

INSTALLATION AND MAINTENANCE GUIDE



TUBULAR DM

ELECTRONIC LAVATORY FAUCET

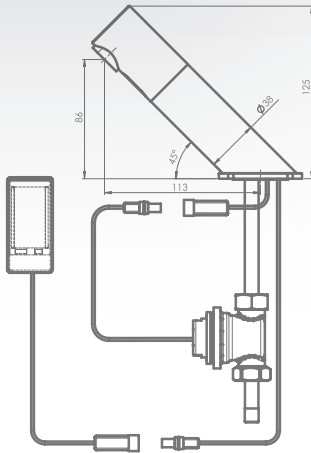
stern

STERN ENGINEERING LTD.

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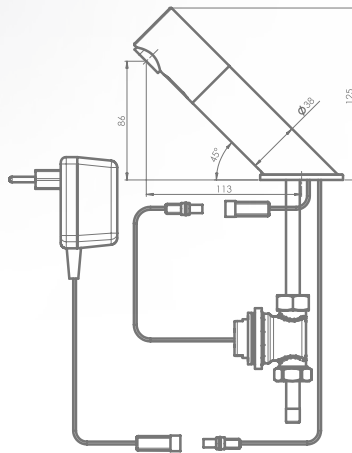
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TECHNICAL DATA



TUBULAR DMB ----- 350700

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



TUBULAR DME ----- 350750

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:

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

80 mm.

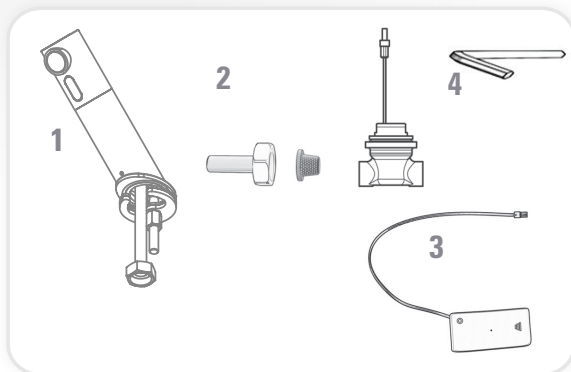
300 mm.

90 seconds. Adjustable with remote control.

Max 70° C.

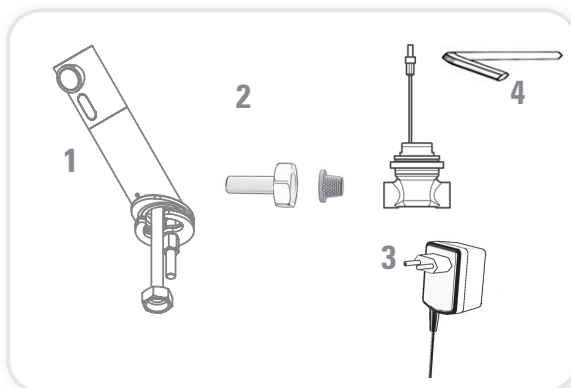
PACK CONTENTS

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



TUBULAR DME

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



TUBULAR DMB

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

PRE INSTALLATION INFO

Check contents

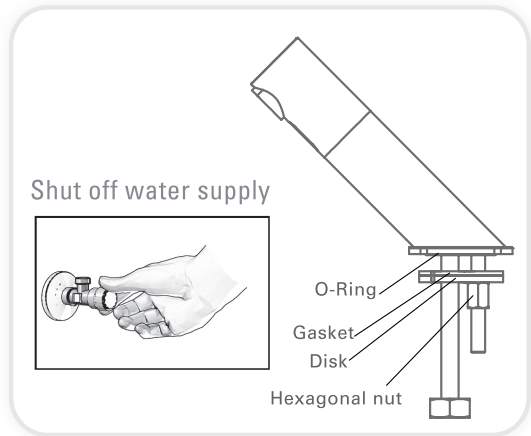
Separate all parts from the packaging and check each part with the Pack contents section. Pay attention to the different models variations.

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

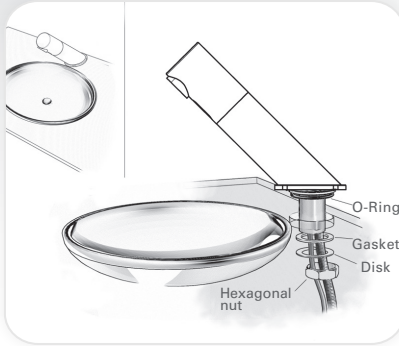
Flush water supply lines thoroughly before installing the faucet. Do not allow dirt, Teflon tape or metal particles to enter the faucet.

Shut off water supply.

