

2024-2475

2024-06-17

PMRA Approved label based on Model label: Copper ion releasing device



MODEL A-800 & A-850

COPPER ION RELEASING DEVICE

HELPS PREVENT ALGAE
GROWTH IN SWIMMING POOLS
AND SPAS

COMMERCIAL

WARNING: Copper levels over 0.5 and a pH reading over 7.8 may cause copper to precipitate.

A MAXIMUM OF 151,400 L (40,000 GALLONS) OF WATER CAN BE TREATED WITH THE
CLEARBLUE™ IONIZER

WARNING: Staining of pool (spa) surfaces may occur due to deposit of copper salts. Excessive levels of copper will increase the probability of this occurrence.

MADE IN CANADA

READ THE LABEL AND THE INSTALLATION AND OPERATION MANUAL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NUMBER 29954 PEST CONTROL PRODUCTS ACT

NOTICE TO USER: This control product is to be used only in accordance with the directions on this label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.



facebook.com/ClearBlueIonizer

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twitter.com/CleanClearWater

ClearBlue Ionizer Inc.
1-3170 Ridgeway Dr.
Mississauga ON L5L 5R4
Tel: 905-608-2138

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Replacement cell label

ARGENIA SYSTEMS
CLEARBLUE IONIZER, MODEL A-800 & A-850
REPLACEMENT CELL

Replacement electrode for the copper releasing device CLEARBLUE IONIZER, MODEL A-800 & A-850, REGISTRATION NUMBER 29954, *PEST CONTROL PRODUCTS ACT*. This electrode must only be used on this model of copper generating device.

Read the label and the Installation & Operation Manual of the copper generating device CLEARBLUE IONIZER before using.

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Owner's Manual label

INSTALLATION & OPERATION MANUAL

PLEASE CAREFULLY READ AND SAVE THESE INSTRUCTIONS

Thank you for purchasing a ClearBlue Ionizer. This device will assist in controlling bacteria and algae in pools and spas by augmenting the bactericidal and algicidal activity of primary disinfectants such as chlorine or bromine. Once the copper concentration has reached the required level of 0.2 – 0.4ppm, maintain 0.6 – 3ppm of free available chlorine in pools and 3 – 5ppm of free available chlorine in spas. Regulated pools must follow provincial or municipal guidelines.

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IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed. Please read all instructions before using this system.

- Do not reduce chemical usage in pools until the ion level reaches 0.2 - 0.4 parts per million (ppm)
- Protect controller from direct elements (rain, sun). A weatherproof outdoor enclosure is recommended.
- To prevent corrosion and extend the longevity of your controller, add lithium grease to the inside of the pink connector before the electrodes are plugged in.
- To reduce the risk of injury, do not permit children to operate this device.
- Follow all aspects of the local and National Electrical Code(s) when installing this device.
- Install or locate this equipment only in accordance with the provided installation instructions.
- This unit is only water resistant when the black plug is plugged in or the electrodes are plugged in to the pink connector. Failure to do this may result in internal water damage.
- Use this equipment only for its intended use as described in this manual.
- This system should be serviced only by the manufacturer. Contact your retailer or the manufacturer for examination, repair or adjustment.

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- Do not operate this system if it has a damaged cord or plug.
- Do not immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Heavy bather loads may trigger the need for additional chlorine/bromine.
- DO NOT add pool chemicals directly to the skimmer. This may damage the unit.
- Check the expiry date of the test kit as test results may be inaccurate if used after that date.
- Use a registered or scheduled pool or spa sanitizer to maintain an appropriate chlorine/bromine residual in the water.
- The expected life expectancy of the electrodes is one year (2160 "on" hours) under normal use conditions.
- When replacing the electrode, only use replacement electrodes having a label that clearly states that it is a replacement electrode for the copper ion releasing device ClearBlue Ionizer, REGISTRATION NUMBER 29954, PEST CONTROL PRODUCTS ACT."
- Refer to the Directions for use of your chlorine/bromine sanitizer for appropriate water parameters.

