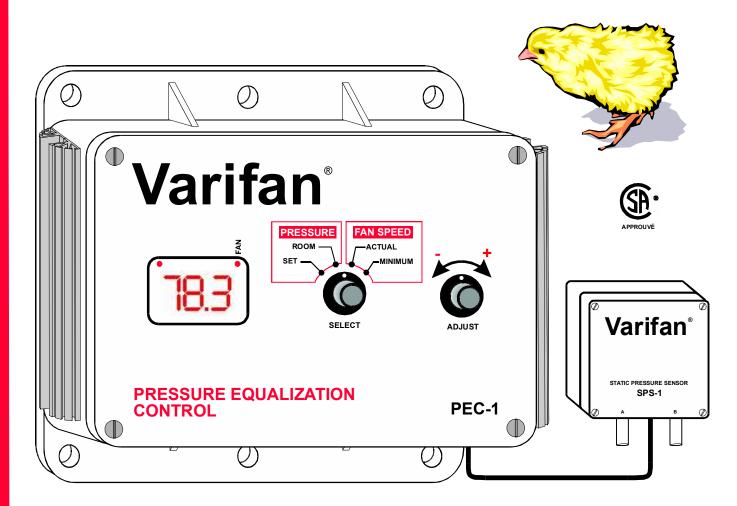
# Varifan®

## PEC-1

## HATCHERY VENTILATION CONTROL



### **FEATURES:**

- Maintains static pressure at 0 or set value by changing fan speed
- · Digital static pressure display
- · Remote solid state pressure transmitter
- Adjustable minimum fan speed
- Selectable control sensitivity
- · Can be use in exhaust or intake mode
- · No calibration required

### **SPECIFICATIONS:**

Power Supply: 115 or 23v 50/60Hz
Pressure Range: -120 to +120 inches WC
Output Capacity: 15 Amp, slow blow fuse
Operation Temperature Range: 32 to 100°F

# OPERATION AND INSTALLATION INSTRUCTIONS

### **OPERATION:**

Two settings on the display are available. The minimum fan speed can be set to match the idle capability of the fan controlled by the PEC-1 control. The desired room static pressure is set to establish the control logic for pressure control.

The first LED "NEG" on the display lights to indicate a negative pressure reading or setting. The pressure display is divided by 1000, for example, if the display indicates 080 and the led NEG is lit, the real value is -0.080 IN WC The fan speed will display as a percentage.

As the control fan speeds up and slows down to compensate for changes in room pressure, the actual fan speed as a percentage can be displayed. Changing the desired room static pressure will also cause the fan to change speed to adjust for the different pressure settings.

DIP switches settings:

DIP #1: Not used

DIP #2: ON - Exhaust mode

Increases output when pressure decreases

OFF - Intake mode

Decreases output when pressure decreases

DIP #3: Sensor response timer; ON = Fast, OFF = Slow

DIP #4: Output response timer; ON = Fast, OFF = Slow

### **INSTALLATION:**

#### SPS-1 Static Pressure Sensor

The SPS-1 static pressure sensor can be installed up to 500 feet from the PEC-1 control unit. A three-wire cable of 22 AWG conductors is used to connect the transmitter to the controller unit. The transmitter box can be located on either an inside wall or an outside wall, or even the ceiling if necessary. If the transmitter is mounted outside, it must be in a protected location so that wind and weather do not disturb the transmitter air inlet. If the transmitter is mounted on the inside of the building, the flexible vinyl tube that would be connected to the exterior probe inlet must also be in a protected location on the outside of the building.

To mount the transmitter box, remove the four screws that join the top and bottom halves of the box, then use wood screws through the holes in the base of the unit to mount the box to an appropriate surface. Ensure that the wiring is correct then fasten the top of the unit to the base with the four screws previously removed from the housing. Make sure that the tubing is not bent sharply which could interfere with the pressure sensing function. Do not cut or pinch the tubing.

### PEC-1 Control

The PEC-1 control unit should be installed where most practical for operation. Electrical power corresponding to the type of fan to be used is wired into the control. Verify that the correct voltage is selected inside the control unit to match the line voltage. Make sure that appropriate wiring codes are used to determine wiring type and size. The output to the fan is wired from the control unit so as to be able to control the

PARAMETERS	DESCRIPTION	RANGE	INCREMENTS	REMARKS
PRESSURE ÷ 1000				
Set	Sets desired Static Pressure	-100 to +100"H <sub>2</sub> O	001	Setting
Room	Indicates Room Static Pressure	-120 to +120"H₂O	001	Reading
FAN SPEED				
Actual	Indicates Fan Speed	16 to 100%	2%	Reading
Minimum	Sets Minimum Fan Speed	16 to 100%	2%	Setting





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