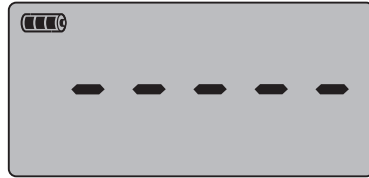
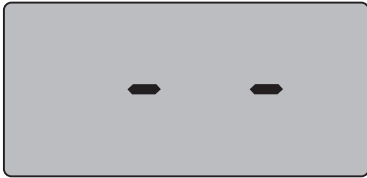


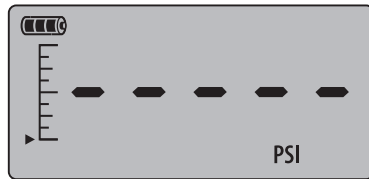
m1 Quick Reference



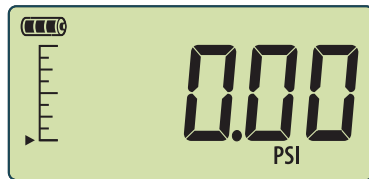
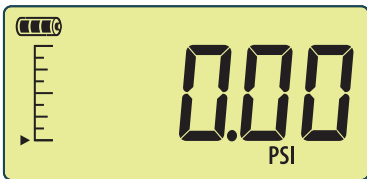
Power On



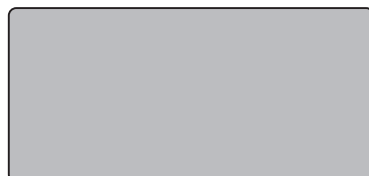
Zero



Backlight



Power Off



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engineering corporation

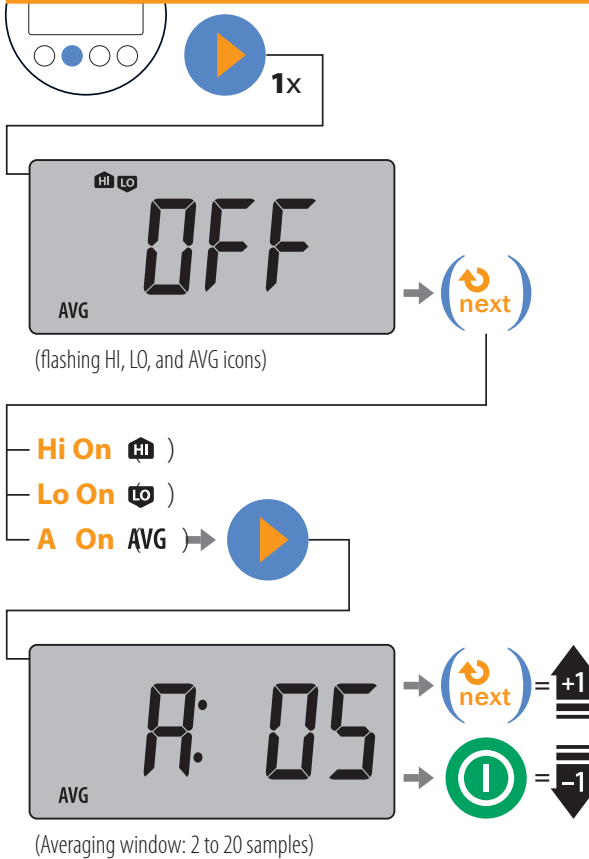
Note: Pressing the **enter** button always returns the gauge to operating mode. If you want to set multiple Display Functions, press the **setup** button to navigate from one Display Function to the next, then press the **enter** button when you are done.

