



AEA BALLISTICS CALCULATOR USER MANUAL

Hit Smart. Hit Sure.

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To users

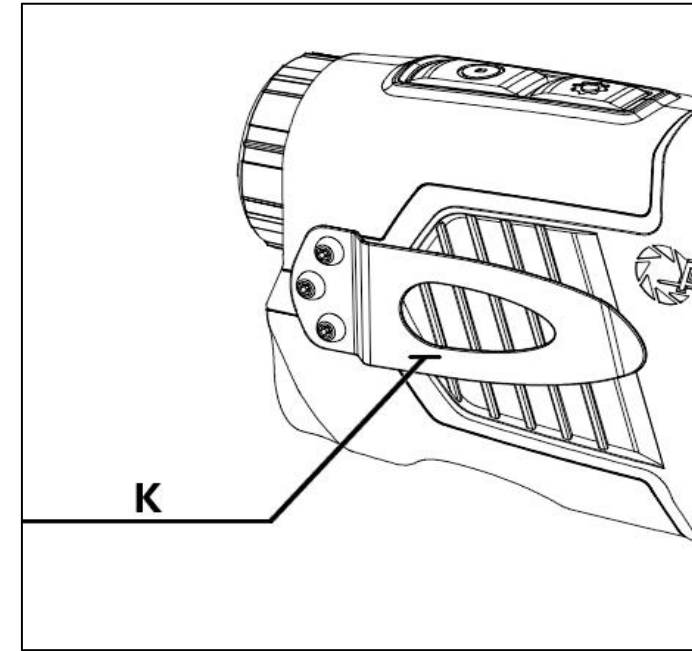
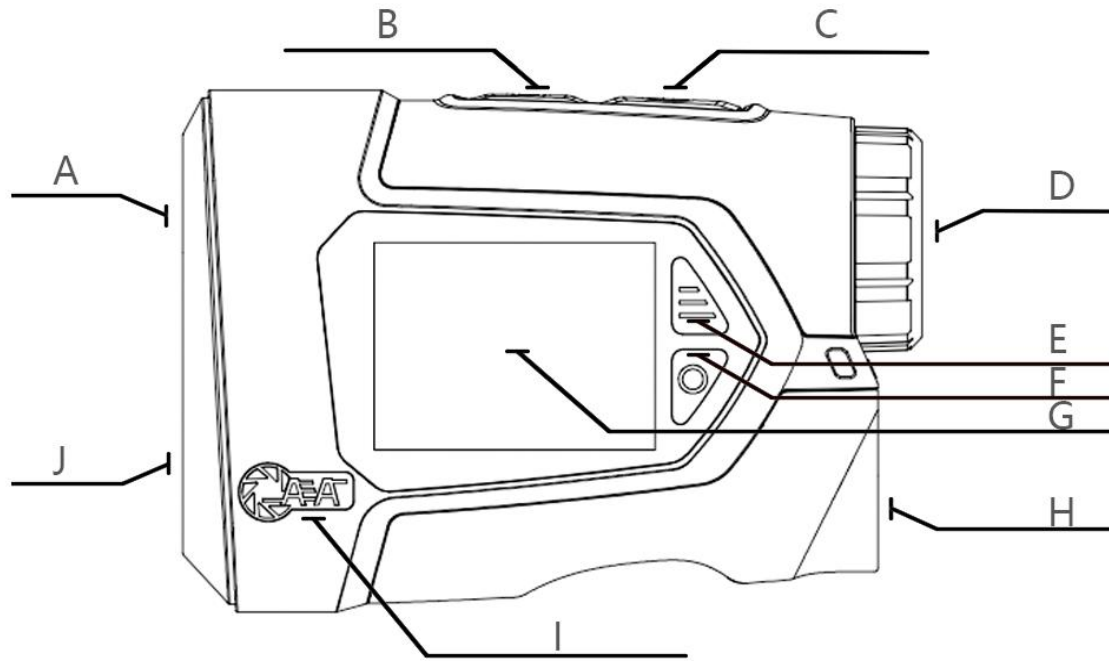
Dear users:

We sincerely appreciate your purchase of our multi-function laser rangefinder. Before utilizing this device, kindly ensure you thoroughly read this manual. Upon completion, please store it properly for future reference should any issues arise during use. It is imperative for users to comprehend and adhere to the operational guidelines outlined in this manual to prevent any potential damage to components caused by incorrect handling. Should there be any modifications to this manual due to version updates or other factors, our company will not provide individual notifications.

