

Air Monitor airflow/pressure meters are designed to measure velocity pressure, duct/space pressure, or filter loading pressure and indicate in the appropriate scaled engineering units. Scaled units include: CFM, FPM, m<sup>3</sup>/ sec, L/sec, IN of w.c., and kPa. Other custom scales available upon request.

**CONFIGURATIONS.** Meters are supplied in four configurations:

- 1. Unmounted. Meter to be mounted in customer supplied panel, wall, etc.
- 2. Stationary (Wall) Meter. Single meter installed and tubed in a bracket for wall mounting.
- 3. Central Panel. Multiple meters installed and tubed in panel door designed to customer's requirements.
- 4. Portable Meter. Meter mounted in a portable carrying case and supplied with two 8' sections of tubing and quick-connect fittings.

### WARRANTY

Air Monitor Corporation (hereinafter referred to as "Seller") warrants that at the time of shipment, products sold pursuant to this contract will be free from defects in materials and workmanship, and will conform to the specifications furnished or approved in writing by Seller. No warranty is given that delivered products will conform to catalog sheets, data sheets, and the like, which are subject to change without notice.

Seller will repair or replace, at its option, any products listed under this warranty which is returned freight prepaid to Seller and within the earlier of one (1) year after start-up or fifteen (15) months after shipment, prove upon test and examination by Seller to be defective within the terms of this warranty. The warranty period for any item repaired or replaced shall be for the time remaining on the warranty period for the original components. Purchaser shall notify Seller in writing of such defect within sixty (60) days of discovery of the defect.

This warranty does not extend to any product sold by Seller which has been the subject of misuse, neglect, accident, damage or malfunction caused by interconnection with equipment manufactured by others, improper installation or storage, or used in violation of instructions furnished by Seller, nor does it extend to any product which has been repaired or altered by persons not expressly approved by Seller. Nor does Seller warrant equipment against normal deterioration due to environment; nor items such as thermocouples, electrodes, and similar items subject to wear or burnout through usage. Adjustments for items or equipment not manufactured by Seller shall be made to the extent of any warranty of the manufacturer or supplier thereof. Seller shall not be liable for any special or consequential damages or for loss of damage directly or indirectly arising from the use of the products. Seller's warranty shall be limited to replacement of defective equipment and shall not include field removal and installation expenses.

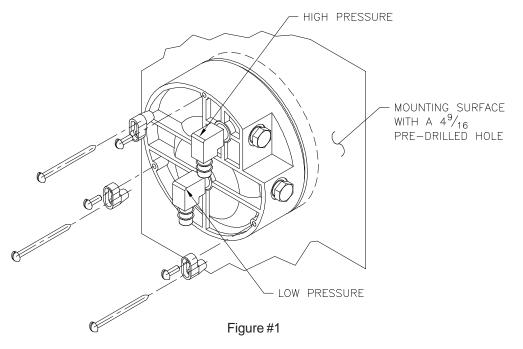
The warranty set forth above is in lieu of all other warranties either express or implied and constitutes the full extent of Air Monitor Corporation's liability to the customer, or any other party for breach of warranty. THERE ARE NO EXPRESS WARRANTIES EXCEPT AS SET FORTH HEREIN. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, WHICH ARE PARTICULARLY DISCLAIMED.

#### **RECEIVING & INSPECTION.**

- Carefully remove meter from the shipping container and inspect for damage. Any shipping damage should be noted and carrier notified for corrective action.
- If meter(s) are mounted and tubed, verify that meter(s) are still secure and all tubing is properly connected.
- Verify that all meters are the correct range and units specified in order. If not, contact Air Monitor's Customer Service Department at 1-800-AIRFLOW for further guidance.

**<u>MOUNTING</u>**. Meter(s) should be mounted on a rigid surface, free of excessive vibration and positioned so that the meter face is vertical. Ambient temperature in mounting location should not exceed 140°F and exposure to direct sunlight should be avoided.

Unmounted Meters. At desired mounting location, cut a 4-9/16" diameter hole. While holding meter in the mounting hole, install the three mounting tabs to the back of the meter using the supplied #6-32 machined screws, see Figure #1. Thread the supplied 2" long sheet metal screws through the tab and tighten until point of screw is secure against the rear of the mounting surface, see Figure #1.



- 2. Stationary (Wall) Meter. Hold meter in the desired location and mark on the mounting surface the location of the four holes in the mounting bracket flange. Drill the required size holes in mounting surface and install applicable mounting hardware.
- 3. Central Panel. Consult documentation/drawings supplied with your order for the mounting tab dimensions on the panel. Locate the mounting locations on the mounting surface and install appropriate hardware. Verify panel is secure on the mounting surface.
- 4. Portable Meter. Mounting not applicable.

