Holo series

Thermal imaging collimator

User manual

V1.0

THERMFOX

1. Product description

We are proud to introduce our newest product - the thermal imaging collimator (Holo series). It is a multifunctional device that can be used for day and night target observation. Its compact size and lightweight design make it easy to carry. It is excellent for its long operating time, good concealment and great ability to detect, recognize and identify objects or targets quickly and easily. Holo is effective at short and long ranges regardless of light and harsh weather conditions, i.e., even in total darkness, through heavy smoke, haze, fog and dust.

Fig. 1 Description of components

Fig. left counterclockwise:

Display, Joystick, On button, Clamping plate, Screw head, Battery compartment, Picatinny rail

Fig. right counterclockwise:

Laser, Lens, Battery compartment marking, Mounting, Lock button, Lever, USB-C port

2. Battery fitting

Fig. 2 Fitting the battery

➤ First, remove the threaded battery cover cap by turning it counterclockwise as shown above.

➤ Then insert the CR123 battery with the positive pole in and the negative pole out.

➤ Finally, tighten the cap by turning it clockwise.

Remark:

The device can use a 3V CR123 dry battery or a 3.7V CR123 rechargeable battery.

The device can be connected to an external source using a USB-C data cable. In the case of such a connection, there is no need to remove the battery, but the rechargeable battery will not be recharged.

3. Operating instructions

Fig.3 Normal interface mode

3.1 Switching on/off

Press the power button to turn on the device and the screen will display an image similar to Fig. 3.

Press the same button to switch the device off.

3.2 Status display

When the device is turned on, a status bar appears at the bottom of the screen that shows the current status of some common functions, such as display mode, laser activation, battery model, and current battery level.
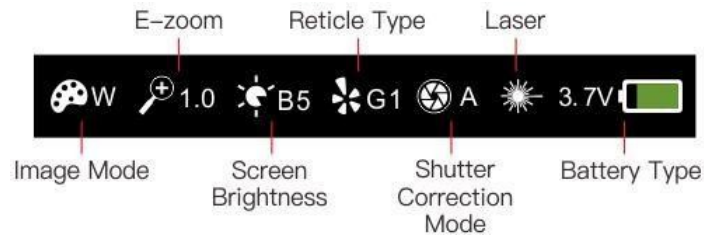
Fig. 4 Status bar

Fig. from left to right (top): E-zoom, Crosshair type, Laser
(bottom): picture mode, screen brightness, shutter correction mode, battery type

3.3 E-zoom

In normal interface mode, push the joystick up to achieve 1x to 4x electronic image magnification.

3.4 Shutter Correction

In normal interface mode, push the joystick down to correct the shutter.

3.5 Setting the screen brightness

In normal interface mode, push the joystick to the left to adjust the screen brightness (from level 1 to level 9).

3.6 Switching off the display

In normal interface mode, push the joystick to the right to turn off the display.

3.7 Navigation menu

In normal interface mode, press the centre of the joystick briefly to enter Navigation Menu 1 - Navigation Menu 2 - Exit Navigation Menu.

After navigating to the Navigation Menu, four function icons appear on the screen "up, down, left and right", which correspond to the buttons on the joystick "up, down, left and right.

| Fig. 5 Navigation menu 1 | Fig. 6 Navigation menu 2 |

3.8 Navigation menu 1

There are four functions in the Navigation Menu 1 interface that select display mode, laser activation, shutter correction, and battery type selection (see Figure 5 for details).

3.8.1 Display mode

In the Navigation Menu 1 interface, press the joystick up to toggle between the four display mode types White Hot (W)-Black Hot (B)-Red Hot (R)-Color (C) and the corresponding icon will appear at the bottom of the screen.

3.8.2 Switching the laser on/off

In the Navigation Menu 1 interface, press the joystick down to switch the laser marking on/off. When the laser is on, a red circular "O" icon is displayed on the screen.

3.8.3 Setting the laser position

With the laser on in the Navigation Menu 1 interface, press and hold the joystick down for three seconds to activate the laser position setting and the laser indicator will flash. Adjust the position by pressing the joystick up, down, left and right. After making adjustments, press and hold the joystick to save and exit.

3.8.4 Shutter correction mode

In the Navigation Menu 1 interface, press the joystick to the left to toggle between the two shutter correction modes - Manual (M) or Auto (A) and the corresponding icon will appear at the bottom of the screen.

3.8.5 Battery type

In the Navigation Menu 1 interface, press the joystick to the right to switch between the two battery types - 3V and 3.7V and the corresponding icon will appear at the bottom of the screen.

3.9 Navigation menu 2

In the Navigation Menu 2 interface, there are four aiming cross functions to choose from - colour, style, type and position adjustment (see Figure 6 for details).

3.9.1 Colour of the sighting cross

In the Navigation Menu 2 interface, press the joystick up to switch between the four colours of the aiming cross: white-black-red-green.

3.9.2 Crosshair style

In the Navigation Menu 2 interface, press the joystick down to switch between four styles of sight cross - cross, T, square and red dot.

3.9.3 Types of sighting cross

In the Navigation Menu 2 interface, press the joystick to the left to switch between the four types of sight crosshairs - G1,G2,G3 and G4. A total of four groups of infrared calibration data can be stored and displayed in the lower status bar.

3.9.4 Setting the position of the sighting cross

In the Navigation Menu 2 interface, press the joystick to the right to enter the interface with the crosshair adjustment. The position can be adjusted by pressing the joystick up, down, left and right. Press and hold the center of the joystick when the adjustment is complete. When the button is released, an "ok" message will appear on the screen to confirm the current position has been saved. Once saved, the position can be recalled using the crosshair type.

Fig. 7 Setup interfaceFig   . 8 Defective pixel calibration interface of
the aiming cross

4. Defective pixel calibration

Press and hold the center of the joystick for three seconds in the normal mode
interface to enter the defective pixel calibration interface. Short press the joystick
button or long press up, down, left and right to complete the movement of the aiming
cross. After selecting a defective pixel, short press the middle button to calibrate and
long press to save and exit.

5. Clamping

Fig. left, from the left: Fitting, Locking button, Lever
Fig. right, left: Clamping plate, Screw head

The lower part of the Holo series is equipped with a quick-release clamp that allows
quick mounting on a picatinny rail. Handling is easy and practical. Fitting is carried
out as follows:

①First, use the screw head to adjust the clamping plate to the correct position;

②Then press the lock button to release the lever and then open the lever;

③After placing the device in the correct position on the picatinny rail, return the lever

to the starting position for proper locking.

6. Product parameters

Model	HL13	HP06
Resolution	320×280	240×210
Pixel size	17μm	17μm
Lens lens	13mm	6.8mm
Field of view	28.4° (H) × 21.4° (V)	34.8° (H) × 26.0° (V)
Detection distance (Target size: 1.7*0.5m, P(n)=99%)	476m	249m
Frame rate	25Hz	
Display	1.63" AMOLED	
E-zoom	×1 / ×2 / ×3 / ×4	
Laser	650nm	
Aiming cross	Different patterns and colours	
Batteries	CR123×1	
Max. battery life	3.5h(600mAh)	
IP protection	IP67	
Dimensions	58.5mm×80.5mm×74.5mm	
Weight	230g (Without batteries)	
Setting	Picatinny rail	