SW05E Installation Manual

Part 1 Note

In order to make SW05E work normally, please connect the chassis ground according to the requirements of this manual when installing and using it.
In order to make SW05E work normally, please connect according to the wire sequence of the power interface in this manual when installing and using it.

Part 2 Safety Precautions

Notice following safety precautions at any moment when installing, wiring, operating, maintenance and examining.

Installation

Please set up SW05E according to this manual otherwise it may cause device damage.
It's forbidden to uncover the product in the environment that has water vapor, corrosive gas or combustible gas, otherwise it may cause electric shock or fire.

Wiring

Please connect the grounding terminal with CLASS-3(Less than 100Ω) ground, otherwise it may cause electric shock or fire.
2. Please use DC24V power supply for the switch. The access of other ranges of power supplies may lead to instability of some parameters or performance, and may seriously lead to machine damage.

Operational Requirements:

1. By default, WPOE does not supply external power. The WPOE power supply function on SW05E needs to be used in conjunction with Wecon related products.
Do not change wiring while the power is ON, otherwise it may cause electric shock or device damage.

Maintenance

It is forbidden to touch the inside of the SW05E interface, otherwise it may cause device damage and electric shock.
When the power supply is started, non-professionals are forbidden to remove SW05E without permission, otherwise it may cause device damage and electric shock.
Do not touch connection terminal in 10 minutes after power-off, otherwise residual voltage may lead to electric shock or device damage.
When the switch is running, the exhaust hole cannot be sealed, otherwise it will easily cause failure.

Communication

Please connect to the communication wire according to this manual.
The length of communication wire should meet the requirement. When using the WPOE interface for power supply, the length of the network cable cannot exceed 2 meters.
Use the correct ground loops in order to avoid abnormal communication.

Part 3 Work Environment

The product must be placed in the packaging box before installation. If not in use, be sure to notice the following items when stored in order to make the product accord with the warranty of our company and future maintenance:
Storage environment must be dry and dust-free.
Storage environment temperature must refer to "Specifications".
Storage humidity must refer to "Specifications".

Avoid corrosive gases and liquids in the storage environment.
Avoid placing the product directly on the ground.

Part 4 Basic Inspection

Please do the following basic tests before using the switch:
General inspection:
1. Regularly check whether the switch power supply and network port wiring are good or loose.
The vent hole should be protected from oil, water and metal powder, and the chip powder of the drill should be prevented from falling into the SW05E.
3. If the switch is installed in a place with harmful gases or dust, it should prevent the intrusion of harmful gases and dust.
Checking before installation (Unpowered)
Please deal with connection division of wiring terminal insulated.
Communication wiring should be correct, otherwise abnormal operation may occur.
3. Check whether foreign objects have entered the switch, especially conductive objects such as screws or metal pieces and flammable objects.
4. When the electronic instruments used near the switch are subject to electromagnetic interference, please use the instrument adjustment to reduce electromagnetic interference.
5. Please make sure whether the power supply voltage of the switch interface is correct.
Checking before running (Powered)
Check the status of the power indicator.
Check if the communication between the V-BOX and the device is normal.
If there is any abnormality in the interface, please contact the manufacturer.

