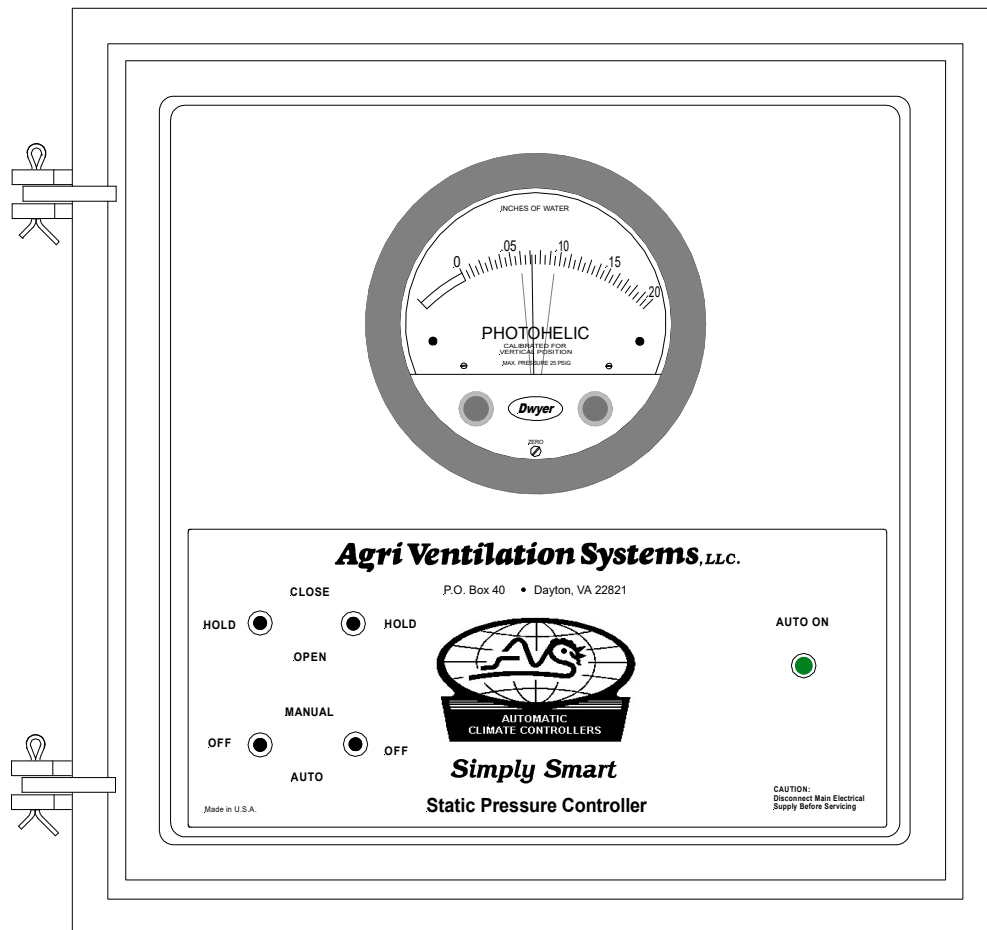


# ***Agri Ventilation Systems, LLC.***

3101 John Wayland Hwy, Dayton, Virginia 22821

1-540-879-9864

## **STATIC PRESSURE CONTROLLER For INLET DOORS or CURTAINS**



### **SP-AN-1000**

### **INSTALLATION AND PARTS MANUAL**

Read This Entire Manual Prior To Installation. This Manual Must Be Given To And Reviewed By The Grower After The Unit Has Been Installed. This Manual Should Be Kept In A Safe, Readily Accessible Place For Quick Reference.

## LIMITED WARRANTY

Agri Ventilation Systems, LLC, (AVS) hereby warrants to the Purchaser, subject to the conditions below, that it will repair or replace (at AVS's option) any product or component parts do not conform to the specifications and physical descriptions as detailed by AVS, or that such products or component parts do not perform the function for which they were intended, the Purchaser, at their expense, shall return the products or component parts to the Seller, as prescribed in the AVS Return Materials Policy, with a RGA number, and a written report of defects or failed performance. The Seller shall review the report and inspect the items, and shall determine warranty status, and shall authorize, where applicable, either the repair or replacement of any non-conforming, or non-functioning product or component parts. The liability of the Seller to the Purchaser arising out of the supply of, or use of the product or component parts, whether such liability shall arise during the warranty period, shall in no case exceed the amount paid by the Seller in the repair or replacement of non-conforming, or non-functioning product or component parts. Upon the expiration of the warranty period, all liability of the Seller shall terminate.

