

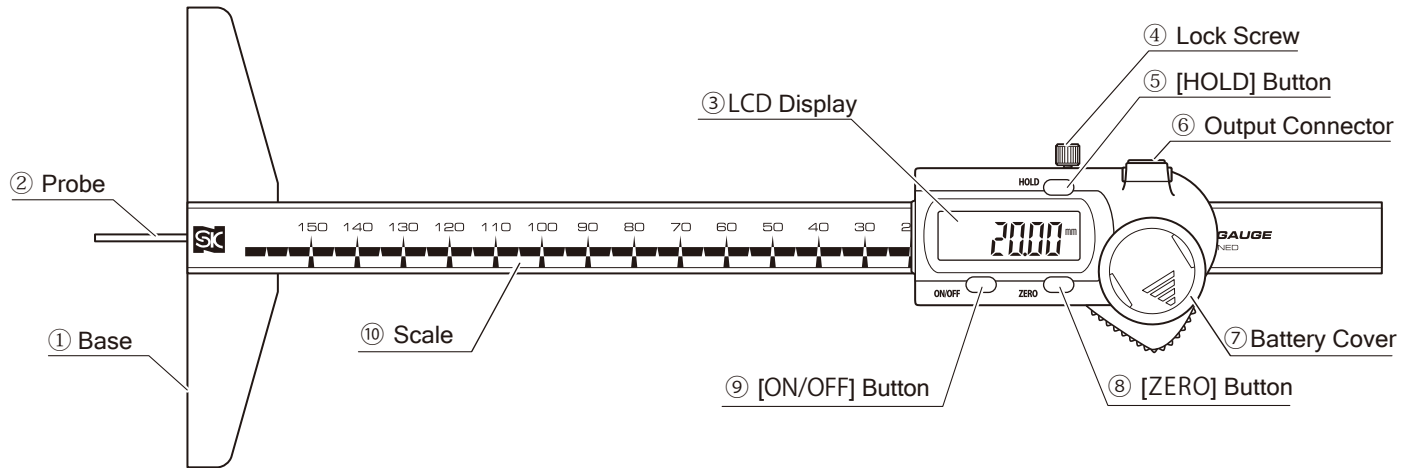
Precision Measuring Tool
For Depth Measurement

DIGITAL DEPTH GAUGE

Thank you for purchasing Niigata Seiki Digital Depth Gauge. This product is a digital instrument for measuring depth.

- For safe and proper use of this product, please read this instruction manual before use and follow the procedures described. Keep this manual with the instrument for future reference.
- Keep this manual with the instrument if transferred or leased to a third party.
- For inquiries about this product, please contact dealer or Niigata Seiki at the address listed on the following page.

■ PARTS IDENTIFICATION & FUNCTION




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|-----------------------|---|--------------------------|---|
| ① Base | Reference surface placed on face of workpiece. | ⑥ Output Connector | Connect to optional Bluetooth Box to send measurements to PC. |
| ② Probe | Insert into groove to measure depth. | ⑦ Battery Cover | Open to access battery. |
| ③ LCD Display | Displays digital measurement. | ⑧ [ZERO] Button | When pressed, Display will read "0.00" |
| ④ Lock Screw | Tighten to prevent the slide and display from moving. | ⑨ [ON/OFF] Button | For turning power ON / OFF. |
| ⑤ [HOLD] Button | When pressed, "HOLD" Icon appears on Display and measurement will be fixed. | ⑩ Scale | Supports LCD Display Unit. |

SAFETY PRECAUTIONS








Please Observe

To prevent harm to yourself or others, and to prevent damage to property, always follow the procedures marked by the following symbols.

 Denotes a prohibition - You **MUST NOT** do

 Denotes a requirement - You **MUST** do

 **WARNING:** Indicates risk of **personal injury** or **property damage** if not followed.

- | | |
|---|--|
| <p> Read the manual and follow the directions.</p> <ul style="list-style-type: none"> • Use of product other than as described in this manual may cause accident. <p> Use only for measuring.</p> <ul style="list-style-type: none"> • Use for any purpose other than measuring may damage or wear the instrument. Improper use may also cause accident. <p> Handle with Care.</p> <ul style="list-style-type: none"> • Do not drop or subject instrument to excessive shock. Do not place under heavy objects. Improper handling may cause damage or poor accuracy. • Do not scratch instrument, for example by writing ID number. <p> Avoid using in high electric fields, such as near fluorescent lights or switching power supplies.</p> <ul style="list-style-type: none"> • Incorrect value may be displayed on LCD | <p> Use and store only in environment meeting the following conditions:</p> <ul style="list-style-type: none"> • Dry location protected from rain, water, and oils. • Location that is not excessively hot. • Location protected from use by children and unauthorized people. • Use in places contrary to the above may cause damage to the product resulting in accident or injury. <p> Do not disassemble or modify.</p> <ul style="list-style-type: none"> • Disassembly may damage product or cause accident. For repair, please contact distributor or place of purchase. <p> Do not write on instrument with electric engraver.</p> <ul style="list-style-type: none"> • Do not engrave instrument body or jaw, such as an ID number with engraver or electric pen. |
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PREPARATION FOR USE

Before using, please follow the steps below

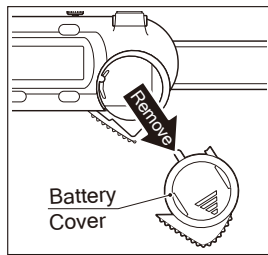
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|--|--|
| <p>● Wipe off oil, rust proofing, and dirt from measuring surfaces and slide.</p> <p>Contamination of surfaces may cause measurement error.</p> | <p>● Allow the gauge and object to be measured time to reach the same temperature.</p> <p>A temperature difference between the object to be measured and the gauge may cause measurement error. Allow time for the temperatures to equilibrate.</p> |
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INSERTING • REPLACING BATTERY

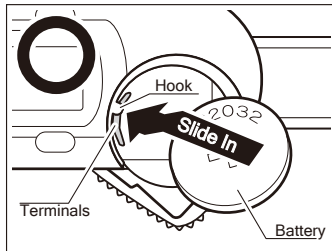
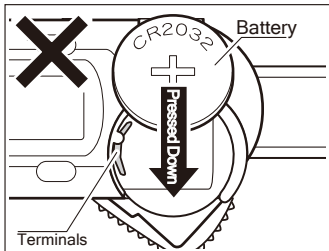
- ① Slide cover in direction of arrow.
- ② Insert battery with (+) side outward.
- ③ Replace battery cover.

