NETGEAR®

WiFi Booster for Mobile WN1000RP

User Manual

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.*

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Getting Started

1

This chapter covers the following topics:

- *How the Booster Works*
- *Hardware Features*
- *Install the Booster*
- *Position the Booster*
- *Performance*

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

How the Booster Works

The booster works like a bridge between a WiFi router and a computer or wireless device outside the wireless router's range. The booster has two main jobs:

1. The booster connects to a WiFi network.

   When the booster connects wirelessly to a network, it acts as a network client. This is similar to how a computer connects to a network.

2. The booster acts as an access point for computers.

   The booster has its own wireless network called NETGEAR_EXT that wireless computers can join. In its role as an access point, the booster performs tasks that wireless routers do, such as broadcasting its network name (SSID).

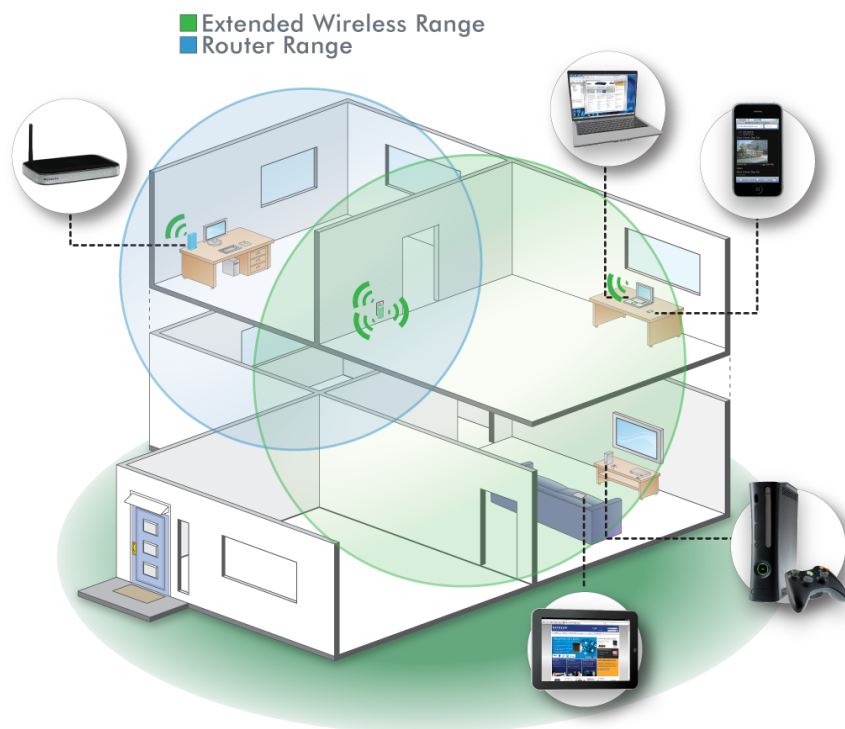The booster needs to do each of these jobs so that both ends of the bridge are in place.

Figure 1. Booster in a home

When to Use Your Booster

NETGEAR recommends that you connect to the booster only when your home network connection is poor. Because data traffic routed through the booster is inherently slower than traffic routed directly from the network, the computer should stay on the network if the connection is good enough. NETGEAR recommends that you connect through the booster network only when the computer is in a "dead zone" where connection from the network is poor or non-existent.

The booster LEDs can help you tell if the booster is correctly set up and working as it should.

- The best performance is delivered when the Link Rate LED 📶 and the PC to Booster LED ⬆⬇ are green.
- A workable performance is delivered when the Link Rate LED is amber and the PC to Booster LED ⬆⬇ is green.

Hardware Features
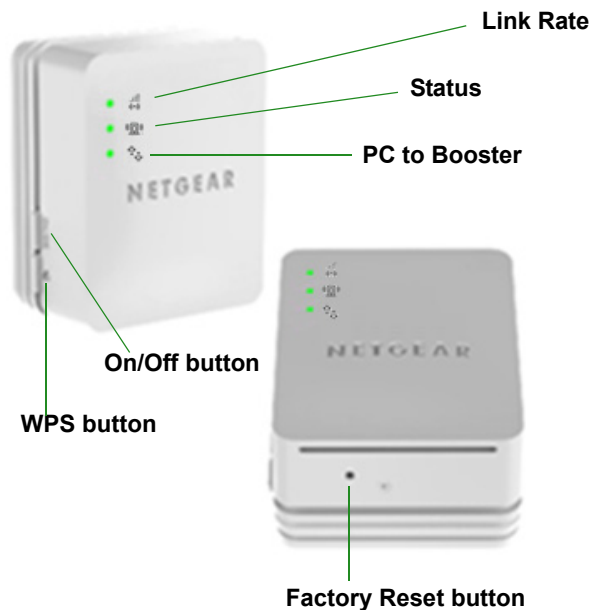
The following figure shows the booster.

Figure 2. Booster

The LEDs on the front show how the booster is working:

- 📶 **Link Rate**. This LED indicates a wireless connection between the booster and the router.

