



JEREZ N SERIES

ELECTRONIC FLUSH VALVE FOR WC

OPERATION AND INSTALLATION

1	TECHNICAL DATA
2-4	PACK CONTENTS
5	PRE-INSTALLATION INFO
6-7	INSTALLATION JEREZ N/ JEREZ N P
8-11	INSTALLATION JEREZ N/ JEREZ N P WITH IRON FRAME
12-13	CONNECTING THE POWER SOURCE - JEREZ N (BATTERY)
14-15	CONNECTING THE POWER SOURCE - JEREZ N (TRANSFORMER)
16-17	CONNECTING THE POWER SOURCE - JEREZ N P (BATTERY)
18-19	CONNECTING THE POWER SOURCE - JEREZ N P (TRANSFORMER)
20	BATTERY REPLACEMENT
21-23	SETTINGS ADJUSTMENT
24	MAINTENANCE
25	LIMITED WARRANTY

OPERATION

Jerez N is a touch free electronic flush valve for W.C. operated by an infrared sensor. Water will start flushing when the user will walk away from the W.C.

If the user was present in front of the W.C. for less than one minute, a reduced flush will take place to remove liquid waste.

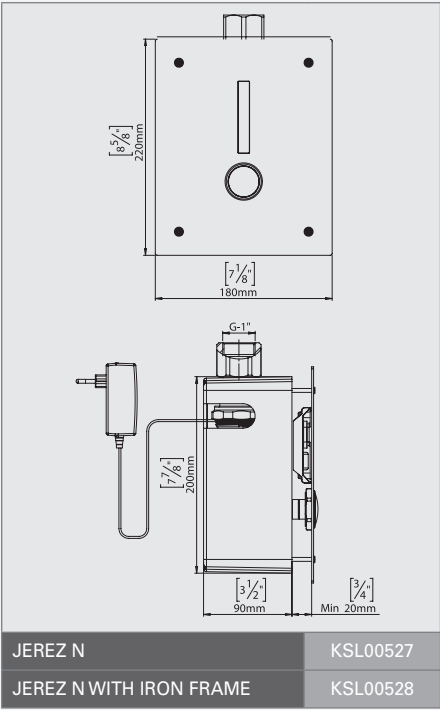
If the user was present in front of the W.C. for one minute or more, a full flush will occur to remove solid waste.

Jerez N includes a mechanical override push button for alternative manual operation.

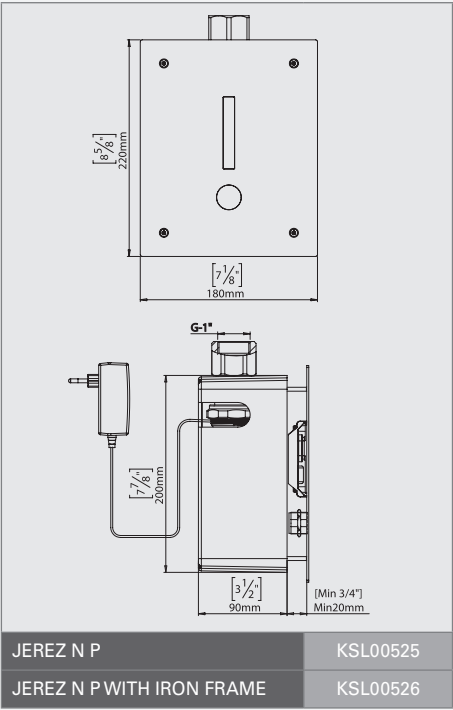
Jerez N P includes a piezo button for alternative touch operation.

Once the manual push button / piezo button is used, the system will discharge a full flush.

The information in this document reflects products at the date of printing. KASSEL SANITÄR S.L. reserves the right, subject to all applicable laws, at any time, at its sole discretion, and without notice, to discontinue or change the features, designs, materials and other specifications of its products, and to either permanently or temporarily withdraw any of the foregoing from the market. All information in this document is provided "as is" without warranty of any kind, either expressed or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement. KASSEL SANITÄR S.L. assumes no responsibility for errors or omissions in the information presented in this document. In no event shall KASSEL SANITÄR S.L. be liable for any special, incidental, indirect or consequential damages of any kind, or any damages whatsoever arising out of or in connection with the use or performance of this information. The tradenames, trademarks, logos and service marks presented in this document, including their design, are the property of KASSEL SANITÄR S.L. or other third parties and you are not permitted to use them without the prior written consent of KASSEL SANITÄR S.L. or such third party as may own them.



