

Chapter 1

Connecting the Router to the Internet

This chapter describes how to connect your router and how to access the Internet through it.

What's in the Box?

The product package should contain the following items:

- The wireless router
- An AC power adapter (varies by region)
- An Ethernet cable
- *Resource CD*, including:
 - The Smart Wizard Installation Assistant
 - This manual
- Warranty and Support Information cards

If any of the parts are incorrect, missing, or damaged, contact your NETGEAR dealer. Keep the carton, including the original packing materials, in case you need to return the product for repair.

The Front of the Router

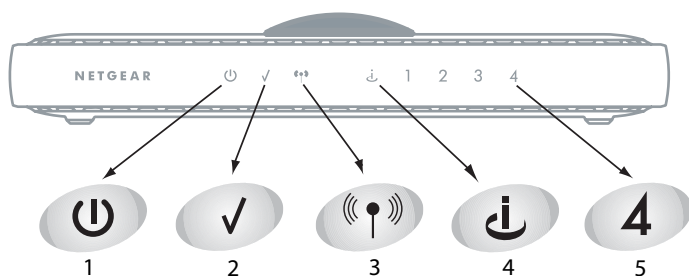


Figure 1-1

You can use the status lights on the front of the wireless router to verify various conditions.

Table 1-1. Status Light Descriptions

Item	Function	Activity	Description
1	Power	On Green Solid Off	Power is supplied to the router. Power is not supplied to the router.
2	Test	On Off Slow blinking	The unit is performing the power on self test diagnostic. The unit successfully completed the power on self test diagnostic. Reset button is being pushed, restoring the factory default settings.
3	Wireless	On Off Blink	The wireless interface is enabled. The wireless interface is turned off. Data is being communicated over the wireless network.
4	Internet	Amber off Amber on Amber blinking Green off On Blink	No Ethernet cable is connected to the modem. Ethernet cable connection to modem is good. Packets are being transmitted and received from a modem or other network device, but no IP address has been received. No IP address received. IP address received. IP address received and data is being transmitted and received.
5	LAN	Green Amber	The LAN port has detected a 100 Mbps link with an attached device. The LAN port has detected a 10 Mbps link with an attached device.

The Back of the Router

The rear panel of the WPN824v2 router contains the items listed below.

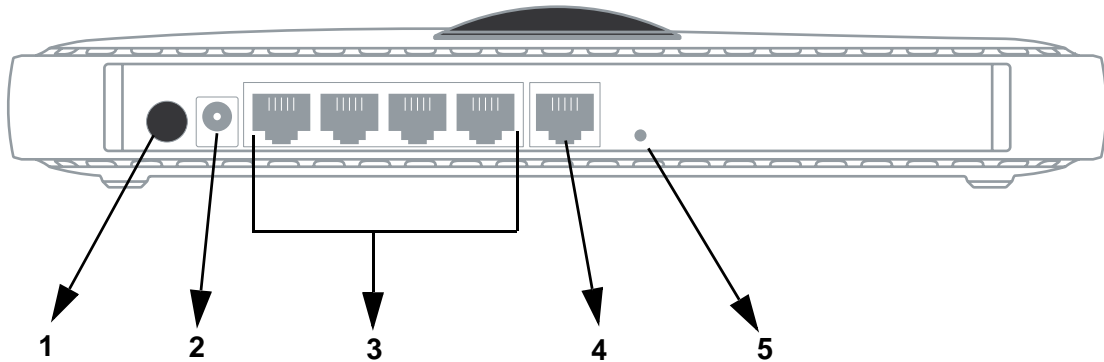


Figure 1-2

The back of the wireless router has a switch for the antenna lights and the following port connections:

1. Antenna light LED on/off switch
2. AC power adapter outlet
3. Four Local (LAN) 10/100 Mbps Ethernet ports for connecting the router to the local computers
4. Internet (WAN) Ethernet port for connecting the router to a cable or DSL modem
5. Factory Default Reset push button

The Top Panel



Figure 1-3

The top of the wireless router includes a dome with status lights that identify which of the seven internal antennas are active. The lights flash according to the direction of the wireless signal. These status lights are off by default but can be turned on using the [Antenna light LED on/off switch](#).

