



NETGEAR®

54 Mbps Wireless Ethernet Bridge

WGE111



Reference Manual

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1 Preparing to Install the WGE111 Bridge

Introduction

Thank you for purchasing a NETGEAR WGE111 54 Mbps Wireless Ethernet Bridge. With this bridge you can connect one or more gaming consoles, personal computers, printers, or other Ethernet-enabled devices to communicate with your network.

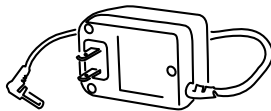
Note: If you have a wired network, you must have a wireless router or access point set up in the network. To connect more than one device to the bridge you must use switch or a hub.

This guide shows you how to connect the bridge and configure it for your network — whether to work with a wireless router or access point, or to work with other wireless devices. Setup is easy – follow the instructions in this guide and your network will be up and running quickly.

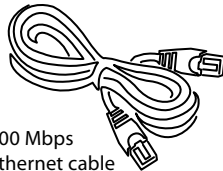
Package Contents



Resource CD for 54 Mbps Wireless Ethernet Bridge, Installation guide, Support information card, Warranty card



Power adapter



100 Mbps Ethernet cable



WGE111 54 Mbps Wireless Ethernet Bridge

The product package should contain the following items:

- WGE111 54 Mbps Wireless Ethernet Bridge
- Power adapter
- Ethernet cable
- WGE111 54 Mbps Wireless Ethernet Bridge Resource CD, that includes this Reference Manual for the Model WGE111 54 Mbps Wireless Ethernet Bridge in Adobe® Acrobat® PDF file format
- Installation guide
- Warranty card
- Support information card

System Requirements

Before installing the WGE111 54 Mbps Wireless Ethernet Bridge, please make sure that these minimum requirements have been met:

- For connecting into a wired network, you must have the network set up and working with an access point or wireless router.
- For creating an Ad-Hoc network without an access point, all devices must have a receiver/transmitter. (The receiver/transmitter may be another WGE111 bridge.)

If the default settings on the bridge do not work, you will need to configure the bridge. Also, if you have more than one WGE111 in the network, only one can use the default IP address. You'll have to configure the others with unique IP addresses. To configure the bridge with the configuration software, you must have a personal computer with Internet browser software installed, such as Microsoft® Internet Explorer 5.0 (or later) or Netscape® 6.0 (or later).

Placement and Range Guidelines

Computers and other Ethernet-enabled devices can connect over wireless networks indoors at more than 500 feet. However, the operating distance or range of your wireless connection can vary significantly based on the physical location of the WGE111 54 Mbps Wireless Ethernet Bridge. For best results, avoid potential sources of interference, such as:

- Large metal surfaces
- Microwaves
- 2.4 GHz cordless phones

In general, wireless devices can communicate through walls. However, if the walls are constructed with concrete or have metal (or metal mesh), the effective range will decrease if such materials are between the wireless devices.

Operating Modes

The WGE111 Wireless Ethernet Bridge operates in either Infrastructure or Ad-Hoc mode.

- Infrastructure mode is used when you have an access point or wireless router connected to a wired network. The wireless devices and computers communicate with the wired network (and other wireless devices) through the wireless router or access point. For example, with a wireless router multiple computers (both wired and wireless) can share a single cable or DSL broadband Internet connection.
- You use the bridge in Ad-Hoc mode if you have a small, wireless-only network and all the devices have wireless transmitters/receivers. In this case, there's no need for an access point or a wireless router for the wireless devices communicate directly to one another.

WGE111 Default Wireless Configuration Settings

Note: If you are setting up a new wireless network, please set up the network and make sure it works *before* adding the WGE111 Wireless Ethernet Bridge into the network.

You will need to identify the wireless configuration and security parameters already defined in your wireless network.

Note: All NETGEAR, Inc. 802.11g and 802.11b wireless access products use similar factory settings as the WGE111 and will work without any configuration changes.

The factory default settings for your WGE111 54 Mbps Wireless Ethernet Bridge are:

- Mode (Infrastructure or Ad-Hoc): **Infrastructure**
- Wireless network name Service Set Identification (SSID): **Any**

Note: **Any** means the bridge will connect to the access point or wireless router that has the strongest signal. This may not be the closest access point or wireless router. For the WGE111 Wireless Ethernet Bridge to communicate with a specific wireless router or access point, both devices must be configured with the same SSID.

