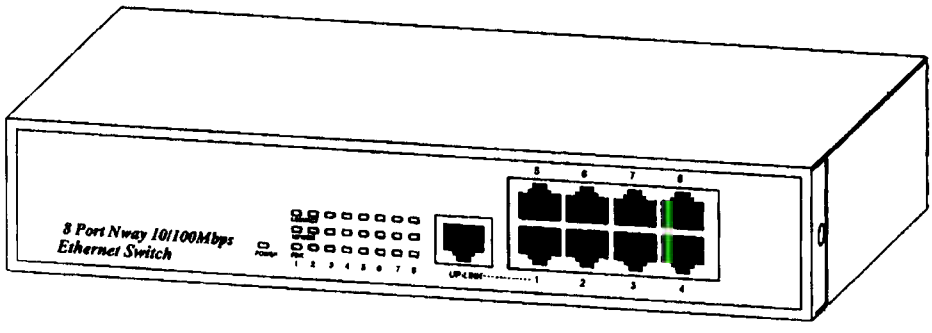
LBS 208AE

BLACK BOX®
NETWORK SERVICES

14 JAN 2002

8 Port Nway Fast Ethernet Switch

User's Manual



FCC Warning

This device has been tested and found to comply with limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the user's manual, may cause interference in which case user will be required to correct the interference at his own expense.

CE Mark Warning

This is Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

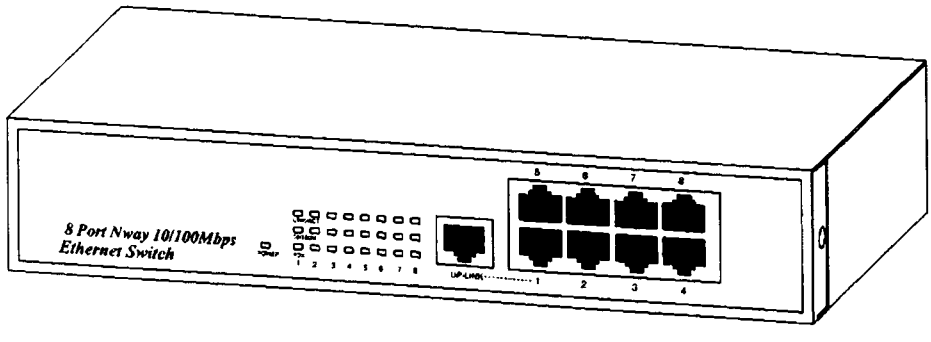
Chapter 1

8 Port Nway Fast Ethernet Switch

Introduction

The Switch provides 8 10/100Mbps ports. 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.

With the compact rigid desktop size was specifically designed for ROBO (Remote Office & Branch Office) and small to medium workgroups. The Switch can be installed where space is limited; moreover it provides smooth network migration and easy upgrade to network capacity.



Key Features

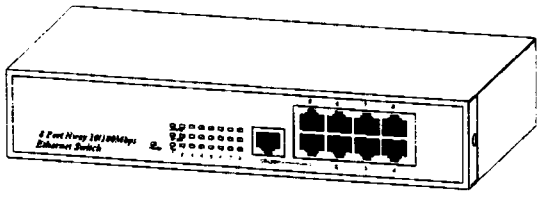
- 8 Port 10/100BASE T/TX Nway (Auto-negotiation) Switch with RJ-45 connectors
- Desktop size with compact rigid design
- Auto-detect of Full/Half-duplex modes in all ports
- Dedicated full-duplex 200Mbps bandwidth on each port
- Broadcast storm control
- Store & Forward switching methods
- IEEE 802.3x flow control for Full-duplex
- Zero-Packet Loss Back-pressure flow control for Half-duplex
- Non-blocking & Non-head-of-line blocking full wire speed forwarding
- Auto-learning of networking configurations
- Status LEDs: Power, Speed, Link/Activity And Full/Half-duplex
- Smart plug & play

Chapter 2

Package Contents

Before you start to install the Switch, please verify your package contain the following items:

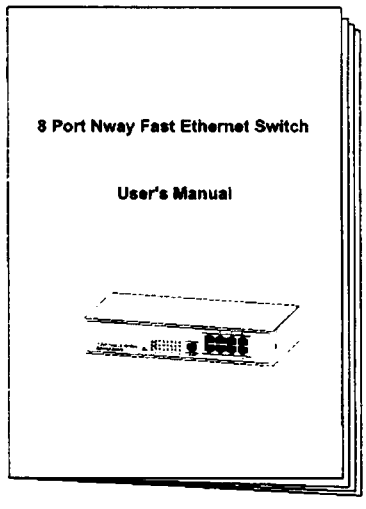
- One Fast Ethernet Switch
- One Power Cord
- One User's Manual



8 Port Switch

Power Cord

User's Manual



Note: If any of these items is found missing or damaged, please contact your local supplier for replacement.

