maytronics | ozoneSwim®

1200i, 1000, 2000, 3000

USER MANUAL

v2

Important Safety Information

This manual contains important information about the operation and safe use of this product.

READ AND FOLLOW ALL INSTRUCTIONS. IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

WARNING
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure they do not play with the appliance.

WARNING
Do not open the Electronic Control Unit. There is no user-serviceable part in the control box. Repairs are only to be made by an Ozone Swim qualified technician. If the supply cord is damaged, it shall only be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard.

WARNING
Do not operate the electrolytic cell without proper flow or water circulation as this may cause damage to the unit.

CAUTION
This unit is not intended for use with temporary or fold-able/storable pools. All pipe-work associated with this system is intended to be fixed and should remain intact following installation by qualified personnel.

Ozone Swim Exceptional Pool Purification

Congratulations on your choice of an Ozone Swim pool purification system for your swimming pool. Ozone Swim is designed for easy and simplistic operation and maintenance.

Please take the time to read these instructions thoroughly before attempting to operate your unit. Should you require additional information or further assistance, do not hesitate to contact your local Ozone Swim representative or visit our website www.ozoneswim.com.au.

Pools with a Spa

If you are using this system for a pool with an integrated spa, you may require a de-gas vessel if the pool return goes to the spa first. Alternately, your installer may fit a flow switch to idle the system while the spa is in use.

Equipment Below Water Level

For installations where the filter/chlorination system is below the level of the pool, a drain valve must be fitted to keep the ozone outlet line dry should any water backflow through the line. This drain valve is available from Maytronics.

 Warnings: These products must be installed by a qualified installer. These products may not perform as expected if installed incorrectly. Water quality needs to be regularly tested. Please consult your pool supplier for further details about water testing procedures. Failure to correctly connect will result in damage to the Ozone Cell which will void the warranty. Ensure flow is correct. Ensure that you have dry hands when operating these products. These products are designed and tested to conform to AS/NZS. 3136 - AS/NZS 3100. To comply with this standard the chlorinator must not be installed in the pool zone. Trademarks: Throughout this document trademark names may have been used. Rather than placing a trademark symbol in every occurrence of a trademark name, we state that we are using the names only in an editorial fashion and to the benefit of the trademark owner with no intention of infringement of the trademark. Notice of Liability: While every effort has been taken to ensure the accuracy of this document, neither Maytronics Australia nor any of its official representative shall have any liability to any person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by the information contained in this guide. Should you find any error or inconsistency, please notify us accordingly. Maytronics Australia reserves the right to make changes to features and specifications at any time without prior notification in the interest of ongoing development and improvement.

Not for use in commercial pools. Use in commercial pools may result in warranty being invalidated. For use in commercial applications, please contact Maytronics Australia on 1300 693 657.

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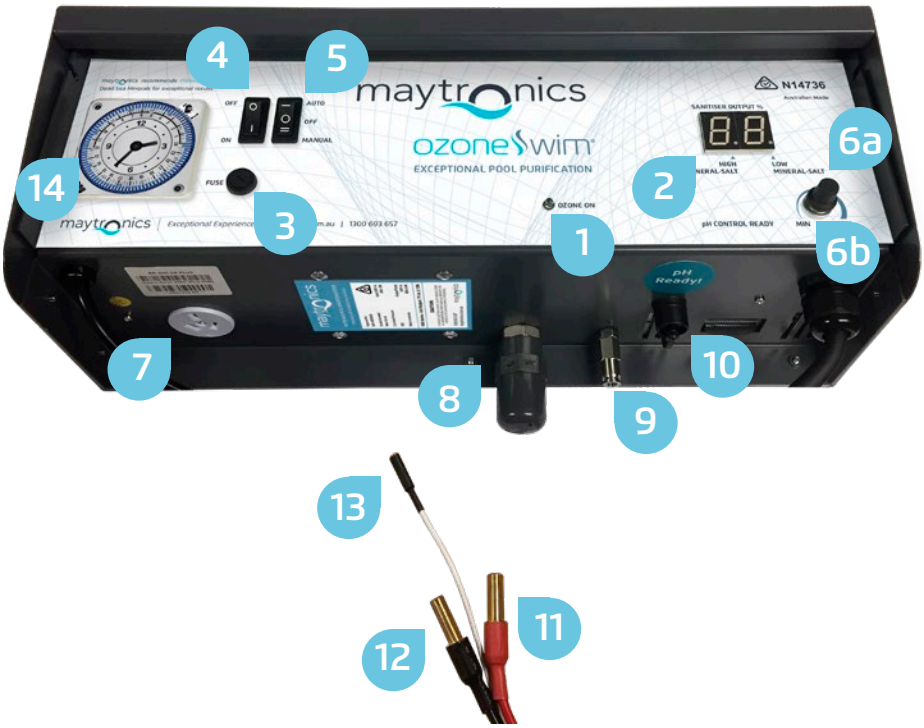
Control Unit Features

