

## MOSA2 QUICK REFERENCE GUIDE - Windows

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MARPORT



# Legal

## History

V1	01/15/21	First release
V2	04/19/21	Includes Mosa2 version 02.07.
V3	10/11/21	Includes Mosa2 version 02.09: <ul style="list-style-type: none"> <li>• Added guidelines on how to connect a sensor to the Dock.</li> </ul>
V4	08/04/22	Includes Mosa2 version 02.11: <ul style="list-style-type: none"> <li>• Added guidelines on how to connect a sensor to Mosa2 using the Configuration Cable connected to the Dock.</li> <li>• Clarified information about the compatibilities with the different PCBA versions.</li> </ul>
V5	03/23/23	Includes Mosa2 version 02.11.14: <ul style="list-style-type: none"> <li>• Added details about Configuration Cable Revision 3 compatibility.</li> </ul>

## Purpose of the document

This document offers a description of Marport Mosa2 application. This application allows you to configure Marport sensors and receivers.

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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 of Mosa2:**

<b>Mosa2 version</b>	<b>Configuration Cable Com- patibility</b>	<b>Configuration Cable Revision 3 Compati- bility</b>	<b>Dock Compatibility</b>
02.03.x	No	No	No
02.05.x	Yes	No	No
02.07.x	Yes	No	No
02.09.x	Yes	No	Yes
02.11.x	Yes	No	Yes
02.11.14	Yes	Yes	Yes


Compatible from Windows 11 version.

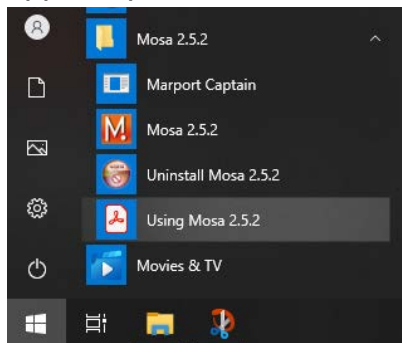
## Installing Mosa2

If Mosa2 is not already installed on the computer, you need to install it to configure the sensor.

1. Double-click the \*.exe file received from Marport.
2. A message asks if you allow the app to make changes to the device: click **Yes**.
3. Click **Install** from the setup wizard.
4. Follow the steps of the Device Driver Installation Wizard.
5. When the Microsoft Visual C++ installation window appears, click **Install**.
6. Once the installation is complete, click Mosa2 icon on the desktop to open it.  
If you see a message saying that Windows Defender Firewall blocked some features of the app, select **both** options and click **Allow access**.




**Tip:** You can find Mosa2 quick reference guide for Windows in Mosa2 program folder: click **Start** , then look for Mosa folder in the list of apps. Expand the folder and click **Using Mosa**.



## Detecting the Sensor on Windows Operating System

You need to add the sensor as a peripheral device to be able to connect it to Mosa2.

 **Note:** The computer needs to be compatible with Bluetooth Low Energy to be able to detect A2S sensors. See [A2S sensor is not detected by Mosa2 \(on page 22\)](#) to know how to check the compatibility.



