



# SSC SERIES SALT CHLORINATOR USER MANUAL

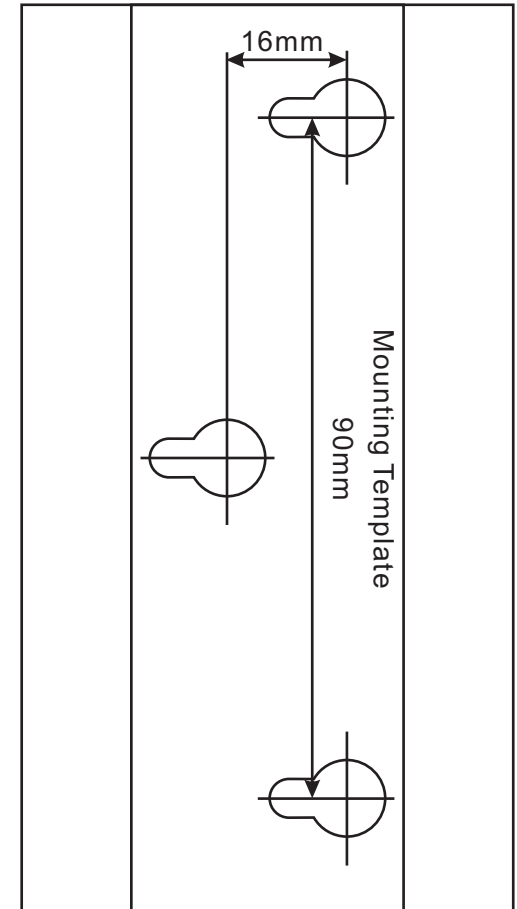


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## Installation template

Ratio 1:1



## Maintenance and Troubleshooting

Salt Chlorinators are a valuable piece of pool sanitizing equipment and must be cared for to get the best performance and life span from it.

1. Keep the water chemical balance
2. Good operation environment
3. Regular check of the titanium plates. During the chlorination process a white powder Calcium scale may naturally build up on the titanium plates in the cell. Regular monitor of the cell to prevent excessive scale build up. Excessive scale build up will cause damage to your cell, and dramatically reduce its efficiency and lifespan.
4. If the control box failure or calcium excessive build up, maintenance must be carried out by professionals.
5. Avoid any insect from entering the control box, it may damage the electrical component inside.
6. Regular monitor of the filter and pump

## Troubleshooting

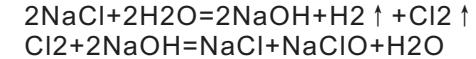
1. Low/no chlorine production	How to handle
- Check the electrical plug/control box/ pump power	- Connect the power properly
- Setting system is too low	- Turn the system control to maximum
- Automatically stopped by the timer setting	- Adjust the timer setting
- Blown fuse	- Cut the power and replace the fuse
- excessive scale build up on the cell	- Switch off the salt chlorinator and clean the salt cell by professional serviceman.
- Filter Backwashing	- Once the backwash is complete, turn the filter back to normal filtration
- The gas sensor is not connected	- Connect the gas sensor according to this manual
- Pump malfunction	- Stop the filtration system and repair the pump
- Water temperature too low	- Turn on the winter switch
- Salt lever too low	- Add salt to the pool
- pH valve too high	- Check the water pH valve and keep it around 7.0-7.6
2. No flow	
- Pump malfunction	- Stop the filtration system and repair the pump
- Filter Backwashing	- Once the backwash is complete, turn the filter back to normal filtration
- The gas sensor is not connected	- Connect the gas sensor according to this manual
3. No display	
- Setting system is too low	- Turn the system control to maximum

## Emaux Salt Chlorinator

Safe Pool Sanitizing

## Working Principle

The chlorinator uses electrolysis to break down the salt (NaCl) in the swimming pool to form Chlorine (Cl<sub>2</sub>). The control unit of the chlorinator can regulate the chlorine production by altering the electric current flow through the titanium electrode in the cell housing. Chlorine is an effective sanitizing agent which is commonly used in swimming pools, it can inhibit the growth of bacteria and fungi.



## Product Features

- ✓ Convenience and the constant delivery of pure chlorine-based sanitizer.
- ✓ No more artificial chemical cleaning agent which could cause skin and eye irritation. You just need to add natural salt in the pool.
- ✓ The salt in the water is so little you do not taste or smell the salt.
- ✓ The electrode is made of titanium, which is durable and resistant to corrosion.
- ✓ Easy to install and operate.
- ✓ The water does not have the heavy smell of chlorine because chlorine is not directly added to the pool.

