RHX500S Product User Manual

Full-Color Infrared Fusion Telescope

Model： RHX500S

Next-generation night vision technology with high-definition full color Infrared Fusion Telescope

The RHX500S is a revolutionary day/night binocular featuring integrated full-color and infrared fusion technology. It combines full-color night vision, infrared night vision, and fusion contour enhancement capabilities. Equipped with BeiDou positioning, an electronic compass, laser rangefinding, and other related functions. It enables all-weather observation, undeterred by extreme darkness in tunnels, caves, or other completely lightless environments. At night, it provides full-scene observation of all targets, unaffected by adverse weather, fog, rain, or obstructions like glass. In fusion display mode, it delivers a unique contour enhancement visual effect.

Product Features

• 24/7 all-weather observation, unaffected by intense light

• Full-color night vision with vivid hues for comfortable viewing, enabling faster target detection and accurate assessments

• BeiDou/GPS global positioning, electronic compass, electronic rangefinder

Product Overview

1 Eyepiece Cover	2 Eyepiece Focusing	3 Battery Cap
4 Function Menu	5 BeiDou/GPS Positioning	6 Rotary Knob Menu
7 Infrared Focusing Tube	8 Laser Rangefinder Port	9 Full-Color Focusing Barrel

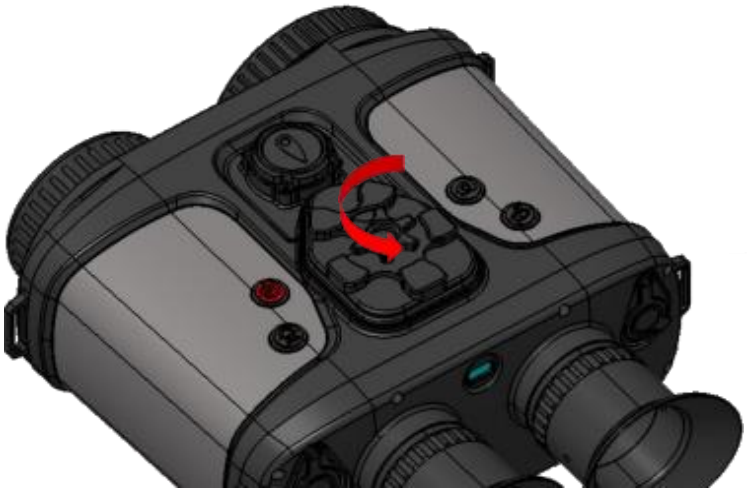
Specifications

Objective Lens	F1.2
Full-Color Optical Magnification	Zoom 4.5×
Combined Magnification	Day 45×, Night 18×
Low-Light CMOS Resolution	3840x2160
Thermal Imaging Detector Resolution	640X512
Frame Rate	30HZ
Laser Rangefinder Range	3 Km
Minimum Illumination Operating Environment	10^{-3} Lux
Display Type	Micro OLED
Display Resolution	1920x1080
Protection Rating	IP67
Operating Range	-25℃- 40℃
Battery Type	18650 Battery5 pieces
Battery Capacity	17500mAh
Dimensions	225mm×204mm×100mm
Weight	1950 g（Without Battery）
Working time	≥10 hours

Instructions for Use

Before using this product, remove all packaging from the product and the lens cap, then install the battery as follows.

Installing the Battery
Step 1: Turn the battery cover counterclockwise to open it.

