Jane Ino

Intuitive. Versatile. Efficient.

OPERATING MANUAL

OTHER LANGUAGES AVAILABLE

NL/ Scan bovenstaande QR code om de Nederlandstalige handleiding te raadplegen.

FR/ Scannez le code QR ci-dessus pour consulter la notice en Français.

DE/ Scannen Sie den QR-Code, um das deutsche Handbuch zu finden.

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1. INTRODUCTION

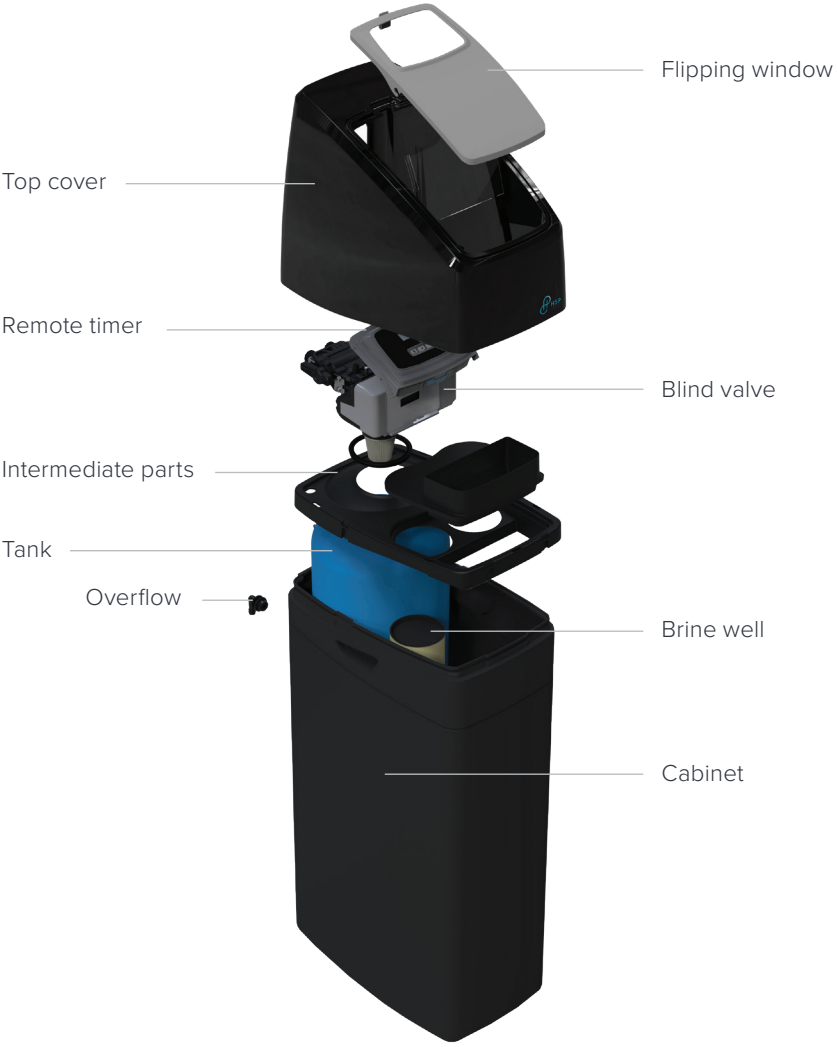
We would like to thank you for acquiring our Jane Ino water softener. You have made an excellent choice that will allow you to benefit from the highest quality of water in the future.

The Jane Ino is delivered in a cardboard box together with a by-pass. Please check the softener carefully, in the presence of the delivery man, to ensure you that it was not damaged during transport.

Before starting up your softener, please read this manual carefully. Proper installation guarantees a long service life and high performance of your water softener.

The packaging can be fully recycled, please dispose of it in a suitable place.

2. PRESENTATION



3. SAFETY INSTRUCTIONS

The installer/user should read the manual in full. The installer must ensure that the manual is available to the user in a legible form. The installer must ensure that all safety measures are followed and maintained.

The following safety and installation instructions are applicable:

- Never install or operate damaged products.
- Only use unaltered and compatible original parts.
- If the equipment is opened improperly, is wrongly installed, commissioned or operated, there is risk of physical injury and material damage.
- The equipment contains parts that can be swallowed.

TRANSPORT

The Jane Ino softener is delivered in a box. Please inspect carefully your device to be sure it has not been damaged during transportation.

INSTALLATION

Follow all instructions for installation. See chapter 5 ‘Installation softener’.

