AX-DL100 - Laser Distance Meter

1. Overview

Thanki you for choosing our products!
Please carefully read this product Quick Start to ensure the safe and most efficient use of this product.
Designed by globally recognized team, the AX-DL100 laser distance meter is compact and handy. The innovative design with clip accessory enables user to bring the meter anytime as well as it also protect the batterites broken out when drop on the ground in operation.
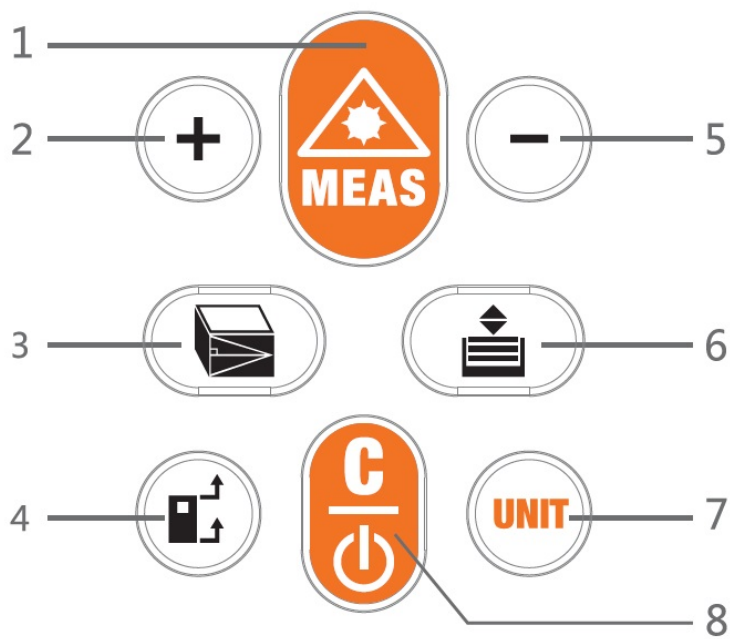
2. Warning

Laser Class 2 products;
Do not look directly into the beam with optical aids or direct it towards other people unnecessarily.
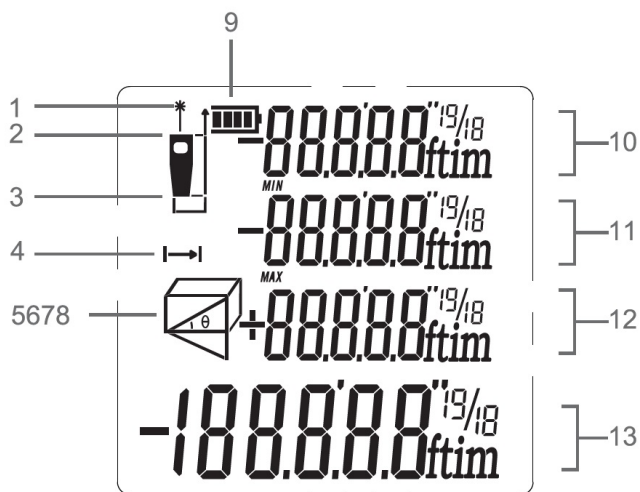
3. Button functions

1. Measure button
2. Add(+) button
3. Area / Volume / Pythagorean button
4. Measuring reference button
5. Subtract(-) button
6. Historical memory button
7. Unit button
8. ON/OFF/Clear button

4. LCD display

1. Laser on
2. Reference point (front)
3. Reference point (rear)
4. Distance /Continuous measurement
5, 6, 7, 8. Measuring mode indication
9. Battery status
10. Value 1
11. Value 2 / Min value
12. Value 3 / Max value
13. Summary line / latest value / calculation result

5. Initial operating and setting

Power On / Off
Long press ⬢ (8) to switch on/off the device. The instrument switches off automatically after three minutes of inactivity.
Return / Clear
When measuring, press ⬢ (8) to undo the last action or clear measured value.
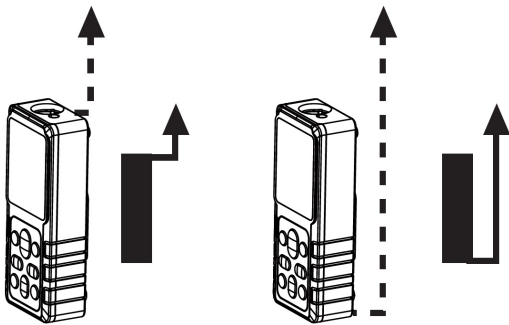
Adjusting Measuring Reference

Press ⊚ (4) to switch reference point between the front and the rear of the instrument.

There is a beep warning tone when reference point is changed.

