

N40 Series

Graphic Total Station



- EDM Trigger Key
- Auto Instrument Height & Guide Light (*1)
- Camera for Target Aiming & Recording (*2)

Class-leading Performance

Graphic Display to Boost Your Daily Work

Featuring a easy-to-use O.S with graphical display, N40 series total station enriches your surveying workflow with visual possibility and productivity. With extreme long-range EDM, quadruple-axis compensator, trigger key and powerful onboard applications, it allows you to work quickly and effectively from the first day.



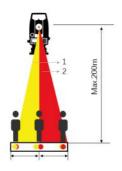
Advanced Accuracy with Long-Range EDM

Up to 1+1ppm, 1" angle accuracy. Or 2+2ppm with 2" angle accuracy. With 1000m reflectorless range, N40 series total station is a powerful tool for all the surveying jobs.



Trigger Key

The measurement can be taken at any time with just a simple button press by EDM trigger key. You can measure and get the result without taking your eye off the telescope.



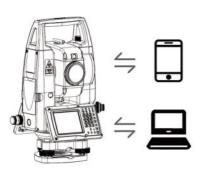
Guide Light *1

With red and yellow flash lights, the guide light is an efficient tool, helping to speed up your working when stake out.



Save Time with Auto Height *1

With integrated LPDM module on laser plummet, N40 minimizes errors and accelerates the setup process onsite. Auto height enables the operator the get the instrument height with a simple press.



Versatile Connectivity

Transfer the data by versatile methods, for example SD card, USB or mini USB. It provides a faster connection to your laptop and Android mobile by Bluetooth.

Also you can export the data to data processing software via serial port.



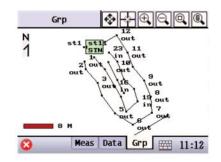
Powerful Applications

Every N40 total station comes with a complete range of powerful applications, like stake out, area 2D&3D, volume, REM, MLM, offset, road.

Graphic Display

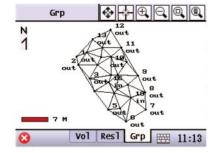
With 3.5 inches high-resolution touch screen, each measured point can be linked automatically to generate a sketch intuitively and clearly.

The easy-to-use graphical interface makes your job more efficient than ever.



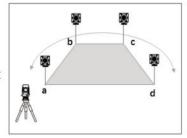
Volume

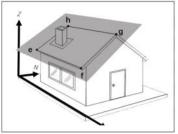
It is used to calculate the volume from points which connected by straights. Those points can be measured, selected or inputted in bulk or individually. With graphic display, N40 provides fluent workflow and brilliant readability for your daily tasks.



Area 2D & 3D

Area program can be projected onto the horizontal plane (2D) or a slope reference plane defined by 3 points (3D), which is widely used in the measurement of inclined surface (e.g. roof) or vertical surface (e.g. billboard).



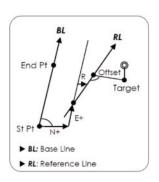


Stake-Out

Featured electronic compass, a complete solution for every type of stakeout is included in N40 series total station. Stake-out function calculates the required elements to find out the stake-out points from coordinates, angles & distance, alignment, lines and reference lines.

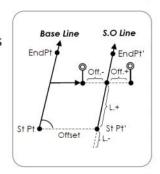
Reference Line

It calculates the coordinate of stake-out point by a known base line, which defined by two know points, and the related offset. The reference line can be offset either longitudinally, parallelly or vertically to the base line, or be rotated around the base point.



Line S.O

Line stake-out calculates the coordinate of stakeout points by a base line, which defined by two know points and the offset distance.



