

User manual

Aquasalis SC series · Salt chlorinator



Models: SC 2 · SC 4 · SC 6 · SC 8 · SC 10 · SC 12 · SC 16 · SC 20 · SC 25

Thank you for choosing Aquasalis. Read this manual carefully before installing and using the device, and keep it in a safe place where it is easy to find.

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01 Safety instructions

Thank you for choosing the Aquasalis SC salt chlorinator. To get the best from the device and to prevent accidents, read this entire manual before installation and use, and follow it strictly. Ignoring the safety warnings can lead to serious injury, damage to property or danger to life.

1. Installation and maintenance must be carried out by a qualified electrician. Otherwise there is a risk of electric shock, serious injury, damage to property or danger to life.
2. Before any maintenance or operation, make sure the salt chlorinator is unplugged, all connected equipment is switched off and the main power supply is off.
3. Connect the external power supply of the salt chlorinator to a mains supply that is separate from the filtration system (no feedback control) and equipped with earthing.
4. Installers must read this manual carefully before installation. In case of incorrect installation or operation, contact your nearest authorised dealer or Aquasalis support.
5. If parts are damaged, use only original replacement parts from Aquasalis or an authorised dealer.
6. To reduce the risk of injury, do not allow children to use this product.
7. Intensive use of the pool or spa, or high water temperatures, may require a higher chlorine production level to maintain an adequate level of free chlorine.

02 How salt chlorination works

Salt chlorination disinfects pool water by salt electrolysis. This electrochemical process converts the salt in the water into a disinfectant (sodium hypochlorite, NaOCl). After it has done its work — on contact with organic matter such as bacteria, or under the effect of UV light — the hypochlorite turns back into salt, and the cycle starts again.

WARNING

Salt chlorination alone will not clear green water. If algae appear, for example after a period of high temperatures or heavy use, it may be necessary to add chlorine tablets as well. Never put chlorine tablets directly into the skimmer; use a floating dispenser.

03 Features

1. Controller and cell integrated in one unit, for easier installation and less space.
2. Water inlet and outlet on the same axis, so less pipework is needed.
3. Fully waterproof design for safer use.
4. Electrode plates made of titanium.
5. Detachable construction: the titanium plates can be removed for easy cleaning, installation and maintenance.
6. Simple control panel that is easy to understand and operate.
7. Water flow switch that protects the device and ensures effective disinfection.
8. Salinity detection and protection: if the salinity is too low, the device gives an alarm and pauses to protect itself; if it is too high, it gives an alarm but keeps running.
9. Water temperature detection and protection: below 10 °C the device gives an alarm and pauses; above 42 °C it gives an alarm but keeps running.
10. Self-cleaning of the titanium plates by polarity reversal, which extends the life of the cell.
11. Adjustable chlorine production level and daily operating time, to match the condition of your pool water.
12. Voltage and current monitoring: the device gives an alarm when a limit is exceeded.
13. Electrode monitoring: the device gives an alarm when an electrode fault occurs.
14. Memory function: after a power cut, the device resumes its last settings automatically.
15. Child lock, to prevent unintended operation.
16. Automatic salinity test of about 5 minutes at the start and end of every run.
17. Manual salinity test: always test manually after adjusting the salinity of the pool water.
18. One-touch boost mode: 24 hours at 100 % chlorine production for intensive use. Afterwards the device returns to its previous settings.

04 Technical specifications

Model	Chlorine output	Max. pool volume	Cell voltage	Pipe connection
SC 2	2 g/h	≤ 10 m ³	12 V DC	D32 / D38
SC 4	4 g/h	≤ 20 m ³	12 V DC	D32 / D38
SC 6	6 g/h	≤ 30 m ³	24 V DC	D32 / D38
SC 8	8 g/h	≤ 40 m ³	24 V DC	1.5" / D50
SC 10	10 g/h	≤ 50 m ³	24 / 29 V DC	1.5" / D50
SC 12	12 g/h	≤ 60 m ³	24 V DC	1.5" / D50
SC 16	16 g/h	≤ 80 m ³	24 V DC	1.5" / D50
SC 20	20 g/h	≤ 100 m ³	29 V DC	1.5" / D50
SC 25	25 g/h	≤ 120 m ³	29 V DC	1.5" / D50

