Touchcomputer User Guide

15A1 15" LCD Multifunction Touchcomputer

Tyco Electronics

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Elo TouchSystems Touchcomputer User Guide

15" LCD Multifunction Touchcomputer

ESY15A1

Revision C

P/N E362310

Elo TouchSystems

1-800-557-1458

www.elotouch.com

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CHAPTER

1

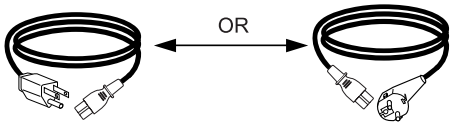
Setup

This chapter discusses how to set up and test your touchcomputer and any included peripheral options.

Unpacking Your Touchcomputer

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

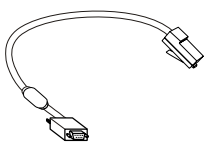
Touchcomputer



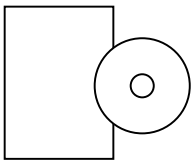
Power cable US/Canadian

European power cable

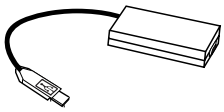
PS/2 Y-cable



DB9 adapter cable



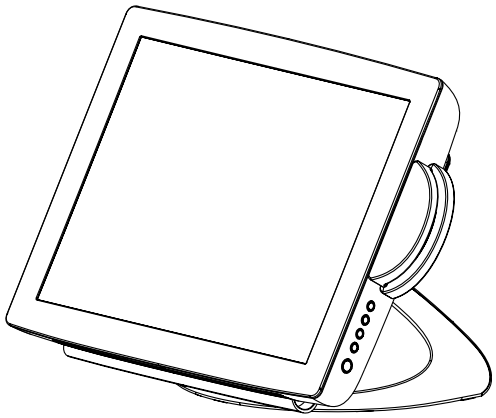
CD and Quick Install Guide



Power Adapter

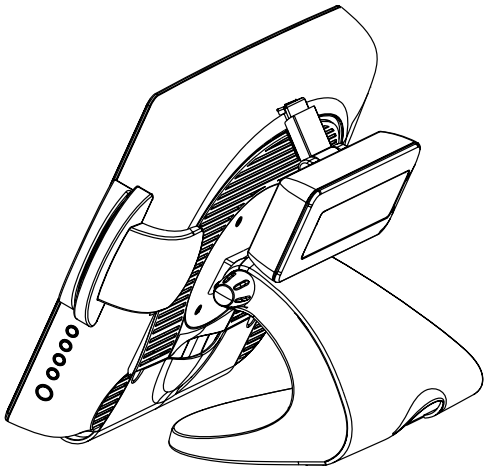
Product Overview

