

JOHNSON[®]

Self-Leveling Cross-Line Laser Model No. 40-0912 & 40-0921



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

Model No. 40-0912

	<u>Qty.</u>
Self-Leveling Cross-Line Laser with 360° Rotating Base	1
“AAA” Alkaline Batteries	3
Instruction Manual with Warranty Card	1
Soft-Sided Carrying Case	1

Model No. 40-0921

	<u>Qty.</u>
Self-Leveling Cross-Line Laser with 360° Rotating Base	1
Tinted Glasses	1
Elevating Tripod	1
Instruction Manual with Warranty Card	1
Hard-Shell Carrying Case	1

2. Features and Functions

- Two laser beams to plot both horizontal (level) and vertical (plumb) lines.
- Self-levels to within a range of $\pm 6^\circ$.
- 360° graduated base allows angle layout.





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: 625-645nm

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



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.





4. Location/Content of Warning Labels



DANGER

**LASER RADIATION
AVOID DIRECT EYE
EXPOSURE.**

MAXIMUM OUTPUT POWER
< 5mW @ 825-645nm

CLASS IIa LASER PRODUCT.
THIS PRODUCT COMPLIES
WITH THE APPLICABLE
REGULATIONS IS OF 21 CFR
PARTS 1040.10 & 1040.11.

Mfg. by Johnson Level & Tool Mfg. Co., Inc.
6333 W. Chicago Bay Rd. Mequon, WI 53092
Manufactured in China by JLT05
Date (m/y): _____





5. Location of Part/Components



Lock/unlock
On/off switch





6. Operating Instructions

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

Battery Installation

Open the cover on the back of the unit in accordance with markings on the cover and insert three AAA batteries (included in 40-0912 only). Place cover back onto unit.



Lock/Unlock
On/off switch

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

The unit must be locked/turned off before returning the laser to its case. Locking the unit must be done when the unit is in its upright position. It is done to hold the internal components in place to avoid damage to the internal mechanism during transport. The knob must be unlocked/turned on prior to each use and locked/turned off after each use of the laser.

Tripod Set-up

Open up the tripod and position it firmly on a surface that is even and as near level as possible. For uneven surfaces and inclines, compensate by adjusting the telescoping legs of the tripod. Tightly screw the unit and tripod together.

Tripod working range from 17" to 47".

The laser can be used either with the tripod or independently.

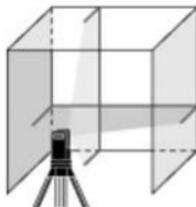




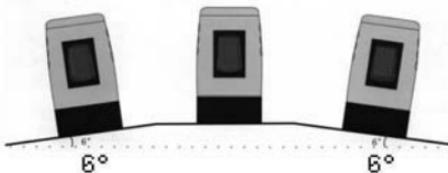
7. Using the Product

Horizontal and Vertical Line Projection

Turning on the knob on the side of the unit will generate a simultaneous vertical and horizontal line laser beam. To turn off, simply turn knob counter-clockwise. If you have unlocked the knob on side of the unit (as per previous page) then simply allow for the unit to level itself. The unit can be manually rotated to the full 360° range.



Note: The laser level is able to compensate for slope of +/- 6°. If the level is placed on a slope that is too great, it will not be able to level itself accurately. The laser beam will flash if outside of its leveling range.





8. Self-Check & Fine Calibration

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

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 reference. Compensator has to be locked before making calibration adjustments. If the line is tilted, remove the side plastic screw/plug and use a 2 mm hex head wrench to calibrate the unit through its side calibration hole. Rotate the hex head wrench clockwise when the horizontal line tilts to the right. Rotate the hex head wrench counter-clockwise when the horizontal line tilts to the left.
3. If the horizontal line is too low or too high, carefully remove the housing by removing the four screws located at the top of the housing. Carefully remove the housing paying close attention to the power cord inside the unit. Locate the three screws at the front of the unit below the glass prisms. If the line needs to be moved down, loosen the two outer screws and tighten the inner screw. If the line needs to be moved up, loosen the inner screw and tighten the two outer screws. Reassemble the housing after completing the calibration procedure.





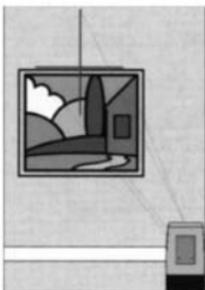
9. Technical Specifications

Laser Wavelength	635nm \pm 10
Laser Classification	Class IIIa
Maximum Power Output	\leq 5mW
Accuracy	\pm 1/4"/35 ft. (\pm 0.6mm/m)
Interior Range	Up to 100 ft. (30m) depending upon light conditions
Self-Leveling Range	\pm 6°
Power Supply	3 "AAA" alkaline batteries (included in 40-0912 only)
Battery Life	Approx. battery life 12 hours continuous use
Dimensions	5" x 4" x 3 1/2" (127 x 101 x 89mm)
Weight	1.2 lbs. (0.54 Kg)
Working Temperature	14°F to 113°F (-10°C to +45°C)
Center Screw Thread	5/8" – 11
IP Protection Class	54

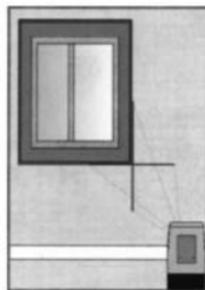




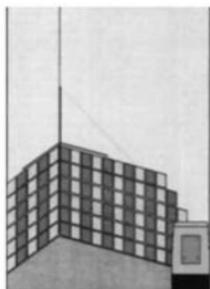
10. Application Demonstrations



Hanging pictures



Installing framework
or shelving



Laying tiles or floors





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.



