Firmware Update Instructions
for Isolation Transceiver, Synapse and Sidescan Interface

Marine Magnetics Firmware Installer allows users to update the firmware in the recent models of the Isolation Transceiver, Synapse and Sidescan Interface Transceiver units. Please refer to the table below for compatibility details.

Table 1 - Firmware update compatibility summary for Marine Magnetics products

Product	Model that supports upgrades	Earliest firmware that supports upgrades
Isolation Transceiver gen.2	Blue and Orange 4-port GPS-enabled isolation transceivers manufactured after late 2023. NOTE: SeaSPY Gradiometer mode must be disabled before updating the software in the gradiometer transceiver. NOTE: blue 3-port transceivers require factory updates.	Isolation Transceiver firmware 0.2.21 or newer
Isolation Transceiver gen.3	Orange 4-port GPS-enabled isolation transceiver with upgraded electronics, released in 2025. NOTE: SeaSPY Gradiometer mode is not supported by gen.3 isolation transceiver.	Transceiver firmware 3.5.0 or newer Compatible with sidescan interface firmware 1.03-1.6x
Sidescan Interface Transceiver	Sidescan interface units manufactured since 2024 Earlier models: factory updates only	Sidescan Interface firmware 1.03 or newer Compatible with gen.3 transceiver firmware 3.5.0 or newer
Synapse gen.1	Synapse manufactured beginning in 2024 Earlier models: factory updates only	Synapse node firmware 0.2.63 or newer
Synapse gen.2 with RS-232	Synapse with RS-232 support, manufactured after mid-2025 Earlier models: see Synapse gen.1	Synapse node firmware 2.0.0 or newer
SeaQuest	Factory updates only.	
Explorer	Explorer magnetometer: factory updates only. Explorer Power Isolator does not support firmware updates.	
Sea Sentinel / Sentinel 1	Factory updates only.	
Sentinel 2	Sentinel2 requires a different update procedure. Please refer to the Sentinel2 operating manual for details http://marinemagnetics.com/products/base-stations/sentinel-2/	Sentinel2 software release 2022.09.20 or newer https://marinemagnetics.com/install/sentinel/
Argos		Argos firmware 2.31 or newer

Firmware Installer setup and firmware update files

The Marine Magnetics firmware installer tool can be found on the main web site, in the products list.

Alternatively please use the following web page: https://marinemagnetics.com/install/syfi/public/default.htm

The latest firmware versions are downloaded automatically by the installer tool, and are also available for manual downloading from the same web page.

Firmware Installer Steps

The Firmware Installer has a simple and linear interface that guides you through the steps:

1. Connect the device to the PC (e.g. Synapse, transceiver, or both)
2. Select the COM port and correct baud rate for connecting to the target device
3. Check the list of detected devices
4. Select the latest firmware update if available for one of the connected devices, or alternatively select a previously downloaded file from your computer
5. Install new firmware
6. Update another device if necessary

