

INSTALLATION AND MAINTENANCE GUIDE

TUBULAR SERIES

WALL MOUNTED ELECTRONIC FAUCET FOR COLD OR PREMIXED WATER



Tubular B Tubular E Tubular CB Tubular CE Tubular 2030 B Tubular 2030 E

stern

STERN ENGINEERING LTD.

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TECHNICAL DATA

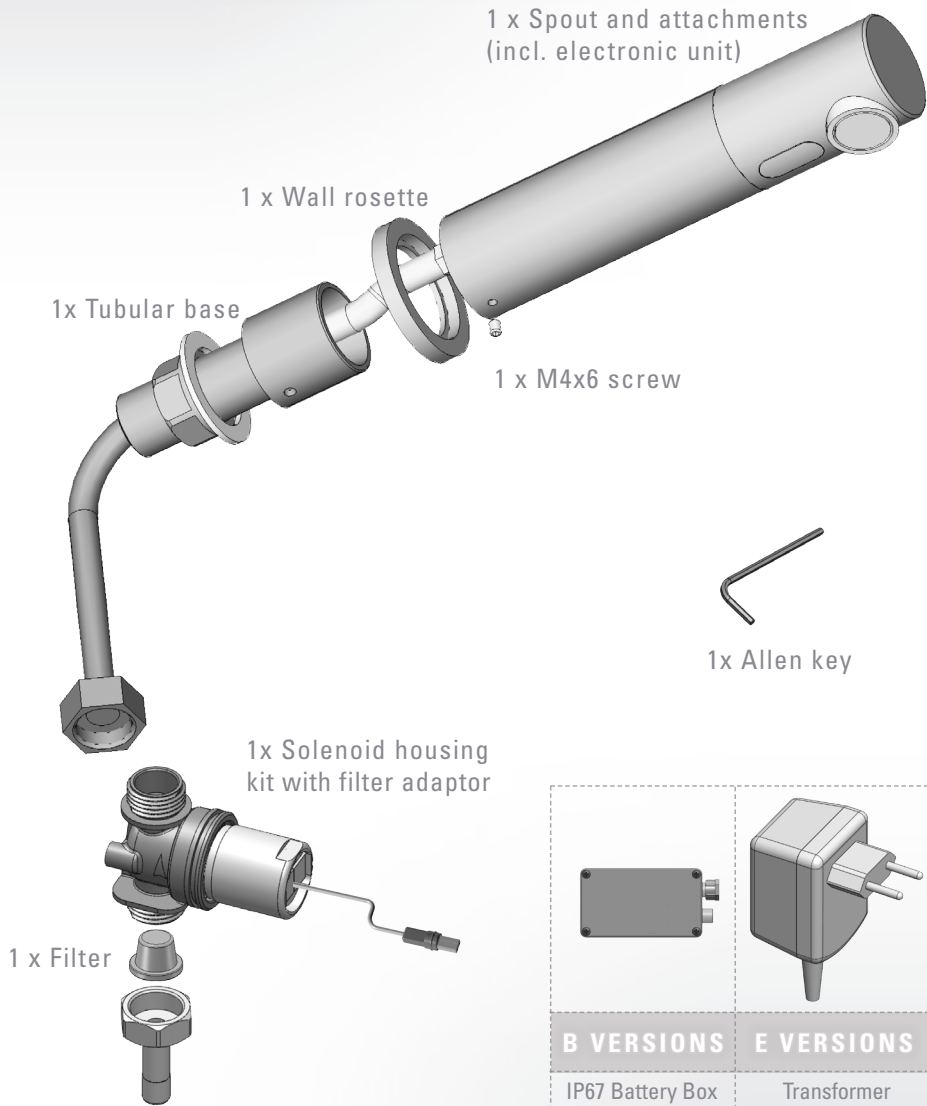


TUBULAR WALL MOUNTED ELECTRONIC FAUCET FOR COLD OR PREMIXED WATER

Power supply:	6x1.5V AA battery (Tubular B, CB models) 1x9V battery (Tubular 2030B model) 9V transformer (Tubular E, CE, 2030E models)
Recommended water pressure:	0.5-8.0 bar (7-116 PSI) With water pressure of more than 8 bars, use a pressure reducing valve
Sensor range:	Self adjusting sensor. Adjustable with remote control
Minimum sensor range:	80 mm
Maximum sensor range:	300 mm
Security time:	90 seconds. Can be reduced with the remote control.
Hot water temperature:	Max 70°C

