

ABSOLUTE ORIGIN DIGITAL CALIPER Operating Instruction and Parts Manual

iGAGING OriginCal, Digital Caliper uses the high accuracy ABSOLUTE encoder technology. It memories its origin zero. Whenever the digital caliper turned on, the LCD displays the actual sensor position ready to start measuring. It's not necessary to reset zero. The measuring speed is unlimited. Standard SPS/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 for fear of damaging the circuit.
- 3. After use, take corrosion prevention measures. Corrosion will cause the trouble.

SPECIFICATIONS

Resolution: 0.0005 "/0.01mm

Battery life: more than 2 years under normal operation Accuracy :0 .001 "/ \pm 0. 02mm (range \leq 6 "/150mm)

0.0015 " ± 0.03 mm (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 $0\sim +40^{\circ}\text{C}$; relative humidity < 80%

Storage temperature: -10~+60°C

NAME AND FUNCTION OF EACH PART

1. Step measuring faces

2. Inside measuring faces

3. in/mm switch

4. LCD display

5. Clamp screw

6. ORIGIN switch

7. Output connector lid

8. Scale

9. Depth bar

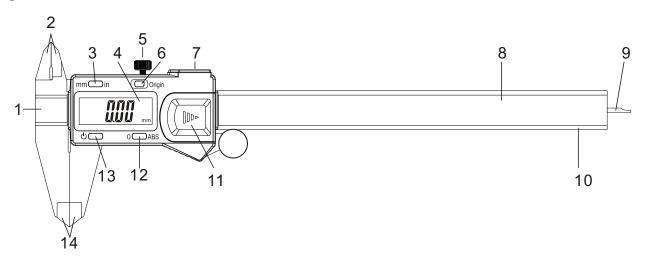
10. Main scale

11. Battery compartment lid

12. ZERO/ABS switch

13. ON/OFF switch

14. 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. No matter when it's switched on, LCD will allways display current slider position for measurement any time.
- 5. Adopt absolute origin point, No repeating adjusting zero.
- 6. Low consumption and long battery life (≥ 2 years).
- 7. No response speed limit and will not cause over-speed error.
- 8. Higher accurey.

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 0.00mm at normal mode and then it can take normal measurement (because this caliper has been ORIGIN SET before sending).
- b) If the display are other digits, then press ORIGIN switch 5 seconds and the display is 0.00mm, Now ORIGIN set is finished and then take normal measurement.
- (4) Switch of absolute measurement and incremental measurement. The caliper is at absolute mode under normal use; To press 0/ABS key, INC indicator will appear at the left corner of LCD display. And zero-clearing will be done at the same time, then the caliper will enter into incremental measurement; presses 0/ABS key 5 seconds at incremental mode, or short press ON/OFF key, INC indicator will disappear and return to absolute mode.
- 3. Battery Installation and Origin Setting

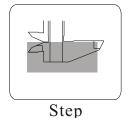
When "Lat" (low voltage alarm) blinks or no display, it shows flat battery. Now a battery should be replaced.

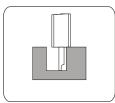
Removing an old battery by pushing backward a battery cover and install a new battery to make sure the positive pole of the battery must face out.

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.

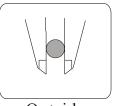


- Do not disassemble, short-circuit, charge, or heat the battery. Otherwise it will cause battery explosion and bring harm.
- If a battery is swallowed, immediately consult a doctor.
- The outside and inside measuring jaws of this caliper have a sharp edge, Handle it with great care to avoid injury









Depth

Outside