Installation Instructions **EFS Hand Washing Station**



Step One: Mount The Faucet



1. Hand tighten threaded rods into threaded bosses in spout base.



2. Install gasket on base of faucet. Feed soap tube, water line, and power cable through the holes in the sink or deck.



3. Feed the soap tube, water line, and power cable through the side notch in the mounting brackets.



4. Place mounting bracket onto threaded rods and secure to the sink with hex nuts. Before tightening, make sure water line and soap tube pass freely through the deck and bracket, without pinching or kinking.

Step Two: Connect Water Supply

If an existing tempering valve is not in place, one should be installed. Order Chicago Faucets thermostatic mixing valve, 131-ABNF. Follow installation instructions included with the valve.





1. With the mixing valve installed, insert filter into the nut of stainless steel EFS supply hose. Connect and tighten to the outlet port of the tempering valve. Open the supply stops and check for leaks.

Step Three: Install The Dispenser

Determine the location where the dispenser assembly will be mounted. Ensure there is enough space to mount, to open the door, and to make the tubing and electrical connections.



1. To open the enclosure, 2. Find tubing assembly lift the blue cover latch. A hardware bag and tubing assembly are inside the enclosure.



with Y connector. Arrows on the fitting should be pointing toward the Y.



3. Locate the clear polyethylene tube from the spout. Trim the tube if necessary, then push the top end of the Y connector onto the tube.



4. Position the enclosure against the wall. Ensure the tubing assembly and power cable from the spout will reach the bottom of the enclosure.



5. Mark the three mounting holes with a pencil (2 on the top and 1 on the bottom).



6. Drill 1/4" holes where marked and install the provided wall anchors flush with the wall surface.*



7. Determine the best path to route the tubing assembly to reach the dispenser enclosure.



8. Locate the push connect ports on the bottom of the dispenser.



9. Connect the tubing to the push connect ports on the bottom of the dispenser. The clear tube should be installed on the left port and the black tube on the right.

If the tubing is too long, you can cut to length. The cut ends of the tubing must be square, straight, and clean to ensure a proper seal in the push connect ports. Separate 3" of the tubes for connection to the soap dispenser.

10. Locate the cable assembly from the spout and press firmly into the electrical connector on the lower right side of the dispenser. Note: The connector is directional so align it to match the installation orientation.

With the tubing and cable connected additional securing may be required to organize any extra cable or tubing. Use zip ties or wall mount fasteners to secure the extra tubing or wiring.

* The provided wall anchors are intended for use in drywall. If mounting to other wall material such as brick or masonry, you may need to provide appropriate wall anchors or other mounting hardware. Note that the mounting holes in the enclosure are sized for a #10 mounting screw.

Step Four: Initial Startup Procedure

If present, remove the protective film from the UI module screen on the front of the spout. For proper calibration, be sure the area in front of the module sensor is clear of obstructions.



1. Open the enclosure door and install batteries.



2. The lighted indicators on the spout faceplate will flash in sequence as the spout runs through a calibration mode. Allow the dispenser to complete the startup before placing any object in front of the spout sensor.*

Step Five: Install Soap Bottle



 Locate the pump lever arm in the center of the open enclosure. Gently pull down on the end of the handle approx. 45° to an open, locked position.



2. Grasp the bottle and align the black plastic collar to the retention tabs of the dispenser chassis. Press the bottle into the chassis.



3. Make sure the outlet of the bottle is centered over the top of the pump seal. If not aligned properly, reinstall bottle.



4. Press the "Reset" button below the tool access door. The pump actuator cycles, engaging the pump umbrella, raising the pump lever arm, and resetting the bottle dispense counter to "0".



5. Press the prime button until soap is dispensed through the tubing check valves.



6. Run multiple hand washes to clean out dispenser tubing. Oils from plastic parts and tubing will lower foam quality for first dispense cycles.

 EFS Touchless Hand Washing Station
 CHICAGO EAUCETS a deter compare Marning! Hand Wash Only Marning! Hand Wash Only b Crub hands thoroughly. Water will be dispensed automatically. Rinse hands thoroughly.

 Water will be dispensed automatically. Rinse hands thoroughly.
 Do Not Drink

Soap Part Numbers:

- 6100865 Foam Hand Soap
- 6100850 Antibacterial Foam Hand Soap (Triclosan)
- 6101087 Advanced Antibacterial Foam Hand Soap (Benzalkonium Chloride)

Your hand washing station is now ready for operation.

