

stern

STERN ENGINEERING LTD.



ELECTRONIC LAVATORY FAUCET

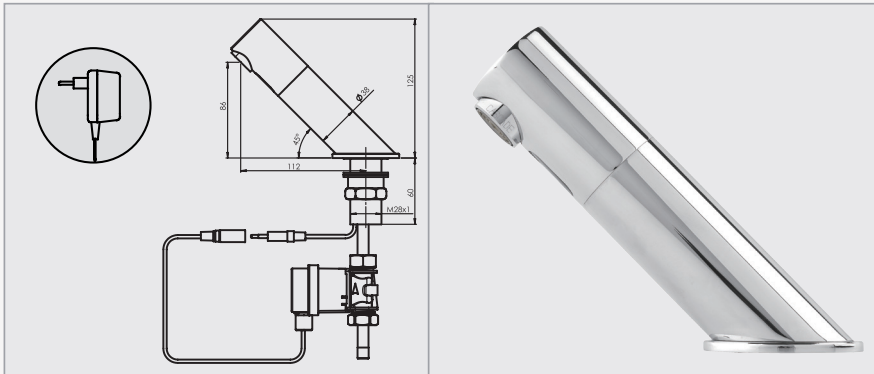
TUBULAR DM

INSTALLATION AND MAINTENANCE GUIDE

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TECHNICAL DATA



TUBULAR DM B	350700
TUBULAR DM E	350750

Power supply	Tubular DMB: 9V Alkaline battery Tubular DME: 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	Self adjusting sensor.
Minimum sensor range	100 mm
Maximum sensor range	300 mm
Security time	90 seconds.
Hot water temperature	Max 70°C

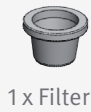
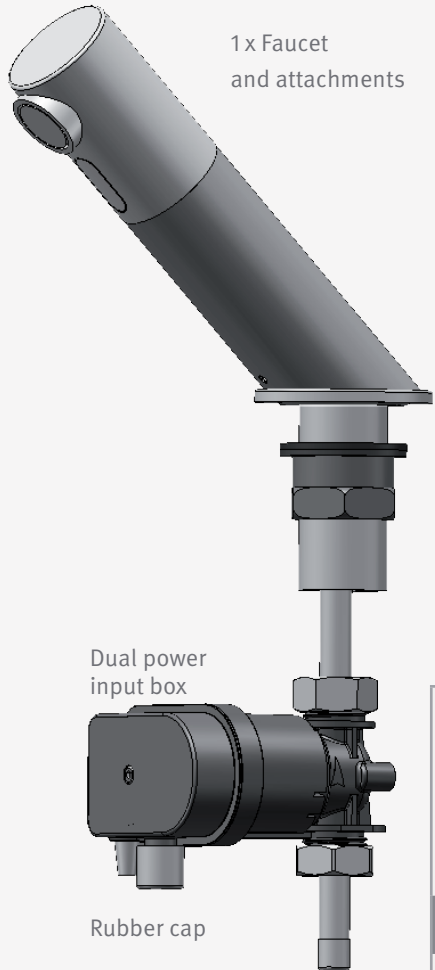
● **DUAL POWER INPUT BOX OPERATION**

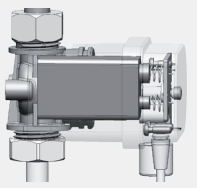
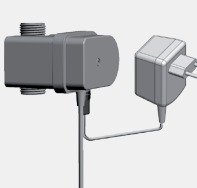
These models feature a dual power input box which in turn can be operated with a 9V battery or a 9V transformer. In addition, the dual power input box can serve as an integrated battery back up, for normal use during power supply failures, when a 9V battery is added (Lithium battery recommended).

PACK CONTENTS

TUBULAR DM B / E

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



	
TUBULAR DM DUAL POWER B	TUBULAR DM DUAL POWER E
Dual power input box with 9V Alkaline battery	Dual power input box with 9V Transformer

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

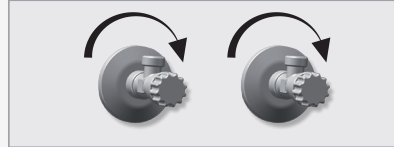
All plumbing is to be installed in accordance with applicable codes and regulations.

FAUCET INSTALLATION

STEP 1 – PREPARATION FOR MOUNTING THE FAUCET

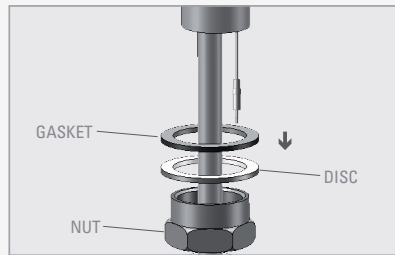
1

Shut off the water supply.



