

↳ Density

Unit Setup Guide

↳ Density



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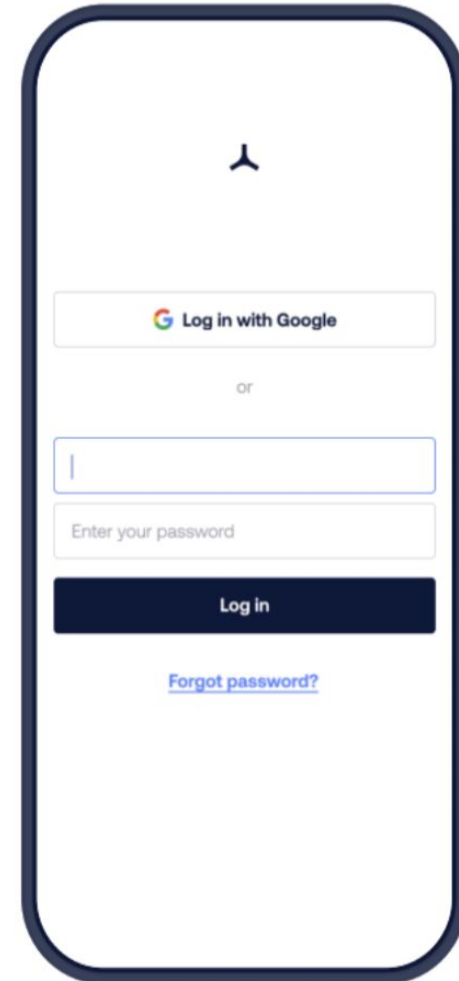
Download & Login

01

Download iOS or Android app and log in

The Density Setup App connects to the sensor via bluetooth and assigns a network and doorway to the unit. The app also configures and improves the accuracy of the unit via Advanced Setup tools.

- + Get the Setup App by going to mobile.density.io and downloading from the App Store or Google Play.
- + Login with Google Single Sign-On or with the email and password that you set your Density account up with. Contact support@density.io if you need an account.



Setup Network

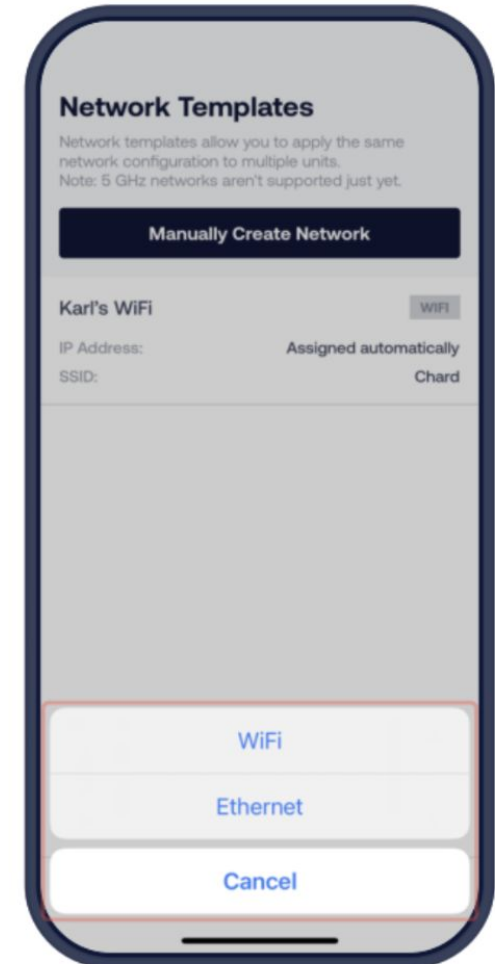
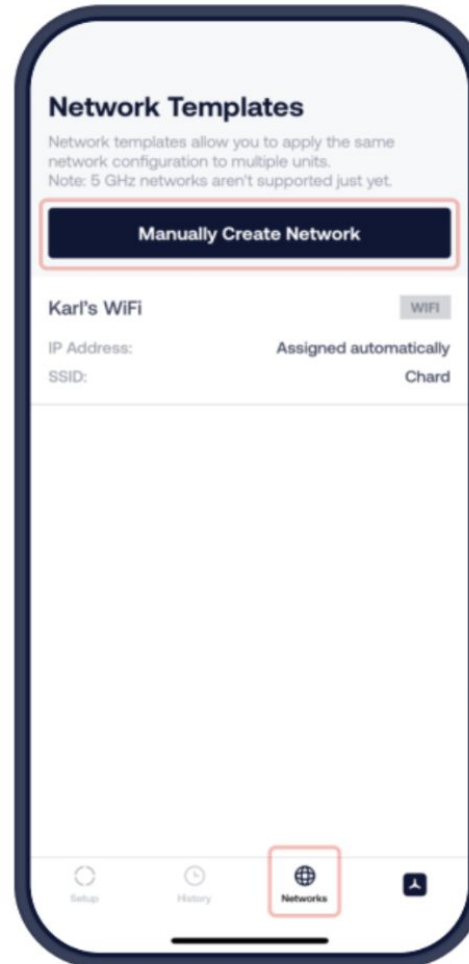
02

Create a Network Template

A Network Template is created to bundle your network information (e.g., network name and password) to a profile that can be named and saved.

