



# Outdoor Thermographic Telescope

## User manual



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User Manual Version 1.2. September 7, 2020.

HT-C8

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## Overview

HT-C8 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

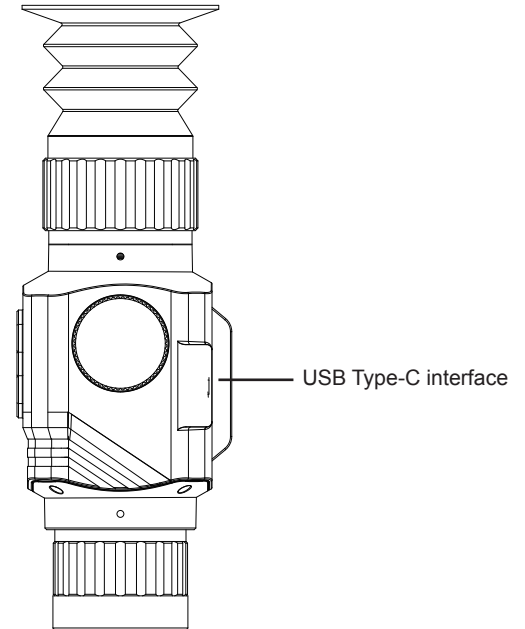
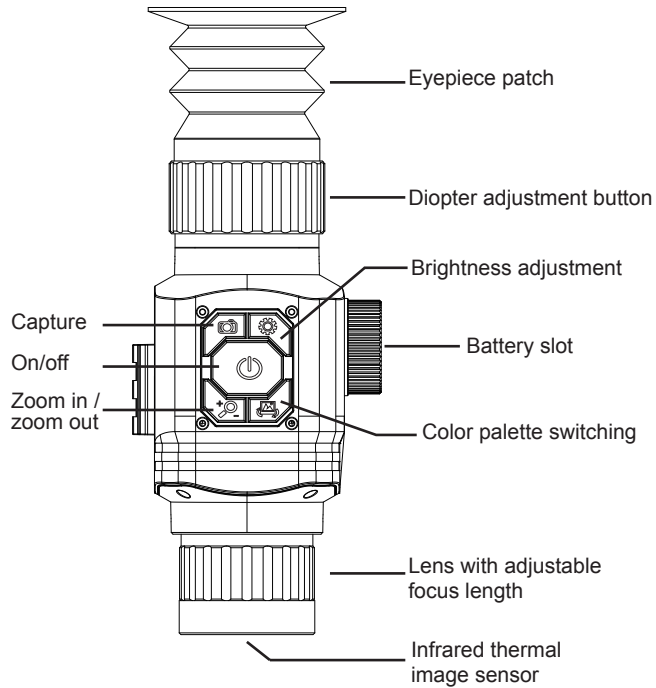
**Please read the user manual carefully in order to use the product correctly:**

- 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 abrasant, 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

Detector type	Uncooled focal plane
Resolution ratio	384×288 infrared focal plane
LCD resolution ratio	1024×768
Focal length	25mm; 35mm; 54mm; 75mm
Eyepiece	Single-eyepiece display (the refraction is adjustable and calibrated).
Field angle	14.9°x11.2°; 10.7°x8.0°; 6.9°x5.2°; 5.0°x3.7°;
Digital zoom	2x; 4x
Wavelength coverage	8μm to 14μm
Frame rate of thermal images	50Hz
Color palette	Rainbow, hot metal, white hot, black hot.
Focal length	Adjustable
Battery	Built-in chargeable batteries
Storage space	8G
Image type	BMP
USB	Type-C
Working time	6 hours
Weight	500g
Product size	180×72 ×62mm (focus length 25mm)
Work temperature	0°C-45°C
Storage temperature	-20°C-60°C
Protection level	IP66
Automatic power-off time	40min

# Product structure



## Description of charging of the battery

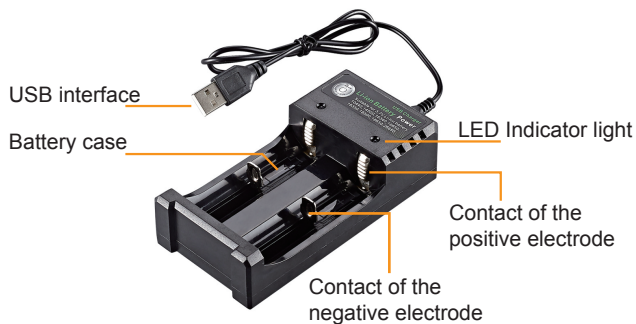
The product is provided with built-in chargeable battery. When the battery level is not sufficient, please charge it in time through two modes.

