

CE25 SALT CHLORINATOR INSTALLATION AND OPERATING INSTRUCTIONS



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GENERAL OVERVIEW

Congratulations! You have purchased an Filtrite by Hurlcon CE₂₅ Salt Chlorinator. Please read the instructions carefully and your purchase will provide you with years of trouble free use.

Your Filtrite by Hurlcon chlorinator works by converting some of the salt (sodium chloride) in your pool into chlorine which starts to destroy algae and bacteria and sanitises your pool. As part of the process, the chlorine is converted back into salt and hence salt is not consumed.

Your chlorinator control has many features which ensure simple operation of your chlorinator and filtration system.

The CE₂₅ chlorinator has an internal electronic time clock designed to operate the filtration pump up to 2 separate time periods each day. The control has a non-replaceable backup power source which is designed to maintain timer setting memory in the event of an infrequent and short power interruption.

WARNING: This appliance is not intended for use by persons including young children or infirm persons with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Please ensure that young children are supervised to ensure that they do not play with the pump or chlorinator.

To avoid a safety hazard, the supply cord if damaged, must only be replaced by a suitably gualified person.

CHLORINATOR CONTROL INSTALLATION

The CE₂₅ Chlorinator control has a Rating of IPX₃ enabling it to be installed outdoors. Regulations require that the control is not allowed to be located within 3.5 metres of the pool water.

The control should be installed in a well ventilated position ideally away from direct sunlight. Ensure that the unit is not located near pool chemicals as fumes may damage the control.

When installing the control on a post, first attach a flat waterproof panel at least 300mm wide by 500mm long. Make sure the control is located centrally on the panel and sits flat.

Plug the 3 pin plug into a suitable weatherproof outlet and then plug the pump into the 3 pin socket in the Chlorinator control.

Note: The pump current rating must not exceed 8 amps.

CELL INSTALLATION

The chlorinator cell must be located last in the pipe work just prior to the return to the pool. If valves are installed between the Chlorinator and the pool outlet, it is essential that they cannot deadhead the pump. If the pressure in the cell exceeds 250kPa and/or the water temperature exceeds 40 degrees C, the cell may fail.

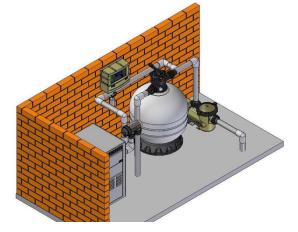
WARNING: Never install the cell before the pump or heater

The cell **MUST** be installed with the barrel unions underneath (water connections pointing downwards) and the cell should be horizontal. Both 40mm and 50mm fittings have been provided. Use 40mm (1.5") high pressure PVC pipe and glue into the 40MM barrel union tails **or** use 50mm (2") high pressure PVC pipe and glue into the 50mm barrel union tails. Make sure that the o'rings are correctly fitted and the unions are tightened firmly.

Direction of flow through the cell is critical – unit must be plumbed with the water entering the cell at the end closest to the terminal connections (as indicated by flow direction label mounted on cell)



- **WARNING:** It is essential that pipe work and equipment do not allow gases generated from the cell to collect and build up.
- **WARNING:** Cell must be installed vertically with water connections pointing downwards this creates a safety gas trap. Installation in any other way may cause explosion, injury or death.
- **WARNING:** Cell must be installed in the return pipework to the pool. Always install after filter, gas heater, solar heater or heat pump connections.
- WARNING: DO NOT install isolation valves on inlet or outlet of cell.



Once the cell is located, connect the black multi-core cable to the cell. The blue wire must be connected to the blue terminal. The cable is designed to come from below the cell. Make sure wing nuts are correctly tightened to ensure good contact.

The recommended salt level for the CE25 salt chlorinator is 6,000ppm. The chlorinator requires between 5,000ppm and 6,000 ppm of salt dissolved into the pool water. The level of salt will depend on water temperature, but if a level of 6,000 ppm dissolved salt is allowed for, your chlorinator will always be able to produce the maximum level of chlorine. We recommend you add 6 kg's of salt for every 1,000 litres of water (a typical pool of around 50,000 litres requires 300kg of salt).

Salt should always be added at the shallow end of the pool and allowed to dissolve. Running the pump will mix the water and speed the dissolving process. You should also use your pool brush to move the salt around – DO NOT ALLOW SALT TO SIT ON THE BOTTOM OF THE POOL.

WARNING: Never add salt to the skimmer box!!

NOTE: Plug the pump directly into a power outlet (bypass the Chlorinator) and run for 8-10 hours to ensure the salt is dissolved prior to running the chlorinator.

When the salt is dissolved, connect the pump to the chlorinator and run it on maximum chlorine output. Check that low salt is not indicated on the screen. If it is, check again in 24 hours. If the low salt indicator still persists, have the salt level checked by your local pool shops and ensure it is increased to 6,000 ppm.

