PROWAY EPL 1

Digital Display Dual-Axis Inclinometer — User Manual

EN Version

Product Introduction & Features

The PROWAY EPL 1 is a high-precision digital display dual-axis inclinometer designed, engineered, and manufactured in Taiwan. Integrating an OLED digital display with ultra-low power Bluetooth (BLE 5.0) technology, it measures X and Y-axis tilt angles simultaneously and supports mobile App integration for real-time remote monitoring, data logging, and screenshot capture.

Simultaneous Dual-Axis Measurement

Displays both X and Y axes concurrently, significantly improving equipment installation and leveling efficiency.

Ultra-High Precision

Delivers high resolution and accuracy up to ±0.01 mm/m (2").

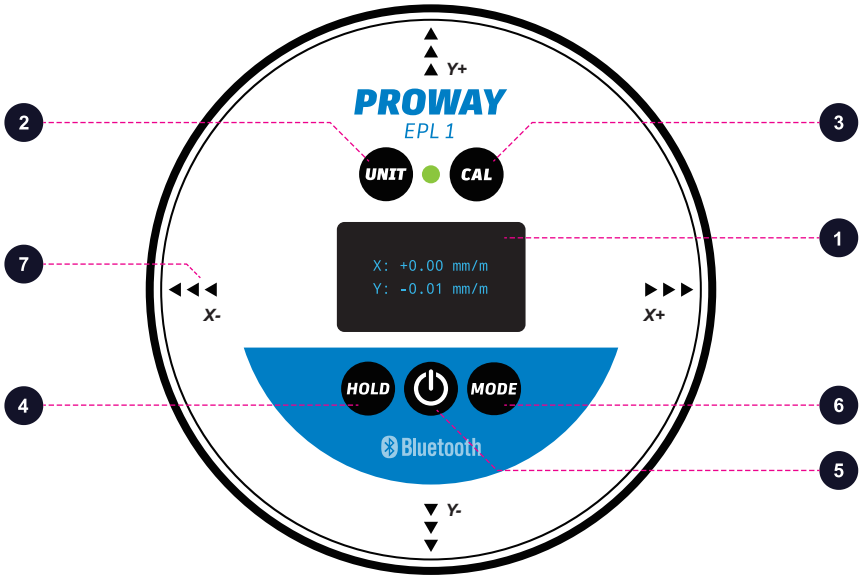
Multi-Unit Switching

Supports Sec (arcsecond), in/ft (inch/foot), Degree, and mm/m (millimeter/meter).

Reference Zero Mode (REF)

Sets any tilt angle as a relative zero point to display relative variation directly.

Panel & Button Layout



No.	Component / Button	Operation & Functional Description
1	OLED Display Screen	Live X/Y readings, unit status, battery & Bluetooth
2	UNIT Button	Short press to switch measurement units (Sec → in/ft → Degree → mm/m).
3	CAL Button	Used for instrument calibration and zero-setting configurations.
4	HOLD Button	Short press to hold the current displayed value for easy reading.
5	Power Button	Long press to toggle power (Power ON / OFF).
6	MODE Button	Used to switch working modes such as High/Low precision.
7	X / Y Axis Indicators	X/Y arrows indicating relative tilt direction

Basic Operating Procedures

1 Power On & Placement
Insert 4 AAA batteries into the battery compartment (or connect external Type-C power), place the unit stably on the target surface, and long-press the power button to turn it on.

2 Unit Selection
Based on engineering drawings or specification requirements, short-press the UNIT button to sequentially switch between mm/m, Sec (arcsecond), in/ft, or Degree.

3 Relative Zero / REF Mode
To measure relative tilt instead of absolute level: Place the instrument on the reference surface and press the CAL button once to set relative zero. The screen will display this surface as zero; move the unit to the target point to read the deviation directly.

Bluetooth APP & Remote Operation

System Compatibility:
The App is exclusively compatible with Android OS (smartphones, tablets) and PC-based Android emulators. (Note: iOS is not supported).

Core App Features:
Includes real-time dual-axis monitoring, unit switching, reference zeroing, High/Low precision mode switching (H/L Mode), and a built-in Snapshot function.

Technical Specifications

Measuring Axes	X / Y Dual-Axis Simultaneous
Accuracy	±0.01 mm/m (2")
Display Screen	1.3-inch OLED Digital Display (128 × 64 pixels)
Units	mm/m, Sec, in/ft, Degree
Wireless Connectivity	Bluetooth BLE 5.0
App Compatibility	Android OS / PC Android Emulators - *iOS not supported*
Power Supply	AAA Batteries × 4 or Type-C External Power
Dimensions	Ø109 × H43 mm / Approx. 1047 g
Country of Origin	Made in Taiwan

Precautions & Maintenance

Impact & Drop Protection:
High-precision electronic device. Avoid drops, heavy impacts, or excessive pressure to protect sensor accuracy.

Base Maintenance:
No wiping required before use; proceed directly with measurement. After use, clean the surface and reapply a light layer of anti-rust oil before storage. Never use acidic or alkaline solvents.

Battery Safety:
Remove AAA batteries when unused for extended periods to prevent leakage and circuit corrosion.

Instrument Calibration Procedure Standard Operating Procedure

⚠️ **Important Warning & Recommendation:**
This instrument is calibrated to high precision before leaving the factory. **User calibration is strongly discouraged unless absolutely necessary.** Performing calibration on a surface with insufficient flatness will severely compromise measurement accuracy. If recalibration is required, please contact the manufacturer or a certified calibration laboratory.

★ **Prerequisite for Calibration:**
If self-calibration must be performed, it is mandatory to place the EPL 1 on a high-precision inspection platform (or granite surface plate) with a flatness of less than 0.01 mm.

1. **Enter Calibration Mode**
With the device powered on, long-press the CAL button until CAL appears on the screen to successfully enter calibration mode.

2. **X-Axis Calibration**
Long-press the CAL button to begin X-axis calibration with a 10-second countdown on the screen; keep the EPL 1 completely stationary until the countdown ends.
Next, rotate the instrument 180 degrees in place along the X-axis, long-press the CAL button again, and keep it stationary for the second 10-second countdown to complete X-axis calibration.

3. **Y-Axis Calibration**
Proceeds to Y-axis calibration: A 10-second countdown appears; keep the unit stationary. Next, rotate the instrument 180 degrees in place along the Y-axis, long-press the CAL button again to confirm, and wait for the 10-second countdown to finish.

4. Completion & Exit
After both countdowns finish, short-press another button (such as UNIT or MODE) or restart the device to exit calibration mode and return to standard measurement.