



User Manual

Rev 1.1 September 2025

Introduction

Thanks for being part of the TrailLink community! We're excited to have you on board, and your experience means a lot to us. If you ever need help getting your TrailLink set up, just send us a note at **support@ratiomotorsports.com** — we're always happy to help.

What is TrailLink?

TrailLink devices create a wireless mesh network allowing you to stay connected with your group completely off-grid. Simply clip the device to your jacket or mount on the handlebar of your snowmobile, SXS or ATV.

Key Features

- Long range connection, over 10km on open fields and ~1-2km in forests (topography dependent).
- Mesh technology allows data from the furthest device to hop between all the group members that may not be in direct range.
- Long lasting battery designed to withstand freezing temperatures.
- Live location group tracking in the TrailLink mobile app.
- Follow breadcrumb trails so you can retrace your steps or find a lost member.
- Send messages and alerts through the app.
- View group member status and notifications at a glance with the LED display.

Safety Information

General Safety Precautions

- Use TrailLink as a supplement, not a replacement for safe riding practices. Always keep a visual awareness of your group and surroundings.
- Do not operate vehicles while distracted by the device or mobile app. Mount your device securely before use.
- Keep TrailLink away from extreme heat, fire, or direct contact with fuel.

Battery & Charging Safety

- Charge only with a USB power source that meets the specified voltage/current requirements.
- Do not attempt to open, crush, or puncture the device; it contains a lithium battery.
- If the device becomes hot, swollen, or emits an odor, stop using it immediately and contact support.
- Never charge near flammable materials or while the device is wet.

Weather/Water Resistance Notes

- TrailLink is designed to resist snow, rain, and splashes, but is **not fully waterproof**. Avoid submerging in water.
- After exposure to moisture or dirt, wipe the device clean and dry before storing or charging.
- Ensure the charging port is dry before plugging in.

Quick Safety Checklist - Before You Ride

- ☐ Mount your TrailLink securely so it won't shake loose on the trail.
- ☐ Charge fully before heading out. Never ride with a low battery.
- ☐ Keep the charging port dry and clean.
- ☐ Don't use the app while driving, check it only while stopped.
- ☐ Remember: TrailLink is a tool, not a guarantee. Always ride smart and stay aware.
- ☐ After your ride, dry off your device and store it in a cool place.

Getting Started

What's in the Box

The standard TrailLink Go Kit Includes:

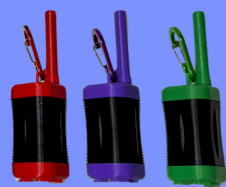
- 1x TrailLink Go
- 1x Carabiner
- 1x LED Display
- 1x USB-C Charging Cable
- Quick Start Guide

Optional add-ons:

- Handlebar Mount
- Backpack Strap Mount
- Hard-mount Kit

What's In The Box

- 3x TrailLink Go
- 3x LED Display & USB
- 3x Strap Mount
- 3x Bar Mount
- Stainless Hardware



TrailLink Go



LED Display



Strap Mount



Stainless Steel
Hardware

Quick Start
Guide



Handle Bar Mount

Device Overview

1. Charging Port USB-C
 - Charge TraiLink (5v 0.5A)
2. Power Button / Multifunction Button
 - Press to turn on, press and hold for 10 seconds to turn off.
 - When the device is turned on the power button functions the same as the LED display. This allows you to send notifications from pressing and holding for the desired time.
3. Multifunction output USB-C
 - Connect to the LED display
 - Emergency phone charging
4. Mount connection points
 - 2x M4 threaded
 - Carabiner loop



Figure 2: Bottom View of TraiLink Go

5. Multifunction LED
 - Amber - Booting Up (takes roughly 10 seconds)
 - Dark Blue - Bluetooth pairing (The device will be discoverable in the TraiLink app)
 - User Colour - Connected to a phone
6. Battery Status LED
 - Green - Greater than 40% battery
 - Amber - Greater than 10% battery
 - Red - Less than 10% battery
 - Purple - Charging
 - Light Blue - Charged

