see the world

BE5100 WiFi7 Outdoor AP

Model: AERIAL BE51

@WavlinkOfficial

@WavlinkTechSupport

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About This Guide

This guide is a complement to Quick Installation Guide. The Quick Installation Guide provides instructions for quick internet setup, while this guide contains details of each function and demonstrates how to configure them.

When using this guide, please notice that features of the router may vary slightly depending on the model and software version you have, and on your location, language, and internet service provider. All screenshots, images, parameters and descriptions documented in this guide are used for demonstration only.

Conventions

In this guide the following conventions are used :

Convention	Description
Underlined	Underlined words or phrases are hyperlinks. You can click to redirect to a website or a specific section.
Teal	The content and text that needs to be emphasized on the web page is the theme color `#1D428A` , including menus, items, buttons, etc.
>	The menu structures to show the path to load the corresponding page. For example,**More > Network > Mode Selection** means the Mode Selection function page is under the Network menu that is located in the More tab.
Note:	Do not ignore this type of comment, it is to remind you to better use the device, to avoid the operation of the error that will cause the function to be invalid.
Tips:	Indicates important information that helps you make better use of your device.

More Info

The latest software, management app and utility are available from the Download Center at **https://docs.wavlink.xyz/Firmware/** .

A quick installation guide can be found in this guide.

Specifications can be found on the product page at **https://docs.wavlink.xyz/**.

If you encounter any issues, please don't hesitate to email **contact@wavlink.com / techsupport@wavlink.com / postsales@wavlink.com** to provide feedbacks or contact online customer service, thank you !

Speed/Coverage Disclaimer

*Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage are not guaranteed and will vary as a result of 1) environmental factors, including building materials, physical objects, and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead, and 3) client limitations, including rated performance, location, connection, quality, and client condition.

Overview

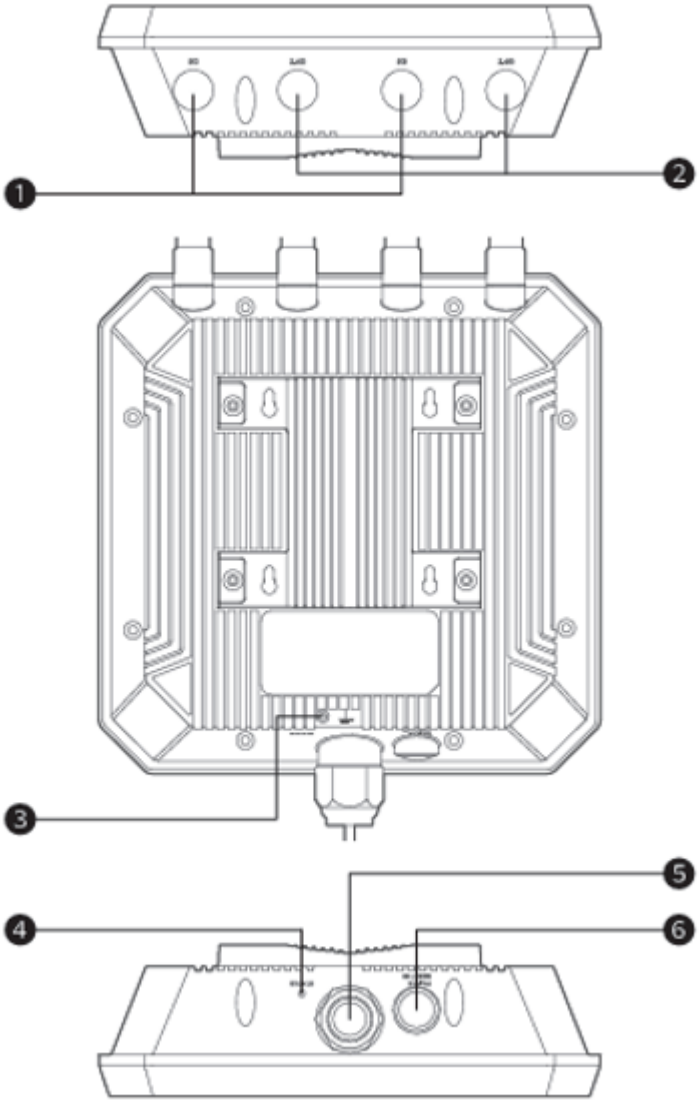
This chapter contains the following sections:

• Overview

• LED Indicators

• Basic Info

Overview



① 5G Antenna Port

② 2.4G Antenna Port

③ Grounding Terminal

④ Status LED

⑤ WAN/LAN Port (PoE)

⑥ Pair/Reset Button

1. Reset Button: Press and hold for 6 seconds to reset the device.

2. Pair Button: Press and hold for 1 second to pair.

LED Indicators

Mode	LED Status (Blue)	Description
AP	Solid on	The device has connected/disconnected to the Internet.
Mesh AP/ Mesh Router	Slow blinking	The device is pairing.
	Solid on	The device has connected to the upstream router and the Internet has been connected.
	Fast blinking	No Internet.
Repeater	Slow blinking	The device has connected to the upstream router but has 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	Solid blinking	No Internet/ The device is pairing.
	Solid on	The device has connected to the Internet.

Basic Info

Default IP: **http://192.168.30.1**

Login: **http://waplogin.link**

2.4G SSID: **WAVLINK-BE_XXXX**

5G SSID: **WAVLINK-BE_5G_XXXX**

Installation

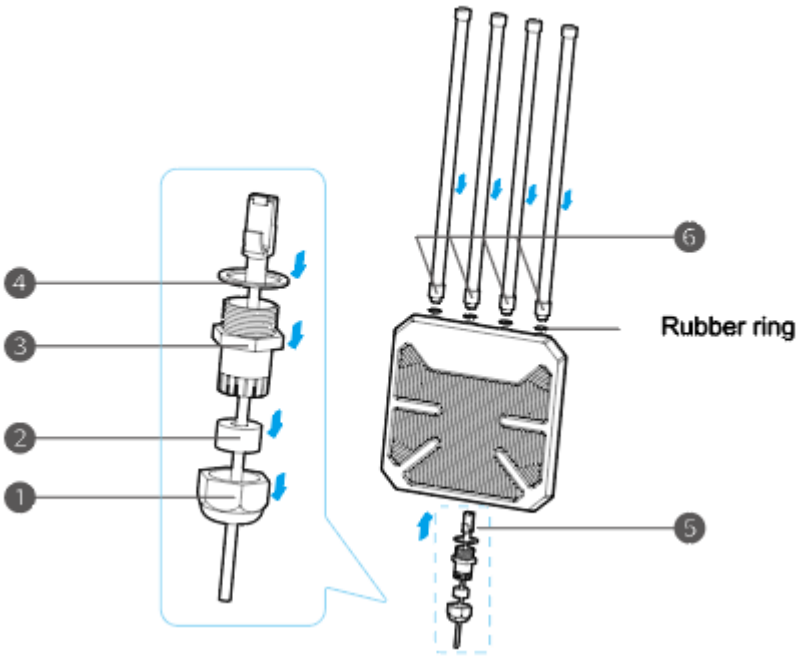
This chapter contains the following sections:

• Assembly

• Installation

Installation

1.Assembly



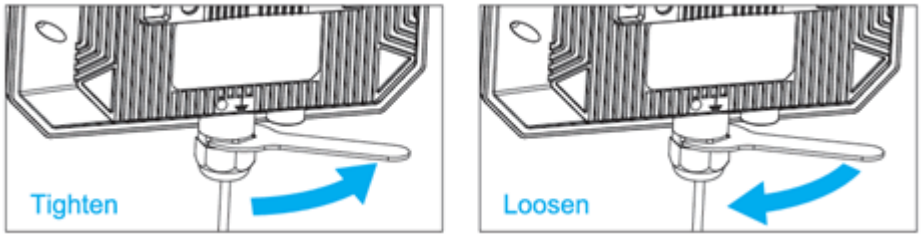
① Pass the Ethernet cable through the hex cap.

② Pass the Ethernet cable through the sealing plug.

③ Pass the Ethernet cable through the hex stud.

④ Pass the Ethernet cable through the sealing ring.

⑤ Connect the Ethernet cable to the WAN/LAN port, screw the hex stud, insert the sealing plug into the hex stud, and screw the hex cap counterclockwise to tighten the waterproof connector using the wrench.



NOTE

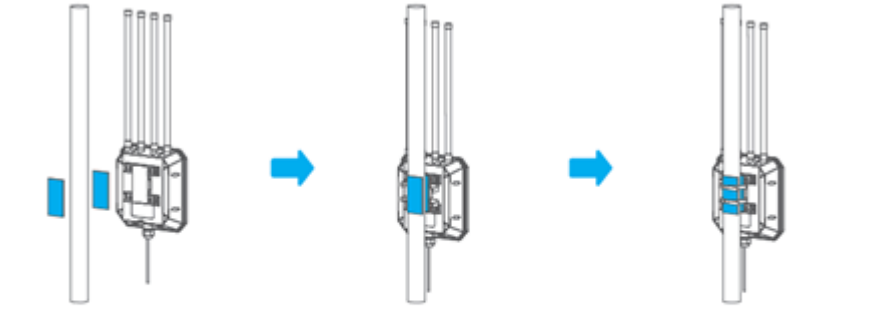
During assembly, turn the wrench counterclockwise to tighten the waterproof connector and clockwise to loosen it.

⑥ Screw the omni antennas into the 2.4G and 5G antenna connectors and screw up the connectors.

2.Installation

2.1 Outdoor Installation

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



Step 1: Stick two silicone pads on the bracket and post respectively.

Step 2: Thread the cable ties through the fixing point of the bracket.

Step 3: Fix the product to the post with cable ties.

