

**IMPORTANT**

WitroxView v2 is a free, standalone software to use with our Witrox oxygen instruments to monitor and log oxygen and temperature values.

**1** Any logged data or calibration settings you set up in WitroxView cannot be transferred to other Loligo® software, like AutoResp™ v3.

You must perform the oxygen sensor calibration in the software you intend to use with your Witrox instrument. In other words, if you are using your Witrox with AutoResp™ v3, the sensors should be calibrated in AutoResp™ v3.

**2** If you are using the Witrox instrument with AutoResp™ v3, skip to step 12.

**INSTALLING AND RUNNING THE SOFTWARE**

**3** Download the latest version of WitroxView v2 from our website: [loligosystems.com/downloads](http://loligosystems.com/downloads) Follow the instructions on screen and then restart the PC.

**SETTING UP HARDWARE**

**4** Connect the recommended **long-range Bluetooth radio** (4) to a USB port on your PC and let Windows initialize it. Disable any built-in/other Bluetooth radios on your PC, if you are using the long-range dongle.

- 5** a. Connect the power adapter for the Witrox instrument to a wall outlet and then the USB cable to the backside socket (4). Alternatively, power the Witrox directly via a USB port on your PC.
- 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. Power on the Witrox instrument by pressing the **POWER BUTTON** (5). *Notice that the instrument will time out after 300 seconds of inactivity (ERROR ICON (5) will light red).*

Make sure that all Witrox instruments are turned ON (**POWER BUTTON** lighting green). The **SIGNAL ICON** (5) will blink blue until measurements start or until the Witrox becomes inactive. The SIGNAL ICON will light blue when the Witrox instrument is connected and measuring.

**6** Open WitroxView v2. Choose **Scan for new devices** and let WitroxView find the instruments. This might take several minutes. When the scan is finished, all connected Witrox instruments are shown.

