

Water Treatment System

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STOP!!

<u>DO NOT</u> CONNECT POWER TO YOUR ULTRA BLU SYSTEM UNTIL YOU HAVE FULLY READ THESE INSTRUCTIONS!

IMPORTANT SAFETY INSTRUCTIONS!

- 1. PLEASE READ AND FOLLOW ALL INSTRUCTIONS.
- 2. ***WARNING**** RISK OF INJURY
 - Never permit children to operate this product.

RISK OF ELECTRICAL SHOCK & HAZARD:

- Connect transformer only to a proper-sized grounding type receptacle protected by a Ground-Fault-Circuit-Interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.
- **DO NOT** remove transformer power supply cord grounding prong. Doing so could result in serious injury or death.
- **DO NOT** bury the electrical cord. Place cord out of the way of lawn mowers, hedge trimmers, and other electrical equipment.
- Replace a damaged electrical cord immediately.
- **DO NOT** use an extension cord to connect the transformer to an electrical supply. Provide a properly located outlet.
- 3. SAVE THESE INSTRUCTIONS.

Ultra Blu Installation Instructions

Note: To avoid immediate staining, make sure that Marcite Finish pools cure at least 90 days before your Ultra Blu System is used. Only use salt specifically made for use in swimming pools.

• Electrical Hook-up CAUTION:

- DO NOT connect power to your unit until you have followed the System Installation Instructions.
- Alteration of the electrical cord in any way will render the warranty null and void.
- Ensure that your electrical hook-up conforms with all local and national electrical codes.

Your 120-volt Ultra Blu System must be plugged directly into a properly grounded, GFCI protected receptacle with the cord provided.

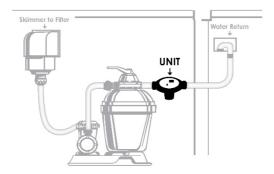
Please Reference Safety Instructions Before Proceeding

If a GFCI protected outlet has been installed, you are now prepared to install your Ultra Blu System.

Warning: If your pool equipment includes a gas heater, be sure to install your Ultra Blu System at least 18" away from the heater unit.

SYSTEM INSTALLATION

- 1. Turn your filtration system off. Block both the water suction and return fittings on your pool to prevent any water loss during system installation.
- 2. Disconnect the water return hose from your filter and remove the connecting threaded hose fitting from your filter. Apply Teflon tape to the fitting and re-install it into the end of your Ultra Blu system. The unit can face in either direction.
- 3. Apply Teflon tape to both ends of the coupler fitting included with your system. Carefully thread it into your filter return port (DO NOT OVERTIGHTEN).
- 4. Thread the other end of the connector fitting into the open end of the Ultra Blu system.
- Open both your suction and return lines to your filter system and inspect for any water leaks. Turn on your filter system and connect power to the Ultra Blu system.



System Features:

"Active" light indicates that the system is connected to a live power source, and the electrodes are receiving power.

"Chamber" light indicates that the electrodes are not producing ions and that it is time to replace your electrode chamber.

"Level Control" up and down arrows will adjust the rate at which copper and silver ions are dispensed into the pool water. Your ideal range for minerals is between 0.3-0.5 ppm. Follow the instructions under the "Getting Started" section to use this control properly.

"Water Temperature Display" displays the current temperature of the pool water when the pump is on, and water is actively flowing.

GETTING STARTED

This manual was designed to help reduce the time, effort, and cost of maintaining your pool, while improving the water quality.

How it works...

- 1. Balance the water
 - a. pH 7.2 7.8 ppm
 - b. Total Alkalinity 80 140 ppm
 - c. Calcium Hardness....... 200 350 ppm
 - d. Total Dissolved Solids.... 900 ppm (minimum)
- 2. Turn on the Ultra Blu system.
 - a. Set the level control to "4". Ensure that the green "Active" light is illuminated when water is flowing.
- Add 50 lbs. of swimming pool salt.
 - a. Salt is used to raise your total dissolved solids level and achieve 900 ppm.
 - b. For larger pools, it may be necessary to add additional salt to achieve 900 ppm.
 - c. Test pool water daily until the copper level reaches 0.3 0.5 ppm.
- 4. Broadcast the 25 lb. bucket of **Launch** directly to the pool surface.

Weekly Maintenance...

