

1870, 1870- 4 Faucet *intelligent™* Electronic Lav Faucet



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
- e/w plug-in adapter 120/24vac

Features

- Sealed waterproof electronics
- Vandal Proof / Tamper cycle
- Remote control re-programmable
- Smooth flow non-splash laminar nozzle

Certification

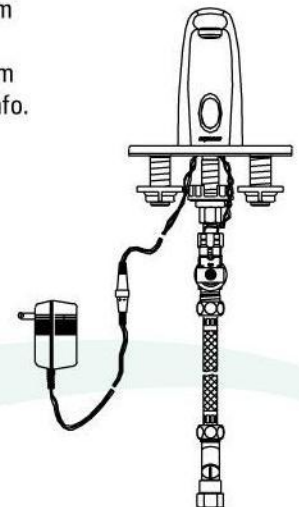
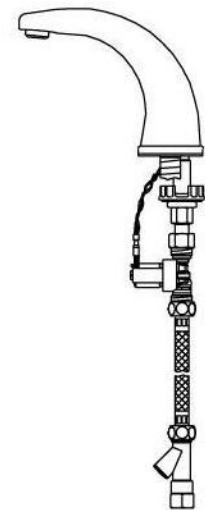
IAPMO cUPC
ADA / ANSI Compliant

Model Choice :

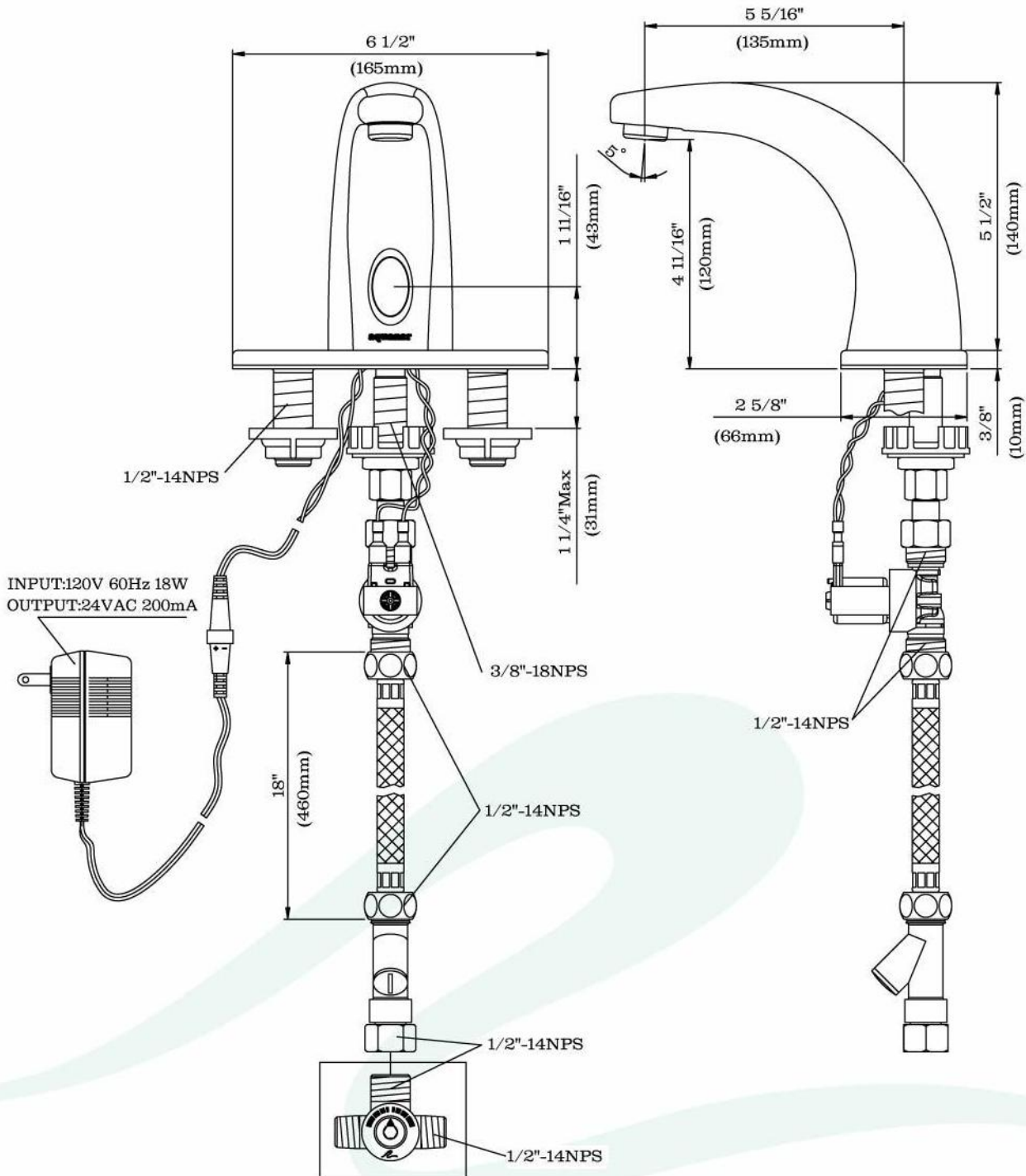
1870
1870M
1870-4 or -8
1870-4M or-8M
M = MP1 mechanical mixer
4 = 4" deck plate
8 = 8" deck plate

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.



