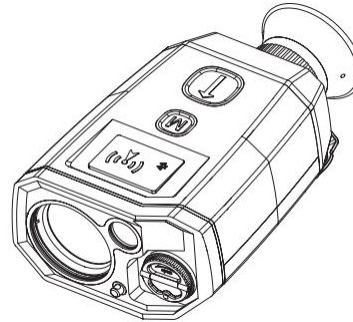


LRF1000D Laser Ranging User Manual

Model:LRF1000D

PRODUCT DESCRIPTION

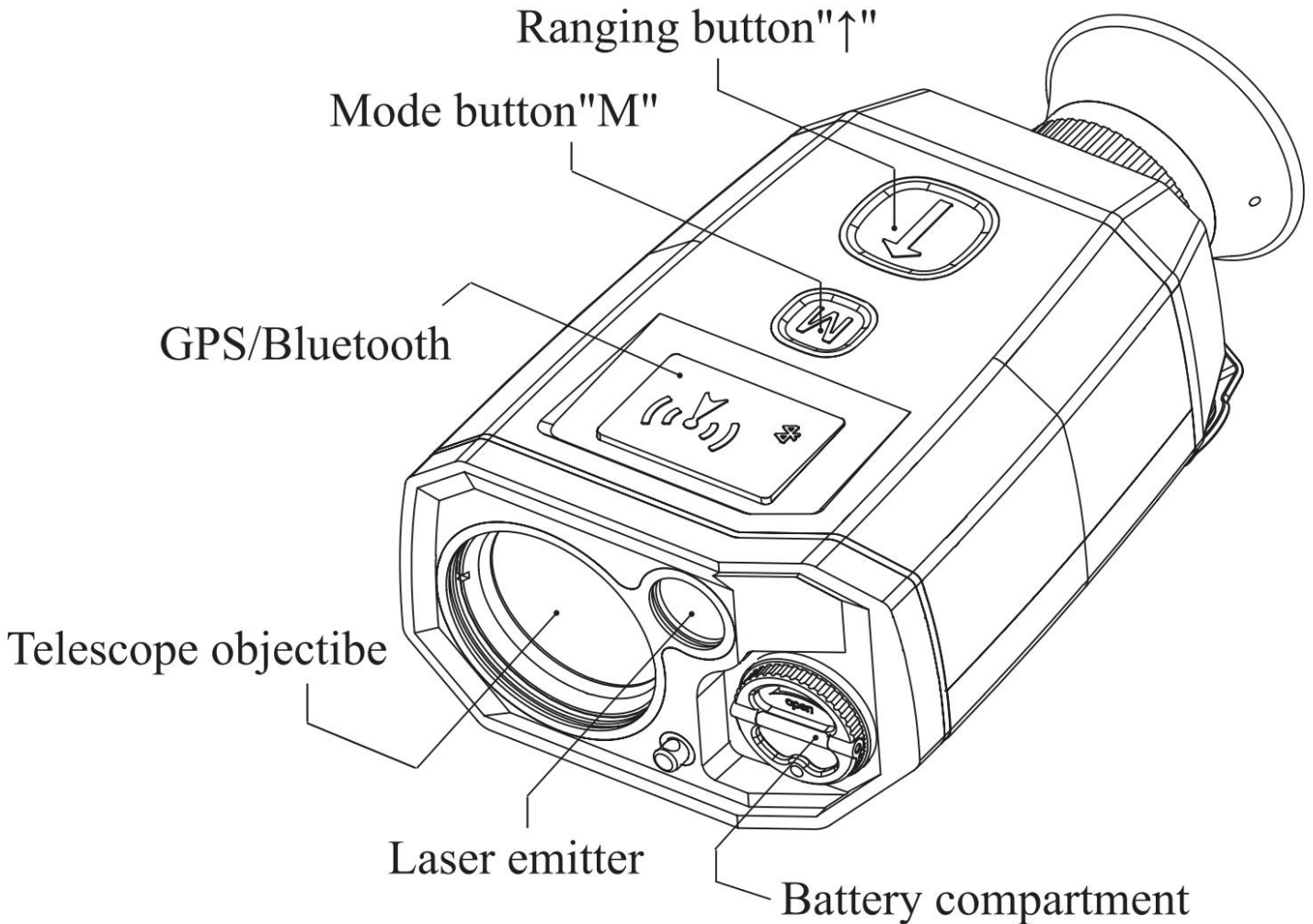
The LRF1000D laser rangefinder is developed based on the independently developed 1535nm erbium glass laser. It is a Class I eye safety product and has rich functions. The main functions include distance, distance measurement, angle measurement, altimeter, two-point distance measurement, target positioning, 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.

