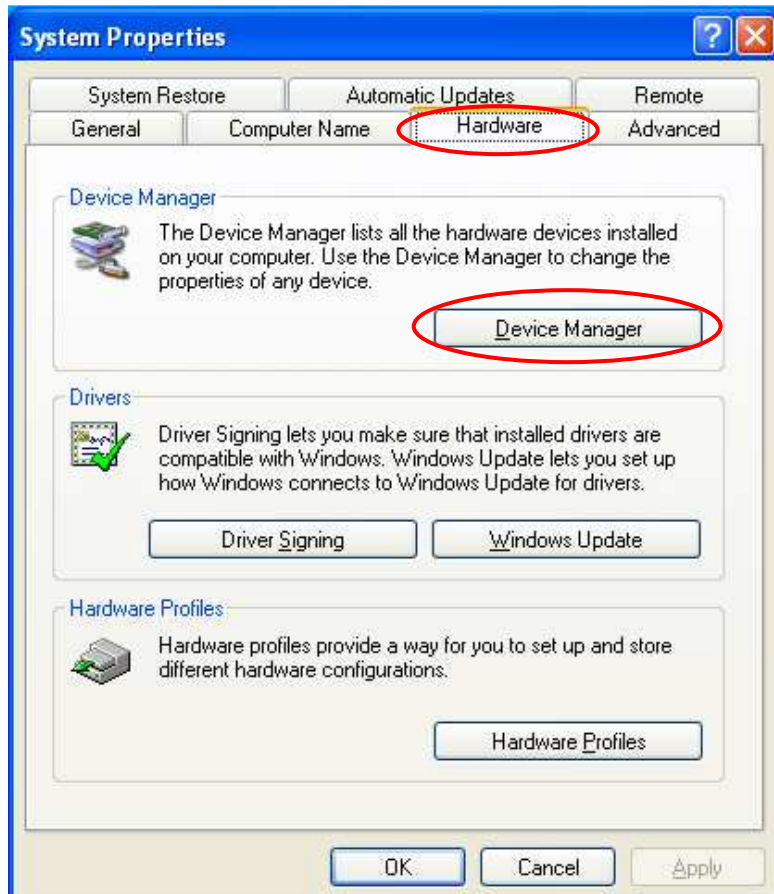
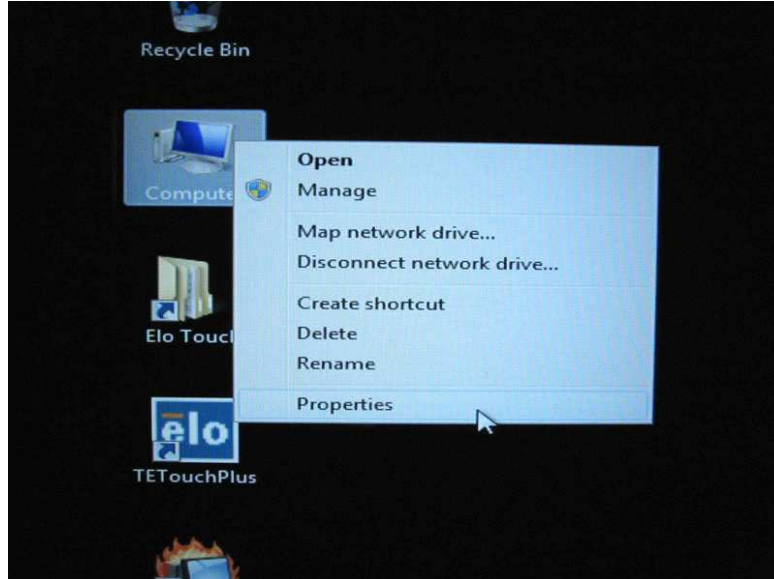
**NOTE:** All data is deleted during the recovery process. The user must back up files when necessary. Elo TouchSystems does not accept liability for lost data or software.

**NOTE:** If using POSReady 2009 or Windows 7 and your hard disk is corrupted, you can request a Recovery DVD from Elo TouchSystems customer service.

**NOTE:** The end user must adhere to Microsoft's Licensing Agreement.

**NOTE:** After you recovered your touchcomputer by using the included image, the operating system might reassign your USB Serial Ports during the first bootup. You can follow the instructions below to reassign it manually.

