

# **10HN50N** 40-6780 Line Laser Detector Operator's Manual

Thank you for purchasing this Johnson line laser detector, model 40-6780. This detector is the fastest way to locate red beam line laser signals in bright locations or over long distances where it's difficult to see the laser beam with the naked eye.

#### This laser detector features:

- LCD display
- LED indication of beam position
- Audio indicator with volume control
- Auto-off timer
- Grade rod clamp
- Dust and rain resistant construction

## High accuracy:

- 0.019" from 0' to 50'
- 0.039" from 50' to 100'
- 0.059" > 100"

# **GETTING STARTED**

- 1. Ensure the line laser you are using has a pulse mode operation: otherwise it will not be detectable. See your laser's operator's manual for details. Not all line lasers are compatible with laser detectors.
- 2. Insert the included 9V battery. See "INSERTING BATTERIES."
- 3. Attach the detector to the included clamp (if using a grade rod) or remove the clamp if using the detector on a standalone basis.
- 4. Press to turn on the detector.
- Enable or disable the audio indicator by pressing 🔍
- 6. Operate the detector. See "USING THE DETECTOR."
- 7. When you are finished using the detector, power it off by pressing (1). This detector will also automatically power off after 6 minutes of inactivity (no buttons pressed or laser signals received).

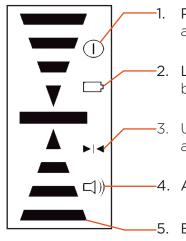
**NOTE:** If the detector battery is low, the low battery indicator will flash to indicate the battery should be replaced soon.

## **INSERTING BATTERIES**

- 1. Remove the battery cover by depressing the retaining tab on the bottom edge of the battery door and lifting the cover off.
- 2. Insert a 9V battery following the indicated polarity printed inside of the battery compartment.
- 3. Replace the battery cover and, if desired, replace the grade rod clamp.



## INTERPRETING THE LCD DISPLAY



POWER ICON - Indicates the detector is on and ready to receive laser signals.

2. LOW BATTERY INDICATOR - Indicates the battery needs to be replaced.

-3. Used on select models only. This indicator is always illuminated on this model.

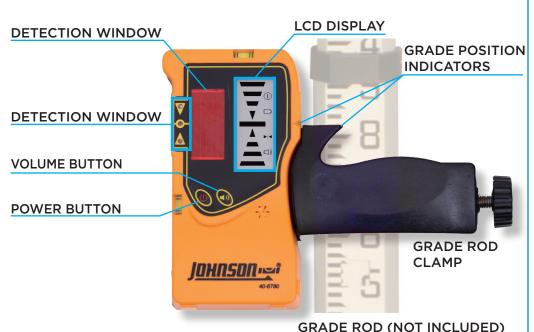
4. AUDIO - Indicates sound is enabled.

5. BEAM LOCATION INDICATOR - Indicates the direction to move the detector to find the laser beam. See "USING THE DETECTOR".





## **USING THE DETECTOR**



1. Follow the instructions in "GETTING STARTED" to prepare the detector for use. Position the detector so the detection window is facing the laser and nothing (including your own body) is in between the detector and the laser.

**TIP:** Be cautious of laser reflections from windows and high gloss surfaces that can cause laser reflection and erroneous signals.

- 2. Move the detector perpendicular to the plane of laser light until you begin to locate the beam. The detector will beep (if sound is enabled), and the LCD beam location indicator will appear when the laser passes through the detection window. If you're having trouble finding the beam initially, make sure you are using a slow, steady motion to move the detector and that the laser is in pulse mode.
- 3. Continue to move the detector up or down until you locate the beam. You will receive both visual cues and audio cues (if enabled) regarding which direction to move the detector to locate the beam:



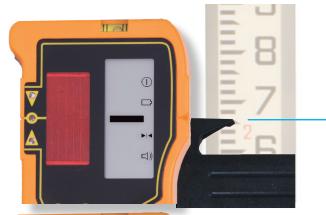


ON GRADE
(SOLID TONE)

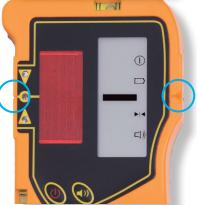
4. Use the grade position indicators to read or mark the position of the laser.

**TIP:** Use care when operating the detector in the vicinity of other lasers - laser signals can be detected over very long ranges.

**IF USING A GRADE ROD:** Read the top edge of the grade position indicator on the grade rod clamp (indicated by the blue line in the image below). In this image of a ft/100's (engineer's scale) grade rod, the grade reading would be 0.67'.



0.67



#### IF NOT USING A GRADE ROD:

Read grade position using the grade position indicators on the housing of the laser detector (shown with the blue circles in the image to the left).

For your convenience, an indent in the housing will help locate a pencil, marker or other marking tool so that you can mark the grade position directly on your work surface.

