SPECIFICATIONS

RUIDE

X4

	X4
Measuring Range	
1P	5.0km
3P	8-10 km
Non prism	1000m
Digital Display	Maximum: 99999999.9999 Minimum: 0.1mm
Accuracy	With prism: 2mm+2ppm, without prism 3mm+2ppm
Measuring Time	Tracking 0.1s, Fine 0.3s (optimal)
Atmospheric Correction	**Automatic Correction by Inputting Parameter**
Prism Constant	Automatic Correction by Inputting Parameter
Angle Measurement	
Measurement Method	Absolute Encoding
Diameter of The Raster Disk	79mm
Minimum Reading	1 " / 5 " Optional
Accuracy	2 "
Detection Method	Horizontal: Four Sensors Vertical: Four Sensors
Telescope	
Image	Erect
Length	154mm
Effective Aperture	45mm (DTM 50mm)
Magnification	30 X
Field of View	1° 30′
Resolving Power	3 "
Minimum Focus	1m
Compensation	
System	Dual axis liquid-electric
Working Range	±3′
Resolving Power	1 "
Sensitivity of Vials	
Plate Vial	30 " /2mm
Circular Vial	8′ /2mm
Laser Plummet	Yes
Data Storage and Communication	
Internal Memory	12 M / 120,000 points
External Memory	USB Flash Memory (up to 32G)
Communication Port	USB, Bluetooth
Display	
Type	Dual sides, 6 lines, black and white
Battery	
Power Supply	Rechargeable battery (3100mAH)
Voltage	7.4V DC
Operation Time	10 hours
Dimension and Weight	
Dimension	160mm×150mm×330mm
Weight	5.7 kg
Environmental Specification	
Dust/Water (IEC60529)	IP66
Working Temperature Range	-20℃~50℃
Humidity	95%, non-condensing

The High Performance
Total Station with Great
Reliability, Flexibility and Economy

Where Challenging Happens, Where Amazing Happens.

The spirit of exploration and challenge is just like the light, leading people to advance to new frontiers.

In May 2020, Ruide instrument was chosen as the official equipment for China's national surveying team and reached the summit of Mount Qomolangma (Everest). During this mission of re-measuring the height of the world's highest peak, these surveyors showed us that we should never give up trying to achieve our dreams.
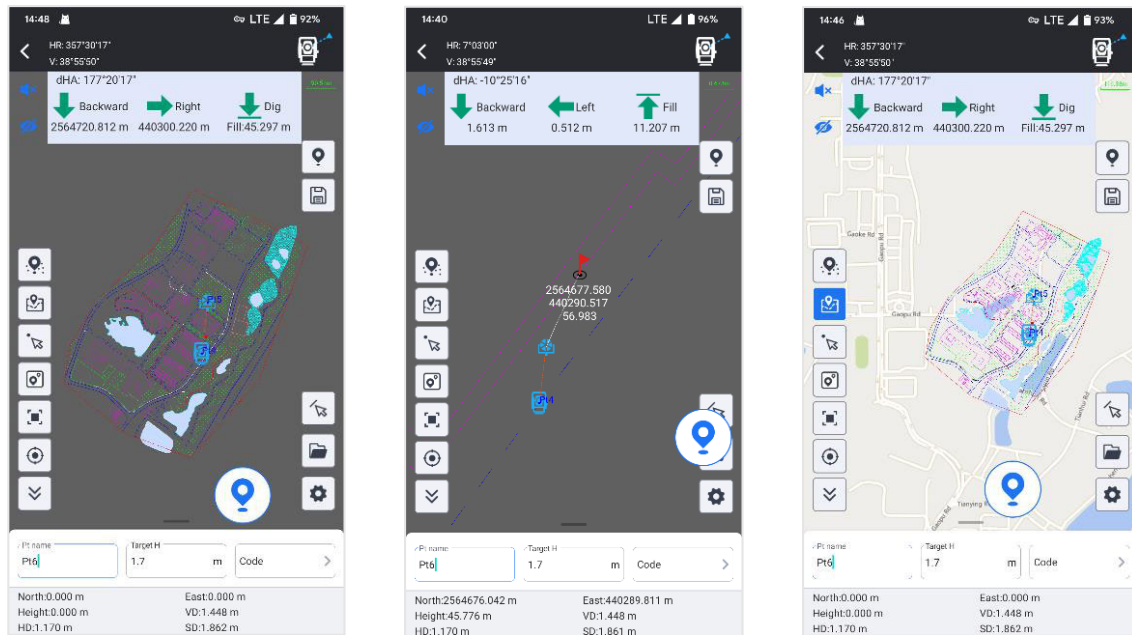
To mark this important milestone, Ruide launches a new total station X-METER series.