Front View

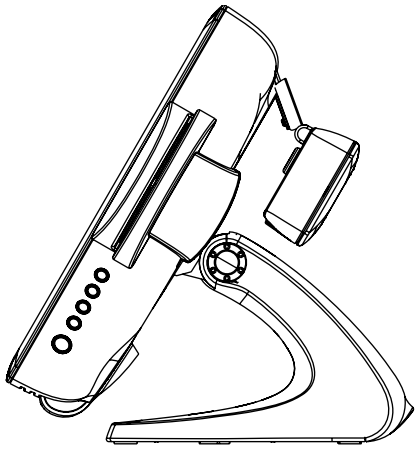


Note: Shown with optional peripherals

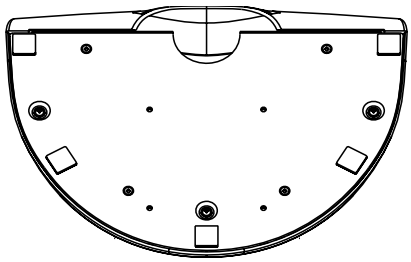
Rear View



Side View

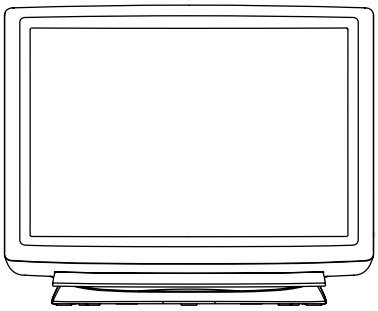


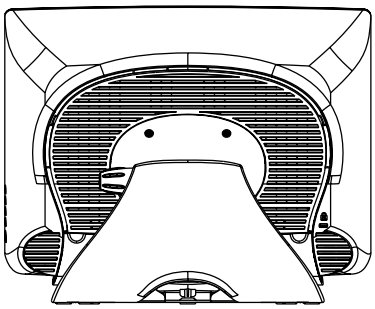
Base Bottom View

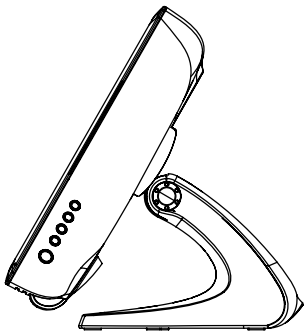


Note: Shown with optional peripherals

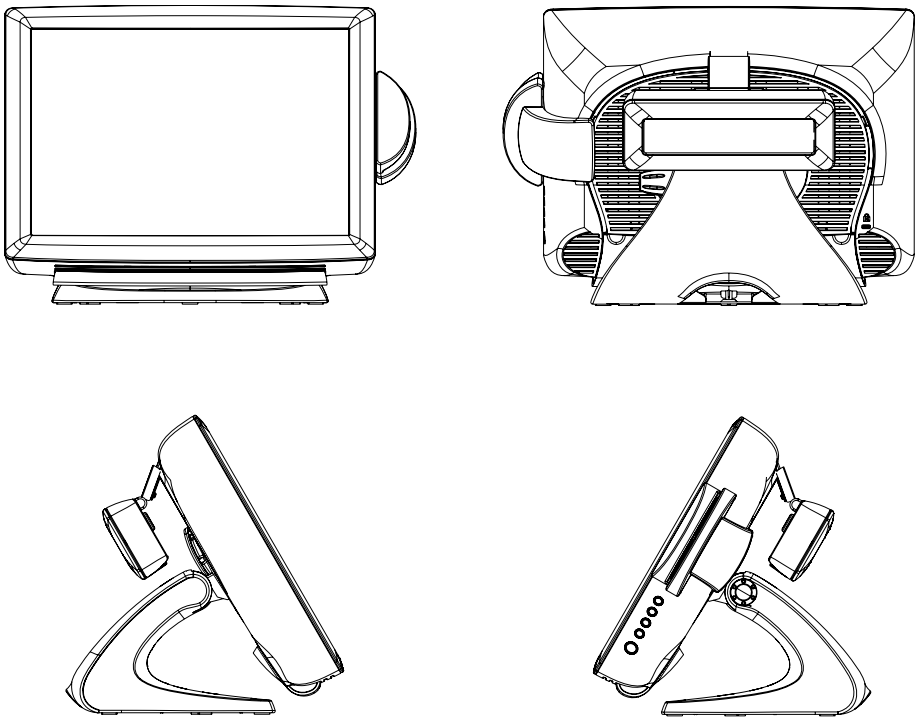
Display Orientation







Display Orientation with Peripherals



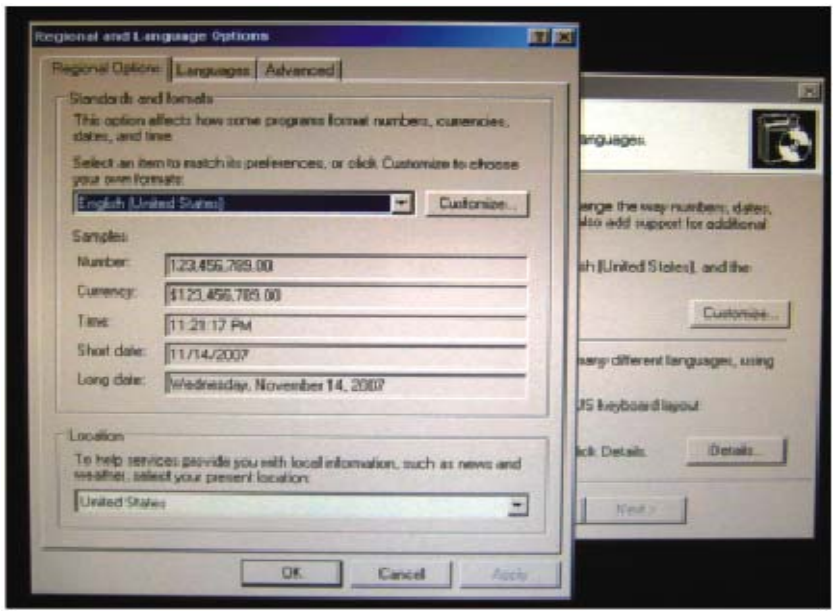
Initial Turn-On

The initial setup of the operating system takes approximately 5-10 minutes. Additional time may be needed depending on touchcomputer hardware configuration and connected devices. To setup the Windows OS for the touchcomputer, turn on the touchcomputer and follow the instructions on the screen.

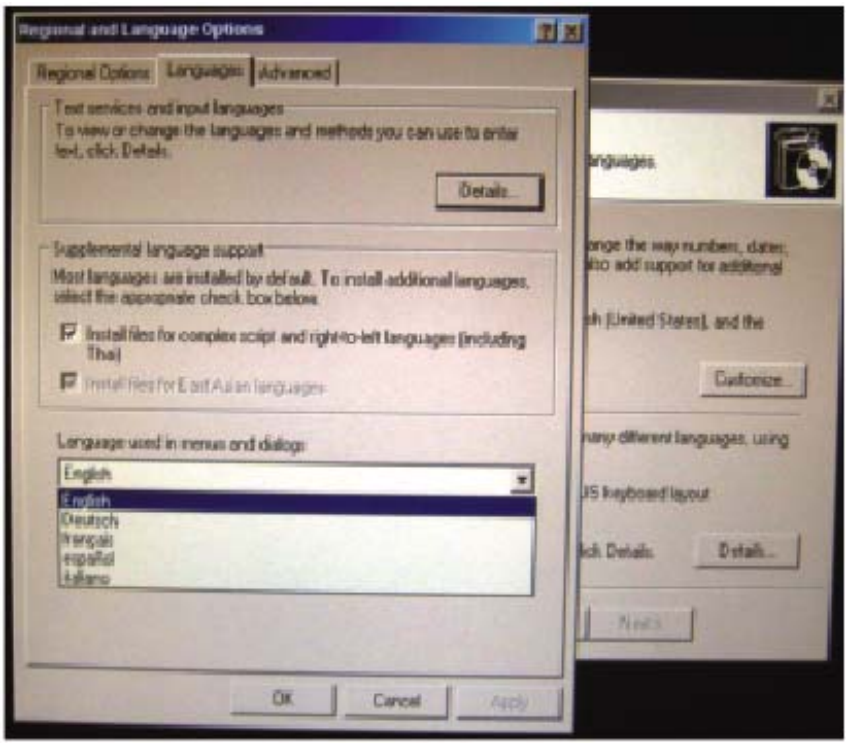
Language Selection

When the following window appears, you have the option of changing the language used in menus and dialogs.

