# **AutoChlor**<sup>®</sup> RESIDENTIAL SALT WATER CHLORINE GENERATOR

Classic Series

### This manual is for:

CLASSIC RP MODEL RANGE (FEATURING REVERSE POLARITY TECHNOLOGY) RP-15, RP-20, RP-25, RP-36, RP-50, RP-64, RP-80

CLASSIC LS MODEL RANGE (RP20-3500ppm, RP25-3500ppm, RP35-3500ppm)

#### **MIDI RANGE** (RP-100, RP-150)

Includes:

TIME CLOCK MODELS (battery backup optional) POOL LIGHT MODELS (where fitted)

#### Version: SHPACRPIM V20a

#### DISCLAIMER

- While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions.
- Australian Innovative Systems Pty Ltd (AIS Water) reserves the right to change the specifications of the hardware and software described herein at any time without prior notice.
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- Australian Innovative Systems Pty Ltd makes no warranties for damages resulting from lack of supply of chlorine due to a mistaken operation or malfunction of the chlorine generator or use of non-genuine replacement parts.

#### TRADEMARK ACKNOWLEDGEMENTS

AutoChlor® is a trademark of Australian Innovative Systems Pty Ltd.

#### USE OF GENUINE REPLACEMENT PARTS IS RECOMMENDED

This product is designed to perform optimally when used with genuine Australian Innovative Systems replacement parts. Australian Innovative Systems Pty Ltd shall not be liable for any damages to this product caused by the use of non-genuine replacement parts (e.g. electrode.). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine replacement parts, although you may request such repairs on a chargeable basis.

## PURCHASED FROM:

PURCHASED DATE: \_

NOTE: Proof of purchase / installation is required for warranty claims. Please keep your records in a safe place.

# **Auto**Chlor<sup>®</sup>



#### 1. High Salt Light

If the light is on or flashing see Warning Indicator Lights, page 12.

#### 2. Low Salt / Cell Off Light

If the light on or flashing see Warning Indicator Lights, page 12.

- 3. Power ON / Water Flow Light If light flashes see Warning Indicator Lights, page 12.
- 4. Overload / Normal Operation Light When light is ON/Steady and machine is beeping the chlorine generator power supply is on standby due to failure. Contact manufacturer for service.

When flashing, machine is working in reverse cycle (normal operation).

#### 5. Chlorine Controller

Turn clockwise to increase the chlorine output and anti-clockwise to reduce the chlorine output.

(Note: When production lights are off, 'power on' and 'cell off ' lights are on, chlorine production is in standby mode).

#### 6. Chlorine Output Indicator

Each light on represents 10% of chlorine output (e.g. 5 lights on = 50% output).

#### 7. Circuit Breaker

If tripped, press to reset. Refer to page 11.

- 8. Time Clock (Timer models only) See page 14 for operation.
- 9. Time Clock Bypass (Timer models only) See page 15 for operation.

## THE AutoChlor® SALT WATER CHLORINATION SYSTEM

Congratulations on your choice of an AutoChlor<sup>®</sup> salt water chlorinator system for your swimming pool. The AutoChlor<sup>®</sup> salt water chlorinator you have purchased is designed for easy and simplistic operation and maintenance. By following these instructions you are assured years of trouble free operation.

These instructions have been compiled and produced to help you get the maximum results from your unit and to assist you to fully understand and correctly operate your AutoChlor<sup>®</sup> salt water chlorinator.

Please take the time to read these instructions thoroughly before attempting to operate your unit. Should you require additional information or further assistance, please do not hesitate to contact your local AutoChlor® representative or visit our website www.aiswater.com.au.

#### **SPECIAL NOTE:**

Please remember that your salt water chlorinator is not designed to chemically maintain your pool water and keep it balanced, but rather to produce chlorine from a mild salt solution within the water.

We encourage regular water testing, balancing and correction if & when required to maintain the recommended stability levels of your pool water. This is a vital part of a complete maintenance program and will ensure trouble free chlorinator performance as well as a healthy and sparkling clean pool.

### **ADDITION OF SALT**

For best results the salt concentration in the pool water is required to be within an average range of approximately 4,500 to 5,500 parts per million (ppm). These figures are temperature dependant. In summer time, as water temperatures rise, salt levels may require slight reduction while in winter time the reverse may be true to allow optimum performance of your unit.

