



# USER MANUAL

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## **Elo Touch Solutions** USB Expansion Module



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# Section 1: Introduction

## Product Description

Elo USB Expansion Module can upgrade your system with Point-Of-Sale functionality. It comes with one 12/24V switchable 12V/24V cash drawer port, four USB to RS232 ports, three 12V powered USB ports, one 24V powered USB port, one USB to Ethernet port and one USB 2.0 port.

## 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 the Safety & Maintenance Section 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 module, read through this manual, especially the Installation and Operation Sections.

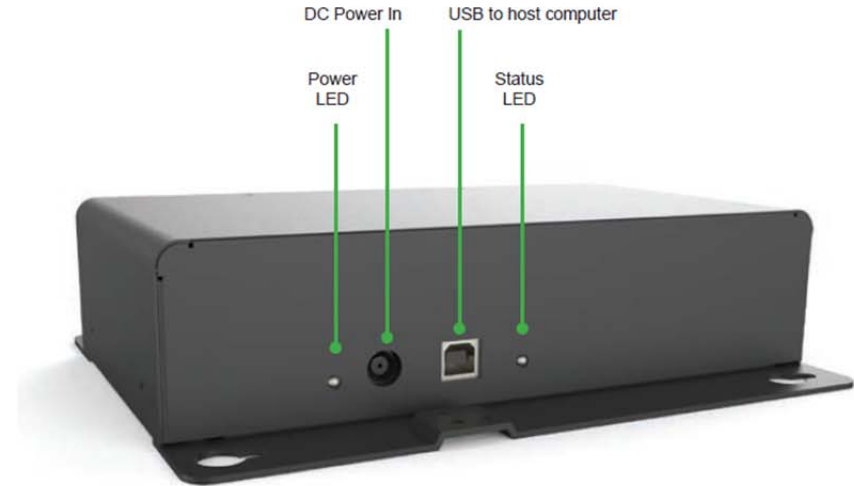
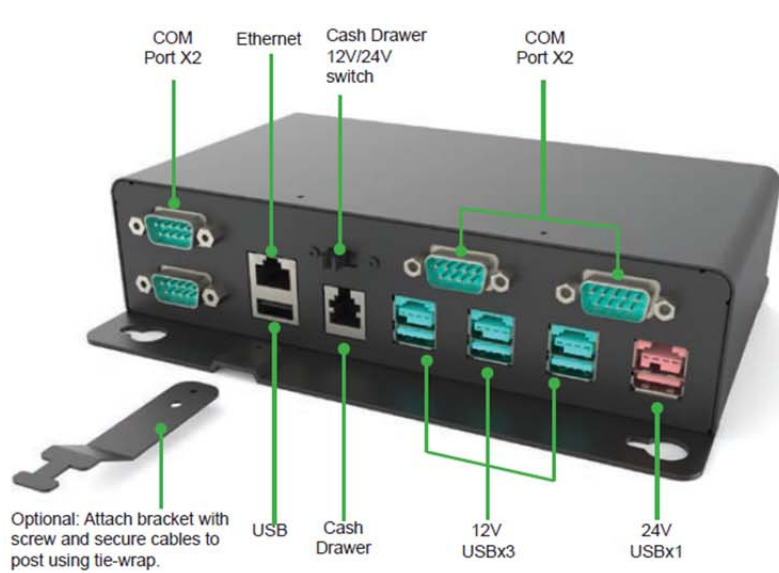
# Section 2: Installation

## Unpacking the Expansion Module

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

- Expansion Module
- Expansion Module Cable
- 19V 150W Power Adapter
- Quick Install Guide
- US AC cord and EU AC cord
- Module Mounting Brackets and their screws
- China RoHS flyer

