

The calibratable ULTRALEVEL model is an electronic level that is user friendly with recalibration. It can allow the user to calibrate the level to any small angle as desired. When used in such a manner, the ULTRALEVEL will give a “level” indication when inclined to the desired angle.

A. HOW TO CALIBRATE THE ULTRALEVEL

1. Remove plugs from the two calibration holes on the front of the unit.
2. To calibrate the level axis, place the ULTRALEVEL on a stable, previously leveled surface.

NOTE:

- a. The more accurate the reference surface, the more accurate the calibration will be. For a quick calibration, the unit may be placed on top of a high quality spirit level and the bubble centered. To return the unit to original factory specifications, it must be calibrated on a flat, stable surface which has been leveled with a precision level to within $\pm 0.025\text{mm/Meter}$.
- b. If desired, the reference surface may be inclined at any angle between $\pm 35\text{mm/Meter}$. When calibrated on an inclined surface, the unit will give a “level” indication upon reaching that inclination. When finished using the ULTRALEVEL in this offset mode, be sure to recalibrate it on a level reference surface.
- c. Insert a small, straight bladed screwdriver through the lower calibration hole and turn the adjustment fully clockwise. Now turn it back slowly counterclockwise until the “level” indication (bar, or flat line) appears. If you turn it too far (past the “level” indication), turn it back clockwise and begin again. It is important for best results that you always approach the level calibration starting from a clockwise position.

NOTE:

The adjustment is very sensitive, and it may take a few tries before obtaining a good adjustment.

- d. To calibrate the plumb axis, place and hold the level against the selected plumb reference with the plumb arrow on the label facing up. Again, this surface must be stable and accurate.
- e. Insert the screwdriver through the upper calibration hole which is on the right side in this orientation. Turn the adjustment fully counterclockwise. Now turn it back slowly clockwise until the “plumb” indication just appears. Again, if you turn it too far (past the “plumb” indication), turn it back counterclockwise and begin again. It is important for best results that you always approach the plumb calibration starting from a counterclockwise position.
- f. Replace plugs in the calibration holes.

B. TYPICAL CUSTOMER QUESTIONS

1. If the unit is left in freezing conditions, and then “thawed” out, will it still work accurately?

Yes, it should.

2. How does the sensor work? How does it sense “level”?

Proprietary information.

3. How accurate is the UltraLevel in the 10” that it sits? Please provide answer in thousandths of an inch.

Accuracy shown on sell sheet is: 1/32 in. over 3 ft. To convert, see the following formula:

$.03125 \text{ divided by } 36 = .0086 \text{ round up to } .009 \text{ of an inch.}$

in 10 inches

Window width is 6 arc minutes (1/60 of a degree = 1 minute)

Note: VideoLevel window width is 4.5 arc minutes Accurate to .008 of an inch over 2’

LaserVision .006

LaserVision is the most accurate of the three, VideoLevel is the second most, and the UltraLevel is the third most accurate.

4. What does it mean when the bar and arrows in the display are flashing?

This is a low battery indication. -

5. What does it mean when there is a “spot” of black in the corner of the screen?

This would indicate that the LCD display is going bad. Return for replacement.

INSTRUCTION ADDENDUM

ULTRALEVEL™ FIELD CALIBRATION PROCEDURE

A very important feature of this ULTRALEVEL electronic level is its ability to be recalibrated by the user, allowing the unit to be restored to factory accuracy at any time. This feature also allows the user to calibrate the level to any small angle such as the desired slope of a drain pipe. When used in such a manner, the ULTRALEVEL will give a “level” indication when inclined to the desired angle. Below is the simple calibration procedure:

1. Remove plugs from the two calibration holes on front of unit.

2. To calibrate the level axis, place ULTRALEVEL on a stable, previously leveled surface.

NOTE: 1) The more accurate the reference surface, the more accurate the calibration will be. For a quick calibration, the unit may be placed on top of a high quality spirit level and the bubble centered. To return the unit to original factory specifications, it must be calibrated on a flat, stable surface which has been leveled with a precision level to within $\pm 0.025\text{mm/Meter}$.

2) If desired, the reference surface may be inclined at any angle between $\pm 35\text{mm/Meter}$. When calibrated on an inclined surface, the unit will give a “level” indication upon reaching that inclination. When finished using the ULTRALEVEL in this offset mode, be sure to recalibrate it on a level reference surface.

3. Insert a small, straight-bladed screwdriver through the lower calibration hole and turn the adjustment fully clockwise. Now turn it back slowly counterclockwise until the “level” indication (bar, or flat line) appears. If you turn it too far (past the “level” indication), turn it back clockwise and begin again. It is important for best results that you always approach the level calibration starting from a clockwise position.

NOTE: The adjustment is very sensitive, and it may take a few tries before obtaining a good adjustment.

4. To calibrate the plumb axis, place and hold the level against the selected plumb reference with the plumb arrow on the label facing up. Again, this surface must be stable and accurate.

5. Insert the screwdriver through the upper calibration hole which is on the right side in this orientation. Turn the adjustment fully counterclockwise. Now turn it back slowly clockwise until the “plumb” indication just appears. Again, if you turn it too far (past the “plumb” indication), turn it back counterclockwise and begin again. It is important for best results that you always approach the plumb calibration starting from a counterclockwise position.

6. Replace plugs in the calibration holes.