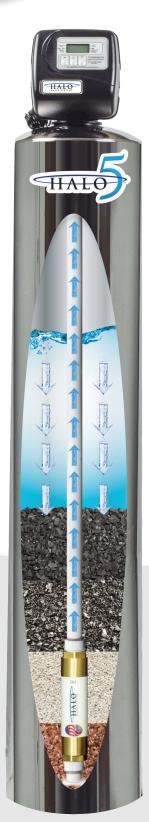




**Homeowner's Guide** 

Change your water. Change your life.







# WQA Tested & Certified According to NSF/ANSI 61 NSF/ANSI 372 for lead free compliance

# MAINTENANCE FREE • 10 YEAR WARRANTY Whole House Filtration & Conditioning System

#### STAGE 1 HALO Granular Activated Carbon (GAC)

Acid-washed GAC for the general removal of chlorine, chloramines, gases, dyes, fuels, heavy metals, man-made pollutants, disinfectants, pesticides, TTHM, sodium hypochlorite, undesirable odors, undesirable taste and volatile organic contaminants.

Our GAC meets or exceeds NSF/ANSI Standard 61 and all Food Chemical Codex, AWWA, ASTM and USP Standards.

#### STAGE 2 HALO Catalytic High Activity Carbon (HAC)

Catalytic HAC is an outstanding material for successfully reducing free chlorine from water supplies. The end product is clean, fresh water with no objectionable taste or odor characteristics. Additionally, HAC can be used for filtering waters having a wide range of pH levels and will impart a high "polish" to the filtered water.

Our HAC meets or exceeds the requirements of the NSF/ANSI Standard 61

#### STAGE 3 HALO AG Plus

HALO Ag Plus is an all-natural, environmentally safe media with a large surface area and micro-porous structure. It is a highly efficient filter media for the reduction of suspended matter down to the 5 micron or less range and is thus, extremely effective at removing water turbidity.

Our HALO-Ag Plus meets or exceeds the requirements of the NSF/ANSI Standard 61.

#### STAGE 4 HALO High Density Garnet Filter Media

Garnet is a high hardness, high density granular filtration media that can effectively filter down to the 10-20 micron range. It also provides an excellent support bed for the other filtration media.

Our High Density Garnet meets or exceeds AWWA specifications. It is also classified by Underwriters Laboratories Inc.\* in accordance with ANSI/NSF Standard 61.

#### STAGE 5 HALO Proprietary ION 2.0 Scale Inhibitor Water Conditioner•

Our proprietary HALO ION in-line water conditioner uses multi-reversing polarity permanent magnetic fields to alter the molecular structure of positively and negatively charged ions of dissolved calcium and magnesium. This causes the hard water minerals that would normally cause lime scale to stay suspended in the water instead of attaching to pipes and appliances. The conditioned water also helps prevent corrosion due to scale and will dissolve existing scale over time.

With over 45 years of track record, the HALO ION Scale Inhibitor in line water onditioner is a proven, ecofriendly hard water treatment solution.



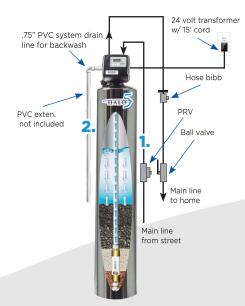
Scan code to learn more about HALO 5

# **Installation at a Glance**

#### **MAINTENANCE FREE**

Whole House Filtration & Conditioning System





- 1. Plumb inlet/outlet to system main.
- 2. Plumb drain line includes .75" 90° angle male threaded PVC connector.
- 3. Flush the system with hose bib (20 minutes).
- **4.** Force regeneration (10 minutes).
- 5. Flush the system a second time with hose bib (20 minutes).
- **6.** Force a second regeneration (10 minutes).
- 7. Finally flush the system a third time with hose bib (20 minutes).
- Open system to household.
- 9. Test for chlorine at hose bib and kitchen sink and show customer the results.

# **System Specifications**

Capacities are calculated based on occupancy over ten years

System	Tank Size	Wt. (lbs)	Ht. (in.)	W (in.)	D (in.)	Inlet/ Outlet (in.)	Part #	System Capacity
HALO 5 - 1"	10" X 54"	93	61	10	10	1"	H5-100	1,000,000 Gallons
HALO 5 - 1.25"	12" X 52"	121	59	12	12	1.25"	H5-125	1,500,000 Gallons
HALO 5 - 1.50"	13" X 54"	148	73	13	13	1.50"	H5-150	2,000,000 Gallons
HALO 5 - 2"	16" X 65"	246	74	16	16	2"	H5-200	Commercial - 3M Gal.

