MeshCore Setup Guide

From unboxing to sending your first message. Setup is usually quick once your device is charged.

What you need before starting

- A MeshCore-compatible LoRa device, fully charged
- A smartphone (Android or iOS)
- The **MeshCore companion app** (free). The official clients by Liam Cottle are linked from **app.meshcore.nz** (web app) and **files.liamcottle.net/MeshCore** (iOS, Android APK, Windows and Mac). Verify you are installing the official client before searching an app store, as several MeshCore-related apps exist.

Step 1 - Charge your device

Connect via USB and charge fully. Most devices show a red LED while charging and green or blue when complete. Initial charge takes 2-3 hours.

Step 2 - Power on

Hold the power button for 2-3 seconds until the screen activates. Bluetooth typically starts automatically.

Step 3 - Pair with your phone

1. Open the MeshCore app
2. Tap **Add Device** or the + icon
3. Select your device from the list (shown as "MeshCore_XXXX")
4. Wait 10-20 seconds for pairing to complete

Step 4 - Select the correct preset

This is the most critical step. The preset bundles the radio settings (frequency, bandwidth, spreading factor, coding rate). Every node must share the same radio settings just to hear each other at all - the wrong preset means you cannot reach anyone. Note that the preset is separate from a channel: to talk on a private (shared-key) channel you also need that channel's matching key, in addition to the matching radio settings.

- Navigate to **Choose Preset** in the app
- Select **USA/Canada (Recommended)** (910.525 MHz, SF7, BW 62.5 kHz, CR5)
- Set a recognizable display name for your node

Step 5 - Test your connection

Open the **Public channel**. You are now on the network. Any nearby nodes will appear, and you can send and receive messages.

Tips for better performance

- Test outdoors first - LoRa range through walls is significantly reduced
- Elevation matters enormously - even a second-floor window vs. ground level makes a measurable difference
- Leave default radio settings alone until you understand what they control
- Keep firmware updated for the latest improvements

Revision #3
Created 2026-05-03 01:31:45 UTC by Mesh America Admin
Updated 2026-06-09 14:35:38 UTC by Mesh America Admin