

**NIGHTHAWK®**

Nighthawk® AX12/12-stream AX6000 WiFi Router



## Leading the New Era of WiFi

Nighthawk® 12-Stream AX6000 WiFi Router is powered by the industry's latest 802.11ax WiFi standard with 4 times increased data capacities in a dense environment to handle today

and tomorrow's growing home network. Blazing-fast combined WiFi speeds up to 6Gbps and AX optimized 64bit 2.2GHz Quad-core processor powers smart home

automation, ultra-smooth 4K UHD streaming, online gaming, and more.

**NETGEAR®**

**NIGHTHAWK®****Nighthawk® AX12/12-stream AX6000 WiFi Router****AX WiFi—Ready for Today and Tomorrow's Smart Home**

Introducing AX WiFi—the latest generation of WiFi that delivers four times better performance than AC WiFi.

With innovative technologies, such as Orthogonal Frequency-Division Multiple-Access (OFDMA), 8x8 Multi-User MIMO, and intelligent scheduling, AX WiFi delivers a huge boost in speed and total capacity. Rising to the challenges of modern smart home demands, this new standard of WiFi is ready to support more devices with better reliability and faster speeds.

**Capacity**

AX WiFi gives you improved network capacity for more WiFi devices. Have more fun with the uninterrupted 4K/8K streaming, gaming, and the smart home experience. With MU-MIMO, AX WiFi supports up to eight simultaneous streams for the number of users that can be served double at the same time as compared to an AC router.

**Speed**

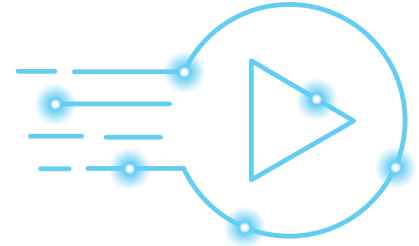
Get ultra-fast wireless speeds with more connections for all devices with less congestion. You'll get some blazing connection speeds of 1Gbps or more, 4K/8K streaming, & VR/AR gaming.

**Range**

Experience reliable and stronger WiFi coverage indoors and outdoors for all your devices. High-performance antennas on the router amplify WiFi signals for maximized range and reliable coverage.

**NIGHTHAWK®****Nighthawk® AX12/12-stream AX6000 WiFi Router****12 Stream AX WiFi—4X Better Performance**

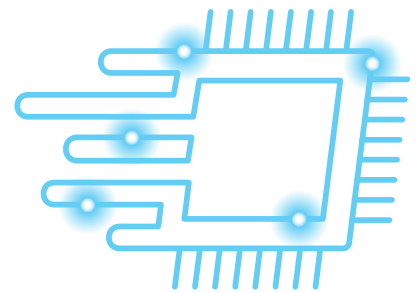
Twelve WiFi spatial streams - four in the 2.4GHz band, and eight in the 5GHz band offer four times the device capacity as compared to typical 2x2 AC WiFi. AX WiFi also supports sending up to eight multi-user MIMO transmissions at a time, up from four for AC WiFi. This results in a significantly improved network capacity and benefits the performance of all legacy devices.

**8 High-Performance Antennas**

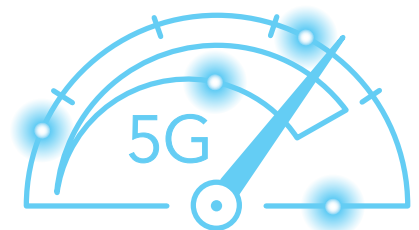
Eight high-performance antennas extend wireless range indoors and out. Router signals are amplified to maximize reach and reliability, letting you use your WiFi in more places. Get stronger WiFi signals throughout your home, whether you're gaming in the basement or need that extra coverage for your outdoor security cameras.

**64bit 2.2GHz Quad-Core Processor**

Ultra-fast processor for smoother 4K UHD streaming, online/VR gaming, and a stronger, more reliable WiFi experience. This powerful processor is optimized for AX ensuring speed and performance for even more smart home devices and high-speed applications.

**New Multi-Gigabit Wired Speeds**

The multi-gigabit Ethernet port gives you 5 times faster speeds than the wired speed of a typical Gigabit port over Cat 5 cables. Use the four gigabit Ethernet LAN ports to connect more wired devices for faster file transfer and uninterrupted connections. Combine two gigabit Ethernet ports to further improve the aggregated file transfer speed.

