



TESTING TIPS

If you want to go to a particular section, click on the index below or use the bookmarks.

| | |
|--|----|
| Blanking (Calibration) | 2 |
| Running a Test | 7 |
| Testing Tips | 15 |
| Interferences | 20 |
| Error Messages | 28 |
| Maintenance | 29 |
| Battery Replacement | 30 |

BLANKING Before Testing

Fill sample bottle with water sample then rinse the tubes.
Keep outside tube surfaces dry or wipe dry then refill the sample bottle.



BLANKING Water Sample

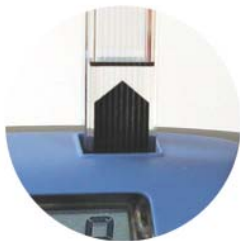
Fill a clean tube to 5mL line with water sample.

Make sure there are no stains, scratches, or condensation on tubes during analysis.



BLANKING Water Sample

Insert tube into ColorQ with black reference mark facing front of meter.



BLANKING Water Sample

Turn meter on. When 'bLA' appears press button to "Blank" the meter. Wait for self-calibrate mode to end (the dashes will stop moving up and down).



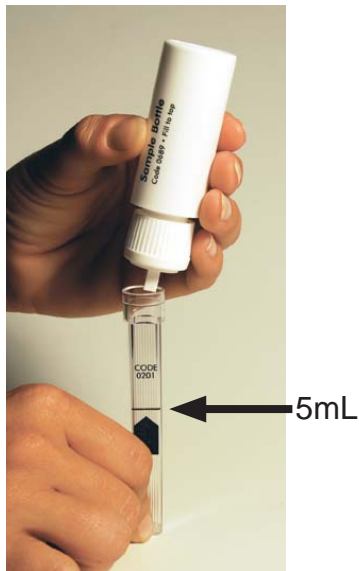
BLANKING Water Sample

The ColorQ is ready to test (FCL). Remove tube and add reagent.



RUNNING A TEST

Fill each tube to the 5mL line.



RUNNING A TEST

After the meter has been properly blanked, add reagents.

Liquid: Make sure bottle is vertical when adding drops.
5 drops each.



Tablet: Use tablet crusher to help disintegrate tablets.



RUNNING A TEST

Cap and invert to mix.
DO NOT SHAKE,
EXCEPT CHLORINE
TABLET TESTS. If you
are using tablets, make
sure you check the
directions carefully.



RUNNING A TEST

Press button on meter to advance to desired test. If you want to do Free Chlorine (FCL) you are already there from previous step.



RUNNING A TEST

If wet, dry outside of tube with soft tissue or cloth before inserting into meter.



RUNNING A TEST

Insert tube into meter.
Press button to read test.



RUNNING A TEST

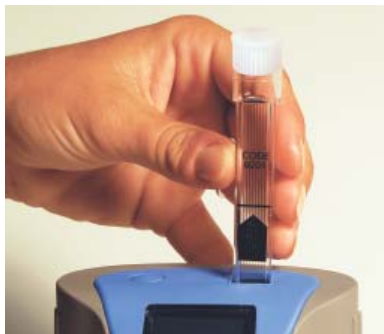
Press button to advance to next test **BEFORE** removing tube.

> *Use same tube for FCL and tCl tests.*



RUNNING A TEST

Remove tube. Press
button to select next test.



TESTING TIPS

Skipping tests: If not testing every factor in the sequence you still must always Blank the meter first then press button until the desired test factor is shown.



TESTING TIPS

Over Range: Samples with results greater than the range of the reagent system must be diluted. Add 1 mL of sample water to a test tube by filling the cap $\frac{1}{2}$ full. Then fill to the 5mL line with distilled or deionized water (bottled water can contain hardness) to get estimated results. Cap and mix. Blank with this diluted sample then follow the test procedure add reagent to the diluted sample. Multiply the displayed result by 5. (Not applicable for the pH test!).