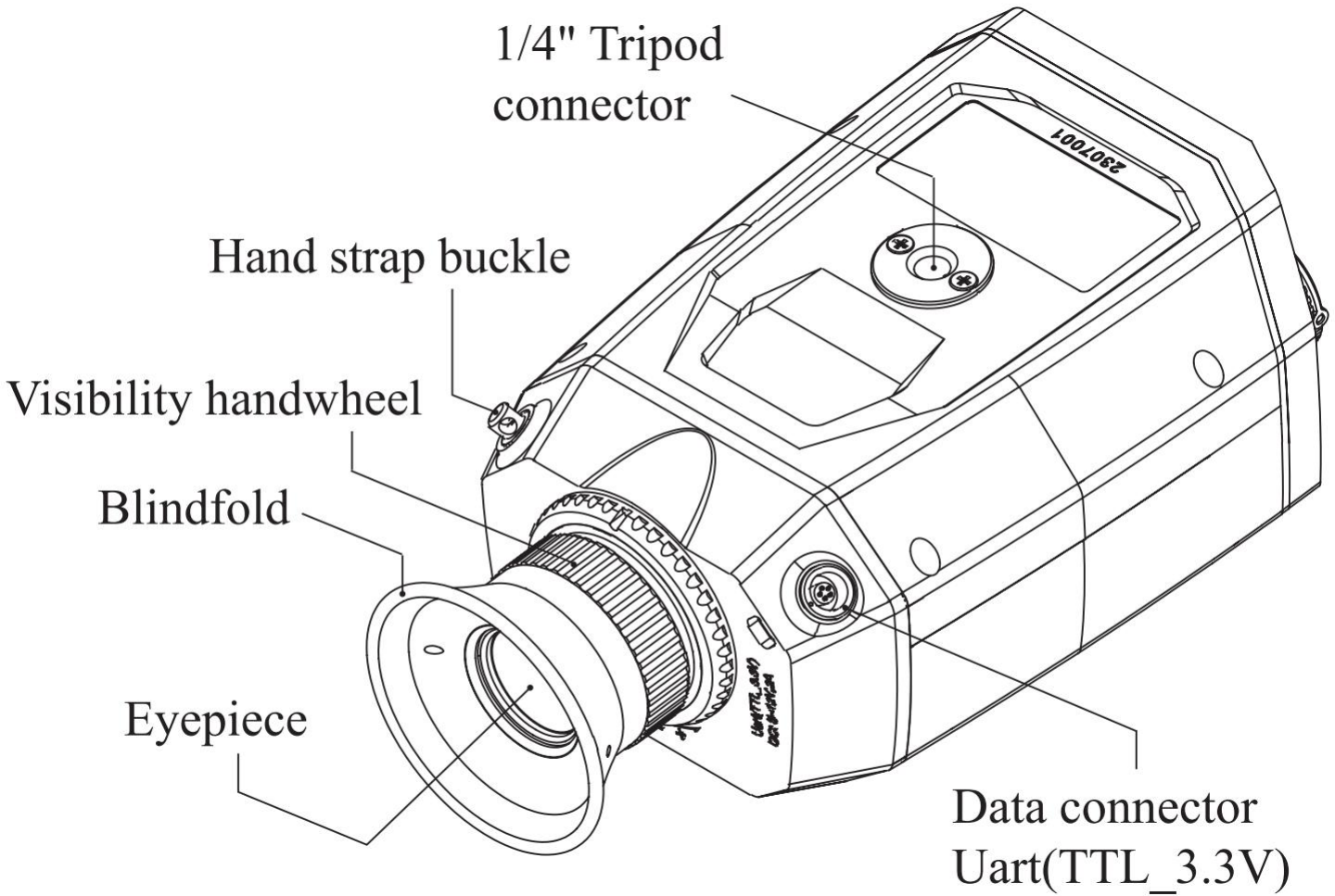


TECHNICAL DATA

Model	LRF1000D
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°C
Storage temperature	-50~+65°C
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





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!



CLASS 1 LASER PRODUCT

