MARPORT | PRO

RX2

2026

USER MANUAL



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Legal

History

V1	05/19/26	First release
V2	08/11/26	• Updated max. number of sensors, now up to 4. • Updated frequency range in **Technical Specifications (on page 8)**. • Added guidance to add depth offsets to the sensors in **Adding Depth Offsets to Sensors (on page 13)**.

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Disclaimer

Marport endeavors to ensure that all information in this document is correct and fairly stated, but does not accept liability for any errors or omissions.

The present user guide is applicable for the following versions:

- Mosa2: 02.15.10
- Scala2: 02.18.05

If you use other versions, the visual interface and options may vary.

Introduction and Presentation

Get a basic knowledge of the system.

Introduction

The Marport Rx2 system meets the needs of small trawlers and seiners. It delivers essential features found on larger vessels, without added complexity or cost.

The Rx2 is easy to install and use. It integrates quickly on board, even on vessels with limited space.

The system supports up to four sensors. It includes up to two hydrophones with automatic signal selection. It delivers high performance at a controlled cost and operates reliably in real fishing conditions.

The Rx2 is upgradeable. Users can upgrade to the NX series of sensors as their needs evolve. This upgrade does not require replacing the full system.

The Rx2 offers a balanced solution combining performance, simplicity, and accessibility.

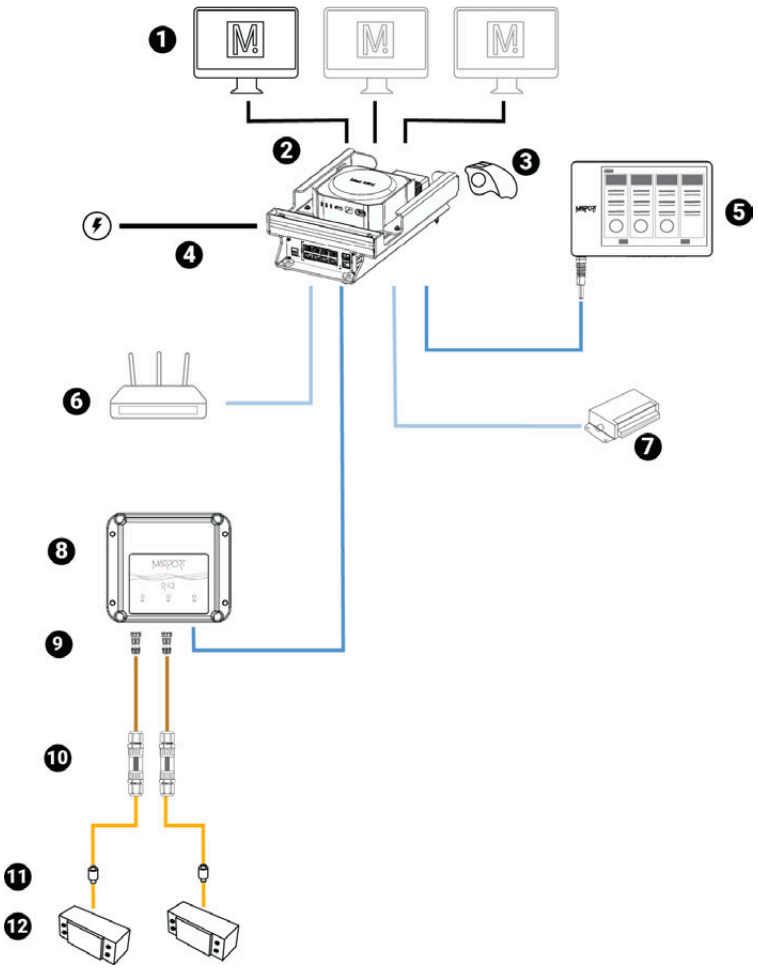
Rx2 system is also compatible with sensors and hydrophones from other brands, consult your local dealer for more information.



Description

System Overview

The following drawing shows an example of installation with a Mac mini and switch.



