# SANI-LAV FREDUCTS

# **Operating Manual for Hands-Free Floor Mount Stainless Steel Sink**

AC Models ES2-521L and ES2-521L-0.5 Battery Models ESB2-521L and ESB2-521L-0.5





Columbia does not recommend use with harsh chemicals.

# **Product Compliance**

NSF/ANSI 2 Food Equipment, NSF/ANSI 372 Lead-Free Compliant, ASME A112.18.1





### AC OR BATTERY POWERED

#### **Parts List**

- (1) Sink bowl
- ☐ (1) Pedestal base
- ☐ (6) Nuts and washers to attach bowl to pedestal base
- (1) AC or battery powered sensor faucet assembly
- ☐ (1) Strainer assembly with basket
- □ (1) Mixing check valve

# **Tools Required**

- □ Tape measure
- ☐ Adjustable wrench
- ☐ Drill motor and drill bits
- ☐ Pipe wrench
- □ Level
- □ Safety glasses
- ☐ Screw drivers: phillips and standard
- □ Pencil
- ☐ Socket wrench

#### **Installation Instructions**

#### Step 1

- 1. Install strainer assembly.
- 2. Attach bowl to pedestal base by slipping bolts on bowl through openings on pedestal base as shown in illustration A.
- 3. Tighten the 6 nuts to the threaded bolts under bowl. Do not over-tighten.

- 1. Install faucets to the sink following the instructions provided with sensor unit.
- 2. Attach supply tube with elbow to back of faucet.
- 3. Install mixing check valve and compression fitting to control box of each sensor faucet.

# Step 3

- 1. Place sink at the desired location.
- 2. Mark the floor where the four holes are at the pedestal base as shown in illustration B.
- 3. Drill holes as required for mounting hardware (Hardware not included).

- 1. Secure sink to floor.
- 2. Connect waste line to strainer assembly.
- 1. Mount sensor control box at desired location on wall.
- 2. Connect power line from sensor to control box.
- 3. Attach supply tube from faucet to control box.
- 4. Connect hot and cold water from the source to mixing check valve.
- 5. Remove aerator from the spout and flush water system. (see step 7 sensor installation instructions)
- 6. Check connections for leaks.
- 7. Replace aerator onto the spout.

Go to columbiasinks.com for more information on replacement parts and installation videos.



Illustration A

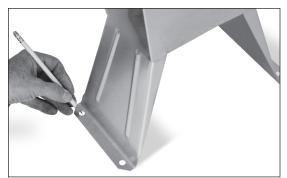


Illustration B

**Notice for California Consumers** 

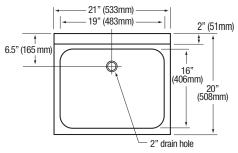
WARNING: This product can expose you to chemicals including Chromium (hexavalent compounds), Lead, and Phthalates (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

NOTE: Lead content originates from Brass components in valves and faucets and is certified under NSF/ANSI 372 as containing less than 0.25% lead in wetted surfaces.

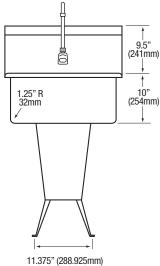
# SINK WITH ELECTRONIC SENSOR

AC OR BATTERY POWERED

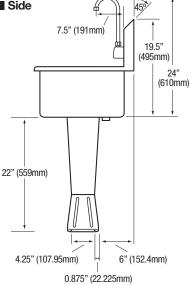
# ■ Top



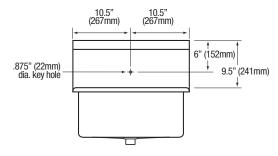
# ■ Front



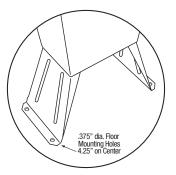
# ■ Side



# ■ Hole Configuration



# **■** Floor Mounting Detail



# **Care and Maintenance**

Regular cleaning will preserve the appearance and integrity of the surface. Stainless steel can easily be cleaned and kept stain-free using various methods.

