HUEPAR®

User Manual

Laser Distance Measure

BLM-60/BLM-100/BLM-60G/BLM-100G
BLM-60-BT/BLM-100-BT/BLM-60G-BT/BLM-100G-BT

English
Deutsch
Français
Italiano
Español
Русский
日本語

support@huepar.com

EN
ENGLISH

Scan the QR code for more language instructions.

DE
DEUTSCH

Nach weiteren sprachanleitungen suchen sie den code.

FR
FRANÇAIS

Scannez le code qr pour plus d’ instructions dans d’ autres langues.

IT
ITALIANO

Scannerizzare il codice qr per controllare le istruzioni in altre lingue.

ES
ESPAÑOL

Escanea el código qr para ver más instrucciones en otros idiomas.

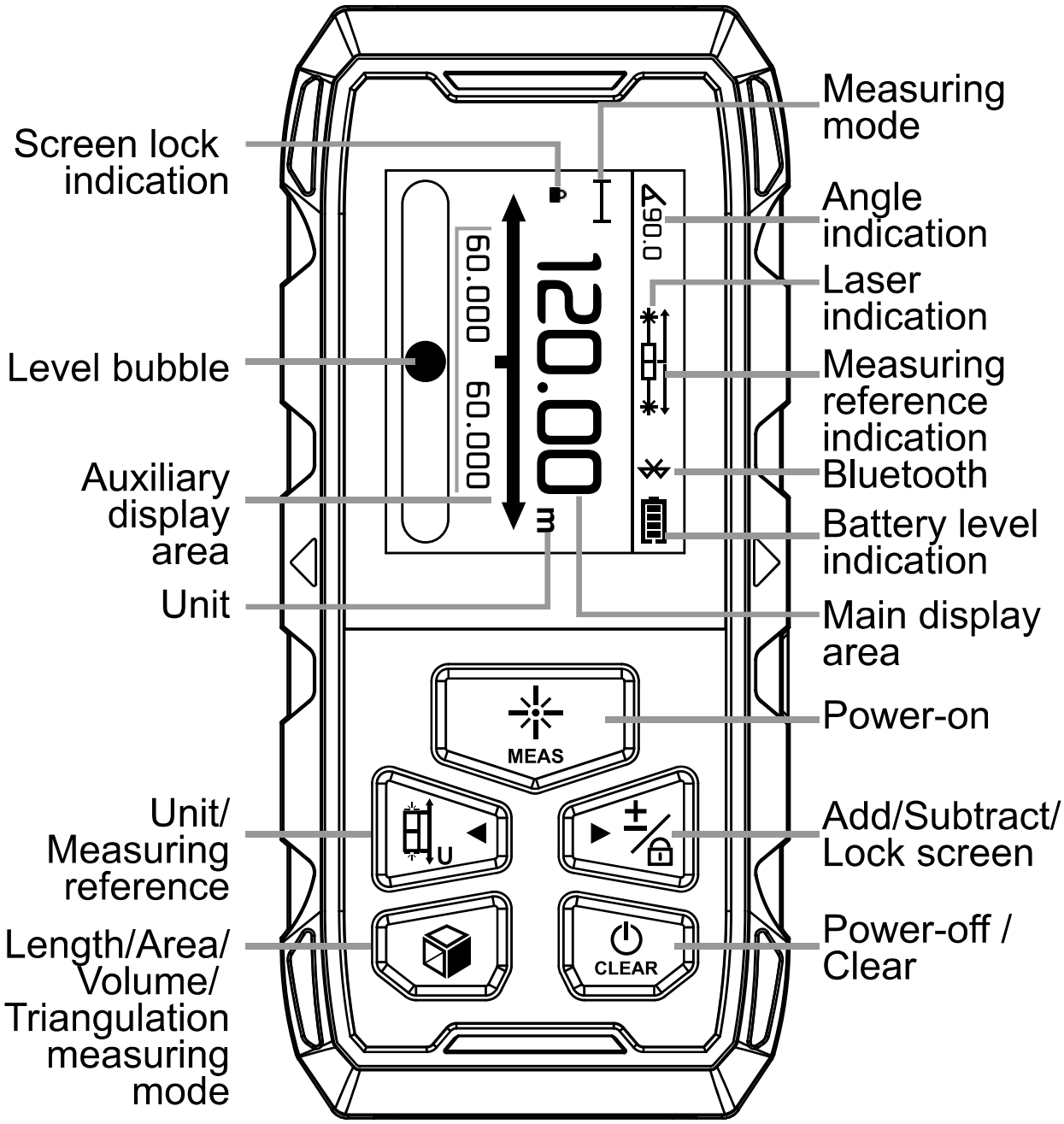
RU
РУССКИЙ

Просканируйте бинарный код для дополнительной лингвистической спецификации.

