

ēlo

ēlo



USER MANUAL

**Elo Touch Solutions
ET1517L and ET1717L Touchmonitors**

SW601708 Rev G



Copyright © 2018 Elo Touch Solutions, Inc. All Rights Reserved.

No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, including, but not limited to, electronic, magnetic, optical, chemical, manual, or otherwise without prior written permission of Elo Touch Solutions, Inc.

Disclaimer

The information in this document is subject to change without notice. Elo Touch Solutions, Inc. and its Affiliates (collectively "Elo") makes no representations or warranties with respect to the contents herein, and specifically disclaims any implied warranties of merchantability or fitness for a particular purpose. Elo reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of Elo to notify any person of such revisions or changes.

Trademark Acknowledgments

AccuTouch, CarrollTouch, Elo, Elo (logo), Elo Touch, Elo Touch Solutions, Elo TouchSystems, IntelliTouch, iTouch, SecureTouch, TouchTools and VuPoint are trademarks of Elo and its Affiliates. Windows is a trademark of Microsoft Corporation.



Table of Contents

Chapter 1: Introduction	4
Chapter 2: Installation	5
Chapter 3: Mounting	7
Chapter 4: Operation	13
Chapter 5: Technical Support	18
Chapter 6: Safety & Maintenance	20
Chapter 7: Regulatory Information	22
Chapter 8: Warranty Information	28



Chapter 1: Introduction

Product Description

Your new touchmonitor combines the reliable performance of Elo Touch Solutions touch products with the latest developments in touch technology and display design. This combination of features creates a natural flow of information between the user and the touchmonitor.

This touchmonitor incorporates a 16.2M color, active matrix thin-film-transistor LCD panel to provide high quality display performance. Its LED backlight significantly reduces power consumption and eliminates mercury (compared to CCFL-backlit panels). Other features that enhance this LCD monitor's performance are Plug & Play compatibility, on-screen display (OSD) controls, and an optional magnetic stripe reader (MSR).

Precautions

Follow all warnings, precautions and maintenance as recommended in this user manual to maximize the life of your unit, to ensure user safety, and to prevent risks. See the Safety & Maintenance chapter for more information.

This manual contains information that is important for the proper setup and maintenance of the unit. Before setting up and powering on your new touchmonitor, read through this manual, especially the Installation, Mounting, and Operation chapters.



Chapter 2: Installation

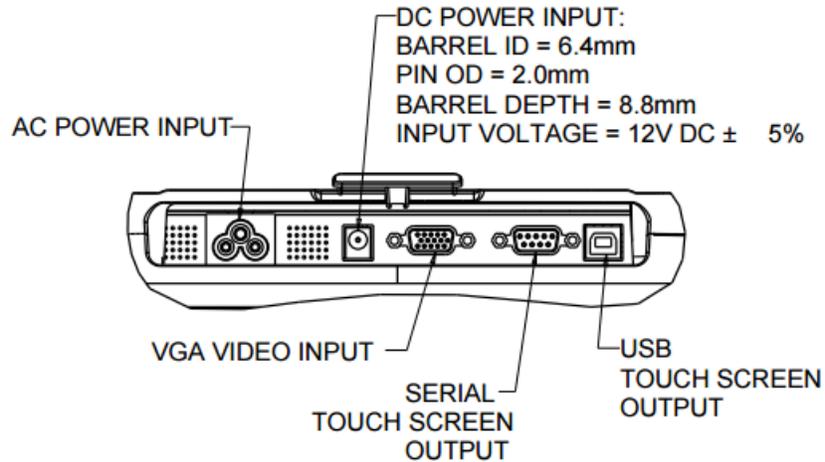
Unpacking the Touchmonitor

Open the carton and verify that the following items are present:

- Touchmonitor with protective sheet over touchscreen
- User Manuals CD
- Japanese language regulatory information pamphlet
- Quick Install Guide
- VGA cable
- USB cable
- North American power cable
- European power cable
- Filler plate (White or Black, depends on the monitor color)



Connector Panel & Interfaces



Touchmonitor Connections

1. Connect the VGA video cables between the monitor's VGA input connectors and your VGA video source, respectively. Tighten the video cable's screws for best performance.
2. Connect the USB/serial touch cable between the monitor's USB/serial connector and your PC's USB/serial port.
3. Select the correct power cable for your region. Connect the power cable between the AC power source and the monitor's AC input power jack.
4. Alternatively, if you have purchased an optional power adapter and elected to use it, connect the cable between the AC power source and the optional power adapter's input connector. Connect the power adapter's DC output connector to the monitor's DC input power jack.
5. The touchmonitor ships in an OFF state. Press the power button to turn it on.