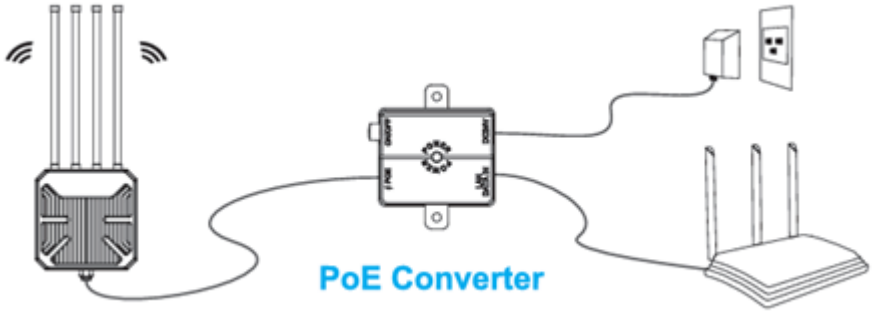
NOTE

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

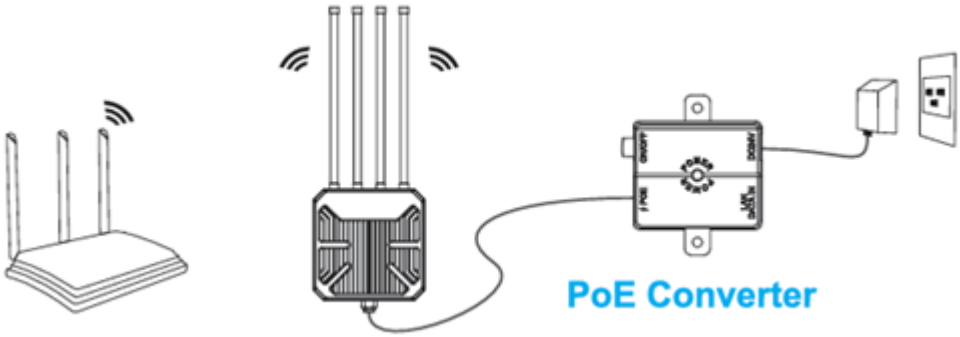
2.2 Connection

2.2.1 Passive PoE

(1)Wired (For Mesh Router/Mesh AP/AP Mode)



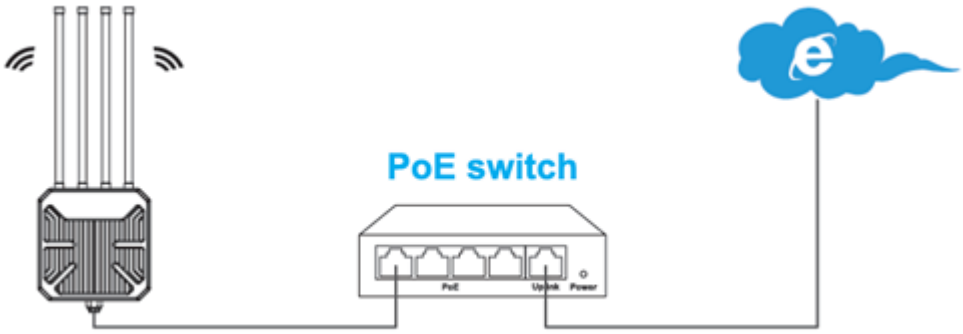
(2) Wireless (For Repeater Mode)



① Connect the “PoE” port of the PoE converter with an Ethernet cable to the WAN/LAN port of the device.

② Connect one end of the power adapter to the “DC IN (37-57V)” port of the PoE converter. Then plug the other end into a power outlet.

2.2.2 Active PoE (For Mesh AP/AP/Mesh Router Mode)



NOTE

- Make sure you ues a certified CAT6 or higher standard Ethernet cable with RJ45 connectors.
- Make sure the Ethernet cable length is less than 100 meters (328 feet).

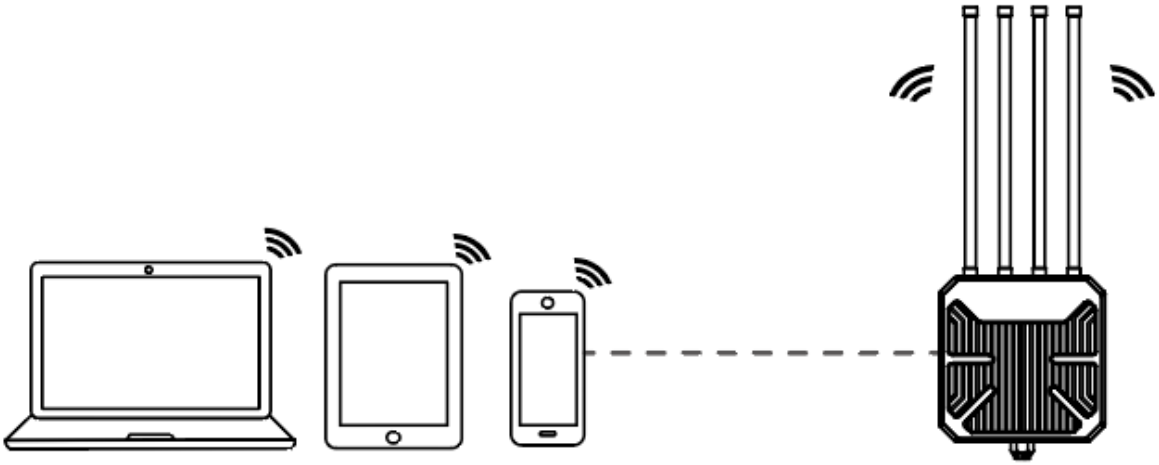
Configuration

This chapter introduces steps of configuration.

Configuration

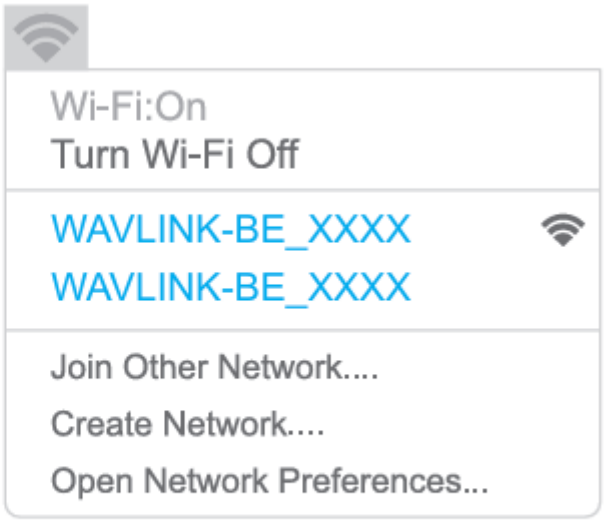
Step 1: Connecting to the Network

1.1 Via Wireless



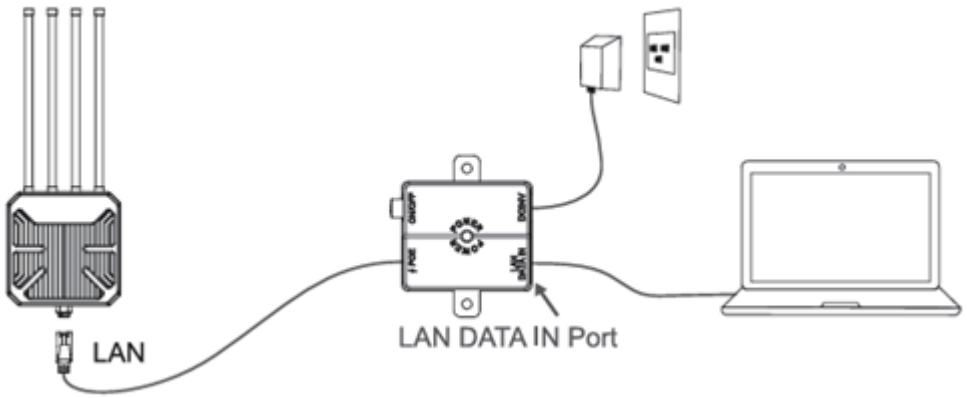
1. Disconnect the Ethernet cable from your computer. (If you have one.)
2. Turn on your Wi-Fi, find the SSID of this product on your wireless devices (smartphone, tablet computer, laptop, etc.) and place a connection.