Electrode Bipolar titanium electrode, 7,000 or 10,000 hours (two versions)

Protection rating IPX5

Salinity 2,500–5,000 ppm (ideal 3,000–4,000 ppm)

Salinity detection Automatic before and after each run; manual with the salinity button

Water temperature 10–42 °C

Water flow through the device 2–10 m³/h

Alarms Salinity too low or too high · water temperature too low or too high · insufficient water flow · electrode fault · current fault · voltage fault

Operating time Adjustable: 2 / 4 / 6 / 8 / 10 / 12 / 18 / 24 hours

Power level Adjustable: 25 / 50 / 75 / 100 %

Polarity reversal Adjustable: every 4 / 6 / 8 / 12 hours

Boost mode 100 % for 24 hours

Connectivity Wi-Fi and Bluetooth, Smart Life app

Power supply input 100–240 V AC, 50/60 Hz

Memory function Yes

Dimensions (L × W × H) 330 × 124.5 × 138 mm



L 330

W 124.5



L 330

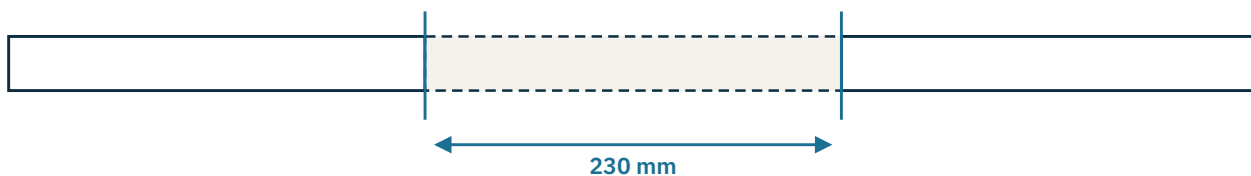
H 138

Dimensions (mm)

05 Installation

Case 1: D50 PVC pipe (in-ground pools)

To fit the device into an existing D50 PVC pipe, cut out a section of exactly 230 mm. Use PVC cement suitable for the 1.5" (D50) connectors.



