

Operation Instructions for VX760T Series

Thank you for choosing the ViewX human-machine interface. For more efficient use of the ViewX human-machine interface, please read the included quick startup guide before using this product.

In addition to the HMI machine, this package includes the following items:

- One DC socket terminal block (socket terminal block, P=5.08 mm)
- Four retaining brackets (made of iron and 4 set screws 【 Metric M4*25 】)

Machine Dimensions

The machine is 203.2 mm in width, 152.4 mm in height, and 50.8 mm in depth. (including the height of the power socket terminal block)

Installation Dimensions

The opening size of the VX760T HMI series is 191.4 mm*140.6 mm with an error of +2 mm.

Please do not leave the set screws over tightened or unbalanced. The maximum torque of the retaining bracket is 0.3 Nt·m.

Safety

Please be mindful of the following for the installation, maintenance, wiring, and related inspections:



- Please follow the instructions to install ViewX HMI to avoid damage to the equipment.
- It is prohibited to expose ViewX HMI to environments with high humidity, hazardous gases and liquids to avoid electrical shock or fire hazard.



- Please make sure the ground terminal is below 100Ω before connecting it to ground. Poor grounding may cause poor signal reception, electric shock, or fire hazard.



- The operation of ViewX HMI requires dedicated planning software. Failure of software planning or ViewX HIM verification may cause abnormal machine operation.



- Please remove the socket terminal block from ViewX HMI during wiring.
- Only one wire can be inserted into each slot of the inlet on the quick connector.
- In case of error, remove the wire. Examine the wire and start the machine again.



- Please use wiring materials by following the specifications.
- The communication wires must comply with the specifications.
- Correct ground loop must be used to avoid communication problems.

Please read these instructions carefully before operating the machine and be mindful of the following reminders !

- Beware of the environmental safety. (hazardous gases, caustic liquid, high humidity, elevated operation, and dangerous operation)
- Please follow the instructions for HMI wiring.
- Make sure secured ground engineering and conduct all jobs by following the National Electrical Code.
- (Please see NFPA 70 - National Electrical Code (2008))
- When the power is on, please do not conduct any disassembling or wiring modifications.
- During the HMI operation, please do not touch the power.

For any questions about machine operation, please contact your local distributors. In addition, all new information of our products will be updated on our website. Please check www.vx-hmi.com at your convenience to download the most recent operation instructions.

Other Notes of Caution:

- Do not alter the wiring when the power is still on to avoid electrical shock or personal injury.
- Please do not touch the panel with sharp objects, which may cause operation problems of the ViewX human-machine interface.
- It is prohibited to disassemble the ViewX human-machine interface to avoid electric shock.
- Once the power is turned on, it is prohibited to disassemble the panel of the ViewX human-machine interface.
- Within ten minutes after the power is turned off, it is prohibited to touch the connection terminal of the ViewX human-machine interface, for the residual voltage may cause electric shock.
- When the ViewX human-machine interface is in running, the vent must be kept clear to avoid abnormal signals or malfunction caused by machine overheating.

Conditions of Installation Environment

This product must be stored in the packaging box if it is to be used immediately. To ensure that the product will be eligible for warranty and future maintenance, the storage must be done by the following measures:

- Store in clean and dry locations.
- The temperature of the storage environment must be $-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$.
- The humidity for storage must be $20\sim85\%$ RH (with no condensation)
- Avoid storing the package in any environments with dangerous or harmful materials (please look for signs for Dangerous and Harmful Materials of General Rules)
- Please store the package on attended countertop or shelf.
- Locations suitable for installation include: clean room, environment with no high temperature (no high temperature operation), locations with no water drops, steam or dust, environment with no dangerous or harmful materials, locations without dust and smoke,; locations with no vibrations and high intensity of electromagnetic waves.

Orientation and Space of Installation

Notes of Caution

- The installation must be done by the instructions. Otherwise, improper installation may cause malfunction.
- To ensure good cooling during the HMI operation, the HMI must be installed with at least 50 mm of space on the four sides and adjacent environment to avoid accumulation of heat.
- The maximum thickness of the installed panel cannot exceed 5 mm.

Descriptions of Individual Parts VX 760T Series (Front)



