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Compliance

For the current EU Declarations of Conformity, visit http://support.netgear.com/app/answers/detail/a_id/11621/.



Nighthawk AC1900 Smart WiFi Router Model R7000 Installation Guide



Package Contents

The box contains the following items.

Nighthawk AC 1900 Smart WiFi Router



Ethernet cable



Antennas (3)



Power adapter

In some regions, a resource CD is included in the package.

Installation Video

To view the Nighthawk installation video, visit

http://www.netgear.com/R7000_QR_IG_EN

or use this QR code:



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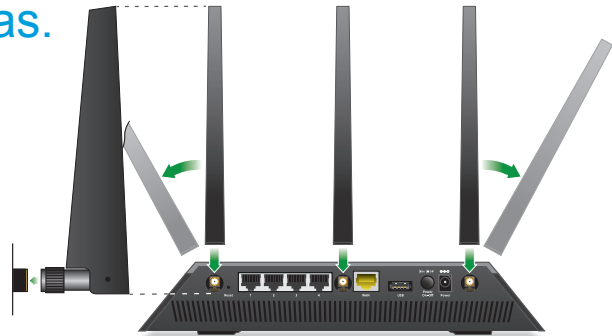
You can use this diagram to connect your router or follow the detailed instructions in this booklet.

1. Attach the antennas.

Attach the antennas on the threaded antenna posts.

Position the antennas for the best WiFi performance.

NETGEAR recommends that the center antenna be vertical and that you aim the others outward at 45 degree angles, as shown.

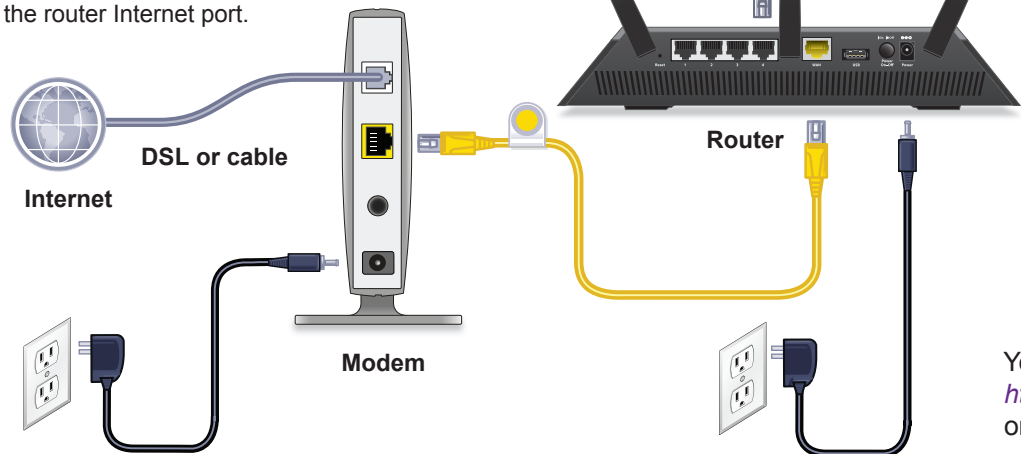


2. Prepare your modem.


Unplug your modem's power. If it has a battery backup, remove the battery.

3. Connect your modem.

Plug in your modem. Put the battery back in. Then cable the modem to the router Internet port.



4. Power on the router.

The Power LED  lights amber and then turns white when the router is ready.

5. Connect a computer.

You can use an Ethernet cable or connect with WiFi.

To connect with WiFi, use the WiFi network name and password on the router label.

6. Launch a browser.

NETGEAR genie displays.

Follow the genie steps to connect to the Internet.

If you do not see genie, type **www.routerlogin.net**. Then type **admin** for the user name and **password** as the password.

Get the genie app.

Download the free genie app from www.NETGEAR.com/genie.

Easily share media, files, and printers on the network from your smartphone, tablet, or laptop.



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

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 website.

For product updates and web support, visit <http://support.netgear.com>.

NETGEAR recommends that you use only the official NETGEAR support resources.

