

REED

Model R3002

Digital Manometer

Instruction Manual



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Features

- Measures gauge and differential pressure from 0 to 5 psi
- 11 selectable units of measure: psi, inH₂O, bar, mbar, kPa, inHg, mmHg, ozin², ftH₂O, cmH₂O, kgcm²
- Dual LCDs with backlighting
- Max/Min/Avg record with time stamp
- Data Hold freezes the displayed reading
- Low battery indication with auto power off
- Push button zero adjust and offset readings
- USB output

Specifications

Function	Range	Resolution	Function	Range	Resolution
inH ₂ O	138.3	0.1	ozin ²	80.00	0.01
psi	5.000	0.001	ftH ₂ O	11.53	0.01
mbar	344.7	0.1	cmH ₂ O	351.5	0.1
kPa	34.47	0.01	kgcm ²	0.351	0.001
inHg	1.018	0.001	bar	0.344	0.001
mmHg	258.5	0.1			

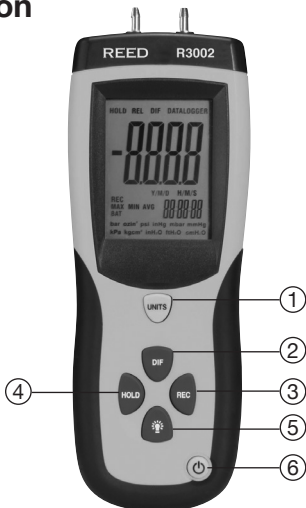
Display:	Dual LCD
Accuracy:	±0.3% f.s (25°C)
Repeatability:	±0.2% (Max.+/-0.5% f.s)
Linearity/Hysteresis:	±0.29% f.s
Pressure Range:	5 psi
Maximum Pressure:	20 psi

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Response Time:	0.5 seconds
Low Battery Indicator:	Yes
Over range Indicator:	Err1
Under range Indicator:	Err2
Operating Conditions:	0°C to 50°C
Storage Conditions:	-10°C to 60°C
Serial format:	Baud rate: 9600 Baud, 8 Data Bits
Power Supply:	Single 9V alkaline battery
Includes:	USB cable, tubing, hard carrying case & battery
Optional Accessories:	Tripod (model BS-6)

Instrument Description

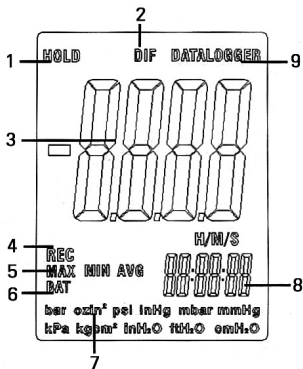
1. UNITS
2. DIF
3. REC
4. HOLD
5. BACKLIGHT
6. ON/OFF



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Display Description

1. Hold Function
2. Differential Mode
3. Primary Data screen
4. Record Mode
5. MAX/MIN/AVG
6. Low Battery indicator
7. Pressure Unit indicator
8. Relative Time Clock
9. Data output from USB



Operating Instructions

Turning the unit on

Press the ON/OFF button to turn power on or off. The meter will perform a short self-test when turned on. The meter will default to the last setting used during operation.

Zero Adjust and Offset

To Zero Adjust and Offset the meter, turn the meter on, without any fitting attached. Press the HOLD button for about 2 seconds to zero the meter. The meter will reset displaying “0 0 0 0” on the LCD screen, changing to “0.000”. If you want to offset the meter and display, press the DIF button while taking a measurement. Subsequent readings will be the difference between the current measurement and the measurement that was on the display when the DIF button was pressed.

Data Hold

Press the HOLD button momentarily to freeze the displayed reading. The ‘HOLD’ icon will appear on the upper left-hand side of the display. If the pressure value is over the range, error codes will show on the screen. Press the HOLD button again to return to normal operation.

Record

The MAX/MIN mode allows the user to view only the highest (MAX), lowest (MIN) or average (AVG) readings with a relative time stamp.

1. Press the REC button once, and the REC symbol will appear on the display. All other functions will be locked out except for Power & Backlight. The relative time clock also appears in the secondary display and will start counting.
2. Press the REC Button a second time and MAX will appear on the display. The display will show maximum pressure and relative time that it was recorded.
3. Press the REC button a third time to display the minimum (MIN) reading with the relative time.
4. Press the REC button a fourth time to display the average value (AVG) reading with the relative time.
5. Press the REC button a fifth time to continue recording MAX/MIN/AVG measurements.
6. To exit the MIN/MAX/AVG mode, press the REC button for 3 seconds to return to normal operation.

Backlight Display

Press the Backlight button to turn on the backlight. It will remain on for 40 seconds.

Automatic Power Off

The meter will automatically shut off after 20 minutes to conserve battery life. To disable Auto Power Off, when the meter is off, hold down the HOLD button and turn on the meter on. An “n” will appear in the display indicating that Auto Power Off mode is disabled. The meter will return to normal operation when it is turned off.

Units

Press the Unit button and the meter will cycle through the 11 available units of measurement as indicated by the cursor on the bottom of the display.

Error Codes

If the meter fails its internal diagnostic test all button functions will cease and an error message will appear on the display.

1. Err1: Pressure value is over the range.
2. Err2: Pressure value is below the range.
3. Err3: DIF function, the differential pressure value is over range.
4. Err4: DIF function, the differential pressure value is below range.

Battery Replacement

When the battery power falls low, "BAT" will appear on the display screen. Immediately replace the 9V battery.

1. Turn unit off
2. Carefully open battery compartment at the back of the instrument
3. Remove old battery
4. Replace with new battery observing the correct polarity
5. Close battery compartment

Notes