Important:

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

FAUCET INSTALLATION

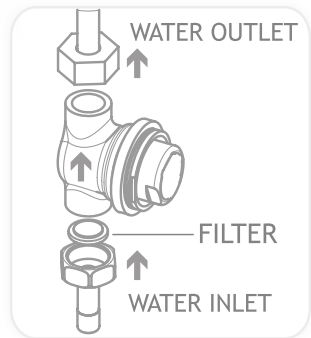


Step 1 – Remove all mounting hardware

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.

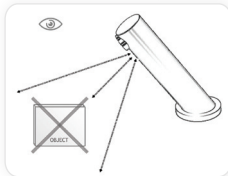


Step 3 – Connecting the water supply

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: Tubular DM 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.

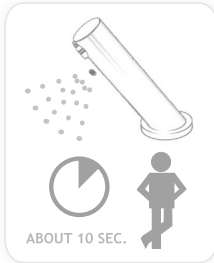
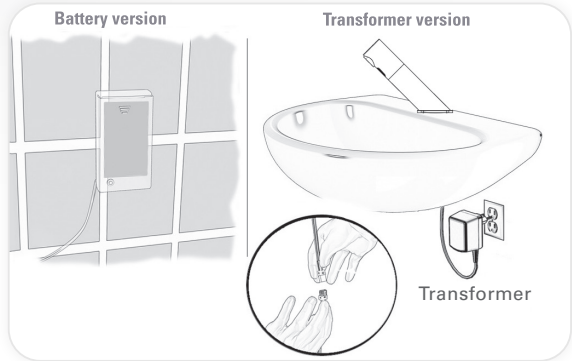
FAUCET INSTALLATION

Step 4 – Connecting the power source

1. For Tubular DMB: 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 Tubular DME: 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.

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.



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

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. To get back to the self adjustment mode, use the ADJ button only.

SETTINGS ADJUSTMENT

Adjusting other settings with the remote control



ENTRANCE TO THE SELF ADJUSTMENT MODE: Check that no objects are in front of the sensor. Press the ADJ button. Once a quick flashing of the red light of the sensor eye is perceived, remove your hand holding the remote control from the sensor area. The ideal sensor range for the specific location will be set automatically. Once the self adjustment has taken place 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.



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.

SETTINGS ADJUSTMENT



24 HOUR HYGIENE FLUSH: It is possible to program a 24 hours hygiene flush also in faucets upon request. 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.

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.



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).

The faucet 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.

Note: To enter the self adjusting mode, use the ADJ button. To change the sensor range, use the RANGE button.

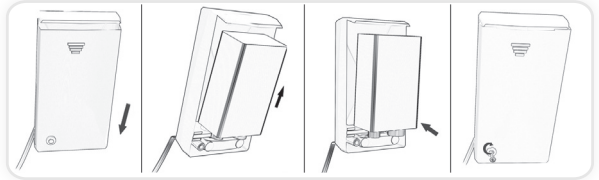
BATTERY REPLACEMENT

Battery models only

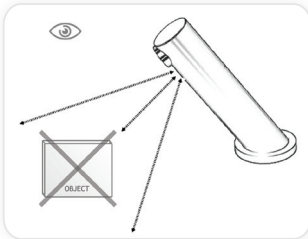
When the battery weakens, the red indicator light will blink at a constant rate. The battery must be replaced within two weeks.

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: Tubular DM 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 tap 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.	<ol style="list-style-type: none"> 1. Range is too short. 2. Range is too long. 3. Battery is completely used up 4. Unit is in "Security Mode"^{**} 5. Sensor is picking up reflections from the washbasin or another object. 	<p>Increase the range. Decrease the range.</p> <p>The battery must be replaced.</p> <p>Eliminate cause of reflection.</p>
	3. Red light in the sensor flashes when user's hands are within the sensor's range.	<ol style="list-style-type: none"> 1. Connectors between the electronic unit and solenoid are disconnected. 2. Debris or scale in solenoid. 3. The central orifice in the diaphragm is plugged or the diaphragm is torn 4. The water supply pressure is higher than 8 bar. 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. 	<p>Connect the electronic unit connectors to the solenoid.</p> <p>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.</p> <p>Clean the orifice or replace diaphragm.</p> <p>Reduce the supply water pressure.</p> <p>Shut off water supply and unscrew one of the flexible pipes in order to reduce the pressure that blocks the product.</p>
Water flow from spout does not stop:	1. Sensor flashes when user's hands are within the sensor's range.	Debris or scale in diaphragm	Clean the orifice or replace diaphragm.
	2. Red light in the sensor does not flash when user's hands are within the sensor's range	<ol style="list-style-type: none"> 1. Sensor is dirty or covered.** 2. Sensor is picking up reflections from the washbasin or another object. 	<p>Clean or eliminate cause of interference.</p> <p>1. Decrease the range or eliminate cause of reflection.</p>
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. 07220056
Solenoid valve kit	Cat. No. 07230002
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
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, labor 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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