**NETGEAR®**

**NIGHTHAWK®****Nighthawk® AX12/12-stream AX6000 WiFi Router****Speed**

Get ultra-fast wireless speeds for better 4K/8K UHD streaming, gaming or video conferencing experience.



UP TO 6GBPS SPEEDS—1.2 + 4.8 Gbps with 12-stream connectivity\*\*



8x8 MU-MIMO<sup>+</sup>—Go faster by simultaneously streaming to multiple devices



AX OPTIMIZED QUAD-CORE PROCESSOR—Powerful 2.2GHz processor boosts wireless, wired & WAN-to-LAN performance



MULTI-GIG 5G/2.5G/1G ETHERNET PORT—5 times the wired speed of typical Gigabit Ethernet port



1024-QAM—25% increased data efficiency and faster speeds than a 256-QAM router



TWO SUPERSPEED USB 3.0 PORTS —Up to 10x faster than USB 2.0



PORT AGGREGATION—Ability to aggregate two gigabit LAN ports for faster file transfers

**Capacity**

Get better performance for all your smart home devices even when your family is busy streaming videos or uploading media files during the Internet rush hour.



MORE WIFI FOR MORE DEVICES—OFDMA allows efficient data transmission up to 8 devices at the same time<sup>s</sup>



UP TO 8 SIMULTANEOUS WIFI STREAMS—8-stream MU-MIMO<sup>+</sup> enables up to four (4) 2x2 devices to stream content at the same time



AX OPTIMIZED POWERFUL PROCESSOR—64bit 2.2GHz Quad-core processor ensures smooth 4K UHD streaming & gaming - ideal for Gigabit Internet speeds

**WiFi Range**

Faster and expanded coverage throughout your home and for all your devices.



ULTIMATE RANGE—WiFi coverage throughout very large homes



HIGH-PERFORMANCE ANTENNAS—Eight (8) hidden antennas extend strong and reliable WiFi signals over larger area. Antennas are pre-optimized for best WiFi performance

**NIGHTHAWK®****Nighthawk® AX12/12-stream AX6000 WiFi Router****Sharing**

With NETGEAR, sharing across your network is fun and easy, anything from accessing stored photos & music to wireless printing. And make sure you keep it safe by using the included ReadySHARE Vault application for backing up Windows-based PCs.



**READYSHARE® USB ACCESS**—Wirelessly access & share USB hard drive & printer via two (2) USB ports



**TWO USB 3.0 PORTS**—Faster streaming, backup and easy access to your stored media



**READYSHARE® VAULT**—Free software for automatic PC backup to a USB hard drive connected to the router



**READYCLOUD® USB ACCESS**—Enjoy personal & secure cloud access to USB storage anytime, anywhere

**Reliable Connections**

There's nothing more frustrating than lost connections! With NETGEAR's advanced features & best-in-class technology, you'll reduce interference & enjoy more reliable WiFi connectivity.



**BEAMFORMING+**—Improve range and performance for both 2.4 and 5GHz devices



**SIMULTANEOUS DUAL BAND WIFI**—Supports two WiFi bands simultaneously to double the available bandwidth and provide a reliable, dedicated WiFi network for smooth online gaming without any network congestion



**PRE-OPTIMIZED ANTENNAS**—Unfold and set antennas on the router, no further adjustment required. The AX12 antennas come pre-optimized for best WiFi performance.

**Ease Of Use**

Start enjoying your new device faster than ever. NETGEAR wants to make sure installation and management is simple & easy, so you can connect quickly & make sure you stay that way!



**SMART CONNECT**—Intelligently selects the fastest WiFi band for every device connection. One WiFi name for the entire home.



**NIGHTHAWK APP**—Easily set up your router and get more out of your WiFi. Includes remote access to manage your network away from home



**AX WIFI SUPPORTS ALL CURRENT WIFI DEVICES**—Backward compatible with 802.11a/b/g/n/ac client devices



**VOICE CONTROLLED BY AMAZON ALEXA & THE GOOGLE ASSISTANT**—Control your NETGEAR WiFi network with simple voice commands

## Security

Maintain high security across your network to ensure your privacy & family is safe while online. Whether it's preventing phishing & spyware or just limiting access for kids & guests, NETGEAR has you covered.



