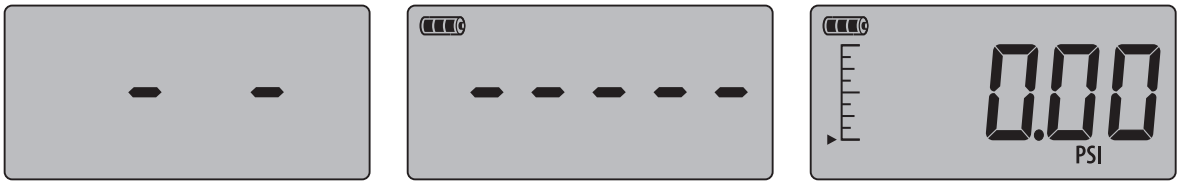
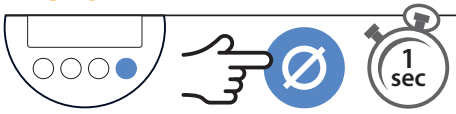
m1 Quick Reference

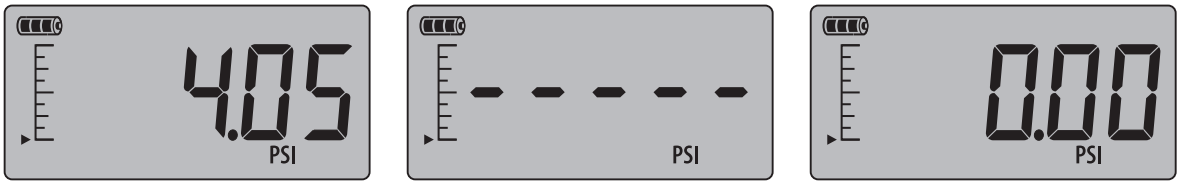
Power On



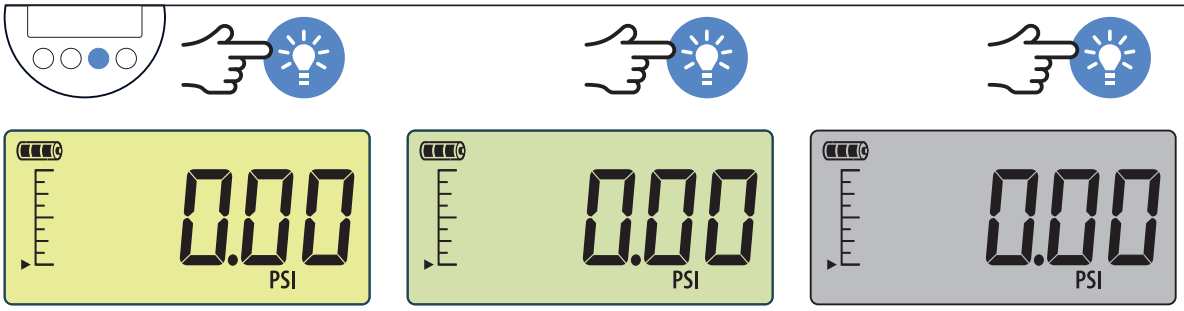
Zero



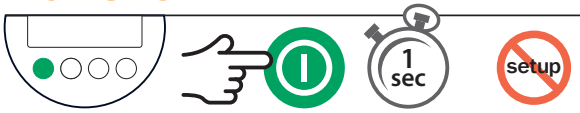
20 PSI, 1.4 bar,
140 kPa, 1.4 kg/cm²

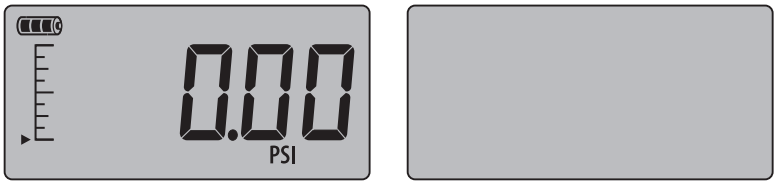


Backlight



Power Off





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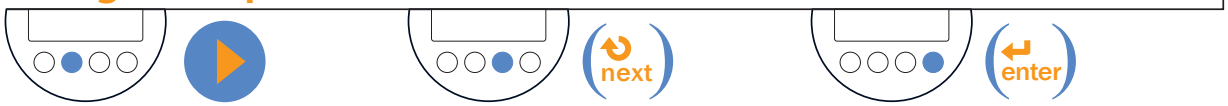
Note: Pressing the **enter** button always returns the gauge to operating mode. If you want to set multiple Display Functions, press the **setup** button to navigate from one Display Function to the next, then press the **enter** button when you are done.

Gauge Setup Basics



1 Access Setup

2 View Setup options

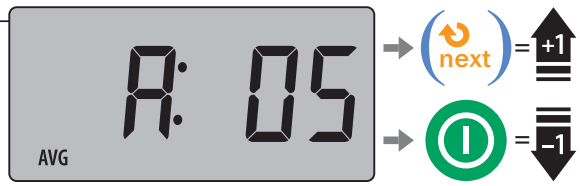
3 Select an option

Gauge Setup Map

Maximum, Minimum, or Averaging

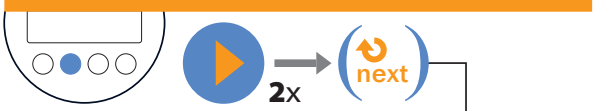
(flashing HI, LO, and AVG icons)

- Hi On (HI)
- Lo On (LO)
- A On (AVG)

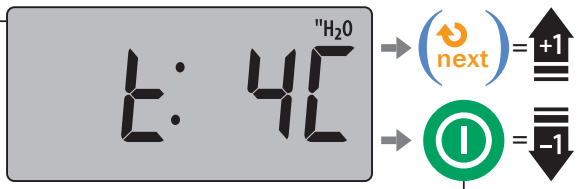


(Averaging window: 2 to 20 samples)

Pressure Units



- PSI
- mmHg
- "Hg
- mmH_2O*
- $"H_2O$*
- kg/cm^2
- mbar
- bar
- MPa
- kPa



- t: 68F
- t: 60F

All units are not available with every pressure range.

