

WAVLINK

see the world

Quick Start Guide

AX3000 WIFI6 Mesh Router



www.wavlink.com/en_us/WL-WN588HX3

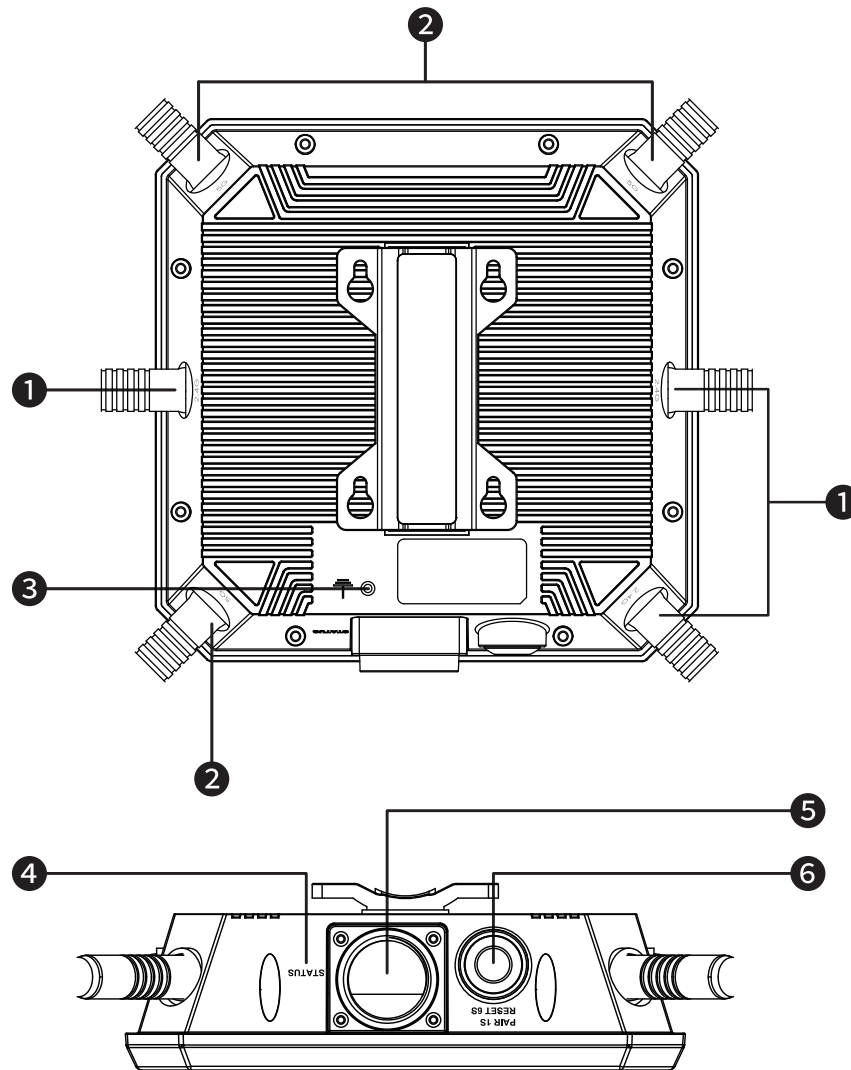
Scan the QR code or access the link for
Quick Start Guide downloading

WL-WN588HX3



WAVLINK (@WavlinkOfficial)
WAVLINK SUPPORT (@WavlinkTechSupport)

Hardware Overview



- ❶ 2.4G Antenna
- ❷ 5G Antenna
- ❸ Grounding Terminal

- ❹ Status LED
- ❺ WAN/LAN Port (PoE)
- ❻ Pair/Reset Button

Reset Button

Press and hold for 6 seconds to restore the device to default settings.

Pair Button

Press and hold for 2 seconds to pair with the existing Everything Mesh Wi-Fi system.

Default Parameters

2.4G SSID: [WAVLINK-AX_XXXX](#)

5G SSID: [WAVLINK-AX_5G_XXXX](#)

Default IP: [192.168.30.1](#)

Login: <http://waplogin.link>

Default Login Password: [admin](#)

