JOHNSON Level®

Self-Leveling Ultra-Bright Cross-Line Laser

Model No. 40-6625

Instruction Manual

Congratulations on your choice of this Self-Leveling Cross-Line Laser. 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

Description for Model 40-6625	Qty.
Self-Leveling Cross Line Laser	1
Multi-Functional Elevating Magnetic Base	1
"AA" Alkaline Batteries	3
Mounting Strap	1
Magnetic Target	1
Instruction Manual with Warranty Card	1
Soft Sided Pouch	1

2. Features and Functions

- Able to project one cross-line beam, consisting of one horizontal line and one vertical line.
- Magnetic dampening compensation system.
- Laser flashes/sounds audible alarm when beyond leveling range.
- Manual mode feature allows unit to be tipped at extreme angles without the audible alarm and laser flash being triggered
- Multi-functional elevating magnetic base is included to allow hanging on wall, attach to metal, or connect to tripod (5/8"-11 or 1/4"-20).
- While on the bracket, the laser can be raised or lowered 2-1/2" and rotate 360º.
- Includes adjustable strap for attachment to pipe or conduit.

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.

ATTENTION  **IMPORTANT**

- 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® parts and accessories purchased from your Johnson® authorized dealer. Use of non-Johnson® parts and accessories will void warranty.

DANGER!

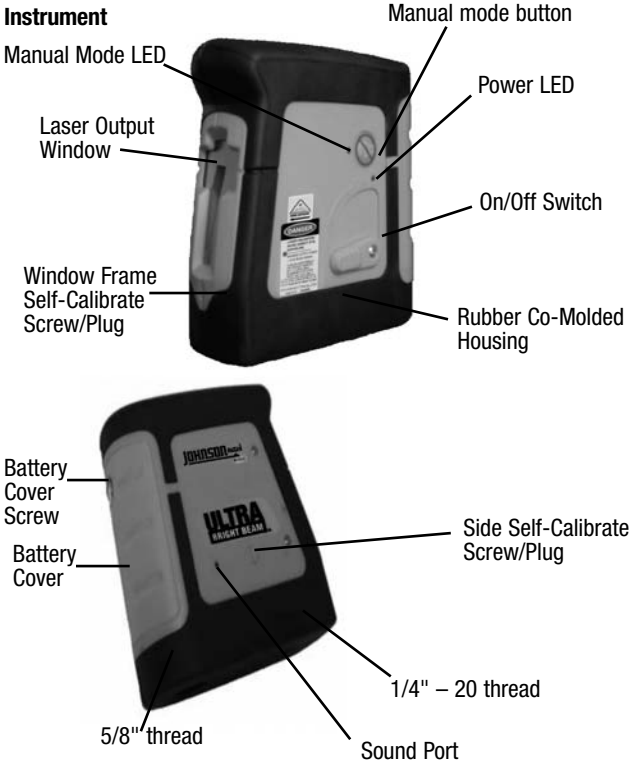
Class IIIa Laser Product
Max. Power Output: ≤ 5mW
Wavelength: 625-645nm

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

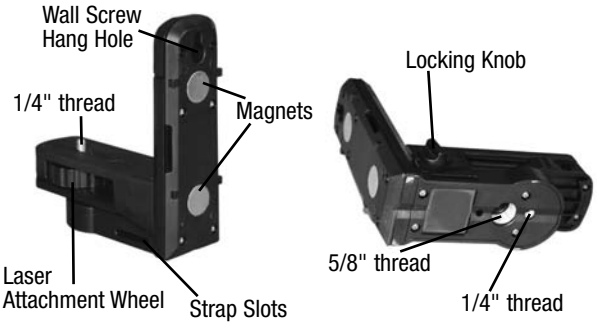
4. Location/Content of Warning Labels

5. Location of Part/Components

Instrument



Multi-Functional Elevating Magnetic Base



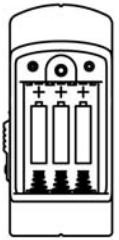
6. Operating Instructions

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

Battery Installation

Note: Always check to be sure that the on/off switch is in the off position before removing and replacing batteries.

1. Open the battery-box cover and put in three "AA" batteries according to the illustrated polarity direction
2. Place the laser on a platform or a tripod.
3. Power on the laser by turning the on/off switch to the on position, and a cross line will be projected.



Note:

- Pay attention to the polarity of the batteries.
- Used (discharged) batteries are hazardous waste and should be disposed of properly.
- If the power indicator light is flashing, the batteries are low and should be changed soon.

7. Using the Product

This base was specially designed for more extensive adaptability of the laser. Both the laser and the base can be connected with a standard tripod by 5/8"-11 thread and camera tripod by 1/4" – 20 thread. With the use of its base, the laser can be freely rotated, elevated 2-1/2", hung on the wall, attached to a metal plate, or connected on pipe with use of its strap.

1. As shown in fig. 1, take out the magnetic base.
2. As shown in fig. 2, install the laser on the base (1/4" – 20 thread) by rotating the connecting knob counter-clockwise.

Figure 1 **Figure 2**

Manual Mode Operating Instructions

1. Locate the Manual Mode Button (fig. 3) on the side of the laser, above the on/off switch.

Figure 3

2. When the laser is turned on, push the button once to engage the Manual Mode Feature. Red light next to manual mode button will turn on and green power LED will stay on.
3. Push the button a second time to turn off the Manual Mode Feature. Red light will turn off and green power LED will stay on.