Installing the Touch Technology Software Drivers

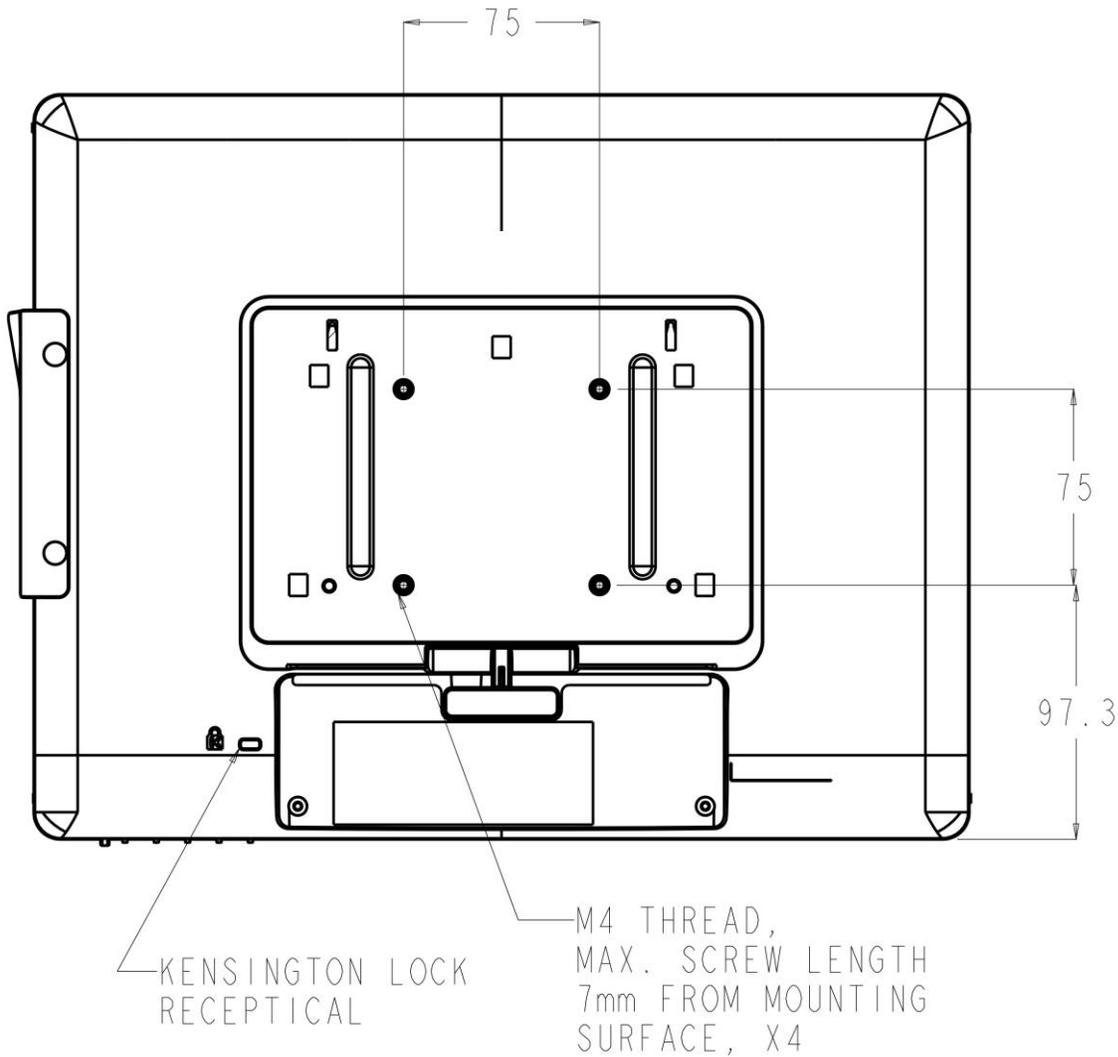
Some software installation is required for your touchmonitor to work with your computer. No additional drivers are required for your projected-capacitive touchmonitor, it uses Windows HID drivers.