  Green is best.

  Amber is good.

  Red is poor.

- 📡 **Status**. This LED is lit when the booster is powered on.
- ⬆⬇ **PC to Booster**. The LED is lit when the booster is connected to a computer.

The side panel has the following features:

- **On/Off button**. Turns the device on and off.
- 📶 **WPS button**. Press the **WPS** button to wirelessly connect the booster to your router or wireless adapter.

The bottom of the booster has the following feature:

- **Factory Reset button**. To use this button, stick a paper clip into the reset hole and hold it until the Status LED blinks. Then release the button.

Install the Booster

➢ **To install the booster:**

1   Either connect the AC plug, or attach the stand and the power adapter cord.

2   Find a place to install the booster that is about halfway between the router and the computer or wireless device that is outside of the range of the router.
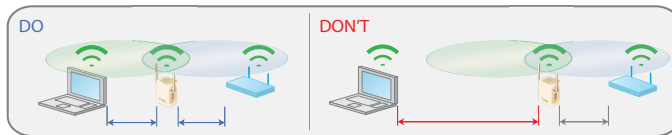

If you have to use a different location, see *Position the Booster* on page 8.

3   Power up the booster.

- If you connected the AC plug to the booster, plug it directly into an electrical outlet.
- If you attached the stand and power adapter, plug the power adapter into an electrical outlet.

4   Wait until the Status LED 〔回〕 turns green.

5   Use a computer or wireless device to connect to the booster. During installation, it might be easier to use a computer or device that is in the same room as the booster.

For a wireless connection, use a WiFi network manager to find and connect to **NETGEAR_EXT** (the SSID) wireless network.
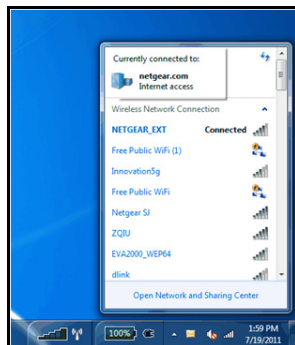
Tip: You can use any WiFi network manager utility on a computer or tablet to find and connect to the booster wireless network.

After the connection with the computer is established, the PC to Booster LED 〔⇧⇩〕 turns green.

6 On your computer or wireless device, launch an Internet browser.

The browser displays the genie screen.

If you do not see the genie screen, type **http://www.mywifiext.net** in the address field of your browser.

The genie scans for wireless networks in your area.

7 Follow the genie steps to set up the booster to work with your network and to set up your computer or wireless device to connect to the booster network.

These steps are explained in *Use NETGEAR genie After Installation* on page 12.
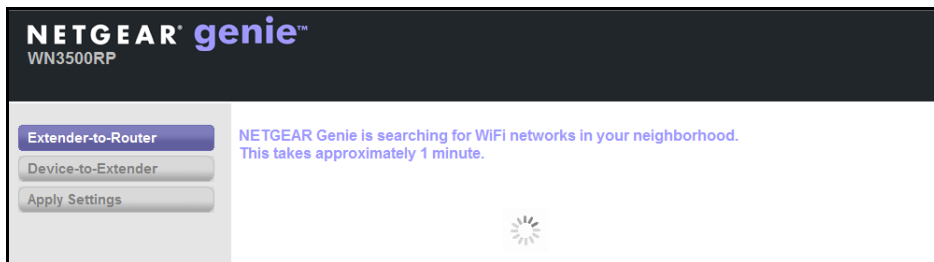
Position the Booster

The best connection is established when there is a clear line of sight between the booster and the router and between the booster and the computer or wireless device. If this straight path is blocked by a thick wall or other materials, move the booster to a different location half-way between the computer and the router.

If the Link Rate LED is green or amber and the PC to Booster LED is green, the booster is working as expected.

➢ **To place the booster and apply power:**

1 Place the booster an equal distance between your router and the wireless device located outside the range of your router.

2 Plug the booster into an electrical outlet, and wait 1 minute until the Status LED 〈◻〉 turns green.

- If you have to use a different location, move the booster closer to the device, but still within the wireless range of the router.

- During installation, you can put the booster in the same room as the router. After you complete installation, you can move the booster to a location that is halfway between the router and your computer, and the booster is still displaying a green link rate.

➢ **To improve the Link Rate LED from red or amber to green:**

1 If the Link Rate LED is red, move the booster closer to the router or to a different spot where it provides a better line of sight.

2 As you move the booster, check the LEDs until you find a location where the Link Rate LED is green or amber, and the PC to Booster LED ⬆⬇ is green.

3 You might have to unplug the booster as you move it to a different location. If you do, from the new location, power up the booster and continue to check the LEDs.

Once the LEDs show that the booster is in a good location, open a browser and go to http://www.mywifiext.net to continue the setup process.

Performance

The Link Rate LEDs indicate the performance of the 📶 2.4 GHz wireless connection from the booster to a router.

