

INSTALLATION AND MAINTENANCE GUIDE



SMART SERIES

ELECTRONIC LAVATORY FAUCET

stern

STERN ENGINEERING LTD.

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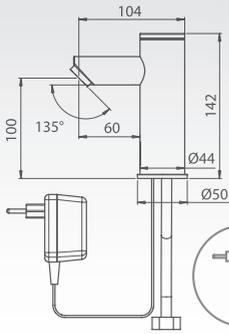
TECHNICAL DATA



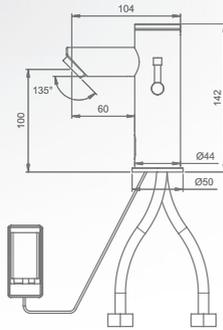
TECHNICAL DATA

Power supply:	9V battery or 9V transformer
Recommended water pressure:	0.5-8.0 bar (7-116 PSI) With water pressure of more than 8 bars, use a pressure reducing valve for reduction.
Preset sensor range:	170 mm Adjustable.
Minimum sensor range:	80 mm
Maximum sensor range:	300 mm
Security time:	90 seconds
Hot water temperature:	Max 70°C

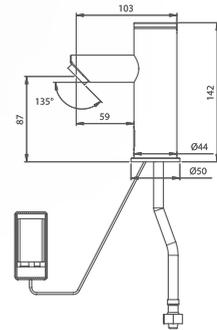
TECHNICAL DATA



Smart B 237200



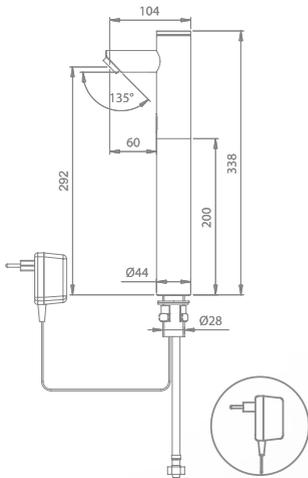
Smart 1000 B 237100



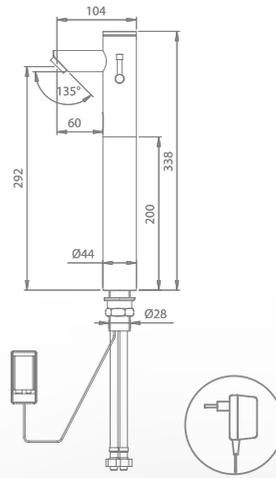
Smart Medical B 237600

Smart E 237300

Smart 1000 E 237000



Smart Plus B 237250



Smart 1000 Plus B 237150

Smart Plus E 237350

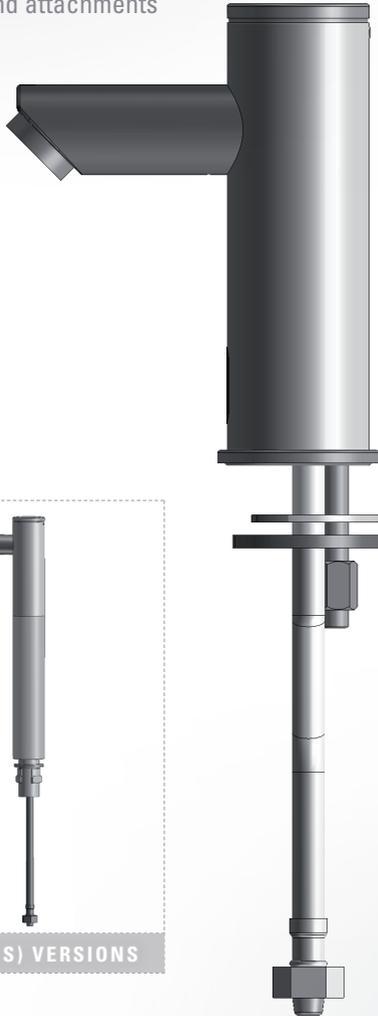
Smart 1000 Plus E 237050

PACK CONTENTS

SMART B / E / MEDICAL

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

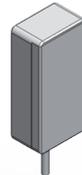
1x Faucet and attachments



1x Filter

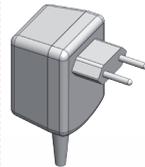


1x Allen key



B VERSIONS

9V Battery box



E VERSIONS

Transformer

OPTIONAL:



IP67 Battery Box



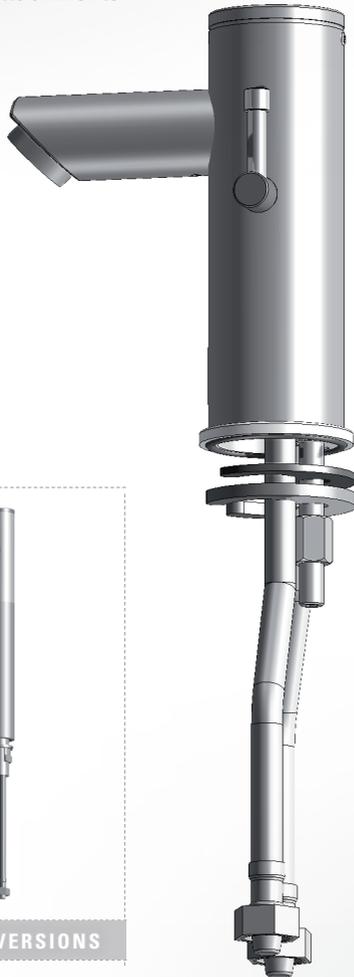
IP67 Transformer Box

PACK CONTENTS

SMART 1000 B / E

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

1x Faucet and attachments



1x Filter



1x Allen key

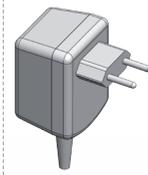


TALL (PLUS) VERSIONS



B VERSIONS

9V Battery box



E VERSIONS

Transformer

OPTIONAL:



IP67 Battery Box



IP67 Transformer Box

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 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

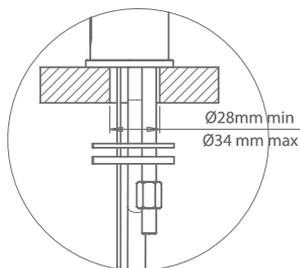
Flush water supply lines thoroughly before installing the faucet. Do not allow dirt, Teflon tape or metal particles to enter the faucet.

Shut off water supply.

Important

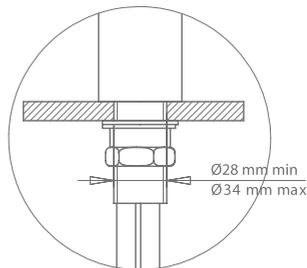
All plumbing is to be installed in accordance with applicable codes and regulations.

Recommended hole size



STANDARD VERSIONS

Recommended hole size

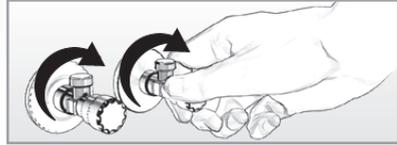


TALL VERSIONS

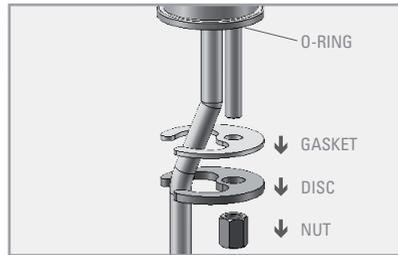
FAUCET INSTALLATION

STEP 1 – PREPARATION FOR MOUNTING THE FAUCET

- 1 Shut off the water supply.

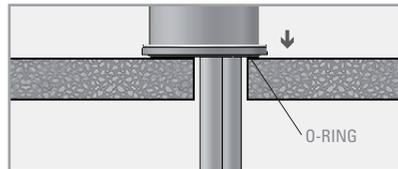


- 2 Remove the hexagonal nut, the disk and the gasket. Do not remove the O-ring from the base of the faucet.

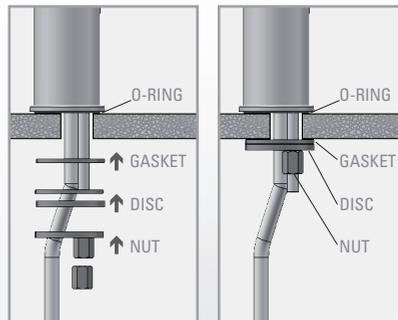


STEP 2 – INSTALLING THE FAUCET

- 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 the gasket, disk and hexagonal nut over the flexible hose and secure the faucet into place.



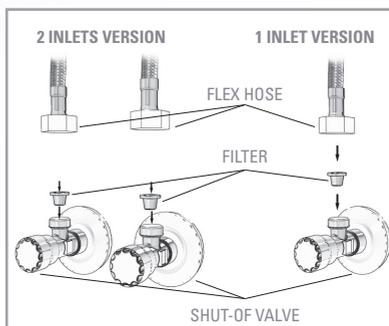
FAUCET INSTALLATION

STEP 3 – CONNECTING THE WATER SUPPLY

Connect the flexible pipe to the water supply.

1

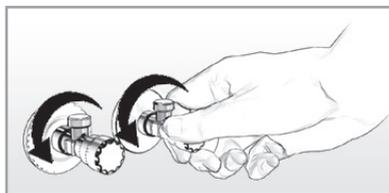
For models with temperature control connect the red flexible pipe to the hot water supply and the blue flexible pipe to the cold water supply.