2

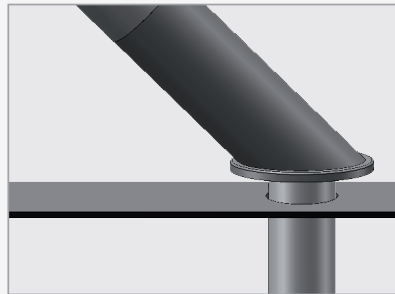
Remove the hexagonal nut, the disk and the gasket. Do not remove the O-ring from the base of the faucet.



STEP 2 – INSTALLING THE FAUCET

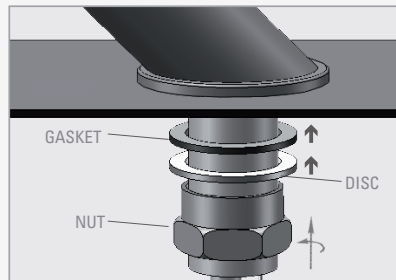
1

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.

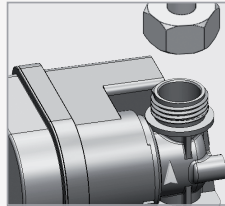


FAUCET INSTALLATION

STEP 3 – CONNECTING THE WATER SUPPLY

1

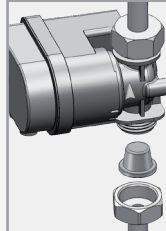
Connect the flexible hose coming from the faucet base to the solenoid valve housing in the dual power input box.



IMPORTANT:
Inlet and outlet should follow the indicating arrow at the solenoid housing

2

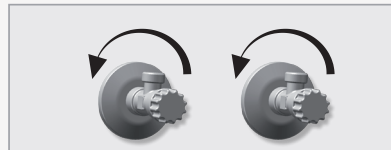
The faucet is provided with an inlet adapter. If needed, connect the inlet adapter to the dual power input box. Fit the water supply inlet to the inlet adapter in the solenoid valve housing at the dual power input box or connect the dual power input box directly to the shut off valve.



NOTE:
Make sure that the filter is installed between the solenoid valve housing in the dual power input box and the shut off valve (angle valve) (not supplied).

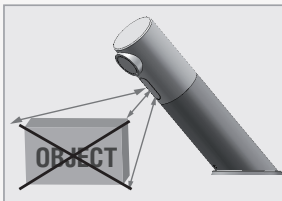
3

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

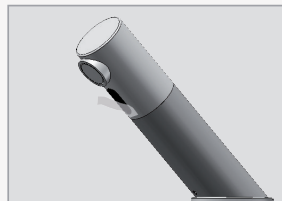


STEP 4 – CONNECTING THE POWER SOURCE

IMPORTANT: This product includes a self adjusting sensor. The ideal sensor range for the specific location will be set automatically.



IMPORTANT: Check that no objects are in front of the sensor besides the washbasin.

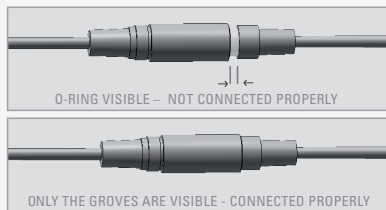


Now, remove the protective sticker that covers the sensor.

FAUCET INSTALLATION

1

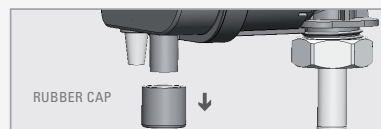
Connect the 4 contacts connector coming from the faucet body to the one at the dual power input box. Please note that since the connector is water proof, some friction might apply.
IMPORTANT: the 4 contacts connector should be connected properly so that the white o-ring is not visible and a clicking sound is heard.
PAY ATTENTION: If the 4 contacts connectors will not be connected properly, the motor will work continuously.



In battery versions a 9V battery is already installed in the dual power input box. For transformer versions follow the next steps:

2

Remove the IP67 rubber cap protecting the transformer socket at the dual power input box.



Connect the transformer into the transformer socket and plug it into the electricity socket.



3

After you have connected the power source (Battery or Transformer) wait 15 seconds in order to allow the system to set the ideal 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. If the range is unsatisfactory, refer to the section titled "Settings adjustment".



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.



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: This faucet was supplied with a Self Adjusting Sensor. The ideal detection range for the specific location will be set automatically.

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



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 and move away 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 running 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.

SETTINGS ADJUSTMENT



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.



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.



