



# FLECK 5800 XTR2 Quick Start MANUAL



Brine Tank Dimensions: 14" wide x 17" deep x 38" tall

## **INSTALLATION**

### Water Pressure

A minimum of 20 psi (1.4 bar) of water pressure is required for the regeneration valve to operate effectively.

### **Electrical Facilities**

An uninterrupted power supply is required. The control uses a transformer to supply 12 VDC. Please make sure your voltage supply is compatible with your unit before installation.

## **Existing Plumbing**

Condition of existing plumbing should be free from lime and iron buildup. Piping that is built up heavily with lime and/or iron should be replaced. If piping is clogged with iron, a separate iron filter unit should be installed ahead of the system.

## Location Of System And Drain

The system should be located close to a drain to prevent air breaks and back flow.

## **Outdoor Locations**

When the water conditioning system is installed outdoors, several items must be considered.

• Moisture — The system is not designed to withstand extreme humidity or water spray from below. Examples are: constant heavy mist, near corrosive environment, upwards spray from sprinkler.

#### **CAUTION** This unit is for dry location use only unless used with a Listed Class 2 power supply suitable for outdoor use.

- Direct Sunlight The materials used will fade or discolor over time in direct sunlight. The integrity of the materials will not degrade to cause system failures. If it is necessary to locate the system in direct sunlight, a protective outdoor cover (P/N 61882) over the valve and controller is necessary.
- Insects If installing in an environment that may expose the system to insects or other small animals, a protective cover is required. The protective outdoor cover (P/N 61882) has been designed to keep all but the smallest insects out of the critical areas. The cover should be installed securely in place.

## **Bypass Valves**

Always provide for the installation of a bypass valve if unit is not equipped with one.

CAUTION Water pressure is not to exceed 125 psi (8.6 bar), water temperature is not to exceed 110°F (43°C), and the unit cannot be subjected to freezing conditions.

**WARNING:** The system must be depressurized before removing any connections for servicing.

### Installation Instructions

- 1. Place the media tank where you want to install the unit. Make sure the unit is level and on a firm base.
- 2. During cold weather, the installer should warm the valve to room temperature before operating.
- 3. All plumbing should be done in accordance with local plumbing codes. The pipe size for a residential drain line should be a minimum of 1/2" (13 mm). Backwash flow rates in excess of 7 gpm (26.5 Lpm) or drain line length in excess of 20' (6 m) require 3/4" (19 mm) drain line. Commercial drain lines should be the same size as the drain line flow control.

- 4. Soldering of joints near the drain port must be done prior to connecting the Drain Line Flow Control fitting (DLFC). Leave at least 6" (15 cm) between the DLFC and solder joints when soldering pipes that are connected on the DLFC. Failure to do this could cause interior damage to the DLFC.
- 5. Plumber tape is the only sealant to be used on the drain fitting.
- 6. Make sure that the floor is clean beneath the salt storage tank and that the tank is level.
- 7. Add 2 gallons of water to the brine tank.
- 8. On units with a bypass, place in bypass position. Turn on the main water supply. Open a cold soft water tap nearby and let run a few minutes or until the plumbing is free from foreign material (usually solder) that may have resulted from the installation. Once clean, close the water tap.
- 9. Slowly place the bypass in service position and let water flow into the mineral tank. When water flow stops, slowly open a cold water tap nearby and let water run until the air is purged from the unit.
- 10. Plug the transformer into an electrical outlet.

# **NOTE:** All electrical connections must be connected **according** to local codes. Be certain the outlet is uninterrupted.



60002 Rev E

Figure 1 Residential Air Check Valve

## **Electrical Connection**

The controller operates on 12-volt DC power supply. This requires use of the supplied power adapter included with your system.

NOTE: The power source should be constant. Be certain the power adapter is not on a switched outlet. Power interruptions longer than eight hours may cause the controller to lose the time setting. When power is restored, the time setting must then be re-entered.

# **TOUCHSCREEN CONTROL QUICK START**

The 5800 XTR2 control was designed to be easy to set up and begin using right out of the box. The following simple procedure can be used to set up the system and begin treating water in most typical applications.

#### NOTE: Steps 2 - 4 are optional and are not required to start the system. All control settings may be changed after the unit is in service.

1. After plugging in the unit, the Format screen (Figure 3) is displayed.



Figure 3 Format Screen

Press the **units** button to adjust the system's units of measure (either U.S. or metric). Press 🗸 when finished.

# NOTE: If the screen is blank after plugging in the unit, touch the screen to turn the screen on.

2. After pressing •, the Assistance Name screen (Figure 4) is displayed.

Assistance Name

After pressing , the Assistance Phone screen (Figure 5) is displayed.

