

enviro^{swim}

fresh water swimming pools

ES-3 FRESH WATER SANITISING SYSTEM



USER MANUAL

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1. IMPORTANT SAFETY & WARNING INFORMATION

1.1 Important Warnings

- This manual should be given to the operator and or the owner of this equipment.
- This equipment shall be installed according to AS/NZS 3000 wiring rules and outside the pool zone. Please refer to the ES-3 installation manual.
- The Electronic Control Unit should not be opened by an unauthorised person, there is a danger of electrical shock if opened and any warranty will be invalidated.
- Do not operate the electrolytic cell without proper flow or water circulation. A buildup of gasses will result in a hazardous condition. The system should never operate without the pool pump operating.

1.2 Important Safety Information

- This Equipment is not intended for use by persons, including children with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, unless they are supervised or given instruction concerning the safe use of the equipment by a person responsible for their safety. Children should be supervised to ensure they do not play with the equipment.
- When adding chemicals to your pool always dilute in a bucket of water first. **ALWAYS ADD CHEMICALS TO WATER. Never add water to chemicals.**

1.3 Helpful Hints & Recommendations

- Read and keep your manual in a safe place. For more information visit envirowimpooolschool.com.
- If using a VARIABLE SPEED PUMP, please ensure there is adequate water flow and the Oxidiser/Ionisation Chamber are filled with water at all times when in use.
- When a large number of swimmers are using the pool switch the unit on to manual if the system is not already operating.
- Ensure your copper levels are between **0.2-0.4ppm**. Check weekly and only check your copper levels when your pH is **7.4** or below. Please use the copper test kit supplied with your ES-3 system.
- Maintain TDS (Total Dissolved Solids) level between **1,000 – 1,500ppm** for a true Fresh Water Experience, optimum performance and longevity of Oxidiser Cell Plates.

Do not use Stabiliser (Cyanuric Acid)

Do not use Bromine Compounds

Do not use Aluminium based or any other Flocculants

Do not use Soda Ash (Sodium Carbonate)

Do not use granular Chlorine or tablets

Do not use forms of Volcanic Filtration Media (Zeolite)

Do not put un-dissolved chemicals into your pool

Clean your pool filter, skimmer and pump lint basket regularly.

2. GENERAL OVERVIEW

Thank you and congratulations on purchasing your Enviroswim ES-3 Fresh Water Sanitiser. Please take the time to read the entire manual before operating your new system. Your system must be installed and operated as per the ES-3 User & Installation manuals. The world's safest and most effective sanitiser.

While every effort has been made to ensure that the information supplied in this manual is accurate and complete, no liability will be accepted for any errors or omissions. Enviroswim reserves the right to change the specifications of hardware and or software or documentation at any time without prior notice.

The ES-3 sanitisers residential swimming pools up to and including 100,000 L.

The ES-3 is designed to operate **1 hour per 10,000 L** of water per day

Ensure pH levels are not above 7.5 for extended periods of time. If you test copper levels when your pH is high you will not get an accurate reading.

The ES-3 is not deigned to chemically maintain the balance of your pool water. Please ensure you balance and check your water regularly and please ensure you check your copper and pH level every 7 to 14 days and adjust where necessary.

During periods of intense use or when your pool water has been significantly diluted or contamination more frequent testing and management may be required.

Please note the copper and silver electrodes are sacrificial and will be required to be replaced from time to time. The rate of usage of these electrodes will vary depending on the size of your pool, bather load and the environment. For an average residential size pool (40,000L) with normal environment influences, rods will typically last 2 years.

NOTE: NEVER STORE CHEMICALS IN THE VICINITY OF YOUR ENVIROSWIM CONTROL BOX

Thank you again for choosing the world's leading swimming pool sanitiser.

For further information please visit our support website.

enviroswimpoolschool.com

For purchasing consumables please visit our online store.

www.enviroswim.com/buy-now

Happy Fresh Water Swimming from the Enviroswim Team.

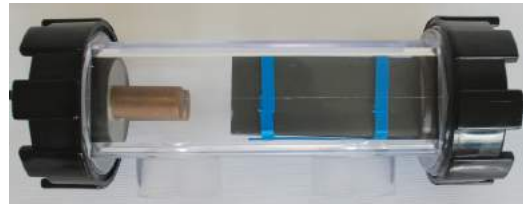
2. GENERAL OVERVIEW cont.

