

SIESTA AUTOMATIC CHLORINATOR
MODEL: CSA-2P ORP-Chlorine pump
INSTALLATION INSTRUCTIONS

1. PARTS:

Parts for liquid chlorine head

1pc. ¼" poly delivery tubing, 4 metres
1pc. drum weight and retainer
1pc. ¼" poly tube connector
1pc. ¼" poly non-return valve

Parts for water line connection

1pc. 40mm x ½" x 6mm poly pipe tee
1pc. ¼" tube x ½" bsp connector injection fitting.
1pc. chlorine / ORP probe and lead

2. DESCRIPTION:

The Dema SIESTA CSA-2 pool and spa chlorinator is an economical liquid chlorine feeder unit designed to automatically inject liquid into pools and spas to maintain sparkling clear water all year round. The amount of liquid chlorine being delivered into pool or spa is measured constantly via the chlorine / ORP probe to be installed on the return to the pool' water line. Chlorine ppm can be adjusted with the push button setting on the front panel. The unit is equipped with a pump head sufficient for all standard sized domestic pools. Chlorine levels are measured through the oxygen reduction potential-ORP.

A second SIESTA semi automatic unit can be installed for the delivery of set amounts of pool acids, to help maintain the correct PH levels in the pool.

3. INSTALLATION:

A) Control cabinet:

Mount the control cabinet on a wall not more than two metres from the liquid container. Make sure that the other equipment is not directly below the chlorinator. Do not mount in exposed area or pool zone or in direct sunlight.

B) Tube connections: (also refer to drawings under section 10 and 12)

Decide where in the 'return to pool line' the poly tee is to be installed. Cut the required lengths of tubing for the suction and discharge lines. Push the poly-barbed connector into the suction side of the pump and the NON-RETURN valve into the discharge side. Push the cut lengths of poly tubes onto these fittings.
Fit the end of the SUCTION TUBE through the ceramic weight; fit the assembly into the chlorine container.
Fit the end of the DISCHARGE TUBE into the injection fitting in the poly tee. Be sure to push the tubing right through the tee fitting and into the opposite internal wall, the pull back 10mm and tighten the nut.

Note: Pump direction is shown on the faceplate and is in a clockwise direction. The non-return valve must be installed on the discharge side. Be sure to mount the non-return valve in the direction of flow – an arrow is molded on the side of the valve. Refer to drawing in section 10.

C) Poly Tee piece:

The tee piece may now be installed into the 'return to pool' line in position already chosen. This is accomplished by cutting a piece out of the line and gluing the tee into place.

Important: If the return 'return to pool' line is below the water level of the pool, be sure to isolate this line before cutting it to avoid the loss of water.

D) Chlorine / ORP probe:

The probe is supplied with an o-ring and may be screwed straight into the side of the poly tee piece now installed. Plug the BNC connector into the probe socket on the probe socket on the side panel SIESTA CSA- 2. Push and turn clockwise-1/4 turn.

E) Electrical connection:

Plug into 240 ac power outlet with the filter pump. The lead supplied with the SIESTA is fitted with a 'piggy back' for ease of installation. Chlorine dosing operations are controlled automatically by the SIESTA while the water filter pump is on.

Alternatively, the SIESTA may be used with a separate timer, but ensure that the timer is set to operate only when the filter pump is running.

4. OPERATION:

Ensure that the chlorine container has sufficient liquid chlorine.

A) Adjustments:

1. Switch on the power to the SIESTA and filter pump.
2. Press mode button until the adjust mode LED is selected and set the indicator display panel to the centre, by pushing the increase or decrease buttons.
3. The SIESTA pump will start immediately. The SIESTA will inject chlorine for a maximum of 45 seconds in each minute and takes measurements the remaining 15 seconds.
The SIESTA will cut back injection to a suitable proportion of one minute when desired chlorine level is reached in pool or spa. Select ADJUST mode and press increase or decrease buttons to adjust your desired setpoint or chlorine level.
4. Allow a few hours for the SIESTA to stabilize.
5. Test the pool for the next 7 days. Adjust the dial to give the desired - chlorine level. No further adjustments are required.
During heavy bathing periods or excessive rain, the SIESTA AUTOMATIC will dose the correct amount of chlorine to keep your pool at the required adjusted level.

