

MDWXDOFP LDM-35

LDM-35 Laser Rangefinder User Manual

High-Precision Infrared Rangefinder Laser Electronic Ruler Handheld Measuring Instrument

1. INTRODUCTION

Thank you for choosing the MDWXDOFP LDM-35 Laser Rangefinder. This high-precision infrared laser measuring instrument is designed for accurate and efficient distance, area, and volume measurements. Its compact and handheld design makes it ideal for various applications in construction, interior design, and DIY projects. Please read this manual thoroughly before using the device to ensure safe and optimal performance.



Figure 1: Front view of the LDM-35 Laser Rangefinder, showing the display and control buttons.

2. SAFETY INFORMATION

To ensure safe operation and prevent damage to the device or injury to yourself or others, please observe the following safety precautions:

- **Laser Radiation:** This device emits Class 2 laser radiation. Do not stare directly into the laser beam or direct it at other people. Avoid prolonged exposure.
- **Eye Protection:** Never look directly into the laser aperture. Use caution when operating in environments where the laser beam could reflect off shiny surfaces.
- **Children:** Keep the device out of reach of children.
- **Operating Environment:** Do not operate the device in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- **Maintenance:** Do not attempt to disassemble or modify the device. Refer all servicing to qualified personnel.
- **Batteries:** Use only the specified battery type. Dispose of batteries properly according to local regulations.

3. PRODUCT FEATURES

The LDM-35 Laser Rangefinder offers a range of features designed for precision and ease of use:

- **High Precision:** Accurate measurements with a precision of $\pm 1.5\text{mm}$.
- **Multiple Measurement Modes:** Supports single distance, continuous measurement, area, volume, and Pythagorean theorem calculations.
- **Fast Measurement:** Achieves measurements in as little as 0.5 seconds.
- **Durable Design:** Optimized for strong light measurement and adaptable to harsh environments.
- **Large LCD Display:** Clear and easy-to-read display for measurement results.
- **Compact and Portable:** Handheld design for convenient use anywhere.

Change

Define a wider horizon

Strong

Optimization of strong light measurement

Adapt to harsh environments

Quasi

± 1.5mm precision

Accurate measurement

Spirit

1mm measurement perception

Easy to measure

Fast

Optimized measurement operation

0.5 second fast measurement



Figure 2: Diagram illustrating key features such as strong light optimization, high precision, fast measurement, and 1mm perception.

4. COMPONENTS AND CONTROLS

Familiarize yourself with the main components and controls of your LDM-35 Laser Rangefinder:



Figure 3: Side view of the LDM-35 Laser Rangefinder, showing its ergonomic design.

4.1. Device Layout

1. **Laser Emission Aperture:** Where the laser beam exits.
2. **Laser Receiving Lens:** Where the reflected laser beam is detected.
3. **LCD Display:** Shows measurement results, mode indicators, and battery status.
4. **Keypad:** Contains various function buttons.
5. **Battery Compartment:** Located at the bottom/rear for battery insertion.

4.2. Keypad Functions

| Button | Function |
|-------------------------|--|
| MEAS | Initiates a single measurement; confirms selection. |
| MAX/MIN | Switches between continuous measurement (Max/Min tracking). |
| + / - | Adds or subtracts measurements. |
| Unit | Changes measurement units (e.g., meters, feet, inches). |
| CLR / Power | Clears the last measurement; long press to power on/off. |
| Function Buttons | Buttons for Area, Volume, and Pythagorean measurement modes. |

5. SETUP

5.1. Battery Installation

1. Locate the battery compartment cover on the rear of the device.
2. Slide or unclip the cover to open it.
3. Insert the required batteries (e.g., AAA batteries) according to the polarity indicators (+/-) inside the compartment.
4. Close the battery compartment cover securely.

5.2. Powering On/Off

- **To Power On:** Press and hold the **CLR / Power** button until the display illuminates.
- **To Power Off:** Press and hold the **CLR / Power** button until the display turns off. The device will also automatically power off after a period of inactivity to conserve battery life.

