



Self-Leveling Cross-Line Laser Level
Model No. 40-6620 and 40-6625



Instruction Manual

Congratulations on your choice of this Self-Leveling Cross-Line Laser Level. We suggest you read this instruction manual thoroughly before using the instrument. Save this instruction manual for future use.

This is a Class II (40-6620) and Class IIIa (40-6625) 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

<u>Description for Model 40-6620 and 40-6625</u>	<u>Qty.</u>
Self-Leveling Cross Line Laser Level	1
Multi-Functional 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 magnetic base is included to allow hanging on wall, attach to metal, or connect to tripod (5/8"-11 or 1/4"-20).
- 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.



40-6620

CAUTION!

Class II Laser Product

Max. Power Output: $\leq 1\text{mW}$

Wavelength: 625-645nm

THIS TOOL EMITS LASER RADIATION.

DO NOT STARE INTO BEAM.

AVOID DIRECT EYE EXPOSURE.



40-6625

DANGER!

Class IIIa Laser Product

Max. Power Output: $\leq 5\text{mW}$

Wavelength: 625-645nm

THIS TOOL EMITS LASER RADIATION.

DO NOT STARE INTO BEAM.

AVOID DIRECT EYE EXPOSURE.



4. Location/Content of Warning Labels

40-6620

CAUTION

Laser Radiation. Do Not Shine Into Beam.
 Maximum Output Power = 1000W
 Wavelength = 830-850nm
 Class II Laser Product
 Complies with applicable requirements
 of 21CFR parts 1040.10 and 1040.11.



Mfg. for Johnson Level & Tool Mfg. Co., Inc.
 6333 W. Donges Bay Rd., Mequon, WI 53092
 Manufactured in China by JLTOS
 Date (m/y):



40-6625



DANGER

LASER RADIATION
 AVOID DIRECT EYE
 EXPOSURE.

MAXIMUM OUTPUT POWER
 = 2000 W (500-WATT)

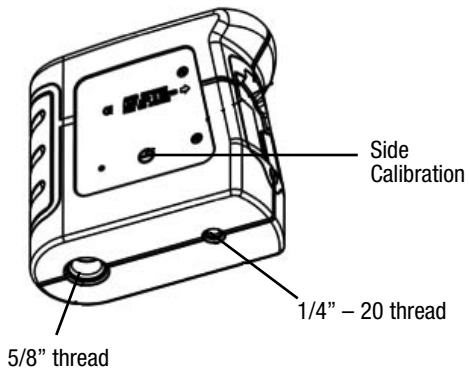
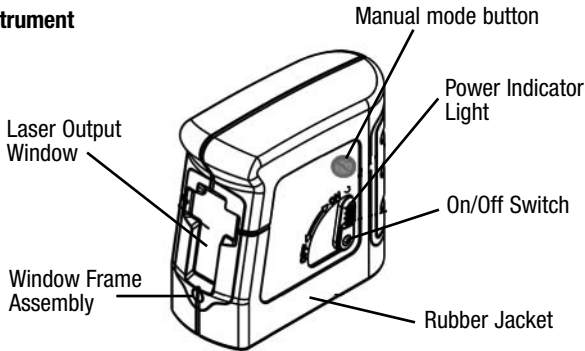
CLASS II LASER PRODUCT
 THE BEAM IS LIMITED
 WITH THE APPROPRIATE
 REQUIREMENTS OF 21CFR
 PARTS 1040.10 & 1040.11

Mfg. for Johnson Level & Tool Mfg. Co., Inc.
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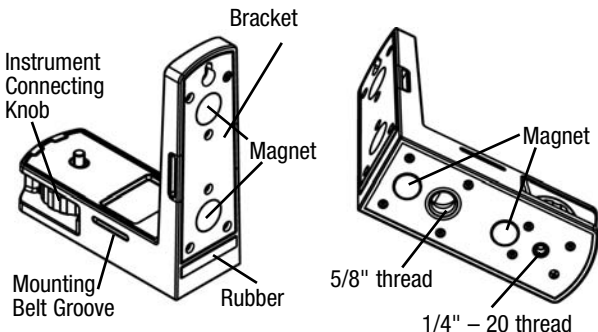


5. Location of Part/Components

Instrument



Special Base



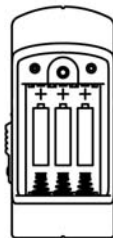
6. Operating Instructions

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 instrument on a platform or a tripod.
3. Power on the instrument 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.

