



MK-R3000





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INSTALLING & USING THE RIX TACTICAL APP

TO 1 ATTENTION

- * The laser safety category of this product is Class 1. Do not look directly at the laser!
- * Avoid measuring targets within 6m to prevent damage to the instrument!
- * Do not disassemble any product components. Unauthorized modifications void the warranty!
- * Keep the product out of reach of small children!
- * Ensure the optical glass surfaces (telescope objective, eyepiece window) remain clean!
- * Avoid measuring distances through glass or translucent materials, as it may cause range errors!
- * Weather conditions (rain, snow, fog, haze, dust) can affect ranging performance!
- * Remove the battery if storing the device for an extended period!



PRODUCT OVERVIEW

The MK-R3000 is a handheld laser rangefinder developed using 905nm laser technology. It is classified as a Class 1 eye-safe product.

This device integrates:

- · Binocular optics with an advanced laser rangefinder;
- · Weather station with temperature, pressure, and humidity sensors;
- Ballistic calculator powered by a proprietary Ballistic Engine;

Main Function:

- Single-point ranging
- Angle measurement
- Environmental data acquisition
- · Ballistic calculations
- Real-time measurement display in the eyepiece
- · Wireless data transmission

PRODUCT OVERVIEW



VO3 CONTENTS

Package Contents:

- MK-R3000 Binocular Laser Rangefinder
- Eyepiece Cover
- Objective Lens Cover
- Storage Case & Neck Strap Kit
- User Manual

For additional support and the latest Operator's Manual, visit rixtactical.com or download the RIX Tactical App.



VO3 CONTENTS



Binocular Laser Rangefinder



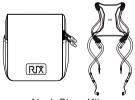
Eyepiece Cover



Objective Lens Cover



User Manual



Neck Strap Kit



Storage Case

VO4 KEY FEATURES

- Red OLED display with auto-brightness adjustment.
- ED glass for superior optical quality.
- Wide Field of View: 7 degrees (123m @ 1000m).
- Ballistic calculation with a database for bullets and gun types.
- Stores up to 10 custom ballistic profiles.
- · Bluetooth 5.3 for extended connectivity.
- Onboard sensors: temperature, pressure, humidity, and digital compass.
- Three ranging modes:
- (1) Single-Point Ranging Mode (SRM),
- (2) Continuous Ranging Mode (CRM),
- (3) Ballistics Application Mode (BAM).
- Ergonomic six-button design for intuitive operation.

PRODUCT IDENTIFICATION





PRODUCT IDENTIFICATION

A	Eyecups	G	Mode Button"M"
В	Image Focus	Н	RIGHT Button
С	Display Focus	1	LEFT Button
D	Diopter Focus	J	DOWN Button
E	Ranging Button"R"	K	UP Button
F	Battery Compartment	L	Device Information Panel

TECHNICAL DATA

SN	Specification	Value
1	Laser Type	905nm
2	Eye Safety	Class 1
3	Beam Divergence	2.5x0.8mrad
4	Magnification	8×
5	Objective Lens Diameter	32mm
6	Field of View	7°
7	Eye Relief	17mm
8	Exit Pupil	4mm
9	Diopter	-5~+5D
10	Interpupillary Distance	56~74mm
11	Light Transmission	≥87%
12	Lens Coating/Glass Type	Fully Multi Coated/ ED Obiective Lenses
13	Range Capability	6~3000m
14	Range Reflective	3000m

▼06 TECHNICAL DATA

SN	Specification	Value
15	Range Building	2500m
16	Range Tree	2000m
17	Range Deer	1500m
18	Accuracy	±1m (6m ~ 300m); ±1+0.1% (> 300m)
19	Range Frequency	≥1.25Hz
20	Detection	≥95%
21	Angle Range	Pitch angle:±90°(±1°)
22	Power Supply	DC 2.6~3.3V
23	Battery Type	CR2×1
24	Battery Life	4000 measurements (at 20°C)
25	Dimensions	135×133×60mm
26	Weight	780g(without battery)
27	Operating Temperature	-20°C to +50°C

▼06 TECHNICAL DATA

SN	Specification	Value
28	Storage Temperature	-30℃ to +55℃
29	Waterproof Rating	IP67
30	Wireless Transmission	Bluetooth 5.3
31	Display Type	OLED
32	Brightness Control	Automatic / Manual
33	Ballistics	Internal ballistics
		Support anemometer Kestrel
34	Mobile App	ios, Android

