NETGEAR® Installation Guide

NETGEAR 16-port Gigabit Switch Model GS116v2

Start Here

Estimated Installation Time: 5–10 minutes

Unpack the Box and Verify the Contents

When you open the box, verify that you received everything. The package includes:

- NETGEAR 16-port Gigabit Switch Model GS116v2
- AC power adapter
- Wall-mounting screws
- GS116v2 Installation Guide (this document)
- Warranty/support information card

If you do not have everything listed above, see the support information card for contact information. If you are missing the support information card, get contact information at *http://www.NETGEAR.com* in the Technical Support section.

Prepare to Install the Switch

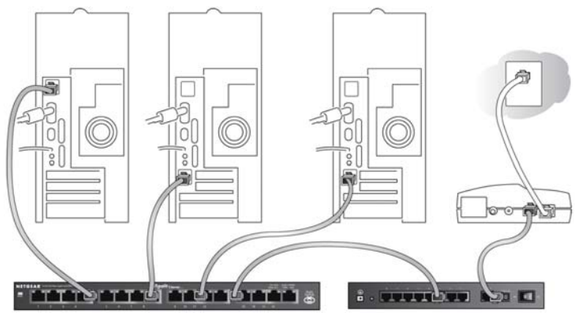
Decide where you want to place the switch. Find a flat horizontal surface such as a table, desk or shelf. The switch comes with wall-mounting screws. You can use the screws if you want to hang the switch in an open space on a wall. Make sure the selected location is:

- 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).

Also, you will need one Category 5e (Cat 5e) Ethernet cable with RJ-45 connectors for each device you want to connect to the switch. Each Ethernet cable must be less than 328 feet (100 meters).

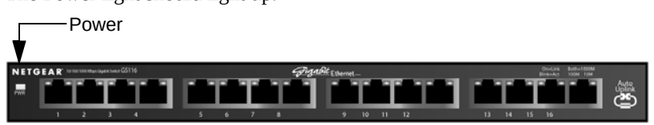
Install the Switch and Connect the Other Devices

1. Place the switch on a flat surface or hook onto the screws.
2. For each device, insert one end of an Ethernet cable into the port in the device and insert the other end into one of the Ethernet ports on the switch.



3. Connect the power adapter cord into the back of the switch and then plug the adapter into a power source (such as a wall socket or power strip).

   The Power light should light up.



4. Check the LEDs to confirm that all connections are correct.

LED	Activity
Power	• **On**: 16-port Gigabit Switch has power. • **Off**: No power.
RJ-45 ports	• **Right LED on**: 10 Mbps connection to a powered device. • **Left LED on**: 100 Mbps connection to a powered device. • **Both LEDs on**: 1000 Mbps connection to a powered device. • **Blink**: Activity on this port.

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 and TOS priority, WRR queuing with four queues
Network interface	RJ-45 connector for 10BASE-T, 100BASE-TX, or 1000BASE-T Ethernet interface
Power Adapter	18W max and 12V @ 1.5A DC input
Power Consumption	9.6W max
Weight	1.08 Kg (2.38 lbs)
Dimensions (W x D x H)	285 mm x 103 mm x 27 mm 11.22 in x 4.06 in x 1.06 in
Operating temperature	0 to 50° C (32 to 122° F)
Operating humidity	10% t0 90% relative humidity, non-condensing
Electromagnetic compliance	CE Class A, included EN55022 (CISPR 22) and EN55024, FCC part 15 Class A, VCCI Class A, C-Tick Class A
Power adapter safety agency approvals	CE mark, Commercial UL listed (UL 60950-1), C-Tick

Performance Specifications	
Frame filter rate	14,880 frames/sec max for 10M port; 148,800 frames/sec max for 100M port; 1,488,000 frames/sec max for 1000M port
Frame forward rate	14,880 frames/sec max for 10M port; 148,800 frames/sec max for 100M port; 1,488,000 frames/sec max for 1000M port
Network latency (using 64-byte packets)	100 Mbps to 100 Mbps: 10 µs max 1000 Mbps to 1000 Mbps: 5 µs max
Address database size	up to 8K MAC addresses
MAC Address Learning	Automatically updated
Queue buffer	512 KB
Jumbo frame support	up to 16KB
NETGEAR Green features	• Auto power-down mode saves energy when ports are unused • Power-saving per port if the cable length is less than 32.8 feet (10 meters)

Troubleshooting Tips

Problem	Action
Power light is not lit	The switch has no power. Make sure that: • The power cord is properly connected to the switch. • The power adapter is properly connected to a functioning power outlet. If it is in a power strip, make sure the power strip is turned on. If the socket is controlled by a light switch, make sure the switch is in the on position. • You are using the NETGEAR power adapter supplied with your switch.
Port number light is not lit for a connected device, or stays on continuously	There is a hardware connection problem. • Make sure the cable connectors are securely plugged in at the switch and the device. • Make sure the connected device is turned on. • If the Ethernet cable is connected to a NIC or other Ethernet adapter, make sure the card or adapter is installed correctly and is working. • Make sure the cable is less than 328 feet (100 meters).

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 our telephone support service. Registration via our website is strongly recommended.

Go to *http://kb.NETGEAR.com/app/home* for product updates and Web support. For Warranty and Regional Customer Support phone numbers, please see the *Resource CD* that came with your product.

Regulatory Compliance

Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, NETGEAR reserves the right to make changes to the product described in this document without notice. NETGEAR does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

Certificate of the Manufacturer/Importer

It is hereby certified that the NETGEAR 16-port Gigabit Switch Model GS116v2 has been suppressed in accordance with the conditions set out in the BMPT-AmtsblVfg 243/1991 and Vfg 46/1992. The operation of some equipment (for example, test transmitters) in accordance with the regulations may, however, be subject to certain restrictions. Please refer to the notes in the operating instructions.

Federal Office for Telecommunications Approvals has been notified of the placing of this equipment on the market and has been granted the right to test the series for compliance with the regulations.

Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the 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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

EN 55 022 Declaration of Conformance

This is to certify that the NETGEAR 16-port Gigabit Switch Model GS116v2 is shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN 55 022 Class A (CISPR 22).

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (NETGEAR 16-port Gigabit Switch Model GS116v2) does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (NETGEAR 16-port Gigabit Switch Model GS116v2) respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

This symbol was placed in accordance with the European Union Directive 2002/96 on the Waste Electrical and Electronic Equipment (the WEEE Directive). If disposed of within the European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive.

201-10224-01

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