

best water solutions

supreme



Installation Manual

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EN



For future reference, fill in the following data

INSTALLATION RECORD

Serial number:.....

Model:.....

Iron (Fe) content-inlet:.....

Manganese (Mn) content-inlet:.....

Hydrogen sulphide (H₂S) content-inlet:.....

Water pressure-inlet:.....

Date of installation:.....

Company name:.....

Installer name:.....

Phone number:.....

IMPORTANT INFORMATION



- Before you begin the installation of the appliance, we advise you read and carefully follow the instructions contained in this manual. It contains important information about safety, installation, use and maintenance of the product. The actual system that you have received, may differ from the pictures, illustrations, descriptions in these Instructions.
- Failure to follow the instructions could cause personal injury or damage to the appliance or property. Only when installed, commissioned and serviced correctly, the appliance will offer you many years of trouble-free operation.
- The appliance is intended to 'filter' the water, meaning it will remove specific undesired substances; it will not necessarily remove other contaminants present in the water. The appliance will not purify polluted water or make it safe to drink!
- Installation of the appliance should only be undertaken by a competent person, aware of the local codes in force. All plumbing and electrical connections must be done in accordance with local codes.
- Before setting up the appliance, make sure to check it for any externally visible damage; **do not install or use when damaged.**
- Use a hand truck to transport the appliance. To prevent accident or injury, do not hoist the appliance over your shoulder. Do not lay the appliance on its side.
- Keep these Instructions in a safe place and ensure that new users are familiar with the content.
- The appliance is designed and manufactured in accordance with current safety requirements and regulations. Incorrect repairs can result in unforeseen danger for the user, for which the manufacturer cannot be held responsible. Therefore repairs should only be undertaken by a competent technician, familiar and trained for this product.
- The appliance must be serviced at least once a year (this service may be payable). The service must be done by a qualified company. In order to perform the services, please contact the distributor from whom you purchased your appliance.
- In respect of the environment, the appliance should be disposed of in accordance with Waste Electrical and Electronic Equipment requirements. Refer to national, local laws and codes for correct recycling of the appliance.

OPERATING CONDITIONS AND REQUIREMENTS



Limits of application:

| Parameter | OXYLINE | OXYLINE PLUS |
|---|---------------|---------------|
| pH to remove iron | 6,8 - 9,0 | 5,8 – 10,0 |
| pH to remove manganese | 8,0 - 9,0 | 5,8 – 10,0 |
| pH to remove iron and manganese | 8,0 – 8,5 | 5,8 – 10,0 |
| Max. level of iron (Fe ²⁺) [*] | up to 15 mg/l | up to 70 mg/l |
| Max. level of manganese (Mn ²⁺) [*] | up to 2 mg/l | up to 35 mg/l |
| Max. level of hydrogen sulphide (H ₂ S) [*] | up to 5 mg/l | up to 15 mg/l |
| Organic compounds [*] | up to 2 mg/l | 0 mg/l |
| Chlorine [*] | up to 5 mg/l | - mg/l |

^{*} the values presented in the table are developed based on the MSDS from the producers of filter beds and depend on other physical and chemical parameters of water.

We strongly recommend to have the appliance selected by a qualified water technologist.

OPERATING PRESSURE MIN-MAX: 2,5-8,6 bar / 36-125 psi

- this appliance is configured to perform optimally at an operating pressure of 3 bar (45 psi) ±1/2 bar (7 psi); in case of a lower or higher operating pressure the performance may be affected negatively!
- check water pressure regularly.
- take into account that night time water pressure may be considerably higher than day time water pressure.
- install a pressure reducer ahead of the appliance if necessary.

OPERATING CONDITIONS AND REQUIREMENTS



OPERATING TEMPERATURE MIN-MAX: 2-43 °C / 39-109 °F

- do not install the appliance in an environment where high ambient temperatures (e.g. unvented boiler house) or freezing temperatures can occur.
- the appliance cannot be exposed to outdoor elements, such as direct sunlight or atmospheric precipitation.
- do not install the appliance too close to a water heater; keep at least 3 m (10 ft) of piping between the outlet of the appliance and the inlet of the water heater; water heaters can sometimes transmit heat back down the cold pipe into the appliance; always install a check valve at the outlet of the appliance.