1 mL



TESTING TIPS

Wet tubes: The outside of the tubes must be dry before putting them into the ColorQ. This is best accomplished by dispensing the water sample from the sample bottle and drying tubes with a soft cloth or tissue if they get wet.



TESTING TIPS

Mixing reagents: In one complete inversion, the tube will be turned cap down then right side up. The air bubble will move slowly to the bottom of the tube and back up to the cap.



TESTING TIPS

Bubbles? If small bubbles form after adding reagents, tap bottom of tube sharply once or twice to dislodge bubbles. Bubbles in the tube or condensation on the outside of the tube will interfere with the test results.



INTERFERENCES



Chlorine:

High sanitizer levels = A high chlorine/ bromine, sanitizer level beyond 10ppm can bleach the DPD reaction.

Chloramines = High chloramines can break through into the DPD Free Chlorine test making it read a false high. Always test Free Chlorine within 30 seconds after adding DPD1 reagents.



INTERFERENCES

MPS Monopersulfate (non-chlorine shock) =

MPS will affect DPD reactions by indicating a false positive for combined chlorine. Allow MPS to dissipate prior to testing or use “MPS Out” reagent 6910-E.



INTERFERENCES



pH:

High sanitizer levels = High chlorine/ bromine levels can make a pH reaction turn purple and read high (>8.0).

Previous test = Leaving residue from a previous test in the tube can alter pH readings.



INTERFERENCES



Alkalinity:

High sanitizer levels = A high chlorine/bromine sanitizer level, above 10 ppm, can bleach the alkalinity test to a pale yellow.

Algaecide = Algaecide treatments well above recommended levels may lower the alkalinity results.



INTERFERENCES

Calcium Hardness:

High copper = Copper levels above 1.0 ppm may lower hardness readings. In titrations copper often has the **opposite effect**.



INTERFERENCES

Calcium Hardness:

Low pH = Very Low pH levels (<6.0) can significantly lower the hardness results.

Low alkalinity = Low alkalinity levels can also lower the hardness results. It may cause the pH of the reagent to alter the pH of the test and give erroneous readings.



INTERFERENCES

Cyanuric Acid:

Cyanuric Acid (CYA) =

CYA tests are temperature sensitive. The best results are obtained when sample temperatures are between 70 and 80 degrees. In cold water, results may read high, while in warm water they may read low.



INTERFERENCES

Variable results = The CYA test measures turbidity. As particles pass by the optical lens there will be small variations. The higher the result the more variation. Follow the test procedure and read immediately after inserting the tube.



ERROR MESSAGES

Er 3 = Insufficient light is reaching the detector. Sample may be too dark, or tube may be in sideways. Turn off meter and retest.



Er 7 = [Click here](#) to see 10 conditions that cause Er 7. [Click here](#) to see Specifications list.

SUN = Extremely bright sunlight directly overhead. Use body shade to block sunlight from hitting the optics.

Lo = Concentration is below the minimum detection limit. Use an alternative test method for comparison. [Click here](#) to see Specifications list.

Hi = Concentration is above the upper detection limit. Use an alternative test method comparison. [Click here](#) to see Specifications list.

bAt = Low battery. Will show on display before blanking.

MAINTENANCE

- Use a can of compressed air to clean light chamber of debris.
- May also clean light chamber with a damp cotton swab. Avoid abrasive cleaners that can damage plastic. Window cleaner on a cotton swab is suggested.
- Clean test tubes with test tube brush.
- Replace stained or scratched tubes (0201).
- Avoid high heat. Store at room temperature away from excessive heat, humidity, moisture and direct sunlight.



BATTERY REPLACEMENT

1. Use small Phillips head screwdriver to remove all 5 screws in the base.
2. Gently pull the battery holder from inside and replace **TWO** AA batteries. Duracell® or Energizer® batteries are suggested.
3. Replace screws securely but do not over-tighten screws which can tear the rubber base.

