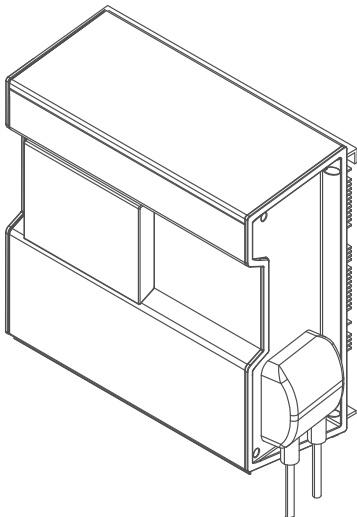


INSTALLATION & OPERATING MANUAL

# A COMPLETE GUIDE TO YOUR Vi PREMIUM CHLORINATOR



**i**nsnrg

# CONGRATULATIONS ON PURCHASING YOUR INSNRG CHLORINATOR

**THIS MANUAL HAS BEEN CAREFULLY DEVELOPED TO  
GIVE YOU ALL THE INFORMATION YOU NEED TO GET THE  
BEST VALUE FROM YOUR PURCHASE.**

It is important that you read through the manual to identify the key areas you need to understand, particularly the following:

- Health and Safety Concerns
- Installation requirements
- How to operate the major features of the unit
- The importance of maintenance
- If you have a problem, what to trouble shoot before you contact your professional
- Finally, your entitlements under your product warranty.

Insnrgr have developed their product to provide you with the ultimate experience and are sure you will be delighted with your purchase.

**Please note:** This manual has been designed to cater for installation rules and codes in the USA, Canada and Australia. Specific rules and regulations for each country has been highlighted by the National flag of each country. Please ensure you follow the installation rules specific to your country.

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## SECTION 1

# WE CARE ABOUT YOUR SAFETY



## IMPORTANT WARNINGS

Insnrng highly recommend that this product be installed and serviced by professionals who are qualified in pool and spa product installation and service. Improper installation and/or operation can create an unwanted electrical hazard which can cause serious injury, property damage, or death. Improper installation and/or operation will void the warranty.

**This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.**

## **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 use of the appliance by a person responsible for their safety.

## **WARNING**

This chlorinator is to be supplied by an isolating transformer or supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.

## **WARNING**

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

## **CAUTION**

All components of the filtration system including Pumps, Filters, Heaters must be positioned so as to prevent being used as a means of access to the pool by young children. To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times.

## **WARNING - HAZARDOUS PRESSURE**

Pool and Spa water circulation systems operate under hazardous pressure during start up, normal operation, and after pump shut off. Stand clear of circulation system equipment during pump start-up. Failure to follow safety and operation instructions could result in violent separation of the pump housing and cover, and/or filter housing and clamp due to pressure in the system, which could cause property damage, severe personal injury, or death. Before servicing pool and spa water circulation systems, all system and pump controls must be in the off position and filter manual relief valve must be in open position. Before starting system pump, all system valves must be set in a position that allows system water to return back to the pool. Do not change filter control valve position whilst system pump is operating. Before starting system pump, fully open filter manual air relief valve. Do not close filter manual air relief valve until a steady stream of water (not air) is discharged.



## **WARNING – RISK OF ELECTRIC SHOCK**

All electrical wiring **MUST** be in conformance with applicable local codes, regulations, and the National Electric Code (NEC). Hazardous voltage can shock, burn, and cause death or serious property damage. To reduce the risk of electric shock, do **NOT** use an extension cord to connect unit to electric supply. Provide a properly located electrical receptacle. Before working on any electrical equipment, turn off power supply to the equipment.



## **WARNING**

To reduce the risk of electric shock replace damaged wiring immediately. Locate conduit to prevent abuse from lawn mowers, hedge trimmers and other equipment.

## **ELECTRICAL CODES**

All electrical work must be performed by a licensed electrician and conform to all national, state, and local codes. Applicable national codes, include but not limited to the following:

- In the USA, National Electrical Code (“NEC” or NFPA-70)
- In Canada, Canadian Electrical Code (“CEC” or C22.1)
- In Australia, AS3000 Wiring Rules

and/or any other local and national installation codes.

## **GENERAL SAFETY GUIDELINES**

The Insnrg Chlorinator has been designed specifically for domestic (residential) swimming pool use. Using the product for any other purpose could affect performance, void warranty, and may result in property damage, serious injury, or death. Consult your local pool professional if you have any doubts.

The following general guidelines should be followed upon installation:

- The Insnrg Chlorinator has an inbuilt water flow sensor that will stop operation when lack of water flow. However, care should always be taken to not operate the Insnrg Chlorinator without any water flowing through the cell, this may cause a build-up of flammable gases, potentially resulting in fire or explosion.
- Always install equipment out of reach of children.
- A damaged power supply cable and/or chlorinator cell cable should only be replaced by the qualified service agent, electrician or manufacturer.
- When installing and using this electrical equipment, always follow basic safety precautions.
- When preparing to install the Insnrg Chlorinator, disconnect all power to your installation area.

