

GroupTrack

Installation Guide — Version 2.4

March 2026 | Android | For Authorized Testers

GroupTrack is a Meshtastic-based off-grid convoy coordination app. No cellular required. No server. Everything works via low-power LoRa radio mesh. This guide covers APK installation for authorized testers on Android devices.

PART 1 — WHAT YOU NEED

REQUIREMENT	DETAIL
Android Device	Android 8.0 or later. Tablet recommended for best map visibility while riding.
Meshtastic Radio	SenseCAP T1000-E (recommended), T-Beam v2, or any Meshtastic LoRa device running firmware 2.6+.
Bluetooth	Required to pair Android device with the radio.
Storage	Minimum 500 MB free storage recommended for offline map tiles. 100 MB minimum for app only.
APK File	GroupTrack-V2.4-debug.apk — provided by the organizer via email or direct transfer.

PART 2 — ENABLE INSTALLATION FROM UNKNOWN SOURCES

Android blocks apps from outside the Google Play Store by default. You need to enable this once before installing GroupTrack.

Android 8.0 and Later (Most Devices)

- Open Settings on your Android device
- Go to Apps (or Apps & Notifications)
- Tap Special app access
- Tap Install unknown apps
- Find your email app or Files app in the list
- Toggle Allow from this source to ON

TIP: You only need to do this once. You can turn it back off after installation if preferred.

PART 3 — INSTALL THE APK

Step 1 — Get the APK File

The file GroupTrack-V2.4-debug.apk will be provided by the organizer. Transfer it to your Android device using any of these methods:

METHOD	INSTRUCTIONS
Email (Easiest)	Open the email on your Android device. Tap the GroupTrack-V2.4-debug.apk attachment to download it directly.
Google Drive	Upload the APK to Google Drive from your PC. Open the Drive app on your Android device and download it.
USB Cable	Connect your Android device to your PC. Copy the APK to the Downloads folder on the device.
OneDrive / Dropbox	Upload from PC, download via the app on your Android device.

Step 2 — Install the APK

- Open the Files app or Downloads app on your Android device
- Navigate to where you saved GroupTrack-V2.4-debug.apk
- Tap the file
- Android will show an Install screen — tap Install
- If Play Protect shows a warning, tap Install Anyway — this is expected for apps outside the Play Store
- Wait for installation to complete (10–30 seconds)
- Tap Done or Open when installation finishes

Installation Complete: GroupTrack will appear in your app list. Look for the GroupTrack icon. Proceed to Part 4 to pair your radio.

PART 4 — FIRST LAUNCH AND RADIO PAIRING

- Open GroupTrack from your app drawer
- The GroupTrack splash screen appears briefly, then the map loads as the home screen
- Turn on your Meshtastic radio
- Tap the connections icon at the top of the screen (person/antenna icon)
- Tap Scan for devices
- Select your radio from the list
- Wait for CONNECTED status — the status indicator turns green

INFO: If your radio is brand new or factory reset, the organizer must configure it using Apply Ride Info to Radio before the radio will communicate with other GroupTrack members. See the User Guide for full instructions.

PART 5 — VERSION 2.4 WHAT'S NEW

FEATURE	DESCRIPTION
Offline map tile download	Draw a rectangle on the map to download tiles for offline use. All 4 tile types (SAT, HYB, TOPO, RD) can be cached for field use without internet.
Location search	Search for a named area (city, park, trail system) before downloading. Map flies to center with a reference pin and crosshair lines. Up to 5 results shown.
Download progress chip	Live progress overlay on map during download: tile count, time remaining. Toast notifications on start and completion. Keep app open during download.
Online / Offline switch	Manual toggle in map settings to switch between streaming tiles (ONLINE) and local cache (LOCAL). Status shown in map header.
Fly radius control	Slider to control how close the map zooms when flying to a search result (1-10 miles).
Download size estimation	Before downloading, dialog shows area dimensions in miles, tile count, estimated MB, and tile source. 500MB ceiling enforced.
Single-boot radio config	Radio configuration applies in one reboot. Channel and PSK travel in the binary. No second stage required.
Auto-reconnect	Automatic Bluetooth disconnect/reconnect during radio reboot. No manual toggle required on most devices.
GroupTrack branding	App rebranded with GroupTrack launcher, splash screen, nav labels, and website reference.

TROUBLESHOOTING

PROBLEM	SOLUTION
No vehicles on map	Check radio is connected (green status). Verify all radios use same channel name and PSK.
Yellow lock icon on radio	Encryption not active. Run Apply Radio again — complete the process fully.
Radio does not reconnect	Toggle Bluetooth OFF then ON manually in Android notification shade. Wait 10 seconds.
Verify screen shows failures	Channel write incomplete. Run Apply Radio again.
Imported ride not in RIDE	Open GroupTrack menu — splash screen confirms import. If no splash,

tab	resend the ride.
Play Protect warning on install	Tap Install Anyway. Expected for APKs outside the Play Store.
Map tiles not loading online	Check internet connection. Online connection required for map tile display.
Map blank offline	No tiles downloaded for this area. Download tiles while online before going to field.
Download blocked — too large	Reduce the selected area. 500MB ceiling enforced per download.
Location search no results	Add state (e.g. 'Zion UT'). Use coordinates for precise locations: 37.44, -113.25.