- 1. Test water for pH, Alkalinity, and Copper.
 - a. Copper should be maintained between 0.3 0.5 ppm.
- 2. Adjust the Ultra Blu output by using the Level Control up and down arrows.
- 3. Alternate shock treatments.
 - a. 1 bag of shock treats 10K gallons of pool water.
 - b. Week 1, shock the pool using Rocket.
 - Week 2, shock the pool using Propel. After waiting 2 hours for Propel to completely dissipate, add in a pint of Orbit.
 - d. Always run the filter system for at least 2 hours when treating the water to allow for proper circulation of chemicals.

A Fresh Look at The Basics

To have pure water in your pool, you will need to manage:

- Quality Water Circulation and Filtration. The continuous movement of water is
 necessary to filter out debris and circulate oxidizers. Circulation is essential because
 it helps ensure that the water isn't stagnant and is a breeding ground for algae.
 Filtration removes debris from the water. Most bacteria and viruses are smaller than
 the finest filter screens, which is why water purification is so important.
- <u>Purification.</u> Disinfecting and oxidizing (burning off) harmful micro-organisms. The Ultra Blu system releases natural minerals into your water. Pure water is clear, refreshing, healthy and free of microorganisms through disinfection and oxidation.
- <u>Disinfecting.</u> Chlorine is a potent chemical element. While chlorine kills harmful living organisms, it is so powerful it can create a very uncomfortable swimming environment. Chlorine can also be unstable. As a result, chlorine-treated water generally requires constant monitoring and frequent chemical additions which affect water balance (pH, Alkalinity, and Calcium Hardness). The advantages and disadvantages of chlorine are why we use chlorine only in a weekly shock dosage.
- Oxidation. Oxidation is needed to eliminate dead algae, dead bacteria, and organic waste from your pool. Be sure to follow the manufacturer's instructions to ensure that adequate oxidation occurs.
- Water Balance and Stability. Water is sensitive to changes in pH, Total Alkalinity, and Calcium Hardness. Your Ultra Blu System makes water balance easier to maintain. Unlike Chlorine and Bromine, the Ultra Blu System produces natural minerals that are pH neutral.

Your Ultra Blu System helps to maintain quality water the natural way, with copper and silver, without affecting the balance of important pool water properties. Low levels of copper and silver attack algae, bacteria and viruses that infect your pool water. These minerals, which are natural disinfectants, are safe for your family and our environment.

Basic Water Chemistry

The ideal ranges for Total Alkalinity, pH, and Calcium Hardness differ with local water conditions. Also, water balance must be monitored regularly since it can be disrupted by almost anything.

Total Alkalinity. Total Alkalinity is the water's "buffer capacity". Proper balanced Total Alkalinity help the pH level remain stable and prevents scale deposits from forming on pool surfaces. Low Total Alkalinity means the water has too little buffering capacity, which results in constantly fluctuating pH readings. This can damage equipment and pool surfaces over time. High Total Alkalinity generally leads to cloudy water, high pH levels and potential for scaling. Because of its effect on pH, it is necessary to adjust the Total Alkalinity prior to adjusting pH. The ideal range for Alkalinity is between 80-120 ppm.

How to correct Total Alkalinity. When Total Alkalinity is too low, an alkalinity increaser (sodium bicarbonate) will return it to the recommended level. Total Alkalinity that is too high may be more difficult to adjust. It may require partially draining the pool or using an acid, most commonly muriatic acid, to bring down to the ideal range. *Always follow the manufacturer's instructions based on your pool size (gallons)*

pH. The pH refers to the water's acidity level. An improper pH level can damage your pool surface, plumbing and equipment. For instance, etching of the pool surface or corrosion of the metal parts in the pump or heater are signs that the water is too acidic (pH is too low). Alternatively, scale on the pool surface, cloudy water and algae growth are signs that the water is too basic (pH is too high). The recommended level of pH is between 7.2-7.6. **How to correct pH.** If pH is too low, add pH increaser (soda ash). If pH is too high, add pH down (dry acid). *Always follow the manufacturer's instructions based on your pool size (gallons)*