JEREZ N	KSL00527
JEREZ N WITH IRON FRAME	KSL00528

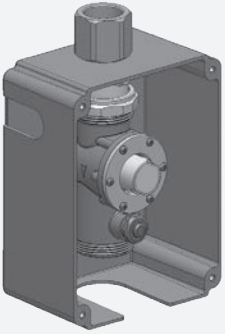


JEREZ N P	KSL00525
JEREZ N P WITH IRON FRAME	KSL00526

Power supply	9V Battery or 9V Transformer
Operating water pressure	1.0-8.0 bar (14.5 – 116.0 PSI). With water pressure of more than 8 Bars, use a pressure reducing valve for reduction.
Sensor range	700 mm +/- 50 mm / 27.56" +/- 1.97" (customizable by optional remote control)

PACK CONTENTS - JEREZ N

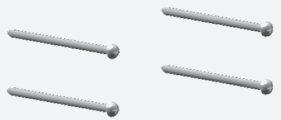
Familiarize yourself with the part names and confirm that the parts are included:



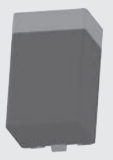
1 x Box assembly with concealed flush valve

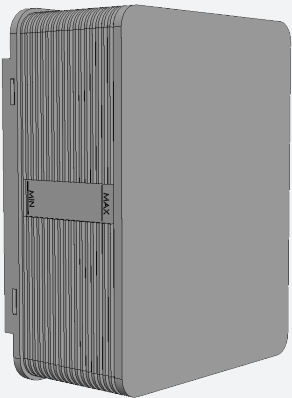


1 x Wall cover plate with electronic unit (battery box included in battery versions)



4 x Screws

	
B VERSIONS	E VERSIONS
Battery box for 1 x 9V battery	9V transformer



1 x Mud guard cover



1 x Allen key 4mm



1 x Allen key



Set of adjusting screws

PACK CONTENTS - JEREZ N P

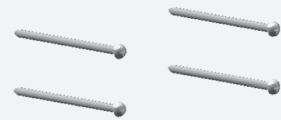
Familiarize yourself with the part names and confirm that the parts are included:



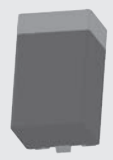
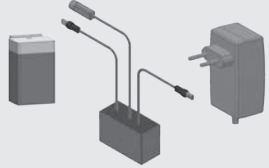
1 x Box assembly with concealed flush valve

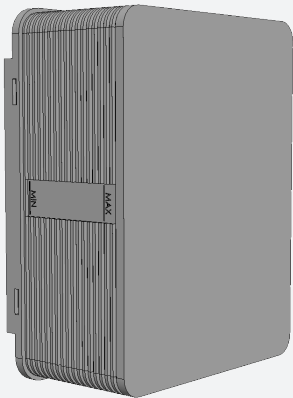


1 x Wall cover plate with electronic unit (battery box included in battery versions)



4 x Screws

	
B VERSIONS	E VERSIONS
Battery box for 1 x 9V battery	Backup device, Battery box for 9V battery and 9V transformer



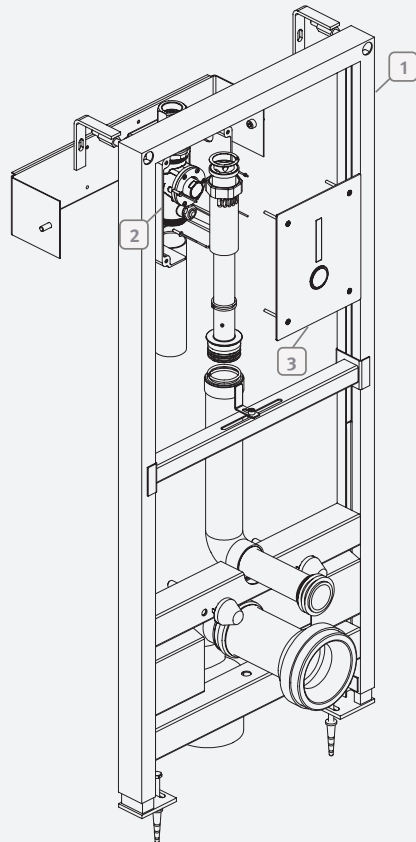
1 x Mud guard cover



1 x Allen key 4mm



1 x Allen key



- 1 1 x Iron frame and accessoires
- 2 1 x Plastic box with concealed flush valve
- 3 1 x Wall cover plate with the electronic unit

Note:

1. Keep a minimum distance of 500mm between the upper surface of the bowl and the infra red sensor.
2. The maximum thickness of the plaster wall covering the frame should be up to 50mm.

