

# 1--Wi-Fi EXTENDERS

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Web location for this  
presentation:

<http://aztcs.apcug.org>

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# SUMMARY

Verizon Home Internet Gate  
connects with a wireless Wi-Fi  
backhaul

to a Wi-Fi extender

connects via a Cat 7 cable

to a router that is the "Main" part of a  
mesh

connects via a wireless Wi-Fi backhaul  
to a router that is the "Satellite" part of a  
mesh

**Internet Cloud**  
(= "Data Plan" in cell phone lingo)



**Nokia "GATEWAY" PROVIDED BY VERIZON**

**TP-Link router on  
(South side of the  
house)**

Spotty wireless coverage  
on the North side of the  
house and wired  
Ethernet connections  
needed on the first floor  
of the house

**Internet Cloud  
(= "Data Plan")**

The diagram illustrates a network architecture. At the top is a grey cloud labeled 'Internet Cloud (= "Data Plan")'. To its right is a cell tower. Below the cloud is a green-bordered box labeled 'Arcadyan "GATEWAY" PROVIDED BY VERIZON'. Below that is another green-bordered box labeled 'Wi-Fi Extender'. Below that is a green-bordered box labeled 'Router acting as "Main" part of the mesh', with a laptop icon to its left. At the bottom is a green-bordered box labeled 'Router acting as Satellite part of the mesh', with another laptop icon to its left. Blue double-headed arrows connect the cloud to the gateway, the gateway to the Wi-Fi extender, the Wi-Fi extender to the main router, and the main router to the satellite router. Red double-headed arrows connect the main router to both laptops, and blue arrows point from the satellite router to both laptops. A blue arrow also points from the cell tower to the gateway box.

**Arcadyan "GATEWAY" PROVIDED BY VERIZON**

**Wi-Fi Extender**



**Router acting as "Main" part of the mesh**



**Router acting as Satellite part of the mesh**

- [https://www.amazon.com/dp/B0C7RRYFH3?psc=1&ref=ppx\\_yo2ov\\_dt\\_b\\_product\\_details](https://www.amazon.com/dp/B0C7RRYFH3?psc=1&ref=ppx_yo2ov_dt_b_product_details)
- <https://www.tp-link.com/us/home-networking/range-extender/re815xe/>



# Wi-Fi EXTENDER

- The TP-Link Wi-Fi extender extends the wireless range of the Verizon gateway:



# Wi-Fi EXTENDER (continued)

- The TP-Link Wi-Fi extender's 2.5 Ghz transmitter/receiver called Verizon\_XC7J3W\_EXT is a repeat of the Verizon gateway's 2.5 GHz transmitter/receiver called Verizon\_XC7J3W



Wi-Fi



Verizon\_XC7J3W

Connected, secured



Disconnect



Verizon\_XC7J3W\_EXT





Wi-Fi



Verizon\_XC7J3W



Connected, secured

Disconnect



Verizon\_XC7J3W\_EXT

## Wi-Fi EXTENDER (continued)

- The TP-Link Wi-Fi 6 extender has three "Wi-Fi 6" transmitter/receivers:
  - a 2.5 GHz RF transmitter/receiver
  - a low-band 5 GHz RF transmitter/receiver
  - and a high-band 6 GHz RF transmitter/receiver
- All three of the transmitter/receivers have the same SSID.
- Each has a different BSSID.<sub>12</sub>

# Wi-Fi EXTENDER (continued)

- The TP-Link Wi-Fi extender repeats and transmits  
the XC7J3W 2.45 GHz RF  
transmitter/receiver of the Verizon gateway  
and  
the XC7J3W 5 GHz RF transmitter/receiver  
of the Verizon gateway



Inspector

Survey

Planning

Search

# Networks around you








17 of 34 networks selected

SSID	BSSID	Channel	Frequency	Channel wid...	Band	Security	Vendor	Mode
Verizon_XC7J3W_EXT	92:A7:31:94:B8:43	44 (50)	5220	160	5	WPA2-Personal	-	ac/ax
Verizon_XC7J3W_EXT	9A:A7:31:94:B8:44	6, +1	2437	40	2.4	WPA2-Personal	-	ax



