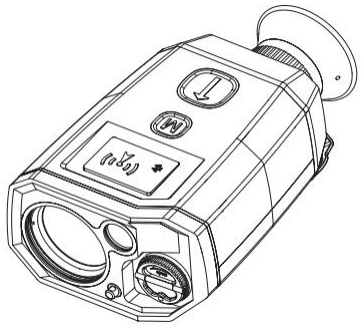
Laser Ranging Telescope 10km
User Manual

Model:LRF10000D

PRODUCT DESCRIPTION

The LRF10000D laser ranging telescope 10km is developed based on the independently developed 1535nm erbium glass laser. It is a Class I eye safety product and has rich functions. The main functions include distance, distance measurement, angle measurement, altimeter, two-point distance measurement, target positioning, and ballistics. Calculation, Bluetooth, mobile APP, OLED projection display, GPS, data transmission and other functions. It is mainly used for one-handed hand holding and can be equipped with a tripod for long-distance targets. Additionally, it is small and lightweight and can easily fit into your pocket.

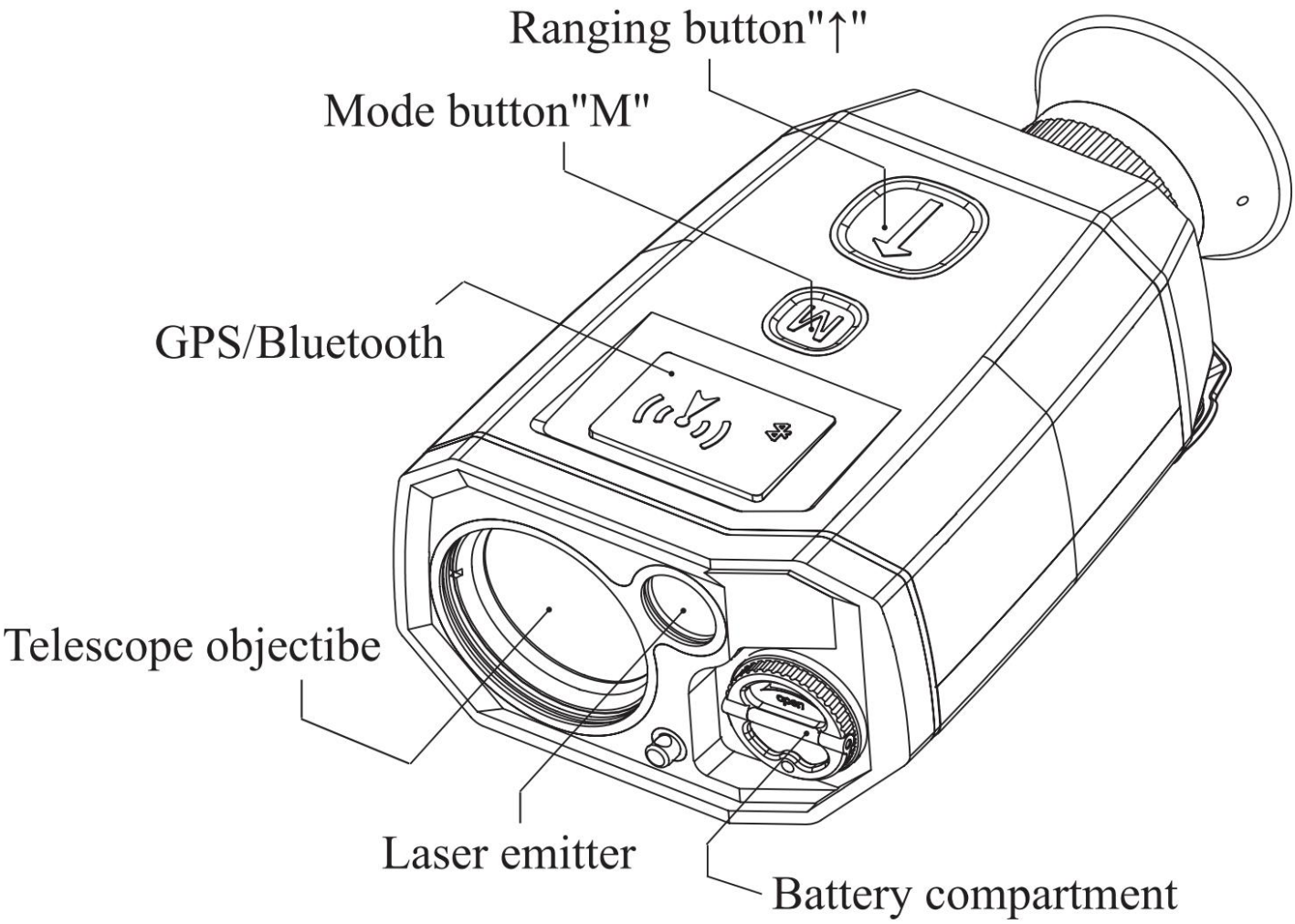


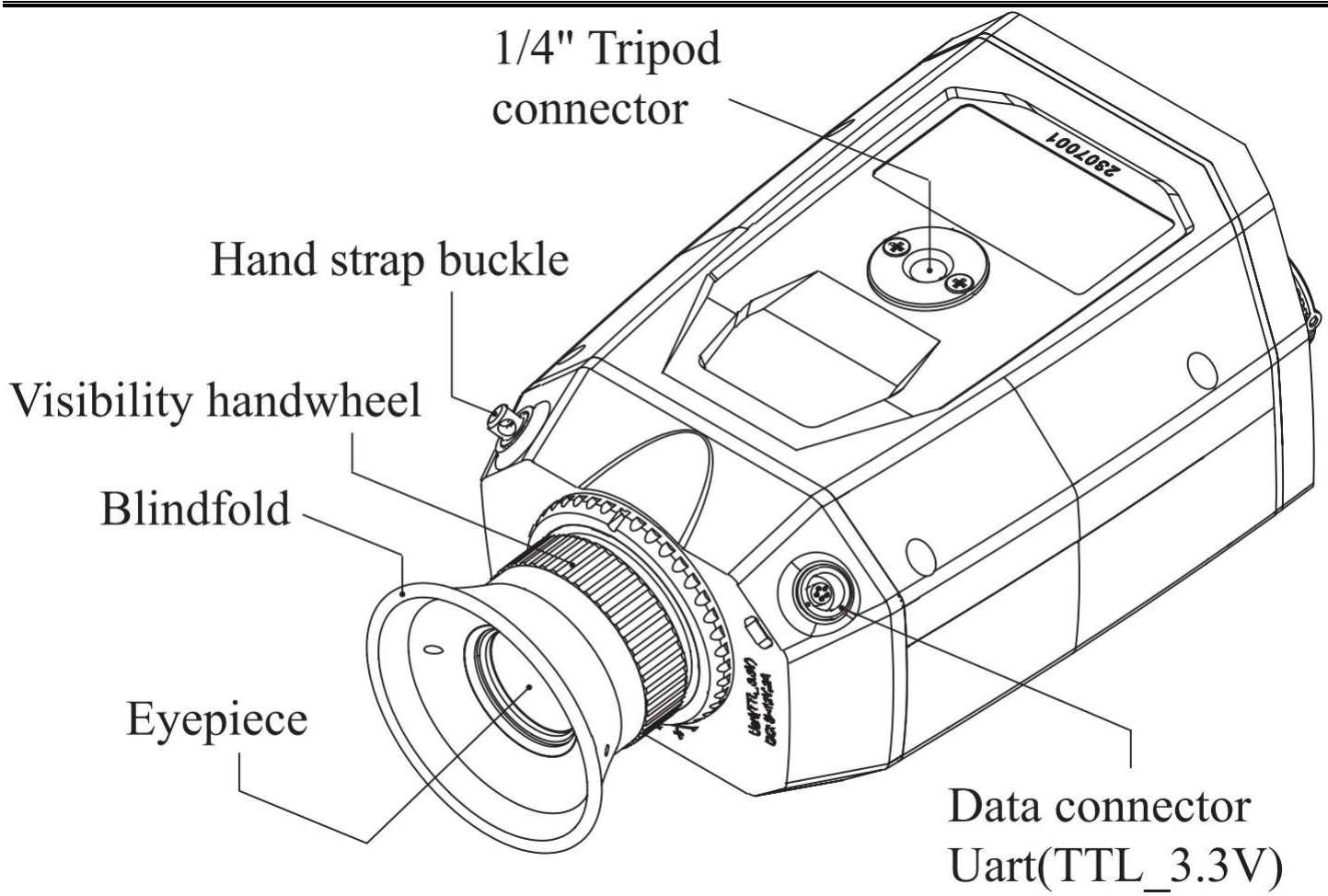
TECHNICAL DATA

Model	LRF10000D
Eye safety level	Class 1（IEC60825-1）
Magnification	7×
Field of view	6°/106mil
Pupil distance	20mm
Receive caliber	Φ32mm
Diopter	-5~+5D
Laser wavelength	1535nm
Range (building)	≥ 20~10000m
Accuracy	±1m
Frequency	1Hz (3Hz in continuous ranging mode)
Accurate	≥98%
Divergence angle	0.4mrad
Angular range	Azimuth: 0~360°(±1°); Pitch angle: ±90° (±1°)
Power supply	DC 5~12V
Battery type	Rechargeable battery 16340×2/CR123A×2
Battery life (room temperature)	5000 ranging
Weight	≤ 430g (including battery)
Volume	141×81×53mm (L×W×H)
Operating temperature	-40~+55℃
Storage temperature	-50~+65℃
Waterproof rating	IP67
Connector	Uart（TTL_3.3V）to USB
Wireless transmission	Bluetooth 5.0
Positioning type	GPS/BeiDou/GLONASS
Location accuracy	≥50m
Other	Mobile APP interconnection
Product certification	CE、RoSH

