Quick Start

Nighthawk X6S
AC4000 Tri-band WiFi Router
Model: R8000P

NETGEAR®

Package Contents

The box contains the following items.

AC3200 Tri-Band WiFi Router

Ethernet cable

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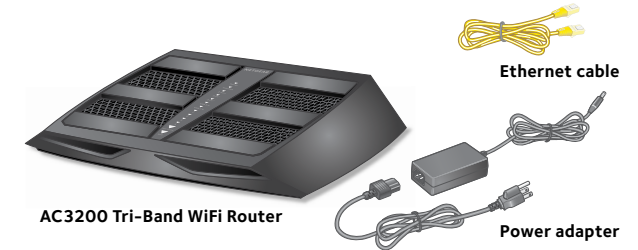
In some regions, a resource CD is included in the package.

Installation Video

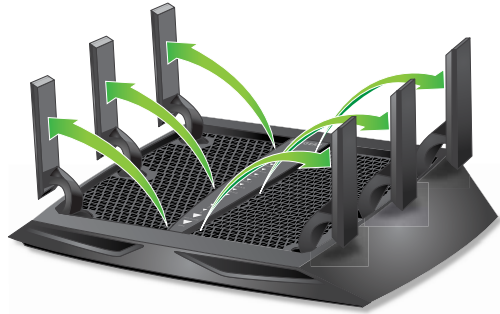To view the Nighthawk X6 installation video, visit *http://www.netgear.com/R8000_vid1* or use this QR code:

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

1. Extend the antennas.

Position the antennas for the best WiFi performance.

NETGEAR recommends that you position all of the antennas vertically 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 yellow Internet port on the router.

4. Check the router's LED On/Off switch.

If the **LED On/Off** switch on the rear panel of the router is in the off position, slide the **LED On/Off** switch to the on position.

5. Power on the router.

The Power LED lights amber and then turns white when the router is ready.
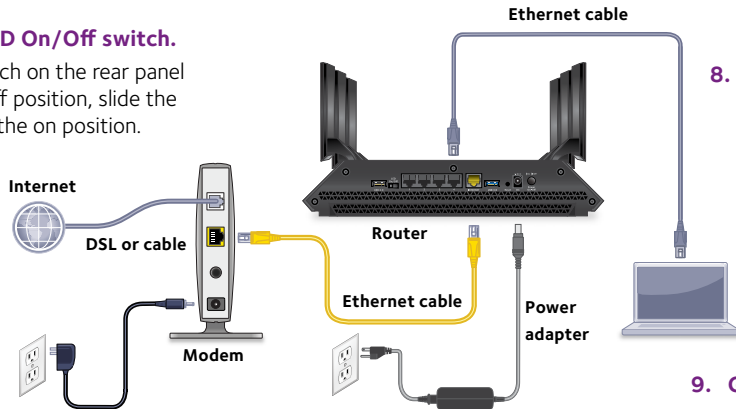
6. Connect a computer.

You can use an Ethernet cable or connect with WiFi.

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

7. Log in to the router.

Launch a web browser.

NETGEAR genie displays.

If you do not see genie, enter **www.routerlogin.net** in the address field of the web browser. When prompted, enter **admin** for the user name and **password** for the password.

Follow the genie steps to connect to the Internet.

8. Get free apps.

During the installation process, genie prompts you to download two free apps:

- **genie app**. A personal dashboard that lets you monitor, control, and repair your home network.

- **ReadySHARE Vault app**. Enables automatic continuous backup of a Windows computer to a USB device that's connected to your router.