X is the unknown,
X is the impossible,
X is the extreme,

Let's meter all the "X" with our skill, courage and wisdom.
Challenging Never Stops.

Seven Major Improvements
To lift your capability and productivity

TECHNOLOGIES

1000m	Speed	Co-axial
1000m Reflectorless	Ultra Fast Measurement	Co-axial Laser Beam
Ultra Low-noise Amplifier	Noise Phase Analysis	150HMZ Carrier Frequency
Bluetooth	USB Storage	Dual Axis Compensation
Laser Plummet	Laser Pointing	IP66

PROGRAMS

REM	Resection	Road Design
Column Offset	Plane Offset	Distance Offset
Area Cal.	MLM	P/L SO

Total Station Module of RTKgo App: Four Main Features to Give You More Power & Freedom
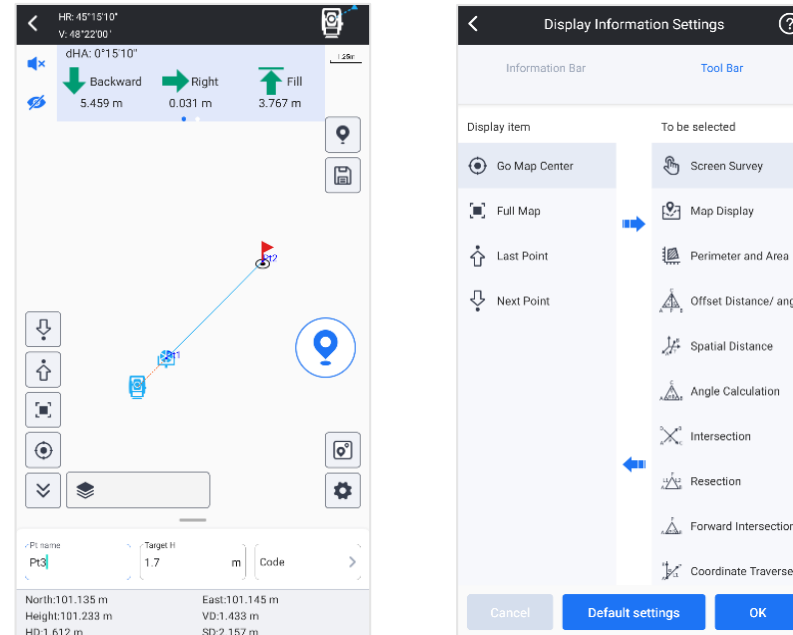
CAD Stakeout: Increasing Productivity & Decreasing Error

CAD Stakeout allows you to import **CAD basemap** and stakeout it, without input point coordinates one by one.