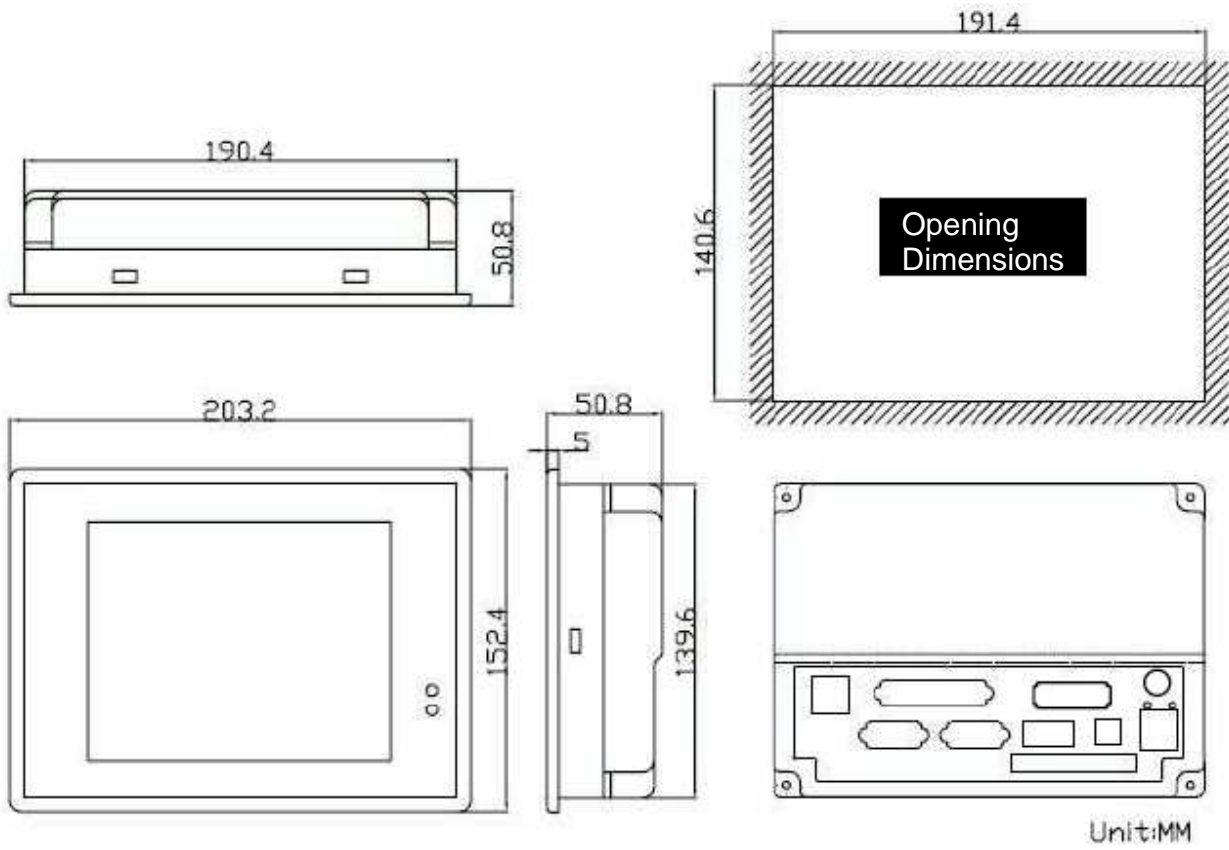
- A RUN: The red light indicates STOP and program download pending. Blinking green light indicates normal operation
- B Link: Connection indicator
- C Operation/Display Area

VX 760T Series (Back)



- A Power Input Terminal (DC24V)
- B COM1 communication port RS-232/RS-422/RS-485 (automatic switching)
- C COM2 communication port RS-232/RS-422/RS-485 (automatic switching)
- D USB host (for upload/download through connection to PC)

Machine/Opening Dimensions (Unit: mm)



Recommended wiring materials

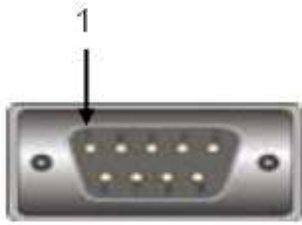
Type	Power wiring (AWG)	Strip Length
Single Core Wire	28~12	7~8mm
Multi-Core Wire	30~12	7~8mm

Basic Inspections

Items of Inspection	Content of Inspection
General Inspection	<ul style="list-style-type: none"> Regularly inspect if the screws and connection points between the HMI and the equipment are intact. The vent opening should be kept clear and not be blocked by any objects. Beware of falling of small foreign objects in installation. If the HMI is installed in locations with dust and harmful gases, it is necessary to install the facility or equipment that can block the dust and harmful gases.
Inspection before Operation (Control power is not supplied)	<ul style="list-style-type: none"> Please appropriately insulate the connection segment of the wiring terminal. Ensure correct wiring to avoid abnormal actions. Inspect for any conducting materials such as small metal flakes inside the HMI and watch for hazardous substances such as flammable materials and inflammable gases. If the electronic instruments near the HMI are affected by the electromagnetic interference, please use the calibration instrument to reduce the interference. Please make sure the voltage of the HMI is correct and stable.
Inspection before Running (control power is supplied)	<ul style="list-style-type: none"> Check whether the power indicator is on Check if the communications between various systems are normal. Please contact your local distributor if there is any abnormal behavior by the HMI.

