


### 1 Installation and Startup Guide

This document covers the installation of cMT2108X Series HMI, for the detailed specifications and operation, please refer to Datasheet, Brochure and EasyBuilder Pro User Manual. Please read all warnings, precautions, and instructions on the device carefully before use.

#### Install Environment:

NEMA Rating	The HMI product is UL Type 4X (NEMA 4) rated, indoor use only.
Electrical Environment	The HMI product has been tested to conform to European CE requirements. This means that the circuitry is designed to resist the effects of electrical noise. This does not guarantee noise immunity in severe cases. Proper wire routing and grounding will insure proper operation.
Environmental Considerations	<ol style="list-style-type: none"> <li>(1) Make sure that the displays are installed correctly and that the operating limits are followed. Avoid installing units in environments where severe mechanical vibration or shocks are present.</li> <li>(2) Do not operate the unit in areas subject to explosion hazards due to flammable gases, vapors or dusts.</li> <li>(3) Do not install the unit where acid gas, such as SO<sub>2</sub> exists.</li> <li>(4) This device should be mounted in the vertical position and for use on the flat surface enclosure.</li> <li>(5) Conform to UL 61010-1 3rd ed. and UL 61010-2-201 2nd ed. safety requirement for use in Pollution Degree 2 Environment and dry location.</li> <li>(6) Relative Humidity: 10% ~ 90% (non-condensing)</li> </ol>
Cleaning Considerations	Clean the device using dry cloths. Do not use liquid or spray detergents for cleaning.
IP Rating	IP 66
 Warning	Protection impairment if used in a manner not specified by the manufacturer. Déficit de protection si utilisé d'une manière non spécifiée par le fabricant.

### 2 Unpacking the Unit

Unpack and check the delivery. If damage is found, please contact the supplier.

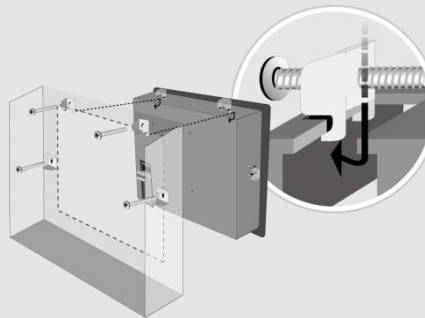
**NOTE: Place the operator panel on a stable surface during installation. Dropping it or letting it fall may cause damage.**

The package includes:

- (1) Installation Instruction, 2-sided A4 \*1
- (2) Human Machine Interface \*1
- (3) Power Connector \*1
- (4) Brackets & Screws \*1 pack
- (5) USB Stick Clamp & Tying Strap \*1

### 3 Installation Instructions

Use a control box that provides enough stiffness. Cutout Dimension: 260 mm x 202 mm. Secure the operator panel in position, using all the fastening holes and the provided brackets and screws. Screw Torque: 2.6 ~ 3.9 lbf.in. (For reaching waterproof effect and preventing the panel from being deformed.)



Plan for adequate space around the unit to dissipate the heat from other devices inside the enclosure. Maximum ambient temperature: 50°C

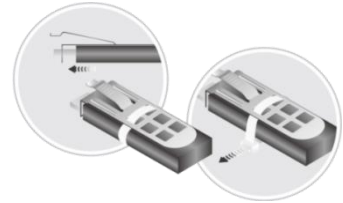
Minimum required clearances (along the back of the unit):  
Maximum panel thickness: 4.5 mm

The aluminum flat-sheet at the back of the unit is not a heat sink since its heat can rise to 70°C in some cases. The space between the back of the unit and other components should be maintained.

#### USB Stick Clamp Usage

Combining the USB Stick with the clamp can be used to secure the HMI when strong vibration is present.

1. Insert the USB connector to the clamp.
2. Press the spring and insert the USB stick.



### 4 Power Connections


Power Connector Specifications:  
Wire AWG: 24~12  
Wiring Conductor Minimum Temperature: 0°C  
Screw Torque: 4.5 lbf-in (max.)  
Copper conduct only.



