



50 FT. LASER DISTANCE MEASURER

INSTRUCTIONS



LDM1


Please read these instructions carefully and thoroughly before using the product.

INTRODUCTION

Thank you for purchasing General Tools & Instruments' (General's) LDM1 50 Ft. Laser Distance Measurer. The LDM1 is designed to replace a conventional tape measure in the hands of both DIYers and professionals.

The LDM1 works by shining an invisible infrared beam on a target, which reflects the beam back to the tool. The time it takes the beam to return is proportional to the distance to the target. A red laser pointer is used only to aim the beam, and not to carry any information. The LDM1's range of 50 ft. makes it suitable for most indoor measuring tasks and many outdoor jobs as well.

Why is the LDM1 better than a conventional tape measure?

- **It's faster.** It takes much less time—and only one hand—to hold the tool against a wall, aim at the opposite wall and press the  button than it does—requiring both hands—to secure one end of a conventional tape measure, walk the other end to the far wall, write down the reading and retract the tape. The longer the distance to be

measured, the more time saved. Using the laser, the average measurement can be made up to 10 times faster than by a tape measure.

- **It's more accurate.** Thanks to precision optics, the LDM1 can measure the distance between any two points more than 10 inches apart with $\pm 1/4$ in. accuracy and $1/16$ in. resolution. It's impossible to get that level of precision from a tape that can bend or sag. What's more, it's much easier to read the LDM1's digital display, which can be held at eye level, than to read a conventional tape measure whose position may make tiny hash marks hard to see.
- **It's safer.** Because the LDM1 can measure distances from a distance, it takes the risk out of routine but tricky tasks. For example, it makes it unnecessary to stand on a stepladder and reach to measure the height of a ceiling.

WHAT'S IN THE PACKAGE

The LDM1 comes on a blister-packed card along with two "AAA" Alkaline batteries.

PRODUCT OVERVIEW

Fig. 1 shows the key components of the LDM1. Fig. 2 shows all possible display icons and indications. Use Fig. 1 to familiarize yourself with the position and function of all components before moving on to the safety, setup and operating instructions.

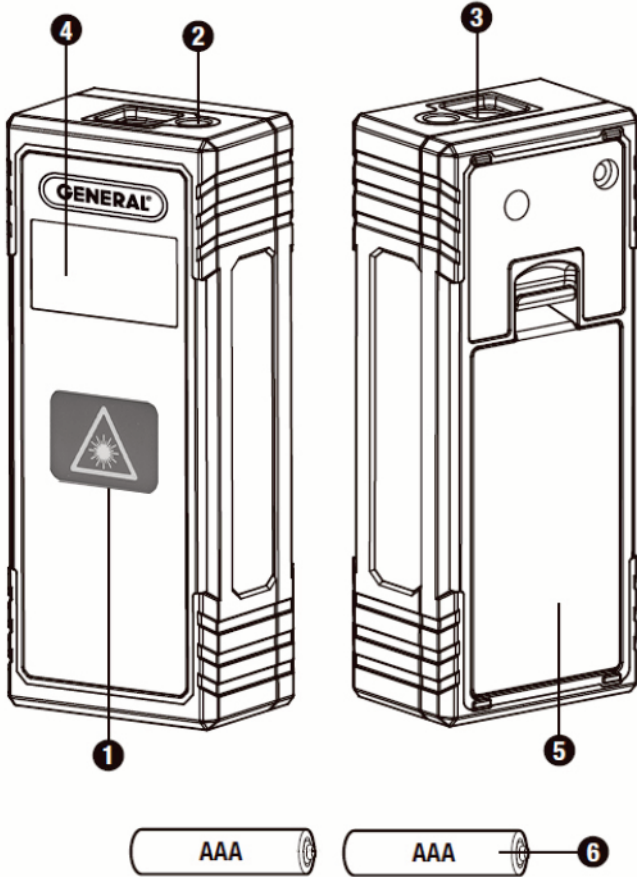


Fig. 1. The LDM1's key components


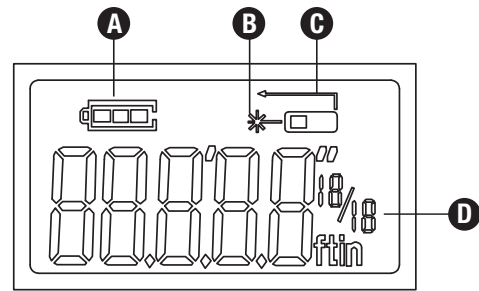
1.  button. **Press once** to activate the laser pointer, **press again** to make a measurement. **Press and hold** three seconds to turn off the tool.
2. Red laser pointer exit
3. Infrared transmitter/receiver port
4. Measurement display (see Fig. 2)
5. Battery compartment
6. Two "AAA" Alkaline batteries (included)

Fig. 2. The LDM1's measurement display



- A. Battery charge indicator
- B. Laser enabled icon. When flashing, indicates that the laser pointer is activated and ready to be aimed at a target.
- C. Indicates that measurements are referenced to the bottom of the tool.
- D. Distance readout

SAFETY INSTRUCTIONS

CAUTION!