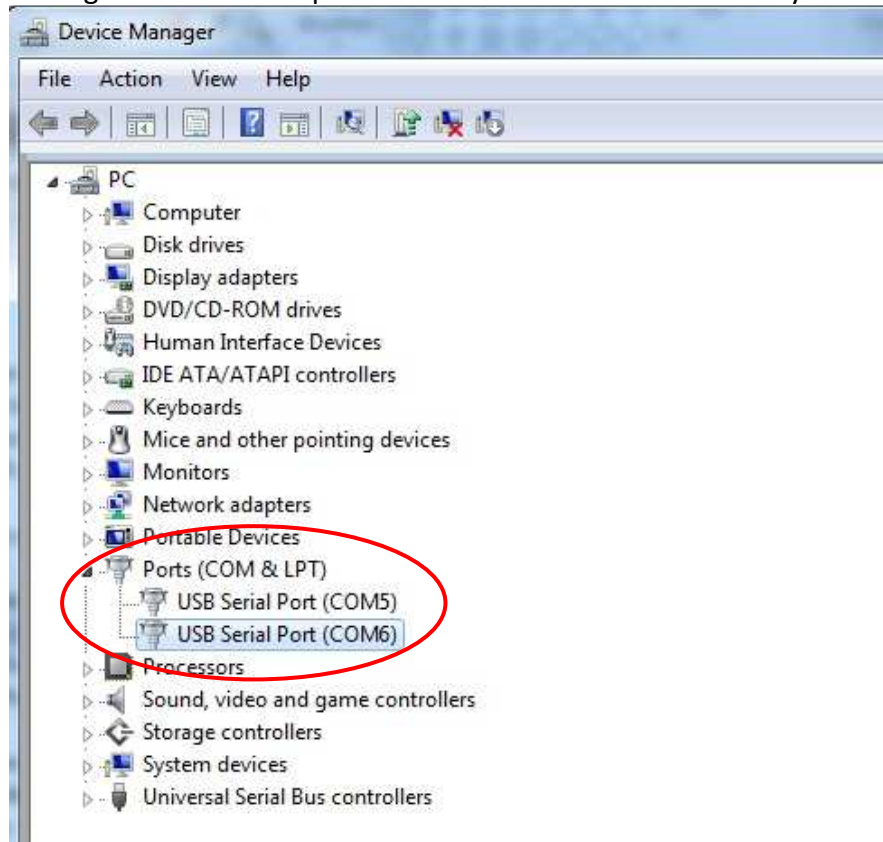
- Instructions to reassign the **USB Serial Port**
  1. For Windows XP or POSReady 2009, right click the “Computer” → Click “Properties” → “Hardware” → “Device Manager”.  
For Windows 7, right click the “Computer” → Click “Properties” → “Device Manager”.



- Double click the “Ports (COM & LPT)” and check all of these “USB Serial Port” settings must be **IDENTICAL** as the following table.

Description	Location
USB Serial Port (COM3)	On USB Serial Converter A
USB Serial Port (COM4)	On USB Serial Converter B

- If you see a situation as below, it shows the operating system has reassigned these serial ports. You need to correct it manually.

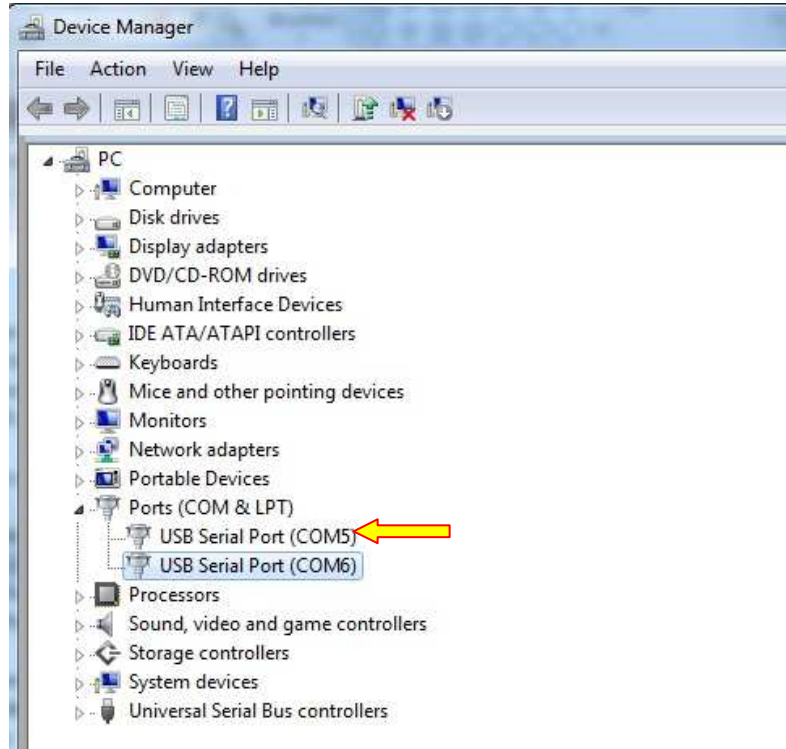


In usual, even if the operating system reassigns these serial ports, they are still in order. In this case, you should change it as the following table.

