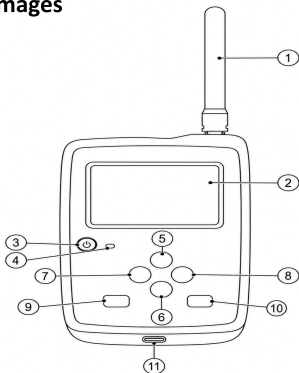


# **Radioddity Nodara User Manual**

**English**

## I. Product Images



## II. Appearance

### 1: Antenna

- Professional 50  $\Omega$  antenna.

### 2: E-Ink Display

### 3: Power Button

### 4: Indicator Light:

- Red: Charging or power-off status;
- Green: Fully charged or powered-on status;
- Blue: Bluetooth pairing status.

### 5: Up Button

**6:Down Button**

**7:Left Button**

**8:Right Button**

**9: A Button**

**10: B Button**

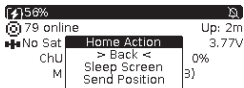
**11: USB-C Charging Port**

## III. Screen Display Guide

Use the left and right buttons to switch pages. Press B (Enter) to open the menu for the current page. Press A (Fn) to turn off the screen or cancel an operation. After you switch pages, the navigation bar appears briefly at the bottom; the highlighted icon indicates the current page. The screenshots below show the device's actual display and are presented in page order.



Home Screen



Press B to open Home Action

### 1. Home Screen

The overview page displayed after startup.

The top shows the battery level and time. The page also shows the number of online nodes, uptime (Up), GPS status (No Sats / No Lock / N sats / GPS off), battery voltage, channel utilization (ChUtil), and the device's long and short names.

When Bluetooth is off, BT off appears on the right. Use the left and right buttons to switch pages. Press Up or Down to open the preset message list; messages are broadcast on the primary channel. Press B to open Home Action: Back, Sleep Screen (turn off the screen), and Send Position (broadcast the position when GPS is on; otherwise, send Node Info).

56% Channel Message    
 Pri Ch: Long\_fast  
 0s ago from 11c0  
 de



Channel Message Page

56% Channel Message    
 Pri Ch: L Channel Message  
 0s ago fr  
 de

> Back <  
 Select Channel  
 Send Preset  
 Del This  
 Del All

Channel Message Menu

56% Channel Message    
 Pri Ch: Long\_fast  
 0s ago from 11c0  
 de

Select Channel  
 > Pri Ch: Long\_fast <

Select Channel

To: #LongFast  
 > [Select Destination]  
 [- Free Text -]  
 Hi  
 Bye  
 Yes  
 No  
 Ok  
 [Exit]



Preset Message (to #LongFast)

## 2. CH Channel Messages

Group chat page. Titled Channel Message / CH Msg. The screen displays the current channel (e.g., Pri Ch: Long\_fast), relative time, sender's short name, and message text.

When there are no messages, the page displays only the title and channel name. Use the Up/Down buttons to browse the message history of the current channel, and the Left/Right buttons to switch pages.

## 3. CH Menu

Press the B key on the CH page to open the Channel Message menu, which includes Back, Select Channel, Send Preset, Del This, and Del All.

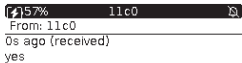
Select Channel allows users to switch between the configured primary and secondary channels for browsing messages. Send Preset opens the preset message list for the current channel. Select Del This to delete the current message, or Del All to clear all messages in the current channel. Both actions require confirmation before deletion.

## 4. Sending a Preset Message

Press the Up/Down buttons on the Home page, or select Send Preset from the CH/DM menu to open this page. The destination is displayed at the top: channel messages use To: #Channel Name, while direct messages use To: @Node.

The menu includes Select Destination, preset messages (Hi / Bye / Yes / No / Ok), and Exit. select Free Text to open the virtual keyboard and enter a custom message.

Use the Up/Down keys to navigate and select an option, press B to confirm, or press A to exit. The page automatically exits after approximately 20 seconds of inactivity.



Direct Message Page

## 5. DM Direct Messages

The one-to-one messaging page. When a node is selected, the title displays the recipient's short name. If no node is selected, the title displays DM.

If messages are available, the page shows From/To, the time, the (sent)/(received) status, and the message text. If there are no messages, it displays No messages with this node. After selecting a node, use the Up/Down keys to browse the conversation with that node.

