



749 Hope Road, Suite A Eatontown, New Jersey 07724 Phone: (732) 389-8922 Fax: (732) 389-8821  
[www.biologicalcontrols.com](http://www.biologicalcontrols.com)

## How To Use The ACCUSTAT P1 (Portable) Room Pressurization Monitor

### INSTALLATION INSTRUCTIONS:

1. When you first receive your ACCUSTAT P1 Portable Air Pressurization Monitor, it will be necessary to charge the NiMh batteries. It is recommended that the first charge on the unit be performed overnight to bring the unit up to a full charge. This should take a minimum of approximately four (4) hours. Once the batteries are fully charged, you should get nineteen (19) hours of use on each charge.
2. When the batteries are low, there will appear a low battery indicator signal "BAT" appearing in the lower left corner of the numerical display indicating that you have less than one hour left on your charge.
3. Before the unit can be used again, you must provide a full charge to the batteries. When the red LED on the back of the unit is not lighted and the power cord of the power transformer is still plugged in, the batteries will be fully charged. When the unit is fully charged, the red light will not be lit. The unit can also be operated when plugged directly into an electrical outlet while additionally providing a trickle charge to the battery.
4. The black switch on the back of the unit is an on/off switch. "On" is the UP position, "Off" is in the DOWN position.

The switch key on top of the unit can be used to monitor either NEGATIVE pressure when pointed to the "N" or POSITIVE pressure when pointed to the "P."

5. Prior to connecting plastic pressure tube, a zero indication (.000) can be verified by allowing unit to operate 5 minutes to stabilize reading and obtain a zero calibration. If after 5 minutes unit does not maintain a (.000) reading, the potentiometer on the circuit board (see drawing) needs to be adjusted (clockwise for positive, counterclockwise for negative. ACCUSTAT P1 has been calibrated at the factory to maintain a (.000) zero reading; however, due to its sensitivity, on site fine tuning is not unusual and should not be cause for concern.
6. Now connect plastic tube to P2 port only (right port) (P1 Port used only for a particular requirement). Failure to connect the proper port can seriously damage the transducer.
7. Start with the small black switch on the face being in the center position. Once the unit is plugged into the power jack or fully charged, the plastic tube can be connected and a digital readout will appear in the window. This will be displayed as either a negative (-) or positive (+) reading. A reading of (.000) designates a neutral or equal pressure within the room as compared to the surrounding area.
8. With the plastic tube inserted into P2 (right side port), place other end of tube under door. Place unit on floor or hold unit by handle; however, do not tilt monitor. It will affect accuracy of reading.
9. First adjustment will be to set small black slide switch to far left position to allow setting of desired alarm point. Inset small flat head screwdriver into front slot (next to slide switch) and adjust readings to desired alarm set point.

EXAMPLE: Room is currently reading (-.05), and you designate alarm set point at a (-0.1) reading. By turning adjustment control clockwise, LED light will remain green until readings fall below (-0.1) at which point LED will turn red.

10. Now push small black slide switch to far right position to activate audible alarm. (Note: Audible alarm has a one minute activation delay built in before alarm sounds, once pre-set is exceeded. Digital reading in window actually designates current room differential pressure)
11. Black slide switch in middle position indicates actual room pressure, but audible alarm is deactivated in this position. Although red LED will still activate, no audible signal will be heard. (Note: In order to deactivate alarm when sounding, switch can be moved to center position from the extreme right position)
12. Three position slide switch functions:
  - a. Extreme left position indicates set point alarm setting only. No audible alarm is available in this mode.
  - b. Center position indicates current room pressure reading, but audible alarm is deactivated in this mode.
  - c. Far right position indicates current room pressure with activated alarm cycle.  
(Note: There is a built-in 1 minute delay cycle to cut down on false alarms when the room experiences only a temporary pressure differential)

Warning: Do not exceed over pressure of 5 psi which will damage the transducer.  
Do not operate in temperatures below -40° or above 185° Fahrenheit.  
Damage may result from reversal of supply and ground connections.

## WARRANTY

Biological Controls (BC) warrants to its purchasers that all products sold by it will be free of manufacturing and material defects. Any defective product will be replaced, free of any charge if a claim is brought to BC's attention in writing, within ONE year following the date of shipment by BC. BC will not be responsible for any installation costs involved in such replacement. Replacement will include shipment cost within the continental United States. This warranty is IN LIEU OF any other warranty, express or implied, including, but not limited to, any implied WARRANTY OF MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. BC's liability under this warranty is limited to replacement and does not include any responsibility for incidental or consequential damages of any nature.

