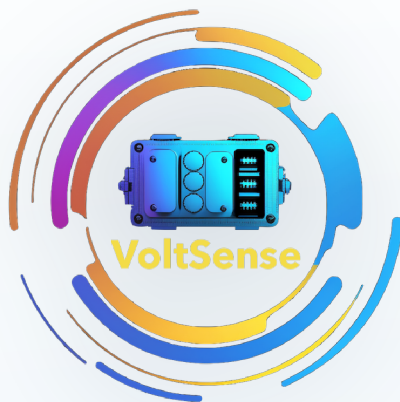




VoltSense P2

Installation & Getting Started Guide

1 Welcome

Thank you for choosing VoltSense P2, the smart monitoring solution for your boat. This guide will help you install and connect your new P2 device safely and correctly.



Battery voltages ×3



Bilge pump activity



Temperature



GPS position & geofence



Motion & impacts (G-sensor)



Wireless BLE sensors

Package contents

- VoltSense P2 device
- 1.5 m pre-wired harness (Bat1, Bat2, Bat3, Bilge, Ground) with inline 3 A fuse holders
- Press-on wire connector (for bilge monitoring)

Note: Mounting hardware is not included. Please select suitable marine-grade screws, brackets, or adhesives appropriate for your boat.

Before you start, you will need

- Basic hand tools and marine-grade mounting hardware
- A smartphone with the VoltSense App (App Store / Google Play)
- The account information card supplied with your device

⚠ Read before installation

- **Always disconnect power** before installing new connections.
- Ensure all connections are secure and protected from water exposure.
- Verify that your boat's electrical system shares a **common negative** to prevent malfunction.
- All battery connections must be **fused at 3 A**. The pre-wired harness includes inline fuse holders.
- For **12 V / 24 V / 48 V systems** with input DC voltage up to **96 V** — such as trolling motors and electric outboards.
- Installation should be performed by persons familiar with marine electrical systems. If in doubt, consult a professional installer.

About the device

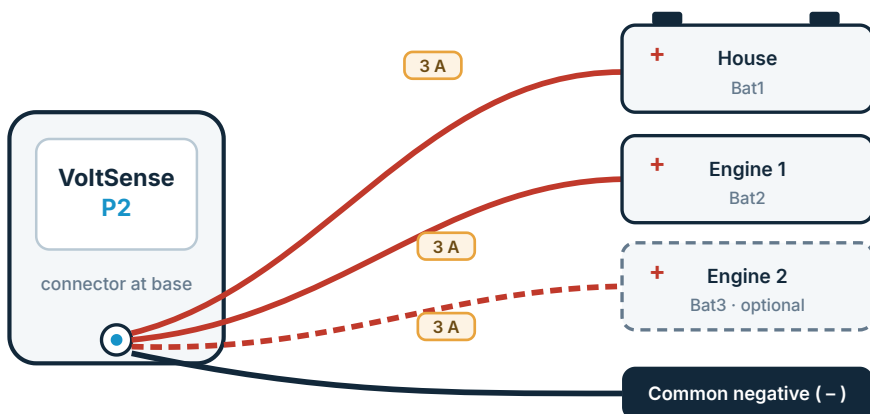
- The device contains a rechargeable **Li-ion battery** (18650, 3.6 V / 3400 mAh), charged from the **Bat1** input. Do not open, puncture, or expose the device to excessive heat.
- Enclosure rated **IP65** — dust-tight and protected against water jets, but not intended for submersion. Do not mount below the bilge waterline.
- There are no user-serviceable parts inside. Opening the enclosure voids the warranty.

Shipping mode: your P2 ships in a low-power mode and wakes up automatically when the harness is plugged in.

3 Wiring the device

3.1 Battery connections

- 1 **Bat1 — House battery:** connect the Bat1 (red) wire to the positive (+) terminal of the boat's house battery. Bat1 also charges the device's internal battery, so always connect it.
- 2 **Bat2 — Engine 1 battery:** connect the Bat2 (red) wire to the positive (+) terminal of the Engine 1 battery.
- 3 **Bat3 — Engine 2 battery (optional):** if your boat has a second engine, connect the Bat3 (red) wire to the positive (+) terminal of the Engine 2 battery.
- 4 **Ground:** connect the black negative (–) wire to the batteries' common negative terminal.



▲ Important: ensure all batteries share the same negative ground for safe operation.

4 Bilge monitoring (optional)

If you wish to enable bilge pump monitoring:

- 1 Locate the bilge pump **manual switch wire** or the bilge notification light **positive (+) wire**.
- 2 Use the supplied **press-on wire connector** to connect the red Bilge wire from the P2.
- 3 If the connection point is far from the P2 device, extend the wire using a **marine-grade extension cable**.