To download latest touch drivers

1. Visit www.elotouch.com/Support/Downloads/Driver/DriverDownload/Default.aspx
2. Select the operating system from “Operating System” dropdown menu.
3. Select the technology from “Technologies” dropdown menu.
4. Click on the driver version required for your touchmonitor.
5. Click “Accept” once you are directed to the “Driver License Agreement” page.
6. Enter you email address, Click on “Next Step”. Your driver download will start automatically.
7. If you are a new user, fill in the required information and Click on “Register”. Your driver download will start automatically.

Rear VESA Mount

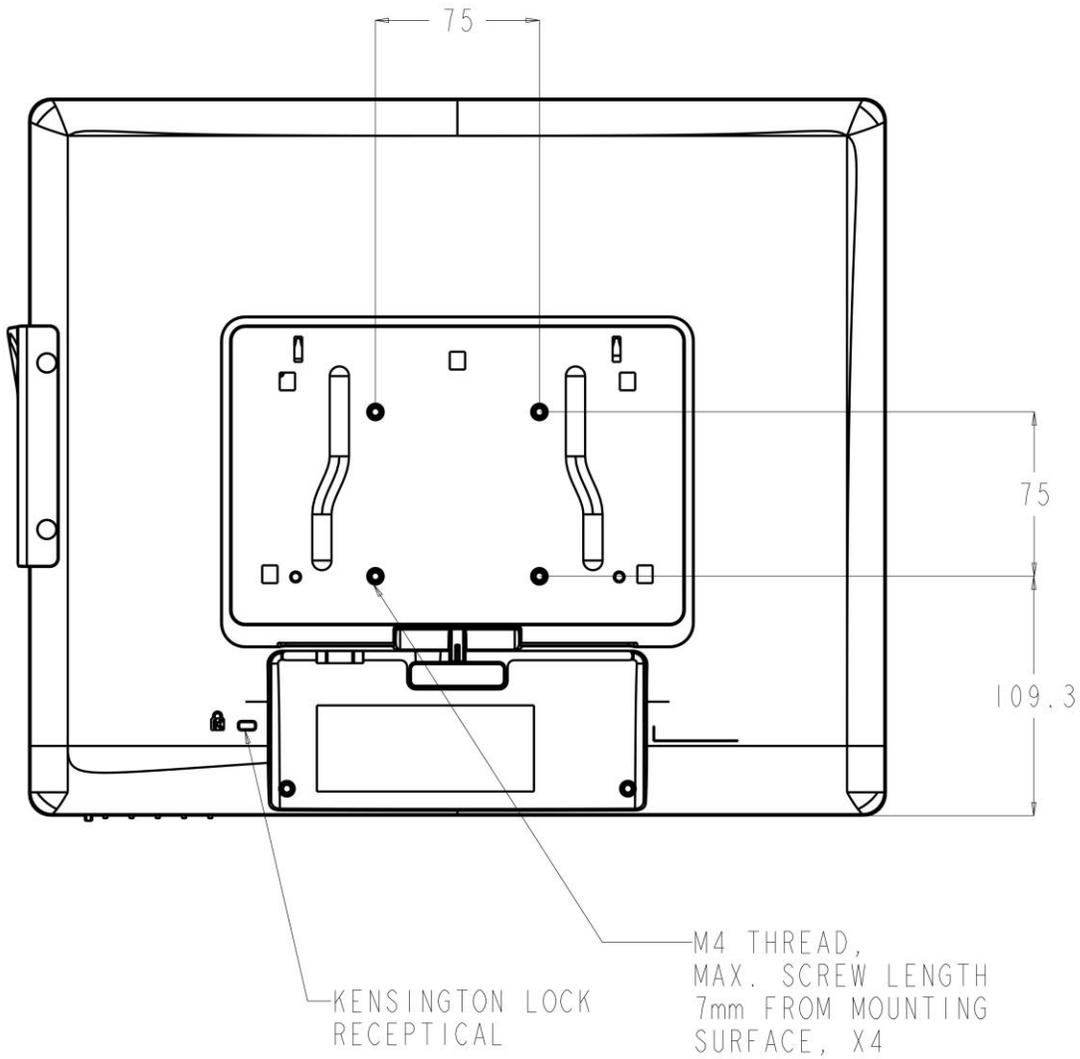
For the 15 inch touchmonitor, a four-hole 75x75mm mounting pattern for M4 screws is provided on the rear of the monitor. Remove the stand using a Phillips screwdriver to access this mounting interface. The VESA FDMI-compliant counting is coded: VESA MIS-B, 75, C.