**WARNING:** Do not use with water that is microbiological unsafe or of unknown quality without adequate disinfection before or after the system. Intended for use treatment of cold water only. Do not exceed 80 psi. Intended for residential use only.

**NOTE:** The HALO filtration systems are intended for treatment of potable water provided by municipal water providers. While the HALO Filtration Systems may be effective for treatment of well water it is vital that a well water quality analysis be provided for review and recommendation in to ensure that optimum results can be realized. Failure to provide a current well water report to HALO Water Systems for analysis and recommendation voids all warranties.

# **HALO Water Systems Best Practices**

### **Tips to Help You Get The Best Results**

#### **Congratulations on the purchase of your new HALO**

The following information and list of "tips" was designed to help you better understand and maximize the effectiveness of this advanced water treatment technology.

#### **Understanding and Appreciating Aragonite:**

In appliances, on dishes and on countertops where water is frequently left standing, you may begin to notice a powdered talc-like substance collecting. This powder is called Aragonite. Aragonite is a harmless, electrically neutral and non-corrosive form of calcite that is produced during the magnetic conditioning water treatment process. Prior to passing through the ION magnetic conditioner, this Aragonite is actually the minerals that would have caused limescale build-up and corrosion in your pipes and appliances. The Aragonite is a byproduct formed after hard water passes through the ION magnetic conditioner and it is easily wiped off most surfaces. You should consider Aragonite as welcome proof that your ION conditioner is operating effectively.

#### Simple Actions to Help Minimize Aragonite on Dishes.

- Use ONLY powdered dishwasher soap.
- © CUT DOWN ON SOAP. Use only 1
  Tablespoon TOTAL divided one half tablespoon into each dispenser cup. Too much soap may cause spotting, etching, filming and/or glazing.
- Dishwasher hot water temperature should be at least 140° and hotter is better so, prior to starting your dishwasher, you should run the HOT water at the kitchen sink until it begins to flow hot. This ensures hot water for the dishwasher's wash cycle.
- Use (as directed) a rinse agent such as "Lemi Shine". Available at most Target, WalMart stores and Amazon.com.
- Turn off the dishwasher heating element and allow the dishes to cool dry. Open the dishwasher door slightly to allow steam to escape as soon as the wash cycle is complete.
- Always store detergent in a dry place as moisture adversely affects dish detergent contributing to spotting. Purchasing small boxes of detergent, may make it easier to keep fresh product on hand. Check the expiration date for freshness because dish detergent actually does expire!

#### Tips to Remove & Prevent Limescale Film on:

Dishes, glasses, small appliances & plumbing fixtures that have been subjected to untreated water prior to the installation of your HALO System; *these items likely have soap scum and limescale build up.* 

- Place affected dishes into dishwasher and run a complete wash cycle substituting 1 cup of white vinegar for the soap. Some glasses can become permanently etched if too much soap has previously been used.
- Residue and mineral build up can be cleaned from small appliances such as coffee makers by using a 2-1 solution of hot water and white vinegar.
- Limescale and hard water deposits which have built-up on faucets and plumbing fixtures prior to the installation of your new HALO water treatment system should be carefully removed with the help of products such as CLR® or Lime Away®. Lemi Shine® has also been reported to help remove mineral build up from dishwashers as well as from bathtubs, sinks and toilets.

#### **Maintaining Your Bath & Shower Enclosures:**

- Use CLR®, X-14®, Lemi Shine® or BIO-CLEAN® as directed to remove any existing mineral build-up from your bath tub, shower walls, shower basin and glass doors.
- Use a squeegee or wipe down shower doors and walls after each use to prevent spots caused by soap scum.
- Applying Turtle Wax® or Bio-Clean Superior Silicone Sealant® on clear glass doors, chrome, brass and dark colored shower tile will help to promote water sheeting and discourage soap scum build-up.
- ALO treated water contains almost no chlorine. This water it is more enjoyable to drink and to bathe in, but chlorine does help prevent mildew from developing. Proper ventilation and consistently wiping down the bath tub and shower enclosure after each use will keep your bathing area free of mildew.

#### **Toilet Maintenance & Cleaning:**

- Adding bleach to toilet bowl will help prevent mildew and bacteria. This is particularly important for newer low-flush toilets that do not fully flush away deposits.
- Infrequently used toilets, such as those located in vacation homes or in guest bathrooms, may be subject to rapid mineral build-up due to inactivity. Use a product such as CLR® to remove this mineral build-up.



