

NETGEAR R8500

NETGEAR Nighthawk X8 AC5300 Tri-Band WiFi Router

MODEL: R8500-100NAS

Introduction

This manual provides comprehensive instructions for the setup, operation, maintenance, and troubleshooting of your NETGEAR Nighthawk X8 AC5300 Tri-Band WiFi Router (Model R8500-100NAS). The Nighthawk X8 AC5300 Smart Wi-Fi Router is designed to deliver high-performance wireless connectivity with combined speeds of up to 5.3 Gbps. It features Tri-Band Quad Stream performance, four external Active Antennas, four internal antennas, and a powerful 1.4GHz Dual Core Processor for faster connections and extended Wi-Fi range. This router supports MU-MIMO for simultaneous streaming to multiple devices and offers six Gigabit Ethernet ports, with two capable of aggregation for enhanced wired speeds.

Product Overview



Top view of the NETGEAR Nighthawk X8 router, highlighting the sleek design and LED status indicators.



Angled view of the router, showcasing the four external active antennas in an extended position.



Rear panel of the router, displaying the Internet port, six Gigabit Ethernet LAN ports, USB ports, and power controls.



Side view of the router, highlighting the conveniently located USB 2.0 and USB 3.0 ports for connecting external devices.

Product Tour Video

Watch a detailed product tour of the NETGEAR AC5300 Nighthawk X8 Tri-Band WiFi Router to understand its features and design.

Unboxing Video

View an unboxing video of the NETGEAR AC5300 Nighthawk X8 Tri-Band WiFi Router (R8500-100NAS) to see what's included in the box.

Setup

To set up your NETGEAR Nighthawk X8 router, follow these general steps:

1. **Unpack the Router:** Carefully remove the router and all accessories from the packaging.
2. **Connect the Antennas:** Attach the four external active antennas to the designated ports on the router.
3. **Position the Router:** Place the router in a central location in your home for optimal Wi-Fi coverage.
4. **Connect to Modem:** Connect one end of the provided Ethernet cable to the yellow Internet port on your router and the other end to your modem.
5. **Power On:** Connect the power adapter to the router and plug it into a power outlet. Press the Power On/Off button.
6. **Connect Devices:** Connect your computer or mobile device to the router's Wi-Fi network using the default Wi-Fi name (SSID) and password found on the router label. Alternatively, use an Ethernet cable to connect your computer to one of the router's LAN ports.
7. **Access Setup Wizard:** Open a web browser and navigate to routerlogin.net or www.routerlogin.com. Follow the on-screen instructions of the NETGEAR genie setup wizard to complete the installation.
8. **Use the Nighthawk App:** For an easier setup experience, download the Nighthawk app from your mobile device's app store and follow the instructions.

Operating Instructions

Your Nighthawk X8 router is designed for seamless operation, providing high-speed internet access to multiple devices. Once set up, it will broadcast three Wi-Fi bands (one 2.4GHz and two 5GHz) for optimal performance across various devices and applications.

- **Connect to Wi-Fi:** Use the Wi-Fi name (SSID) and password you configured during setup to connect your wireless devices.
- **Wired Connections:** Utilize the six Gigabit Ethernet ports for stable, high-speed connections to devices like gaming consoles, smart TVs, and desktop computers.
- **USB Storage:** Connect USB storage devices to the router's USB 2.0 or USB 3.0 ports to share files across your network or access them remotely.
- **Guest Network:** Enable the guest Wi-Fi network to provide internet access to visitors without sharing your main network password.
- **Dynamic QoS:** The router features Dynamic QoS to prioritize bandwidth by application and device, ensuring smooth streaming and gaming experiences.

Dynamic QoS Explained

Learn how Dynamic Quality of Service (QoS) works on your NETGEAR router to prioritize network traffic for optimal performance.

Maintenance

Regular maintenance ensures your router operates efficiently and securely.

- **Firmware Updates:** Periodically check for and install firmware updates through the router's web interface or the Nighthawk app. Updates often include performance improvements and security patches.

- **Router Placement:** Ensure your router is in an open area, away from obstructions and other electronic devices that might cause interference.
- **Cleanliness:** Keep the router clean and free from dust to prevent overheating.
- **Password Security:** Regularly change your Wi-Fi and router administration passwords to strong, unique combinations.

Changing Admin Password

Instructions on how to change your NETGEAR Router's Admin Password for enhanced security.

Troubleshooting

If you encounter issues with your router, try the following troubleshooting steps:

- **Restart Router and Modem:** Power cycle both your modem and router by unplugging them for 30 seconds and then plugging them back in.
- **Check Connections:** Ensure all Ethernet cables are securely connected to the correct ports.
- **Verify Internet Connection:** Check if your modem has an active internet connection.
- **Factory Reset:** If problems persist, perform a factory reset by pressing and holding the reset button on the back of the router for about 7-10 seconds. Note that this will erase all custom settings.
- **Consult Online Resources:** Visit the NETGEAR support website or community forums for more detailed troubleshooting guides.

Router Password Recovery

Learn how to set up and use the router password recovery feature for your NETGEAR device.

Ask Alexa for WiFi Password

Discover how to use Amazon Alexa to retrieve your WiFi password from your NETGEAR router.

Specifications

Feature	Detail
Brand	NETGEAR
Model Name	R8500
Frequency Band Class	Tri-Band
Wireless Communication Standard	802.11ac
Connectivity Technology	Wireless, Ethernet
Color	Black

Antenna Type	Internal, External Active
Operating System	Windows 7, Mac OS
Security Protocol	WPA, WPA2-PSK
Number of Ports	8 (6 LAN, 1 WAN, 2 USB)
Control Method	Voice (Amazon Alexa)
Data Transfer Rate	5300 Megabits Per Second
LAN Port Bandwidth	6 gigabits per second
Number of Antennas	8 (4 active external, 4 internal)
Smart Home Compatibility	Smart Home Compatible
Router Firewall Security Level	High
Wi-Fi Generation	Wi-Fi 6 (Note: Product description states AC5300, which is Wi-Fi 5. This might be a data discrepancy. Following provided spec.)
Coverage	Up to 5,300 sq ft wireless coverage
Item Weight	3380 Grams

Warranty and Support

For warranty information, technical support, and additional resources, please visit the official NETGEAR support website. You can also find FAQs, community forums, and software downloads to help you get the most out of your Nighthawk X8 router.

Visit the [NETGEAR Store on Amazon](#) for more products and information.