

ACCULINE[®]

LASER LEVELS

PRO[®]

Quad Line Self-Leveling Line Generator **Model No. 40-6662**



Instruction Manual

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

This tool emits four cross line laser beams and one down plumb beam. Beam visibility depends upon lighting conditions in the work area.

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.

Table of Contents

- | | |
|--|--------------------------------|
| 1. Kit Contents | 8. Self-Check and Calibration |
| 2. Features and Functions | 9. Technical Specifications |
| 3. Safety Instructions | 10. Application Demonstrations |
| 4. Location/Content
of Warning Labels | 11. Care and Handling |
| 5. Location of Parts/Components | 12. Product Warranty |
| 6. Operating Instructions | 13. Product Registration |
| 7. Using the Product | 14. Accessories |

1. Kit Contents

Description	Qty.
Quad Line Self-Leveling Line Generator	1
Tripodic Base	1
Ni-MH Rechargeable Battery Pack	1
Alkaline Battery Pack (batteries not included)	1
Battery Adapter	1
Tinted Glasses	1
Magnetic Target	1
Instruction Manual with Warranty Card	1
Hard Shell Carrying Case	1

2. Features and Functions

- Indoor and outdoor use (for outdoor use must use 40-6780 detector-not included)
- Simultaneously projects four self-leveling cross lines plus one plumb down dot
- Locking mechanism protects inner pendulum during transportation
- Self-leveling with visual and audible alarms when beyond leveling range
- Emits continuously both a solid and pulse beam (pulse beam for use with detector)
- Manual mode allows unit to tilt to extreme angles

3. Safety Instructions

Please read and understand all of the following instructions, prior to using this tool.

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.
- Use of controls or performance of procedures other than those specified herein may void warranty.
- 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, it may void the warranty.
- 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.

4. Location/Content of Warning Labels

DANGER

**LASER RADIATION
AVOID DIRECT EYE
EXPOSURE.**

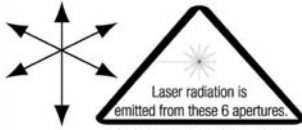
 MAXIMUM OUTPUT POWER
< 5mW @ 625-645nm

CLASS IIIa LASER PRODUCT.
THIS PRODUCT COMPLIES
WITH THE APPLICABLE
REQUIREMENTS OF 21CFR
PARTS 1040.10 & 1040.11.

Mfg. for Johnson Level & Tool Mfg. Co., Inc.
6333 W. Dongas Bay Rd., Mequon, WI 53092

Manufactured in China by JLT05
Date (m/y): _____



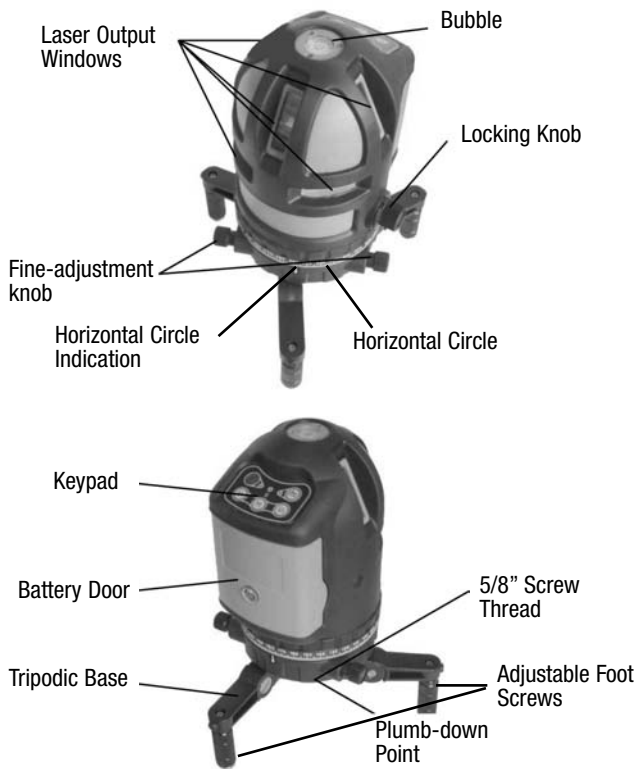


Laser radiation is
emitted from these 6 apertures.