MAKE SURE THAT THE FILTER(S) IS/ARE INSTALLED BETWEEN THE FLEXIBLE PIPE AND THE SHUT OFF VALVE (ANGLE VALVE) (NOT SUPPLIED).

2

Turn on the central water supply and the shut-off valves (angle valves) and check for leaks.

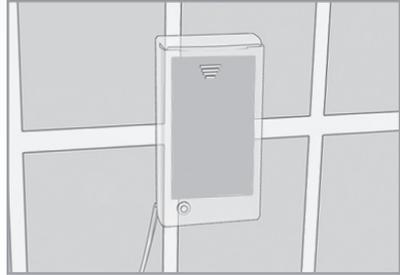


FAUCET INSTALLATION

STEP 4 – CONNECTING THE POWER SOURCE (TRANSFORMER VERSION)

BATTERY VERSION

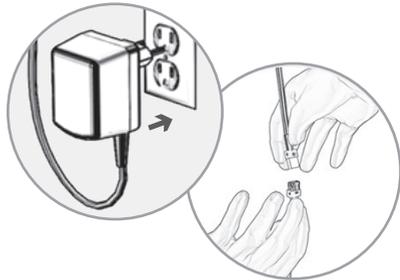
Install the battery box at the wall underneath the sink using the two sided adhesive foam tape. The cable connection must point down. (You can use an optional extension cable in order to assemble the battery box up to 10ft. away from the sink.)



1

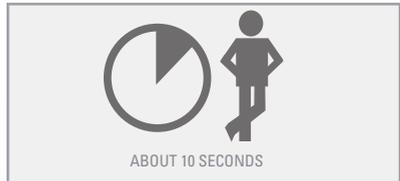
TRANSFORMER VERSION

Plug the transformer into the electricity socket and connect the connectors.



2

In order to avoid entering into the adjusting mode, wait 10 seconds before operating the faucet. If the range is unsatisfactory, refer to the section titled “settings adjustment



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 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.

SETTINGS ADJUSTMENT



DETECTION RANGE: The sensor range is the greatest distance that an object can be away from the sensor to activate the faucet. The sensor is factory preset.

To adjust the sensor range press + to increase detection range and – to decrease the detection range of the sensor.



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: 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: If you have a compatible model with a 24 hours hygiene flush it is possible to enable and disable it .

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



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.



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 minute.



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.

SETTINGS ADJUSTMENT

Adjusting the sensor range without a remote control:

1. Disconnect the power supply, battery or transformer, from the sensor.
2. Activate the sensor three or four times.
3. Reconnect the power supply to the sensor.
4. To enter into the adjusting mode, put your hand in front of the sensor at a distance of 2"(5cm) to 4"(10cm) within 5 seconds after the reconnection of the power supply.

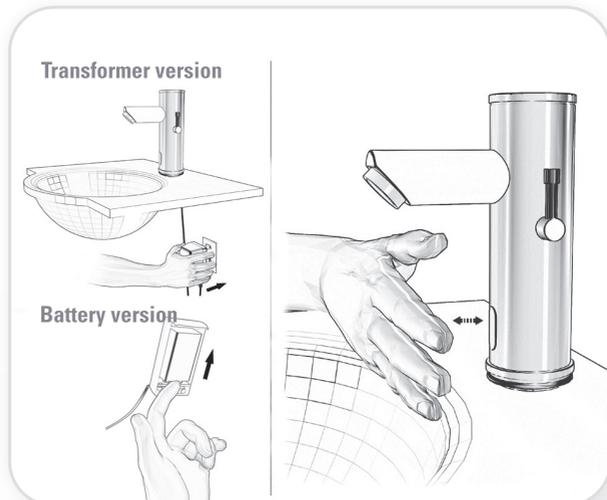
Note: If you will not put your hand in front of the sensor after connecting the power supply, the sensor will not enter into adjusting mode and the previous setting will return.

5. When the sensor enters into the adjusting mode and your hand is in front of the sensor, a slow flashing of the red light at the front of the sensor will occur.

6. Keep your hand at the front of the sensor until the slow flashing changes into quick flashing. At this point, move your hand to the required distance from the sensor and wait until the red light will stop flashing.