PROPER USE

The equipment is to be used on city water. The user is solely responsible for any damage incurred by improper use of the equipment.

EXCLUSION OF LIABILITY

The manufacturer accepts no liability for personal injury or material damage incurred due to misuse or errors caused by improper installation, commissioning or operation.
The safe and fault-free use and the operational safety of the equipment is only guaranteed with proper use according to the specifications of this operating manual.

4. FUNCTIONING

4.1. GENERAL FUNCTIONING OF A WATER SOFTENER

A water softener provides softened water by removing ions such as Calcium and Magnesium from the incoming water. The incoming water is sent to the valve that directs the water over a vessel filled with special softener resins. These resins will exchange the “hard” Ca- and Mg-ions present in the water for soft “Na”-ions. The softened water coming out of the vessel is then sent via the valve to the different tap-points in the house.

The resins have a certain capacity to remove hard ions from the water. The harder the water or the higher the water consumption, the faster the resins will be exhausted. As the water hardness is known and fixed, the resin bed will be exhausted after a certain amount of water. At this moment, the resins have to be regenerated in order to bring them back to their initial capacity. This regeneration is done by bringing them in contact with brine (dissolved salt (Na-ions)). In order to be able to create the brine, the softener-cabinet is to be filled with salt-tablets. After brining, the resin bed has to be rinsed and backwashed so that there is no salty taste and the resin bed is in perfect condition to capture again incoming hardness ions (Ca- and Mg-ions).

The heart of the softener is the valve, equipped with a controller that manages the softener in a fully automated way. Water consumption is measured and the valve will trigger at the appropriate moment a regeneration. A regeneration consists out of 4 cycles:

- **Backwash:** water is sent over the resin bed in the opposite way in order to remove possible impurities on top of the bed and to unpack the resin bed.
- **Brining and slow-rinse:** brine is being sent over the resin bed.
- **Refill:** water is sent to the part of the cabinet where the salt is located. This water will dissolve a part of the salt so that the necessary brine will be available to perform the next regeneration.
- **Fast rinse:** the last traces of brine are removed and the bed is packed again.

4.2. FUNCTIONING

The Jane Ino Mini & Midi have the following characteristics:

	Mini 10	Mini 14	Midi 18
Unit Size	10	14	18
Control System	Ino 20	Ino 20	Ino 20
Regeneration type	Upflow	Upflow	Upflow
Nominal flow	H 0.7 M 0.9	H 1 M 1.2	H 1.3 M 1.5
Peak flow	H 1.6 M 1.9	H 2.4 M 2.5	H 1.6 M 1.9
Exchange capacity	H 0.40 M 0.45	H 0.56 M 0.63	H 0.75 M 0.79
Water extraction possible during regeneration	Yes, hard water	Yes, hard water	Yes, hard water
Working pressure*	2 bars	2 bars	2 bars
Feedwater temperature range	1 - 45°C	1 - 45°C	1 - 45°C
Connected power supply	230 V	230 V	230 V
Diameter inlet & outlet	3/4'' or 1''	3/4'' or 1''	3/4'' or 1''
Diameter drain	1/2'' barb	1/2'' barb	1/2'' barb
Dimensions (H x W x D)	741 x 300 x 500	741 x 300 x 500	1072 x 300 x 500

(*) It is necessary to put a pressure reducer in case the incoming pressure is higher than 6 bar or is unstable ("Water hammer")

The Jane Ino Maxi has the following characteristics:

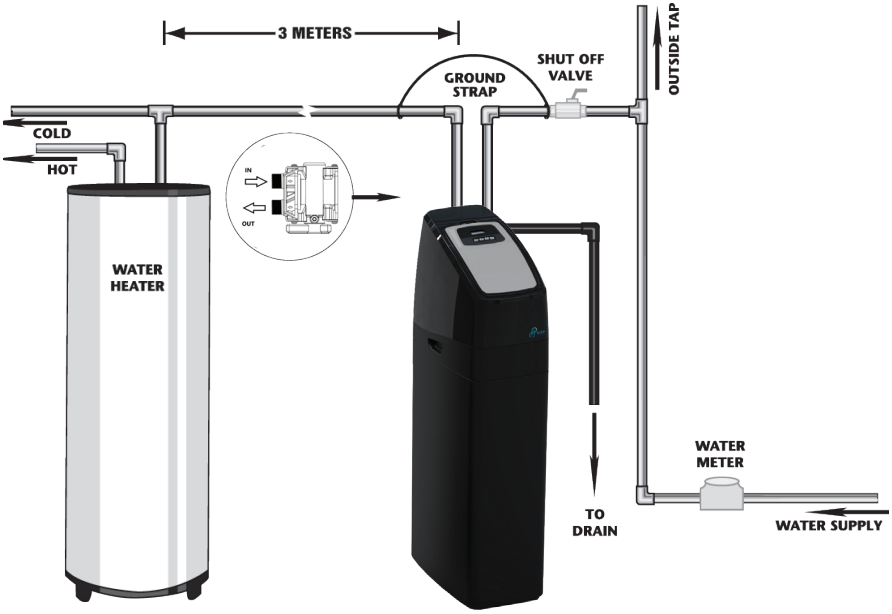
	Maxi 22	Maxi 30
Resin volume	22	30
Control System	Ino 20	Ino 20
Regeneration type	Upflow	Upflow
Nominal flow	H 1.5 M 1.7	H 1.7 M 1.7
Peak flow	H 1.6 M 1.9	H 2.1 M 2.2
Exchange capacity	H 1.09 M 1.15	H 1.47 M 1.55
Water extraction possible during regeneration	Yes, hard water	Yes, hard water
Working pressure*	2 bars	2 bars
Feedwater temperature range	1 - 45°C	1 - 45°C
Connected power supply	230 V	230 V
Diameter inlet & outlet	3/4'' or 1''	3/4'' or 1''
Diameter drain	1/2'' barb	1/2'' barb
Dimensions (H x W x D)	1200 x 300 x 500	1200 x 300 x 500

(*) It is necessary to put a pressure reducer in case the incoming pressure is higher than 6 bar or is unstable ("Water hammer")

- The Jane Ino softener keeps track of the water consumption via an integrated water meter. The amount of water that can be softened depends on the water hardness of the incoming water and is programmed when commissioning the system.
- When the resin bed is exhausted, the Jane Ino softener will perform a regeneration. This regeneration is programmed by default at 2 a.m. or 3 a.m. because there is no softened water available during regeneration. If necessary, the regeneration hour can be modified.
- The Jane Ino softener will optimise the moment of regeneration based on the real water consumption of the user.
- The Jane Ino softener disposes of a LCD screen where the functioning of the softener can be monitored and parameters can be set or changed.
- Most of the parameters of the Jane Ino softener are preprogrammed in the factory so that only a few user-specific parameters have to be set when commissioning the unit.
- Parameters are stored in the memory and will not be lost due to power outage.
- The Jane Ino softener allows to configure the outgoing hardness by turning the hardness screw.
- The Jane Ino softener allows to trigger a manual regeneration for special cases where this could be needed.

5. INSTALLATION

5.1. PREPARATION OF THE INSTALLATION



5.2. PREPARATION OF THE INSTALLATION

Location

The device is only to be used for interior operation. Install your softener on a flat, firm and clean surface. The unit must be close to a drain line to allow an easy connection. Check if there is an electrical earth grounded plug to power the unit. It is essential to foresee sufficient space for installation, commissioning and easy maintenance. It is also important to ensure good access for filling salt.

Pressure

A minimum incoming pressure of 2 bar is needed to allow the valve to perform a proper regeneration.

Always use a pressure reducer upstream of your installation to ensure a regular pressure during the day and to withstand water hammer during the night.

Power connection

Be sure that the power cannot be switched off accidentally by a wall switch.

If the power cable is damaged, please ask a skilled electrician to change it.

When the unit is disconnected from the electrical network for a number of days, do not forget to reprogram the clock.

When the unit stays disconnected from the electrical network for a long period of time, please verify if all parameters are still set at the correct values.

Plumbing

The plumbing must be in good state. In case of doubt, please change it.

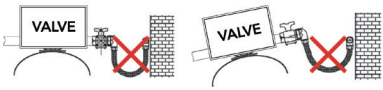
All plumbing for the water inlet, distribution and drain line should be done correctly and in accordance with the legislation in force at the time of the installation.

Possible soldering should be done before installing the softener. Failing to do so can generate irreversible damages. For any operation, shut down water inlet, unplug your softener and open faucets at the top and at the bottom of your house to drain your installation.

The connection to the softener must be done using flexible hoses.

The connection to the drain should be done in accordance with legislation. Often an airgap is needed.

In order to adequately compensate the tank elongation the flexible tubes must be installed horizontally. If the flexible piping connection is installed in vertical position, instead of compensating the elongation, it will create additional stresses on the valve & tank assembly.