Usage & Cautions

- ◆ Prevent this machine from dampness or rain exposure.
- ◆ Do not open the casing without permission, as the machine contains no user-serviceable parts.
- ◆ Maintenance tasks must be performed solely by our company's professional staff.
- ◆ Whether the machine is powered on or off, it is forbidden to directly aim it at high-intensity radiation sources.
- ◆ Avoid vigorous shaking or collision of the equipment during use and transportation.
- ◆ During transportation and storage, ensure the temperature of the main unit does not fall below -40 °C or rise above 60 °C.

1 INTRODUCTION



A.Objective Lens	B.Mode Button	C.Power & Fire Button
D.Eyepiece	E.Up Select Button	F.DN(down) Select Button
G.TFT LCD Screen	H.Battery compartment	I.Logo
J.Emission Lens	K.Quick Fixture	

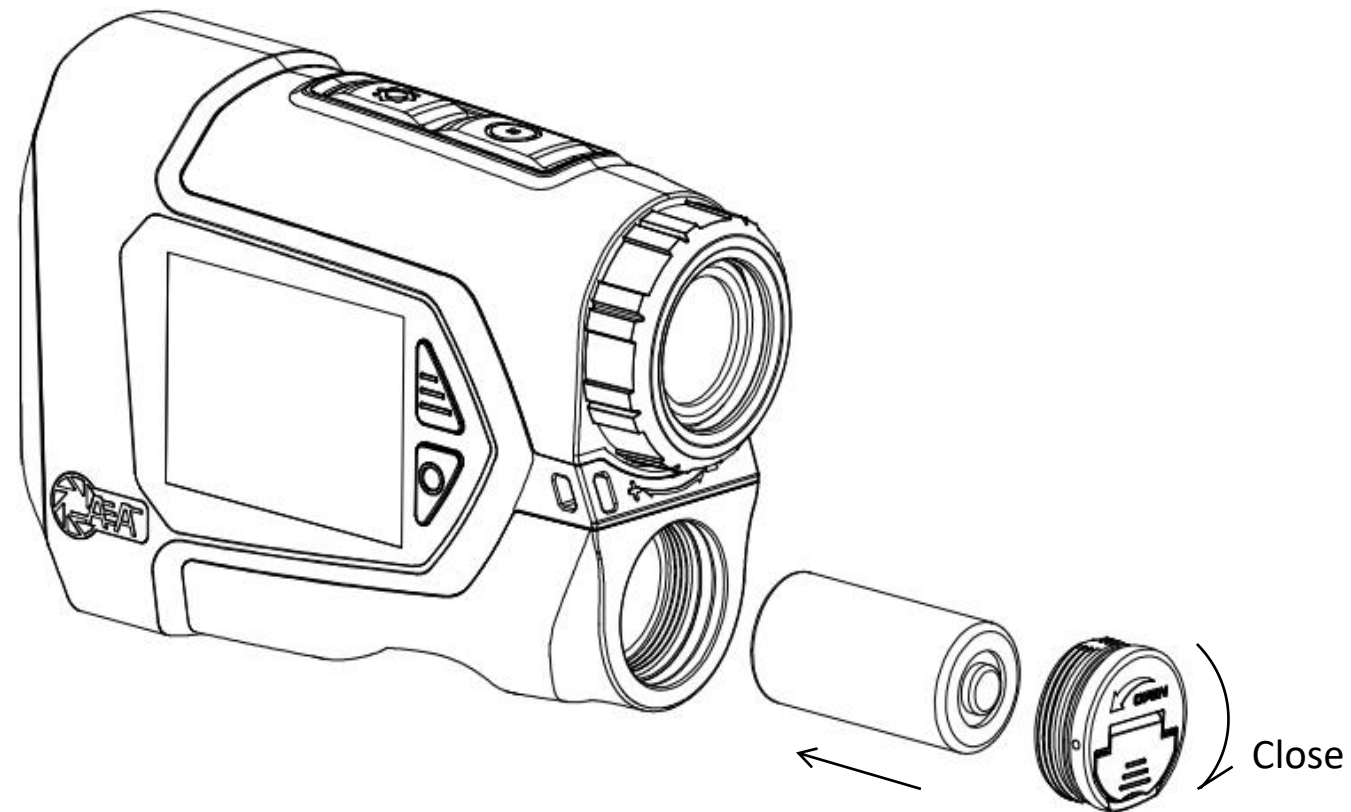
2 SPECIFICATIONS

Model	HD7W-BC1500
Size	107MMX77MMX40MM
Battery	CR123A /3V X 1
Laser Wavelength	905nm
Laser Standards	CLASS1 Eye Safety & FDA
Operating Temperature	-20°C ~ +60°C
Field of view	7°
Display	OLED & 2.0" TFT Display
Unit	M Y
Measurement Range	1-1500M Y
Ballistic Data	Stores data for 4 groups, with a max range of 1000 meters.

