NETGEAR[®]

N300 WiFi Range Extender

Model WN3000RP User Manual



April 2014 202-11346-01

350 East Plumeria Drive San Jose, CA 95134 USA



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 *https://my.netgear.com*. You must register your product before you can use NETGEAR telephone support. NETGEAR recommends registering your product through the NETGEAR website. For product updates and web support, visit *http://support.netgear.com*.

Phone (US & Canada only): 1-888-NETGEAR.

Phone (Other Countries): Check the list of phone numbers at http://support.netgear.com/general/contact/default.aspx.

Compliance

For regulatory compliance information, visit http://www.netgear.com/about/regulatory.

See the regulatory compliance document before connecting the power supply.

Trademarks

NETGEAR, the NETGEAR logo, and Connect with Innovation are trademarks and/or registered trademarks of NETGEAR, Inc. and/or its subsidiaries in the United States and/or other countries. Information is subject to change without notice. © NETGEAR, Inc. All rights reserved.

Contents

Chapter 1 Get to Know Your Extender

Front Panel	5
Extender Side and Bottom Panels	6
How the Extender Works	6
When to Use Your Extender	7

Chapter 2 Install Your Extender

Place the Extender	. 9
Connect to an Existing WiFi Network	. 9
Find the Best Location	12
Extender WiFi Performance	12
Cable a Computer or Device to the Ethernet Port	13

Chapter 3 Manage the Extender Network and Settings

Chapter 4 Monitor and Maintain the Extender

Back Up the Extender Configuration	. 24
Restore Saved Configuration Settings	. 24
Return the Extender to Its Factory Settings	. 25
Use the Factory Reset Button to Restore Factory Settings	. 25
Erase the Extender Settings and Return to Factory Settings	. 26
Upgrade the Firmware	. 27
View Wired and Wireless Network Devices	. 28

Chapter 5 FAQs and Troubleshooting

FAQs	31
Cannot Log In to the Extender	32
Cannot Join the Extender WiFi Network	32

Appendix A Supplemental Information

Factory Default Settings	. 35
Technical Specifications	. 35

Get to Know Your Extender

1

This chapter covers the following topics:

- Front Panel
- Extender Side and Bottom Panels
- How the Extender Works
- When to Use Your Extender

For more information about the topics covered in this manual, visit the support website at *http://support.netgear.com.*

Firmware updates with new features and bug fixes are made available from time to time on *downloadcenter.netgear.com*. Some products can regularly check the site and download new firmware, or you can check for and download new firmware manually. If the features or behavior of your product does not match what is described in this guide, you might need to update your firmware.

Front Panel

The front panel has LEDs.

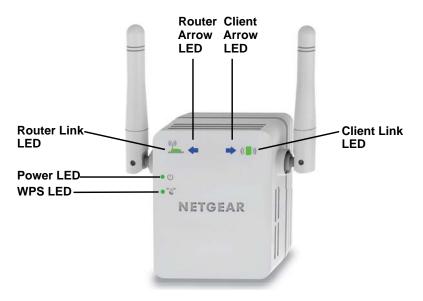




Table	1.	LEDs

LED	Description
Router Link LED	 The connection between the extender and the router or access point. Solid green. Best connection. Solid amber. Good connection. Solid red. Poor connection. Off. No connection.
Client Link LED (())	 The connection between the extender and a computer or mobile device. Solid green. Best connection. Solid amber. Good connection. Solid red. Poor connection. Off. No connection.
Power LED	 Solid amber. The extender is booting. Solid green. The extender is powered on. Off. The extender is powered off.
WPS LED	 Solid green. WiFi security is enabled (WPA or WPA2). Blinking green. A WPS connection is in progress. Off. WiFi security is not enabled.
Router Arrow and Client Arrow	If the Router Arrow or Client Arrow LED blinks, see <i>Find the Best Location</i> on page 12. If no arrow LEDs are lit, the extender is in a good location.

Extender Side and Bottom Panels

The side panel has buttons, and the bottom panel has the Factory Reset button and an Ethernet port.

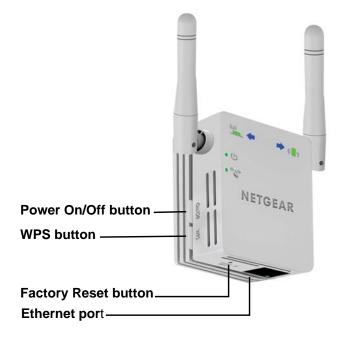


Figure 2. Extender side and bottom panels

How the Extender Works

The extender increases the distance of a WiFi network. The extender connects to your network's WiFi signal and it broadcasts its own WiFi signal. When you are too far away to connect to your network's WiFi signal, you can connect to an extender WiFi signal instead.