- The best performance is delivered when the Link Rate LED is green.

- A workable performance is delivered when the Link Rate LED is amber.

- A red Link Rate LED indicates a poor connection or no connection between the booster and the router.

- Make sure that your ⬆⬇ PC to Booster LED is green before you check the Link Rate LED for performance.

➢ **To improve booster performance:**

1 Move the booster closer to the router or to a different location with a better line of sight.

2 As you move the booster, check the Link Rate and the PC to Booster LEDs on the booster until you find a good location. These LEDs should remain solid green.

Network Settings

2

This chapter covers the following topics:

- *Log In to the Booster*
- *Use NETGEAR genie After Installation*
- *Add a WPS Client to the Booster WiFi Network*
- *Setup Menu*
- *Maintenance Settings*
- *Advanced Settings*

Log In to the Booster

You can log in to the booster to use NETGEAR genie or to use the menu selections to view or change the booster's settings.

➢ **To log in:**

1. Launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 log in prompt, make sure to include *http://* when you type **http://www.mywifiext.net** in your browser.

3. Type **admin** for the user name. The default password is **password**. NETGEAR recommends that you set a more secure password after you log in (see *Set the Password* on page 22).

   • If your booster has an Internet connection, the Firmware Update screen displays (see *Upgrade the Firmware* on page 22), and the software checks for new firmware at the NETGEAR website.

   • The Status screen displays with the menu on the left. This screen shows what the current settings are for the booster.

If you have trouble connecting:

• Make sure that you have connected to the WN1000RP's SSID.

• Make sure that the WN1000RP's PC to Status LED is lit.

Use NETGEAR genie After Installation

NETGEAR genie can help you set up your booster to connect to a wireless network. During installation, when you launch your Internet browser, NETGEAR genie automatically displays.

➢ **After installation, to use genie again:**

1. Log in to the booster.

Note: Once you begin using genie, you have to complete all of its steps before you can exit.

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2. Select **Setup Wizard**.

The software detects wireless networks in your area and displays a list:

3 Either select a network from the list, or select the **Manually input my wireless SSID** radio button and type the SSID.

If the network is secure, you are prompted to enter the passphrase (network password):
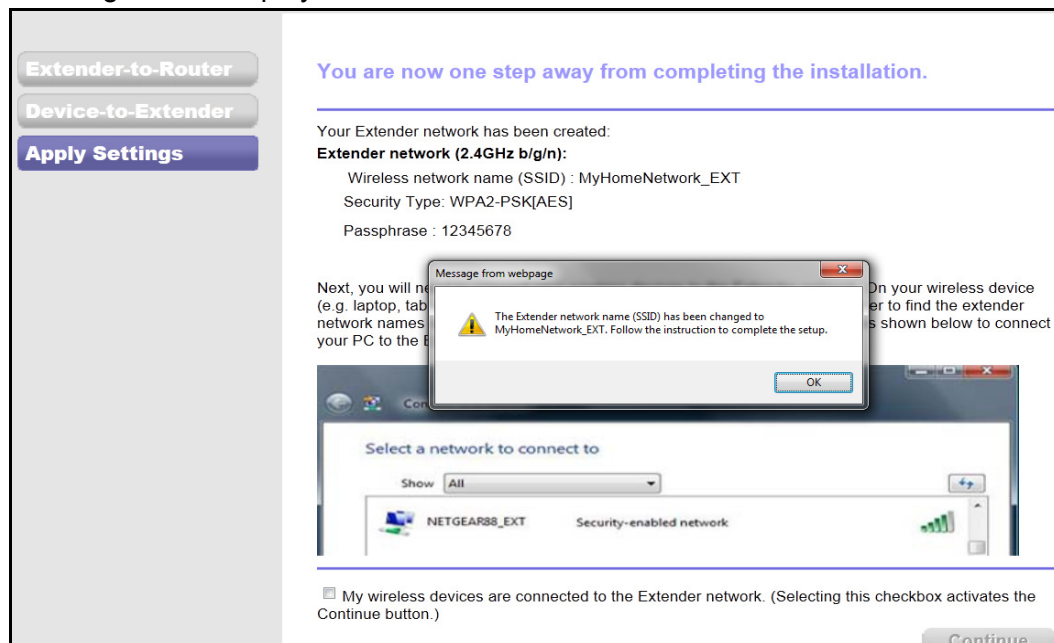
4. Enter the password for your wireless network and click **Continue**.

The genie sets up a WiFi connection from the booster to the router, which takes about 2 minutes. Then the following screen displays.

5. Review the settings, and make sure that they are correct. Then, click **Continue**.

The Device-to-Booster settings are applied, which takes about 2 minutes. Then the following screen displays..

6 Join the booster network with your wireless computer or device.

7. Select the check box.

8 Click **Continue**.

Add a WPS Client to the Booster WiFi Network

WPS (Wi-Fi Protected Setup) lets you join a secure WiFi network without typing its password. Instead, you use a WPS button or enter a PIN to connect. WPS supports WPA and WPA2 wireless security.