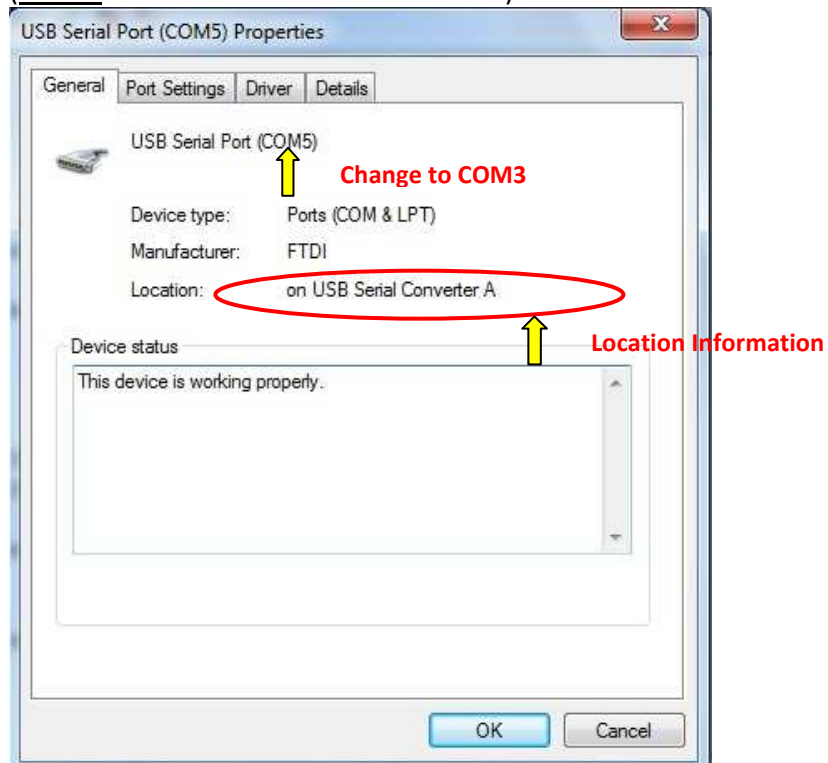
Original one	Change to
USB Serial Port (COM5)	<b>USB Serial Port (COM3)</b>
USB Serial Port (COM6)	<b>USB Serial Port (COM4)</b>

Thus, the settings for these USB Serial Ports should begin at **COM3** and end at **COM4** in order.

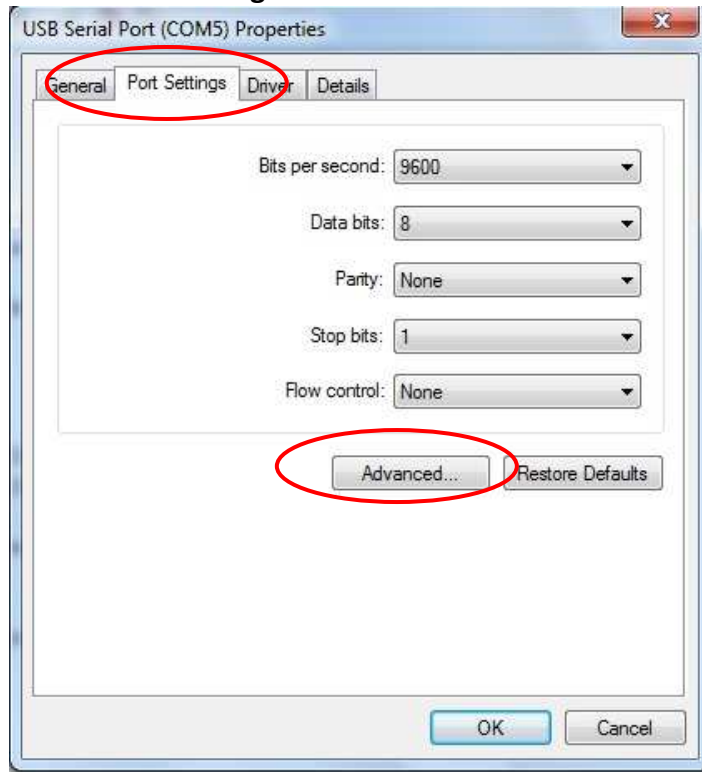
4. To correct it, please follow the instructions below:  
Double click the port you need to change. In this case, it is **COM5**.



