Support

Thank you for purchasing this NETGEAR product.

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.

Trademarks

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Compliance

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

For regulatory compliance information, visit:
http://www.netgear.com/about/regulatory/.

See the regulatory compliance document before connecting the power supply.

NETGEAR, Inc.
350 East Plumeria Drive
San Jose, CA 95134 USA

201-18065-04

October 2014

Quick Start

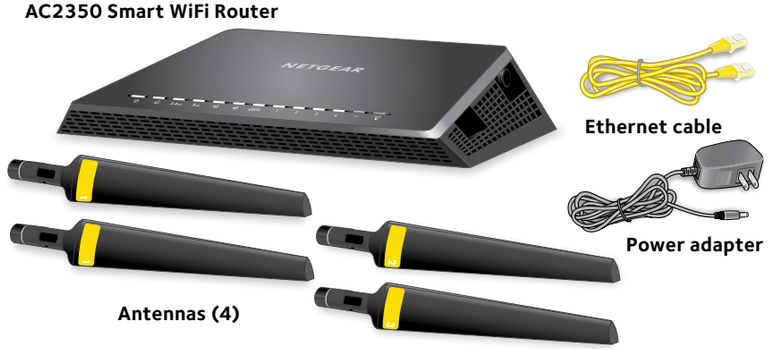
Nighthawk X4
AC2350 Smart WiFi Router

Model R7500

NETGEAR®

Package Contents

The box contains the following items.



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

Installation Video

To view the Nighthawk installation video, visit
http://www.netgear.com/R7500_vid1
or use this QR code:

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

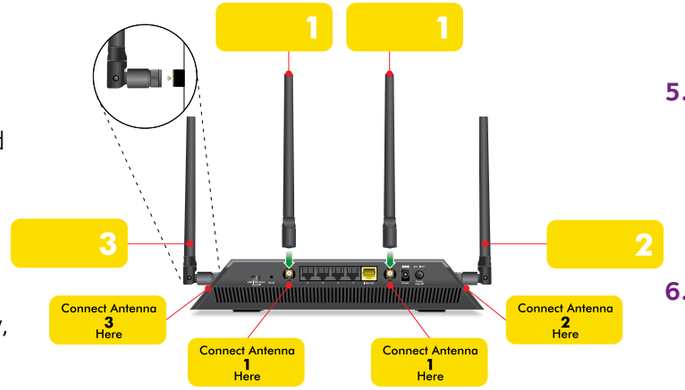
1. Attach the antennas.

To determine where to attach the antennas, match the labels on the antennas with the labels on the router.

Attach the antennas on the threaded antenna posts.

Position the antennas for the best WiFi performance.

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

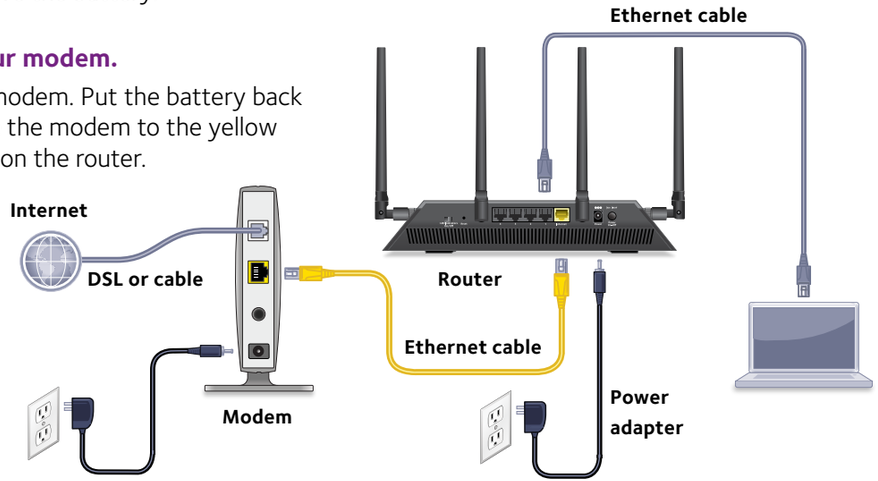


2. Prepare your modem.

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. 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 product label.