CE RoHS

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.

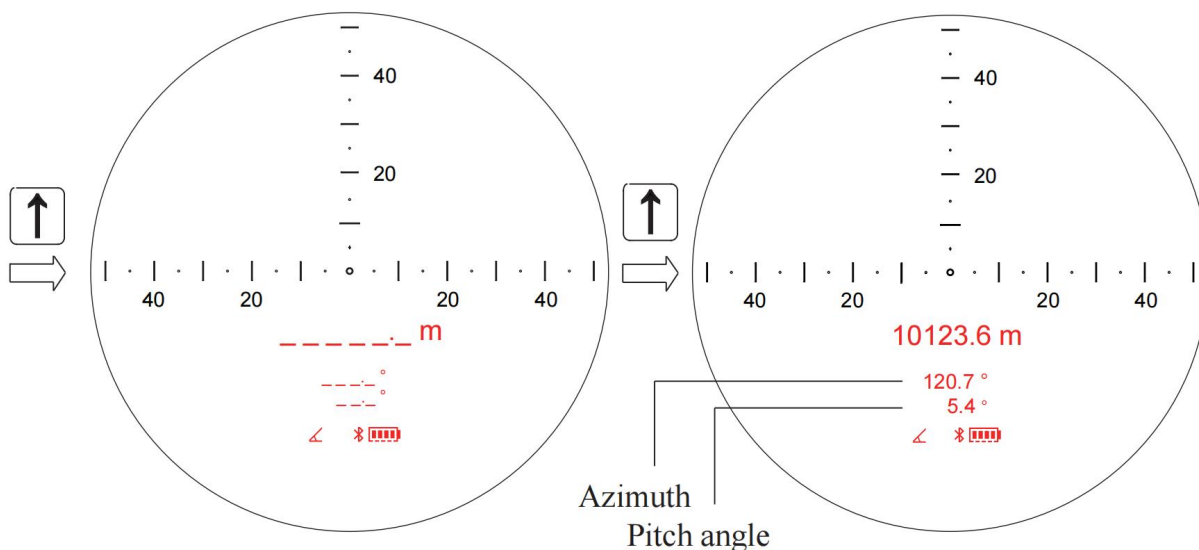
Small and lightweight, it fits easily in your pocket.

DIRECTIONS FOR USE

1. Ranging & Angle

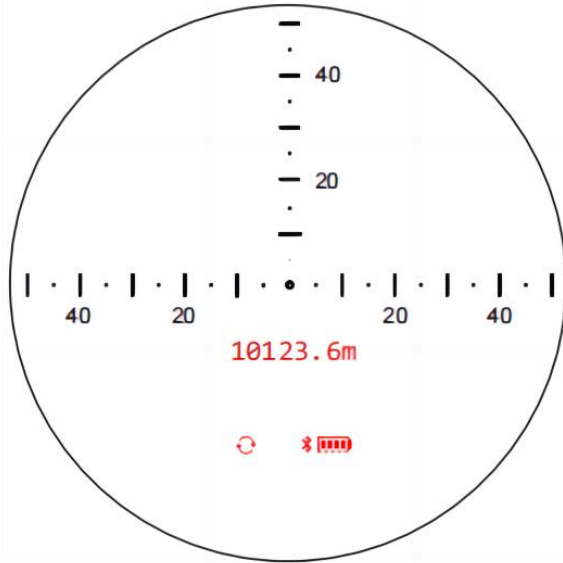
Press "↑" to Power on, default measuring range and angle mode.