7.1 Basic Opreation

7.1.1 Battery Installation

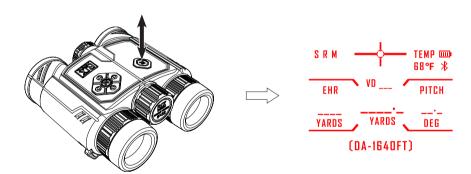
- 1. Remove the battery cap by turning it counterclockwise.
- 2. Insert a CR2 battery (+ terminal first).
- 3. Reinstall the battery cap and tighten it clockwise.

Caution: Be careful not to cross-thread the battery cap during installation.

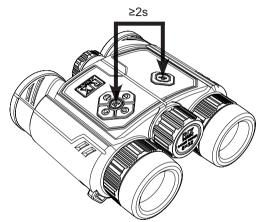




7.1.2 Power On/Off

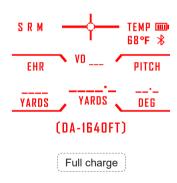


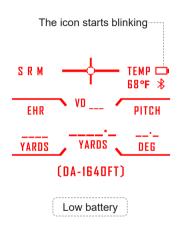
1. Power on: Press the "R" button.



- 2. Power off: Hold the "R" + "M" buttons for 2 seconds.
- 3. Auto Power Off:
 - (1) Screen turns off after 20s of inactivity; (2) Device shuts down after 2 minutes of inactivity.

7.1.3 Battery Indicator





One CR2 batteries can meet 4000 measurements on a full charge.

^{*} The CR2 battery voltage should not be less than 2.6V.

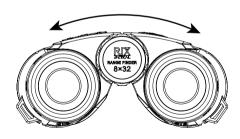
7.1.4 Installing the Neck Strap

Attach the neck strap to the binoculars by taking the small sewn paracord loops and inserting the paracord end through the attachment points on both sides of the binocular. Next connect the neck strap clips to the paracord loops. Adjust the neck strap as appropriate for an optimal fit.



7.1.5 Adjusting the Interpupillary Distance

The interpupillary distance (IPD) is the distance between the centers of the left and right eye pupils. Match the binocular's IPD to that of your eyes so you see a single image free of shading. Rotate the binocular barrels inward or outward to line your eyes up with ocular lenses.

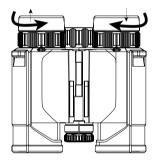


7.1.6 Adjusting the Eyecups

The eyecups on a MK-R3000 twist up and down so any viewer can see the full field and enjoy comfortable viewing—with or without eyeclasses.

When not using eyeglasses or sunglasses, keep the eyecups fully extended. For best viewing when wearing eyeglasses, twist eyecups down.

The adjustable eyecups are designed for comfort and to set the correct eye relief. To adjust the eyecup up, increasing the eye-relief, turn it counter clockwise. To return the eyepiece down, decreasing the eye-relief, turn it clockwise.



7.1.7 Properly Focus the Binocular

For the best views, follow this process to properly set the display, center focus, and diopter. Choose an object that is about 20 yards away from you and stay in the same spot until you have adjusted the binocular for your eyes.

- (1) Begin by pressing the "R" button once to turn on the display. Close your left eye or cover the left objective lens with your hand, and adjust the diopter on the right channel to focus the display.
- (2) With your left eye still closed, or the left objective lens still covered, adjust the center focus ring to bring the scene into focus.
- (3) Now, while viewing the same distant target while the OLED display is in focus, open your left eye and adjust the left diopter adjustment to bring the target image into focus with your right eye.
- (4) While adjusting either diopter adjustments you should use the same distant target for adjustment and should avoid adjusting the center focus wheel.

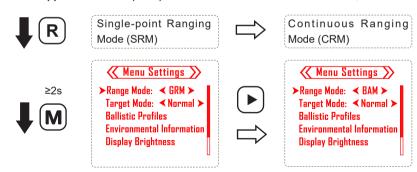
Note: It can be beneficial to put a small mark on the binocular housing in line with the diopter reference line. Use this as a quick reference to ensure the diopter ring is not accidentally adjusted.



