

TROUBLESHOOTING

Use the following troubleshooting information to resolve possible problems with the iChlor® SCG.

⚠ WARNING Switch OFF main system power to the iChlor SCG cell before servicing.

Note: Switch power off to unit before to attempting service or repair. Always remove AC power to Power Center when plugging or unplugging the iChlor SCG cell into the Power Center.

Troubleshooting Chart

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Low or no chlorine.	Low stabilizer (cyanuric acid) level in pool water (outdoor pools only).	Add cyanuric acid in outdoor pools only to maintain 30 - 50 PPM per pool professional's recommendations. See Stabilizer Chart, Table 1, page 13.
	Insufficient operating hours of the iChlor SCG (pump time).	Increase the iChlor SCG operating time per day. See page 23 for pump run time information.
	iChlor OUTPUT percentage set too low or off at 0%.	Increase iChlor OUTPUT by pressing the MORE button. See page 8.
	Recent increases in weather temperature without increasing the iChlor Output.	Increase SANITIZER OUTPUT by pressing the MORE button. See page 8.
	Temporary loss of chlorine due to heavy organic load, rain, leaves, fertilizer or heavy bather load, recent party, or pets using pool.	Set "Boost" mode and allow to run for 24 hours. Recheck, If still too low, super-chlorinate by using an outside source. (Take pool water sample to pool professional).
	Low salinity level in pool water (less than 2600 ppm), reduced chlorine production. Observe Salt Display lights. See <i>Salt Level Status LEDs</i> , page 7.	Add salt to pool to achieve 3600 ppm. See pages 12-13.
	Low salinity level in pool water (less than 2000 ppm), shuts off chlorine production. Observe Salt Display lights. See <i>Salt Level Status LEDs</i> , page 7.	Add salt to pool to achieve 3600 ppm. See pages 12-13.
	High nitrate and phosphate level.	Contact Pool Professional. Maximum nitrate level is 10 ppm. Maximum phosphate level is 125 ppb
	Metals (copper, iron, manganese, etc.) present in pool water	Contact Pool Professional.
	New pool water, or not shocked properly upon startup.	Super Chlorinate Pool. See <i>Start-up Procedure (Super Chlorination)</i> , page 24.
	Clogged or dirty cell.	Remove cell for inspection. Clean if necessary. (see page 26).
SALT LED is solid RED	Low salinity level. Salinity between 2600 and 2999 ppm. Chlorine is being produced but pool water needs salt.	Add salt to pool to achieve 3600 ppm. See pages 12-13.
SALT LED is Flashing RED.	Very low salinity level. Salinity between 2000 and 2599 ppm. Chlorine is being produced at a reduce rate. Pool water needs salt.	Add salt to pool to achieve 3600 ppm. See pages 12-13.
	Not enough salinity level. Salinity below 2000 ppm. No chlorine is being produced. Pool water needs salt.	Add salt to pool to achieve 3600 ppm. See pages 12-13.

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Troubleshooting Chart (Continued)

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
SALT LED flashing GREEN	High salinity level. Salinity level above 4500 ppm. Unit will continue normal operation. High salinity level may cause damage to other pool equipment and surrounding surfaces.	If needed, dilute pool water by draining some water, then filling with fresh water. Adjust salinity level to 3600 ppm. See pages 12-13.
CELL LED does not come on.	Chlorine Production set to 0 %.	Adjust iChlor Output to desired percentage.
	Insufficient water flow. Cell is plugged with debris, pump has lost prime.	Remove obstruction and/or clean cell. See page 26. Prime pump if necessary.
	Salt level below 2000 ppm.	Add salt to pool to achieve 3600 ppm. See pages 12-13.
	Cell may be in an off-period of the sanitizing cycle and will return shortly.	Cell should turn on within five minutes.
	Chlorine Production set to output levels of 8% or lower. Cell will only turn on once an hour.	Cell will turn on once an hour.
CELL LED is red. Display shows "COLD"	Standby mode. Water is below 52°F. COLD WATER CUT OFF. No chlorine is being produced.	The water temperature must be above 52°F to produce chlorine.
CELL LED is flashing green. Display shows "CELL"	Check salt level. Salinity level might be too low and in combination with low water temperatures, could put the unit into an "INSPECT CELL" condition.	Add salt if necessary to maintain 3600 ppm minimum. Increase water temperature above 60°F if possible.
	Cell has calcium build-up and requires cleaning.	Refer to Maintenance Procedure for acid wash/cleaning. See <i>Maintenance</i> section on page 25.
	Check water chemistry and water balance. High nitrate and phosphate levels, could contribute to this situation. NOTE: metal content should be 0 ppm.	Contact Pool Professional. Remove nitrates and phosphates, and balance the water properly. Remove metals from water using chemical solution.
CELL LED has a "short flash RED" either while the cell is ON or while the cell OFF.	Unit has detected a malfunction on the temperature sensor.	Replace Flow switch (Flow/Temperature sensor).
Flow LED is RED	Pump fails to provide sufficient water flow.	Check for correct operation of the pump, i.e., loss of pump prime or clogged strainer baskets.
	Closed valves.	Check and correct all valve alignments.
	Dirty filter.	Follow filter cleaning procedures.
	Obstruction in the cell.	Remove cell for inspection. Follow cleaning procedures. See <i>Cleaning the Cell Blades</i> on page 26.
	Flow Switch failure. Make sure there is enough flow through the cell. Flow LED should turn GREEN.	Replace Flow switch.
Flow LED - Short flickering either on GREEN flow or RED flow	This is a confirmation that iChlor is in communication with an IntelliFlo pump, and it is monitoring the pump status (SmartSense Flow Detection).	No action needed.
EasyTouch reporting salinity 0000 ppm.	iChlor cell has detected a malfunction on the temperature sensor, and will not be able to read accurate salinity. CELL LED will show a "short flash RED", confirming the temperature sensor failure.	Replace Flow switch (Flow/Temperature sensor).

