# **NETGEAR**°

## User Manual

A8000 Nighthawk® A8000 WiFi 6/6E USB 3.0 Adapter

NETGEAR, Inc.

350 E. Plumeria Drive San Jose, CA 95134, USA

#### **Support and Community**

Visit <u>netgear.com/support</u> to get your questions answered and access the latest downloads.

You can also check out our NETGEAR Community for helpful advice at <u>community.netgear.com</u>.

#### **Regulatory and Legal**

Si ce produit est vendu au Canada, vous pouvez accéder à ce document en français canadien à <a href="https://www.netgear.com/support/download/">https://www.netgear.com/support/download/</a>.

(If this product is sold in Canada, you can access this document in Canadian French at <a href="https://www.netgear.com/support/download/">https://www.netgear.com/support/download/</a>.)

For regulatory compliance information including the EU Declaration of Conformity, visit <a href="https://www.netgear.com/about/regulatory/">https://www.netgear.com/about/regulatory/</a>.

See the regulatory compliance document before connecting the power supply.

For NETGEAR's Privacy Policy, visit <a href="https://www.netgear.com/about/privacy-policy">https://www.netgear.com/about/privacy-policy</a>.

By using this device, you are agreeing to NETGEAR's Terms and Conditions at <a href="https://www.netgear.com/about/terms-and-conditions">https://www.netgear.com/about/terms-and-conditions</a>. If you do not agree, return the device to your place of purchase within your return period.

Applicable to 6 GHz devices only: Only use the device indoors. The operation of 6 GHz devices is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

#### **Trademarks**

©NETGEAR, Inc. NETGEAR and the NETGEAR Logo are trademarks of NETGEAR, Inc. Any non-NETGEAR trademarks are used for reference purposes only.

## Contents

Chapter 1 Get Started and Connect to a WiFi Network	
Copy or Download the A8000 Installation Program  Set Up and Install the Adapter  Join a WiFi Network  Join a Network Using the Adapter Driver	5 6
Chapter 2 Monitor and Maintain the Adapter	
View the Connection Status and Details Upgrade the Adapter Software Uninstall the Adapter Software	10
<b>Chapter 3 Troubleshooting and Frequently Asked Question</b>	S
Troubleshooting	12 12 13 r from 13
Appendix A Factory Default Settings and Technical Specifica	tions
Factory Default Settings Technical Specifications	

# 1

## Get Started and Connect to a WiFi Network

The NETGEAR A8000 WiFi 6E USB Adapter connects your notebook or desktop computer over WiFi to an 11ax or other network for applications such as lag-free video streaming throughout your home, online gaming, and secure and reliable Internet connections.

This chapter describes how to set up and connect the A8000 WiFi 6E USB Adapter, in this manual referred to as *the adapter*, to a WiFi network. The chapter includes the following sections:

- Copy or Download the A8000 Installation Program on page 5
- Set Up and Install the Adapter on page 5
- <u>Join a WiFi Network</u> on page 6
- **NOTE:** For more information about the topics covered in this manual, visit the support website at <u>support.netgear.com</u>.
- **NOTE:** You can register your A8000 with NETGEAR and receive notifications with firmware updates. Firmware updates with new features and bug fixes are made available from time to time at <u>downloadcenter.netgear.com</u>.

# Copy or Download the A8000 Installation Program

The adapter installation program is provided:

- On the USB thumb drive included in the A8000 package.
- On the NETGEAR download site.

#### To obtain the A8000 standalone adapter installation program:

- 1. Copy or download the installation program
  - a. Copy the installation program from the supplied USB thumb drive to your computer.



- b. Visit <a href="https://www.netgear.com/A8000-download">https://www.netgear.com/A8000-download</a> and download the latest software file.
- 2. Follow the steps in <u>Set Up and Install the Adapter</u> on page 5 to run the installation program.

## Set Up and Install the Adapter

Before you begin using your adapter, set up the adapter by running the installation program.

#### To install the Windows standalone adapter:

- 1. Make sure your computer is running an up-to-date version of Windows 10 or Windows 11.
  - For more information about updating Windows, see Microsoft's <u>Update Windows</u> support article.
- 2. Complete the steps described in <u>Copy or Download the A8000 Installation Program</u> on page 5 to download the latest software file for Windows.
- 3. Run the A8000 installation program:
  - a. To start extraction of the installation files, double-click on the file that was copied or downloaded and is named A8000 Windows Installation Program V.xxxx, where xxxx is the version number.
  - b. Double-click on the file that was copied or downloaded and is named A8000 Windows Installation Program V.xxxx.exe where xxxx is the version number.
    - **NOTE:** If a User Account Control window appears that asks if you want to allow the app to make changes to your device, select **Yes**.
  - c. Follow the prompts to complete installation. When prompted, you can remove the USB thumb drive, and insert the Nighthawk® A8000 WiFi 6 & 6E USB 3.0 adapter into your computer's USB port.
    - NOTE: The installation program gives you the option to disable other WiFi adapters. For best performance, we recommend that you disable other adapters
- 4. Click **Finish** to exit the installation wizard.