ELECTRICAL CONNECTION: 230V-50Hz

- the appliance only works on 12V AC; always use it in combination with the supplied transformer 230/12V-50Hz.
- make sure to plug the transformer into a power outlet, which is installed in a dry location, with the proper rating and over-current protection.

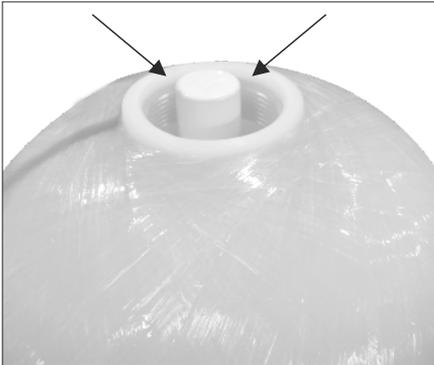
PREPARATION OF THE SYSTEM FOR INSTALLATION



IMPORTANT INFORMATION

- Before installing the appliance, in the first place you should prepare the system for installation. To do so, please follow the steps described below.

Step 1. Unscrew the head from the cylinder. **NOTE! The distribution pipe should be embedded inside the cylinder.**



Step 2. Cover the distribution pipe with an end cap. **NOTE! If quartz or bed gets inside the distribution pipe, it can damage the control valve during the appliance operation.**

Step 3. Fill in the cylinder with quartz substrate so that it is placed evenly on the cylinder bottom and it covers completely the lower distributor.

NOTE! To make the cylinder filling easier, please use a funnel.



Step 4. Fill in the cylinder with the proper bed.

Step 5. Screw up the control valve on the cylinder.

NOTE! Earlier take off the end cap from the distribution pipe.

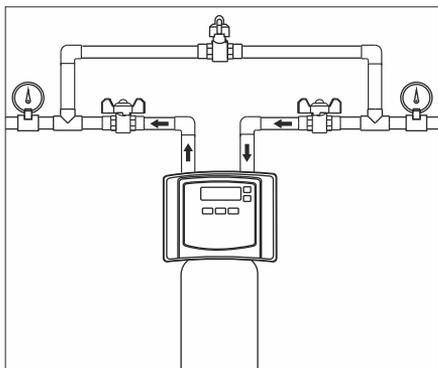
INSTALLATION



INLET & OUTLET

- In case of high concentration of impurities in the inlet water, we recommend the installation of a sediment filter, ahead of the appliance.
- We strongly recommend the use of flexible hoses to connect the appliance to the water distribution system; use hoses with a large diameter in order to limit the pressure loss.
- If the appliance is not equipped with the factory bypass (optional), we strongly recommend to install a 3-valve bypass system (not included with this product!) to isolate the appliance from the water distribution system in case of repairs. It allows to turn off the water to the appliance, while maintaining (untreated) water supply to the user.

WITH FACTORY BYPASS (optional).



1. mains water supply (untreated water).
2. inlet of appliance (untreated water).
3. outlet of appliance (treated water).
4. house/application (treated water).

STEP 1. Screw the factory bypass onto the connections of the appliance (2 & 3); make sure to install the gasket seals. Tighten the nuts firmly by hand.

STEP 2. Screw the connection kit with nuts onto the factory bypass (1 & 4); make sure to install the gasket seals. Tighten the nuts firmly by hand.

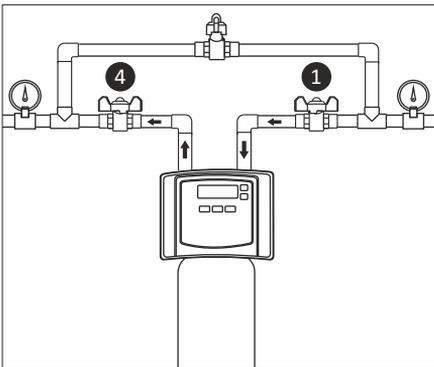
STEP 3. Connect the mains water supply to the adaptor on the inlet port of the factory bypass (1).