Official Website: www.wavlink.com

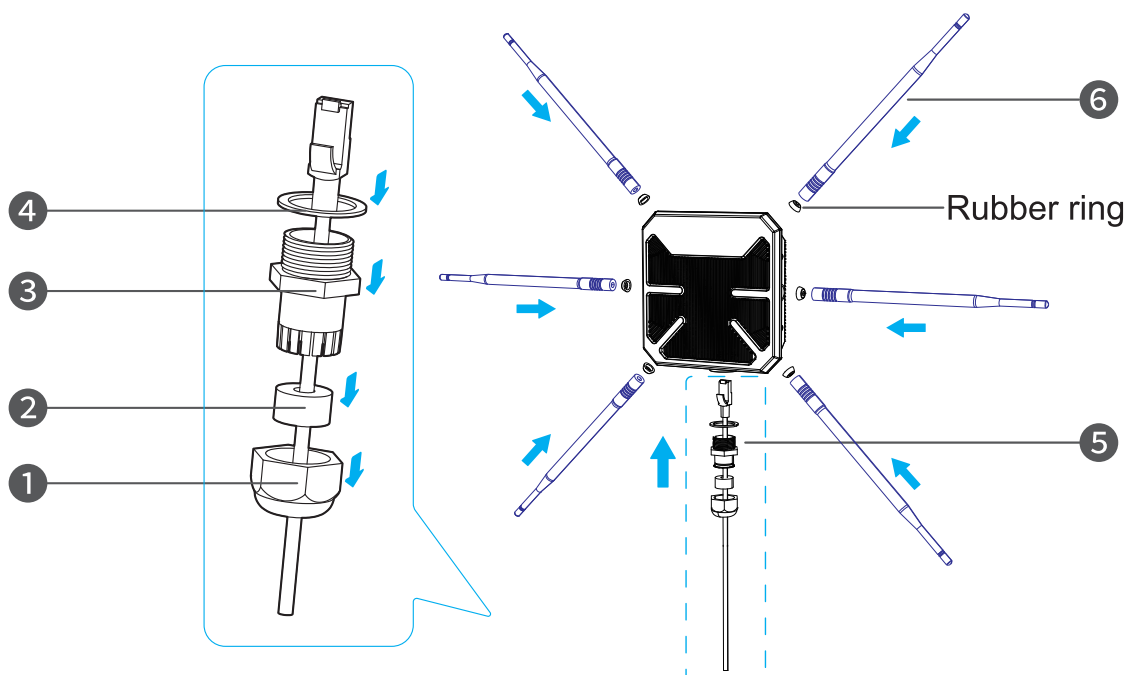
Technical Support: support@wavlink.com

LED Indicator

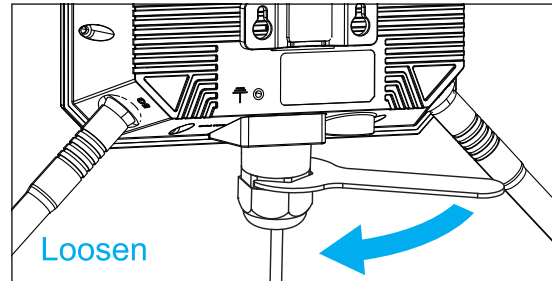
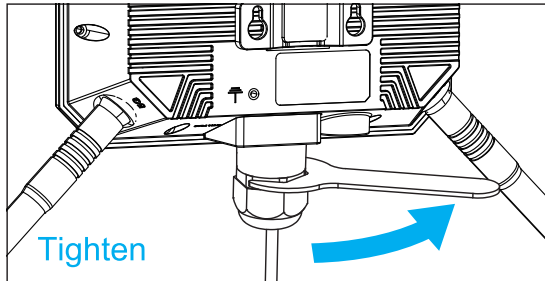
Mode	LED Status	Description
Mesh AP/Mesh Router Mode	Slow blinking	The device is in pair.
	Solid on	The device has connected to the Internet.
	Fast blinking	No Internet
Repeater Mode	Slow blinking	The device has connected to the upstream router but no access to the Internet.
	Solid on	The device has connected to the upstream router and the Internet has been connected.
	Fast blinking	The device has not connected to the upstream router.
Mesh Extender Mode	Slow blinking	The device has connected to the upstream router but no access to the Internet.
	Solid on	The device has connected to the upstream router and the Internet has been connected.
	Fast blinking	The device has not connected to the upstream router.
AP Mode	Solid on	The device has connected/disconnected to the Internet.

Installation

1. Assembly



- ① Pass the RJ45 cable through the waterproof connector cover.
- ② Screw the waterproof seal into the waterproof connector bracket.
- ③ Pass the RJ45 cable through the waterproof connector bracket, and screw the waterproof connector bracket into the cover.
- ④ Put the waterproof sealing ring on the waterproof connector bracket.
- ⑤ Connect the RJ45 cable to WAN/LAN port.
- ⑥ Screw the connecting cable into the 2.4G and 5G antenna connector and screw up the connector.



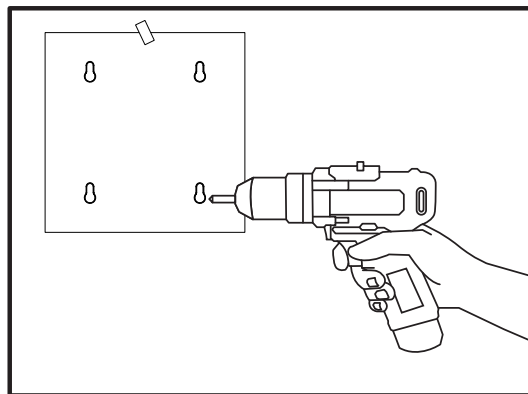
Note: Turn the wrench counterclockwise during assembly to tighten the bracket; Turn the wrench clockwise to loosen the bracket during disassembly.

2. Installation

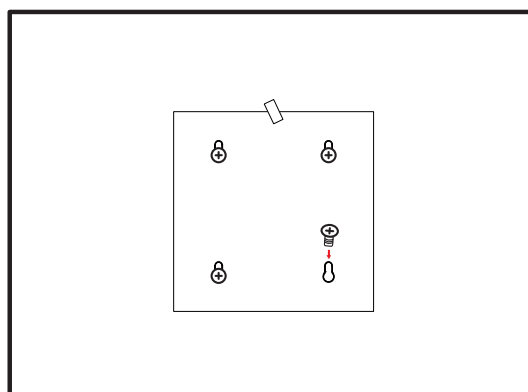
2.1 Outdoor Installation

Option1: Wall Mounting

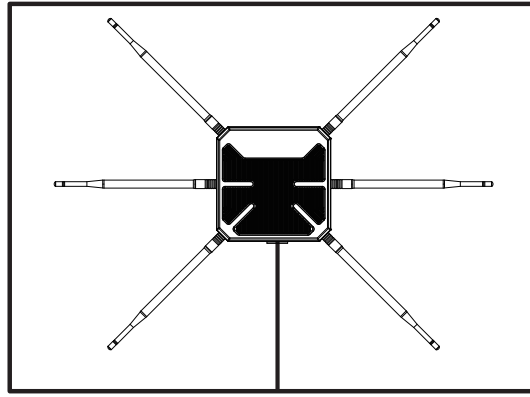
- ① Use a 6mm drill to make 4 holes of 2.5 cm depth in the wall according to the positioning card.



- ② Put the rubber plug into the hole and put in the screw. The screws should be left with a gap of about 5 mm.

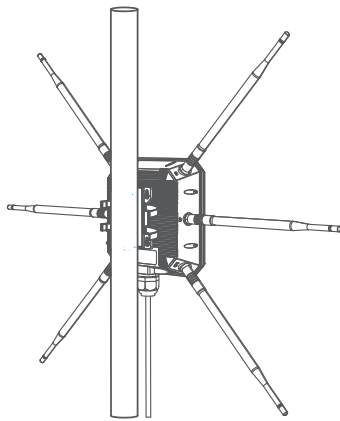


- ③ Hang the router to the screws through the wall mounting holes.

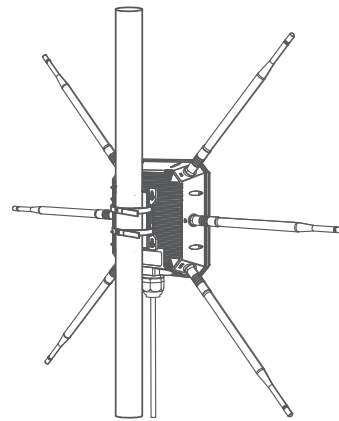


Option2: Pole Mounting

Fix the device to the post with cable ties, or fix the device to the wall with screws, then follow the assembly step to install.



