



SSC SERIES SALT CHLORINATOR USER MANUAL

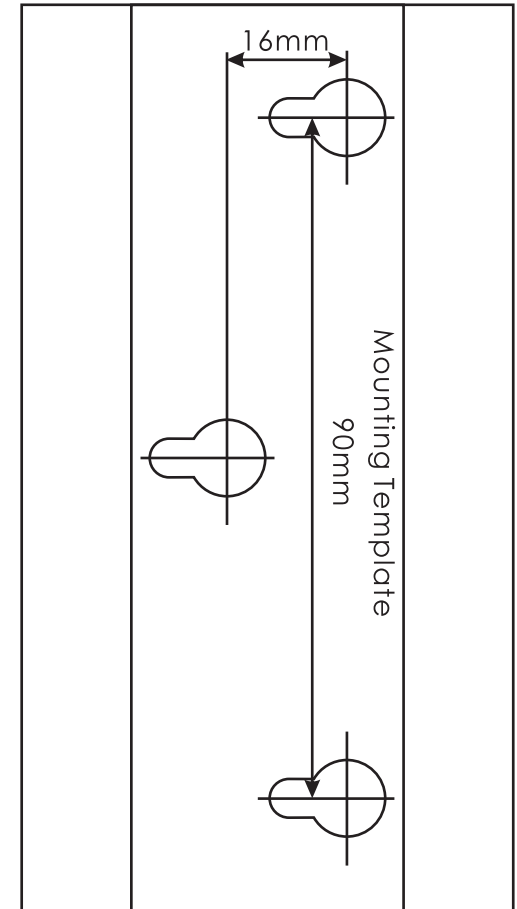


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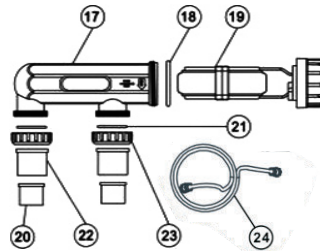
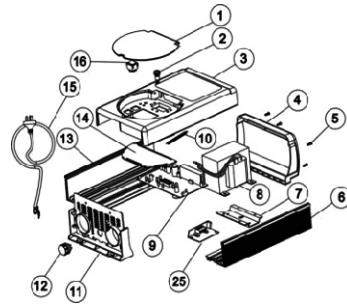
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Installation template

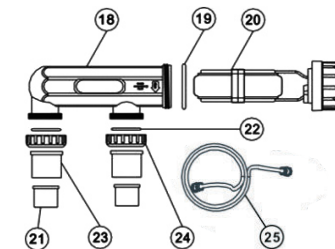
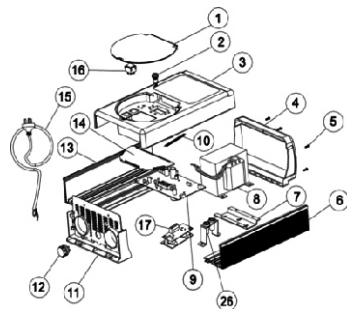
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Parts of SSC Models: SSC15-E / SSC25-E			
Key No.	Part No.	Description	Qty
1	01041040	Door Model	1
2	89380201	Fuse Seat	1
3	89380207	SSC15-E Lid with Label	1
3	89380208	SSC25-E Lid with Label	1
4	01360002	Chlorinator Top Cover	1
5	03011169	M4 x 10 Screw	28
5	02020003	Plastic Caps for Chlorinator Top Cover	4
6	03031031	Profile B	1
7	03031024	Hanging Bracket	1
8	04012005	Transformer for SSC15	1
8	04012006	Transformer for SSC25	1
9	89380202	SSC15 PCB Control Complete	1
9	89380203	SSC25 PCB Control Complete	1
10	03014016	Spring	1
11	01360008	Bottom Panel Comp	1
12	04010018	SP Power Point	1
13	03031022	Profile A	1
14	01360004	Fense Cover	1
15	04013082	Cable and Euro Plug	1
15	04013101	Cable and Australian Plug	1
16	04010007	Switch I/O 250VAC/6A	1
17	01201025	Cell Housing	1
18	02021044	O-Ring for Housing	1
19	08050018	Replacement Cells for SSC15	1
19	08050019	Replacement Cells for SSC25 & SSC50	1
20	01171155	1.5" Union	2
21	02020016	O-Ring for Union	2
22	01171154	2.0" Union (A/E)	2
23	01013032	2.0" Union Nut	2
24	89380206	SSC15 \ SSC25 Salt Chlorinator Cable	1
25	04010029	SSC15 Silicon contrlled combination	1
25	04010028	SSC25 Silicon contrlled combination	1