The default reference setting is from the rear of the instrument. The reference point will be set to default every time when it's powered off, i.e. the measuring reference point is from the rear of the instrument every time when it's powered on.

Measurement Unit

Long press ⊝ (7) to change distance unit between m, ft, in and ft+in.

6. Operating instructions

Single Distance Measurement

Press ⚨ (1) to activate the laser.

Press ⚨ (1) again to trigger the distance measurement. The measured value is displayed immediately.

Continuous Measurement (Min / Max)

Long press ⚨ (1) to activate continuous measurement. The maximum and minimum distances measured are shown in the display.

The last measured value is displayed in the summary line. User can press ⚨ (1) or ⚨ (8) to stop the function.
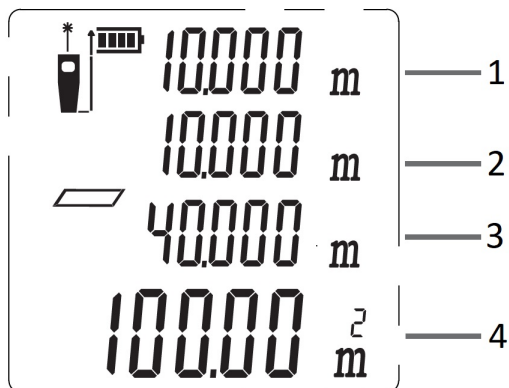
*This function will be stopped automatically after 5 minutes of inactivity.

Area Measurement

Press 🖾 (3) once, the symbol ▱ appears in function filed of display.

Press 🔶 (1) to take the first distance measurement (e.g. Length).

Press 🔶 (1) again to take the second distance measurement (e.g. width).

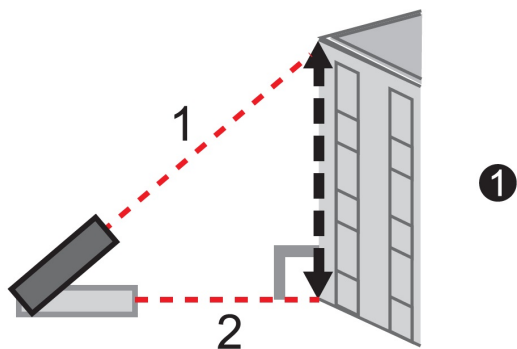The results of length, width, perimeter and area are displayed in the screen.

1 - the first distance

2 - the second distance

3 - the perimeter

4 - the area

Volume Measurement

Press 🖾 (3) twice, the symbol ▱ appears in the function field on the display.

Press 🔶 (1) to take the first distance measurement (e.g. Length). Next get the width, then height, the result of length, witdh, height and volume is displayed orderly.
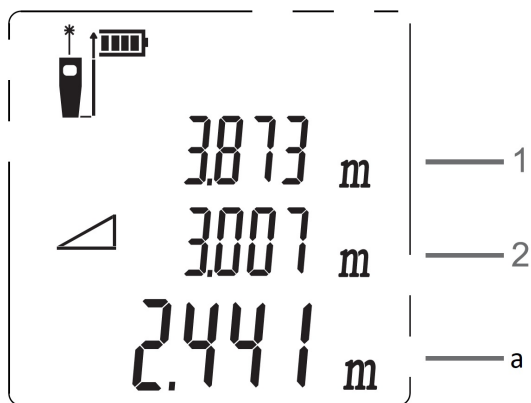
Pythagorean Method-Tow points

Refer to figure 1. Press ▣ (3) 3 times to activate the function, the symbol ⟋ appears in the function field on the display.

Take measurement with the 2 points shown on the figure in numeric sequence, the height of the object will be calculated automatically and displayed on screen.

a - calculation result
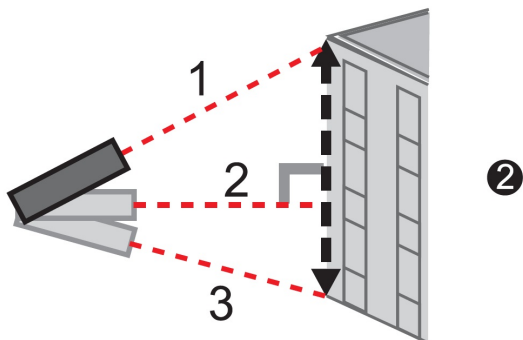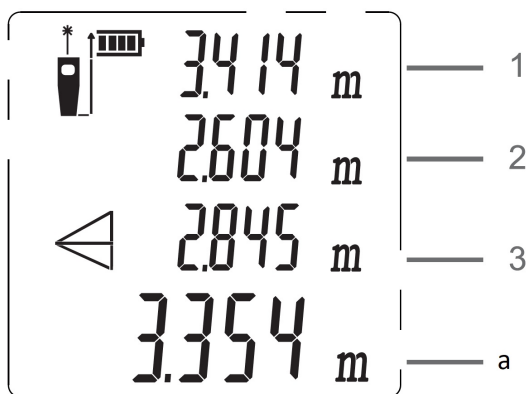**Pythagorean Method-Three points**

❷

Refer to figure 2. Press 🖳 (3) 4 times to activate the function, the symbol ◁ appears in the function field on the display.