When you need, you can connect to your local online map and overlap it to CAD basemap, to increase the precision of your job.
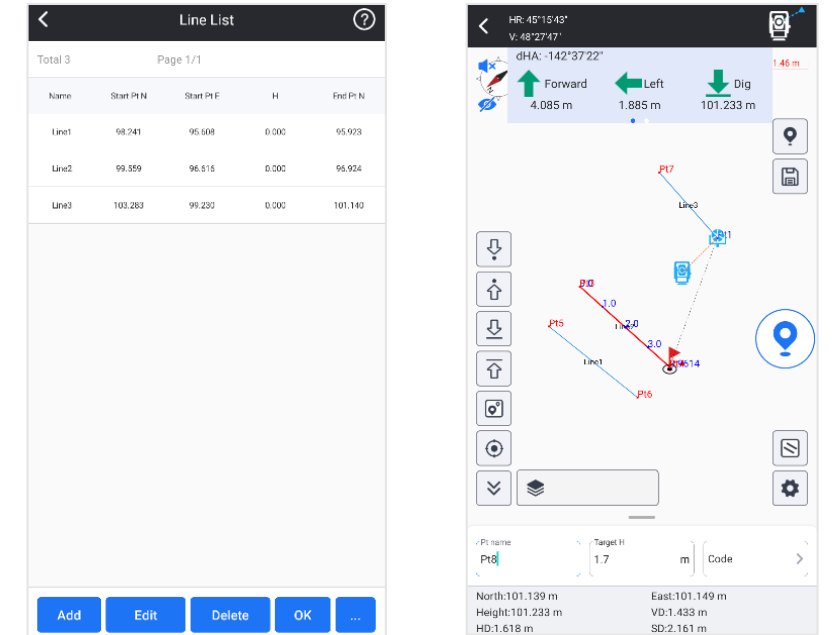
Point Survey & Stakeout: More Ease and Convenience

With graphic display, now it is easy to you to observe the relation between occupied point and target points. It will help you to make less mistakes when measuring many points.

The stakeout program screen displays information more completely, indicates target points more intuitively, your workflow will be smoother than before.
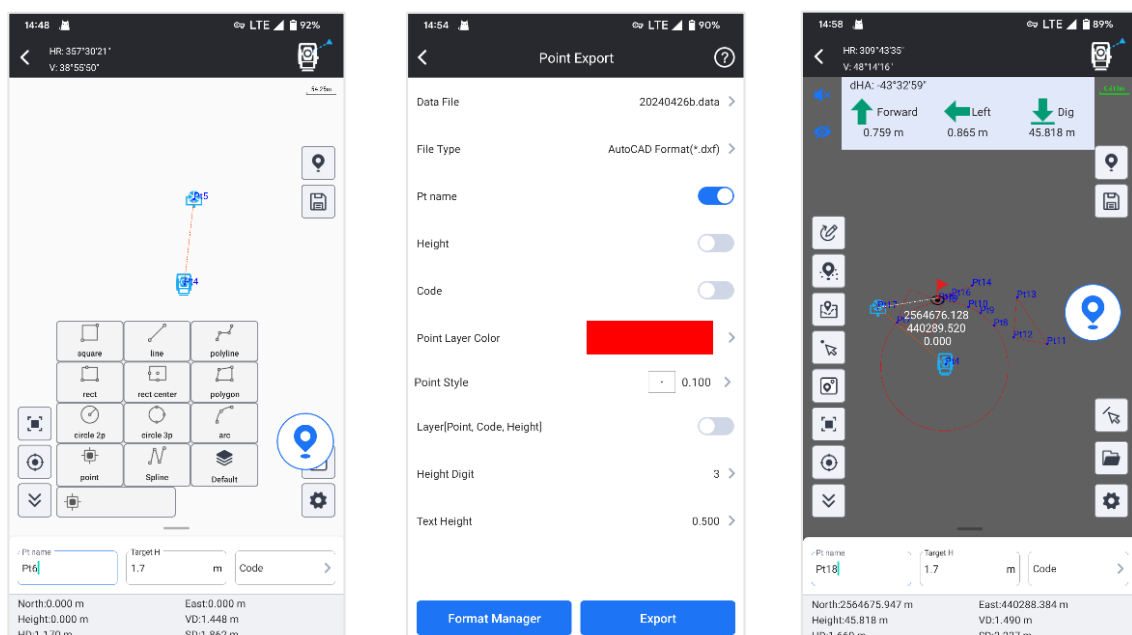
Line Stakeout: Smarter than Traditional Way

User is allowed to manually choose points from library, line will be formed by program automatically. Then user input interval distance, setout points will be calculated out and displayed on screen.

