

## Mastech MS-6450

# Mastech MS-6450 Laser Distance Meter User Manual

Model: MS-6450

## 1. INTRODUCTION

Thank you for choosing the Mastech MS-6450 Laser Distance Meter. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your device. Please read this manual thoroughly before using the meter and keep it for future reference.



Figure 1: Mastech MS-6450 Laser Distance Meter. This image shows the compact black device with a digital display and multiple control buttons on its front face.

## 2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury and damage to the device:

- Do not look directly into the laser beam.
- Do not disassemble or modify the device.
- Keep the device away from water and extreme temperatures.
- Use only specified batteries.
- Store the device in a dry, cool place when not in use.

## 3. SETUP

### 3.1. Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Slide the cover open.
3. Insert the required batteries (refer to specifications for type) observing the correct polarity (+/-).
4. Close the battery compartment cover securely.

### 3.2. Initial Power On

Press the **POWER** button to turn on the device. The display will illuminate, showing the current measurement mode and battery status.

## 4. OPERATING INSTRUCTIONS

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### 4.1. Basic Measurement

1. Point the laser aperture towards the target surface.
2. Press the **READ** button once to activate the laser.
3. Press the **READ** button again to take a measurement. The distance will be displayed on the screen.

### 4.2. Measurement Modes

The MS-6450 supports various measurement modes. Use the **MODE** button to cycle through them:

- **Single Measurement:** Standard distance measurement.
- **Continuous Measurement:** Displays real-time distance as the device moves.
- **Area Measurement:** Measure length and width to calculate area.
- **Volume Measurement:** Measure length, width, and height to calculate volume.
- **Pythagorean Measurement:** Indirect measurement using the Pythagorean theorem.

### 4.3. Unit Conversion

Press the **UNIT** button to switch between measurement units (e.g., meters, feet, inches).

## 5. MAINTENANCE

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### 5.1. Cleaning

Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents. Keep the laser lens clean for accurate measurements.

### 5.2. Storage

When not in use for extended periods, remove the batteries to prevent leakage. Store the device in its original packaging or a protective case in a cool, dry environment.

## 6. TROUBLESHOOTING

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| Problem                   | Possible Cause                                     | Solution                                      |
|---------------------------|--|---|
| Device does not power on. | Low or dead batteries; Incorrect battery polarity. | Replace batteries; Check battery orientation. |

| Problem                  | Possible Cause  | Solution  |
|--------------------------|---|---|
| Inaccurate measurements. | Dirty laser lens; Unstable measurement surface; Environmental interference. | Clean lens; Ensure stable target; Avoid strong light sources. |
| Display shows "Error".   | Measurement out of range; Obstruction.                                      | Ensure target is within range; Remove obstructions.           |

## 7. SPECIFICATIONS

- Model:** MS-6450
- Measurement Range:** Refer to product packaging for specific range. Typical range for similar devices is 0.05m to 40m.
- Measurement Accuracy:** Refer to product packaging for specific accuracy. Typical accuracy for similar devices is  $\pm 2\text{mm}$ .
- Laser Class:** Class II
- Laser Type:** 635nm, <1mW
- Units:** Meters (m), Feet (ft), Inches (in)
- Battery Type:** Refer to product packaging for specific battery type. Commonly uses AAA batteries.
- Operating Temperature:** Refer to product packaging for specific operating temperature. Typical range is 0°C to 40°C.
- Dimensions:** Refer to product packaging for specific dimensions.
- Weight:** Refer to product packaging for specific weight.

## 8. WARRANTY INFORMATION

Mastech products are designed for durability and quality. This product typically comes with a standard manufacturer's warranty against defects in materials and workmanship. Please refer to your purchase documentation or the official Mastech website for specific warranty terms and conditions applicable to your region. Keep your proof of purchase for warranty claims.

## 9. CUSTOMER SUPPORT

For technical assistance, troubleshooting beyond this manual, or service inquiries, please contact Mastech customer support. You can typically find contact information on the official Mastech website or through your local distributor. When contacting support, please have your product model (MS-6450) and serial number (if applicable) ready.

Official Mastech Website: [www.mastech.com](http://www.mastech.com)

