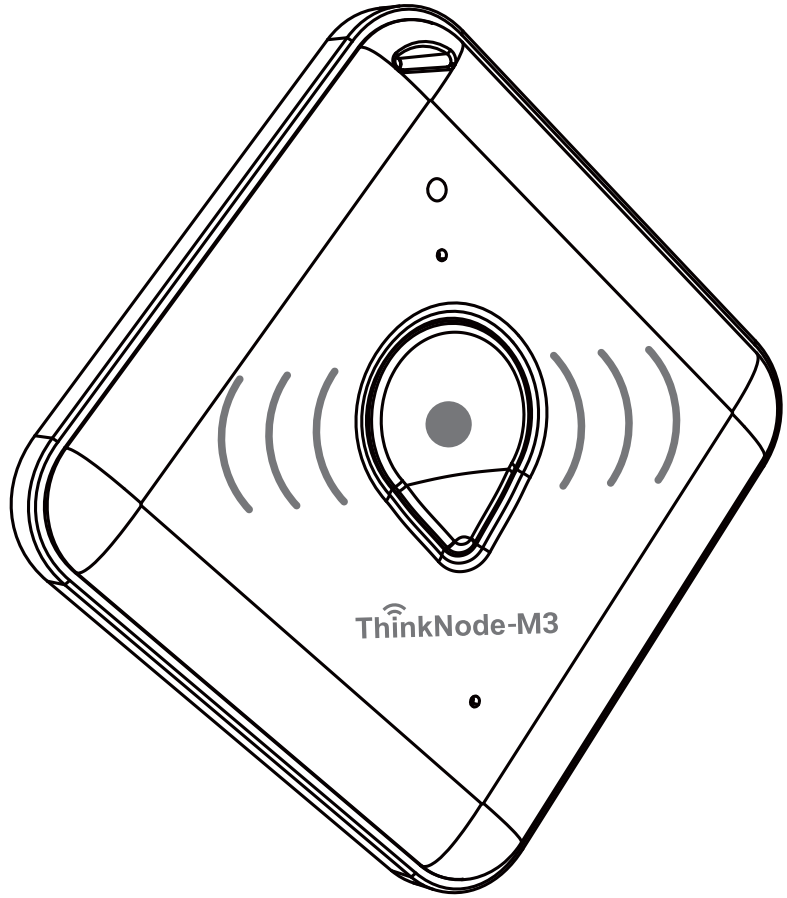
Quick Start Guide

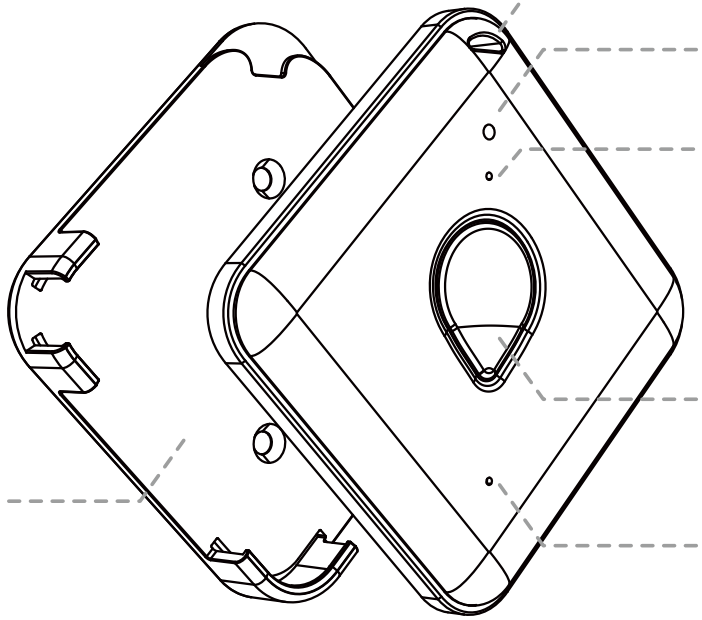
for ThinkNode-M3(Meshtastic)



FCC ID: 2BDNA-TNM3-ELE

Made in China

Device Part



Lanyard hole

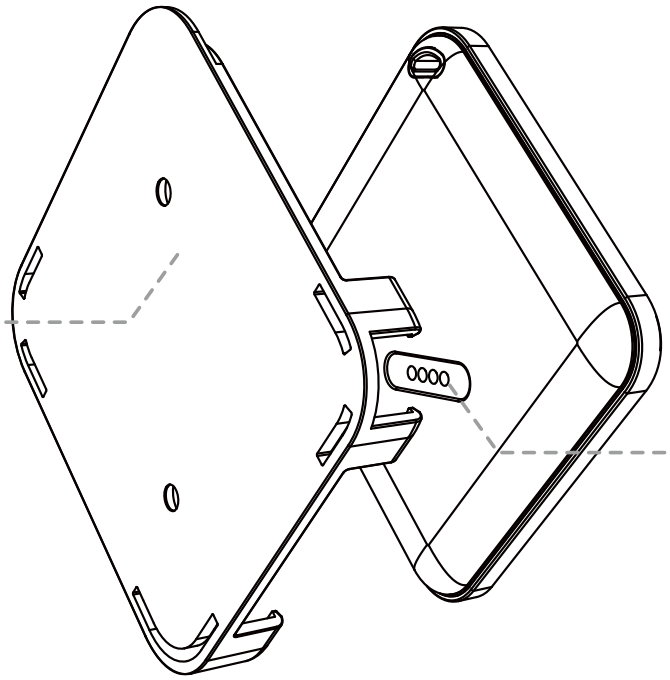
Indicator light

Temperature and humidity sensor

Button

Base

Buzzer



Double-sided adhesive tape position

Magnetic charging port

Double-sided adhesive tape on base enables mounting in vehicles, on desktops, or outdoors.

Parameter

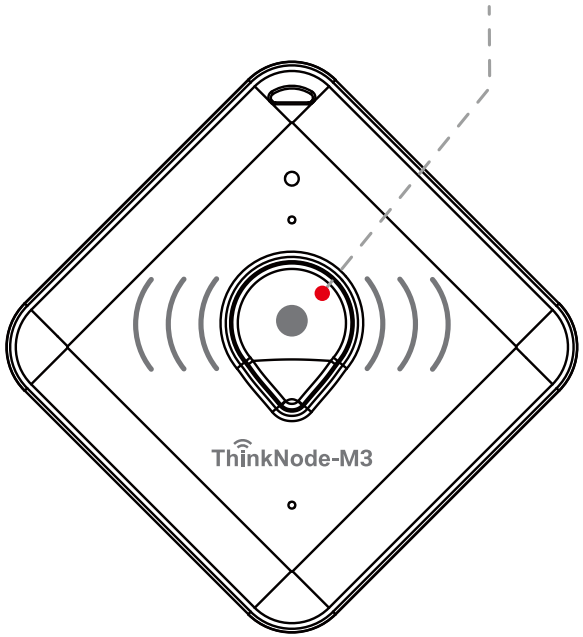
Product Name	ThinkNode-M3
Dimensions	64mm*64mm*10mm(Mounting base not included)
Base Dimensions	68mm*68mm*10.2mm
Material	PC+ABS
Net Weight	38.5g
Main Control IC	nRF52840
LoRa Chip	LR1110
LoRa Frequency Band	EU868, US915
Antenna	Internal Onboard Antenna(GNSS/LoRa/BLE)
Bluetooth	Bluetooth 5.0
Battery Type	Lithium Battery
Battery Capacity	3.7V, 770mAh
Operating Temperature	-20°C-60°C
Power Input	5V ⎓ 0.5A
Protection Rating	IP66
Sensors	Temperature/humidity sensor, buzzer
Range	Open field: up to 10 km (915 MHz), up to 7 km (868 MHz)
Certifications	FCC, CE