Check contents

Separate all parts from packaging and check each part with the pack contents section.

Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install the electronic flush valve until you obtain the missing parts.

Warnings

Do not install the system facing a mirror or any other electronic system operated by an infrared sensor.

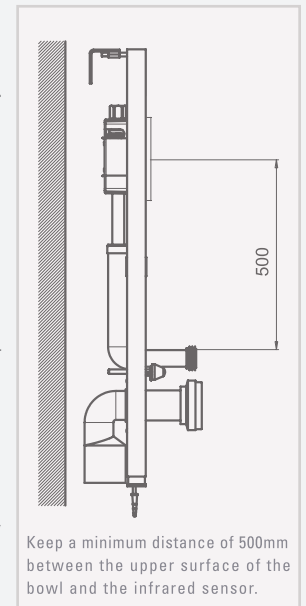
To prevent reflection problems, it is recommended to keep a minimum distance of 1.50 meters between the flush valve and other objects.

Preparation for installation

Flush water supply lines thoroughly before installing the flush valve. Do not allow dirt, Teflon tape or metal particles to enter the flush valve.

All plumbing is to be installed in accordance with applicable codes and regulations.

Installations in Australia and New Zealand must comply with the requirements of AS/NZS 3500.



Keep a minimum distance of 500mm between the upper surface of the bowl and the infrared sensor.

Important: For the optimal performance of this flush valve, the entire piping infrastructure from the main big water-supply pipe down to the W.C. would have 1" diameter.

If you product comes with iron frame, refer to pages 8-11 for the iron frame installation instructions before flush valve installation.

STEP 1 - INSTALLING THE FLUSH VALVE AND CONNECTING THE WATER SUPPLY	
1	Shut off the water supply. Make sure the piping is clean and has been washed away of any debris.
2	Cut an adequate opening in the wall for the dimensions of the box and the sleeve (not supplied).
3	Insert the electronic flush valve box through the opening in the wall.
4	Connect the water supply to the flush valve inlet.
5	Connect the flush valve outlet nipple to the pipe leading to the toilet bowl inlet.
6	Turn on the water supply. Make sure there is no water leakage.
7	Assemble the mud guard cover to protect the flush valve. Note the MIN and MAX marks on the box.

STEP 1 - INSTALLING THE FLUSH VALVE AND CONNECTING THE WATER SUPPLY	
8	Once the electricity, plumbing and tile works are finished, cut the mud guard cover wherever required by the installation. For the transformer powered version, before cutting the mud guard box insert the transformer cable through the designated hole in the box. Do not plug the transformer in at this stage.
9	If your product comes with the mechanical override button: Before assembling the panel, consider using the provided adjusting screw in order to optimize the operation of the mechanical button. If needed, assemble the adjusting screw to the mechanical button at the internal side of the panel and adjust it to the desired distance.

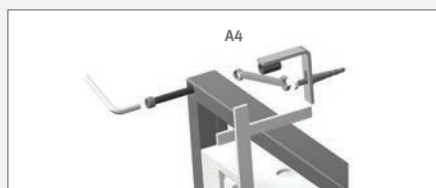
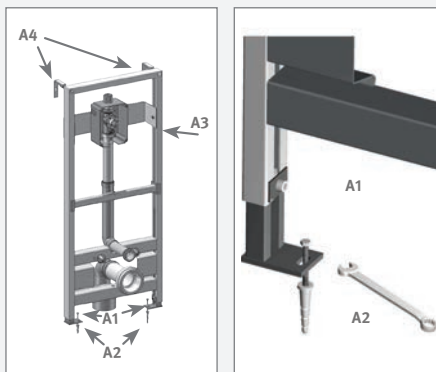
IRON FRAME INSTALLATION

Iron Frame Floor and Wall Mounting:

Adjust the two legs (A1) of the Iron Frame to the desired height according to your toilet bowl height.

Mount the frame legs to the floor (A2).

Use the supplied Wall Brackets (A4) to fix the frame to the wall.

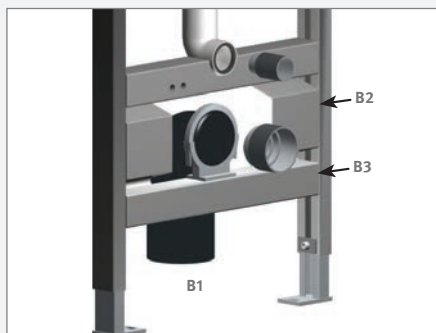


Pipe Assembly

Cut the lower part of the Waste Pipe to the desired length.

