

# **WAVLINK**



see the world

**User Manual**

**AX3000 Repeater/AP/Router**

**Model: AERIAL D6XH**

**@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
<u>Underlined</u>	Underlined words or phrases are hyperlinks. You can click to redirect to a website or a specific section.
<b>Teal</b>	The content and text that needs to be emphasized on the web page is the theme color <b>#1D428A</b> , including menus, items, buttons, etc.
<b>&gt;</b>	The menu structures to show the path to load the corresponding page. For example, <b>More &gt; Network &gt; Mode Selection</b> 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](mailto:contact@wavlink.com)/[techsupport@wavlink.com](mailto:techsupport@wavlink.com)/[postsales@wavlink.com](mailto: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.

Information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.

## Safety Instructions

Always read the safety instructions carefully.

Keep this Quick Start Guide for future reference.

Keep this equipment away from humidity.

If any of the following situation arises, get the equipment checked by a service technician:

☐ The equipment has been exposed to moisture.

☐ The equipment has been dropped and damaged.

☐ The equipment has an obvious sign of breakage.

☐ The equipment has not been working well or you cannot get it work according to Quick start Guide.

## Copyright Statement

No part of this publication may be reproduced in any form by any means without the prior written permission.

Other trademarks or brand names mentioned herein are trademarks or registered trademarks of their respective companies.

## 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.

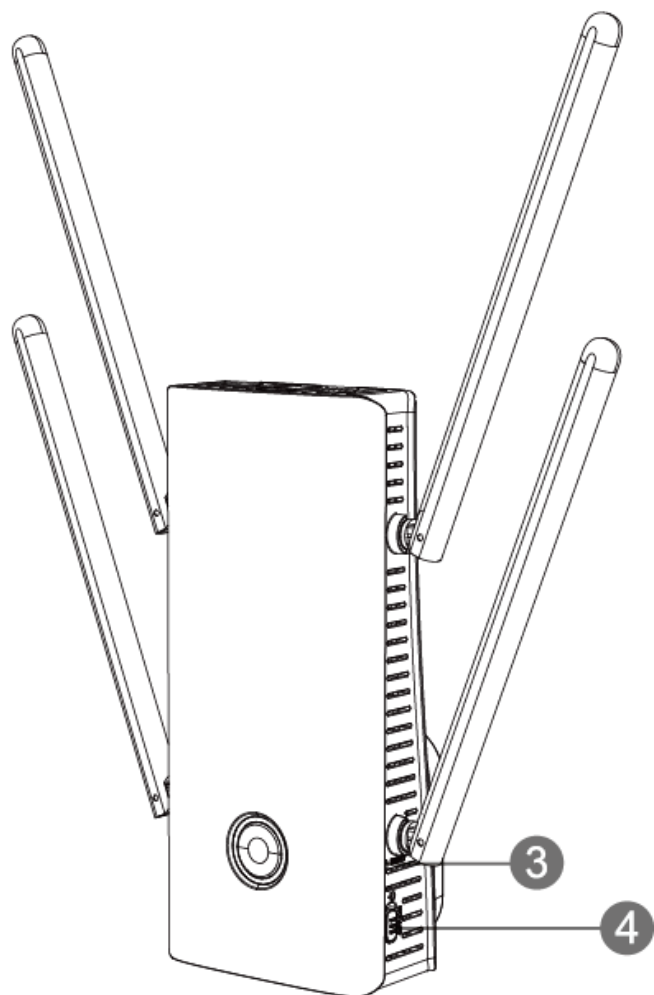
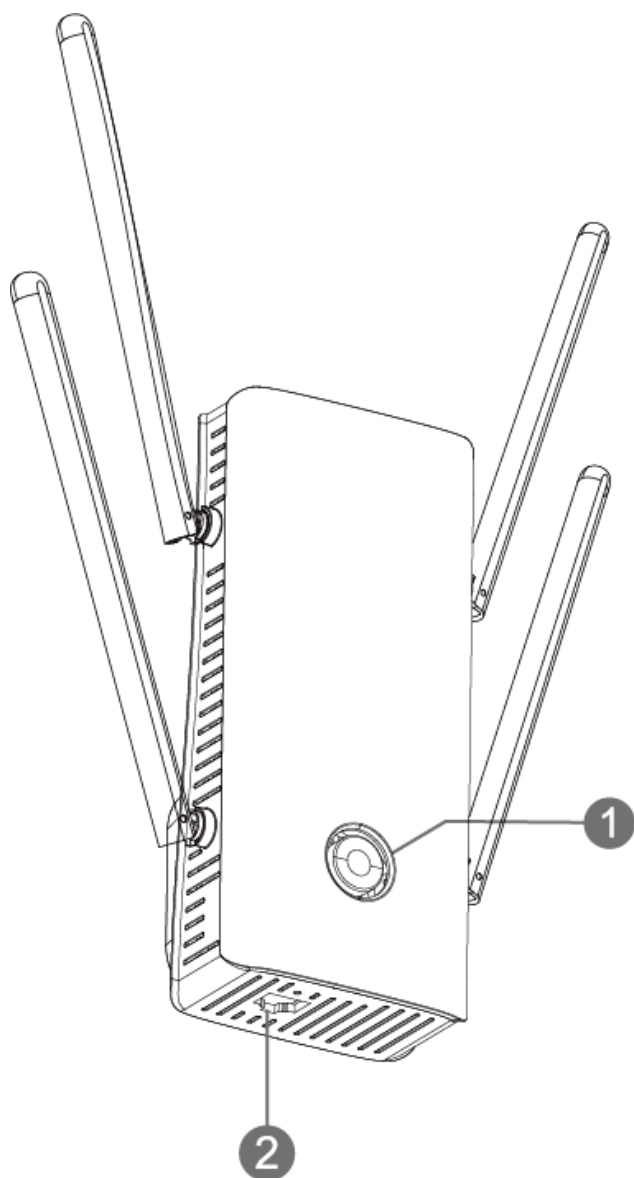


# Chapter 1 Overview

This chapter contains the following sections :

- [Product Overview](#)
- [Basic Info](#)
- [LED Indicator](#)

## Product Overview



- ① WPS/Mesh Pair Button
- ② WAN/LAN Gigabit Port
- ③ Reset Button

④ Power Button(Off/On)

### WPS/Mesh Pair Button:

In AP Mode, press and hold WPS for **2** seconds to connect to downstream devices.

In Repeater Mode, press and hold the WPS Button for **2** seconds to connect to the downstream devices and for **8** seconds to connect to the upstream router.

In Mesh Extender and Mesh Router Mode, press and hold the Mesh Pair Button for **2** seconds to pair.

### Reset Button:

Press and hold the button for **6** seconds to reset to product's factory settings.

## Basic Info

SSID: **WAVLINK-AX\_XXXX**

Default IP: **192.168.10.1**

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

Official Website: **[www.wavlink.com](http://www.wavlink.com)**

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

## LED Indicator

Light Color	Light Status	Description
Purple	Solid	The device is being activated.
Red	Fast Blinking	The device is not connected to the higher-level router.
Red	Slow Blinking	The device doesn't have access to the Internet.
Blue	Fast Blinking	Pairing with the WPS of an higher-level router.



Light Color	Light Status	Description
Blue	Slow Blinking	The phone is pairing with WPS.
Blue	Slow Blinking	Press the pair button for Mesh pairing.
Blue	Solid	The Internet is connected and stable.
Blue	Solid	AP Mode.