9. Get the user manual.

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

LEDs

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

- Power LED
- Internet LED
- 2.4 GHz WiFi LED
- 5 GHz WiFi 1 LED
- 5 GHz WiFi 2 LED
- USB 3.0 port LED
- USB 2.0 port LED
- Ethernet ports 1–4 LEDs
- WiFi On/Off button and LED
- WPS button and LED
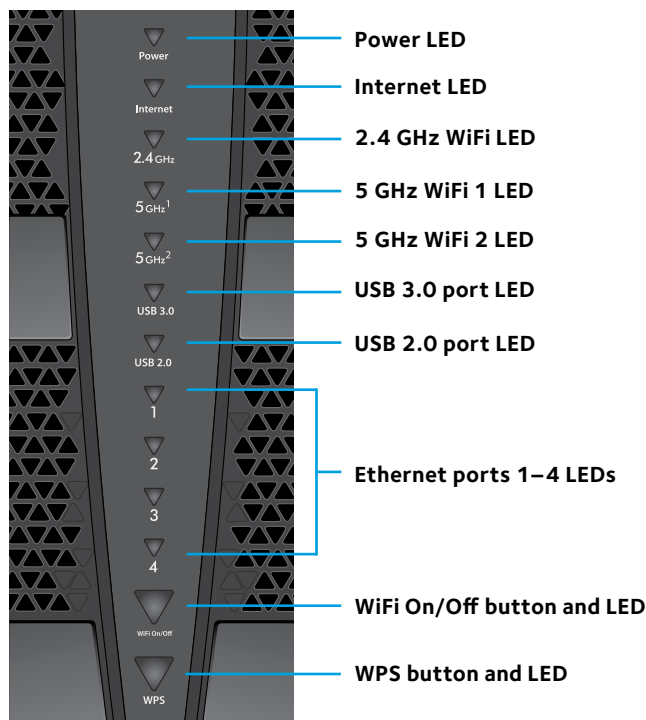
You can use the **LED On/Off** switch on the rear panel of the router to turn the LEDs on the top of the router on or off.

Note: The Power LED stays lit even if the **LED On/Off** switch is in the Off position.

LED On/Off switch
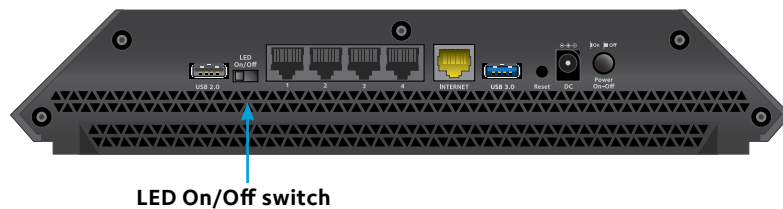
Install Your Router

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

> ➢ **To install your router:**

1. Extend the antennas.

   Position the antennas for the best WiFi performance.

   NETGEAR recommends that you position all of the antennas vertically as shown.

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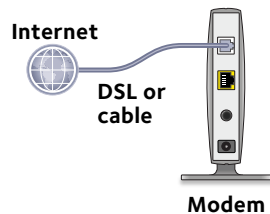
   a. Unplug your modem's power.
   b. If the modem has a battery backup, remove its batteries.
   c. If your modem was already connected to another router, disconnect the cable between your modem and that router.

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

3. Connect your modem.
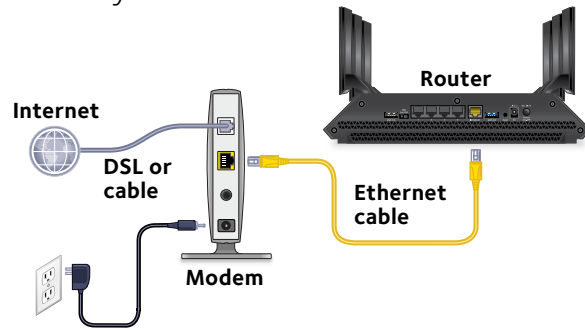
a. Plug in, then turn on your modem.
b. If you removed the batteries, replace them.
c. With the yellow Ethernet cable that came with the router, connect your modem to the yellow Internet port on your router.

