Congratulations on your choice of this Magnetic Torpedo Laser Dot. We suggest you read this instruction manual thoroughly before using the instrument. Save this instruction manual for future use.

This is a Class IIIa laser tool and is manufactured to comply with CFR 21, parts 1040.10 and 1040.11 as well as international safety rule IEC 285.
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1. Kit Contents

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<th>Description</th>
<th>Qty.</th>
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<td>Magnetic Torpedo Laser Dot</td>
<td>1</td>
</tr>
<tr>
<td>&quot;AA&quot; Alkaline Batteries</td>
<td>3</td>
</tr>
<tr>
<td>Leveling Bracket</td>
<td>1</td>
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<tr>
<td>Instruction Manual with Warranty Card</td>
<td>1</td>
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<tr>
<td>Soft-Sided Pouch</td>
<td>1</td>
</tr>
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2. Features and Functions

• Simultaneously projects three beams for level, plumb and square applications
• Leveling vials are in four directions: 45°, 90°, 180° and cross check
• Magnetic base attaches onto any ferrous surfaces
• Able to work with a 1/4" - 20 tripod
• Removable base plate can make horizontal leveling more convenient
• V-groove aligns unit with pipes.
3. Safety Instructions

Please read and understand all of the following instructions, prior to using this tool. Failure to do so, may void the warranty.

**DANGER!**
Class IIIa Laser Product
Max. Power Output: \( \leq 5 \text{mW} \)
Wavelength: 640-660nm

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

**ATTENTION**

- Read all instructions prior to operating this laser tool. Do not remove any labels from tool.
- Do not stare directly at the laser beam.
- Do not project the laser beam directly into the eyes of others.
- Do not set up laser tool at eye level or operate the tool near a reflective surface as the laser beam could be projected into your eyes or into 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 as serious eye injury may result.
- Always turn the laser tool off when not in use or left unattended for a period of time.
- Remove the batteries when storing the tool for an extended time (more than 3 months) to avoid damage to the tool should the batteries deteriorate.
- Do not attempt to repair or disassemble the laser tool. If unqualified persons attempt to repair this tool, warranty will be void.
- Use only original Johnson\textsuperscript{®} parts and accessories purchased from your Johnson\textsuperscript{®} authorized dealer. Use of non-Johnson\textsuperscript{®} parts and accessories will void warranty.
4. Location/Content of Warning Labels

- Laser radiation is emitted from this aperture. Avoid exposure.

Maximum output power: < 5mW @ 640-660nm
Class IIIa laser product. This product complies with the applicable requirements of 21CFR Parts 1040.10 & 1040.11.
5. Location of Part/Components

- Precision vials
- 3 beams: plumb, level & square
- Laser output windows
- Strap raceway (strap not included)
- Magnetic base
- On/off switch
- Battery door
- Laser reference edge
- V-groove
- 1/4" Screw hole
- Adjustable support feet
- 1/4" bolt

Leveling Bracket
**V-Groove:**
Use the V-groove to align on pipes up to 10" (254 mm) in diameter.

**1/4"-20 Tripod Mount:**
Use the threaded hole in the base to mount to a camera tripod.

**Strap Raceways:**
Use straps (not included) to fasten to pipes, studs, etc.

**Magnetic Base:**
Use the magnetic base to attach to metal studs or pipes.
6. Operating Instructions

**IMPORTANT:** It is the responsibility of the user to verify the calibration of the instrument before each use.

**Battery Installation**
Turn on/off button in the counter-clockwise direction and completely unscrew the switch. This will provide you access to the battery compartment. Insert all three batteries by following the polarity on the outside of the unit. Return the switch to the original position.

**Note:** Used (discharged) batteries are hazardous waste and should be disposed of properly.

7. Using the Product
With the press of the red power-on/off button, the laser will simultaneously project 3 laser dots through the laser output windows, and with one more press of the power-on/off button, the laser dots will turn off. When the laser dot appears dim, it is time to replace the batteries.

Laser output mode is shown as follows:
Horizontal Usage with Base

Connect the laser level with the leveling bracket

Center the bubble by adjusting the support feet
Adjust the support feet to center the bubble. The laser is now level in the horizontal plane.

Project horizontal laser dot

3/4" from reference surface to laser dot.
Vertical Usage
Center the plumb vial as shown in the illustration.

Angle Usage
Center the 45º vial as shown in the illustration.

Magnetic base usage
Attached on any ferrous surface
Attached on iron pipe
8. Self-Check and Calibration

Horizontal bubble vial check
Put the laser on a smooth and horizontal plane, and then check according to steps as follows:

Step 1

Step 2 Rotate unit 180 degrees.

