

INSTALLATION AND MAINTENANCE GUIDE



TOUCH FREE

ELECTRONIC LAVATORY FAUCET

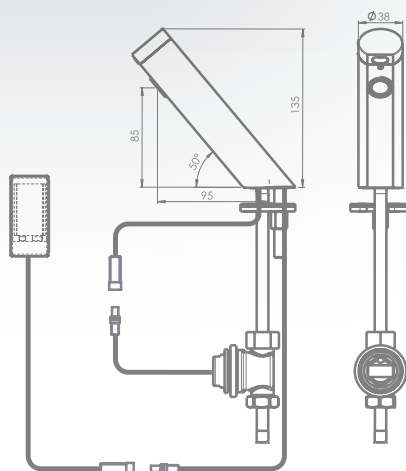
stern

STERN ENGINEERING LTD.

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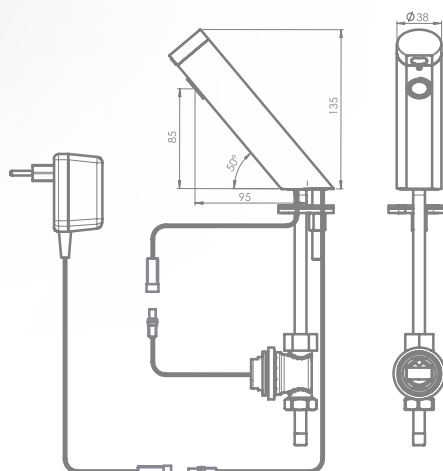
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TECHNICAL DATA



TOUCH FREE B ----- 225600

Electronic faucet for cold or premixed water to be powered by battery.



TOUCH FREE E ----- 225700

Electronic faucet for cold or premixed water to be powered by electricity.

Power Supply:

Optional:

Operating Water Pressure:

Sensor Range:

Minimum Sensor Range:

Maximum Sensor Range:

Security time:

24 hours hygiene flush:

Hot Water Supply:

9V battery or 9V transformer

IP 67 battery box for 6 x 1.5 V AA batteries

0.3-8.0 bar (4.3-116 PSI)

With water pressure of more than 8 Bars, use a pressure reducing valve for reduction.

Self adjusting sensor. Adjustable with remote control

50 mm.

160 mm.

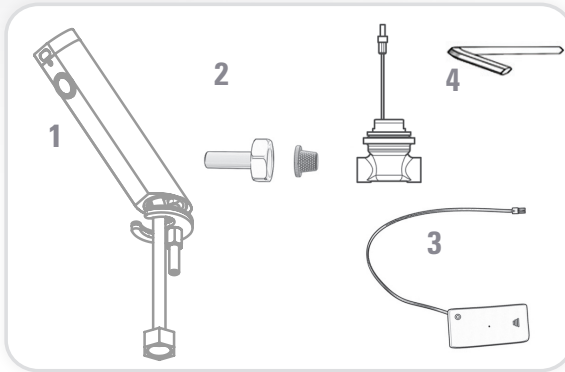
90 seconds. Adjustable with remote control.

optional, to be enabled with Stern's remote control.

Max 70° C.

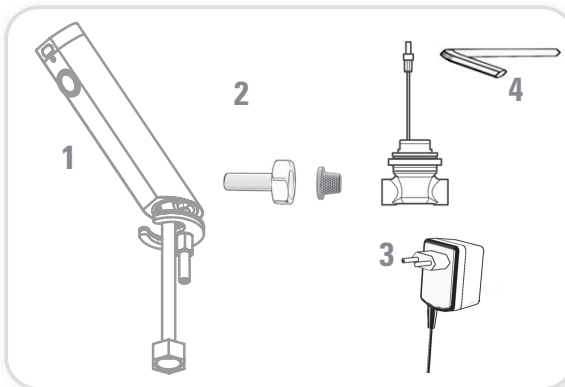
PACK CONTENTS

Familiarize yourself with the parts names and confirm that the parts are included.