GROUNDING INSTRUCTIONS



Caution: This system must be grounded while in use to protect the operator from electric shock. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This system is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

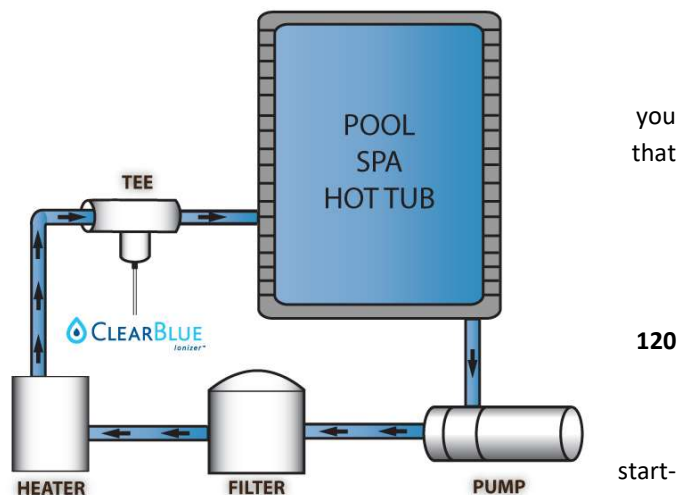
Electrical Requirements

Check Installation Instructions for proper location for the power supply. The electrical requirements are a 120 or 240 volt 60 Hz, AC only, 15+ amp protected electrical supply. Please check the label on the back of the ionizer for voltage requirement. The retailer and manufacturer cannot accept any liability for damage to the equipment or personal injury resulting from failure to observe the correct electrical connection procedures.

INSTALLATION INTRUCTIONS

ClearBlue Ionizer can be installed in under 30 minutes. The ion chamber (PVC tee) is usually installed in the pool circulation system after the pump, filter and heater. It is recommended that install the tee as close to the pool as possible. If location does not work for some reason you may install anywhere between the pump, filter or heater. Please follow these instructions:

1. **Ensure the total alkalinity is between 100 and ppm. (Most important!)** Also ensure hardness, pH and TDS are within acceptable levels (see maintenance section) Excessive amounts of algae should be controlled prior to up.
2. Turn off the pump.



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3. Plan the placement of the tee (so electrodes are vertical, facing upwards), controller and plug ensuring there is adequate room and all parts reach designated power source. A qualified electrician can extend the electrodes line cord if required using standard 18/3 cable.
4. Drain the water pipe in which you have chosen to install the tee.
5. Cut out a 3" section of the horizontal run of pipe where you have chosen to install the tee.
6. Replace this part of the pipe with the tee assembly and fasten with standard PVC glue making sure that the electrodes are vertical in order to allow maximum contact with water and to avoid dirt formation or air pockets around the electrodes.
7. Mount the controller with the screws provided on a suitable surface.
8. Connect cable from electrodes and wire from power supply into the controller.
9. Wrap Teflon tape around the threads on the electrodes six times. Use your hand to turn the electrodes clockwise into the Tee until it is secure. To ensure even wearing of electrodes, turn until they sit parallel to the water so water flows between the two metal prongs evenly.
10. Plug into suitable ground fault protected outlet.
11. In pools, do not stop reduce your current sanitizer until the ion level reaches 0.2 ppm.

THE DIGITAL DISPLAY



Ionizing

When the "ionizing" light is illuminating, it confirms that the system is ionizing the water. To illuminate, the electrodes must be fully submersed in water, and at least 80mA of current must be flowing from the electrodes into the water. The more ions that are being released into the water, the faster the light will blink. The light will look solid at maximum dose.

Ion/Action

This user defined setting represents the percentage of time in each hour the Ionizer is on for. The suggested ion setting follows in the operating instructions.

Large Dose

Press this button to release the maximum amount of ions for the number of hours you choose. There is a 24 hour default setting. The display will count down the amount of hours left. The system will return to the previously set ion/action setting when the large dose ends. Use this function at your discretion whenever a large increase in ions is required. You may choose to use this when the ionizer is first installed, upon re-filling, or during large amounts of rain or spillage.

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“-” This button will *decrease* the setting for Ion/Action or large dose hours.

“+” This button will *increase* the setting for Ion/Action or large dose hours.