Click **Customize**. The Regional and Language window shown below will appear.



Select the **Language** tab. The window shown below will appear.



Select the desired language in the drop-down list labeled **Language used in menus and dialogs**.

Time-zone selection

When the following window appears, you may change the time-zone, date, and/or time of the touchcomputer.

After making any changes, click **Next** to finish. Windows Setup will complete the initialization of the touchcomputer.

Test Devices

The touchcomputer can be pre-installed with several different hardware options. To test an optional device that is installed on the touchcomputer, follow the instructions below.

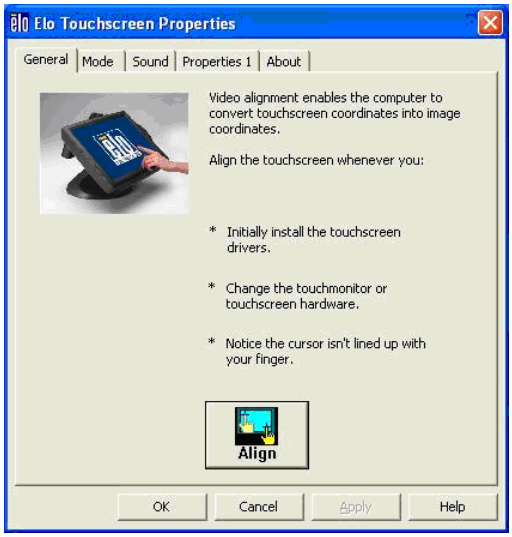
NOTE: Testing icons are located on the desktop. Testing of a particular device can only be done after the device is properly installed.

Testing the Touchscreen

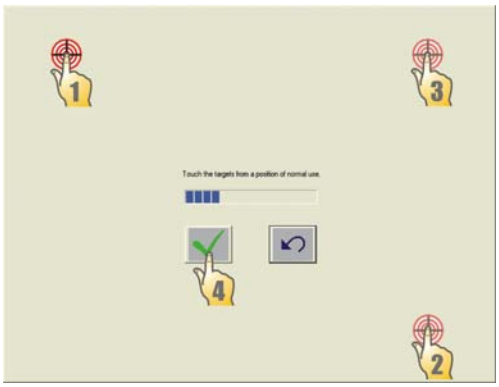
The touchscreen is pre-calibrated for accurate touch response.

Calibration*

If for any reason the touchscreen needs to be re-calibrated, double-click the **Touchscreen-Test** icon. The window shown below will open.



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

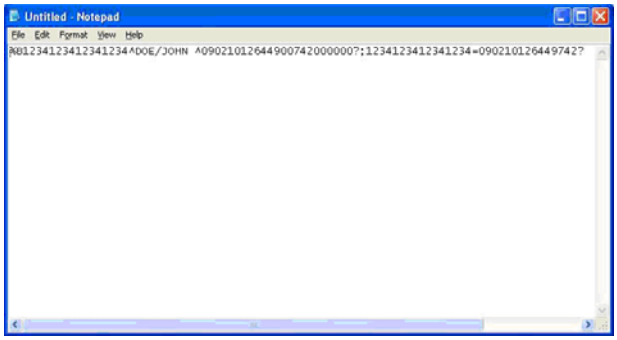


*Calibration may not be applicable for all touch technologies.

Testing the Magnetic Stripe Reader (MSR) (optional)

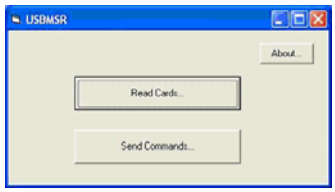
Testing in USB MSR Keyboard (KB) Emulation Mode

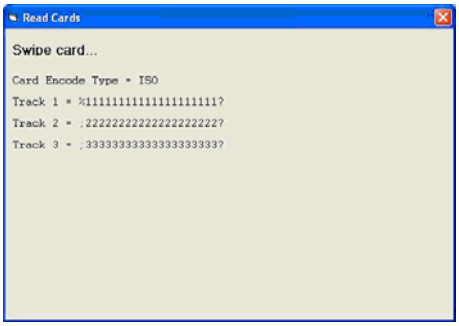
1. Double-click the **KB MSR Test** icon to open the Notepad application
2. Slide the card through the MSR and verify that the data is displayed in the application window.



Testing in USB MSR Human Interface Device (HID) Mode

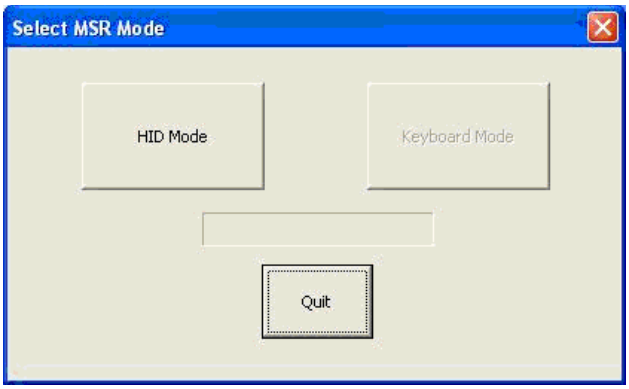
1. Double-click the **HID MSR Test** icon to start the test application.
2. Click the **Read Cards** button.
3. Slide the card through the MSR and verify that the data is displayed in the application window.





