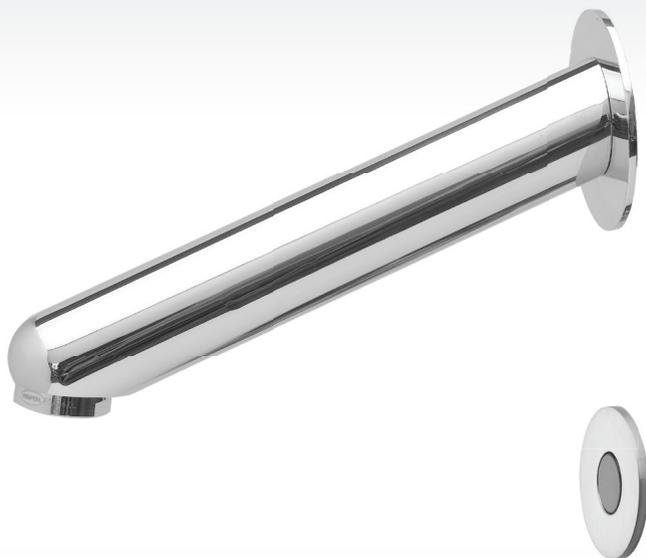


INSTALLATION AND MAINTENANCE GUIDE

# APOLLO AL

WALL MOUNTED ELECTRONIC FAUCET  
FOR COLD OR PREMIXED WATER



Apollo ALB

Apollo ALE

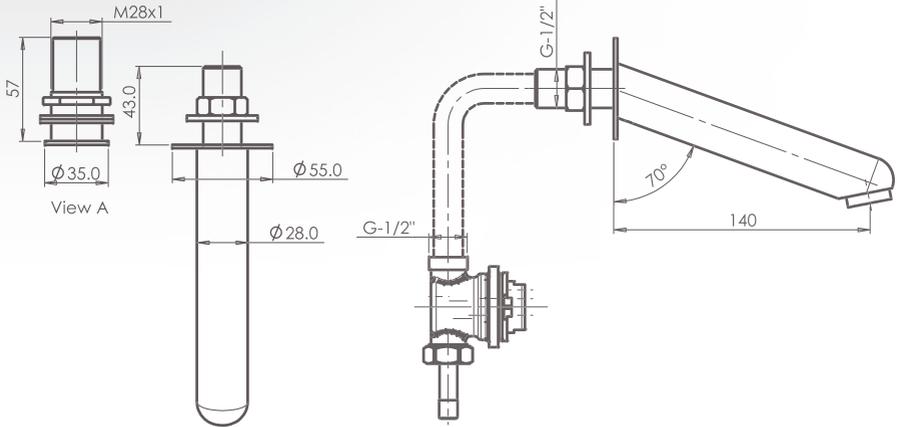
# stern

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.

