Laser Distance Meter

R2B User Manual

Product Overview

Thank you for purchasing and using MileSeey handheld laser distance meter, please read the manual carefully before using.

Mileseey product model R2B is a handheld Laser Distance Meter integrated with measuring wheel and laser level.

Thanks to robust housing, compact inner structure,R2B offers the perfect features of IP65 waterproof, drop-resistance and super long lifespan. With 2.4 inch HD colored display, it enables user to read the data easily.

Adopting the most cutting-edge technologies of 3D measurement, curve measurement, angle marking function, R2B solved a variety of difficulties for all users.

R2B has 15 functions to satisfy different measuring needs and greatly improved user experience.

Safety Instructions

For the safe use of this handheld laser distance meter, please read below instructions carefully.

⚠ if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

⚠ Warning

a,The device is categorized into Class 2 laser product. DO NOT stare at laser directly or shoot at others or it will cause damage to eyes.

b,The product is in accordance with strict standards and regulations through the development and manufacturing, but still can't entirely exclude the possibility of interference to other devices, may cause discomfort to human and animals.

- Please DO NOT use this product under explosive or corrosive environment.
- Please DO NOT use this product near medical devices.
- Please DO NOT use this product on the plane.

FCC Statements:
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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or 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 technician for help.

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 my cause undesired operation.
MODIFICATION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

1,Disposal

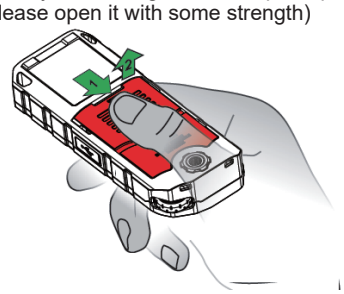
Everyone is responsible for environmental protection.
It's prohibited to dispose used batteries together with household waste, please collect used batteries to designated waste station.
This product must not be recycled with household waste. Dispose of the product appropriately in accordance with the national regulations in your country.

2,Scope of Responsibility

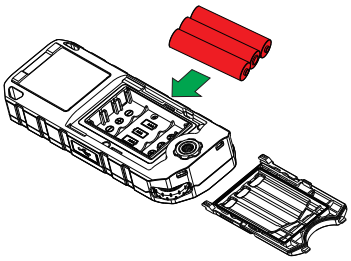
MileSeey will not be responsible for the damages caused by improper use below:
*Using the product without instruction;
*Use of accessories from other manufacturers without approval from MileSeey ;
*Carrying out modification or conversion of the product.

Battery installation and using instructions

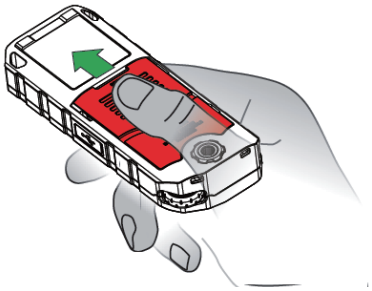
Press the battery cover and slide down to unlock it first, then uplift it to open. (The battery cover is tight for waterproof purpose, please open it with some strength)



Insert 3* AAA rechargeable Ni-MH batteries, observing correct polarity.



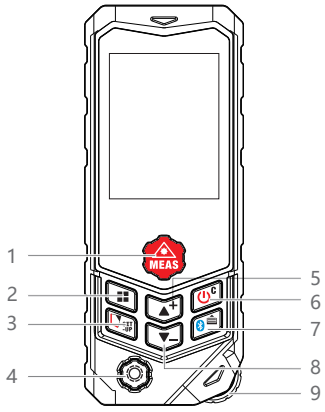
After the battery is placed, cover and hold the battery door, press and slide to the top, the cover can be sealed.