Fasten the Waste Pipe to the Iron Frame (B1) and connect it to the main drain line.

Plug the Dust Covers into the Flush Pipe (B2) and the Waste Pipe (B3).



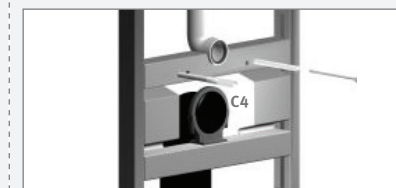
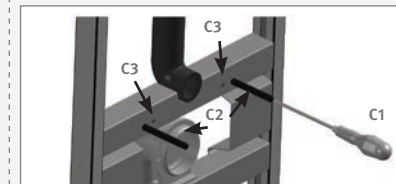
IRON FRAME INSTALLATION

Toilet Support Rod Assembly

Use a screwdriver (C1) to install the two Bowl Support Threaded Rods (C2) into the frame. Use either the external or the internal pair of threaded holes (C3) in the frame to fit the dimensions of the selected toilet bowl.

⚠ Caution: verify that the Bowl Support Threaded Rods (C2) are tightly fastened to their position and are not loose.

Place the Rod Cover Sleeves (C4) onto the Threaded Rods.



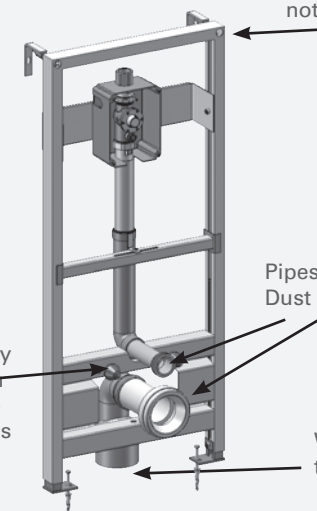
Final Verification before tiling works:

Frame is tightly fixed and not loose

Pipes are sealed with Dust Cover Plugs

The Bowl Support Threaded Rods are tightly fastened to their position and are covered with the plastic Rod Cover Sleeves

Waste Pipe is connected to the Main Drain Line



INSTALLATION

JEREZ N / JEREZ N P WITH IRON FRAME

IRON FRAME INSTALLATION

5	Connect the water supply to the flush valve inlet.	
6	Assemble the mud guard cover to protect the flush valve. Note the MIN and MAX marks on the box.	
7	Once the electricity, plumbing and tile works are finished, cut the mud guard cover wherever required by the installation. For the transformer powered version, before cutting the mud guard box insert the transformer cable through the designated hole in the box. Do not plug the transformer in at this stage.	
8	This part of the installation should be performed after the wall and floor construction is completed. Use a standard wall-hung toilet bowl (not supplied).	

INSTALLATION

JEREZ N / JEREZ N P WITH IRON FRAME

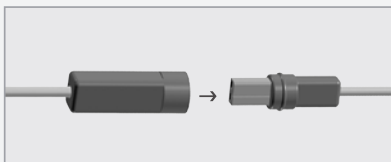
IRON FRAME INSTALLATION

9	Toilet Bowl Installation Remove the Waste Pipe and the Water Flush Pipe plugs. Measure (E1) and Cut (E2) the adapters to the necessary length between the wall surface and the toilet bowl, to allow for maximum sealing. Smooth any sharp edges to prevent damages to the pipes sealing rings (E3).	
10	Assemble the gaskets onto the two adapters and plug them into their final position in the wall (E4). Cut the Rod Cover Sleeves to expose the threading at the end of the Rods ends. Carefully install the Isolation Pad followed by the Toilet Bowl and tighten them as shown (E5). Cut the exposed part of the Isolation Pad.	
11	Turn on the water supply. Make sure there is no water leakage.	
12	If your product comes with the mechanical override button: Before assembling the panel, consider using the provided adjusting screw in order to optimize the operation of the mechanical button. If needed, assemble the adjusting screw to the mechanical button at the internal side of the panel and adjust it to the desired distance.	

STEP 2 - CONNECTING THE POWER SOURCE

1

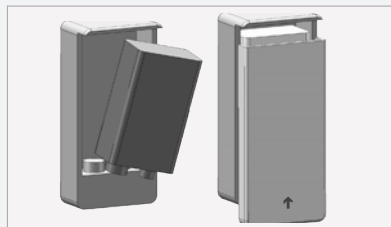
- Connect the electronic unit to the solenoid connector.
- Connect the electronic unit to the battery box (or transformer). Do not plug the transformer in at this stage.