Converting MSR from Keyboard Emulation to HID and vice versa

1. Double-click the **MSR Change Mode** icon to start the switch application.
2. Click on **HID Mode** to switch to HID mode OR click on **Keyboard Mode** to switch to Keyboard mode. The dimmed box will indicate the current setting.
3. Click Quit to close the window.



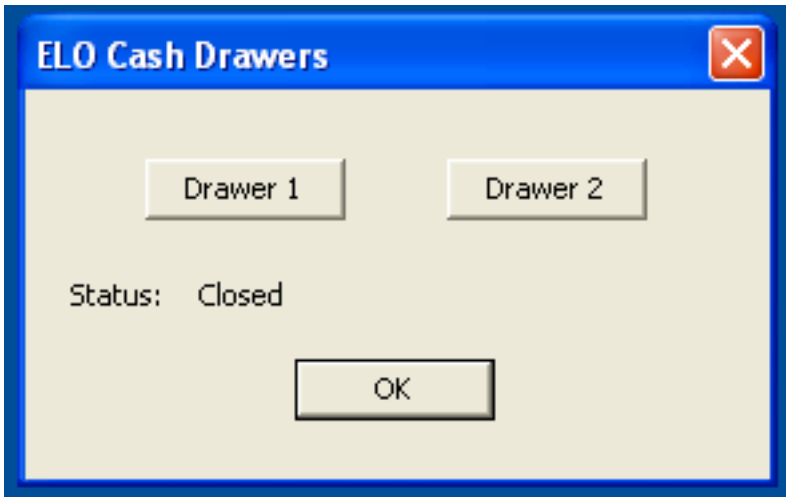
Testing the Customer Display (optional)

1. Double-click the **CustDisplay Test** icon.
2. Verify that the device shows "EloTouch Systems Customer Display" on the display.

Testing the Cash Drawer Port

To test the cash drawer port, first ensure that a cash drawer port is attached to the touchcomputer using a cable with the correct wiring definition. For additional information, see **Cash Drawer Port Signal Definition and Control** section on page 35.

1. Double-click the **Cash Drawer Test** icon to start the test application.
2. Click the **Drawer 1** or **Drawer 2** box to open the cash drawer. The status line indicates whether the drawer is open or closed.



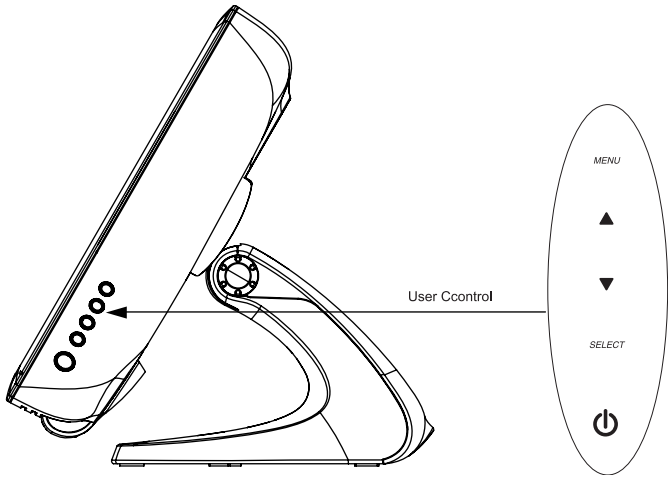
CHAPTER

2

Operation

This chapter shows the user how to control the On-Screen Display (OSD) and Power buttons, use the I/O panel, securely mount the touchcomputer and adjust the display head.

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



OSD Control

OSD Menu

To display the OSD Menu, press the Menu button.

1. Press the **UP** button or **DOWN** button to toggle and the **SELECT** button to select among the different OSD sub-menus and functions.
2. When the function you want to change is shown, press the **SELECT** button.

To adjust the value of the function:

1. Pressing the **UP** button increases the value of the selected OSD control option.
2. Pressing the **DOWN** button decreases the value of the selected OSD control option.

The OSD provides the following adjustments:

Brightness

Adjusts the background luminance of the LCD panel.

Contrast

Adjusts the contrast or the values of color gain (RED, GREEN or BLUE).

Color Temperature

- sRGB mode can be selected
- Sets color temperature values of 4200K, 5000K, 6500K, 7500K, 12000K, 150000K, and user defined.

OSD time-out

Adjusts the time the OSD remains on the screen after no activity.

OSD Vertical Position

Adjusts the OSD position up or down.

OSD Horizontal Position

Adjusts the OSD position left or right.

OSD Orientation

Adjusts the rotational orientation of the OSD

OSD Language

Adjusts the language selection of the OSD among English, French, Italian, German, or Spanish

Factory Reset

Changes all OSD settings to factory default.

Color Reset

Changes all OSD color settings to factory default.

Position Reset

Changes all OSD position settings to factory default.

Sharpness

Adjusts the sharpness of the display.

Volume

Adjusts the audio signal level of the internal speakers and audio output.

Information

The current OSD version is displayed in the exit tab of the main menu.

The current resolution and refresh rates are displayed at the bottom of every OSD menu.

Shortcut keys

There are two shortcut buttons allowing the user to make quick adjustments. These shortcuts are available only when the OSD menu is NOT displayed.

- To adjust brightness, press the UP button
- To adjust volume, press the DOWN button

OSD Lockout

You are able to lock and unlock the four OSD buttons. The touchcomputer is defaulted in the unlocked position.

