



Broadcast Devices, Inc.

PSW-100 Pressure Sensor

Operations Quick Start Guide

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***Option Dependent**

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I. Basic Description

The PSW-100 Pressure Sensor is designed to be a direct plug in accessory to all BDI DPS-100D and ERI PWR-100D True RMS Power Sensors. The PSW-100 Accepts 5 VDC and Ground and outputs a D.C. voltage in the range of 0.5-4.5 VDC linearly corresponding to 0-15 PSI.

II. Installation Instructions

The PSW-100 is supplied with a three position push on connector.

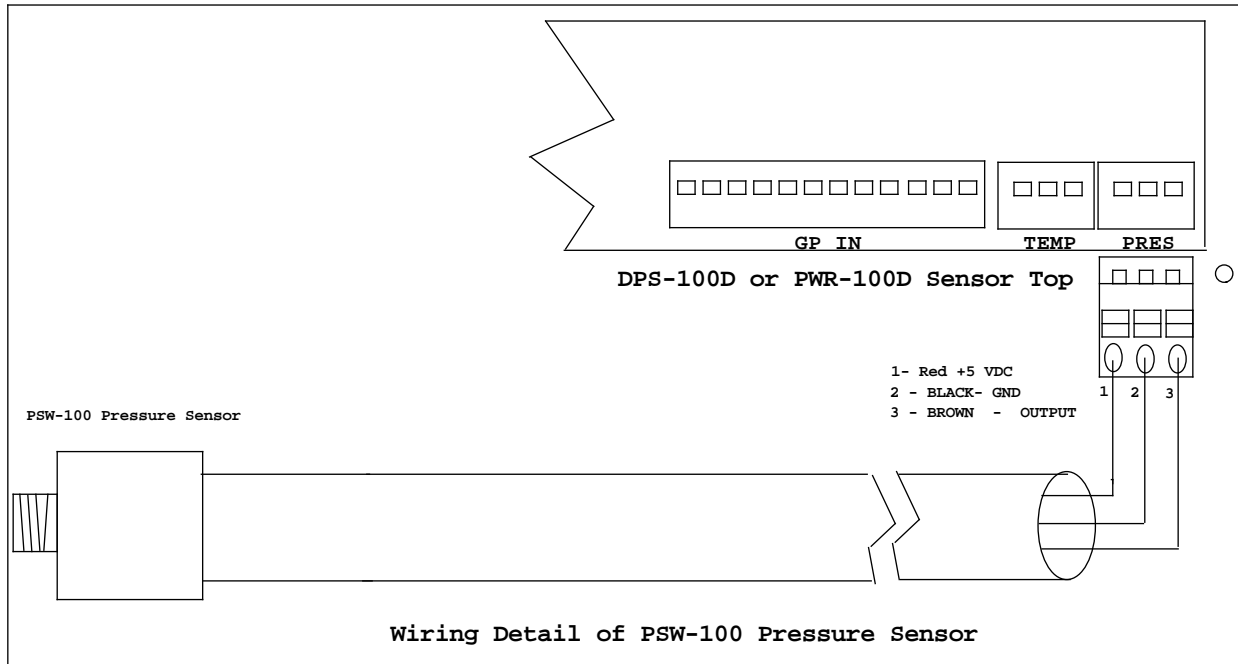
1. Install the sensor by applying a small amount of Teflon tape to the threads of the sensor.
2. Screw the sensor into the gas receptacle on the transmission line. Do not overtighten the sensor as typically it will be installed into a brass fitting and can the brass threads can easily be stripped if overtightened. If Teflon tape has been used it should only be necessary to snug the fitting in place.
3. Using soapy water in a spray bottle spray the fitting to check for leaks.
4. Plug the three position connector into the socket marked "PRES" on top of the DPS-100D or PWR-100D sensor.
5. Check the pressure indication on the face of the DPS-100D or PWR-100D sensor or log into the web page to view all parameters.

Note:

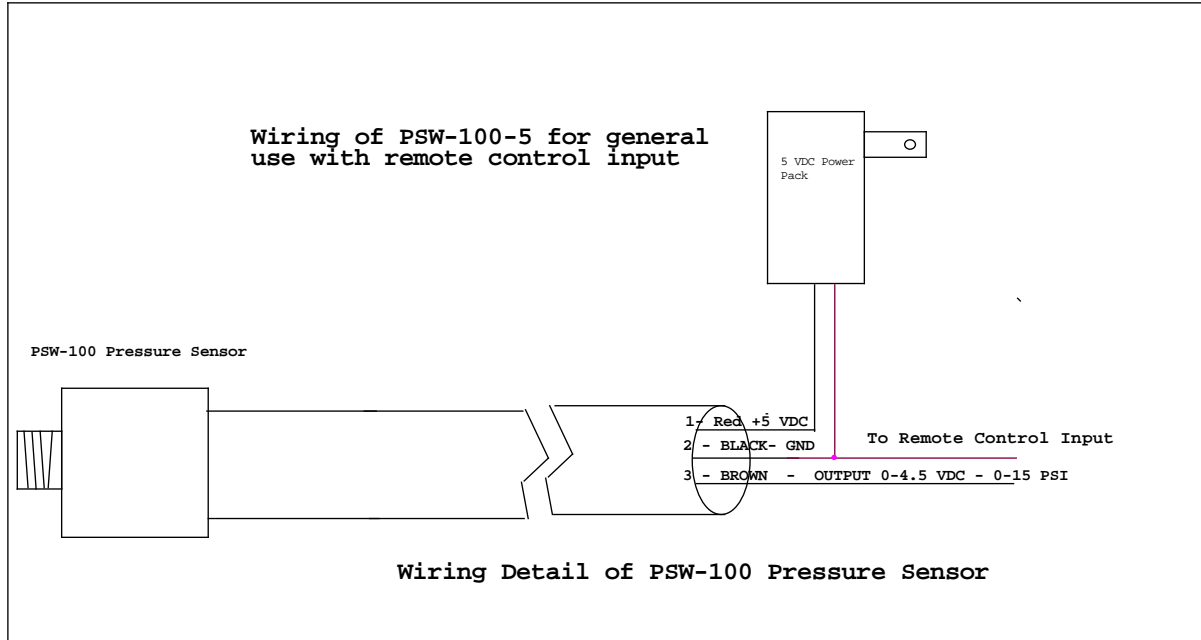
It is possible to use the PSW-100 Pressure Sensor with a remote control without the use of a BDI DPS-100D or ERI PWR-100D sensor. **Please follow the instructions below carefully as an error in wiring will cause damage to the sensor and will void the warranty.**

1. Remove the three position connector by pressing the orange release button under each hole.
2. Connect the BLACK wire to common-ground
3. Connect the WHITE wire to the metering input of the remote control
4. Connect the Red wire to a +5 VDC source. The ground for the +5 VDC source must be common to where the BLACK common-ground wire is connected on the remote control
5. Follow your remote control manufacturers instructions for providing a linear read out of the PSW-100 sensor. The sensor will indicate 0 – 15 PSI for a 0.5-4.5 VDC output from the sensor. See Fig. 2 Transducer Specifications for complete detail.

Figure 1 – PSW-100 Schematic



Connections for use with BDI DPS-100D Series True RMS Power Meter



Wiring for use with remote control analog input.

0.5-4.5 VDC Output ratio metric for 0-15 PSI indication

Power Requirements: 5 VDC

III. Specifications

Fig. 2 Transducer Specifications

TRANSDUCER SPECIFICATIONS	
Input	
Supply Voltage	4.75 - 5.25 VDC
Pressure Range	0 to 15 PSIG
Proof Pressure	2X Full Scale
Burst Pressure	4X Full Scale
Fatigue Life	More Than 4 Million Cycles
Output	0.5 to 4.5 VDC (Ratiometric)
Performance	
Accuracy	± 0.4% BFSL
Stability	± 0.25% Per Year
Compensated Temperatures	0 to 70°C (32 to 158°F)
Operating Temperatures	-10 to 85°C (14 to 185°F)
Zero/Span Offset Tolerance	± 1.0% FS
Current Consumption	< 3mA
Mechanical Configuration	
Pressure Port	1/8"-27 NPT Male
Electrical Connection	Packard Connector
Ingress Rating	IP67

IV. Warranty

Broadcast Devices, Inc. products are warranted against failure due to faulty materials or workmanship for a period of one year from the date of shipment to the ultimate user. The warranty covers repair or replacement of defective parts at the factory, provided the unit has been returned prepaid by the user. All shipments to the factory shall have affixed to the outside of the container a return authorization number obtained from the factory. The above warranty is void if the unit has been modified by the user outside of any recommendations from the factory or if the unit has been abused or operated outside of its electrical or environmental specifications. If customer conducted field tests suggest that the unit may be faulty, whether or not the unit is in warranty, a full report of the difficulty should be sent to Broadcast Devices, Inc. factory at Cortlandt Manor, New York. The office may suggest further tests or authorize return for factory evaluation.

Units sent to the factory should be well packed and shipped to Broadcast Devices, Inc. – www.broadcast-devices.com Remember to affix the R.A. number to the outside of the carton. Any packages received without such R.A. number will be refused. Note: freight collect shipments will also be refused. When the unit has been received, inspected and tested, the customer will receive a report of the findings along with a quotation for recommended repairs, which are found falling outside of the standard warranty. Units returned for in-warranty repairs, which are found not to be defective will be subject to an evaluation and handling charge. In-warranty units will be repaired at no charge and returned via prepaid freight.

Out-of-warranty units needing repair require a purchase order and will be invoiced for parts, labor, and shipping charges.

When ordering replacement part, always specify A) Part Description, and Quantity; B) Date of Purchase, Where Purchased; C) Any Special Shipping Instructions. Always specify a street address, as shipping companies cannot deliver to a postal box.

Broadcast Devices, Inc. is not responsible for any other manufacturer's warranty on original equipment. Nor are we responsible for any failure, damage, or loss of property that may occur due to the installation or operation of our equipment outside of recommended specifications.

Broadcast Devices, Inc. reserves the right to change materials, specifications, and features from time to time.

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