

## Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

Manuals.plus /

› [MEASUREMAN](#) /

› MEASUREMAN MA031 Digital Pressure Gauge User Manual

## MEASUREMAN MA031

# MEASUREMAN MA031 Digital Pressure Gauge User Manual

Models: 0-100psi, 0-3000psi, 0-10000psi

## 1. INTRODUCTION

---

This manual provides instructions for the proper installation, operation, and maintenance of your MEASUREMAN MA031 Digital Pressure Gauge. This device is designed for accurate measurement of hydraulic, oil, water, and air pressure. It is suitable for media that are not corrosive to stainless steel wetted parts.

The gauge features a 3-1/8" dial size, a protective boot, a bright backlight, and 0.25% accuracy. It offers a 5-digit display with four interchangeable units: psi, bar, Mpa, and kpa. The device also includes a battery status display and a 1/4" NPT male stainless steel connection.

## 2. SAFETY INFORMATION

---

Read all instructions carefully before operating the device. Failure to follow these instructions may result in damage to the product or personal injury.

- Ensure the pressure medium is compatible with 316 stainless steel to prevent corrosion and damage.
- Do not exceed the maximum pressure rating of the gauge (150% over load protection).
- Handle the gauge with care to avoid physical damage.
- Ensure proper sealing of the 1/4" NPT connection during installation to prevent leaks.

## 3. PRODUCT COMPONENTS AND DISPLAY

---

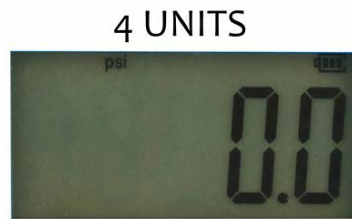
The MEASUREMAN Digital Pressure Gauge consists of the main display unit, a protective rubber boot, and a 1/4" NPT male connection. The display shows pressure readings, selected units, and battery status.

**Accuracy: +/-0.25%**



**Figure 3.1:** Front view of the MEASUREMAN Digital Pressure Gauge, highlighting its 0.25% accuracy. The display shows "0.000 MPa" and a battery indicator.

## Bright backlight LCD **Batteries status display**



100psi



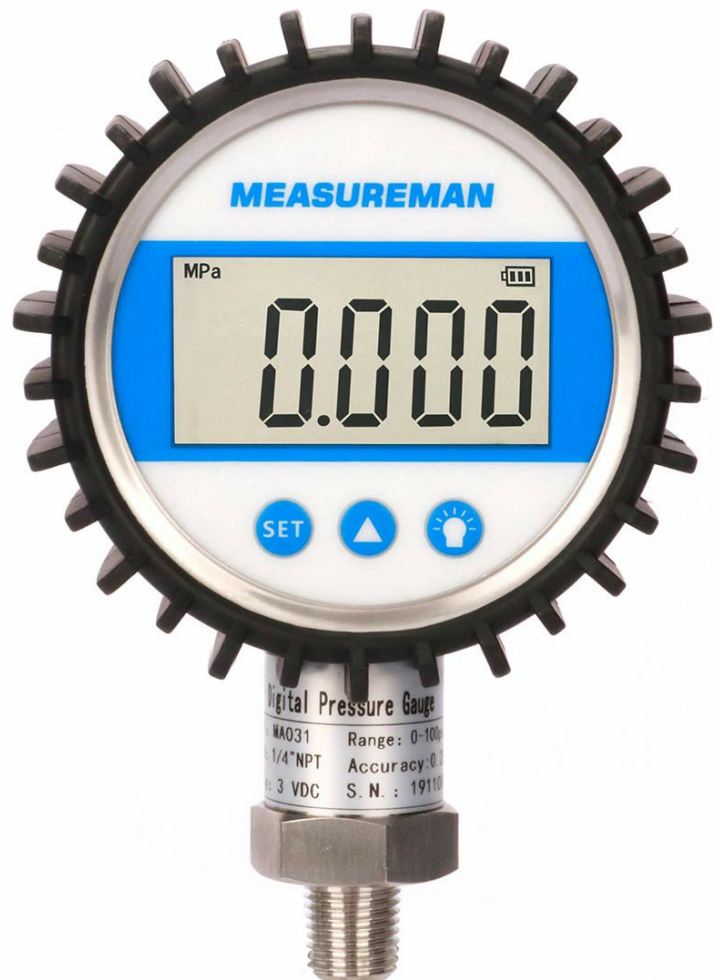
7bar



0.7Mpa



700kpa



4 units interchangeable **5 digit display**

**Figure 3.2:** The gauge display demonstrating the four interchangeable pressure units: psi, bar, Mpa, and kpa. The main gauge shows "0.000 MPa" with a battery icon.