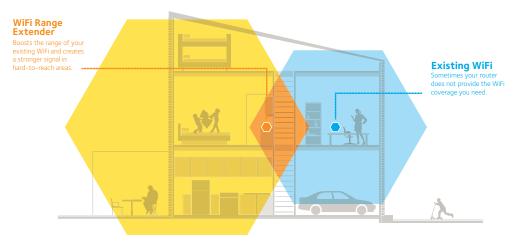


Figure 3. The extender WiFi signals reach areas outside of the range of your router

When to Use Your Extender

NETGEAR recommends that you connect to the extender only when your WiFi network connection is poor. Data traffic routed through the extender is inherently slower than traffic routed directly from the network.

Install Your Extender

2

This chapter covers the following topics:

- Place the Extender
- Find the Best Location
- Extender WiFi Performance
- Cable a Computer or Device to the Ethernet Port

Place the Extender

NETGEAR recommends that you place the extender near the router during initial setup. Then move it farther away from the router as needed to increase the area that has a WiFi signal.

> To place the extender:

- 1. Place your extender in the same room as your WiFi router.
- 2. Plug the extender into an electrical outlet.

The Power LED • U lights green. If the Power LED does not light, press the **Power** button.

Connect to an Existing WiFi Network

To extend the range of your WiFi network, you must connect the extender to your existing WiFi network. You can connect with WPS or with NETGEAR genie Smart Setup.

Connect with WPS

Wi-Fi Protected Setup (WPS) lets you connect the extender to a secure WiFi network without typing the network name and password. The WPS button is a physical button on the router or access point.

WPS does not support WEP network security. If you are using WEP security, see *Connect* with NETGEAR genie Smart Setup on page 10.

> To connect with WPS:

1. Press the **WPS** button on the side panel of the extender.

The WPS LED • 🗳 blinks.

2. Within two minutes, press the **WPS** button on your router or access point.

The WPS LED on the extender lights solid green, the Router Link LED <u>Ights</u> lights, and the extender is connected to your existing WiFi network.

Note: If the Router Link LED does not light, try again. If it still does not light, see *Connect with NETGEAR genie Smart Setup* on page 10.

3. On your computer or wireless device, find the new extender network name.

The extender's wireless network name (SSID) changes to your existing WiFi network name, with **_EXT** at the end of the name.

For example:

- Existing WiFi network name. MyNetworkName
- New extended network name. MyNetworkName_EXT

4. Connect your existing WiFi devices to the new extended network.

Use the same WiFi password that you use for your WiFi router.

5. Unplug the extender and move it to a new location closer to the area with a poor WiFi signal.

The location that you choose must be within the range of your existing WiFi router network.

6. Plug the extender into an electrical outlet and wait one minute.

The Power LED • U lights green. If the Power LED does not light, press the **Power** button.

7. Use the Router Link LED on the front panel to help you choose a spot where the extender-to-router connection is optimal.

Connect with NETGEAR genie Smart Setup

You can use a web browser to connect to the extender and set it up.

> To connect with the browser-based Smart Setup:

1. Use a WiFi network manager on a computer or mobile device to find and connect to the extender WiFi network.

After the connection with the computer or mobile device is established, the Client Link LED () lights solid green.

2. Open a web browser window from the same computer or mobile device.

The browser takes you directly to NETGEAR genie smart setup.

- **Note:** If you are not automatically directed to NETGEAR genie, launch a web browser and enter **www.mywifiext.net** in the address field. Enter **admin** for the user name and **password** for the password.
- 3. Select a WiFi network to extend and click the **Continue** button.

				Refresh Continu
	SSID	Channel	Signal	Security
0	Millers	10	100%	WPA2-PSK
0	ASUS	6	39%	WPA2-PSK
\circ	2WIRE394	3	29%	WPA/WPA2-PSK
0	2WIRE406	1	24%	WPA-PSK
0	2WIRE394	6	20%	WPAWPA2-PSK
0	AppleTC	7	10%	WPA2-PSK

4. In the **Password** field, type the network password (also called passphrase or security key) and click the **Continue** button.

5. In the **Name** field, type a name (SSID) for your new extender WiFi network and click the **Continue** button.

Enter name and security se	ettings for your extended WiFi network.
2.4GHz Network Name (SSID):	Millers_EXT
🗹 Use the same security and pass	word as those for the existing network.
Back Continue	

Note: You can use the same security settings as your existing network by selecting the check box.