1. Connect the water-switch.

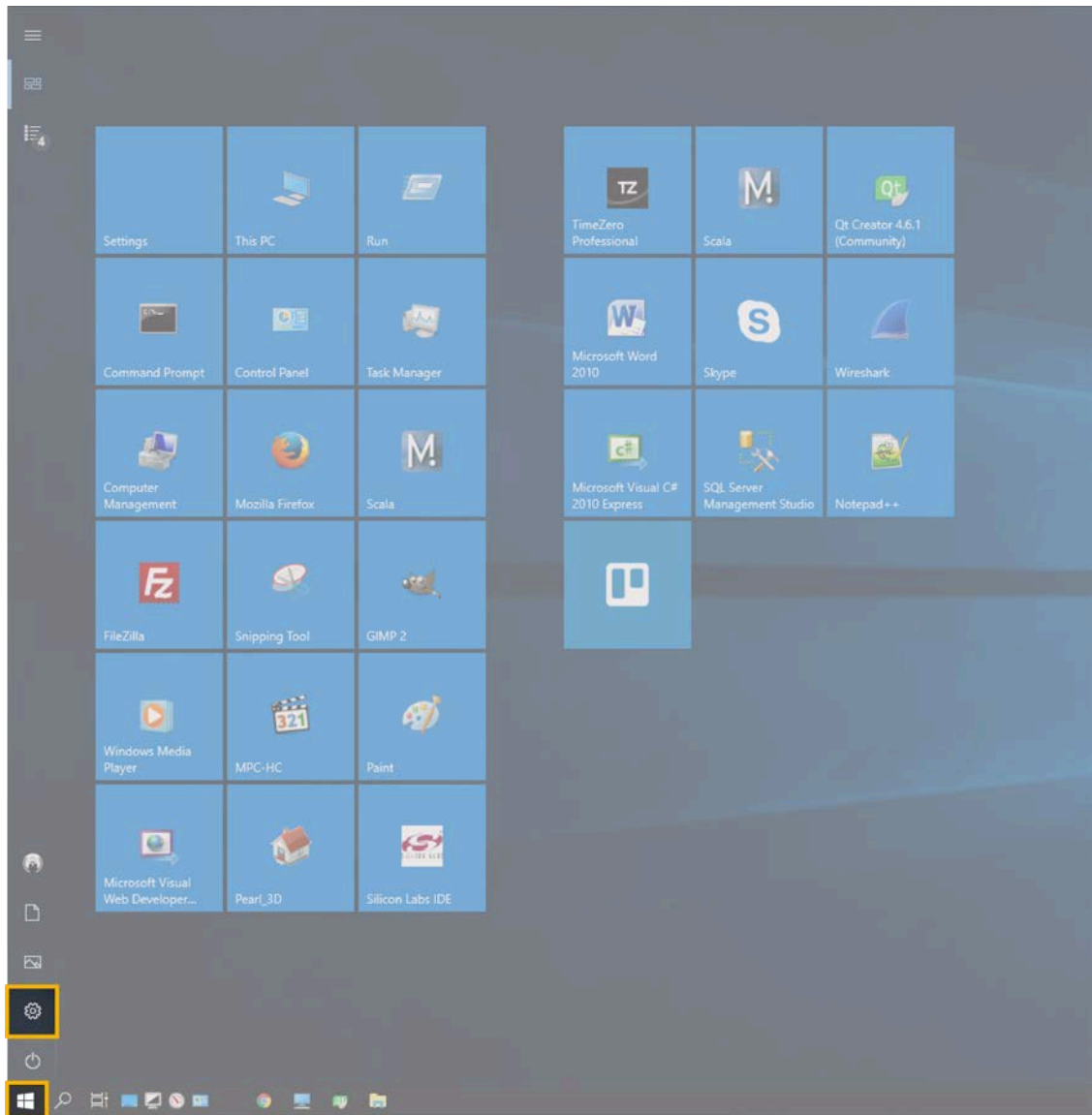


The light on the transducer flashes red.

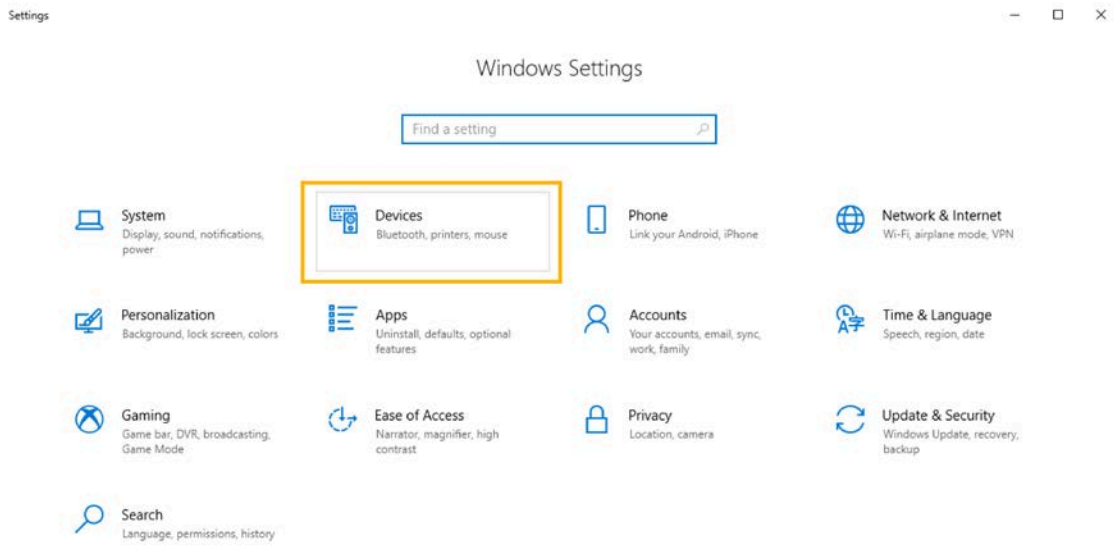
2. Disconnect the water-switch.

After a few seconds, the light flashes green.