## Join a WiFi Network

The adapter can join a known WiFi network by using the adapter standalone driver.

- Install the adapter's standalone driver.
- Use the WiFi network settings on your computer to join a WiFi network (see <u>Join a Network Using the Adapter Driver</u> on page 6).

### Join a Network Using the Adapter Driver

This task describes how to join a WiFi network using the adapter.



**NOTE:** The adapter provides the best performance with a USB 3.0 port but is compatible with a USB 2.0 or USB 1.1 port.

#### To join a WiFi network:

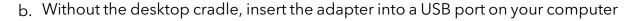
- 1. Connect your adapter to your computer's USB port with or without the desktop cradle.
  - a. With the desktop cradle, place the adapter into the desktop dock and connect the USB cable to the USB port on your computer.

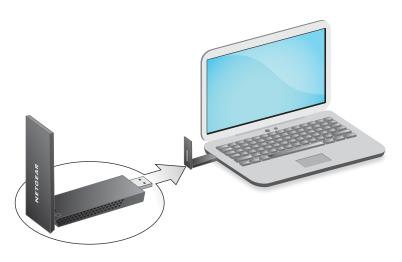


**NOTE:** NETGEAR does not recommend that you use another cable to connect the adapter to the USB port on your computer. Use the desktop dock with the attached cable that is supplied in the package. Using another USB cable might affect the performance and correct functioning of the adapter.



**NOTE:** When the adapter is placed in the desktop dock, you can fold out the adapter to its maximum angle for increased WiFi performance.





#### A8000

- 2. Open the Wifi network settings on your computer by right-clicking the WiFi icon.
  - ( or the No Internet Access icon ( ), which display in the lower right corner of your screen
- 3. (Windows 11 only) Click **Manage Wi-Fi connections (>)**, which is next to the WiFi icon.
- 4. Select your network's name
- 5. Click Connect.
- 6. Enter the network security key (WiFi password).
- 7. Click **Next**.

When you see the message "Connected, secured," setup is complete.

8. Press the **ESC** key on the desktop to exit WiFi network settings.

# 2

## Monitor and Maintain the Adapter

This chapter includes the following sections:

- <u>Upgrade the Adapter Software</u> on page 10
- <u>Uninstall the Adapter Software</u> on page 10

## View the Connection Status and Details

You can check your network connection status in Windows.

#### To view connection status and details:

- 1. Select the **Start** button, then type Settings.
- 2. Select Settings > Network & internet.

## Upgrade the Adapter Software

You can upgrade the Adapter software by downloading and running the latest Installation program.

If you have registered with NETGEAR on your A8000, then when there is a new version release, NETGEAR will notify you that an update is available.

## Uninstall the Adapter Software

You can uninstall the adapter:

- From the Windows Settings interface.
- By using the adapter Installation Program.
- To uninstall using Windows, select Start > Settings > Apps > Netgear A8000 WiFi
   &6 E Adapter > Uninstall.
- 2. To uninstall using the A8000 Installation Program:
  - a. Double-click on the installation program.
  - b. Select **Uninstall** to remove the software.

# 3

# Troubleshooting and Frequently Asked Questions

This chapter covers the following topics:

- <u>Troubleshooting</u> on page 12
- Frequently Asked Questions on page 13

## Troubleshooting

This section provides the following troubleshooting sections:

- Adapter LED Is Not Lit on page 12
- When I Connect to the Network, I Cannot Access Shared Resources Such as Printers on page 12
- Adapter Lost Its IP Address on page 12

### Adapter LED Is Not Lit

If the LED is not lit, use these troubleshooting tips:

- Remove and reinsert the adapter.
- Check the Windows device manager to see if the adapter is recognized and enabled. Reinstall the adapter software, if necessary.
- Insert the adapter in a different USB port on your computer if one is available.

## When I Connect to the Network, I Cannot Access Shared Resources Such as Printers

Try these troubleshooting tips:

- Make sure that the router or access point is physically connected to the Ethernet network.
- Make sure that the IP addresses and the Windows networking settings are configured correctly.

### Adapter Lost Its IP Address

The adapter might lose its IP address after you upgrade the adapter software but do not reboot your computer. Either restart your computer, or connect to a different router or access point.