Step 1: Thread the cable ties through the fixing point of the bracket.



Step 2: Fix the product to the post with cable ties.

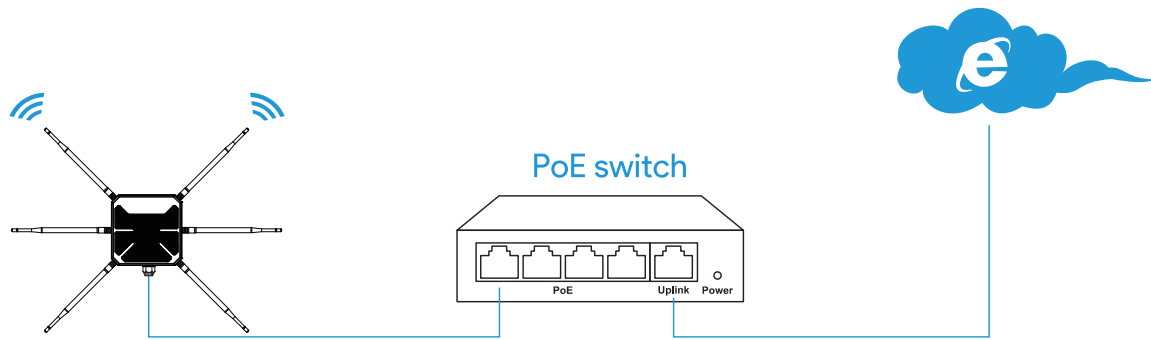
Note: If it is installed in an area where lightning occurs frequently, we recommend you to install the device via a ground connection to strengthen the lightning protection function.

Working Mode

This AP supports two work modes: FAT mode and FIT mode.
Here is a brief introduction to the two work modes:

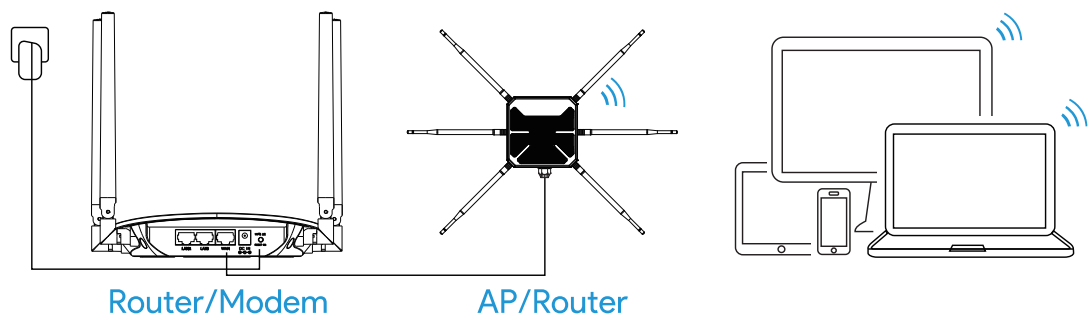
Case 1: FAT AP

- FAT mode means that the AP can be independently configured and has a separate management interface, just like a regular wireless AP.
- FAT mode is primarily used in small networks that do not use an AC Controller.

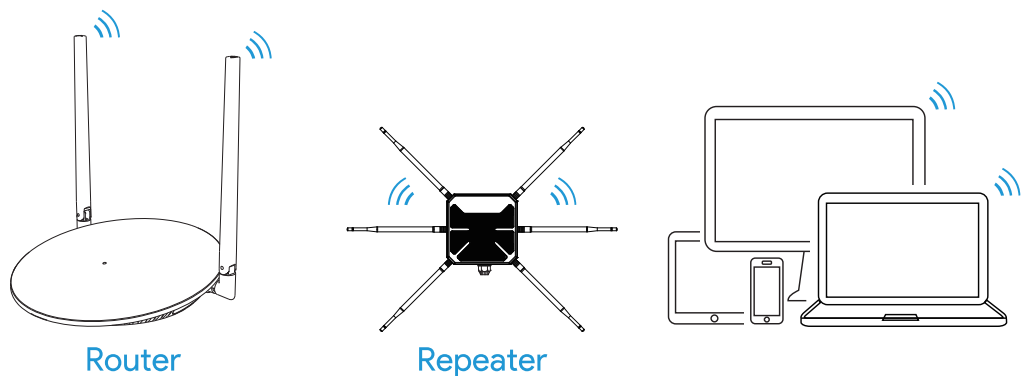


Here are several typical work modes for Fat AP:

AP/Router Mode



Repeater Mode

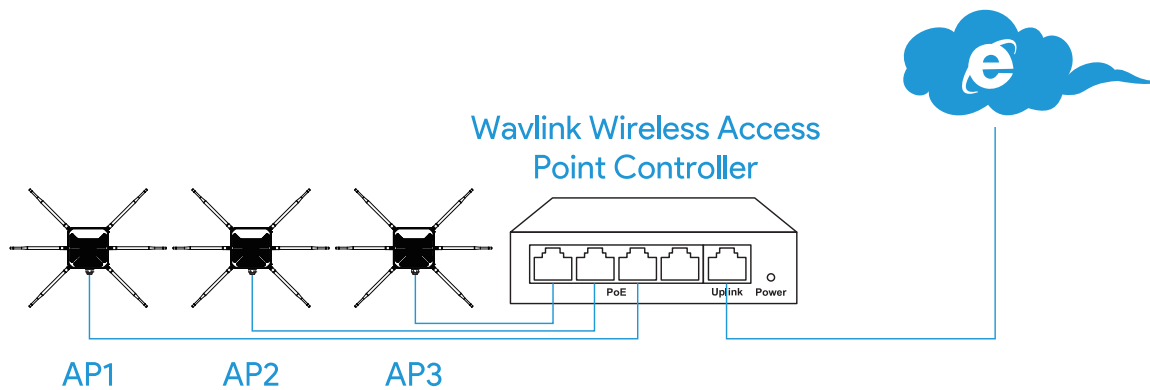


Case 2: FIT AP

FIT mode means that the AP is centrally controlled and managed by the WAVLINK AC (Wireless Access Point Controller).

