

WATER CONSERVATION SETTING

Whole Home Water Filtration Systems

FOR THESE MODEL NUMBERS:

Whole Home Water Filtration & Conditioning Systems:

EWS-1354-1.5, EWS-1665-2, EWS-2472-2

Whole Home Water Filtration Systems:

CWL-1354-1.5, CWL-1665-2, CWL-2472-2

for all
1.5" and 2" full port brass valves with
NXT controllers (green screen)
as of January 2018



ENVIRONMENTAL WATER SYSTEMS®
Quality Water Filtration Crafted in the USA Since 1987.

WWW.EWSWATER.COM

Customer Service
Monday - Friday 8:00am - 4:30pm Pacific Time
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ALL FILTRATION PRODUCT PROUDLY MADE & ASSEMBLED IN THE USA

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WATER CONSERVATION NOTE:

Once system has gone through this proper start up, the setting can be adjusted for a water conservation setting which can reduce the total water usage from 20 minutes (for a proper start-up) down to 11 minutes. The setting is dependant on local water conditions and usage.

See the step by step instructions to adjust the system self-cleaning settings to conserve water while maintaining the filter capabilities and the filter longevity

Water Conservation – Water Restrictions – Drought Conditions

With growing issues with water shortages, it becomes more important to filter all your water. However to properly do so requires a point of entry system that properly self-cleans or backwashes the filter media. This is a requirement in order to get longevity out of the filtration media. Most importantly, backwashing the filter media is a requirement in order to properly filter contaminants.

The Valve:

Self-cleaning or backwashing is necessary to provide better flow rates (see non-backwashing pass through tanks with flow rates @ 7gpm compared to EWS up to 37gpm, 50gpm for 1.5" valves and 100gpm for 2" valves). The valve also provides an opportunity to either backwash the system properly either automatically or manually.

Water Does Not Need to be Wasted:

Backwash water is used to lift filtration media and prevent packing or channeling and allows for greater surface areas in order to filter effectively and over a long period of time. This is only filtered water and not a brine and can be used for all purposes and is safe for waste water treatment or to be used. Water can go back to pool to maintain water levels or be used to water desert landscape creating a zero waste. Make sure to see proper drain applications using a spring check and air gap requirements for any installation.

The Need to Backwash: (please see back pages)

We have attached a chart excerpted from a large study comparing backwashing and non-backwashing carbon filtration media which dispels the deceptive marketing of non- backwashing whole home filtration systems. The results show that non-backwashing systems which render the filtration ineffective. Period.

Great Marketing by Competitors but Unfortunately is Poor or Deceptive Information:

Running the water up through the filtration media or upflow is not a proper backwash and makes for poor surface contact and is ineffective as a filtration device.

In Simpler Terms (if you do not backwash):

The carbon and filtration will not work...! You get ripped off...! It does not do what they say it will...!

