



## ORP (Redox) Calibration Video Transcript

### Function

The ORP sensor measures the oxidation-reduction potential of a solution by measuring the electrical potential between a reference electrode (the pH reference) and a platinum band or stud in contact with the solution being tested. The Hydrolab ORP sensor is integrated with the pH sensor.

### Maintenance

The only maintenance required for the ORP sensor is to keep the platinum band or stud clean. A very soft brush and mild soapy water can be used to remove any dirt or residues. The platinum electrode is part of the pH sensor, so great care must be taken not to damage the thin glass.

### Calibration

Prior to calibration of the ORP sensor, maintenance and calibration must be performed on the pH sensor.

Establish a connection to the sonde with Hydras 3LT. Click the button labeled '**Operate Sonde**'. When the sonde finishes its initialization, click the '**Calibration**' tab, then click the '**ORP [mv]**' tab. You will see pictures of the four different pH probes available as well as the current ORP in millivolts, the date and time, and the current temperature. The two probes on the left have ORP electrodes.

Rinse the sensors in de-ionized water and dry them. Attach the calibration cup. Fill the cup about 25% with Zobell's solution and screw the storage cap on. Shake vigorously for six seconds. Discard the Zobell's. Fill the cup with Zobell's solution again, this time until the pH sensor and reference are covered. Wait one minute for the reading to stabilize. When the reading is stable type the value from the chart into the box based on the temperature. Click '**Calibrate**'. A "Calibration Successful" message will appear.

The ORP sensor is now calibrated.