#### **Recommendations:**

- Clean with an abrasive cleaner like, Bon-Ami or Zud weekly or bi-weekly. Always scrub in the direction of the grain or polish lines. Another option is to use Baking soda. Make sure to rinse well and dry. Illustration A
- Most soaps and detergents contain chlorides, we recommend rinsing the stainless-steel sink with hot water after use, to prevent corrosion. Illustration B
- Regularly dry your sink to prevent water and surface rust marks. Illustration C
- · Do not leave salt in the sink or near a saltwater environment.
- Use a quality stainless steel cleaner and follow cleaner instructions. Wipe along the grain (NOT against). Illustration D

## Things to Avoid:

- · Avoid harsh abrasive cleaners and corrosive chemicals.
- Avoid abrasive scouring pads, carbon steel brushes and steel wool for cleaning as iron particles left behind can lead to rust.
- Avoid the use of oily rags or greasy cloths when wiping the surface. To avoid water spots, wipe dry after use.

#### **Additional Tips:**

- · Regularly drying your sink works wonders to prevent water and surface rust marks.
- · Wear rubber gloves when working with cleaners to protect your hands.
- · Never mix cleaners. Some products react to create dangerous gases.
- There are thousands of blended or compound cleaners on the market. Users are advised to contact suppliers of solvents for information on their applications on stainless steel.
- $\boldsymbol{\cdot}$  DO NOT USE SOLVENTS in closed spaces or while smoking.
- · Note: Columbia does not recommend use with harsh chemicals.



Illustration A



Illustration B



Illustration C

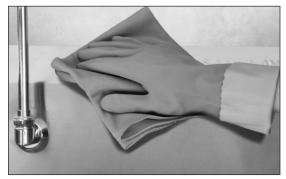


Illustration D

# **SANI-LAV Sensor Faucets**

Wall Mounted AC and Battery Powered Meets ANSI/ASME A112.18.1 M-1989

# ADA Compliant

# **Operation**

- 1. A continuous, invisible beam is emitted from the sensor.
- The faucet is activated by placing hands under the spout within the effective range of the beam. Water starts to flow immediately for as long as the user's hands remain in the sensor range.
- When hands are removed, the water flow stops. The sensor will automatically reset and be ready for the next user.
- In the battery powered version, a flashing red light will indicate a low battery condition.

Faucet Construction Solid brass, chrome plated
Control Circuit Solid state, AC or battery, switchable

Auto. Time-out
 Preset at 20 seconds and adjustable to 10,

30, or 60 seconds

- Line Purge (request only) 2 minute run every 12 hours

or 24 hours

Scrub Mode Delay (request only) 60, 120, 180 secondsSensor Range Preset and adjustable

- Shut-off Delay Presets and adjustable from 1-8 seconds

Control Cable Armored, vandal resistant Solenoid Valve 6V DC, normally closed

Wattage: 0.4W (idle), 5W (in use)Operating Pressure: 5 psi to 125 psi

Flow Control 2.0 or 0.5 GPM, Laminar Flow Control

# **AC Mode**

## **Power Adapter**

Standard Plug-in
 (UL/CSA)
 Power Cable
 Optional Multi-Unit Adapter
 Input AC 120V 60 Hz or 220V
 Output DC 12V, 0.8A/Class 2
 Armored, vandal resistant
 Serves up to 8 faucets

- (UL/CSA) Input AC 120V, Output DC 12V, 3A

**Battery Mode** 

**Battery Powered Models** (4) AA Alkaline Batteries

**Battery Service Life** 400,000 on/off cycles, up to 4 years

# **Package Includes**

- (1) Faucet with electronic sensor
- (1) Control box w/6V DC solenoid
- (1) 12V DC plug-in power adaptor (H-6700C, -DC, -LR and -LRDC only)
- (1) In-line filter with clean-out trap
- (1) 18" Flex, S.S. supply tube, 3/8"(1) 6" Gooseneck Spout
- (1) Mounting hardware
- (1) 2.0 GPM Flow Control(4) AA Alkaline batteries (HB-6700C, -DC, -LR, -LRDC only)
- (1) Battery holder (HB-6700C, -DC, -LR, -LRDC only)

