



Your Prescription for Crystal Clear Water™



Electronic Chlorine Generator Installation & Operation Manual



Millstream
Distribution LLC

Millstream Distribution LLC
1-800-253-4775

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be exercised, including the following:

WARNING

Risk of Electric Shock. All electrical wiring **MUST** be in conformance with all applicable local codes, regulations, and the National Electric Code ® (NEC®).

WARNING

To reduce the risk of injury, do not permit children to use this product.

WARNING

Higher temperatures may require higher chlorine output to maintain proper free available chlorine residuals. The actual amount of chlorination required by your pool can change, and varies according factors not limited to bather load, rain, temperature, dirt, debris, and chemical balance.

WARNING

Always turn unit off when operating any plumbing control valves such as for backwashing, water exhaust, or during operation of spa or water features if operation restricts water flow to the cell. A build-up of flammable gases will result in hazardous conditions.

- When install the unit, ensure that materials and parts used in the pool are compatible with the use of chlorinated water and salt. Avoid high salt levels (above the recommended range).

- Ensure that the chlorine generator operates only when the circulation pump is operating. When installed with a pool equipment timer, the Control Module must be to the load side of the timer clock.
- If additional chlorine is required (due to hot weather), use Sodium Hypochlorite to maintain an appropriate chlorine residual in the water.
- Proper pool chemistry must be maintained at all times.
- Please find the green terminal inside the control box and connect it to the grounding device in order to minimize the risk of electric shock. Use the correct copper wire size and make sure the wire is connected to an electrical service ground.
- The control box also equips with one bonding at the bottom. Use a solid copper bonding conductor not smaller than 8 AWG and Connect local bonding structure in the pool area.

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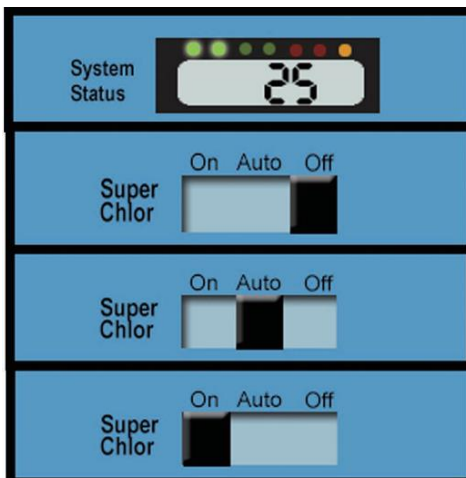
INTRODUCTION

HydroSalt™ Salt water chlorination is a process that uses dissolved salt for the chlorination of swimming pools. The HydroSalt™ chlorine generator uses electrolysis in the presence of dissolved salt to produce chlorine gas or its dissolved forms, hypochlorous acid and sodium hypochlorite, which are already commonly used as sanitizing in pools.

The HydroSalt™ is designed for residential swimming pool up to 40,000 gallons (150,000 liters).

The actual amount of chlorination required to properly disinfect the pool depends on the bather's load, rainfall, air temperature, water temperature, exposure of the pool to the sun, pool surface and cleanliness.

Switches of Control



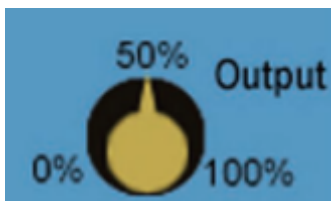
AUTO: Generally, if the HydroSalt™ is in “Auto”, it will automatically work according to the chlorine output settings.

SUPER CHLOR: The “Super Chlor” function is the process of temporarily increasing the free chlorine levels in the pool for the purpose of increased sanitation power. It's often necessary when the pool water is cloudy, free chlorine levels to fall below optimum levels. Switch to “ON”. It will work 100%, remember to back to “Auto” when you have desired chlorine.

OFF: In “OFF”, the HydroSalt™ stops outputting chlorine.

NOTE: During the maintenance, please turn the power off the circuit breaker. The OFF switch is not to be used.

OUTPUT LEVEL CONTROL



Adjust this setting to increase or decrease the chlorine output level percentage.

WATER CHEMISTRY

For any pools it is mandatory to maintain proper water chemistry of the pool water, including pH, calcium levels, and alkaline content, especially to maintain proper levels of salt and stabilizer. It helps to prevent corrosion or scaling and to bring better experience for pool users. It is recommended that pool water be professionally tested a minimum of twice per 3 months and adjust the water chemistry in time. Remember to tell the pool store service staff that you are using a salt chlorine generator.

