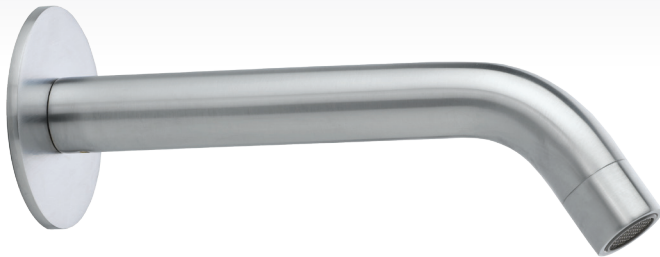


INSTALLATION AND MAINTENANCE GUIDE

# EXTREME WM

WALL MOUNTED ELECTRONIC FAUCET  
FOR COLD OR PREMIXED WATER



Extreme WMB   Extreme WME   Extreme WMLB   Extreme WMLE

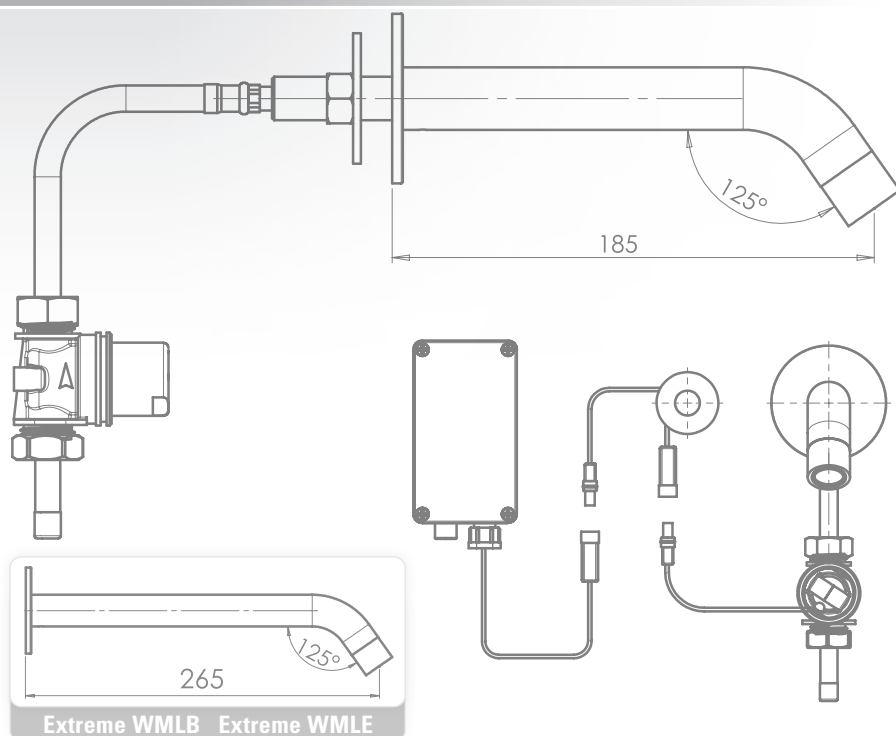
# stern

STERN ENGINEERING LTD.

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# TECHNICAL DATA



**Power supply for battery versions:**

6 x 1.5 V AA batteries

**Power supply for electricity versions:**

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

**Sensor type:**

Wave sensor

**Preset sensor range:**

50 mm. Adjustable.

