DL-502/503

TOPCON

Electronic Digital Level

- One Button Triggers Measurement and Data Storage
- 0.6mm/0.8mm Height Accuracy
- "Wave-and-Read" Technology Guarantees Easy and Accurate Measurement
- Pre-installed Measurement Programs
- Height Difference Measurement
- Inverse Staff Reading for Ceiling Height

DL-502/503 Electronic Digital Level

Quick. Easy. Reliable. No Error. Less Fatigue. Digital Technology Speeds Up All Leveling Tasks!

World's First "Wave-and-Read" Technology

Topcon DL-500 series digital levels maximize work efficiency and minimize human error, providing consistent measurement precision and speed, regardless of operator skill.

Incorporating cutting-edge Random-Bidirectional (RAB) coding technology, an optimized digital processing algorithm, the DL-500 provides exceptional measurement accuracy, stability and speed, under a variety of environmental conditions. Even when the staff surface is partially shaded, or in dim lighting conditions as low as 20 lux, a single button triggers measurement and the DL-500 instantly provides reliable results.

The world's first "Wave-and-Read" technology provides an additional survey style option that allows a rod operator to wave the staff forward and back, instead of keeping the staff plumb. This simpler method is faster, easier, minimizes the fatigue and is just as accurate.

Internal memory stores field data, and can be directly transferred to your computer via serial cable, eliminating human error.

Maximum Reliability! Field-proven Compensator

Incorporating a field-proven pendulum compensator with magnetic damping system, the DL-500 provides the stability you need when working on busy roads or bridges subject to vibrations.

Measures Ceiling Height! Inverse Staff Reading

The DL-500 can read the RAB-code staff in the inverted position. This feature dramatically facilitates height measurement of ceilings, tree branches, road signs, bridges, tunnel crowns, and other structures.

"Wave-and-Read" Technology

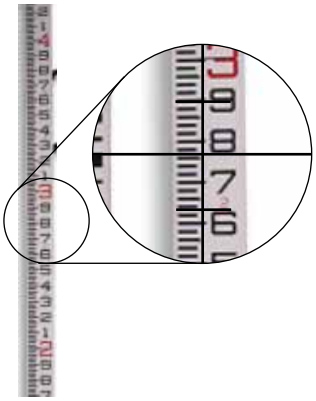
The DL-500 tracks the RAB-code staff when waved forward and back, and automatically reads the correct height. The reading is at the minimum when the staff stands vertically, and the DL-500 automatically finds the least value of staff readings.

Practical Measurement Programs! No Need for Calculators

Onboard programs support various measurement routines such as elevation, height difference, ceiling height, as well as cut/fill and stakeout in horizontal distance.

Single Button Operation!

After focusing on the staff, just press one button. The DL-500 reads height and distance, and stores data. Auto levels require you to read the graduations on the staff with your own eye, but digital technology eliminates misreading and reduces operator's eye fatigue.



PRIMARY FEATURES

Internal Memory and Easy Data Transfer!

DL-500 stores the data for up to 2,000 measurements. DL TOOL software transfers data to your computer in CSV format, via serial cable.

** DL TOOL is available at topconpositioning.com*

KIT COMPONENTS

Standard Configuration

- Digital Level
- Power Cable
- Hex Wrench
- Vinyl Cover
- Digital Manual
- Carry Case
- Battery and Charger

DL-502/503 Electronic Digital Level

SPECIFICATIONS

Telescope	DL-502	DL-503
Magnification	32X	28X
Objective Aperture	45mm (1.78″)	36mm (1.42″)
Resolving Power	3″	3.5″
Field of View	1°20″	
Minimum Focus	1.5m (5.0 ft.)	
Image	Erect	
Stadia Ratio	100	
Compensator (Magnetic Dampened)		
Working Range	±15′	
Height Measurement		
Accuracy (standard deviation for 1km double run leveling)		
Electronic Reading		
Invar Staff	0.6mm	0.8mm
Fiberglass Staff	1.0mm	1.5mm
Optical Reading	1.0mm	2.0mm
Measuring Range	5.3 to 328ft. (1.6 to 100m)	
Environmental		
Water Resistance	IPX4	
Operating Temperature	-4°F to 122°F (-20°C to 50°C)	
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	
Other		
Operating Time	Approx. 16 Hours	
Weight	5.3lbs (2.4kg)	
Size	10.1 x 6.2 x 7.2in (257 x 158 x 182mm)	

For more specification information:
www.topconpositioning.com/dl-500

Topcon TotalCare

This online resource comes with real live people ready to help. Get expert training from Topcon University's large collection of online materials, and expert help directly from Topcon Technical Support.

Access software and firmware updates, current publications, and guidance from the experts at Topcon all right from your computer or mobile device.

Please visit the TotalCare website to learn more.
topcontotalcare.com

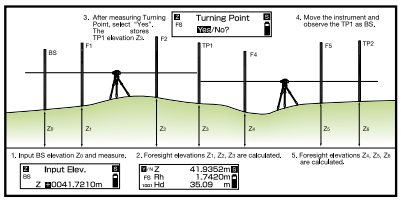
BUILT-IN MEASUREMENT PROGRAMS

DL-500 Series

Pre-installed measurement programs assist various leveling tasks and accompanied calculations.

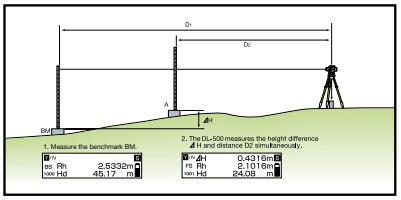
Elevation

Calculates elevation of foresight (FS) with reference to backsight (BS) elevation. Elevation of the turning point (TP) is used for a new backsight, allowing for consecutive leveling.



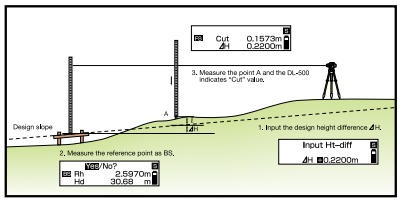
Cut and Fill

Cut and fill stakeout routines facilitate slope work. Measurement can be taken with 0.1mm or 1mm (0.001ft. or 0.01ft.) resolutions.



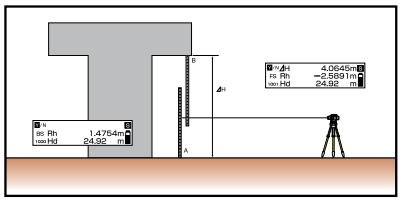
Height Difference

Automatically displays the height difference between backsight (BS) and foresight (FS) in 0.1mm or 1mm (0.001ft. or 0.01ft.) unit.



Ceiling Height

Two measurements provide a ceiling height; one with a staff placed on the ground, the other with an inverted staff put onto the ceiling. Ceiling elevation can also be calculated with reference to the benchmark elevation.



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