

# Infrared thermal imager User Manual



# Publication Notes

This manual is a guide for users of multi-functional infrared night vision devices to understand their basic structure, performance, usage, maintenance, and storage.

Until a new instruction manual is published, the use and maintenance of the multi-functional infrared night vision device should be based on this manual, and other materials should be used for reference only.

If any problems are found during use, please provide feedback promptly so that we can study and make modifications.

## Table of contents

I.Product Overview .....	3
1. Product Description .....	3
2. Product Features .....	3
3. Product Appearance .....	5
II.Technical parameters.....	6
III.Packing configuration .....	7
IV.Preparation.....	8
1. Unboxing .....	8
2. Battery installation .....	9
V.Function Operation .....	11
1. Power on/off .....	11
2. Menu Description .....	12
3. TYPE-C interface .....	12
4. Adjusting the reticle type .....	12
5. Quick switch color palette .....	13
6. Switch color palette .....	14

## User Manual

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7. DDE.....	14
8. Zeroing function.....	15
9. Contrast adjustment.....	16
10. Brightness adjustment.....	16
11. shutdown settings.....	17
12. Equipment Information.....	18
13. Factory reset.....	18
VI.transportation.....	19
VII.Storage.....	20

# Precautions

**Please strictly adhere to the following precautions at all times:**

- 1) Do not use or store the instrument in environments exceeding the permitted operating or storage temperatures for this product.
- 2) Do not point this product directly at sources of high-intensity heat radiation, such as the sun, lasers, welding machines, etc.
- 3) Do not expose this product to dusty or humid environments.
- 4) Do not strike, throw, or vibrate the instruments and accessories to avoid damage.
- 5) Do not disassemble this machine

yourself, as this may damage the equipment and void the warranty.

**Please follow these steps when wiping this equipment:**

- 1) Non-optical surfaces: If necessary, wipe the non-optical surfaces of the product with a clean, soft cloth.
- 2) Optical Surface: Avoid soiling the lens's optical surface when using the product. Do not touch the lens with your hands, as sweat can leave marks on the lens glass and may corrode the optical coating. When the lens surface becomes contaminated, carefully wipe it with professional lens paper.

# I. Product Overview

## 1. Product Description

This product integrates a high-performance 256\*192 resolution infrared thermal imaging module, providing detailed and lag-free infrared images.

The 13mm lens and 1.6-inch display provide users with a comfortable aiming experience.

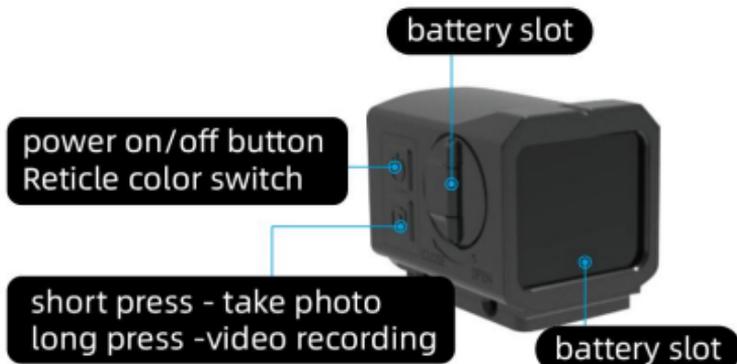
The product compact size and extremely lightweight design allow it to be used as a pistol scope.

## 2. Product Features

- 1) Imaging capabilities: It integrates a high-performance 256 \* 192 resolution infrared thermal imaging module, which can output detailed and delay-free infrared images;
- 2) Visual configuration: Equipped with a 13mm objective lens and a 1.6-inch display, providing users with a comfortable aiming experience;
- 3) Lightweight design: The body is compact (size L50W39H42mm) and weighs only 110g, making it flexible for use as a pistol scope;
- 4) Power supply and battery life: Powered by a CR2 battery, with a maximum working time of 4 hours, and also supports a 5V external

- power supply via a Type-C interface;
- 5) Environmental adaptability: It achieves an IP67 protection rating and can operate stably within a temperature range of -20 to +50°C, making it suitable for complex scenarios.

### 3. Product Appearance



## II. Technical parameters

index	parameter
Objective lens size, millimeters	13mm, F0.93
Field of view (Horizontal * Vertical)	13.5x10.1°
Display parameters	1.6 inches, 360x320
Detector resolution	256*192
Battery	CR2
Maximum working time	4 hours
External power interface	Type C, 5V
Material	aluminum alloy
IP Level	IP67

## User Manual

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Operating temperature	-20~+50°C
weight	112g
size	43mm*41mm*52mm

### III.Packing configuration

Serial Number	name	quantity
1	device	1
2	RMR support	1
3	M3 countersunk screws and hex wrench pool	1
4	CR2 battery	2
5	Black Type-C data cable	1
6	Lens cloth	1

7	manual	1
8	Warranty card	1
9	Desiccant	1
10	Certificate of Conformity	1

## IV.Preparation

### 1. Unboxing

- 1) Before using the infrared thermal imager for the first time, please be sure to unpack and check that everything is complete.
- 2) Open the equipment box and check the completeness of the infrared thermal imager according to its packaging configuration.

- 3) Inspect the multi-purpose monocular night vision device for any obvious damage to the lens, body, eyepiece, buttons, vibration damping bracket assembly, etc.
- 4) Check the infrared lens and eyepiece for dirt. If there are obvious stains, wipe the infrared lens with a lens cloth to ensure the lens is clean.