- Ensure you connect to a circuit that is protected by a ground fault circuit interrupter (GFCI).
- The Insnrg Chlorinator requires airflow to assist in cooling down the unit during operation, therefore, do not install within an outer enclosure or beneath the skirt of a hot tub or spa.
- To avoid damage due to water from rain, splash-off, the control box must be installed a minimum of 1.5 metres (5 feet) vertically from the ground.

Your Insnrg Chlorinator is intended for use with permanent swimming pools and may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

To reduce the risk of electric shock, fire or injury, service should only be attempted by a qualified pool service professional.

## **EQUIPMENT UNDER PRESSURE**

Always turn pump and other equipment off prior to installing or servicing the Insnrg Chlorinator control box and/or cell. Your filtration system operates under pressure and this pressure must be released before you begin work to avoid any serious injuries or equipment damage. Please refer to your Pump and/or Filter instruction manual for further instructions.

To reduce the risk of injury, do not remove the suction fittings of your spa or hot tub. Never operate a spa or hot tub if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the equipment assembly.



## PREVENT CHILD DROWNING

Do not let anyone, especially small children, sit, step, lean or climb on any equipment installed as part of your pool's operational system. Locate the components of your operational system at least 3 metres (10 feet) from the pool so children cannot use the equipment to access the pool and be injured or drown.

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 use of the appliance by a person responsible for their safety.

## PROTECTION OF SURROUNDS

Your Insnrg Chlorinator maintains your water quality with little assistance required from the pool owner. However, it is important to consider the surrounding areas of your swimming pool and spa and carefully select materials that are compatible with the chemicals commonly used to make your pool and spa water clean, safe and healthy for your family to use. These include Salt, Minerals, Acids, Chlorine, Stabilizers and other additives. Before selecting materials to be used in and around your pool and spa, please discuss all options with your contractor or pool professional to assess the compatibility of such materials and chemicals.

### **Some areas you should consider include the following:**

- **Plants** – choosing plants that can withstand water containing chlorine, salt and other chemicals.
- **Metals** – any objects containing metal components that are regularly used in the pool area should be of a high grade, quality stainless steel.

- **Stones** - the porosity and hardness of natural stones varies greatly. Consult with your builder or stone contractor on the best choice for stone materials around your pool or spa. They may also recommend a regular sealing schedule to prevent weathering, staining or premature degradation.
- **Chemicals** - use only chemicals recommended by your pool professional, others may be hazardous and cause serious damage. Always follow the chemical manufacturers instructions on the label when dispensing.

Insnrq does not warrant or guarantee that the chlorinated water generated by the Insnrq Chlorinator will not damage or destroy certain types of plants, decking, coping and other materials in and around your pool and spa.

## SECTION 2

WE WANT YOU TO BE  
DELIGHTED WITH YOUR  
PURCHASE, CORRECT  
INSTALLATION WILL PROLONG  
LIFE AND MAXIMISE THE  
PERFORMANCE OF THIS UNIT.

**Insnrng highly  
recommend the  
use of qualified  
service technicians  
to ensure the best  
performance as  
well as the health  
and safety of your  
family.**

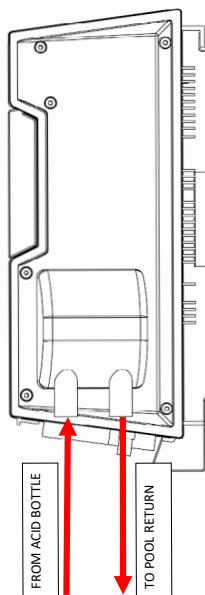
# INSTALLING THE CONTROL BOX

**The Insnrgr Chlorinator has been designed to withstand the harshest conditions, however, to prolong the life and get the most value out of your chlorinator it is important to consider the following:**

- Choose a location that is preferably out of direct sunlight
- It should be near the filter system
- The controller should be located 1.5 metre (5 feet) above ground level to prevent rain splash back or sprinkler system damage to the underside of the controller
- The controller must be mounted on a vertical surface/wall
- Mount the wall bracket using the screws provided on a secure wall.
- If mounted on a post, a flat sheet 20mm larger than the controller housing must be used

## Acid Connection

It is important that the Acid Bottle or Acid Drum is connected correctly onto the Peristaltic Pump on the side of the unit. Use the diagram below to ensure the correct flow of Acid. The Supply Tube to the Pool Return must be installed into the supplied coupling (see below) and sealed. This coupling needs to be installed as the last point before the water returns to the pool. It must not be placed before any equipment such as Filters, Chlorinator Cells or Heaters otherwise it will affect the performance and warranty of these units.



