

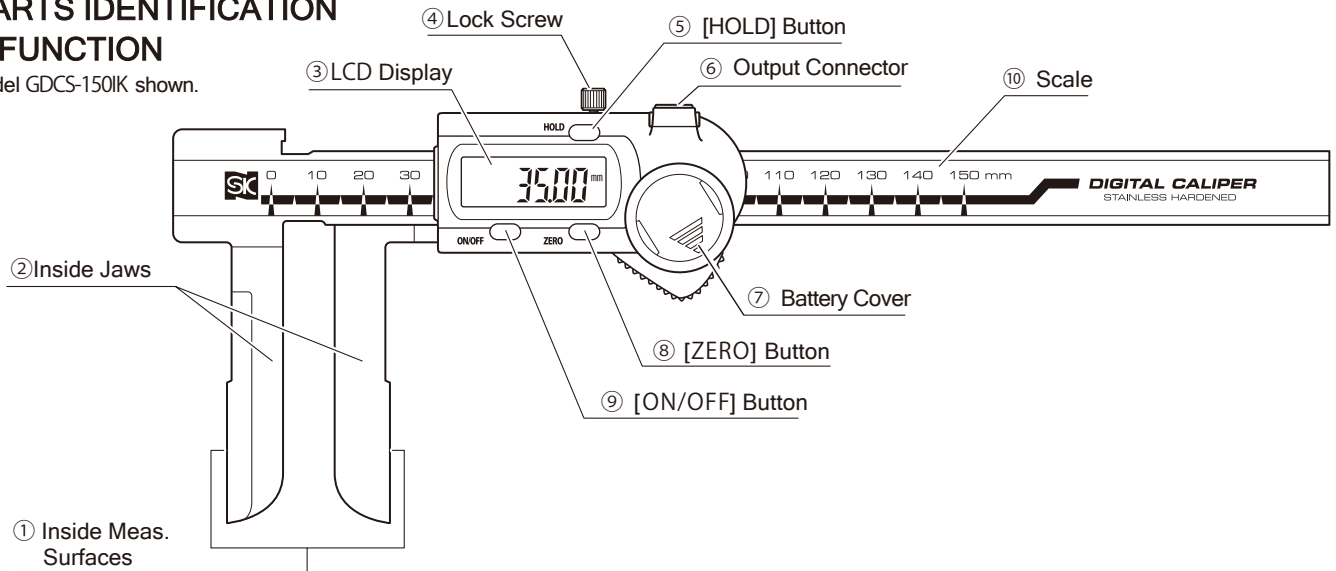
# Precision Inside Measuring Tools **DIGITAL INSIDE CALIPER** – Knife Edge Type

Thank you for purchasing Niigata Seiki Digital Inside Caliper.  
This is a precision measuring tool for measuring inside dimensions.

- For safe and proper use, please read this instruction manual before use and follow the procedures described.  
Please keep manual where it is accessible to user 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

※ Model GDCS-150IK shown.



- |                         |   |                    |   |
|-------------------------|---|--------------------|---|
| ① Inside Meas. Surfaces | Position surfaces inside object to be measured.                             | ⑥ Output Connector | Connect to optional Bluetooth Box to send measurements to PC. |
| ② Inside Jaws           | For measuring inside dimensions.  | ⑦ Battery Cover    | Cover for CR2032 Lithium battery.                             |
| ③ LCD Display           | Displays digital measurement.   | ⑧ [ZERO] Button    | When pressed, Display will read "0.00"                        |
| ④ Inside Meas. Surfaces | Tighten to prevent the slide and display from moving.                       | ⑨ [ON/OFF] Button  | For turning power ON / OFF.                                   |
| ⑤ Lock Screw            | 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.

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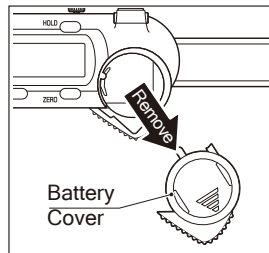
## PREPARATION FOR USE

Before using the caliper, please follow the steps below:

- **Wipe off rust proofing and dirt from measuring surfaces and slide.** Contamination of surfaces may cause measurement error.
- **Allow the caliper and object to be measured time to reach the same temperature.** A temperature difference between the object to be measured and the caliper may cause measurement error. Allow enough time for the temperatures to equilibrate.

## INSERTING • REPLACING BATTERY

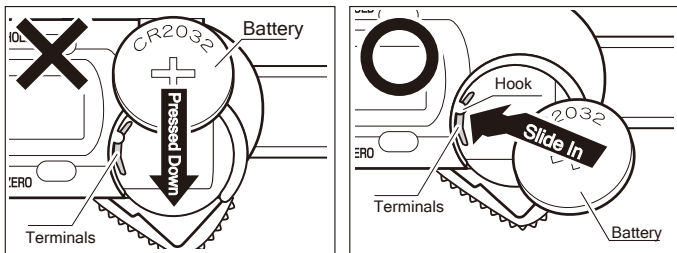
- ① Slide cover in direction of arrow.
- ② Insert battery with (+) side outward.
- ③ Replace battery cover.



**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.

## 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.**

## 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 Mode

- ① Loosen the Lock Screw and turn power ON.
- ② With jaws closed, press the [ZERO] Button.
- ③ When "0.00mm" is displayed on LCD, Caliper is ready to start measurement.

### Comparison Measure Mode

- ① Loosen the Lock Screw and turn power ON.
- ② With jaws open to desired reference position (any point is OK,) press [ZERO] Button.
- ③ When "0.00mm" is displayed on LCD, Caliper is ready to start measurement.

## 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 inquires or provide service directly. Please contact distributor or place of purchase.

## SPECIFICATIONS

Model	Measurement Range (mm)	Jaw Length (mm)	Weight (g)
GDCS-150IK	15 - 150	60	220
GDCS-200IK	18 - 200	75	260

- Resolution: . . . . . 0.01mm
- Instrument Error: . . . . . ±0.04mm  
※ Not including quantization error (±1 count)
- Display: . . . . . 5 Digit LCD
- Auto Off: . . . . . approx. 20 min.
- Maximum Response Speed: . . . . . Slide to right. . . 1.5m/s  
Slide to left. . . 0.75m/s  
※ Left/Right as shown in diagram at top of manual.
- Operating Temperature Range: . . . 0°C · 40°C
- Storage Temperature Range: . . . -10°C · 60°C
- Power: . . . . . (1x) CR2032 Lithium Battery
- Battery Life: . . . . . approx. 2.5 years in normal use.
- Accessory: . . . . . CR2032 Lithium Battery (for test)

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