

Pool *eXact*® **Z**

ADVANCED PHOTOMETER SYSTEM

DIGITAL ACCURACY FOR BETTER POOL CARE



Certified to
NSF/ANSI Standard 50



DIGITAL **WATER TESTING**

QUICK START GUIDE

exactmeters.com

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WELCOME.

Thank you for your Pool eXact® EZ purchase! This guide will quickly walk you through the technical details of your new photometer. After initial set-up, test procedures, and tips, you will be on your way to digital water testing! Each test will require the use of one or more of the testing methods outlined in this manual.

YOUR POOL EXACT® EZ COMES WITH:

- Cleaning Brush
- Quick Start Guide (this booklet)
- Acrylic Calibration Key
- 48 foil packet strips (6 of each): Free Chlorine, Combined Chlorine, pH, Total Alkalinity, Calcium, Phosphate, Chloride, and Copper

Note: The Pool eXact EZ Starter Kits include eXact Strip/Reagent bottles with 25 tests each (reagents vary with each kit) and not individual foil packets listed above.

WHAT YOU WILL NEED TO GET STARTED:

- Four (4) AAA batteries
- #4 Phillips head screwdriver

Note: This system has been calibrated for use with only our eXact® Micro reagents.

YOUR NEW POOL EXACT EZ PHOTOMETER IS IDEAL FOR TESTING AND MAINTAINING YOUR POOL AND SPA WATER.
POOL WATER TEMP 77°F-85°F (25°C-29°C).
SPA WATER TEMP 95°F-106°F (35°C-41°C).

SAMPLE CELL - 4 ML

Built-in plastic 4mL cell for collecting your water sample

LIGHT SOURCE

Uses 525nm wavelength and 11mm path-length for testing

LCD DISPLAY



LOW BATTERY
 RESULT UNITS

LCD DISPLAY

Displays results and test name

READ BUTTON

Starts test timer

MENU BUTTON

Cycles through available tests

ZERO/ON BUTTON

Turns the meter on and creates a baseline for your water testing

BASE

Install/replace batteries here (IP67 rated waterproof)

CELL COVER

Covers the cell for mixing and bright light situations

waterproof IP67

Protected against the effects of immersion in water to depth between 15cm and 1m



Part no. **486201 & 486201-BT**

INSTALL "AAA" BATTERIES (NOT INCLUDED)

1. Use a #4 Phillips head screwdriver to remove the screw from the base of your Pool eXact® EZ.
2. Remove the base.
3. Install Four (4) new AAA batteries as illustrated inside your photometer's battery compartment. We recommend using high quality batteries.
4. Replace the base firmly with pressure while tightening the screw. The meter will turn on automatically.
5. Tighten the screw with #4 Phillips head screwdriver. Be sure not to over tighten.



SCREW
 Unscrew to remove base

FILL, DIP, READ TOTAL ALKALINITY

4

1

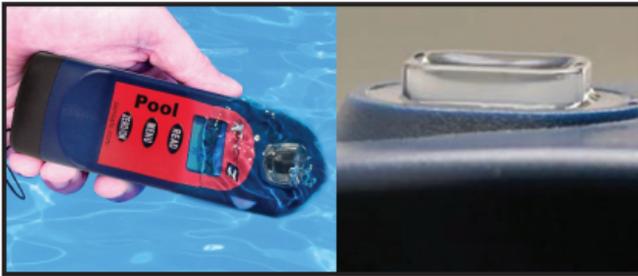
POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Pool eXact® EZ.

2

FILL CELL

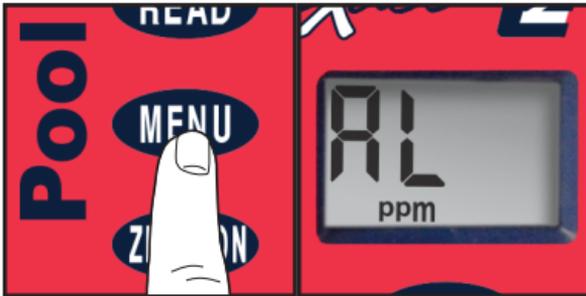
Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

SELECT TEST

Press and re-press the **MENU** button until the display shows AL(1).



4

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0PPM, indicating the meter is ready for testing.



5

REMOVE STRIP

Remove one eXact® Strip Micro AL (Part No. 486641) and set in a dry, convenient place. Replace cap.



6

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Be careful to not spill the sample from the CELL. Remove and discard the strip.



TIP

For hot tubs (above 95°F/35°C), dip strip for **ONLY 10 seconds**. Remove strip when the timer displays "10" and press **READ**, or use the specially calibrated SPA eXact® EZ photometer.

7

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Total Alkalinity. This result is automatically stored in the AL(1) menu. After testing is complete, rinse the sample cell immediately and clean with brush.



TIP

If result reads "HI", repeat steps 5-7 with a Total Alkalinity Range Extender Strip (part no. 486665) until a numerical value is displayed; Count how many AL Range Extender strips were used; each strip adds 130 ppm to the final result.

FILL, DIP, READ CALCIUM HARDNESS

6

1

POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Pool eXact® EZ.

2

FILL CELL

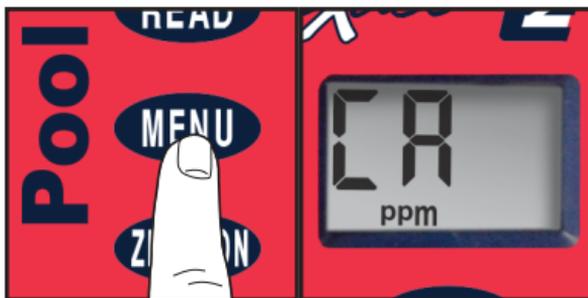
Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

SELECT TEST

Press and re-press the **MENU** button until the display shows CA(5).



4

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0PPM, indicating the meter is ready for testing.