The settings are applied and the following screen displays:

hollow the instruction network.	ons below to connect you devices to the extended
2.4GHz Extender network	
Name (SSID) : Millers_EXT Security: WPA2-PSK[AES]	
Password: pepper40	
	a laptop, tablet, smart TV, etc. to your extended network. For example, a the Windows WiFi manager to connect to the newly extended network.
(17) Wireless Network Connect Network Tasks	tion 27 Choose a wireless network Clok an item in the lat below to connect to a wireless network in range or to get more information.

- 6. Use a WiFi network manager on the computer or mobile device to connect to the extender's newly created WiFi network.
- 7. Enter your password.
- 8. Select the check box and click the **Continue** button.

Follow the instruction	ons below to connect you devices to the extended network.
2.4GHz Extender network Name (SSID) : Millers_EXT Security: WPA2-PSK[AES] Password: pepper40	
	laptop, tablet, smart TV, etc. to your extended network. For example, on your laptop you may use the connect to the newly extended network.
Network Tasks	Choose a wireless network
💋 Refresh network list	Click an item in the list below to connect to a wireless network in range or to get more information.
Set up a wireless network for a home or small office	((°)) NETGEAR88_EXT Automatic 🛠 ^
🗹 Once you have connecte	d your devices, mark the checkbox and click the Continue button.
	Continue

- **9.** Unplug the extender and move it to a new location closer to the area with a poor WiFi signal. The location you choose must be within the range of your existing WiFi router network.
- **10.** Plug the extender into an electrical outlet and wait one minute.

The Power LED \bullet \bigcirc lights green. If the Power LED does not light, press the **Power** button.

11. Use the Router Link LED on the front panel to help you choose a spot where the extender-to-router connection is optimal.

Find the Best Location

If the WiFi signal is weak, the first time you join the extender network, an arrow LED blinks for two minutes. If this happens, adjust the position of the extender. Use the following table to understand the arrow LEDs.

Table 2. Arrow LEDs	Table	2.	Arrow	LEDs
---------------------	-------	----	-------	------

Arrow LED State	Action
No arrow LEDs are lit.	No action is needed. The extender is in a good location.
Router arrow blinks.	Move the extender closer to the router.
Client arrow blinks.	Move the computer or mobile device closer to the extender.

Extender WiFi Performance

The extender LEDs indicate the strength of the extender's WiFi connections. Use the following table to understand the extender LEDs.

LED	Description
Router Link LED indicates the strength of the WiFi signal between the router and the extender.	The LEDs are color coded as follows:Green indicates the best connection.Amber indicates a good connection.
^{(()}) Client Link LED indicates the strength of the WiFi signal between the extender and the computer or mobile device.	 Red indicates a poor connection. An LED that is off indicates no WiFi connection

Cable a Computer or Device to the Ethernet Port

You can use an Ethernet cable to connect a computer or device to the Ethernet port on the extender. Here are some examples of when you might want to do this:

- You want to use a computer to log in to the extender to view or change its settings, but you are having trouble connecting to the extender WiFi networks.
- You have already installed the extender and now you want to connect a device to the extender's Ethernet port.

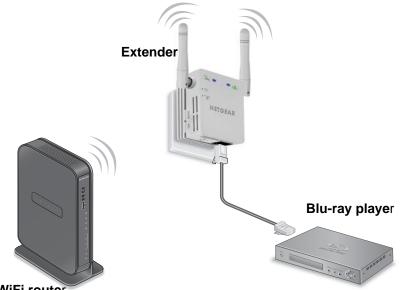
> To cable a computer to the extender Ethernet port:

- 1. Install the extender so that it is connected to your existing network with a WiFi link.
- 2. Connect an Ethernet cable to the Ethernet port on the extender and to an Ethernet port on your computer.

The computer connects to the extender. Your computer might display a message notifying you of an Ethernet connection.

> To cable a device to the extender Ethernet port:

- 1. Install the extender so that it is connected to your existing network with a WiFi link.
- 2. Connect an Ethernet cable to the Ethernet port on the extender and to an Ethernet port on your device.



WiFi router

The device connects to the extender. Now, the device can access your existing network through the extender.

3

Manage the Extender Network and Settings

This chapter covers the following topics:

- Log In to the Extender After Initial Setup
- Change the admin Password
- Use the Setup Wizard to Connect the Extender to a Network
- Add a WPS Client to the Extender Network
- View or Change Wireless Settings
- View or Change Advanced Wireless Settings
- Set Up a Wireless Access List
- Set Up the Extender to Use a Static IP Address

Log In to the Extender After Initial Setup

After installation, you can log in to the extender to view or change its settings.