IDEAL CHEMICAL LEVELS

Salt Level	Free Chlorine	pH	Calcium Hardness	Stabilizer	Metals	Total Alkalinity	Saturation Index
3000 - 4000 ppm	1.5 - 3.0 ppm	7.2 - 7.7	200 - 400 ppm	50 - 80 ppm	0 ppm (none)	80 - 120 ppm	-.2 - +.2

Saturation Index

The “saturation index,” or the “stability index,” is a numerical value indicating whether or not water is balanced.

$$\text{Saturation Index} = \text{pH} + \text{TF} + \text{CF} + \text{AF} - 12.1$$

Ideal Salt Levels & Pool Size

Use the table below to help determine the amount of salt and pool size.
The ideal salt level is between 3200-3400 ppm.

How to calculate your pool size in Gallons:

Rectangular Pools:

Length(feet) x width(feet) x average depth(feet) x 7.5

Circular Pools:

Diameter x diameter x average depth x 5.9

Oval Pools:

Length x width x average depth x 6.7

How to calculate your pool size in Liters:

Rectangular Pools:

Length(meters) x width(meters) x average depth(meters) x 7.5

Circular Pools:

Diameter x diameter x average depth x 5.9

Oval Pools:

Length x width x average depth x 6.7

Type of Salt to Use

Use evaporated, granular non-iodized salt (sodium chloride). The purer the salt (at least 99%).

Improve the life and performance of the electrolytic cell. Water softening

salt (also called water conditioner)

Granules are an economical way to buy large amounts of salt. However, only NaCl salt with a purity of at least 99% can be used. The pill is a compressed form of evaporated salt and may take longer to dissolve. Avoid using salt with an anti-caking agent, which may cause discoloration.

When adding salt to the pool, it's best to pour the required salt into the shallow end of the pool and run filter and pump at the same time to circulate the water and dissolve the salt. Do not pour the salt bag into the water because the chemicals and ink on the bag will Disturb water balance. In summer, salt may take 24-48 hours to dissolve, while in winter it takes longer. Fine grain the salt will dissolve faster than compressed tablets.

In any swimming pool, do not add salt directly to the skimmer or directly to the main drain. Due to the high concentration of salt and reduced pump flow, this will shut down or shorten the life of the cells.

If the addition is incorrect, please turn off HydroSalt™ immediately for 24 hours while the pump and filter are still running. This will help distribute the salt evenly. The salt display may take up to 24 hours to respond to changes in salt concentration.