Thank you for purchasing Huepar BLM-60/BLM-100/BLM-60G/BLM-100G BLM-60-BT/BLM-100-BT/BLM-60G-BT/BLM-100G-BT Laser Distance Measure. Before using the product, please read this manual thoroughly to ensure proper use.

- **Product Overview**
- **Safety Instructions**
- **Battery Safety**
- **Start the Device/Menu Setting**
- **Screen Rotation and Lock**
- **Distance/Area/Volume/Pythagorean/ Add/Subtract Measurement**
- **Records**
- **Charging Precautions**
- **Bluetooth /APP**
- **Prompt Information**
- **Specifications**
- **Maintenance**
- **Warranty**

Product Overview



Safety Instructions

Before using this product, please read thoroughly and comply with the Safety Instructions. Failure to read and follow may void the warranty. This document must be kept in a safe place and if the laser device is passed on, this document must be passed on with it.

WARNING!

CLASS Ⅱ LASER PRODUCT

COMPLIES WITH CFR 1040.10 AND 1040.11

Max. Power Output: <1mW

Wavelength: 505nm-670nm

LASER RADIATION:

DO NOT STARE INTO BEAM.

DO NOT DIRECT EYE EXPOSURE.

AVOID VIEW WITH OPTICAL DEVICES.

IEC/EN60825-1:2014

Attention:

Read all instructions before operating this laser tool. Do not remove any labels from the tool.

• Do not point the laser beam at people or animals, and do not look directly at the laser beam. It will disturb the vision of others, cause accidents, or hurt eyes.

• Do not operate the laser around children or allow children to operate the laser. Serious eye injury may result.

• If the laser beam enters your eyes, please close your eyes consciously and immediately turn your head out of the laser beam range.

• Do not attempt to view the laser beam through optical tools such as telescopes, as serious eye injury may result.

• Do not disassemble or modify the laser in any way. Modifying the tool may result in hazardous Laser Radiation Exposure.

• Laser recognition glasses cannot be used as protective glasses. After wearing the laser recognition glasses, it can help you recognize the laser, but it cannot protect you from laser radiation.

• An exposure to the beam of a Class 2 laser is considered safe for a maximum of 2 seconds. Eyelid reflexes will normally provide adequate protection.

• The following label/print samples are placed on the product to inform of the laser class for your convenience and safety.

Battery Safety

• The product is equipped with 3.7V/850mAh lithium-ion battery which is built-in and non-removable.
Please charge it if it can't be turned on or there is no power indication after starting up. When the device runs out of battery, the battery icon will be displayed and flashing.

• Please use the charging adapter with DC 5v and 1A to charge it, the charging port is the Type-C port, (It is recommended to use a phone charger).

• The battery icon will be displayed in a scrollable way during the charging process. The battery icon will be is played and flashing when the charging process is completed.

• When not in use for a long time, please fully charge the device and recharge it once every six months to avoid battery discharge damage.

Start the Device/Menu Setting

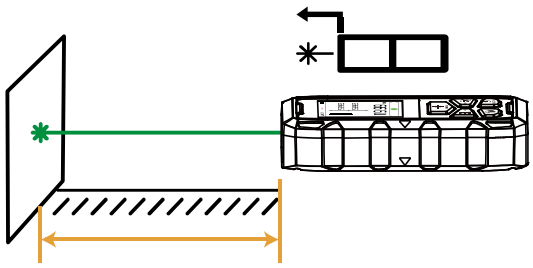
Turn ON/OFF the device
Turn ON: Long press the button MEAS to start the device. Short press the button MEAS again, the laser starts and stands by for measurement.
Turn OFF: Long press button CLEAR to turn the device off. The device can also be shut off without any operation within 180 seconds.
Unit Setting
Long press button U ◂ to switch the measurement unit, which can reset the current measurement unit. The default unit is 0.000m. There are 6 units for selection.

