



## User Guide

AES4001

24 x GE | 4 x 10 GE SFP+ | L3



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This manual is applicable to AES4001. Unless otherwise specified in the manual, the product diagram shows AES4001 as an example.

## Packing List

When using the Switch for the first time, carefully open the packing box. The packing box should contain the following items:

- Switch\*1
- User Manual\*1
- Power Cord\*1
- Console Cable\*1
- Accessories (Rack Mount Kit\*2, Rubber Feet\*4, Screw\*8)

**⚠Note:** Precision devices are built in the device, please handle them carefully to avoid violent vibration, which may affect the performance of the device. If you find that the equipment is damaged or any parts are lost in the process of transportation, please inform us, we will give you a proper solution as soon as possible.

## Chapter 1 Product Introduction

### 1.1 Product Overview

AES4001 is a management switch product independently developed by our company. Provides 24 10/100/1000Mbps adaptive RJ45 ports, each supporting MDI/MDIX automatic flip and wire-speed forwarding, and 4\*10Gbps SFP+ fiber modules. It also provides high performance, enterprise QoS, advanced security policies, and rich layer 3 management features. With all these advanced features, the switch is powerful and flexible enough to deploy wireless access points or IP-based network surveillance cameras for users, making it ideal for WIFI coverage, Internet cafes, computer rooms, and more.

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## Chapter 2 Product Appearance Description

### 2.1 Front Panel

Introduction of switch front panel:

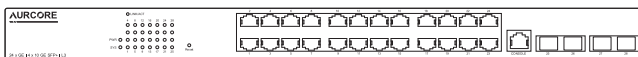


Figure 2-1 Switch front panel diagram

### 2.2 LED Indicator

The LED indicator light of the switch is shown in the following table. Users can easily and quickly monitor the work and operation status of the switch through the following indicator light:

LED	Color	Function
PWR	Green	Off: No power supply. Light: Indicates the Switch has power.
LNK/ACT	Green	Off: No network device is connected. Light: The network device is connected. Blink: Indicates that the Switch is actively sending or receiving data over that port.

### 2.3 Rear Panel

The rear panel of the switch is introduced:



Figure 2-2 Diagram of the rear panel of the switch

#### ➤ AC Power Socket

This is an AC power socket, connect the negative plug of the power cord to this interface, and connect the positive plug to the AC power supply.

#### ➤ Grounding Column

Located on the left side of the power interface, please use a wire to ground in case of lightning.

**⚠ Precautions:** The product has provision for a permanently connected protective grounding conductor, this conductor need to install to building earth by a skilled person.

## Chapter 3 Installation Guide

This chapter helps users correctly install and safely use Switches.

### 3.1 Installation Precautions

**⚠Precautions:** To avoid equipment damage and personal injury, observe the following precautions:

- The Switch room should be dry and ventilated, free from corrosive gases and strong electromagnetic interference.
- The humidity of the Switch equipment room should be lower than 90%. Install proper devices when possible.
- The grounding of the Switch shall comply with the grounding requirements described in this manual, and shall be separately and well grounded.
- The Switch voltage should be stable to prevent abnormal operation of the Switch caused by power supply voltage mutation, fluctuation and other phenomena.
- Keep a proper distance between the Switch and other devices. Do not stack other devices with the Switch.

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- The connection cable between the Switch and the distribution frame should be standardized and reasonable, and the distribution frame (box) jumper wire should be concise and clear to prevent the phenomenon of parallel lines and wires.
- To avoid the danger of electric shock, do not open the chassis without authorization; If any fault occurs, contact professional maintenance personnel.

**⚠ Safety Tips:**

- Use a three-hole socket with safe grounding, and ensure that the PGND cable of the power socket is properly grounded.
- Ensure sufficient space for heat dissipation and ventilation of the Switch. Do not place heavy objects on the Switch.

### 3.2 Installation Environment

Before installation, make sure that the proper working environment is available, including power requirements, adequate space, proximity to other equipment to be connected, and other equipment in place. Please confirm the following installation requirements:

- Ensure the stability of the workbench and good grounding;
- Environment requirements: The operating temperature ranges from 0°C to 40°C (32°F to 104°F) and the working humidity is 10% ~ 90%.