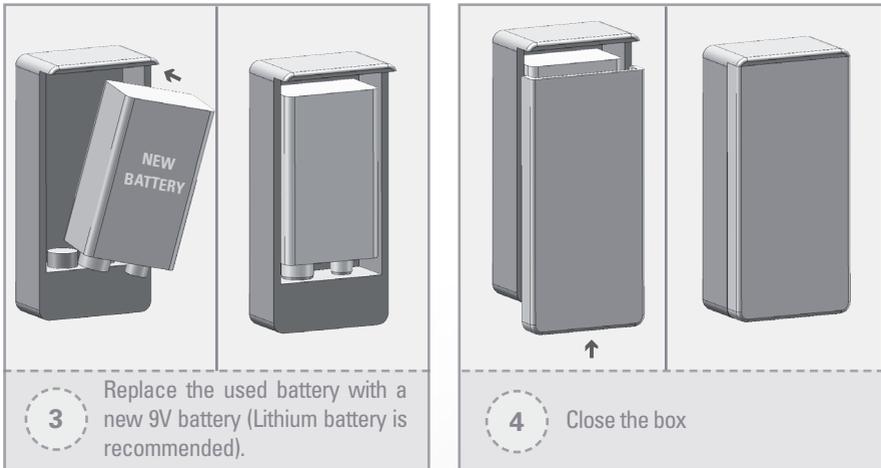
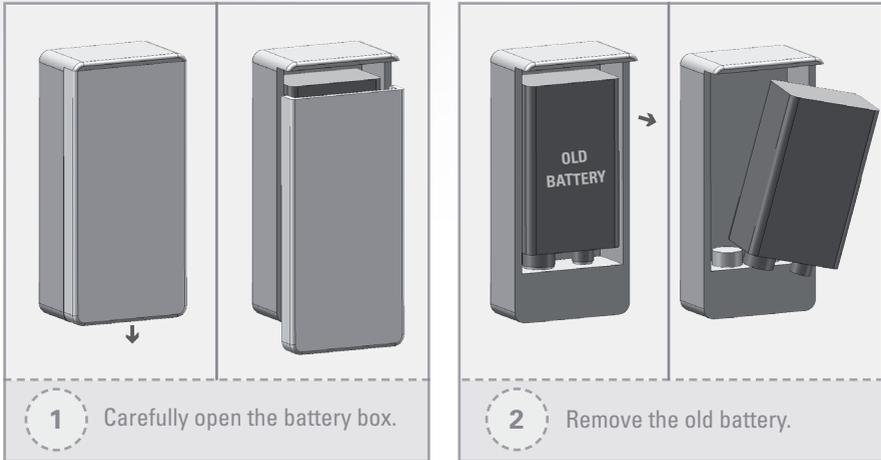
7. When the red light has turned off, the sensor has been adjusted to the required distance.

8. Check the distance you have set and if it is not satisfactory, repeat steps 1-6.



BATTERY REPLACEMENT

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



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



MAINTENANCE

Filter cleaning instructions

This faucet is provided with one / two stainless steel filter(s) preventing foreign particles to enter the lines. If the water flow has decreased, this can be because the filter(s) is/are clogged. The filter(s) can be cleaned as follows:

1. Shut-off the water shut off valve (angle valve).
2. Disconnect the flexible pipe/s.
3. Remove the filter(s) and wash it/them under running water.
4. Reassemble the parts.
5. 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 faucet 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.

SPARE PARTS LIST

Sensor kit for Smart	Cat. No. 07220009
Sensor kit for Smart Plus	Cat. No. 07220042
Solenoid valve kit	Cat. No. 07230003
Filter adapter kit	Cat. No. 07212001
Battery box (Battery models only)	Cat. No. 06530018
Transformer (Transformer models only)	Cat. No. 06522047

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. 06530019
IP 67 Transformer box with 300 mA transformer	Cat. No. 06530029
Back Up Device	Cat. No. 06530032
Power splitter (2 ways)	Cat. No. 06001004
Power splitter (3 ways)	Cat. No. 06001005
Power splitter (4 ways)	Cat. No. 06001006

LIMITED WARRANTY

Y. Stern Engineering Ltd. warrants that its electronic faucets, flush valves and controls 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, Y. Stern Engineering Ltd. 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 Stern Engineering Ltd. with all warranty claims.

Stern Engineering Ltd 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 Stern Engineering Ltd. exceed the purchase price of the faucet, valve or control.

If you believe that you have a warranty claim, contact your Stern 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.

Y. STERN ENGINEERING 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, water composition, 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.

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 once 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 once 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 once when user's hands are within the sensor's range.	Debris or scale in diaphragm	Clean the orifice or replace diaphragm.
Water flow diminished	2. Red light in the sensor does not flash once when user's hands are within the sensor's range.	1. Sensor is dirty or covered.**	Clean or eliminate cause of interference.
		2. Sensor is picking up reflections from the washbasin or another object.	1. Decrease the range or eliminate cause of reflection.
		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.

STERN

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