ELECROW ThinkNode M1

ELECROW ThinkNode M1 LoRa Meshtastic Transceiver User Manual

Product Overview

The ELECROW ThinkNode M1 is a high-performance LoRa Meshtastic transceiver designed for reliable, long-range, off-grid communication. Equipped with an nRF52840 main processor, SX1262 LoRa module (915MHz), and built-in GPS, it supports the Meshtastic protocol for stable data transmission. Its 1.54-inch E-Ink display ensures clear visibility in various lighting conditions, while the 1200mAh battery provides extended operational time. This device is ideal for outdoor adventures, emergency communications, community networking, and fleet management.

Image: ELECROW ThinkNode M1 device with its main processor (nRF52840), LoRa transceiver (SX1262 915MHz), Bluetooth 5.4, 1.54-inch E-Ink display, 1200mAh battery, and various functions like GPS, EPD display, RTC, USB2.0, and buzzer.

Key Features:

- **Reliable LoRa Communication:** Utilizes nRF52840 and SX1262 LoRa modules with a 915MHz antenna, supporting Meshtastic for stable long-range transmission.
- **High-Precision GPS Navigation:** Built-in GPS supports GPS, GLONASS, BeiDou, and QZSS systems for accurate positioning and location sharing.
- **1.54-inch E-Ink Display:** Provides clear status, node info, and GPS data visibility even under sunlight, with low power consumption.
- **Long-Lasting Battery Life:** Integrated 1200mAh rechargeable battery offers over 48 hours of use for extended outdoor activities.
- **Easy Setup & Smart Control:** Connects via Bluetooth 5 using the Meshtastic app for configuration, messaging, and map viewing.

Package Contents

- 1x ThinkNode M1 Device

- 1x USB-A to Type-C Cable
- 1x Rubber Stick Antenna for LoRa
- 1x User Manual

Image: The ThinkNode M1 package contents, showing the device, a rubber stick antenna, a USB-A to Type-C cable, and the user manual.

Setup Guide

1. Initial Device Assembly

1. **Attach the Antenna:** Carefully screw the provided rubber stick antenna into the SMA connector on top of the ThinkNode M1 device. Ensure it is finger-tight.
2. **Charge the Device:** Connect the ThinkNode M1 to a power source using the supplied USB-A to Type-C cable. The red indicator light will flash while charging and remain solid when fully charged.

2. Power On/Off

- **Power On:** Rotate the black knob on the side of the device clockwise until you hear a click. The E-Ink screen will light up and display status information.
- **Power Off:** Rotate the black knob counter-clockwise until you hear a click. The device will power off.

3. Meshtastic App Installation

Download the official Meshtastic app from your device's app store (iOS App Store or Android Play Store) or from the official Meshtastic website. Grant necessary Bluetooth permissions.

Video: Introduction to ThinkNode M1 Device for LoRa Meshtastic. This video provides a visual guide to the initial setup and features of the ThinkNode M1 device.

Operating Instructions

1. GPS Functionality

- **GPS Toggle Switch:** The GPS toggle switch has clear operation markings. Toggle it upward to turn on the GPS function and downward to turn it off.

2. Function Button Operations

- **Single Press:** Sends a temporary PING signal of the device's current location via the network.
- **Double Press:** Turns the device's front light on or off to cope with dim environments.
- **Triple Press:** Immediately triggers the SOS alarm function. The device's buzzer will sound an alarm, and the indicator light will flash alternately in red and blue.
- **Long Press:** Activates the low-power sleep mode, where the red light turns off. To exit sleep mode, press the function button once or use a pin to trigger the reset button.

3. Page Switch Button

- The page turning button is used to switch the display pages on the screen, facilitating the viewing of device data and status from different dimensions.

4. Backlight Adjustment

- You can flexibly adjust the brightness of the display's front light by rotating the black knob on the body to adapt to viewing needs under different light conditions.

Video: How to use Meshtastic with the ThinkNode M1. This video demonstrates the various button functions and app connectivity for the ThinkNode M1.

Troubleshooting

Why ThinkNode M1 has no GPS signal?

1. Ensure the GPS switch is turned on.
2. The device must be placed outdoors to acquire a GPS signal.
3. Update your device to the latest firmware (both stable and unstable) and try again.
4. If settings in the app might be incorrect, try restoring factory settings in the app, then turn on the GPS switch on the device.

If you encounter any further problems or the GPS signal issue is still not resolved, please contact customer support.

Technical Specifications

Feature	Specification
Main Processor	nRF52840
LoRa Transceiver	SX1262 (915MHz)
Display	1.54 Inches E-Ink (200x200 resolution)
Battery Capacity	1200mAh Lithium Polymer
Average Battery Life	48 Hours
GPS Support	GPS, GLONASS, BeiDou, QZSS
Connectivity	Bluetooth 5.4, LoRa
Dimensions	1.9 x 3.2 x 0.9 inches
Item Weight	2.88 ounces

Warranty and Support

ELECROW products are covered by a limited warranty against defects in materials and workmanship. For detailed warranty information, technical support, or service inquiries, please visit the official ELECROW website or contact our customer service team. Please retain your proof of purchase for warranty claims.