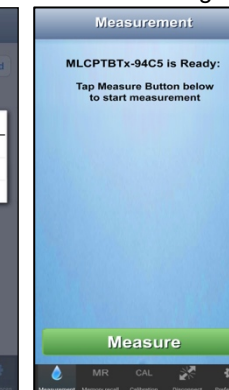
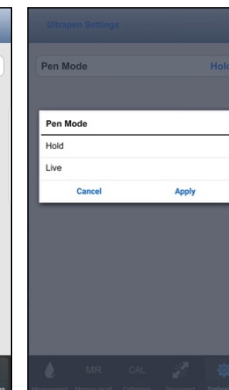
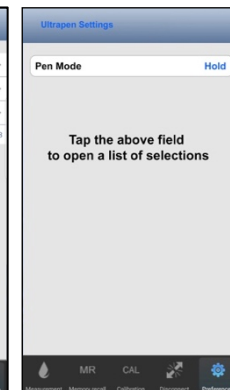
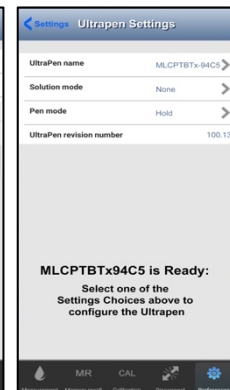
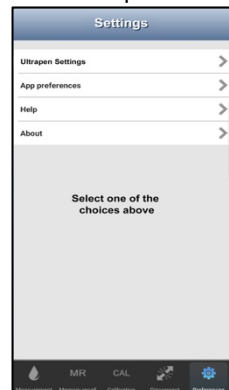



CHANGING THE PTBT4 LIVE / HOLD MODE

1. Press and release the PEN BUTTON on the PTBT4 to turn it ON and place the Ultrapen into STANDBY mode.



3. Tap the line that says Ultrapen Settings.
4. Tap the Pen mode line on the screen.
5. The App will display the current mode setting. Tap the Pen mode field.
6. Select Live or Hold, then tap APPLY.
7. Return to the Measurement screen and tap the GREEN MEASURE button.
8. Either tap the BLUE button to manually stop LIVE mode, or it will stop by itself after 5 minutes.

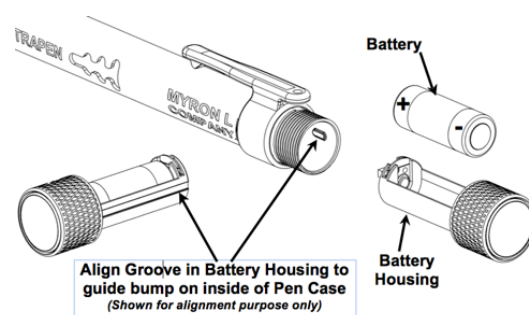
EXPORTING DATA RECORDS

1. Tap the MEMORY RECALL  button in the Feature Navigation Bar.
2. Tap the EDIT button in the upper right corner of the Record List. The Record List Edit screen will appear.
3. Tap individual records to select them for export, or tap the BLUE, SELECT ALL button to select the entire record list.
4. As you select records the CLEAR and DELETE buttons update to show the number of records selected.
5. Tap the SEND button in the upper left corner of the record list. The default email program for your Mobile Device will open.
6. An attachment will be present containing the selected records.
 - The format of the attachment will be either .csv (default), .xls or .xlsx.
 - The format for exporting attachments can be changed. Open the PREFERENCES > APPLICATION PREFERENCE screen.
7. Complete the email in the standard manner for your email application.

BATTERY REPLACEMENT

When PTBT4 charge level falls below 25% immediately replace the battery with a new N type battery.

1. In a CLEAN, DRY place unscrew the battery cap in a counter-clockwise direction.
2. Slide the cap and battery housing out of the PTBT4.
3. Remove the depleted battery from its housing.
4. Insert a new battery into the battery housing oriented with the negative end touching the spring.
5. Align the groove along the battery housing with the guide bump inside the PTBT4 case and slide the tray cap back on in a clockwise direction.
DO NOT OVER TIGHTEN.



