Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

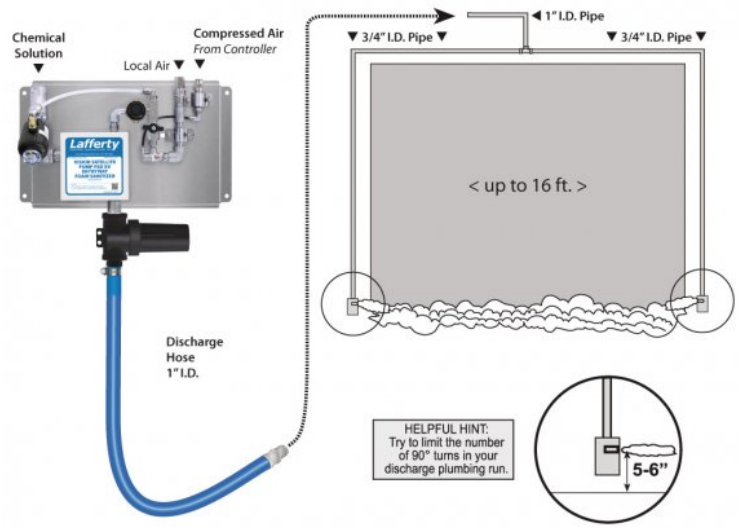
Model # 976726 · Vision Satellite PF Entryway XV Foam Sanitizer

REQUIREMENTS

Ready-to-Use Chemical Solution	
Temperature	up to 160°F
Pressure	35 to 100 PSI
Flow	4 GPM @ 40 PSI
Supply Line	1/2" Min
Compressed Air	up to 6 CFM
Hose/Pipe	1" & 3/4" ID
Nozzle	HV Entryway Spreader (2 - use both)

OPTIONS

Regulate the Operation of Multiple Vision Satellite Entryway Foam Sanitizers	
6-Zone PLC Vision Satellite Controller (120V)	# 976710
6-Zone PLC Vision Satellite Controller (24V)	# 976710-24V
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 Vision Satellite Pump Fed Entryway XV Foam Sanitizer is an automated foam applicator for projecting sanitizing chemicals on to floors of 8'-16' wide/overhead 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 two HV Spreader™ nozzles. Vision Satellite units are activated by compressed air from the Vision Controller and operated by compressed air local to the satellite - no electrical connection is required at the entryway location. The Vision Controller features highly flexible programmable settings with multiple options to precisely manage the foam sanitizing of up to six zones of multiple doorways with independent settings for each zone.

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.
Install an independent 3/8" compressed air supply line starting from the Vision Satellite Controller and extending to each Vision Satellite. This dedicated air line will activate the satellites. Each satellite will also require a local compressed air supply to create the foam.

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. Frame the doorway with 3/4" ID piping (not included), as shown in the illustration on Page 1.
4. Mount the spreader nozzle slots 5-6" off the floor, a little higher for wider entryways. Use **both** nozzles.
5. Connect the unit to the 3/4" pipe frame using the provided 10' hose (1" ID) and 1" ID piping. Each nozzle should be the same distance from the connection between 1" and 3/4" piping to ensure simultaneous activation. Use as few elbows as possible. *Hose/pipe ID is very important.*
6. Connect local compressed air supply to the unit. It is recommended that local compressed air is regulated to 80 PSI.
7. Connect air line from the Vision Satellite Controller to the unit and close the air ball valve.
8. Connect chemical solution supply - **a solution check valve is recommended.**

TO OPERATE

Testing & Adjustment

The Vision Satellite Entryway Foam Sanitizer is equipped with an air ball valve. While testing and adjusting the unit, or in case of an emergency, the unit can be shut off by closing the air ball valve completely. The unit will not operate when the air ball valve is closed, regardless of Vision 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.

Recommended Testing Procedure — You can temporarily, directly connect a separate compressed air supply to the unit. In this case you would need to connect the air supply to both the local air inlet port and the air inlet from the Vision Controller port.

