

1870B Series

intelligent™ Electronic Lav Faucet, Battery Operated



Product Description

- Solid brass electronic faucet
- Designer Series, high arc spout
- Computer based micro controller w/specially designed infrared sensors to detect within a required distance.
- Auto shut-off - 1 minute
- Modular design to accept optional equipment
- Battery housing e/w 6V sealed polarized plug

Features

- Sealed waterproof electronics
- Vandal Proof / Tamper cycle
- Auto-focus
- Smooth flow non-splash laminar nozzle

Certification

IAPMO cUPC
ADA / ANSI Compliant

Model Choice :

1870B
1870BM
1870B-4 or 1870B-8
1870B-4M or 1870B-8M
1870B-4M2
1870B-4M3

M = MP1 mechanical mixer

4 = 4" deck plate

8 = 8" deck plate

Options

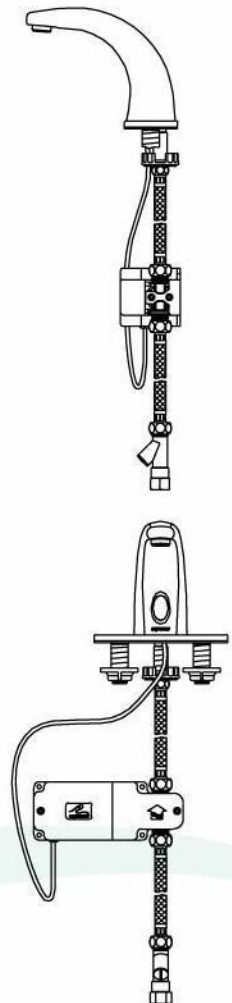
MP4 Mixer 1/2"

MP6 Mixer 3/8"

