Touch-Controlled Infrared Thermal Imager

T13-Mini

User Guide

Publication Note

This manual serves as a guide for users of T13 Mini Infrared Thermal Imager, providing an understanding of its basic structure, performance, operation methods, and maintenance and storage procedures.

Until the new manual is published, the usage and maintenance of T13 Mini Infrared Thermal Imager shall be governed by these instructions, while other materials are for reference only.

In case any issues are identified during usage, please promptly provide feedback for review and revision.

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PRECAUTIONS

Please strictly follow the following precautions at all times:

- Do not use or store the instrument in an environment that exceeds the operating temperature or storage temperature allowed by this product.
- Do not directly aim this product at high-intensity heat radiation sources, such as the sun, lasers, welding machines, etc.
- Do not expose this product to dust or damp environments.
- Do not disassemble the device yourself. Any damage caused by unauthorized disassembly will not be covered by the warranty.

Please follow the following measures when wiping this device:

- Non optical surfaces: A clean, soft cloth can be used to wipe the non-optical surfaces of the product when necessary.
- Optical surface: When using the product, avoid dirtying the optical surface of the lens. Do not touch the lens with your hands, as sweat stains on your hands can leave marks on the lens glass and may corrode the optical coating layer on the glass surface. When the surface of the optical lens is contaminated, carefully wipe it with professional lens paper.

PRODUCT OVERVIEW

1. Product features

Imaging capability: This product integrates a high-performance 256 × 192 resolution infrared thermal imaging module, which can output smooth and clear infrared images.

Visual configuration: Equipped with a 13 mm objective lens and a 1.6-inch display screen, providing users with a comfortable aiming experience.

Lightweight design: With its compact size and ultimate lightweight design, this product can flexibly adapt to various tactical equipment or portable devices.

Power supply and endurance: Equipped with a 14280 rechargeable battery, the device provides at least 4 hours of operating time and supports an external 5 V power supply via the USB Type-C interface.

Environmental adaptability: It can work stably within the temperature range of -20 °C to +50 °C and cope with complex scenarios.

2. Product appearance

1. **Button**
2. **Battery Compartment**
3. **Screen**



TECHNICAL SPECIFICATIONS

Parameter	Indicator
Objective Lens	13 mm, F0.9
Field of View	13.5 × 10.1°
Display	1.6 inches, 360 × 320
Detector Resolution	256 × 192
Battery	14280 rechargeable battery
Operating Time	≥ 4 hours
External Power Interface	USB Type-C, 5 V
Operating Temperature	-20 °C to +50 °C
Weight	105 g
Dimensions	43 mm × 41 mm × 52 mm
Base Magnification	0.475 ×
NETD	< 50 mK
Shock Resistance	1000 g
IP Rating	IP66

BASIC SPECIFICATIONS

1. Button

The right side of the product features three controls (as shown in the figure below). For button definitions and operations, please refer to the table below.

NO.	Key Name	Function
1	Power Button	Long press: Power off, power on; Short press: Shutter calibration
2	Photo/Video Button	Short press: Take photos; Long press: Start recording/Stop
3	Touch Screen	Long press: Turn off the screen, open the menu



PACKING CONFIGURATION

1. **Standard Components (as shown in the table below)**

NO.	Name	Quantity	Remarks
1	Main Unit	1 unit	
2	RMR Bracket	1 piece	
3	M3 Hexagon Socket Head Screw	4 screws	
4	Hexagon Wrench	1 piece	
5	14280 Rechargeable Battery	2 cells	
6	USB Type-C Data Cable	1 cable	
7	Lens Cloth	1 piece	
8	Instruction Manual	1 copy	
9	Warranty Card	1 copy	
10	Desiccant	1 copy	
11	Certificate of Conformity	1 copy	

2. Optional Components

The table below shows some optional rail brackets, which can be mounted on different devices.

Accessory Name	Model	Reference Image	Application Scenario
Picatinny Rail	IPSR-4		Compatible with MIL-STD-1913 rails

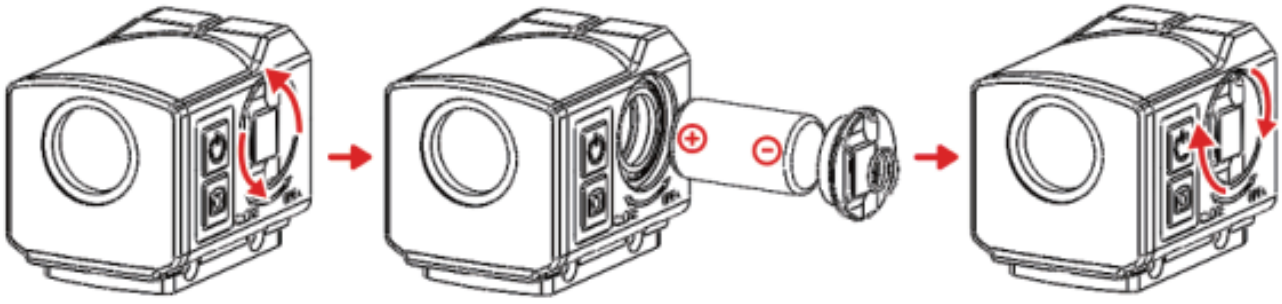
PREPARATION FOR USE

1. Unboxing

1) When using the Mini infrared thermal imager for the first time, be sure to check that all items are complete.
2) Inspect the device body, infrared lens, screen, buttons, battery compartment, and mounting components for any obvious damage.
3) Check whether the infrared lens and screen are dirty. If necessary, clean the infrared lens carefully with the supplied lens cloth.