KNOW THE PRODUCT


Supports GPS,Beidou and GNASS satellite positioning
Mobile phone apps or other trajectory calculation devices can be connected via Bluetooth
UART data transmission
Universal 1/4 inch tripod interface
81mm
53mm
Double-button design, simple operation
Military grade standard, IP67
141mm
Laser witheye safety band (Class I)
Large exit pupil diameter, adjustable diopter
Equipped with a wrist strap for better use
2 CR123A batteries with sufficient capacity for more than 5000 measurements


Ranging button"↑"
Mode button"M"
GPS/Bluetooth
Telescope objectibe
Laser emitter
Battery compartment



Dear users,
Before starting to operate the product, please read this manual carefully to ensure that you use it correctly and obtain accurate measurement results, while ensuring the safety of the equipment and extending the service life of the equipment!

ATTENTION

- The laser safety category of this product is Class 1, please do not look directly at the laser!
- Do not distance the target within 5m to avoid damaging the instrument!
- Do not disassemble the corresponding parts of the product, non-standard operation will cause damage to the product and will

invalidate the warranty!

- Please keep the optical glass surface (laser, telescope objective, eyepiece window) clean!
- Do not measure the distance through glass or other translucent materials, so as not to cause the ranging error to become larger!
- Extreme weather conditions such as rain, snow, fog, haze, and dust will affect the ranging performance!
- If you do not use the product for a long time, please remove the batteries!

PRODUCT OVERVIEW

Handheld laser rangefinder is developed based on the 1535nm erbium glass laser independently developed by our company, which belongs to Class 1 eye-safe products.

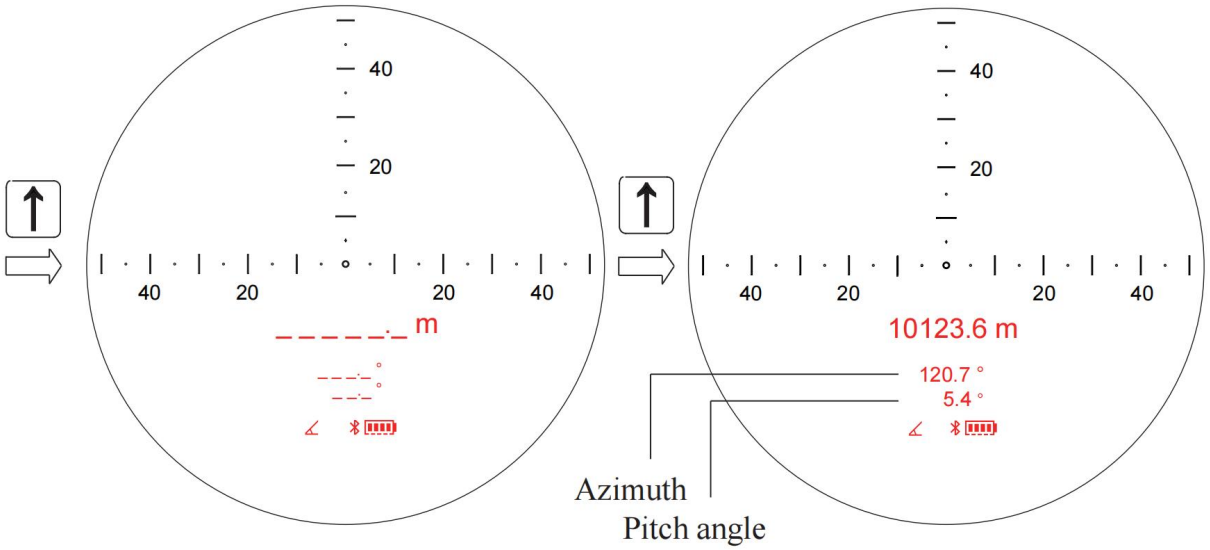
The main functions are: single-point ranging, two-point ranging, angle measurement, height measurement, distance gating, target positioning, ballistic calculation, real-time display of measurement information in the eyepiece, power indication, data transmission and other functions. It is mainly used for one-handed holding, and can be used with a tripod for long-distance targets.

Small and lightweight, it fits easily in your pocket.

