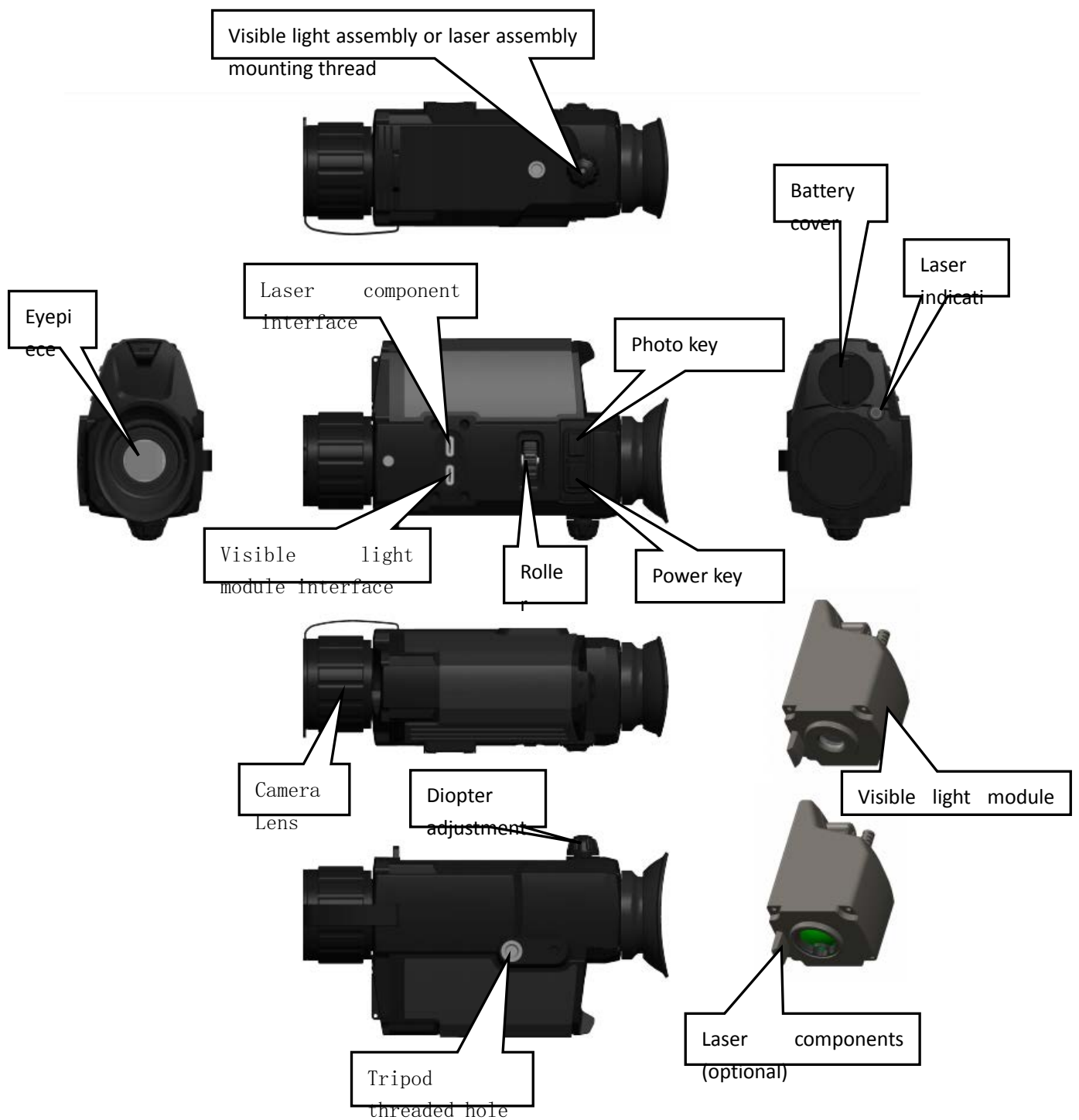
