

## UF8C

## INSTALLATION / OPERATION MANUAL

## FULLY AUTOMATIC ULTRAFILTRATION SYSTEM



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General Specifications	UF8C
Micron Rating	.02
Pre-Filtration Required (microns)	<5
Maximum Clear Iron / Manganese (ppm)	0
Service Flow Rate (gpm)	10
Backwash Flow Rate (gpm)	5.0
Gallons Used / Regeneration	15
Space Required	8 x 14 x 56
Approximate Shipping Weight (lbs)	46

Project water analysis profile form must be completed and included with water sample and sent to Chandler Systems prior to purchasing equipment. Applications where organic color or tannin is evident, two (2) 12 ounce water samples are required for bench testing purposes. Pathogenic organism analysis data must be conducted by a certified water testing laboratory. A copy of the analysis report must be included with the project water analysis profile form and water sample. Failure to comply with these requirements will exonerate Chandler Systems from all liability and void the system warranty.

#### WARNING

#### Lubricants

Do NOT use Vaseline, oils, hydrocarbon lubricants or spray silicone anywhere! Petroleum base lubricants will cause swelling of o-rings and seals. The use of other lubricants may attack plastic Noryl<sup>®</sup>. It is recommended that Dow Corning<sup>®</sup> silicone grease be used as a lubricant for all control valves. Dow Corning<sup>®</sup> 7 Release Compound is used in the manufacture of Chandler Systems control valves. (Part # LT-150)

#### Sealants

Pipe dope and liquid thread sealers may contain a carrier that attacks some plastic materials. It is recommended that Teflon® tape be used to seal plastic Noryl® threaded fittings



## A PRESSURE TANK WITH A MINIMUM OF 15 GALLONS OF DRAW DOWN IS REQUIRED TO BE INSTALLED DOWNSTREAM OF THE UF8C.

#### **Installation Requirements**

A level floor position ahead of fresh water pressure tank.

Unit must be installed at least 10 feet ahead of the inlet to a water heater to prevent damage due to back-up hot water.

DO NOT install the unit in an area of direct sunlight or where freezing temperatures may occur!

Locate the unit near an unswitched, 120 volt / 60 Hz grounded electrical outlet.

Check for distance and proper drain installation (e.g. floor drain, washing machine standpipe).

Determine type and size of piping required for filter connection (e.g. copper, galvanized, PVC, plastic).

- Note: If household plumbing is galvanized and you intend to make the installation with copper (or vice versa), obtain di-electric unions to prevent dissimilar metal corrosion.
- **Caution:** If using PVC or plastic pipe, primers and solvent cements specifically recommended for use with potable water are required.

#### Installation Procedure

#### Water Supply Connection and Bypass Valve

To allow for UF filter servicing, swimming pool filling or lawn sprinkling, a manual bypass valve has been installed at the factory. The bypass allows raw water to be manually routed around the filter.

- 1. Position UF filter at desired location for installation. If pretreatment equipment is to be installed, the filter should be positioned after all other equipment, but ahead of the fresh water pressure tank
- 2. Turn OFF main water supply and OPEN nearest faucet to relieve pressure.
- 3. Cut main line and install appropriate elbows and extensions. Inlet and outlet connections on the control valve are 1" MNPT

### Note: Inlet and outlet are reversed from the standard of orientation of our other filter valves. Bypass will be labeled accordingly.

#### **Drain Line Connection**

 Install 3/4" I.D. drain line tubing (not included) from flow control to an open drain. A 4" gap between end of the drain line and the open drain is required to prevent waste water backflow. Keep the drain line as short as possible. An overhead drain line can be used if necessary, but should discharge below the control valve. A siphon trap (taped loop) at the outlet of the drain line is advisable to keep the drain line full and assure correct flow during backwash. Elbows or other fittings must be kept at a bare minimum.

#### **Electrical Connection**

1. Connect the power supply to the control valve and plug into a 115 volt / 60 Hz receptacle.

Note: Do not plug into an outlet controlled by a wall switch or pull chain that could inadvertently be turned off.

#### **Installing Battery Back Up**

1. Remove the rear cover.

2. Install a 9 volt battery.

3. Reinstall rear cover.

#### **Pressurizing The System**

- 1. Slowly rotate inlet knob of the bypass valve to the SERVICE position. Slowly rotate outlet knob to the SERVICE position. (Position of bypass knobs are parallel to inlet / outlet piping).
- 2. Open the nearest faucet to evacuate air from plumbing lines.
- 3. Check for leaks!