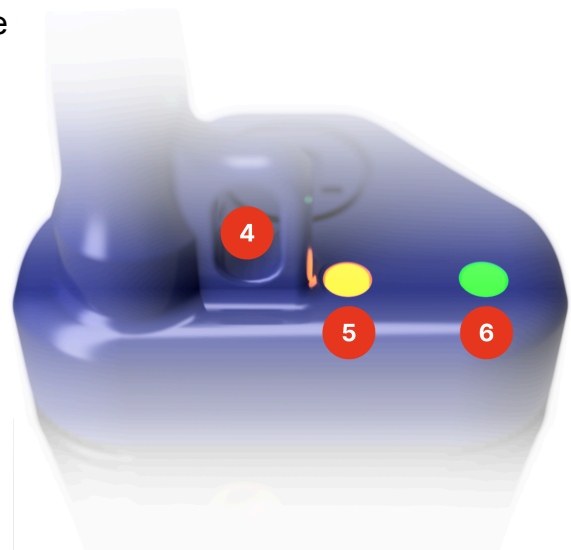


Figure 3: Top View of TraiLink Go

Basic Device Operation

Turning On/Off

- **Turn On:** Press and hold the power button briefly. The multifunction LED will illuminate amber as the device starts up, which takes roughly 10 seconds.
- **Turn Off:** Once the battery status LED is illuminated then you can turn off the device. Press and hold the power button for 10 seconds. Both the battery status LED and multifunction LED will turn off once the device is powered off.

LED Indicators

The two LED indicators give quick feedback about the device Status.

Multifunction LED

- Amber - Booting Up (takes roughly 10 seconds)
- Dark Blue - Bluetooth pairing (The device will be discoverable in the TrailLink app)
- Your Colour - Connected to your phone
- A group members Colour - They are sending a notification
- Red - A group member is sending a SOS

Battery Status LED

- Green - Greater than 40% battery
- Amber - Greater than 10% battery
- Red - Less than 10% battery
- Purple - Charging
- Light Blue - Charged



Figure 4: Top View of TrailLink Go

Battery Status

- When powering on, the battery status LED takes 20 seconds to illuminate. Once illuminated, the exact battery percentage is available in the app.
- When charging a phone in an emergency situation the battery status is not accurate and reads lower than in reality.
- When charging TrailLink the exact percentage reads slightly higher than in reality.

Charging TrailLink

1. Plug the included USB-C cable into the charging port.
2. Connect to any USB power adaptor. TrailLink charges at 5v 500MAh (any USB charging brick will work).
3. The power status LED will turn purple while charging and light blue once charged.
4. A full charge typically takes ~5 hours and provides multiple days of use (varies with conditions).

Note: TrailLink supports passthrough power, this means the device is always powered-on when a charger is connected and provides power from the multifunction USB-C port.

Note2: The charging ports are designed to be an extremely tight fit around the USB-C connector. This helps keep dust and water out of the port while connected. Depending on the cable, you may need to slightly wiggle as you press it into the port.

Important: Always ensure the ports are **completely** dry before charging.

First-Time Power-On Checklist

- ☐ Recommend to fully charge the device before first use.
- ☐ Power on by holding the button for 1 second.
- ☐ Watch for the Multifunction LED to illuminate amber, this means it's booting up.
- ☐ Once the multifunction LED is blue the device is ready to connect to your phone. Continue to the next section (Connecting to the TrailLink App) to Complete setup.

TraiLink Setup

Download the App

1. Open the **App Store** or **Google Play Store** ***COMING SOON***.
2. Search for **TraiLink** (Or scan the QR code below).
3. Download and install the app on your smartphone.