For Windows users



For Mac users

1.2 Via Cable



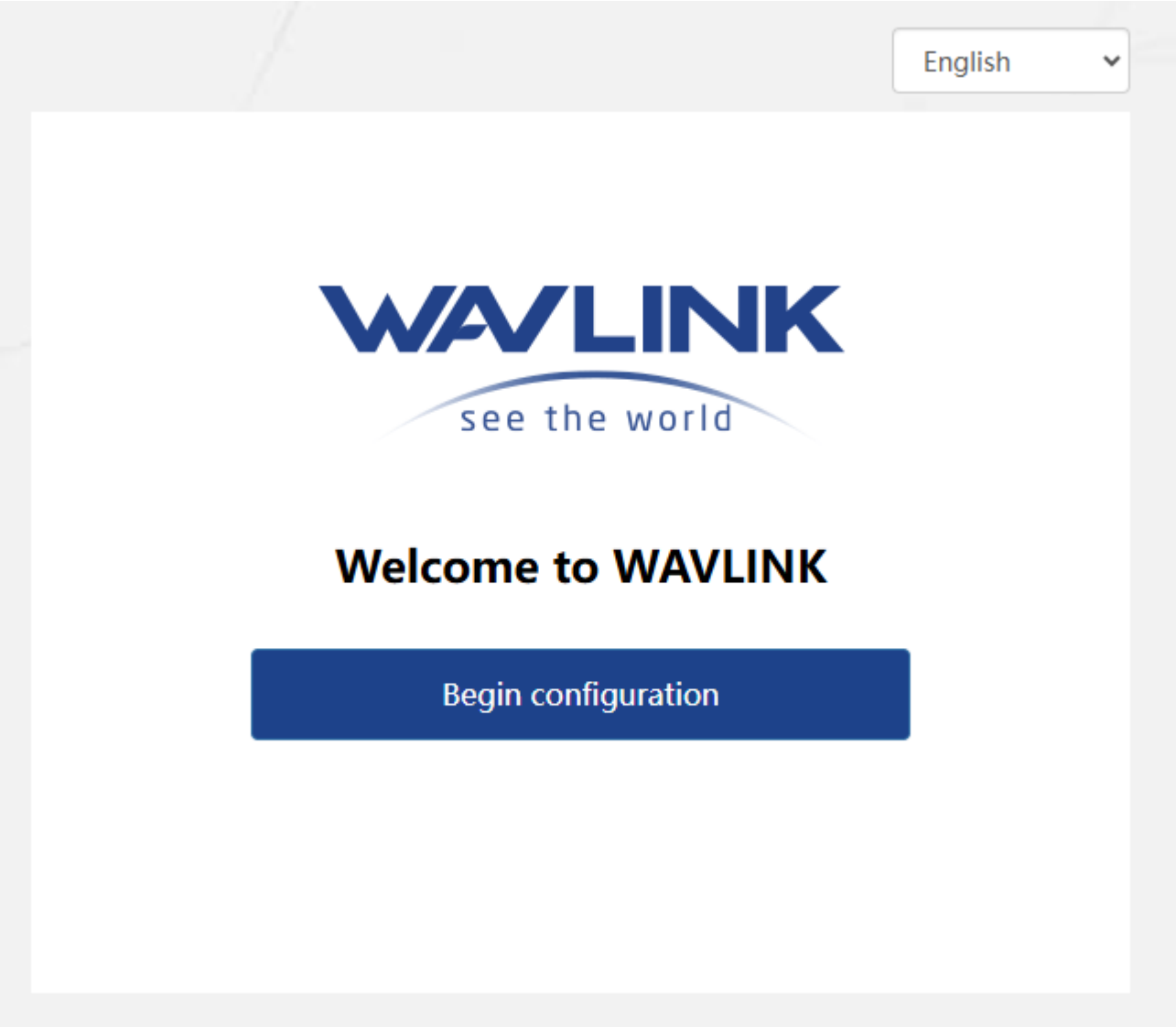
Connect the Ethernet cable to your PC/laptop and the LAN DATA IN port of your PoE converter, and then you can start configuring the device.

NOTE

If you want to use this device's Mesh AP/AP/Mesh Router Mode function, please finish the configuration of Mesh AP/AP/Mesh Router Mode, and then connect the LAN DATA IN port to the LAN port of the upper router.

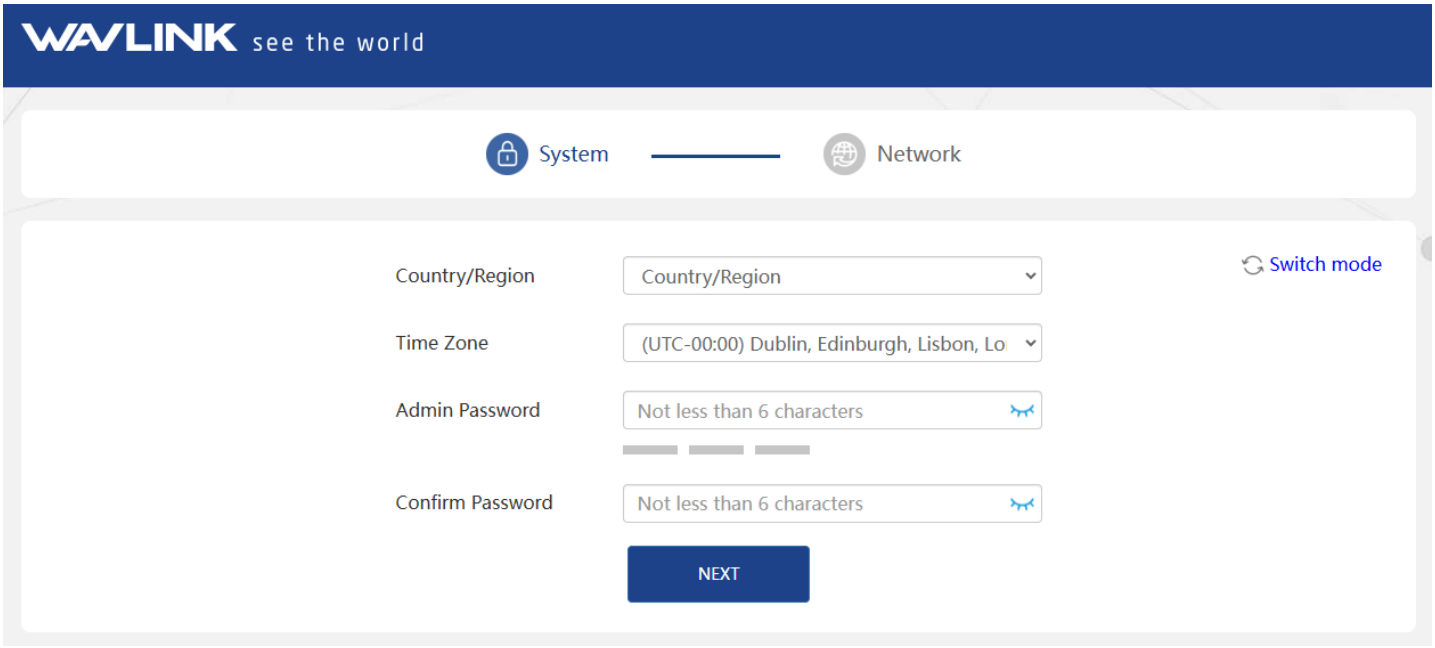
Step 2

The login page will pop up when the router is connected to your devices for the first time. Also, you can launch a browser from your computer or smartphone and enter http://waplogin.link into the address bar.



Step 3

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



NOTE

The three colored bars in **Admin Password** area indicate the strength of the login password.

Mode Selection

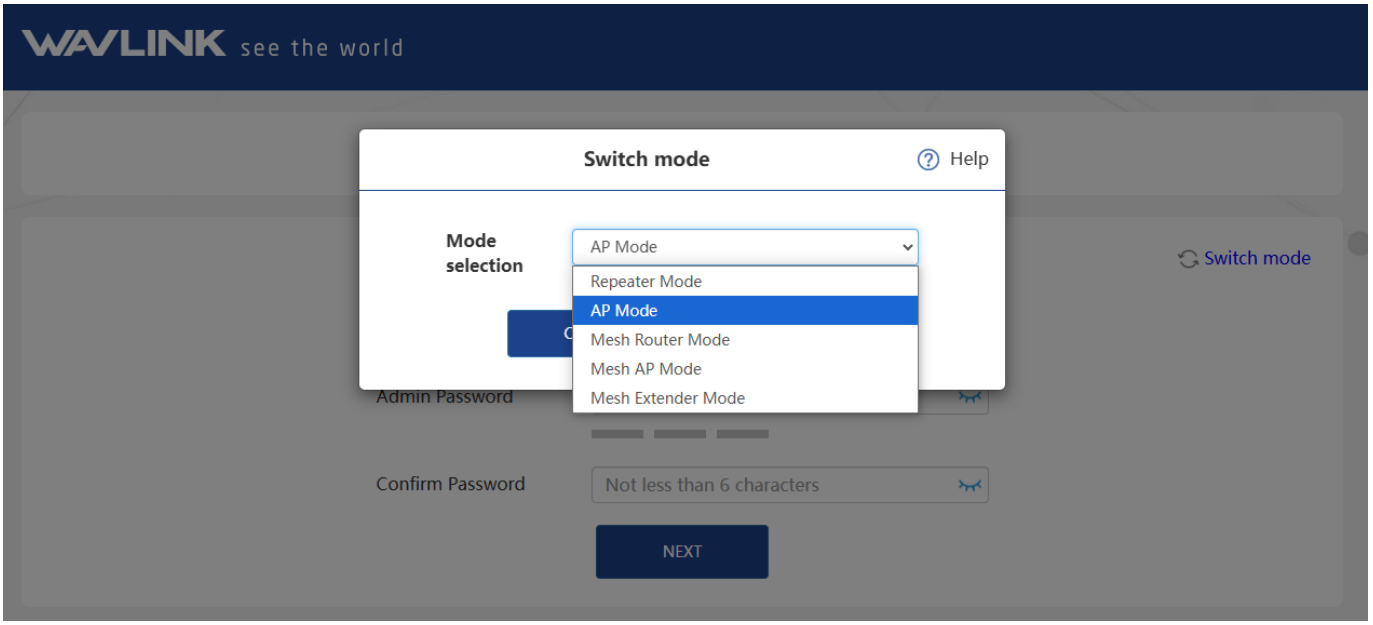
This chapter introduces 5 modes, including AP, Mesh AP, Repeater, Mesh Router, and Mesh Extender mode.