AVOID EXPOSURE



5. Location of Part/Components



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.

Alkaline batteries installation

Put 4 x AA alkaline batteries into the battery case according to the polarity indication shown in the battery case. Then put the battery case on the instrument and tighten the locking screw.



Alkaline battery case



Rechargeable battery case installation

Put the rechargeable battery case on the instrument and tighten the locking screw.



Rechargeable battery case



Adapter Usage

The rechargeable battery case can be charged off the instrument or connected to the instrument.

If the rechargeable battery case is on the instrument and plugged into the adapter, the battery pack will charge and the instrument will also operate. The DC power LED is red during charging and will turn green after the rechargeable battery pack is fully charged. The power LED operates the same when recharging the battery pack when it is off the instrument.



Charging by connecting with the instrument directly



Power LED

Charging solely

Adjustable Foot Screws

Adjust the three adjustable foot screws on the tripod base, to put the bubble in the bullseye of the vial (the bubble centered means the instrument is in its self-leveling range).



Adjusting the bubble

360° Rotation and Fine Adjustment

This instrument can turn 360° and can also make angle fine-adjustments using the fine-adjustment knob.



360° rotation



Fine adjustment

Connecting to the Tripod

This instrument can be connected to a tripod using the 5/8" screw thread hole located either on the tripodic base or on the bottom of the instrument.



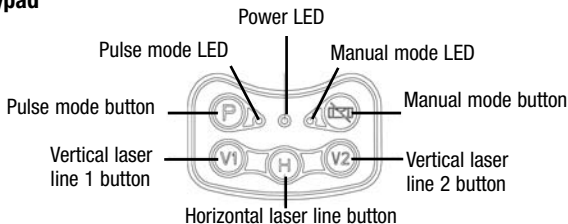
Connecting to a tripod with the tripodic base.



Connecting to a tripod with just the instrument.

7. Using the Product

Keypad



Power LED:

Light On: Power on

Light Off: Power off

Light Flashing: Low Battery

Pulse mode LED:

Light On: Pulse mode is on and the laser can be used with the 40-6780 detector (not included)

Light Off: Pulse mode is off

Manual mode LED:

Light On: Manual mode is on and laser can be turned on with compensator locked

Light Off: Manual mode is off

Note: When manual mode is on, the laser does not self-level and no out-of-level alarm is indicated.

Compensator Transportation Lock



Set the locking knob to "Unlock/On" position



Set the locking knob to "Lock/Off" position

When the locking knob is in the "Unlock/On" position, the bubble will illuminate and the power LED will be on.

When the locking knob is in the "Lock/Off" position, the bubble will not be illuminated and power LED will be off.

Output of the laser line



Press **H** key



Press **V** key



Press **V2** key



Press **H** **V** **V2** key

Pulse Mode:

Unlock the transportation lock and press the horizontal and/or vertical laser line buttons. Press the pulse mode button to turn on the pulse mode, the pulse mode LED will turn on and the laser beam line will dim. The laser line can now be located by a detector (not included). Press the pulse mode button again to switch off the pulse mode, the pulse mode LED will turn off. The laser line now can not be located with a detector.

Manual Mode:

Press the manual mode button with the transportation lock knob in the "Lock/Off" position. The manual mode LED will flash and the bubble light will go on. The output of the laser lines are the same as in the self-leveling mode. Press the manual mode button again to turn the instrument power off.

Note: When manual mode is on, the laser does not self-level and no out-of-level alarm is indicated.

8. Self-Check and Calibration

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

Horizontal Line for Level

1. Set the laser unit on a tripod or flat surface approximately 10' away from a reference wall.
2. Unlock the transportation lock on the unit.
3. Press the horizontal laser line button (H) and the vertical laser line button (V1).
4. Point the cross line at the reference wall (**It is important to see the laser line very clearly. This test should be performed indoors and in low light conditions.**)
5. Mark the intersection of the cross line as point A.
6. Rotate the laser unit counter clockwise until the laser cross line is 8 feet away from point A (to the left of point A). Mark the laser line at point A as point B.
7. Rotate the laser unit clockwise until the cross line is 8 feet to the right of point A.
8. Mark the laser line a point A as point C.
9. If the distance between point B & C is greater than 1/16" the unit needs to be recalibrated. (See calibration information).

