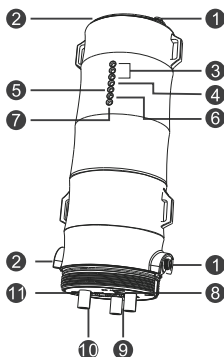
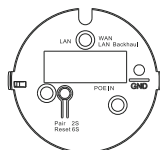


## Hardware Overview



Top view



Bottom view

- ① 2.4G RP-SMA Antenna Connectors
- ② 5G RP-SMA Antenna Connectors
- ③ 3 x Wi-Fi Signal LEDs
- ④ Status LED
- ⑤ WAN/LAN Backhaul LED

- ⑥ LAN LED
- ⑦ POWER LED
- ⑧ Reset/PAIR Button
- ⑨ LAN Port
- ⑩ WAN(PoE IN)/LAN Backhaul
- ⑪ Grounding Terminal

\* This product supports 802.3 AT/AF Active PoE and Passive PoE to supply power.

## Default Parameters

Web: <http://waplogin.link>

Default IP: [192.168.30.1](http://192.168.30.1)

Login Password: [admin](#)




2.4G SSID: [WAVLINK-N\\_XXXX](#)




5G/AC SSID: [WAVLINK-AC\\_XXXX](#)

## LED Indicators

<b>Power</b>	On	The device is powered on.
	Off	The device is not receiving electrical power.
<b>LAN</b>	On	The Ethernet port is connected.
	Off	The Ethernet port is disconnected.
<b>WAN/LAN Backhaul</b>	On	The Ethernet port is connected.
	Off	The Ethernet port is disconnected.
<b>Status</b>	Fast flash	Another router has not been connected when the device is in the repeater mode.
	Slow flash	The another router has been connected but the device has no access to the network in the repeater mode.
	On	The device keeps on in the AP mode; The device can access the network normally.

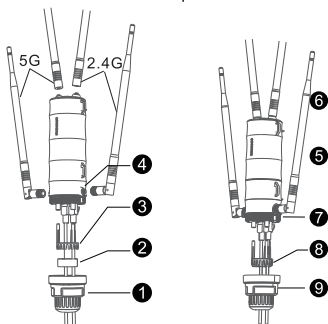
## Wi-Fi Signal

Mode				Description
<b>AP</b>	ON	ON	ON	Wi-Fi signal output power 100%.
<b>Repeater</b>	ON	ON	ON	Better reception: signal 81%~100%.
	ON	ON	OFF	Good reception: signal 60%~80%.
	ON	OFF	OFF	Weak reception: signal below 0~59%.

Mode				Description
<b>Mesh Router</b>	ON	ON	ON	Wi-Fi signal output power 100%.
<b>Mesh Extender</b>	ON	ON	ON	Better reception: signal 81%~100%.
	ON	ON	OFF	Good reception: signal 60%~80%.
	ON	OFF	OFF	Weak reception: signal below 0~59%.

# Installation

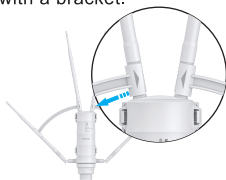
1. Please follow the installation steps when assembling the device.



- ① Pass RJ45 cable through the spiral cover
- ② Pass RJ45 cable through the rubber seal
- ③ Pass RJ45 cable through the holder
- ④ Connect the RJ45 cable to PoE IN/WAN port.
- ⑤ Spin 2.4G antenna into the 2.4G external RP-SMA connector
- ⑥ Spin 5G antenna into the 5G external RP-SMA connector
- ⑦ Screw the holder
- ⑧ Plug the rubber seal to the holder
- ⑨ Screw the spiral cover
- ⑩ Secure the antenna with a bracket.

## 2. Antenna bracket installation

- 1) Place the arrow pattern on the bracket snap toward the two antennas in the center.
- 2) Secure the antenna with a bracket.



## 3. Install the device.

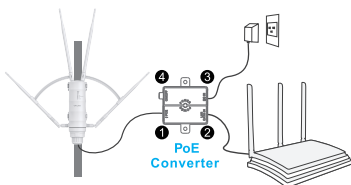
- 3.1 Firstly fasten the device to somewhere firm, then install the device in the holder.



## Remark

If you happen to live in the zone where lightning happens a lot, we suggest that you install the device through grounding connection in order to strengthen the lightning-resistant function.

