

INSTALLATION AND MAINTENANCE GUIDE

# QUADRAT SERIES

WALL MOUNTED ELECTRONIC FAUCET FOR COLD OR PREMIXED WATER



Quadrat B   Quadrat E   Quadrat 2030 B   Quadrat 2030 E   Quadrat LB   Quadrat LE  
Quadrat 2030 LB   Quadrat 2030 LE

# stern

STERN ENGINEERING LTD.

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# TECHNICAL DATA



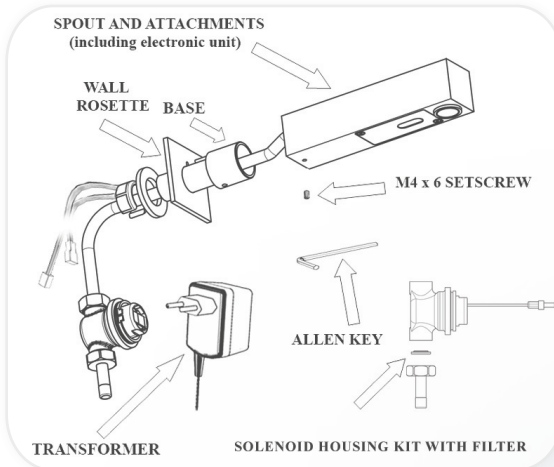
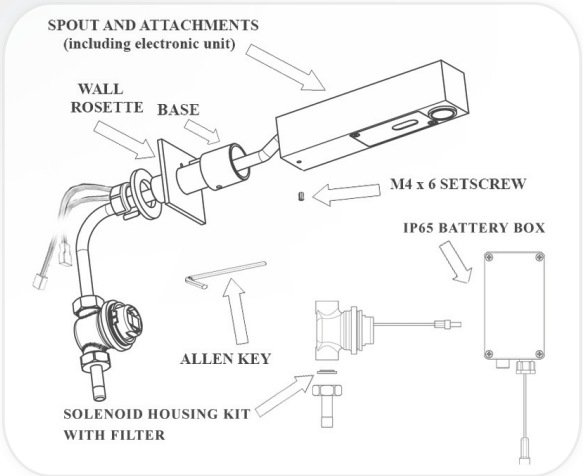
**QUADRAT** WALL MOUNTED ELECTRONIC FAUCET FOR COLD OR PREMIXED WATER

<b>Power supply:</b>	6x1.5V AA battery (models Quadrat B, LB) 1x9V battery (model Quadrat 2030 B, 2030 LB) 9V transformer (models Quadrat E, LE, 2030 E, 2030 LE)
<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
<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. Can be reduced with the remote control.
<b>Hot water temperature:</b>	Max 70°C

# PACK CONTENTS

## QUADRAT B, LB

1. 1 x Spout and attachments (incl. electronic unit)
2. 1x Quadrat base
3. 1 x wall rosette
4. 1 x M4x6 screw
5. 1 x Allen key
6. 1x Solenoid housing kit with filter adaptor.
7. 1 x IP67 Battery box
8. 1 x Filter



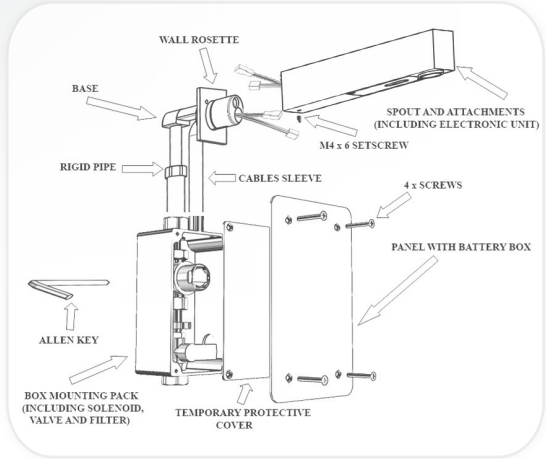
## QUADRAT E, LE

1. 1 x Spout and attachments (incl. electronic unit)
2. 1x Quadrat base
3. 1 x wall rosette
4. 1 x M4x6 screw
5. 1 x Allen Key
6. 1x Solenoid housing kit with filter adaptor
7. 1 x Filter
8. 1 x Transformer

