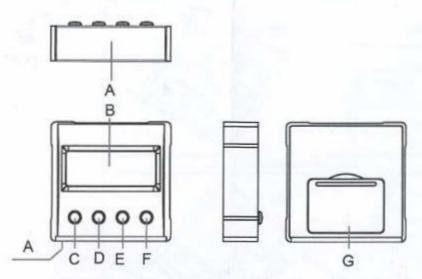


# Mini Digital Protractor Operating Instructions

# 1. NOMENCLATURE



A Stainless steel sheet-Measuring faces, Securely attaches gauge to any metal surface.

- B \_\_\_\_ LCD display Large , easy to read digits.
- C ---- ON/OFF BUTTON
- D ...... UNIT BUTTON Degree/ percentage of slope conversion.
- E ----- CALIBRATE Absolute/ relative measurement conversion.
- HOLD BUTTON Holding measured display values.
- G Battery compartment

## 2. TECHNICAL SPECIFICATIONS

- Measuring Range: 4×90°
- · Resolution: 0. 1º
- Dimension: 55×55×16mm
- Battery Type: 3V CR2032×2
- Working Temperature:0°C-40°C
- Relative Humidity: 40%-80%

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## 3. FUNCTIONS

## 1. Absolute angle measurement

Press ON/OFF and the unit will directly enter the state of absolute angle measurement (No matter change the batteries). It will display the angle between the measured surface and the level. When the angle between the working surface of the unit and the level changes, the angle value changes accordingly. When the two indicating arrows on both sides of the LCD display appear, they show that the working surface of the unit is not on the level. For example, when the arrow "\cup" on one side appears, it shows that this side is under the level. It needs to move up this side of the unit to reach the level. The arrow "\cup" shows that it above the level. when the unit's working surface is on the level, The two indicating arrows will disappear.

# 2. Relative angle measurement

Put the unit's working surface on the surface you need to preset, press CALIBRATE button, "0.00°" is displayed. Then move the unit to other surface to be measured, the displayed value will be the included angle of the two surfaces. Press CALIBRATE button for 3~5 seconds, it will change to the state of absolute measurement.

#### 3. Upright display

The displayed value would be not upside down whatever the unit is upside down or not.

## 4. ATTENTIONS

- Don't clean this precision device with organic solvent. Keep it away from water and corrosive.
- Don't hurt the unit's working surface. Get rid of any dirt on it with soft cloth in order to keep its accuracy.



- 3. While using, it will shut down if the unit's buttons are not pressed in 3 minutes in order to save power. When the power icon appears, it shows its power is used up and stops measuring. Replace with new 3V CR2032 batteries. Take out the batteries if it's not used for a long time in order to avoid the leakage of battery liquid.
- Keep this device indoors in -30 °C~+65 °C and relative humidity < 90%.</li>

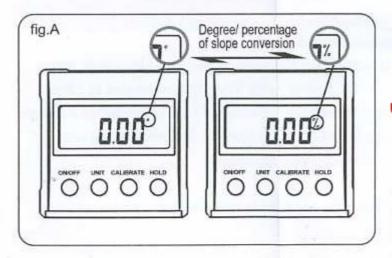
## 5. BUTTON OPERATING

#### 1. ON/OFF BUTTON

Press this button to switch on power, press it for 3~5 seconds to switch power off.

#### 2. UNIT BUTTON

Degree (xx.xx°) and percentage of slope (yy.yy%) in conversion(fig.A) Press O%, it displays "yy.yy%". yy.yy%= tga×100%(0≤a=xx.xx°≤45°) or yy.yy%=tg(90°-a)×100%(45°<a=xx.xx°≤90°)



E-PROPS unit = degree

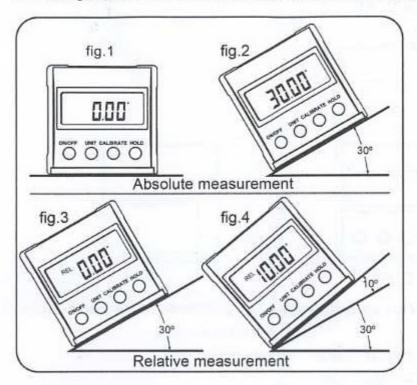
#### 3. CALIBRATE BUTTON

- 1.In absolute measurement (fig.1, fig.2).
- 2.In relative measurement. Press ABS/REL button to setting Zero at any position (fig.3,fig.4).

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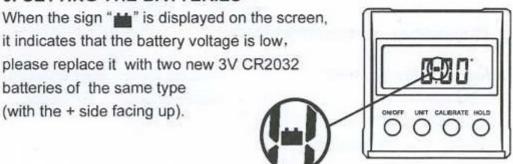
3.Conversion between absolute measurement and relative measurement. Press CALIBRATE button for 3 seconds and the unit will change back to the state of absolute measurement (fig. 2,3).



## 4. HOLD BUTTON

If the measured value needs to be saved, press HOLD to hold the display. The arrows on both sides will twinkle. Press it again it will quit.

## 6. SETTING THE BATTERIES



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