You can assign the saved network template to other units during their setup process to save time.

Note: Density Entry Sensor only supports 2.4 GHz Wifi



Setup

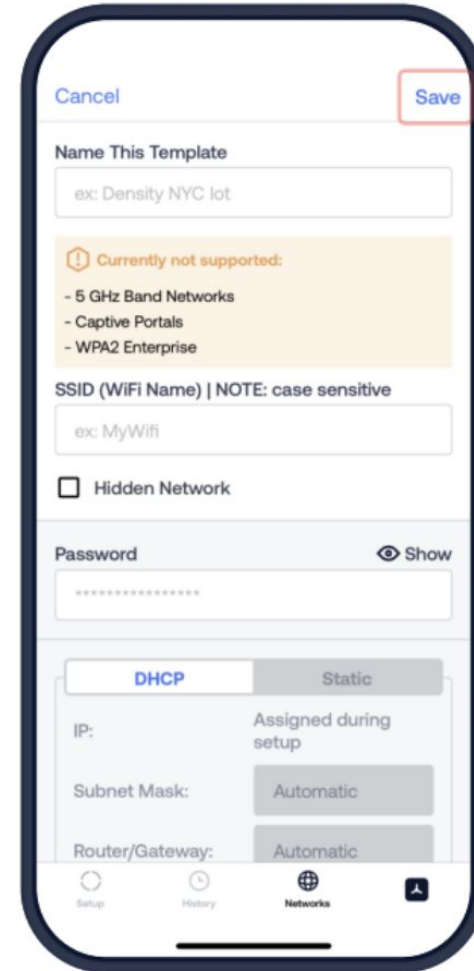
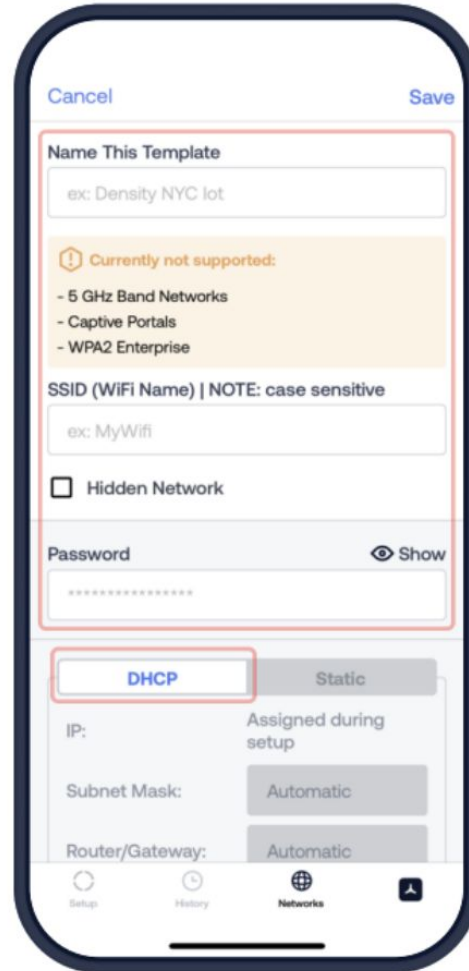
- Select the **Networks** button, then press the **Manually Create Network** button
- Select **WiFi** or **Ethernet**.
- **Note:** The following steps are the same for both WiFi and Ethernet Templates

DHCP or Static Setup

- Choose to set up your network with either **DHCP** or **Static** setup options found on the next slides.
- **Note:** We recommend using DHCP unless your IT team has specifically requested a Static IP configuration.

