LINKSYS™

User Guide

RE6300/RE6400

Introduction

This User Guide can help you connect the extender to your network and solve common setup issues. You can find more help from our award-winning, 24/7 customer support at Linksys.com/support.

**Contents**

Overview

Front

RE6300

RE6400

The light on the front of the range extender gives you information about power, updating and signal strength.

| Power Light	Status/ description
Blinking Green	• Booting up • Resetting to factory defaults • Upgrading firmware
Solid Green	• Ready to use
Solid Orange	• Weak connection with the router *Fix: Unplug the extender, and move it closer to the router*
Blinking Orange	• Not connected to the router • Other error *Fix: Unplug the extender, plug it back in, wait two seconds, reconnect to your network*

Side

<side>
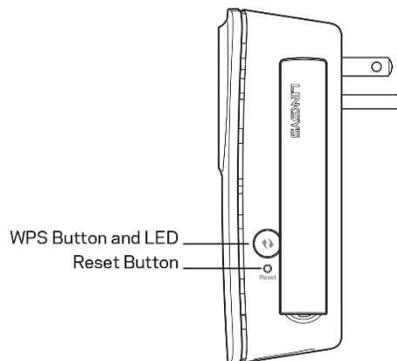
Power Switch European versions only.

Wi-Fi Protected Setup Button and LED Use Wi-Fi Protected Setup to automatically and securely add compatible wireless devices to your network. Refer to Using Wi-Fi Protected Setup on page 7.

Reset Press and hold for about five seconds to reset to factory defaults. You can also restore the defaults from the Administration > Factory Defaults screen in the extender's browser-based utility.

Bottom
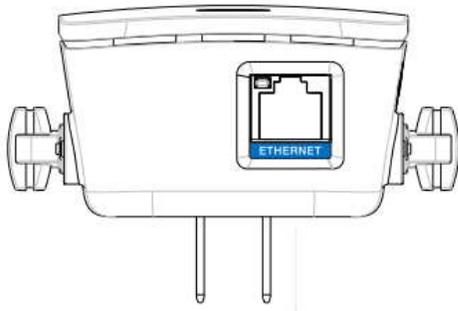
Ethernet (blue) Connect wired devices to your wireless network with Ethernet (network) cables. The green light turns on when an Ethernet device is connected and active on this port. The light blinks when the extender is sending or receiving data over the Ethernet port.

How to install the range extender

Before setup, unplug or disconnect any range extenders on the network.

1. **Plug in the range extender midway between your router and the area without Wi-Fi.** Be sure you have at least 50% of your router's Wi-Fi signal at that point on the device you will use for setup. The setup software will help you find the best spot if you have trouble.
   <Diagram>
2. Wait for a solid light on the cover of the range extender. It could take up to two minutes. On a computer, phone or tablet, connect to the Wi-Fi network "Linksys Extender Setup."
   <diagram2>
3. If setup doesn't start automatically, open a browser to http://extender.linksys.com.

Linksys's Spot finder technology will help you find the right location for your range extender if you have trouble. You will be guided to place the range extender closer or farther from your router to improve the signal. If you nailed it with your first placement you will not see Spot finder screens.

<screenshot of Too Far page>

4. During setup you will be asked whether you want the range extender to update itself automatically. If you allow automatic updates, the range extender will download and install updates when released by Linksys. Automatic updates will take place overnight so they do not disrupt your network activity.

You also can decide to manually update your range extender at your convenience.

<screen shot>

<u>Post set-up LED behavior mention here as well and in the QSG</u>

Special Feature - Music Streaming

Wireless Music Playback

**Stream music through your AC1200 MAX range extender to connected speakers.**

iOS devices:

- Connect iOS device to the same Wi-Fi network as your range extender.
- Swipe up from the bottom of your screen.
- Tap on Linksys Range Extender.

Android devices

For Samsung Galaxy

- Connect Galaxy device to the same Wi-Fi network as your range extender.