The amount of salt required to achieve the desired level is determined by the capacity of the pool. By measuring your pool and multiplying the average length by the average width by the average depth you can easily establish this. This will give you your pool's water capacity in cubic metres. Multiply this by 4.2 and you will get the amount of salt (in kilograms) needed to adequately achieve the required dosage for your pool capacity.

For example: Pool size = 9 metres by 4.5 metres by 1.6 metres in depth Multiply 9 x 4.5 x 1.6 = 64.8 (cubic metres of water) Multiply 64.8 x 4.2 = 272.16 (salt required in kilograms)

# **Auto**Chlor<sup>®</sup>

Using only refined swimming pool salt add the desired quantity to the swimming pool water. To assist in the rapid dissolving and mixing, sweep or brush the solids until they are fully dissolved. Undissolved salt may result in staining your pool finish.

As salt is heavier than water it will continue to lie at the deepest point of your pool, even though the salt granules themselves have fully dissolved. In order to ensure adequate and permanent distribution of salt throughout the pool water, we recommend additional sweeping and filter operation over a 12 - 24 hour period.

Whilst adding the original salt and prior to commissioning your AutoChlor<sup>®</sup> unit, and when adding future salt supplies to your pool, please ensure that your chlorinator power supply is switched off to prevent overload situations and/or damage to the cell electrode plates or power supply.

## **SPECIAL NOTE:**

Contrary to popular belief, the action of your AutoChlor<sup>®</sup> salt water chlorinator does not use up the salt content of your pool water. In effect as the water is passed over the cell plates, the salt is electrolysed and converted into sodium hypochlorite (chlorine).

This sanitises your pool water and converts back into salt - basically a never-ending cycle. However salt loss will occur through swimmer action, filter back washing and wet weather conditions.

This salt needs to be replaced periodically for your chlorinator to operate at maximum capacity. Your local pool shop can advise you the correct salt dosage required to maintain saline levels at recommended guidelines.

### WATER BALANCE

As previously advised, for best performance and operation of your AutoChlor<sup>®</sup> salt water chlorination system, certain water balances must be maintained within your swimming pool. Please check your pool water and ensure that your chemical balances are within the following guidelines.

- · Chlorine 1.5ppm-2.0ppm
- · pH 7.2-7.4
- · TA (Total Alkalinity) 80ppm -120ppm
- · Hardness, 150-350ppm;
- · Cyanuric acid, 30ppm-50ppm;
- · Phosphate, 0-500ppb;
- $\cdot$  Salt 5,000 ppm for Classic RP models
- $\cdot$  Salt 3,500 ppm for Classic LS models

Adjust your pool water balance to achieve the above levels. Your local pool shop can assist here to give you accurate readings and aid in correct dosages as necessary.

## **SPECIAL NOTE ON CHLORINE:**

Your salt water chlorinator is not designed to bring your pool from a zero chlorine reading to an acceptable level but rather to maintain acceptable levels. Should it become necessary due to unforeseen circumstances (such as the unlikely event of chlorinator malfunction, severe weather patterns, or massive use of the swimming pool) that you find your pool requires additional chlorine then chlorine should be manually added rather than running your filter and chlorinator excessively to replace the lost chlorine. Doing this could put your chlorinator and cell under unnecessary strain which could shorten their lives.

In situations such as this we recommend the use of liquid chlorine (sodium hypochlorite) to supplement and maintain chlorine levels. The use of dry stabilised chlorine (calcium hypochlorite) is not recommended unless liquid chlorine is unavailable and even then only in limited amounts.

## CHLORINE PRODUCTION IN VARIOUS CLIMATES

Environmental factors such as rainfall, temperature and sunlight will all have an effect on the chlorine demand in your pool, and it is important to understand how this affects the treatment of your pool, at your individual location.

The table below has been provided as a recommended guideline to the ratio of chlorine production to typical water volume, treated in different climate conditions.

Climate Type	AVG Temperature in summer (°C)	Chlorine Production (g/hr)	Typical water volume treated in climate conditions (I)
Mild	15-22		3000
Temperate	21-30	1	2000
Tropical	26-33+		1500

EXAMPLE: If living in a tropical climate, expect the AutoChlor chlorinator to treat 1500l with 1 g/ hr production.

