

# NT-023

## Multi-functional Theodolite

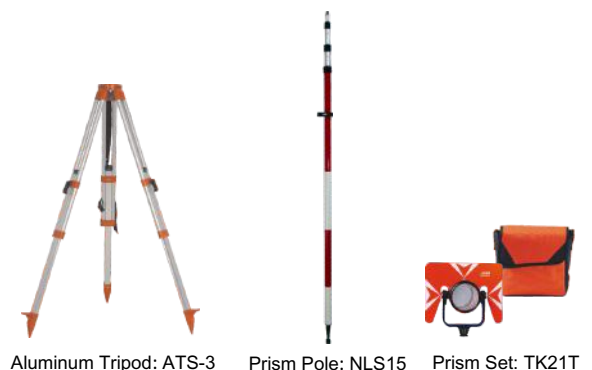
*Redefined the Theodolite*



### Features

- Disruptive Innovation in Theodolite
- 300m Distance Measurement
- Supportable for Long-term Working
- Standard Laser Pointer
- Numeric keypad display unit
- 2.6 inches big screen
- Angle, Distance, Axes on board program

### Recommend Accessories



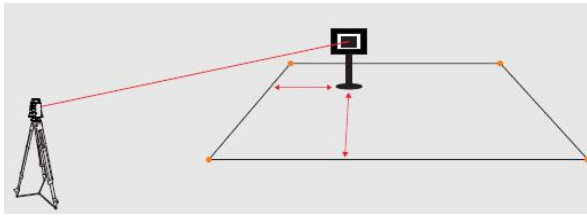
Aluminum Tripod: ATS-3

Prism Pole: NLS15

Prism Set: TK21T

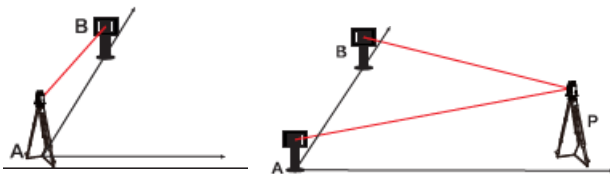
## Software

### Axes Stake Out



The building axes is the basis of constructions. You can choose the relative axes to stake out based on the points' position when doing the project. With this powerful Axes Stake Out function, NT-023 will help you find the stake out point precisely in an easier method.

### Two Methods to Stake Out the Axes



A: Occupied Pt

B: Target Pt

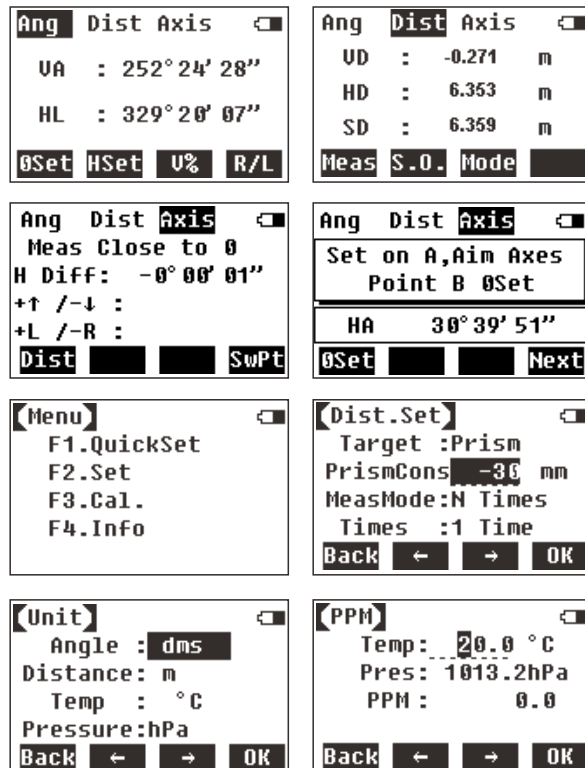
Set NT-023 on one end of the axes

P: Occupied Pt

A/B: The end of axes

Set NT-023 on an arbitrary point

### Disruptive Innovations



300m distance measurement with Prism  
Redefined the Theodolite by it's small size but strong performance



2.6 inches LCD Screen with high-capacity battery  
Afford a better solution for outside surveying project.

## Specification

### Distance Measurement (Single Prism)

- Range: 300m
- Accuracy:  $\pm(3\text{mm}+2\text{ppm}\cdot D)$
- Measure Time: Continuous: 0.35s, Single 1.5s
- Atmosphere Correction: Auto correction by input parameter
- Prism Constant: Auto correction by input parameter

### Angle Measurement

- Measure Method: Absolute Encoder
- Diameter of Encoder Disk: 79mm
- Min. Display: 1"
- Accuracy: 2"
- Detection Method: Horizontal: Dual; Vertical: Dual

### Telescope

- Image: Erect
- Magnification: 26.5x
- Effective Aperture: 40mm
- Resolving Power: 3"
- Field of View:  $1^\circ 30'$
- Min. Focus Range: 1.5m
- Multiple Constant: 100
- Additive Constant: 0
- Stadia Accuracy:  $\leq 0.40\%/L$
- Tube Length: 155mm

### Compensator

- Type: Single Axis
- Working Range:  $\pm 3'$
- Accuracy:  $\pm 3''$

### Vial

- Plate Vial:  $30''/2\text{mm}$
- Circular Vial:  $8''/2\text{mm}$

### Laser Tube

- Wave Length:  $635\pm 20\text{nm}$
- Class II Laser
- Spot Diameter:  $\leq 5\text{mm}/100\text{m}$
- Axis Error:  $\leq 10''$

### Laser Plummet

- Accuracy:  $\pm 1.5\text{mm}$  (@1.5m InsHt)
- Spot Diameter:  $\pm 2.5\text{mm}$  (@1.5m InsHt)
- Length:  $635\pm 20\text{nm}$
- Class II Laser

### Display Unit

- 2.6 inches, 160x96 dot
- 4 lines display

### Power Supply

- Battery: Lithium rechargeable battery
- Voltage: 7.4V
- Continuous Working Hrs: 8 hrs

### Environment

- Working Range:  $-20^\circ\text{C}\sim 50^\circ\text{C}$

### Dimension

- Size:  $165*160*340\text{mm}$
- Weight: 4.7kg