NOTE: A delay of a couple of seconds may occur between when changing settings

Remember also that during winter and low pool usage periods your chlorine usage will decrease

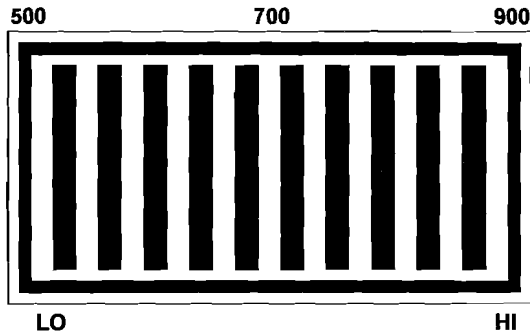
Important: The pool PH level must be kept at correct level (7.2 to 7.6) for effective chlorinating.

B) Super Chlorination:

To super chlorinate your pool, simply push the 'super chlor' button located on the right side of the front panel. This overrides the probe information and runs the pumps on a duty cycle of 75% (running / on for 45 seconds and off for 15 seconds) for a present time of approximately 60 minutes. Once this time has elapsed, the chlorinator automatically switches back to its normal control mode.

Note: To cancel this mode, press the SUPERCHLOR or MODE buttons.

5. **SIESTA CSA-2 INDICATOR RANGE – APPROXIMATE VALUES.**
(Variances of plus or minus 5 to 10 % may occur in the below figure due to pc card component tolerances)



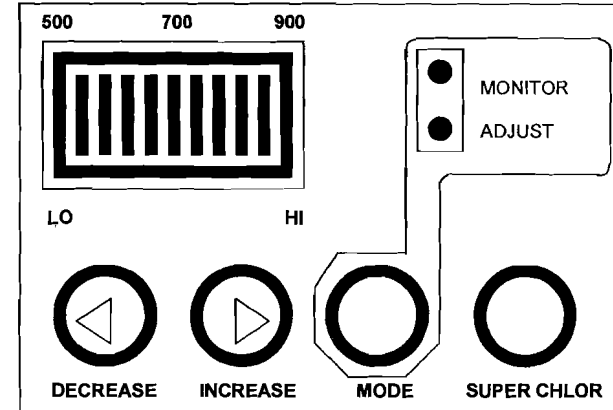
6. **SERVICING:**

- A) Clean the injection point periodically.
- B) Lubricate the squeeze tube regularly with approved lubricant. (every three months).
- C) Replace the squeeze tube periodically. (every twelve months).
- D) Check the chlorine probe periodically. Clean with a MILD acid solution.
- E) The chlorine probe should be checked by pool shop every twelve months.

7. **TROUBLE SHOOTING:**

Feeder not pumping, CHECK the following.

- 1) power to SIESTA.
- 2) suction tube in the bottom of chlorine container?
- 3) squeeze tube for leaks and not squashed.
- 4) the suction and delivery tubes for leaks.
- 5) the control dial is not set too low.
- 6) empty chlorine drum.
- 7) blockage at injector point.



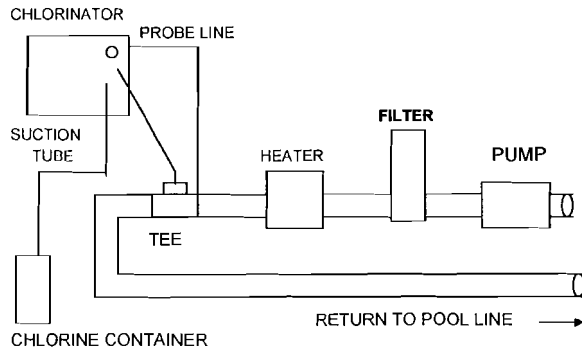
8.

- 1. Display is normal with MONITOR indicator on.
- 2. Mode button will change between the MONITOR and ADJUST.
- 3. While in ADJUST mode, DECREASE and INCREASE buttons may be used to adjust desired set point or chlorine level.
- 4. SUPER CHLOR button will invoke "super chlorinate" mode which will continue for approximately one hour or until SUPER CHLOR or MODE button is pressed to cancel. Flashing indicator display and MONITOR LED show super chlorinate mode is on.