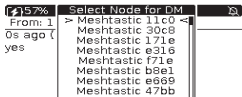


Direct Message Menu

## 6. DM Menu

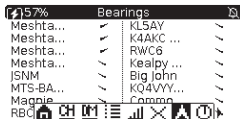
On the DM page, Press the B key on the DM page to open the Direct Message menu, which includes Back, Select Node, Send Preset, Del This, and Del All.

Select Node for DM to view the node list. Once a node is selected, the corresponding conversation opens. If Send Preset is selected before a node has been selected, the page displays the message "No DM node selected."

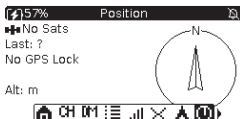


Select Node for DM

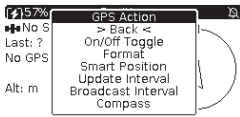




Bearings



Position



GPS Action



LoRa Info

## 10. Bearings

Small arrows indicate each node's bearing relative to this device. If this device or the other node has no valid position, the arrow is only a placeholder.

The menu is the same Node Action menu.

## 11. Position

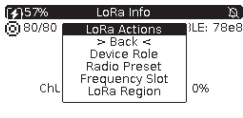
This page displays satellite status, the last positioning time (Last), coordinates, altitude (Alt), and compass information. If a GPS fix is unavailable, "No Sats" or "No GPS Lock" appears in the satellite status field. The coordinate field may also display "No GPS Lock".

Press the B button to open the GPS Action menu. Available options include On/Off Toggle, Format (DEC, DMS, UTM, etc.), Smart Position, Update Interval, Broadcast Interval, and Compass.

GPS on/off settings changed through the GPS Action menu are saved to the device configuration. The A + Right key shortcut only toggles GPS temporarily without changing the saved settings.

## 12. LoRa Radio Information

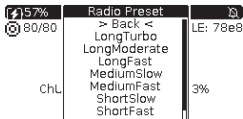
The LoRa Info screen displays the number of nodes, the last four digits of the MAC address used for Bluetooth (BLE) pairing, device role (Role), region and modulation preset (e.g., US/LongFast), operating frequency (Freq), and channel utilization (ChUtil).



LoRa Actions

Press the B key to open the LoRa Actions menu. Available options include Device Role, Radio Preset, Frequency Slot, and LoRa Region.

After you change any of these settings, the device automatically saves the new configuration and restarts to apply the changes.



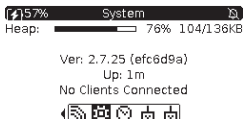
Radio Preset List

### 13. LoRa Submenu Examples

Radio Preset offers the following options: LongTurbo, LongModerate, LongFast, MediumSlow, MediumFast, ShortSlow, ShortFast, and ShortTurbo.

Frequency Slot can be set to Auto or a specific frequency slot.

LoRa Region allows you to select a region, such as US, EU\_868, or CN. If no LoRa region has been configured at the factory, the device prompts you to select one after the welcome screen during initial startup.

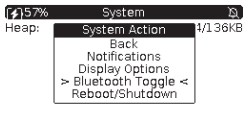


System

### 14. System

The System screen displays heap memory usage as a progress bar and percentage, along with the firmware version (Ver), device uptime (Up), and app connection status (No Clients Connected / App Connected).

Press the B button to open the System Action menu.



System Action



Display Options



Digital Clock



Clock Action

Available options include Notifications (notification sound settings), Display Options, Bluetooth Toggle, and Reboot/Shutdown.

Changes to the Bluetooth setting require a device restart to take effect. You can also toggle Bluetooth using the A + Up key shortcut.

## 15. Display Options

Go to System → Display Options to configure Frame Visibility (show or hide Last Heard, Hops/Sig, Distance, Bearings, Position, LoRa, Clock, favorites pages, and more), Display Units (Metric / Imperial), and Message Bubbles.

## 16. Clock

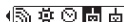
The Clock screen displays the current time in large digits (hours:minutes) by default.

Press the B button to open the Clock Action menu. Available options include Clock Face (Digital or Analog), Time Format (12-hour or 24-hour), and Timezone.

57% \*30c8\*

Meshtastic 30c8

Sig:Good ...



Favorites Page

57% \*30c8\*

Meshtastic 30c8

Sig:Good ...

