

# LOGIX™ SERIES INSTALLER QUICK-START SHEET

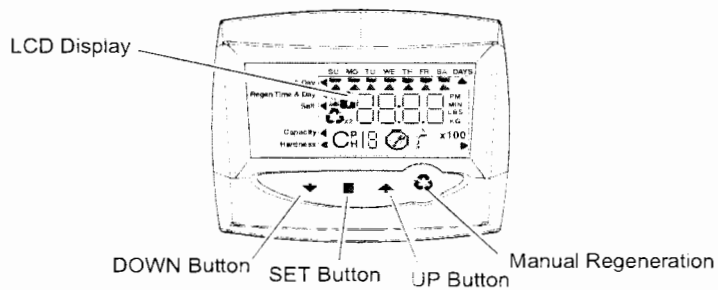
This sheet is intended for use by the water treatment system installer. This sheet is not intended for use by the end user. A separate sheet (PN 1240200) is available for the end user.

## LOGIX SERIES CONTROLLERS

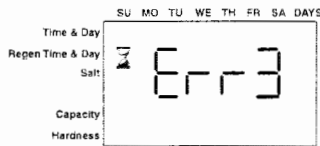
**740 Controller** - Electronic time clock control capable of doing 7-day (day of week) regeneration, or up to a 99 interval day regeneration. This control will operate both in a conditioner (softener) or 3-cycle filter mode with the same controller.

**760 Controller** - Electronic metered-demand (volumetric) controller which regenerates based on the water usage of the installation site. A calendar override is a standard feature on this controller.

The Logix Series will operate on both the 255 and Performa valve body series.



## INITIAL POWER-UP



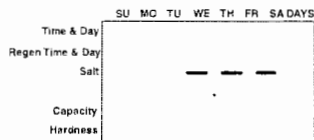
### Initial Power Up - (CAMSHAFT proceeds to HOME position)

- At initial power-up, the camshaft will need to rotate to the HOME (in service) position.
- Camshaft may take 1-2 minutes to return to home position.
- Err 3 will be displayed until the camshaft returns to home.
- If more than 2 minutes elapses, verify that the motor is turning the camshaft. If it is not turning, see the troubleshooting section in *Dealer Installation and Service Manual*.



**NOTE:** The Logix controller features a self-test sequence. At first power-up of the control, you may see a number such as 1.00, 1.02, or 1.04, displayed. This is an indication that the self-test is not completed. To complete the test, verify that the turbine cable is connected. Blow into the turbine port (valve outlet) to spin the turbine. The controller will verify that the turbine works and the self test will finish. Proceed with the initial start up procedure.

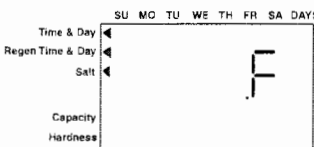
## INITIAL START-UP STEP-BY-STEP INSTRUCTIONS



### Step 1: Program System Size

This step may have been performed by your system's OEM manufacturer. In this case, proceed to step 2

- Input system size - resin volume - in cubic feet or liters.
- Use UP and DOWN buttons to scroll through resin volume choices.
- Choose the nearest volume to your actual system size.
- To choose a 3-cycle filter operation - press DOWN until an "F" is displayed.
- Press SET to accept the system size you've selected.



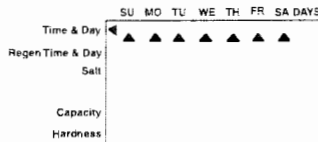
- If incorrect setting is programmed, see "Resetting the Control" section below.

### Step 2: Program Time of Day



- While "12:00" is blinking, set the correct time of day.
- Use the UP and DOWN buttons to scroll to the correct time of day.
- "PM" is indicated, "AM" is not indicated.
- Press SET to accept the correct time of day and advance to the next parameter.

### Step 3: Set Day of Week

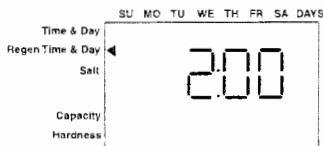


- Press SET to make the arrow under SU flash.
- Use the UP and DOWN buttons to advance the arrow until it is under the correct day of week.
- Press SET to accept and advance to the next parameter.