Program Lock This feature will lock the controller at the currently programmed settings. To lock the program, hold down the “-” button and the “+” button simultaneously for 20 seconds, you will see “PL” (program lock) appear on the screen. To unlock, use the same process.

OPERATING INSTRUCTIONS

- 1. Power Up** Plug in controller. The digital display will turn on.
- 2. Program** Press the “Ion/Action” button to set the ion cycle time. Follow the guidelines below based on the gallons you are ionizing.
- 3. Optional** Press the “Large Dose” button to set the hours of large dose. You may set from 1 to 99 hours. 24 hours will activate as the default setting. Follow the guidelines below. When the large dose cycle is finished it will return to the previously set ion duty cycle.

Model A-800 (Maximum 94,650 L)

Liters	Gallons	Ion/Action	Large Dose
1,900	500	8	3
5,700	1500	15	6
37,850	10,000	32	40
56,800	15,000	55	58
75,700	20,000	72	75
94,650	25,000	90	95

Model A-850 (Maximum 151,400 L)

Liters	Gallons	Ion/Action	Large Dose
37,850	10,000	20	24
75,700	20,000	45	48
113,560	30,000	70	72
151,400	40,000	95	96

*Please note these are only **general guidelines**. You will need to adjust the levels based on your copper test kit readings. See the maintenance section for more information.*

Based on the ion output, it will take approximately 4 days to attain the minimum copper residual of 0.2ppm and 9 days to attain the copper residual of 0.4ppm in the maximum pool volume stated on the label.

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MAINTENANCE

1. **Copper (Cu) Ion Test:** Using a copper test kit, ensure ions are between 0.2 - 0.4 ppm; spa applications can increase ion level up to 0.6ppm. Test the ion level at least once a week until you have found the proper Ion/Action setting for your pool or spa. Increase or decrease the Ion/Action setting as required. Carefully read and follow the instructions for your Cu test kit. Check the expiry date of the Cu test kit as test results may be inaccurate if used after that date.
2. **Electrodes:** Electrodes that deliver current to the water need only be checked once per season and typically last for one year (2,160 "on" hours) under normal use conditions. You can purchase additional electrodes from your authorized dealer. To replace your electrodes, simply turn old electrodes counter clockwise to release them from the tee. Wrap Teflon tape around the threads of the new set of electrodes six times. Use your hand to turn the electrodes clockwise into the Tee until it is secure. To ensure even wearing of electrodes, turn until they sit parallel to the water so water flows through them evenly.
3. Occasionally, you will need to **oxidize** the water to help break down excess organic matter (i.e. sweat, urine, makeup, suntan oils). In pools, we suggest running your ionizer system in conjunction with 0.6 ppm chlorine. Chlorine tablets are recommended before liquid shock as they are extremely stable and slow releasing. Or, you may prefer a non-chlorine oxidizer such as Spaboss Energize (or equivalent brand) which is pH neutralized.
4. **Keep the total alkalinity between 100 and 120 ppm. (Most important!)**
5. **Keep pH between 7.2 -7.6.** Unlike chlorine, ions are pH neutral so they will not change the pH level of the water. But your choice of oxidizer or environmental factors may.
6. **Keep calcium hardness between 200 and 300 ppm.**
7. **Keep total dissolved solids (TDS) between 500 and 2,000 ppm.**
8. Ensure **phosphates** are at 100ppb or less by testing phosphates on an algae free pool (chlorine must be below 5ppm). If phosphates are above 100ppb use **PHOSfree** to remove the bulk of the phosphates. Once the phosphates are below 100ppb then begin maintenance with **Pool Perfect+PHOSfree**. If phosphate levels continue to rise, the following may be the cause: fertilizers, organics, metal sequestering products, scale products, or extreme rainfall. The above will cause phosphates to continue to rise above what **Pool Perfect+PHOSfree** can maintain. It is important to reduce/eliminate the source of the phosphates for **Pool Perfect+PHOSfree** to work properly. If possible, prevent runoff from gardens and lawns from entering the pool. Remove leaves from the pool regularly and promptly.
9. You may need to add a **clarifier or flocculent** if you see extremely fine particles in the water which the filter cannot separate. This clarifier makes these fine particles clump together and sink to the bottom when your pump is off. When the particles have settled on the bottom of the pool they are easily removed by vacuuming. This is not a dangerous chemical and it is used in small quantities. Please follow the directions on the product label.
10. **Closing the pool.** Put in an algaecide 24 hours before closing and then shock after lowering the water level. Pre-mix any powdered shock before putting it into the pool to prevent a bleached area on the liner. It's also a good idea to have your water tested at a store for other imbalances. You don't want to use a stain and scale preventer because it will reduce the effectiveness of the ionizer. If you reside in a region where there is frost, you should unplug and remove your system from its installation and store the ClearBlue indoors. It's a good time to check the electrodes and make note of when they will need replacing.

