

## 1. SPECIFICATIONS:

Automatic Sensor Detection Range {inches (mm)}	4-3/4 ± 1-1/2 (121 ± 38)
Adapter Type Required	6 VDC from 120-240 VAC Plug-In Adapter Model No. 72-ACA
Dispensing Volume/Weight {fl oz (ml) / oz (gm)}	0.034 ~ 0.051 (1 ~ 1.5) / 0.33 ~ 0.4 (2.4 ~ 2.9)
Dimensions Spout (W x H x D) {inch (mm)}	1-15/16 x 4 x 5-9/16 (49.2 x 101.3 x 142)
Dimensions Pump (W x H x D) {inch (mm)}	4-5/8 x 12-1/4 x 5-1/16 (117.4 x 310.4 x 129.2)
Operation Mode	Automatic from Sensor Trigger
Sensing Delay Time (msec)	500 ~ 1k
Room Temperature {°F (°C)}	41 ~ 104 (5 ~ 40)
Supply Reservoir Type {fl oz (ml)}	Reusable, Replaceable 50.7 (1500)
Soap Acidity-Alkalinity Range (pH)	5.5 ~ 8.5
Soap Viscosity {cP (mPa·s)}	1-3000
Spout Material & Finish	316 SS, Bright finish only
Unit Net Wt (empty) & Shipping Wt {lb(kg)}	2.6 & 3.3 (1.17 & 1.49)
Intrusion Protection	IPX4 - Sensor fully protected from water.

## 2. ITEM LIST:

No.	Description	Qty.
1	Funnel key	1
2	Metal Inlay Finish Plate	1
3	Top cap	1
4	Sensor assembly	1
5	Spout Assembly	1
6	Sensor Lens	1
7	Air Venting tube	1
8	O-ring	1
9	Elbow connector	1
10	Nozzle Tip (w/o mesh outlet)	1
11	Soap tube	1
12	SUS ring	1
13	Rubber washer for Escutcheon	1
14	SUS washer	1
15	Housing Locking nut	1
16	Refill tube assembly	1
17	Control box assembly	1
18	Mounting Bracket	1
19	Refill tube rubber washer	1
20	Soap pump & tank assembly	1
21	AC Adapter (part# 72-ACA)	1
22	Paddle-Key	2
23	Socket wrench	1
24	Plastic Anchor	3
25	Mounting Screw	3
26	Foam Pad	1

Figures are best viewed online for enhanced clarity

## 3. BEFORE INSTALLATION (See also Installation Mounting Template 1902271650) READ THIS INSTRUCTION SHEET COMPLETELY BEFORE STARTING INSTALL and RETAIN for future reference:

1. Provide horizontal and flat, clean and smooth mounting surface for Spout Escutcheon. (Item 13, Rubber Washer, under Spout Escutcheon)
2. Make sure there is enough room around spout to adjust position for final assembly and make sure there is adequate space to place pump-control-tank module under vanity within reach of Sensor Assembly Cable and Soap Supply Tube. See Fig. 2 in Section 5.
3. Ensure there are no obstructions in front of unit in sensor zone.
4. Check operation of unit while holding in place by hand **BEFORE** permanent installation.

## 4. RECOMMENDED INSTALLATION, SPOUT:

RIM HEIGHT<sup>†</sup> MAX 1-3/16" (30)  
DISTANCE 9-3/4" (248) MAX X;Y  
Use "Touch Mark" on Template (MT p/n 1902271650) and see Section 5 INSTALLATION STEPS  
Z is 4-5/8" (117.5) Please ensure the nozzle of the soap dispenser is within the washbasin.

Fig. 1 Fig. 2

Install the spout with the sensor facing forward, (Fig. 1) and/or ensure there is no interference in the path of the sensor. When installing the spout near a sensor activated faucet, ensure the path of the sensor on each unit does not intersect each other (Fig. 2).

