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› LASELION LT50 Laser Distance Meter User Manual

LASELION LT50

LASELION LT50 Laser Distance Meter User Manual

Model: LT50

1. INTRODUCTION

The LASELION LT50 Laser Distance Meter is a high-precision measuring tool designed for various applications, from home renovations to professional surveying. It offers a maximum range of 50 meters (165 feet) and includes multiple measurement modes such as area, volume, continuous measurement, and Pythagorean theorem. Equipped with a built-in level bubble and a mute function, the LT50 provides accurate, reliable, and convenient measurements.

This manual provides detailed instructions on how to set up, operate, maintain, and troubleshoot your LT50 Laser Distance Meter to ensure optimal performance and longevity.



Figure 1: Front view of the LASELION LT50 Laser Distance Meter, displaying its screen and control buttons.

2. SAFETY INFORMATION

Please read and understand all safety instructions before using the device. Failure to follow these instructions may result in laser exposure, electric shock, fire, or serious injury.

- **Laser Classification:** This device is a Class II laser product with a power output of <1mW.
- **Eye Safety:** Do not stare directly into the laser beam. Avoid direct eye exposure to the laser.
- **Children:** Keep the device out of reach of children.
- **Repairs:** Do not attempt to disassemble or modify the device. Repairs should only be performed by authorized service personnel.
- **Environment:** Do not operate the device in explosive atmospheres or near flammable liquids and gases.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x LASELION LT50 Laser Distance Meter
- 2 x AAA Batteries (1.5V)
- 1 x User Manual (Multi-language)
- 1 x Carrying Pouch
- 1 x Wrist Strap



Figure 2: All components included in the LASELION LT50 Laser Distance Meter package.

4. PRODUCT OVERVIEW

Familiarize yourself with the LT50's components and display.



Figure 3: Detailed overview of the LT50's display and button functions.

4.1. Buttons and Functions

- **Measure Button (Red Triangle):** Activates the laser, initiates single measurement, or confirms selection.
- **Menu Button:** Enters the menu for advanced settings and measurement modes.
- **Addition / Subtraction Button (+/-):** Adds or subtracts measurements.
- **Continuous Measurement Button:** Activates continuous measurement mode.
- **Clear / Mute Button (C/M):** Clears the current measurement, returns to the previous screen, or toggles mute function (long press).
- **Reference Point / Unit Button (Unit):** Switches between front and rear reference points (short press) or changes measurement units (long press).
- **Memory Button:** Accesses stored measurement data.
- **Power ON / OFF Button:** Turns the device on or off.

4.2. Display Icons

- **Laser On Icon:** Indicates the laser is active.
- **Memory Icon:** Shows when memory is being accessed.
- **Battery Status Icon:** Displays current battery level.
- **Reference Point:** Indicates whether the front or rear of the device is the measurement reference.
- **Continuous Measurement Icon:** Appears in continuous measurement mode.
- **Pythagoras Measuring Mode Indication Symbol:** Indicates Pythagorean mode.
- **Area & Volumes Measuring Mode Indication Symbol:** Indicates area or volume measurement mode.
- **Memory Location Number Row:** Shows the current memory slot.
- **Value Rows (1, 2, 3):** Display measurement results, max/min values, or intermediate calculations.
- **Latest Value / Summary Line / Calculation Result:** Displays the final measurement or calculation.

5. SETUP

5.1. Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Slide the cover open.
3. Insert two AAA batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

6. OPERATING INSTRUCTIONS

6.1. Power On/Off

- **To Power On:** Press the **Power ON / OFF** button.
- **To Power Off:** Press and hold the **Power ON / OFF** button for a few seconds, or the device will automatically shut off after 180 seconds of inactivity to save battery.

6.2. Basic Measurement (Single Distance)

1. Turn on the device.
2. Point the laser at the target.
3. Press the **Measure** button once to activate the laser.
4. Press the **Measure** button again to take the measurement. The result will appear on the main display line.

6.3. Continuous Measurement (Min/Max Tracking)

This mode allows you to track minimum and maximum distances as you move the device.

1. Press the **Continuous Measurement** button.
2. Move the device slowly towards or away from the target. The display will continuously update the current, minimum, and maximum distances.
3. Press the **Measure** button or **Clear** button to exit this mode.



Figure 4: Continuous measurement mode displaying real-time, minimum, and maximum values.