Part 5 Product Installation

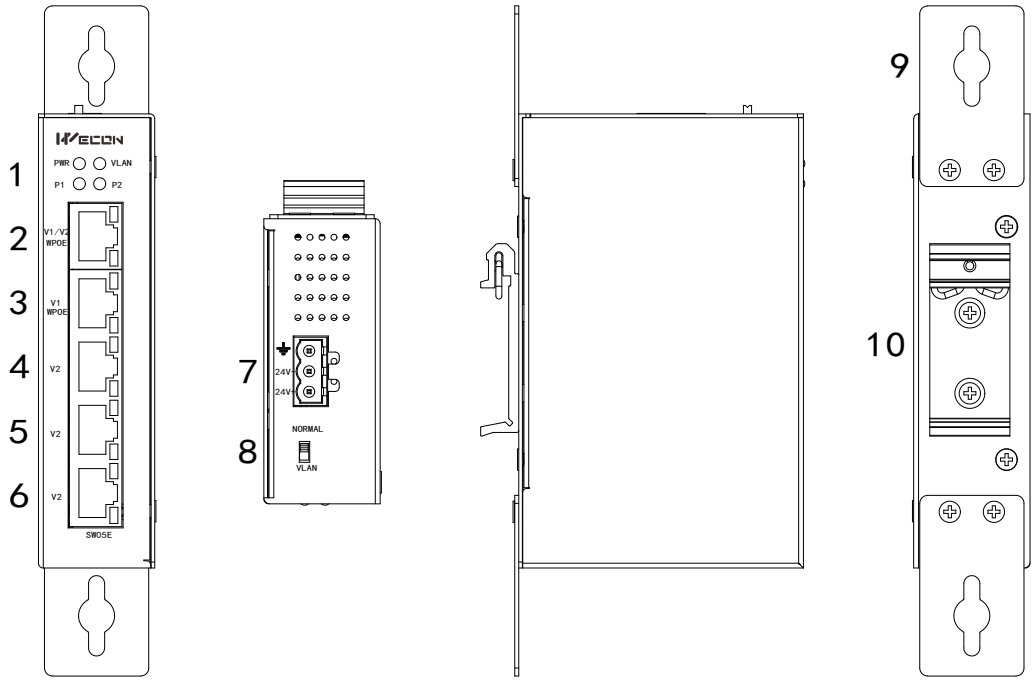
Notes:
The installation direction must be in accordance, otherwise it may lead to fault.
2. In order to achieve a good cooling cycle effect, when installing the switch interface, sufficient space must be maintained for adjacent items and baffles (walls) on the top, bottom, left and right to avoid equipment damage caused by poor heat dissipation.
Used in crust plane of Type 4X indoor grade.
Installation steps:
1. There are two modes of SW05E installation: Track mounting and wall mounting;
Make sure the fixed piece screw is cased, and then hitch front cover screw to withstand inside control box.
Please tighten the screw with a suitable torque, remember not to exceed this torque, otherwise it will cause damage to the plastic shell.
Torsion: 6.17lb-inch (0.7nm)

Part 6 Specifications

Model / Content	SW05E
Power voltage	DC 24V
Power voltage range	DC19V-DC28V

Model / Content	SW05E
Allowed instantaneous stop time	<5ms
Power consumption	<1W @24V
WPOE Single Port Power	<10W @24V
Working temperature	-10℃~+55℃
Storage environment temperature	-20℃~+70℃
Ambient humidity	10%-90%RH(Non-condensing)
Storage environment humidity	10%-90%RH(Non-condensing)
Vibration resistance	10 to 25Hz (X, Y, Z direction 2G/30 minutes)
Corrosion resistance	Avoid corrosive gases
Cooling	Air cooling

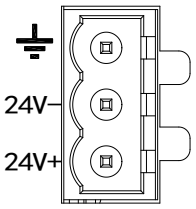
Part 7 Parts and Functions



SWE05 component description

1	Indicator light	2	Network interface1	3	Network interface 2	4	Network interface 3
5	Network interface 4	6	Network interface 5	7	Power terminal	8	DIP switch
9	Fixed plate	10	Rail fastener				

The power interface is defined as follows (From top to bottom):



Case grounding
DC 24V negative pole
DC 24V positive pole

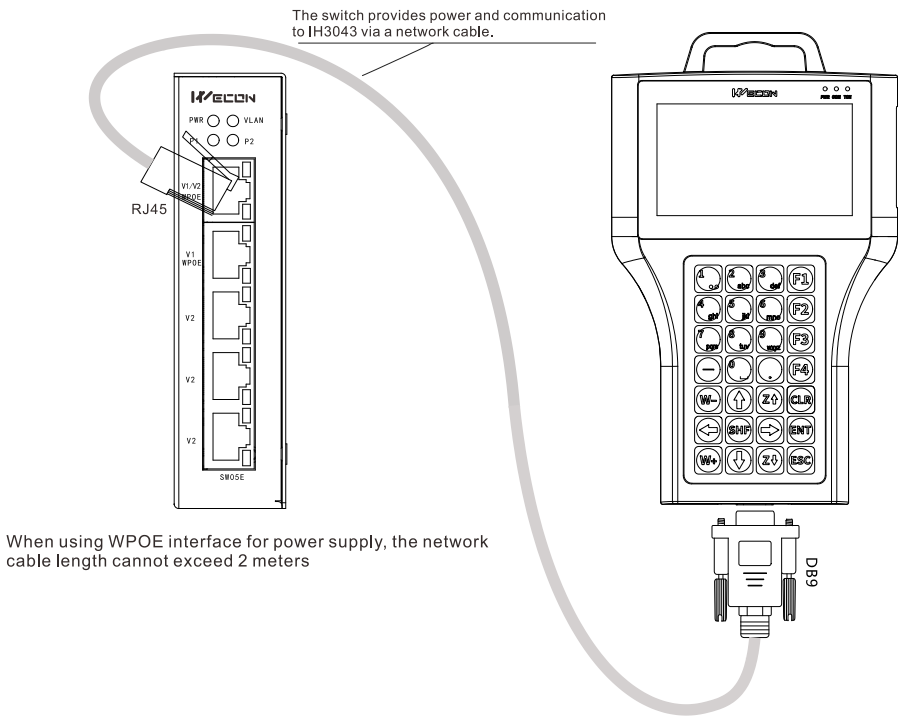
Network port function:

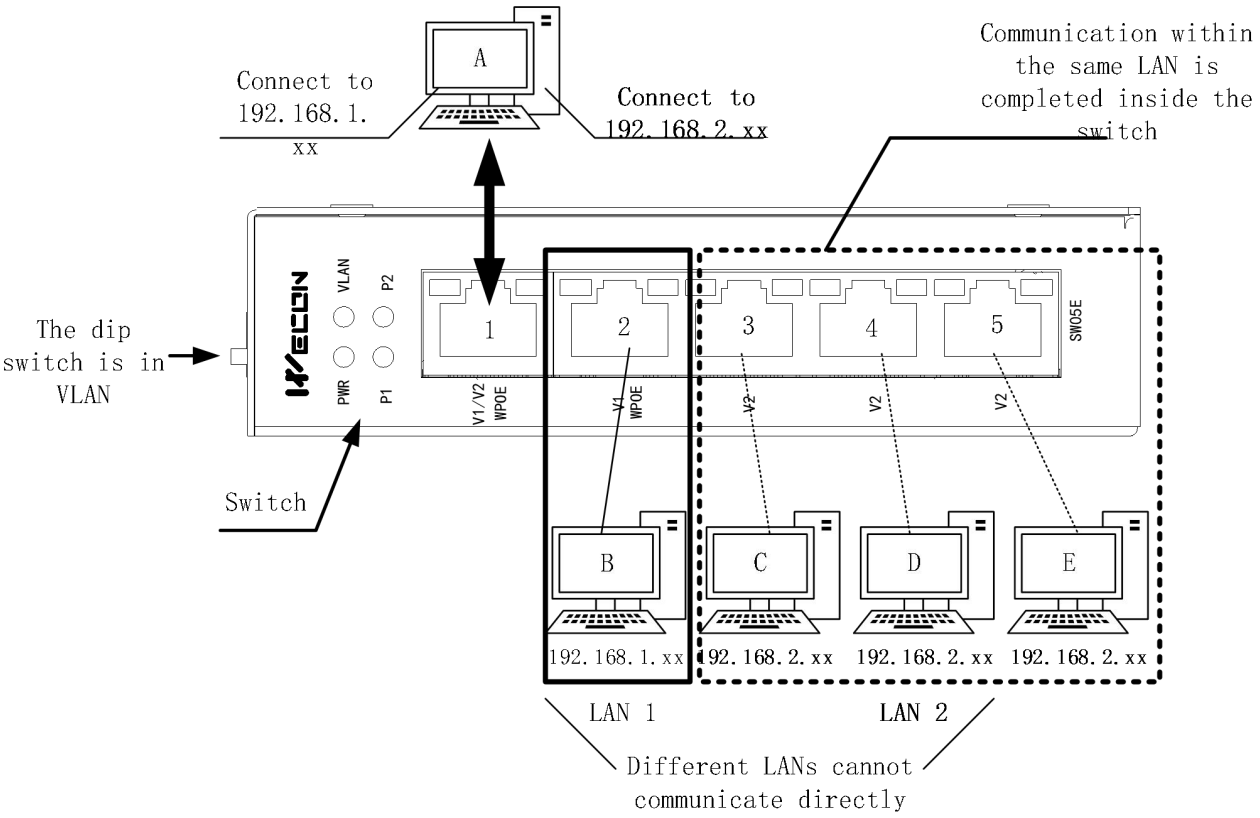
Network interface	Function	Description
Network interface1	V1/V2 WPOE Network port	1) Network ports ① and ② support WPOE function: After the peer device connected to the network port recognizes the mechanism set by Wecon through the network cable, it can directly supply power to the peer device through the network cable, and at the same time has the function of network port communication. (The output voltage is equal to SW05E power interface voltage) 2) Five network ports: 10/100M Adaptive. 3) The DIP switch is in the NORMAL position: The five network ports are the same local area network, and the ports under the same network segment can transmit and communicate with each other. 4) The DIP switch is in the VLAN position: The five network ports are divided into two local area networks. ❖ Network port ② is one local area network, and network ports ③, ④, and ⑤ are another local area network. (Different LAN ports are isolated and cannot communicate, that is, network port ② and network ports ③, ④, and ⑤ cannot communicate with each other. Network ports ③, ④, and ⑤ are the same LAN, and the three ports can communicate with each other under the same network segment) ❖ Network port ① is a trunk port connecting two different local area networks (②⇋ ①⇌ ③④⑤).
Network interface 2	V1 WPOE Network interface	
Network interface 3	V2 network interface	
Network interface 4	V2 network interface	
Network interface 5	V2 network interface	

