

User Manual

AI PoE++ Switch

Notice: This installation guide takes 8-port switch as an example

RJ 45 Making Method

Instruments to be used: wire crimper, network tester. Wire sequence of RJ45 plug should conform with EIA/TIA568A or 568B.

- 1) Shuck off about 2cm long the insulating layer, and bar the 4 pairs UTP cable;
- 2) Depart the 4 pairs UTP cable and straighten them;
- 3) Line up the 8 pieces of cables per EIA/TIA 568A or 568B;
- 4) Cut out 1.5 cm cable wrap and leave the bare wire;
- 5) Plug 8 cables into RJ45 plug, make sure each cable is in each pin;
- 6) Then use wire crimper to crimp it;
- 7) Follow the 5 steps above to make the another end, following the same sequence of the first plug;
- 8) Using network tester to test the cable whether is working.

pin color		pin color	
1 white/green		1 white/orange	
2 green		2 orange	
3 blue		3 white/green	
4 white/orange		4 blue	
5 white/blue		5 white/blue	
6 white/brown		6 green	
7 orange		7 white/brown	
8 brown		8 brown	
EIA/TIA 568A		EIA/TIA 568B	

Indoor PoE++ Switch Items

AI PoE++ Switch

Power Cable

User Manual

Outdoor PoE++ Switch Items

Outdoor PoE++ Switch

Power Cable

Mounting Kits

User Manual

Indoor Switch installation diagram

Wall Mounted

Rack Mounted

Desktop Mounted

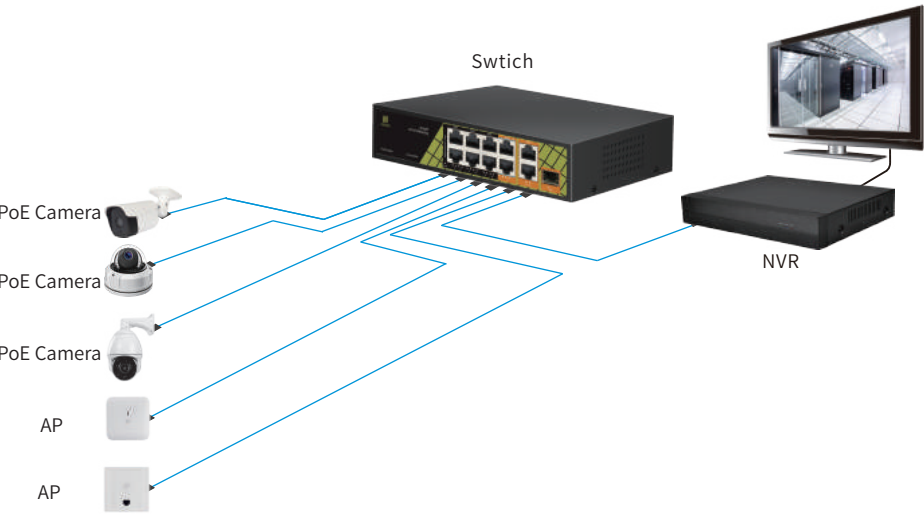
Outdoor Switch installation diagram

Wall Mounted

Hoop Mounted

Mounting ear Wall Mounted

Application



Installation Steps:

- Please follow installation steps as below:
- 1) Please turn off the signal source and the device's power, installation with power on may damage the device;
 - 2) Use 8pcs network cables to connect 8pcs IP cameras with the product's 1~8 RJ45 Ethernet ports;
 - 3) Use another network cable or (optical fiber) to connect switch's UPLINK port with NVR or computer;
 - 4) Connect switch with power adapter;
 - 5) Check if the installation is correct and device is good, make sure all the connection is reliable and power up the system;
 - 6) Make sure every network device power supply works normally.

Function Description

AI Watchdog
Detect PoE Camera when it is frozen, and redoot it automatically.

Step 1

Data Request

PD status good

Data Echo

PoE Camera

Step 2

Detect aktive status for aaround 90s.

Data Request

PoE Camera

Step 3

PoE

Reboot PoE canera if without response

PoE Camera

Step 4

PoE

PD Alive

PoE Camera

PoE++
The blue port is a 60W power supply port

24V 42W Splitter

24V(38-40W)

High Power AP

IP Sound

Power Analysis

PoE Red Light Indication

- 2POE power light blinks to determine the power status of the receiving end, and each blink is 2.7 watts
- Blink 7 Times Every 4 Seconds: Output Power ≥ 16.2 watts
- If the power light flashes continuously, the Watchdog function has been turned on

Ports Description

1000Mbps Series

100Mbps 1000Mbps Hybrid Series

100Mbps Series

1 -100Mbps PoE Ports

2 -1000Mbps PoE Ports

3 -1000Mbps Uplink Ports

4 -1000Mbps SFP Ports

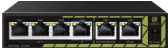
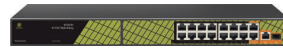
5 -1000Mbps 60W power supply Ports