Function Button

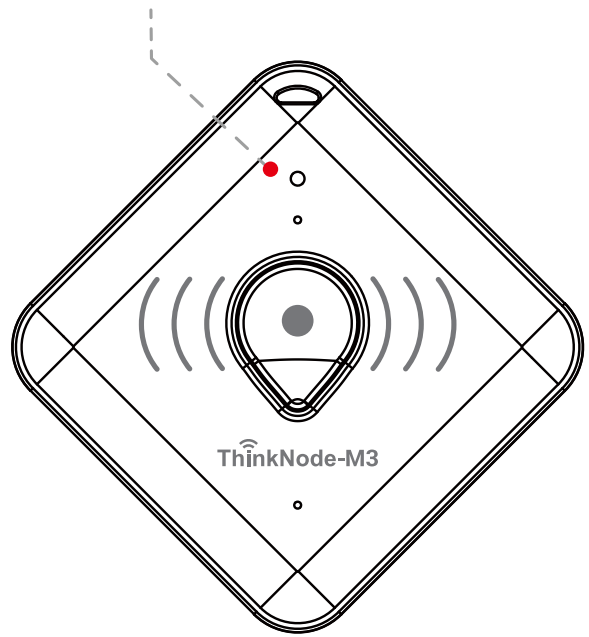
Power On/Off	**Power On**: Press button once. Red LED stays on for 5s, followed by 3 beeps.
	Power Off: Press and hold button for 5s until 4 beeps sound, then release. Device beeps 3 times and powers off.
Bluetooth Pairing	• Upon power-on, blue LED flashes slowly for pairing mode, then turns off after 6 flashes. • During pairing (password entry), blue LED flashes for 1 minute. • When paired successfully, blue LED stays on for 30s. • When disconnected, blue LED flashes 8 times over 30s. • When re-pairing after deleting from device list, blue LED flashes for 1 minute.
LoRa Data Transmission	• **Receiving**: 15s beep with green LED flashing 8 times slowly. Press button once to mute beeper (1 beep confirms). Note: Green LED only activates after factory reset via Meshtastic app. • **Sending**: No beeper or LED indication.
Charging Status	• Device powers on automatically when connected to power. • Red LED flashes while charging. • Red LED stays on when fully charged.
Firmware Flash Mode	• Press and hold button for 15-20s to enter flash mode. Device auto-restarts after successful flash. • To exit flash mode without flashing, press and hold button for 10s.
Low Power Mode	Press and hold button for 5s to enter low power mode (25±5μA). Device remains in this mode after subsequent power cycles. Note: Devices ship in low power mode by default.
GPS	Press button 3 times to toggle GPS on/off.
Factory Reset	Factory reset available through Meshtastic app settings.