- AP Mode/Mesh AP Mode
- Repeater Mode
- Mesh Router Mode
- Mesh Extender Mode

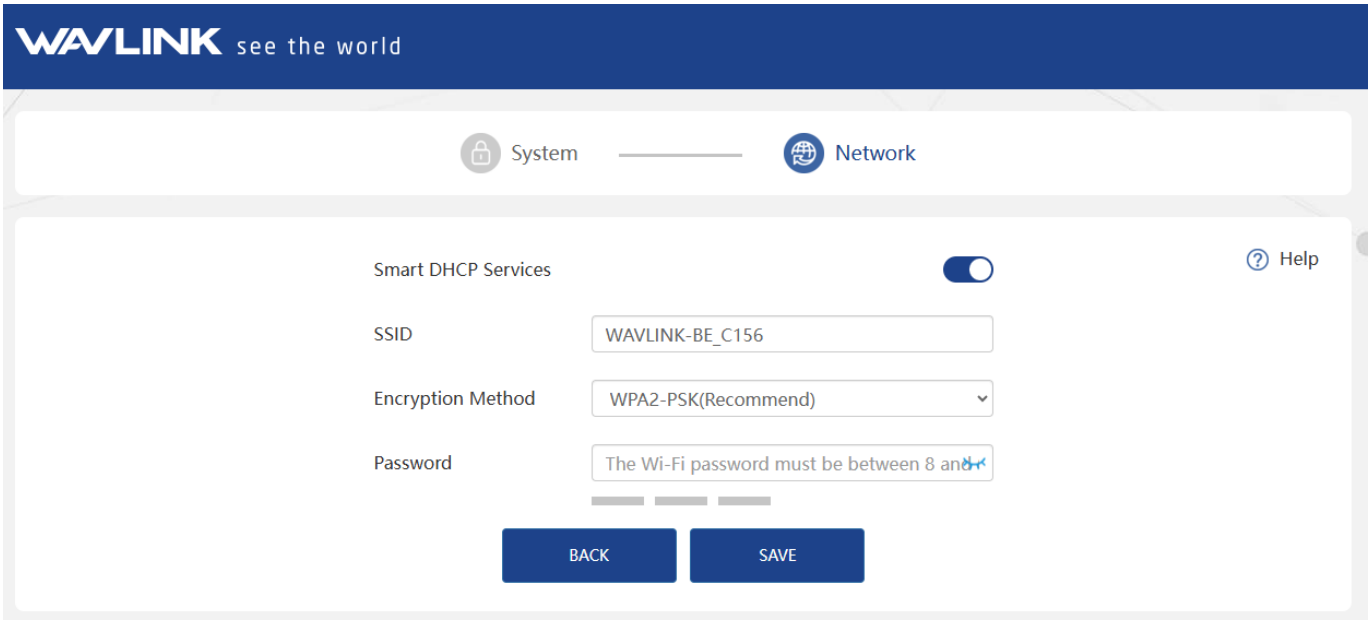
Mode Selection

AP Mode/Mesh AP Mode

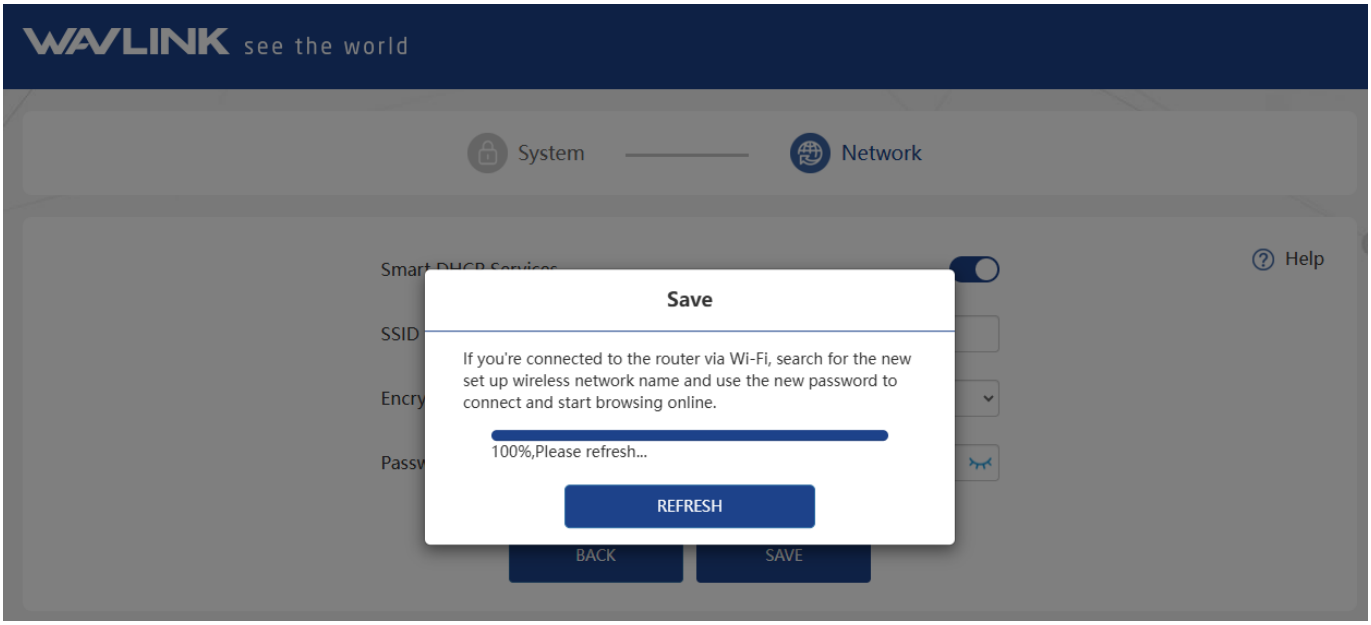
1. Click **Switch Mode** and select **AP Mode/Mesh AP Mode**.



2. You can change the SSID or use the default one. The recommended encryption mode is **WPA2-PSK**. For your network security, please create a new password according to the rule, then click **SAVE**.