**VPN SUPPORT**—On PC, MAC, & now also with OpenVPN Connect app on iOS & Android, securely access your home network & Internet connection from your mobile device remotely



**LATEST SECURITY STANDARD**—Supports WPA3 the latest and cutting-edge Wi-Fi security protocol



**VPN CLIENT SUPPORT**—Protect your network identity and prevent DDoS attack



**GUEST NETWORK**—Separate and secure network for your guests



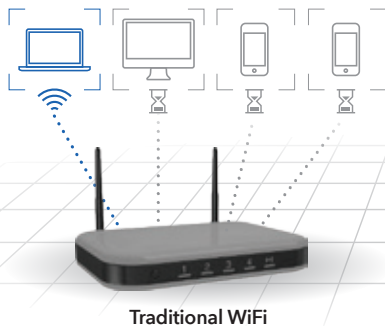
**AUTOMATIC FIRMWARE UPDATE**—Delivers latest security patches to the router

## 8x8 Multi-User MIMO

Using multi-user MIMO technology, routers can stream data to multiple devices simultaneously. That means faster downloads and smoother streaming for your devices. AX WiFi extends MU-MIMO to 8-stream support so it can support double the number of simultaneous transmissions as compared to 4x4 MU-MIMO AC WiFi routers.

## Enjoy simultaneous streaming with MU-MIMO

Data sent to one device at a time



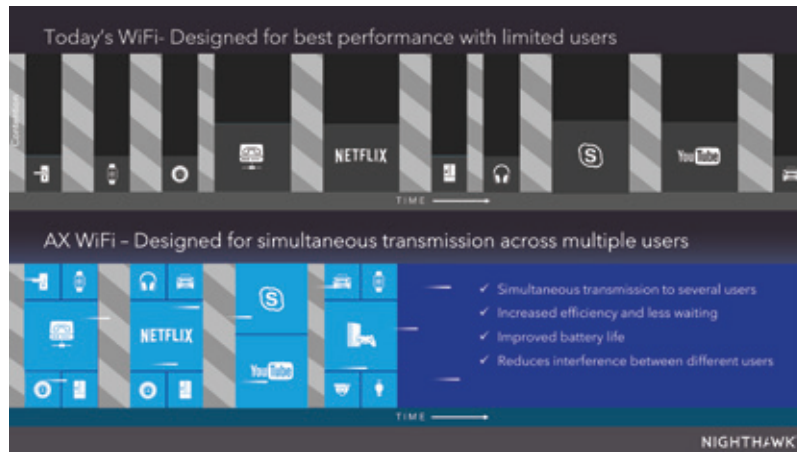
Data sent to multiple devices simultaneously





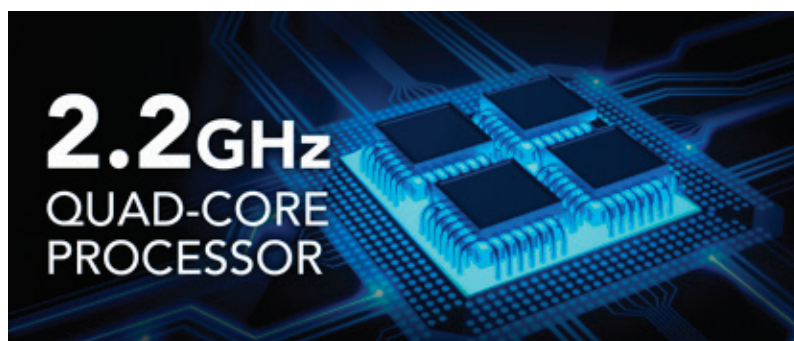
### Orthogonal Frequency Division Multiple Access (OFDMA)

Using the OFDMA feature of AX WiFi, the WiFi traffic is managed much more efficiently since data is transmitted from different devices concurrently, rather than having each device's data wait for its turn. This results in an efficient use of air-time, reduced latency, and increased bandwidth to add more devices to your network.



### Ultra-Powerful AX-Optimized Quad-Core Processor

Nighthawk AX12, powered by a 64bit 2.2GHz quad-core processor, is built for performance at an ultimate level. The ultra-fast processor enables the router to seamlessly handle data intensive applications such as 4K/8K UHD video streaming, VR/AR gaming, as well as provide a stronger, more reliable WiFi experience. This powerful processor is optimized for AX making intelligent spontaneous decisions to schedule data traffic to maximize WiFi Bandwidth utilization.