**i NOTE**

**Fast:** Blinking every 0.3s.

**Slow:** Blinking every 1.2s.

# Chapter 2 How to Use

This chapter contains the following sections :

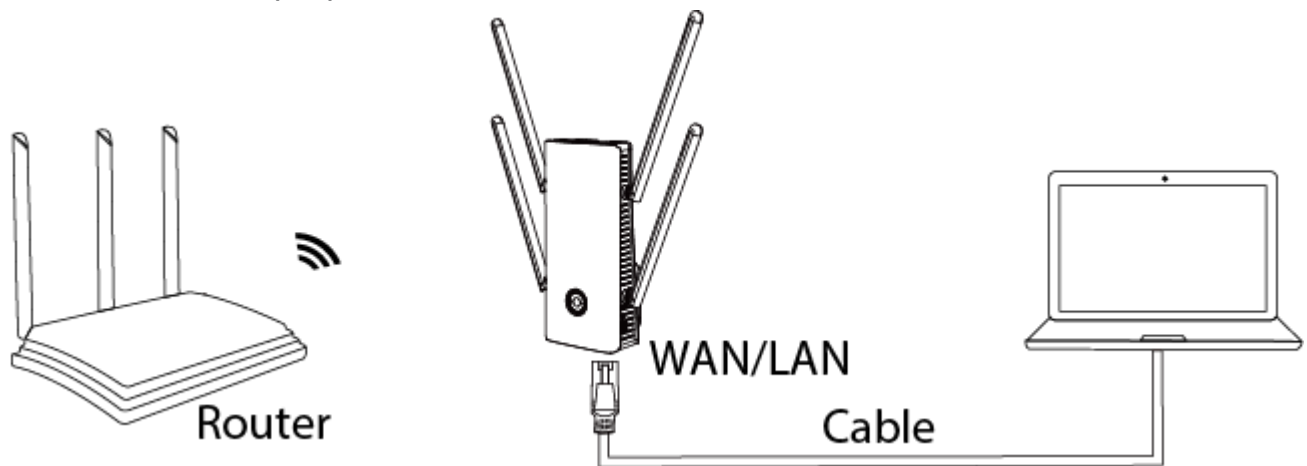
- [Product Connection](#)
- [Configuration Wizard](#)

## Product Connection

1. Plug the product into a power outlet.
2. Turn on the power button, then use the device wirelessly or via an Ethernet cable.

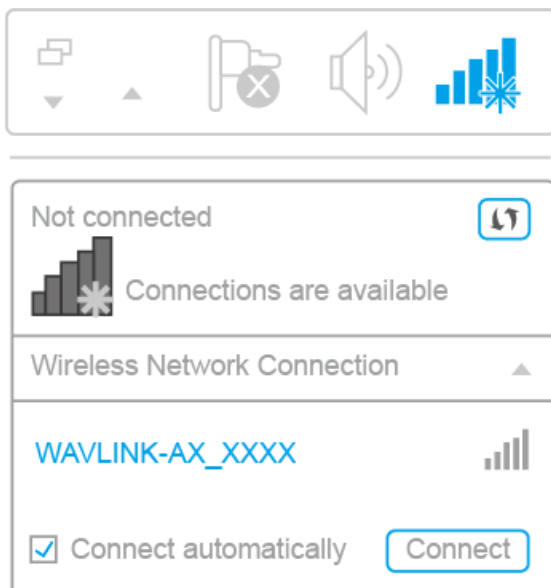
### 2.1 Cable Connection

Connect one end of the Ethernet cable to the WAN/LAN port on the product, and other end to the laptop.

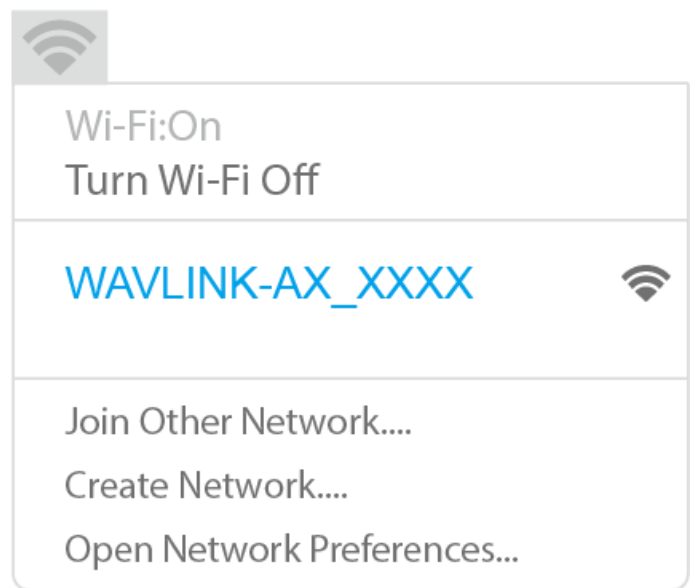


### 2.2 Wireless Connection

Power on the product and search SSID of the product on the wireless devices (smartphone, tablet PC, laptop, etc.) then click to connect.



**For Windows users**



**For Mac users**

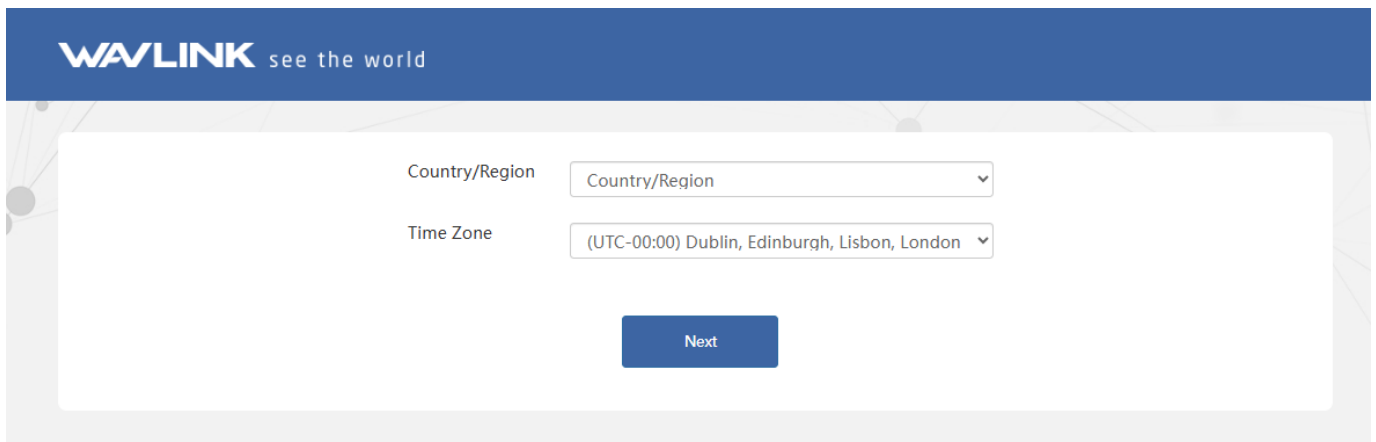
## Configuration Wizard

1. After connecting to the device successfully in the first time, the login web UI will pop up to guide you to configure the product. If it doesn't, open a web browser and enter <http://waplogin.link> or **192.168.10.1** in the address bar(not search bar) of the browser on PC/laptop or phone.



**Note:** If you are unable to access the web-based setup page, please get solution from **FAQ:Q2**.

2. Select your **Country/Region** and **Time Zone**. Then click **Next**.

The image shows the WAVLINK setup form. At the top, there is a blue header bar with the WAVLINK logo and the tagline "see the world". Below the header, there is a white form area. Inside the form, there are two dropdown menus. The first is labeled "Country/Region" and has a placeholder text "Country/Region". The second is labeled "Time Zone" and has a placeholder text "(UTC-00:00) Dublin, Edinburgh, Lisbon, London". Below the dropdown menus, there is a blue button with the text "Next" in white.

### 3. Mode Selection

The product has four modes, and selects repeater mode by default.

#### 3.1 Repeater Mode

Any Wi-Fi signal network can be extended through wireless.








### 3.1.1 Selecting Wi-Fi:

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**.

