

Tevin Sentinel S2



Mini Touch Infrared Thermal Imager

User Manual

1. Product Introduction

1.1 Product Description

Tevin Sentinel S2 is a 3-in-1 (mini search, mini sight, mini helmet) mini thermal imaging telescope.

It can be mounted on the most popular pistols and helmets on the market, equipped with a 256×192

infrared detector, capable of reproducing the color and details of infrared images under both day and night conditions. It features a 45mm diameter OLED wide field of view, supports both touch and button operation modes, and can respond quickly in various complex or harsh environments.

1.2 Main Features

- High-sensitivity 256×192 infrared detector
- 1.4-inch touch screen, OLED large display
- High-performance AI chip and image detail enhancement technology
- Ergonomic design, supports both touch and button operation
- Multiple image modes and reticles, quick switching by finger swipe
- High reliability, 1000G shock resistance

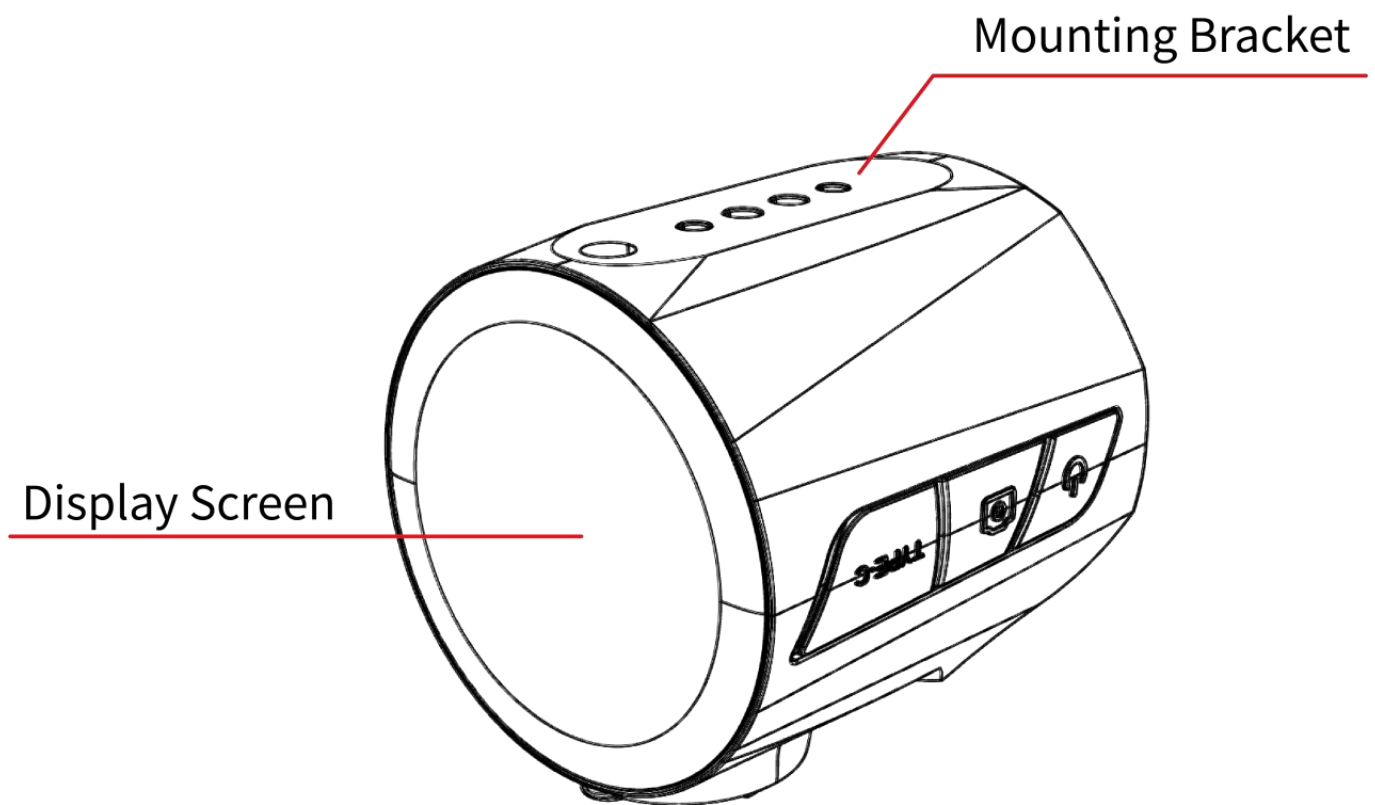
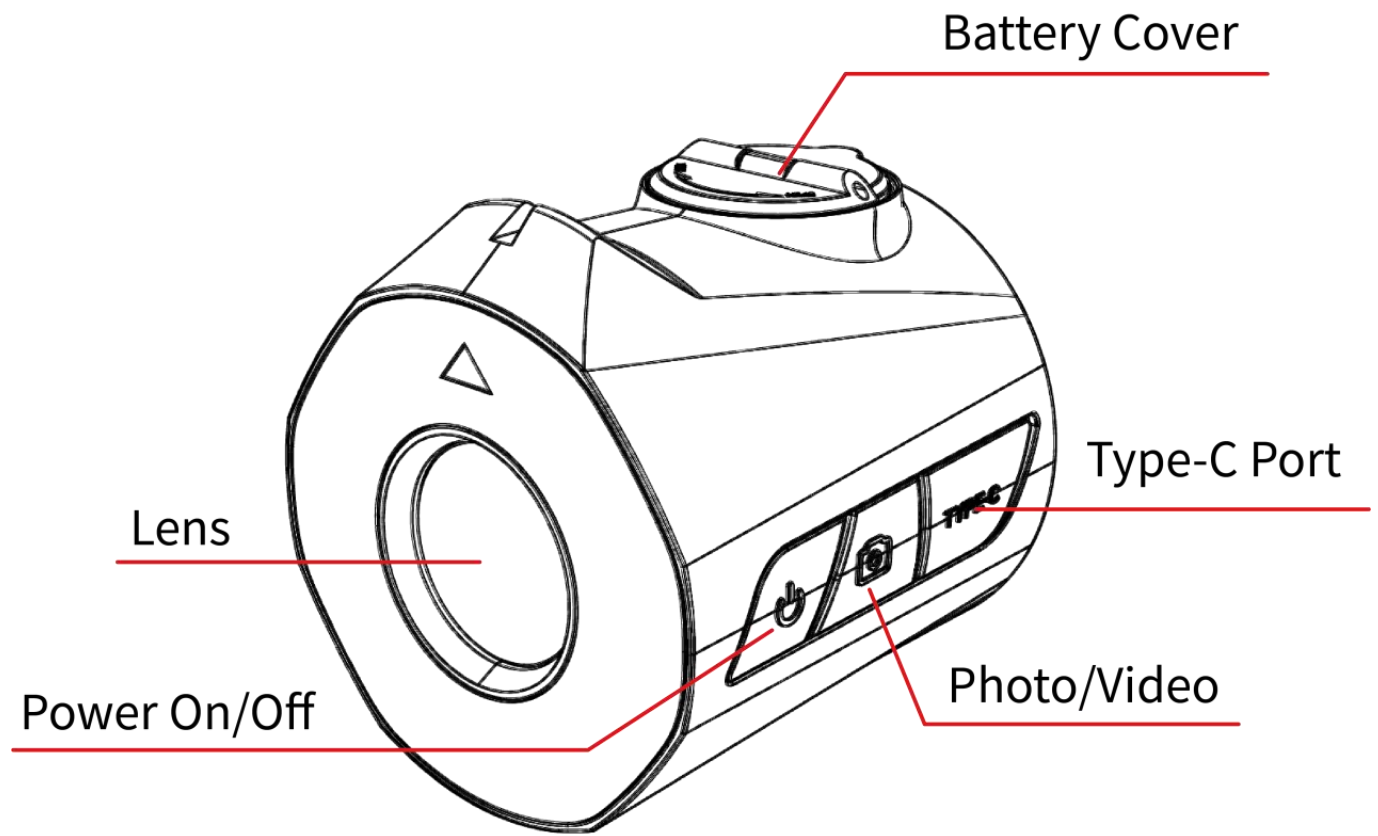
1.3 Main Functions