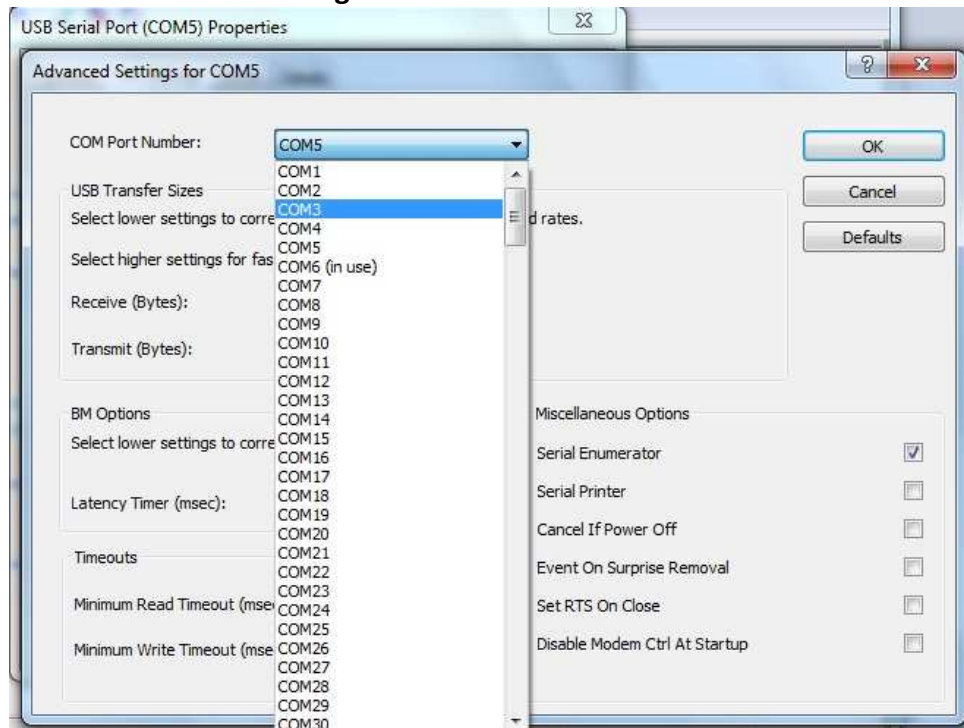
**COM5** is the 1<sup>st</sup> port of these USB serial ports so the “**Location:**” should be “**on USB Serial Converter A**”. Please assign this serial port to **COM3**. (**COM4** for the **USB Serial Converter B**).



Select **“Port Settings”** → Click **“Advanced...”**”



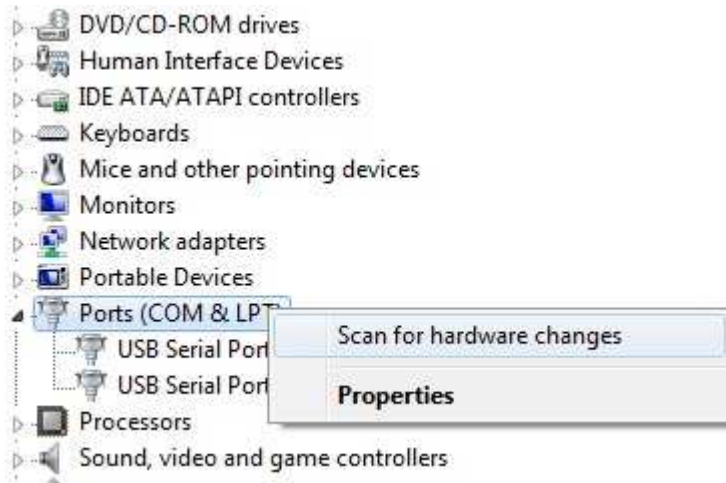
In this case, select **COM3** from the drop-down menu → click **OK** → **OK** back to the **Device Manager**.