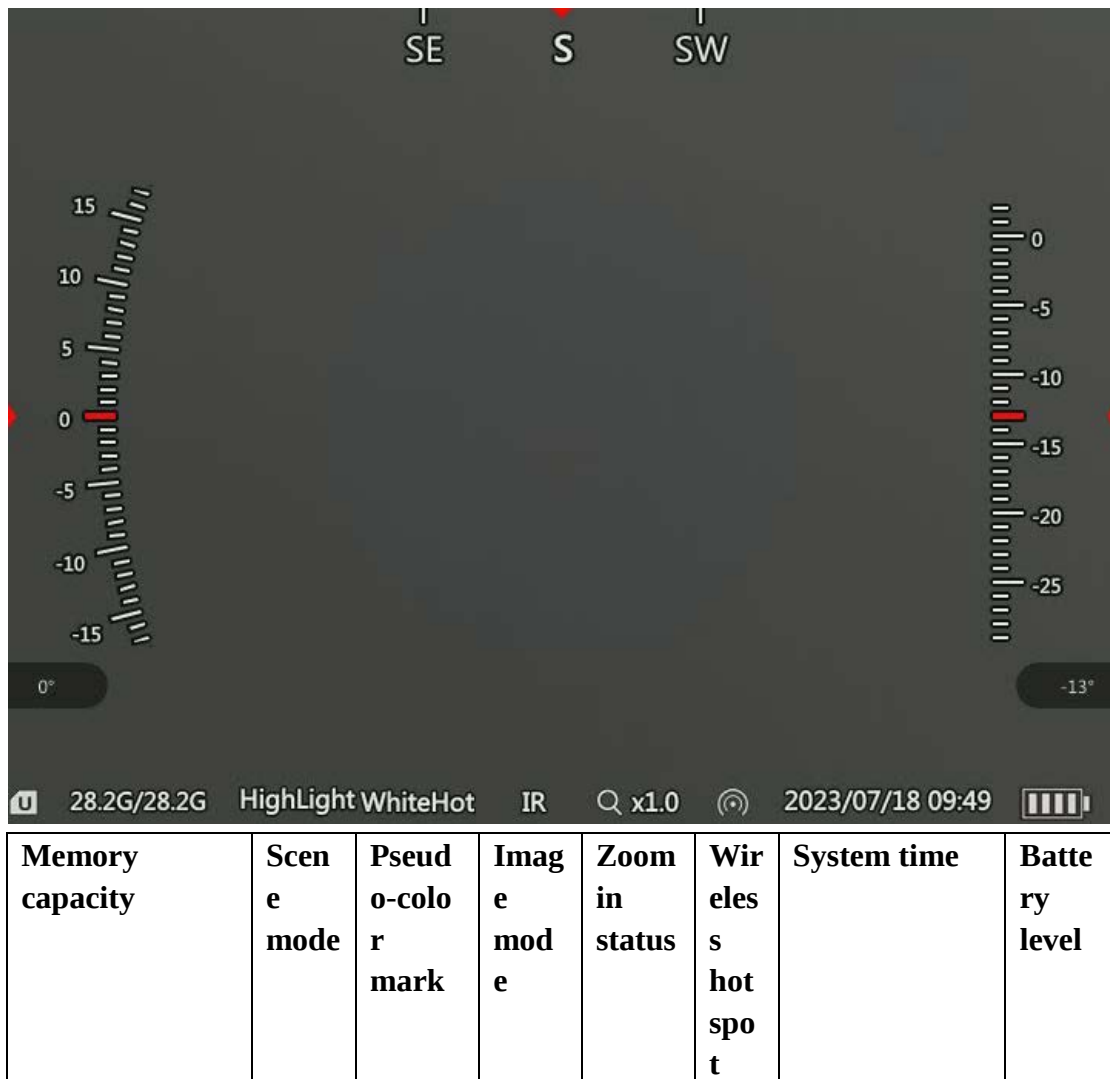