> To log in to the extender after the initial setup:

- 1. Connect a computer or mobile device to the extender's network.
- 2. Launch a web browser and enter www.mywifiext.net in the address field.

A login screen displays.

3. Enter admin for the user name and password for the password.

If your extender has an Internet connection, the extender automatically checks for new firmware at the NETGEAR website.

The Status screen displays.

NETGEA	R°genie [,]				
N300 WiFi Range Ex	ktender		Auto	~	Logout
,			Firm	ware Versi	on V1.0.0.24
Setup Wizard	Status				
Add WPS Client	Hardware Version	WN3000RPv2			~
Add WPS Client	Firmware Version	V1.0.0.24			
▶ Setup	GUI Language Version	V1.0.0.17			
• Maintenance	Connection Status to Existing Network				
· mantenance	Name (SSID)	Millers			
Constant of the second of the	Connection Status	Connected			
<u>Status</u>	Link Rate	54Mbps			
Network Devices	manted to appreciate				
Backup Settings	Extender IP Info				
Concerner and the	MAC Address	08:BD:43:C2:EA:CE			
Set Password	IP Address	192.168.1.84			
Firmware Upgrade	DHCP Client	ON			
C 2011 16	IP Subnet Mask	255.255.255.0			
▶ Advanced	Gateway IP Address	192.168.1.254			
	Domain Name Server	192.168.1.254			
	Extender Wireless Setting				
	Name (SSID)	Millers_EXT			
	Region	Europe			
	Channel	10			
	Wireless AP	ON			
	Broadcast Name	ON			
	Wi-Fi Protected Setup	Configured			~
	Help Center		_	<u>Show/H</u>	ide Help Center
Help & Support Docum	nentation Online Support Extender FAQ GNU GPL	SEARCH H	ELP Enter	Search Item	GO

Change the admin Password

The user name to access the extender is admin, and its default password is password. NETGEAR strongly recommends that you set a more secure password.

> To change the password for the extender:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password and want to change it again, type your personalized password.

4. Select Maintenance > Set Password.

Set Password		
	× Cancel	Apply 🕨
Old Password		
Set Password		
Repeat New Password		

- **5.** Type the old password.
- 6. Type the new password twice.
- 7. Click the Apply button.

Your settings are saved.

Use the Setup Wizard to Connect the Extender to a Network

The first time that you use a browser to connect to the extender to install it, the NETGEAR genie installation wizard displays. If you want to use a wizard to set up the extender again, you can log in to the extender and use the Setup Wizard.

> To use the Setup Wizard to connect the extender to a WiFi network:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select Setup Wizard.

The extender finds the wireless networks in your area and displays a list.

				Refresh Continu
	SSID	Channel	Signal	Security
0	Millers	10	100%	WPA2-PSK
0	ASUS	6	39%	WPA2-PSK
0	2WIRE394	3	29%	WPAWPA2-PSK
0	2WIRE406	1	24%	WPA-PSK
0	2WIRE394	6	20%	WPA/WPA2-PSK
0	AppleTC	7	10%	WPA2-PSK

- 5. To select the network you want the extender to join, do one of the following:
 - Select the radio button for the network.
 - Select the **Manually input my wireless SSID** radio button and type the name of the network.
- 6. Enter the security settings for the network that you selected.
- 7. Click the **Continue** button.

You are prompted to name the extender network.

Enter name and security set	tings for your extended WiFi network.
2.4GHz Network Name (SSID):	Millers_EXT
🗹 Use the same security and passw	ord as those for the existing network.
Back Continue	

By default, the extender network name is the same as the network that you selected with _EXT at the end.

8. Either change the name or leave it as is, and click the **Continue** button.

The settings are applied to the extender.

Note: You can use the same security settings used in your existing network by selecting the check box.

The settings are applied and the following screen displays:

Follow the instructi network.	ons below to connect you devices to the extended
2.46Hz Extender network Name (SSID) : Millers_EXT Security: WPA2-PSK[AES] Password: pepper40	
	laptop, tablet, smart TV, etc. to your extended network. For example, the Windows WiFi manager to connect to the newly extended network.
Network Tasks	Choose a wireless network
🛃 Refresh network list	Click an item in the list below to connect to a wireless network in range or to get more information.
Set up a wireless network for a home or small office	((Q)) NETGEAR88_EXT Automatic 👷 ^
🗌 Once you have connect	ed your devices, mark the checkbox and click the Continue button.