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

Contents

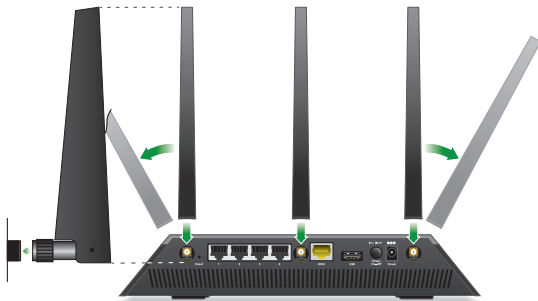
Install Your Router	2
1. Attach the antennas.	2
2. Prepare your modem.	2
3. Connect your modem.	3
4. Add power to the router.	3
5. Connect a computer.	4
6. Launch a web browser.	4
LEDs	5
WiFi Network and Security	6
Join the WiFi Network	7
View or Change the Router Settings	8
Prioritize with Quality of Service	10
Share a USB Drive on the Network	13
NETGEAR genie App	14
ReadySHARE Vault Backup App	15
Share a USB Printer	16
More Premium Features	16

Install Your Router

Make sure that your Internet service is active before you install your router.

➤ To install your router:

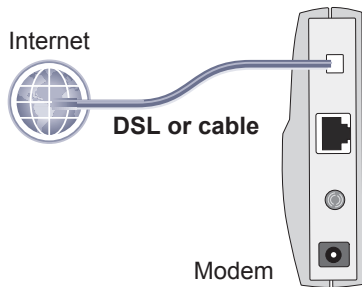
1. Attach the antennas.



- Align the antennas with the antenna posts on the router.
- Attach the antennas on the threaded antenna posts.
- Position the antennas for the best WiFi performance. NETGEAR recommends that the center antenna be vertical and that you aim the others outward at 45 degree angles, as shown.

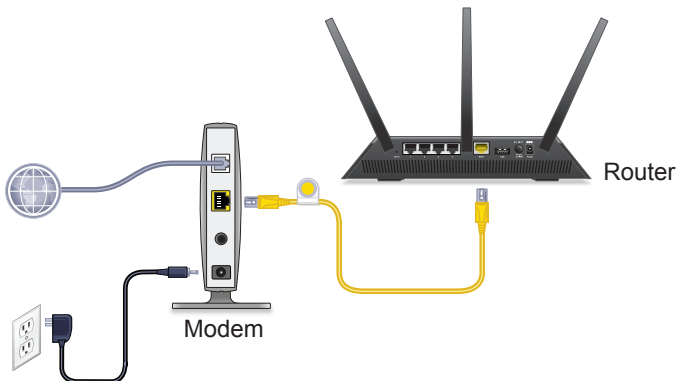
2. Prepare your modem.

- Unplug your modem's power.
- If the modem has a battery backup, remove its batteries.
- If your modem was already connected to another router, disconnect the cable between your modem and that router.



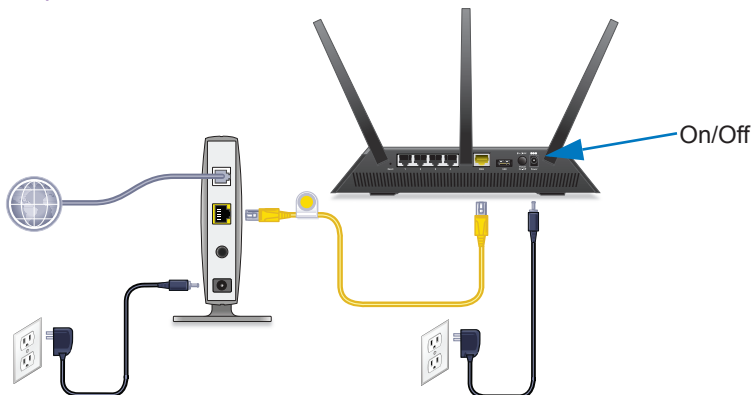
Make sure that your modem is turned off and is cabled only to the wall jack for your Internet service.

3. Connect your modem.




- a. Plug in, then turn on your modem. (Replace the batteries if you removed them previously.)
- b. With the yellow Ethernet cable that came with the router, connect your modem to the Internet port of your router.