Troubleshooting Chart (Continued)

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Display shows "AC". No other indication on the cell.	iChlor cell was powered with an "AC" power supply, or the unit had detected an "AC" input voltage.	Make sure iChlor is plugged into an IntelliChlor Power Center, or an iChlor Power pack (old IntelliChlor IC15 Power Packs cannot be used with iChlor).
Display alternates between "CELL" and "FLO" CELL LED is blinking RED.	iChlor unit has detected a "low current" condition, and is placing the unit in a "safety lock".	Inspect Flow Switch functionality by turning the pump off, while iChlor unit is powered. Confirm flow switch LED turns RED (no flow). If Flow switch LED stays GREEN with NO water flow, replace flow switch immediately or remove iChlor unit until a flow switch replacement is available (Do Not run the unit with a faulty flow switch!). Inspect the cell for any calcium build-up, and clean if necessary. After inspecting the unit, restart iChlor (power off-on), and confirm everything is working properly.
Display shows "FLO" SALT and CELL LED blinking RED. FLOW LED blinking GREEN.	iChlor unit has detected a "bad flow switch" condition, and is placing the unit in a "safety lock".	Inspect Flow Switch functionality by turning the pump off, while iChlor unit is powered. Confirm flow switch LED turns RED (no flow). If Flow switch LED stays GREEN with NO water flow, replace flow switch immediately or remove iChlor unit until a flow switch replacement is available (Do Not run the unit with a faulty flow switch!). To manually clear this condition, the unit requires "user acknowledgement" (passcode). Passcode will be 1-2-3 (which can be entered by pressing "LESS" and "MORE" Buttons in the following sequence: LESS - MORE - MORE - LESS - LESS - LESS
Display shows "LOSS" SALT and FLOW LED blinking RED.	iChlor unit has detected a "loss of communication" with an IntelliFlo or IntelliCenter (loss safety device), and is placing the unit in a "safety lock".	If communication is restored, iChlor will resume operation. To manually clear this condition, the unit requires ""user acknowledgement"" Passcode will be 1-2-3 (which can be entered by pressing "LESS" and "MORE" Buttons in the following sequence: LESS - MORE - MORE - LESS - LESS - LESS
Display alternates between output percentage and a 24 hours countdown timer.	iChlor cell is in "Boost" mode operation.	Press both (LESS and MORE) buttons together, to turn "Boost" mode OFF if needed.
iChlor unit does not have power.	Fuse in Power Center is blown.	Replace fuse located in the Power Center. Fuse information can be found on the wiring label inside the Power Center cover.
	No incoming power to Power Center.	Verify time clock is providing 110 VAC or 220 VAC to Power Center when active.
	Transformer leads not wired correctly in Power Center.	Verify transformer leads wired properly, by referring to wiring diagram decal on inside of Power Center cover.

Diagnostic Mode

To enter “Diagnostic Mode” press and hold the MORE button for 3 seconds, until light indicates you are in diagnostic mode.

Note: Be sure you are not in Output Percentage mode (Output flashing). In this mode, pressing and holding the MORE button will only fast-forward the output setting.

While in “Diagnostic Mode”, you can advance to the next screen by pressing the MORE button. **You will not be able to go back to the previous screen. You can only advance by pressing the MORE button.** The LESS button has different functions during diagnostic mode and will be explained further below.

There are five different screens in diagnostic mode:

First screen: Total Cell Hours (life).

Displays total cell hours (lifetime) in a rotating pattern.

While on this screen, the WAND report can be displayed by pressing the LESS button.

Note: If needed, the WAND report can be re-sent by pressing the LESS button once again.

Second screen: Temperature (°F or °C)

Displays water temperature in either °F or °C.

While on this screen the user can switch between °F and °C by pressing the LESS button.

Third screen: Salinity (ppm)

Displays last salinity level (ppm) recorded by the unit.

While on this screen the unit is able to take real-time salinity readings, which can be accessed by pressing the LESS button.

Fourth screen: Cell Voltage (V)

Displays last cell voltage recorded by the unit.

While on this screen the unit is able to take real-time cell voltage readings, which can be accessed by pressing the LESS button.

Note: If front panel orientation is flipped 180° (see explanation below), displayed voltage will not show the decimal point as it shows during factory-set orientation. For example, 22.4V will be displayed as 224.

Fifth screen: Firmware Revision (r)

Displays current firmware revision (r X.XX)

While on this screen the orientation of the user interface can be flipped 180° by pressing both (LESS and MORE) output buttons. This will allow for multiple types of installations and field set ups.

Note: After flipping the user interface the button functionality will be swapped, and the display will be upside down. You will need to install a 180° overlay (included with every unit) in order to operate the unit in this mode.