Quick Start
1. Press for 1 second to turn on your SDMN6.
2. If necessary, press ZERO for 1 second to set the ambient pressure of P1 and P2.
3. P1 will be displayed in inches of water column (inWC). P1-P2 will be displayed on lower line.
4. See sections below for details on testing pressure switches.

Scanner for Video

Certifications
C-Tick (N22675)  
CE  
WEEE  
RoHS Compliant

Static Pressure
1. ZERO your SDMN6 while at ambient pressure with any hoses/probes attached. This will zero both P1 and P2. For measurements less than 2 inWC, take reading within 1 minute after zeroing for best accuracy.
2. Use one hose (P1 or P2) to get the gauge pressure relative to the ambient or ZERO pressure.
3. Connect both hoses if you want to see relative pressure, P1 and P2. This is common when evaluating equipment such as a blower.

NOTE: Always use the static pressure probes if checking static pressure of an airflow stream. NOTE: The red arrows on the probes should point toward the airflow stream.

Display
Auto Power Off (APO) Enabled
Solid Readings Hold
Blink Auto-Capture Mode
Pump Speed Limit Reached
Low Battery

MILLIBAR
PSI
INWC
MMWC

News Item

Controls
Hold for one second to toggle power. Press to toggle backlight.

Select P1 or P2 on top display.

Select mbar, inWC, mmWC, or psi. Hold to check % battery remaining.

Gas Pressure
1. See manufacturer’s specification for target inlet and outlet pressures.
2. Shut off main gas supply to furnace.
3. Shut off power to furnace equipment.
4. Zero your SDMN6 while at ambient pressure with hoses attached.
5. Remove outlet pressure tap screw, and insert the brass screw fitting of the P1 hose into the outlet pressure tap of the gas regulator.

NOTE: Some pressure taps have a 5/16" boss instead of an insert screw. In this case, remove the boss screw fitting from the P1 hose and connect the included 5/16" adapter tube. Loosen the tap screw about 1 revolution, and slide the tube over the boss (see illustration at left). Make sure the tube is over the boss enough to prevent leakage.
6. Put furnace into operation (i.e. turn on gas and power to the furnace, call for heating, and have furnace ignite as if running it in normal operation). 7. P1 will show the pressure coming out of the regulator.
8. If you suspect high or low inlet pressure into the regulator, connect P1 to inlet tap and P2 to outlet tap to see the pressure drop across the regulator.
Pressure Switch Test

1. Connect the 2 yellow hoses of the Y-splitter to the P1 and PUMP ports of your SDMN6.
2. Connect leads (interchangeable) from the pressure switch to the P1 and PUMP ports of your SDMN6. (common) terminals of the pressure switch.
3. Connect the 2 yellow hoses of the Y-splitter to the P1 and PUMP ports of your SDMN6.
4. Before every use, check the SDMN6 and the tubing for moisture build-up as well. Check the tubing for breaks or blockage. Check the tubing for moisture build-up as well.
5. Before use, check the SDMN6 and the tubing for breaks or blockage. Check the tubing for moisture build-up as well.
6. Press HOLD to automatically HOLD a closing or opening pressure of a switch as you change the speed of the pump. “HOLD” blinks until a change in continuity is detected. Press HOLD again to exit AUTO CAPTURE mode.
7. Fieldpiece is not liable for any defects in material or workmanship for one year from date of purchase. Fieldpiece will replace or repair the defective unit, at its option, subject to verification of the defect. This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument. Any implied warranties arising from the sale of a Fieldpiece product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. Fieldpiece shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss. State laws vary. The above limitations or exclusions may not apply to you.

Adjustable Pressure Switch Calibration

WARNING: Read “Pressure Switch Testing Safety Info” section below prior to testing.

1. In the interest of safety, the SDMN6 should only be used by trained, competent professionals who understand the hazards and limitations or exclusions may not apply to you. For international customers, warranty for products purchased outside of the U.S. should be handled through local distributors.

For Service

In the USA, call Fieldpiece Instruments for one-price-fix-all out of warranty service pricing. Send check or money order for the amount quoted. Send the meter freight prepaid to Fieldpiece Instruments. Send proof of date and location of purchase for in-warranty service. The meter will be repaired or replaced, at the option of Fieldpiece, and returned via least cost transportation. Outside of the USA, please visit www.fieldpiece.com for service contact information.