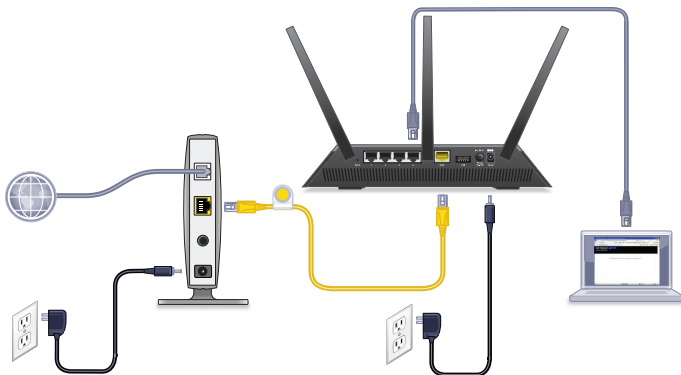
4. Add power to the router.



- a. Connect the power adapter to the router, and plug the power adapter into an outlet.

- b. Wait for the Power LED  on the front panel to light amber and turn white. If no LEDs are lit, press the **Power On/Off** button on the rear panel of the router.

5. Connect a computer.




You can use an Ethernet cable or connect with WiFi:

- For a wired connection, use an Ethernet cable (not included) to connect your computer to a black Ethernet LAN port on your router.
- To connect with WiFi, use the WiFi settings on the router label.

6. Launch a web browser.

The first time that you connect to the router, the genie screen displays. Follow the genie steps to connect to the Internet.

If the genie screen does not display, try the following:

- Close and reopen the browser.
- Make sure that your computer is connected to one of the four black LAN Ethernet ports on the router, or that you are connected to your WiFi network.
- Make sure that the router has full power, and that its Power LED  is lit.

- If your computer is set to a static or fixed IP address (this is uncommon), change it to obtain an IP address automatically from the router.










If you still do not see the genie screen, log in to the router so that genie can detect your Internet connection.

➤ **To log in to the router:**

1. In the address field of your web browser, type **www.routerlogin.net** or **www.routerlogin.com**.
A login screen displays.
2. Enter **admin** for the user name and **password** for the password.
The router BASIC Home screen displays. If your Internet connection is not set up yet, genie automatically detects your Internet connection.

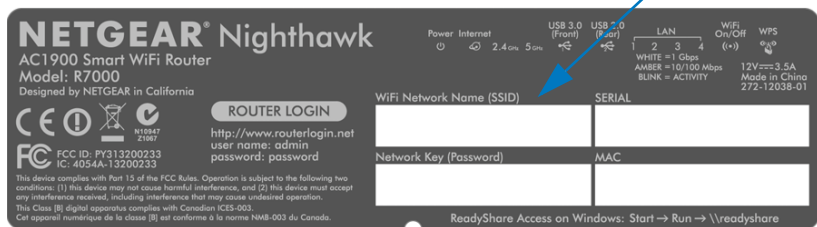
LEDs

The LEDs on the top of the router light to indicate router activity:

-  Power
-  Internet
-  2.4 GHz WiFi
-  5 GHz WiFi
-  USB 1 (USB 3.0 port on the front panel)
-  USB 2 (USB 2.0 port on the rear panel)
-  1 2 3 4 Ethernet ports 1–4
-  WiFi On/Off button with LED
-  WPS button with LED

WiFi Network and Security

The preset WiFi network name (SSID) and network key (password) are unique to your router, like a serial number. Because the router automatically uses WiFi security, you don't need to set it up. The WiFi settings are on the label.



NETGEAR recommends that you use the preset WiFi settings because you can check the router label if you forget them. NETGEAR genie lets you change these settings if you want. If you do so, write down the new WiFi settings and store them in a safe place.

You can write the WiFi settings from your router's label in this space for easy reference.

WiFi network name (SSID): _____

Network key (password): _____

If you change the WiFi settings, write the new settings here for easy reference and store this booklet in a safe place.

