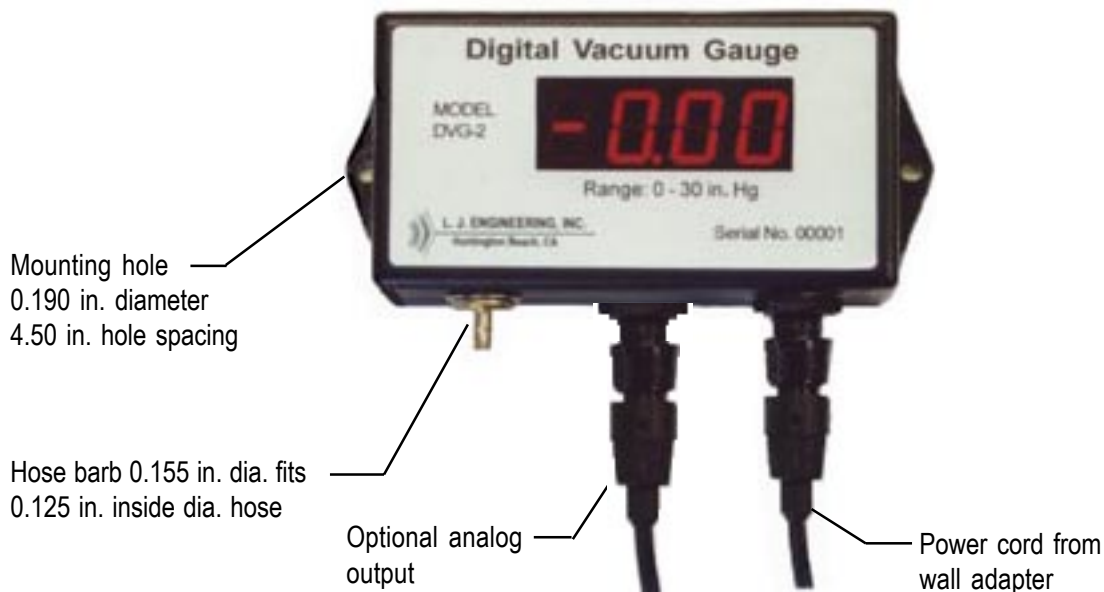


Installation Instructions for All Model Ranges of Digital Vacuum Gauge (DVG) and Digital Pressure Gauge (DPG)

GENERAL INFORMATION:

These instructions are intended to provide guidance on the installation, use, and trouble shooting for all ranges of Digital Vacuum Gauges and Digital Pressure Gauges. A dash number located after DVG or DPG specifies the range of the gauge. The gauge's range and units of measure are shown directly below the digital display. Verify that the pressure you intend to measure is within the range of the gauge. Pressure or vacuum in excess of the gauge's range could damage the unit. The Digital Gauge is designed for continuous monitoring with low power consumption. It may be turned off by unplugging the wall transformer from the 120 Vac wall outlet. The electrical connector at the DVG/DPG housing and power cord have gold-plated leads designed to provide long life and protect from degradation due to corrosion.



INSTALLATION NOTES:

1. Select the desired mounting location for the DVG or DPG. Keep in mind the length of the wall adapter power cord and the location of the 120 Vac power outlet. The power outlet should be located in a dry location, away from weather and areas where it could become wet. Enclosures of the Digital Gauges are water resistant, but **NOT WATERPROOF**, therefore the mounting location should be as dry as possible. Use suitable screws or bolts to fasten the Digital Gauge to the wall or mounting surface.
2. When the Digital Gauges are used to measure pressure or vacuum levels in systems which contain liquids, care must be taken to ensure that liquid does not enter the gauge (hose barb). The mounting location and installation arrangement must absolutely prevent liquid from entering the hose barb, since liquid inside the gauge could damage the pressure/vacuum sensor. Install the gauge well above the liquid level of the system. In addition, the use of an air-permeable/liquid-impermeable filter will ensure that no liquid enters the gauge.

3. Align the key of the plug on the connector-end of the wall adapter power cord with the mating connector on the bottom side of the Digital Gauge. Push the black retaining collar up and rotate to lock the connector together. Plug the transformer-end of the power cable assembly into a 120 Vac outlet and the display will indicate a pressure or vacuum reading.

IMPORTANT!

If the Digital Gauge is equipped with an optional analog output, its lead wire assembly should be isolated or unplugged from the Digital Gauge prior to plugging in the wall adapter to prevent the leads from shorting to each other or any other electrical connection.

