Hti

Outdoor Thermographic Telescope
User manual

HT-A3

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Overview

HT-A3 Outdoor Thermographic Telescope device adopts advance non-cooled focal plane infrared detector and quality optical lenses as the core. With the characteristics of convenient and quick operating system, small appearance design, expansion parts with perfect function, long duration of use, it is sturdy and durable and applicable to all types of environments and provides an ideal temperature measurement tool featuring "clear imaging, precise measurement, simple operation and easy to carry". This is the best selection for onsite detection, preventive maintenance and other application sites.

The product may be used for outdoor animal observation, search and rescue, law enforcement detection for policemen, night patrol, outdoor activities and personal security, etc. The product is provided with the photographing function. The photos may be browsed by connecting with a computer through USB to make it convenient for observation of many persons at the same time, which creates possibility for application in more occasions.
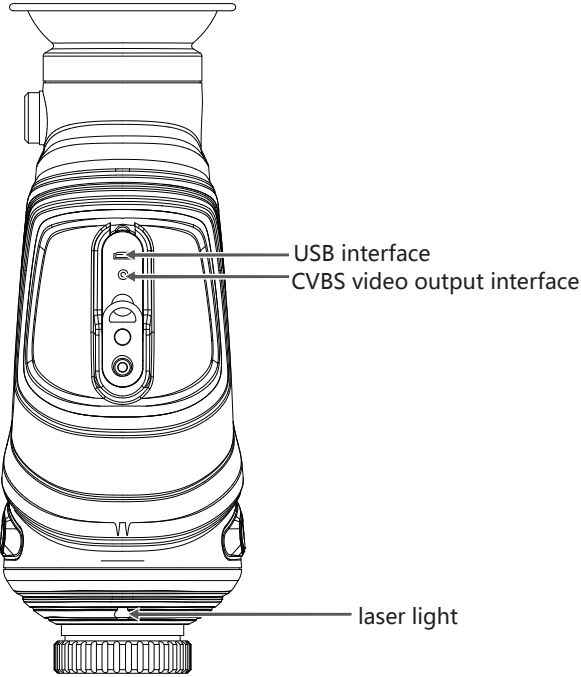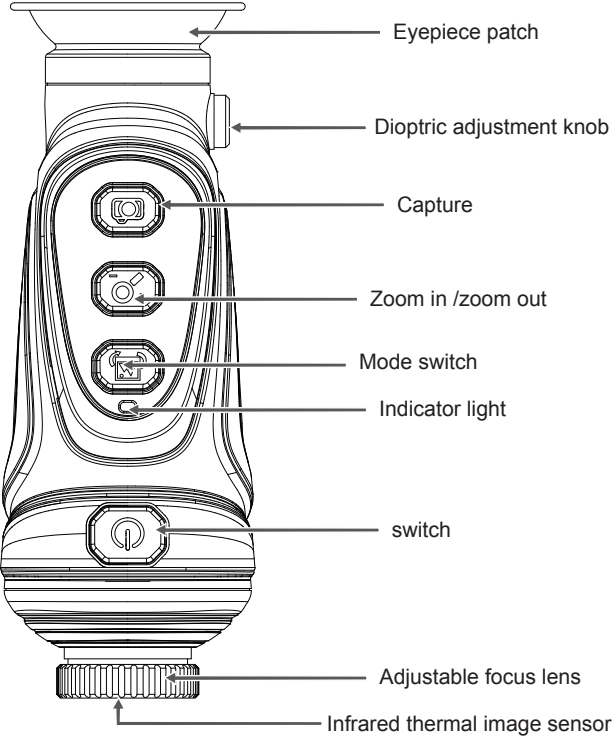
Considerations and Safety Maintenance

Please read the user manual carefully in order to use the product correctly:

- Don't use the product in explosive, flammable, damp or corrosive environment.
- The product contains precision electronic and sensitive optical devices.Don't impact and drop it to avoid damage.
- Don't dismantle and remodel the product without permission. Please use damp cloth or weak soap to clean the enclosure of the device.
- Don't use abradant, isopropanol or solvent to clean. The lens and screen should be cleaned with use of professional optical glasses.
- When the product works, slight click will be given out every several seconds. This is the normal phenomenon that the lens captures the image.

Performance Index

Probe type	Uncooled focal plane
Resolution ratio	384x288 infrared focal plane
LCD resolution	720X540
focus length	19mm；25mm；35mm
Eyepiece	Single eyepiece display (the dioptric compensation is adjustable)
Field angle	19.5°x14.7°；14.9°x11.2°；10.7°x 8°
Digital zoom	2X；4X
Wavelength coverage	8μm-14μm
Frame rate of thermal images	50Hz
Color palette	Rainbow/Hot metal/white heat/black heat
Focusing mode	Adjustable
Image storage	BMP
Battery	Built-in rechargeable batteries
USB	Micro USB
Working time	≥6 hours
Product weight	440g
Product size（length × height）	186x69x68 mm（with eye patch）
Work temperature	0℃- 45℃
Storage temperature	-20℃- 60℃

Product Structure

Eyepiece patch

Dioptric adjustment knob

Capture

Zoom in /zoom out

Mode switch

Indicator light

switch

Adjustable focus lens

Infrared thermal image sensor

USB interface
CVBS video output interface

laser light

Operating Description

- Charging: the product is provided with built-in battery. When the battery power is not sufficient, please charge it through Micro USB interface in time.