Filter

A pre-filter is needed upstream of the softener in order to protect the valve from impurities present in the water that might cause damage to the valve or its seals.

Water temperature

The temperature of water should not exceed 45 °C and the installation should not be subjected to freezing conditions (risk of very serious damage).

Do not use the softener on hot water!

Salt

Only use salt tablets for water softening applications (purity should be at least 99. 5%). Other types of salt, for example, finely granulated are not permitted.

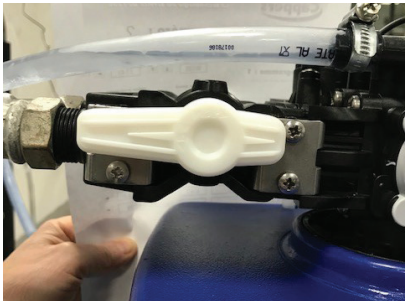
PHYSICAL INSTALLATION

After unpacking the system, please put the power supply, bypass valve and any other accessories apart. When moving the system, pay attention not to hold or move the softener by hoses, valves or other parts not suited for that purpose. In cold weather, it is recommended that the Jane Ino is brought up to ambient temperature before proceeding with the installation. The Jane Ino must be positioned so that it is protected from freezing temperatures. Do not install the unit where it is exposed to direct sunlight or high temperatures (45 °C max).

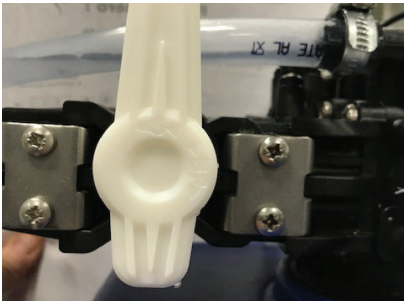
Installation of the bypass on the softener:

- The installation of a bypass allows you to bypass the water softener when required (maintenance, need for unsoftened water, . . .).
- A bypass is supplied as a kit with your softener. To install it, unscrew the manifold screws, remove the clips, install the bypass, tighten the bypass clips, reinstall the manifold and tighten its clips. Install the hoses according to the direction of the arrows.
- When the bypass handle is horizontal, the incoming water flows through the softener. When the bypass handle is vertical, the water is sent directly to the taps, without being softened.
- The drain connection of the valve must be connected to the drain with a metal ring without damaging the outlet.
- The overflow connection on the cabinet has to be connected (separately from the drain connection on the valve) to a drain that is situated below the softener as possible water coming out is unpressurised.

WATER FLOWS THROUGH THE VALVE



WATER DOES NOT FLOW THROUGH THE VALVE



6. PROGRAMMING

6. 1. SET TIME OF DAY

Press ▸ to switch from the remaining volume display to the time of day display

Press ▾ or ▴ to adjust time of day.

A power failure will cause the display to blink indicating the need to adjust the time of day. The blinking stops after adjustment.

6.2. DISPLAY THE REMAINING VOLUME

Press ▸ to switch from time of day to remaining volume. Press again to switch back.
Press ▸ to go back to the time of day display

6.3. EXECUTING A MANUAL REGENERATION

Press on the **R** button to program a regeneration (regeneration indicator blinks). Hold the button longer for immediate regeneration start.

6.4. ADJUST THE REGENERATION INTERVAL, HARDNESS OR CAPACITY, TIME OF REGENERATION.

Press the ▸ button for at least 8 seconds. F-14 is displayed.

Adjust the number of day before forced regeneration. Can be set at “OFF”.

Briefly press the ▸ button, H 30 is displayed.

Adjust the inlet hardness in f°H according to the raw water.
1°fH = 10 ppm = 0,56°dH

Briefly press the ▸ button, oX: XX is displayed.

Adjust the threshold in litres triggering regeneration.

Briefly press the ▸ button, 03:H1 or 02:H1 is displayed.

Adjust the regeneration time if necessary.

Briefly press the ▸ you can adjust the inlet water hardness.

Briefly press the ▸ button to return to the normal display.

7. COMMISSIONING

We recommend following steps for the commissioning of the softener. Wait to put salt in the softener till the end of the commissioning in line with the guidelines below.

- Rinsing of the piping.

Set the bypass of the softener in the position bypass. Open the main water inlet of the building. Open a faucet with cold water nearby the softener and let the water flow during several minutes. Possible impurities caused by the installation activities should be removed from the piping. Close the faucet when the water has become clear.