2.1 Contents

1 x ES-3 Electronic Control Box



1 x Complete Oxidiser/Ioniser Wet Cell Housing



1 x Sonic Chamber



1 x Enviroswim Copper test kit



4 x 50/40 mm reducing bushes

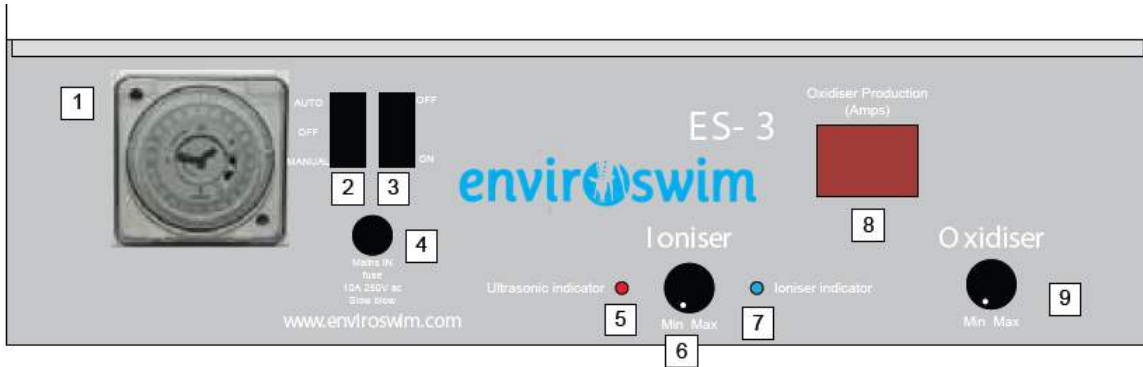


Documentation

- 1 x Installation Manual
- 1 x Users Manual
- 1 x Commissioning Instruction
- 1 x Chemical Storage Instruction

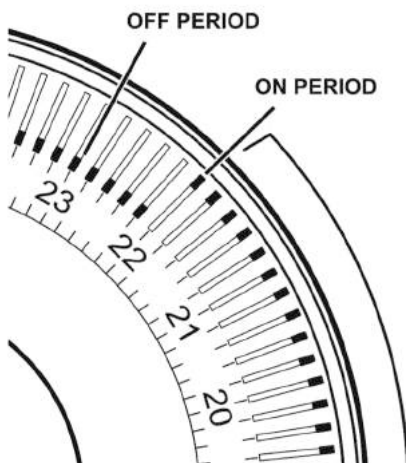
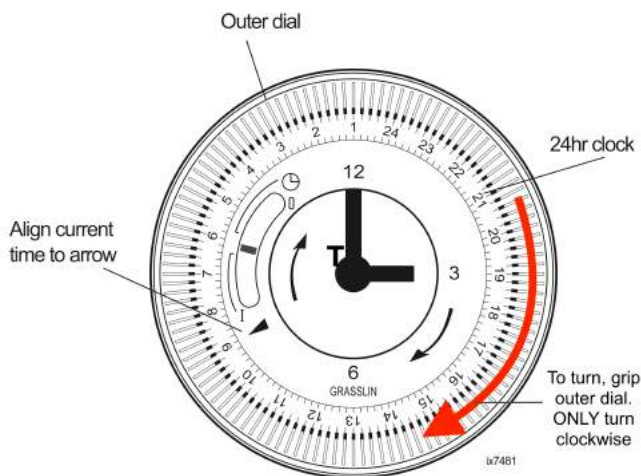
3. SYSTEM OPERATION

3.1 Electronic Control Unit



- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Time clock 2. OFF/MANUAL/AUTO Switch 3. ON/OFF – Enviroswim Functions Switch 4. Fuse 5. Ultra Sonic Operation Indicator | <ol style="list-style-type: none"> 6. Ioniser Timer Control 7. Ioniser Polarity Indicator 8. Oxidiser Amperage Display 9. Oxidiser Output Control |
|--|---|

3.1.1 Time Clock



If using the Timer,

The outer dial should be set to the current time. Rotate the dial slowly in a clockwise direction until the correct hour is aligned with the arrow printed on the dial.