- The LDM1's Class II laser pointer emits less than 1mW of radiation at 620 to 690 nm (nanometers). However, avoid looking directly at the laser, and never point it at people or animals. Eye protection is normally afforded by the blink reflex. U.S. law prohibits pointing a laser beam at aircraft; doing so is punishable by a fine of up to \$10,000 and imprisonment.
- Do not operate the LDM1 in explosive environments containing flammable liquids, gases or dust. Sparks may be created in the tool which may ignite the dust or fumes.
- Keep the LDM1 away from cardiac pacemakers. A magnet inside the tool generates a field that can impair their function. Likewise keep the tool away from magnetic data storage media, whose contents may be erased by the magnetic field.


SETUP INSTRUCTIONS


INSTALL BATTERIES


The LDM1 is ready to use after you install the two supplied "AAA" batteries. **To open the battery compartment (Fig. 1, Callout 5, press the latch** at the top of its cover and remove the cover. Install the batteries in series by following the polarity marks on the inside of the compartment. Then replace the cover, making sure the latch snaps to secure it.

OPERATING INSTRUCTIONS


To make a distance measurement, hold the bottom of the tool against a wall or the floor and press the  button (Fig. 1, Callout 1). This activates the display, the laser pointer and the infrared transmitter/receiver. It also causes the laser enabled icon (Fig. 2, Callout B) to flash. This indicates that the tool is ready to make a measurement.

Within 15 seconds, aim the laser pointer at the opposite wall or the ceiling of the room or space and press the  button again. The distance between the two surfaces will be displayed on the LCD. The laser pointer will automatically extinguish 15 seconds after each measurement.

If you take more than 15 seconds to press the  button a second time, the laser enabled icon (and the red spot on the target) will disappear. To attempt another measurement, you must press the button twice more—once to reactivate the laser pointer and infrared transmitter/receiver while you re-aim, and the second time to actually make the measurement.

To power off the LDM1 manually, press and hold the  button for at least three seconds.

OPERATING & MAINTENANCE TIPS

Because the LDM1's laser pointer silently powers off 15 seconds after being activated, you'll often find that when you press the  button intending to make a measurement, all you have done is reactivate the pointer and infrared transmitter/receiver. As noted earlier, what you must do in this case is press the button twice more—once to reactivate the laser pointer and IR transmitter/receiver while you re-aim, and the second time to actually make the measurement.

When measuring horizontal distances, keep the tool as horizontal as possible.

When measuring long distances, use a target plate made of white paper or cardboard. Pressing the back of the tool against a surface (rather than holding it in your hand) helps to steady the laser pointer on distant targets.

If the display shows “all dashes” rather than a distance reading, the likely cause is one of the following:

- The laser pointer is moving too quickly. To steady the pointer, press the back of the tool (the side with the battery compartment) against the wall or floor.
- The target is beyond the maximum range (50 ft.) of the IR transmitter/receiver, or closer than the minimum range of 10 in. In other words, the returned IR signal is too weak or too strong.
- The target is too reflective. In this case, use a target plate made of white paper or cardboard, as recommended above.
- The target is flooded with ambient light. “Masking” the target with white paper or cardboard should solve the problem.
- The target is an LCD, LED or plasma TV/computer screen. These screen types absorb incoming IR radiation and reflect nothing back to the tool.
- The ambient temperature is outside the specified operating range (32° to 104°F).

Replace the batteries when the on-screen battery charge icon (Fig. 2, Callout A) begins flashing. Use alkaline batteries only. To avoid having an old battery leak acid and ruin the tool, remove both batteries when you do not expect to use the LDM1 for a long period of time (several months).

Clean the LDM1 by wiping it with a damp soft cloth. Never use solvents or abrasives.

Keep the tool away from water and extreme temperatures.

FEATURES AND SPECIFICATIONS

- Measurement range/accuracy/resolution:
50 ft./±1/4 in./1/16 in.
- Measurement unit: feet + fractional inches
- Display: 5-digit LCD measuring 1 x 1/2 in.,
with 1/4 in. high digits
- Laser automatically powers off after 15 seconds
(for safety reasons)
- Display automatically powers off after 60 seconds
(to conserve battery charge)
- Battery charge indicator
- Power source: Two “AAA” Alkaline batteries (included)
- Typical battery life: >3,000 measurements
- Laser output: <1mW (Class II) @ wavelength of
620 to 690 nm
- Operating temperature: 32° to 104°F
- Storage temperature: 14° to 140°F
- Dimensions: 3.187 x 1.313 x 0.938 in.
- Weight: 0.15 lbs.
- 1-year limited warranty

WARRANTY INFORMATION

General warrants its instruments and accessories, and digital tools products against defects in material or workmanship for one year from the date of purchase unless otherwise stated on the packaging, user’s manual, and/or marketing materials. General also warrants its non-digital tools products against defects in material or workmanship on a limited lifetime term.

General will replace or repair the defective unit, at its option, subject to verification of the defect.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the product. It also does not cover products purchased from unauthorized distributors. A proof of purchase must accompany each warranty claim.

Any implied warranties arising from the sale of a General product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. General shall not be liable for loss of use of the product or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss. State laws vary. The above limitations or exclusions may not apply to you.

For more details or to file a warranty claim, contact General Tools & Instruments Technical Support at techsupport@generatools.com.

RETURN FOR REPAIR POLICY

Every effort has been made to provide you with a reliable product of superior quality. However, in the event your instrument requires repair, please contact our Customer Service to obtain an RGA (Return Goods Authorization) number before forwarding the unit via prepaid freight to the attention of our Service Center at this address:



General Tools & Instruments
75 Seaview Drive
Secaucus, NJ 07094
212-431-6100