*Figure 1 – Select the COM port and correct baud rate*
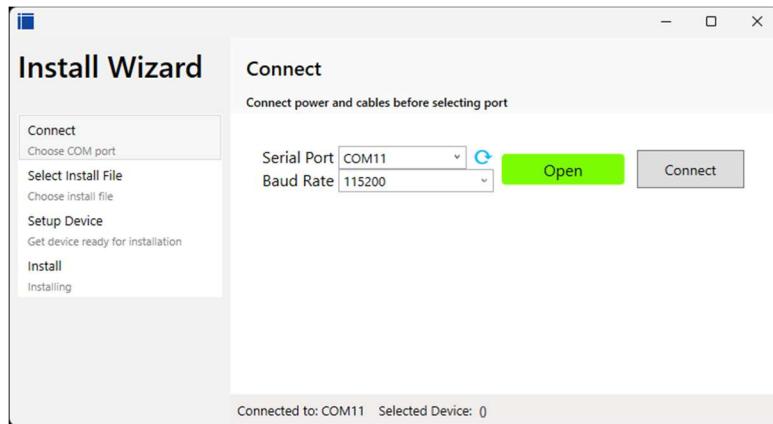
Figure 2 – Ensure all connected devices are detected. Select one of the Install file options for the device you wish to update.
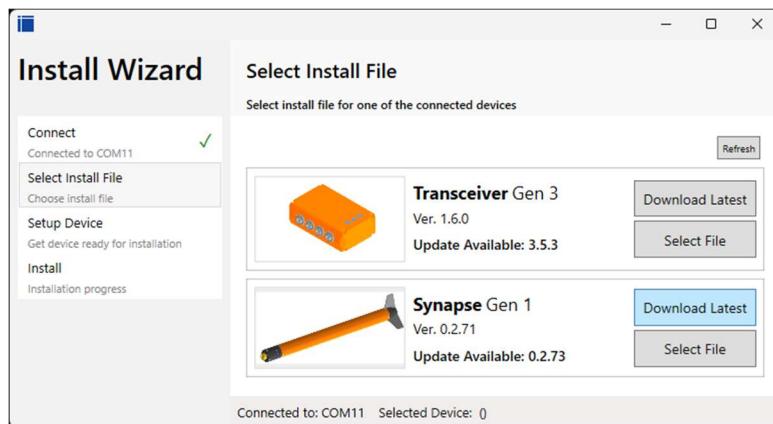
IMPORTANT: gen.3 transceivers share the same electronics with the sidescan interface transceivers, but differ in their configuration and data interface protocol. When using these transceivers with older Synapse gen.1 magnetometers (Synapse without RS-232 support), **do not update** from version 1.x.x to 3.x.x unless you need the gen.3 features and functionality. Additional FSK configuration will be needed if you do. Contact Marine Magnetics for details.

*Figure 3 – If updating a Synapse magnetometer or array, check that all connected nodes are listed.
All selected units will be updated, with the Master node being the last in sequence.*
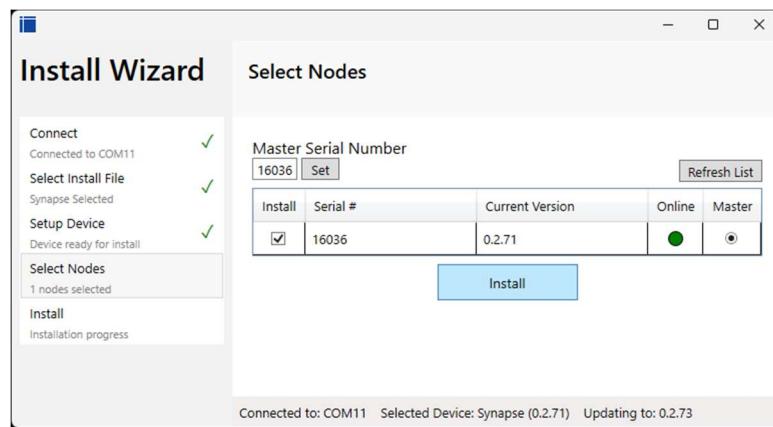
Figure 4 – Wait for the installation to complete
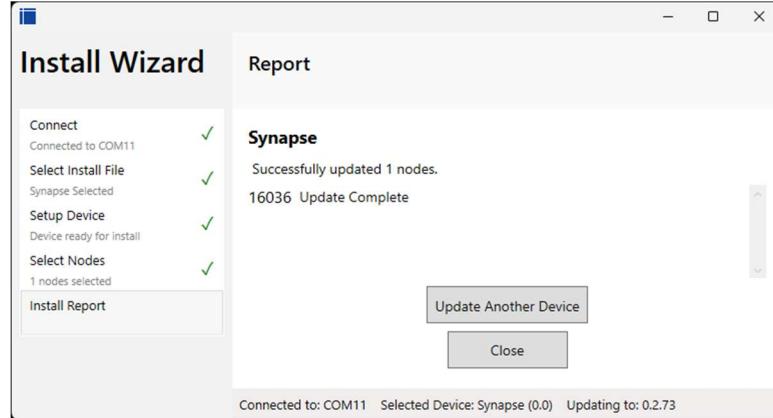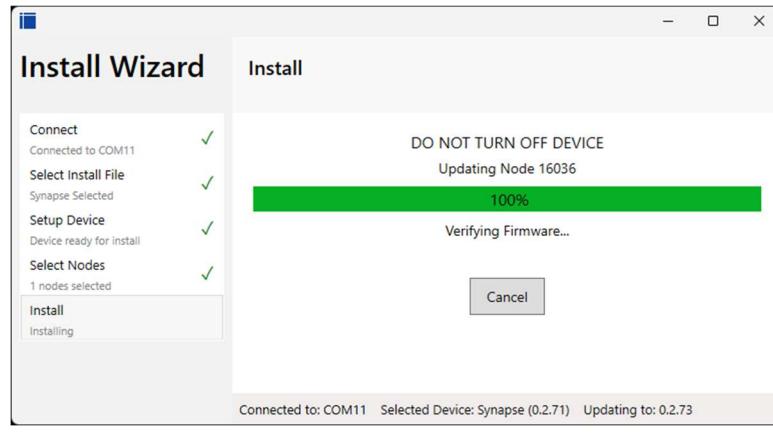
Updating firmware in the gen.2 Isolation Transceiver