Any warranty will be terminated if any product or component parts are installed improperly, misused, misapplied, tampered with, abused, modified, or altered without authorization from Agri Ventilation Systems, LLC. Warranty will not apply to defects of failures caused by, or due to Acts of God, or nature.

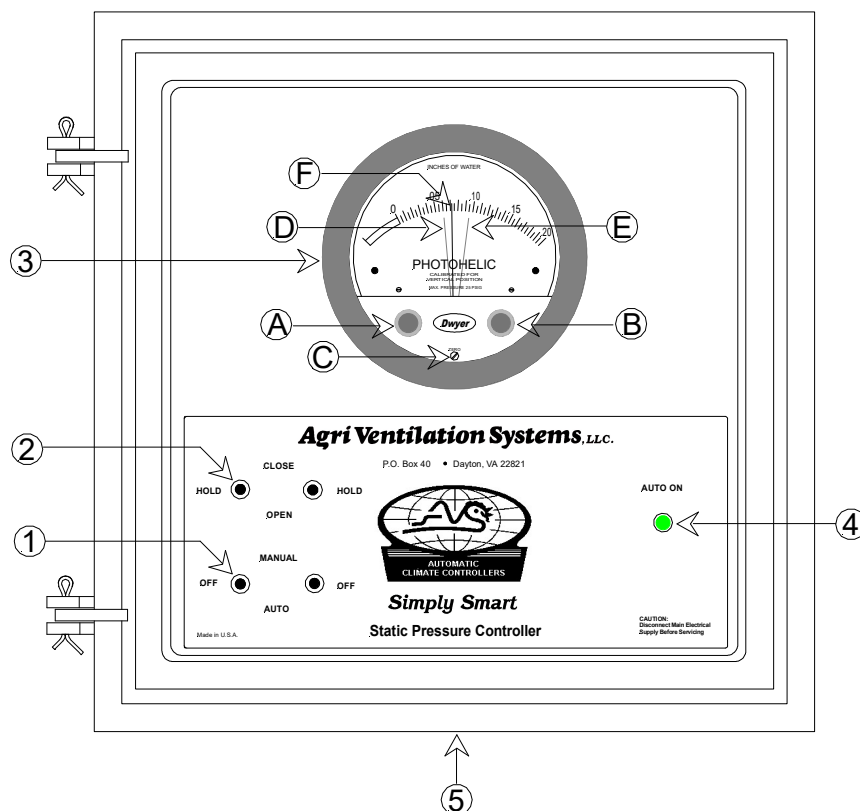
**WARNING:** WHEN THE PRODUCT OR COMPONENT PARTS ARE USED IN A LIFE SUPPORT VENTILATION SYSTEM, WHERE FAILURE COULD RESULT IN LOSS OR INJURY, THE USER SHALL PROVIDE ADEQUATE PERSONAL ATTENTION, BACK-UP VENTILATION, SUPPLEMENTARY NATURAL VENTILATION, OR FAILURE SYSTEMS, ETC., NECESSARY TO CONTROL THE OPERATION, OR ACKNOWLEDGE WILLINGNESS TO ACCEPT THE ASSOCIATED RISKS OF SUCH LOSS OR INJURY.

This equipment is offered for sale specifically on the Purchaser's acceptance of the above conditions and the manufacturer's warranty for this equipment. Acceptance, retention, installation, or operation of this equipment by the Purchaser shall be considered as acknowledgment and acceptance of the above conditions.

AGRI VENTILATION SYSTEMS, LLC  
3101 John Wayland Hwy, Dayton, VA 22821

## PRO II Static Pressure Controller Features

- Automatic Control of Inlet Vents of Doors
- At-A-Glance Panel: Actual Static Pressure and High and Low Setpoints
- Easy Adjustment
- Variable High and Low Delays
- Overload Protection