## 5. INSTALLATION STEPS, Pump-Control-Tank Module

1. Drill a 1-1/2" Dia. (Ø38) hole in the counter top after checking for appropriate clearances under the vanity (see Fig. 1 and Fig. 2).
2. Put the soap dispenser with rubber washer (item 13) through the hole in the Counter Top (Fig. 2). Place the SUS washer (items 14) on the thread on the shaft under the vanity. Use the Screw Nut (Item 15) to fasten the soap dispenser to the washbasin.
3. Tape the installation mounting template (1902271650) at the appropriate location on the mounting surface.
4. Put the mounting template in the best installation position on the wall according to the test fit with tubes and cables (Fig. 2). Do not tilt the unit during installation. Drill two (2) 1/4" Dia. (Ø6.4) holes at marked locations on mounting template.
5. Insert two (2) plastic anchors (supplied) into drilled holes (Fig. 3); remove template.
6. Insert two (2) screws (supplied) into plastic anchors and leave 3/16" (4.8) space from the wall under head (Fig. 3 & Fig. 4) for hanging dispenser.
7. Hang the dispenser on the two (2) screws through the keyhole slots at backplate top. Tighten both screws (Fig. 5)
8. Connect the sensor wire (A), the soap tube (B), and the venting tube (C). (Fig. 6)
9. Connect the corrugated soap tube to the bottom of the dispenser shank. Ensure to thread in completely. (Fig. 7)
10. Connect the bottom coupler of the corrugated soap tube to the tank fill port. Ensure the rubber washer inside the coupler fitting stays in place. (Fig. 8)
11. Connect the AC adapter pack to complete installation (Fig. 9). The LED will flash to signal low soap level as the default setting after installation. Refer to Page 2 of this OM, Section 6, Fig's 10 through 12 to fill soap.

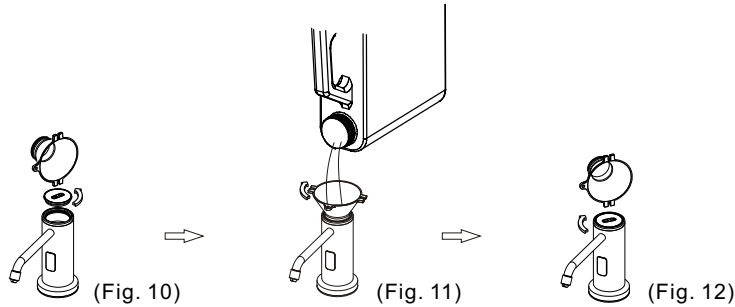
Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9

## 6. OPERATION INSTRUCTIONS

### A. Filling Soap

1. Open the fill port cap with the funnel-key or the provided paddle-key. (Fig. 10)
2. Thread in the funnel-key to the fill port to fill soap. (Fig. 11)
3. When the soap level is filled a buzzer will sound. Stop refilling when the warning is heard. Do not overfill. The auditory warning will last for 20 seconds during which time the sensor will be turned off to prevent unwanted activation.
4. Replace the cap after soap filling and use the funnel-key or paddle-key to tighten. (Fig. 12)
5. Place hands in front of the sensor to prime the system. The soap dispenser will activate up to 10 times or until hands are removed to finish priming.

**Note:** Soap dispenser will automatically dispense once every 48 hours of inactivity to prevent clogging in the soap tube and at the nozzle.

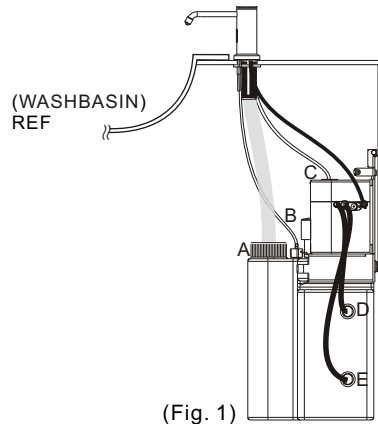


### B. User's Instructions

1. Place hand below the dispenser spout within the sensing range. The dispenser will automatically release the preset amount of liquid soap from the nozzle spout.
2. Obtain additional soap by withdrawing hand and then again placing hand below the dispenser spout within the sensing range.

