



**Deco X50-4G**  
Superior Mesh Wi-Fi, Everywhere



# User Guide

## 4G+ AX3000 Whole Home Mesh Wi-Fi 6 Gateway



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# About This Guide

This guide provides a brief introduction to Deco 4G+ AX3000 Whole Home Mesh Wi-Fi 6 Router and the Deco app, as well as regulatory information. Features available in Deco may vary by model and software version. Deco availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual Deco experience.

## Conventions

In this guide, the following conventions are used:

Convention	Description
Deco	Stands for Deco Whole Home Mesh Wi-Fi System/ Unit.
<u>Underline</u>	Hyperlinks are in teal and underlined. You can click to redirect to a website or a specific section.
Teal	Key information appears in teal, including management page text such as menus, items, buttons and so on.
Note:	Ignoring this type of note might result in a malfunction or damage to the device.
Tips:	Indicates important information that helps you make better use of your device.

## More Info

- Specific product information can be found on the product page at <https://www.tp-link.com>.
- A Technical Community is provided for you to discuss our products at <https://community.tp-link.com>.
- Our Technical Support contact information can be found at the [Help](#) center of the Deco app and the [Contact Technical Support](#) page at <https://www.tp-link.com/support>.

## Speed/Coverage/Device Quantity Disclaimer

Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage, and quantity of connected devices are not guaranteed and will vary as a result of network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.

## 4G Speed Disclaimer

Maximum 4G download speeds depend on external factors such as the local 4G network coverage, data plan, real-time network capacity, client limitations, and environmental factors.

## Wi-Fi 6 Disclaimer

Use of Wi-Fi 6 and other features including OFDMA, MU-MIMO, 1024-QAM, and BSS Color require clients to support the corresponding features.

## Seamless Roaming Disclaimer

Clients need to support 802.11k/v/r and may require additional set up. Performance may vary depending on the client device.

## HomeShield Disclaimer

HomeShield includes the Free Basic Plan. Fees apply for the Pro Plan. Visit <https://www.tp-link.com/homeshield/> for more information.

## WPA3 Disclaimer

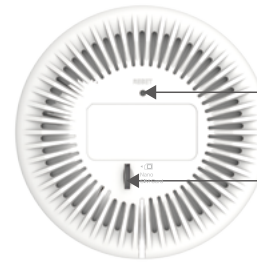
Use of WPA3 encryption requires clients to also support the corresponding feature.

# Appearance

Each Deco has an LED that changes color according to its status, three RJ-45 Ethernet ports, two external antennas port, a SIM card slot, a power slot, and a Reset button.

Tip: The product label can be found at the bottom of the product.

- Pulse yellow:**  
Deco is resetting.
- Solid yellow:**  
Deco is starting up.
- Pulse blue:**  
Deco is ready for setup or WPS in progress.
- Solid blue:**  
Deco is setting up.
- Pulse green:**  
Deco is upgrading firmware.
- Solid green:**  
Deco is all set up and connected.
- Pulse red:**  
The satellite Deco is disconnected from the main Deco.
- Solid red:**  
Deco has an issue.



## Reset Button:

Press for 1 second and release to reset Deco to factory default settings. The light changing from pulsing yellow to solid yellow indicates a successful reset.

## SIM Card Slot:

For inserting a Nano SIM card (not included in the package) to Deco.

## External Antenna Ports:

For connecting external antennas (not included in the package) to your Deco.

Note: Make sure you have installed two external antennas to ensure that Deco's LTE network works properly.

## Gigabit Ethernet Ports:

For connecting Deco to your modem, the Ethernet outlet, or for other internet services in Wireless Router mode.

Note: All WAN/LAN ports will operate as either WAN or LAN ports. Only one port can serve as a WAN port at a time. When Deco is operating in 3G/4G Router mode, all the ports can only work as LAN ports.

## Power Slot:

For connecting Deco to the power socket via the provided power adapter.



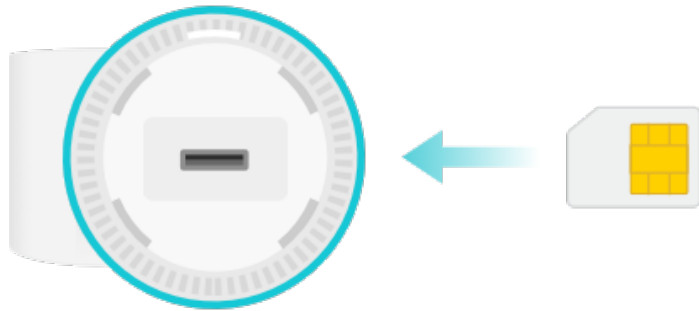
# Before You Start

You can set your Deco as a 3G/4G router or a wireless router to meet the needs of different network scenarios.

## 3G/4G Router Mode

When working in 3G/4G Router mode, Deco connects to the internet via a SIM card inserted.

Follow [Set Up Your Deco for 3G/4G Router Mode](#) to set up your Deco.



## Wireless Router Mode

When working in Wireless Router mode, Deco connects to the internet via an Ethernet cable. If you already have a modem or your internet comes via an Ethernet cable from the wall, you can set the Deco as a regular wireless router to share the internet.

Follow [Set Up Your Deco for Wireless Router Mode](#) to set up your Deco.



# Set Up Your Deco for 3G/4G Router Mode

When working in 3G/4G Router mode, Deco connects to the internet via a SIM card inserted. The intuitive Deco app guides you through an easy setup process that gets each unit up and all your devices connected and online.

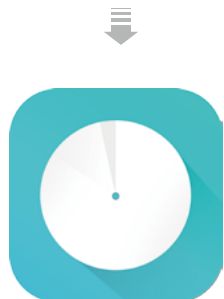
Follow the steps below to set up your Deco for 3G/4G Router mode.

## 1. Download and install the Deco app

Scan the QR code below or go to Google Play or the App Store to download the Deco app. Install the app on your Android or iOS smartphone or tablet.



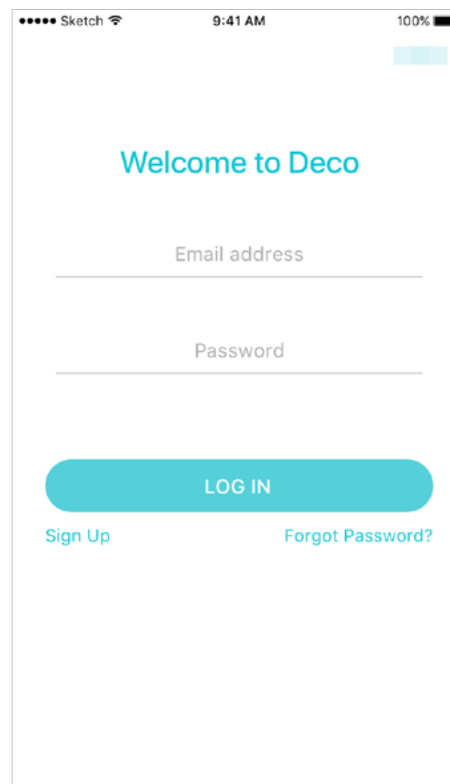
or



## 2. Log in with TP-Link ID

Open the app. Use your TP-Link ID to log in. If you don't have a TP-Link ID, sign up first.

Note: If you forgot your login password, tap [Forgot Password?](#). The Deco app will guide you through the rest.



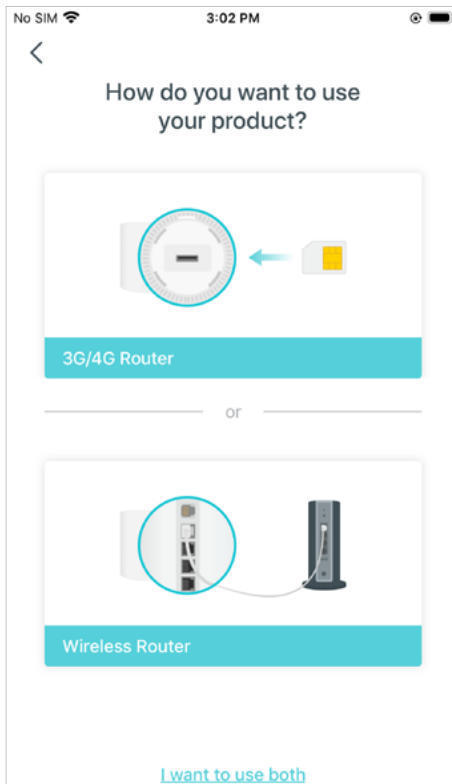
## 3. Identify your Deco

Choose your Deco model.



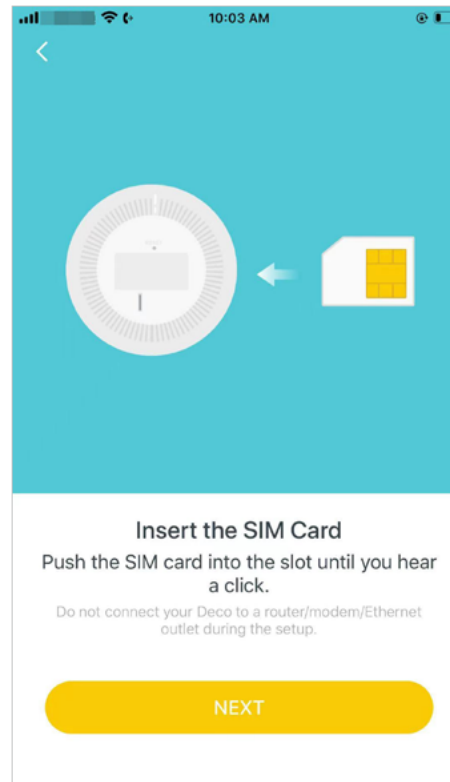
#### 4. Choose an operation mode

Select [3G/4G Router](#).



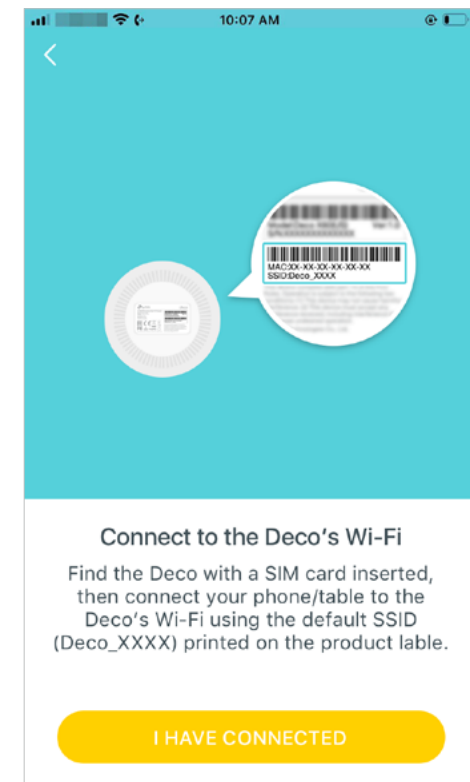
#### 5. Insert the SIM card and power on Deco

Insert the SIM card into the slot at the bottom of Deco. Then Power on the Deco.



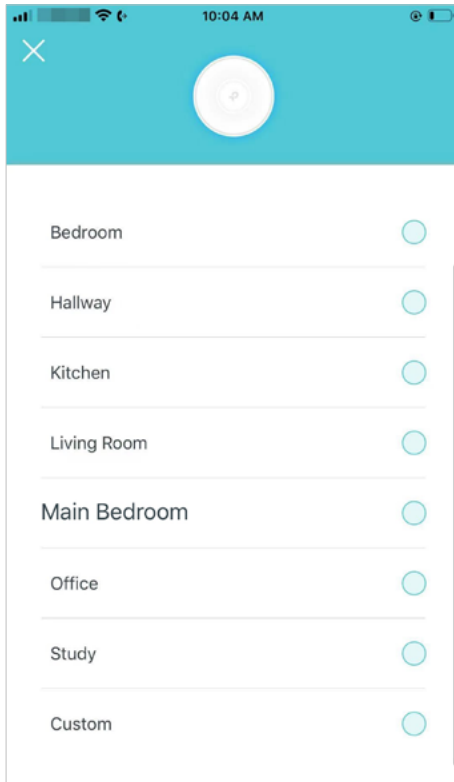
#### 6. Connect to the Deco's Wi-Fi

Wait until the Wi-Fi Signal LED pulses blue, then connect to the Deco's Wi-Fi using the default SSID printed on the product label.



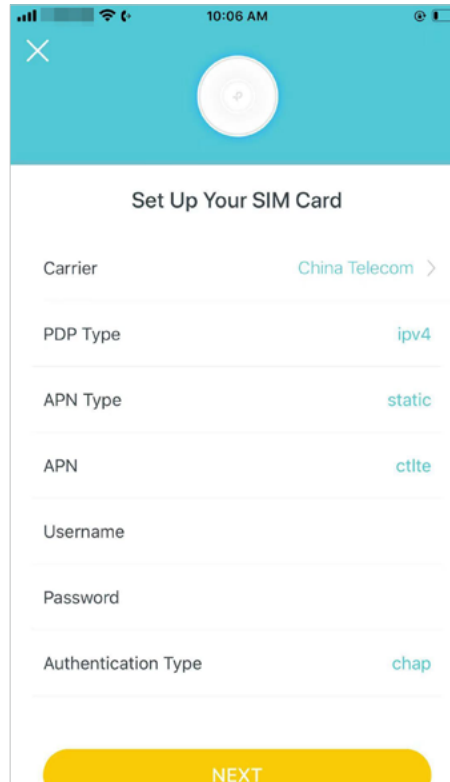
### 7. Select a location

Select a location for Deco. If its location is not listed, you can create a new one by choosing [Custom](#). This will be the name of your Deco.



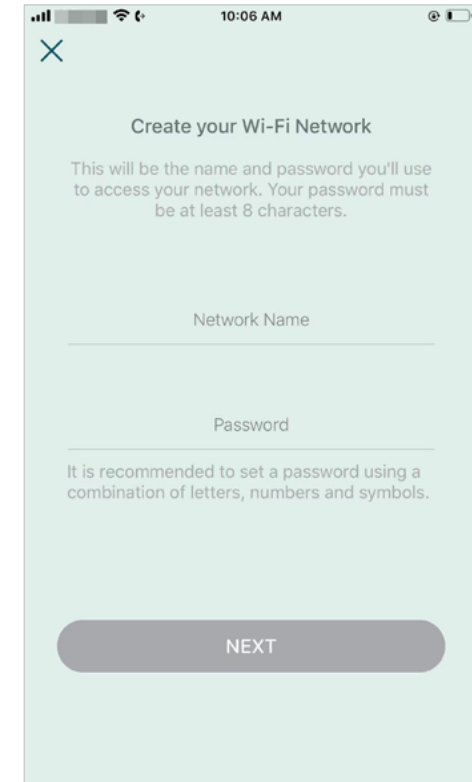
### 8. Set up the SIM card

Confirm or customize the SIM card information. If you are not sure, contact your ISP.



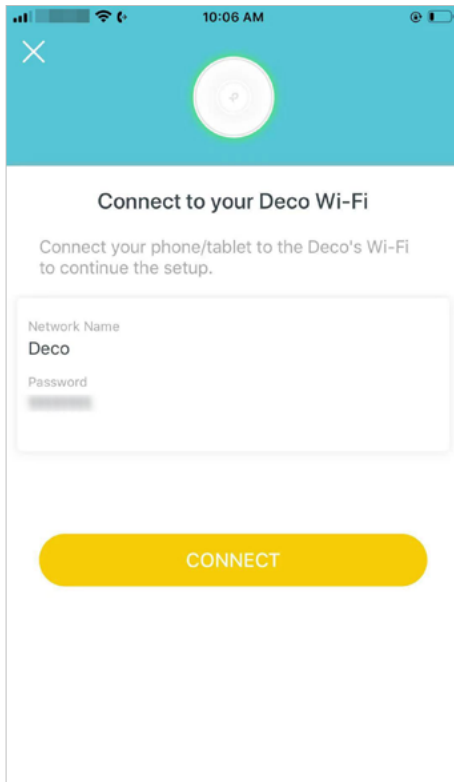
### 9. Create your Wi-Fi network

Set a network name and a password. These will be the name and password you use to connect your devices to Wi-Fi.



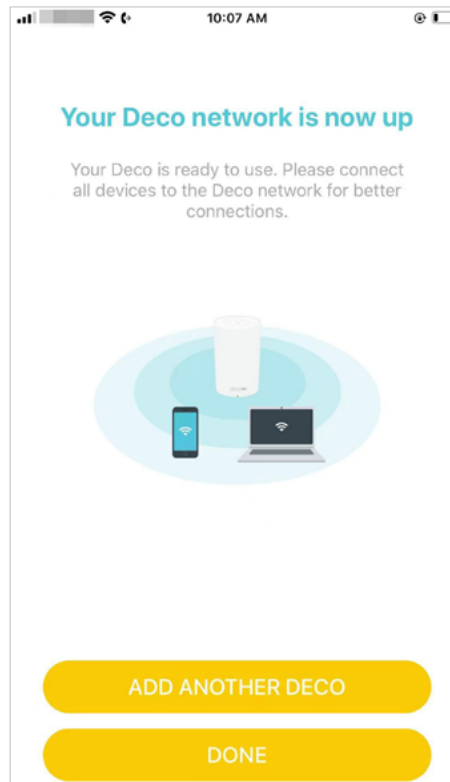
## 10. Connect to your Wi-Fi network

Connect your smartphone/tablet to the Deco's Wi-Fi.



## 11. Setup complete

Your Deco network is now up. Connect all devices to the network. You can also [Add More Decos](#) to expand the Wi-Fi coverage.



# Set Up Your Deco for Wireless Router Mode

When working in Wireless Router mode, Deco connects to the internet via an Ethernet cable. If you already have a modem or your internet comes via an Ethernet cable from the wall, you can set the Deco as a regular wireless router to share the internet.

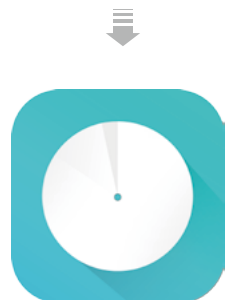
The intuitive Deco app guides you through an easy setup process that gets each unit up and all your devices connected and online. Follow the steps below to set up your Deco for Wireless Router mode.

## 1. Download and install the Deco app

Scan the QR code below or go to Google Play or the App Store to download the Deco app. Install the app on your Android or iOS smartphone or tablet.



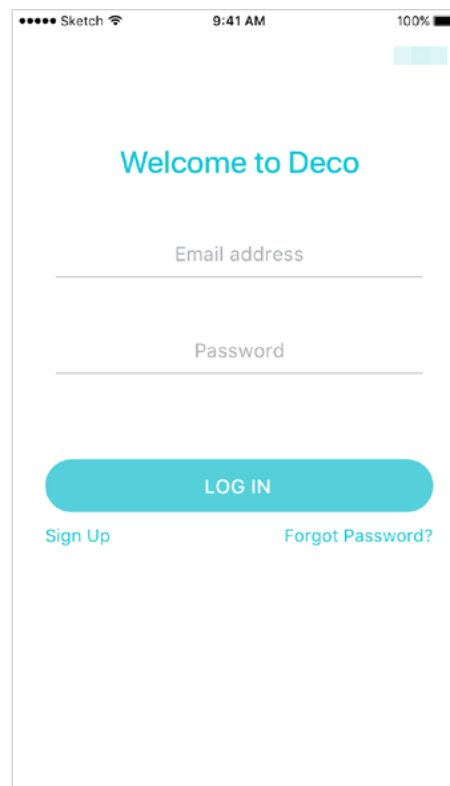
or



## 2. Log in with TP-Link ID

Open the app. Use your TP-Link ID to log in. If you don't have a TP-Link ID, sign up first.

**Note:** If you forgot your login password, tap [Forgot Password?](#). The Deco app will guide you through the rest.



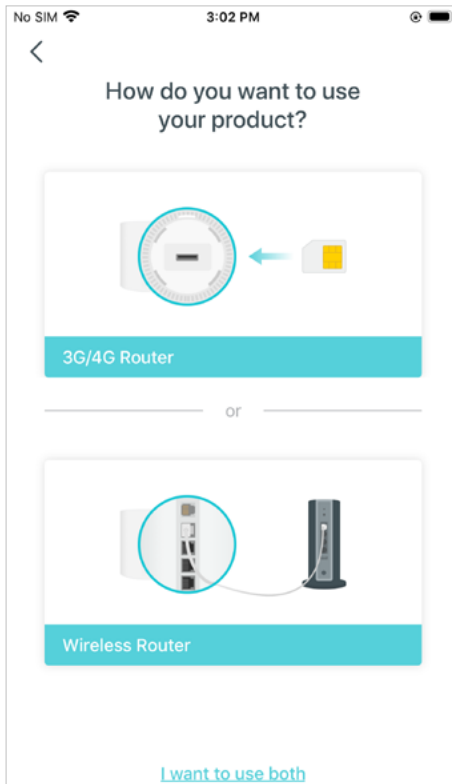
## 3. Identify your Deco

Choose your Deco model.



#### 4. Choose an operation mode

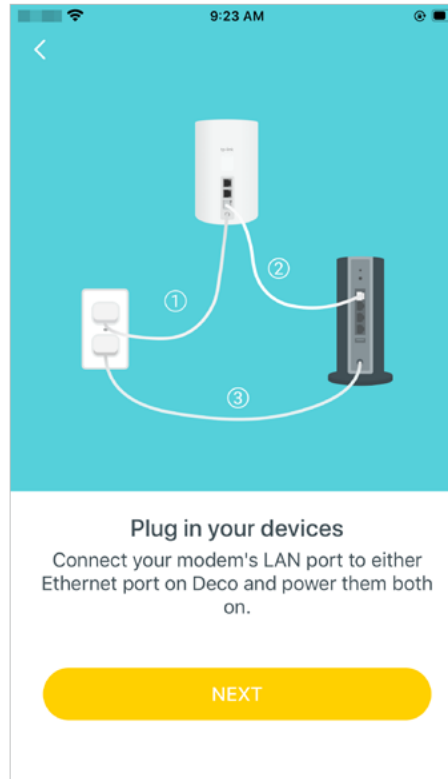
Choose [Wireless Router](#).



#### 5. Plug in and power on Deco

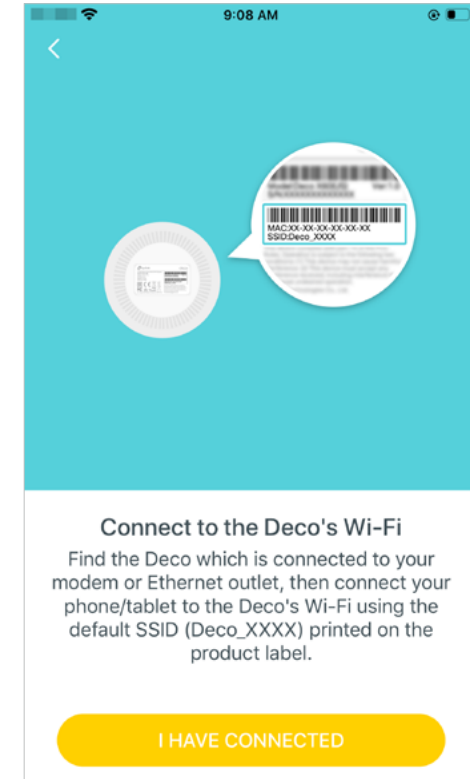
Power off your modem. Connect your Deco to the modem and power them both on.

If you don't have a modem, connect the Ethernet outlet directly to your Deco.



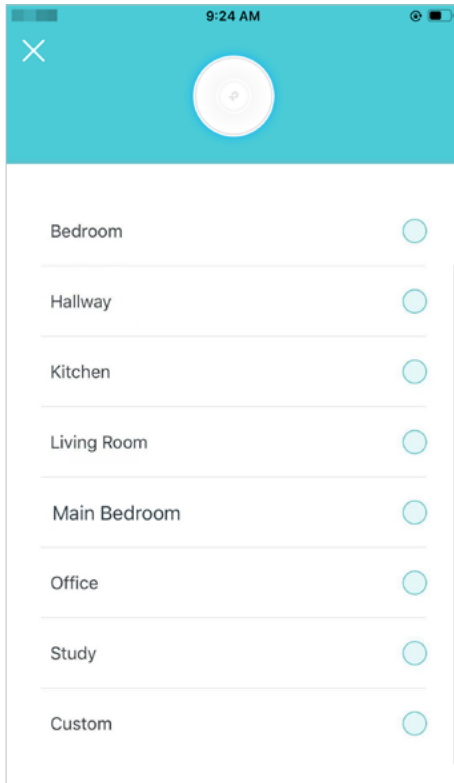
#### 6. Connect to the Deco's Wi-Fi

Wait until the Wi-Fi Signal LED pulses blue, then connect to the Deco's Wi-Fi using the default SSID printed on the product label.



