

# Self-Leveling Cross-Line Laser Level with GreenBrite® Technology Model No. 40-6640



# **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 Illa laser tool and is manufactured to comply with CFR 21, parts 1040 .10 and 1040 .11 as well as international safety rule IEC 285.

### **Table of Contents**

- 1. Kit Contents
- 2. Features and Functions
- 3. Safety Instructions
- Location/Content of Warning Labels
- 5. Location of Parts/Components
- 6. Operating Instructions
- 7. Using the Product

- 8. Self-Check and Calibration
- Technical Specifications
- 10. Application Demonstrations
- 11. Care and Handling
- 12. Product Warranty
- 13. Product Registration
- Accessories

## 1. Kit Contents

<u>Qty.</u>
1
1
1
1
1
1
1
1
1

### 2. Features and Functions

- Green Beam is 400% brighter than red beam laser level.
- 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 tolerance.
- Manual mode feature allows unit to be moved to extreme angles without the audible alarm and laser flash being triggered
- Multi-functional magnetic mount 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 result in bodily injury.

# 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 AccuLine Pro™ parts and accessories purchased from your AccuLine Pro authorized dealer. Use of non-AccuLine Pro parts and accessories will void warranty.

### **DANGER!**

Class Illa Laser Product Max. Power Output: ≤ 5mW Wavelength: 522-542nm

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



**CAUTION:** If using this product with any type of tinted goggles, please note safety warning below.

### **WARNING!**

The tinted goggles are designed to enhance the visibility of the laser beam. They DO NOT offer protection to the eyes from direct exposure of the laser beam.

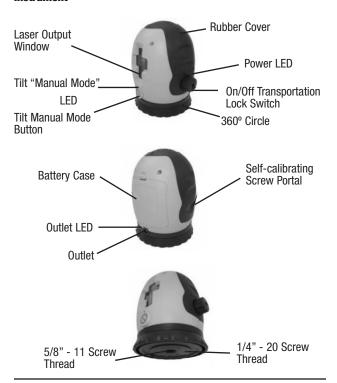


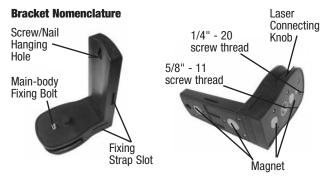
# 4. Location/Content of Warning Labels



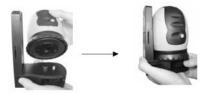
# **5. Location of Part/Components**

#### Instrument





### **Connecting the Bracket to the Main-Body**



- Make the threaded holes mutually aligned. Align the 5/8" 11 and 1/4" - 20 knob and hole.
- Tighten instrument on the bracket by turning the handwheel clockwise.

#### **LED**

Power LED Lighted LED means power-on

Extinguished LED means power-off Flashing LED means weak battery

Outlet LED Extinguished LED means no external power
Green LED means connected to external power or
battery is fully charged
Red LED means charging the battery

#### Tilt Manual Mode LED

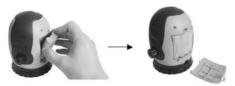
Extinguished LED means the normal working state, and the laser line will flash if out of the self-leveling range Lighted LED means the laser is in the Tilt "Manual Mode". This turns off the out of level indicators (sound and flash) and allows the operator to tilt the unit for extreme slope

# **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.



- Open the battery-box cover and put in the battery pack into the battery case according to polarity marked in the battery-box.
- 2. Snap the battery cover back on.

### **Power Adapter Usage**

By connecting to the adapter, without the battery pack, the outlet LED light will turn green and the instrument will be powered by the adapter. If the rechargeable batteries are in the battery box, they

will be charged in this way and the outlet LED light will be red in the course of charging. When the LED light turns green, the batteries are fully charged.



#### Power on/off

With the rechargeable batteries or the adapter connected, turn the on/off switch clockwise, the power LED will light and the instrument will project a green laser cross beam (as shown below). By turning the on/off switch counter-clockwise, the power LED will go out and the instrument will be powered off and the compensator will be locked in place.