If it work as a Fit AP , which is typically responsible only for data transmission and basic radio frequency management. All network decisions, configurations, security, and traffic control operations are handled by the WAVLINK AC Controller.

Fit APs are typically used in an AC+AP network architecture and can only be utilized with the WAVLINK wireless access point controller, as shown in the diagram below.

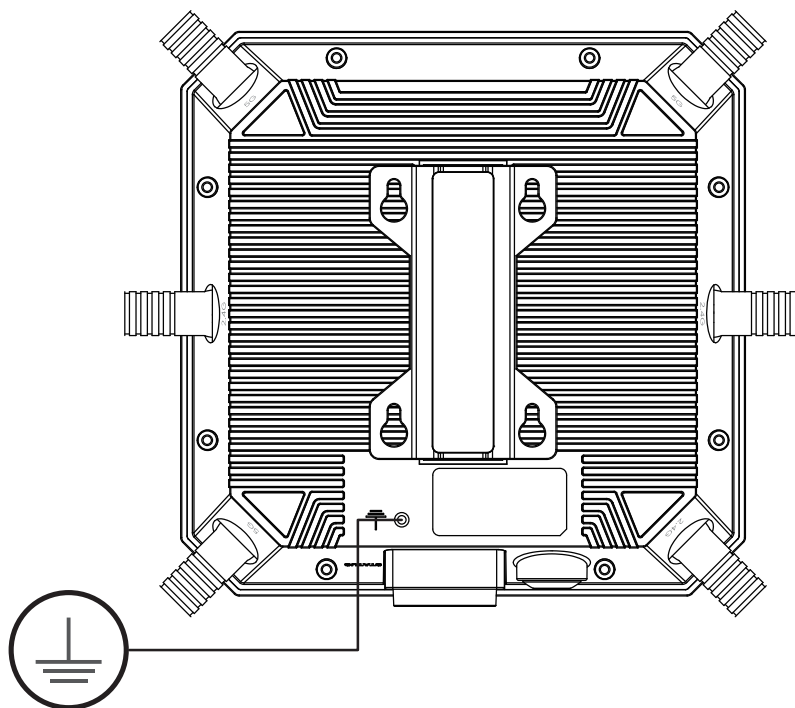


FIT mode is ideal for larger networks with broader coverage, a higher number of users, and a need for efficient network performance and enhanced security.

Lightning and ESD Protection

Lightning and ESD Protection is important for safety, so proper grounding is extremely important for outdoor devices.

To reduce potential damage from lightning strikes and ESD, please use a suitable grounding wire to connect the grounding terminal to the grounding facility before installing this product. And the grounding wire should meet the local installation requirements. You should use screws to secure the grounding wire to the grounding terminal.

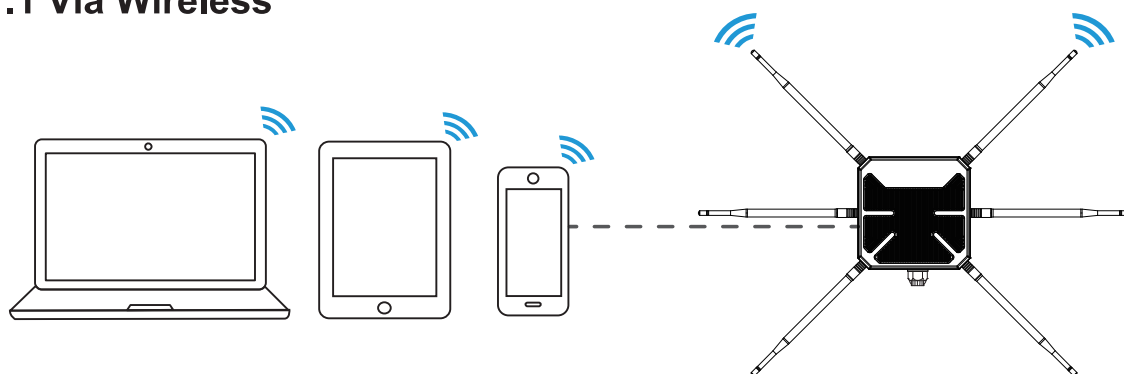


Grounding Terminal

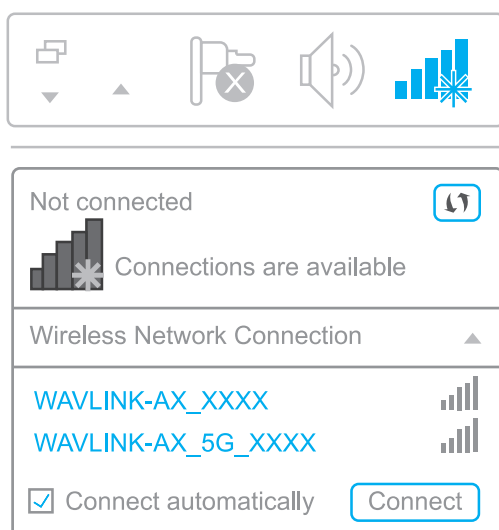
Configuration(FAT AP Mode)

1. Connect the device

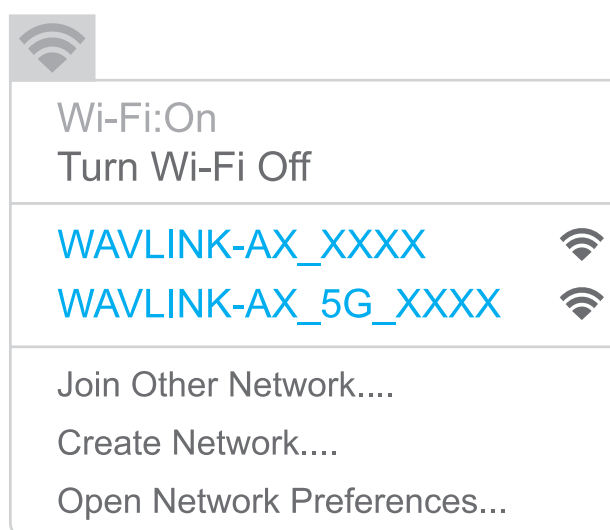
1.1 Via Wireless



- ① Disconnect the Ethernet cable from your computer (if you have one).
- ② Turn on your WiFi, find the SSID of this product on your wireless devices (smartphone, tablet computer, laptop, et.) and place a connection.