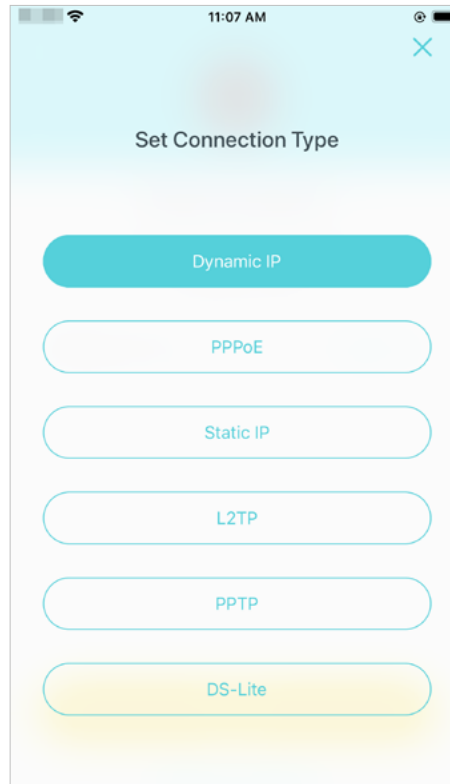
### 7. Select a location

Select a location for the Deco. If its location is not listed, you can create a new one by choosing **Custom**. This will be the name of your Deco.



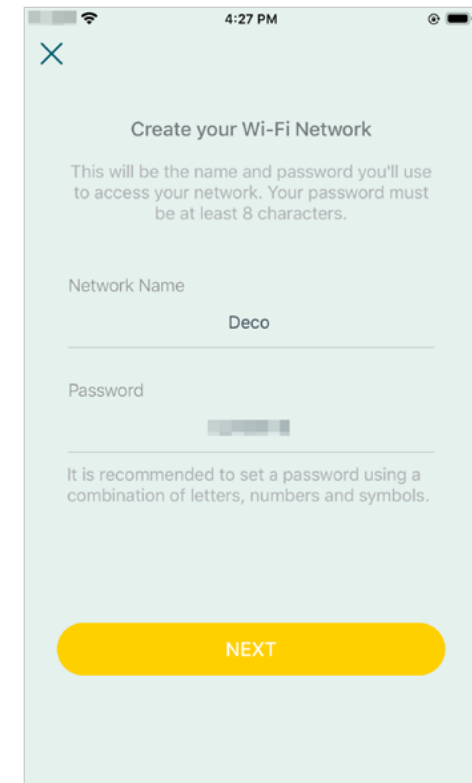
### 8. Set up internet connection

Select the internet connection type and enter the information. If you are not sure, contact your internet service provider.



### 9. Create your Wi-Fi network

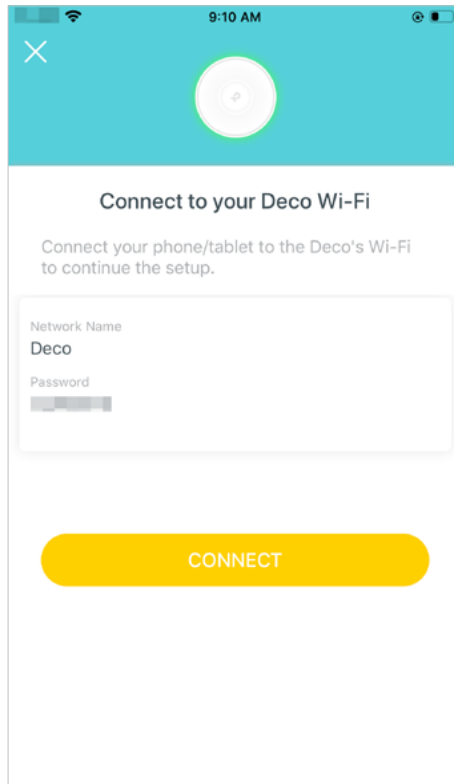
Set a network name and a password. These will be the name and password you use to connect your devices to Wi-Fi.





## 10. Connect to your Wi-Fi network

Connect your phone/tablet to the Deco's Wi-Fi.



## 11. Setup complete

Your Deco network is now up. Connect all devices to the Deco network. You can also [Add More Decos](#) to expand the Wi-Fi coverage.



# Install LTE External Antennas

When working in 3G/4G Router mode, you can install LTE external antennas (not included in the product package) manually to strengthen the LTE signals of your Deco.

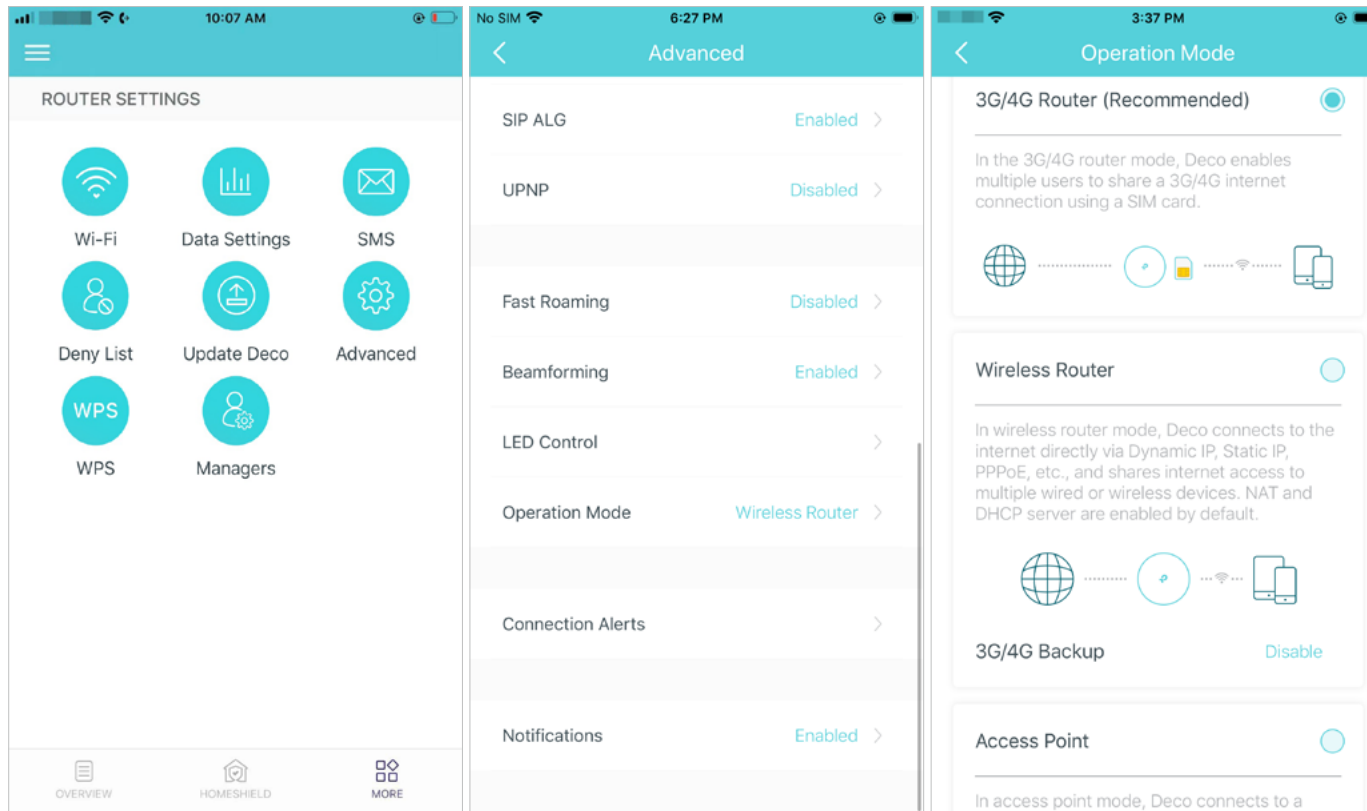
## Before You Start

- Make sure your antennas frequency supports the working frequency of Deco X50-4G listed below.

E-UTRA Operating Band	Uplink (UL) operating band BS receive UE transmit	Downlink (DL) operating band BS transmit UE receive	Duplex Mode
	FUL_low – FUL_high	FDL_low – FDL_high	
1	1920 MHz – 1980 MHz	2110 MHz – 2170 MHz	FDD
3	1710 MHz – 1785 MHz	1805 MHz – 1880 MHz	FDD
5	824 MHz – 849 MHz	869 MHz – 894MHz	FDD
7	2500 MHz – 2570 MHz	2620 MHz – 2690 MHz	FDD
8	880 MHz – 915 MHz	925 MHz – 960 MHz	FDD
20	832 MHz – 862 MHz	791 MHz – 821 MHz	FDD
28	703 MHz – 748 MHz	758 MHz – 803 MHz	FDD
38	2570 MHz – 2620 MHz	2570 MHz – 2620 MHz	TDD
40	2300 MHz – 2400 MHz	2300 MHz – 2400 MHz	TDD
41	2550 MHz – 2650 MHz	2550 MHz – 2650 MHz	TDD

- Two SMB to SMA adapters are provided in the product package of your Deco. Make sure your antennas have the same connector type ([SMA Male](#)).

- Make sure your Deco is working at 3G/4G Router Mode. If not, open the Deco app and go to  > [Advanced](#) > [Operation Mode](#) to switch the mode.



**Follow the steps below to install your external antennas:**

1. Remove the cover on the back of your Deco.

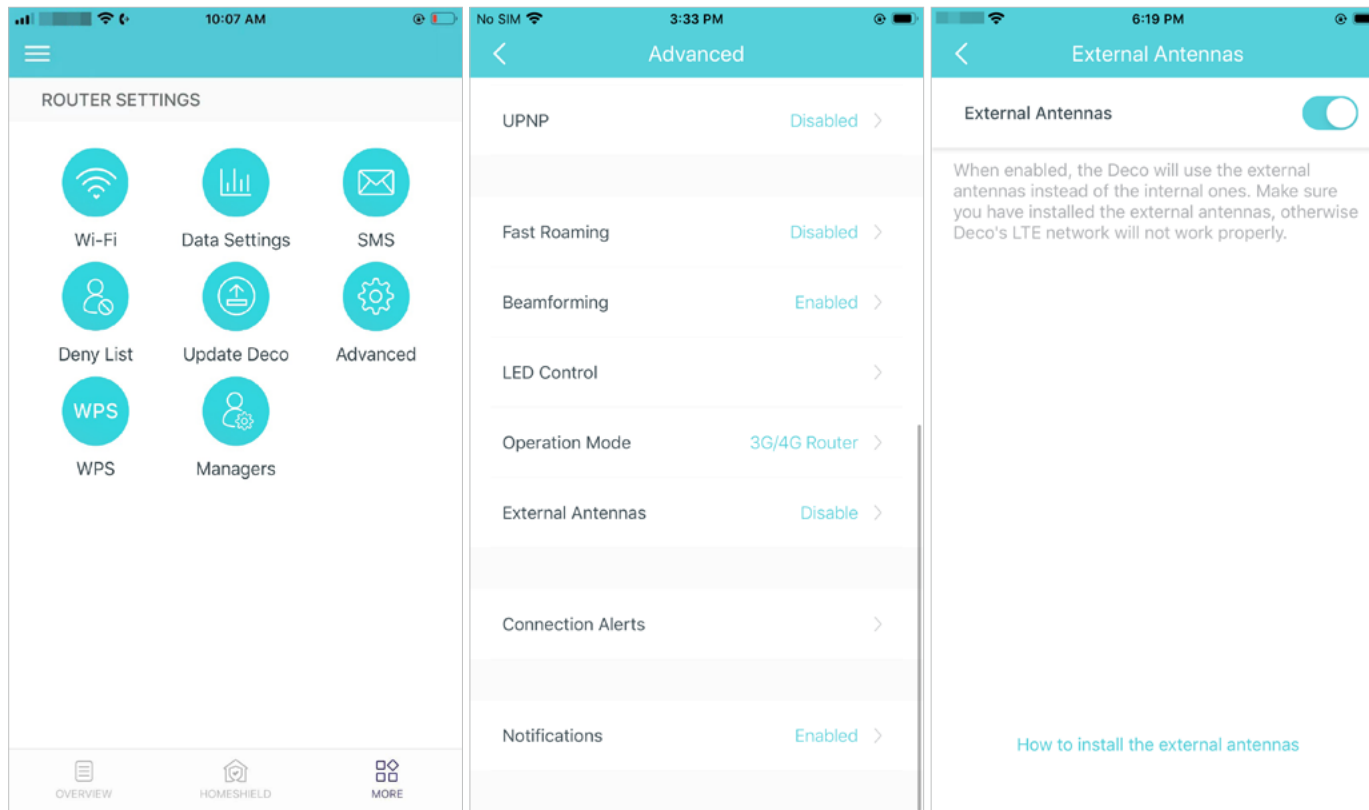


2. Insert the provided [SMB to SMA adapters](#) to the [External Antennas Ports](#), and then connect your LTE external antennas to the adapters.

■ Note: The image of antennas is for reference only and may differ from actual products. We cannot guarantee the performance while using any third-party LTE external antennas.



3. Open the Deco app, go to  > [Advanced](#) > [External Antennas](#) and enable [External Antennas](#). When enabled, the Deco will use the external antennas instead of the internal ones.




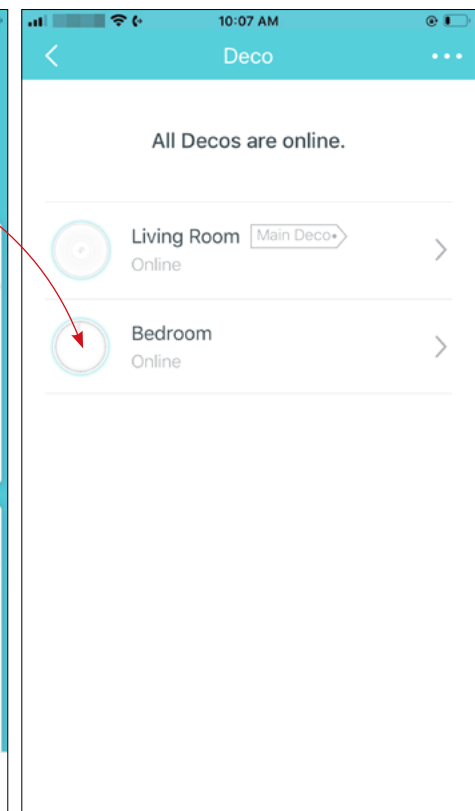
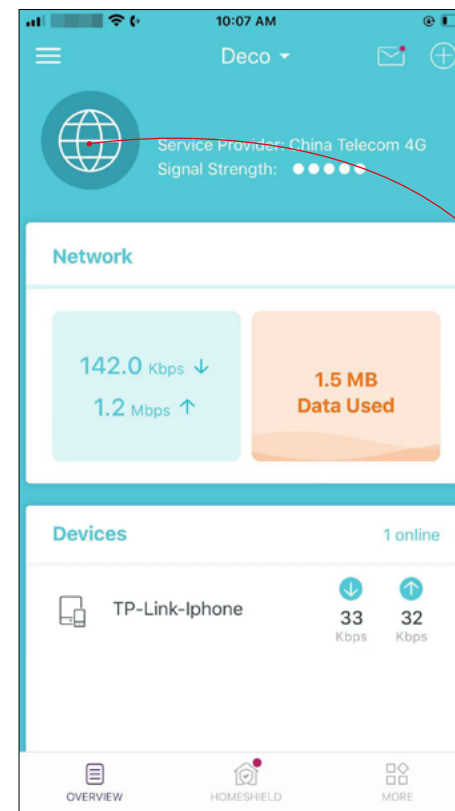
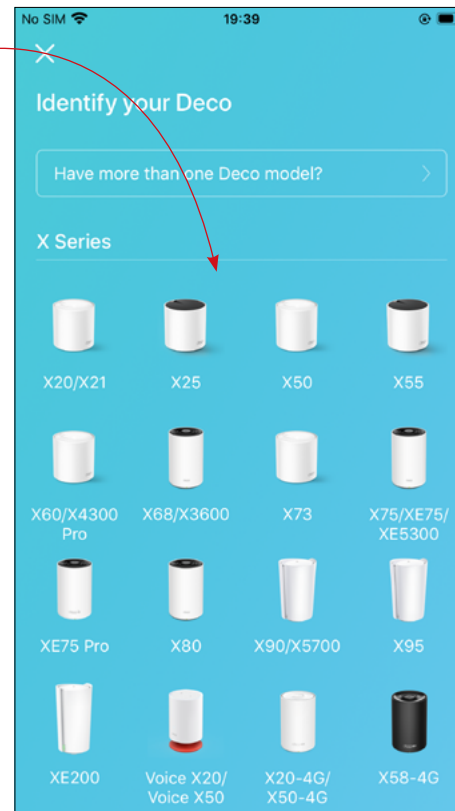
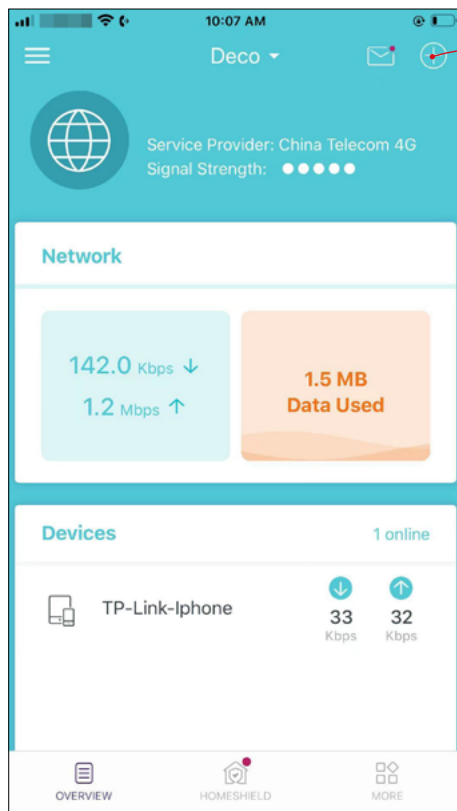
# Add More Decos

After creating a Deco network, you can add more Deco units to the network to expand the Wi-Fi coverage and manage them easily on your Deco app.

1. In Overview, tap .

2. Select the Deco model you want to add, and follow app instructions to complete the setup.

3. After the setup, you can find the added Deco units by tapping  in Overview.

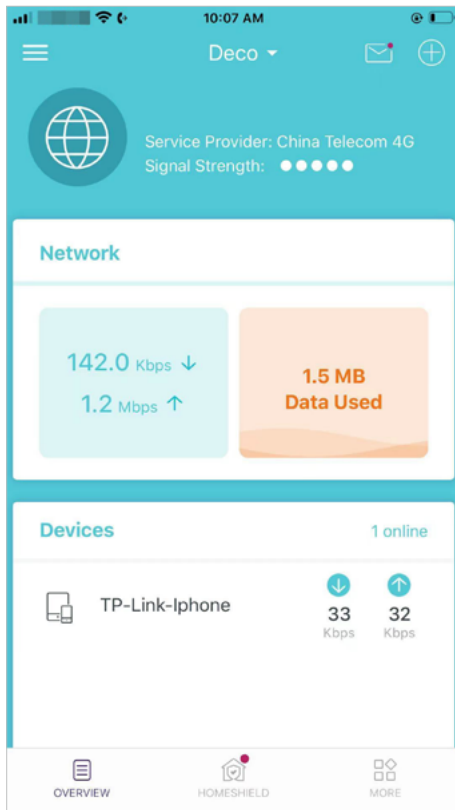



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

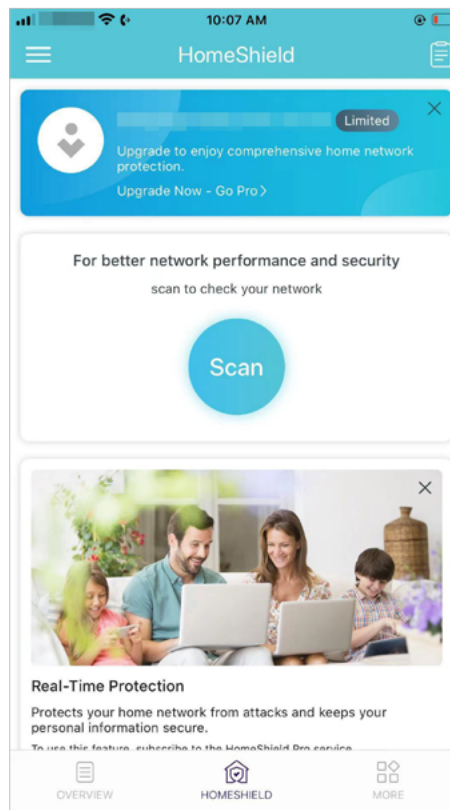
# Dashboard


After you successfully set up your Deco network, you will see the dashboard of the Deco app. Here you can get an overview of the network status, check the real-time network speed and data usage when Deco works in 3G/4G Router mode, customize your home network with enhanced security using a kit of features built to TP-Link HomeShield and set up various advanced features.

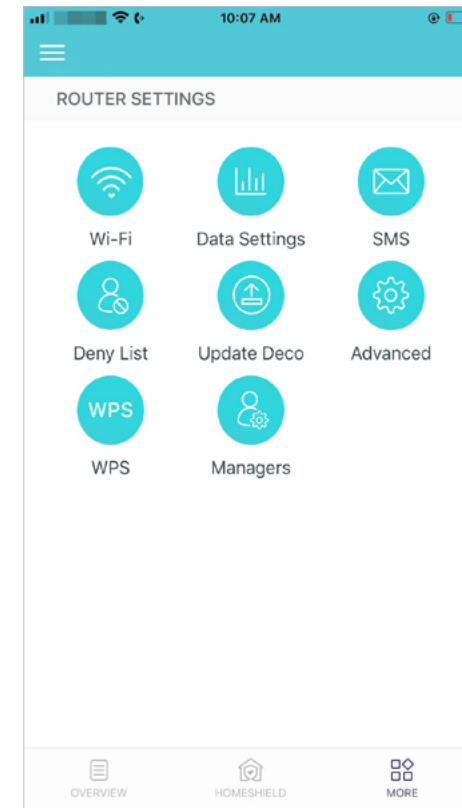
Tap  to get an overview of the network status.



Tap  to enter the [HomeShield](#) page for enhanced security.




Tap  for more features.

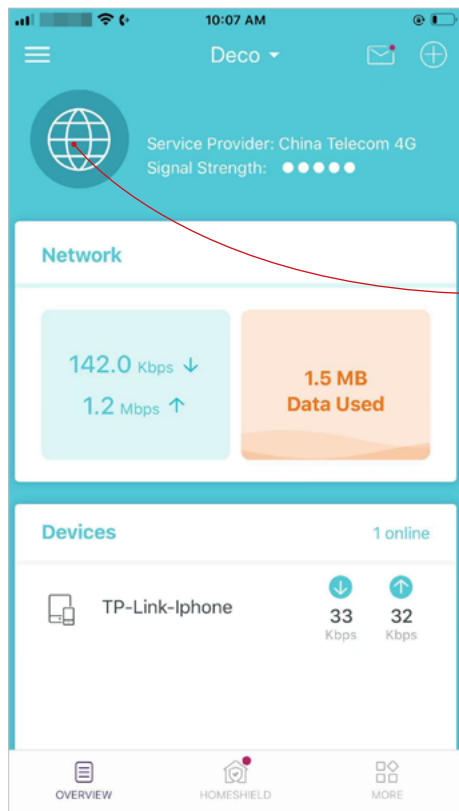


\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

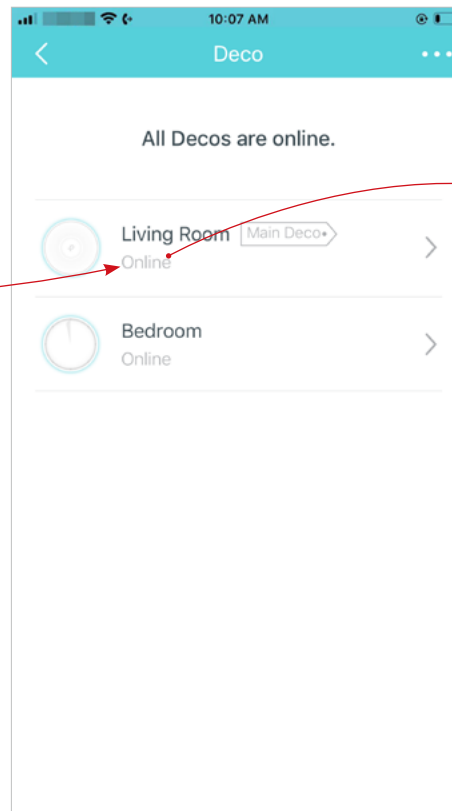
# Check Deco Status

In Overview, you can check the working status (online/offline) of all the Decos, check the details (speed/Deco's IP address & MAC address/connected clients) of each Deco unit, change the Deco's location/name, and more.

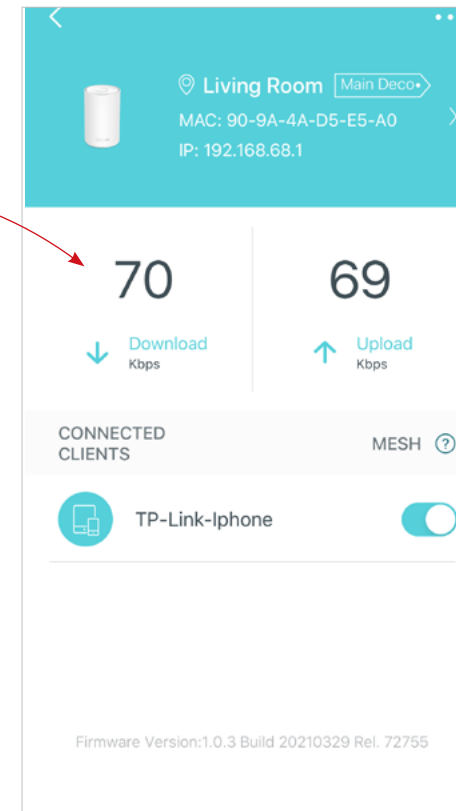
Tap  to check all Decos' status.