PAY ATTENTION, STEPS 2-5 SHOULD BE COMPLETED WITHIN 30 SECONDS

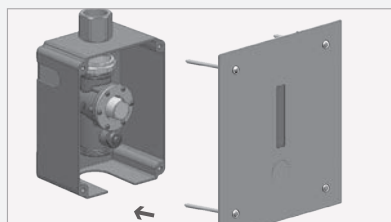
2

- Insert the battery into the battery box.



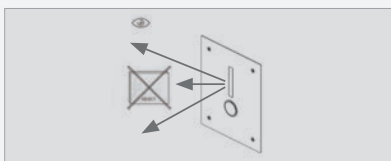
3

- Assemble the panel to the mounting box. Install the screws, but do not tighten them at this point.



4

- The ideal sensor range for the specific location will be set automatically. Right now, check that no objects are in front of the sensor.



5

- Remove the protective sticker covering the sensor and move away from the sensor range.



6

- Wait about 30 seconds before you step or place your hand within the sensor range. As an indication of the self adjustment, a LED in the sensor eye will flash continuously. The solenoid valve will open and close for 1 second as an indication that the ideal sensor range is set and the product is ready for use.



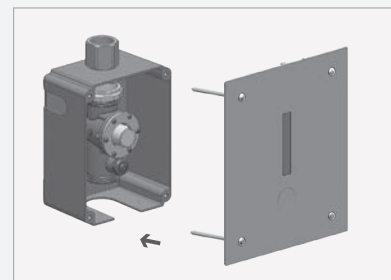
To activate the product step within the sensor range for a minimum of 8 seconds. The flush valve will flush a few seconds after you leave.

The flow rate can be adjusted by turning the regulating valve. In order to avoid entering into the self adjusting mode, do not disconnect the electronic unit from the battery box.

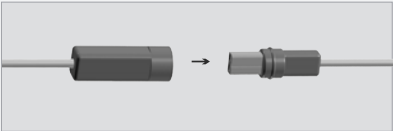
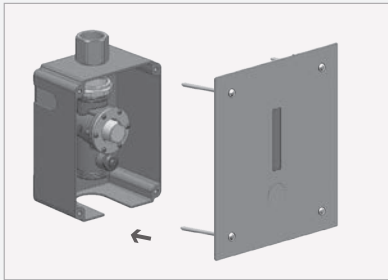
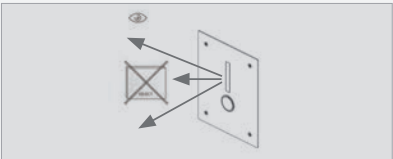
If the range is unsatisfactory, refer to the section entitled "Settings Adjustment".

7

- Tighten the panel to the mounting box with 4 supplied screws.



STEP 2 – CONNECTING THE POWER SOURCE

1	Place the transformer near the electricity plug, insert the transformer cable wire through the designated hole in the box. Do not plug the transformer in at this stage.	
2	a. Connect the electronic unit to the solenoid connector. b. Connect the electronic unit to the battery box (or transformer). Do not plug the transformer in at this stage.	
3	Before assembling the panel, consider using the provided adjusting screw in order to optimize the operation of the mechanical button. If needed, assemble the adjusting screw to the mechanical button at the internal side of the panel and adjust it to the desired distance.	
4	Assemble the panel to the mounting box. Install the screws, but do not tighten them at this point.	
5	The ideal sensor range for the specific location will be set automatically. Right now, check that no objects are in front of the sensor.	

STEP 2 – CONNECTING THE POWER SOURCE

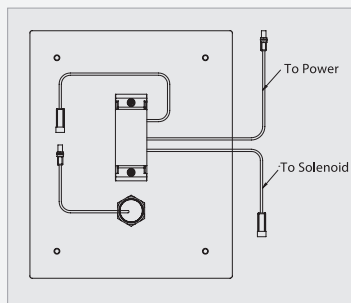
7	Remove the protective sticker covering the sensor.	
8	Plug in the transformer. Keep away from the sensor range.	
9	Wait about 30 seconds before you step or put your hand within the sensor range. As an indication that the self adjusting is taking place, a LED in the sensor eye will flash continuously. The solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.	
10	To operate, step within the sensor range for a minimum of 8 seconds. Move away and the flush valve will flush a few seconds after your departure.	
11	If needed adjust the flow rate by turning the regulating valve. In order to avoid entering into the self adjusting mode, do not disconnect the cables between the electronic unit and the transformer.	
14	If the range is unsatisfactory, refer to the section entitled "Settings Adjustment".	