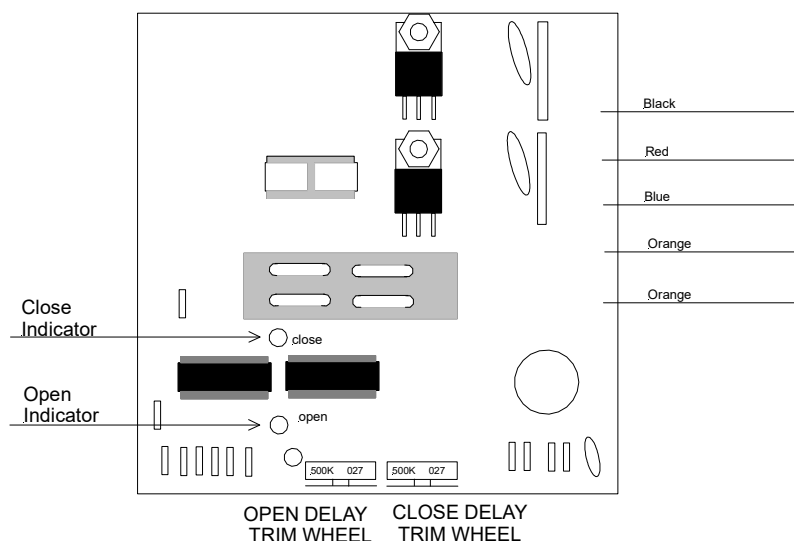


## OPERATION / CONTROL BOX LAYOUT

1. **MANUAL/OFF/AUTO Toggle Switch.** Select MANUAL to adjust vents with CLOSE/HOLD/OPEN switch. OFF to keep vents in current position. Select AUTO for automatic control of vents by Static Pressure Controller.
2. **CLOSE/HOLD/OPEN Toggle Switch.** Active only when #1 is in MANUAL position.
3. **DWYER Photohelic Gage.** Displays current static pressure in inches water column. Also shows current low and high setpoints.
  - A. Low/Close Setpoint adjustment knob
  - B. High/Open Setpoint adjustment knob
  - C. Zero Set adjustment screw
  - D. Low Pressure Setpoint Needle (Red)
  - E. High Pressure Setpoint Needle (Red)
  - F. Actual Static Pressure Indicator (Black)
4. **AUTO ON Indicator**
5. **Manual Reset Button.** Switches Controller off if current is elevated for extended periods.

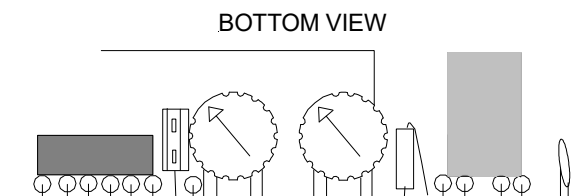
## INTERNAL CONTROL CIRCUIT BOARD

There are two features of the Circuit Board helpful to the grower or serviceman. The first feature is the open and close indicator lights (LEDs) located in the lower left portion of the circuit board. When troubleshooting, these can be compared to the location of the black indicator needle relative to the Low and High setpoint needles. They are also indicators of what the vent drive unit should be doing. If the upper indicator is on, the drive unit should run close (after its time delay). If the lower indicator is on, the drive unit should run open. If neither indicator is on, the control is 'satisfied,' or is off, or does not have power (control breaker tripped, for example). If both indicators are on, this indicates a fault in the photohelic gage, or the circuit board plug is not attached to the gage, or a problem on the circuit board.



## TIME DELAYS

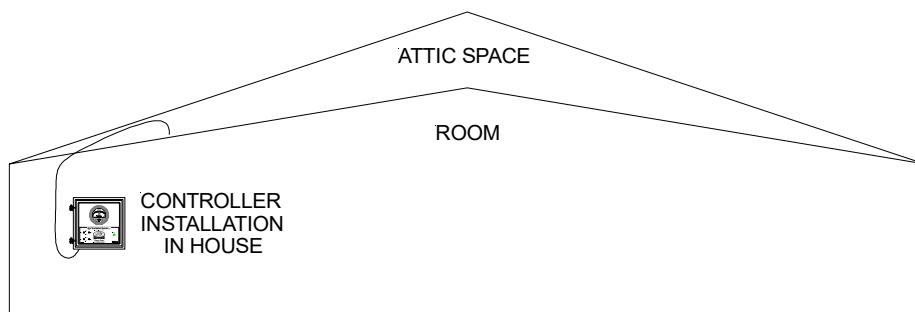
The second feature of the circuit board is adjustable open and close time delays to accommodate rapid variance in static pressure due to wind gusts, rapid opening and closing of entrance doors, etc. The time delay trimwheels are located on the lower portion of the circuit board.



