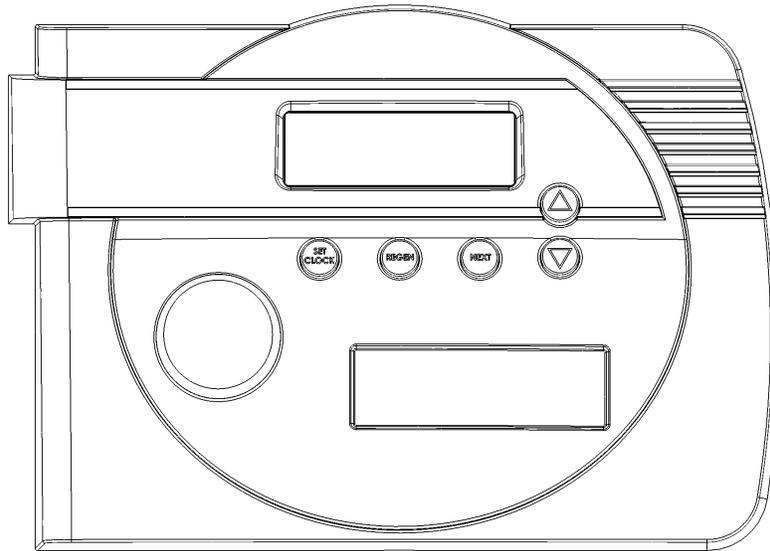


Simply Soft Owner Manual Supplement



Simply Soft Control with Dot Matrix Display

SIMPLY SOFT
Professional Water Treatment Products

Lee Supply Corp
6610 Guion Road
Indianapolis, IN 46268
800-873-1103

System Information

Model Number _____
Serial Number _____
Date of Install _____
Dealer Name _____
Dealer Phone Number _____
Water Hardness (in grains) _____
Iron (ppm) _____
Hardness Setting (grains + {iron x 4}) _____

Table of Contents

SS Front Cover and Drive Assembly4
Installer Display Settings 5
User Display Settings..... 7
Diagnostics..... 9
Valve History 11

Simply Soft Front Cover and Drive Assembly

Drawing No.	Order No.	Description	Quantity
1	V3381-01AB	WS1 ER Front Cover Asy Blk HS SIMSOFT	1
2	V3107-01	WS1 Motor	1
3	V3106-01	WS1 Drive Bracket & Spring Clip	1
4	V4078AD-BOARD	WS1THRU2 AD PC Board Replace	1
5	V3110	WS1 Drive Gear 12x36	3
6	V3109	WS1 Drive Gear Cover	1
Not Shown	V3186	WS1 AC ADAPTER 110V-12V	1
Not Shown	V3946	WS Wide Back Plate	1

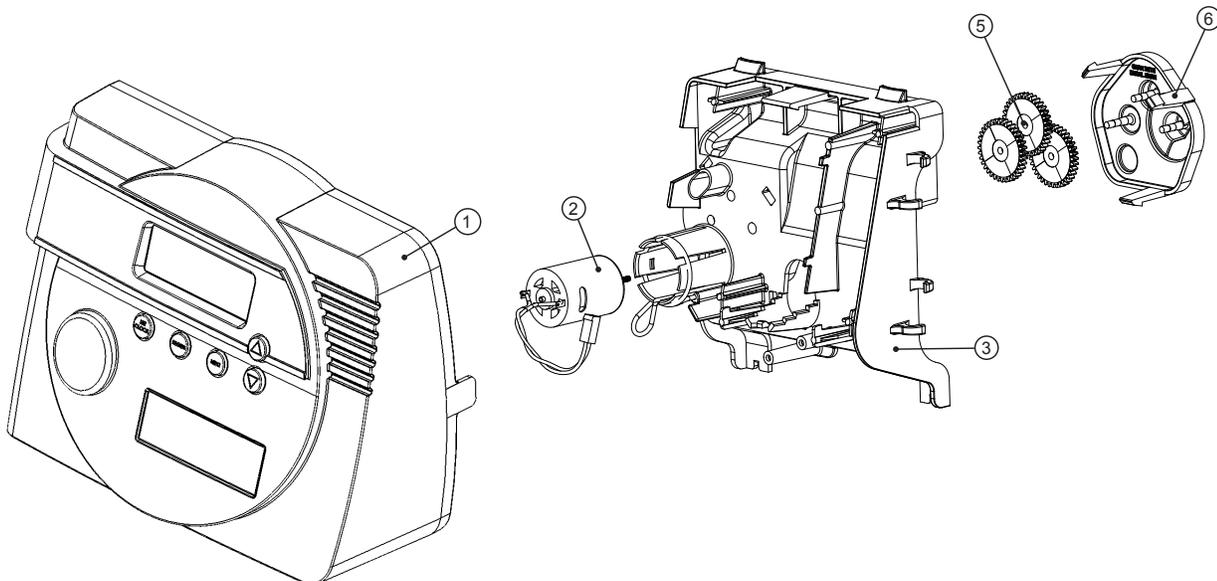
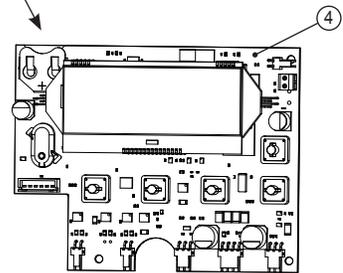
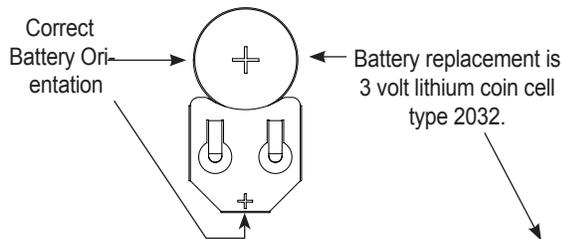
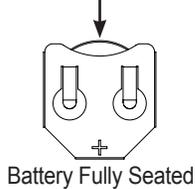
Refer to Control Valve Service Manual for other drawings and part numbers.

