Instructions
MS11

Laser Measure
Solution Specialist

μmeasure®
measure.hk

Umeasure Intelligence
for measure

COPYRIGHT

The specifications of this product are subject to change without prior notice. All explanatory rights are owned by Zhuhai Mesausre science and technology co., LTD. All trademarks, product pictures, technical parameters, copyright and ownership are owned by Zhuhai Measure science and technology co.,LTD.

USER GUIDE

This manual is applicable to the device : MS11-A/B/C/D
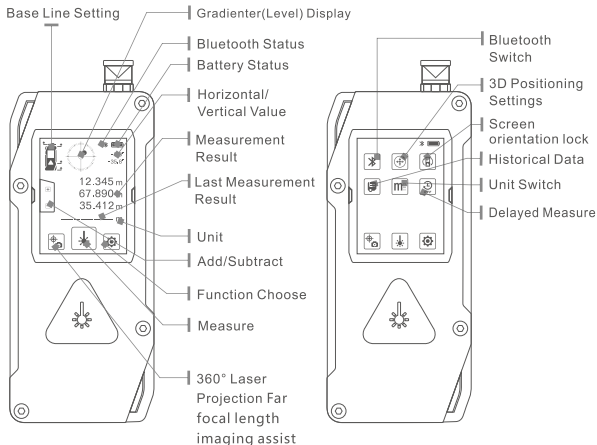
μMeasure makes measurement more intelligent.

Light Ruler is a professional intelligent touch screen laser distance meter, with it's metal structure body, the industry leading waterproof design and the leading device performance combined together, you can easily cope with all the measuring difficulties.
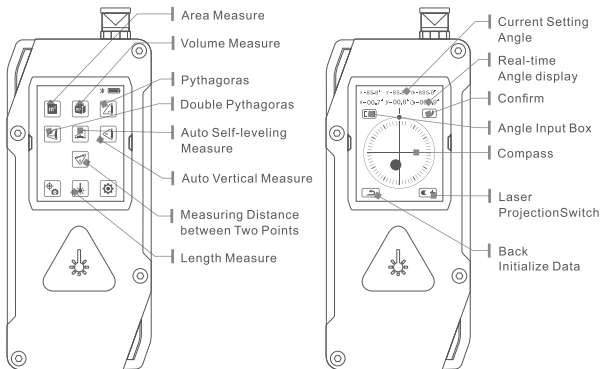
Sagacity Light Ruler Feature
- **Measuring distance**
  40m,60m,80m,100m
- **Multiple measurement functions :**
  Professional measure, 8 measurement modes are designed for different user needs.
- **Technical innovation :**
  New generation of laser emitter plus the latest triangulation algorithm, measuring error accuracy improved to ±1.5mm, leading the industry.
- **Bluetooth connection :**
  Bluetooth 4.0, seamless connection to mobile phone, with the APP developed by μMeasure, we can realize visualized measurement data record.
- **Operating system :**
  The latest UM-3 OS by μMeasure, much easier to control, more user-friendly.

TOUCH SCREEN FUNCTIONS DESCRIPTION

Base Line Setting

Gradienter(Level) Display

Bluetooth Status

Battery Status

Horizontal/Vertical Value

Measurement Result

Last Measurement Result

Unit

Add/Subtract

Function Choose

Measure

360° Laser Projection Far focal length imaging assist

12.345 m
67.890 m
35.412 m

Bluetooth Switch

3D Positioning Settings

Screen orientation lock

Historical Data

Unit Switch

Delayed Measure

Note: 360° Laser Projection/Cross Line Laser/Far focal length imaging assist, the 3 functions correspond to 3 different models. For details, see the parameter description.