> **Note:** You *cannot* use the Push 'N' Connect WPS button on the booster to connect the booster to your wireless network. The WPS button on the booster can be used only to connect a computer to the booster.

➢ **To join the booster network using WPS:**

1. Select **Add WPS Client**. The following screen displays:
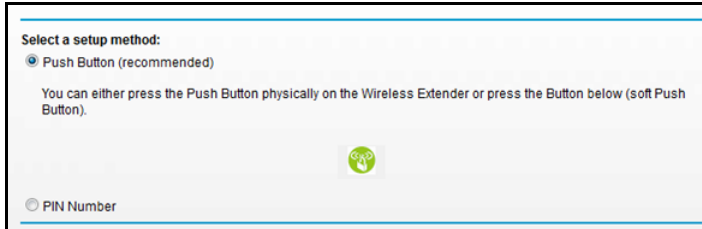
2. Select a radio button:

   • **Push Button (recommended)**. Either click the [icon] button or press the [icon] **WPS** button on the front of the booster.

   • **PIN Number**. Select the radio button, and a PIN displays.

   The booster tries to find the wireless client (the computer) that is attempting to join the network. If you are using a WPS button, it tries for 2 minutes. If you are using a PIN, it tries for 4 minutes.

3. Go to your wireless computer. Use its WPS software to try to connect to the booster.

Setup Menu

After initial setup, you can use the Setup Menu to view or change the settings.

Connect the Booster to an Existing Wireless Network

You can wirelessly connect the booster to your home network.

1. Select **Setup > Connect to an Existing Network**. The booster scans for wireless networks, and displays a list.

If your wireless network is not on the list, the booster might be too far away from the router. See *Position the Booster* on page 8 for suggestions.

2. Select the radio button for your network, and click **Continue**.

    If you selected the manual option, you are prompted to type the network name (SSID) and to enter the password to access it:

3. Enter your network's password or key, and click **Continue**.

    The booster joins your wireless network.

Booster Wireless Settings

You can use the Wireless Settings screen to change the network name (SSID) for the booster's network and to set up wireless security. If you do not change these settings, the network name is NETGEAR_EXT, and the network is open (no wireless security is set up).

Note: If you use a wireless computer to change the booster's wireless settings, you will be disconnected when you click Apply. To reconnect, you have to select the new network name that you created, and enter its password or wireless security key.

➢ **To change the wireless settings for the booster network:**

1. Select **Setup > Wireless Settings** to display the following screen.

2. In the Name (SSID) field, you can type in a new name to customize your booster network. This makes it easier to identify your booster if more than one is operating in your neighborhood.

3. In the Security Options section of the screen, select the type of wireless security that you want to use on your network.

   • **None**. This is an open wireless network. Any wireless computer or device is allowed to join this network.

   • **WEP**. WEP is an older standard, and is less secure than WPA or WPA2. WEP uses encryption keys and data encryption for data security. You can select 64-bit or 128-bit encryption.

   • **WPA-PSK [TKIP]**. WPA is more secure than WEP. When using wireless computers or devices that support WPA, you can enter a passphrase to join the booster wireless network.

   • **WPA-PSK [AES]**. AES is an optional encryption feature for WPA. It is more secure compared to TKIP, but some older computers do not support this standard.

- **WPA2-PSK [AES]**. WPA2 is even more secure, but some older computers do not support this standard. When using wireless computers or devices that support WPA2, you can enter the passphrase to join the booster wireless network.

- **WPA-PSK [TKIP] + WPA2-PASK [AES]**. When using wireless computers or devices that support either WPA or WPA2, you can enter the passphrase to join the booster wireless network.

4. Click **Apply** to save your settings.

5. Use your wireless computer to connect to the booster network with its new settings. The Smart Wizard can guide you through this process.

Set Up WPA, WPA2, or WPA + WPA2

Both WPA and WPA2 provide strong data security. WPA with TKIP can be used on Windows systems with Service Pack 2 or later. WPA2 with AES is a hardware implementation; see your device documentation before implementing it.

➢ **To configure WPA or WPA2 in the booster:**

1. On the Wireless Setting screen, select the radio button for the WPA or WPA2 option of your choice.

2. The settings displayed on the screen depend on which security option you select.

3. For WPA-PSK or WPA2-PSK, enter the passphrase.

4. Click **Apply** to save your settings.

Set Up WEP

WEP is a legacy wireless security setting. NETGEAR recommends that you use a newer standard such as WPA2 or WPA unless you have older wireless equipment that supports only WEP.

➢ **To set up WEP:**

1. In the Wireless Settings screen, in the Security Options section, select the **WEP** radio button.

2. Select the authentication type: **Automatic**, **Open System**, or **Shared Key**. The default is Open System.

> **Note:** The authentication is separate from the data encryption. You can select authentication that requires a shared key, but still leaves data transmissions unencrypted. Security is stronger if you use both the Shared Key and WEP encryption settings.