6. 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.

7. 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.

8. 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

Internet

2.4 GHz

5 GHz

USB 3.0 port 1

USB 3.0 port 2

eSATA port

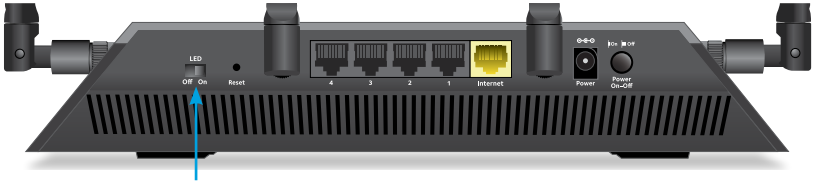
1 2 3 4 Ethernet ports 1–4

WiFi On/Off button with LED

WPS button with LED

You can use the **LED Off/On** 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 Off/On** switch is in the off position.



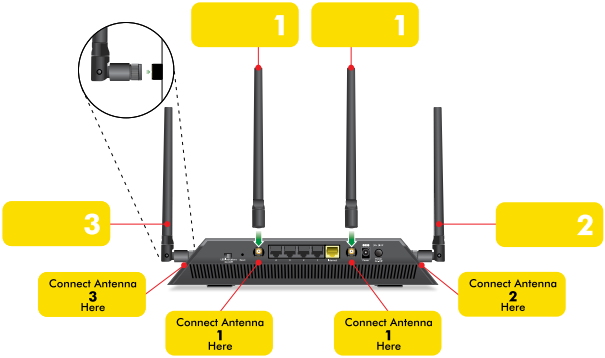
LED Off/On switch

Install Your Router

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

➢ To install your router:

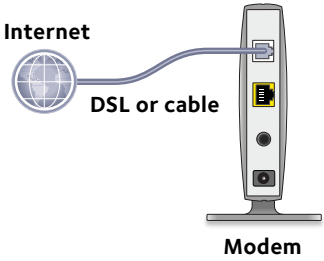
1. Attach the antennas.



   a. To determine where to attach the antennas, match the labels on the antennas with the labels on the router.
   b. Align the antennas with the antenna posts on the router.
   c. Attach the antennas on the threaded antenna posts.
   d. Position the antennas for the best WiFi performance.

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

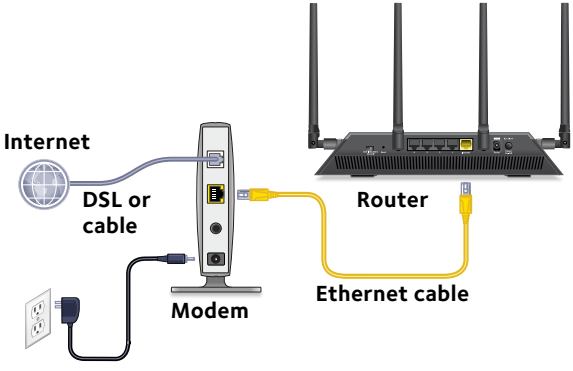
2. Prepare your modem.



   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.

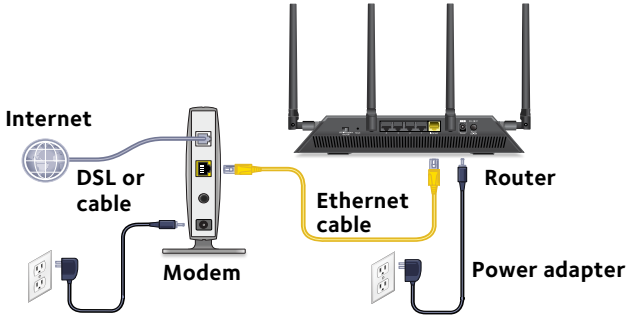
   Make sure that your modem is turned off and is cabled only to the wall jack for your Internet service.

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. Add power to the router.