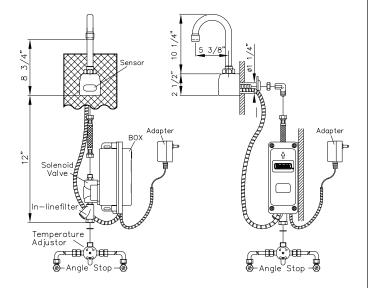
## **Dimensions**

<ul> <li>Base Width (Outside Measurement)</li> </ul>	2-1/4"
- Base Depth	2-1/2"
<ul><li>Faucet Height (Aerator to Base)</li></ul>	8-3/4"
- Faucet Height Overall	12-3/4"
<ul> <li>Depth (Center of Aerator to Center of Faucet Base)</li> </ul>	5-3/8"
<ul> <li>Mounting Bolt Length</li> </ul>	1-7/16"
- Mounting Bolt Pattern	Single-hole mount

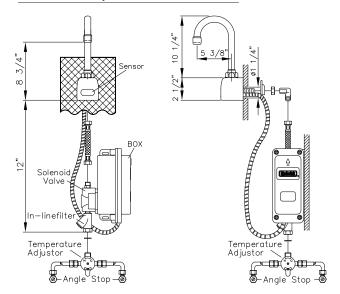
# **Optional Variations and Accessories**

- 0.35, 0.5, 1.5, 2.2 GPM Laminar Flow
- HC-010 Multi-Unit Voltage Adapter (AC Powered Only) 8 units
- HC-0104 Multi-Unit Voltage Adapter (AC Powered Only) 4 units
- HC-001 Mixing/Check Valve (Mechanical)
- HBL-04-LR Thermostatic Mixing Valve with Checks (Low Lead)
- 8" deep Gooseneck and 6" or 8" Swing Swing SpoutModel

Model	Sensor Type	Flow-Rate
ES2RL	AC Powered	Standard 2.0 GPM
ES2RL-0.5	AC Powered	Low-Flow 0.5 GPM



Model	Sensor Type	Flow-Rate
ESB2RL	Battery Powered	Standard 2.0 GPM
ESB2RL-0.5	Battery Powered	Low-Flow 0.5 GPM



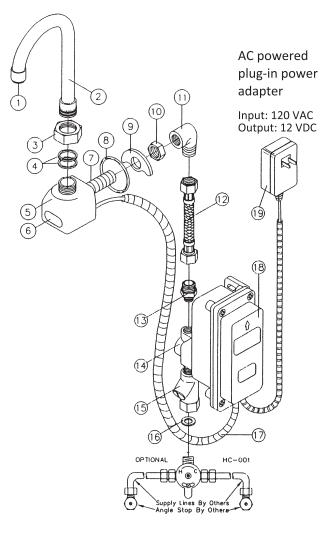
DC Powered Sensor Operated Mixing Faucet

#### **Installation Instructions**

- 1. Prior to installation, thoroughly flush all water lines and replace stop washers, if required.
- 2. To ensure proper operation, "DRY TEST" the faucet by plugging the Sensor Eye Cable (17) into the matching connector on the PC board inside of the Control Box (18).
  - a. AC Powered: Connect the *Power Adapter (19)* to the PC board inside of the *Control Box (18)*, then plug the Power Adapter into a 120 V AC wall outlet. Place your hand in front of the sensor eye and listen for a clicking sound. If there is no clicking sound, call the factory.
  - b. Battery Powered: Properly install new batteries into the battery holder and ensure the battery holder is connected to the PC board. Place your hand in front of the sensor eye and listen for a clicking sound. If there is no clicking sound, call the factory.
- 3. After a successful "DRY TEST", unplug the **Sensor Eye Cable (17)** and **Power Adapter (19)** or battery holder from the PC board.
- 4. Loosen Flow Control Device (1) and assemble the Gooseneck Spout (2) using the Split Washers (4) and Spout Nut (3). Mount the Gooseneck Spout (2) onto the Body (5). Feed the Sensor Eye Cable (17) through the sink wall and tighten the faucet onto the sink using the O-Ring (8), Washer (9), and Mounting Nut (10). Attach the 90-Degree Elbow (11) to the Supply Rod (7).

