

# Lafferty Equipment Manufacturing, LLC Installation & Operation Instructions

## Model # 976640 · Satellite PF Entryway Foam Sanitizer

### REQUIREMENTS

#### Ready-to-Use Chemical Solution

Temperature	up to 160°F
Pressure	35 to 75 PSI
Flow	1.34 GPM @ 40 PSI
Supply Line	1/2"

**Compressed Air** up to 3 CFM

**Hose** 3/4" ID x 10'

**Nozzle** Entryway Spreader

### OPTIONS

#### Regulate the Operation of Multiple Satellite Entryway Foam Sanitizers

Timed Entryway Satellite Controller (120V)	# 976625
Timed Entryway Satellite Controller (24V)	# 976625-24V
PLC Jazz Entryway Satellite Controller (120V)	# 976630
PLC Jazz Entryway Satellite Controller (24V)	# 976630-24V

#### Central Pump Systems (AODD)

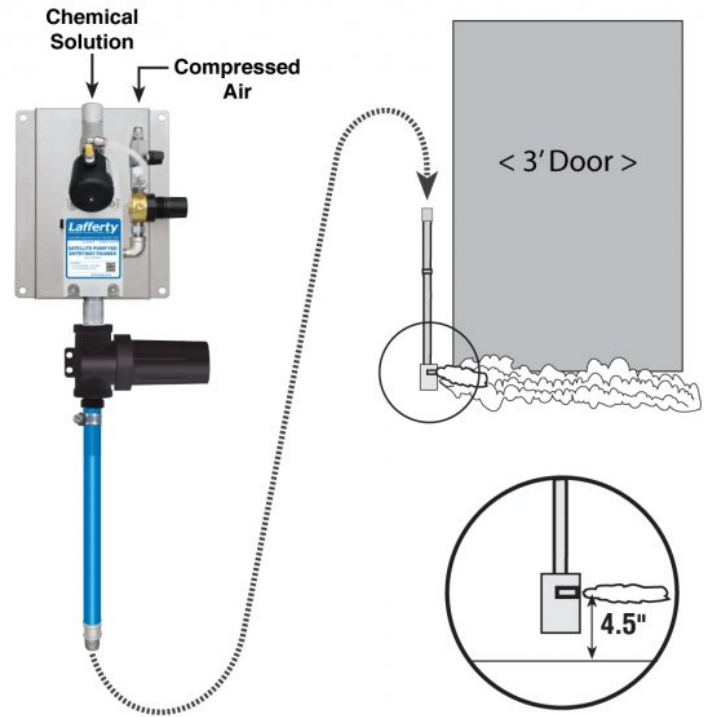
Mini-Central Pump System (1/2" PP)	# 919050
Central Pump System (1" SS)	# 919060SS

#### High Flow Level Masters Provide an Automatic Supply of Ready-to-Use Chemical

60/10 High Flow Level Master	# 989106
60/20 High Flow Level Master	# 989108

#### Foam Solution Check Valves & Strainer

Check Valve, PP, 1/2" (EPDM)	# 491409
Check Valve, PP, 1/2" (Viton)	# 491411
Check Valve, 316SS, 1/2", MF (Teflon)	# 491348SS-T
Strainer, "Y", SS, 1/2" MF	# 150350-1



**Lafferty**  
EQUIPMENT MANUFACTURING LLC  
CFS TECHNOLOGIES

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**WARNING! READ ALL  
INSTRUCTIONS BEFORE  
USING EQUIPMENT!**



### OVERVIEW

The Pump Fed Satellite Entryway Foam Sanitizer is an automated foam applicator for projecting sanitizing chemicals on to floors of 3' wide employee walk doors to prevent cross contamination. When activated, this system is fed with RTU chemical solution from a central chemical feed system. Rich, clinging foam is created by injecting compressed air into the solution to greatly increase volume and coverage ability. Foam is then projected through the discharge hose and Spreader™ nozzle. Up to 10 Satellite units are activated and operated by compressed air from a timed Entryway Satellite Controller - no electrical connection is required at the entryway location. All units will activate and deactivate at the same time.

## SAFETY & OPERATIONAL PRECAUTIONS

- For proper performance do NOT modify, substitute nozzle, hose diameter or length.
- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear protective clothing, gloves and eye-wear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- Follow the chemical manufacturer's safe handling instructions.
- Turn off solution supply and air when unit is not in use for extended periods.

## TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

*Illustration on Page 1 shows overall system setup.*

Run a common 1/2" ID compressed air supply line from the Satellite Controller to each Satellite . The size of the airline may need to be 3/4" depending on the distance and number of Satellite Entryway Foamers being installed. You will need up to 4 CFM at 60 PSI per station. If in doubt, **oversize** the airline. You can use short 3/8" tubing to connect the main airline to each Satellite.

