Congratulations! The M4 is one of the most capable handheld pressure calibrators available. Follow the instructions in this quick guide to become familiar with the unit. See the User's Manual on the product CD or Meriam website for detailed operating instructions. Consult the specifications on the back of this page before use. Thank you for choosing Meriam Process Technologies!

Task	**Step by Step Instructions**
How do I get started with my M4?	Remove the hand strap. Loosen the two screws on the battery cover. Insert the 4 AA batteries following (+,-) polarity signs. Insert the provided SD™ card in slot next to batteries. Make sure the tab on SD™ card is unlocked. You will hear a click once installed correctly.
How do I change units of measure?	Press the **Sensor Key** to highlight the sensor. The display will turn black on the first sensor. The **Units Key** is now active. Press the **Units Key** to scroll through the Engineering units. To confirm selection press the **Left Arrow Key** or wait approximately 5 seconds. The screen will return to Measure mode.
How do I source 24V and measure mA(I)?	Press the **Sensor Key** repeatedly until VI is highlighted. Press the **Setup Key** to see details and available operation modes. The Mode selection will be highlighted. Press the **Right Arrow Key** or **F4** to enter in menu. Place finger on white wheel with slight pressure and rotate clockwise or counter clockwise until 24V Source is highlighted. Press the **Right Arrow Key** or **F4** to confirm. Mode will now say "24V Source". Press **Left Arrow Key** or **F1** to return to Measure mode. You are now sourcing 24V and Measuring mA.

1/8" FNPT Pressure Port(s)

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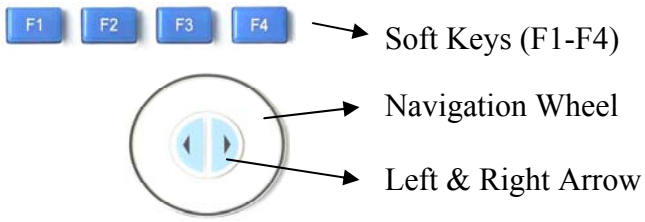
▲▲

Standard Banana Jacks

Quick Key and Screen Guide (M400 and M402)

P1:Pressure Sensor #1, P2: Pressure Sensor #2
VI: Volts & Current Sensor



How do I setup a Data Logging session to capture readings once a second for one minute?	Press the **Setup Key**. Place finger on white wheel with slight pressure and rotate clockwise or counter clockwise until Data Logging is highlighted. Press the **Right Arrow** or **F4 Key** to confirm. Place finger on wheel and rotate clockwise until interval is selected. Press the **Right Arrow** or **F4 Key**. Use wheel to change value to 1 sec. Press Save and then Exit. Use wheel to highlight duration. Press the **Right Arrow** or **F4 Key**. Use wheel to highlight 1 minute. Press the **Right Arrow** or **F4 Key** to confirm. Use wheel to highlight start. Press the **Right Arrow** or **F4 Key** to confirm. REC will appear in left hand corner of the screen. When test is complete it will disappear. Results can be downloaded using USB cable and software utility provided on the product CD.

Meriam Process Technologies • 10920 Madison Avenue • Cleveland, Ohio 44102 U.S.A.
Phone (216) 281-1100 • Fax (216) 281-0228 • www.meriam.com

M4 Series SPECIFICATIONS

Pressure Measurement

M400: single pressure sensor (specified by customer)
M402: dual pressure sensors – any two compound gauge or absolute sensors, mix and match as desired
Accuracy: ±0.025% of Reading from 10 - 100% FS, ±0.002% of Full Scale under 10% of FS
Temperature Performance: Accuracy includes all affects of temperature from -20º to +50º C (-4º to +122º F)

Pressure Limits

DN sensors:	2x range when pressurized on P1 (HI) side only, 150 PSI when applied simultaneously to P1 (HI) and P2 (LO) sides.
DI sensors:	3x range when pressurized on P1 (HI) side only, 3x range or 150 PSI (whichever is less) on P2 (LO) side only 1000 PSI when applied simultaneously to P1 (HI) and P2 (LO) sides.
CI, AI sensors:	2x range

Media Compatibility

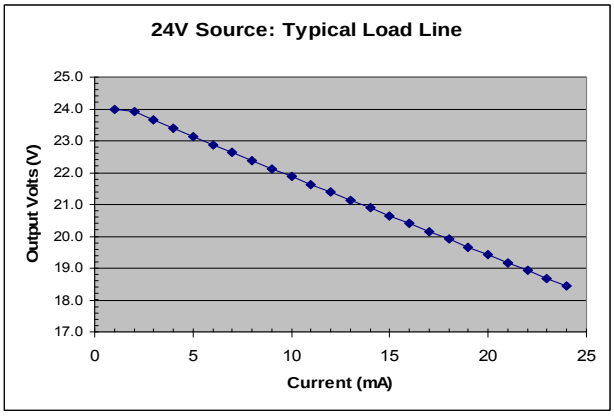
DN sensors:	Non-isolated for clean, dry, non-corrosive gases only (Brass, 316L SS, Silicon gel)
DI sensors:	Isolated for fluids compatible with 316L SS and Viton
CI, AI sensors:	Isolated for fluids compatible with 316L SS

Voltage & Current, Measurement, Sourcing, Sinking

DC Voltage: ±50 VDC measure, 0 – 24 VDC source
DC Current: ±100 mA DC measure, 0 – 24 mA DC source, 1 – 24 mA sink at 1-50 VDC external power
Accuracy: ± (0.015% of Reading +0.002 units)
Temperature Performance: Accuracy includes all affects of temperature from -20º to +50º C (-4º to +122º F)
Resolution (measure mode): 0.001 V, 0.001 mA or 0.0001 V, 0.0001 mA (user selectable)

Loop Power

250Ω HART® resistor included
See 24 VDC Load Curve at right
Four (4) AA alkaline batteries power a transmitter at 20 mA output for 10 hours



Temperature

Operating: -4 to 122°F (-20 to 50°C)
Storage: -40 to 140°F (-40 to 60°C)

Connections

Pressure: ⅛" NPT (female)
Electrical: Standard banana jacks on ¾" centers
Firmware updates, data retrieval: USB mini-B (female)

Power

Portable service: Four (4) AA alkaline batteries provides 30+ hours of continuous measurement service
Operation with PC: Power over USB using USB type A to mini-B cable (requires high power 500 mA port)

Enclosure: 8.5" L x 3.75" W (max.) x 2.25" D (max.), polycarbonate case, Softflex® over-molded bumpers, IP40

Weight: M400 single sensor: 1.5 – 1.8 lbs, M402 dual sensor: 1.8 lbs

Consult manual located on the product CD or at www.meriam.com for detailed instructions, software utility, and safety information!

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