3 INSTALLATION

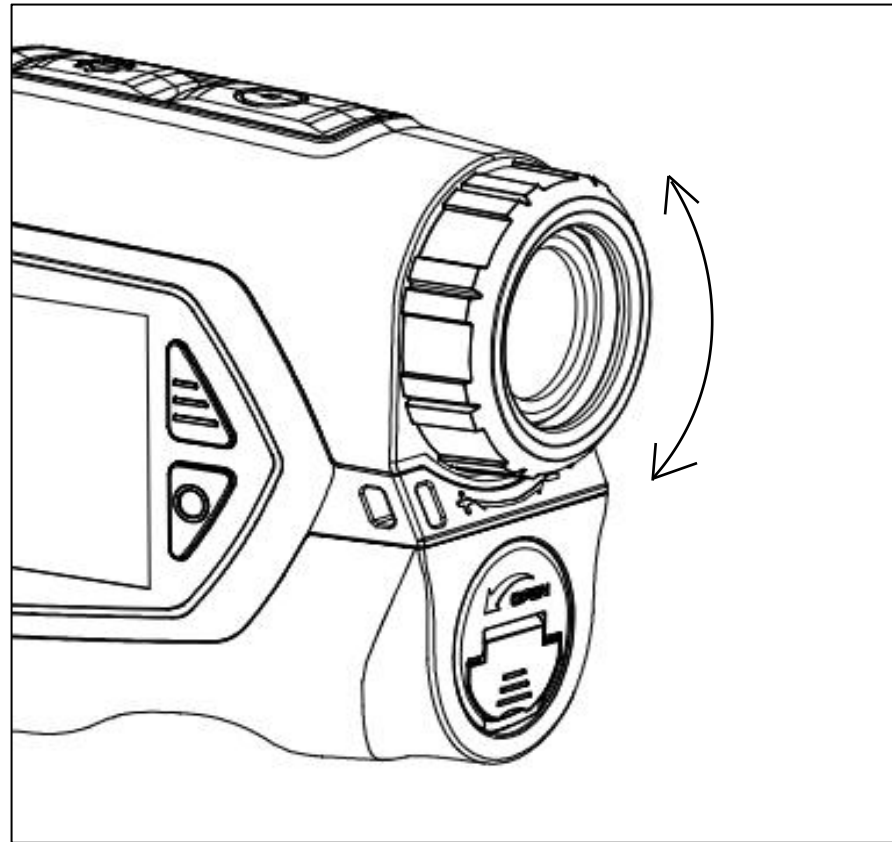
3.1 Battery Installation

Remove battery cover, insert a 3V-rated CR123A lithium battery with negative terminal inward, then securely fasten the cover.



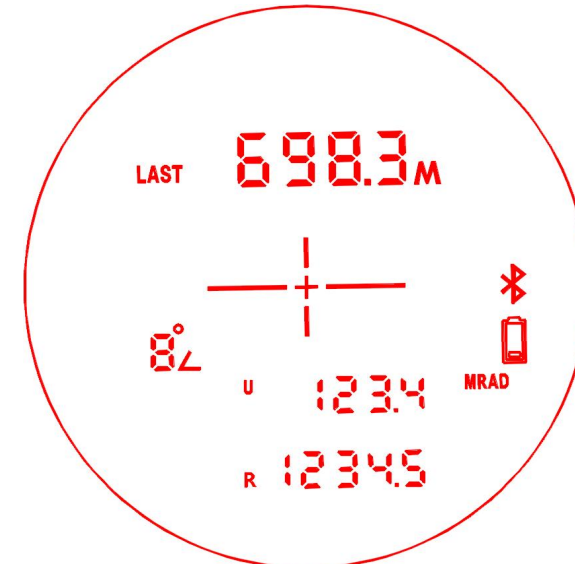
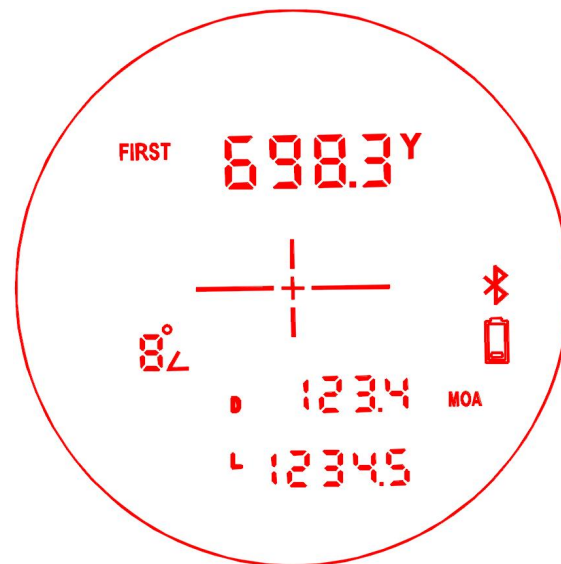
3.2 Adjust Visibility