#### Note:

- Pay attention to the polarity of the batteries.
- Do not charge alkaline batteries to avoid explosion.
- Used (discharged) batteries are hazardous waste and should be disposed of properly.

# 7. Using the Product



The laser can turn around the center of the scale 360 degrees.

The instrument can be placed on a platform separately.









The instrument can be installed on the bracket.

The instrument can be installed on a tripod. (5/8" - 11 thread or 1/4" - 20 thread)









The instrument can be attached to a steel plate while on its base.

The instrument can be fixed to a pipe with the fixing strap while on its base.

### 8. Self-Check and Calibration

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

- Set the instrument on a level flat head tripod centered between two walls (marked 1 & 2) approximately 15 feet apart. (See fig. 1).
- Point the instrument directly at wall 1. Turn the laser on and mark the intersection of the beams as point A.
- Turn the instrument 180 degrees so that the laser is pointed directly at wallTurn 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 Wall 1
  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.
- Measure the distance between points B & D.
- If the difference between points
   A & C and points B & D are less
   than 1/16", your instrument is within
   its tolerance.



15 ft.

Fig 1

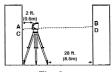


Fig 2

#### Calibration

Re-calibration can be performed as described below.

- 1. Use a level to mark a horizontal reference line on the wall.
- Power on the unit to compare the projected horizontal line with the reference line.



Figure 1



Figure 2

3. If the projected laser line is tilted, power off the unit and lock the compensator. Screw off the calibration portal screw (figure 1) Use a 3mm hex head wrench to calibrate the unit through its side calibration hole. Insert the hex head wrench into the instrument and into the calibration screw. Turn the 3mm hex head wrench until the projected line is level. (figure 2) Turn the hex head wrench clockwise if the line tilts to the right and counter-clockwise if the line tilts to the left.



Figure 3



Figure 4

4. If the horizontal line is too high or too low take off the rubber plugs behind the rechargeable batteries (figure 3). Using a 3mm hex head wrench turn the calibration screws, moving one screw at a time, clockwise to lower the line and counter-clockwise to raise the line. Adjust the line to the correct height (figure 4).

# 9. Technical Specifications

Laser Wavelength 532nm±10
Laser Classification Class Illa
Maximum Power Output ≤5mW

Accuracy  $\pm 1/8"/35 \text{ ft. } (\pm 3 \text{mm}/10 \text{m})$ 

Interior Range Up to 200 ft. (60m) depending upon light

conditions + 5°

Self-Leveling Range

Power Supply Rechargeable battery pack or 6V adapter

(included)

Battery Life Approx. battery life 20 hours continuous use

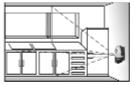
Dimensions 3 7/8" x 4 1/4" x 5 1/8"

(98x110x130mm) Weight 1.653 lbs. (0.75 Kg)

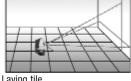
Working Temperature 32° to 104°F (0° to 40°C)
Center Screw Thread 5/8" – 11: 1/4" – 20

IP Protection Class 54

# **10. Application Demonstrations**



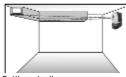
Fixing cabinets



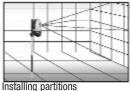
Laying tile

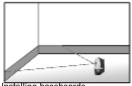


Fixing doors and windows

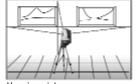


Setting pipelines

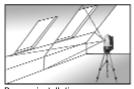




Installing baseboards



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 and is in the locked position. Failure to lock before transport or storage may cause damage to the units inner mechanisms and void warranty.
- 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 one year limited warranty on each 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 us online 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. Required repair/calibration must be done by an authorized AccuLine Pro<sup>TM</sup> service center or Johnson Level & Tool's limited warranty, if applicable, will be void and there will be NO WARRANTY. Contact our Customer Service Department to obtain a Return Material Authorization (RMA) number for return to an authorized service center. 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 Department.

In the U.S., contact Johnson Level & Tool's Customer Service Department at 800-563-8553.

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 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 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

AccuLine Pro<sup>TM</sup> accessories are available for purchase through authorized AccuLine Pro dealers. Use of non-AccuLine Pro 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.

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