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

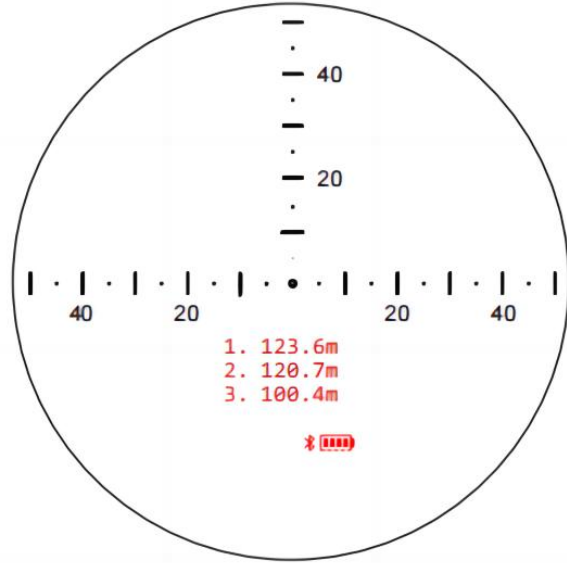


Long press "↑" to continuous ranging at ranging and angle mode, release to stop. * Angles are not displayed when continuous ranging or measuring multiple targets. Up to measuring 3 targets in multi-target.

