


### 1 Installation and Startup Guide

This document covers the installation of cMT3161X 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   | <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 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.<br>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

### 3 Installation Instructions

Use a control box that provides enough space around the operator panel in position, using all the holes and the provided brackets and screws. (For waterproof effect and preventing the panel being deformed.)


Plan for adequate space around the unit and the enclosure, for ventilation and cable management. The heat from other devices inside the enclosure may affect the HMI.

The ambient temperature around the HMI should be 0 ~ 50°C

Minimum required clearances (along the enclosure):

Maximum panel thickness: 4 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 and ground to the '-' terminal.
2. When downloading project using EasyBuilder Pro, connect HMI with PLC and PC simultaneously. Potential difference may result in damage.

### 5 System Settings

When HMI is powered up and displays the Start screen, press the Start Button in the upper-left corner to open the Setting dialog box. Tap the Start button to log in. (Default System Password: 11111111)  
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, Language, and more.

### 6 EasyBuilder Pro Software

Launch EasyBuilder Pro software, select the HMI file in the dialog box: Select Ethernet > IP tab > Select the HMI file to HMI.

Using screensaver and backlight save settings by displaying the same image on HMI. (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. COM1 RS-485 / COM3 RS-485 are not isolated.

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

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

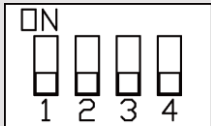
| PIN# | COM1 [RS232]4W | COM3 [RS232]2W |
|------|----------------|----------------|
| 1    |                |                |
| 2    | RxD            |                |
| 3    | TxD            |                |
| 4    |                |                |
| 5    | GND            |                |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

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

COM1/COM3 [RS485]/CAN Bus 9 Pin, Female, D-sub

| PIN# | COM1 [RS485]2W | COM1 [RS485]4W | COM3 [RS485]2W |
|------|----------------|----------------|----------------|
| 1    | Data-          | Rx-            |                |
| 2    | Data+          | Rx+            |                |
| 3    |                | Tx-            |                |
| 4    |                | Tx+            |                |
| 5    | GND            |                |                |
| 6    |                |                | Data-          |
| 7    |                |                |                |
| 8    |                |                |                |
| 9    |                |                | Data+          |

## 8 DIP SW Settings & Restore Factory Default



| SW1 | SW2 | SW3 | SW4 | Mode                        |
|-----|-----|-----|-----|-----------------------------|
| ON  | OFF | OFF | OFF | Reset Factory Default       |
| OFF | ON  | OFF | OFF | Hide HMI System Setting Bar |
| OFF | OFF | ON  | OFF | Update OS                   |
| OFF | OFF | OFF | ON  | Reserved                    |
| OFF | OFF | OFF | OFF | Normal                      |

### 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 pressing this button.

## 9 Battery Replacement

Battery replacement shall be performed by qualified personnel 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)

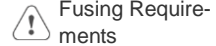
### CAUTION



Power

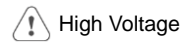
**NOTE:** Make s  
installing the un

Use power output th  
powered by DC po  
systems. The power  
supply. The peak sta



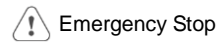
Fusing Require-  
ments

If the display does no  
prevent damage if th  
and try to power up a



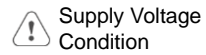
High Voltage

An Internal fuse will  
voltage sources sho



Emergency Stop

A Hard-wired EMER  
ICS Safety Recomm



Supply Voltage  
Condition

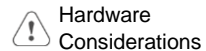
Do not power the un  
power supply. Note:  
power the unit.



Wire Routing

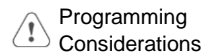
- a. Power wire leng
- b. Please use twist
- c. If wiring is to be
- d. Keep AC, high e
- e. Add a resistor an

### DANGER



Hardware  
Considerations

The system design  
thereby create an  
interface can lead  
physical injury to the  
If you use any prog  
potential safety haza  
steps depend on y  
installation of solid-  
installation of Contro



Programming  
Considerations

To conform to ICS  
ensure that all writ  
checks built into the  
personnel.

## Limited Warranty

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

- (a) Out of warranty period which is 12 month
- (b) Damage caused by Force Majeure, acci
- (c) Product has been repaired or taken apar
- (d) Products whose identification markings l