

# WARRANTY

**THIS EQUIPMENT HAS BEEN MANUFACTURED AND TESTED TO THE HIGHEST STANDARD AND ACCORDINGLY CARRIES THE FOLLOWING WARRANTY.**

1. The Power Pack will be repaired or replaced at no charge for a period of 24 Months from the date of purchase should it be found, after examination, that the failure has been caused by faulty workmanship or materials. The Electrolytic Cell carries a 1 year repair/replacement + 4years pro-rata warranty (based on a percentage of the recommended retail price nominated by the manufacturer).
2. In the case of ancillary parts not manufactured by the manufacturer, such as switches, timers, etc., the guarantee or warranty extended to the purchaser will be limited to the guarantee or warranty available to the manufacturer by their supplier. Any warranty of the manufacturer in relation to any such part is expressly excluded. No warranty is provided on fuses.
3. The Power Pack warranty may be extended if the unit is covered by our Gold Warranty for a further 36 months (i.e. 5years in total).
4. Adverse operating conditions beyond the control of the manufacturer such as improper voltage or water pressure, excessive ambient temperature or any condition that adversely affects the performance of the equipment will render this warranty null and void.
5. Defective equipment must be returned to the manufacturer or dealer as soon as the purchaser becomes aware of the defect and all transport must be prepaid. Neither the manufacturer nor the dealer shall be responsible for any goods damaged in transit.
6. If after examination the equipment is found to be defective it will be repaired or replaced free of charge (other than transport costs which will be borne by the purchaser). However, if upon inspection of the equipment it is found that the terms of this warranty are not satisfied, then the usual charges of the manufacturer for repair or replacement will be made.
7. Any liability of the manufacturer pursuant to the Trade Practices Act 1974, as amended for a breach of a condition or warranty shall be limited to replacing or acquiring the equipment (or part thereof) where the same has been supplied.
8. The maximum liability incurred by the manufacturer shall not in any case exceed the contract price for the equipment or the product parts or components thereof claimed to be defective. Further, the manufacturer shall not be liable for any loss, damage or delay directly or indirectly caused by any malfunction of or defect of or failure of the equipment other than as expressly provided in this warranty.
9. Products sold by the manufacturer are designed for use with swimming pool water balanced in accordance with the Langlier Saturation Index with a pH range of 6.8-7.8. Chlorine level should not exceed 4ppm and the salt level should not exceed 4000ppm.
10. The manufacturer will not be held liable for damage caused by, but not limited to, corrosion, scaling or stress.

**The Warranty is void under the following circumstances:**

1. Installation is carried out incorrectly by any person other than a person authorised by us to do so.
2. The Power Pack or Cell is serviced by any person other than a person authorised by us to do so.
3. Correct salt levels are not maintained at all times.
4. The Power Pack is not protected from the elements.
5. The Power Pack is not operated in a position/area with good ventilation.
6. Water has been allowed to enter the cabinet or Junction Box.
7. Run in a Commercial Installation (these have a 1 year warranty on power pack and cell).
8. Insect infestation or penetration by dust, sand or other foreign particles inside the power supply.
9. Damage beyond our control.
10. Equipment that has been misused, neglected, damaged, repaired without authorisation or altered in any way.

This warranty is applicable to workmanship and materials only.

This warranty is not transferable under any circumstance.

This unit is for use in Domestic Swimming Pools only where the correct size unit produces enough chlorine in approx 8 hours. Extended periods to gain more chlorine Production voids the Warranty.

**Keep your original purchase invoice and serial number in a safe place.**

# CRYSTAL CLEAR CHLORINATORS



Unit 6, 89 Casua Drive, Varsity Lakes, Q4227  
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Phone: (07) 5593 5494 - Fax: (07) 5593 6072

**LOW SALT – 3000ppm**

## SELF CLEANING UNIT



### **INSTALLATION: (REFER TO DIAGRAM)**

1. Connect the equipment as explained on the next page.
2. Turn the chlorine production control to maximum and switch the unit on.  
If the salt level is correct the output should be close to 100% (at the top of the green or just into the red). When the water is cold it will read slightly lower than when warmer. If the output is well over 100% the salinity may be too high. In this case reduce the output control and take care that it is not accidentally turned up.  
**ONLY ADD SALT WHEN YOU CANNOT REACH THE TOP OF THE GREEN SCALE (i.e. maximum output).**
3. Set the Timer to run 6 - 10 hours in the summer and 3 - 6 hours in the winter. Run the unit for 2 periods every day (early morning and evening). If possible the evening period should be the longest period with only 1 - 2 hours in the morning with the evening period dependant on pool size and the Chlorinator model. In winter the output can be turned down but reducing the run time is more economical. Only do this if you are still able to get adequate filtration.
4. **Hard/Soft Setting Switch:** The switch should be in the soft position. This allows the micro-processor to automatically change direction of the current flow every 6 hours (even if the power is interrupted). If you have hard water and calcium is building up then try the hard cycle that changes direction every 4 hours. The Platinum coating may not last as long on the hard cycle as a percentage of the wear on this coating is related to the number of reverse switches.  
**NOTE:** Most Pool Shops will check your salt for you, please refer them to these instructions.

**CORRECT SALINITY: 3000ppm to 3500ppm (0.3%-0.35%)**

**MORE CHLORINE** is produced at the CORRECT salt level.

All our Self Cleaning chlorinators are controlled by a Micro-Chip that performs several functions, including the change of current direction and water sensing. The unit will operate with good stability on higher salt levels but it is still advisable to run at the correct level to prevent damage should the control be turned up by accident.

