



MT6000/8000iE SERIES INSTALLATION INSTRUCTION

1. INSTALLATION AND STARTUP GUIDE

Read these instructions carefully before installing, operating or perform maintenance in this equipment.

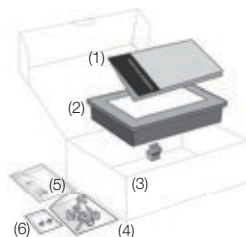
This document covers the installation of MT6000/8000iE Series HMI, for the detailed specifications and operation, please refer to brochure and EasyBuilder Pro user manual.

Install environment:

NEMA rating	MT6000/8000iE Series HMI is NEMA 4 rated (indoor only).
Electrical environment	The MT6000/8000iE 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	(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 ₂ exists. (4) This device should be mounted in the vertical position and for use on the flat surface enclosure. (5) Conform to UL 508 (ISBN 0-7629-0404-6) machine safety for use in Pollution Degree 2 Environment.

2. UNPACKING THE UNIT

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



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
6. Fuse 1.25 A/250 V 5*20mm *1

Note!

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

3. INSTALLATION INSTRUCTIONS

Secure the operator panel in position, using all the fastening holes and the provided brackets and screws:



Type	A (mm)	B (mm)
MT6070iE	192	138
MT8070iE	192	138
MT8100iE	260	202

3.1. USB Stick Clamp Usage

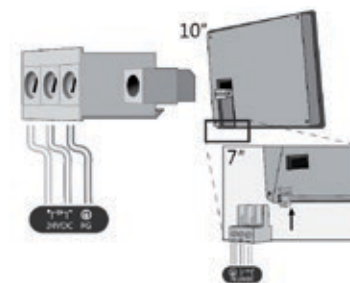
Combining the USB stick with the clamp and the tying strap can prevent USB stick from disconnecting with HMI when strong vibration is present.

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.



4. POWER CONNECTIONS

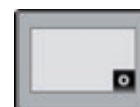


Note!

1. Connect positive DC line to the '+' terminal and the DC ground to the '-' terminal.
2. Please do not connect HMI with PLC and PC simultaneously to prevent potential difference from destroying USB ports of HMI and PC.

5. SYSTEM SETTINGS

When HMI is powered up and displays image, click the system setting button (default system password: 111111). It is necessary to connect the HMI to your network through a RJ45 cable (N/A for MT6070iE).

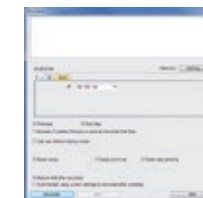


Go to the Network tab, you may choose to auto get DHCP IP, or designate your own IP.



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. If use MT6070iE, please select USB cable. (please refer to EasyBuilder Pro User Manual for software operation details).

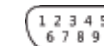


7. COMMUNICATION CONNECTIONS

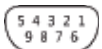
Note!

1. COM1 and COM3 (RS485) 2 W support MPI 187.5K, please use one at one time.
2. COM1 (RS485) / COM3 (RS485) with isolation protection. (N/A for MT6070iE).

COM1 RS232, 9 Pin, Male, D-sub

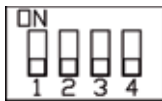


PIN#	Symbol	COM1 (RS232)
1		Not used
2	RxD	Received data
3	TxD	Transmitted data
4		Not used
5	GND	Ground
6		Not used
7	RTS	Ready to send output
8	CTS	Clear to send input
9		Not used



PIN#	Symbol	COM1 (RS485)		COM3 (RS485)
		2 W	4 W	
1	Rx-	Data-	Rx-	
2	Rx+	Data+	Rx+	
3	Tx-		Tx-	
4	Tx+		Tx+	
5	GND	Ground		
6	Not used			
7	Data-			Data-
8	Data+			Data+
9	GND			Ground

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	Not supported
OFF	OFF	OFF	OFF	Normal

CAUTION!	<p>Note! Make sure that all local and national electrical standards are met when installing the unit. Contact your local authorities to determine which codes apply.</p>
	<p>POWER! The HMI can be powered by DC power only, voltage range: 24±20% Volts DC, compatible with most controller DC systems. The power conditioning circuitry inside the unit is accomplished by a switching power supply. The peak starting current can be as high as 2 A.</p>

	<p>FUSING REQUIREMENTS! If the display does not come on within 5 seconds of power up, remove power. An internal fuse will prevent damage if the polarity of the DC power is incorrect. Check wiring for proper connections and try to power up again.</p>
	<p>HIGH VOLTAGE! An Internal fuse will prevent damage for overcurrent condition however it isn't guaranteed. DC voltage sources should provide proper isolation from main AC power and similar hazards.</p>
	<p>EMERGENCY STOP! A Hard-wired EMERGENCY STOP should be fitted in any system using HMI to comply with ICS Safety Recommendations.</p>
	<p>SUPPLY VOLTAGE CONDITION! Do not power the HMI and inductive DC loads, or input circuitry to the controller, with the same power supply. Note: The 24 V dc output from some controllers may not have enough current to power the HMI.</p>
	<p>WIRE ROUTING!</p> <ol style="list-style-type: none"> a. Power wire length should be minimized (max: 500 m shielded, 300 m unshielded). b. Please use twisted pair cables for power wire and signal wire and conform to the impedance matching. c. If wiring is to be exposed to lightning or surges, use appropriate surge suppression devices. d. Keep AC, high energy, and rapidly switching DC power wiring separated from signal wires. e. Add a resistor and capacitor in the parallel connection between the ungrounded DC power supply and the frame ground. This provides a path for static and high frequency dissipation. Typical values to use are 1M Ohm and 4.700 pF.

