

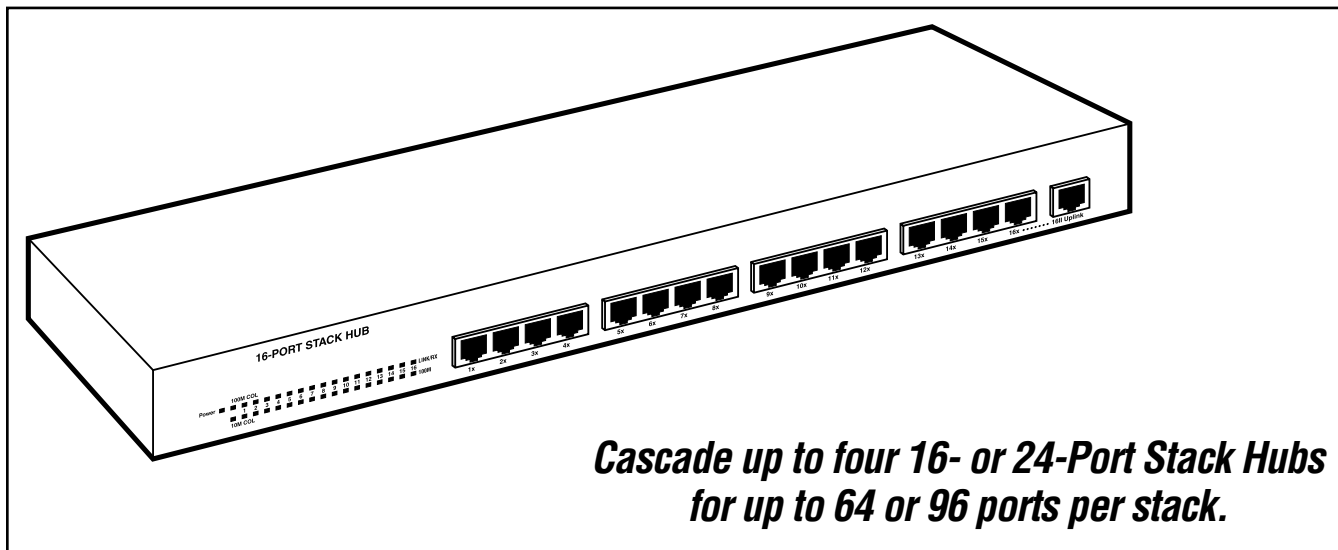
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Black Box Corporation.

# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

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## STACK HUBS



***Cascade up to four 16- or 24-Port Stack Hubs  
for up to 64 or 96 ports per stack.***

### Key Features

- ▶ ***Uplink port for connections to other hubs, switches, bridges, or servers.***
- ▶ ***Built-in switch function keeps data moving across your network.***
- ▶ ***No crossover cables required to connect network devices.***
- ▶ ***Rackmount them in a standard 19" rack.***
- ▶ ***Meet all applicable Ethernet standards.***

The 16- and 24-Port Stack Hubs from Black Box are a practical, efficient way to add 10-/100-Mbps ports to your Ethernet or mixed Ethernet network. With a stack of four 16-port units, you can add up to 64 ports. Stack four 24-port units and get up to 96 ports.

Both models feature a built-in switch function that automatically transfers packets between 10-Mbps Ethernet and 100-Mbps Fast Ethernet connections. This function allows 10- or 100-Mbps devices to communicate with one another while improving network operation.

On both models, the uplink port is a MDI port, enabling you to connect devices to the hub with a simple straight-through cable. This uplink port also functions as a standard device port, though with a different pinout. On the 16-port model, the uplink port and port 16 are the same, so be sure not to

use port 16 and the uplink port at the same time. On the 24-port model, port 12 and the uplink port are the same, so don't use port 12 and the uplink port at the same time.

On the 10-Mbps side, the maximum length of a network segment is 100 meters (328 ft.), and the cable should be Category 3 or better. Also, be aware that you have to use 10-Mbps Ethernet repeaters to link 10-Mbps network segments. Otherwise, your network will be subjected to the restrictions of dual-speed devices.

For Fast Ethernet network segments, the maximum length of a network segment is 100 meters (328 ft.). The maximum diameter in a collision domain (using Class II hubs like these) is 205 meters (672.6 ft.).