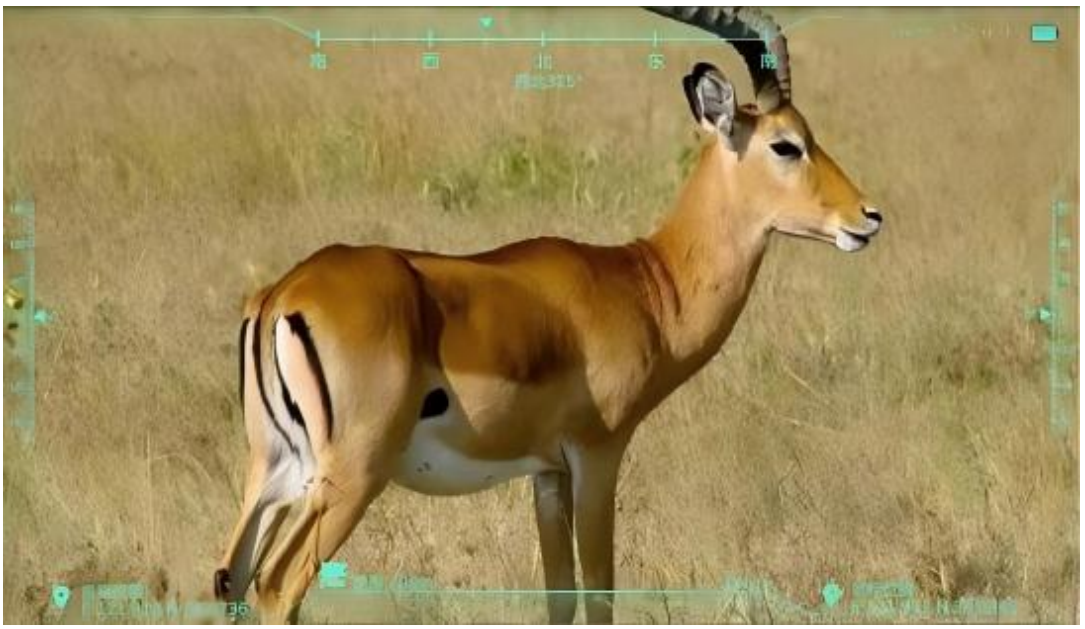


Step 2: Turn the battery cover knob counterclockwise, pull open the battery cover, insert the battery with the negative terminal facing upward.

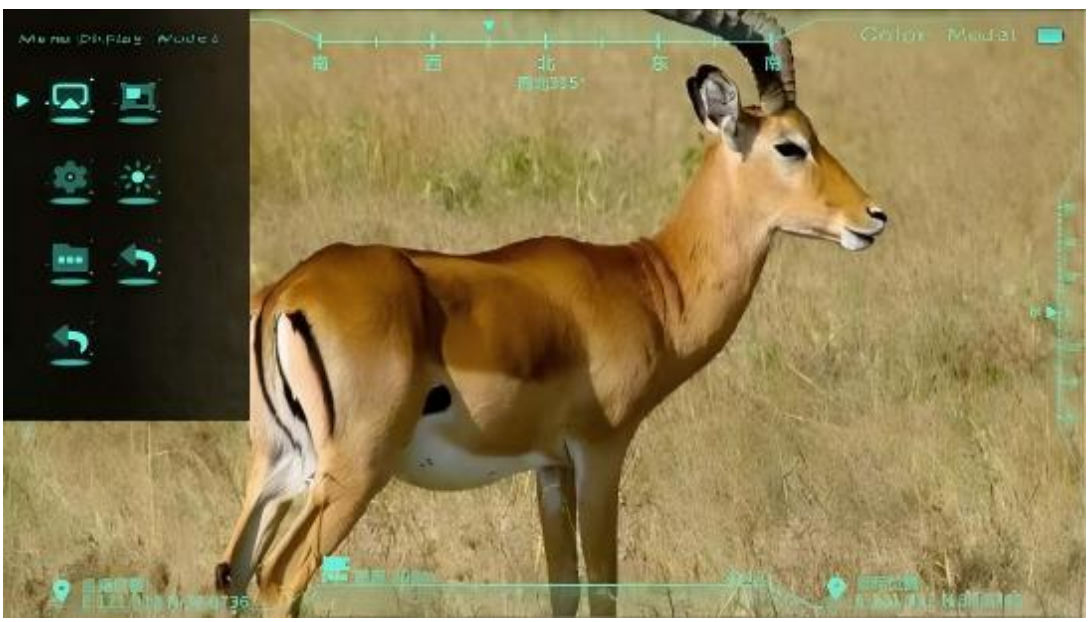
Power-on procedure

1	Power button	2	Display Mode Quick Switch Key
3	Photo/Video capture button	4	Laser Rangefinder Button
5	Aviation connector: Includes DC/USB/RS232 ports	6	Rotating Menu Button
7	High-definition HDMI port	8	Day/Night Switch Key
9	Proximity sensor		