## Connector Panel & Interfaces



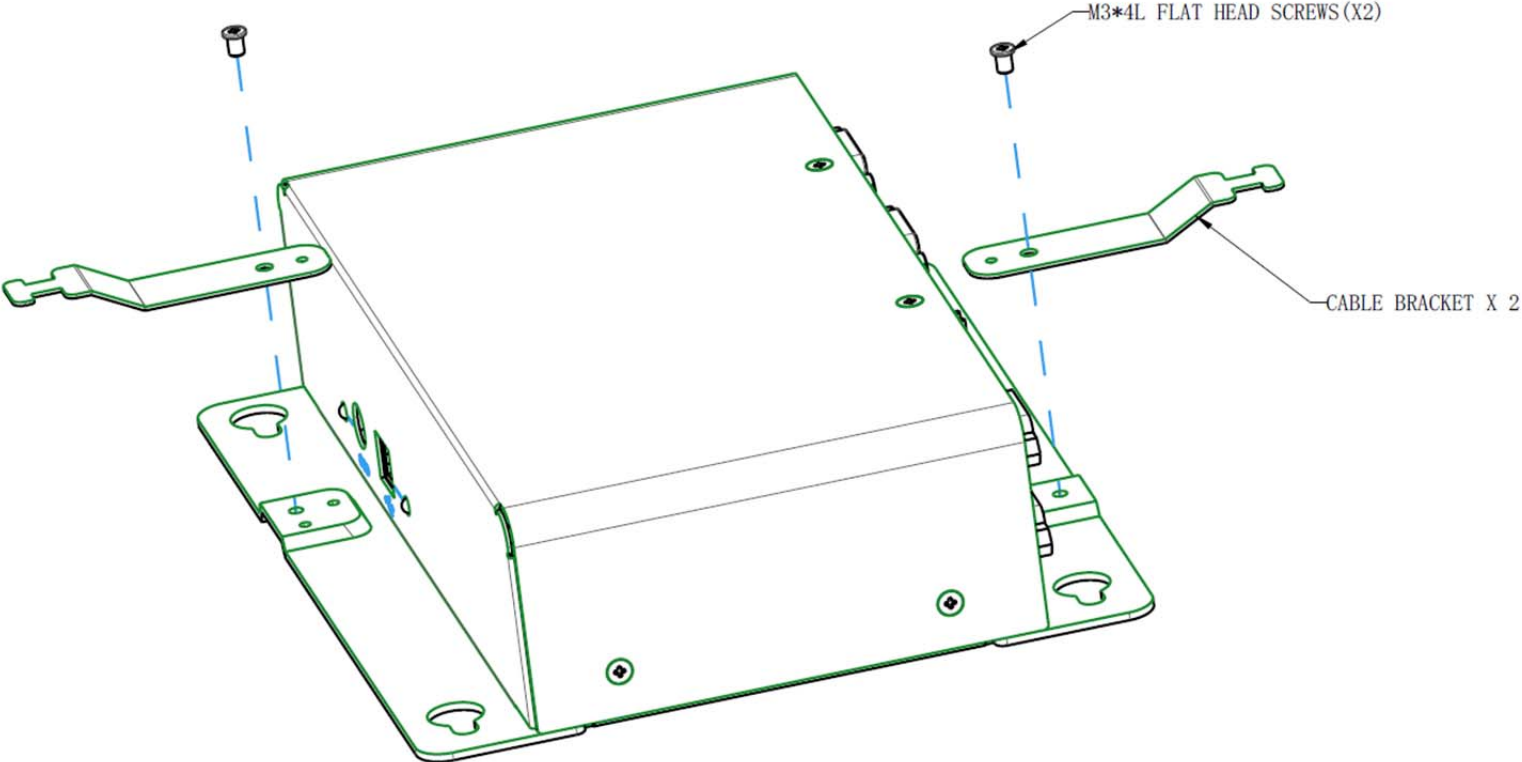
## Connecting to Your Host Computer

1. Connect the USB cable between your host computer and Type-B USB connector on the module
2. Connect the 19VDC power adapter to the module's input power jack.
3. Ensure both LED indicator lights are green which refer to connection successfully.

## Installing Cable Brackets

Follow the drawing below to install included screws and cable brackets to your module.

The brackets can be used for organizing cables.






