Thank you for purchasing this Electronic Horizontal & Vertical Self-Leveling Rotary Laser Level from Johnson. This tool features:

- Dual-slope
- Tilt indicator
- Scan mode
- Visual/audible out-of-level alarms
- Split beam for orthogonal layout

### **Typical Applications Include:**

- Excavation/Grading
- Concrete Flatwork/Form Layout
- Drywall Track Installation
- Tilt-Up Wall Installation
- Landscaping
- Ceiling & Wainscoting Installation
- Post & Pipe Installation



#### **GETTING STARTED**

1. Insert the supplied batteries. If rechargeables are used, ensure they are fully charged. The laser can be operated either by the keypad or the remote control. Note, after 30 minutes of inactivity the laser will stop receiving remote control signals to save power. Power it on from the keypad to start receiving remote signals again.

- 2. Attach the laser to a tripod or other stable surface.
- 3. Tap (1) to power on the laser. The laser will self-level and rotate.
- 4. Tap to adjust the rotational speed.
- 5. Tap to turn off the laser after use.
- 6. The laser will flash and beep if out of its self-leveling range. Relocate the laser to a more level surface or adjust the tripod legs if this occurs.

**Pro Tip:** For best results, use faster speeds with a detector, and slower speeds when working indoors.

#### SINGLE-AXIS SLOPE MODE

Single-axis slope mode angles the laser beam in either the X or Y axis. If the laser is disturbed, it will re-level the non-sloped axis while maintaining the slope on the sloped axis.

- 1. Press and hold for 3 seconds to enable single-slope mode.
- 2. The X-LED will be solid and the Y-LED blinking, indicating slope can be set for the X axis. Press again to toggle axes.
- 3. Use the slope buttons or to adjust slope. Tap for small adjustments; press and hold for larger adjustment.

**Pro Tip:** Set a specific slope using a grade rod and detector.

- 1. Set the detector a known distance from the laser. Find grade.
- 2. Raise/lower the detector the required amount, then adjust the slope until the detector reads the beam.
- 3. For example, to slope 1/4" per 10', set the detector 10' from the laser and find grade. Lower the detector 1/4" and slope the laser beam until the detector locates the beam again.

# **TILT INDICATOR**

The tilt indicator disables the laser if it's bumped while operating, preventing you from taking inaccurate measurements.

To enable the tilt indicator:

- 1. With the laser powered, press 🤧
- 2. The Tilt Mode LED will flash for 30 seconds. During this time, the laser will automatically re-level and restart if bumped. This gives you time to make any necessary final adjustments to the laser.
- 3. After 30 seconds, the Tilt Mode LED will remain on, indicating Tilt Mode is active. Any disturbance to the laser will cause it to stop spinning and flash to alert you.
- 4. Reset the laser after a tilt event by pressing or exit tilt mode be pressing.







## **DUAL-AXIS SLOPE MODE**

Dual-axis slope mode angles the laser beam in X and Y directions. for example when sloping a concrete slab towards a single corner. Dual-slope mode may be used in both horizontal and vertical modes. Vertical slope mode can speed up the process of establishing reference lines.

When in dual-slope mode, the tilt indocator will not function. Ensure the laser is not bumped while in dual-slope mode.

To enter dual-slope mode:

- 1. Tap (a) on the laser or remote to start dual-slope mode.
- 2. The X axis indicator will blink. Use and to adjust the slope in the X axis. Tap for minor adjustments, or press and hold for larger adjustments.
- 3. Tap (a) on the remote to toggle axes and set slope in the Y direction. The Y-axis indicator will blink. Use and to adjust the slope in the Y-axis.
- 4. If the laser exceeds its slope range, the rotation will stop, the laser will flash, and the alarm will sound. If this happens, reduce the slope in either axis until the laser resumes operation.
- 5. Exit dual slope mode by holding for 3 seconds. The laser will self level and begin to spin horizontally or vertically.

**Pro Tip:** Establish a vertical reference line between two distant points easily by using slope mode. Typically a two-person job, slope mode simplifies this to a quick one-person setup.

- 1. With the laser vertical, position the laser over the near point, and aim it close to the far point.
- 2. Stand at the far point with the remote, and adjust the slope until the laser passes directly through the far point.
- 3. Use the detector to lay our your interim points like normal.

### SCAN MODE

Scan mode can be used to simulate a laser line or to emit a laser dot. Both modes increase the visibility of the laser when working without a detector.

While the laser is rotating, press to change from a rotational laser to a long laser line, short laser line, or dot.

Rotate the line or dot using for





To exit scan mode, press (2). The laser will begin to rotate normally.

# **USING A DETECTOR**

A laser detector locates the beam when your eye can't. This is extremely useful outdoors, over long distances, or whenever your eve can't see the laser. Your laser may have included a detector. or you can use any Johnson rotary laser detector appropriate for vour color laser.

Specific operation of each Johnson laser detector varies. although all detectors work on a similar operating principle. Consult your operator's manual for specific details on your particular model, or use the guide below for a general detector overview.

- 1. Mount the detector and power it on.
- 2. As the laser beam passes over the detecting window, the detector will indicate on grade, above grade, or below grade using lights, audio, and/or the LCD display.
- 3. Move the detector as indicated by the arrow on the display to find grade.
- 4. The detector will alert you to on-grade with audio or visual cues - typically a green light or a solid tone.
- 5. Respect the published range of your laser! Beyond the published range, the detector may not provide an accurate reading.



