General Information

Your Setra Transducer has been carefully calibrated before shipment to you, and it should be handled with the same care given any precision instrument. Pressure range and dimensions are reported on the specifications bulletin for the transducer.

Ambient Conditions

Do not use in ambient conditions corrosive to anodized aluminum, or submerge in liquids, subject to spray or vibration environment.

Electrical Connections:

<table>
<thead>
<tr>
<th>Function</th>
<th>Standard &quot;Belden&quot; Cable Lead (#8723 Grey Cable)</th>
<th>Optional &quot;Tensolite&quot; Cable Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>positive excitation</td>
<td>Red</td>
<td>White</td>
</tr>
<tr>
<td>positive output</td>
<td>Green</td>
<td>Yellow</td>
</tr>
<tr>
<td>negative output</td>
<td>White</td>
<td>Brown</td>
</tr>
<tr>
<td>negative excitation</td>
<td>Black</td>
<td>Black</td>
</tr>
<tr>
<td>case</td>
<td>Shield</td>
<td>Shield</td>
</tr>
</tbody>
</table>

Electrical

The electrical circuit is equivalent to a 4-terminal network which can be grounded at only one point, either at the negative excitation or the negative signal output lead, but must not be commoned or grounded at more than one point.

The pressure transducer must be operated with the case connected either to the negative excitation terminal or to the negative output terminal. Failure to do this may result in damage to, or unsatisfactory operation of the unit. This connection may be made by connecting shield and black (negative excitation) leads or alternatively by connecting the shield and negative output signal leads together. Best shielding against noise will be obtained by connecting the shield and negative excitation leads. Circuit is reversed voltage protected for at least 5 minutes. Internal transient suppression network is provided for short duration transients to 150 volts.

In some instances, use of long cables (several hundred feet long), may introduce enough cable capacitance into the output circuit to cause output oscillation. If encountered, this oscillation may be eliminated by connecting a 100 ohm resistor (1/8 watt or larger) in series in each of the output leads at the end of the 2 foot transducer cable. These series resistors of course add to the output resistance.

Adjustments (with cover removed)

CAUTIONS: 1. Before making any adjustments, determine which circuit board diagram on Page 2 matches the circuit board in your transducer.
2. Turn off excitation power during cover removal or replacement.
3. Touching any adjustments other than zero or span may necessitate recalibration and voids the warranty.

ZERO OUTPUT

Output can be adjusted to zero by potentiometer as shown in diagram. Unit factory adjusted to 0.00 VDC output (±5mV).

SPAN

Can be adjusted by potentiometer as shown in diagram. Unit factory adjusted to 5.00 VDC full scale output (±5mV).

LINEARITY-DO NOT TOUCH

Factory adjusted for best linearity.
OPTION #3
Uses a single, ground referenced power supply for excitation and either a single, isolated readout with a bipolar switch that "breaks before makes" both the + output and - output of each pressure transducer, or a single data acquisition system with a multiplexer (MUX).

NOTE: The shield is internally commoned to the case and pressure port of the transducer. When the shield is connected to ground the case and pressure port of the transducer will also be commoned to that ground.

RETURNING PRODUCTS FOR REPAIR
Please contact Setra (800-257-3872 or 978-263-1400) before returning unit for repair to review information relative to your application. Many times, only minor field adjustments may be necessary. When returning a product to Setra, the material should be carefully packaged and shipped prepaid to:

Setra Systems, Inc.
159 Swanson Road
Boxborough, MA 01719
Attn: Repair Department

To assure prompt handling, please supply the following information and include it inside the package of returned material:

1. Name and phone number of person to contact.
2. Shipping and billing instructions.
3. Full description of the malfunction.
4. Identify any hazardous material used with product.

Notes: Please remove any pressure fittings and plumbing that you have installed and enclose any required mating electrical connectors and wiring diagrams. Allow approximately 3 weeks after receipt at Setra for the repair and return of the unit. Non warranty repairs will not be made without customer approval and a purchase order to cover repair charges.

Calibration Services
Setra maintains a complete calibration facility that is traceable to the National Institute of Standards & Technology (NIST). If you would like to recalibrate or recertify your Setra pressure transducers or transmitters, please call our Sales Department at 1-800-257-3872 (978-263-1400) for scheduling, cost and turnaround estimates.