Thank you for purchasing this Johnson 85’ Laser Distance Meter - the fastest way to measure your jobsite.

SAFETY INFORMATION
This Class II laser tool complies with CRF 21 parts 1040.10 and 1040.11, IEC 285, and EMC Tests EN61000-6-3; 2001+A1:2004, EN61000-6-1:2011, EN61000-4-2, EN61000-4-3, EN 60825 & FCC Test Part 15.

THIS TOOL EMITS LASER RADIATION. DO NOT STARE INTO BEAM. AVOID DIRECT EYE EXPOSURE.

ATTENTION:
• Read all instructions before operating this tool. Do not remove any labels from the tool.
• Do not project the laser into the eyes of others.
• Do not set up laser tool at eye level, or operate the tool near reflective surfaces, as the beam can be projected into your eyes or the eyes of others.
• Do not place the laser tool in a manner that may cause someone to unintentionally look into the laser beam. Serious eye injury may result.
• Do not operate the tool in explosive environments, (i.e., in the presence of gases or flammable liquids).
• Keep the laser tool out of the reach of children and other untrained persons.
• Do not attempt to view the laser beam through optical tools such as telescopes - serious eye injury may result.
• Always turn off the laser tool when not in use or when left unattended for any period of time.
• Disassembly or repair by unqualified persons will void the warranty.

SAFETY LABEL LOCATION

INSTALLING BATTERIES
The LDM85 uses two “AAA” batteries that last for up to 10,000 measurements, depending on usage. To insert batteries:
• Depress the knurled area of the battery door, and slide the battery door off the tool.
• Insert 2xAAA batteries according to the indicated polarity, and replace the cover.
• The tool will indicate remaining power at startup:

![Power Levels]

0-10% 10-50% 50-75% 75-100%

NOTE: When storing the tool for more than three months, remove the batteries to prevent corrosion.

GETTING STARTED
• Power on the LDM85 by pressing \(\square\) or \(\triangle\).
• Set your desired operating units by holding \(\triangle\) until the desired unit is reached, then release.
• Set the measurement reference by pressing \(\square\) and \(\triangle\) simultaneously. The tool will indicate the current reference position:

![Reference Indicators]

FRONT EDGE REFERENCE
REAR EDGE REFERENCE

• Set your operating mode by pressing \(\square\). See the TAKING MEASUREMENTS section for more information on the different operating modes.
• Take your measurements by pressing \(\triangle\).
• When completed, power off the tool by holding \(\square\). The tool will auto-power off in 5 minutes.

LEVEL UP:

Download this manual at www.johnsonlevel.com/manuals
**TAKING MEASUREMENTS**

- **Length:** Measures a single length. Press \( \text{\textendash} \) to measure. Press \( \text{\textendash} \) to re-enable the laser to prepare for the next measurement.

- **Area:** Calculates area based on two measurements, such as for drywall, paint or flooring estimates. Press \( \text{\textendash} \) to record the first length. Press \( \text{\textendash} \) again to record the second length. The tool will display the resulting area.

- **Volume:** Calculate volume based on three measurements, such as for HVAC applications. Press \( \text{\textendash} \) to record each of three lengths. The tool will display the resulting volume.

- **Continuous:** Used for displaying the instantaneous length. Press \( \text{\textendash} \) to begin taking measurements. Press \( \text{\textendash} \) again to pause measurements and hold the current measurement on the LCD.

**Pro Tips:**
- Always hold the tool steady. If possible, position against another surface for stability.
- When in bright light such as sunlight, you may not achieve the full 85’ range of the tool.
- In bright conditions, aim at reflective surfaces to improve beam visibility.
- Always check your reference to avoid erroneous measurements.

**TROUBLESHOOTING**
- Tool does not power on or remain on - Replace batteries. Check battery polarity.
- Measurement is incorrect by about 4 inches - Check your measurement reference and adjust accordingly. See “GETTING STARTED”.
- The tool shows “Err” and a number - Error codes are diagnosed as follows:
  - Err01: Tool’s operating range is exceeded
  - Err02: Weak return laser signal
  - Err03: Value exceeds what LCD can display
  - Err04: Low battery
  - Err05: Tool is outside temperature range
  - Err06: Ambient light is too high to operate

Err02 indicates the tool can’t receive the laser signal. Ensure the receiving window is clean. Ensure the target is non-porous. Porous surfaces include cinder blocks, carpet, foam, etc. A reflective target or white sheet can be used over porous surfaces to take measurements.

**PRODUCT WARRANTY**
Johnson Level & Tool offers a two-year limited warranty on this product. You can obtain a copy of this warranty on our website or by contacting our customer service department. The limited warranty contains various limitations and exclusions. Do not return this product to the place of purchase. Non-warranty repairs and calibration must be done by an authorized Johnson service center or the warranty will be void. A service center list can be found on our website.

Contact us for an RMA number before sending any product in for service. Proof of purchase is required for warranty service.

**PRODUCT REGISTRATION**
Please register your product within 30 days of purchase. Registering ensures we have your information on file for warranty service even if you lose your receipt and lets us contact you if there is ever a product recall. We will never sell your information and will only send you marketing information if you opt-in.

To register, scan or click:

[www.johnsonlevel.com/register](http://www.johnsonlevel.com/register)

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Laser</th>
<th>Class II, &lt;1mW, 650nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>+/- 5/64”</td>
</tr>
<tr>
<td>Range</td>
<td>2” to 85’</td>
</tr>
<tr>
<td>Modes</td>
<td>Length, Area, Volume &amp; Continuous</td>
</tr>
<tr>
<td>Units</td>
<td>m, ft, in, 1/8”, 1/16”, 1/32”</td>
</tr>
<tr>
<td>Operating Temp</td>
<td>23°F to 104°F</td>
</tr>
<tr>
<td>Storage Temp</td>
<td>-4°F to 160°F</td>
</tr>
<tr>
<td>Batteries</td>
<td>2xAAA</td>
</tr>
<tr>
<td>Battery Life</td>
<td>up to 10,000 measures</td>
</tr>
<tr>
<td>Dimensions</td>
<td>3.9” x 1.4” x 0.9”</td>
</tr>
<tr>
<td>Weight</td>
<td>2 5/8 oz. (w/ batteries)</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP54 (rainproof)</td>
</tr>
</tbody>
</table>

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