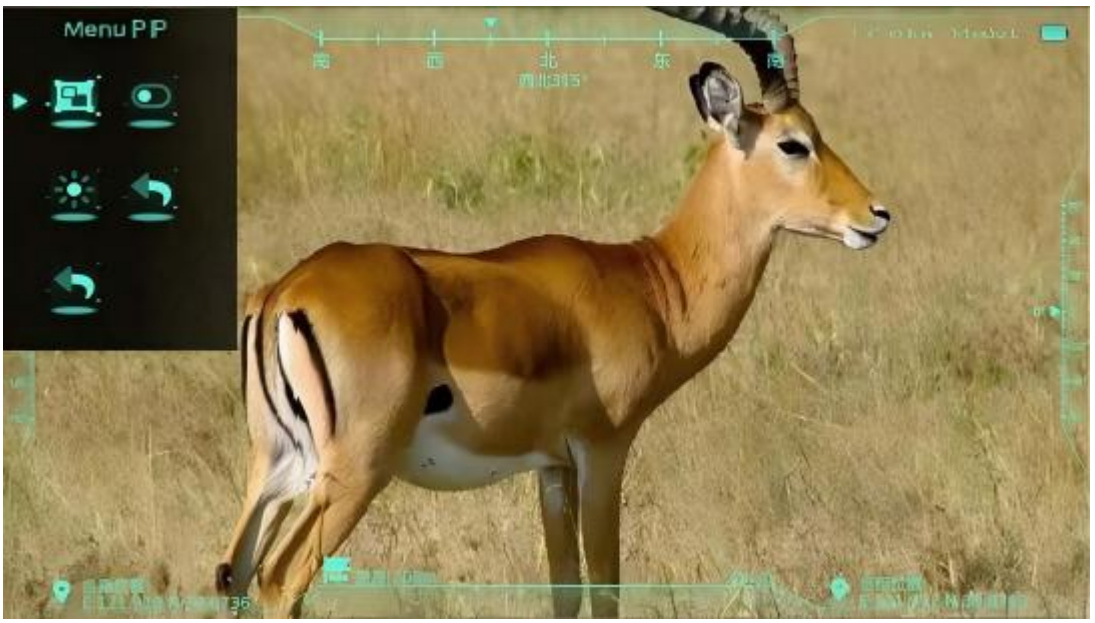
Step 1: Press the power button to turn on the product. To power on or off, press and hold for 5 seconds. The default screen settings are as follows:



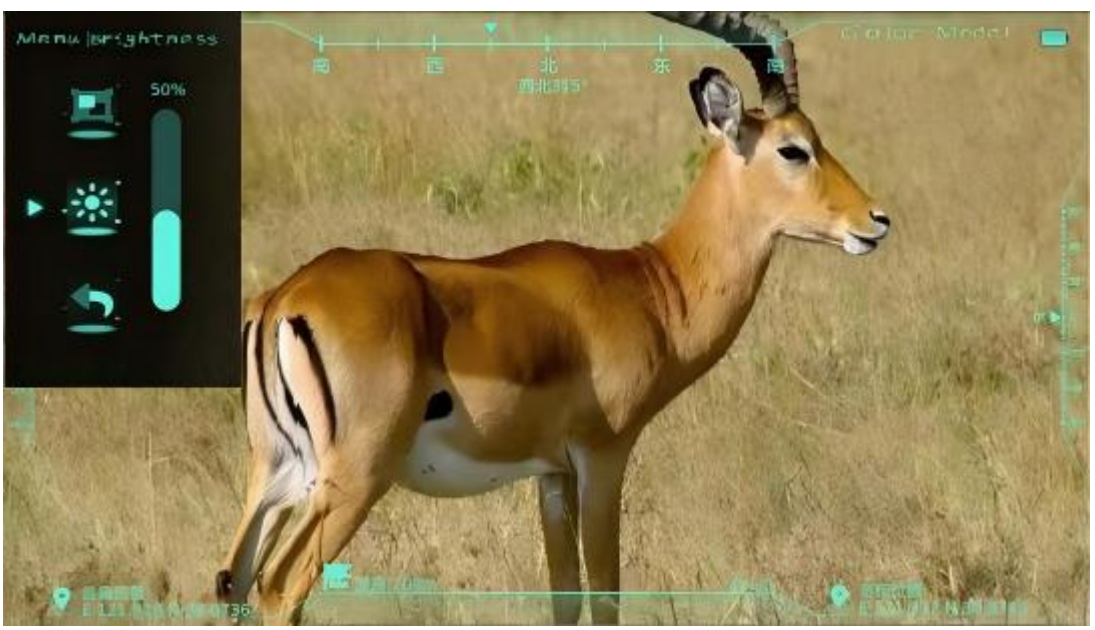
Step 2: Press the rotary menu button to enter the menu display mode:



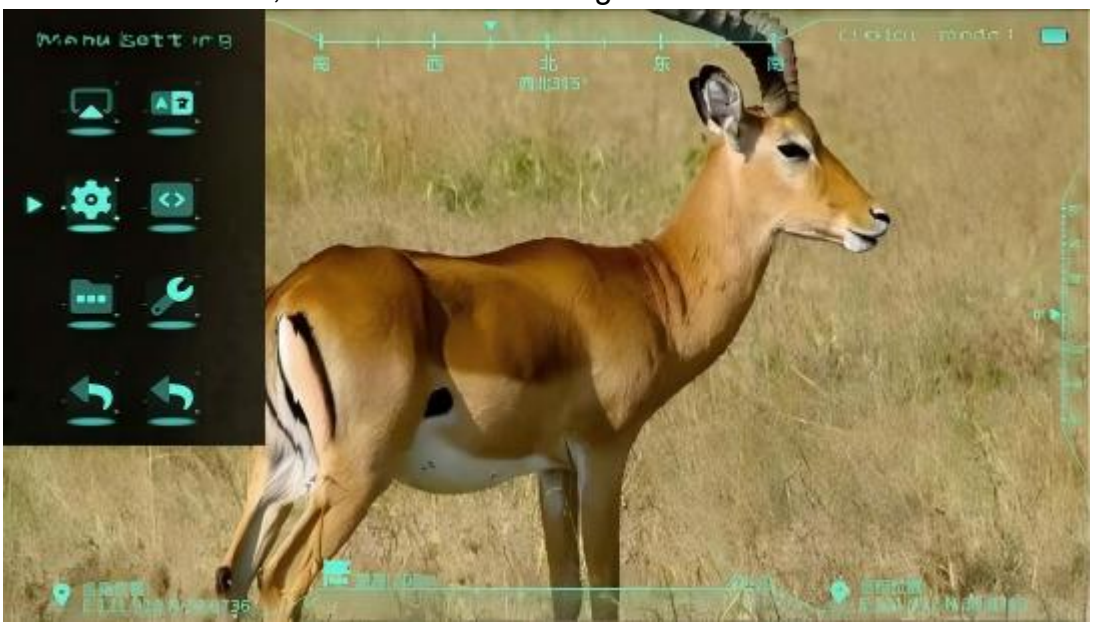
Step 3: Press the rotary menu button again to enter the secondary menu's Picture-in-Picture mode, where you can enable or disable various Picture-in-Picture functions.