1200i unit

1	Ozone Run Indicator	5	Ozone Output
2	Fuse	6	Positive Cell Lead (Red)
3	Master Switch	7	Negative Cell Lead (Black)
4	Air Filter	8	Gas Sensor Connector (White)

***** 1200i does not have a chlorinator. The consumer needs an existing chlorinator.

1000, 2000, 3000 units



1	Ozone Run Indicator	8	Air Filter
2	Chlorine Cell Output Display	9	Ozone Output
3	Fuse	10	pH Drive Socket (12V plug)
4	Sanitation Switch	11	Positive Cell Lead (Red)
5	Master Switch	12	Negative Cell Lead (Black)
6a	Chlorine Cell Output Control (0-99)	13	Gas Sensor Connector (White)
6b	Push menu for e-Series - Dosage menu (d0-d9 & Pr- Prime)	14	Timer
7	Pump Outlet Socket		

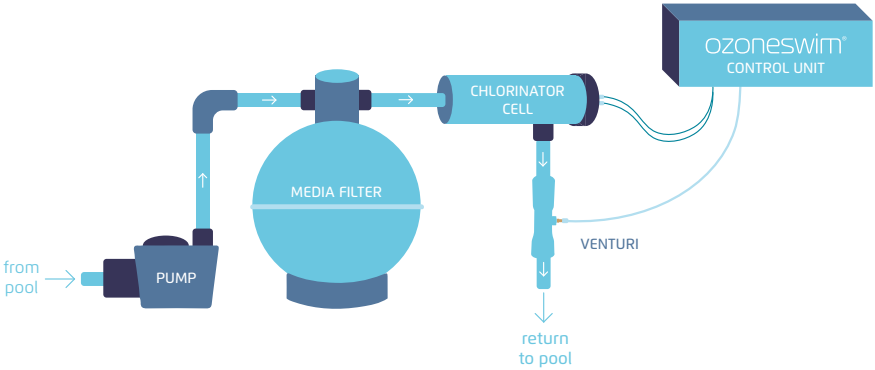
***** 1000, 2000 and 3000 units comes with chlorinator.

INSTALLATION

Installation Guide

1200i control units

These products must be installed by a qualified installer



Note: Install the Ozone Swim control unit a minimum of 900mm above ground level in an area protected from the elements to eliminate possible damage from severe weather conditions.

Step 1:
Mount Ozone Swim control unit a maximum of 1.5 metres from the filter. Fit two screws into control unit wall bracket and hang control unit.

Step 2:
Plumb ozone injection manifold after chlorine cell on the return to the pool; ensuring the direction of the ozone injection manifold is correct (arrow indicated direction of water flow). The manifold should be last on the return line, after all other equipment is installed.

Step 3:
Leave plumbing to cure for a 24 hour period for best results.