Note the outer dial is printed with the 24hr clock

8.00am = 8 on the dial

8.00pm = 20 on the dial

Clock hands will allow for fine adjustment of the current time setting of the dial.

DO NOT ATTEMPT TO ROTATE THE DIAL IN AN ANTI-CLOCKWISE DIRECTION

PROGRAMMING SWITCHING TIMES

Set tappets to outer edge for ON periods and set tappets to inner edge for OFF periods

Multiple ON/OFF periods are able to be set if required

3. SYSTEM OPERATION cont.

3.1.2 OFF/MANUAL/AUTO Switch

- The OFF/MANUAL/AUTO
- OFF position turns all functions including the TIME CLOCK off. Time clock will still maintain time.
- AUTO Turns the TIME CLOCK function on.
- MANUAL Turns the pump and Enviroswim processes on bypassing the TIME CLOCK.

3.1.3 ON/OFF Switch

- The ON/OFF switch turns the 3 Enviroswim processes OFF or ON.
- For your system to operate correctly this should be in the ON position.
- In the OFF position the above AUTO function will still turn your pump on via the TIME CLOCK
- In the OFF position the above MANUAL function will still turn your pump on and off.
- Use for backwashing etc.

3.1.4 Fuse

- Only replace with 240v 10A slow blow

3.1.5 Ultra Sonic Indicator LED

- LED cycles through several colours indicating normal operation

3.1.6 Ioniser Timer Control

- This control is time based.
- Every pool has its own demand for sanitisation. Most pools start by setting their Ioniser setting 6,7 or 8, once the commissioning process has been completed.
- Settings “MAX-Start up” is for commissioning your Enviroswim system. This should only be used to build up a residual of copper/silver when your pool is first commissioned, your pool has been drained or you have No copper present in your pool water
- Copper levels can be increased 2 ways;
 1. Increase the run time.
 2. Increase Ioniser setting.

SETTING	% RUNTIME
0	OFF
1	2
2	3
3	7
4	10
5	13
6	17
7	20
8	23
9	37
10	50
MAX-Start up	100

3. SYSTEM OPERATION cont.

3.1.7 Ioniser Polarity Indicator

- Settings “MAX-Start up” is for commissioning your Enviroswim system. This should only be used to build up a residual of copper/silver when your pool has been commissioned, your pool has been drained or you have No copper present in your pool water.
- This LED indicator changes colour from red to green every 6 minutes of run time. This assists cleaning and even wear and tear on your electrodes.
- This LED is not always on even when the system is running. It is only on for a percentage of the run time.

3.1.8 Oxidiser Digital Display

- This display shows the status of the oxidiser plates and conductivity of your pool water and has a range of values.

Normal Operation

- **SU** – Indicates the Unit is in Start Up-Self Check mode, this mode last 10 second when the unit starts up.
- **OF** – The current being applied to the Oxidiser Plates is negligible or non-existent. The unit displays OFF when the Oxidiser Control knob is sent to MIN.
- **d6** - System in De-gas Mode. The system reverses polarity every 24 hours of run time. The d6 will display for a few minutes when in degas mode.
- **01-15** – Indicates Amperage current being applied to the Oxidiser plates. This is limited to 15 amps. For Swimming pools this should display 15 amps when on the Oxidiser knob is in the MAX position.
- PLEASE FIND FURTHER INFORMATION IN THE TROUBLE SHOOTING SECTION.

3.1.9 Oxidiser Output Control

- This control is used to adjust the current being applied to the oxidiser plates. In normal pool operating circumstance this should be set to MAX. If a pool blanket is used for extended periods of time the output may need to be reduced, to assist with reducing oxidiser build up. If using a blanket please remove the blanket once a week to let gases from your pool water escape to atmosphere.
- For spa use this output may need to be reduced depending on the specific spa usage and set up.
- Extended run times and/or high salt levels and/or not removing your pool blanket frequently may result in excessive chlorine levels. Please reduce oxidiser out put.

