SwimSense

ACCUCHLOR
SALT CHLORINE GENERATOR

Controller Owner's Manual

Installation & Operation



Controller - 60-8100

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UL Listed · CE
For Residential &
Commercial Pool Use

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed. This manual contains important information about the installation, operation, and maintenance of the AccuChlor Salt Chlorine Generator. Give this manual to the pool owner and/or operator for reference.

DANGER	**HYDROGEN GAS.** Failure to properly install, operate, and maintain this product can result in serious bodily injury or death. Salt chlorine generation produces small amounts of hydrogen gas. Never operate the electrolytic cell without proper water flow and circulation – a buildup of flammable gases can create a hazardous condition.
WARNING	**ELECTRIC SHOCK.** Risk of electrical shock or electrocution. Always disconnect all AC power at the circuit breaker before installing or servicing this product. All electrical wiring must be performed by a licensed or certified electrician in accordance with the National Electrical Code (NEC, NFPA-70), CEC, and all applicable federal, state, and local codes and ordinances.
WARNING	**GFCI PROTECTION.** This product must be connected only to a circuit protected by a ground-fault circuit interrupter (GFCI). The controller and Power Center must be installed at least 5 ft (1.5 m) horizontally from the inside wall of the pool or spa, or as required by local code (3 m / 10 ft in Canada).
WARNING	**PUMP INTERLOCK.** The controller must be interconnected with the pool pump so the generator only operates while the circulation pump is running. Do not wire the generator to run independently of the filter pump.
WARNING	**ACID.** When mixing acid with water for cell cleaning, ALWAYS ADD ACID TO WATER – NEVER ADD WATER TO ACID. Wear rubber gloves and eye protection. Acid can cause severe burns.

GENERAL PRECAUTIONS

- Do not permit children to use or operate this product. Keep chemicals and salt out of the reach of children. Bond all metal components within 5 ft (1.5 m) of the pool/spa to the pool bonding grid using a minimum #8 AWG solid copper conductor (#6 AWG in Canada), per NEC Article 680.
- Use only sodium chloride (NaCl) salt that is at least 99% pure. Do not use rock salt, iodized salt, calcium chloride, or salt containing anti-caking additives (yellow prussiate of soda / sodium ferrocyanide).
- Maintain proper pool water chemistry at all times. Improper water balance can damage the cell, pool surfaces, and equipment, and will void the warranty.
- Do not use dry acid (sodium bisulfate) to lower pH in arid regions with high evaporation; by-product buildup can damage the cell.
- Before installing a saline system on a pool or spa that uses natural stone for coping or adjacent decking, consult a qualified stone installation specialist.
- Do not operate the generator when the pool water temperature is below 50°F (10°C). Cold water reduces cell efficiency and can damage the cell.

CALIFORNIA PROPOSITION 65

⚠ **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SAVE THESE INSTRUCTIONS

INTRODUCTION

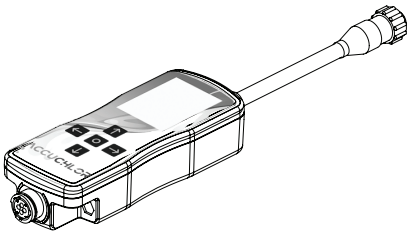
The AccuChlor controller runs your AccuChlor cell. It shows flow, salt level, output, water temperature, and turnover, and lets you set how much chlorine the cell makes. This manual covers replacing the controller, connecting it, and using it. For the cell, plumbing, the AccuChlor Power Center (wiring and bonding), and pool water chemistry, see the Owner's Manual that came with your system.

KEY FEATURES

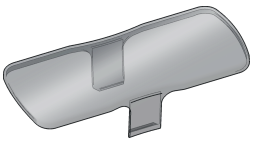
- **LCD display and buttons** – up, down, left, right, and a center Select button to read system status, adjust output, and move through menus.
- **Flow and turnover monitoring** – reads flow from the cell's flow cage and tracks pool turnover.
- **App connectivity** – monitor and control your system from your smartphone or tablet with the SwimSense app (Wi-Fi, 2.4 GHz).
- **Automatic cell cleaning** – reverses the cell's polarity every 4 hours by default (3 or 5 hours selectable) to shed scale from the blades.
- **Boost and cold-water protection** – Boost runs 100% output for a set time; production is reduced or stopped below about 50°F (10°C).

WHAT'S INCLUDED

COMPONENT	DESCRIPTION
AccuChlor Controller	PN 60-8100. LCD control unit with navigation buttons, on its cord to the AccuChlor Power Center.
Controller cover	Ships installed over the display and buttons. Remove it to use the buttons.