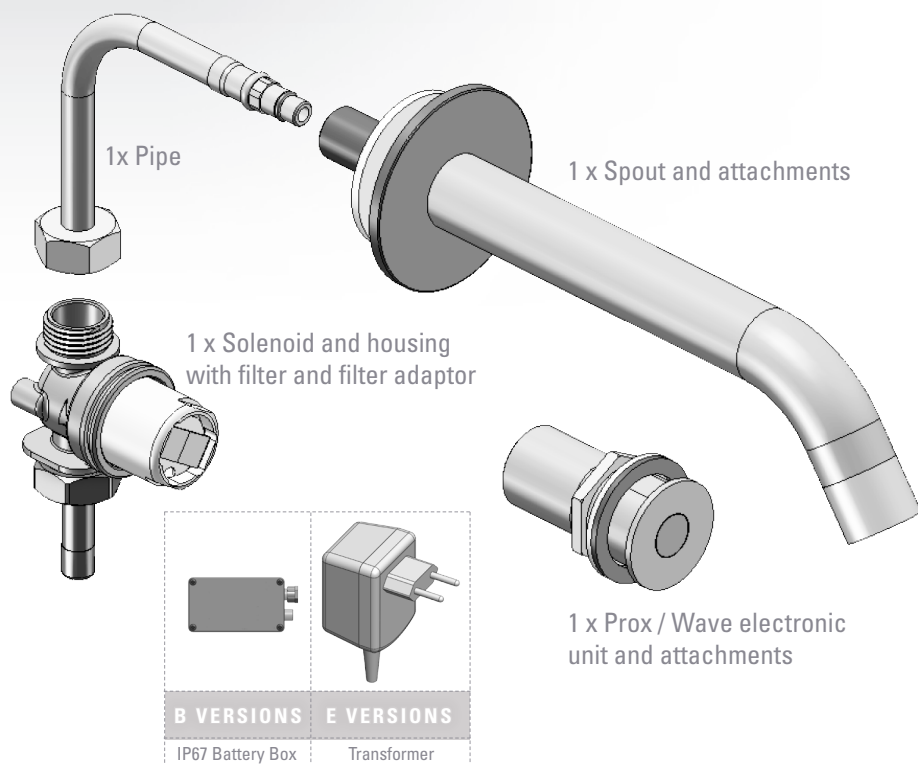
**Flow time:**

8 seconds. Adjustable with a remote control

**Hot water temperature:**

Max. 70° C

## PACK CONTENTS



### OPERATION WITH WAVE ON-OFF SENSOR:

Water will be delivered automatically when the user places a hand within a close distance of the sensor eye.

Water will shut off after the specified run time. Default: 8 seconds.

This solution is ideal for locations where the selected place for the sensor is not necessarily close to the faucet spout.

# PRE-INSTALLATION INFO

## Check contents

Separate all parts from packaging and check each part with the pack contents section.

Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install the 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 infra-red sensor.

To prevent reflection problems, it is recommended keep a minimum distance of 1.50 meters between the faucet and 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.

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

## Care and cleaning of chrome and special finishes

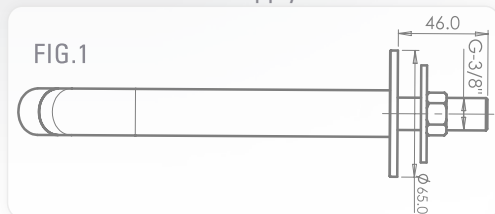
DO NOT use steel wool or cleansing agents containing alcohol, acid, abrasives, or the like. Use of any prohibited cleaning or maintenance products or substances could damage the surface of the faucet. For surface cleaning use ONLY soap and water, then wipe dry with clean cloth or towel. When cleaning bathroom tile, the faucet should be protected from any splattering of harsh cleansers.

If system chemical disinfection is practiced, chlorine can be used (calculated chlorine concentration of 50mg/l maximum in water per one hour dwell time) at service interval frequency.

# FAUCET INSTALLATION

## Step 1 – Installing the faucet

1. Shut off the water supply.

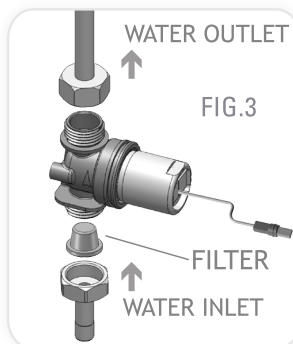
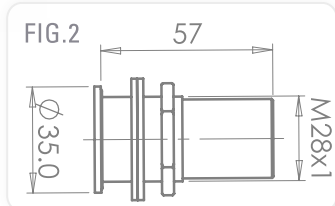


2. Drill an appropriate hole at the place where you want to install the spout of the tap. See FIG.1.

3. Insert the spout through the wall and fix the base behind the wall with the hexagonal nut and the disk.

4. Drill a hole at the place where you want to install the sensor unit. See FIG.2.

5. Insert the electronic unit through the wall or other surface where you want to place it and fix the base behind the wall with the hexagonal nut and the disk.