Cut-out length for D50 pipe

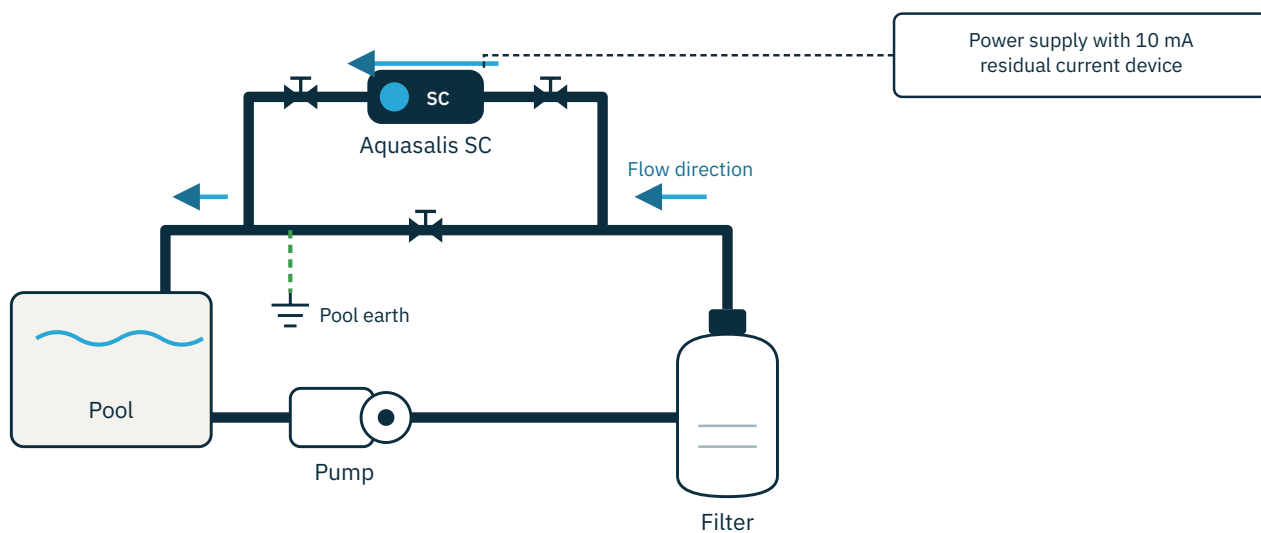


Figure 1 — Horizontal installation with bypass

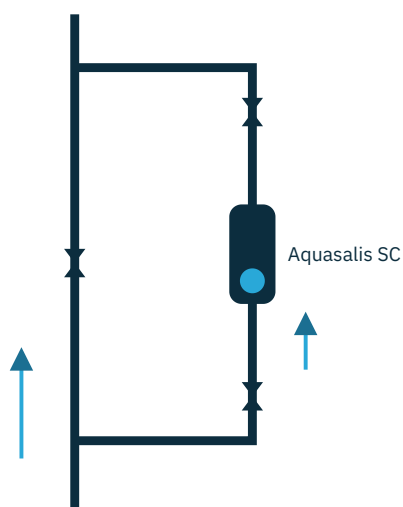


Figure 2 — Vertical installation: water flows from bottom to top

Case 2: D38 or D32 hose (above-ground pools)

With this type of hose, add a second length of hose of at least 50 cm (not supplied), equivalent to the one already in place, to the outlet of the filter. We recommend fitting a valve directly after the device (if there is none yet), so this section can be isolated for maintenance.