ROUTINE MAINTENANCE

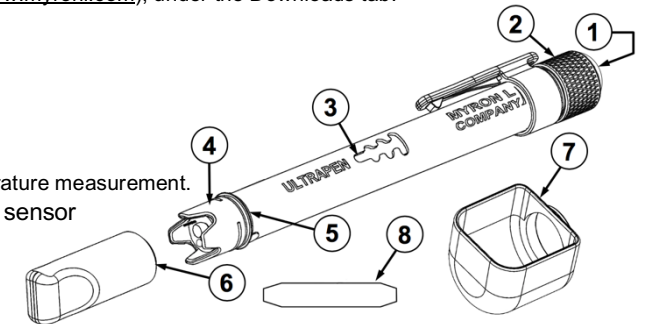
- After each use **ALWAYS** rinse the sensor with clean water (preferably DI, RO, or purified water).
- **ALWAYS** replace the Protective Cap on the sensor after each use. DO NOT push the Cap past the Cap Stop.
 - Make sure to fill the protective cap half way with Myron L[®] Company Storage Solution.
- Do not drop, throw, or otherwise strike the PTBT4 This voids the warranty.
- Do not store the PTBT4 in a location where the ambient temperatures exceed its operating/storage temperature limits.

MYRON L[®] COMPANY
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E-Mail: Customer Service – info@myronl.com ♦ Technical Support – techquestions@myronl.com
Website: www.myronl.com

For more detailed instructions on making measurements, calibrating and maintaining the PTBT4, or changing settings and preferences download the full [PTBTX2OM Operation Manual](#) found on the Myron L[®] Company website (www.myronl.com), under the Downloads tab.

PTBT4 LAYOUT

1. **PEN BUTTON** – Press to turn Ultrapen ON and place it in Standby mode.
2. **BATTERY CAP** – Unscrew to change battery.
3. **LED INDICATOR LIGHT** – Flashes rapidly when the PTBT4 is measuring or every 5 seconds when the PTBT4 is in Standby mode.
4. **FC^E SENSOR** – Contains electrodes for Free Chlorine Equivalent and Temperature measurement.
5. **CAP STOP** – **DO NOT** push the protective cap beyond the cap stop as sensor damage may occur.
6. **PROTECTIVE / HYDRATION CAP** – Protects sensor from damage and holds MLC Storage Solution to preserve sensor functionality.
7. **SCOOP** – Used to hold sample solution when dipping is not possible.
8. **ELECTRODE CLEANING PAPER** – Used for deep cleaning the platinum ORP electrode.



ULTRAPEN APP – FEATURE NAVIGATION BAR

This bar appears at the bottom of all screens. The buttons in this bar are used to navigate between the App's main functional areas.

MEASUREMENT – Returns the App to the Measurement screen.

MEMORY RECALL – Displays a list of saved measurements.

CALIBRATION – Places the App in Calibration mode.

CONNECT – Opens the App's Bluetooth Connect / Disconnect screen.

- Once a PTBT4 is connected to the App the button label says DISCONNECT.

PREFERENCES – Opens the App's Preferences & Settings modes, including an internet link to the full Operation Manual (**HELP**).



USING THE PTBT4

STEP 1 – DOWNLOAD THE “ULTRAPEN PTBTX2” APP



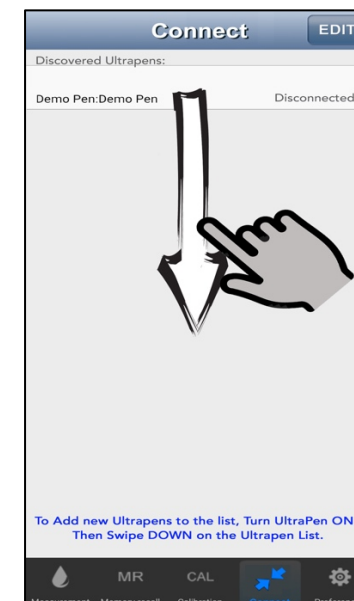
SYSTEM REQUIREMENTS

iOS device running iOS 10.0 or later.
If you are using an iPad, search for iPhone Apps.

Android device running OS 7.0 or later.