Tap a Deco unit to check more details.



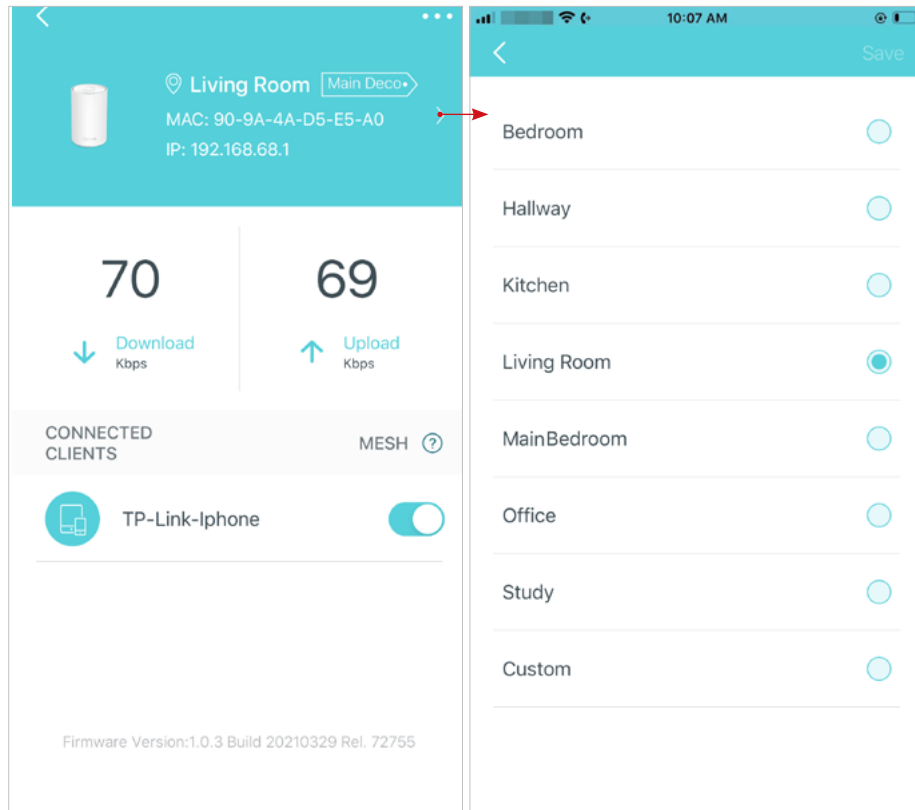
Check download/upload speed of the Deco.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

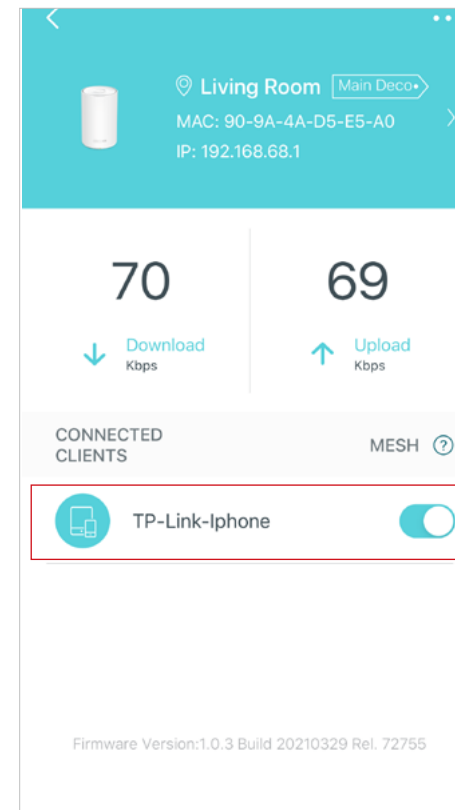


Change or customize the location/name of the Deco.



Check the clients connected to the Deco.

Enable the Mesh feature of a client so it can seamlessly switch to the Deco that provides the fastest speed as you move around.



# Set Main Deco

After setup, you can replace the main Deco with any satellite Deco without resetting and reconfigure the whole network.

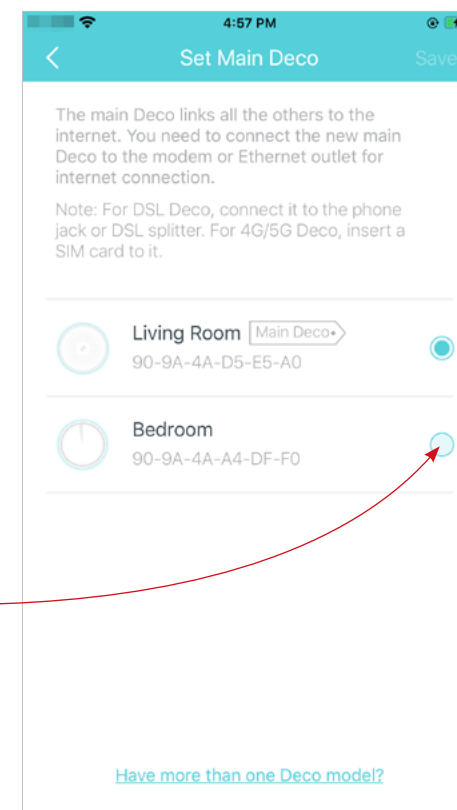
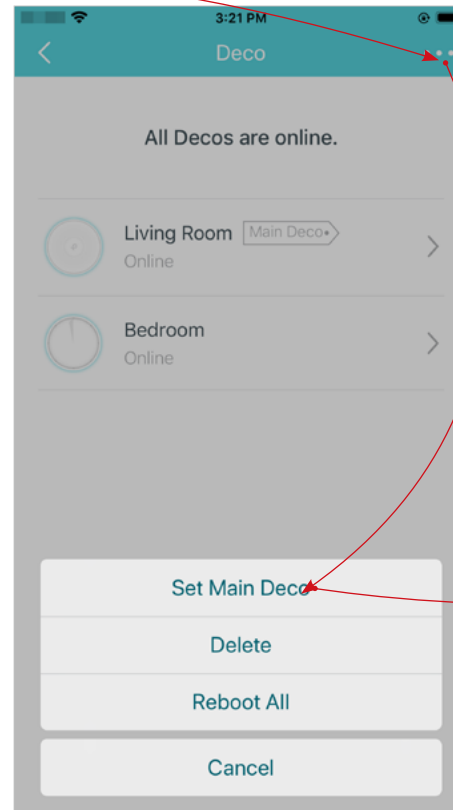
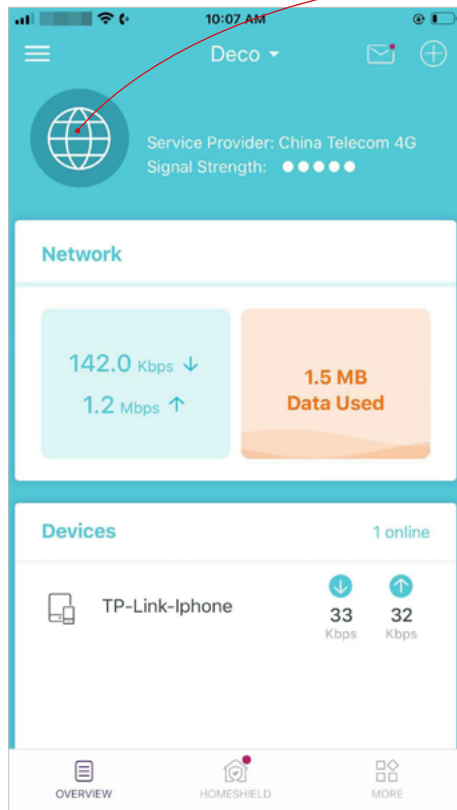
Follow the steps below to complete the setup process.

**Note:** The main Deco links all the others to the internet. You need to connect the new main Deco to the modem or Ethernet outlet for internet connection. For DSL Deco, connect it to the phone jack or DSL splitter. For 4G/5G Deco, insert a nano SIM card to it.

1. In Overview, tap .

2. Tap  > [Set Main Deco](#).

3. Choose a satellite Deco and follow app instructions to complete the settings.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

# Remove/Reboot Deco

You can remove or reboot your Deco easily in the Deco app. Follow the steps below.

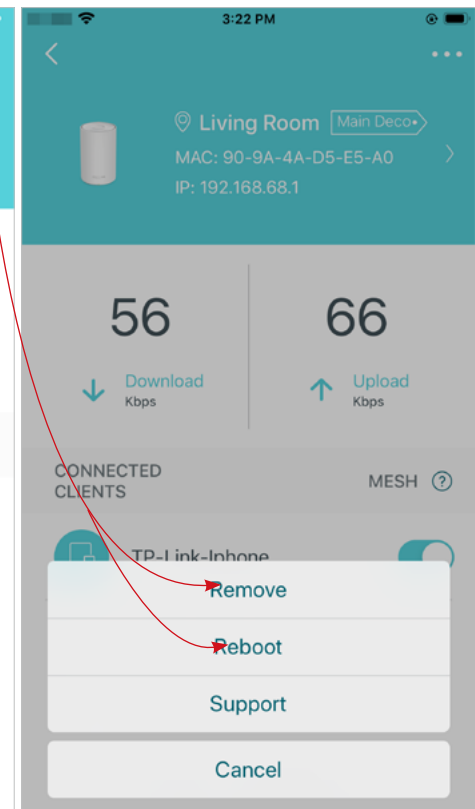
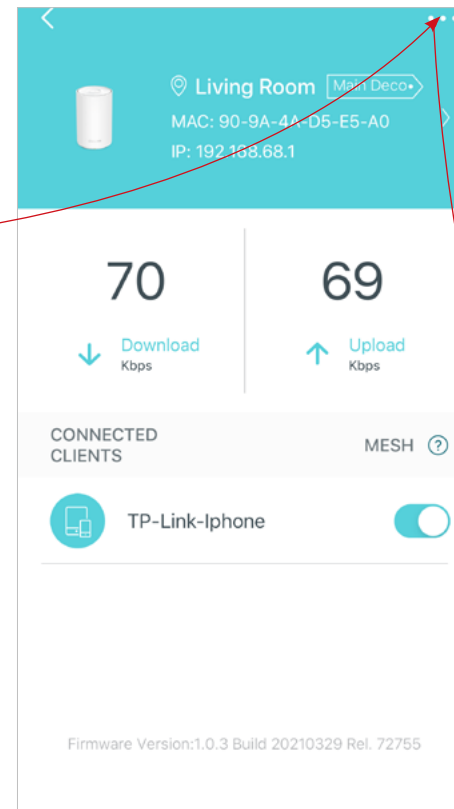
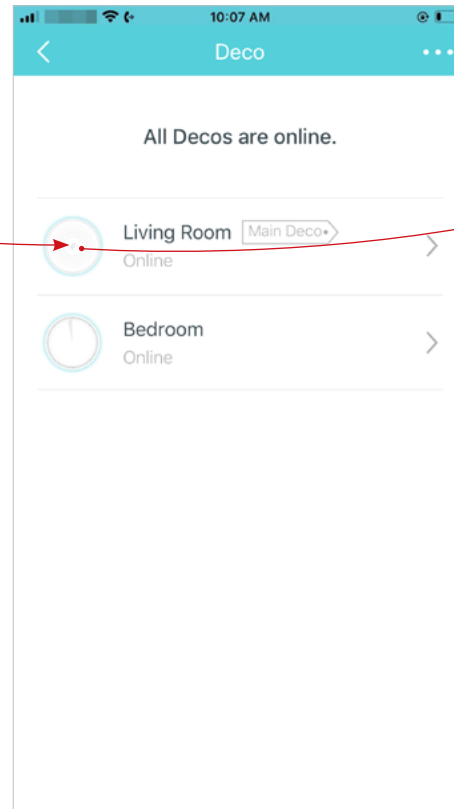
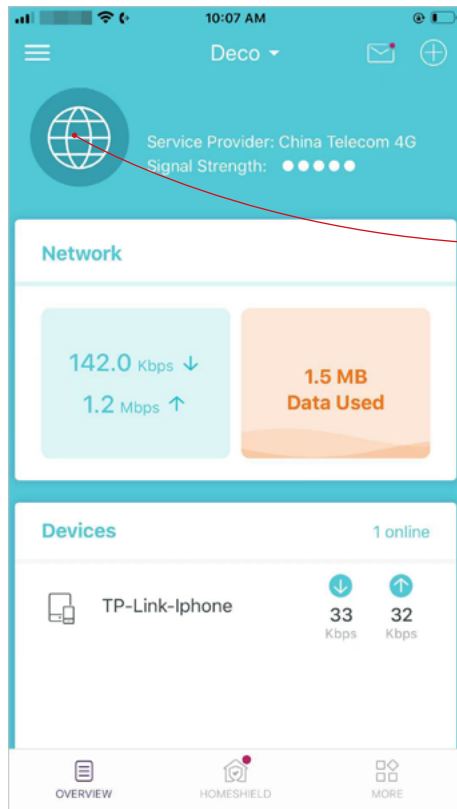
Note: Removing a Deco will reset it to factory default settings and you will need to set up your Deco again. You can also press the Reset button on the Deco for 1 second to quickly reset your Deco to factory default settings.

1. In Overview, tap .

2. Select a Deco unit.

3. Tap  to remove or reboot the Deco.

Note: If the LED light of Deco does not turn pulsing blue after tapping [Remove](#), press the Reset button on the Deco for 1 second to reset it.



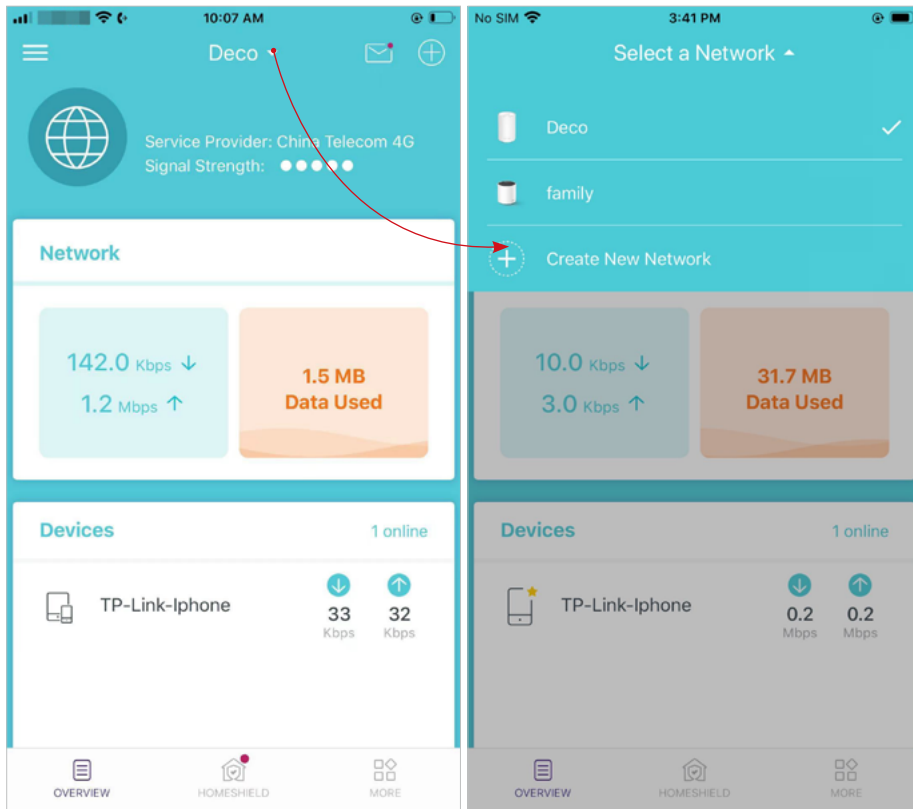
\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

# Create a New Network

In the Deco app, you can create different Deco networks with your TP-Link ID and manage them conveniently from the Deco app with one account. You can also help family or friends manage their networks with your Deco app. Two methods are provided as below to create a new network.


## Method 1. Create a new network from the Overview page

Tap  > [Create New Network](#). Then follow app instructions to complete the setup.



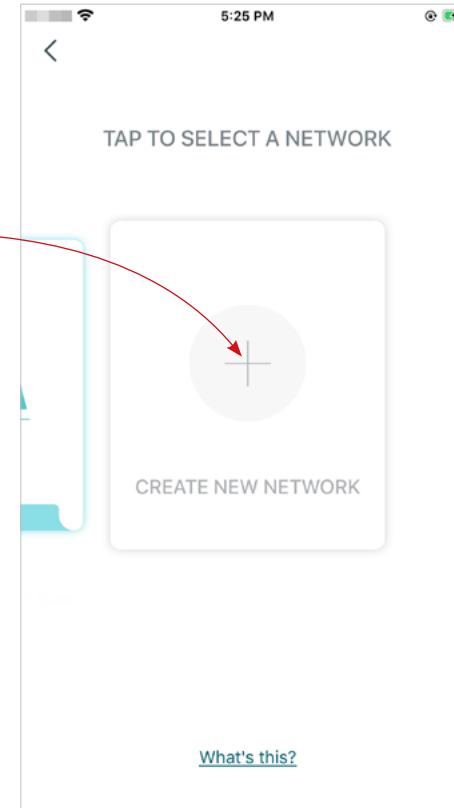
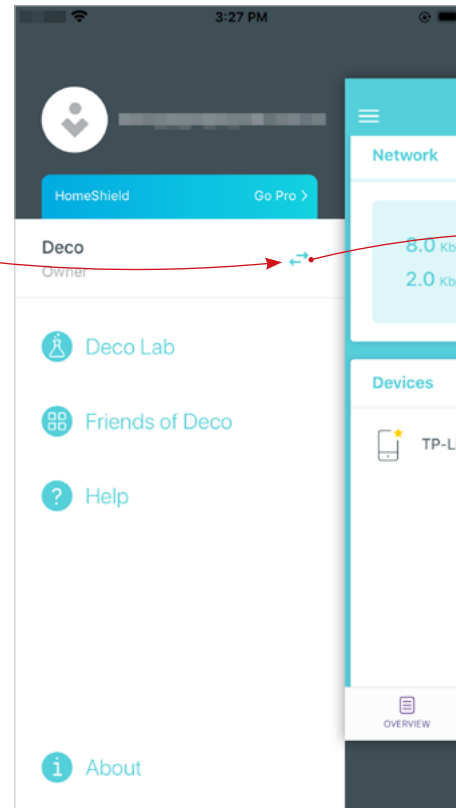
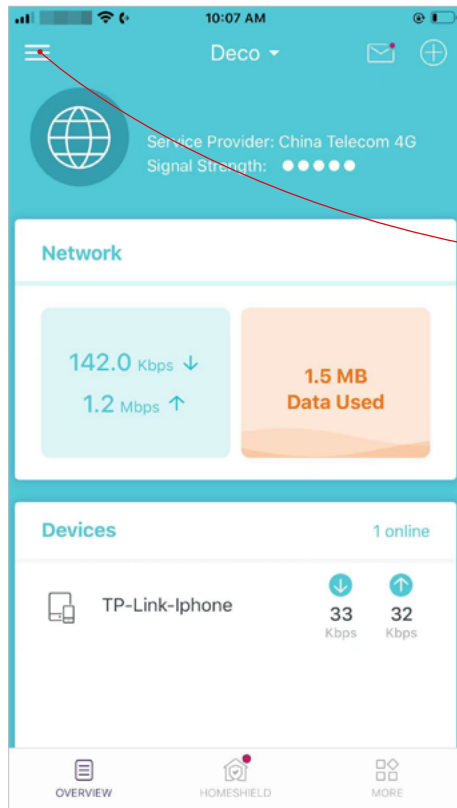
\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

## Method 2. Create a new network from the Menu page

1. Tap  to open the menu.

2. Tap  > [CREATE NEW NETWORK](#).

3. Follow app instructions to complete the setup.



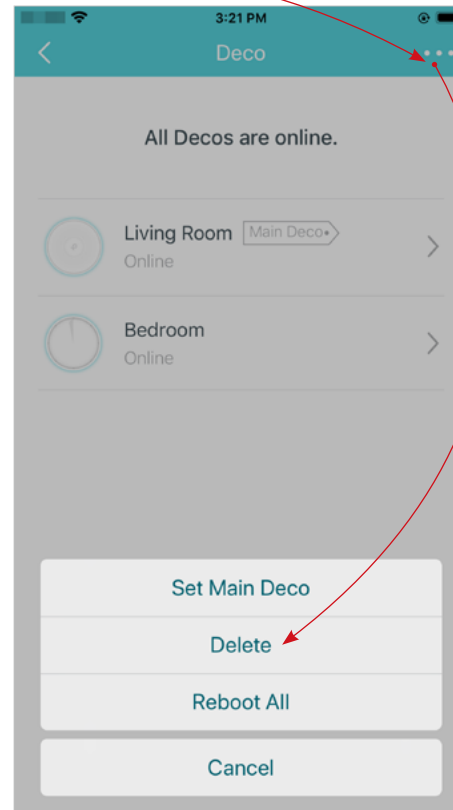
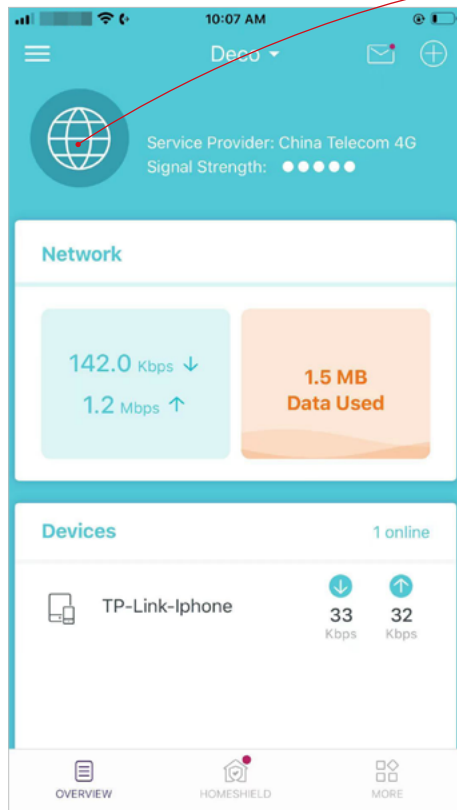
\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

# Delete a Network

You can delete a Deco network if you don't need it anymore. Deleting a Deco network will reset all Decos in this network to factory default settings.

1. In Overview, tap .

2. Tap  > Delete.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

# Data Settings (for 3G/4G Router Mode)

Data Settings is used to monitor the data usage of your Deco in real-time. You can limit your data usage according to your monthly allowance or total allowance and you will receive a warning if your data usage reaches the specified level.