# Driver Installation and Configuration for Your Expansion Module

## Required Materials:

- Elo touchcomputer as the host
- USB keyboard and mouse
- USB expansion module
- USB expansion module driver pack (<http://www.elotouch.com/Support/Downloads/dnld.asp>)

## Steps for installing drivers for Elo USB expansion module:

Download the driver pack from Elo Support download page. Then, install 3 drivers listed in below.

Name	Type	Size
 Cash Drawer Port UPOS Driver	File folder	
 Expansion Board Driver - CP2108	File folder	
 USB to Ethernet Driver - AX88178	File folder	

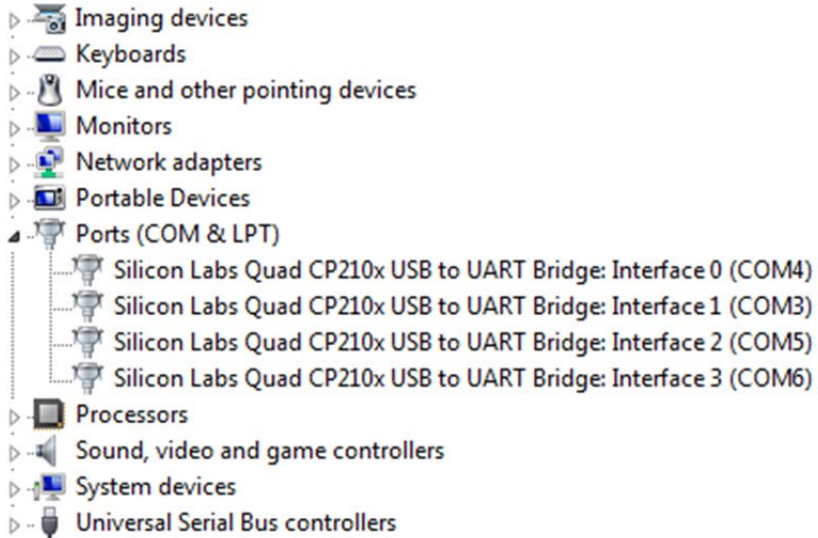
1. Cash Driver Port UPOS Driver folder contains OPOS and JPOS that enable the functionality of cash drawer port on the module.
2. Expansion Board Driver folder contains virtual COM port driver that drives 4 x USB-to-COM ports on the module.
3. USB to Ethernet Driver folder enables the Ethernet port on the module.

Note: Please ensure you install the corresponding driver version based on the computer specification. For example, Win7, Win8 or Win10; 32bit or 64bit.

**Steps for configuring COM ports for Elo USB expansion module:**

**Manual Configuration:**

1. Open "Device Manager" in Windows and you should see 4 x USB to COM interfaces as below.



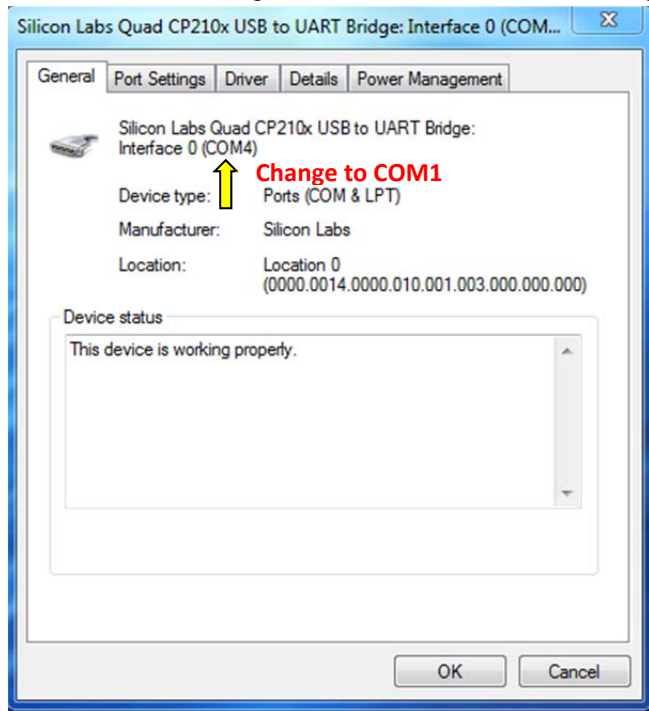
2. These COM ports may not be in order because it is converted via the USB interface. Please assign these ports manually to next available ports in order based on your configuration. Arranging to COM 1 to 4 will be demonstrated in below:

**This is an example:**

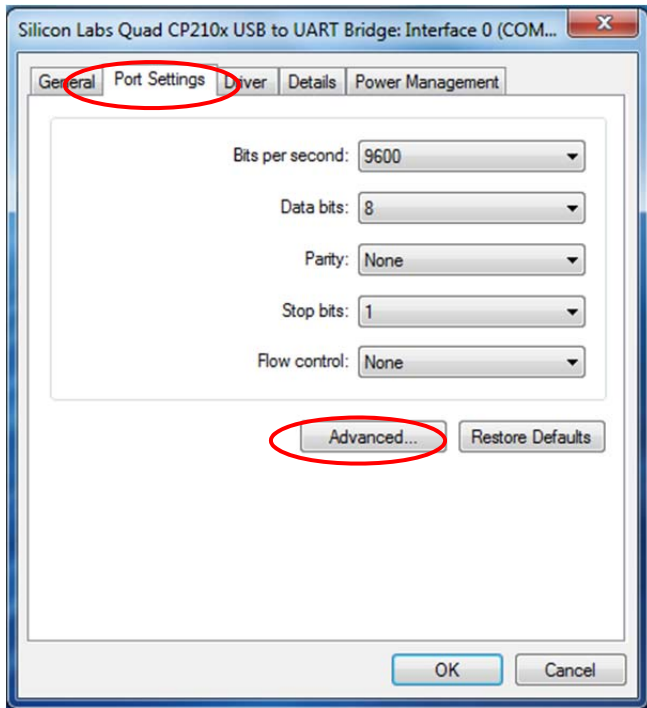
Original one	Change to
... Interface 0 (COM4)	... Interface 0 (COM1)
... Interface 1 (COM3)	... Interface 1 (COM2)
... Interface 2 (COM5)	... Interface 2 (COM3)
... Interface 3 (COM6)	... Interface 3 (COM4)



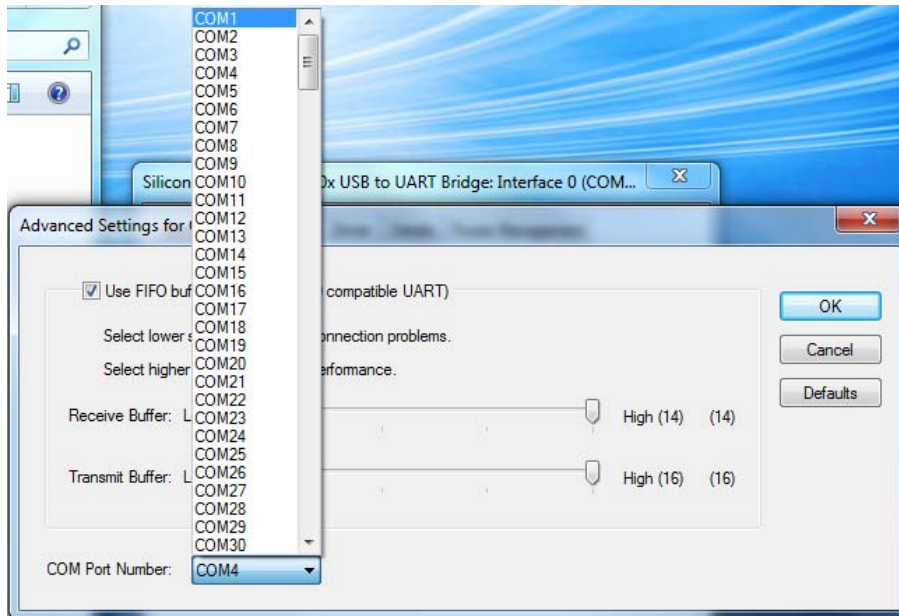
3. Double click "... Bridge: Interface 0" and need to change to COM1