# Quick Start Guide

## 1. Appearance key and composition





**Figure 1. Main interface**

## 2. Key operation on the main interface:

### Power key

- Press and hold to turn on/off the thermal imager, and the green indicator of the instrument will be on after the thermal imager is turned on.
- Short press after startup to turn on the laser lamp and cross dividing cursor.

### Photo key

- Short press to take photo/stop recording, long press to start recording

### Middle key of the scroll wheel

- Short press to toggle the color scale.

- Press and hold to enter the user menu

### **The scroll wheel rolls left**

- Electronic variable magnification reduces 0.1.

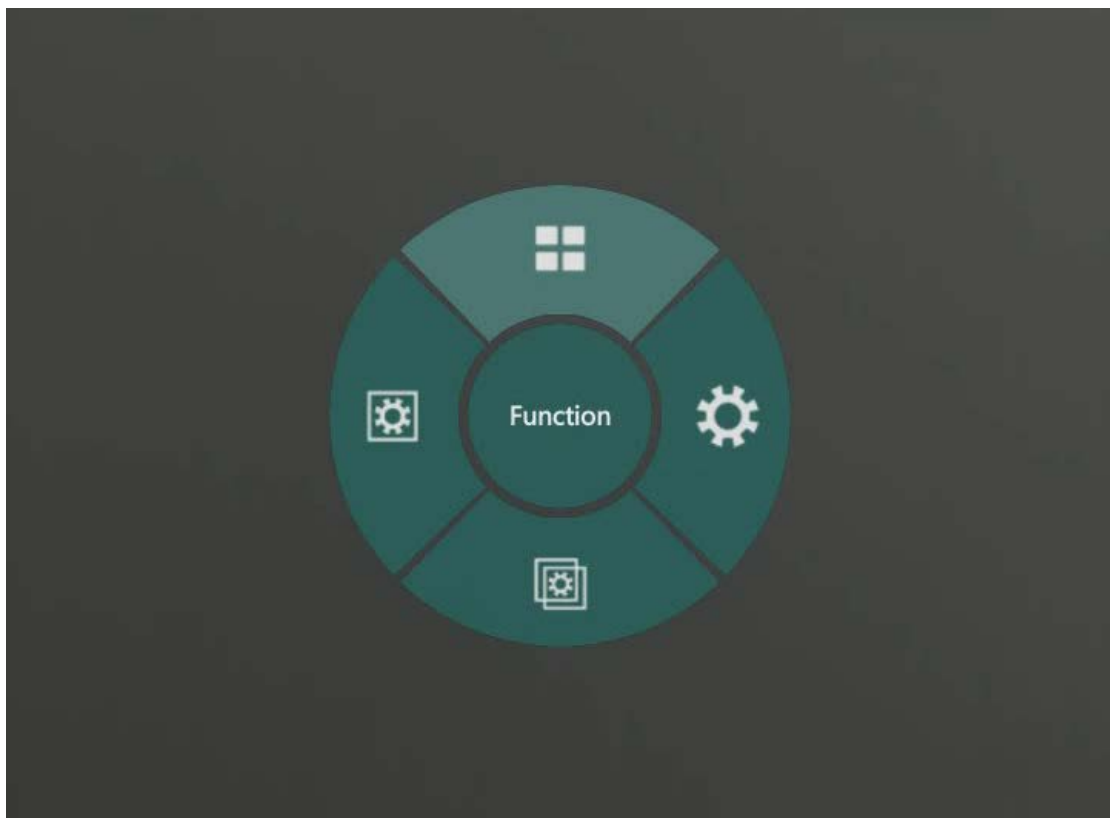
### **Scroll the wheel to the right**

- Electronic variable magnification increases 0.1.

**Key combination: camera key**  **and power key** 

- Press and hold the "Photo"  key and the "Power"  key at the same time to manually correct the image.

## **3. User menu key operation:**



**Figure 2. User Menu Interface Figure**

### **Middle wheel key:**

- Short press OK to enter the next menu

### **Photo key:**

- Short press to return to the previous menu
- Press and hold to exit the user menu and return to the main interface

#### The scroll wheel rolls left

- The user menu rotates counterclockwise and turns down the parameters.

#### Scroll the wheel to the right



**Figure 3. Function Menu**

- Clockwise rotation of user menu and parameter adjustment

## 4. Introduction to menu functions

### 4.1 Function menu



\* Laser ranging: It can be used only when the laser component is connected.

After opening, aim the instrument at a target, and the main interface will display the distance of laser ranging.



**Crosspoint:** enter with the middle key of the scroll wheel, set the cursor type/color of the cross division and adjust the cursor position. You can select three

cursor styles  (style 1, style 2, style 3), three cursor colors  (red, yellow,

green), cursor X-axis movement , cursor Y-axis movement .



**File:** Enter by pressing the middle key of the scroll wheel to view/delete the photos and videos taken by the instrument



**Probabilistic Ranging:** When enabled, automatically displays the distance of a specific target object on the ruler



**Hotspot Track:** After starting, the cursor will automatically track the highest temperature point on the display screen on the main interface.