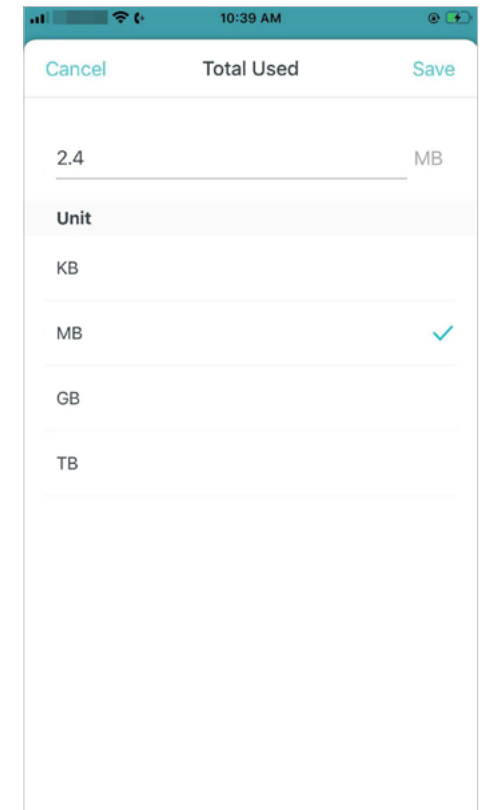
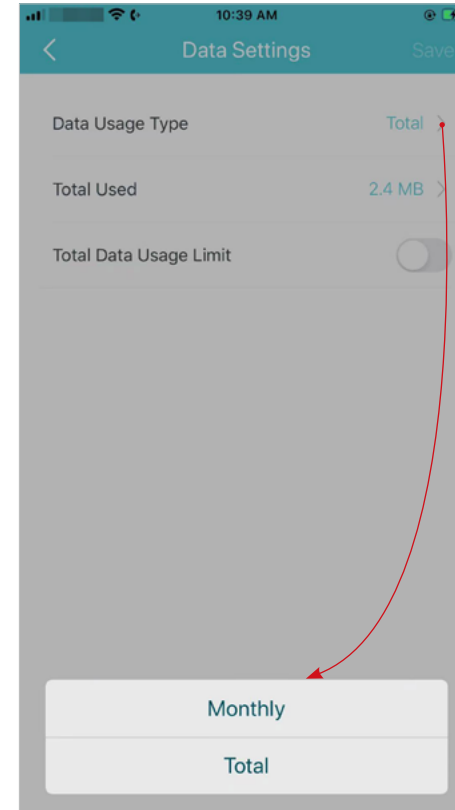
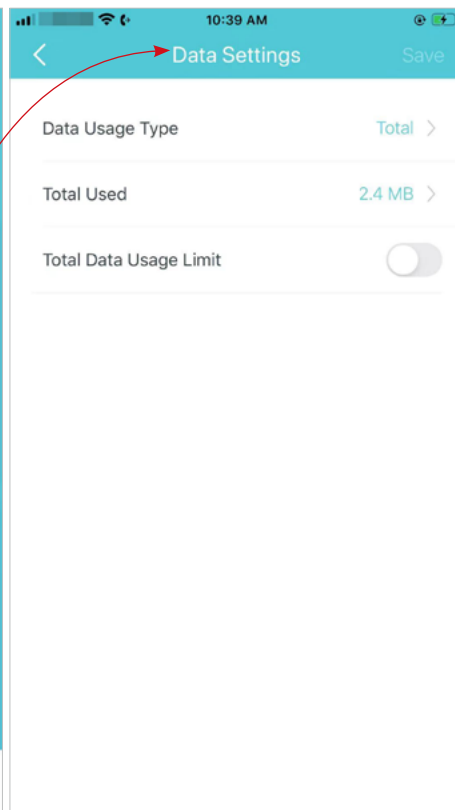
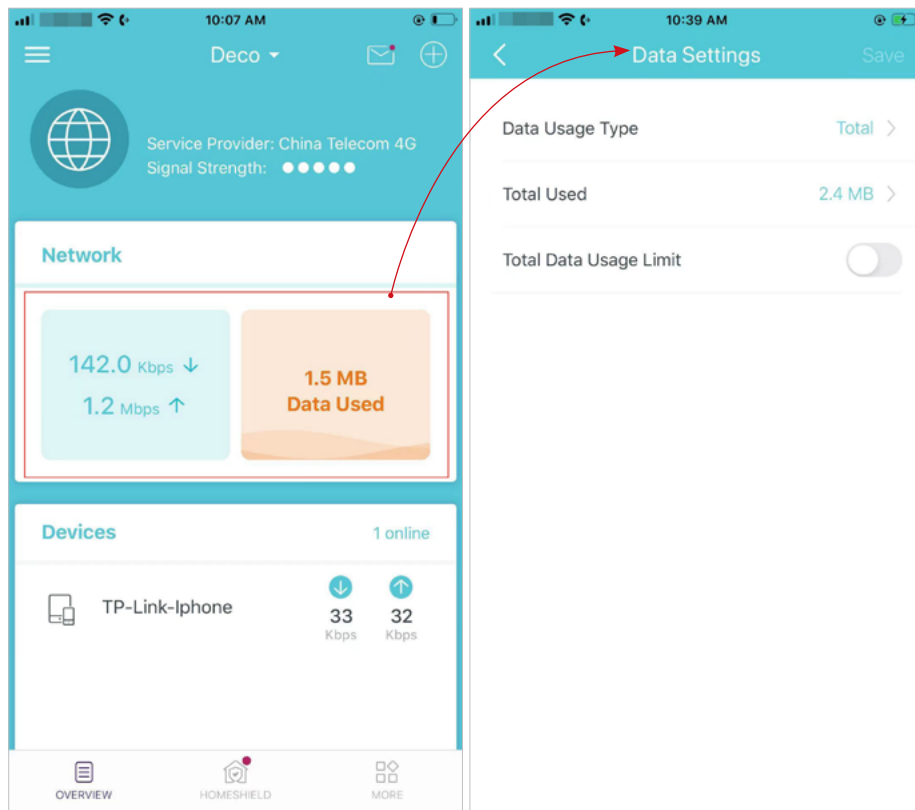
📌 Note: It is not available to modify the data settings when remotely managing the network from Deco app.

1. In Overview, tap the **Network** card to enter the **Data Settings** page.

📌 Tip: You can also go to **MORE > Advanced > Data Settings** to enter the Data Settings page.

2. Set the data usage type as **Monthly** or **Total**.

3. Correct the total/monthly used data manually if the data is inaccurate.



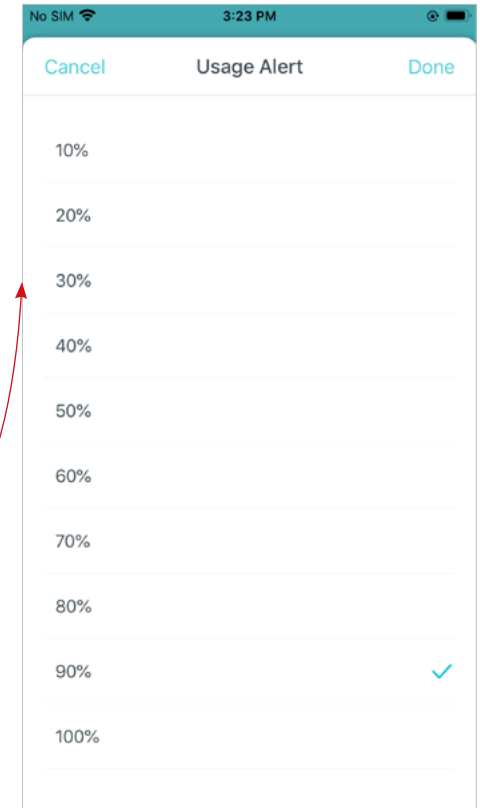
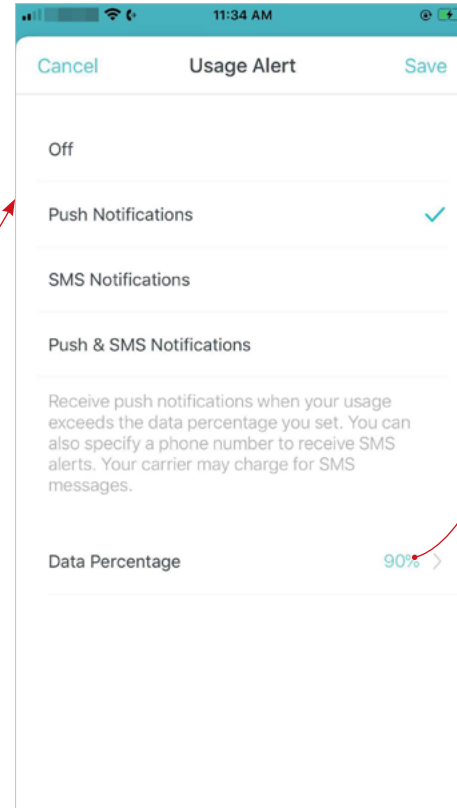
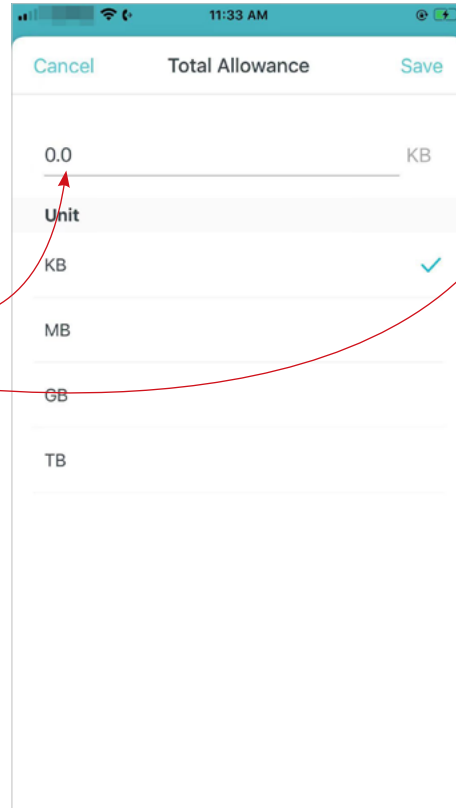
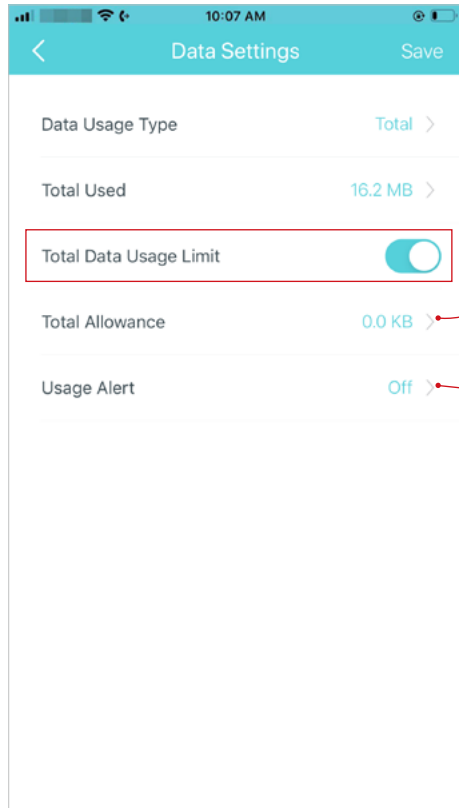
\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

4. Enable **Data Usage Limit** to set total/monthly data allowance and usage alert to prevent data overuse.

5. Enter the allowed amount of total/monthly data. When data usage exceeds the allowed level, the Deco will disconnect from the internet.

6. Choose a notification method if you want to receive a warning when data usage reaches the allowed level.

7. Choose a data percentage to prevent data overuse.

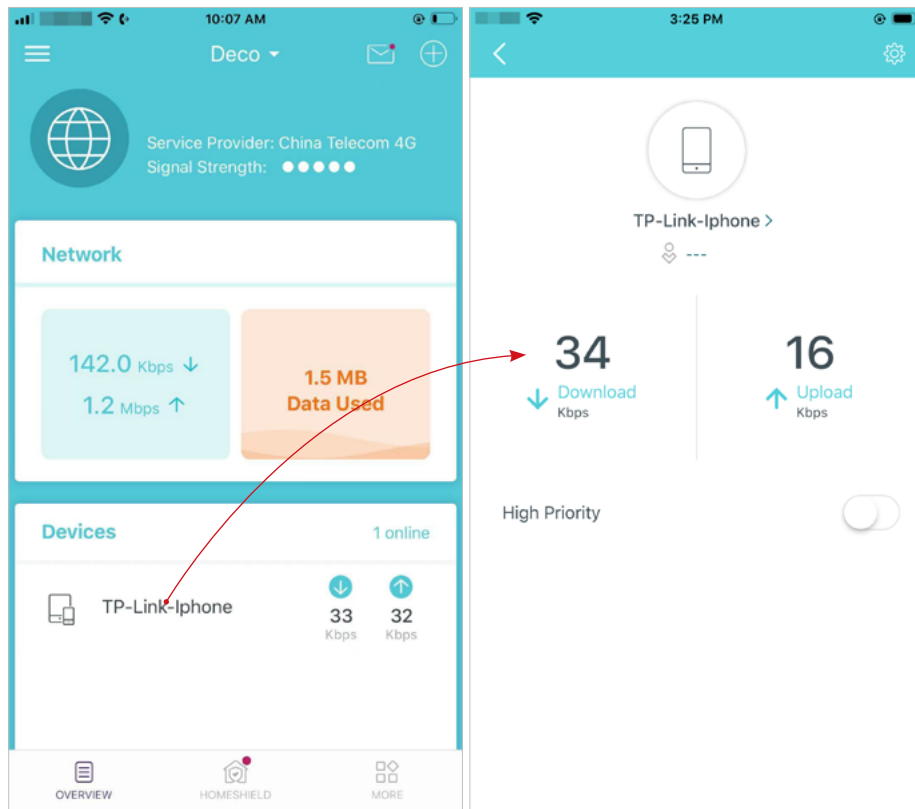




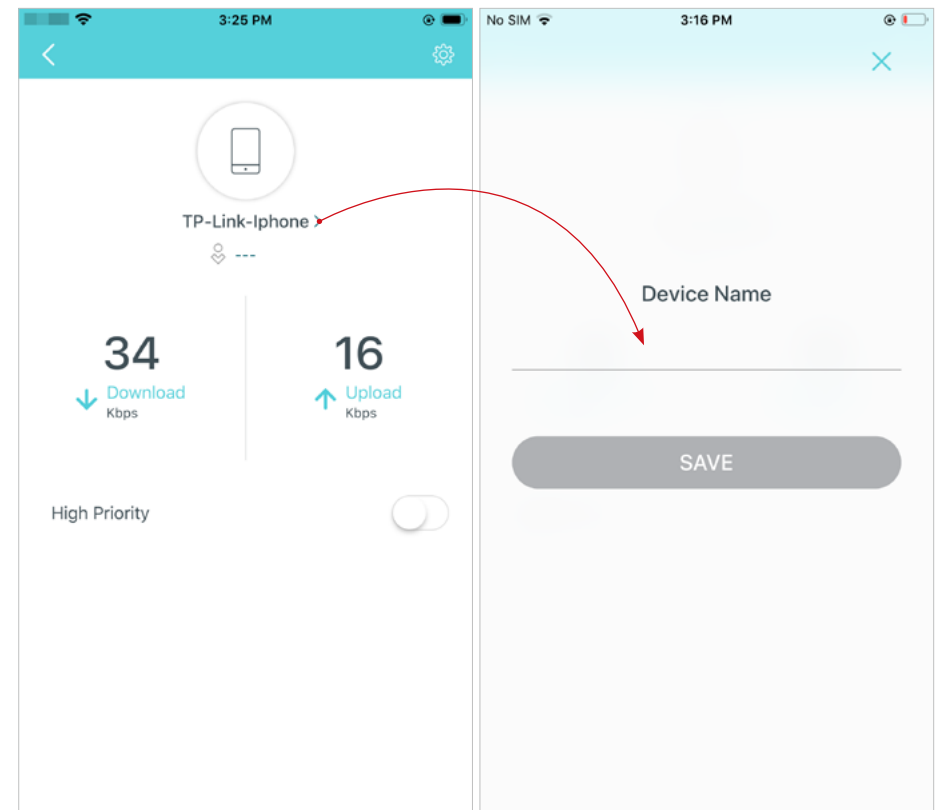
# Manage Connected Devices

In Overview, you can manage your connected devices easily, such as changing the device name and type, enabling Mesh Technology and high priority, and setting a profile to manage its online activities, and more.

Tap a connected device to check the details (eg. real-time upload/download speeds).

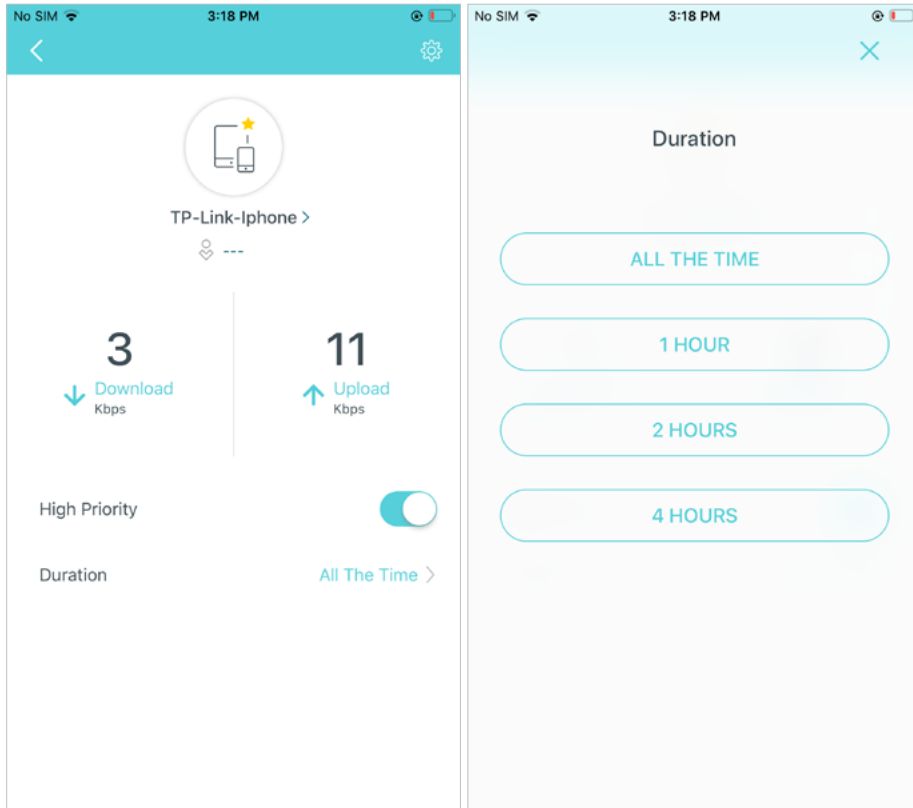



Change the device name as needed.

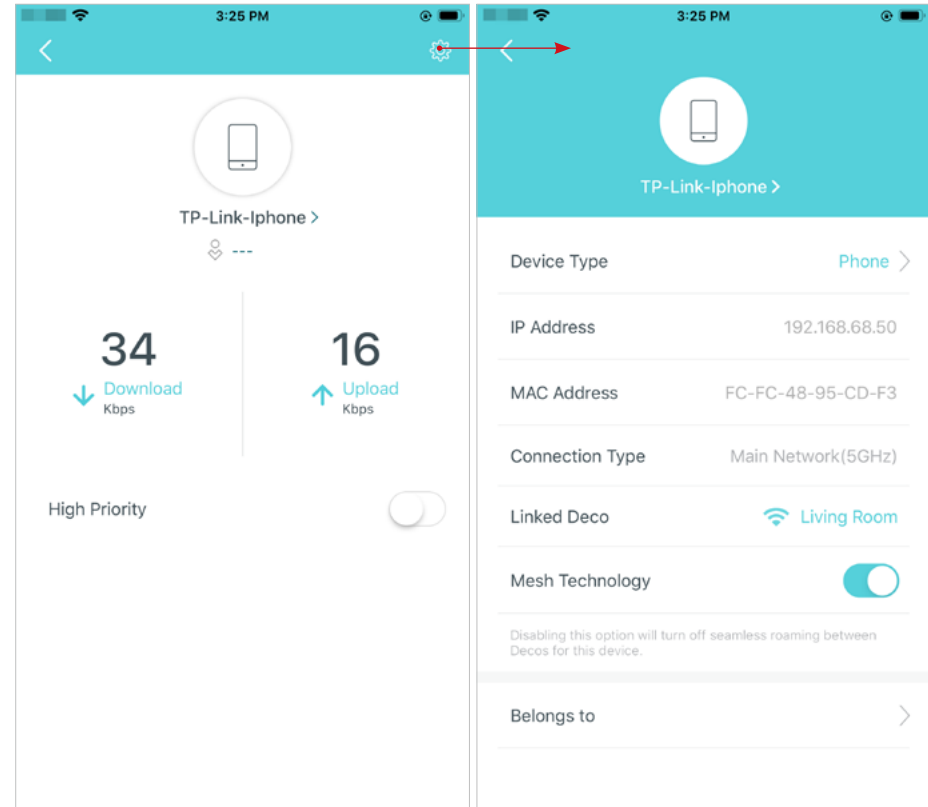


\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

Enable **High Priority** and set the **Duration** time to prioritize the connection of this device during the time, such as a family member's laptop for one hour during a video call.

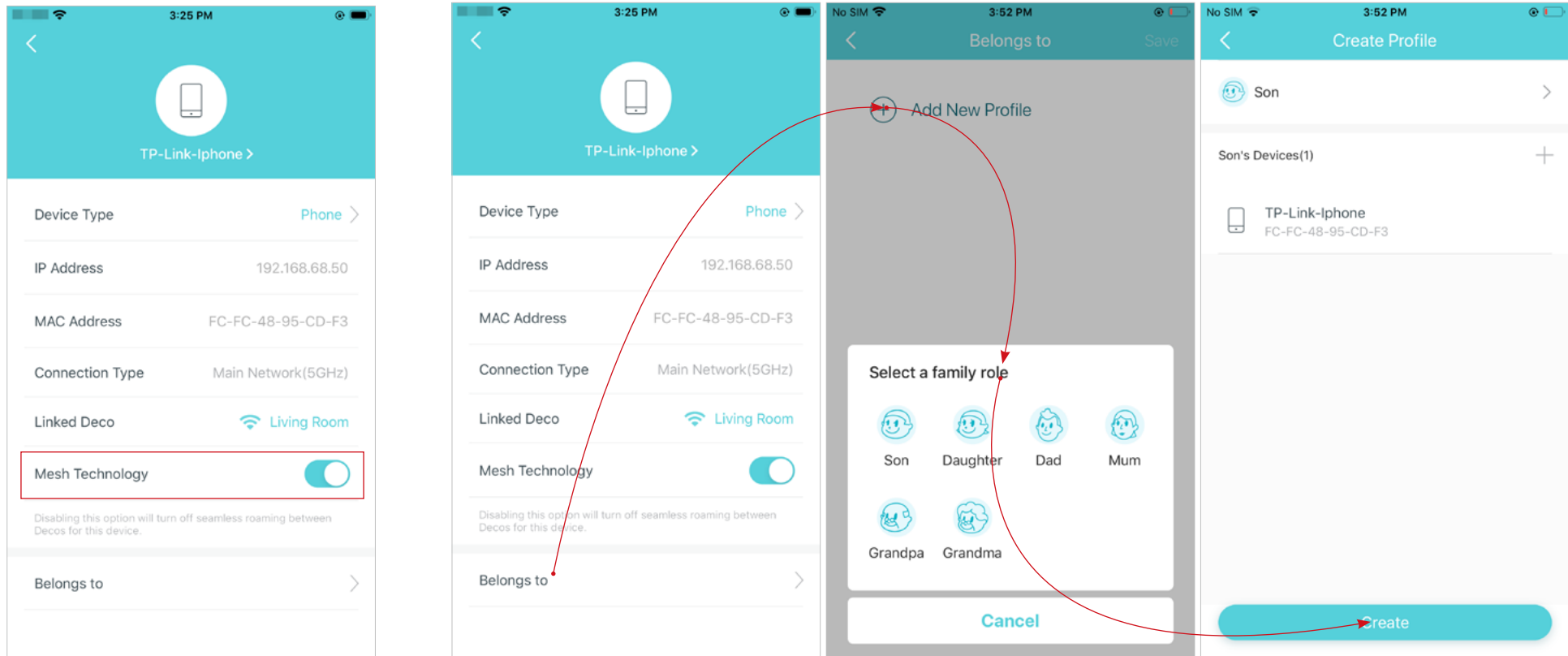


Tap  to manage the device settings, including changing the device name/type, viewing device detailed information (IP address, MAC address, connected network, linked Deco, etc.), and more.



Enable [Mesh Technology](#) and then the device can seamlessly switch to the Deco that provides the fastest speed as you move around.

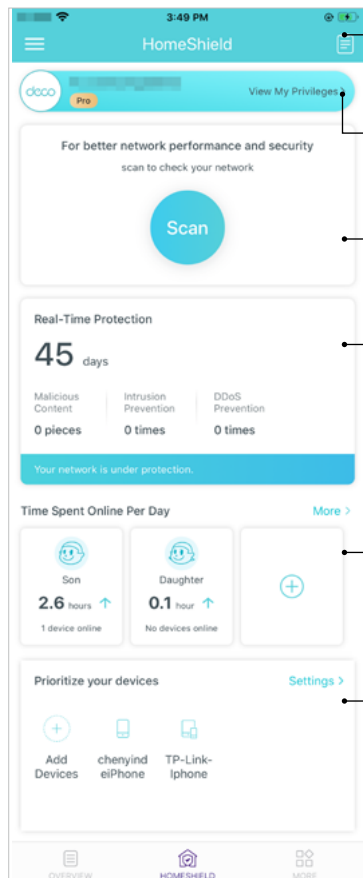
Tap [Belongs to](#) to add a unique profile for the device and manage its online activities. For example, when and for how long this device can access the internet, block inappropriate content, and pause the internet if necessary. For more information about the feature, refer to [HomeShield](#).



# HomeShield

Whether protecting your network from malicious attacks, managing your family's online activities, or prioritizing devices to get better performance, TP-Link HomeShield provides you a kit of basic (free) and Pro (charged) features to enhance your whole home network with enhanced security. An overview of HomeShield features are shown below.

- **What is HomeShield:** <https://www.tp-link.com/homeshield/>
- **How to use HomeShield features and upgrade to HomeShield Pro:** go to the product support page at <https://www.tp-link.com> and refer to [TP-Link HomeShield User Guide](#).



- **Weekly/Monthly Reports:** Review a weekly or a monthly list of usage, such as security threats, top visited contents, and more, to better manage your family's online activities.
- **HomeShield Pro Subscription:** To enjoy more features, you can upgrade to HomeShield Pro.
- **Scan:** Examine your network regularly to identify the potential risks, thus improving your network performance and security.
- **Real-Time Protection:** Real-Time Protection is for Pro users only. There are three ways to ensure your home network and your IoT devices remain safe: (1) block malicious websites, protect your home network and applications against external attacks and eliminate vulnerabilities; (2) prevent infected devices from sending sensitive information or security threats to clients outside your network; (3) identify IoT devices and immediately monitor their security performance once they join the network.
- **Parental Controls:** Create profiles for family members and specify the devices that belong to each. Set individualized parental controls including when and for how long each person can access the internet. Block inappropriate content and pause the internet if necessary.
- **QoS:** Prioritize the connection of a particular device for a set duration, such as a family member's laptop for one hour during a video call.