Refractive adjustment enables adjusting the eyepiece to position the imaging of objects in the viewfinder and display at the clearest point, ensuring optimal viewing comfort.

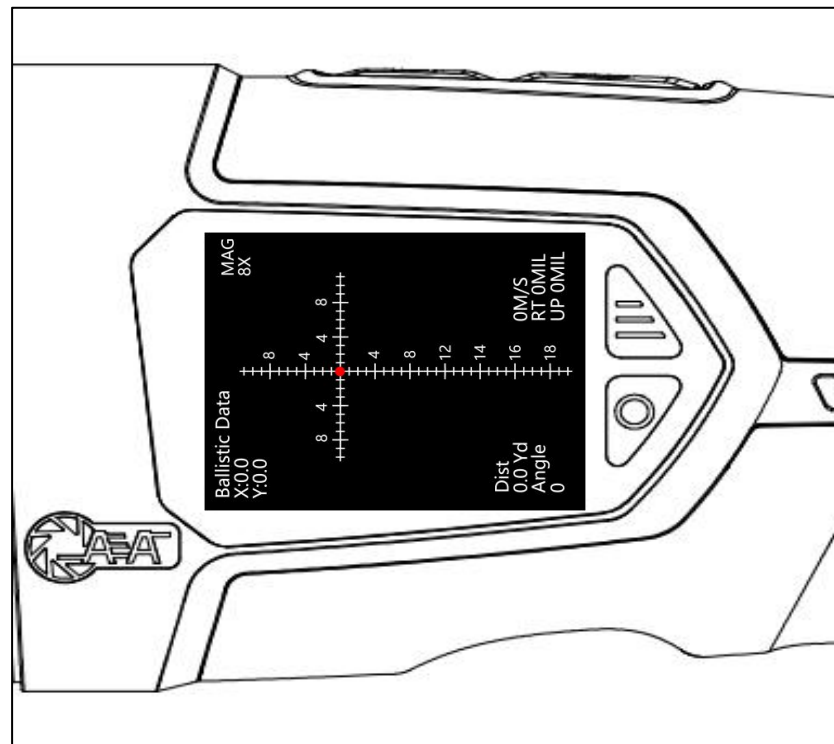
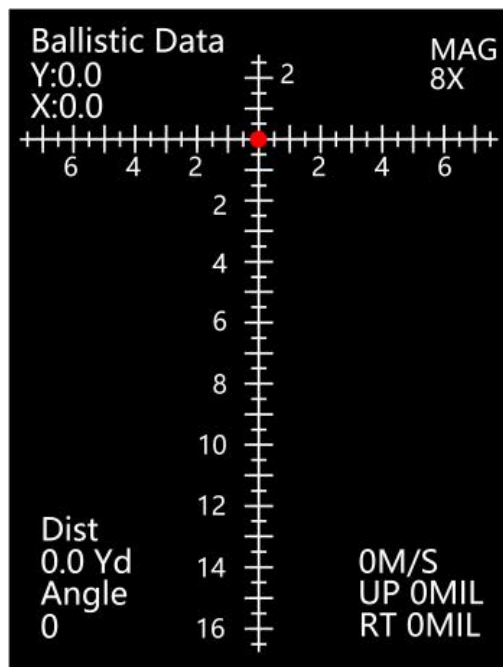


4 DISPLAY VIEW

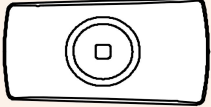
4.1 OLED Display View



4.2 TFT LCD Screen



5 BUTTON OPERATION INSTRUCTIONS

Button	ICON	FUNCTION	STATUS
1 Mode Button		Mode switching, Function Setting, and Function Menu Switching	Click=Mode switching Long Press 3s=SYSTEM Long Press 5s=Power Shutdown
2 ON & Laser Fire Button		Power On, Measurement Target, Selection Key	Click=Power on Measurement Target Selection Key Long Press=Scanning Distance Measurement
3 UP Select Button		Flip Up Key, Data Mode Switch, Option key, Delete Key	Click=+MAG* Selection List Long Press=DEL selection
4 DN Select Button		Scroll Down Key, Confirm Key	Click=-MAG Selection List Long Press=Confirm Selection

