

**NEW** **N40 Series**  
High-Precision Total Station



*Visualize Takes You Further*

- Ultra-large, 4.0 inches color touch screen
- Auto instrument height & guide light \*1
- Camera for target aiming \*2
- 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.





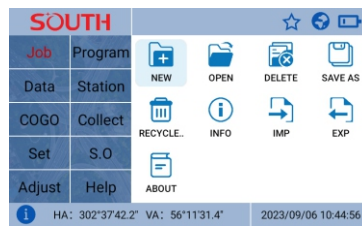
## Fully-New Application Onboard

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.



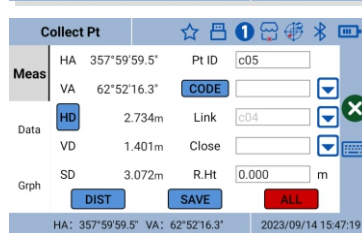
### Main Menu

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



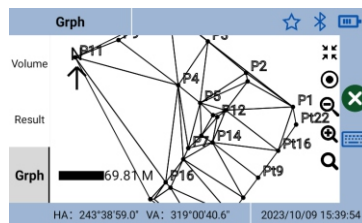
### Basic Measurement

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



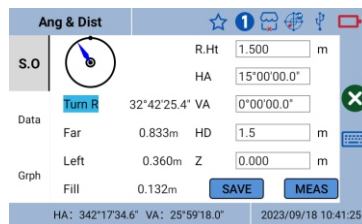
### Graphic Displays

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
<b>Angle Measurement</b>			
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	
<b>Distance Measurement</b>			
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	2+2ppm
	Reflective Sheet	3+2ppm	
	Reflectorless	3+2ppm④	
Measure Rang	Prism ②	Single: 4000m / Triple: 5000m	
	Prism Enhanced	Single: 5000m / Triple: 6000m	
	Reflectorless ③	1500m	
Measure Speed	Prism	Single <1.0s, Repeat <0.25s, Tracking 0.1s	
	Reflective Sheet	Single <1.0s, Repeat <0.25s, Tracking 0.1s	
	Reflectorless	Single <1.0s, Repeat <0.25s, Tracking 0.1s ⑤	
<b>Telescope</b>			
Image		Erect	
Magnification		30x	
Effective Aperture		45mm (DTM: 47mm)	
Resolution		3"	
Field of View		1°30'	
Minimum Focus		1.5m	
Tube Length		152mm	
Retical Illumination		Adjustable, 4 Levels	
<b>Vial</b>			
Plate Vial		30"/2mm	
Circular Vial		8'/2mm	
<b>Compensator</b>			
System		Dual-axis Liquid-electric Sensor	
Working Range		±6'	
Resolution		1"	
<b>Plummet</b>			
Laser Plummet	Laser Class	Class 2. Red Laser	
	Wavelength	635nm	
	Power	0.5mW	
	Brightness	Adjustable, 5 Levels	
Auto Height **②	Measure Range	0.5m-3m	
	Accuracy	±1.5mm@1.5m	
Optical Plummet	Image	Erect	
	Magnification	3x	
	Focusing Range	0.3m~∞	
	Field of View	±4°	
<b>Guide Light*①</b>			
Type		LED	
Wavelength		Red 635nm / Yellow 590nm	
Effective Distance		200m	
<b>Camera*②</b>			
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	
<b>Display Unit &amp; Keyboard</b>			
Display Unit		4.0 Inches Color Touch Screen	
Resolution		800*480	
Backlight		Adjustable, 10 Levels	
Keyboard		26 Keys, numeric and functional	
<b>Memory</b>			
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	
<b>Power Supply</b>			
Type		LI-ION Rechargeable Battery	
Voltage		7.4V	
Capacity		3900mAh, 29Wh	
Working Time		8 Hours	
Charging Time		3 Hours	
<b>Others</b>			
Working Temperature		-20°C~ +50°C	
Storage Temperature		-40°C~ +70°C	
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	1x
Micro USB Cable	1x
Tools Kit	1x
Carry Case	1x
Belt	2x

①EN60825-1: 2007 ②Good conditions: No haze, visibility about 40km. Overcast, no scintillation ③With Kodak gray card white side (90%) reflective. Reflectorless range /accuracy may vary according to measuring objects, observation situations and environmental conditions ④Range less than 300m. When the measurement range is between 300-600 meters, the accuracy will be 5+2ppm, and when the distance is greater than 600m, the accuracy will be 10+2ppm. ⑤Typical, under good conditions. Range less than 500m. It also depends on object surface. Maximum less than 10s

\*1: Available on N41, N40 total station \*  
2: Available on N411 total station

## OPTIONAL ACCESSORIES



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

You Local Authorized Dealer

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SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.  
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http://www.southinstrument.com