### 3.3 Installation

#### Rack mounted

- Check the grounding and stability of the cabinet;
- Fix mounting ears to both sides of the front panel of the Switch using screws. Place the Switch on a bracket of the cabinet and move the Switch along the guide rails of the cabinet to a proper position;
- Use screws to fix mounting ears to the guide rails at both ends of the cabinet to ensure that the Switch is securely installed on the brackets in the cabinet slots. The mounting ear of the device is not used for weight bearing, it is only used for fixation;
- When installing devices in a cabinet, brackets (fixed on the cabinet) are provided below the device chassis to support devices.

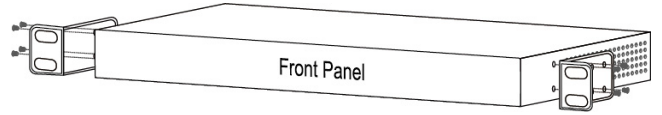


Figure 3-1 Diagram 1 of rack installation

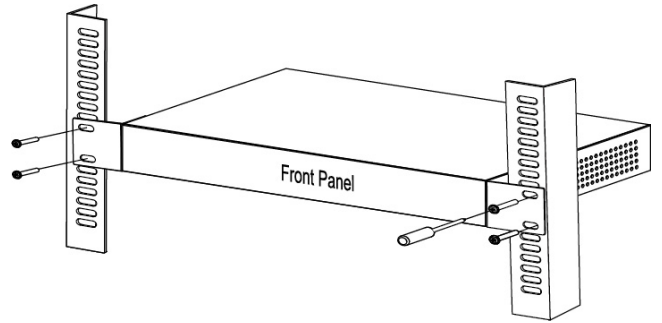


Figure 3-2 Diagram 2 of rack installation

#### Desktop installation

- Place the bottom of the Switch face up on a large enough stable desktop;
- Tear off the attached sticky paper on the surface of the footpad and paste the footpad into the groove at the bottom of the chassis of the Switch to prevent external vibration;
- Carefully position the Switch upright on the workbench.

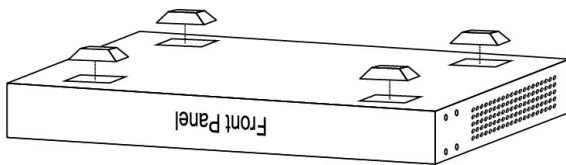


Figure 3-3 Desktop installation diagram

### 3.4 Enabling the Switch

Connect the switch to the power socket using the packaged power cable or power adapter (if available). After the switch is powered on, the switch automatically initializes. If all port indicators are on and off, the system is reset successfully. The power LED indicator is always on.

**Note:** Before powering on the device, ensure that the power supply voltage is consistent with that marked on the switch. Otherwise, the device will be damaged.

### Appendix: Technical Specifications

Model	AES4001
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3ae, IEEE 802.3x, IEEE 802.1X, IEEE 802.1q, IEEE 802.1p, IEEE 802.1d, IEEE 802.1w, IEEE 802.3ad
Network Media	10BASE-T: UTP category 3,4,5 cable (≤100m) 100BASE-TX: UTP category 5 cable (≤100m) 1000BASE-T: UTP category 5e cable (≤100m) 1000BASE-X: MMF, SMF 10GBASE-X: MMF, SMF 10GBASE-SR: OM1/OM2/OM3 or above MMF (2m~300m) 10GBASE-LR: IEC's B1.1 and B1.3 SMF (2m~10000m)
Transfer Mode	Store-and-Forward
Frame Forward Rate	10Base-T: 14881pps/Port 100Base-TX: 148810pps/Port 1000Base-T/X: 1488095pps/Port 10GBase-SR: 14880952pps/Port 10GBase-LR: 14880952pps/Port
MAC Address Table	16K, Auto-learning, Auto-update
Switching Capacity	128Gbps
Input Voltage	AC:100~240V, 50/60Hz, 1A Max
Dimensions (L*W*H)	441.1*206.7 *44 mm
Green Energy Saving	IEEE 802.3az
Power Input	AC: 100~240V 50/60Hz
Operating Temperature	0°C ~ 40 °C (32°F ~ 104°F)
Storage Temperature	-40 °C ~ 70°C (-40°F ~ 158°F)
Operating Humidity	10% ~ 90% non-condensing
Storage Humidity	5% ~ 90% non-condensing