4. Check the router's **LED On/Off** switch.
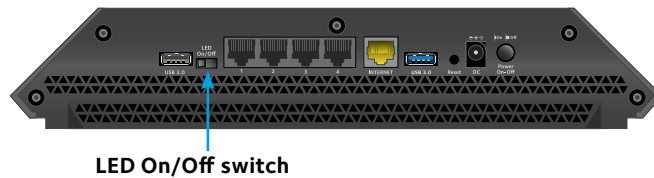
LED On/Off switch

If the **LED On/Off** switch on the rear panel of the router is in the off position, slide the **LED On/Off** switch to the on position.

5. Add power to the router.
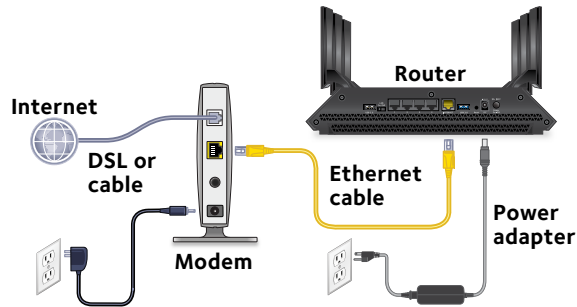
a. Connect the power adapter to the router and plug the power adapter into an outlet.

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.

6. Connect a computer.
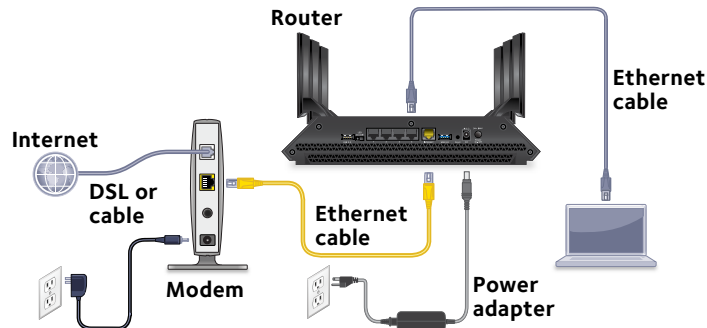
You can use an Ethernet cable or connect with WiFi:

•   For a wired connection, use an Ethernet cable (not included) to connect your computer to a black Ethernet port on your router.

•   To connect with WiFi, use the WiFi settings on the product label.

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7. 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 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. Launch a web browser.
2. Enter **www.routerlogin.net** in the address field of the browser.

    A login screen displays.

3. Enter **admin** for the user name and **password** for the password.

    The BASIC Home screen displays. If your Internet connection is not set up yet, genie automatically detects your Internet connection.

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WiFi Network Name and Password

The preset WiFi network name (SSID) and password (network key) 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 product label.
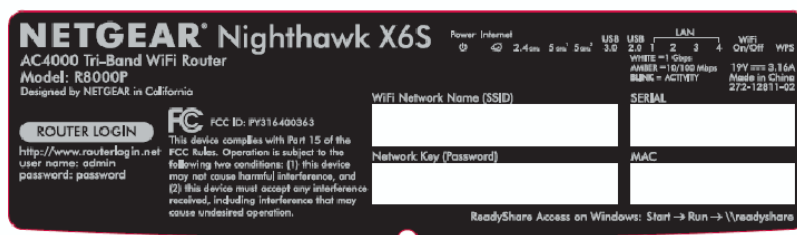
NETGEAR recommends that you use the preset WiFi settings because you can check the product label if you forget them. NETGEAR genie lets you change these settings. If you do so, write down the new WiFi settings and store them in a safe place.

You can write the WiFi settings from your product 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. For help with the WPS button on your computer or WiFi device, check the instructions or online help that came with that computer or device. Some older equipment cannot use WPS.

➢ **To join the network using WPS:**

1. Press the **WPS** button on the router for 3–5 seconds.

   The WPS LED on the router blinks white.

2. Within two minutes, on your computer or WiFi device, press its **WPS** button or click its onscreen **WPS** button.

   The WPS LED on the router lights solid white when the computer or WiFi device connects to your router.