5

REMOVE STRIP

Remove one eXact® Strip Micro CA (Part No. 486629) and set in a dry, convenient place. Replace cap.



6

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. **Even if all pads are not immersed in water, do not bend the strip.** Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Be careful to not spill the sample from the CELL. Remove and discard the strip. See [pg 23](#) for important tips.



TIP

For hot tubs (above 95°F/35°C), dip strip for **ONLY 10 seconds**. Remove strip when the timer displays "10" and press **READ**, or use the specially calibrated SPA eXact® EZ photometer.

7

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Calcium Hardness (CaCO₃). This result is automatically stored in the CA(5) menu. After testing is complete, rinse the sample cell immediately and clean with brush.



FILL, DIP, READ CHLORIDE (Salt)

1

PREPARE SAMPLE

Prepare sample with **Mini Dilution Kit II #487202**.

1. Rinse 50mL graduated tube with salt-free water.
2. Rinse the 3.0mL syringe with saltwater sample.
3. Fill the syringe to the 2.0mL line, very precisely, and add to the graduated tube.
4. Fill the graduated tube to the 40mL line with salt-free water. Cap graduated conical tube.
5. Mix content of graduated tube by turning up side down at least three times. 1:20 Dilution Sample is ready for testing.

2
3

POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Pool eXact® EZ.

FILL CELL

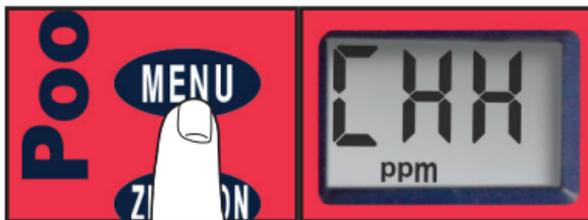
Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



4

SELECT TEST

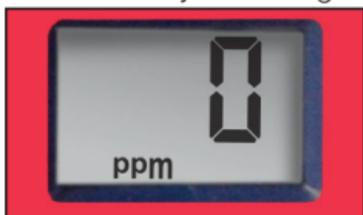
Press and re-press the **MENU** button until the display shows CHH.



5

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0^{PPM}, indicating the meter is ready for testing.



6

REMOVE STRIP

Remove one eXact® Strip Micro CH (Part No. 486757) and set in a dry, convenient place. Replace cap.



7

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays “1”. Be careful to not spill the sample from the CELL. Remove and discard the strip. See [pg 23](#) for important tips.



8

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Chloride. Due to the limit of three digits on the Pool eXact® EZ photometer, you should add a “0” to the end of the result on the LCD (ex. 121 = 1210 ppm). This result is automatically stored in the CHH menu. After testing is complete, rinse the sample cell immediately and clean with brush.



FILL, DIP, READ

10 FREE/TOTAL CHLORINE & TOTAL BROMINE

1

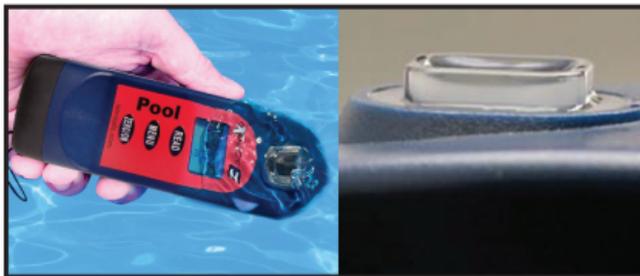
POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Pool eXact® EZ.

2

FILL CELL

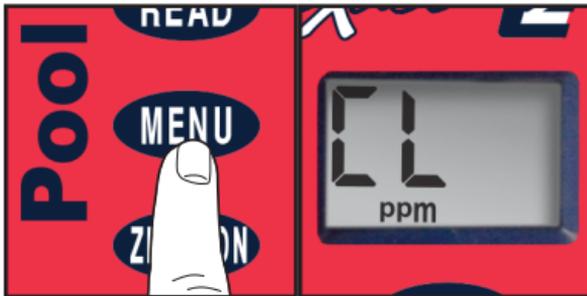
Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

SELECT TEST

Press and re-press the **MENU** button until the display shows CL(3).



4

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00PPM, indicating the meter is ready for testing.



FILL, DIP, READ

FREE/TOTAL CHLORINE & TOTAL BROMINE 11

5

REMOVE STRIP

Remove one eXact® Strip Micro CL (DPD-1) (Part No. 486637), Total Chlorine (Part No. 486670), or Total Bromine (Part No. 486644), and set in a dry, convenient place. Replace cap.



6

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Be careful to not spill the sample from the CELL. Remove and discard the strip.



See [pg23](#) for important tips.

DPD will stain the CELL wall if allowed to remain in the CELL. To remove staining, rinse cell thoroughly and fill with water then add two (2) drops of bleach (5-8%) and clean with brush until stain is removed. Caution: Avoid contact of bleach with eyes and clothing.

TIP

For hot tubs (above 95°F/35°C), dip strip for **ONLY 10 seconds**. Remove strip when the timer displays "10" and press **READ**, or use the specially calibrated SPA eXact® EZ photometer.

7

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Free Chlorine. If Free Chlorine result is **6.0** or greater, repeat steps 5-7 using same sample and a fresh strip. This result is automatically stored in the CL(3) menu. After testing is complete, rinse the sample cell immediately and clean with brush.

TOTAL BROMINE: If CL result is <4ppm multiply by 2.2 (ex. 3ppm in CL menu is 6.6 Total Bromine). If result is 4ppm or higher multiply by 2.0.



Important! Do not empty the CELL from **FREE CHLORINE TEST** if you are also testing for Combined Chlorine. You will need the sample.