4. ENVIROSWIM PARAMATERS & WATER BALANCE

4.1 Envirosxim Operating Parameters

- Total Dissolved Solids (TDS) 1,000 – 1,500ppm.
- Copper 0.2 – 0.4ppm
- Run times 1 hour per 10,000L of water per day – swimming season
If using a variable speed pump this may need to be increased.
Reduce run time by 50% or more once swimming season has finished.
- Oxidiser level 0.5ppm Maximum
The Oxidiser level can be tested using a standard pool chlorine test kit.
Note: A chlorine test kit reads the "Redox" or "Oxidiser potential" of the water, which may be a combination of chlorine, oxygen and other Oxidisers present in the water.

4.2 Water Balance Standards

All swimming pools need to have the water balanced to protect the interior of your pool, bather comfort and to maintain effectiveness of any sanitiser.

- pH 7.0 -7.4
- Total Alkalinity 60-150ppm
- Calcium Hardness 170 -250ppm

IMPORTANT – HIGH pH EFFECTS THE EFFICACY OF ANY SANITISER. E.g. Chlorine is only 3% effective at a pH of 8.0 compared to 75% effective at a pH of 7.0.

A HIGH pH will also accelerate fibreglass gelcoat fading

Further information on water balance can be found at the below Industry Association Link.

<http://www.spasa.membes3.com.au/public/20/files/Water%20Balance.pdf>

5. INITIAL START UP - COMMISSIONING

5.1 New Pool Start Up or Pool Refills

Once the pool has been filled with water the TDS of the water needs to be raised to 1,000-1,500ppm. Ideal for start up is 1,200ppm.

This is **NOT A SALT WATER CHLORINATOR** do not put excessive amounts of salt in your pool.

There will be a minimal amount of TDS in municipal water and this varies from location to location.

Please ensure you have installed the Enviroswim ES-3 as per the installation manual

1. Fill the pool with water
2. Check and adjust Total Alkalinity, pH and Calcium Hardness as per standard water balance.
 - Total Alkalinity 60 -150ppm
 - pH 7.0-7.2 (Fibreglass/Vinyl)
7.2-7.4 (Concrete)
 - Calcium Hardness 170-250ppm

Note, Never add Calcium Harness Increase and Alkalinity Increaser on the same day.

3. Ensure the system is plumbed as per Installation Manual.
4. Turn the ON/OFF switch to **ON**.
5. Turn the AUTO/OFF/MANUAL switch to **MANUAL**
6. Turn the Oxidiser Output Control to **MAX**
 - The Oxidiser Display should read "15" at all times.
 - If the Oxidiser Display reads less the 15 add 5Kg of salt per 10,000L to raise the TDS by approx. 500ppm.
7. Turn the Ioniser Control to **MAX-Start up**
8. Run the system **1 hour per 1,000L** to enable residual sanitisers to build up. E.g., A 50,000L pool should be run for 50 hours straight.
 - Check the copper levels. If you have obtained a minimum **0.2ppm** copper reading, then are ready to switch to **AUTO** mode.
 - If you have not achieved a minimum 0.2ppm copper reading please run the system as is for an additional 24 hours and check copper levels again. Repeat till the minimum copper level is achieved.
9. Once you have achieved the desired copper level reduce the Ioniser control to **"7"** as a starting point
10. Set your time clock to **1 hour of run time per 10,000L** of water. These are our standard operating setting but will vary from pool to pool depending on the Environment, bather load and pool Interiors and their quality.
11. Turn the AUTO/OFF/MANUAL switch to the **AUTO** position.
12. Enjoy your swimming in Enviroswim Fresh Water.

NB. PLEASE MEASURE AND ADJUST pH 8 HOURS BEFORE CHECKING COPPER LEVELS. HIGH pH WILL MASK YOUR TRUE COPPER READING.

- **DO NOT USE STABILISER**
- **DO NOT USE BROMINE COMPOUNDS**
- **DO NOT USE FLOCULANTS**
- **DO NOT USE SODA ASH**
- **DO NOT USE GRANULAR CHLORINE**
- **DO NOT USE PUT UNDISSOLVED CHEMICALS INTO THE POOL**
- **DO NOT USE ZEOLITE**

5. INITIAL START UP – COMMISSIONING cont.

5.2 Salt Water Conversion - Startup

Salt Water Pools have an extremely high TDS, which is mainly Pool Salt. These can be 4,000ppm or in some cases significantly higher. The Definition of Fresh Water is a TDS of less than 1,500ppm or in some cases a Salinity of less than 1,000ppm. These figures do vary around the world and each E.P.A body may have slightly different variations.