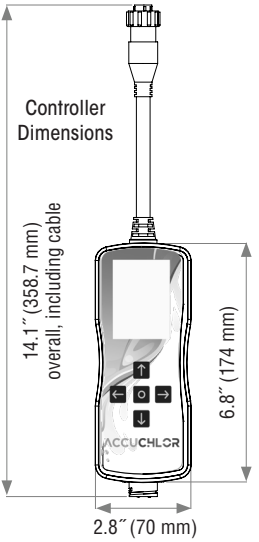
AccuChlor Controller
PN 60-8100



Controller Cover
(ships installed)

SPECIFICATIONS

SPECIFICATION	RATING
Model	AccuChlor Controller, PN 60-8100
Use with	AccuChlor cells AC20 (60-8020), AC30 (60-8030) and AC40 (60-8040)
Powered by	AccuChlor Power Center, PN 60-5000 (sold separately)
Cell output (max)	39 VDC @ 3.1 A (AC20), 3.8 A (AC30), 4.6 A (AC40)
Display and buttons	LCD; up, down, left, right, and center Select
Readings	Flow (GPM), salt (ppm), output (%), water temperature, turnover
Output setting	0% to 100%
Boost	100% output for 15 minutes to 24 hours
Polarity reversal	Every 4 hours (3 or 5 hours selectable)
Cold-water cutoff	Below about 50°F (10°C)
Connectivity	SwimSense app (Wi-Fi, 2.4 GHz only)
Dimensions	6.8″ × 2.8″ (174 × 70 mm); 14.1″ (358.7 mm) overall, including cable
Certifications	cULus Listed (UL 1081, CSA C22.2 No. 218.1) · CE · FCC Part 15 (see page 12)
Warranty	60-day limited; 3-year with registration (see page 11)



REPLACING THE CONTROLLER

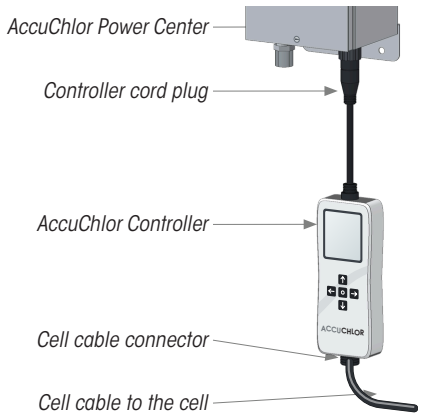
These steps replace an existing AccuChlor controller. First-time installation of the system – plumbing the cell and wiring and bonding the AccuChlor Power Center – is covered in the Owner's Manual that came with your system.

REMOVING THE OLD CONTROLLER

1. Turn off power at the circuit breaker.
2. Unplug the cell cable from the bottom of the controller.
3. Turn the coupling ring on the controller cord plug to loosen it, and pull the plug out of the connector under the Power Center.

CONNECTING THE NEW CONTROLLER

1. Align the key on the controller cord plug with the connector under the Power Center, push it in fully, and turn the coupling ring until it locks hand-tight.
2. Let the controller hang on its cord. Do not fasten it to a wall or place it in an enclosure.
3. Plug the cell cable into the connector on the bottom of the controller. Align the key, push the plug in fully, and turn the coupling ring until it locks hand-tight.
4. Unclip the cover over the display and buttons and lift it off before using the buttons.



START-UP

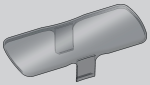
1. With the pump running, restore power at the breaker. On first power-up the controller performs a self-calibration; the display may show a brief "wait" period.
2. Confirm the controller reads flow (GPM) and a salt level within 2,700–3,400 ppm.
3. From the Menu, check Pool Config (pool size and type) and Settings (units, clock, and pump schedule).
4. Set Output to your previous setting, or about 50% to start. After 24 hours, test the free chlorine and adjust in 5–10% steps until it holds at 1.0–3.0 ppm.
5. Pair the new controller with the SwimSense app (page 9).

OPERATION & CONTROLS

The AccuChlor controller has an LCD display and a set of navigation buttons – up, down, left, right, and a center Select button – used to read system status, adjust output, and move through menus.

READING THE DISPLAY

READING	WHAT IT MEANS
Flow (GPM)	Rate of water flowing through the cell, measured by the flow cage. Confirms adequate circulation.
Salt (PPM)	Current salt concentration in the water. Keep within 2,700–3,400 ppm (ideal 3,200).
Output (%)	The chlorine production level you have set, from 0% to 100%.
Temperature (°F or °C, set in Settings)	Current pool water temperature. Below 50°F (10°C) the cell reduces or stops production to protect itself.
Turnover (%)	Progress of a full pool turnover based on measured flow — helps you confirm filtration and know when to clean or replace the filter.