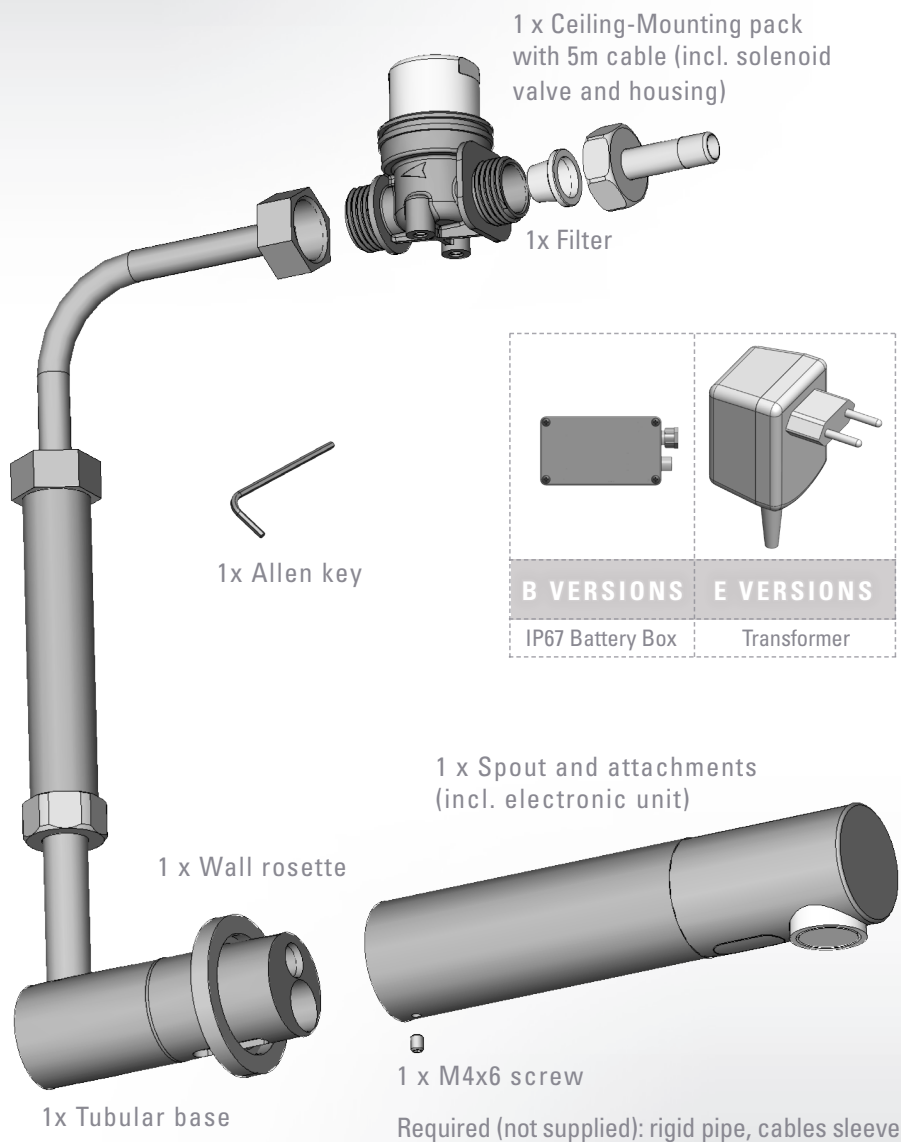
PACK CONTENTS

TUBULAR B / E



PACK CONTENTS

TUBULAR CB / CE



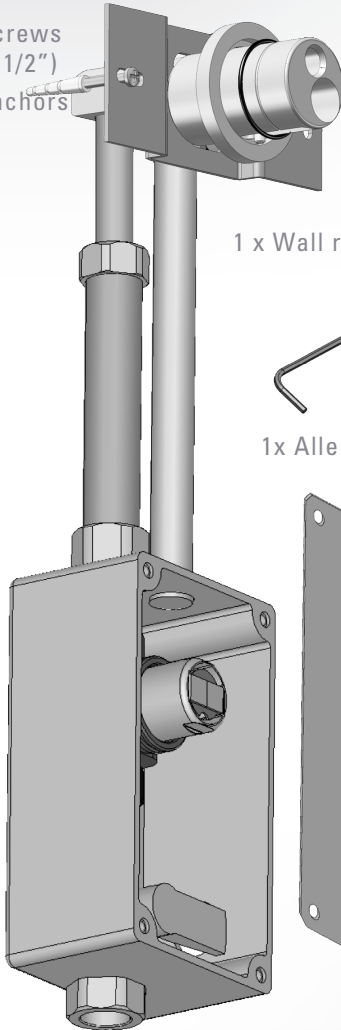
PACK CONTENTS

TUBULAR 2030 B / 2030 E

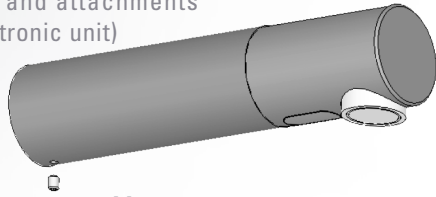
1x Tubular base
with support

3 x Screws
(#6x1 1/2")

3 x anchors



1 x Spout and attachments
(incl. electronic unit)

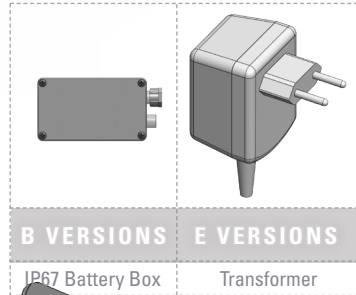


1 x M4x6 screw

1 x Wall rosette



1x Allen key



B VERSIONS

E VERSIONS

IP67 Battery Box

Transformer

4 x Screws

1 x Panel

Required (not supplied): rigid pipe, cables sleeve
For compliance with NSF 372 use a rigid pipe of
copper or steel

1 x Temporary protective cover

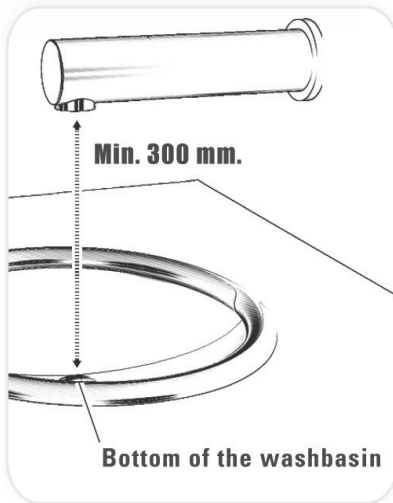
PRE-INSTALLATION INFO

