

INSTALLATION AND MAINTENANCE GUIDE



# EXTREME SERIES

ELECTRONIC LAVATORY FAUCET

# stern

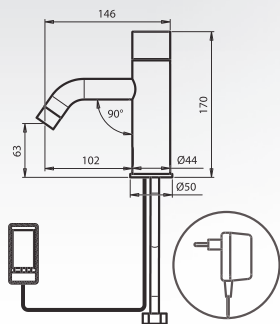
STERN ENGINEERING LTD.

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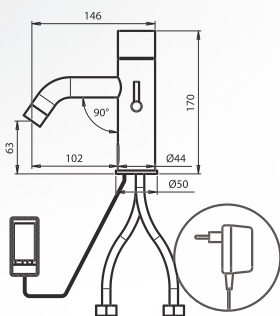
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<b>Power supply:</b>	9V battery or 9V transformer
<b>Recommended water pressure:</b>	0.5-8.0 bar (7-116 PSI) With water pressure of more than 8 bars, use a pressure reducing valve for reduction.
<b>Preset sensor range:</b>	220 mm Adjustable.
<b>Minimum sensor range:</b>	80 mm
<b>Maximum sensor range:</b>	300 mm
<b>Security time:</b>	90 seconds
<b>Hot water temperature:</b>	Max 70°C

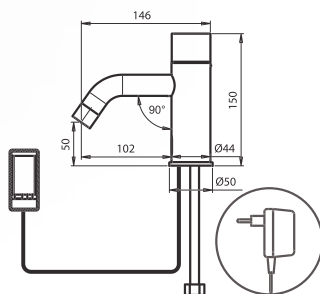
# TECHNICAL DATA



Extreme B 237200



Extreme 1000B 237100

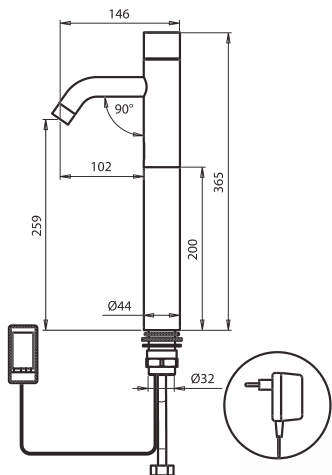


Petite Extreme B 237600

Extreme E 237300

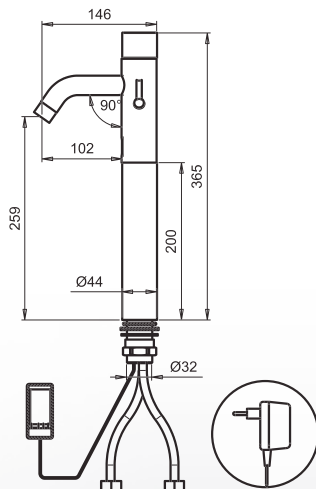
Extreme 1000E 237000

Petite Extreme E 237700



Extreme Plus B 237250

Extreme Plus E 237350



Extreme 1000 Plus B 237150

Extreme 1000 Plus E 237050

# PACK CONTENTS

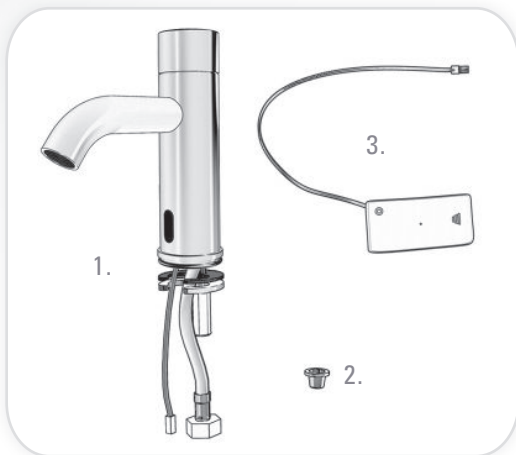
Familiarize yourself with the part names and confirm that the parts are included.

