Jitu Hunt

English

S2 PRO

Handheld Thermal Monocular

Product User Manual

1.Introduction

1.1 Device Description

The handheld observation Thermal Imaging Monocular telescope is equipped with a 256×192 infrared detector and a 1.43-inch AMOLED display. It supports observation, maximum temperature target tracking, Wi-Fi image transmission and other functions. The monocular telescope is mainly used in outdoor search and rescue, bird watching, camping, hiking, tourism, hunting and other scenes.

1.2 Features

- Adopt high-performance AI chip and image detail enhancement technology.
- Support wireless hotspot connection and mobile phone APP connection.
- Built-in memory module supports video recording and photo taking.
- replaceable and rechargeable 18650 battery, which can be used continuously for 8 hours after charging
- Support firmware update via USB flash drive and APP.

1.3 The main function

Hot Spot Tracking

Detect and mark the highest temperature in the scene.

Internet function

Support hotspots, add Thermal Imaging Monocular through mobile phone APP to realize functions such as capture, record, and parameter configuration.

Storage

Built-in storage (up to 32G), supports recording, video recording and taking pictures.

Digital zoom

Support 1.0x, 2.0x, 4.0x, 8.0x

GTshare APP

A software that can obtain real-time video of the Thermal Imaging Monocular and control the Thermal Imaging Monocular

Scene Mode

Normal mode, Outline mode, City mode, Forest mode, Rainforest mode, Bird watching mode.

Color Mode

Black hot, White hot, Red hot, Iron red hot , Green hot.

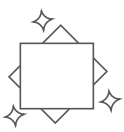
Data transmission (USB-C interface)

Supports data transmission, USB-C to HDMI output, external CVBS display.