STEP 2 – CONNECT THE PTBT4 TO THE APP

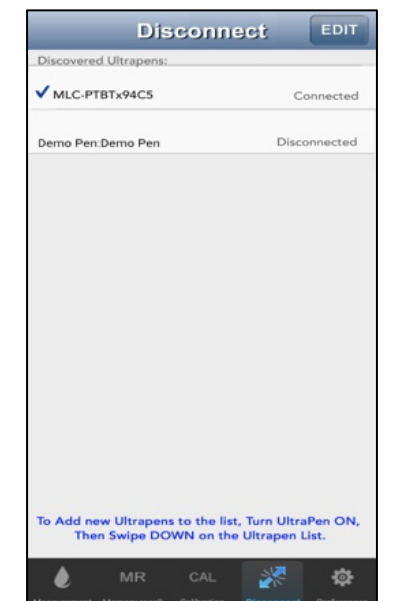
1. On your Device's Home Screen, tap the BLUE PTBTX2 icon.
2. Tap the CONNECT button at the bottom of the App display.
3. The App will switch to the CONNECT Screen.
4. Press and release the PEN BUTTON to turn the PTBT4 ON.



5. Swipe down on the screen. The PTBT4 will appear on the list.



6. Tap the PTBT4's name when it appears. Default: **MLC-PTBTX[Hexadecimal ID]**




7. The PTBT4 will move to the top of the list and a check mark will appear.

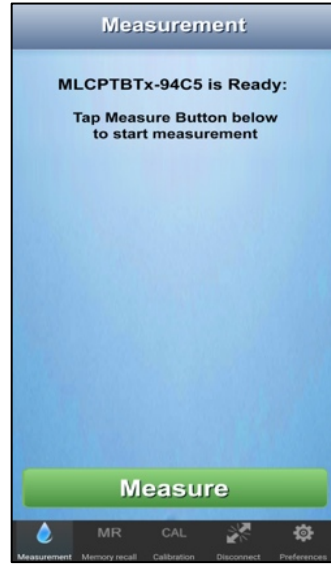
NOTES:

- Some Mobile Devices switch their wireless transmitters to a low power mode when their battery level gets too low.
- This could affect how easily your PTBT4 and your device connect and communicate.
- **ALWAYS** keep your Mobile Device charge level as high as possible.

STEP 3 – MAKE A HOLD MODE MEASUREMENT

1. Press and Release the PEN BUTTON to turn the PTBT4 ON.
2. Dip the PTBT4 sensor in the sample solution.

3. Tap the MEASUREMENT button  in the Feature Navigation Bar.



4. Tap the GREEN MEASURE button.

5. Swirl the pen in the sample while the PTBT4 is measuring. The PTBT4's LED will flash rapidly.

6. When the PTBT4 completes the measurement the App will display the values.

TO USE THE SCOOP:

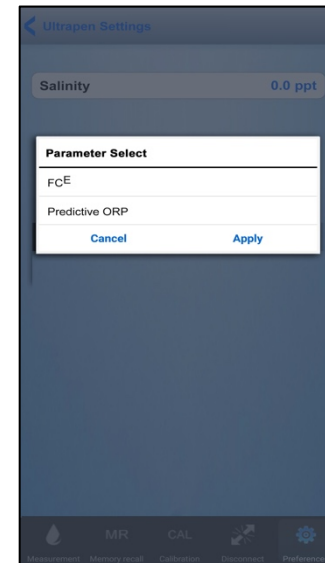
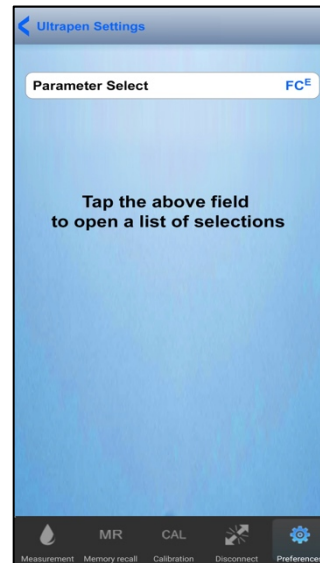
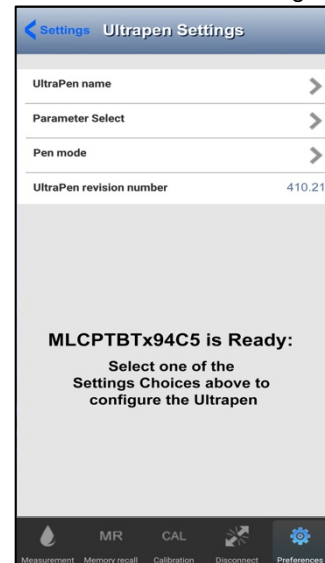
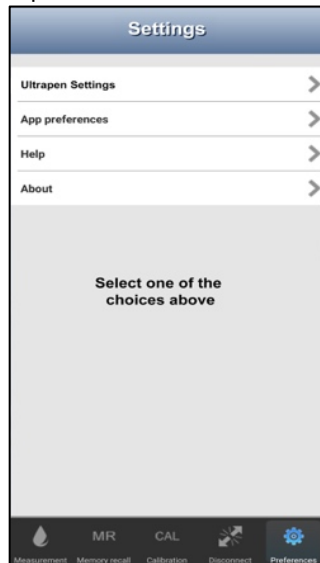
- Push the scoop onto the sensor while shifting it gently side-to-side.
- Hold the scoop directly under a vertical sample stream while measuring. Avoid bubbles.
- To remove the scoop, pull it off while shifting it gently side-to-side.