#### **USE TEFLON TAPE ONLY, NO PIPE DOPE**

- 5. Reconnect the *Sensor Eye Cable (17)* and *Power Adapter (19)* connections described in STEP #2, making sure the cables are seating in the *Control Box (18)* housing properly.
- Attach the Compression Fitting (13) to the Solenoid Valve (14) and connect it to the Elbow (11) using the Supply Tube (12). Insert the Nylon Washer (16) into the swivel nut located on the In-Line Filter (15).
  - a. Pre-tempered or cold water only: Use a union fitting (not supplied) to connect the supply line (not supplied) from the supply stop to the *In-Line Filter (15)*.
  - b. **Tempered water:** Attach an optional Hydrotek *HC-001* or *HC-003* mixing valveto the *In-Line Filter (15)*. Connect the supply lines (not supplied) to the mixing valve.
- 7. Turn on water and check for leaks. Plug the *Power Adapter (19)* into a 120V AC outlet (for AC Powered). Push the reset button on the PC Board. Reinstall the cover for the *Control Box (18)* and tighten screws to ensure water resistance. Place hands in front of the sensor eye to activate water flow. Remove hands and the water should stop. If not, refer to the troubleshooting guide or call the factory.
- 8. Periodically clean the filter element located inside the *In-Line Filter* (15).
- 9. For minor adjustments, refer to the instructions located inside the cover of the *Control Box (18)*.
- 10. **IMPORTANT:** The stop valve should never be opened to the point where the water flow exceeds the flow capability of the fixture. The fixture must be able to accommodate the continuous water flow from the faucet in the event of a failure. Should the fixture overflow due to water exceeding the capability of the fixture and/or the drain pipe, Hydrotek will not be responsible for any damages.



# Parts:

1. Flow Control Device

2. Gooseneck Spout

3. Spout Nut

4. Split Washer

5. Body

6. LED Sensor Cover

7. Supply Rod

8. O-Ring

9. Washer

10. Mounting Nut

11. 90 Degree Elbow

12. Supply Tube

13. Compression Fitting

14. Solenoid Valve

15. In-Line Filter

16. Nylon Washer

17. Sensor Eye Cable

10 C---t--- | D----

18. Control Box

19. Power Adapter

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Sensor Operated Mixing Faucet

## **Troubleshooting Guide**

Normal Operation: When power is connected, the faucet will immediately perform diagnostic function. You will hear a clicking sound and see lights flash. When the user's hands are placed under the spout, the light will flash once and water will start to flow. Water flow will stop when hands are removed. The red indicator light will flash when the batteries are low.

Turn the manual handle clockwise to increase temperature and counter-clockwise to decrease.

Problem	Possible Cause	To Diagnose	Remedy
	Water not turned on	Check water supply	Turn water on
	Power supply failure	No light, no clicking:  • Check batteries  • Check power adapter	Reinstall or replace batteries/ Replace power adapter
	Low battery	Light continues to flash	Replace batteries
	Electronic PCB / Sensor is defective	No light, no clicking: • Reinsert batteries • Reattach power adapter	Replace electronic PCB
Faucet will not turn on:	Solenoid valve is clogged	Solenoid is clicking but no water is coming out	Clean solenoid
	In-line filter is clogged	Open clean-out trap and check filter screen	Clean or replace filter screen
	Solenoid coil is defective	Insert new batteries or reattach power adapter. Light blinks but no solenoid is clicking	Replace solenoid coil
	Flow control is clogged	Open flow control device and check	Celan the flow control device
Faucet will not shut off, has low glow, or drips:	The solenoid valve is normally closed. Turn off water and activate the faucet. If there is a clicking sound, the solenoid valve is dirty. If there is no clicking sound, then check the solenoid valve. If the faucet is dripping, clean the solenoid valve.		

