2.1.1 FRONT PANEL

The switch's front panel has 16 port LEDs and 1 system LED. All front-panel components are shown in Figure 2-1 and are described in Table 2-1.
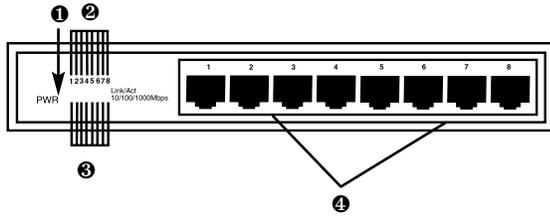

Figure 2-1. The switch's front panel.

Table 2-1. Front-panel indicators and connectors.

Component	Description
❶ Power LED	Lights when power is on.
❷ Link/Act LEDs	Lights when the twisted-pair connection is good. Blinks when traffic is present.
❸ 10/100/1000 Mbps LEDs	Green when 1000 Mbps speed is active. Amber when 100 Mbps speed is active. Off when 10 Mbps speed is active.
❹ RJ-45 connectors	Connect up to eight network devices to these ports.

2.1.2 BACK PANEL

The switch's rear panel has a 100–240-VAC, 50–60-Hz, 10-W power connector.

2.2 What's Included

Your package should include the following items. If anything is missing or damaged, please contact Black Box at 724-746-5500.

- (1) 8-Port 10/100/1000 Ethernet Switch

- (1) AC power cord

- This user's manual

2.3 Typical Application
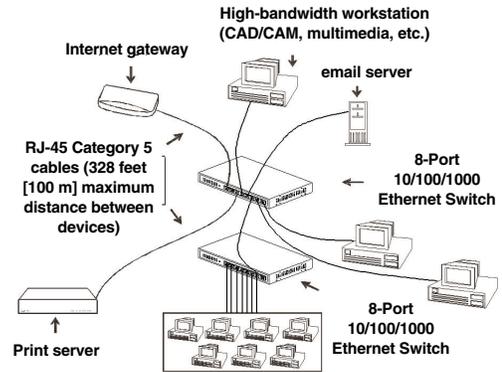
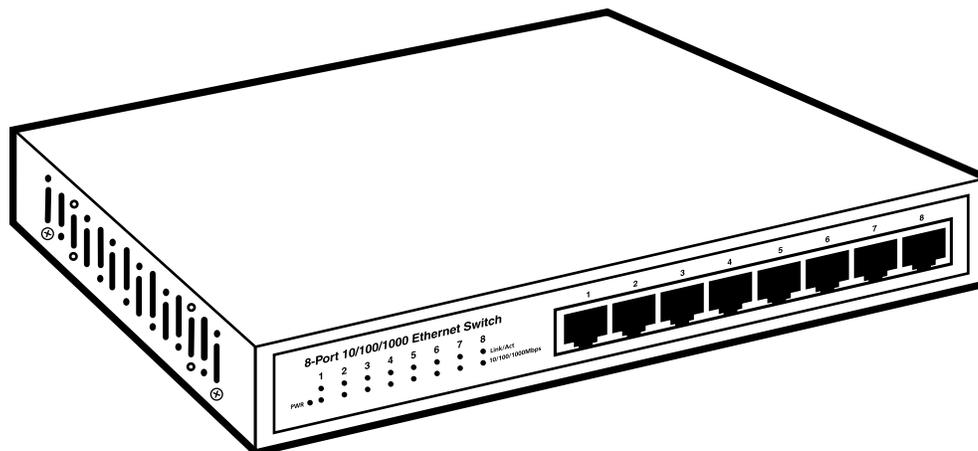An application example is shown below.

Figure 2-2. Sample setup.

3. Installation

The 8-Port 10/100/1000 Ethernet Switch is plug-and-play, so it's easy to install and use. Network and port status can be easily monitored via front-panel diagnostic LEDs. The twisted-pair ports support MDI/MDI-X auto-crossover, so both straight-through and crossover cable will work when connected to the switch's RJ-45 ports. Follow the instructions below to install the switch.

1. Use CAT5 or CAT5e UTP RJ-45 cable to connect one of the switch's twisted-pair ports to a network device, such as a workstation or server. The cable can be up to 328 feet (100 m) long.

2. Repeat step 1 to connect up to eight devices to the switch's eight twisted-pair ports.

8-Port 10/100/1000 Ethernet Switch

1. Specifications

Standards: IEEE 802.3/802.3ab/802.3u/802.3x;
FCC Part 15 Class A; CE

Transmission: 10/100 Mbps full or half-duplex;
1000 Mbps full duplex only

Speed: 1,488,000 pps at 1000 Mbps; 148,800 pps at
100 Mbps; 14,880 pps at 10 Mbps

Maximum Distance: Up to 328 ft. (100 m)

Bandwidth: Up to 16 Gbps aggregate

MAC Address: Up to 8 K

Buffer Memory: 144 KB on chip frame buffer

Flow Control: IEEE 802.3x compliant for full duplex;
backpressure flow control for half-duplex

Switching Method: Store and forward

Cable Required: 10BASE-T: Unshielded twisted-pair
   (UTP) Category 3, 4, 5, or up;
100BASE-TX, 1000BASE-T: UTP Category 5 or up

Connectors: (8) 10/100/1000 Mbps RJ-45

Indicators: System LED: (1) Power;
Per-port LEDs: (8) Link/Act, (8) 10/100/1000 Mbps

Temperature Tolerance: Operating: 32 to 122°F
   (0 to 50°C);
Storage: 32 to 131°F (0 to 55°C)

Humidity Tolerance: 5 to 95%

Power: 100–240 VAC, 50—60 Hz, 10 W

Size: 1.3"H x 7.8"W x 4.7"D (3.3 x 19.8 x 11.9 cm)

2. Overview

2.1 Description

The 8-Port 10/100/1000 Ethernet Switch seamlessly
integrates with a 10/100/1000-Mbps network through
its autonegotiating and nonblocking design. Connect
up to eight Ethernet devices or segments to the switch.
It fits neatly on a desktop, and it provides up to 16 Gbps
aggregate bandwidth.