2. Battery Installation

1) When installing the battery, strictly follow the label instructions on the battery compartment; do not reverse the installation.
2) Before removing or installing the battery, confirm that the Mini infrared thermal imager is turned off. Opening the battery compartment cover or removing the battery while the device is on will cause severe damage to the equipment; do not disassemble, drop, or short-circuit the battery to prevent accidents.
3) If the battery shows abnormal phenomena such as overheating, discoloration, deformation, or swelling during use, charging, or storage, stop using it immediately.
4) The schematic diagram of battery installation is as follows:



FUNCTION OPERATIONS

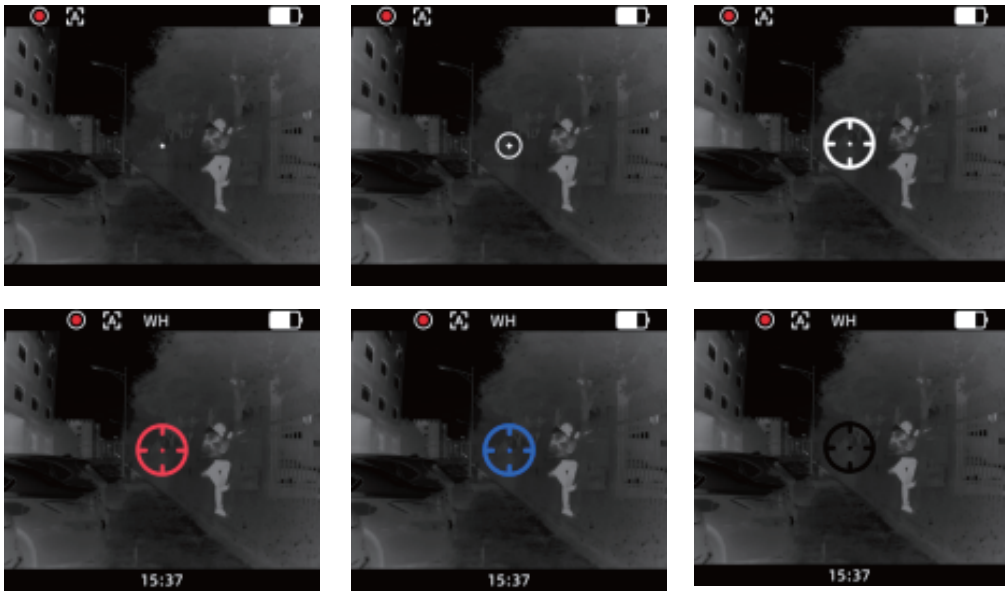
When the product is powered on and in the main interface, long-press the screen to bring up the menu.



Serial Number	Description
1	Indicates the screen is in recording mode
2	Indicates auto-shutdown has been set
3	Indicates night vision mode
4	Indicates battery level
5	Indicates time

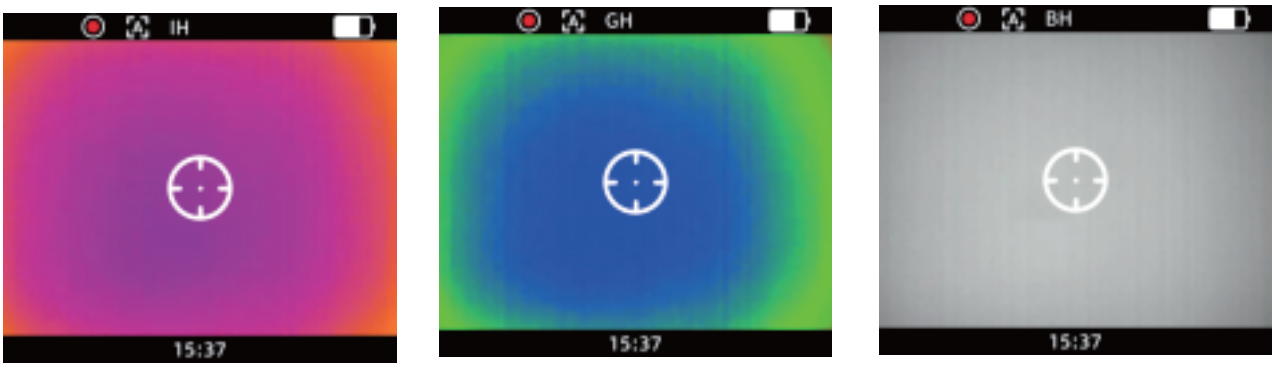
1. Adjust Reticle Size and Color

When the device is powered on and in the main interface:



2. Adjust Pseudo-Color Mode

When the device is powered on and in the main interface, swipe left or right to adjust the image's pseudo-color mode. Supported modes include: White Hot, Black Hot, Iron Red, Green Hot, and Red Hot.



