UNPACKING

- One 5/8-port 10/100M NWay Fast Ethernet Switch
- One external power adapter
- This User's Guide

FEATURES

The Switch was designed for easy installation and high performance in an environment where traffic on the network and the number of user increase continuously.

The Switch with its small, compact size was specifically designed for small to middle workgroups. This Switch can be installed where space is limited; moreover, they provide immediate access to a rapidly growing network through a wide range of user-reliable functions.

The Switch is ideal for deployment with multiple high-speed servers for shared bandwidth 10Mbps or 100Mbps workgroups. With the highest bandwidth 200Mbps (100Mbps full-duplex mode), any port can provide workstations with a congestion-free data pipe for simultaneous access to the server.

The Switch is expandable by cascading two or more switches together. As all ports support 200Mbps, the Switch can be cascaded from any port and to any number of switches.

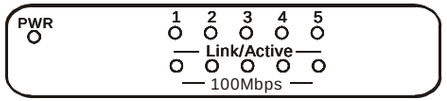
The Switch is a perfect choice for site planning to upgrade to Fast Ethernet in the future. Ethernet workgroups can connect to the Switch now, and change adapters and hubs anytime later without needing to change the Switches or reconfigure the network.

The Switch combine dynamic memory allocation with store-and-forward switching to ensure that the buffer is effectively allocated for each port, while controlling the data flow between the transmit and receive nodes to guarantee against all possible packet loss.

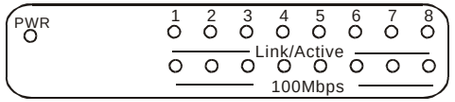
The Switch is a managed 10/100 Fast Ethernet Switch that offers solutions in accelerating small Ethernet workgroup bandwidth. Other key features are:

- Support Auto MDI-X. It can be connect to any network device with any cat. 3 or cat. 5 cable.
- Store and forward switching scheme capability. As the result of complete frame checking and error frame filtering, this scheme prevents error packages from transmitting among segments.
- NWay Auto-negotiation for any port. This allows for auto-sensing of speed (10/100Mbps) thereby providing you with automatic and flexible solutions in your network connections.
- Flow control for any port. This minimizes dropped packets by sending out collision signals when the port's receiving buffer is full. Note that flow control is only available in half duplex mode.
- Data forwarding rate per port is at wire-speed for 100Mbps speed.
- Data forwarding rate per port is at wire-speed for 10Mbps speed.
- Data filtering rate eliminates all error packets, runts, etc., per port at wire-speed for 100Mbps speed.
- Data filtering rate eliminates all error packets, runts, etc., per port at wire-speed for 10Mbps speed.
- 1K MAC address entries table per device for the Switch.
- 768K(Per 8 port)/1M(Per 5 port) Bits RAM buffer per device for the Switch.

FRONT PANEL



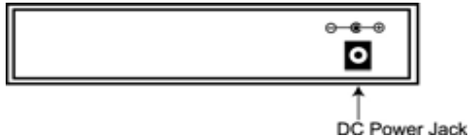
5 Port Panel



8 Port Panel

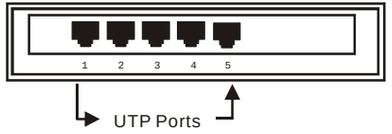
LED INDICATORS

- **Power Indicators (PWR)**
  This LED will be light when the Power-On.
- **Link/Active**
  This LED indicator light green when the port connect to Ethernet correctly. Otherwise, it is blinking when the packets are transmit or received via the port.
- **100Mbps**
  The LED will be light in Green when the cable connects to 100M. And the LED will be light extinguish when the cable connect to 10M.

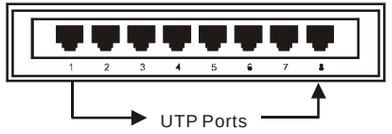


DC Power Jack: Power is supplied through an external AC power adapter. Check the technical specification section for information about the AC power input voltage.

REAR PANEL



5 Port Pear Panel



8 Port Pear Panel

UTP Jacks: Use these jacks to connect stations to the hub. All ports support the Auto MDI-X, just connect to any port to any network devices with any cables.

CONNECTING PC TO SWITCH

A PC can be connected to the Switch via a two-pair Category 3, 4, 5 UTP/STP straight cables. The PC (equipped with a RJ-45 10/100Mbps phone jack) should be connected to any of the 8 ports (1 - 8).

The LED indicators for PC connection dependent on the LAN card capabilities. If LED indicators are not light after making a proper connection, check the PC LAN card, the cable, the Switch conditions and connections.

The following are LED indicator possibilities for a PC to Switch connection:

1. The “Link/Active” LED indicator light green for connecting to Ethernet correctly, and it will be blinking when the packets are transmit and received via the port.
2. The “100” LED indicator that if the port connects to the device that support Fast Ethernet protocol, such that 100Mbps.

CONNECTING HUB TO SWITCH

A hub (10 or 100BASE-TX) can be connected to the Switch via a two-pair Category 3, 4, 5 UTP/STP straight cables. The connection is accomplished from the any one port on the hub to any of the Switch ports.

A. 10BASE-T Hub

For a 10BASE-T hub, the Switch LED indicators should light up as the following:

“Link/Active” indicator is light yellow.

“100Mbps” indicator is *OFF*

B. 100BASE-TX Hub

For a 100BASE-TX hub, the Switch LED indicators should light up as the following:

“Link/Active” indicator is light *yellow.*

“100Mbps” indicator is light green.

SWITCH TO SWITCH (OTHER DEVICES)

The Switch can be connected to another switch or other devices (routers, bridges, etc.) via a two-pair Category 3, 4, 5 UTP/STP straight or crossover cable.

When using any cable, straight or cross-over, connect to any other network device. Because this is a Auto MDI-x switching hub, it can be work by this connection rule.

PORT SPEED & DUPLEX MODE

After plugging the selected cable to a specific port, the system uses auto-negotiation to determine the transmission mode 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 set the duplex mode to half-duplex.

USER’S MANUAL

5/8-port 10/100M Nway
Fast Ethernet Switch

41NE-1708K0-500