WiFi network name (SSID): _____

Network key (password): _____

Join the WiFi Network

You can either use Wi-Fi Protected Setup (WPS) or select your WiFi network and type its password.

➤ **To join the network using WPS:**

1. Press the **WPS** button on the router.
2. Within two minutes, on your computer or wireless device, press its **WPS** button or click its onscreen **WPS** button.

For help with the WPS button on your computer or wireless device, check the instructions or online help that came with that computer or device. Some older equipment cannot use WPS.

➤ **To select your network and enter its password:**

1. On your computer or wireless device, open the software that manages its WiFi connections.

This software scans for WiFi networks in your area.

2. Find and select your WiFi network.

The WiFi network name and password are on the router's label.

3. Enter the WiFi password and click the **Connect** button.

View or Change the Router Settings

After you use genie to set up the router, you can log in to the router to view or change its settings.

Log In to the Router

➤ To log in to the router:

1. Connect a computer or wireless device to the router.
You can use an Ethernet cable or connect with WiFi.
 - For a wired connection, use an Ethernet cable (not included) to connect your computer to a black Ethernet LAN port on your router.
 - To connect with WiFi, select and join your WiFi network.
2. Launch a web browser.
3. Type **www.routerlogin.net** in the address field of the browser.
A login screen displays.
4. Enter **admin** for the user name and **password** for the password.
The router BASIC Home screen displays.

Change the Admin Password

➤ To change the admin password:

1. Log in to the router.
2. Click the **ADVANCED** tab.
3. Select **Administration > Set Password**.
4. Type your old password and type the new password twice.
5. Select the **Enable Password Recovery** check box.
6. Click the **Apply** button.
7. When prompted, answer security questions.
The answers are saved.

Recover a Forgotten Admin Password

The default password for the admin user name is password. If you changed the password and used the password recovery feature, you can retrieve this password.

➤ To retrieve a forgotten admin password:

1. Launch a web browser.
2. Type **www.routerlogin.net** in the address field of the browser.
A login screen displays.
3. Click the **Cancel** button.
4. When prompted, enter your saved answers.

Find a Forgotten WiFi Security Password

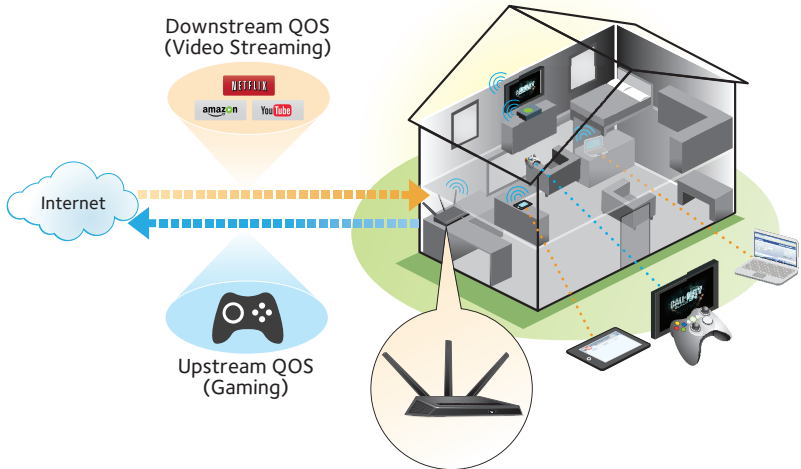
The preset WiFi password is on the router label. If you changed your WiFi password and forgot what it is, log in to the router to view its current WiFi password.

➤ To connect to the router and view its WiFi password:

1. Use an Ethernet cable to connect your computer to a black LAN port on the router.
2. Launch a web browser.
3. Type **www.routerlogin.net** in the address field.
A login screen displays.
4. Enter **admin** for the user name and **password** for the password.
The router BASIC Home screen displays.
5. Select **Wireless Settings**.
The Security Options section of the screen displays your WiFi password.

Prioritize with Quality of Service

You can use Quality of Service (QoS) to assign high priority to gaming and streaming video from the Internet.