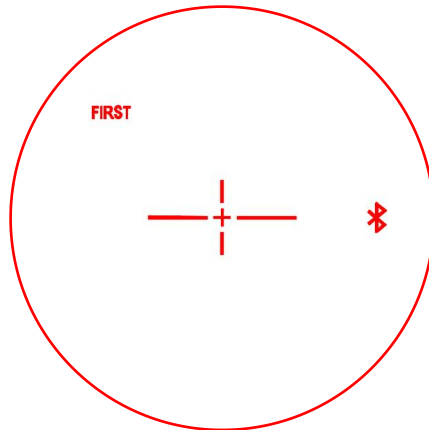
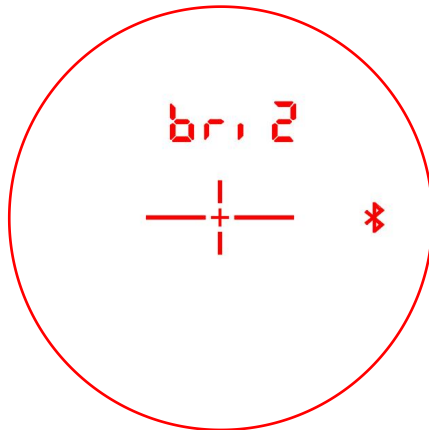
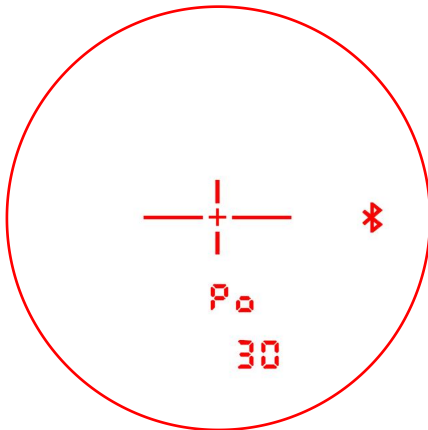
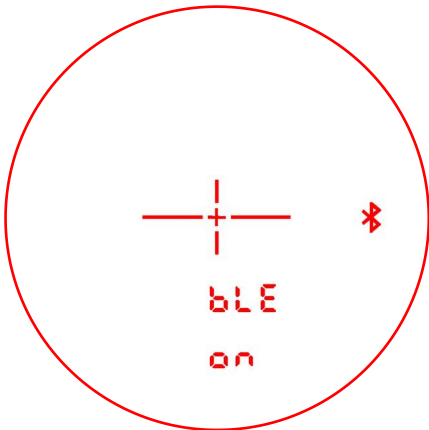
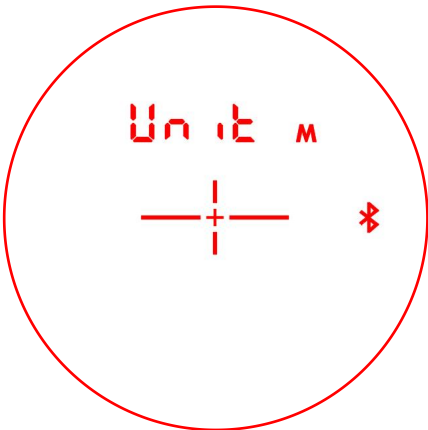
Prompt: Button1+Button2 Long Press 5s = Restore factory settings