3. Click **Start**  button on the task bar, then click **Settings** .

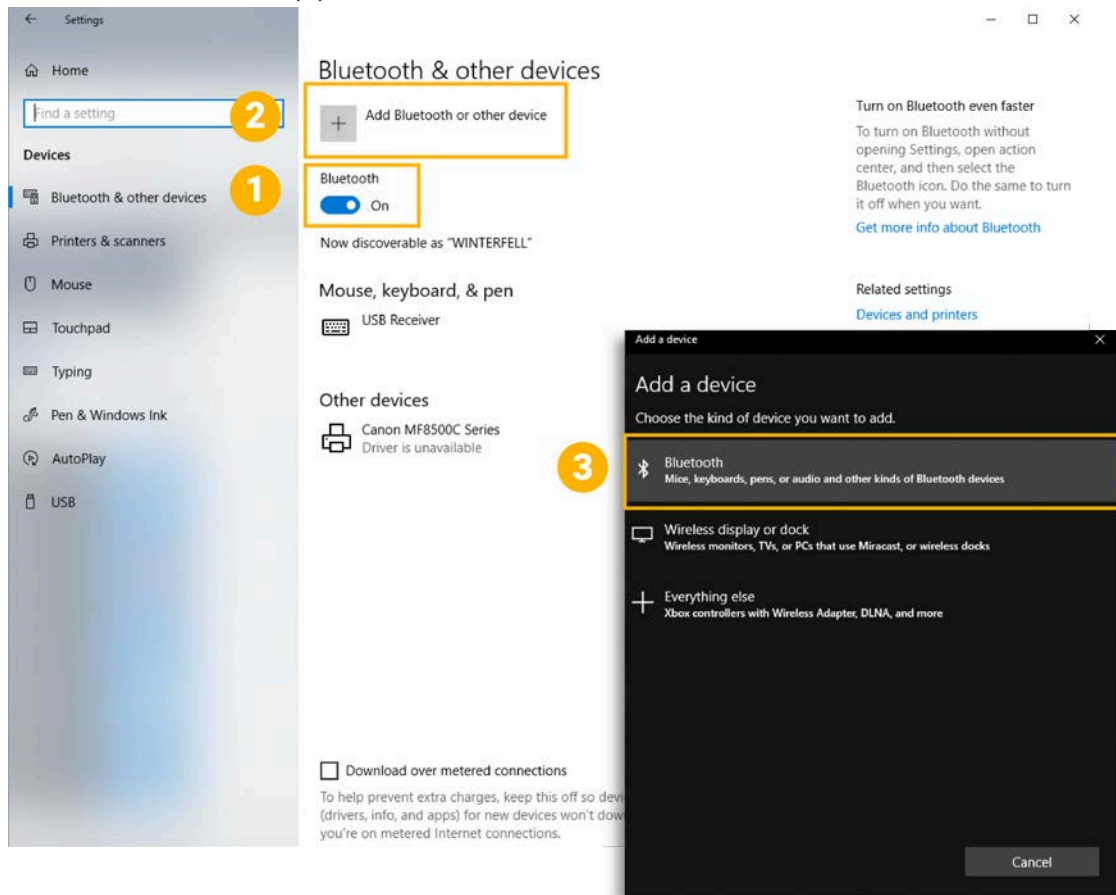


#### 4. In the **Settings** window, click **Devices**.

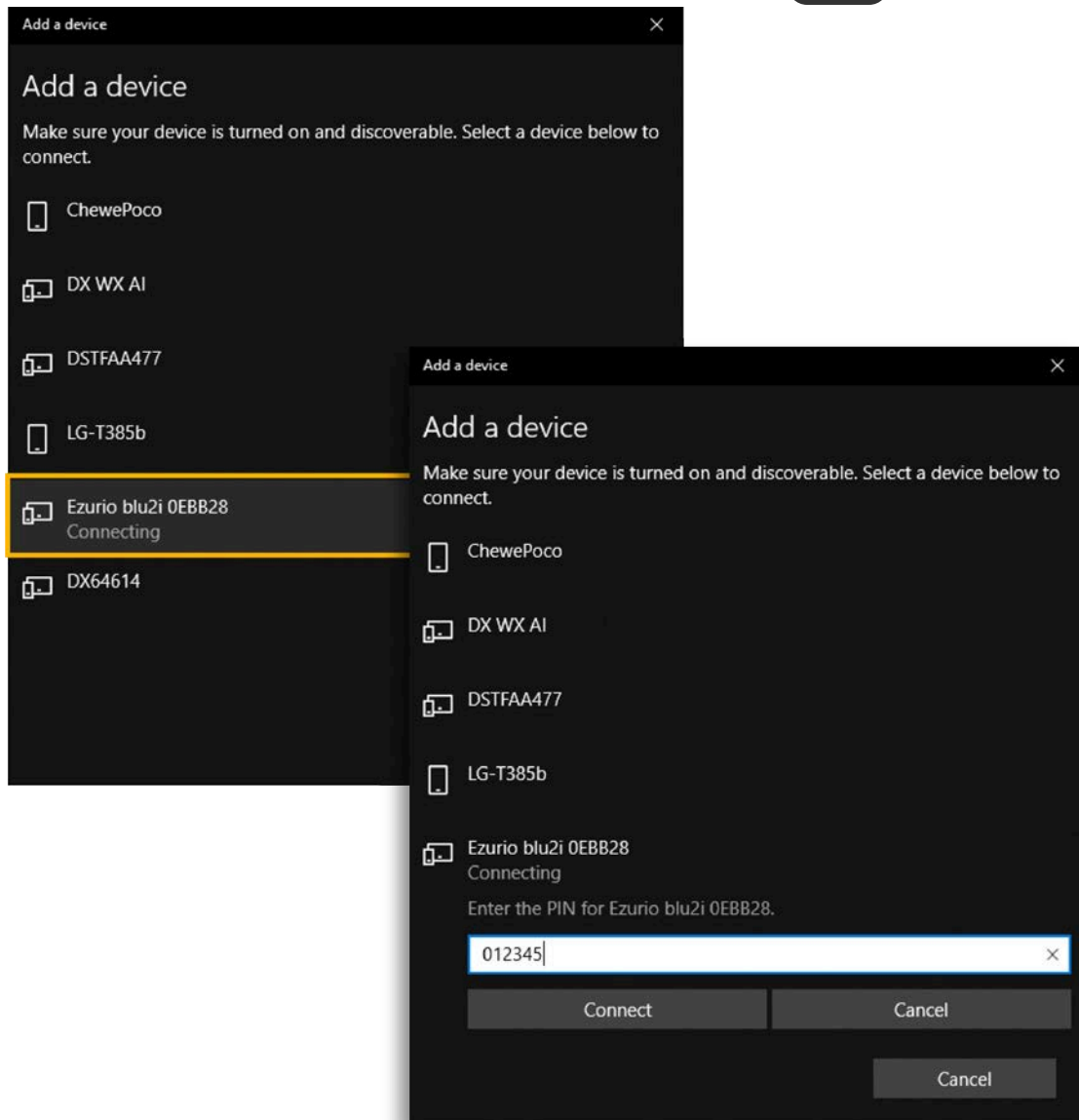





5. Check that the Bluetooth is on (1), then click **Add Bluetooth or other device** (2) and click **Bluetooth** (3).

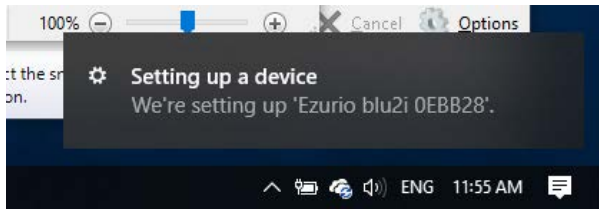


6. Select the sensor from the list and enter the PIN number **012345**.

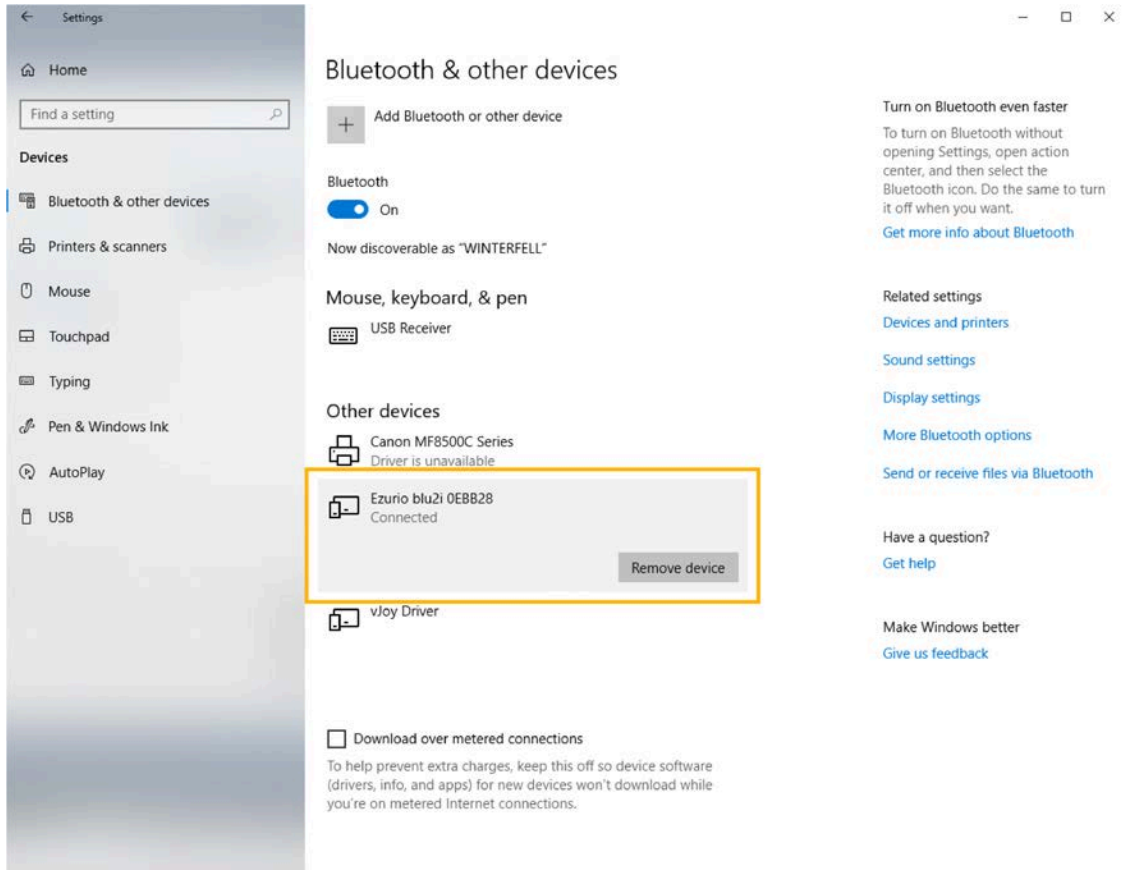


 **Troubleshooting:** If the sensor is not in the list, connect and disconnect the water-switch again and wait a few seconds. If the sensor still does not appear, check that it is not already connected to another computer nearby. The sensor can connect only to one computer at a time.

You should see a notification saying that the device is being set up.



7. Come back to **Bluetooth and other devices** window and check you can see the sensor in the list of devices.



You can now open Mosa2 and connect to the sensor. In Mosa2, the sensor should appear in the sensor list.





**Note:** The detection of the sensor may take up to 2 minutes.

## Connecting the Sensor to Mosa2


To configure the sensor, you need to connect it to Mosa2 using a wireless communication, the Configuration Cable cable or the Dock charger.