## Product Picture



Salt chlorinator control box



Electrolytic cell



1.5"/2" universal union



Cables



Screw and fuse



Manual

## Product Dimension

- Control Box: 360 x 220 x 135 mm
- Electrolytic cell: 380 x 118 x 130 mm

## Working Condition

- Environment Temperature: 0 degree Celsius to 50 degree Celsius
- Humidity:  $\leq$  85%
- Installation Area must be with good ventilation
- Keep away from other heat source

## Chlorine Level Calculation

$$\text{Required Chlorine Production Rate (g/hr)} = \frac{\text{Pool volume (litre)} \times \text{Standard Chlorine (g/litre)}}{\text{Turnover Rate (hr)}}$$

Standard Chlorine Level not less than 2mg/litre = 0.002g/litre

### Example:

Pool Volume: 65m<sup>3</sup> = 65,000litre

Turnover Rate: 4 Hour

$$\text{Required Chlorine Production Rate (g/hr)} = \frac{65,000 \text{ litre} \times 0.002 \text{ g/litre}}{4 \text{ Hours}} = 32.5 \text{ g/hr}$$

## Product Specification:

### SSC-TLT Series

(Chlorinator with underwater light, transformer and time switch)

Model	Salt chlorinator voltage input/ freq	Rating (salt chlorinator and underwater light transformer)	Cell Output	Fiberglass Pool (Litre)	Concrete Pool (Litre)
SSC15-TLT	220~250VAC 50/60Hz	100VA +100VA (underwater light)	15g/hr	50000	45000
	100~120VAC 50/60Hz				
SSC25-TLT	220~250VAC 50/60Hz	100VA +160VA (underwater light)	25g/hr	75000	70000
	100~120VAC 50/60Hz				

**SALT CHLORINATOR On/Off/Auto:** ON/Off Switch. In Auto mode, the chlorinate is operated by the timer setting

**Light On/Off:** Switch for underwater light connected to the control unit (For certain model)

**System Control:** Adjust the chlorine product of the chlorinator, for example, for the control unit turned on for 8 hours

Set at 100% - The salt cell operated at 8 hours

Set at 50% - The salt cell operated at 4 hours

Set at 25% - The salt cell operated at 2 hours

**Display:** Show the percentage of the chlorine production

**Winter Mode Switch and On/ Off LED:** Turn on to change the chlorine production at 85% .

**Cell Polarity LED:** Show the polarity of the electrodes; the polarity of the electrode will shifted every 8 hrs of operation, so as to clean the deposition on the electrode.

**Timer:** Used to set the program to turn on and off the control unit automatically. (SSC-T AND SSC-TLT ONLY)

**Stand-By LED:** Turn on when chlorinate is in stand-by mode, When the chlorinator is turn on, the standby LED will go off after 35 sec.

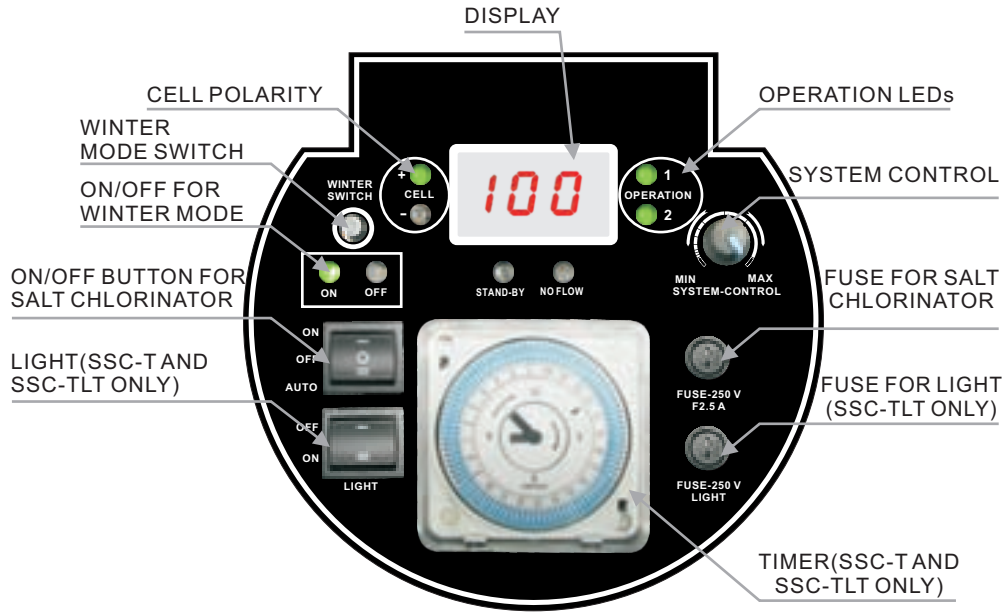
**No Flow LED:** Turn on if there is no water flow, if there is no water flow, the pump and salt chlorinator will stop automatically.