Pairing With Your TraiLink

Make sure your TraiLink device is powered on and ready to connect (multifunction LED solid blue). Follow the instructions in the app. Note the TraiLink **pairing code: 123456**



Figure 6: Launch The App

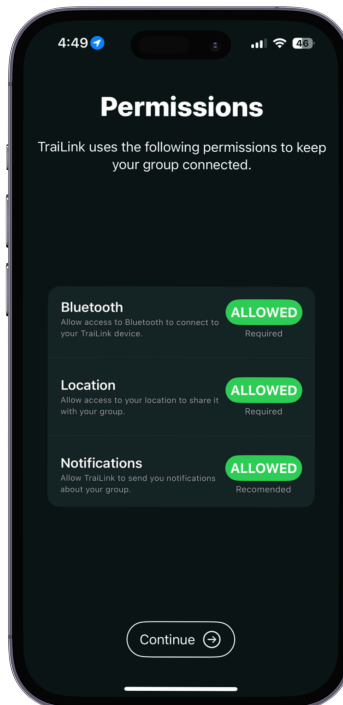


Figure 7: Allow Permissions

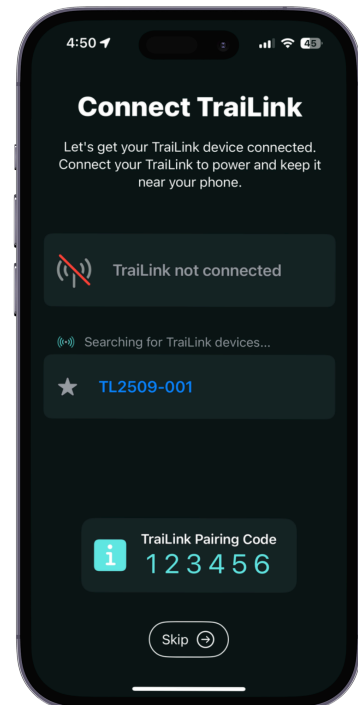


Figure 8: Connect to a TraiLink

Create or Join a Group

Create a Group: Start a new group in the app and share/invite others by locally sharing or giving them the invite code (invite code coming soon!).

