

# ULTRAPEN™ PX SENSOR REPLACEMENT INSTRUCTIONS

For ULTRAPEN models PT2, PT3, PT4, PT6, PTBT2, PTBT3, PTBT4 and PTBT6  
Not for PT5 or PTBT5, see PT5/PTBT5 Sensor Replacement Instructions.

**NOTE:** Please read these instructions thoroughly and carefully — Damage caused by improper installation or mishandling will void the warranties of the instrument and the new sensor.

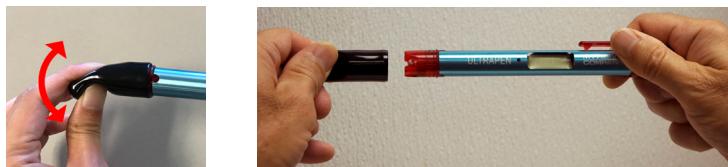
**CAUTION:** Moisture trapped in instrument will cause damage to the electronic circuitry. Careful adherence to the following procedure will significantly reduce the potential for failure due to moisture contamination or damaged connectors.

**CAUTION: AVOID TOUCHING AND/OR CONTAMINATING THE ULTRAPEN ELECTRONICS OR SENSOR CONNECTOR/CIRCUITRY AT ALL TIMES!**

For clarity, this procedure is broken down into three sections. **Follow each section carefully to avoid damage.** Refer to images as necessary. All images are of model PT2 for example.

## I. Preparation of ULTRAPEN

1. Before removing the sensor from the ULTRAPEN, remove the protective/hydration cap from your ULTRAPEN by wiggling it side to side while gently pulling it off the ULTRAPEN, use caution not to spill solution.



2. Rinse the sensor end and surrounding area with clean water and dry thoroughly.



3. Ensure hands are clean and dry. Moisture will damage the electronics.

4. Unscrew the battery cap and remove the battery tray. (There is a pressure relief tube running from the battery compartment to the sensor compartment, which allows pressure equalization in the sensor area.)



5. Grasp the sensor body and gently pull the sensor out of the ULTRAPEN.



6. Carefully clean off any residual salt or liquid around the opening of the ULTRAPEN's sensor compartment using a towel. **CAUTION:** Do NOT contaminate the inside of the ULTRAPEN.



## II. Preparing the New Sensor

### Steps 1 and 2 should be performed AWAY from the ULTRAPEN.

**CAUTION:** The protective/hydration caps on the PT2, PT3, PT4, PTBT2, PTBT3 and PTBT4 ULTRAPENS contain a small amount of concentrated saline storage solution that will cause damage if allowed to come in contact with the ULTRAPEN's electronics or sensor connector/circuitry.

**NOTE:** The O-rings of the sensor are pre-greased for ease of insertion. Carefully remove any packaging from the shaft before installation and handle the sensor by the protective/hydration cap end to avoid migration of the grease.

1. Holding the new sensor, remove the warning label from around the protective/hydration cap. Then remove the clear tape from around the top of the protective/hydration cap.



2. If there are salt crystals around the cap of the sensor, using caution not to allow the connector side of the sensor to get wet or contaminated, carefully rinse sensor with clean water, shake off excess water, and dry the outside of the sensor body. Remove the connector cap from the connector end of the sensor and inspect to ensure 3 O-rings are on the sensor body.



## III. Installing the New Sensor

1. Align the Large and Small alignment tabs on the sensor with the Large and Small grooves on the ULTRAPEN. (It will only go in one way.) **WARNING:** Damage **WILL** occur to the connectors inside your ULTRAPEN if you attempt to install the sensor incorrectly.



2. While maintaining alignment, gently apply pressure to insert the sensor into the ULTRAPEN. You may need to apply a slight twisting motion to start each O-ring, ensuring all 3 O-rings on sensor slide evenly into ULTRAPEN. **CAUTION:** A damaged O-ring will allow solution to leak into the instrument. Press sensor **STRAIGHT** into the ULTRAPEN until it is securely in place.



3. Replace the battery tray by aligning the groove in the side of the enclosure with the groove in the battery tray, then sliding the tray into the case until it is fully seated. The groove in the case corresponds to a guide bump inside the enclosure that guides the tray back into the correct position. Screw the battery cap back on.



Your instrument is now ready for calibration. See Operation Manual for calibration instructions.

2450 Impala Drive  
Carlsbad, CA 92010-7226 USA  
Tel: +1-760-438-2021  
Fax: +1-800-869-7668 / +1-760-931-9189  
[www.myronl.com](http://www.myronl.com)

**Built On Trust.** Founded in 1957, the Myron L® Company is one of the world's leading manufacturers of water quality instruments. Because of our commitment to product improvement, changes in design and specifications are possible. You have our assurance any changes will be guided by our product philosophy: accuracy, reliability, and simplicity.