WARNING

Do not use salt with any Phosphates

		Adding Salt																							
		Approximate Pounds (kg) of Salt Needed to Obtain Ideal Salinity (3,400 PPM)																							
Current salt level (ppm)	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400		
14,000G	419 lbs 190 kg	396 lbs 180 kg	373 lbs 169 kg	350 lbs 159 kg	327 lbs 148 kg	303 lbs 138 kg	280 lbs 127 kg	257 lbs 117 kg	233 lbs 106 kg	209 lbs 95 kg	187 lbs 85 kg	165 lbs 74 kg	144 lbs 64 kg	121 lbs 53 kg	99 lbs 42 kg	77 lbs 35 kg	55 lbs 25 kg	33 lbs 15 kg	11 lbs 5 kg	OK	OK	OK	OK	OK	High Dilute
16,000G	481 lbs 218 kg	454 lbs 206 kg	427 lbs 194 kg	400 lbs 182 kg	373 lbs 170 kg	347 lbs 158 kg	320 lbs 145 kg	293 lbs 133 kg	267 lbs 121 kg	240 lbs 109 kg	213 lbs 97 kg	187 lbs 85 kg	160 lbs 73 kg	133 lbs 61 kg	107 lbs 48 kg	81 lbs 37 kg	55 lbs 25 kg	29 lbs 13 kg	13 lbs 6 kg	OK	OK	OK	OK	OK	High Dilute
18,000G	540 lbs 246 kg	510 lbs 232 kg	480 lbs 218 kg	450 lbs 205 kg	420 lbs 191 kg	390 lbs 177 kg	360 lbs 164 kg	330 lbs 150 kg	300 lbs 136 kg	270 lbs 123 kg	240 lbs 109 kg	210 lbs 95 kg	180 lbs 82 kg	150 lbs 68 kg	120 lbs 55 kg	90 lbs 41 kg	60 lbs 27 kg	30 lbs 14 kg	15 lbs 7 kg	OK	OK	OK	OK	OK	High Dilute
20,000G	599 lbs 272 kg	566 lbs 257 kg	533 lbs 242 kg	500 lbs 227 kg	467 lbs 212 kg	433 lbs 197 kg	400 lbs 182 kg	367 lbs 167 kg	333 lbs 152 kg	297 lbs 136 kg	267 lbs 121 kg	233 lbs 106 kg	200 lbs 91 kg	167 lbs 76 kg	133 lbs 61 kg	100 lbs 45 kg	67 lbs 30 kg	33 lbs 15 kg	17 lbs 8 kg	OK	OK	OK	OK	OK	High Dilute
22,000G	651 lbs 299 kg	624 lbs 284 kg	597 lbs 267 kg	560 lbs 250 kg	523 lbs 233 kg	487 lbs 217 kg	449 lbs 200 kg	410 lbs 183 kg	371 lbs 167 kg	330 lbs 150 kg	288 lbs 133 kg	247 lbs 111 kg	205 lbs 93 kg	163 lbs 74 kg	121 lbs 55 kg	79 lbs 36 kg	47 lbs 21 kg	23 lbs 10 kg	11 lbs 5 kg	OK	OK	OK	OK	OK	High Dilute
24,000G	720 lbs 327 kg	680 lbs 309 kg	640 lbs 291 kg	600 lbs 273 kg	560 lbs 255 kg	520 lbs 236 kg	480 lbs 218 kg	440 lbs 200 kg	400 lbs 182 kg	360 lbs 164 kg	320 lbs 146 kg	280 lbs 127 kg	240 lbs 109 kg	200 lbs 91 kg	160 lbs 73 kg	117 lbs 53 kg	74 lbs 34 kg	39 lbs 18 kg	19 lbs 9 kg	OK	OK	OK	OK	OK	High Dilute
26,000G	779 lbs 354 kg	736 lbs 335 kg	693 lbs 315 kg	650 lbs 296 kg	607 lbs 276 kg	563 lbs 256 kg	520 lbs 236 kg	477 lbs 217 kg	433 lbs 197 kg	390 lbs 177 kg	347 lbs 158 kg	303 lbs 138 kg	260 lbs 118 kg	217 lbs 98 kg	173 lbs 79 kg	129 lbs 59 kg	85 lbs 39 kg	42 lbs 19 kg	21 lbs 10 kg	OK	OK	OK	OK	OK	High Dilute