1. Install foam enhancer to entryway foamer discharge. The arrow on the foam enhancer should point UP - opposite the flow direction.
2. Mount the unit to a suitable surface near the entryway.
3. Connect the unit to the spreader nozzle using only the provided 10' hose, or extend the discharge using hose or piping that matches the ID of the provided hose (hose ID is very important). Use as few elbows as possible.  
Minimum length of the total hose/pipe between unit and nozzle is 10'.
4. Mount the spreader nozzle slot several inches off the ground (refer to Page 1 illustration for details)
5. Connect airline from the Satellite Controller to the unit and close the air ball valve.
6. Connect chemical solution supply - **a solution check valve is recommended.**

## TO OPERATE

### Testing & Adjustment

The Satellite Entryway Foam Sanitizer is equipped with an air ball valve the unit can be shut off or isolated at any time by closing the air ball valve. The unit will not operate when the air ball valve is closed, regardless of the central Satellite Controller settings. **Do not use the air ball valve to control air flow.** This ball valve must be fully open for the unit to operate correctly.

For initial set up and testing you can temporarily, connect a separate compressed air supply to the unit.

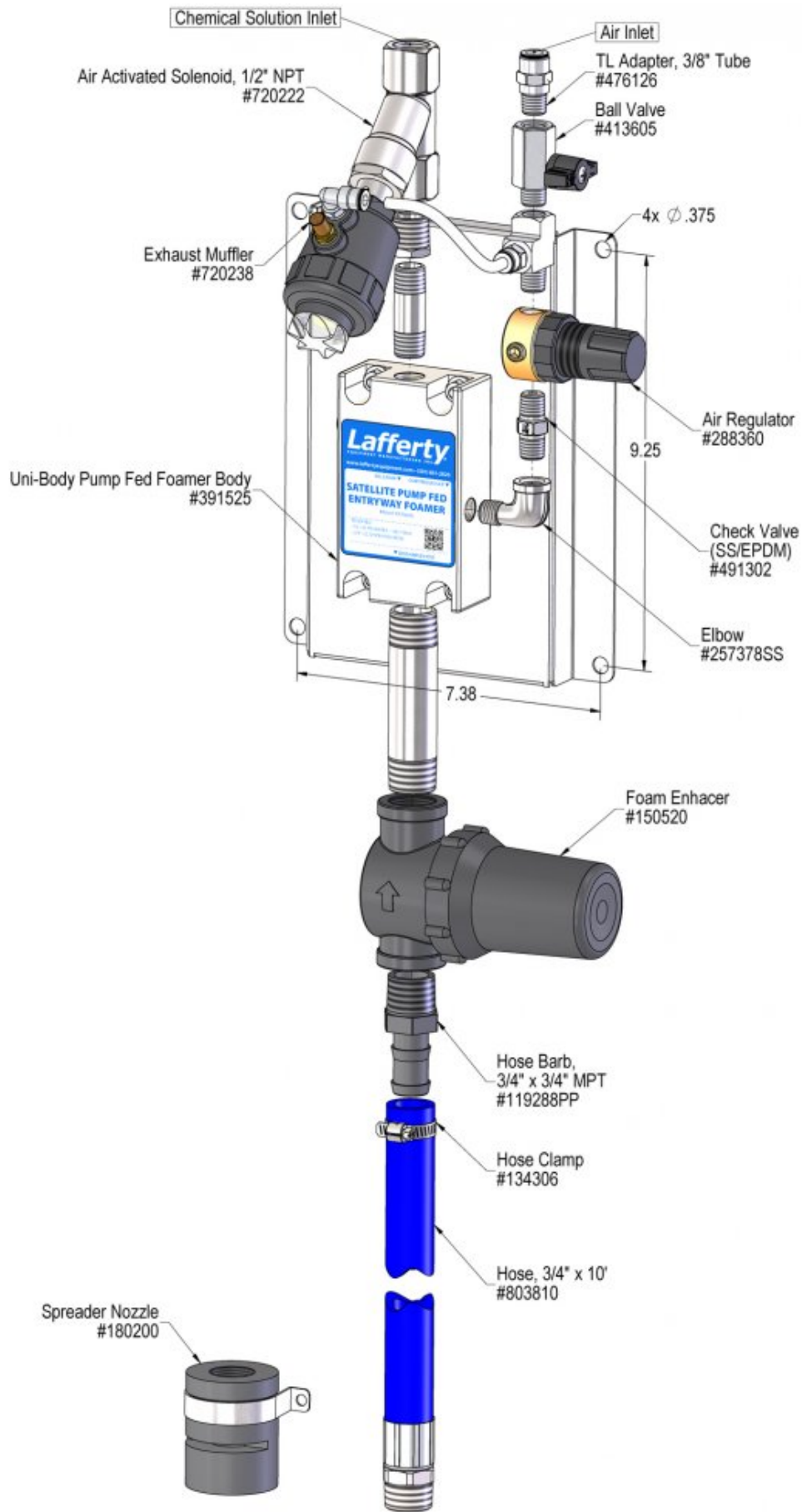
1. Open the air ball valve completely to activate the unit.
2. Wait a few seconds and observe foam consistency.
  - Use the least amount of air needed to achieve good foam quality to prevent solution pressure fluctuations from affecting performance. Air pressure must be kept lower than solution pressure.
  - To adjust foam consistency pull out on the air regulator knob, turn slightly clockwise for dryer foam and counterclockwise for wetter foam. Wait a few seconds to see each adjustment.