- Select Music app

- Choose music file and tap Screen Mirroring icon
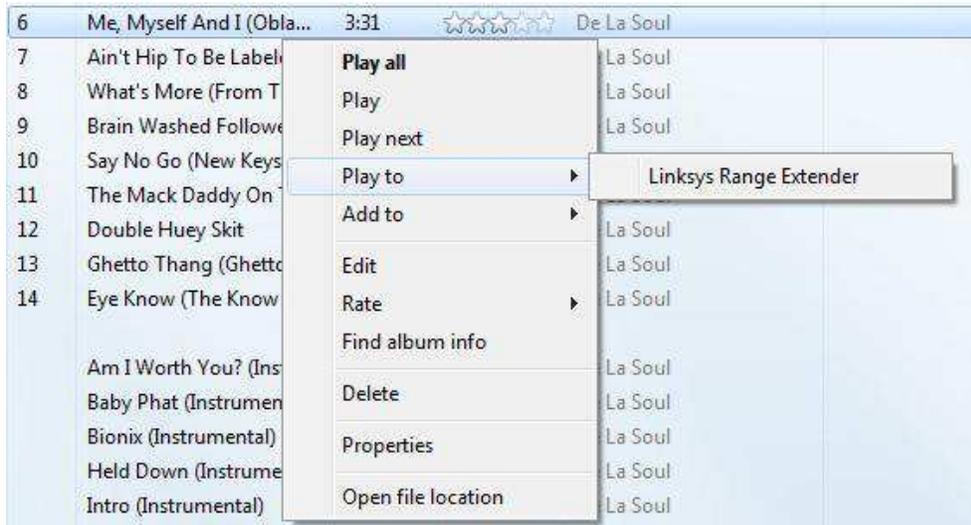- Choose Linksys Range Extender.
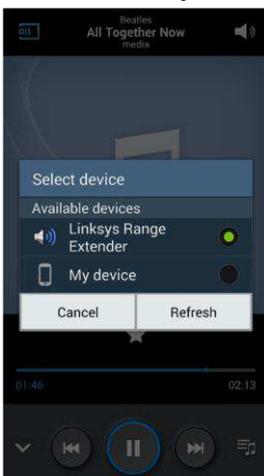
Your screen might look different depending on your device model and version of Android.

For other Android devices, stream music with MediaHouse, UPnPlay, Skifita, ArkMC, BubbleUPnP, Pixel Media, and 2Player 2.0.

Windows

- Open Windows Media Player

- Right-click on music file and choose Linksys Range Extender.

This list of supported media players is subject to change with the release of new software or mobile apps.

- Windows users can stream music with Windows Media Player12.
- Mac users can stream music with proprietary software or the SofaPlay app..
- Android users can stream music with MediaHouse, UPnPlay, Skifita, ArkMC, BubbleUPnP, Pixel Media, and 2Player 2.0.
- IOS devices including iPhone, iPad or iPod can stream music with proprietary software or other apps such as, , ArkMC, Smartstor Fusion, , Mconnect, and DK UPnP/DLNA.
- The extender supports MP3, FLAC, WAV, WMA and AAC file formats, as long as those formats are supported by the device and app doing the streaming.
- The 3.5mm stereo port supports earphones and powered speakers.

How to access the browser-based utility

After setting up the extender use the extender's browser-based utility to change any settings.

On a computer or device that is connected to your range extender, open any browser (Internet Explorer, Chrome, Firefox, Safari, etc.), and enter extender.linksys.com in the address bar.

You will be prompted to enter a user name and password. If you did not change them during setup, leave the user name blank and enter "admin" in the password field. If you customized the SSID and password, enter those credentials.

If you are connected to your local network, but not to the range extender, you will need to enter the range extender's IP address in your browser to access the extender's settings.

TIP

If you are unable to access the range extender's settings, do one of the following:

Find the range extender's IP address by going to your router's administration page and looking for the range extender under connected devices.

Or

Windows XP:

1. Enable UPnP:

   a) Click Start, Control Panel, Add or Remove Program, then click Add/Remove Windows Components.
   b) Select Network Services, then click Details.
   c) Select UPnP User Interface, then click OK.

2. Open Windows Explorer. Click **My Network Places** on the left panel.

3. Look for the RE6700 icon on the right panel. (You might be required to change the firewall settings to allow the display of networked computers. Refer to your operating system's help for instructions.)