☒ Select WI-Fi ☐ Manual Input

Please select the wireless signal to be relayed

5G/2.4G


	00WAVLINK-Mesh_8E4A	■■■	<input type="radio"/>
	00WAVLINK-Mesh_8E4A	■■■	<input type="radio"/>
	000Parental-Wi-Fi	■■■	<input type="radio"/>
	00WAVLINK-Mesh_C480_5G	■■■	<input type="radio"/>
	WAVLINK_Touch	■■■	<input type="radio"/>
	WAVLINK_0380	■■■	<input type="radio"/>
	00WAVLINK-Mesh_8E4A	■■■	<input type="radio"/>

2. Enter the **Target Network Password** of the selected superior wireless network.

**WAVLINK** see the world

Please enter the Wi-Fi password to connect

Target Network Name: WAVLINK\_0380

Target Network Password: Between 8~63 characters 


3. Set the **Wi-Fi Name** and **Wi-Fi password** of this device. Do not tick **Same as the wireless password** to keep the **Wi-Fi password** separate from the management password if it is needed. Then click **Save**.

## Wireless network information of this device

☒ Set a new SSID and password    ☐ Same as the parent router

2.4G Wi-Fi Name

5G Wi-Fi Name

Wi-Fi password  

Set administrator password ☒ Same as the wireless password

Back

Save

### 3.1.2 Manual Input:

There is also an option to manually enter information about the superior wireless network that needs to be relayed.

1. Manually add the wireless network you want to connect, enter the device information, and click **Next**. For the network security, it is recommended to set a password.

## Repeater Mode

Repeater Mode ▾

Any Wi-Fi signal network can be expanded through wireless.

☐ Select Wi-Fi    ☒ Manual Input

## Please input the wireless signal to be relayed

Target Network Name

Frequency band

Channel

Encryption Method

Back

Next

2. After completing the initial setup, click **Advanced** > **Mode Selection** to modify the **Connection Type** to **Gateway Mode/Bridge Mode** when reconfiguring the repeater mode(Optional).

**Wireless network information of this device**

Connection Type	<div>Bridge-Recommend</div>
2.4G Wi-Fi Name	<div>WAVLINK_0380_EXT2.4G</div>
Encryption Method	<div>WPA2-PSK(Recommend)</div>
2.4G Wi-Fi password	<div>Between 8~63 characters</div>
5G Wi-Fi Name	<div>WAVLINK_0380_EXT5G</div>
Encryption Method	<div>WPA2-PSK(Recommend)</div>
5G Wi-Fi password	<div>Between 8~63 characters</div>

Back

Save

**Note for Connection Type**

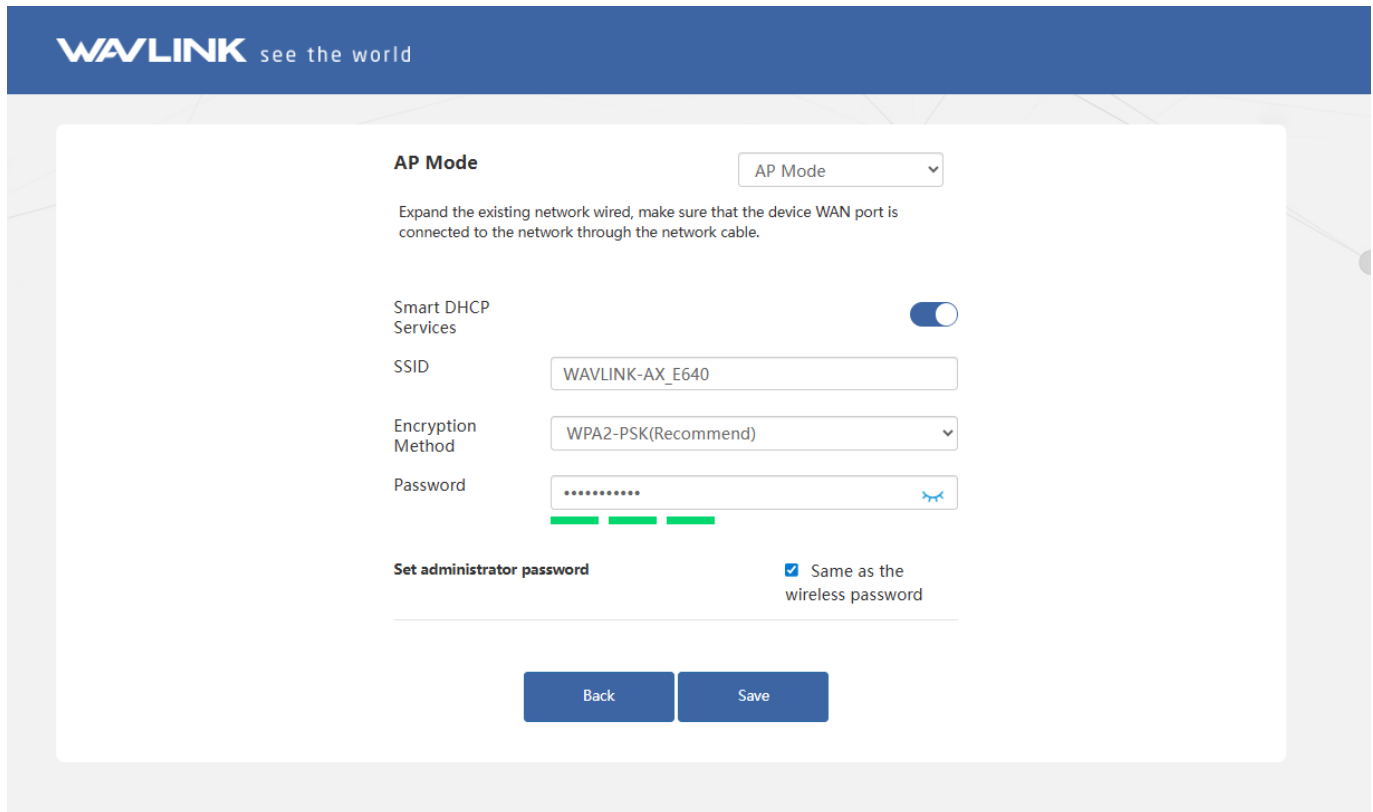
**Gateway Mode:** Functions as a wireless LAN access point(AP). It can relay signals from any wireless network. This mode features DHCP service functionality and operates on a different IP subnet from the upstream device, enabling management of IP address allocation for connected devices.

**Bridge Mode:** This mode can relay signals from any wireless network but does not provide DHCP service. IP addresses are managed by the upstream device. After successful relaying in this mode, access the device configuration page via <http://waplogin.link/> if settings adjustment is required.

**3.2 AP Mode**

To extend an existing network via wired connection, connect the **WAN/LAN** port of the device to the **LAN** port of the upstream router.

1. Choose **AP Mode**.
2. Configure the **SSID(Wi-Fi name)**, **Encryption Method**, and **Password** as your needs, do not tick **Same as the wireless password** to keep the **Wi-Fi password** separate from the management password if it is needed.



The screenshot shows the Wavlink web interface with the header "WAVLINK see the world". The main content area is titled "AP Mode" and includes a dropdown menu set to "AP Mode". Below this, a note states: "Expand the existing network wired, make sure that the device WAN port is connected to the network through the network cable." The "Smart DHCP Services" toggle is turned on. The "SSID" field contains "WAVLINK-AX\_E640". The "Encryption Method" dropdown is set to "WPA2-PSK(Recommend)". The "Password" field is masked with dots and has a strength indicator below it showing three green bars. At the bottom, the "Set administrator password" section has a checkbox labeled "Same as the wireless password" which is checked. "Back" and "Save" buttons are at the bottom of the form.

### 3.3 Mesh Router Mode

Converts the ISP's wired network into a Wi-Fi signal for both wireless and wired Internet access. Meanwhile, this mode supports mesh networking, and you can set this mode to pair sub-routers to form a network.

1. Make sure you have connected the **WAN/LAN** port of this product to the upper router before configuring.
2. Choose **Mesh Router Mode**, configuring the corresponding **WAN Type**, **SSID**(Wi-Fi name), **Encryption Method** and **Password**, then click **Save**.



**Mesh Router Mode**

Mesh Router Mode ▾

Converts a network from a network provider's wired network to a Wi-Fi signal for wireless and wired networking. This mode also supports Mesh networking, which can be set up to pair subrouters to form a networking.