Software Configuration

1. Press button once. Red LED stays on for 5s, followed by 3 beeps to power on the device.



2. Blue LED flashes slowly for Bluetooth pairing mode (turns off after 6 flashes).



3. Download the Meshtastic app as shown below.

Download the ***Meshtastic*** APP for Mobile

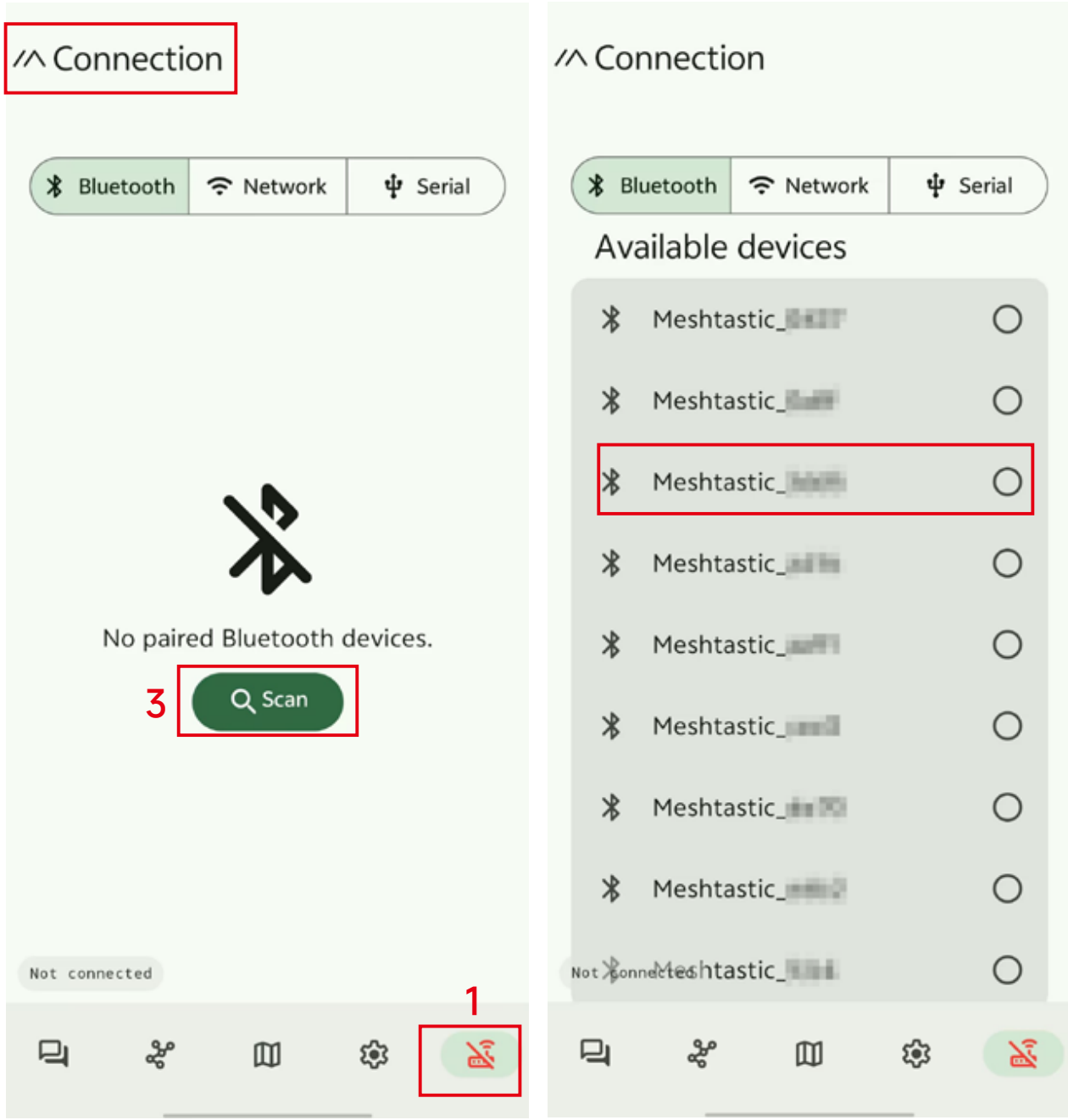
Meshtastic

Available on iOS and Android

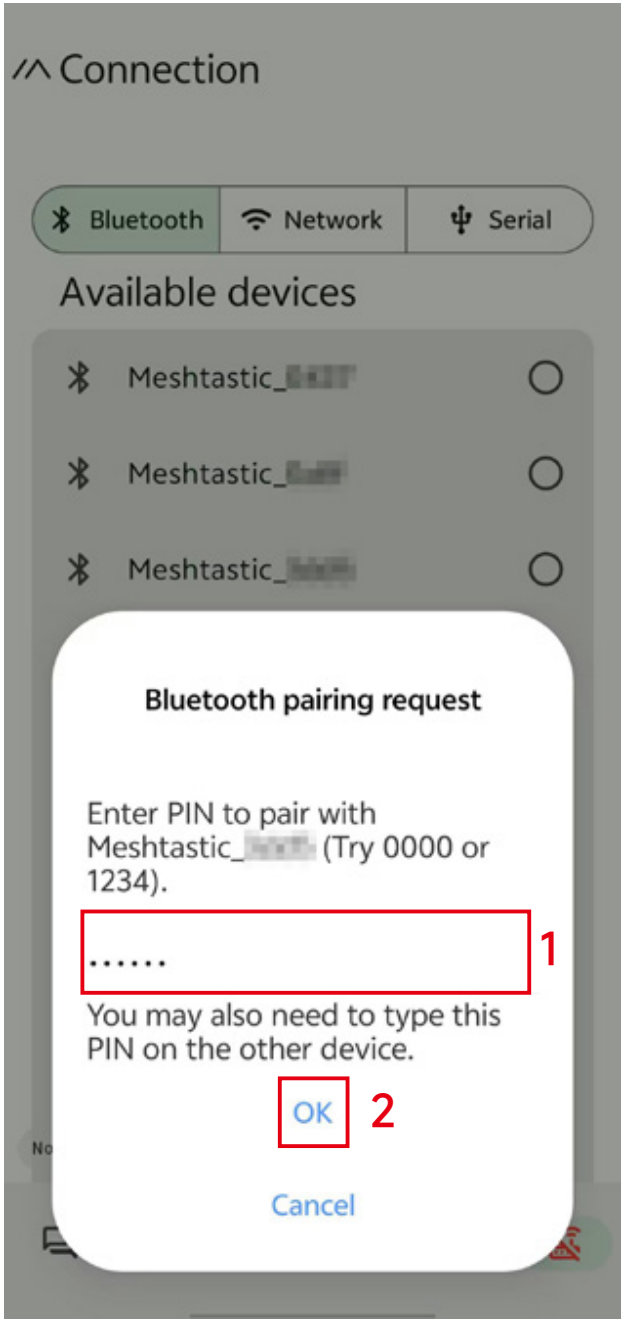
Download on the App Store

GET IT ON Google Play

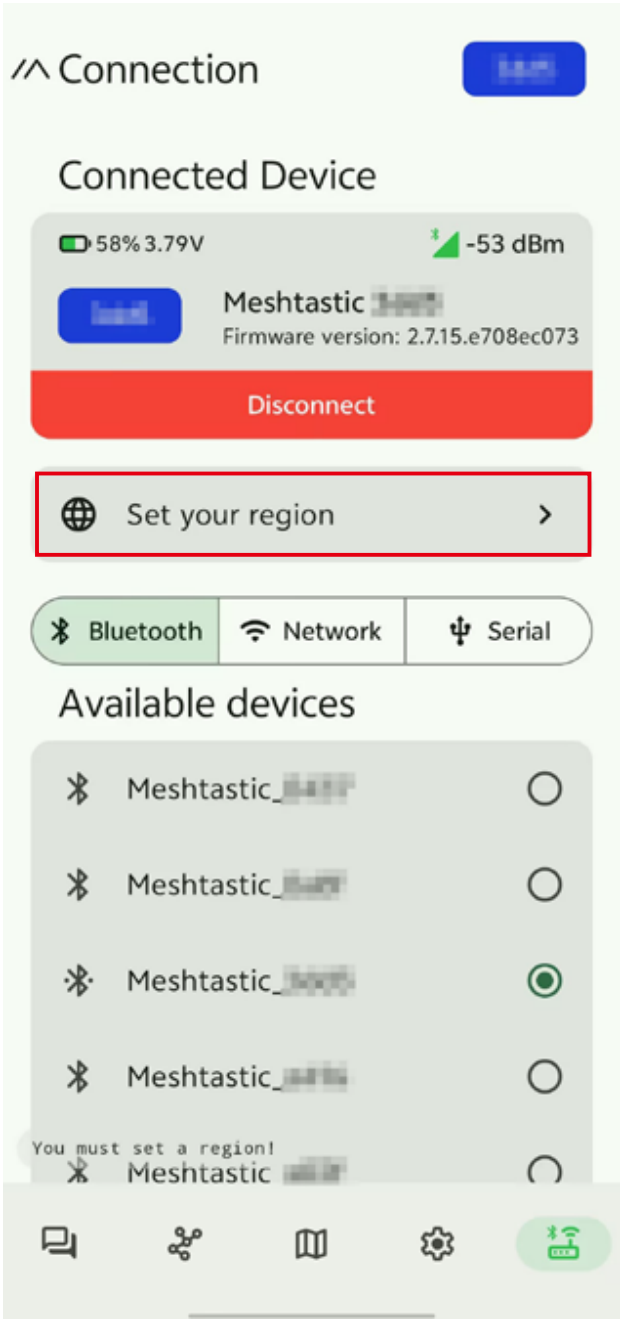
4. Open the app, go to the Connection screen, and tap "**Scan**." Locate your device as **Meshtastic_xxxx** (the last 4 digits vary per device—check the MAC address on the back label; e.g., if MAC starts with 12:34, the Bluetooth name is Meshtastic_3412). Tap to pair.



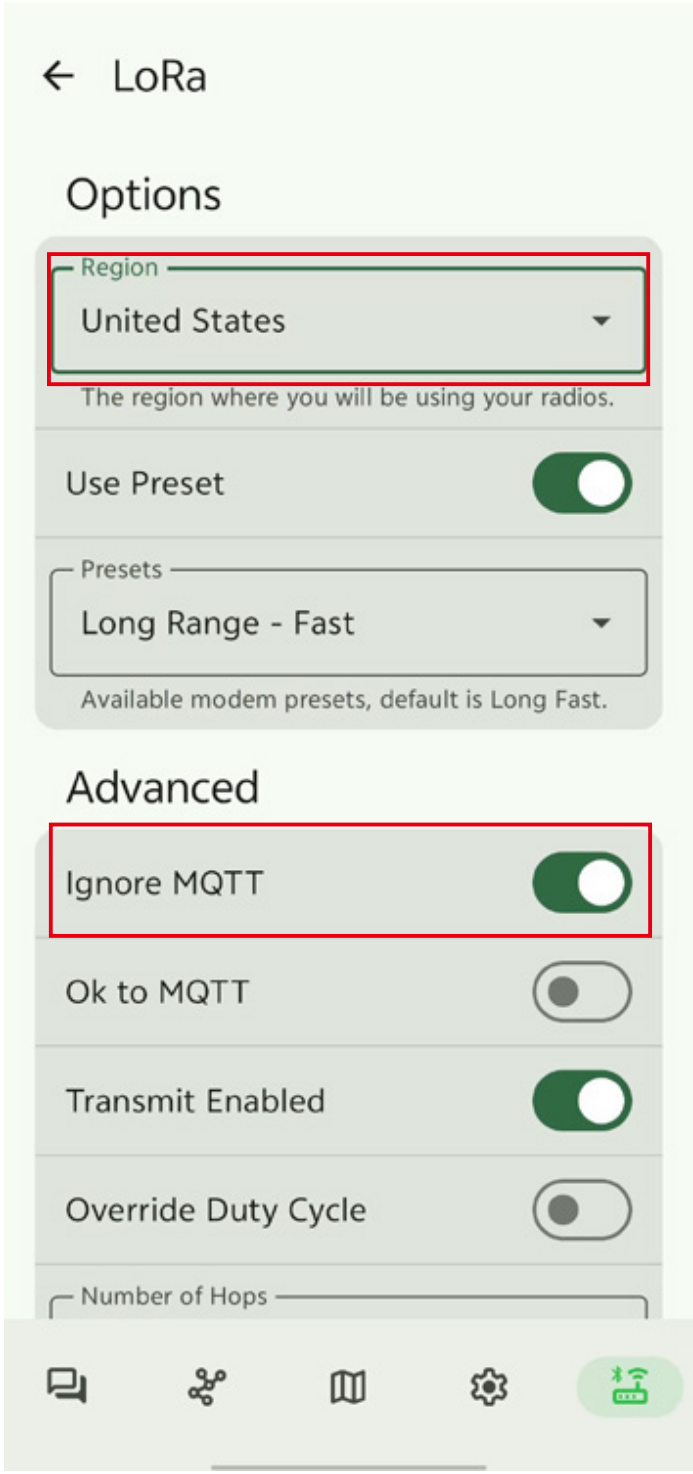
5. Enter PIN code **123456** and tap "OK." (Blue LED flashes during pairing for 1 minute; stays on for 30s once paired successfully.)



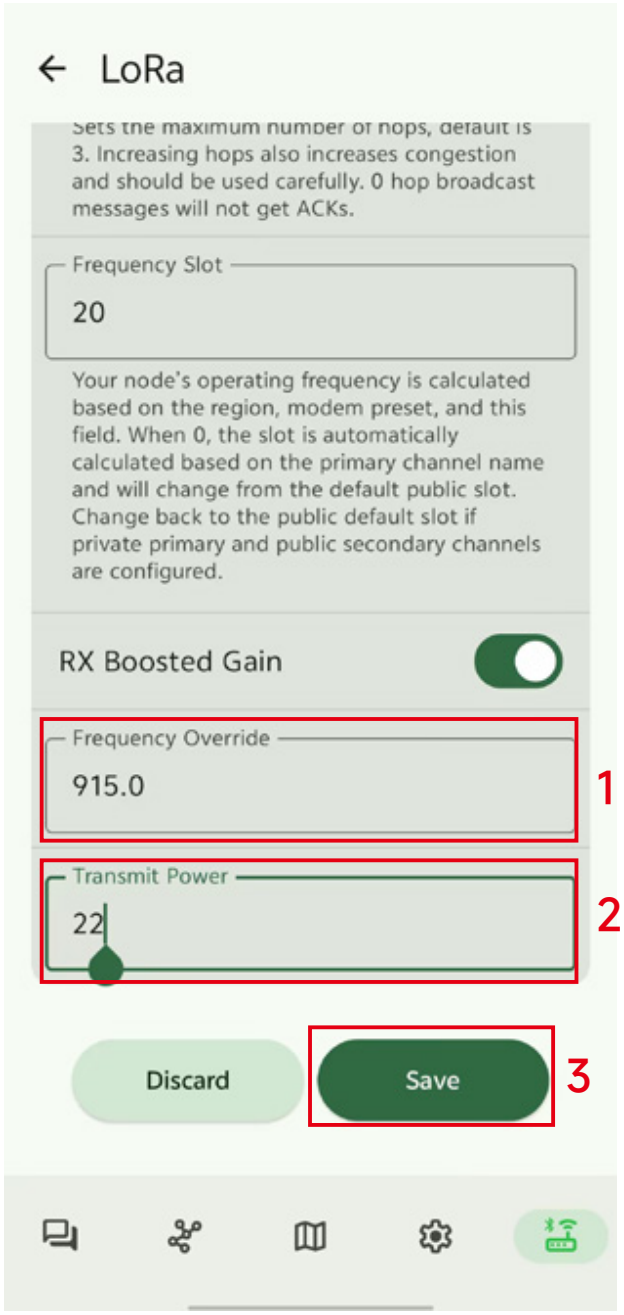
6. After pairing, tap "**Set your region**" to access LoRa configuration.