7.2 Ranging Modes

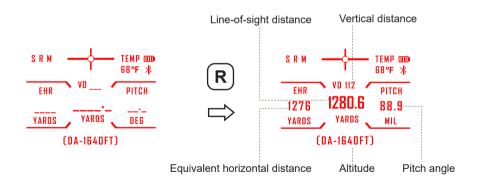
The MK-R3000 have three ranging modes:

- Single-Point Ranging Mode (SRM): Measures direct line-of-sight distance;
- Continuous Ranging Mode (CRM): Tracks target movement;
- Ballistics Application Mode (BAM): Provides advanced ballistic calculations;



7.2.1 Single-point Ranging Mode (SRM)

Press "R" button to Power on, system enter the Single-point Ranging Mode (SRM) . Aim for the target, press "R" button to complete measurement.



7.2.2 Continuous Ranging Mode (CRM)

In the General Ranging Mode(GRM) interface, Long press "R" button to enter Continuous Ranging Mode (CRM), release to stop.

* Vertical distance are not displayed when continuous ranging.



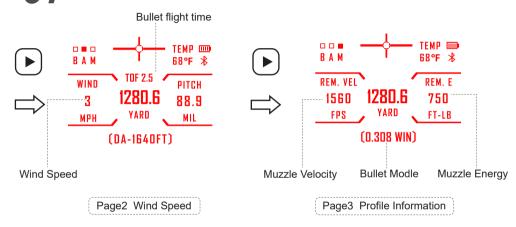
Continuous ranging

7.2.3 Ballistics Application Mode (BAM)

In the General Ranging Mode(GRM) interface, press and hold the "M" button for more than 2s to enter the menu settings interface, then press the Up or Down Arrow Buttons to select the Rang Mode; press the Left or Right Arrow Buttons to select the BAM.

Aim for the target, press "R" button to complete measurement. By pressing the Left or Right Arrow Buttons, you can quickly switch between three pages to access different types of ballistic calculation information.





In the BAM interface, besides the target distance and azimuth, the first page displays the most important information for shooting related uses cases: elevation and windage value (depending on wind direction and speed) calculated by Ballistics Algorithmics.

The second page displays the wind speed and the inclination to your measured target and the time of flight of the bullet according to the activated gun profile.

The third page displays the activated Gun Profile and the remaining energy and velocity of the bullet at the measured target distance.

7.3 Environmental Sensors

- Temperature: -40°C to +80°C (±1°C accuracy);
- Humidity: 0-100% (±3% accuracy);
- Pressure: 300hPa 1200hPa (±0.005hPa accuracy);

7.4 Menu Setting

Press "M" button 2s to enter the menu setting on any measurement interface.

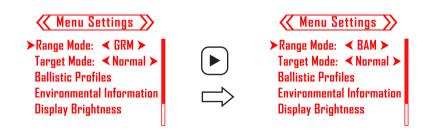
Press the Up or Down Arrow Buttons to select the settings. Press "R" button go to the sub-settings or confirm setting.

Press "M" button 2s to off the setting menu on any setting interface.



7.4.1 Range Mode

You can choose either GRM or BAM ranging mode. Press "M" button 2s to return ranging interface.

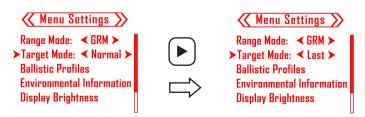


7.4.2 Target Mode

The MK-R3000 provides three target modes: First Mode. Normal Mode and Last Mode.

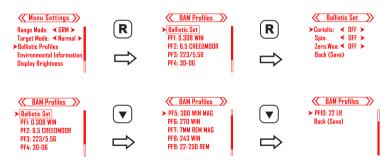
First Mode: This mode is Looks for the closest distance when panning and scanning.

Normal Mode:Your MK-R3000 comes preset to Normal target mode. This is the standard mode providing the target's range with the strongest range result. Best Mode is the recommended target mode for most situations. **Last Mode:**Looks for the farthest distance when panning and scanning. This mode is ideal for ranging a specific target behind a group of objects like brush, trees, rocks, etc.



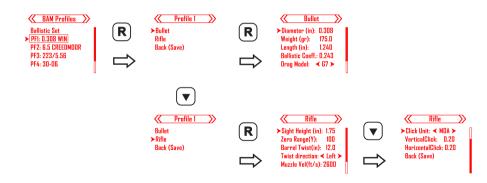
7.4.3 Ballistic Profiles

You can get or reset Ballistic Profiles from the APP; It is also possible to use the 10 common default Ballistic Profiles by factory default.