REV: 04/29/08

NEG. PRESSURE PORT

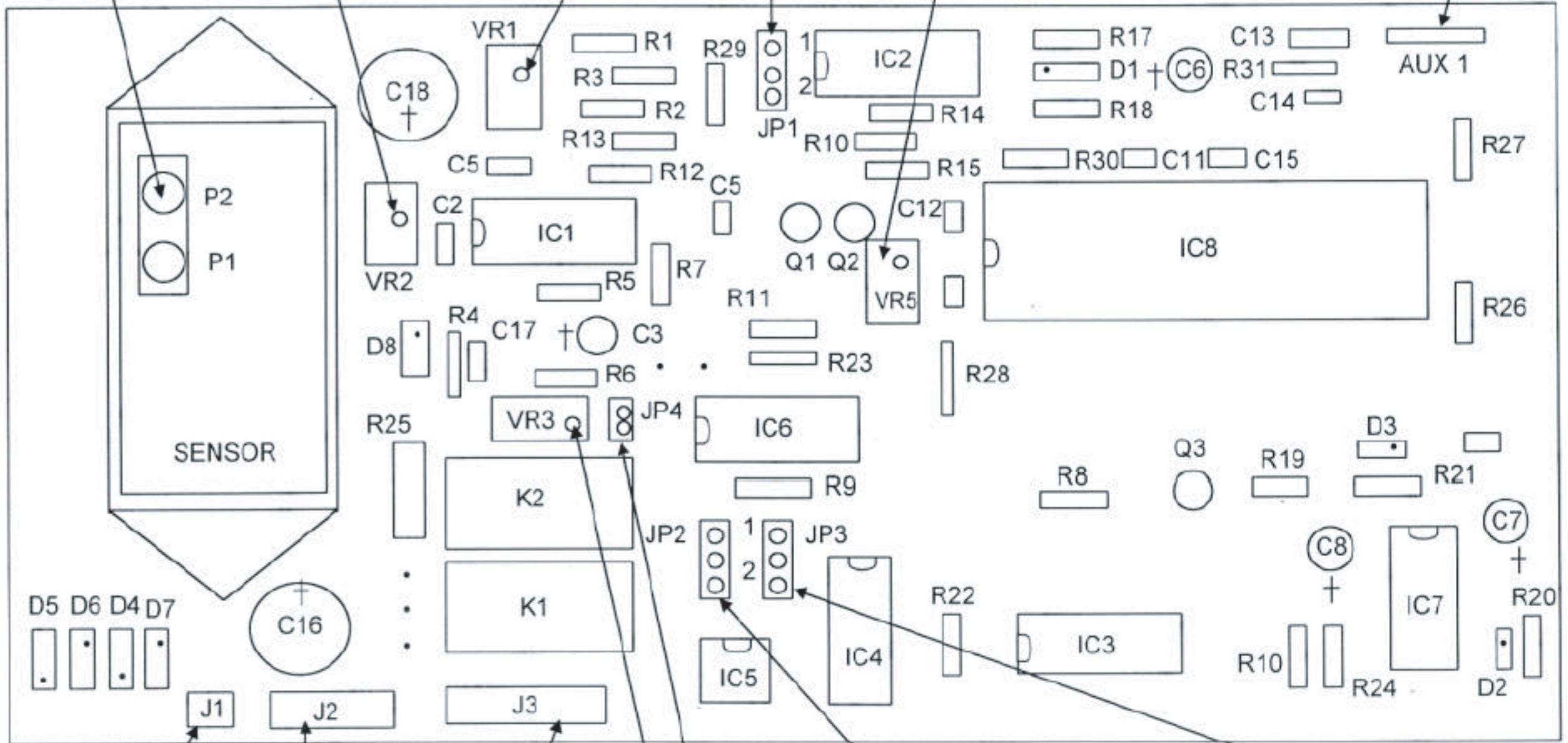
SPAN ADJ.

ZERO ADJ.

ALARM CONTROL

METER ADJ.

FOR BATT. OPERATION



D5 D6 D4 D7

POWER IN  
 12-14 V.DC  
 10 V.AC

BLOWER CONT.

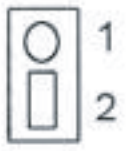
REMOTE ALARM

SPAN ADJ. FINE

ON/OFF SWITCH

ALARM OUTPUT CONTROL

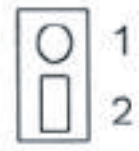
BLOWER CONTROL



1 FOR NEG. PRES.



1 FOR POS. PRES.



1 FAILSAFE



1 DIRECT

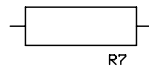


1 FAILSAFE

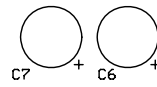


1 DIRECT

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R7

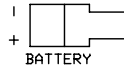


C7

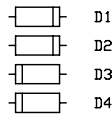
C6



R8



BATTERY



D1

D2

D3

D4



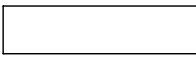
TF1



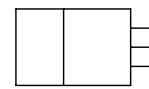
J1 \*



LED1 \*



FUSE .75 A SB



IC1

R1

R2



D5

Q1



S1 \*



OUTPUT

+

-

R6

C5



R3

Q2



C3

R4



R5

BATTERY PACK  
10 CELL 12V NOM.



\* COMPONENTS ON WIRING SIDE

EDI 10-15-05  
MADE IN USA