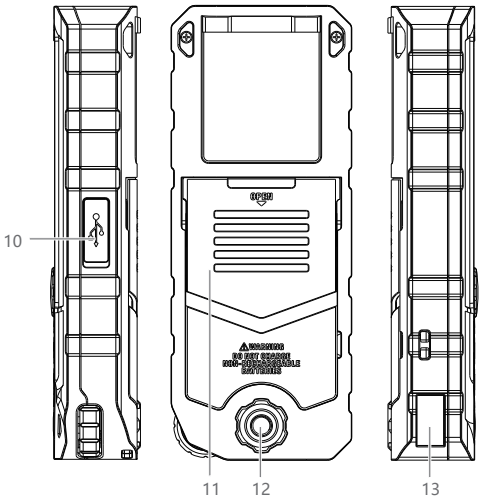


The standard batteries are 3 pieces of AAA NI-MH rechargeable batteries, common dry batteries are workable (Do not charge non-rechargeable batteries). Charge the NI-MH batteries by connecting the charging port and adapter or PC with the USB-C cable.
Warning: ①Do not charge non-rechargeable batteries to avoid any accidents. ②Do not use rechargeable batteries and non-rechargeable batteries at the same time to avoid any accidents. MileSeey will not be responsible for accident due to charging dry batteries.
Laser distance meter may heat up when charging, it's normal, has no effect on the device performance and service life. If it is not used for a long time, remove the batteries and keep it in dry place.

⚠Warning:
Do not use aggressive cleaning agents or solutions. Use only a clean, soft cloth for cleaning.

Appearance





1. Measuring Button
Short press to measure/confirm.
Long press to continuous measurement mode

2. Function Button
Press this button to function menu, select functions by up and down key, press measure button to confirm.

3. Setup, Turn on/off laser level Button
Short press to setup menu, select setup options by up and down key, press measure button to confirm.

4. Wheel Measurement Button
Short press to turn on/off wheel measurement

5. Up/Add Button
Press this button to page up/Add

6.ON/OFF/Return Button
Long press to turn on/off, short press to return to Single measurement

7. Send data by Bluetooh / Historical record
Short press to turn on Bluetooth (manually)/ transfer data to App.
Long press to check historical record

8. Down/Subtract Button
Press this button to page down/subtract

9. Wheel
In wheel measurement mode, move the wheel along the measuring path to measure distance.

Notes: Each time when turning on wheel measuring, first direction that wheel measured is calculated as positive data, the opposite direction measured is calculated as negative.

10. USB-C Port

11. Battery Compartment

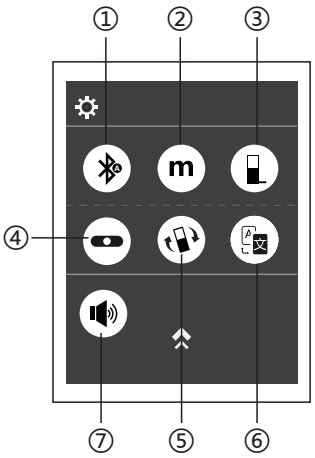
12. Tripod Screw Hole

13. Laser Line Emitting Hole

Instruction for icons

	Wheel Measurement
MEAS	Single/Continuous Measurement
S	Area Measurement
V	Volume
	Pythagoras (2-point)
	Pythagoras (3-point)①
	Pythagoras (3-point)②
	Auto level
	Auto height
	Trapezoid measurement①
	Trapezoid measurement②
	3D measuring: P2P
S	Triangle Area Measurement
	Laser Line Marking Function

Setup menu explanation



①Bluetooth
Short press to switch on Bluetooth (automatically /manually), and turn off Bluetooth.

Bluetooth (Automatic mode), measured data will be transfered to App automatically.

Bluetooth (Manual mode), measured date will be transferred to the App by pressing manually.

When the icon turns gray, Bluetooth is off.

② Measuring units
Short press to switch measuring units between m/ft/in/ft+in

③Reference
Short press to change measuring reference

④Digital Level
Press to activate digital level, the electronic tilt sensor makes it easier to achieve horizontal alignment with the real-time measuring angle.