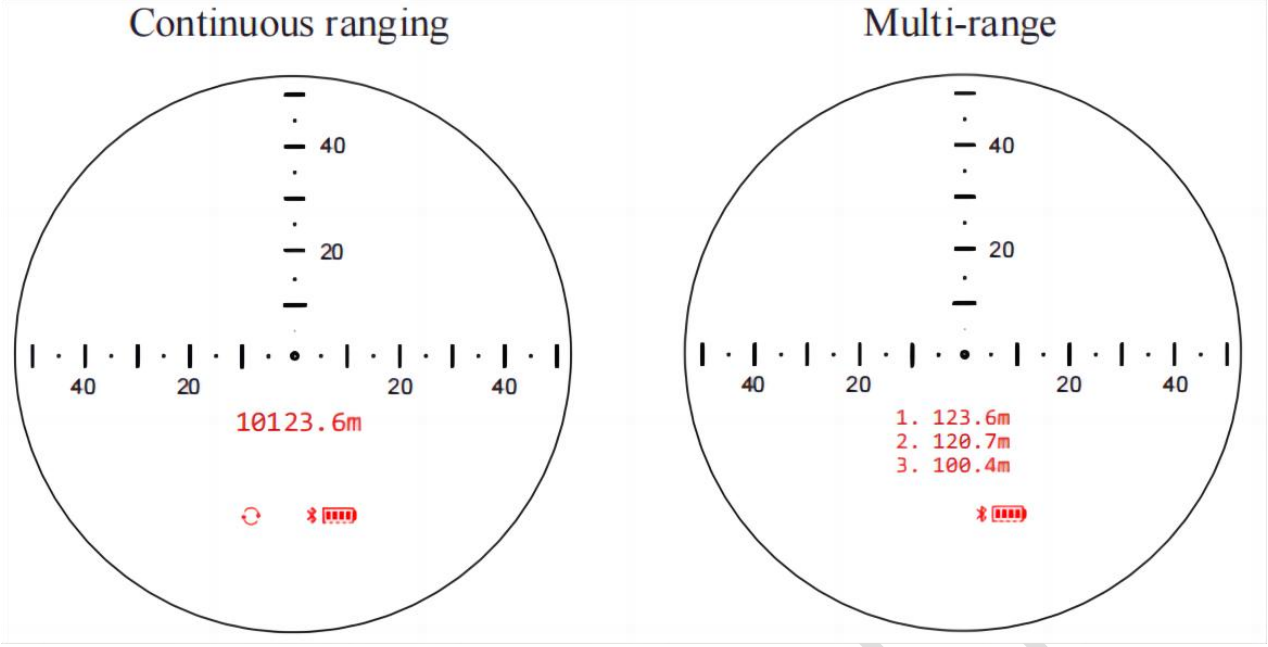
DIRECTIONS FOR USE

1. Ranging & Angle

Press "↑" to Power on,default measuring range and angle mode.
Aim for the target,press "↑" to complete measurement.



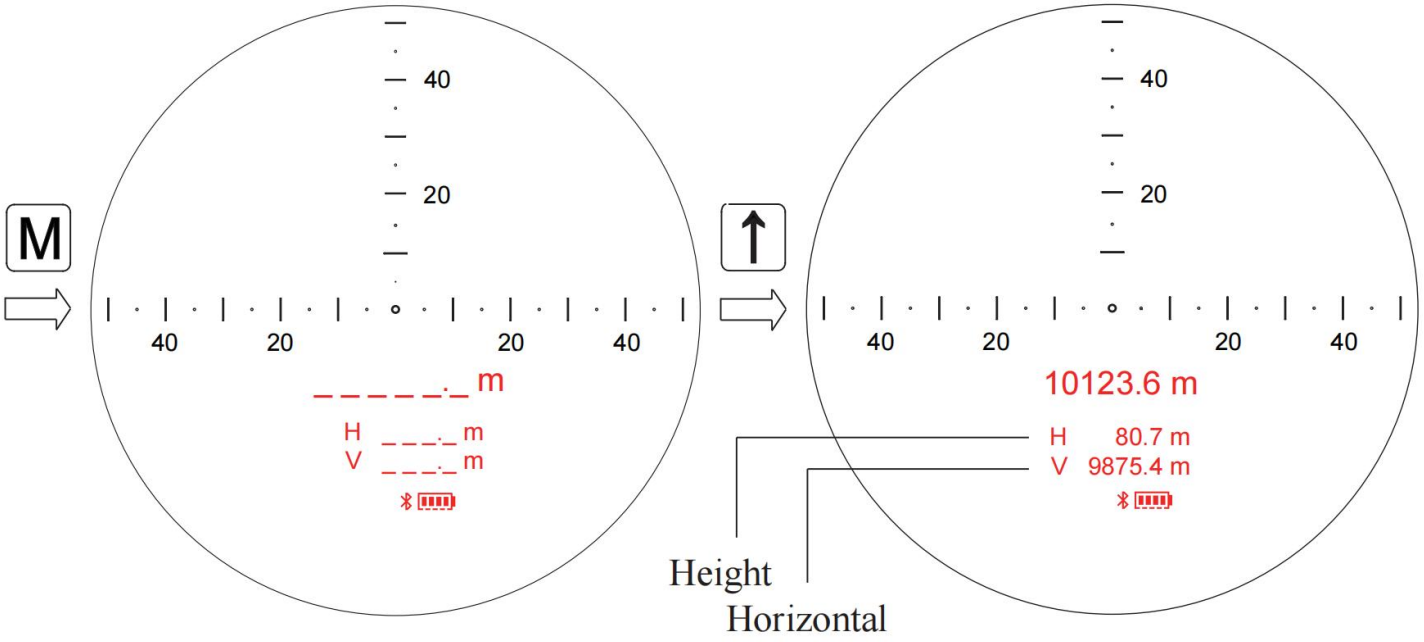
Long press "↑" to continuous ranging at ranging and angle mode,release to stop. * Angles are not displayed when continuous ranging or measuring multiple targets.Up to measuring 3 targets in multi-target.



