

Olufey US-NK50A

OLUFEY 165ft Laser Distance Meter

MODEL: US-NK50A USER MANUAL

1. Introduction

This manual provides detailed instructions for the safe and effective operation of your OLUFEY 165ft Laser Distance Meter, Model US-NK50A. This device is designed for precise measurement of distances, areas, and volumes, featuring a high accuracy of ± 0.08 in within 0.5 seconds and two integrated bubble levels for enhanced precision.

Key Features:

- Fast and accurate measurements up to 165 feet.
- Dual bubble levels for precise horizontal and vertical alignment.
- Multiple measurement modes: single distance, continuous, area, volume, and Pythagorean (three points).
- Addition and subtraction functions for quick calculations.
- IP54 protection against dust and water splashes.
- Stores up to 99 groups of measurement data.
- Compact and portable design.

2. Safety Information

WARNING: Read all safety warnings and instructions before using this product. Failure to follow the warnings and instructions may result in serious injury.

- This device emits a Class 2 laser. Do not stare directly into the laser beam or direct it at other people.
- Do not attempt to modify or disassemble the device. Unauthorized modifications can lead to hazardous laser radiation exposure.
- Keep the device out of reach of children.
- Avoid using the device in explosive environments or near flammable materials.
- Use only the specified battery type (2x AAA 1.5V Alkaline batteries).
- Protect the device from extreme temperatures, strong vibrations, and mechanical shock.

3. Product Overview

Familiarize yourself with the components and controls of your laser distance meter.

Button Function



Image: Front view of the OLUFEY Laser Distance Meter with each button clearly labeled for its function, including Function/Data Storage, Unit/Benchmark Switch, Power ON/Measure, Add/Subtract, and Power OFF/Clear.

Components:

- **Laser Aperture:** Emits the laser beam for measurement.
- **Receiving Lens:** Detects the reflected laser beam.
- **LCD Display:** Shows measurement data, mode, battery status, and other indicators.
- **Bubble Levels:** Integrated horizontal and vertical bubble levels for accurate alignment.
- **Control Buttons:** For various functions and operations.
- **Battery Compartment:** Located at the rear for AAA batteries.

4. Setup

4.1 Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Slide the cover open.
3. Insert two (2) 1.5V AAA alkaline batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

Note: New batteries are included with your purchase.

5. Operating Instructions

5.1 Power On/Off

- **Power On:** Press the **ON/MEAS** button (triangular symbol) to turn on the device and activate the laser.
- **Power Off:** Press and hold the **OFF/CLR** button (power symbol) for 3 seconds to turn off the device. The device will automatically power off after 150 seconds of inactivity.

5.2 Unit Switching

The device supports multiple measurement units: meters (m), feet (ft), inches (in), and feet+inches (ft+in).

UNIT SWITCHABLE

m/ft/in/ft+in



2 Bubble Level



Image: The OLUFEY Laser Distance Meter screen showing various unit options (m, ft, in, ft/in) available for selection.

- Press the **UNIT** button to cycle through the available measurement units. The selected unit will be displayed on the screen.

5.3 Measurement Reference Point

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



Image: A visual representation illustrating how the laser distance meter can measure from either its front edge or its rear edge, indicated by icons on the display.

- Press and hold the **UNIT** button to switch the measurement reference point. An icon on the display will indicate whether the measurement is taken from the front or the rear of the device.

5.4 Single Distance Measurement

1. Turn on the device by pressing **ON/MEAS**.
2. Point the laser at the target.
3. Press **ON/MEAS** again to take a single measurement. The result will be displayed on the screen.

5.5 Continuous Measurement

1. Press the **FUNC** button until the continuous measurement icon appears on the display.
2. Press **ON/MEAS** to start continuous measurement. The device will continuously measure and display the current distance, as well as the maximum and minimum distances.
3. Press **ON/MEAS** again to stop continuous measurement.

5.6 Area Measurement

1. Press the **FUNC** button until the area measurement icon (square) appears.
2. Measure the first side (length) by pressing **ON/MEAS**.
3. Measure the second side (width) by pressing **ON/MEAS**.
4. The device will automatically calculate and display the area.

5.7 Volume Measurement

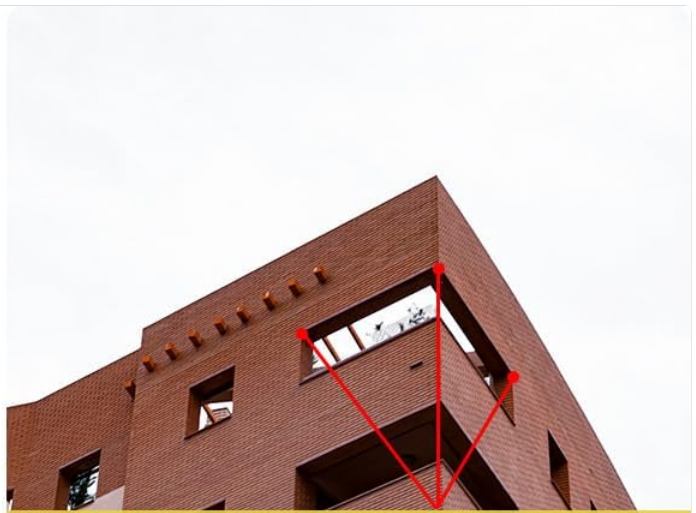
1. Press the **FUNC** button until the volume measurement icon (cube) appears.
2. Measure the length by pressing **ON/MEAS**.
3. Measure the width by pressing **ON/MEAS**.
4. Measure the height by pressing **ON/MEAS**.
5. The device will automatically calculate and display the volume.

