

Smart Pooltester Scuba3s



GB

DE

FR

Parameters List

Parameter	Test name on display	Measuring Range
Free Chlorine	Cl F	0.1 - 6 mg/L
Total Chlorine	Cl T	0.1 - 6 mg/L
Combined Chlorine	Cl Comb.	0.1 - 6 mg/L
Bromine	Br	0.2 - 13.5 mg/L
pH	pH	6.5 - 8.4 mg/L
Cyanuric Acid	CyA	20 - 120 mg/L
Total Alkalinity	TA	5 -300 mg/L
Calcium Hardness	CaH	50 - 500 mg/L
Active Oxygen	O ₂ Act.	0.2 - 10 mg/L
Copper	Cu	0.1 - 5 mg/L
Phosphate	PO ₄	0.06 - 3 mg/L

Range for safe swimming condition* (Green light)	Required Tablet Reagents
0.3 - 4 mg/L	DPD No.1
0.3 - 4.5 mg/L	DPD No.1 + DPD No.3 <i>Evo</i>
0 - 0.5 mg/L	DPD No.1 + DPD No.3 <i>Evo</i>
1.5 - 8.5 mg/L	DPD No.1
6.8 - 7.6 mg/L	Phenol Red Photometer
30 - 50 mg/L	CyA-Test
50 -150 mg/L	Alka-M-Photometer
175 - 400 mg/L	Calcio-H No.1 + Calcio-H No.2
3 - 8 mg/L	DPD No.4 <i>Evo</i>
0.05 - 0.3 mg/L	Copper No.1
0.06 - 0.25 mg/L	Phosphate No.1 LR + Phosphate No.2 LR

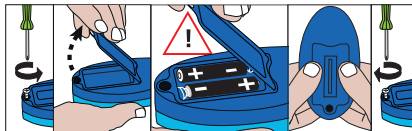
* These are globally considered measuring ranges for safe swimming.

For individual pool control, users should always follow local regulations or recommendations by their Chemical suppliers.

Congratulations on your purchase of the Scuba3s. You are owner of an state-of-the-art smart pooltester for the analysis of poolwater quality with the latest technology.

1. Battery replacement:

Notes / Caution



- Only use non-rechargeable batteries as specified in technical data.
- The instrument must be dry before opening the battery compartment.
- While inserting batteries, pay attention to the correct polarity of the batteries.
- Make sure that the cover is tightly screwed after batteries replacement.
- Please make sure to transfer measurement data before replacing batteries.

2. Important information for consumers in the EU



Disposal instructions for batteries and accumulators
EC Guideline 2006/66/CE requires users to return all used and worn-out batteries and accumulators. They must not be disposed of in normal domestic waste.

Your local authority may have a disposal facility; alternatively, you can hand them in at any shop selling batteries and accumulators. You can also return them to the company which supplied them to you; the company is obliged to accept them.



Disposal of electrical equipment

Due to the European Directive 2012/19/EU your electrical instrument must not be disposed of with normal household waste! Tintometer GmbH will

dispose of your electrical instrument in a professional and environmentally responsible manner. This service, excluding the cost of transportation, is free of charge. Send your electrical Tintometer instruments for disposal freight prepaid to your supplier.



3. Important safety instructions: Read instructions before use

This manual provides important information on the safe operation of the product. Please read it carefully and familiarise yourself with the product before use.

Intended use:

This instrument is a battery-operated measuring device to determine dissolved matter in water for non-commercial applications. The instrument and reagents are intended to be used for chemical water testing and analysis only and may not be used for other purposes. For use inside and outside buildings. Suitable for use in wet environments.



Caution

The reagents are potentially harmful if they are swallowed. Do not swallow! Keep them out of the reach of children. Contact for Poison Center: www.lovibond.com

Requirements for safe use

Note the following points for safe use:

- If the product is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- The product may only be used under the ambient conditions mentioned in this operating manual.
- The housing of the product must not be opened or modified.

