

Precision  
Measuring Tools

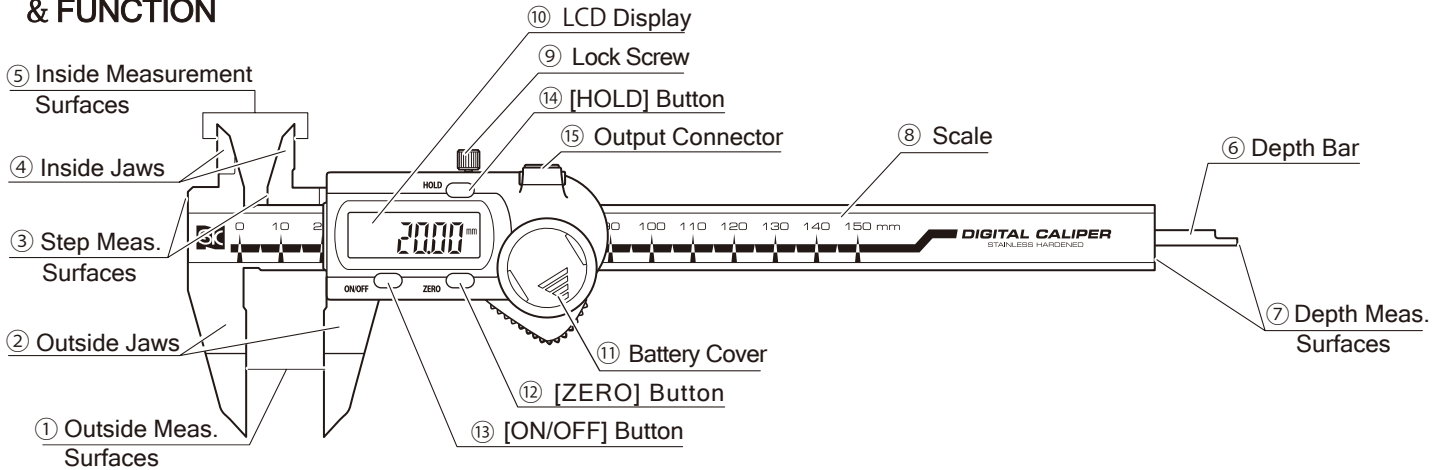
# DIGITAL BLADE CALIPER

Thank you for purchasing Niigata Seiki Digital Blade Caliper.

This is a precision measuring tool for measuring inside, outside, step, and depth dimensions. The Outside Jaw is thin to allow measuring surface inside a narrow groove.

- 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



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| <ul style="list-style-type: none"> <li>① Outside Meas. Surfaces .. Position object to be measured between these surfaces.</li> <li>② Outside Jaws ..... For measuring outside dimensions.</li> <li>③ Step Meas. Surfaces ..... Measures height of steps.</li> <li>④ Inside Jaws ..... For measuring inside dimensions.</li> <li>⑤ Inside Meas. Surfaces .... Position surfaces inside object to be measured.</li> <li>⑥ Depth Bar ..... For measuring depth.</li> <li>⑦ Depth Meas. Surfaces .... Depth is measured between these two surfaces.</li> <li>⑧ Scale ..... Supports LCD Display Unit.</li> <li>⑨ Lock Screw ..... Tighten to prevent the slide and display from moving.</li> </ul> | <ul style="list-style-type: none"> <li>⑩ LCD Display ..... Displays digital measurement.</li> <li>⑪ Battery Cover ..... Cover for CR2032 Lithium battery.</li> <li>⑫ [ZERO] Button ..... When pressed, Display will read "0.00"</li> <li>⑬ [ON/OFF] Button ..... For turning power ON / OFF.</li> <li>⑭ [HOLD] Button ..... When pressed, "HOLD" Icon appears on Display and measurement will be fixed.</li> <li>⑮ Output Connector .... Connect to optional Bluetooth Box to send measurements to PC.</li> </ul> |
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## 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.

- Read the manual and follow the directions.**
  - Use of product other than as described in this manual may cause accident.
- Use only for measuring.**
  - Use for any purpose other than measuring may damage or wear the instrument. Improper use may also cause accident.
- Handle with Care.**
  - 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.
- Avoid using in high electric fields, such as near fluorescent lights or switching power supplies.**
  - Incorrect value may be displayed on LCD.

- Use and store only in environment meeting the following conditions:**
  - 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.
- Jaw Tips Are Sharp—Handle With Care.**
  - Careless handling may cause injury.
- Do not disassemble or modify.**
  - Disassembly may damage product or cause accident. For repair, please contact distributor or place of purchase.
- Do not write on instrument with electric engraver.**
  - Do not engrave instrument body or jaw, such as an ID number with engraver or electric pen.

## 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.

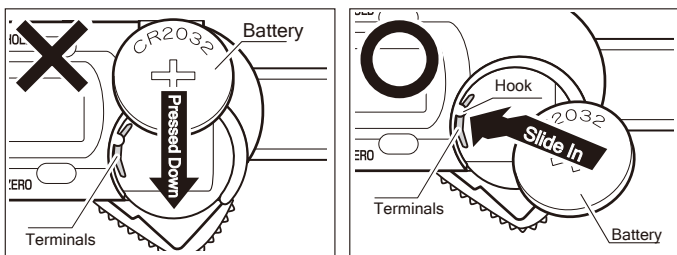
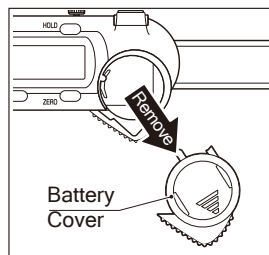
## INSERTING · REPLACING BATTERY

- 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.

## 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.

## 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.

## 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.**

## SPECIFICATIONS

Model	Measurement Range (mm)	Instrument Error* (mm)	Resolution (mm)
GDCS-150B	0-150	±0.03	0.01
GDCS-200B	0-200		

※ 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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