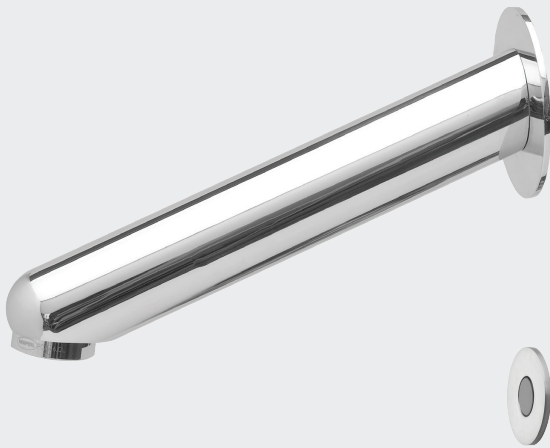


stern

STERN ENGINEERING LTD.



APOLLO AL

Apollo ALB | Apollo ALE

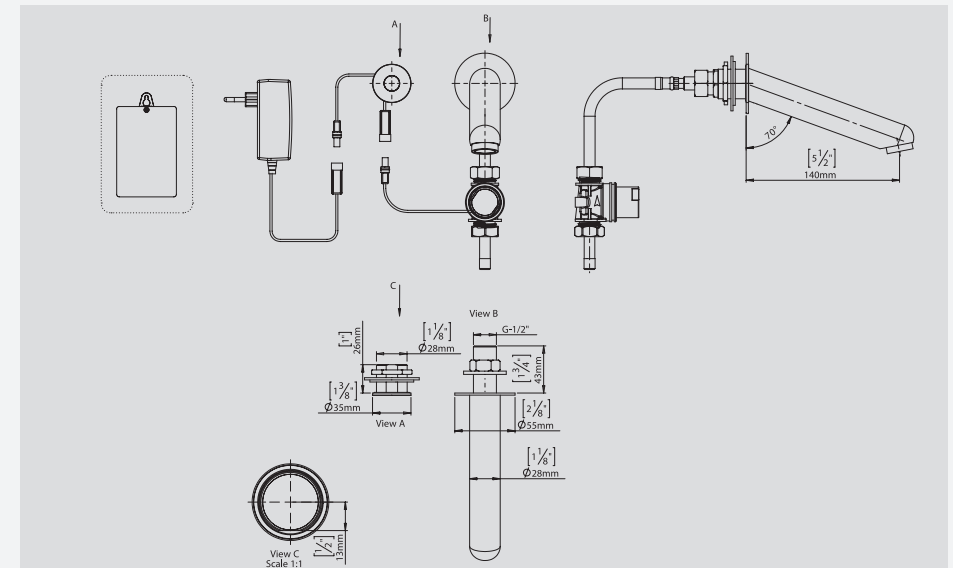
WALL MOUNTED ELECTRONIC FAUCET
FOR COLD OR PREMIXED WATER

INSTALLATION AND MAINTENANCE GUIDE

INDEX

1	TECHNICAL DATA
2	PACK CONTENTS
3	PRE-INSTALLATION INFO
4	FAUCET INSTALLATION
5-8	SETTINGS ADJUSTMENT
9	BATTERY REPLACEMENT INSTRUCTIONS
10	MAINTENANCE
11	SPARE PARTS LIST
12	LIMITED WARRANTY
13	TROUBLESHOOTING

