

NEW **N40x Series**
Graphic Total Station



Visualize Takes You Further

- Ultra-large, 4.0 inches color touch screen
- Auto instrument height & guide light *
- Camera for target aiming *
- Ultra-visualized, boosts your efficiency with graph
- Ultra-flexible, send the data immediately by USB, Bluetooth or even mails



N40 Series

N40 Series Total Station

Combined with a wider screen, the new generation N40 total stations are coming with the new-designed onboard system. It is the perfect choice that boost your daily work with those easy-to-use, highly productive and extremely powerful program, which portable for all occasions.

Ultra-Fast and Advanced Accuracy

- 1" and 2" angle accuracy.
- Fast (0.3s) and accurate (1+1ppm/2+2ppm) for distance.

Ultra-Durable and Powerful EDM

- Long-range prism (5000m) and non-prism (1500m) measurements.
- Optimized EDM algorithm enables you to finish the job quick and stable.

Ultra-Visualized Display

- 4.0 inches colour touch screen, contains more information in one page.
- Dual face with backlight.
- Easier entry with numeric keys and fast navigation.
- Quick- access to start key, compensator and customized user keys, which can be opened in any time or in any page.

Ultra-Convenient with Guide Light, Camera and Auto Instrument Height

- Extremely visible, which largely enhanced your working efficiency.
- Extremely practical, to get the instrument height by a simple button press.

Ultra-Flexible Data Transfer

- Freely to transfer your data by internal memory, USB stick, Bluetooth and WLAN.
- Even you can send your data to your partner immediately by email/network when your job is finished on site.





Fully-New Application Onboard

Intuitive onboard application on N40 Series, guided a fluent work flow for your job with easy-to-understand icons and graphics. The fully-new application includes stake out, extensions, COGO, roads, etc.

Main Menu

Modular and iconic interface design, boosts your efficiency with brilliant readability.



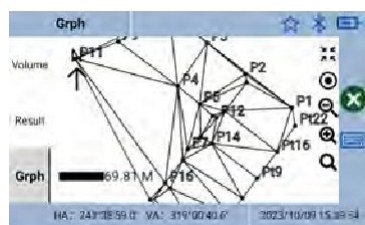
Basic Measurement

Settings like reflector height, instrument height, station and mode can be easily set in the basic measurement page.



Graphic Displays

Each measured point can be linked automatically to generate a sketch intuitively and clearly.



Stake Out

Featured electronic compass, a complete solution for every type of stakeout is included in N40 series total station.



Easier Settings

The settings are hidden in the tool-bar of the screen. For example, you can click the logo to check the current job, or click the time and date to set the it immediately.

Quick Code

Codes are available to be recorded by the direct input, quick codes function or the code list. You can saving point descriptions efficiently and conveniently in the filed.

New COGO

The new Coordinated GeOmetry program on N40 series provides versatile functions like, inverse, traverse, area & girth, volume, intersections, flatness, verticality, 3 points circle, point to line distance and more...

Road

Design a road easily by elements. With N40 series total station, it's available using road program to stake out the road by chainage, increment and offset.