6.4. Area Measurement

1. Press the **Menu** button until the area measurement icon (rectangle) appears.
2. Measure the first side (e.g., length) by pointing the laser and pressing **Measure**.
3. Measure the second side (e.g., width) by pointing the laser and pressing **Measure**.
4. The device will automatically calculate and display the area.

6.5. Volume Measurement

1. Press the **Menu** button until the volume measurement icon (cube) appears.
2. Measure the length, then the width, then the height, pressing **Measure** after each dimension.
3. The device will automatically calculate and display the volume.

6.6. Pythagorean Measurement

This mode allows indirect measurement of heights or distances using the Pythagorean theorem.

1. Press the **Menu** button until the Pythagorean measurement icon appears (triangle).
2. Follow the on-screen prompts to measure the required sides (e.g., hypotenuse and one leg for height).
3. The device will calculate and display the unknown side.

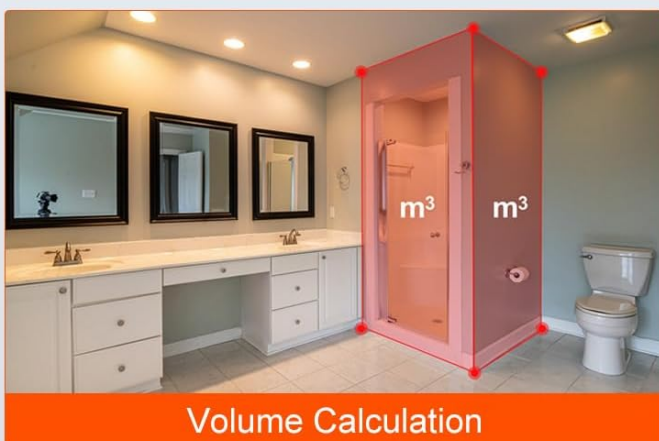
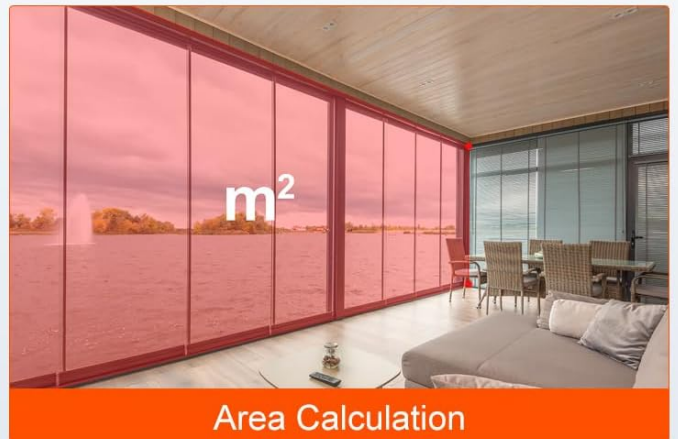


Figure 5: Illustration of the LT50's comprehensive measurement functions.

6.7. Unit Conversion

The LT50 supports conversion between metric (m) and imperial (ft/in) units.

- **To Change Units:** Long press the **Unit** button. The units will cycle through m, ft, in, and ft+in.

5 UNITS OF MEASUREMENT (m/ft/in/ft+in)

Short press  to switch the front and rear reference points,
Long press  to switch the measurement unit (m/ft/in/ft+in)