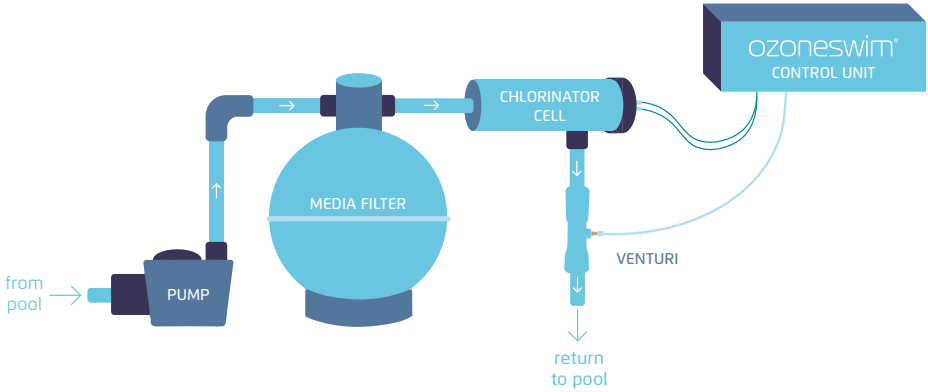
Step 4:
Connect supplied Teflon tubing onto the ozone injection manifold stainless steel fittings and the Ozone Swim Control Unit stainless steel fittings by simply screwing on each end. ***(Do not over tighten).*** *See label on Teflon tubing to ensure the correct* stainless steel *fitting is on the injection manifold and control unit which ensures correct direction of check valve.*

Step 5:
Plug the Ozone Swim power cord into chemical system (salt chlorinator / dosing system). Pool pump can be plugged into the under casing of Ozone Swim control unit. Switch unit on. The ozone unit will be controlled by the existing Chlorinator / Chemical controller.

Note: If using a chlorinator, always ensure your pump is running, never allow your chlorinator to operate without the pump running.

1000, 2000, 3000 control units

These products must be installed by a qualified installer



Note: If this system is installed below water level, ensure you have a drain valve fitted to the ozone outlet.

Step 1:
Mount Ozone Swim control unit a maximum of 1.5 meters from the filter and chlorine cell. Fit two screws 380mm apart (screws supplied for control unit). Install the Ozone Swim control unit a minimum of 900mm above ground level in an area protected from the elements to eliminate possible damage from severe weather conditions. (If system is below water level, install drain valve as per instructions).

Step 2:
Plumb chlorine cell onto return pipe after filter, ensuring there is a gas trap (see images below).

Step 3:
Plumb Ozone injector manifold after chlorine cell on the return of the pool ensuring the direction of the ozone injector manifold is correct. The manifold should be the last on the return line, after all other equipment is installed.

Step 4:
Connect the chlorine cell cable to the three colour coded terminals located on chlorine cell. (Terminals need to be slightly crimped for snug fit).

Step 5:
Ensure appropriate salt/mineral levels are achieved (3500 - 4500ppm) and dissolved. (Confirm with builder/supplier that chemicals can be added to the pool).

Step 6:
Leave plumbing to cure for a 24-hour period for best results.

Step 7:
Set timer on Ozone Swim system to recommended run time for pool size and environment (refer to page 16).

Step 8:
Plug pump power cable into Ozone Swim unit below timer. Turn unit ON to manual. Ozone light should be on. Check all plumbing for visible leaks.

Step 9:
Adjust the Chlorine cell output to recommended output.

> **Note:** We recommend running your system at maximum output for the first week of operation.

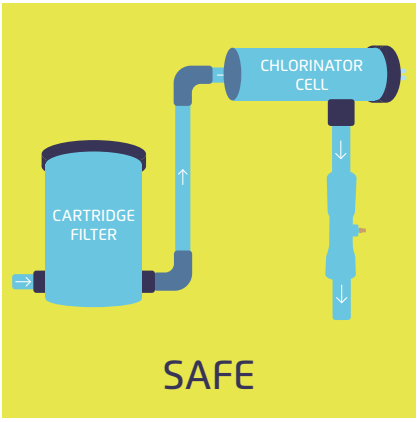
Step 10:
Set the sanitation switch to the Auto position.

