RUIDE

TOTAL STATION

RCS

RDM4 DIS.TECH

The 3rd generation of RDM4 DIS.TECH, measuring a distance faster and more accurate ever. 400m reflectorless range in stunningly speed up 0.3s, and 4km in prism mode with an accuracy up to 2mm+2ppm.

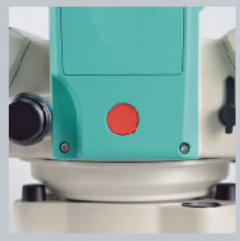
multidimentional compensation system

For physical compensation, the dual axis compensator with an ultra-sensitive CMOS detects any tiny movements of the electronic bubble, displays the tilt condition with 1" resolution, and correspondingly compensates on both horizontal and vertical directions.

For digital compensation, a unique algorithm is adopted to eliminate horizontal collimation error and vertical index error, which are caused by perpendicularities between trunnion and vertical shafts, as well as between sighting axis and trunnion shaft.

lightning measure

One red button independently located on a side cover to trigger a distance measurement. Without looking at the screen and finding the right key on the keyboard, Ligtning Measure allows you to trigger a fast distance measurement in the next second after you aim at the target, avoiding a possible shake on horizontal direction which might happen if you press on the keyboard.

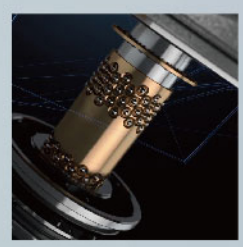


guide light

By flashing LED in red and yellow on top of the objective lens, Guide Light will help the pole man to move the prism pole to the stakeout point fast and precisely during stake-out operation.

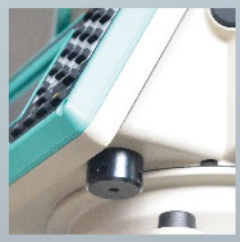
dense ball shaft

Both vertical and horizontal shafts of RCS are embedded more than 100 dense steel balls, which makes RCS rotates extraordinarily smoothly and stably so as to deliver a higher angle accuracy. It also essentially reduces the chances of jamming if the total station encounters violent shock and vibration.