MAG*:The magnification currently being used by the scope

6 GENERAL PARAMETER SETTINGS

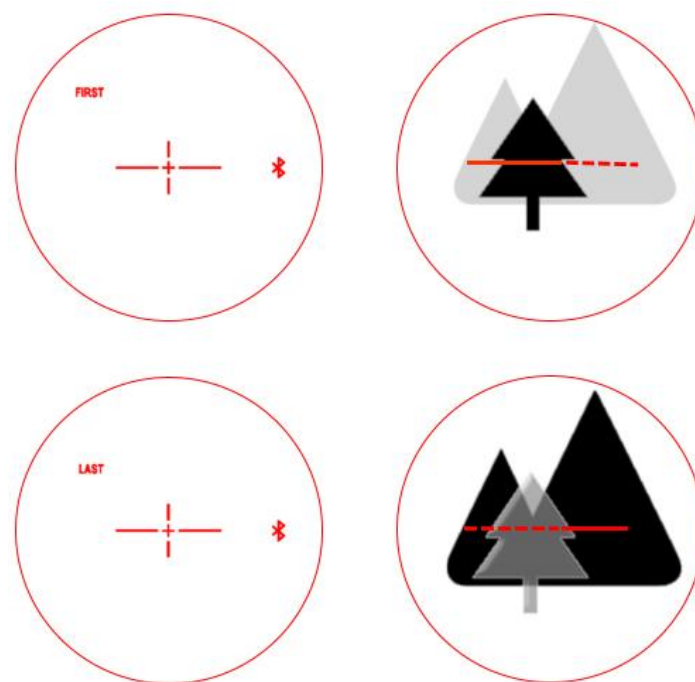
Long press the mode button to access the system settings menu. Then, click and hold the mode button to navigate through various system settings menu pages. On the settings page, click the measurement button to toggle the corresponding function on or off. Once all settings are configured, press the mode button again to save the current settings and seamlessly transition to the next settings option menu.

ITEM	VALUE
Unit	M Y
BLE	ON OFF
Po(Power Shutdown time)	30 60 60 120(s)
Bri(brightness)	1 2 3 4
Ranging mode	FIRST LAST



7 RANGING MODE

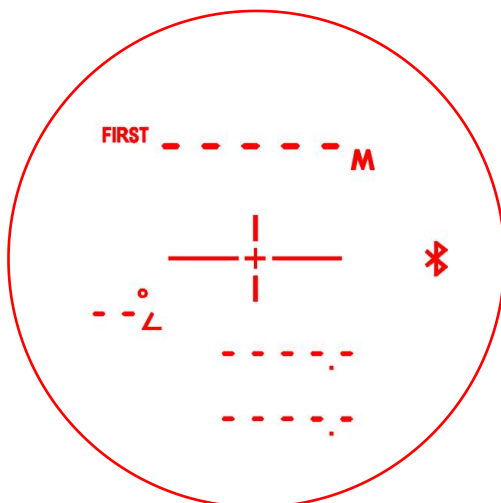
7.1 FIRST&LAST



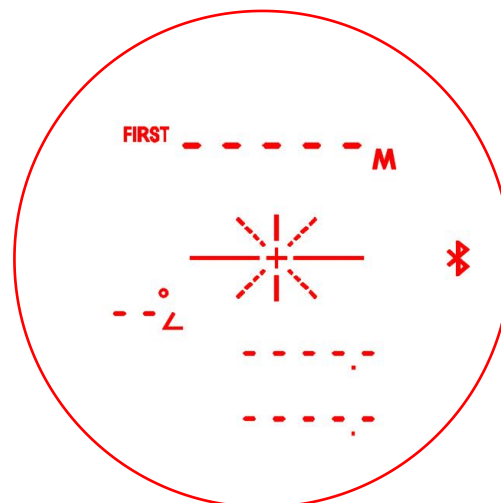
In the general parameter settings of "FIRST&LAST", its function is to differentiate between near and far-ranging targets, particularly when obstacles obstruct the ranging target. "Last" signifies a far range target, while "FIRST" indicates a near range target. To toggle and select the desired mode, such as the near-range mode (with "FIRST" set as the default option), simply press the power button and configure it within the device parameters.

7.2 Standard Ranging Function LINE OF SIGHT(LOS)

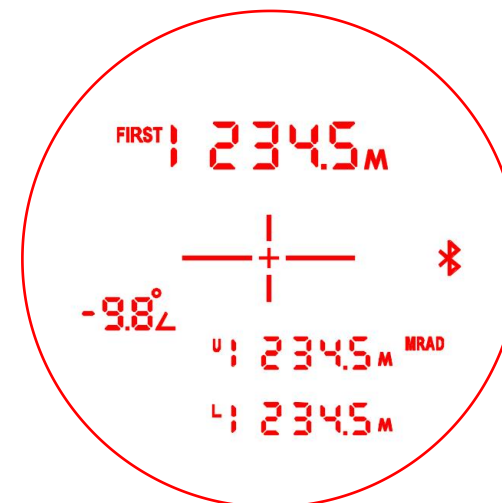
- Press the power button to activate the device, then press the mode button to switch to the standard measurement mode.
- Clicking the measurement button will showcase the distance and angle of the measured target point in the display area. When connected to the APP or using ballistic data mode, trajectory data will also be presented.
- You can long-press the distance measurement button to scan the target for measurement. Upon successful measurement, a vibration alert will notify the user.