To lock the OSD:

While the OSD is not displayed, press the Menu button and UP simultaneously for 2 seconds. A window will appear displaying "OSD Unlocked". Continue to hold the buttons down for another 2 seconds and when the window toggles to "OSD Locked", release both buttons to lock the OSD.

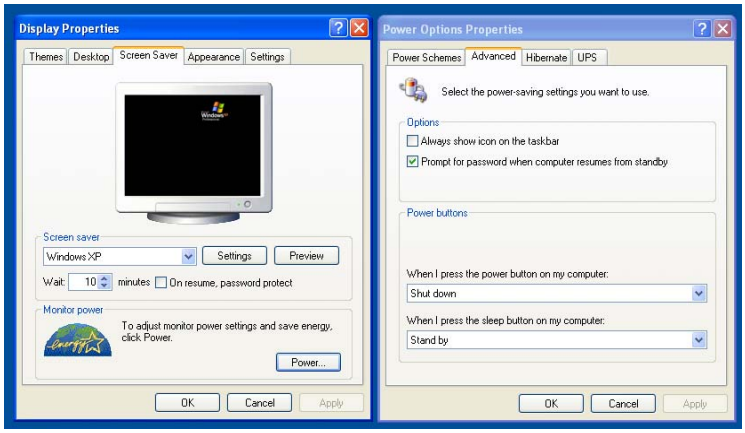
To unlock the OSD:

Press the Menu button and UP simultaneously for 2 seconds. A window will appear displaying "OSD locked". Continue to hold the buttons down for another 2 seconds and when the window toggles to "OSD Unlocked", release both buttons to unlock the OSD.

Power Control

Power Button

The power button function can be set by the operating system under:
Control Panel->Display Properties->Screen Saver->Power->Advanced->Power Buttons



To override all Operating System settings and shut down the touchcomputer, press and hold the power button for 7 seconds.

Note: This function will not work if the power button is locked as described in the section below.

Power Lockout

You are able to lock and unlock the Power button. The touchcomputer is defaulted in the unlocked position.

To lock the Power:

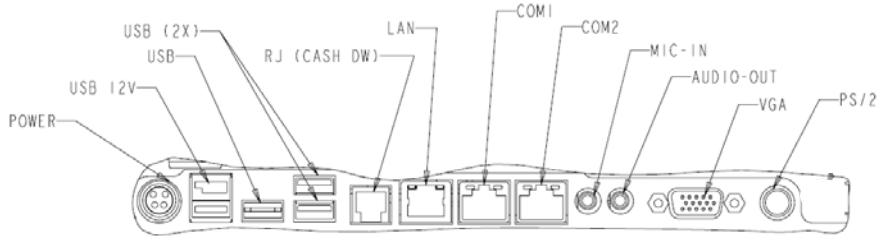
While the OSD is not displayed, press the Menu button and DOWN simultaneously for 2 seconds. A window will appear displaying “Power Unlocked.” Continue to hold the buttons down for another 2 seconds. When the window toggles to “Power Locked” release both buttons to lock the Power button.

To unlock the Power:

Press the Menu button and DOWN simultaneously for 2 seconds. A window will appear displaying “Power locked.” Continue to hold the buttons down for another 2 seconds. When the window toggles to “Power Unlocked” release both buttons to unlock the Power button.

Using the I/O panel

The touchcomputer provides the following I/O interfaces for connecting a wide variety of compliant devices.



USB and Powered USB

There are four USB 2.0 type A ports, including one 12V powered USB 2.0 port.

Cash Drawer

There is one 12V cash drawer port with a six position register jack connector interface. For additional information, see the **Cash Drawer Port Signal Definition and Control** section on page 36.

Ethernet

There is one RJ45 ethernet port providing LAN capabilities

Serial

There are two serial ports with an 8 position registered jack connector interface. COM1 is set to RS232 mode. COM2 is selectable in the BIOS to RS232, RS422 or RS485 modes. Use the supplied DB9 adapter cable to change the interface to DB9.

Microphone Input

There is one 3.5mm microphone input jack for connecting an external microphone

Audio Output

There is one 3.5mm stereo audio output jack for connecting headphones or external powered speakers.

VGA

There is one D-SUB VGA output port for connecting a secondary display.

PS/2 Universal

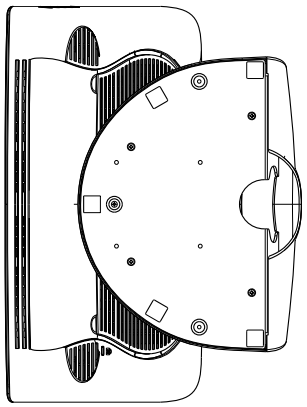
There is one PS/2 Universal port for connecting a keyboard and mouse simultaneously with the supplied Y-cable. A PS/2 keyboard is functional when connected directly to the PS/2 universal port. A PS/2 mouse should NOT be connected directly to the PS/2 universal port without the Y-cable.

Kensington™ Lock

The Kensington™ lock is a security device that prevents theft. To find out more about this security device, go to http://www.kensington.com.