Assistance Phone

 1
 2
 3
 4
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 6

 7
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 ♥ PENTAIR
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 Figure 5 Assistance Phone Screen
 Figure 5 Assistance Phone Screen
 ✓

Enter the phone number of the water treatment professional or company that the homeowner may call for system service (optional). Press 🗸 when finished.

After pressing ♥, the Assistance Interval screen (Figure 6) is displayed.

Assistance Interval



interval

Figure 6 Assistance Interval Screen

Use the Assistance Interval screen to set the interval in which the homeowner will need to call a water treatment professional for system service (optional). The assistance interval can be based on a set number of months (month based) or a number of regenerations (regen based).

Press the **interval** button to select a month-based or regenbased assistance interval, then press  $\checkmark$ . Press either the **month** or **regen** button (depending on your previous selection), and select the number of months (up to 60) or regenerations (up to 2000) until the homeowner will need to call for service. Press  $\checkmark$  when finished.



Figure 4 Assistance Name Screen

Using the keypad, type the name of the water treatment professional or company that the homeowner may call for system service (optional).

To enter a letter using the keypad, quickly press the keypad button the number of times that correspond with the position of the correct letter on the button. For example, to enter the letter "C", quickly press the ABC button three times. Press 😪 when finished. off

# **TOUCHSCREEN CONTROL QUICK START**

#### <u>continued</u>



#### Figure 7 Home Screen

The **Day and Time** button will be flashing, indicating that the day of the week and time need to be set. If the date and time are incorrect, press the **Day and Time** button to update to the correct day and time. The Day and Time screen (Figure 8) appears.



#### Figure 8 Day and Time Screen

Press the **Day of Week**, **Hour**, **Minute**, and **AM/PM** buttons to adjust the values to the correct day and time. Press the **12/24 Hour** button to display the time in 12 or 24 hour format. Press the  $\checkmark$  button when finished to return to the Home screen. Press  $\bigotimes$  to return to the Home screen without saving.

6. Start a regeneration by pressing the **Regeneration** button
 (9) The Regeneration screen appears (Figure 9).



#### Figure 9 Regeneration Screen

Press the **now** button to begin a regeneration immediately.

- 7. The valve will cycle to backwash. Ensure the drain line flow remains steady for 10 minutes or until the water runs clear.
- Press the button to cycle to the brine / slow rinse (Draw) position. Ensure the unit is drawing water from the brine tank.
- Press the button to cycle to the rapid rinse (Rinse) position. Check the drain line flow, and run for five minutes or until the water runs clear.
- 10. Press the **()** button to cycle to the brine tank fill (Refill) cycle. Ensure water goes into the brine tank at the desired rate. The brine valve drive cam will hold the valve in this position to fill the brine tank for the first regeneration.
- 11. Put salt in the brine tank.

#### NOTE: Do not use granulated or rock salt.

The unit is now fully programmed and ready to treat water. This quick setup uses the control's default settings, which are appropriate for most residential applications.

# **TOUCHSCREEN CONTROL FEATURES**

## Features of the XTR2 Touchscreen Control

- Full-featured easy to use graphical touchscreen interface for programming, servicing, and diagnostics.
- Non-linear programming no longer requires cycling through every parameter when programming/servicing.

## **Buttons and Symbols**

#### NOTE: Not all buttons appear on all screens.

#### **Regeneration Cycle Wheel**



• Displays the regeneration cycle step the system is currently in. The wheel rotates with each step so that the current step is shown in green.

#### NOTE: On metered units, the "Treatment" step on the Regeneration Cycle Wheel will flash when water is flowing through the unit.





## Regeneration



• Displays the Regeneration screen, which allows you to start a regeneration and manually cycle through the regeneration steps.

Settings

- **₩**
- Displays the Settings screen, which allows you to adjust commonly used settings. Pressing this button while in the Settings screen provides access to the Master Settings screen, which allows you to fully program the valve.
- NOTE: Due to the complexity of these settings and the potential for errors, Master Settings should only be accessed by your local water professional.





• Displays the Diagnostic screen, which can assist in performing maintenance and troubleshooting performance issues with the valve.



• Displays a name and phone number to call for unit service.

## Screen Navigation Arrows



• Displayed in the upper-left and upper-right corners of the screen, these arrows allow you to navigate from one screen to another.

## Settings Arrows



• These arrows allow you to change the values of certain settings when programming the control.



• Displayed when an alarm has occurred; accompanied with an audible alarm. Press to silence the audible alarm.