- 9. Use a WiFi network manager on the computer or mobile device to connect to the extender's newly created WiFi network.
- **10.** Enter your password.

Your computer or wireless device connects to the network.

Add a WPS Client to the Extender Network

A WPS client is a computer or wireless device. WPS lets you add a wireless computer or device to the extender's WiFi network without typing the WiFi password. WPS does not support WEP network security. If you are using WEP security, see *Connect with NETGEAR genie Smart Setup* on page 10.

Note: For instructions about how to use the physical WPS button on the extender, see *Connect with WPS* on page 9.

> To add a WPS client:

- 1. Launch a web browser from a computer or wireless device that is connected to the network.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

A login screen displays.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type admin for the user name and type your password.

If you have not yet personalized your password, type **password** for the password.

- 4. Select Add WPS Client.
- 5. Click the Next button.
- 6. Select a setup method:
 - **Push button**. Click the **WPS** button on this screen.
 - **PIN Number**. The screen adjusts. Enter the client security PIN, and click the **Next** button.
- 7. Within two minutes, go to the client device and use its WPS software to connect to the WiFi network.

The WPS process automatically sets up your wireless computer with the network password when it connects. The extender WPS screen displays a confirmation message.

View or Change Wireless Settings

Changing the wireless setting disconnects all computers or wireless devices from the WiFi network. To reconnect to the WiFi network, you must use the new settings.

> To view or change the wireless settings:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type admin for the user name and type your password.

If you have not yet personalized your password, type **password** for the password.

4. Select Setup > Wireless Settings.

Wireless Settings	Cancel Apply
My WN3000RPv2 Wireless Network	
Name (SSID):	Millers_EXT
Region:	Europe 💌
Security Options	
ONone	
O WEP	
O WPA-PSK [TKIP]	
• WPA2-PSK [AES]	
○ WPA-PSK [TKIP] + WPA2-PSK [AES]	
Security Options (WPA2-PSK)	
Password (Network Key):	(8-63 characters or 64 hexdigit

- 5. To change the network name, type a name in the Name (SSID) field.
- 6. To change the region, select the correct region from the **Region** list.
- 7. To change the WiFi security, select a radio button in the Security Options section.
- 8. To save your settings, click the **Apply** button.

If you changed the settings, the new settings take effect and computers and wireless devices on the network are automatically disconnected.

View or Change Advanced Wireless Settings

Use care when changing the wireless settings. Incorrect settings might disable the extender's WiFi networks unexpectedly.

> To view or change the advanced wireless settings:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type **admin** for the user name and type your password.

4. Select Advanced > Wireless Settings.



All the check boxes are selected by default.

- 5. In the Advanced Wireless Settings section of the screen, select or clear the check boxes.
 - Enable Wireless Access Point. When this check box is selected, the extender allows WiFi connections. Clearing this check box prevents wireless devices from connecting to the extender. LAN devices can still connect to the extender over an Ethernet cable.
 - Enable SSID Broadcast. When this check box is selected, the extender broadcasts its wireless network name (SSID). Clearing this check box hides the extender's network name. In such a situation, this network name does not display in a WiFi network manager. A user who wants to join this hidden network must know its network name.
 - Keep Existing Wireless Settings. This check box is selected so that if you use WPS to connect to the Extender WiFi network, its wireless network name stays the same instead of changing to a new, randomly generated network name. NETGEAR recommends that you leave this check box selected.
- 6. Click the Apply button.

Your settings are saved.

Set Up a Wireless Access List

By default, any wireless device that is configured with the correct network name (SSID) can access the extender's WiFi networks. For increased security, you can restrict access to the extender's WiFi networks so that only wireless devices with the MAC addresses that you add to an access list can connect.

Each network device has a MAC address, which is a unique 12-character physical address, containing the hexadecimal characters 0–9, a–f, or A–F only, and separated by colons (for example, 00:09:AB:CD:EF:01). Typically, the MAC address is on the label of the wireless device. If you do not have access to the label, you can display the MAC address using the network configuration utilities of the computer. You might also find the MAC addresses on the Network Devices screen (see *View Wired and Wireless Network Devices* on page 28).



CAUTION:

If you use a wireless device to set up the access list, add your wireless device to the access list. Otherwise, you are disconnected when you click the **Apply** button. To avoid this situation, use a computer with a wired connection to access the extender.

Before you enable the access list, you must add the MAC addresses of the wireless devices that you want to grant access to the WiFi network of the extender.