TOUCH FREE B

1. 1x Tap and attachments
2. 1x Solenoid valve, housing, filter and adapter
3. 1x Battery box
4. 1x Allen key



TOUCH FREE E

1. 1x Tap and attachments
2. 1x Solenoid valve, housing, filter and adapter
3. 1x Transformer
4. 1x Allen key

PRE INSTALLATION INFO

Check contents

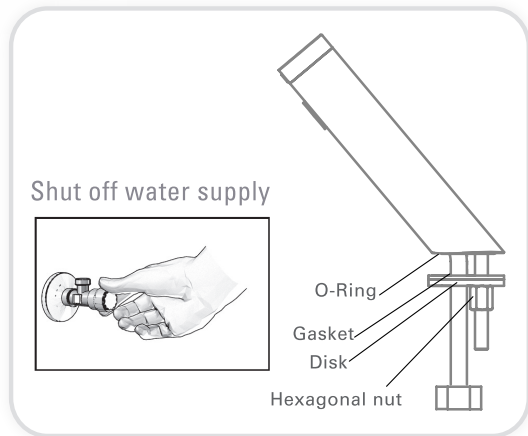
Separate all parts from the packaging and check each part with the Pack contents section. Pay attention to the different models variations.

Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install your electronic faucet 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 faucet and any other objects.



Preparation for Installation

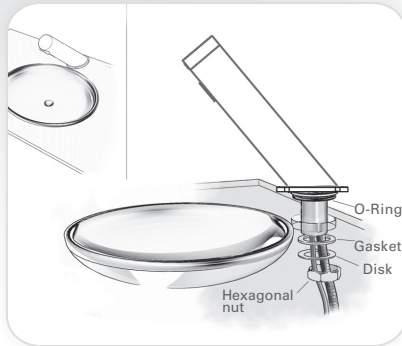
Flush water supply lines thoroughly before installing the faucet. Do not allow dirt, Teflon tape or metal particles to enter the faucet.

Shut off water supply.

Important:

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

FAUCET INSTALLATION

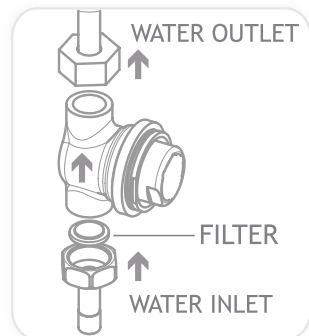


Step 1 – Remove all mounting hardware

Shut off the water supply and remove the hexagonal nut, the disk and the gasket. Do not remove the O-ring from the base of the faucet.

Step 2 – Installing the faucet

1. Place the faucet with O-ring into the hole in deck or lavatory. Make sure the O-ring is located between the deck or lavatory and the bottom of the faucet.
2. Slide gasket over the flexible hose.
3. Secure the faucet to deck or lavatory with the hexagonal nut and the disk.

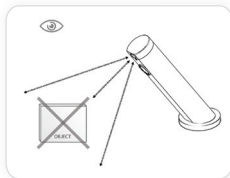


Step 3 – Connecting the water supply

1. Fit the pipe to the housing of the solenoid valve. Important: inlet and outlet should follow the indicating arrow at the solenoid housing.
2. Fit the water supply inlet to the adapter at the solenoid valve housing.

Note: Make sure that the filter is assembled between the housing of the solenoid valve and the adapter.

Important: this faucet was supplied with Stern's new Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically.



Before proceeding to step 3 check that no objects are in front of the sensor besides the washbasin.



Now remove the protecting sticker that covers the sensor.

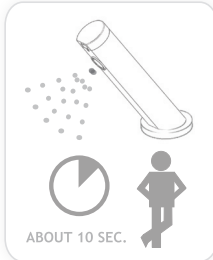
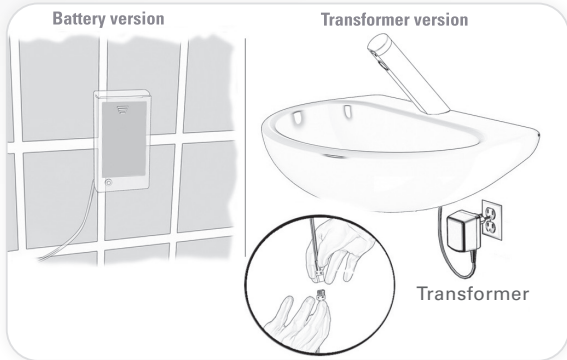
FAUCET INSTALLATION

Step 4 – Connecting the power source

1. For Touch Free B: Install the battery box at the wall under the sink using the two sided adhesive foam tape.

Important: The cable connection must point down. (You can use an extension cable in order to assemble the battery box up to 10 meters away from the sink).