Ethernet cable

Extension cable of the waterproof in-line splice connector

Marport hydrophone cable

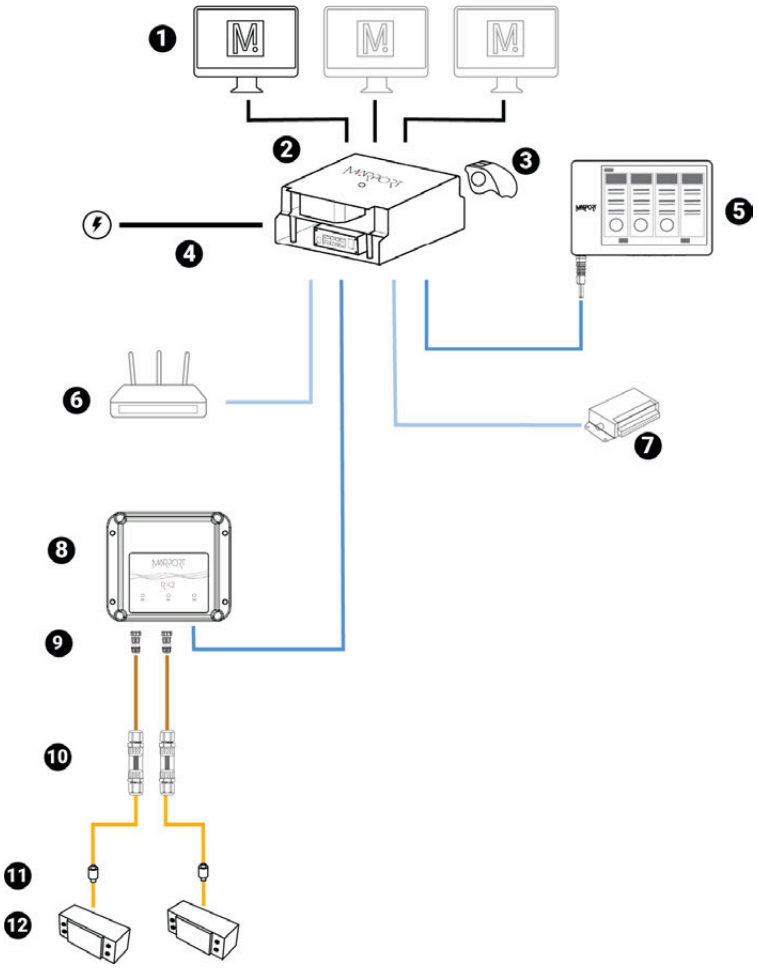
Manufacturer standard cable



(Blurred) Optional elements

1	Monitors	**7**	External devices (e.g. NMEA Multiplexer)
2	Computer and switch (ref. MAC-0-04)	**8**	Rx2 receiver (ref. Rx2-0X)
3	Wireless trackball mouse	**9**	Hydrophone connectors (ref. 104065-SP)
4	Power supply	**10**	Waterproof in-line splice connectors (ref. D00342H)
5	Dock (ref. DOCK-PRO1)	**11**	Thru-hull penetrations (ref. TH-1-XX)
6	Router (optional)	**12**	Hydrophones (ref. NC-1-XX)

The following drawing shows an example of installation with an Mx Hub system.



Ethernet cable

Extension cable of the waterproof in-line splice connector

Marport hydrophone cable

Manufacturer standard cable



(Blurred) Optional elements

1 Monitors

2 Mx Hub (ref. MAC-0-03)

3 Wireless trackball mouse

4 Power supply

5 Dock (ref. DOCK-PRO1)

6 Router (optional)

7 External devices (e.g. NMEA Multiplexer)

8 Rx2 receiver (ref. Rx2-0X)

9 Hydrophone connectors (ref. 104065-SP)

10 Waterproof in-line splice connectors (ref. D00342H)

11 Thru-hull penetrations (ref. TH-1-XX)

12 Hydrophones (ref. NC-1-XX)

Technical Specifications

Rx2 Receiver

Frequency range	27 kHz to 57 kHz
Bandwidth	3 kHz
Hydrophone inputs	Up to 2
Number of sensors	Up to 4
Number of PRP telegrams	Up to 14
Network cables	CAT5e, 100 m max., U/FTP shielding
Dimensions	142 mm x 161 mm
Weight	0.62 kg

System Compatibilities

The Rx2 is compatible with the following versions of applications.

Operating System	Sequoia (macOS 15) and later
Mosa2	2.15.5 and after
Scala2	2.18.5 and after

System Configuration

Read this section to learn how to configure the Rx2 system.

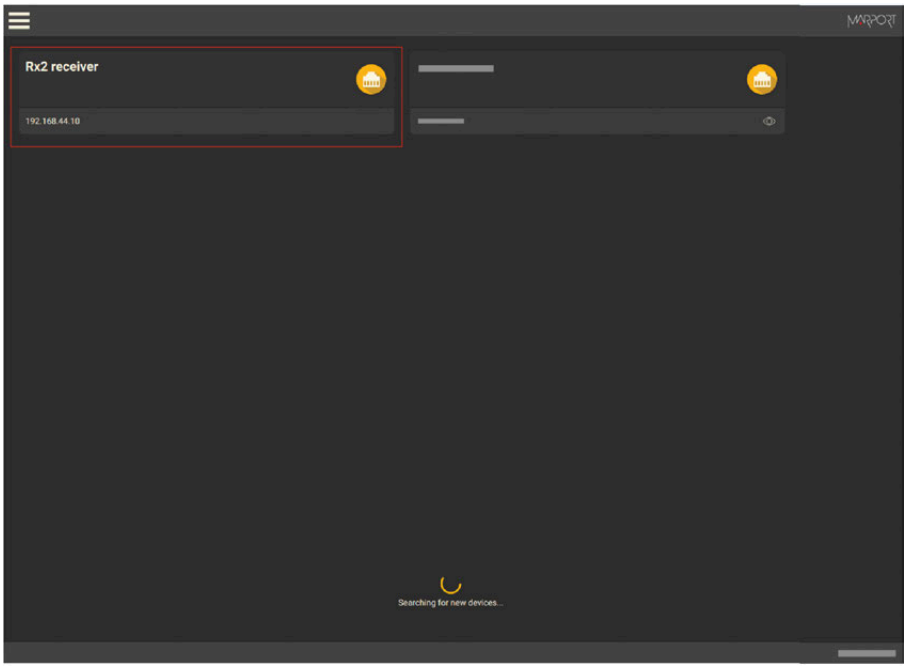
Note: This guide refers to the following version of Mosa2: 02.15.10. If you use another version, the visual interface and options may vary.

Opening the System Configuration Page

Access to the system configuration page via Mosa2 to configure the Rx2 system.