#### **Programming the Control Valve**

The Main Display alternates between days remaining until the next backwash cycle (1) and the time of day.

Setting the time of day is the only programming necessary on initial set up.

User Menu:

#### MAIN MENU:



- To Enter Main Menu Press the Menu/Enter Button (Time of Day will Flash)
- 2. To Set the **Time of Day** Press the Set/Change Button (First Digit will Flash)
  - To Change Digit Value Press the Set/Change Button
  - To Accept the Digit Value Press the Menu/Enter Button
  - Next Digit will Flash to Begin Setting
  - Once the Last Digit Display is Accepted all Digits will Flash

# 3. To Set A.M or P.M. Press the Menu/Enter Button To Change Digit Value Press the Set/Change Button To Accept the Digit Value Press the Menu/Enter Button Once A.M./P.M. is Accepted the Next Menu Item will Flash 4. The next display will show the number of days between regeneration. Example: P-D I

 To Exit Main Menu Press the Menu/Enter Button Note: If No Buttons are Pressed for 60 Seconds, the Main Menu will be Exited Automatically.

#### **Control Valve Operation**

Example [ 12:00]

- 1. Manually index control valve to RINSE (cycle 3) position by holding the **SET / CHANGE** button for 3 seconds and allow water to run to drain for 1 to 2 minutes.
- 2. Manually index control valve to SERVICE (cycle 0) position.

#### UF Filter Default Cycle Time Settings

Backwash (Cycle 3) – 3 minutes

#### **Operation, Care and Cleaning**

When the inlet / outlet knobs of the bypass valve are in SERVICE position (position of bypass knobs are parallel to the inlet / outlet piping), water is directed through the water filter. Water may be bypassed by turning the inlet / outlet knobs to the BYPASS position (position of bypass knobs are at right angles to inlet / outlet piping). Water to the home will bypass the filter and be untreated.

You should manually bypass the filter if :

1. The outside lines do not bypass the UF filter and water is to be used for lawn sprinkling or other similar uses.

2. Servicing the UF filter.

3. A water leak from the UF filter is evident.

#### To Initiate An Extra Backwash

If water demands are unusually heavy, an extra backwash can be initiated manually, by holding down the **SET/CHANGE** button for 3 seconds.

#### To Skip A Backwash

1. For vacations or extended periods of absence, the power supply can be pulled from the receptacle.

The rinse cycle can be cancelled by setting the days between regeneration to *R*- DD (Refer to MAIN MENU, set 4) 2. Upon return, set this setting back to *R*- D I.

#### **General Care and Cleaning**

1. Do not place heavy or sharp objects on UF filter.

2. Use only mild soap and warm water to clean exterior of the unit. Never use harsh, abrasive cleaners.

3. Protect the UF filter and drain line from freezing.

4. Reset the time for daylight savings time periods.

5. Replace 9 volt battery once a year.

#### Master Programming Mode

#### To enter Master Programming Mode, press and hold both buttons for 5 seconds.

Note: All Master Programming functions have been preset at the factory. Unless a change is desired, it is NOT necessary to enter Master Programming Mode.

#### 1. Regeneration Time (r)

- The time of day at which backwash may take place is designated by the letter "r".
- Default regeneration time settings is 12a
- The first display digit indicates A.M. or P.M. To change the value, press the **Set/Change** button.
- Press Menu/Enter button to accept the value and move to the next digit.
- The second and third display digits indicate the hour at which the backwash will occur.
- Change the digits with the Set/Change button and accept with the Menu/Enter button.
- After the entire display flashes, press the **Menu/Enter** button to move to the next menu item.

#### 2. Backwash Cycle Length

- The next displays sets the duration of time in minutes for the rinse cycle.
- The number of minutes allotted is displayed on the far right.
- Change the digit values using the Set/Change and Menu/Enter buttons as described above.
- 5. To Exit the Master Programming Mode, press the **Menu/Enter** button until time of day returns.

Note: If no buttons are pressed for 60 seconds, the Master Programming Mode will be exited automatically.

Note: A 9Volt battery can be used with the Ultra-Filter control board. The battery allows the unit to continue while power is off. Also, if the unit is in backwash and a power failure occurs, the unit will motor to shut-off (rest) position until power is restored. To insert the 9 volt battery, remove the back cover. The battery location will be at the top of the control valve.

#### Example (r 128)

Example (3 - 3)

# G CHANDLER SYSTEMS

#### WATER TREATMENT EQUIPMENT

This warranty cannot be transferred - it is extended only to the original purchaser or first user of the product. by accepting and keeping this product, you agree to all of the warranty terms and limitations of liability described below.