Parts of SSC Models: SSC50E			
Key No.	Part No.	Description	Qty
1	01041040	Door Model	1
2	89380218	Fuse Seat	1
3	89380207	SSC15-E Lid with Label	1
4	01360002	Chlorinator Top Cover	1
5	03011169	M4 x 10 Screw	28
5	02020003	Plastic Caps for Chlorinator Top Cover	4
6	03031031	Profile B	1
7	03031024	Hanging Bracket	1
8	04012007	Transformer for SSC50	1
9	89380216	SSC50 PCB Control Complete	1
10	03014016	Spring	1
11	01360008	Bottom Panel Comp	1
12	04010018	SP Power Point	1
13	03031022	Profile A	1
14	01360004	Fense Cover	1
15	04013082	Cable and Euro Plug	1
15	04013101	Cable and Australian Plug	1
16	04010007	Switch I/O 250VAC/6A	1
17	04010027	SSC50 Silicon contrlled combination	1
18	01201025	Cell Housing	1
19	02021044	O-Ring for Housing	1
20	08050019	Replacement Cells for SSC25 & SSC50	1
21	01171155	1.5" Union	2
22	02020016	O-Ring for Union	2
23	01171154	2.0" Union (A/E)	2
24	01013032	2.0" Union Nut	2
25	89380215	Salt Chlorinator Cable Set	1
26	89380221	The fuse carrier	1

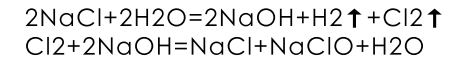


Caution:

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. 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)

**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 (Cl₂). 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

- 1) Convenience and the constant delivery of pure chlorine-based sanitizer.
- 2) No more artificial chemical cleaning agent which could cause skin and eye irritation. You just need to add natural salt in the pool.
- 3) The salt in the water is so little you do not taste or smell the salt.
- 4) The electrode is made of titanium, which is durable and resistant to corrosion.
- 5) Easy to install and operate.
- 6) 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

- 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: 65m³ = 65,000litre

Turnover Rate: 4 Hour

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

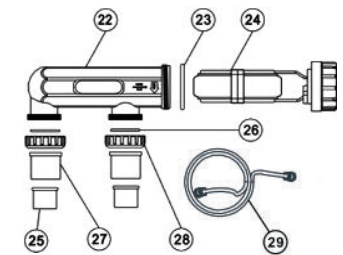
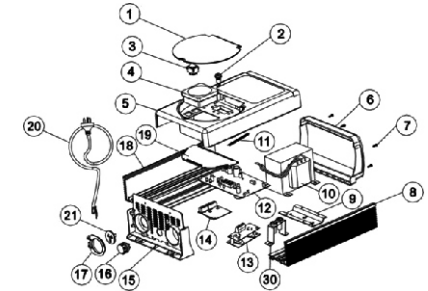
Product Specification:

SSC-TLT Series

(Chlorinator with underwater light, transformer and time switch)

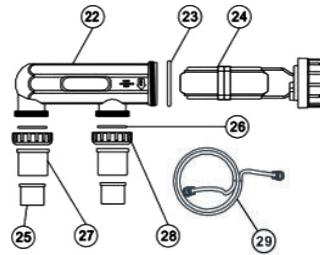
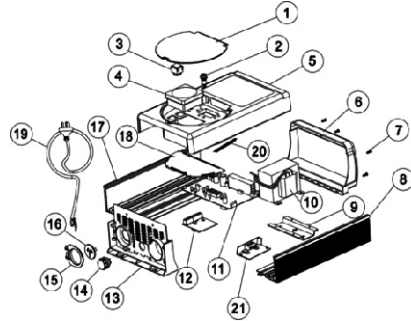
Model	Salt chlorinator voltage input/ freq	Rating (salt chlorinator and underwater light transformer)	Cell Output	Fiberglass Pool (Litre)	Concrete Pool (Litre)
SSC15-TLT	220-250VAC 50/60Hz	100VA +100VA (underwater light)	15g/hr	50000	45000
	100-120VAC 50/60Hz				
SSC25-TLT	220-250VAC 50/60Hz	100VA +160VA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