3.2 Now please follow the steps below.



- 1) Connect the **"PoE"** port of PoE converter to the PoE IN(WAN) port of the device.
- 2) Connect **"LAN DATA IN"** to **"LAN"** of your router.
- 3) Plug in the device through the power adapter.
- 4) Push the **"ON/OFF"** button to turn on or off the device.

### Attention

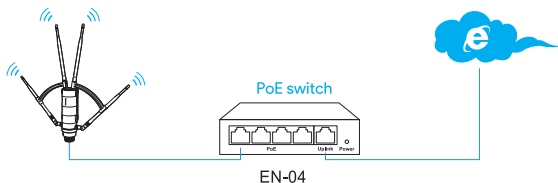
- 1) Ensure that you use a certified CAT5e/CAT6 Ethernet cable with RJ45 connectors.
- 2) Make sure the length of the Ethernet cable from PoE to the device is less than 100 meters (328ft).

## 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

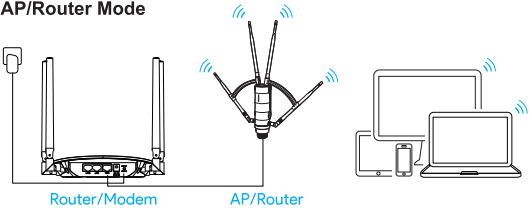
- FAT mode means that the AP can be independently configured and has a separate management interface, just like a regular wireless AP.
- FAT mode is primarily used in small networks that do not use an AC Controller.



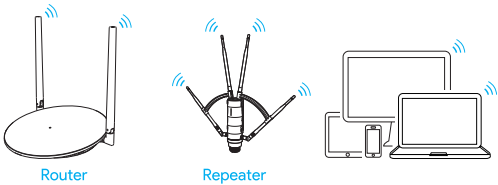


Here are several typical work modes for Fat AP:

**AP/Router Mode**



**Repeater Mode**

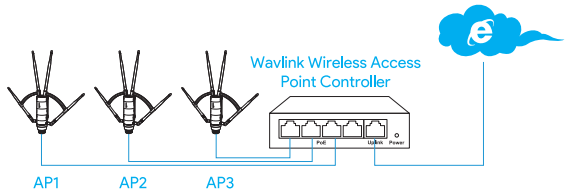


**Case 2: FIT AP**

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

If it works 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.

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.

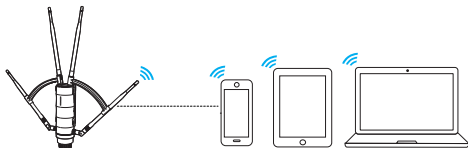


FIT mode is ideal for larger networks with broader coverage, a higher number of users, and a need for efficient network performance and enhanced security.

## Configuration(FAT AP Mode)

### 1. Connection

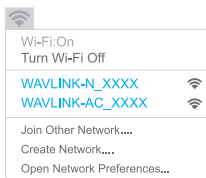
#### 1.1 Via Wireless



Turn on your Wi-Fi, search SSID of this product on your wireless devices (smart phone, tablet computer, laptop, etc.) and connect to it.

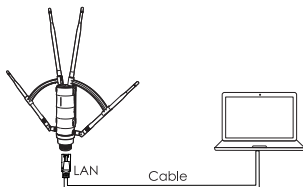


**For Windows users**



**For Mac users**

#### 1.2 Via Cable



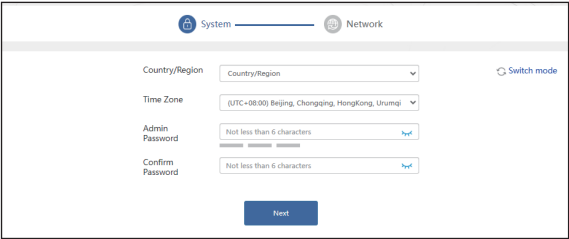
Connect Ethernet cable to your PC/laptop and device's LAN port, then you can start configuring the device.

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 <http://waplogin.link> in the address 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". Below the logo, it says "Welcome to WAVLINK". A red message states "Please set up this device first!". There is a text input field with the placeholder "Please enter your password" and a blue "Login" button below it.