Wan Type

DHCP ▾

SSID

WAVLINK-AX\_C6B0

Encryption Method

WPA2-PSK(Recommend) ▾

Password

Between 8~63 characters



Custom MTU



MAC Clone



If you select DHCP, you need to choose whether to clone the MAC address. When you first access the Internet through their cable modem, some ISPs register the MAC address of your computer. If you add a router to the network to share an Internet connection, the ISP will not accept it because the MAC address has changed. Therefore, we need to clone the MAC address of your computer to the router.

Set administrator password

☒ Same as the wireless password

Back

Save

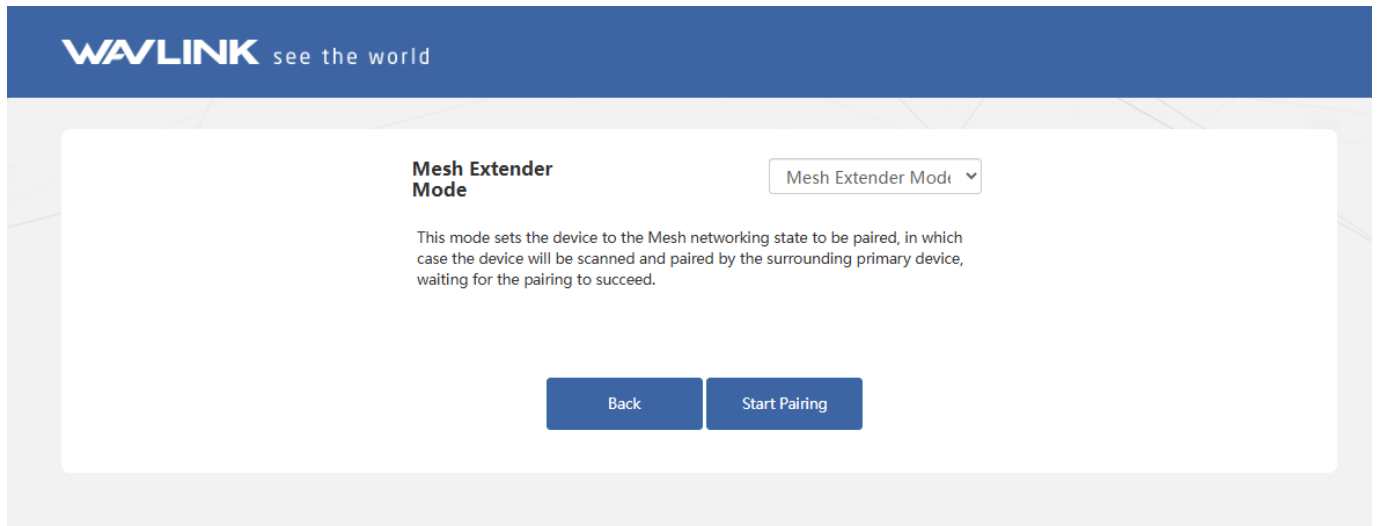
**Which WAN Type am I supposed to choose?**

- ① If you choose **DHCP**, you will need to decide whether to enable the MAC clone. Some ISPs register the MAC address of your computer when you firstly access the Internet through their cable modem, we need to clone the MAC address of your computer to the router. The **Custom MTU(Maximum Transmission Unit)** is the largest size of a data packet that can be transmitted over the network. If your ISP requires you to adjust the MTU size, enable this option. Otherwise, we recommend you to keep it disabled for optimal network performance.
- ② If you choose **PPPoE**, enter the **Username** and **Password** provided by your ISP. PPPoE is usually designed for such as DSL or fiber optics.
- ③ If you choose **Static IP**, enter a specified IP parameters including IP address, Subnet Mask, Gateway, DNS1 and DNS2 provided by your ISP.

**3.4 Mesh Extender Mode**

In this mode, the device enters a Mesh networking pairing state, making it discoverable for scanning and pairing by proximate primary devices waiting to establish a connection.

1. Select **Mesh Extender Mode**, then click **Start Pairing**.



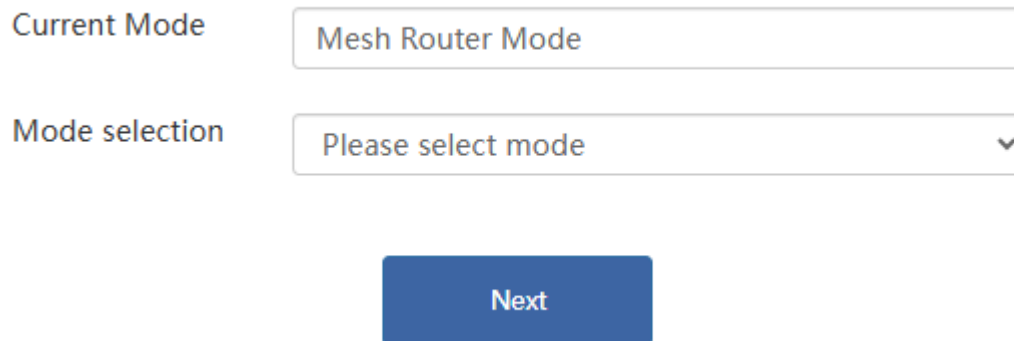
# Chapter 3 Network Management

This chapter contains the following sections :

- [Mesh Settings](#)
- [Network Settings](#)
- [LAN Settings](#)
- [Setting Static IP Binding](#)

## Mesh Settings

1. Click **Advanced** > **Mode Selection**.
2. Select **Mesh Router Mode** or **Mesh Extender Mode** from the **Mode selection**, then click **Next**.



Current Mode

Mode selection

Next

## Mesh Router Mode

Converts the ISP's wired network into a Wi-Fi for both wireless and wired Internet access. Meanwhile, this mode supports mesh networking, and you can set this mode to pair sub-routers to mesh a network.

1. After switching to **Mesh Router Mode**, the **Wan Type** is **DHCP** by default, you can set **PPPoE** and **Static IP** manually if it is needed.
2. Click **Save** and wait for the settings to apply. After waiting about 1 minute, click **Refresh**.

Current Mode	<input type="text" value="AP Mode"/>
Mode selection	<input type="text" value="Mesh Router Mode"/>
Wan Type	<input type="text" value="DHCP"/>

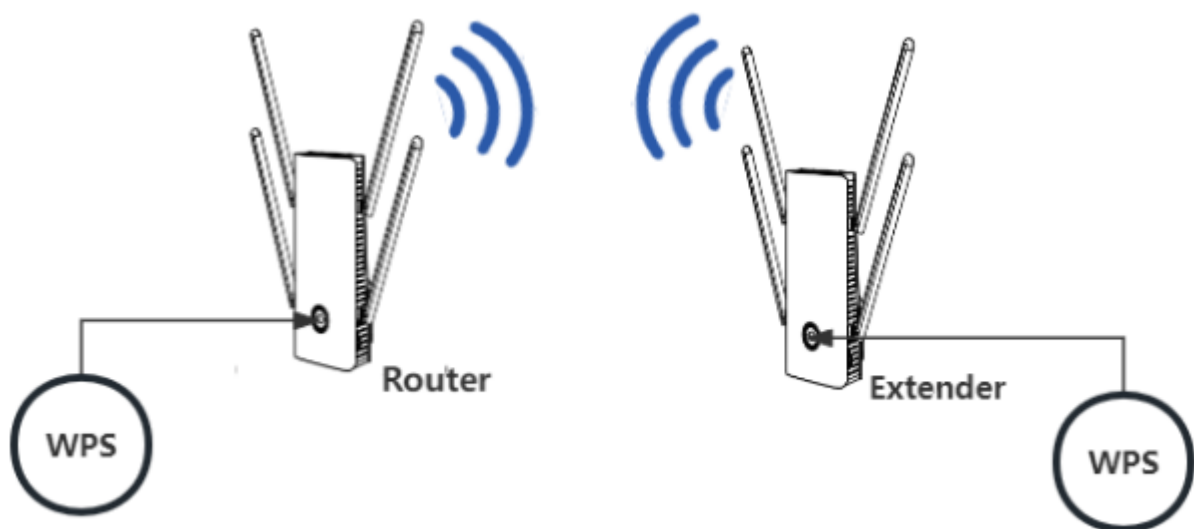
Save

### Note for Mesh Pairing:

Two methods for **Mesh Pairing**, the first is recommended.