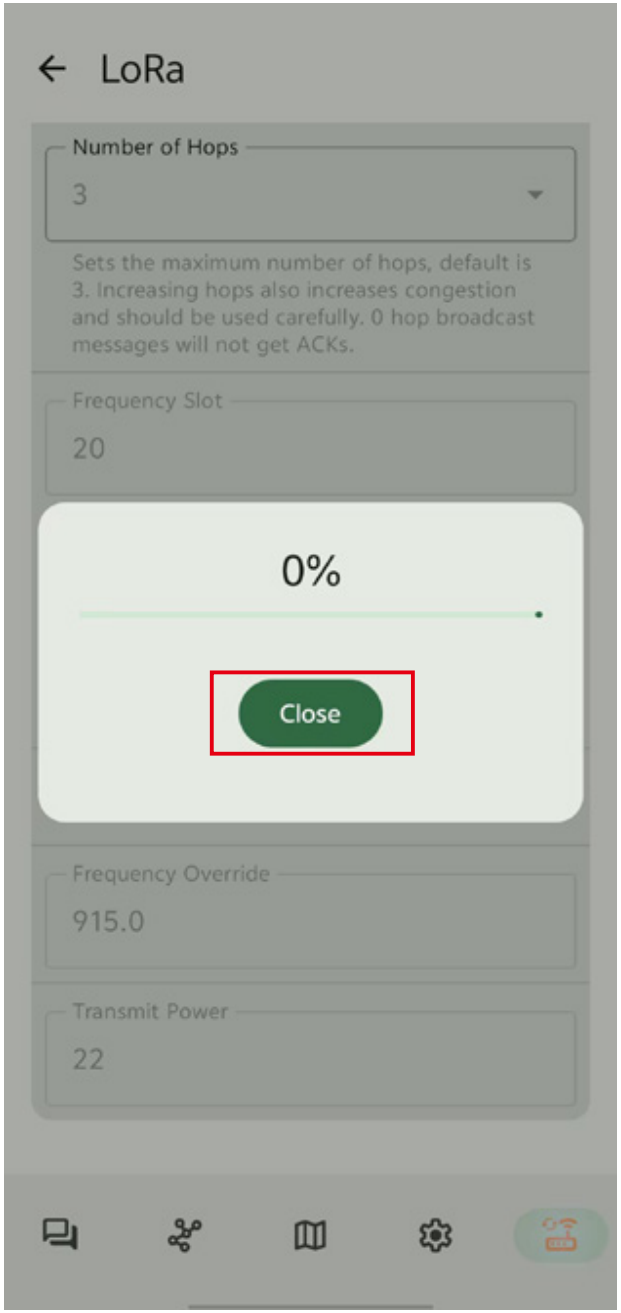


7. In the LoRa settings, set "**Region**" to your country/region (e.g., "United States"), then enable "**Ignore MQTT**."

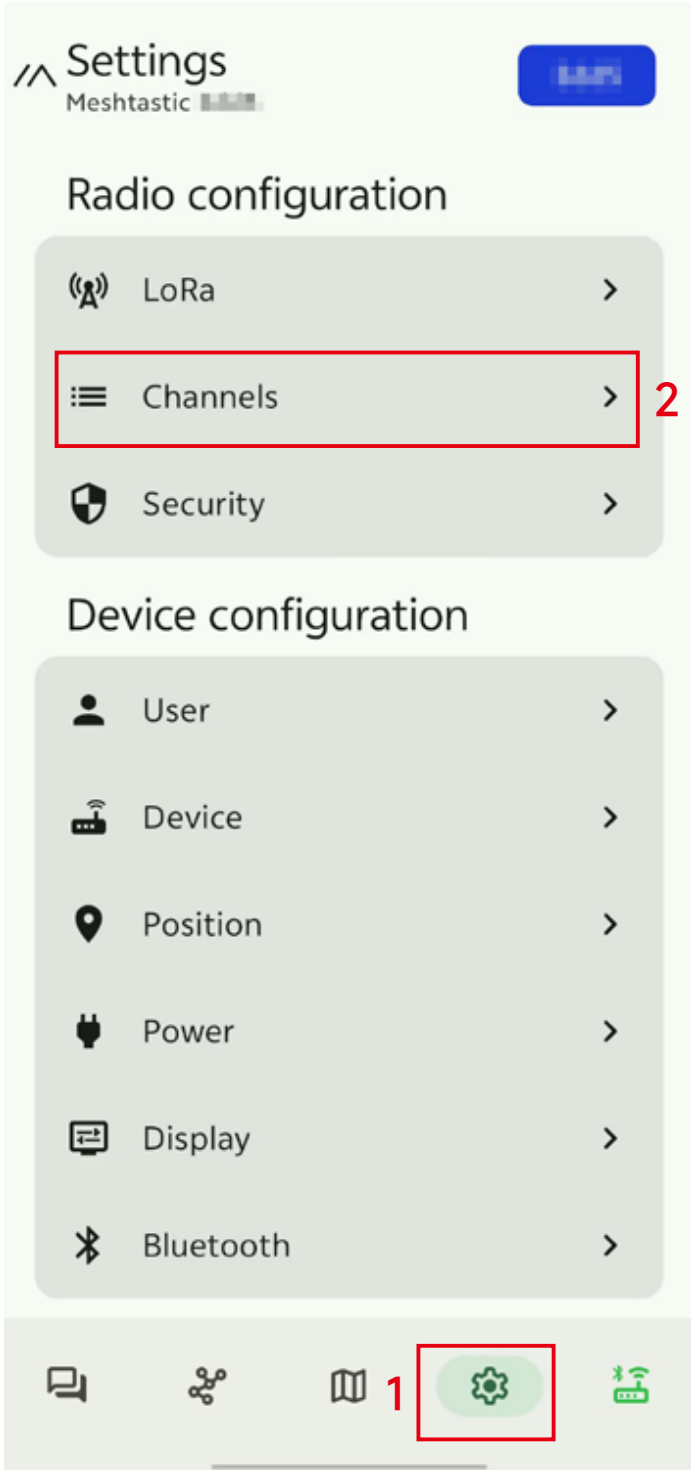


8. Scroll down and set "**Frequency Override**" to the frequency band supported in your country/region (e.g., **915.0 MHz**). Set "**Transmit Power**" to a maximum of 22 (or any integer ≤22). Tap "**Save**." The device will restart with 3 beeps—tap "**Close**" when done.