Chlorinator acid pump connection      Acid Return

With your Chlorinator you have been supplied with two (2) different sizes of Acid Bottles (see below). The larger cap is for the 15 or 20 litre drums that are used when diluting acid with the pool water. The smaller cap is for the 5 litre bottles for when you want to use neat acid. To install, simply connect the long clear tube to the bottom of the cap you wish to use, then screw onto the bottle. Connect the Supply Tube from the Control box to the taller prong. The smaller prong allows you to vent any Acid fumes away from the pool equipment, take some Supply Tube and attached to the smaller prong then place the other end into a safe position. If you have your equipment in a pool shed or enclosure, use the venting device by simply drilling a hole through the wall, then screw the nut to hold into position, fix the other end of the supply tube and any fumes are removed from the enclosure protecting any equipment.



Acid Bottle Cap



## WARNING

**Hydrochloric Acid is classified as a dangerous good and must be handled correctly, for full directions refer to the appropriate MSDS. When handling Hydrochloric Acid for your pool requirements, you must follow the below warnings:**

- Always wear gloves, face mask and eye protection and cover any exposed skin, NEVER let Acid come in contact with your skin
- DO NOT ingest Hydrochloric Acid
- Always add Hydrochloric Acid to the water, not water to the Hydrochloric Acid
- Only handle outdoors or in well ventilated areas
- Thoroughly wash hands with water after handling Hydrochloric Acid
- Refer to the appropriate MSDS for further information

## Control Box Connection Points

Your chlorinator has many control options which will be utilised by your pool professional. Below details the connections available on your chlorinator.

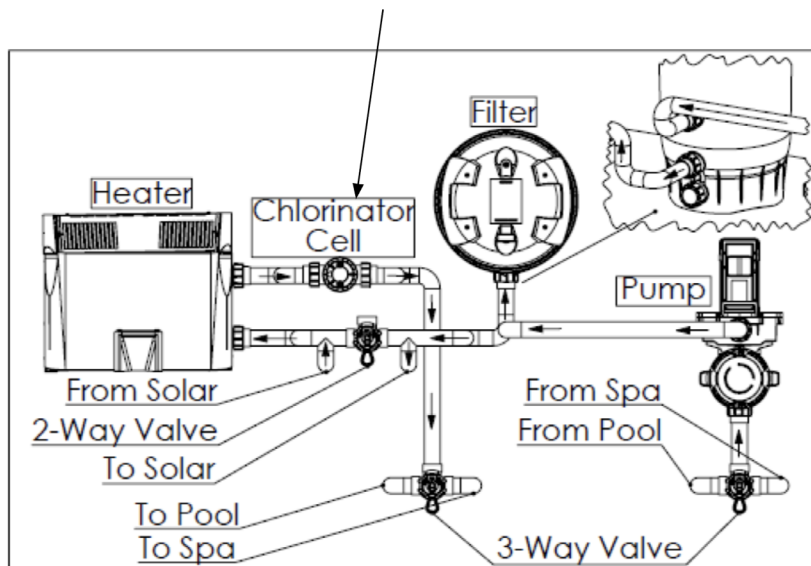


Vi Base

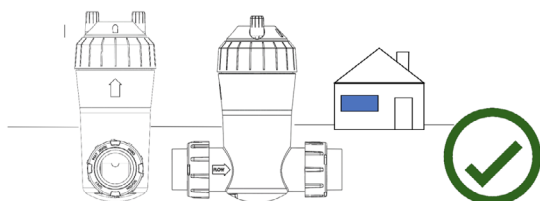
# INSTALLING THE CHLORINATOR CELL

- Glue Chlorinator cell into line after filter, heater and solar (if installed).
- Cell must be installed vertically for operation. A tilt sensor is installed to stop operation of the cell if the installation is not correct.
- The cell must be installed with the barrel unions and the cell should be vertical. Make sure that the 'o'rings are correctly fitted and the unions are done up tightly. Flow direction through the cell is critical – refer to label on housing.
- Hang Controller on wall bracket and plug power supply lead into 3 pin 10 amp outlet
- Plug filter pump 3 pin plug into underside of Controller.
- Connect cell cable into underside of controller
- With the unique design and the water flow within the Chlorinator Cell, you are able to position the cell at any height. This provides greater flexibility when plumbing the full equipment system and potentially reduce the amount of PVC pipe and fittings required.

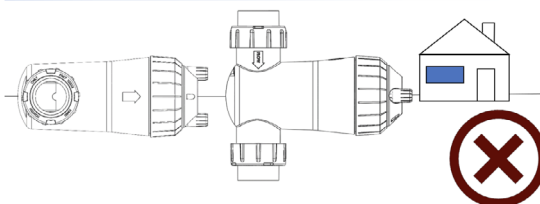
Must be Installed after, pump, filter  
and heater on return line to pool



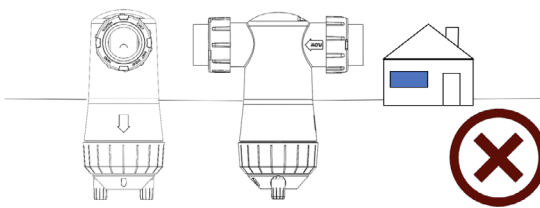
Install cell vertically



Do Not Install side on



Do not Install upside down



# WATER CHEMISTRY

Your Insnrg Chlorinator is designed to operate every day to ensure that your pool is correctly sanitised. During Summer the sun removes chlorine from the water and we recommend increasing the running times compared to the cooler winter months. Timer periods on the Chlorinator are initially defaulted to operate for 10 hours 0800 till 1800. In most instances this will be sufficient. However, consider the below for the different seasons:

## **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 8-1pm) and 4-5 hours in the evening (say 4-9pm). In extremely hot weather it may be necessary to extend the running time if you find that the free chlorine level is too low.