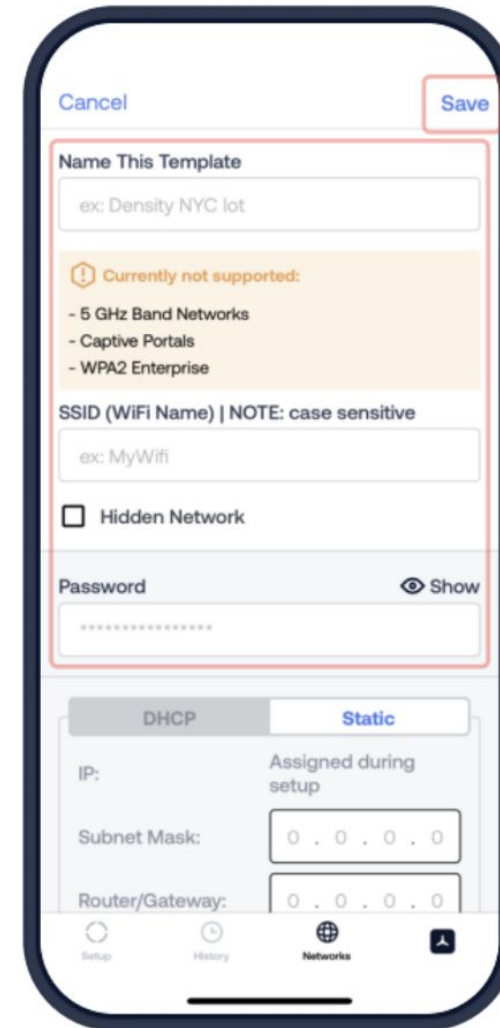
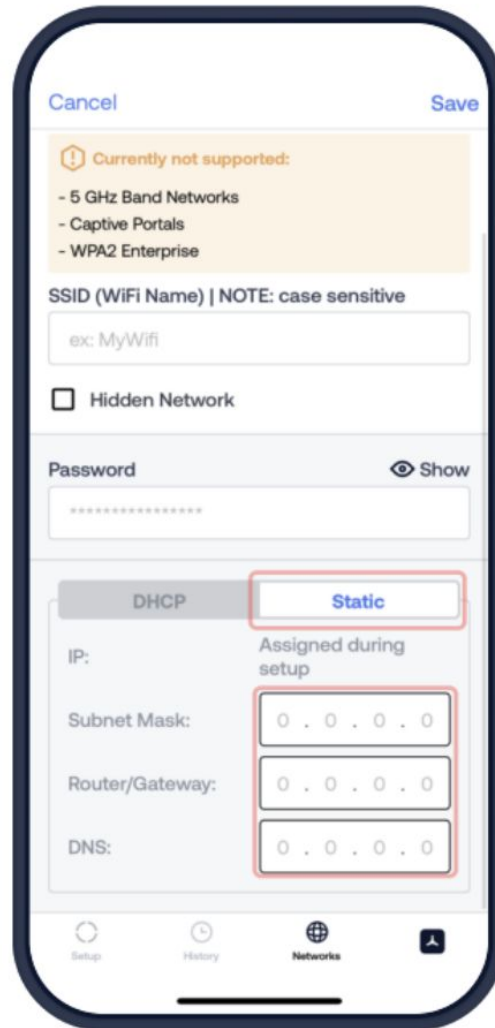
DHCP Setup (Recommended)

- Select **DHCP** (for DHCP, the IP address is automatically assigned to Unit).
- Enter the **Template Name** (whatever you want to call your Network Template), **SSID** (the name of your network), and the **Password** currently set up for your network.
- After inputting all of the above information, press the **Save** button.
- **Note:** *If you do not have a passphrase for your network, it can be left blank. The SSID field (name of your network) is always required.*



Static IP Setup

- Select **Static** (static IP option requires manual input of network and router info).
- Enter the **Template Name** (whatever you want to call your Network Template), **SSID** (the name of your network), and the **Password** currently set up for your network.
- Enter a Subnet Mask, Router/Gateway address, and DNS info.
- After inputting all of the above information, press the **Save** button.
- **Note:** *If you do not have a passphrase for your network, it can be left blank. The SSID field (name of your network) is always required.*



Subnet/Mask

A 32-bit number that masks an IP address, and divides the IP address into network address and host address.

Router Gateway

Subnet Mask the IP address assigned to the router or gateway.

Domain Name System (DNS)

Converts domain names into IP addresses.