**After steps 1-3, the controller will operate most systems. Proceed to step 4 if further adjustments to your system's programming is needed.**

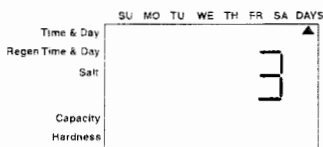
To exit the programming state, wait 30 seconds and the controller will automatically put you into the normal operating mode.

### Step 4: Set Regen Time



- 2:00 (AM) is the default time of regeneration. To accept this time, press the DOWN button to move to step 5.
- To change the regen time, press SET - causing 2:00 to flash.
- Use the UP and DOWN buttons to advance to the desired regen time.
- Press SET to accept the time and advance to the next parameter.

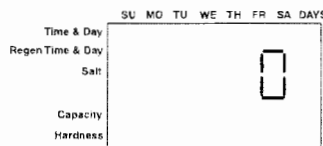
### Step 5: Set Days to Regenerate (740 Time-clock Control Only)



- If using 760 control - proceed to step 5a
- Set number of days between time-clock regeneration (regen frequency).
- Default time is 3 days.
- Days can be adjusted from 1/2 (.5) to 99 days.
- To change, press SET to make the "3" flash.
- Use the UP and DOWN buttons to change to the number of days desired.
- Press SET to accept the regen frequency, and advance to the next cycle.

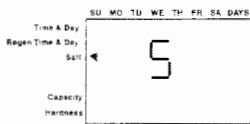
To use the 7-day timer option - see full Dealer Installation Manual.

### Step 5a: Set Calendar Override (760 Demand Control Only)

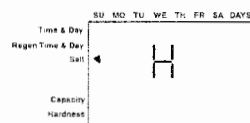


- If using 740 control - proceed to step 6
- Set number of days for calendar override on demand control.
- "0" days is the default for calendar override.
- Days can be adjusted from 1/2 (.5) to 99 days.
- To change, press SET to make the "0" flash.
- Use the UP and DOWN buttons to change to the number of days desired.
- Press SET to accept the regen frequency, and advance to the next cycle.

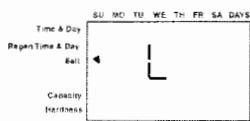
### Step 6: Set Salt Amount (Regenerant Amount)



Standard Salt Setting



High Salt Setting



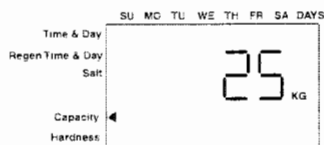
Low Salt Setting

- Set desired salt amount.
- Default setting is "S" standard salting.
- 3 salt settings are available on 740 and 760 controls:
  - S - Standard Salt - 9 lbs/cubic foot of resin (120 grams/liter of resin)
  - H - High Salt - 15 lbs/cubic foot of resin (200 grams/liter of resin)
  - L - Low Salt - 3 lbs/cubic foot of resin (40 grams/liter of resin)
- Low Salt is the "Highly Efficient Mode".
- To change salt setting, press the SET button and use the UP and DOWN buttons to change to the desired setting.

- Press SET to accept the setting and advance to next parameter.

See Dealer Installation Manual for more complete information on salt settings for different system sizes, capacities and expected efficiencies

### Step 7: Estimated Capacity



- System capacity is displayed in total kilograins or kilograms of hardness removed before a regeneration is necessary.
- Value is derived from the system's resin volume input, and salt amount input.
- The capacity displayed is a suggested value - as recommended by resin manufacturers.
- Capacity is only displayed for information purposes on 740 control - it does not (and cannot) need to be changed.
- To change capacity on 760 control, press SET to make the default capacity flash. Use the UP and DOWN buttons to increment to the desired capacity.
- Press SET to accept the setting and advance to the next parameter.

If using 740 control, programming is complete. The control will return you to the normal operation mode.

### Step 8: Enter Hardness (760 Demand Control Only)

- Enter inlet water hardness at installation site.
- Default hardness setting is 10 grains (ppm for metric)
- To change hardness, press SET to make the setting flash. Use the UP and DOWN buttons to scroll to the correct hardness.
- Press SET to accept the entered hardness value.
- The control will return you to the normal operation mode.