Therefore, as a rule of thumb, an AutoChlor RP25 in summer would typically be capable of treating 37,500l of pool water.



## FITTING THE CHLORINATOR CELL HOUSING

The AutoChlor<sup>®</sup> salt water cell housing must be plumbed into the return line of the pool filter system after the filter and any diversion valves. Please refer to the installation diagram and plumbing outline for the correct method of installation (Fig. 2).

In situations where a heater is incorporated, the AutoChlor® housing must be installed after the heater. Should a solar heating system be installed, the housing must be plumbed after the solar diverters and after the water exits the solar system and rejoins the main stream pool return line.

Please note that your cell housing has been manufactured so that 40 mm PVC pipe will fit both inlet and outlet ports internally, and 50 mm couplings will fit externally. This allows the use of either 40 mm or 50 mm PVC pipes in the pool return line.







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**AutoChlor** 

## **INSTALLING THE POWER SUPPLY**

The AutoChlor<sup>®</sup> power supply is mounted on a wall using the mounting bracket and fittings supplied. After securing the bracket in the appropriate position relative to your needs, the power supply is hung on the bracket and locked into position by ensuring that the unit slips into the slots provided on the mounting bracket.

It is preferable that the power supply is mounted in a location where it is protected from accidental water spray and inclement weather. It is strongly recommended that the unit is also protected and screened from the harsh sun, but in such a way that air flows freely through the structure and does not impede the natural airflow through the power supply.

You should also ensure that the power supply is not used as a shelf to store or pack objects, as this can also impede the air flow, causing overheating and/or damage to the unit that is not covered by warranty.

Mount the power supply so that you can see and reach the various controls and so that the cell lead has a comfortable margin to reach the cell terminal posts. Our recommendation is that the power supply is mounted slightly higher and to one side of the filter plant to allow easy access (refer to Fig. 3).



- 1. Pump
- 2. Filter
- 3. Water heater
- 4. Power supply for chlorine generator
- 5. Chlorine generator electrode



## **POWER SUPPLY CONTROL FUNCTIONS**

Your AutoChlor® salt water chlorination system has been designed for simplistic operation and control. The functions and controls (both standard and optional) and their various operations will give you a greater understanding and knowledge of the control and maintenance of both your AutoChlor® unit and your pool (refer to Fig. 3 for controls).

## **CIRCUIT BREAKER**

The circuit breaker is designed to trip out in the event of a power surge or power overload. When tripped the centre button will pop out shutting down the unit to prevent damage. To reset, depress circuit breaker until a click is heard.

## **ON/OFF SWITCH - NON TIMER MODELS ONLY**

The on/off switch is located on the front panel and has been incorporated to allow you to switch off the chlorinator function should you so desire. Please note that this switch will only shut down the chlorinator operation. It will not affect the normal filter functions.

## PUMP OUTPUT SOCKET

A 240 volt pump output power socket is supplied and located on the right hand underside of the power supply. Your pool pump power supply lead should be plugged into this socket so that when the time clock switches at your designated times both the salt water chlorinator and pool pump will activate in unison.

Do not attempt to operate the chlorinator power supply with the pool pump lead disconnected as this will lead to a gas build-up inside the cell housing causing it to overheat resulting in damage to your chlorinator equipment that is not covered by warranty. In extreme cases gas build-up may also cause the cell housing to rupture and explode, as it is not built to withstand this type of pressure, possibly resulting in personal injury.

The pump socket is designed to operate a single pool pump of maximum 8A only. Do not attempt to operate any equipment other than your pool pump from this socket as damage might occur to the power supply unit that is not covered under warranty.

## WARNING INDICATOR LIGHTS

#### (FIG. 1, ITEMS 1, 2, 3 & 4)

There are four (4) warning indicator lights located on the front of your chlorinator. These advise at a glance the status of the chlorinator power supply and, when illuminated they indicate and advise about the situation that the chlorinator's electronic monitoring system has detected. The lights and their functions are listed below.

#### 1. ORANGE LIGHT: SALT HIGHER THAN NECESSARY no action required

When illuminated this indicates that you have exceeded recommended salt levels. As long as this is not causing your chlorinator to overload no further action or reduction of salt concentration is required at this point. No further salt should be added if this light is illuminated.