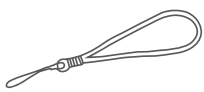
1.4 Standard Components

Thermal monocular x1

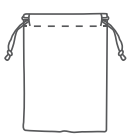
Manual x1



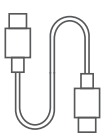
Lens cleaning cloth



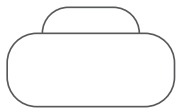
Lanyard x1



Flannel bag x1



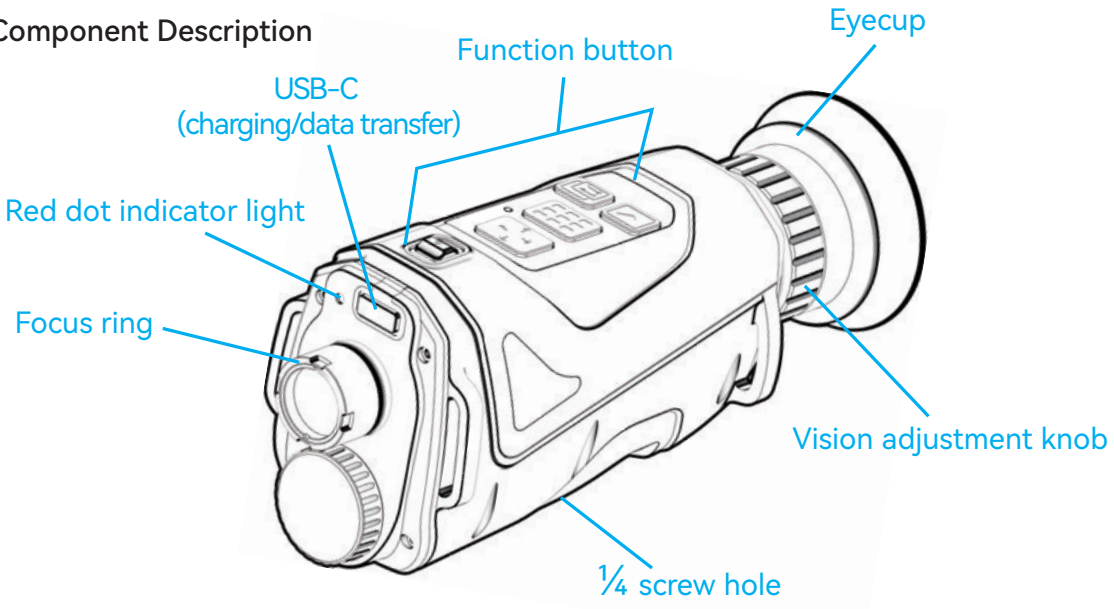
USB-C cable x1



EVA bag x1

2.Appearance

Component Description



Button	Function
Power button	Short press: laser on/off; Long press: power on/off;
Zoom	Short press: media digital zoom/zoom in; Long press: switch scene mode; Menu navigation: cursor up;
Mode key	Short press: switch color palette; Long press: menu operation; Menu navigation: confirm;
Capture button /Record Button	Short press: capture snapshot; Long press: start/stop recording video; Menu navigation: cursor down;
Mode key + zoom key	CVBS: on/off;
Mode key + capture key	Screen: on/off;
• Status Indicator	Red light: flashing - abnormal charging; always on - charging; off - fully charged; Green light: on once - device turned on; flashing - device upgrade;
Supports NUC function, and you can hear a slight sound from the shutter.	

Steps

①Please open the USB port sealing cover on the back of the device when charging.

②Use the USB power cable to connect the device's USB port for charging.

Charging tips:

Red light flashing: indicates that the device is charging abnormally.

Red light always on: indicates that the device is charging.

Red light off: indicates that the device is fully charged.

3.Product Specifications

Model	S2 PRO
Detector resolution	256x192
Ai super resolution	384x288
Pixel size	12 μm
NETD	≤40mk
Response band	8μm to 14μm
Lens (focal length)	10mm
Aperture	F=0.9
Field of view	11.69°×8.78°
Screen refresh rate	60 Hz
Digital zoom	1×、2×、4×、8×
Display	1.43-inch AMOLED display
Scene mode	Normal, Outline, City, Forest, Rainforest, Birdwatching
Color mode	Black hot, White hot, Red hot, Green hot, Iron red hot
Maximum temperature point tracking	Support
Wi-Fi AP	Support
Standby mode	Support
Storage	Built-in 32 GB
Recording Video	Support
Capture snapshot	Support
CVBS output	Support (via USB-C)
MIC input	Support (via USB-C)
HDMI output	Support (via USB-C)
Battery life (Wi-Fi off)	More than 10 hours (@25°C)
Battery capacity	3.7V 4000mAh
Operating temperature	-20°C to 60°C
Protection level	IP66
size	197mmx67mmx55mm
Weight	About 298g

4.Functional Description

1. Power on/off

The Thermal Imaging Monocular starts up. When it is powered off, press and hold the power button for 2 seconds. The indicator light turns green and the startup screen appears in the eyepiece. When it is powered on, press and hold the power button for 2 seconds to shut down the thermal imager.

2.Menu Description

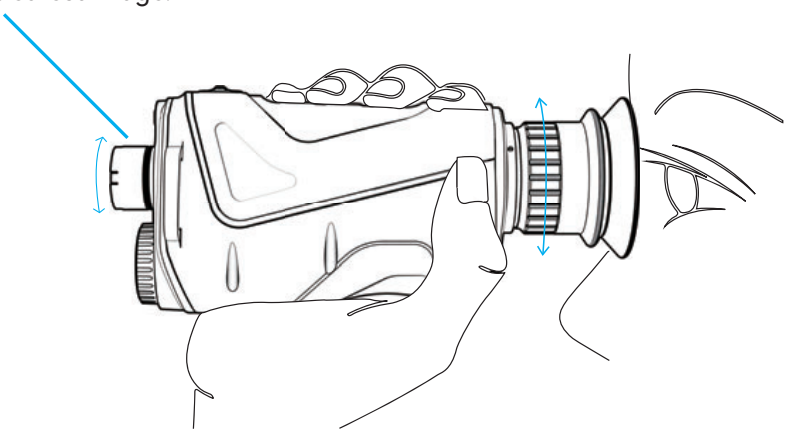
In the main preview interface of the thermal imager, long press the Mode button to enter the main menu.