*The default WPOE port does not supply external power, and the WPOE power supply function needs to be used with Wecon specific related products.

For example, the switch is equipped with our IH3043 teaching pendant, and the product is powered and communicated through a network cable, as shown in the figure below.

*Examples of networking in VLAN mode:





When communicating between different LANs, both parties are connected to the same switch:
Example communication path: sender computer B--switch--computer A--switch--receiver computer C

Indicator light of network port definition:

Always ON: The port normally connects the device;

Blink: The port is transmitting data;

Off: The port is not connected to the device.

Indicator Lamp Definition:

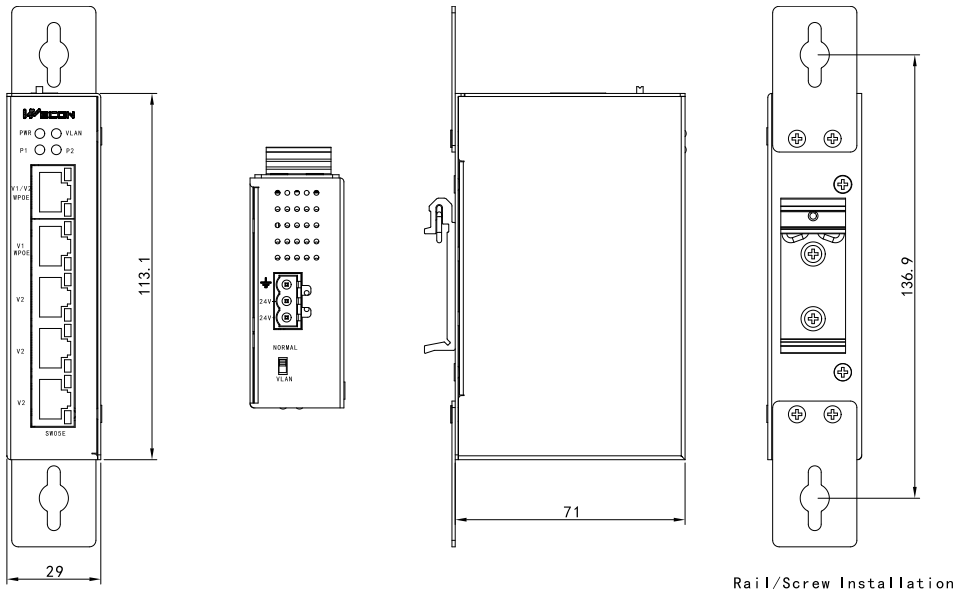
Indicator light	Definition	Description
PWR	Power indicator	Always ON: The device power supply is powered on normally. Off: The device is not powered on or abnormal.
VLAN	Check the status of the model indicator	Always ON: VLAN Off: NORMAL
P1	V1/V2 WPOE network interface power supply indicator	Always ON: Port 1 WPOE Power supply normal Off: Port 1 WPOE No power supply
P2	V1 WPOE network interface power supply indicator	Always ON: Port 2 WPOE Power supply normal Off: Port 2 WPOE No power supply

DIP switch function:

DIP switch	Function
NORMAL	The device is in normal mode. The five network ports are the same local area network, and the ports under the same network segment can transmit and communicate with each other.
VLAN position	The device is in VLAN isolation mode. The five network ports are divided into two local area networks. For detailed functions, please refer to the above network port functions and networking examples.

Part 8 The Size of Product

Unit: mm, error bound ±0.5mm



SW05E Installation Dimension

Notice

The contents of this manual are subject to change without notice.

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