Check contents

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

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.



Warning

- 1) To avoid reflection problems keep a distance of more than 300 mm. between the sink and the spout.
- 2) This faucet model, with an infrared sensor pointing down, is not intended to be used together with a sink of a reflective material such as stainless steel.
- 3) If a sink strainer is straight below the faucet sensor, use a strainer with a non reflective finish (do not use a chrome plated one).

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.

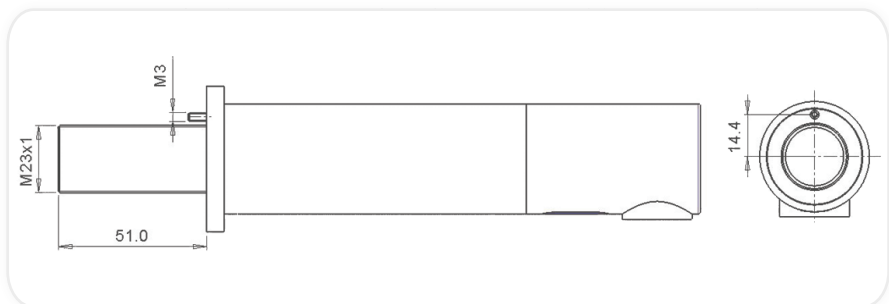
Installations in Australia and New Zealand must comply with the requirements of AS/NZS 3500.

