

# Reyee Home Wi-Fi Series

## Reyee Mesh Solution in Home Scenario




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# Preface

## Intended Audience

This document is intended for:

- Network engineers
- Technical support and servicing engineers
- Network administrators

## Technical Support

- The official website of Ruijie Reye: <https://www.ruijienetworks.com/products/reyee>
- Technical Support Website: <https://reyee.ruijie.com/en-global/support>
- Case Portal: <https://caseportal.ruijienetworks.com>
- Community: <https://community.ruijienetworks.com>
- Technical Support Email: [service\\_rj@ruijienetworks.com](mailto:service_rj@ruijienetworks.com)

## Conventions

### 1. GUI Symbols

Interface Symbol	Description	Example
<b>Boldface</b>	1. Button names 2. Window names, tab name, field name, and menu items 3. Link	1. Click <b>OK</b> . 2. Select <b>Config Wizard</b> . 3. Click the <b>Download File</b> link.
>	Multi-level menus items	Select <b>System &gt; Time</b> .

### 2. Signs

This document also uses signs to indicate some important points during the operation. The meanings of these signs are as follows:

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#### **Warning**

An alert that calls attention to important rules and information that if not understood or followed can result in data loss or equipment damage.

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#### **Caution**

An alert that calls attention to essential information that if not understood or followed can result in function failure or performance degradation.

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 **Note**

An alert that contains additional or supplementary information that if not understood or followed will not lead to serious consequences.

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 **Specification**

An alert that contains a description of product or version support.

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### **3. Instruction**

This manual is used to guide users to understand the product, install the product, and complete the configuration.

- The example of the port type may be different from the actual situation. Please proceed with configuration according to the port type supported by the product.
- The example of display information may contain the content of other product series (such as model and description). Please refer to the actual display information.
- The routers and router product icons involved in this manual represent common routers and layer-3 switches running routing protocols.

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# 1 . Introduction

Reyee Mesh is an innovative feature that connects multiple compatible Reyee home routers to create a whole-home Wi-Fi network. It offers a flexible and scalable solution that enables you to mix different models as needed for extended coverage or additional features. You can effortlessly expand your Reyee Mesh network by adding another compatible router without replacing your current hardware.

## 1.1 Benefits of Reyee Mesh in Home Scenario

Benefits	Resolved Issues
One-touch Reyee Mesh	Configure multiple devices
Supports all Reyee home router models	
Eliminate Wi-Fi dead zones	No Wi-Fi signal in your bedroom
Easily manage the whole-home network	Complicated Wi-Fi setup
Supports seamless Wi-Fi roaming	Disconnections as you move around the house

## 1.2 Limitations of Mesh Scenario

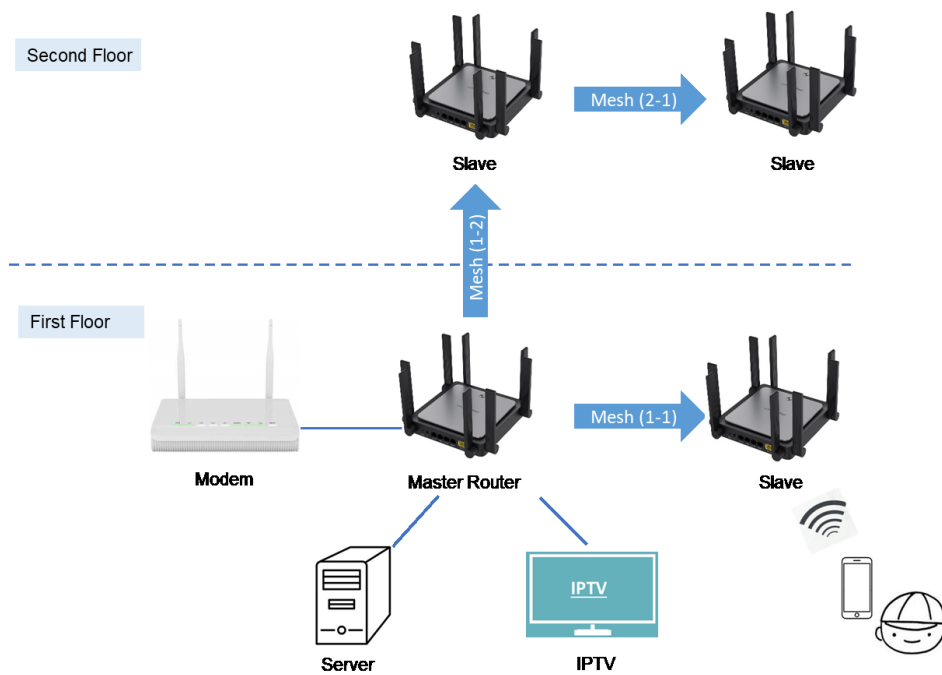
- (1) The maximum capacity of a mesh network is 32 units.
- (2) A wireless mesh network should have no more than 3 hops.



- (3) A wired mesh network should have no more than 11 hops.
- (4) The recommended number of secondary devices on a wireless mesh network should not exceed 3.



### 1.3 Typical Topology of Reyee Mesh in Home Scenario



### 1.4 Products of Reyee Mesh in Home Scenario

Reyee Mesh is supported on all Reyee EW series routers.

## 2 Installation

- (1) The following safety precautions must be followed during installation and use:
- (2) Do not place the device in a damp or wet location, and keep the device away from any kind of liquid.
- (3) Install the device in a position far away from heat sources.
- (4) Wear an ESD wrist strap during installation and maintenance.
- (5) Do not wear loose clothing and tighten your belt, scarf, and sleeves to prevent clothing from getting caught on the device and causing damage.
- (6) Keep tools and accessories away from walking areas to avoid damage.
- (7) You are advised to use an uninterruptible power source (UPS) to avoid power failures and disturbance.