## 2. Battery installation

The infrared night vision device uses a 16340 power supply. The installation steps are as follows:

- 1) When installing the battery, please strictly follow the instructions on the label on the battery compartment

- and do not install it backwards;
- 2) Before removing or installing the battery, please make sure the infrared night vision device is turned off. Otherwise, opening the battery compartment cover and removing the battery while the device is on will cause serious damage to the equipment. Before using the infrared night vision device for the first time, please make sure the battery has power.
  - 3) Do not disassemble, drop, or short-circuit the battery to prevent accidents;
  - 4) If the battery exhibits overheating, discoloration, deformation, odor, or

other abnormal phenomena during use, charging, or storage, it should be discontinued immediately.



Battery installation diagram

## V.Function Operation

### 1. Power on/off



With the device powered off, press and hold this button for 2 seconds until the power-on

screen appears in the eyepiece. With the device powered on, press and hold the left button for 2 seconds to power off. With the device powered on, briefly press this button to adjust the reticle color.

### 2. Menu Description



When the device is powered on, a short press takes a photo, and a long press records a video.

### 3. TYPE-C interface



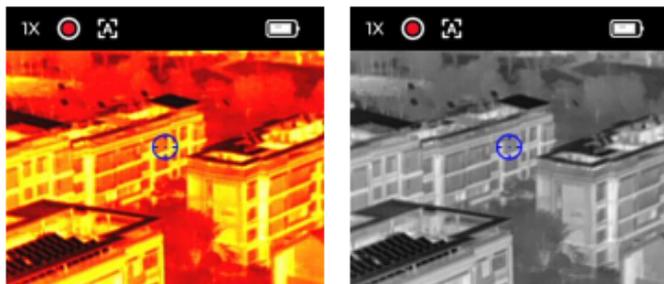
This interface has three functions: power supply, data transfer, and debugging.

### 4. Adjusting the reticle type

When the device is powered on and on the main screen, you can adjust the display type by swiping up or down.



### 5. Quick switch color palette



When powered on and on the main interface, you can adjust the color palette

of the image by swiping left or right, supporting iron-heat, black-heat, red-heat, green-heat, and white-heat.

### 6. Switch color palette

With the product powered on, long press the screen to enter the menu, then slide to . Click the icon to adjust the color palette of the image, supporting iron-heat, black-heat, red-heat, green-heat, and white-heat.



### 7. DDE

After entering the menu, slide to . Tap

the icon to enter the adjustment page. Tap the " +/- " sign to adjust the screen contrast.



### 8. Zeroing function

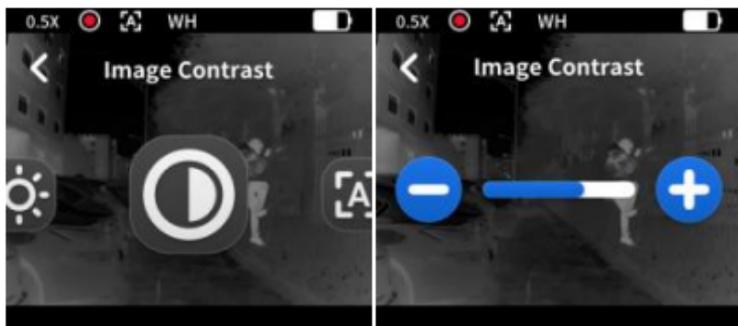


After entering the menu, slide to  . Click the icon to enter the zeroing page, and use the up, down, left, and right arrow

keys to perform zeroing.

### 9. Contrast adjustment

After entering the menu, slide to . Tap the icon to enter the adjustment page. Tap the " +/- " sign to adjust the screen contrast.

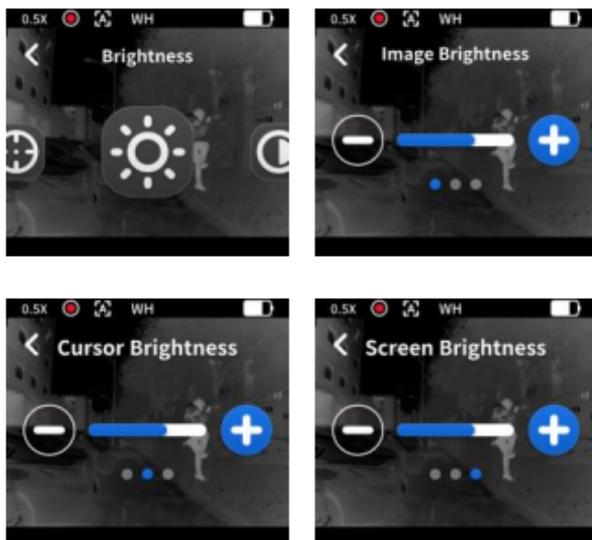


### 10. Brightness adjustment

After entering the menu, slide to . Tap the icon to adjust the screen brightness; there are three adjustment modes:

" IMAGE BRIGHTNESS",

"CURSOS BRIGHTNESS", and "SCREEN BRIGHTNESS". Tap the +/- sign or slide the progress bar to adjust.



### 11. shutdown settings

After entering the menu, slide to  .  
Click the icon to set the shutdown time.



### 12. Equipment Information

After entering the menu, swipe to .  
Click the icon to view device information.



### 13. Factory reset

After entering the menu, slide to .  
Click "YES" to restore factory settings.



### VI.transportation

The product transportation methods are as follows:

- 5) The quality of shipment and the safety requirements of the transportation process comply with the relevant regulations of international transport management authorities;
- 6) The following precautions should be taken when loading and unloading products:

- 7) Regardless of the loading and unloading method, safety and reliability can be guaranteed;
- 8) During shipment, strict adherence to fire prevention, waterproofing, and moisture-proofing regulations is required.
- 9) Do not transport flammable, explosive, or corrosive materials in the same vehicle;
- 10) Avoid collisions during transportation.

### **VII.Storage**

Store the product in a dry, well-ventilated environment free of corrosive gases, with a temperature of 0 °C to +55 °C and a relative humidity of no more than 80%.