2. Height & Horizontal

Press "M" to switch to "Height & Horizontal" mode.

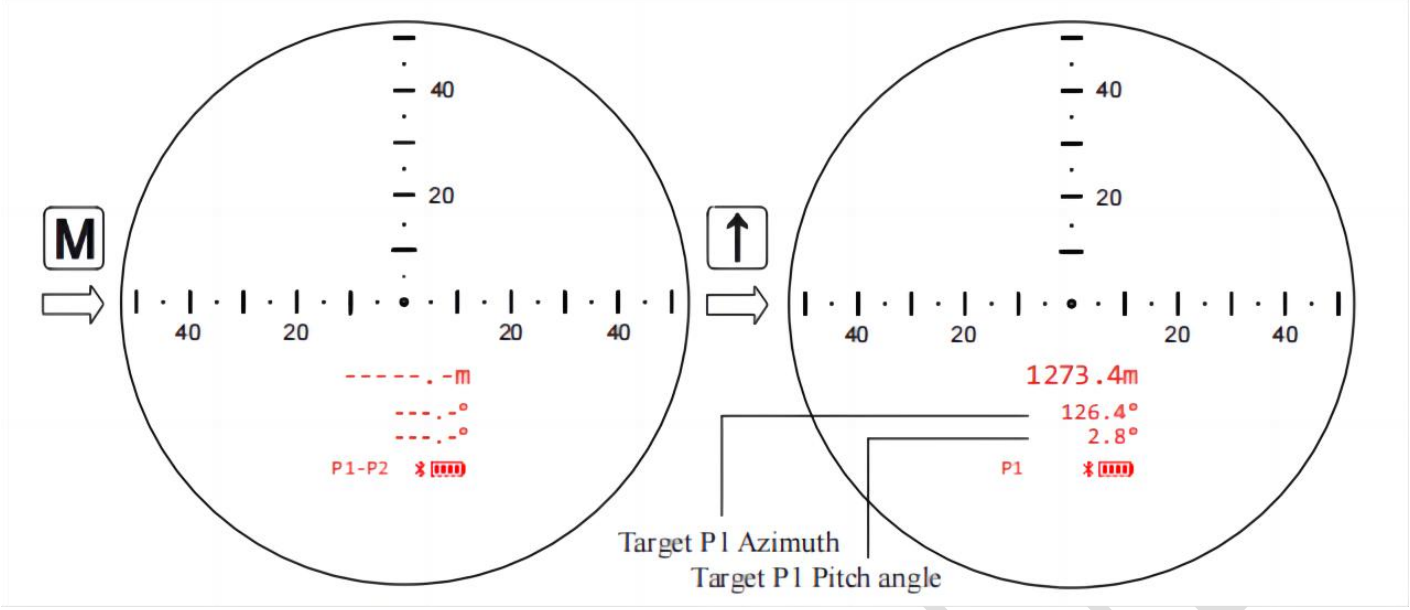
Aim for the target,press "↑" to complete measurement.