Continuous ranging



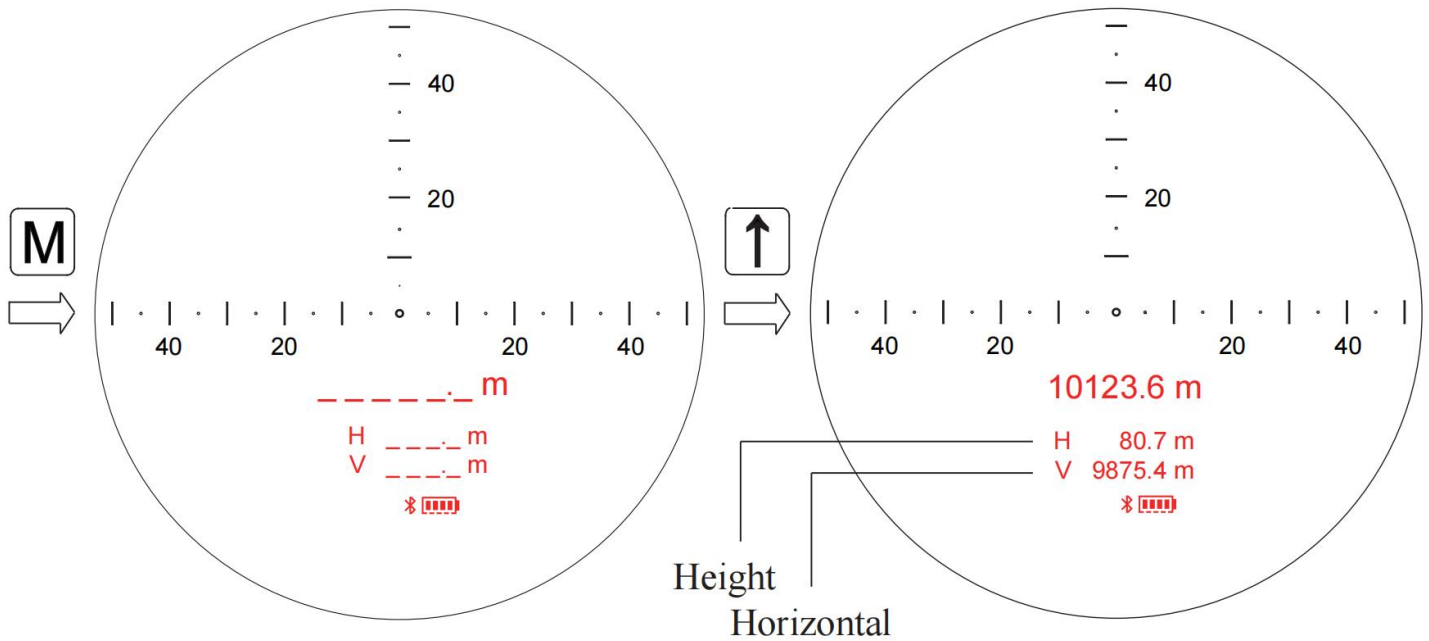
Multi-range



2. Height & Horizontal

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

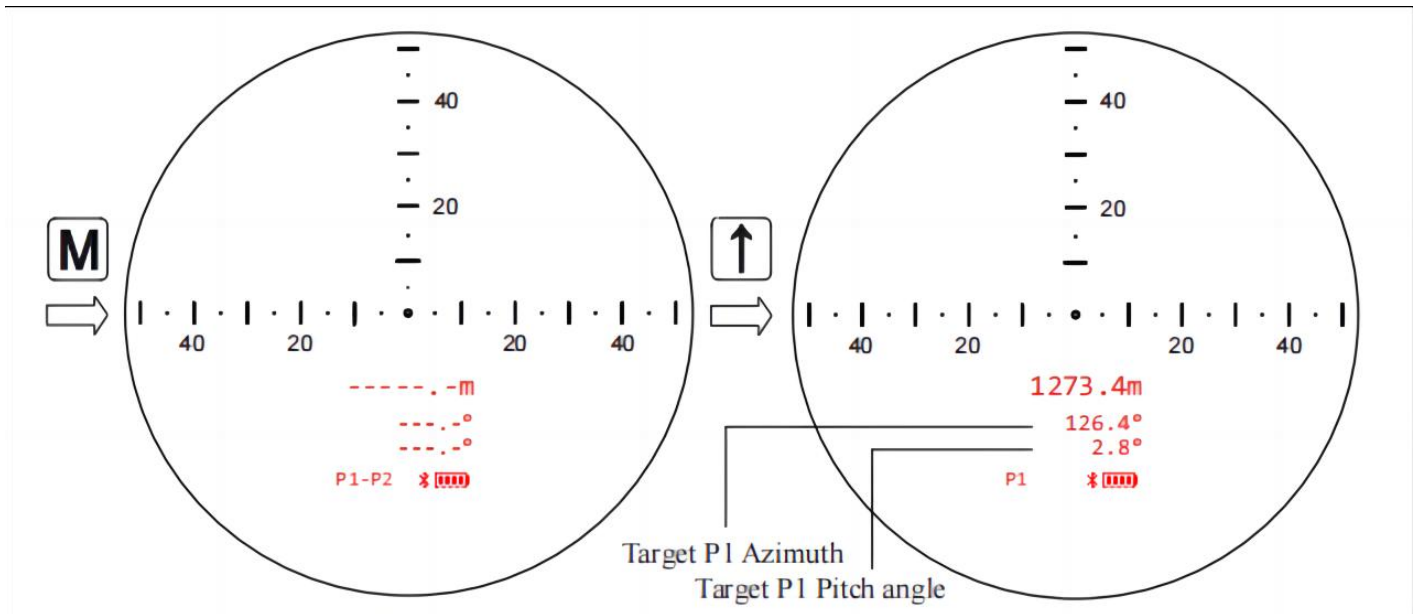
Aim for the target, press "↑" to complete measurement.



