

## 1. Standardising the Jenway pH meter:

ITEMS SUPPLIED
pH meter with Tris compatible electrode
pH 4.0, 7.0 and 10.0 standard buffers
Beakers
Electrode storage solution



1. Remove electrode from the electrode storage solution and rinse with distilled water, pat dry with a tissue.
2. Follow the Operating Instructions for the Jenway 3510 pH Meter (or other meter if you have a different one). The instructions can be found at: [www.kirkhousetrust.org](http://www.kirkhousetrust.org), go to 'Resources → Research Resources → Equipment Manuals'.
3. Press the Mode button until the display shows pH mode. Clear previous buffer information by pressing Setup and Enter buttons.
4. Place electrode in the standard pH solution and press the 'Standardise' button. When the signal stops flashing or you press enter, the buffer is stored. It is best to do this with two pH standard buffers which range between the pH you wish to measure e.g. pH 4.0 and 7.0 or pH 7.0 and 10.0.
5. Rinse the electrode with part of the solution to be measured, pat dry with tissue. Place the electrode in the solution to be measured. Wait for it to stabilize and record the pH reading as required.

## 2. Care of pH meter electrode (probe):

ITEMS SUPPLIED
pH meter
Electrode storage solution
Beaker

1. Always keep your pH electrode tip moist. It can be kept with the end in a beaker of electrode storage solution.
2. When the pH meter is not being used for a pH measurement, the electrode should be immersed in the electrode storage solution provided. Alternatively use either a solution of 4 M KCl or a 1:1 solution of a pH 4 or 7 buffer and saturated KCl solution.
3. You may notice white KCl crystals forming on the outside of the electrode. You can rinse the electrode to remove the KCl crystals and blot dry before use.

**DO NOT STORE ELECTRODE IN DISTILLED OR DEIONIZED WATER**

**This will cause ions to leach out of the glass bulb and render your electrode useless**

### Notes:

Temperature can affect the measured pH value. Please note that Tris has a large temperature co-efficient and the pH of a Tris solution should be adjusted at the same temperature at which it will be used.