*Initial system programming is now complete. The control will return to normal operation mode, if a button is not pushed for 30 seconds.*

**For system start-up procedure, including: purging the mineral tank, refilling the regenerant tank, and drawing regenerant, see the system startup procedure in the *Dealer Installation & Service Manual*.**

## MANUAL REGENERATION PROCEDURES

### To Initiate a Manual Regeneration:

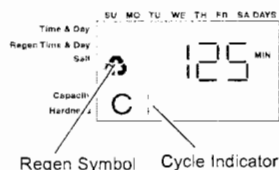
- Press REGEN once for delayed regeneration.
  - System will regenerate at next set regen time (2:00 AM).
  - A flashing regen (recycle) symbol will be displayed.
- Press and hold REGEN for 5 seconds to initiate immediate manual regeneration. A solid regen symbol will be displayed.
- After immediate regeneration has begun, press REGEN again to initiate a second manual regeneration. An X2 symbol will be displayed, indicating a second regeneration will follow the first regeneration.

### During a Regeneration:

- A "C#" is displayed to show current cycle.
- Total regen time remaining is displayed on screen.
- Press and hold SET to show current cycle time remaining.

### To Advance Regeneration Cycles:

- Press and hold SET - showing current cycle time.
- Simultaneously press SET and UP to advance one cycle.
  - An hourglass will display while cam is advancing.
  - When cam reaches next cycle, "C2" will be displayed.
- Repeat SET and UP to advance through each cycle.
- Press and hold SET and UP buttons for 5 seconds to cancel regen.

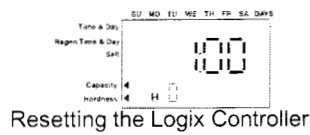


Hourglass will flash once cancelled.  
 Camshaft will advance to home - may take 1-2 minutes.

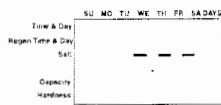
**Regeneration Cycles:**

- C1 - Backwash
- C2 - Regenerant Draw/Slow Rinse (not used in filter mode)
- C3 - Slow Rinse (not used in filter mode)
- C4 - System Pause (to repressurize tank)
- C5 - Fast rinse cycle 1
- C6 - Backwash cycle 2 (not used in filter mode)
- C7 - Fast Rinse cycle 2 (not used in filter mode)
- C8 - Regenerant refill (not used in filter mode)

**RESETTING THE CONTROL**



Resetting the Logix Controller



Unprogrammed control after reset

To reset the control:

1. Press and hold SET and DOWN simultaneously for 5 seconds.
2. H0 and the system's set resin volume (or "F" mode) will be displayed.
3. If a history value other than "H0" is displayed, use the up arrow to scroll through the settings until "H0" is displayed.
4. To reset the control, press and hold SET for 5 seconds.
5. The control will be reset to an unprogrammed state.
6. Go to "Initial Set-up" section of this sheet to reprogram control.



**WARNING:** Resetting the control will delete all information stored in its memory. This will require you to reprogram the control completely from the initial power up mode.

**History Values**

	Description	Range
H0	Resin volume initial setting value	cubic feet or liters
H1	Days since last regeneration	0 - 255
H2	Current flow rate	0 - 47 GPM or 0 - 177 Lpm
H3	Water used today in gallons/m <sup>3</sup> since Time of Regeneration	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H4	Water used since last regeneration in gallons/m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H5	Total water used since reset in 100s	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H6	Total water used since reset in 1,000,000	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H7	Average usage for Sunday in gallons or m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H8	Average usage for Monday in gallons or m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H9	Average usage for Tuesday in gallons or m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H10	Average usage for Wednesday in gallons or m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H11	Average usage for Thursday in gallons or m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H12	Average usage for Friday in gallons or m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>
H13	Average usage for Saturday in gallons or m <sup>3</sup>	0 - 65536 gallons or 0 - 6553.6 m <sup>3</sup>

All further programming or set-up instructions can be found in the *Dealer Installation and Service Manual*, PN 1255652.