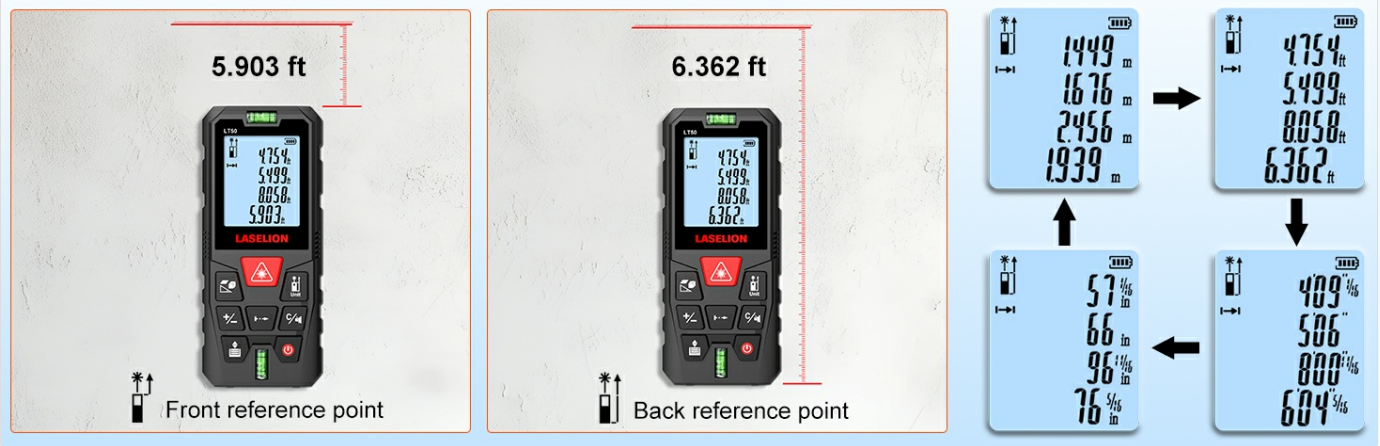


Figure 6: Examples of unit conversion on the LT50 display.

6.8. Reference Point Selection

You can choose to measure from the front or the rear of the device.

- **To Switch Reference Point:** Short press the **Unit** button. An icon on the display will indicate the active reference point.



Figure 7: The LT50 features dual bubble levels for enhanced accuracy and allows selection of front or back reference points.

6.9. Mute Function

To operate the device silently, you can mute the key tone.

- **To Mute/Unmute:** Long press the **C/M** button. A speaker icon with a cross will appear on the display when muted.



Figure 8: The mute function allows for silent operation, indicated by a crossed-out speaker icon.

6.10. Automatic Storage

The LT50 automatically stores up to 100 data sets. When the memory is full, the latest measurement will overwrite the oldest record.

- **To Access Memory:** Press the **Memory** button. Use the arrow buttons (if available, or re-press Memory button) to navigate through stored data.



Figure 9: The LT50 automatically stores up to 100 measurement data sets.

7. MAINTENANCE

- **Cleaning:** Use a soft, damp cloth to clean the device. Do not use abrasive cleaners or solvents. Clean the laser lens gently with a soft cloth, similar to cleaning camera lenses.
- **Storage:** Store the device in its carrying pouch in a cool, dry place when not in use. Remove batteries if storing for extended periods to prevent leakage.
- **Battery Care:** Replace batteries when the low battery indicator appears on the display. Dispose of used batteries responsibly.
- **Durability:** The LT50 is IP54 rated, providing splash-proof and dust-proof protection. However, avoid submerging the device in water or exposing it to heavy rain.

IP54 WATERPROOF / DUSTPROOF

IP54 Splash proof and dust proof function protect the laser distance measure in different user environment.



Figure 10: The LT50 is designed with IP54 splash-proof and dust-proof features for various environments.

8. TROUBLESHOOTING

If you encounter issues with your LT50, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Device does not turn on	Low or dead batteries; Incorrect battery polarity	Replace batteries; Check battery orientation
Inaccurate measurements	Unstable surface; Obstruction in laser path; Dirty lens; Measuring beyond range	Ensure stable measurement; Clear laser path; Clean lens; Measure within specified range
"Error" message on display	Measurement error (e.g., no target, too far/close)	Reposition device, ensure clear target, measure within range
Buttons unresponsive	Device frozen; Low battery	Remove and reinsert batteries; Replace batteries

9. SPECIFICATIONS

Feature	Specification
Model	LT50
Measuring Range	0.05m - 50m (0.16ft - 165ft)
Accuracy	±2mm (±1/16 inch)
Measurement Speed	0.5 seconds
Laser Class	Class II

Feature	Specification
Laser Type	635nm, <1mW
Automatic Shut-off (Laser)	30 seconds
Automatic Shut-off (Device)	180 seconds
Memory Storage	Up to 100 data sets
Units of Measurement	m / ft / in / ft+in
Reference Points	Front / Rear
Battery Type	2 x 1.5V AAA Alkaline Batteries
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
IP Rating	IP54 (Dustproof & Splash-proof)
Material	Acrylonitrile Butadiene Styrene (ABS)
Item Weight	100 Grams (3.53 ounces)
Dimensions	Approx. 14.9 x 9.5 x 4.7 cm (5.87 x 3.74 x 1.85 inches)

10. WARRANTY INFORMATION

The LASELION LT50 Laser Distance Meter comes with a**1-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by misuse, accident, unauthorized modification, or improper maintenance. Please retain your proof of purchase for warranty claims.

11. CUSTOMER SUPPORT

For technical assistance, warranty claims, or any questions regarding your LASELION LT50 Laser Distance Meter, please refer to the contact information provided with your purchase or visit the official LASELION website for support resources.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question