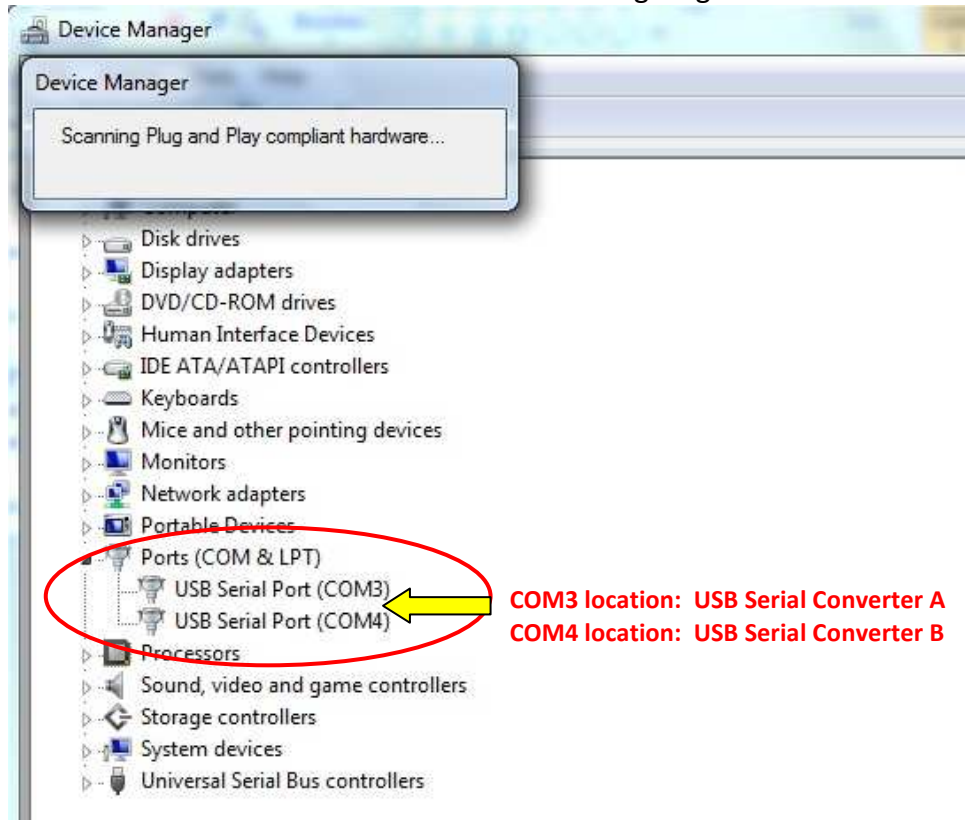
Follow the same steps to accomplish these settings for other ports.



After finished, right click on “Ports (COM & LPT)” and click **Scan for hardware changes**.



5. The outcome should be **identical** as the following diagram.





## 5

## TECHNICAL SPECIFICATIONS

Touchcomputer Specifications

**NOTE:** *Not all operating systems or options are supported in all regions. Please contact your local Elo TouchSystems representative for details.*

FEATURE	B1 models	B2 models	B3 models
Case/Bezel color	Dark Grey		
Processor	Intel Celeron Dual Core E1500 2.2GHz 512KB L2 Cache	Intel Atom Dual Core D510 1.66GHz 1MB L2 Cache	Intel Core 2 Duo E8400 3.0GHz 6MB L2 Cache
RAM (800MHz min)	2GB DDR2 DIMM on 1 of 1 slot	1GB DDR2 DIMM on 1 of 2 slots	2GB DDR2 DIMM on 1 of 1 slot
Chipset	Intel G41 Express	Intel NM10 Express	Intel G41 Express
Video	Intel GMA X4500	Intel GMA 3150	Intel GMA X4500
Operating System Options	Microsoft® Windows® XP Professional Service Pack 3 Microsoft® Windows® POSReady 2009 Microsoft® Windows® 7 Professional No Operating System		
Serial Ports	2 x RS232		
USB Ports	Type A: 4 x USB on I/O, 1 x USB Side Access, 1 x USB for Wireless Header: 6 x USB for Elo optional peripherals		
Ethernet Gigabit	1 x LAN RJ45		
Audio ports	3.5mm jacks for: Audio-Out, Audio-In, Mic-In		
Speakers	2 x 2W		
Hard Disk Drive	160GB 2.5" SATA HDD.		

Real-time Clock	Replaceable lithium-ion battery for clock
Controls	<p>Brightness, Contrast Phase Auto Adjust H-position, V-position Clock Sharpness RGB OSD H-Position, OSD V-Position OSD Time OSD Language (English, French, Italian, German, Spanish, Japanese, Simplified &amp; Traditional Chinese) Recall Power button (All control buttons lockable)</p>
Display	<p>15" models - 15.0 in. diagonal, Active matrix TFT LCD, 4 x 3 17" models - 17.0 in. diagonal, Active matrix TFT LCD, 5 x 4</p>
Languages	<p><b>Win XP</b> – 24 language groups: Arabic, Brazilian, Chinese (Simplified), Chinese (Traditional), Chinese (Hong Kong), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Turkish</p> <p><b>Windows POSReady 2009</b> – 32 language packs: Arabic, Bulgarian, Chinese – Simplified, Chinese – Traditional, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish</p> <p><b>Win 7</b> – 35 language packs: Arabic, Brazilian Portuguese, Bulgarian, Chinese – Simplified, Chinese – Traditional – Hong Kong, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hebrew, Hindi, Hungarian, Italian, Japanese, Korean, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian Latin, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish, Ukrainian</p>
Optional Touchscreens	<p>Acoustic Pulse Recognition AccuTouch IntelliTouch</p>
Optional Peripherals	<p>MSR Customer Display Fingerprint Reader Wireless 802.11b/g/n adapter Powered USB + Cash Drawer 2<sup>nd</sup> VGA port RAID controller PCI-E Modem PCI-E Parallel Port PCI-E 2<sup>nd</sup> Hard Disk Drive Solid State Drive</p>