Relay Driver Output Type – Single Solid-State 12VDC “wet” contact - N.O.
 Relay Driver Output Capacity - 12VDC @100mA.

NOTE: Check for proper mounting dimensions on valve backplate prior to mounting an external relay under control cover.

Wiring For Correct On/Off Operation	
PC Board Relay Terminal Block	Relay
RELAY1	Coil -
COM	Coil +

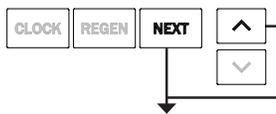
When replacing the battery, align positives and push down to fully seat.



Installer Display Settings

STEP 1I

STEP 1I - Press NEXT and ▲ simultaneously for 3 seconds.



STEP 2I

STEP 2I – Hardness: Set the amount of hardness in grains of hardness as calcium carbonate per gallon using ▲ or ▼. The default is 20 with value ranges from 1 to 150 in 1 grain increments. Note: The grains per gallon can be increased if soluble iron needs to be reduced. This display will not show if “FILTER” is selected in Step 2F or if ‘AUTO’ is not selected in Set Volume Capacity in OEM Softener System Setup. Press NEXT to go to step 3I. Press REGEN to exit Installer Display Settings.

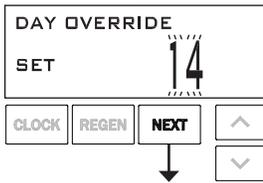


STEP 3I

STEP 3I – Day Override: When volume capacity is set to “OFF”, sets the number of days between regenerations. When volume capacity is set to AUTO or to a number, sets the maximum number of days between regenerations. If value set to “OFF”, regeneration initiation is based solely on volume used. If value is set as a number (allowable range from 1 to 28) a regeneration initiation will be called for on that day even if sufficient volume of water were not used to call for a regeneration. Set Day Override using ▲ or ▼:

- number of days between regeneration (1 to 28); or
- “OFF”.

See Setting Options Table for more detail on setup. Press NEXT to go to step 4I. Press REGEN to return to previous step.



STEP 4I

STEP 4I – Regeneration Time (hour): Set the hour of day for regeneration using ▲ or ▼. AM/PM toggles after 12. The default time is 2:00 AM. This display will not appear if “IMMEDIATE” is selected in Set Regeneration Time Option. Press NEXT to go to Step 5I. Press REGEN to return to previous step.



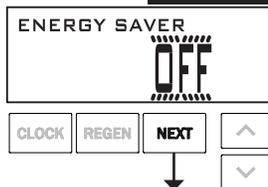
STEP 5I

STEP 5I – Regeneration Time (minutes): Set the minutes of day for regeneration using ▲ or ▼. This display will not be shown if “IMMEDIATE” is selected in Set Regeneration Time Option. Press NEXT to go to Step 6I. Press REGEN to return to previous step.