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

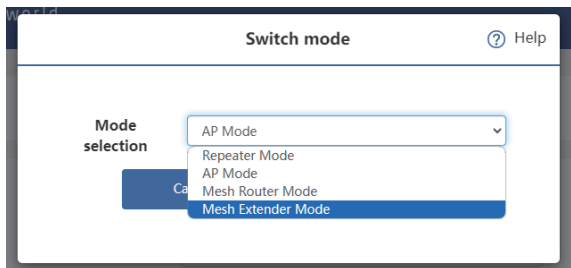


The image shows the WAVLINK System configuration page. At the top, there are two tabs: "System" (selected) and "Network". Below the tabs, there are four configuration items: "Country/Region" with a dropdown menu, "Time Zone" with a dropdown menu, "Admin Password" with a text input field and a strength indicator (three colored bars), and "Confirm Password" with a text input field and a strength indicator. A "Switch mode" link is located to the right of the Country/Region dropdown. A blue "Next" button is at the bottom.

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

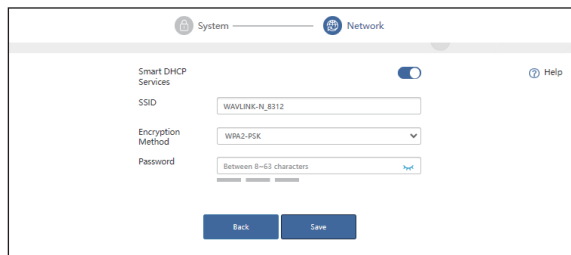
## 4. Mode Selection

This product has 4 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.



## 4.2 Repeater Mode

1. Click **"Switch Mode"** and select Repeater Mode.
2. 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_Guest_5G	<input type="radio"/>
	WAVLINK-AC_5854	<input type="radio"/>
	WAVLINK-Mesh_2366	<input type="radio"/>
	WAVLINK_Guest	<input type="radio"/>
	Wireless-AC_8294	<input type="radio"/>
	WAVLINK-AC_6532	<input type="radio"/>
	MeshCo_0000	<input type="radio"/>

Back Rescan Next

3. Enter the password for the wireless network of your selected. Set the wireless network encryption mode and password for this device. Click **"Save"**.

System Network

Superior wireless network information

Superior Network Name WAVLINK-AC\_5854

Password

Wireless network information of this device

Connection Type WISP-Recommend

2.4G Wi-Fi Name WAVLINK-AC\_5854\_EXT2.4G

2.4G Encryption WPA2-PSK(Recommend)

2.4G Wi-Fi password Between 8-63 characters

5G Wi-Fi Name WAVLINK-AC\_5854\_EXT5G

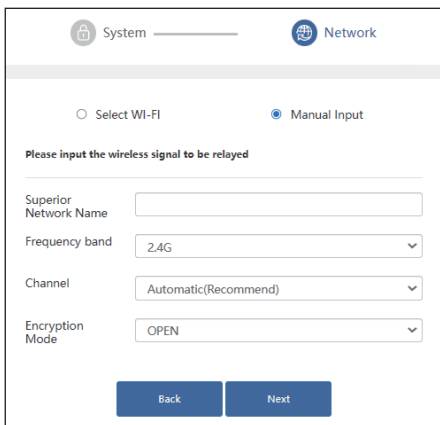
5G Encryption WPA2-PSK(Recommend)

5G Wi-Fi password Between 8-63 characters

Back Save

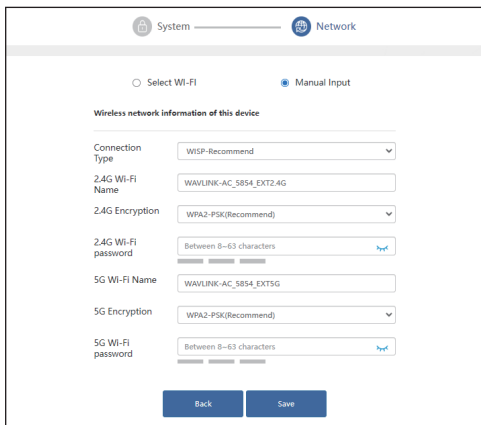
## Manual Input:

1. Manually add the wireless network you want to relay, enter the device information, and click "**Next**".



The screenshot shows a web interface with two tabs: "System" and "Network". The "Network" tab is active. Below the tabs, there are two radio buttons: "Select WI-FI" and "Manual Input". The "Manual Input" option is selected. Below the radio buttons, there is a heading "Please input the wireless signal to be relayed". Under this heading, there are four input fields: "Superior Network Name" (a text box), "Frequency band" (a dropdown menu with "2.4G" selected), "Channel" (a dropdown menu with "Automatic(Recommend)" selected), and "Encryption Mode" (a dropdown menu with "OPEN" selected). At the bottom of the form, there are two blue buttons: "Back" and "Next".