SPECIFICATIONS

| | | N41 | N40 |
|--|-------------------|--|--|
| Angle Measurem | ent | 2" | 4% |
| Accuracy | | 1" | 2" |
| Minimum Reading | | 0.1"/1" | 1"/5" |
| Measure Method | | Absolute Enc | |
| Diatmeter of Encoding Disk | | 79mm Horizontal: 4-path, Vertical: 4-path | |
| Detection Method | | | |
| Angle Unit | | 360°/400gon/6400mil V0/H0 | |
| lorizontal 0/Verti | | V0/H | U |
| | ement | Lacor Clas | e 20 o |
| aser Class | | Laser Clas | |
| Wavelength | | 685nm | |
| Distance Unit | | m/ft | |
| EDM System | | Basic Frequency 70-150MHz | |
| Constant K | | Auto Correction, K=0.14/0.2 | |
| Prism Constant Atmosperic Correction | | Auto Correction Auto Correction | |
| annosperic Corre | Prism | | |
| Accuracy | Reflective Sheet | 1+1ppm | 2+2ppm |
| Accuracy | | 2+2pr | |
| 100 | Reflectorless | 2+2pr | |
| | Prism② | Single: 4000m / | |
| Measure Range | Prism Enhanced | Single: 5000m / | |
| 80 | Reflective Sheet③ | 1200 | |
| | Reflectorless ④ | 1000 | |
| | Prism | Single <1.2s, Repeat <0.5s, Tracking <0.25s | |
| Meaasure Speed | Reflective Sheet | Single <1.0s, Repeat <0.5s, Tracking <0.25s | |
| Tologog wa | Reflectorless | Single: 0.5s-3s; Tracking: 0.25s-3s, max. 10s ® | |
| Telescope | | P | |
| mage | | Erect | |
| Magnifcation | | 30x 45mm (DTM: 47mm) | |
| Effective Aperture | | 45mm (DTM: 47mm) | |
| Resolution | | 3" | |
| Field of View | | 1°30' | |
| Minimum Focus | | 1.5m | |
| Tube Length | | 152mr | |
| Retical Illumination | | Adjustable, 4 Levels | |
| /ial | | 20//2 | |
| Plate Vial | | 30"/2mm | |
| Circular Vial | | 8'/2mi | TI. |
| Compensator | | Dual | octric Conser |
| System | | Dual-axis Liquid-electric Sensor | |
| Working Range Resolution | | ±6′ 1″ | |
| Resolution Plummet | | 1" | |
| rummet | Lacor Class | Class 2 Des | Llaser |
| | Laser Class | Class 2. Rec | 10.000000000000000000000000000000000000 |
| near Divers | Wavelength | 635nn | |
| Laser Plummet | Power | 0.5mW | |
| | Diameter | ≤2.0mm@ | |
| | Brightness | Adjustable, 5 | |
| Auto Height *1*2 | Measure Range | 0.5m-3 | |
| | Accuracy | ±1.5mm@ | |
| | Image | - | Erect |
| Optical Plummet | Magnification | - | 3x |
| 35 | Focusing Range | - | 0.3m~∞ |
| Colda Historia | Field of View | <u> </u> | ±4° |
| Guide Light*1 | | | |
| ype | | LED Pod 635 pm / Vol | low E00e |
| Vavelength | | Red 635nm / Yellow 590nm 200m | |
| ffective Distance | | 200m | |
| | Y | 790,000 | 14.00 |
| Pixel | | 780,000 | 2 |
| Focal Length | | 16mm | |
| Sight of View | | 12.5*11.7 Degree | - |
| | | 11 Frames/s | - |
| Refresh Rate | | 2m-∞ | (4) |
| Refresh Rate Depth of Field | | | |
| Refresh Rate Depth of Field Storage | | jped | 348 |
| Refresh Rate Depth of Field Storage Digital Zoom | | jped 1x, 2x, 3x | (*) |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance | | jped 1x, 2x, 3x Auto | 2907 |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness | | jped 1x, 2x, 3x | (=) |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke | yboard | jped 1x, 2x, 3x Auto Auto | P P P P P P P P P P |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit | yboard | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC | - - - CD Touch Screen |
| tefresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit | yboard | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C | - - - CD Touch Screen Idpi |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight | yboard | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 | - - - CD Touch Screen dpi 3 Levels |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard | yboard | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C | - - - CD Touch Screen dpi 3 Levels |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory | yboard | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key | - - - CD Touch Screen Idpi 3 Levels s |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab | D Touch Screen Idpi B Levels S S 3,000 Points D D D D D D D D D D D D D D D D D D D |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory Data Transfer | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key | D Touch Screen Idpi B Levels S S 3,000 Points D D D D D D D D D D D D D D D D D D D |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory Data Transfer | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab | D Touch Screen Idpi B Levels S S 3,000 Points D D D D D D D D D D D D D D D D D D D |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab | |
| Signt of View Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply Type Voltage | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2. | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply Type Voltage Capacity | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2 | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply Type Voltage | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2 LI-ION Recharges 7.4V | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply Type Voltage Capacity | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2. LI-ION Recharges 7.4V 3900mAh, | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply Type Voltage Capacity Working Time | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2. LI-ION Recharges 7.4V 3900mAh, 10 Hours ,20 hours in Angle in | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit & Ke Display Unit Keyboard Memory Internal Memory Data Transfer Power Supply Type Voltage Capacity Working Time Others | | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2. LI-ION Recharges 7.4V 3900mAh, 10 Hours ,20 hours in Angle in | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply Type Voltage Capacity Working Time Charging Time | ture | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2.: LI-ION Recharges 7.4V 3900mAh, 10 Hours ,20 hours in Angle II | |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory Data Transfer Power Supply Type Voltage Capacity Working Time Others Working Tempera | ture | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2 LI-ION Recharges 7.4V 3900mAh, 10 Hours ,20 hours in Angle r 3 Hour | To Touch Screen dpi B Levels S 3,000 Points le, Maximum 32G 1+EDR, SD Card, RS-232 able Battery 29Wh measurement mode only S 50°C 70°C |
| Refresh Rate Depth of Field Storage Digital Zoom White Balance Brightness Display Unit & Ke Display Unit & Ke Display Unit Resolution Backlight Keyboard Memory Internal Memory External Memory External Memory Oata Transfer Power Supply Type Voltage Capacity Working Time Charging Time Others Working Tempera | ture | jped 1x, 2x, 3x Auto Auto 3.5 Inches Colorful LC 320*24C Adjustable, 8 30 Key 98M, ready for 83 USB & SD Card Availab USB, Mini USB, Bluetooth 2. Li-ION Recharges 7.4V 3900mAh, 10 Hours ,20 hours in Angle r 3 Hour | To Touch Screen dpi B Levels S 3,000 Points le, Maximum 32G 1+EDR, SD Card, RS-232 able Battery 29Wh measurement mode only S 50°C 70°C |

STANDARD PACKING LIST

| Main unit | 1x |
|------------------|----|
| Lens cover | 1x |
| Battery | 2x |
| Tools pouch | 1x |
| SD card | 1x |
| Manual | 1x |
| Charger | 1x |
| Reflective sheet | 1x |
| Carry case | 1x |
| Belt | 2x |
| Mini USB cable | 1x |

①EN60825-1: 2007 ②Good conditions: No haze, visibiliity about 40km. Overcast, no scintillation ③Good conditions. With Koada gray card white side (90%) reflective. standard sheet size. 300m under good conditions with koada 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

OPTIONAL ACCESSORIES





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

You Local Authorized Dealer

Quality Civil Lab Instruments



+91 87543 10647 +91 74026 33973

+91 44 4862 6501



^{*1:} Available on N41, N40X total station

^{*2:} Available on N41I total station