STEP 2 – CONNECTING THE POWER SOURCE

1

Connect the connectors going out from the electronic unit:

- Connect the blue cable connector to the blue cable connector coming out from the piezo button.
- Connect the electronic unit connector that leads to the solenoid valve to the solenoid valve connector.
- Connect the electronic unit connector that leads to the power source to the battery box connector.



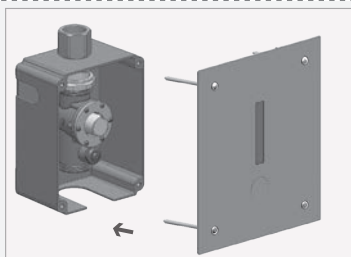
Pay attention, steps 2-5 must be completed within 30 seconds:

2

Insert the battery into the battery box.

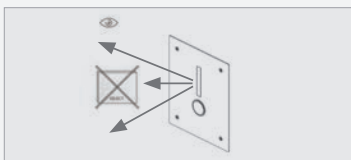
3

Assemble the panel to the mounting box. Install the screws, but do not tighten them at this point.



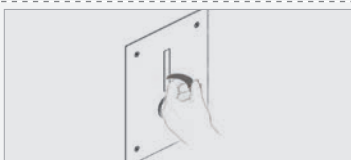
4

The ideal sensor range for the specific location will be set automatically. Right now, check that no objects are in front of the sensor.



5

Remove the protective sticker covering the sensor and move away from the sensor range.



STEP 2 – CONNECTING THE POWER SOURCE

6

Wait about 30 seconds before you step or put your hand within the sensor range. As an indication that the self adjusting is taking place, a LED in the sensor eye will flash continuously. The solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.



7

To operate, step within the sensor range for a minimum of 8 seconds. Move away and the flush valve will flush a few seconds after your departure.

8

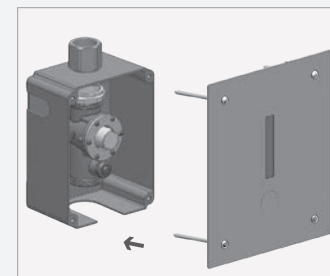
If needed adjust the flow rate by turning the regulating valve. In order to avoid entering into the self adjusting mode, do not disconnect the cables between the electronic unit and the transformer.

9

If the range is unsatisfactory, refer to the section entitled "Settings Adjustment"

10

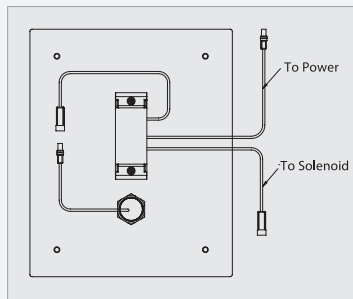
Tighten the panel to the mounting box with 4 supplied screws.



STEP 2 – CONNECTING THE POWER SOURCE

1

- Connect the connectors going out from the electronic unit:
- Connect the blue cable connector to the blue cable connector coming out from the piezo button.
 - Connect the electronic unit connector that leads to the solenoid valve to the solenoid valve connector.
 - Connect the electronic unit connector that leads to the power source to the male connector of the backup device.
 - Connect one of the female connectors from the backup device to the battery box connector.



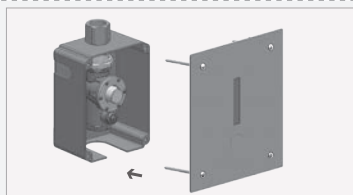
Pay attention, steps 2-5 must be completed within 30 seconds:

2

- Insert the battery into the battery box.

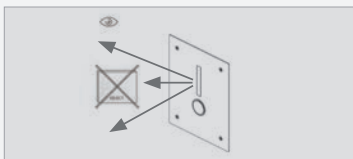
3

- Assemble the panel to the mounting box. Install the screws, but do not tighten them at this point.



4

- The ideal sensor range for the specific location will be set automatically. Right now, check that no objects are in front of the sensor.



5

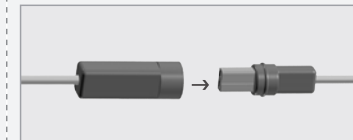
- Remove the protective sticker covering the sensor and move away from the sensor range.



STEP 2 – CONNECTING THE POWER SOURCE

6

- Connect one of the female connectors from the backup device to the transformer connector. Plug in the transformer. Keep away from the sensor range.



7

- Wait about 30 seconds before you step or put your hand within the sensor range. As an indication that the self adjusting is taking place, a red light in the sensor eye will flash continuously. The solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.



8

- To operate, step within the sensor range for a minimum of 8 seconds. Move away and the flush valve will flush a few seconds after your departure.