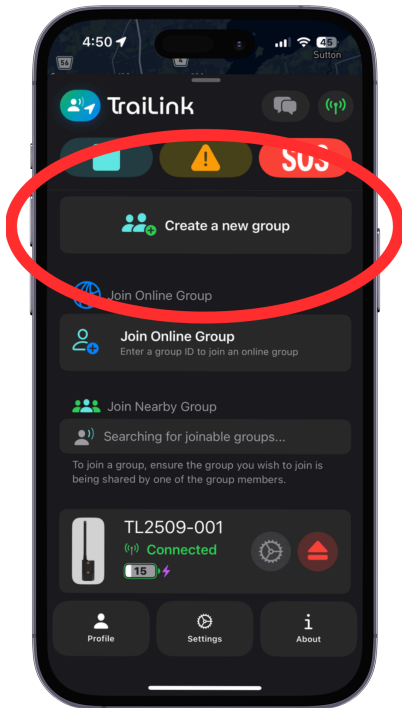


Figure 9: Create A New Group

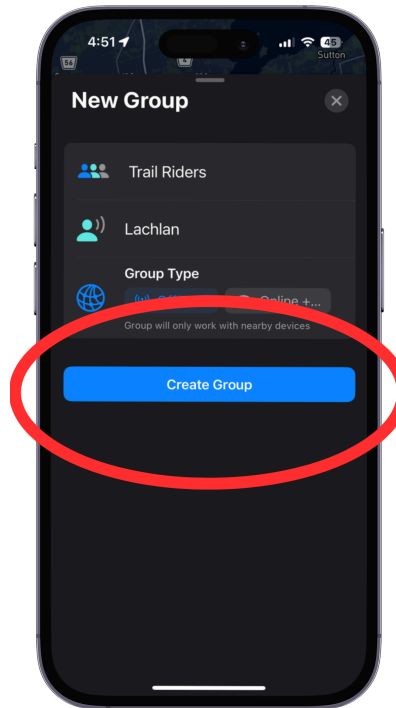


Figure 10: Name The New Group

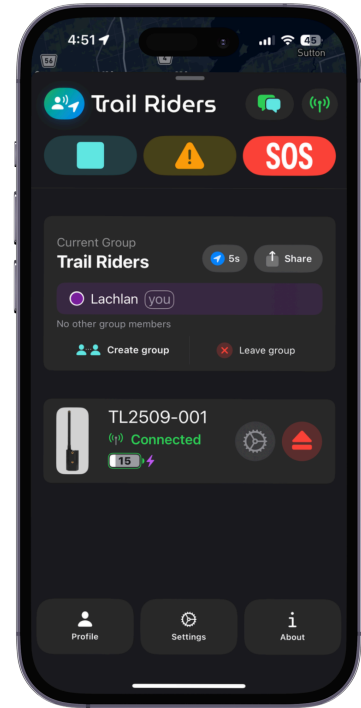


Figure 11: New Group Created

1. Pull open the menu sheet to reveal the button to create a new group
2. Press the button **“Create a new group”** circled in *Figure 9*
3. A new sheet will open, here you will name the group and select the group type as seen in *Figure 10*.
 - a. The group name will only be visible to other people in your group and while sharing it locally. The name has a maximum character limit of 15.
 - b. You can adjust your name easily while creating a new group.
 - c. The group type has two different options. Refer to the Group Type section of the manual for in-depth details (**Online groups feature coming soon**)
4. Once the new group is created you will see it at the top of the menu sheet as seen in *Figure 11*
 - a. To share the group, simply press the “Share” button. This will share the group locally and your group will appear in the “Join Nearby Group” section of the menu sheet.

Join a Group: Ask one of the group members to begin sharing the group by pressing the “Share” button when in a group. It will then become discoverable to join (locally, be within a couple hundred feet). Else, you can enter the code.