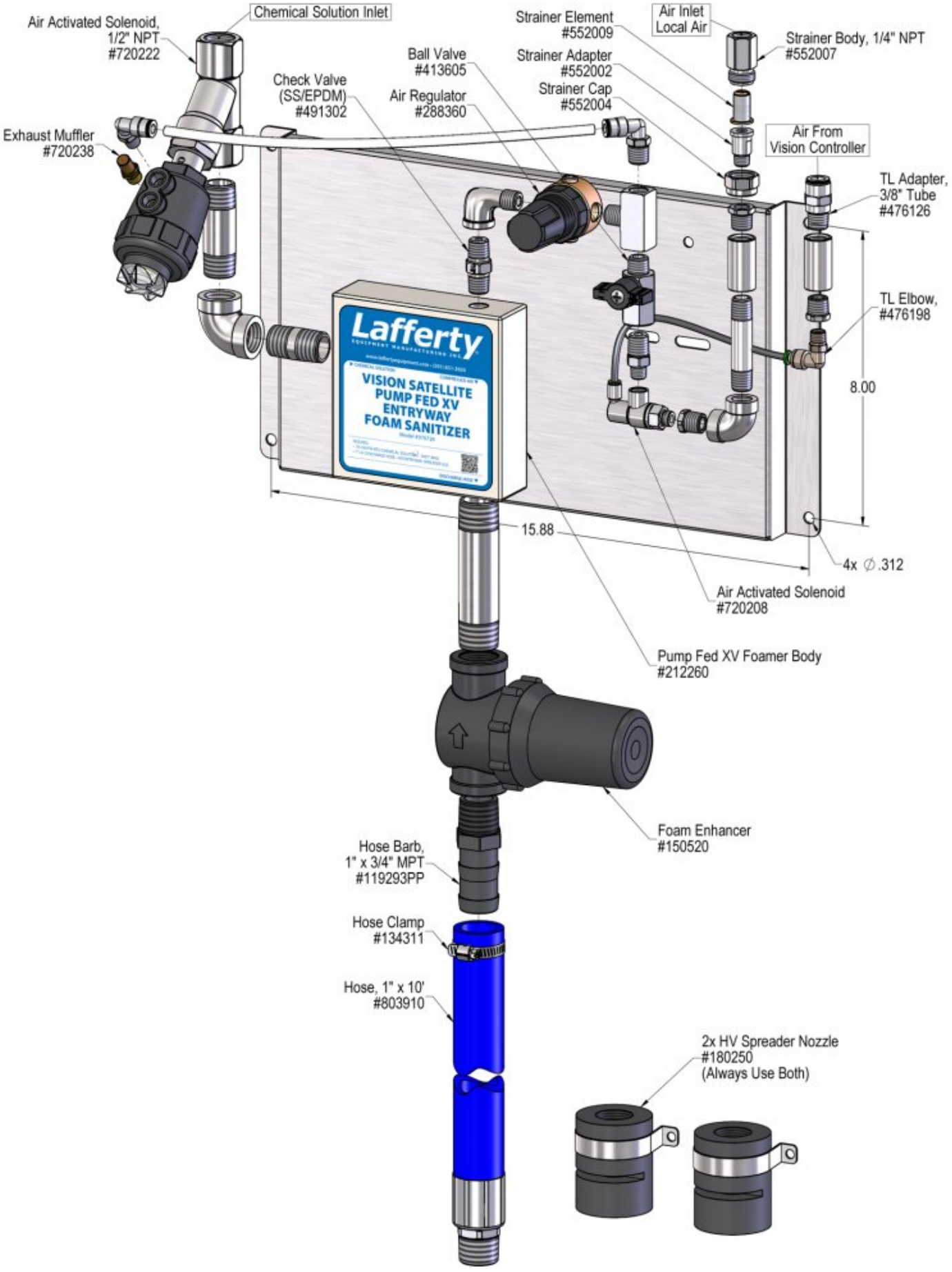
1. Final adjustments will now have to be made.
2. Open the air ball valve completely to activate the unit.
3. Wait a few seconds and observe foam consistency.
    - Use the least amount of air needed to achieve good foam quality to prevent solution pressure fluctuations from affecting performance. Air 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 Vision Controller:

1. Follow page 4 of the separate Vision Controller instructions to select the Zone for this Satellite unit, then set the Zone to Manual Operation for several minutes. Turn off air to any additional satellite units that are connected to the same Zone. 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 Vision Controller.

UNIT FLOW RATES

PSI	GPM
35	3.74
40	4.00
50	4.47
60	4.90
70	5.29
80	5.66
90	6.00
100	6.32


Air Activated Solenoid, 1/2" NPT #720222
Chemical Solution Inlet
Strainer Element #552009
Air Inlet Local Air
Strainer Body, 1/4" NPT #552007
Ball Valve #413605
Strainer Adapter #552002
Check Valve (SS/EPDM) #491302
Air Regulator #288360
Strainer Cap #552004
Exhaust Muffler #720238
Air From Vision Controller
TL Adapter, 3/8" Tube #476126
TL Elbow, #476198
Lafferty
VISION SATELLITE PUMP FED XV ENTRYWAY FOAM SANITIZER
8.00
15.88
4x ∅.312
Air Activated Solenoid #720208
Pump Fed XV Foamer Body #212260
Foam Enhancer #150520
Hose Barb, 1" x 3/4" MPT #119293PP
Hose Clamp #134311
Hose, 1" x 10' #803910
2x HV Spreader Nozzle #180250 (Always Use Both)

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

1. **Air pressure too high**
   - Adjust air regulator slowly counterclockwise until output stabilizes.
2. **Air adjustment too low**
   - Adjust air regulator very slowly clockwise.
3. **Use of an oiler in the airline will cause poor foam quality**
   - Use only clean, dry air.
4. **Not enough chemical**
   - Increase chemical concentration.
5. **Too much chemical**
   - Decrease chemical concentration.
6. **Improper chemical**
   - Ensure product is recommended for foaming and/or the application.
7. **Foam hose kinked or hose/plumbing too long or wrong size (See REQUIREMENTS)**
   - Straighten the hose.
8. **Nozzle size too small (See REQUIREMENTS)**
9. **Chemical solution pressure too low or volume too low / inlet piping too small**
   - Increase solution pressure or volume (See REQUIREMENTS).
10. **No chemical solution to the unit**
    - Ensure that the chemical solution supply is not shut off to the unit.
11. **Timer failed/Controller not set properly or malfunctioned**
    - Replace timer. See Controller manual.
12. **May have electrical problems**
    - Have a qualified electrician check electrical connections. Ensure circuit breaker (5 amp) has not been tripped at control box.

Maintenance

13. **Air regulator failed allowing too much air or not enough air**
    - Clean or replace.
14. **Air check valve or air solenoid clogged or failed**
    - Clean or replace.
15. **Chemical solution solenoid clogged or failed**
    - Clean or replace.
16. **Chemical build-up may have formed in the body, causing poor or no chemical pick-up**
    - Follow PREVENTIVE MAINTENANCE instructions below, using water. In extreme cases, carefully remove fittings and soak entire body in descaling acid.

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.