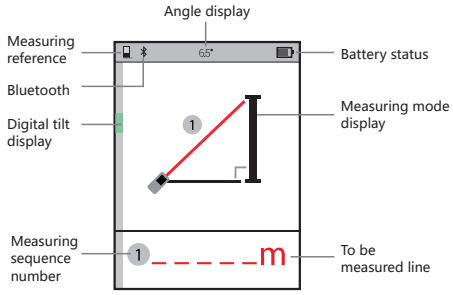
⑤Rotary screen settings
Short press to activate/de-activate the screen rotary settings for Portrait & Landscape view (only available in Single/Continuous measurement)

⑥Chinese/English Voice broadcast.
Short press to select Chinese/English voice broadcast.

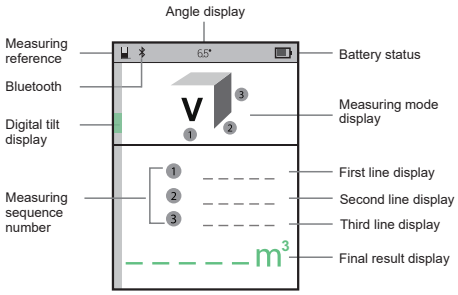
⑦Voice
Short press to turn the Voice Broadcast ON/OFF.

Interface

A Measuring interface：



B Measuring data interface：



Operation Instructions

The device will enter Single distance measurement mode when it is powered ON, short press to select measuring mode, the reminding of the red flashing line shows the line to be measured.

※The measuring data should be different due to different Reference settings. The Rear is the default reference.

⚠ Power on the device, measure in the certain distance within ±2mm accuracy, it can work properly.

Single Distance Measurement

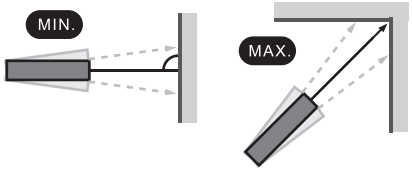
The device will enter Single distance measurement mode when it is powered ON, press MEAS after aiming at target to get result at bottom of the screen.

Continuous Measurement

It can be used to measure the diagonal of the house, horizontal lines, and stake out purposes.

Long press MEAS to activate Continuous measurement, aiming at the target and press MEAS to stop, the Minimum and Maximum data will be displayed accordingly.

※The continuous measurement will stop automatically after 5 minutes.

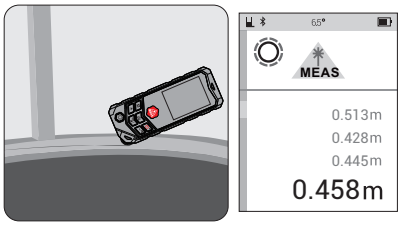


Wheel Measurement

Press to activate wheel measurement, scroll the wheel from the start point to end point, press to stop.

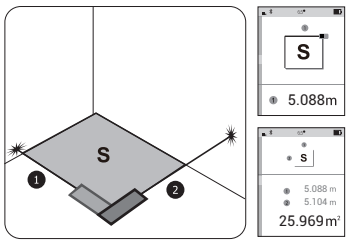
※The wheel measurement can be used in Single measurement, Area measurement and Volume measurement.

Note: When starting the wheel measurement, please keep an eye on right direction of the wheel.



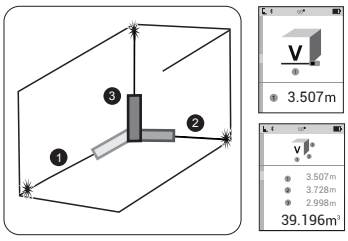
Area Measurement

Press to select Area measurement S, according to the red flashing line, press MEAS to get the ① distance (Length) from the target point, press MEAS again to get ② distance(Width) from the second target point, Area will be calculated and displayed accordingly.



Volume Measurement

Press to select Volume measurement V, according to the red flashing line, press MEAS to get ① distance (Length) from the target point, press MEAS again to get ② distance (Width) from the second target point, press MEAS the third time to get ③ distance (Height), the Volume will be calculated and displayed accordingly.