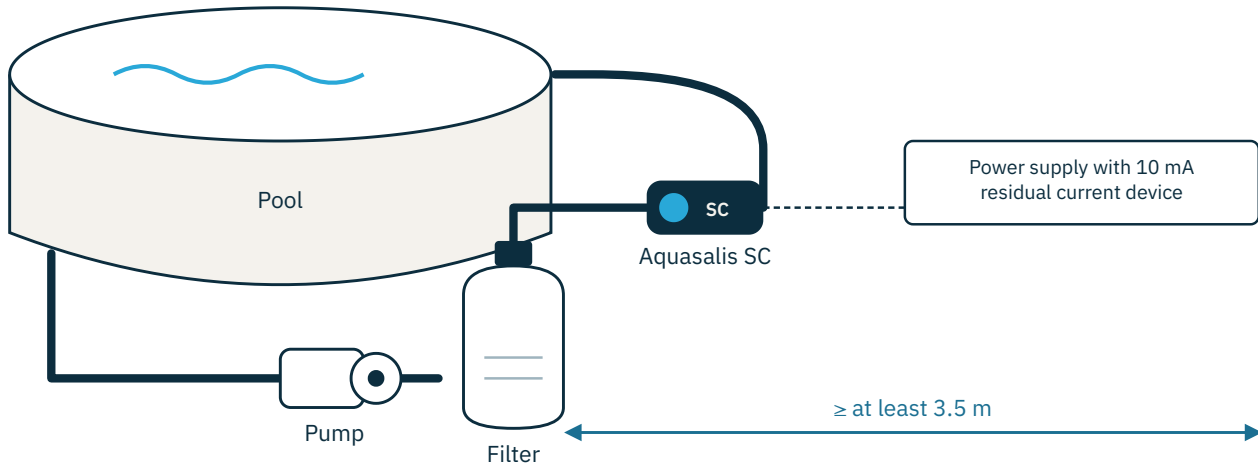


Figure 3 — Above-ground pool with D32/D38 hoses

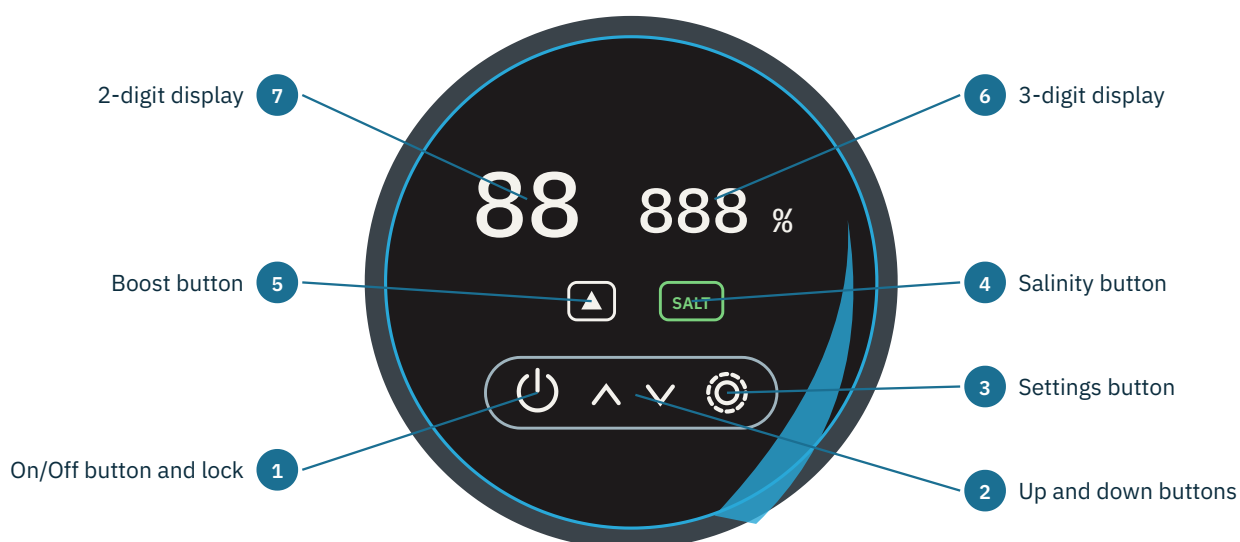
⚠ WARNING

1. Before installation, make sure the power and the water circulation system are switched off and the valves on the pipe to the device are closed.
2. Before installation, clean any dirt or oil from the pipes and connecting joints.
3. Installation without a bypass is possible if your pump has a flow rate below 10 m³/h, but a bypass is strongly recommended so the hydraulic circuit can be isolated. If the pump flow rate is above 10 m³/h, a bypass with an adjustable valve on the main pipe is required. Install the device on the return line that carries water from the filter back to the pool inlets, as shown in Figure 1 (horizontal) and Figure 2 (vertical).
4. Make sure the water flows in the direction of the arrow on the device; otherwise it will not operate.
5. If you use a water heating system, install the device downstream of it, as the last element in the circuit.
6. Install the device in a well-ventilated place, so the electronics can lose their heat.
7. Connect the external power supply to a mains supply protected by a residual current device (100–240 V AC, 50/60 Hz), sheltered from rain and at least 3.5 m from the pool. If the residual current device trips, check the whole installation before resetting it.
8. The device can be installed horizontally (Figure 1) or vertically (Figure 2). In a vertical installation, the water should flow from bottom to top.
9. Do not install the device where water can easily get in, to prevent damage to the electrical components by humidity or rain.

06 Before first use

1. Make sure the salinity of the pool water is within the normal range of 2,500–5,000 ppm; 3,000–4,000 ppm is recommended. See “Adding salt” in the maintenance chapter to adjust the salinity.
2. Once the device is installed and connected, open the valves to the device and adjust the valve on the main pipe. Switch on the residual current device.
3. Switch on the pump. Check that water flows through the device, that no joint is leaking and that the flow switch is closed. The water flow through the device must be between 2 and 10 m³/h.
4. Connect the power supply of the device to the mains and switch it on.

