



## Product Overview



Laser emission /  
reception lens



LCD display screen  
(with backlight)



 Operation key



Function key



Lanyard hole



## Main Parameters

|                       |                           |
|-----------------------|---------------------------|
| Product type          | Portable laser measure    |
| Unit                  | m/in/ft                   |
| Operating temperature | -5°C-40°C                 |
| Storage temperature   | -20°C-60°C                |
| Endurance             | 200mAh/About 3,500 times※ |
| Measuring range       | 0.03-40m                  |
| Laser type            | Class 2 . 620~670nm,<1mw  |
| charging method       | DC 5V <0.2A               |

※ The number of measurements is based on the laboratory environment (5 meters distance, 300LX brightness).



## Technical Data

|                                                  |          |
|--------------------------------------------------|----------|
| Measuring range<br>(※typical)                    | 0.03-40m |
| Measuring range<br>(※unfavourable conditions)    | 20m      |
| Measuring accuracy<br>(typical)                  | ±2mm     |
| Measuring accuracy<br>(※unfavourable conditions) | ±3mm     |
| Relative air humidity                            | Max80%   |
| Lowest indication unit:                          | 1mm      |

※typical: Refers to the strong reflection ability of the laser irradiation area (such as white painted walls), the background illumination is dark and the working temperature is 15 °C-35 °C. At this time, consider the influence of an error of plus or minus 0.05 mm/m.

※unfavourable conditions: Refers to the weak reflection ability of the laser irradiation area (such as black cardboard, polished tiles), strong background illumination and operating temperature of -10 °C to 45 °C. At this time consider the influence of an error of plus or minus 0.15 mm/m.



## Point of operation

- 1.The range finder cannot be moved during measurement. should be placed on a fixed support surface.
- 2.The laser reflection port and the receiving lens cannot be blocked during measurement
- 3.Based on physical principles, errors can occur when measuring on specific surfaces of objects, such as transparent surfaces、reflective surfaces、porous surfaces.

## On/Off:

Long press for about 1 seconds



Long press for about 5 seconds or 45 seconds without operation automatic shutdown



## Measurement:

Single short-twist press. starts measuring again to get the measurement data



## Switch starting point:

Long press for 3 seconds in the power on state



## Continuous measurement:

Press and hold the button for 1.5 seconds. Release the button to initiate continuous measurement

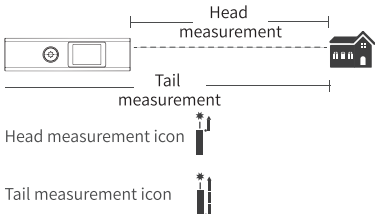


## Maximum/minimum

In continuous measurement mode, the system automatically displays.



## Supplementary explanations before and after the benchmark:



※Pre/post reference: refers to whether the body length is calculated in the measurement data.



## Advanced Features



short-circuit switching function  
long-term exit advanced  
function mode



### A. Area measurement

Click the operation key (the round key) to get the data ①, click again the data ②. The system automatically calculates the area data



----- Data/Length ①

----- Data/Width ②

----- Area measurement  
symbol

----- Area data  
measurement

### B. Volume measurement

Click the operation (round key) to get the data ①  
click again get the data ②. Click again get zhe data  
③ and the system will calculate the volume data.



----- Data/Length ①

----- Data/Width ②

----- Data/Width ③

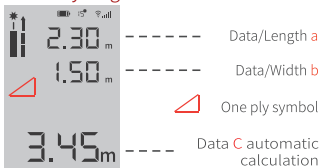
----- Volume  
measurement symbol

----- Volume data  
measurement

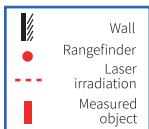
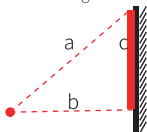
## C. Pythagorean measurement (Indirect)

In this mode, the system uses the Pythagorean law  $a^2+b^2=c^2$ . Calculate the third side data by measuring data on both sides

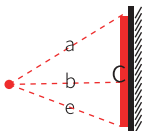
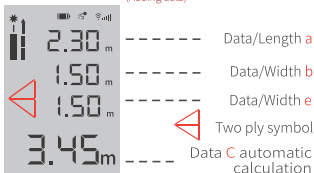
### ※One Pythagorean



Click the operation button to get the data a  
Click again data b. The system automatically calculates the c data



### ※Secondary Pythagorean (Adding data)



Click to operate the data **a**  
Click again data **b**  
Click again to get the data **e**  
System calculates data **c**

## ※Secondary Pythagorean (Data subtraction)



----- Data/Length **a**

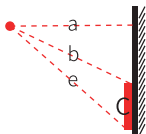
----- Data/Width **b**

----- Data/Width **e**



Two ply symbol

----- Data **C** automatic calculation



Click to operate the data **a**

Click again data **b**

Click again to get the data **e**

System calculates **C** data

## C. One-button height measurement / angle measurement

The system uses the angle sensor to measure the angle the shortest distance and the height of the object with one click.