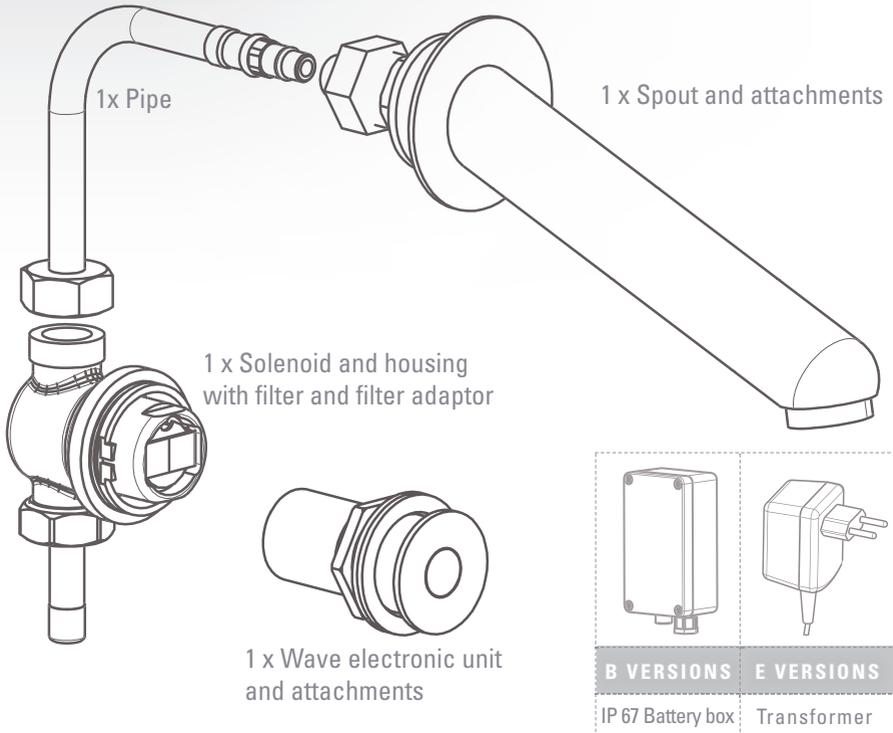
**Flow time:**

8 seconds. Adjustable with a remote control

**Hot water temperature:**

Max. 70° C

# PACK CONTENTS



## OPERATION

Water will be delivered automatically when the user places the hands in front of the sensor.

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

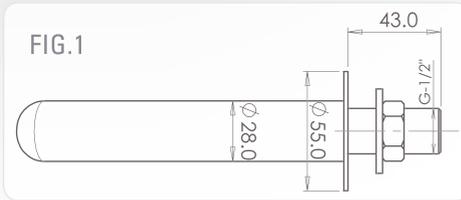
DO NOT use steel wool or cleansing agents containing alcohol, acid, abrasives, or the like. Use of any prohibited cleaning or maintenance products or substances could damage the surface of the faucet. For surface cleaning use ONLY soap and water, then wipe dry with clean cloth or towel. When cleaning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

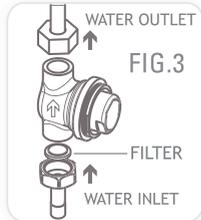
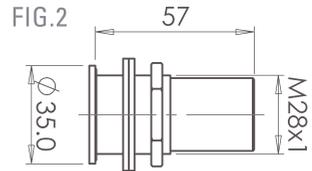


2. Drill an appropriate hole at the place where you want to install the spout of the tap. See FIG.1.

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 wave sensor unit. See FIG.2.

5. Insert the wave 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.

**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.

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



# RANGE ADJUSTMENT

The sensor range is the range an object can be away from the sensor in order to activate the faucet. The sensor is factory preset. If necessary, it can be adjusted as follows:

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

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 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 at the front of the sensor will occur. At this stage, you can change the adjustment by pressing the (+) or the (-) 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.

## **Adjusting other settings with the remote control:**

**Flow time:** Press + to increase the flow 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.

**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:

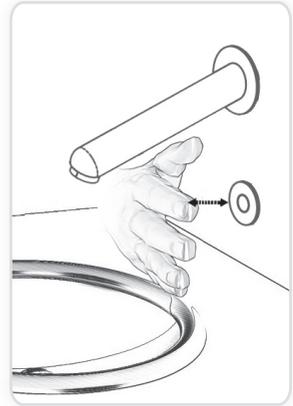
1. Shut off the water supply
2. Disconnect the power supply, battery or transformer from the sensor.
3. Make a short circuit between the (+) and the (-) of the sensor. You can use a screw driver or another conductor material to make this short circuit. Alternatively, after disconnecting the power supply,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



## SPARE PARTS LIST

Wave sensor kit .....	Cat.No. 07225022
Solenoid valve kit .....	Cat.No. 07230002
Solenoid and housing kit .....	Cat.No. 07221005
Transformer .....	Cat.No. 06522025
IP67 Battery box .....	Cat.No. 06522020
Diaphragm .....	Cat.No. 04500001
Remote Control .....	Cat.No. 07100002

# 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 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.

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.

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## 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
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.
		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 does not flash 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 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 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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