The installation site must meet the following requirements:

- (1) Temperature and Humidity
- (2) Cleanliness
- (3) ESD Protection Requirements
- (4) Anti-interference
- (5) Checking the Mounting Workbench

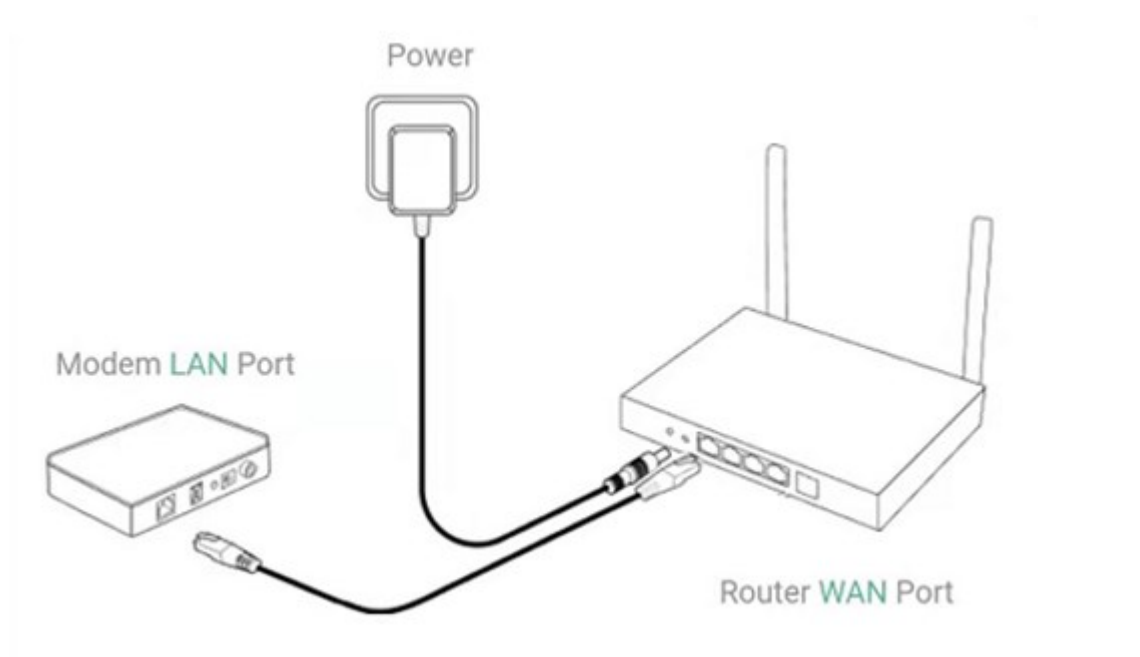
For more details, see [Ruijie Reyee RG-EW3000GX PRO Wi-Fi Router Installation Guide](#).

## 3 Basic Configuration

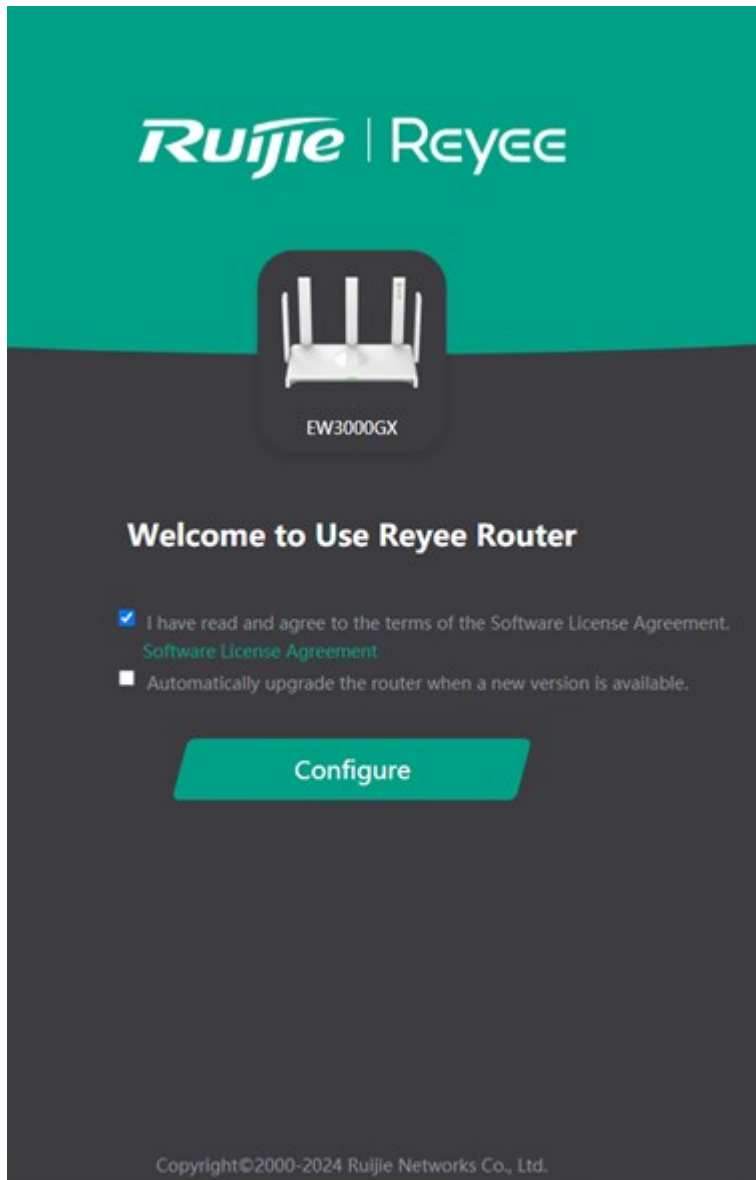
### 3.1 Quick Start

- (1) Connect the primary router to a power source, and then connect the LAN port of the modem to the WAN port of the router.