PROGRAMMING

Setting Current Time/Day

Select Off

- (a) Press the MENU button and screen should display CLK. Press ENTER
- (b) Press ENTER and the hour digit will flash. Use up and down arrows to adjust.
- (c) Press ENTER to change to minutes and set.
- (d) Press ENTER and select AM or PM
- (e) Press MENU to save

Setting Timers

Your Chlorinator has 2 timers enabling you to set different periods in which your chlorinator/pump will operate. Timers are set by entering a start time and an off To set timers, do the following:

- (a) Press the MENU button twice and screen should display TMR. Press ENTER
- (b) Use up and down arrows to adjust start time for TIMER1. Press ENTER
- (c) Use up and down arrows to adjust the off time for TIMER 1. Press ENTER.
- (d) Repeat for TIMER 2

Programming Recommendations

It isl recommend that you use two timers, one for the morning and one for the evening and typically for periods of 2-5 hours for each. Your chlorinator is most effective if running in the early morning or evening when it is cooler (strong sunlight consumes more chlorine). As a factory default, the control is set to come on at o8:00am and o4:00pm both for periods of 4 hours.

CHLORINE OUTPUT

To adjust the chlorine output:

- (a) Use Increase/Decrease arrows for setting the chlorine output level of the chlorinator. The chlorinator output can be set from levels 1 through to 8.
- (b) Chlorine Output display shows the level set

USER OPERATION

The user mode buttons enable you to select Pool or Spa mode and to manually control the Chlorinator/Pump. Functions are as follows:

(a) **POOL MODE:**

Auto - Running	The Chlorinator/Pump will run according to how you have set the timers
Manual -Running	The Chlorinator/Pump will run continuously.
Manual - Stopped	The Chlorinator/Pump will stay off continuously.

Maximum efficiency will be achieved from you chlorinator at the following levels:

Water temperature 25 Degrees – Salt level required is 6,000 ppm

FAULT CODES

The user display can indicate the following fault codes;

- NO F No flow indication
- LOS Low salt indication

Refer to troubleshooting table at the end of this manual for actions to correct these errors.

SETTING THE RIGHT CHLORINE OUTPUT AND FILTRATION TIME

Your CE₂₅ Chlorinator must be run every day to ensure that your pool is correctly sanitised. As the sun dissipates chlorine, running times are higher in the summer compared to the winter. It is recommend that you initially run you chlorinator at maximum output

Summer

You should set your Chlorinator to operate for 8 to 10 hours per day. Ideally, run it for 4-5 hours in the morning (say 8-12pm) and 4-5 hours in the evening (say 6.00-11pm).

In extremely hot weather it may be necessary to extend the running time if you find that the free chlorine level is too low. To prevent consumption of chlorine by sunlight, try adding Cyanuric Acid as recommended by your local pool professional. Additional benefit will be gained by operating your chlorinator and pump into the evening when the strong sunlight has abated.

Chlorine is most effective when the pH of your pool water is 7.4. The electro-chemical process of the chlorinator, (change salt into chlorine) will automatically raise the pH of your pool water, so it is very important to check your pH weekly and adjust as necessary.

Winter

You should set your Chlorinator to operate for 6 to 8 hours per day. Again, running it in the morning and evening is preferable.

Checking Chlorine Level

Ideally, check you Chlorine level after the morning operating period. The free chlorine residual level should be somewhere between 1 and 3 part per million. Increase or decrease the output of the Chlorinator to get the right residual chlorine level. It may also be necessary to adjust the operating period if you are running at minimum or maximum output.

STABILISER

As previously mentioned, sunlight rapidly dissipates the amount of free chlorine in your pool. Chlorine stabiliser greatly reduces this effect. Without stabiliser, you may need to run your Chlorinator and filtration system up to 16 hours per day longer!!!

Keep the Stabiliser reading between 30 and 60ppm.

pH Level

You should keep you pH level between 7.2 and 7.4 for fibreglass pools and 7.2 to 7.6 for other pools.

Total Alkalinity

The ideal range is between 80 and 120 ppm.

Salt Level

Although salt is not consumed by the Chlorinator, salt is lost during backwashing, and when your pool overflows due to rain or splashing. The correct salt level is important to cell life and the effective operation of your chlorinator. Salt level should be maintained around 6,000ppm but should never be allowed to fall below 4,000ppm.

A typical pool of around 50,000 litres requires 300kg of salt to initially set-up the pool to 6,000ppm.

A low salt level warning is indicated on your CE₂₅ Chlorinator if the salt level drops. If Low Salt is indicated, check again in 24 hours and then if it is still indicated, add two 25kg bags of salt to the shallow end of your pool. Run the filtration system for approx. 6 hours to help mix the salt in the pool. It can take up to a day for the salt to fully dissolve.