9. **Poor chlorine level / pool condition, CHECK the following.**

- 1) pool water condition / quality (test kit)
- 2) chlorine container.
- 3) secure probe connection.
- 4) Is the probe clean.
- 5) chlorine strength in the pool with DPD tablet (in test kit)

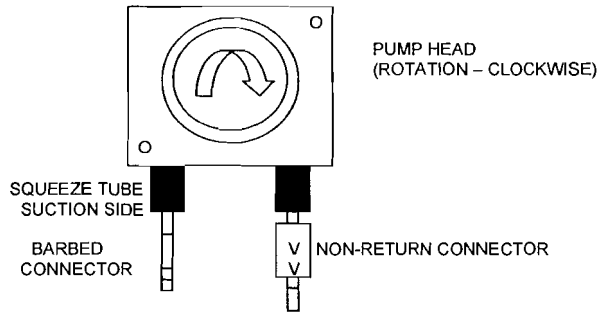
11. STANDARD SIESTA CSA-2-SET-UP:



11. NOTES:

1. It is strongly advised that a sun screening chemical be used every twelve months when using liquid chlorine.
2. The use of copper-based algaecides is prohibited while a SIESTA is installed as this will cause scaling of the probe.
3. The use of powdered chlorine may cause scaling of the probe.
4. Very hard water may cause probe scaling.
5. Operate the controller at the same time every day.

12. PUMP HEAD TUBE CONNECTIONS:



13. SIESTA CSA-2 AUTOMATIC CHLORINATOR – PARTS LIST:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SIESTA UNIT PARTS		ACCESSORIES	
12600	MOTOR 15 RPM DC.	17020	TUBE LUBE 50G
13000	PUMP HEAD SIZE 2.	18700	POLYTUBE 1/4" PER METER
13300	PUMP FACE PLATE SIZE 2.	21053	NON-RETURN CONNECTOR
13750	TRI ROLLER BLOCK SIZE 2.	21100	CHLORINE INJECTOR
14520	SQUEEZE TUBE SIZE 2	21120	POLY TEE 40mm X 1/2" X 6mm
24400	ACCESSORY KIT – CSA-2	22700	RETAINER
26000	POWER LEAD C/W ADAPTER	22705	DRUM WEIGHT
26800	20mm CABLE GLAND	23000	POLY BARBED CONNECTOR
29000	PC CARD SIESTA	23900	CHLORINE/ ORP PROBE
33325	PLASTIC BOX 81.43F	23950	PROBE O-RING
33327	PLASTIC BOX LID 81.44F		
33840	LABEL SIESTA CSA-2		
33355	MOUNTING BRACKETS S/S		

14. SIESTA CSA-2-BASIC TESTING:

A) Feeder not pumping, CHECK the following.

- 1) empty chlorine container.
- 2) suction tube is in the bottom of the chlorine container
- 3) squeeze tube for leaks and not squashed.
- 4) suction and delivery tubes for leaks.
- 5) control dial is not set too low.
- 6) power to the unit.
- 7) blockage at the injector point.

B) Poor chlorine level / pool condition, CHECK the following.

- 1) pool water condition / quality.
- 2) chlorine strength.
- 3) secure probe connection.
- 4) chlorine container.
- 5) Is the probe clean? Clean if necessary with a mild acid solution.

C. Electrical fault finding. To be carried out by an electrician.

- 1) Check for power unit.
 - 2) Is the MONITOR light on ? If not, check fuse connectors.
 - 3) If the MONITOR light is on and motor / pump is not running, check for power at motor terminals on the pc card.
- NOTE: Pump will run for 45 seconds immediately when power is switched on.



- 4) If power is available at motor, and the motor does not work, the motor may need replacing.
- 5) Check all terminals and lugs for tight connection.
- D) **CHLORINE / ORP Probe Test:**
The testing of ORP / chlorine probes should only be carried out by pool shop personnel. See your local pool shop for details.

Please note: All of the above steps are recommended only and are used as a quick guide in finding any fault. Works carried out on any unit still under warranty, outside Dema 's workshop may void its warranty. All warranty work must be returned to;
Dema Australia
Unit 5, 7-11 Parraweena Road, Caringbah NSW 2229.
For any inquiries, please call 02 9525 5177 or Fax 02 9525 5033.