TOUCH SCREEN FUNCTIONS DESCRIPTION

- Area Measure
- Volume Measure
- Pythagoras
- Double Pythagoras
- Auto Self-leveling Measure
- Auto Vertical Measure
- Measuring Distance between Two Points
- Length Measure

- Current Setting Angle
- Real-time Angle display
- Confirm
- Angle Input Box
- Compass
- Laser ProjectionSwitch
- Back Initialize Data

Note: 360° Laser Projection/Cross Line Laser/Far focal length imaging assist, the 3 functions correspond to 3 different models. For details, see the parameter description.
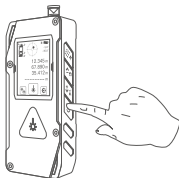
ON/ OFF

ON: Long press the side On/Off button for 1.5 seconds
OFF: While the device is powered on, long press the side On/Off button for 1.5 seconds

Base Line Setting
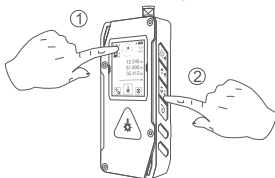
1: Press the icon on the screen to switch the base line

2: Long press the side button for 1 second to switch the base line

Unit display

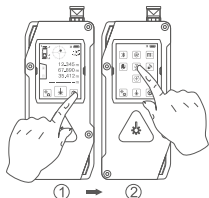① ➡ ② ③ ➡ ④
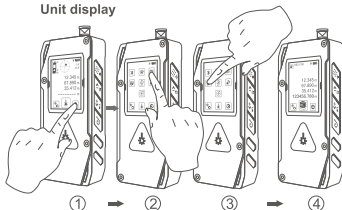
1 Press to enter the function menu interface,

2 Press to switch unit.
  ※Each press change a unit type

3 Press to enter historical data,
  ※Swipe to left/right on the screen to browse historical data by for ward/ backward, record up to 100 data.

Timing Measurement Settings

① ➝ ②

1 Press ⊕ to enter the function menu interface,

2 Press 🕑 to set the delayed measurement time.

Electronic Level

Angle input box
X/Y/Z 3-Dimensional input

Confirm

Angle Switch

Initiate Data/Back

※Touch Screen
Function Introduction

③ ➝ ④
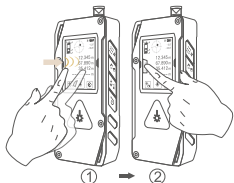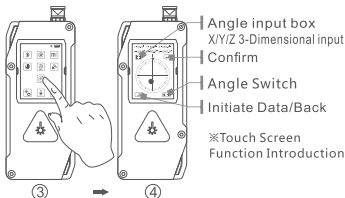
Press ⊕ to enter the electronic level interface,
Set the needed value in the angle input box.

Addition/Subtraction

① ➝ ②

1 Swipe from left to right on screen, drag out the addition/subtraction measure menu.

2 Choose addition/subtraction function to measure.

FUNCTION OF PHYSICAL BUTTONS(PROFESSIONAL USE)

In order to adapt to a variety of using environment, this rangefinder designed physical buttons, for professional use/in case we can't use the touch screen(when the touch screen lost it's effectiveness due to surface water or in dusty environment).By pressing these physical buttons we can realize all the operations to replace the touch screen function.

Button function introduction

Function key
Far focal length imaging assist / Laser project Switch

Up
Historical data

Down
Baseline switch

Back
Off
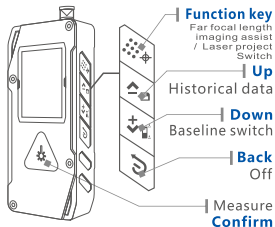
Measure
Confirm

In the measuring mode interface

	Short press	Long press
	Enter function menu	Far focal length imaging assist / Laser project Switch
	Switch between 8 measuring modes	Historical data
	Switch between 8 measuring modes	Baseline switch
	Back	Off
	Measure	Continuous Measure or confirm to enter

In the menu mode interface

|	Short press	Long press
	Enter the measuring mode	Far focal length imaging assist / Laser project Switch
	Move to select function icon	Historical data
	Move to select function icon	System Information
	Back	Off
	Confirm enter	Confirm enter

12.345 m
67.890 m
35.412 m

Menu mode interface
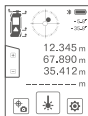
Measuring mode interface

Note: In different mode interface, the button functions have slight changes.