# Networks around you

17 of 34 networks selected

SSID	BSSID	Channel	Frequency
 Verizon_XC7J3W_EXT 	92:A7:31:94:B8:43	44 (50)	5220
 Verizon_XC7J3W_EXT 	9A:A7:31:94:B8:44	6, +1	2437
 Verizon_XC7J3W 	FC:12:63:44:98:BA	112 (106)	5560
Verizon_XC7J3W 	FC:12:63:44:98:B9	6, +1	2437

# Wi-Fi EXTENDER (continued)

- The TP-Link Wi-Fi extender's 5 Ghz transmitter/receiver called Verizon\_XC7J3W\_EXT is a repeat of the Verizon gateway's 5 GHz transmitter/receiver called Verizon\_XC7J3W\_EXT











# Wi-Fi EXTENDER (continued)

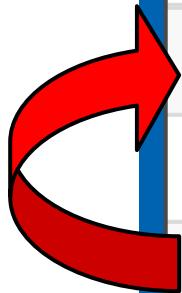
- Inside the wireless Wi-Fi settings of a computer, a tablet, or a cell phone, a Wi-Fi extender shows up as  
<Service Set Identifier of the router>\_ext  
or  
<Service Set Identifier of the router>\_EXT  
or  
<Service Set Identifier of the router>ext  
or  
<Service Set Identifier of the router>EXT



# Networks around you

17 of 34 networks selected

SSID	BSSID	Channel	Frequency
 Verizon_XC7J3W_EXT 	92:A7:31:94:B8:43	44 (50)	5220
 Verizon_XC7J3W_EXT 	9A:A7:31:94:B8:44	6, +1	2437
 Verizon_XC7J3W 	FC:12:63:44:98:BA	112 (106)	5560
 Verizon_XC7J3W 	FC:12:63:44:98:B9	6, +1	2437





# Quick Installation Guide

## Range Extender



### Setup with videos

Scan the QR code, or visit <https://www.tp-link.com/support/setup-video/#range-extenders> and search for the setup video of your model.



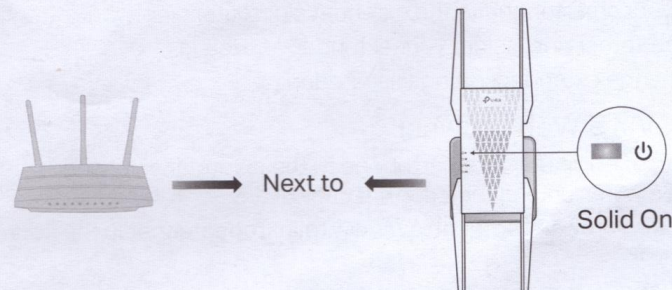
\* Images may differ from your actual product.

# 1

## Power On

Plug the extender into a power outlet **next to** your router. Wait until its Power LED turns solid on.

**Note:** For safety, only plug the extender in the direction as shown below.

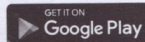
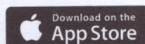


# 2

## Set Up

### Via the Tether App

1. Get the up-to-date Tether app from the Apple App Store or Google Play, or simply scan the QR code.



or



Tether

3. Tap the **+** button and select **Range Extender**.

**Note:** If you cannot find your device, please refer to FAQ > Q1.



### More Setup Methods

#### • Via a Web Browser

1. Connect your computer or smartphone to the extender's network **TP-Link\_Extender**.
2. Visit <http://www.tplinkrepeater.net> or <http://192.168.0.254> in a web browser. Create a password to log in.
3. Follow web instructions to complete the setup.

#### • Via the WPS Button

1. Press the WPS button on your router.



## 2 Set Up

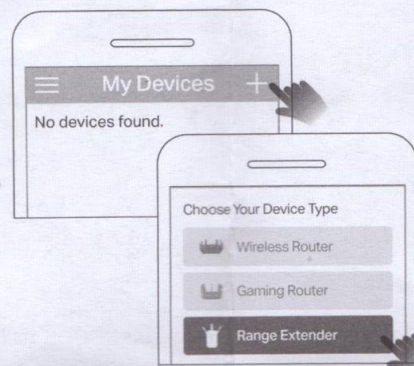
### Via the Tether App

1. Get the up-to-date Tether app from the Apple App Store or Google Play, or simply scan the QR code.




3. Tap the + button and select Range Extender.

Note: If you cannot find your device, please refer to FAQ > Q1.