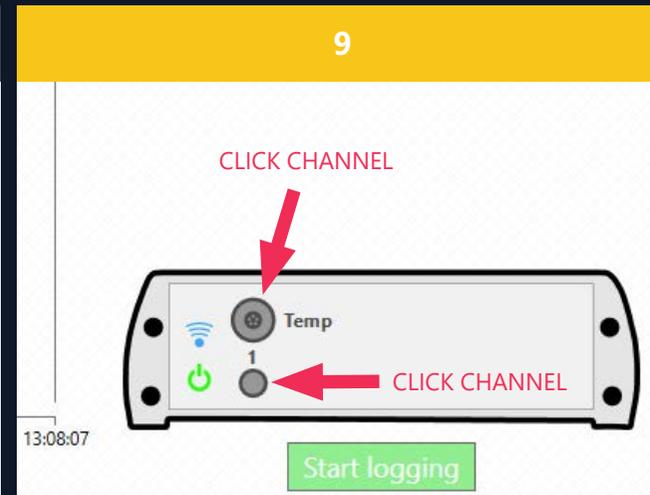
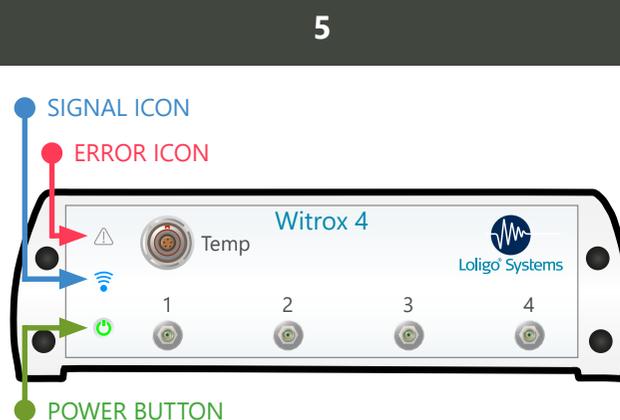
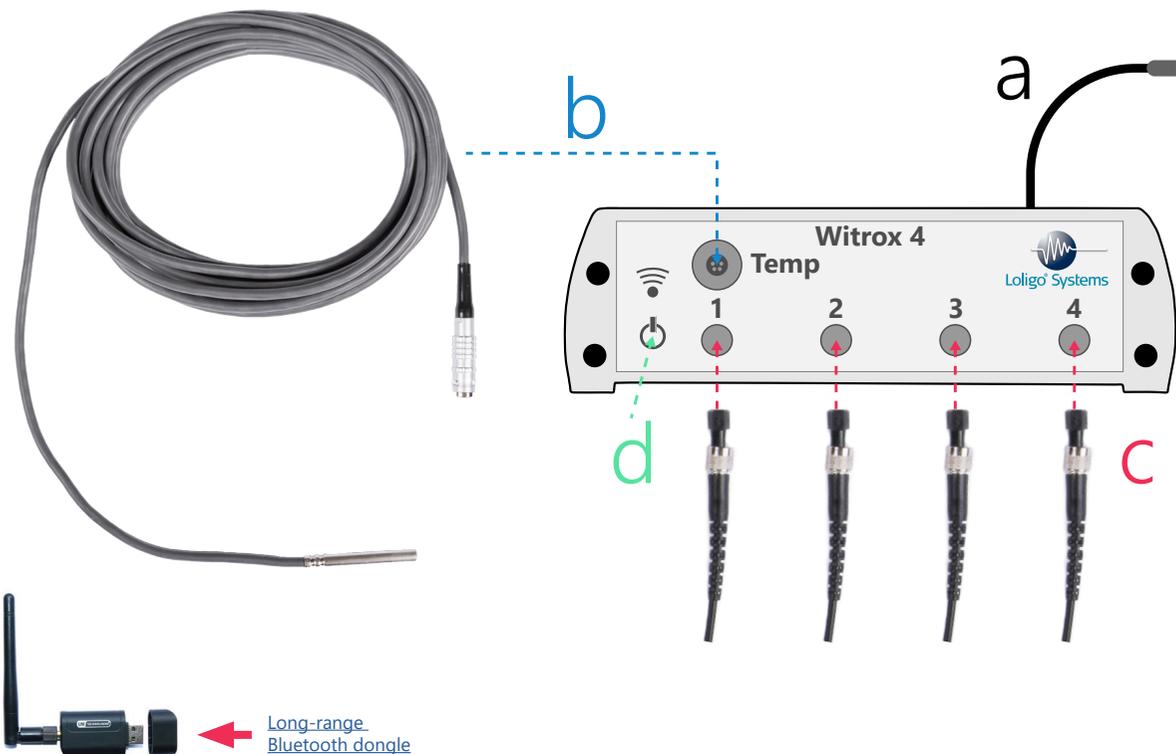
*Please do not use any other Loligo® software simultaneously with the WitroxView v2 software.*

**STARTING AN EXPERIMENT**

**7** Make sure that all the instruments are switched on. Start WitroxView and choose **Use current configuration** to work with the saved configuration.

**8** Click **Calibration** to calibrate the oxygen sensor(s) or to verify current calibration values (go to step 12).

**9** Click **Experiment** to see real-time data. Click on each channel (9) to change setpoint, hysteresis, regulation type etc. Choose between these four types of regulation (Off, Manual, Automated or File).



STARTING AN EXPERIMENT

10

Click **Start logging** (10a) to create a data file and save temperature and oxygen data from the Witrox instrument.

Notice that data from each Witrox instrument is logged to a separate file.

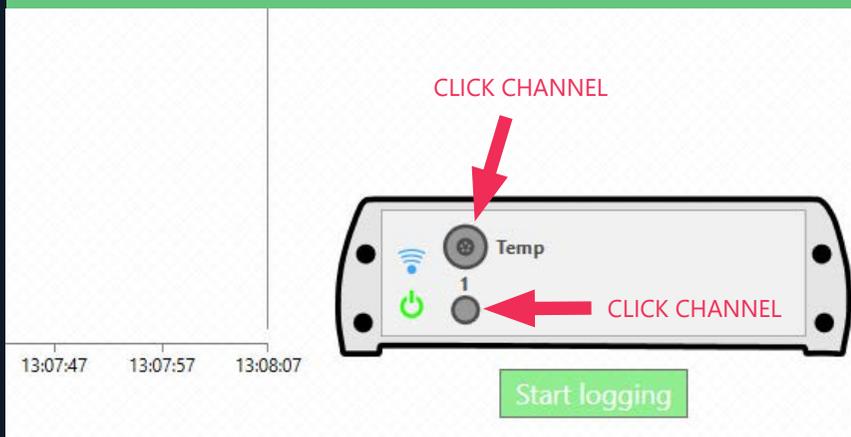
11

Click **Stop logging** (10b) when the experiment is over. Power off the Witrox instrument (press POWER BUTTON), when not in use.