Units:

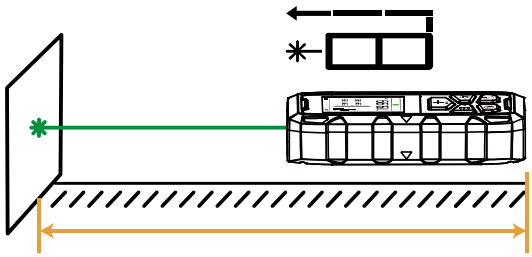
	Length	Area	Volume
1	0.000 m	0.000 m^2	0.000 m^3
2	0.00 m	0.00 m^2	0.00 m^3
3	0.0 in	0.00 ft^2	0.00 ft^3
4	01/16 in	0.00 ft^2	0.00 ft^3
5	0'00" 1/16	0.00 ft^2	0.00 ft^3
6	0.00 ft	0.00 ft^2	0.00 ft^3

Measuring Base

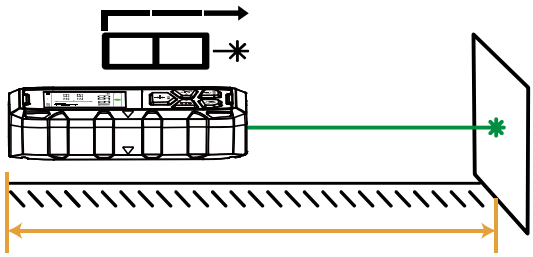
Press U ◂ to set the measurement reference. The default benchmark is bidirectional measurement.



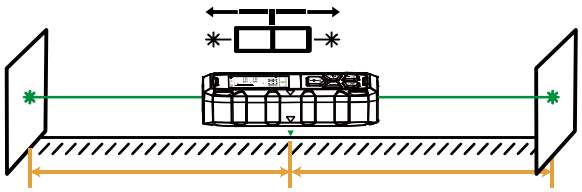
Left-forward datum



Left-back datum



Right-back datum



Bidirectional measurement

Selection of Measuring Modes

Press to enter mode selection, and the screen will display as follows:

Press ◄► to switch mode;

Press MEAS to enter mode;

Press CLEAR to return;

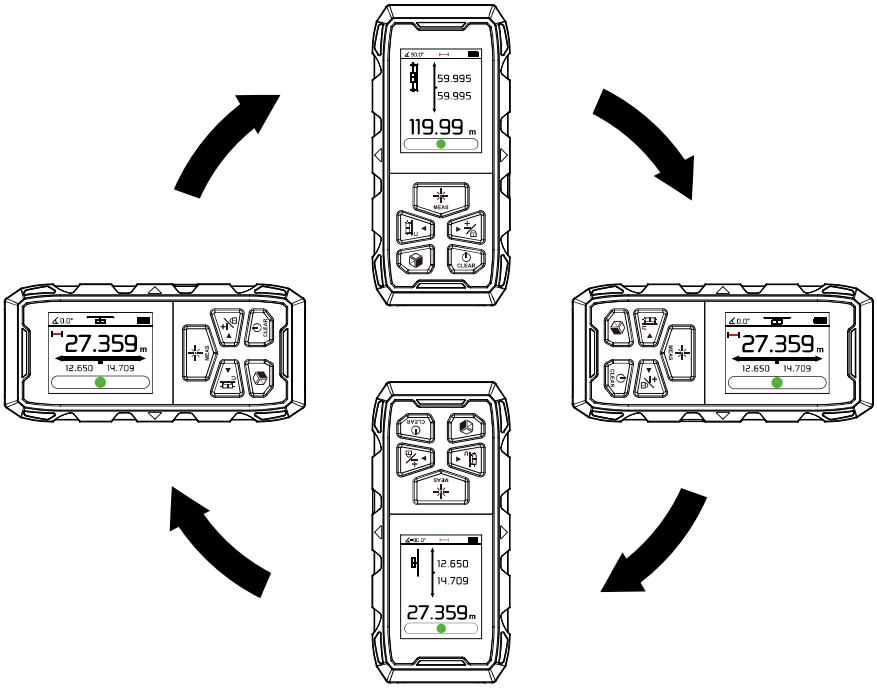
The device provides 9 optional modes.

	Length mode		Calculate height by measuring angle
	Area mode		Calculate height of right triangle
	Volume mode		Calculate hypotenuse of right triangle
	Wall area mode		Calculate the sum of the sides of triangle
			Calculate the auxiliary height of right triangle