Limited Warranty

This meter is warranted against defects in material or workmanship for one year from date of purchase. Fieldpiece will replace or repair the defective unit, at its option, subject to verification of the defect. This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument. Any implied warranties arising from the sale of a Fieldpiece product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. Fieldpiece shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss. State laws vary. The above limitations or exclusions may not apply to you.

Fieldpiece

www.fieldpiece.com

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Transducer Test

1. Connect the 2 yellow hoses of the Y-splitter to the P1 and PUMP ports of your SDMN6.
2. Connect a volt meter to the transducer's terminals.
3. ZERO your SDMN6 while at ambient pressure with yellow hoses attached. For measurements less than 2 in/WC, take reading within 1 minute after zeroing for best accuracy.
4. Connect the 2 yellow hoses of the Y-splitter to the P1 and PUMP ports of your SDMN6. (common) terminals of the pressure switch.
5. Now connect the white hose to the negative side of the pressure switch. (Incorrect setup will cause incorrect pressure measurements.)
6. Make sure the pressure switch is vertically oriented, the same as it is on the equipment.
7. If the CLOSED LED is OFF, press to increase the pump speed and induce a negative pressure on the switch. The CLOSED LED will light when the pressure switch closes. Note the closing pressure.
8. If the CLOSED LED is ON, press to slow the pump and decrease the negative pressure on the switch. The CLOSED LED turns off when the switch opens. Note the opening pressure.
9. For higher rated switches, you can hold down or to accelerate/decelerate the pump faster. Slow your acceleration as you approach the switch's rated pressure. Note: A pressure switch should open and close within the manufacturer's tolerance rating of the switch (typically ±10%).

Pressure Switch Testing Safety Info

The pressure switch is a safety device that prevents the furnace from running in an unsafe condition. An unsafe condition cannot result in injury, loss of property or even loss of life.

1. Before every use, check the SDMN6 and the tubing for breaks or blockage. Check the tubing for any moisture as well.
2. It is critical that the hoses going to P1 and the switch are the same length.
3. Check for the presence of moisture in the pressure switch before using the SDMN6. Do not use the SDMN6 on a pressure switch that has moisture in it. Moisture can damage the SDMN6 and VOID the warranty. Check the tubing for moisture build-up as well.
4. The SDMN6 is designed to produce a precise approach the switch's rated pressure.
5. Fieldpiece is not responsible for incorrect readings by faulty test equipment or untrained personnel.
6. In the interest of safety, the SDMN6 should only be used by trained, competent professionals who understand the hazards and consider the risks of working on and with tools and equipment.
7. The pressure rating for the pressure switch is either stamped on the pressure switch or on a sticker attached to the pressure switch. Otherwise, contact the vendor or manufacturer of the furnace to get that information.
8. An adjustable pressure switch must open at the desired negative pressure to match the one it is replacing.
9. Fieldpiece is not liable for any damages, injuries, or loss of life incurred by the misuse of the SDMN6. Indications a pressure switch is out of calibration, has a weak/bad diaphragm, or a bad micro switch in the pressure switch:
   - Closing/opening outside the manufacturer's tolerance rating.
   - CLOSED LED blinks rapidly.
   - Dramatic fluctuations of pressure readings.

Auto Capture Mode

Press HOLD to automatically HOLD a closing or opening pressure of a switch as you change the speed of the pump. “HOLD” blinks until a change in continuity is detected. Press HOLD again to exit AUTO CAPTURE mode.

Pump Bleed Accessory

Most pressure switches have a bleed port to help regulate the pressure required to close and open the switch. Pump pressures rated around -0.10inWC often don't have a bleed port. You can insert the Pump Bleed Accessory directly onto the PUMP port to give the pump better control of these low negative pressures.

Checking the Diaphragm

If you have difficulty maintaining the correct pressure to open and close the switch the diaphragm could be cracked.

Checking the Bleed Port

Pressure readings are greatly affected when the hose to the pressure switch is pinched. If the pressure does not change when you pinch the hose on a pressure switch with a bleed port, the bleed port could be blocked. Examine the bleed port for signs of corrosion or debris. Corrosion is a sign that the switch has been exposed to excessive moisture and diaphragm could be coated with debris.

Checking the Inducer

If the pressure created by the inducer measures more than enough to close the pressure switch, but the SDMN6 proves the pressure switch to be good, the inducer may not be providing enough airflow to close the switch.

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Limited Warranty

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