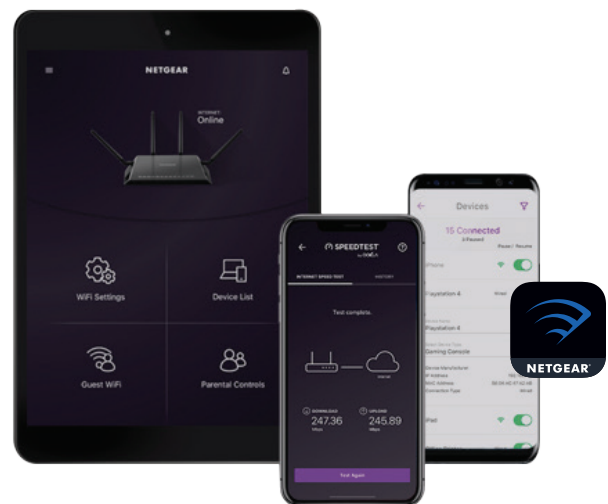
**NIGHTHAWK®****Nighthawk® AX12/12-stream AX6000 WiFi Router****State-of-the-Art Industrial Design**

This next-generation Nighthawk AX12 router design conceals eight (8) high-performance antennas under the 'wings'. The antennas are optimally positioned for best WiFi performance and extend strong and reliable WiFi coverage indoors and outdoors.

**Nighthawk App**

The NETGEAR Nighthawk® App makes it easy to set up your router and get more out of your WiFi. With the app, you can install your router in a few steps—just connect your mobile device to the router network and the app will walk you through the rest. Once set up, you can use the intuitive dashboard to pause the Internet on your connected devices, run a quick Internet speed test, setup smart parental controls and much more!

- Smart Parental Controls—Easily manage content & time online with Circle® with Disney
- Remote Management—Easily monitor your home network anytime, anywhere
- Internet Speed Test—Check the broadband speeds from your service provider
- Pause Internet—Pause the Internet to any device
- Traffic Meter—Track Internet data usage
- Guest Networks—Set up separate WiFi access for guests
- Quick Setup—Get connected in just minutes

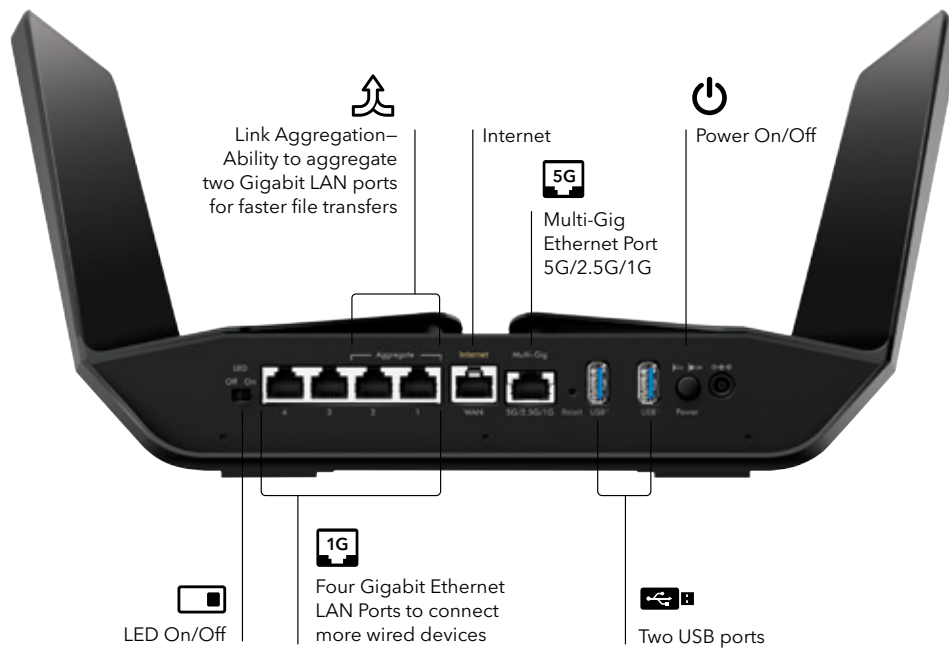
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## Nighthawk® AX12/12-stream AX6000 WiFi Router

## Connection Diagram



**NIGHTHAWK®****Nighthawk® AX12/12-stream AX6000 WiFi Router****Package Contents**

- AX12/12-Stream AX6000 WiFi Router (RAX120)
- Ethernet cable
- Quick start guide
- Power adapter

**Physical Specifications**

- Dimensions: 12.2 x 2.75 x 1.22 in (310 x 70 x 28.50 mm)
- Weight: 3 lbs (1364g)