Parts of SSC Models: SSC50-T			
Key No.	Part No.	Description	Qty
1	01041040	Door Model	1
2	89380218	Fuse Seat	1
3	04010006	Switch I O II 250VAC / 6A	1
4	04010043	Time Analogue Battery Pack	1
5	89380210	SSC50-T Lid with Label	1
6	01360002	Chlorinator Top Cover	1
7	03011169	M4 x 10 Screw	28
7	02020003	Plastic Caps for Chlorinator Top Cover	4
8	03031031	Profile B	1
9	03031024	Hanging Bracket	1
10	04012007	Transformer for SSC50	1
11	03014016	Spring	1
12	89380216	SSC50 PCB Control Complete	1
13	04010027	SSC50 Silicon contrlled combination	1
14	89380217	EMC Board (without Light)	1
15	01360005	Bottom Panel Comp	1
16	04010018	SP Power Point	1
17	89380205	Component Enclosure Plate	1
18	03031022	Profile A	1
19	01360004	Fense Cover	2
20	04013082	Cable and Euro Plug	1
20	04013101	Cable and Australian Plug	1
21	04010015	250V/10A Jack for Australia	1
22	01201025	Cell Housing	1
23	02021044	O-Ring for Housing	1
24	08050019	Replacement Cells for SSC25 & SSC50	1
25	01171155	1.5" Union	2
26	02020016	O-Ring for Union	2
27	01171154	2.0" Union (A/E)	2
28	01013032	2.0" Union Nut	2
29	89380215	Salt Chlorinator Cable Set	1
30	89380221	The fuse carrier	1



REPLACEMENT PARTS

Parts of SSC Models: SSC15 T/ SSC 25 T			
Key No.	Part No.	Description	Qty
1	01041040	Door Model	1
2	89380201	Fuse Seat	1
3	04010006	Switch I O II 250VAC / 6A	1
4	04010043	Timer Analogue Battery Pack	1
5	89380212	SSC15-T Lid with Label	1
5	89380211	SSC25-T Lid with Label	1
6	01360002	Chlorinator Top Cover	1
7	03011169	M4 x 10 Screw	28
7	02020003	Plastic Caps for Chlorinator Top Cover	4
8	03031031	Profile B	1
9	03031024	Hanging Bracket	1
10	04012005	Transformer for SSC15	1
10	04012006	Transformer for SSC25	1
11	89380202	SSC15 PCB Control Complete	1
11	89380203	SSC25 PCB Control Complete	1
12	89380217	EMC Board (without Light)	1
13	01360005	Bottom Panel Comp	1
14	04010018	SP Power Point	1
15	89380205	Component Enclosure Plate	2
16	04010015	250V/10A Jack for Australia	1
17	03031022	Profile A	1
18	01360004	Fense Cover	1
19	04013082	Cable with Euro Plug	1
19	04013077	Cable with Australian Plug	1
20	03014016	Spring	1
21	04010029	SSC15 Silicon contrlrld combination	1
21	04010028	SSC25 Silicon contrlrld combination	1
22	01201025	Cell Housing	1
23	02021044	O-Ring for Housing	1
24	08050018	Replacement Cells for SSC15	1
24	08050019	Replacement Cells for SSC25	1
25	01171155	1.5" Union	2
26	02020016	O-Ring for Union	2
27	01171154	2.0" Union (A/E)	2
28	01013032	2.0" Union Nut (White)	2
29	89380215	SSC50 Salt Chlorinator Cable Set	1



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:

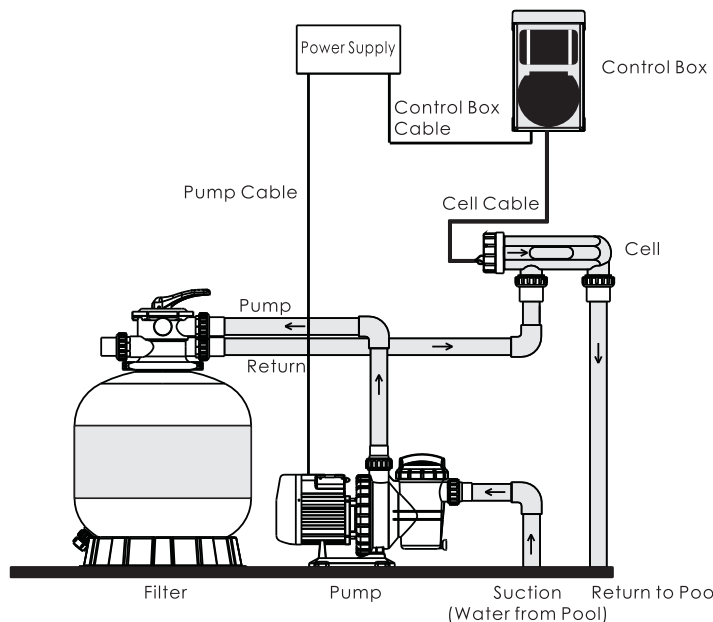
- 1) Select a convenient well-ventilated location within one meter of filter equipment.
- 2) Mount the control unit vertically onto a post or wall 1.5 meters above ground level.(Australian Standards requires that the electric control unit shall not be located within 3 meters of the pool water.)
- 3) 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.