FILL, DIP, READ COMBINED CHLORINE

12

This procedure is a continuation from Free Chlorine Test Method on previous pages. **DO NOT DISCARD SAMPLE FROM FREE CHLORINE TEST.**

8

ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the LCD Display reads 0PPM (**Note:** If second DPD-1 strip was used for Free Chlorine >6ppm then LCD will display 0.00ppm), indicating the meter is ready for testing.



9

REMOVE STRIP

Remove one eXact® Strip Micro CL (DPD-3) (Part No. 486638) and set in a dry, convenient place. Replace cap.



10

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Be careful to not spill the sample from the CELL. Remove and discard the strip.



11

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Combined Chlorine. This result is automatically stored in the CL(3) menu. After testing is complete, rinse the sample cell immediately and clean with brush.



DPD will stain the CELL wall if allowed to remain in the CELL. To remove staining, rinse cell thoroughly and fill with water then add two (2) drops of bleach (5-8%) and clean with brush until stain is removed. Caution: Avoid contact of bleach with eyes and clothing.

To get final result as Total Chlorine, press **READ** again.

Note: If second DPD-1 strip was used for Free Chlorine >6ppm then Total Chlorine will have to be manually calculated.

eXact® Strip Micro CL (DPD-1, DPD-3, DPD-4) Interferences

Interfering Substance	Interfering Levels & Treatments
Acidity	If sample has acidity above 150mg/L CaCO ₃ test may not develop full color. Neutralize to pH 6.0 to 7.0 with 0.5N Sodium hydroxide.
Alkalinity	If sample has alkalinity above 200mg/L CaCO ₃ test may not develop full color. Neutralize to pH 6.0 to 7.0 with 0.5N Sulfuric acid.
Bromine & Bromamines, Br ₂	Color similar to other oxidizer reaction at all levels.
Chlorine, Cl ₂	Color similar to other oxidizer reaction at all levels.
Chlorine Dioxide, ClO ₂	Color similar to other oxidizer reaction at all levels.
Copper, Cu ⁺²	Color development is reduced above 10 ppm (mg/L).
Iodine, I ₂	Color similar to other oxidizer reaction at all levels.
Manganese, Oxidized (Mn ⁺⁴ , Mn ⁺⁶) or Chromium, Oxidized (Cr ⁺⁶)	See AWWA procedure 4500-CL F, 1(d) for removal of interferences.
Monochloramines (NH ₂ Cl) (applies to DPD-1 only)	Monochloramine interferences are known to occur in free chlorine DPD methods. This interference is dependent on temperature and monochloramine concentration.
Ozone, O ₃	Color similar to other oxidizer reaction at all levels.
Peroxides	Interference is possible.
pH	Typical pH samples of potable water with a pH of 6.0 to 9.0 are OK. If outside this range adjust to pH 6.0 to 7.0 using acid (0.5N Sulfuric acid) or base (0.5N Sodium hydroxide).

FILL, DIP, READ COPPER

14

1

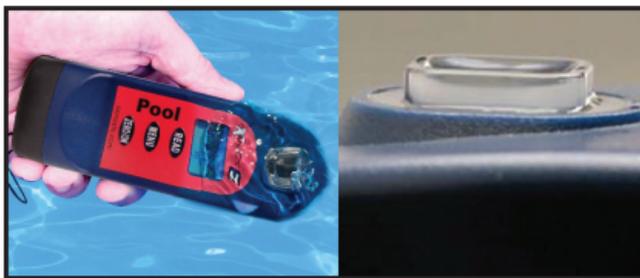
POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Pool eXact® EZ.

2

FILL CELL

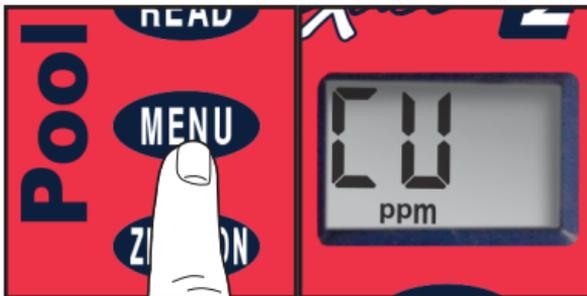
Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

SELECT TEST

Press and re-press the **MENU** button until the display shows CU(7).



4

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00^{PPM}, indicating the meter is ready for testing.



5

REMOVE STRIP

Remove one eXact® Strip Micro CU (Part No. 486632) and set in a dry, convenient place. Replace cap.



6

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Be careful to not spill the sample from the CELL. Remove and discard the strip. The display will automatically start to count up for 120 seconds.



7

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Copper. This result is automatically stored in the CU(7) menu. After testing is complete, rinse the sample cell immediately and clean with brush.



FILL, DIP, READ CYANURIC ACID

Note S/N on back of photometer before beginning test.

1

POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Pool eXact® EZ.

2

FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

SELECT TEST

Press and re-press the **MENU** button until the display shows CY(6).



4

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0PPM, indicating the meter is ready for testing.



5

SHAKE BOTTLE & ADD DROPS

Tilt the meter to discard about 0.2mL water to leave room for liquid reagent. Shake the bottle of eXact® Reagent CY to mix the suspension in the bottle. Refer to images below for correct amount of drops of eXact® Reagent CY to add to the sample cell. Keep reagent bottle vertical while adding drops.



7

CAP & PRESS READ

Place the cell cover onto the sample cell. Press **READ** to initiate a 20 second countdown. Place thumb or finger over cap, and mix the sample by turning the meter upside-down repetitively during the 20 second countdown. When timer displays 1, place the meter on a flat surface (upright). The display will automatically start to count up for 60 seconds.



TIP

For hot tubs (above 95°F/35°C), dip strip for **ONLY 10 seconds**. Remove strip when the timer displays "10" and press **READ**.

8

CAP CELL AND READ RESULTS

READ result displayed as Cyanuric Acid. This result is automatically stored in the CY(6) menu. After testing is complete, rinse the sample cell immediately and clean with brush.



FILL, DIP, READ PH

18

Requires water sample with a Total Alkalinity minimum of 20ppm.