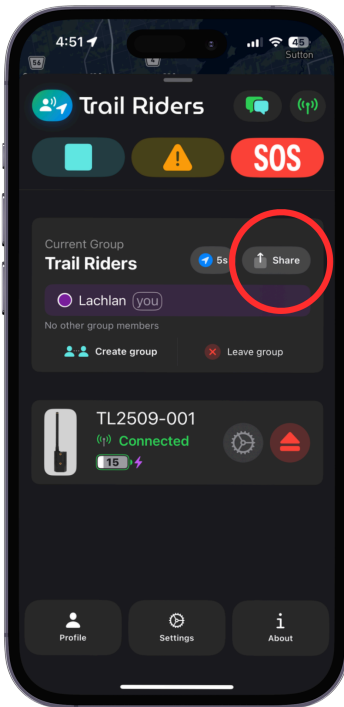


Figure 12: Share button In Group

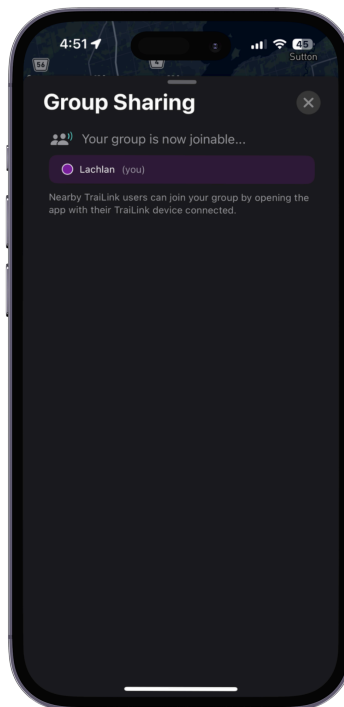


Figure 13: Sharing Group

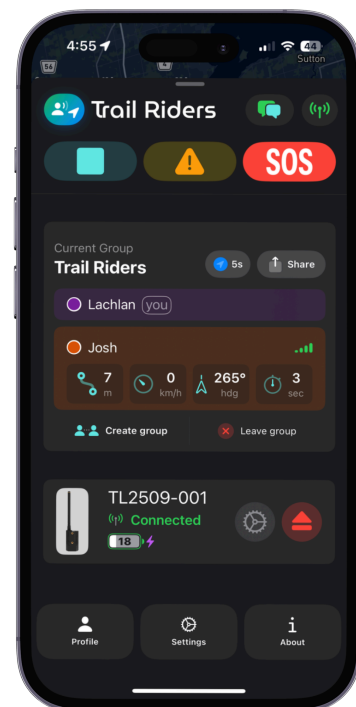


Figure 14: New Group Member

1. The “Share” button is circled in red in *Figure 12*. Located in the “Current Group” section of the menu sheet. You must be in a group in order to share a group.
2. When you begin sharing a group the “Group Sharing” sheet will appear. Keep this sheet open until all the group members have joined. The “Group Sharing” sheet can be seen in *Figure 13*.
3. Once all the group members have joined, close the “Group Sharing” sheet and find the new group members in the “Current Group” section of the menu sheet. In *Figure 14*, a new member “Josh” has been added.

Note: Once connected, the group members will begin to populate. The time it takes to populate the members is dependent on their update frequency (by default is set to 5 seconds). Expect to have all members populated within a minute.

TrailLink Setup Troubleshooting	
TrailLink Won't Turn On	<ol style="list-style-type: none"> 1. Ensure the battery is not dead <ol style="list-style-type: none"> a. Confirm the USB charging cable is connected to the correct port and not the Multifunction output USB-C b. Try a different USB cable c. Try a different power supply 2. Disconnect any charging cable, then press and hold the power button for 30 seconds. Reconnect the charging cable. 3. Connect a USB cable from a computer to the TrailLink's charging port. If your computer detects a removable disk drive then please contact support
TrailLink doesn't appear when the app searches for TrailLink devices	<ol style="list-style-type: none"> 1. Ensure the TrailLink is in Bluetooth pairing and is not connected to another user's phone. 2. Ensure the TrailLink device is within Bluetooth range. 3. Check the Bluetooth permissions in the phone settings 4. If you had connected TrailLink to your phone previously, go to the Bluetooth settings and find the TrailLink device in "My Devices" list and "Forget device". If you had changed the name of your TrailLink then it may appear as the old name in the device list. 5. Reboot both the TrailLink device and the smartphone
My friend is sharing a group but it is not appearing in my app	<ol style="list-style-type: none"> 1. Ensure you are within range of their TrailLink 2. Ensure you are connected to a TrailLink device 3. Ensure you are both running compatible firmware's (Check for updates) 4. Their update interval determines how often they will broadcast the group, if it's set to a long duration such as 60 seconds then it may take a couple minutes. 5. Restart the app
My group members are not populating or there are old group members	<ol style="list-style-type: none"> 1. Open app settings and press "Clear group members" this will reset the current group members populated in your app. Note, This will also clear the breadcrumbs

Using TrailLink

Location Sharing and Map View

Once your TrailLink is connected and you joined or created a group, the app automatically begins sharing your live location with everyone in the group.

- By default your location updates every 5 seconds to the group. This can be adjusted in the settings menu seen in *Figure 15*. The available options are:
 - 2, 5, 10, 20, 30, 45 and 90 seconds.
- Each rider is shown as an icon on the map with their chosen name and colour.

The map has multiple view options and settings seen in *Figure 16*:

1. View orientation selection
 - a. Locked on your location and top of the map is pointing north.
 - b. Locked on your location and top of the map is pointing in your direction.
 - c. Group view where the map zooms in and out as the group members move. This keeps all group members within view.
2. Toggle between Satellite maps and road/topographic maps.
3. Download offline maps. This selection opens the offline map download area selector seen in *Figure 17*.