Procedure

1. Open Mosa2.
2. The discovery page appears. Click the detected Rx2 receiver.



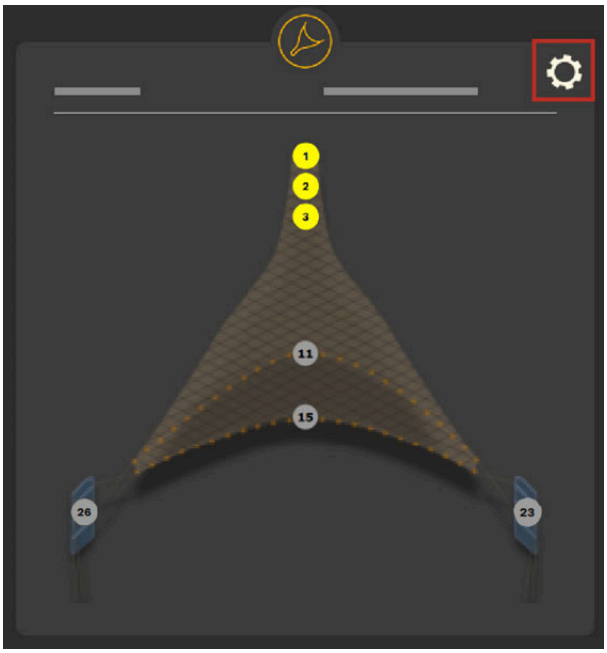
Trouble: If the receiver does not appear, check that it is correctly connected to the system switch (see **Rx2 Receiver Cabling (on page 16)**).

Configuring the Fishing Gear

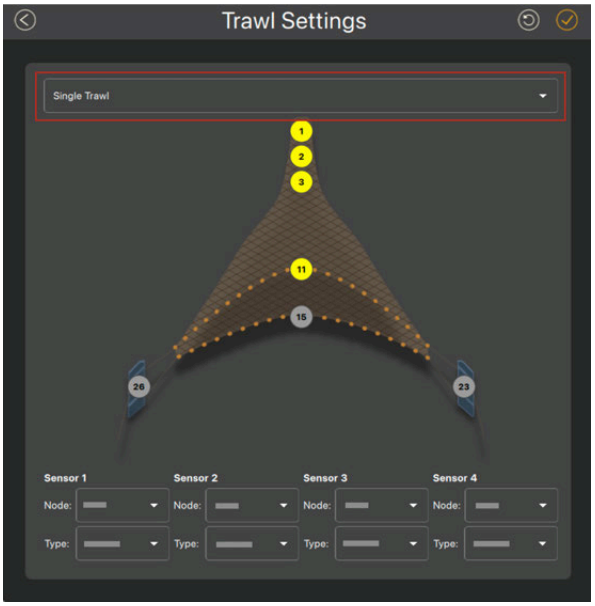
Select the type of fishing gear used on the vessel and add sensors to it.

Procedure

1. Click ⚙ in the fishing gear section.



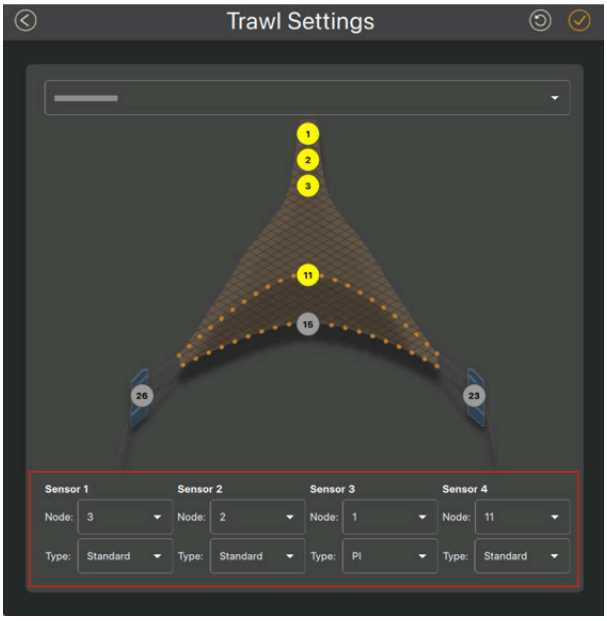
2. Select the type of fishing gear in the drop-down list:



- Single Trawl
- Seine Port
- Seine Starboard
- Clam Rake
- Dredge
- Twin Trawl

3. Add sensors to the fishing gear:

a. Select the nodes on which the sensors are installed. Refer to the trawl image to know their location.



b. Select the type of sensor:

- Standard: Marport sensors.
- PI: Simrad PI sensors.

What to do next

You can now configure the sensors: **Completing the Sensor Communication Settings (on page 11)**.

Completing the Sensor Communication Settings

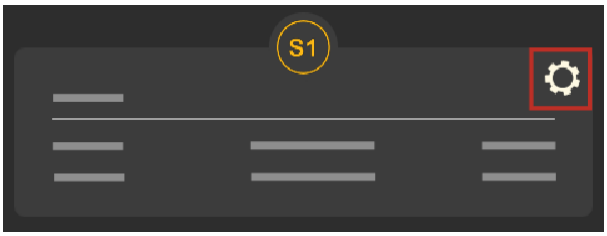
For each sensor, select the transmitted data, telegrams, and frequencies according to the configuration made for each individual sensor.