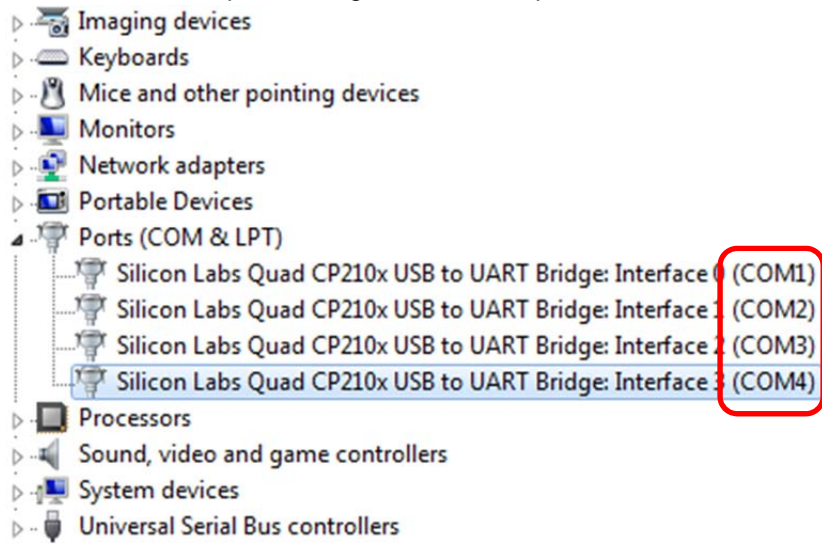
4. Go to “Port Settings” and click “Advanced...”