3. Two target Distances & Angles

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

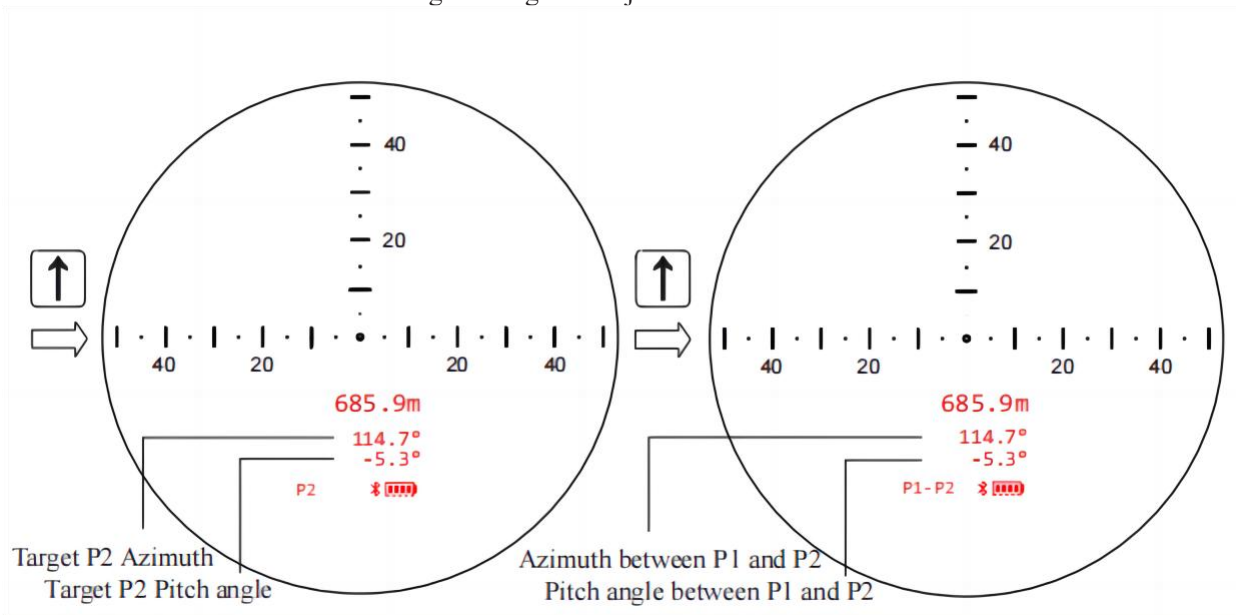
Aim for the first target, press "↑" to complete measurement target P1.



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.

