mTV series

Installation Instruction

1 Installation and Startup Guide

This document covers the installation of mTV Series, for the detailed specifications and operation, please refer to Datasheet and EasyBuilder Pro User Manual.

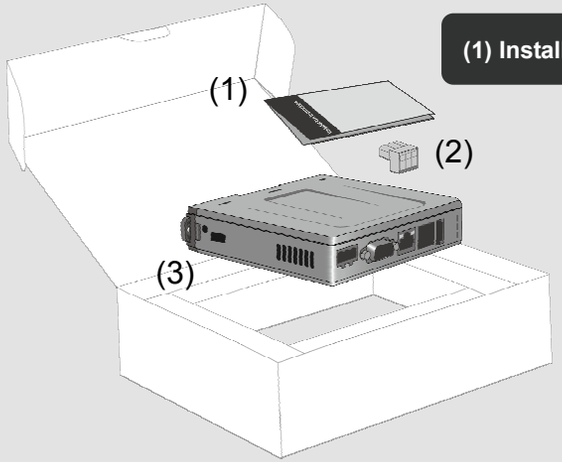
Install Environment:

Electrical Environment	The mTV 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 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 SO2 exists. (4) This device should be mounted in the vertical position and for use on the flat surface enclosure. (5) Conform to UL508 (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.

NOTE:
Place the unit on a stable surface during installation. Dropping it or letting it fall may cause damage.



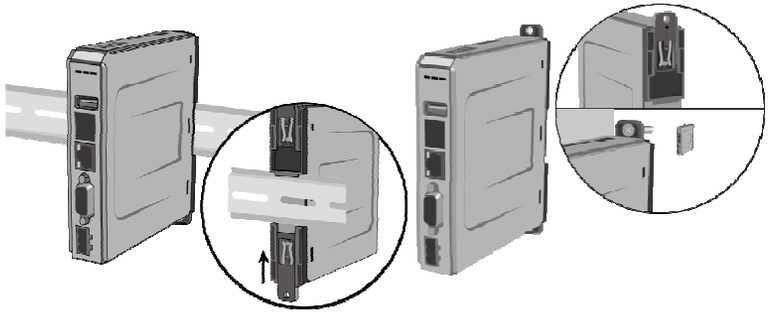
(1) Installation Instruction, A4 double sided *1

(2) Power Connector *1

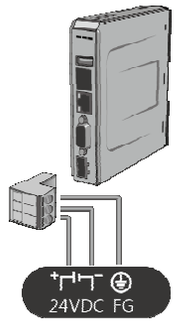
(3) mTV *1

3 Installation Instructions

Rail mounting: DIN rail 35mm
Panel mounting: Use two M4 or #8 panhead screws, mounting hole size is 4.6mm



4 Power Connections

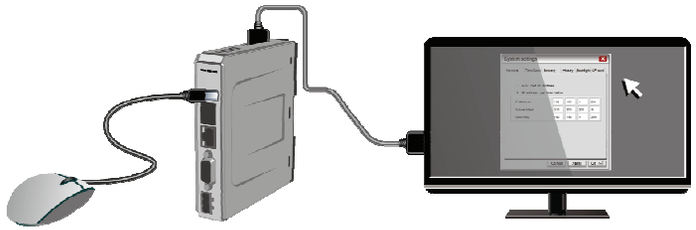


NOTE:
Connect positive DC line to the '+' terminal and the DC ground to the '-' terminal.

To make a connection, strip about 3/8" of insulation off the end of the wire, turn the connector screw counterclockwise until the gap is wide open, insert the wire all the way in, and turn the screw clockwise until it's tight.

5 System Settings

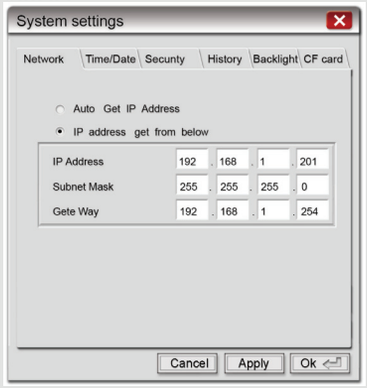
Connect mTV with TV via HDMI.



When mTV powered up and displays image, click the system setting button.
(Default System Password: 111111)
It is necessary to connect the mTV 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.)

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

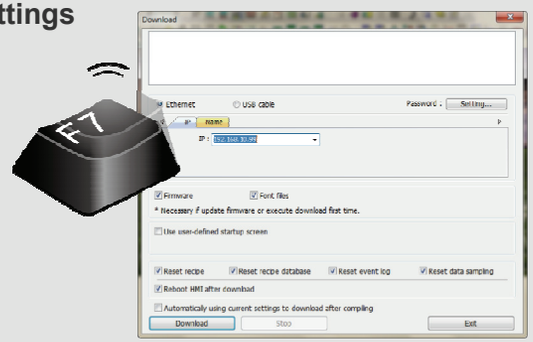


6 EasyBuilder Pro Software Settings

Launch EasyBuilder Pro software, select your project file, press F7 shortcut key to open the download dialog box:

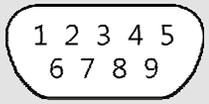
Select Ethernet > IP tab > Enter your mTV IP > Click Download to download this project file to mTV.

(Please refer to EasyBuilder Pro User Manual for software operation details)



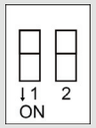
7 Communication Connections

COM1 [RS232]



PIN#	Symbol	COM1 [RS-232]	COM2 [RS-485]		COM3 [RS-485 2W]
			2W	4W	
1	Data+				Data+
2	RxD	Received Data			
3	TxD	Transmitted Data			
4	Data-				Data-
5	GND	Signal Ground			
6	Rx+		Data+	Rx+	
7	Rx-		Data-	Rx-	
8	Tx+			Tx+	
9	Tx-			Tx-	

8 DIP SW Settings



SW1	SW2	Mode
OFF	OFF	Normal Mode
ON	OFF	Hide HMI System Setting Bar
OFF	**ON**	Boot Loader Mode
ON	**ON**	Restore Factory Default

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
The unit 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 500mA.

High Voltage
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 mTV 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 with 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.

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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 1 year from the date of purchase.
(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.