The connection options depend on the version of the sensor hardware. To know the version of the sensor's PCBA: open MASP website, then go to the list of the sensor components and look at the **Cat. Name** and **Hard Rev.** fields of the board.

Type of connection	Compatible hardware		
	A1	A2S Gen 2	A2S Gen 3, A2S Gen 4, A2H
Short-range wireless connection	Yes	Yes	
WiFi		Yes	
Configuration Cable connected to computer	Yes	Yes	Yes
Configuration Cable connected to Dock	Yes	Yes	
Configuration Cable Revision 3 connected to Dock	Yes		
Dock charger plug			Yes

 **Note:** The Configuration Cable Revision 3 is identifiable by its M logo on the plug . It is compatible only with Mosa2 version 02.11.14 and later.

### Using a wireless connection

 **Note:** If you need to increase the range of the wireless signal, Marport recommends the use of TRENDnet USB Adapter (ref. TBW-106UB). Compatible with Windows operating system only.

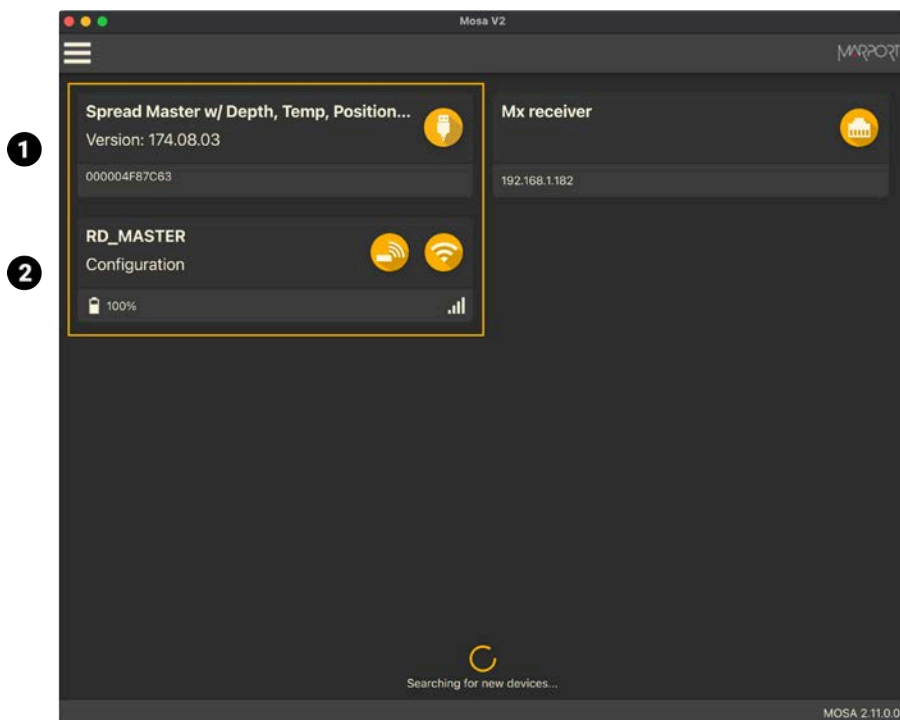
 **Important:** Only sensors with an A1 PCBA and A2S PCBA revision 02 can connect to Mosa2 using a wireless connection.

