

#4022-12 ALDON DIGITAL TRAVELING TRACK LEVEL

For use on AL-102 Rolling Track Gauge
And For use in Hi-Rail Vehicles

On/Off

The instrument is powered by a single push of the on/off BUTTON. Power is removed by a second push of the button. This button gives a reading referenced to gravity.

Easy-to-Read Liquid Crystal Display (LCD)

The display is in inches, but represented by the degree symbol ($^{\circ}$).



Indicates counterclockwise rotation from level.



Indicates clockwise rotation from level.

Lo Bat

LO BAT is displayed when the battery voltage drops below 7 volt. The battery should be replaced when this condition exists. The instrument will operate approximately 120 hours with a standard 9-volt battery. To change the battery, remove the two screws on the back cover and remove the cover. When the new battery is installed on the battery clip, carefully stow the battery clip wires and replace the cover and its retaining screws.

Do Not Drop the Instrument

It is water resistant, however, it cannot be immersed in liquids or be left in the rain or other damp environment.

Procedure

Vehicle must be on known level track before starting to take readings.

Push ON button.

To select degrees ($^{\circ}$):



Push the $^{\circ}$ IN/FT button as many times as necessary to see the degree symbol.

This ($^{\circ}$) will give you reading in inches.



Tilt on Vehicle



To correct for tilt. Press calibrate for 2 seconds, until symbol CAL 1 appears.

Followed by the flashing angle measurement. It will blink slowly.



Press CALIBRATE until symbol CAL 2 appears.

It should now read 0.0



Now you are ready to proceed. If the tenths are flashing too fast to be meaningful, it will be necessary to stop for an accurate reading. **Two seconds are required for the instrument to settle.** The range on curves exceeds 10 inches of elevation.

Note:

To conserve power the digital display shuts off automatically if it is not jostled or moved within a six to eight minute period. HOWEVER, the calibration is not lost, just push the "ON" button again to continue.

Recalibrating

To recalibrate takes less than 10 seconds. Remove the level from its holder and place it on a flat surface (which does not have to be level) but within 10 degrees of level, aligning edge of level with straight edge of the flat surface. The display should be facing you. You do not need to change the setting. Press CALIBRATE button, holding button down until the symbol "CAL 1" appears followed by the angle measurement itself. They blink slowly. Rotate the level 180° so display faces away from you. Be sure edges are again aligned. Press CALIBRATE button again the symbol "CAL 2" appears. That's it!

Beeper

A push on this button will activate the beeper which sounds when level is reached.



Troubleshooting Guide

Problem	Reason	Solution
Level does not turn on.	Battery dead or battery connections are not tight or have become disengaged.	Check battery connection.
Level does not automatically shut off after five minutes.	Sensor Module is being moved or jostled.	Keep unit stationary for five minutes or more; or turn module off using On/Off button.
Level does not measure accurately.	Level has not been recalibrated recently, or has not been recalibrated correctly.	See Calibrate button, and follow appropriate recalibrating steps closely.
Calibrate button does not work.	Not pressing calibrate button for a sufficient time.	Push calibrate button down until the display reading appears.
Difficult to select desired mode or range setting.	°%/In/Ft button is being pressed too long	Release button as soon as desired setting appears.
CALIBRATE button does not work.	Not pressing CALIBRATE button for a sufficient time.	Push CALIBRATE button down until the display reading changes.
Display keeps flashing.	The CALIBRATE button has accidentally been pressed.	Press the CALIBRATE button again or turn level off. Repeat the recalibrating procedure.
Display reads "ERR" or "CAL".	Software diagnostics code.	Turn the module off, then on. If display continues to read "ERR" or "CAL", call Customer Service at 1-800-762-7853.
Button sticks.	Dirt lodged between button and Sensor Module housing.	Hold module with display facing downward. Press button repeatedly to dislodge dirt.
Battery compartment cover does not come off.	Screws not completely disengaged.	Unscrew more thoroughly.

Tech Tips

A Frozen Sensor Module

Have you ever had one of those days...you've got an employee out sick, an accounts receivable file that's getting dangerously thick and a customer comes in and tells you his Level sensor module is defective and will not work because it is frozen on 0.00° or 38°?

Well, never fear! This is one of our most common calls in Customer Service and can be corrected in literally a couple of minutes.

One of the major reasons this problem occurs is that human curiosity prompts people to start pushing **all** the buttons on their brand new Level at the same time—rendering the software within the module at somewhat of a loss as to what its owner really wants it to do! So, the sensor freezes up on 0.00° or 38° so as not to give incorrect readings—a built-in software safeguard.

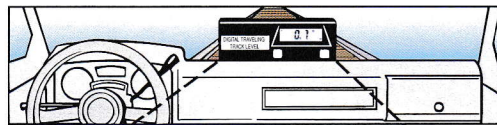
The good news is this can easily be resolved by recalibrating. See instructions herewith. It's a snap!

If you require any assistance with calibrating or anything else at all, please call **Customer Service at 1-800-762-7853**. We're here to help you.