STEP 4. Connect the house/application to the adaptor on the outlet port of the factory bypass (4).

INSTALLATION



WITH 3-VALVE BYPASS SYSTEM (not included).



1. mains water supply (untreated water).
2. inlet of appliance (untreated water).
3. outlet of appliance (treated water).
4. house/application (treated water).

STEP 1. Install the 3-valve bypass system.

STEP 2. Screw the connection kit with nuts onto the connections of the appliance (2 & 3); make sure to install the gasket seals. Tighten the nuts firmly by hand.

STEP 3. Connect the 3-valve bypass system to the adaptors on the in (2) and out (3) connections.

STEP 4. Connect the mains water supply to the inlet of the 3-valve bypass system (1).

STEP 5. Connect the house/application to the outlet of the 3-valve bypass system (4).

DRAIN

- We recommend the use of a stand pipe with air trap.
- To prevent backflow from the drainage system into the appliance, always make sure to have an air gap between the end of the drain line and the drainage system itself; as a rule of thumb, the air gap should be minimum 2x the diameter of the drain line.
- Lay-out the drain hoses in such a way that pressure loss is minimized; avoid kinks and unnecessary elevations.
- Make sure that the sewerage system is suitable for the rinse water flow rate of the appliance.



STEP 1. Screw up the hose on the connection (1), make sure that the hose is equipped with the stiffening insert at its end.

STEP 2. Run the drain hose to the drainage system and connect it to the stand pipe assuring sufficient air gap. This drain line operates under pressure, so it may be installed higher than the appliance.

COMMISSIONING



ELECTRICAL CONNECTION

PREPARATION OF THE HEAD FOR PROGRAMMING..

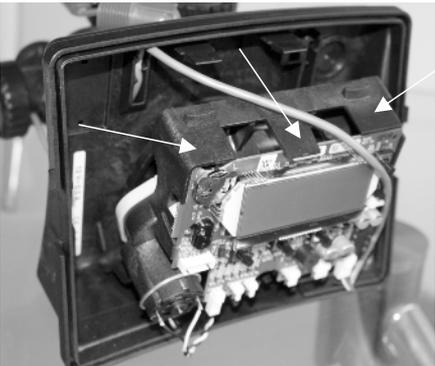
Before programming the head, in the first place you should install the power cord to the transformer. To do so you must:

Step 1: Take off the head front panel gently.



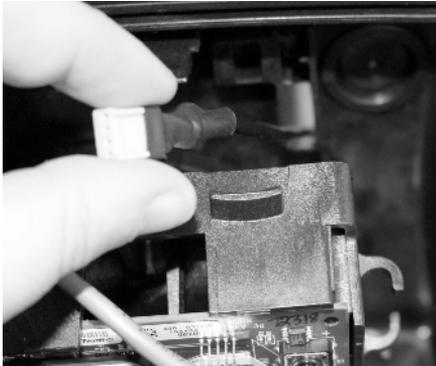
Step 2: Raise the ratchets with special attention (see photo). Pull out the element on which the controller is installed by pushing it gently.

NOTE! YOU MUST BE PARTICULARLY CAREFUL NOT TO BREAK THE FASTENINGS AND NOT TO DAMAGE THE DISPLAY.

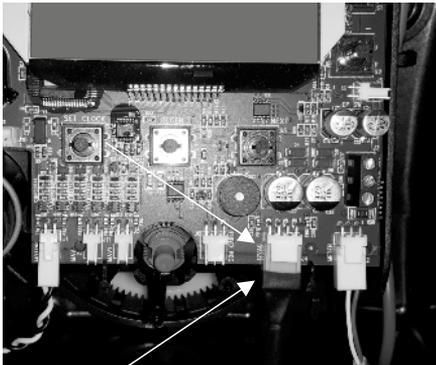


Step 3: Draw the transformer cord through the slot in the housing.

