Nikon NE-102 and NE-103 Theodolites

Exceptional Reliability and Ease of Use for Your General Construction Needs

Ease of use, reliability, and durability make the Nikon NE-102 and NE-103 series theodolites a smart choice for your general construction, alignment and layout applications. These affordable instruments, featuring the familiar Nikon quality, are ideal for concrete form alignment, anchor bolt positioning, and steel column erection. The theodolites enable a number of positioning techniques: 90-degree layout, checking angles, alignment and plumb, as well as short range grade work and leveling.

Easy-to-use display and keypad

The ergonomic keypad and display provide easy access to the powerful and accurate



measurement capabilities of the Nikon NE-102 and NE-103 theodolites. Large, easy-to-identify buttons provide one-button operation for key functions. A large text display area makes information easy to read and use on the job. This design provides for a very short learning curve and utilization within a matter of minutes.

Maximum operation time

Standard AA alkaline batteries are the convenient power source for the Nikon NE-102 and NE-103 theodolites.

Operation time on a a single set of batteries is up to 22 hours, and a battery life indicator provides a visual reminder of battery status providing better planning and reduced downtime.



Operation time is also enhanced by display and scope illumination that allows you to keep working outside even in low light conditions. These features can be especially useful near dawn or dusk during the short days of winter.

Tough, reliable and compact

The Nikon NE-102 and NE-103 theodolites are built tough to withstand the harsh environments common to many construction job sites. Resistant to water and dust, these rugged units are designed to reduce downtime for repairs.

The NE-102 and NE-103 are also compact and easy to transport. A small carrying case holds the theodolite, manual, and tools.

Features and Benefits

- Large display and keyboard make it easy to learn and use
- Alkaline (standard AA) batteries with battery life indicator
- Resistant to water and dust to withstand harsh job site conditions
- Small carrying case for easy transport
- Display and scope illumination for longer working hours in low light seasons or conditions
- Superior Nikon optics for exceptional viewing clarity





Nikon NE-102and NE-103 Theodolites

Exceptional reliability and ease of use for your general construction needs

	NE-103	NE-102	
Felescope			
Effective diameter of objective	ø45mm (1.77 in.)		
Magnification	30x		
mage	Erect		
ield of view (at 100m/100 ft.)	1°20' (2.3m/2.3 ft.)		
Shortest focusing distance	0.7m (2.3 ft.)		181
Stadia multiplier constant	100		
itadia additive constant	0		
Reticle illuminator	Provided		
Angle measurement			
Reading system	Photoelectric incremental encoder		
Circle diameter	ø79mm/3.1 in.		
Jnit of reading Minimum digital reading*	Degree/gon/mil (selectable)	stable)	STANDARD
Accuracy (based on DIN 18723)	1/5", 0.2/1mgon, 0.005/0.02mil (sele	clable)	ACCESSORIES
-	5"/1mgon		Carrying case
Automatic vertical compensator	(NE-103 only) Liquid-electric detection		2x hexagonal key
Γγρe Norking range	$\pm 3'$ (out-of-range warning provided)	-	(1.5mm/2mm)
Display		-	Adjustment pin
	Dot-matrix LCD 20 characters x 2 line		6x AA batteries
ype Ilumination	Backlight illumination provided	\$S	
Keyboard	Backlight indimination provided		Operation manua
ocation	Both sides		Dust cover
Optical plummet	Dotti sides		
Magnification	3x		
Field of view	5°		
Focus range	0.5m (1.6 ft.) to infinity		
evel sensitivity			
Plate level	30"/2mm		
Circular level	10 ¹ /2mm		
eveling base			
ype	Detachable		
nternal power source			
ype of batteries	1.5V manganese R6-type (AA) x 6 or	alkaline LR6-type (L40)	
Continuous operating time (at 20°C/68°F)			
With manganese battery (R6)	21 hrs.	22 hrs.	
With alkaline battery (LR6)	47 hrs.	48 hrs.	
Ambient temperature range			
-20°C to +50°C (-4°F to +122°F)			
Dimensions (W x D x H)			
153.5 x 172 x 334mm (6.0 x 6.8 x 13.1 in.)			
Neight			
nstrument	4.6kg (10.1 lbs.)	4.5kg (9.9 lbs.)	
Plastic carrying case	3.9kg (8.6 lbs.)		