FAUCET INSTALLATION

Installation instructions for **TUBULAR B** & **TUBULAR E**

Step 1 – Installing the faucet

1. Shut off the water supply
2. Drill a hole (23 to 24 mm) at the place where you want to install the spout of the tap.
3. If your model includes an optional anti-rotation pin, drill a small hole just above the previous one for the anti-rotation pin.



4. Insert the Tubular and its attachments through the wall. The aerator at the Tubular spout must face the washbasin.
5. Insert the anti-rotation pin into the small hole (if needed)
6. Fix the base behind the wall with the hexagonal nut and the disk.

FAUCET INSTALLATION

Step 2 - Connecting the water supply

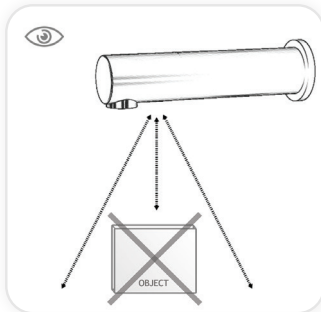
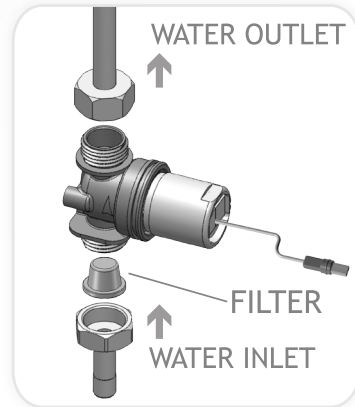
1. Fit the flexible pipe coming from the Tubular base to the solenoid valve housing.
2. Fit the water supply inlet to the adapter at the solenoid valve housing.

Inlet and outlet should follow the indicating arrow at the solenoid housing.

Note: Make sure the filter is located at the solenoid inlet.

3. Connect the cable coming from the electronic unit to the solenoid valve.

Important: Tubular was supplied with a 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.

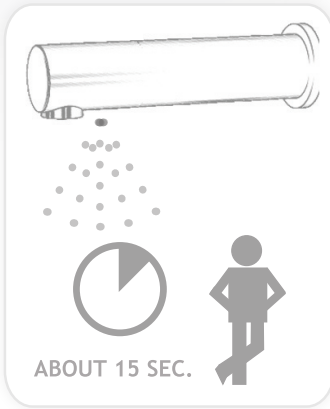


Now, remove the protecting sticker that covers the sensor.

FAUCET INSTALLATION

Step 3 – Connecting the power source

1a. For Tubular B: Connect the other cable coming from the electronic unit at the Tubular base to the battery box.



1b. For Tubular E: Connect the other cable coming from the electronic unit at the Tubular base to the transformer. Plug the transformer into the electricity socket.

2. 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.**

3. Turn on the central water supply. Check for leaks.

Note: Tubular 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.

ATTENTION! the aerator is tightened to prevent removal by hand.



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

FAUCET INSTALLATION

Installation instructions for

TUBULAR CB

&

TUBULAR CE

Step 1 – Installing the faucet

1. Shut off the water supply
2. Cut an opening at the wall for the spout of the tap, for the rigid pipe and for the cables sleeve (not supplied).
3. Mount the Tubular base through the wall opening.

Important: The Tubular base should be installed so that the outside surface of the finished wall falls between the minimum and maximum lines marked at the base.

4. Assemble the pipe (not supplied) to the inlet at the Tubular base.
5. Pull the wires of the power supply (transformer/battery) and sensor cable out of the Tubular base.
6. Lead the wires to the ceiling through the cable sleeve.
7. Once the works on electricity, plumbing and tiles have been finished, insert the wall rosette through the Tubular base.

8. Connect the cable leading to the solenoid and the power supply cable at the spout to those at the Tubular base. Fix the Tubular spout by inserting the nipple into the Tubular base. Make sure that this area is clean before proceeding. Secure the screw with the Allen key. Make sure that the aerator at the Tubular spout will be installed facing the washbasin.