28,000G	841 lbs 381 kg	794 lbs 360 kg	747 lbs 339 kg	700 lbs 318 kg	653 lbs 297 kg	607 lbs 276 kg	560 lbs 256 kg	513 lbs 233 kg	467 lbs 212 kg	420 lbs 191 kg	373 lbs 170 kg	327 lbs 148 kg	280 lbs 127 kg	233 lbs 106 kg	187 lbs 85 kg	133 lbs 61 kg	89 lbs 40 kg	45 lbs 20 kg	22 lbs 10 kg	OK	OK	OK	OK	OK	High Dilute
30,000G	900 lbs 409 kg	850 lbs 387 kg	800 lbs 364 kg	750 lbs 341 kg	700 lbs 318 kg	650 lbs 297 kg	600 lbs 273 kg	550 lbs 250 kg	500 lbs 227 kg	450 lbs 205 kg	400 lbs 182 kg	350 lbs 159 kg	300 lbs 136 kg	250 lbs 114 kg	200 lbs 91 kg	150 lbs 68 kg	100 lbs 45 kg	50 lbs 23 kg	25 lbs 11 kg	OK	OK	OK	OK	OK	High Dilute
32,000G	963 lbs 439 kg	908 lbs 413 kg	854 lbs 389 kg	800 lbs 365 kg	747 lbs 339 kg	693 lbs 317 kg	640 lbs 291 kg	587 lbs 267 kg	533 lbs 243 kg	480 lbs 219 kg	427 lbs 195 kg	373 lbs 169 kg	320 lbs 145 kg	267 lbs 121 kg	213 lbs 96 kg	159 lbs 72 kg	105 lbs 48 kg	53 lbs 24 kg	27 lbs 12 kg	OK	OK	OK	OK	OK	High Dilute
34,000G	1021 lbs 462 kg	964 lbs 439 kg	907 lbs 412 kg	850 lbs 388 kg	793 lbs 360 kg	737 lbs 337 kg	680 lbs 310 kg	623 lbs 283 kg	567 lbs 256 kg	510 lbs 232 kg	453 lbs 207 kg	397 lbs 180 kg	340 lbs 154 kg	283 lbs 129 kg	227 lbs 104 kg	171 lbs 78 kg	117 lbs 53 kg	60 lbs 27 kg	30 lbs 14 kg	OK	OK	OK	OK	OK	High Dilute
36,000G	1080 lbs 490 kg	1020 lbs 464 kg	960 lbs 436 kg	900 lbs 408 kg	840 lbs 382 kg	780 lbs 358 kg	720 lbs 328 kg	660 lbs 300 kg	600 lbs 274 kg	540 lbs 246 kg	480 lbs 219 kg	420 lbs 191 kg	360 lbs 163 kg	300 lbs 137 kg	240 lbs 110 kg	180 lbs 83 kg	120 lbs 55 kg	70 lbs 32 kg	35 lbs 16 kg	OK	OK	OK	OK	OK	High Dilute
38,000G	1139 lbs 517 kg	1076 lbs 490 kg	1013 lbs 460 kg	950 lbs 430 kg	887 lbs 403 kg	823 lbs 378 kg	760 lbs 346 kg	697 lbs 317 kg	633 lbs 289 kg	570 lbs 261 kg	507 lbs 231 kg	443 lbs 201 kg	380 lbs 172 kg	317 lbs 144 kg	253 lbs 117 kg	189 lbs 86 kg	125 lbs 57 kg	75 lbs 34 kg	37 lbs 17 kg	OK	OK	OK	OK	OK	High Dilute
40,000G	1201 lbs 545 kg	1134 lbs 515 kg	1067 lbs 484 kg	1000 lbs 453 kg	933 lbs 424 kg	867 lbs 395 kg	800 lbs 364 kg	733 lbs 333 kg	667 lbs 304 kg	600 lbs 273 kg	533 lbs 243 kg	467 lbs 211 kg	400 lbs 181 kg	333 lbs 152 kg	267 lbs 123 kg	200 lbs 91 kg	133 lbs 60 kg	80 lbs 36 kg	40 lbs 18 kg	OK	OK	OK	OK	OK	High Dilute

