

DIGITAL LEVEL

DL-103/103AF



"EASY OPERATION" & "ACCURACY"

TOPCON proudly announces
added to the current "DL s
Our concept with the new
which all users of optical l
Topcon will advance the di

Simple & Easy Operation

Just press the measurement button and the measured value is displayed.

The measurement time is only 2 seconds !

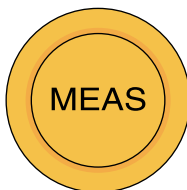
The DL-103/103AF will dramatically improve your productivity in the field, compared to standard leveling procedures.

1. Collimate Staff and focus on.

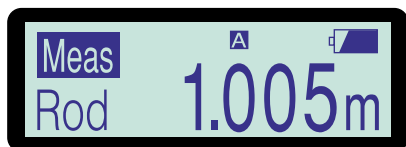


2. Press "Meas" (Measurement) button.

2 Sec.



3. Measured Value is displayed.



No Human Error

The instrument person does not have to read a leveling rod. The DL-103/103AF does it automatically, using a bar code staff.

RS-232C Data-Output

RS-232C port allows data-communication to a data collector or PC. You can compute the leveling data quickly, easily and accurately.



s that the "DL-103/103AF" Digital Levels have been series".

DL-103 is primarily "easy operation" & "Accuracy" leveling instruments are trying to achieve.

Digitalization in leveling with the "DL-103/103AF".



Distance Measurement

Distance can be measured using the bar code staff.

Adjusting Mode

The Adjusting Mode allows the users to maintain good adjustment all of the time. The interactive guidance through all the procedures, will eliminate mis-adjustment

Unique fiberglass Staff

Unique fiberglass staff is compatible with DL-103/103AF. (e.g. 5m)

Easy-Portability & Handling

The compact size & light weight of the DL-103/103AF will allow you to handle it easily and make field use stress free. (2.3kgs/DL-103)

ADVANCED FEATURES OF DL-103/103AF

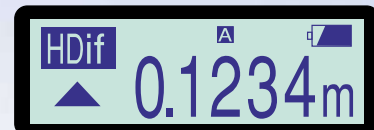
Auto-Focus (DL-103AF)

The DL-103AF allows you to use an "Automatic-Focusing" function. Auto-focus of the DL-103AF eliminates all your manual focusing-procedures ! (Conventional manual focus is selectable)



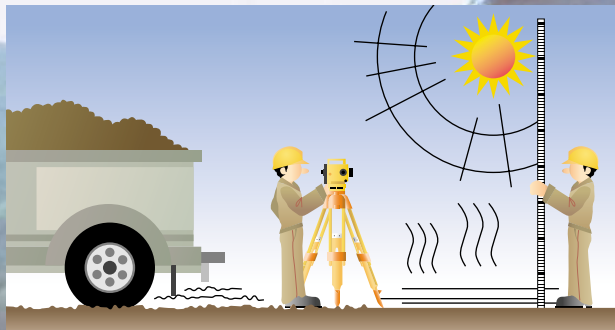
Height-difference mode

The Difference of height between the reference point and other measured points can be calculated and displayed for quick "cut/fill" work.



Environmental Resistance

The DL-103 is designed to resist almost any conceivable situation in the field, such as vibration, shade, rain-conditions etc. (Water-proof : class IPX 6/DL-103)



Continuous 20 hours operation, Power remaining indicator, Auto Cut-Off

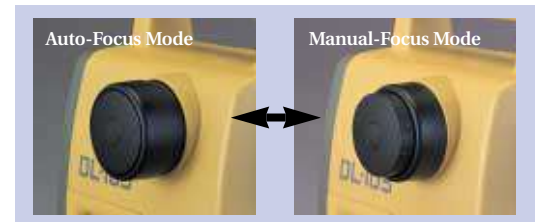
Our low power consumption design enables 20 hours continuous operation in the field. The display of DL-103/103AF keeps you updated on the remaining power, and you can easily change the dry-cell batteries before an unexpected interruption of work. The Auto Cut Off function will prevent wasting power if you do not operate the instrument for a 30 minute span.

SPECIFICATIONS

DL-103		DL-103AF		DL-103		DL-103AF	
TELESCOPE				MEASURING RANGE 2m to 60m (7ft to 197ft)			
Magnification	26×			MEASURING TIME 2 sec.			
Objective Aperture	30mm			CIRCULAR LEVEL SENSITIVITY 10'/2mm			
Field of View	1°30'			OTHERS			
Resolving Power	4"			Display	128×32 dot, Dot matrix LCD with backlight (55.01mm×16.29mm)		
Minimum Focus	0.9m			Data Transmission	RS-232C port provided		
Image	Erect			Key (including power key)	5 keys		
COMPENSATOR				Application Program Rod Height/Difference of elevation			
Working Range	±10'			Timer	Built-in Timer for auto power-off		
Setting Accuracy	0.5"			Horizontal Circle	360° or 400gon		
HIGHT MEASUREMENT				Power Supply AA size dry battery × 4			
Accuracy (Standard Deviation for 1km double run leveling)				Operating Time	20 hours (Alkaline)	8 hours (Alkaline)	
Electronic Reading	±1.8mm w/Glass Fiber Staff			Ambient Temperature Range	-20°C to +50°C (-4°F to +122°F)		
	±2.0mm w/Aluminum Staff			Water Proof	IPX 6	IPX 4	
Optical Reading	±2.5mm			Dimensions	196(H)×158(W)×232(L)mm	196(H)×158(W)×232(L)mm	
Least Count	0.1mm/1mm (0.001ft/0.01ft) selectable				7.7(H)×6.2(W)×9.1(L)inch	7.7(H)×6.7(W)×9.1(L)inch	
DISTANCE MEASUREMENT				Weight	2.3kg	2.4kg	
Least Count	1cm (0.02ft)			(including battery)			
Accuracy (D=Measuring Distance: m)				STAFF			
w/Glass Fiber Staff	±(0.1%×Dm) (D>10m)			Glass Fiber staff SG-3M	Length: 3m [9.84ft] (Slide Type: 2 pcs)		
	±10mm (D≤10m)			Aluminum staff SA-5M	Length: 5m [16.40ft] (Slide Type: 3 pcs)		
w/Aluminum Staff (SA-5M)	±(0.15%×Dm) (D>10m)			Glass Fiber 5m	Length: 5m [16.40ft] (Slide Type: 3 pcs)		
	±15mm (D≤10m)						

STANDARD SET COMPONENTS

- Instrument DL-103/103AF1 pc (with lens cap)
- Carrying Case1 set
- Plastic Rain Cover1 pc
- Silicon Cloth1 pc
- Plumb Bob Set.....1 set
- Hexagonal Wrench.....1 pc
- Instruction Manual.....1 pc
- AA size dry battery.....4 pcs



Selectable Focusing Method (DL-103AF)

• Designs and specifications herein are subject to change without notice.

Important In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.



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