# **Operation & Maintenance of Pocket Colorimeter II**

### Low Range Chlorine Residual Measurement

The Pocket Colorimeter II measures chlorine residuals from 0.02 – 8.00 mg/L. Tests for residuals ranging from 0.02 – 2.20 mg/L must be done in low range. Instructions below apply to low range tests only.



Fill the glass bottle with water to the 10 mL line and cap bottle.



Press the POWER key; the display screen will illuminate and an arrow should indicate low range (LR).



Insert the bottle into the meter with diamond facing the keypad, and cover with instrument cap.



Press the ZERO/SCROLL key and the display screen will show "---" then "0.00". Remove bottle.



Add reagent from 1 DPD Free Chlorine foil packet; cap bottle and shake for 20 seconds. Wipe the bottle and place in the meter: with diamond facing keypad.



Cover with instrument cap and press READ/ENTER within 1 minute of adding DPD Free Chlorine reagent. Record results, discard sample, and rinse bottle.

Repeat steps 1 to 6 to conduct a Total Chlorine Residual test using reagent from 1 DPD Total Chlorine foil packet. For step 6, wait 3 to 6 minutes after adding the reagent before pressing READ/ENTER.

### Operation:

- ☐ Ensure meter is in low range (LR)
- ☐ Ensure DPD packets are not expired
- ☐ Use separate bottles for free and total chlorine residual tests; otherwise rinse bottles between tests
- ☐ Accuracy is not affected by undissolved powder
- ☐ A flashing "2.20" means the test must be done
  in high range (HR)
- ☐ Refer to manual for more detailed instructions

#### Maintenance:

- ☐ Check your meter with Spec Secondary
  Standards to verify repeatability; readings
  should fall within the stated tolerance limits to
  the initial value recorded for that meter
- □ Clean sample bottles with Hach 88449 HCL 1:1 solution and rinse with deionized water
- ☐ Clean the meter with deionized water and a Q-tip or lint free cloth; do not use alcohol as it can damage the meter
- ☐ Sample bottle must be clean, dry & defect free

## To switch between Low Range (LR) and High Range (HR):

- ☐ Press MENU key; the display will show "SEL"; a flashing arrow indicates current range
- ☐ Press READ/ENTER key to toggle between ranges
- Press MENU key again to accept and exit back to the measurement screen