6 DC Ports

7 -100Mbps Uplink Ports

8 -100Mbps 60W power supply Ports

Indoor PoE Switch port correspond to the Outdoor PoE Switch

Model						
Ports	PoE Ports:PoE1~4 100Mbps 60W PoE Ports:PoE4 100Mbps Uplink Ports:LAN1~2 100Mbps Power Input: DC 12-52V/LAN1~2(60W)	PoE Ports:PoE1~8 100Mbps 60W PoE Ports:PoE7~8 100Mbps Uplink Ports:PoE1~8 100Mbps	PoE Ports:PoE1~8 100Mbps 60W PoE Ports:PoE7~8 100Mbps Uplink Ports:LAN1~2	PoE Ports:PoE1~6 100Mbps PoE Ports:PoE7~8 1000Mbps 60W PoE Ports:PoE7~8 1000Mbps Uplink Ports: LAN1~2 1000Mbps SFP Ports:SFP 1000Mbps	PoE Ports:PoE1~14 100Mbps PoE Ports:PoE15~16 1000Mbps 60W PoE Ports:PoE15~16 1000Mbps Uplink Ports: LAN1/PoE15~16 1000Mbps SFP Ports:SFP 1000Mbps	PoE Ports:PoE1~22 100Mbps PoE Ports:PoE23~24 1000Mbps 60W PoE Ports:PoE23~24 1000Mbps Uplink Ports: LAN1~2/PoE23~24 1000Mbps DC Port: 5v1A DC Power output
Transmission Rate	200Mbps Full Duplex; 10 or 100Mbps Half Duplex			2000Mbps Full Duplex; 10 or 100 or 1000Mbps Half Duplex		
Performance	Bandwidth: 1.2Gbps	Bandwidth: 1.6Gbps	Bandwidth: 2Gbps	Bandwidth: 11.2.0Gbps	Bandwidth: 10.8Gbps	Bandwidth:12.4Gbps
	Network Latency (10 to 100Mbps): <16μs (use the 64byte package size)			Network Latency (10 to 1000Mbps): < 16μs (use the 64byte package size)		
	MAC address table: 2K			MAC address table: 8K		
	The Frame Filter & Transmission Rate: 14800pps the most for 10M port, 148800pps the most for 100M port			The Frame Filter & Transmission Rate: 14800pps the most for 10M port, 148800pps the most for 100M port,1488000pps the most for 1000M port		
Networking	IEEE 802.3i 10BASE-T/IEEE 802.3u 100BASE-TX/IEEE 802.3xFlowControl					
	IEEE 802.3ab 1000BASE-T/IEEE 802.3z:1000BASE-X				IEEE 802.3ab 1000BASE-T	
	IEEE 802.3af/at/bt Power over Ethernet					
Power Support	Power Input: DC 12~52V Switch Input:48-52V (60W)	Power Input: AC 110~220V 120W			Power Input: AC 110~220V 400W	
	Power output: PoE1~3Port:1/2(+52V),3/6(GND) PoE 4Port:1245(+53V),3678(GND) compatible1/2(+52V),3/6(GND)	Power output: PoE1~6Port:1/2(+52V),3/6(GND) PoE7~8Port:1245(+53V),3678(GND) compatible1/2(+52V),3/6(GND)			Power output: PoE1~14Port:1/2(+52V),3/6(GND) PoE15~16Port:1245(+53V),3678(GND) compatible1/2(+52V),3/6(GND)	Power output: PoE1~22Port:1/2(+52V),3/6(GND) PoE23~24Port:1245(+53V),3678(GND) compatible1/2(+52V),3/6(GND)
Size(L*W*H)	130mm*65mm*31mm	187mm*139mm*43mm			430mm*180mm*45mm	
Working	Operating Temperature: -10℃ ~55℃ (-14°~131℉)					
	Storage Temperature: -40℃ ~70℃ (-104°~158℉)					
	Operating Humidity: 10%~90% non-condensing					
	Storage Humidity: 5%~90% non-condensing					

Model						
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Transmission Rate	2000Mbps Full Duplex; 10 or100 or 1000Mbps Half Duplex					
Performance	Bandwidth: 12Gbps	Bandwidth: 16Gbps	Bandwidth: 24Gbps	Bandwidth: 36Gbps	Bandwidth: 52Gbps	Bandwidth: 16.8Gbps
	Network Latency (10 to 1000Mbps): < 16μs (use the 64byte package size)					
	MAC address table: 8K					
	The Frame Filter & Transmission Rate: 14800pps the most for 10M port, 148800pps the most for 100M port,1488000pps the most for 1000M port					
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Physical Specifications	Size(L*W*H): 130mm*65mm*31mm	Size(L*W*H): 187mm*139mm*43mm		Size(L*W*H): 430mm*180mm*45mm		
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