For the 17 inch touchmonitor, a four-hole 75x75mm mounting pattern for M4 screws is provided on the rear of the monitor. Remove the stand using a Phillips screwdriver to access this



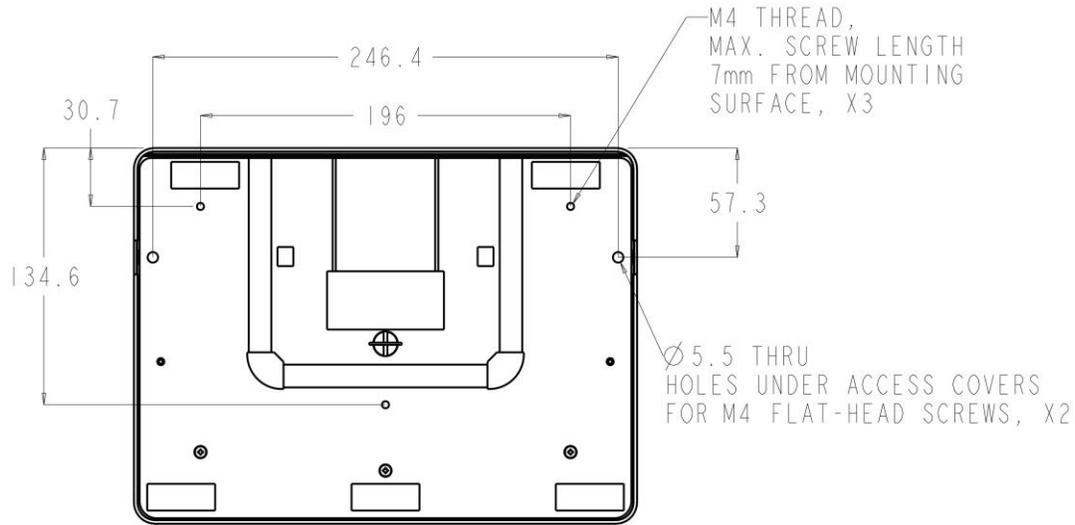
mounting interface. The VESA FDMI-compliant counting is coded: VESA MIS-B, 75, C.