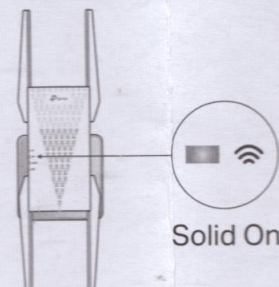


2. Launch the Tether app and log in with your TP-Link ID. If you don't have an account, create one first.



4. Follow app instructions to complete the setup. The  LED should turn solid on, indicating successful connection to your router.

Note: If the LED does not turn solid on, please refer to FAQ > Q2.




## More Setup Methods

### • Via a Web Browser

1. Connect your computer or smartphone to the extender's network TP-Link\_Extender.
2. Visit <http://www.tplinkrepeater.net> or <http://192.168.0.254> in a web browser. Create a password to log in.
3. Follow web instructions to complete the setup.

### • Via the WPS Button

1. Press the WPS button on your router.
2. Within 2 minutes, press the WPS button on the extender for 1 second. The  LED should change from blinking to solid on, indicating successful connection.

**Note:** If the LED does not turn solid on, repeat steps 1 and 2 to connect again, or connect via the Tether app or web browser.

#### **Extended Network Names:**

Router's network name with EXT at the end

or

Same as your OneMesh router  
(See back for OneMesh details)

#### **Passwords:**

Same as your router





**Notes**



**Clock**



**App Store**



**Settings**



**Messages**



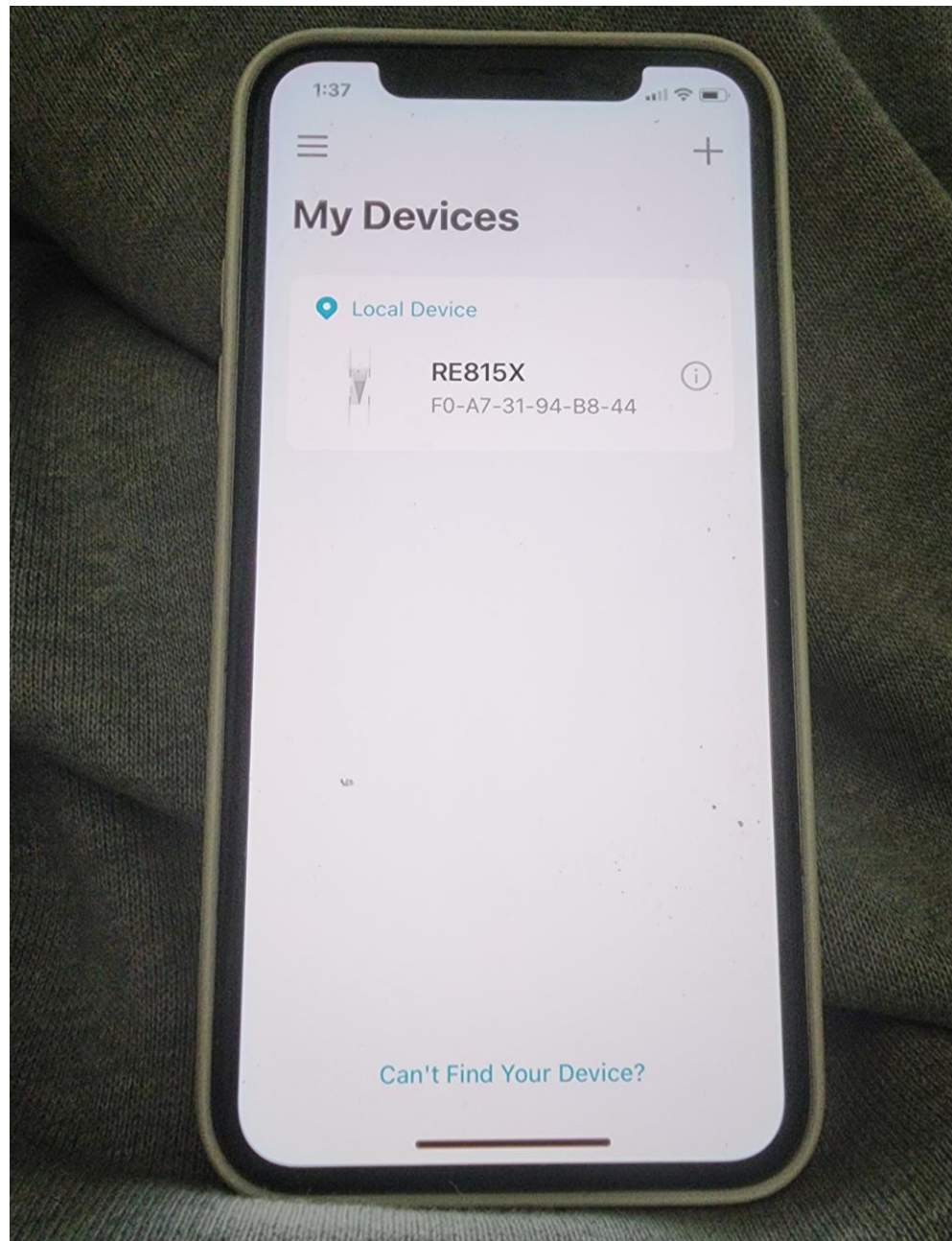
**FaceTime**

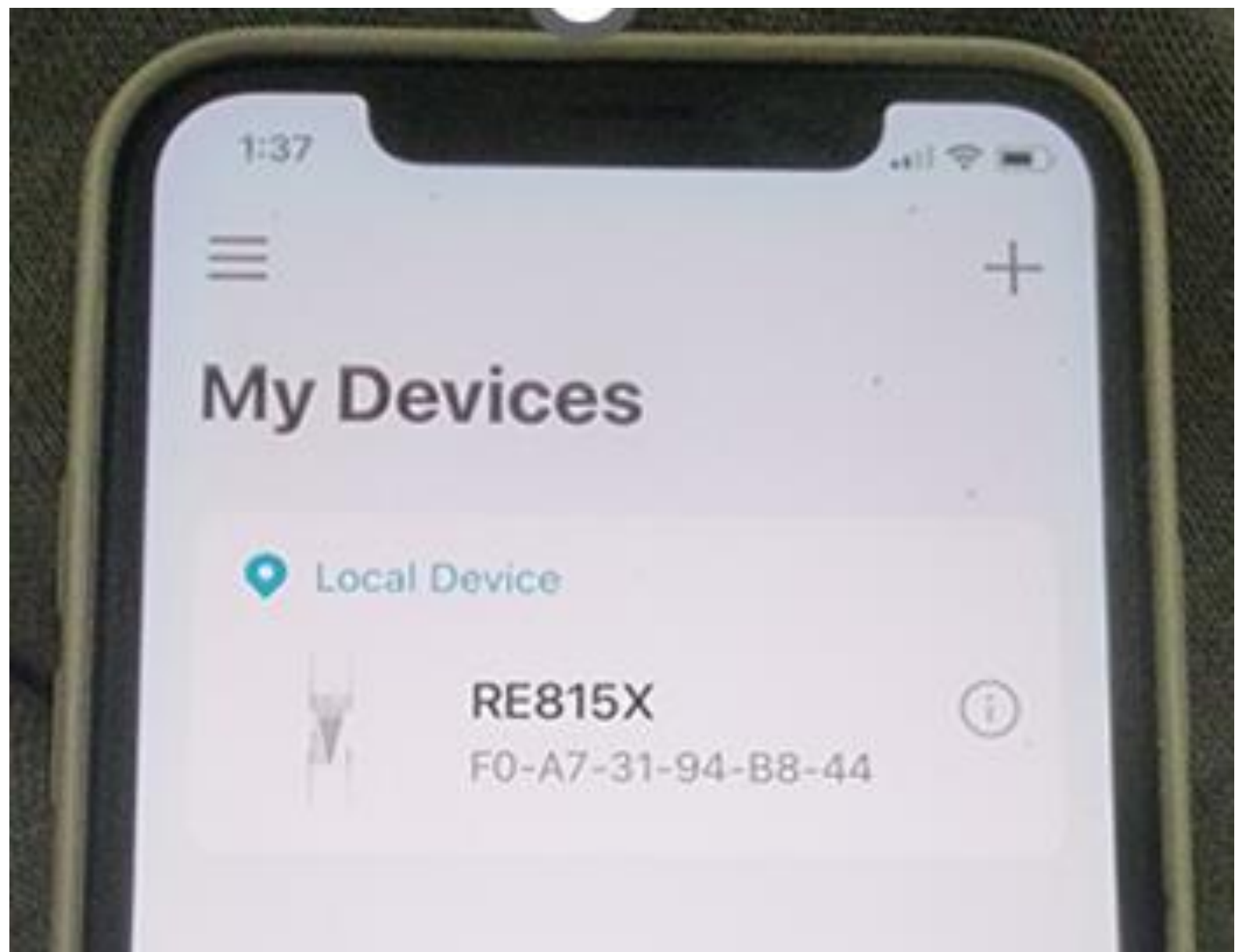


**Tether**

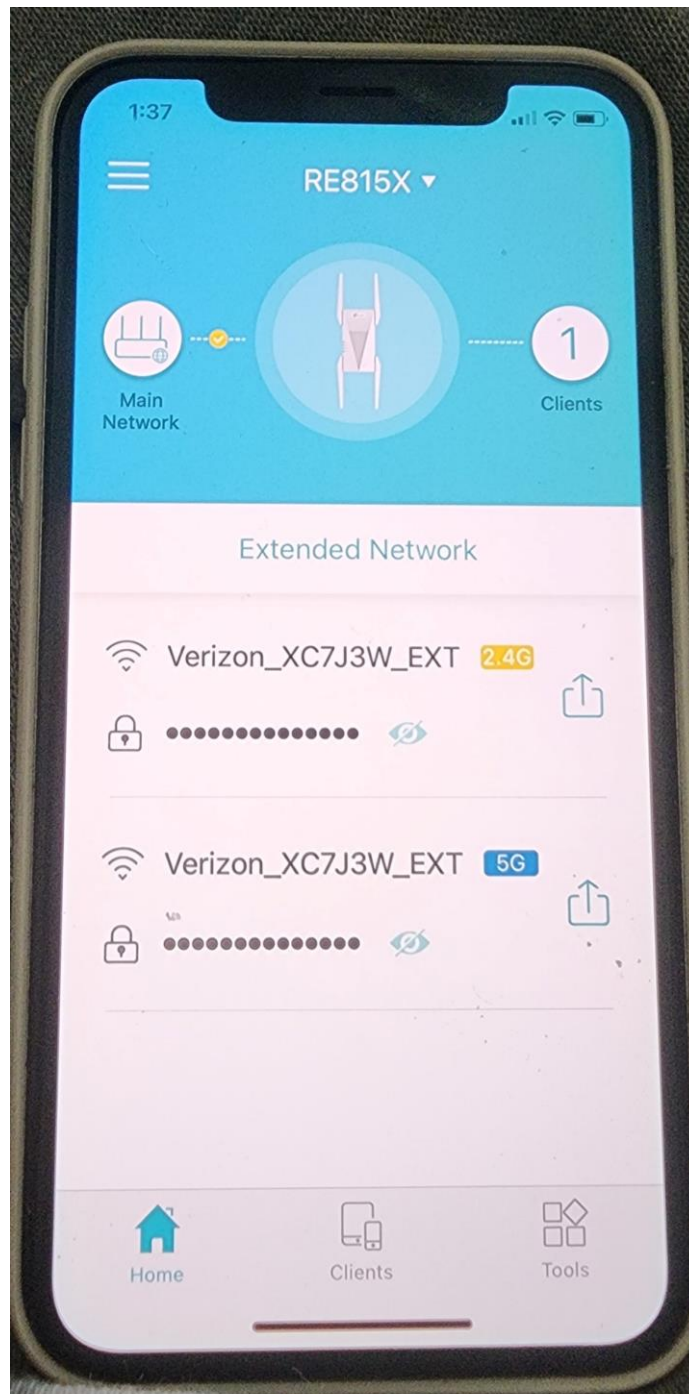


