

Digital Manometer



- HT-1890
- **HT-1891**
- HT-1892
- HT-1893
- HT-1895
- HT-1890B
- **HT-1890C**



Introduction

The meter can measure the differential pressure/positive pressure/negative pressure. there are 11 uints can be selectable, as inH2O,psi, bar,mbar,kPa,inHg, mmHg,ozin,ftH2O,cmH2O,kgcm, Equipped with a simple hose connection device, it is used for testing Ventilation and air conditioning system, spot check, clean room, or any gas pressure system troubleshooting. Easy operation and clear reading, it is an indispensable testing tool for HVAC technician, maintenance enginers and science researchers.

Meter Diagram

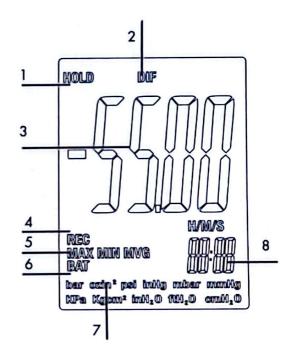
The meter has six buttons.

- 1. UNITS
- 2. DIF
- 3. HOLD
- 4. ON/OFF
- A. REC
- B. BACKLIGHT

A B UNITS 1 2 4 Manometer Am Gr

Display Description

- 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



HT-1890

Function	Range	Resolution	Function	Range	Resolution
the same of the sa	± 55.40	0.01	Ozin2	_±32.00	0.01
Psi _	± 2.000	0.001	ftH2O_	_±4.612	
Mbar	± 137.8	0.1	cmH2O	_±140.6	
kPa	± 13.79	0.01	Kgcm2	_±0.140	
inHg_	± 4.072	0.001	Bar	_±0.137	0.001
mmHg	± 103.4	0.1			

HT-1890B

Function	Range	Resolution	Function	Range	Resolution
InH2O	± 12.04	0.01	Ozin2	±6.96	0.01
Psi _	± 0.435	0.001	ftH2O	±1.003	0.001
Mbar	± 30.0	0.1	cmH2O	±30.6	0.1
kPa	± 3.000	0.001	Kgcm2	±0.030	0.001
inHg _	± 0.886	0.001	Bar	±0.030	0.001
mmHg	± 22.5	0.1			

HT-1890C

Function Range Resolution	Function	Range	Resolution
InH2O ± 24.08 0.01	Ozin2	±13.92	0.01
Psi <u>± 0.870</u> 0.001	ftH2O	±2.006	0.001
Mbar <u>± 60.0</u> 0.1	cmH2O	±60.9	0.1
kPa <u>± 6.000</u> 0.001	Kgcm2	±0.060	0.001
inHg <u>± 1.771</u> 0.001	Bar	±0.060	0.001
mmHg ± 45.0 0.1			



HT-1891

Function	Range	Resolution	Function	Range	Resolution
InH2O	±138.3	0.1	Ozin2	±80	1
Psi	±5.000	0.001	ftH2O_	±11.53	0.01
Mbar_	±344.7	0.1_	cmH2O	±351.5	0.1
kPa	±34.47	0.01	Kgcm2	±0.351	0.001
inHg_	±1.018	0.001_	Bar	±0.344	0.001
mmHg	±258.5	0.1			

HT-1892

Function	U	Resolution	Function	Range	Resolution
InH2O Psi Mbar kPa	±415.2 ±15.00 ±1034 ±103.4	0.1 0.01 1 0.1	Ozin2 ftH2O cmH2O Kgcm2	±240.0 ±34.60 ±1055 ±1.055	0.1
inHg _ mmHg	±30.54 ±775.7		Bar_	_±1.033_ _±1.034_	0.001

HT-1893

Function	Range	Resolution	Function	Range	Resolution
InH2O	±830_	_ 1	Ozin2	±480.0	0.1
Psi _	±30.00	0.0_1	ftH2O	±69.20	0.01
Mbar_	±2068	_ 1	cmH2O	±2109	1
kPa _	±206.8	_ <u>0.1</u> _	Kgcm2	±2.109	0.001
inHg_	<u>±61.08</u>	_ <u>0.0</u> 1_	Bar	±2.068	0.001
mmHg	±1551	1			