# FREQUENTLY ASKED QUESTIONS

#### What is the difference between a HALO 5 and a water softener?

The differences are profound. It is not an apples to apples comparison. While many softeners are comparably or priced higher than a HALO 5, traditional water softeners are a more expensive less effective way to address hard water scale and corrosion and actually add more contaminants into household water supplies and the environment. Most water hardness treatment systems use ion exchange with salt as a regenerate which can have an adverse effect on our health and the environment. While ion exchange systems substitute salt for calcium, the HALO ION In-line Water Conditioner transforms dissolved calcium for crystallized calcium. Calcium in its crystallized state is rendered harmless and free from its hard properties and scaling effects. For a detailed comparison please see the side by side comparison of "HALO 5 vs. Traditional Softeners".

#### What is the maintenance schedule on a HALO 5?

The HALO 5 IS MAINTENANCE FREE.

NOTE: In a home with 4 people, the water heater will need to be flushed (of scale solids) 3-4 months after the installation of the HALO 5, or any other HALO solution that includes an HALO ION water conditioner. This is because the HALO ION water conditioner will dissolve existing scale formation and inhibit hard water corrosion.

#### How much water is used during the backwash cycle?

On the HALO 5 Stage system, they come preprogrammed to backwash once a week. This is a 10 minute program that includes 6 minutes of fluidizing the media bed and 4 minutes of compaction.

On the H5-100 (HALO 5 Stage - 1") System - Approx. 3.5 gallons per minute. NOTE: The water that is discharged during the backwash cycle is actually cleaner than the water that came in from the street. It is safe for plants, can be run into a flower bed or a tree well.

#### How does the HALO 5 clean itself with no filters?

It automatically backwashes once a week. This is not so much to clean the system but really to reset the media bed and prevent "channeling". "Channeling" is water passing through the least resistant path of the granular bed avoiding contact time with the carbon resulting in lower effectiveness.

#### What are the commercial applications for HALO?

Food service equipment.
Heating and boiler applications.
Cooling and cooling tower applications.
Swimming pool, spa and water feature applications.
Agriculture and irrigation applications.

#### What separates the HALO 5 form other systems?

We use 2 of the best carbon medias on the market. GAC is great for the removal of chlorine and chloramines. HAC works great with free chlorine. The combination of the two will give you the best results 365 days a year.

We use a tank with a distributor head which reduces backwash rate by 30% or more, and pressure loss properties are improved by upwards of 40%. **WQA tested and approved. NSF 61 Lead free certification.** Integrated Solution (Filters and Conditions) that is effective for the family, home and planet. Quality of Collateral Materials

Scope of Applications

Variety of Price Points

Quality of Sales Support

Quality of Technical Support

Quality of Customer Service

Only Available to Licensed Contractors.

#### How do we know when the HALO 5 is at its end of life?

On the H5-100 unit, after approximately 1 million gallons of usage. If the treated water tests positive for chlorine.

#### What are the Warranties?

HALO 5 - Limited lifetime warranty
Lifetime on the tank (up to one replacement)
10 years on the control head
10 years on the media (up to one tank replacement)
HALO ION - 25 year prorated warranty (on magnetic field)
HALO Mini Series - 1 year on housings. 25 years on HALO ION

#### What is the difference between a HALO 5 and bottled water?

HALO retains the minerals in the water.

HALO is available throughout the entire home for bathing cooking and drinking water. HALO does NOT contain Xenoestrogens or BPA commonly found in bottled water. HALO water cost about 1/1000th as much as bottled water.

#### How does the HALO ION In-line water conditioner work?

The patented system, when installed in a water supply line, controls the formation of scale and corrosion deposits without the use of chemicals. Water passing through the alternating magnetic fields causes most minerals (iron excepted) to stay suspended in the water so they cannot form a hard brittle scale. The entire process bonds calcium ions to each other rather than to your plumbing and fixtures.

Water passes, under pressure, and with minimal turbulence, through alternating magnetic lines of force perpendicular to the waters flow direction. This causes a polarizing effect upon non-polar constituents in the water, and provides energy of activation level necessary to cause the dissolve of calcium Carbonate (calcite) CaCO<sub>3</sub> within the water to recombine and form "aragonite" (an amorphous powdery form) when the solubility limit is reached. Unlike crystalline CaCO<sub>3</sub>, aragonite can easily remain suspended in the water stream rather than attaching to system walls as "scale".