## 7. PERIODICALLY CLEAN THE TANK (Every 10 soap refills or 6 months, whichever is sooner)

1. Disconnect the power supply.
2. Disconnect the corrugated soap tube (A), the air-venting tube (B), the soap tube (C), and the two soap level sensors (D & E). (A,B,C,D,E. Fig. 1 below, right)  
Retain the rubber washer inside of the corrugated soap tube.  
Remove tank from mounting bracket.
3. Fill the soap tank with water and shake it lightly.  
Manually press the soap pump a few times (full strokes, 3~8 times) to allow water to rinse through and clean the soap pump.
4. Reinstall the corrugated soap tube (with rubber washer {item 19} reinstalled into coupler), the venting tube, the soap tube, and the two soap level sensors disconnected in step 2 above. (A,B,C,D,E. Fig. 1 below, right).  
Reinstall the soap tank into the mounting bracket.
5. Reconnect the AC Adapter plug into the socket.



## 8. SENSING RANGE

Sensing is automatically controlled to set the appropriate distance for the triggering zone. This is based upon mounting height above the counter and the ambient and reflected lighting conditions. There are no user adjustable controls for this feature. It is important to observe the guidelines in Section 4 (on reverse side of these instructions) and install unit to avoid false or inadvertent triggering from near-field obstructions and environmental conditions. Orientation of spout to avoid "seeing" faucet running water and the arm or shirt cuff of a user will provide a more satisfactory experience for the user.

## 9. IMPORTANT NOTICE

1. Ensure no bright light source is aimed or reflected at the sensor.
2. Use fresh new liquid soap only and clean the soap container properly before each re-fill. Deposits of old soap will lead to malfunction and jamming.
3. Do not dilute liquid soap unless concentrate. **DO NOT** use soap containing abrasive. Observe indicated viscosity factor of liquid soap.
4. Do not immerse the soap dispenser in water or clean it under running water. This will lead to short circuit.
5. Should the dispenser be out of order do not attempt any repair work. Call your dealer for professional assistance.

## 10. CLEANING AND MAINTENANCE

**DO NOT** use steel wool or cleansing agents containing alcohol, acid, abrasives, or the like. Use of any cleaning or maintenance products containing these substances could damage the finish of the soap dispenser. For surface cleaning, use **ONLY** mild soap and water on a wet cloth, then wipe dry with a clean cloth or towel. When cleaning bathroom tiles or counters, protect the soap dispenser from any splattering of harsh cleansers.

## 11. TROUBLESHOOTING

Problem Symptom	Solution Diagnostic
Unit does not respond at all or has delayed response	<ul style="list-style-type: none"> <li>• Check all connections.</li> <li>• Clean any dirt/smudges from sensor.</li> <li>• Remove any obstructions near or in front of sensor.</li> <li>• If using AC adapter, make sure it is plugged into outlet completely and that adapter is supplying correct power (see sections 1,5).</li> </ul>
Unit activates, but no soap is dispensed	<ul style="list-style-type: none"> <li>• Check soap qualities, properties and level in reservoir.</li> <li>• Check spout nozzle, soap supply tube, and valve pump for clogs.</li> </ul>
LED indicator blinking green	<ul style="list-style-type: none"> <li>• Refill soap.</li> </ul>
Low volume soap dispensed	<ul style="list-style-type: none"> <li>• Remove soap tank and wash out spout nozzle and valve pump and replace with fresh new soap.</li> </ul>
Soap leaks at bottom of housing	<ul style="list-style-type: none"> <li>• Check if valve pump is not properly seated on connector neck of reservoir or reservoir is damaged/punctured or top plate connector or soap tube is damaged or not connected properly, or valve pump body is damaged.</li> </ul>
Green LED indicator stays on	<ul style="list-style-type: none"> <li>• The wrong type of soap may have been used or the soap may have thickened and congealed after long periods of inactivity. Change to the right soap type or clean the soap tank and add new soap to return to normal function.</li> </ul>
No over-fill auditory warning during soap refilling	<ul style="list-style-type: none"> <li>• Check all connections.</li> <li>• The soap level sensor may be damaged. Change the soap tank assembly (item 20).</li> <li>• The control box may be damaged. Change the pump-motor-control box (item 17).</li> </ul>