- Power on/off: hold down " ⏻ " key to power on /off.

- Image capture: Press " 📷 " key to capture the image. The screen will show " √ " prompt, indicating that image capture is successful.

- Image review:After powering on, short press the " ⏻ " key to enter the image viewing mode (the image shows the last image taken), press the " 🔍 " key to view the previous image, press the " 🖼 " key to view the next image, and press the " ⏻ " key to exit Image viewing mode.

- Delete image: After entering the image viewing mode, press and hold the " ⏻ " key to delete the currently viewed image.

- Image Export: Capture and save images can be viewed and exported via a Micro USB connection to a computer.

- Mode switching: Press the " 🖼 " button to switch between the four imaging modes of rainbow, hot metal, black heat, and white heat.

- CVBS video output: Press and hold the " 🖼 " key to switch to CVBS video output. Press and hold again to return to the local display.

- Zoom in / out: Under the power-on state, press the " 🔍 " key, and each time you press it, the target of "2X, 4X" will be gradually enlarged and displayed. Press again to return to the normal state.

- Brightness adjustment of the display screen: Under the power-on state, press and hold the " 🔍 " key to adjust the brightness. Each long press adjusts the brightness by 1 level.

- Laser light on / off: In the power-on state, press and hold the " 📷 " key to turn on the laser light, and long press it again to turn it off.

- Diopter adjustment: Rotate the diopter adjustment button left and right to adjust the diopter for yourself.

- Focusable lens: Rotate the focus lens button left and right to focus. Rotate clockwise for near focus and counterclockwise for far focus.

Battery Charging Instructions

Use USB data line to charge:

This product has a built-in rechargeable battery.

When the battery is low, please charge it in time via the Micro USB port.

After fully charged, unplug the USB cable.

Note: When the battery is completely empty, there will be an abnormality. It is recommended to use the battery when it is sufficient.

Indicator Light

Status	Not being charged	In charging	Fully charged
Power on	Blue	Red blue (purple)	Blue
Power off	None	Red	None

Application of Amplification

The magnification function may be utilized when remote objective is photographed so as to observe the objective clearly.

The effect picture is as follows:
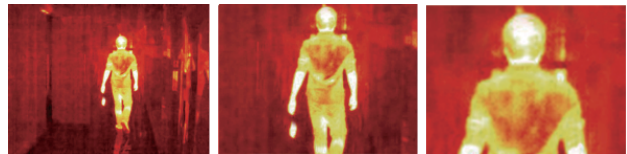
Normal   2X   4X

Application of Color Palette

The magnification function may be utilized when remote objective is photographed so as to observe the objective clearly.
The effect picture is as follows:

The color palette menu may change the pseudo color of infrared thermal image and provide three types of color palettes: rainbow, Hot metal, white heat,black heat.

The selection of proper color palette can show the details of target object in a better manner. The color palette of rainbow and Hot metal focuses on display of color and is very suitable for the condition of high heat contrast and used to improve color contrast between high temperature and low temperature. But the white heat color palettes provide even linear color.

The image effect photographed with three types of color palette.
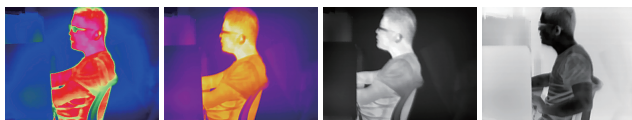
Rainbow   Hot metal   White heat   Black heat

After-sale Service of the Product

Respected customers:

Thank you for purchasing the product of our company. The product carries a warranty period from the date of sale.

During the warranty period of the product, if installation and use is made according to the user manual at normal environment and conditions, users may enjoy free repair service by warranty voucher for faulty product caused by raw materials and manufacturing process. The warranty voucher should be kept properly by the users and will not be reissued if lost.

In order to avoid problems during the use process, our company suggests that you familiarize with the user manual of the product first before the product is used.

The following conditions are not within the warranty scope:

1. Unable to show the original of effective warranty voucher.
2. The product installation does not comply with product require-ments and relevant specification, which causes damage;
3. The damage is caused due to that users use and store it improperly or dismantle and repair it without permission and other reasons;
4. Damage caused by natural disasters (earthquake, flood and lightning stroke) and external disasters;
5. Exceed the warranty period.

Considerations:

1. If the product malfunction, repair or replacement with new or good product is made according to the condition after the product is inspected.

2. For product exceeding the warranty period, determine whether to repair or replace the part after inspection for the product is performed. Relevant expense will be charged for all types of repair and replacement of parts and components according to actual condition.

1. The product enjoys warranty service within one year from the purchase date if it is used normally and not dismantled and is confirmed by warranty personnel for product quality problem. Repair will be provided at any condition. 2. The warranty voucher should be filled at the time of purchase. It should be carried for product maintenance.	

Customer's name	Purchase date	Product type	Distributor
Warranty record:			