Electrolytic cell and Electrode

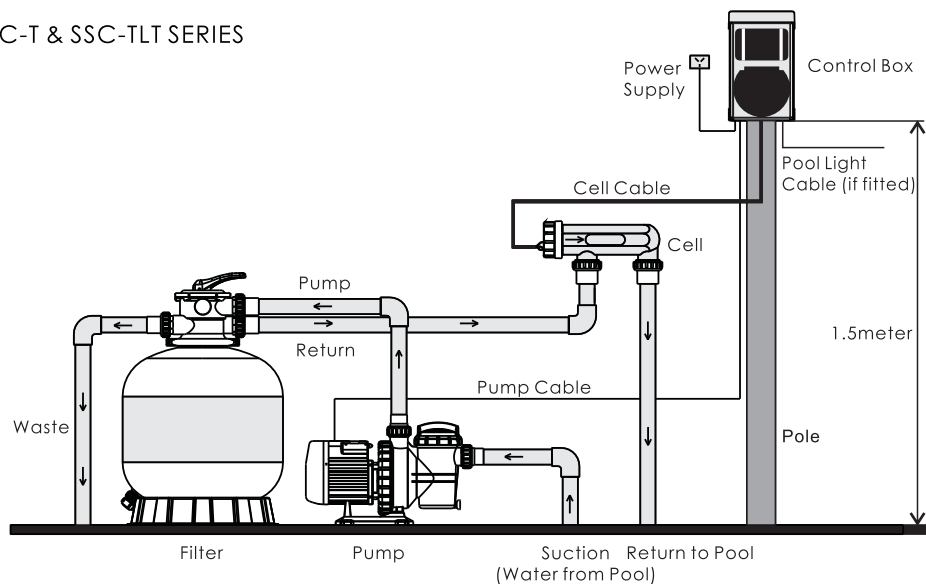
- 1) The cell must be installed horizontally
- 2) Connect the water inlet and outlet to the Cell Unit. The water flow direction must be as indicated on the Cell.
- 3) To avoid lost of chlorine, the Cell should be installed at the end of the filtration system, right before the pool water return.

Installation

SSC-E SERIES

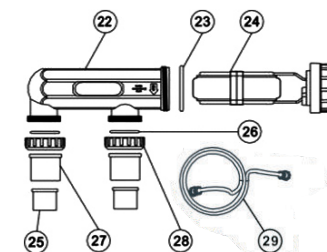
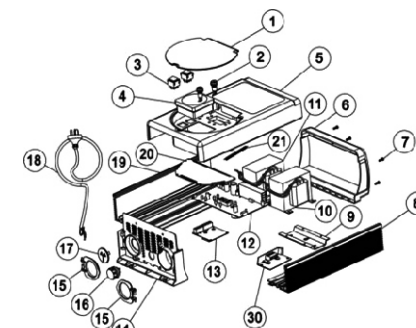


SSC-T & SSC-TLT SERIES



REPLACEMENT PARTS

Parts of SSC Models: SSC15 TLT/ SSC 25 TLT			
Key No.	Part No.	Description	Qty
1	01041040	Door Model	1
2	89380201	Fuse seat	2
3	04010006	Switch I O II 250VAC / 6A	1
3	04010007	Switch I O 250VAC /6A	1
4	04010043	Timer Analogue Battery Pack	1
5	89380214	SSC15-TLT Lid with Label	1
5	89380213	SSC25-TLT Lid with Label	1
6	01360002	Chlorinator Top Cover	1
7	03011169	M4 x 10 Screw	28
7	02020003	Plastic Caps for Chlorinator Top Cover	4
8	03031031	Profile B	1
9	03031024	Hanging Bracket	1
10	04012005	Transformer for SSC15	1
10	04012006	Transformer for SSC25	1
11	04012008	Transformer for Lighting	1
12	89380202	SSC15 PCB Control Complete	1
12	89380203	SSC25 PCB Control Complete	1
13	89380204	EMC Board (with Light)	1
14	01360005	Bottom Panel Comp	1
15	89380205	Component Enclosure Plate	2
16	04010018	SP Power Point	1
17	04010015	250V/10A Jack for Australia	1
18	04013082	Cable and Euro Plug	1
18	04013101	Cable and Australian Plug	1
19	03031022	Profile A	1
20	01360004	Fense Cover	1
21	03014016	Spring	1
22	01201025	Cell Housing	1
23	02021044	O-Ring for Housing	1
24	08050018	Replacement Cells for SSC15	1
24	08050019	Replacement Cells for SSC25	1
25	01171155	1.5" Union	2
26	02020016	O-Ring for Union	2
27	01171154	2.0" Union (A/E)	2
28	01013032	2.0" Union Nut	2
29	89380206	SSC15 \SSC25 Salt Chlorinator Cable	1
30	04010029	SSC15 Silicon contrlled combination	1
30	04010028	SSC25 Silicon contrlled combination	1