## **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. A lower chlorine output level may also be selected.

## **CHECKING CHLORINE LEVEL**

Ideally, check your chlorine level after the morning operating period. The free chlorine residual level should be somewhere between 1 and 3 parts 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**

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 or longer. Keep the Stabiliser reading between 20 to 30ppm.

## **PH LEVEL**

You should keep your pH level between 7.0 and 7.4 for fibreglass pools and 7.2 to 7.8 for other pools.



## TOTAL ALKALINITY

The ideal range is between 80 and 120 ppm.

## CALCIUM HARDNESS

The ideal range is between 200 and 250 ppm.

## SALT LEVEL

Salt level should be maintained around 4,000ppm but should never be allowed to fall below 2,000ppm. 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.

A typical pool of around 50,000 litres requires 200kg of salt to initially set-up the pool to 4,000ppm.

A low salt level warning is indicated on your Insnrg 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 4000ppm then you may need to have your Chlorinator checked.



### WARNING

Some people recommend that you put salt directly in the skimmer box. This is a very bad practice as it allows very high concentrations of salt to be passed through your filtration and other pool equipment.



### WARNING

**WHEN MIXING ACID WITH WATER:  
ALWAYS ADD ACID TO WATER. NEVER ADD  
WATER TO ACID.**

	<b>10,000 GALLONS</b>  <b>37,800 LITRES</b>		<b>15,000 GALLONS</b>  <b>56,700 LITRES</b>		<b>20,000 GALLONS</b>  <b>75,600 LITRES</b>	
Salt required to increase PPM by the below amount	POUNDS	KG'S	POUNDS	KG'S	POUNDS	KG'S
<b>4,000</b>	333	151	499	227	665	302
<b>3,750</b>	312	142	468	213	624	284
<b>3,500</b>	291	132	437	198	582	265
<b>3,250</b>	270	123	405	184	541	246
<b>3,000</b>	249	113	374	170	499	227
<b>2,750</b>	229	104	343	156	457	208
<b>2,500</b>	208	95	312	142	416	189
<b>2,250</b>	187	85	281	128	374	170
<b>2,000</b>	166	76	249	113	333	151
<b>1,750</b>	146	66	218	99	291	132
<b>1,500</b>	125	57	187	85	249	113
<b>1,250</b>	104	47	156	71	208	95
<b>1,000</b>	83	38	125	57	166	76
<b>750</b>	62	28	94	43	125	57
<b>500</b>	42	19	62	28	83	38
<b>250</b>	21	9	31	14	42	19
<b>-</b>	-	-	-	-	-	-

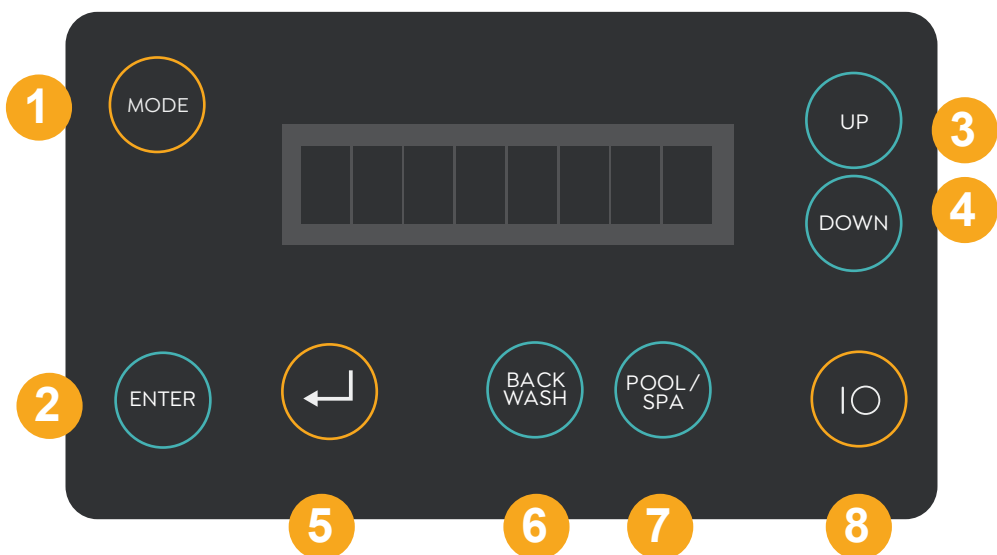
	25,000 GALLONS  94,500 LITRES		30,000 GALLONS  113,400 LITRES		35,000 GALLONS  132,300 LITRES	
Salt required to increase PPM by the below amount	POUNDS	KG'S	POUNDS	KG'S	POUNDS	KG'S
4,000	832	378	998	454	1,164	529
3,750	780	354	936	425	1,091	496
3,500	728	331	873	397	1,019	463
3,250	676	307	811	369	946	430
3,000	624	284	748	340	873	397
2,750	572	260	686	312	800	364
2,500	520	236	624	284	728	331
2,250	468	213	561	255	655	298
2,000	416	189	499	227	582	265
1,750	364	165	437	198	509	232
1,500	312	142	374	170	437	198
1,250	260	118	312	142	364	165
1,000	208	95	249	113	291	132
750	156	71	187	85	218	99
500	104	47	125	57	146	66
250	52	24	62	28	73	33
-	-	-	-	-	-	-