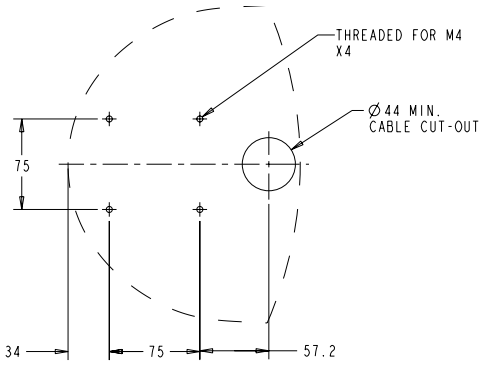
Securing the Touchcomputer Base

Base Bottom View



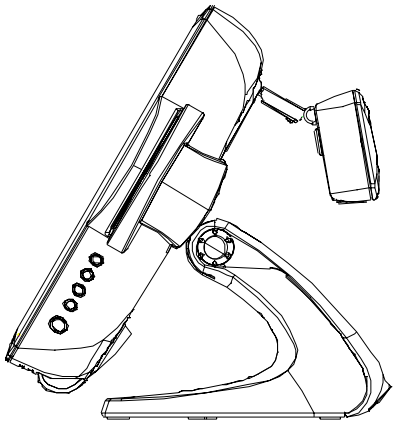
Note: Shown with optional peripherals

Mounting Pattern

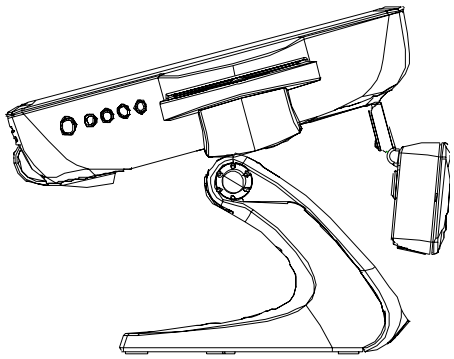


Display Angle

For viewing clarity, you can tilt the LCD forward up 30 to 75 degrees.



Tilt 30° from vertical



Tilt 75° from vertical

CAUTION In order to protect the LCD, be sure to hold the base when adjusting the LCD, and take care not to touch the screen.

CHAPTER

3

Upgrades

Adding Peripherals

The availability of peripheral options may vary. Please contact Elo TouchSystems for more information (see page 54 for contact information).

CHAPTER

4

Maintenance

Care and Handling of Your Touchcomputer

The following tips will help keep your Elo 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 dissolvent. 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 may 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.)

Waste Electrical and Electronic Equipment (WEEE) Directive

In the European Union, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

Servicing the Hard Disk Drive

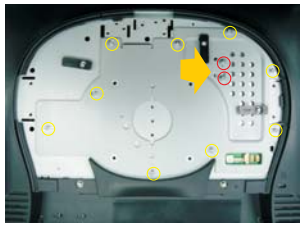
When removing or installing a hard disk drive, first turn the touchcomputer off and remove the power supply connection.

To Install Hard Disk Drive

1. Take off the back cover insert, and remove the four screws connecting the stand to the chassis. Once these screws are removed, the stand will come off. Then remove the screws on the chassis. If you have an existing hard drive, please pull on the metal handle. After pulling on this handle, the hard drive will easily slide out.

2. Grasp the handle of the new hard drive and slide the hard drive into the slot with the manufacturer's label faced down and the connector facing the top of the touchcomputer. Slide the hard drive to the right until it stops. Then push the hard drive up into the SATA connector and make sure that it locks into place.

3. Secure the Hard Drive to the touchcomputer using 2 screws. Reinstall the screws to close the chassis.



4. Reinstall the stand by using 4 screws and replace the back cover insert.

Recovering the Operating System

If for any reason the touchcomputer's operating system and software needs to be recovered, insert the included recovery disk into an external DVD-ROM drive or internal DVD drive (if available) and reboot the touchcomputer. Follow the on-screen instructions to complete recovery.

NOTE: All data will be deleted during the recovery process. User must back up files when necessary. Elo TouchSystems does not accept liability for lost data or software.

CHAPTER

5

Technical Specifications

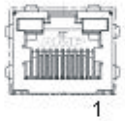
Touchcomputer Specifications

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

Processor	Intel Celeron M 1.0GHz CPU w/400MHz Front-Side Bus
RAM	512 MB DDR2 RAM standard. Up to 1.5GB
Northbridge	Intel 915GME
Southbridge	Intel ICH6
Video	Intel GMA 900 Up to 128MB shared w/ DVMT
Operating systems	Microsoft Windows XP Professional Microsoft Windows Embedded for Point of Service (WEPOS)
Ports	4 x USB 2.0 ports 1 x 12V powered USB 2.0 port 1 x 12V cash drawer port 1 x 10/100 Base-T ethernet port 2 x Serial ports (RJ connector) COM1, RS232, COM2 selectable RS232/RS422/RS485 1 x Microphone input 3.5mm 1 x Audio Output 3.5mm 1 x VGA output 1 x PS/2 Universal
BIOS	ACPI 2.0, APM 1.2, SMBIOS 2.4, PXE, WOL
Real Time clock	Replaceable lithium-ion battery for clock
Storage	XP/WEPOS: 40 GB HDD(minimum)
Power supply	Type: External brick Input (line) voltage: 100-240 VAC, 50-60 Hz Output voltage/current: 12 V at 10 amps max. 120 watts minimum
Power dissipation	100 W Typical
Temperature	Operating: 0°C to 35°C Storage: -20°C to 60°C
Humidity	Operating: 20%-80% Storage: 5%-95% noncondensing

