

Dwyer DM-1110

Dwyer DigiMag Series DM-1000 Differential Digital Pressure Gauge User Manual

MODEL: DM-1110

Brand: Dwyer

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Dwyer DigiMag Series DM-1110 Differential Digital Pressure Gauge. The DM-1110 is designed to accurately monitor the pressure of air and compatible gases, offering a digital display for precise readings. Its user-friendly interface and robust design ensure reliable performance in various industrial and scientific applications.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the device. Failure to comply with these instructions may result in injury or damage to the equipment.

- Ensure the gauge is used only with air and non-combustible, compatible gases.
- Do not exceed the maximum pressure rating of the device.
- Handle the gauge with care to prevent physical damage.
- All electrical connections should be made by qualified personnel in accordance with local electrical codes.
- Disconnect power before performing any maintenance or installation procedures.

3. PRODUCT OVERVIEW

The Dwyer DigiMag Series DM-1110 features a clear 4-digit LCD display and intuitive four-button operation for easy setup and calibration. It is designed for precise differential pressure measurement.



Figure 3.1: Front view of the Dwyer DigiMag DM-1110 Differential Digital Pressure Gauge, showing the LCD display and control buttons (MENU, WAKE, Up/Down, E).



Figure 3.2: Rear view of the Dwyer DigiMag DM-1110 Differential Digital Pressure Gauge, showing the connection ports, model label, and mounting points.

Key Features:

- Monitors air and non-combustible, compatible gases.
- 4-digit LCD for clear display of readings.
- Simplified four-button operation.
- Digital push-button zero and span calibration.
- Removable terminal block for 16 to 26 AWG wiring.
- Cable gland for 0.114 to 0.250" (2.9 to 6.4 mm) diameter cable.

4. SETUP AND INSTALLATION

Proper installation is crucial for accurate readings and safe operation.

4.1 Mounting

Mount the gauge in a location free from excessive vibration, direct sunlight, and extreme temperatures. Ensure adequate space for wiring and pressure connections.

4.2 Electrical Connections

Connect power and signal wires to the removable terminal block. The terminal block accommodates 16 to 26 AWG wiring. Use the provided cable gland for secure cable entry, suitable for cables with diameters from 0.114 to 0.250" (2.9 to 6.4 mm).

4.3 Pressure Connections

Connect the pressure lines to the appropriate ports on the rear of the gauge. Ensure all connections are tight and leak-free. Refer to Figure 3.2 for port locations.

5. OPERATING INSTRUCTIONS

The DM-1110 features a simplified four-button interface for easy operation.

5.1 Powering On/Off

- To power on, press the **WAKE** button.
- The device may have an auto-shutdown feature to conserve power. Consult factory specifications for details.

5.2 Displaying Readings

Once powered on, the 4-digit LCD will display the current differential pressure reading. Readings can be displayed in common English and metric units, eliminating the need for manual conversions.

5.3 Zero and Span Calibration

The DM-1110 allows for digital push-button zero and span calibration. This simplifies the calibration process and ensures accuracy.

- To perform a zero calibration, ensure no pressure is applied to the gauge, then follow the instructions in the device's menu using the **MENU** and arrow buttons.
- For span calibration, apply a known reference pressure and adjust the span via the menu.

5.4 Menu Navigation

Use the **MENU** button to access various settings and calibration options. The **UP** and **DOWN** arrow buttons are used to navigate through menu options, and the **E** (Enter) button confirms selections.

6. MAINTENANCE

Regular maintenance ensures the longevity and accuracy of your DigiMag gauge.

6.1 Cleaning

Clean the exterior of the gauge with a soft, damp cloth. Do not use abrasive cleaners or solvents that could damage the display or housing.

6.2 Calibration Check

Periodically check the calibration of the gauge using a known pressure source. Recalibrate as necessary using the digital zero and span functions described in Section 5.3.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your DM-1110 gauge.

Problem	Possible Cause	Solution
No display/Gauge not powering on	No power supply; Loose electrical connections.	Check power source and ensure all electrical connections are secure.
Inaccurate readings	Gauge out of calibration; Pressure leaks in connections; Incorrect unit setting.	Perform zero and span calibration. Check all pressure connections for leaks. Verify the display unit setting.
Display frozen or unresponsive	Temporary software glitch.	Power cycle the device (turn off and on again). If the problem persists, contact technical support.

8. SPECIFICATIONS

Parameter	Value
Model Number	DM-1110
Pressure Range	0-25"WC (Water Column)
Compatible Gases	Air and non-combustible, compatible gases
Display	4-digit LCD
Electrical Connections	Removable terminal block for 16 to 26 AWG
Cable Gland Compatibility	0.114 to 0.250" (2.9 to 6.4 mm) diameter cable
Housing Material	Glass filled plastic
Manufacturer	Dwyer Instruments
Package Dimensions	7.5 x 6.6 x 3.6 inches
Item Weight	1.55 Pounds

9. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the documentation provided with your purchase or visit the official Dwyer Instruments website. For technical support, troubleshooting assistance beyond this manual, or spare parts, please contact Dwyer Instruments customer service directly.

Note: Specifications are subject to change without notice. Always refer to the latest product documentation from the manufacturer.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question