3. Image adjustment

By adjusting the image's pseudo color mode, brightness, scene mode, NUC and other functions, the image can be displayed with the best effect.

3.2 Adjusting the focus

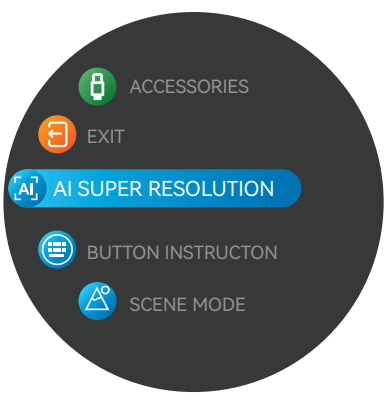
Use the focus ring to adjust the focus of the thermal imager to obtain the clearest image.



Note: When using the Thermal Imaging Monocular for the first time, you must first adjust the vision and then configure the functions.

4. AI super resolution on/off

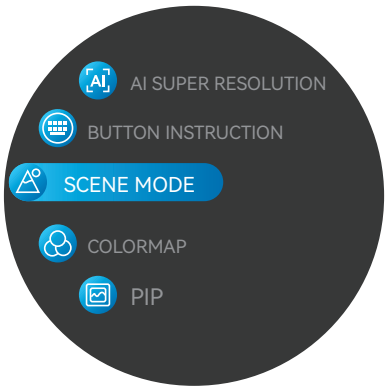
AI super-resolution on/off, on by default, AI super-resolution technology improves the display effect to the same as the display effect of the sensor with 384*288



Turn Off Ai

Turn On Ai

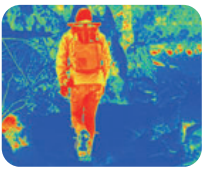
5. Scene Mode




Normal


Outline


City


Forest


Rainforest

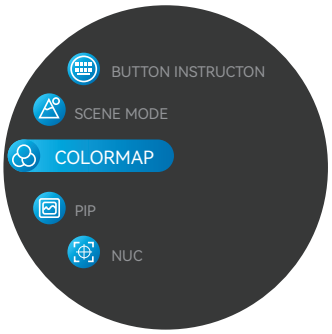

Birdwatching

6. Brightness adjustment

1. When the device is powered on, long press the Mode button to enter the main menu and select Brightness Adjustment
2. Short press to adjust the screen brightness in levels 1 2 3 4 5.

7. Color Mode

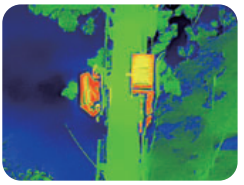
For the same scene or target, different pseudo color modes can produce different display effects. In the main preview interface, long press the zoom key to switch the pseudo color mode.

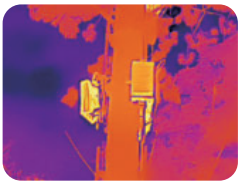



White hot


Black hot


Red hot


Green hot


Iron red hot

8. Recording function

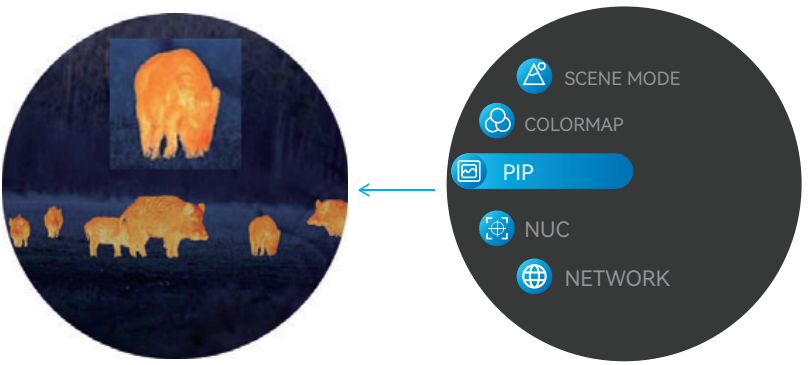
1. When the device is powered on, long press the capture button to start recording video. The recording icon and time will be displayed in the upper left corner of the image.