3. Select the encryption strength setting:

- **WEP 64-bit encryption**. Enter 10 hexadecimal digits (any combination of 0–9, a–f, or A–F).

- **WEP 128-bit encryption**. Enter 26 hexadecimal digits (any combination of 0–9, a–f, or A–F).

4. Enter the encryption keys. You can manually or automatically program the four data encryption keys. These values must be identical on all computers and access points in your network.

   - **Passphrase**. To use a passphrase to generate the keys, enter a passphrase, and click **Generate** to create the keys to access the booster network.

   Note: Not all wireless computers support passphrase key generation. If your computer does not support the passphrase, you need to type the encryption key in order to join the wireless network.

   - **Key 1**–**Key 4**. These values are *not* case-sensitive. You can manually enter the four data encryption keys. These values must be identical on all computers and access points in your network. Enter 10 hexadecimal digits (any combination of 0–9, a–f, or A–F).

5. Select which of the four keys will be the default.
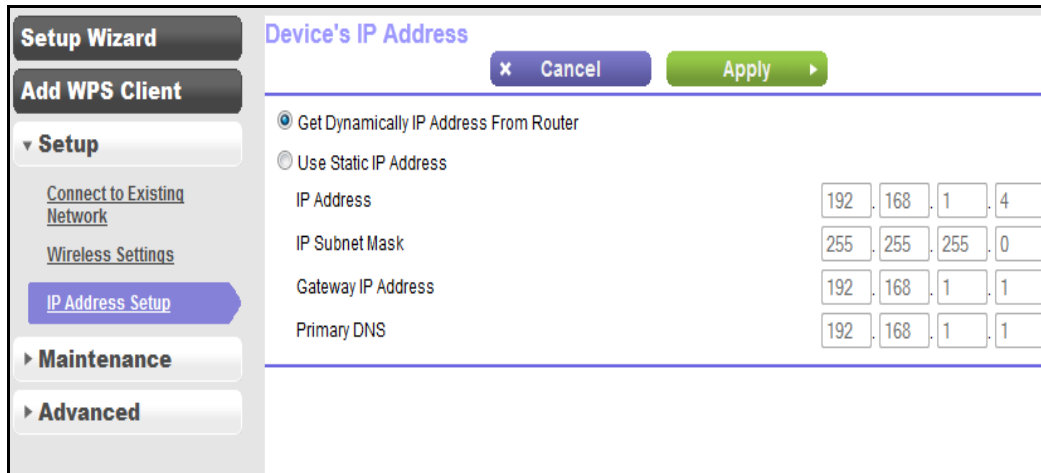
   Data transmissions are always encrypted using the default key. The other keys can only be used to decrypt received data. The four entries are disabled if WPA-PSK or WPA authentication is selected.

6. Click **Apply** to save your settings.

Booster IP Address Setup

The IP Address Setup screen shows whether the booster is set to get its IP address dynamically from the router (this is the most common setting), or is set up with a static IP address.

➢ **To view or change the IP address settings:**

Select **Setup > IP Address Settings**.

The following information is displayed:

- **Get Dynamically IP Address From Router**. The wireless network router assigns an IP address when the booster connects to its wireless network. Most networks are set up so that the router does this automatically.

- **Use Static IP Address**. Specify a static IP address. This is not usually necessary. If you set this up, you should be technically experienced or have a technically experienced person help you.

  - **IP Address**. The static IP address.
  - **IP Subnet Mask**. The subnet mask associated with the IP address.
  - **Gateway IP Address**. The IP address for the gateway.
  - **Primary DNS**. The primary Domain Name Server (DNS).
  - **Secondary DNS**. The secondary Domain Name Server (DNS).

Maintenance Settings

You can use the maintenance settings to view the booster status, view attached devices, back up and restore configuration settings, set the password, and update the firmware.

Status Screen

When you connect to http://www.mywifiext.net, after the automatic firmware check, the Status screen displays. You can also select **Status** from the menu to display this screen:

This screen shows the current settings and the status of your booster.

You can click **Show Statistics** to see device performance statistics such as the number of packets sent and number of packets received for each port. See *Show Statistics* on page 21.

The following fields are displayed in the Status screen:

*   **Hardware Version**. The hardware version of the booster.
*   **Firmware Version**. The current firmware version of the booster. If you upgrade the firmware, this field changes.
*   **GUI Language Version**. The language version running on the booster. If you upgrade the firmware, this field changes.

Connection Status to Existing Network

*   **Name (SSID)**. Your booster is set up to connect to this SSID, also called the wireless name.
*   **Connection Status**. The status of your wireless connection (connected or disconnected).
*   **Link Rate**. The actual transmission (Tx) and receive (Rx) link rate in the current wireless connection.

Extender (Booster) IP Info

• **MAC Address**. The physical address of the booster, as seen from the local area network (LAN).

• **IP Address**. The IP address of the booster. The default is 192.168.1.250.

• **DHCP Server**. Identifies the network DHCP server on the wireless network.

