

SpecFive Trace Tracking Device

User Guide

Overview

This guide explains how to set up and use your SpecFive Trace device to track your dog or team members. The device leverages GPS and mesh networking to provide real-time location updates. The SpecFive Trace can be attached to a dog collar to track a dog or, using the Molle mount, attached to tactical gear to track a team.

Getting Started

What's Included

- SpecFive Trace tracking device
- USB charging cable
- Dog collar or Molle attachment
- User manual

Requirements

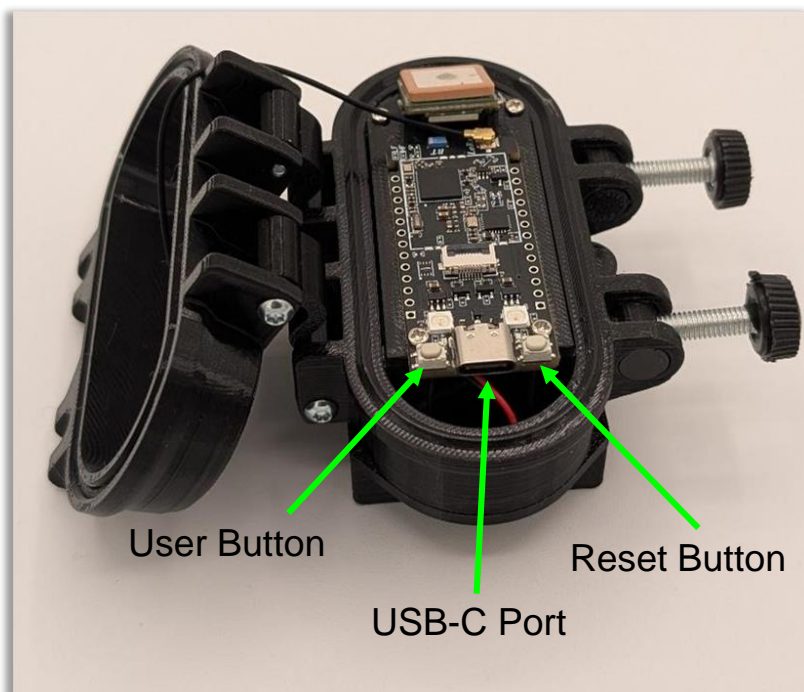
- Smartphone or tablet with the Meshtastic app installed
- Access to Wi-Fi for initial setup and downloading offline maps
- Optional: Additional Meshtastic devices for network expansion



Setting Up the Device

Step 1: Charge the Device

- Loosen the 2 Thumb screws on the housing enough to rotate them 90deg away from the housing. Open the housing to expose the radio and USB-C connector
- Use the provided USB cable to fully charge the device.
- An Orange LED indicates the device is charging. The Green LED will illuminate indicating the device is running. The Orange LED will turn off when the device is fully charged.
- Press and hold the USER button(closest to the hinge) for 6 seconds to turn off the device. The Green LED will switch to solid for a few seconds as the device shuts down and then remains off. If the Green LED is blinking the device is on.

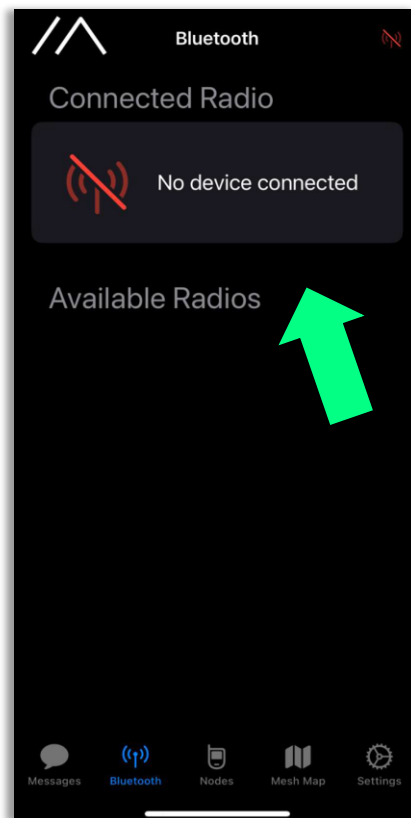
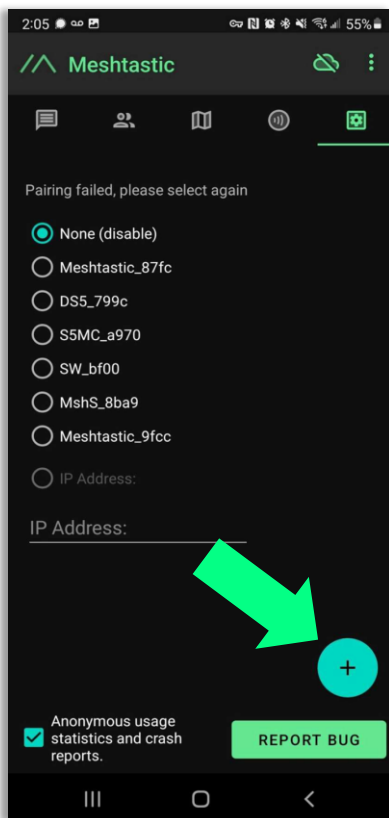


