

JLX[®] 40-6681 & 40-6682 Operator's Manual

Thank you for purchasing this JLX 180° crossline laser. JLX tools are Johnson's professional tools, designed to help you work faster, safer, and smarter.

SAFETY INFORMATION

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.

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

ATTENTION:

- Read all instructions before operating this tool. Do not remove any labels from the tool.
- Do not project the laser into the eyes of others.
- Do not set up laser tool at eye level, or operate the tool near reflective surfaces, as the beam can be projected into your eyes or 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 - serious eye injury may result.
- Always turn off the laser tool when not in use or when left unattended for any period of time.
- Disassembly or repair by unqualified persons will void the warranty.

SAFETY LABEL LOCATIONS



MAIN COMPONENTS OPERATING PANEL

LASER EMITTING WINDOWS

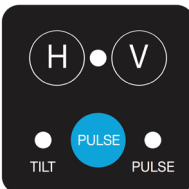


PENDULUM LOCK

TRIPOD THREAD (UNDERSIDE)

BATTERY DOOR

OPERATING PANEL OVERVIEW



H: Enables/disables the horizontal laser beam.

V: Enables/disables the vertical laser beam.

PULSE: Enables pulse mode, so the laser can be used with a detector.

INSTALLING/CHARGING BATTERIES

Model 40-6682 requires 4 "AA" alkaline batteries, while model 40-6681 uses either the internal Li-Ion battery pack or 4 AA's. When using AA's, always use the alkaline battery holder and ensure correct battery polarity.

40-6681 LI-ION CHARGING: Remove the battery from the laser and plug the charger directly into the battery's charge port. The charger will illuminate red to indicate charging, then change to green to indicate fully charged.



UNLOCKING THE PENDULUM

The pendulum lock secures the laser during transport to prevent damage to the self-leveling mechanism. It also enables the laser to be used at any angle in manual mode. To lock the pendulum, rotate the pendulum lock switch to the **OFF** position, indicating the laser will be powered off. To unlock the pendulum and allow it to self-level, rotate the switch to the **ON** position, indicating the laser can be powered on in self-leveling mode.



OPERATING THE LASER

- Insert batteries. See INSTALLING BATTERIES.
 - Install the laser on a tripod, the included magnetic wall mount bracket or other stable surface.
 - Unlock the pendulum to use in self-leveling mode. Lock the pendulum to use in manual mode. See UNLOCKING THE PENDULUM. In manual mode, the **TILT** LED will illuminate to alert you to that the laser is not self-leveling.
 - Power on or off each individual laser by pressing **H** for the horizontal beam and/or **V** for the vertical beam. If you do not need both beams for your work, disabling the unneeded beam significantly extends the life of the battery.
 - Press **PULSE** at any time to enable pulsed operation, which makes the beam detectable by compatible laser detectors. The **PULSE** LED will illuminate when in pulse mode.
- Note:** For information about laser detector compatibility and operation, contact Johnson or your local Johnson dealer.
- When you have completed your work, lock the laser pendulum and store the tool in its provided case.

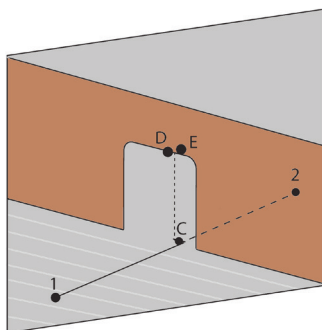


CHECKING ACCURACY

Before starting any critical work, check your laser for accuracy.

PLUMB ACCURACY:

- Position laser at P₁ 10' from a doorway.
- Mark beam at P₁.
- Mark point P₂ 20ft away.
- Mark points C on the floor under doorway and D on doorway.
- Move laser near P₂. Aim the beam through P₂, C and P₁. Mark point E next to D on doorway.
- If the distance D to E < 1/16" for a 10' doorway, your plumb accuracy is within specification.



HORIZONTAL ACCURACY:

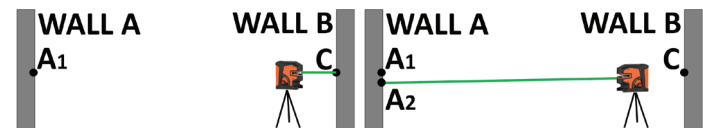
Check accuracy using two walls 15' apart.



1: Set laser next to Wall A. Mark beam height on Wall A as point A₁.



2: Rotate laser 180°. Mark beam height on Wall B as point C.



3: Set laser next to Wall B and adjust beam to height C.



4: Rotate laser 180°. Mark beam height on Wall A as A₂.

5: Measure the vertical distance between A₁ and A₂. If this distance is smaller than 1/8" at 20', your horizontal accuracy is within specification.

NOTE: If your laser needs non-warranty service or calibration, return it to a Johnson authorized service center for repair.

TROUBLESHOOTING

- **Tool does not power on or remain on:** Replace batteries. Check battery polarity.
- **Laser flashing or emitting audible tone:** Laser is outside of its self-leveling range.
- **Battery light flashes, laser appears dim:** The batteries have depleted. Replace or recharge the batteries.
- **Laser does not self-level:** Unlock the pendulum. See UNLOCKING THE PENDULUM.
- **Laser is not detectable by a laser detector:** Ensure pulse mode is enabled. Ensure the detector is compatible with the laser's wavelength and is meant to detect pulsed laser lines. Contact Johnson or your local Johnson dealer for help in choosing a suitable laser detector to use with your laser.

SPECIFICATIONS

Laser (40-6681) (40-6682)	Class IIIa, <5mW, 520nm Class IIIa, <5mW, 635nm
Accuracy	±1/8" @ 35'
Interior Range	Up to 200'
Self-Leveling Range	±3°
Power Supply	Li-Ion or 4xAA (40-6681) 4xAA (40-6682) [†]
Battery Life	6 hr (40-6681)* 20 hr (40-6682)**
Operating Temp	14°F to 113°F
IP Rating	IP54
Weight	1.3 lb
Dimensions	4 1/2" x 2 3/16" x 4 1/4"

*As tested with included Li-Ion Battery

**As tested with alkaline AA Batteries

[†]40-6682 optional Li-Ion battery pack (Item 40-6998) and charger (40-6999) sold separately - see website for details.

PRODUCT REGISTRATION

Please register your product within 30 days of purchase. Registering ensures we have your information on file for warranty service even if you lose your receipt and lets us contact you if there is ever a product recall. We will never sell your information and will only send you marketing information if you opt-in.

To register, scan or click:



www.johnsonlevel.com/register

PRODUCT WARRANTY

Johnson Level & Tool offers a three-year limited warranty on this product. You can obtain a copy of this warranty on our website or by contacting our customer service department. The limited warranty contains various limitations and exclusions.

Do not return this product to the place of purchase. Non-warranty repairs and calibration must be done by an authorized Johnson service center or the warranty will be void. A service center list can be found on our website.

Contact us for an RMA number before sending any product in for service. Proof of purchase is required for warranty service.

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. If you experience problems with this product, please contact us.

Email: service@johnsonlevel.com

On the Web: www.johnsonlevel.com

In the US: 888-9-LEVELS (888-953-8357)

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