Maintenance and Troubleshooting

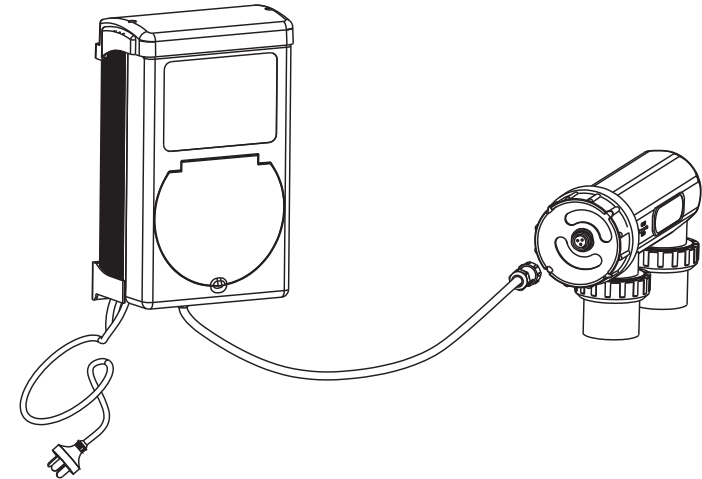
Salt Chlorinators are a valuable piece of pool sanitizing equipment and must be cared for to get the best performance and life span from it.

- 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

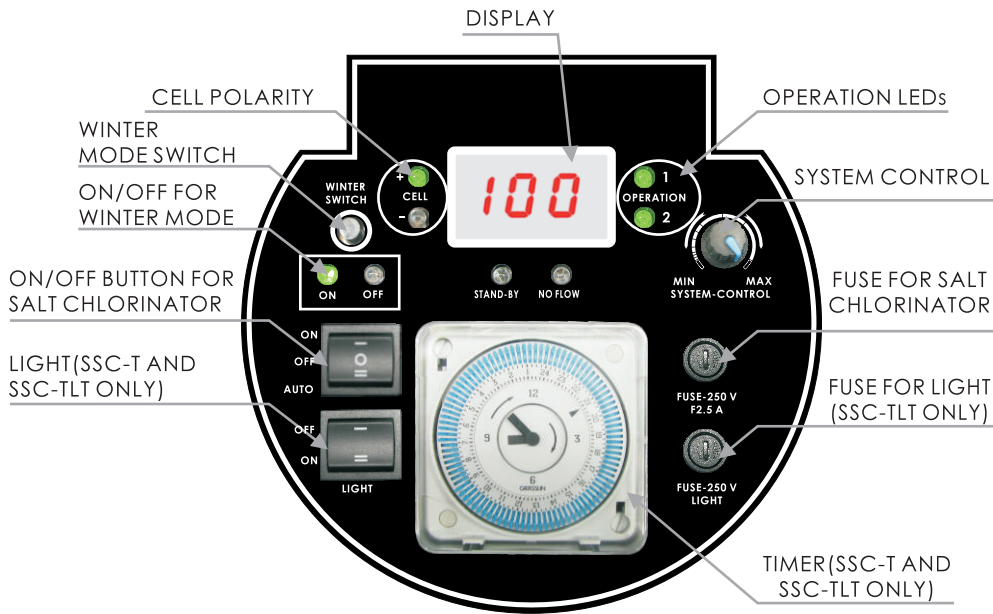
- 1) Two self-tapping screws and wall plugs have been provided for fast and simple installation. Simply cut out Template provided for the location of drill entry points. Use a 8mm masonry drill when fitting control unit to a brick or concrete wall. When mounting to a post drill pilot holes and fit screws 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 lever: 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.

Control Panel



OPERATION LEDs

Fuze: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

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

- 1) Turn the outer clock face until the time of the day is aligned with the clock at the center of the timer
- 2) 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.
- 3) The timer clock will rotate with time; the chlorinator will be turned on automatically if its captive tripper is pushed outward.