Step 2: Install the Meshtastic App

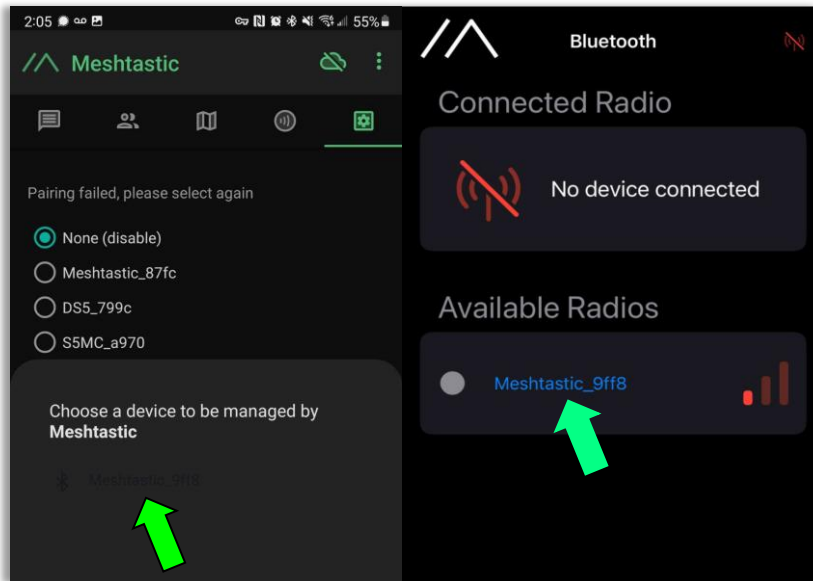
- Download the Meshtastic app from the Google Play Store or Apple App Store.
- Open the app and follow the prompts for general user instructions

Step 3: Pair the Device with the App

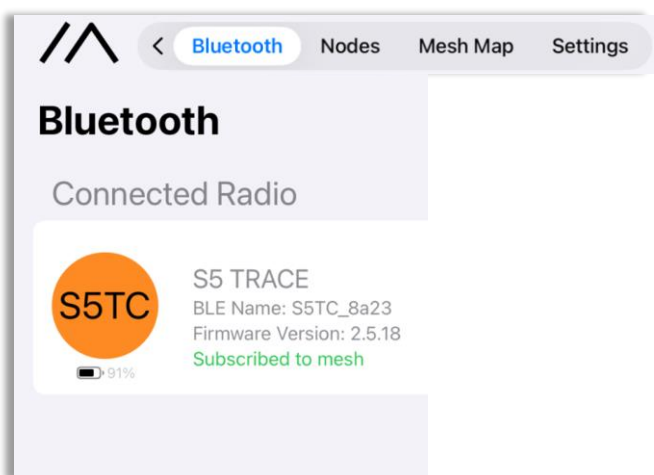
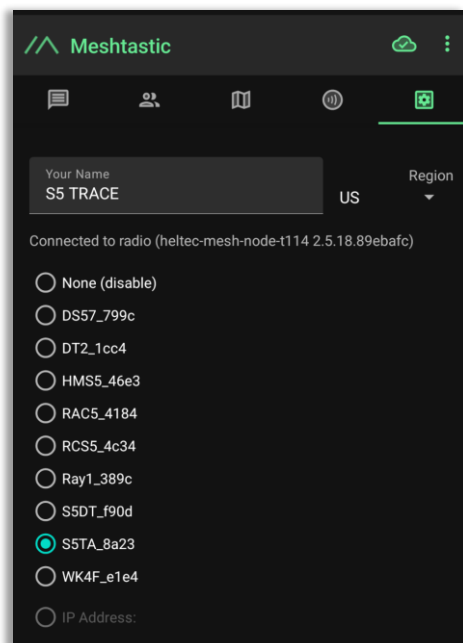
- Turn on the device by pressing the RESET button. The Green LED will illuminate and begin flashing steadily.
- Open the Meshtastic app



- Select your device from the list of available devices. The Trace will show up as S5TC-####(the last 4 digits are randomized).