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

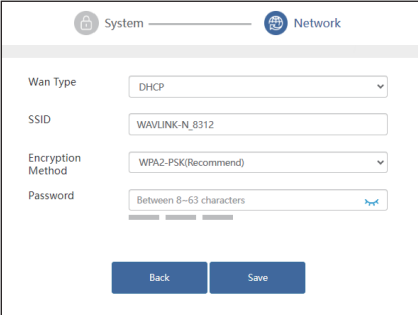


The screenshot shows the same web interface as the previous one, but now the "Manual Input" option is selected. Below the radio buttons, there is a heading "Wireless network information of this device". Under this heading, there are seven input fields: "Connection Type" (a dropdown menu with "WISP-Recommend" selected), "2.4G Wi-Fi Name" (a text box with "WAVLINK-AC\_5854\_EXT2.4G" entered), "2.4G Encryption" (a dropdown menu with "WPA2-PSK(Recommend)" selected), "2.4G Wi-Fi password" (a text box with "Between 8-63 characters" and a strength indicator), "5G Wi-Fi Name" (a text box with "WAVLINK-AC\_5854\_EXT5G" entered), "5G Encryption" (a dropdown menu with "WPA2-PSK(Recommend)" selected), and "5G Wi-Fi password" (a text box with "Between 8-63 characters" and a strength indicator). At the bottom of the form, 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.

You can add more devices that support WAVLINK Everything Mesh for networking in Mesh Router mode, refer to 5 for adding method.



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 are four configuration fields: 'Wan Type' with a dropdown menu showing 'DHCP'; 'SSID' with a text box containing 'WAVLINK-N\_8312'; 'Encryption Method' with a dropdown menu showing 'WPA2-PSK(Recommend)'; and 'Password' with a text box containing 'Between 8-63 characters' and a strength indicator. At the bottom, there are two blue buttons: 'Back' and 'Save'.

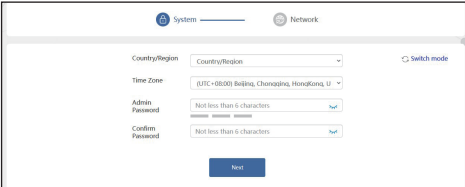
#### Which WAN Type am I supposed to choose?

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 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**". Then choose "**Mesh Extender Mode**".



The screenshot shows the 'Network' configuration page for Mesh Extender Mode. 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 are four configuration fields: 'Country/Region' with a dropdown menu showing 'Country/Region'; 'Time Zone' with a dropdown menu showing '(UTC+08:00) Beijing, Chongqing, HongKong, U'; 'Admin Password' with a text box containing 'Not less than 6 characters' and a strength indicator; and 'Confirm Password' with a text box containing 'Not less than 6 characters' and a strength indicator. At the bottom, there is a blue button labeled 'Next'.

2. Select your Country/Region and Time Zone. Enter the Admin Password. After click **"Start Pairing"**, follow 5 to add this device on the primary router.

System

Network

Country/Region

Global

Time Zone

(UTC-00:00) Dublin, Edinburgh, Lisbon, London

Admin Password

\*\*\*\*\*

Confirm Password

\*\*\*\*\*

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.

5. 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 <http://waplogin.link>.
2. **"Advanced"** -> **"Mesh Network"**.
3. Click on **"Add"** and then follow the prompts on the screen.

WAVLINK see the world

HomeTerminalWirelessAdvancedDevice -

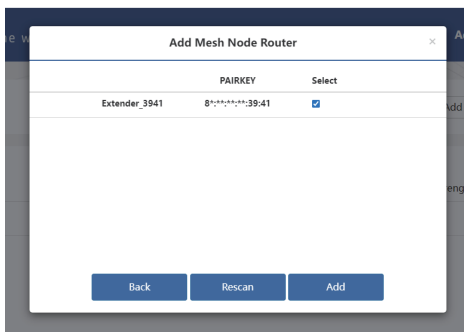
< Mesh Network

AddMesh Topology

	Name	IP	MAC Address	Signal strength	Delete
	Router	192.168.30.1	80-***-***-04:8F		

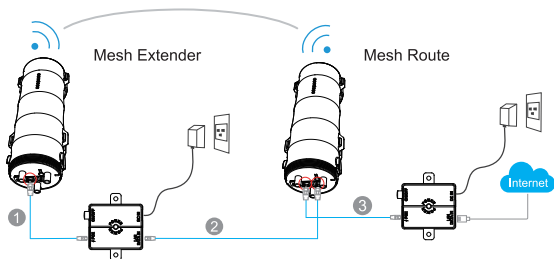


4. After scanning, please make sure the device you want to add is listed, and click **"Add"**. If not, make sure the Mesh extender to be added is in a paired state. Click **"Rescan"**.