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Note: Do Not Use a Stain & Scale Preventer with this system. You should not use a sequestering agent with an ionizer. Stain & Scale Preventer is only needed if you have water from a well with high concentrations of metal, lime etc. Although Stain & Scale Preventer is designed to remove iron and calcium, it will also remove the ClearBlue ions. If you have a serious staining and scaling problem, it should be treated at the point where the water enters the pool or spa using a *Metal Trap* filter. This filter can be attached to any garden hose and will provide better water quality for your pool or spa.

If you have already added a sequestering agent to your pool or spa, it will combine with minerals and get collected by the filter (backwashed) out or dissipate within a month. Therefore, you can use your ionizer after this period without depleting the ions.

CLEANING & CARE

Electrodes: Cleaning will remove oxidization. Some deposits may form on the electrodes depending on the water conditions. Clean the flat face of the electrodes using a smooth file and some water. The surface does not have to be “polished”; simply remove any traces of oxidization and other sediments. Remove the old Teflon tape, use new tape and wrap it around six times.

Exterior Housing: The housing of the ionizer is made from a durable PVC plastic. Clean the outside with a mild soap and water; rinse and dry with a soft cloth. Do not use any type of household or abrasive cleaner.

System Controller: Care should be taken in cleaning the controller. If the controller becomes soiled, wipe the panel with a cloth dampened slightly with water only. Dry with a soft cloth. Do not scrub or use any sort of chemical cleaners.

WARRANTY

All ClearBlue ionizers carry a five (5) year limited warranty to be free from all manufacturing defects. This warranty does not include replacement electrodes, which are subject to normal wear and must be replaced periodically. You must obtain a Return Materials Authorization (RMA) number from Customer Service before returning a product. The device will be repaired or replaced within fifteen business days following a claim. This warranty is in effect starting the date of purchase and is only applicable to those units with an unopened enclosure and a serial number that is in its original unaltered state. This warranty does not apply to the following incorrect operating procedures, breakage, or (transport/impact) damages caused by fault, abuse, misuse, carelessness, misapplication, alteration, modification, improper maintenance, over voltage of the unit as well as act of God, fire, chemical (alteration) or natural corrosion or any other casualty. This warranty does not apply to the spa or pool but solely to the components manufactured by Argenia Systems Inc.

SPECIFICATIONS

Input Voltage: 120 or 240 Volts AC

Input Frequency: 50 to 60 Hertz

Output Voltage: 12 VDC

Output Current: 2 AMP Max

Outside Dimensions: 5" x 3" x 2.5"

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Controller: 0-99 variable settings
Flow Rate: 10 to 80 GPM
Tee: Slip x Slip x 1 1/2" FIP S40 PVC Tee
Electrode Size: 3" x 1/2" x 5/16" Each x (2) Bars
Electrode Weight: 8 ounces
Typical Electrode Life: 2,160 "on" hours
Capacity: Max 25,000 or 40,000 Gallons

REPLACEMENT PARTS & ACCESSORIES

Description / Part No

Controller (120v or 240v) / A-800 (25,000 Gallon Max) or A-850 (40,000 Gallon Max)

Electrodes (anodes) / A-750E

Copper test kit / A-CUI

Copper test kit liquid refills / A-CUI-R

1 1/2" PVC tee / PLA-85150

2" PVC tee / PLA-85142

Need help?

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