2. ORANGE LIGHT:	STEADY	CELL OFF
		chlorinator on standby
	FLASHING	SALT LOW
		add salt and/or clean cell

STEADY – When illuminated in a STEADY continuous light your chlorine production has been switched off by turning the chlorine controller anti clockwise and your chlorinator power supply is now in a standby mode. Turn the chlorine controller clockwise to resume normal operation.

FLASHING – If the light is illuminated and FLASHING the monitoring system has detected low salt levels and this will need to be adjusted for the chlorinator to operate at maximum capacity. This light will also flash if the cell has reached a point where its output is below the normal operating output. Please refer to the section detailing the addition of salt to your pool.

3. RED LIGHT: STEADY POWER ON FLASHING NO WATER FLOW chlorinator on standby

STEADY – During normal operation this light will remain STEADY, indicating that power is on and the chlorinator is operating correctly.

FLASHING – When FLASHING the monitoring system has detected a water flow problem and has shut down to prevent damage. It will also be accompanied by a beeping alarm alerting you of this situation. When problem is rectified normal operation will resume.



4. RED LIGHT:	STEADY	OVERLOAD
	OFF	NORMAL OPERATION in forward cycle
	FLASHING	NORMAL OPERATION (RP MODEL ONLY)
		in reverse cycle

STEADY – When this light is illuminated and STEADY it will also be accompanied by a beeping alarm alerting you of this situation. The chlorinator has overloaded and shut down to prevent any damage. A direct short between two of the electrode plates coming into contact with each other could cause this, or a foreign object could be shorting out two or more plates. It can also be caused by a massively high concentration of salt in the pool water. Depending on the problem and rectification required, normal operations can proceed. Please note that the chlorinator power supply must be switched off and then on again to reset the electronic circuitry and resume operations.

OFF – When this light is off, the chlorinator is operating correctly in forward cycle mode. FLASHING – When illuminated and FLASHING the chlorinator is operating correctly in reverse cycle mode.

# SPECIAL NOTE ON WARNING INDICATOR LIGHTS (RP MODELS ONLY):

When your chlorinator is operating in forward polarity cycle, light number 3 (Fig. 1, item 3) is on and steady while light number 4 (Fig. 1, item 4) is off.

When your chlorinator is operating in reverse polarity cycle, light number 3 remains on and steady while light number 4 will flash.

At the end of each cell operational cycle (or cell reverse), the power on/no water flow light & overload light (Fig. 1, Items 3 & 4) will ALTERNATE by flashing in a slow fashion for approximately thirty (30) seconds. This is the cell rinse procedure and is part of the normal operation, which occurs at each reverse cycle change of your AutoChlor® REVERSE POLARITY chlorinator. On completion normal operations in the next cycle will begin.

Contrary to popular belief, during both normal and reverse cycle modes the chlorinator continues to manufacture chlorine, whilst at the same time the opposite polarity cell plates are being automatically cleaned.

## CHLORINE CONTROLLER

#### (FIG. 1, ITEM 5)

The chlorine controller regulates the amount of chlorine production relevant to the position it has been set to. By adjusting the chlorine controller clockwise you increase chlorine manufacture and by turning anti clockwise you reduce production. Do not attempt to turn the controller beyond its stops as this could cause damage to your unit that is not covered by warranty.

### CHLORINE OUTPUT INDICATOR (FIG. 1, ITEM 6)

Your power supply is fitted with ten green indicator lights set in a crescent shaped formation. During operation of your chlorinator these lights will illuminate relevant to the degree at which the chlorine controls have been adjusted. Working in conjunction with the chlorine controller you can increase or decrease chlorine output to suit your pool's requirements. As you increase the output, (by turning the control knob clockwise), the corresponding lights will illuminate progressively to 100% (ten lights).

You have full control of chlorine production merely by adjusting the chlorine controller and illuminating the number of lights to satisfy your chlorine demand. Each light represents 10% (one light) of capable chlorine production up to its maximum output of 100% (ten lights).

## TIME CLOCK OPERATIONS (TIMER MODELS ONLY) (FIG. 1, ITEM 8)

The standard timer (Grässlin model FM/1 Stuz) is designed to switch your equipment on and off at the nominated times.

Your timer has a standard clock face and hands set in the centre section, whilst the outer grey bezel shows the hours in military style (24 hour) time. To set the clock to present time, place your finger on the outer grey bezel and slowly turn it clockwise to the desired time.