1. Open Mosa2.
2. Connect the water-switch.




The light on the transducer flashes red.



3. Disconnect the water-switch.  
After a few seconds, the light flashes green.
4. Wait a few seconds for the sensor to be recognized.



1. A1 sensor / 2. A2S rev02 sensor

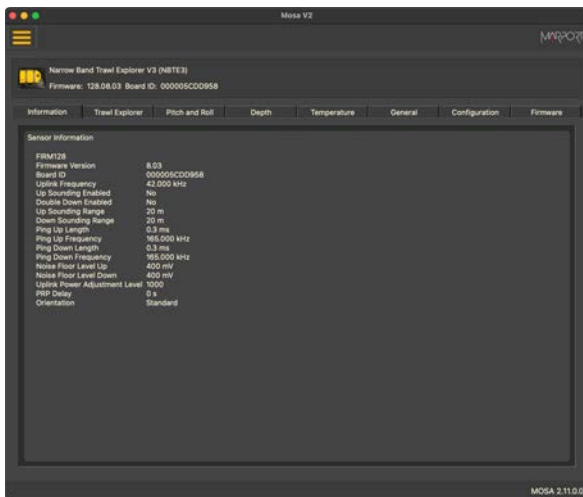
5. **A1 sensors (1)**: click  when the sensor appears on the discovery page.

6. **A2S sensors (2)**:

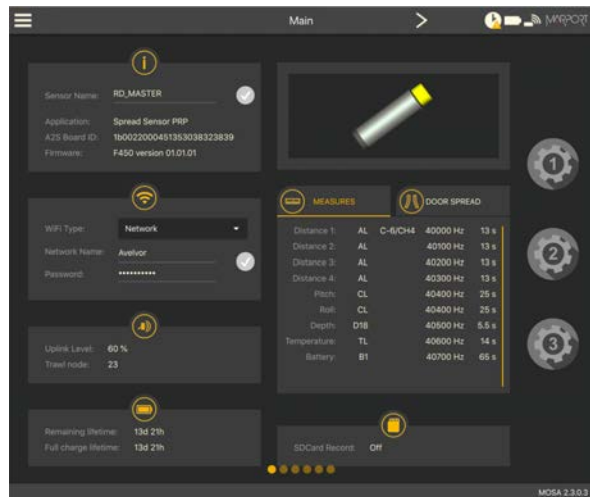
- a. Click  to connect in short-range wireless communication.
- b. If the sensors has a PCBA revision 02, click the WiFi icon  to connect using the WiFi network of the vessel or using the sensor as a WiFi access point.

The sensor configuration pages are displayed.

 **Note:** A2S sensors: click  > **Advanced** to change settings.



A1 sensor




A2S rev02 sensor

You can now configure the sensor. Refer to the sensor's user guide for details about the settings.

## Using the Configuration Cable

Simply connect the Configuration Cable from the computer to the sensor to display the sensor configuration page on Mosa2.

 **Tip:** Refer to the [Configuration Cable Quick Reference Guide](#) available on our website for more details about the use of this product.

1. Move other electrical devices minimum 1 m away from the computer.
2. Connect the USB connector directly to the computer.

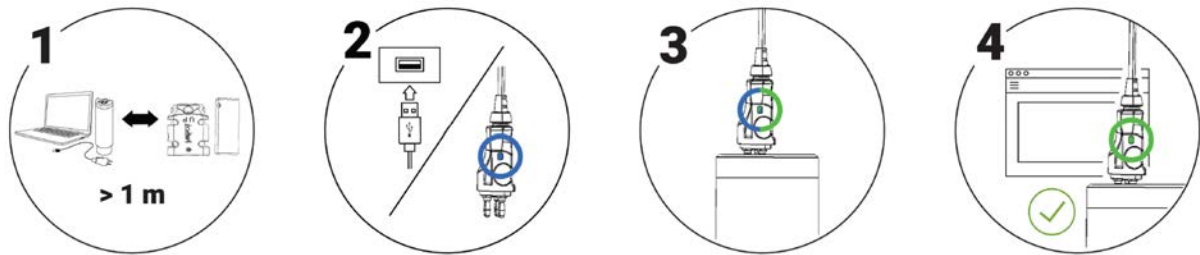
Mosa2 opens automatically and the startup wizard is displayed. The LED on the plug is solid blue.

3. Connect the three-pin plug to the sensor.


The LED on the plug blinks alternatively blue and green.

4. Wait a few seconds. The configuration page of the sensor is displayed on Mosa2.

The LED on the plug is solid green.



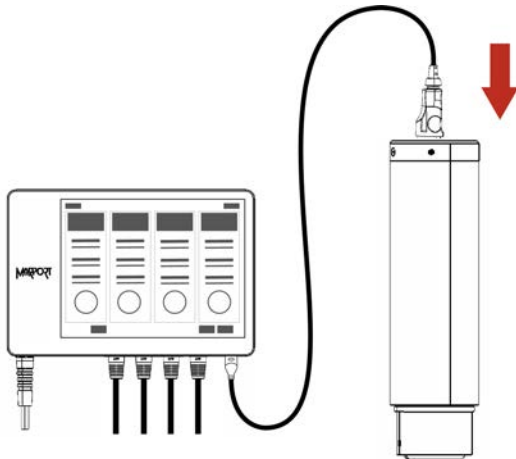
You can now configure the sensor.

- Note:** You can keep the Configuration Cable continuously connected by USB, and virtually eject or connect it. When no sensor is connected to the Configuration Cable, click **Menu**  > **Eject Config Plug** or **Connect Config Plug**. When ejected, you come back to the discovery page. It stays disconnected until you virtually connect to it or manually disconnect then connect it.

