5-Port 10/100Mbps Fast Ethernet Switch

User's Manual

FCC COMPLIANCE STATEMENT

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the instructions provided with the equipment, may cause interference to radio and TV reception. The equipment has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a commercial environment. However, there is no guarantee that interference will not occur in a particular installation.

If you suspect this equipment is causing interference, turn your switch on and off while your radio or TV is showing interference to determine the source of the interference.

You can try to correct the interference by one or more of the following measures:

1. Reorient the receiving radio or TV antenna where this may be done safely.
2. To the extent possible, relocate the radio, TV or the other receiver away from the equipment.
3. Plug the computer which has the equipment installed into a different power outlet so that equipment and the receiver are on different branch circuits.

If necessary, you should consult the place of purchase or an experienced radio/ television technician for additional suggestion.

CAUTION : The phone jack cannot be connected to telephone system.

Contents

1 Introduction

Congratulations on your purchase of this 5-port desktop Fast Ethernet Switch. This high performance switch provides five Fast Ethernet ports to segment network traffic, extend Fast Ethernet connection distance, and convert data packets between different transmission speeds.

This switch provides five shielded RJ-45 ports both with 10Base-T/100Base-TX Auto-negotiation capability. All ports in this switch support Full-Duplex and Half-Duplex operation modes.

This switch is typically used to segment network traffics that can improve the network performance by increasing the total bandwidth as illustrated in Figure 1-1.

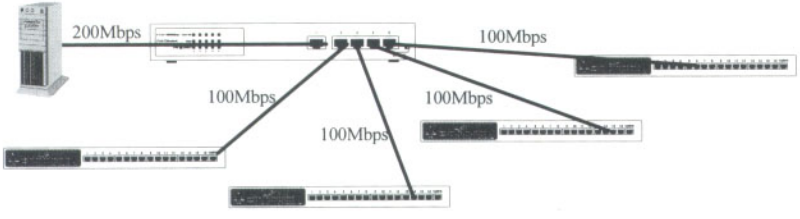

Figure 1-1 Increase network bandwidth

This switch utilizes stored-and-forward switching architecture that filters and forwards data after the complete data packet is received and examined to be free of errors.

With one set of status LEDs for each individual port, the switch operation status can be easily monitored. Their slim and compact design allows direct placing on the desktop or conveniently mounted on the wall or the side of a desk to accommodate cabling consideration.

2 Features & Specifications

(1) Features

- Comply with IEEE 802.3 10Base-T Ethernet and 802.3u 100Base-TX Fast Ethernet Standards.
- Simple and economical way to bridge 10Base-T network and 100Base-TX network.
- Easily connect and segment five Fast Ethernet hubs or segments.
- All RJ-45 ports support 10Base-T/100Base-TX and Full-Duplex /Half-Duplex Auto-negotiation function.
- Support store-and-forward switching architecture.
- Slim and Compact design
- Wall mountable
- Two-year warranty

(2) Specifications

- Standards : IEEE 802.3 and 802.3u
- 10/100Mbps Ports : RJ-45 x 5
- Switching Architecture : Store and Forward
- Filter/Forward Rate : 148,800 packets/sec.
- MAC Address : 8K
- Buffer : 1MB
- Nway Auto-negotiation : on all ports
- Full-Duplex/Half-Duplex : on all ports
- Switch LEDs : Power
- Port LEDs : LNK/ACT(Link/Activity), 100M, COL/FDX(Collision/Full Duplex)
- Dimensions : 8.67 x 4.61 x 1.18 inches/220 x 117 x 30 mm
- Weight : 1.76 lb./800g
- Power : 5V DC, 3A
- Operating Temperature : 32-131^{0}F (0-55^{0}C)
- Operating Humidity : 10-95% (Noncondensing)
- Emission : FCC Class A & CE Mark

3 Package Contents

- One 5-port 10/100Mbps Fast Ethernet Switch
- One external power adapter
- One set of (two pieces) stacking brackets and rubber stands
- User's manual