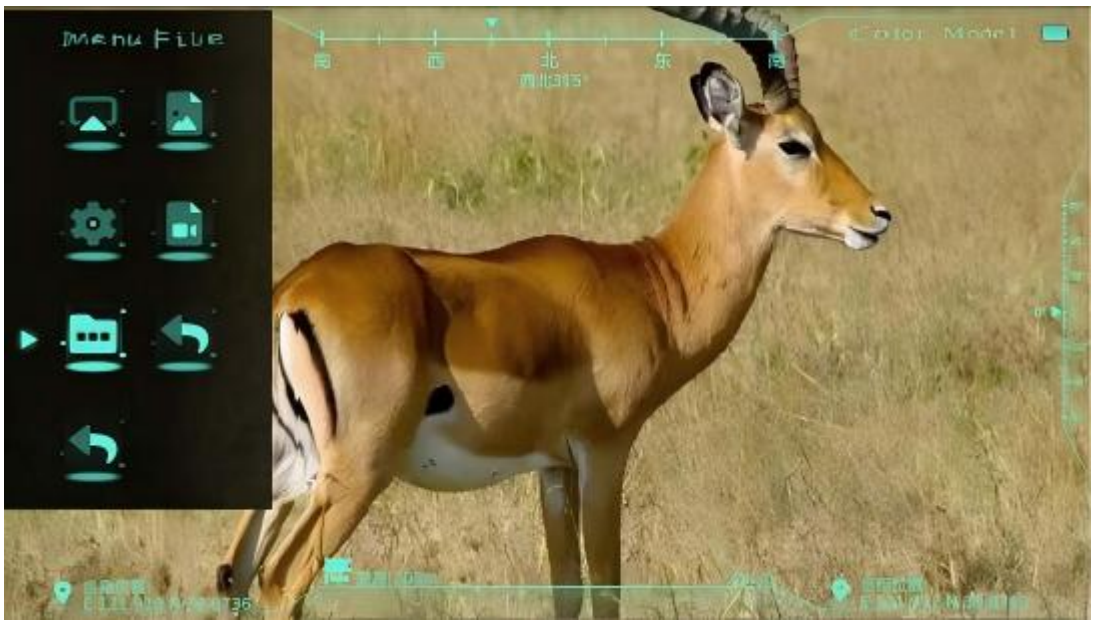
Step 4: Scroll to Brightness to adjust the display brightness.



Step 5: Scroll to General Settings mode for optional language settings, device information, and defibrillator settings.



Step 6: Scroll to the folder to browse or delete videos and photos.



Step 7: Press the Mode Switch button to toggle between Full Color Mode, Infrared Mode, and Fusion Mode.
Step 8: Press the Capture button: short press for still photos, long press for video recording.
Step 9: In Infrared Mode only, press the Laser Rangefinder button (this function is inactive in other modes). Short press displays the instantaneous position of the target; long press allows panning to view the positions of all targets within the scene.

Step 10: Open the aviation connector protective cover to download required files
Step 11: Open the high-definition protective cover to download required files
Step 12: Day/Night Switch: Daytime electronic magnification reaches 4x, nighttime electronic magnification reaches 2x

Eyepiece Focusing

Eyepiece Focusing: To accommodate each user's vision, the eyepiece offers diopter adjustment.

| Normal visual position

⇨ Right rotation, myopia adjustment (-5 diopters)

⇦ Left-handed, hyperopia adjustment (+3 diopters)

Objective lens focusing

Objective Lens Focusing: Adjust the full-color and infrared lenses to clearly observe targets at varying distances, ranging from 30 meters to infinity.

After-sales Service

1. The product warranty period is 12 months. If a malfunction occurs within 7 days of purchase during normal use, consumers may choose to exchange the product. For non-human-induced malfunctions occurring within one year, free repairs are provided. For consumers not eligible for free replacement or warranty service, our company still offers technical support.

2. The product primarily consists of the housing, control components, and photosensitive components.
1. Normal wear and tear on the housing is not covered by warranty; the housing will not be replaced.
2. Warranty does not cover circuit damage caused by wiring errors or control components overloaded beyond their capacity.
3. Warranty does not cover damage to photosensitive components resulting from overpressure use or impact with hard objects.

3. After-sales service is not available under any of the following circumstances:
1. Unauthorized disassembly, repair, or modification of the product by the user without our company's permission.
2. Damage caused by improper transportation after purchasing our products.
3. Damage resulting from other force majeure events (such as floods, lightning strikes, earthquakes, or abnormal electrical conditions).