The Wireless Router Bottom Label

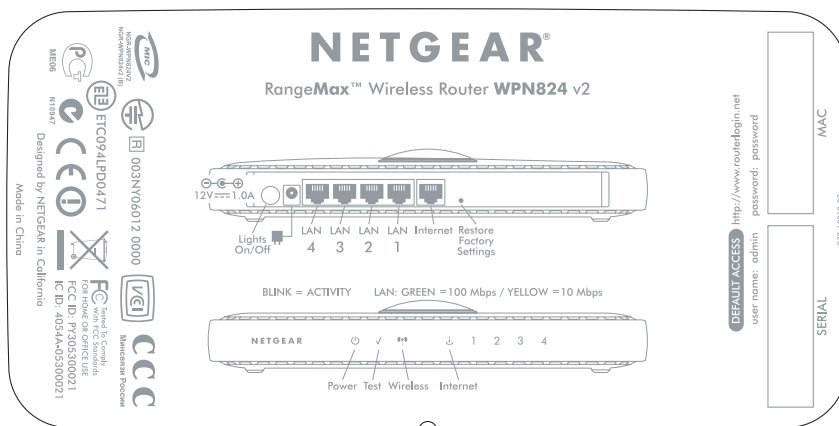


Figure 1-4

View the label on the bottom of the wireless router to identify the serial number, port connectors, status lights, and default login information.

What You Need Before You Begin

Prepare the following before you set up your router:

- Internet service.
- The configuration information your Internet Service Provider (ISP) gave you. Depending on how your Internet account was set up, you may need one or more of these settings for the wireless router to access the Internet:
 - Host and Domain Names
 - Internet Login Name and Password (frequently an email address and password)
 - Domain Name Server (DNS) Addresses
 - Fixed or Static IP Address

Your ISP should have provided you with all the information needed to connect to the Internet. If you cannot locate this information, you can ask your ISP to provide it.

- For cable modem service, use the computer you first used to set up your Internet service.

Two Setup Methods: Smart Wizard Setup, or Manual Setup

You have two methods available for setting up your wireless router.

- **Smart Wizard Setup**
 - This option is the easiest. The wizard guides you through the setup process, automates many of the steps, and verifies that necessary conditions exist and that steps you perform have been successfully completed.
 - This option requires a PC running Microsoft Windows.

- **Manual Setup**

This option is best if you cannot use the wizard on the CD, are replacing an existing wireless router, or are technically knowledgeable. Follow the instructions in this manual to set up your wireless router.

Use the setup option that best suites you.

Smart Wizard Setup

The wizard setup process should take about 20 minutes to complete.

1. Insert the NETGEAR CD into a Windows PC. The CD will automatically start and detect the language you are using on your PC. Accept the language option or change to a different language.



Note: If the CD does not automatically start, browse the CD and double-click on Autorun. Be sure to double-click the Autorun file that begins with upper case “A”.

2. When the Welcome screen appears, click **Install router** to start the Smart Wizard. Follow the wizard instructions.

Manual Setup

There are two steps to setting up your wireless router:

1. Connect the router to the ADSL or cable modem, and connect a computer to the router.



Note: Your computer has to be set to automatically get its TCP/IP network settings from the router via DHCP. This is usually the case. If you are unsure about this, use the wizard on the CD which automatically takes care of this for you, or refer to the documentation for your computer.

2. Configure the router to use your Internet service.

To Connect Your Wireless Router

1. Connect the wireless router, the computer, and the modem.
 - a. Turn off your computer.
 - b. Turn off and unplug the cable or ADSL broadband modem.

- c. Locate the Ethernet cable (1) that connects your computer to the modem.

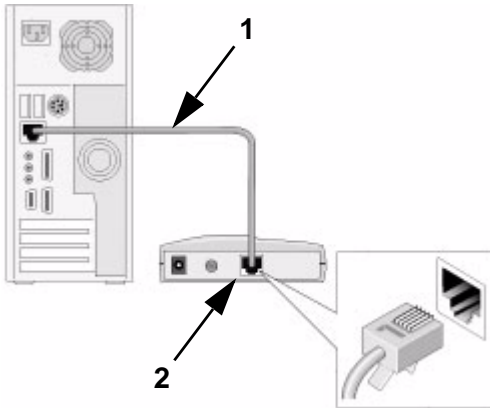


Figure 1-5

- d. Disconnect the cable at the modem (2). You will connect it to the router later.
- e. Use the label on the bottom of the wireless router to locate the Internet port, which is on the left next to the power connection.
- f. Locate the Ethernet cable that came with the Netgear product. Securely insert that Ethernet cable into your modem and into the Internet port of the wireless router (3).