LCD display	15.0-inch diagonal TFT active matrix LCD 17.0-inch diagonal TFT active matrix LCD
Pixel Pitch	15" models - 0.297mm (H) x 0.297mm (V) 17" models - 0.264mm (H) x 0.264mm (V)
Useful screen area Horizontal x Vertical	15" models - 304.128mm x 228.096mm 17" models - 337.920mm x 270.336mm
Optimal (native) resolution	15" models - 1024x768 17" models - 1280x1024
Supported Resolutions	15" models VESA 640 x 480 (72 / 75Hz) VESA 800 x 600 (56 / 60 / 72 / 75Hz) VESA 1024 x 768 (60 / 70 / 75Hz)  17" models VESA 640 x 480 (72 / 75Hz) VESA 800 x 600 (56 / 60 / 72 / 75Hz) VESA 1024 x 768 (60 / 70 / 75Hz) SXGA 1280x1024 (60 / 75Hz)  <b>Note:</b> <i>If input fH&gt;60kHz, or fV&gt;75Hz, then OSD displays an out of range warning.</i>
Brightness(Typical)	APR – 225 cd/m <sup>2</sup> AT - 200 cd/m <sup>2</sup> IT - 225 cd/m <sup>2</sup>
Response Time	15" models - Total: 8ms (Typical) 17" models - Total: 5ms (Typical)
Colors	15" models – 16.2M (minimum) 17" models – 16.7M
Viewing Angle (from center)	15" models - 70° looking left typical at a CR=10 70° looking right typical at a CR=10 60° looking up typical at a CR=10 65° looking down typical at a CR=10  17" models - 80° looking left typical at a CR=10 80° looking right typical at a CR=10 80° looking up typical at a CR=10 80° looking down typical at a CR=10

Contrast Ratio	15" models - 700:1 (typical) 17" models - 1000:1 (typical)		
Maximum touchcomputer dimensions with stand	15" models 14 (W) x 14.3 (H) x 10.5 (D) in 354.4(W) x 363.5(H) x 267.0(D) mm		
Display at 0° tilt (vertical)	17" models 15.2 (W) x 14.2 (H) x 10.5 (D) in 386.4 (W) x 361.0 (H) x 267.0 (D) mm		
Maximum touchcomputer dimensions without stand	15" models 14.0 (W) x 13.1(H) x 3.6 (D) in 354.4 (W) x 331.8 (H) x 91.3(D) mm		
	17" models 15.2 (W) x 13.0 (H) x 3.8 (D) in 386.4 (W) x 329.5 (H) x 95.8 (D) mm		
Max Power Consumption (No Peripherals)	15" – 75 W 17" – 90 W	15" – 50 W 17" – 65 W	15" – 105 W 17" – 120 W
Weight with Stand	15" – 20.5lbs (9.3kg) 17" – 23.1lbs (10.5kg)	15" – 19.0lbs (8.6kg) 17" – 20.5lbs (9.3kg)	15" – 20.5lbs (9.3kg) 17" – 23.1lbs (10.5kg)
Weight without Stand	15" – 15.7lbs (7.1kg) 17" – 18.3lbs (8.3kg)	15" – 14.2lbs (6.4kg) 17" – 15.7lbs (7.1kg)	15" – 15.7lbs (7.1kg) 17" – 18.3lbs (8.3kg)
Shipping Weight	15" – 29.1lbs (13.2kg) 17" – 31.7lbs (14.4kg)	15" – 27.6lbs (12.5kg) 17" – 29.1lbs (13.2kg)	15" – 29.1lbs (13.2kg) 17" – 31.7lbs (14.4kg)
Shipping Box dimensions	15" – 443mm (W) x 258mm (D) x 555mm(H) 17" – 443mm (W) x 258mm (D) x 555mm(H)		
Temperature	Operating - 0°C to 35°C Storage - -20°C to 60°C		
Humidity (non-condensing)	Operating - 20% to 80% Storage - 5% to 95%		
Altitude	Operating 0 to + 12,000 feet [3,658m] Equivalent to 14.7 to 10.1 psia Non-Operating 0 to + 40,000 feet [12,192m] Equivalent to 14.7 to 4.4 psia		
Warranty	3 years		
Backlight Lamp Time to ½ brightness	Minimum 50,000 hours		
MTBF (mean time between	50,000 hours		