• Displayed when an error has occurred. Press to display the Error screen for more detailed error information.



• This arrow allows you to advance through cycle steps during a regeneration.



• Displayed in the Diagnostics screen to reset Totalizer and Peak Flow data and in Master Settings to reset parameters to default settings.

Accept

• Press to save or accept changes in control configuration.

Cancel 🗙

• Press to cancel configuration and exit to previous screen without saving.

## **TOUCHSCREEN CONTROL FEATURES**

#### <u>continued</u>

### **Screen Features**

#### **Home Screen**



Figure 10 - Home Screen

The Home screen is always displayed unless the control settings are being configured or during regeneration. This screen displays general information about the system and allows you to start a manual regeneration or access control settings. Features of the screen are described below, followed by more detailed information about each feature.

- NOTE: If no button is pushed for five minutes, the screen will enter a power save mode. The unit will continue to operate, but the screen will be blank. Touch anywhere on the screen to exit power save mode.
  - **Regeneration**: Press to start a manual regeneration.
  - **Settings**: Press to access commonly used settings.
  - Diagnostics: Press to view diagnostic data.
  - **Assistance**: Press to display the name and phone number to call for service.
  - **Regeneration Cycle Wheel**: Displays the cycle steps the valve will step through during a regeneration; the current cycle step is always at the top of the wheel.
    - Treatment: The unit is treating water
    - **Backwash**: Water flows from the bottom of the vessel to the top of the vessel to clean the media
    - **Draw**: Brine is drawn into the media and then slowly rinsed out
    - **Rinse**: Water flows from the top of the vessel to the bottom of the vessel to rinse the media
    - Refill: Brine tank is refilled with water
  - Next Scheduled Regeneration: Displays the next scheduled regeneration in either time or volume, depending on control settings.

• **Day and Time**: Displays the currently programmed day of the week and time. This button will flash if the control has been reset.

#### Regeneration

Regenerate the system on demand by pressing the Regeneration button on the home screen. Manual Regeneration can only be used while the valve is in the treatment position. From the Home screen, press the **Regeneration** button <sup>©</sup>. The Regeneration screen appears.



Figure 11 Regeneration Screen

- Press the **now** button to begin a regeneration immediately, or press the **tonight** button to queue the regeneration for the programmed regeneration time (2:00 AM by default). Pressing the **tonight** button again will cancel the manual regeneration.
- During Regeneration, press the  $\otimes$  button to immediately advance to the next cycle step. Once in regeneration, the volume or time will be displayed below the  $\otimes$  button.

#### **Day and Time**

From the Home screen (displayed in Figure 10 above) press the Day and Time button. The Day and Time screen appears.



Press the Day of Week, Hour, Minute, and AM/PM buttons to adjust the values to the correct day and time. Press the 12/24 Hour button to display the time in 12 or 24 hour format. Press the Sutton when finished to return to the Home screen.

# **TOUCHSCREEN CONTROL FEATURES**

#### <u>continued</u>

### Settings

The Settings screen allows you to change basic control settings including time of regeneration and water hardness. These settings improve the operational efficiency of the system and can be adjusted independently from other control settings without needing to enter Master Settings.

From the Home screen, press the **Settings** button <sup>(2)</sup>. The Settings screen is displayed.



#### Figure 13 Settings Screen

- Press **regen time** to adjust the time of day that an automatic regeneration cycle will begin.
- Press **hardness** to adjust the hardness setting. This value should match the hardness of the incoming untreated water supply.
- Press I to save your changes or press I to return to the Home screen.

Additional features may be accessed from the Settings screen by pressing the Settings button at the bottom of the screen (see Figure 13):

- **Master Settings**: Displays the Master Settings screen, which allows you to fully program the valve.
- NOTE: Due to the complexity of these settings and the potential for errors, Master Settings should only be accessed by your local water professional.
- NOTE: Settings can not be accessed during a regeneration. If a regeneration starts while in the settings menu, the screen will return to the main screen and all parameters will be voided.

## **User Assistance**

The Assistance screen displays the name and phone number that the homeowner may call for service of the unit. Press the **Assistance** button **6** from the Master Settings or Home screens. The Assistance screen is displayed.



Figure 14 Assistance Screen

- This information is entered upon initial control startup (see TOUCHSCREEN CONTROL QUICK START) or can be changed in Master Settings.
- Press the **Home** button <sup>(2)</sup> to return to the Home screen.

NOTE: The Assistance screen is also displayed automatically when the system reaches the programmed assistance interval. See TOUCHSCREEN CONTROL QUICK START.