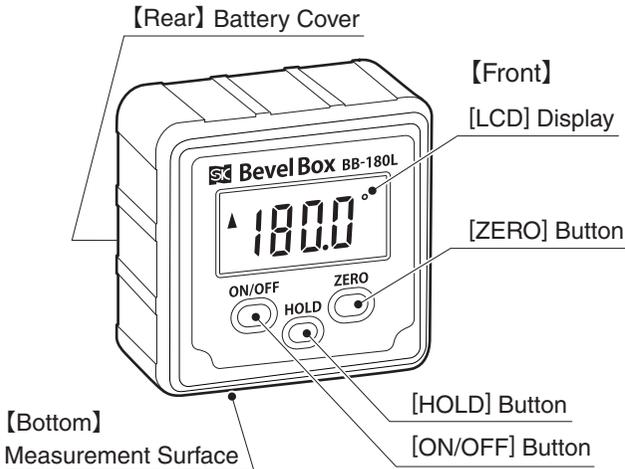




Thank you for purchasing the Bevel Box Digital Angle Meter.
Please read this manual thoroughly before use for proper operation.

■ PARTS IDENTIFICATION



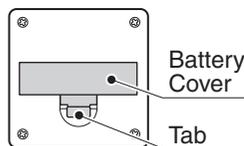
⚠ CAUTION

- This is a precision measurement instrument - Handle With Care. Do not drop or subject to shock.
- Instrument accuracy is listed under Specifications section. For applications requiring higher accuracy, please use higher precision angle gauge.
- Do not engrave or mark with electric pen.
- Holding power of magnet will vary depending on workpiece. Test for sufficient holding force before use to insure instrument does not fall.
- Keep away from precision instruments, watches, etc. and any devices that can be damaged by magnet.
- Clean measuring surface with soft cloth after use to remove any debris or contamination.
- Remove battery if gauge will not be used for a long period of time.
- Do not use or store in places subject to extreme temperature fluctuations, direct sunlight, dusty locations, or locations that are wet or have high humidity.

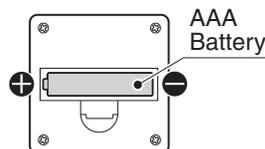
■ INSERTING / REPLACING the BATTERY

- 1 × AAA battery required (not included.)

① Push on tab of rear battery cover to open.



② Insert AAA battery as shown in drawing. Replace cover.



■ APPLICATIONS and FEATURES

- Precision angle measurement and working reference for assembly of machinery, tooling, jigs, etc.
- Magnetic base.
- Absolute Mode for measuring angle referenced to true horizontal.
- 0-point can be set at any position in Relative Mode.
- Hold function to freeze display.
- Auto Power Off feature. (approx. 5 minutes)

■ SPECIFICATIONS

Model	BB-180L
Measurement Range	±180.0°
Resolution	0.1°
Accuracy	± 0.2°
Repeatability	0.1°
Operating Temperature Range	approx. 5~45°C
Weight	approx. 70g (without battery)
Power	AAA Battery (1 ×)
Battery Life	approx. 40Hr. (for alkaline battery)
Accessories	Storage Case
Measurement Modes	Absolute (ABS), Relative

■ LCD DISPLAY (POWER) ON / OFF

【To Turn ON Power】

When power is OFF, press [ON/OFF] Button.

【To Turn OFF Power】

When power is ON, long press of [ON/OFF] Button.

【Auto Power Off Feature】

If there is no change in measured value for approximately 5 min., power will turn OFF automatically.

■ MEASUREMENT MODE

【Absolute Measurement Mode (ABS)】

When power is ON, press [ON/OFF] button to switch gauge to Absolute Mode. "ABS" icon will appear on the LCD display.

【Relative Measurement Mode】

When power is ON, press [ZERO] button to switch gauge to Relative Mode. The "ABS" icon will turn off and display will reset to 0.0.

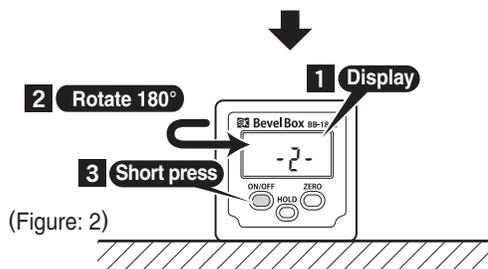
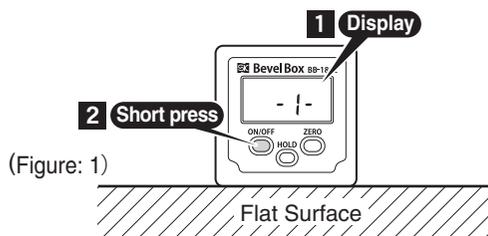
■ HOLD FUNCTION

Press [HOLD] to fix the reading on the display.
Press [HOLD] a second time to release.

