

| 1876 Series Digital Levels Quick Start Guide (1876-2400 • 1876-4800)

Thank you for purchasing this Johnson digital level! This level helps you accurately determine plumb, level or any angle in between perfect for building ramps, setting drainage pitches and more!



This digital level features:

- Accuracy of 0.10° (at 0°/90°)
- Accuracy of 0.20° for all other angles
- Reads in units of in/ft, mm/m, degrees and percent
- Angled backlit display for easy reading
- IP54 dust and water resistance
- Hold and reference modes

LCD SCREEN & BUTTON OVERVIEW



ON/OFF Powers on/off the level

SOUND Enables/disables sound

Sets the temporary zero reference

MODE Changes the displayed unit or auto shutoff timer

IGHT Enables/disables the backlight

Freezes the current screen reading

Initiates calibration mode

INSTALLING THE BATTERIES

- 1. Always use fresh batteries (2xAAA).
- 2. Use a #1 Philips screwdriver to remove the battery cover.
- 3. Insert the battery according to the polarity indicated on the level and in the diagram below.
- 4. Replace the cover do not over-tighten the screw.



GETTING STARTED

- Insert fresh batteries see "INSTALLING THE BATTERIES".
- 2. For best results, calibrate your level prior to each use. See "CALIBRATION PROCEDURE" for details.
- 3. Power on the digital level by pressing 0\\0\forall
- 4. Enable or disable sound by pressing SOUND.
- 5. Set your operating units by pressing MODE
- 6. Enable the backlight by pressing LIGHT. The backlight will automatically turn off after 30 seconds of inactivity. Press any button or move the level to re-enable the backlight.
- 7. Set the desired auto shutoff timer by pressing and holding MODE. The LCD will indicate "5" for 5 minutes or "2H" for 2 hours.
- 8. Set a temporary zero reference by pressing RF. See "SETTING A ZERO REFERENCE". To exit reference mode, press REF again.
- 9. To hold a measurement, press HOLD. To return to normal operation, press HOLD again.
- 10. During operation, the level indicators will show which direction the digital level must be tilted to achieve a reading of zero:







11. The audio alert will increase in speed as you approach closer to zero, and turn into a solid tone when you have achieved zero.

12. To power off the level, press 0\\0\formalf



SETTING A ZERO REFERENCE

Reference mode temporarily sets the digital level's current reading to zero without changing the calibration of the digital level.

Reference mode is ideal to speed up your work in a variety of scenarios:

- 1. When taking repeat measurements, such as checking multiple ramps for ADA compliance, setting a consistent drainage slope, or adjusting concrete formwork at multiple points, reference mode can be used to make the desired target "zero". Then, a reading of "zero" in reference mode means you have achieved your desired slope.
- 2. When trying to find the difference between two slopes, reference mode can eliminate the mathematics and simplify the task. Set the level on the first slope, enable reference mode, and read your second slope. The displayed value is the difference between the angles.
- 3. When trying to find a relative angle on an unlevel surface, such as setting a blade angle on a saw that is setting on non-level ground, reference mode can compensate for the angle of the ground. Using reference mode, you can set the blade angle directly without the need to compensate for the non-level ground.

To enter reference mode, press **REF**. The digital level will set the current measurement to "0.0" or "0 in/ft", and all measured angles will be relative to this setpoint.

To exit reference mode and return to normal operation, press REF

CALIBRATION PROCEDURE

Calibration is quick and easy, and is the best way to ensure your level is reading consistently every time you use it. We recommend calibrating at the start of each critical job, or when the level is subjected to drastic changes in temperature (such as going from a cold car to a warm jobsite).

To calibrate your digital level:

- 1. Place the level against a wall so that the bubble in the horizontal vial is in the center of the two indicator marks and the LCD is facing you.
- 2. With the level powered ON, press and hold (AL) for three seconds.
- 3. The LCD will flash "CAL" while calibration is in progress.
- 4. If calibration is successful, the LCD will briefly indicate "rdy" and return to normal operation.
- 5. If the level fails to calibrate, it will display "Erro" after the calibration process. If this happens, repeat the calibration procedure. The most common reasons the level will fail to calibrate include:
 - Moving the level during calibration
 - The level is too far from its factory zero-point (not leveled)



CALIBRATION POSITION

TROUBLESHOOTING: "Erro" MESSAGE

If this digital level is tilted past approximately 30° forward or backward (in the non-operational direction), "Erro" will be displayed on the screen. To return to normal operation, bring the level back to within 30° of its standard operating position.