5.8 Pythagorean Measurement

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



 **Single Measurement**



 **Continuous Measurement**



 **Distance**



 **Area**



 **Volume**



 **Pythagoras**

Image: A composite image showing visual examples of single distance, continuous, area, volume, and Pythagorean measurement modes.

- **Single Pythagorean Mode:** Press **FUNC** until the single Pythagorean icon appears. Follow the on-screen prompts to measure the hypotenuse and one leg. The device will calculate the other leg.
- **Double Pythagorean Mode:** Press **FUNC** until the double Pythagorean icon appears. Follow the on-screen prompts to measure the necessary segments. This mode is used for more complex indirect height measurements.

5.9 Addition and Subtraction

You can add or subtract measurements.

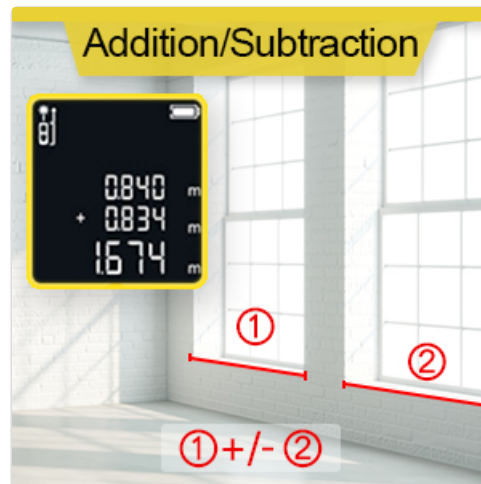


Image: The laser distance meter's display showing two measurements being added together, with the sum displayed below.

- After taking a measurement, press the **+/-** button to enter addition or subtraction mode.
- Press **+/-** again to toggle between addition and subtraction.
- Take the next measurement. The result of the operation will be displayed.

5.10 Data Storage and Recall

The device can store up to 99 groups of historical measurement data.

99 Group Historical Date Record



Image: The OLUFY Laser Distance Meter's screen showing a list of historical measurement records, indicating its data storage capability.

- To view stored data, press the **FUNC** button repeatedly until the data storage icon appears.
- Use the arrow buttons (part of the +/- control) to scroll through the stored measurements.
- If the storage capacity exceeds 99 groups, the oldest data will be automatically overwritten.

6. Maintenance

Proper maintenance ensures the longevity and accuracy of your device.



Image: The OLUFEY Laser Distance Meter depicted in scenarios demonstrating its dustproof and IP54 waterproof capabilities, such as a dusty construction site and light rain.

- **Cleaning:** Use a soft, damp cloth to clean the device. Do not use abrasive cleaners or solvents. Pay special attention to the laser aperture and receiving lens, cleaning them gently with a lens cloth if necessary.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display. Remove batteries if the device will not be used for an extended period to prevent leakage.
- **Storage:** Store the device in its carry bag in a cool, dry place, away from direct sunlight and extreme temperatures.
- **IP54 Protection:** The device is rated IP54, meaning it is protected against dust ingress and splashing water from any direction. However, it is not designed for immersion in water.

7. Troubleshooting

Problem	Possible Cause	Solution
Device does not turn on.	Batteries are dead or incorrectly inserted.	Check battery polarity or replace with new AAA batteries.
Inaccurate measurements.	Laser aperture/lens is dirty; incorrect reference point; unstable surface.	Clean laser aperture/lens; verify reference point setting; ensure stable measurement surface.
Laser beam is not visible.	Bright ambient light; laser not activated.	Move to a less brightly lit area; ensure device is powered on and laser is active.
Error message on display.	Measurement out of range; strong interference.	Ensure target is within 165ft range; try measuring in a different environment.

8. Specifications

Feature	Specification
Measuring Range	165 feet
Accuracy	±0.08 inches
Measurement Time	0.5 seconds
Units	m / ft / in / ft+in
Laser Class	Class 2
IP Rating	IP54 (Dustproof, Splashproof)
Data Storage	99 groups
Auto Power Off	150 seconds of inactivity
Batteries	2 x 1.5V AAA Alkaline (included)
Material	Acrylonitrile Butadiene Styrene
Item Weight	80 Grams (2.82 ounces)
Product Dimensions	5.5"L x 3.05"W x 1.57"H
Model Number	US-NK50A

9. Warranty and Support

Your OLUFEY Laser Distance Meter comes with a one-year after-sale service warranty from the date of purchase. This warranty covers manufacturing defects and ensures proper functioning under normal use.

For technical support, warranty claims, or any questions regarding your device, please contact OLUFEY customer service through the retailer where the product was purchased or refer to the contact information provided on the product packaging or official OLUFEY website.

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