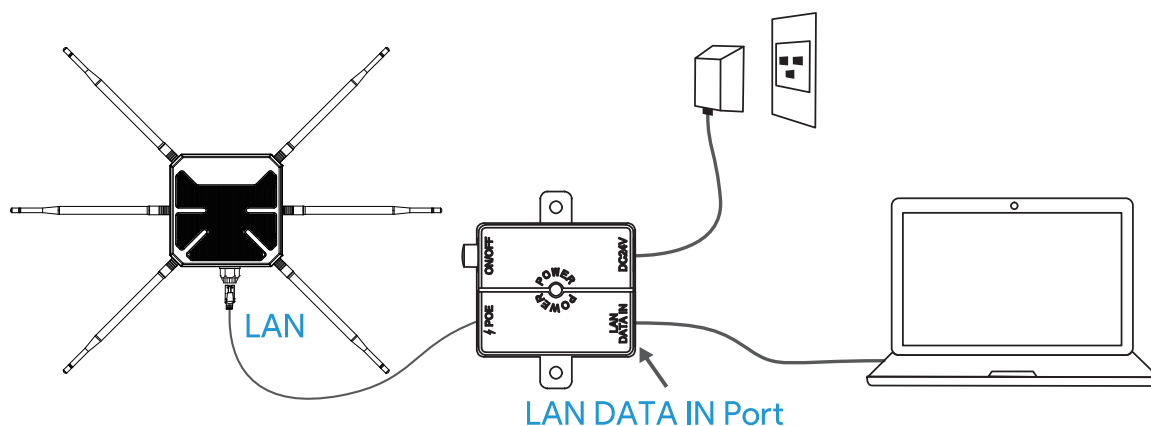


For Windows users



For Mac users

1.2 Via Cable



- ① Connect the Ethernet cable to your PC/Laptop and the LAN DATA IN port of your PoE converter, then you can start the configuration of the device.

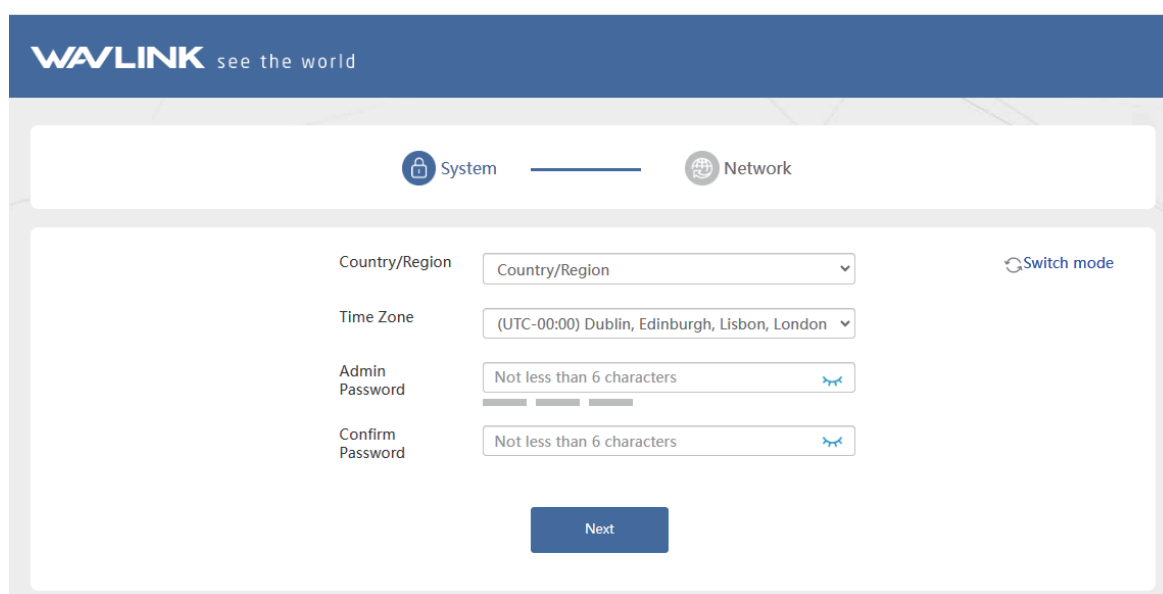
If you are using the AP/Router function of this device, please connect the LAN DATA IN Port to the LAN port of the upper router after finishing 4.1 and 4.3.

2. Normally the product web UI will guide you to the “login” page once you have connected to the device successfully in your first time, but if it doesn’t, please manually input 192.168.30.1 or <http://waplogin.link> in the URL bar (not the search bar) of your browser on PC/laptop or phone, the default password is [admin](#).



The image shows the WAVLINK login page. At the top is the WAVLINK logo with the tagline "see the world" and "Welcome to WAVLINK". Below this is a red text prompt: "Please set up this device first!". Underneath is a white input box with the placeholder text "Please enter your password". At the bottom is a blue "Login" button.

3. Select your **Country/Region** and **Time Zone**. For your network security, we suggest that you set a new login password.



The image shows the WAVLINK configuration page. At the top is the WAVLINK logo with the tagline "see the world". Below the logo is a navigation bar with "System" (selected) and "Network" tabs. The main content area has a "Switch mode" link. Below this are four fields: "Country/Region" (a dropdown menu), "Time Zone" (a dropdown menu showing "(UTC-00:00) Dublin, Edinburgh, Lisbon, London"), "Admin Password" (a text input field with a strength indicator and a "Not less than 6 characters" message), and "Confirm Password" (a text input field with a strength indicator and a "Not less than 6 characters" message). At the bottom is a blue "Next" button.

Note: The three colored bars in “**Admin Password**” area indicates the strength of the login password.

4. Mode Selection

This product has 5 modes. Click “**Switch mode**” to switch mode.

4.1 AP Mode

1. The system selects AP mode by default, there is no need to select the AP mode manually. Click on “**Next**”.
2. Connect the WAN/LAN port of this product to the poe and connect the lan data in port of the poe box to the host router via Ethernet cable. Then you can change the SSID or use the default one, the encryption mode recommend is **WPA2-PSK**. For your network security. please create a new password according to the rule. Then click on “**Save**” and wait for the setting process to complete.