This function is suitable for road or other objective that is containing lines.
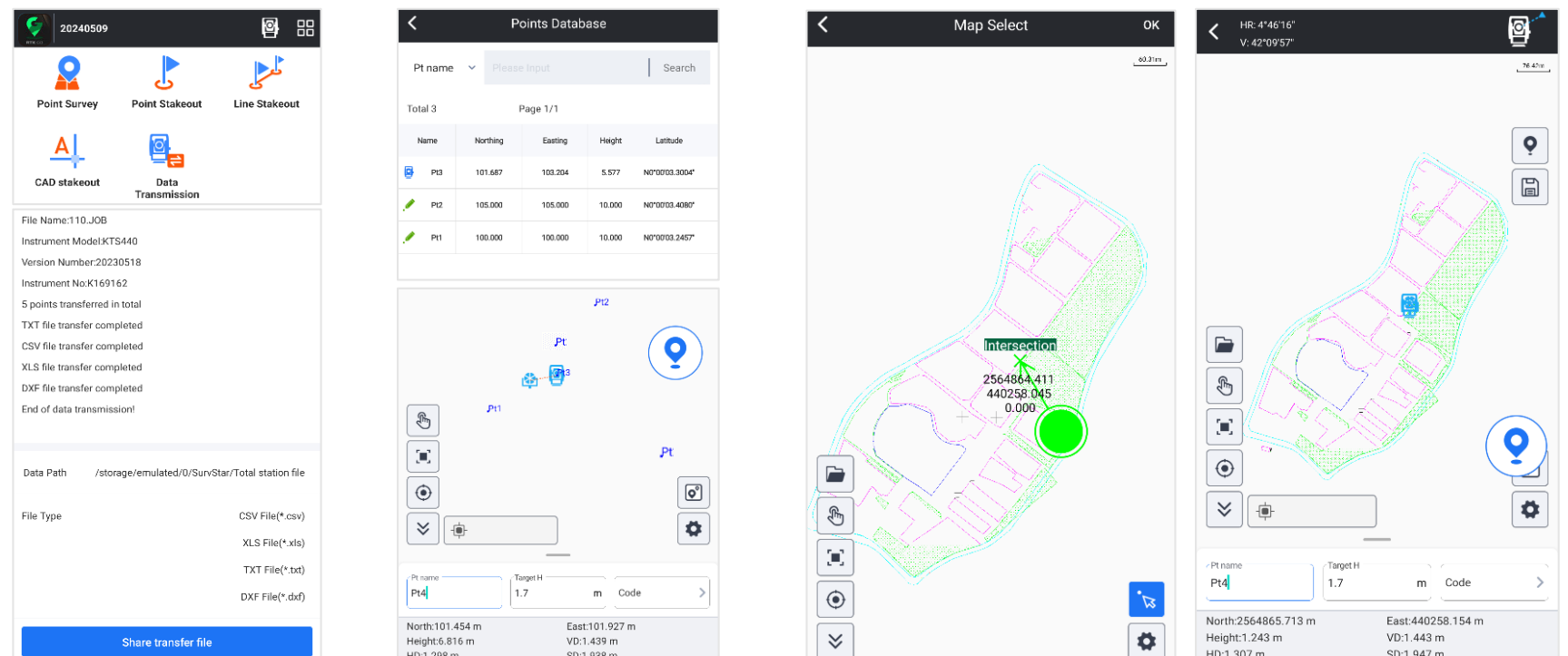
Measure & Draw: Save Time in Both Field work and Indoor Work

User is allowed to draw line, polygon, circle...up to 11 kinds of graphic, while measuring target points. No need to manually draw draft map anymore.

User is allowed to manage different objectives as different layers. The draft map can be saved and output in CAD format, and to be used in indoor works.

Other Features: More Innovation, No Limitation

Download & Share
(.csv, .dxf, .txt, .xls)

Resection

Set Occupied Point from CAD basemap or Graphic Map

Other Modules of RTKgo App: GNSS, Marine Survey, 3D Laser Scanner...