



## Operating Instructions Model 276 Barometric Pressure Sensor

### 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. Accuracy and dimensions are reported on the specifications bulletin for the transducer.

The label on the unit specifies the calibrated output voltages at the low end and the high end of its pressure ranges.

### Ambient Conditions

Do not use in ambient conditions corrosive to the stainless steel housing or PVC jacketed cable, submerge in liquids, or subject to spray or vibration environment.

### Electrical Connections:

Function	"Belden" Cable Lead (#8723 Grey Cable)
positive excitation	Red
positive output	Green
negative output	White
negative excitation	Black
case	Shield

### Electrical

The electrical circuit is a 3-terminal circuit. Separate leads for negative output and negative excitation are provided for convenience in wiring but are internally commoned. Use of these leads also avoids errors in voltage readings caused by ground loops which can occur on 3 wire devices.

The pressure transducer should be operated with the shield connected either to the negative excitation wire or to the negative output wire. Failure to do this may result in unsatisfactory operation of the unit.

**NOTE: The circuit is not protected against mis-wiring. Use extreme care in wiring the positive excitation voltage only to the red wire, and to ensure all four leads are correctly connected before applying power. REVERSED OR MIS-WIRED EXCITATION MAY CAUSE PERMANENT DAMAGE TO THE TRANSDUCER.**

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 to each of the output leads at the end of the 2 foot transducer cable. These series resistors add to the output resistance

### Calibration

This unit has been precision calibrated at the factory. It has been designed to be inherently stable; recalibration adjustments are not normally field accessible. If you do wish to perform a recalibration, and have access to a high accuracy primary pressure standard, call the factory for instructions on field access to the calibration adjustments.

## RETURNING PRODUCTS FOR REPAIR

Please contact Setra (1-800-257-3872, 978-263-1400) before returning unit for repair to review information relative to your application. 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.

## LIMITED WARRANTY AND LIMITATION OF LIABILITY

SETRA warrants its products to be free from defects in materials and workmanship, subject to the following terms and conditions:

Without charge, SETRA will repair or replace products found to be defective in materials or workmanship within the warranty period; provided that:

- a) the product has not been subjected to abuse, neglect, accident, incorrect wiring not our own, improper installation or servicing, or use in violation of instructions furnished by SETRA;
- b) the product has not been repaired or altered by anyone except SETRA for its authorized service agencies;
- c) the serial number or date code has not been removed, defaced, or otherwise changed; and
- d) examination discloses, in the judgment of SETRA, the defect in materials or workmanship developed under normal installation, use and service;
- e) SETRA is notified in advance of and the product is returned to SETRA transportation prepaid.

Unless otherwise specified in a manual or warranty card, or agreed to in a writing signed by a SETRA officer, SETRA pressure and acceleration products shall be warranted for one year from date of sale.

The foregoing warranty is in lieu of all warranties, express, implied or statutory, including but not limited to, any implied warranty of merchantability for a particular purpose.

SETRA's liability for breach of warranty is limited to repair or replacement, or if the goods cannot be repaired or replaced, to a refund of the purchase price. SETRA's liability for all other breaches is limited to a refund of the purchase price. In no instance shall SETRA be liable for incidental or consequential damages arising from a breach of warranty, or from the use or installation of its products.

No representative or person is authorized to give any warranty other than as set out above or to assume for SETRA any other liability in connection with the sale of its products.

159 Swanson Road, Boxborough, MA 01719-1304; 800-257-3872;  
(978) 263-1400; Fax. 978-264-0292; WEB; [www.setra.com](http://www.setra.com);  
E-mail: [transducer.sales@setra.com](mailto:transducer.sales@setra.com)