⚠ Notice Use only CR2032 type battery

- Use care to avoid damaging terminals when inserting battery.



- Terminals may be broken if battery is pressed straight down.
- Insert battery at angle, underneath the small hook, as shown.



TROUBLESHOOTING

Q. Nothing is displayed on LCD.

A. The battery may be running low, please replace battery with a new one.

Q. With power on, the number on the LCD does not change as Display Unit is moved.

A. Please reset by removing battery for about 30sec., and then replacing.

Q. Nothing happens when buttons are pressed.

A. Make sure battery is properly inserted.

Q. The characters "MIN", "MAX", or "△" are displayed on LCD.

A. Cycle power, or apply several long presses to [HOLD] Button.
Use as normal once character is off.

Q. The correct value is not displayed.

A. High humidity may cause dampness. Please dry off the instrument and use only in dry location.

SERVICE

- If Instrument is not working properly, or if you have any questions, please contact distributor or place of purchase.
- Please note, manufacturer is unable to respond to inquiries or provide service directly. Please contact distributor or place of purchase.

SPECIFICATIONS

- Measurement Range 0-150mm
- Resolution 0.01mm
- Instrument Error $\pm 0.04\text{mm}$
※Not including quantization error (± 1 count)
- Display 5 Digit LCD
- Auto Off approx. 20 min
- Maximum response speed . . . Slide in pos. dir. . . . 1.5m/s
Slide in neg. dir. . . . 0.75m/s
- Operating Temp. Range 0°C 40°C
- Storage Temp. Range -10°C 60°C
- Power (1x) CR2032 Lithium Battery
- Battery Life approx. 2.5 years in normal use
- Weight: 240g
- Accessory CR2032 Lithium Battery (for test)

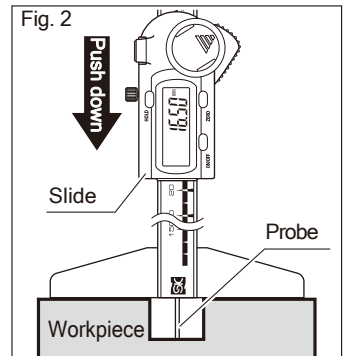
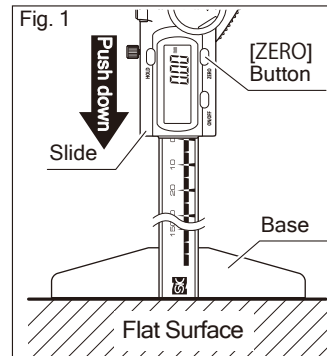
HOW TO USE

■ Power ON/OFF

- ① To turn on, press the [ON/OFF] Button.
- ② To turn off, press the [ON/OFF] Button.
- ③ With power on, press the [HOLD] Button to fix the value on the display.

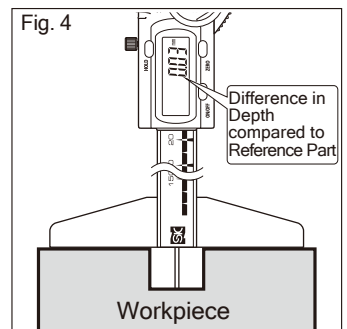
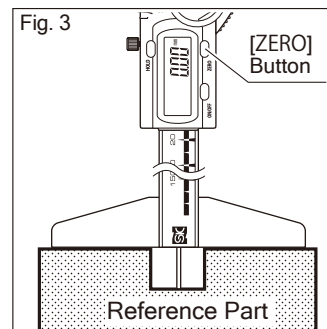
■ Absolute Measurement

- ① Turn on power, and loosen the Lock Screw.
- ② Place the Base on a flat surface, and push the Slide down. When the Probe tip contacts the surface, press the [ZERO] Button. (Fig. 1) The Display will read "0.00mm" and the gauge is ready for measurements.
- ③ When placed on workpiece with Probe tip lowered into groove, the depth of the groove will be displayed. (Fig. 2)



■ Comparative Measurement

- ① Turn on power, and loosen the Lock Screw.
- ② Place the Base on the Reference Part and push the Slide down. When the Probe tip is in contact with the bottom of the groove, press the [ZERO] Button. (Fig. 3) The Display will read "0.00mm" and the gauge is ready for measurements.
- ③ When placed on workpiece with Probe tip lowered into groove, the difference in depth compared to the Reference Part will be displayed. (Fig. 4)



AFTER USE CARE • STORAGE

- After use, wipe off any dirt or oil from measuring surfaces, sliding surfaces, and exterior using a dry cloth and perform rust prevention treatment.
For rust prevention, lightly apply anti-rust oil, or place in rust preventive bag.
- Store with Lock Screw loosened.
If stored with Lock Screw tight, expansion due to temperature changes may cause excessive force which will cause inaccuracy.
- Store in a cool, dry, and dark location in the provided case.
Keep out of direct sunlight and moisture, and please keep secure from unauthorized personnel.
- Remove battery if Caliper will not be used for a long period of time.

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