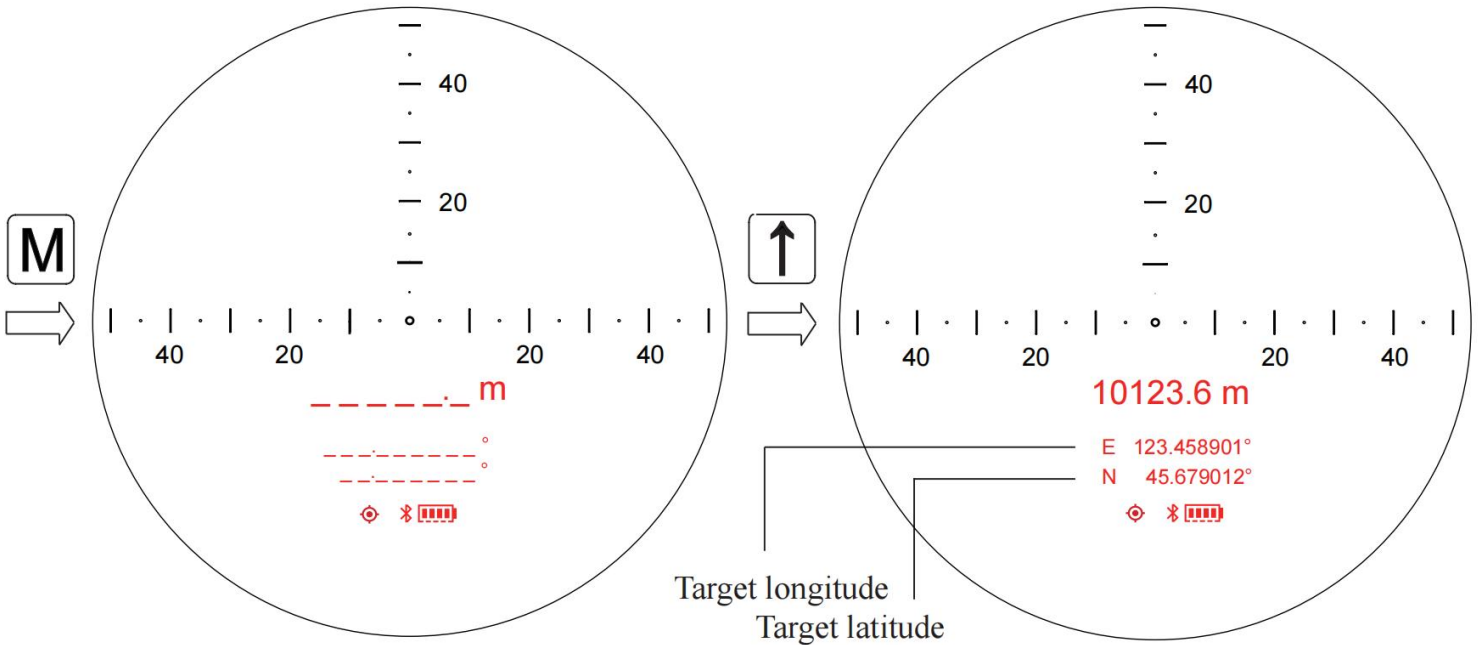


4. Ranging & Location

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.

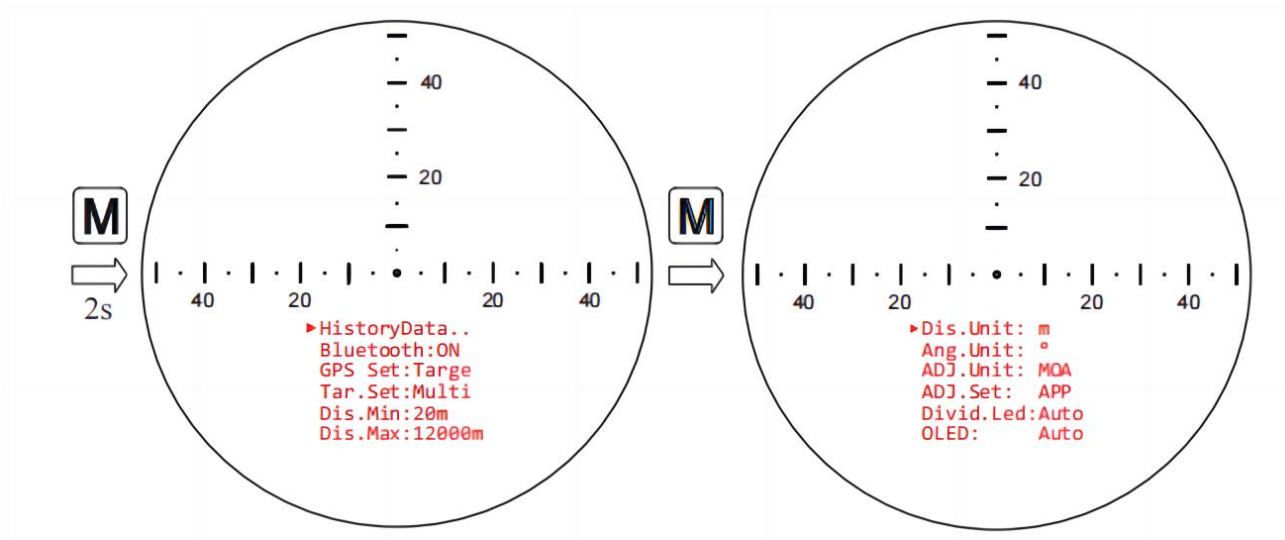


5. Settings menu

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

▶ HistoryData..
Bluetooth:ON
GPS Set:Targe
Tar.Set:Multi
Dis.Min:20m
Dis.Max:12000m



▶ 1. 10123.4m
2. 999.7m
3. 2357.8m

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

HistoryData..
▶ Bluetooth:ON
GPS Set:Targe
Tar.Set:Multi
Dis.Min:20m
Dis.Max:12000m



▶ Bluetooth:ON
OFF

You can turn bluetooth on or off.