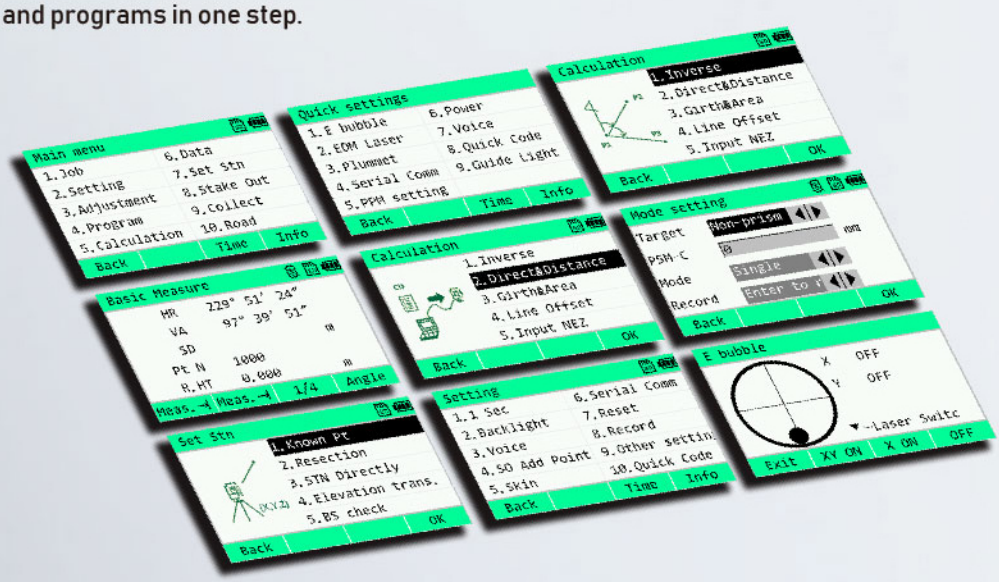
ATMOS sense

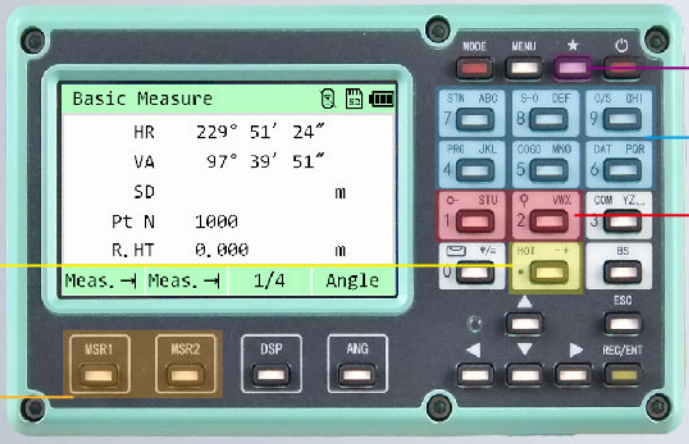
One of the most unique features of RUIDE's total station. A small sensor hidden under the keypad can detect the surrounding temperature and air pressure then calculate the PPM value and correct the distance result in real time.



wormhole travel

Efficiency is primarily counted when we redesign the program of RCS. Instead of going through 3 or 4 steps by pressing several keys and selecting several options, almost each number key is like a wormhole allowing you to “jump” to most of specific functions, settings and programs in one step.





Frequent Measure

Most surveyors frequently shift prism and non-prism mode in different circumstances, which costs time. RCS provides 2 measuring keys to simplify this operation. You can customize each measure key with different measure mode and parameters with your preferences.

Hot Key

Hot Key provdes quick access to 4 settings which are mostly used during your job, such as setting a target height, atmosphereic correction, target list and making a quick memo.

Quick Settings

In any menu or program, you can press this key to pop out some settings such as E bubble, laser pointer, power management, quick code, sound, etc.

Shortcuts

You can find 6 number keys brining you to 6 programs or functions, which refer to setting a station, stake out, offset, programs, COGO, and coordinates data. In this way, you no longer need to go to the general menu to find the right entries, and your operation efficiency will be essentially boosted.

Customization

You can also customize 2 number keys to trigger a shortcut to some common settings or programs such as backsight check, COGO, and even a specific survey program like remote height.

SPECIFICATION

TELESCOPIC

Length	152mm
Diameter	Telescope: 45mm; EDM: 47mm
Magnification	30x
Image	Erect
Field of View	1°30'
Resolving Power	3"
Mini.Focus	1.5m

DISTANCE

Single Prism Range	5000m
Accuracy	+/-(2mm+2ppm*D) m.s.e
Non-Prism Range	400m
Accuracy	+/-(3mm+2ppm*D) m.s.e
Measuring Time	Fine: 0.3s; Normal: 0.2s
Meteorologic Correction	ATMOSense Auto Correction
Prism Constant	Manual

ANGLE

Accuracy	2"
Method	Absolute Encoding
Detection System	H: Dual; V: Dual
Mini. Reading	1"/5"
Diameter of Circle	79mm
Vertical Angle 0°	Zenith: 0°; Horizontal: 0°
Unit	360°/400gon/6400mil

DISPLAY

Display Unit	Graphic, 640*320 color touch LCD
No. of Displays	2
Keyboard	Alphanumeric

TILT CORRECTION

Tilt Sensor	Dual Axis
Method	Liquid Electric
Range	4'
Resolution	1"

OPTICAL PLUMMET

Image	Erect
Magnification	3x
Focusing Range	0.3m to infinite

LEVEL

Plate Level	30"/2mm
Circular Level	8'/2mm

DATA INTERFACE

Date Interface	RS232, SD card, USB, Bluetooth

GENERAL

Guide Light	
Ligtning Measure	
Weight	5.4kg
Dimension	353 (H) * 206 (L) * 200 (W) mm
Working Temperature	-20°C to 50°C
Battery Type	Rechargeable Li-on Battery, 7.4V, 3000mAh
Water & Dust Proof	IP65
Working Duration	12 hours

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