Before you begin

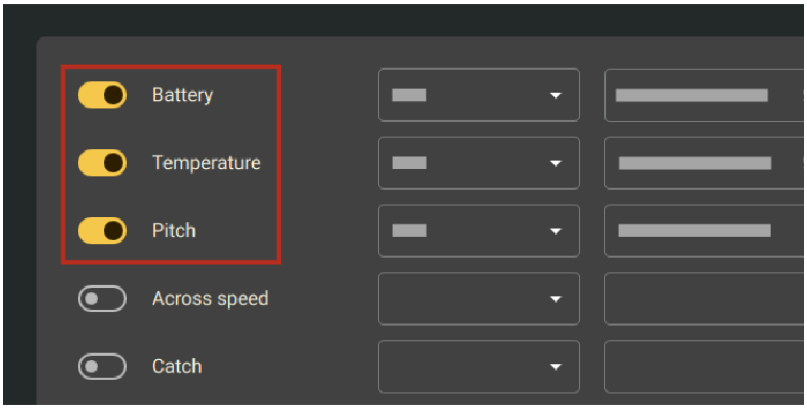
- You must have added sensors to the fishing gear: see **Configuring the Fishing Gear (on page 9)**.
- The telegrams and frequencies you enter here must correspond to the sensor configurations.

Procedure

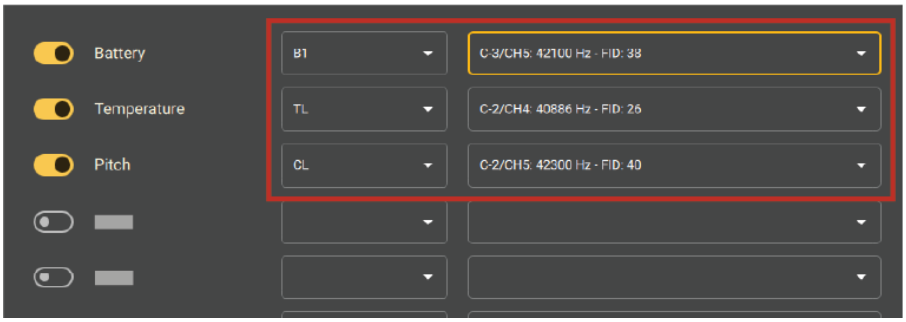
1. Click  next to the sensor (S1, S2, S3, S4) you want to configure.



2. To activate the data, turn on the corresponding toggle.



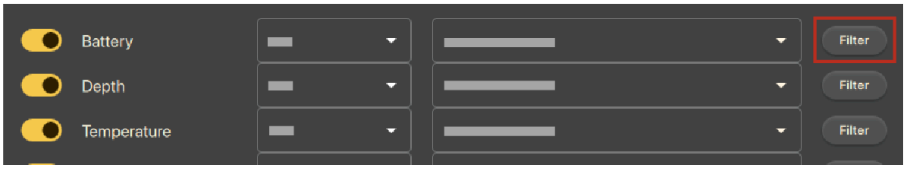
3. Select the type of telegram and its frequency.



Note: Refer to **Sensor Telegrams (on page 26)** for more details about the telegrams.

Important: The sensor frequencies must be within the receiver bandwidth. If not, the frequencies are displayed in red and you cannot save the settings.

4. To apply filters to the sensor's incoming data, click **Filter**:



- **Minimum and maximum value**: Removes data that is too high and not coherent with the maximum conditions of the vessel. This filter is particularly useful for depth or spread data.
- **Filtering level**:
  - Low: select if you need more responsiveness for the received data.
  - Medium: smooths the received data. Recommended level.
  - High: applies more smoothing to the received data. For example, use if you notice jumps in the display.

Adding Depth Offsets to Sensors

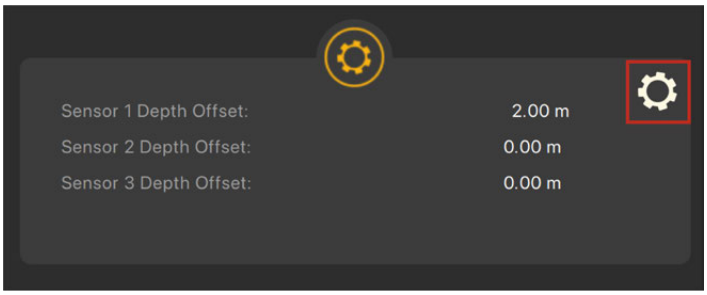
You can add offsets to depth measurements when they are not exact.

About this task

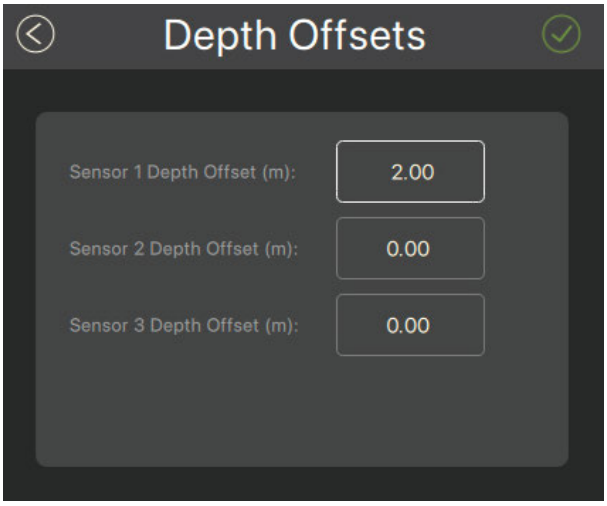
Use these settings to apply depth offsets to sensors from other brands, or to Marport sensors. Note that depth and additional measurement offsets of Marport sensors can also be set when directly configuring the sensor. Refer to the sensor's manual for more details.

Procedure

1. Click ⚙ next to the depth offset list.



2. Enter the corresponding offset (-/+ 10 maximum). For example, a sensor displaying 2 meters instead of 0 will have an offset of 2 meters.



