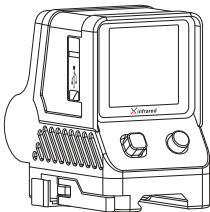


Holo Series

Thermal Reflex Sight

User Manual

V1.0



IRay Technology Co., Ltd.

1 Production Description

We are proud to introduce our newest product -the thermal reflex sight (Holo series). It is a multifunctional device that can be used for both day and night target observation. Its compact size and lightweight design make it easy to carry. What makes it outstanding is long operation hours, good concealment and great ability to detect, recognize and identify objects or targets fast and easy. The Holo is effective at close and long ranges irrespective of light and harsh weather conditions, that is, in total darkness, through heavy smoke, haze, fog, and dust.

2 Components and Controls



3 Battery Installation



Fig. 1 Battery Installation

- © Firstly, remove the threaded battery cap in the counterclockwise direction as shown above.
- © Then, place a CR123 battery in as positive facing inward and negative facing outwards.
- © At last, tighten the battery compartment cover clockwise.

Note

- ★ Holo series support CR123 batteries in both 3V and 3.7V, suggest using CR123 battery in 3.7V for better performance.
- ★ The device can also be connected to an external power supply via the Type-C interface data cable. No need to remove the battery when connected, but the rechargeable battery will not be charged at this time.

4 Operation Instructions

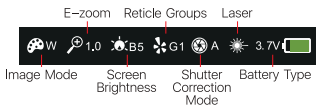
4.1 Power On/Off

Pressing the power button to turn on the unit and the splash screen shows upon.

Pressing the same button to turn off the unit.

4.2 Status Display

When the unit turns on, there is a line of status bar at the bottom of the screen that shows the current status of some regular functions, such as image mode, E-zoom, screen brightness, Reticle groups, shutter correction mode, laser enabling, battery model, and current battery status.



4.3 E-zoom

In the normal mode interface, pushing the joystick upward to achieve the image one to four times electronic magnification.

4.4 Shutter Correction

In the normal mode interface, pushing the joystick

downward for shutter correction.

4.5 Screen Brightness Adjustment

In the normal mode interface, pushing the joystick leftward for screen brightness adjustment (from level 1 to level 6).

4.6 Display Off

In the normal mode interface, pushing the joystick rightward for display off. Do this once again to activate the screen.

4.7 Navigation Menu

In the normal mode interface, pressing the middle part of the joystick briefly to achieve the operation of Navigation Menu 1- Navigation Menu 2 - exit the Navigation Menu.

When accessing the Navigation Menu, four- function icons will appear in the four directions of "top, bottom, left and right" on the screen, which corresponding to the "top, bottom, left, right" keys of the joystick.



Fig.2 Navigation Menu 1

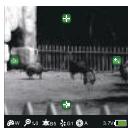


Fig.3 Navigation Menu 2

4.8 Navigation Menu 1

In the Navigation Menu 1 interface, there are four functions of choosing image mode, laser enabling, shutter correction, and battery type selection. (Refer to Fig. 2 for details)

4.8.1 Image Mode

Pushing the joystick upward to switch following five image mode types: White Hot (W)-Black Hot (B)-Red Hot (R)- Color (C)-Target Highlight(H) and the icon will display at the bottom of the screen (Mode H is only applied to HL13).

4.8.2 Laser On\Off

Pushing the joystick downward to turn the laser indication on/off. And a red circular icon "O" will appear in the screen when the laser is turned on.

4.8.3 Laser Position Adjustment

When the laser is on, push the joystick downward for three seconds to enter the laser position adjustment interface and the laser indicator icon flashes. Position movement can be achieved by pushing the joystick up, down, left and right. When the adjustment is done, press and hold the joystick to save and exit.

4.8.4 Shutter Correction Mode

Pushing the joystick leftward to switch two types shutter

correction mode Manual (M) or Automatic (A) and the icon shows at the bottom of the screen.

4.8.5 Battery Type

Pushing the joystick rightward to switch two battery types 3V and 3.7V and the icon shows at the bottom of the screen.

4.9 Menu Navigation 2

In the Navigation Menu 2 interface, there are four reticle functions of choosing reticle color, style, type, and the reticle position adjustment. (Refer to Fig.3 for details)

4.9.1 Reticle Color

Pushing the joystick upward to switch following four reticle colors: white-black-red-green.

4.9.2 Reticle Pattern

Pushing the joystick downward to switch four reticle patterns which are crossing, T shape, box, and red dot.

4.9.3 Reticle Groups

Pushing the joystick leftward to switch four reticle groups which are G1, G2, G3, and G4. A total of four groups of IR calibrator data can be stored and displayed in the status bar at the bottom.

4.9.4 Reticle Position Adjustment

Pushing the joystick rightward to enter the reticle adjustment interface. You can adjust the position by toggling the joystick up, down, left, and right. When the adjustment is done, press and hold the middle part of the joystick and the message "OK" appears before you release the button, which indicates the current calibration has been saved. And it can be brought up by the groups of reticle after saving.

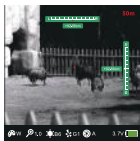


Fig.4 Reticle Adjustment Interface



Fig. 5 Blind Pixel Calibration Interface

4.10 Blind Pixel Calibration

Pressing the middle part of the joystick for three seconds in the normal mode will lead entering the blind pixel calibration interface. By pressing the joystick briefly or long press the four directions (up, down, left, right) of the navigation button to achieve the movement of the reticle. Selecting the blind pixel, press briefly the middle button for calibration and long-press to save and exit.

5 Fixture Instruction



The bottom of the Holo series is provided with a quick release clamp which can be quickly installed on the Picatinny rail for fixing. The operation is simple and convenient. The specific method is as follows:

- ◎ Firstly, adjust the pressing plate to a proper position by a screw cap;
- ◎ Then the locking button is pressed to release the locking state of the spanner and open it upon;
- ◎ Placing the unit on the proper position of the Picatinny rail and return the spanner to clamp tight.

★ The Holo can either be mounted on the Picatinny rail by the fixture or be assembled to the matching handle (the handle needs to be purchased separately) in which can be installed with a single detachable 18650 battery as an external power supply.

6 Product Parameters

Model



HP06



HL13

Resolution	240×210	320×280
Pixel Size	17μm	17μm
Objective Lens	6.8mm	13mm
Field of View	33.4°×29.4°	23.6°×20.7°
Detection Range (Target size: 1.7m×0.5m, P(n)=99%)	249m	476m
Frame Rate	25Hz	
Display	1.63" AMOLED	
E-zoom	×1/×2/×3/×4	
Laser	650nm	
Reticle	Multiple patterns and colors options	
Battery	CR123×1	
Max. Battery Time	3.5h	
IP Rating	IP67	
Dimension	58.5mm×80.5mm×74.5mm	
Weight	<250g (without battery)	
Mount	Picatinny Rail (quick release)	



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