2. For Touch Free E: Plug the Transformer in to the electricity socket and connect the connectors.



3. After you have connected the power source (Battery or Transformer) wait 10 seconds in order to allow the system to set the ideal sensor range. Then the product will be ready for use.

4. Turn on the central water supply and the shut-off valves.

5. Check for leaks.

Note: this faucet includes a special aerator that allows you to adjust the water stream direction on site in order to prevent water splashing if needed. To change the angle of the water stream, simply move the adjustable tilting plate by pressing it smoothly.



6. If the automatically adjusted sensor settings is not satisfactory, please refer to the section entitled "Settings adjustment".

SETTINGS ADJUSTMENT

Adjusting the sensor range with the remote control



This faucet was supplied with Stern's new Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically.

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

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 4" (10cm). 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 red light 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.



1 DETECTION RANGE: Press + to increase detection range and – to decrease the detection range of the sensor.



2 ENTRANCE TO MANUAL RANGE ADJUSTMENT: This mode allows you to adjust the sensor range using your hand to indicate the desired distance.

Press the ADJ button. Wait until a quick flashing of the red light of the sensor eye is perceived. Place your hand at the desired distance. The range will be adjusted when the light will stop blinking.

SETTINGS ADJUSTMENT

Adjusting other settings with the remote control



SECURITY TIME: 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 red light of the sensor eye is perceived. Then, press + to increase the security time and – to reduce it.



DELAY IN TIME: The delay in time prevents unwanted activations. It is recommended to change the delay in time for flush valves for urinals or toilets only.

If required, the delay in time can be modified also in faucets as follows:

Press the IN button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.



DELAY OUT TIME: This button allows modifying the water flow time after the user removes his hands from the faucet. 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 red light of the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.



24 HOUR HYGIENE FLUSH: This function is ideal to maximize hygiene and prevent Legionella and other diseases. It also helps to prevent pipes from freezing, keeping the water moving through the pipes every 24 hours.

The optional 24 hours hygiene flush is disabled by default. To activate the hygiene flush, press the clock button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then press + to activate the hygiene flush or – to deactivate it.

SETTINGS ADJUSTMENT

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LOCK OUT TIME: It is possible to program a lock out time in Stern products upon request. This lock out time allows a user to activate the faucet, only after a specific amount of time has passed.

If a specific lock out time was preset in a Stern product as default, and you would like to deactivate it, press the lock button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then press + to activate the lock out time or – to deactivate it.

To activate it again, press the lock button and without releasing it, press the + button once.

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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).

Faucets 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 or 2 minutes depending on the product.

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RESET BUTTON: This function allows the sensor to return to the original factory preset settings.

If required, press the Reset button and without releasing it, press the + button once.

Note: After the reset function is performed, the Self Adjusting Sensor will set again the ideal sensor range for the specific location. Check that there are no objects in front of the sensor and wait 10 seconds in order for the product to be ready for use.

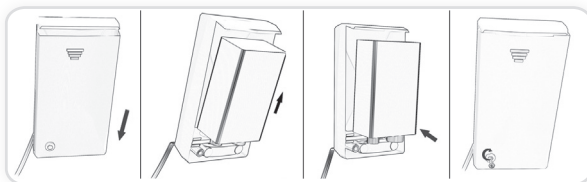
BATTERY REPLACEMENT

Battery models only

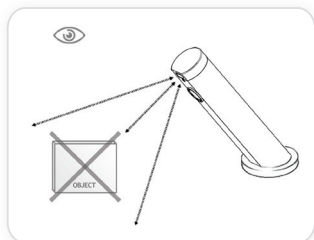
When the battery weakens, the red indicator light will blink at a constant rate. The battery must be replaced within two weeks.

To replace the battery at battery models:

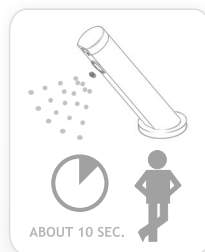
1. Carefully open the battery's box.
2. Remove the old battery.
3. Replace the used battery with a new 9V battery (Lithium battery is recommended).
4. Close the box.



Important: This faucet was supplied with Stern's new Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically again after changing the battery.



