

### **Rainbow Pool Products**

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# Email: Intogramser, Web: www.rainbowpoolproducts.com.au CECCTROCHLOR Salt water pool chlorinator

- LCD diagnostic display
- Precision chlorine production
- Super chlorination function
- In built pump protection
- Advanced 7 day timer
- Self cleaning, long life titanium electrolytic cell









www.waterco.com

#### **Pool Sanitisation**

Indoor and outdoor pools are contaminated by a number of human-borne and airborne contaminants, which can come from a variety of sources. These include: sweat, bathing oils/cosmetics, bacteria and other atmospheric pollutants. For this reason, any treatment process must deal with a diverse numbers and kinds of elements which vary over time based on the time of day and in the case of outdoor pools, the local atmospheric conditions.

Chlorine is one of the most effective treatment of water to make it potable or safe to drink. Chlorine's powerful disinfectant qualities come from its ability to bond with and destroy the outer surfaces of bacteria and viruses. Chlorination is one of the most widely used methods to safeguard drinking water supplies.

# "Chlorine occurs in nature, mainly as a common salt"

## **Chlorine Production by Electrolysis**

Through the process of electrolysis, a saline solution pass over an electrolytic cell, then the saline solution is separated into its basic components: chlorine and sodium. The chlorine is instantaneously transformed into Hypochlorous acid; this is the chlorine form that kills algae and other harmful organism in the water.

A chlorine generator's main function is to produce chlorine for the pool. This keeps a residual of chlorine in the pool that prevents algae from growing. The chlorine then turns back into salt and the system continues as long as the generator is functioning properly.



"The concentration of salt in a human tear is about 5000 ppm"

## Why Salt-Water?

Ocean water has a salt content of around 35,000 parts per million ("ppm"). Humans have a salt taste threshold of around 3,500 ppm. The Electrochlor Chlorinator requires a salt content of 4000 - 6500 ppm in the pool.

Swimming in a mild saline solution is much like taking a shower in soft water. In a salt-water pool (one with an Electrochlor) the water feels silky, your skin feels smooth and many people feel more refreshed.

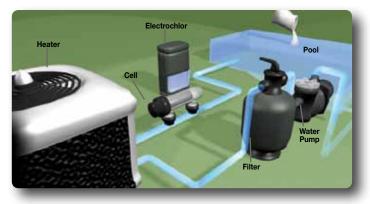


## **Electrochlor Salt Water Chlorinator**

The Electrochlor will automatically maintain the chlorine level of your pool and eliminate problems associated with periods of very high or low chlorine levels. Fewer fluctuations in chlorine levels mean fewer fluctuations in pH levels. This adds up to more stable, balanced water.

Consistently maintained sanitizer levels in the pool water will prevent the growth of all common algae. A salt-water chlorinated pool requires much less attention than a chlorine pool. A salt water pool provides a more comfortable swimming environment. Salt water feels better and is less irritating to the body than standard chlorinated water.





The Electrochlor is plumbed directly in-line with the pool equipment, typically after the heater

Electrochlor consists of a power pack (to supply power to the cell) and a Salt Cell (where chlorine is produced)

#### **Electrochlor Power Pack:**

The Power Pack monitors and controls chlorine production by regulating the amount of electrical energy supplied to the salt cell.





## **Advanced Programming:**

Programme the chlorinator timer to turn on or off at any time that suits your lifestyle. 7 Day timer allows for settings on week days, weekends, any day or every day operation. 3 timer settings are available. You can program the Electrochlor for extra chlorination during the weekends and less chlorination during weekdays.

#### **Pool Monitor:**

Electrochlor's power pack has an inbuilt:

- Salt level indicator
- Chlorine production indicator

#### **Pump Protection:**

If no water flow is detected in the salt cell, Electrochlor automatically switches off the pump to prevent any damage to the pump and pool equipment. Indicators will start blinking on the LCD panel to alert the pool owner, until the fault is rectified.

### **Battery Back Up:**

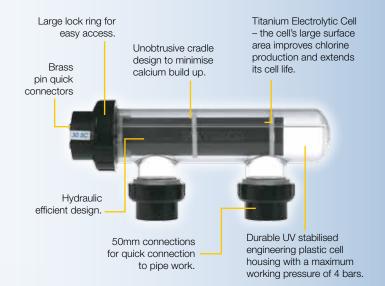
A Battery backup is incorporated to save your settings in the event of a power failure. A battery link is provided to maximise battery life.