- Pseudo-color modes: Black Hot, White Hot, Iron Red Hot, Red Hot, Green Hot, etc.

2. Product Appearance

Component description: The original document contains component diagrams and labels.

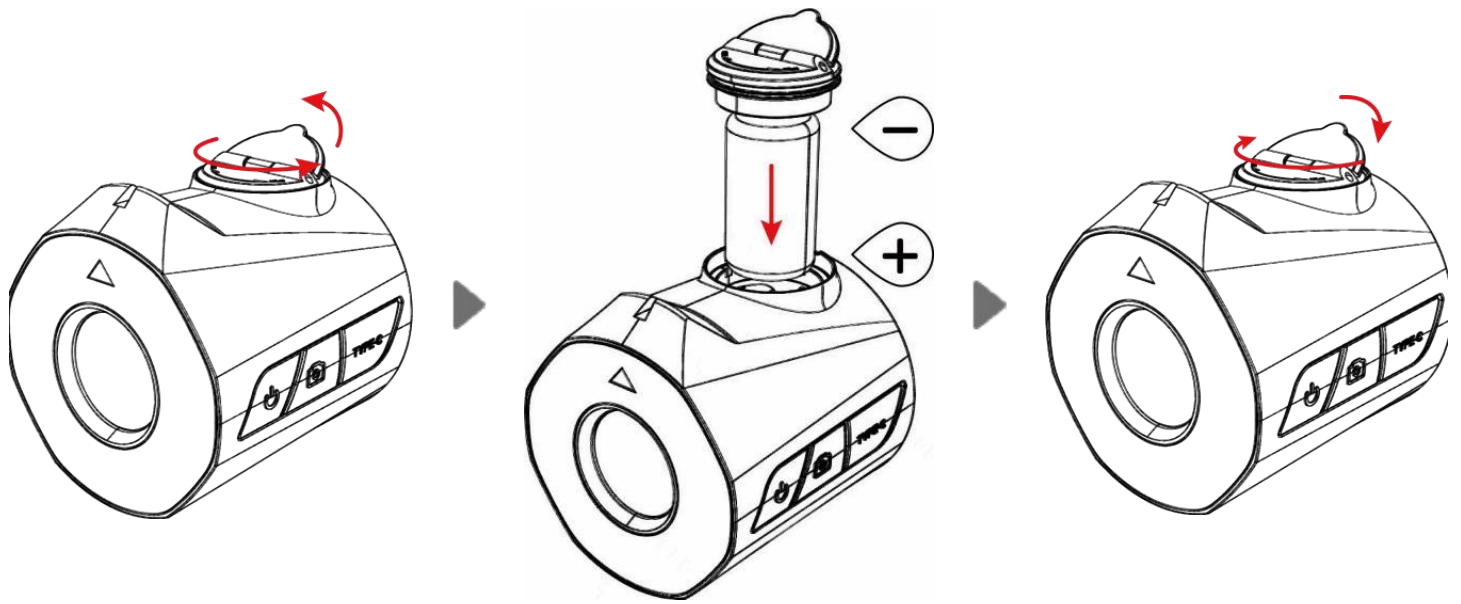
Please refer to the actual product or original images.