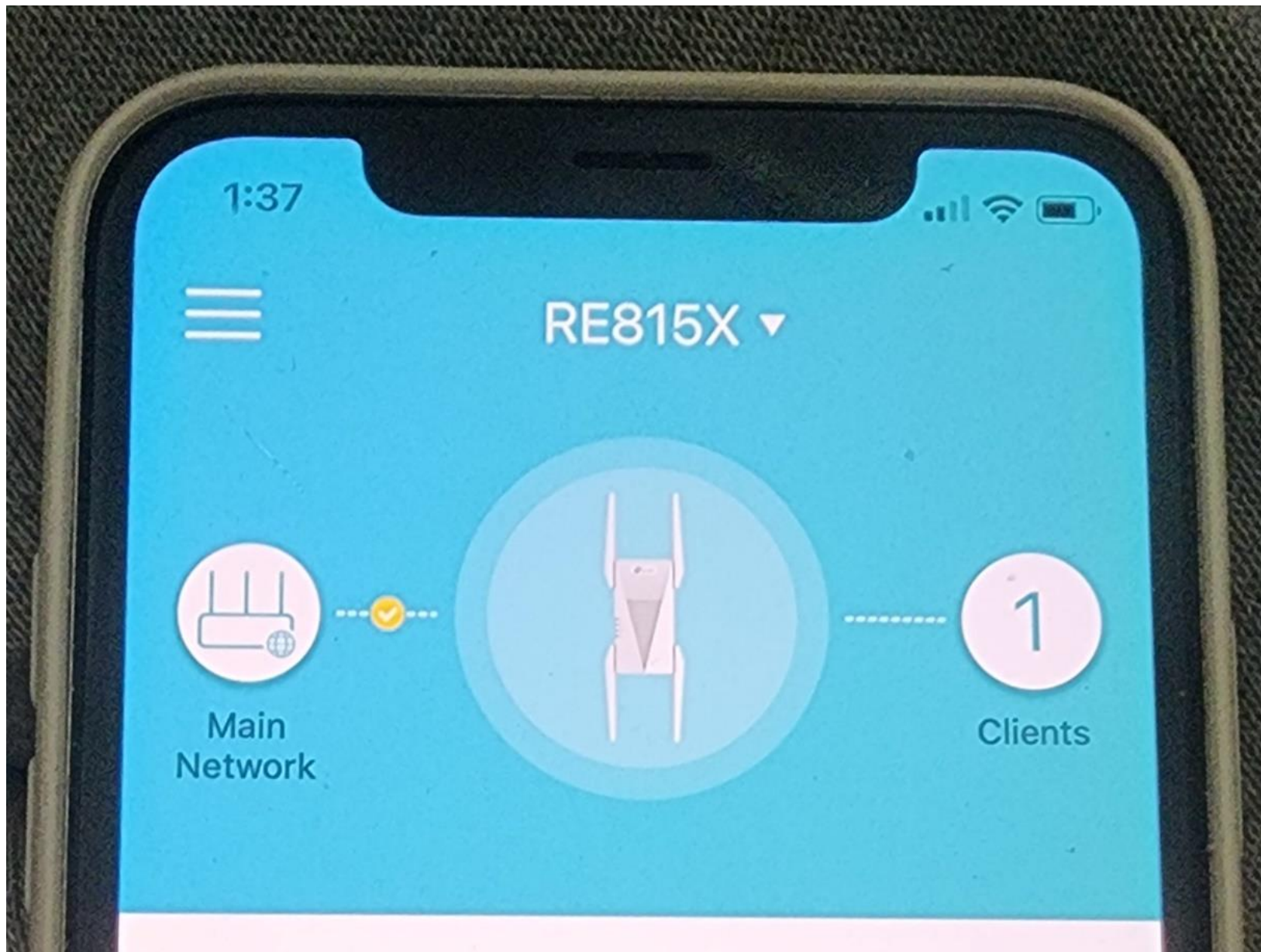
**Phone**

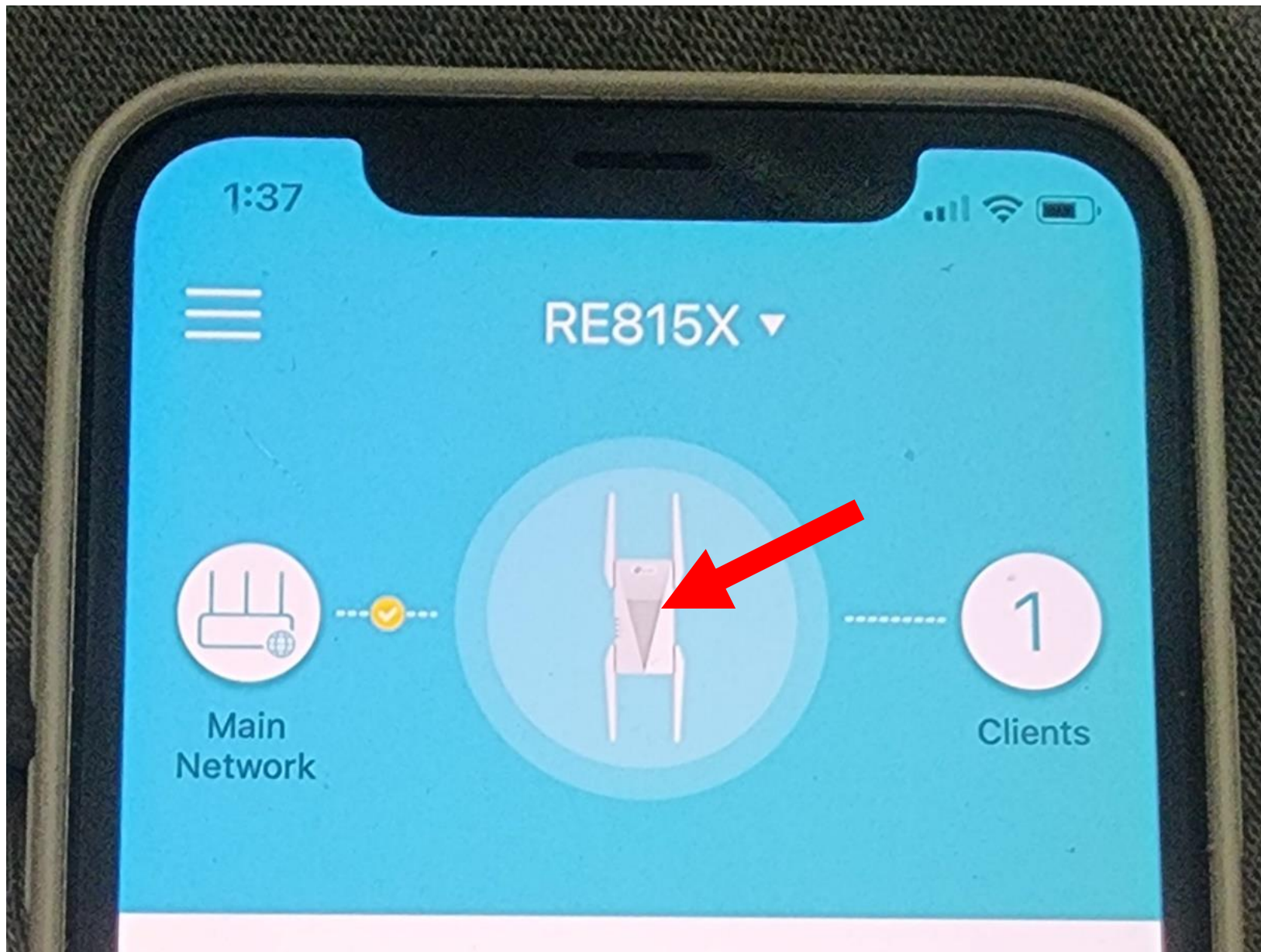
















## Extended Network

 Verizon\_XC7J3W\_EXT **2.4G** 

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 Verizon\_XC7J3W\_EXT **5G** 

 Verizon ●●●●●●●●●● 

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