Special Note:

In the menu interface, you can also adjust the pseudo-color mode by clicking the icon  (as shown in the figure below).

In the menu interface, when the “GREEN HOT” toggle in the top right corner is off, Green Hot mode cannot be selected in the main interface.

To enable this mode, click the  toggle to turn it on.







3. Zero Calibration

When the device is powered on, long-press the screen to enter the menu, then swipe to

 the Zero function.

Tap the icon to enter the zero calibration interface. Press the up, down, left, and right buttons to adjust the position.

Tap the icon 

in the top right corner to hide the reticle; tap it again to display the reticle.







4. Adjust Contrast

After entering the menu, swipe to  Contrast.

Tap the icon to enter the settings page. Tap the “+/-” buttons to adjust the contrast.





5. Adjust Brightness

After entering the menu, swipe to  Brightness and activate it.

Tap the icon to adjust the screen brightness. There are three brightness options: “IMAGE”, “CURSOR” and “SCREEN”. Use the “+/-” buttons or drag the slider to adjust.









6. Device Information

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





7. Restore Factory Settings

After entering the menu, swipe to  Reset. Tap “YES” to restore the factory settings.





8. Adjust Pseudo-Color Mode

When the product is powered on, long-press the screen to enter the menu, swipe to  Palette. Tap the icon to adjust the pseudo-color mode. Supported modes include: White Hot, Black Hot, Iron Red, Green Hot, Red Hot.







9. DDE

After entering the menu, swipe to 

DDE to enhance the clarity of the image. Tap the icon to enter the adjustment page, then use the “+/-” buttons to make adjustments.





10. Set Time and Date

After entering the menu, swipe to  Date & Time.

Tap the icon to set the time and date.







11. Set Auto Power-Off Time

After entering the menu, swipe to  Power-Off Settings.

Tap the icon to set the power-off time.

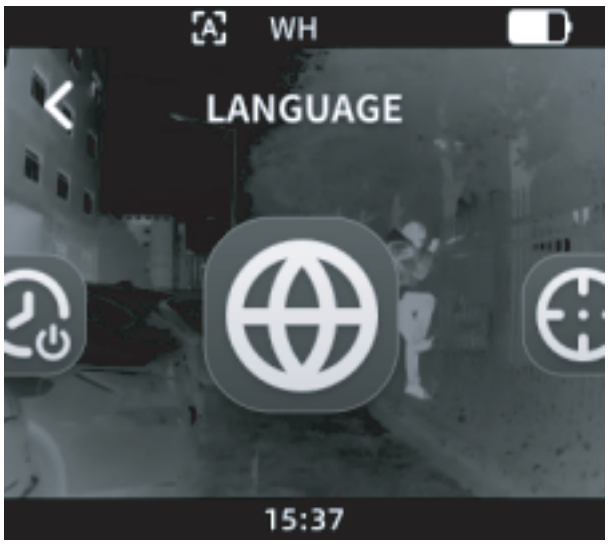


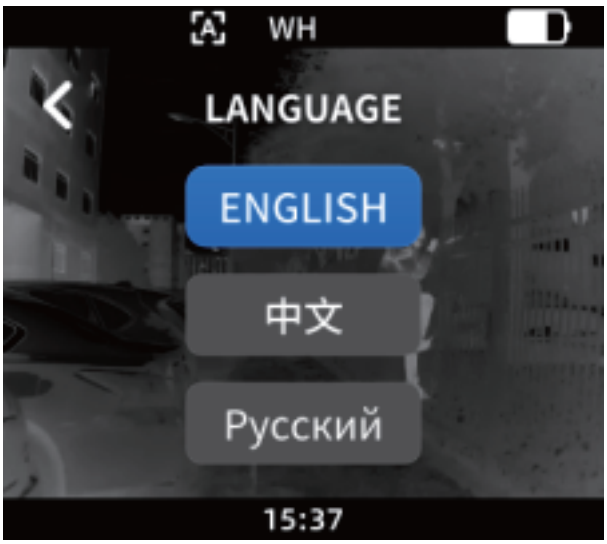


12. Set Language

After entering the menu, swipe to  Language.

Tap the icon to select a language.





TRANSPORTATION

The safety requirements for transportation and the transportation process shall comply with the relevant regulations of the national road transportation management department;
The product packaging shall meet the following requirements:
Ensure safety and reliability regardless of the loading and unloading method;
Comply with the requirements for shockproof, waterproof, and moisture-proof protection during transportation;
Do not transport together with flammable, explosive, or corrosive goods;
Avoid collisions during transportation.

STORAGE

The product should be stored in a dry, ventilated environment free of corrosive gases, with a temperature range of -10 °C to +55 °C and a relative humidity not exceeding 80%.