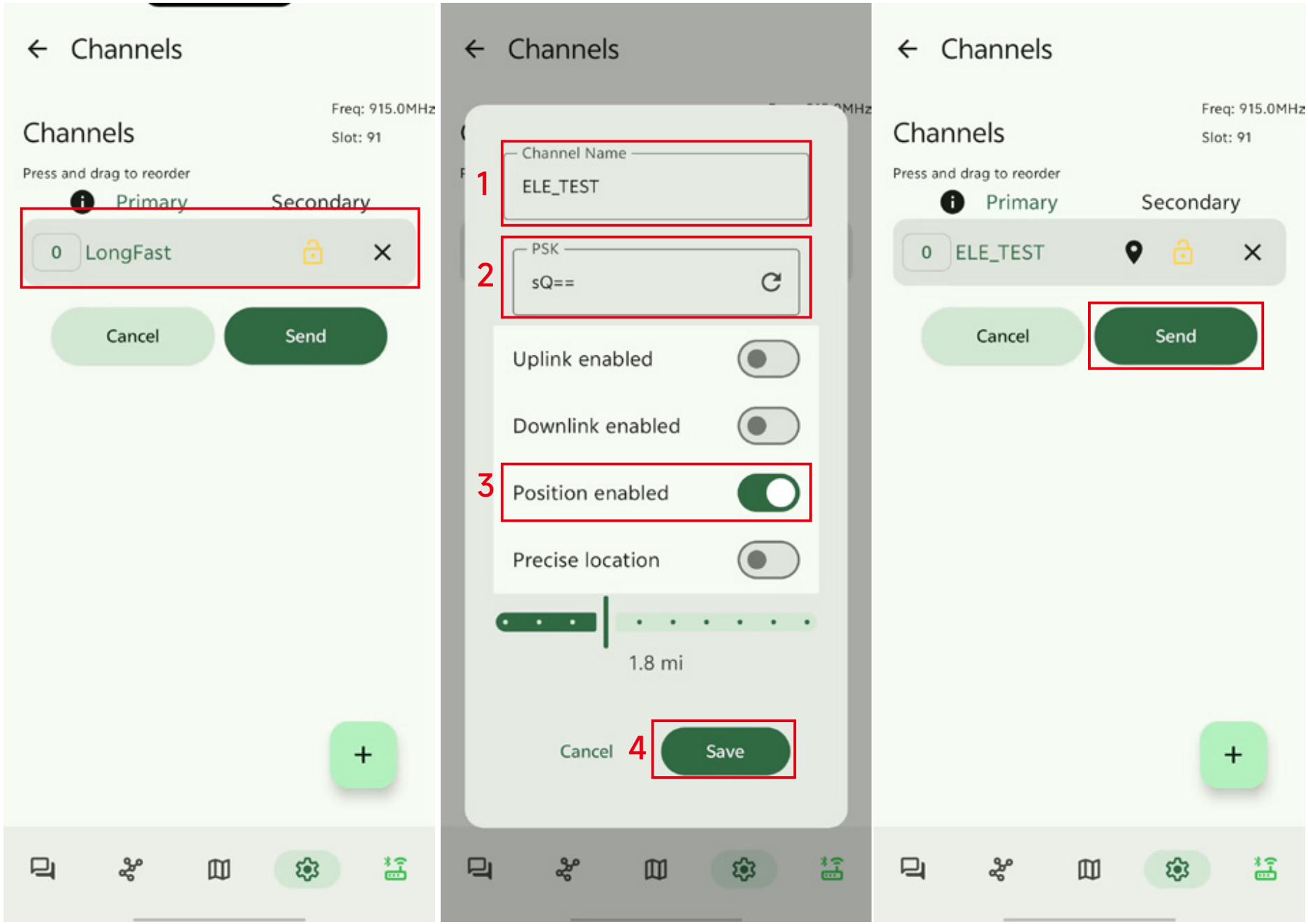




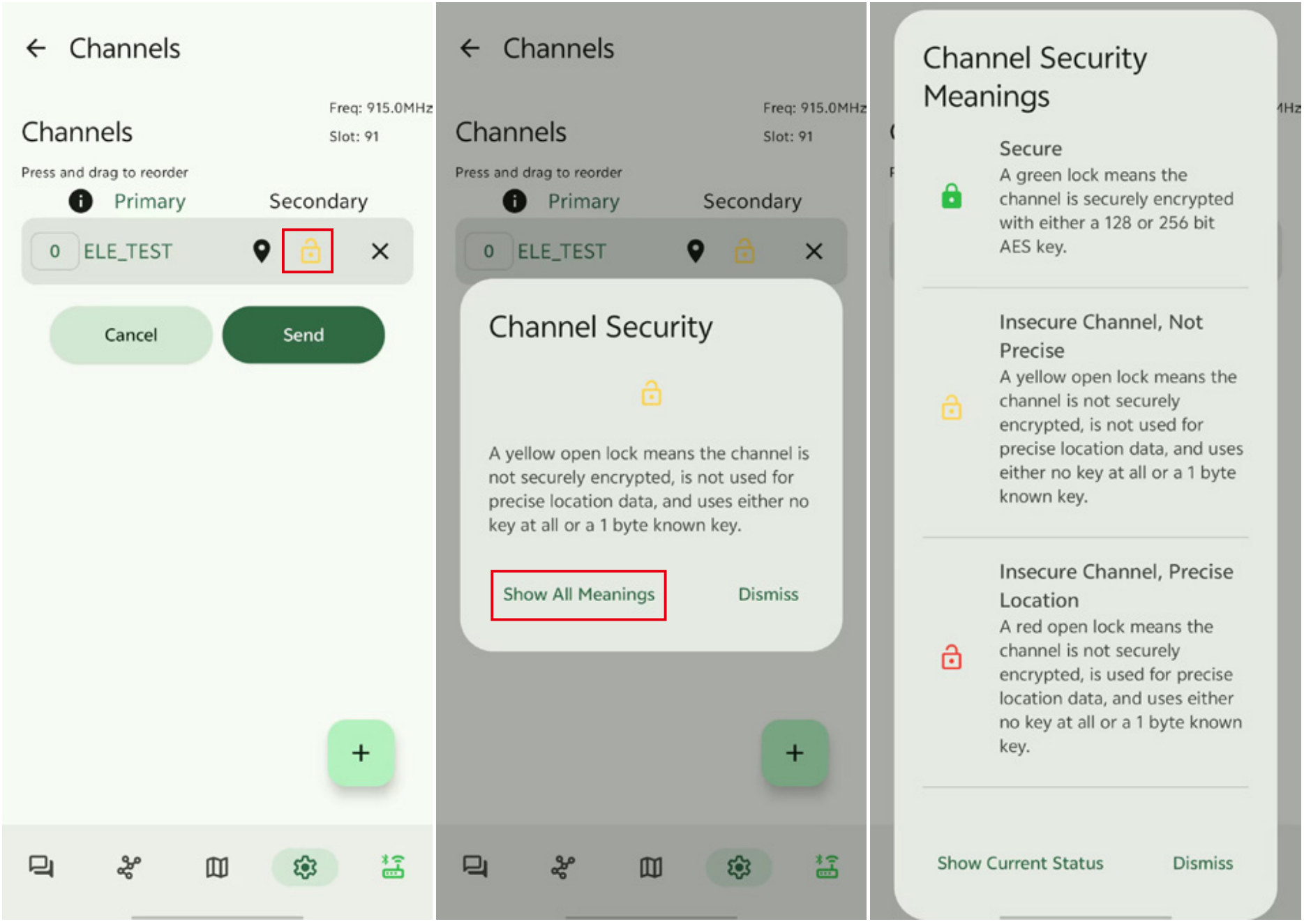
9. Tap the gear icon to enter "**Settings**," then select "**Channels**."



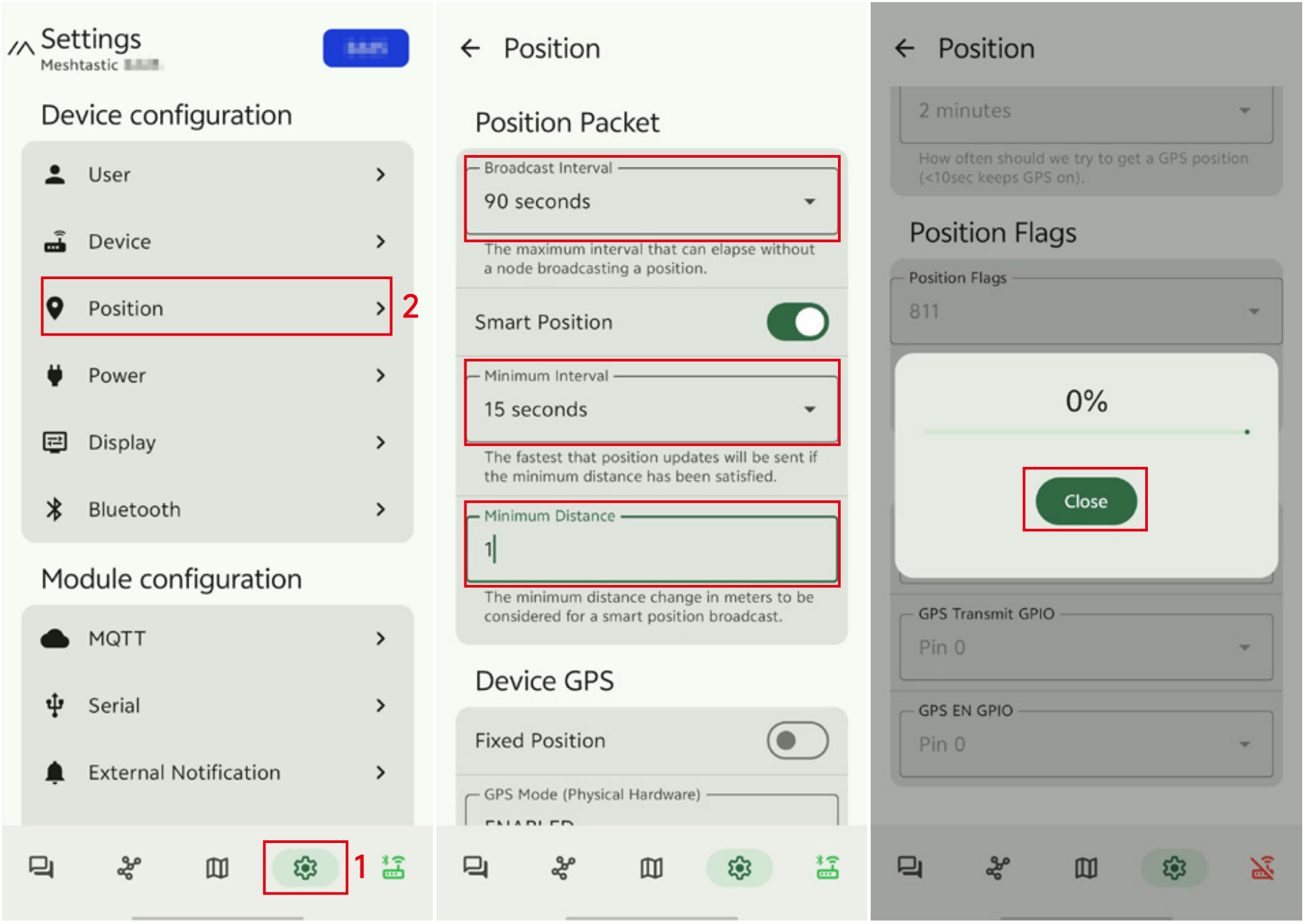
10. Tap "**LongFast**" to access channel settings. Set "**Channel Name**" (e.g., "ELE_TEST") and "**PSK**" (e.g., "sQ=="—case-sensitive, or tap the icon to generate randomly). Enable "**Position enabled**" and keep other defaults. Tap "**Save**," then tap "**Send**" as shown.