5.3. Unit Selection

To change the measurement unit (e.g., meters, feet, inches):

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

6. OPERATING INSTRUCTIONS

6.1. Single Distance Measurement

1. Point the laser aperture at the target surface.
2. Press the **MEAS** button once. The laser will activate.
3. Press the **MEAS** button again to take the measurement. The result will be displayed on the screen.

6.2. Continuous Measurement (Max/Min Tracking)

1. Press the **MAX/MIN** button. The device will start continuous measurement.
2. Move the device slowly to scan the desired area. The display will show the current, maximum, and minimum distances.
3. Press **MEAS** or **MAX/MIN** again to stop continuous measurement.

6.3. Area Measurement

1. Press the **Area** function button (usually indicated by a square icon).
2. Measure the first side (e.g., length) by pointing the laser and pressing **MEAS**.
3. Measure the second side (e.g., width) by pointing the laser and pressing **MEAS**.
4. The calculated area will be displayed.

6.4. Volume Measurement

1. Press the **Volume** function button (usually indicated by a cube icon).
2. Measure the length, width, and height sequentially by pressing **MEAS** after each dimension.
3. The calculated volume will be displayed.

6.5. Pythagorean Measurement

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

改变，不止于此

安全多功能 经久耐用 卓越性能



长度测量



面积测量



体积测量



勾股测量



Figure 4: Illustration of Pythagorean measurement for calculating height or distance indirectly.

1. Press the **Pythagorean** function button (usually indicated by a triangle icon).
2. Follow the on-screen prompts to measure the required sides (e.g., hypotenuse and one leg for height calculation).
3. The device will automatically calculate and display the unknown side.

7. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your LDM-35 Laser Rangefinder:

- **Cleaning:** Use a soft, damp cloth to clean the device casing. Do not use abrasive cleaners or solvents.
- **Lens Care:** Gently clean the laser emission and receiving lenses with a soft, lint-free cloth, similar to cleaning camera lenses. Avoid touching the lenses with your fingers.
- **Storage:** When not in use for extended periods, remove the batteries to prevent leakage. Store the

device in a cool, dry place, away from direct sunlight and extreme temperatures.

- **Avoid Impact:** Protect the device from drops and strong impacts, which can affect its calibration and internal components.

8. TROUBLESHOOTING

If you encounter issues with your LDM-35 Laser Rangefinder, refer to the following common problems and solutions:

| Problem | Possible Cause | Solution |
|-------------------------------|--|--|
| Device does not power on. | Low or dead batteries; incorrect battery polarity. | Replace batteries with new ones; ensure correct polarity. |
| Inaccurate measurements. | Dirty laser lens; unstable measuring surface; strong light interference. | Clean the lens; ensure stable positioning; measure in less reflective or shaded areas. |
| "Error" message on display. | Measurement out of range; laser beam obstructed; internal error. | Ensure target is within range; clear obstructions; restart the device. If persistent, contact support. |
| Display is dim or flickering. | Low battery power. | Replace batteries. |

9. SPECIFICATIONS

| Parameter | Value |
|--------------------------|---|
| Model | LDM-35 |
| Measurement Range | Up to 35 meters (approx. 115 feet) |
| Measurement Accuracy | ±1.5mm |
| Measurement Units | m / ft / in |
| Laser Class | Class 2 |
| Automatic Laser Off | 30 seconds (approx.) |
| Automatic Instrument Off | 180 seconds (approx.) |
| Power Supply | AAA Batteries (not specified, assuming common type) |
| Operating Temperature | 0°C to 40°C (32°F to 104°F) |

| Parameter | Value |
|---------------------|---|
| Storage Temperature | -20°C to 60°C (-4°F to 140°F) |
| Dimensions | 1.18 x 0.79 x 0.39 inches (from product specifications) |
| Weight | 1.76 ounces (from product specifications) |

10. CUSTOMER SUPPORT

For technical assistance, warranty information, or service inquiries, please contact MDWXDOFP customer support through your original point of purchase or visit the official MDWXDOFP website.

Please have your product model number (LDM-35) and purchase details ready when contacting support.