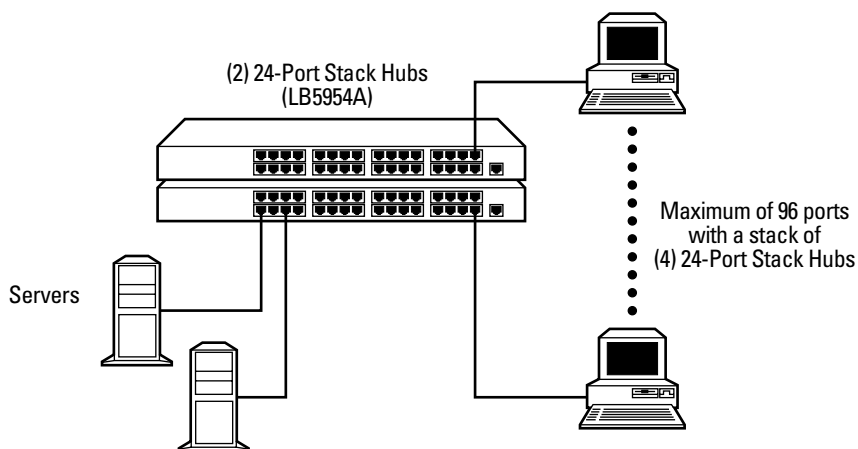
These sturdy metal units can sit alone on a shelf, or they can be rackmounted in a standard 19"

(48.3-cm) rack. If you rackmount these hubs, be sure to leave a space at least 3.9" (10 cm) at the front and rear of the unit for ventilation. While cooling fans aren't required, we recommend them if you rack the hubs with many other devices.

Please note that while Category 3 UTP can be used in some Ethernet applications, if you're using a mix of 10- and 100-Mbps Ethernet, be sure your Category 3 cabling is used only on dedicated, 10-Mbps links. To avoid any problems with cable capacities, we highly recommend that you upgrade all your cabling to at least Category 5—especially in mixed Ethernet—so you can more easily upgrade all your stations to 100-Mbps in the future and avoid associated network problems.



***In this configuration, the Stack Hubs maximize the number of ports in mixed Ethernet environments.***



## Specifications

**Compliance:** Networking: IEEE 802.3, IEEE 802.3u;  
Emissions: FCC Class A, CE, VCCI-I; Safety: cUL, TUV

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

**Speed:** 10 or 100 Mbps, autonegotiating; 140 Mbps per hub aggregate

**Connectors:** Both: (1) MDI-II cascade port, (2) DB25 daisychain ports;  
LB5953A: (16) RJ-45;  
LB5954A: (24) RJ-45

**Daisy chaining (Maximum):** 4 hubs per stack

**Indicators:** LEDs: Per switch:  
(1) power, (1) 10-Mbps activity, (1) 100-Mbps activity, (1) 10-Mbps collision, (1) 100-Mbps collision, (1) hub activity;  
Per port: (1) 10-Mbps Link/Rx, (1) 100-Mbps Link/Rx

**Network Media:** Ethernet: Category 3 or better UTP; Fast Ethernet: Category 5 UTP/STP, 100-ohm twisted pair

**Networking Protocol:** CSMA/CD

**Network Diameter:** 672.5 ft. (205 m)

**Network Segment:** 328 ft. (100 m)

**Topology:** Star

**Humidity:** 10 to 90% noncondensing

**Operating Temperature:** 14 to 104°F (-10 to +40°C)

**Storage Temperature:** -4 to +158°F (-20 to +70°C)

**Power Consumption (Maximum):** 40 W

**Power:** 110–240 VAC, 50–60 Hz, autosensing, internal

**Size:** 1.7"H x 17.3"W x 7.9"D (4.3 x 43.9 x 20 cm)

**Weight:** LB5953A: 9 lb. (4.1 kg); LB5954A: 10 lb. (4.5 kg)

## Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

### Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p. m. and you need help, but your vendor's tech support line is closed.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely

important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

## Ordering Information

### ITEM

### CODE

Stack Hubs

16-Port.....LB5953A

24-Port.....LB5954A

*Remember to order your cables...*

Category 5 Patch Cable, 100-MHz, 4-Pair, Straight-Pinned, PVC, Beige, 10-ft. (3 m) .....EVMSL05-0010