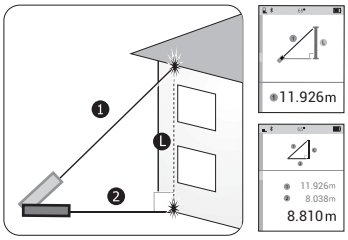


Tips for Pythagorean Measurement

All Pythagoras measurement can be applied to different directions of applications , only to ensure that the right-angle side is perpendicular to the measured object.
Note: According to the Pythagorean Theorem, the right-angle side cannot be greater than the hypotenuse; otherwise there is a calculation error.

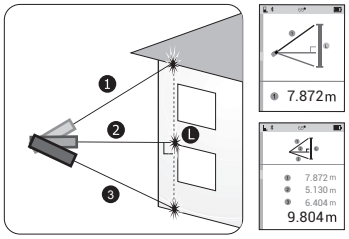
Pythagoras (2-point)

Press to select Pythagoras (2-point) , according to the red flashing line, press to get the hypotenuse ① from the first target point, rotate around the center of the Reference to the direction perpendicular to the measurement target, press to get distance of vertical edge ②, the second distance of vertical edge L will be calculated and displayed accordingly.



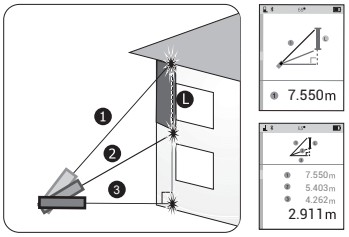
Pythagoras (3-point)①

Press to select Pythagoras (3-point)① , according to the red flashing line, press to get the hypotenuse① from the first target point, rotate around the center of the Reference to the direction perpendicular to the measurement target, press to get distance of vertical edge②, rotate a second time by the same baseline and target at the third point, press to get the second hypotenuse③, the distance between the first and third point L will be calculated and displayed accordingly.



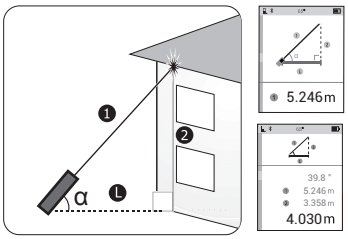
Pythagoras (3-point)②

Press to select Pythagoras (3-point)② , according to the red flashing line, press to get the hypotenuse ① from the first target point, rotate around the center of the Reference to aim at second target point, press to get ② hypotenuse, rotate the second time by the same baseline to the direction perpendicular to the measurement target, press to get ③ distance of vertical edge, the distance tween the first and second point L will be calculated and displayed accordingly.



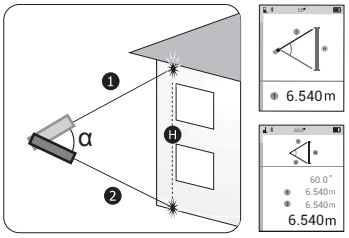
Auto Level

Press to Auto level , according to the red flashing line, aiming at first target point, press to get the angle between hypotenuse and horizontal edge, hypotenuse ①,vertical length ② and horizontal length L, all the data will be displayed at bottom of the screen.



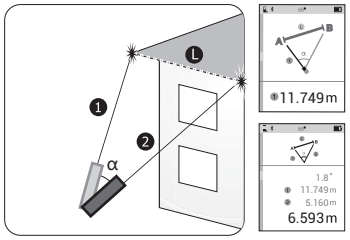
Auto Height

Press to Auto height ,according to the red flashing line, aiming at first target point, press to get hypotenuse ①, rotate around the center of the Reference to aim at second target point, press to get hypotenuse②, the angle between two hypotenuses, the length of ①②, vertical length H , all the data will be displayed at bottom of the screen.