The water in your pool is in simple terms the fuel for your sanitiser to operate as it is meant to.

The Envirowim needs pool water that is low in TDS (fresh water).

To convert a salt-water pool to be a fresh water pool we need dilute the current TDS levels to the Envirowims Fresh Water parameters. [1,000-1,500ppm](#).

The only way to reduce TDS is to dilute your pool water with fresh water.

Please ensure you have installed the Envirowim ES-3 as per the installation manual.

1. Take a sample of your salt-water pool to a pool shop and ask them to test the Total Dissolved Solids.
2. Work out your Percentage of water you need to drain from your pool to lower the TDS to 1,500ppm. E.g. If your TDS is 4,500 you will need to drain two thirds of the salty water and replace it with fresh tap water (or other fresh water source).
3. Before draining excessive amounts of water from your swimming pool always check with a pool builder first.
4. [Now refer to instructions in previous section 5.1 for startup.](#)

PLEASE SEE PREVIOUS PAGE FOR PRODUCTS THAT YOU SHOULD NOT USE IN YOUR POOL

6. MAINTENANCE

The Enviroswim ES-3 system is very low maintenance. The copper/silver electrodes are consumables and require periodic replacement.

The Ultra sonic chamber is maintenance free.

The oxidiser plates are self-cleaning. If you continually run a high pH calcium scaling will occur on the plates and this will reduce the life expectancy of your plates.

6.1 Fuse

Fuse replacement: [240Volt, 10 amp, slow blow](#)

WARNING: There is a risk of electrical shock, fire and damage to the system if an incorrectly sized fuse is installed.

6.2 Replacement of Electrodes

- The Copper/Silver electrodes are a consumable and will require periodic replacement.



- The life of the electrodes will depend on many factors including, pool use, water balance, dirt and other debris that are allowed to build up in the pool.
- If you are experiencing uneven wear and tear on the electrodes which can result from turbulence and water flow through the wet cell housing, the electrode assembly can be removed from the wet cell housing, rotated 180 degrees and then placed back into the wet cell housing.
- The Electrodes should be replaced before they disappear completely.

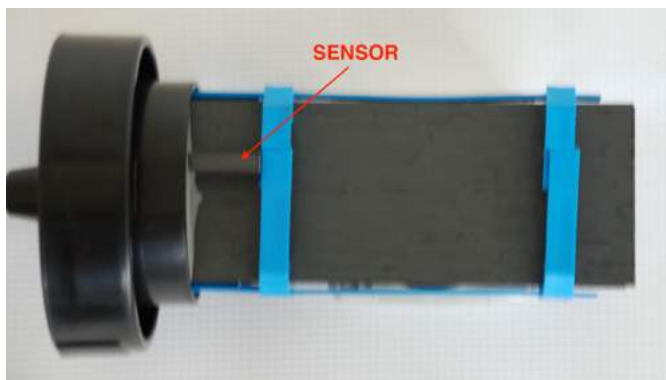
- NOTE: ONLY USE GENUINE ENVIROSWIM ELECTRODES AND SPARE PARTS.
- ENVIROSWIM WILL NOT BE HELD LIABLE FOR THE PERFORMANCE OR EFFECTIVENESS OF THE SYSTEM WHEN NON-GENUINE SPARE PARTS AND CONSUMABLES ARE USED.
- REPLACEMENT ELECTRODES CAN BE PURCHASED AT OUR ONLINE STORE AT THE BELOW LINK

www.enviroswim.com/buy-now

6. MAINTENANCE Cont.

6.3 Oxidiser Plates - Cleaning

- Plates should be cleaned if there are signs of calcium build up on the plates, Sensor or if your system is unable to draw the “15”amps or Oxidiser Output Display is fluctuating.
- Scaling on these plates generally indicates that the pH has been high (above 7.6) for extended periods



- Please check the following. range are correct.
 - TDS is within range 1,000 – 1,500ppm
 - All connections are correct.