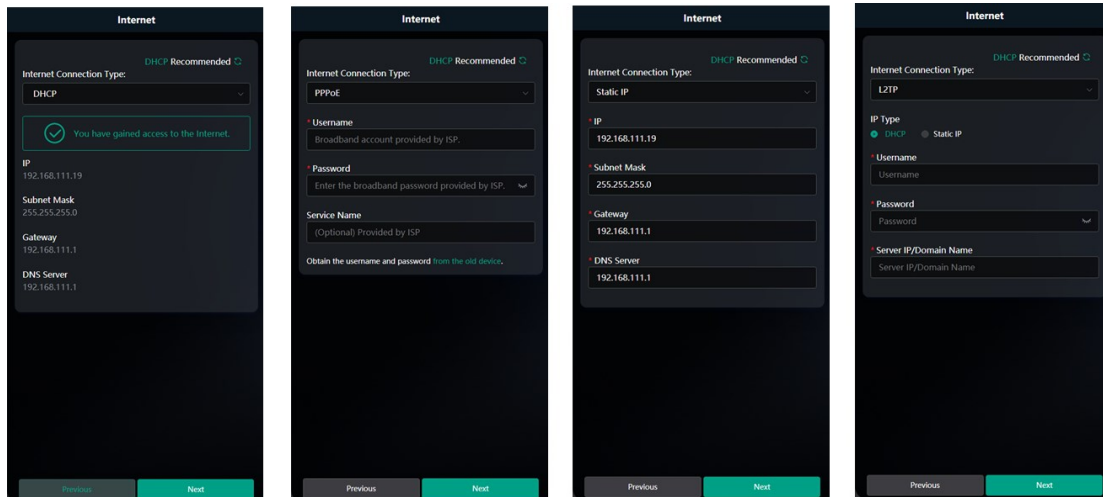


- (2) After the system status LED turns solid on, connect your PC or phone to the SSID (@Ruijie-sXXXX). You will be automatically redirected to the configuration page.

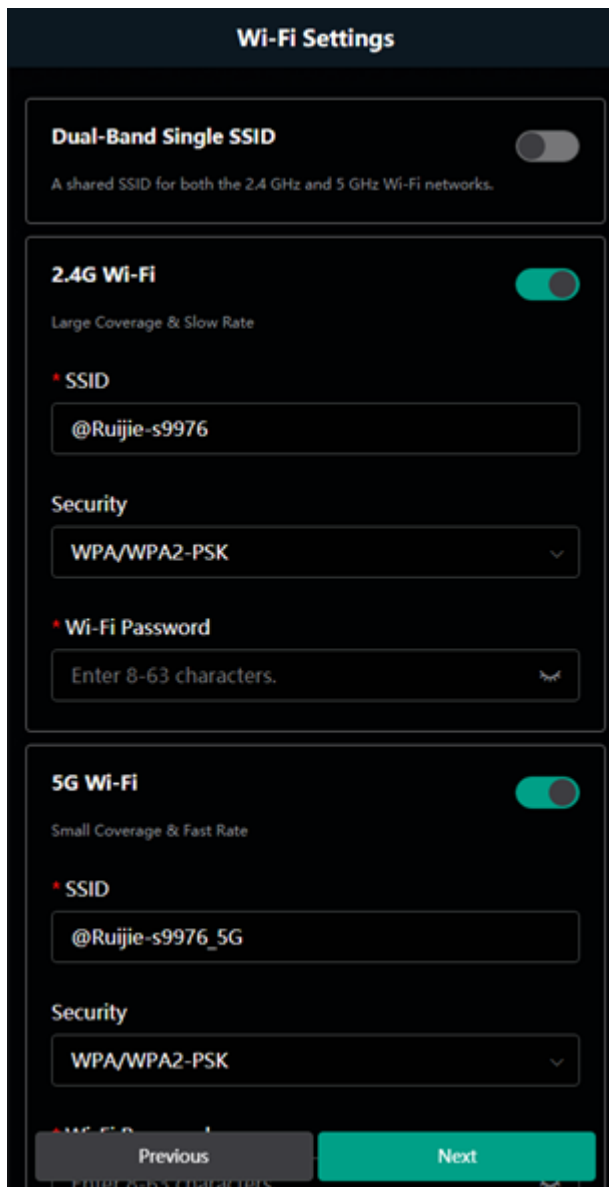


(Note: If the configuration page does not appear, enter 192.168.110.1 in the browser to access the web interface and proceed with the configuration as prompted.)

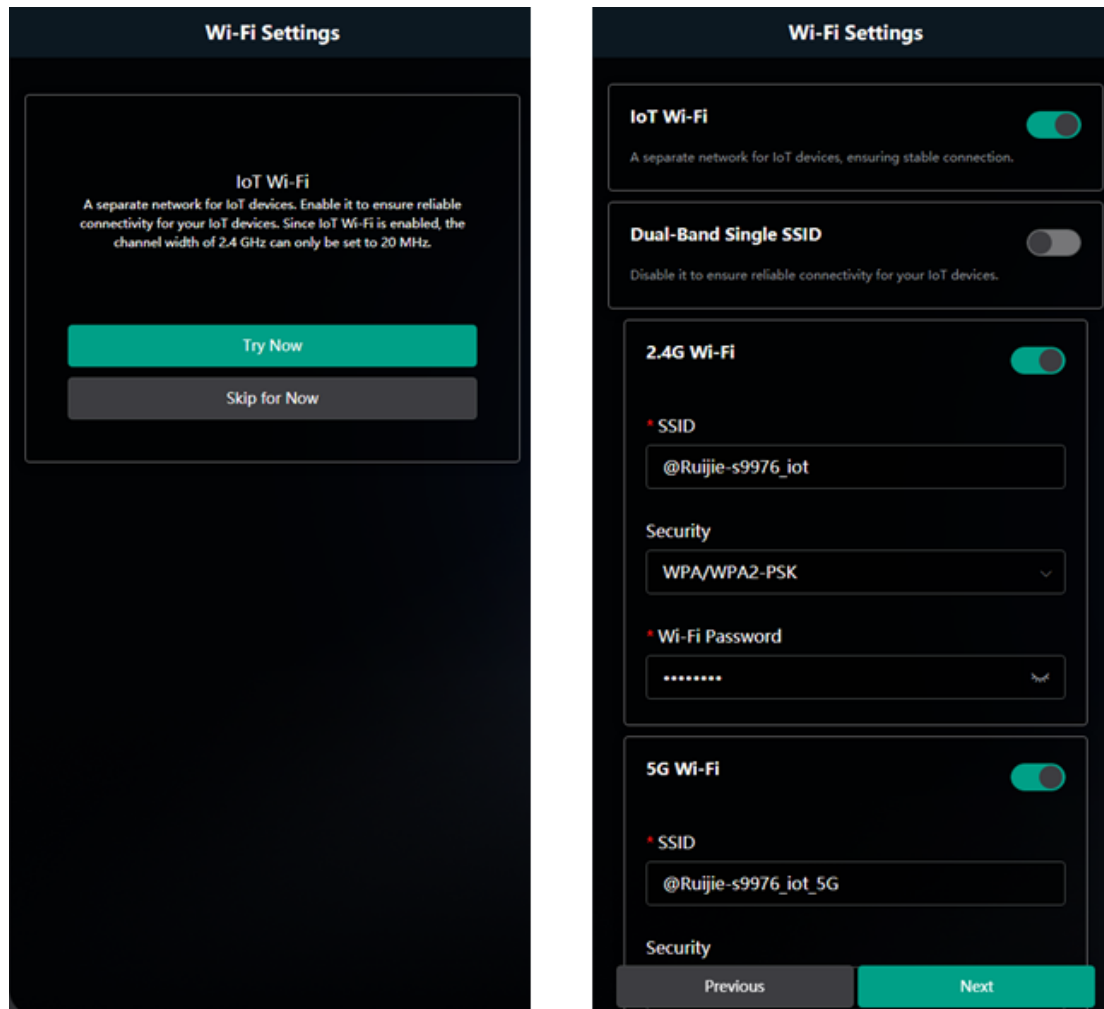
- (3) Configure the Internet connection type as confirmed by your local ISP. You can choose from DHCP, PPPoE, Static IP, or L2TP for Internet connection.