Note: all bottles are 1250mL To order additional soap, call Ecolab, 800-352-5326

* If the lights do not flash be sure the batteries are installed correctly.

TROUBLESHOOTING

UNIT OPERATION

Indicator	Checklist	Question	Potential Resolution	PPE
Dispenser or faucet do not function	1	Is the green light in lower enclosure flashing?	Faucet wire is not properly connected to the enclosure.	
 Prime/Reset buttons are non-functional 	2	Is there any functionality of the unit? Check power source.	Battery power may be too low to operate. Replace batteries.	

WATER LEAKING

Indicator	Checklist	Question	Potential Resolution	PPE
• Water is leaking	1	Is water leaking from mixer or supply stops?	Tighten the leaking connections.	Safety Glasses
	2	Is there a constant flow of water from spout?	Cycle power to latch the water solenoid closed. Replace batteries if low.	

SOAP LEAKING FROM TUBING

Indicator	Checklist	Question	Potential Resolution	PPE
 Soap is leaking 	1	Is the soap leaking from push connector or Y connector?	Press tube into connector to ensure it is fully seated.	Safety Glasses
	2	Is tube seated properly, but leak persists?	Remove tube from connector and trim tubing to create a new sealing surface.	Safety Glasses Safety Gloves

WATER TEMPERATURE

Indicator	Checklist	Question	Potential Resolution	PPE
Water temperature is too cold	1	Are the hot and cold water turned on at the source?	Check that the water shutoff valves are open.	
• Water temperature is too hot	2	Is a tempering valve in place, installed correctly, and working?	Inspect for tempering (mixing) valve. Adjust temp control warmer or colder. Activate the water override button to start the flow of water and note a water temperature change. Additional cycle may be necessary before noticing a temperature change as building water line lengths vary.	
	3	With a tempering valve in place, water temperature is still difficult to control	Tempering valves require minimum house pressures and equal hot and cold line pressure. Replace with different tempering valve or adjust water shutoff position to try to improve water temperature.	

SOAP LEAKING INSIDE DISPENSER ENCLOSURE

Indicator	Checklist	Question	Potential Resolution	PPE
 Soap is leaking at the pump seal Low soap dosage 	1	Is the soap bottle installed correctly?	Ensure the bottle collar is engaged and the outlet of the pump is centered on top of the seal.	
	2	Is the pump seal in good condition?	Ensure the pump seal is still properly installed and in good condition inside the plunger.	
	3	Is the umbrella of the pump fully engaged by the pump carriage?	Inspect that the flexible umbrella of the pump is fully seated under the dose adjuster. Press the prime button to cycle the pump mechanism.	
	4	Is the lever arm moving with the pump carriage?	When the pump cycles, the lever arm should remain up. If it is being pulled down with the carriage, disengage the small internal hooks of the lever arm from the carriage.	

TROUBLESHOOTING

Indicator	Checklist	Question	Potential Resolution	PPE
• Spout sensor is not properly triggering when hands are present	1	Are your hands in front of the sensor?	Reposition hands in front of the clear sensor square near the center of the UI module glass.	
	2	Is the UI module on the front of the spout dirty?	Clean the glass screen with soap and water to remove dirt and debris from the sensor panel.	
	3	Has the power been cycled?	Make sure there is nothing in front of spout. Cycle the power to the dispenser by removing a battery. Let the dispenser restart to recalibrate the IR sensor.	
	4	Has the sensor sensitivity been adjusted?	Enter the Programming Mode and change the sensor sensitivity to a longer range.	

SPOUT SENSOR – NOT TRIGGERING

SPOUT SENSOR – FAULTY TRIGGERS

Indicator	Checklist	Question	Potential Resolution	PPE
• Spout sensor is triggering when hands are not present	1	Is there an obstruction in front of the spout?	Remove any objects that may be triggering the sensor.	
	2	Is the UI module on the front of the spout dirty?	Clean the glass screen with soap and water to remove dirt and debris from the sensor panel.	
	3	Has the power been cycled?	Make sure there is nothing in front of spout. Cycle the power to the dispenser by removing a battery. Let the dispenser restart to recalibrate the IR sensor.	
	4	Has the sensor sensitivity been adjusted?	Enter the Programming Mode and change the sensor sensitivity to a shorter range.	