Windows 8, Windows 7, or Vista:

1. Open Windows Explorer (File Explorer in Windows 8). Click **Network**. Look for the RE6700 icon on the right panel. (You might be required to change the firewall settings to allow the display of networked computers. Refer to your operating system's help for instructions.)
2. Right-click the **RE6700** icon. Click **Properties**. Click on the address link in **Device webpage**.

Mac OS X:

1. Open **Safari**. Be sure that Bonjour is included in the Bookmarks menu and Favorites bar.
   a. Go to Safari Preferences > Advanced and be sure each Bonjour box is selected.
2. Find Bonjour in the Bookmarks menu or Favorites bar and choose "Linksys Range Extender." If you have changed your network name and password, choose the network name and enter the password you created.

Using range extender settings

Click **Help** on the right side of the screen for additional information on the screen's options.

Changes to settings will not be effective until you click **Save** at the bottom of the screen. You also can click **Cancel** to clear any changes.

Using Wi-Fi Protected Setup

Wi-Fi Protected Setup™ makes it easy to connect your extender to your network, and connect other devices to your network through the extender.

Wi-Fi Protected Setup light activity

WPS Button and LED

<WPSButtonOnly.PNG>

WPS Light	Status/ description
	•
Solid (10 seconds) Blinking slowly (two minutes)	• WPS connection was successful • WPS connection in process
Blinking quickly (two minutes)	• When WPS cannot establish connection or encounters a problem *Fix: wait a few seconds after LED stops blinking and try again*

Connecting the extender to an existing access point

If your access point or router supports it, you can use Wi-Fi Protected Setup to connect the range extender to the access point or router. Log in to the browser-based utility and click on **WPS** in the left navigation bar. Choose from the setup methods below to connect the extender.

If you have an access point or a router that does not support Wi-Fi Protected Setup, note the wireless settings, and then manually configure the extender.

Connecting with the Wi-Fi Protected Setup Button

Use this method if your router or access point has a **Wi-Fi Protected Setup** button

WPS Button and LED

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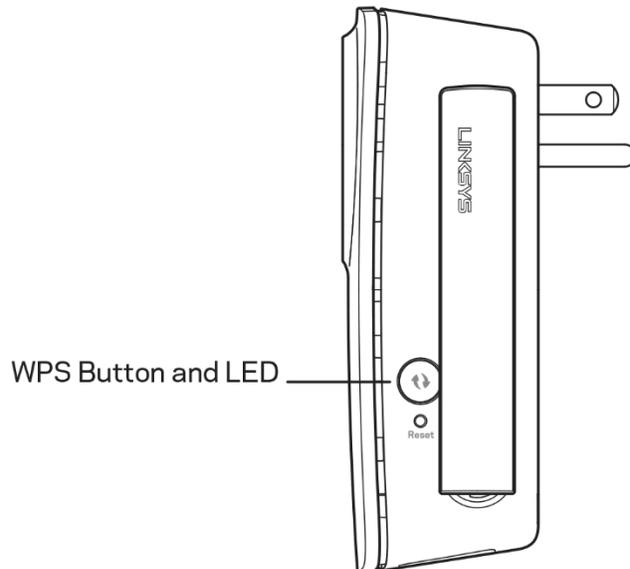

Wi-Fi Protected Setup™

Use one of the following for each Wi-Fi Protected Setup supported device:

1. If your router has a Wi-Fi Protected Setup button, click or press that button, and then click the button on the right.

1. Press the **Wi-Fi Protected Setup** button on the extender. If you have a dual-band router you will do this again to extend the second network. The 2.4 GHz band will be extended first.
2. Click the **Wi-Fi Protected Setup** button on the router's Wi-Fi Protected Setup screen (if available), OR press and hold the Wi-Fi Protected Setup button on the router for one second. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
3. If you used the extender's Wi-Fi Protected Setup screen, click **OK** in that screen within two minutes.

TIP

You can also access WPS in the browser-based utility by clicking **WPS** in the left navigation bar.

Connecting with the range extender's PIN

The Wi-Fi Protected Setup PIN (Personal Identification Number) can be found on the product label on the back of the extender. You can use this method only if your router's administration utility has a Wi-Fi Protected Setup menu.