If the low salt light is still on, then you should get your pool water tested. If the Salinity is above 6,000ppm then you may need to have your Chlorinator checked.

Warning: Never add salt directly to the skimmer box. This practice should be avoided as it allows very high concentrations of salt to be passed through your filtration and other pool equipment.

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

Warning: Operating the Chlorinator with less than 4,000 ppm of dissolved salt in the water may cause damage to the cell and will void the warranty. Never start chlorinator until the correct quantity of salt has been added and dissolved in your pool water.

Cell Maintenance

Your CE₂₅ Chlorinator has an automatic cleaning feature that under normal conditions, will keep the cell plates clear of deposits of salt and calcium.

CE25 Series cells have a negative charge sensor that monitors the flow and salt levels of the water. This sensor is designed to be fail safe. As it is negative charges deposits of calcium or other debris may be deposited on it and cause it to indicate a low salt or no flow condition. Should a low salt condition be indicated, have your salt level checked at your local pool shop. If the low salt condition persists, or a no flow condition is indicated when the supply pump is operating, you may need to manually clean your chlorinator cell.

Cell Cleaning Instructions:

- close applicable valves
- disconnect the Chlorinator from the mains by removing the 3 pin plug
- disconnect the cell wires
- undo the barrel nuts connecting the cell to your filtration system.
- turn the cell upside down (inlet and outlet on top) and fill the cell with an approved cell cleaning solution available through Clark Rubber Pool Shops – DO NOT USE HYDROCHLORIC ACID AS THIS CAN DAMAGE THE CELL AND VOID WARRANTY
- repeat if necessary and then rinse well in clean water
- re-install the cell ensuring o-rings are correctly located and barrel nuts are tightened to prevent leaks
- re-connect cell wires with wing nuts supplied making sure the blue wire is connected to the blue terminal.
 Incorrect connection may damage your chlorinator control. Tighten wing-nuts to ensure the electrical connection is sound.
- Return all valves to their normal positions, re connect power to the Chlorinator and turn on at power point.

WARNING: Follow safety instructions provided with the Hydrochloric acid or cleaning solution. When handling Hydrochloric Acid, the use of eye protection, mask and gloves are highly recommended. Extreme caution should be taken whenever handling Hydrochloric Acid or Cell Cleaning Solution.

Maintenance of your Chlorinator

Maintenance Schedule: You new product incorporates moving parts and withstands high velocity water with chemicals in it. Some of these parts will wear in the normal course of use and require regular checks and maintenance. Performing these checks and maintenance will identify parts that have worn and require repair/replacement before further serious damage is sustained. A small amount of regular care and attention to your pool equipment will help ensure long life and trouble free performance.

Timing	Maintenance Check	Service action (if required)
Fortnightly	Check cell for calcium build up	Soak electrode in a cell cleaning soloution.
		Use a soft brush only if required
		Balance pH in pool and adjust output of unit
	Check water chemistry	to ensure satisfactory production of
		chlorine.
		Ensure no water contact is occurring with
	Check cable connections to cell	pins
Three Monthly	Check cell connections for leaks	Isolate Pump, turn power off, clean and
		grease O rings or replace if necessary
Six Monthly	Check chlorine levels and pump operating	Adjust timer and output depending on
	hours	demand for current season.
	Prevent insect ingress to controller	Turn controller off, use a insect spray and
		spray onto walls around controller. Do not
		spay directly into unit.

Important note: Regular maintenance is important to ensure long life and trouble free performance of your pool equipment. If unable to perform the maintenance yourself, contact your local AstralPool office who will arrange a trained service technician to perform the maintenance for you.

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Model No.:

Serial No.:

Your CE₂₅ Chlorinator has diagnostic and safety features to make it easy to maintain your system. The table below summarises potential faults and their causes.

Fault Indication	Potential Cause	Remedy
No Flow	Pump turned off/disconnected or valves closed	Ensure valves/pump on
	Blue wire disconnected from cell	Connect Blue sense wire to cell
Low salt	Salt level in pool has dropped too low	Take sample of water to pool shop and check salt level – add salt as recommended.
	Pool water temperature is low	Add salt and turn chlorinator output down until the water is
	Cell has calcified	warmer
	Cell has failed	Call for Service
Display blank	No Power to Controller	Plug in controller and ensure mains power available
		Have a service technician
Low/No chlorine in	Fuse blown Cables not connected to cell	replace fuse (3 amp slow blow) Connect cables
pool	Cables not connected to cell	Connect cables
	Timer period too short	Increase timer period – particularly in summer
	Chlorine output level too low	Increase chlorine output
	Filter needs backwashing	Backwash filter
	Ph too high	Balance pH level to 7.4 – 7.6
	Pool stabiliser (cyanuric acid) too low	Increase Stabiliser between 30 and 60 ppm
	Salt level too low	Increase salt to above 6,000 ppm
Clock loses time when mains power removed	Battery life expired	Call a technician

Fluidra Group Australia Pty Ltd (ABN 87 002 641 965) provides the following express warranty for this product.