3 Vertical Lines for Plumb

1. Use a plumb line or known vertical reference point.
2. Turn the laser unit on following the instructions above.
3. Rotate the laser unit so the vertical laser line intersects the plumb line.
4. Check all three vertical lines.
5. If the vertical laser line is not parallel with the plumb line (i.e. intersects at the top and bottom), the unit needs to be recalibrated. (See calibration information).

Self-Calibration Adjustment

Self-Calibrating the side vertical laser lines (not the front vertical laser line) for plumb

1. Locate the calibration port inside the battery compartment.
2. Remove the rubber plug.
3. Unlock the compensator.
4. Use a 3mm hex head wrench.
5. Turn the calibration screw counter clockwise to move the top of the side vertical lines to the back of the unit (towards the battery compartment). **Do not rotate the screw more than 4 rotations.**
6. If the side vertical lines can not be brought into plumb after 4 rotations of the screw, the unit will need to be serviced by Johnson Level & Tool.



Self-Calibrating the horizontal laser line and front vertical laser line

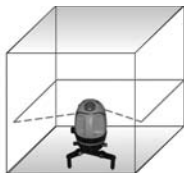
1. Locate calibration port on the side of the laser unit.
2. Remove the plastic screw.
3. Unlock the compensator.
4. Use a 3mm hex head wrench.
5. Rotate the screw counter clockwise to raise the left side of the horizontal line and to adjust the top of the front vertical line to the right. **Do not rotate the screw more than 4 rotations.**
6. If the laser lines can not be brought into calibration after 4 rotations the unit will need to be serviced by Johnson Level & Tool.



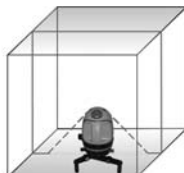
9. Technical Specifications

Laser Wavelength	635nm±10nm
Laser Classification	Class IIIa
Maximum Power Output	≤5mW
Accuracy	±1/8"/50 ft. (±1mm/5m)
Interior Range	Up to 200 ft. (60m) depending upon light conditions
Exterior Range	Up to 300 ft. (90m) with detector
Self-leveling Range	±3°
Power Supply	4 "AA" rechargeable battery -pack (included) or 4 "AA" alkaline batteries (not included)
Battery Life	Approx. battery life 8 hours continuous use
Dimensions	4.73" x 4.96" x 7.09" (120 x 126 x 180mm)
Weight	4 lbs (1.8 Kg)
Working Temperature	14°F to 113°F (-10°C to +45°C)
Center Screw Thread	5/8" – 11
IP Protection	54

10. Application Demonstrations



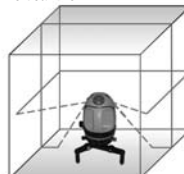
Horizontal line



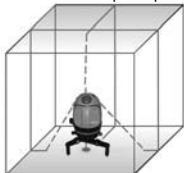
Vertical line



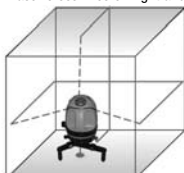
Front vertical and plumb point



Laser cross lines on right and left sides



Plumb reference formed by the laser cross line on ceiling and plumb down point



Front laser cross line



Simultaneously supply four laser crosslines on the front, left, right, and top



Operate with detector to extend working distance

11. Care and Handling

Care must be taken to maintain the accuracy of the instrument.

- After each use, the instrument should be wiped clean and kept in its carrying case.
- Remove dust from the lenses with a soft brush or a nonabrasive wipe. Never touch the lenses with your fingers.
- Store the instrument in a dust-free area with low humidity.
- A bag of silica gel dryer is included with each instrument.

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® 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® 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.

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.

