



**User Guide**  
**Consejos para el usuario**  
**Astuces pour l'utilisateur**

#### Testing Tips

- Read all instructions before testing.
- Do not interchange color-coded caps.
- Press button to turn meter ON and OFF
- = Cap tube to eliminate stray light
- There are two ColorQ 2x tubes. Code 0205 has a 2 cm path length. Code 0206 has a 1 cm path length. The tube specified in the test procedure must be used.
- Be sure that the outside of the tube is dry before placing it in the ColorQ 2x. This is best accomplished by dispensing the sample water from the sample bottle.
- Brush and rinse the tubes and caps after testing. Reagent left in the tube can affect the next test or stain the tube.
- If not testing all of the tests in the sequence, follow the blanking procedure and then quickly press the button twice repeatedly until the desired test factor is shown or press the button once and hold to scroll more quickly. Follow the test procedure.
- Invert the tube to mix the sample and reagent. In one complete inversion, the tube is turned cap down and then cap up. The air bubble will move slowly to the bottom of the tube and back again to the cap end.
- If small bubbles form after adding reagents, tap the bottom of the tube sharply once or twice to dislodge bubbles. Bubbles will interfere with test results.
- A indicates that a tablet reagent system should be used. A on the display indicates that a liquid reagent system should be used.
- Test results that are out of the range of the reagent system will be indicated with a - or + to the right of the result value.
- The unit will auto-off after three minutes of inactivity. If this happens during testing, rinse and fill a tube. Repeat the Blank and return to testing.
- Replace liquid reagents annually. To learn more about reagent storage guidelines and shelf life go to S

#### Reagent System Interferences

**High Chlorine/Bromine High** sanitizer levels may cause the DPD reaction to bleach out to a colorless or near colorless solution. Use the dilution procedure above to determine the sanitizer content of sample with high levels. Note: At high chlorine levels, chloramines could break through the chlorine test, the pH reaction may turn purple and the alkalinity reaction may be yellow.

**High Sanitizer Levels** Sanitizer concentrations greater than 10 ppm can turn the pH reaction purple and bleach the alkalinity reaction.

**High Combined Chlorine** When testing samples with high levels of combined chlorine, *Standard Methods for the Examination of Water and Wastewater* recommends waiting 2 minutes for full color development.

**High Monochloramine** Add Steadifac Reagent [Code 6383WT-H] to samples with very high monochloramine concentrations to prevent breakthrough in the Free Available Chlorine Test.

**Potassium Monopersulfate** Add MPS-DUT Liquid Reagent [Code 6910-E] to prevent interference of potassium monopersulfate with combined chlorine results.

**Low pH** Low pH can significantly lower the hardness results.

**High Hardness** Hardness levels above 450 ppm may cause the reaction with DPD liquid reagent to become turbid. Add 5 drops of DPD 1 A [P-6740] and 5 drops of DPD 1 B [P-6741] to an empty tube and then fill to the 5 mL line with the sample.

**High Copper** Copper levels above 1.0 ppm may cause the hardness test to read low.

**Algacide** Algacide treatments above recommended levels may cause low alkalinity results.

**Cyanuric Acid** Cyanuric acid reactions are temperature dependent. The best results are obtained when the ample temperature is between 70 and 80 °F. In cold water results may read high, while in warm water they may read low.

**Low Alkalinity** Low alkalinity levels can significantly lower the hardness results.

#### Bluetooth Connection

Connecting with Bluetooth:

1. Make sure the app used has the ability to receive test results from the ColorQ 2x meter.
2. Log into the app.
3. Search for a customer record, site record or create a new one.
4. Start a test in the app.
5. The meter and the Bluetooth enabled mobile device will connect automatically.
6. Perform water tests by following the instructions for the ColorQ 2x meter.
7. The result for a test will be transferred to the mobile app when the button is pressed to go to the next test.

**Maintenance** Clean the ColorQ 2x optics with a damp cotton swab. Avoid abrasive cleaners and alcohol that can damage plastic. Do not use the brush to clean the ColorQ 2x chamber. Replace stained or scratched tubes.