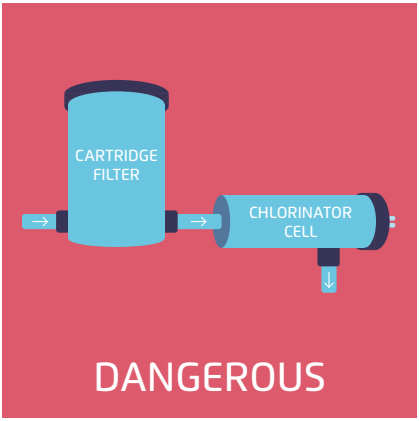
Important Notes

Chlorinator Cell Housing Installation

The Ozone Swim cell housing must be plumbed into the return line of the pool filter system after the filter and any diversion valves.

In situations where a heater is incorporated, the Ozone Swim cell housing must be installed after the heater. Should a solar heating system be installed, the housing must be plumbed after the solar diverters and after the water exits the solar system and re-joins the main stream pool return line. Ensure there is a gas trap by always installing the chlorinator cell at a higher level than the filter (see below).



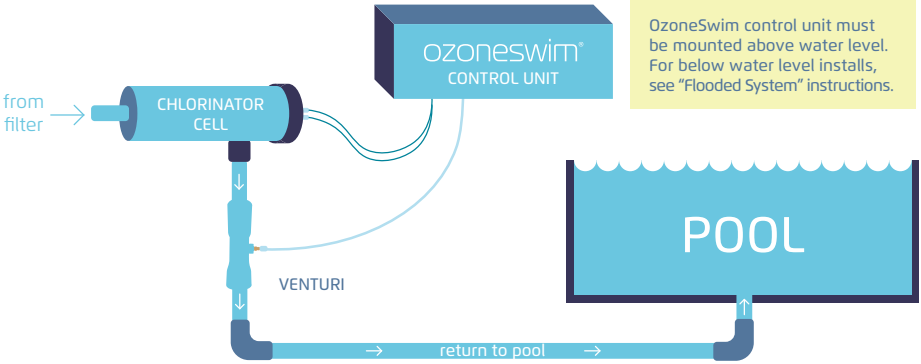


Pump Outlet Socket

A 240 volt pump output power socket is supplied and located on the left-hand underside of the Ozone Swim control unit. Your pool pump power supply lead should be plugged into the socket so that when the time clock switches at the designated times both the Ozone Swim and the pump will activate in unison.

The pump socket is designed to operate a single pool pump of maximum 1.5 hp (horse power) only. On rare occasions, a 2hp pump will be used as an integrated solution for in-floor and pool filtration. Do not attempt to operate any equipment other than your pool pump from this socket as damage might occur to the Ozone Swim control unit that is not covered under warranty.

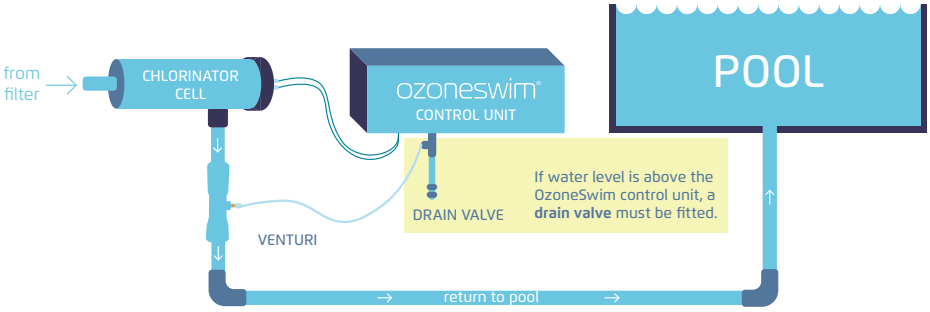
Standard "Non-Flooded" Installation*



* Diagram is for illustration purposes only. Does not include all required swimming pool equipment.