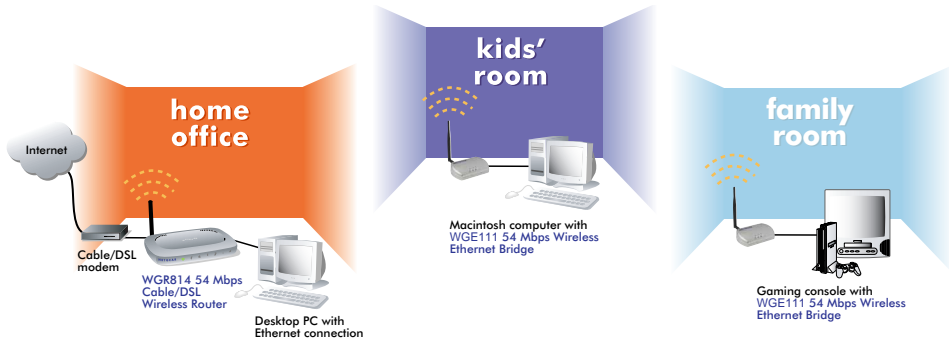
- User ID: **admin**
- Password: **password**
- Authentication type: **Auto**
- WEP security: **Disabled**
- Country/Region: **United States**

Warning: Having the bridge set to the wrong country or region may result in the violation of local laws.

WGE111-specific default settings:

- IP address: **192.168.0.202**
- Protocol: **Static**
- Device name: **netgearxxxx** (where xxxx is the last 4 digits of the MAC address)
- Data rate: **b/g combo**

2 Installing the WGE111 Bridge



This section provides instructions for connecting the WGE111 54 Mbps Wireless Ethernet Bridge, using the default settings, to either a single Ethernet-enabled device or to multiple devices through a switch or hub.

Note: If you find that the default settings don't work, if you know that you've configured your wireless network with WEP security, if you're placing more than one WGE111 bridge on the network, or if you are not in the United States, you'll have to configure the bridge before connecting it to the Ethernet-enabled device(s). To configure the bridge, see *Configuring the WGE111 Bridge for Your Wireless Network* on page 12.

Connecting the Bridge to a Single Device

1. Unpack the box and verify the contents.
2. Identify a flat surface where you will put the wireless game adapter. For best results, follow these guidelines:
 - Place it away from potential sources of interference, such as computers, monitors, TVs, microwaves, cordless phones, or large metal surfaces.
Warning: Failure to follow these guidelines can cause intermittent or complete failure of wireless connectivity.
 - Place it in an elevated location such as a high shelf or on a wall in the center of your wireless access area. If you mount the bridge on a wall, do *not* place the bridge in such a way that it is vertical with the NETGEAR name upside-down and the power adapter plug hanging from the bottom of the unit. Having the unit in this position violates power adapter regulations.
3. Lift the bridge's antenna so it is vertical.

Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, NETGEAR reserves the right to make changes to the products 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 Model WGE111 54 Mbps Wireless Ethernet Bridge has been suppressed in accordance with the conditions set out in the BMT- 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.

VCCI Statement

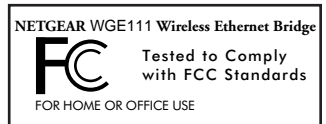
This equipment is in the Class B category (information equipment to be used in a residential area or an adjacent area thereto) and conforms to the standards set by the Voluntary Control Council for Interference by Data Processing Equipment and Electronic Office Machines aimed at preventing radio interference in such residential areas. When used near a radio or TV receiver, it may become the cause of radio interference. Read instructions for correct handling.

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:

1. This device may not cause harmful interference.
2. 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 B 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: (1) Reorient or relocate the receiving antenna, (2) Increase the separation between the equipment and receiver, (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected, (4) Consult the dealer or an experienced radio/TV technician for help.



Federal Communications Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Model WGE111 54 Mbps Wireless Ethernet Bridge) does not exceed the Class B limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Technical Support

PLEASE REFER TO THE SUPPORT INFORMATION CARD THAT SHIPPED WITH YOUR PRODUCT.

By registering your product at www.NETGEAR.com/register, we can provide you with faster expert technical support and timely notices of product and software upgrades.

NETGEAR, INC.

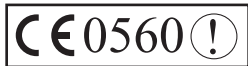
Support Information

Phone: 1-888-NETGEAR (for US & Canada only), available 24x7.

For other countries see your Support Information card.

E-mail: support@NETGEAR.com (24x7 online support)

www.NETGEAR.com



Attention: When you configure the wireless settings of this device please make sure to select the correct country settings. Due to EU-law, the country settings must be identical to the country where the device is operating (important due to non-harmonized frequencies in the EU).

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