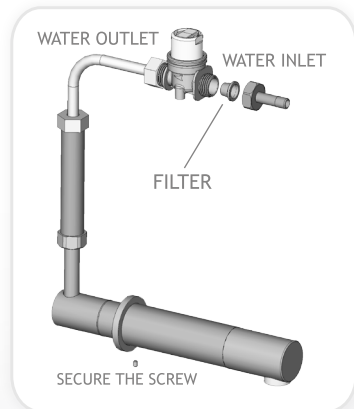
Step 2 - Connecting the water supply

1. Fit the pipe to the housing of the solenoid valve at the ceiling.

Inlet and outlet should follow the indicating arrow at the solenoid housing.

2. Fit the water supply inlet at the ceiling to the adapter at the solenoid valve housing.

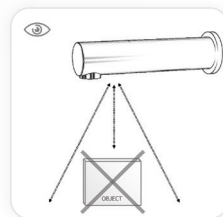
Note: Make sure the filter is located at the solenoid inlet.



FAUCET INSTALLATION

Important: Tubular was supplied with a Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically. Right now, check that no objects are in front of the sensor besides the washbasin.

3. Now remove the protecting sticker that covers the sensor.



Step 3 – Connecting the power source

1. Connect the electronic unit wire coming from the cables sleeve to the solenoid valve wire.

2. Connect the power supply wire coming from the cables sleeve to the battery box (model CB) or to the transformer (model CE).



3. If your model is Tubular CB, fix the battery box in the ceiling using the screws or the two sided adhesive foam.

4. If your model is Tubular CE, plug the transformer into the electricity socket.

5. 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.**



6. Turn on the central water supply. Check for leaks.

Note: Tubular 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.

ATTENTION! the aerator is tightened to prevent removal by hand.



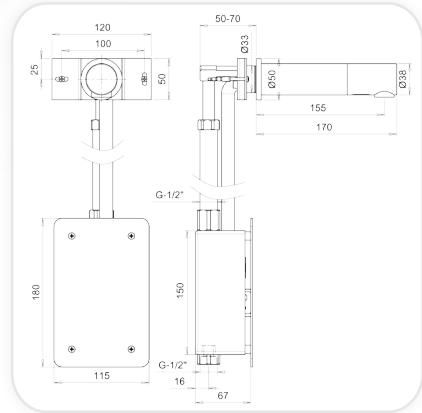
7. If the automatically adjusted sensor range is not satisfactory, please refer to the section entitled "Settings adjustment".

FAUCET INSTALLATION

Installation instructions for TUBULAR 2030B & TUBULAR 2030E

Step 1 – Installing the faucet

1. Shut off the water supply
2. Cut an adequate opening in the wall according to the dimensions of the Tubular box, the cables sleeve, the rigid pipe and the Tubular base with the support (at the place where you want to install the spout).
3. Cut two small holes for the Tubular base support and drive the anchors in.



4. Insert the Tubular box through the wall. Connect the water supply pipe to the nipple at the bottom of the Tubular box.
5. Mount the Tubular base with the support through the wall opening, and secure the base support to the two small holes using 2 screws.

Important: The Tubular base should be installed so that the outside surface of the finished wall falls between the minimum and maximum lines marked at the base.

6. Assemble the rigid pipe from the nipple at the box to the inlet at the Tubular base.
7. Pull the wires of the power supply (transformer/battery) and sensor cable out of the Tubular base.
8. Lead the wires through the cable sleeve.
9. Connect the electronic unit's connector coming from the Tubular base to the solenoid's connector.

FAUCET INSTALLATION

10. If your model is Tubular 2030 E, connect the power supply connector from the electronic unit coming from the Tubular base to the transformer.

11. Assemble the temporary protective cover panel to the Tubular box.

12. Once the works on electricity, plumbing and tiles have been finished, insert the wall rosette through the Tubular base.

13. Connect the cable leading to the solenoid and the power supply cable at the spout to those at the Tubular base. Fix the Tubular spout by inserting the nipple into the Tubular base. Make sure that this area is clean before proceeding. Secure the screw with the Allen key. Make sure that the aerator at the Tubular spout will be installed facing the washbasin.

Step 2 – Connecting the power source

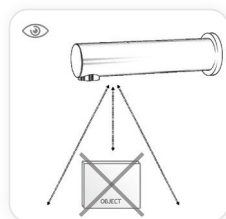
1. Remove the temporary protective cover panel.