Sensor Setup

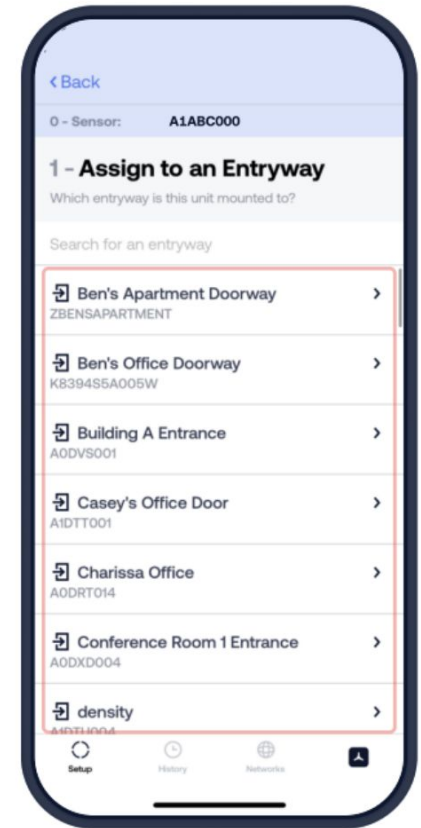
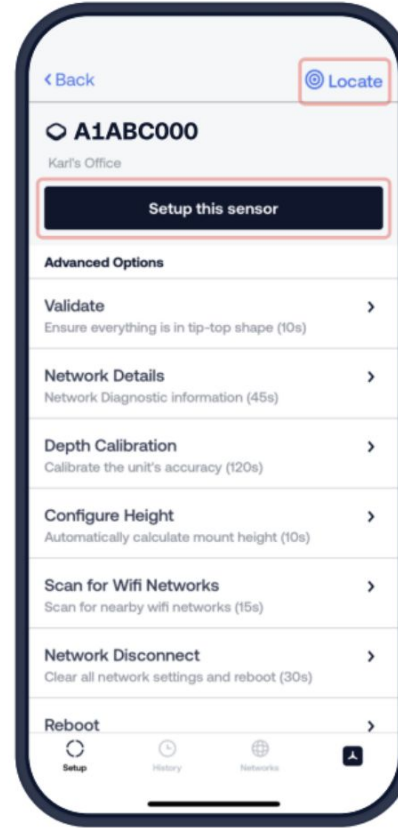
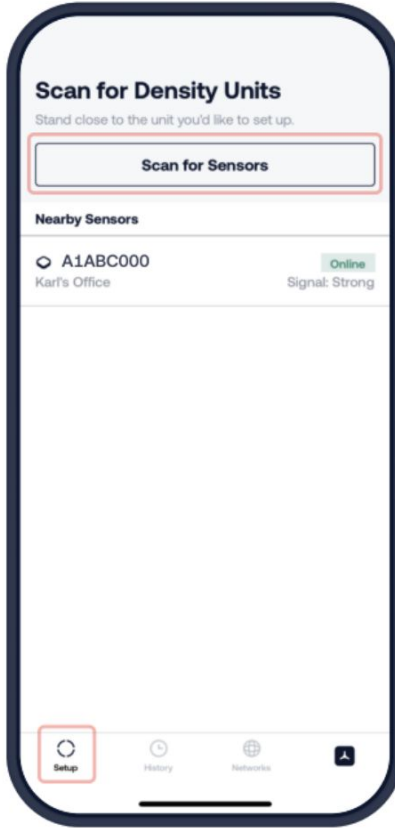
03

Prior to Sensor Setup

- Before getting started with the sensor setup, a doorway must be created for Entry sensor to linked to.
If you need help with this, please reach out to your Customer Success Manager or contact support@density.io
- Write down the serial number located on the sensor.
- Hang up the sensor before starting the setup process (refer to the [Complete Installation Guide](#) for install instructions).

Setup

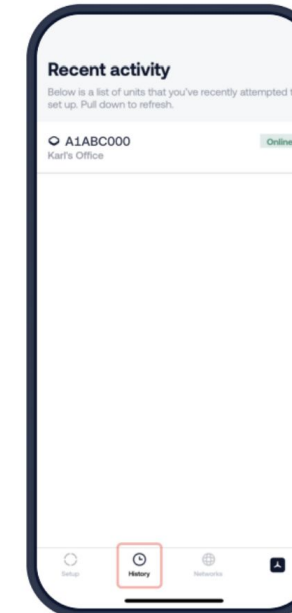
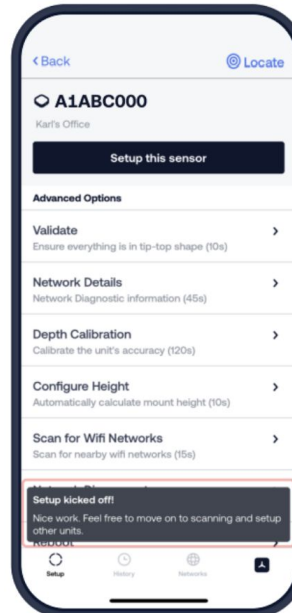
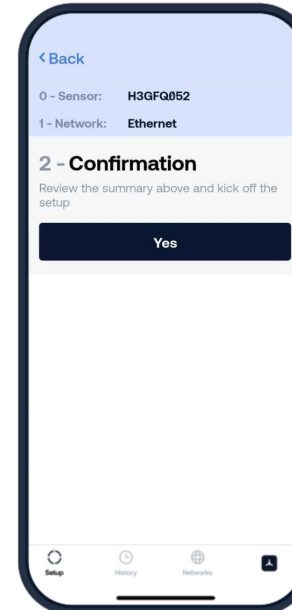
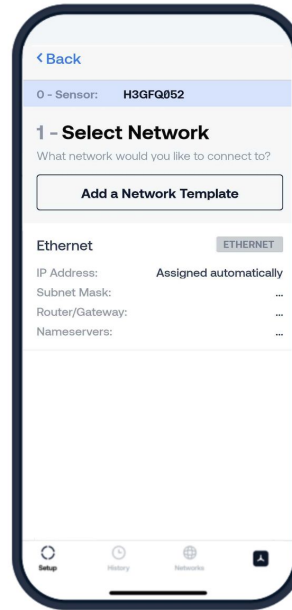
- Select the **Setup** button. Stand beneath the sensor you would like to set up and press the **Scan for Sensors** button.
- Press the **Locate** button. The LED on the front of the sensor will blink white 5 times.
- After the sensor stops blinking, press the **Setup this sensor** button.
- Confirm the serial number on the app matches the serial number on the sensor.
- **Note:** The label can be found on either the top of the mount OR the top of the sensor lid.
- Select the doorway you'll like to assign the sensors to.



