Introduction

The 16 port Ethernet Switch are designed to allow simultaneous transmission of multiple packets via an internal high-speed data channel. This means that it can partition a network more efficiently than bridges or routers in most environments. This 16 port Ethernet Switch is a highly reliable network Switch and is the ideal device for bridging Ethernet to Fast Ethernet workgroups or networks. Simple and cost-effective, the 16 port Switch Ethernet supports IEEE802.3 10Base-T Ethernet and IEEE802.3u 100Base-TX Fast Ethernet.

The front panel of the 16 port Ethernet Switch provides LEDs for Switch operation status and for troubleshooting. These LEDs display the power status for the system and link status speed, collision and receives status for each port.

Package Contents

- 16 port 10 / 100 switch
- One Power Cord and Accessory
- External power adapter （7.5V / 1.5A）
- One Quick Installation Guide (this guide)
- 2 pcs mount brackets and 8 screws included
- Rubber Pads for tabletop and stackable hub installation

Specification

Standard:
IEEE802.3 10Base-T Ethernet
IEEE802.3u 100Base-TX Fast Ethernet

Network Media:
100Base-TX - UTP/STP category 5 cable
10Base-T - UTP/STP category 3 or 5 cable

Connector: STP RJ-45 port for 10/100Mbps TX

LED indicators:
System – Power LED.
Individual port - link/activity and speed LEDs

Temperature: Operating （0 oC to 50 oC）
Storage : -20 oC to 70 oC
Humidity: Operating 10% to 90% RH
Storage :5% to 90% RH

Input Power Requirement: 100 - 240VAC, 50 - 60Hz, Auto-sensing

Registrations: FCC Part 15 Class A, CE

Features :

- Complies with IEEE 802.3/802.3u Ethernet standard
- Provided with 16/24 10/100Mbps RJ-45 ports
- Flow control is provided
- Full and Half duplex mode operation
- Built-in Storage of more than 1K MAC address
- Automation source address learning
- IEEE802.3X flow control for full duplex operation
- Backpressure flow control support for half duplex operation
- Per-port LEDs to indicate 10/100Mbps, Link/Activity
- Global power LED
- Supports Auto MDIX function
- Internal universal AC power is provided (16 port)
- External power Adapter is provided (16-port without internal universal AC power)
- Plug and play
- FCC, CE certified

Hardware Overview

Before you start to setup your network with your *Switching Hub*, browse through this section first and familiarize yourself with the various components of the hub. This section shows what the front and rear panels look like and briefly explains what each component is intended for.

Front panel of the *Switching Hub* consists of the followings:

Normal 10Base-T / 100Base-TX UTP Ports

These ports allow connections to PCs, workstations and servers in a 10Base-T or 100Base-TX network. They can automatically detect the transmission speed (that is, 10Mbps or 100Mbps) and adjust accordingly. Each auto MDIX port is an 8-pin RJ-45 connector (see figure below), and allow connection to a compatible hub, hub stack or switch using straight through cable.

LED Indicators

The LED indicators at the front panel show the overall hub status, individual port state and individual port speed.

LED Definition:

Please refer to the following table for LED definition

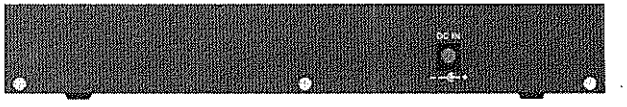
Front Panel

16 Ports 10/100 Internal Power Switch

LED	Status	Operation
Power	Green	Lit: Power is on
Link/act	Green	Lit: Indicates the adapter is connected to swich correctly Flash: the port is transmitting/receiving data.
10/100	Green	Lit: 100M bps Not lit: 10M bps

Power Receptacle

The power receptacle allows you to connect the provided



Back Panel of 16-port Switching Hub

Hardware Installation

Place the 16 port Switch on a smooth surface
Connect the output of power cord to the AC-inlet of 16 port Switch.
Connect other IEEE802.3 compatible network device(Hub ,Switch ,PC) to one port of the 16 port Switch using Category 3/4/5 UTP/STP cabling.
Connect another IEEE802.3 compatible network device (Hub , Switch ,PC) to another port of 16 port Switch by following the same process as described in Step3.

