

# AVENTOR DIGITAL CALIPER

## Operating Instruction and Parts Manual

The AVENTOR Digital Caliper uses the high accuracy Definitive Positioning memory technology, which keeps track of its origin position once set. Whenever the digital caliper is turned on, the easy-view large LCD displays the actual sensor position and is ready to start measuring. It's not necessary to reset zero. The measuring speed is unlimited. Standard USB data output. High quality surface finish for extra smooth slider movement.

To ensure operator safety, use this instrument in conformance with the specifications, functions, and directions given in this User's Manual.

### ● IMPORTANT

1. Before using this caliper for the first time, wipe the rust preventive oil from the caliper with a soft cloth.
2. Never apply voltage (e. g. engraving with an electric engraver) on any part of the caliper to avoid damaging the circuit.
3. After use, take corrosion prevention measures. A rusty tool is a worthless tool.

### ● SPECIFICATIONS

Resolution: 0.0005" / 0.01mm

Battery life: more than 2 years under normal operation

Accuracy : 0.0001" / ±0.02mm (range ≤ 6" / 150mm)  
 0.00015" / ±0.03mm (range ≤ 12" / 300mm)

Measuring speed: Unlimited

Protection rating: IP54 (Humidity and dust resistance)

Power: 3V, CR2032 Lithium battery included, environment friendly

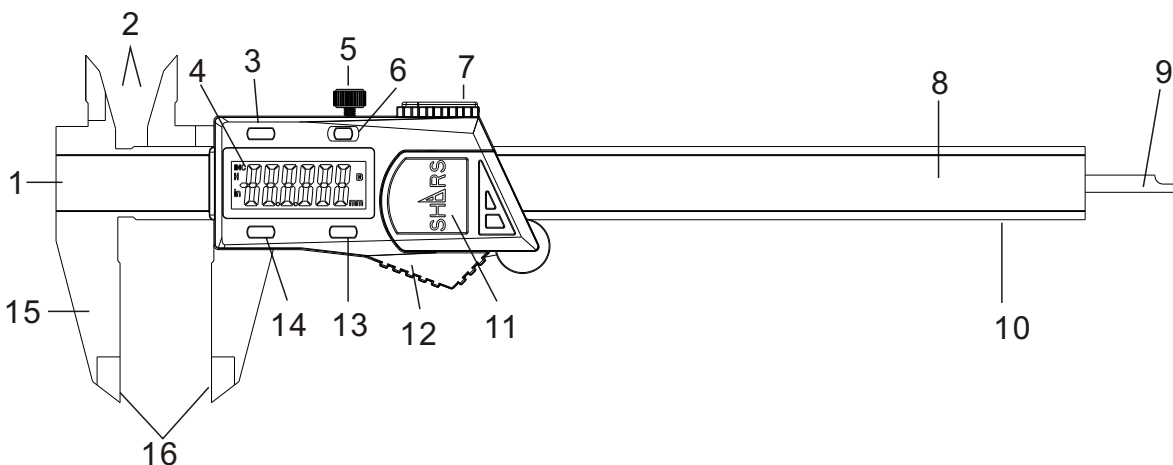
Battery life: 2 years under normal operation

Operating environment: temperature 0~+40°C; relative humidity < 80%

Storage temperature: -10~+60°C

### ● NAME AND FUNCTION OF EACH PART

- |                           |                         |                             |
|---------------------------|-------------------------|-----------------------------|
| 1. Step measuring faces   | 6. ORIGIN switch        | 11. Battery compartment lid |
| 2. Inside measuring faces | 7. Output connector lid | 12. Display module          |
| 3. in/mm switch           | 8. Scale sticker        | 13. ZERO/ABS switch         |
| 4. LCD display            | 9. Depth bar            | 14. ON/OFF switch           |
| 5. Clamp screw            | 10. Main scale          | 15. Slider                  |
|                           |                         | 16. Outside measuring faces |



## ● FUNCTIONS AND FEATURES

1. Zero-setting at any position
2. mm/in switch at any position.
3. Can keep tracing origin point (Absolute zero) set.
4. Whether on or off, LCD will allways display current slider position for measurement.
5. With Origin point technology, there is no need to repeatedly indicate zero.
6. Low consumption and long battery life ( $\geq 2$  years).
7. Unlimited response speed system eliminates over-speed error.
8. Higher accuracy.

## ● OPERATIONS


### 1. Preparation

- (1) Dry the surface of the scale sticker and clean all measuring surfaces.
- (2) Loosen the clamp screw and move the slider to check if LCD display and all keys work properly.

### 2. Measurement

- (1) Press ON/OFF key to switch on power
- (2) Press in/mm key to select desired unit system.
- (3) Move the slider to make two outside measuring faces touch gently and then observe the display.
  - a) The display should be 0/0.00mm at normal mode and can take normal measurement from this point (this caliper has been origin set before sending).
  - b) If the display shows anything other than 0 when completely closed, press and hold the Origin button for around 5 seconds. This should set the Origin point at 0 and allow normal measurement.
- (4) Changing from Absolute to Incremental measurement. The caliper is in absolute measurement mode in its default state; Pressing and holding the ZERO/ABS key, will cause an INC indicator to appear in the top of left corner of the LCD display. The display will clear to zero at the same time as it enters into incremental measurement mode. Pressing and holding the ZERO/ABS key for 5 seconds while in incremental mode or turning the caliper off and will return the unit back to absolute mode.

### 3. Battery Installation and Origin Setting

When “” (low voltage alarm) blinks or there is no display, the battery needs to be changed. Removing an old battery by pushing backward a battery cover and install a new battery to make sure the positive pole of the battery must face out.

Move the slider and close the jaws and hold down the ORIGIN switch for about 5 seconds the “0.0000” display appears, indicating origin (absolute zero) setting is complete.



CAUTION

- Do not disassemble, short-circuit, charge, or heat the battery. Otherwise it will cause battery to explode and perhaps result bodily harm.
- If a battery is swallowed, immediately consult a doctor.
- The outside and inside measuring jaws of this caliper have a sharp edge, Handle it with great care to avoid injury