1870, 1870- 4 Faucet
intelligent™ Electronic Lav Faucet
TECHNICAL SPECIFICATIONS



1870, 1870- 4 Faucet

intelligent™ Electronic Lav Faucet

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.

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 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. The comfort 'soft-flow' laminar nozzle highly reduces splash and is equipped with a flow regulator.

Note : The faucet is also available with a 4" deck plate as an anti-rotational setup to eliminate vandalism.

Adjustments:

Adjustments are pre-set by the factory for normal-usage; reprogramming the control unit to suit special conditions is possible with an optional remote reprogrammer module. This user-friendly module permits easy function changes in the distance and time cycles, for example:

*Non-interrupt cycle:	0 - 15 seconds
*Detection delay:	0 - 15 seconds
*Cold-start:	2 - 30 seconds
*Sensitivity (detect range):	level 1 to level 15 (to 7")
*Address (Detect Frequency)	Frequency 1 to 4
Tamper cycle:	1 minute auto-stop
(*re-programmable)	

Technical Specifications:

Electrical requirements:	24 Vac 15 V.A.
Electro-mechanical valve:	24 Vac 50/60 Hz
Operating water pressure:	15 to 150 psi
Water flow rate:	1.5 gpm regulated
Water connection:	1/2" NPS

1870, 1870- 4 Faucet

intelligent™ Electronic Lav Faucet

FUNCTION INFORMATION

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) Address (Detect Frequency)	Frequency 1 to 4
F) 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) Address - Detect Frequency

This *intelligent™* feature eliminates possible problems of oppositely (face to face) mounted systems.

Such installation can trigger oppositely mounted units unnecessarily. With the remote, change of frequency, address 1 to 4, makes it impossible for one unit to be inadvertently triggered by another.

**The address frequency is factory programmed at 1 and is reprogrammable from 1 to 4.*

F) 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.

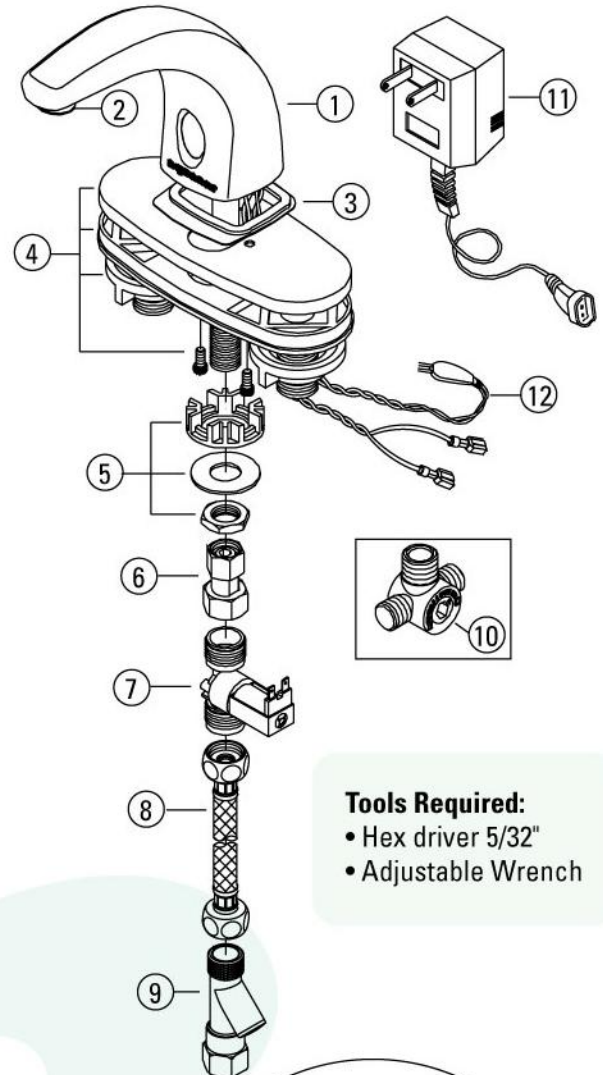
The unit will shut off and the control will return to its regular operation only when the object is removed.

1870, 1870- 4 Faucet intelligent™ Electronic Lav Faucet 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 wires through the center hole.
- 3 - With faucet in position, slip through 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 wires. Position carefully the wire 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 brass connector # 6 on the faucet shank.
- 6 - Screw on the solenoid valve # 7 to the connector # 6. (observe 'arrow symbol' water direction on solenoid) Do not apply sealant. O-ring allows low tightening pressure.
- 7 - Attach the braided ss hose # 8 to the solenoid valve.
- 8 - Attach the braided ss hose to the Y filter # 9.
- 9 - Connect the Y filter to a tempered water source or to the top (outlet side) of the optional MP1 #10 mixer.
- 10 - Electrical connection
 - a- The two wires with insulated terminal tabs connect to the solenoid valve. No polarity is required.
 - b- The paired cable with the 2 pin plug connects to the 120/24Vac adapter. Insert the 'plug-in' adapter to an appropriate 120Vac electrical outlet.
- 11 - Open water source and check for leaks. Place hand in front of the faucet and check for correct function.