VX 760T Series

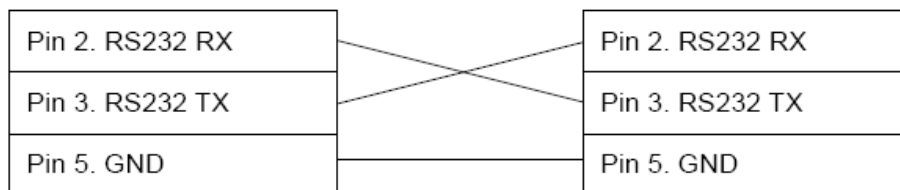
COM1 & COM2 Connector (DB 9)

COM Port Schematic diagram	Pin Number	Description
	1	RS422 RX+
	2	RS232 RX
	3	RS232 TX
	4	RS485 TX+
	5	GND
	6	RS422 RX-
	7	RS232 RTS
	8	RS232 CTS
	9	RS485 TX-

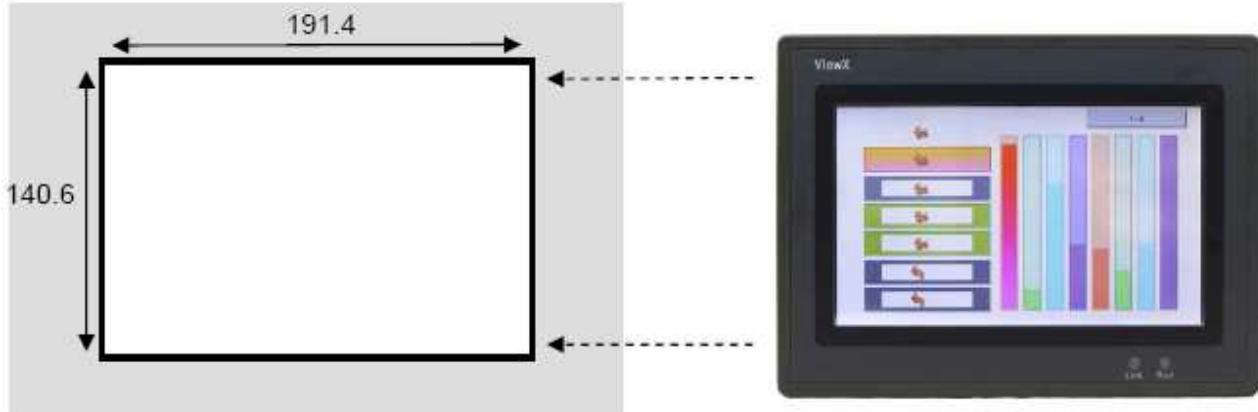
Download Adaptor Wire

PC DB9 FEMALE

VX760T DB9 FEMALE



Schematic Diagram for Installation:



Please place the HMI with its back facing the opening side of the machine.



Please install the metal retaining bracket on the side of VX 760T, with the metal clip hooking the front cap and the top of the screw pushing against the inside of the control box.



Please secure the screws on the side (the maximum torque for the retaining bracket is 0.3 Nt·m)

Product Specifications

	Function Specifications	VX760T	
Product Specifications	Central Processing Unit (CPU)	32 Bits RISC	
	Memory	7680K/8192K	
	Communication Port		COM1 RS-232/RS-422/RS-485 (automatic switching)
			COM2 RS-232/RS-422/RS-485 (automatic switching)
			Expandable USB Host
			Expandable Ethernet Network
	Calendar		Built-in (powered by rechargeable lithium battery)
Display device	Display Type	TFT LCD	
	Display Size	7 inches	
	Display Color	Color 65K	
	Brightness	300 cd/m ²	
	Screen Resolution	800 * 480	
	Brightness Adjustment	Digital (0-100)	
	Contrast Adjustment	Automatic	
	Screen Contrast Ratio	400 : 1	
	Backlight	LED	
	Language	All texts available in Windows	
	Audio Output	Buzzer	
Touch Panel	Type	Resistive	
Electrical Specifications	Rated Voltage	24V DC±10%	
	Power Consumption	Below 10W	
	Anti-statics	Contact discharge: -6KV~+6KV (Grade 3 by IEC61000-4-2)	
	Anti-statics	Non-contact discharge: -15KV~+15KV (Grade 4 by ICEC61000-4-2)	
Environmental Specifications	Working Temperature	0°C~45°C	
	Storage Temperature	-20°C~60°C	
	Humidity	20~85% RH (no condensation allowed)	
	Anti-shock capability	10Hz~25Hz (0.5 mm along X, Y, and Z directions for 30 minutes)	
	Waterproof Capability	IP65/NEMA4	
	Cooling	Natural air circulation	
Machine Dimensions	Exterior Dimensions 【mm】	203.2*152.4*50.8	
	Opening Dimensions 【mm】	191.4*140.6	
	Weight	0.75 kg	
	Exterior Material	ABS (Acrylonitrile Butadiene Styrene)	