STEP 6I

STEP 6I – Energy Saver: OFF indicates the backlight is always on. ON sets the backlight to go off after 5 minutes of inactivity. AUTO sets the backlight to go off after 5 minutes of inactivity, except when a valve error has been detected or a service alarm has activated. Press NEXT to exit Installer Display Settings. Press REGEN to return to the previous step.

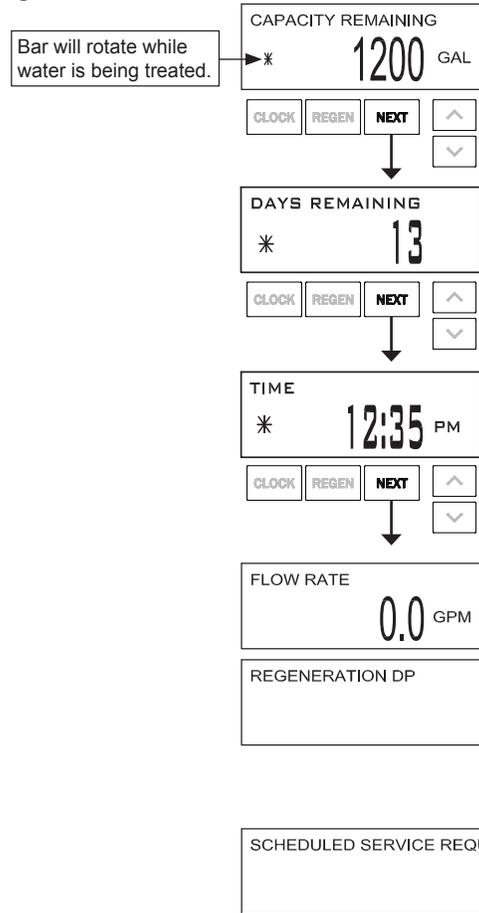


**RETURN TO
NORMAL MODE**

User Display Settings

General Operation

When the system is operating, one of several displays may be shown. Pressing NEXT will alternate between the displays. One of the displays is always the current time of day. Days remaining is the number of days left before the system goes through a regeneration cycle. Capacity remaining is the gallons that will be treated before the system goes through a regeneration cycle. Pressing ▼ while in the Capacity Remaining display will decrease the capacity remaining in 10 gallon increments and will also increase the volume used impacting the recorded values in Diagnostics Steps 3D, 4D and 5D and Valve History, Step 4VH. The fourth display shows the current treated water flow rate through the system. The fifth display will show either dP or hold if the dP switch is closed. If the system has called for a regeneration that will occur at the preset time of regeneration, the words REGEN TODAY will alternate with the header on the display. If a water meter is installed, the bar rotates on the display when water is being treated (i.e. water is flowing through the system).



If a service call schedule has been set in Step 11S or Step8F, a display will appear instructing the user to call for service. To clear the Service Call reminder, press ▲ and ▼ simultaneously while SCHEDULED SERVICE REQUIRED is displayed.

Regeneration Mode

Typically a system is set to regenerate at a time of low water usage. An example of a time with low water usage is when a household is asleep. If there is a demand for water when the system is regenerating, untreated water will be used.



When the system begins to regenerate, the display will change to include information about the step of the regeneration process and the time remaining for that step to be completed. The system runs through the steps automatically and will reset itself to provide treated water when the regeneration has been completed.

Manual Regeneration

Sometimes there is a need to regenerate the system sooner than when the system calls for it, usually referred to as manual regeneration. There may be a period of heavy water usage because of guests or a heavy laundry day.

To initiate a manual regeneration at the preset delayed regeneration time, when the regeneration time option is set to “DELAYED” or “DELAYED + IMMEDIATE”, press and release REGEN. The words “REGEN TODAY” will periodically be shown on the display to indicate that the system will regenerate at the preset delayed regeneration time. If you pressed REGEN in error, pressing the button again will cancel the request. Note: If the regeneration time option is set to “IMMEDIATE” there is no set delayed regeneration time so “REGEN TODAY” will not activate if REGEN is pressed.

To initiate a manual regeneration immediately, press and hold REGEN for three seconds. The system will begin to regenerate immediately. The request cannot be cancelled.

Note: For softeners, if brine tank does not contain salt, fill with salt and wait at least two hours before regenerating.