07 Control panel



Control panel

08 Operation

① On/Off button and lock

1. Press the On/Off button to switch the device on or off. When it is off, the 3-digit display shows "OFF". The On/Off indicator is red when the device is off and white when it is on.
2. If no button is pressed for 60 seconds, all buttons except On/Off are locked and the lock indicator turns orange. The panel then shows only the 2-digit display, the 3-digit display, the salinity indicator and the boost indicator, at reduced brightness; the up, down and settings buttons are not lit. Press and hold the On/Off button for 3 seconds to unlock.

② 2-digit display

1. During normal operation, the display shows the water temperature.
2. In case of an alarm, it shows the error code; if there are several, they are shown in turn.

③ Salinity

1. When the salinity is in the normal range, the indicator is green.
2. When the salinity is too low, the indicator flashes red with a beep, the device pauses and the 2-digit display shows error code "F5". Add salt to bring the salinity back into the normal range, then press and hold the salinity button for 3 seconds to clear the alarm and resume operation.
3. When the salinity is too high, the indicator flashes green without a beep, the device keeps running and the 2-digit display shows error code "F6". Add fresh water to bring the salinity back into the normal range, then press and hold the salinity button for 3 seconds to clear the error code.
4. At the start and end of every run, and when you press the salinity button, the device tests the salinity for about 5 minutes. During the test, the outer segments of the 3-digit display rotate. Afterwards, if the salinity is normal, the display returns to the operating time and the indicator is green; if not, the device reacts as described above.

④ Settings

1. The 3-digit display shows the settings; by default it shows the operating time. Press the settings button to switch between operating time, chlorine production level and polarity reversal time, and use the up and down buttons to change the value.
2. **Operating time:** choose 2, 4, 6, 8, 10, 12, 18 or 24 hours. The selected value flashes on the 3-digit display and is applied after 5 seconds without input. Factory setting: 8 hours. Example: with 2 hours, the device runs for 2 hours a day and is on standby for the remaining 22 hours; with 24 hours, it runs continuously. On standby, the 3-digit display shows "---". The daily run starts at the time the device was last switched on. Changing the operating time does not change this start time; after switching the device off and on, or after a power cut, the start time becomes the moment it was switched on again.
3. **Chlorine production level:** choose 25, 50, 75 or 100 %. The selected value flashes and is applied after 5 seconds without input. Factory setting: 75 %. Example: a 20 g/h model set to 75 % produces 15 g/h. The "%" symbol is only shown while you are selecting.
4. **Polarity reversal time:** choose 4, 6, 8 or 12 hours. The selected value flashes and is applied after 5 seconds without input. Factory setting: 6 hours. Example: with 4 hours, the device pauses at 3 hours 57 minutes and the 2-digit display shows "--" for 3 minutes; at 4 hours the polarity of the electrode reverses, operation resumes and the display shows the water temperature again.

⑤ Boost button

1. **Boost mode:** press the boost button to start or stop boost mode. In boost mode, the device runs for 24 hours at 100 % chlorine production, the 3-digit display shows “24H” and the indicator is red. When boost mode ends, the device returns to its previous settings. Press the boost button again to stop it early.
2. **Fault indicator:** when the device is working normally, the indicator is white; in case of a fault, it flashes red. For faults that must be cleared manually, press and hold the boost button for 3 seconds after solving the problem to resume operation.

⑥ Water flow detection

1. The device detects water flow automatically. When water flow is detected (flow switch closed), the device works normally; when no flow is detected (flow switch open), operation pauses.
2. If the flow switch opens while the device is running, the boost indicator flashes red with a beep, operation pauses and the 2-digit display shows error code “F2” until the flow switch closes again.
3. If the flow switch opens while the device is on standby, the boost indicator flashes red without a beep and the 2-digit display shows “F2” until the flow switch closes again.

⑦ Water temperature detection

1. The operating range for water temperature is 10–42 °C.
2. If the water temperature stays above 42 °C for 30 seconds, operation continues, the boost indicator flashes white without a beep and the 2-digit display shows “F1” until the temperature drops below 42 °C.
3. If the water temperature stays below 10 °C for 30 seconds, operation pauses, the boost indicator flashes red with a beep and the 2-digit display shows “F1” until the temperature rises above 10 °C.