> To set up and enable the access list:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

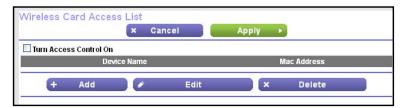
You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type admin for the user name and type your password.

If you have not yet personalized your password, type password for the password.

4. Select Advanced > Wireless Settings and click the Setup Access List button.

The Wireless Card Access List screen displays.



5. Click the Add button.

The screen adjusts.

Available Wireless Cards				
	Device Name	Mac Address		
Wireless Card Entr	у			
Device Name				
Mac Address				

- 6. In the **Device Name** field, type a name for the wireless device.
- 7. In the MAC Address field, type the MAC address of the wireless device.
- 8. Click the **Apply** button.
- 9. Above the Wireless Card Access list, select the Turn Access Control On check box.
- **10.** Click the **Apply** button.

Now only computers and devices in the Wireless Card Access list can join the extender's WiFi networks.

Set Up the Extender to Use a Static IP Address

By default, the extender gets its IP address dynamically from the router in your network. This is the most common setting and is suitable for most situations. You can set up the extender to use a static IP address. You specify the static IP address and it always stays the same. Working with a static IP address requires networking knowledge.

> To specify a static IP address:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type admin for the user name and type your password.

If you have not yet personalized your password, type **password** for the password.

4. Select Setup > IP Address Setup.

evice's IP Addres	× Cancel	Apply	•			
Set Dynamically IP Add	dress From Router					
OUse Static IP Address						
IP Address			192	. 168	. 1	. 250
IP Subnet Mask				1.].	1.
Gateway IP Address				1		
Primary DNS						==

- 5. Select the Use Static IP Address radio button and complete the static IP address fields.
- 6. Click the Apply button.

Your settings are saved.

Monitor and Maintain the Extender

4

This chapter covers the following topics:

- Back Up the Extender Configuration
- Restore Saved Configuration Settings
- Return the Extender to Its Factory Settings
- Upgrade the Firmware
- View Wired and Wireless Network Devices

Back Up the Extender Configuration

When the extender works correctly after initial setup, NETGEAR recommends that you back up the extender configuration settings. After you have backed up the settings, if you change the extender settings but are not content with the new settings, you can restore the backed-up configuration settings.

> To back up the extender configuration settings:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type **admin** for the user name and type your password.

If you have not yet personalized your password, type **password** for the password.

4. Select Maintenance > Backup Settings.

Backup Settings	
Save a Copy of Current Settings	
	Backup
Restore Saved Setting from a File	
	Browse
	Restore
Revert to Factory Default Settings	
	Erase

5. Click the **Backup** button.

Your browser extracts the configuration file from the extender.

6. If you do not have your browser set up to save downloaded files automatically, locate where you want to save the file.

A copy of the current settings is saved in the location you specified.

Restore Saved Configuration Settings

You can restore the configuration file of the extender to a previously saved configuration file.

> To restore the extender configuration settings:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type admin for the user name and type your password.

If you have not yet personalized your password, type **password** for the password.

4. Select Maintenance > Backup Settings.

Backup Settings	
Save a Copy of Current Settings	Backup
Restore Saved Setting from a File	Browse Restore
Revert to Factory Default Settings	Erase

- 5. Click the **Browse** button.
- 6. Locate and select the previously saved backup file.

By default, the name of the backup file is NETGEAR_WN3000RP.cfg.



CAUTION:

After you click the **Restore** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting!

7. Click the **Restore** button.

A confirmation pop-up screen displays.

8. Confirm your decision.

The extender restarts. This process takes about one minute.

Return the Extender to Its Factory Settings

To reset the extender to factory default settings, you can use either the **Factory Reset** button or the Erase feature. For information about the factory settings, see *Factory Default Settings* on page 35.

Use the Factory Reset Button to Restore Factory Settings



CAUTION:

This process erases any settings that you have configured in the extender.

- > To restore factory settings:
 - 1. Insert a paper clip into the **Factory Reset** hole and hold it until the Power LED blinks amber.



2. Release the button.

Factoy Reset button

All the LEDs turn off for about three seconds.

The Power LED lights solid amber for about 30 seconds.

The Power LED • U lights solid green.

The extender returns to its factory settings.

Erase the Extender Settings and Return to Factory Settings



CAUTION:

This process erases any settings that you have configured in the extender.

> To erase the extender's current settings:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type **admin** for the user name and type your password.

4. Select Maintenance > Backup Settings.

Backup Settings	
Save a Copy of Current Settings	Backup
Restore Saved Setting from a File	Browse
Revert to Factory Default Settings	Erase



CAUTION:

After you click the **Erase** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting!