Take measurement with the 3 points shown on the figure in numeric sequence, the height is calculated and displayed on the summary line.

Press 🔸 (8) to delete any measured length and then press 🔶 (1) to re-measure.

a - calculation result

Addition / Subtraction

Addition: short press ⊕ (2)

Subtraction: long press ⊖ (5)

Take a measurement, then press ⊕ (2) or ⊖ (5), addition / subtraction symboll will apear on display, then press 🔶 (1) button to take the second easurement, the second value will be automatically added to/subtracted from the first one.

Note: This process can be repeated as required.

Histrorical memory

Press ⏏ (6) to view histrorical memory, the last 20 measured value will be displayed in reversed order.
Press ⏻ (8) to quit historical value viewing.

7. Trouble shooting

All errors or failures will be shown as codes. The following table explains the meaning of codes and solutions.

Code // Cause // Corrective Measure

204 // Calculation error // Refer to user manual, repeat the procedures.

208 // Excessive current // Please contact your distributer

220 // Battery low // Replace new batteries.

252 // Temperature too high // Let device cool down to operating temperature at 0°C - 40°C.

253 // Temperature too low // Warm up the device to operating temperature.

255 // Received signal too weak or measurement time too long // Use target plate or change a good reflective surface.

256 // Received signal too strong // Target too reflective, use target plate or do not aim at strong light objective.

261 // Outside of the range of measurement // Select the measurement distance within the range of measurement.

500 // Hardware error // Switch on/off the device several times. If the symbol still appears, please contact your dealer for assistance.

8. Specification

Specification // AX-DL100
The maximum measuring range* // 100 m
Measuring accuracy** // ±2 mm
Measuring units // m / ft / in / ft+in
Laser class // Class 2
Laser type // 630-670nm, < 1mW
Single distance measurement // √
Min. / max. value // √
Area, Volume Measurement // √
Indirect Pythagorean theorem // √
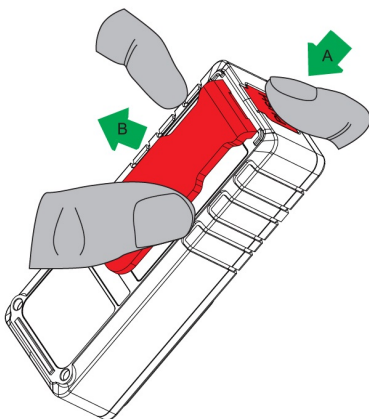Continuous measurement // √
Addition and subtraction // √

Beep // √
4-line display with backlight // √
Historical memory // 20 sets
Button // Soft rubber butons
Operating temperature // 0°C-40°C
Storage temperature // -10°C-60°C
Battery life // 5,000 measurement times
Battery type // AAA 2 x 1.5V (not included)
Auto laser off // 30 seconds
Auto instrument off // 180 seconds
Dimensions (mm) // 120*50*29
Weight (g) // 126

* - The maximum measuring range is determined by the version of laser distance meter. Exact measuring range is shown on the gift box. During daylight or if the target has poor reflection properties, please use target plate.

** - In favorable conditions (good target surface properties, room temperature), the device can reach up to rated measuring range. In unfavorable conditions, such as intense sunshine, poorly reflecting target surface (black surface) or high temperature variations, the deviation over 10m of distance may increase.

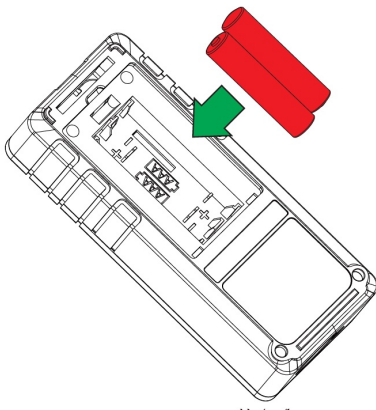## 9. Clip assembly drawing

Hold down A and simultaneously pull out B

After separation

10. Battery insertion

Open the battery compartment then insert batteries according to the direction incon in the compartment.

For safety, please close the compartment with the provided lid after battery insertion.