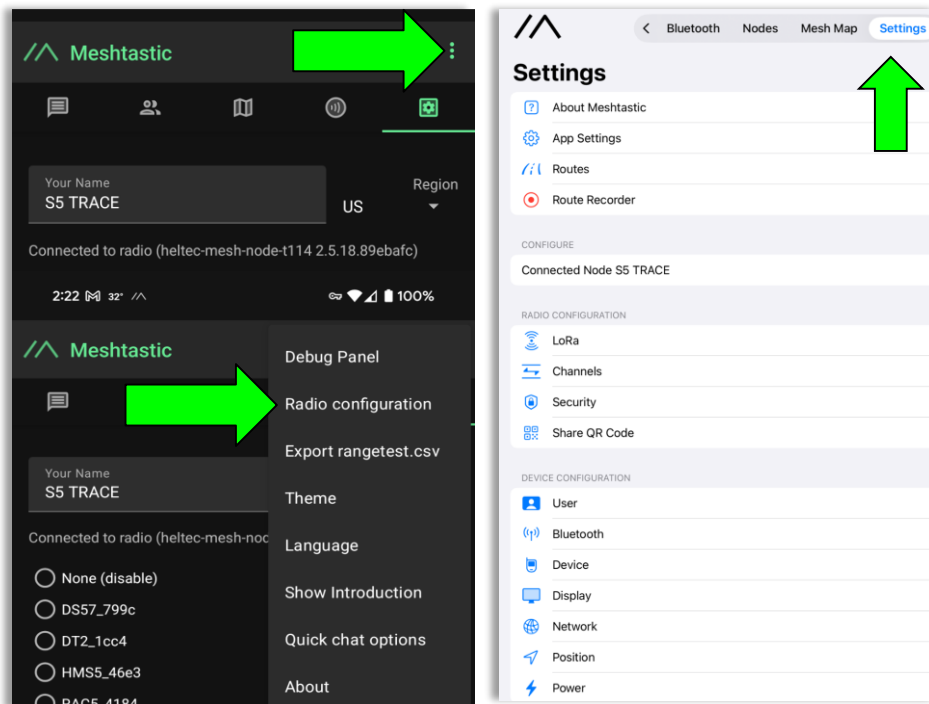
- Enter the device's pin when prompted, which is by default set to: **123456**
- Your Device is now paired to the app for further configuration



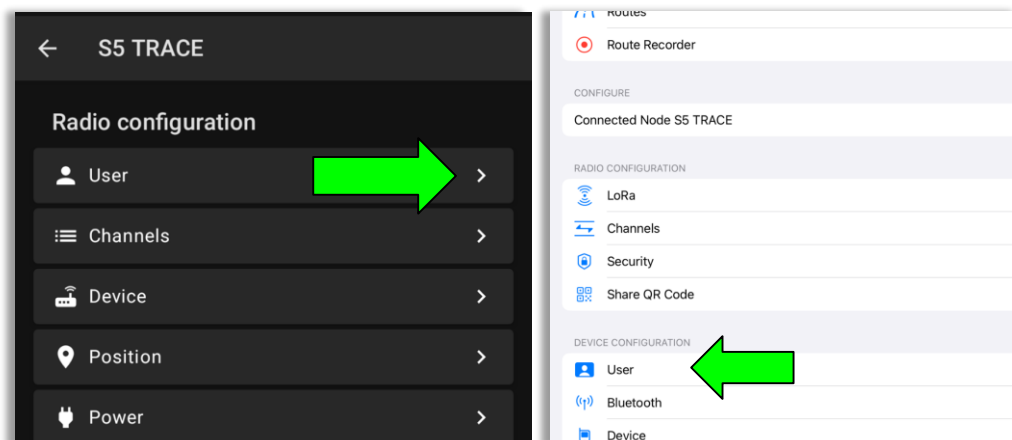
Step 4: Changing the Device Name

- If you're tracking multiple devices, it's recommended to change the default device name to easily distinguish between them.