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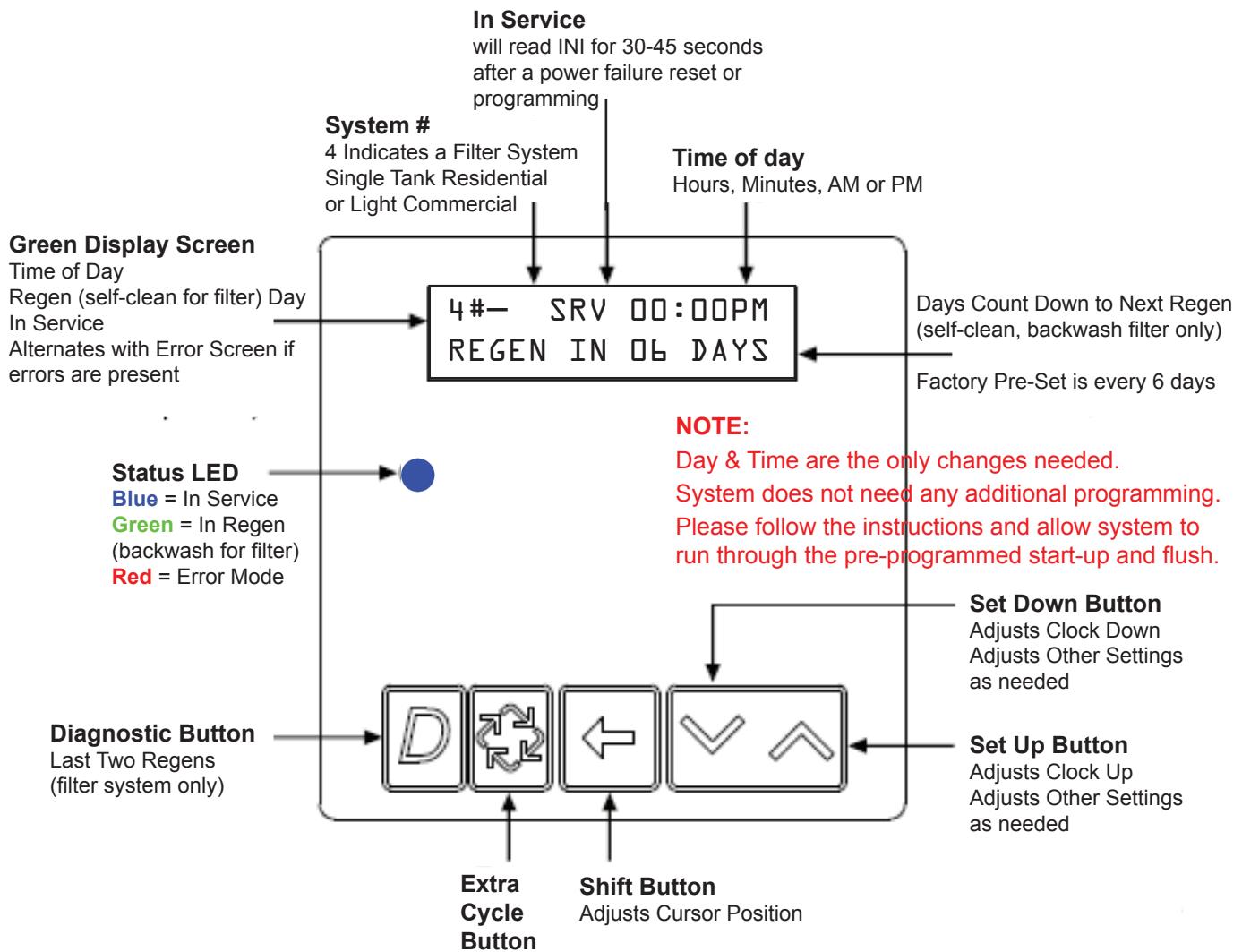
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green display led screen and what you see when the system is on

this is the home screen where you will start



water conservation procedure - getting through the master programming

You will see the screens in the proper order in which they appear.

Follow the simple step by step instructions.

Make sure these screens read the factory default setting.

If not, press Up or Down Button until you reach the correct screen read-out

From the Home Screen

Press the Shift and Up Button at the same time and hold for 5 seconds until screen changes

You will see SELECT LANGUAGE:
ENGLISH

Press the Extra Cycle Button

You will see SYSTEM TYPE: 4
SINGLE UNIT

Press the Extra Cycle Button

You will see REGEN TYPE:
TIMECLK DELAYED

Press the Extra Cycle Button

You will see VALVE TYPE:
2850

Press the Extra Cycle Button

You will see REGENERANT FLOW:
DOWN FLOW

Press the Extra Cycle Button

You will see REMOTE SIGNAL:
START: OFF

Press the Extra Cycle Button

You will see DISPLAY FORMAT:
US-GALLONS

on to the adjustments you will need to make

water conservation procedure

Extend the days between backwash from every 6 days to 10, lower the backwash cycle from 10 minutes to 8, lower the rapid rinse cycle from 10 minutes to 3 and as needed you can change the time the system will automatically backwash

Press the Extra Cycle Button

You will see REGENERATION DAY:
 OVERRIDE: 06 DAYS

You have moved the frequency
of the system backwash from
every 6 days to every 10

Press the Up Button and move the days from 06 to 10

Then - Press the Extra Cycle Button to proceed to the next screen

You will see REGENERATION
TIME: 12:00AM

This is the factory default setting for the time
the system will backwash. If the noise of the
backwash is an issue, use the Up or Down But-
ton to adjust the time of time (note time and
AM or PM) you want the system to backwash