Continued on next page

Setup

- **Select a network** from the list of network templates
- If no network templates are available, you can press **Add a Network Template** to create one. Please refer to the *02 — Setup Network* section
- Once you selected the network template, press the **Yes** button
- Setup kicked off! Move on to scanning and setting up other units if you have more.
- Press the **history** icon to see a history of units that have been set up and their status.
- **Note:** If you have two or more sensors covering an entry threshold or doorway, you'll need to reach support@density.io to set it up. Please provide the following details in the email:
 - Doorway name
 - Sensor height
 - Distance between sensors
 - Serial numbers



Advanced Options

04

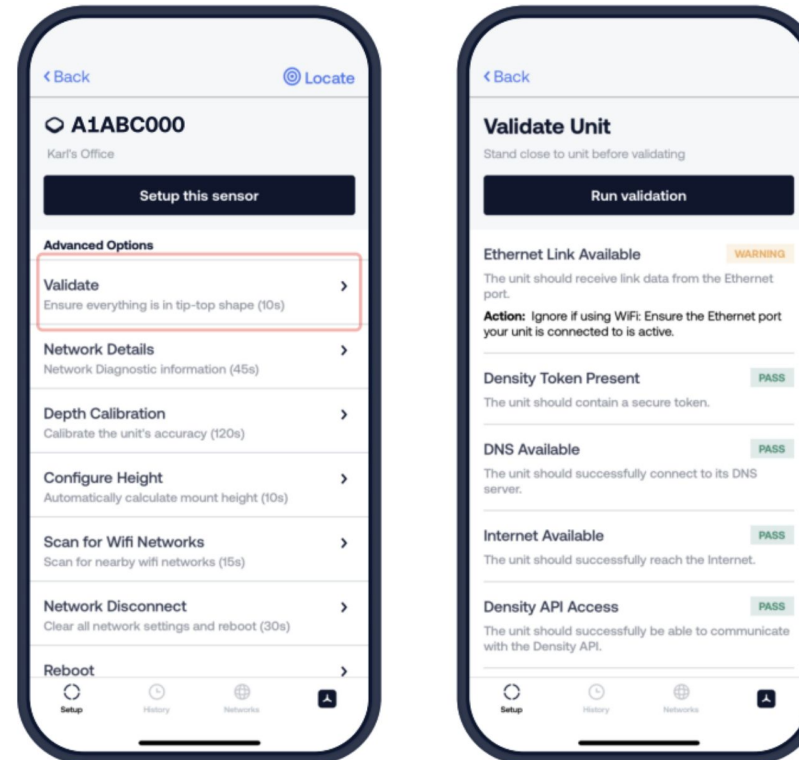
Troubleshooting

Advanced options are troubleshooting tools and are not considered part of a standard successful setup process.

Validate

Ensures everything on the sensor is in working order. This step takes approximately 10 seconds.