**Battery Replacement** The battery indicator is located on the lower left corner of the display. To replace the battery, use a small Phillips head screwdriver to remove the three screws on the bottom of the meter that hold the battery compartment cover in place. Replace the TWO AA style batteries. Replace the cover and the screws.

**Warranty** There is a 1 year warranty of ColorQ 2x parts and workmanship.

### Ideal Ranges to Maintain in Your Pool or Spa Water

The chemicals chosen to sanitize and balance your water should be maintained within Ideal Ranges to protect the health of your bathers and extend the life of your pool or spa parts and surfaces. Consult the specific chemical manufacturer's website or brochures for proper use.

**Chlorine (FCL and tCL)** Pools: 1–3 ppm; Spas: 2–4 ppm

Many forms of chlorine are available; some tend to lower the pH and others tend to raise the pH. If pH is a continuous problem, consider changing the chlorine type to offset a low or high pH. Never mix chemicals in a bucket, skimmer, or dispenser. In extreme heat, consider maintaining a higher chlorine concentration – this is why the ideal range is higher in spas. The FREE Chlorine test measures active levels of chlorine while the Total Chlorine test measures the combined level of active and inactive Chlorine.

**Bromine (br)** Pools: 2–5 ppm; Spas: 3–6 ppm

Mostly used in spas, Bromine is more stable in hot water.

**pH (PH)** Pools & Spas: 7.2–7.8

Proper pH is critical to protect bathers and pool or spa parts and surfaces. Low or high pH levels can irritate the eyes and skin. Water with a low pH can corrode parts while water with a high pH tends to be scale-forming. A high pH will also reduce the effectiveness of chlorine.

**Total Alkalinity (ALY)** Pools: 80–120 ppm; Spas: 100–150 ppm

Total Alkalinity indicates the ability of water to resist changes in pH. Since a pH in the ideal range is so critical, maintaining the Total Alkalinity above 80 ppm is important. When the Total Alkalinity is above 150 ppm, the water often will have a high pH that is difficult to adjust to 7.8 or less.

**Calcium Hardness (CH)** Pools: 200–400 ppm; Spas 175–350 ppm

Low levels of Calcium Hardness can lead to corrosive conditions which can damage pool or spa surfaces such as plaster. If the level is too high, scale may be deposited on surfaces or clog pipes. Keeping pH, Alkalinity and Hardness in the ideal range will prevent pool and spa damage.

**Cyanuric Acid (CYA)** Pools: 30–100 ppm

Cyanuric Acid [also called Stabilizer] is added to slow the destruction of Chlorine by sunlight. It is not usually used in spas. Some types of Chlorine [dichlor and trichlor] contain Cyanuric Acid so it can build up over time. Too much Cyanuric Acid may reduce the sanitizing power of chlorine.


**Metals (Iron and Copper)** Pools & Spas: <0.3 ppm

Metals in pool water can cause staining on pool surfaces. If your test kit does not test for metals be sure to have a pool professional do a metals test before adding a heavy dose of chlorine when opening your pool or spa to avoid rapid coloring or staining of surfaces. For general advice on pool or spa care visit: [www.askalanaquestion.com](http://www.askalanaquestion.com)

### Cleaning

Keep the optical system clean and dry. Store the instrument in an area that is free from aggressive chemical vapors. Clean the exterior with a damp, lint-free cloth. Point a can of compressed air into the chamber to clean the chamber. Use a cotton swab dampened with streak-free window cleaner to gently swab the chamber. Do not use alcohol; it will leave a thin residue over the optics when dry.

### Specifications

Electrical Rating	3V  , 0.1A, with batteries
Battery Type	AA alkaline non-rechargeable
Conditions	Indoor/Outdoor
Altitude	Up to 6562 ft./2000 m
Operation Temperature Range	41 – 104 °F/5 – 40°C
Operation Humidity Range	0 – 90% RH, non-condensing



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