Start and stop times are set by pushing the black pins out for on and inward for off. For example, to turn the chlorinator on between 6 pm and 10 pm, push all the pins outwards between 18 and 22. The remainder of the pins should be pushed inwards. With the elements pushed outwards the timer will turn your equipment on when they reach the black indicators. With the elements pushed in the timer will turn your equipment off during those times.

If you switch off the unit and pump during its timer cycle by interrupting the supply of power via the power point or isolation switch, please remember to reset the time clock to present time when you reconnect unit to power (models without quartz battery backup only).



### SPECIAL NOTE ON TIMERS (TIMER MODELS ONLY):

If you require your AutoChlor<sup>®</sup> salt water chlorinator to be connected to a cheaper off peak tariff we recommend the use of an appropriate quartz time clock for that purpose. The unit may also be hard wired in however, in case of incorrect wiring or damage caused by modifications warranty will be void.

We suggest that an appropriate quartz time clock (with battery backup) be fitted in lieu of the standard model to allow time of day to be maintained when power supply is interrupted.

Quartz time clocks can be fitted at factory stage, or later at extra cost. Please see your AutoChlor<sup>®</sup> representative if you wish to have this done.

## TIMER BY-PASS SWITCH (TIMER MODELS ONLY)

#### (FIG. 1, ITEM 9)

AutoChlor<sup>®</sup> models fitted with a timer, a timer bypass switch will be found on the right-hand side of the time clock. This switch allows you to bypass timer functions.

Three functions are available:

#### TIMER:

The time clock will automatically switch your pool equipment on or off at your designated times.

#### OFF:

The time clock will not switch, but normal time will be maintained.

#### **BYPASS:**

The clock has bypassed all designated functions and will operate pool equipment indefinitely.

PLEASE NOTE: Return switch to 'timer' position after using the 'off' or 'by-pass' functions.

## UNDER WATER POOL LIGHTS (POOL LIGHT MODELS ONLY)

Where requested, and as an optional extra, some AutoChlor<sup>®</sup> models have swimming pool under water light transformers fitted. This special transformer allows you to connect your pool light lead to the special connection supplied and operate them from the chlorinator power supply.

The under water light lead is connected directly into the special light connector strip which is located on the underside of the chlorinator power supply. Connect the lead from your pool lights to the connector strip terminals by use of the two locating screws.

The on/off switch (Fig. 1, item 7) for the pool lights is located on the left hand side of the time clock. The pool light circuitry is protected by its own circuit breaker, which is located adjacent to the main circuit breaker at the rear of the unit.

Operation of your pool lights is only through the on/off switch provided. Your chlorinator time clock will not switch your pool lights on or off at the designated pool filtration times.

Pool light transformers are available in 12, 24 and 32 volt models. Please check to ensure that you have matched your pool light voltage to that supplied with your AutoChlor® chlorinator

## **GENERAL CHLORINATOR OPERATION**

Before switching on your AutoChlor<sup>®</sup> salt water chlorination system please ensure that you have added the correct amount of pool salt, it has fully dissolved and is distributed throughout the pool water. (see Addition of Salt Section). Ensure that the base pool chemistry is at the recommended levels and the pool water is clean and crystal clear.

Switch on the pool filter system and the AutoChlor<sup>®</sup> unit. At this point the AutoChlor<sup>®</sup> electronic display may register a water flow fault as the cell housing fills with water and an alarm (beeping) may activate. This is normal start up procedure and will cease as soon as the unit registers full and correct water flow throughout the electrodes. (see Water Balance Section)

With the chlorine controller knob (Fig. 1, item 5) now turned fully clockwise to the maximum position the green chlorine output indicator lights will illuminate one after the other. With the correct amount of salt added to the pool water you should achieve a 100% (ten lights) reading. In this position the AutoChlor<sup>®</sup> chlorinator is producing maximum chlorine output.

As previously stated, chlorine demand will differ from pool to pool due to bather load, water temperature or weather conditions and this must be taken into consideration. By testing for chlorine residuals on a regular basis you will quickly determine the chlorine state of your pool and what action you need to take to adjust it if required.

After determining your particular pool's chlorine needs, you can set the controller to the desired setting to achieve your chlorine requirements and/or adjust your daily running times.