3. Repeat this process to add other computers or WiFi devices.

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

1. Open the software utility that manages your WiFi connections on the computer or WiFi device that you want to connect to your router.

   This utility scans for WiFi networks in your area.

2. Find and select your router's WiFi network name (SSID).

   The SSID is on the product label.

3. Enter the router's password (or your custom password if you changed it) and click the **Connect** button.

   The password is on the product label.

4. Repeat Step 1 through Step 3 to add other computers or WiFi devices.

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 WiFi 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 port on your router.

   - To connect with WiFi, select and join your WiFi network.

2. Launch a web browser.

3. Enter **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 BASIC Home screen displays.

Change the admin Password

➢ **To change the admin password:**

1. Launch a web browser.

2. Enter **www.routerlogin.net** in the address field of the browser.

   A login screen displays.

3. Enter **admin** for the user name and **password** for the password.

   The BASIC Home screen displays.

4. Select **ADVANCED > Administration > Set Password**.

5. Type your old password and type the new password twice.

6. To be able to recover the password, select the **Enable Password Recovery** check box.

   NETGEAR recommends that you enable password recovery.

7. Select two security questions and provide answers to them.

8. Click the **Apply** button.

   Your changes are saved.

Recover a Forgotten admin Password

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

➢ **To retrieve a forgotten admin password:**

1. Launch a web browser.

2. Enter **www.routerlogin.net** in the address field of the browser.

   A login screen displays.

3. Click the **Cancel** button.

   If password recovery is enabled, you are prompted to enter the serial number of the router. The serial number is on the product label.

4. Enter the serial number of the router.

   The serial number is on the product label.

5. Click the **Continue** button.

A screen displays requesting the answers to your security questions.

6. Enter the saved answers to your security questions.
7. Click the **Continue** button.

   A screen displays your recovered password.

8. Click the **Login again** button.

   A login screen displays.

9. With your recovered password, log in to the router.

Find a Forgotten WiFi Security Password

The preset WiFi password is on the product 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 Ethernet port on the router.
2. Launch a web browser.
3. Enter **www.routerlogin.net** in the address field.

   A login screen displays.

4. Enter the router user name and password.

   The default user name is **admin** and the default password is **password**. You can use the default credentials if you did not change them.

   The BASIC Home screen displays.

5. Select **Wireless Settings**.

   The Security Options section of the screen displays your WiFi password.

Enable Dynamic Quality of Service

Dynamic Quality of Service (QoS) resolves Internet traffic congestion when you have limited Internet bandwidth and competing demands by using better application and device identification, bandwidth allocation, and traffic prioritization techniques.

If you like gaming and streaming videos, then you can benefit from enabling Dynamic QoS.

Note: If you use a gigabit Internet connection, or your Internet download and upload speed is 300 Mbps or faster, then you don't need to use Dynamic QoS.

➢ **To enable Dynamic QoS:**

1. Launch a web browser.
2. Enter **www.routerlogin.net** in the address field of the browser.

   A login screen displays.

3. Enter the router user name and password.

   The user name is **admin** and the default password is **password**. You can use the default credentials if you did not change them.

   The BASIC Home screen displays.

4. Select **Dynamic QoS**.

   The Dynamic QoS screen displays:

5. Select the **Enable Dynamic QoS** check box.
6. Specify your Internet bandwidth.

   You can use Speedtest to detect your Internet bandwidth or you can enter your Internet bandwidth manually. NETGEAR recommends that you use Speedtest.

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To use Speedtest to detect your Internet bandwidth:

a. For more accurate Speedtest results, make sure that no other devices are accessing the Internet.

b. Click the **Speedtest** button.

    Speedtest determines your Internet bandwidth.

7. Click the **Apply** button.

    Your settings are saved.

8. To view bandwidth utilization by device and application, click the **Click here to see bandwidth utilization by device and application** link at the bottom of the screen.