The product must not be used if:

- It is visibly damaged (e.g. after being transported)
- It was stored under adverse conditions for a lengthy period of time (ambient conditions, see "Technical Data")

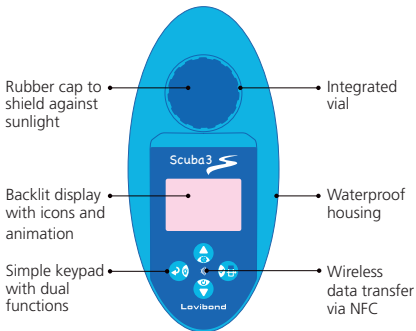
4. Guidelines for photometric measurements

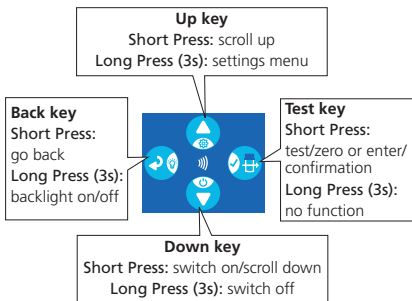
- Use only blister tablets with black printing.
- Always add the reagent tablets to the water sample straight from the foil without touching them with the fingers.
- Close the blue lid on top of the sample chamber tightly before zeroing / reading.
- Always ensure that the sample chamber, the lid and the stirring rod are thoroughly rinsed when changing from one test to the other.

Maintenance guidelines

- Keep the instrument in a clean condition.
- No solvent, abrasive materials or brushes should be used to clean the instrument. Clean the sample chamber using a soft tissue.
- Dry the instrument when not in use, store it under the advised ambient conditions.
- Remove batteries and don't close the battery lid if the instrument is being stored for an extended period.

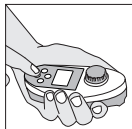
5. Instrument Overview





6. General Measurement procedure:

6.1 Switch Scuba3s on:



When not in use, Scuba3s turns off automatically after 5 minutes.

To turn off manually, press **Down** key for 3 seconds.

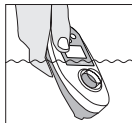
6.2 Select Parameters



Select parameter on screen with **Test** key or scroll up and down to select any other parameter.

After parameter selection, the Scuba3s shows "Zero measurement" screen.

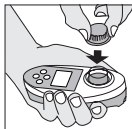
6.3 Collect Sample:



Collect sample by dipping Scuba3s into pool water multiple time.

Make sure the sample chamber is filled completely.

6.4 Cover measuring chamber



Cover measuring chamber with the rubber cap.

Make sure that the chamber is tightly closed.

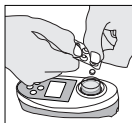
6.5 Perform Zero



Zero measurement sets a reference point by eliminating the influence of measuring chamber and sample. It is required to perform zero before each Test measurement.

Press **Test** key to perform zero. When finished, the icon on the left side on the display will change from empty vial to full vial.

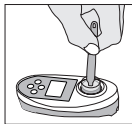
6.6 Add tablet



Add tablet reagent directly from blister by pressing from top of the blister as shown in the picture.

Refer to parameters list on the first page to choose the appropriate reagents for each test.

6.7 Dissolve tablet



Use stirring rod delivered in Scuba3s Box to crush and dissolve the tablet.

Make sure that the tablet is completely dissolved.

6.8 Perform Test



Close the chamber with rubber cap swirl the device back and forth for approx. 15 seconds, do not shake it. Press **Test** key to perform the test.

Some parameters such as Cl.Comb requires two tests, in this case 2nd test will follow the first test immediately.

6.9 Reaction timers



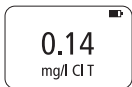
- 1) Cl F, Br, TA, CyA, pH: **No timers**
- 2) Cl T, O2 Act., CaH, Cu: **2 minutes**
- 3) PO4: **10 minutes**

Scuba3s has integrated timers which ensure that the reaction time between reagent and water sample is kept and colour is fully developed.

Countdowns start automatically, and when finished, measurement takes place.

You can skip timer by pressing **Test** key again, but it is not recommended.