Calcium Hardness. All water naturally seeks moderate hardness levels. While some forms of chlorine make water harder, the natural ionization process of the Ultra Blu System has no effect on Calcium Hardness, so it helps maintain balance. If your Calcium Hardness is too low, the water will look to pull Calcium from areas on the pool surface and equipment, causing corrosion. Adversely, if the Calcium levels are too high, it will leave deposits on the pool surface and equipment. The ideal range for Calcium Hardness is between 200 – 400 ppm. How to correct Calcium Hardness. Increasing Calcium Hardness is easy: add hardness increaser (calcium chloride). Removing hardness, on the other hand, is more difficult. You may have to partially drain the pool and refill to dilute the calcium content. *Always follow the manufacturer's instructions based on your pool size (gallons)*

TROUBLESHOOTING YOUR ULTRA BLU SYSTEM

The "Active" light should be lit anytime your unit is attached to the appropriate power source and water is flowing. If it is not lit:

- Make sure the power is on. The receptacle should be ground fault protected. Check to see if the GFCI has been tripped. If tripped, follow your GFCI operating instructions to reset. If it continues to trip, contact your local pool dealer for assistance. If the GFCI is not tripped, ensure the circuit breaker in your main panel is on.
- 2. Ensure the power source is correct. Compare it to the electrical rating on the top of the transformer.
- 3. Ensure the pump is operating and water is flowing through the unit. The system senses water flow and without it will not come on.
- 4. Ensure that your system is installed directly to the outlet of the filter tank. It is necessary for the system to sense the vibration of the pump running to be active.
- 5. If the power is on, the GFCI hasn't been tripped, and you have water flow, contact technical support at 1-888-333-1134.

The "Chamber" indicator should only come on if your cell is no longer able to put copper and silver ions into your pool.

If the "Chamber" light is lit:

- 1. Remove the cell from the base of the unit (always shut water off first) and check status of copper/silver bars.
- 2. If the bars are still in reasonable condition, it is possible that the level control is set too high. Press the down arrow until the light turns off.

Note: The electrode bars are eroding while the system is in use. Once you achieve the desired copper level and level setting, over time you will need to increase that setting slightly to maintain that same copper level.

TROUBLESHOOTING FOR PROBLEM WATER

Issue: Difficulty building and maintaining the proper mineral (copper) level in your pool.

Possible Solutions:

- Ensure that your <u>Total Dissolved Solids</u> levels are above 900 ppm. The copper/silver ions need solids in the water to build up the proper residual. Adjust by adding additional salt to the pool water. One pound of salt will raise the TDS levels in 10,000 gallons of water by 12 ppm.
- 2. Check the <u>Power Source</u>. Ensure that the "Active" light is on continuously. The light should be illuminated and remain on while the filtration system is operational. If the light is not on, check your power supply.
- 3. Adjusting the <u>Level Control</u> will increase or decrease the residual level in your pool. On a new pool installation and a new cell, it is possible for the system to shut down if the Level Control is set to "8" (max). The "Active" light will also not illuminate if the system is set to "0". If the Level Control has been set to "4" for 72 hours upon start up, and is still not building a residual, turn level control to "5" or "6" and retest in 72 hours.
- 4. <u>Test the pool water</u> to ensure that it is properly balanced. Low Alkalinity and pH levels may not allow for proper residual build-up.

Issue: Cloudy Water.

Possible Solutions:

- Check filter operation and length of filter cycle times. Running the filer system for longer cycles, especially in extreme heat, will ensure adequate water purification.
- 2. <u>Test the pool water</u> to ensure that it is properly balanced. Quite frequently, the Alkalinity and pH of your pool will alter the appearance of the water. Heavy rains are the most common cause of fluctuation.

3. Shock the pool using a chlorinated shock such as sodium dichlor. Often the pool will need a boost after a heavy bather load.

Issue: "Clear" Green-Tinted Water.

Possibly Solutions:

- 1. <u>Test the pool water</u> to ensure that it is properly balanced. It is possible that the Alkalinity is higher than the top end 120 ppm.
- Shock the pool using a chlorinated shock. After heavy rains, large bather loads, or in extreme heat, it is possible the pool water will need a boost of chlorine to eliminate contaminants. Dark green tinted water may require 2-3 times the weekly dosage to resolve the issue.
- 3. <u>Check the "Chamber"</u> light to see if the chamber needs to be serviced. If the "Chamber" light is on, it may be time to replace the cell. Refer to the details in the next section regarding the replacement of the cell.
- 4. Check the Copper Residual. If the copper residual is excessive (above 1 ppm), you may need to turn the Level Control to "0" or simply unplug the unit. If the copper residual is above 3 ppm, it may be necessary to add a metal remover. Call the technical support line for assistance 1-888-333-1134.