#4022-12 Digital Traveling Track Level

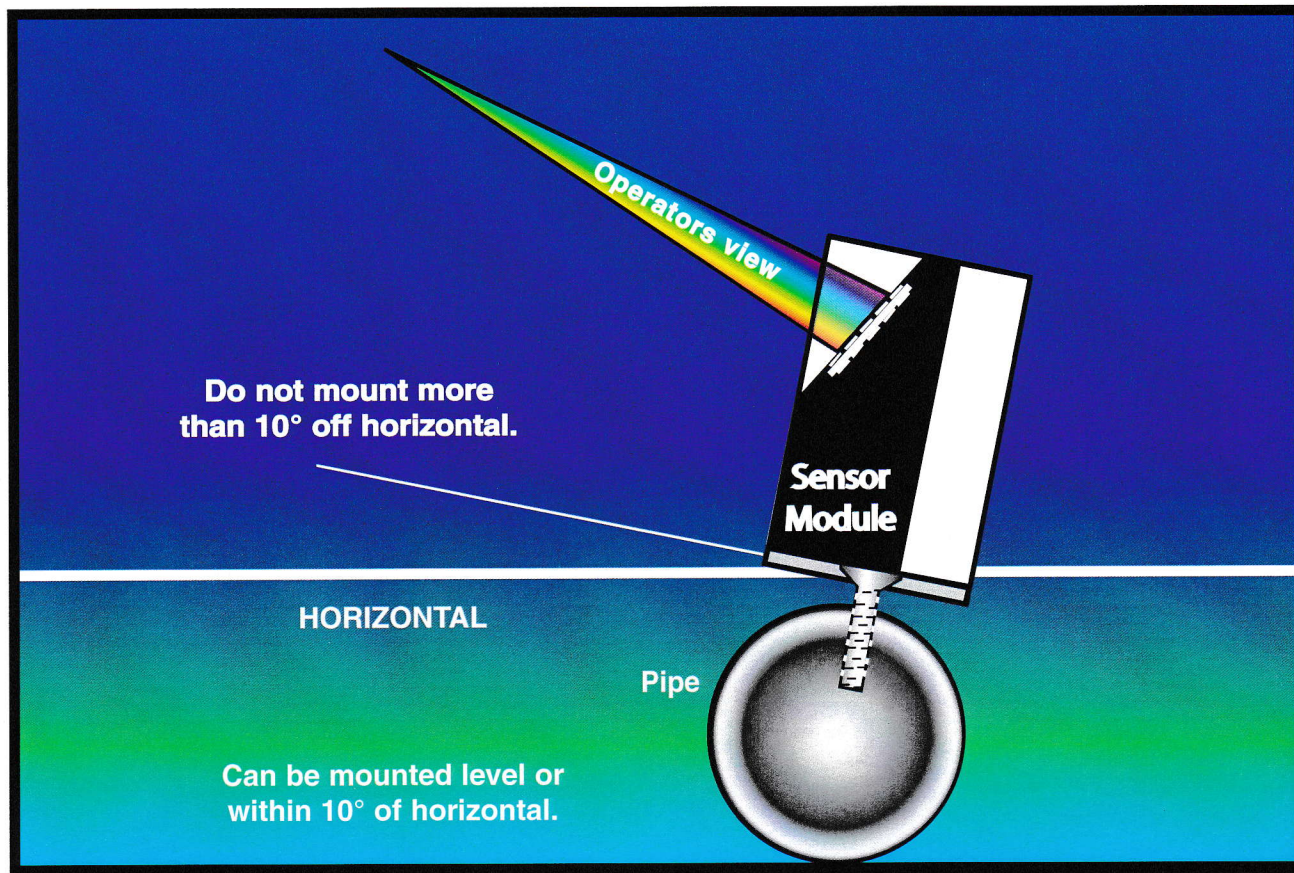
The Digital Traveling Track Level can be used on any rail-riding truck or track geometry equipment to check level conditions of straight or curved track. Mounted on the dashboard, the level can be easily seen from the driver's seat. Level is compact, made of high-impact plastic, with a pre-drilled aluminum mounting base. It consists of a rugged electronic sensor, custom VLSI circuitry and liquid crystal display. Display is in inches and tenths of inches. There is no limit on elevation reading on curves. For very accurate reading, vehicle must be stopped on curve--it takes 2 seconds for display to settle.

1. **ON/OFF...** The instrument is powered by a single push of the ON/OFF button. Power is removed by a second push of the button. this button gives a reading reference to gravity, with no correction for angle or tilt that may be on the vehicle.
2. **TILT...** See instruction herewith for correcting for tilt on vehicle.
3. **HOLD...** By pressing the **hold button the display reading is retained and flashed until the hold button** is pushed a second time.
4. **EASY-TO-READ LIQUID LIQUID CRYSTAL DISPLAY (LCD)...**
The display is in inches. Up and down arrows indicate rotation from level.
5. **LO BAT...** Is displayed when the battery voltage drops below 7 volts. Battery should be replaced when this condition exists. The instrument will operate approximately 100 hours with a standard 9-volt battery.
6. **RECALIBRATING...** See instructions herewith.



Actual size
2" x 6-1/2"

Mounting on Item #4022-10 The AL-102 Rolling Track Gauge Reader



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