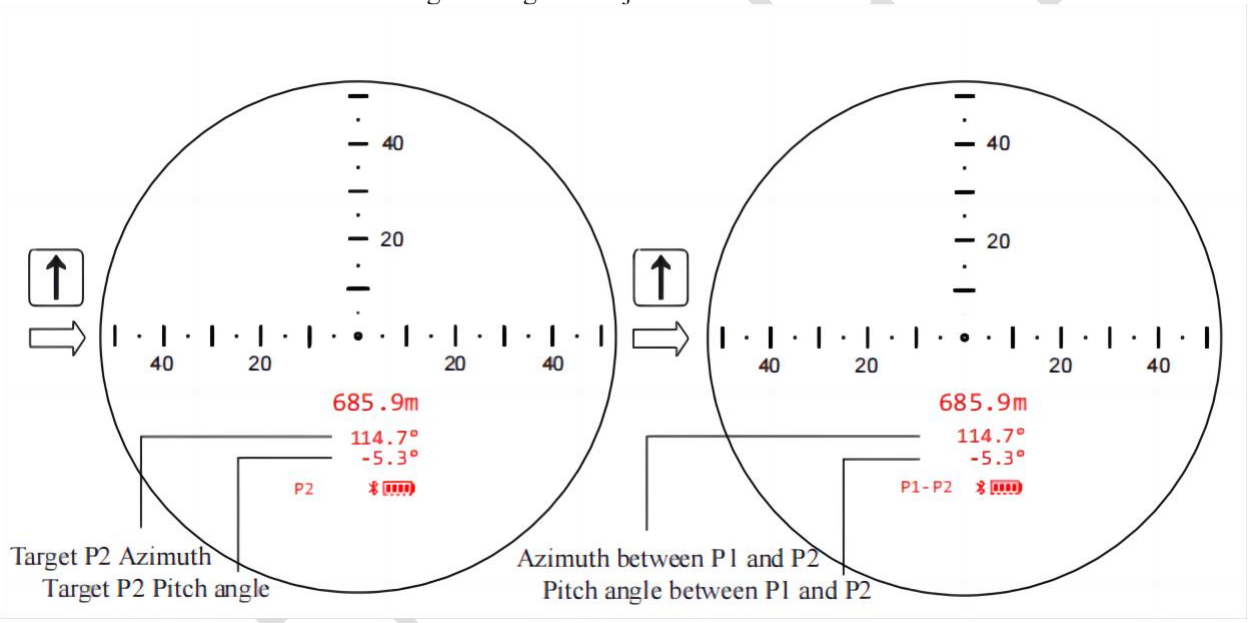
3. Two target Distances & Angles

Press "M" to switch to "Two target Distances & Angles" mode.

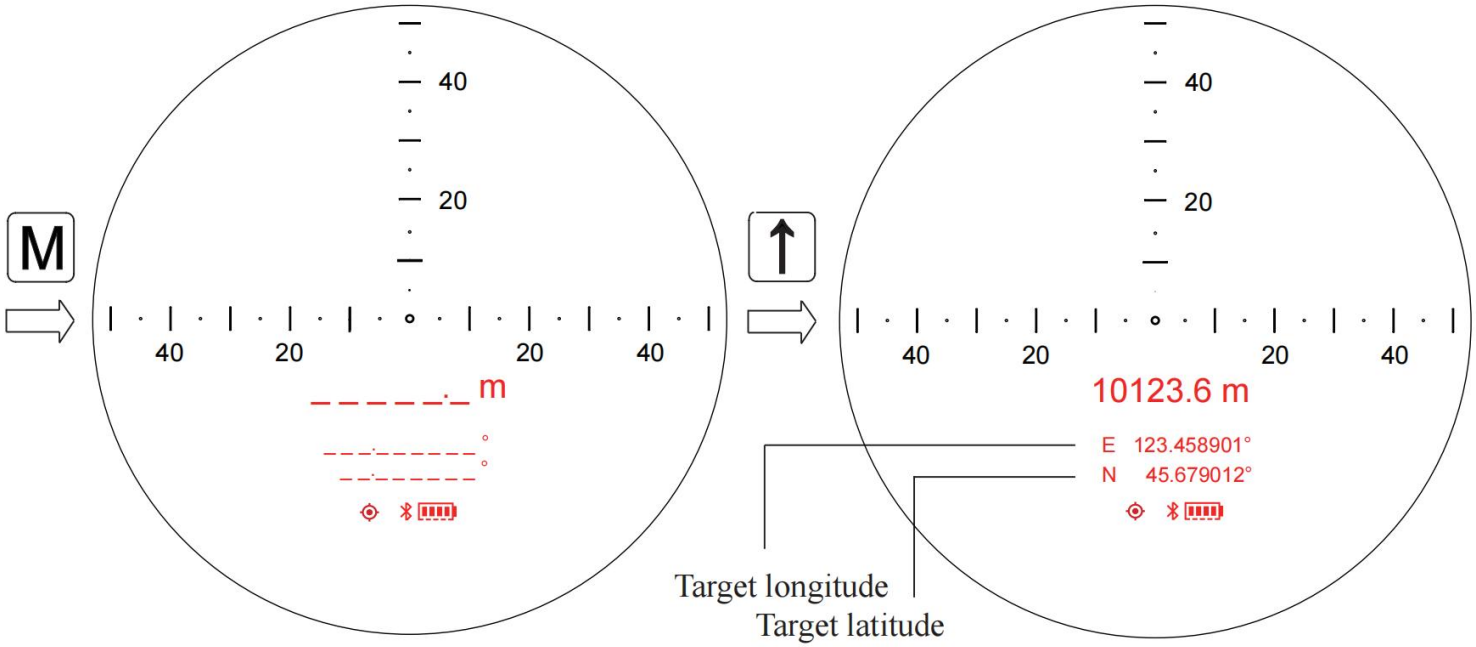
Aim for the first target,press "↑" to complete measurement target P1.