- (4) On the **Wi-Fi Settings** page, set the SSID and password for the general Wi-Fi network and Game Wi-Fi network.

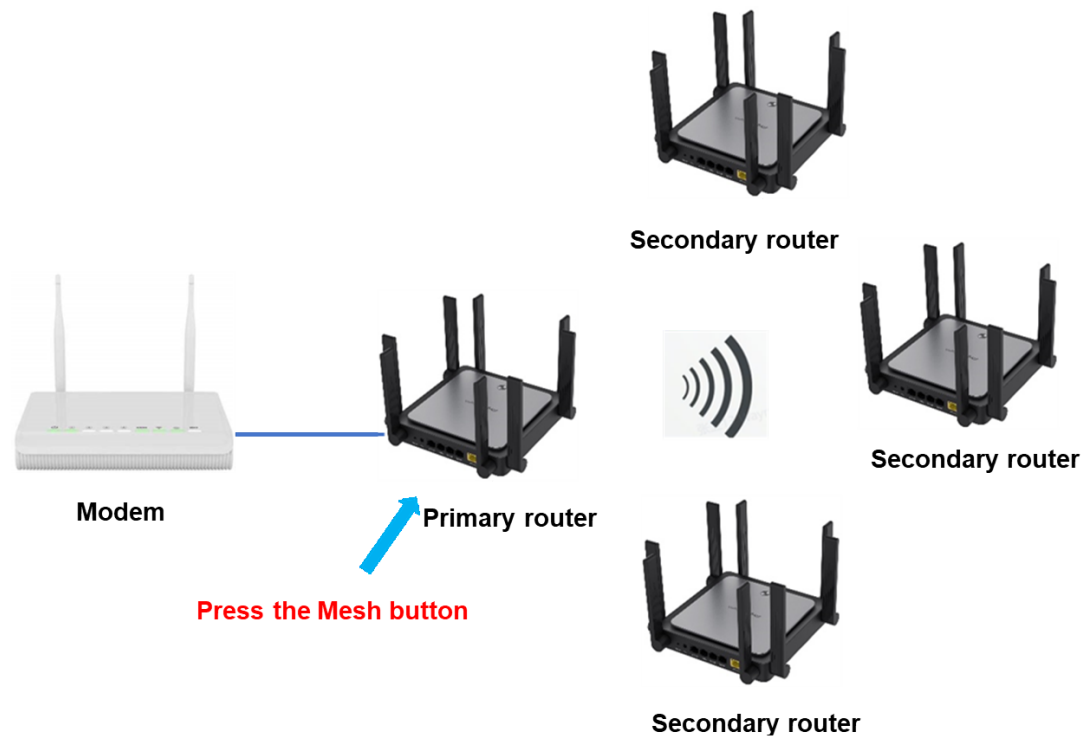


- (5) Enable **IoT Wi-Fi** to ensure reliable connectivity for your IoT devices.



