

UV•Xchange Quick Start Guide

This document is a quick guide for setting up UV•Xchange on a compatible instrument. Complete details can be found in the UV•Xchange manual. For a summary on setting up the instrument, consult the appropriate instrument Quick Start Guide.

Setup for UV•Xchange will depend on which instrument it is installed on: i.e. on a multi-parameter instrument, a multi-parameter instrument with Independent UV ports, or on a single parameter instrument (Micro•X). Refer to the appropriate sections below.

Note: UV•Xchange emits Ultraviolet light. Care should be taken to avoid direct exposure of skin or eyes.

UV•Xchange installed in a Secondary Xchange port

UV•Xchange is typically shipped from the factory installed on an instrument with the LED modules correctly oriented. This section is applicable for these general cases.

1. Inspect UV•Xchange to ensure that the glass tube is completely seated. The tube should be sitting directly on the polycarbonate washer. If pressure differential encountered during shipping has unseated the tube, remove UV•Xchange from the instrument endcap, press the tube into place (covering all three o-rings), and re-install UV•Xchange into the instrument endcap. Note: do not attempt to seat the tube with UV•Xchange installed on the endcap.
2. Install SeaCast software from the USB provided or download via AML website (www.AMLoceanographic.com). Ensure you have administrative privileges on the computer.
3. Run SeaCast. It is best to run as administrator.
4. Ensure UV•Xchange will not irradiate any persons or equipment should it begin to emit light. This can be achieved by either placing a shield around the end of the instrument or pointing the instrument away.
5. Connect the instrument to the computer serial port using the supplied cable. Apply 8-26 VDC to the bare leads on the end of the cable to power the instrument. Observe polarity: red is positive, black is negative.
6. On logging instruments equipped with an LED indicator, it will turn solid green when powered up.
7. On the *Instrument* tab in SeaCast, choose the appropriate communication port to connect to the instrument.
8. Once the correct communication port is selected, SeaCast will detect the instrument.
9. On the *Setup* tab in SeaCast, in the *UV•X Biofouling Control* panel, enter the value of '20' into both the 'On' and 'Off' boxes. This will set the duty cycle to 20 minutes on, 20 minutes off (50% duty cycle) when the changes are applied.
10. In the *UV•X Operation Mode* box, select 'Mode 2'. This will configure UV•Xchange to operate at all times, regardless of instrument state when the changes are applied. Refer to the UV•Xchange manual for further details on operation modes.
11. Click the 'Apply' button to submit the changes. On the *Instrument* tab, click 'Detect Sensors.' This will force SeaCast to refresh the settings. UV•Xchange will now begin to cycle.
12. This completes setup of UV•Xchange, which will now operate during instrument deployment. Refer next to the instrument's Quick Start Guide for instrument setup.

When using UV•Xchange on Micro•X:

It is preferable to have UV•Xchange begin to cycle automatically upon instrument power up. To achieve this, enter "SET DETECT 0 7" into the 'Advanced Instrument Control' panel on the bottom of the Setup tab of SeaCast. This forces the instrument to use a Baud rate of 38400 and ensures that UV•Xchange will begin cycling immediately upon instrument power up instead of waiting for a command.

UV•Xchange installed in Independent UV ports

1. Inspect UV•Xchange to ensure that the glass tube is completely seated. The tube should be sitting directly on the polycarbonate washer. If pressure differential encountered during shipping has unseated the tube, remove UV•Xchange from the instrument endcap, press the tube into place (covering all three o-rings), and re-install UV•Xchange into the instrument endcap. Note: do not attempt to seat the tube with UV•Xchange installed on the endcap.
2. Ensure UV•Xchange will not irradiate any persons or equipment should it begin to emit light. This can be achieved by either placing a shield around the end of the instrument or pointing the instrument away.
3. Apply 12-26 V through a cable to pins 5 and 6 on the main connector. This will immediately power the UV•Xchange according to the duty cycle already programmed onto the controller in the instrument.
4. This completes setup of UV•Xchange, which will now operate whenever it is powered. Refer next to the instrument's Quick Start Guide for instrument setup.