1

POWER ON PHOTOMETER

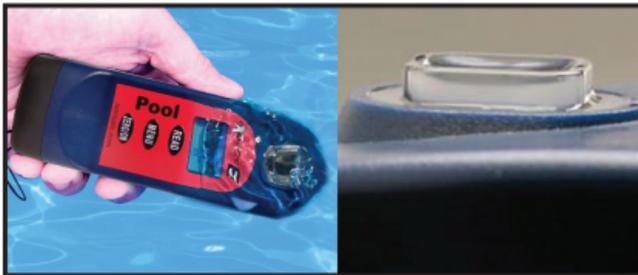
Press the **ZERO/ON** button to power on the Pool eXact® EZ.

2

FILL CELL

Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.

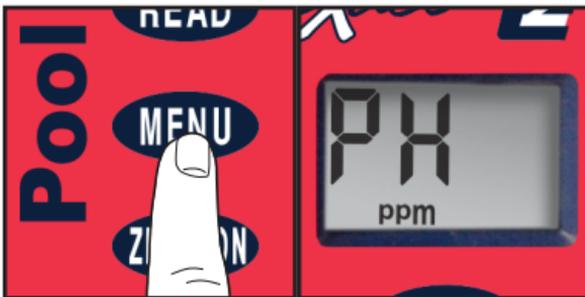
NOTE: For accurate results, water sample must have a minimum Total Alkalinity of 20 ppm.



3

SELECT TEST

Press and re-press the **MENU** button until the display shows PH(2).



4

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.0_{pH}, indicating the meter is ready for testing.



5

REMOVE STRIP

Remove one eXact® Strip Micro PH (Part No. 486639-II) and set in a dry, convenient place. Replace cap.



6

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays “1”. Be careful to not spill the sample from the CELL. Remove and discard the strip.



TIP

For hot tubs (above 95°F/35°C), dip strip for **ONLY 10 seconds**. Remove strip when the timer displays “10” and press **READ**, or use the specially calibrated SPA eXact® EZ photometer.

7

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as pH. This result is automatically stored in the PH(2) menu. After testing is complete, rinse the sample cell immediately and clean with brush.



1

POWER ON PHOTOMETER

Press the **ZERO/ON** button to power on the Pool eXact® EZ.

TIP

For optimal accuracy, clean CELL with 0.1N HCl, Distilled Vinegar (5%), or Muriatic Acid (diluted 1:40 with H₂O) before filling the meter with the sample to be tested

2

FILL CELL

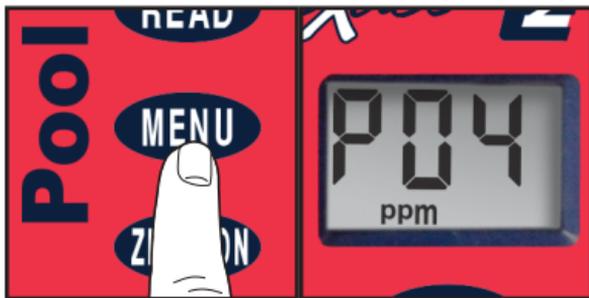
Before testing, rinse CELL and clean with brush thoroughly. Finally rinse the cell 3 times with the water sample to be tested, then **FILL** cell to capacity to begin test.



3

SELECT TEST

Press and re-press the **MENU** button until the display shows PO4.



4

CAP CELL AND ZERO METER

Place the Cell Cover onto the CELL and press **ZERO/ON** and the photometer display reads 0.00PPM, indicating the meter is ready for testing.



5

REMOVE STRIP

Remove one eXact® Strip Micro PO₄ (Part No. 486814) and set in a dry, convenient place. Replace cap.



6

DIP STRIP AND PRESS READ

Press **READ** to initiate a 20 second countdown and simultaneously **DIP** the eXact® strip in the sample, gently touching the bottom of the cell. Use a gentle constant back and forth motion (2 strokes per second) until the timer displays “1”. Be careful to not spill the sample from the CELL. Remove and discard the strip. The display will automatically start to count up for 120 seconds. See [pg 23](#) for important tips.



7

CAP CELL AND READ RESULTS

Place the Cell Cover onto the CELL and **READ** result displayed as Phosphate. This result is automatically stored in the PO₄ menu. After testing is complete, rinse the sample cell immediately and clean with brush.



The Acrylic Calibration Key is a tool for verifying the calibration of your Pool eXact® EZ Photometer compared to its original factory settings. Run this test immediately upon receipt and record value for future reference. Follow steps 1-4 on page 10 (do not use cap during ZERO). Then, follow the remaining steps below.

5

DIP KEY AND PRESS READ

Place the Acrylic Calibration Key into the water sample in the center of the CELL. Be sure the key is positioned upright (vertical) and to the bottom of the CELL. Press READ



6

READ RESULT & RECORD

Result is displayed on the Pool eXact® EZ. Record value below. For additional tests, repeat steps 4-6.

Expect the result to be within 0.15 units from previous calibration. If variation is greater, please re-check your ZERO procedure (steps 3-4 on page 10) and be sure to use clean water (deionized or distilled if necessary).