Chapter 3

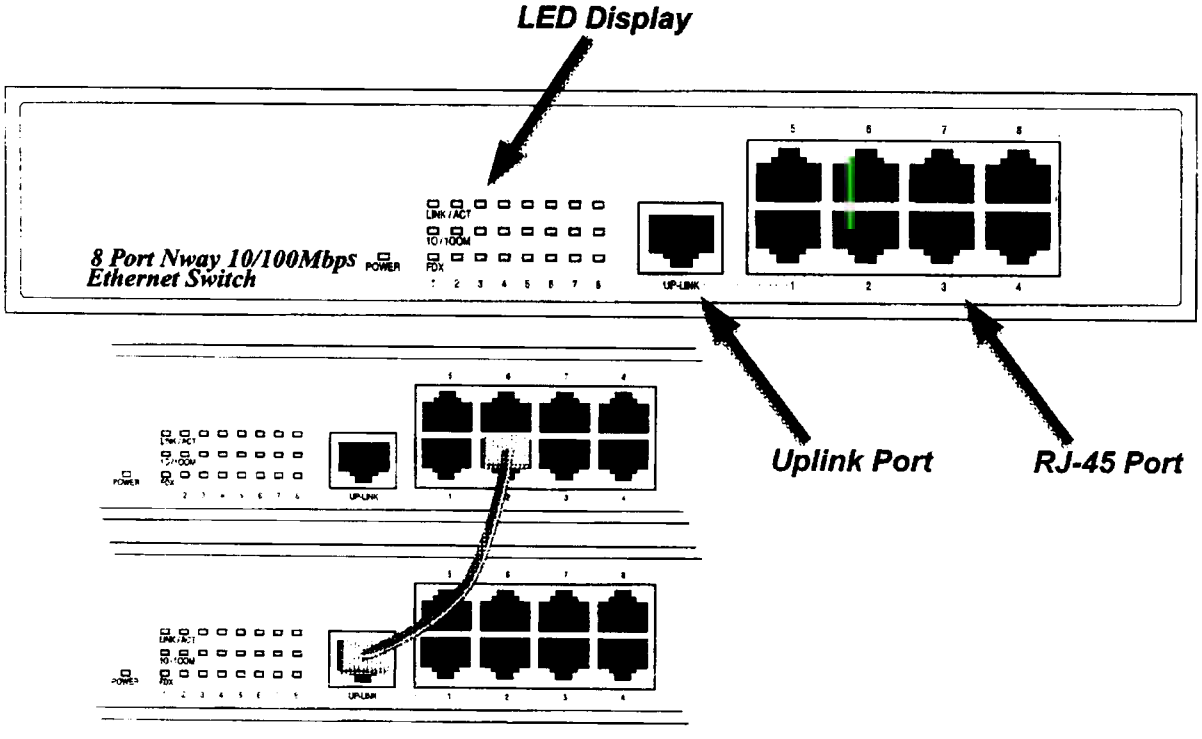
Front Panel Layout

I. 8 RJ-45 10/100Mbps Switch Ports

There are 1~8 RJ-45 connectors on the front panel for connecting to servers, workstation or other devices. The Switch provides 8 10/100Mbps switching ports that could sense the 10/100M speed and negotiate Full/Half-duplex mode automatically. These switching ports allow users to connect the Switch to 10BASE-T and 100BASE-TX devices.

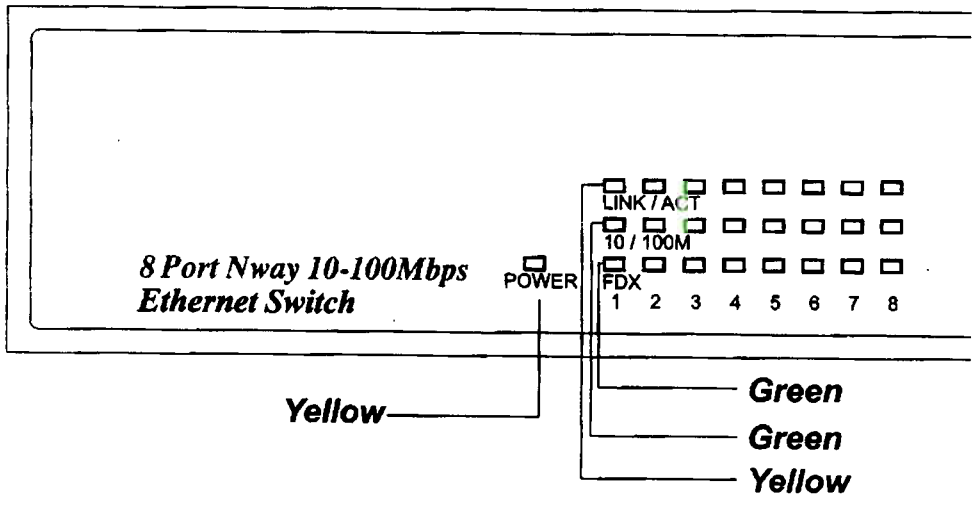
II. Uplink Port

Uplink port shared with the port #1 for expanding to another Hub or Switch. The Uplink port and port 1 share the same port & function. Do not use both of the Uplink port and port 1 at the same time.