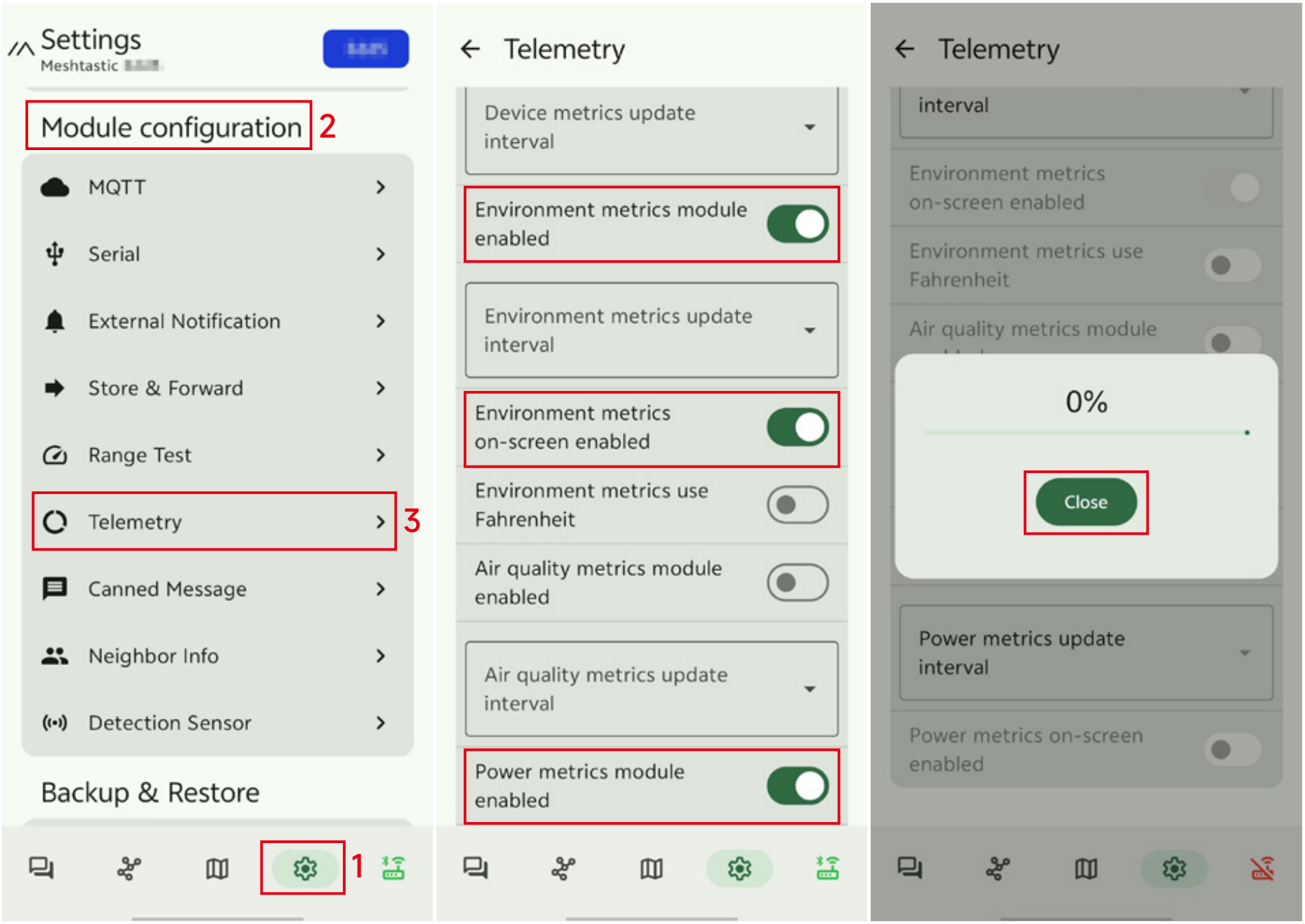
11. Tap the icon shown to view "**Channel Security Meanings.**" Higher encryption levels provide greater channel security.



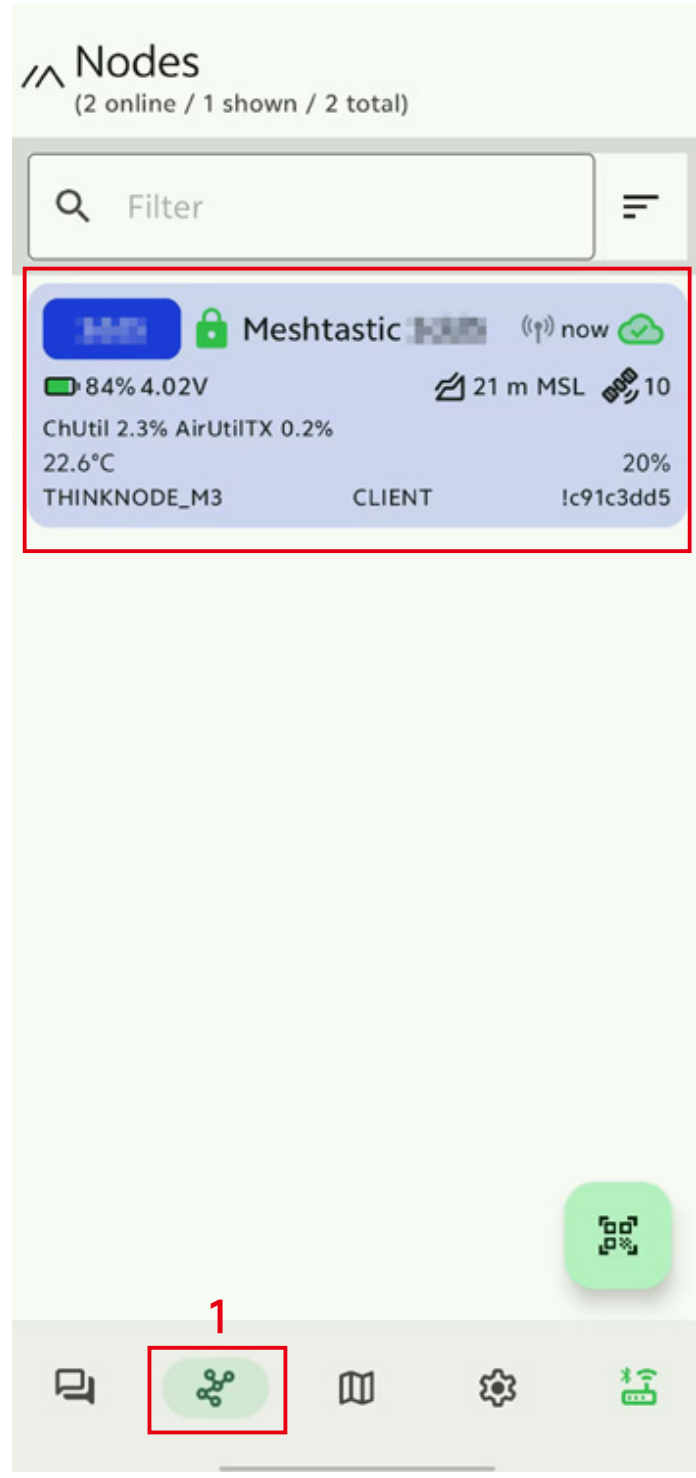
12. Return to Settings and select "**Position.**" Set "Broadcast Interval" to **90 seconds**, "Minimum Interval" to **15 seconds**, and "**Minimum Distance**" to **1**. Keep other defaults and tap "**Save.**" The device will restart with 3 beeps—tap "**Close**" when done.