10



12



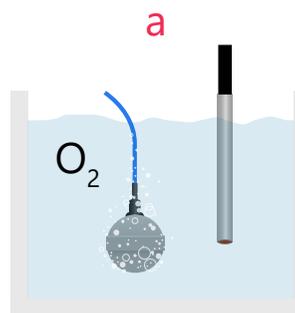
CALIBRATION, SERVICE & MAINTENANCE

Choose **Calibration** to calibrate oxygen sensor(s). Click on the relevant channel (CH1-CH4) or their gear icon in the legend panel to open the channel calibration menu (12). Select the type of temperature input (Witrox controlled or User controlled) and then perform a **Manual** (user-defined) 2-point calibration (12.1 and 12.2):

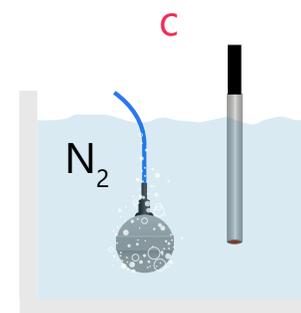
12

- Place the sensor spot in a mixed air-equilibrated water sample. This can be achieved by purging atmospheric air into sample water, e.g. with an air pump. If the sensor is not fixed onto a fiber optic cable, mount the fiber optic cable onto the sensor spot. Otherwise, the Witrox instrument cannot read the oxygen values.
- Wait for the phase reading (sensor signal) to stabilize around 27-30, and then click **Read current values** to save the current value as the HIGH calibration value (100 % air saturation).
- Transfer the sensor spots to an oxygen free water sample, e.g. by purging nitrogen gas into sample water or by dissolving ~10 grams of Na<sub>2</sub>SO<sub>3</sub> in 500 ml of distilled water.
- Wait for the phase reading to stabilize around 57-60, and then click **Read current values** to save the current sensor signals as the LOW calibration value (0 % air saturation).

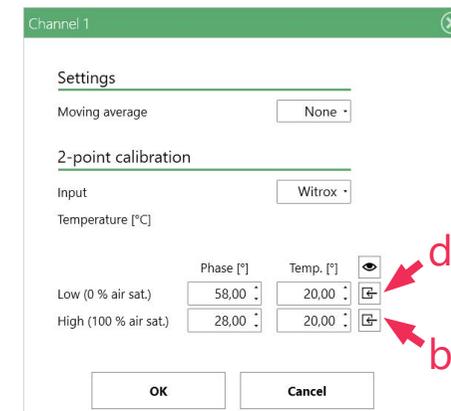
12.1



100 % air sat.



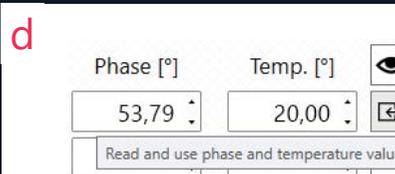
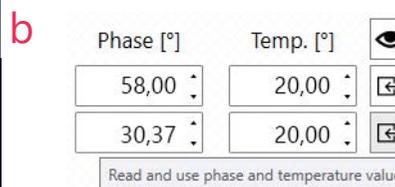
0 % air sat.



13

To clean the oxygen sensor(s), use a mild soap solution or bleach, and rinse with demi water (13). Then dry.

12.2

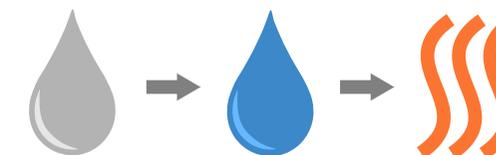


13

MILD SOAP/  
BLEACH

WATER

DRY



14

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).