9. Capture function

1. When the device is powered on, short press to capture the image.
2. When recording a video, long press to capture a picture, and the capture output icon will appear above the image;

10. Picture-in-Picture

The Picture-in-Picture function captures a partial image of the center of the scene, enlarges the partial image, and overlays it on the main preview interface, making it easier to see the details of the key image.

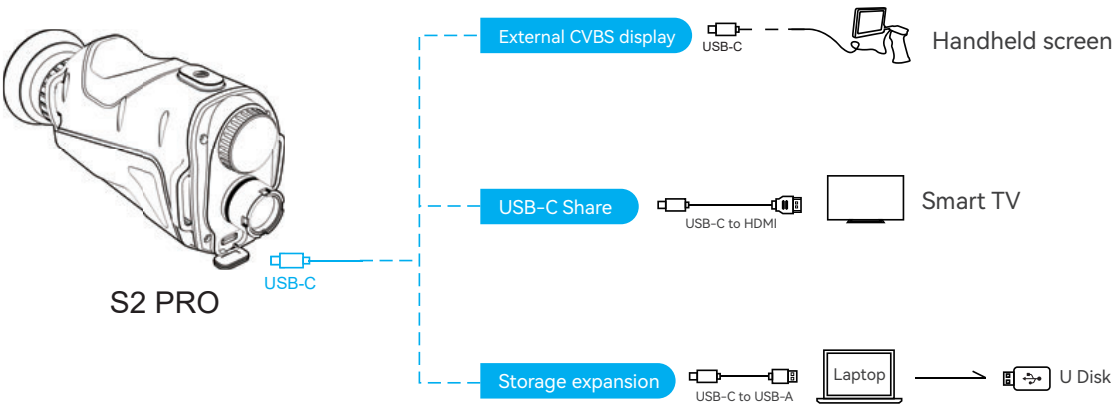


Operation steps:
① Long press the key to enter the main menu
② Select PIP, short press the key to turn PIP on/off.

11. Expansion devices

Can connect external devices via USB-C, CVBS output, HDMI output, microphone input, etc.

12. Support USB-C to connect external devices



13. Network connection

The Thermal Imaging Monocular supports Wi-Fi or hotspot connection to the network for network access.
When the battery level of the thermal imaging is less than 15%, the Wi-Fi and hotspot functions will be automatically turned off.

13.1 Set up hotspot connection

Turn on the device hotspot mode, and use your mobile phone to directly connect to the device hotspot. After establishing a connection through the hotspot, connect the device to the app.

Operation steps

①Press and hold the key, select menu, and select AP option
②Turn on WiFI on your phone and connect to the thermal imager AP hotspot.
- Wi-Fi name: JITUHUNT AP-last 6 digits of the serial number
- Wi-Fi password: 12345678

③Open the JITUHUNT app, select thermal imaging, scan equipment, and add equipment. Click on the client homepage to enter the observation access device to perform operations such as preview, recording, parameter configuration, and media file sharing.

Note: The device serial number can also be confirmed by referring to the instructions for Viewing Device Information.

13.2 Set up Wi-Fi connection

Turn on the device Wi-Fi mode, set the mobile phone hotspot or router name as the device WIFI name, and then the device will automatically connect to the mobile phone hotspot or router WIFI. The mobile phone is connected to the same router WIFI. After the network connection is established, connect the device to the app.