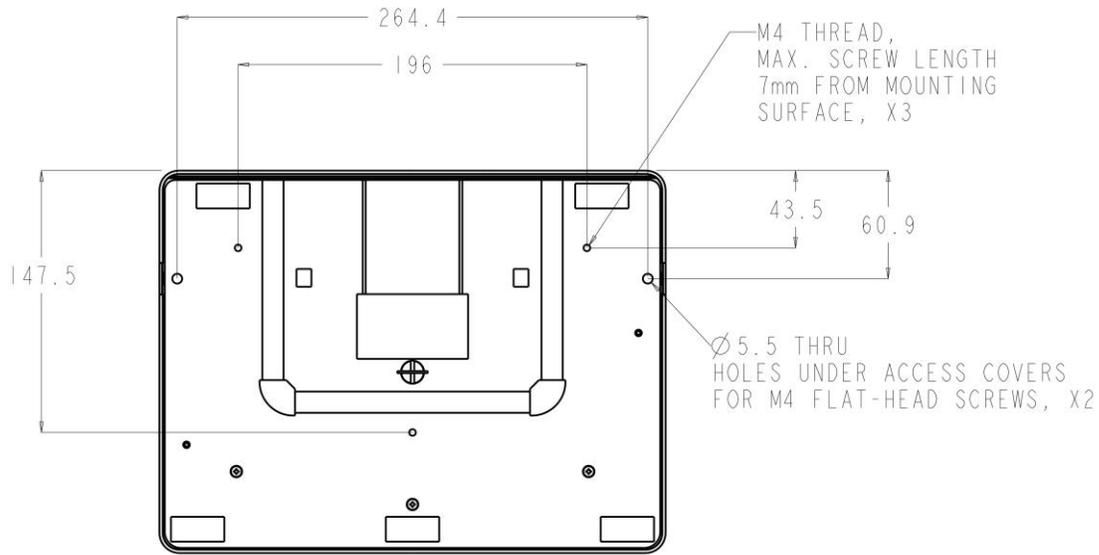
Base Mount

For the 15 inch touchmonitor, a threaded three-hole mounting pattern for M4 screws is provided on the bottom of stand base for mounting or securing. An additional two-hole pattern is available under small caps on the top of the base. See page 15 for instructions on how to access holes.



1517 STAND BOTTOM VIEW

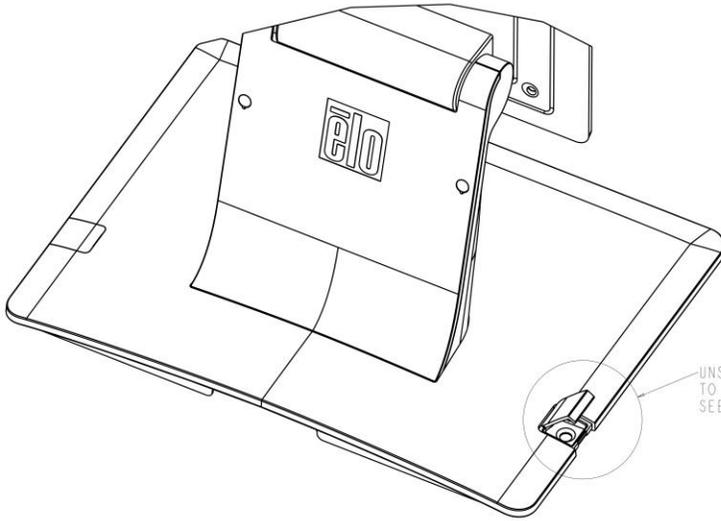
For the 17 inch touchmonitor, a threaded three-hole mounting pattern for M4 screws is provided on the bottom of stand base for mounting or securing. An additional two-hole pattern is available under small caps on the top of the base. See page 15 for instructions on how to access holes.



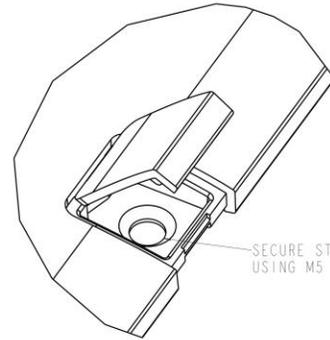
1717 STAND BOTTOM VIEW

Both the 15" and 17" touchmonitors have covered mounting holes for securing the stand to a flat surface using M4 flathead screws. To utilize these mounting holes, unsnap the access covers from the outside, install the screws into the holes and then snap the cover back into place.

elo



UNSNAP COVERS ON EACH SIDE
TO REVEAL MOUNTING HOLE
SEE DETAIL A



SECURE STAND TO TABLE
USING M5 FLATHEAD SCREW, X2

DETAIL A
SCALE 3.000



Chapter 4: Operation

Power

To turn the touchmonitor on or off, press the touchmonitor power button once.