NOTE! YOU MUST BE PARTICULARLY CAREFUL NOT TO BREAK THE FASTENINGS AND NOT TO DAMAGE THE DISPLAY.



Step 4: Connect the transformer.



COMMISSIONING



Step 5. Plug in the element on which the controller is installed. Push the element gently until you can hear a characteristic „click“.

NOTE! YOU MUST BE PARTICULARLY CAREFUL NOT TO BREAK THE FASTENINGS AND NOT TO DAMAGE THE DISPLAY.



Step 6. Place the front panel and then connect the transformer to power outlet.



PRESSURIZING

STEP 1. Make sure the bypass system is in 'bypass' position.

STEP 2. Make sure the electronic controller of the appliance is in service mode.

STEP 3. Open the mains water supply.

STEP 4. Open a cold treated water faucet nearby the appliance and let the water run for a few minutes until all air is purged and all foreign material that may have resulted from the installation is washed out; close the tap.

STEP 5. Gently pressurize the appliance, by putting it into service:

factory bypass:

1. open the 'outlet' valve;
2. slowly open the 'inlet' valve.

3-valve bypass:

1. close the 'bypass' valve;
2. open the 'outlet' valve;
3. slowly open the 'inlet' valve.

STEP 6. After 2-3 minutes, open a cold treated water faucet nearby the appliance and let the water run for a few minutes until all air is purged from the installation and the resin bed is rinsed (it is normal for the rinse water to show some discoloration!); close the tap.

STEP 7. Check the appliance and all hydraulic connections for leaks.



ELECTRONIC CONTROL PANEL

SETTING THE TIME AND DAY OF THE WEEK

Setting the time should take place only in case when the appliance is connected to the power supply (the first start-up) and in case when the reset occurred during longer power outage. In such case, after restarting the controller the figures indicating the time are flashing.

Step 1: Press the button „SET CLOCK“.



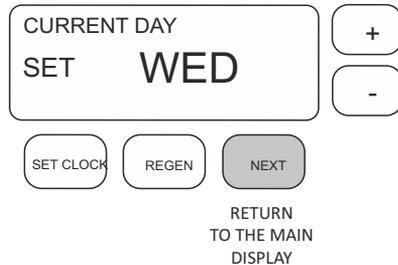
Step 2: SETTING THE TIME (HOUR): Set proper figure of „hour“ by pressing the buttons „+“ or „-“. Pressing the button „NEXT“ causes going to the next parameter. You can go back to the previous step anytime by pressing the button „REGEN“.



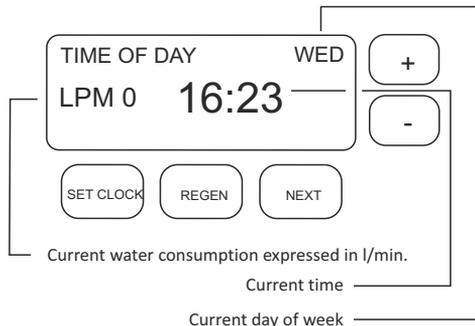
Step 3: SETTING THE TIME (MINUTES): Set proper figure of „minutes“ by pressing the buttons „+“ or „-“. Pressing the button „NEXT“ causes going to the next parameter. You can go back to the previous step anytime by pressing the button „REGEN“.



Step 4: SETTING THE PROPER DAY OF THE WEEK: Set the day of the week by pressing the buttons „+“ or „-“. Pressing the button „NEXT“ causes going to the next parameter. You can go back to the previous step anytime by pressing the button „REGEN“.

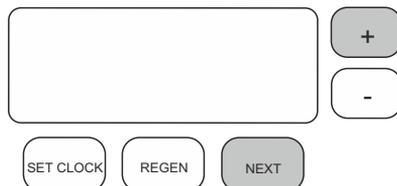


The properly programmed controller should display the information:



APPLIANCE PROGRAMMING

Step 1: Press the buttons „NEXT and „+“ at the same time.