Charging mode 1:

Please charge it through USB Type-C interface of the thermal imagery telescope and pull off the USB line after charging is completed.

Charging mode 2:

1. Open the battery cover to take out the batteries.
2. Please use the charger provided by the original factory to charge the batteries and install the batteries according to the polarity on the charger correctly.
3. Please disconnect the power supply of the charger in time after fully charging.



Prompt: If the device is out of use for a long time, please charge it once every three months to avoid irreversible reduced capacity loss due to self discharge of the battery due to long-term storage.

## Instruction for battery installation

1. Open the battery cover: screw off the battery cover in anti-clockwise direction.
2. Install the lithium battery: put the battery into the battery compartment with the negative electrode facing outwards as shown in figure 1.
3. Install the battery cover: screw up the battery cover in clockwise

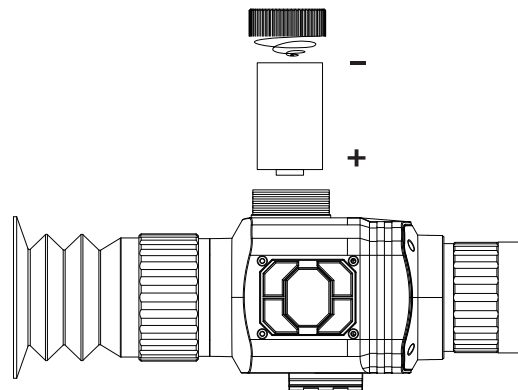















figure 1

## Operating description

- Power on/off: hold down “” key to power on /off.
- Image capture: Press “” key to capture the image. The screen will show “” for prompt, indicating that image capture is saved successful. Please take another picture after 2 seconds. Cannot take pictures when the image is enlarged.
- Image export: The saved images through capture may be checked and exported by connecting with a computer through USB Type-C.
- Open/close the differentiation line: in the power-on state, press the power key to open/close the differentiation line.
- Adjust the position of the differentiation line:
  1. Short press the “” key to open the differentiation line.
  2. Short press the “” key again, the differentiation line enters the adjustable state, and the upper left corner of the screen displays “CAL-MODE”.
  3. Press the following buttons to move the differentiation line:
    - Press “” to move up;
    - Press “” to move down;
    - Press “” to move to the left;
    - Press “” to move to the right;
  4. Short press the “” key again to save and close the differentiation line.

- Mode switching: press “” key to switch among four imaging modes: rainbow, hot metal, black hot and white hot.
- Zoom in/ zoom out: in the power-on state, press “” key. Every press will zoom in the objective with “2X, 4X” displayed. Press it again to come back to common state.
- Brightness adjustment of the display screen: in the power-on state, press “” key to carry out brightness adjustment. Press it once to adjust one level of the brightness.
- Diopter adjustment: rotate the diopter adjustment button leftwards and rightwards to find the diopter suitable for you.
- Lens with adjustable focus length: rotate leftwards and rightwards to adjust the lens for focusing. Clockwise rotation is the near focus and anti-clockwise rotation is distant focus.

## Application of amplification

The magnification function may be utilized when remote objective is photographed so as to observe the objective clearly, Can zoom in 2x or 4x.

## Application of color palette

The image effect photographed with four types of color palettes.

The color palette menu may change the pseudo color of infrared thermal image and provide four types of color palettes:

Rainbow, hot metal, white hot, black hot.

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 hot color palette provides even linear color.



Rainbow



Hot metal



Black hot



White hot

## 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 requirements 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.

<p>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.</p> <p>2. The warranty voucher should be filled at the time of purchase. It should be carried for product maintenance.</p>			
Customer's name	Purchase date	Product type	Distributor
Warranty record:			