III. LED Indicators of 8 Port 10/100Mps Switch

LED	Color	Status	Description	No. Of LED
Power	Yellow	On	Power on	1
FDX	Green	On	Full-duplex	8(1~8)
		Off	Half-duplex	8(1~8)
		Flashing	Partial collision occurs	8(1~8)
10/100M	Green	On	Port is on the 100M status	8(1~8)
		Off	Port is on the 10M status	8(1~8)
LINK/ACT	Yellow	On	10/100Mbps port for connection	8(1~8)
		Flashing	10/100Mbps for data activating	8(1~8)



VI. LED Definitions

Power LED

On	: The unit is powered on and ready for use.
Off	: The unit is powered off.

FDX

On	: The port is operating at Full-duplex.
Off	: The port is operating at Half-duplex without any data being transmitted or received.
Flashing	: Collisions occurred and the port is operating at Half-duplex mode.

10/100M LED

On	: The port is on the 100Mbps status.
Off	: The port is on the 10Mbps status.

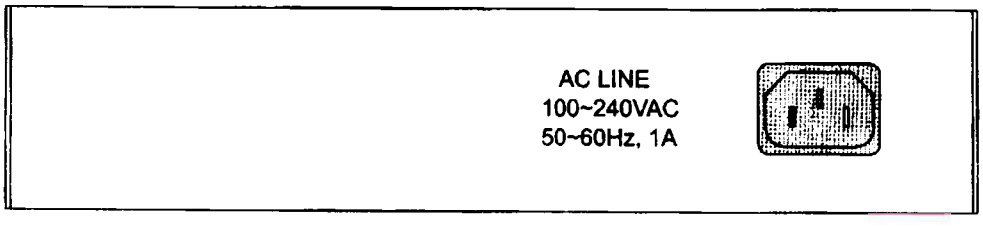
LINK/ACT LED

On	: The port is ready for 10/100Mbps connection
Flashing	: The data being transmitted or received on the port.

Rear Panel Layout

AC input

AC input (100~240V/AC, 50~60Hz) UL Safety



Chapter 5

Technical Specifications

1. Standards Compliance
   - IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX
2. Number Of Ports
   - 8 integrated ports: 10/100Mbps Nway port
3. Expansion Interface
   - 1 uplink port
4. Fully Flow Control Supported
   - Half-duplex mode: Backpressure
   - Full-duplex mode: IEEE 802.3x
5. Network Transmission Media
   - 10BASE-T Cat. 3, 4, 5 UTP/STP
   - 100BASE-TX Cat. 5 UTP/STP
6. Network Status Monitoring LEDs
   - Per port: LINK/ACT, 10/100M, FDX
   - System: POWER
7. Buffer Memory
   - RAM: 2Mbits per device
   - RAM buffer dynamically allocated for each port
8. Filter/Forward Rate
   - Packet Filtering/ Forwarding Rates
   (In Half-duplex 64 packet length)
   -100Mbps port - 148,800bps
   -10Mbps port - 14,880bps
9. MAC Address
   - Up to 16K per device
10. Power
   - AC input (100~240V/AC, 50~60Hz) UL Safety

11. Power Consumption

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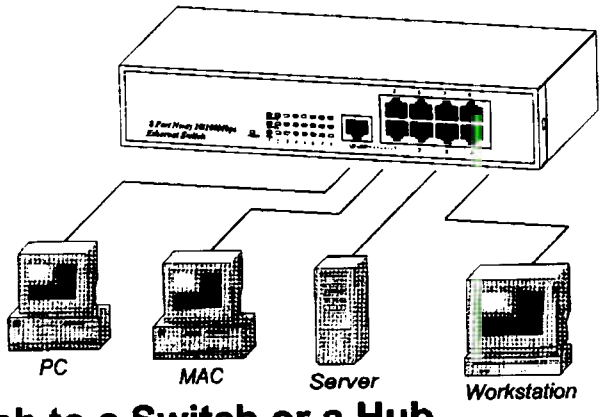
Chapter 4

Installation

I. Connecting Switch to PCs, servers, and other network devices.

To connecting the Switch to PCs, servers and other network devices, please use straight-through twisted-pair cable. You can build the networks as figure shown.



II. Connecting Switch to a Switch or a Hub

To connecting the Switch to Switch or a Hub, please use crossover cable. While the Uplink port connecting the Switch to Switch or a Hub, please use straight-through twisted pair cable. You can build the networks as figure shown.