ELECTRONIC CONTROL PANEL



Step 2: SETTING THE LANGUAGE - the display shows that it operates in English version „ENGLISH“. With the buttons „+“ or „-“ you can change the language. The user may select the following language versions: English, German, French, Spanish and Italian. Press the button „REGEN“ if you want to finish, or „NEXT“ if you want to go to the next parameter.



Step 3: Setting the time regeneration - As standard the producer set the interval between the regenerations every 4 days. If this parameter is set as „OFF“, the regeneration will take place in the volume mode i.e. it will be initiated when proper amount of water in m3 has flown through the system.

If the daily regeneration mode is set at the position „OFF“, then the system will operate in the volume mode, but if the time regeneration parameter is set up (range 1 - 28), then the system will operate in the volume and time mode.

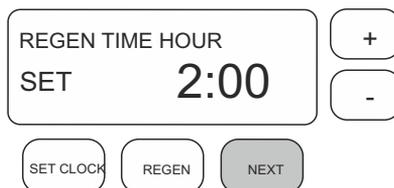
With the buttons „+“ or „-“ set the daily regeneration mode (recommended 4 days).

NOTE! Based on the observation and the result of the water test done, the user may increase the time interval between the regenerations. In order to adjust the appliance as precisely as possible to the flushing cycles, we suggest also using the readouts from the pressure gauges installed on the water inlet and outlet from the appliance. The difference in the values, (the pressure drop at the second pressure gauge by 0.5 bars or more), informs when the next regeneration of the appliance should occur.

Press the button „NEXT“ to go to the next parameter. Press the button „REGEN“ if you want to go back to the previous parameter.

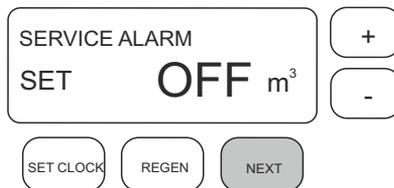


Step 4: Setting the regeneration time (HOUR) - As standard the producer set the regeneration at 2:00. At that time the appliance regeneration cycles are to be initiated. By means of the buttons „+“ or „-“ you can set by yourself the time at which the system is to initiate the regeneration process. We suggest to leave the regeneration time in the standard mode, because the water demand is smaller at night, and in most cases the electricity cost tariff is lower. Press the button „NEXT“, to go to the next parameter. Press the button „REGEN“ if you want to go back to the previous parameter.



Step 5: Setting the regeneration time (MINUTES) - By pressing the buttons „+“ or „-“, set the minutes analogically.

Press the button „NEXT“ to go to the next parameter. Press the button „REGEN“, if you want to go back to the previous parameter.



Step 6A: Service alarm - By pressing the buttons „+“ or „-“ set the service alarm in m³.

If you want your appliance to remind you about the planned service works after the proper amount of water has flown through, switch on the service message (range 100 - 50000 m³). The producer recommends to leave this option as switched off - OFF mode.

ELECTRONIC CONTROL PANEL



Press the button „NEXT” to go to the next parameter. Press the button „REGEN”, if you want to go back to the previous parameter.

SERVICE ALARM
 SET 1.00 YR

+
-

SET CLOCK
REGEN
NEXT

Step 6B: Service alarm - By pressing the buttons „+” or „-” set the service alarm in days.

If you want your appliance to remind you about the planned service works after the proper number of days passed by, switch on the service message.

The interval is set as every 3 months (0.25). Setting the value „1.00” causes the alarm to switch on once a year.

NOTE! The appliance must be serviced at least once a year (this service may be payable). The service must be done by a qualified company. In order to perform the services, please contact the distributor from whom you purchased your appliance.

Press the button „NEXT” to go to the next parameter. Press the button „REGEN”, if you want to go back to the previous parameter.

NORMAL ALARM DISPLAY
 SET TYPE

+
-

SET CLOCK
REGEN
NEXT

CUSTOM ALARM DISPLAY
 SET TYPE

+
-

SET CLOCK
REGEN
NEXT

Step 7: Setting the type of messages.

