

Electrical Conductivity meter – EC HIGH

Use the **Electrical Conductivity (EC) meter** to measure salinity. Salinity (EC) is measured using millisiemens (mS) or micro-siemens per centimetre ($\mu\text{S}/\text{cm}$). The more salt in the water the more electricity it will conduct. High salt levels generally mean poor water quality.

CALIBRATION

1. You will have a bottle of 1413 standard solution to calibrate your meter. Store this in the refrigerator or a cool, dark place.
2. Switch the tester on using the **POWER** button and rinse the sensor with clean water.
3. Open the standard solution **EC 1413 CAL**.
4. Remove the cap from the bottom end of the meter and place the sensor in the solution, swirl gently and allow time for the reading to stabilise.
5. To adjust the value to match the calibration standard, press the **HOLD /ENT** key to increase the number displayed on the screen to suit your Standard Solution (i.e. 1413 – with this tester it should read 1.4). If your number is lower, hold the HOLD/ENT key until it reaches its maximum and then continues to lowest value.
6. Release the **HOLD/ENT** key to accept the calibration value. After a few seconds (ENT) is shown.
7. Your meter is now ready to test your sample.



MEASUREMENT

1. Turn the **meter on** (POWER BUTTON).
2. The probe is automatically set to **test mode**.
3. Fill the plastic baker with a small amount of the water sample you are testing.
4. Insert the tip of the sensor in the sample. Make sure the electrode is completely submersed.
5. Slowly stir the sample with the probe to remove air bubbles.
6. The meter will auto range and the reading will be displayed.
7. Once stable, **record your results** on the *water quality data sheet* or enter them directly into the River Detectives website.
8. Switch the meter off. Rinse the sensor with clean water. Replace the cap.

NOTE

- If the result is a single digit number and a decimal e.g. 4.2 if is shown in millisiemens per centimetre (mS/cm). You will need to multiply this by 1000 for your final result to be recorded in micro-siemens per centimetre ($\mu\text{S/cm}$).