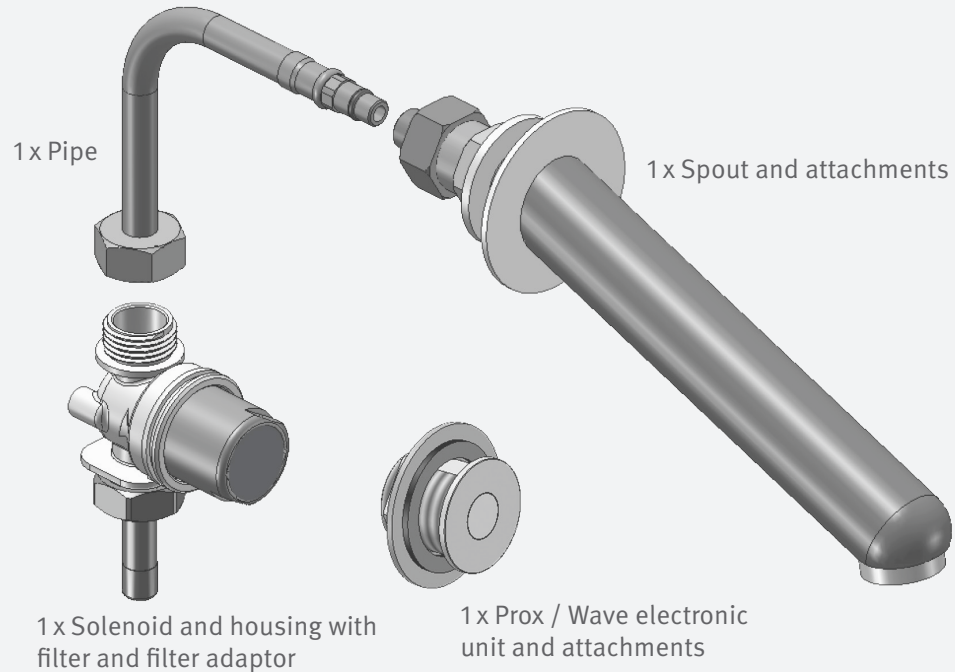
TECHNICAL DATA



Apollo ALB	340600
Apollo ALE	340700

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
Hot water temperature:	Max. 70 ^o C
Sensor type:	Prox sensor (default)
Preset sensor range:	200mm +/- 20mm / 7.87" +/- 0.79" (customizable by optional remote control)
Security time:	90 seconds. Can be reduced with optional remote control
Sensor type:	Wave On/Off sensor (Optional)
Preset sensor range:	100mm +/- 10mm / 3.94" +/- 0.39" (customizable by optional remote control)
Flow time: (Wave sensor)	8 seconds (customizable by optional remote control)

PACK CONTENTS

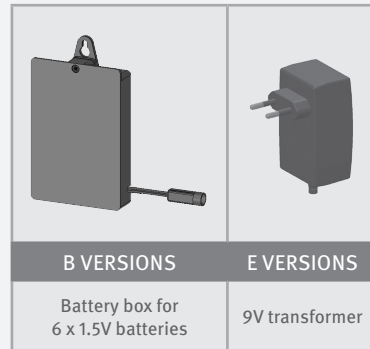


OPERATION WITH OPTIONAL WAVE ON/OFF SENSOR:

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 infrared sensor.

To prevent reflection problems, it is recommended to 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.

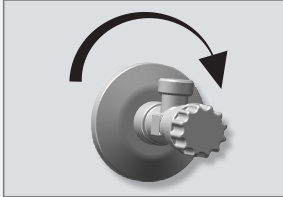
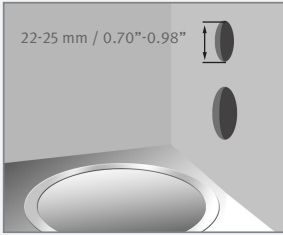
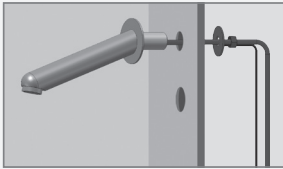
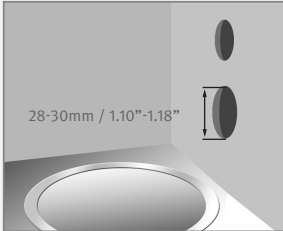
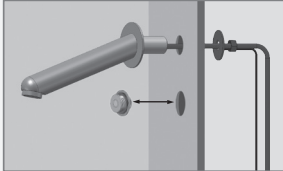
Care and cleaning of chrome and special finishes

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

INSTALLATION

STEP 1 – INSTALLING THE FAUCET

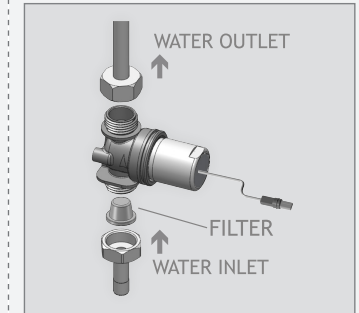
<p>1</p>	<p>Shut off the water supply.</p>	
<p>2</p>	<p>Drill a hole (22 to 25 mm) in the location you wish to install the faucet.</p>	
<p>3</p>	<p>Insert the spout through the wall and fix the base behind the wall with the hexagonal nut and the disk.</p>	
<p>4</p>	<p>Drill a hole (28 to 30 mm) in the location you wish to install the sensor unit.</p>	
<p>5</p>	<p>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.</p>	

INSTALLATION

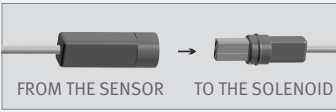
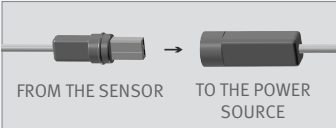
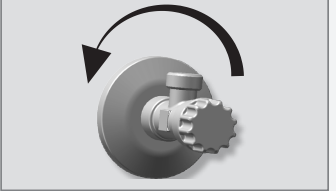
STEP 2 – CONNECTING THE WATER SUPPLY

Fit the pipe from the spout base to the solenoid valve housing
Fit the water supply inlet to the filter adapter at the solenoid housing.

Note: Make sure the filter is located between the solenoid housing and the water inlet.



STEP 3 – CONNECTING THE POWER SOURCE

<p>1</p>	<p>Connect the cable coming from the sensor unit to the solenoid valve connector.</p>	
<p>2</p>	<p>Connect the other cable coming from the sensor unit to the power source connector (battery box or transformer).</p>	
<p>3</p>	<p>Turn on the central water supply. Check for leaks.</p>	
<p>4</p>	<p>If the automatically adjusted sensor range is not satisfactory for your purposes, please refer to the section entitled "Settings adjustment".</p>	

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 LED 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



PROX WAVE

DETECTION RANGE: 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 LED of the sensor eye is perceived. Then, press + to increase the one level 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.