    For more information, see the user manual, which is available online at *http://downloadcenter.netgear.com* or through a link in the router's user interface.

Share a USB Device on the WiFi Network

ReadySHARE lets you access and share a USB device connected to the router USB port. (If your USB device has special drivers, it is not compatible.)
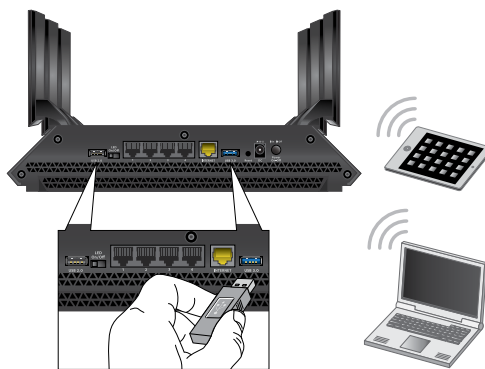
> ➢ **To access the USB device from a Windows computer:**

1. Connect your USB device to a USB port on the router.

   NETGEAR recommends you use the blue USB 3.0 port on the router to get the best USB device access speed.

   If your USB device has a power supply, you must use it when you connect the USB device to the router.

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

2. Select **Start > Run**.
3. Enter **\\readyshare** in the dialog box.
4. Click the **OK** button.

   A window automatically opens and displays the files and folders on the device.

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➢ To access the USB device from a Mac:

1. Connect a USB device to a USB port on the router.

   NETGEAR recommends you use the blue USB 3.0 port on the router to get the best USB device access speed.

   If your USB device has a power supply, you must use it when you connect the USB device to the router.

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

2. On a Mac that is connected to the network, launch Finder and select **Go > Connect to Server**.

3. Enter the **smb://readyshare** in the **Server Address** field.

4. Click the **Connect** button.

5. When prompted, select the **Guest** radio button.

   If you set up access control on the router and you allowed your Mac to access the network, select the **Registered User** radio button and enter **admin** for the name and **password** for the password. For more information about access control, see the user manual, which is available online at *http://downloadcenter.netgear.com* or through a link in the router's user interface.

6. Click the **Connect** button.

   A window automatically opens and displays the files and folders on the device.

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.

Note: The following operating systems support ReadySHARE Vault:

- Windows XP SP3
- Windows 7
- Windows 8
- Windows 8.1

➢ **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 router.

2. Download ReadySHARE Vault from *www.netgear.com/readyshare* and install it on each Windows computer.

3. Launch ReadySHARE Vault.
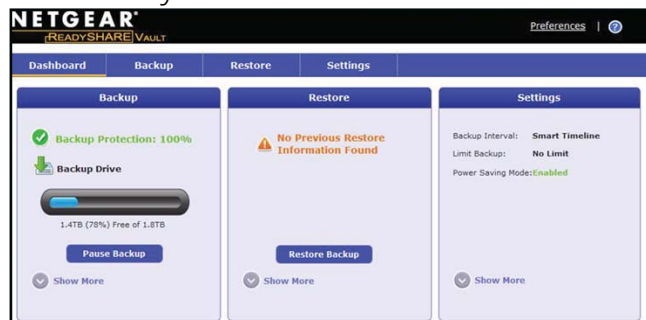
4. Use the dashboard or the Backup tab to set up and run your backup jobs.

Share a USB Printer

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

➢ **To set up ReadySHARE Printer:**

1. Connect the USB printer to a USB port on the router with a USB printer cable.
2. On each computer that will share the printer, do the following:
    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/readyshare* and install it.
    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:

- Play music from a USB device with 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 device that is connected to the router USB port. You can also use the Apple Remote app from an iPhone or iPad to play music on any AirPlay devices, such as Apple TV or AirPlay–supported receivers.