⑧ Memory function

If the device was not switched off before a power cut, it resumes operation automatically when power returns: the On/Off indicator is white, the 3-digit display shows the operating time from before the power cut, and the 2-digit display shows “FP” followed by the water temperature. If the device was switched off before the power cut, the On/Off indicator is red and the 3-digit display shows “OFF” when power returns.

⑨ First start

When the device is switched on for the first time, the On/Off indicator is red and the 3-digit display shows “OFF”.

⑩ Factory reset

With the panel unlocked, press and hold the On/Off button for 5 seconds to restore the factory settings.

09 Troubleshooting

Code	Error	Note	Solution
F1	Water temperature outside the operating range	The operating range is 10–42 °C.	First check whether error code “F3” is also shown. If so, check that the temperature sensor is connected; if it is, the sensor is faulty and must be replaced. If not, make sure the water temperature is within the operating range.
F2	Water flow error	Normally the flow switch is closed when water flows and open when there is no flow.	Check that the water flow is more than 2 m³/h. If it is, the flow switch is faulty and must be replaced.
F3	Water temperature sensor fault	Must be cleared manually.	Check that the sensor is connected. If it is, the sensor is faulty and must be replaced.
F4	Electrode fault	Must be cleared manually.	Make sure the salinity is above 1,000 ppm. Switch off the pump and the device and close the valves on both sides. 1. Check the titanium plates for scale; if there is scale, remove the device from the pipe and clean the cell (see “Cleaning the cell”). 2. Open the lid and check whether the electrode is loose or disconnected; if so, reconnect it firmly. 3. Check the titanium plates for corrosion; if they are corroded, replace them. If none of this applies, contact your dealer or Aquasalis support.
F5	Salinity too low	Normal range: 2,500–5,000 ppm.	Measure the salinity with a salinity meter. If it is below 2,500 ppm, add salt to bring it back into the normal range, then press and hold the salinity button for 3 seconds to clear the alarm and resume operation.
F6	Salinity too high	Normal range: 2,500–5,000 ppm.	Measure the salinity with a salinity meter. If it is above 5,000 ppm, add fresh water to bring it back into the normal range, then press and hold the salinity button for 3 seconds to clear the error code.
F8	Abnormal output voltage of the power supply	Must be cleared manually.	Replace the power supply.
F9	Output current of the circuit board too high	Must be cleared manually.	Contact your dealer or Aquasalis support for repair or replacement.
FC	Circuit fault	Must be cleared manually.	Switch the power off and on again. If the device starts normally, the error code is cleared. If the code keeps returning, contact your dealer or Aquasalis support for repair or replacement.
FP	Abnormal power cut	The 2-digit display shows the code for a while, then the water temperature.	Find out why the power was cut.

Code	Error	Note	Solution
Fb	Communication fault between circuit board and display	Must be cleared manually.	Switch the power off and on again. If the device starts normally, the error code is cleared. If the code keeps returning, contact your dealer or Aquasalis support for repair or replacement.

10 Remote control with the Smart Life app

Connecting the device

1. Download the Smart Life app from the App Store or Google Play, open it and create an account or sign in.
2. Set the language you want in the app settings.
3. On the home screen, tap “+” in the top right corner and choose “Add Device”.
4. Allow the app to use Bluetooth: it is needed for the first connection.
5. On the device, press and hold the up and down buttons together for 5 seconds, so the app can find it. When the device appears in the app, tap its icon.
6. If your phone is not yet connected to Wi-Fi, connect it. Select your Wi-Fi network, enter the password and tap “Next”.
7. Wait while the device is added. When the app shows “Added successfully”, tap “Done”.