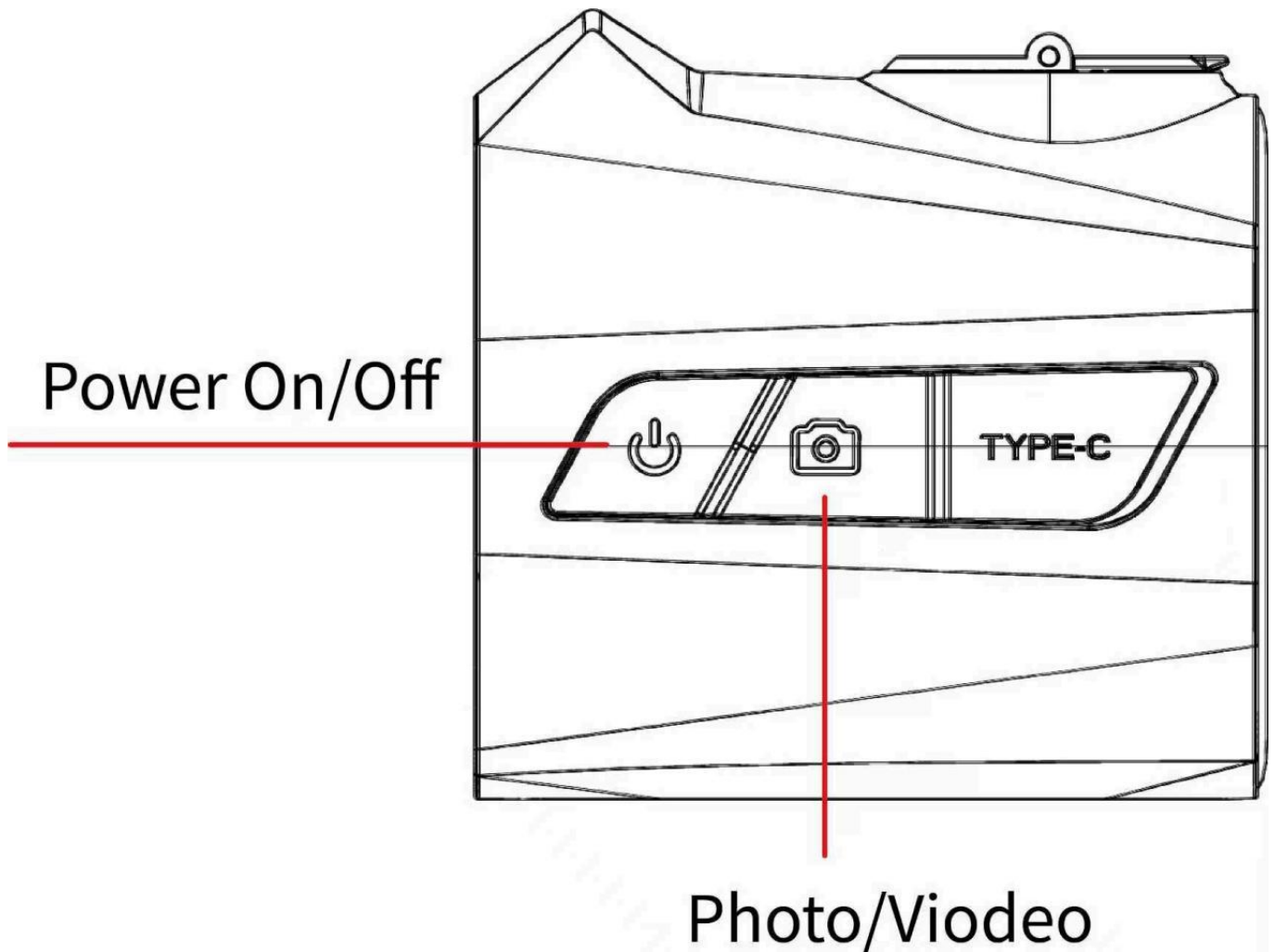
Charging Steps

When charging, please open the battery cover, remove the battery from the compartment, and use the adapter to charge the battery. After charging is complete, put the battery back into the compartment and close the cover.