* H_20 icons and temperature settings will only display on H_20 enabled units.

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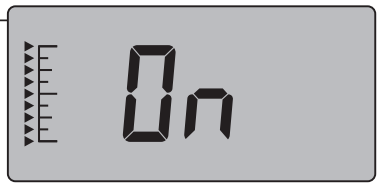
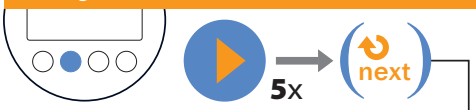
Gauge Setup Map continued

Vertical Bar Graph

On (solid Bar Graph)
Off (flashing Bar Graph)



Backlight Timer



Lt: 15 (light stays on for 15 seconds)
Lt: 60 (light stays on for 60 seconds)
Lt: On (light does not turn off automatically)

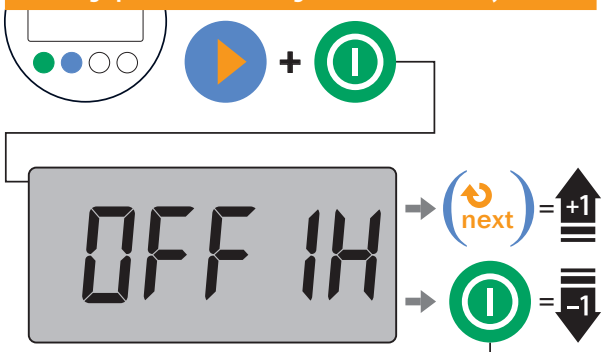
To Clear Peaks or Line Pressure

Note: If there is no gauge activity for 10 seconds, the gauge will return to operating mode. Any Setup options that you have selected will be enabled.

Auto Off

Off 1H (gauge turns off after 1 hour)
Off - - (gauge does not turn off automatically)

Readings per Minute Settings (Extended Battery Life)*



rd 0.1 (1/10 minutes 30,000 hours)
rd 0.2 (1/5 minutes. . 25,000 hours)
rd 1.0 (1/1 minute. . . 10,000 hours)
rd 2.0 (1/30 seconds . 6,000 hours)
rd 4.0 (1/15 seconds . 3,000 hours)
Off - - (4/1 second . . . . . 600 hours)
Off 1H (4/1 second . . . . . 600 hours)

Whenever one of the **rd** settings is selected the battery icon will change from ▮▮▮▮ to ▮▮▮ indicating that the M1 is in power-saving mode.

*This menu can be accessed only when the gauge is **off**.

Troubleshooting

Err 1 displayed:
The M1 checks the internal calibration every time it's turned on.
Contact factory for further instructions.

Err 2 displayed:
The M1 has tried to display a number too large for the display due to electrical malfunction or numerical error.
Contact factory for further instructions.

Err 5 or **Err 6** displayed:
The XP2i pressure sensor is exhibiting behavior out of normal operating condition. **Contact factory for sensor replacement.**

m1QuickReference

Specifications

Accuracy, Pressure

20% to 100% of Full Scale: ± (0.2% of Reading).

0 to 20% of Full Scale: ± (0.04% of Full Scale).

Accuracy, Vacuum

Vacuum for 2 MPa (300 PSI, 20 bar, 20 kg/cm^2) and lower pressure gauges:

0 to -99.9 kPa (-14.5 PSIG): ± (0.25% of Full Scale), where F.S.: -99.9 kPa (-14.5 PSIG).

(Not recommended for continuous use at high vacuum)

Operating Temperature Range

-10°C to +50°C (14°F to 122°F)

No change in accuracy over operating temperature range. Gauge must be zeroed to achieve rated specification.

Storage Temperature Range

-40°C to +75°C (-40°F to 167°F).

Overpressure Capability

Minimum 1.5x Range.

Display

Numerical Display height: 16.8mm (0.66").

Description: 5 full (seven segment) digits.

Display rate: 4 readings per second.

(The display rate can be modifed to a reading every 15 seconds, 30 seconds, 1 minute, 5 minutes, and 10 minutes.)

Over Scale Limit

Display will flash at 110% of Full Scale.

Fitting

¼" NPT or
G 1/4 B (ISO 228-1 threads per EN-837-1).

Batteries

2 x AA alkaline (LR6) batteries.

Battery life (backlight off–rd 0.1[1 reading per 10 minutes]): 30,000 hours

Battery life (backlight on): approximately 50 hours at maximum brightness.

Caution: Do not overtighten rear cover when replacing batteries.

Sensor

Piezoresistive silicon sensor with permanent oil isolation system and integral filter.

All wetted surfaces are 316 Stainless Steel.

All welded design (no o-rings, thread tape, epoxy, or sealant on any part of sensor assembly).

Enclosure

Water resistant housing incorporating o-ring seals.

Polyester/Polycarbonate blend compatible with Skydrol(TM) and common industrial fluids.

Additional Features

Vertical bar graph (arrow disappears in vacuum).
Minimum (LO) and maximum (HI) capture.

Averaging (2 to 20 samples).

Note: Specifications include all the effects of linearity, hysteresis, repeatability, temperature, and stability for one year.

CE

the m1 pressure G·A·U·G·E

P/N: 3416 – Rev B