The Power Status LED on the bottom of the touchmonitor functions according to the following table:

Touchmonitor status	LED status
OFF	OFF
SLEEP	PULSING
ON	ON

The system consumes low power when in SLEEP and OFF modes. For detailed power consumption specifications, refer to the technical specifications available on the Elo website www.elotouch.com.

Touching the screen will bring the attached host PC out of SLEEP mode (similar to moving the mouse or pressing a keyboard key).

To improve reliability and reduce wasteful power consumption, disconnect the power adapter when long periods of disuse are planned.

Touch

Your touchmonitor is factory-calibrated and should not need manual calibration (unless the input video is not fully scaled to the native resolution, or the touch experience needs to be calibrated to a specific user).



Video

A display's native resolution is its width and height measured in number of pixels. Generally, for best performance, an image displayed on this monitor will look best when your computer's output resolution matches this monitor's native resolution, which is 1024 x 768 for the 15 inch, or 1280 x 1024 for the 17 inch.

For computer output resolutions at non-native resolutions, the monitor will scale the video to its panel's native resolution. This involves stretching or compressing the input image as needed in the X- and Y-dimensions to fit the display's native resolution. An unavoidable byproduct of the scaling algorithms is a loss of fidelity when the computer's output video image is scaled by the monitor to fit the display. This loss of fidelity is most apparent when viewing feature-rich images at close distances (for example images containing small-font text).

Your touchmonitor will likely not require video adjustments. However, for analog VGA video, variations in video graphic card outputs may require user adjustments through the OSD to optimize the quality of the touchmonitor's displayed image. These adjustments are "remembered" by the touchmonitor. Also, to reduce the need for adjustments for different video mode timings, the monitor correctly scales and displays some of the video industry's most common video timing modes. Refer to the technical specifications for this monitor at <http://www.elotouch.com> for a list of these Preset Video Modes.

On-Screen Display (OSD)

Four OSD buttons are on the bottom of the monitor. These can be used to adjust various display parameters.



The buttons and their functionality are:



Button	Function when OSD is not displayed:	Function when OSD is displayed:
Menu	Display OSD main menu	Return to previous OSD menu
◀	Display OSD Brightness submenu	Decrease value of selected parameter / select previous menu item
▶	Display OSD Contrast submenu	Increase value of selected parameter / select next menu item
Select	Auto Adjust	Select parameter for adjustment / select submenu to enter



The OSD buttons control an on-screen graphical user interface, which displays on top of your input video. This allows for intuitive adjustment of the following display parameters:

Parameter	Available Adjustment
Brightness	Increase/decrease monitor brightness Default: Maximum
Contrast	Increase/decrease monitor contrast Default: Best gray-shade performance
Clock	Allows fine adjustments of the panel's pixel dot clock <i>Only applicable for VGA input video</i>
Phase	Allows fine adjustments of the panel's pixel dot clock phase <i>Only applicable for VGA input video</i>
Auto Adjust	Automatically adjusts the system clock to the input analog VGA video signal, affecting the H-position, V-position, Clock, and Phase menu items <i>Only applicable for VGA input video</i>
H-position	Moves the image horizontally on the display in single-pixel increments Default: Centered <i>Only applicable for VGA input video</i>
V-position	Moves the image vertically on the display in single-pixel increments Default: Centered <i>Only applicable for VGA input video</i>
Sharpness	Adjusts sharpness of the displayed images Default: No sharpness adjustment <i>Only applicable at non-native input video resolutions</i>
Color Temperature	Selects the display's color temperature. The available color temperatures are 9300K, 7500K, 6500K, 5500K, and User Defined. If the User Defined option is selected, the user can change the color temperature by changing individual R, G, and B gains on a scale from 0 to 100. Default: User Defined with R, G, and B all set to 100
OSD Timeout	Adjusts how long a period of OSD button inactivity the touchmonitor will wait before closing the OSD. The adjustable range is between 5 and 60 seconds. Default: 15 seconds
OSD Language	Selects which language the OSD information is displayed in. The available languages are: English, French, Italian, German, Spanish, Simplified Chinese, Traditional Chinese, and Japanese Default: English
Recall Defaults	Selecting "Recall Defaults" restores all factory default settings for OSD-adjustable parameters (except OSD Language) and for Preset Video Mode timings.
Video Source	The monitor continually scans for active video on the VGA and DVI connectors. This adjustment selects which of those input ports should be given priority to be displayed. The options are: VGA Priority, DVI Priority Default: DVI Priority