Battery Installation



3. Button Functions



Button	Function
Power Button	Long press: Power off / Power on; Short press: Shutter calibration; Double click: Standby mode / Exit standby mode

Button	Function
Photo/Video Button	Short press: Take photo; Long press: Start / Stop video; Double click: Helmet mode / Normal mode
Touch Screen	Long press: Open menu; Swipe up: Switch reticle (crosshair) style; Swipe down: Switch reticle (crosshair) color; Swipe left or right: Switch pseudo-color

Note: After entering the thermal imager menu, please refer to the menu instructions for specific button definitions.

4. Product Specifications

General Parameters

Model	Tevin Sentinel S2
Weight	≤120 g
Dimensions	52 mm × 48 mm × 41 mm
Operating Temperature	-20 °C ~ +50 °C

Detailed Parameters

Detector Type	Uncooled Focal Plane Arrays
Resolution	256 × 192
Refresh Rate	60 Hz
Pixel Size	12 μm
Spectral Response	8 μm – 14 μm
Lens Focal Length	13 mm, F0.9
Detection Distance	≤700 m
Field of View	13.5° × 10.1° / 23m×17m

Battery Type	16340
Operating Time	≥ 5 h (25 °C)
Display	1.4 inch, 466×466, OLED
Brightness Adjustment	Yes
Color Palettes	Black Hot, White Hot, Iron Red Hot, Red Hot, Green Hot
Video Recording	On-board Video Recording
Photo	Yes
Reticle Indication	Yes
Built-in Storage	Built-in EMMC (32GB)
Shock Resistance	1000 g / 0.4 ms

5. Packing List

Standard Components



Standard package includes: Picatinny Rail, User Manual, Adapter, 16340 Battery × 2, 2mm Hex Wrench, M3 countersunk Screws × 2, Type-C Data Cable, and Lens Cloth,

Optional Components

The following table shows some optional rail mounts for installation on different firearms and devices.

Accessory Name	Model	Reference	Usage
Acro Mount	IPSR-1		Acro interface compatible red dot sight

Side-flip Mount	IPSR-2		For MIL-STD-1913 rail, mount can flip 90° , supports quick release
-----------------	--------	--	--

Accessory Name	Model	Reference	Usage
Handheld Mount	IPSR-3		Handheld mount with eyepiece and eye cup
Helmet Mount	IPSR-4		Helmet mount

6. Function Description

Power On/Off

When powered off, long press the left button for 2 seconds to power on. When powered on, long press the left button for 2 seconds to power off.

Menu

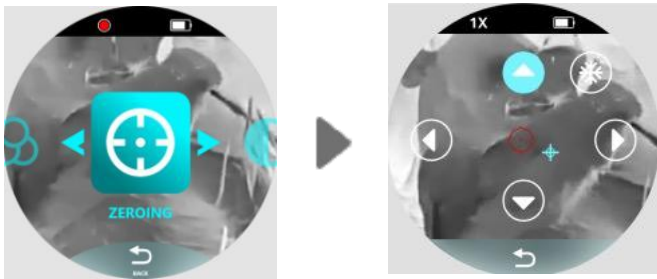
When the device is powered on and at the main interface, long press the screen to bring up the menu.

Image Adjustment

Adjust pseudo-color mode, brightness, and contrast to achieve the best image effect.

Zeroing Function

Long press the screen to enter the menu, swipe to the zeroing function. During zeroing, tap or long-press the direction keys to calibrate the cursor. You can also use the freeze button on the upper right corner to freeze the screen, tap back to save and return.



Brightness Adjustment

Tap the screen to enter the menu, swipe to brightness adjustment. Tap the icon to enter brightness adjustment, swipe left/right to switch regions, tap +/- or slide the bar to adjust.