## 3.2 One-touch Reyee Mesh

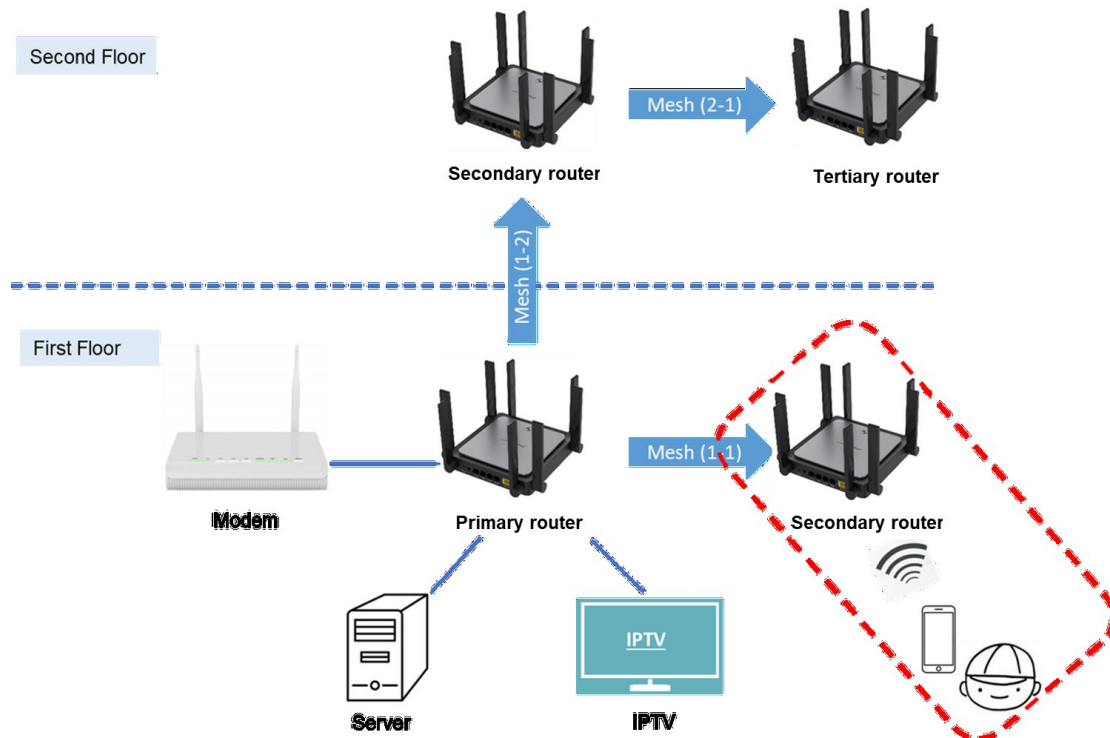
- (1) Place the secondary routers 2 meters (6.56 ft.) away from the primary router and power them on. Wait a few minutes until the system status LEDs on the secondary routers change from blinking green to solid red, indicating that the routers have finished starting up. Ensure the secondary routers are reset to factory settings. If they have been previously configured, use a pin to press the **Reset** button and restore them to factory settings.
- (2) Press the **Mesh** button on the primary router. Mesh pairing will complete in 2 minutes. During pairing, the Reyee Mesh LEDs on the routers will blink for approximately 2 minutes. Mesh pairing is successful once the LEDs turn solid on. The secondary routers' Wi-Fi name and password will automatically synchronize with those of the primary router.



- (3) Place the secondary routers in areas where the Wi-Fi signal strength needs to be improved and then power them on. No further configuration is needed after power-on. Once the system status LED turns solid green, you can connect to the SSID broadcast by the router for Internet access.