Thank you for choosing Ultra Blu!

We are confident that this Water Management and Troubleshooting Pamphlet will provide the proper product knowledge for operating the system. Our technical support team is available to answer any questions that may arise during use.



33800 Lear Industrial Parkway, Avon, OH 44011 Technical Support 1-888-333-1134

1 Year "Hassle Free" Warranty

This warranty extends to the original purchaser only and commences on the date of the original retail purchase, regardless of the date of installation. Accordingly, this warranty is not transferable to subsequent purchasers.

If your Ultra Blu system ceases to operate within the warranty period, it will be repaired or exchanged by Main Access, at no charge. This warranty does not cover any Ultra Blu system which has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the specified instruction manual. This warranty does not apply to any damage that is a result of improper maintenance or to any Ultra Blu system which has not been installed as specified in the owner's manual. This warranty also does not cover any Ultra Blu system that has been altered or modified.

To obtain warranty service, the Ultra Blu system must be returned, within the warranty period. A Returns Goods Authorization (RGA) number must be obtained prior to shipping the unit by calling 1-888-333-1134. The expense of removing, reinstalling, and returning the system is the responsibility of the owner. THE COMPANY'S responsibility with respect to warranty claims is limited to exchanging or repairing the system and shipping charges related to its return to the owner. No claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Ultra Blu system.

THE COMPANY reserves the right to change or improve the design of any Ultra Blu system without obligation to modify any system previously manufactured.

All implied warranties, including mechantability and fitness for a particular purpose, are disclaimed in their entirety after expiration of the warranty period with respect to parts and design.

THE COMPANY'S obligation under this warranty is strictly and exclusively limited to the exchange of defective Ultra Blu system and THE COMPANY does not assume or authorize anyone to assume for it, any other obligation.

THE COMPANY assumes no responsibility for incidental, consequential, or other damages including, but not limited to, transportation or shipping expenses, telephone charges, rental of a like product during the time of warranty service, travel, loss or damage to personal property, loss of revenue, loss of use, loss of time or inconvenience.

Some states do not allow the exclusion or limitation of incidental, consequential damages, so the above limitations and exclusions may not apply to you.

IMPORTANT

4 Year "HASSLE FREE" *Extended Warranty

An extended 4 year "Hassle Free" warranty is available with your new Ultra Blu system. You have 30 days from your original date of purchase to purchase the extended warranty. Read below for details.

WHY PURCHASE THE EXTENDED WARRANTY?

Your new Ultra Blu system (Transformer module only. Electrodes are not covered.) is covered by a 1 year, "Hassle Free" warranty. The extended warranty program provides an inexpensive way for you to eliminate any worries concerning costly maintenance and repairs for 5 full years. This is particularly important today because labor and component parts costs are always increasing.

For only \$49.95, you can extend your 1 year, "Hassle Free" warranty for an additional 4 years. That means, if your Ultra Blu system stops operating, call toll free 1-888-333-1134. Mention that you have an extended warranty and request a Return Goods Authorization (RGA). Remove and package your system, mark the RGA number on the outside of the box in large printing and return it to Main Access shipping prepaid. When we receive it, we will repair or replace it and we will send it back to you via FedEx.

Important Notes:

- 1. FAILURE TO SEND YOUR CHECK FOR \$49.95, ALONG WITH THE COMPLETED RETURN PORTION OF THE EXTENDED WARRANTY CARD WILL MEAN AUTOMATIC ENROLLMENT IN THE 1 YEAR WARRANTY PROGRAM ONLY!!!
- It is the responsibility of the owner to remove and return the Ultra Blu system. Should you wish to have the equipment removed and returned by a dealer or service company, you will be responsible for any labor or other charges relating to its removal or installation.
- 3. The terms and conditions of the 1-year warranty also apply to the extended warranty and are extended to the original purchaser only. Proof of original purchase may be requested before any warranty work is carried out.
- 4. Fill out the return portion of the extended warranty card and separate along perforation. Make out a check payable to: Main Access. Mail both items to: Main Access, 33800 Lear Industrial Parkway, Avon, OH 44011 within 30 days of purchase of your new Ultra Blu system. Your canceled check is proof of extended warranty enrollment.

*See 1 year warranty card for details.

Pool Maintenance Schedule/Notes	