 System

 Network

Smart DHCP Services

☒

SSID

WAVLINK-AX_50F2

Encryption Method

WPA2-PSK(Recommend) ▼

Password

Between 8~63 characters 

Back

Save

4.2 Repeater Mode

Click “**Switch mode**” and select **Repeater Mode**.

1. After scanning, please make sure the Wi-Fi you want to select is listed, and click “**Next**”, if it isn't, please click “**Rescan**”.

System

Network

Select WI-Fi

Manual Input

Please select the wireless signal to be relayed

5G/2.4G

WAVLINK_Touch

zh_h_debug_5G

WAVLINK-AX_5G_D483

WAVLINK_8914

202X3_2F16_5G

WAVLINK-Mesh_C1B0

WAVLINK-Mesh_586A_5G

Back

Rescan

Next

- Enter the password for the wireless network of you selected. Set the wireless network encryption mode and password for this device. Click **“Save”**.

System

Network

Superior wireless network information

Target Network Name

WAVLINK_8914

Target Network Password

Between 8~63 characters

Wireless network information of this device

Connection Type

Bridge-Recommend

2.4G Wi-Fi Name

WAVLINK_8914_EXT2.4G

2.4G Encryption

WPA2-PSK(Recommend)

2.4G Wi-Fi password

Between 8~63 characters

5G Wi-Fi Name

WAVLINK_8914_EXT5G

5G Encryption

WPA2-PSK(Recommend)

5G Wi-Fi password

Between 8~63 characters

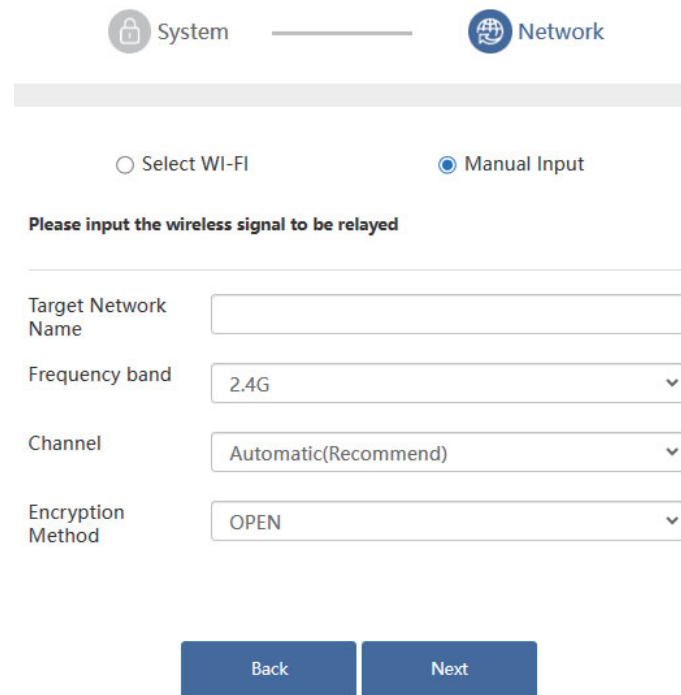
Back

Save

EN-10

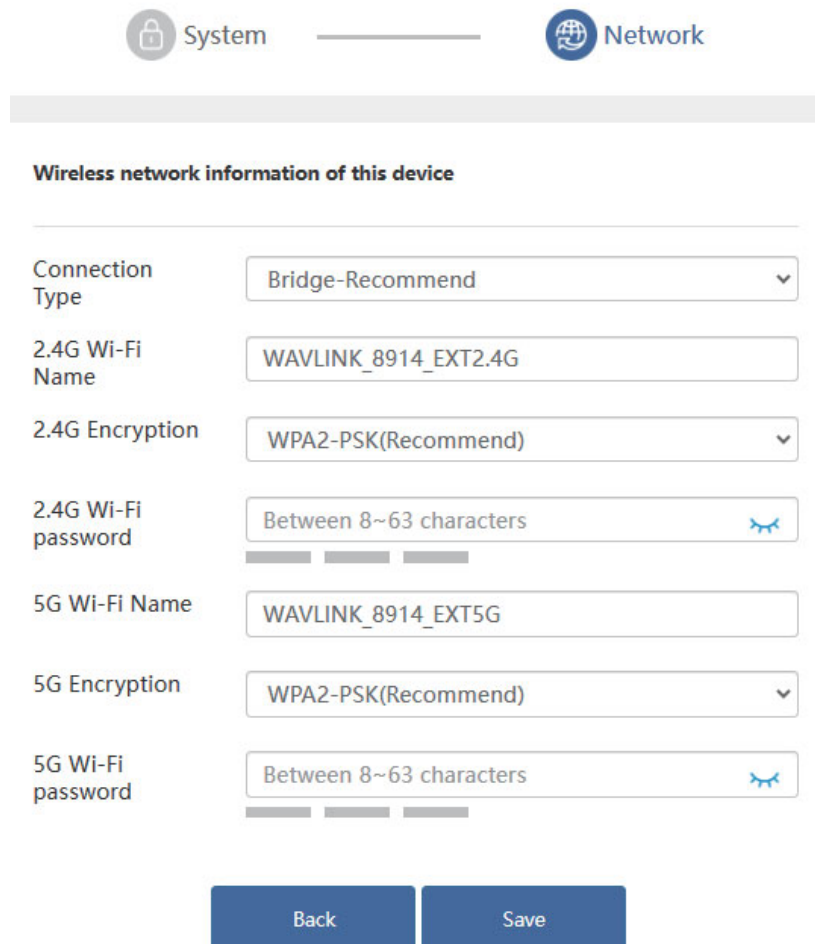
Manual Input:

1. Manually add the wireless network you want to connect, enter the device information, and click “**Next**”.



The screenshot shows the 'Manual Input' configuration screen. At the top, there are two tabs: 'System' (with a lock icon) and 'Network' (with a globe icon). The 'Network' tab is active. Below the tabs is a horizontal bar. Underneath, there are two radio buttons: 'Select WI-Fi' and 'Manual Input'. The 'Manual Input' radio button is selected. Below the radio buttons is the text 'Please input the wireless signal to be relayed'. There are four input fields: 'Target Network Name' (text box), 'Frequency band' (dropdown menu showing '2.4G'), 'Channel' (dropdown menu showing 'Automatic(Recommend)'), and 'Encryption Method' (dropdown menu showing 'OPEN'). At the bottom, there are two blue buttons: 'Back' and 'Next'.