Aim for the second target,press "↑" to complete measurement target P2.
Press "↑" again to complete measurement distance between P1 and P2.
* This mode is also suitable for measuring the height of objects.

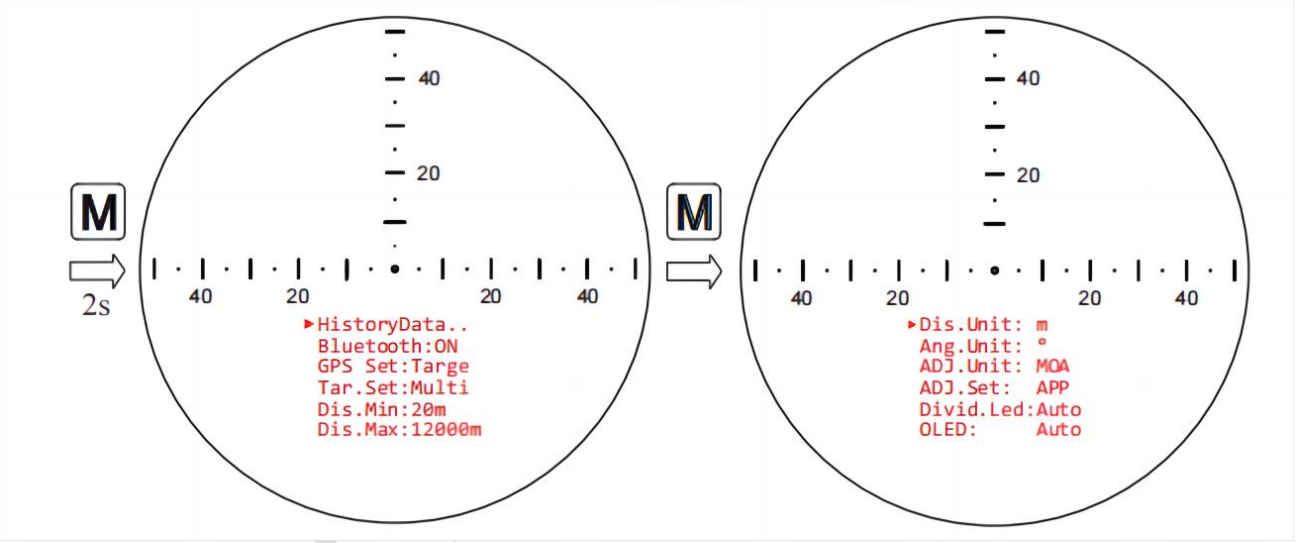


4. Ranging & Location
Press "M" to switch to "Ranging &Position" mode.
Aim for the target,press "↑" to complete measurement.
* When GPS set off, the measuring location page is not displayed.

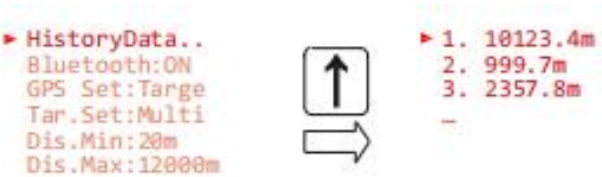


5. Settings menu

Press "M" 2s to enter the setting menu on any measurement interface.
Press "M" switch the settings.Press "↑" go to the sub-settings or confirm setting.
Press "M" 2s to off the setting menu on any setting interface.



5.1 History Data



You can view the historical data of ranging, and support up to 10 pieces of information. Press "M" to turn the page.

5.2 Bluetooth and Location Setting

You can turn bluetooth on or off.

You can set measuring the target location self-location, or close location.

5.3 Target Setting

You can set measuring the first target, last target or multi-target.
* Up to measuring 3 targets in multi-target.

5.4 Distance gating Setting

You can set the minimum measurement range.

You can set the maximum measurement range.

5.5 Measurement Unit

Set the measuring distance value unit.

Set the measuring angle value unit.

5.6 Ballistic solution Setting

►ADJ.Unit: MOA
mil
mrad

Sets the unit of the ballistic solution correction.

►ADJ.Set: APP
LRF

Set up the ballistic solver.