To ensure HydroSalt™ working well, swimming pool stabilizer to protect and extend the life of chlorine generator. Use the chart to see how to reach ideal 80 ppm.

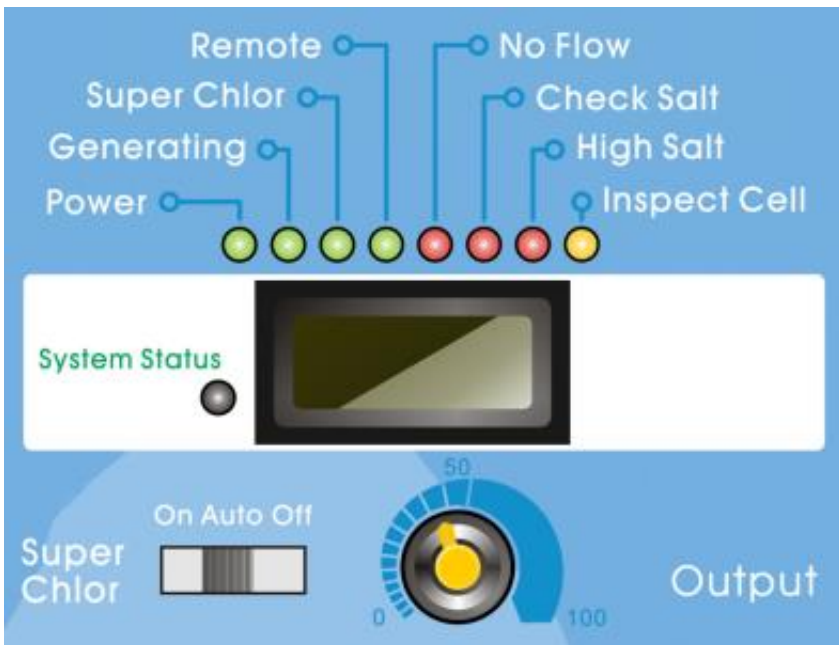
Current Stabilizer Level (ppm)	POUNDS and (kg) of STABILIZER CYANURIC ACID NEEDED FOR 80 PPM								
	0 ppm	10 ppm	20 ppm	30 ppm	40 ppm	50 ppm	60 ppm	70 ppm	80 ppm
14,000G	9.4 lbs	8.2 lbs	7.0 lbs	5.9 lbs	4.7 lbs	3.5 lbs	2.4 lbs	1.2 lbs	0.0
52,500L	4.3 kg	3.7 kg	3.2 kg	2.7 kg	2.1 kg	1.6 kg	1.1 kg	0.54 kg	0.0
16,000G	10.7 lbs	9.4 lbs	8.0 lbs	6.7 lbs	5.4 lbs	4.0 lbs	2.7 lbs	1.4 lbs	0.0
60,000L	4.9 kg	4.3 kg	3.6 kg	3.0 kg	2.4 kg	1.8 kg	1.2 kg	0.64 kg	0.0
18,000G	12.0 lbs	10.5 lbs	9.0 lbs	7.5 lbs	6.0 lbs	4.5 lbs	3.0 lbs	1.5 lbs	0.0
67,500L	5.4 kg	4.8 kg	4.2 kg	3.4 kg	2.7 kg	2.0 kg	1.4 kg	0.68 kg	0.0
20,000G	13.4 lbs	11.7 lbs	10.0 lbs	8.4 lbs	6.7 lbs	5.0 lbs	3.3 lbs	1.7 lbs	0.0
75,000L	6.1 kg	5.3 kg	4.5 kg	3.8 kg	3.0 kg	2.3 kg	1.5 kg	0.77 kg	0.0
22,000G	14.7 lbs	12.9 lbs	11.0 lbs	9.2 lbs	7.4 lbs	5.5 lbs	3.7 lbs	1.8 lbs	0.0
82,500L	6.7 kg	5.9 kg	5.0 kg	4.2 kg	3.3 kg	2.5 kg	1.7 kg	0.82 kg	0.0
24,000G	16.0 lbs	14.0 lbs	12.0 lbs	10.0 lbs	8.0 lbs	6.0 lbs	4.0 lbs	2.0 lbs	0.0
90,000L	7.3 kg	6.4 kg	5.4 kg	4.5 kg	3.6 kg	2.7 kg	1.8 kg	0.91 kg	0.0
26,000G	17.3 lbs	15.2 lbs	13.0 lbs	10.8 lbs	8.7 lbs	6.5 lbs	4.3 lbs	2.2 lbs	0.0
97,500L	7.9 kg	6.9 kg	5.9 kg	4.9 kg	3.9 kg	2.9 kg	2.0 kg	1.0 kg	0.0
28,000G	18.7 lbs	16.4 lbs	14.0 lbs	11.7 lbs	9.3 lbs	7.0 lbs	4.7 lbs	2.3 lbs	0.0
105,000L	8.5 kg	7.4 kg	6.4 kg	5.2 kg	4.2 kg	3.2 kg	2.1 kg	1.1 kg	0.0
30,000G	20.0 lbs	17.2 lbs	15.0 lbs	12.5 lbs	10.0 lbs	7.5 lbs	5.0 lbs	2.5 lbs	0.0
112,500L	9.1 kg	8.0 kg	6.8 kg	5.6 kg	4.5 kg	3.4 kg	2.3 kg	1.2 kg	0.0
32,000G	21.3 lbs	18.7 lbs	16.0 lbs	13.3 lbs	10.7 lbs	8.0 lbs	5.3 lbs	2.7 lbs	0.0
120,000L	9.7 kg	8.5 kg	7.2 kg	6.0 kg	4.8 kg	3.6 kg	2.4 kg	1.2 kg	0.0
34,000G	22.7 lbs	19.8 lbs	17.0 lbs	14.2 lbs	11.3 lbs	8.5 lbs	5.7 lbs	2.8 lbs	0.0
127,500L	10.3 kg	9.0 kg	7.7 kg	6.3 kg	5.1 kg	3.9 kg	2.6 kg	1.3 kg	0.0
36,000G	24.0 lbs	21.0 lbs	18.0 lbs	15.0 lbs	12.0 lbs	9.0 lbs	6.0 lbs	3.0 lbs	0.0
135,000L	10.9 kg	9.5 kg	8.1 kg	6.7 kg	5.4 kg	4.1 kg	2.7 kg	1.3 kg	0.0
38,000G	25.3 lbs	22.2 lbs	19.0 lbs	15.8 lbs	12.7 lbs	9.5 lbs	6.3 lbs	3.2 lbs	0.0
142,500L	11.5 kg	10.0 kg	8.6 kg	7.1 kg	5.7 kg	4.3 kg	2.8 kg	1.4 kg	0.0
40,000G	26.7 lbs	23.3 lbs	20.0 lbs	16.7 lbs	13.3 lbs	10.0 lbs	6.7 lbs	3.3 lbs	0.0
150,000L	12.0 kg	10.5 kg	9.0 kg	7.5 kg	6.0 kg	4.5 kg	3.0 kg	1.5 kg	0.0

OPERATION

By familiarizing yourself with the operation of the HydroSalt™ generator, you can achieve maximum performance for your pool. When chemical levels are in the recommended range, there are FOUR factors that you can control. Filter time each day, amount of salt in the pool, the output of chlorine you set, and stabilizer level in the water will directly impact the amount of chlorine the HydroSalt™ will generate.

When you just begin to set the model, it will take you days to find ideal chlorine output, you can start at a high setting and then turn down.

Indicators and Diagnostic Displays.



POWER: Power illuminate, model is in power.

GENERATION: Model in normal operation, the LED will be steady. If it is flashing, check the pool water chemicals.

SUPER CHLOR: The generator runs at 100% capacity which can produce enough chlorine to clear up moderate cloudiness, but the generator is forced to overwork. It will be automatically switched to the original output after 24- hour SUPER CHLOR operation.

REMOTE: Controlled by remote models (not available)

CHECK CELL: If “Check Cell” LED is flashing and salt level is above 2700ppm, 500hrs cell count down timer is active. Once cleaned, hold down “System Status” button (3-5 seconds) to reset timer for 500hrs.

HIGH SALT: When it is on or flashing, HydroSalt™ is warning that the water salinity is too high to work

CHECK SALT: When it is on or flashing, HydroSalt™ salinity is too low to work.