Normally once set, these controls do not require further adjustment except perhaps for the seasonal ones suggested earlier.

Set your chlorine controller to achieve maximum and optimum results for your pool situation. Please remember that an over chlorinated pool is not a healthy pool, so it may not be necessary for you to run your chlorinator at maximum output to maintain recommended chlorine levels.

Your AutoChlor® salt water chlorinator is fitted with a sophisticated electronic circuit board which is designed to minimise the need for manual operations and maximise cell life by constantly managing the correct operation of the power supply and electrolytic cells. In addition to the four warning lights, a warning alarm (beeper) has been installed to alert you of any problems that the electronic monitoring system has interpreted. The alarm will activate to alert you to any problems that have been detected, and once rectified the unit will resume normal operations.

## **IMPORTANT SPECIAL NOTE FOR RP MODEL ONLY**

Your AutoChlor® reverse polarity monitoring system is factory pre set to reverse cycle at the completion of each 8 hours operational period. The circuitry is fitted with a microchip that measures the actual operating hours of the electrodes. When the chlorinator has operated for the total factory designated hours in one direction it will then change (reverse) cycle and operate in the opposite direction for the same operational time. This ensures that the electrode plates (+ and -) each receive the same operational time, therefore equalising and extending cell life, and ensuring adequate cleaning for each cycle.

By maintaining a watch on the indicator and warning lights, keeping the cells in a clean state and chemically balancing your pool water regularly you are ensuring trouble free operation of your AutoChlor<sup>®</sup> chlorination unit with the least amount of effort.

## **CHLORINATOR RUNNING TIMES**

Chlorinator running times will vary from pool to pool, and are dependent upon the situation they are installed into, pool size and the overall usage of the pool in general.

Several factors will determine the operational time of the chlorinator to be able to produce sufficient chlorine for your pools requirements:

#### TIME:

The longer you run your filter plant and chlorinator, the more chlorine you will produce.

#### RATE:

The higher the chlorine output indicator lights up, the more chlorine is being produced.

#### **CELL CLEANLINESS:**

The cleaner the cell, the better the chlorine production rate.

#### **BASIC POOL CHEMISTRY:**

The more correctly maintained, the less chlorine waste.



## MAINTENANCE

#### **ELECTRODE INSPECTION:**

AutoChlor<sup>®</sup> has a reverse polarity feature which reduces electrode cleaning. Regular inspection of the electrode is recommended. We recommend inspecting and cleaning the electrode once or twice a year, subject to your pool's application, location, and electrode condition.

Note that if water hardness (calcium) in your area exceeds our guidelines of 150 - 350ppm (see page 5), increased frequency of inspection and cell cleaning must be carried out. Higher than recommended calcium hardness will result in a greater frequency of calcium buildup on electrodes. Therefore, inspection and cleaning outside of the recommended once/twice a year must be carried out.

For related warranty purposes a water sample may be requested by AIS.

#### ELECTRODE REMOVAL:

Ensure the power to the chlorine generator is switched off.



- Step 1. Unplug the electrode lead from the electrode.
- Step 2. Unscrew (anticlockwise) the large threaded locking nut.
- Step 3. Remove the electrode from the housing. Look inside the electrode for signs of calcium build up (a white chalk like substance). If there is calcium build up the electrode will require cleaning. If cleaning is not required reassemble the electrode. Cleaning and reassembly are described on page 20.

## **ELECTRODE CLEANING:**

Mix up a solution of 1-part hydrochloric acid to 8 parts water. Submerse the electrode in this solution. Do not submerse brass terminals.

#### **CAUTION:**

- When working with acid the use of eye protection, respirator, and rubber gloves are strongly recommended.
- Always refer to MSDS when dealing with hazardous chemicals.
- When mixing, add acid to water, but NEVER water to acid.



There will be a reaction as the calcium is dissolved. When the reaction ceases (about 10 minutes) rinse the electrode in clean water, wipe the brass terminals dry and check that all calcium has been dissolved. If not, repeat the process with a new solution.

### **ELECTRODE REASSEMBLY:**

Ensure the silicon seal is still in place on the inside circumference of the electrode cap. Insert the electrode back into the housing and screw on (clockwise) the locking nut. Plug the electrode lead back on to the electrode terminals and turn on the power to the chlorine generator.