The presence of aragonite in the water provides an additional benefit in terms of corrosion protection. A thin film of soft aragonite, which normally forms as a result of long term magnetic treatment, actually prevents free oxygen within the water from attacking metallic components through which the water travels, thus preventing corrosion.

#### What is your product used for?

The HALO ION In-line Water Conditioner has several uses. It is primarily used in commercial applications where scale prevention is required, such as water heater pretreatment or reverse osmosis pretreatment. It is also used for residential applications where the HALO ION is desired for its taste and functional use.

#### What is so special about HALO ION In-line Water conditioner?

The HALO ION In-line Water Conditioner technology has been in use since 1964. It is the most widely used, recognized and reliable maintenance free system available today. In addition, local bans on soft water equipment or wastewater discharge permits **are not** applicable with this system.

#### Why is it important to not use chemicals or sodium in treating water?

1. You are not spending money on them. 2. You are not ingesting them in part or in whole. 3. You are not adding to the pollution of water supplies and the precious environment.

#### If the HALO ION does not use chemicals or sodium, what does it use?

Just water! The water is altered through a multi-stage magnetic process. There is nothing to add.

#### Will the water test soft after the system is installed?

**NO.** Remember that the calcium is still present, but in an altered suspended state. A test for hardness in reality is a test for the presence of the minerals calcium and magnesium, which have naturally hard properties. The HALO ION In-line Water Conditioner renders them harmless.



# QUICK REFERENCE PROGRAMMING GUIDE HALO 5

If the head on your HALO 5 does not look like the image to the right, you need to remove the weatherproof cover over it.

# Set the time of day

Hold the **set** button for 5 seconds, then use the ▲ or ▼ buttons to select the current hour.

Note: The hour is AM unless PM is indicated by the ▶ pointing at the PM on the right side of the display screen.

Press the **set** button again to adjust the minutes.

# 2 Select system regeneration settings

Hold the **set** button and the  $\triangle$  simultaneously for 3 seconds, until the digital display flashes. Adjust the time for regeneration to a time when minimal water is being used. Press the **set** button again to accept the setting and advance to the next step in the programing process.

# **5** Days between regeneration cycle

Recommended unless otherwise requested by homeowner.

1 Person in the home: 11 days2-3 persons in the home: 9 days4 or more persons in the home: 7 days

Press the **set** button to accept the setting and advance to the next step in the programming process. You will return to the home screen.

## **4** ■ Verify system regeneration cycle

Hold the **set** button and the ▲ button simultaneously for 3 seconds. Let go and then hold the **set** button and the ▲ button simultaneously again for 3 seconds **P7** should be displayed. If this screen does not display **P7**, press the ▲ or ▼ buttons until **P7** is selected. Press **set** to accept this setting. Press **set** again. You should now see the number **99** with a blinking arrow next to **days to regen** on the bottom right of the display screen. If you see the number **7** instead of **99** press the ▲ or ▼ button until the number **99** appears, then press **set**, dP will flash **12** hr will be displayed, press **set** again to return to the main screen.



# 5 Main screen will now display time

Press the  $\triangle$  or  $\nabla$  button to toggle between time of day and days until next regeneration. Confirm the system regeneration is scheduled for the number of days you selected in step 3.

#### **Programming is now completed!**

#### E1 or E2 error codes

If the screen displays an E1 or E2 error code, hold **set** and ▼ buttons until you hear the gear recenter, then release buttons.

### **IMPORTANT**

#### It is now essential the you force 2 regenerations.

Next run water from each fixture in the home for **2 minutes** to completely flush the system. If water remains cloudy and repeat the process and force 2 regenerations, then run water again for **2 minutes** from every fixture. **Thoroughly clean and carbon residue from fixtures.** 

If forced regenerations are not performed customer will likely complain about water quality and gray water.



## LIMITED PRODUCT WARRANTY

HALO Water System's (HALO 5 Series) point of entry residential water filters and conditioners (up to 13" diameter I tanks) are warrantied to the original owner at the original residential installation location to be free from defects in materials and workmanship from the date of manufacture as specified. If a HALO 5 System was purchased from a 3rd party, liquidator or by any means other than an authorized licensed wholesale distributor, the warranty is void.