## SECTION 3

# HAVE FUN AND GET THE MOST OUT OF YOUR PURCHASE

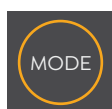
Your Insnrg Chlorinator is the brains of your swimming pool. This section will outline the features of the chlorinator and instruct on how to set-up for the best results, all year round.





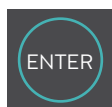
# DISPLAY OVERVIEW

## BUTTON ALLOCATION



### 1. **MODE button**

This button is pressed to select the appropriate mode you wish to change / view. Scroll through various modes by pressing up or down button. Press the enter button to view / change the desired mode.



### 2. **ENTER Button**

This button is pressed to enter the menu / mode and allows you to change and save information



### 3. **UP button**

### 4. **DOWN Button**

Press the **UP** and **DOWN** buttons to adjust values until correct



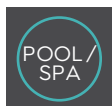
## 5. BACK Button

The **Back** button is pressed to return to previous screens within menus



## 6. Backwash button

This button controls a timer function to assist when backwashing a Sand/Media filter. Turns Pump on and off for short periods of time to allow for better cleaning and remove the risk of leaving pump run and drain the pool. (See Backwashing Operation explained later)



## 7. Pool/Spa Button

This button controls the output of the chlorinator if you have Pool and Spa combination. When in Spa Mode it will reduce the output of the chlorinator cell to 20% to avoid over chlorinating a small body of water.



## 8. Adjust Hours (Manually On)/Auto/Off Button

This button controls the power to the Pump. Three options are available, Adjust Hours (Manually ON), Manually OFF or Automatic Timing.

- **Adjust Hours (Manually On)** – If you press enter without adjust the hours then the unit will come on and run with an output 0% (produce no chlorine) until power option is changed. This function is helpful when cleaning up a pool without any salt in the water. It will protect the cell plates until the correct amount of salt is added.
- **Adjust Hours (Manually On )** – By pressing the up or down arrows you determine how long you want the chlorinator to run in manual mode. You can also change the output by pressing the up or down button. Once the time period has expired the unit will return to Auto Mode
- **Auto** – Chlorinator will operate in conjunction with the timers that have been set. Chlorine output can be adjusted by pushing Up or Down button.
- **Off** – Chlorinator is off

# MENU OVERVIEW

The Mode button is used to select the relevant area that you want to adjust on your Insnrg Chlorinator. The following areas are accessed by pressing the Mode button the appropriate number of times then press the ENTER button to access this menu.

## **MENU AVAILABLE:**

1. Change Settings – Timers Periods on / off
2. Set Time
3. Activate Timer Periods
4. Service Menu
5. Install Menu



## MENU 1 – CHANGE SETTINGS

Press ENTER to access this menu and select the area you wish to change, summary of options as follows:

### 1. Chem Balance

- **pH Set Point** – Press up or down button to change value.
- **ORP Set Point** – Press up or down button to change value.
- **Chlorinator Boost** – When activated this will run the chlorinator and circulation pump for 24 hours at maximum output, ignoring ORP and pH settings / readings. After 24 hours it will revert back to Auto timer period and operate according to pH and ORP set points.
- **Prime Acid Pump** – By pressing Backwash Button acid pump will operate quickly and prime the tubing for the acid feeder.

### 2. Equip Status

This allows assigned equipment to be turned to Auto (timer period), On or Off. This can be achieved all at once or individually. This operation will only function once equipment has been assigned through the Install Menu.

### 3. Temperature Settings

- **Solar** – Used for setting temperature when solar heating is connected.
- **Pool** – Used for setting temperature when external heater is connected.
- **Spa** – Used for setting temperature when external heater is connected.

## MENU 2 – SET TIME

Press the **MENU** button until *Set Time* appears on the Display, then press the **ENTER** button. The Cursor will then flashes on hours, press up or down buttons to change hours then press **ENTER** button to move to minutes, press up or down to change and press **ENTER** button to save.