3. Wait for the setting process to complete, then click **REFRESH**.

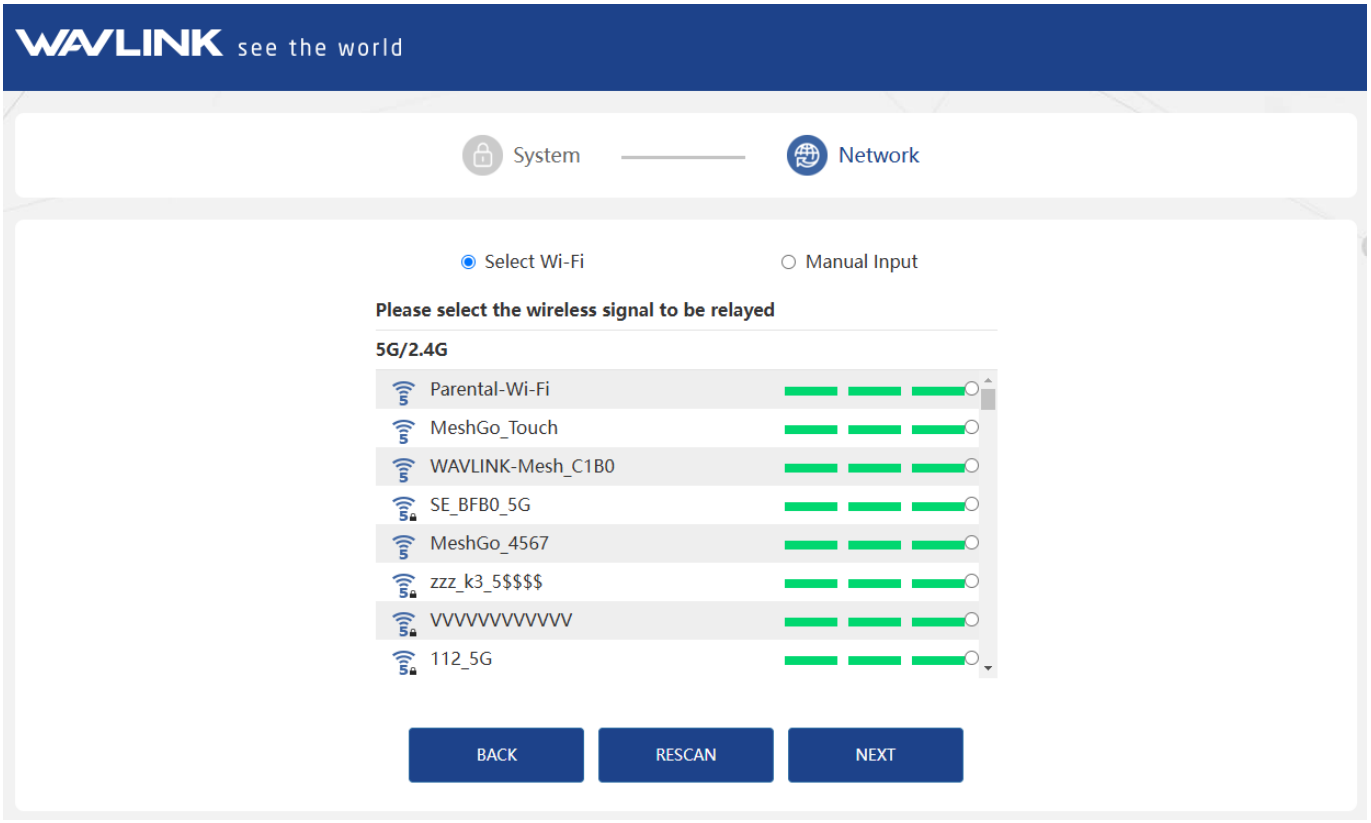


Repeater Mode

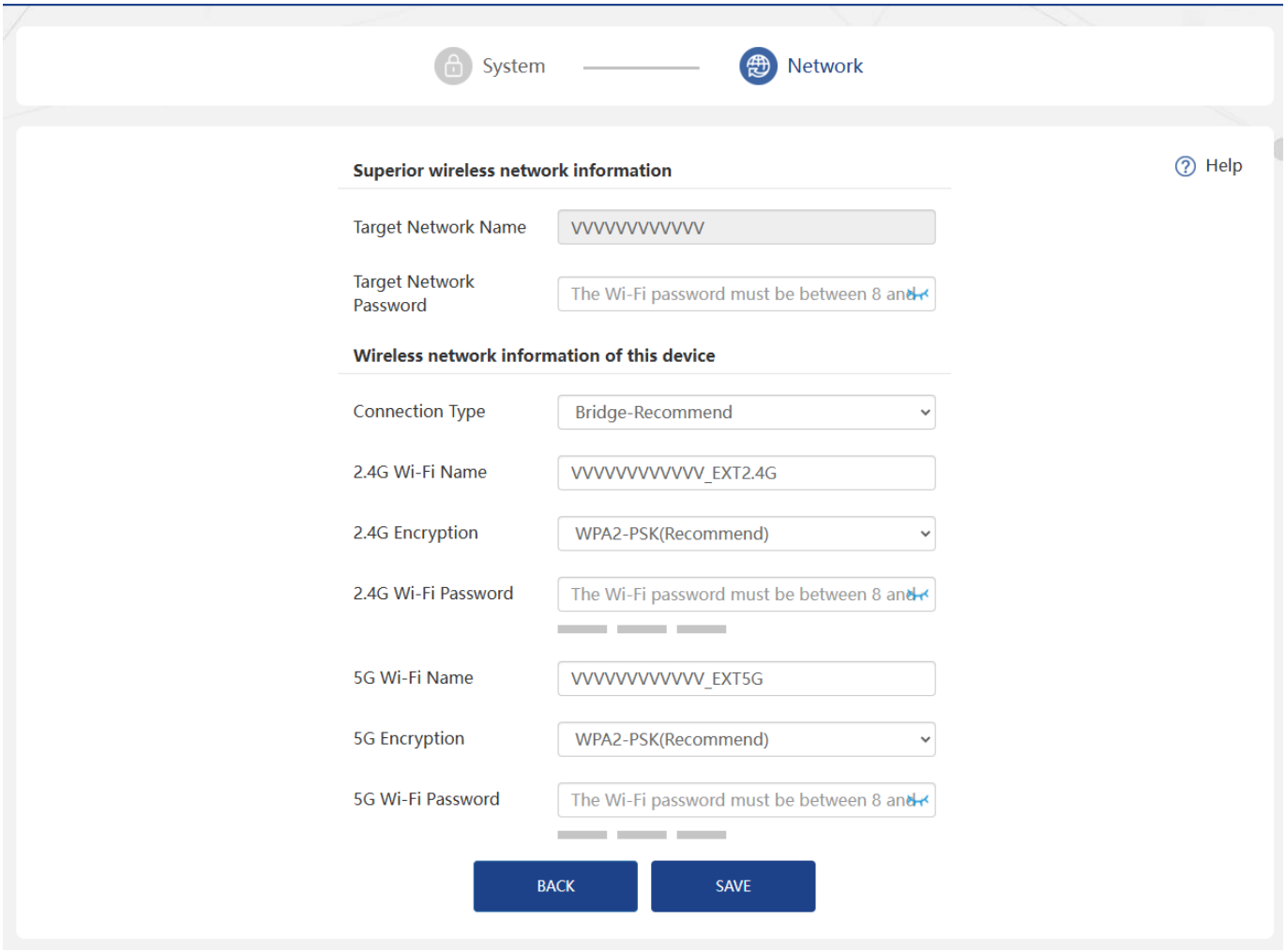
Click **Switch Mode** and select **Repeater Mode**.

- **Select Wi-Fi**

1. After scanning, please make sure the Wi-Fi you want to select is listed, and click **NEXT**. If not, please click **RESCAN**.

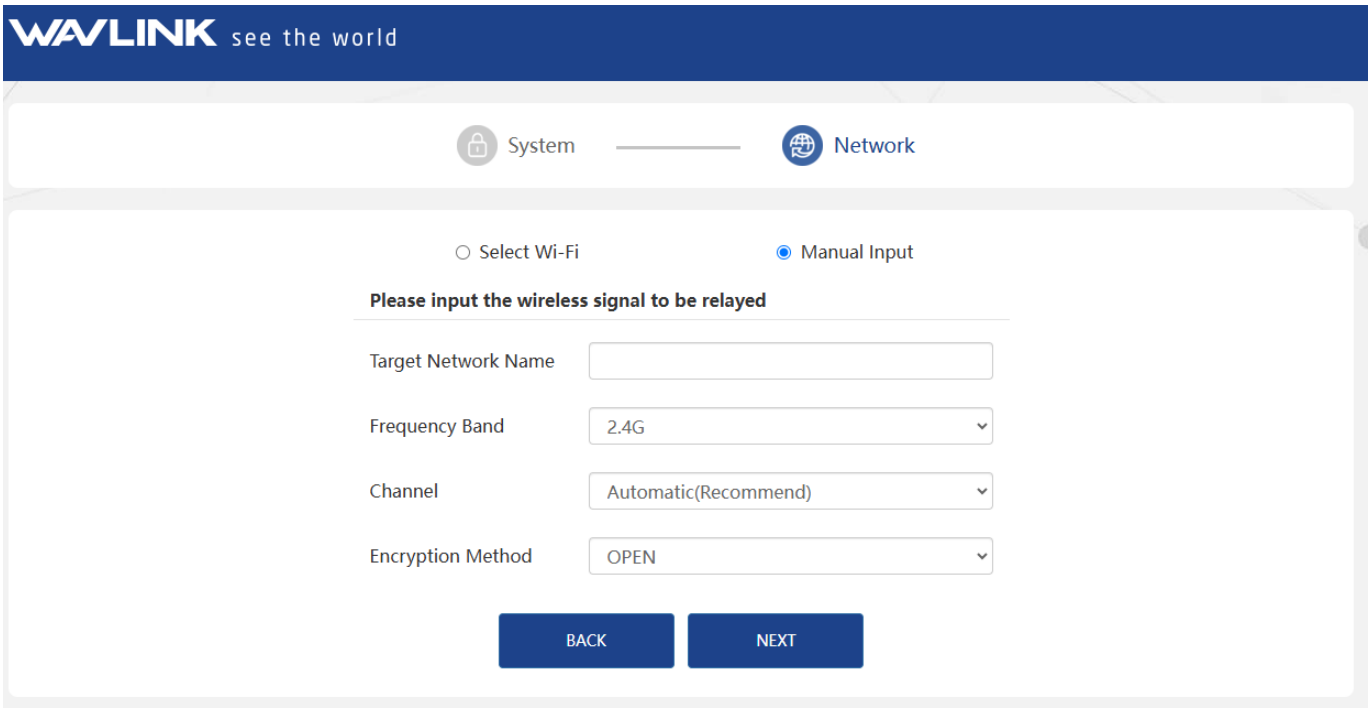


2. Enter the password of the wireless network you selected. Set the wireless network encryption mode and password for this device. Click **SAVE**.