**PIP:** Turn PIP on/off to magnify the center area by 2x.



**Compass:** After opening, the main interface will display the information of the electronic compass.



**Wi-Fi Mode:** In the hotspot mode, the mobile phone can be connected to the instrument hotspot to operate the instrument; The WLAN mode instrument can be connected to the router, and the mobile phone connected to the same router at the same time can operate the instrument.



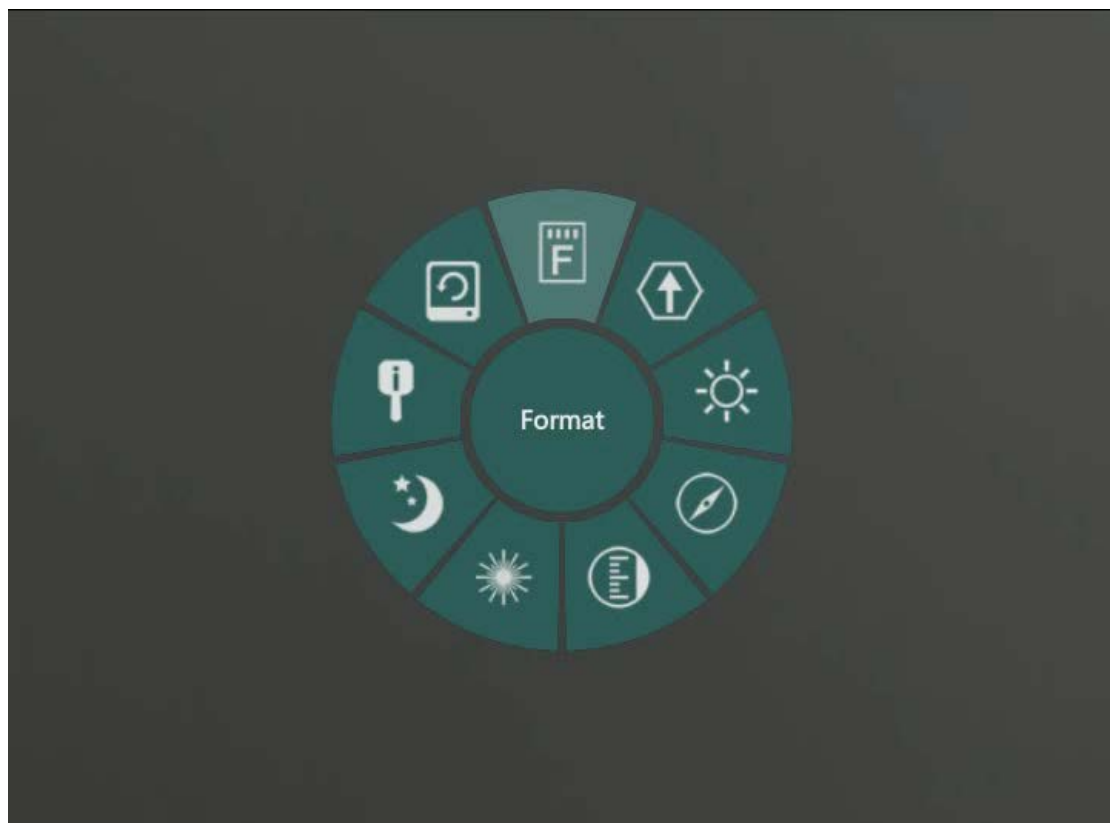
**WiFi:** Turn on/off WiFi

Android system can download the mobile client program "IR-TRACKER V" from the official website, install and run the mobile client program, and find the instrument hotspot "MS3.xxxxxxx" (WiFi name is "model \_ serial number") in the mobile WIFI for the first time, and the initial password is "12345678". After successful connection, open the mobile phone "IR-TRACKER V" software, click the software "Connect" to see the image, and realize the image shooting, video recording, playback, storage and

other functions through the mobile phone client software. The WiFi name and password can be customized on the client after connection.

**Note: Turn on WIFI for a long time to increase the power consumption of the instrument and shorten the standby time of the instrument. Please turn off this function when not in use.**

#### 4.2 System Menu



**Figure 4. System Menu**



**Auto Sleep:** The optional automatic sleep time is 0 min, 5 min, 30 min and 60 min. If there is no operation during this period, the eyepiece will be automatically

turned off. The low-power standby of the instrument increases the endurance. Press any key to restore the standby sleep state.