4. The Digital Gauge should provide many years of trouble-free operation provided that the gauge is not subjected to abuse, such as liquids entering the barb or the application of pressure or vacuum in excess of the gauge's range.

TROUBLESHOOTING:

If the Digital Gauge is not displaying numbers or decimal point, check to make sure that the wall adapter is plugged into a wall outlet that has power. Additionally, verify that the power cord is properly attached to the gauge connector.

If the gauge is suspected of incorrect pressure or vacuum indication, verify that it reads approximately 0 when no pressure or vacuum is applied. (Absolute Pressure Gauge models, however, should indicate the approximate atmospheric pressure.) A small pressure or vacuum reading may be present when no pressure or vacuum is applied to the system. This small variation is normal and occurs as the meter is warming up after being turned on. Additionally, all meters are calibrated at the factory in a vertical mounting position (e.g., mounting on a wall). Mounting the meter horizontally can have a slight effect (plus or minus a few counts in the least significant digit) on the reading due to gravity acting on the pressure sensor's diaphragm. In any event, the meter should indicate the correct pressure or vacuum within the accuracy tolerance of + 0.25% of the full-scale range once the meter has warmed up (approximately 15 minutes) and provided it is oriented in the vertical position, as calibrated at the factory.

If an air-permeable/liquid-impermeable filter is installed in the line, verify that it is not causing the reading error by being plugged or contaminated. Indicated readings should be the same with and without the filter installed. If the two readings are different, the filter is contaminated and requires replacement.

If repairs are necessary, please contact L.J. Engineering for assistance in returning the unit to the factory for calibration/repair. A description of the problem should accompany the product being returned. **Disassembling any portion of the Digital Gauge housing or associated hardware is not allowed under the warranty.**

CLEANING:

UNPLUG THE WALL TRANSFORMER FROM THE 120 Vac OUTLET. Clean the outside of the case with a damp cloth using a mild soap and water solution. Do not use solvents or chemicals to clean the Digital Gauge since this could damage the case or label material.

SPECIFICATIONS:

Accuracy: +/- 0.25% of full scale range

Range: Specified on the front of each Digital Gauge below the digital display

Environmental Range:

Temperature: 0°F to 150°F

Relative Humidity: 95% non-condensing from 0°F to 150°F

Power Supply:

Input: 120 Vac, 60 Hz, 6 W

Output: 9 Vdc, 300 mA

Optional Analog Output:

An optional analog output is available which is proportional to the meter reading and ranges over the full output voltage range of the pressure sensor (typically 0.25 Vdc to as much as 4.5 Vdc for the full range). A connector similar to the power cord connector, but with the reverse plug configuration to prevent interchanging, is located at the bottom of the case. Polarity of the analog cable is Red wire (+) and Black wire (-). Do not short these leads together or connect either wire to a power source. Damage to the Digital Gauge will result.

LIMITED WARRANTY:

L. J. Engineering, Inc. ("LJE") warrants to Buyer that the product here furnished is free of defects in material and workmanship for a period of twelve (12) months from the date of delivery to the end-user customer. LJE's sole obligation, and Buyer's exclusive remedy for defects in the product shall be limited, at LJE's sole option, to either the repair or replacement of the defective product, or to issue a credit to customer not to exceed the purchase price paid. The repair or replacement of the product under this warranty shall be FOB LJE's plant, Huntington Beach, California. Any claim by Buyer under this warranty must be made in writing not later than ten (10) days from the discovery of the claimed defect, but in no event after the expiration of the above stated warranty period.

Products considered to be defective shall be returned to LJE, shipping costs prepaid, only after contacting LJE to coordinate the product return. A description of the defect symptoms must accompany the returned product.

THIS WARRANTY IS THE SOLE WARRANTY COVERING THE PRODUCT AND LJE MAKES NO OTHER WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, OR STATUTORY. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS WARRANTY. IN NO EVENT SHALL LJE BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM THE USE, STORAGE, OR PERFORMANCE OF THE PRODUCT, ANY DEFECTS IN THE PRODUCT, OR FROM LJE'S PERFORMANCE OF THE CONTRACT TO FURNISH THE PRODUCT.

This warranty shall not apply to product which has been repaired or altered other than by LJE; or to product which has been abused, subjected to environments for which it was not designed such as fire, water, shock, or sand; or which was not installed, maintained, or operated within its normal rated usage and the requirements set forth in the instruction material accompanying the product. **If no such instruction material accompanied the product, do not attempt to install or operate the product until you contact LJE for, and receive, such instruction material and have read and understood it.**

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