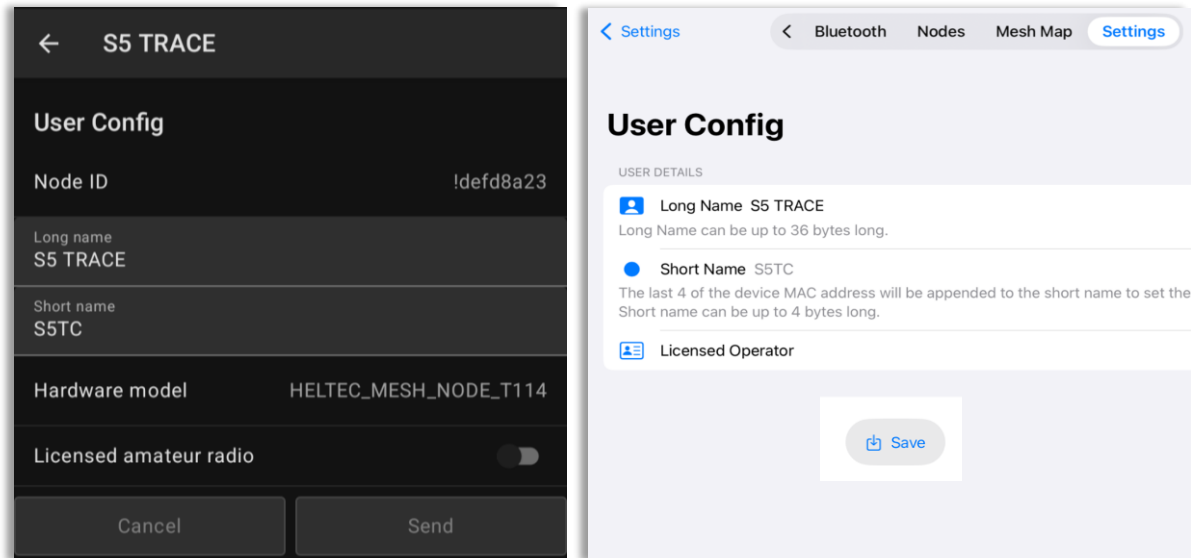
1. Find the Radio Configuration/Setting Tab on your app
 - a. Android: Click the 3 vertical dots on the top right and select Radio Configuration
 - b. iOS: Select the Settings tab



2. Go to the User tab



3. Update the Long and Short name of your Trace to the name of your Dog or Team Member. Long Name can be up to 30 characters including emojis. Short Name can be up to 4 characters, numbers and letters only.



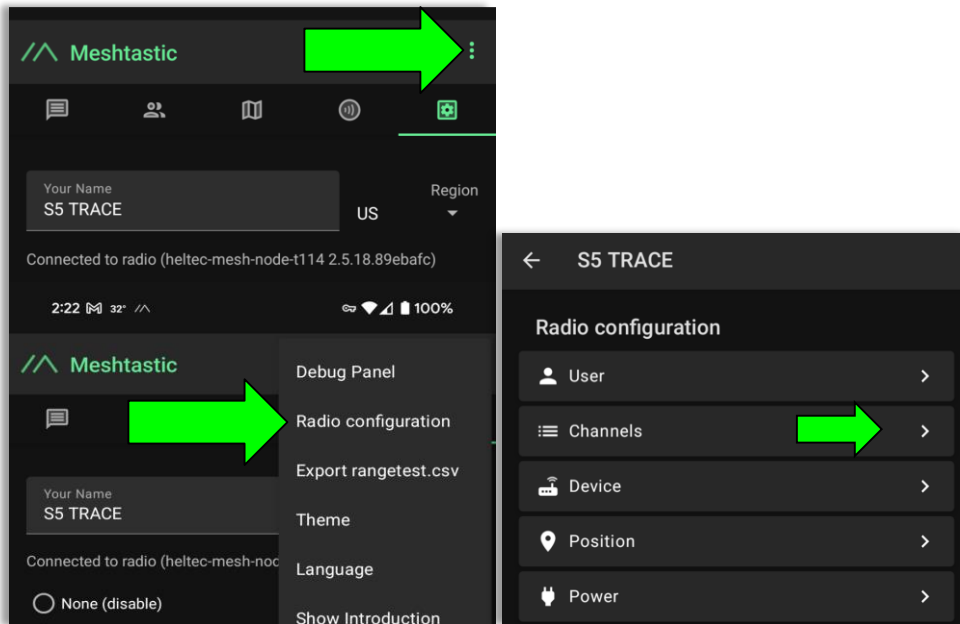
4. Once you have updated the device name to your desired name, click Send(Android) or Save(iOS) and the device will reboot.

Step 5: Create a Private Channel

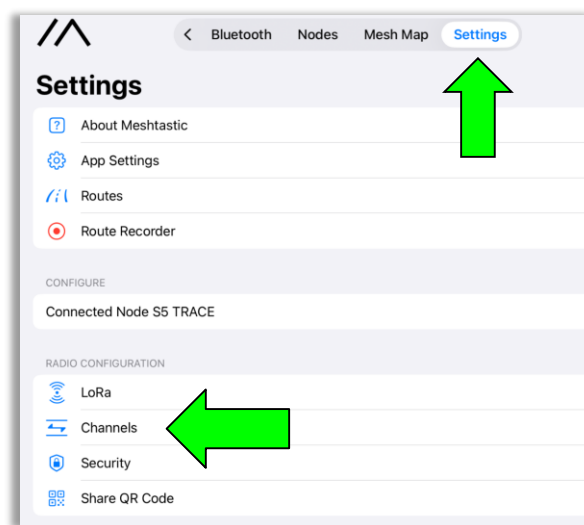
The SpecFive Trace comes pre-programmed to communicate on Meshtastic's public channel, "LongFast." This means that any nearby Meshtastic user will be able to see your Trace's location. If you intend to use your Trace within a mesh network with other Meshtastic users and want to share its location, you can keep the default LongFast channel.