NO FLOW: When it is on, flow switch will be detected that there is no flow through the cell. If it is flashing, the flow is restored.

DIAGNOSTIC DISPLAY

Average Salt Level (default as 2800ppm)

1. Water Temperature (xx degrees Fahrenheit or Celsius)
2. Cell Voltage ((typically 21.0 to 27.0 volts when chlorine is being generated, otherwise 16-25V)

3. Cell Amperage (typically 2.50 to 7.80 amps when chlorine is being generated, otherwise 0 amps)
4. Desired Output % (“0P” — “100P” depending on knob position)
5. Instant salinity (-xxxx PPM or-x.xx PPT)
6. Product name sent to the display
7. Software revision level
8. Cell type
9. Salt Calibration (E000)
10. End of the loop (-EE)

RECALIBRATING YOUR HydroSalt™

If your water test reading differs from what the system is showing, then you may need to recalibrate the system. The very first time you calibrate your system, the display will read "E000."

Once calibrated, the display will show "E***."

If you've recalibrated your system before, the display will show your last reading. For example, if it shows E800, then the last time we calibrated the system, you added 800PPM into the pool.

1. Move the Super Chlorinate switch to OFF.
2. Hit the "System Status" button nine times until you find "E****" on the display board.
3. Move the "Chlorine Output" dial to 100% then down to 50%. The "E" should begin to flash. When you see the "E" flashing, you can set the dial to 0%-50% or 50%-100%.
4. Press the "System Status" button once to set.
5. You are finished when you see "-AA".

Spring Start-up

When reopening the pool after long term, check all water chemistry before power on the HydroSalt™.

Maintenance

When checking other water chemistry levels, always monitor the salinity level of the swimming pool.

After the system runs for a period of time, it will eventually need to clean the cells due to the scaling of natural minerals.

You will be notified by opening "CHECK CELL" Light. When lit, cleaning the cell with a cleaning stand is better.

Important information: The frequency of cleaning depends on your water chemistry and water saturation index.

For most people, only need to clean a few times per season. Faster mineral accumulation must be long-term high saturation index, chemical imbalance may lead to rapid fouling. Consult Swimming pool professionals.

How to clean the cell?

Important information: If there is severe mineral accumulation, more than one cleaning may be required to dissolve the remaining solids.

After cleaning, carefully inspect the cell plate with bright light. If you see any remaining scale, debris or physical blocked in the salt cell, please repeat the cleaning process as needed. If it is "check cell" come back soon after cleaning,

- 1) Confirm that the salinity is within the range
- 2) Ensure that the cell is fully filled with water
- 3) Verify the cell type setting of the system

Before removing the cell for cleaning or replacement:

- 1) Turn off all power sources of all swimming pool equipment and close the water supply line valve (if applicable).
- 2) Unplug the cell cable connecting to the control box.
- 3) Loosen the threaded ring around the joint at the junction of the pool and the pipes.

To clean the cell with mineral deposits:

- 1) Cleaning stand and adjust the direction of the cell vertically. Place on the ground and stabilize to keep it upright.
- 2) In a separate bucket, mix one part of muriatic acid with four parts of water. Pour this acid solution directly to cell. Make sure that the cleaning water completely covers the components inside the cell.
- 3) Wait for the foaming to stop. Let the solution soak for no more than fifteen minutes.
- 4) Properly dispose of the acid solution, and use a hose to wash away the remaining debris from the pool.
- 5) Look inside the unit and check if there is no debris or scale residue. If necessary, repeat steps 2-4.
- 6) Re install the cell into the PVC return pipe.

Note: If you do not currently have a cleaning cap or cleaning rack, you can fully immerse the cell in a five-gallon bucket.

**ALWAYS POUR ACID INTO WATER-NEVER POUR WATER INTO ACID.
BE SURE TO WEAR PROTECTIVE GLASSES, CLOTHING, AND CHEMICAL
RESISTANT GLOVES.**

INSTALLATION

Before installation, make sure all the water chemistry is in normal range.

Using 2-inch pipes and should be performed by qualified personnel in case there is a 1.5-inch pipe, a reducer can be used to fit the system; be sure to pay attention to any changes.

Check each measurement carefully before cutting.

Mounting the HydroSalt™ Control

Install the control box as close as possible to the pump and filter system. For safety reasons, please do not install the control box within 10 feet of the edge of the pool and comply with all applicable regulations. Verify cell and flow switch cable can reach the control box.

As with most electronic devices, avoid using the controller above the heater or in a tightly enclosed or insulated space can avoid excessive heat accumulation and also avoid being close to acid chemicals, it may damage the control.