Set Time of Day

The user can also set the time of day. Time of day should only need to be set if the battery has been depleted because of extended power outages or when daylight saving time begins or ends. If an extended power outage occurs, the time of day will flash on and off which indicates the time of day should be reset. The non rechargeable battery should also be replaced.

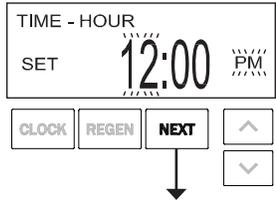
STEP 1U

STEP 1U – Press CLOCK.



STEP 2U

STEP 2U - Current Time (hour): Set the hour of the day using ▼ or ▲. AM/PM toggles after 12. Press NEXT to go to Step 3U.



STEP 3U

STEP 3U - Current Time (minutes): Set the minutes of the day using ▼ or ▲. Press NEXT to exit Set Time of Day. Press REGEN to return to previous step.



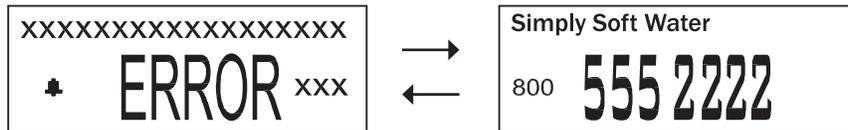
RETURN TO NORMAL MODE

Power Loss

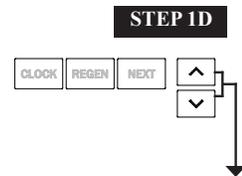
If the power goes out, the system will keep time until the battery is depleted. If an extended power outage occurs, the time of day will flash, indicating the battery should be replaced and the time of day reset. The system will retain all valve programming and diagnostic information.

Error Message

If the word "ERROR" and a number are displayed contact the OEM for help. This indicates that the valve was not able to function properly. If the number and banner text display has been edited, the two displays will alternate.



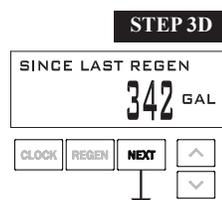
Diagnostics



STEP 1D – Press ▲ and ▼ simultaneously for three seconds.



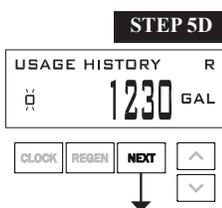
STEP 2D – Days, since last regeneration: This display shows the days since the last regeneration occurred. Press NEXT to go to Step 3D. Press REGEN to exit Diagnostics.



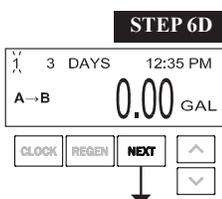
STEP 3D – Volume, since last regeneration: This display shows the volume of water that has been treated since the last regeneration. This display will equal zero if a water meter is not installed. Press NEXT to go to Step 4D. Press REGEN to return to previous step.



STEP 4D – Reserve History Volume used for last 7 days: If the valve is set up as a softener, a meter is installed and Set Volume Capacity is set to “Auto,” this display shows 0 day (for today) and the reserve capacity. Pressing ▲ will show day 1 (which would be yesterday) and the reserve capacity. Pressing ▲ again will show day 2 (the day before yesterday) and the reserve capacity. Keep pressing ▲ to show the capacity for days 3, 4, 5 and 6. ▼ can be pressed to move backwards in the day series. This screen is not displayed if time clock, meter immediate, or volume override regeneration is selected. This display does not appear if 1.0T is selected in Step 2CS. Press NEXT at any time to go to Step 5D. Press REGEN to return to previous step.

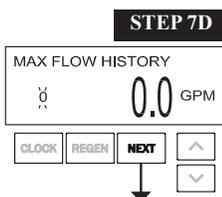


STEP 5D - Volume, 63-day usage history: This display shows day 0 (for today), day 1 (for yesterday), etc., and the volume of water treated that day. Press ▲ to show the volume of water treated for the last 63 days. If a regeneration occurred on the day the letter “R” will also be displayed. This display will show dashes if a water meter is not installed. Press NEXT at any time to go to Step 6D. Press REGEN to return to previous step.

