

### Universal Dual Band WiFi Extender – Desktop/Wallplug WN3500RP Installation Guide



#### **Technical Support**

Thank you for selecting NETGEAR products.

After installing your device, locate the serial number on the label of your product and use it to register your product at *https://my.netgear.com*. You must register your product before you can use NETGEAR telephone support. NETGEAR recommends registering your product through the NETGEAR web site.

Phone (US only): 1-888-NETGEAR Phone (Other Countries): See http://support.netgear.com/general/contact/default.aspx.

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# Hardware Features

The LEDs on the front show how the extender is working.



Link Rate. Indicates a 2.4 GHz or 5 GHz wireless connection between the extender and a router. The appropriate LED lights to indicate the type of connection:

- · Green is best.
- Amber is good.
- Red is poor.
- · Off. Not connected to router.

#### Wireless Device to Extender.



This LED is solid green when the extender is connected to a wireless device.

**WPS**. This LED indicates a WPS wireless connection.



- Solid green. There is wireless security (WPA or WPA2).
- Blinking green. A WPS connection is in progress.
- · Off. No wireless security.



The top and side panels have the following features:

**On/Off button**. Use this button to turn the extender on and off.

**WPS button**. Use this button to connect the extender to your existing WiFi network. For more information, see *Connect the Extender to an Existing WiFi Network* on page 7.

**Ethernet port**. Use the Ethernet port on the extender to connect an Ethernetenabled device wirelessly to your network.

Audio port. Use the Audio port to connect the extender to your speaker.

**USB port.** Use the USB port to connect the extender to a printer.

**Reset factory settings**. To reset the extender to its original factory settings, insert a paper clip into the reset hole and hold it until the Power LED flashes.



Insert the AC plug like this:



#### Attach the stand like this:



# **Getting Started**

The WiFi Range Extender extends the wireless network to include the area outside the range of your existing WiFi network. The extender supports both desktop and wall plug placement. Follow these steps to set up the extender.

### Place the Extender and Apply Power

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



- **Tip:** If you have to use a different location, move the extender closer to the device, but still within the wireless range of the router. Configure the extender and router in the same room. Once you have verified the working connection, move the extender to a location that is midway between the router and your computer, and still displaying a green link rate.
- Plug the extender into an electrical outlet, and wait 1 minute until the extender starts. The Power LED U turns green.

### Connect the Extender to an Existing WiFi Network

To extend the range of your WiFi network, you must connect the extender to your existing WiFi network. You have two options to connect the extender to your network.

#### Option 1: Connecting with WPS (Wi-Fi Protected Setup)

WPS lets you easily join a secure WiFi network without typing the network name and password. The WPS button is a physical button on the WiFi router, gateway, or access point.

If your router supports WPS (Wi-Fi Protected Setup), NETGEAR recommends that you use Option 1; otherwise, go to Option 2.

Tip: WPS does not support WEP network security. If you are using WEP security, use Option 2 to connect.

Option 2: Connecting without WPS, using the web browser setup guide

The web browser setup guide walks you through the necessary steps to connect your extender to an existing WiFi network.

#### Connecting with WPS (Option 1)

- 1. Press the **WPS** button on back panel of the extender. The WPS LED on the front blinks.
- 2. Within 2 minutes, press the **WPS** button on your wireless router, gateway, or access point.

If successful, the WPS LED on your extender turns solid green, the 2.4 GHz Link Rate LED lights up, and the extender is connected to your existing WiFi network.

Note: If the 2.4 GHz Link Rate LED does not turn green, repeat steps 1 and 2, or make sure your router supports WPS.

 If your router supports the 5 GHz band, repeat steps 1 and 2 to connect the extender to the 5 GHz band. The 5 GHz Link Rate LED on your extender lights up.

The extender's wireless network name (SSID) changes to your existing WiFi network name, with **\_2GEXT** or **\_5GEXT** at the end of the name, depending on whether the extender is connecting to your WiFi network in 2.4 GHz or 5 GHz.

Existing WiFi network name: MyNetworkName

New Extender network name: MyNetworkName\_2GEXT

To connect additional WiFi devices to your extender network, use the same network security key (password) as the one that is set on your existing wireless network/wireless router.

#### Connecting with the web browser setup guide (Option 2)

 Once the extender is powered on and the Power LED U is green, use a wireless network manager on a computer to find and connect to NETGEAR\_EXT (the SSID) wireless network.



**Tip:** You can use any wireless network manager utility on a computer or tablet to find and connect to the extender wireless network.

