POWEROLOGY

60M Powerful Laser Rangefinder

SKU:P60PLRFBU

Product Overview

1. Laser Emitting Lens
2. Laser Receiving Lens
3. LCD
4. Power/Measure Button
5. Mode Switch
6. Type-C Charging Port

Displayisplay

- Power Supply
- Mode
- Laser On
- Maximum Value
- Auxiliary Display Area
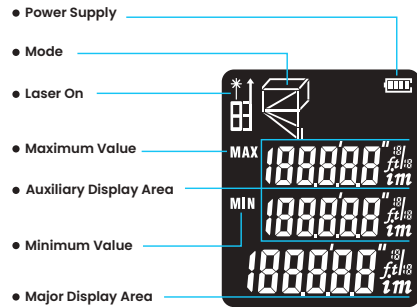- Minimum Value
- Major Display Area
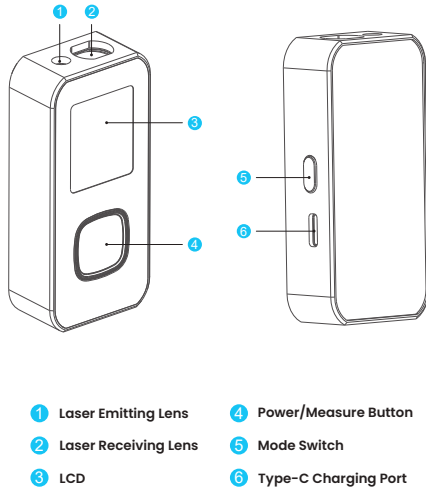
Starting the Instrument / Menu Settings

Powering On/Off:

To turn on, press the ● power button.The device and laser activate simultaneously, entering measurement mode.

To turn off, press and hold the ● power button for 3 seconds. If inactive, the device automatically powers down after 150 seconds.

Unit Setting:

With the device off, long press the ▬ mode switch button to cycle through measurement units. The default is meters (0.000m). Units available:

	Length	Area	Volume
1	0.000 m	0.000 m²	0.000 m³
2	0.0 in	0.00 ft²	0.00 ft³
3	0.00 ft	0.00 ft²	0.00 ft³

Reference Point Adjustment:

While on, long press ▬ mode switch button to switch reference points. The default is the device's end.

Battery Information:

The instrument contains a 3.7V 370mAh lithium battery. A flashing battery icon indicates low power.

Single Measurement

To initiate a single distance measurement in test mode, press the power button ● . The device will emit a laser to secure the measurement point. Press the power button ● again to confirm the measurement. The result will be displayed in the primary display area.

Continuous Measurement

In test mode, hold the power button ● until you see the max/min indicator flash. Release the button to enter continuous measurement mode. The device will record and display the maximum and minimum values in the auxiliary display area during the measurement. The current measurement value will be shown in the main display area. To exit continuous measurement mode, press either the power or mode switch button ● or ▬.

Area Measurement

To measure an area, press the ▬ button as shown on the display ▢ . When one side of the rectangle icon blinks, follow these steps for area measurement:
Press the power button ● once to measure length.
Press the power button ● again to measure width.
The device will automatically calculate and display the area in the primary display area, with the dimensions of length and width displayed in the auxiliary display area.

Perimeter Measurement

Press mode switch button ▬ twice. A ▱ will appear on the screen. To measure the perimeter:

- Press the power button ● once to measure length.
- Press the power button ● again for width.

The device automatically calculates the perimeter and displays the result in the primary display area. Length and width are shown in the auxiliary display.

Volume Measurement

Press the mode switch button ▬ three times to activate volume measurement mode. A ▱ icon will appear. To measure volume:

- Press the power button ● once for length.
- Press the power button ● again for height.
- Press the power button ● a final time for width.

The device calculates the volume and displays it in the primary display area, with height and width in the auxiliary display.

Metope Area Measurement

Press the ▬ button four times until a metope icon ▱ appears. For metope area measurement:

- Press the power button ● once for the wall height.
- Press the power button ● again to measure the width of wall section 1.