2. If your router asks for the client's PIN number, enter this number **14727030** in your router device.

1. Enter the extender's PIN into the appropriate field on the router's Wi- Fi Protected Setup screen. Click Register. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
2. Click **OK**.

Connecting devices to your network through the extender

Choose from the methods below to connect devices that support Wi-Fi Protected Setup to your network.
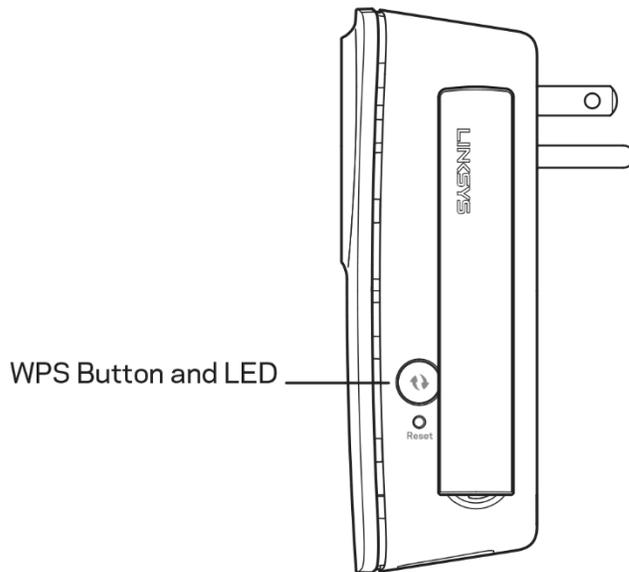
Delete the screen below

NOTE

Repeat the instructions for each client device that supports Wi-Fi Protected Setup.

Connecting with the Wi-Fi Protected Setup Button

Use this method if your client device has a Wi-Fi Protected Setup button.

WPS Button and LED

1. Press the Wi-Fi Protected Setup button on the client device.
2. Click the **Wi-Fi Protected Setup** button on the extender's Wi-Fi Protected Setup screen, OR press and hold the Wi-Fi Protected Setup button on the side of the extender for one second. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
3. If using the extender's Wi-Fi Protected Setup screen, be sure to click OK within two minutes or you will have to start over.

Connecting with the client device's PIN

Use this method if your client device has a Wi-Fi Protected Setup PIN (Personal Identification Number).

1. Enter the PIN from the client device in the field on the extender's Wi-Fi Protected Setup screen.
2. Click **Register** on the extender's Wi-Fi Protected Setup screen. When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
3. Click **OK** on the extender's Wi-Fi Protected Setup screen within two minutes or you will have to start over.

Connecting with the extender's PIN

Use this method if your client device asks for the extender's PIN.

1. On the client device, enter the PIN listed on the extender's Wi-Fi Protected Setup screen. (It is also listed on the product label on the back of the extender.) When the connection is complete, the Wi-Fi Protected Setup light on the extender will be solid.
2. Click **OK** on the extender's Wi-Fi Protected Setup screen within two minutes.

How to use Site Survey

Site Survey gives a snapshot of all neighboring access points and wireless routers within range of the extender.

To open the Site Survey page:

1. Log in to the browser-based utility (see "How to access the browser- based utility" on page 5).
2. Click the **Wireless** tab. Click the **Site Survey** page.
3. **Select**—To connect to a wireless network, click the button next to the wireless network name (SSID) in the Select column, and click Connect.
4. **SSID**—Displays the name of neighboring wireless networks.
5. **GHz**—Displays the radio band (in GHz) of the neighboring wireless networks
6. **Signal Strength**—Displays the relative position of the neighboring access points by indicating the power of the wireless signal received: dot only = 25%, dot + one wave = 50%, dot + two waves = 75%, dot + three waves = 100%. If no waves are displayed, your extender is too far from the upstream access point or the signal is blocked. Try to keep the signal strength between 60% and 100% for optimum performance.
7. **Security**—Displays the mode of security in use by the neighboring APs. If a network supports Wi-Fi Protected Setup, the Wi-Fi Protected Setup icon is also displayed.
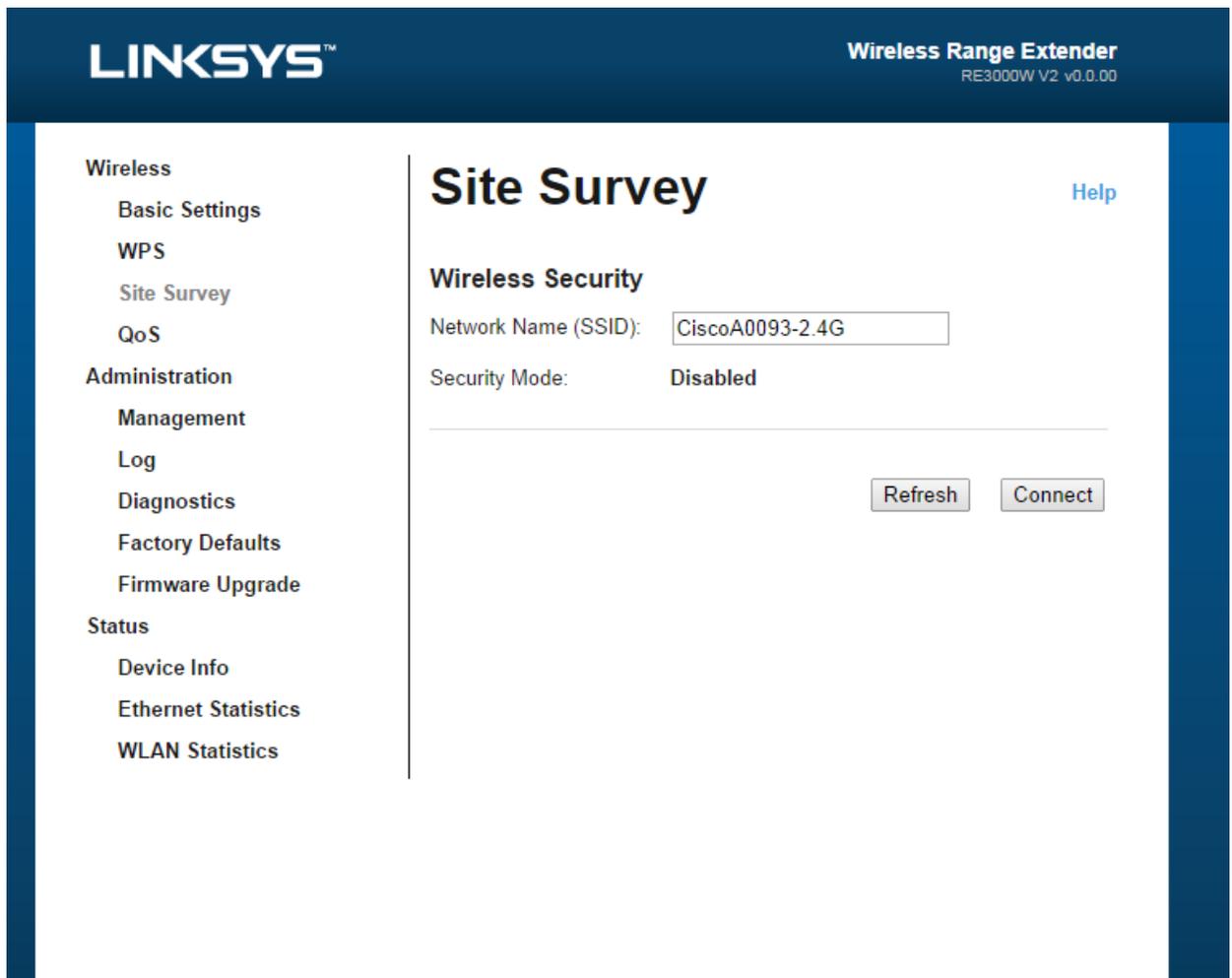
To connect your extender with an access point or router in Site Survey, you will need to know the password or passphrase of the network on that device.

1. Select the network name (SSID) that you want to repeat with your extender by clicking the corresponding button in the Select column.
2. Click **Connect**. When prompted, enter the password or passphrase used to secure your wireless network. The type of security information required in this screen must match your access point or router's wireless security settings.