After the connection with the computer is established, the Wireless Device to Extender LED turns green. Next, you must connect the extender to your existing WiFi network.

2. Open a web browser window from the same computer, and the browser should take you directly to the onscreen setup guide.



Tip: You can always access the extender settings again by typing www.mywifiext.net in your browser address bar.

- **3.** The web browser setup guide walks you through the following steps:
  - Selecting the WiFi network you would like to extend.
  - Entering the security password for the existing network.
  - Choosing the name for your new extender network.
  - Connecting your wireless devices to your new extender network.

#### **Extender Configuration Settings**

If you want to make changes after initial setup, or you wish to run the setup again, you can always access the extender configuration settings. To access the settings:

- 1. Make sure that your device is connected to the WN3500RP.
- 2. In your device's browser address bar, enter: www.mywifiext.net
- When prompted to log in, use the following information: User name: admin Password: password

# **Extender Performance**



The Link Rate LED indicates the performance of the 2.4 GHz or 5 GHz wireless connection from the extender 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.
- If the Link Rate LED is off, there is no connection between the extender and the router.

**Tip:** Make sure that your Wireless Device to Extender LED is green before you check the Link Rate LED for performance.

#### To improve extender performance:

- 1. Move the extender closer to the router or to a different location with a better line of sight.
- 2. As you move the extender, check the Link Rate and the Wireless Device to Extender connection LEDs on the front panel until you find a good location. These LEDs should remain solid green.

# FastLane<sup>™</sup> Technology

Fastlane<sup>™</sup> Technology offers maximum WiFi performance. It provides high-speed WiFi with a dedicated band connecting the extender and the wireless device, and a second band connecting the extender and the router. It is ideal for HD gaming and HD video streaming.

#### To enable FastLane Technology:

- After you have set up the extender, switch to FastLane mode by logging in to www.mywifiext.net to access the Extender Settings screen.
- In the menu options on the left side of the Settings table, select Advanced > Operating Mode.
- 3. Select FastLane Technology.
- 4. Review the two FastLane Technology options, and select the one that suits your setup.
- 5. Click Apply.
  - Tip: To maximize performance, FastLane limits device connection to the band you select. NETGEAR recommends that you choose the band that most of your devices support.

# One-Port WiFi Adapter

Once the extender is connected to your existing wireless WiFi network, you can use the Ethernet port on the extender to connect a device wirelessly to your network. Simply plug the Ethernet cable from your Ethernet-enabled device (connected TV, Blu-ray player, gaming console) to the Ethernet port of the extender, and enjoy wireless connectivity.

# When to Use the Extender Wireless Network

NETGEAR recommends that you connect to the extender wireless network only when a computer or wireless device is in a "dead zone" where the network connection to your existing router is very poor or nonexistent. This is because data traffic routed through the extender wireless network is slower than traffic directly from the original wireless router network.

If you cannot connect from your wireless device to the extender, move the extender to a different location halfway between the device and the router. If, after you try several locations, the device cannot connect to the extender, move the extender closer to the device.

# **ReadySHARE** Printer

ReadySHARE Printer lets you connect a USB printer to the extender's USB port, and access it wirelessly.

#### To enable ReadySHARE Printer:

- 1. Connect the USB printer to the extender's USB port with a USB printer cable.
- 2. Install the USB printer driver software *on each computer* that will share the printer. If you do not have the printer driver, contact the printer manufacturer to find and download the most recent printer driver software.
- 3. On each computer that will share the printer, download the NETGEAR USB Control Center utility. The NETGEAR USB utility has a Mac version and a Windows version, which you can access from the ReadySHARE Printer area of the page you access using this URL: www.netgear.com/readyshare



#### NOTE:

- You *must* install this utility before you can use the ReadySHARE Printer feature.
- For the ReadySHARE Printer feature to work, this utility must be run in the background.
- When the status is Available, you can use the USB printer.
- Some firewall software, such as Comodo, blocks the ReadySHARE Print utility from accessing the USB printer. If you do not see the printer in the utility, you can disable the firewall temporarily to allow the utility to work.
- 4. If your printer supports scanning, make sure that the printer is in the Available state, and click the **Network Scanner** button. Clicking this button activates the Scanner window so you can use the printer for scanning.

System Iools About		
Device	Status	
SMFP - Canon - MP180	Available	
Connect	Discound	Notwork Sommer

For more detailed information about ReadySHARE Printer, see the *User Manual* by clicking the **Documentation** link in the router web management interface or on the WN3500RP product page on the Support website: http://support.netgear.com.

