

FIRST TIME USE

1 Download the latest Witrox compatible software (WitroxView (free), AutoResp or WitroxCTRL) from our website (www.loligosystems.com/downloads). Follow the instructions on the screen and then restart the PC.

FOR EACH TRIAL

2 Connect the (green) **WiBu copy protection dongle** (containing the software license) to a USB port on the same PC (2a).

NB. Please only run one Loligo® software at a time from a single PC.

3 Connect the recommended **long-range Bluetooth adapter** to a USB port on the same PC and let Windows initialize it (2b). Disable any built-in/other Bluetooth radios on your PC.

- 4 a. Connect the power adapter for the Witrox instrument to a wall outlet and then the USB cable to the backside socket (alternatively, power the Witrox directly from a USB port).
- b. Connect the PT1000 temperature sensor to the socket labelled "Temp" on the front of the Witrox instrument.
- c. Connect the fiber optic oxygen sensor(s) to the SMA ports labelled **CH1-CH4** on the front of the Witrox instrument.
- d. Turn on the Witrox instrument by pushing the power button (lower left corner). Notice that the instrument will time out after 300 seconds of inactivity.

CALIBRATION, SERVICE & MAINTENANCE

Each oxygen sensor must be calibrated before use. Follow these steps for a manual calibration (5.1 and 5.2):

- 5 a. Place the sensor tip in a mixed air-equilibrated water sample. This can be achieved by purging atmospheric air into sample water, e.g. with an air pump.
- b. Wait for the phase readings (sensor signal) to stabilize and then click **Read current values** to save the current value as the HIGH calibration value (100 % air saturation).
- c. Transfer the sensor to an oxygen free water sample, e.g. by purging nitrogen gas into sample water or by dissolving ~10 grams of Na₂SO₃ in 500 ml of distilled water.
- d. Wait for the phase reading to stabilize and then click **Read current values** to save the current sensor signals as the LOW calibration value (0 % air saturation).

NB. The software calibration menu may vary depending on the software being used. Refer to the user manual of the preferred software for more info.

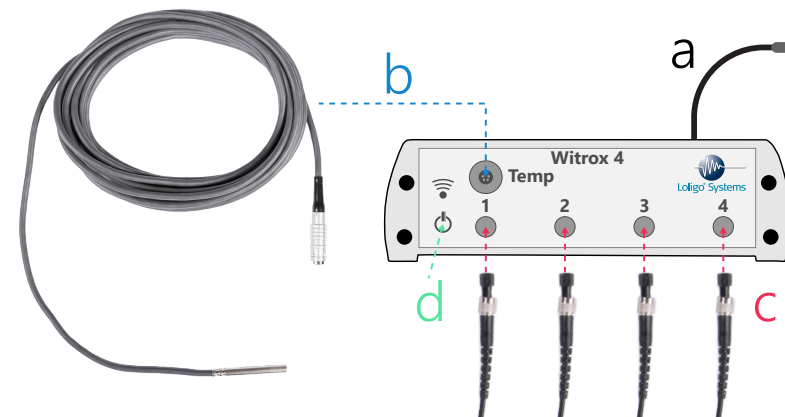
6 To clean the oxygen sensor(s), use a mild soap solution or bleach, and rinse with demi water. Then dry.

7 Store oxygen sensors in a dark place between trials to avoid exposing the fluorescent dye to UV light. UV light will bleach the sensor dye and decrease the signal strength (amplitude).

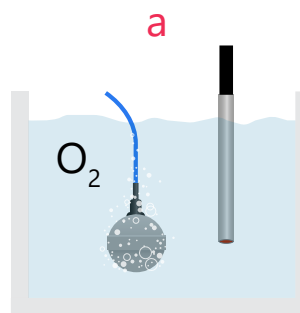
2



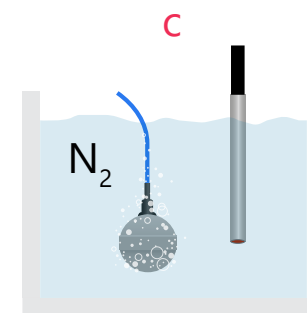
4



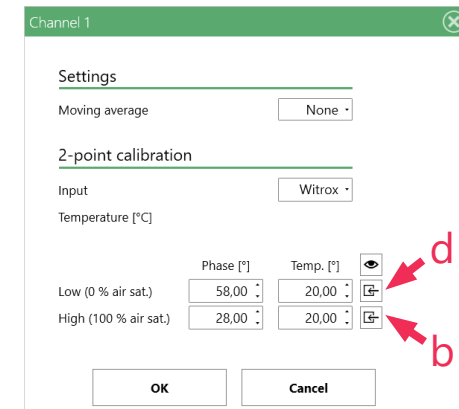
5.1



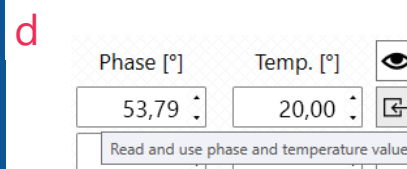
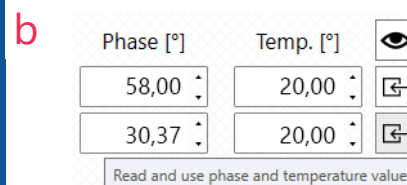
100 % air sat.



0 % air sat.



5.2



6

MILD SOAP/
BLEACH

WATER

DRY