## MENU 3 – ACTIVATE TIMER PERIODS

Press the **MENU** button until *Activate Timer Periods* appears on the Display, then press the **ENTER** button. Screen will display “*Timer 1 Active*” with cursor flashing on “Active”, press up or down buttons to cycle between “Active” and “Off”. Press **ENTER** to select and move to next screen.

If “*Active*” is selected, cursor will move to Timer 1 Start and flash under hours, press up or down button to change, then press **ENTER** button, cursor will move to minutes, press up or down button to change then press **ENTER** button, cursor will then move to Timer 1 Finish and flash under hours, press up or down button to change, then press **ENTER** button, cursor will move to minutes, press up or down button to change, then press **ENTER**. If Insnrg Variable Speed Pump has been set-up the cursor will now move to “*Pump Speed*”, press up or down button to select the correct speed, then press the **ENTER** button to save.

This process can now be repeated for the four (4) available timer periods available in the MENU.

“Each timer period will ask if you want the Chlorinator or Filtration Pump to operate with these timers. **Specify ‘NO’ if you want to operate other equipment during set timer periods without the chlorinator or filtration pump operating.**”

## MENU 4 – SERVICE MENU

Press the **MENU** button until Service appears on the screen, then press the **ENTER** button to enter menu. Screen will display **“Service Menu locked”**. We need a combination of buttons to enter the service menu (secret buttons) which will be supplied to your local Pool Professional or Insnrng Service Technician.

**Once the combination of secret buttons is entered, the Screen will display:**

- **Calibrate pH** – This allows you to change the pH value by pressing the up or down button.
- **Calibrate ORP** – This allows you to change the ORP value by pressing the up or down button.
- **Calibrate Stat 1** – Allows calibration of connected thermistor to allow for different types of thermostat wells.
- **Calibrate Stat 2** – Allows calibration of connected thermistor to allow for different types of thermostat wells.
- **Polarity** – Allows you to change the polarity of the cell.
- **Total Hours** – Shows number of hours that the cell has been operating
- **Reversal Hours** – Shows number of hours that the cell has been in reversal
- **Cell Replaced** – When cell is replaced, can reset hour statistics by pressed YES
- **Volts / Amps** – This shows cell output in both volts and amps.
- **Temperature** – Shows internal temperature of the chlorinator box
- **Version** – Shows version number of Firmware
- **Prime Protect** – If activated it will turn pump off and protect mechanical seal if the water sensor in the cell does not sense water flow within 5 minutes.
- **Probe Settle Time** – If activated it will sense pH and ORP for one hour before activating cell or dosing acid. Sensors can take up to an hour before sensing correct ORP and pH when circulating pump is first turned on each day. It is only recommended for indoor swimming pools and prevents over chlorination.
- **Test Output** – This is used to verify the voltage and current to the cell are correct.
- **Firmware Update** – allows your pool professional to carry out any Firmware updates

## MENU 5 – INSTALL MENU

Press the **MENU** button until **INSTALL MENU** appears on the screen, then press the ENTER button to enter menu.

### Screen will display:

- **Insnrg Pump** – If you have an INSNRG Qi Pump installed, you can select YES and the Pump and Chlorinator will talk together. Requires a separate Cable that can be purchased from your selected Pool Professional.
- **Calcium Level** – Will adjust the reversal time of the cell to handle high Calcium levels. By increasing the Calcium level it will shorten the life of the cell. Please discuss with your Pool Professional before changing this setting.
- **Solar** – Allows you to set-up the chlorinator to activate your Solar System as per the following options
  - **1. None** – Solar not used
  - **2. Ind Pump** – When independent pump is running solar it allows you to set temperature and start time
  - **3. Valve** – Operates assigned valve for solar
  - **4. Inline**
- **Channel 1** – Press up or down button to scroll through names you want to assign to this Channel.
- **Channel 2** – Press up or down button to scroll through names you want to assign to this Channel.
- **Channel 3** – Press up or down button to scroll through names you want to assign to this Channel.
- **Valve 1** – Press up or down button to scroll through names you want to assign to this Channel.
- **Valve 2** – Press up or down button to scroll through names you want to assign to this Channel.
- **Valve 3** – Press up or down button to scroll through names you want to assign to this Channel.
- **Stat 1** – Can be assigned to air sensor (roof solar sensor) or water sensor (in pipework)
- **Stat 2** – Can be assigned to air sensor (roof solar sensor) or water sensor (in pipework)
- **Antifreeze** – If activated will turn pump on when water approached freezing point to prevent water freezing in pipework. Only works if air sensor installed and activated. This feature is mainly used in the US where temperatures regularly drop below freezing.
- **VF Connect** – Voltage Free contact used for connection of heat pump or gas heater. If assigned and water sensor (Stat 1 or Stat 2) is connected and assigned, will allow the Vi to turn heater on and off. Usually the water pressure switch or dedicated external connection is wired to the VF contact.
- **Heater Run On** – Will run circulating pump for 5 minutes after heater turned off to remove residual heat from gas heater.
- **pH Sensor Connected** – Activates pH sensor.
- **ORP Sensor Connected** – Activates ORP sensor.
- **Pool Size** – Press up or down button to input correct pool size.
- **Spa Size** – Press up or down button to input correct spa size.
- **Return To Fact Settings** – This will return all settings to the original factory settings.