HT-1895

Function	Range	Resolution	Function	Range	Resolution
InH2O	±2772	_ 1	Ozin2_	_ <u>±1600</u>	1
Psi_ Mbar	±100.0 ±6895	_ <u>0</u> . <u>1</u>	ftH2O_	_ <u>±</u> 2 <u>3</u> 0 <u>.7</u>	0_1
kPa	±689.5	- 	cmH2O Kgcm2	_ <u>±7031</u>	_1
inHg	±203.6	- <u>0.1</u>	Bar	_ <u>±</u> 7 <u>.031</u> _ <u>±</u> 6 <u>.895</u>	
mmHg	±5171	1		_ <u>±0.030</u>	_ 0.001_

Display	Dual LCD
Accuracy	±0.3%FSO(25°C)
Repeatability	±0.2%(Max+/-0.5%FSO)
Linearity/Hysteresis	±0.29% FSO
	10psi (HT-1890,HT-1890B,HT-1890C)
Maximum Pressure	20psi (HT-1891)
	100psi (HT-1892,HT-1893)
	150psi (HT-1895)
Response Time	0.5Seconds typical
Low Battery Indicator	Yes
Over Range Indicator	Err.1
UnderRange Indicator	Err.2
Operating Conditions	32°F to 122°F(0 to 50°C)
Storage Conditions	14°F to 140F°(-1 to 60°C)
Power Supply	1X 9V Battery (included) or External 9VDC
Standard Accessories	Pouch &.Tubing

Operation

1.ON / OFF button:

to turn on or off the power

Press the ON / OFF button to turn on the power of manometer. When turned on, the screen will be displayed for about two seconds and then will display the normal measurement mode.

2.Clearance button:

When turned on, if there is no input differential pressure, instrument will not be cleared by itself. Necessarily need to be manually cleared, press the HOLD button for about 5 seconds,

The screen will show —it will be cleared later.

3.UNITS button:

intermittently press the UNITS button there will revolve various units at the bottom of the screen. These units are as follows: bar, mmHg, Ozin2, Kgcm2, psi, inH2O, Kpa, ftH2O, inHg, cmH2O, mbar.

4.DIF button:

the pressure value when pressing the DIF button subtracting the pressure value before pressing.

5.HOLD button:

pressing the HOLD button will keep the current measured result. Pressing once more will lift the hold function.

6.REC button:

this button is on the side of the instrument, intermittently press this button will display the maximum, minimum, average result in process of recording measuring. Meanwhile the other function buttons are locked and can not operated. Long pressing the REC button for about 5 seconds and it will quit recording mode.

7. Backlit button:

pressing the backlight button and the backlight will turn on. In dark environment can use this function. Press the backlight button again to turn off the backlight.

8. Automatic power-off function:

it will automatically power off if instrument not work for more than 25 minutes. This can extend the battery life. If do not want to turn off the power, press hold button first, then press the ON / OFF button to start.

LCD will show "ON" to close the function of automatic power-off.

Error Codes

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

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

Battery Replacement

When the battery power falls low, "BAT" will appear on the LCD. Replace the 9V battery.

rning: Pressure inputs of 10 psi or higher will damage the instrument. Do not by pressure higher than the maximum pressure listed in the specification table

tery Replacement

the low battery indicator **BAT** appears on the display or if the meter does not switch on the POWER button is pressed, it is necessary to replace the battery.

To replace the battery:

- Open the battery compartment by sliding the meter's rear panel in the direction of the embossed arrow.
- 2. Replace the 9V alkaline battery
- Replace the battery compartment cover.



Never dispose of used batteries or rechargeable batteries in household waste. As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold.

Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

Other Battery Safety Reminders

- Never dispose of batteries in a fire. Batteries may explode or leak.
- Never mix battery types. Always install new batteries of the same type.