Final connections

- 1 Plug the cable connector into the P2 device and hand-tighten the locking ring.
- 2 The P2 will automatically **wake up from shipping mode** once connected.
- 3 Within a few minutes the first readings appear in the VoltSense App.



P2 device with the pre-wired harness: red battery wires with ring terminals and inline fuse holders, black common-negative wire.

Tip: route the harness away from ignition cables and high-current alternator wiring where practical, and support it so the connector is not under strain.

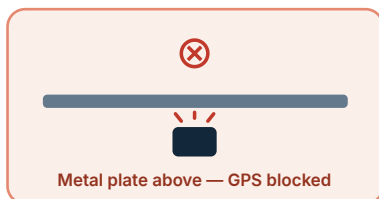
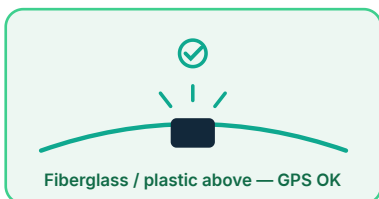
5 Mounting the device

- 1 Choose a suitable location inside the boat (hull or furniture).
- 2 The P2 can be mounted **vertically or horizontally**.
- 3 Ensure the wiring harness reaches the chosen location **without strain**.
- 4 Secure the device with mounting hardware of your choice.

⚠ Use only marine-grade screws, brackets, or adhesives suitable for your boat.

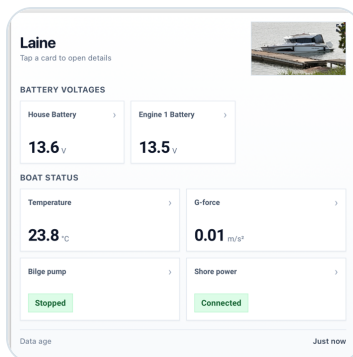
Choosing a good location

- **Stable position** — the integrated G-sensor detects movement and impacts. For best results, the device should remain firmly fixed and not swing or vibrate.
- **Clear sky view for GPS** — the P2 uses satellites for positioning. Avoid locations with metal plates directly above the device. GPS signals pass well through plastic or fiberglass, but may be blocked by metal surfaces.
- **Splash-protected** — although the enclosure is IP65-rated, choose a dry location above the bilge waterline.



6 App setup

- 1 Download the **VoltSense App** from the App Store or Google Play.
- 2 Log in using the **account information** provided with your P2 device.
- 3 Follow the in-app instructions to pair and activate monitoring.
- 4 Set your alert limits — voltage thresholds, bilge activity, geofence and temperature — under **Settings**.



One clear view of your boat in the VoltSense App.

For detailed app setup, see the **VoltSense App User Manual** — included separately and available at voltsense.eu.

Good to know

- **Reset:** hold a magnet near the bottom-left side of the device to reset it.
- **First data:** readings can take up to 300 seconds to appear after wiring a battery input.
- **Out of coverage?** If the device is outside cellular coverage, readings are stored in memory and sent automatically once the connection is restored.

✓ **Installation complete**

Your VoltSense P2 is now monitoring your boat's critical systems.

Technical specifications

Model	VoltSense P2
Battery inputs	3 × 12 V / 24 V / 48 V systems, input DC voltage up to 96 V (trolling motors, electric outboards)
Digital input	Bilge pump activity sense
Sensors	Temperature, motion / G-sensor, GNSS positioning (humidity via optional EYE Sensor)
Connectivity	Cellular IoT (Nordic nRF9151), Bluetooth LE (Ezurio BL54L15) for wireless sensors
Internal battery	Rechargeable Li-ion 18650, 3.6 V / 3400 mAh (UN 3481), charged from Bat1 input
Enclosure	IP65 dust-tight, protected against water jets
Harness	1.5 m pre-wired, inline 3 A fuses required on all battery connections

Compliance

Purpletail OÜ declares that the radio equipment type **VoltSense P2** is in compliance with Directive 2014/53/EU (RED) and RoHS Directive 2011/65/EU incl. (EU) 2015/863. The full text of the EU Declaration of Conformity is available from the address below.

Contains: FCC ID 2ANPO00NRF9151 (Nordic nRF9151) · FCC ID SQG-BL54L15 (Ezurio BL54L15).

The crossed-out wheeled bin means this product and its battery must not be disposed of with household waste. Return it to a designated WEEE collection point or to the manufacturer for recycling.



Designed and made
in Estonia 

Purpletail OÜ — VoltSense brand · Tallinn, Estonia

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