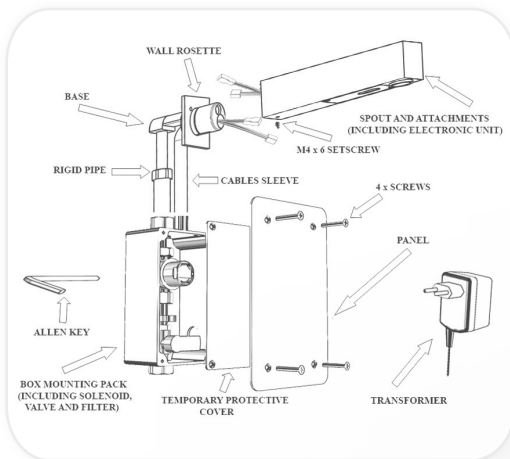
# PACK CONTENTS

## QUADRAT 2030 B, 2030 LB

1. 1 x Spout and attachments (incl. electronic unit)
2. 1x Quadrat base
3. 1 x wall rosette
4. 1 x M4x6 screw
5. 1 x Allen key
6. 1 x Box mounting pack (incl. solenoid valve and filter)
7. 1 x Panel with battery box
8. 1 x Temporary protective cover
9. 4 x Screws
10. Rigid pipe
11. Cables sleeve



Required (not supplied) : rigid pipe, cables sleeve



Required (not supplied): rigid pipe, cables sleeve

## QUADRAT 2030 E, 2030 LE

1. 1 x Spout and attachments (incl. electronic unit)
2. 1x Quadrat base
3. 1 x wall rosette
4. 1 x M4x6 screw
5. 1 x Allen key
6. 1 x Box mounting pack (incl. solenoid valve and filter)
7. 1 x Panel
8. 1 x Temporary protective cover
9. 4 x Screws
10. 1 x Transformer
11. Rigid pipe

# FAUCET INSTALLATION

## 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.

### Warnings

To avoid reflection problems it is recommended to keep a distance of more than 300 mm. between the sink and the spout.

### 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

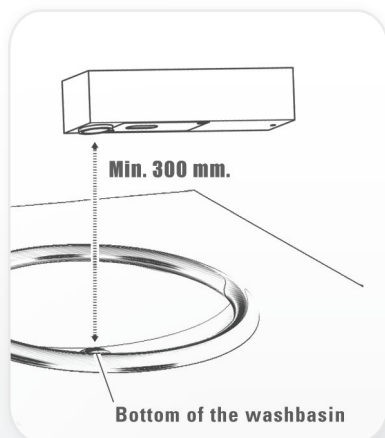
All plumbing is to be installed in accordance with applicable codes and regulations.

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## Installation instructions for **QUADRAT B, LB, E, LE**

### Step 1 – Installing the faucet

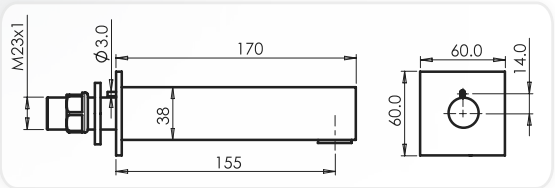
1. Shut off the water supply
2. Cut a hole at the place where you want to install the spout of the tap.
3. **Note:** Keep a distance of not less than 300 mm. above the sink to avoid reflection problems.
4. If your model includes an optional anti-rotation pin, drill a small hole just above the previous one for the anti-rotation pin.



# FAUCET INSTALLATION

5. Insert the flexible hose, the cable and the base of the faucet through the wall.

6. Insert the anti-rotation pin into the small hole (if needed)



7. Fix the base behind the wall with the hexagonal nut and the disk.

8. Insert the wall rosette through the faucet base. Fix the Quadrat spout by inserting the nipple into the faucet base. Make sure that this area is clean before proceeding. Secure the screw with the Allen key. Make sure that the aerator at the faucet spout will be installed facing the washbasin.

## Step 2 - Connecting the water supply

1. Fit the flexible pipe coming from the faucet base to the solenoid valve housing.

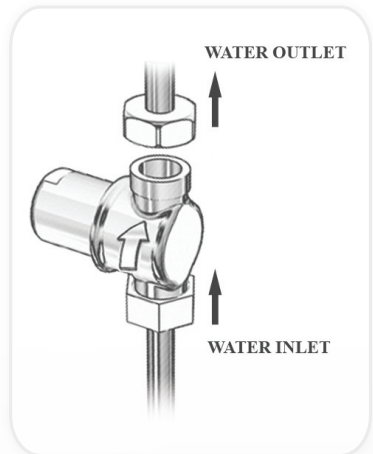
2. Fit the water supply inlet to the adapter at the solenoid valve housing.