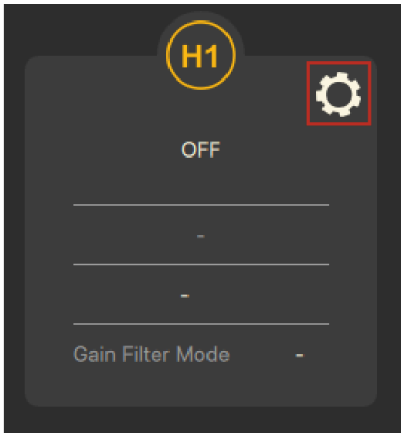
Note: Depth displayed = depth measured by sensor **minus (-)** the offset

Configuring the Hydrophones

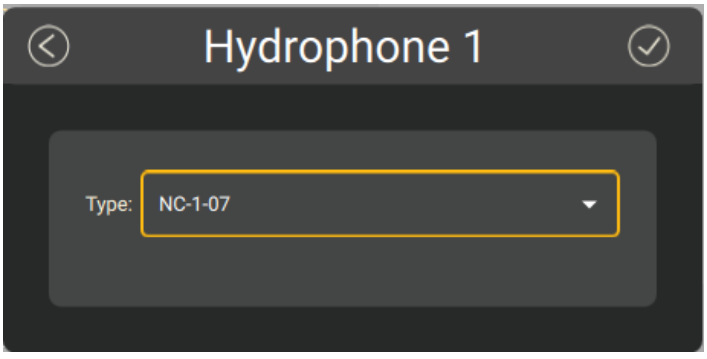
Select the hydrophone model.

Procedure

1. Click ⚙ next to the hydrophone (H1, H2) you want to configure.



2. Select the model of hydrophone in the drop-down list and click ✓.



3. For active wideband hydrophones NC-1-06 and NC-1-08, select the gain in the list. The configurations correspond to the following parameters:

Configuration	NC-1-06 first generation (46-127-X)	NC-1-06 second generation (46-138-X) and NC-1-08 (46-139-X)
1	38 kHz and 50 kHz filters activated / Gain High	38 kHz filter activated / Gain High
2	38kHz and 50kHz filters activated / Gain Low	38kHz filter activated / Gain Low
3	38kHz filter activated / Gain High	38kHz and 50kHz filters activated / Gain High
4	No Filters / Gain High	50kHz filter activated / Gain High

Results

The hydrophone section now displays the hydrophone model, bandwidth, current and gain filter mode.



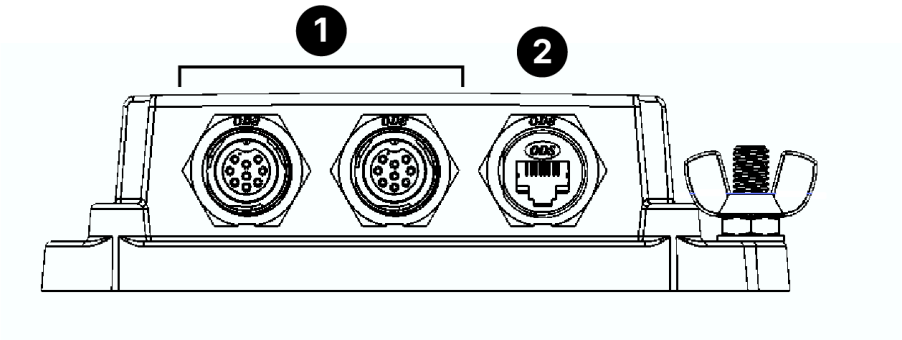
Installation

Read this section to learn how to connect and install on board the equipment of the Rx2 system.

Rx2 Receiver Cabling

Connect the Rx2 receiver according to the following cabling.

Note: For detailed instructions related to the connection of Mx Hub system components, refer to the M3 Hub, M5 Hub, and M6 Hub user manuals.



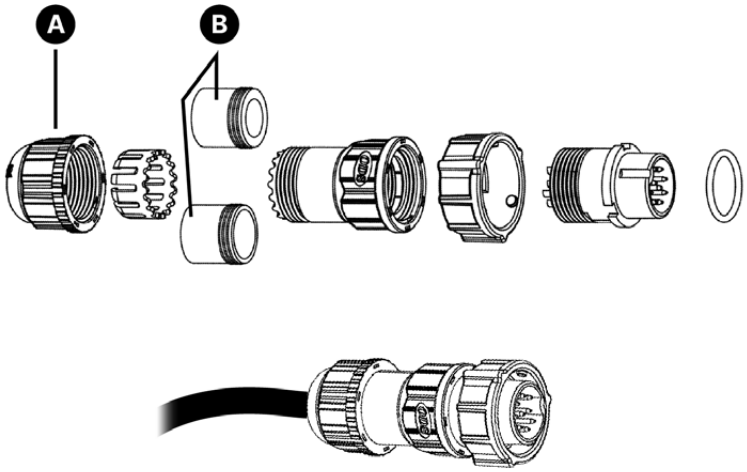
1	Hydrophone ports	Connect the hydrophone connector.
2	Ethernet port	Connect the Ethernet CAT5e cable with a sealing nut between the receiver and the system switch (Mx Rec port).

Hydrophone Connector Wiring

You need to wire the extension cable coming from the waterproof in-line splice connector to a connector plugged into the Rx2 receiver.

Note: Only one hydrophone connector is included in the receiver package. You need to order a spare part if you need a second one (ref. 104065-SP).