SPECIFICATIONS

	N41	N40	
Angle Measurement			
Accuracy	1"	2"	
Measure Method	Absolute Encoding Disk		
Diameter of Encoding Disk	79mm		
Detection Method	Horizontal: 4-path, Vertical: 4-path		
Angle Unit	360°/400gon/6400mil		
Horizontal 0/Vertical 0	V0/H0		
Distance Measurement			
Laser Class	Laser Class 3R①		
Wavelength	685nm		
Distance Unit	m/ft		
EDM System	Basic Frequency 70-150MHz		
Constant K	Auto Correction, K=0.14/0.2		
Prism Constant	Auto Correction		
Atmospheric Correction	Auto Correction		
Accuracy	Prism	1+1ppm	
	Reflective Sheet	3+2ppm	
	Reflectorless	2+2ppm⑤	
Measure Range	Prism ②	Single: 4000m / Triple: 5000m	
	Prism Enhanced	Single: 5000m / Triple: 6000m	
	Reflective Sheet ③	1700m	
	Reflectorless ④	1500m	
Measure Speed	Prism	Single <1.2s, Repeat <0.5s, Tracking <0.25s	
	Reflective Sheet	Single <1.0s, Repeat <0.5s, Tracking <0.25s	
	Reflectorless	Single: 0.5s-3s; Tracking: 0.25s-3s, max. 10s⑥	
Telescope			
Image	Erect		
Magnification	30x		
Effective Aperture	45mm (DTM: 50 mm)		
Resolution	3"		
Field of View	1°30'		
Minimum Focus	1.5m		
Tube Length	171mm		
Retical Illumination	Adjustable, 4 Levels		
Vial			
Plate Vial	30"/2mm		
Circular Vial	10'/2mm		
Compensator			
System	Dual-axis Liquid-electric Sensor		
Working Range	±6'		
Resolution	1"		
Plummet			
Laser Plummet	Laser Class	Class 2. Red Laser	
	Wavelength	635nm	
	Power	0.5mW	
	Brightness	Adjustable, 5 Levels	
Auto Height **	Measure Range	0.5m-3m	
	Accuracy	±1.5mm@1.5m	
Optical Plummet	Image	-	Erect
	Magnification	-	3x
	Focusing Range	-	0.3m~∞
	Field of View	-	±4°
Guide Light*			
Type	LED		
Wavelength	Red 635nm / Yellow 590nm		
Effective Distance	200m		
Camera (optional)			
Pixel	780,000	-	
Focal Length	16mm	-	
Sight of View	12.5*11.7 Degree	-	
Refresh Rate	11 Frames/s	-	
Depth of Field	2m-∞	-	
Storage	Jpeg	-	
Digital Zoom	1x, 2x, 3x	-	
White Balance	Auto	-	
Brightness	Auto	-	
Display Unit & Keyboard			
Display Unit	4.0 Inches Color Touch Screen		
Resolution	800*480		
Backlight	Adjustable, 10 Levels		
Keyboard	26 Keys, numeric and functional		
Memory			
Internal Memory	32GB		
Data Transfer	USB 2.0 Type A (Max. 256GB), Micro USB, RS-232, Bluetooth 2.0/4.2, Wi-Fi 802.11a/b/g		
Operating System	On-Board Graphic ANDROID		
Power Supply			
Type	LI-ION Rechargeable Battery		
Voltage	7.4V		
Capacity	3900mAh, 29Wh		
Working Time	20 Hours*		
Charging Time	3 Hours		
Others			
Dust and Water Protection	IP 66		
Working Temperature	-20℃~ +50℃		
Storage Temperature	-40℃~ +70℃		
Size	206mm*200mm*353mm		
Weight	6kg		

STANDARD PACKING LIST

Main Unit	1x
Lens Cover	1x
Battery	2x
Charger & Adapter	1x
Reflective Sheet	1x
Rain Cover Micro	1x
USB Cable Tools	1x
Kit	1x
Carry Case	1x
Belt	2x

①EN60825-1: 2007 ②Good conditions: No haze, visibility about 40km. Overcast, no scintillation
 ③Good conditions. With Koda gray card white side (90%) reflective. standard sheet size. 300m under good conditions with koda gray card grey side (18%).
 ④With Kodak gray card white side (90%) reflective. Reflectorless range /accuracy may vary according to measuring objects, observation situations and environmental conditions ⑤Range less than 200m. When the measure range is over 200m, the accuracy will be 5+2ppm. ⑥Typical, under good conditions. Range less than 500m. It also depend on object surface. Maximum less than 10s.

*1: Available on N41, N40X total station
 *2: Available on N41I total station

OPTIONAL ACCESSORIES



ATS-2B Fiberglass Tripod
 NLS-15 Prism Pole
 TK21T Prism Set

You Local Authorized Dealer

SOUTH
 Target your success

SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.
 E-mail: mail@southsurvey.com
 http://www.southinstrument.com