#### 1) Via WPS Button:

1. Turn on the power of other Mesh node router, one note is this product should have been reset.
2. Press and hold **WPS Button** on the primary router for **2** seconds. Then the LED Indicator switches to slow flashing in blue.
3. In 2 minutes, press and hold the **WPS Button** on the node router for **2** seconds, the pairing will last **40-120s**, at the same time, the LED indicator will be solid blue indicating the pairing is successful.



#### 2) Via WEB Interface:

1. Click **Advanced>Mesh Network**.






2. Click **Add**, then following the prompt instruction.

[<](#) Mesh Network


Refresh

Add

Mesh Topology

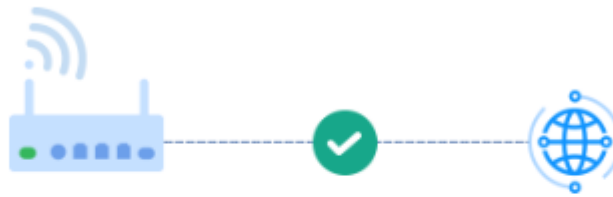
	Name		IP	MAC Address	Signal strength	Delete
	Router		192.168.10.1	8*:***:***:E6:42		
	Extender_C1B2		192.168.10.135	8*:***:***:C1:B2	Good	<div>-</div>
	Extender_0187		192.168.10.195	8*:***:***:01:87	Good	<div>-</div>

[Advanced >](#)

 Help

3. Ensure all Mesh node routers are properly positioned and the main router has an active internet connection, click **Next**, if the node router is in use, reset it.

## Add Mesh Node



1. Please confirm that the main router has successfully connected to the Internet.
2. Place the mesh node to be added near the main router. If the extender has been used, please reset it.

Next

4. Confirm the mesh node router is on, if it is not, turn it on, then press and hold the **WPS Button** for **2** seconds.
5. Click **Start scanning**, then check the device information listed in the result, tick to add the device.

## Add Mesh Node



1. Power up the mesh node, and press "Pair" after the startup is complete.
2. Click "Start Scan", and the main router will automatically scan for the Mesh node whose the pair button has been pressed.

Back

Start scanning

## Add Mesh Node



	PAIRKEY	Select
Extender_4a5b	8*:~*:~*:~*:4a:5b	<input checked="" type="checkbox"/>

Back

Rescan

Add

## Advanced Settings

### 1) Roaming

Roaming helps your devices switch seamlessly between two mesh routers. When you move away from one and closer another router, it will disconnect from the current router and switch to the nearer one to make the internet smoother. And no manual operation is required.

**Note:** The roaming threshold should only be configured by experienced professionals. If you lack professional expertise in this setting, it is recommended to retain the default value to avoid compromising your network experience.

### 2) Topology Optimization

When you have three or more paired devices and all devices have completed pairing, you can enable the topology optimization feature. This function can automatically adjust the optimal path based on the signal strength between devices to ensure that all sub-routers and corresponding upper-level devices have the best signal connection status, achieving optimal network coverage.

**Note:** You can adjust the signal threshold that triggers topology optimization to achieve the best mesh network coverage. If you do not have professional setup experience, it is recommended to use the default settings.

# Mesh Extender Mode

This mode puts the device into a Mesh pairing-ready state, where it will be scanned and paired by nearby primary devices. Await successful pairing.

< Mode Selection

Current Mode

Mesh Router Mode

Mode selection

Mesh Extender Mode

Note: The node router has been used before, setting this mode requires resetting the router!

Reset

?

Help

i

NOTE

If prompted with **Note: The node router has been used before, setting the mode requires resetting the router**, please reset the product following the wizard, then, select **Mesh Extender Mode** during the initial setup.

1. Click **Start Pairing** to put the device into pairing mode, at the same time, press and hold the **PAIR** button on the primary router for **2** seconds, or add the Mesh device on the configuration interface of the primary router. This pairing process will take approximately 2 minutes.

Mesh Extender Mode

Mesh Extender Mode

This mode sets the device to the Mesh networking state to be paired, in which case the device will be scanned and paired by the surrounding primary device, waiting for the pairing to succeed.

BackStart Pairing

i

NOTE



- If pairing fails, check whether the primary router is configured correctly, then restart the pairing process by pressing the **PAIR** button or reentering this device's settings interface.
- If you wish to switch to another mode after successfully configuring the **Mesh Extender Mode**, factory reset this device.

# Network Settings

The way of network access can be changed as your requirement through configuring the network setting. Choose the **WAN Type** according to the method provided by the ISP.

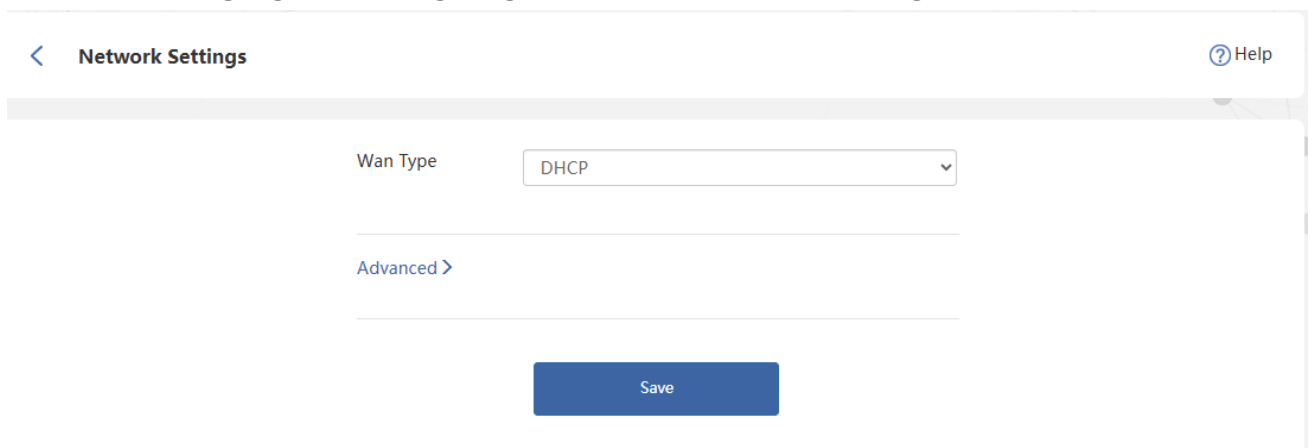
- **DHCP:** Network parameters configured automatically by your ISP
- **Static IP:** Requires manual entry of IP address, Subnet Mask, Gateway, DNS1 and DNS2
- **PPPoE:** Requires ISP-provided Username and Password.

1. **Advanced > Network Settings.**

2. Select **Wan Type** from the list.

## 1) DHCP(Dynamic Host Configuration Protocol)

- It assigns network information including IP, Subnet Mask, default Gateway and others, managing and assigning IP without manual configuration.



The screenshot shows a web interface for 'Network Settings'. At the top left is a back arrow and the title 'Network Settings'. At the top right is a 'Help' icon. Below the title bar, there is a form with a label 'Wan Type' and a dropdown menu currently showing 'DHCP'. Below this, there is a link 'Advanced >'. At the bottom of the form is a blue 'Save' button.

## 2) PPPoE(Point-to-Point Protocol over Ethernet)

- It is designed for broadband access methods such as ADSL, fiber optics and others to provide a secure network connection.
- The **Name** and **Password** provided by your ISP is required.

Wan Type Name Password [Advanced >](#)

### 3) Static IP

- It assigns fixed IP address for the computer automatically. It is designed for servers, remote access, etc., which require long-term stability to ensure the stability of network connections.
- Correct **IP Address**, **Subnet Mask**, **Gateway**, **DNS1** and **DNS2** is required.