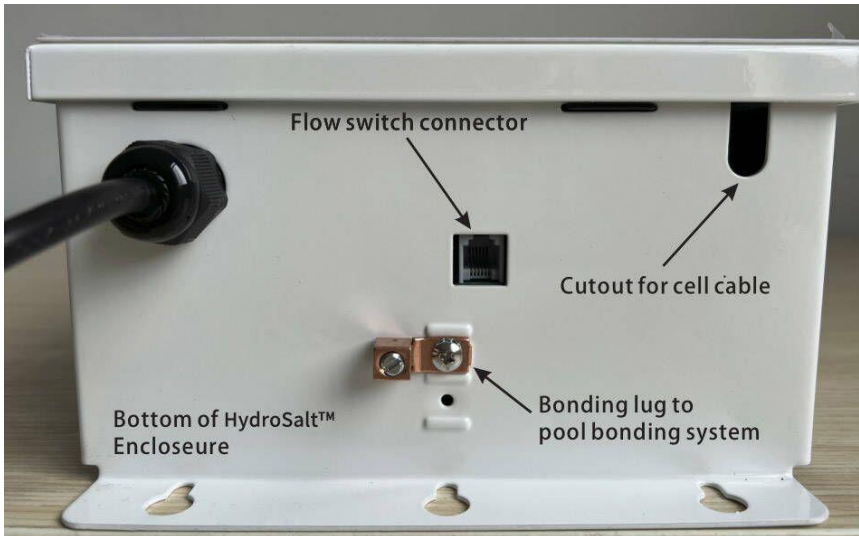
Use screws to fix the mounting bracket of the control box on the wall or vertical bracket comfortably horizontally.

At least 3 feet above the ground. Hang the control on the bracket.

Mounting the Flow Switch, and Cell.

Flow switch, confirm that the arrows on the flow switch (located on the side) point in the same direction of water flow.

The Cell and Flow Switch cables have easy plug-in connectors in the control, the diagram below for the location of these connections.



Plumbing

These instructions apply to 2-inch pipe (typical). Make sure to choose with existing pool pipe size (1.5 inches or 2 inches), and discard other unnecessary joints.

For articulated connections, you will also use the included 2" to 1.5" reducer bushing to accommodate the flow switch. For 1½" installations, be sure to pay attention to any new or other measurements before cutting the tube.

Overview

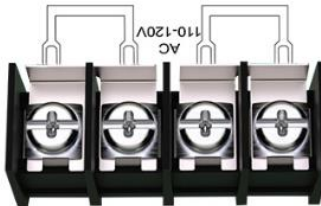
All service should only be attempted by a person with appropriate electrical skills needs to be licensed electrician only,with all equipment disconnected from power. The factory setting is 220-240V,if you need 100-120V,please move the internal jumper as below.

JUMPER CONFIGURATION

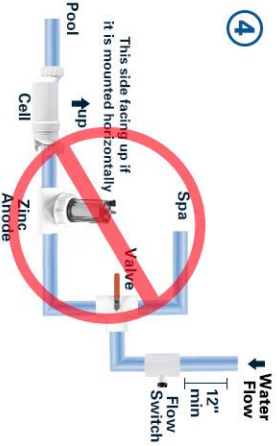
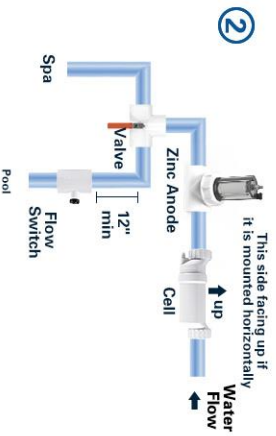
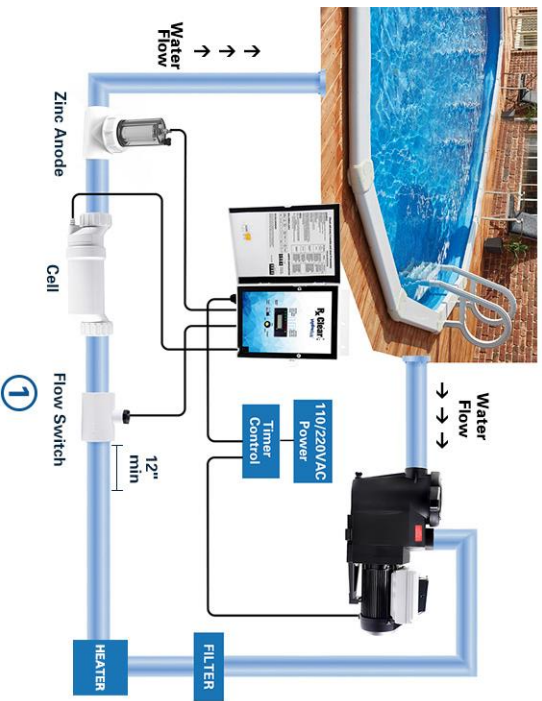