9

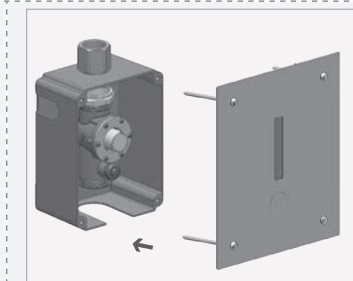
- If needed adjust the flow rate by turning the regulating valve. In order to avoid entering into the self adjusting mode, do not disconnect the cables between the electronic unit and the transformer.

10

- If the range is unsatisfactory, refer to the section entitled "Settings Adjustment".

11

- Tighten the panel to the mounting box with 4 supplied screws.



BATTERY REPLACEMENT

Battery replacement instructions

When the battery weakens, the LED indicator light will blink at a constant rate. The battery must be replaced within two weeks. Always use batteries from a reputable source. Poor quality batteries may affect the performance of the product.

To replace the battery:

1. Release the 4 screws of the cover plate and remove the cover plate.
2. Carefully open the battery box.
3. Replace the used battery with a new 9V battery (Lithium battery is recommended).
4. Close the battery box.
5. Refit the wall cover plate.



Important: Spent batteries should not be disposed of with normal household waste. Contact your local authority for information on waste disposal and recycling.



SETTINGS ADJUSTMENT



Adjusting the settings with the remote control

If necessary, the sensor settings can be adjusted as following:

Shut off the water supply. In order to adjust the sensor with the remote control, hold the remote control straight in front of the sensor in a distance of about 6-8" (15-20cm). Choose the function you want to adjust by pressing once on one of the function buttons. After pressing once on a specific function button, a quick flashing of the LED at the front of the sensor will occur. At this stage, you can change the setting by pressing the (+) or the (-) buttons, every push will increase or decrease one level. After finishing the adjustment, turn the water supply back on.

SETTINGS ADJUSTMENT



DETECTION RANGE: Only if necessary, use the remote control to adjust the sensor range as follows:

Press the RANGE button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the one level and – to reduce it every push will increase or decrease one level.

NOTE: Once you have changed the detection range with the remote control, this distance will be remembered by the sensor, even if the power source is disconnected.



DELAY INTIME: If required, the delay in time can also be modified as follows: Press the IN button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.



DELAY OUTTIME: This button allows modifying the flushing start time after the user moves away from the product. A delay out time close to 0 will save more water. An increased delay out time will make the user experience more comfortable.

If required, the delay out time can be modified as follows:
Press the OUT button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.



TEMPORARY OFF FUNCTION: This function is ideal to perform any kind of activity in front of the sensor without operating the system (for example, cleaning).

The product will remain shut for 1 minute when this button is pressed once. To cancel this function and to return to normal operation press the On/Off button again or wait 1 minute.



RESET BUTTON: This function restores all the factory settings except for the sensor range. If required, press the Reset button and without releasing it, press the + button once.

SETTINGS ADJUSTMENT



SECURITYTIME: The Security time, prevents continuous flushing of water due to reflections or vandalism. By default, if the sensor is covered for more than 90 seconds the water flow will shut automatically. To resume regular operation any obstruction must be removed.

Press the SEC button. Wait until a quick flashing of the LED of the sensor eye is perceived. Then, press + to increase the security time and – to reduce it.



24 HOUR HYGIENE FLUSH: This model includes a 24 hours hygiene flush which is disabled. To activate the hygiene flush, press the clock button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then press + to activate the hygiene flush. To disable it again, press – to deactivate it.



COMFORT FLUSH: If your model includes a COMFORT FLUSH setting, it can be activated by pressing the flush button.

When the button is pressed, one blink of the blue in the sensor eye is perceived. The pre-programmed flush cycle will take place then. The Comfort flush cannot be interrupted or deactivated by pressing any button until it is over.

Care and cleaning of chrome and special finishes

DO NOT use steel wool or cleansing agents containing alcohol, acid, abrasives, or the like. Use of any prohibited cleaning or maintenance products or substances could damage the surface of the flush valve. For surface cleaning use ONLY soap and water, then wipe dry with clean cloth or towel. When cleaning bathroom tile, the flush valve should be protected from any splattering of harsh cleansers.

If system chemical disinfection is practiced, chlorine can be used (calculated chlorine concentration of 50mg/l maximum in water per one hour dwell time) at service interval frequency.

Kassel Sanitar, S.L. warrants that its electronic products will be free of defects in material and workmanship during normal use for two years from the date the product is purchased.