MS11/A
360° Laser Projection

MS11/B
Cross Line Laser

MS11/C
Far focal length
imaging assist
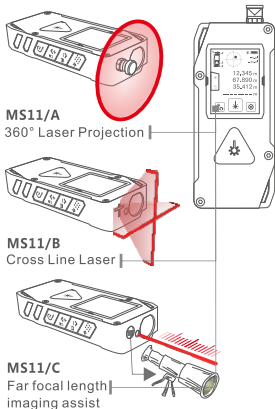
Note: 360° Laser Projection/Cross Line
Laser/Far focal length imaging assist,
the 3 functions correspond to 3 different
models. For details, see the parameter
description.

Length Measure

When powered on, it will enter the default
Single Measuring mode. Aim at the
target, press the main button ⚠ , the
result will be shown on the screen.
The current measurement data is
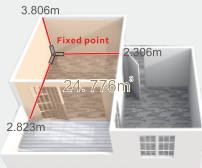displayed on the last line.

6. 688m
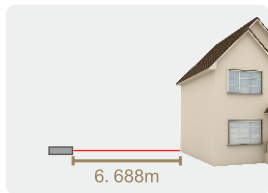
Area Measurement

1. Press ✳ function key to enter the measurement mode select interface, choose Area Measurement mode 🔲 .
2. Press the main button ⚠ , get the result of the first side (line a);
3. Press the main button ⚠ again, get the result of the another side(line b), The calculated Area result will be shown on the last line.

Fixed point   7.106m
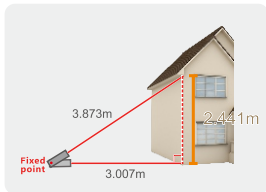
6. 823m   48. 488m²
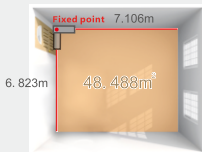
Volume Measurement

1. Press ✳ function key to enter the measurement mode select interface, choose Volume Measurement mode 🔲 .
2. Press the main button ⚠ , get the result of line a.
3. Press the main button ⚠ again , get the result of line b.
4. Press the main button ⚠ for a 3rd time, get the result of line c, The calculated Volume result will be shown on the last line.

3.806m

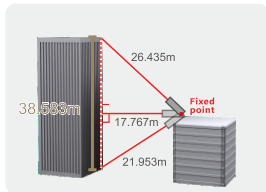Fixed point   2.306m

24. 776m³

2.823m

Pythagoras (one time)

1 Press ⚏ function key to enter the measurement mode select interface, choose Pythagoras (one time) ▱ .

2 Press the main button ⚏, get the length of the slope (line a), hold this point fixed, turn to the perpendicular direction of the target, press the main button ⚏ to get the length of the second line (line b),
The calculated height will be shown on the last line.

3.873m   2.441m

Fixed point   3.007m

Double Pythagoras

1 Press ⚏ function key to enter the measurement mode select interface, choose Double Pythagoras ▱ .

2 Press the main button ⚏ , get the length of the slope (line a), hold this point fixed, turn to the perpendicular direction of the target, press the main button ⚏ to get the length of the second line (line b),
Adjust the direction, press the main button ⚏ for a 3rd time, get the length of the 3rd line (line c),
The calculated height will be shown on the last line.

26.435m

38.583m

17.767m

Fixed point

21.953m

Auto Self-leveling Measurement

1. Press 🔽 function key to enter the measurement mode select interface, choose Auto Self-leveling Measurement 📐 .

2. Press the main button ⚠ as the direction indicates in the illustrate, you will get the length of hypotenuse, vertical and horizontal side shown on the screen accordingly.

10.431m
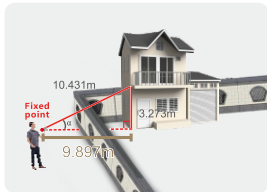
Fixed point

3.273m

9.897m

Auto Vertical Measurement

1. Press 🔽 function key to enter the measurement mode select interface, choose Auto Vertical Measurement ◁ .

2. Press the main button ⚠ , get the length of first line a, then press the main button to get the second line b,
The calculated vertical height result will be shown on the last line of screen.

39.125m

36.821m

Fixed point

12.597m

Measuring Distance between Two Points

1 Press ✳ function key to enter the measurement mode select interface, choose Measuring Distance between Two Points 🔽 .

2 Press the main button ⚠, get the length of first line a;

Press the main button again ⚠, get the length of second line b;

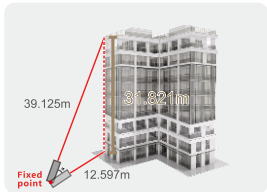The distance between these two points will be shown on the last line of screen.

