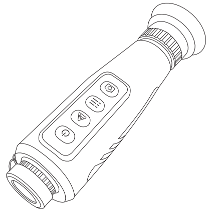
English

Hawkeye Ai15

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.
- Built-in rechargeable lithium battery, which can be used continuously for 10 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

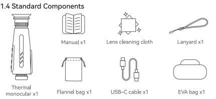
GTshare APP
A software that can obtain real-time video of the Thermal Imaging Monocular and control the Thermal Imaging Monocular

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

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

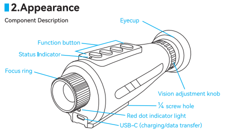
Data transmission (USB-C interface)
Supports data transmission, external microphone input, USB-C to HDMI output, external CVBS display.

1.4 Standard Components



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: start/stop video recording; Menu navigation: cursor up;
Mode key	Short press: switch color palette; Long press: menu operation; Menu navigation: confirm;
Capture button /Record Button	Short press: switch scene mode; Long press: capture snapshot; 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.

4.Product Specifications

Model	Hawkeye Ai15
Detector resolution	256x192
Ai super resolution	384x288
Pixel size	12 µm
NETD	≤40mk
Response band	8µm to 14µm
Lens (focal length)	15mm
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	-10°C to 50°C
Protection level	IP66
size	197mmx67mmx55mm
Weight	About 298g

5.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

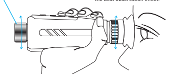
In the main preview interface of the thermal imager, long press the Mode button to enter the main menu.

3. Image adjustment

By adjusting the image's pseudo color mode, brightness, scene mode, and flat field correction (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.

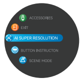
3.1 Adjusting the diopter
By adjusting the diopter adjustment knob, the Thermal Imaging Monocular can adapt to the vision differences of different users to obtain the best observation effect.

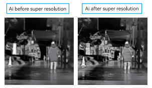


Note: When using the Thermal Imaging Monocular for the first time, you must first adjust the vision and then configure the functions.

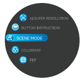
4. AI super resolution on/off

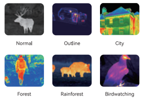
AI super-resolution on/off, on by default, AI super-resolution technology improves the display effect to the same as the display effect of the sensor with 384*288




Ai before super resolution
Ai after super resolution

5. Scene Mode



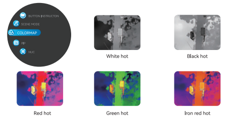


6. Brightness adjustment

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, select different pseudo color modes to get different display effects. In the main preview interface, short press to switch the pseudo color mode.



8. Recording function

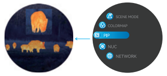
1. When the camera is powered on, long press the zoom button to start recording video. The recording icon and time will be displayed in the upper right corner of the image.

9. Capture function

1. When the device is powered on, long press to capture a picture;
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.

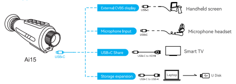


Operation steps:
① Long press the key to enter the main menu
② Select PIP, short press the key to turn PIP on/off.
③ After PIP is turned on, digital zoom is performed, the image magnification of the main interface remains unchanged, and only the PIP image is enlarged or reduced.

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: Hawkeye AP-last 6 digits of the serial number
- Wi-Fi password: 12345678

③Open the GT share client, 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 to open the menu, select the NETWORK option, and then select WiFi.
②Turn on WiFi on your phone and connect to the AP hotspot of the Thermal Imaging Monocular.
- Wi-Fi name: Hawkeye WIFI
- Wi-Fi password: 12345678

③After setting, the device will automatically connect to the phone's network. Please check the device to ensure that it has been successfully connected.

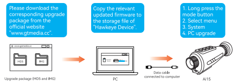
14. Install GTshare app

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

GTshare
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

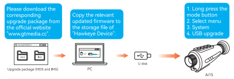

Upgrade package (MD5 and IMG)
PC
Data cable connected to computer
Ai15

Please download the corresponding upgrade package from the official website "www.gtmedia.cc".

Copy the relevant updated firmware to the storage file of "Hawkeye Device".

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

15.2 Firmware update via U disk



Please download the corresponding upgrade package from the official website "www.gtmedia.cc".

Copy the relevant updated firmware to the storage file of "Hawkeye Device".

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

FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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 against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following 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.
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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

REP EC
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