HistoryData..
Bluetooth:ON
▶ GPS Set:Target
Tar.Set:Multi
Dis.Min:20m
Dis.Max:12000m



▶ GPS Set:Target
Owner
OFF

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

5.3 Target Setting

HistoryData..
Bluetooth:ON
GPS Set:Targe
▶ Tar.Set:Multi
Dis.Min:20m
Dis.Max:12000m



▶ Tar.Set:Multi
First
Last

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

HistoryData..
Bluetooth:ON
GPS Set:Targe
Tar.Set:Multi
▶ Dis.Min:20m
Dis.Max:12000m



▶ Dis.Min:20m
100m
500m
1000m
2000m

You can set the minimum measurement range.

HistoryData..
Bluetooth:ON
GPS Set:Targe
Tar.Set:Multi
Dis.Min:20m
▶ Dis.Max:12000m



▶ Dis.Max:12000m
10000m
8000m
6000m
4000m

You can set the maximum measurement range.

5.5 Measurement Unit

▶ Dis.Unit: m
Ang.Unit: °
ADJ.Unit: MOA
ADJ.Set: APP
Divid.Led:Auto
OLED: Auto



▶ Dis.Unit: m
yard

Set the measuring distance value unit.

Dis.Unit: m
▶ Ang.Unit: °
ADJ.Unit: MOA
ADJ.Set: APP
Divid.Led:Auto
OLED: Auto



▶ Ang.Unit: °
mil

Set the measuring angle value unit.

5.6 Ballistic solution Setting

Dis.Unit: m
Ang.Unit: °
▶ ADJ.Unit: MOA
ADJ.Set: APP
Divid.Led:Auto
OLED: Auto



▶ ADJ.Unit: MOA
mil
mrad

Sets the unit of the ballistic solution correction.

Dis.Unit: m
Ang.Unit: °
ADJ.Unit: MOA
▶ ADJ.Set: APP
Divid.Led:Auto
OLED: Auto



▶ ADJ.Set: APP
LRF

Set up the ballistic solver.

5.7 Dividing LED and OLED Setting

Dis.Unit: m
Ang.Unit: °
▶ ADJ.Unit: MOA
ADJ.Set: APP
Divid.Led:Auto
OLED: Auto



▶ ADJ.Unit: MOA
mil
mrad

Sets the unit of the ballistic solution correction.

Dis.Unit: m
Ang.Unit: °
ADJ.Unit: MOA
▶ ADJ.Set: APP
Divid.Led:Auto
OLED: Auto



▶ ADJ.Set: APP
LRF

Set up the ballistic solver.

PRODUCT FEATURES

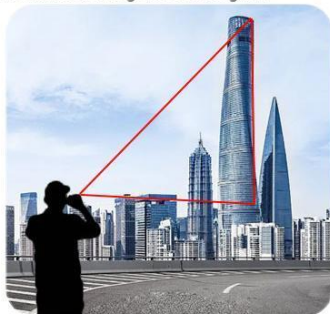
1. Single point ranging

The straight-line distance (slope) from the measurement target to the measurer.



2. Two point ranging

Measure the straight line distance between target A and target B



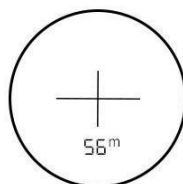
3. Angle measurement

Measures the pitch/azimuth angle of the target-body connection relative to the horizontal/true north direction.



4. Height measurement

Measure the height of the target from the level of the observer.



5. Data transmission

Measurement information is transmitted in real time through the serial port.



ERDI PRODUCT DETAILS

Ergonomic design

Comfortable grip
Simple and smooth design style



Tripod interface

Measure to prevent jitter
Data is more accurate



Easy to carry

Small volume
Light weight



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