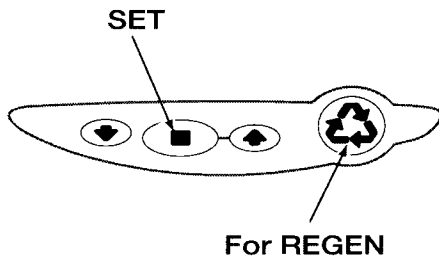


# WATER TREATMENT SYSTEM OPERATION

This water treatment system has been designed to provide your home with dependable, low-cost treated water. The system is designed to operate without the need for regular maintenance, other than the addition of a regenerant if the system requires. These instructions provide the basic information needed to operate the system's control valve.

## Normal Operation

During normal valve operation, the 740 will display the time of day. The 760 will alternate between the time of day, and the volume of water remaining (in gallons or cubic meters) before the water system will need to regenerate.



## Manual Regeneration

There may be times that you would like to start a manual regeneration. This override feature is used when you would like to refresh the system's media bed before the automatic control calls for a regeneration. There are two types of manual regeneration:

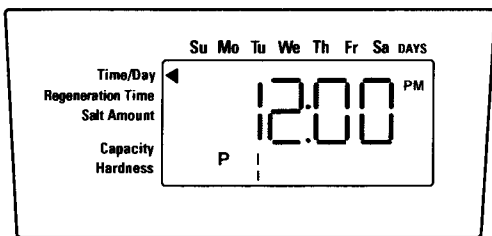
1. Immediate Regeneration: Press and hold the REGEN button for 5 seconds to start.
2. Delayed Regeneration: Press the REGEN button once. This will cause a regeneration to occur at the next set regeneration time.

While in regeneration, the control will display the total regeneration time remaining in minutes. It is recommended that you minimize the amount of water used — any water used is not treated during regeneration.

## Setting the Clock

The system controller has an 8 to 24-hour built-in back up system to maintain the time of day. If the power is out longer than 8 hours, the time is lost and needs to be reset. To reset:

1. Press the SET button. The display will flash 12:00.
2. Use the UP or DOWN buttons to advance to the correct time. Note: There is a PM indicator, but no AM indicator.
3. Press the SET button to accept the time of day selected.
4. The control will advance to the DAY OF WEEK setting.

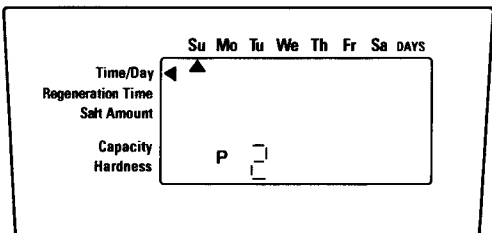


## Setting the DAY OF WEEK

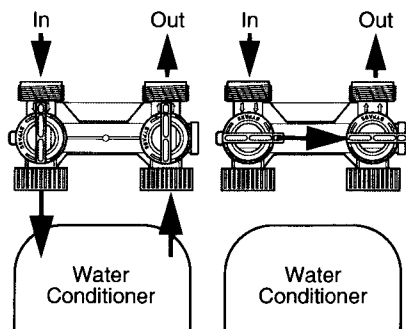
The controller can be set for the specific day of the week. It is important to set this for proper system operation. A cursor will be displayed under "SU" (Sunday).

1. Press the SET button to make the cursor flash.
2. Use the UP or DOWN buttons to advance the flashing cursor under the correct day of the week.
3. Press the SET button again to accept the changes.

The system should be in operation. The settings that were programmed will be used.



## Normal Operation In Bypass



## Bypass Mode — If System Needs Servicing

Most water treatment systems will be plumbed with a system bypass. A water bypass is used when the system is being maintained, or if the system develops a leak. To put the system in bypass:

**Valve Bypass** — Rotate the two bypass dials counterclockwise to the "bypass" position. If they are difficult to turn, a pliers or wrench may be used. The system will be bypassed. Water will not enter the valve but, the pressure in the tank will remain. Call your installing dealer for immediate service. **CAUTION:** Rotate to bypass arrow position only.

## For Service Concerns or Questions:

If you have concerns about the operation or performance, or for more operation information on your water treatment system, please contact your water treatment dealer or installer for service or maintenance.

Place Installer business card here



1240200