- **MS Button**
Tap to record the last measurement.
- **MS Replace Button**
Tap to replace data in an existing record with data from the last measurement.

CHANGING THE MEASUREMENT PARAMETER

1. Press and Release the PEN BUTTON to turn the PTBT4 ON.

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



3. Tap the line that says **Ultrapen Settings**.

4. Tap the Parameter Select.

5. The App will display the current parameter setting. Tap the Parameter field.

6. Select **FC^E** or **Predictive ORP**, then tap **APPLY**. The App will update the PTBT4 Parameter.


7. Return to the Measurement screen and tap the GREEN MEASURE Button to start a new measurement.

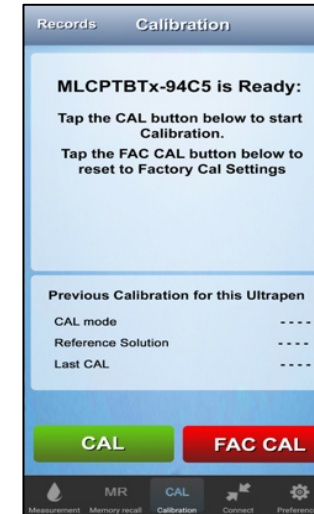
CALIBRATING THE PTBT4

NOTE: Requires one of the following MLC buffers or reference solutions:

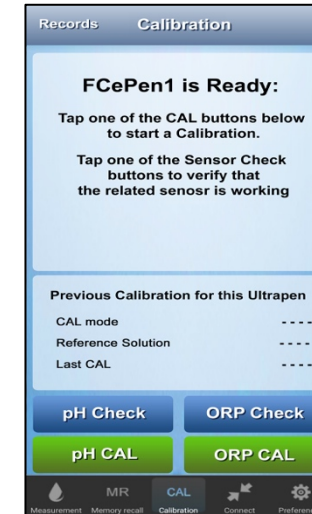
- To calibrate the pH sensor: Use 4.0 pH, 7.0 pH and 10.0 pH Calibration Buffers.
- To Calibrate the ORP sensor: Use 80mV Quinhydrone, 260mV Quinhydrone, or 470mV Light's solution.

To Calibrate the ORP Sensor:

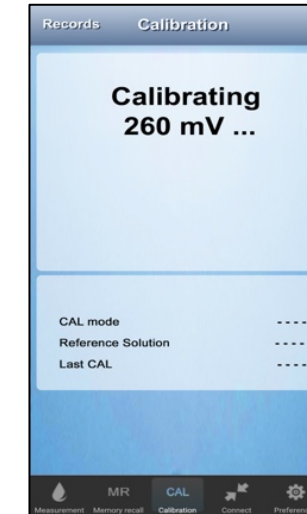
1. Rinse the PTBT4 sensor in Myron L® Company Calibration Buffer / Solution.
ALWAYS Rinse the sensor BEFORE EACH CAL point in the solution / buffer to be used for that point.
2. Press and release the PEN BUTTON on the PTBT4 to turn it ON.
3. Tap the CAL button  in the Feature Navigation Bar.