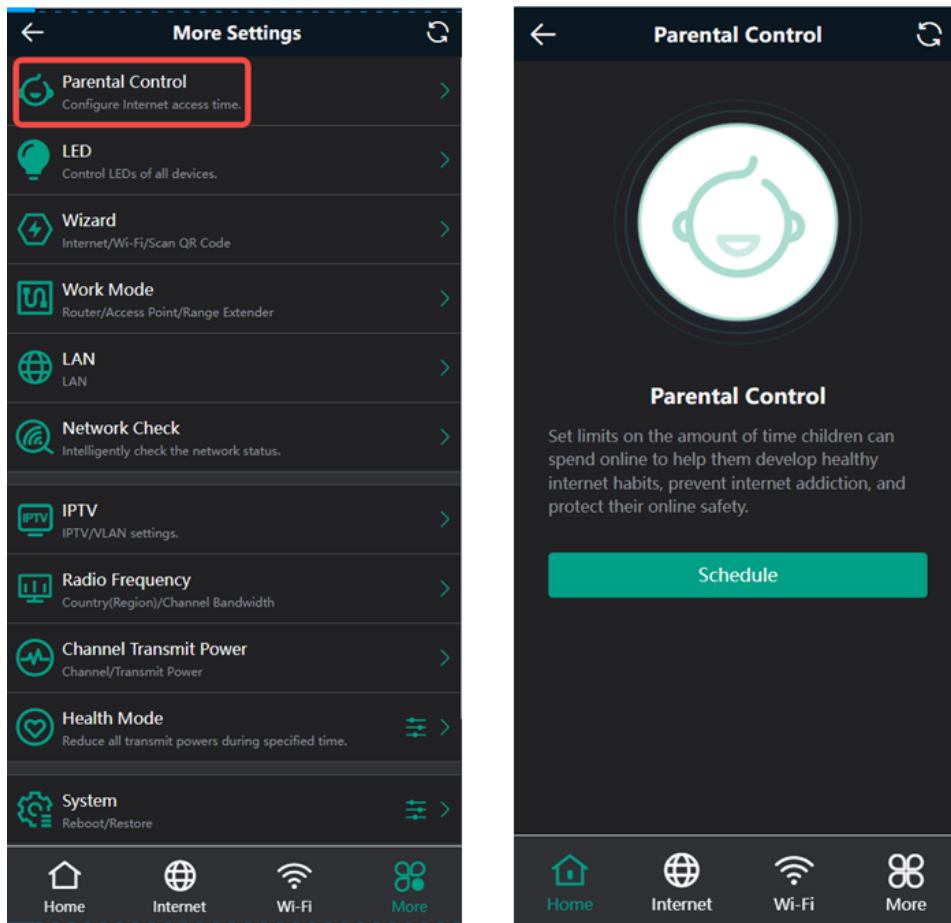
# 4 Advanced Configuration

## 4.1 4.1 Parental Control

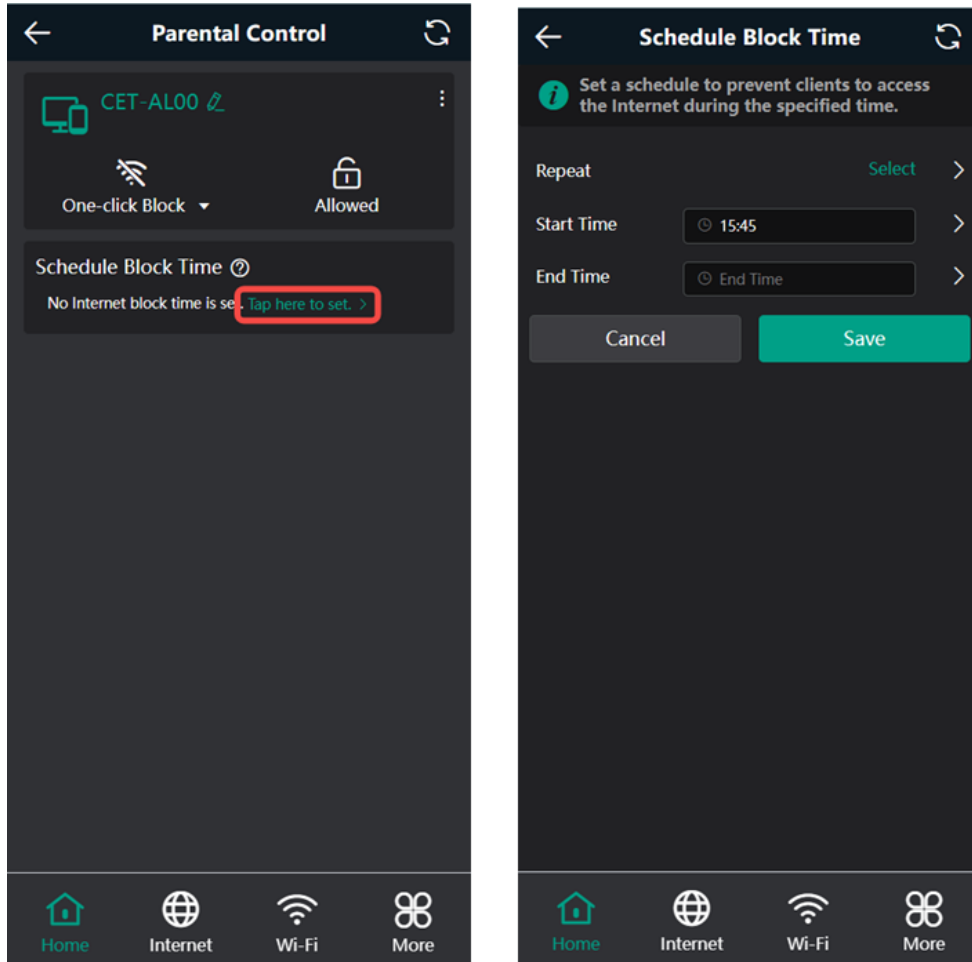


To help children develop healthy Internet habits, prevent Internet addiction, and safeguard their online safety, consider setting time limits for their online activities. Follow the following steps for phone view (For PC view, choose **Clients > Manage Blocking Schedules.**)

- (1) Choose **More > Parental Control.** Select a client and click **Schedule.**

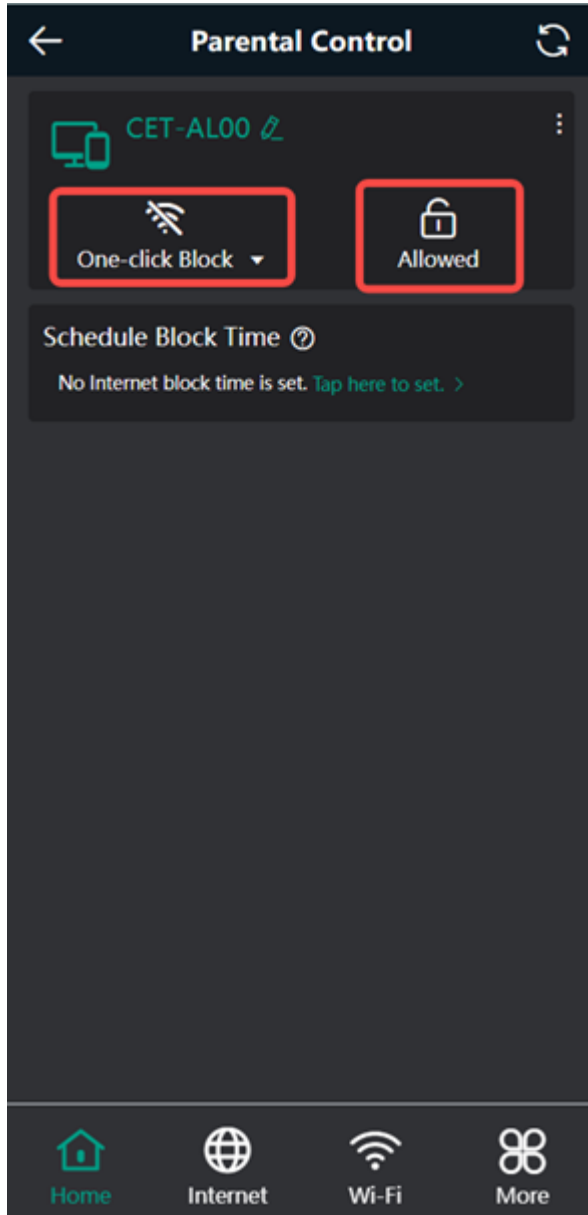


- (2) Tap **Tap here to set** to set the Internet block periods. During these periods, the selected client cannot access the Internet. You can select specific days of the week or customize the block periods. Use **One-click Block** to temporarily restrict Internet access for the client.