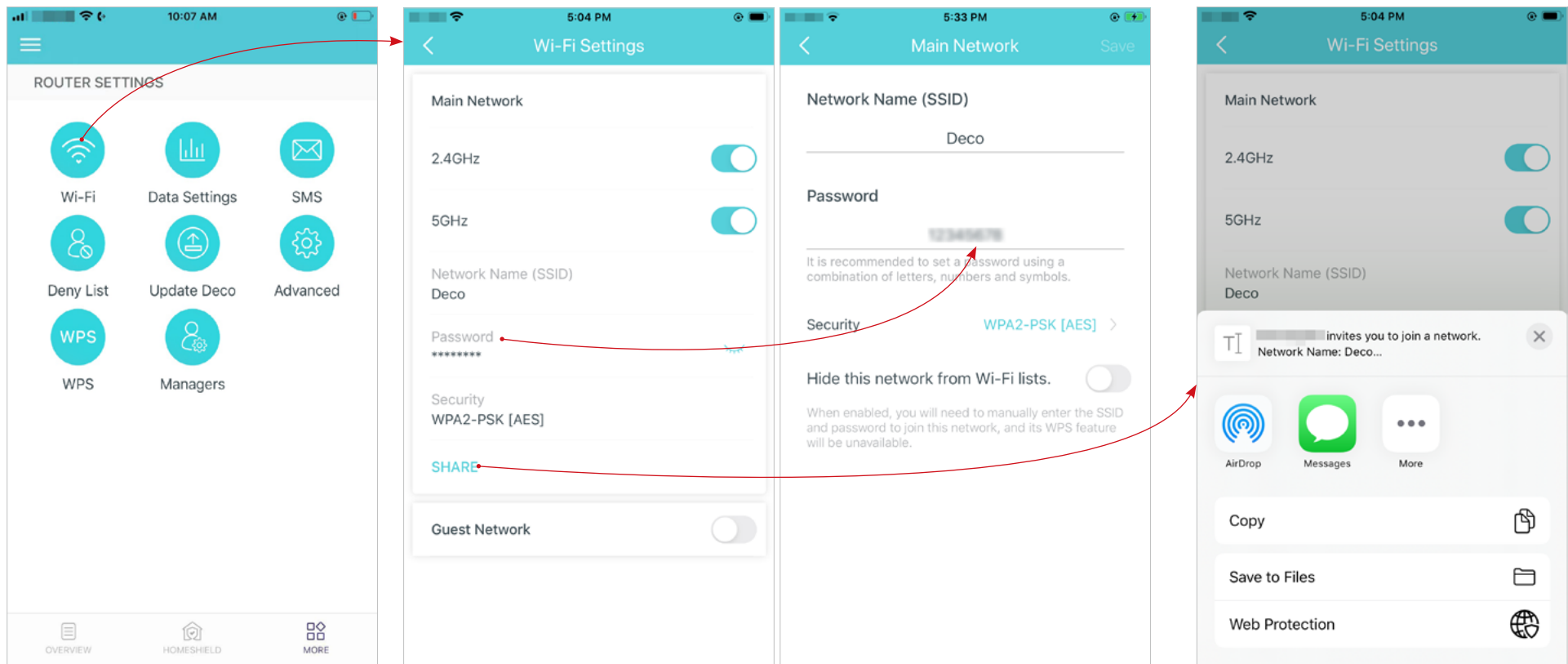
# Wi-Fi Settings

You can change the network name and password of your main network at any time and share the network easily with family and friends.

Tap  > [Wi-Fi](#).

Manage main network (eg. change your main network's Wi-Fi name and password, hide the network from Wi-Fi list, etc.).


Share your network with others.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

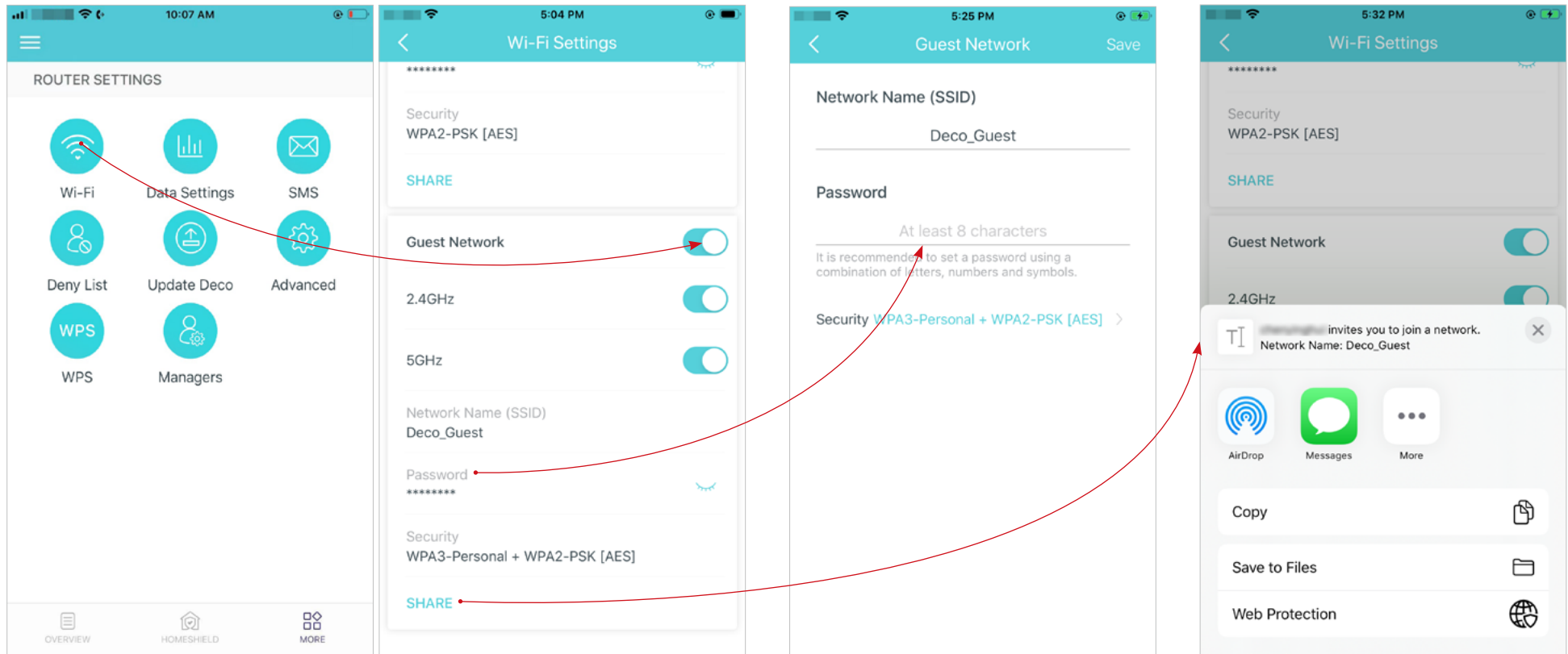
# Guest Network

You can create and share a separate network for guests to guarantee the security and privacy of your main network.

Tap  > **Wi-Fi** and enable **Guest Network**.

Set a Wi-Fi name and password for the guest network.

Share your guest network with others.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

# SMS Service (for 3G/4G Router Mode)

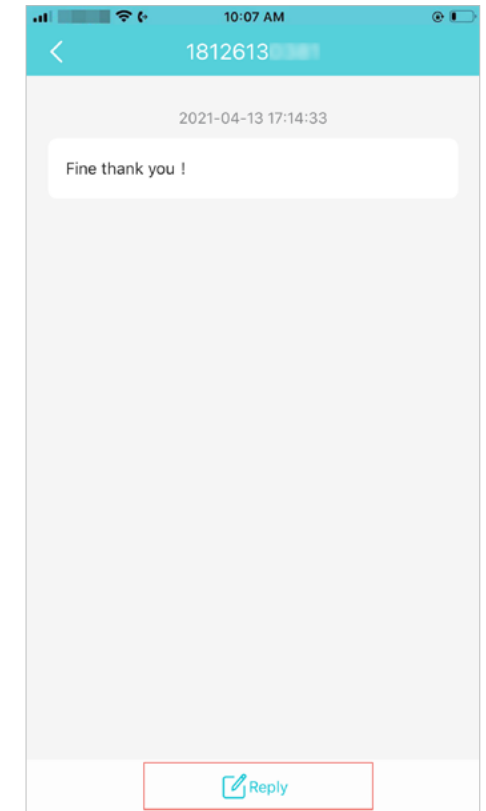
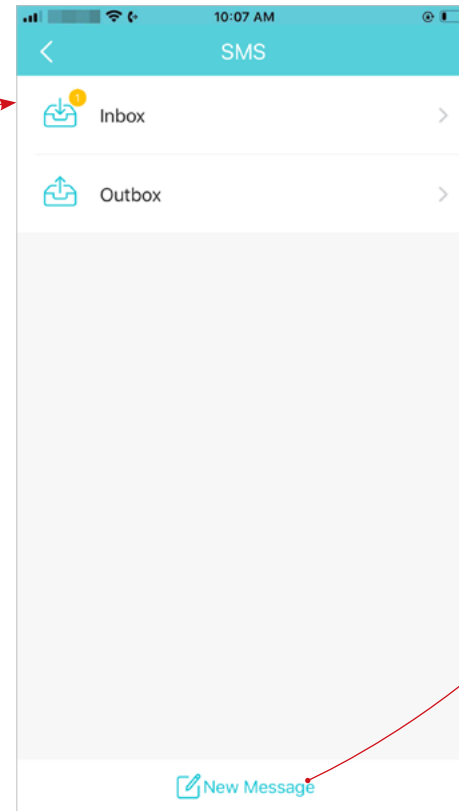
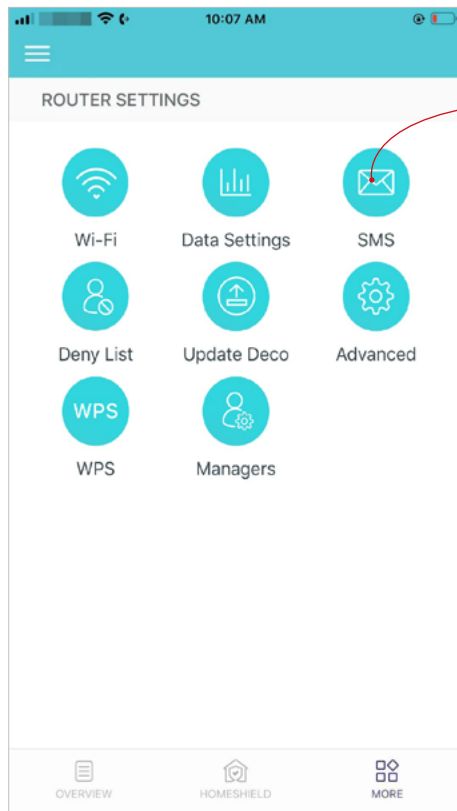
When Deco works in 3G/4G Router mode, you can view, send and receive messages with the SMS Service in the Deco app.

Tap  > SMS.

View inbox and outbox messages.

Create new messages.

Reply messages.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

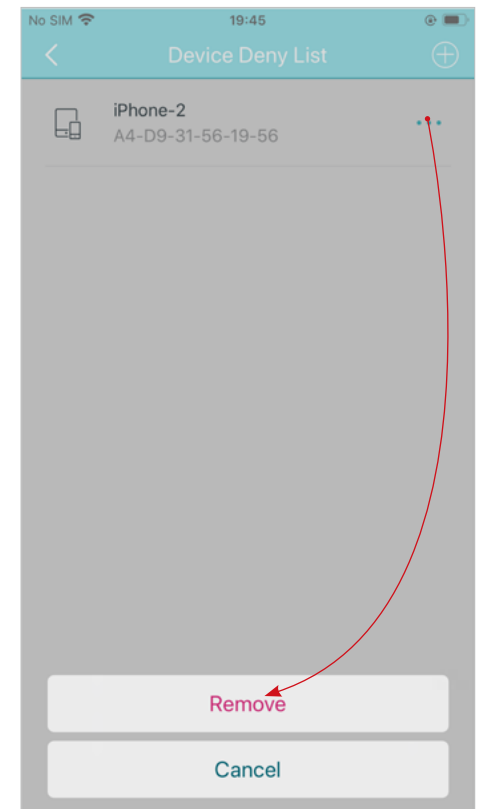
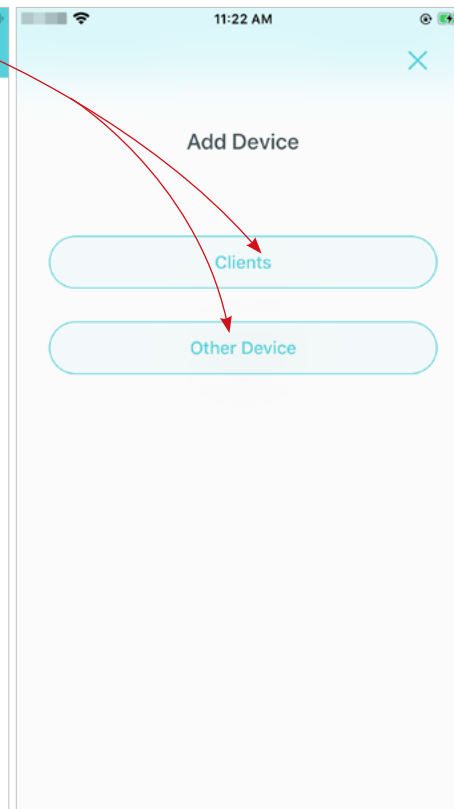
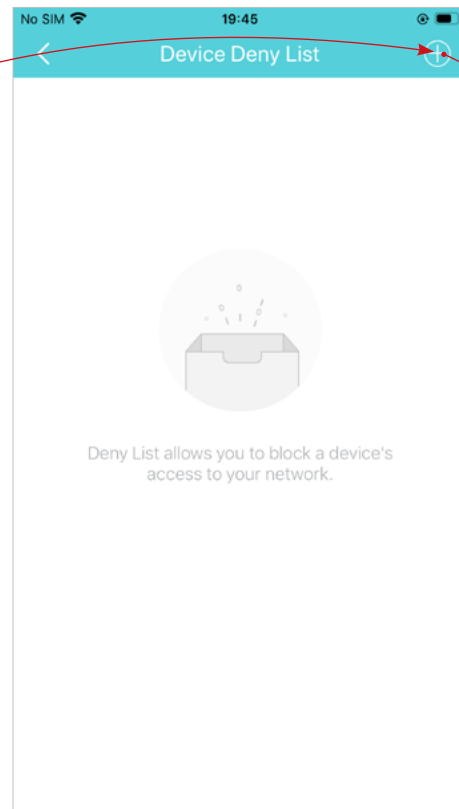
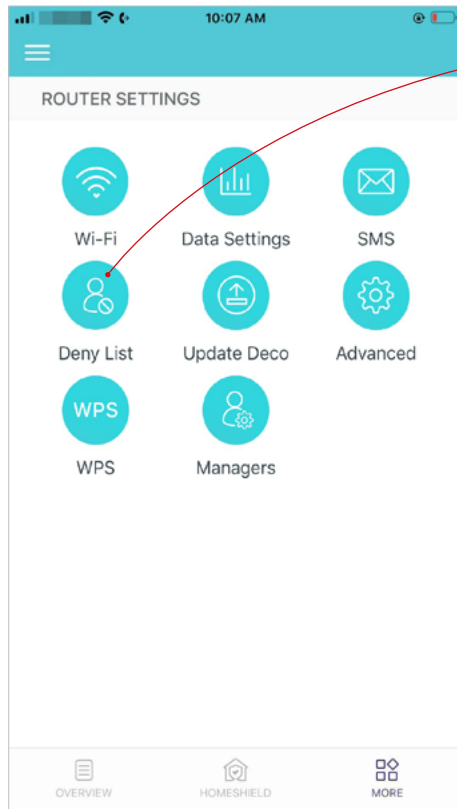
# Deny List

Add devices to the deny list to prevent the devices from accessing your network, ensuring the safety of your personal information shared in the network.

Tap  > Deny List.

Tap + in the top right corner and add clients or other devices to the deny list.

Remove devices/clients from deny list.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

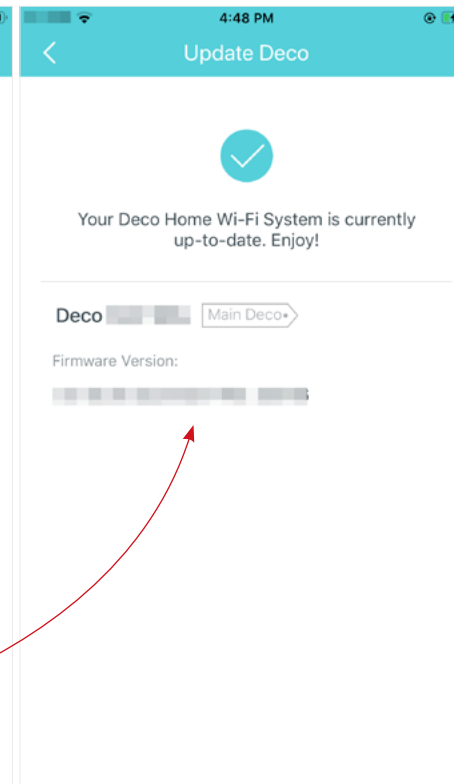
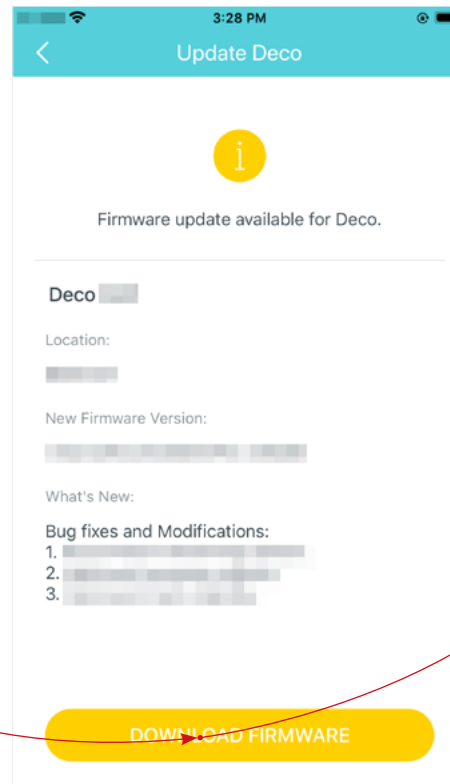
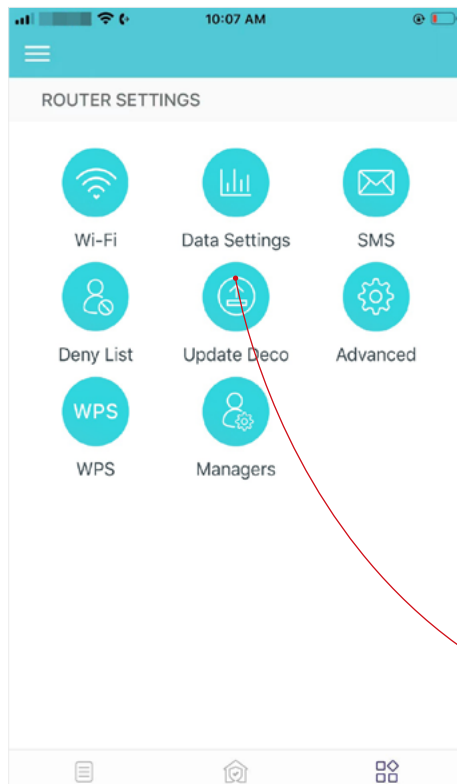


# Upgrade Your Deco

TP-Link is dedicated to improving product features and providing a better customer experience. An up-to-date firmware provides better and stabler network performance. Always update your Deco to the latest firmware version when prompted in the Deco app.

1. Tap  > Update Deco.

2. Download and install the firmware (if any) and follow app instructions to update your Deco to the latest version.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

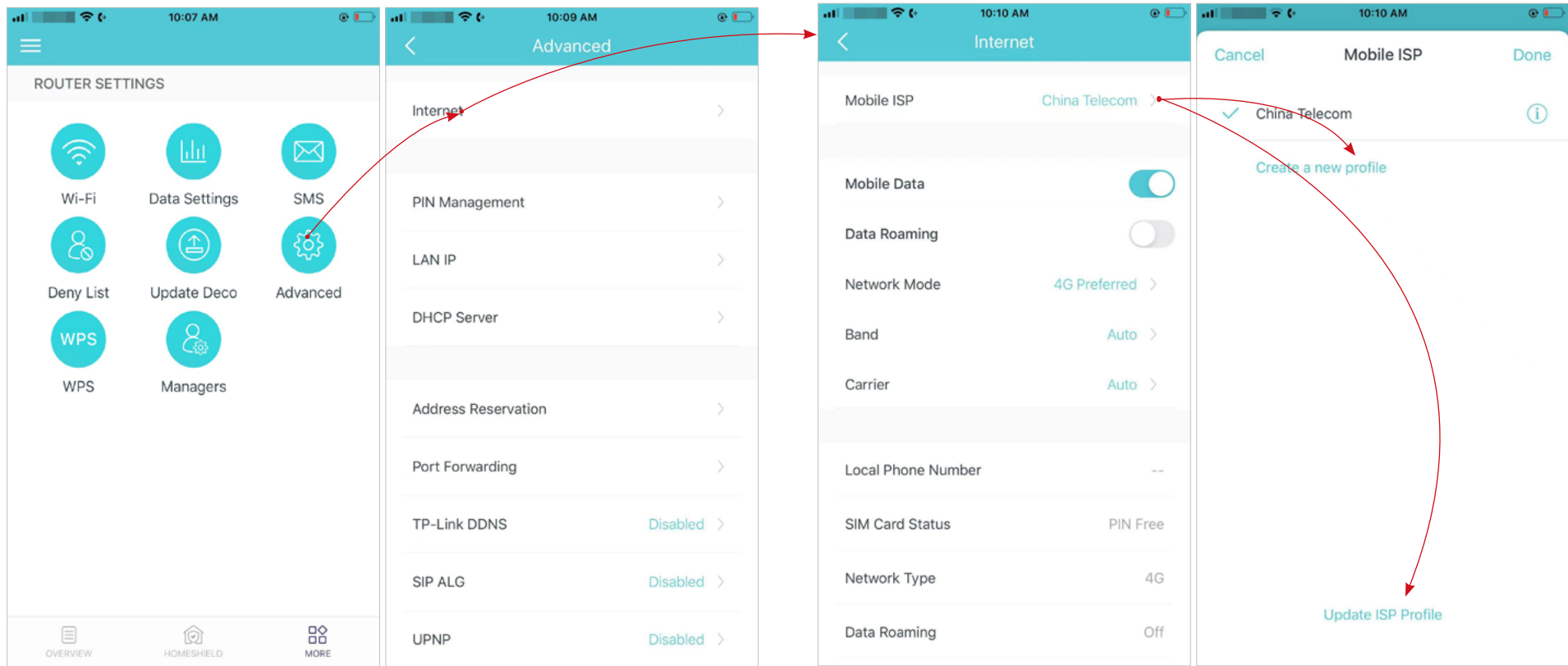
# Internet Settings (for 3G/4G Router Mode)

When Deco works in 3G/4G Router mode, you can configure the internet settings, including updating or creating your ISP profile, enabling/disabling mobile data and data roaming, changing a network mode, and more.

⚠ Note: It is not available to change the internet settings when remotely controlling the network from the Deco app.

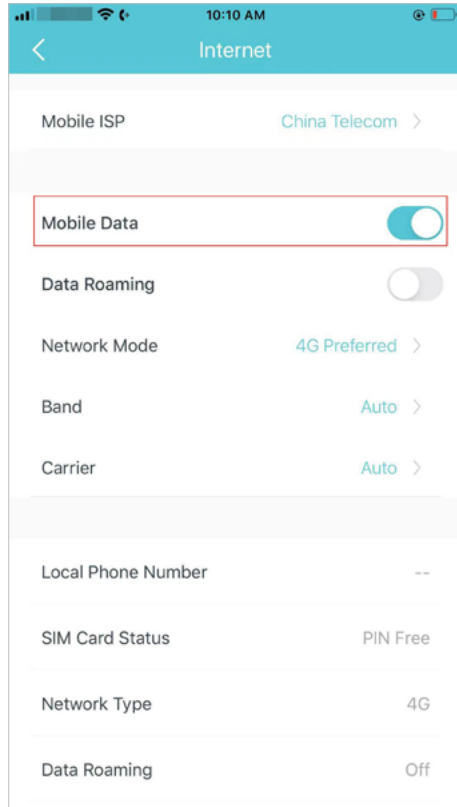
Tap  > [Advanced](#) > [Internet](#).

Tap [Mobile ISP](#) to update your ISP profile or create a new one.