Screen Rotation and Lock

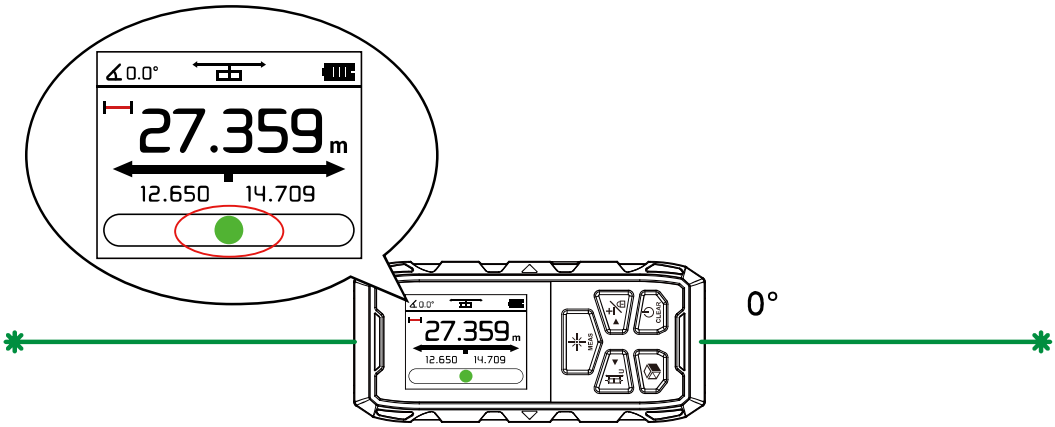
The device supports automatic screen rotation. Long press ▸ ±/🔒 to lock the screen direction, and the screen displays [🔒].

Long press ▸ ±/🔒 again to cancel the screen orientation lock.



Electronic Level Bubble

The device is equipped with an electronic level bubble to measure the levelness of the plane.



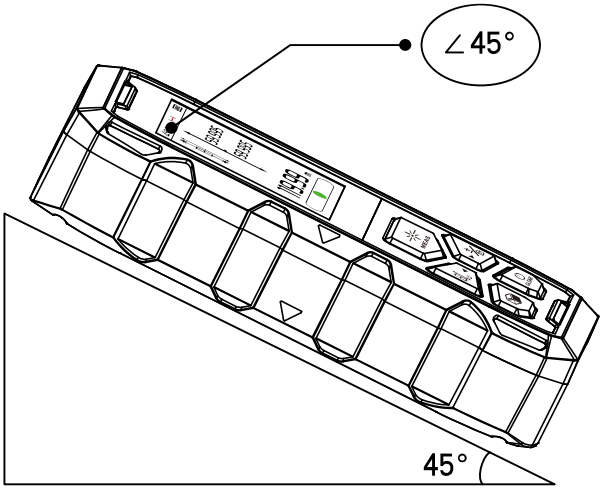
Strong Magnetic Adsorption

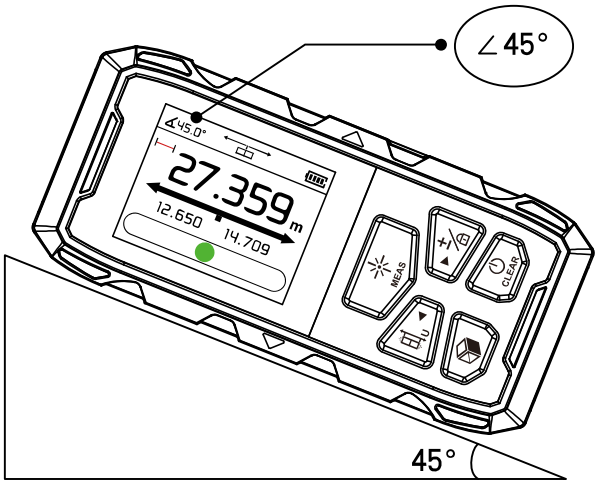
The back of the device is magnetic, so that the device can be adsorbed on the metal surface.

A magnetic object can be fixed by the strong magnetism

Angle Measuring

The device has built-in tilt sensor, which can measure the angle between the base and the two planes of the device in real time.





Sound &Self-calibration

Press and hold CLEAR key and press MEAS key to start. When the screen lights up, release MEAS key immediately. When "Sound" appears on the screen, release CLEAR key. to enter the sound setting.

1.Sound Setting

Switch the sound on/off by pressing U◄ or ►± ;
Press MEAS key to save the setting and enter the self-calibration.

2.Self-calibration

The self-calibration is divided into two steps: first adjust the front-end value (laser emission at the top of the device near the display), and then adjust the back- end value (laser emission at the bottom of the device near the button). The adjustment range is: -0.009m to +0.009m. Operation is as follows:

•Short press U◄ or ►± key to modify the self-calibration value;

•After the sound setting, enter the front-end adjustment; Short press MEAS key to enter the back-end adjustment. After the back-end adjustment is complete, press MEAS key to enter the measurement interface.

3.Example of Self-calibration:

The actual distance is 3.780m.