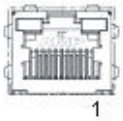
Weight	Actual: 17.2 lb (7.8 kg) Shipping: 22.5 lb (10.2 kg) Shipping box dimensions (485mmx420mmx330mm)
Backlight lamp life	Min 40,000 hours to half brightness
Agency approvals	UL/cUL (*recognized component), FCC, CE, VCCI, C-Tick, EN60950
Speakers (internal)	Two-watt/channel speakers in display head
User controls	Side: Power and user controls with lockout function for public use
Mounting options	75 mm VESA mount
Other features	Removable base Fanless User accessible hard drive Energy save mode (less than 2 watts) Touchscreen sealed to bezel and LCD Security lock receptacle
Peripheral Options and Upgrades	May vary

COM1, COM2 Connector(RS232 Mode)



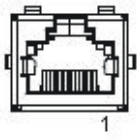
Pin #	Signal Name
1	Ground
2	Receive Data (RD)
3	Clear to send (CTS)
4	Signal ground
5	Transmit Data (TD)
6	Request to Send (RTS)
7	+5 vdc
8	+5 vdc return

RS422 Mode Pin Definition(for COM2 only)



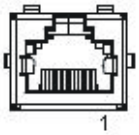
Pin #	Signal Name
1	Ground
2	TX+
3	TX-
4	Signal ground
5	RX+
6	RX-
7	+5 vdc
8	+5 vdc return

RS485 Mode Pin Definition(for COM2 only)



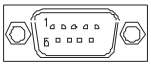
Pin #	Signal Name
1	Ground
2	DATA+
3	DATA-
4	Signal ground
5	
6	
7	+5 vdc
8	+5 vdc return

RJ45 connector Pin Definition



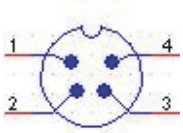
Pin #	Signal Name
1	
2	Receive Data (RD)
3	Clear to Send (CTS)
4	Signal Ground
5	Transmit Data (TD)
6	Request to send
7	
8	

DB9 connector Pin Definition



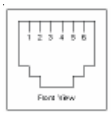
Pin #	Signal Name
1	
2	Receive Data (RD)
3	Transmit Data (TD)
4	
5	Signal Ground
6	
7	Request to send
8	Clear to Send (CTS)
9	

Power Input Pin Definition



Pin #	Signal Name
1	+12V
2	Ground
3	Ground
4	+12V

Cash Drawer Port Signal Definition and Control



Pin #	Signal Name
1	Frame Ground
2	CD 1 Drawer kick-out drive signal 1
3	SW (+) connected on the side of the open/closed detection switch on the drawer
4	L (+) +12V DC for drawer kick-out supplied
5	CD 2 Drawer kick-out drive signal 2
6	(-) Ground

Control

Below is the source code of the test application showing how the cash drawer port is implemented. The cash drawer is controlled by two GPIOS to open the drawer and one GPIO to read back status.

```
*/
#include <stdio.h>
#include <conio.h>
#include <time.h>

#define GPIO_BASE     0x480
#define          PMBASE                    0x800
#define GPE0_STS3     PMBASE + 0x2B
#define          GP_LVL3                   GPIO_BASE + 0x0F
#define          GPIO_2          0x08
#define          GPIO_3          0x10
#define CASH_STS_MSK          0x20
#define DRAWER1               0x01
#define DRAWER2               0x02
void Sleep(clock_t t);
int open_drawer(int drawer);
/*
═══════════════════════════════════════════════════════════════
 Function:
 Parameters:
 Return:
 Exit:
 Description:
═══════════════════════════════════════════════════════════════
```

```
*/

int main(int argc, char *argv[])
{
    printf("\nELO SBC6 Cash Drawer Demo.\n");
        if( is_open() )
        printf("\nCash register is open.\n");
    else
        printf("\nCash register is closed.\n");
        printf("\nOpening Cash Drawer 1.\n");
    open_drawer(DRAWER1);
    printf("\nOpening Cash Drawer 2.\n");
    open_drawer(DRAWER2);
    if( is_open() )
        printf("\nCash register is open.\n");
    else
        printf("\nCash register is closed.\n");
    return(0);
}
/*
═══════════════════════════════════════════════════════════════════════
  Function:
  Parameters:
  Return:
 Exit:
  Description:
═══════════════════════════════════════════════════════════════════════
*/
int is_open(void)
{
    int data = 0;/* Chipset register data */
    /* Clear status register. */
        _outp(GPE0_STS3,CASH_STS_MSK);
    Sleep(10);
    /* Read status register. */
        _inp(GPE0_STS3);
    data &= CASH_STS_MSK;
    data >>= 5;
    return(data);
}
```

```
/*
=============================================================================
Function:
  Parameters:
  Return:
 Exit:
  Description:

=============================================================================
*/
int open_drawer(int drawer)
{
    int data = 0;              /* Chipset register data */
    int status = 0;                    /* Cash drawer status signal */
        /* Get current cash drawer status. */
        status = is_open();
    if( status ) {
        printf("\nCash Register is already open.\n");
        return(1);
    }
        /* Toggle cash drawer signals - low pulse. */
        data = _inp(GP_LVL3);
    if( drawer == DRAWER1 )
        data &= ~GPIO_2;
if( drawer == DRAWER2 )
        data &= ~GPIO_3;
    _outp(GP_LVL3,data);
        Sleep(50);
    if( drawer == DRAWER1 )
        data |= GPIO_2;
    if( drawer == DRAWER2 )
        data |= GPIO_3;
    _outp(GP_LVL3,data);
    return(1);
}
void Sleep(clock_t t)
{
    clock_t t2;
    t2 = t + clock();
        while( t2 > clock() );
}
```