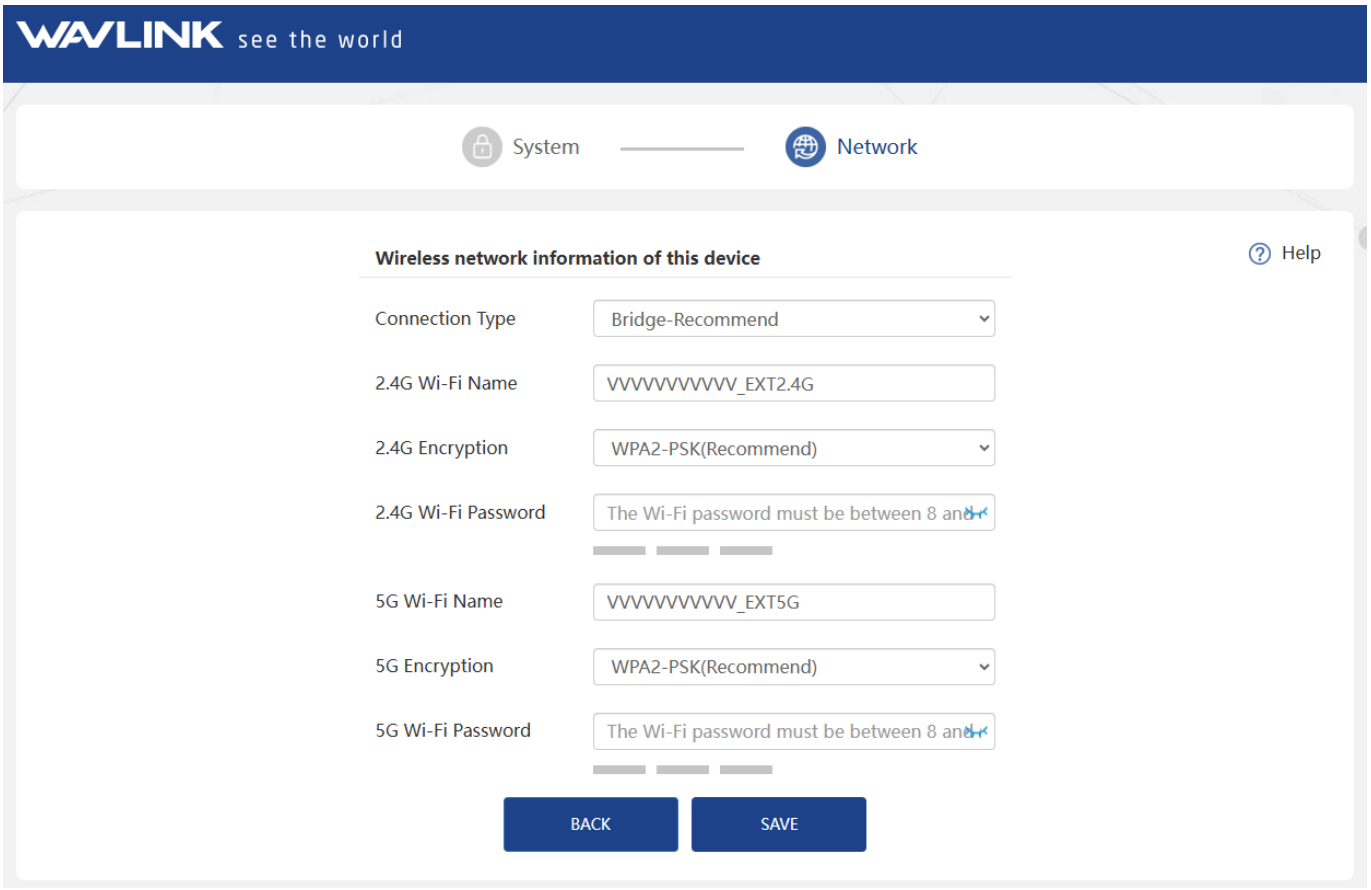


- **Manual Input**

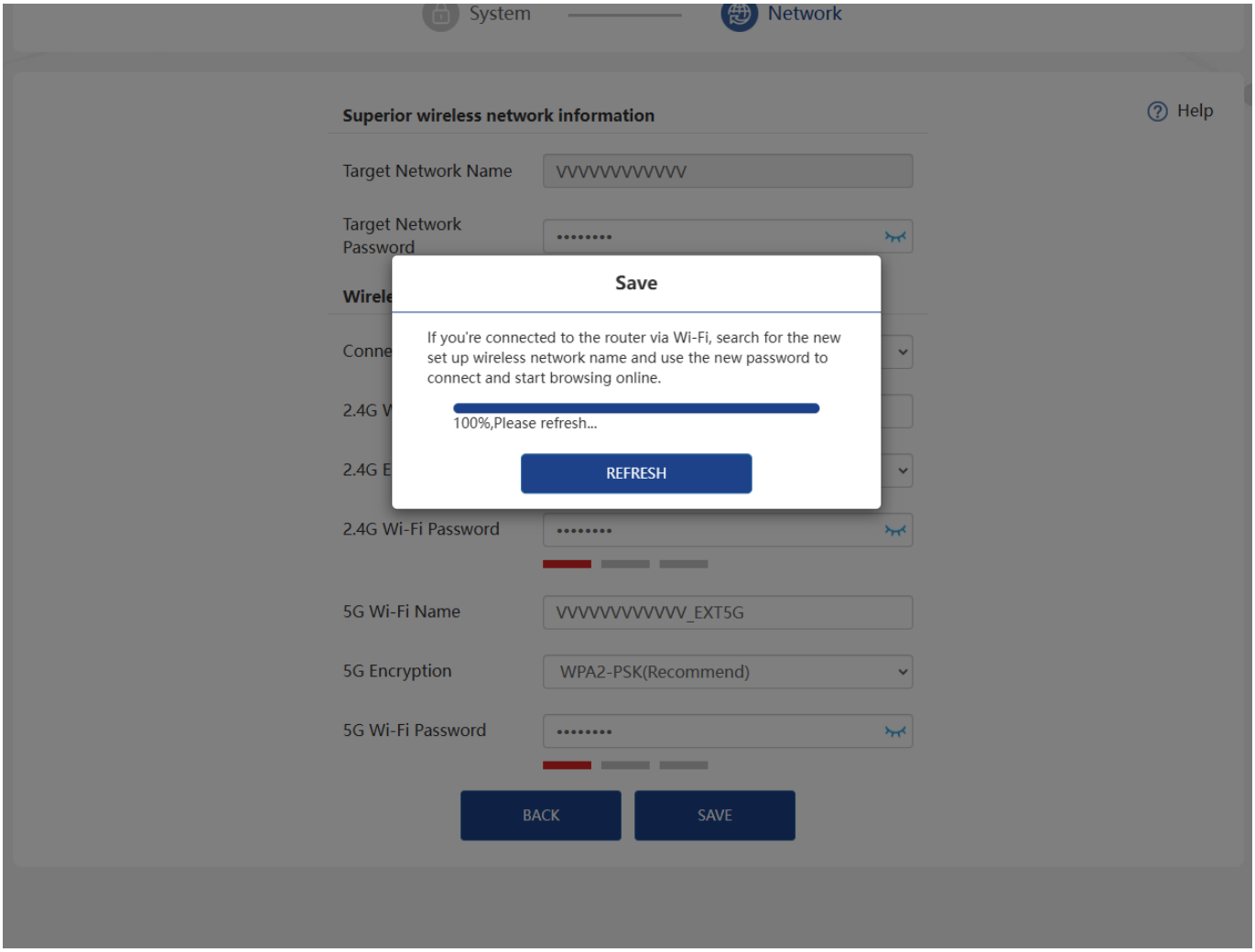
1. Manually add the wireless network you want to relay, enter the device information, and click **NEXT**.



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

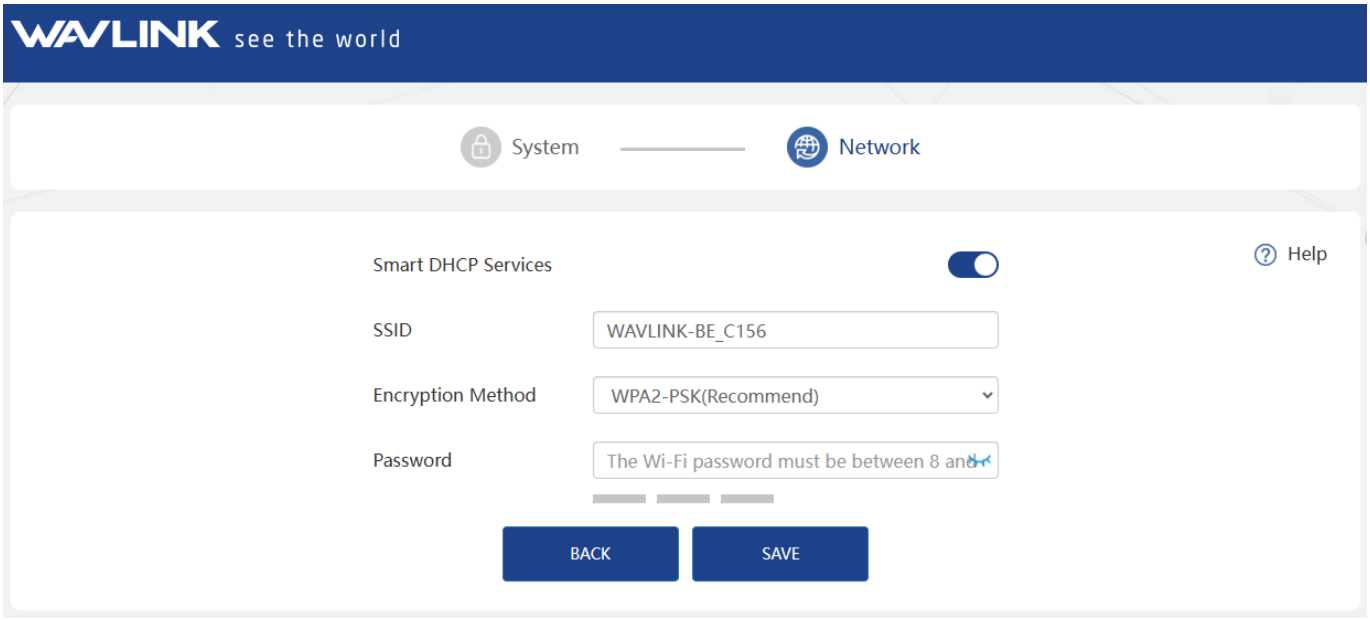


3. Wait for the setting process to complete, then click **REFRESH**.



Mesh Router Mode

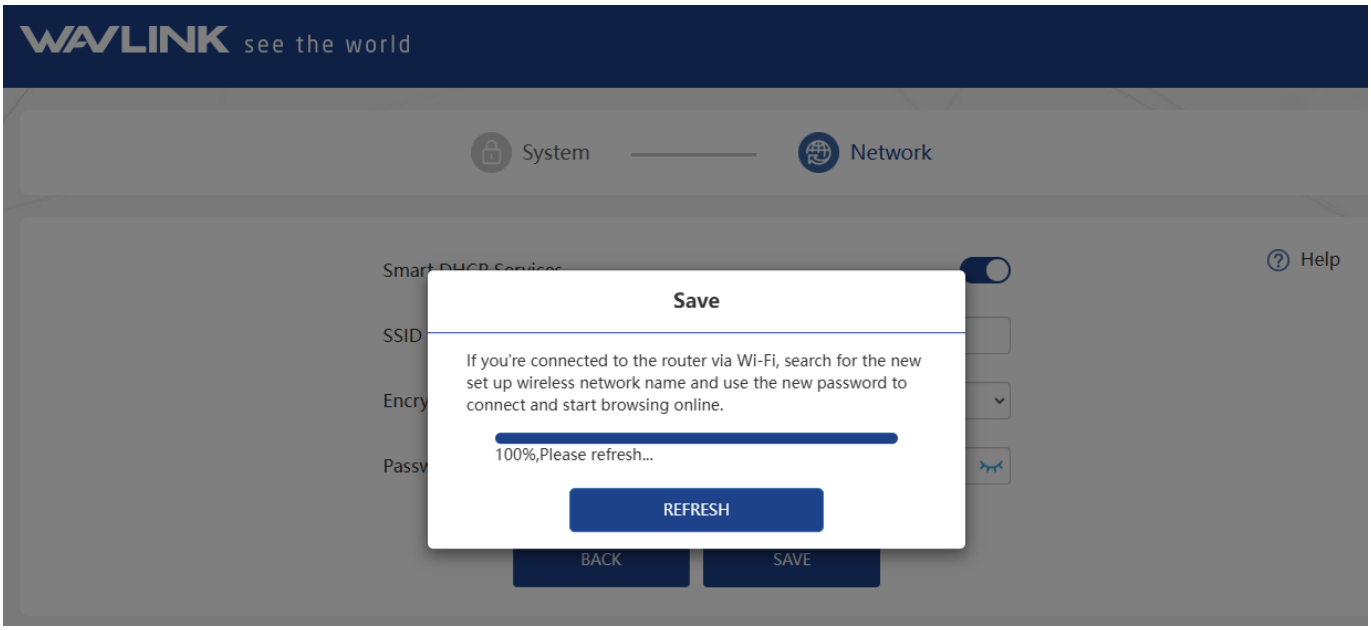
1. Click **Switch Mode** and select **Repeater Mode**.
2. Before configuring, please make sure your upper router has connected to the WAN/LAN port of this product. Select **Wan Type**. The recommended Encryption Mode is **WPA2-PSK**. For your network security, we suggest you set a new password. Click **SAVE**.



ⓘ WHICH WAN TYPE AM I SUPPOSED TO CHOOSE?