failures)	
Cables and Accessories	North American and European Power cables included
Power Supply	External 12VDC universal-type power supply brick AC input voltage: 100-240V AC Input frequency: 50-60Hz Max output power: 240W
Dimensional drawing number	15" models - MS600845 17" models - MS600846
Mounting Options	1. With provided stand (on flat surface or bolted to surface via holes in base) in landscape or portrait mode 2. 100 mm <a href="#">VESA Mount</a>
Agency Certification	UL/cUL, CE, NOM, AR, CCC, GOST-R, RCM, C-Tick, VCCI
Other Features	Serviceable internal components Touchscreen Sealed to bezel and LCD for APR and AT models Kensington Security Lock

## 6

**TECHNICAL SUPPORT****Technical Assistance**

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There are three methods to obtain contact information for technical assistance on the touchcomputer:

- The touchcomputer
- The web
- The phone

**Using the Touchcomputer**

You can access support information in System Properties by clicking the **Support Information** button. You can get to System Properties by either of the following methods:

Right-click **My Computer** and choose **Properties**.

OR

Click the **Start** button, select **Control Panel**, and double-click the **System** icon.

**Using the Web**

For online self-help, go to [www.elotouch.com/go/websupport](http://www.elotouch.com/go/websupport).

For technical support, go to [www.elotouch.com/go/contactsupport](http://www.elotouch.com/go/contactsupport).

For current Elo news, product updates, and announcements, or to register to receive our Touchcomputer newsletter, go to [www.elotouch.com/go/news](http://www.elotouch.com/go/news).

**Using the Phone**

Call toll-free 1-800-ELO-TOUCH (1-800-356-8682).

## REGULATORY INFORMATION

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### I. Electrical Safety Information

A) Compliance is required with respect to the voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified herein may result in improper operation, damage to the equipment, invalidation of warranty, or a fire hazard if the requirements are not followed.

B) There are no operator-serviceable parts inside this equipment. There are hazardous voltages generated by this equipment which constitute a safety hazard. Service should be provided only by a qualified service technician.

C) This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.

1) Do not substitute the cord with other than the provided approved type. Under no circumstances should you use an adapter plug to connect to a 2-wire outlet as this defeats the continuity of the grounding wire.

2) The equipment requires the use of the ground wire as a part of the safety certification. Modification or misuse can provide a shock hazard that can result in serious injury or death.

3) Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment to main power.

### II. Emissions and Immunity Information

A) Notice to Users in the United States: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential or commercial installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

B) Notice to Users in Canada: This equipment complies with the Class A limits for radio noise emissions from digital apparatus as established by the Radio Interference Regulations of Industry Canada.

C) Notice to Users in the European Union: Use only the provided power cords and interconnecting cabling provided with the equipment. Substitution of provided cords and cabling may compromise electrical safety or CE Mark Certification for emissions or immunity as required by the following standards: This Information Technology Equipment (ITE) is required to have a CE Mark on the manufacturer's label which means that the equipment has been tested to the following Directives and Standards:

This equipment has been tested to the requirements for the CE Mark as required by EMC Directive 89/336/EEC indicated in European Standard EN 55022 Class A and the Low Voltage Directive 73/23/EEC as indicated in European Standard EN 60950.

D) General Information to all Users: This equipment generates, uses, and can radiate radio frequency energy. If not installed and used according to this manual, the equipment may cause interference with radio and television communications. There is, however, no guarantee that interference will not occur in any particular installation due to site-specific factors.

1) In order to meet emission and immunity requirements, the user must observe the following:

- a) Use only the provided I/O cables to connect this digital device with any computer.
- b) To ensure compliance, use only the provided manufacturer's approved power cord.
- c) The user is cautioned that changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2) If this equipment appears to cause interference with radio or television reception, or any other device:

- a) Verify as an emission source by turning the equipment off and on.
- b) If you determine that this equipment is causing the interference, try to correct the interference by using one or more of the following measures:
  - i) Move the digital device away from the affected receiver.
  - ii) Reposition (turn) the digital device with respect to the affected receiver.
  - iii) Reorient the affected receiver's antenna.



iv) Plug the digital device into a different AC outlet so the digital device and the receiver are on different branch circuits.

v) Disconnect and remove any I/O cables that the digital device does not use. (Unterminated I/O cables are a potential source of high RF emission levels.)

vi) Plug the digital device into only a grounded outlet receptacle. Do not use AC adapter plugs. (Removing or cutting the line cord ground may increase RF emission levels and may also present a lethal shock hazard to the user.)

vii) If you need additional help, consult your dealer, manufacturer, or an experienced radio or television technician.