**Acrylic Calibration Key Records:**

Date Tested	Recorded Value	Comments



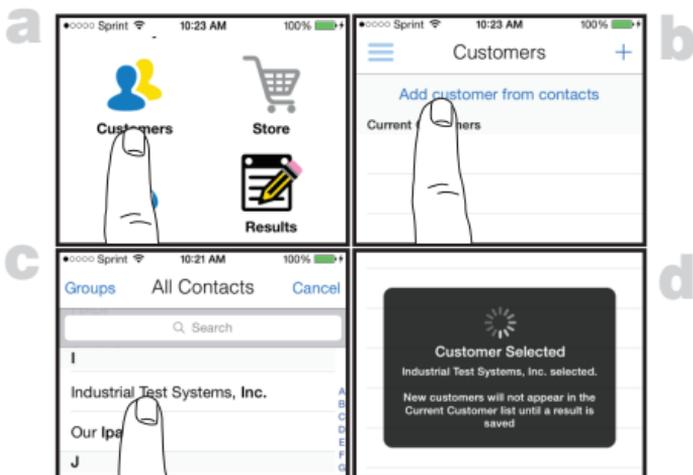
1

SELECT CUSTOMER

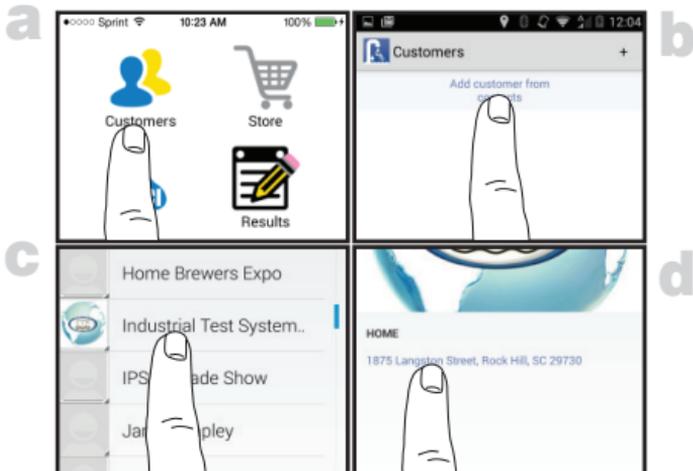
- Select '**Customers**' from the '**Home**' screen.
- Tap '**Add customer from contacts**'.
- Select a contact from your list. After selecting a contact, tap on the customer's address if shown.
- Verify customer has been selected.

Note: In order to take full advantage of the GPS and Data Storage features, each test result is linked to a contact.

Apple



Android



CONNECT TO POOL EXACT EZ (486201-BT)

2

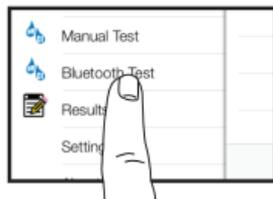
POWER ON POOL EXACT® EZ

Press ZERO/ON button to power on the Pool eXact® EZ.

3

SELECT
BLUETOOTH® TEST

Tap the menu slide out '≡' and select 'Bluetooth Test' from the choices shown.



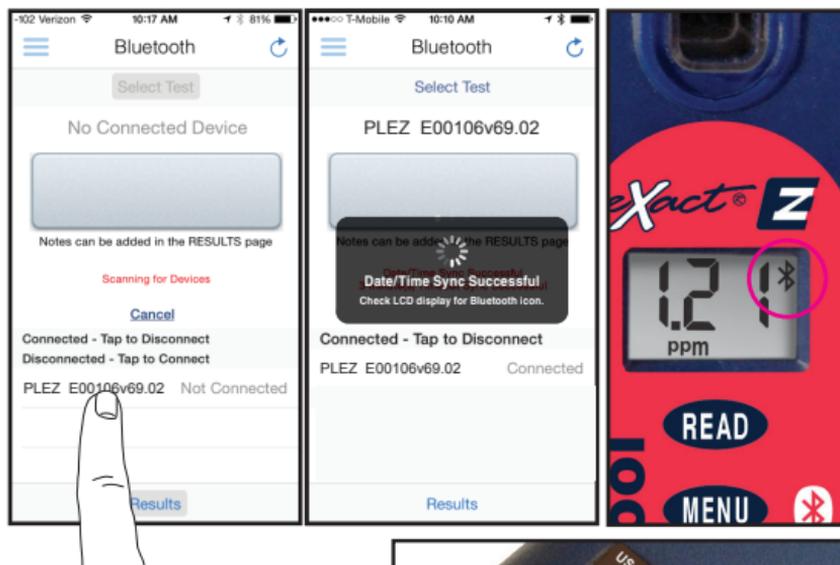
4

CONNECT POOL EXACT® EZ

The eXact iDip® app will automatically connect to the most recently used smart photometer. If not, select your Pool eXact® EZ from the bottom of the screen.

Note: Ensure you always connect your Pool eXact EZ photometer via the Bluetooth® connection within the app. To verify connection look for the Bluetooth icon in the upper right corner of your photometer.

If you experience an issue connecting your device, check to ensure that your smartphone/tablet's Bluetooth® function is turned on.



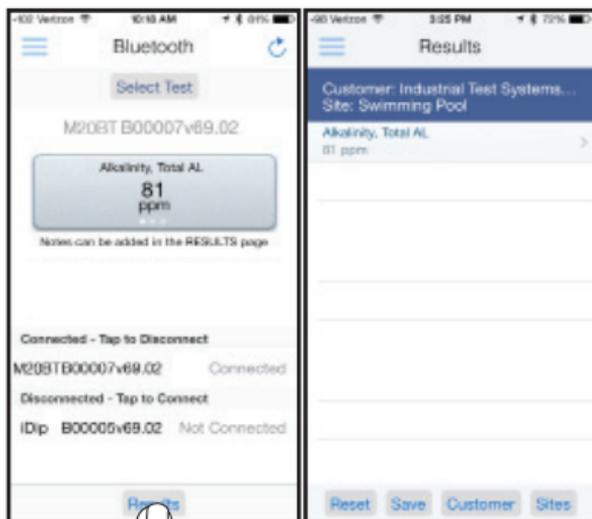
Refer to the back of your Pool eXact EZ to determine the serial number for your device. This will also be the name for the Bluetooth® connection.



Once connected to the Pool eXact EZ, you can run tests as usual. Test results will be stored automatically in the Results section of the app.