1. First, place the cable inside the hydrophone connector, and assemble the components of the hydrophone connector as follow:



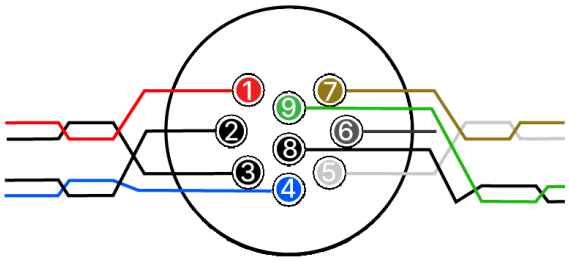
Note: Choose the seal (**B**) according to the cable diameter.

Important: Note that once you tighten the sealing nut (**A**), you cannot reverse it.

2. Solder the cable wires to the hydrophone connector according to the following drawings (back view).

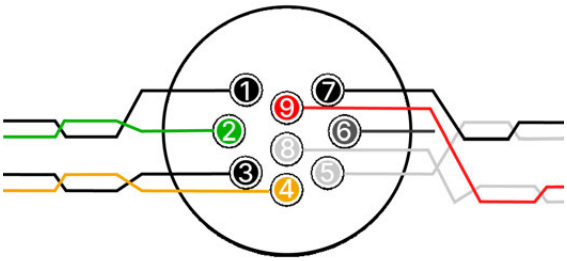
Important: Strip the cable sheath to a maximum of **2 cm**. Once assembled, the sealing nut (**A**) must tighten around the cable sheath and not on the individual wires.

Cable ref. C277



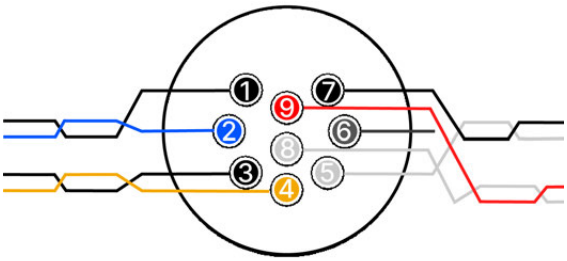
#	Wire Color	Wire Type
1	Red	NC
2	Black	-12V
3	Black	GND
4	Blue	+12V
5	White	Passive -
6	Uninsulated wire	Drain
7	Brown	Passive +
8	Black	CMD0
9	Green	CMD1

Cable ref. C398 10300



#	Wire Color	Wire Type
1	Black	NC
2	Green	-12V
3	Black	GND
4	Orange	+12V
5	White	Passive -
6	Uninsulated wire	Drain
7	Black	Passive +
8	White	CMD0
9	Red	CMD1

Cable ref. C398 10125

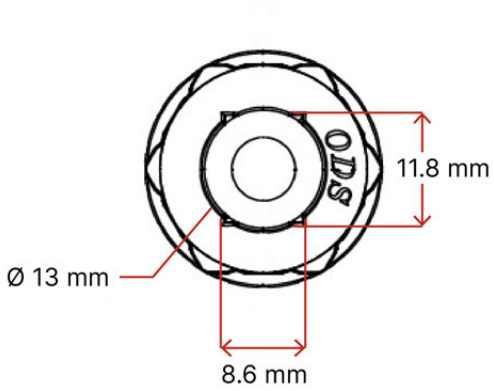


#	Wire Color	Wire Type
1	Black	NC
2	Blue	-12V
3	Black	GND
4	Orange	+12V
5	White	Passive -
6	Uninsulated wire	Drain
7	Black	Passive +
8	White	CMD0
9	Red	CMD1

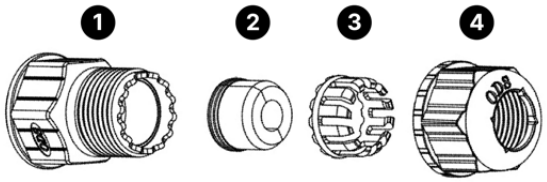
Ethernet Port Connection

The Ethernet port connected to the receiver needs to be protected from water splashes by an Ethernet sealing plug.

When choosing the Ethernet connector, you need to take into account the sealing nut opening size. Below are the sealing nut's opening dimensions:



The Ethernet sealing plug assembly is the following:



1. Body and gasket

2. Seals

3. Clip

4. Sealing nut

1. Insert the cable through the sealing nut (**4**), the clip (**3**), and the body gasket (**1**). Make sure the clip is oriented in the same way as shown in the drawing.
2. Assemble the seal (**2**) around the cable.
3. Assemble the components together and tighten the sealing nut.
4. Connect the Ethernet plug to the receiver, then tighten the body and gasket to the receiver.

Understanding the Receiver LEDs

The LEDs on the receiver indicate if the receiver is connected to the computer and what types of hydrophones are connected to the receiver.

Hydrophone LEDs

The LEDs on the hydrophone inputs identify the type of hydrophone that is connected to the receiver.



- **Blue**: passive hydrophone
- **Red**: active hydrophone
- **No light**: no configured hydrophone

Ethernet LED



- **Fixed blue**: Ethernet network is initializing.
- **Blinking blue**: the receiver is connected to a power source but it is disconnected from the computer.
- **Blinking green**: the receiver is connected to a power source and to the system computer.
- **Blinking red**: the receiver is connected to Mosa2.

Maintenance and Troubleshooting

Read this section for troubleshooting and maintenance information.