Notice:

The cable distance between 16 port Switch and other IEEE802.3 compatible network device should not exceed 100 meter.
Make sure the wiring is correct
It can be used Category 3/4/5 cable in 10 Mbps operation. To reliably operate your network at 100Mbps, you must use an Unshielded/Shielded Twisted-Pair (UTP/STP) Category 5 cable, or better Data Grade cabling. While a Category 3 or 4 cable may initially seem to work, it will soon cause data loss.
All kinds of IEEE802.3 compatible network device (Hub , Switch ,PC)can connect to Switch by using straight-through wires or crossover wires because of Switch's auto MDIX function.

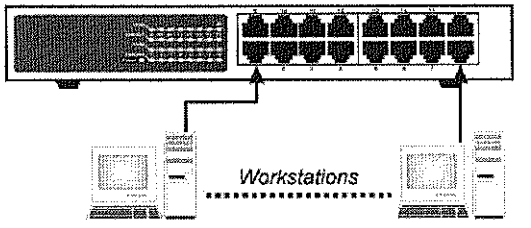
Connecting Computers to the Switching Hub

After placing the *Switching Hub* to your desired location, you can now start to setup your network. The first thing you can do is to start connecting computers. You can connect *servers and workstations* to the Switching hub.
As you follow through the installation procedure in this section, please take a close look on the connectivity rules indicated. Make sure you follow them to setup your network properly.

1. Connect each server or workstation to any of the *Normal ports* on the Switching hub

2. To connect, plug one end of the UTP cable to the network card on the computer and the other end to a Normal port on the Switching hub.

When connecting a server or workstation to the Switching hub, the cable length should not exceed 100 meters.

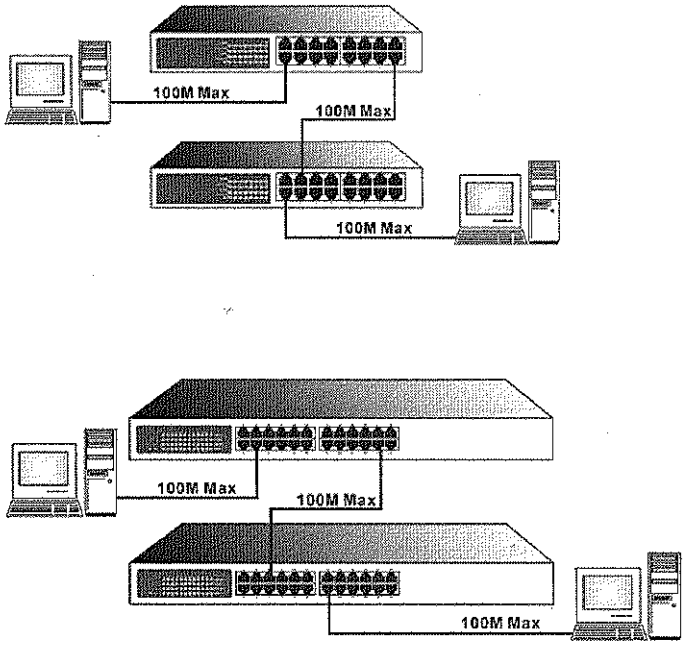


Connecting Computers to the Hub

Interconnecting Hubs

Follow the setup diagram and procedure below to connect a second *Switching Hub* or any compatible Switch.

Connect a straight through UTP cable between Port 8 or any auto MDIX port of your Switching Hub and any Normal or any auto MDIX port on the second hub or switching hub



Troubleshooting

If the 16 port Switch is not functioning properly, make sure the 16 port Switch was set up according to instructions in this manual.

The Power LED is not lit
Solution:
a. Check if the AC power cord is well connected. Try to unplug and plug back the power cord to the LAN Switch or try another power cord.
b. Check if the AC power source is in good condition.

The Link LED is not lit
Solution:
a. Make sure the Switch configuration is consistent with the connecting device
c. Check the cable connections.
d. Make sure the cable distance between 16/24 port

Switch and other IEEE802.3 compatible network device should not exceed 100 meter. Performance is bad
Solution:
a. Check the full duplex status of the Ethernet Switching. If the Ethernet Switching is set to full duplex and the partner is set to half duplex, then the performance will be poor.
b. Make sure the cable between the switch and other IEEE802.3 compatible network device is Category 5 UTP at 100Mbps operation.

Some stations can not talk to other stations located on the other port
Solution:
a. Check status of the LNK LED to make sure the link is correct.
b. Make sure that the workstation's network configuration is correct, modify the network configuration of workstation if need.
c. Please reset the switch if need.