### III. Agency Certifications

The following certifications have been issued for the monitor:

- Argentina S-Mark
- Australia C-Tick
- CE
- China CCC
- China RoHS
- FCC
- IMERC
- Japan VCCI
- Mexico NOM
- Russia PCT
- WEEE
- UL
- cUL

## WARRANTY

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Except as otherwise stated herein or in an order acknowledgment delivered to Buyer, Seller warrants to Buyer that the Product shall be free of defects in materials and workmanship. With the exception of the negotiated warranty periods; the warranty for the touchcomputer and components of the product is 3 years.

Seller makes no warranty regarding the model life of components. Seller's suppliers may at any time and from time to time make changes in the components delivered as Products or components. Buyer shall notify Seller in writing promptly (and in no case later than thirty (30) days after discovery) of the failure of any Product to conform to the warranty set forth above; shall describe in commercially reasonable detail in such notice the symptoms associated with such failure; and shall provide to Seller the opportunity to inspect such Products as installed, if possible. The notice must be received by Seller during the Warranty Period for such product, unless otherwise directed in writing by the Seller. Within thirty (30) days after submitting such notice, Buyer shall package the allegedly defective Product in its original shipping carton(s) or a functional equivalent and shall ship to Seller at Buyer's expense and risk.

Within a reasonable time after receipt of the allegedly defective Product and verification by Seller that the Product fails to meet the warranty set forth above, Seller shall correct such failure by, at Seller's options, either (i) modifying or repairing the Product or (ii) replacing the Product. Such modification, repair, or replacement and the return shipment of the Product with minimum insurance to Buyer shall be at Seller's expense. Buyer shall bear the risk of loss or damage in transit, and may insure the Product. Buyer shall reimburse Seller for transportation cost incurred for Product returned but not found by Seller to be defective. Modification or repair, of Products may, at Seller's option, take place either at Seller's facilities or at Buyer's premises. If Seller is unable to modify, repair, or replace a Product to conform to the warranty set forth above, then Seller shall, at Seller's option, either refund to Buyer or credit to Buyer's account the purchase price of the Product less depreciation calculated on a straight-line basis over Seller's stated Warranty Period.

THESE REMEDIES SHALL BE THE BUYER'S EXCLUSIVE REMEDIES FOR BREACH OF WARRANTY. EXCEPT FOR THE EXPRESS WARRANTY SET FORTH ABOVE, SELLER GRANTS NO OTHER WARRANTIES, EXPRESS OR IMPLIED BY STATUTE OR OTHERWISE, REGARDING THE PRODUCTS, THEIR FITNESS FOR ANY PURPOSE, THEIR QUALITY, THEIR MERCHANTABILITY, THEIR NONINFRINGEMENT, OR OTHERWISE. NO EMPLOYEE OF SELLER OR ANY OTHER PARTY IS AUTHORIZED TO MAKE ANY WARRANTY FOR THE GOODS OTHER THAN THE WARRANTY SET FORTH HEREIN. SELLER'S LIABILITY UNDER THE WARRANTY SHALL BE LIMITED TO A REFUND OF THE PURCHASE PRICE OF THE PRODUCT. IN NO EVENT SHALL SELLER BE LIABLE FOR THE COST OF PROCUREMENT OR INSTALLATION OF SUBSTITUTE GOODS BY BUYER OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES.

Buyer assumes the risk and agrees to indemnify Seller against and hold Seller harmless from all liability relating to (i) assessing the suitability for Buyer's intended use of the Products and of any system design or drawing and (ii) determining the compliance of Buyer's use of the Products with applicable laws, regulations, codes, and standards. Buyer retains and accepts full responsibility for all warranty and other claims relating to or arising from Buyer's products, which include or incorporate Products or components manufactured or supplied by Seller. Buyer is solely responsible for any and all representations and warranties regarding the Products made or authorized by Buyer. Buyer will indemnify Seller and hold Seller harmless from any liability, claims, loss, cost, or expenses (including reasonable attorney's fees) attributable to Buyer's products or representations or warranties concerning same.

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- *News on upcoming events*
- *Press release*
- *Software drivers*
- *Touch Monitor Newsletter*

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**Getting in Touch with Elo**



To find out more about Elo's extensive range of touch solutions, visit our Website at [www.elotouch.com](http://www.elotouch.com) or simply call the office nearest you:

**North America**

Elo TouchSystems  
301 Constitution Drive  
Menlo Park, CA 94025  
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