• **IP Subnet Mask**. The IP subnet mask associated with the LAN IP address of the booster. The default is 255.255.255.0.

• **Gateway IP Address**. The IP address of the wireless network gateway.

• **Domain Name Server**. The IP address of the Domain Name Server (DNS) of the wireless network.

Extender (Booster) Wireless Settings

• **Name (SSID)**. The name (SSID) of the wireless network.

• **Region**. The location where the booster is operating.

• **Channel**. The channel of the wireless network.

• **Wireless AP**. On or Off.

• **Broadcast Name**. On or Off.

• **Wi-Fi Protected Setup**. Configured.

Show Statistics

Scroll to the bottom of the Status screen, and click **Show Statistics**. The following screen displays:

System Up Time 00:29:45							
Port	Status	TxPkts	RxPkts	Collisions	Tx B/s	Rx B/s	Up Time
WLAN	72M	13507	9727	0	3846	679	00:29:45

Poll Interval : 5 (secs)   **Set Interval**   **Stop**

The screen shows statistics for wireless LAN (WLAN) ports. For each port, the screen displays the following:

• **Status**. The status of the port.

• **TxPkts**. The number of packets transmitted on this port since reset or manual clear.

• **RxPkts**. The number of packets transmitted on this port since reset or manual clear.

• **Collisions**. The number of collisions on this port since reset or manual clear.

• **Tx B/s**. The current line utilization—percentage of current bandwidth used on this port.

• **Rx B/s**. The average line utilization for this port.

• **Up Time**. The time elapsed since the last power cycle or reset.

• **Poll Interval**. Specify the poll interval frequency. If you change this value, click **Set Interval** so that your change takes effect.

Attached Devices

Select **Maintenance > Attached Devices** to display the following screen:

Back Up and Manage Booster Settings

You can save and retrieve a file containing your booster configuration settings. Once you have your booster working correctly, you should back up the information to have it available if something goes wrong. When you back up the settings, they are saved as a file on your computer. You can restore the device's settings from this file.

➢ **To back up settings:**

1. Select **Maintenance > Backup Settings** to display this screen.

2. Click **Backup**. Your browser extracts the configuration file from the booster.
3. If you do not have your browser set up to save downloaded files automatically, locate where you want to save the file.
4. You can give the file a meaningful name at this time, such as internet_adapter.cfg.

➢ **To restore settings:**

1. On the Backup Settings screen, click **Browse**.
2. Locate and select the previously saved backup file.
3. Click **Restore**.

    A screen displays letting you know that the device has been successfully restored to the previous settings. The booster restarts, which takes about 1 minute.

> ⚠️ **CAUTION:**
>
> Do not try to go online, turn off the booster, shut down the computer, or do anything else to the booster until it finishes restarting.

4. Close the message window.

➢ **To erase settings:**

Under some circumstances (for example, if you have lost track of the changes that you made to the booster settings), you might want to erase the configuration. After an erase, the booster returns to its factory settings (see *Factory Settings* on page 31).

To erase the configuration, click the **Erase** button in the Backup Settings screen. The booster automatically shuts down and reboots with its factory settings.

> ⚠️ **CAUTION:**
>
> Do not try to go online, turn off the booster, shut down the computer, or do anything else to the booster until it finishes restarting.

Set the Password

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

➢ **To set the password:**

1. Select **Maintenance > Set Password**. The following screen displays:

Set Password	
✕ Cancel	Apply ▶
Old Password	
Set Password	
Repeat New Password	
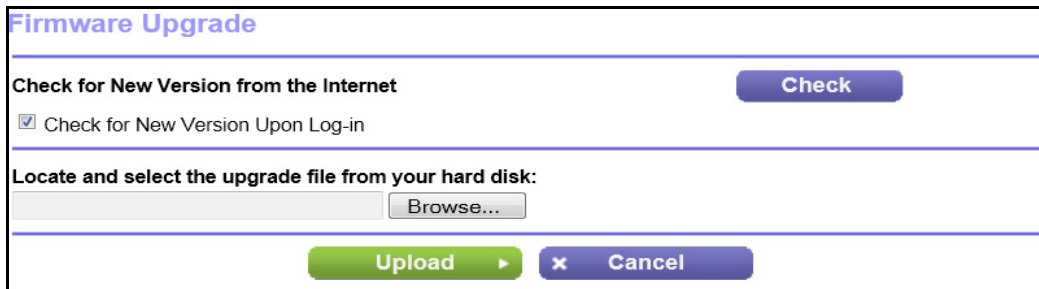
2. Type the old password, type the new password twice, and then click **Apply**.

Upgrade the Firmware

Unless you changed the settings in the Firmware Update screen previously, the booster is set up to check for new firmware automatically at log in.

➢ **To check for firmware and upgrade if it is available:**

1. Select **Maintenance > Firmware Update**. The following screen displays:

Firmware Upgrade

Check for New Version from the Internet   **Check**

☑ Check for New Version Upon Log-in

Locate and select the upgrade file from your hard disk:

[   ] Browse...