Important: Tubular was supplied with A Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically. Right now, check that no objects are in front of the sensor besides the washbasin.

2. Now remove the protecting sticker that covers the sensor.

3. If your model is Tubular 2030 B the battery box is attached to the cover panel. Connect the battery box connector to the electronic unit connector.

4. If your model is Tubular 2030 E, plug the transformer into the electricity socket.



FAUCET INSTALLATION



5. 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.**

Step 3 - Connecting the water supply

1. Turn on the central water supply.
2. Check for leaks.
3. Assemble the wall cover panel by screwing the four screws.

Note: Tubular 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.

ATTENTION! the aerator is tightened to prevent removal by hand.



4. If the automatically adjusted sensor range is not satisfactory, please refer to the section entitled "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: 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 delay out time 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 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 also be modified 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.



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

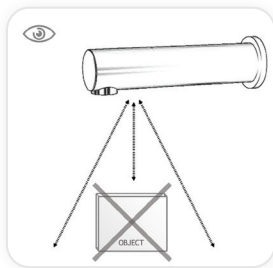
Battery models only

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

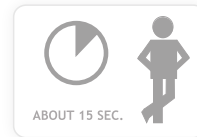
To replace the battery (battery models only):

1. For Tubular B or Tubular CB: Open carefully the batteries' box and remove the old batteries. Replace the used batteries with six new 1.5V AA batteries. Close the box.
2. For Tubular 2030B: Release the screws at the panel and remove it. The battery box is located behind the panel. Open carefully the battery's box and replace the used battery with a new 9V battery (Lithium battery is recommended). Close the box and re-assemble the wall cover panel.

Important: Tubular was supplied with A 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 replaced the battery, move away from the sensor range. Wait 15 seconds in order to allow the system to set the ideal sensor range. Then after 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.

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 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. For Tubular B, Tubular E, Tubular CB and Tubular CE:
 - a. Shut-off the water shut off valve.
 - b. Disconnect the water supply pipe from the adaptor and disassemble the filter from it.
 - c. Wash the filter under running water.
 - d. Reassemble the parts.
 - e. Restore the incoming water supply.
 - f. Make sure that there is no water leakage.
2. For Tubular 2030, Tubular 2030 E:
 - a. Release the screws at the panel and remove it. Turn off the regulating valve.
 - b. Disassemble the solenoid valve by opening the nuts.
 - c. Remove the filter and wash it under running water.
 - d. Reassemble the filter.
 - e. Reassemble the solenoid valve.
 - f. Turn on the regulating valve and adjust the flow capacity.
 - g. Make sure that there is no water leakage. Re-assemble the wall cover panel.

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

Self adjusting sensor kit	Cat.No. 07220056
Solenoid valve kit	Cat.No. 07230017
Solenoid housing kit for Tubular B, E, LB and LE	Cat.No. 07231008
Transformer	Cat.No. 06522042
IP67 Battery box	Cat.No. 06522020
Diaphragm	Cat.No. 04500001

Optional accessories

Remote control	Cat.No. 07100005
Battery box for 1 x 9V battery	Cat.No. 06530008
IP67 Transformer box with transformer	Cat.No. 06530021
Transformer junction box	Cat.No. 06530013
Transformer junction box exit with 3 meter cable and male connector	Cat.No. 06000084
Mixing valve	Cat.No. 200070

TROUBLE SHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
No water coming out of the tap:	1. Sensor flashes continuously when user's hands are within the sensor's range.	Low battery.	Replace battery.
		1. Range is too short. 2. Range is too long.	Increase the range. Decrease the range.
	2. Red light in the sensor does not flash once when user's hands are within the sensor's range.	3. Battery is completely used up	The battery must be replaced.
		4. Unit is in "Security Mode"*	
		5. Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
	3. Red light in the sensor flashes once when user's hands are within the sensor's range.	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:	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.
		1. Sensor is dirty or covered.	Clean or eliminate cause of interference.
	2. Red light in the sensor does not flash when user's hands are within the sensor's range	2. Sensor is picking up reflections from the washbasin or another object.	1. 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 to re-establish operation.

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.

STERN

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