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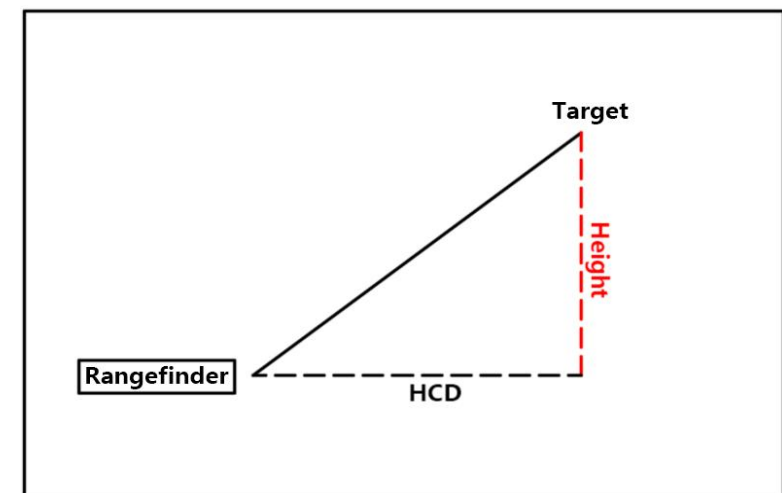
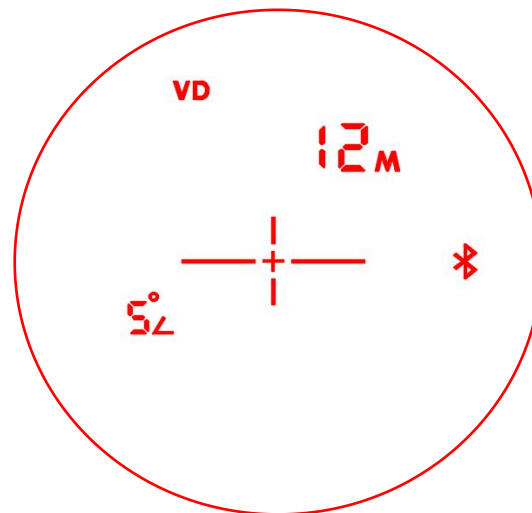
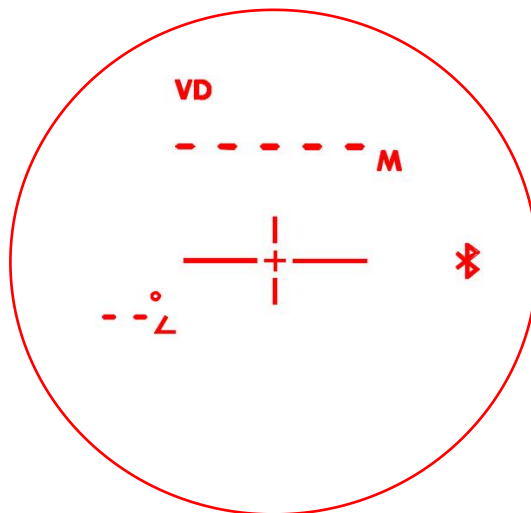
Ranging...