If a defect is found in normal use, Kassel Sanitar, S.L. will, at its discretion, repair, provide a replacement part or product, or make appropriate adjustments. Damage caused by accident, misuse, or abuse is not covered by this warranty. Improper care and cleaning will void the warranty. Proof of purchase (original sales receipt) must be provided to Kassel Sanitar, S.L. with all warranty claims.

Kassel Sanitar, S.L. is not responsible for labor charges, installation, or other incidental or consequential costs other than those noted above. In no event shall the liability of Kassel Sanitar, S.L. exceed the purchase price of the product.

If you believe that you have a warranty claim, contact your Kassel distributor, dealer or plumbing contractor. Please be sure to provide all pertinent information regarding your claim, including a complete description of the problem, the product, model number, the date the product was purchased, from whom the product was purchased and the installation date. Also include your original invoice.

KASSEL SANITAR, S.L. AND/OR SELLER DISCLAIM ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty excludes product damage due to installation error, incorrect maintenance, wear and tear, battery, product abuse, or product misuse, whether performed by a contractor, service company, or the consumer. This warranty does not cover product damage caused by the following:

- Incorrect installation.
- inversions of supply pipes.
- Pressures or temperatures exceeding recommended limits.
- Improper manipulation, tampering, bad or lapsed maintenance.
- Foreign bodies, dirt or scale introduced by the water supply or soap tank.
- Use of the soap outside of viscosity specifications.
- Alteration of the original soap/foam dispenser components (including pipes).

TROUBLESHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
Valve does not flush	The LED indicator in the sensor flashes continuously when the user steps within the sensor's range.	Low battery.	Replace battery.
		Inappropriate sensor range.	Increase or decrease the sensor range.
		Battery is completely used up.	Replace battery.
	The LED indicator in the sensor does not flash (once) when the user steps within the sensor's range.	The sensor is picking up reflections from a mirror or another object.	Eliminate cause of reflections.
		Connectors between the electronic unit and the solenoid valve are disconnected.	Connect the connectors of the electronic unit to the solenoid valve.
		Debris or dirt in the solenoid valve clog up the bleeding hole.	Replace or clean the solenoid valve. Unscrew the solenoid, pull out the plunger and the spring from the solenoid and clean them. When placing the plunger and spring back, please make sure the spring is in vertical position.
		The water supply pressure is higher than 8 bars or pressure peaks over 8 bars in the water supply causes pressure to be trapped in the flush valve.	Reduce the water supply pressure.
Continuous Flow	The LED indicator in the sensor flashes (once) when the user steps within the sensor's range.	Debris or dirt in the Flush Valve clog up the piston or the orifice. The piston doesn't close.	Open the piston cover and clean the piston, the orifice and body internally.
		Debris or dirt in the solenoid valve. The solenoid valve doesn't close.	Replace or clean the solenoid valve. Unscrew the solenoid, pull out the plunger and the spring from the solenoid and clean them. When placing the plunger and spring back, please make sure the spring is in vertical position.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Low Discharge	The self cleaning needle came out of the piston orifice or is displaced. The orifice delivers more water than usual pushing down the piston, causing the piston to close faster than normal.	Replace the piston.
	The U-seal is torn or damaged and doesn't seal well enough.	Replace the U-seal.
	Flow time setting is too short.	Increase the flow time.
High Discharge	Debris or dirt in the Flush Valve clog up the piston. Friction in the piston movement causes the piston to close slower than normal.	Open the piston cover and clean the piston and body internally.
	Dirt in the piston orifice prevents enough water from going through the orifice. The reduced flow causes the piston to close slower than normal.	Open the piston cover and clean the piston and the orifice.
	Flow time setting is too long.	Reduce the flow time setting.
Dripping	Debris or dirt in the piston seat.	Clean the piston seat.
	Piston seal is torn or damaged.	Replace piston seal.
	Debris or dirt in the solenoid valve orifice. The solenoid valve doesn't close properly.	Replace or clean the solenoid valve. Unscrew the solenoid, pull out the plunger and the spring from the solenoid and clean them. When placing the plunger and spring back, please make sure the spring is in vertical position.
	The plunger seal is torn or damaged.	



KSL01207 12/2019

Kassel Sanitär S.L.

- Avda. de Castilla, 1 - Polígono Industrial, 28830 San Fernando de Henares, Madrid, **Spain**
- Daimlerstraße 2, D-93133 Burglengenfeld, **Germany**

Tel. +34 916 778 993 | Fax. +34 916 777 774 | info@kassel.es | www.kassel.es

KS
Kassel Sanitär