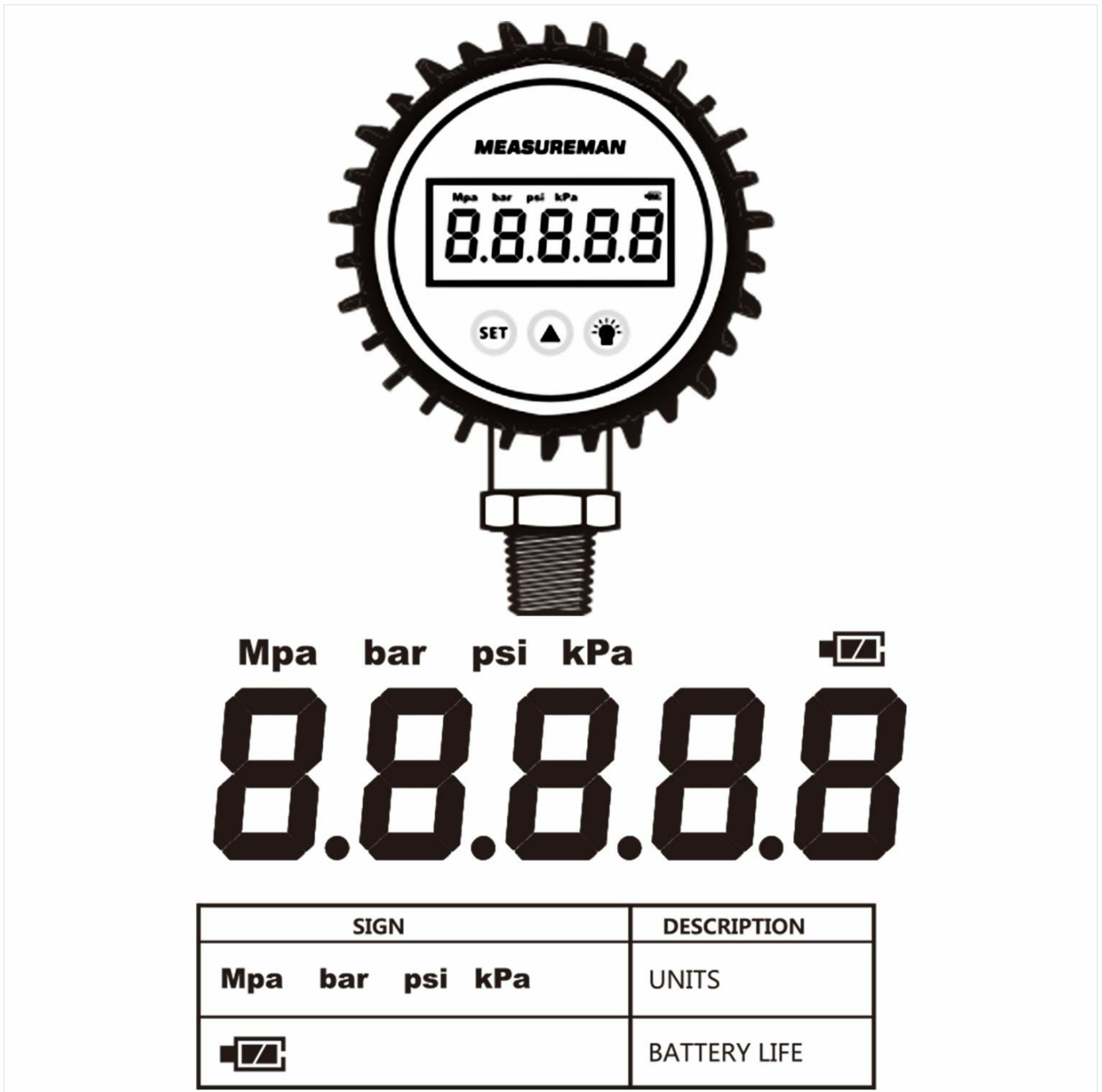


Figure 3.3: A schematic diagram illustrating the various display elements, including Mpa, bar, psi, kpa units, and the battery life indicator.

## 4. SETUP AND INSTALLATION

### 4.1. Battery Installation

The gauge requires 2 x AAA 1.5V batteries. To install or replace batteries:

1. Carefully remove the protective rubber boot from the gauge.
2. Locate the battery compartment cover on the back of the unit.
3. Unscrew the three screws securing the metal cover plate.
4. Insert the 2 x AAA batteries, ensuring correct polarity.
5. Replace the metal cover plate, aligning it correctly, and secure it with the three screws.
6. Re-install the protective rubber boot.

