



### Instructions for use of Eco pH1 meter to ascertain acidity or alkalinity of system water



#### PLEASE NOTE:

It is normal if white crystals form around the cap.

#### CONDITIONING:

The pH meter should be conditioned before first use. Remove the transparent cap and fill with water to a depth of 20mm. Hold the tester upright, and recap. Soak the sensor for one hour. This will activate the sensor and dissolve any crystals present. Rinse the cap after use.

#### CALIBRATION:

Use a buffer solution (test solution) with pH 7 for general testing, or a buffer solution with pH 4 or 10 if you are

measuring acidic or alkaline solution samples. Switch on by pressing ON/OFF button. Immerse the electrode in the buffer solution with at least 2 cm immersed, and stir gently.

Wait for the value displayed to stabilize at or near the pH level of the chosen buffer solution. Press the 'cal' button to enter the calibration sequence. 'CAL' will flash on the display momentarily and then a flashing default reading. To complete the calibration, press 'hold/ent' button to confirm.

#### pH TESTING:

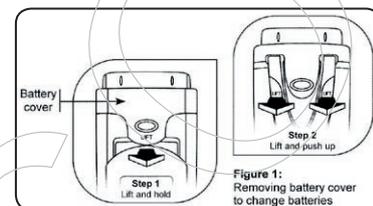
1. Take a sample of at least 100cc of the water to be tested in a suitable beaker / vessel, to a depth of approx. 5cm.
2. Remove the transparent protective cap from the pH meter.
3. Turn the pH meter on by depressing the ON/OFF button located on the side of the meter.
4. Dip the sensor in at least 2 cm of test solution.
5. Stir once, and let the display stabilize. Note the pH reading. Press the 'hold/ent' button if you wish to hold the reading. Press again to cancel the hold mode. Press the ON/OFF button to shut the pH tester off.  
Note: The Eco pH1 meter automatically shuts off after 8.5 minutes of non-use to conserve batteries.
6. After taking the reading, remove the meter from the sample, and flush with clean water before storing.

#### CHANGING BATTERIES:

To remove batteries, lift up front battery cover and hold in position before lifting two sides of the pocket

clip (Figure 1). Remove old batteries and replace with fresh ones. Note polarity as shown in battery compartment.

No re-calibration is required after battery change as the tester's non-volatile memory retains calibration.



#### MAINTENANCE:

Rinse the electrode in tap water after use. In harsh samples, take readings quickly, rinse electrode immediately afterwards with de-ionized water to remove residues and prevent electrode contamination. To maximize electrode life, place a small piece of clean cloth or sponge in the cap, moisten with tap water (NOT DE-IONIZED WATER), and replace cap.

#### USEFUL NOTE:

To avoid cross contamination, rinse between samples and buffer with de-ionized water. Calibration should be done regularly to ensure good tester accuracy.

If you experience inconsistent readings or difficulty in calibrating, remove batteries for 5 seconds and refit.

#### Self diagnostic / error messages

- bAt:** Weak batteries – replace with four new batteries.
- Err:** Wrong or bad buffer value (out of range), and/or the sensor is failing. Use fresh buffer solution.
- Or, Ur:** Over range / Under range signal, or electrode is not in contact with solution.

#### RESET OPTION

Reset option allows you to restore the calibration back to factory default settings. Press ON/OFF button to turn off the tester. Press and hold hold/ent button and then switch on using the ON/OFF button. The display shows a flashing rSt (reset). Press hold/ent to confirm.

#### SPECIFICATION:

pH range:	0.0 to 14.
Resolution:	0.1 pH.
Automatic temperature compensation	Yes.
Auto power off:	Yes.
Auto-buffer recognition:	pH 4, 7, & 10.
Batteries:	4 x A76.
Battery life:	>60 hours.