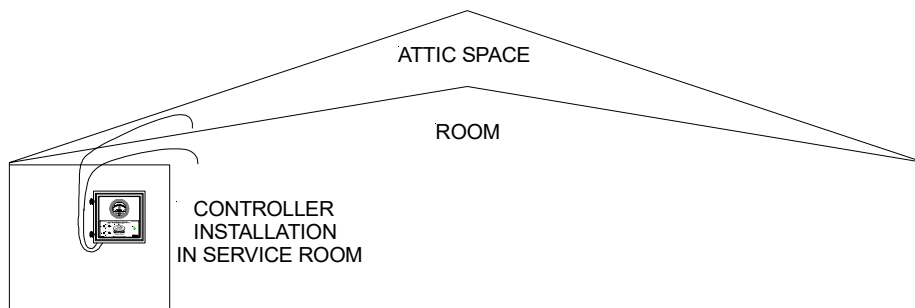
These delays are preset at the factory for 5-6 seconds, and can be adjusted from 0 to 15 seconds. Turn the adjusting trimwheel clockwise (to the right) to increase the delay; counterclockwise (to the left) to decrease the delay.

## INSTALLATION

The Static Pressure Control Box is equipped to be mounted in the room or location where the negative static pressure is being monitored. A 15-foot long length of vinyl tubing is included from the manufacturer. One end should be attached to the tubing extending from the bottom of the control box (this tubing is connected to the High Pressure Port of the Photohelic Gage). The other end has a filter assembly. This should be placed in the attic space if available with adequate ventilation to outside air. If attic space is not available the filter assembly must be placed outside the building protected from rain and moisture and adverse wind conditions.



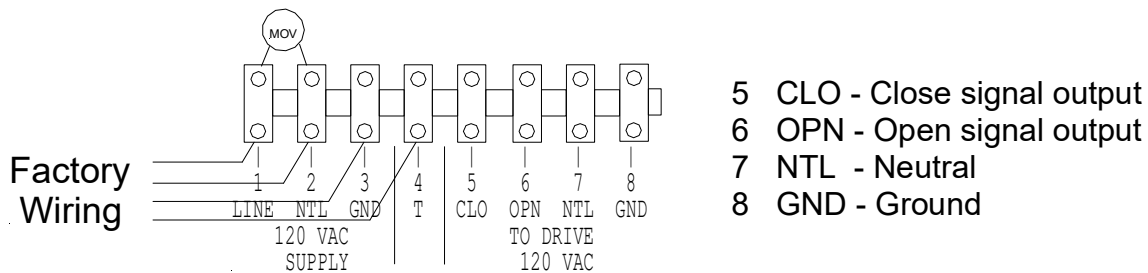
If the Static Pressure Control is mounted in an access room, or service room, a second length of tubing with filter assembly (not included, must be ordered separately) must be attached to the Low Pressure Port of the Photohelic Gage and then extended into the room where the static pressure is being monitored.



The Static Pressure Controller is configured to monitor and control negative or low pressure. It may also be used to monitor and control positive pressure. To accommodate this use, the hose/filter that originally monitors the high pressure (the attic space) in a negative pressure system must be interchanged on the Photohelic Gage. On the backside of the Photohelic Gage (insider the controller box), interchange the tubing connections for the HIGH PRESSURE port with the LOW PRESSURE port.

The Static Pressure Controller is usually equipped with a standard 120V power cord. **[CAUTION: DO NOT PLUG IN POWER CORD while connecting the wiring from the control outputs to the vent drive unit.]** The Output terminals produce 120 VAC output. It can directly control a 120 VAC drive unit with a maximum ¼ horsepower motor. If a larger motor, a motor with different voltage, or multiple motors are being controlled, a separate power supply with relays should be used to drive them. Contact your dealer, service representative, or Agri Ventilation Systems for information.

The standard control output is located on the terminal block located in the control box on the bottom of the enclosure. The left side of the terminal block is already wired from the factory. The right side contains the connections for wiring a 120 VAC vent or curtain drive unit to the controller.



## REPLACEMENT PARTS

ET-DY-L020	Dwyer LED Photohelic Gage
ET-CB-1000	LED Gage Adaptor Board (mounted on Photohelic Gage)
ET-CB-0000	Static Pressure Circuit Board
EP-SW-1200	SPDT Center Off Toggle Switch
EP-SW-2200	DPDT Center Off Toggle Switch
SP-LT-0000	Indicator Light Assembly
EP-4X-7460	120 VAC to 24 VAC Transformer
EP-BF-W585	5 Amp Breaker
ET-MV-0150	150V MOV Surge Absorber

For further questions about installation, operation, or troubleshooting, contact your dealer, service representative, or Agri Ventilation Systems, LLC.