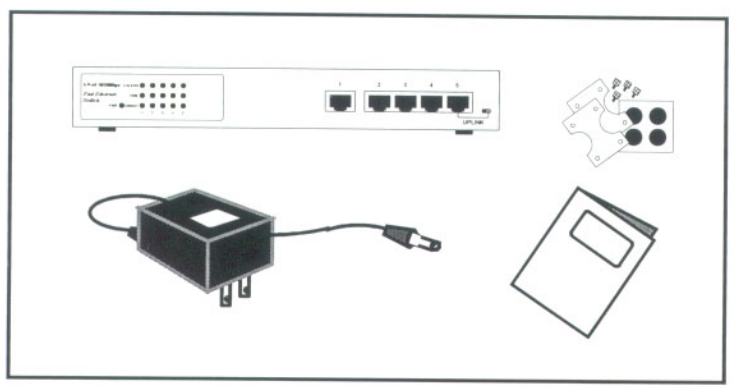

Figure 3-1 Package contents

4 Physical Description

(1) Panel

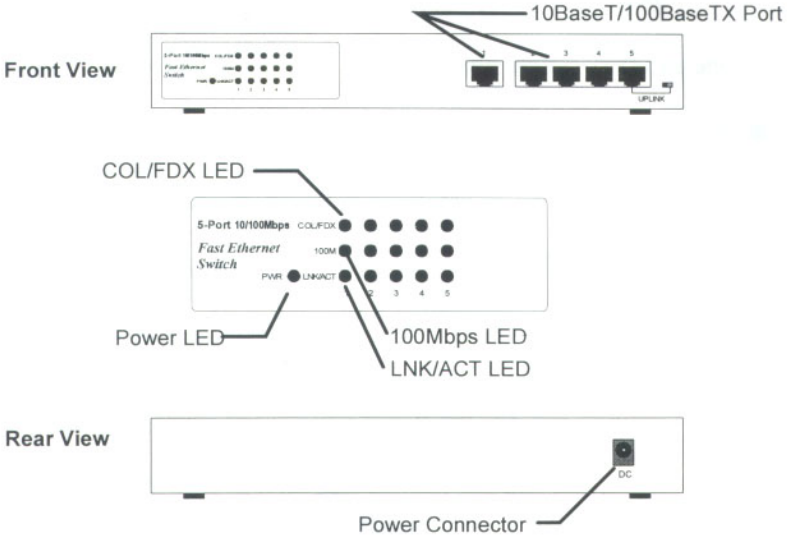

Figure 4-1 Panel description

(2) LED

LED	Color	Status	Description
PWR (Power)	Green	Lit	Power is supplied
		Off	No power
LNK/ACT (Link/Activity)	Green	Lit	A valid link is established
		Flash	Data packets received
		Off	No link is established
100M	Green	Lit	This port run at 100Mbps
		Off	Not connected or run at 10Mbps
COL/FDX (Collision/Full Duplex)	Yellow	Lit	This port run at Full Duplex
		Flash	Collision detected in this segment
		Off	No collision

Table 4-1 LED description

5 Installation

1. Operating Environment

This switch must be installed and operated within the limits of specified operating temperature and humidity (see previous section under Specifications). Do not place objects on top of the unit. Do not obstruct any vents at the sides of the unit. Do not position the unit near any heating source such as heater, radiator, or direct exposure to sun. Prevent entering of water and moisture into the unit. If necessary, use dehumidifier to reduce humidity.

2. Connecting to network devices

The RJ-45 ports on the switch are designed as MDI-X ports which allow using straight-through cables to connect the switch to workstation or hub's uplink port (MDI). A crossover cable must be used to connect the switch directly to a hub's regular port.

Connect one end of the network cable to the RJ-45 port on the front panel, and connect the other end of the network cable to the RJ-45 port on the network device. Follow the same procedure to connect all the RJ-45 ports of the switch. The UTP network cables must comply with EIA/TIA 568 specifications and Category 5 standard for 100Mbps data transmission. Maximum length, using UTP cable, between the switch and connected device is 100 meters (300ft). Once the network cable is connected to both ends and the attached network device is powered on, the green LNK/ACT LED should be lit.

An uplink slide switch is located right next to the 5th port of this switch allowing the 5th port to be configured as regular port(MDI-X) connecting to workstation, or as uplink port(MDI) connecting to another hub/switch. By shifting the uplink slide switch to uplink position, the 5th port becomes an Uplink port for easy connection to other hub's normal port using regular straight-through cables.

3. Connecting the power

Connect the output end of the AC power adapter to the power connector on the rear panel of the unit. Connect the AC power adapter to the power outlet. The green Power LED on the front panel should be lit.

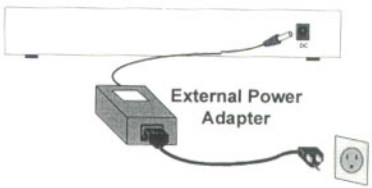

Figure 5-1 Connect the AC power adapter

6 Trouble-shooting

1. Power LED is not lit

- Check if the power cord is properly connected to the external switching power adapter and the power outlet. Make sure the DC power jack is firmly plugged into the power socket of the switch.

2. 100M Link is not lit when connect to 100Mbps device

- Check the power switch of the network device attached to the switch; make sure it is turned ON.
- Check the network cable; make sure it is properly connected to the switch and the network device.
- Check the network cable; make sure the UTP cables comply with EIA/TIA 568 and Category 5 specification.
- If RJ-45 ports are used to connect to a hub, make sure you have connected to a uplink port and not an regular port. If RJ-45 ports are used to connect to a hub's regular port, make sure the crossover cable is used.

3. Collision LED flashes constantly

- Remove all the network cables; connect the cables back one by one to isolate the source of the collision.
- Check the network cable, inferior cable quality will result in excessive collision and error packets.

[!] Contact your dealer if problem persist.