04- 159L Nozzle, vandal proof 1.5 gpm

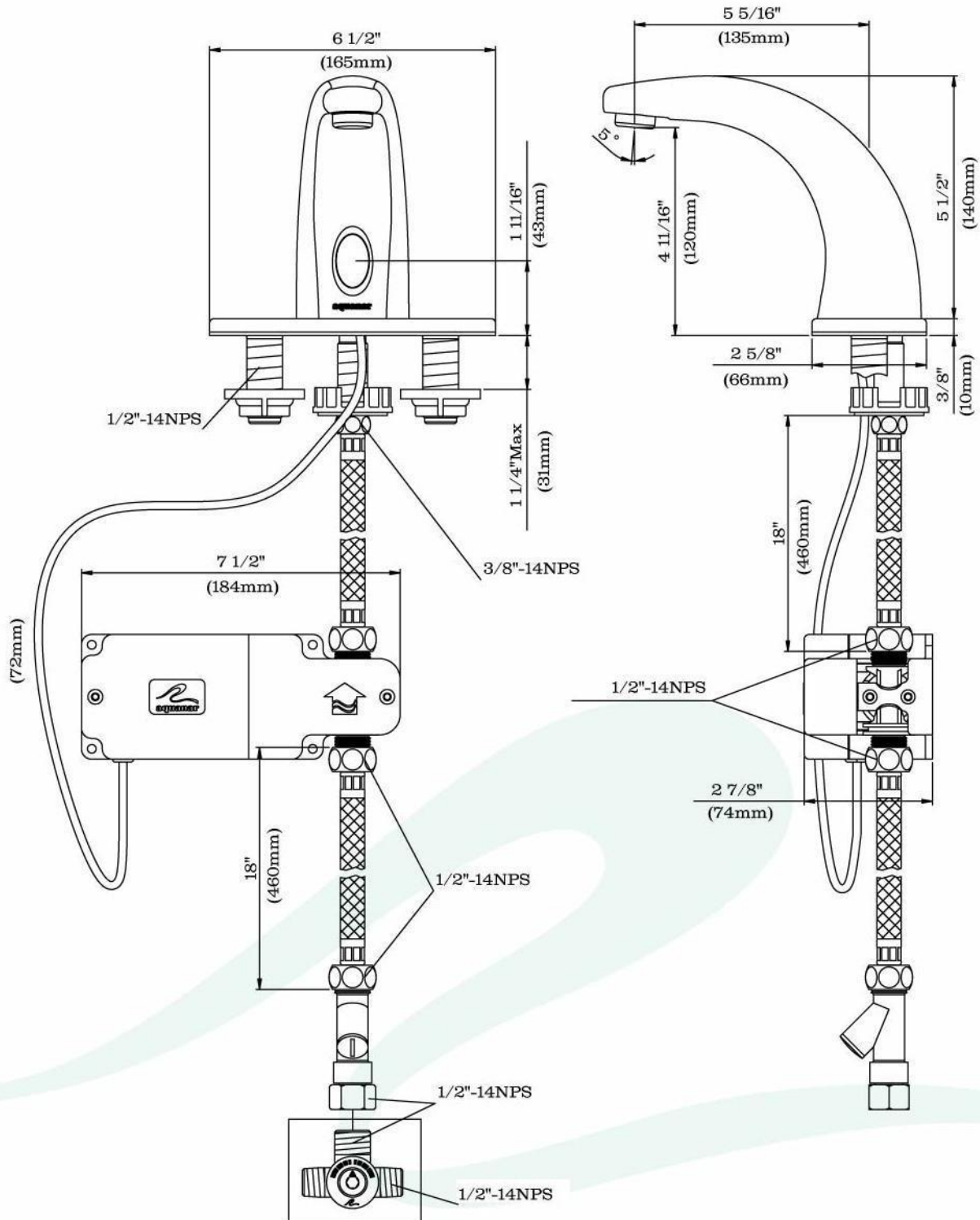
04- 104 Nozzle, .5 gpm

04- 116 Nozzle, vandal proof 0.5 gpm
note; see mixer section for add info.



1870B Series

intelligent™ Electronic Lav Faucet, Battery Operated TECHNICAL SPECIFICATIONS



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PRODUCT DESCRIPTION

Function:

The electronic module detects the presence of the user. A computer based micro-processor with specially designed infra-red sensors is programmed to detect a user within a required distance. The detection circuit is auto-focus and needs no adjustments.

Packaging:

The entire unit is constructed of non-corrosive materials. The faucet is a solid brass body to withstand abuse and a chrome polish finish to ensure years of quality appearance. The comfort 'soft-flow' laminar nozzle highly reduces splash and is equipped with a flow regulator. The electronic module is a single compact unit with the emitter, receiver and micro-controller circuit as a one piece and sealed unit within the faucet body. There are no unnecessary separate circuits and related wiring. Simplicity at its best. There are no electro-mechanical devices for adjustments to hinder sealing or which may require troublesome disassembly.

Note : The faucet is also available with a 4" deck plate as an anti-rotational setup to eliminate vandalism. The battery pack is packaged to house the battery holder (4 x 1.5Vdc 'C' batteries), cable assembly with polarized gold plated contacts and sealed connector of the highest quality. The pack also holds the solenoid valve e/w easy clean barrel mesh filter.

Technical Specifications:

Electrical requirements:	4 x 1.5Vdc 'C' Batteries
Electro-mechanical valve:	6 Vdc
Operating water pressure:	15 to 150 psi
Water flow rate:	1.5 gpm regulated
Water connection:	1/2" NPS

1870B Series

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A) Non-Interrupt Cycle (Run Time)	1 to 15 seconds
B) Detect Delay (Detect Time)	0 to 14 seconds
C) Cold start (Warm-Up)	2 to 30 seconds
D) Sensitivity (Detect Range)	level 1 to level 15 (to 7")
E) Tamper cycle	1 min. Auto-stop pre-set

A) Non-Interrupt Cycle (Run Time)

The user may momentarily be out of detection range, therefore a 2 second non-interrupt cycle is factory-programmed to accommodate such absences and allow continuous water flow

** The non-interrupt cycle is re-programmable from 1-15 seconds.*

B) Detect Delay (Detect Time)

The detection delay is set at 0 second. (Instantaneous)

**The detect delay cycle is re-programmable from 0-14 seconds*

C) Cold start (Warm-Up)

This *intelligent™* feature allows warm water to arrive at the faucet. Activate the faucet and as soon as the water flows, remove hand. The faucet runs by itself for the 6 sec. period, or an allotted time if you wish to re-program for your building application.

NOTE : To conserve water, the cold start cycle is automatically available only once in a 30-minute period.

** The cold start cycle is re-programmable from 2-30 seconds.*

D) Sensitivity (Detect Range)

The detection range is adjustable through re-programming and detects up to 7". Factory-programmed detection range is set at level 7.

- To increase range, re-program sensitivity from level 9 to 15. (15 for a longer range)
- To decrease range, re-program sensitivity from level 7 to 1. (1 for a shorter range)

** The sensitivity cycle is re-programmable from level 1 to 15.*

Function Feedback

Upon activation, when the faucet detects a user or object, a light appears on the detection. This confirms detection and also used in adjustments for different detections distances to accommodate various types of sinks and use.

E) Tamper cycle

To prevent tampering (for example, if for some reason an object is permanently placed in the detect range to simulate a user) the faucet will run, but for a maximum time of 1 minute. The tamper cycle is not adjustable.

The unit will shut off and the control will return to its regular operation only when the object is removed.

