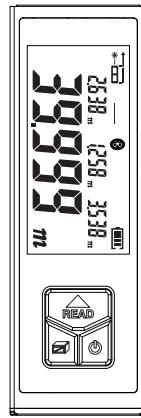


LASER DISTANCE METER User's Manual



Volume Measurement

Press button twice to enter volume measurement mode. A will show on the top of screen. Please follow the below instruction for volume measuring:

Press for Length
Press again for Width
Press thirdly for height

The device calculates and shows the result in the major display area.

Press clear off the result and measuring again if necessary.

Painter Function

Press button three times till showing in the display.

Press to measure the height of the wall first; Press to measure the bottom edge of the first wall, get the first area in the major display area;

Press to measure the bottom edge of another wall, get the sum of these two walls.

Repeat these operations for more walls. Press button to clear the previous measuring result and start new measurement.



Safety regulations

Please read the safety regulations and operation guide carefully before operating.

⚠ Please read all of the operational guide and safety regulations in this manual before operation. Improper operations without complying with this manual guided could cause damage to the device, influence on measurement result or bodily injury to the user.

⚠ The instrument is not allowed to disassemble or repair in any ways. It is forbidden to do any illegal modification or performance change for laser emitter. Please keep it out of reach of children and avoid using by any irrelevant personnel.

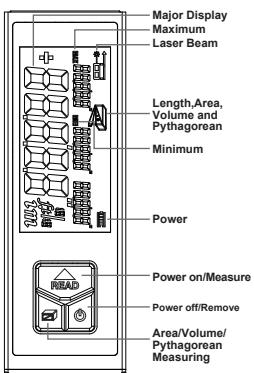
⚠ It is strictly prohibited to shoot eyes or other parts of body with the laser; it is not allowed take the laser to shoot any objects' surface with strong reflecting.

⚠ Due to electromagnetic radiation interference to other equipment and devices, please don't use the meter in the plane or around medical equipment, don't use it in inflammable, explosive environment.

⚠ Discarded batteries or meter device shall not be processed just like household garbage, please handle them in line with related law and regulations.

⚠ Any quality issues or any questions on the meter, please contact local distributors or manufacturer in time, we are ready to offer solutions for you.

1. General Instructions



2. Battery Installation

The product is equipped with 3.7V/850mAh lithium battery which is built-in and non-removable. Please charge it if it can not be turned on or there is no power indication after starting up. Please use charging adapter with DC5V and 1A to charge it (We recommend to use phone charger).

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

Battery Maintenance

Please make sure the device is fully charged if it's not used for a long time; and please charge it every half year, in case that the batteries get damaged.

3. Start the Device/Setting

Turn on/off the Instrument

Under off status, press button , device and laser get starting simultaneously and stand by for measurement.

Under on status, long press button for 2 seconds to turn off the device. The device can also be off without any operation in 150 seconds.

In case of unexpected errors, please long press over 10s to force the device's shutdown.

Turn on/off Laser

Press when it is in "to be tested" mode to turn on the laser. The icon shows at the left top. The laser will be turned off in 20s when there is no operation.

When the laser is on, just press the button to turn off the laser.

Switch the Reference Point

Press key to change the reference point. The device reference point by default is rear.

Back Light On/Off

The back light is set to turn on and off automatically. The back light can be on for 15s while operating, and it will be shut off automatically in 15s when there is no operation to the device.

Unit setting

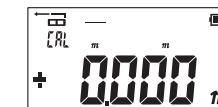
Long press button , reset current measurement unit, the default unit is: 0.000m. There are 6 units for options

	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	0.0 ft ²	0.0 ft ³
4	0.00 ft	0.00 ft ²	0.00 ft ³
5	0 1/16 in	0.00 ft ²	0.00 ft ³
6	0'00" 1/16	0.00 ft ²	0.00 ft ³

Self-Calibration & Sound on/off Setting

Self-Calibration

To ensure the accuracy of the instrument, a self-calibration function is provided. Calibration method: In the power-off state, press and hold and at the same time. The moment the screen lights up. Release immediately and keep pressing . 'CRL' will be displayed within 3s and there are flashing numbers at the bottom, and enter the self-calibration.