Product Name	Warranty Period	Limitations / Enhancements
FILTRITE CE25 CHLORINATOR	2 years	

EXPRESS WARRANTY

Fluidra Group Australia Pty Ltd (Fluidra) warrants that its Products will be free from defects in materials and workmanship when used in domestic swimming pools. This express warranty only applies to services and products purchased within Australia from Authorised Dealers

For the purposes of this warranty, 'domestic swimming pool' means a swimming pool on a single dwelling site. Products used at other sites, including (but not limited to) hotels, swimming schools, rehabilitation and therapy centres, apartment buildings, townhouse complexes and other multiple dwelling sites, are generally operated for significantly longer periods and are subject to more wear and tear than Products used in domestic swimming pools. Consequently, for all Products used at such sites the warranty period is 1 year instead of the periods set out above. Fluidra, may, however, in its absolute discretion, consider extending the 1 year warranty period for FILTRITE CE25 CHLORINATOR used at particular sites because of actual usage patterns. Any such extension shall only be binding if Fluidra gives it expressly in writing.

CONDITIONS

- 1. This express warranty only applies if the Product has been purchased from a dealer authorised by Fluidra to supply it (Authorised Dealer). Purchase from an Authorised Dealer ensures that the product is a genuine A product, that it is the version designed for Asia Pacific conditions, and that the Purchaser has access to appropriate technical knowledge and advice.
- **2.** The liability of Fluidra, under this express warranty is limited, at its option, to the repair or replacement of the Product or the payment of the cost of having the Product repaired or replaced.
- **3.** This express warranty does not apply in the following circumstances: (a) if the Product has not been installed in accordance with the product's installation instructions; (b) if the Product has been modified other than as authorised by Fluidra or if a component part has been replaced by a part that is not a genuine Fluidra product; (c) if a defect results from use of the Product outside recommended operating conditions; or (d) if a defect results from damage (including damage to any internal electronics) caused by a power surge or lightning strike, insect or animal ingress. FILTRITE CE25 CHLORINATOR is designed and tested in accordance with International Standard EN 61000-6-1 immunity measurements. The product is designed to tolerate minor fluctuations (2000 volts) in power supply that can be reasonably expected to occur in the energy grid. They will not tolerate power surges outside these limits.
- **4.** Without limiting 3 above, products sold by Fluidra are designed for use with swimming pool water balanced in accordance with Australian Standard AS3633-1989 with a pH range of 7.0 7.8. Maximum chlorine readings should not exceed 4ppm. Where pool water is not maintained within these parameters, Fluidra will not be responsible under this express warranty for any resulting damage, including damage caused by corrosion, scaling or stress loading.
- **5.** Replacement parts supplied under this express warranty are warranted to be free from defects in materials and workmanship for the remainder of the warranty period or for 12 months from the supply of the replacement, whichever is longer.
- 6. This express warranty is not transferable and applies to the original purchaser only.
- 7. How to make a warranty claim. A proof of purchase must be received by Fluidra, prior to any warranty work being approved. Where applicable, a serial number, installation date and name of installer is required as part of this process. The Purchaser must telephone or email Fluidra Customer Service and obtain a warranty ID number for warranty claim. Contact details are: Fluidra Australia, 219 Woodpark Road, Smithfield NSW 2164, Customer Service telephone:1300MY FLUIDRA. Email address: service.au@fluidra.com
- **8.** Fluidra, as the case may be, reserves the right to determine, in relation to each warranty claim, whether the Product should be returned to the Authorised Dealer at the address where the Purchaser purchased the

Product or whether warranty service will be provided in the field, repaired at a Fluidra workshop or at the premises of an authorized Fluidra warranty agent.

- **9.** If it is necessary for the Purchaser to incur freight charges in making a valid claim under this warranty, Fluidra, as the case may be, will reimburse the Purchaser for charges reasonably incurred upon proof of the charges.
- **10.** Additional guarantees, rights and remedies Australian Purchasers Guarantees under the Australian Consumer Law. The benefits of this express warranty are in addition to other guarantees, rights and remedies Australian consumers have under the Australian Consumer Law. Our products come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- **11.** INCONSISTENCY WITH WARRANTY STATEMENTS IN PRODUCT MANUALS OR OTHER DOCUMENTS ACCOMPANYING PRODUCTS If any warranty statements in a Fluidra product manual or other document are inconsistent with the above Express Warranty and Guarantees, the above overrides and replaces the inconsistent statements.



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