Point-to-Point (P2P) Measurement

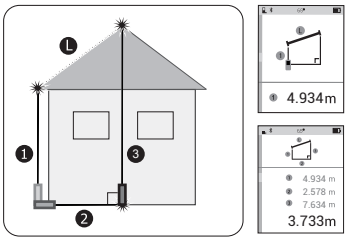
Press to Point-to-Point Measurement ,a message"please wait...."shows up, please keep the device still until the message disappear. According to the red flashing line, aiming at the first target point, press to get the distance① from the first target point; rotate around the center of the Reference, aiming at the second target point, press to get the distance②, the angle between two hypotenuses, the length of ①② and the distance between these two points are displayed on the screen orderly.



Note: if calibration fails, please return and recalibrate.

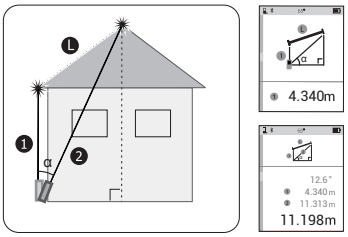
Trapezoid measurement 1

Press to select Trapezoid Measurement ① , according to the red flashing line, aiming at the first target point, press to get the first right-angle length①; aiming at the second target point, press to get the second right-angle length②; aiming at the third target point, press to get the third right-angle length③, the calculated length of the forth hypotenuse is displayed on the screen.



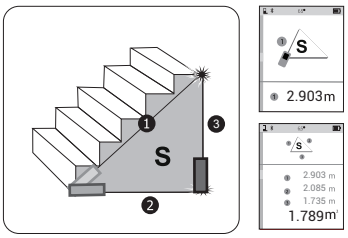
Trapezoid measurement 2

Press to select Trapezoid Measurement ② , according to the red flashing line, aiming at the first target point, press to get the first right-angle length ① ; aiming at the second target point, press to get the second diagonal length②; the angle between diagonal and horizontal line, the length of first right-angle①, the length of diagonal② and the length of hypotenuse are displayed on the screen.



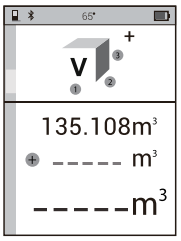
Triangular Area Measurement

Press to select Triangular area measurement , according to the red flashing line, press to measure three lines of the triangle ①②③, the triangular area will be calculated and displayed orderly.



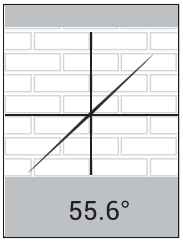
Add/Subtract Function

Under the mode of Single distance, Area, Volume measurement, after get the first measuring result, press the Add or Subtract button to make add/subtract calculations on the basis of previous and current record, the result is displayed on the screen.



Laser Line Marking Function

Short press to enter the Laser Line Marking Function, mark the red laser line on the target, the real-time angle of laser line is displayed on the screen, and it varies with the angle of device.



Note:

1. When you're using "line-laser" function, please keep the left side surface (the same side as line-laser) of the device parallel to the wall, the angle of the line to horizon is displayed on screen(Figure A). Head up and head down the device, to project the line at different angles.(Figure B)
Do not turn the head of the device left or right, or it will cause incorrect angle readings.

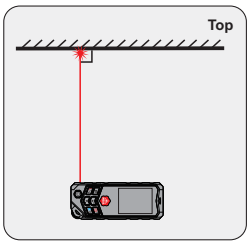


Figure A

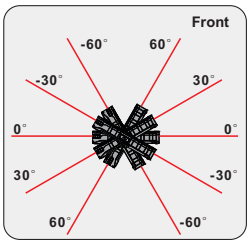


Figure B

2. The angle of the laser line displayed on screen is not absolutely accurate, because of environment and inevitable and slight improper operation. The angle is for reference only. If you need highly accurate laser line, please use more accurate angle measuring tools.

