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Manufacturer of innovative compressed gas fittings, regulators & measurement tools.

M1004 Digital Calibrator & Sensors

Quick Start Guide

First things first

General purpose use only



M1004 Digital Calibrator

This digital calibrator is not intended for hazardous locations.

Steps to get started

Make a connection

- Attach the pressure fittings to the pressure sensor module.
 - The threads should be coated with a pipe sealant compound before installation.
 - Tighten to finger tight plus 1.5 turns to 3 turns using a 19 mm (¾ in.) wrench on the manifold.



Use only a **wrench** on the fitting and the manifold.

Carefully equalize the pressure

To avoid damaging differential sensors:

- Make sure you are connecting to the correct pressure port on DN or DI differential pressure modules.
 - P1 port is high pressure.
 - 2. P2 port is low pressure.
- 2. Apply pressure to both differential ports (P1 and P2) at the same time.

Know your batteries

The calibrator is powered by four 1.5 volt AA size batteries.

- Never mix batteries—not by manufacturer or by size, by capacity, or by chemistry.
- Never mix old and new batteries.
- Remove all four batteries in the calibrator at the same time.
- Replace all four batteries with batteries from the same package or with the same expiration date.

Install the batteries

- Turn over the calibrator so the display faces down.
- Remove the two screws on the battery cover with the Phillips head screwdriver by turning them counterclockwise.
- 3. Insert four AA batteries.

Note: Pay attention to the positive (+) and negative (-) battery polarity markings at the bottom of the compartment.

4. Replace the battery cover. To secure the cover, torque the screws clockwise 2 in. lbs. maximum.

Learn the function keys

The keys from left to right

- Backward
- Home
- Forward
- Units
- Release Hold
- Hold
- Up arrow
- Left arrow
- Zero
- Right arrow
- Down arrow
- Cancel or X or Esc
- Accept or √
- Power
- Information
- Backlight

Frequently Asked Questions

FAQs

How often is a new pressure measurement displayed?

The digital calibrator display updates with a new pressure measurement five times per second.

What are the different Display functions on the digital calibrator?

The digital calibrator ships with all six functions active. They are listed below.

- 1. Home (default)
- 2. MIN (Minimum)
- 3. MAX (Maximum)
- 4. AVG (Average)
- 5. FACTORY CAL TAP √ TO RESTORE
- 6. RESPAN TAP √ TO BEGIN

What does it mean when the red backlight flashes?

- The flashing red backlight indicates an error condition.
- Possible error conditions are:
 - Pressure has exceeded the stated upper limit of the sensor(s).
 - Pressure has fallen below the stated lower limit of the sensor(s).
- The red backlight overrides the white backlight.

FAQs

What does the Zero (Ø) key do?

Home

- If the sensor is within a tolerance band around zero, press and hold the *Zero* key to zero the pressure measurement and to reset the Min and Max measurements.
- Note: The tolerance band is approximately ± 1 % of the Full Scale pressure value of the sensor.
- Absolute sensors have additional functionality.

In Min or Max mode

Press and hold the *Zero* key to reset the Min and Max measurement. However, this does not zero the pressure measurement.

In Average mode

 Press and hold the Zero key to restart the rolling average.

Holding the Zero key

 The key must be held to perform the Zero mode. The displayed value(s) dashes out during the zero process.

Why are the available units different between a 15 psi and 3 000 psi sensor?

If a given measurement unit cannot display the correct number of digits, the digital calibrator automatically advances to the next displayable unit.

FAQs

How long does the white backlight stay on after the Backlight key is pressed?

The white backlight has an automatic timeout.
If no keys have been pressed, the backlight automatically turns off after 20 seconds.

What does the bar graph at the top of the display indicate?

- The bar graph displays a live indication of the current pressure applied to the sensor as a % of Full Scale.
- However, when the battery percentage is displayed, the bar graph follows the large digit display in indicating the remaining state of charge for the batteries.

What does low battery indicator mean?

 Be prepared to change batteries when you see the outline of the battery icon or when the outline of the icon flashes.

FAQs

How long will the calibrator remain on if I leave it unattended?

30 minutes.

How to contact us

Contact Sales

If you have any issues, questions, or suggestions, please contact us using one of the following methods.

Email: meriamsales@westernenterprises.com

Phone: (800) 817-7849