

10/100Mbps Fast Ethernet Switch User Manual



RECYCLABLE

Chapter 1 INTRODUCTION

1.1 Product Briefs

The switch is a un-management 10/100Mbps switch, the Fast desktop switches provides 5/8/16/24 10/100Mbps auto-negotiation ports, all ports support Auto MDI / MDIX feature. Ideally designed for SOHO and small workgroup networking connection, Simple and easy installation, it eliminates networks bottleneck while giving users flexibility and scalability.

1.2 Product Features

Table 1-1 Ethernet Switch Product Features

Item	Description
Standard	IEEE 802.3、IEEE 802.3u
Protocol	CSMA/CD
Data Rate	Ethernet: 10Mbps@Half Duplex; 20Mbps@Full Duplex Fast Ethernet: 100Mbps@ Half Duplex; 200Mbps@ Full Duplex
Topology	Star
Ports	5/8/16/24 autosensing 10/100Mbps Ethernet ports

Network Cables	<p>10Base-T: Category 3/4/5 shielded twisted pair (STP) with the maximum transmission distance of 100 m</p> <p>100Base-TX: Category 5 STP with the maximum transmission distance of 100 m</p>
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1.3 Physical & Environmental

Table 1-2 Ethernet Switch Environmental Features

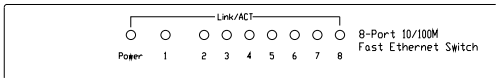
Temperature	<p>Operating: 0° ~ 40° C (32°F to 104°F)</p> <p>Storage: -10° ~ 70° C (14°F to 158°F)</p>
Humidity	<p>Operating: 10% ~ 90% RH, non-condensing</p> <p>Storage: 5% ~ 90% RH, non-condensing</p>
System cooling	Air cooling

1.4 Hardware Introduction

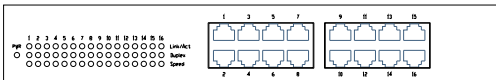
1.4.1 Product Appearance

1. Front Panel

The figure below shows the front panel of the Switch.



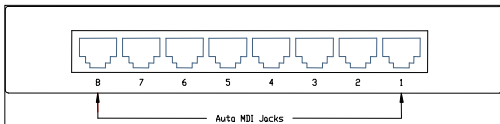
5/8-Port 10/100Mbps Switch Front Panel



16/24-Port 10/100Mbps Switch Front Panel

2. Rear Panel

The figure below shows the rear panel of the Switch. All MDI/MDI-X ports and an external DC power adapter jack in the 5/8-port rear panel. There is a AC inlet in the 16/24-Port switch rear panel.



5/8-Port Switch Rear Panel



16/24-Port Switch Rear Panel

Auto MDI/MDI-X Ports:

All ports support automatic MDI/MDI-X crossover detection. The Auto MDI/MDI-X function makes it simple to connect to the switch—just plug either a Crossover or Straight-Through CAT5 cable into any port.

DC Power Jack:

Power is supplied through an external DC power adapter. Check the technical specification section for information about the DC power input voltage.

AC inlet

Power is supplied through external AC power. The input AC voltage is 100~240V.

1.3.2 LED Indicators

Table 1-3 Ethernet Switch LED Indicators

LED	Panel signature	Status	Description
Power Indicator	Power	Green ON	Switch is powered ON
		OFF	Switch is powered OFF
Speed Indicator	Speed	Green ON	100Mbit/s
		OFF	10Mbit/s OR OFF
Status Indicator	Link/Act	Green ON	Link
		Green Blinking	Activity
		OFF	No link path

Chapter 2 CONNECTING THE SWITCH

- PC to Switch

A computer can be connected to the 8-Port 10/100Mbps Switch via a two-pair Category 3, 4, 5 UTP/STP Straight-Through or Crossover cable. A computer equipped with a RJ-45 10/100Mbps port can be connected to any of the eight 8-Port 10/100Mbps Switch ports.

The LED indicators for the PC connection depend on the capability of the computer's Ethernet card. If the LED indicators are not lit after making a proper connection, check the computer's Ethernet card, the cable, and the 8-Port 10/100Mbps Switch's conditions and connections.

- Hub to Switch

A hub (10 or 100BASE-TX) can be connected to the 8-Port 10/100Mbps Switch via a two-pair Category 3, 4, or 5 UTP/STP Straight-Through or Crossover cable. For 100Mbps operation a Category 5 cable must be used. The connection is accomplished from any port of the hub to any port of the 8-Port 10/100Mbps Switch.

- Switch to other devices

The 8-Port 10/100Mbps Switch can be connected to another switch or other devices (routers, bridges, etc.) via a two-pair Category 3, 4, 5 UTP/STP Straight-Through or Crossover cable. A Category 5 cable must be used for 100Mbps operation. The connection can be accomplished from any (MDI-X) port on the 8-Port 10/100Mbps Switch to any of the 10Mbps or 100Mbps (MDI-X) ports on another switch or other devices.

- Port Speed & Duplex Mode

After plugging the selected cable to a specific port, the system uses auto-negotiation to determine the transmission mode, auto-detecting the network speed (10Mbps or 100Mbps) for any new twisted-pair connection.

If the attached device does not support auto-negotiation or has auto-negotiation disabled, an auto-sensing process is initiated to select the speed and half-duplex mode is selected.

Chapter 3 MOUNTING THE SWITCH ON A WALL

The 8-Port 10/100Mbps Switch can also be mounted on a wall. Two mounting slots are provided on the bottom of the switch for this purpose. Please make sure that the front panel is exposed in order to view the LEDs. Please refer to the illustration below:

A.) Mounting on a cement wall

1. Mount the Nylon screw anchors into a cement wall.
2. Drive the T3 x 15L screws into the Nylon screw anchors.
3. Hook the mounting holes of the switch back on the screws; you have completed the wall-mount.

B.) Mounting on a wood wall

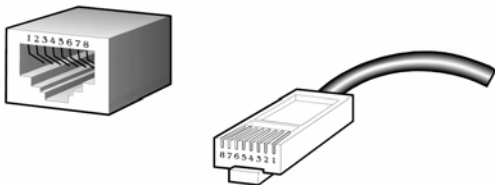
1. Drive the T3 x 15 L screws into the wood wall.
2. Hook the mounting holes of the switch back on the screws; you have completed the wall-mount.
 - (1) 3/4 inch minimum for wood wall
 - (2) 3 inch minimum for cement wall

Annex RJ-45 PIN SPECIFICATION

The following diagram and tables show the standard RJ-45 receptacle/connector and their pin assignments.

RJ-45 Connector pin assignment	
Contact	Media Direct Interface Signal
1	Rx +(receive)
2	Rx - (receive)
3	Tx + (transmit)
4	Not used
5	Not used
6	Tx - (transmit)
7	Not used
8	Not used

RJ-45 Connector pin assignment



Standard RJ-45 receptacle/connector

FCC Uc vgo gpv

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.