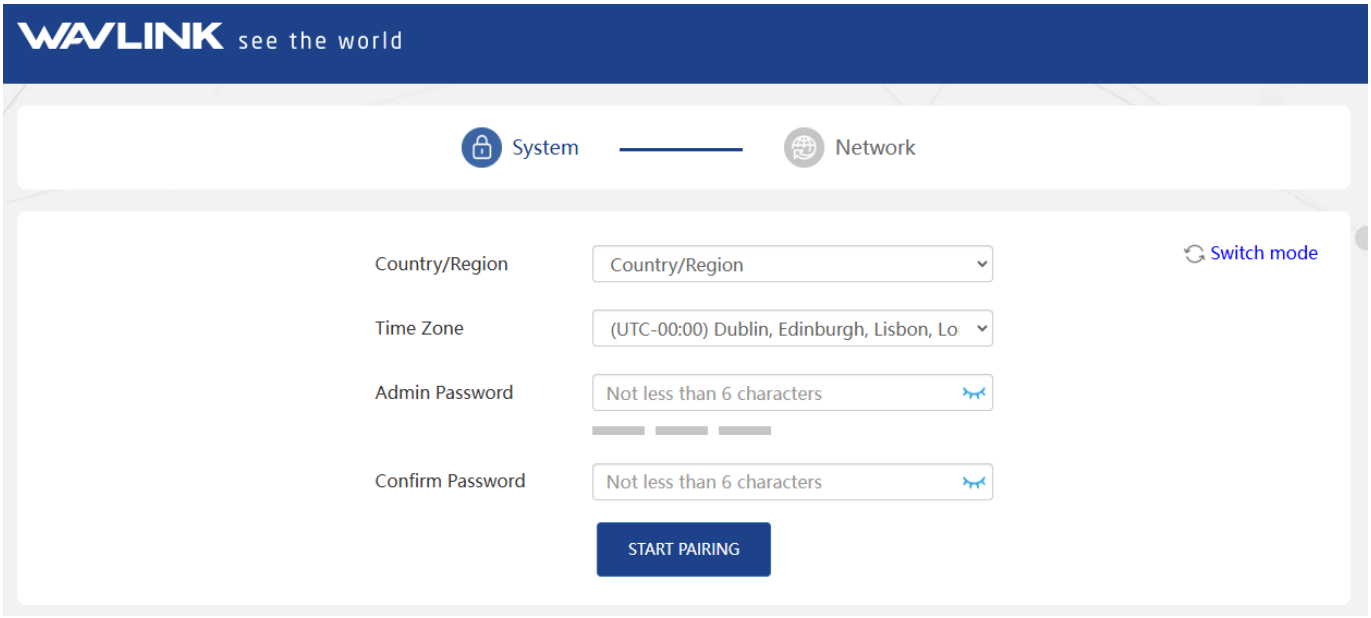
If you use DSL line and you are only provided an account name and a password by your ISP (Internet Service Provider), please choose **PPPoE**. If you use cable TV or fiber cable, please choose **DHCP (Dynamic IP)**. If you are provided information such as Ip address, Subnet Mask and Default Gateway,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

3. Wait for the setting process to complete, then click **REFRESH**.

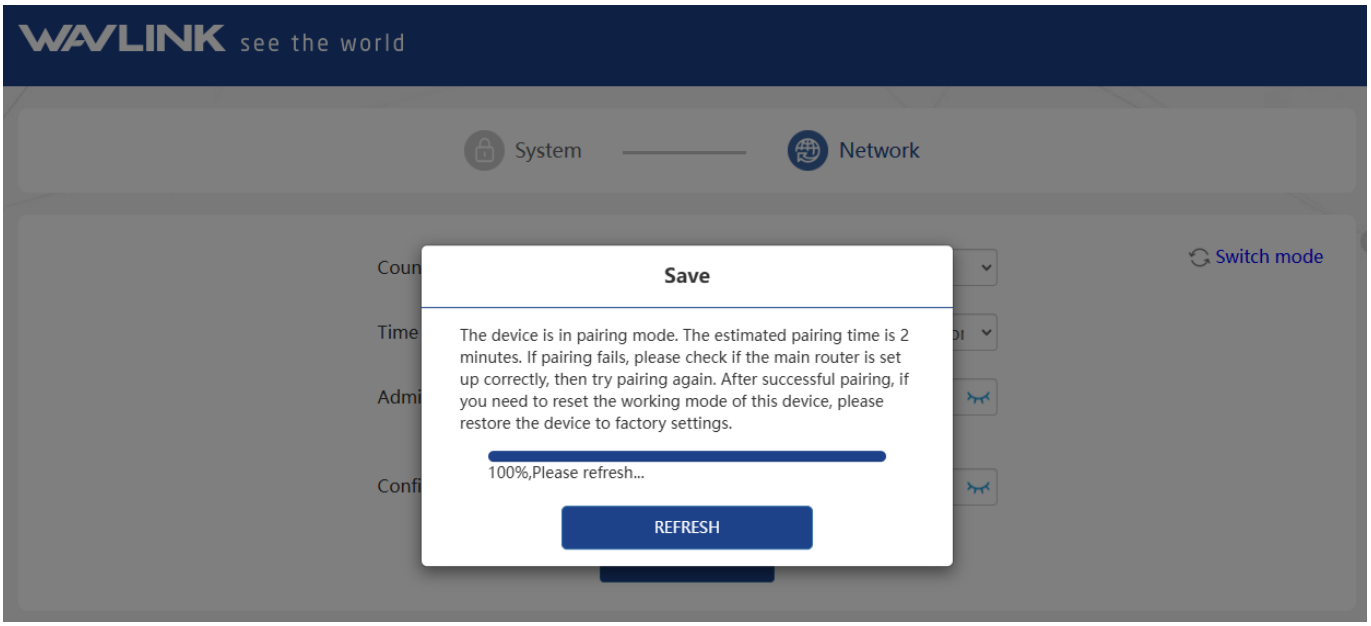


Mesh Extender Mode

1. Click **Switch Mode** and select **Mesh Extender Mode**.
2. Select your **Country/Region** and **Time Zone**. For your network security, we suggest that you set a new password, and click **START PAIRING**.



3. Wait for the setting process to complete, then click **REFRESH**.



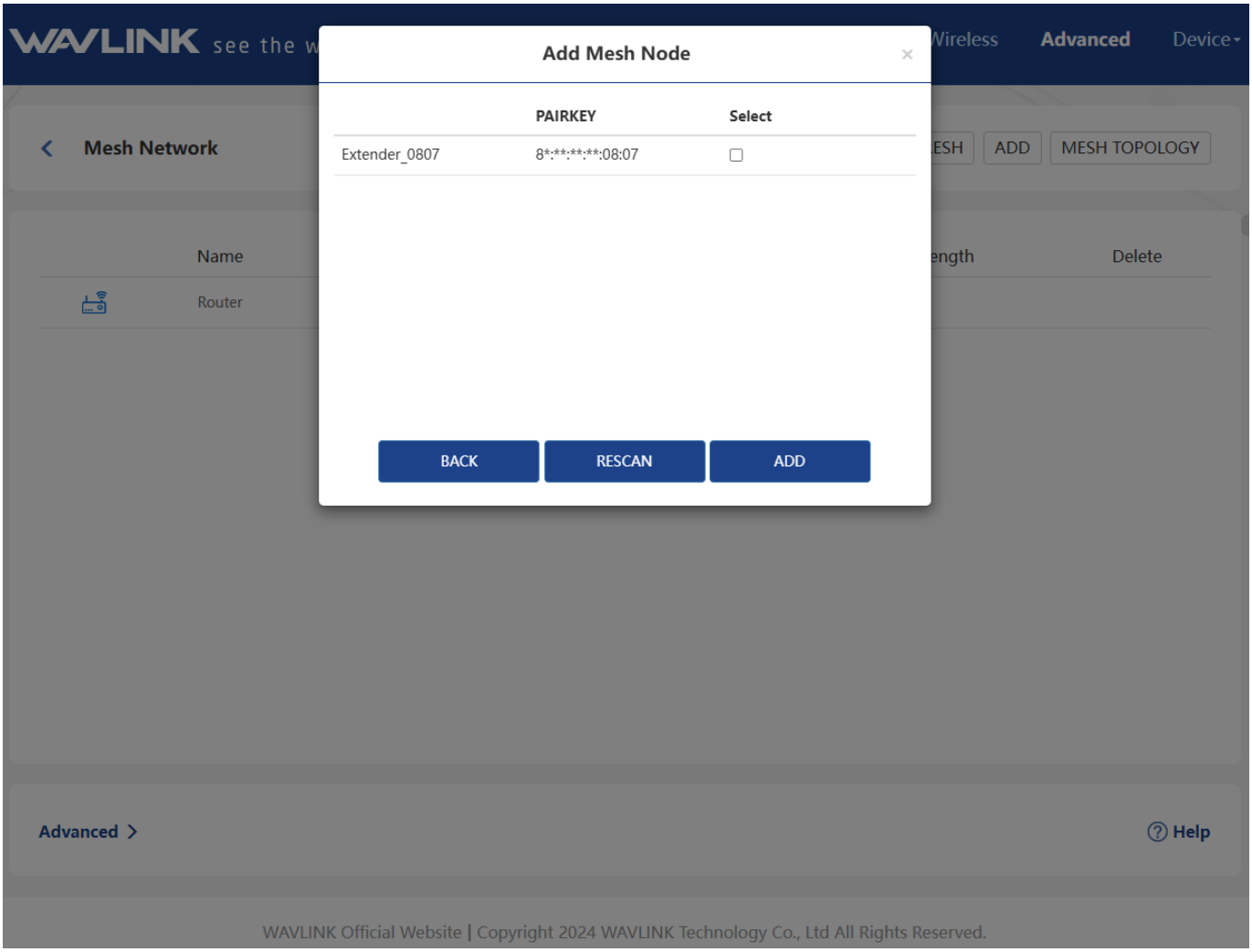
More Mesh Devices

This chapter introduces the steps of adding more mesh devices.