## ONE INLET battery versions

1. 1x Faucet and attachments
2. 1x Filter
3. 1x Battery box



**Optional:** IP67 Battery Box



## ONE INLET transformer versions

1. 1x Faucet and attachments
2. 1x Filter
3. 1x Transformer



**Optional:** Transformer with IP67 box

# PACK CONTENTS

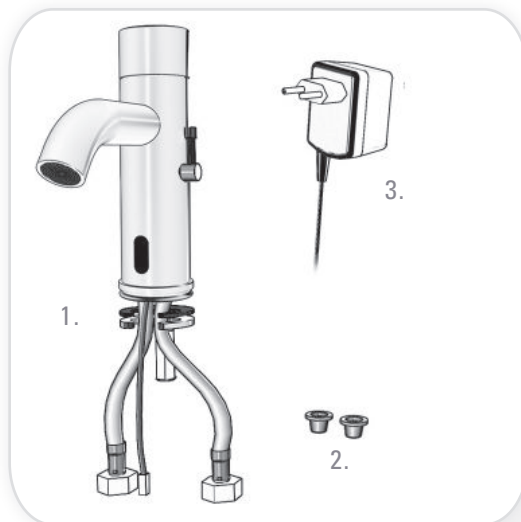
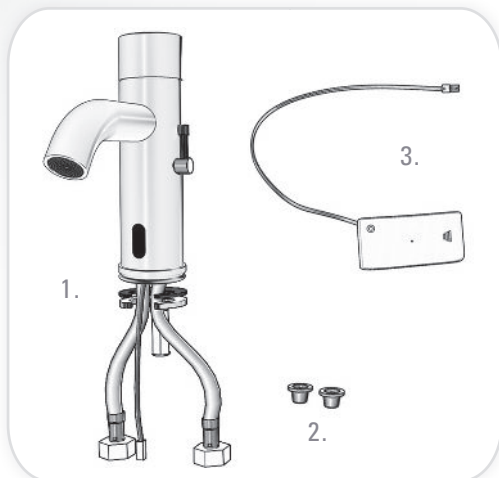
## TWO INLETS

### battery versions

1. 1x Faucet and attachments
2. 2x Filters
3. 1x Battery box



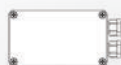
**Optional:** IP67 Battery box



## TWO INLETS

### transformer versions

1. 1x Faucet and attachments
2. 2x Filters
3. 1x Transformer



**Optional:** Transformer with IP67 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 Extreme 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 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**

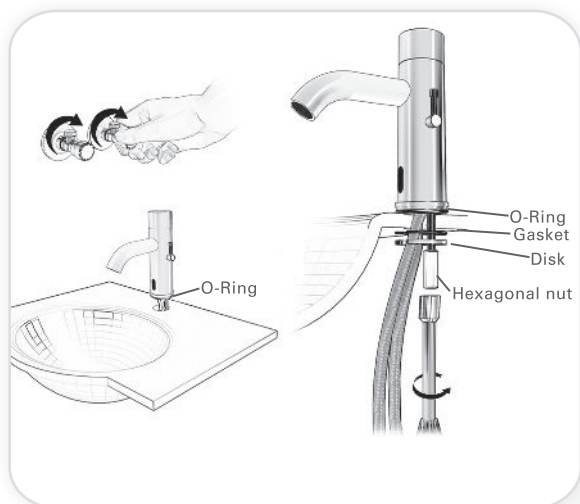
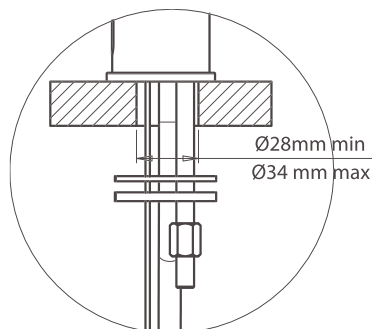
All plumbing is to be installed in accordance with applicable codes and regulations.

# FAUCET INSTALLATION

## Step 1 – Preparation for mounting the faucet

Shut off water supply and remove the hexagonal nut, the disk and the gasket. Do not remove the O-ring from the base of the faucet.

## Recommended hole size



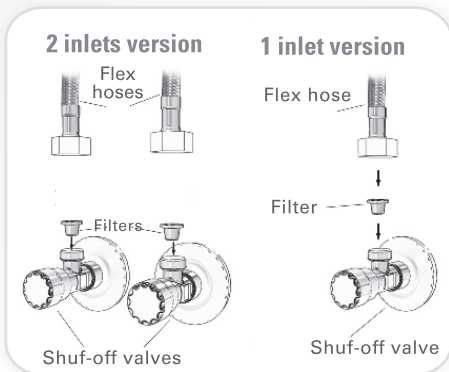
## Step 2 – Installing the faucet

1. Place the faucet with O-ring into the hole in the 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 over flexible hose(s).

# FAUCET INSTALLATION

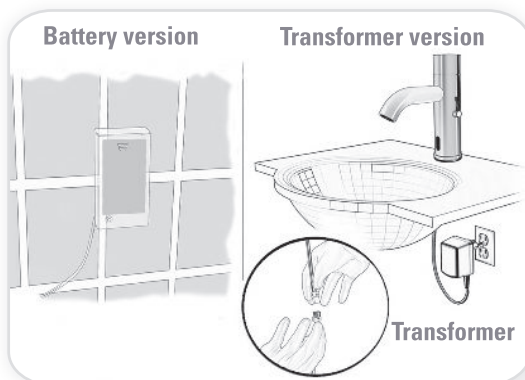
## Step 3 – Connecting the water supply

- a. Connect the flexible pipe to the water supply.
  - 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).
- Turn on the central water supply and the shut-off valves (angle valves).
- Check for leaks.



## Step 4 - Connecting the power source

- Connect the power source:
  - For battery versions: install the battery's box at the wall underneath the sink using the two sided adhesive foam faucete. 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. See section "Spare parts")
  - For transformer versions: Plug the transformer into the electricity socket and connect the connectors.