All touchmonitor adjustments made through the OSD are automatically memorized as soon as they are entered. This feature saves you from having to reset your choices every time the touchmonitor is unplugged or powered off and on. If there is a power failure, the touchmonitor settings will not default to the factory specifications.

OSD and Power Lockouts

Press and hold the “Menu” and “Down” buttons for two seconds to enable/disable the OSD Locking feature. When the OSD Locking is enabled, pressing any of the Menu, Up, Down, or Select keys will have no effect on the system.

Press and hold the “Menu” and “Up” buttons for two seconds to enable/disable the Power Locking feature. When the Power Locking is enabled, pressing the power switch will have no effect on the system.



Chapter 5: Technical Support

If you are experiencing trouble with your touchmonitor, refer to the following suggestions.

If the problem persists, please contact your local dealer or contact Elo Touch Solutions Customer Service.

Solutions to Common Problems

Problem	Suggested Troubleshooting
The touchmonitor does not respond when turning on the system	Check that the DC power adaptor is properly connected Verify the DC power adaptor is functioning
Monitor display is dim	Use the OSD to increase the brightness Use the OSD to increase the contrast
Monitor display is blank	If the Power Status LED is blinking, the monitor may be in SLEEP mode. Press any key / move the mouse / touch the Touchscreen to see if the image reappears Check that the signal source device is turned on Check that that there are no loose cable connections
Monitor displays an “Out Of Range” message	Adjust your computer’s resolution/timing mode to be within the allowable timing ranges specified for your touchmonitor (see website for specifications)
Monitor display image looks abnormal	Adjust your computer’s resolution/timing mode to be within the allowable timing ranges specified for your touchmonitor (see website for specifications) Use the Auto Adjust function in the OSD
Touch functionality doesn’t work	Verify your PC has the latest Elo drivers installed Perform the calibration routine provided with the latest Elo drivers
The OSD buttons or power button does not respond when pressed	Check to see if the OSD lock or power lock functions are on



Technical Assistance

Visit www.elotouch.com/products for technical specifications for this device

Visit www.elotouch.com/go/websupport for online self-help.

Visit www.elotouch.com/go/contactsupport for technical support.

See this user manual's last page for worldwide technical support phone numbers.



Chapter 6: Safety & Maintenance

Safety

To avoid risk of electric shock, follow all safety notices and do not disassemble the touchmonitor. They are not user-serviceable.

Ensure that your installation is equipped to maintain the specified environmental conditions listed in the Technical Specifications chapter.

Care and Handling

The following tips will help keep your touchmonitor functioning at an optimal level:

- Disconnect the AC power cable before cleaning.
- To clean the display unit cabinet, use a clean cloth lightly dampened with a mild detergent.
- It is important that your unit remains dry. Do not get liquids on or inside the unit. 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 applied to a clean cloth or sponge. Never apply the cleaner directly to the touchscreen. Do not use alcohol (methyl, ethyl or isopropyl), thinner, benzene, or other abrasive cleaners.



Waste Electrical & Electronic Equipment Directive (WEEE)



This product should not be disposed of with household waste. It should be deposited at a facility that enables recovery and recycling. Ensure that product is disposed at the end of its useful life according to local laws and regulation.

Elo has put in place recycling arrangements in certain parts of the world. For information on how you can access these arrangements, please visit <http://www.elotouch.com/AboutElo/ewaste-program/>.



Chapter 7: Regulatory Information

I. Electrical Safety Information:

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.

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.

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

Notice to Users in the United States:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice to Users in Canada:

This equipment complies with the Class B limits for radio noise emissions from digital apparatus as established by the Radio Interference Regulations of Industrial Canada.