**ZEROING**. When mounting is complete and prior to installing signal tubing, verify that the indicating pointer is on the zero mark. If not, use a small flat blade screwdriver to adjust the adjustment screw at the lower front of meter until the indicating pointer is on the zero mark. If adjustment cannot be made, refer to the "Customer Service" section of this manual.

<u>SIGNAL CONNECTIONS</u>. The signal tubing between the meter and the measuring device can be any length, however, increasing the distance will increase response time of the meter.

**<u>CAUTION</u>**: When connecting the signal tubing to the meter, it is important that no pressure be present in the tubing until both (if applicable) tubes are fully connected to the meter.

- 1. Unmounted Meter. Standard signal fittings on the back of the meter are barb type fittings suitable for use with flexible tubing with an ID of 1/8". Refer to the chart below for proper signal connections for the meter application. See Figure #1 for the location of the High and Low pressure connections.
- 2. Stationary (Wall) Meter. Standard signal connections on the top of the mounting bracket are 1/4" compression and can be used with rigid or flexible tubing. Refer to the chart below for proper signal connections for the meter application.
- 3. Central Panel. Consult documentation/drawings supplied with your order for information on the location and size of signal fittings in the panel. Use the appropriate tubing when making the required connections. Refer to the chart below for proper signal connections for the meter application.
- 4. Portable Meter. Open the back of the carrying case and remove the two coils of 1/4" flexible tubing. One section of tubing is clear and the other is blue, this helps eliminate switching tubes when making field connections. Either tube can be used for either connection, but user should establish a routine to preclude incorrect connection which can damage the meter. Refer to the chart below for proper signal connections.

METER SIGNAL CONNECTIONS				
A P P L I C A T I O N		Total (High) Pressure Port	Static (Low) Pressure Port	
	Airflow	Total Pressure From Airflow Device	Static Pressure From Airflow Device	
	Positive Room/ Duct Pressurization	Monitored Room/Duct	Reference Area/ Open to Atmosphere	
	Negative Room/ Duct Pressurization	Reference Area/ Open to Atmosphere	Monitored Room/Duct	
	Filter Loading	Upstream side of Filter	Downstream Side of Filter	

**OPERATION**. Once meter(s) have been mounted (except portable meter) and signal connections completed, the meter should continuously indicate the monitored airflow or pressure. No further interface by the user is required.

**<u>MAINTENANCE</u>**. No periodic maintenance is required. Occasionally inspect the meter for proper zero indication (see "**ZEROING**" for procedure), cleanliness, security of mounting, and integrity of signal connections. Operating experience should be used as a guide to establish a frequency for these checks.

**TROUBLESHOOTING**. The following are some possible problems and probable causes/solutions:

PROBLEM	CAUSE / SOLUTION	
Meter is sluggish in response to changes in airflow pres- sure.	<ul> <li>Signal tubing may be plugged or leaking.</li> <li>Signal connection fittings may be loose.</li> <li>Meter cover may be loose.</li> </ul>	
Meter cannot be zeroed.	<ul> <li>Signal pressure is still being sensed by the meter.</li> <li>Both signal tubes need to be removed to properly zero meter.</li> </ul>	
Meter tries to go below zero when connected to process.	<ul> <li>– Signal connections reversed.</li> <li>– One signal tube is disconnected.</li> </ul>	

**<u>CUSTOMER SERVICE</u>**. Air Monitor Corporation provides in-house technical support for all our products:

Monday through Friday, 7 am to 5 pm (pst) Phone: 707-544-2706 or 1-800-AIRFLOW Fax: 707-526-2825

If after contacting the Customer Service Department it is determined that equipment will require return to Air Monitor Corporation for further repair, a Return Authorization number will be issued. A Confirmation of Return Authorization with shipping instructions will be sent via facsimile. Equipment to be returned to Air Monitor should be returned in its original shipping container if possible. If this is not possible, ensure equipment is packaged sufficiently to protect it during shipment.

# Caution: All damage occurring during transit is the Customer's responsibility.

List the Return Authorization (R/A) number on the packing list and clearly mark this number on the outside of each shipping container. Costs associated with the return of equipment to Air Monitor Corporation are the customer's responsibility regardless whether the repair/return is under warranty.

Once the Customer Service Department determines that the equipment repair is under warranty, the item will be repaired and returned to the customer at no charge. If the equipment is not under warranty, customer will need to approve a repair quote which will be invoiced along with return shipping charges.

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