Check that there are no objects in front of the sensor after the battery replacement was completed.



After you have connected the power source wait 10 seconds in order to allow the system to set the ideal sensor range. Then the product will be ready for use.

MAINTENANCE

Filter cleaning instructions

This faucet is provided with a stainless steel filter preventing foreign particles to enter the lines. If the water flow has decreased, this may be because the filter is clogged.

The filter can be cleaned as follows:

1. Shut-off the water shut off valve.
2. Disconnect the water supply pipe from the adaptor and disassemble the filter from it.
 - a. Wash the filter under running water.
 - b. Reassemble the parts.
 - c. Restore the incoming water supply.
 - d. Make sure that there is no water leakage.

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 faucet. For surface cleaning of faucets use **ONLY** soap and water, then wipe dry with clean cloth or towel. When cleaning bathroom tile, the faucets should be protected from any splattering of harsh cleansers.

TROUBLE SHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
No water coming out of the faucet:	1. Sensor flashes continuously when user's hands are within the sensor's range.	Low battery.	Replace battery.
	2. Red light in the sensor does not flash when user's hands are within the sensor's range.	1. Range is too short.	Increase the range.
		2. Range is too long.	Decrease the range.
		3. Battery is completely used up	The battery must be replaced.
		4. Unit is in "Security Mode"*	
	3. Red light in the sensor flashes when user's hands are within the sensor's range.	5. Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
1. Connectors between the electronic unit and solenoid are disconnected.		Connect the electronic unit connectors to the solenoid.	
2. Debris or scale in solenoid.		Unscrew solenoid, pull out the plunger and the spring from the solenoid and clean them. Use scale remover material if needed. When replacing the plunger, please make sure that the spring is in vertical position.	
3. The central orifice in the diaphragm is plugged or the diaphragm is torn		Clean the orifice or replace diaphragm.	
4. The water supply pressure is higher than 8 bar.		Reduce the supply water pressure.	
Water flow from spout does not stop:	5. The water supply pressure is under 8 bars and yet the pressure in the faucet's body is higher. This situation could be caused by a sudden increase in the water supply pressure that the backcheck prevents from dropping, even after water supply pressure drops under 8 bars.	Shut off water supply and unscrew one of the flexible pipes in order to reduce the pressure that blocks the product.	
	1. Sensor flashes when user's hands are within the sensor's range.	Debris or scale in diaphragm	Clean the orifice or replace diaphragm.
Water flow	2. Red light in the sensor does not flash when user's hands are within the sensor's range	1. Sensor is dirty or covered.**	Clean or eliminate case of interference.
		2. Sensor is picking up reflections from the washbasin or another object.	1. Decrease the range or eliminate cause of reflection.
Water flow		Filter or aerator is clogged	Remove, clean, re-install

* "Security Mode": If the sensor is covered for more than 90 sec. the faucet will automatically shut off water flow. To return to normal operation remove any blockage.

** In this case, the water flow will stop anyway after 90 seconds because of the security time.

SPARE PARTS LIST

Self adjusting sensor kit	Cat.No. 08004001
Solenoid valve kit	Cat. No. 07230017
Solenoid housing kit	Cat. No. 07231001
Battery box (Battery models only)	Cat. No. 06530008
Transformer (Transformer models only)	Cat. No. 06522025

Optional accessories:

Extension cable (Battery models only)	Cat. No. 06009015
Remote control	Cat. No. 07100005
Mixing valve (for one inlet models)	Cat. No. 200060
IP 67 Battery box with 6 x 1.5V AA batteries	Cat.No. 06530020
IP 67 Transformer box with 300 mA transformer	Cat.No. 06530021
Battery Back up device	Cat.No. 06530033
Power splitter (2 ways)	Cat.No. 06001001
Power splitter (3 ways)	Cat.No. 06001002
Power splitter (4 ways)	Cat.No. 06001003

LIMITED WARRANTY

This product is covered by a limited warranty of two years from date of purchase.

During this period, STERN undertakes, at its option, to repair or replace any faults caused by defective materials or manufacturer defaults that may arise (see STERN Warranty).

The guarantee does not cover faults, labour costs or damage caused by incorrect installation and/or maintenance, wear and tear, battery, or water composition. This includes, but is not limited to 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.

STERN

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