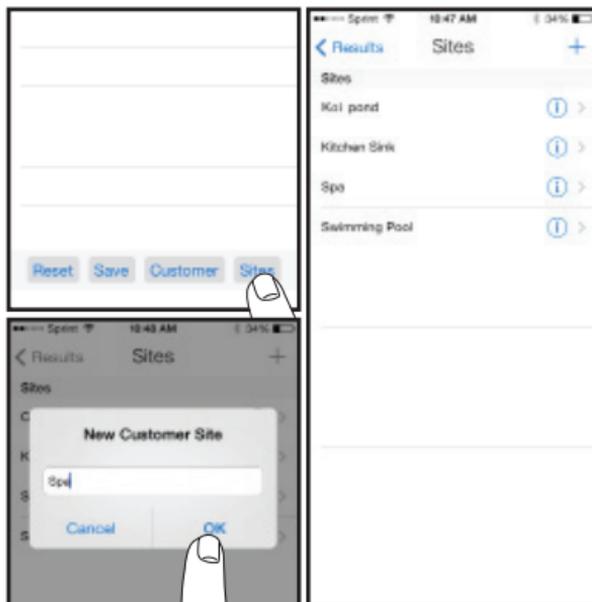
RESULTS

After tests have been performed, tap **'Results'** at the bottom of the screen.



ADD SITES

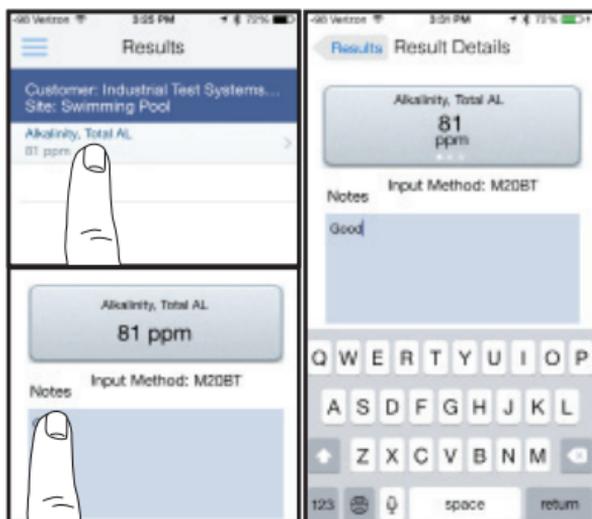
Each set of results must be saved to a customer's **'Site'** (water source at the location). Select a site from the list or to add new sites, tap **'Sites'**, then **'+'**. Enter a **Site** name, tap **'OK'**.



ADD NOTES

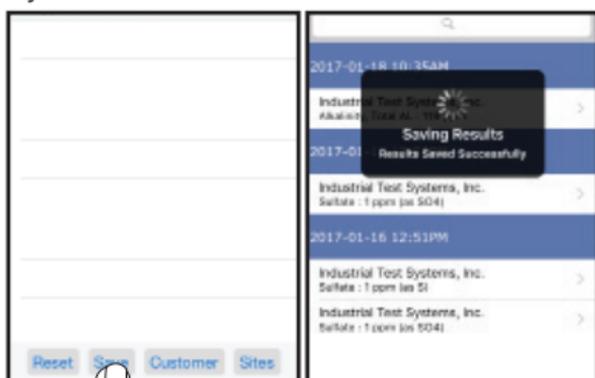
To add notes to each test tap the desired test result.

Type notes in the **'Notes'** box, which are automatically saved. Press **'Results'** to return to the results menu.



SAVE TO HISTORY

In 'Results' screen, tap 'Save' to store into 'History'. If this step is omitted, test results will not be permanently saved. A 'Saving Results' pop-up appears, verifying that your result is now successfully saved.

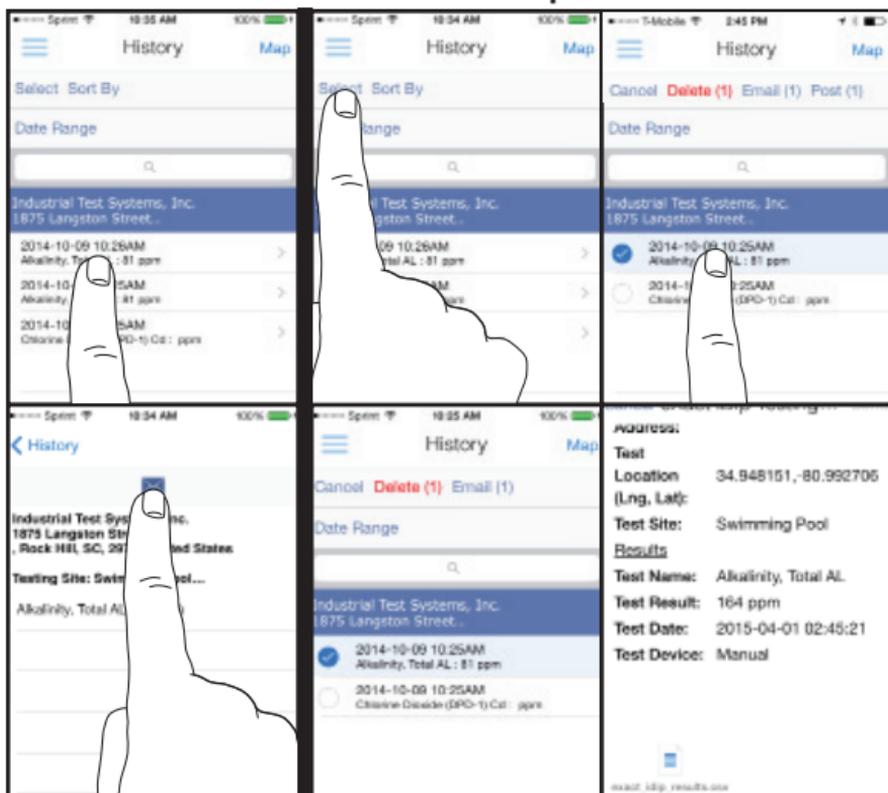


SEND/SHARE VIA EMAIL

In History you can edit, select, and email your results. To email you can either tap an individual result displayed, or use the 'Select' button to access multiple data points. Press the blue envelope icon if you tapped an individual result. Select 'Email' at the top if multiple tests are selected. A .csv (spreadsheet) file will be attached at the bottom of the e-mail.