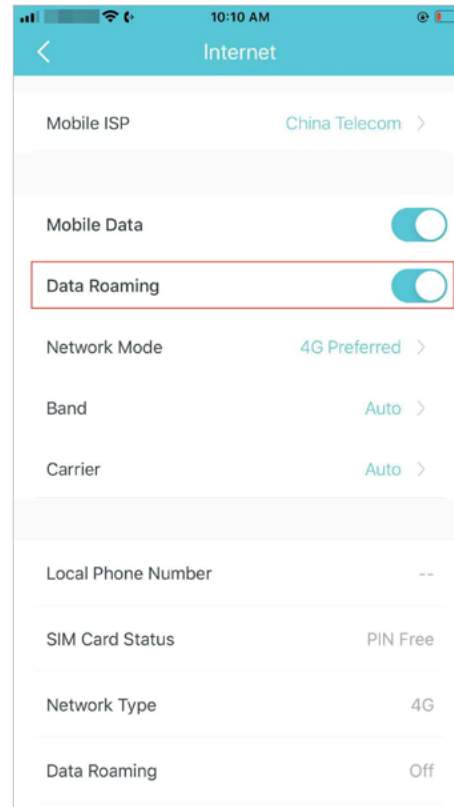


\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

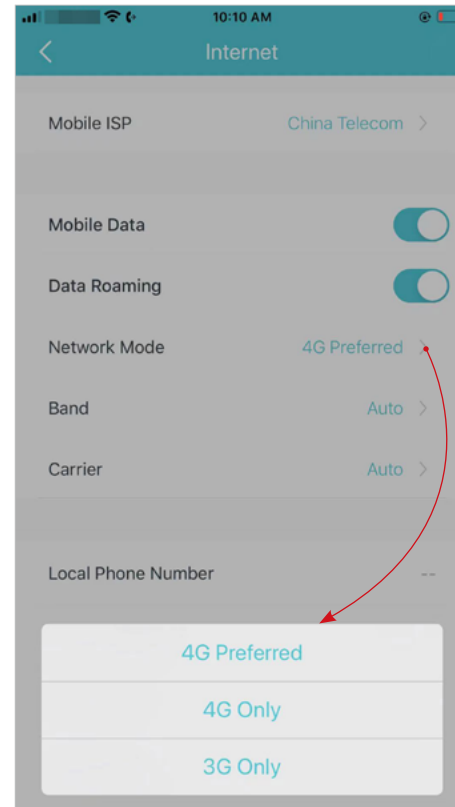
Enable **Mobile Data** to ensure internet access.



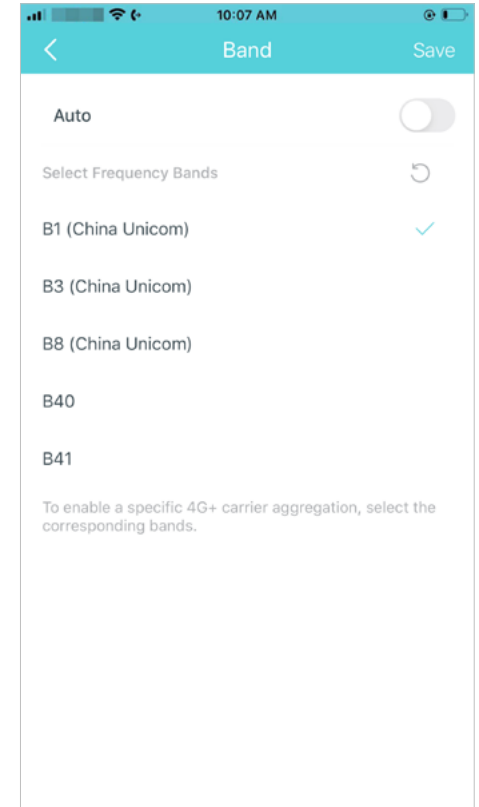
Enable **Data Roaming** to ensure the internet access while you are outside the service area of your carrier.



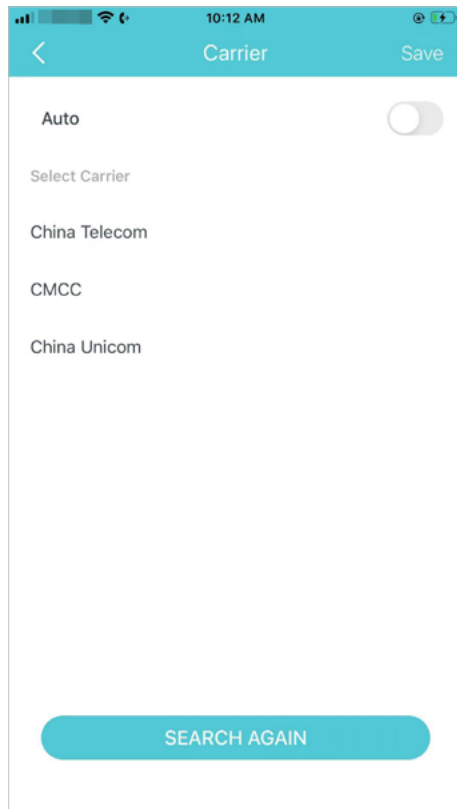
Change the mobile network mode (4G Preferred / 4G Only / 3G Only) according to your needs.



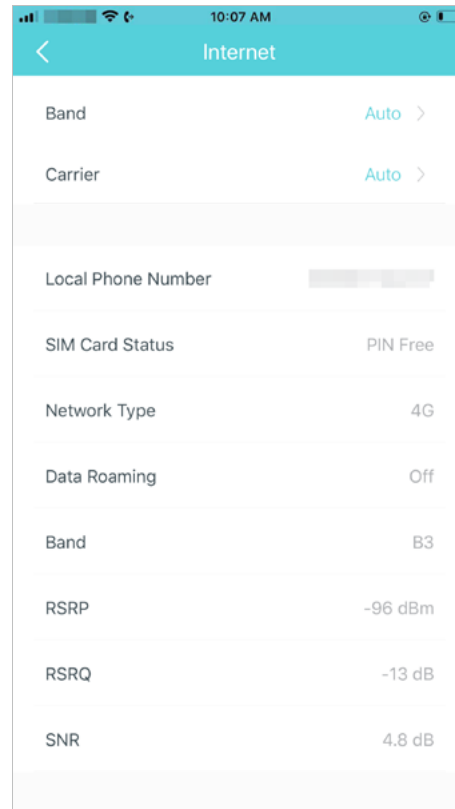
Select frequency bands manually or automatically.



Select preferred carrier network manually or automatically.



Check internet detailed information.



# PIN Management (for 3G/4G Router Mode)

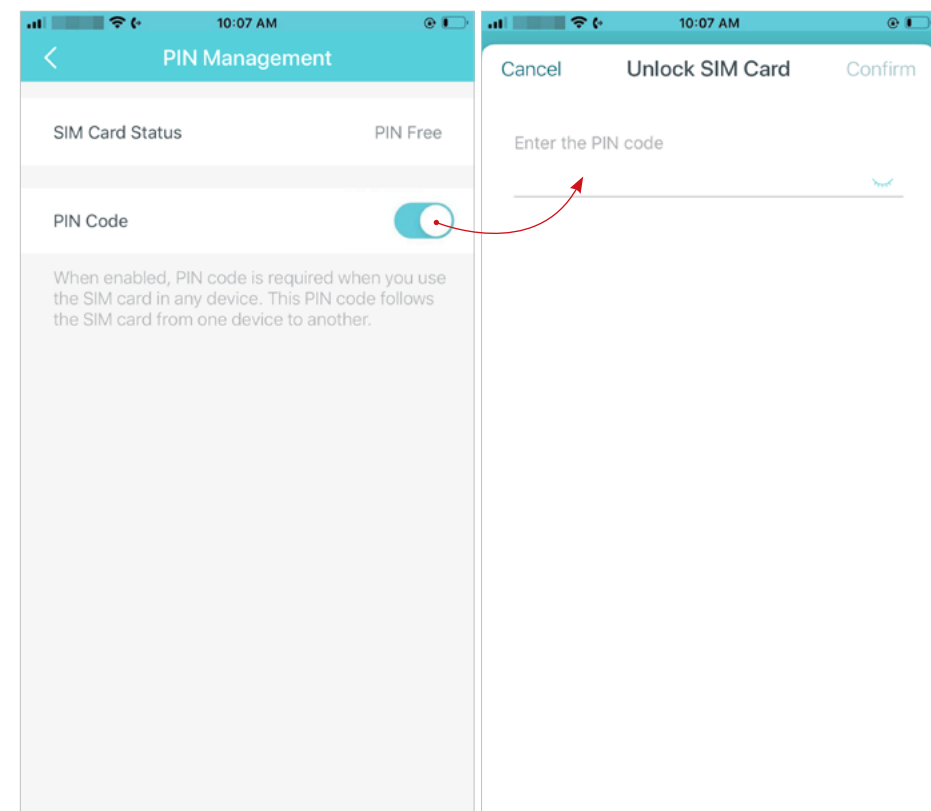
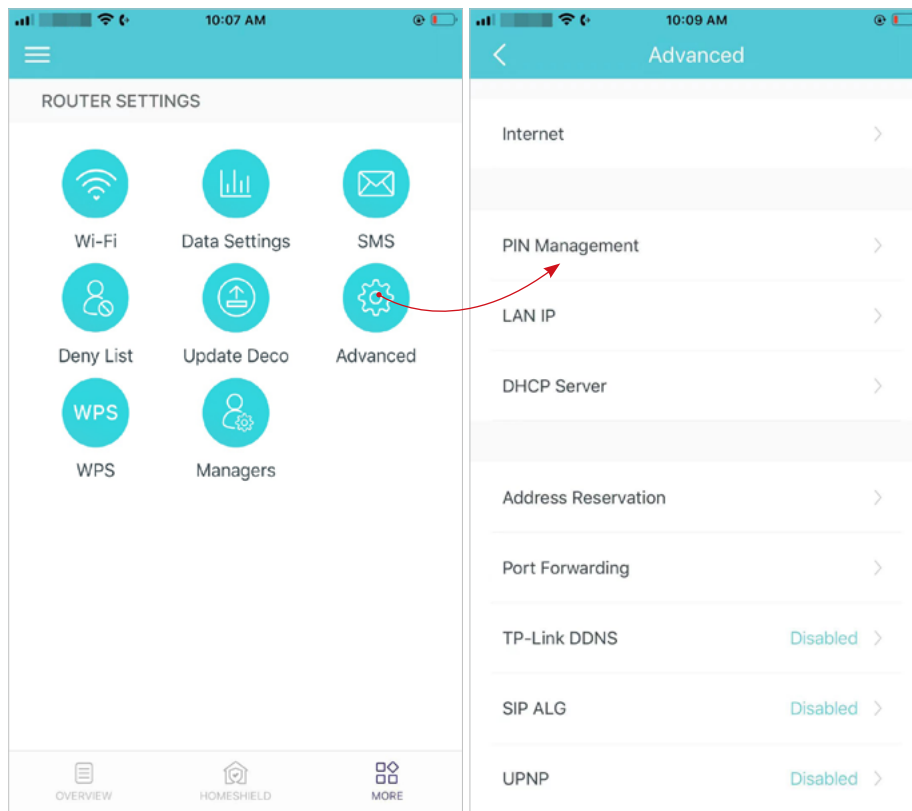
While Deco works in 3G/4G Router mode, a SIM card is inserted to it for internet access. To protect your SIM card from embezzlement, PIN Management is available in the Deco app. When enabled, PIN code is required when you reboot the Deco or reinsert the SIM card to it.

■ Note: This feature is available only when your Deco works in 3G/4G Router mode, but is not available when Deco works in 3G/4G Router mode and being remotely controlled from the Deco app.

1. Tap  > [Advanced](#) > [PIN Management](#).

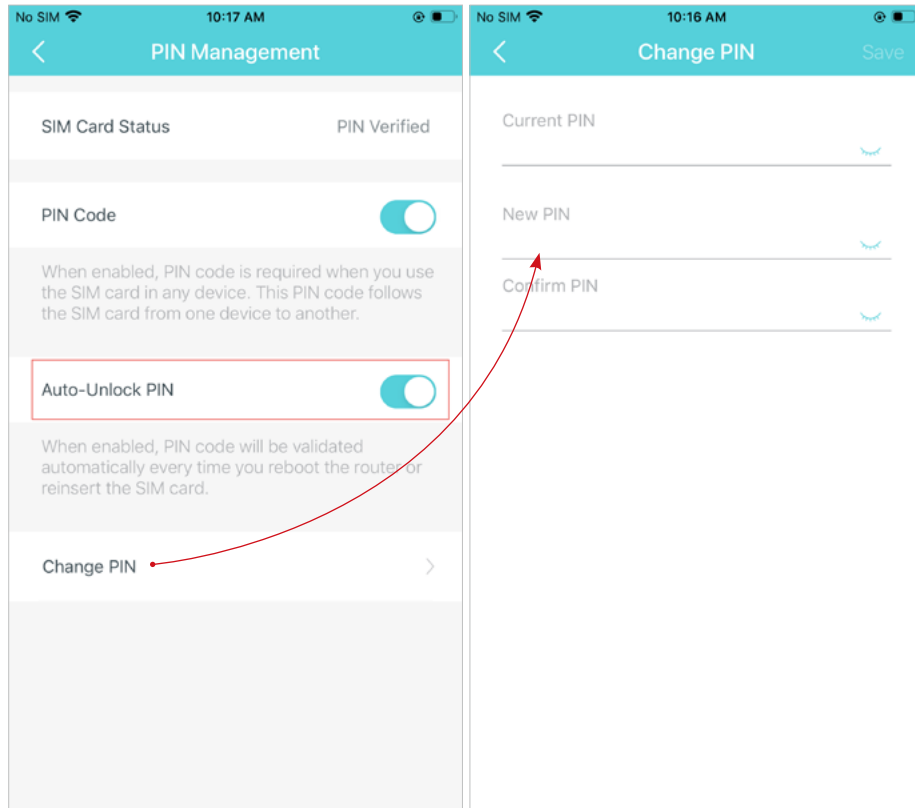
2. Enable [PIN Code](#) and set a PIN code for SIM card unlock. Then the PIN code is required every time you reboot the Deco or reinsert the SIM card to it.

■ Note: If you enter the wrong PIN code too many times, your SIM card will be automatically locked. Contact your carrier for help if your SIM card is locked.

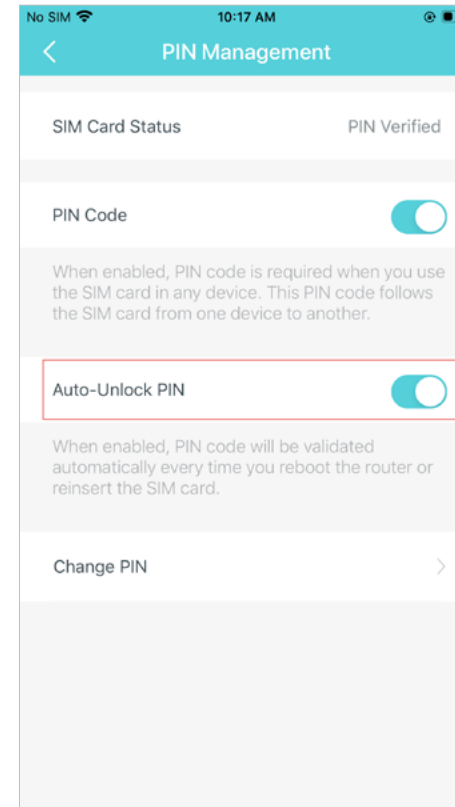


\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

3. Tap [Change PIN](#) whenever you want to set a new PIN code. You need to enter the current PIN before you set a new one.



4. Enable [Auto-Unlock PIN](#), then the PIN code will be validated automatically every time you reboot the router or reinsert the SIM card.



# Advanced Features

Additional features are available under the Advanced menu. The features vary with the working mode of Deco. For example, you can modify the mobile ISP settings only when your Deco is in 3G/4G Router mode, and modify WAN settings only in Wireless Router mode. Follow the instructions to explore different features.

**Note:** When Deco works in 3G/4G Router mode and being remotely controlled from the Deco app, Internet Settings, PIN Management, Data Settings, and External Antennas are not available. When Deco works in Wireless Router mode and being remotely controlled from the Deco app, IPv4, IPv6, VLAN/IPTV, 3G/4G Backup and Offline Detection are not available.

Tap  > [Advanced](#).

View IPv4 details or change the internet connection type.

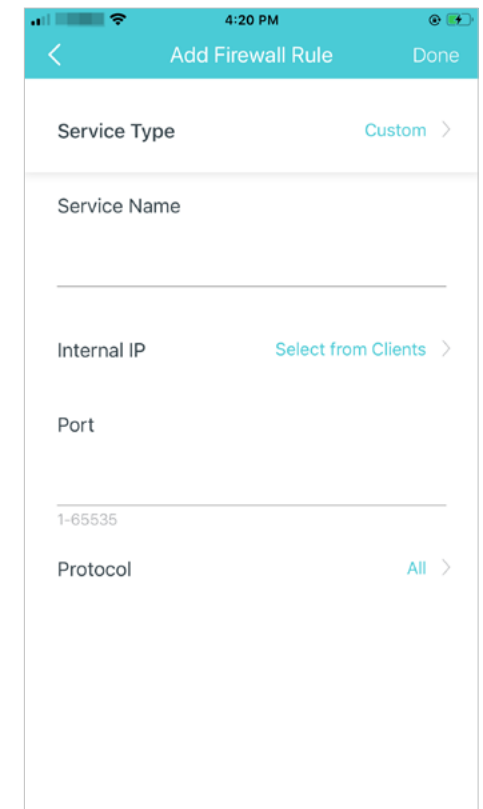
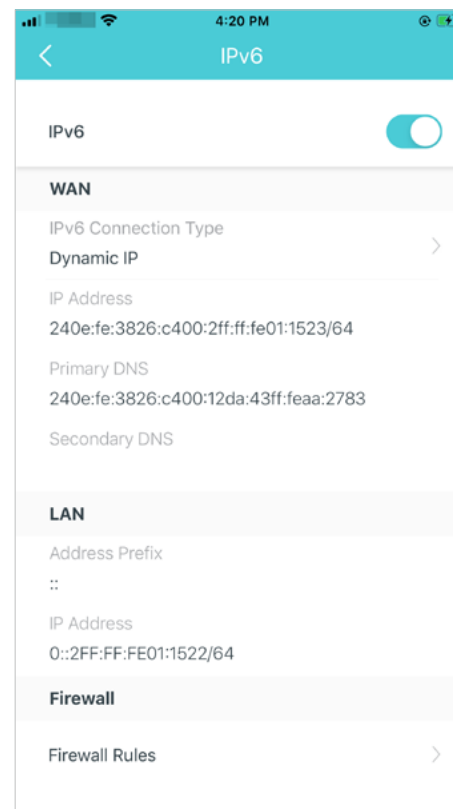
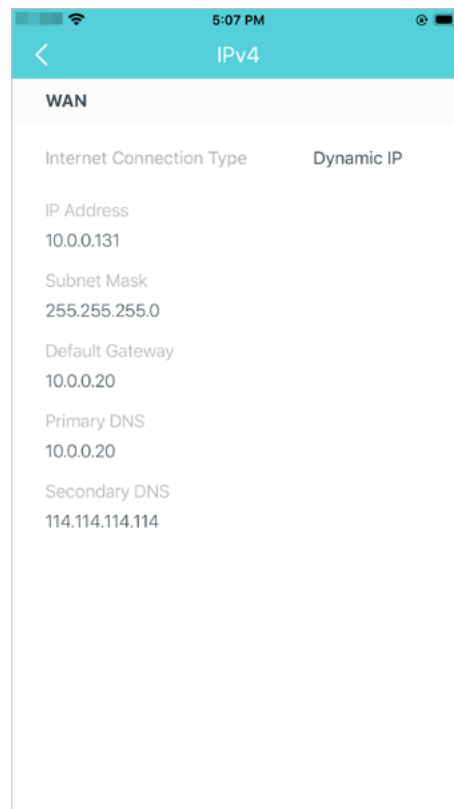
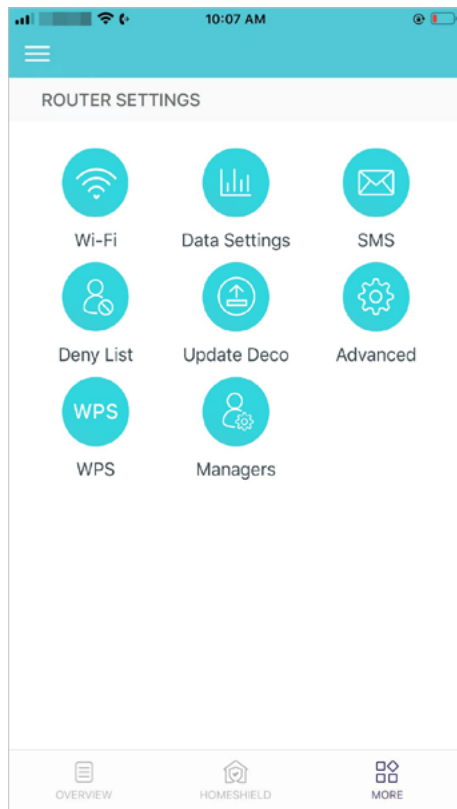
**Note:** This feature is available only when your Deco works in Wireless Router mode.

Enable IPv6 to set up an IPv6 internet connection.

**Note:** This feature is available only when your Deco works in Wireless Router mode.

Add IPv6 firewall rules to allow specific devices to access the specified services.

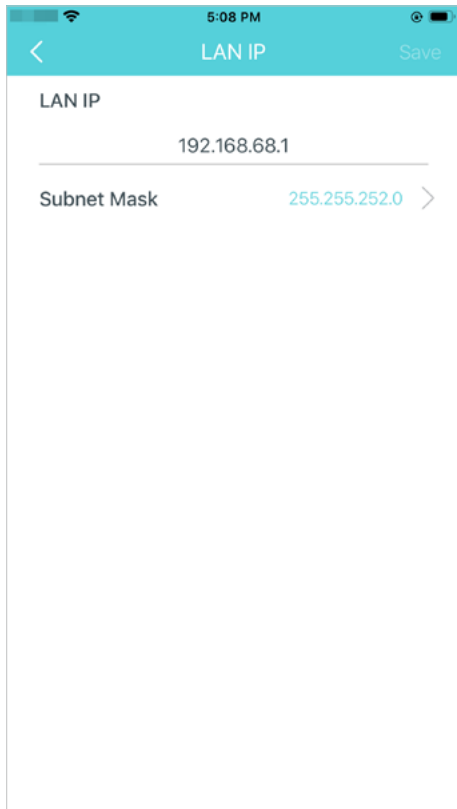
**Note:** This feature is available only when your Deco works in Wireless Router mode.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

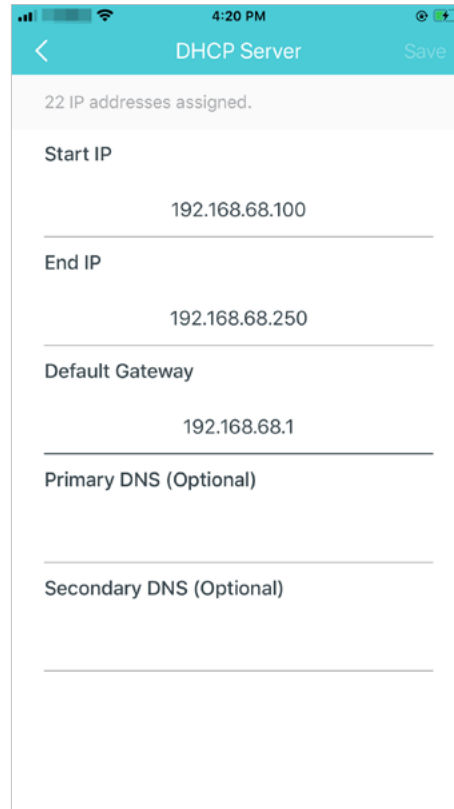
Modify LAN IP to avoid IP address conflict.

Note: This feature is not available only when your Deco works in Access Point mode.



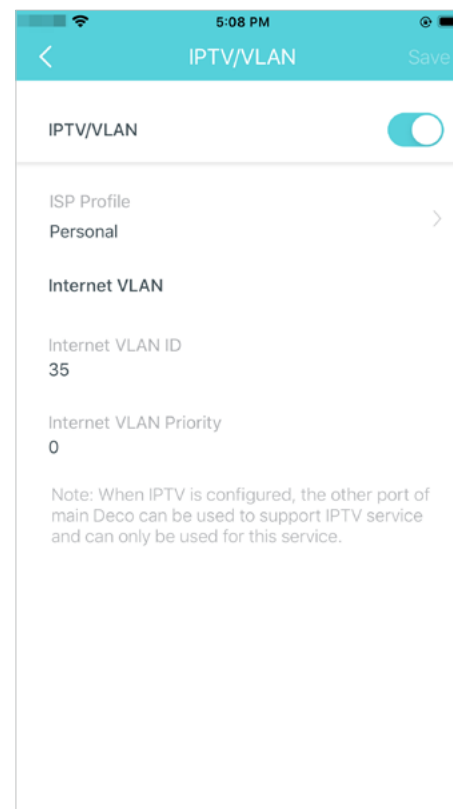
Change DHCP Server settings.

Note: This feature is not available only when your Deco works in Access Point mode.



Enable IPTV/VLAN mode to support IPTV services.