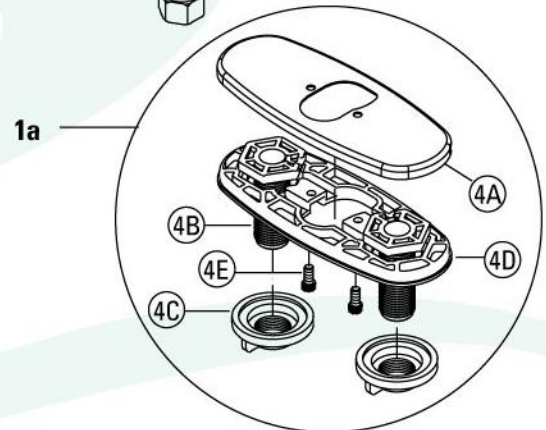
1a For the 1870 - 4 (equipped with 4' deck plate)

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 wires 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



1870, 1870- 4 Faucet *intelligent™* Electronic Lav Faucet 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

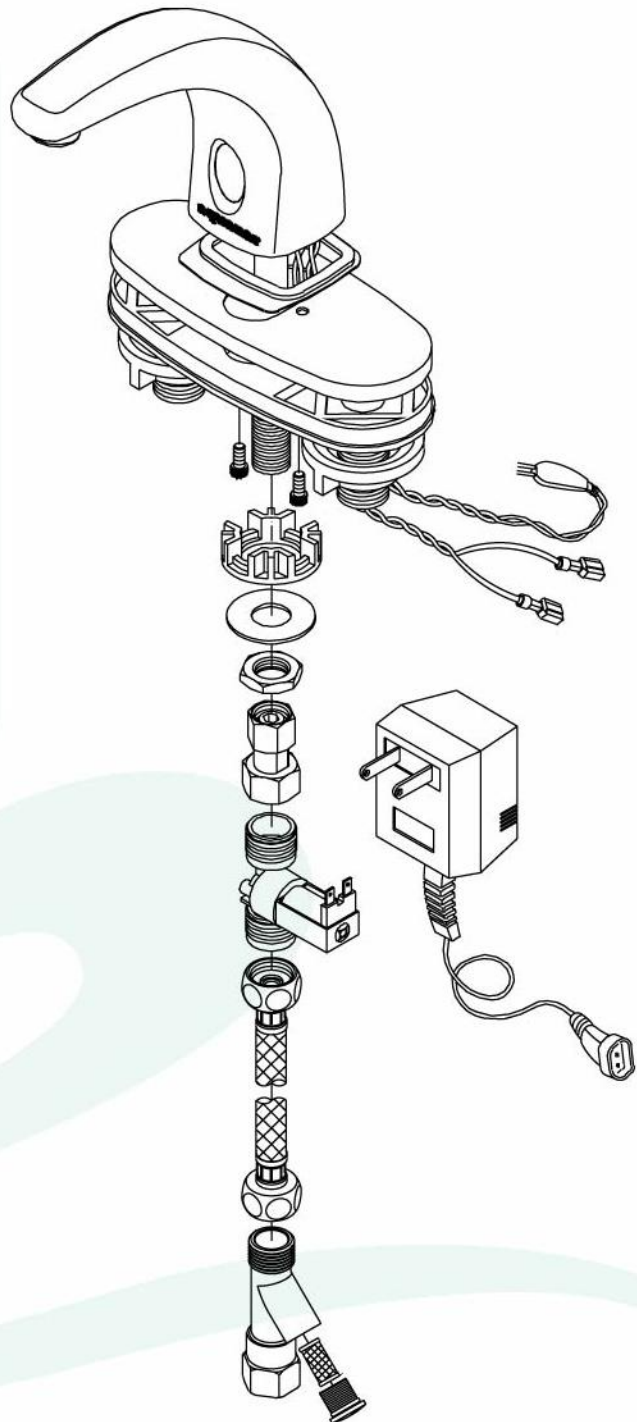
- Close water source.
- With flat screwdriver, remove the access 'screw plug' of the 'Y' filter.
- *A small pail can hold dripping water to keep floor clean.*
- Remove barrel mesh filter. Remove debris and rinse thoroughly.

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.



1870- 4 Faucet *intelligent™* Electronic Lav Faucet 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
6	Pipe assembly, taper base	01-019
7	Magnetic valve 24Vac	04-025
8	Flexible hose 18" 1/2" x1/2"	04-058
9	"Y" Filter	01-027
10	Mechanical mixer	AQN-MP1
11	Plug in adapter 120/24Vac	04-059
12	Electronic Module	AQN-1870-2
13	Wedge block	02-070
14	Mounting block with screw	01-089