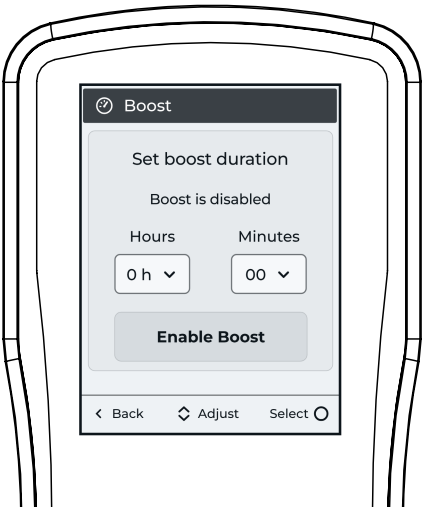
⚠ NOTE The controller ships with a clip-on cover over the display and buttons. Unclip the cover and lift it off before using the buttons.

ADJUSTING CHLORINE OUTPUT



- Use the arrow buttons to select Output, then increase or decrease the percentage. Higher Output produces more chlorine.
- Start at 50% and adjust in 5–10% steps, re-testing free chlorine after 24 hours until it holds at 1.0–3.0 ppm.
- Three things control how much chlorine reaches your pool: the Output % setting, the number of hours the pump runs each day, and the salt level. Adjust pump run time and Output together for best results.

BOOST / SUPER-CHLORINATE



Use Boost mode to temporarily run the generator at maximum output for a period (for example, after heavy use, a rainstorm, or cloudy water). The controller returns to your normal Output automatically when the Boost period ends. Boost can be set from 15 minutes up to 24 hours.

MENUS & SETTINGS



Use the center Select button to enter the menu and the arrow buttons to navigate. From the menu you can change display units (°F/°C), set the clock and pump schedule, view diagnostics (flow, salt, temperature, cell current), and pair the unit with the SwimSense app. The pump schedule is used only to calculate turnover; the controller does not switch the pump.

AUTOMATIC CELL CLEANING (REVERSE POLARITY)

AccuChlor periodically reverses the electrical polarity of the cell to shed scale from the cell blades automatically. This self-cleaning cycle helps extend the time between manual cleanings but does not replace periodic inspection and acid washing when needed. The default interval is 4 hours; you can change it to 3 or 5 hours in the SwimSense app or on the controller.

COLD-WATER CUTOFF

To protect the cell, AccuChlor automatically reduces or stops chlorine production when the water temperature falls below about 50°F (10°C). This is normal. In cold weather, supplement with manually added chlorine if the pool remains in use.

CONTROLLER SCREEN MAP

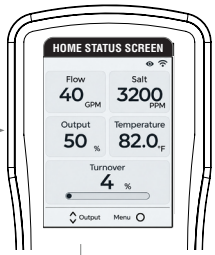
The map below shows every screen on the AccuChlor controller and how to move between them. From the Home status screen, press Select to open the Menu, then use the arrow buttons to reach Pool Config, Diagnostics, Settings, Boost, or Wi-Fi. Press Back (◀) at any time to return to the previous screen.

ACCUCHLOR CONTROLLER – SCREEN MAP

How to move between screens on the AccuChlor handheld controller

Select/enter the highlighted option
Press Select on the center button to open a menu or confirm a value

▲▼◄► Navigate the list/adjust a value
◄ Back returns to the previous screen



◄ back

press Select

MENU

Select an option– ▲▼navigate,
Select opens the five screens below

1 POOL CONFIG	• Pool Size, Pool Type • Min / Max Chlorine
2 DIAGNOSTICS	• IP address • MAC address • Signal (dBm) • Transmit Power (dBm) • Status – read-only
3 SETTINGS	• Units (°F/°C), Clock, Pump Schedule, Output, System
4 BOOST	• Set hours and minutes, then select Enable Boost • Runs at 100% output for a set period
5 Wi-Fi	• Network/SSID Connection status • Signal strength – pair with the SwimSense app

THE SWIMSENSE APP

SCAN HERE TO DOWNLOAD
SWIMSENSE APP
app.swimsenseusa.com/app

The SwimSense app lets you monitor and control your system from your smartphone or tablet. View live flow, salt, output, temperature, and turnover; adjust chlorine output; and receive alerts – all remotely.

1. Download the SwimSense app from the Apple App Store or Google Play.
2. Ensure the controller is powered and within range of your home Wi-Fi network.
3. Pair the controller with the app and join your Wi-Fi network:

    1) On the controller, press the center button to open the Menu.
    2) Scroll down to Wi-Fi and select it.
    3) Select Wi-Fi setup.
    4) Select Begin.
    5) Open the SwimSense app and go to Settings.
    6) Tap Add Device, then tap Continue.
    7) When the app connects to the controller, choose your home Wi-Fi network (2.4 GHz only).
    8) Once Wi-Fi connects, the Configuring Device screen appears. No action is needed.