•Set the device to the left back reference, if the measured value is 3.778m, 2mm less than the actual value, then adjust the front-end value to +0.002m. If the measured value is 3.783m, 3mm larger than the actual value, then adjust the front-end value to -0.003m.

•Set the device to the right back reference, if the measured value is 3.778m, 2mm less than the actual value, then adjust the back-end value to +0.002m, If the measured value is 3.783m, 3mm larger than the actual value, then adjust the back-end value to -0.003m.

Distance/Area/Volume/Pythagorean/ Add/Subtract Measurement

Length Mode-Single Measurement ⊢—⊣ :

Short press MEAS into length mode, and the device emits laser to lock the measuring point. Then press MEAS for a single distance measurement, and the measurement results will be displayed in the main display area. In bidirectional measurement, the auxiliary display area displays the distance between the left and right ends.

Length Mode- Continuous Measurement ⊢.....⊣ :

Long press MEAS in length mode to enter continuous measurement mode. The screen displays the real-time measurement data, maximum value, and minimum value.

Press MEAS to exit the continuous measurement mode.

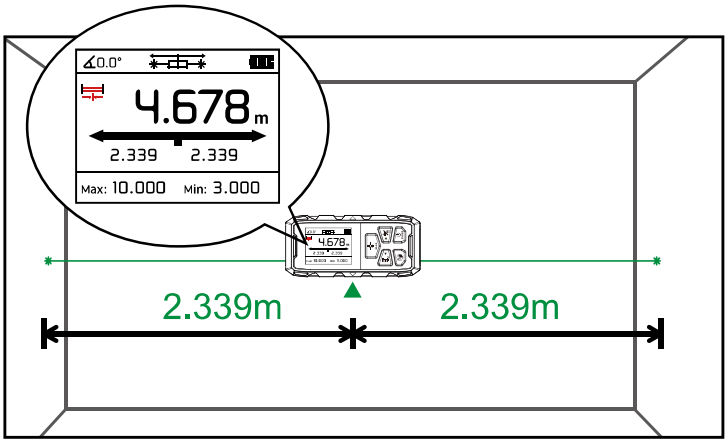
Look for the midpoint: set the reference to bidirectional reference, long press MEAS to start continuous measurement. Follow these tips to look for the middle point.

Landscape screen:

1. If 【←】 is displayed on the screen, please move to the left
2. If 【→】 is displayed on the screen, please move to the right

Portrait screen:

1. If 【↑】 is displayed on the screen, please move up
2. If 【↓】 is displayed on the screen, please move down, If →I← is displayed on the screen, the current position is the midpoint.



Area Measurement

Press MEAS to measure the first side (length)

Press MEAS to measure the second side (width)

The auxiliary display area displays measured values of the length and width of the rectangle. In the measurement process, user can press CLEAR to clear the measurement results and measure again.

Volume Measurement

Press MEAS to measure the first side (length)

Press MEAS to measure the second side (width)

Press MEAS to measure the third side (height)

The device can calculate volume automatically and display the results in the main display area. The auxiliary display area displays measured value of the length, width and height of the cube.

In the measurement process, user can press CLEAR to clear the measurement results and measure again.

Wall area measurement

Press the MEAS to measure the height of the wall;

Press MEAS to measure the width 1 of wall 1;

The device will automatically calculate the wall area = height x width 1;

Press MEAS to measure the width 2 of wall 2.

The device will calculate the total area of the wall automatically.

Total Area = Height x (Width 1+ Width 2)

By analogy, press MEAS to measure the width of the wall n;

Total Area = Height x (Width 1+ Width 2+..... + Width n);

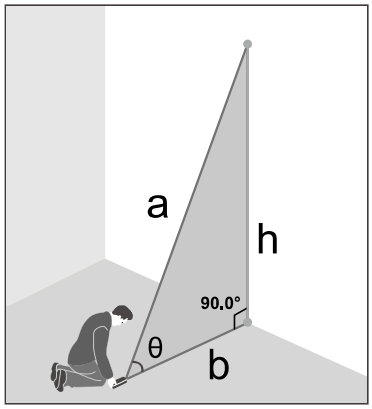
In the measurement process, user can press CLEAR to clear the measurement results and measure again.