Gauge Setup Basics

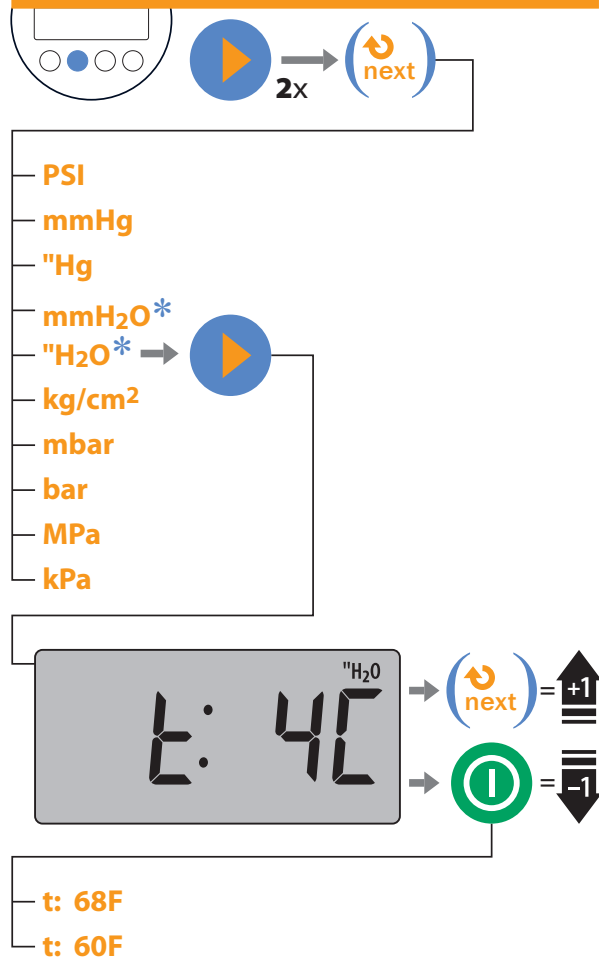


Gauge Setup Map

Maximum, Minimum, or Averaging



Pressure Units



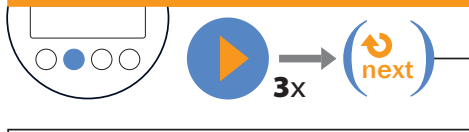
All units are not available with every pressure range.

* H₂O icons and temperature settings will only display on H₂O enabled units.



Gauge Setup Map continued

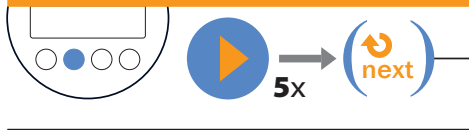
Vertical Bar Graph



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



Backlight Timer



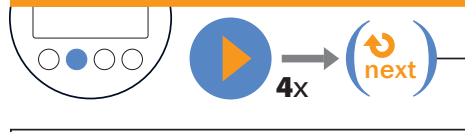
- **Lt: 15** (light stays on for 15 seconds)
- **Lt: 60** (light stays on for 60 seconds)
- **Lt: On** (light does not turn off automatically)

To Clear Peaks or Line Pressure



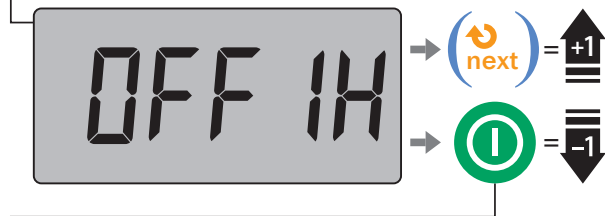
Note: If there is no gauge activity for 10 seconds, the gauge will return to operating mode. Any Setup options that you have selected will be enabled.

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.**

Specifications

Accuracy, Pressure

20% to 100% of Full Scale: \pm (0.2% of Reading).
0 to 20% of Full Scale: \pm (0.04% of Full Scale).

Accuracy, Vacuum

Vacuum for 2 MPa (300 PSI, 20 bar, 20 kg/cm²) and lower pressure gauges:
0 to -99.9 kPa (-14.5 PSIG): \pm (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 modified to a reading every 15 seconds, 30 seconds, 1 minute, 5 minutes, and 10 minutes.)

the
m1
pressure
G · A · U · G · E



P/N: 3416 – Rev B

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.