However, if you prefer a private network, the instructions in the next section will guide you through creating a private channel for your Trace and sharing access with specific Meshtastic devices.

1. Go to the Radio Configuration tab and select Channel.

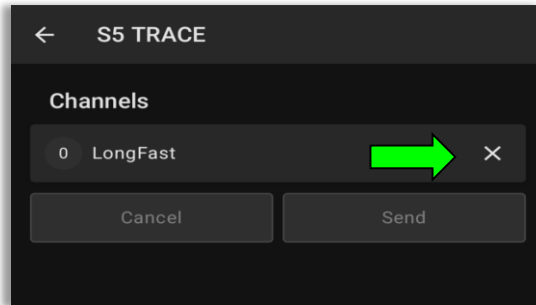


Android

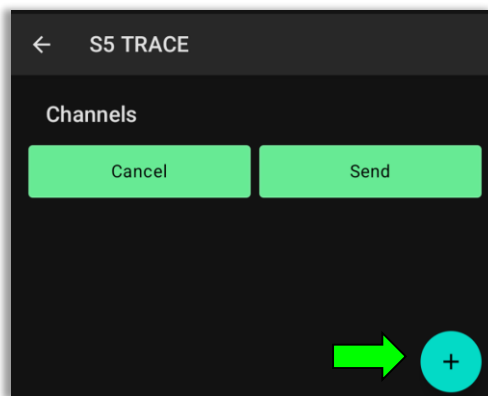


IOS

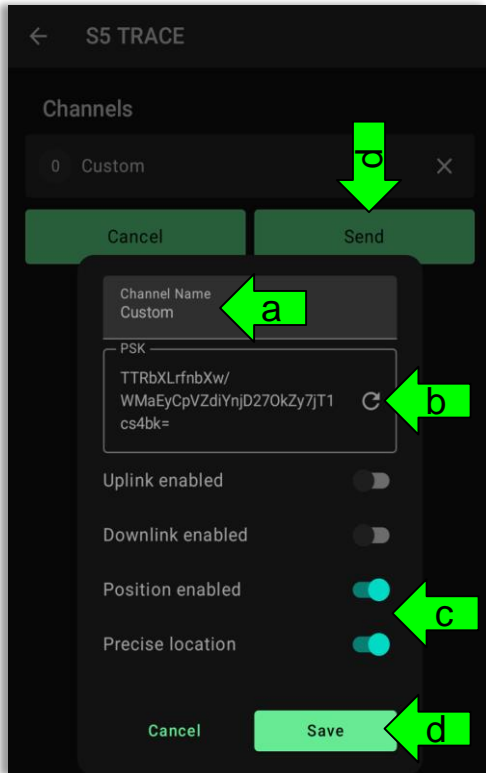
2. On Android delete the public channel “LongFast”. On iOS you cannot delete the primary channel but you can edit it.



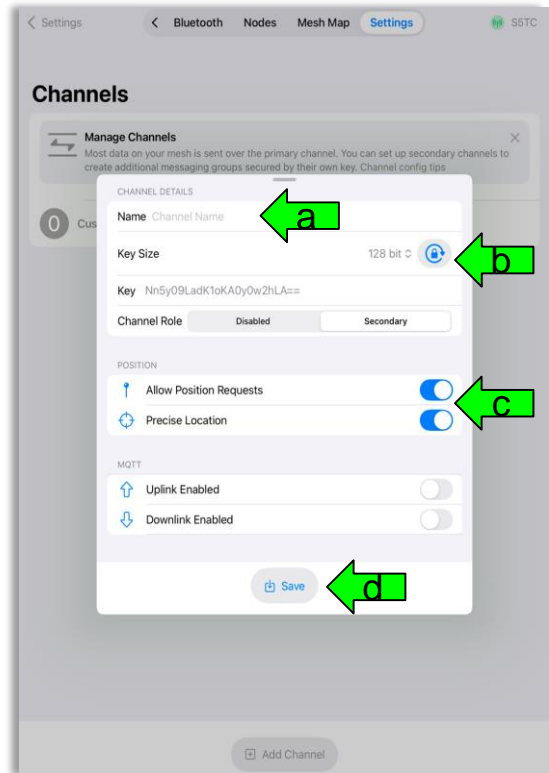
3. Add a new Channel by clicking the “+” button



4. Create the Custom Channel on Android. Edit the Primary channel on iOS.
 - a. Name the new Channel to your liking.
 - b. Click the Refresh Button on the PSK to create a new randomized pre-shared key.
 - c. Turn on “Position Enabled” and “Precise Location”.
 - d. Click Save and then Send to update the channel on the device. The device will reboot