Wan Type IP Address Subnet Mask Gateway DNS1 DNS2 [Advanced >](#)

## Advanced Settings

- **Custom MTU(Maximum Transmission Unit)**

The MTU(Maximum Transmission Unit) is the largest size of a data packet that can be transmitted over the network. If your ISP requires you to adjust the MTU size,

enable this option. Otherwise, we recommend you to keep it disabled for optimal network performance.

- **MAC Clone**

If the network operator only permits single device to access the internet, you can enable **MAC Clone** and spoof the MAC address of the originally connected device. This allows other devices connected to the router to access the internet normally.

- **Custom DNS**

If the network operator assigned fixed DNS address for you, you can enable **Custom DNS** and input the address provided. Otherwise, manual activation is unnecessary—the router will automatically obtain DNS addresses.

[<](#) **Network Settings** [? Help](#)

Wan Type

DHCP

Advanced

Custom MTU

1500

MAC Clone

Custom MAC address

80:3F:5D:86:E7:26

Custom DNS

DNS1

DNS2

Save

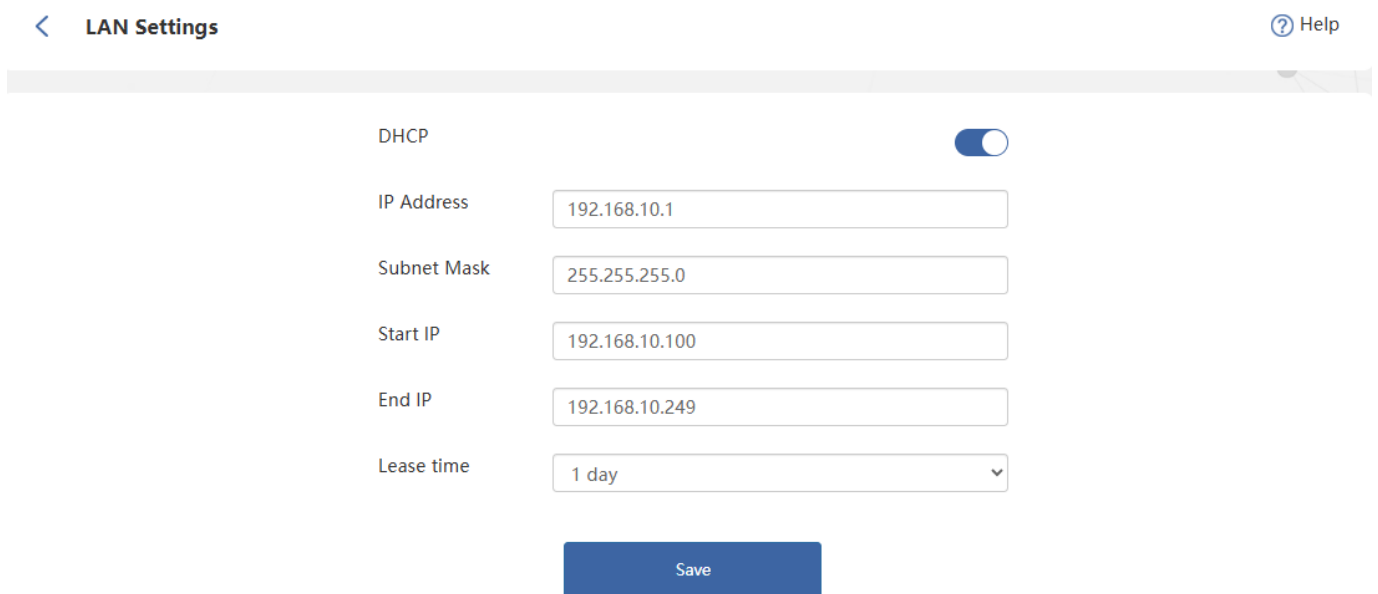
## LAN Settings

DHCP(Dynamic Host Configuration Protocol) server automatically assigns IP addresses to devices on the LAN. To modify DHCP settings, refer to the instructions below.

1. Click **Advanced** > **LAN Settings**.
2. Click to enable DHCP, and configure the corresponding information.

- **IP Address:** The IP address from which the router connects to the LAN. This can be used to log in to the router's network management page.
- **Subnet Mask:** The subnet mask that the router connects to the LAN.
- **Start IP, End IP:** The range of IP addresses that can be allocated by the router to connected devices.
- **Lease time:** This is the lease time of the IP address that the device obtains when accessing the router. If you need to modify it, please select it again in the Lease Time drop-down list.

3. Click **Save** to finish the setup.




The screenshot shows the 'LAN Settings' page. At the top left is a back arrow and the text 'LAN Settings'. At the top right is a 'Help' icon. The main content area has a light gray background. On the left, the 'DHCP' label is followed by a toggle switch that is turned on. Below this, there are six rows of configuration fields: 'IP Address' with the value '192.168.10.1', 'Subnet Mask' with '255.255.255.0', 'Start IP' with '192.168.10.100', 'End IP' with '192.168.10.249', and 'Lease time' with a dropdown menu showing '1 day'. At the bottom center is a blue 'Save' button.

## Setting Static IP Binding

It allows you to link the specific IP to the MAC address of customer devices. Using it, you can assign a fixed IP for the specific device.

1. Click **Advanced** > **Static IP**.
2. Click **Add a new rule** at the top right corner.
3. Input the **IP Address** and **MAC Address** from the binding device, then click **Bind**.

Add a new rule 

IP Address	MAC Address	Operate	
<input type="text" value="192.168.10.248"/>	<input type="text" value="42:3D:E5:0F:7A:2F"/> 	<input type="button" value="Bind"/>	<input type="button" value="Cancel"/>

# Chapter 4 Managing Wireless Network

This chapter contains the following sections:

- [Wireless](#)
- [Guest Wi-Fi](#)
- [Parental Control](#)

## Wireless

In **Wireless**, you can configure the **SSID**(Wi-Fi name), **Encryption Method**, **Password**, and other wireless parameters for both the 2.4G and 5G networks.

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-AX\_E640

Encryption Method

WPA2-PSK(Recommend) ▼

Password

•••••••• 

[Advanced >](#)

[WIFI schedule >](#)

Save

## Band Steering

When enabled **Band Steering**, both 2.4GHz and 5GHz wireless networks share the same Wi-Fi name. The router will dynamically assign devices to the optimal frequency band based on real-time network conditions. When disabled, you may configure separate Wi-Fi names and settings for the 2.4GHz and 5GHz bands.

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.



## SSID(Wi-Fi Name) and Password

1. Create a new Wi-Fi name in the **SSID** input field.
2. Select the **Encryption Method** from the dropdown list(WPA3-SAE/WPA2-PSK is recommended.)
3. Create a new Wi-Fi password in **Password**.

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.



### 2.4G WiFi

SSID

WAVLINK-AX\_E640

Encryption  
Method

WPA2-PSK(Recommend)

Password

.....



### 5G WiFi

SSID

WAVLINK-AX\_E640\_5G

Encryption  
Method

WPA2-PSK(Recommend)

Password

.....



**Note:** Using the new password to reconnect to the Wi-Fi network after setting up a new network.

## Advanced

1. Click **Wireless** > **Advanced**.

**2.4G WiFi Settings**

Channel	<div>Automatic▼</div>
Bandwidth	<div>20/40MHz▼</div>
Disable Wi-Fi	<input type="checkbox"/>
Hide SSID	<input type="checkbox"/>
TWT	<input type="checkbox"/>
MU-OFDMA	<input type="checkbox"/>

**5G WiFi Settings**

Channel	<div>Automatic▼</div>
Bandwidth	<div>20/80/160MHz▼</div>
Disable Wi-Fi	<input type="checkbox"/>
Hide SSID	<input type="checkbox"/>
DFS	<input checked="" type="checkbox"/>
TWT	<input type="checkbox"/>
MU-OFDMA	<input type="checkbox"/>

- **Channel** and **Bandwidth** :

1. From the **Channel** dropdown list, select the operating channel for your wireless network. (If you are unsure about which channel to choose, it is recommended to select **Automatic**, so the device can automatically select the optimal channel based on the surrounding environment for your better network experience.)
2. From the **Bandwidth** dropdown list, select the bandwidth for the router's wireless data transmission.