Upload ▶   ✕ **Cancel**

2. Click **Check** to see if new firmware is available. If it is, follow the onscreen prompts to download it onto your computer.

3. In the Browse field, enter the path for the new firmware, or click **Browse** to locate and select the file.

4. Click **Upload** to install the new firmware on your booster.

⚠ **CAUTION:**

Once you start the firmware upgrade, do not try to go online, turn off the booster, shut down the computer, or do anything else to the booster until it finishes restarting!

Advanced Settings

You can view or change advanced wireless settings.

Advanced Wireless Settings

The booster is already configured with the optimum settings. Do not alter these settings unless you have a specific reason to do so. Incorrect settings might disable the booster unexpectedly.

➢ **To view or change advanced wireless settings:**

Select **Advanced > Wireless Settings**. The following screen displays:

You can view or configure the following settings:

- Advanced Wireless Setting:
  - **Enable SSID Broadcast**. Enable the booster to broadcast its wireless network name (SSID). If this check box is cleared, the wireless network is hidden. To join a hidden wireless network, you have to type the wireless name.
- WPS Settings:
  - **Disable Extender's PIN**. Selecting this check box disables the booster's PIN. The PIN can be used for a WPS wireless connection.
  - **Keep Existing Wireless Settings**. When this check box is selected, the settings in the Wireless Settings screen stay the same when WPS is used for a wireless connection.
- **Wireless Card Access List**. Specify a list of computers or wireless devices that are allowed to connect to the network. If you use an access list, computers that are not on the list are not allowed to join the wireless network.

➢ **To set up a wireless card access list:**

1. On the Advanced Wireless Settings screen, click **Setup Access List**.

   The following screen displays:

2. Select the **Turn Access Control On** check box.

3. Add the computers and wireless devices that you want to give access to the network.
   - Click the **Add** button for each device.

- If you are not sure of the MAC address, check the product label.
- Make sure to add the computer or wireless device that you are currently using.

4. Click **Apply** so that your changes take effect.

Troubleshooting

3

This chapter includes the following sections:

- *Frequently Asked Questions*
- *Connecting to http://www.mywifiext.net*
- *Joining WiFi Networks*

Frequently Asked Questions

NETGEAR genie keeps asking me for my wireless password, and I am sure I have entered the correct wireless password. What can I do?

It is likely that the booster is placed at the borderline of the range covered by the router. To resolve this, follow the instructions in *Position the Booster* on page 8. If you are using WEP security, make sure that you are typing the wireless key in the correct field.

I connected to NETGEAR_EXT and launched a browser. Why am I unable to see NETGEAR genie?

First, make sure that your computer is set up to use DHCP (most are). Second, make sure that the PC to Booster LED is solid green and you have a valid IP address. Finally, relaunch the browser, and enter **www.mywifiext.net**.

Does the booster work if I connect it to the router with an Ethernet cable?

No. The booster is designed to connect wirelessly to the router.

I have enabled a wireless MAC filter, also called wireless access control (ACL) on my router. What should I do when installing the booster?

The wireless device MAC address is translated to another MAC address when the wireless device connects to the booster. If your router MAC filter is enabled, the wireless device will not be able to get the IP address from the booster. To allow this wireless device to access the Internet, you must add the translated MAC address into the router.

➢ **To get the translated MAC address:**

1. Disable the MAC filter on your router.

2. Power on the booster and connect all of your wireless devices to the booster.

3. Make sure that the Link Rate LED remains lit.

4. Log in to your router and check the attached devices on the Attached Devices screen. Add any MAC addresses that begin with **02:0F:B5** into your router's MAC filter table.

My router security is WEP, and I entered the wrong passphrase or security key on the booster. I cannot access the booster any more. What can I do?

The booster cannot check to see if the WEP passphrase is correct. If you entered the wrong passphrase, your wireless device is not able to get the IP address from the booster. You must reset the booster to the factory defaults to get the IP address back.

I have completed the Installation Wizard, but my wireless devices cannot get the IP address from the booster. What can I do?

Make sure that the passphrase you entered on your wireless device is correct, and power cycle the booster and your router. If your device is still not able to get the IP address:

1. Move the booster closer to your router, and move your wireless device closer to the booster.

2. Disable the wireless interface and enable it again to see if your wireless device can get the IP address.

3. If your router has a MAC filter (wireless access control), disable it, and follow the instructions in the FAQs to add the device's MAC address to your router.

Connecting to http://www.mywifiext.net

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

- For help with passwords, see *Log In to the Booster* on page 11.

- If your browser displays an error page, make sure that you include *http://* when you type this URL in the address field of your Internet browser. If you leave it out, you might not be able to connect.

- The booster LEDs can help you tell if the booster is correctly set up and working as it should.

  - The best performance is delivered when Link Rate LED and the PC to Booster LED are green.

