Perfect Prime

Digital Manometer AR1895

www.perfectprime.com **for product register and warranty**

Customer Service: cs@perfectprime.com

Contents

1. Overview

The AR1890 digital manometer can measure different pressure levels with high accuracy (details below) as well as the maximum pressure across the measurement. In addition, there are 11 units that can be selected:
1. inH2O   2. psi   3. bar   4. mbar
5. kPa   6. inHg   7. mmHg   8. ozin2
9. ftH2O   10. cmH2O   11. kgcm

With a simple hose connection device equipped，it can be used for:

1. Testing ventilation
2. Air conditioning system
3. Spot checking
4. Air conditions in a room
5. Any gas pressure system troubleshooting.

Easy operation and clear reading are the major features of AR1895. Therefore, it is doubtlessly an indispensable testing tool for HVAC technician, maintenance engineers and science researchers.

2. Performance Index

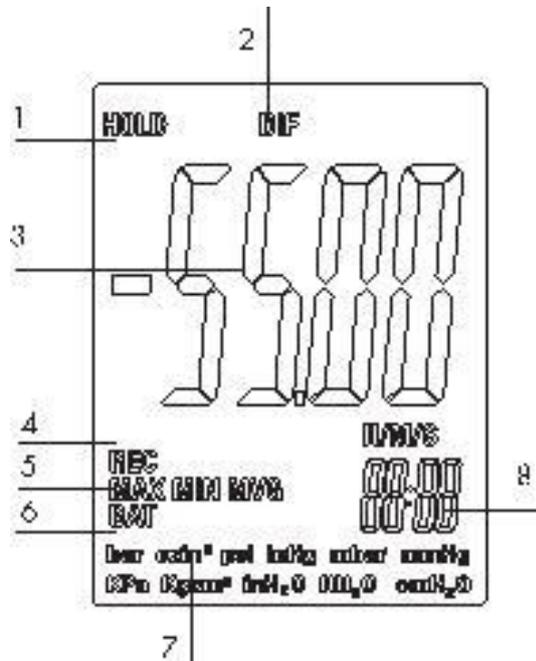| Display	Dual LCD
Accuracy	±0.3%FSO(25°C)
Reliability	±0.2%FSO(Max+/-0.5%FSO)
Linearity/Hysteresis	±0.29%FSO
Maximum Pressure	150 psi
Response Time	0.5 seconds typical
Low Battery Indicator	Yes
Over Range Indicator	Err.1
Under Range Indicator	Err.2
Operating Temperature	32°F to 122°F (0 to 50°C)
Storage Temperature	14°F to 140°F (-1 to 60°C)
Power Supply	1 X 9V Battery (included) or External 9VDC
Standard Accessories	Pouch &. Tubing

3. Buttons Description

The meter has six buttons:

1. UNITS

2. DIF

3. HOLD

4. ON/OFF

A. REC

B. BACKLIGHT

4. 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

5. Degree of Accuracy And Range of Units

Function	Range	Accuracy	Function	Range	Accuracy
inH2O	±2772	1	Ozin2	±1600	1
Psi	±100.0	0.1	ftH2O	±230.7	0.1
Mbar	±6895	1	cmH2O	±7031	1
kPa	±689.5	0.1	Kgcm2	±7.031	0.001
inHg	±203.6	0.1	Bar	±60895	0.001
mmHg	±5171	1			

6. Operation

1. ON/OFF button:
    -Press the ON / OFF button to turn on/off manometer.
    -When turned on, the screen will be displayed for about two seconds and the
     normal measurement mode will appear afterwards.

2. Clearance:
    -If there is no input deferential pressure, the manometer will not be clear the
data automatically.
    -When manually clearance is needed, press the HOLD button for about five
     Seconds,
      -->the screen will show ---- then it will be cleared.

3. UNITS button:
    -Press the UNITS button, units at the bottom of the screen will change.
    -These units include:

    1. inH2O   2. psi   3. bar   4. mbar
    5. kPa   6. inHg   7. mmHg   8. ozin2
    9. ftH2O   10. cmH2O   11. kgcm

4. DIF button:
    -Press the DIF button, the pressure value will subtract the pressure value before
     pressing.

5. HOLD button:
    -Press the HOLD button, the current measured result will be kept.
    -Press once more will lift the hold function.

6. REC button:
    -Press this button intermittently, the maximum, minimum, average result from
     process of recording the measuring will be displayed.
    -Press and hold the button for about 5 seconds and it will stop recording.
    -Other function buttons are locked and can not be used during recording.

7. Backlit button:
    -Press this button, the backlight will turn on.
    -Press the button again to turn off the backlight.

8. Automatic power-off function:
    -The manometer will automatically power off if no buttons has been pressed for
25 minutes.
    -If you want to turn off function of automatic power-off:
        1. Press HOLD button.
        2. Press the ON / OFF button to start.

3. LCD will show "ON"--->the function of automatic power-off turned off.

7. Error Codes

An error message will appear on screen if the meter fails an internal diagnostic test.

1. Err. 1: Pressure value is over the read range.
2. Err. 2: Pressure value is below the read range.

8. Battery Replacement

When the battery power is low, "BAT" will display on the screen to remind you for replacing the 9V battery.

9. Safety Precaution And Consideration

• If product operates abnormally, stop using.

• Please test the manometer before usage to ensure proper operation.

• Always ensure that the connecting hoses are free from kinks, blockage or splits.

• While using the manometer, if you suspect gas is leaking or smell gas:

   1. Turn off gas supply and ventilate the affected areas.
   2. Identify and iron out the source of leaking before using the product again.

• Do not disassemble or modify the manometer in any way. Otherwise, accident and injury may occur.