**Important:** inlet and outlet should follow the indicating arrow at the solenoid housing.

**Note:** make sure the filter is located between the solenoid housing and the adapter.

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

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



## Step 3 – Connecting the power source

a. For Quadrat B, LB: Connect the other cable coming from the electronic unit at the Quadrat base to the battery box.

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

**Important:** After connecting the power source, wait a few seconds before activating the faucet to avoid entering into "adjusting mode".





# FAUCET INSTALLATION

b. Connect the power supply connector from the electronic unit coming from the faucet base to the transformer.

10. Assemble the temporary protective cover to the Quadrat box.

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

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

## **Step 2 – Connecting the power source**

1. Once the works on electricity, plumbing and tiles have been finished , remove the temporary protective cover.

2. If your model is Quadrat 2030 B or 2030 LB the battery box is attached to the cover panel. Connect the battery box connector to the electronic unit connector.

3. If your model is Quadrat 2030 E or 2030 LE, plug the transformer into the electricity socket.

4. Assemble the wall cover panel by screwing the four screws.

## **Step 3 - Connecting the water supply**

5. Turn on the central water supply.

6. Check for leaks.

**Important:** After connecting the power source, wait a few seconds before activating the faucet to avoid entering into “adjusting mode”.

# 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 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

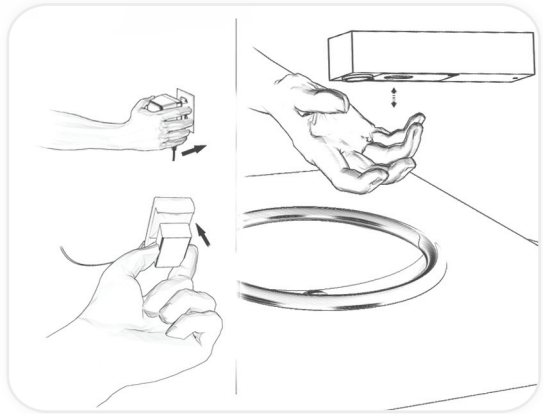
## Adjusting the sensor range without remote control:

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, 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.

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

1. For Quadrat B or Quadrat LB: 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 Quadrat 2030 B or Quadrat 2030 LB: 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.

# 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. For Quadrat B, Quadrat E, Quadrat LB and Quadrat LE:
  - 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 Quadrat 2030 B, Quadrat 2030 LB, Quadrat 2030 E, Quadrat 2030 LE:
  - 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 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.

# SPARE PARTS LIST

Sensor kit .....	Cat.No. 07220003
Solenoid valve kit for Quadrat B, Quadrat E, Quadrat LB and Quadrat LE .....	Cat.No. 07230002
Solenoid valve kit for Quadrat 2030 B, Quadrat 2030 LB, Quadrat 2030 LE and Quadrat 2030 LE .....	Cat.No. 07500100
Solenoid housing kit for Quadrat B, Quadrat E, Quadrat LB and Quadrat LE .....	Cat.No. 07231001
Transformer .....	Cat.No. 06522025
IP67 Batteries box .....	Cat.No. 06522020
Diaphragm .....	Cat.No. 04500001

## Optional accessories

Remote control .....	Cat.No. 07100002
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. 06000067
Mixing valve .....	Cat.No. 200070

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## LIMITED WARRANTY

This product is covered by a limited warranty for 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 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

# TROUBLE SHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
<b>No water coming out of the tap:</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.	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"*	
	3. Red light in the sensor flashes when user's hands are within the sensor's range.	5. Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
		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.	
<b>Water flow from spout does not stop:</b>	1. Sensor flashes when user's hands are within the sensor's range. 2. Red light in the sensor does not flash when user's hands are within the sensor's range	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.
		Debris or scale in diaphragm	Clean the orifice or replace diaphragm.
		1. Sensor is dirty or covered.	Clean or eliminate cause of interference.
		2. Sensor is picking up reflections from the washbasin or another object.	1. Decrease the range or eliminate cause of reflection.
<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 to re-establish operation.

# STERN

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