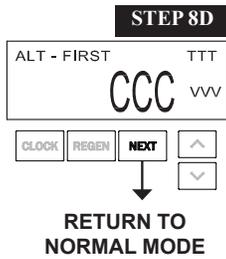


STEP 6D – Tank Transfer History. Only displayed when 1.0T is selected in Step 2CS. Use ▲ or ▼ to scroll through the last 10 tank transfers. “1”= transfer number – 10 transfers maximum. “A” = tank transferring. “3 DAYS” = days ago of transfer – 99 days maximum. “0.00 GAL” = gallons used at time of tank transfer. “12:35” = time of transfer.

Press NEXT to go to Step 7D. Press REGEN to return to previous step.



STEP 7D – Flow rate, maximum last seven days: Use ▲ or ▼ to display the maximum flow rate in gallons per minute that occurred in each of the last seven days. This display will equal zero if a water meter is not installed. Press NEXT to go to Step 8D. Press REGEN to return to previous step.



STEP 8D – MAV Drive History: Displays the drive time histories of all active MAV drives. Use ▲ or ▼ to review the history of all active MAV outputs. TTT – measured MAV drive time in 1/100 of a second; a 19.34 second move is displayed as 1934; VVV – measured MAV drive voltage; CCC – total number of drives (in or out); “-” indicates piston drive into MAV; “+” indicates piston drive out of MAV. **NOTE: When a MAV is replaced, it is recommended that the diagnostics screen for that MAV be cleared. That is done by selecting the + or – screen for that MAV. Press and hold ▲ or ▼ for about 3 seconds. Failure to do this may result in inconsistent MAV operation.**

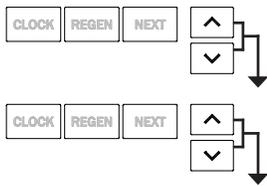
When a MAV error occurs, the Drive History will automatically be reset. To view previously recorded history, press and hold CLOCK and ▲. The display will be similar to the normal MAV drive history display, with the addition of EEE – MAV error code present at the time of reset. If the display shows “---”, there was no MAV error before the reset.



Press NEXT to exit Diagnostics. Press REGEN to return to previous step.

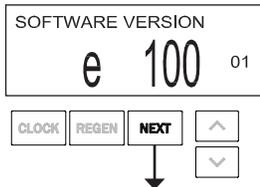
Valve History

STEP 1VH



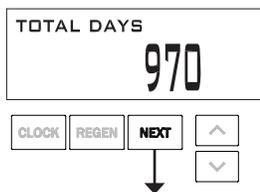
STEP 1VH – Press ▲ and ▼ simultaneously for three seconds and release. Then press ▲ and ▼ simultaneously and release. If screen in step 2VH does not appear in 5 seconds the lock on the valve is activated. To unlock press ▼, NEXT, ▲, and CLOCK in sequence, then press ▲ and ▼ simultaneously for 3 seconds and release. Then press ▲ and ▼ simultaneously and release.

STEP 2VH



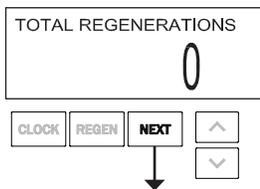
STEP 2VH – Software Version: This display shows the current software version programmed. Press NEXT to go to Step 3VH. Press REGEN to return to previous step.

STEP 3VH



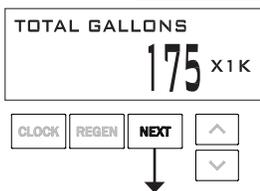
STEP 3VH⁴ – Days, total since start-up: This display shows the total days since startup. Press NEXT to go to Step 4VH. Press REGEN to return to previous step.

STEP 4VH



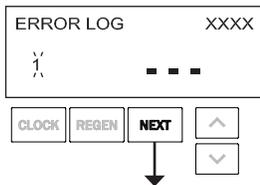
STEP 4VH⁴ – Regenerations, total number since start-up: This display shows the total number of regenerations that have occurred since startup. Press NEXT to go to Step 5VH. Press REGEN to return to previous step.

STEP 5VH



STEP 5VH⁴ – Volume, total used since start-up: This display shows the total gallons treated since startup. This display will equal zero if a water meter is not installed. Press NEXT to go to Step 6VH. Press REGEN to return to previous step.

STEP 6VH



STEP 6VH⁴ – Log of the last 10 Error Codes generated by the control. XXXX - The position count at the time of stall detection is recorded in the top line of the display for 102/107/117 errors. Press ▲ or ▼ to view each error recorded. Press NEXT to exit Valve History. Press REGEN to return to the previous step.

RETURN TO NORMAL MODE

⁴ Values in steps 2VH through 6VH cannot be reset.