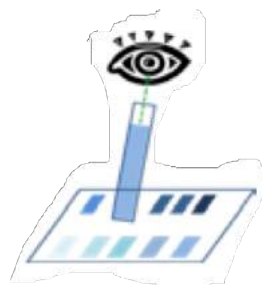
- Scale may be loosened by striking **gently** with wooden or plastic object. Take care not to damage the plastic separators.
- Once excess scale is removed clean plates by soaking in a **75/25% ratio water/hydrochloric acid solution**. A plastic bucket or a 1.25 Litre soft drink bottle with the top cut off is an ideal size for bathing the plates.
- Do not leave the plates in the solution for extended periods of time – 3 Minutes should be adequate.
- See enviroswimpoolschool.com
- **Never use metal objects to clean the plates, as this will damage the plate coating.**
- **REMEMBER: Always add Acid to Water. Never add water to acid.**
- **LEAVING CALCIUM SCALE ON YOUR PLATES WILL SHORTEN THE LIFE OF THE PLATES.**
- **NOTE: ONLY USE GENUINE ENVIROSWIM ELECTRODES AND SPARE PARTS.**
- **ENVIROSWIM WILL NOT BE HELD LIABLE FOR THR PERFORMANCE OR EFFECTIVENESS OF THE SYSTEM WHEN NON-GENUINE SPARE PARTS AND CONSUMABLES ARE USED.**
- **REPLACEMENT OXIDISER PLATES CAN BE PURCHASED AT OUR ONLINE STORE AT THE BELOW LINK**

www.enviroswim.com/buy-now

6. MAINTENANCE Cont.

6.4 Copper Testing

- NOTE: HIGH pH will mask your copper test results.
- Please ensure you pH is below 7.4 before doing a copper test.
- We strongly advise that you use the test kit and instructions supplied with your Enviroswim System.
- Copper levels 0.2 - 0.4ppm
- If taking a sample of pool water to a pool shop for testing ensure pH is within set parameters for 24 hours prior.
- Some pool shop testing equipment can also give a false reading due to the silver in the water. When using the supplied test kit ensure you look down the test vial when comparing to the colour chart.



- If your copper reading is above 0.4 ppm turn the Ioniser control to the 0 setting (OFF)
- Only turn the Ioniser control back ON once your copper level 0.3 or lower
- In normal operating circumstances your Ioniser Control should NOT be left in the MAX START UP setting, unless you need to build you copper levels up. Please contact us before leaving the system on this setting. Never leave on this setting for more than 7 days unless you are discussing with one of our service technicians.
- NOTE: Enviroswim will not be held responsible for high copper levels.

REPLACEMENT COPPER TEST KITS CAN BE PURCHASED AT OUR ONLINE STORE AT THE BELOW LINK

www.enviroswim.com/buy-now

6. MAINTENANCE Cont.

6.5 Adjusting and Maintaining Water Balance

Water balance is applicable to all Sanitised pools. This is an Industry standard.

IMPORTANT – HIGH pH EFFECTS THE EFFICACY OF ANY SANITISER. E.g. Chlorine is only 3% effective at a pH of 8.0 compared to 75% effective at a pH of 7.0.

	Ideal Range	Measuring	Adjusting
Alkalinity	60-150 ppm	Pool shop or test kit Frequency: 3 Monthly	Raise by adding Sodium Bicarbonate – Alkalinity Increaser.
pH	7.0 – 7.2	Pool shop or test kit Frequency: 7-14 Days	Lower by adding Hydrochloric acid Raise by adding Sodium Bicarbonate – Alkalinity Increaser.
Water Hardness	170 – 250 ppm	Pool shop Frequency: 3 Monthly	

Suggested testing frequencies are recommendations only for average use domestic pools. More frequent testing may be required.

REMEMBER: Always add Acid to Water. Never add acid to water.

6.6 Winterise Your Pool

Winterising your Enviroswim treated pool is an area where large savings can be made. Once the water becomes too cold for bathing the daily run time of the pump/enviroswim can be reduced to save on electricity, which is one of the highest pool running costs.

The final winterised run time depends on the pools surrounding environment as the pump will need to run long enough for the filter to remove dirt and organic material that enter the pool.

Many pools owners can reduce the run time to a few hours a week, others surrounded by falling leaves or dust require longer to oxidise and filter the rubbish.