#### NOTE:

1. Connect positive DC line to the '+' terminal.
2. When downloading project using EasyBuilder Pro with PLC and PC simultaneously, failure may result in damage to HMI or PC.

### 5 System Settings

When HMI is powered up and displays the Start screen, press the round Start Button in the upper-left corner of the screen to open the Setting dialog box. Press the  icon and log in. (Default System Password: 111111)

Go to the Network tab, and setup your network settings. In Setting dialog box you can see device information, configure general settings, set HMI Time, and more.

## 6 EasyBuilder Pro Software Settings

Launch EasyBuilder Pro software, select your project file, press F7 shortcut key to open the download dialog box: Select Ethernet > IP tab > Enter your HMI IP > Click Download to download this project file to HMI.

Using screensaver and backlight saver is recommended in order to avoid image persistence caused by displaying the same image on HMI for a long time.

(Please refer to EasyBuilder Pro User Manual for software operation details.)

## 7 Communication Connections

NOTE:

1. Only Tx & Rx (no RTS/CTS) may be used for COM1 RS232 when COM3 RS-232 is also used.

1 2 3 4 5  
6 7 8 9 **Con.B**

COM1/COM3 [RS232] 9 Pin, Male, D-sub

PIN#	COM1 [RS232]	COM3 [RS232]
1		
2	RxD	
3	TxD	
4		
5	GND	
6		
7	RTS	TxD
8	CTS	RxD
9		

5 4 3 2 1  
9 8 7 6 **Con.A**

COM2/COM3 [RS485] 9 Pin, Female, D-sub

PIN#	COM2 [RS485]2W	COM2 [RS485]4W	COM3 [RS485]2W
1	Data-	Rx-	
2	Data+	Rx+	
3		Tx-	
4		Tx+	
5	GND		
6			Data-
7			
8			
9			Data+

## 8 Touchscreen Calibration & Restore Factory Default

**Touchscreen Calibration:**

Press and hold anywhere on the screen when HMI starts until it enters touchscreen calibration mode.

**Restore Factory Default:**

Follow Step 5 to open the Setting dialog box. Go to "Reset options" tab, press the button of "Reset HMI to default". An Attention window shows, enter "yes".

Another way to restore factory default is entering "default111111" when logging in. An Attention window shows, enter "yes".

Please note that the projects and data stored in the unit are all cleared after restoring factory default.

## 9 Battery Replacement

Battery Specification: UL Certification Battery, Type CR2032, Rated 3V, Max. Abnormal Charging Current 10mA, Working Temperature: max. 70°C

Battery replacement shall be performed by qualified personnel (engineer) only and care must be taken when handling lithium batteries. For more information on battery replacement and disposal considerations, please refer to the following link:


[http://www.weintek.com/download/MT8000/eng/FAQ/FAQ\\_103\\_Replace\\_Battery\\_en.pdf](http://www.weintek.com/download/MT8000/eng/FAQ/FAQ_103_Replace_Battery_en.pdf)

### CAUTION


 Power

**NOTE:** Make installing the u

Use power output powered by DC p systems. The pow supply. The peak s

 Fusing Require-ments


If the display does will protect against of time. Check wiri

 High Voltage

A resettable fuse DC voltage source

 Emergency Stop

A Hard-wired EME ICS Safety Recom


 Supply Voltage Condition

Do not power the power supply. Note power the unit.


 Wire Routing

- Power wire len
- Please use tw impedance ma
- If wiring is to b devices.
- Keep AC, high
- Add a resistor supply and the dissipation. Ty

### DANGER

 Hardware Considerations

The system desig thereby create an interface can lea physical injury to th If you use any pr potential safety ha steps depend on installation of soli installation of Cont

 Programming Considerations

To conform to ICS ensure that all wr checks built into th personnel.

## Limited Warranty

This product is limited warranted ag The proven defective product will e This warranty shall not cover any p

- Out of warranty period which is 12 month
- Damage caused by Force Majeure, accid
- Product has been repaired or taken apar
- Products whose identification markings h