5. Click the Erase button.

A confirmation pop-up screen displays.

6. Confirm your decision.

The extender restarts. This process takes about one minute.

Upgrade the Firmware

Unless you changed the settings in the Firmware Upgrade screen previously, the extender is set up to check for new firmware automatically when you log in. You can also check for new firmware.

- > To check if new firmware is available and update the firmware:
 - 1. On your computer, launch a web browser.
 - 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type **admin** for the user name and type your password.

4. Select Maintenance > Firmware Upgrade.

Check for New Versior	from the Internet		Check
Check for New Vers	ion Upon Log-in		
Locate and select the	ıpgrade file from yo	ur hard disk:	
	E	rowse	

- 5. Click the **Check** button.
- 6. If new firmware is available, follow the onscreen prompts to download it onto your computer.

Note: You might need to unzip the firmware file.

- 7. Click the **Browse** button.
- 8. Locate and select the new firmware file.



CAUTION:

After you click the **Upload** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting!

9. Click the Upload button.

The firmware update starts and the extender restarts. This process takes a couple of minutes

View Wired and Wireless Network Devices

You can view the active wired and wireless devices in both the extender network and the network to which the extender is connected. If you do not recognize a wireless device, it might be an intruder.

> To view devices on the network:

- 1. On your computer, launch a web browser.
- 2. In the address field of your browser, enter http://www.mywifiext.net.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type http://www.mywifiext.net in your browser.

3. Type admin for the user name and type your password.

4. Select Maintenance > Network Devices.

Netw	vork Devices			
Wired	Devices			
#	IP Address	MAC Address	Virtual MAC Address	Device Name
Wirele	ss Devices(Wireless in	truders also show up here)		
#	IP Address			
	IF MUUICSS	MAC Address	Virtual MAC Address	Device Name
1	192.168.1.128	MAC Address 00:18:77:90:EF:28	Virtual MAC Address	Device Name TECHPUBS

For each wired and wireless device, the IP address, device name, and MAC address display.

5. (Optional) Click the **Refresh** button.

The screen is updated.

FAQs and Troubleshooting

5

This chapter covers the following topics:

- FAQs
- Cannot Log In to the Extender
- Cannot Join the Extender WiFi Network

FAQs

This section provides answers for difficulties you might experience with the extender.

1. Question. Will the extender work if I connect it to my wireless router with an Ethernet cable?

Answer. No. The extender is designed to connect wirelessly to the router or access point.

2. Question. What are the user name and default password to log in to the extender?

Answer. If you are online at http://www.mywifiext.net, you can use the following user name and password to log in:

- User name. admin
- **Password**. password
- 3. Question. The web browser setup keeps asking me for my network security key (passphrase), and I am sure that I have entered the correct passphrase. What can I do?

Answer. The extender is probably placed at the borderline of the range covered by the router or access point. For more information, see *Place the Extender* on page 9.

If you are using WEP security, make sure that you are typing the wireless key in the correct field.

4. Question. I am connected to NETGEAR_EXT and launched a browser. Why can't I see the web browser setup genie?

Answer. Try these troubleshooting steps:

- Make sure that your computer is set up to use DHCP (most are).
- Make sure that the Client Link LED is green and that you have a valid IP address.
- Relaunch the web browser and type **www.mywifiext.net** or **www.mywifiext.com** in the address field of the web browser. Enter **admin** for the user name and **password** for the password.
- 5. Question. Is seamless roaming supported? During a VoIP call, when I move to a different location the call is dropped. What should I do?

Answer. No, the extender does not support seamless roaming. You might notice performance issues if your network device (laptop, smartphone, or tablet) connects to a different WiFi network. For example, you could connect to the extender WiFi network, begin a call, and move to the location of your existing network. Your device automatically connects to the network in your current location, which takes a few seconds. This might cause your call to be dropped. To prevent this problem, decide which WiFi network you want to use for your VoIP call, and stay within the range of that network.

6. Question. My router security is WEP, and I entered the wrong passphrase or security key on the extender. I cannot access the extender anymore. What can I do?

Answer. The extender cannot detect if the WEP passphrase is correct. If you entered the wrong passphrase, your wireless device cannot get the IP address from the extender. You must reset the extender to the factory settings to get the IP address back.

7. Question. I have enabled a wireless MAC filter (wireless access control or ACL) on my wireless router. What should I do when installing the extender?

