ULTRAPENX2™ PTBT6 – Basic Calibration Instructions
Instructions for Performing a Basic, 1-Point Calibration of the PTBT6

CALIBRATION

Myron L® Company recommends calibrating the PTBT6 before each series of tests, depending on usage.

I   GENERAL NOTES

- **IMPORTANT:** The Nitrate sensor should be conditioned prior to performing a calibration (see SENSOR CONDITIONING section of the PTBT6 Quick Start Instruction sheet).
- Calibration solutions must be prepared prior to use.
- This calibration procedure describes a 1-point Calibration using the 100 ppm, NO_3^--N reference solution (N100SOL) included in the shipping box of your instrument.
  - For greatest accuracy complete a 2-point calibration as described in the PTBT6 Operation Manual. Download from the Myron L® Company website (*www.myronl.com*, *Downloads tab*).
- **ALWAYS** keep the temperature of the prepared calibration solution(s) the same as the test solution.

USING THE PIPETTE TO DRAW SOLUTION:
1. Depress the pipette plunger to the 1st stop.
2. Place tip in ISA solution and release slowly.
3. To dispense, depress pipette plunger completely to the 2nd stop.
   - **DO NOT** contaminate the pipette tip by touching it with your fingers or setting it on a dirty worksurface.
   - **DO NOT** dip the pipette tip in the calibration solution as this will cause cross-contamination between solutions.
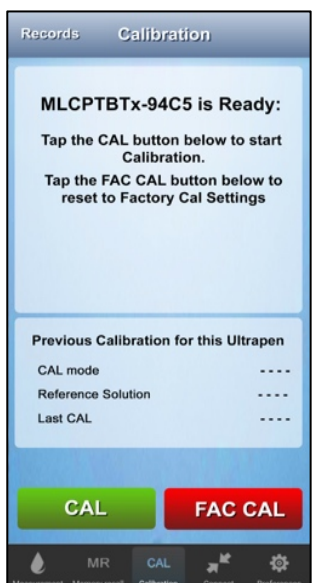
II. PREPARING CALIBRATION SOLUTION

NOTE: reference solution(s) must be prepared prior to calibration. For each standard solution selected:
1. Fill a graduated cylinder to the 10 mL line with the reference solution.
2. Add 200 µL of the Nitrate ISA solution to the graduated cylinder (using the supplied 100 µL pipette).
3. Replace the cap on the graduated cylinder and shake well to mix the prepared reference solution.
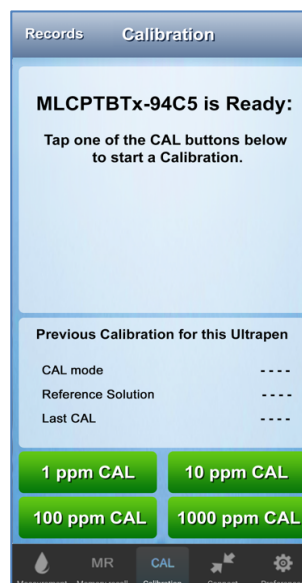
III. 1-POINT CALIBRATION

You will need prepared 100ppm reference solution, clean water (preferably DI, RO, or distilled), and a clean, dry, lint-free cloth.

1. Remove the protective / hydration cap from the Nitrate sensor.
2. Rinse sensor for about 5 seconds with clean water (preferably DI, RO, or distilled).
3. **CAREFULLY** blot the sensor membrane with a soft, clean, lint-free cloth or tissue to remove any water drops.
4. Dip the pen in the prepared **100 ppm** reference solution. Make sure the sensor is completely submerged.
5. Swirl it around to remove any bubbles that may have been caught in the sensor.
6. Tap the CAL button [CAL Calibration] in the Feature Navigation Bar.
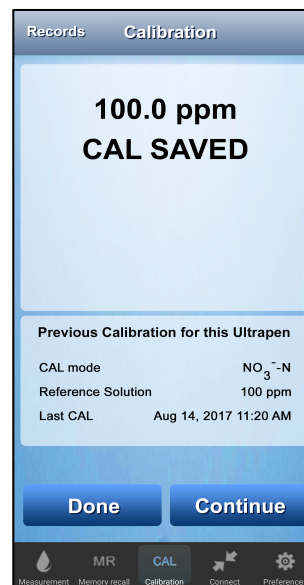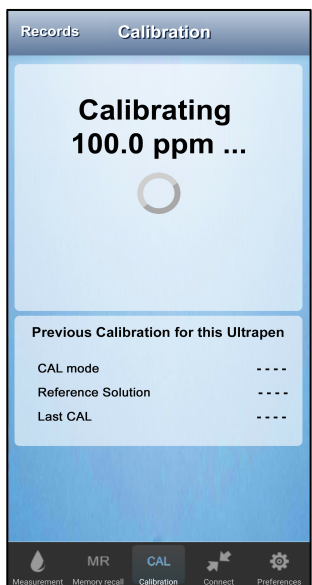

7. The Initial CAL screen will appear.
8. Tap the CAL button.

9. The PTBT6 Secondary CAL screen will appear.
10. Tap the 100 ppm CAL button

11. The PTBT6 will begin calibrating.

- The LED on the PTBT6 will begin to flash rapidly.

- Hold the sensor steady while the calibration is being performed.

13. Tap the DONE button to exit the calibration process.

12. When the initial calibration point is completed, the App displays the values and saves a CAL record.

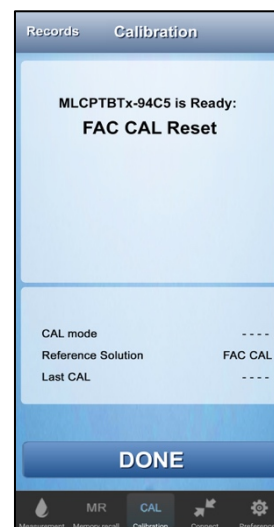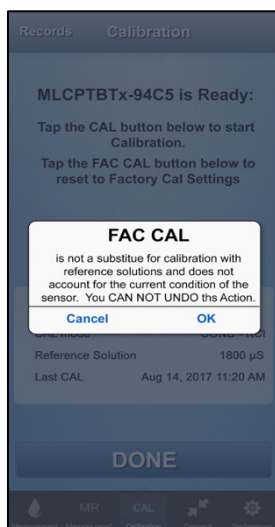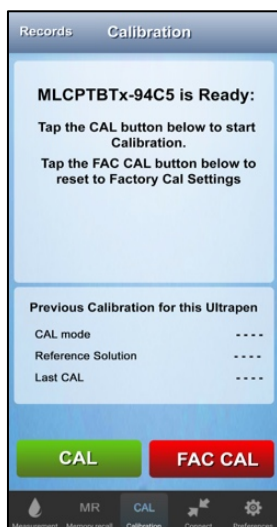- A DONE button will appear.

- A CONTINUE button will appear.

FACTORY CALIBRATION RESET

The PTBT6 can be returned to factory default calibration settings using the FAC CAL function. This will erase any calibration constants stored during previous calibrations and does **NOT** take into account the current condition of the ISE sensor.

To return your PTBT6 to factory calibration:

1. If the PTBT6 is OFF, press and release the PEN BUTTON to turn the PTBT6 ON and place it in Standby mode.

2. Tap the CAL button   in the Feature Navigation Bar.

3. The Initial CAL screen will appear.

4. Tap the FAC CAL button.

5. Tap OK to reset the PTBT6's calibration settings.

6. Tap CANCEL to leave them unchanged.

7. When the FAC CAL is completed, the App acknowledges that it is completed.

- A DONE button will appear.

8. Tap the DONE button to exit the calibration process.