North America

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Nikon NE-100 and NE-101 Theodolites

Exceptional Reliability and Ease of Use for Your General **Construction Needs**

Ease of use, reliability, and durability make the Nikon NE-100 and NE-101 series theodolites a smart choice for your general construction, alignment and layout applications. These affordable instruments, featuring the familiar Nikon guality, are ideal for concrete form alignment, anchor bolt positioning, and steel column erection. The theodolites enable a number of positioning techniques: 90-degree layout, checking angles, alignment and plumb, as well as short range grade work and leveling.

Easy-to-use display and keypad

The ergonomic keypad and display provide easy access to the powerful and accurate



measurement capabilities of the Nikon NE-100 and NE-101 theodolites. Large, easy-to-identify buttons provide one-button operation for key functions. A large text display area makes information easy to read and use on the job. This design provides for a very short learning curve and utilization within a matter of minutes.

Maximum operation time

Standard AA alkaline batteries are the convenient power source for the Nikon NE-100 and NE-101 theodolites.

Operation time on a a single set of batteries is up to 22 hours, and a battery life indicator provides a visual reminder of battery status providing better planning and reduced downtime.



Operation time is also enhanced by display and scope illumination that allows you to keep working outside even in low light conditions. These features can be especially useful near dawn or dusk during the short days of winter.

Tough, reliable and compact

The Nikon NE-100 and NE-101 theodolites are built tough to withstand the harsh environments common to many construction job sites. Resistant to water and dust, these rugged units are designed to reduce downtime for repairs.

The NE-100 and NE-101 are also compact and easy to transport. A small carrying case holds the theodolite, manual, and tools.

Features and Benefits

- Large display and keyboard make it easy to learn and use
- Alkaline (standard AA) batteries with battery life indicator
- Resistant to water and dust to withstand harsh job site conditions
- Small carrying case for easy transport
- Display and scope illumination for longer working hours in low light seasons or conditions
- Superior Nikon optics for exceptional viewing clarity





Nikon NE-100 and NE-101 Theodolites

Exceptional reliability and ease of use for your general construction needs

SPECIFICATIONS	NE-100	NE-101	<u></u>
TELESCOPE			
Magnification	30X	30X	125
Image	Erect	Erect	
Field of view (at 100m/100ft.)	1°20'(2.3 m/2.3 ft)	1°20'(2.3 m/2.3 ft)	
Shortest focus range	0.7 m/ 2.3 ft	0.7 m/ 2.3 ft	
Stadia multiplier constant	100	100	10.00
Stadia additive constant	0	0	
Reticule scope illuminator	Yes	Yes	STANDARD
ANGLE DISPLAY	10/20"	5/10"	ACCESSORIES
	2/5 mgon	1/2 mgon	Carrying case
	0.02/0.05 mil	0.02/0.05 mil	2x hexagonal keys (1.5mm/2mm)
H/V ANGLE ACCURACY	10"/3 mgon	7"/2.2 mgon	Adjustment pin
LCD DISPLAY	Dot-matrix	Dot-matrix	6x AA batteries
	20 characters x 2 lines	20 characters x 2 lines	Operation manual
	Backlight available	Backlight available	Dust cover
OPTICAL PLUMMET			-
Magnification	2.2X	2.2X	
Focusing range	Fixed (1.3 m/4.3 ft)	Fixed (1.3 m/4.3 ft)	
Field of view	5°	5°	
ACCURACY OF PLATE LEVEL VIAL	60"/2 mm	40"/2 mm	
ACCURACY OF CIRCULAR LEVEL VIAL	10'/2 mm	10'/2 mm	
DIMENSIONS (W X D X H)	153.5 x 172 x 334 mm	153.5 x 172 x 334 mm	
POWER SUPPLY	6 x AA	6 x AA	
ENVIRONMENTAL	Water and dust resistant	Water and dust resistant	

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