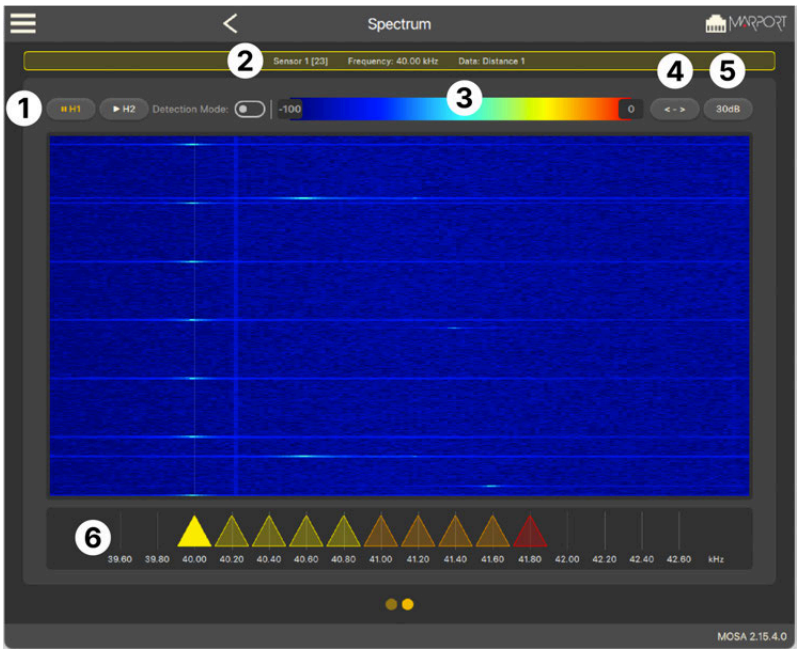
Important: Only an approved Marport dealer can access the internal unit. Warranty will become void if anyone other than an approved dealer tries to do internal maintenance duties on the product.

Monitoring the Noise Level and Sensor Signals

Use the spectrum in Mosa2 to check the noise level of the hydrophones, check for received sensor signals and interference.

Procedure

1. Click **Menu** ☰ , then click **User Mode > Advanced**.
2. Click the hydrophone number (**1**) to start the spectrum.



1. Hydrophone selection

2. Telegram details: appear when hovering over the corresponding frequency marker (**6**).

3. Color palette

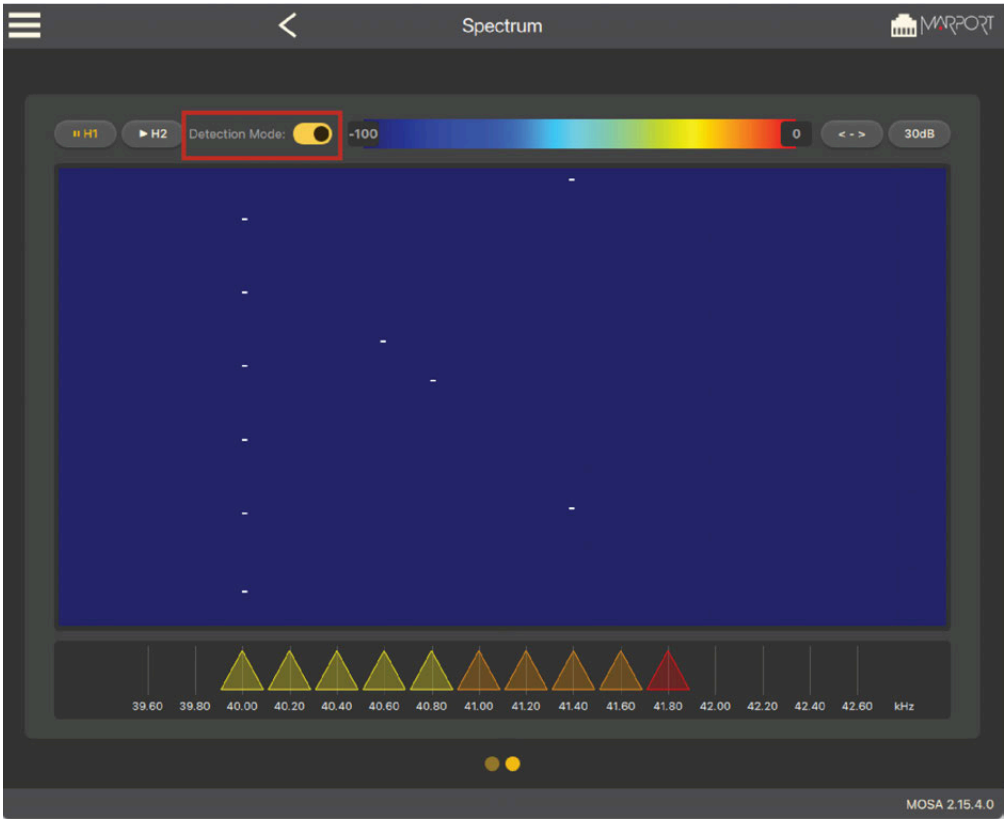
4. Palette and range reset

5. Set a 30 dB range

6. Sensors' frequencies

3. To stop the spectrum, click again the hydrophone number or leave the page.

4. Activate **Detection Mode** to show the sensor pulses that are decoded by Rx2.



Support Contact

You can contact your local dealer if you need maintenance on your Marport products. You can also ask us at the following contact details:

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8, rue Maurice Le Léon

56100 Lorient, France

supportfrance@marport.com

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Appendix

List of Compatible Hydrophones

The following table lists the models of hydrophones compatible with the Rx2 system.