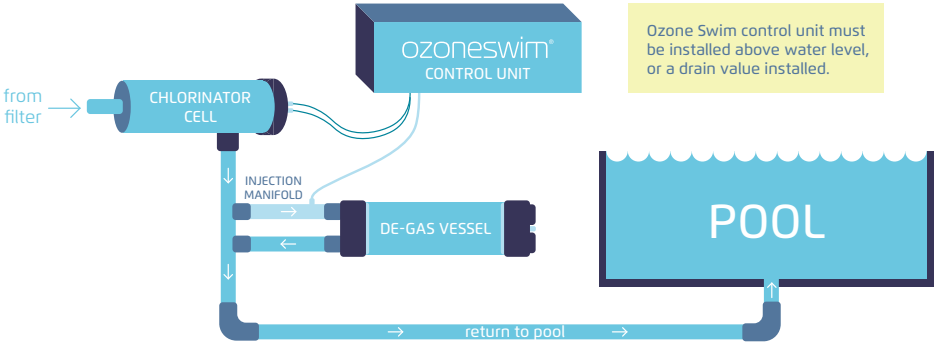
Flooded Installation*

For installations where control box is below water level



* Diagram is for illustration purposes only. Does not include all required swimming pool equipment.

Installation with De-Gas Chamber*



* Diagram is for illustration purposes only. Does not include all required swimming pool equipment.

OPERATIONS

Operating Instructions

Salt/ Mineral Requirements

All Ozone Swim units require 3,500-4,500ppm salt/mineral levels. Using only refined swimming pool salt or minerals, add the desired quantity to the swimming pool water. To assist in the rapid dissolving and mixing, sweep or brush the solids until they are fully dissolved.

Note: Undissolved salt may result in staining of your pool's interior walls.

Achieving the correct salt/mineral levels

For best results, the salt concentration in the pool water is required to be within an average range of approximately 3,500 to 4,500ppm. Check salt/ mineral supplier's guide for achieving correct ppm.

Existing Pools

To establish the salt level in an existing pool, take a water sample to your local pool shop for testing, they will tell you the current salt/mineral levels (TDS) and advise the correct course of action required.

New Pools

- It is essential that the new pool is balanced correctly. Consult your pool builder on how do this or Maytronics can provide information to do this.
- You can find the water chemistry parameters on p. 21 of this manual.

Sanitation Switch

Off The system will not operate.
Auto The time clock will automatically switch your pool equipment on or off at your designated times.
Manual The timer is by-passed, the system will operate all functions permanently.

- Set the master switch to the “on” position.
- Set the sanitation switch to “manual” position to turn the unit on.
- Once the salt/minerals have been added and dissolved turn the cell production dial to the required position based on the season and the size of the pool (set to max output to start with and adjust down as required).
- Set the timer (see setting the timer) to run for the recommended times (4-6 hours for winter / 8-10 hours for summer), switch the system to auto and the unit will now be controlled by the timer.
- To set current time, rotate minute hand clockwise until arrow head aligns with correct time.

Note: This will need to be reset whenever the power is disconnected from the unit and for daylight saving time changes.

Note: Only rotate clockwise to set. Rotating incorrectly will damage the time clock.

- To set ON/OFF times, move required tappets to appropriate position. Inner position for OFF and outer position for ON.

Note: proper operation requires that the appropriate switch settings below are enabled.

- Each of the tappets on outer edge of the timer represents 15-minute intervals.

Note: If you require your Ozone Swim to be connected to an off-peak tariff we recommend the use of an appropriate battery backup time clock for that purpose.

Checking Chlorination Output

The chlorine cell output controller regulates the amount of chlorine production relevant to the position it has been set to. By adjusting the cell output controller clockwise, you increase chlorine production and by turning anti clockwise you reduce production. Do not attempt to turn the controller beyond its stopping positions as this could cause damage to your unit that is not covered by warranty.