Display Specifications

Model	15A1
LCD Display	15" TFT Active Matrix Panel
Display Size	304.1(H) x 228.1(V) mm
Pixel Pitch	0.297(H) x 0.297(V) mm
Display Mode	VGA 640 x 350 (70 Hz)
	VGA 720 x 400 (70 Hz)
	VGA 640 x 480 (60 / 72 / 75 Hz)
	SVGA 800 x 600 (56 / 60 / 72 / 75Hz)
	XGA 1024 x 768 (60 / 70 / 75Hz)
Native	XGA 1024 x 768
Contrast Ratio	500 : 1 (typical)
Brightness	
LCD	250 cd/m^2 (Typical)
AccuTouch	200 cd/m^2 (Typical)
IntelliTouch	230 cd/m^2 (Typical)
CarrollTouch	230 cd/m^2 (Typical)
Response Time	Tr= 2 msec, Tf= 6 mesc typical
Display Color	16.2 million color
Viewing Angle	(L/R)= -70^o/+10^o (typical), (U/D) -60^o/+65^o (typical)
Plug & Play	DDC1 / 2B
Touch Panel (optional)	AccuTouch, IntelliTouch and CarrollTouch,

Power Supply Specifications

The touchcomputer shall be powered by 12VDC from a universal type power supply brick with the following characteristics:

Input voltage	100 to 240 V~
Input frequency	50/60 Hz
Output voltage	12 V
Output line and load regulation	+/- 5%
Output current	10 Amps minimum

Touchscreen Specifications

Available with Accutouch five-wire resistive (AT), and IntelliTouch surface-wave technology. For detailed specifications, please visit our website at www.elotouch.com. Note: Touch options may vary depending on region.

Peripherals Specifications

Magnetic Stripe Reader (MSR)

The MSR is a USB 1.1 device which reads all three data stripes on standard credit cards or driver's licenses conforming to ISO/ANSI standards. The MSR will have foreign language capability. The credit card is read by sliding the credit card through the MSR, stripe side toward the display, forward or backward. The MSR is powered from the USB port; no external power is needed. Here are its specifications:

- Power source: from USB port
- Message format: ASCII
- Card speed: 3 to 50 IPS
- Electronics MTBF: 125,000 hours
- Mechanical MTBF: 1,000,000 passes
- Operating current: 30 mA maximum
- Non-operating current: 300u maximum

Customer Display

The Customer Display is a twenty character two line vacuum fluorescent display (VFD). It consists of a VFD and VFD controller.

USB Version

Optional Parameters	
Characters per row	20
Number of rows	2
Character configuration	5x7 dot matrix
Character Height	9.5mm
Character width	6.2mm
Character configuration	ASCII
Character color	Blue green
MTBF	300,000 hours

Environmental Specifications

Temperature Ranges

Operating Temperature (Independent of altitude)	0°C to 35°C
Non-Operating Temperature (Independent of altitude)	-30°C to 60°C

Humidity

Operating (non-condensing)	20% to 80%
Non-Operating (38.7 °C maximum wet bulb temperature)	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.

CHAPTER

6

Technical Support

Technical Assistance

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 the support information by going to the System Properties and clicking on 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 on the "**Start Button**" and select "**control panel**" and Double click on the "**System**" icon .

Using the Web

www.elotouch.com/go/contactsupport

Using the Phone

Call toll-free 1-800-557-1458

Regulatory Information

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 will likely result in improper operation, damage to the equipment or pose a fire hazard if the limitations 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 use an adapter plug to connect to a 2-wire outlet as this will defeat 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 mains 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 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 55 022 Class A and the Low Voltage Directive 73/23/EEC as indicated in European Standard EN 60 950.

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 line 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.

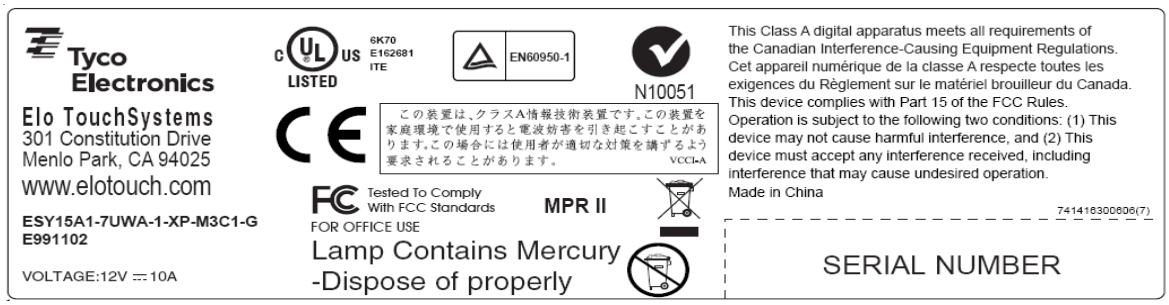
v) Disconnect and remove any I/O cables that the digital device does not use. (Unterminated I/O cables are a potential source of high RF emission levels.)

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. Safety Label

The following marks have been issued for the unit and appear on the safety label as shown in the illustration below:



Warranty

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. The warranty for the touchcomputer and components of the product is regional; please contact your regional office. For contact information, see page 50 or go to www.elotouch.com.

Seller makes no warranty regarding the model life of components. Seller 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.

Check out Elo's Website!

www.elotouch.com

Get the latest...

- ***Product information***
- ***Specifications***
- ***News on upcoming events***
- ***Press release***
- ***Software drivers***
- ***Touchmonitor Newsletter***

Getting in Touch with Elo

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

North America
Elo TouchSystems
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Menlo Park, CA 94025
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