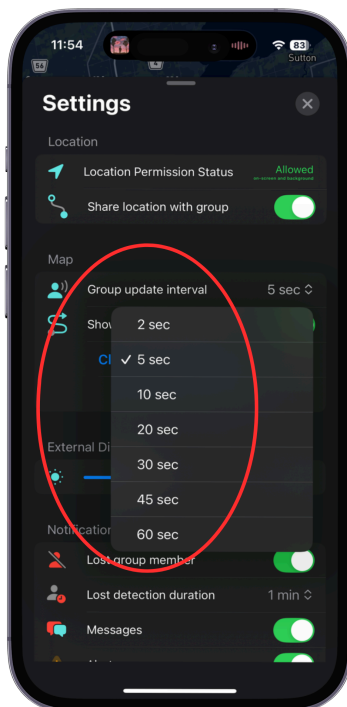


Figure 15: Location Update Interval

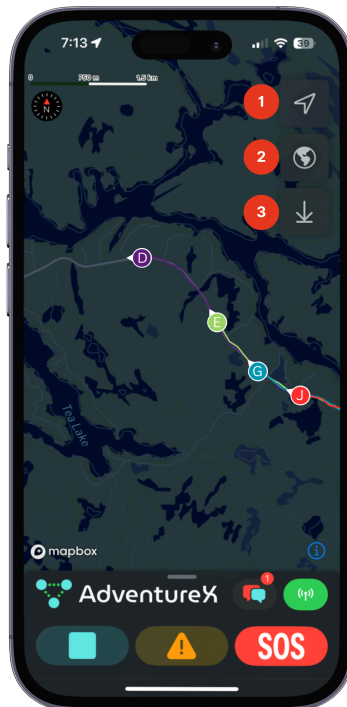


Figure 16: Map View



Figure 17: Offline Map Download

Notifications & Alerts

Lost Connection Notifications

If a TrailLink user in your group moves beyond TrailLink's effective range, you'll get an alert in the app. The lost detection duration can be adjusted from 20 seconds to 10 minutes (seen in *Figure 18*), this allows you to adjust how long a group member has been lost before notifying you.

- The users icon will show their last known location, speed and direction (seen in *Figure 19*)
- A notification will appear on your phone so you know someone has dropped out of range.
- Once they come back into range, the app will reconnect automatically.

Group Alerts

TrailLink supports three different alerts that allow users to quickly signal to their group:

1. **Stop Request** - Let your group know you're stopping.
2. **Help Request** - Let your group know you need help.
3. **SOS** - Let **ANY** TrailLink group within range know you need immediate help.

Note: Each type of notification can be disabled in the TrailLink settings page (seen in *Figure 18*). This allows you to customize the notifications you receive and eliminate distractions.

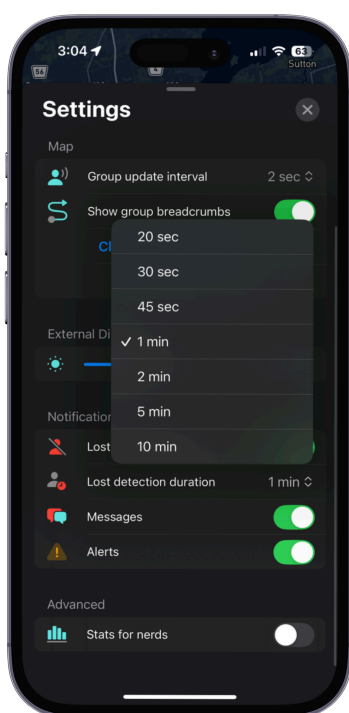


Figure 18: Lost detection Duration



Figure 19: Lost Purple Member

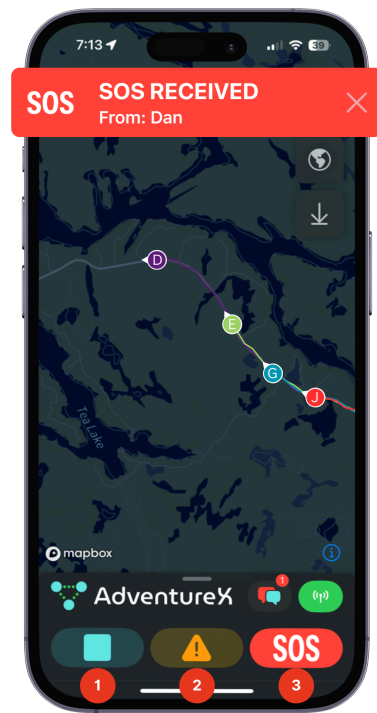


Figure 20: SOS Received

TraiLink LED Display

The TraiLink LED Display gives you **instant visual alerts** so you're always in the loop without pulling out your phone. Simply plugs into TraiLink via the multifunction USB port.