Product Reference	Name	Bandwidth (3 dB)	Typical current consumption	Cable Color[1]
NC-1-02	Active hydrophone (integrated preamplifier)	38-45 kHz	8 - 12 mA	Black
NC-1-04	Active hydrophone (integrated preamplifier)	38-45 kHz	8 - 12 mA	Blue
NC-1-05	Passive wideband hydrophone (no preamplifier)	33-60 KHz	0.0 mA	Blue
NC-1-05 + NC-2-02	Passive hydrophone + Wideband preamplifier box	33-60 KHz	25-29 mA	Blue
NC-1-07	Active hydrophone (integrated preamplifier)	41-44 KHz	4-6 mA	Green
NC-1-06	Active wideband hydrophone (integrated preamplifier)	30-60 KHz	25-29 mA	Yellow
NC-1-08	Active wideband hydrophone (integrated preamplifier)	30-60 KHz	18-22 mA / 18-24 mA[2]	Yellow
NC-1-09[3]	Active hydrophone (integrated preamplifier)	41-44 KHz	4-6 mA	Blue, heavy-duty

[1]Note that from the NC-1-05 version, cables are colored according to the type of hydrophone: blue for passive, green for active narrowband and yellow for active wideband.

[2]Hydrophones with the serial number **A000G85P and after** have a higher power supply current limit (24 mA) than the earlier models.

[3]Add as NC-1-07 in the receiver configuration page.

Rx2 system is also compatible with hydrophones from other brands, consult your local dealer for more information.

Sensor Telegrams

The following table lists Marport sensor telegrams.

Option	Telegram	Value and/or update rate
Along Speed & Across Speed	CL	Every 11 to 12 sec.
	CL2	Every 11 to 12 sec.
Battery	B1	Every 60 to 70 sec.
Catch	M1	Full status every 20 sec. / Empty status every 30 sec.
Catch PI	SLOW	Full status every 123 sec. / Empty status every 126 sec.
	NORMAL	Full status every 32 sec. / Empty status every 34 sec.
	FAST	Full status every 5 sec. / Empty status every 5.5 sec.
Depth	D1	100 m., every 1 to 2 sec.
	D2	150 m., every 3 to 8 sec.
	D3	300 m., every 3 to 8 sec.
	D3_MC	300 m., every 4 to 8 sec.
	D6	600 m., every 3 to 8 sec.
	D12	1200 m., every 3 to 8 sec.
	D18	1800 m., every 3 to 8 sec.
Depth PI - D3	SLOW	280 m., every 33 to 36 sec.
	NORMAL	280 m., every 13 to 16 sec.
	FAST	280 m., every 3 to 6 sec.
Depth PI - D6	SLOW	560 m., every 33 to 36 sec.
	NORMAL	560 m., every 13 to 16 sec.
	FAST	560 m., every 3 to 6 sec.
Depth PI - D10	SLOW	930 m., every 33 to 36 sec.

Option	Telegram	Value and/or update rate
	NORMAL	930 m., every 13 to 16 sec.
	FAST	930 m., every 4 to 7 sec.
Distance (Master/ Port and Clump sensors only)	AN	Less than 320 m. Sends data every 3 to 8 sec.
	AL	Less than 390 m. Sends data every 11 to 15 sec. (compatible with Scanmar system)
	AL3	Less than 290 m. Sends data every 11 to 15 sec. (compatible with Scanmar system)
	A6	Less than 640 m. Sends data every 3 to 8 sec. (starboard telegram only)
	AL6	Less than 630 m. Sends data every 11 to 14 sec. (compatible with Scanmar system)
	AL7	Less than 360 m. Sends data every 11 to 14 sec. (compatible with Scanmar system)
	AN7	Less than 370 m. Sends data every 11 to 14 sec. (compatible with Scanmar system)
Distance Door PI	SLOW	Every 32 to 36 sec.
	MEDIUM	Every 13 to 16 sec.
	FAST	Every 4 to 7 sec.
Grid angle	GL	Every 11 to 12 sec.
Height	FH	Up to 100 m., every 1 to 2 sec.
	SH	Up to 100 m., every 3 to 5 sec.
Height and depth	FHD1	• Height up to 100 m., every 1 to 2 sec. • Depth up to 100 m., every 2,5 to 3,5 sec.
	FHD3	• Height up to 100 m., every 1 to 2 sec. • Depth up to 300 m., every 2,5 to 5,5 sec.
	SHD1	• Height up to 100 m., every 3 to 5 sec. • Depth up to 100 m., every 5 to 10 sec.

Option	Telegram	Value and/or update rate
	SHD3	• Height up to 100 m., every 3 to 5 sec. • Depth up to 300 m., every 5 to 10 sec.
	SHD6	• Height up to 100 m., every 3 to 5 sec. • Depth up to 600 m., every 5 to 10 sec.
	SHD10	• Height up to 100 m., every 3 to 5 sec. • Depth up to 1000 m., every 5 to 10 sec.
	SHD20	• Height up to 100 m., every 3 to 5 sec. • Depth up to 2000 m., every 5 to 10 sec.
Height PI	SLOW	100 m, every 33 to 35 sec.
	MEDIUM	100 m, every 13 to 15 sec.
	FAST	100 m, every 4 to 6 sec.
Pitch and Roll	CL	Every 11 to 14 sec.
	VQ	Every 5 to 7 sec.
Pitch only	D6	Every 3 to 4 sec.
	AN	Every 3 to 6 sec.
	VSH	Every 2 to 4 sec.
Roll only	D3	Every 3 to 8 sec.
	D6	Every 3 to 4 sec.
	AL	Every 11 to 15 sec.
	VRH	Every 2 to 4 sec.
Temperature	TL	Every 11 to 16 sec.
	TN	Every 3 to 11 sec.
	TL_MC	Every 8 to 11 sec.
Temperature PI	SLOW	Every 33 to 35 sec.
	NORMAL	Every 13 to 15 sec.
	FAST	Every 3 to 5 sec.

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