

AML-1 Temperature / Conductivity Probe Installation

For information on the AML-1 temperature / conductivity probe and other AML Oceanographic products, please visit their website: <https://amloceanographic.com/>.

AML-1 RT, With CT.X2 Installed - 6000m Rated

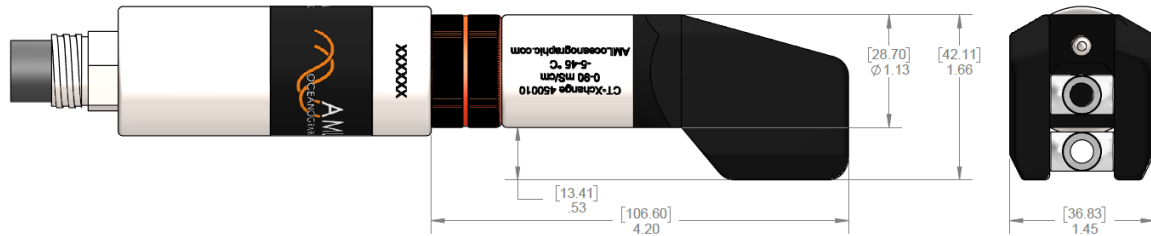


Figure 1. AML-1 RT, With CT.X2 Installed



Figure 2. AML-1 RT

The AML-1 RT instrument features an RS232 streaming output, through a waterproof cable (see Figure 3).



Figure 3. Waterproof cable (black) connected between the AML-1 RT and an RS232 port of the AMOS computer. The grey cable supplies power (red +12 V and black GND) to the black cable and the AML-1 RT.

The DB-9 connector from the AML-1 RT cable should be connected to a male DB-9 connector on a USB-RS232 converter hooked up the AMOS computer. In Nature Robotics recommends FTDI-based USB-RS232 converters. For details on setting up the USB-RS232 converter so that it always has the same port name in Linux, please see for example: <https://rolfblijleven.blogspot.com/2015/02/howto-persistent-device-names-on.html>

The AMOS configuration file (found in `~/Computer_Programs/RemoteControlTest/prefs.txt`) should contain the following text (under the `[sensors]` section), related to the conductivity sensor:

[sensors]

```
temp_conductivity_sensor 1
```

```
temp_conductivity_port /dev/ttyUSBPort3
```

The “temp_conductivity_port” value could be named differently, depending on the name of the USB device on your particular system.

There is a test command line program found in ~/Computer_Programs/TempConductivityTest that can be used to test the functionality of the temperature / conductivity sensor. Simply run:

```
sudo ./TempConductivityTest /dev/ttyUSBPort3
```

to see some streaming output of temperature and conductivity values from the sensor.

Please note that sensor integration and installation can be performed at In Nature Robotics, either when an AMOS robot is being purchased or by retrofitting an existing robot.

For more information, please see: <https://www.innaturerobotics.com/> or email us at info@innaturerobotics.com