The app screen

- **Error code:** shows “Normal”, or the active error code (see “Troubleshooting”).
- **Level and countdown:** the chlorine production level and the remaining operating time of the current run.
- **Water temperature and salinity:** salinity is shown in orange when too high and in red when too low.
- **Working hours:** choose Standard or Boost, and the daily operating time.
- **Level:** choose the chlorine production level.
- **Polarity switch:** choose the self-cleaning interval.
- **On:** switches the device on or off.
- **Child lock:** press and hold for 1.5 seconds to unlock.
- **Salinity detection:** orange for high salinity, red for low salinity. After solving the problem, press and hold for 1.5 seconds to resume; press briefly to test the salinity after adjusting it.
- **Status:** orange for high temperature, red for low temperature and other faults. After solving the problem, press and hold for 1.5 seconds to resume.

11 Tips and maintenance

① Calculating the pool volume

Knowing the volume of your pool is the first step before adding salt.

- Rectangular pool: length (m) × width (m) × average depth (m) = volume (m³)
- Round pool: diameter (m) × diameter (m) × average depth (m) × 0.785 = volume (m³)
- Oval pool: length (m) × width (m) × average depth (m) × 0.893 = volume (m³)
- Pool with a sloping floor: volume (m³) × 0.85 = volume (m³)

② Choosing the right salt

The purer the salt, the better the device works and the longer it lasts. Use salt with at least 99.6 % sodium chloride (NaCl), preferably dry, granular, food-grade salt.

- Do not use rock salt: its impurities can shorten the life of the device.
- Do not use calcium chloride; only sodium chloride is suitable.
- Do not use salt with anti-caking agents such as sodium ferrocyanide ("YPS"): it can discolour pool equipment.
- Salt tablets can be used, but they take a long time to dissolve.

③ How much salt to add

Most pool water already contains some salt, depending on the water source and the disinfectants used. Measure the current salinity with a salinity tester or pen. The optimum salinity for the device is 3,500 ppm, which equals 3.5 kg of salt per cubic metre of water (ppm ≈ grams of salt per 1,000 litres).

Salt to add (g) = pool volume (m³) × (3,500 – current salinity in ppm). Example: a 100 m³ pool with a current salinity of 850 ppm needs 100 × (3,500 – 850) = 265,000 g, or 265 kg of salt.

④ Adding salt

1. Switch on the pool pump and let the water circulate.
2. Switch off the device.
3. Measure the current salinity of the pool.
4. Calculate the amount of salt to add, as described above.
5. Spread the salt around the edge of the pool so it dissolves quickly and evenly. Do not let salt pile up on the bottom; if necessary, brush the bottom until the salt has fully dissolved.

⑤ Lowering the salinity

The only way to lower the salinity is to drain part of the pool water and replace it with fresh water.

⑥ Cleaning the cell

For the best performance, inspect the cell at least every 3 to 4 months: there should be no debris blocking the flow sensor or sitting between the electrode plates. The self-cleaning function (polarity reversal) normally keeps the cell working efficiently and prevents scale. Clean the cell once or twice per season.

In areas with very hard water (high calcium content), or in pools with poorly balanced water, the cell may need cleaning more often. Set the polarity reversal time (4, 6, 8 or 12 hours) according to your water hardness: the harder

the water, the shorter the interval. If the water is very hard, some scale on the titanium plates is unavoidable and must be removed.

1. Remove the cell from the device and fill a suitable container with a descaling solution for salt cells.
2. Place the cell in the container so that all scale is submerged.
3. Wait 10 to 20 minutes, depending on the type and amount of scale, and stir the solution from time to time.
4. Check that all scale has gone, and repeat if necessary. Then rinse the cell and reassemble it.

12 Removing and fitting the lid

Removing the lid

1. Hold the device.
2. Press the lid down with the palm of your hand and turn it 10° clockwise.
3. Lift the lid off.

Fitting the lid

1. Hold the device and place the lid on it.
2. Press the lid down with the palm of your hand and turn it 10° anticlockwise until it locks.



Removing and fitting the lid

13 Disposal



Do not dispose of this device with household waste. At the end of its life, take it to a collection point for electrical and electronic equipment, in line with local regulations. This helps protect the environment and human health.



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