6.10 Results



The results are stored automatically.

The results of some parameters can be switched into different form (PO4 to P) by pressing Up key. In case of Cl Comb, press Up / Down key to see results of Cl F or Cl T.

The instrument indicates if the water is safe for swimming or not.

	Indication of globally accepted measuring range for safe swimming.
	Indication of too low or too high measuring range for safe swimming.
	over range (Value is too high). Press Test key to confirm and go back.
	under range (value is too low to be detectable). Press Test key to confirm and go back.

Attention: Please follow local regulations and recommendations provided by your chemicals providers to know ideal concentrations for your pool.

7. Settings

Scuba3s settings menu



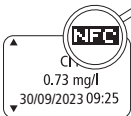
- When in home menu press **Up** key for 3 seconds to enter settings menu.
- Scroll through the list to see different setting options.
- Press **Test** key to enter sub-menu.

7.1 Results



- The latest results will be shown on screen.
- Scroll up or down to see next results.
- Press **Back** key to go back to main settings menu.

7.2 Transfer Results



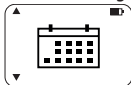
- The instrument shows NFC next to the battery icon.
- Follow instructions from Lovibond® PoolAssistant App to receive data.
- Note: All data sets are transferred from the memory.

7.3 Delete results



- Press **Test** key to select the data delete option.
- Press **Test** key again to confirm the action.
- All results will be deleted.
- **Note:** Make sure to transfer all your results before deleting.

7.4 Date Setting



- Press **Test** key to select date setting.
- Scroll up or down to see other date formats or press **Test** key to confirm.
- Press **Up** or **Down** key to increase/ decrease value.
- Press **Test** key to confirm value and move to next entry.
- When the arrow is at last entry, press **Test** key to save the date.

7.5 Time Setting



- Press **Test** key to select time setting.
- Press **Up** or **Down** key to increase/ decrease value.
- Press **Test** key to confirm and move to next entry.
- When the arrow is at last entry, press **Test** key to save the time.

7.6 Error Codes



- E1 - Indicates an insufficient light on detector.
- E2 - Indicates calculation error.
- E4 - Indicates invalid calibration.
- E7 - Indicates method not found.

8. Technical Data:

Optics:	Spectrometric sensor, multi-wavelength
Wavelength:	Multi
Display:	LCD Dot Matrix with Backlight
Interface:	NFC (Near Field Communication)
App Connectivity:	Lovibond®-PoolAssistant
Memory:	100 data sets
Power Supply:	2 x AA batteries (Mignon AA/LR6) 3V DC / 55mA
Battery Life:	5000 measurements
Auto – Off:	5 minutes
Protection class:	IPX7 according to DIN EN 60529
Conformity:	CE, UKCA
Warranty:	2 years
Ambient conditions:	
Temperature:	10 - 50 °C
Humidity:	30 - 95 %
Pollution degree:	2
Maximum altitude above sea level:	3500 meters

9. Delivery Content:

- 1 x Scuba 3s in a robust plastic case with hanger
- 2 x AA batteries
- 1 Stirring rod
- 1 Instruction Manual
- 1 Blue lid
- **Reagents:**
 - 20 x DPD No.1 tablets
 - 10 x DPD No.3 *Evo* tablets
 - 20 x Phenol Red Photometer tablets
 - 10 x Alka-M-Photometer tablets
 - 10 x CyA-Test tablets
 - 10 x Calcio-H No.1 tablets
 - 10 x Calcio-H No.2 tablets

10. List of Accessories & Reagents:

- 525620 - Refill Pack Cl_2 -pH
- 525621 - Refill Pack Cl_2 -pH-Alka-m-CyA
- 525652 - Refill Pack Calcium Hardness
- 525651 - Refill Pack Active Oxygen
- 525653 - Refill Pack Copper
- 525654 - Refill Pack Phosphate
- 364107 - Stirring rod
- 364140 - Stirring rod 10er pack
- 19802218 - Blue lid

Lovibond® PoolAssistant



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