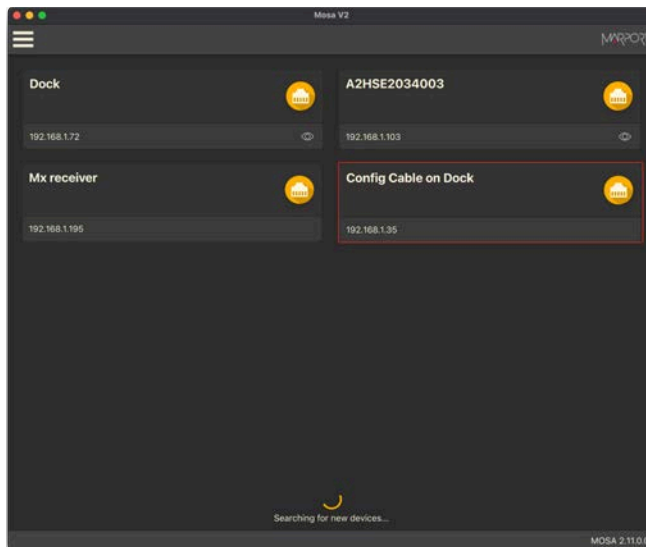
## Using the Dock and a Configuration Cable


- Important:** Only sensors with an A1 PCBA and A2S PCBA revision 02 can connect to Mosa2 via the Dock using the Configuration Cable. For the Pro line of sensors, use the charging plugs of the Dock.
- Note:** The firmware of the sensors with A2S rev02 PCBA cannot be updated with this type of connection, use the WiFi connection instead.


1. Connect the USB connector of the Configuration Cable to the Dock and the plug to the sensor's endcap.





2. Open Mosa2. The Configuration Cable is displayed on the discovery page.



Click  to open the sensor configuration page.

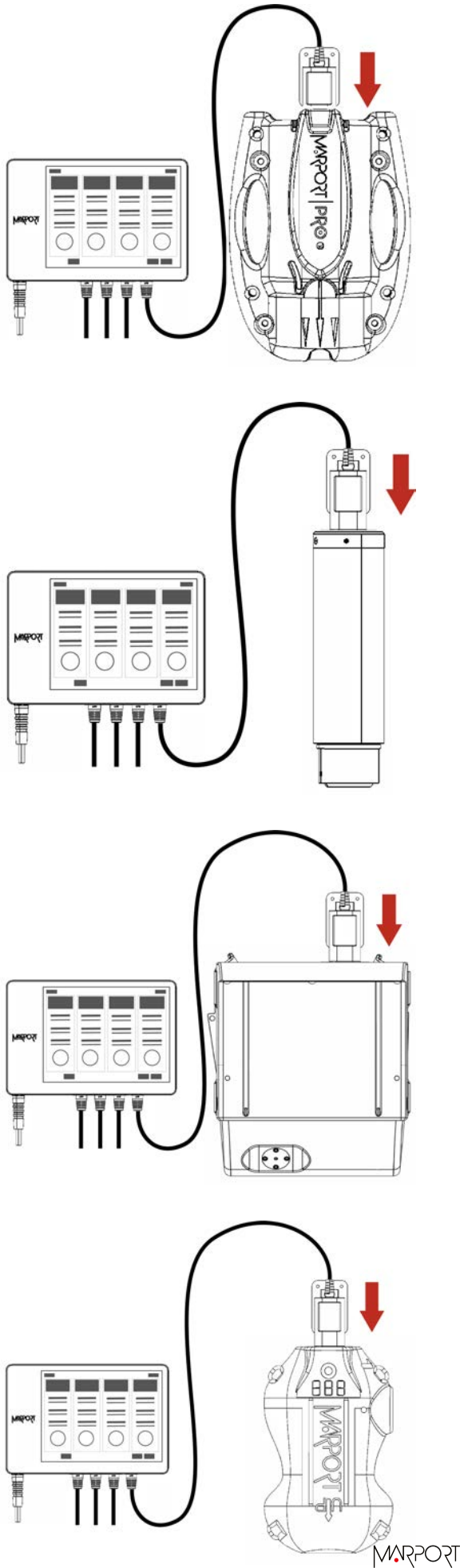
3. To leave Mosa2 configuration page and come back to the discovery page, click  > **Disconnect**.

## Using a Dock Charger Plug

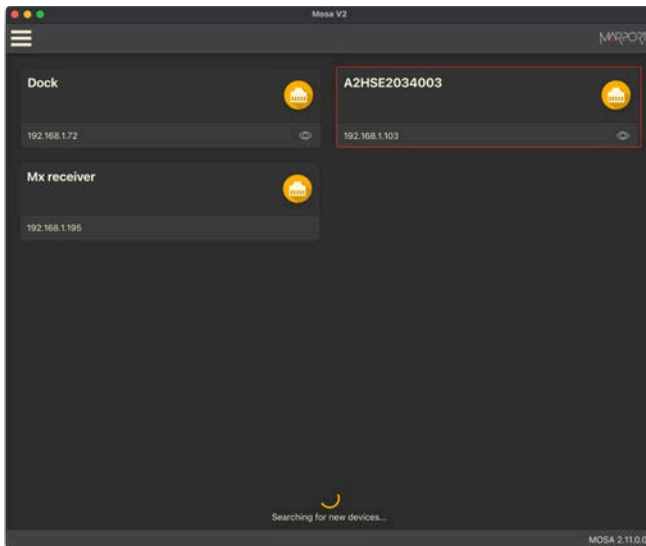
-  **Important:** Only Pro line of sensors with an A2S PCBA revision 03 and later, and A2H PCBA can connect to Mosa2 via the Dock using the charger plug.
-  **Tip:** Refer to Dock user manual to have more details about the use of this product.