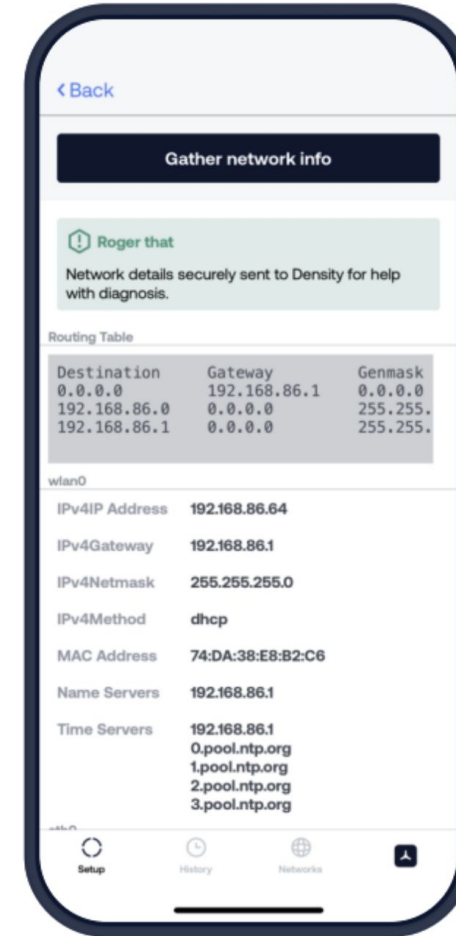
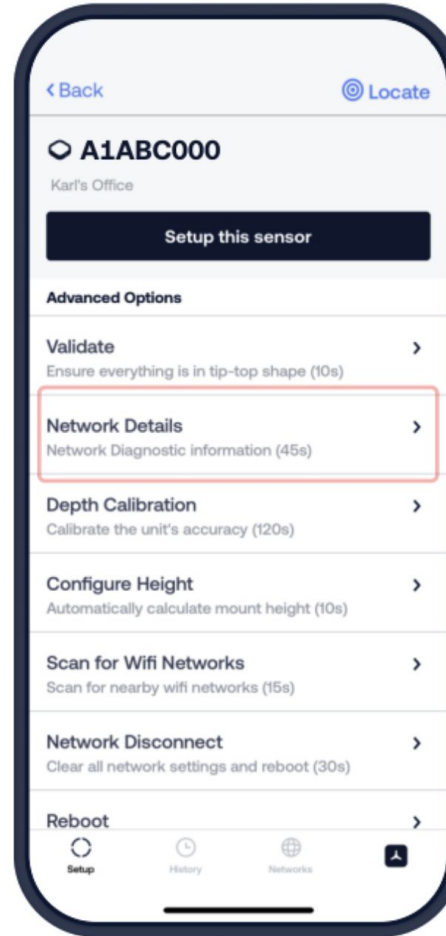
- Select a sensor from the setup list
- Select **Validate**
- Press the Run validation button.
Confirm that all items on the validation list have a Pass indicator.
If there are issues, follow the instructions for each item in the application.



Network Details

Gathers Network diagnostic information.
This step takes approximately 45 seconds.