- Filling of the softener with water and rinsing of the resins

Put the bypass in service. Start an immediate manual regeneration of the softener (See chapter programming). Skip the refill, pause, brine and backwash steps by pushing the regeneration button and go immediately to the “5-Rapid rinse”. Open the main water supply at quarter position.
The softener is being filled in a slow way. When the flow in the drain tube has become constant (the bottle is meanwhile full of water), open the main water completely and let the water flow to the drain until it has become clear. Now the resins are rinsed. Move the valve towards service-position by pushing the regeneration button.

- Put water in the cabinet of the softener

Fill the cabinet with 5L (for mini) or 10L (for maxi) of water (where you would normally put the salt). Do not use any salt yet. This water will be needed to check the correct functioning of the suction of the valve.

- Remove possible air from the bottle

Start a new manual regeneration. During “4- Backwash” possible present air will be pushed to the drain. Once the flow to the drain is stable (= all air is gone), please press the R button several times until the display start with 3 (brining and slow rinse phase).

- Check correct functioning of the suction of the valve

Check if the water in the tank is properly being aspirated. All water above the air check (lower part of the safety brine valve) must be extracted. The water below the air check will remain in the tank.

- Fill cabinet with water and salt (for next regeneration)

Go on with the manual regeneration. Go to the “fill” phase by pushing one time the R button until the display starts with “1”. There is still no salt in the cabinet. The cabinet is now filled with a quantity of water that will dissolve later on the correct amount of salt and as such create brine. Once it is verified that the cabinet is filled with the correct amount of water, the softener can be filled with salt. It will take 1 hour to turn the salt into brine. This brine will then be used during the next regeneration. The valve is now in service. The softener starts delivering soft water.

- Adjust the outgoing hardness

Not all customers want to have 100% softened water. If a customer wants an outgoing hardness of a few degrees (for instance 5°fH or 3°dH), you can adjust the outgoing hardness by turning the mixing (+ for more hard water and - for less hard water) that is situated on top of the valve (next to the meter connection).

Use a hardness tester to check whether the appropriate outgoing hardness is reached. If not, further adjust the position of the mixing screw.

- Finalise the programming of the parameters

Most of the parameters are pre-programmed in the factory. A few parameters are installation dependant and can therefore only be programmed at the moment of commissioning. For more information on programming, please have a look at chapter 6 ‘Programming’.

8. TROUBLESHOOTING

INCIDENTS	CAUSES	SOLUTIONS
The system does not regenerate	Wrong setting	Check settings
	Defective power	Use the appropriate 5V power supply
	Power loss	Restore the power supply by a professional
	Defective connection with meter cable	- Verify that the volume decreases when water is used (flow indicator runs) - Verify cable connection and its state. - Clean up or replace the turbine
	Other	Contact your installer
Hard water on outlet	Salt needed	Add salt in the brine tank
	Valve in “bypass position”	Switch bypass to “service position”
	Wrong settings	Check settings (Electronic board or mixing device)
	Lack of maintenance	Contact your installer
	Other	Contact your installer
Brine level too high	Wrong settings	Check settings
	Insufficient brine draw	Clean up the breech and verify the water tightness of brine line
	Lack of maintenance	Contact your installer
	Other	Contact your installer
Error message displays	Failure alarm	Please have a look on chapter 9 - Error Messages
Other	Other	Contact your installer

9. ERROR MESSAGES

Er 11 to 18 blinking	Valve operates normally	Valve has run through hard points (drive force too high	Low battery(ies) Defect in power supply Drive force too high (foreign material, dameged part	Check batter(ies) level Check power supply Inspect valve body (drive force, stat of main seals, spacers and piston, foreign material)
Er 19 permanent	Valve is frozen in service position, no further regeneration possible	Valve has run through 9 hard points over the past generations	Low battery(ies) Defect in power supply Motor damaged	Check battery(ies) level Check power supply Check motor operation (no short circuit)
Er 21 to 29 blinking	Valve operates normally	Valve couldn't reach targeted position in time	Low battery(ies) Defect in power supply Drive force too high (foreign material, damaged part...)	Check battery(ies) level Check power supply Inspect valve body (drive force, state of main seals, spacers and piston, foreign material)
Er 21 to 29 permanent	Valve is frozen in position with a risk of wasting water. Urgent action is needed.	Valve couldn't reach targeted position within 2 min.	Motor unplugged Low battery(ies) Defect in power supply Drive force too high (foreign material, damaged part...)	Check motor cable Check battery(ies) level Check power supply Inspect valve body (drive force, state of main seals, spacers and piston, foreign material)

Jane Ino