Pythagorean Measurement

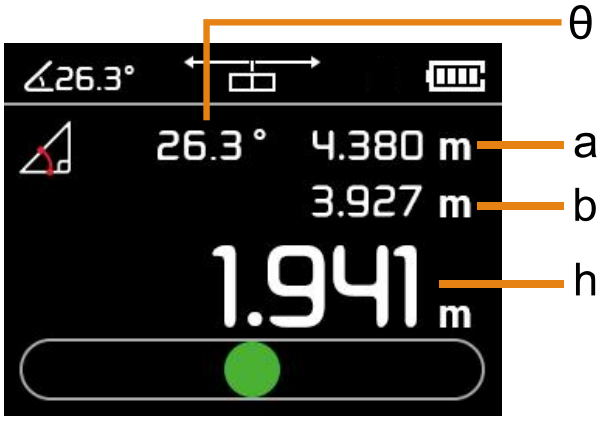
1.Calculate height by measuring angle (as shown in Figure 1)

Press MEAS to measure the length of the hypotenuse (a) according to the screen prompt.

The device will simultaneously measure the angle θ between the hypotenuse and the base. The device automatically calculates the horizontal distance b and the vertical height h.



(Figure 1)



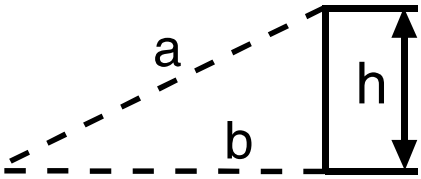
(Screen)

2.Measure the height of right triangle (as shown in Figure 2)

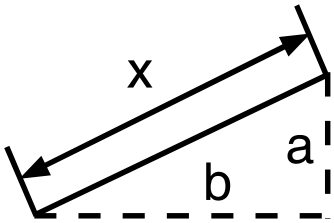
Press MEAS to measure the length of the hypotenuse (a) according to the screen prompt.

Press MEAS to measure the length of the right angle (b).

The device will automatically calculate the height (h)of the triangle after the second measurement.



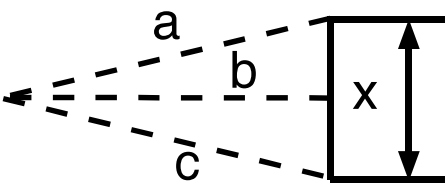
(Figure 2)



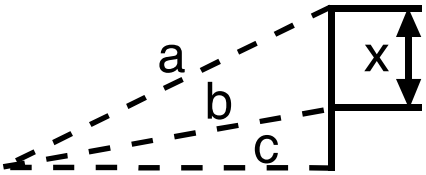
(Figure 3)

3.Measure the hypotenuse of right triangle (as shown in Figure 3)
Press MEAS to measure the length of the side (a) according to the screen prompt.
Press MEAS to measure the length of the leg (b).
The device will automatically calculate the hypotenuse(x)of the triangle after the second measurement.

4.Measure the sum of triangle base (as shown in Figure 4)
Press MEAS to measure the length of the hypotenuse (a)according to the screen prompt.
Press MEAS to measure the length of the leg (b)
Press MEAS to measure the length of another hypotenuse(c)
The device will automatically calculate the height (x)of the triangle after the measurement.



(Figure 4)

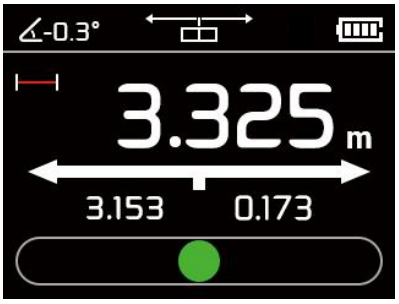


(Figure 5)

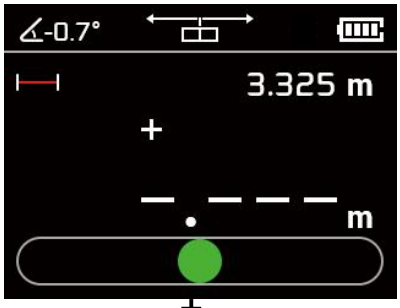
5.Measuring triangle auxiliary height (as shown in Figure 5)
Press MEAS to measure the length of the hypotenuse (a) according to the screen prompt.
Press MEAS to measure the length of the other hypotenuse (b)
Press MEAS to measure the length of the side (c)
After measurement, the device will automatically calculate the height (x) of the auxiliary line of the triangle.
In the Pythagorean measurement mode, the length of the leg of the triangle must be less than the hypotenuse. Otherwise the device will give an error prompt. To ensure the accuracy of measurement, make sure to measure from the same starting point, and in the order of hypotenuse and legs.