- **Disable Wi-Fi:**

1. If enabling this feature, the corresponding Wi-Fi signal will be closed.



- **Hide SSID:**

1. After enabling this, the wireless signal for the corresponding network will be hidden.

- **DFS:**

1. After enabling this, the device will automatically avoid channels that are restricted in your region.

- **TWT:**

1. After enabling this feature, the router will automatically optimize resource scheduling between devices, negotiate target wake time to reduce contention, increase device sleep time, and ultimately extend the lifespan of the router.

**Note:** TWT compatibility issues may occur with certain terminal devices.

- **MU-OFDMA**

1. Once enabled, the router will implement multi-user channel resource sharing, enhancing transmission efficiency in multi-device environments and reducing network latency.

## WiFi Schedule (Wireless Timer Switch)

The schedule function allows you to customize the date and time to control the wireless network switch, with up to three rules definable for the 2.4G and 5G separately. This feature only takes effect after obtaining the network time and only affects the main network. For the guest network, you need to manually enable or disable this feature or define separate rules within the **Guest Network** settings.

1. Navigate to **Wireless > WiFi Schedule**.
2. Click on **Rule 1/2/3** under either the **2.4G wireless schedule** or **5G Wireless Schedule** to set the timing rules.
3. Click **Save** to complete the settings.

## 2.4G wireless schedule

Rule 1



	Blocking Start Time			Blocking End Time			
Internet Blocking Period	00	:	00	~	00	:	00
Internet Blocking Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Rule 2



Rule 3



## 5G Wireless Schedule

Rule 1



	Blocking Start Time			Blocking End Time			
Internet Blocking Period	00	:	00	~	00	:	00
Internet Blocking Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Rule 2



Rule 3

**Note:**

- The schedule is based on the router's time. You can modify the time in **Advanced > Time Zone**.

## Guest Wi-Fi

This feature allows you to provide Wi-Fi to guests without exposing your main network. When you have visitors at your home, apartment, or workplace, you can create a guest Wi-Fi for them. Additionally, you can customize guest Wi-Fi settings to ensure security and privacy.

1. Navigate to **Advanced > Guest Wi-Fi**.
2. Click **Multiple SSID** to enable guest Wi-Fi.
3. Set the **SSID**.
4. Set the encryption method in the **Visitor Network Mode**.
5. Set the **Internet Blocking Period** and **Internet Blocking Day** in the **WIFI schedule**.
6. Click **Save** to complete the settings.

## &lt; Multiple SSID

## Multiple SSID



## Multiple SSID

SSID

WAVLINK\_Guest

Visitor Network  
Mode

Unencrypted mode

Equipment  
Isolation

Turn On

## Wi-Fi schedule

Rule 1



Rule 2



Rule 3



Save

### Note for Equipment Isolation:

Equipment isolation is designed for network security, this feature can isolate the devices within the same LAN to enforce the network security and private protection. This function has the following features:

- **Isolating Communication among Devices:** Device isolation blocks direct communication between devices within the LAN, effectively isolating and restricting the data traffic between them. This mitigates the spread of malware or attackers from compromised devices to other network devices.
- **Enhancing Online Privacy:** Through equipment isolation, the user can better protect the privacy of their devices and data. For instance, in public Wi-Fi, equipment isolation prevents nearby users from accessing directly to each other's devices, thereby reducing the risks of data leaks and snooping.
- **Preventing Unauthorized Access:** Equipment isolation restricts communication between devices and prevents unauthorized devices from accessing or interfering

with other devices on the network. This enhances the overall security of the network while reducing the risk of potential intrusions.

Equipment  
isolation

Turn On

## Parental Control

Parental Wi-Fi allows you to set up a separate wireless network for family members. You can configure its SSID, encryption method, and rules.

1. Navigate to **Advanced** > **Parental Control**.
2. Click to enable **Parental Control**.
3. Set the **SSID**, **Encryption Method**, and **Password**.
4. Set the **Internet Blocking Period** and **Internet Blocking Day** in **Rule 1/2/3** to control internet access time.
5. Click **Save** to complete the settings.

< Parental Control

Parental Control



Wi-Fi

SSID

Parental-Wi-Fi

Encryption  
Method

WPA2-PSK(Recommend)

Password

Please enter your password



WIFI schedule

Rule 1



Rule 2



Rule 3



Save



# Chapter 5 Network Security

## Security Settings

1. Navigate to **Advanced** > **Security Settings**.
2. **Block Ping**: It can prevent ping attacks and scanning and reduce the risk of network attacks on this device.
3. **Port Scan Blocking**: It can protect server ports on devices from attacks.
4. **Block DDoS Attacks**: It enables the router to avoid the massive resource consumption caused by DDoS attacks, and ensures normal services.
5. Click **Save** to finish the configuration.

[<](#) Security Settings [? Help](#)

Block Ping

☐

Block Port Scanning

☐

Block DDoS Attacks

☒

Save

# Chapter 6 Remote Control

## Remote Control

With this function, you can manage this router remotely via the Internet. Input **http://WAN IP: port number** for remotely accessing this device. We recommend you write this router's WAN port number down before using this function.

1. Access to **Advanced > Remote Control**.
2. Click to enable **Remote Control**.
3. Set **External Port**.
4. Click **Save** to complete settings.

[<](#) Remote Control [? Help](#)

Remote Control

☒

External Port

Save

# Chapter 7 Net Tools


## Network Diagnostics

The network diagnosis will check the status of the upstream network, router network status, and device's system status. The test results may be affected by the environment where the router is located and the upstream network, therefore the test results are for reference only.

- 1. Access to **Advanced > Network Diagnostics**.
- 2. Click **Start Testing**.

< Network Diagnostics

Help



If your device is unable to connect to the Internet or the network is unstable, we recommend that you perform a test

Start Testing

WAN Status	Check WAN port status, IP acquisition, and port rate limit	Not detected
Internet status	Detect the connectivity status between devices and gateways and networks	Not detected
Wi-Fi status	Detect Wi-Fi signal interference status	Not detected
Memory detection	Check memory and CPU usage	Not detected

- 3. When the testing is done, click **One-click fix**, or follow the prompt to optimize the network.



## &lt; Network Diagnostics

[? Help](#)

Detection completed. The results are as follows

[One-click fix](#)

## WAN Status

Check WAN port status, IP acquisition, and port rate limit



WAN Port and Network Cable Connection Status



WAN IP Address Status

Contact your carrier to troubleshoot or check if the network cable is connected correctly



WAN Port Network Link Speed

Link rate:1000M Full duplex

## Internet status

Detect the connectivity status between devices and gateways and networks



Ping Testing Status

Ping WAN gateway is incorrect, please contact the carrier to solve it



Network connection status

DNS resolution error, please contact the carrier to solve it



## Wi-Fi status

Detect Wi-Fi signal interference status



2.4G Wi-Fi Signal Status



5G Wi-Fi Signal Status

Wi-Fi signal interference is strong



## Memory detection

Check memory and CPU usage



# Chapter 8 System Setting

This chapter contains the following sections:

- [Firmware Upgrade](#)
- [Change Admin Password](#)
- [Set System Time](#)
- [LED Control](#)
- [Backup and Restore](#)
- [Timing Reboot](#)

## Firmware Upgrade

Regular firmware upgrade can obtain the newest functions and security patches, improving the performance and stability of the router, and fixing possible bugs and security risks.

WAVLINK provides two methods to upgrade your firmware: **Local Upgrade** and **Online Upgrade**. You can choose one of them to update your firmware.

Access to **Advanced** > **Firmware Upgrade**.

### Local Upgrade

1. Access to WAVLINK official website: [www.wavlink.com](http://www.wavlink.com). Download the upgrade software corresponding to your current device version.
2. Select the device that needs to be updated.
3. Click on **Choose File** or **File** icon, and select the firmware file that needs to be uploaded. Click on **Upload**.
4. Wait for the upgrade process to complete.

