

# USER MANUAL

**Elo** Temperature Sensor Pro



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## **Section 1: Introduction**

### Product Description

Utilizing an infrared bolometer (thermometer) and 2D camera, the Elo AccessTM Temperature Sensor Pro offers heatmap temperature reading. With no alignment needed, the temperature sensor can detect a face, automatically adjust based on height and output temperature data for each person detected in the field of view (FOV).

#### Precautions

Follow all warnings, precautions and maintenance as recommended in this user manual to maximize the life of your unit and prevent risks to user safety. See Section 5 for more information on safety.

This manual contains information that is important for the proper setup of the Temperature Sensor Pro. Before setting up and powering on your new Temperature Sensor Pro, read through this manual, especially the Installation, configuration, and operation chapters.

## **Section 2: Installation**

## Unpacking the Temperature Sensor Pro

Verify that the box contains:

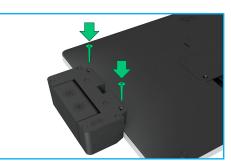
- Temperature Sensor Pro
- Quick Install Guide
- 2 mounting screws
- 2 screw covers
- 1 cable

#### Installing the Temperature Sensor Pro

Follow steps 1 through 6 to connect the Temperature Sensor Pro to the Edge Connect port on the display. Once complete, connect the power splitter to the display.



1. Some systems have more than one mounting option. Select the top location to mount the Temperature Sensor Pro.



4. Install the 2 flat head screws included with the Temperature Sensor Pro.



2. Remove the selected peripheral cover from the display head to expose the peripheral bay.



 Remove the protective film from the included mylar covers and place the covers over the screws.



 Gently press the Temperature Sensor Pro into the peripheral bay making sure the connector is mated.

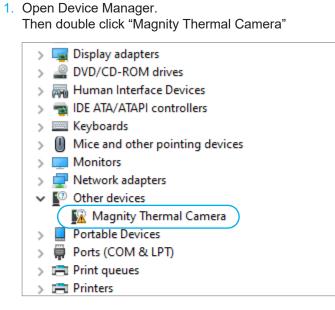


 Connect the micro-USB cable to another Edge Connect port to provide additional power for the Temperature Sensor Pro.

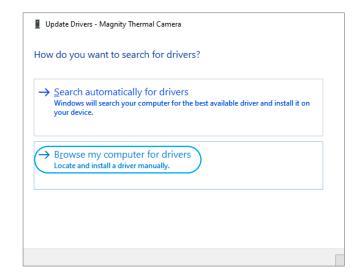
## Installing the Touch Technology Software Drivers

#### For use with Windows Systems:

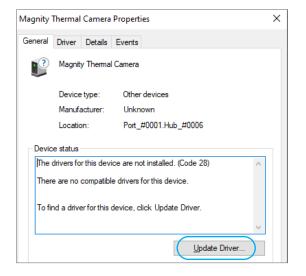
- Visit www.elotouch.com/products for technical specification for the driver to download and install.
- Temperature Sensor Pro Driver



3. Press "Browse my computer for drivers"



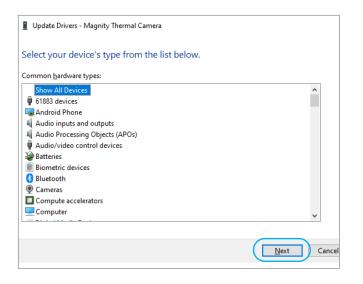
2. Press "Update Driver"



4. Press "Let me pick from a list of available drivers on my computer"

Update Drivers - Magnity Thermal Camera	
Browse for drivers on your computer	
Search for drivers in this location:          Image: Search for drivers in this location:         Image: Browse         Image: Search for drivers	
$\rightarrow$ Let me pick from a list of available drivers on my computer This list will show available drivers compatible with the device, and all drivers in the same category as the device.	)
Next	Cance

#### 5. Press "Next"



#### 7. Press "Next"

Update Drivers - Magnity Thermal Camera	
Select the device driver you want to install for this hard	ware.
Select the manufacturer and model of your hardware device ar disk that contains the driver you want to install, click Have Disk	
☑ Show <u>c</u> ompatible hardware	
Model	
🔄 Thermal Camera	
This driver is digitally signed.	Have Disk
Tell me why driver signing is important	<u>Have Disk</u>
tea me my arres signing is inpotente	
	Next Cance

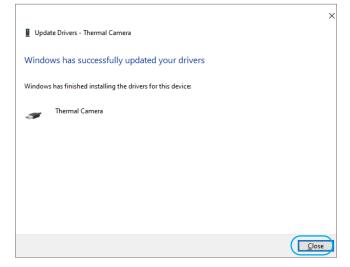
#### For use with Android systems

- Use the Temperature Sensor Pro in the default mode of the system.
- Run the application.