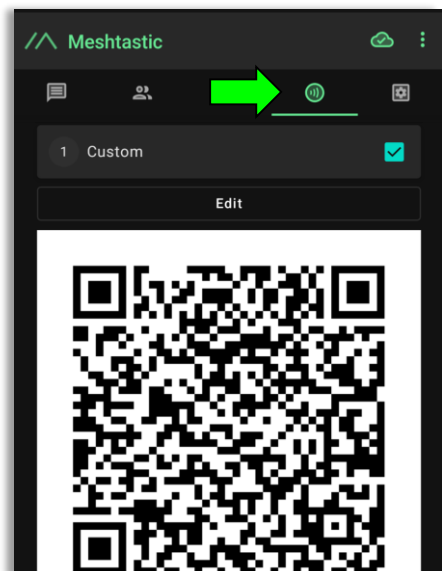
Android



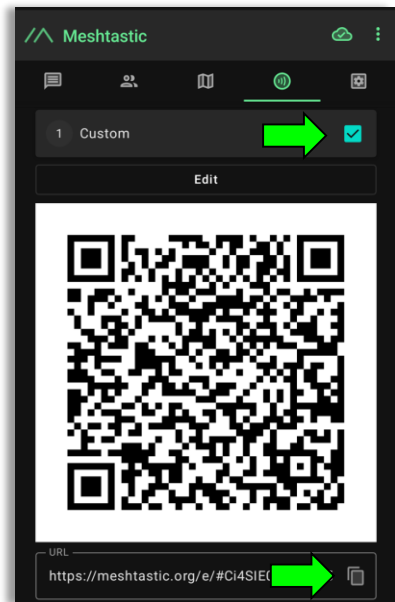
IOS

Step 6: Sharing the Custom/Private Channel with your other Devices

1. Navigate to the Channels tab on the Meshtastic app. Your phone needs to be connected via bluetooth to your Trace to share the channels
2. Select your custom channel. The QR code and URL will update when selections are changed.

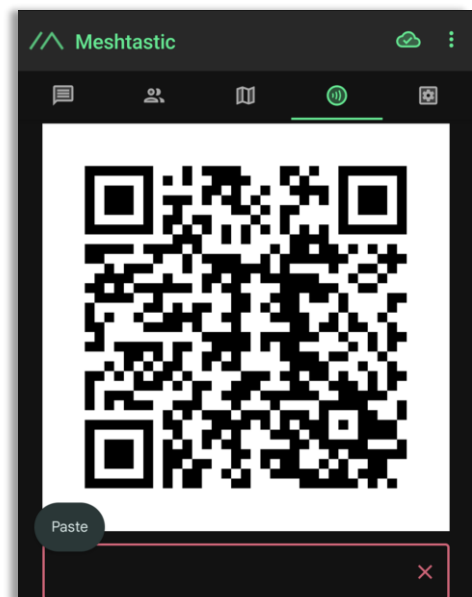


- a. If you are adding this channel to another device using the same phone/tablet, you will want to copy the URL and save it to the clipboard or to a text file.
- b. If you are sharing this channel with a device connected to another phone or tablet, simply scan the QR code using the Meshtastic app on the second phone/tablet.

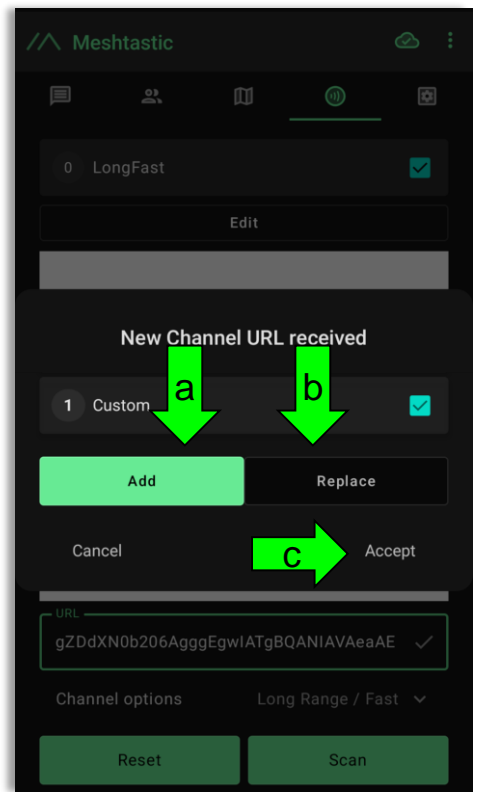


You are now done with the configuration of your Trace. Follow these same instructions for multiple Trace devices.