Image Brightness Adjustment



Reticle Brightness Adjustment

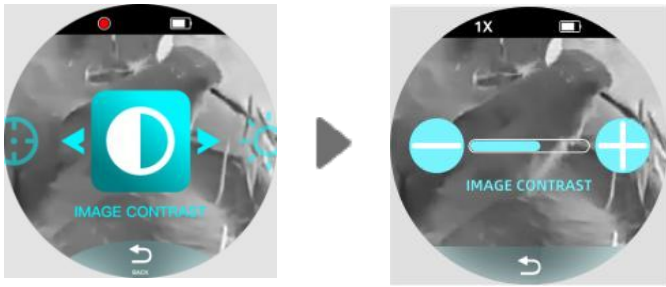


Screen Brightness Adjustment



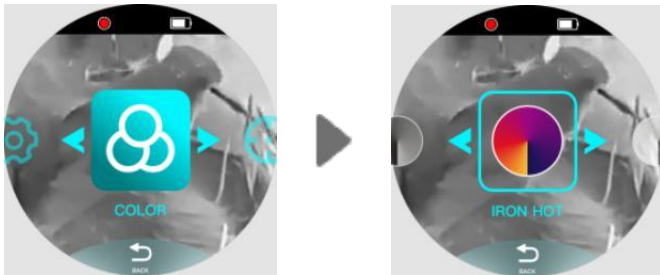
Contrast Adjustment

Long press the screen to enter the menu, swipe to contrast adjustment. Tap the icon to adjust screen contrast, tap +/- or slide the bar to adjust.