■ SETUP

Setting True Horizontal Position for Absolute (ABS) Mode

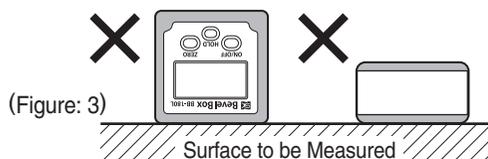
- This is set before shipment, but can be adjusted at any time.
 - This value is stored even after battery is replaced.
- ① Press [ON/OFF] to turn on power.
 - ② If "ABS" icon is not displayed, press [ON/OFF] again to display icon and switch gauge to Absolute Measurement Mode.
 - ③ Place gauge on flat surface.
 - ④ Press [ON/OFF] and [ZERO] buttons at the same time.
 - ⑤ LCD will display - 1 - , Without moving gauge, press [ON/OFF]. (Figure:1)
 - ⑥ - 1 - on display will blink for a few seconds, and then - 2 - will display on LCD.
 - ⑦ While keeping gauge in same location, rotate horizontally 180°. Then, without moving gauge, press [ON/OFF]. (Figure:2)
 - ⑧ - 2 - on display will blink for a few seconds. LCD display will then return to normal. Setting is complete.



■ TAKING MEASUREMENTS

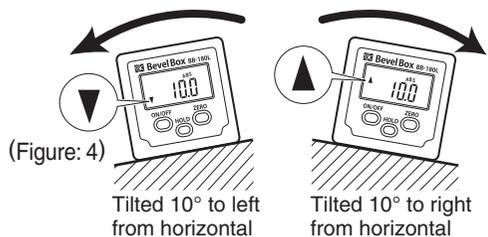
When Taking Measurements, Please Note

- Place the measurement surface of the gauge onto the object to be measured. (Figure:3)
- ※ If there is excessive tilting of gauge toward front or back sides, measurement can not be taken and "Erro" will be displayed on LCD.



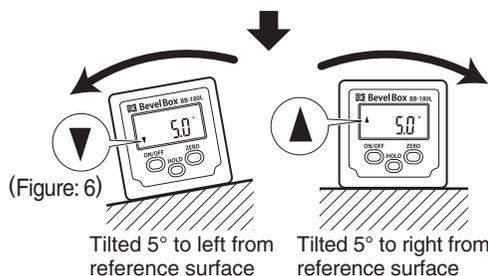
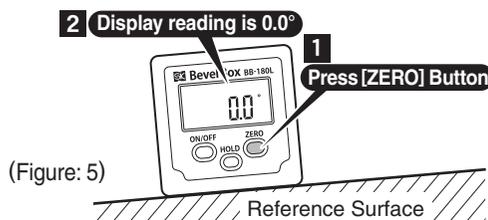
Absolute Measurement Mode (ABS)

- ① Press [ON/OFF] to turn on power.
 - ② If "ABS" icon is not displayed, press [ON/OFF] again to switch gauge to Absolute Measurement Mode and display icon.
 - ③ Place the measurement surface of the gauge onto the object to be measured. (Figure:4)
- Direction of tilt icon will display next to measured value -
 If tilt is to left, ▼ icon will display.
 If tilt is to right, ▲ icon will display.



Relative Measurement Mode

- In Relative Measurement Mode, 0° can be preset at any angle.
- ① Press [ON/OFF] to turn on power.
 - ② Place gauge on reference surface and press [ZERO] button. (Figure:5)
 - ③ Place the measurement surface of the gauge onto the object to be measured. (Figure:6)
- Direction of tilt icon will display next to measured value -
 If tilt is to left, ▼ icon will display.
 If tilt is to right, ▲ icon will display.



■ TROUBLESHOOTING

If any of the following symptoms appear, please cycle power by removing and replacing battery, or replacing battery with a fresh one.

- No display.
 - Displayed reading is in error.
 - Displayed value does not change as gauge is moved.
- ※ If problem persists, 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.

SK Niigata seiki Co., Ltd.

6-15-22, Tsukanome, Sanjo, Niigata, Japan, 955-0055
 Tel. : +81-256-31-5660 Fax. : +81-256-39-7730
 MAIL: intl.sales@niigataseiki.co.jp
 URL http://www.niigataseiki.co.jp
 I245-K 1506