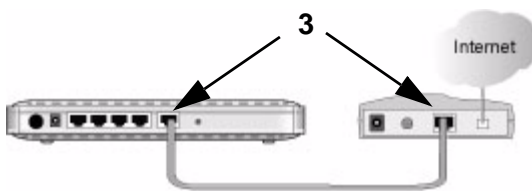


Figure 1-6

- g. Locate the cable you removed from the modem in [step c](#) above. Securely insert that cable (4) into a LAN port on the router such as LAN port 1.

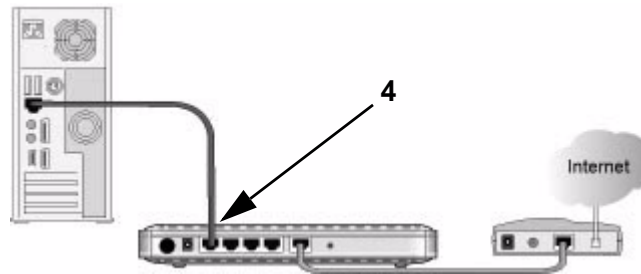


Figure 1-7

Your network cables are connected and you are ready to start your network.

2. Start your network in the correct sequence



Warning: Failure to start or restart your network in the correct sequence could prevent you from accessing the Internet.

- First, plug in and turn on the cable or DSL modem. Wait 2 minutes.
- Now, plug the power cord into your wireless router and into a power outlet. Wait 1 minute.
- Last, turn on your computer.



Note: For DSL customers, if software logs you in to the Internet, *do not* run that software. You may need to go to the Internet Explorer Tools menu, Internet Options, Connections tab page where you can select “Never dial a connection.”

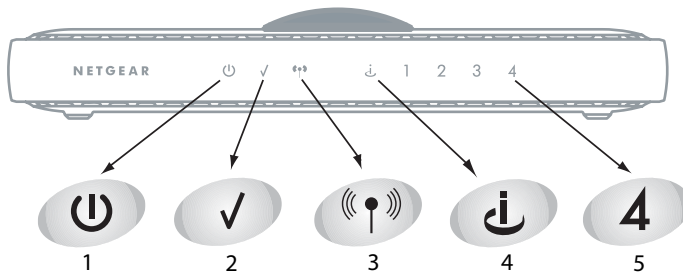


Figure 1-8

- d. Check the wireless router status lights to verify the following:
 - **Power:** The power light (1) should turn solid green. If it does not, see “[Power Light Not On](#)” on page 2-3.
 - **Test:** The test light (2) blinks when the router is first turned on, then goes off. If after 2 minutes it is still on, see “[Test Light Never Turns On or Stays On](#)” on page 2-3.
 - **Wireless:** The wireless light (3) should be on.
 - **Internet:** The Internet port light (4) should be lit. If not, make sure the Ethernet cable is securely attached to the wireless router Internet port and the modem, and the modem is powered on.
 - **LAN:** A LAN light (5) should be lit. Green indicates your computer is communicating at 100 Mbps; amber indicates 10 Mbps. If a LAN light is not lit, check that the Ethernet cable from the computer to the router is securely attached at both ends, and that the computer is turned on.
3. Connect to the wireless router by typing **http://www.routerlogin.net** in the address field of your browser, then click **Enter**.

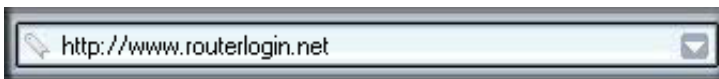


Figure 1-9



Tip: Connect to the wireless router by typing any one of these three URLs in the address field of your browser, then clicking Enter:

- <http://www.routerlogin.net>
- <http://www.routerlogin.com>
- <http://192.168.1.1>

The wireless router will prompt you to enter the user name of admin and the password.

A login window like the one shown below opens:



Figure 1-10

4. For security reasons, the router has its own user name and password. When prompted, enter **admin** for the router user name and **password** for the router password, both in lower case letters.



Note: The router user name and password are not the same as any user name or password you may use to log in to your Internet connection.

After logging in, if you see a window with a message about firmware upgrades, click **Close Window**.