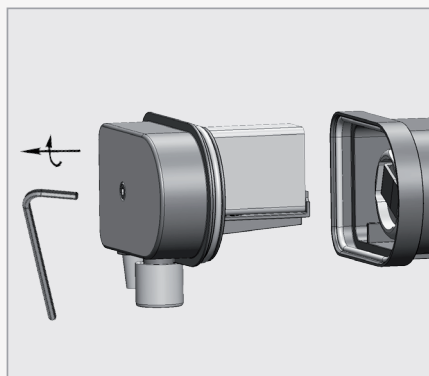
RESET BUTTON: This function restores all the factory settings except for the sensor range. If required, press the Reset button and without releasing it, press the + button once.

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

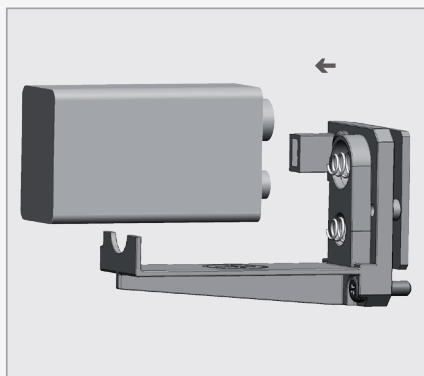
BATTERY REPLACEMENT

When the battery weakens, the red indicator light will blink at a constant rate when the user's hands are within the sensor range. The battery must be replaced within two weeks.

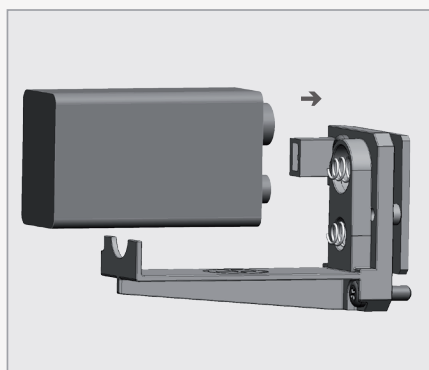
To replace the battery at Tubular DM B:



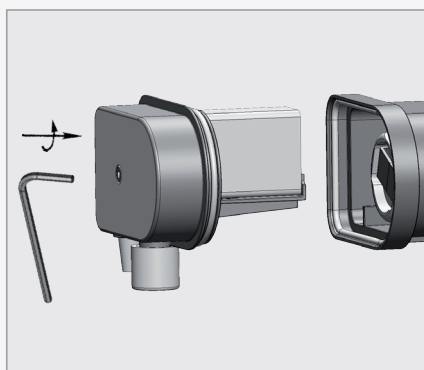
1 Carefully open the dual power input box using the 2.5mm Allen key provided.



2 Remove the old battery.



3 Replace the used battery with a new 9V battery (Lithium battery is recommended).



4 Close the box

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



SPARE PARTS LIST

SEALS AND SCREWS KIT	07210131
SELF ADAPTIVE SENSOR KIT	07220174
SOLENOID HOUSING DUAL POWER KIT	07231011
SOLENOID HOUSING DUAL POWER KIT USA	07231012
SOLENOID VALVE KIT	07230018
DUAL POWER COVER KIT	07220080
TRANSFORMER	06522047

MAINTENANCE

Filter cleaning instructions

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

1. Shut-off the water shut off valve (angle valve).
2. Remove the filter located between the dual power input box and the inlet adapter \ shut off valve.
3. Wash the filter 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.

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.

TROUBLESHOOTING

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"*	Eliminate cause of reflection.	
		5. Sensor is picking up reflections from the washbasin or another object.		
3. Red light in the sensor flashes once when user's hands are within the sensor's range.		6. Connectors between the electronic unit and the Dual power input box are disconnected or not connected properly.	Connect the connectors properly. Refer to page 6 to see how.	
		1. 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.	
			2. The central orifice in the diaphragm is plugged or the diaphragm is torn	Clean the orifice or replace diaphragm.
			3. The water supply pressure is higher than 8 bar.	Reduce the supply water pressure.
			4. 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.
Water flow from spout does not stop:	1. Sensor flashes once when user's hands are within the sensor's range.	1. Debris or scale in diaphragm	Clean the orifice or replace diaphragm.	
	2. Red light in the sensor does not flash once when user's hands are within the sensor's range.	2. Connectors between the electronic unit and the Dual power input box are disconnected or not connected properly	Connect the connectors properly. Refer to page 6 to see how.	
		1. Sensor is dirty or covered.**	Clean or eliminate case of interference.	
		2. Sensor is picking up reflections from the washbasin or another object.	Decrease the range or eliminate cause of reflection.	
Water flow diminished		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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