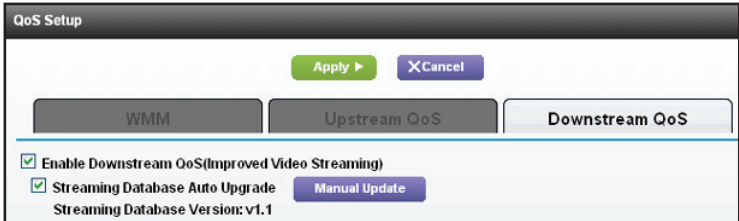
To set up QoS, log in to the router and enable Downstream QoS and Upstream QoS.

- Downstream QoS prioritizes Internet traffic from the Internet to your network. This delivers better performance when you stream Internet video, such as when you watch YouTube videos.
- Upstream QoS prioritizes network traffic from local devices like your Xbox to the Internet. This provides for a lag-free online gaming experience.

Prioritize Internet Video Streaming

To set up QoS to assign a high priority to Internet video streaming, log in to the router and enable Downstream QoS.

- **To enable downstream QoS:**
- 1. Click the **ADVANCED** tab.
- 2. Select **Setup > QoS Setup > Downstream QoS**.



The screenshot shows the 'QoS Setup' web interface. At the top, there are 'Apply' and 'Cancel' buttons. Below them are three tabs: 'WMM', 'Upstream QoS', and 'Downstream QoS'. The 'Downstream QoS' tab is selected. Under this tab, there are two checked checkboxes: 'Enable Downstream QoS(Improved Video Streaming)' and 'Streaming Database Auto Upgrade'. Below these checkboxes is a 'Manual Update' button and the text 'Streaming Database Version: v1.1'.

- 3. Select the **Enable Downstream QoS (Improved Video Streaming)** check box.
- 4. (Optional) Select the **Streaming Database Auto Upgrade** check box.

The router automatically checks for updates for the streaming database, and downloads and installs them.

- 5. Click the **Apply** button.

Prioritize Internet Gaming

To set up QoS to assign a high priority to Internet traffic from your gaming system, log in to the router and enable Upstream QoS.

➤ **To enable upstream QoS:**

1. Click the **ADVANCED** tab.
2. Select **Setup > QoS Setup > Upstream QoS**.

QoS Setup

Apply Cancel

WMM Upstream QoS Downstream QoS

Enable Upstream QoS (Optimized for Gaming)

Turn Bandwidth Control On

Uplink bandwidth Maximum 1.4 Mbps Please go to <http://speedtest.net> to check your uplink bandwidth.

QoS Priority Rule list Setup QoS rule

3. Select the **Turn Internet Access QoS On** check box.
4. Select the **Turn Bandwidth Control On** check box.
5. If you do not know what your uplink bandwidth is, use speedtest.net to find out:
 - a. Visit <http://www.speedtest.net/>.
 - b. Click the **BEGIN TEST** button.

Speedtest.net verifies the downstream and upstream speed of your Internet connection. This test is more accurate when your computer has a wired Ethernet connection to the router.
 - c. Note the number in the **UPLOAD SPEED** field.
6. Select the **Uplink Bandwidth Maximum** radio button.
7. In the **Uplink bandwidth Maximum** field, type the maximum speed based on your ISP or from the upload results from speedtest.net.
8. Click the **Apply** button.

The router assigns a high priority to Internet traffic from your gaming devices to the Internet.

Share a USB Drive on the Network

ReadySHARE lets you access and share a USB drive connected to the router USB port. (If your USB drive has special drivers, it is not compatible.)



➤ To connect a USB drive:

1. Insert your USB storage drive into the blue USB 3.0 port on the front of the router.
2. If your USB drive has a power supply, you must use it when you connect the USB drive to the router.

When you connect the USB drive to the router USB port, it might take up to two minutes before it is ready for sharing. By default, the USB drive is available to all computers on your local area network (LAN).

➤ **To access the USB drive from a Mac:**

1. Select **Go > Connect to Server**.
2. Enter **smb://readyshare** as the server address.
3. Click the **Connect** button.

➤ **To access the USB drive from a Windows computer:**

Select **Start > Run**. Enter **\\readyshare** in the dialog box and click the **OK** button.