# Long Life Salt Cell:

The Electrochlor's salt cell consists of a series of titanium electrodes with opposite charges. Electrochlor's clear salt cell housing allows visual inspection of the salt cell plates and enables monitoring of chlorine production.

The cell housing is constructed using clear U.V. stabilized acrylic. Both anode and cathode of the self-clean chlorinator are made from uniquely coated titanium mesh to add extra durability and life.



#### **Low Maintenance:**

Electrochlor Self Clean Salt Cell has the added ability to reverse the polarity of the voltage to clean calcium buildup off its electrodes.



Brass pin connections – utilising quick connectors for quick simple removal of the cell

# Salts Level - Operation:

Once an Electrochlor is installed and the desirable salt level is achieved (see table), salt needs only to be added occasionally to replace any water loss e.g. splash out, evaporation, backwashing.

Salt Levels (ppm)				
Minimum = 4000	Optimum = 6000	Maximum = 6500		
Note: Low salt level will reduce the life of the salt cell and				

#### **Five Years Warranty:**

lead to low chlorine production

Electrochlor Chlorinator	2 years + 3 years pro rata*
Titanium cell	2 years + 3 years pro rata
Power pack	2 years
Commercial Installations	1 year

\*Please refer to Waterco's Warranty terms and conditions.

# **FREQUENTLY ASKED QUESTIONS**

# *Is there a difference between 'salt chlorinator' chlorine and 'normal' chlorine?*

A salt chlorinator makes chlorine the same way a chlorine factory does. The difference is that it is manufactured in your pool. Liquid chlorine is approximately 12.5% pure, whereas Electrochlor's chlorine is 100% pure.

# Will I ever need to add standard pool chlorine again?

From time to time it may become necessary to add some chlorine to the pool. This may be due to heavy rain or if the chlorine level needs to be shocked back up.

# Does the salt damage pool equipment?

No. Low levels of salt have relatively insignificant corrosive effects on pool fittings and equipment.

# How do I get started?

It's easy! After installing your salt chlorinator, you simply add the recommended amount of salt to your pool and choose your desired chlorine level.

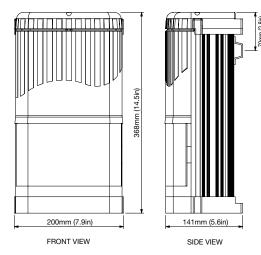
# How much salt will I need?

1 kg of salt in 1,000 litres of water raises the salt level by 1,000ppm. Therefore, 420 kg of salt will raise a 70,000 litres pool from 0 ppm to 6,000 ppm.

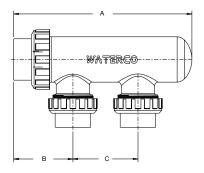
# What type of salt should I use?

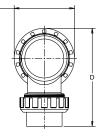
High purity salt, it is important that the salt does not contain additives. Any common salt (like table salt) usually has an additive that may have staining properties.

#### **Electrochlor Power Pack Dimensions**



#### **Electrochlor Self Clean Cell Dimensions**





119.6

Model	A (mm)	B (mm)	C (mm)	D (mm)
30 SC	423.5	136.5	180	188.8
20 SC/25 SC	353.5	117.5	129	194.3

These chlorinators are approved and conformed to AS3136 Swimming Pool Equipment, as a prescribed article under Australian Registration. These Chlorinators conform to the Australian Electromagnetic Compatibility Standard marked by the C-tick.



#### **Electrochlor Technical Specifications**

Model	Input Watt (kW)		Chlorine Production	Max Pool Capacity (L) Climate	
	max	(A) max	(g/hr)	Temperate	Tropical
Electrochlor 20SC	290	20	20	80,000	48,000
Electrochlor 25SC	330	25	25	100,000	60,000
Electrochlor 30SC	380	30	30	120,000	72,000

	20 SC	25 SC	30 SC
Primary Input (Volts) / Frequency (Hz)	220-240 /	220-240 /	220-240 /
Frimary input (voits) / Frequency (Hz)	50-60	50-60	50-60
Input Power (W)	290	330	380
Maximum Total Current (A)	10	10	10
Pump Outlet Maximum (A)	8	8	8
Cell Voltage (V)	6 - 8	6 - 8	6 - 8
Degree of Protection	IP23	IP23	IP23