1. Connect one Dock charging plug to the sensor's endcap.



2. Mosa2 discovery page opens. The sensor is displayed.




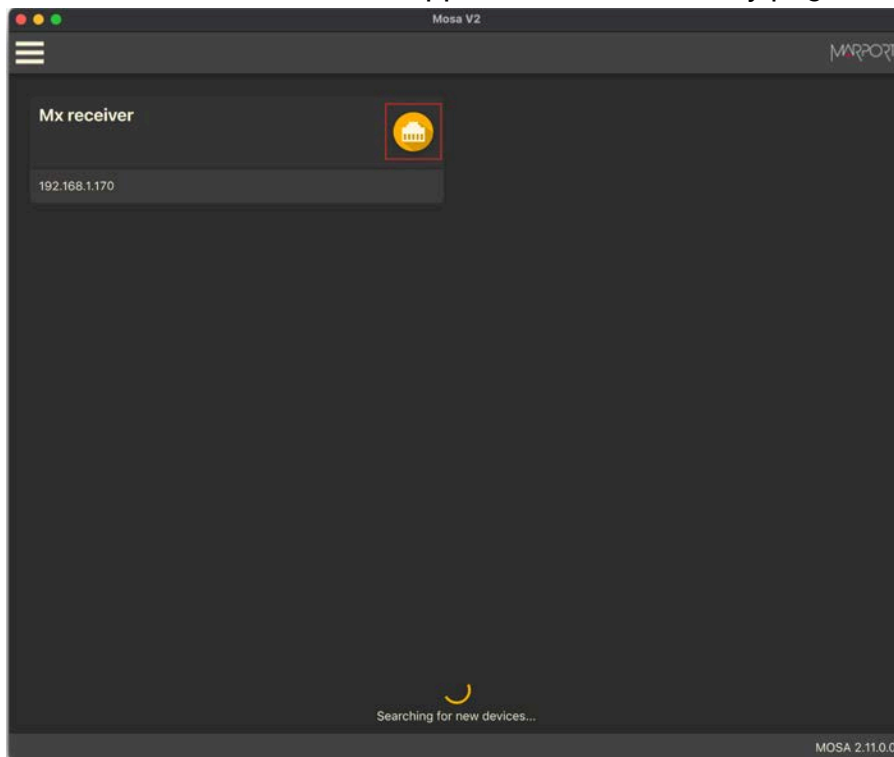
- Click  to open the sensor configuration page.
- Click  to show the deploy animation on the charger plug for 30 seconds.




## Configuring the Receiver

You can use Mosa2 to see information about the receiver, change its IP address, update its firmware, export and import its configuration.

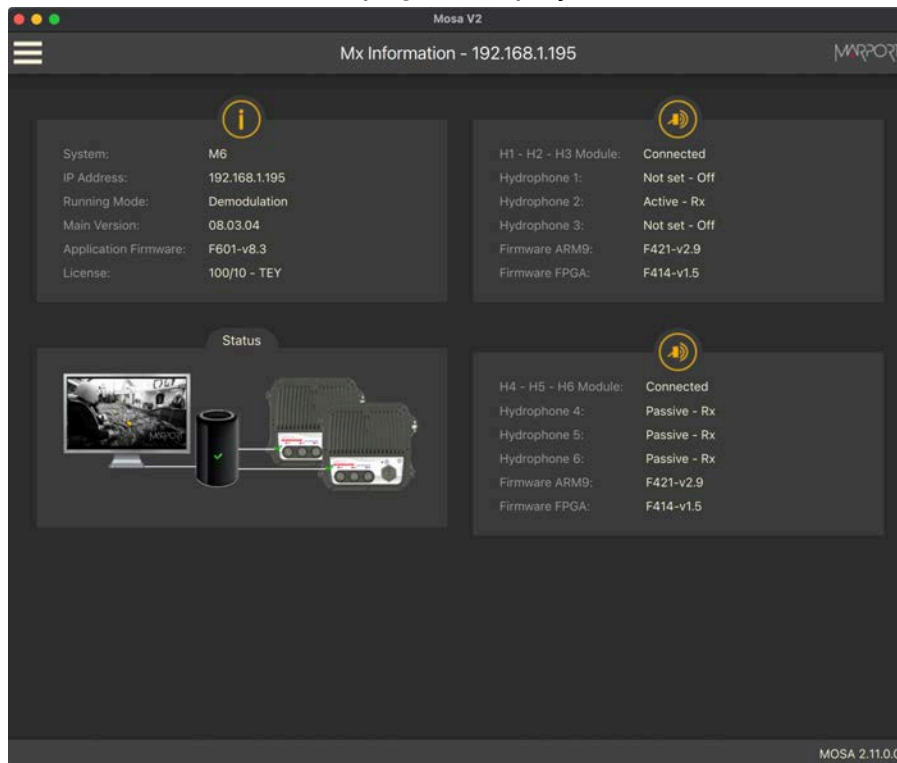
Mosa2 can detect all the receivers that are on the same Ethernet network as the computer.


1. Click  when the receiver appears on the discovery page.

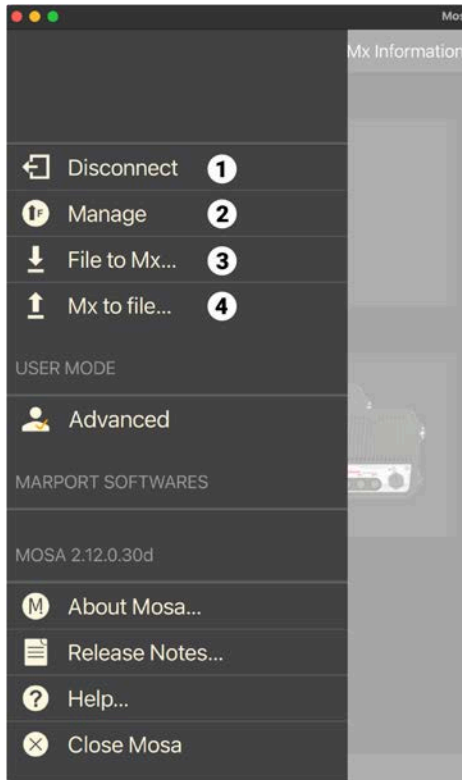


-  **Trouble:** If the receiver icon is gray , it means the receiver is not on the same sub-network as the computer. Click the icon to see details about the receiver, then click  if you need to change the receiver IP address.