----- Data/Length **a**

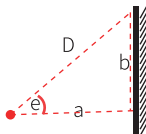
----- Data/Height **b**

----- Angle data **e**



One ply symbol

----- Data **D** measurement



Click to get the data **D**

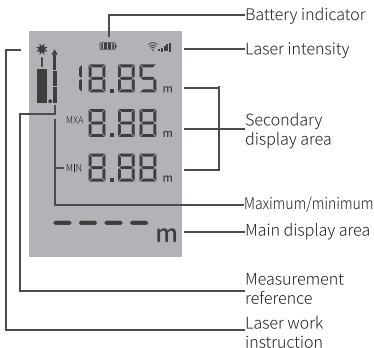
The system calculates the shortest distance **a**

Automatically calculate the actual height **b**

Automatically calculate the angle **e**



## Screen Description



## Setting Mode

In the setting mode, the meaning of the icon:

BOOT \_\_\_\_\_ Set mode/status

CRL. \_\_\_\_\_ Calibration

BL.ON/OFF \_\_\_\_\_ Backlight on/off

*m* \_\_\_\_\_ Meter (metric unit)

*in* \_\_\_\_\_ Inch (imperial units)

*ft* \_\_\_\_\_ Feet (imperial units)



## The way to enter the setup mode:

Turn on and keep pressing for 5 seconds

## The basic operation logic:

Single short, change setting data/mode  
longer short(1 seconds) save the current settings and go to the next setting

## Setup Page 1 :

### Calibrating the Laser Rangefinder

On this page, the LS1 can be calibrated within  $\pm 7\text{mm}$



## Page 2: Switch LS1 measurement unit

On this setup page, you can change the unit of measure.



The units available for setting are:

*m* , *in* , *ft* , ' , *in*

## Setup page 3: Turn the backlight on/off

you can set whether or not to display the LCD backlight.



ON / OFF



## Problems /Solutions

| Fault type         | Possible causes and solutions                                                                                                                                                                                                                                      |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Can not boot       | <ol style="list-style-type: none"><li>1. The battery has no power, charge and then try to boot.</li><li>2. Long press time is not enough, please confirm Move for more than 1.5 seconds</li><li>3. Switch or damage, please contact the dealer to solve.</li></ol> |
| No backlight       | <ol style="list-style-type: none"><li>1. Set the mode to turn off the backlight by mistake. turn it on.</li><li>2. The display backlight is damaged, please contact your dealer.</li></ol>                                                                         |
| Large error        | <ol style="list-style-type: none"><li>1. The environment is bad, please add a white reflector.</li><li>2. Correct calibration accuracy on the settings page</li></ol>                                                                                              |
| Unable to charge   | <ol style="list-style-type: none"><li>1. The charging cable is damaged, replace the charging cable.</li><li>2. The charging module is damaged. please contact your dealer.</li></ol>                                                                               |
| Error code D.E     | Measuring distance too close/far                                                                                                                                                                                                                                   |
| Error code T.L/T.H | The ambient temperature is too low / too high. please warm / cool the equipment                                                                                                                                                                                    |
| Error code B.L     | Battery voltage is too low, please charge                                                                                                                                                                                                                          |
| No data            | <ol style="list-style-type: none"><li>1. Laser receiving / emitting head fouling, cleaning treatment</li><li>2. Rangefinder shaking too large, please stand</li></ol>                                                                                              |



## Usage Notice

 Please read all the terms and operating instructions in this manual carefully before using this product. Failure to follow these safety guidelines and operating instructions may result in hazardous laser radiation damage or personal injury.

 Do not attempt to alter the performance of the laser in any way, which can cause laser exposure to be dangerous. Turn on the laser only when using the instrument, and do not look directly at the laser. Please keep your instrument in a safe place to avoid the use of unrelated personnel.

- Do not intentionally use a laser to illuminate others or beam to objects on highly reflective surfaces.

- Please keep it out of the reach of children.

 Do not repair the instrument without authorization.

 Electromagnetic radiation may interfere with equipment and devices (such as medical instruments such as pacemakers or hearing aids).

Dispose of the discarded instrument in accordance with the laws of your location.



Class 2 safety laser  
But direct view is strictly prohibited

※ Due to continuous improvement and continuous upgrading of products.

The company reserves the right to modify this specification without further notice.



LASER RADIATION  
DO NOT STARE INTO BEAM  
CLASS 2 LASER PRODUCT  
MAXIMUM OUTPUT  $< 1\text{mW}$   
WAVELENGTH 635nm  
IEC/EN 60825-1:2014

# After-sales card

Dear friends , If problems are found in the use of the product or there are criticisms and suggestions. Please contact us to solve the problem for you.

If the product has quality problems and needs after-sales service, please fill in After the following information, Send the problem product and this page (Tear off) to us together.

**Please fill in your information :**

Name :  Phone :

Product return address :

Product problem description :

Return address :

※Please tear this page off and send it back with the product.