## Step 2 - Connecting the water supply

1. Fit the pipe from the spout base to the solenoid valve housing.
2. Fit the water supply inlet to the filter adapter at the solenoid housing. See FIG.3.

**Note:** Make sure the filters are located between the solenoid housing and the water inlet.

## Step 3 - Connecting the power source

1. Connect the cable coming from the wave electronic unit to the solenoid valve connector.
2. Connect the other cable coming from the wave electronic unit to the power source connector (battery box or transformer).
3. Turn on the central water supply. Check for leaks.
4. If the automatically adjusted sensor range is not satisfactory to your purposes, 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:** 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.

# RANGE ADJUSTMENT

## Adjusting the sensor range without remote control:

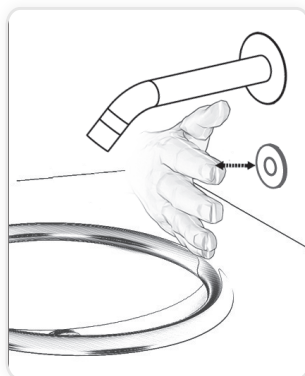
1. Shut off the water supply
2. Disconnect the power supply, battery or transformer from the sensor.
3. Make a short circuit between the (+) and the (-) of the sensor. You can use a screw driver or another conductor material to make this short circuit. Alternatively, after disconnecting the power supply, activate the sensor three or four times.

**Do not make a short circuit on the power supply or on the sensor when the power supply is connected to the sensor.**

4. Reconnect the power supply to the sensor.
5. To enter into the adjusting mode, you have to put your hand in front of the sensor at a distance of 2" (5cm) to 4" (10cm) from the sensor within 5 seconds from 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 adjustment will return.

6. When the sensor enters into adjusting mode and your hand is in front of the sensor, a slow flashing of the red light in front of the sensor will occur.
7. Keep your hand in front of the sensor until the slow flashing changes to quick flashing. At this point, move your hand to the required distance from the sensor and wait until the red light will stop flashing.
8. When the red light has turned off, the sensor is adjusted to the required distance.
9. Check the distance you have set and if it is not satisfactory, repeat steps 1-7.
10. Turn on the water supply.



# 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.

Always use batteries from a reputable source. Poor quality batteries may affect the performance of the product.

### To replace the battery (battery models only):

1. Carefully open the batteries' box.
2. Remove the old batteries.
3. Replace the used batteries with six new 1.5V AA batteries.
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.



# 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.
3. Wash the filter under running water.
4. Reassemble the parts.
5. Restore the incoming water supply.
6. 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 us **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.

If system chemical disinfection is practiced, chlorine can be used (calculated chlorine concentration of 50mg/l maximum in water per one hour dwell time) at service interval frequency.

## SPARE PARTS LIST

Prox sensor kit .....	Cat.No. 07224003
Wave sensor kit .....	Cat.No. 07225022
Solenoid valve kit .....	Cat.No. 07230017
Solenoid housing kit .....	Cat.No. 07221008
Transformer .....	Cat.No. 06522042
IP67 Battery box .....	Cat.No. 06522020
Diaphragm .....	Cat.No. 04500001
Remote Control .....	Cat.No. 07100005

# 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 tap	Sensor flashes continuously when user's hands are within the sensor's range.	Low batteries.	Replace batteries.
		Range is too short.	Increase the range.
	Red light in the sensor does not flash once when user's hands are within the sensor's range.	Range is too long.	Decrease the range.
		Batteries are completely used up.	Replace batteries.
		Sensor is picking up reflections.	Eliminate cause of reflection.
	Red light in the sensor flashes once when user's hands are within the sensor's range.	Connectors between the electronic unit and the solenoid are disconnected.	Connect the electronic unit connectors to the solenoid.
		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.
		The central orifice in the diaphragm is plugged or the diaphragm is torn.	Clean the orifice or replace diaphragm.
		The water supply pressure is higher than 8 bars.	Reduce the water supply pressure.
Water flow from spout does not stop	Sensor flashes once when user's hands are within the sensor's range.	Debris or scale in diaphragm.	Clean the orifice or replace diaphragm.
	Red light in the sensor does not flash once when user's hands are within the sensor's range.	Sensor is dirty or covered.	Clean or eliminate cause of interference.
		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.



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