#### **CONDITIONS OF WARRANTY**

- The system must be installed and maintained according to local codes and secondarily in accordance with manufacturer's recommendations. Contact HALO if there are any conflicts between local codes and our printed instructions.
- The system must be maintained with HALO approved replacement components.
- · Failures resulting from fire, freezing, neglect, accident, alteration, abuse, improper installation or acts of nature are not covered.
- Water pressure must be regulated between 40 to 80 pounds per square inch working or static pressure. Pressure exceeding 80 pounds per square inch (psi) working or static pressure voids all warranties.
- · If installed without a current well water report being sumitted for recommendation to HALO Water Systems all warranties are void.
- Internal water temperature exceeding 120° F voids warranty on tank.
- Influent chlorine must not exceed 1 mg/L.
- HALO does not warrant to perform, pay for, or finance any repairs and/or installations. The customer must contact the HALO
  representative prior to any repairs or replacements
- If a recirculation pump is in use at the location of the HALO system, install a secondary HALO ion conditioner on each
  recirculating loop present in order to ensure expected results.
- The system must be properly installed by a licensed contractor.
- Proper precautions must be taken when installing the system near objects that can be damaged by water. HALO Water Systems, LLC accepts no responsibility for water damage or loss of property due to water damage. In areas of high risk of water damage, the use of a water protection device is recommended.

#### HALO WARRANTY COMMITMENTS

- 1. HALO will provide one (1) replacement tank for any tank that fails due to a manufacturing defect.
- 2. HALO warrants that components for the equipment will be available for the lifetime of the system.
- 3. HALO will provide comparable components of our selection to replace any obsolete items.
- 4. HALO will, within ten years from date of install repair or replace warranted defective control valve parts at no charge.
- 5. HALO will provide one (1) replacement carbon media package at no charge (except freight and handling) for 10 years from the date of installation due to media failure. (Chlorine only)
- 6. This warranty gives you specific legal rights that may vary from state to state.

#### **OBTAINING WARRANTY SERVICE**

Prior to any Warranty actions, including replacement or removal of parts and/or equipment, Service Tech must put system on by-pass and immediately contact HALO to provide model number, serial number and photos of system and problem site.

All returns must be accompanied by a "Return Merchandise Authorization" (RMA) Form along with all defective/warranted part(s) including a copy of this warranty, original purchase receipt, and the RMA number. HALO will at our option, provide replacement parts, no more than two parts at no cost, except freight, handling charges. You can contact HALO at (800) 591-0538 or email us at service@halowater.com.

#### LIMITATIONS AND EXCLUSIONS

This warranty is exclusive and in lieu of any other warranty expressed or implied, including but not limited to, any implied warranty of merchantability of fitness for a particular purpose. HALO shall not be liable for any loss or incidental or consequential damages resulting from the misuse or inability to use this equipment by the buyer or any user. This warranty is non-transferable and is valid only on residential applications for the treatment of municipal water supplies.

#### Warranty is Void if:

- 1. You are not the original purchaser (unless you are listed as the owner when activating the warranty)
- 2. You did not activate the warranty online at www.halowater.com
- 3. The HALO product was not installed by a licensed contractor
- 4. The product was not sold to you by a licensed contractor
- 5. If the HALO 5 System was purchased from a 3rd party, liquidator or by any means other than an authorized licensed wholesale distributor, the warranty is void.



# **Bypassing System While on Vacation**

### When leaving the home:

#### 1. Place the system in bypass

Rotate the two red handles on the bypass valves 90 degrees in the clockwise direction. This bypasses the filter and restores city water to the home

#### 2. Run the water inside the home

Open the hot and cold faucets in the home for a couple of minutes to allow the unfiltered (chlorinated) water to reach every fixture. Leave the system in bypass.

#### 3. Main Shutoff for Home

If you wish to shut off water to the home, shut the water off at the main. Leave the system in bypass.

### When returning to the home:

- Return the system to the service position Rotate red handles counter clockwise.
- 2. Flush the System

Force a regeneration by pressing the arrow up and arrow down buttons simultaneously. Once regeneration begins release the buttons. Once the regeneration finishes repeat these steps 3 more times until 4 regenerations have been completed.

#### **BYPASS**



#### SERVICE POSITION



# HALO WATER SYSTEMS



HALO FOR YOUR HAPPINESS.



HALO TO KEEP YOUR APPLIANCES RUNNING RIGHT.



HALO FOR YOUR HEALTH.



HALO TO FEEL HEAVENLY.



HALO TO KEEP YOUR FIXTURES LOOKING FABULOUS.



HALO TO KEEP FABRICS FRESH.

# www.**HALO**water.com

800.591.0538

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