The alarm of messages operates in two modes:

NORMAL ALARM DISPLAY: in this option the system will additionally inform you with a buzzer about the planned service.

CUSTOM ALARM DISPLAY: in this option the system will not additionally inform you with a buzzer about the planned service.

With the buttons „+” and „-” you may choose the proper mode. Press the button „NEXT” to go to the next parameter. Press the button „REGEN”, if you want to go back to the previous parameter.

Step 8. After choosing the proper mode of the alarm display, the planned time schedule for the messages is shown on the screen.

SCHEDULED SERVICE
 IN 1.00 YR

+
-

SET CLOCK
REGEN
NEXT

Step 9: Alarm buzzer - By pressing the buttons „+” or „-” set the alarm buzzer in the position ON or OFF.

If you set the service alarm in m³ or in days and you want your appliance to inform you with a buzzer about the planned service works, set the parameter in the position ON.

Press the button „NEXT” to go to the next parameter. Press the button „REGEN”, if you want to go back to the previous parameter.

ALARM BUZZER
 SET ON

+
-

SET CLOCK
REGEN
NEXT

Step 10: Setting the time for sound message.

START-UP: SETTING THE TIME (HOUR): Set proper figure of „hour” by pressing the buttons „+” or „-”.

Pressing the button „NEXT” causes going to the next parameter. You can go back to the previous step anytime, by pressing the button „REGEN”.

ELECTRONIC CONTROL PANEL



START-UP: SETTING THE TIME (MINUTES): Set proper figure of „minutes“ by pressing the buttons „+“ or „-“. Pressing the button „NEXT“ causes going to the next parameter. You can go back to the previous step anytime, by pressing the button „REGEN“.

ALARM BUZZER START
SET 6:00

+

-

SET CLOCK

REGEN

NEXT

COMPLETION: Similarly, set the time when the alarm is to switch off.

Pressing the button „NEXT“ causes going to the next parameter. You can go back to the previous step anytime, by pressing the button „REGEN“.

ALARM BUZZER END
SET 22:00

+

-

SET CLOCK

REGEN

NEXT

Step 11: Setting the display operation - By pressing the buttons „+“ or „-“ set the mode of the display operation.

OFF mode - if the user does not take any action, the display switches off after several minutes.

ON mode - causes that the display is switched on all the time.

You can go back to the previous step anytime, by pressing the button „REGEN“. Pressing the button „NEXT“ causes the return to the main display.

LIGHT NORMALLY
SET OFF

+

-

SET CLOCK

REGEN

NEXT

RETURN TO THE
MAIN DISPLAY

GENERAL INFORMATION

During the operation, the controller may show one of the five screens. By pressing the button „NEXT“ you can switch over between the alternative screens.

The first screen always indicates the current time.

The second screen indicates the amount of water expressed in litres per minute, which has flown through (has been filtered) by the system.

The third screen informs whether the holiday mode is activated (the holiday mode may be activated or deactivated from this level). The holiday mode is responsible for starting up the regeneration in case when the time regeneration is switched off. Then, although sufficient amount of water does not flow through the system, the system goes into the regeneration mode to flush periodically the filter bed.

The fourth screen shows the volume of water remaining to the time of next regeneration

The fifth screen shows the number of days remaining to the time of next regeneration.

If the regeneration is initiated on a given day, the message „REGENERATION TODAY“ appears on the screen.

REGENERATION TODAY WED
LPM 3250 16:23

+

-

SET CLOCK

REGEN

NEXT

REGENERATION MODE

At the moment the system goes into the regeneration mode, the screen displays the information on the current stage of the regeneration, as well as the amount of time remaining to its completion.

BACKWASH-AIR 10%
SET 8 SEK

+

-

SET CLOCK

REGEN

NEXT



ELECTRONIC CONTROL PANEL

If the regeneration is initiated on a given day, the message „REGENERATION TODAY“ appears on the screen.