CAN ICES3(B)/NMB3(B)

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage; et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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 2014/30/EU as indicated in European Standard EN 55032 Class B and the Low Voltage Directive 2014/35/EU as indicated in European Standard EN 60950-1.

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.

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.)

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



2 November 2018

FCC Declaration of Conformity

Per FCC 47 CFR FCC Part15 subpart B Section 2.1077(a)
In accordance with FCC Rules and Regulations

Model Number: ET1515L/ET1715L/ET1915L Series

Equipment Category: Information Technology and Telecommunications Equipment

Equipment Class: Commercial and Light Industrial

Product Name: Monitor

Manufacturer: Elo Touch Solutions, Inc.
670 N. McCarthy Blvd.
Suite 100
Milpitas, CA 95035
www.elotouch.com

Trademark:



Declaration:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

Kevin Huang
Director, Systems Engineering
Elo Touch Solutions, Inc.

III. Agency Certifications

The following certifications and marks have been issued or declared for this monitor:

Australia RCM	Japan VCCI	United States FCC, UL
Canada CUL, IC	Korea KC	
China CCC	Mexico CoC	
Europe CE	Taiwan BSMI	

IV. China RoHS

In accordance to Chinese law (Administration on the Control of Pollution Caused by Electronic Information Products), the section below lists out the name and amount of the toxic and/or hazardous materials that this product may contain.

Component Name	Toxic or Hazardous Substances and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr6+)	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Plastic Parts	O	O	O	O	O	O
Metal Parts	X	O	O	O	O	O
Wire and Cable Assembly	X	O	O	O	O	O
LCD Panel	X	O	O	O	O	O
Touch Screen Panel	X	O	O	O	O	O
PCBA	X	O	O	O	O	O
Software (CD, etc.)	O	O	O	O	O	O

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this component is below the limit requirement in SJ/T11363-2006.
X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this component is above the limit requirement in SJ/T11363-2006. For items marked with X, exemptions were taken according to EU RoHS.

Explanation of Markings

(1). In accordance with the SJ/T11364-2006 requirement, the electronic information products are marked with the following pollution control logo. The Environment-Friendly Use Period for this product is 10 years. The product will not leak or mutate under normal operating conditions listed below, so that the use of this electronic information product will not result in any severe environmental pollution, any bodily injury, or damage to any assets.

Operating Temperature:0-40 / Humidity:20%-80% (non-condensing).



Storage Temperature:-20~60 / Humidity:10%~90% (non-condensing).



(2). It is encouraged and recommended that this product be recycled and reused according to local laws. The product should not be thrown away casually.



V. Power Adapter Specifications

Electrical Ratings: Input: 100-240VAC, 50/60Hz
 Output: 12VDC, minimum 4.16A, LPS

VI. Monitor Specifications

Electrical Ratings: Input 1517L: 100-240VAC, 50/60Hz, 0.3A or 12VDC, 2.5A
 Input 1717L: 100-240VAC, 50/60Hz, 0.5A or 12VDC, 2.5A

Operating Conditions: Temperature: 0°C - 40°C
 Humidity: 20% to 80% (non-condensing)
 Altitude: 0 to 3,048m

Storage Conditions: Temperature: -20°C - 60°C
 Humidity: 10% to 90% (non-condensing)
 Altitude: 0 to 12,192m



Chapter 8: Warranty Information

See <http://www.elotouch.com/Support/warranty.asp> for more information



Check out Our Website!

www.elotouch.com

Get the latest...

- Product Information
- Specifications
- Upcoming events
- Press releases
- Software drivers

Getting in Touch with us

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

North America

Tel +1 408 597 8000
Fax +1 408 597 8001
customerservice@elotouch.com

Europe

Tel +32 (0)16 70 45 00
Fax +32 (0)16 70 45 49
elosales@elotouch.com

Asia-Pacific

Tel +86 (21) 3329 1385
Fax +86 (21) 33291400
www.elotouch.com.cn

Latin America

Tel 786-923-0251
Fax 305-931-0124
www.elotouch.com

Copyright 2017 Elo Touch Solutions, Inc. All rights reserved.