

NETGEAR®

Installation Guide

Connect with Innovation™

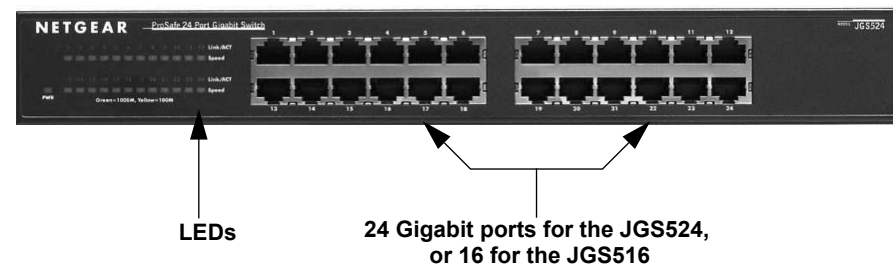
ProSafe® 16-port or 24-port Gigabit Switch JGS516 V2 or JGS524 V2

Package Contents

Verify that all items are in the box. The package includes:

- ProSafe® 16-port or 24-port Gigabit Switch JGS516 V2 or JGS524 V2
- Power cord with localized plug
- Adhesive feet
- Rack-mount brackets and hardware
- *Installation Guide* (this document)

Front View



The switch supports 10 Mbps, 100 Mbps, and 1000 Mbps connections. Using Gigabit Ethernet (1000 Mbps), the switch sends files across the network at speeds up to 2000 Mbps due to the full duplex nature of Gigabit Ethernet connections. The switch supports straight-through or crossover Ethernet cables. Each port on the switch configures itself based on the cable that you plug into it. Depending on the model, you can use the switch to connect either up to 24 or 16 Ethernet devices such as computers, file servers, printers, routers, switches, or hubs.

Installation

Estimated time: 5–10 Minutes

Select a Location

Decide where you want to place the switch. Find a flat horizontal surface or a 19-inch rack.

Make sure that the location is:

- Not in direct sunlight or near a heater or heating vent.
- Not cluttered or crowded. There should be at least 2 inches (5 cm) of clear space on all sides of the switch.
- Well ventilated, especially if it is in a closet.

Install the Switch

1. For each device that you want to connect to the switch, provide an enhanced Category 5 (Cat 5e) Ethernet cable with RJ-45 connections. Each Ethernet cable has to be less than 328 feet (100 meters) long.
2. Install the switch on a flat surface or in a standard 19-inch rack.
 - **Flat surface.** The switch comes with four self-adhesive footpads. Stick one footpad on each of the four concave spaces on the bottom of the switch. The footpads cushion the switch against shock and vibrations.
 - **Rack mounting.** Follow the instructions in the 19-Inch Rack Mounting section.

Verify Cable Connections

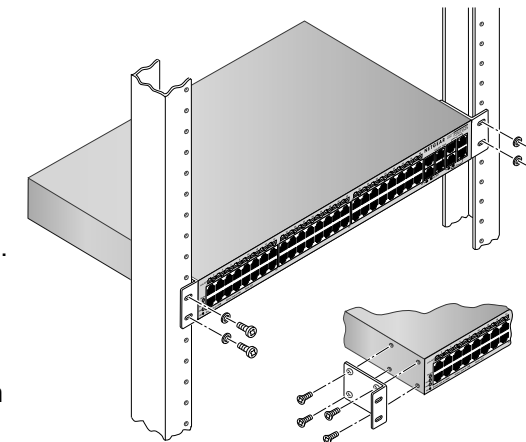
Before you apply power, perform the following checks:

1. Inspect the equipment thoroughly.
2. Verify that all cables are installed correctly.
3. Check cable routing to ensure that cables are not damaged and will not create a safety hazard.
4. Be sure that all equipment is mounted securely.

19-Inch Rack Mounting

Use the rack-mount kit supplied with your switch.

1. Use the Phillips head screws to fasten the mounting brackets to the sides of the switch. Tighten the screws with a No. 1 Phillips screwdriver.
2. Align the bracket and rack holes. Use two pan-head screws with nylon washers to fasten each bracket to the rack. Tighten the screws with a No. 2 Phillips screwdriver to secure the switch in the rack.



Troubleshooting

You can use the LEDs to troubleshoot hardware problems.

Power LED Is Off

The switch has no power.

- Make sure that the power cord is securely connected to the switch.
- Make sure that the power cord is connected to a functioning power outlet. If it is connected to a power strip, make sure that the power strip is turned on. If the socket is controlled by a light switch, make sure the switch is in the on position.

Port LED Is Off for a Connected Device or Stays On Continuously

There is a hardware connection problem.

- Make sure that the cable connectors are securely plugged in to the switch and the device.
- Make sure that the connected device is turned on.
- If the Ethernet cable is connected to a network interface card or other Ethernet adapter, make sure that the card or adapter is installed correctly and is working.
- Make sure the cable is less than 328 feet (100 meters) long.

Technical specifications	
Standards compatibility	IEEE 802.3i 10BASE-T Ethernet, IEEE 802.3u, 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3x flow control, IEEE 802.1p priority, DSCP priority
Network interfaces	RJ-45-connectors for 10BASE-T, 100BASE-TX, or 1000BASE-T Ethernet interfaces
Power	100-240V 1.0A AC, 50/60 Hz internal universal power supply
Power consumption (full load)	JGS516 12W (cable length > 10 M) JGS524 18W (cable length > 10 M)
Physical dimensions (w x d x h)	328 x 169 x 43.2mm (12.91 x 6.65 x 1.70 in)
Weight	JGS516: 1.47kg (3.24lbs) JGS524: 1.65kg (3.64lbs)
Operating environment	Temperature: 0° to 50° C (storage: 0° to 70° C) Humidity: 10% to 90% (storage: 5% to 90%)
Electromagnetic and safety compliance	CE and CE LVD, Class A; FCC Class A; VCCI Class A; C-Tick; KCC; CB; CCC; and UL

Performance specifications	
Frame filter/forward rates	14,880 frames/sec max for 10 M port 148,800 frames/sec max for 100 M port 1,488,000 frames/sec max for 1000 M port
Frame forward rate	14,880 frames/sec max for 10 M port 148,800 frames/sec max for 100 M port 1,488,000 frames/sec max for 1000 M port
Network latency	Using 64-byte-packets <ul style="list-style-type: none"> • 10 Mbps to 10 Mbps: 35 µs max • 100 Mbps to 100 Mbps: 5.4 µs max • 1000 Mbps to 1000 Mbps: 2.7 µs max Using 1518-byte packets <ul style="list-style-type: none"> • 10 Mbps to 10 Mbps: 36 µs max • 100 Mbps to 100 Mbps: 5.5 µs max • 1000 Mbps to 1000 Mbps: 2.9 µs max
Filtering address table	Up to 8 K entries
Jumbo frame	Up to 9 KB
MAC address learning	Automatic update
RAM buffer	2 Mb

Technical Support

Thank you for selecting NETGEAR products.

After installing your device, locate the serial number on the label of your product and use it to register your product at <http://www.NETGEAR.com/register>. Registration is required before you can use the telephone support service. Registration through the NETGEAR website is strongly recommended.

Go to <http://support.netgear.com> for product updates and web support.

For complete DoC go to the NETGEAR EU Declarations of Conformity website at http://support.netgear.com/app/answers/detail/a_id/11621/.

For GNU General Public License (GPL) related information, go to http://support.netgear.com/app/answers/detail/a_id/2649.

WARNING: Do not stack equipment, or place equipment in tight spaces, in drawers, or on carpets. Make sure your equipment is surrounded by at least 2 inches of air space.



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