Addition and Subtraction Measurement

1.Length Addition and Subtraction



Measure a set of data in length mode



Press ▸ ±/🔒 to enter the addition mode

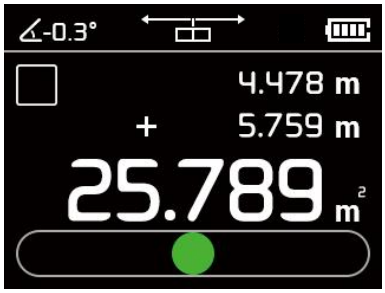
When measuring again,the instrument will automatically add up the data and sum it up

Short press ▸ ±/🔒 ,"+" appears in the main display area of the screen, and the device enters the addition measurement mode. If the device continues to measure, it will automatically add up the measured value.

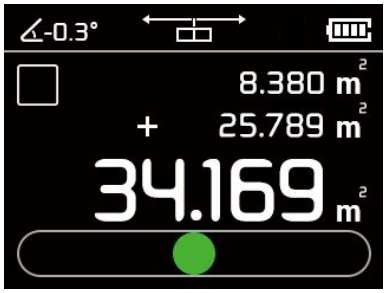
In the addition mode, press ▸ ±/🔒 again, "_" appears in the main display area of the screen, and the device enters the subtraction measurement mode. If the device continues to measure, the device will automatically subtract the measured value.

2.Area/Volume Addition and Subtraction, The operation of adding and subtracting volume is the same as that of area. Take area addition and subtraction as an below:

(Figure 1)



(Figure 2)



(Figure 3)

Step 1: Measure the area once (Figure 1)

Step 2: Press ▸ ±/🔒,"+" appears in the main display area of the screen, and the device enters the addition measurement mode. Then measure the area for the second time (Figure 2).

Step 3: Press MEAS and the device will automatically calculate the sum of two areas (Figure 3).
Area subtraction: In the first step, press ▸ ±/🔒 to enter the addition mode first. Then press ▸ ±/🔒 to switch to the subtraction mode. The subsequent operation is similar to the addition mode.

Multiple add/subtract operations:
In the step 2, after the second area is obtained, short press ▸ ±/🔒 again to continue adding/subtracting the next area. Finally, according to the step 3, the result is obtained.

Records

•After the measurement is completed, the device automatically stores the results.

•Long press 📦 to view records; Short press U ◂▸ ±/🔒 to view the record forward or backward; Long press ⏻ CLEAR to clear all records.

Charging Precautions

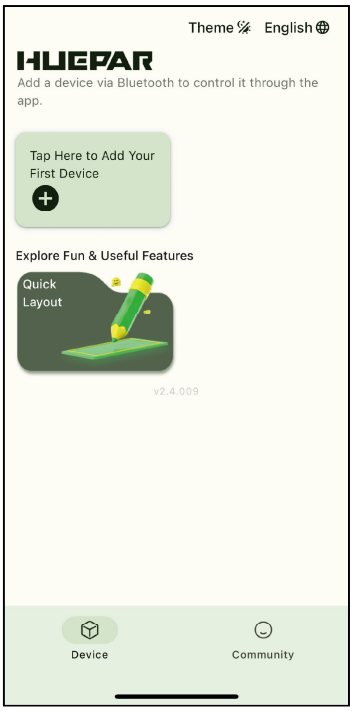
• If the device shows ▭, it means the battery is low. It is recommended that users charge it immediately to avoid affecting the measurement accuracy.
•Use a compliant charger with DC5V ≥1A output for charging. Phone chargers are recommended.
•Charging indication: If ⚡ scroll, it means that the battery is not fully charged. If ⚡ is displayed and is no longer rolling ⚡, the battery is fully charged.
•Battery maintenance: If not used for a long time, it is recommended to fully charge the device and charge it once every six months to avoid battery discharge damage.

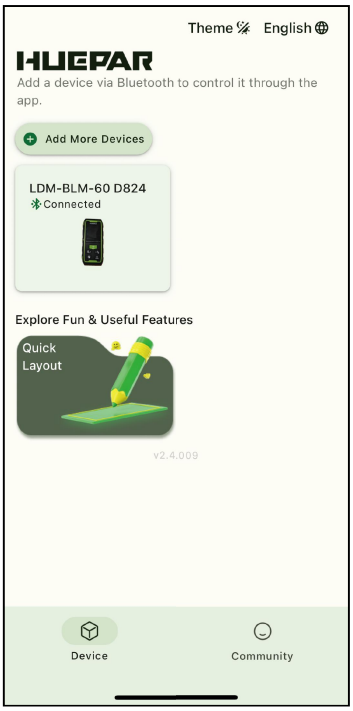
Bluetooth/APP

Once the device is paired with the Bluetooth app, you can remotely switch the laser level's functions from your phone/pad easily and more intuitive.It is limited to model BLM-60-BT/ BLM-100-BT/BLM-60G-BT/BLM-100G-BT.

