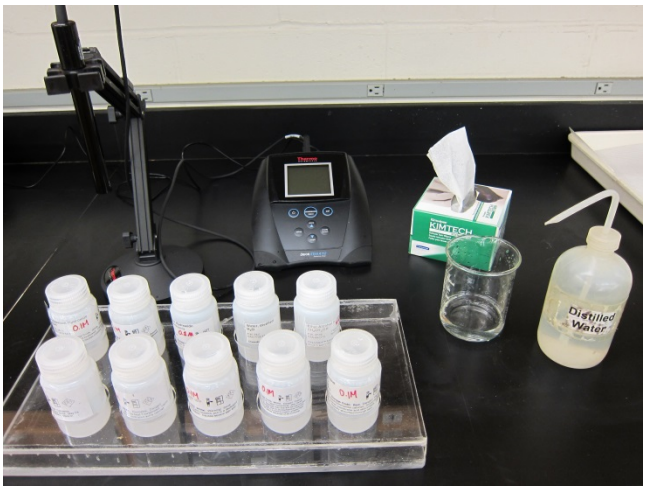
Instructions for Thermo Scientific Orion Star A112 Conductivity Meter



Single Point Conductivity Calibration

1. Use the 1413 µS/cm conductivity standard.
2. Rinse conductivity probe with distilled water, insert into standard and stir gently.
3. Press "cal". "Cal" will appear in upper right of display. Wait for "ready" to appear.
    a. If "AUTO" Appears at the top of the display, the standard was recognized. Press "mode (enter)" to view the calculated cell constant.
    b. After 2 seconds, meter will go to measurement mode.

Conductivity Measurement

1. If units are not µS/cm or mS/cm press "mode (enter)" until the correct units are shown.
2. Rinse conductivity probe with distilled water and blot dry with kimwipe.
3. Insert into sample and stir gently.
4. Press "measure"
    a. Record conductivity and temperature of sample when "READY" is displayed and unit of measurement stops blinking. *Make sure to record unit. Meter shows µS/cm or mS/cm depending on sample, so recording unit is very important.*
5. Remove probe from sample, rinse and blot.
6. For storage between samples, probe may be stored in distilled water. For long term storage, it should be stored dry and clean.

Table 1: Ranges of Conductivities for Different Types Electrolytes (0.1 M solutions)

Type of Electrolyte	**Range of Conductivity Measurements** *Based on measurements using our meters*
strong	20.0–50.0 mS/cm
weak	700–5000 µS/cm (or 0.70–5.0 mS/cm)
non	0–10 µS/cm