

NETGEAR C6900-100NAS

NETGEAR Nighthawk C6900-100NAS AC1900 Dual Band Cable Modem Router Instruction Manual

Model: C6900-100NAS

1. INTRODUCTION

The NETGEAR Nighthawk C6900-100NAS is a dual-band AC1900 cable modem router designed to provide high-speed internet access. This two-in-one device integrates a cable modem and a Wi-Fi router, offering a streamlined solution for home networking. It supports Wi-Fi speeds up to 1.9 Gbps and features 24x8 channel bonding for efficient data transfer. The device is compatible with major cable internet providers such as XFINITY from Comcast, Spectrum, and Cox.

Key Features:

- Integrated Cable Modem and Wi-Fi Router
- Dual-Band AC1900 Wi-Fi for combined speeds up to 1.9 Gbps
- DOCSIS 3.0 with 24x8 Channel Bonding
- 1.6GHz combined processor for enhanced performance
- Four Gigabit Ethernet ports for wired connections
- USB 2.0 port for ReadySHARE functionality
- Compatible with XFINITY from Comcast, Spectrum, Cox, and Cablevision

2. SETUP GUIDE

Follow these steps to set up your NETGEAR Nighthawk C6900-100NAS cable modem router:

1. **Unpack the Device:** Carefully remove the cable modem router and all accessories from the packaging.
2. **Connect Coaxial Cable:** Connect a coaxial cable from your cable wall outlet to the Cable port on the back of the modem router. Ensure the connection is secure.
3. **Connect Power Adapter:** Plug the power adapter into the Power port on the modem router and then into an electrical outlet.
4. **Power On:** Press the Power On/Off button if available, or wait for the device to power on automatically. The

LED indicators on the front panel will light up as the device starts.

5. **Connect to a Computer (Optional for initial setup):** For initial setup or wired connection, connect an Ethernet cable from one of the Gigabit Ethernet ports on the modem router to the Ethernet port on your computer.
6. **Activate Your Internet Service:**
 - Open a web browser on your connected computer or mobile device.
 - You should be redirected to your Internet Service Provider's (ISP) activation page. If not, type your ISP's activation URL or the router's default gateway IP address (e.g., routerlogin.net or 192.168.0.1) into the browser.
 - Follow the on-screen instructions to activate your internet service. You may need your account information.
 - Alternatively, you can contact your ISP directly to activate the modem router.
7. **Connect to Wi-Fi:** Once activated, locate the Wi-Fi network name (SSID) and password printed on the label of your modem router. Connect your wireless devices to this network.
8. **Use the Nighthawk App:** Download the NETGEAR Nighthawk app from your mobile device's app store for easy setup, monitoring, and management of your network.



Figure 1: Front view of the NETGEAR Nighthawk C6900-100NAS Cable Modem Router.



Figure 2: Back view of the NETGEAR Nighthawk C6900-100NAS, showing Ethernet, coaxial, and power ports.

3. OPERATING YOUR DEVICE

LED Indicators:

The front panel of your modem router features LED indicators that provide status information:

- **Power LED:** Indicates if the device is powered on.
- **Downstream/Upstream LEDs:** Indicate the status of the cable modem connection to your ISP.
- **Internet LED:** Indicates internet connectivity.
- **2.4 GHz Wi-Fi LED:** Indicates the status of the 2.4 GHz wireless network.
- **5 GHz Wi-Fi LED:** Indicates the status of the 5 GHz wireless network.
- **Ethernet LEDs (1-4):** Indicate activity on the corresponding Gigabit Ethernet ports.
- **USB LED:** Indicates activity on the USB port.

Wireless Connectivity:

The C6900-100NAS operates on dual bands (2.4 GHz and 5 GHz) to provide flexible and high-speed Wi-Fi. The 2.4 GHz band offers wider coverage, while the 5 GHz band provides faster speeds for devices closer to the router. Devices will automatically connect to the optimal band using Smart Connect technology.

Wired Connectivity:

Four Gigabit Ethernet ports are available on the back of the device for connecting wired devices such as computers, gaming consoles, smart TVs, and network-attached storage (NAS) for stable and high-speed connections.

USB Port (ReadySHARE):

The USB 2.0 port supports NETGEAR ReadySHARE, allowing you to connect a USB storage device and share its content across your network. This can be used for media streaming or file sharing.

4. MAINTENANCE

- **Firmware Updates:** Regularly check for and install firmware updates through the Nighthawk app or the router's web interface. Firmware updates often include security patches, performance improvements, and new features.
- **Ventilation:** Ensure the modem router is placed in a well-ventilated area to prevent overheating. Avoid placing it in enclosed spaces or stacking other devices on top of it. The device features ventilation grilles on its sides and top.
- **Regular Reboot:** Periodically reboot your modem router (unplug from power for 10 seconds, then plug back in) to refresh its connection and clear any temporary issues.
- **Reset Button:** A reset button is located on the back of the device. Use a paperclip to press and hold this button for 7-10 seconds to restore the device to factory default settings. This should only be done as a last resort for troubleshooting.

5. TROUBLESHOOTING

- **No Internet Connection:**
 - Check all cable connections (coaxial, Ethernet, power) to ensure they are secure.
 - Verify that your ISP service is active and there are no outages in your area.
 - Reboot the modem router and your connected devices.
 - Check the LED indicators on the front panel. If the Internet LED is off or amber, there might be an issue with your ISP connection.
- **Slow Wi-Fi Speeds:**
 - Ensure your devices are connected to the appropriate Wi-Fi band (5 GHz for closer, faster connections; 2.4 GHz for wider range).
 - Reduce interference by moving the modem router away from other electronic devices (cordless phones, microwaves).
 - Consider the number of devices connected and their bandwidth usage.
 - If you have a large home, consider Wi-Fi extenders or a mesh system to improve coverage.
- **Cannot Access Router Settings:**
 - Ensure your device is connected to the router's network (either wired or wirelessly).
 - Try accessing the web interface using `routerlogin.net` or the default IP address (e.g., `192.168.0.1`).
 - Clear your browser's cache and cookies, or try a different browser.

6. SPECIFICATIONS

Feature	Detail
Model Name	C6900-100NAS
Brand	NETGEAR
Wireless Communication Standard	802.11ac
Frequency Band Class	Dual-Band

Connectivity Technology	Wi-Fi
Item Weight	2.5 pounds
Package Dimensions	15.94 x 12.6 x 4.69 inches
Manufacturer	Netgear
Input Voltage	100-240V
Compatible Devices	Personal Computer
Recommended Uses	Gaming
Antenna Type	Fixed

7. WARRANTY AND SUPPORT

NETGEAR provides a limited hardware warranty for this product. For specific warranty details, please refer to the warranty information included with your purchase or visit the official NETGEAR website.

Technical Support: You are entitled to 90-day complimentary technical support from NETGEAR. For assistance, visit www.netgear.com/support.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question