➢ **To specify iTunes Server settings:**

1. On your iPhone or iPad, find and connect to the WiFi network.
2. Download the Remote app from the Apple App Store.
3. Launch the Remote app from your iPhone or iPad.
4. Click the **Add a Device** button.

    A passcode displays.

5. Specify the passcode in the router.

    a. Launch a web browser.

    b. Enter **www.routerlogin.net** in the address field of the browser.

      A login screen displays.

    c. Enter the router user name and password.

      The default user name is **admin** and the default password is **password**. You can use the default credentials if you did not change them.

The BASIC Home screen displays.

d. Select **ADVANCED > USB Storage > Media Server**.

e. Select the **Enable iTunes Server (Music Only)** check box and click the **Apply** button.

f. Enter the passcode and click the **Allow Control** button.

Your changes take effect.

On your iPhone or iPad, the ReadySHARE music library displays in the Remote app. You can play this music on any Airplay devices.

VPN Service

VPN service allows remote access to your home network with a secure connection. After you set up VPN service, you can use VPN to access the router's USB device and media and to access your Internet service at home. To set up VPN service, follow these high-level steps:

1. Specify the VPN service.
2. Install OpenVPN software on your computer.
3. Use a VPN tunnel.

These steps are explained in detail in the user manual, which is available online at *http://downloadcenter.netgear.com* or through a link in the router's user interface.

Personal FTP Server

With your customized free URL, you can use FTP to access your network when you aren't home through Dynamic DNS. To set up your FTP server, follow these high-level steps:

1. Register for a free NETGEAR Dynamic DNS (DDNS) service account.
2. Provide the account settings to your router.
3. Connect a USB hard disk to your router and set up FTP access through the Internet.

These steps are explained in detail in the user manual, which is available online at *http://downloadcenter.netgear.com* or through a link in the router's user interface.

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*.

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.   These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.   However, there is no guarantee that interference will not occur in a particular installation.   If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For operation within 5.15 ~ 5.25GHz / 5.47 ~5.725GHz frequency range, it is restricted to indoor environment. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 34cm between the radiator & your body.

Industry Canada statement:

This device complies with ISED's licence-exempt RSSs. Operation is subject to the following

two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution :
(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
(iii) the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and
(iv) the worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.2(3) shall be clearly indicated.
(v) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:
Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :
(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
(ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5250 à 5 350 MHz et de 5470 à 5725 MHz doit être conforme à la limite de la p.i.r.e;
(iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée pour l'exploitation point à point et l'exploitation non point à point, selon le cas;
(iv) les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 3), doivent être clairement indiqués.
(v) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou

des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 36cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 36cm de distance entre la source de rayonnement et votre corps.

This radio transmitter (IC: 4054A- 16400363/ Model: R8000P) has been approved by ISED to operate with the antenna type listed below with maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 4054A- 16400363/ Model: R8000P) a été approuvé par ISED pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

WLAN (Radio 1) Antenna				
Antenna No.	Ant. Gain(dBi)	Frequency range (GHz)	Antenna Type	Connecter Type
1	1.76	2.4~2.4835	PIFA	i-pex(MHF)
	3.12	5.15~5.25		
	3.11	5.25~5.35		
2	1.76	2.4~2.4835	PIFA	i-pex(MHF)
	3.12	5.15~5.25		
	3.11	5.25~5.35		
3	1.76	2.4~2.4835	PIFA	i-pex(MHF)
	3.12	5.15~5.25		
	3.11	5.25~5.35		
WLAN (Radio 2) Antenna				
Antenna No.	Ant. Gain(dBi)	Frequency range (GHz)	Antenna Type	Connecter Type
4	2.14	5.47~5.725	PIFA	i-pex(MHF)
	2.2	5.725~5.8		
5	2.14	5.47~5.725	PIFA	i-pex(MHF)
	2.2	5.725~5.8		
6	2.14	5.47~5.725	PIFA	i-pex(MHF)
	2.2	5.725~5.8		