Note:

When the Manual Mode Feature is engaged, the self-leveling alarm is deactivated.

8. Self-Check & Fine Calibration

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

1. Set the laser on a level flat head tripod centered between two walls (marked 1 & 2) approximately 15 feet apart. (See fig. 1).
2. Point the laser directly at wall 1. Turn the laser on and mark the intersection of the beams as point A.
3. Turn the laser 180 degrees so that the laser is pointed directly at wall 2. Turn the laser and mark the intersection of the beams as point B.
4. Move the laser and the tripod so the laser is positioned approximately 2 feet away from wall 1 (see fig. 2). Level the tripod and position the laser on the tripod facing wall 1. Turn the laser on and mark the intersection of the beams as point C.
5. Turn the laser off and rotate the laser 180 degrees so that it is facing directly to wall 2.
6. Turn on the laser and mark the intersection of the beams as point D.
7. Measure the distance between points A & C.
8. Measure the distance between points B & D.
9. If the difference between points A & C and points B & D are less than 1/16", your laser is within its tolerance.

Wall 1 Wall 2

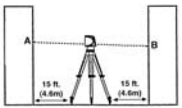


Fig 1

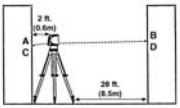


Fig 2

Calibration

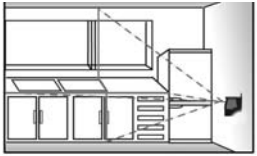
Re-calibration can be performed as described below.

1. Use a level to mark a horizontal reference line on the wall.
2. Power on the unit to compare the projected horizontal line with its references. **Compensator has to be locked before making calibration adjustments.** If it tilts, remove the side plastic screw/plug and use an allen wrench to calibrate the unit through its side calibration hole. Rotate the allen wrench clockwise when the horizontal line tilts right. Rotate the allen wrench counter-clockwise when the horizontal line tilts to the left.
3. If the horizontal line is too low or too high, carefully disassemble the window frame by removing the outer plastic screw/plug and the inner metal screw. Use an allen wrench to calibrate the adjustment screws located between the glass prisms. Rotate the allen wrench clockwise when the horizontal line is too low. Rotate the allen wrench counter-clockwise when the horizontal line is too high. Reassemble the window frame after completing the calibration.

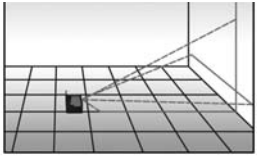
9. Technical Specifications

Laser Wavelength	635nm±10
Laser Classification	Class IIIa
Maximum Power Output	≤5mW
Accuracy	±1/8"/35 ft. (±3mm/10m)
Interior Range	Up to 150 ft. (45m) depending upon light conditions
Self-Leveling Range	± 5°
Power Supply	3 “AA” alkaline batteries
Battery Life	Approx. battery life 20 hours continuous use
Dimensions	2" x 5.25" x 6.25" (51x133x159mm)
Weight	2 lbs. (0.93 Kg)
Working Temperature	14°F to 113°F (-10°C to +45°C)
Center Screw Thread	5/8" – 11; 1/4" – 20
IP Protection Class	55

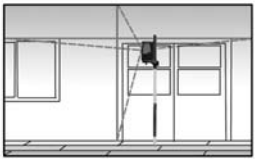
10. Application Demonstrations



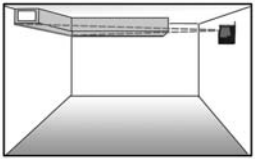
Fixing cabinets



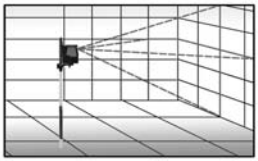
Laying tile



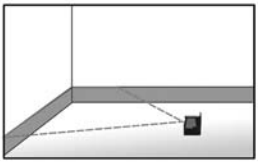
Fixing doors and windows



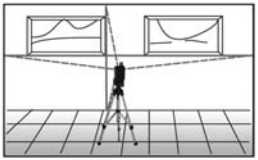
Setting pipelines



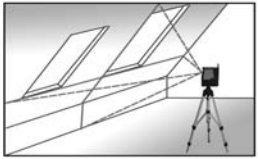
Installing partitions



Installing baseboards



Hanging pictures



Dormer installation

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. Warranty Registration

Enclosed with this instruction manual you will find a warranty registration card to be completed for your product. You will need to locate the serial number for your product that is located on the bottom of the unit. **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 AND PROOF OF PURCHASE 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.

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

15. Trouble Shooting

- If the unit does not turn on, check the battery polarity or install new batteries and clean the battery terminals.
- If the laser does not illuminate, check the battery polarity or install new alkaline batteries and clean the battery terminals.
- If the unit is out of calibration less than 1/2" at 35', follow calibration procedure in manual.
- If the unit is out of calibration more than 1/2" at 35', contact an authorized Johnson service center or Johnson Level & Tool's customer service department.
- If the unit will not calibrate, contact an authorized Johnson service center or Johnson Level & Tool's customer service department.
- If the unit beeps and/or flashes constantly, check to see if the unit is being tilted to angles beyond the self-leveling range. If so, push the "horn" button to engage manual mode. If the unit is being used for a level application, place onto a surface that is within the self-leveling range. If it is still beeping and/or flashing, the unit is out of calibration.
- If the unit turns off after a short time, install new alkaline batteries and clean the battery terminals. Also, make sure that the on/off knob is in the on position.