To ensure your Chlorinator is working correctly, follow the steps below:

- Ensure the cell production is at maximum.
- With the unit running take a sample of water from the skimmer box and conduct a chlorine test, note the result.
- Take a sample of water directly in front of the return to the pool outlet and conduct a chlorine test, note the result.
- If the latter is higher in chlorine than the first test, your Ozone Swim is efficiently producing chlorine (if not please see TROUBLESHOOTING).

Checking Ozone Output

To ensure your Ozone Swim ozone production unit is working follow the steps below:

- Check that the green ozone light is on.
- Check that there is suction at the air filter on the bottom of the power pack.
- Check there is bubbles at the return jets when the system is running.

Chlorine Cell Output Display Definitions (1000, 2000 & 3000 series only)

Your Ozone Swim unit is fitted with a digital display. During operation of your Ozone Swim unit the display will illuminate relevant to the degree at which the chlorine output control has been adjusted. You can increase or decrease chlorine output to suit your pool's requirements. As you increase the output (by turning the control knob clockwise), the display will indicate **% of full production capacity / the Amps** reading to the cell. You have full control of chlorine production merely by adjusting the chlorine controller and illuminating the number of lights to satisfy your chlorine demand.

The Ozone Swim also has on board diagnostics to indicate any issues with the system (see table below for definitions).

1-xx	A value in the range of 1-15, 25 or 30 indicates the Amperage current being applied to the cell.
OF	Cell output control knob is turned off, the Ozone Swim's chlorination has been manually switched off.
dg	Automatic cleaning cycle beginning, the self-cleaning function is beginning. This is only displayed for a short period.
Pb	(Flashing) There is insufficient water flow through the cell to produce. if this persists, please refer to troubleshooting.
OL	(Flashing) overload condition (see troubleshooting).

MAINTENANCE

Maintenance

Replace the check valve in the Ozone

Every 12 months or as required

The Teflon check valve prevents water from returning to the system. Flooded systems (below water level) require a water trap (drain valve) to protect the system in the event that the check valve fails. To replace the check valve simply pull the delivery line off the check valve at both ends and replace with new check valve.

Ozone Filter Replacement

Regularly (every 3-6 months)

Replace the Ozone air filter located under the control unit. To remove the filter turn it anticlockwise, remove the old cotton wool and replace with half a standard cotton wool ball. Only hand tighten the filter when refitting.

Electrode (Cell) Cleaning

Although you have a reverse cycle (automatic cell cleaning) system, it is recommended from time to time that the cell be checked for any accumulation of calcium or other deposits that may have built up. We recommend cleaning the cell once or twice a year subject to your pool's application and location.

Water Chemistry (Balancing Information)

Regular water testing must be performed to ensure the water is within the recommended ranges (see below):

Chlorine	1-3 ppm
pH	7.2 - 7.6
Total Alkalinity	80 - 120 ppm
Hardness	150 - 350 ppm
Cyanuric Acid (CA)	30 - 50 ppm
Phosphates	0 - 300 ppm (or as per chlorinator manufacturer's instructions)
TDS	3500 - 4500 ppm