3. Add the Custom/Private Channel on your personal mesh radio. This will be the device you keep on your person while the Trace is attached to your dog/pet.
 - a. Connect your second device to the Meshtastic app.
 - b. Under the Channels tab on the app you will erase the hyperlink under "URL" and paste in the hyperlink you saved in the previous step.



4. A window will appear giving you 2 options
 - a. Add: This will add the custom channel as a secondary channel on your personal device. This is a good option for when you want to keep the public channel “LongFast” on your device to communicate with other Meshtastic Users
 - b. Replace: This will replace the default public channel “Longfast” with your custom channel so you can only see and communicate with the devices on your custom channel.
 - c. Click Accept to send the new channel to the device.



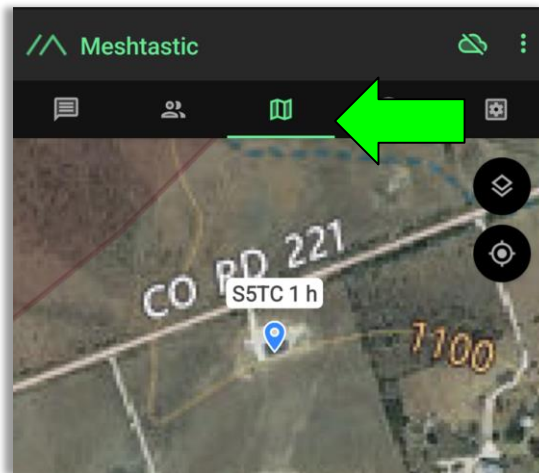
Step 7: Attach the Device

- **For Dog Tracking:** Secure the device using the provided collar attachment. Ensure the Trace is on the back of the neck of your dog so that the internal GPS antenna faces the sky for optimal signal reception.
- **For Team Tracking:** Use the Molle mount to attach the device securely to tactical gear, with the “S” in “spec5” pointing up so that the internal GPS antenna faces towards the sky for optimal signal reception.

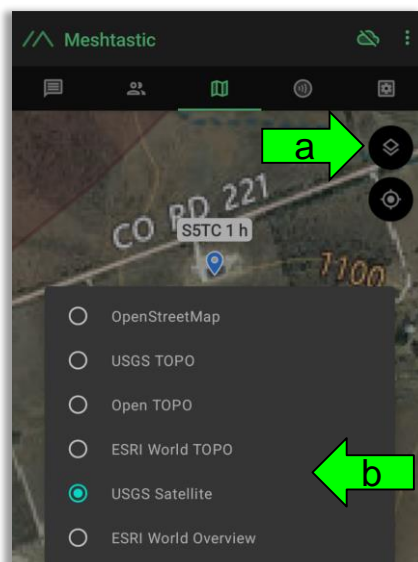
Using the Tracking Features

Download Maps for Offline Use(Android)

1. Open the Meshtastic app and navigate to the map tab while connected to WIFI or your Cellular network.
2. Move your map to locate the area to anticipate needing offline maps for.