See note in red to the right - adjust this time as needed

Then - Press the Extra Cycle Button to proceed to the next screen

You will see CYCLE 1 00: 10:00
 BACKWASH

You have reduced the backwash
time to 8 minutes from 10

Press the Down Button and adjust the time of the backwash to 08:00

Then - Press the Extra Cycle Button to proceed to the next screen

You will see CYCLE 2 00: 05:00
 BRINE&SLOW RINSE

Do not adjust

Press the Extra Cycle Button

You will see CYCLE 3 00: 10:00
 RAPID RINSE

You have reduced the rapid rinse
time to 3 minutes from 10

Press the Down Button and adjust the time of the backwash to 03:00

Then - Press the Extra Cycle Button to proceed to the next screen

You will see CYCLE 4 OFF
 BRINE TANK FILL

Do not adjust

Press the Extra Cycle Button

You will see AUXILIARY RELAY:
 DISABLED

Press the Extra Cycle Button

.....and you will return to the Home Screen and you are finished

Did You Know?

- Self-cleaning filtration systems last longer and filter effectively
 - Systems that do not self-clean have short lives and poor filtration results ~~see test results below!~~
 - EWS offers you control over your system's water use
 - Self-clean can be turned off or on when needed
 - EWS gives you flexibility other systems do not provide
 - Water used during EWS self-clean is filtered and reusable



Make the Smart Choice.

Do good for yourself, your family, your pets (and plants), and the environment.

Features



Water conservation is important. Making sure your family's water is free of contaminants is also important. EW's use the best and easiest solution for handling both concerns. You don't have to sacrifice quality and your family's health for an ineffective non-backwash system.

EWS	Others	Chemical Detergents or the like substances in water	Self-Cleaning Bio-films or the like substances in water	Non-Cleaning Non-bio-films and OAC in water
<input checked="" type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO	None	None
<input checked="" type="checkbox"/>	NO	<input checked="" type="checkbox"/> NO	>1000	100
<input checked="" type="checkbox"/>	NO	<input checked="" type="checkbox"/> NO	>1000	100
<input checked="" type="checkbox"/>	NO	<input checked="" type="checkbox"/> NO	>1000	100
<input checked="" type="checkbox"/>	NO	<input checked="" type="checkbox"/> NO	>1000	100
<input checked="" type="checkbox"/>	NO	<input checked="" type="checkbox"/> NO	>1000	100
<input checked="" type="checkbox"/>	NO	<input checked="" type="checkbox"/> NO	>1000	100
<input checked="" type="checkbox"/>	NO	<input checked="" type="checkbox"/> NO	>1000	100
				

Source: Adapted from *Impact and activated carbon in treatment of groundwater nitrate and manganese*, Chen A, Snyder, Sander, Achtem, et al., *JAWP* 2005, Chemical & Process Engineers, page 327 of 164 pages.



Role of membranes and activated carbon in the removal of endocrine disruptors and pharmaceuticals

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"Granular activated carbon [GAC] was highly effective at removing all target chemicals."

"In full-scale applications, the impact of regeneration [backwashing] was observed as activated carbon filters that received regular regeneration had minimal breakthrough of organic contaminants, while non-regenerated filters displayed no removal of target compounds."

Facility #1
Testing results on [backwashing](#) GAC

Facility #2
Testing results on [non-backwashing](#) GAC

Contaminant	% Removed	Contaminant	% Removed
Atrazine	94	Atrazine	3
Caffeine	>99	Caffeine	16
Carbamazepine	>99	Carbamazepine	15
DEET	>99	DEET	36
Dilantin	>99	Dilantin	22
Erythromycin	>99	Erythromycin	8
Gemfibrozil	>99	Gemfibrozil	8
Ibuprofen	>99	Ibuprofen	16
Iopromide	>99	Iopromide	28
Meprobamate	>99	Meprobamate	13
Sulfamethoxazole	>99	Sulfamethoxazole	16

Original charts on page 177 of the study.

In two full scale GAC applications evaluated, vastly different results were observed. At a drinking water facility with on-site and regular regeneration (backwashing), removal of trace organics occurring in source water was efficiently improved.

In contrast, a facility with relatively high levels of TOC [trace organic compounds] using GAC without regular replacement/regeneration provided very little removal. These data collectively show that activated carbon in both powdered and granular forms has great potential for the removal of trace organic contaminants; however...GAC backwashing/regeneration will be critical for excellent removal.