- Download the Huepar APP from APP store .

- Click the"Add Devices"part to search the devices .
- Choose the device which show on the" Available Devices"part to connect .
- Click the picture of the device to enter the main operating page.
- Follow the instruction on the main operating page to view and switch the function steady without touching the device.





Prompt Information

During use, the following prompt information may be is played in the main display area:

Info	Cause	Solution
Err	Out of measuring range	Use the instrument within the measurement range
Err1	Weak signal	Measure the target point with strong reflectivity
Err2	Strong signal	Measure the target point with weak reflectivity
Err3	Low battery voltage	Charge the battery
Err4	Out of operating temperature range	Use the instrument in the specified environment
Err5	Wrong Pythagorean measurement	Remeasure, ensure the hypotenuse is longer than the right side
Err6	Angle sensor failure	Return to factory for repair

Specifications

Item	BLM-60 BLM-60G BLM-60-BT BLM-60G-BT	BLM-100 BLM-100G BLM-100-BT BLM-100G-BT
Measuring range	60m(Unidirectional) 120m(Bidirectional)	100m(Unidirectional) 200m(Bidirectional)
Accuracy	±(2mm+D*1/10000*(Unidirectional)	
Angle measuring range	±90°	
continuous measurement	✓	
Area/Volume measurement	✓	
Wall area measurement	✓	
Pythagorean measurement	✓	
Angle and height measurement	✓	
Length addition/subtraction measurement	✓	
Max/Min value	✓	
Electronic level bubble	✓	
Automatic screen rotation	✓	
Magnetism	✓	
Laser level	II	
Laser type	500-800nm <1mw	
Max storage	100 units	
Auto laser-off	20s	
Auto power-off	180s	
Backlight time	60s	
Battery	3.7V 850mAh Li-ion	
Charge time	About 1.5 hours	
Charging specification	DC5V 0.75A Type-C	
Operation times at fullcharge	5500 times (Unidirectional); 3500 times (Bidirectional)	
Storage temperature	-20℃~60℃	
Working temperature	0℃~40℃	
Storage humidity	20%~80%RH	
Dimension	118x54x25.5mm	

*"D" indicates the actual distance.
**In harsh environment, such as: the sunlight is too strong, the ambient temperature fluctuates excessively, the reflection effect of the object's surface is weak and the battery is low, the measurement results will have a large error, so a reflecting plate is needed.

Maintenance

• It is forbidden to store the device in a high temperature and humid environment for a long time When the device is not used for a long time, please put the device in a cloth box and store it in a dry and cool place.

• Please keep the surface of the device clean. User can wipe the dust with a damp soft cloth. Do not clean the device with corrosive liquid. The laser window and focusing mirror can be wiped in the same way as the optical device.

Warranty

The angle gauge has passed a rigorous and comprehensive product inspection. We are confident in the quality of our products and provide excellent guarantees for professional users of the products.
We offer One Year Warranty from the date of your purchase, including that:

• Proof of purchase is produced.

• Service/repairs have not been attempted by unauthorized persons.

• The product has not been misused.
Defective products will be repaired or replaced, free of charge or at our discretion if sent together with proof of purchase to our authorized distributor(s).

This Warranty does not cover:

• Faults caused by accidental damage.

• The product has suffered unreasonable wear and tear.

• Failure to use according to manufacturers' instructions.

• Defects caused by maintenance or renovation without our authorization.

• Calibration and maintenance are not included in the warranty.

※ **Note:**

• We are not liable for any direct or indirect loss caused by the failure of this product beyond the scope stipulated by law.

• Repair or replacement under this Warranty does not affect the expiry date of the Warranty.

This warranty is only applied to customers who have purchased this product and are not permitted to transfer this warranty to any third parties.

• This Warranty shall not be altered without our authorization.

You can enjoy a 12 months limited warranty, If you encounter any questions or confusion about the product, please feel free to contact us: **support@huepar.com**

FR

Vous êtes responsable de remettre tous les appareils électriques et éléctroniques usagés à des points de collecte correspondants.

Pour en savoir plus:
www.quefairedemesdechets.fr

FR

Les piles et batteries se recyclent

A DÉPOSER EN MAGASIN

OU

A DÉPOSER EN DÉCHÈTTERIE

Points de colllecte sur www.quefairedemesdechets.fr

FR

ETUI + TUBE

E-mail: support@huepar.com

Made in China

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.