Specification

Measuring Range(m)[1]	0.2-40/60/80/100
Measuring accuracy[2]	±(2.0mm+5x10^{-5}D)
Wheel Measurement Accuracy[3]	5‰
Wheel Measurement	√
Single Distance Measurement	√
Continuous Measurement	√
Area Measurement	√
Volume Measurement	√
Triangular Area Measurement	√
Pythagoras (2-point)	√
Pythagoras (3-point) ①	√
Pythagoras (3-point) ②	√
Auto Level	√
Auto Height	√
Trapezoid Measurement ①	√
Trapezoid Measurement ②	√
Point to Point (P2P) Measurement	√
Laser Line Marking Function	√
Add/Subtract	√
Bluetooth 4.0	√
Tilt Sensor	√
Rotary screen	√
Display Screen	2.4 inch HD colored screen
Tilt Accuracy[4]	±(0.3°+0.1°+0.01*D)
Voice Broadcast	Chinese/English
Measuring Reference	Front/Tripod/Rear
Measuring Unit	m / ft / in / ft+in
Memory	50 values
Auto Power off	After 180s of inactivity
Protection Class	IP65
Laser Class	Class 2
Laser Type	630-670nm, < 1mW
Battery Type	BPI AAA 800 (NI-MH rechargeable battery) 3*AAA alkraine battery powered
Charging Interface	USB-C
Operating Temperature	0℃~+40℃(32°F~+104°F)
Storage Temperature	-20℃~70℃(-4°F~158°F)
Altitude	up to 2000m
Humidity	0-95%
Size(mm)	137x55x26
Weight(g)	132

1. Measuring Range
The Rear is the default reference. The maximum range shall be different according to different models. The actual range refers to the package.
2. Measuring Accuracy ("D" is the measured length)
If measuring under favorable conditions, such as smooth surface, proper temperature and indoor lighting, the device is able to work within certain range as indicated.
Maximum deviation occurs under unfavorable conditions such as bright sunlight or when measuring to poorly reflecting or very rough surfaces.
Tips: In case of bright sunlight and bad reflection of the object, please use the target plate or reflector.
3. Wheel Measurement Accuracy
Note: Please keep the device moving smoothly while measuring,
4. Tilt Accuracy
0.1° is caused by temperature, D is +/- 0~45°, eg: at normal temperature the accuracy is +/-0.3° at angle of 0° , at abnormal temperature the accuracy is +/-0.85° at angle of 45°.

Trouble shooting

All information will be showed as code or "Error", the following are all codes and corresponding explain and solution.

Code	Cause	Corrective Measure
204	Calculation error	Refer to user manual, repeat the procedures.
220	Low battery	Replace batteries or charge the batteries
255	Received signal too weak or measurement time too long	Improve the reflective surface. (Use target plate, white paper)
256	Received signal too strong.	Improve the reflective surface. (Use target plate, or don't aim at strong light)
261	Out of measuring range	Measuring the distance within measurement range.
500	Hardware error	Switch on/off the device, if the symbol still appears after several times, please contact with your dealer.

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IOS APP

Andriod APP

Contact Us

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迈测科技 MILESEEY

Warranty Card

Model name	Serial Number	
Invoice Code		
User Info	User Name	
	Address &Tel.	
Date of purchase		warranty period
Dealer	Dealer's name, address, tel.	
Fault Description		

Warranty Terms

Warranty period

- This laser distance meter has two years warranty in the precondition of non-artificial damage.

Within the warranty period, certain maintenance costs will be charged under following cases

- Damages caused by improper usage or maintenance of the tool;
- The tool had been disassembled or mended by non-authorized third party;
- Without the warranty card or the purchase invoice;
- The serial number on the warranty card is different with the one on product;
  The serial number has been altered or abraded;
- Damaged by any force majeure factors;
- Replacement of the worn out accessories;
- Damages caused by the abnormal factors such as the temperature/humidity in usage;
- Damages caused by the improper operation.

Please send the tool with warranty card & purchase invoice to local dealer if maintenance needed. The warranty card will not be reissued if lost; please keep it carefully for maintenance.