

In-Situ Aqua Troll 400/600 Quick Start Guide

The In-Situ Aqua Troll 400 and 600 multi-parameter probes are compatible with the Nexsens X2 data logger using RS485 Modbus RTU output.



Change COM Settings

Sensors shipping from NexSens will be ready for plug-and-play communication with the logger using a factory-fitted UW-8 plug connector.

Other sensors will need to have their COM settings adjusted to work with the X2:

- 1 Connect the UW-plug cable from the Aqua Troll to a UW-FLxR cable.
- 2 Wire the leads of the UW-FLxR cable into In-Situ's Modbus Sensor Communication Device Kit based on the table and picture below:

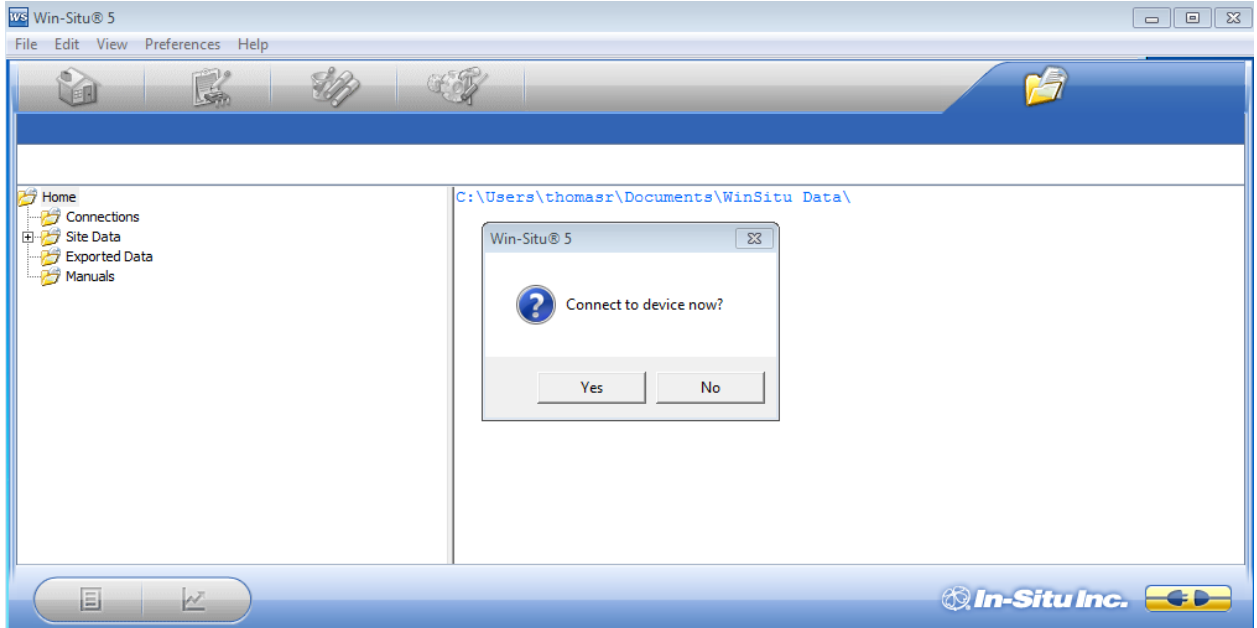
UW-FLxR Wire Color	Signal	In-Situ Device Kit Terminal
Red	9VDC (device kit battery)	Red
Black	GND	Black
Green	RS485-A	Blue
Blue	RS485-B	Green



