MONSPRO MASTNODE · GETTING STARTED

Quick Setup Guide

Set up, connect and pair your MastNode AIS station, then start earning **$MAST** for the coverage you provide.

TL;DR

1. Connect the AIS, GNSS and Wi-Fi antennas.
2. Set the A–B switch to **B**, then power on.
3. Get online. Ethernet: just plug in.
   Wi-Fi: join `AIS-Station-Setup` (password `configure`).
4. The Green LED goes solid once you're online.
5. Open `ais-station.local` and follow the pairing steps.

Getting started is easy

To connect to MastChain and earn rewards, you only need to work through five steps.

1. **Power & antennas**
   Connect the VHF and GNSS antennas and power on the station.
2. **Connect to the internet**
   Plug in Ethernet, or join the station over Wi-Fi.
3. **Pair with MastChain**
   Link the station to your MastChain account.
4. **Onocoy dual mining** OPTIONAL
   Earn on a second network from the same device.
5. **Monitor & earn**
   Watch your coverage and collect $MAST rewards.

One device, two networks.
MastChain maritime coverage plus optional onocoy positioning, earning from day one.

BEFORE YOU START · WHAT YOU NEED

- USB-C power cable + 3A USB supply
- Ethernet cable or Wi-Fi antenna
- VHF antenna tuned for AIS
- GPS / GNSS antenna

Most USB-C supplies are 3A. If you use a USB-A supply with a USB-C cable, confirm it meets the 3A requirement.

STEP 01

1 Set up the antennas

Connect the VHF and GPS/GNSS antennas to your MastNode. The **MastNode sits indoors; the antennas go outdoors.** Give the GNSS antenna a clear view of the sky, and mount the VHF antenna as high as possible with a clear line of sight over the water you want to monitor. AIS signals don't travel well through obstacles, so a direct line of sight matters.

Rear panel · GNSS + WiFi antenna ports · LAN · A–B switch

STEP 02

2 Power on the station

With the antennas connected, set the **A–B switch to B**, plug in the USB-C cable, and switch the station **ON**.

Red solid + **Green** blinking	Powered, not yet online.

STEP 03

3 Connect to the internet

OPTION A

Ethernet

Plug the cable into the port. That's it, continue to pairing.

OPTION B

Wi-Fi setup

1. Keep the switch in **B** with the station ON. It acts as an access point.
2. On your phone, join Wi-Fi `AIS-Station-Setup` · password `configure`.
3. A setup page opens automatically. If not, open any page and you'll be redirected.
4. Choose your home Wi-Fi, enter its password, and save.
5. Switch the A–B switch to **A**.

Online check: in 1–2 min the **Green LED goes solid**. Still blinking after 2 min? Reboot (off, wait 15s, on). Blinking past 5 min? Switch back to B and retry, then re-check the SSID and password.

STEP 04

4 Pair with MastChain

01 Go to `app.mastchain.io` and log in, or create an account if you don't have one.

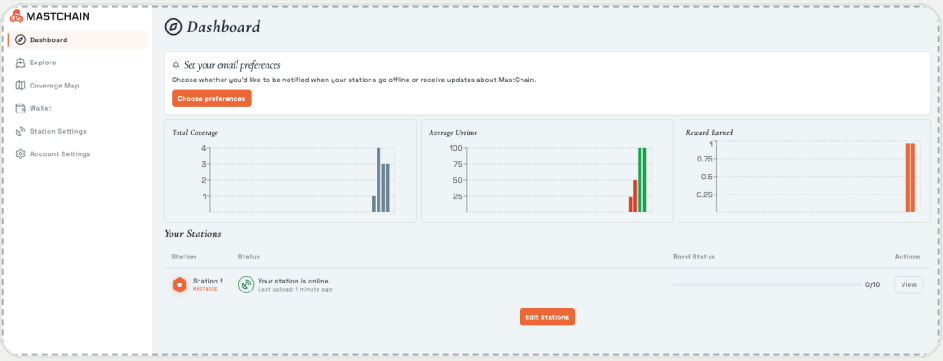
02 From a device on the **same network** as the station, open `http://ais-station.local`.

Can't reach it? Use the station's IP from your router's device list instead. On Mac, prefer Safari over Chrome.

03 The station page guides you to pairing. Follow the **"Pair this station"** link.

04 You'll finish pairing in the MastChain app. Within 1–2 min your dashboard confirms the station is online and pushing data.

Your station is paired and earning.
`app.mastchain.io/app/dashboard`



OPTIONAL · DUAL MINING

Set up Onocoy

MastNode supports dual mining. After pairing to MastChain, open the **Onocoy tab**, click **Edit Credentials**, and add your Onocoy account details. One device feeds two networks, earning across both. See Onocoy's documentation for more.

Note: Onocoy requires a separate GNSS antenna, which is not included.

STEP 05

5 Monitor & earn

You're all set. The vessels you capture appear on your `app.mastchain.io` dashboard, and your first rewards land within **24 hours**.

TIP

Keep `http://ais-station.local` open to watch performance and confirm every component is healthy, including the link to the server.

Welcome to the MastChain family.

You're now part of the network.

Reading the front panel

Red On → powered (2–5 s after power, stays on) · Off → no power

Green Solid → internet OK · Blink → no internet

Blue Solid → AIS service up, no traffic · Blink → AIS message received · Double-blink → uploading data

Yellow Solid → GPS fix · Off → no fix yet

A–B SWITCH

A = Wi-Fi client (normal use)
B = Access point (setup + pairing)

SETUP MODE (B)

SSID AIS-Station-Setup
PW configure
Portal 192.168.4.1

WHAT TO EXPECT · TIMINGS

Red lights up · 2–5 s
Internet detect · ~1 min
Boot to running · ~30–45 s
GPS first fix · 30 s–5 min

If something's off

Most issues resolve in a few steps. Find the symptom, then apply the fix.

No LEDs at all after power-on	Verify the supply (5 V / ≥ 3 A) and that the SD card is seated. Contact support if unresolved.
Red on, no other activity after 1–2 min	Boot or services didn't start. Power-cycle the station.
Green blinks > 5 min after connecting	Device is offline or underpowered. Check the Wi-Fi password and that the router has internet with no captive portal. Allow ~1 min first. If unresolved, try a different power supply.
Yellow never turns on	No GPS sky view. Move the antenna outdoors or near a window. Cold start can take 5+ min.
Blue off, AIS antenna connected	AIS service didn't start. Reboot. If it persists, check the dashboard log in client mode.
Captive portal won't open on phone	Some phones suppress portal detection. Open `http://192.168.4.1` manually.
`ais-station.local` won't resolve	mDNS isn't supported on your network. Use the station's DHCP IP from your router's admin page.

SUPPORT

We're here if you get stuck.

We built MastNode to be as easy as possible to set up. If you hit a snag, start with the troubleshooting page. Most issues resolve in a few steps. Still stuck? Reach out and we'll be happy to help.

Join the community on Discord
discord.gg/wcU7eA2XvH

Email support
support@mastchain.io