**Standards**

- Two (2) USB 3.0 ports
- 2.4GHz AX: 4x4 (Tx/Rx) 1024 QAM 20/40MHz, up to 1.2Gbps
- 5GHz AX: 8x8 (Tx/Rx) 1024 QAM 20/40/80/80+80MHz, up to 4.8Gbps
- Five (5) 10/100/1000Mbps—(1 WAN & 4 LAN) Gigabit Ethernet ports

**Technical Specifications**

- 802.11ax Dual Band WiFi (AX6000)
  - 2.4GHz AX: 4x4 (Tx/Rx) 1024 QAM 20/40MHz, up to 1.2Gbps
  - 5GHz AX: 8x8 (Tx/Rx) 1024 QAM 20/40/80/80+80MHz, up to 4.8Gbps
  - Backwards compatible with 802.11a/b/g/n/ac WiFi
- OFDMA<sup>§</sup>—Improved capacity and efficiency
- 1024-QAM—25% data efficiency and faster speeds than a 256-QAM router
- Powerful 64bit Quad-Core 2.2GHz Processor
- Longer range with 8 high-performance antennas

- Five (5) 10/100/1000 Mbps Gigabit Ethernet ports
  - 1 WAN & 4 LAN
  - Dual Gigabit Ethernet Port Aggregation
- 5G/2.5G/1G Multi-Gig Ethernet LAN port
- IPv6 Support (Internet Protocol Version 6)
- On/Off LED light switch

**Key Features**

- 4X Better Performance than an AC Router—12 Stream WiFi with up to 1.2 + 4.8 Gbps<sup>†</sup> for ultra-fast wireless speeds<sup>\*\*</sup>
- More WiFi for More Devices—OFDMA allows efficient data transmission for up to 8 devices at the same time<sup>§</sup>
- Up to 8 Simultaneous WiFi Streams—8-stream MU-MIMO enables up to four (4) 2x2 devices at the same time.
- Maximized Range—Eight (8) antennas extend wireless range coverage indoors and out
- AX Optimized Powerful Processor—64bit 2.2GHz quad-core processor ensures smooth 4K UHD streaming & gaming – ideal for Gigabit Internet speeds.
- Multi-Gig Ethernet Port 5G/2.5G/1G—5 times the wired speed of typical Gigabit port
- Smart Connect—Intelligently selects the fastest WiFi band for every device connection. One WiFi name for the entire home
- Nighthawk App—Easily set up your router and get more out of your WiFi. Includes remote access to manage your network away from home
- AX WiFi supports all current WiFi devices—Backward compatible with 802.11a/b/g/n/ac client devices
- Works with Amazon Alexa & the Google Assistant—Control your NETGEAR WiFi network with simple voice commands

**Support**

- 90-day complimentary technical support following purchase from a NETGEAR authorized reseller
- Join the NETGEAR Community Forum. Visit <http://community.netgear.com>

**System Requirements**

- Microsoft® Windows 7, 8, 10, Vista®, XP®, 2000, Mac OS®, UNIX®, or Linux®
- Microsoft® Internet Explorer® 11 or higher, Microsoft Edge, Google Chrome™ 55 or higher, Firefox® 45 or higher, Safari® 10 or higher

**Security**

- Supports WPA3, the latest and cutting-edge Wi-Fi security protocol
- Automatic firmware update delivers latest security patches to the router
- Guest network access—separate & secure
- VPN Support—Secure access to your home network away from home
- VPN CLIENT SUPPORT—Protect your network identity and prevent DDoS attacks

**Warranty**

- [www.netgear.com/warranty/](http://www.netgear.com/warranty/)
- Extend your warranty & technical support within 90 days of product purchase [US only]. Visit: [prosupport.netgear.com/home](http://prosupport.netgear.com/home)

This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller.

<sup>†</sup> Maximum wireless signal rate derived from IEEE 802.11 specifications. Actual data throughput and wireless coverage will vary and may be lowered by network and environmental conditions, including network traffic volume and building construction. NETGEAR makes no representations or warranties about this product's compatibility with future standards. This router does not support some of the mandatory features ratified in Draft 3.0 of IEEE 802.11AX specification, such as Uplink OFDMA, Target Wake Time, and BSS Coloring.

<sup>‡</sup> MU-MIMO capability requires both router and client device to support MU-MIMO.

<sup>\*</sup> Supported AX clients

<sup>\*\*</sup> Compared to a 2x2 AC router working with a 2x2 AC mobile client such as iPhone X, Samsung S9

<sup>§</sup> Requires compatible AX clients

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RAX120-2