cMT3106XM series

Installation Instruction

1 Installation and Startup Guide

This document covers the installation of cMT3106XM 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:

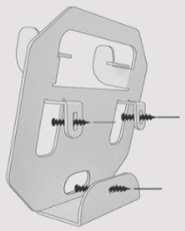
Electrical Environment	The HMI product has been tested to conform to European CE requirements. This means that the circuitry is designed to resist the effects of electrical noise. This does not guarantee noise immunity in severe cases. Proper wire routing and grounding will insure proper operation.
Environmental Considerations	(1) Make sure that the units 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) For use in Pollution Degree 2 Environment and dry location. (5) Relative Humidity: 10% ~ 90% (non-condensing)
IP Rating	IP 65
Cleaning Considerations	Clean the device using dry cloths. Do not use liquid or spray detergents for cleaning.
⚠ 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.

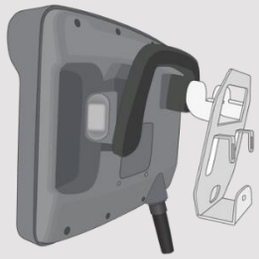
2 Unpacking the Unit

Unpack and check the delivery. If damage is found, please contact the supplier.
NOTE: Place the unit 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) Handheld HMI *1 (3) Wall Mounting Bracket *1

3 Installation Instructions

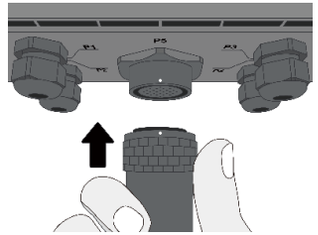
Securely attach the wall mounting bracket to a control box with sufficient rigidity, then hang the unit on it. Allow adequate clearance around the unit for ventilation and cable routing. Maintain an ambient temperature of 0~ 50 °C.

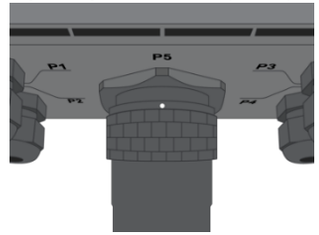




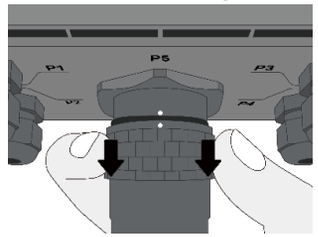
Proper Holding Position

Connecting the Handheld HMI to the Standard / Compact Connection Box
1. Align the red dot on the handheld HMI's cable connector with the red dot on the connection box's cable connector.
2. Push the cable connector in firmly until you hear it snap into place indicating it's fully engaged.





Removing the Standard / Compact Connection Box
1. Use your thumb and index finger to pull the cable connector's outer ring all the way back, and pull the connector straight out to detach.



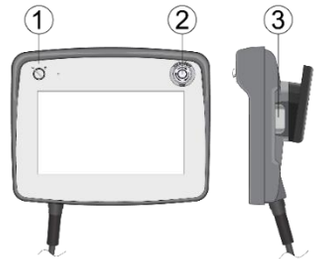
4 System Settings

When the HMI powers up and displays an image, tap the round Start Button in the upper-left corner to open the Setting page. To configure the network, go to the Network tab, tap "configure", and a login window will appear. The settings can be modified by entering the system password (default: 111111). In the Setting page, you can see device information, configure general settings, set HMI Time/Date/Name, and more.

5 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.
Flash memory has a limited write lifespan, and frequent data writing (e.g., Event Log, Data Sampling) can accelerate degradation. Consider write frequency and lifespan management in system design to prevent data loss. Refer to "3.2.1. Prolong the Lifespan of Flash Memory" in the Product Security User Manual for guidance.
(Please refer to EasyBuilder Pro User Manual for software operation details.)

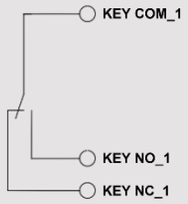
6 Switch Instructions



① Key Switch
② Emergency Stop Switch
③ 3-Position Enable Switch

① **Key Switch**

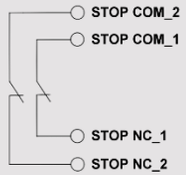
This switch has two positions: L and R.
Turning the key switches the connected signal ON or OFF, and the key can only be removed in the L position.



