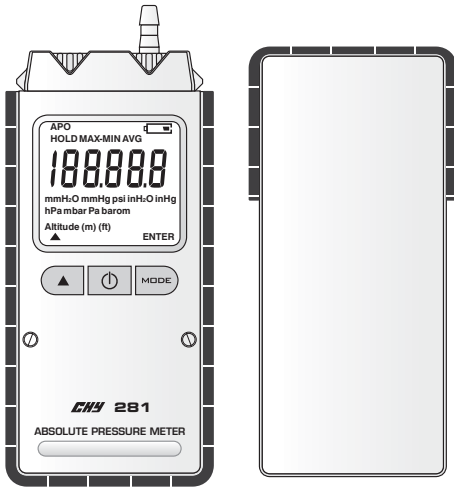


OPERATING INSTRUCTIONS


MODEL 281

ABSOLUTE PRESSURE METER



SPECIFICATIONS



| Units | Range | Resolution | Accuracy |
|--------------------|-----------------|------------|----------|
| mmH ₂ O | 3059 to 12237 | 1 | ±31 |
| mmHg | 225.0 to 900.1 | 0.1 | ±2.3 |
| psi | 4.351 to 17.405 | 0.001 | ±0.044 |
| inH ₂ O | 120.4 to 481.8 | 0.1 | ±1.2 |
| inHg | 8.859 to 35.436 | 0.001 | ±0.089 |
| hPa | 300 to 1200 | 0.1 | ±3 |
| mbar | 300 to 1200 | 0.1 | ±3 |
| Pa | 30000 to 120000 | 1 | ±300 |

- Accuracy:** Stated accuracy at 23°C±5°C, <70% R.H.
- Temperature Coefficient:** 0.1 times the applicable accuracy specification per °C out of 23°C±5°C.
- Measurement rate:** 2 times/second.
- Operating environment:** 0°C to 50°C at <70% R.H.
- Storage temperature:** -20°C to 60°C, 0 to 80% R.H. with battery removed from meter.
- Low battery indication:** The "" is displayed when the battery voltage drops below the operating level.
- Battery:** 1.5V x 2 pcs AAA size.
- Battery Life:** more than 600 hours typical with alkaline battery.
- Dimensions:** 24.7mm(T)x50.9mm(W)x 132.9mm(H).
- Weight:** Approx 120g including batteries.

OPERATIONS

There are 3 operation modes, namely Measurement Mode, Set Mode and Hold Mode.



1. Turning on and off the meter:

- When power is off, a short push on " key turns on the meter and enter Measurement Mode.
- When power is on, Press and hold " key for 2 seconds turns the power off.
- Right after power on, all the indicators on the LCD display lights up for one second.

2. Measurement Mode:


- When power is on, the meter start measuring the absolute pressure and refresh 2 times per second.

Backlight:





- In measurement mode, a short push on " key turns on the backlight for dark environment; it goes off automatically after 15 seconds if without further operation.
- In measurement mode, short push on " key to select Absolute pressure, barom (barometric pressure), Altitude (height above mean sea level).


3. Set Mode:

- In set mode, user can set unit of height above mean sea level, set value of height above mean sea level (Altitude), set unit of pressure and set on/off APO function. (APO = Auto Power Off, when APO is ON, the meter power off automatically if no operation in 10 minutes).

When power is off, press and hold " key for 2 seconds to enter Set Mode.

Push "Mode" key each time the display changes in following sequence:

- 3.1 Set unit of height above mean sea level: Short push on " key switches between m and ft. Push "MODE" key to save the setting and go to next step.
- 3.2 Set value of height above mean sea level (Altitude): Short push on " key increases this digit from 0 to 9 and then to 0. Press "Mode" keys each time move settable position/digit (indicator of settable position/digit blinks.) or save the setting and go to next step.
- 3.3 Set unit of pressure: Short push on " key to change unit through mmH₂O, mmHg, psi, inH₂O, inHg, hPa, mbar and Pa. Push "MODE" key to select and go to next step.
- 3.4 APO ON/OFF: Short push on " key switches between ON and OFF. Push "MODE" key to save the setting and exit Set Mode and Entering Measurement Mode. (Please refer to the section of Measurement Mode.)

※Note: To turn off power in Set Mode abandon the current setting and previous settings remain unchanged. If " indicator appeared, the setting value can works till power off but did not save to meter.

4. Hold Mode:

- In Measurement Mode, short push "Mode" key to enter Hold Mode with indicator "HOLD" shows at upper left corner of LCD.
- Right after entering this mode, shown in the LCD is the last measurement and the reading will not be updated with new measurement.

Push "Mode" key each time the display changes in following sequence:

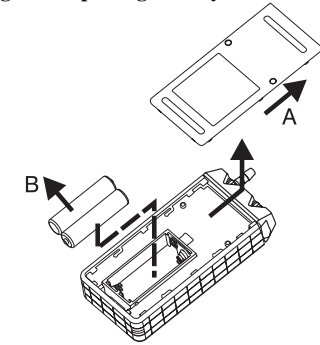
- 4.1 Last Measurement: with indicator "HOLD".
- 4.2 Maximum value recorded: with indicator "HOLD" + "MAX".
- 4.3 Minimum value recorded: with indicator "HOLD" + "MIN".
- 4.4 Maximum-Minimum value recorded: with indicator "HOLD" + "MAX-MIN".
- 4.5 Average of values recorded: with indicator "HOLD" + "AVG".
- 4.6 Exit the Hold Mode and return to Measurement Mode.

To clear the recorded values:


- In Hold Mode and during viewing MAX, MIN, MAX-MIN or AVG, press and hold "Mode" key for 2 seconds, to clear the recorded data and return to measurement mode.

MAINTENANCE

Installing and Replacing Battery:



A. Battery Cover
B. Battery

1. Power is supplied by 2pcs 1.5V (AAA SIZE).
2. The " appears in the display when battery replacement is needed.
3. Push the Battery Cover and lift it in the direction as shown in the figure.
4. Remove the batteries from battery compartment.
5. Replace with 2 new AAA batteries with polarity as indicated on the bottom of Battery Compartment.
6. Replace the Battery Cover.

Cleaning

- Periodically wipe the case with a damp cloth and detergent, do not use abrasives or solvents.

INTRODUCTION

This instrument is normally used to measure absolute pressure. Barometric measurements and height measurements between two points are also possible.

SAFETY INFORMATION

It is recommended that you read the safety and operation instructions before using the absolute pressure meter.

1. Only operate the measuring instrument properly, for its intended purpose and within the parameters specified, please refer to section of specifications.
2. Never store the product together with solvents, acids or other aggressive substances.
3. Don't keep in place with high Temp, or high humidity.
4. When not use for long time remove battery.