The residual copper & silver will take care of algae and bacteria as they continue to work 24/7 regardless of the pump run time. Therefore, it is important to continue to balance the pH & check copper levels regularly during the winter to ensure maximum efficiency of the ions and avoid possible overdose of copper/silver resulting in premature wear of the electrodes.

Always run the oxidiser on maximum (15) during winterisation, as the oxidiser is required to treat suspended solids that enter the water. Vacuum the pool as & when required to avoid sediment building up which can stain and cause extra demand and runtime of the system

Reminder: To ensure an accurate copper reading the pool water pH must be below 7.5 preferably 7.3 when the test sample is taken. High pH water will cause a false (lower than actual) copper reading. Follow these guidelines and you will save money and have a great pool ready for the coming summer.

7. TROUBLE SHOOTING

Symptom	Possible Causes	Remedy
Blown Fuse	<ul style="list-style-type: none"> ○ In-Rush Current from pool pump ○ Undiluted Chemicals added to pool or skimmer basket ○ Short Circuit on Oxidiser Plates ○ Internal electrical fault 	<ul style="list-style-type: none"> ○ Have pump checked ○ Turn off power to control box. Replace fuse and allow clean water to circulate through the system before switching back on. ○ Check for any visible short circuits in wet cell and clear. ○ Contact Enviroswim
Copper Level too low	<ul style="list-style-type: none"> ○ Low Conductivity (TDS) ○ Copper/Silver Electrodes worn away ○ Pool or Equipment leaking ○ Scale Build up on Electrodes ○ System not running long enough ○ Ioniser setting too low ○ pH high 	<ul style="list-style-type: none"> ○ Increase TDS to 1,000-1,500ppm ○ Replace with new electrode Kit ○ Repair leak ○ Clean rods – correct water balance ○ Increase run time ○ Increase Ioniser setting ○ Adjust pH to correct level
Excessive scale on Oxidiser Plates	<ul style="list-style-type: none"> ○ pH too high ○ High Calcium content (Water Hardness) in pool water 	<ul style="list-style-type: none"> ○ Adjust pH to correct level ○ Dilute Pool water with fresh water
Cloudy Water	<ul style="list-style-type: none"> ○ Insufficient Run time ○ Poor water balance ○ Oxidiser plates have excessive scale build up ○ High bather load 	<ul style="list-style-type: none"> ○ Increase run time ○ Adjust water to correct levels ○ Clean Oxidiser plates ○ Run pool on manual while swimming
Algae in Pool	<ul style="list-style-type: none"> ○ Low copper levels ○ Phosphates in water ○ Poor water circulation ○ pH too high 	<ul style="list-style-type: none"> ○ Increase run time or Ioniser setting ○ Phosphate treatment required ○ Check/Clean filter, skimmer box, pump lint basket. Ensure pump is operating correctly and not at low speed if variable speed. ○ Adjust pH to correct level

7. TROUBLE SHOOTING Cont.

Fault Mode	Possible Causes	Remedy
<p>Oxidiser Display</p> <p>OL</p> <p>Current no longer being applied to Oxidiser plates</p>	<ul style="list-style-type: none"> Excessive TDS greater than 2,500ppm Undiluted chemicals added to skimmer Short circuit across Oxidiser connections or plates Short Circuit across Ioniser connections or electrodes 	<ul style="list-style-type: none"> Dilute pool water to reduce TDS to below 1,500ppm Allow clean water to circulate through the system before switching back on. Remove short circuit Remove short circuit
<p>Oxidiser Display</p> <p>TP</p> <p>Control Unit Over heating. Thermal cut out activated. Unit will shut down to prevent damage</p>	<ul style="list-style-type: none"> Excessively low TDS Air flow vents blocked Unit is installed in an area with poor ventilation Excessive ambient temperature 	<ul style="list-style-type: none"> Increase TDS to 1,000-1,500ppm Remove blockage Move to area with good ventilation Unit should restore once ambient Temperature drops. If not contact Enviroswim
<p>Oxidiser Display</p> <p>Pb</p> <p>Current no longer being applied to Oxidiser plates</p>	<ul style="list-style-type: none"> Air in system Insufficient water flow Calcium Build up on Oxidiser Plates or sensor 	<ul style="list-style-type: none"> Check for leaks and prime pump Check/Clean filter, skimmer box, pump lint basket. Ensure pump is operating correctly. Increase speed of Variable speed pump if applicable Clean Oxidiser Plates and sensor.