## Frequently Asked Questions

This section addresses the following frequently asked questions (FAQs):

- Do USB Ports Go into Sleep Mode if No Traffic Is Going to or from the Port? on page
   13
- How Can I Improve the Speed of My WiFi Connection? on page 13
- How Can I View the IP Address of the Adapter? on page 14

## Do USB Ports Go into Sleep Mode if No Traffic Is Going to or from the Port?

USB devices go into sleep mode if a Windows USB feature called Selective Suspend is enabled, which it is by default. If your adapter or another USB device goes into Selective Suspend mode, the network disconnects. To prevent this type of network disconnection, disable Selective Suspend.

#### To disable Selective Suspend mode:

- Select Start > Control Panel > Hardware and Sound > Power Options > Edit Plan Settings > Change Advanced Power Settings > USB Settings .
- 2. Change the setting for Selective Suspend mode to Disabled.

## How Can I Improve the Speed of My WiFi Connection?

The connection speed can vary depending on the type of USB port on your computer, the capacity of the router or access point for the WiFi network, and the type of Internet connection. The following limits might apply:

- If the physical rate is limited to 54 Mbps, the adapter might be connected to an 802.11a, 802.11b, or 802.11g network. If you want a faster physical rate, connect to an 802.11ac or 802.11n network, if available.
- If the physical rate is limited to 54 Mbps, the network security might be WPA (TKIP).
  When WPA (TKIP) security mode is configured on the router or access point, WiFi
  regulations allow the adapter to connect at up to 54 Mbps only. For a faster
  connection, configure the security for the router or access point as WPA2 or
  WPA + WPA2 mixed WiFi security. The connection speed still depends on the WiFi
  capacity of the router or access point.
- If your computer does not include a USB 3.0 or USB 2.0 port, the physical rate is limited to the 14 Mbps of the USB 1.1 legacy standard.

#### A8000

## How Can I View the IP Address of the Adapter?

To check your Adapter IP Address:

- 1. Select the Start button.
- 2. Select Settings.
- 3. Select Settings > Network > Internet > Properties.



# Factory Default Settings and Technical Specifications

This appendix covers the following topics:

- Factory Default Settings on page 16
- Technical Specifications on page 16

## Factory Default Settings

The following table lists the default settings of your adapter.

Table 1. Factory default settings

Default Settings	
WiFi communication	Enabled
Country/region	United States (varies by region)
Operating mode	802.11ax, 802.11ac, 802.11n, 802.11a, 802.11g, or 802.11b
Data rate	<ul> <li>Up to 1200 Mbps with a WiFi router or access point that supports 802.11ax 6.0GHz</li> <li>Up to 1200 Mbps with a WiFi router or access point that supports 802.11ax 5.0GHz</li> <li>Up to 574 Mbps with a WiFi router or access point that supports 802.11ax 2.4GHz</li> <li>Backwards compatible with IEEE 802.11 a/b/g/n/ac WiFi</li> </ul>

## **Technical Specifications**

The following table provides technical specifications for the adapter.

Table 2. Technical specifications

Feature	Description
Antenna	Two dual-band dipole antennas
Standards	IEEE 802.11 a/b/g/n/ac/ax
Radio data rate	Autosensing

#### A8000

Table 2. Technical specifications (Continued)

Feature	Description
Frequency	• 2.4 GHz to 2.5 GHz CCK and OFDM modulation
	• 5 GHz and 6GHz with OFDM, 802.11n MCS0-15, and 802.11ac MCS0-9 coding scheme
Encryption	WPA2-PSK [AES]
	• WPA3
	WPA-PSK [TKIP]
	• 40-bit (also called 64-bit) WEP data encryption
	128-bit WEP data encryption
Power	5V USB supply
Bus interface	USB 3.0, compatible with USB 2.0 and USB 1.1
Provided drivers	Microsoft Windows 11
	<b>NOTE:</b> For connecting to the 6GHz WiFi band, Microsoft Windows 11 is required. Microsoft Windows 10 only supports 2.4/5GHz.
	Microsoft Windows 10
Dimensions	Adapter: 93.0 x 31.4 x 14.45 mm (3.66 x 1.24 x 0.57 in) Cradle: 63.14 x 44.67 x 35.19 mm (2.49 x 1.76 x 1.39 in)
Weight	Adapter: 28g (0.99oz); Cradle: 90g (3.17oz)
Operating temperature	0-35°C (32-95°F)
Regulatory compliance (certification)	USA/FCC, EU/CE, UK/UKCA, Canada/ISED, Australia/RCM, New Zealand/RSM, Japan/TELEC and VCCI, Korea/KC, China/SRRC, Singapore/IMDA, Taiwan/NCC and BSMI, UAE/TDRA, Saudi Arabia/CITC