Step 3

If the laser level is in horizontal, the bubble vial position should be as follows:

$L = (L_1 + L_2)/2$
**Vertical bubble vial check**

Put the laser on a smooth and vertical plane, like fixed and firm window glass, and then check according to steps as follow:

**Step 1**

- Vertical plane

**Step 2** Rotate unit 180 degrees.

**Step 3**

- Vertical plane

If the laser is in vertical, the bubble vial position should be as follows:

\[ L = \frac{(L_1 + L_2)}{2} \]
### 9. Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Wavelength</td>
<td>650nm ± 10</td>
</tr>
<tr>
<td>Laser Classification</td>
<td>Class IIIa</td>
</tr>
<tr>
<td>Maximum Power Output</td>
<td>≤5mW</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 1/8&quot;/50 ft. (±1mm/5m)</td>
</tr>
<tr>
<td>Interior Range</td>
<td>Up to 100 ft. (30m)</td>
</tr>
<tr>
<td></td>
<td>depending upon light conditions</td>
</tr>
<tr>
<td>Power Supply</td>
<td>3 “AA” alkaline batteries</td>
</tr>
<tr>
<td>Battery Life</td>
<td>Approx. battery life 50 hours</td>
</tr>
<tr>
<td></td>
<td>continuous use</td>
</tr>
<tr>
<td>Dimensions</td>
<td>9 1/2&quot; x 2 1/8&quot; x 1&quot;</td>
</tr>
<tr>
<td></td>
<td>(242 x 56 x 25mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>1.653 lbs. (0.75 kg)</td>
</tr>
<tr>
<td>Working Temperature</td>
<td>14°F to 113°F (-10°C to +45°C)</td>
</tr>
<tr>
<td>Center Screw Thread</td>
<td>1/4&quot; – 20</td>
</tr>
</tbody>
</table>
10. Application Demonstrations

- Squaring (window frame)
- Leveling (cabinets)
- Point (deck)
11. Care and Handling

- This laser unit is a precision tool that must be handled with care.
- Avoid exposing unit to shock vibrations and extreme temperatures.
- Before moving or transporting the unit, make sure that the unit is turned off.
- Remove the batteries when storing the unit for an extended time (more than three months) to avoid damage to the unit should the batteries deteriorate.
- Always store the unit in its case when not in use.
- Avoid getting the unit wet.
- Keep the laser unit dry and clean, especially the laser output window. Remove any moisture or dirt with a soft, dry cloth.
- Do not use harsh chemicals, strong detergents or cleaning solvents to clean the laser unit.

12. Product Warranty

Johnson Level & Tool offers a three year limited warranty on each of its products. You can obtain a copy of the limited warranty for a Johnson Level & Tool product by contacting Johnson Level & Tool's Customer Service Department, as provided below, or by visiting our web site at www.johnsonlevel.com. The limited warranty for each product contains various limitations and exclusions.

Do not return this product to the store/retailer or place of purchase. Non-warranty repairs and course calibration must be done by an authorized Johnson® service center or Johnson Level & Tool’s limited warranty, if applicable, will be void and there will be NO WARRANTY. Contact one of our service centers for all non-warranty repairs. A list of service centers can be found on our web site at
www.johnsonlevel.com or by calling our Customer Service Department. Contact our Customer Service Department for Return Material Authorization (RMA) for warranty repairs (manufacturing defects only). Proof of purchase is required.

**NOTE:** The user is responsible for the proper use and care of the product. It is the responsibility of the user to verify the calibration of the instrument before each use.

For further assistance, or if you experience problems with this product that are not addressed in this instruction manual, please contact our Customer Service Dept.

In the U.S., contact Johnson Level & Tool’s Customer Service Department at 888-9-LEVELS.

In Canada, contact Johnson Level & Tool’s Customer Service Department at 800-346-6682.

**13. Product Registration**

Enclosed with this instruction manual you will find a warranty card to be completed for product warranty registration. Product warranty registration can also be completed online at our web site www.johnsonlevel.com. You will need to locate the serial number for your product that is located at the side of the torpedo level. **PLEASE NOTE THAT IN ADDITION TO ANY OTHER LIMITATIONS OR CONDITIONS OF JOHNSON LEVEL & TOOL’S LIMITED WARRANTY, JOHNSON LEVEL & TOOL MUST HAVE RECEIVED YOUR PROPERLY COMPLETED WARRANTY CARD WITHIN 30 DAYS OF YOUR PURCHASE OF THE PRODUCT OR ANY LIMITED WARRANTY THAT MAY APPLY SHALL NOT APPLY AND THERE SHALL BE NO WARRANTY.**
14. Accessories

Johnson® accessories are available for purchase through authorized Johnson® dealers. Use of non-Johnson® accessories will void any applicable limited warranty and there will be NO WARRANTY. If you need any assistance in locating any accessories, please contact our Customer Service Department.

In the U.S., contact Johnson Level & Tool’s Customer Service Department at 888-9-LEVELS.

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