5. Select “COM1” in this case.

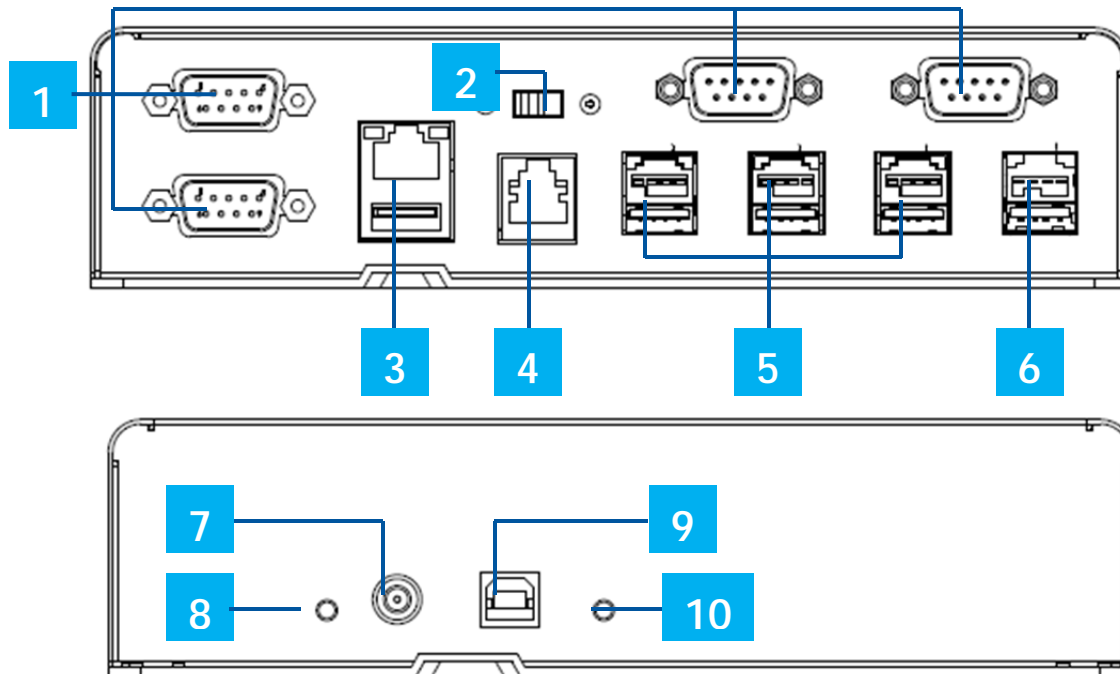


6. Follow the same steps to configure the rest of ports and will see the results as below.



# Section 3: Operation

## Layout



**Elo expansion module front side view (Top), rear view (bottom).**

1	USB to Serial COM Ports	6	+24V/2.3A Powered USB Port (Red)
2	12V/24V Cash Drawer Power Switch	7	Power Input 19-19.5VDC/7A
3	Ethernet LAN & USB Ports	8	Power LED
4	RJ11 Cash Drawer Port	9	USB Port to Host PC
5	+12V/1.5A Powered USB Ports (Green)	10	USB Connection LED

## 12V/24V Cash Drawer Port Switch

The user can switch the input power to the cash drawer with either 12V or 24V input.

## RJ11 Cash Drawer Pinouts

The cash drawer port is a RJ-11 connector and the default setting is set to +24V. The pinouts are defined by the table below.

Pin #	Signal Name	Pin #	Signal Name
1	GND	2	Channel 1
3	DETECT	4	POWER
5	Channel 2	6	GND

**NOTE: THE MAXIMUM OUTPUT CURRENT FOR 24V POWERED USB PORT IS 2.3A RMS  
THE MAXIMUM OUTPUT CURRENT FOR 12V POWERED USB PORT IS 1.5A RMS**

# Section 4: Technical Support

If you are experiencing trouble with your expansion module, refer to the following suggestions.  
If the problem persists, please contact your local dealer or contact Elo Touch Solutions Customer Service.  
Worldwide technical support phone numbers are available on the last page of this use manual.

## Solutions to Common Problems

<b>Problem</b>	<b>Suggested Troubleshooting</b>
No Power (Power LED Off)	Check that the DC power adaptor is properly connected Verify the DC power adaptor is functioning
Not Connected to Host (Status LED Off)	Check the USB cable is properly connected Check the host computer is not entered Sleep or Hibernate mode
Any of I/O is not functional	Check all required drivers are installed Check any error from Windows Device Manager

## Technical Assistance

### Technical Specifications

visit [www.elotouch.com/products](http://www.elotouch.com/products)  
for technical specifications for this device

### Online Self-Help

visit [www.elotouch.com/go/websupport](http://www.elotouch.com/go/websupport)  
for online self-help

### Technical Support

visit [www.elotouch.com/go/contactsupport](http://www.elotouch.com/go/contactsupport)  
for technical support

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

# Section 5: Safety & Maintenance

## Safety

- To avoid risk of electric shock, follow all safety notices and do not disassemble the module. They are not user-serviceable.
- The module is equipped with an AC/DC power adapter. Do not use a damaged AC/DC power adapter. Use only the AC/DC power adapter supplied by Elo. Use of an unauthorized AC/DC power adapter may invalidate your warranty.
- Ensure that your installation is equipped to maintain the specified environmental conditions listed below.

### Electrical Ratings

Input	19-19.5VDC, 7A
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### Operating Conditions

Temperature	0°C - 35°C
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Humidity	20% to 80% (non-condensing)
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Altitude	0 to 3,048m
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### Storage Conditions

Temperature	-20°C - 60°C
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Humidity	10% to 95% (non-condensing)
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Altitude	0 to 12,192m
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## Care and Handling

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

- Disconnect the AC power cable before cleaning.
- It is important that your unit remains dry. Do not get liquids on or inside the unit. If liquid does get inside, turn the unit off and have a qualified service technician check it before you power it on again.
- Ensure the environmental temperature and humidity are maintained within specification and do not block ventilation slots.

## 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.



# 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 B 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 B 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/EC as indicated in European Standard EN 55032 Class B and the Low Voltage Directive 2014/35/EC 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 module:

- Australia RCM
- Japan VCCI
- United States FCC, UL
- International CB/CE

## Explanation of Markings

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

Storage Temperature: -20~60 / Humidity:10%~95%(non-condensing).

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



# Section 7: Warranty Information

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 touch display and their components is three 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 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 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 non-infringement, 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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