NETGEAR genie App

The free NETGEAR genie app lets you easily monitor, connect, and control your home network from a Windows or Mac computer, tablet, or smartphone. You can share and stream music or videos, diagnose and repair network issues, set up parental controls, and more:

- Access your router and change its settings or diagnose and repair network issues.
- Make a printer AirPrint compatible so that you can print from an iPad or iPhone.
- Use MyMedia to find and play media files in your network.
- Use Turbo Transfer to quickly send files from your computer or smartphone to another device on the network.
- Set up parental controls.
- Connect your smartphones and tablets to your home WiFi by scanning the WiFi QR code from genie.

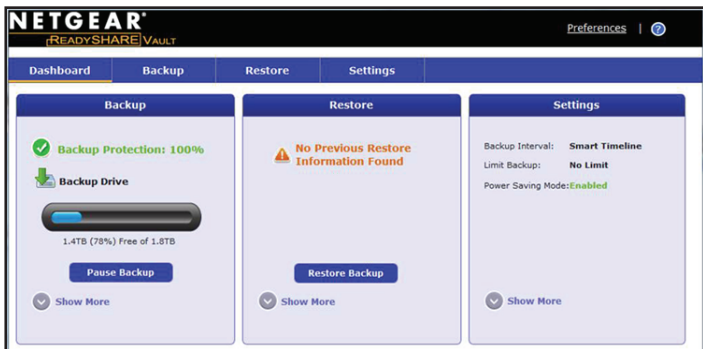
Download the free genie app from www.NETGEAR.com/genie.

ReadySHARE Vault Backup App

Your router comes with free backup software for all the Windows computers in your home. Connect a USB hard disk drive (HDD) to the USB port on your router for centralized, continuous, and automatic backup.

To back up your Windows computer:

1. Connect a USB HDD to a USB port on the router.
For best performance, connect a USB 3.0 HDD to the blue USB 3.0 port on the front of the router.
2. Install the genie app on each Windows computer.
3. Download ReadySHARE Vault from www.netgear.com/readyspace and install it on each Windows computer.
4. Launch ReadySHARE Vault.



5. Use the Dashboard or the Backup tab to set up and run your backup.

Share a USB Printer

You can connect a USB printer to the router's USB port and print wirelessly.

➤ To set up ReadySHARE Printer:

1. Connect the USB printer to the router's USB port with a USB printer cable.
2. On each computer that will share the printer:
 - a. Install the current USB printer driver software (available from the printer manufacturer).
 - b. Download the NETGEAR USB Control Center utility from www.netgear.com/readysware.
 - c. Select the language.
3. If prompted, select the printer and click the **Connect** button for each computer.

When the first computer connects, the status changes to *Manually connected by xxx*. For each computer, when you complete Step 3, the printer status displays as Available.

More Premium Features

Your router lets you do the following and more:

- Share media from DLNA and iTunes Server.
- Set up a secure VPN Service connection to your home network.
- Create a personal FTP server with a custom URL.

iTunes Server

iTunes Server lets you play music with your Windows or Mac iTunes app from a USB drive that is connected to the router USB port. You can also use the Apple Remote from iPhone and iPad to play music on any AirPlay devices, such as Apple TV or AirPlay-supported receivers.

➤ **To set up iTunes Server:**

From the ADVANCED tab, select **Advanced > USB Storage > Media Server**.

VPN Service

VPN Service allows you remote access to your home network with a secure connection.

➤ **To set up VPN Service:**

From the ADVANCED tab, select **Advanced Setup > VPN Service** to set up the VPN connection.

Personal FTP Server

With your customized free URL, you can easily access your own FTP server set up on your home network remotely.

➤ **To set up FTP and your free URL in the router:**

1. From the ADVANCED tab, select **USB Storage > Advanced Settings**, and set up the FTP (via Internet) feature.
2. From the ADVANCED tab, select **Advanced Settings > Dynamic DNS**, and select NETGEAR as the service provider.

For more information about these and other features, see the user manual, available online at <http://downloadcenter.netgear.com> or through a link when you log in to the router.