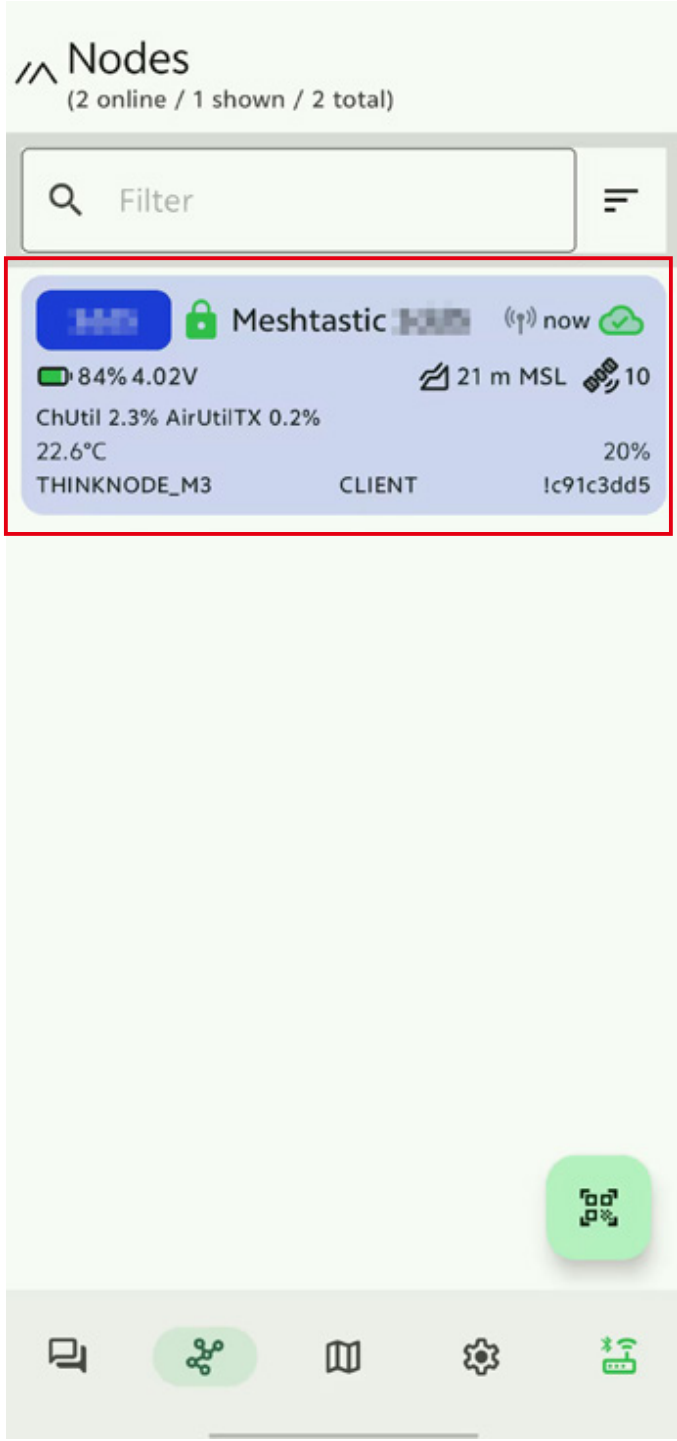
13. Return to Settings, scroll down to "**Module configuration**," and select "**Telemetry**" as shown. Enable the following 3 toggles and tap "**Save**." The device will restart with 3 beeps—tap "**Close**" when done.

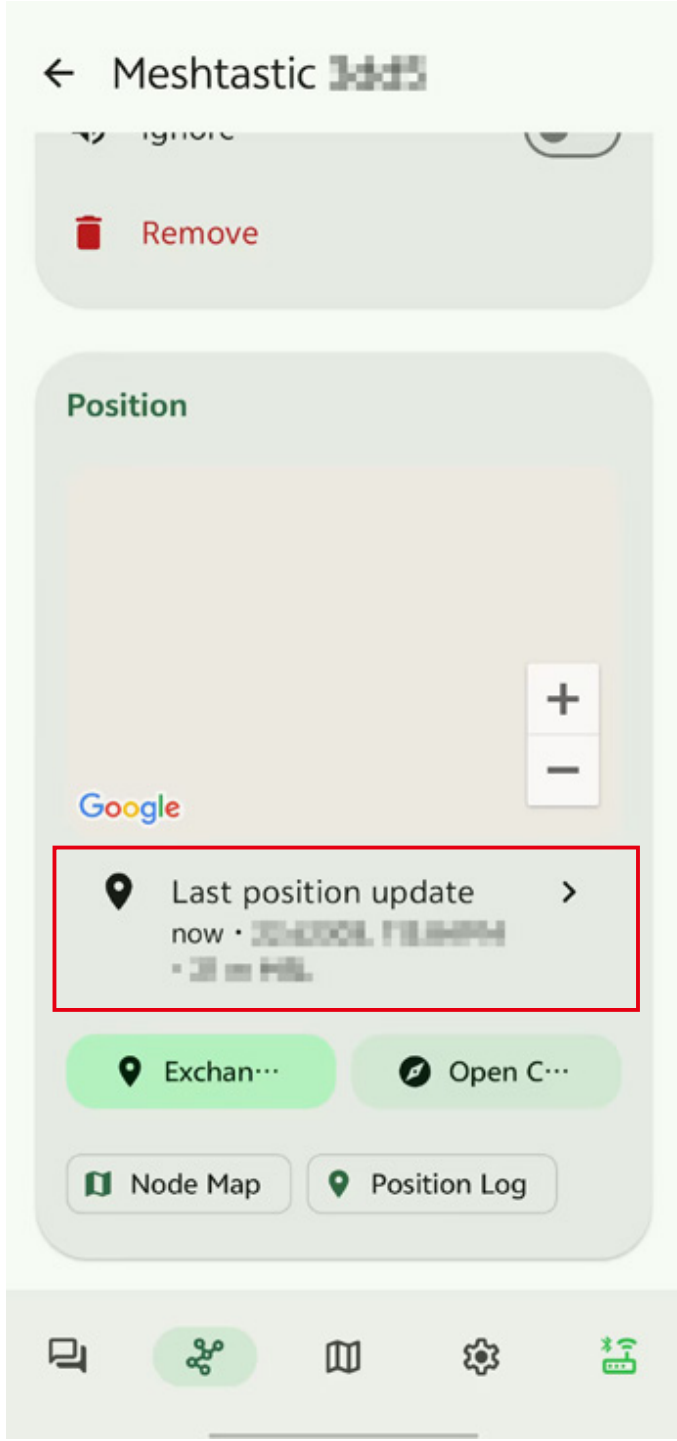


14. Tap the icon shown to enter the "**Nodes**" screen. Here you can view device information including battery level, voltage, ambient temperature, and satellite count. (If not displayed immediately, wait a moment for the app to initialize.)