On the left, click **Setup Wizard** to view the menu below

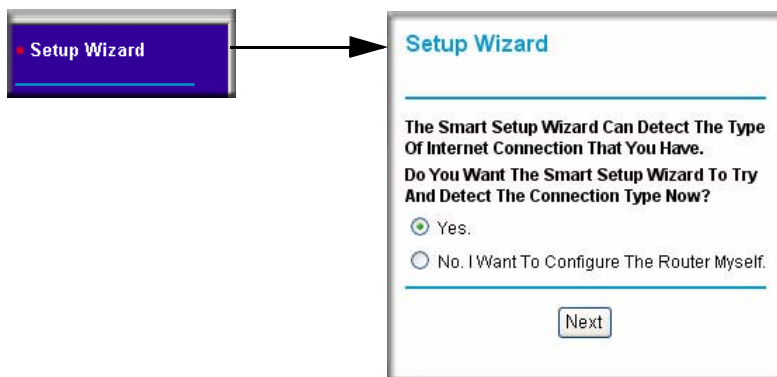


Figure 1-11

If you cannot connect to the wireless router, verify your computer networking setup. It should be set to obtain *both* IP and DNS server addresses automatically, which is usually so. For help with this, consult the documentation that came with your computer or see the links in [Appendix B, “Related Documents”](#).

5. Click **Next**. The wizard will assist you with configuring your wireless router to access the Internet.

Advanced users who want to manually configure the router can select the No radio button, enter **admin** and **password** as the user name and password when prompted, and fill in the required information on the Basic Settings page.

6. Click **Done** to finish.

You are now connected to the Internet!

Product Registration, Support, and Documentation

Register your product at <http://www.NETGEAR.com/register>. Registration is required before you can use our telephone support service. Product updates and Web support are always available by going to: <http://kbserver.netgear.com/>.

Documentation is available on the CD, on the support Web site, and on the documentation Web site. When the wireless router is connected to the Internet, click the Knowledge Base or the Documentation link under the Web Support menu to view support information or the documentation for the wireless router.

How to Access the Wireless Router Again Later

The configuration assistant wizard only appears when the router is in its factory default state, and access to the router does not require a login name or password. After you configure the wireless router (or bypass the configuration assistant wizard), it will not appear again, and you will have to log in to the your wireless router to make changes to it.



Note: The factory default state is restored when you use the factory reset button. See [“How Do I Restore the Default Password and Configuration Settings?”](#) on page 2-7 for more information on this feature.

To access the router using its login name and password, follow these instructions.

1. Connect to the wireless router by typing **http://www.routerlogin.net** in the address field of your browser, then click **Enter**.



Figure 1-12



Tip: Connect to the wireless router by typing any one of these three URLs in the address field of your browser, then clicking Enter:

- <http://www.routerlogin.net>
- <http://www.routerlogin.com>

The wireless router will prompt you to enter the user name of admin and the password.

2. For security reasons, the router has its own user name and password. When prompted, enter **admin** for the router user name and **password** for the router password, both in lower case letters.



Note: The router user name and password are not the same as any user name or password you may use to log in to your Internet connection.

A login window like the one shown below opens:



Figure 1-13

Enter the user name and password. The wireless router will display its home page.

When the wireless router is connected to the Internet, click the Knowledge Base or the Documentation link under the Web Support menu to view support information or the documentation for the wireless router.

If you do not click Logout, the wireless router will wait 5 minutes after there is no activity before it automatically logs you out.

How to Set Up and Test Basic Wireless Connectivity

Follow the instructions below to set up and test basic wireless connectivity. Once you have established basic wireless connectivity, you can enable security settings appropriate to your needs.

1. Log in to the wireless router at its default LAN address of `http://192.168.0.1` with its default user name of **admin** and default password of **password**, or using whatever LAN address and password you have set up.
2. Click the Wireless Settings link in the main menu of the wireless router.
3. Note that the default SSID is **NETGEAR**.



Note: The SSID of any wireless adapters must match the SSID you configure in the wireless router. If they do not match, you will not get a wireless connection.

4. Set the Region. Select the region in which the wireless interface will operate.
5. Click **Apply** to save your changes.



Note: If you are configuring the router from a wireless computer and you change the router's SSID, channel, or security settings, you will lose your wireless connection when you click Apply. You must then change the wireless settings of your computer to match the router's new settings.

6. Configure and test your computers for wireless connectivity.

Program the wireless adapter of your computers to have the same wireless network name (SSID) as the wireless router. Check that they have a wireless link and are able to obtain an IP address by DHCP from the router.

Implement Appropriate Wireless Security



Warning: Indoors, computers can connect over 802.11g wireless networks at a range of over 300 feet. Such distances can allow for others outside of your immediate area to access your network.

Unlike wired network data, your wireless data transmissions can extend beyond your walls and can be received by anyone with a compatible adapter. For this reason, use the security features of your wireless equipment. The wireless router provides highly effective security features which are covered in detail in full reference manual that is available from a link on the CD as well as a link in the main menu of your router. Follow the instructions in the full manual and in the router help screens to deploy the security features appropriate to your needs.