PROX

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 10 minutes 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 LED of the sensor eye is perceived. Then, press + to increase the security time and – to reduce it.



PROX

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 showers as follows:

Press the IN button. Wait until a quick flashing of the LED of the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.



PROX

DELAY OUT TIME: This button allows modifying the water flow time after the user removes his hands from the shower. 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 LED of the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.

SETTINGS ADJUSTMENT



PROX WAVE

24 HOUR HYGIENE FLUSH: This model includes a 24 hours hygiene flush which is disabled. To activate the hygiene flush, press the clock button. Wait until a quick flashing of the LED of the sensor eye is perceived. Then press + to activate the hygiene flush. To disable it again, press – to deactivate it.



PROX WAVE

COMFORT FLUSH: If your model includes a Comfort flush setting, it can be activated by pressing the flush button. When the button is pressed, one blink of the LED in the sensor eye is perceived. The pre-programmed flush cycle will take place then. The Comfort flush cannot be interrupted or deactivated by pressing any button until it is over.



PROX WAVE

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 shower will remain shut for 2 minutes when this button is pressed once. To cancel this function and to return to normal operation press the On/Off button again or wait 2 minutes.



PROX WAVE

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.

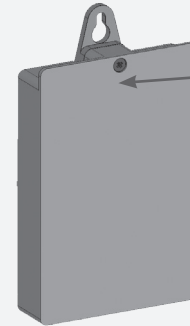


WAVE

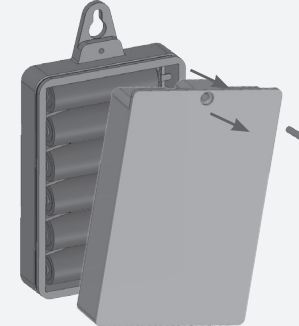
FLOW TIME: This function determines the water flow time once the user operates the system. Press the two waves button. Wait until a quick flashing of the LED of the sensor eye is perceived. Then, press + to increase the flow time and – to reduce it.

BATTERY REPLACEMENT

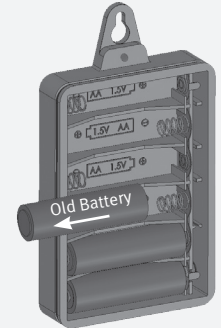
When the battery weakens, the LED indicator light will blink at a constant rate. The battery must be replaced within two weeks.



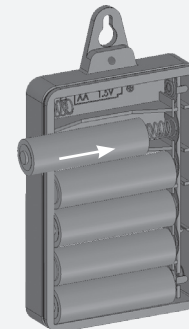
1. Unscrew the holding screw



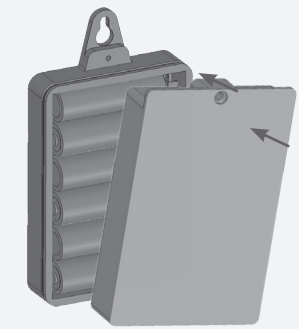
2. Carefully open the battery box



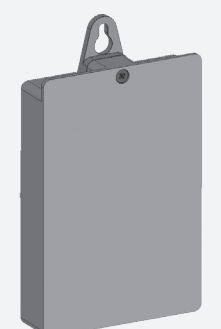
3. Remove the old batteries



4. Replace the used batteries with a new 6 X 1.5V batteries (Lithium battery is recommended).



5. 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

Prox sensor	07224069
Wave On/Off sensor (Optional)	07224075
10-Pack Solenoid valve kit	07232000
8-Pack Solenoid and Housing Kit	07221103
9V Transformer (EU plug)	06522091
Battery box with 6X1.5V AA batteries	06530092
10-Pack Diaphragm	04500048
Remote Control (Optional)	07100005
Soap & Water Remote Control (Optional)	07100014

LIMITED WARRANTY

Y. Stern Engineering Ltd. warrants that its electronic products 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 product.

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, 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 or soap tank.
- Use of the soap outside of viscosity specifications.
- Alteration of the original soap/foam dispenser components (including pipes).

TROUBLESHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
No water coming out of the faucet:	1. Sensor flashes continuously when user's hands are within the sensor's range.	Low battery.	Replace battery
	2. LED in the sensor does not flash once 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. LED in the sensor flashes 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"**	Eliminate cause of reflection.
Water flow from spout does not stop:	1. 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.
	2. LED in the sensor does not flash once 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.
		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 back check prevents from dropping, even after water supply pressure drops under 8 bars.	Shut off water supply and unscrew one of the flexible pipes in order to reduce the pressure that blocks the product.
Water flow diminished	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.
		2. LED in the sensor does not flash once when user's hands are within the sensor's range.	1. Sensor is dirty or covered.**
		2. Sensor is picking up reflections from the washbasin or another object.	Decrease the range or eliminate cause of reflection.
		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.

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