The receiver information page is displayed.



2. Click **Menu**  > **Advanced**. The menu gives you access to different settings:




**1. Disconnect:** leave the receiver page and come back to the discovery page.

**2. Manage:** go here to change the receiver IP address and update the receiver with the latest application and system patches.

**3. File to Mx:** apply to the receiver an existing configuration.

**4. Mx to File:** export the configuration of the receiver into a configuration file.

 **Note:** Refer to the system user guides to have detailed procedures.

# Troubleshooting

Learn how to solve common problems.

## Sensor cannot connect in wireless connection

When trying to connect to the sensor by wireless connection, the sensor appears on Mosa2 discovery area but you cannot click it OR the sensor does not appear on the discovery area.



**Remember:** First, always connect the sensor to a charger, then disconnect it. The sensor will reboot and this may resolve the issue.

- The sensor is out of the range of the wireless signal.
  - Bring the sensor closer to the computer.
- Mosa2 may have trouble detecting the sensor if you try reconnecting to it to check that the changes have been successfully saved. If this is the case, you need to remove the sensor from the Bluetooth preferences:
  1. Go to **Settings > Devices > Bluetooth and other devices**.
  2. Select the sensor from the list, then click **Remove device**.
  3. Repeat the procedure [Detecting the Sensor on Windows Operating System \(on page 6\)](#) to add again the sensor as a peripheral device.
  4. Open Mosa2 and connect to the sensor.

## A2S sensor is not detected by Mosa2

A2S sensor does not display on Mosa2 discovery page, neither on **Bluetooth and other devices** panel of the computer.

- The computer needs to be compatible with Bluetooth Low Energy to be able to detect A2S sensors. Check if the computer is compatible.
  1. Turn on the Bluetooth.
  2. Open **Device Manager**.
  3. Expand the Bluetooth group of devices and check if **Microsoft Bluetooth LE Enumerator** is listed. If it is, the computer is compatible.

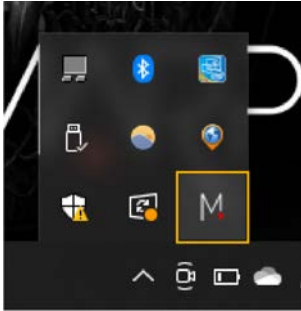
## Sensor does not connect correctly with Mosa2 when using the Configuration Cable




**Remember:** If the sensor does not connect correctly with Mosa2, always:

- Disconnect both USB connector and three-pin plug.
- Connect again the Configuration Cable.
- Make sure the three pins are fully inserted inside the sensor.

- Mosa2 does not automatically open when connecting the Configuration Cable.
  - Check that you see Marport Captain icon in the desktop taskbar. If you do not see it: close, then open Mosa2. The icon should appear in the taskbar.



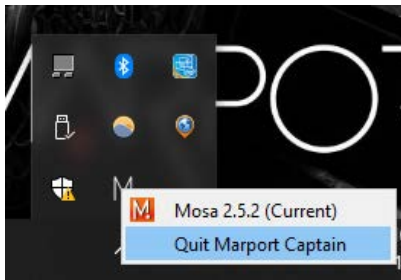
 **Note:** Marport Captain is a program running in the background. It allows Mosa2 automatic opening and displays shortcuts to Mosa2 and Scala applications installed on the computer. It should not be closed.


- If the problem persists, install Mosa2 again.
- At the end of step 2 of the configuration wizard, the sensor does not respond. Mosa2 displays a red cross and the Configuration Cable LED is red.
  - Check that no other instance of Mosa2 application is already running on the computer. If this is the case, close both applications, then open only one.
  - Or else, connect the sensor to a charger and wait until it is fully charged.
- The sensor has been disconnected from Mosa2.
  - Check that the Configuration Cable is not connected to a USB hub. The Configuration Cable must be connected directly to the computer.
  - If the computer goes to sleep mode, the sensor may be disconnected. Change the settings on your computer to increase the time before sleep mode.
  - If the problem persists, connect the sensor to a charger and wait until it is fully charged. Then try again to connect.
- Mosa2 displays a critical error message.
  - Disconnect both USB connector and three-pin plug. Then, connect again the Configuration Cable. If the message is still displayed, it means there is an issue with the sensor's components. Contact Marport support.

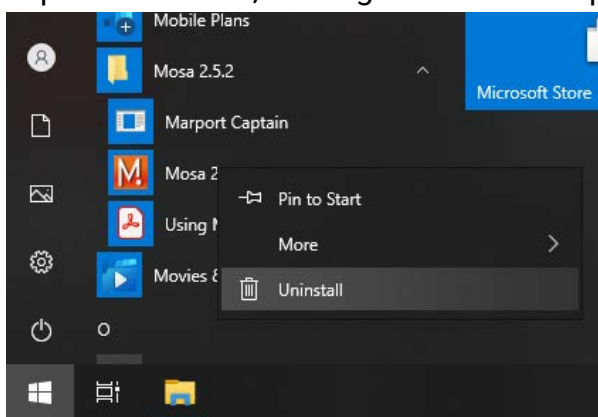
## Uninstalling Mosa2

You can uninstall Mosa2 from the computer.

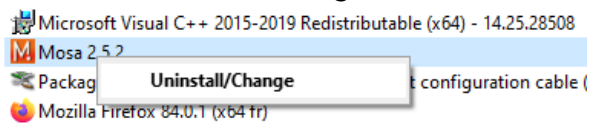
1. First, quit Marport Captain: right-click its icon on the task bar, then click **Quit Marport Captain**.



2. Click **Start** , then look for Mosa folder in the list of apps.
3. Expand the folder, then right-click Mosa app and click **Uninstall**.



4. **Programs and Features** window opens: right-click Mosa application in the list and click **Uninstall/Change**.



5. Confirm you allow the app to make changes, then click **Uninstall** from the wizard.