**Back batteries compartment**  
**For 2 x AAA 1.5V**  
**Easy to replace.**



**Figure 4.1:** Rear view of the gauge, indicating the location of the battery compartment for 2 x AAA 1.5V batteries.

## **4.2. Physical Installation**

The gauge features a 1/4" NPT male stainless steel process connection for mounting.

1. Ensure the system is depressurized before installation.
2. Apply appropriate thread sealant (e.g., PTFE tape) to the 1/4" NPT male threads.
3. Thread the gauge into the desired pressure port. Tighten securely but do not overtighten to avoid damaging the threads or the gauge.
4. Verify that the gauge is oriented for easy reading.



## 5.1:KEY NOTE

KEY	FUNCTION	DESCRIPTION
▲	ON/OFF	Long press to power on,or power off
	UNIT	Short press to change pressure units circularly
💡	BACK-LIGHT	Short press, the back-light will light on for 8 seconds
	SET	Long press for 5 second to calibrate zero

Figure 4.2: Detailed view of the 1/4" NPT male stainless steel process connection at the bottom of the gauge.

## 5. OPERATING INSTRUCTIONS

The gauge has three primary buttons: **SET**, **UNIT/POWER** (triangle icon), and **BACKLIGHT** (light bulb icon).



## 1/4" NPT MALE STAINLESS STEEL PROCESS CONNECTION



Figure 5.1: The gauge face showing the three control buttons and a table detailing their functions.

### 5.1. Button Functions

Key	Function	Description
UNIT/POWER (▲)	ON/OFF	Long press to power on or power off the device.
UNIT/POWER (▲)	Change Units	Short press to change pressure units circularly (psi, bar, Mpa, kpa).
BACKLIGHT ( )	Backlight	Short press to turn the backlight on for 8 seconds.
SET	Zero Calibration	Long press for 5 seconds to calibrate the zero point. Ensure no pressure is applied during calibration.

### 5.2. Reading Pressure

Once powered on, the gauge will display the current pressure reading in the selected unit. Allow a few seconds for the reading to stabilize, especially after significant pressure changes.

## 6. MAINTENANCE

---

### 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. Battery Replacement

Replace batteries when the battery status indicator shows low power. Refer to section 4.1 for detailed battery installation instructions.

### 6.3. Storage

When not in use for extended periods, store the gauge in a dry, cool place, away from direct sunlight and extreme temperatures. It is recommended to remove batteries if storing for a very long time to prevent leakage.

## 7. TROUBLESHOOTING

---

Problem	Possible Cause	Solution
Gauge does not power on.	Dead or incorrectly installed batteries.	Check battery polarity and replace batteries if necessary (refer to section 4.1).
Inaccurate readings.	Gauge not zeroed; sensor issue; external interference.	Perform zero calibration (section 5.1). Ensure no pressure is applied. If problem persists, contact support.
Slow response time.	This is a characteristic of the device.	Allow sufficient time for the reading to stabilize. This is normal operation.
Display is dim or flickering.	Low battery power.	Replace batteries (refer to section 4.1).

## 8. SPECIFICATIONS

---

Feature	Detail
Dial Size	3-1/8"
Pressure Range	0-100psi (also available in 0-3000psi, 0-10000psi variants)
Accuracy	0.25%
Display	5-digit LCD with bright backlight
Units	psi, bar, Mpa, kpa (interchangeable)
Overload Protection	150%
Connection	1/4" NPT Male, 316 Stainless Steel
Wetted Parts Material	316 Stainless Steel

Feature	Detail
Power Supply	2 x AAA 1.5V batteries
Product Dimensions	15.24 x 10.16 x 5.08 cm (6 x 4 x 2 inches)
Item Weight	480.81 g (1.06 lbs)
Manufacturer	MEASUREMAN
Model Number	MA031