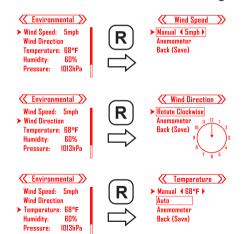


Press the Left or Right Arrow Buttons to switch "ON" or "OFF" about the three rows of parameters that affect the result of the ballistic solution.

The profiles can be used as is or customized to reflect your specific rifle and bullet combination. Edit a profile, ensure it is designated with the arrow and then select it. You are able to customize Bullet information, Rifle information.



7.4.4 Environmental Information Setting



You can manually set the wind speed by pressing the Left and Right buttons, or you can get information through the anemometer.

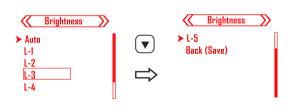
You can set the wind direction manually or get it from the anemometer.

You can use the "R" button to rotate the wind direction arrow to match your current wind conditions.

You can manually set the temperature, humidity, and pressure by pressing the Left and Right buttons, also you can get information from the anemometer or the sensors onboard your rangefinder.



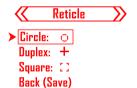
7.4.5 Display Brightness



You can set the OLED screen brightness through both automatic and manual modes; In automatic mode, the screen brightness is adaptively adjusted according to the ambient brightness. In manual mode, there are five levels: L-1、L-2、L-3、L-4 and L-5, which you can set by the "R" button and the Up and Down buttons.

7 DIRECTIONS FOR USE

7.4.6 Reticle Selection



Within the Reticle Selection submenu, you will see four options for selection. There are three options for the central aiming feature: a small circle, a duplex and a square box. And circle is default.

7.4.7 Bluetooth Settings

You can turn bluetooth on or off. When Bluetooth is on, you can search for and connect to a device by pressing "R" button, and you can also refresh the list of nearby Bluetooth devices.

View: Displays the name of the currently connected device.

Disconnect: Disconnect the currently connected device, and the View displays"-----".

Historical records: You can view and delete previous historical device records; It is also possible to connect devices through history.

7 DIRECTIONS FOR USE

















Remove:Delete by pressing the left button. **Connect**:Connect by pressing the right button.











➤ Bluetooth

➤ View: Elite -2569184

Disconnect
Search
Historical records
Back (Save)

7 DIRECTIONS FOR USE

7.4.8 Unit Settings





You can set the units of distance, angle, temperature, wind speed, Altitude and Windage.

(1)Distance: yard/m;

(4)Wind speed: mph / m/s;

(2)Angle: degrees(°)/mil;

(5)Windage: MOA/MRAD;

(3)Temperature: °C/°F; (6)A

(6)Altitude: feet/m;

7.4.9 About

Within the About submenu, you will see the current software versions installed on your MK-R3000 and the serial number of your product. You can choose to restore factory Settings to clear previous changes.

You will see the following menu:



8.1 Download the App

- iOS: Download from App Store.
- Android: Download from Google Play Store.
- *The specific functions of the APP are subject to the APP manual. This manual is for reference only.



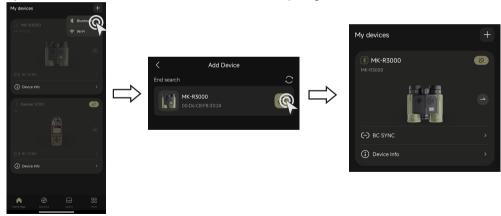






8.2 Pairing via Bluetooth

- 1. Enable Bluetooth on your smartphone;
- 2. Launch the RIX Tactical App;
- 3. Tap "Search for Device" and select MK-R3000; 4. Confirm pairing;



8.3 Ballistics Calculation

- · Retrieves wind speed, temperature, and altitude;
- · Displays muzzle velocity, energy, and bullet drop;
- · Supports Kestrel anemometers for real-time wind data;







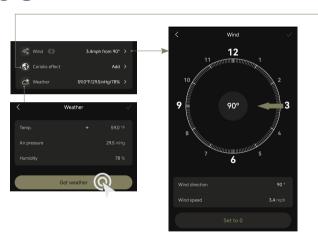
Distance

Press "R" on the device or ranging button in app can get the distance.

Pitch angle

Aming the target and tap "ok" to get pitch angle.