### Testing Procedure when unit is connected to a Timed or PLC Jazz Satellite Controller:

1. Follow the instructions below for the Controller model you have installed.
  - **Timed Entryway Satellite Controller** — The timer is preset to run for 60 seconds to allow for final adjustments. Turn on power to the Controller, then follow steps 2 and 3 under Recommended Testing Procedure, above.
  - **PLC Jazz Entryway Satellite Controller** — Turn off air to any additional satellite units that are connected to the controller. Follow the Jazz Controller instructions to set the system to Manual Operation (page 4) for several minutes, then follow steps 2 and 3 under Recommended Testing Procedure, above.
2. When testing is complete, close the air ball valve at the unit. Follow the Controller instruction manual to re-set the Controller for standard operation.
3. Re-open the air ball valve at all units to allow activation by the Timed or PLC Jazz Satellite Controller.

## UNIT FLOW RATES

PSI	GPM
35	1.25
40	1.34
50	1.50
60	1.64
70	1.77
75	1.83



## Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Foam surges.	1, 2, 3, 4, 6, 7, 8, 9, 10, 11	13, 15, 16
B) Foam output too wet.	2, 3, 4, 6, 7, 8, 9, 10, 11	13, 14, 15, 16
C) Foam output too dry.	1, 5	13, 14
D) Unit doesn't come on when switch is turned on.	11, 12	
E) Unit comes on and runs continuously.	11	
F) Unit comes on but no solution through solenoid.	12	15

Possible Cause / Solution	
Startup	Maintenance
<ol style="list-style-type: none"> <li><b>1. Air pressure too high</b> <ul style="list-style-type: none"> <li>◦ Adjust air regulator slowly counterclockwise until output stabilizes.</li> </ul> </li> <li><b>2. Air adjustment too low</b> <ul style="list-style-type: none"> <li>◦ Adjust air regulator very slowly clockwise.</li> </ul> </li> <li><b>3. Use of an oiler in the airline will cause poor foam quality</b> <ul style="list-style-type: none"> <li>◦ Use only clean, dry air.</li> </ul> </li> <li><b>4. Not enough chemical</b> <ul style="list-style-type: none"> <li>◦ Increase chemical concentration.</li> </ul> </li> <li><b>5. Too much chemical</b> <ul style="list-style-type: none"> <li>◦ Decrease chemical concentration.</li> </ul> </li> <li><b>6. Improper chemical</b> <ul style="list-style-type: none"> <li>◦ Ensure product is recommended for foaming and/or the application.</li> </ul> </li> <li><b>7. Foam hose kinked or hose/plumbing too long or wrong size (See REQUIREMENTS)</b> <ul style="list-style-type: none"> <li>◦ Straighten the hose.</li> </ul> </li> <li><b>8. Nozzle size too small (See REQUIREMENTS)</b></li> <li><b>9. Chemical solution pressure too low or volume too low / inlet piping too small</b> <ul style="list-style-type: none"> <li>◦ Increase solution pressure or volume (See REQUIREMENTS).</li> </ul> </li> <li><b>10. No chemical solution to the unit</b> <ul style="list-style-type: none"> <li>◦ Ensure that the chemical solution supply is not shut off to the unit.</li> </ul> </li> <li><b>11. Timer failed/Controller not set properly or malfunctioned</b> <ul style="list-style-type: none"> <li>◦ Replace timer. See Controller manual.</li> </ul> </li> <li><b>12. May have electrical problems</b> <ul style="list-style-type: none"> <li>◦ Have a qualified electrician check electrical connections. Ensure circuit breaker (5 amp) has not been tripped at control box.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li><b>13. Air regulator failed allowing too much air or not enough air</b> <ul style="list-style-type: none"> <li>◦ Clean or replace.</li> </ul> </li> <li><b>14. Air check valve or air solenoid clogged or failed</b> <ul style="list-style-type: none"> <li>◦ Clean or replace.</li> </ul> </li> <li><b>15. Chemical solution solenoid clogged or failed</b> <ul style="list-style-type: none"> <li>◦ Clean or replace.</li> </ul> </li> <li><b>16. Chemical build-up may have formed in the body, causing poor or no chemical pick-up</b> <ul style="list-style-type: none"> <li>◦ Follow PREVENTIVE MAINTENANCE instructions below, using water. In extreme cases, carefully remove fittings and soak entire body in descaling acid.</li> </ul> </li> </ol>

**PREVENTIVE MAINTENANCE:** When the unit will be out of service for extended periods, run water through the system to flush the chemical and help prevent chemical build-up.