6. Press "Have Disk". Then in the pop-up dialog, select "Thermal\_Camera.inf"

nstall From Di	sk		×	
Locate File			×	Ī
Look in:	Elothermal 🗸	g 🏚 📂 🛄 🗸		n click Next. If you ha
Name	^	Date modified		
	_Camera.inf	9/14/2020 7:58 PM		
<			>	
File <u>n</u> ame:	Thermal_Camera.inf	<ul> <li>✓ <u>O</u>pen</li> </ul>		Have Disk
	Setup Information (*.inf)	Cancel		

8. After dialog shows "Windows has successfully updated your drivers", press "Close"



## **Section 3: Technical Specification**

#### Measurement Distance

Smart mode and expert mode are suggestions to software application. Customer is the development owner of software application.

Smart mode: Measure distance to customer: 24 inches Measure height of customer: 5 feet to 6.5 feet The Temperature Sensor Pro is able to auto adjust camera angle to detect object and read temperature data.

Expert mode: Measure distance to customer: 12 inches - 40 inches Measure height of customer: 5 feet to 6.5 feet The Temperature Sensor Pro is able to detect object and read temperature data in this range.

### Temperature

Temperature measurement range: 30°C – 45°C Temperature accuracy: +/- 0.5°C @ ambient temperature 20 - 30°C; 1°C @ ambient temperature > 30°C

## Section 4: Technical Support

### Technical Assistance

### **Technical Specifications**

visit **www.elotouch.com/products** for technical specifications for this device

Support

visit **www.elotouch.com/support** for online self-help and technical support

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

Contact us to get Windows and Android SDK for developers to use.

## Section 5: Safety

## 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.

Elo has put in place recycling arrangements in certain parts of the world. For information on how you can access these arrangements, please visit www.elotouch.com/e-waste-recycling-program/.

## Section 6: Regulatory Information

### **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.

## 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 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.

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 Industrial Canada.

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 A 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.

### Agency Certifications

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



## **Power Specifications**

Electrical Ratings					
Input	5VDC				
Operating Conditions					
Temperature	10°C-30°C				
Humidity	20% to 80% (non-condensing)				
Storage Conditions					
Temperature	-20°C - 50°C				
Humidity	5% to 95% (non-condensing)				

## Section 7: Warranty Information

For warranty information, go to https://www.elotouch.com/support/warranty

## **Section 8: Attention Information**

## Legal Disclaimer

The Elo Access Temperature Sensor Pro is not intended to diagnose, treat, cure, mitigate, or prevent any disease or health condition, including COVID-19. An indication of an elevated body temperature should be confirmed by a secondary evaluation method (such as a non-contact infrared thermometer or clinical grade contact thermometer). Use only as directed; various environmental and methodological factors can impact thermal imaging. HIPAA compliance is responsibility of user. This is not an FDA-approved device. Not available in all areas.

## Tips:

For wall-mount of 22 inch Elo displays, ensure effective space size (from rear shell to wall) >15 mm



The focal length of the camera is available by default. If it needs to be adjusted, please manually rotate the outer ring of the camera clockwise or counter clockwise.



For the accuracy of temperature, please use the Temperature Sensor Pro after turning it on for 5 minutes.

When the application is first launched, if the image has an X-axis and Y-axis offset, user needs to run the coordinate calibration function at a distance of 24 inches from the device, which relies on the ISV to match the image of the infrared camera with the image of the RGB camera.

Two ways to calibrate the Temperature Sensor Pro:

- Open the test application from Elo and press the "X+/X-/Y+/Y-" buttons to calibrate it.
- Use the software provided by ISV to calibrate it.



## Notes EloTouch.com

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Learn more about Elo at EloTouch.com.

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