The Envoswim Control box has two vents that are located on under side of the control box at either end, from time to time please ensure these are not blocked, and if they are please clean with a soft bristle brush eg. Tooth brush

FOR FURTHER INFORMATION PLEASE VISIT

enviroswimpoolschool.com

8. SPECIFICATION, STANDARDS and WARRANTY

8.1 Specifications

- Enviroswim T.D.S. operating parameters: 1,000-1,500ppm
- Enviroswim recommended copper levels: 0.2-0.4ppm
- Enviroswim ES3 system sanitisers swimming pools up to 100,000 litres
- Enviroswim run time – 1 hour per 10,000 litres (environment dependent)
- Enviroswim tested and complies with CISPR 14 Electromagnetic Compatibility.
- Enviroswim tested and complies with CE.
- Electrical requirements 220/240 volts ac 10 amp GPO.
- Electrical consumption of Enviroswim approx. 200 watts +/- 20% this is dependent of conductivity of the pool water.

8.2 Standards

Type	Standard	Description
Electrical	AS/NZS 3136	Electrical Equipment for Spa and Swimming Pools
	EN 55014-2 EN 61000-3-2 EN 61000-3-3	Electromagnetic Compatibility
Chemical		Australian Pesticides and Veterinary Medicines Authority Approval no. 58847
Efficacy	NATA Accredited NSF/ANSI 50	Approved as hybrid system by the National Sanitization Foundation (USA) Cert# 4D640-02
	NZS5826	New Zealand Pool Water Quality Standards
HSO		NZ Drinking Water Standards 2005

8. SPECIFICATION, STANDARDS, and WARRANTY.

8.3 Warranty

The Envirosim system has a (2) year replacement warranty on the control box.

8.4 Contact Information

Watertech Services International

PO Box 5835
GCMC Bundall
Queensland 9726

Support enviroswimpoolschool.com
General info@envirosim.com

Phone 1300 888 457
Overseas info@envirosim.com



9. POOL SHOPS and SERVICE TECHNICIAN INFORMATION

If using a pool shop or service technician to look after and maintain your swimming pool, please give them this page as a minimum.

THIS IS NOT A SALT WATER CHLORINATOR

FURTHER INFORMATION CAN BE FOUND AT envirowimpoolschool.com

or Contact us on 1300 888 457

OPERATING PARAMETERS

- Total Dissolved Solids (TDS) 1,000 – 1,500ppm.
- Copper 0.2 – 0.4ppm
- Run times 1 hour per 10,000L of water – swimming season
If using a variable speed pump this may need to be increased.
Reduce run time by 50% or more once swimming season has finished.
- Oxidiser Recommended level 0.0 – 0.5ppm
The Oxidiser level can be tested using a standard pool chlorine test kit.
Note: A chlorine test kit reads the "Redox" or "Oxidiser potential" of the water, which may be a combination of chlorine, oxygen and other Oxidisers present in the water.

All swimming pools need to have the water balanced to protect the interior of your pool, bather comfort and to maintain effectiveness of any sanitiser.

- pH 7.0 -7.4
- Total Alkalinity 60-150ppm
- Calcium Hardness 170 -250ppm

IMPORTANT – HIGH pH EFFECTS THE EFFICACY OF ANY SANITISER. E.g. Chlorine is only 3% effective at a pH of 8.0 compared to 75% effective at a pH of 7.0.

A HIGH pH will also accelerate fibreglass gelcoat fading

A HIGH pH WILL MASK YOUR TRUE COPPER READING PLEASE LOWER pH 8 HOURS BEFORE CHECKING COPPER LEVELS

- DO NOT USE STABILISER
- DO NOT USE BROMINE COMPOUNDS
- DO NOT USE FLOCULANTS
- DO NOT USE SODA ASH
- DO NOT USE GRANULAR CHLORINE
- DO NOT USE PUT UNDISSOLVED CHEMICALS INTO THE POOL
- DO NOT USE ZEOLITE