### **Music Playback**

The WN3500RP supports the DLNA DMR function, which means you can stream your network music and play it back through the WN3500RP audio jack.

- Windows7 users can use Windows Media Player (WMP) to play back music.
- Android phone, iPhone, or iPad users can download NETGEAR genie to play back music (go to http://www.netgear.com/genie).
- DLNA DMR supports mp3, wave. flac, and aac file formats.
- The 3.5 mm stereo port supports earphones and powered speakers.

# Wireless SSIDs and Passwords

Use this space to record your new extender network name (SSID) and extender security settings, in case you must add additional wireless devices to your extender in the future.

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# Frequently Asked Questions

You can find more information about your product in the User Manual available at http://support.netgear.com.

1. 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 extender is placed at the borderline of the range covered by the router. To resolve this, follow the instructions in *Getting Started* on page 6. If you are using WEP security, make sure that you are typing the wireless key in the correct field.

#### 2. 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 Wireless Device to Extender LED is solid green and you have a valid IP address. Finally, relaunch the browser, and enter **www.mywifiext.net**.

# 3. Will the extender work if I connect it to the router with an Ethernet cable?

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

#### 4. What are the user name and password to log in to the extender? The user name is admin, and the default password is password. Both are case-sensitive.

# 5. I have enabled a wireless MAC filter (wireless access control – ACL) on my router. What should I do when installing the WN3500RP?

The wireless device MAC address is translated to another MAC address when the wireless device connects to the WN3500RP. If your router MAC filter is enabled, the wireless device will not be able to get the IP address from the WN3500RP. 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:

- a. Disable the MAC filter on your router.
- **b.** Power on the WN3500RP and connect all of your wireless devices to the WN3500RP.
- c. Make sure that the Link Rate LED remains lit.
- d. 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.

ached	Devices		
red Device	'S		
	IP Address	Device Name	MAC Address
1	192.168.1.7	SQA-PERF-PC	D4:BE:D9:8A:B5:90
reless Der	rices (Wireless intruders also s	bow up here) Device Name	MAC Address
reless Der	rices (Wireless intruders also s	bow up here) Device Name	MAC Address
reless Der	IP Address 192.168.1.8	bow up here) Device Name optiplex-936c99	MAC Address 02:0F:B5:C4:7C:C8
neless Der	IP Address         Iso s           192.168.1.8         192.168.1.0           192.168.1.0         192.168.1.0	bow up here) Device Name optiplex-936c99 sqa-dell_5300 Nanocopp	MAC Address 02:0F:85:C4:7C:C8 02:0F:85:28:31:20 02:0F:85:26:30:20
reless Der 1 2 3 4	ICES (Wireless intruders also s IP Address 192.168.1.8 192.168.1.10 192.168.1.250	how up here) Device Name optplex-936c99 sqa-dell_5300 WN2500RP	MAC Address 02:0F:85:C4:7C:C8 02:0F:85:28:31:20 02:0F:85:32:59:E3 E0:24:05:25:9E3 E0:24:05:25:05:05:05:05:05:05:05:05:05:05:05:05:05
# 1 2 3 4 5	ICES (Wireless intruders also s IP Address 192.168.1.8 192.168.1.10 192.168.1.10 	how up here)	MAC Address 02.0F.85:C4.7C.C8 02.0F.85:28.31.20 02.0F.85:28.31.20 E0.24.82:3C.59.E4 02.0F.85:28.31.20

# 6. My router security is WEP, and I entered the wrong passphrase or security key on the WN3500RP. I cannot access the WN3500RP any more. What can I do?

The WN3500RP 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 WN3500RP. You must reset the WN3500RP 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 WN3500RP. What should I do?

Make sure that the passphrase you entered on your wireless device is correct, and power cycle the WN3500RP and your router. If your device is still not able to get the IP address:

- **a.** Move the WN3500RP closer to your router, and move your wireless device closer to the WN3500RP.
- **b.** Disable the wireless interface and enable it again to see if your wireless device can get the IP address.
- **c.** If your router has a MAC filter (Wireless Access control), disable it and follow the FAQ to add the device's MAC address to your router.

#### User Manual

You can get the user manual online at *http://downloadcenter.netgear.com* or through a link in the product's user interface.

#### Compliance

For the complete EU Declaration of Conformity, visit: http://support.netgear.com/app/answers/detail/a\_id/11621/.

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