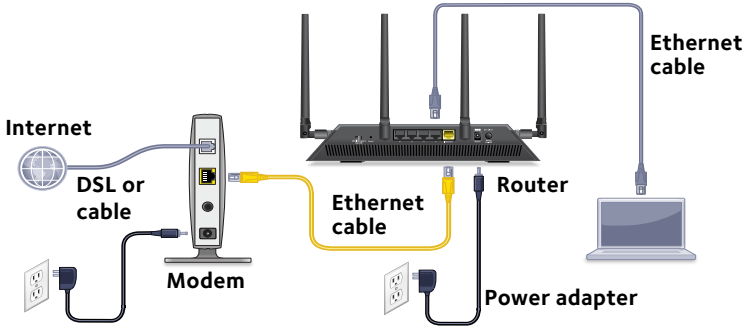


a. Connect the power adapter to the router and plug the power adapter into an outlet.

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 port on your router.
- To connect with WiFi, use the WiFi settings on the product 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. 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.

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 soft-ware 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.

Prioritize with Dynamic Quality of Service

Dynamic Quality of Service (QoS) helps improve your router's Internet traffic management capabilities through better application and device identification, bandwidth allocation, and traffic prioritization techniques. Dynamic QoS resolves traffic congestion when you have limited Internet bandwidth and competing demands. If your Internet download and upload speed is 250 Mbps or less and you like gaming and streaming video, 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 must specify your Internet bandwidth so that Dynamic QoS can perform bandwidth allocation and traffic prioritization.

To allow Speedtest to detect your Internet bandwidth (recommended):

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.

   A link displays on the bottom of the screen to view bandwidth utilization. Clicking the link displays the Attached Devices 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 Storage Devices on the Network

ReadySHARE lets you access and share storage devices, such as a USB or eSATA storage device, connected to the router. (If your storage device has special drivers, it is not compatible.)

➢ To access the storage device from a Windows computer:

1. Connect a USB or eSATA storage device to the appropriate port on the router.

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

   When you connect the storage device to the router's port, it might take up to two minutes before it is ready for sharing. By default, the 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.

➢ To access the storage device from a Mac:

1. Connect a USB or eSATA storage device to the appropriate port on the router.

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

   When you connect the storage device to the router's port, it might take up to two minutes before it is ready for sharing. By default, the 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

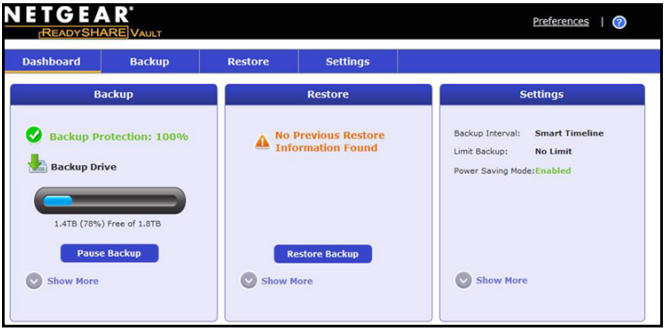
Your router comes with free backup software for all the Windows computers in your home. Connect a USB hard disk drive (HDD) or an eSATA storage device to the router for centralized, continuous, and automatic backup.

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 or eSATA storage device to the appropriate 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.

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*.
   c. Select the language.
3. If prompted, select the printer and click the **Connect** button for each computer.
4. 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 storage 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 storage device that is connected to the router. 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 specify iTunes server settings:

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

   A passcode displays.
4. 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 > ReadySHARE > ReadySHARE Storage > Media Server**.

e. Make sure that the **Enable iTunes Server (Music Only)** check box is selected.

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

g. Click the **Apply** button.

   Your changes are saved.

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

VPN Service

VPN service allows you 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 storage 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 frequency range, it is restricted to indoor environment.

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 43cm between the radiator & your body.

Industry Canada statement:
This device complies with RSS-210 of the Industry Canada 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.
Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet 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) 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:
les dispositifs fonctionnant dans la bande 5 150-5 250 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) 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 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.
Radiation Exposure Statement:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated

with minimum distance 43cm between the radiator & your body.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 43 cm de distance entre la source de rayonnement et votre corps.