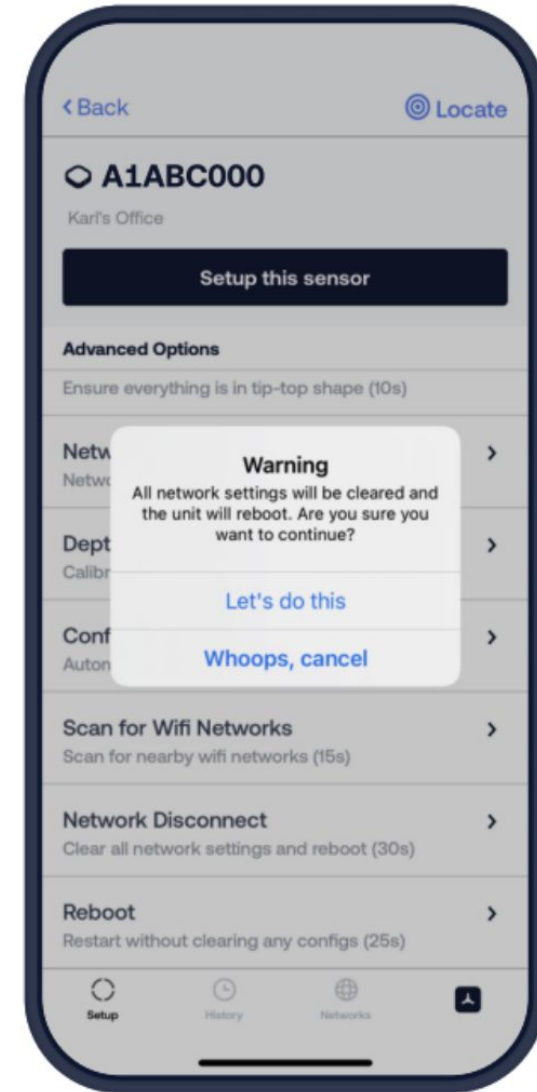
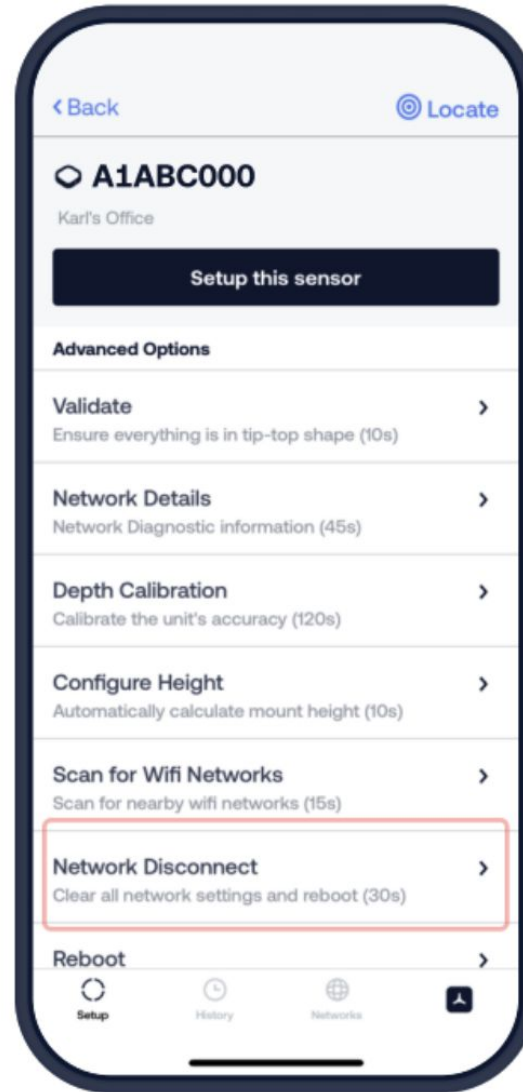
- Select a unit from the setup list.
- Select Network Details.
- Select **Gather network info**.



Network Disconnect

Clears all network settings and reboots the sensor

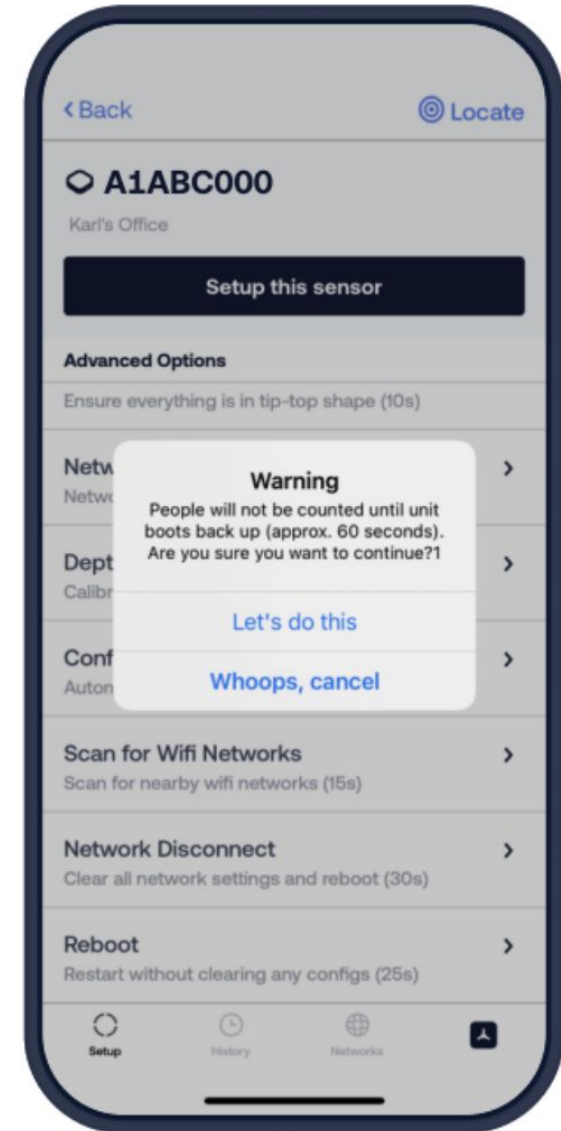
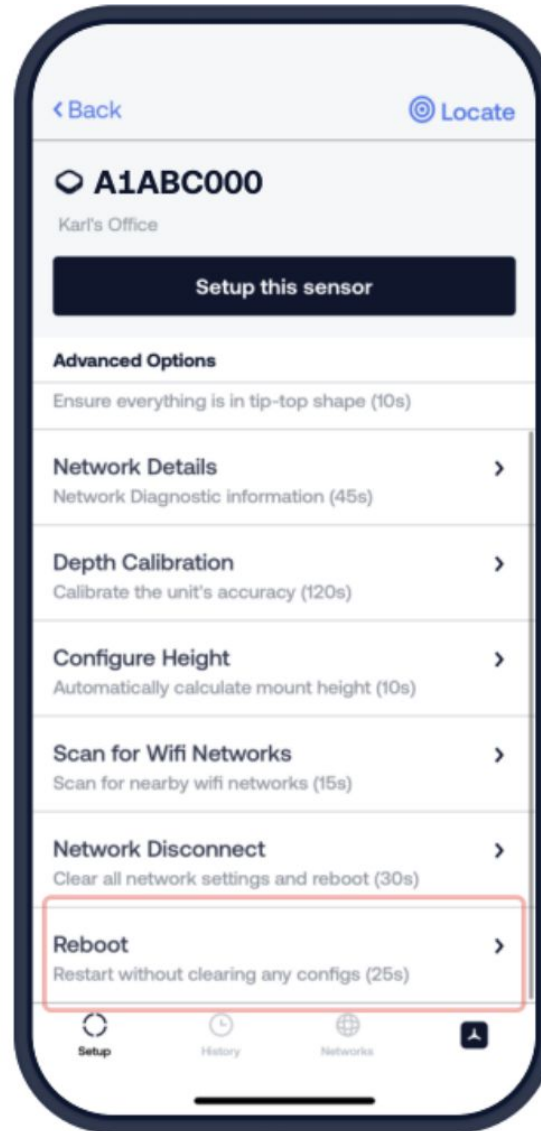
- Select a unit from the setup list.
- Select **Network Disconnect**.
- Select **Let's do this** to proceed, or **Whoops, cancel** to stop.