Answer. When the wireless device connects through the extender to your router, the MAC address of the wireless device shown on the router is translated to another MAC address. If your router's MAC filter is enabled, the wireless device connects to the extender but cannot get an IP address from the extender and cannot access the Internet. To allow the wireless device to receive an IP address from the extender and access the Internet, you must provide the translated MAC address to the router.

> To get the translated MAC address:

- 1. Disable the MAC filter on your router.
- 2. Turn on the extender and connect all of your wireless devices to the extender.
- 3. Make sure that the Router Link $\stackrel{(p)}{=}$ LED remains lit.
- 4. Log in to the router and check the attached devices on the Attached Devices or similar screen.
- 5. Add any MAC addresses that begin with 02:0F:B5 to your router's MAC filter table.

Cannot Log In to the Extender

If you have trouble connecting to the extender, try to locate the source of the problem:

- Make sure that you use the correct user name and password to log in:
 - User name. admin
 - **Password**. password
- If your browser displays an error page, make sure that you include http:// when you type http://www.mywifiext.net in the address field of your Internet browser. If you leave it out, you might not be able to connect.
- If you already set up the extender but can no longer connect to it with WiFi, check if the Power LED ● ① is off. If the Power LED does not light, press the **Power** button.
- If the extender is powered on but you cannot connect to the extender WiFi network, you can use an Ethernet cable to connect your computer to the Ethernet port on the extender. For more information, see *Cable a Computer or Device to the Ethernet Port* on page 13.

Cannot Join the Extender WiFi Network

To join a WiFi network, you must know its network name (also called the SSID) so that you can select it. If the network is secure, you must know the passphrase or key. If the extender does not connect to the network that you select, the following message displays:

Connection was not established to the selected network.

If this situation occurs, the cause might be one of the following:

- You might have typed the network name, passphrase, or key incorrectly. Use the Setup Wizard to select a WiFi network from the list with detected networks, and retype the passphrase or key. The passphrase or key is case-sensitive. For example, PASSWORD25 is not the same as Password25 or password25.
- If the extender cannot detect your WiFi network, check to see if your WiFi network is still working. Make sure that the wireless router is turned on. If possible, move the extender closer to the wireless router.
- If the extender Router Link LED is red, a poor wireless connection exists between the wireless router and the extender. You can establish the best connection with a clear line of sight between the extender and the wireless router. Make sure that no physical obstacles exist between the extender and the wireless router and try to move the extender closer to the wireless router.
- When you use the Setup Wizard, it automatically checks to see if you have a working Internet connection. If you cannot access the Internet with your computer or wireless device, the Setup Wizard displays the following message:

You are not able to connect to the Internet. Click Continue to run through setup again to connect to your network.

This message can display due to the following reasons:

- The extender cannot connect to the wireless router.
- The extender cannot get an IP address from the wireless router.
- The wireless router is not connected to the Internet.

Either run the Setup Wizard again or exit the Setup Wizard and try again later.

Supplemental Information



This appendix includes the following sections:

- Factory Default Settings
- Technical Specifications

Factory Default Settings

The following table includes the factory settings for the extender. You can use the **Factory Reset** button or the Erase feature to return the extender to these settings. (See *Return the Extender to Its Factory Settings* on page 25.)

Table 4. Factory Settings

Feature	Setting
Setup Wizard	Enabled
Wireless communication	Enabled
Wireless network names (SSID)s	NETGEAR_EXT
Security	Disabled
Transmission speed	Auto ¹
Country/region	Varies by region
Operating mode	802.11n, 802.11g, 802.11b
Data rate	Up to 300 Mbps
DHCP	Client enabled

1. Maximum wireless signal rate (IEEE Standard 802.11). Actual throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate.

Technical Specifications

The following table includes the product specifications.

Table 5. Technical specifications

Extender Specifications			
Network protocol and standards compatibility	Data and routing protocols: TCP/IP, DHCP server and client, DNS relay		
Power consumption	100-240V ~0.1 A, 50-60 Hz		
Physical specifications	 Dimensions: 67 x 55 x 34 mm (2.64 x 2.17 x 1.34 in.) Weight: 98 g (3.46 oz) 		

Extender Specifications		
Environmental	 Operating temperature: 32° to 140°F (0° to 40°C) Operating humidity: 90% maximum relative humidity, noncondensing Electromagnetic emissions: Meets requirements of FCC Part 15 Class B. 	
Interface	 Local: 10BASE-T, 100BASE-Tx, RJ-45 802.11n, 802.11g, 802.11b 	

Table 5.	Technical	specifications	(continued)
----------	-----------	----------------	-------------