

# eMT-3000 Series

## Installation Instruction

### 1 Installation and Startup Guide

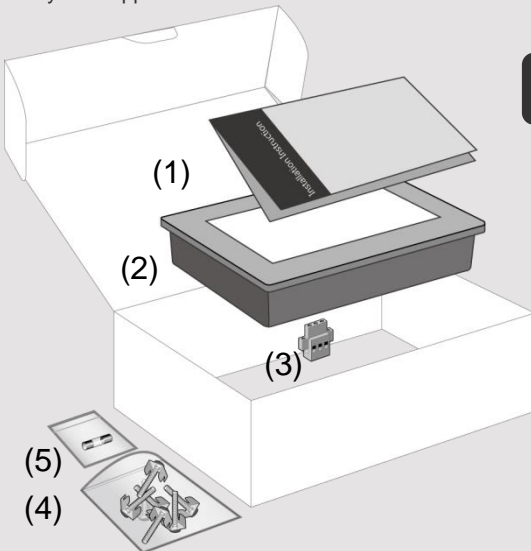
This document covers the installation of eMT-3000 Series HMI, for the detailed specifications and operation, please refer to Brochure and EasyBuilder Pro User Manual.

#### Install Environment:

NEMA Rating	The eMT-3000 Series HMI is NEMA 4 rated.
Electrical Environment	The eMT-3000 Series 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 UL508 (ISBN 0-7629-0404-6) machine safety for use in Pollution Degree 2 Environment.</li> </ol>

### 2 Unpacking the Unit

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



#### NOTE:

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

(1) Installation Instruction, 2-sided A4 \*1

(2) Human Machine Interface \*1

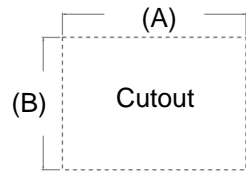
(3) Power Connector \*1

(4) Brackets & Screws \*1 pack

(5) Fuse 1.6A/250V 5\*20mm \*1  
(1.25A for 3070)

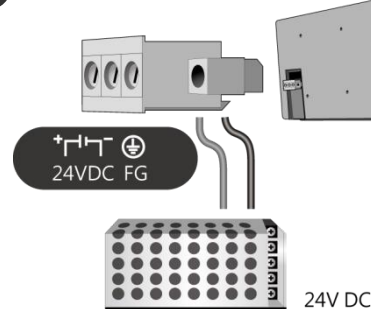
### 3 Installation Instructions

Secure the control panel in position, and screws. Screw Torque: 2.6 ~ 3.9 N·m (from being deformed.)



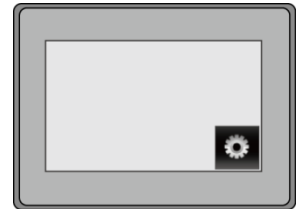
Type	A(mm)	B(mm)
eMT3070A/B	192	138
eMT3105P	259	201
eMT3120A	305	231
eMT3150A	352	279

### 4 Power Connections



### 5 System Settings

When HMI is powered up and displays, click the system setting button. (Default System Password: 111111) It is necessary to connect the HMI to your network through a RJ-45 cable.



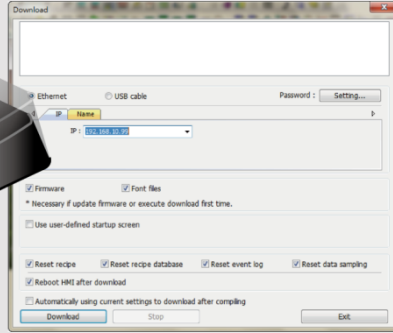
( Note 1: For the details of HMI DIP SW function settings please refer to Part 8 in this guide. )

## 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.

( 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 RS-232 when COM3 RS-232 is also used.  
2. COM1 and COM3 RS-485 support MPI 187.5K, please use one at one time.  
3. COM1 RS-485 / COM3 RS-485 / CAN Bus with isolation protection.

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

1 2 3 4 5  
6 7 8 9

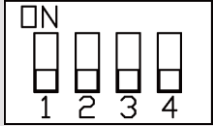
PIN#	COM1 [RS232]	COM3 [RS232]
1		
2	RxD	
3	TxD	
4		
5	GND	
6		
7	RTS	TxD
8	CTS	RxD
9		

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

5 4 3 2 1  
9 8 7 6

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

## 8 DIP SW Settings



SW1	SW2	SW3	SW4	Mode
ON	OFF	OFF	OFF	Touch Screen Calibration Mode
OFF	ON	OFF	OFF	Hide HMI System Setting Bar
OFF	OFF	ON	OFF	Boot Loader Mode
OFF	OFF	OFF	ON	Reserved
OFF	OFF	OFF	OFF	Normal

## 9 Calibration mode

To enter touch screen calibration mode, press and hold anywhere on the screen for more than 2 seconds when HMI starts. After all the calibration points have been touched, a pop-up window is displayed and begins countdown from 10 seconds. If the user clicks the OK button within 10 seconds, the calibration data will be saved to the system; otherwise, the calibration will restart. During the 10-second countdown, the user can touch the screen to check the calibration result.



### CAUTION

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

- Power** The unit can be powered up without the most controller DC system. Switching power supply.
- Fusing Requirements** If the display does not power up, prevent damage if the power supply is and try to power up again.
- High Voltage** An Internal fuse will prevent overvoltage sources should be used.
- Emergency Stop** A Hard-wired EMERGENCY Stop Safety Recommendation.
- Supply Voltage Condition** Do not power the unit at a voltage above the power supply. Note: The power supply must be able to power the unit.
- Wire Routing**
  - a. Power wire length should be matched.
  - b. Please use twisted pair wiring.
  - c. If wiring is to be exposed, it should be protected.
  - d. Keep AC, high energy lines away from the power supply and the frame.
  - e. Add a resistor and a capacitor to the power supply and the frame.

### DANGER

- Hardware Considerations** The system designer must create an unsafe condition during equipment start-up, if you use any program that a safety hazard exists in your particular application. Programmable controller software is recommended in NE.
- Programming Considerations** To conform with ICS standards, ensure that all writable registers are initialized in the program, with an initial value.

### Limited Warranty

This product is limited warranted against a defective product will either be repaired or replaced. This warranty shall not cover any product which is:

- (a) Out of warranty period which is 12 months
- (b) Damage caused by Force Majeure, accident, fire, flood, etc.
- (c) Product has been repaired or taken apart
- (d) Products whose identification markings have been removed