5.7 Dividing LED and OLED Setting

►ADJ.Unit: MOA
mil
mrad

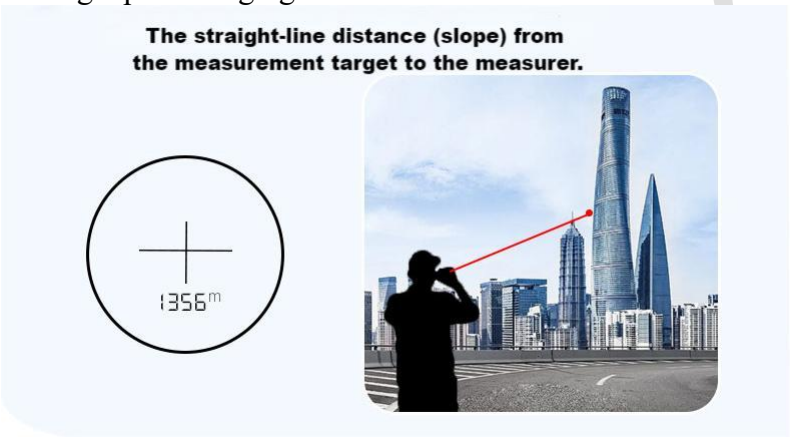
Sets the unit of the ballistic solution correction.

►ADJ.Set: APP
LRF

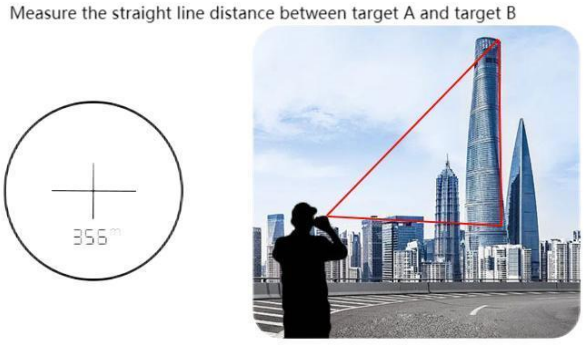
Set up the ballistic solver.

PRODUCT FEATURES

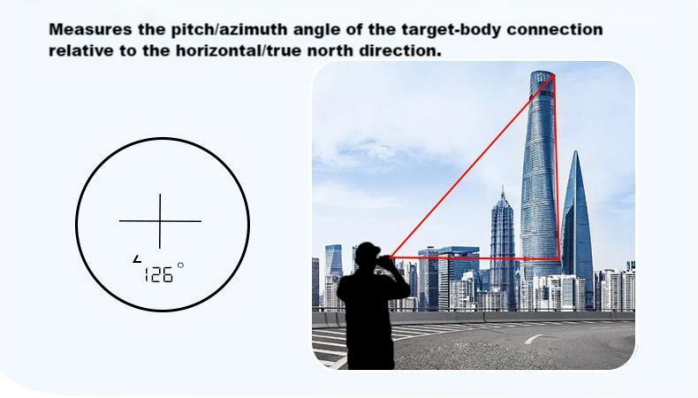
1. Single point ranging



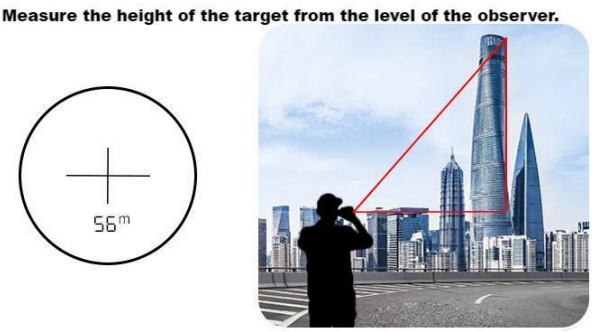
2. Two point ranging



3. Angle measurement

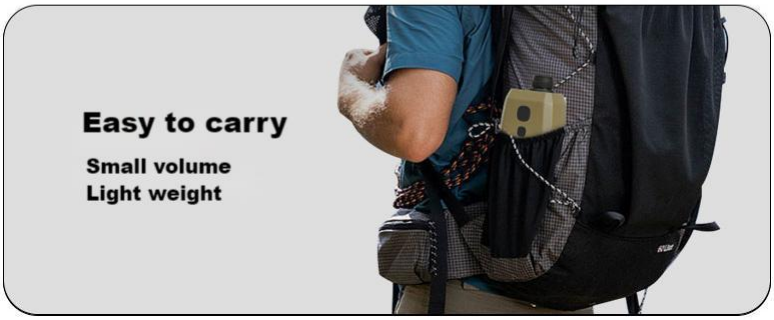


4. Height measurement



5. Data transmission

PRODUCT DETAILS



INVENTORY

SN	Name	Qty.
1	Scouter Pro Laser Rangefinder	1
2	Carrying case	1
3	16340 lithium battery	2
4	16340 Battery charger (including cable)	1
5	Data transmission cable (TTL to USB)	1
6	Wrist strap	1
7	Lens wiping cloth (12 × 12cm)	1
8	Scouter User Manual	1
9	16340 Lithium battery manual	1
10	16340 Battery charger instructions	1
11	Product certificate	1