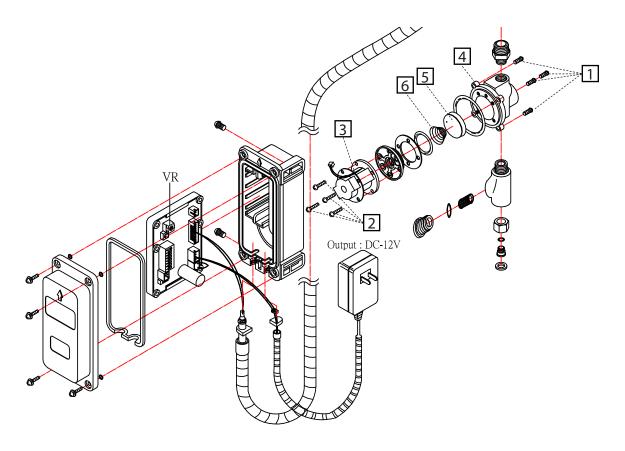
**IMPORTANT:** Periodic maintenance is required for smooth and trouble-free operation of this faucet.

For service and inquiry about available repair kits, please call Hydrotek Technical Support at (800) 922-9883.

# **Care and Cleaning Instructions:**

- WARNING! Using abrasive or chemical cleaners will damage the chrome or decorative finishes.
- Use only soap and water to clean the finish, then wipe dry with a clean cloth.
- If chemical cleaners are used for other parts of the lavatory, ensure that the faucet is protected from potential contact from those cleaners.

Sensor Operated Mixing Faucet **Solenoid Valve Cleaning** 



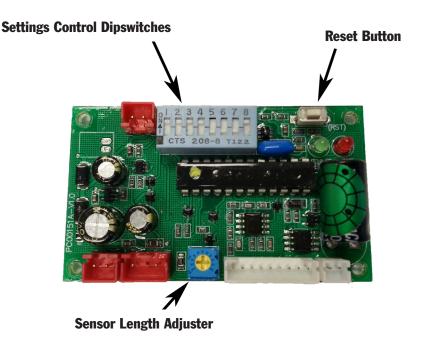
- 1. Turn off water supply at stop valve.
- 2. Remove control box (if possible) to gain access to the solenoid valve.
- 3. Remove four Screws (#1) and separate the valve from the box.
- 4. Remove four Coil Screws (#2) and separate Coil (#3) from Valve Seat (#4).
- 5. Clean or replace Control Disc (#5), Disc Spring (#6), Piston, Piston Spring, and check the Piston Sleeve for corrosion.
- 6. Re-install all parts in same order as the diagram below
- 7. Re-install solenoid on the control box and remount box in water line.

- 8. Check and clean Filter Screen (#24) in Filter Body (#22).
- 9. Reset P.C. Board and make sure solenoid clicks open and thumps closed.
- 10. Turn on water and check for leaks and proper operation.

(For further questions, please call Hydrotek Tech Support at 1-800-922-9883 ext. 103)

Sensor Operated Mixing Faucet

# **Control Module Settings**



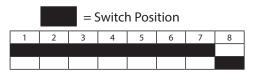
Shut Off Time Delay (After hands are removed)

Sw1	Sw1 Sw2 Sw3 Delay		
On	+		1 Sec
On	On	On	1 3ec
On	On	Off	2 Sec
On	Off	On	3 Sec
On	Off	Off	4 Sec
Off	On	On	5 Sec
Off	On	Off	6 Sec
Off	Off	On	7 Sec
Off	Off	Off	8 Sec

Automatic Time Off (maximum run time after activation)

Automatic Time On (maximum run time arter		
Sw4	Sw5	Time Off
On	On	OFF
On	Off	15 Sec
Off	On	30 Sec
Off	Off	60 Sec

**Factory Preset** 



# **Sensor Distance**

Sw6	Mode	Distance
On	Std	4" - 12"
Off	Enhanced	10" - 12"

To increase distance, turn adjuster CLOCKWISE To decrease distance, turn adjuster COUNTER-CLOCKWISE

# Faucet Switch - DO NOT TOUCH

Sw7	Sw8	Mode
On	Off	Auto Faucet

**IMPORTANT:** Always push the Reset Button after any adjustments