Operation steps

①Press and hold the Menu button, select the NETWORK menu, and select the WIFI option.
②Turn on the mobile phone hotspot and set the following parameters. Or modify the router to the following parameters.
- Wi-Fi name: JITUHUNT-WIFI
- Wi-Fi password: 12345678

③Wait a moment, the device will automatically connect to your mobile hotspot or router.

14. Install JITUHUNT app

Prerequisites:

The phone system must be iOS 12 or above, or Android 7.0 or above.

JITUHUNT

Available on the APP Store

GET IT ON Google Play

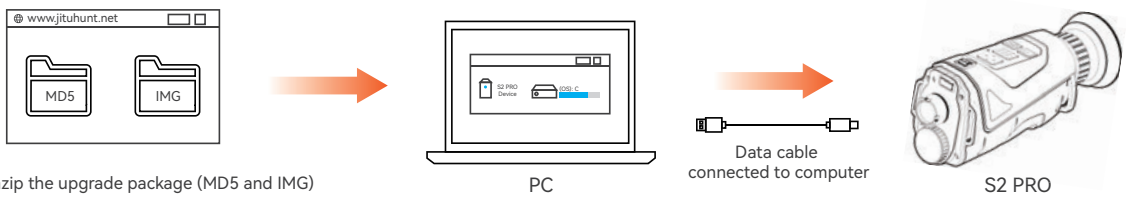
As the products are constantly updated and upgraded, the company reserves the right to make changes at any time without prior notice.

15.1 Firmware update via PC

Please download the corresponding upgrade package from the official website "www.jituhunt.net".

Copy MD5 and IMG to the Root storage file of " S2 PRO Device".

1. Long press the mode button
2. Select menu
3. System
4. PC upgrade



Unzip the upgrade package (MD5 and IMG)

PC

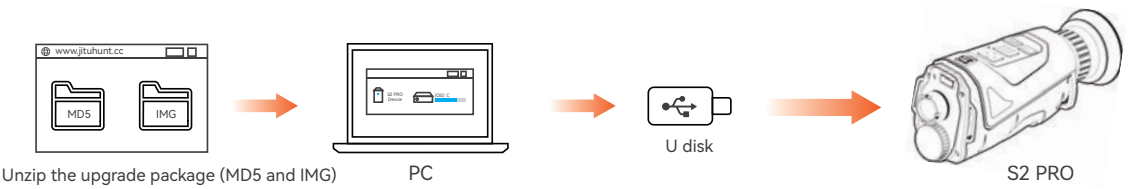
S2 PRO

15.2 Firmware update via U disk

Please download the corresponding upgrade package from the official website "www.jituhunt.net".

Copy MD5 and IMG to the Root storage file of "S2 PRO Device".

1. Long press the mode button
2. Select menu
3. System
4. USB upgrade



5.Notes

1. The rated charging voltage of this product is DC5V. Please charge it in time when the battery is low to avoid over-discharge of the battery and reduce the life of the thermal imager.

2. This product is not recommended for long-term use in high temperature environment. The thermal imager will enter high temperature protection state and automatically shut down.

3. The recommended operating temperature of the product is -10℃~50℃.

4. When using in a water environment, please first confirm that the USB interface cover on the top of the thermal imager is tightly closed.

5. In any case, avoid direct exposure of the thermal imager to strong radiation sources such as the sun and laser to avoid irreversible damage to the thermal imager.

6. When the thermal imager is not used for a long time, charge it at least once every 2 months during storage and store it in a dry and ventilated environment.

7. For thermal imagers equipped with red dot indicators, do not expose the red dot indicator to human eyes.

8. Do not charge in an environment above 40℃.

FCC Warnning:

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 againstharmful interference in a residential installation. This equipment generates, uses and can radiateradio frequency energy and, if not installed and used in accordance with the instructions, maycause harmful interference to radio communications. However, there is no guarantee thatinterference will not occur in a particular installation. If this equipment does cause harmfulinterference to radio or television reception, which can be determined by turning the equipmentoff and on, the user is encouraged to try to correct the interference by one or more of thefollowing 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.