Factory Set
For 220-240V

For 110-120V



Installation mode



TROUBLESHOOTING

Situation	Possible Cause	Suggestion
Start the HydroSalt™ without reaction, no display	Check the power connection	Use test pencil to check if there is electricity
		Change the socket
		Check the wire connection
		Check the overload protection device
	Check the fuse	If fuse blow out, replace it
	If the PCB board just be replaced	Check the connection of the PCB is right or wrong
Check the transformer to see it is good or not		
"NO FLOW" light on	No flow or too little low	Check if pump is connected, if use variable speed pump, speed up the water flow. Keep flow rate at least 25-30 GPM
	Wrong flow direction	Remain the flow direction same as the arrow outside the flow switch
	Flow switch or crystal plug is broken	Change the flow switch

"NO FLOW" light is blinking	Start the machine, it is normal that the light blink because it need time to detect the water flow	Normal
	Variable speed pump, water flow too slow	Change the flow switch
"Inspect Cell" light is flashing	The machine worked around 500 hours	Press the "System Status" button for 3 seconds to stop
"Generating" light is flashing	Check the temperature in the swimming pool is whether too high or too low	Check the temperature, water temp should be above 55°F, less than 122°F
"Check Salt" and "Inspect Cell" light on	Check cell type	Match the right cell type with the program
	If use variable speed pump, water flow too slow	Speed up the water flow
	Actual Salinity is less than 2300PPM	Add salt, ideal salt level 3500-3600ppm
	Cell is blocked	Clean the cell
	Temperature sensor is broken	If not, replace flow switch with a temperature sensor
	PCB or cell may is broken	Contact distributor

"Check Salt" light is flashing	Check cell type	Match the right cell type with the program
	Actual Salinity is between 2300-2500PPM	Add salt, ideal salt level 3500-3600ppm
	Cell is blocked	Clean the cell
"High Salt" light blinking	Check cell type	Match the right cell type with the program
	Actual Salinity is between 4500-6400PPM	Add water, ideal salt level 3500-3600ppm
	Temperature sensor is broken	If not, replace flow switch with a temperature sensor
	The cell plates are short-circuit because they are not fixed in the housing	Change the cell
	PCB is broken	Change the PCB
"High Salt" and "Inspect cell" light is on	Check cell type	Match the right cell type with the program
	Actual Salinity is more than 6500PPM	Add water, ideal salt level 3500-3600ppm
	Temperature sensor is broken	If not, replace flow switch with a temperature sensor
	The cell plates are short-circuit because they are not fixed in the housing	Change the cell
	PCB is broken	Change the PCB

Low or no Chlorine in pool	The water temp too high or too cold	Check the temperature, water temp should be above 55°F, less than 122°F
	PH not normal, the water in alkalinity will influence the chlorine	Keep PH 7.2-7.7
	Bad water quality has large quantity of microorganism or germ will consume the chlorine	Change good quality water
	With chemistry, like Chemical Fertilizers and Pesticides	Ensure all chemicals on page.6 are within range

REPLACEMENT PART LIST

Item No.	Part description



Two (2) Year Limited Warranty

RxClear[™] (*HydroSalt*[™]) is warranted to be free from defects in materials and workmanship, under normal use and non-commercial application, for a period of Two (2) years from date of purchase, per the schedule below. To obtain service, contact the authorized dealer from which the unit was purchased. Proof of purchase may be required. This limited warranty is extended exclusively to the original purchaser of the *HydroSalt*[™] system and is non-transferable. *HydroSalt*[™] is intended for residential pool use and any commercial application voids all warranties.

Two (2) year warranty for power cell and generating cell.

One (1) year warranty on components.

Exclusions from warranty coverage:

- Problems arising from failure to maintain proper water chemistry levels, per manufacturer's recommendations, as outlined in the Owner's Manual.
- Problems arising from failure to use *HydroSalt*[™] in accordance with manufacturer's recommendations, as outlined in the Owner's Manual.
- Problems resulting from tampering, accident, electrical surges, abuse, neglect, unauthorized or unqualified repairs, product alteration, fire, flood, freeze damage, acts of nature.
- Damage or degrading of concrete, natural stone, wood or synthetic surfaces adjacent to the swimming pool or spa.
- Problems or damages incurred due to improper installation and/or improper electrical supply.

Millstream Distribution LLC is not responsible for any labor charges, loss of

water or any damages that may occur. The purchaser is responsible for all shipping and handling fees for the replacement and/or replacement parts covered by this warranty.

This Warranty provides the exclusive remedy for any damages, including direct, consequential, special or incidental loss or damage. This warranty gives you specific legal rights. You may have other rights, which may vary from state to state.

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