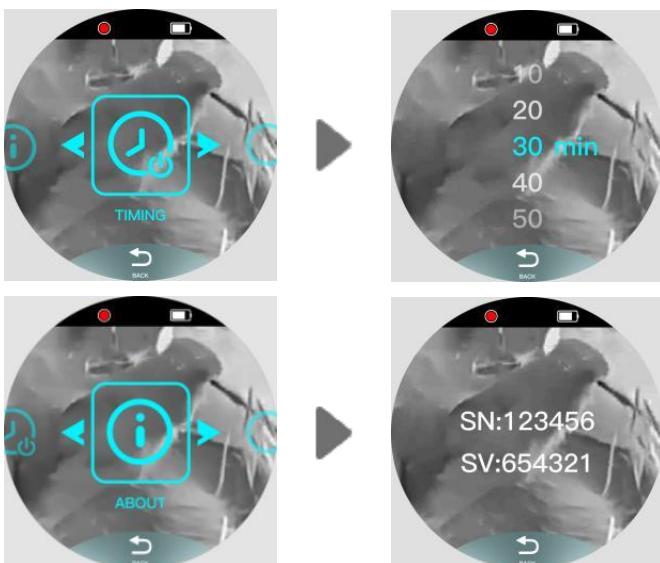
Pseudo-color Mode

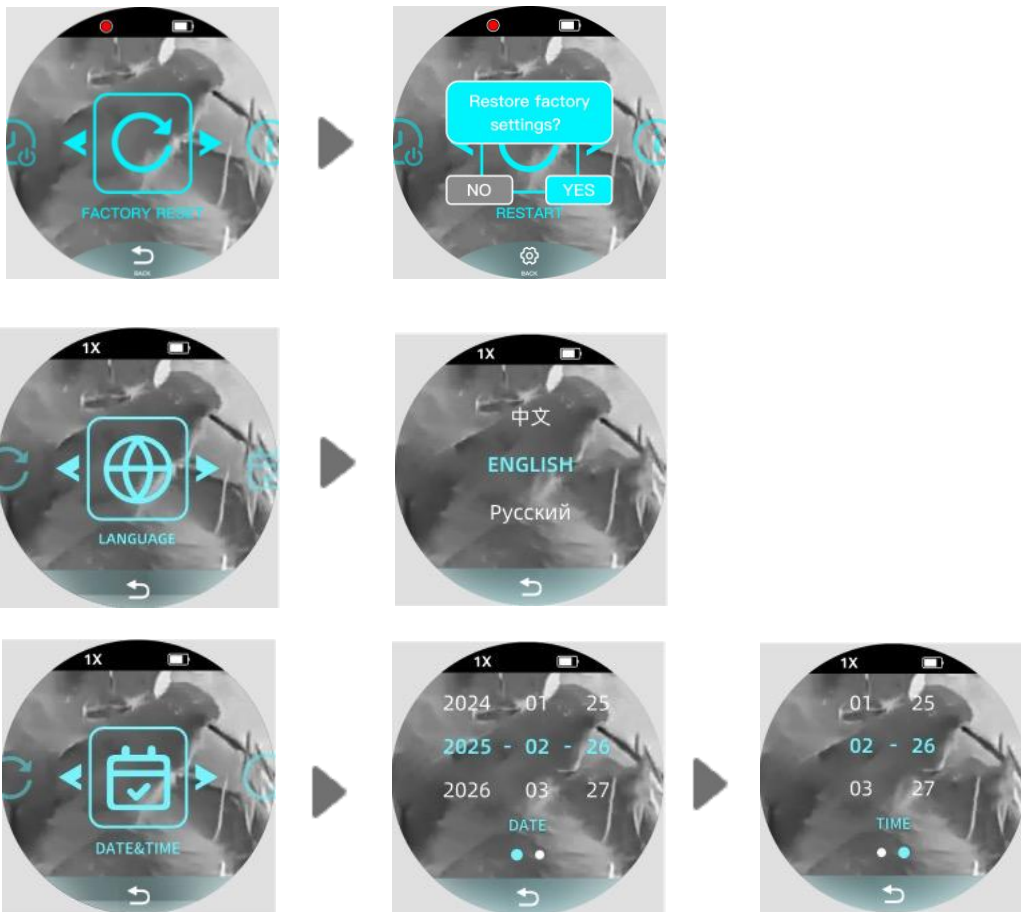
Tap the screen to enter the menu, swipe to pseudo-color mode. Tap the icon to set pseudo-color mode, swipe left/right to select, supports Iron Red, Black Hot, Red Hot, Green Hot, and White Hot.



System Settings

Supports auto power-off time setting, system info viewing, factory reset, etc.





- Auto power-off time setting
- System info (view device SN and version)
- Factory reset (confirm in menu)
- Set language (tap to switch language)
- Set date and time (Scroll up and down to select date and time Scroll left and right to switch between date and time)

External Devices

Supports Type-C connection: can use DC5V charger for external power (not for internal battery charging); can connect to PC, open VIRGO disk, view images/videos; can manage device storage via PC.

7. Cautions

1. Avoid Strong Thermal Radiation Sources

- Do not point the device lens directly at the sun, laser, high-temperature welding arc, or other strong thermal/radiation sources, as this may damage the infrared detector or affect normal operation.

2. Lens and Display Protection

- The lens and touch screen are precision optical and electronic components. Do not touch or wipe them directly with fingers, sharp or rough objects.

- If there is dust or stains, use a blower or soft brush to remove loose particles first, then gently wipe with a lens cloth.
- Do not use tissues, sandpaper, alcohol, gasoline, or ammonia-based strong solvents for cleaning.

3. Power and Charging

- Use a power supply with rated voltage DC 5V or the supplied charger for charging.
- When the battery is low, please charge or replace the battery in time to avoid over-discharge.

4. Regular Inspection

- It is recommended to check the device appearance, fasteners, battery compartment seal, and interface cover every 3–6 months. If looseness, cracks, or damage are found, stop using and contact after-sales service.

5. Long-term Storage

- When storing, please remove the battery and store it separately, and place it in the original packaging or shockproof box.
 - Do not place it in a humid, high-temperature, or strong magnetic environment for a long time.
-