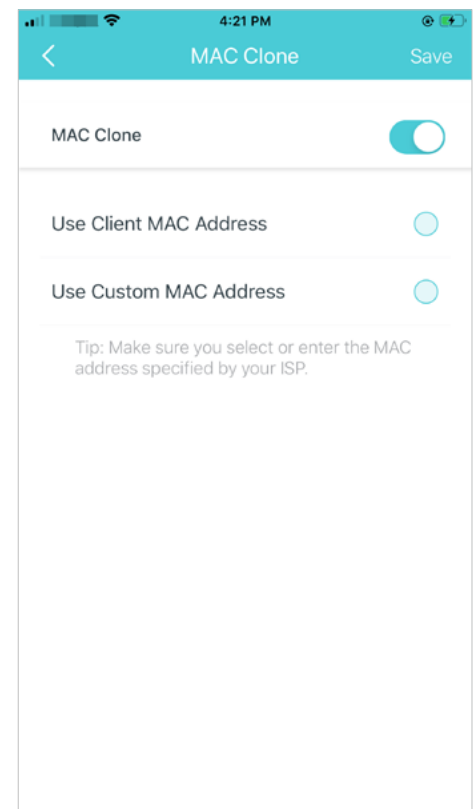
Note: This feature is available only when your Deco works in Wireless Router mode.



Enable MAC Clone if Deco fails to connect to the internet.

Tip: For more about MAC Clone, refer to <https://www.tp-link.com/support/faq/2925/>.

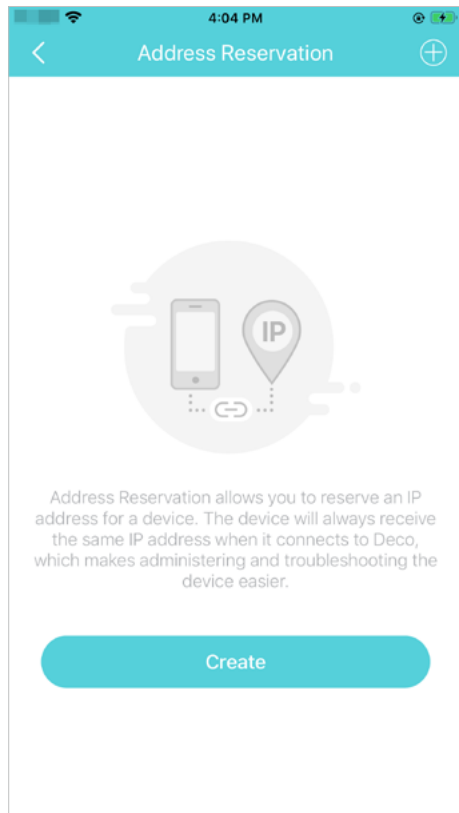
Note: This feature is available only when your Deco works in Wireless Router mode.





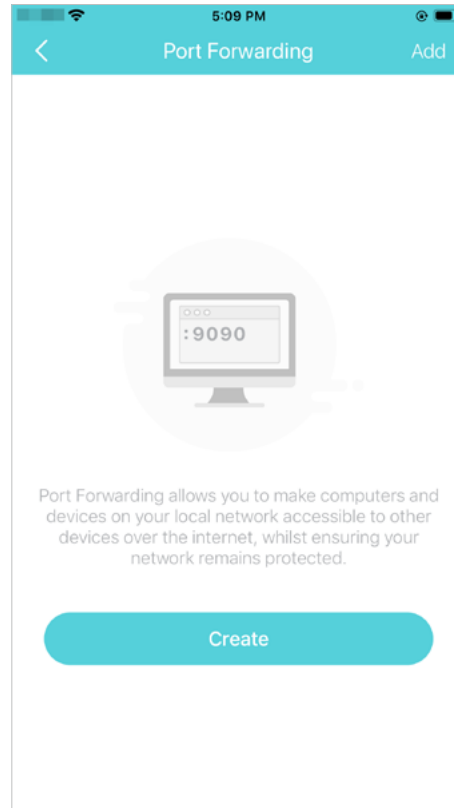
Reserve IP addresses for specific devices to recognize and manage the device more easily.

**Note:** This feature is not available only when your Deco works in Access Point mode.



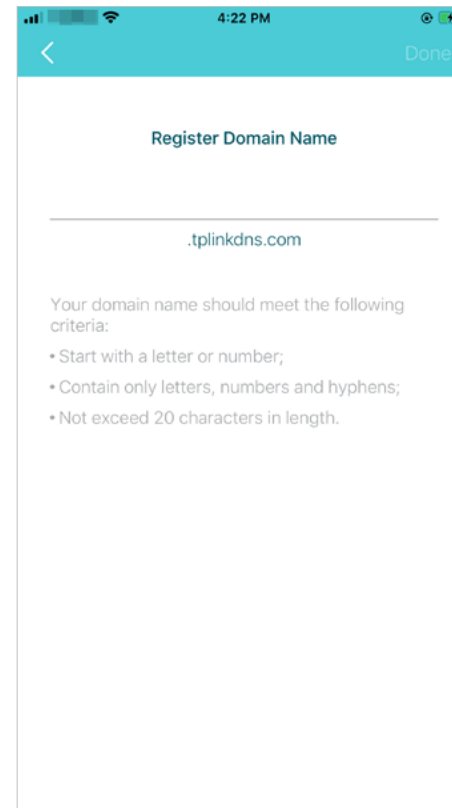
Set up port forwarding rules to enable devices in your network accessible over the internet with safety.

**Note:** This feature is not available only when your Deco works in Access Point mode.



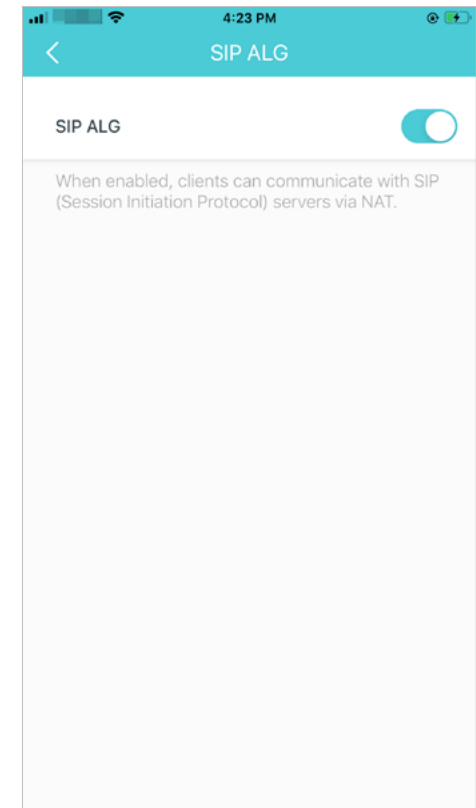
Register a TP-Link DDNS domain name to access your router and local servers using a domain name.

**Note:** This feature is not available only when your Deco works in Access Point mode.



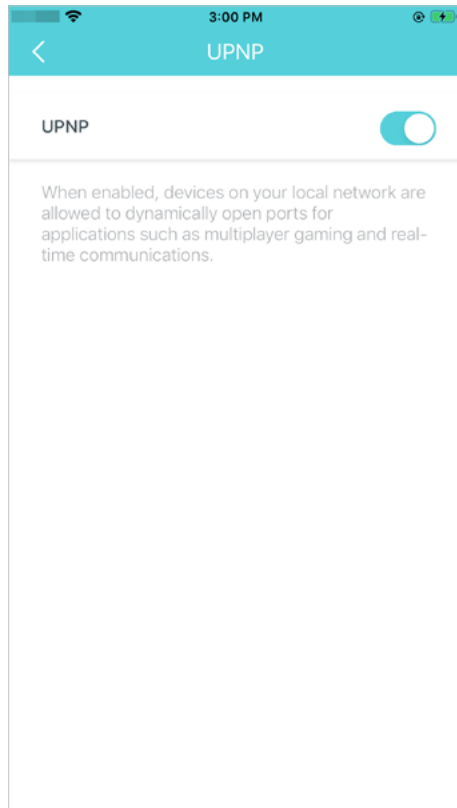
Enable SIP ALG to communicate with SIP (Session Initiation Protocol) servers via NAT).

**Note:** This feature is not available only when your Deco works in Access Point mode.

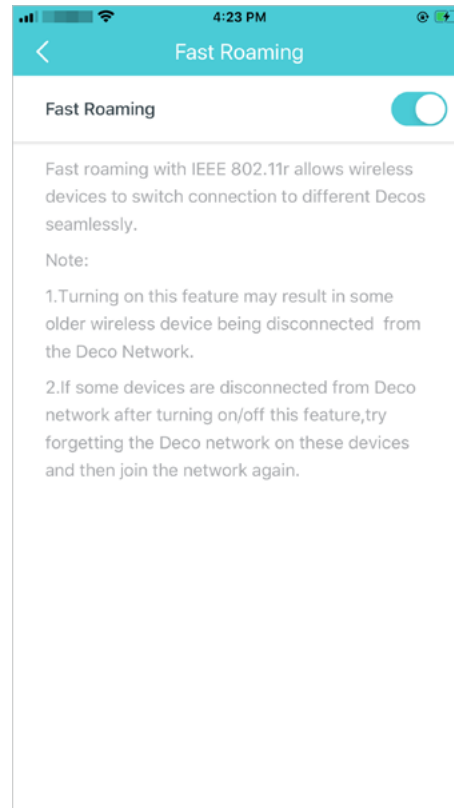


Enable UPNP to allow your local network to dynamically open ports for applications like gaming.

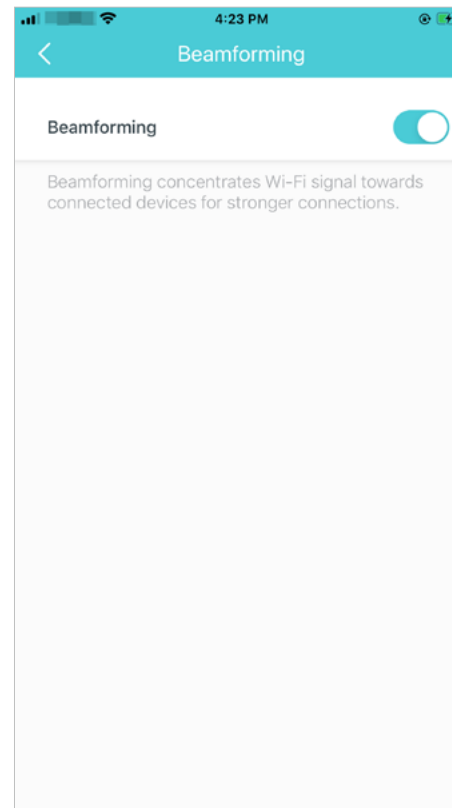
Note: This feature is not available only when your Deco works in Access Point mode.



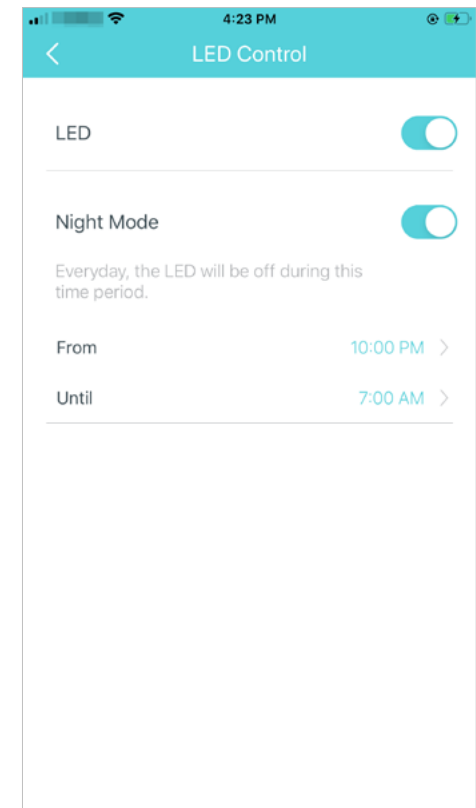
Enable Fast Roaming to allow your wireless devices to switch connection to different Decos.



Enable Beamforming to concentrate Wi-Fi signal towards connected devices for stronger connections.

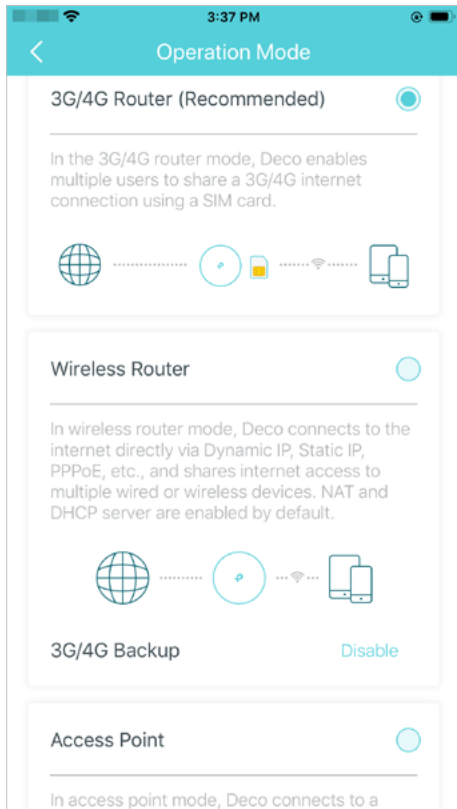


Toggle off LED to turn off the light on Deco. Configure the Night Mode to turn off the LED light at bedtime only.



Change the operation mode.

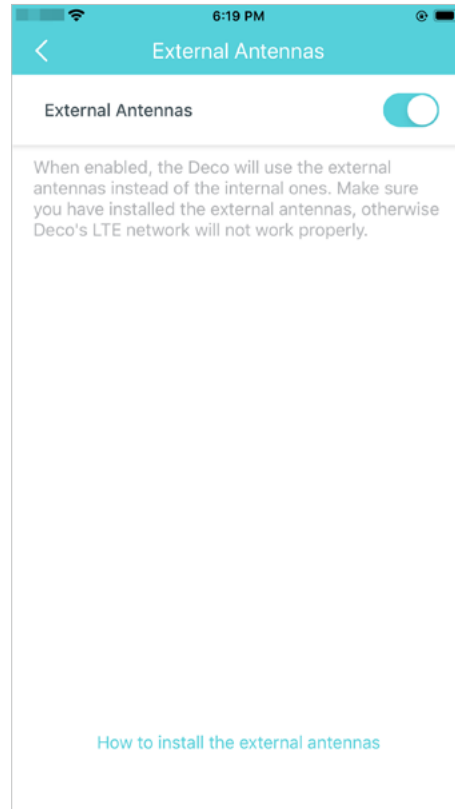
Tip: You can enable 3G/4G Backup when you switch the network to Wireless Router mode. Refer to [3G/4G Backup \(for Wireless Router Mode\)](#) for details.



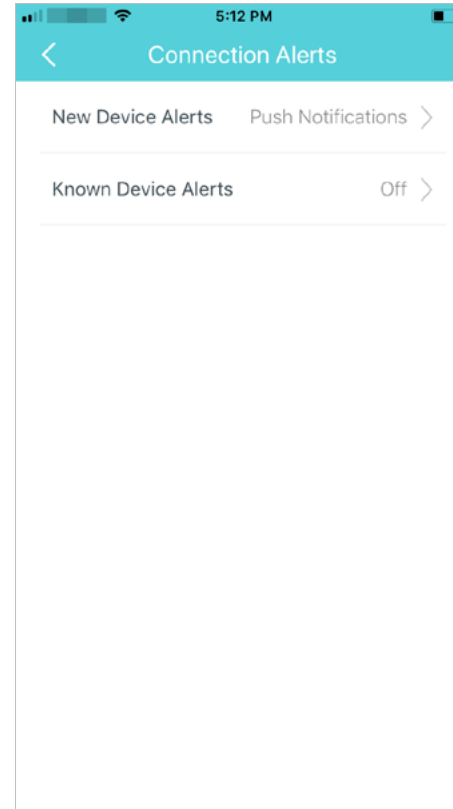
Enable to use external antennas instead of the internal ones.

Note:

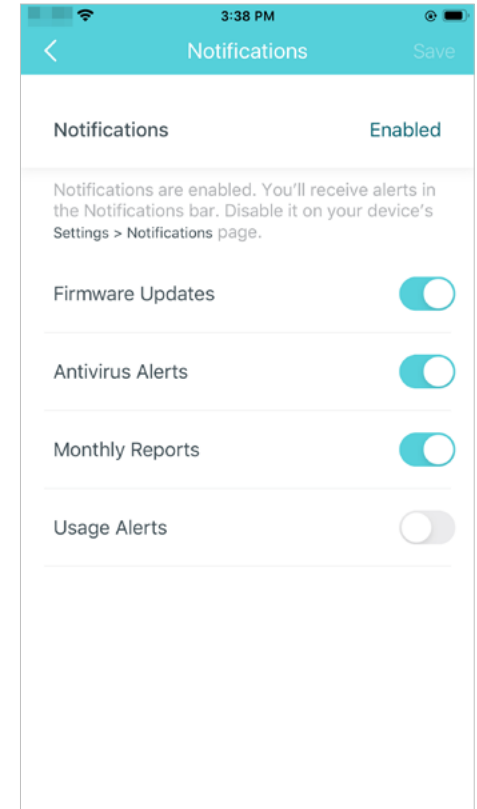
This feature is available only when Deco works in 3G/4G mode. Make sure you have installed two external antennas to ensure that Deco's LTE network works properly.



Set connection alerts to receive notifications once the clients connect to or disconnect from Deco.



Set notifications to receive alerts in the notification bar.



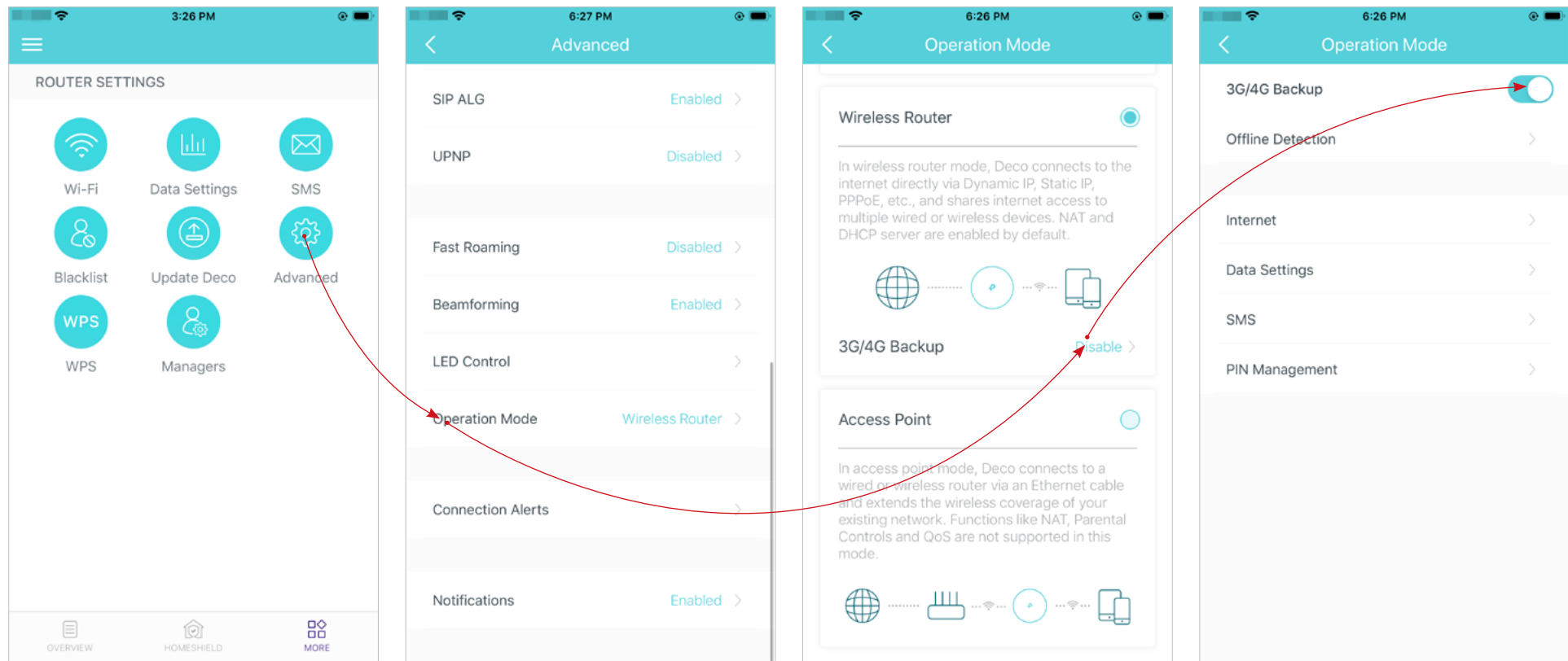
# 3G/4G Backup (for Wireless Router Mode)

When Deco works in Wireless Router mode, you can use 3G/4G network as a backup solution for internet access. When 3G/4G Backup is enabled, your Deco will be directly connected to the 3G/4G network when your original network service fails.

Follow the steps below to enable 3G/4G Backup and configure the corresponding settings.

ⓘ Note: When Deco works in Wireless Router mode and being remotely controlled from the Deco app, 3G/4G Backup and Offline Detection are not available.

Tap  > **Advanced** > **Operation Mode** > **3G/4G Backup** and enable **3G/4G Backup**.



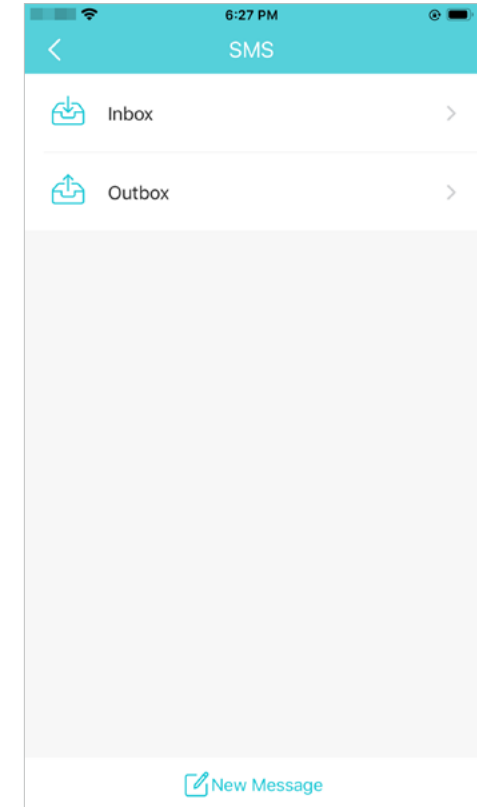
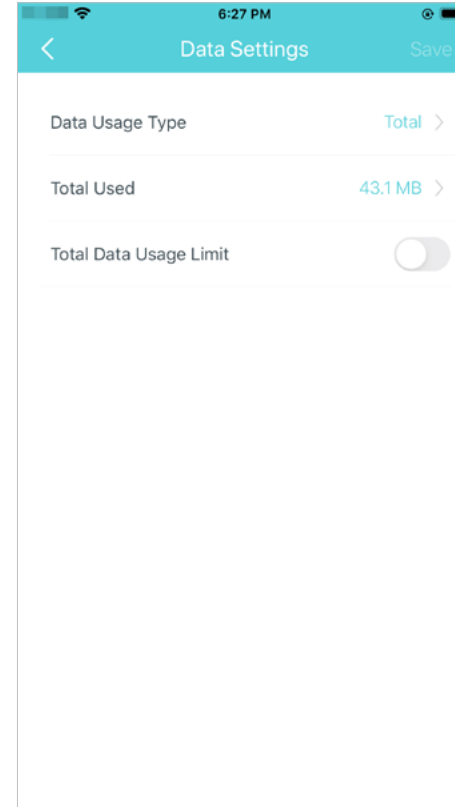
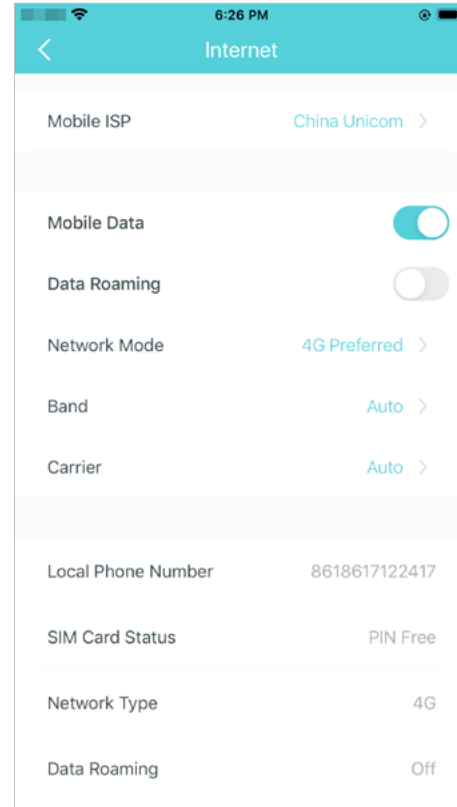
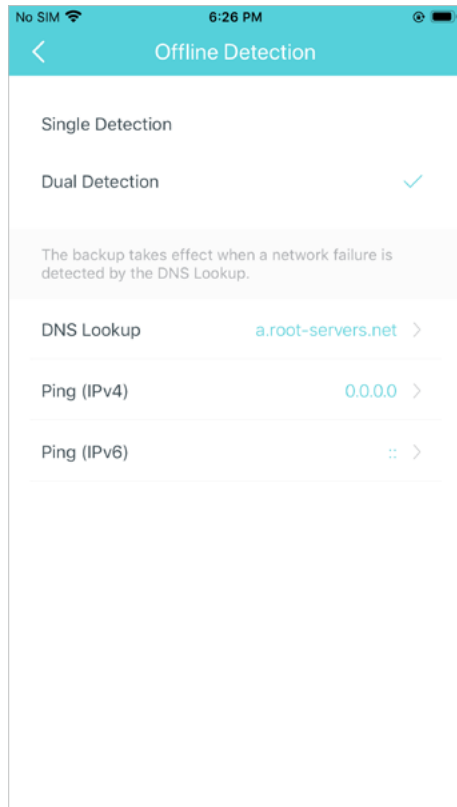
\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

Select detection methods (single detection with DNS Lookup or dual detection with DNS Lookup and Ping) which determine when the network is disconnected and the backup takes effect.