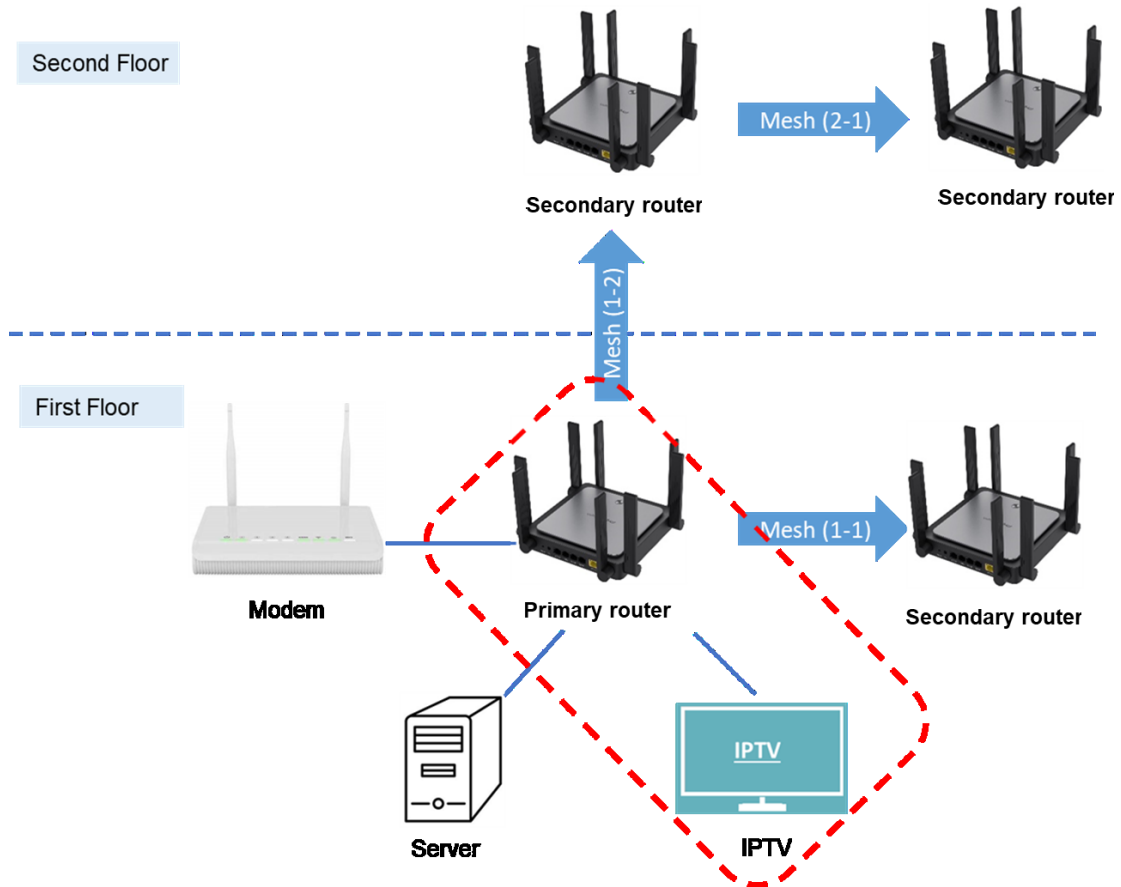
Tap **Allowed** to remove all Internet access restrictions imposed on the client for the current day. This change is effective only for today. The restrictions will resume from tomorrow onward.





## 4.2 IPTV

IPTV is an Internet TV service provided by your ISP. This feature is supported only when the device operates in router mode (as the primary router on a mesh network). Before configuring IPTV, verify if the IPTV service is configured. Additionally, check whether your local IPTV service uses VLAN or Internet Group Management Protocol (IGMP). If VLAN is used, ask your ISP for the VLAN ID. If you're unsure about the type of IPTV service, please contact your ISP.



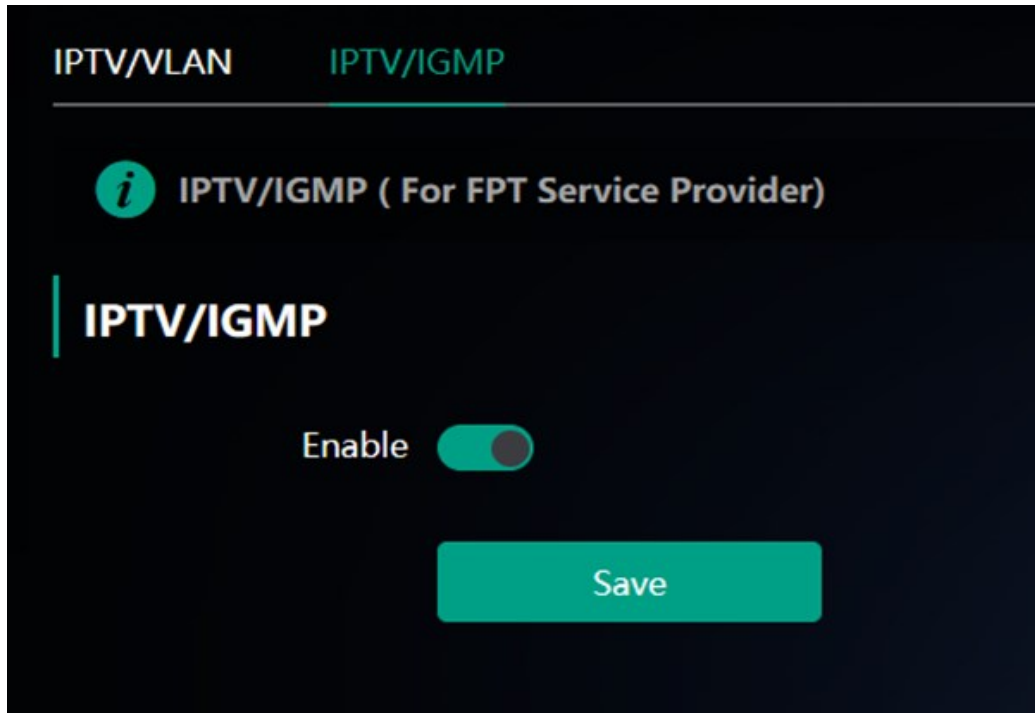
(1) VLAN IPTV

Toggle on **IPTV**, and select the LAN port connected to the IPTV box. Toggle on **VLAN**, and enter the VLAN ID provided by your ISP for IPTV. Then, ensure the IPTV box is properly connected to the LAN port. Connect the IPTV box to LAN1, as shown in the following figure.