15. Tap to enter the device details screen and scroll down to "**Position**" to view “**Last position update**”.

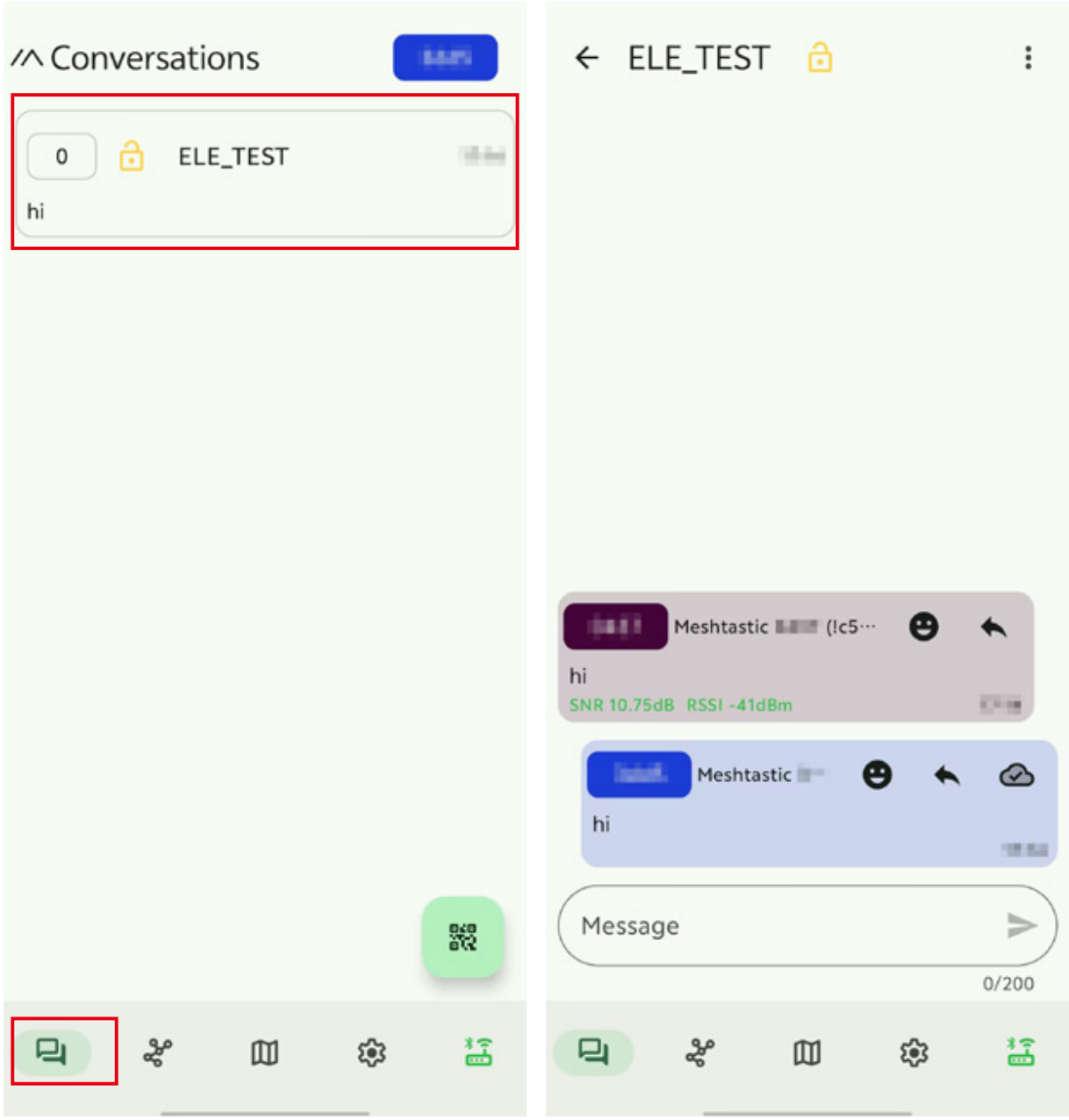




Communication Setup

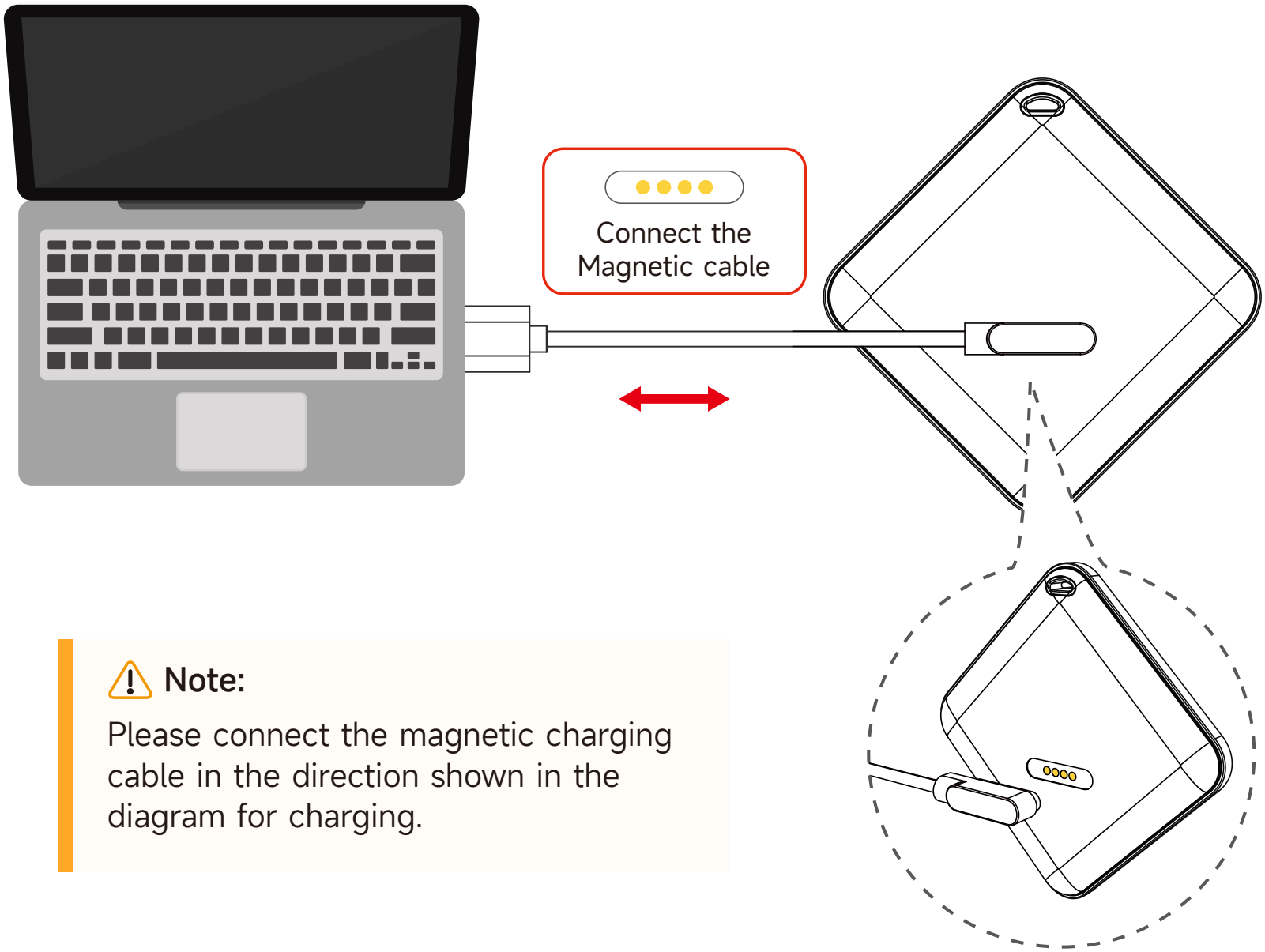
1. Using another phone, connect to a second M3 device and repeat the software configuration steps.
Important: Channel name, PSK, and frequency must match on both devices for communication.

2. Switch to the chat screen and enter the configured channel. Devices can now exchange messages. When receiving messages, the device beeps for 15s with green LED flashing 8 times slowly. (Note: Green LED only activates after factory reset via Meshtastic app.)



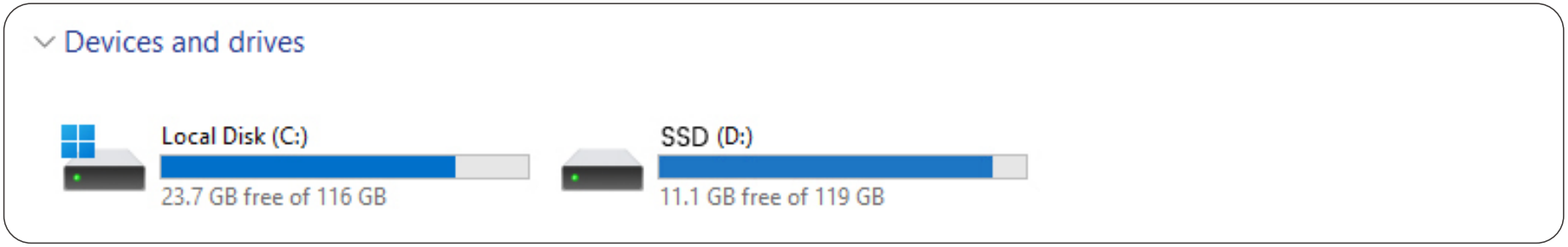
Firmware Flashing

1. Connect the ThinkNode-M3 charging cable: magnetic end to the device's magnetic charging port, USB-A end to the computer.

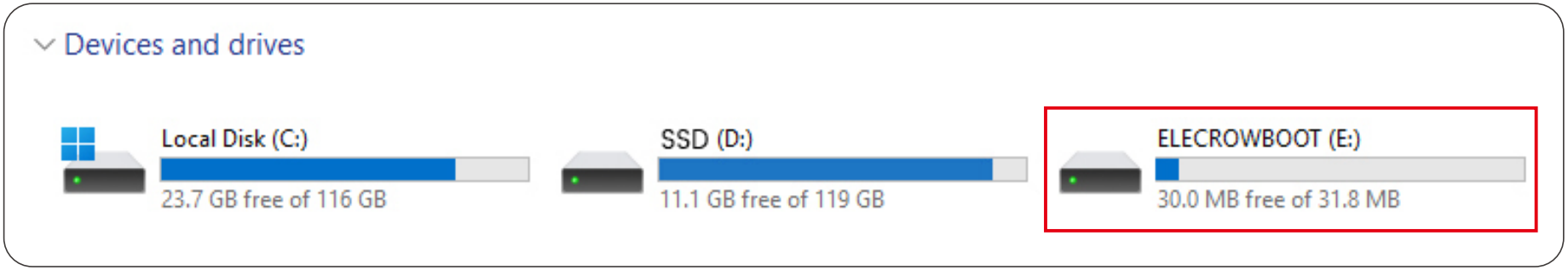


> ⚠ **Note:**
>
> Please connect the magnetic charging cable in the direction shown in the diagram for charging.

2. Open "This PC" in File Explorer on your computer.



3. Press and hold the device button for 15-20s until a drive named "**ELECROW_BOOT**" appears. Copy the firmware file downloaded from the Meshtastic website into this drive. The device will restart automatically and the drive will disappear once flashing is complete.



Package Contents

- ThinkNode-M3 x1
- Magnetic charging cable × 1
- Lanyard × 1
- Screw kit × 1
- Double-sided adhesive tape × 1
- Base x 1
- Liner x 1
- Box x 1
- User manual × 1

FCC Caution

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.