7.892m

5.091m   4.937m

Fixed point

Parameter

Type	MS11/A	MS11/B	MS11/C	MS11/D
Laser Type	620nm-690, <1MW			
Accuracy	± (1.5mm)			
Function Mode	Laser+360° Laser Projection	Laser+Cross Line Laser	Laser+Far focal length imaging assist/Laser	Laser
Measurement Range	40/60/80 /100m	40/60/80 /100m	40/60/80 /100m	40/60/80 /100m
Unit	m/ft/in			
Screen Type	HD Capacitive screen			
Protection Degree	IP67			
Weight	140g	140g	140g	140g
Dimension	128x51x27(mm)			
Battery	1.5v(AAA)x3			
Auto Shut-down	180 Second			

Note: The working range and accuracy depend on the energy of the laser reflectance.
The brightness of the laser will be affected by the ambient light. Use a target board or a reflective sheet to increase the stability of the measure accuracy within the working range.

µMeasure Laser Products implement 1-year replacement policy

1、Warranty period :

1.1 Under normal operating conditions, within 1 years from the date of purchase, MS11 laser distance meter guaranteed all failures related to quality issues can be repaired for free.

2、Within the warranty period, the following situation is out of warranty scope and could be repaired with charge :

2.1 The product is damaged due to improper use, maintenance and storage.

2.2 Disassembled or repaired by customer or a 3rd party;

2.3 Without warranty card or purchase invoice;

2.4 The warranty card No. is altered or inconsistent with the product No.;

2.5 Damage caused by force majeure;

2.6 Normally worn parts need to be replaced;

2.7 Loss or damage due to abnormal factors such as temperature/humidity in extreme environment;

2.8 Damage caused by failure to operate as required.

3、When the instrument needs to repair, please send it to your local dealer, and provide an effective warranty card and the original invoice for your purchase. The warranty card can not be reissued if lost, please keep it properly.

Warranty Card

Model		SN	
Invoice No.			
User Info			
Purchase Date			Warranty Period
	Day	Month	Year
Dealer	Dealer Name, Address, Contact		
Fault Description			

In order to use this hand-held laser distance meter safely, be sure to read all instructions below carefully.

⚠️ **Warning :**

a. This product belongs to the Class-II laser product. When using it, do not look directly at the laser or aim the laser beam at another person. Do not look at the laser beam through the optical lens. Otherwise it will do harm to the eyes.

b. This product strictly meets relative standards and regulations, but it cannot completely rule out the possibility of product interference with other equipment and may cause discomfort to humans and animals.

Do not use this product in an explosive or corrosive environment. Do not use this product near medical equipment.

1 Waste disposal:
Everyone has a responsibility to protect our environment!
It is forbidden to dispose of used batteries together with household garbage. Please dispose of used batteries at a designated garbage collection point.
This product cannot be recycled together with household waste. Please dispose of this product in accordance with national and regional regulations.

2 Limitation of Liability:
Zhuhai Measure Science and Technology co., LTD will not be liable for any loss caused by failure to use the instrument in accordance with this manual, use of third-party accessories or self modification of this instrument.

Measure Website

Measure product service No

All error information is displayed in code.
The following contents list the codes and
the corresponding solutions!

Code	Cause	Solution
204	Miscalculation	Try again according to user manual
208	High temperature	Working temperature should between 0°~40°C
220	Low battery	Please change battery
253	Low temperature	Please warm up the instrument
255	Reflected signal too weak/ Measuring time too long	Improve reflecting surface/Use a target board or white paper.
256	Reflected signal too strong	Use a target board, or not aim at the strong light.

umeasure®
measure.hk

ZHUHAI MEASURE SCIENCE AND TECHNOLOGY CO.,LTD
ADD: Floor3 Building A,Pingdong Fourth Road,
Nanping Science and Technology Park, Zhuhai
City,Guangdong Province ,China
TEL: +86-756-**6982209**
Made in **P.R.C**