**Favorites Action**  
 > Back <  
 New Preset Msg  
 Trace Route  
 Remove Favorite

Favorites Action

57% Last Heard

|             |      |               |    |
|-------------|------|---------------|----|
| ■ Meshta... | ?    | Meshta...     | ?  |
| ■ Meshta... | ?    | Meshta...     | ?  |
| Meshta...   | ?    | Byt...        | 4m |
| Meshta...   | ?    | ZUULLL...     | 4m |
| Meshta...   | ?    | Doogie ...    | 4m |
| Meshta...   | ?    | Meshta...     | 4m |
| Meshta...   | ?    | hhoweb        | 4m |
| Meshta...   | 78e8 | Screen Paused | 4m |

Screen Paused

## 17. Favorite Nodes

After you mark a node as Favorite in the Node Action menu, a dedicated screen for that node is added to the screen rotation, displaying its short name and signal information.

Press the B button to open the Favorites Action menu. Available options include New Preset Msg (send a preset message to the node), Trace Route, and Remove Favorite.

To hide all favorite node screens, go to Display Options → Frame Visibility.

## 18. Screen Off / Screen Paused

Press the A key or wait for the screen to time out to enter Screen Paused mode. The device's short name and "Screen Paused" appear at the bottom of the screen.

Press any key to wake the screen. The first key press only wakes the screen without triggering any action. Press a key again to perform the corresponding screen action.

## IV. Basic Operation

### Charging

Connect the device to a USB power source. The indicator lights up red while charging and turns green when fully charged.

### Power On

Press and hold the power button for approximately 5 seconds until the green indicator starts flashing and the startup animation appears on the screen. Then release the button. (When connected to USB power, the red and green indicators may light up simultaneously.)

### Power Off

Press and hold the power button. The red indicator lights up and starts flashing after approximately 5 seconds. Release the button when the shutdown animation appears on the screen. The device is fully powered off when the red indicator stops flashing.

### Download the App

Search for “Meshtastic” in your phone’s app store, then download and install the app.

### Bluetooth Pairing

After powering on, the blue indicator flashes for 30 seconds to indicate that the device is in Bluetooth pairing mode.

Open the Meshtastic app on your phone and search for available devices. The device name appears on the screen in the format “Meshtastic \*\*\*\*”. Find the matching device name in the app and tap it to pair.

Once paired successfully, the blue indicator stays on for 30 seconds before turning off automatically.

Note: If pairing is not completed while the blue indicator is flashing, you can still search for and pair with the device through the app after the indicator turns off.

### More Information

For more information, visit: <https://meshtastic.org/docs/introduction/>.

## Shortcut Button Guide

Bluetooth toggle: Up + A

GNSS toggle: Right + A

Deep Sleep: Down + A (Press B briefly to wake the device.)

Press A briefly: Turn off the screen / cancel a menu / return to the previous menu

Press B briefly to open the menu / confirm a selection

Enter Bootloader mode: With the device powered off, press and hold A, then press and hold the power button for 5 seconds.

Bluetooth On/Off: Up + A

GNSS On/Off: Right + A

Deep Sleep: Press A + Down to enter Deep Sleep mode. Briefly press B to wake the device.

Short Press A: Turn off the screen, cancel an action, or return to the previous menu.

Short Press B: Open a menu or confirm a selection.

Enter Bootloader Mode: With the device powered off, press and hold A, then press and hold the power button for approximately 5 seconds to enter Bootloader mode.

# V. Specifications

## LoRa Transmission Parameters

RF output power: 0-22dBm

Frequency range: US:915MHz/ EU:868MHz

Transmit current: ≤330mA

Battery capacity: 3.8 V, 2500 mAh, 9.5 Wh

## Power Consumption

| Nodara | Bluetooth (BT) | LoRa Telemetry | GPS Positioning  | E-Ink Display | Average Power (mW) | Average Current (mA) | Notes                                                                                              |
|--------|----------------|----------------|------------------|---------------|--------------------|----------------------|----------------------------------------------------------------------------------------------------|
| 1      | Advertising    | Receiving      | Normal operation | Always on     | 226                | 59                   | About 233 mW during the first 30 seconds of Bluetooth advertising; power decreases afterward.      |
| 2      | Connected      |                |                  |               | 228                | 60                   | Peaks at about 233 mW while the app reads configuration data.                                      |
| 3      | Off            |                |                  |               | 226                | 59                   |                                                                                                    |
| 4      | Advertising    |                | Sleep            |               | 86                 | 22                   | Peaks at about 118 mW during screen operation and about 120 mW during LoRa transmission/reception. |
| 5      |                |                |                  | Screen off    | 40                 | 10                   |                                                                                                    |
| 6      | Sleeping       |                |                  |               | 0.807              | 0.212                | About 0.064 mW after powering off with the power button.                                           |