# BACKWASHING OPERATION

If you have a Sand or Media Filter Installed you will need to periodically clean your filter as per the instructions provided in the relevant manual. Your Insnrgr Chlorinator has a Backwash Menu that will assist you to ensure you get the right amount of time to clean your filter and to eliminate the risk of leaving your pump running too long and wasting your expensive pool water. Also, as an additional safety feature, when the chlorinator is in Backwash mode, then chlorinator cell stops producing eliminating any risk of excess Chlorine Gas build up in the cell.

Follow your instructions to clean your filter. When you have selected Backwash on your Multiport Control Valve, then select the BACKWASH button as below:

- Ensure Chlorinator is OFF.
- Ensure Filter is in Backwash mode (see filter instruction manual)
- Press BACKWASH button once and determine how long you want to backwash for by prssing up or down buttons to determine number of minutes to backwash.
- Press Enter button and chlorinator turns pump on but no power to cell. Time clock will start to count down and turn the pump off when timer reaches zero.
- Use this function for both the Backwash and Rinse settings to get the best benefit.

# CHLORINE OUTPUT LEVEL

The amount of Chlorine in your swimming pool affects you and your family's enjoyment of swimming. Every pool needs enough chlorine to 'kill' the bacteria in the pool than can cause algae or other bugs making the pool water unsightly and unhealthy to swim in. This is usually a low level around 1,000 to 1,500 parts per million. Your pool professional will be able to guide you in the best level for your pool depending on external conditions and bather loads.

Your Insnrg Chlorinator can be simply adjusted by selecting the chlorine level and adjusting up or down in 20% increments. This is done by simply pushing the Up or Down button and you will see the output put change.

Continual monitoring will ensure the best quality swimming water all year round.



## SECTION 4

# OOPS, SOMETHING'S NOT RIGHT?

Maintenance, Trouble Shooting,  
Replacement Parts, Warranty &  
Contact Section



# MAINTENANCE PLAN

Your new Insnrg Chlorinator is one of the hardest working items in your household. It is designed to withstand harsh outdoor conditions and withstand high velocity water with chemicals. Some of these parts will wear in the normal course of use and require regular checks and maintenance. A well thought out pro-active maintenance schedule with identify faults early and extend the lifespan of your chlorinator.

To protect against extremes of temperature, your unit is designed to allow expensive electronics to cool. Ants and some insects are often attracted to the warmer, dry environment inside the enclosure. We recommend that, with power turned off, you spray a surface insecticide on the surfaces surrounding the control to prevent ant and insect ingress. Repeat every three months or as necessary.

WHEN?	WHAT ARE YOU LOOKING FOR?	HOW CAN YOU FIX?
Weekly	Visual confirmation of chlorine gas around the cell during operation	If no gas, check cables and connections. If problem continues contact your pool professional.
Quarterly	Check all Gaskets	Isolate and turn off the Pump. Remove all gaskets on Chlorinator Cell and turn over. You can also apply a silicon based grease to extend the life. If dry, then contact your local pool professional to replace.
	Check around the unit for leaves/debris or signs of flooding.	Remove any debris that is restricting air circulation around the equipment. If in a flood prone location, rectify.
	Check for any Insects/ Ants etc	It is a good practice to use a good quality surface spray around your equipment. Make sure all units are turned off and then spray around all units to eliminate any insect/ants etc
	Check for any leaks	If you notice any water leaking from the chlorinator cell. Check gaskets first and reseal. If continues, contact your local pool professional to assess and rectify.

# WINTERISATION

Is it important to protect your Insnrq Chlorinator from freezing water conditions. As water freezes it expands and that can cause the internals of the Chlorinator Cell to break under the intense pressure of expanding water. It is up to you to monitor temperatures and take the following actions:

1. In mild climate areas, when temporary freezing conditions may occur, run your pump and filtering equipment all night to maintain water circulation and prevent freezing.
2. If freezing conditions are expected, take the following steps to reduce the risk of freeze damage. Freeze damage is not covered under warranty.

**To prevent freeze damage follow the procedures listed below:**

1. Shut off electrical power for the pump at the house circuit breaker.
2. Drain the water out of the pump housing by removing the two thumb-twist drain plugs from the housing. Store the plugs in the pump basket. This should also drain the Chlorinator Cell.
3. Cover the motor to protect it from severe rain, snow and ice. Once the freezing conditions are finished, it is important to reverse the above procedure and prime the pump for operation.