  - A workable performance is delivered when the Link Rate LED is amber and the PC to Booster LED is green.

Joining WiFi Networks

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

Connection was not established to the selected network.

If this happens, it could be for one of these reasons:

- The network name, passphrase, or key might have been typed incorrectly. Click **Cancel**, use the Smart Wizard to select the network from the list, and retype the passphrase or key. This is case-sensitive. PASSWORD25 is not the same as Password25 or password25. See *Log In to the Booster* on page 11.

- If the Smart Wizard does not find your wireless network (it is not displayed in the Select Existing Network screen), check to see if your wireless network is still up and running. Make sure that the router is turned on. If possible, move the booster closer to the router and click **Try Again**.

- If the booster Link Rate LED is red, this indicates a poor wireless connection. The best connection is established when there is a clear line of sight between the booster and the router you are connecting to. Make sure that there are no physical obstacles between the booster and the router, and try to move the booster closer to the router.

If you use the Smart Wizard, and the booster cannot connect to the router or cannot get an IP address from the router, it 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.*

If you click **Continue**, the Smart Wizard starts again. If you click **Exit**, the Status screen displays.

Supplemental Information

A

Factory Settings

You can press and hold the **Factory Settings** button on the side panel for 7 seconds. The booster resets, and returns to its factory settings.

Table 1.

Factory Settings		
Smart Wizard		Enabled
Wireless	Wireless communication	Enabled
	Wireless Network Name (SSID)	NETGEAR_EXT
	Security	Disabled
	Transmission speed	Auto[1]
	Country/Region	United States (varies by region)
	Operating mode	802.11n, 802.11g, 802.11b
	Data rate	Up to 150 Mbps

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

Table 2.

Technical Specifications	
Network protocol and standards compatibility	Data and Routing Protocols: TCP/IP, DHCP server and client
AC input	100-240V, 0.2A (Max.)
Physical specifications	• Dimensions: 67 x 55 x 52 mm (2.63 x 2.17 x 2 in) • Weight: 0.086 kg (3 oz)
Environmental	• Operating temperature: 32° to 140° F (0° to 40° C) • Operating humidity: 90% maximum relative humidity, non condensing • Electromagnetic emissions: Meets requirements of: FCC Part 15 Class B.
Interface	802.11n/g/b

Compliance Notification

B
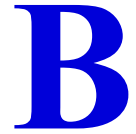
Regulatory Compliance Information

This section includes user requirements for operating this product in accordance with National laws for usage of radio spectrum and operation of radio devices. Failure of the end-user to comply with the applicable requirements may result in unlawful operation and adverse action against the end-user by the applicable National regulatory authority.

This product's firmware limits operation to only the channels allowed in a particular Region or Country. Therefore, all options described in this user's guide may not be available in your version of the product.

Europe – EU Declaration of Conformity

Products bearing the C€ marking comply with the following EU directives:

- EMC Directive 2004/108/EC
- Low Voltage Directive 2006/95/EC

If this product has telecommunications functionality, it also complies with the requirements of the following EU Directive:

- R&TTE Directive 1999/5/EC

Compliance with these directives implies conformity to harmonized European standards that are noted in the EU Declaration of Conformity.

Intended for indoor use only in all EU member states, EFTA states, and Switzerland.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 - 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

FCC Requirements for Operation in the United States

FCC Information to User

This product does not contain any user serviceable components and is to be used with approved antennas only. Any product changes or modifications will invalidate all applicable regulatory certifications and approvals.

FCC Guidelines for Human Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Declaration of Conformity

We, NETGEAR, Inc., 350 East Plumeria Drive, San Jose, CA 95134, declare under our sole responsibility that the WiFi Booster for Mobile WN1000RP complies with Part 15 Subpart B of FCC CFR47 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.

FCC Radio Frequency Interference Warnings & Instructions

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 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 methods:

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

FCC Caution

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- For product available in the USA market, only channel 1~11 can be operated. Selection of other channels is not possible.
- This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

TV Tuner (on Selected Models)

Note to CATV System Installer: This reminder is provided to call the CATV system installer's attention to Section 820-93 of the National Electrical Code, which provides guidelines for proper grounding and, in particular, specifies that the Coaxial cable shield be connected to the grounding system of the building as close to the point of cable entry as possible.

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (WiFi Booster for Mobile WN1000RP) 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.

This Class [B] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada

Industry Canada

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE: Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Caution:

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

NOTE IMPORTANTE: Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Interference Reduction Table

The table below shows the Recommended Minimum Distance between NETGEAR equipment and household appliances to reduce interference (in feet and meters).

Household Appliance	Recommended Minimum Distance (in feet and meters)
Microwave ovens	30 feet / 9 meters
Baby Monitor - Analog	20 feet / 6 meters
Baby Monitor - Digital	40 feet / 12 meters
Cordless phone - Analog	20 feet / 6 meters
Cordless phone - Digital	30 feet / 9 meters
Bluetooth devices	20 feet / 6 meters
ZigBee	20 feet / 6 meters