2. Set the wireless network encryption mode and password for this device. Click “**Save**”.



The screenshot shows the 'Wireless network information of this device' configuration screen. At the top, there are two tabs: 'System' (with a lock icon) and 'Network' (with a globe icon). The 'Network' tab is active. Below the tabs is a horizontal bar. Underneath, there is the text 'Wireless network information of this device'. There are six input fields: 'Connection Type' (dropdown menu showing 'Bridge-Recommend'), '2.4G Wi-Fi Name' (text box showing 'WAVLINK_8914_EXT2.4G'), '2.4G Encryption' (dropdown menu showing 'WPA2-PSK(Recommend)'), '2.4G Wi-Fi password' (text box showing 'Between 8~63 characters' with a strength indicator and a toggle icon), '5G Wi-Fi Name' (text box showing 'WAVLINK_8914_EXT5G'), and '5G Encryption' (dropdown menu showing 'WPA2-PSK(Recommend)'). At the bottom, there are two blue buttons: 'Back' and 'Save'.

4.3 Mesh Router Mode

1. Click on “**Switch mode**”, then choose “**Mesh Router Mode**”.
2. Before configuring, please make sure your upper router has connected to the WAN/LAN port of this product. The system will guide you to select the **WAN Type**. As for the **Encryption Mode**, we recommend you to select **WPA2-PSK**. For you network security, we suggest you create a **Password**.

 System

 Network

Wan Type

DHCP

SSID

WAVLINK-AX_50F2

Encryption Method

WPA2-PSK(Recommend)

Password

Between 8~63 characters

Back

Save

Which WAN Type am I supposed to choose?

If you use DSL line and you are only provided an account name and a password by your ISP, choose **PPPoE**. If you use cable TV or fiber cable, choose **DHCP(Dynamic IP)**. If you are provided information such as IP address, Subnet Mask and Default Gateway, choose **Static IP**.

4.4 Mesh AP Mode

1. Click “**Switch mode**”, and choose “**Mesh AP Mode**”.
2. Before configuration, connect this product’s WAN/LAN port to the PoE. The PoE switch’s LAN port connects to the upper router. You can change the WiFi name or use the default WiFi name. WPA2-PSK is recommended for the encryption method. For network safety, set a new password, then click on “**Save**” and wait for the configuration to complete.

The screenshot shows the 'Network' configuration page. At the top, there are two tabs: 'System' (with a lock icon) and 'Network' (with a globe icon). The 'Network' tab is active. Below the tabs, there is a horizontal bar. Underneath, the 'Smart DHCP Services' toggle is turned on. The 'SSID' field contains 'WAVLINK-AX_50F2'. The 'Encryption Method' dropdown is set to 'WPA2-PSK(Recommend)'. The 'Password' field has a placeholder 'Between 8~63 characters' and a strength indicator. At the bottom, there are 'Back' and 'Save' buttons.

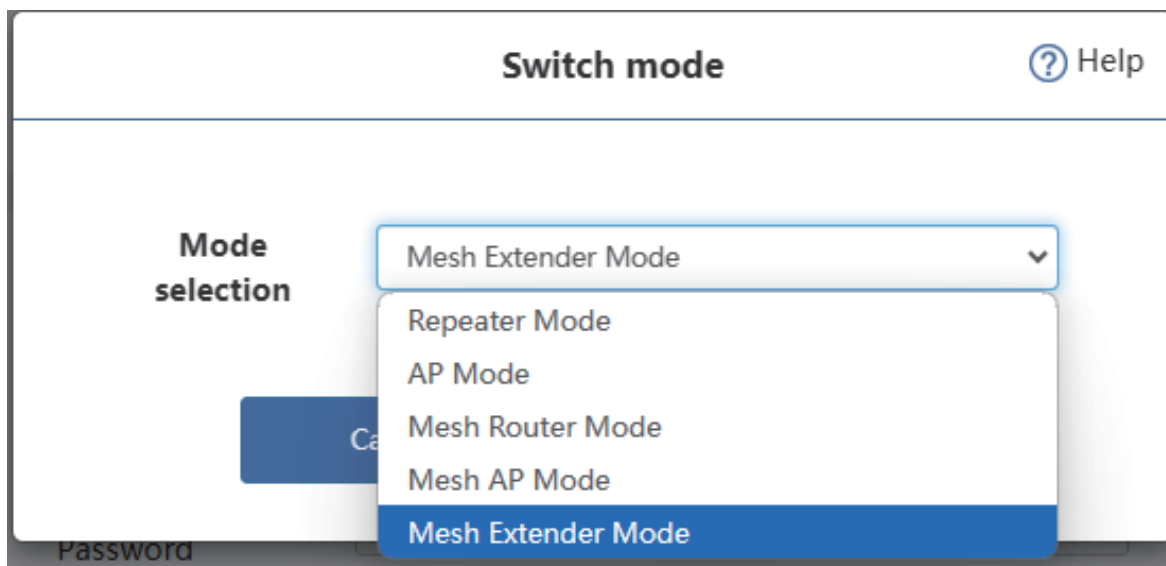
4.5 Mesh Extender Mode

If you have a router that supports WAVLINK Everything Mesh function, then you can build a mesh system with this mode.

1. Click on “**Switch mode**”.

The screenshot shows the 'Network' configuration page for Mesh Extender Mode. At the top, there is a blue header with the 'WAVLINK see the world' logo. Below the header, there are two tabs: 'System' (with a lock icon) and 'Network' (with a globe icon). The 'Network' tab is active. Below the tabs, there is a horizontal bar. Underneath, the 'Country/Region' dropdown is set to 'Country/Region'. The 'Time Zone' dropdown is set to '(UTC-00:00) Dublin, Edinburgh, Lisbon, London'. The 'Admin Password' field has a placeholder 'Not less than 6 characters' and a strength indicator. The 'Confirm Password' field also has a placeholder 'Not less than 6 characters' and a strength indicator. At the bottom, there is a 'Next' button. A 'Switch mode' link is visible in the top right corner.