Signal	L	R
KEY NO_1	0 (OFF)	1 (ON)
KEY NC_1	1 (ON)	0 (OFF)

② **Emergency Stop Switch**

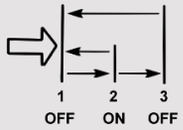
Used to immediately stop the equipment in an emergency.
When pressed, the contacts open.
To reset the switch, pull it upward or rotate it fully in the direction of the arrow.



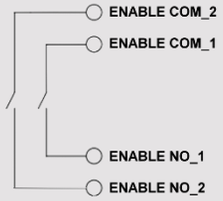
Signal	Not Pressed	Pressed
STOP NC_1	1 (ON)	0 (OFF)
STOP NC_2	1 (ON)	0 (OFF)

③ **3-Position Enable Switch**

This switch has three positions and two contacts.
When lightly pressed to the middle position (2), the contacts close.
In both the not-pressed (1) and fully pressed (3) positions, the contacts remain open.
Returning from position 3 to position 1 does not change the open state of the contacts.



Position 1: Not pressed (contacts open)
Position 2: Middle position (contacts closed)
Position 3: Fully pressed (contacts open)



Signal	Position 1	Position2	Position 3
ENABLE NO_1	0 (OFF)	1 (ON)	0 (OFF)
ENABLE NO_2	0 (OFF)	1 (ON)	0 (OFF)

7 Touchscreen Calibration & Restore Factory Default

Touchscreen Calibration: Press and hold anywhere on the screen during HMI startup.
Restore Factory Default: Follow section 5 instructions of this manual to open the Setting page, and then select "System Properties", press "Reset HMI to Default", enter the Admin password or "default111111", and press "Reset". Please note that all stored project files and data will be erased.

8 Battery Replacement

Battery Specification: Type CR2032, Rated 3V
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

CAUTION

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.

Power	Use power output that meets SELV (Safety Extra-Low Voltage) requirements. The unit can be powered by DC power only, voltage range: 24±20%, 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 2A.
Fusing Requirements	If the display does not come on within 5 seconds of power up, remove power. A resettable fuse will protect against overcurrent faults in DC circuit and the resetting will take place after a period of time. Check wiring for proper connections and try to power up again.
High Voltage	A resettable 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.
Emergency Stop	A Hard-wired EMERGENCY STOP should be fitted in any system using an HMI to comply with ICS Safety Recommendations.
Supply Voltage Condition	Do not power the unit and inductive DC loads, or input circuitry to the controller, with the same power supply. Note: The 24 VDC output from some controllers may not have enough current to power the unit.
Wire Routing	a. Power wire length should be minimized (Max: 500m shielded, 300m 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 4700pF.

DANGER

Hardware Considerations	The system designer should be aware that devices in Controller systems could fail and thereby create an unsafe condition. Furthermore, electrical interference in an operator interface can lead to equipment start-up, which could result in property damage and/or physical injury to the operator. If you use any programmable control systems that require an operator, be aware that this potential safety hazard exists and take appropriate precautions. Although the specific design steps depend on your particular application, the following precautions generally apply to installation of solid-state programmable control devices, and conform to the guidelines for installation of Controllers recommended in NEMA ICS 3-304 Control Standards.
Programming Considerations	To conform to ICS Safety Recommendations, checks should be placed in the controller to ensure that all writable registers that control critical parts of plant or machinery have limit checks built into the program, with an out-of-limit safe shut down procedure to ensure safety of personnel.

Limited Warranty

This product is limited warranted against defects in design and manufacture.
The proven defective product will either be repaired or replaced, at Weintek's discretion.
This warranty shall not cover any product which is
(a) Out of warranty period which is 12 months from the manufacturing month of the HMI products.
(b) Damage caused by Force Majeure, accident, negligence, improper installation or misuse.
(c) Product has been repaired or taken apart by unauthorized technicians.
(d) Products whose identification markings have been removed or damaged.