

Topic – Cleaning and Calibrating the PYXIS ST-500 PTSA probe using the uPYXIS app

A clean PTSA probe is required for accurate traceability to maintain proper water chemistry. We recommend cleaning the probe once a month for normal applications. Increasing the cleaning frequency may be required in applications with excessive suspended solids, corrosion and scale by products. Calibrating a checking the cleanliness of your probe can be easily accomplished by using the *uPYXIS* app with a MA-WB wireless WiFi adaptor.

Required Items:

1. Field Cleaning Kit part number **SER-01**. The cleaning kit comes with a 500mL of probe cleaning solution, enough for five cleanings, a 500mL bottle of 100ppb calibration solution, along with a pipe cleaner, Q-tips, and a Mason jar.
2. **MA-WB** wireless WiFi adaptor. The adaptor comes with connecting cables. These two items are available from *Pyxis Lab, Inc* www.pyxis-lab.com
3. Distilled or de-ionized water for rinsing the probe.
4. Android or iPhone
5. The *uPYXIS* app

The following instructions are using the free *uPYXIS* app that is available for Apple and Android phones.

I. Probe Cleanliness Check

- A. Disconnect the probe from the interface box.



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- B. Connect the probe to the MA-WB wireless adaptor.
- C. Connect the MA-WB wireless adaptor to the interface box.



- D. Making sure that your WiFi is enabled on your cell phone, open the *uPYXIS* app and connect to the ST-500 WiFi network using “pyxis2015” for the password. Open the *uPYXIS* app and select “Diagnostics” and the “Cleanliness Check.” If dirty, follow the process below; if “Clean” go to step F.
- E. Cleaning steps:
 1. Fill the beaker with 100 mL of cleaning solution.
 2. Insert the probe and let it soak for 15 minutes.
 3. Remove the probe and run the pipe cleaner through the hole from both sides performing a scrubbing action.
 4. Next use a Q-tip to dry off the remaining residue.

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5. Place the probe back into the cleaning solution for another 15 minutes.
6. Rinse the probe in distilled or de-ionized water.
7. Perform another diagnostics cleanliness check. The probe should read “Clean.” If not, repeat the cleaning steps.
8. If clean, proceed to calibration.

II. Perform Calibration

- F. Place the probe in distilled or de-ionized water and wait a few minutes for the reading to stabilize.
- G. Select “Calibration” and the “Zero Calibration” on the app.
- H. You should see “Calibration Succeeded OK.”
- I. Next, place the probe in 100 ppb calibration solution and wait a few minutes for the reading to stabilize.
- J. Select “Slope Calibration” and enter 100 in the text box.
- K. Enter “Slope Calibration.”
- L. You should see “Calibration Succeeded.”

NOTE To see a video of the cleaning and calibration processes along with use of the adaptor and *uPYXIS* app visit:
<https://www.youtube.com/watch?v=Z5SLEzhBb3M>