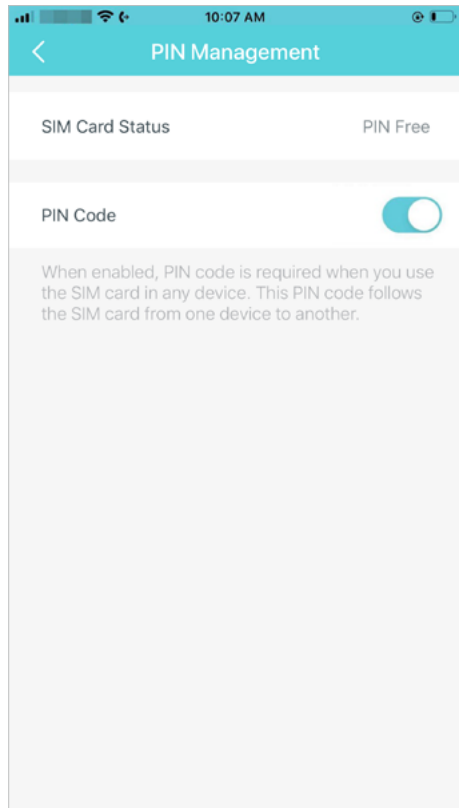
Configure internet settings for your SIM card (eg. modify mobile ISP information and network mode, turn on/off mobile data and data roaming, select frequency bands and preferred carrier network etc.).

Configure data usage settings (eg. select data usage type, adjust total/monthly used data, set the allowance for total/monthly data usage, set the usage alerts, etc.).

View, send, receive and reply messages via the SMS Service.



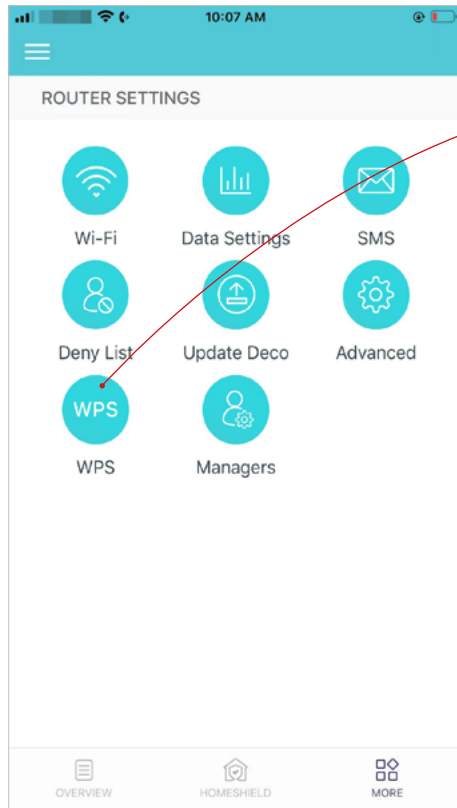
Set a PIN code to protect the SIM card from embezzlement. When enabled, PIN code is required when you use the SIM card in any device.



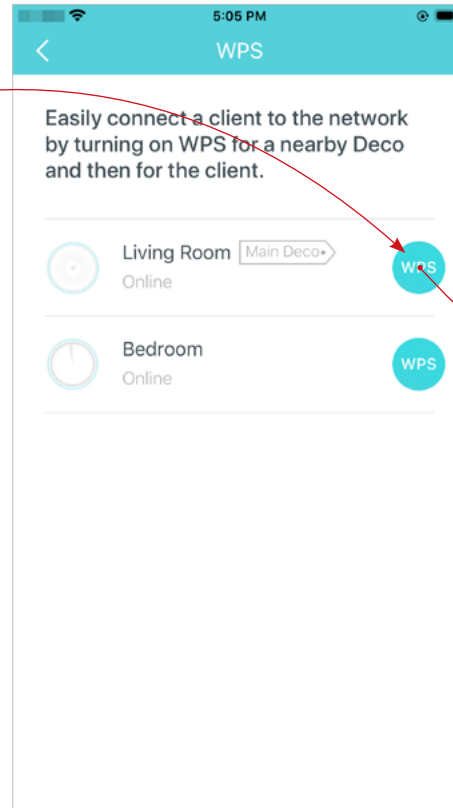
# WPS

WPS (Wi-Fi Protected Setup) helps you to quickly and securely connect a client to the network with a tap without entering any password.

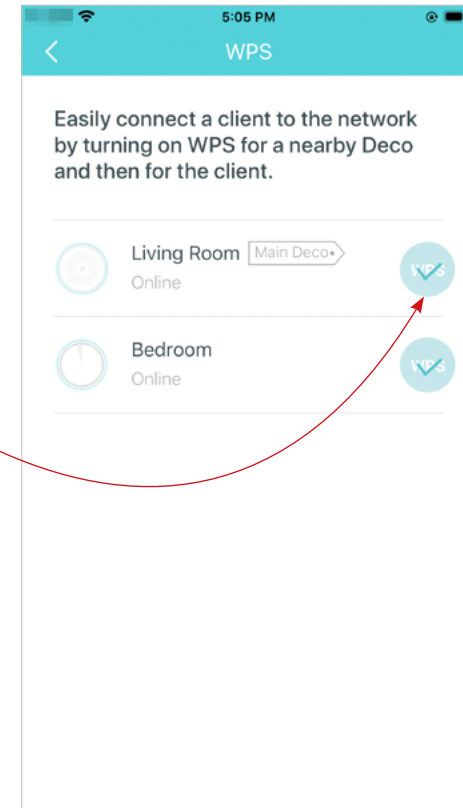
1. Tap  > WPS.



2. Tap the **WPS** icon in Deco app and then on your client.



3. Your client has connected to the network successfully if shown as below.




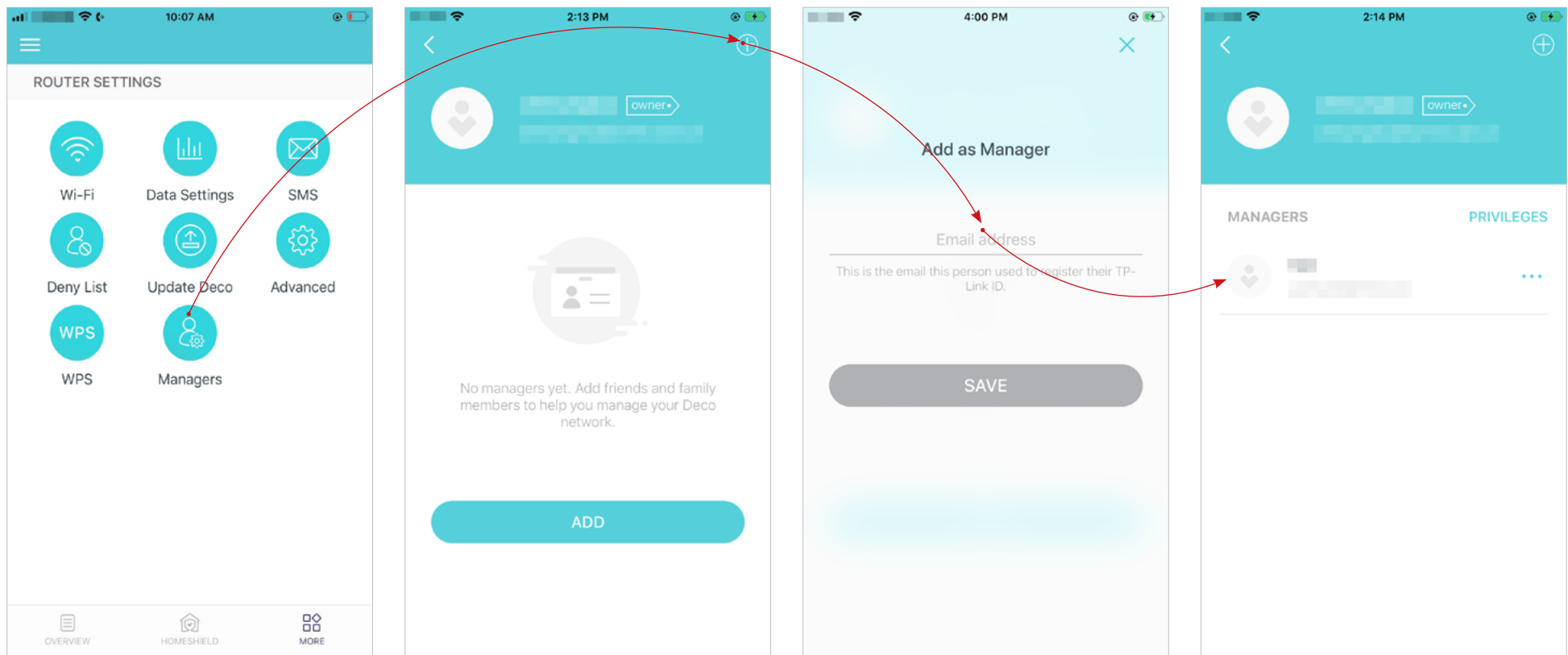
\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

# Managers

Add friends and family members to help manage your network. Each manager should have their own TP-Link ID.

Note: Managers can not modify owner's account, add other accounts, or set manager privileges.

Tap  > [Managers](#), and follow app instructions to add other TP-Link ID account as manager.

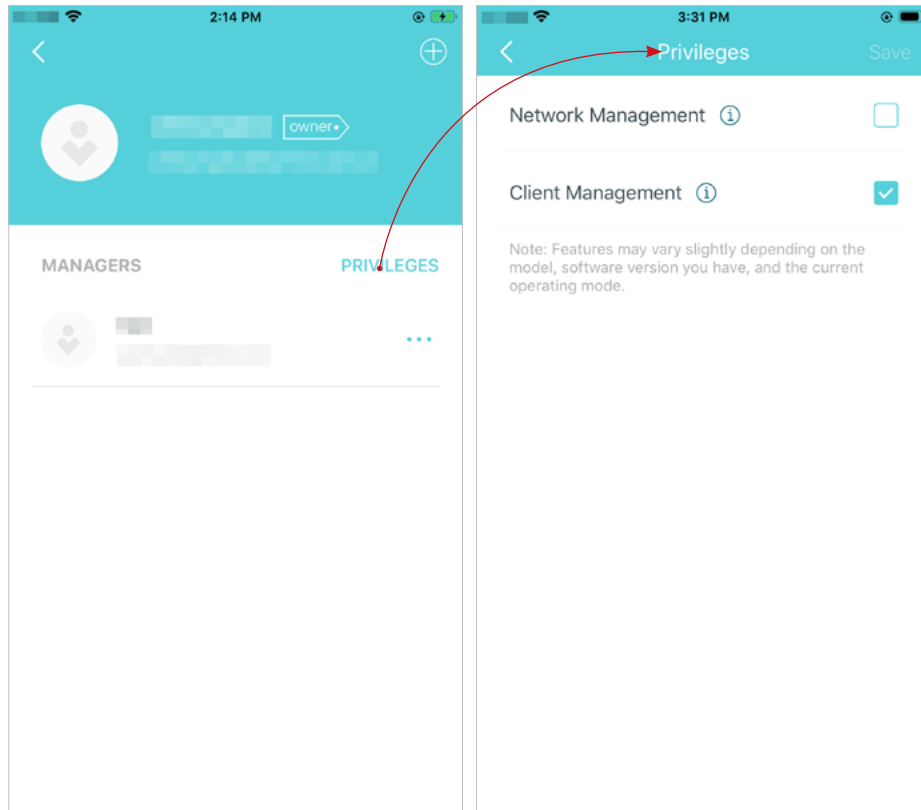


\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

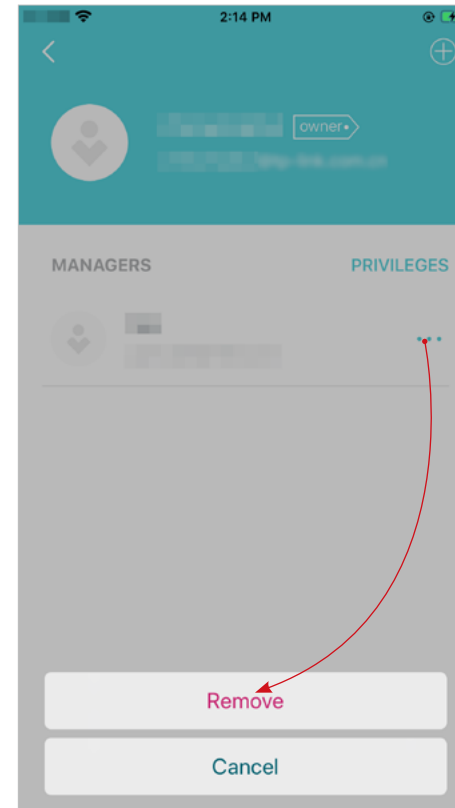


## Set privileges for managers.

Note: Privileges may vary slightly depending on the model, the current operation mode, and software version you have.



## Remove managers.



# Control Your Deco with Alexa

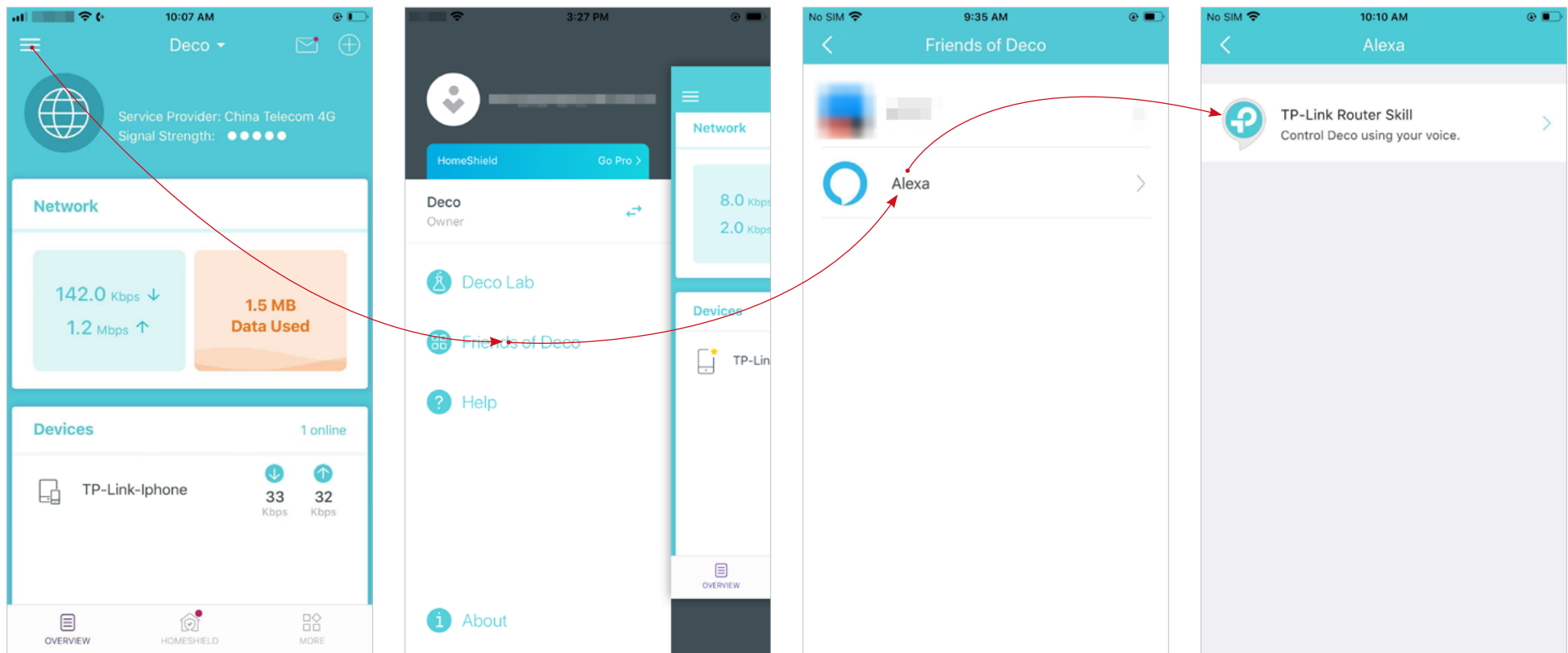
Alexa Integration allows you to control your Deco using Amazon's Alexa voice service. You can control and customize your home network by giving simple voice commands to Alexa, such as enabling the Guest Network, turning off your Deco LEDs, and more.

Follow the steps below to use Alexa voice commands to control your Deco network.

Tip: To know more about how to set up Alexa Integration in Alexa app, refer to <https://www.tp-link.com/support/faq/1571/>.

Note: This feature is currently available in English (US), English (UK), German and Japanese.

In the Deco app, tap  to open the menu, tap **Friends of Deco** > **Alexa** > **TP-Link Router Skill**, then follow the app instructions complete the setup.



\*The app screen depicted is for 3G/4G Router mode only and may differ when Deco works in different modes.

# Troubleshooting

Solutions to common problems during setup or use are provided here for reference. Follow the steps and the provided link below to diagnose and solve problems you might experience with your Deco.

If problems still exist, contact us: <https://www.tp-link.com/support>

## Q1. What should I do if I fail to connect to the internet over the mobile connection?

- Verify that your SIM card is an LTE or WCDMA card.
- Make sure that the nano SIM card is inserted correctly into Deco and the Deco is operating in 3G/4G Router mode.
- Check with your ISP to ensure that your SIM card is in your ISP's service area.
- Check with your ISP to ensure that your 3G/4G mobile plan is available.
- Move your Deco to a different location such as closer to the window or door to see whether it gets better signal strength.
- Launch the Deco app, go to [Advanced](#) > [Data Settings](#) to verify if the [Total/Monthly Used](#) exceeds the [Total/Monthly Data Usage Limit](#). If it does, set Total/Monthly Data Usage Limit to **0(zero)**, or disable [Total/Monthly Data Usage Limit](#).
- Launch the Deco app, go to [Advanced](#) > [Internet](#) to verify [Mobile Data](#) is enabled.
- Confirm with your ISP if you are in a roaming service area. If you are, go to [Advanced](#) > [Internet](#) in the Deco app to verify [Data Roaming](#) is enabled.

## Q2. What should I do if I fail to configure the satellite Deco and get stuck on "We couldn't find another Deco"?

- For Deco which is operating in 3G/4G Router mode and set as the main Deco, disconnect the Ethernet cable (if any) connected to the front-end router with DHCP Server function from the Deco's Ethernet port and try again. If it doesn't work, try the following guide.
- Refer to the guide <https://www.tp-link.com/support/faq/1447/> or video <https://youtu.be/iVgDzoo16T4>

## Q3. What should I do if I fail to configure the main Deco and get stuck on "Testing Internet Connection"?

- Refer to the video <https://youtu.be/OSUrGdWH-i0>

- Follow [Q5](#) and try again.

#### Q4. What should I do if my wireless devices cannot connect to Deco?

Refer to <https://www.tp-link.com/support/faq/2718/>

#### Q5. What should I do if Deco suddenly lost internet access?

- For Deco which is operating in 3G/4G Router mode and set as the main Deco, disconnect the Ethernet cable (if any) connected to the front-end router with DHCP Server function from the Deco's Ethernet port and try again. If it doesn't work, try the following guide.
- Visit [192.168.68.1](http://192.168.68.1) on a web browser and log in with your TP-Link ID. Tap [Internet](#) and check the [Internet IP Address](#).



If the Internet IP address is [not 0.0.0.0](#), try the following methods:

- 1) Make sure that the SIM card is working stably when it's inserted in your phone at the same place or confirm with your ISP that the SIM is working properly.
- 2) Launch the Deco app and go to [Advanced](#) > [DHCP Server](#), change the Primary DNS to [8.8.8.8](#), and change the Secondary DNS to [8.8.4.4](#).

If the Internet IP address is [0.0.0.0](#), try the following methods:

- 1) Check with your ISP to make sure that your SIM card supports the network type which your Deco supports. Also, make sure the SIM card works properly when it's inserted to your phone.

- 2) Contact your ISP to get the PIN Code of your SIM card , then go to  > [Advanced](#) > [PIN Management](#) > [PIN Code](#) on the Deco app to fill it in.
- 3) Launch the Deco app, go to  > [Advanced](#) > [Internet](#) > [Mobile ISP](#) to create a new profile. Contact your ISP for the necessary information.

**Q6. How can I find a suitable spot for my Deco?**

Refer to <https://www.tp-link.com//support/faq/1446/>

**Q7. What can I do if the Deco app isn't working properly?**

Refer to <https://www.tp-link.com/support/faq/1456/>

# Authentication

## 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.

## OPERATING FREQUENCY(the maximum transmitted power)

2412MHz—2483.5MHz (20dBm)

5150MHz—5250MHz (23dBm)

5250 MHz -5350 MHz (23dBm)

WCDMA: B1/B5/B8 (24dBm+1.7/-3.7dB)

LTE: B1/B3/B5/B7/B8/B20/B38/B40 (23dBm±2.7dB)

LTE: B28 (23dBm+2.7/-3.2 dB)

## EU declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/53/EU, 2009/125/EC, 2011 /65/EU and (EU) 2015/863.

The original EU declaration of conformity may be found at <https://www.tp-link.com/en/support/ce/>

## RF Exposure Information

This device meets the EU requirements (2014/53/EU Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

The device complies with RF specifications when the device used at 20 cm from your body.

## National restrictions

Attention: This device may only be used indoors in all EU member states and EFTA countries, and Northern Ireland.

	AT	BE	BG	CH	CY	CZ	DE	DK
	EE	EL	ES	FI	FR	HR	HU	IE
	IS	IT	LI	LT	LU	LV	MT	NL
	NO	PL	PT	RO	SE	SI	SK	UK(NI)

## UKCA Mark



## UKCA declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of the Radio Equipment Regulations 2017.

The original UK declaration of conformity may be found at <https://www.tp-link.com/support/ukca>

## National restrictions

Attention: This device may only be used indoors in Great Britain.



## Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

## NCC Notice & BSMI Notice:

注意!

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。  
 低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。  
 前述合法通信，指依電信管理法規定作業之無線電通信。  
 低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。  
 應避免影響附近雷達系統之操作。

### 安全諮詢及注意事項

- 請按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先切斷電源。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮，請勿將水或其他液體潑灑到本產品上。
- 插槽與開口供通風使用，以確保本產品的操作可靠並防止過熱，請勿堵塞或覆蓋開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風，否則不可放在密閉位置中。
- 不要私自拆開機殼或自行維修，如產品有故障請與原廠或代理商聯繫。

### 限用物質含有情況標示聲明書

設備名稱： Equipment name:		型號（型式）： Type designation (Type)				
AX3000 Whole Home Mesh Wi-Fi 6 Router		Deco X50-4G				
單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr <sup>+6</sup> )	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
PCB	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源供應器	—	○	○	○	○	○



其他及其配件	—	○	○	○	○	○
<p>備考1. 超出0.1 wt %” 及 “超出0.01 wt %” 系指限用物質之百分比含量超出百分比含量基準值。</p> <p>Note 1: “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.</p> <p>備考2. “○” 系指該項限用物質之百分比含量未超出百分比含量基準值。</p> <p>Note 2: “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.</p> <p>備考3. “—” 系指該項限用物質為排除項目。</p> <p>Note 3: The “—” indicates that the restricted substance corresponds to the exemption.</p>						



Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.












#### Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.
- Do not use damaged charger or USB cable to charge the device.
- Do not use any other chargers than those recommended.
- Do not use the device where wireless devices are not allowed.
- Adapter shall be installed near the equipment and shall be easily accessible.
- Use only power supplies which are provided by manufacturer and in the original packing of this product. If you have any questions, please don't hesitate to contact us.
- Operating Temperature: 0°C~40°C (32°F~104°F)

Please read and follow the above safety information when operating the device. We cannot guarantee that no accidents or damage will occur due to improper use of the device. Please use this product with care and operate at your own risk.

This product uses radios and other components that emit electromagnetic fields. Electromagnetic fields and magnets may interfere with pacemakers and other implanted medical devices. Always keep the product and its power adapter more than 15 cm (6 inches) away from any pacemakers or other implanted medical devices. If you suspect your product is interfering with your pacemaker or any other implanted medical device, turn off your product and consult your physician for information specific to your medical device.

### Explanation of the symbols on the product label

Symbol	Explanation
	Class II equipment
	Alternating current
	Polarity of d.c. power connector
	Energy efficiency Marking
	DC voltage
	Caution
	Operator's manual
	Indoor use only
	<p><b>RECYCLING</b></p> <p>This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.</p> <p>User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.</p>