7. Using the Product

This base was specially designed for more extensive adaptability of the instrument. Both the instrument 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 instrument can be freely rotated, hung on the wall, attached to a metal plate, or bound on staff or 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 instrument on the base by rotating the connecting knob counter-clockwise.
3. As shown in fig. 3 and fig. 4, the instrument can be rotated on the base.
4. As shown in fig. 5, the instrument can be hung on the wall or column by a nail.

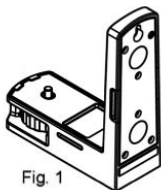


Fig. 1



Fig. 2



Fig. 3

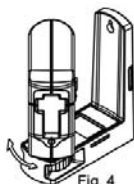


Fig. 4

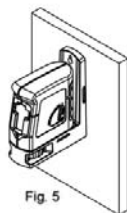


Fig. 5

Manual Mode Operating Instructions

1. Locate the Manual Mode Button (fig. 9) on the side of the instrument, above the on/off switch (fig. 10).



Figure 10

Figure 9



- When the unit is turned on, push the button once to engage the Manual Mode Feature. Red light next to manual mode button will turn on.
- Push the button a second time to turn off the Manual Mode Feature. Red light will turn off.

Note:

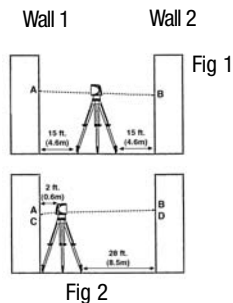
When the Manual Mode Feature is engaged, the self-leveling alarm is deactivated.



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 instrument on a level flat head tripod centered between two walls (marked 1 & 2) approximately 15 feet apart. (See fig. 1).
2. Point the instrument directly at wall 1. Turn the laser on and mark the intersection of the beams as point A.
3. Turn the instrument 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 instrument and the tripod so the laser is positioned approximately 2 feet away from wall 1 (see fig. 2). Level the tripod and position the instrument 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 instrument is within its tolerance.





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.





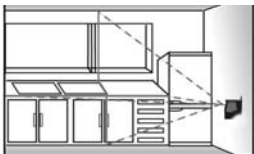
9. Technical Specifications

Laser Wavelength	635nm \pm 10
Laser Classification	Class II (40-6620) Class IIIa (40-6625)
Maximum Power Output	\leq 1mW (40-6620) \leq 5mW (40-6625)
Accuracy	\pm 1/8"/35 ft. (\pm 3mm/10m)
Interior Range	Up to 100 ft. (30m) depending upon light conditions (40-6620) Up to 150 ft. (45m) depending upon light conditions (40-6625)
Self-Leveling Range	\pm 5 $^{\circ}$
Power Supply	3 "AA" alkaline batteries
Battery Life	Approx. battery life 20 hours continuous use
Dimensions	2" x 5-1/4" x 6-1/4" (51x133x159mm)
Weight	2 lbs. (0.93 Kg)
Working Temperature	14 $^{\circ}$ F to 113 $^{\circ}$ F (-10 $^{\circ}$ C to +45 $^{\circ}$ C)
Center Screw Thread	5/8" – 11; 1/4" – 20
IP Protection Class	55

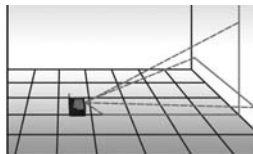




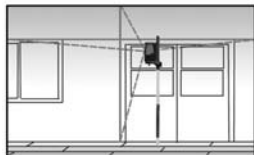
10. Application Demonstrations



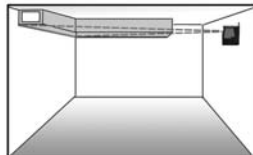
Fixing cabinets



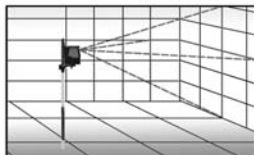
Laying tile



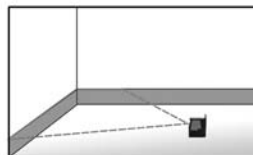
Fixing doors and windows



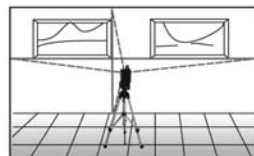
Setting pipelines



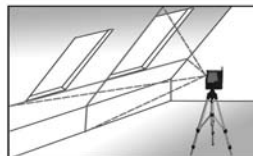
Installing partitions



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.