2. Please choose “**Mesh Extender Mode**”.



3. Select your **Country/Region** and **Time Zone**. Enter the **Admin Password**. Click on “**Start Pairing**”.

A screenshot of the "System" configuration page. At the top, there are two tabs: "System" (active, with a lock icon) and "Network" (with a globe icon). Below the tabs is a horizontal progress bar. The form contains four fields: "Country/Region" with a dropdown menu showing "EU"; "Time Zone" with a dropdown menu showing "(UTC+01:00) Amsterdam, Berlin, Bern, Rome, St"; "Admin Password" with a text input field containing six dots, a strength indicator bar (red, grey, grey), and an eye icon; and "Confirm Password" with a text input field containing six dots and an eye icon. At the bottom is a blue button labeled "Start Pairing".

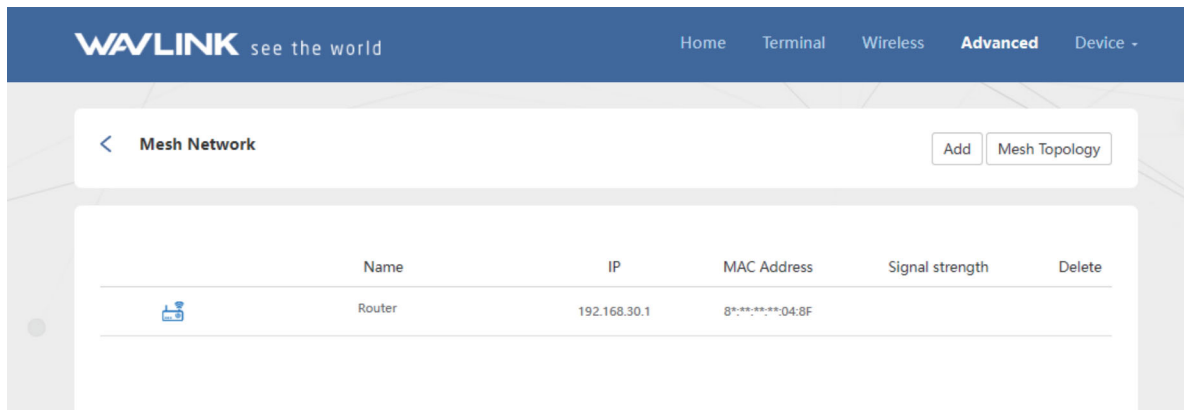
When the device enters the pairing state, please Keep pressing the PAIR button 2s of the primary router or add the mesh device in the primary router configuration page, the pairing time is expected to be 2 minutes. If the pairing fails, check whether the primary router is set correctly, and then enable re-pairing via the pairing button or re-enter this device page. If you want to switch to another mode when you have successfully configured Mesh Extender Mode, please reset this device.

More Mesh Devices

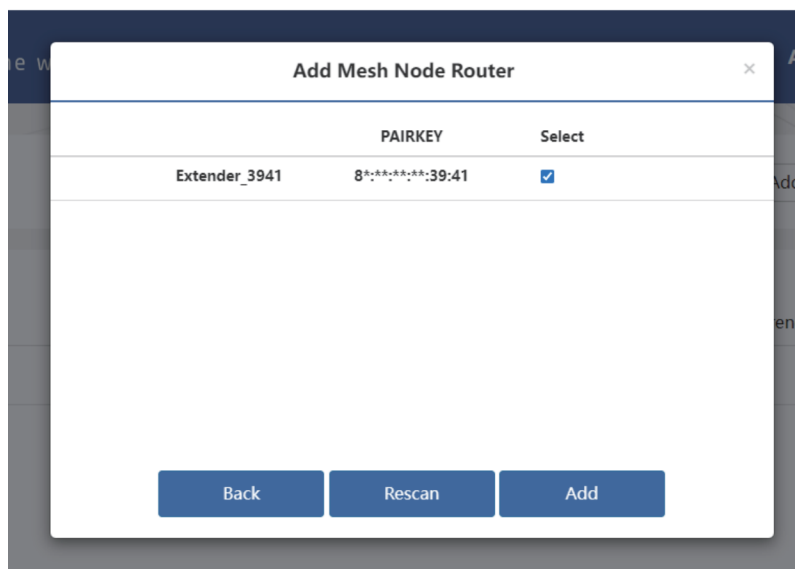
If you need to add more mesh devices to build up a stronger network in your home. You simply need to pair the new mesh devices with the existing network.

Pairing on the Web

1. Log in to waplogin.link or 192.168.30.1.
2. “**Advanced**” -> “**Mesh Network**”.
3. Click on “**Add**” and then follow the prompts on the screen.



4. After scanning, please make sure the device you want to add is listed, and click “**Add**”. If not, make sure the Mesh extender to be added is in a paired state. Click: “**Rescan**”.



Pairing with Pair Button

After configuring the main router and when the main router has the network, press and hold the pair button for both the main router and the mesh extender for 2 seconds. When LED lights become solid blue, the pairing process is successfully completed.

Q1. Why doesn't the login page appear after entering <http://waplogin.link>?

- If your computer is wirelessly connected, please verify that you have connected to the device's SSID. If your computer is connected via an Ethernet cable, please verify that the connection is stable.
- Make sure your computer is set to obtain an IP address automatically.
- Use the IP address to log in to the page. The default IP is 192.168.30.1. If the device is connected to the host Wi-Fi, please go to the router's DHCP client list to obtain the device's current IP address.
- If the problem still exists, please reset the device again.

Q2. How do I restore the device to its factory default settings?

- While the device is powered on, press and hold the **Reset Button** until all the LEDs turn on momentarily.

Q3. What should I do if the LED does not change to solid after completing?

- You may have entered the incorrect Wi-Fi password of your host Wi-Fi during the configuration. Please log into the device's web-based interface to check the password and try again.
- Reset the device and go through the configuration again.

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<http://www.gnu.org/licenses/old-licenses/lgpl-2.0.html>

<http://www.gnu.org/licenses/gpl.html>

WEEE Directive & Product Disposal



At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

Need help?

We're here for you!



Online support: wavlink.com

Available Mon-Fri 8:30 am-5:30pm (UTC+8)



support@wavlink.com

Available Mon-Fri 8:30 am-5:30pm (UTC+8)



+1 8889730883 (US Local)

Mon-Fri 9:00 am - 10:00 pm (UTC-5)

www.wavlink.com



**Thank you for purchasing
WAVLINK product!**

FCC 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.

Note: 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 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 or more 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device must operate with a minimum distance of 20 cm between the radiator and user body.