## TIMER OPERATION for SSC-TLT & SSC-T Series Only

- Turn the outer clock face until the time of the day is aligned with the clock at the center of the timer
- The 24-hour dial has 15 minutes division. The timer can be programmed by pushing the captive trippers to the outer ring position for the entire period that the load is to be turn ON.
- The timer clock will rotate with time; the chlorinator will be turned on automatically if its captive tripper is pushed outward.



## Control Panel



### OPERATION LEDs

**Fuse:** Used to protect the electronic components inside the control unit.  
**Operation LED:** There are three status of the operation LED, for example

#### Status1: Normal Operation

- (Green) ● 1  
Operation
- (Green) ● 2

#### Status2: Low salt level/ Deposition on the electrode/ Low water temperature

- (Green) ● 1  
Operation
- (Red) ● 2

#### Status3: Extremely low salt level/ Serious deposition on the electrode/ Extremely low water temperature

- (Red) ● 1  
Operation
- (Red) ● 2

## SSC-T Series

(Chlorinator with time switch)

Model	Salt chlorinator voltage input/ freq	Rating (salt chlorinator and underwater light transformer)	Cell Output	Fiberglass Pool (Litre)	Concrete Pool(Litre)
SSC15-T	220~250VAC 50/60Hz	100VA	15g/hr	50000	45000
	100~120VAC 50/60Hz				
SSC25-T	220~250VAC 50/60Hz	160VA	25g/hr	75000	70000
	100~120VAC 50/60Hz				
SSC50-T	220~250VAC 50/60Hz	300VA	45g/hr	120000	110000
	100~120VAC 50/60Hz				

## SSC-E Series

(Basic Salt Chlorinator)

Model	Salt chlorinator voltage input/ freq	Rating (salt chlorinator and underwater light transformer)	Cell Output	Fiberglass Pool (Litre)	Concrete Pool(Litre)
SSC15-E	220~250VAC 50/60Hz	100VA	15g/hr	50000	45000
	100~120VAC 50/60Hz				
SSC25-E	220~250VAC 50/60Hz	160VA	25g/hr	75000	70000
	100~120VAC 50/60Hz				
SSC50-E	220~250VAC 50/60Hz	300VA	45g/hr	120000	110000
	100~120VAC 50/60Hz				

## Installation Guide

### Control Unit:

1. Select a convenient well-ventilated location within one meter of filter equipment.
2. Mount the control unit vertically onto a post or wall 1.5 meters above ground level.  
(Australian Standards requires that the electric control unit shall not be located within 3 meters of the pool water.)
3. Plug Power supply into a suitable weatherproof outlet
4. Plug pump into the power outlet of the Power Supply Unit. (applicable for SSC-TLT Series only)
5. The Unit must be kept away from acid and other chemical storage areas. Acid and chemical vapors will corrode the electronics inside the Unit.
6. It must also be kept away from heat sources.

## Caution:

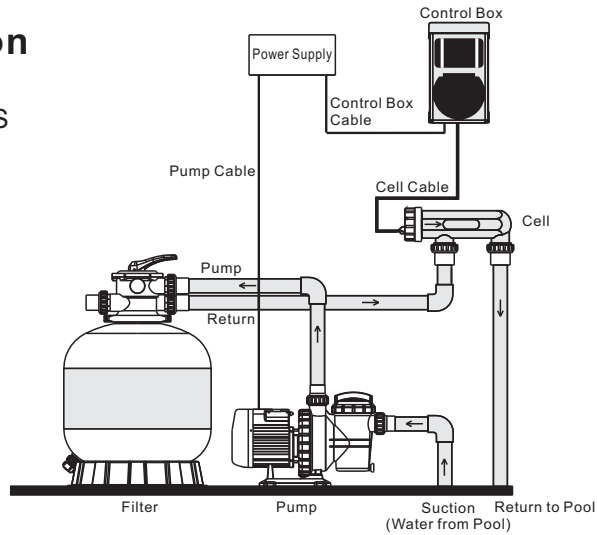
- The control unit can connect to one pump and one underwater light only (SSC-TLT Series Only)
- The current loading of the pumped connected must not exceed 8 Amp. (SSC-TLT Series Only)