## **POWER SUPPLY REPAIR/MAINTENANCE:**

Do not open, no user serviceable parts inside.

The power supply module and cords attached are to be serviced and/or repaired/replaced only by qualified electrician or the manufacturer.

If the supply cord is damaged, it shall only be replaced by the manufacturer or its service agent or similarly qualified person in order to avoid a hazard.

# **Auto**Chlor<sup>®</sup>

## **TROUBLESHOOTING GUIDE**

PROBLEM	REASON	SOLUTION
There are no lights on the chlorine generator and the pump is not running	<ol> <li>There is no mains power</li> <li>The time clock is in a designated off period, or switch moved to OFF position.</li> </ol>	<ol> <li>Unplug the chlorine generator from the power and test power outlet with another known working appliance</li> <li>Switch to BYPASS to circumvent TIMER or OFF functions.</li> </ol>
Status Light (3) is on and the pump is running, but no other lights are on	The chlorine generator pro- duction is turned off	Adjust control knob clock- wise to increase production.
The chlorine generator is not generating enough chlorine	<ol> <li>Chlorine production is reduced on the chlorine generator.</li> </ol>	1. Adjust control knob clock- wise to increase produc- tion.
	2. Chlorine generator is not operating long enough	2. Increase the operation running time
	<ol> <li>Calcified electrode</li> <li>Water chemistry is incor-</li> </ol>	3. Clean the electrode (see maintenance)
	rect	4. Correct water chemistry
Status Light (3) is flashing and the generator is beeping	1. The pump is not running, filtration blocked, or air locked	<ol> <li>A large air bubble in the electrode housing will cause this alarm. Clean out the skimmer box. Check &amp; clear any blockage. Re-prime the pump.</li> </ol>
	2. Electrode lead not properly plugged in	2. Check the electrode lead plug is properly plugged onto the electrode

## **TROUBLESHOOTING GUIDE**

PROBLEM	REASON	SOLUTION
The high salinity light is on or flashing	1. Pool salinity is too high	1. Have the salinity level tested by pool professional and decrease if necesssary
	2. Chlorine generator is faulty	2. Contact dealer or AIS Water.
The low salinity light is on or flashing	1. Water salinity is too low	1. Have the salinity level tested by pool professional and increase if necessary
	2. Electrode is calcified	2. Clean electrode (see maintenance)
	3. Faulty electrode	<ol> <li>Have the electrode tested and replace if necessary</li> </ol>
There is a white powdery material on the pool bottom.	Excessive water hardness.	Test the water chemistry and adjust accordingly.
Circuit breaker is tripping.	1. Mains power surge.	1. Set machine to off and push circuit breaker.
	2. Fault with shorted electrodes.	<ol> <li>a) Visually inspect electrode and check for foreign or conductive surfaces. If found, remove and clean cell.</li> </ol>
		b) Check electrode plates are not contacting/ touching each other. If yes, replace cell.
	3. Fault with power supply	3. Contact dealer or AIS Water.



#### WARRANTY

When used in a domestic application, your AutoChlor<sup>®</sup> chlorine generator is covered by a forty-eight (48) month in-factory repair warranty, on all parts and labour, from the date of purchase. This warranty applies to the original purchaser and is not transferable.

Any model used in a commercial application is covered by a one (1) year warranty.

All chlorine generators are fully tested prior to being packed. If within 48 months of purchase a problem occurs due to faulty workmanship or components, AIS Water will (at their discretion) repair or replace the chlorine generator.

The manufacturer will not be liable for any consequential loss or damage caused by operation outside the prescribed limits as outlined in the instruction manual, incorrect installation, connection to an incorrect mains power supply, changes to internal wiring, misuse, abuse, negligence, accidental damage, normal wear and tear, or damage caused by water entry.

Note: This warranty is strictly in-factory repair. In the case of failure, the complete unit must be returned to the manufacturer or their designated agent. All forward and return costs are the responsibility of the owner.

### **CONTACT DETAILS**

In the unlikely event of a problem with your chlorine generator, please contact: Warranty Hotline: 1800 676 076

Online warranty aiswater.com.au and go to: Support – Warranty Requests.

For assistance outside of the warranty period: call +617 3396 5222

#### Your local dealer:

For international warranty claims: Please contact your local dealer.

**AIS Contacts** 

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