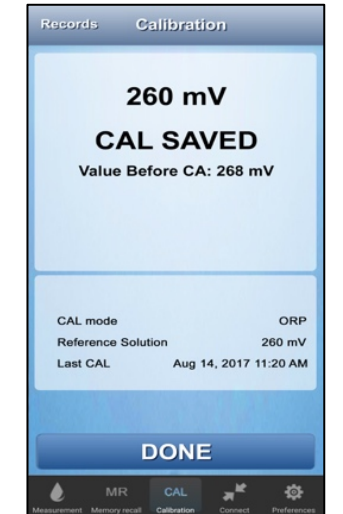
4. The INITIAL CAL screen will appear.
5. Tap the CAL button.



6. The Secondary CAL screen will appear.
7. To Calibrate the ORP sensor, tap **ORP CAL**.



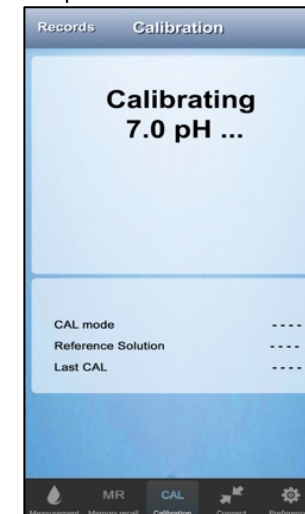
8. Swirl the pen in the CAL solution while the PTBT4's LED is flashing rapidly. The PTBT4 will identify the reference solution.



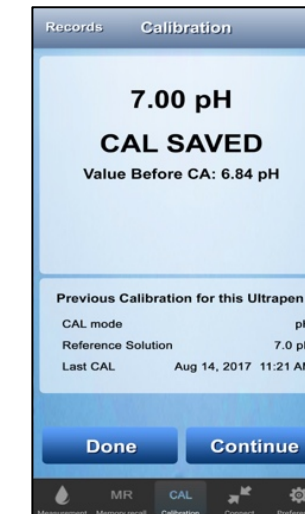
9. When the Calibration is done the App displays the values and saves a CAL record.

To Calibrate the pH Sensor:

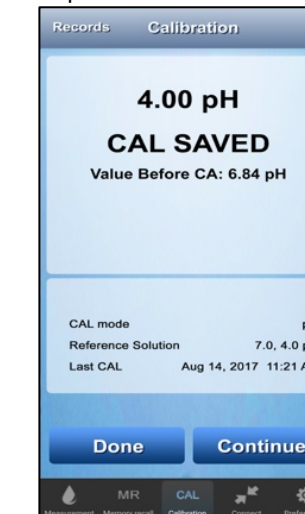
10. Tap the DONE button to return to the INITIAL CAL screen.
11. Tap the CAL button on the Primary CAL Screen.



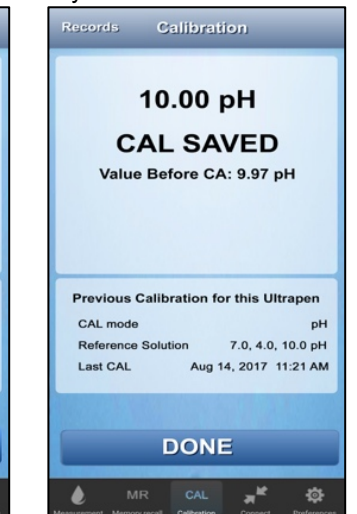
12. Tap the GREEN pH CAL button on the Secondary CAL Screen.
13. Swirl the pen in the 7.0 pH buffer while The PTBT4's LED is flashing rapidly.



13. When the 1st CAL Point is finished, place the PTBT4 sensor in either 4.0 or 10.0 pH Buffer, then tap CONTINUE.



14. When the 2nd CAL point is finished, place the PTBT4 sensor in the remaining pH Buffer, then tap CONTINUE.



15. When the last CAL point is done the App displays the final CAL point value and saves a CAL record.
16. Tap the DONE button.

NOTE: **FAC CAL** resets the PTBT4 to Factory settings, but **IT DOES NOT** account for current sensor condition.