## (2) IGMP IPTV

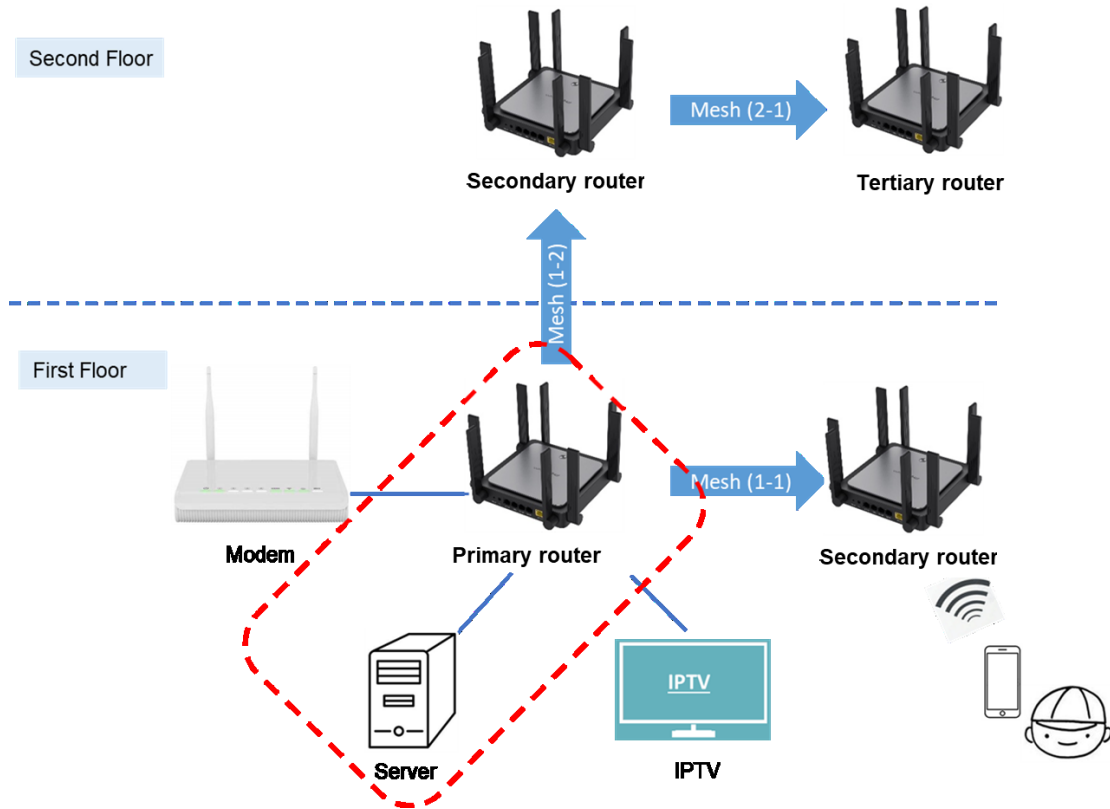
This configuration is specific to the Vietnamese ISP FPT. Once enabled, you can connect the IPTV box to any LAN port on the router.



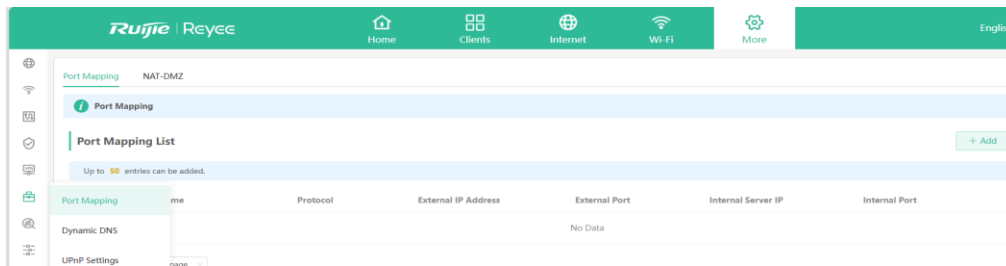
## 4.3 Port Mapping

Port mapping links the IP address of a device on your LAN to an external network using a combination of a WAN IP address and port number. This enables access to devices like IP cameras or PCs from outside your home network. Port mapping needs to be configured for such access when you are away from home.

Before configuring the port mapping feature, ensure you have the IP address of the target device on your LAN and the port number. Additionally, verify that your router has a public IP address. If your IP address is dynamic, changing it could lead to port mapping failures. In such cases, consider using a Dynamic Domain Name Service (DDNS) to resolve any potential IP changes.



To create a port mapping policy, click **Add** on the configuration page. In the pop-up dialog box, enter the name, service type, protocol, external port/range, internal server IP address, and internal port/range. You can configure a maximum of 50 port mapping rules. To access the internal server's web service in this case, set the internal port to 80. Use the WAN IP address of your router as the external IP address.



### Add ✕

\* Name

Preferred Server

Protocol

External IP Address 10.52.56.57

\* External Port/Range

\* Internal Server IP

\* Internal Port/Range

## 5 Troubleshooting

### 5.1 What should I do if I forgot the password?

- (1) Forgot the management password of the web interface: Enter the Wi-Fi password and try again. If the password is still incorrect, restore the router to factory settings. The management password will also be restored to the default management password.
- (2) Forgot the Wi-Fi password:
  - Enter the default Wi-Fi password on the label on the back of the router and try again.
  - Scan the QR code on the label at the back of the router to change the Wi-Fi password via Ruijie Reyee App.
  - If the fault persists, restore the router to factory settings. The management password will also be restored to

the default Wi-Fi password.

## 5.2 What should I do if I cannot log in to the router's web interface (192.168.110.1)?

- (1) Ensure that the PC's NIC is set to **Obtain an IP address automatically**.
- (2) Ensure that the PC is connected to one of LAN1/2/3 ports on the router, and that the port status LED is on. If the port status LED is not on, replace the Ethernet cable.
- (3) Close and re-open your browser (Google Chrome is recommended), and enter **192.168.110.1** in the address bar to try again.
- (4) Use another Web browser.
- (5) Use another Ethernet cable or PC.

If the fault persists, restore the router to factory defaults by pressing the Reset button for 10 seconds.

## 5.3 What should I do if the EW router fails to establish a mesh network?

Refer to [Mesh/Repeater Failure Troubleshooting Guide](#) to resolve this issue.

## 5.4 What should I do if my Internet speed is slow?

Refer to [How to do if the test speed of EW device is slow?](#) to resolve this issue.

## 5.5 What should I do if I cannot access the Internet?

Refer to [How to do if client cannot access the Internet](#) to resolve this issue.