

## **OPERATION INSTRUCTION**

## Digital Level And Protractor 2179

Measuring range: 0-360°(90°x4) Resolution: 0.05° (=0.873mm/m)

Accuracy: 0° and 90°: ±0.1°; others: ±0.2°



2-"hold/sound" button

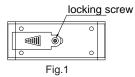
3-"on/REF/off" button

4-LCD display

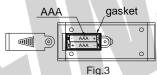
5-"unit/light" button



- The sea level is permanently set inside the chip, zero setting is not needed when batteries replaced.
- 2. The instrument is IP54 dust/waterproof and used as level and protractor. Magnetic bottom with V-groove for shafts, so it can be used on surface and cylindrical.
- 3. Install the battery:
  - ---Loosen the locking screw on the battery cover(Fig.1)
  - ---Slide the battery cover 2mm(fig.2), remove the battery cover
  - ---Insert two AAA batteries as the Fig.3, make sure gasket in the groove, install battery cover and then tighten the locking screw



battery cover



4. Button

on/REF/off ---When the instrument powers off, short press to power on; when the instrument powers on, short press to switch mode(level mode, relative mode), "REF" shows up in relative mode, long press to turn off.

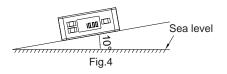
hold/sound ---Short press, "H" shows up and then into hold mode, short press again to exit.

Long press to turn on beeper, \*\(\mathbb{\text{s}}\) shows up. When the reading is close to 0° or 90°, beeper will sound, long press again to turn off beeper.

unit/light ---Short press to switch unit(°, mm/m, %, in/ft); long press to turn on backlight, long press again to turn off backlight.

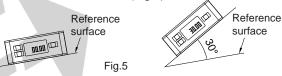
## 5. Level

The instrument is at level mode. Put the instrument on the surface which is measured. The reading shows the level of this surface (fig.4).

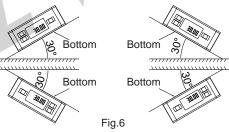


## 6. Protractor

Put it on the reference surface, press "on/REF/off" button to set zero("REF" shows up on display, the reading is zero) into relative mode. Move the instrument to the second surface, the reading is the angle between two surfaces(Fig.5).



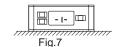
7. The instrument can use in 4-orientation, the display flips over when the bottom faces up(Fig.6).



- 8. Automatic power off in about 5 minutes. One battery will last for 100 hours of continuous use. If product is not be used for a long period of time, please remove the battery. Otherwise, liquid may leak from the battery and damage the instrument.
- If the digits do not change when buttons are pressed, take out battery and put it back after 1 minute.
- 10. Working temperature is 0-50°C/32-122°F, relative humidity should not exceed 85%.

Note: Recalibration is required after it dropped or hited:

Put instrument on sea level, press "hold/sound" and "on/REF/off" in sea level, "-1-" appears on the display(Fig.7), short press "on/REF/off", " -1-" blinks, please don't touch instrument before " -2-" blinks(Fig.8). Rotate instrument 180°, put instrument on the same place(Fig.9), short press "on/REF/off" again, " -2-" blinks for several seconds, and then finish calibration.







MN-2179-C/E