4. Once paired, your live system readings appear on the app dashboard, and you can adjust Output and Boost remotely.

⚠ **NOTE** Keep the app and controller firmware up to date for the latest features and reliability improvements.

⚠ **NOTE** For pool water chemistry, adding salt, and cell maintenance, see the Owner's Manual that came with your system.

TROUBLESHOOTING

Use the table below to diagnose common conditions. If a problem persists after these steps, contact your dealer or SwimSense technical support.

SYMPTOM	POSSIBLE CAUSE	SOLUTION
No display / controller dark	No power; pump not running; timer off	Confirm the pump is running and the breaker/timer is on; verify wiring and voltage
“No flow” or low flow (GPM)	Pump off, low water, dirty filter, closed valve, or debris in flow cage	Run the pump, clean the filter, open valves, and clear/clean the flow cage
“Add salt” / low salt	Salt below ~2,700 ppm	Test and add salt to reach 3,200 ppm; confirm reading after 24 hours
“High salt” warning	Salt above range (over ~3,600 ppm)	Partially drain and refill with fresh water to lower salt
Salt reads low but test is correct	Scaled cell or cold water	Clean cell, re-check
Little or no free chlorine	Output too low; low stabilizer; short pump run time; warm water; scaled cell	Raise Output, add stabilizer to 60–80 ppm, extend pump time, clean the cell
Green/cloudy water despite output	High chlorine demand, algae, or low stabilizer	Use Boost/super-chlorinate, balance water, and confirm stabilizer level
Scale on cell blades	High calcium hardness or high pH	Acid-wash the cell (see the Owner’s Manual) and rebalance the water
Production stops in cold weather	Cold-water cutoff active (below ~50°F/10°C)	Normal protection; supplement with manual chlorine if the pool is in use
Erratic flow / turnover readings	Debris or wear in the flow cage sensor	Clean the flow cage; replace the flow cage assembly if worn
App won’t connect	Wi-Fi range or pairing issue	Move within Wi-Fi range, re-pair in the app, update firmware

⚠ **NOTE** Recording your normal flow, salt, and output values at start-up makes it easier to spot changes later.

SwimSense LLC – Limited Warranty & Product Registration

SwimSense LLC manufactures its products to the highest standards of workmanship, materials, and engineering to deliver value and peace of mind.

LIMITED WARRANTY

SwimSense LLC warrants its products to be free from defects in materials and/or workmanship for a period of sixty (60) days, parts only, from the original date of purchase or installation, as demonstrated by proof of purchase. The customer agrees to prepay all shipping charges for products returned to SwimSense LLC.

Proof of purchase is required for warranty service. If proof of purchase is unavailable, the product's manufacturing date will be used as the purchase date.

EXTENDED WARRANTY

To receive an extended product warranty of three (3) years from the original date of installation, the customer must register the product within sixty (60) days of the product's purchase date.

Visit warranty.swimsenseusa.com for information regarding registration, coverage, and possible warranty exclusions applicable to your specific pool and spa equipment.

SwimSense LLC shall not be responsible for transportation, removal, repair, installation labor, or any other costs incurred in obtaining warranty replacement or repair.

The express limited warranty stated above constitutes the entire warranty provided by SwimSense LLC with respect to its pool products and is in lieu of all other warranties, express or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall SwimSense LLC be responsible for any consequential, special, or incidental damages of any nature.

GENERAL WARRANTY TERMS AND CONDITIONS – Denial of Warranty Claims

A warranty claim may be denied under any of the following circumstances:

- Water chemistry out of range, freeze damage, scaled cell.
- Damage caused by careless handling, improper repacking, or shipping.
- Damage caused by misapplication, misuse, abuse, or failure to install or operate the product in accordance with the owner's manual and specifications.
- Accidental damage, fire, acts of God, or other circumstances beyond the control of SwimSense LLC.

**Supersedes all previous publications*

SwimSense

For further information or consumer technical support, please visit
swimsenseusa.com | warranty@swimsenseusa.com
SwimSense LLC | 1021 S Rogers Circle #2
Boca Raton FL 33487

SCAN FOR WARRANTY INFO

FCC COMPLIANCE STATEMENT

Contains FCC ID: 2AC7Z-ESP32WROOM32E

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by SwimSense LLC could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF exposure: this equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. Install and operate it with a minimum distance of 20 cm (8 in) between the controller and your body.



For further information or consumer technical support, visit our website at www.swimsenseusa.com

SwimSense LLC
1021 S Rogers Circle #2, Boca Raton FL 33487 | **swimsenseusa.com**