- Wait a few seconds before activating the faucet.
- If the range is unsatisfactory, refer to the section titled "Range adjustment".



# RANGE ADJUSTMENT

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. If necessary, it may be adjusted as follows:

## **Adjusting the sensor settings with a remote control – optional and recommended:**

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. If necessary, it may be adjusted as follows

In order to adjust the sensor with a Remote Control you should 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 in front of the sensor will occur. At this stage, you can change the adjustment by pressing the (-) or (+) buttons, every push will increase or decrease one level. After finishing the adjustment, turn on the water supply.

**Range:** Press + to increase detection range and – to decrease the detection range of the sensor.

**The remote control can also be used to adjust:**

**Flow time (Security time):** Press + to increase the security time and – to decrease it.

**Delay In:** Changes the time the water will start flowing when the user’s hands are within the sensor range. Press + to increase it and – to decrease it.

**Delay Out:** Changes the time of water flow after the user’s hands are removed. Press + to increase it and – to decrease it.

**On/Off:** Press this function button and the faucet will remain off for 1 minute. To cancel this function press the on/off again.

**Reset:** This function allows to come back to all the factory settings. Press the Reset button and without releasing it, press one time the + button.



# RANGE ADJUSTMENT

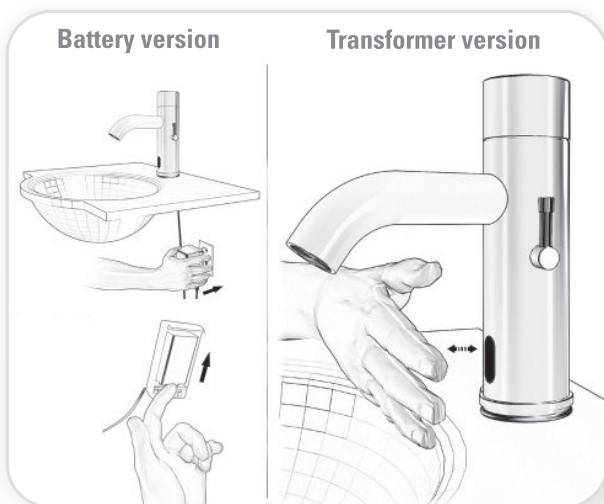
NOTE: Adjust only if necessary.

## Adjusting the sensor range without 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.



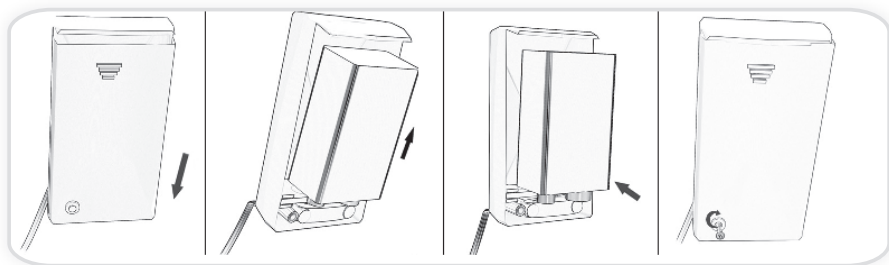
# BATTERY REPLACEMENT

## 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.



# 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 .....	Cat.No. 07220009
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. 06522027

## **Optional accessories:**

Extension cable (Battery models only) .....	Cat. No. 06009015
Remote control .....	Cat. No. 07100002
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
Power splitter (2 ways) .....	Cat.No. 06001004
Power splitter (3 ways) .....	Cat.No. 06001005
Power splitter (4 ways) .....	Cat.No. 06001006

# TROUBLE SHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
<b>No water coming out of the faucet:</b>	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"> <li>1. Range is too short.</li> <li>2. Range is too long.</li> <li>3. Battery is completely used up</li> <li>4. Unit is in "Security Mode"<sup>**</sup></li> <li>5. Sensor is picking up reflections from the washbasin or another object.</li> </ol>	<p>Increase the range. Decrease the range. 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"> <li>1. Connectors between the electronic unit and solenoid are disconnected.</li> <li>2. Debris or scale in solenoid.</li> <li>3. The central orifice in the diaphragm is plugged or the diaphragm is torn</li> <li>4. The water supply pressure is higher than 8 bar.</li> <li>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.</li> </ol>	<p>Connect the electronic unit connectors to the 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.</p> <p>Clean the orifice or replace diaphragm. Reduce the supply water pressure. Shut off water supply and unscrew one of the flexible pipes in order to reduce the pressure that blocks the product.</p>
<b>Water flow from spout does not stop:</b>	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"> <li>1. Sensor is dirty or covered.**</li> <li>2. Sensor is picking up reflections from the washbasin or another object.</li> </ol>	<p>Clean or eliminate cause of interference.</p> <p>1. Decrease the range or eliminate cause of reflection.</p>
<b>Water flow diminished</b>		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.

# 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, labour 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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