- The main screen of the display shows key information about your group.
 - Each group member (up to four group members) represented by their chosen colour.
 - The connection status of each group member (based upon the last detection duration for lost group members).
 - Your colour at the top.
- The display also doubles as a button so you can easily send alerts to your group without pulling out the phone.
 - Alerts are sent in your colour to the whole group. This allows your group members to know who needs help when quickly glancing at the display. In *Figure 21* the display is currently indicating a Help Request from the purple group member.
 - Press and hold to cycle through the different alerts
 - 1 second = Stop Request
 - 3 seconds = Help Request
 - 5 seconds = SOS
 - Press and hold for 10 seconds to power off the device. When powered off TraiLink can be powered back on by a 1 second press of the display.

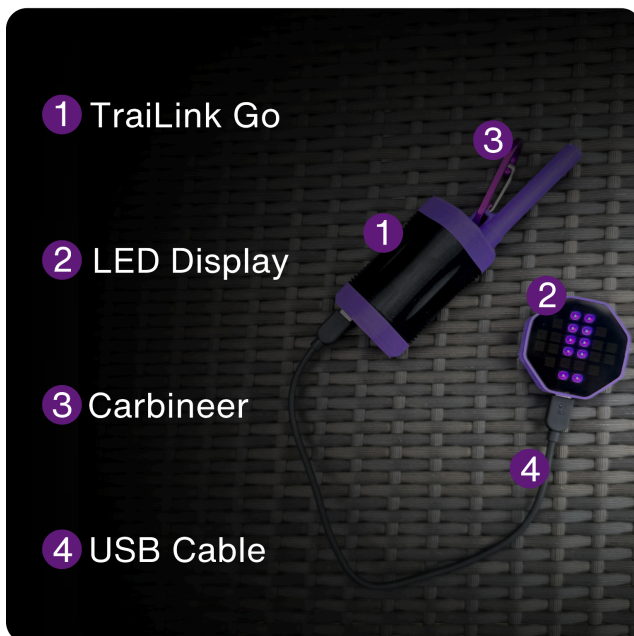


Figure 21: LED Display Connected To TraiLink

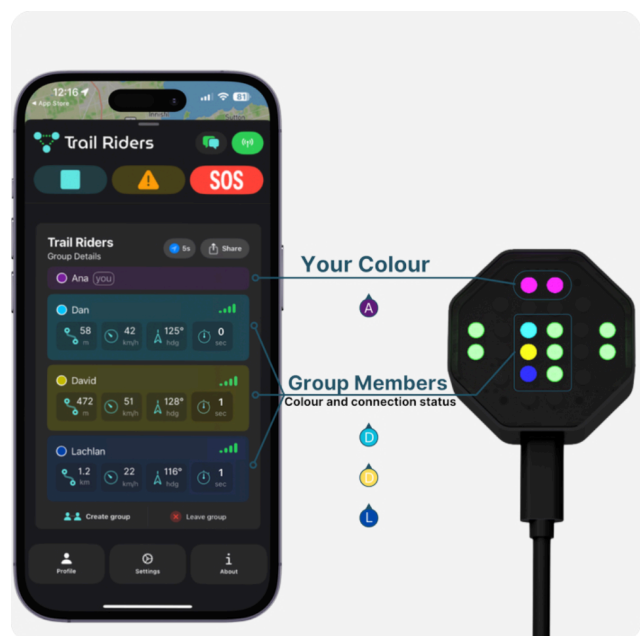


Figure 22: TraiLink Display Main Screen