Users can adjust the figures according to accuracy of the device with the buttons and . Adjusting range: -9 to 9mm. For example, the actual distance is 3.780m; while it measures at 3.778m with this device, then it is 2mm shorter than actual distance. Then enter calculation mode, and use button to add 2mm on the present basis.

If it measures at 3.783m with this device, it's 3mm longer than actual distance. Then enter calculation mode, and use button to minus 3mm.

After adjusting, press button to save calculation result.

Sound on/off Setting

press button to save calibration result. Then it enters mode of sound settings. "b" appears on the display, and letters are flickering at the bottom of the display. Press button can control the sound on/off. After settings, press or , it exits setting.



4. Length/Area/Volume Measurement & Pythagoras

Single Distance Measuring:

Turn on the laser beam by short press of the button under measuring mode, press the button again for single measurement of length, then the measured results displayed in the major display area.

Continuous Measuring:

Long press button under measuring mode and enter into continuous measuring mode. Maximum measuring result displays in auxiliary display area, present result displays in major display area. Short press button or to exit continuous measuring mode.

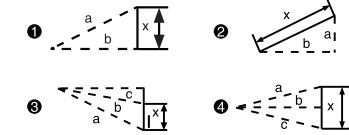
Area Measurement:

Press button , shows on the screen. One of the sides of rectangle blinking on the display, please follow the below instructions for area measuring:

Press once for length
Press again for width

The device calculates and shows the result in the major display area.

Pythagoras



There are four Pythagoras modes in case that user gets hard to reach the target.

1. Calculate the second leg by measuring the hypotenuse and another leg.

Short press four times to enter Pythagoras mode, the hypotenuse of blinking.

Press measure the length of hypotenuse (a)

Press measure the length of one leg (b)

Device calculates the length of another leg (c)

2. Calculate the hypotenuse by measuring the length of two legs.

Short press five times, when one leg of blinking.

Press measure the length of one leg (a)

Press measure the length of another leg (b)

Device calculates the length of hypotenuse (x)

3. Press six times till the one side of blinking on the screen.

Press measure the length of one side (a)

Press measure the length of the median line (b)

Press measure the length of another side (c)

Device calculates the length of the leg of the side (x)

4. Press seven times till the hypotenuse of blinking on the screen.

Press measure the length of one hypotenuse (a)

Press measure the length of line (b)

Press measure the length of one leg (c)

Device calculates the length of the leg in full line (x)

Legs must short than hypotenuse, or there will be "Err5" shows on screen. In order to guarantee the accuracy, please make sure all measurements are start from the same point.

5. Technology Specifications

ITEM	SW-B60
Working Range	0.05-60m
Distance measurement precision	$\pm(2mm+d/10000)^*$
smallest unit of display	0.001m
Continuous measurement	✓
Area of volume measurement	✓
Pythagoras	✓
Self-Calibration	✓
Min/Max value	✓
sound on/off	✓
Voice prompt	✓
Laser type	II 630-670nm,<1mW
Automatically cut off laser	20s
Automatic shutdown	150s
Storage temperature	-20°C-60°C
Working temperature	0°C-40°C
Storage humidity	20%-80%RH
Battery	3.7V 850mAh Lithium Battery
Charging specifications	DC 5V ≥1A Type-C USB
Battery life	8000 times for single measurement
Display screen	4-line segment display
Dimension	100.3×33.4×18.3mm

*Note: Use a target plate to increase the measurement range during daylight or if the target has poor reflection properties.

* "d" indicates the actual distance

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

6. Instrument Maintenance

The meter should not be stored in high temperature or strong humidity environment for long time; if it is not used very often, please take out the battery and place the meter in the allocated portable bag and store in cool and dry place.

Please keep the device surface clean. Wet soft cloth is applied to clean dust, but erosion liquid is never allowed to use for the meter maintenance. Laser output window and its focus lens can be maintained according to maintenance procedures for optical device.

7. Errors

You may get some warning information as below:

Info message	Cause	Solution
Err1	Received signal is too weak	Choose the surface with stronger reflectance. Use a reflecting plate.
Err2	Received signal is too strong	Choose the surface with weaker reflectance. Use a reflecting plate.
Err3	Low power	Change the power supply.
Err4	The working temperature is out of working range.	Use the device in the specified temperature.
Err5	Pythagoras measuring error.	Re-measure and ensure that Hypotenuse is bigger than Cathetus.
Err6	Over measuring range	Please measure inner the range.