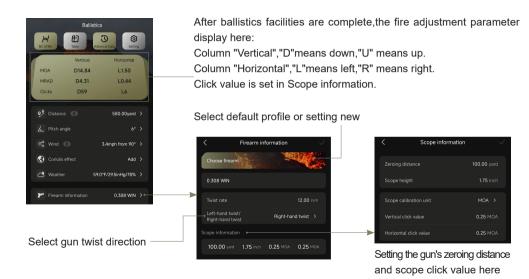


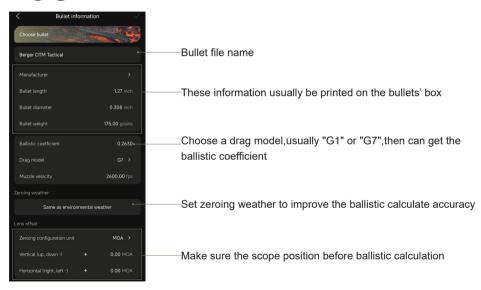
Weather - Get temperature, air pressure, humidity from local station

Wind-Input wind direction and speed from anemometer device to app

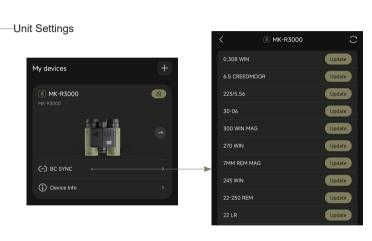


Coriolis effect - Get the latitude and azimuth angle from your phone









When the MK-R3000 is connected to the app via Bluetooth, you can get or reset 10 common default Ballistic Profiles from the APP;

FREQUENTLY ASKED QUESTIONS (FAQ)

SN	Question	Answer		
1	Device not powering on?	a. Ensure a fresh CR2 battery is installed. b. Make sure the battery cover is tight. c. If you are in a bright light environment, make sure the OLED brightness is set to L-3 or Auto mode.		
2	Display not focusing?	Adjust the diopter ring.		
3	Information on the display is disappearing	If there is no operation, screen goes off after 20s and the product power off after 2 mins.		
4	The battery icon starts blinking	The battery is almost used up,please change a new battrey.		
5	Measurements can not be taken - no function at all	a. The battery has run out. b. Low temperature reduces performance of battery. c. The positive and negative terminals of the battery are inverted. d. The device is defective. a. Distance/Angle is outside the specified range. b. Object too small or inaccurately targeted. c. Bad weather conditions.		
6	When I measurement,the OLED displayM orDEG			

FREQUENTLY ASKED QUESTIONS (FAQ)

SN	Question	Answer	
7	Ballistic solution in the App and displayed in the MK-R3000 is always off a few inches.	For accurate ballistic solutions make sure you have updated the temperature and altitude within the App to your current location, you have the correct bullet caliber (diameter) and weight selected, your zero distance is correct and that your muzzle velocity is correct.	
8	In weather with low visibility, the rangefinder's ranging ability decreases	The rangefinder will have very different performance based on changes in ambient conditions such as bright sunlight or snow, rain or fog, temperature and the reflectivity of the target being ranged.	
9	Battery drains too fast?	a.Continuous ranging mode consumes more power. b.This is normal operation but you should always keep a spare CR2 battery when heading out to remote locations.	
10	Inaccurate ballistic calculations?	a. The wind speed changes too fast,so that the results of ballistic calculation are obsoletely. b. Update environmental data in the app.	

INVENTORY

SN	Name	Qty.
1	MK-R3000 Binocular Laser Rangefinder	1
2	Storage Case	1
3	Neck Strap Kit	1
4	Objective lens cover	1
5	Eyepiece cover	1
6	Lens Cleaning Cloth	1
7	User Manual	1

LEGAL & REGULATORY INFORMATION



WARNING LASER

CLASS 1 LASER PRODUCT. INVISIBLE LASER RADIATION.

This product complies with IEC 60825-1: 2014 and complies with FDA performance standards for laser products.

Pp<45.1W. λ=905 nm. t= 20ns





Caution -use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Contain FCC ID: XMR2023HCM111Z

- 1. 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

LEGAL & REGULATORY INFORMATION

2. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

EMC Class B

Note: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.

Bluetooth Frequency Range: 2402.0-2480.0 MHz.

Warranty: 5 Years - Binocular Laser Rangefinder.