1870B Series

intelligent™ Electronic Lav Faucet, Battery Operated INSTALLATION STEPS

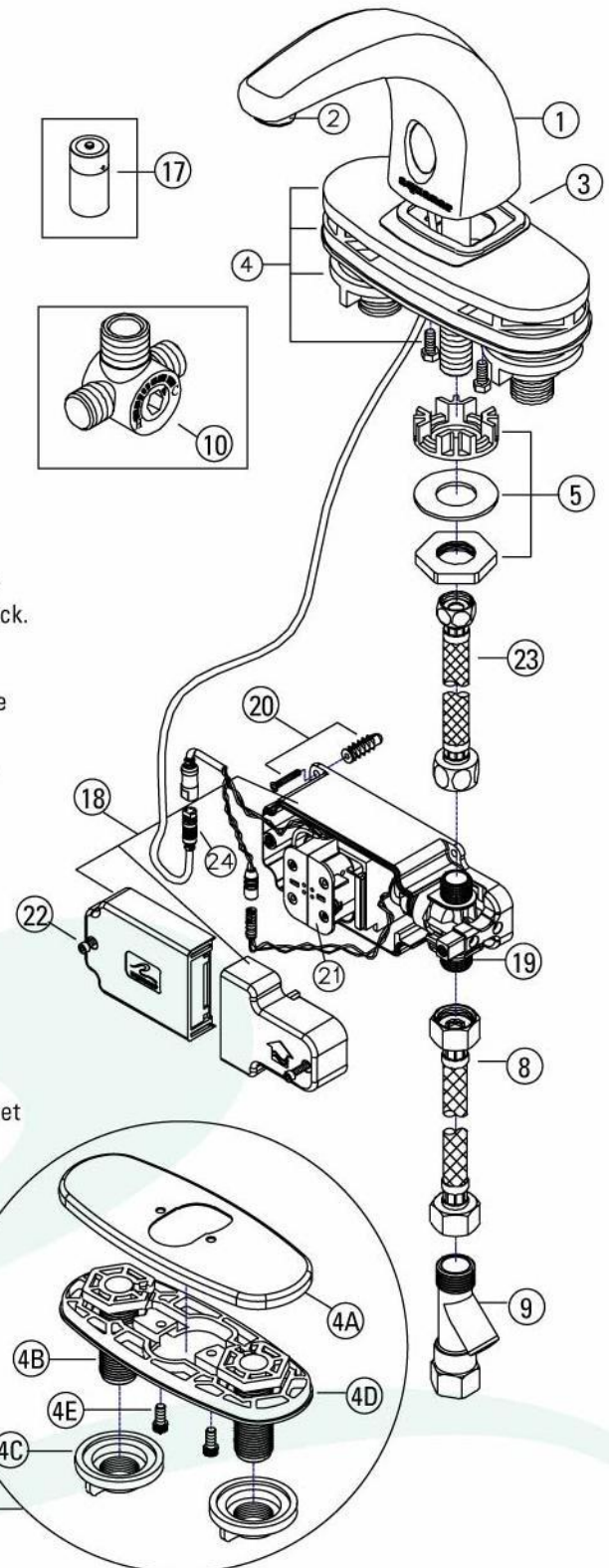
- 1 - Place the black rubber base gasket # 3 on the faucet body # 1.
- 2 - Install the faucet on the sink by passing the brass shank and electrical cable through the center hole.
- 3 - With faucet in position, slip onto the brass shank, the plastic wire washer, metal washer and brass nut # 5.
- 4 - **Note.** The plastic clearance washer is design to allow passage of the wires. Insert properly to avoid pinching cable. Position carefully the cable washer, slip up the flat washer and screw the brass nut until snug. Verify again for correct wire clearance and tighten nut as required.
- 5 - Screw on braided hose # 23 onto the faucet brass shank.
- 6 - With battery pack in hand, find suitable mounting wall location, keeping in mind the length of the connection upper braided hose # 23. Observe 'up' arrow on pack, mark and fix to the wall.
- 7 - Attach the upper braided hose # 23 to the upper outlet side of the solenoid valve. The solenoid valve is pre-mounted in the battery pack.
- 8 - Attach lower braided ss hose # 8 to the Y filter # 9.
- 9 - Connect the Y filter to a tempered water source or to the top of the 'optional' MP1 mixer.
- 10 - To connect the electrical cable to the battery pack, remove cover (left side) to expose the connector. Remove rubber grommet from pack and slip over the faucet cable. Connect the polarized 4 pin connectors together. Place the cable and grommet to the battery pack, making sure the connector is inside the pack. Replace cover with captive screw.
- 11 - Open water source and check for leaks. Place hand in front of the faucet and check for correct function.

1a For the 1870B - 4 (equipped with 4' deck plate)

Place the two threaded plastic shanks # 4B into the black gasket Base # 4D. Insert the black gasket into the chrome deck plate # 4A. With the 2 Hex Socket screws # 4E, attach the assembled deck plate to the faucet body. Install the faucet on the sink by passing the electrical cable through the center hole and the two threaded shanks through the other sink holes. Screw on the black plastic thumb nuts # 4C, carefully positioning the faucet centered in the sink, and tighten. Hand tightening will suffice.