**IMPORTANT: ALWAYS ADD FRESH WATER OR SALT TO THE BODY OF THE POOL AND NEVER DIRECTLY TO THE SKIMMER BOX.**

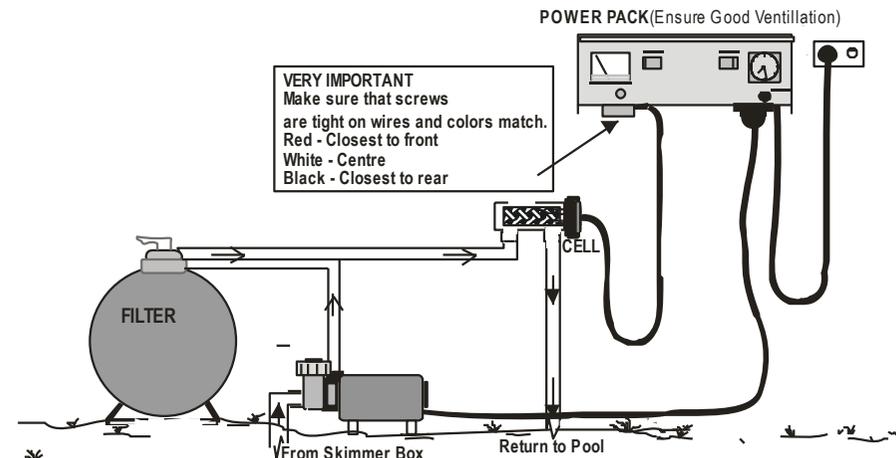
## INSTALLATION: (Refer to Diagram also)

1. Mount the Power Pack well above the ground and above the Cell if possible to prevent water from entering the Power Pack or Junction Box when the cell is removed for cleaning. **Saltwater will burn/damage the Junction Box and damage electrical components in the Power Pack.**
2. Connect the Cell horizontally in the return line to the Pool. Reducing bushes are supplied if you are using 40mm Pipe.
3. Connect the leads to the Junction Box under the Power Pack ensuring that the colours match. Ensure that the screws are **tight on the copper wire** and not on the plastic insulation. Do not pinch the wires by over tightening the silver metal clamp on the junction box (lightly tighten this clamp).
4. Add pool salt until a reading of 3000ppm is obtained. When the Chlorinator is turned on full (black controller fully clockwise) the needle should reach the top of the Green. This shows that the water has the correct conductivity. If it is slightly low it may be that the water is very cold. More Salt may be added until needle reaches the top of the Green.

**The normal range is 3000ppm in summer 3500ppm in winter.**

- \* Never add fresh water into the Skimmer Box as this can shorten the life of the cell.
- \* Clean the Cell if ever excessive calcium builds up (mainly at the legs, sides of plates and sensor on the head end). This may happen in very hard water over a long time.  
See "CELL CLEANING" on the next page.
- \* Maintain salt level at 3000ppm-3500ppm. Increasing the Salt above this does not improve chlorination and may overload the unit.

**NOTE: Excessive Salt will also reduce chlorine output and overheat the power pack thereby shortening its life.**



Warning: Do not plug in if carton has been wet.

## CELL CLEANING:

1. The Cell should not normally require cleaning.
  2. In very hard water all calcium may not be removed. A slight deposit might form on the legs, sensor or sides of the cell plates. This will **NOT** effect the operation.
  3. If you have abnormal calcium build up then clean it as below or contact your Pool Shop if problem persists.
  4. To clean, unscrew Cell cap and remove head with electrodes.
  5. A solution can be made by mixing 1 part hydrochloric acid to 5 parts of water. Using 10 parts of water will make a more gentle solution.
  6. When returning the Cell head to the housing ensure that the O-Ring is clean and properly seated.
5. Check that the junction box screws are tight at least once a year.

## TROUBLE SHOOTING:

### Excessive Calcium Build Up on Cell (even after cleaning)

1. The current should reverse every 4-6 hours. This can be tested by switching off the Cell switch while it is running and turning it on after 20 seconds (not less). The Cell current should now be in the opposite direction. Contact your Pool Shop or the Manufacturer if this does not happen.

### Low Chlorine Residual or Production:

1. Check for correct PH or insufficient stabiliser. Lift stabiliser to 60ppm in mid-summer and during peak periods (normal range 40 - 60ppm).

### Very Low Chlorine Production:

1. Check that the Cell is clean and the Salinity is 3000 ~ 3500ppm.
2. Check if the Cell switch lights up and if not check the Fuse/Circuit breaker.
3. Check that the Sensor has water covering it and not air. The Cell head should be placed so that the sensor "Peg" is on the bottom.
4. Remove and dry the Cell plates and examine every electrode to see if the black coating looks patchy. They may require cleaning and drying before this can be seen. If this is the case then the Cell might need replacing.

Note: Rapid damage like this is normally the result of far too low salinity or filling the pool with fresh water put direct into the skimmer box

### Nil Chlorine Production:

1. Check fuse/Circuit Breaker.
2. Check that the Pump is running and water is flowing through the Cell.
3. Check that the Sensor Peg is covered with water and not air/bubbles.
4. Check that the sensor is not covered with Calcium.
5. Check the Junction Box to see if all the connections are tight. If there is any sign of melting or burning of the Junction box it must be replaced. This is caused by either leaving a wire loose or salt water getting under the cover causing electrolysis of the connections.
6. If none of the above then contact your supplier.

*If the residual test is low or the Pool remains cloudy, then the chlorine is being lost due to high chlorine demand caused by contaminants. If PH and stabiliser tests are correct a shock treatment with an oxidiser agent is advised.*

*If the Pool has not been maintained correctly, super-chlorination may be required.*