More Mesh Devices

Generally, a mesh router device supports up to 7 (including the existing device). Therefore, if you need to add more mesh devices to bulid a stable network in your home, please pair new mesh devices with the existing network.

1. Log in to **http://waplogin.link** or **192.168.30.1**.
2. Click **Advanced**, enter **Mesh Network**.
3. Select the Mesh Node you want to add, and click **ADD**.



NOTE

- The sub-routers must be Mesh Extender Mode when you add more mesh devices.

- You can also more mesh devices by pairing. Set the sub-routers to Mesh Extender Mode, press the **Pair button** on the main router and the sub-router simultaneously for 1 second.

Firmware Upgrade

This chapter contains the following sections:

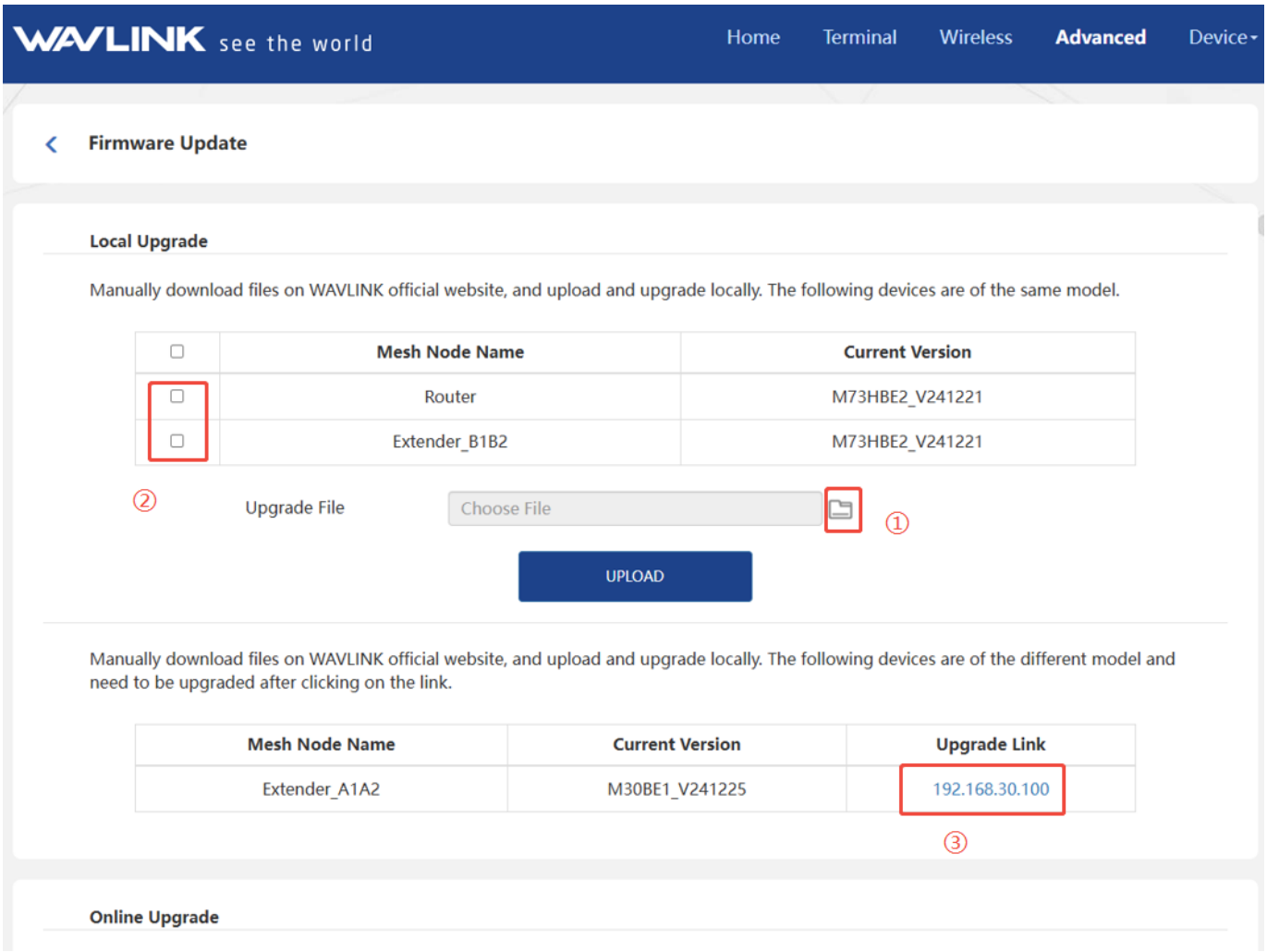
• Option I: Local Upgrade

• Option II: Online Upgrade

Firmware Upgrade

Option I: Local Upgrade

1. Download the latest firmware file from WAVLINK website.
2. Extract the firmware from the downloaded file.
3. Log in to http://waplogin.link, then click **Advanced**, enter **Firmware Update**.
4. Click ① to locate the extracted firmware file.
5. Click on **UPLOAD** and choose **Apply**, and wait for the firmware upgrade process to complete.

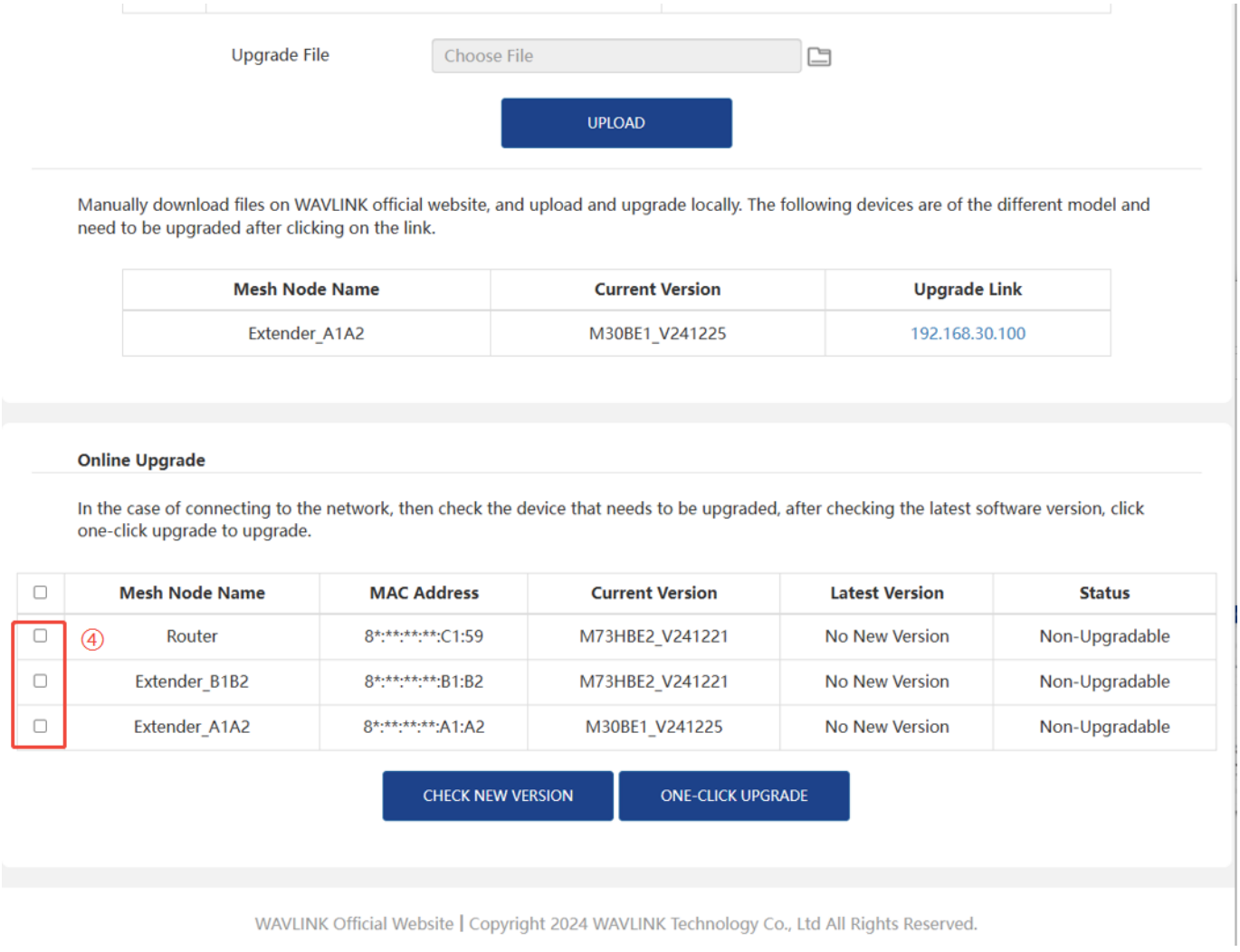


NOTE

If your all mesh devices are same model, you can check and upgrade your deviecs together at ②. If the model of your devices are not same, please visit the web interface of each device and upgrade it in ③.

Option II: Online Upgrade

1. Log in to http://waplogin.link, click **Advanced**, enter System and click **Firmware Update**.
2. Select the Mesh Node Name among ④ that needs to be upgraded.
3. Click **CHECK NEW VERSION** to find the latest version.
4. Click **ONE-CLICK UPGRADE**, and wait for the firmware upgrade process to complete.



FAQ & After Sales

This chapter contains the following sections:

- FAQ
- GNU
- After Sales

FAQ

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 confirm that the connection is stable.
- Make sure your computer is set to obtain an IP address automatically.
- Use the IP address to log into the page. The default is **192.168.30.1**. If the device is connected to the host Wi-Fi, please obtain the device’s current IP address on the router’s DHCP client list.
- Reset the device and go through the configuration 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 for 6 seconds.

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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After Sales

Need help?

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

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

+1 8889730883 (US Local)
Mon-Fri 9:00 am - 10:00 pm (UTC-5)

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