Tools Required:

- Hex driver 5/32"
- Adjustable Wrench



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MAINTENANCE

Aquanar products are design and engineered with precision and specially chosen components. Replacement with genuine Aquanar parts are an important factor in product performance. Non genuine parts may void warranty.

Cleaning the Solenoid valve / filter

- Close water source.
- With flat screwdriver, remove the access 'screw plug' of the 'Y' filter.
- *A small pail can hold dripping water to keep floor clean.*
- Remove barrel mesh filter. Remove debris and rinse out.

Changing Batteries

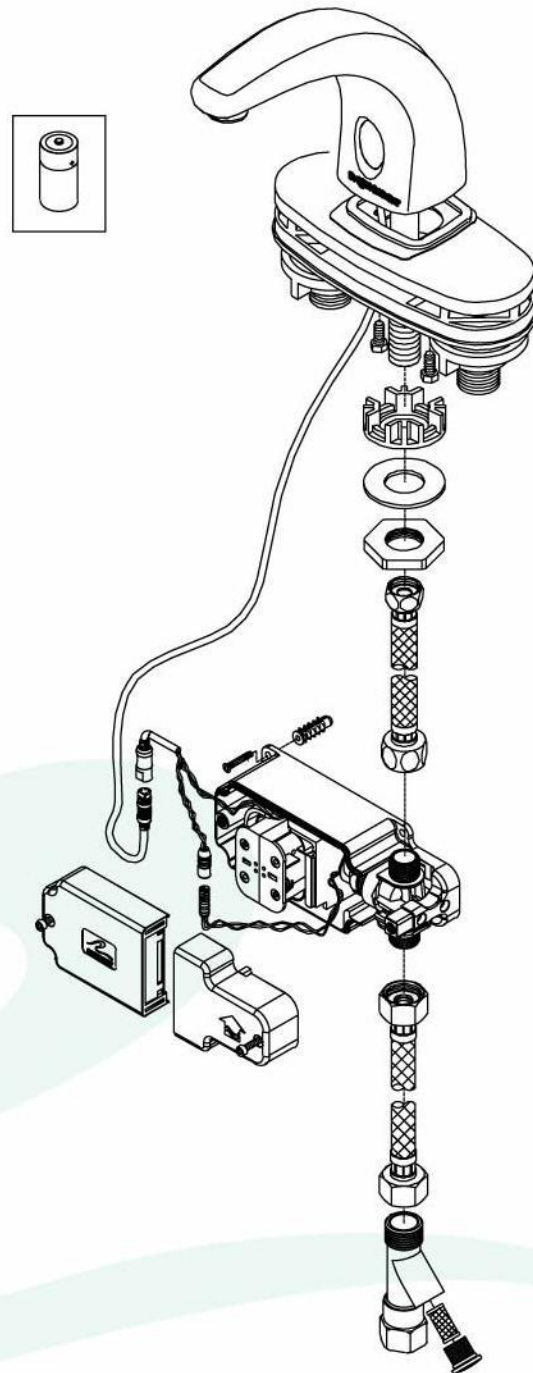
Remove the left side cover door on the battery pack (1 screw).
Pull out battery holder and replace the 4 'C' size 1.5Vdc batteries.
Re-insert the battery holder with the fresh batteries and close cover.

Product Care

Aquanar products are constructed of the highest quality materials. Although durable and robust, abrasives and harsh chemicals can damage surfaces. Clean chrome polish body and lens with a soft damp cloth. Dry with a soft towel.

Re-assembling

Reinstall the filter and o-ring sealed connector, in reverse of the above steps.



1870B Series intelligent™ Electronic Lav Faucet, Battery Operated PARTS LIST

#	Description	Part Number
1	Solid brass body C.P.	02-154
2	Laminar nozzle 1.5 gpm	04-158L
3	Base seal, rubber	02-087
4	4" plate assembly	01-103
5	Nut, Washer & Wire washer	01-088
8	Flexible hose, lower 18" 1/2" x 1/2"	04-058
9	"Y" Filter	01-027
10	Mechanical mixer	AQN-MP1
13	Wedge block	02-070
14	Mounting block with screw	01-089
17	Battery 'C' 1.5v Alky	04-082
18	Battery pack assy	01-050
19	Magnetic valve 6Vdc	04-176
20	Screws & wall Anchor Kit	08-040
21	Battery holder 'C' & cable assy	01-082
22	Screws M4 x 20 mm	08-047
23	Flexible hose, upper 8" 1/2 x 3/8	04-068
24	Electronic Module	AQN-1870B-2