The device will calculate the area as
Area = Height x Width 1

- Start the measurement with the power button ● .
- Press the power button ● again for the width of wall section 2.
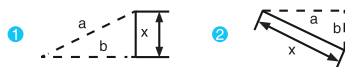
The device will sum the areas to calculate the total wall area as
Total Area = Height x (Width 1 + Width 2)

To measure additional widths, continue pressing the power button ● for each section. The total area is:
Total Area = Height x (Width 1 + Width 2 +...+ Width n)
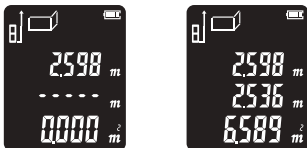
Pythagoras Measurement Modes

There are two modes provided by the Pythagoras function, which are suitable for indirect measurement in challenging environments.

1. To Calculate the Length of the Second Leg (x), Measure the hypotenuse (a) and one leg (b):

- Enter Pythagoras mode by pressing the mode switch button ▬ five times quickly.
- Press the power button ● to capture the length of the hypotenuse (a).
- Press again after measuring one leg (b).
- The device then computes the length of the second leg (x) automatically.

2. To Calculate the Hypotenuse (x) by Measuring Two Legs, Measure each leg of the triangle:

- Engage Pythagoras mode with six quick presses of the mode switch button ▬ until the leg indicator blinks.
- Press the power button ● after measuring one leg (a).
- Press again after measuring the second leg (b).
- The device automatically calculates the hypotenuse (x).

For accurate measurements, ensure that the hypotenuse is the longest side. Start all measurements from the same point, in the sequence of hypotenuse and legs.

Troubleshooting Tips

During operation, the device may display error prompts in the main display area:

Prompt	Cause	Solution
Err	Measurement out of range.	Use the device within its range.
Err 1	Weak signal.	Utilize a surface with a stronger reflection.
Err 2	Signal too strong.	Use a surface with a weaker reflection.
Err 3	Low battery voltage.	Recharge the battery.
Err 4	Device beyond working temperature range.	Operate within the specified temperature.
Err 5	Pythagoras measurement rule violation.	Re-measure, ensuring the hypotenuse is the longest side.

Specifications

Feature Specification

Measurement Range	0.05-60m
Precision	±(2mm+d/10000)*
Continuous Measurement	✓
Metope Area Measurement	✓
Area/Volume Measurement	✓
Perimeter Measurement	✓
Pythagorean Measurement	✓
Min/Max Value Detection	✓
Laser Level	Class II
Laser Type	630-670nm, <1mW
Auto Laser Cut-off	20s (single measurement)
Auto Power-off	150s
Charging Specification	DC5V 0.35A
Battery	3.7V 370mAh lithium battery
Charge Lifespan	8000 times for single measurements
Storage Temperature	-20°C - 60°C
Operating Temperature	0°C - 40°C
Storage Humidity	20% - 80%RH
Weight	65g
Dimensions	80x37x20mm

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*Note: "d" denotes the measured distance.

**In Challenging Environments: In conditions where sunlight is intense, temperature varies significantly, or the reflective properties of the target surface are inadequate, which may result in significant measurement errors, the use of a reflective plate is recommended for accuracy.

Instrument Maintenance

Storage Instructions: Avoid long-term storage in hot, humid environments.
If not in frequent use, store the device in its original packaging in a cool, dry location.

Cleaning Guidance:
- Maintain a clean surface on the device by gently wiping with a soft, dry cloth.
- Refrain from using abrasive or corrosive cleaning agents.
- Employ the same cleaning method as that used for optical equipment when cleaning the device's meter and focusing mirror.

Packing List

Ensure that all items are present as per the list:

No.	Item	Unit	QTY	Note
1	Meter	pc	1	
2	User Manual	pc	1	
3	Gift Box	pc	1	
4	Charging Cable	pc	1	

Safety Regulations

Prior to use, thoroughly review the safety regulations and operating instructions.

1. Ensure full compliance with the operating guide and safety regulations outlined in this manual before use. Failing to do so may result in damage to the device, skewed measurement results, or personal injury.

2. Disassembling or repairing the instrument on your own is prohibited. Any unauthorized modification or performance changes are strictly forbidden. Keep the device out of reach from children and any unqualified individuals.

3. Direct exposure of the eyes or skin to the laser beam is strictly prohibited. Avoid directing the laser onto any highly reflective surfaces.

4. The device should not be used near equipment sensitive to electromagnetic radiation. Do not operate it on aircraft or in proximity to medical equipment. Additionally, avoid using it in volatile or explosive environments.

5. Disposal of the device should not be equated with regular household waste. Please adhere to applicable laws and regulations for proper disposal.

6. For any quality issues or inquiries concerning the device, reach out to local distributors or the manufacturer. Assistance and solutions are readily available.