Important Warning: Read carefully the Chandler Systems Water Treatment Systems Equipment Installation, Operating and Maintenance Instructions Manual to avoid serious personal injury and property HAZ-ARDS and to ensure safe and proper care of this product.

#### Model Numbers Covered: Water Softeners, Media Filters and Upflow Filters

\*FOR AS LONG AS YOU OWN AND LIVE IN YOUR SINGLE FAMILY HOME, this warranty covers your water treatment equipment, if you are the first user of this Chandler Systems equipment and purchased it for single family home use - subject to all of the conditions, limitations and exclusions listed below. Purchasers who buy the Chandler Systems equipment for other purposes, and other component parts are subject to more limited warranties and you should read all of the terms included in this form to make sure you understand your warranty.

#### What is covered by this warranty?

Chandler Systems warrants that at the time of manufacture, the water treatment equipment shall be free from defects in material and workmanship as follows :

Product	Warranty
Residential Mineral Tank	10 Years
Proprietary Control Valves	7 Years
Other Softener / Filter Control Valves	5 Years
Brine Tank	5 Years
Residential Reverse Osmosis System	5 Years
Other Accessories and Parts	1 Year
Brine Tank Components	1 Year
REVERE Wireless Low Salt Alarm	90 Days

\* This warranty does not include media and/or cartridge filter elements.

#### Additional Terms & Conditions

What Chandler Systems will do if you have a covered warranty claim Chandler Systems will at its option either make repairs to correct any defect in material or workmanship or supply and ship either new or used replacement parts or products. Chandler Systems will not accept any claims for labor or other costs.

#### Additional Exclusions and Limitations

This warranty is non-transferable and does not cover any failure or problem unless it was caused solely by a defect in material or workmanship. In addition, this warranty shall not apply :

- If the water treatment equipment is not correctly installed, operated, repaired and maintained as described in the Installation, Operating & Maintenance Instructions Manual provided with the product.
- Defects caused as a direct result of the incoming water quality

- If the tank is not the size indicated for the supply line size of the installation, as described in the manual.
- To any failure or malfunction resulting from abuse (including freezing), improper or negligent; handling, shipping (by anyone
- If the unit has not always been operated within the factory calibrated temperature limits, and at a water pressure not exceeding 125 psi other than CSI), storage, use, operation, accident; or alteration, lightning, flooding or other environmental conditions;
- To any failure or malfunction resulting from failure to keep the unit full
  of potable water, free to circulate at all times; and with the tank free of
  damaging water sediment or scale deposits;
- This warranty does not cover labor costs, shipping charges, service charges, delivery expenses, property damage, administrative fees or any costs incurred by the purchaser in removing or reinstalling the water treatment equipment.
- The warranty does not cover any claims submitted to Chandler Systems more than 30 days after expiration of the applicable warranty, and does not apply unless prompt notice of any claim is given to an authorized Chandler Systems Dealer or to Chandler Systems or a designated contractor is provided access to the installation and to the water treatment equipment.

THESE WARRANTIES ARE GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. NO Chandler Systems REPRESENTATIVE OR ANY OTHER PARTY IS AUTHORIZED TO MAKE ANY WARRANTY OTH-ER THAN THOSE EXPRESSLY CONTAINED IN THIS WARRANTY AGREEMENT.

#### Additional Warranty Limitations

ANY IMPLIED WARRANTIES THE PURCHASER MAY HAVE, IN-CLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BE-YOND THE APPLICABLE TIME PERIODS SPECIFIED ABOVE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

#### Limitations of Remedies

The remedies contained in this warranty are the purchaser's exclusive remedies. In no circumstances will Chandler Systems or the seller of the product be liable for more than, and purchaser-user's remedies shall not exceed, the price paid for the product. In no case shall Chandler Systems or seller be liable for any special, incidental, contingent or consequential damages. Special, incidental, contingent and consequential damages for which Chandler Systems is not liable include, but are not limited to, inconvenience, loss or damage to property, consequential mold damage, loss of profits, loss of savings or revenue, loss of use of the products or any associated equipment, facilities, buildings or services, downtime, and the claims of third parties including customers. Some states do not allow the exclusion or the limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.

What to do if you have a problem covered by this warranty Any warranty coverage must be authorized by Chandler Systems. Contact the person from whom you purchased the product, who must receive authorization from a Chandler Systems Dealer.

If your product is new and not used and you wish to return it, contact your Chandler Systems Dealer.

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