REGENERATION MODE

The system is configured in such way that it goes into the regeneration mode when the water demand is lower (night hours).

The regeneration process starts automatically, and then it resets to the water treatment mode by itself. When the regeneration is completed, the system starts again to supply the installation with the treated water.

REGENERATION MODE

MANUAL REGENERATION: Sometimes it is necessary to initiate the earlier cycle of regeneration. It may be related to an intensive period of the system exploitation.

POSTPONED MODE: To initiate the regeneration manually and define its time, you should press and release the button „REGEN“. „REGENERATION TODAY“ appears on the screen, the system goes into the regeneration mode at the set time (you can change the time of regeneration by reprogramming the hour according to the steps described previously).

If pressing the button „REGEN“ causes an error display, pressing it again will cancel the whole procedure.

INSTANT MODE: To initiate the regeneration immediately, you should press and hold the button „REGEN“. The system immediately goes into the regeneration mode.
NOTE! THIS PROCESS CANNOT BE CANCELLED.

In case the system is during the regeneration, it is possible to supply the installation with untreated water. In such situation you should set the BY-PASS valve in the BYPASS POSITION.



MAINTENANCE

ROUTINE CHECKS

Regularly the user should perform a basic check to verify if the appliance is functioning correctly, on the basis of the following control points:

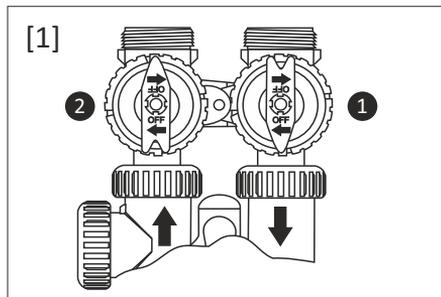
1. Check settings of electronic control panel.
2. Measure the contamination level before and behind the appliance.
3. Check drain line from control valve; there shouldn't be any water flow (unless appliance is in regeneration).
4. Check appliance and surrounding area; there shouldn't be any water leakages.

BYPASSING THE APPLIANCE

Occasionally it may be necessary to put the appliance hydraulically in bypass, i.e. to isolate it from the water distribution system; f.e.:

- in case of an urgent technical problem;
- when it is not necessary to supply treated water to the house/application (refill swimming pool, irrigation,...).

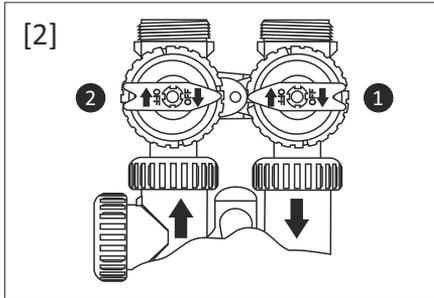
WITH FACTORY BYPASS (optional).



SERVICE POSITION [1]

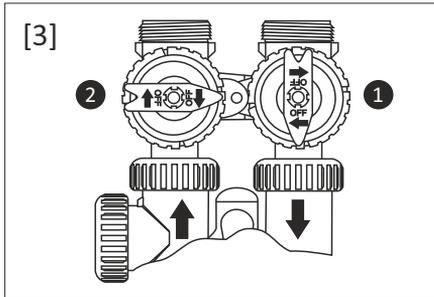
1. inlet valve to appliance is OPEN.
2. outlet valve from appliance is OPEN.

MAINTENANCE



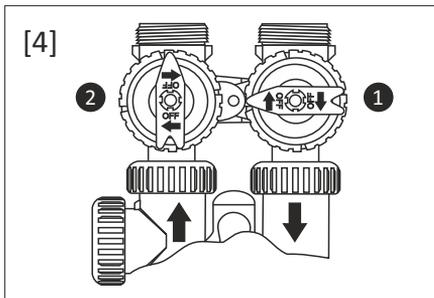
BYPASS POSITION [2]

1. inlet valve to appliance is CLOSED.
2. outlet valve from appliance is CLOSED.