### 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	M83AX3_V241109
<input type="checkbox"/>	Extender_C1B2	M83AX3_V241109
<input type="checkbox"/>	Extender_0187	M83AX3_V241109

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
----------------	--------------------	--------------

## Online Upgrade

1. Tick the device that needs to be updated.
2. Click on **Check New Version** to view the upgradable version to update.
3. Click **One-Click Upgrade**.
4. Wait for the upgrade process to complete.

### 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	8*:*:*:*:E6:42	M83AX3_V241109	No New Version	Non-Upgradable
<input type="checkbox"/>	Extender_C1B2	8*:*:*:*:C1:B2	M83AX3_V241109	No New Version	Non-Upgradable
<input type="checkbox"/>	Extender_0187	8*:*:*:*:01:87	M83AX3_V241109	No New Version	Non-Upgradable

Check New Version

One-Click Upgrade

### Note:

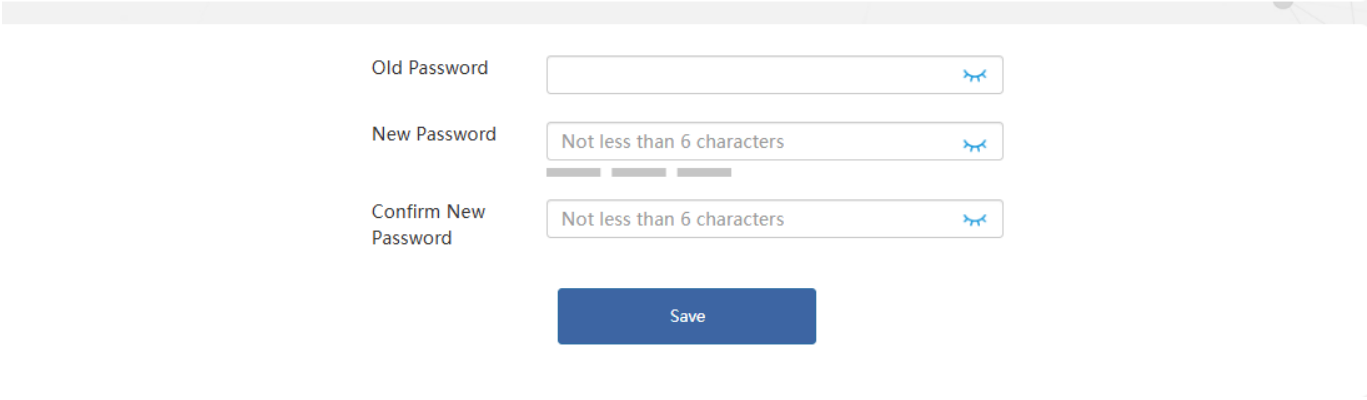
- After updating, the router will automatically reboot to apply new firmware. The process will take few minutes to complete, please wait patiently.

- During updating, the router can't be powered off in case the firmware gets damaged.

## Change Admin Password

1. Access to **Advanced** > **Admin Password**.
2. Input the current one on the **Old Password** text field.
3. Input the new one on the **New Password** and **Confirm New Password** text field, ensuring the inputted password is the same.
4. Click on **Save** to complete password changing.

< Admin Password



The screenshot shows the 'Admin Password' configuration page. It features three input fields: 'Old Password', 'New Password', and 'Confirm New Password'. The 'New Password' and 'Confirm New Password' fields have a validation message 'Not less than 6 characters' and a strength indicator (three bars). A blue 'Save' button is located at the bottom.

Old Password	<input type="password"/>
New Password	<input type="password"/> Not less than 6 characters
Confirm New Password	<input type="password"/> Not less than 6 characters

Save

## Set System Time

The system time is the time displayed during device runtime. The system time configured here will be used for other time-dependent functions, such as Wi-Fi schedules and timing reboot.

1. Access to **Advanced** > **Time Zone**.
2. Select the time zone from the dropdown list of **Time Zone**.
3. Enable **Daylight Time**(optional).
4. Click on **Save** to complete the configuration.

Current Time 2024/11/09 09:19:42

Time Zone (UTC-00:00) Dublin, Edinburgh, Lisbon, London ▼

Daylight Time ☐

Save

## LED Control

The router's LED provide real-time feedback on the device's operational status. By observing the light color, flashing patterns, or illumination status, you can quickly determine whether the router is functioning properly and help identify potential issues. If needed, you may also enable or disable the LED indicator in the settings.

1. Access to **Advanced** > **LED Control**.
2. Enable/Disable **LED Status**.
3. Click on **Save** to complete the configuration.

LED Status



Save

## Backup and Restore

Access to **Advanced** > **Backup and Restore**.

### Backup the Current Configuration of the Router

The system will automatically create a backup file containing all current configuration settings. The configuration file will then be downloaded to your computer via your browser. Please confirm saving the file when prompted in the browser dialog.

# Restore the Router's Configuration

If you accidentally forget previous settings after modifying certain configuration options, you may upload a previously saved backup file to the system and click **Restore Configuration** to revert to earlier settings. Please note that this operation will overwrite all current configuration settings, so carefully consider before proceeding.

1. Click the file icon in the backup file field, then select the configuration file you wish to restore.
2. Click on **Restore Configuration**, and wait a few minutes to restore the configuration and restart the router.

# Reset Router to Default Factory Settings

1. Click on **Restore factory settings** to reset the router.
2. Wait a few minutes for the reset and reboot.

<

Backup and Restore

?

Help

Generate Backup File

Upload File

Please select a backup file

Restore Configuration

Restore factory settings

# Timing Reboot

Automatic reboots can help clear unnecessary data from your router and automatically select optimal wireless channels. Before enabling **Reboot plan**, ensure the system time is accurate. When router uptime is less than 60 minutes, the device will skip non-essential reboots after reaching the scheduled reboot time.

1. Access to **Advanced > Timing Reboot**.
2. Click to enable **Reboot plan**.

3. Configure **Reboot time** and **Reboot date**.
4. Click **Save** to complete the configurations.

< Timing Reboot

? Help

Reboot plan



Current Time 2024/11/09 09:19:42

Reboot time

00

:

00

Reboot date

Su

Mo

Tu

We

Th

Fr

Sa

Save

# Chapter 9 FAQ

This chapter contains the following sections :

- [FAQ](#)
- [GNU General Public License Notice](#)
- [After-sale-Service](#)

## FAQ

### Q1. How do I turn off the LED light if it affects my sleep?

- Please go to **Advanced** > **LED Control** to manage the light status.

### Q2. Why can't I visit the web UI by inputting the IP address 192.168.10.1 or [http://waplogin.link](#) ?

- If you can't log with AP Modem, please check the IP address arranged by the upstream router, use the new IP address to log in.
- Make sure you have connected to the Wi-Fi of the 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. How do I choose the modes?

- Please choose the mode that suits your needs.
- In AP Mode, it extends network coverage by connecting to a router/switch via Ethernet cable.
- In Repeater Mode, it extends network coverage wirelessly by connecting to an existing Wi-Fi network.
- In Mesh Router Mode, it converts the wired connection from your ISP into a Wi-Fi signal and acts as the primary mesh node.
- In Mesh Extender Mode, it extends network coverage by wirelessly joining an existing mesh network.

### Q4. What should I do if I forget my admin password?

- Try to restore factory settings.



- Feel free to contact us.

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## After-sale Service

# Need help?

## We're here for you!



Online support: [wavlink.com](http://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

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

[www.wavlink.com](http://www.wavlink.com)



Thank you for purchasing  
WAVLINK product!



# Chapter 10

## Safety and Emission Statement

### CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

### NOTE:

(1)The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2)To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

**Declaration of Conformity** Hereby, Winstars Technology Limited, declares that the radio equipment type AERIAL D6XH is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following Internet address:[https://www.wavlink.com/en\\_us/ce.html](https://www.wavlink.com/en_us/ce.html)

**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.

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.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

#### Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

**NOTE:** (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.