## Electrolytic cell and Electrode

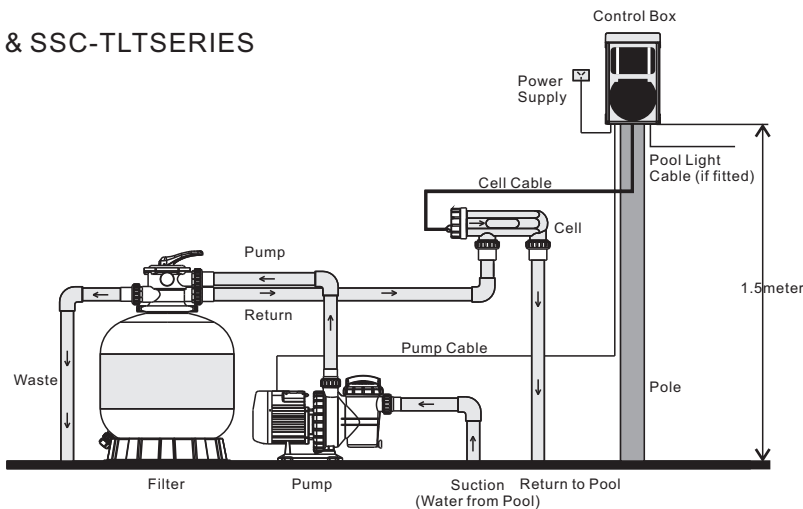
1. The cell must be installed horizontally
2. Connect the water inlet and outlet to the Cell Unit. The water flow direction must be as indicated on the Cell.
3. To avoid lost of chlorine, the Cell should be installed at the end of the filtration system, right before the pool water return.

## Installation

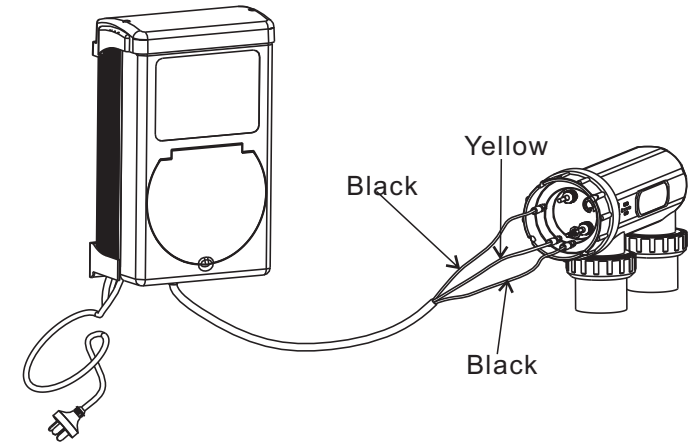
### SSC-E SERIES



### SSC-T & SSC-TLT SERIES



1. Two self-tapping screws and wall plugs have been provided for fast and simple installation. Simply cut out Template provided for the location of drill entry points. Use a 8mm masonry drill when fitting control unit to a brick or concrete wall. When mounting to a post drill pilot holes and fit screws provided. Once screws are in position simply hang the chlorinator via the bracket on back of Control Box .
2. Glue the salt cell horizontally on the pool return pipe, allow 24 hour curing of the pipe glue.
3. Used the provided cable to connect the control unit and the salt cell together,
  - ✧ The single black plug should be connected to the control unit.
  - ✧ The yellow wire shall be connected to the gas sensor of the Cell
  - ✧ The black wires shall be connected to the electrodes; the connectors may be fitted either way.



## Operation Overview

1. Power input: 220-240VAC, 50/60Hz
2. Recommended pool salt level: 4000PPM or above (no less than 40kg of pure salt dissolved in 10,000 liter of pool water)
  - Run chlorinator at the Salt Levels stated within this document and on the product to ensure optimum sanitizer output and cell life.
  - Operating this device at low salt levels will damage the cell and reduce its life.
  - The control unit displays a RED indicator when the salt level is low.
  - If no action is taken to rectify the salt level, damage to the cell may result which will not be covered under warranty.
3. During extreme hot weather conditions or high bather load, the pool water need to be super-chlorinated using granulated or liquid chlorine or increase the running time of the chlorinator.
4. Always turn down the system control to zero before adding salt, once the salt is completely dissolved, return to the set position.
5. The aluminum casing at the back of the Control Unit acts as a heat sink, do not touch it with bare hands.