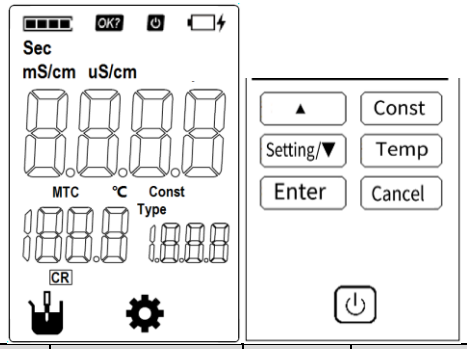
EC110B Conductivity Meter Operation Quick Guide

1. Specification

Parameters: Conductivity

Conductivity Range: 0.00μS/cm ~ 100.0mS/cm

2. Screen Icons



Symbol	Explanation	Symbol	Explanation
	Reading state	Sec	Time Unit
OK?	Confirm the option	μS/cm mS/cm	Conductivity Unit
	Automatic shutdown	MTC	Manual temperature compensation
CR	continuous-read	°C	Temperature Unit
	Measurement	Const	Cell Constant
	Setting	Type	Electrode Type
	Power low		Charging

3. Maintenance& Precaution

3.1. The meter

1. Disconnect the charge when storage for a long term.
2. Keep the meter and accessories clean and away from acids, alkalis, and any corrosive solutions/gases.
3. Put the dust cover on the meter or put the meter in a packing box for storage overnight or longer.

3.2. Conductivity Electrode

1. Rinse with deionized water for several hour to clean the cell when the first time usage or storage a long term.
2. For accurate measurement, rinse with distill or deionized water before every measurement.
3. For accurate measurement, calibrate the constant with a standard solution which value is close to the test sample.
4. Keep the socket away from moisture.
5. For storage overnight or longer, put the EC electrode back to the packing box and store in a cool, dry place.

4. Preparation

1. Connect the EC electrode (e.g. k=1) to the meter.
2. Take off the electrode protection cap.
3. Rinse the conductivity electrode with DI water, dry out.
4. Switch on the meter.

Note: The exact constant is attached to the cable in a new EC electrode.

5. Calibration

5.1. Cell Constant Setting

1. In the measurement status,press "Const" to access the constant menu.
2. Press "Const" to exchange 1.0, 10 or 0.1 to set the desired constant type (e.g. k=1) .
3. Press the "▲" or "Setting/▼" to adjust the constant and press "Enter" key to save the setting and return to the measurement status.

5.2. Manual Calibration

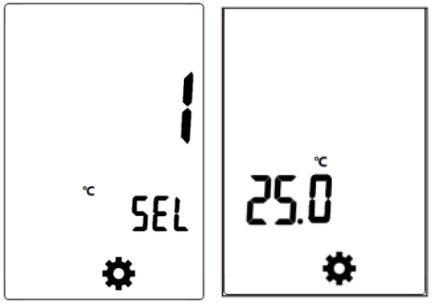
1. Set the desired constant type as the Cell Constant Setting (e.g. k=1) .

2 . Set the temperature to (25.0±0.1) °C in the meter.

3 . In the measurement status,press "Setting" to access the main setting menu.

1) Press the "▲" or "Setting/▼" to highlight "1 °C" and press "Enter" key.

2) Press the "▲" or "Setting/▼" to adjust the temperature as 25°C and press "Enter" key to save the setting and return to the measurement status.



4 . Prepare a standard conductivity solution(e.g. conductivity solution Cs=1413μS/cm) .

5 . Prepare a thermostatic bath, and set the temperature to (25.0±0.1)°C.

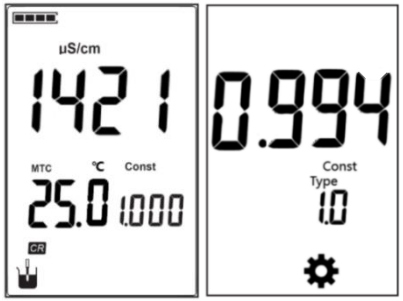
6 . Place a standard conductivity solution in a thermostatic bath.

7 . Place the conductivity electrode into a standard solution.

8 . When the temperature shows (25.0±0.1)°C in a thermostatic bath, record the conductivity as the Ct (e.g. 1421μS/cm).

9 . Calculate the constant , constant=Cs/Ct (e.g. constant=1413/1421=0.994).

10 . Adjust the the cell constant referring to the 5.1 Cell constant setting.



6. Measurement

1. Measure the test solution temperature with the temperature meter.

2. Set the real temperature in the meter (e.g. 25.2°C).

1) In the measurement status,press "Temp" to access the temperature menu.

2) Press the "▲" or "Setting/▼" to highlight "1 °C" and press "Enter" key.

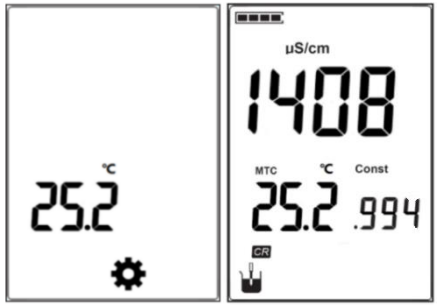
3) Press the "▲" or "Setting/▼" to adjust the temperature as real temperature (e.g. 25.2°C) and press "Enter" key to save the setting and return to the measurement status.

3. Rinse the conductivity electrode with DI water, dry out.

4. Put the measurement end of the electrode into the sample solution.

5. When the reading is stable, the reading prompts shows ▬▬▬▬.

6. End the measurement and record the results.



7. During measurement, stored EC electrode in distilled or deionized water.

8. After measurement, rinse the EC electrode with deionized water thoroughly and put on the electrode protection cap.

Note: For accurate, please calibrate and measure at the same temperature.