


### 1 Installation and Startup Guide

This document covers the installation of cMT2078X 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 NEMA 4 rated (Indoor 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	(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. (2) Do not operate the unit in areas subject to explosion hazards due to flammable gases, vapors or dusts. (3) Do not install the unit where acid gas, such as SO <sub>2</sub> exists. (4) This device should be mounted in the vertical position and for use on the flat surface enclosure. (5) For use in Pollution Degree 2 Environment and dry location. (6) Relative Humidity: 10% ~ 90% (non-condensing)
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

#### USB Stick Clamp Usage

Combining the USB Stick with the clamp and the tying strap can prevent USB stick from disconnecting with HMI when strong vibration is present.


1. Insert the USB connector to the clamp and tie them together with the tying strap.
2. Press the spring and insert the USB stick into HMI.



### 3 Installation Instructions

Use a control box that provides enough space for the operator panel in position, using all the provided brackets and screws. The panel weight is 2.6 ~ 3.9 lbf.in. (For reaching waterproofing, preventing the panel from being deformed, Plan for adequate space around the unit enclosure, for ventilation and cables. Consider heat from other devices inside the enclosure. Maintain ambient temperature around the unit not exceeding 50°C. Minimum required clearances (along top / Bottom / Sides 15 mm / Maximum panel thickness: 4.5 mm

### 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, for safety, result in damage to HMI or PC.

### 5 System Settings

When the HMI powers up and displays the main screen, open the Setting page. To configure the system, or later, tap "configure", and a login window will appear. Enter the system password (default: 111111). If the password is correct, and log in to make changes. In the Setting page, set HMI Time/Date/Name, and other settings.

### 6 EasyBuilder Pro Software

Launch EasyBuilder Pro software, select the connection dialog box: Select Ethernet > IP tab > Enter IP address to HMI.

Using screensaver and backlight save power by displaying the same image on HMI screen. (Please refer to EasyBuilder Pro User Manual for details.)

## 7 Communication Connections

### NOTE:

1. Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.
2. COM2 and COM3 RS-485 2W support MPI 187.5K, please use one at a time.

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	GND	

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 Restore Factory Default

There are two methods to restore factory default, both of which will erase all project files and data stored on the device.

1. Follow the instructions in section 5 of this manual to open the Setting page and select the appropriate page based on the OS version before pressing "Reset HMI to default":  
For OS versions 20231201 or later, select the "System Properties" page, press "Reset HMI to Default," and select "Reset".  
For OS versions before 20231201, select the "Reset Options" page, press "Reset HMI to default", and enter "yes".
2. Alternatively, during login, enter "default111111".  
For OS versions 20231201 or later, select "Reset".  
For OS versions before 20231201, enter "yes".

## 9 Battery Replacement

Battery Specification: UL Certification Battery, Type CR2032, Rated 3V, Max. Abnormal Charging Current 10mA, Working Temperature: max. 80°C

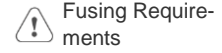
Battery replacement shall be performed by qualified personnel (engineer) only and care must be taken when handling lithium batteries. For more information on battery replacement and disposal considerations, please refer to the following link:

[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)

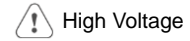
### CAUTION



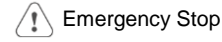
Power



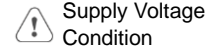
Fusing Requirements



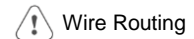
High Voltage



Emergency Stop

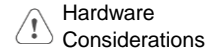


Supply Voltage Condition

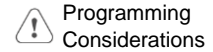


Wire Routing

### DANGER



Hardware Considerations



Programming Considerations

**NOTE:** Make sure you are following the correct procedure when installing the unit.

Use power output powered by DC power supply systems. The power supply. The peak current is 1.5A.

If the display does not power on, it will protect against overcurrent of time. Check wiring.

A resettable fuse is provided for DC voltage source protection.

A Hard-wired EME stop button is required for ICS Safety Recommendation.

Do not power the unit with a power supply. Note: Do not power the unit.

- a. Power wire length should be less than 10m.
- b. Please use twisted pair cable with impedance matching.
- c. If wiring is to be done in a rack, use rack-mounted devices.
- d. Keep AC, high voltage, and power supply wires away from the unit to avoid power supply and the unit's dissipation. Try to avoid the unit's heat sink.

The system design should be carefully reviewed to thereby create an interface that can lead to physical injury to the user. If you use any product, please refer to the potential safety hazards. The steps depend on the installation of solid state relays and the installation of Contactors.

To conform to ICS safety requirements, ensure that all wiring is done according to the checks built into the unit by the personnel.

## Limited Warranty

This product is limited warranted against manufacturing defects. The proven defective product will be replaced or repaired. This warranty shall not cover any product under the following conditions:  
(a) Out of warranty period which is 12 months from the date of purchase.  
(b) Damage caused by Force Majeure, accident, fire, flood, etc.  
(c) Product has been repaired or taken apart by unauthorized personnel.  
(d) Products whose identification markings have been removed or altered.