Individual Result

Multiple Results



The Pool eXact® EZ photometer has a 5 minute auto-shutoff timer.

For best results, use the cell cover when zeroing and reading samples.

Before testing rinse CELL and clean with brush thoroughly. (Rinsing minimizes the potential for cross-contamination from a previous test.)

Always fill the cell to capacity (4mL); be careful not to splash liquid over the side.

When testing pH, it is recommended to run the pH test prior to running Chlorine. If you choose to run the pH after Chlorine, ensure you thoroughly clean the cell with water and the brush provided. Test immediately after filling the cell with the water sample.

Due to the strip slitting process, you may find one or two strips that are noticeably smaller or larger in width than the normal strips in the bottle. **These should be discarded.** Using these strips may give unreliable results.

Meter is not compatible for use with powder pillows, tablets, or liquids from other manufacturers.

Dip strip for entire countdown.

Each eXact® Strip Micro is valid for ONLY one test. Discard strip after use.

Dry the outside of the meter and inside the mixing cap before storage to prevent corrosion.

Remove batteries before storing for prolonged periods.

Store the meter and test materials out of direct sunlight and away from chemical storage areas.

Minimize exposure of meter and test reagents to heat above 90°F (32°C).

When installing batteries, verify the O-ring is still attached to the screw before tightening.

Even if all pads are not immersed in water, **DO NOT BEND THE STRIP.** Make sure the strip touches the bottom of the CELL while dipping the strip for 20 seconds.

To ensure lab quality results, it is recommended to clean the cell with the brush provided after every test. Use Distilled White Vinegar to clean the cell after testing for Phosphate to remove reagent deposits from the cell wall.

Each test menu can store 20 results. To retrieve the stored results, go to the desired test using the MENU key. When the desired test is displayed, press and hold down the MENU key. Continue holding down the MENU key to scroll the stored results for that test, starting with the most recent result. The meter will display, from memory, the last 20 readings in sequence beginning with -20, which is the latest result, followed by -19, which is the 2nd latest result, etc; and finally -01, which is the oldest result retained. Only the last 20 readings are stored in each menu. This meter is able to store 160 results in memory (20 in each menu).

Listed below are possible situations that may arise while testing. Please contact one of our knowledgeable customer service representatives if you require further assistance.

Subject	Cause	Solution
Dim screen or no response from meter	Low battery	Replace batteries
"LO" on LCD while zeroing	Low battery	Replace batteries
	Dirty cell	Clean cell
	Cloudy sample	Dilute sample or use filter
	Bad LED	Contact ITS
"HI" on LCD while reading	Result above detection level	Re-run test to verify result
"LO" on LCD while reading	Result below detection level	Re-run test to verify result
"LO" flashes on LCD, then "Err"	Improper test procedure for Combined Chlorine	Re-read test procedure and follow directions carefully
"HI" flashes on LCD, then "Err"	Combined Chlorine result above detection limit	Re-run test to verify result
		Dilute and re-run test
"Er1" on LCD	Communication error	Verify Bluetooth connection
"Er2" on LCD	Bluetooth connection lost	Reconnect to eXact iDip app and re-run test

POOL EXACT® EZ ACCURACY

All tests have been calibrated using certified reference standards and analytical spectrophotometric methods. The Pool eXact® EZ has been factory calibrated and will stay valid because of its exceptional quality. We are so confident in the Pool eXact® EZ, we offer an industry leading 2-year warranty.

We built the Pool eXact® EZ to be easy, accurate and environmentally friendly. We have achieved this by utilizing our patented eXact® Strip Micro Technology, which uses 60% less water and chemistry than alternative methods. Instead of using a 10mL water sample, eXact® Strip Micro uses a 4mL water sample. The accuracy of the meter is maintained by designing the sample cell with an 11mm path-length.

TECHNICAL SUPPORT

Please visit sensafe.com/pool-exact-ez/ for the latest technical information and how-to-videos. For additional technical support, call (803) 329-9712.

Industrial Test Systems, Inc.

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BUILT IN SAMPLE CELL

The built-in sample cell is made of transparent plastic; the sturdy cell design will last for over 20,000 readings. Our studies have shown that scratches on the cell will not compromise the accuracy of your results because of the cell's fixed position.

WARRANTY (2 YEARS)

Registration of your Pool eXact® EZ photometer must be received within 30 days from date of purchase to activate the warranty. Registration is available over the phone (+1-803-329-9712 Ext. 0) or online at sensafe.com/micro/warranty/ (Personal data is kept confidential). The Pool eXact® EZ photometer is warranted to be free from defects in materials and workmanship for a period of two (2) years from the date of purchase by the customer. ITS will repair or replace, at its discretion, product which is deemed to be faulty due to manufacturing defect. Warranty does not cover product damage caused by abuse (such as crushing a tablet in the cell), battery corrosion damage, or improper use. If the meter is faulty or otherwise defective contact ITS by phone (+1-803-329-9712 Ext. 0) or email (its@sensafe.com) to describe the problem and obtain a return authorization form before returning the photometer to ITS. Damage caused by improper packing of the photometer for return shipment to ITS will not be covered by the warranty. Customer is responsible for shipping charges to ITS. ITS pays postage when photometer is returned to customer. A maximum processing fee of \$125 (subject to change) will be charged for repair or replacement of non-registered photometers and damages not covered by this warranty. The repair or replacement of the photometer will not extend or renew the period of guarantee. This warranty does not affect your statutory rights. The warranty is not transferable.