*Figure 5 - **Download Latest** option automatically gets the latest compatible update from the MMC web site*
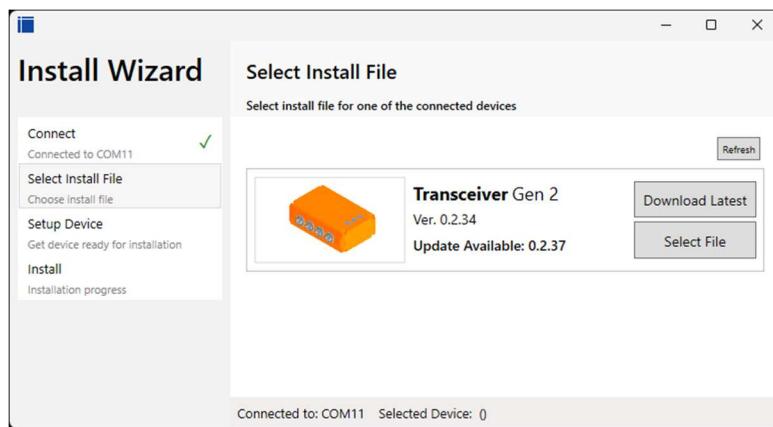

Figure 6 – gen.2 isolation transceivers with software 0.2.1 or older do not support firmware updates.
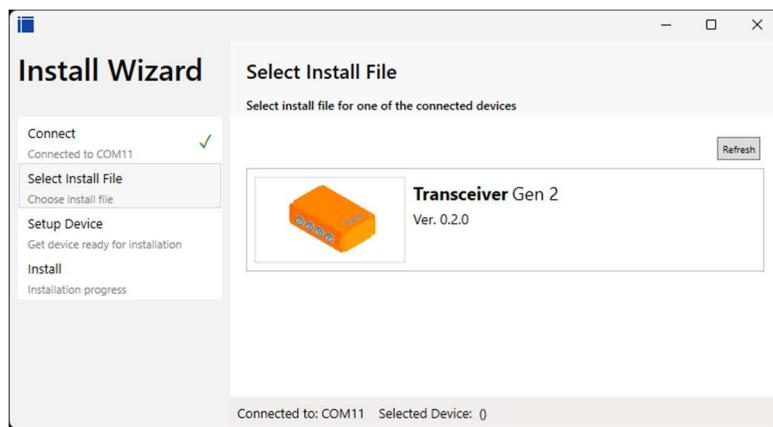
Updating firmware in the sidescan integration transceiver

The procedure for updating the sidescan integration transceiver is identical to that of the desktop isolation transceiver, with the exception of the test cable used to interface to the unit.