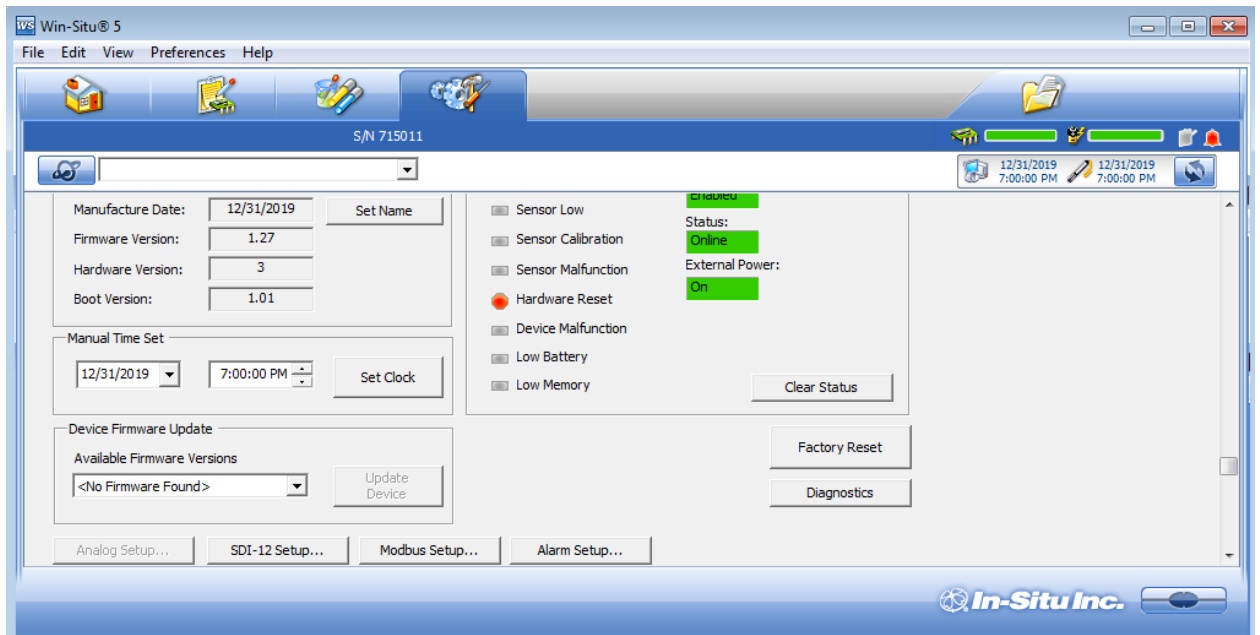
UW-FLxR cable wired to the In-Situ Communication Device Kit. **Note that the blue and green signals are switched.**

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- 3 Launch In-Situ's Win-Situ 5 software and click **Yes** to auto-connect.
 - a. If the auto-connection fails, navigate to **Preferences|COM Settings** and verify the USB COM Port number is correct.



- 4 Navigate to the **Device Setup Tab**.



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- 5 Go to **Modbus Setup** and change the **Parity Bits** field to **None**.
 - a. Change the Device Address to a unique value if another Modbus-capable sensor will also be connected to the data logger.

The screenshot shows a window titled "Device Communication Settings" with a close button (X) in the top right corner. The window contains the following fields:

- Device Address: 1 (1-247)
- Serial Communications (grouped in a box):
 - Baud: 19200
 - Data Bits: 8
 - Parity Bits: None
 - Stop Bits: 1
- End Of Message Timeout (ms): 1000
- End Of Session Timeout (ms): 5000
- Mode: Modbus-RTU

At the bottom right of the window, there are two buttons: a cancel button (X) and a confirm button (checkmark).

Required Modbus Communication settings for connection to an X2 logger.

Sensor Detection

- 1 If the Aqua Troll's sensors or central wiper have not been installed, follow In-Situ's Quick Start instructions to do so.
 - a. Record the installation date for reference as most probes have a life-span starting from the installation date.
- 2 After the Aqua Troll's Modbus communication settings have been configured as shown above, connect the plug end of the sensor cable into a sensor port on the X2 data logger.
 - a. Record the port number for reference. Following the X2's auto-detection process, the sensor will only communicate when connected to this port.
- 3 Follow the X2 data logger **Quick Start Guide** and verify the Aqua Troll sensor profile updates to WQData LIVE following the sensor detection.