Conductivity Calibration

(Hach SensION™ 5 conductivity meter)

CALIBRATION

1. Calibrate the Hach SensION™ 5 conductivity meter using a conductivity standard that is in the expected range of the samples.

   NOTE: Take care to blot the probe dry following rinsing with deionized water so as not to contaminate the primary conductivity standard. Tap the probe opening on a clean Kimwipe to get excess water out of the probe opening.

2. Turn the meter on by pressing the **EXIT** button. Place the probe in the primary conductivity standard and gently stir the probe a few times to dislodge any air bubbles and press the **ENTER** button. Record the value and temperature on the calibration sheet as the pre-calibration value.

3. Next, press the **CAL** button (button #10). The last calibration value will appear in the display. The numeric keypad will become active.

   NOTE: If the meter readings are drifting and do not stabilize, contact the Volunteer Monitoring Coordinator (see contact list). The value you observe should be within 5% of the true value of the standard as written on the bottle label.

   TECHNICAL NOTE: The meter is set up to report conductivity measurements as the value which would be observed if the measurement were to be made at 25ºC.

   TROUBLE-SHOOTING NOTE: If number entry error occurs, start over by pressing **SETUP** key.

4. After you press the **ENTER** button, the meter will wait until the conductivity reading is stable. Then it will automatically store the calibration and return the meter to the measurement mode.

5. Record the conductivity and temperature readings of the primary standard on the Conductivity calibration datasheet as the post-calibration value.

6. Replace the Calibration Check Standard (CCS) solution for the Conductivity Field Calibration Check and place the container in the sampling kit for sampling day field calibration check. The old solution can be disposed of in the sanitary sewer system (down the sink or toilet).
SETUP (only required if the meter is new or the memory has been cleared)

1. To access the setup menu, press the setup key.

2. After the setup key has been pressed, the setup icon and a flashing number will be displayed. Note: The arrow icons will be displayed, indicating that additional options are available within the menu. Press the up or down arrow key to scroll to the desired option, then press ENTER. The number in the upper right corner shows which setup option is being changed. Pressing ENTER will enable toggling the setting between on and off. When the setting is disabled, the Display Lock icon and OFF are displayed. When the lock is enabled, the Display Lock icon is displayed with OFF.

3. Setup number 1 is the display lock option. When this feature is not used, the measurement value may continue to fluctuate and Stabilizing… will be displayed.

4. When the desired option is selected, press EXIT to return to the reading mode or an arrow key to scroll to other setups.

5. Setup number 2 is the temperature unit. Default is ºC. Use the ENTER key to toggle between ºC and ºF. And use the EXIT key to return to the reading mode or an arrow key to scroll to other setups.

6. Setup number 3 turns the Temperature Correction on or off. Toggle between the on and off option as mentioned in earlier steps. When the feature is enabled, the thermometer icon is displayed without an off icon and vice versa. Press EXIT or the arrow key to go to the measurement mode or to the other setups, respectively.

7. Setup number 4 permits a temperature compensation value to be entered. The manufacturer has determined a non-linear coefficient from measurements using aqueous Sodium Chloride (NaCl) solutions. Use ENTER to toggle between a linear function and the non-linear NaCl option. Select the NaCl option. And use the EXIT key to return to the reading mode or an arrow key to scroll to other setups.

8. Setup number 5 relates to Total Dissolved Solids. Skip this one.

9. Setup number 6 is used to set the reference temperature. Use ENTER to toggle between 20ºC and 25ºC. And use the EXIT key to return to the measurement mode or an arrow key to scroll to other setups.

10. Setup numbers 7, 8 and 9 are used to set Time, Date and Year, respectively. Use the EXIT key to return to the measurement mode or an arrow key to scroll to other setups.