MAINTENANCE POSITION [3]

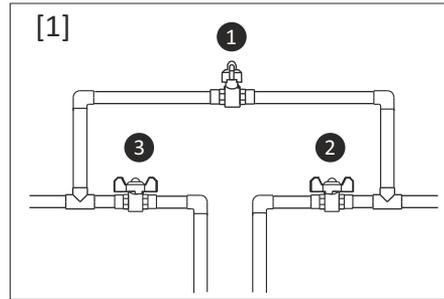
1. inlet valve to appliance is OPEN.
2. outlet valve from appliance is CLOSED.



CLOSED POSITION [4]

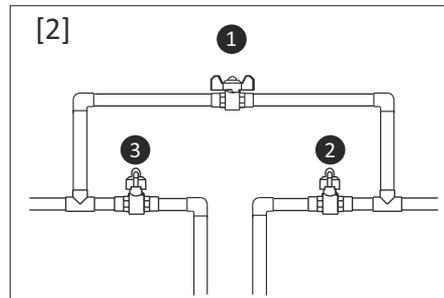
1. inlet valve to appliance is CLOSED.
2. outlet valve from appliance is OPEN.

WITH 3-VALVE BYPASS SYSTEM (not included).



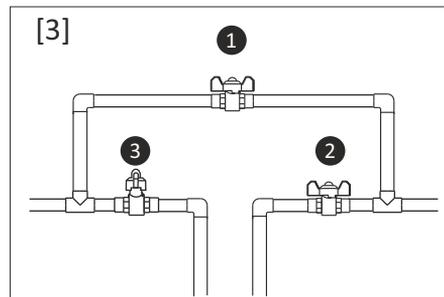
SERVICE POSITION [1]

1. bypass valve is CLOSED.
2. inlet valve to appliance is OPEN.
3. outlet valve from appliance is OPEN.



BYPASS POSITION [2]

1. bypass valve is OPEN.
2. inlet valve to appliance is CLOSED.
3. outlet valve from appliance is CLOSED.



MAINTENANCE POSITION [3]

1. bypass valve is OPEN.
2. inlet valve to appliance is OPEN.
3. outlet valve from appliance is CLOSED.

MAINTENANCE

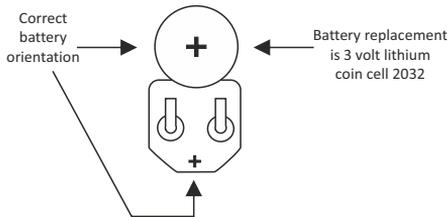


POWER LOSS AND BATTERY REPLACEMENT

The AC transformer comes with a 15 foot power cord and is designed for use with the control valve; the transformer should only be used in a dry location.

In the event of a power outage that is less than 24 hours, the control valve will remember all settings and time of day. After 24 hours, the only item that needs to be reset is the time of day and will be indicated by the time of day flashing. All other settings are permanently stored in the nonvolatile memory.

If a power loss occurs that is less than 24 hours and the time of day flashes, this indicates that the battery is depleted. The time of day should be reset and the non-rechargeable battery should be replaced. The battery is a 3 Volt Lithium Coin Cell type 2032 and is readily available at most stores. To access battery location, remove front cover.



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



Battery fully seated

APPEARANCE

To retain the appearance of the appliance, simply wipe it with a damp cloth or clean it with a mild soap solution; never use abrasive cleaners, ammonia or solvents.

SANITIZING THE APPLIANCE

This appliance is manufactured from premium quality material and assembled in safe conditions to assure it is clean and sanitary. If installed and serviced correctly, this appliance will not infect or contaminate your water supply. However, as in any 'device' plumbed-in in your water distribution system, a proliferation of bacteria is possible, especially in case of 'stagnant water'. Therefore this appliance is equipped with a 'days override' feature, that will automatically rinse the resin bed periodically, even in case of low or absence of water usage.

ERROR

ERROR MESSAGE: If the word "ERROR" and a number are alternately flashing on the display record the number and contact the dealer for help. This indicates that the control valve was not able to function properly.