METHOD VERIFICATION *ReadySnap*®

Ready Snap® are method and calibration verification solutions with predetermined values to verify the accuracy of your Pool eXact® EZ.

The easy 3 step procedure (snap, fill, and test) allows for quick verification of test parameters. Each box contains 10 ampoules of 10mL solution with no dilution necessary.



READY SNAP®	METHOD VERIFICATION TEST FOR	PART NO.
Ready Snap® 1P (plastic ampoules)	Total Alkalinity, pH-II, Calcium Hardness, Copper, Cyanuric Acid, and Phosphate.	480911
Ready Snap® 3P (plastic ampoules)	Red dye for verifying 525nm eXact® Photometer calibration	480913

* Please visit sensafe.com/pool-exact-ez/ for the latest values.

COMPLIANCE TESTING

This DPD test system for Chlorine is accepted for reporting by most health departments because the tests are USEPA (DIN Standard 38 408 G4/G5, ISO 7393/2) accepted for testing requirements for Free Chlorine and Total Chlorine.



The compliance requirement is a photometer wavelength to measure between 490 and 530nm. The Pool eXact® EZ smart photometer uses a 525nm wavelength and 11 mm path-length. The eXact® Strip Micro CL (DPD-1) use the same reagents and proportions, and the resulting solution pH is maintained between 6.2 and 6.5 as specified by AWWA method 4500-Cl G/CIO2-D. The USEPA does not “approve” commercial DPD delivery systems. The eXact® Strip Micro CL (DPD-1) for **Free Chlorine**, and the eXact® Strip Micro CL (DPD-3) for **Combined Chlorine**, and the eXact® Strip Micro CL (DPD-4) for **Total Chlorine** meet your reportable testing requirements because the eXact® Strip Micro strips deliver the same chemicals in identical proportions. Consult with your local health department for official regulations.

COMPONENT (FREE CHLORINE)	AWWA 4500-CL G	POOL EXACT® EZ
Anhydrous DPD sulfate	1.5%	1.5%
Anhydrous Na ₂ HPO ₄	33.4%	33.4%
Anhydrous KH ₂ PO ₄ Na ₂	64.0%	64.0%
EDTA	1.1%	1.1%

EXACT IDIP APP

For more detailed information and instructions about the Pool eXact® EZ with Bluetooth® and the eXact iDip® app, visit sensafe.com/content/486205-BT.pdf or scan the QR code below.



eXact iDip



The Model Aquatic Health Code (MAHC) is a set of guidelines published by the Centers for Disease Control and Prevention (CDC). This document brings together the latest knowledge based on science and best practices to help state and local government officials develop and update pool codes. They may use the code in whole, choose to use parts, or modify to fit their needs. Use of the MAHC is intended to save time and resources spent individually developing and updating codes across the country, while giving agencies the benefit of the latest science and best practices to help keep pools fun, safe, and healthy.



The MAHC requires NSF/ANSI 50 certification of water quality testing devices (WQTD) used in recreational facilities such as public swimming pools, interactive fountains, and Waterparks. Third-party certification to NSF/ANSI 50 allows manufacturers to make verified claims regarding the performance, accuracy and operating range of their WQTD. The performance testing of a WQTD involves accuracy and repeatability testing on two different lots of new production. Unlike most NSF/ANSI 50 certifications, WQTDs require follow-up testing of the product at the end of the manufacturer's specified shelf life. Certified products are given an accuracy rating to one of three levels: L1, L2 or L3, with L1 being the highest accuracy rating.

TEST	RANGE	ACCURACY RATING
POOL PARAMETERS		
Combined Chlorine	0 - 12 ppm	L2
Free Chlorine	0 - 12 ppm	L1
pH	6.4 - 8.4 pH	L1

Pool *eXact*® EZ

ADVANCED PHOTOMETER SYSTEM

NSF Certified Tests

EXACT® MICRO TESTS & REAGENTS

PARAMETER / TEST ¹	PART #	RANGE ppm	% BEST [†] ACCURACY	# OF TESTS
Alkalinity, Total	486641	20 – 200	10	100
Alkalinity, Total Range Extender	486665	Each strip adds 130 ppm		100
Bromine, Total (DPD-4)	486644	0.00 - 24.0	5	100
Chloride (Salt)	486757	500 – 6700	8	25
Chlorine, Free (DPD-1) ²	486637	0.00 – 12.0	NSF-50 L1	100
Chlorine, Combined (DPD-3)	486638	0.00 – 12.0	NSF-50 L2	100
Chlorine, Total (DPD-4) ²	486670	0.00 – 12.0	5	100
Copper	486632	0.00 – 8	2	50
Cyanuric Acid	481652-III	6 – 120	12	60
Hardness, Calcium	486629	20 – 700	5	50
pH	486639-II	6.4 – 8.4	NSF-50 L1	100
Phosphate	486814	0.08 – 3.0	8	50
EXACT REFILL BOX	PART #	PARAMETER / TESTS		
Pool Refill Box	486211	Total Alkalinity, pH, Free Chlorine, Combined Chlorine, Calcium Hardness, Cyanuric Acid III		

¹ Value provided represents best possible accuracy under laboratory conditions, but may vary throughout the detection range. For a complete list of accuracies throughout all ranges, please visit sensesafe.com/pool-exact-ez/.

² Requires the use of 2 strips if reading is above 6 ppm.

PATENT INFORMATION

US Patent #7,333,194; Euro Pat No. 1 725 864 DE FR UK; South Africa Pat No 2007/0628 by Industrial Test Systems, Inc., 1875 Langston Street, Rock Hill, SC USA.

EXACT® is a registered trademark of Industrial Test Systems, Inc. Rock Hill, SC USA.

All information in this manual is subject to change. Visit us online: sensesafe.com/pool-exact-ez/ for up-to-date product information.



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Industrial Test Systems, Inc.

Innovators of Water Quality Testing