# TROUBLESHOOTING

The chart below identifies some of the main issues you may encountered with your chlorinator. This should assist with the majority of problems. Insrng highly recommends regular checks and maintenance of your swimming pool equipment by a qualified pool professional. This will extend the life of your equipment and give you the best performance.

WHAT IS THE PROBLEM?	WHAT YOU CAN DO ABOUT IT?
<b>No Flow</b>	<ul style="list-style-type: none"><li>• Check all valves on system are in the correct position.</li><li>• Check any blockages in skimmer basket and pump basket.</li><li>• Check suction cleaner is free from any blockages.</li></ul>
<b>Low Salt</b>	<ul style="list-style-type: none"><li>• Test Salt level and add required bags of salt to achieve minimum level</li><li>• Pool water temperature can affect salt reading if too cold</li><li>• Salt sensor may be calcified or covered with debris. Clean cell and operate. If problem still continues contact your pool professional.</li></ul>
<b>Blank Display</b>	<ul style="list-style-type: none"><li>• Check all power connections. Disconnect and reposition. Check. If problem continues contact your pool professional.</li></ul>
<b>Low / No Chlorine Production</b>	<ul style="list-style-type: none"><li>• Check cell cable connection</li><li>• Adjust timer period according to swimming season and bather load.</li><li>• Increase chlorine output level.</li><li>• Check water chemistry including pH level and stabiliser level. Adjust as per demands from pool professional.</li></ul>

# WARRANTY

Insrg products are designed and manufactured to the highest possible standards of performance.

## **Australian Consumer Law**

Our goods 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.

## **Warranty Period and Conditions**

Insrg Techne Pty. Ltd. (hereinafter “the Company”) is pleased to warrant to the original retail purchaser that this product shall be free of manufacturing and material defects for a period of three (3) years from the original invoice date subject to the following conditions:

1. The product is purchased new from an authorised Insrg dealership in Australia, New Zealand or North America.
2. This warranty is not assignable and applies to the original retail purchaser only and the original receipt, invoice or any other proof of purchase must be retained and produced if requested by the Company.
3. Nothing in this warranty shall apply to any defects caused by misuse or abuse, neglect, accident, extremes of climate, dampness, humidity, reasonable fair wear and tear and/or any causes other than defects in manufacturing and materials. Proper care and maintenance information is detailed in the Owner’s Manual for this product which you must follow.
4. Where a defect is physically visible or otherwise affects the exterior surfaces of the product, you must notify the Company of such defect within fourteen (14) days from the date of your purchase.
5. If the product is bought as a demonstration, refurbished, ex-rental, discontinued or otherwise previously unboxed unit, the warranty applicable shall be limited to twelve (12) months only.

## Warranty Claim Procedure

To exercise your rights under this warranty, you must:

Within fourteen (14) days of you becoming aware of any defect, report the following details to the dealership from which the product was purchased:

- Your name, address and contact information;
- Model, and serial number of the product; and
- A detailed description of the defect.

On receipt of the above information, the Company will allocate to your dealership an Insnrg Authorisation Number (IAN).

Depending on the model type, how it is installed, and the defect reported, your nominated dealership will advise on how the warranty service will be performed. This could include, but not limited to, return of product to the dealership, return of product to the company, or a visit by qualified service technician to your poolside.

If advised to return the product, place the defective product in secure packaging, clearly label it with the IAN number allocated and send it to the address of the authorised service agent which will be advised by your dealership.

The Company will not be liable for any transportation costs, or in the event that a poolside call is arranged with an authorised service technician, costs of technician's travel time if the defect is found not to be covered by the consumer guarantees.

In the case of returned product, the authorised service technician or dealership will contact the purchaser when the product has been repaired and is ready for collection.

The Company will repair or replace at its absolute discretion your product at no cost for parts or labour in accordance with the terms stated in this warranty provided that the reported defect is able to be located by the technical staff assigned to the product. If the technical staff is unable to locate the defect, you may be liable to pay for the cost of the technician's travel time and labour.

## **Commercial Installations**

Commercial installations are defined as installations where the pool user pays for the use of the pool either directly or indirectly through hiring, renting of accommodation or membership of gym, health club or public pool and where the equipment is operating for more than 12 hours per day. In installations as above, the warranty period is limited to 1 year.

The benefits under this warranty are in addition to your rights and remedies available under the Australian Consumer Law.



We know that you will get many years of enjoyment from this product.

Insnrg has been founded by persons with over 120 years experience in the Pool and Spa industry.

We pride ourselves on developing products that are specifically created for your backyard lifestyle. We are continuously developing new products and ideas to make pool ownership easier and fun.

Should you wish to keep updated with our progress and hear first hand our new products and developments, please feel free to stay in touch by using any or all of the below methods:

#### **SNAIL MAIL**

64 Duerdin Street,  
Clayton, VIC, 3168

#### **LANDLINE**

1800 INSNRG (1800 467674)

#### **WEBSITE**

[www.insnrg.com](http://www.insnrg.com)

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insnrg

PRODUCTS IN PERFECT SYNERGY