TIP: For dual-band networks, be sure to connect to both bands, 2.4 GHz and 5 GHz.

3. Click **Save.** Your extender wireless parameters should be configured. The wireless interface will restart, and the extender will connect to the access point or router you have chosen.

Cross-Band

Cross-Band is the simultaneous use of both bands for high-speed data transfer and uninterrupted streaming and gaming.

Troubleshooting

NOTE Your RE6700 works on 2.4GHz and 5 GHz networks.

You cannot get your extender connected

Check the position of your router and extender

- For first-time setup, you may need to place the extender closer to the router. After you've set up your extender, you can unplug it and move it to the final location.
- To reduce signal obstructions, try alternate locations for the router and extender.
- Avoid placing the router and extender near metal objects, masonry walls, and reflective surfaces such as glass or mirrors.
- Avoid placing the router and extender near other electronics that may cause signal interference.

If you're using Wi-Fi Protected Setup to connect, wait until the Wi-Fi Protected Setup indicator stops blinking before trying to make the connection again.

You cannot access your range extender

To access your range extender, you must be connected to your own network. If you currently have wireless Internet access, the problem may be that you have accidentally connected to a different wireless network.

For Mac instructions, see "To fix the problem on Mac computers:" on page 12.

To fix the problem on Windows computers:

1. On your Windows desktop, right-click the wireless icon in the system tray. The icon might look different depending on which version of Windows you are running.
2. Click View Available Wireless Networks.

Disable
Status
Repair

View Available Wireless Networks

Change Windows Firewall settings

Open Network Connections

3. Select your network name. Click Connect. In the example below, the computer was connected to another wireless network named JimsRouter. The name of the correct network, BronzeEagle in this example, is selected.

4. If you are prompted to enter a network key, type your password (Security Key) into the Network key and Confirm network key fields. Click **Connect**.

You should now be able to access the range extender's browser-based utility.

To fix the problem on Mac computers:

1. In the menu bar across the top of the screen, click the Wi-Fi icon. Linksys Connect has automatically assigned your network a name.

In the example below, the computer was connected to another wireless network named JimsRouter. The name of the Linksys E-Series network, BronzeEagle in this example, is selected.

2. Select the wireless network name of the router you want to connect to.
3. Type your wireless network password (Security Key) into the Password field. Click **OK**.

You should now be able to access the range extender's browser-based utility.

You have intermittent connection problems

Plug in the range extender midway between your router and the area without Wi-Fi. Be sure you have at least 50% of your router's Wi-Fi signal at that point on the device you used for setup.

Specifications

RE6300/RE6400

Model Name	Linksys RE6300/RE6400
Model Description	Dual-band Wireless-AC Range Extender
Model Number	RE6300/RE6400
Standards	IEEE 802.11ac, 802.11a, 802.11n, 802.11g, 802.11b, 802.3u
Ports	Gigabit Ethernet, audio
Buttons	Reset, Wi-Fi Protected Setup™, Power (European model only)
LEDs	Power/Wi-Fi Protected Setup, Ethernet (link, activity)
Antennas	2 external (non-detachable)
Wireless Security	Wi-Fi Protected Access™ 2 (WPA2), Wi-Fi Protected Access™ (WPA), WEP
Security Key Bits	Up to 128-bit encryption

Environmental

Dimensions	2.64" x 1.49" x 4.13" (67 x 38 x 105 mm)
Weight	5.12 oz (145 g)
Power	12VDC/1.0A
Certification	FCC, ICES-003, RSS210, CE, Wi-Fi (IEEE 802.11a/b/g/n), WPA2™, WMM®, Wi-Fi Protected Setup™
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Operating Humidity	10 to 80% noncondensing
Storage Humidity	5 to 90% noncondensing

Specifications are subject to change without notice.

Visit linksys.com/support for award-winning 24/7 technical support

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.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

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 22cm between the radiator & your body.

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Industry Canada statement:

This device complies with RSS-247 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-247 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:

(i) 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 27cm 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 27 cm de distance entre la source de rayonnement et votre corps.