Reboot

Reboots the sensor. The sensor will not count for approximately 30 seconds

- Select a unit from the setup list.
- Select **Reboot**
- Select **Let's do this** to proceed, or **Whoops, cancel** to stop.

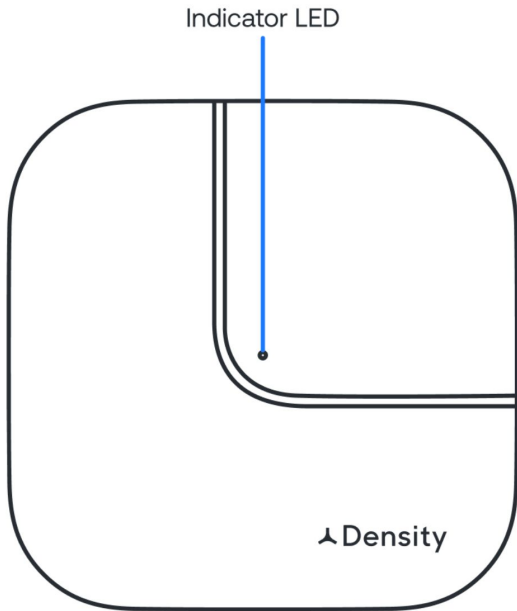


Status LED Guide

LED Status Indicators

The sensor has an indicator LED located on the front of the sensor.

The color chart explains the meaning of each color, defines any issues, and lists what actions to take if necessary.



Color	Pattern	Visual	Meaning	Description/Action
None	No Light		Sensor is not receiving power	Check whether sensor is plugged into power and receiving power from the source
White	Solid		Operating normally	No action needed
White	Flashing		Locate sensor function	Indicates which sensor you're interacting with when using Locate function in Unit Setup app
Blue	Solid		Ready to be provisioned	Typical state out of the box once sufficient power is provided
Blue	Flashing		Sensor is provisioning	Triggered via Unit Setup app. This process may take 5-10 minutes
Orange	Solid		Factory OS	Contact support@density.io
Orange	Flashing		Low power mode	Confirm switch is PoE+ with at least 30W per port or test ethernet cable
Purple	Solid		Sensor cannot connect to Density server	Provision sensor via Unit Setup app and if not resolved, run Validation in same app
Purple	Flashing		Server cannot connect to DNS	Verify DNS is available on VLAN. If no internal DNS server, review corporate firewalls to verify device can reach default DNS servers
Red	Solid		Sensor does not have a network configuration	If using WiFi, use the Unit Setup app to create a Network Template. If using Ethernet, verify DHCP server is available on VLAN
Red	Flashing		No Dongle Present or No ToF (reserved)	Occurs when device has not yet been provisioned and the Bluetooth Dongle is absent. Plug in Bluetooth Dongle to provision. (this is expected to go away in the future as devices will be able to be connected to Ethernet and provisioned on Density's end)