

## Electrical Conductivity meter - CREAM

Use an **Electrical Conductivity (EC) meter** to measure salinity. Salinity (EC) is measured using 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. Fill the plastic cup to the 20mL line with the standard solution.
3. Switch the tester on using the **ON/OFF** key and rinse the probe with the 1413 standard solution.
4. Remove the cap from the top end of the meter and press the **INC** or **DEC** key to enter calibration mode ('CAL' will appear in the upper display).
5. Use the **INC** or **DEC** key to increase or decrease the number displayed on the screen to suite your Standard Solution (i.e. 1413 – with this tester it should read 1410 or 1420).

**Note:** *INC & DEC keys are located inside the battery compartment, Refer figure 1.*

**Note:** *For ECTestr11 & ECTestr11+ models, the caption of HOLD key is 'HOLD/ENT'*



Figure 1: Battery compartment

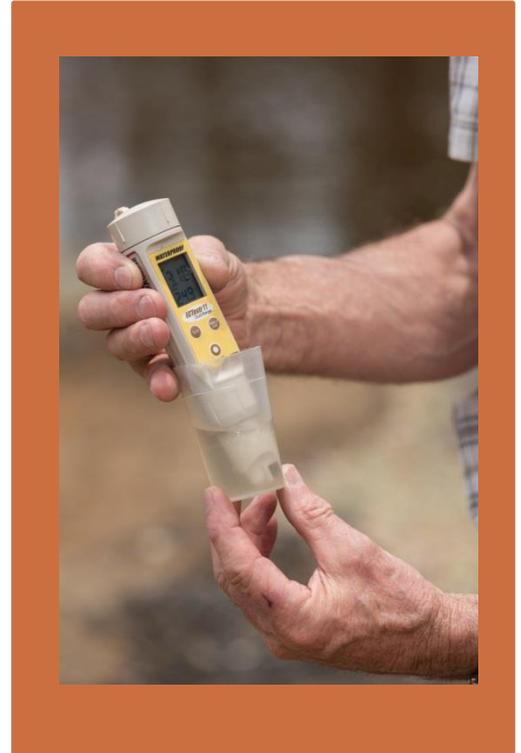
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**Note:** *If you do not press the INC or DEC key within five seconds of entering calibration mode the tester will automatically confirm 'CO' and will return to measuring mode.*

6. Wait for 5 seconds with the probe in the solution to automatically confirm the calibration by displaying the 'CO' and return to measurement mode.
7. Your meter is now ready to test your sample.

## MEASUREMENT

1. The probe is automatically set to **test mode**
2. Turn the **meter on** (ON/OFF BUTTON).
3. Fill the plastic cup to the 20mL line with the test/water sample.
4. Immerse the probe in the sample. Make sure the electrode is completely submerged.
5. Slowly stir the sample with the probe to remove air bubbles.
6. The meter will auto range to the proper 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. Rinse the electrode with clean water. Replace the cap.



## NOTES

- The large number on the screen is your result. The smaller digits at the bottom of the screen are temperature.
- If the result is a single digit number and a decimal e.g. 4.2 you will need to multiply this by 1000 for your final result.
- If 'Or' is displayed, the salinity level is too high for the EC meter to measure. Contact your local River Detectives coordinator.