### 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.



## Wi-Fi Password Management

When you need to change your Wi-Fi password, please click on **"Wireless"**.

WAVLINK see the world
Home Terminal Wireless Advanced Device

Enable it to make 2.4G and 5G Wi-Fi dual bands in one SSID. The router will automatically select the faster Wi-Fi band for you. If you disable it, you can set up the dual bands separately.
Help


Wi-Fi
SSID
WAVLINK-N\_8312
Encryption Method
WPA2-PSK(Recommend)
Password
\*\*\*\*\*
Save

## Firmware Upgrade

If you need to update firmware, please proceed as the following steps:

### Option I

#### Local Upgrade

1. Download the latest firmware file.
2. Extract the firmware from the downloaded file.
3. Log in to <http://waplogin.link> then choose “**Advanced**” and select “**Firmware Update**”.
4. Click on  to locate the extracted firmware file.
5. Click on “**Upload**” and choose “**Apply**”, and wait for the firmware upgrade process to complete.

WAVLINK see the world
Home Terminal Wireless Advanced Device

Firmware Update

Local Upgrade

Manually download files on WAVLINK official website, and upload and upgrade locally. The following devices are of the same model.

<input type="checkbox"/>	Mesh Node Name	Current SW Version
<input type="checkbox"/>	Router	M72HP3_V000000X

Upgrade File
Choose File
Upload

Manually download files on WAVLINK official website, and upload and upgrade locally. The following devices are of the different model and need to be upgraded after clicking on the link.

Mesh Node Name	Current SW Version	Upgrade Link
----------------	--------------------	--------------

## Option II

### Online Upgrade

1. Log in to <http://waplogin.link> then choose “Advanced” and select “Firmware Update”.
2. Select the Mesh Node Name that needs to be upgraded.

Online Upgrade

In the case of connecting to the network, then check the device that needs to be upgraded, after checking the latest software version, click one-click upgrade to upgrade.

<input type="checkbox"/>	Mesh Node Name	MAC Address	Current SW Version	Latest Software Version	Status
<input type="checkbox"/>	Router	88-88-88-88-04-8F	M72HF3_V0000000	No New Version	Non-Upgradable

Check New VersionOne-Click Upgrade

**Note:** After updating firmware, please Reset The Device And Clear Your Browser Cache.

### What is firmware upgrade and why do I need it?

Firmware contains fixed for bugs and new features, please keep the latest firmware to improve the experience of using the product. Please do not use the wrong firmware, otherwise, it will damage your device and void the product warranty.

For more details, please visit our website [www.wavlink.com](http://www.wavlink.com)

Our Technical Support: [support@wavlink.com](mailto:support@wavlink.com)

## FAQ

### Q1. What can I do if I can not access the Internet?

- Make sure your Internet works normally, please contact your ISP(Internet Service Provider) if it doesn't.
- Initiate your browser, enter <http://waplogin.link>, then set up the following quick start guide.
- Reboot your device and try it again.

### Q2. Why can't I visit the web UI by inputting

#### <http://waplogin.link>?

- If you can't log in to URL in AP Mode, please check the IP address arranged by the upstream router, then try to restart the process.
- Make sure you have connected to the WiFi of the Wavlink device.
- Please try to clean the cache of the browser.
- Try to log in the management page via another browser.
- Try to log in the management page via other devices.

### Q3. What can I do if I forget my administration management password?

- Please reset the device, the default password is [admin](#).

#### **Q4. How do I find the best location for mesh devices?**

- Please put your mesh devices in a relatively open space to avoid obstacles such as metal objects, reinforced concrete walls and so on.

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The source code should be complete, if you want us to provide any additional source code files under GNU General Public License (GPL) please contact us in these matters. We are committed to meeting the requirements of the GNU General Public License (GPL). You are welcome to contact our local office to get the corresponding software and licenses. Please inform us of your contact details (full address) and the product code. We will send you a software package with the software and license for free.

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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](https://wavlink.com)**

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



**[support@wavlink.com](mailto: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](https://www.wavlink.com)**



**Thank you for purchasing  
WAVLINK product!**