Nikotek US-NK50

NIKOTEK US-NK50 Laser Measure Device Instruction Manual

Model: US-NK50

1. Introduction

This manual provides detailed instructions for the safe and effective use of your NIKOTEK US-NK50 Laser Measure Device. Please read this manual thoroughly before operating the device and keep it for future reference. The NIKOTEK US-NK50 is a portable digital measurement tool designed for accurate distance, area, and volume calculations, featuring bubble levels and an IP54 rating for dust and water resistance.

2. Product Overview

2.1 Key Features

- High Accuracy: Measures up to ±1/16 inch, with a measuring distance up to 165 feet (50 meters).
- Unit Switching: Easily switch between Meters (M), Inches (In), and Feet (Ft).
- LCD Backlight: Black LCD display for clear visibility in various lighting conditions.
- Multiple Measurement Modes: Supports single distance, continuous measurement, area, volume, and Pythagorean method (three points).
- IP54 Protection: Dustproof and waterproof for enhanced durability.
- Portable Design: Lightweight and compact for easy carrying and handling.
- Historical Data Record: Stores up to 99 groups of historical measurement data.
- Integrated Bubble Levels: Features two bubble levels for precise horizontal and vertical alignment.

2.2 Device Components and Button Functions

Familiarize yourself with the device's layout and button functions as illustrated below:



Image 1: NIKOTEK US-NK50 Laser Measure Device showing button functions. The image displays the front of the device with its LCD screen and six buttons. Labels point to: "Function Button / Data Storage", "Benchmark / Unit switch", "Power ON / Measure button", "Add/ Subtract, forward/ Backward", and "Power OFF / Clear Button".

- **FUNC (Function Button / Data Storage):** Press to cycle through measurement modes (distance, area, volume, Pythagorean) or to access stored data.
- **UNIT (Benchmark / Unit Switch):** Press to change the measurement unit (m/ft/in/ft+in) or to switch the measurement benchmark (front/rear of device).
- **ON/MEAS (Power ON / Measure Button):** Press once to turn on the device or activate the laser. Press again to take a measurement.
- **+/- (Add/Subtract, Forward/Backward):** Used for adding or subtracting measurements, or navigating through historical data.
- **OFF/CLEAR (Power OFF / Clear Button):** Press to clear the current measurement or long-press to power off the device.

3. Setup

3.1 Battery Installation

The NIKOTEK US-NK50 requires two 1.5V AAA batteries (included). To install:

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

3.2 Initial Power On and Unit Selection

After installing batteries:

1. Press the **ON/MEAS** button to power on the device.
2. To change the measurement unit (m/ft/in/ft+in), press the **UNIT** button repeatedly until your desired unit is displayed.
3. To change the measurement benchmark (from the front or rear of the device), long-press the **UNIT** button. An icon on the display will indicate the current benchmark.



Image 2: NIKOTEK US-NK50 Laser Measure Device displaying unit switching options (m/ft/in/ft+in) and highlighting its two integrated bubble levels for horizontal and vertical alignment.

4. Operating Instructions

4.1 Basic Measurement (Single Distance)

1. Ensure the device is powered on.
2. Point the laser at the target surface.
3. Press the **ON/MEAS** button once to activate the laser.
4. Press the **ON/MEAS** button again to take a measurement. The result will be displayed on the screen.

4.2 Continuous Measurement

Continuous measurement allows you to move the device and see real-time distance updates.

1. Press the **FUNC** button until the continuous measurement icon appears (often a line with arrows).
2. Press the **ON/MEAS** button to start continuous measurement.
3. Move the device slowly. The display will update with the current distance.
4. Press **ON/MEAS** again to stop.

4.3 Area, Volume, and Pythagorean Measurements

The device supports various complex measurements:



Image 3: Visual representation of various measurement modes: Single Measurement (straight line), Continuous Measurement (moving object), Distance (vertical height), Area (square meters), Volume (cubic meters), and Pythagoras (triangle calculation).

- **Area Measurement:**
    a. Press **FUNC** until the area icon (square) appears.
    b. Measure the first side (e.g., length) by pressing **ON/MEAS**.

c. Measure the second side (e.g., width) by pressing **ON/MEAS**.
d. The device will automatically calculate and display the area.

- **Volume Measurement:**

a. Press **FUNC** until the volume icon (cube) appears.
b. Measure length, width, and height sequentially, pressing **ON/MEAS** after each measurement.
c. The device will automatically calculate and display the volume.

- **Pythagorean Measurement (Indirect Measurement):**
  This mode is used to calculate inaccessible heights or distances using the Pythagorean theorem.

a. Press **FUNC** until the Pythagorean icon (triangle) appears. There are typically two or three point Pythagorean modes.
b. Follow the on-screen prompts to measure the required sides of the triangle (e.g., hypotenuse, base).
c. The device will calculate and display the unknown side.

4.4 Historical Data Record

The NIKOTEK US-NK50 can store up to 99 groups of measurement data.



Image 4: NIKOTEK US-NK50 Laser Measure Device displaying multiple lines of historical measurement data on its display, indicating its ability to store up to 99 groups of records.

1. To access stored data, press the **FUNC** button repeatedly until the data storage icon appears (often a folder or list icon).
2. Use the **+/-** buttons to scroll through the stored measurements.
3. To exit the historical data view, press the **OFF/CLEAR** button.

5. Maintenance

5.1 Cleaning and Care

To ensure the longevity and accuracy of your device:

- Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Clean the laser lens carefully with a soft cloth, similar to cleaning camera lenses. Avoid touching the lens with fingers.
- The device has an IP54 rating, meaning it is protected against dust ingress and splashing water from any direction. While it is water-resistant, do not submerge it in water.



Image 5: The NIKOTEK US-NK50 Laser Measure Device shown in environments demonstrating its IP54 rating, indicating protection against dust and water splashes.

5.2 Storage

Store the device in a cool, dry place, away from direct sunlight and extreme temperatures. If storing for extended periods, remove the batteries to prevent leakage.

6. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Low or dead batteries; incorrect battery installation.	Replace batteries with new 1.5V AAA batteries. Check battery polarity.
Laser does not activate.	Device not powered on; laser safety feature engaged.	Press **ON/MEAS** button once to power on, then again to activate laser.
Inaccurate measurements.	Unstable surface; laser obstructed; dirty lens; incorrect benchmark setting.	Ensure stable measurement surface. Clean laser lens. Verify benchmark setting (front/rear). Avoid measuring through transparent surfaces.
Display is dim or unreadable.	Low batteries; direct sunlight.	Replace batteries. Move to a shaded area if in direct sunlight.
Cannot switch units or modes.	Buttons not pressed correctly; device frozen.	Ensure firm button presses. Try powering off and on again.

7. Specifications

Feature	Detail
Brand	Nikotek
Model Number	US-NK50
Measuring Range	50 meters (165 feet)
Accuracy	±1/16 inch
Units	Meters (m), Inches (in), Feet (ft), Feet+Inches (ft+in)
International Protection Rating	IP54 (Dustproof and Water Resistant)
Battery Type	2 x 1.5V AAA Alkaline Batteries
Historical Data Storage	Up to 99 groups
Material	Acrylonitrile Butadiene Styrene (ABS)
Item Weight	88 Grams
Product Dimensions (L x W x H)	14L x 7.8W x 4H centimetres

8. Warranty and Support

The NIKOTEK US-NK50 Laser Measure Device comes with a one-year after-sale service and lifetime technical support. If you encounter any issues or have questions regarding your device, please contact NIKOTEK customer support for assistance. *Please refer to your purchase documentation for specific contact details.*

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

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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