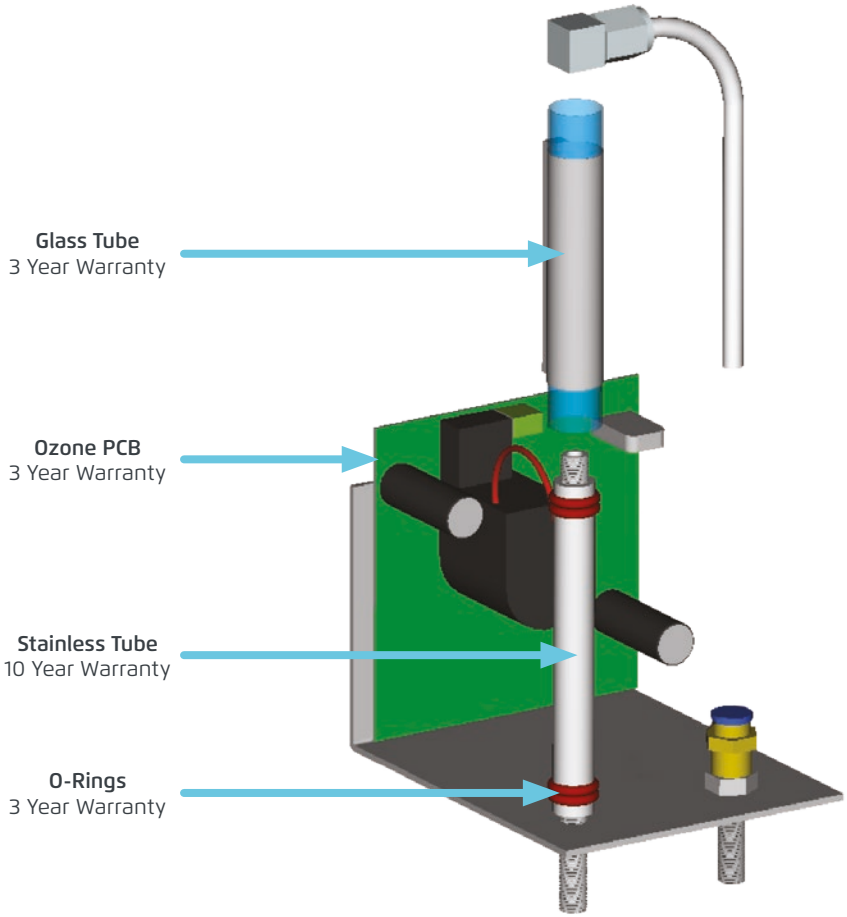
WARRANTY

Warranty Information

Ozone Swim systems have:

- 3 year parts replacement warranty (1 YEAR IN-FIELD) on the control box, electronics and seals.
- 5 year pro-rata warranty of chlorinator cell. (1000, 2000, 3000 series only).
- 10 year (1 YEAR IN-FIELD) warranty on the ozone production corona discharge unit.

Activate your Ozone Swim warranty by registering at:
maytronics.com.au/support/registration



TROUBLESHOOTING

Troubleshooting

Fault	Potential Causes	Action Required
Cell output display flashing "Pb" continuously (no water flow)	• Pump turned off or disconnected • Valves closed • Gas sensor wire at cell disconnected	• Ensure pump is on • Ensure correct valves are open • Reconnect sensor wire at cell
Low salt indicator flashing	• Salt level in pool has dropped too low • Pool water temperature is low • Cell has calcified • Cell has failed	• Take sample of water to pool shop and check salt level – add salt as recommended • Add salt and turn chlorinator output down until the water is warmer • Ensure cell is clean
High Salt indicator flashing	• Too much salt has been added to the pool	• Take a sample to your local pool shop to confirm salt levels and remove and replace water as required
No display	• No mains power • Ozone Swim plug removed from power point • Ozone Swim fuse blown • Unit is turned off	• Ensure there is mains power available • Ensure Ozone Swim is plugged into power point and its turned on • Check fuse condition and call technician if blown • Ensure manual mode and sanitation are switched on
Low/No Chlorine	• Insufficient run times • Incorrect cell production setting • Low/high salt levels • Loose connections at the cell (red & black) • Water chemistry	• Adjust run times to allow more production • Increase cell production • Check/adjust salt levels to be within required range • Disconnect leads, then reconnect leads firmly • Take water sample to pool shop
No Ozone light	• Water Chemistry Issue • LED failed • Ozone Module Failed	• Take water sample to Pool Shop • Call Ozone Swim technician
Cell output flashing "OL"	• Possible short circuit in cell (debris) • Extremely high salt levels	• Remove cell and check for any debris and clean • Check and adjust salt levels
Water dripping out of drain valve (Flooded systems)	• Teflon Check valve has failed	• Replace Teflon Check valve

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