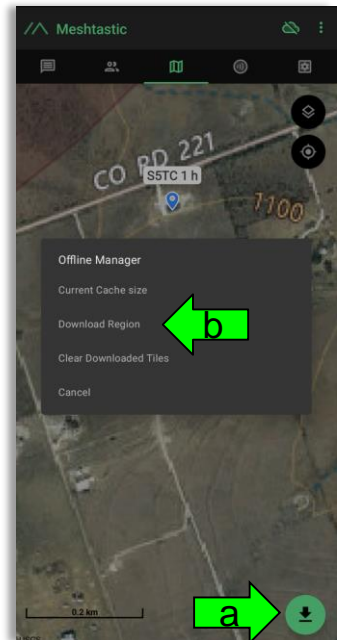


3. Select the Map Type you wish to use
 - a. Click the Map options button
 - b. Select your preferred Map



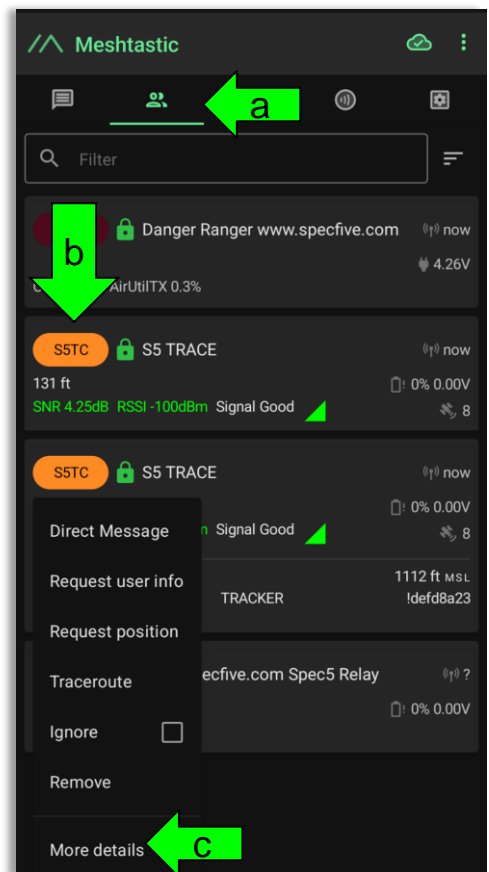
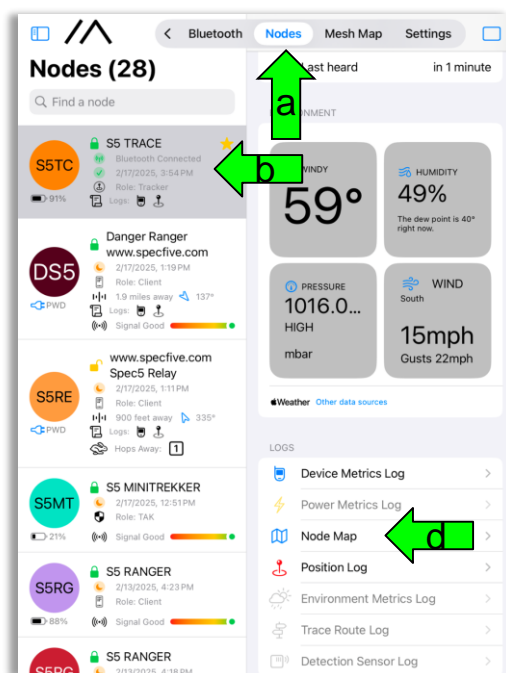
4. Download the Map region

- Click the Download Button
- Click “Download Region” to download the current map region your map is zoomed to. Use the “Current Cache Size” to see how much storage your current offline maps are using. “Clear Downloaded Tiles” to remove map data for regions you are no longer using.

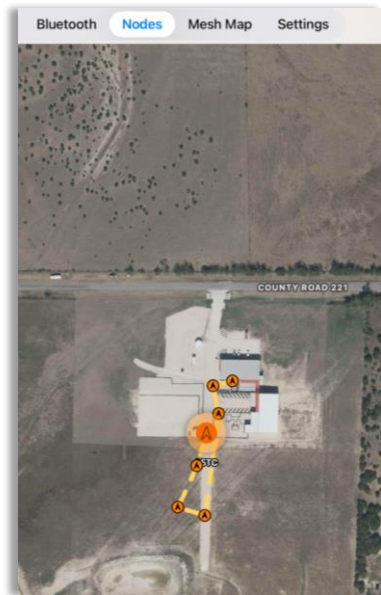
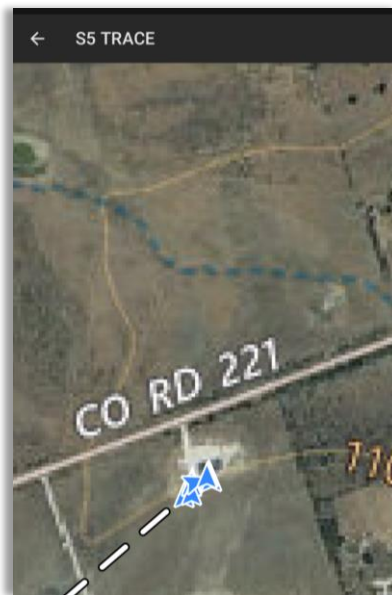
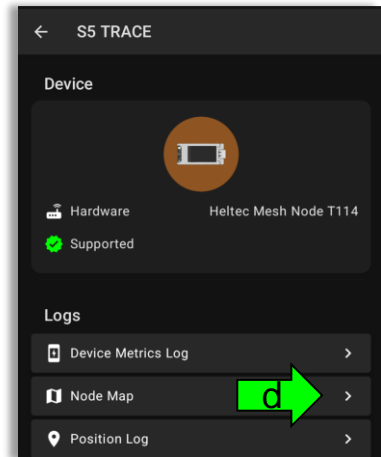


Real-Time Location Tracking

- Open the Meshtastic app and connect to your personal device.
- Go to the map tab to see the locations of all of the devices in your mesh including your Trace.
- To see the present and past locations of your Trace
 - Go to the nodes list
 - Select you Trace by clicking on the Short name
 - Select More Details



d. Select “Node Map” to view past and present GPS locations of your Trace



Support and Contact Information

If you experience issues or have questions, contact us at:

- Email: general@specfive.com
- Website: www.specfive.com

With your SpecFive Trace device, you can track your dog or team members confidently and stay connected no matter where your adventures take you!