NOT DISPENSING FOAM SOAP

Indicator	Checklist	Question	Potential Resolution	PPE
 No liquid or foam soap is being dispensed 	1	Is there soap in the soap bottle?	Ensure there is sufficient soap in the soap bottle. See page 3 for soap ordering instructions.	
• Only liquid soap is being dispensed	2	Are the lines primed up to the spout?	Inspect the clear soap line to see if the soap is reaching the check valves of the tubing assembly. If not, press the prime button until line is primed.	
	3	Does the pump mechanism cycle?	Open the dispenser cover and run a hand wash cycle. Inspect the pump mechanism to ensure it cycles the bottle pump. If not, inspect the wiring connections.	
	4	Is the air pump activating?	Open the dispenser cover and run a hand wash cycle. Listen for the air pump to turn on after the pump mechanism cycles. If it does not actuate, inspect the wiring connections to the internal board. Replace pump assembly if faulty.	
	5	Has the quality of foam decreased overtime?	The foam chamber inside the spout body may be clogged. Replace if necessary.	
	6	Is any soap being dispensed?	If no soap is being dispensed, ensure soap is being delivered through the lines. Remove the upper spout body cover to ensure soap tube has not become disconnected from the foam chamber.	

ADJUSTMENT & SETTINGS

Clean Cycle

- The CLEAN CYCLE disables the faucet sensor for 2 minutes so that the area around the faucet may be cleaned without triggering a hand wash cycle.
- 1. Press and hold the water override button and cover the sensor window simultaneously to put the faucet in Programming Mode.
- 2. After a few seconds the right icon on the front UI module screen will flash once. Release the button and uncover sensor area.
- 3. Lower module icons will flash in sequence, indicating faucet is in CLEAN CYCLE. Faucet will reset to hand-washing mode after 2 minutes.

NOTE: The following setting adjustments can be modified only within 30 minutes of connecting power source. To make changes after 30 minutes, cycle the power to the faucet by disconnecting the power source for at least 10 seconds, OR press and hold the RESET button inside the enclosure for at least 5 seconds.

Dual Soap Dispense

Dispenser default is set to actuate bottle pump once during hand wash. Follow these steps to activate dual soap dispense if double amount of soap is required.

1. Press and hold the water override button and cover the sensor window simultaneously to put the faucet in Programming Mode.

2. After a few seconds the right icon on the front UI module screen will flash once.

- 3. Continue to hold until icon flashes consecutively 3 times. Release button and uncover sensor.
- 4. The 3 icons will flash across the module twice to indicate the setting is now changed to dual soap dispense.

Single Soap 1. First method: Reset **Dispense** ALL the adjustable

If the soap dispenser was previously changed to dual dispense it can be changed back using two methods.

- 2. Second method: Make sure the water override button is enabled (default). hold both the "RESET" Press and hold the and "PRIME" buttons water override button and cover the sensor seconds. The light will window simultaneously flash indicating reset. to put the faucet in Programming Mode.
- 3. After a few seconds the right icon on the front of the UI module screen will flash once.
- 4. Continue to hold button and cover sensor until icon flashes 8 times. Release button and uncover sensor area.
- 5. The 3 icons will flash across the module twice to indicate the setting is now changed to single soap dispense.

Faucet Sensing **Range Adjustment**

By default, faucet operation will begin as soon as hands are placed directly under the outlet. A longer or shorter sensing range mav be selected by following these steps.

1. Press and hold the water override button and cover the sensor window simultaneously to put the faucet in Programming Mode.

settings to default.

To do so, press and

simultaneously for 5

2. After a few seconds the right icon on the front UI module screen will flash once. Continue to hold the button and cover the sensor. The icon will continue to flash consecutive sets of flashes.

3. For the shortest range wait 4 flashes. For a longer range wait 5 flashes. For the longest range wait 6 flashes. Release button and uncover sensor after the desired number of flashes.

- 4. To change back to default sensing range, repeat steps 1 & 2. After nine consecutive flashes, release button and uncover sensor.
- 5. Any time these steps are followed, the 3 icons will flash across the module twice to indicate the setting has been changed.

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