**Figure 8.1:** Dimensional drawing of the digital pressure gauge, showing key measurements in centimeters and inches.

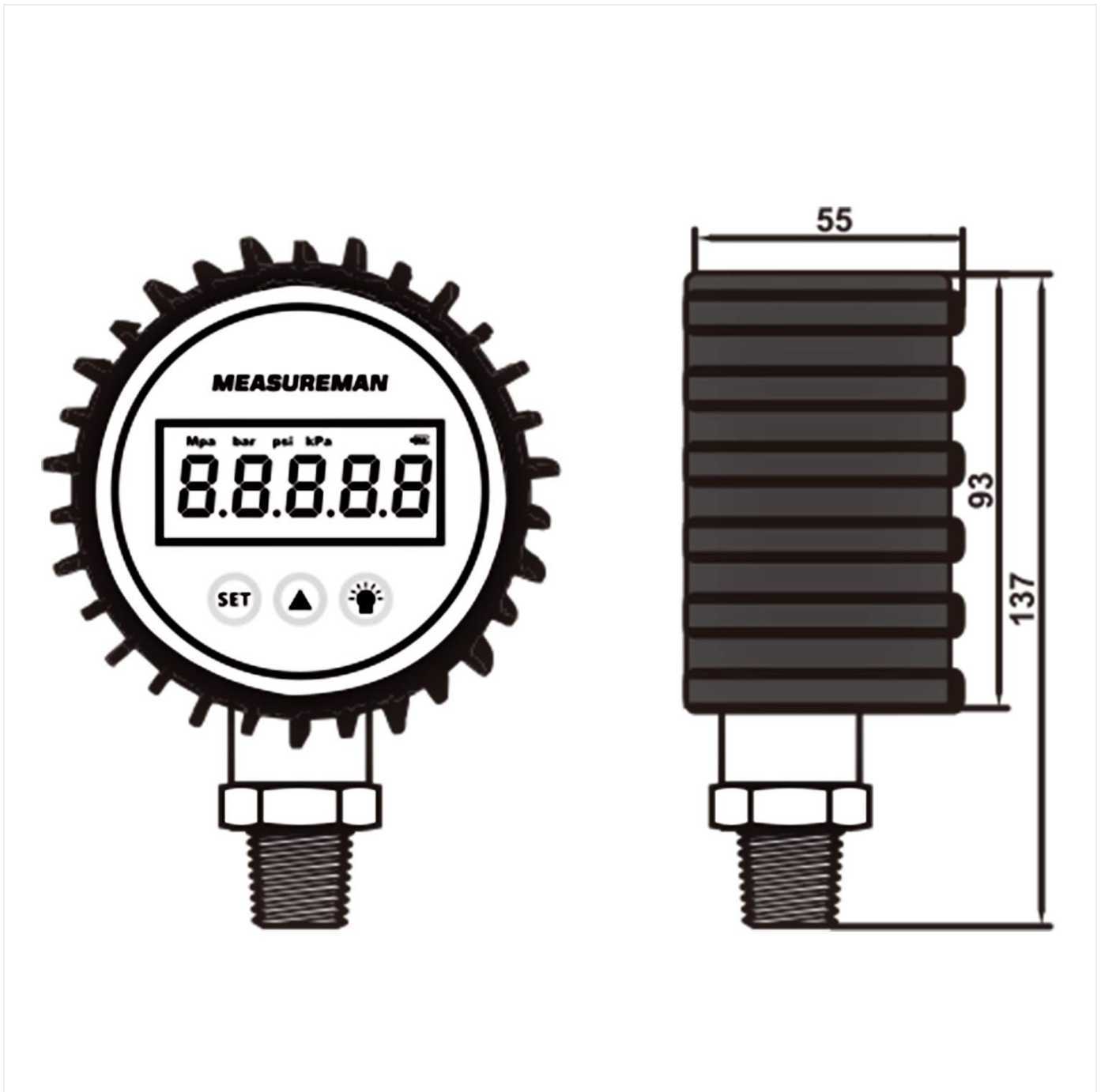


Figure 8.2: Technical drawing providing detailed dimensions of the digital pressure gauge.

## 9. KEY APPLICATIONS

The MEASUREMAN Digital Pressure Gauge is suitable for a variety of applications where precise pressure measurement is required, provided the media is compatible with stainless steel.

- Hydraulic Systems
- Oil Pressure Monitoring
- Water Pressure Measurement
- Air Pressure Systems

# Key Applications



Figure 9.1: Visual examples of typical applications for the digital pressure gauge, including hydraulic systems, oil pressure, and water pressure measurement.

## 10. WARRANTY AND SUPPORT

---

This product comes with a **1-year warranty** from the date of purchase. For warranty claims or technical support, please contact MEASUREMAN customer service. Refer to your purchase documentation for specific contact details.

For additional information or assistance, please visit the [MEASUREMAN Store on Amazon](#).

## 11. PRODUCT VIDEO

---



Video 11.1: An overview video demonstrating the features and functionality of a digital pressure gauge. This video is provided by Roastove, a seller of similar products.