result

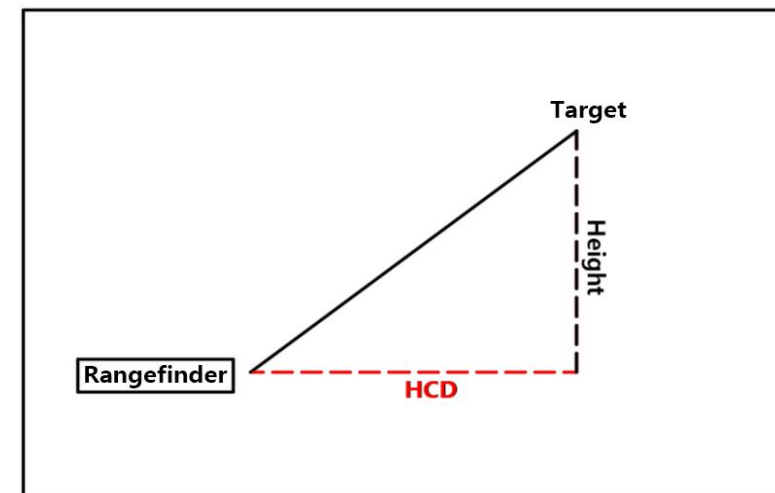
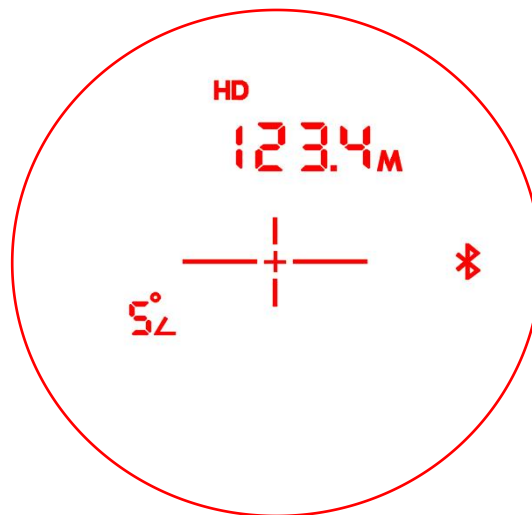
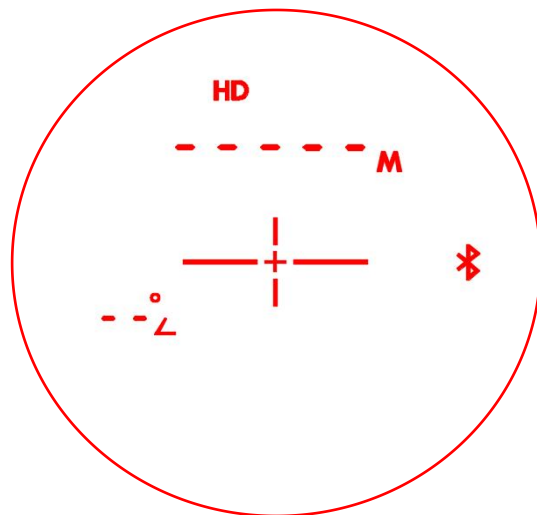
7.3 Height Measurement(Height)

- Press the power button to activate the device, then press the mode button to switch to the height measurement function.
- When the measurement button is pressed, the display area shows the height and angle between the measured target point and the horizontal plane. This measurement function is unavailable in ballistic data mode or real-time ballistic mode .
- You can long-press the distance measurement button to scan the target for measurement, with the measured height updating in real time.

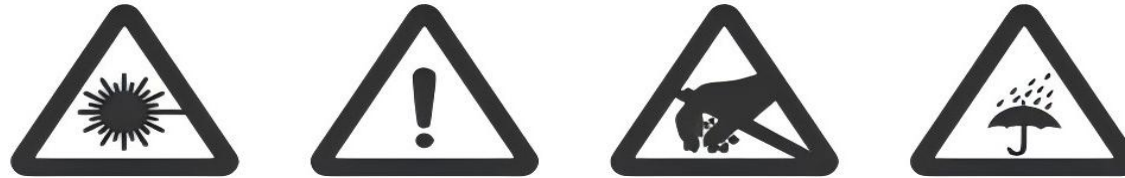


7.4 HORIZONTAL COMPONENT DISTANCE (HCD)

- Press the power button to activate the device, then press the mode button to switch to the horizontal component distance measurement mode.
- When the measurement button is clicked, the display area shows the horizontal distance and angle between the device and the target point. This measurement function is unavailable in ballistic data mode or real-time ballistic mode.
- You can long-press the distance measurement button to scan the target for measurement, and the measured horizontal distance will update in real time.



8 PRECAUTIONS



Laser Safety: This product falls under Class 1 safety category; avoid direct laser gaze.

Operation Guidelines: Incorrect handling may harm the product and pose a risk of personal injury.

Electrostatic Precautions: Static electricity can irreparably damage the product's internal parts.

Humidity Considerations: During transportation, storage, and usage, steer clear of humid conditions. For transportation and storage, retain the product in its original packaging.

When utilizing the product, keep it away from water and other liquids, and shield it from dust and other contaminants.

- Please maintain the cleanliness of the optical glass surface. Should you encounter stubborn dust or deposits, please reach out to our after-sales service for assistance.
- In environments with intense light, the ranging performance for objects with low surface reflectivity may diminish. Utilizing ordinary glass, optical filters, or other semi-transparent materials for distance measurement could lead to increased measurement inaccuracies.
- Rapid temperature fluctuations, along with weather conditions such as rain, snow, fog, haze, and dust, can all impact the ranging performance.
- Refrain from measuring the distance of highly reflective targets at close range (e.g., glass, smooth metal surfaces, etc.). Always shield the receiving lens during the installation and adjustment of the product. Failure to do so may result in permanent damage to the detection components.

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

APA PRECISION AIRGUNS