**System Information:** display information such as instrument model/software version.



**System Upgrade:** the version can be upgraded.

The version upgrade operation is as follows:

Preparation: Download the version upgrade program file through the PC (contact the manufacturer's after-sales technical support for details), and copy the "bin" upgrade program to the root directory of the local storage space of the instrument.

Instrument upgrade: Click this function in the instrument and select upgrade. After the instrument is upgraded, press and hold the "power button" to read the bar and shut down the machine. After the machine is turned on and restarted, the upgrade is completed.



**Format:** The memory card can be formatted, and a prompt will appear at the top after successful formatting.

**Note:** After formatting, all files in the built-in memory card will be deleted.

**Please operate with caution.**



**Recover Default:** All parameters will be restored to the default values after being turned on. It will automatically shut down after the restore is complete.



**Screen Brightness:** support 5-gear eyepiece display screen brightness adjustment.



**Compass Calibrate:** After entering the compass correction, rotate the instrument according to the prompt to correct the electronic compass.

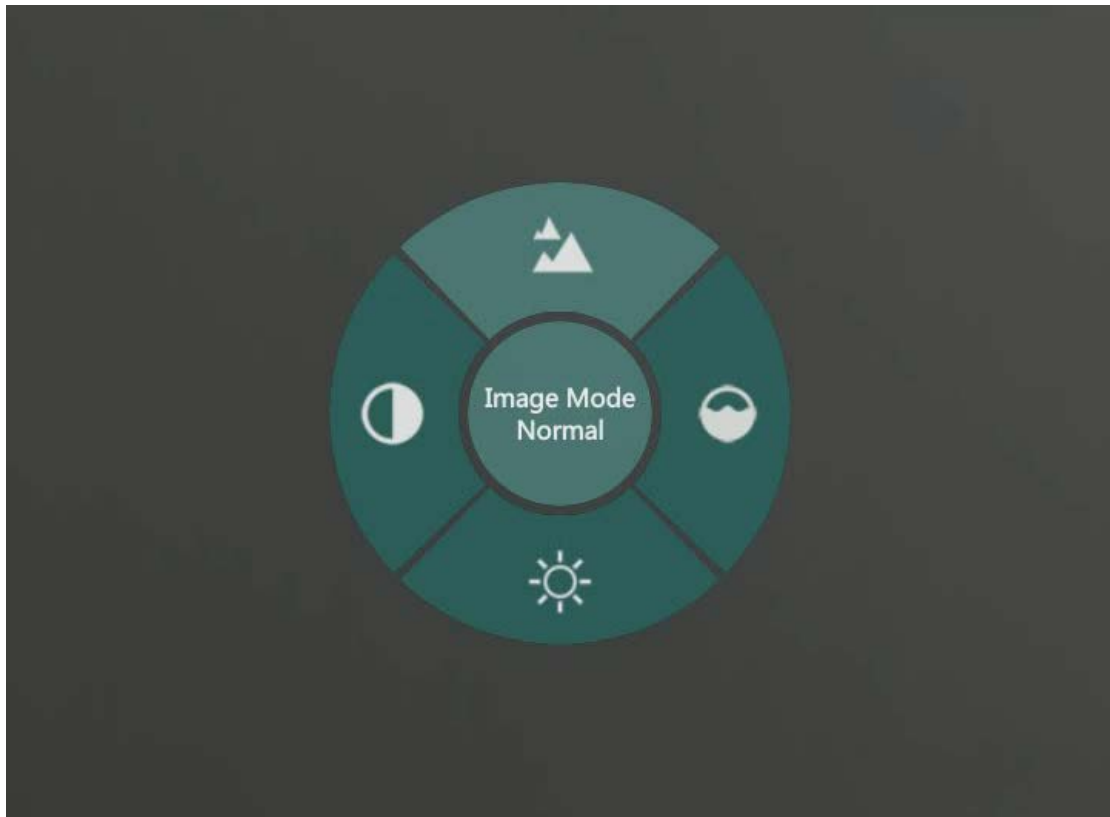


**Distance Unit:** meter/yard. Select the unit for the laser range distance display.



**Laser Indication:** If the laser indication is turned off, the laser lamp will not be turned on by pressing the power button for a short time. On by factory default.

### 4.3 Infrared Menu



**Figure 5. Infrared Menu**



**Brightness:** 0 ~ 100% adjustable, can be adjusted according to the site environment by the left and right rollers.



**Contrast Ratio:** 0 ~ 100% adjustable, can be adjusted according to the scene environment by the left and right wheel.



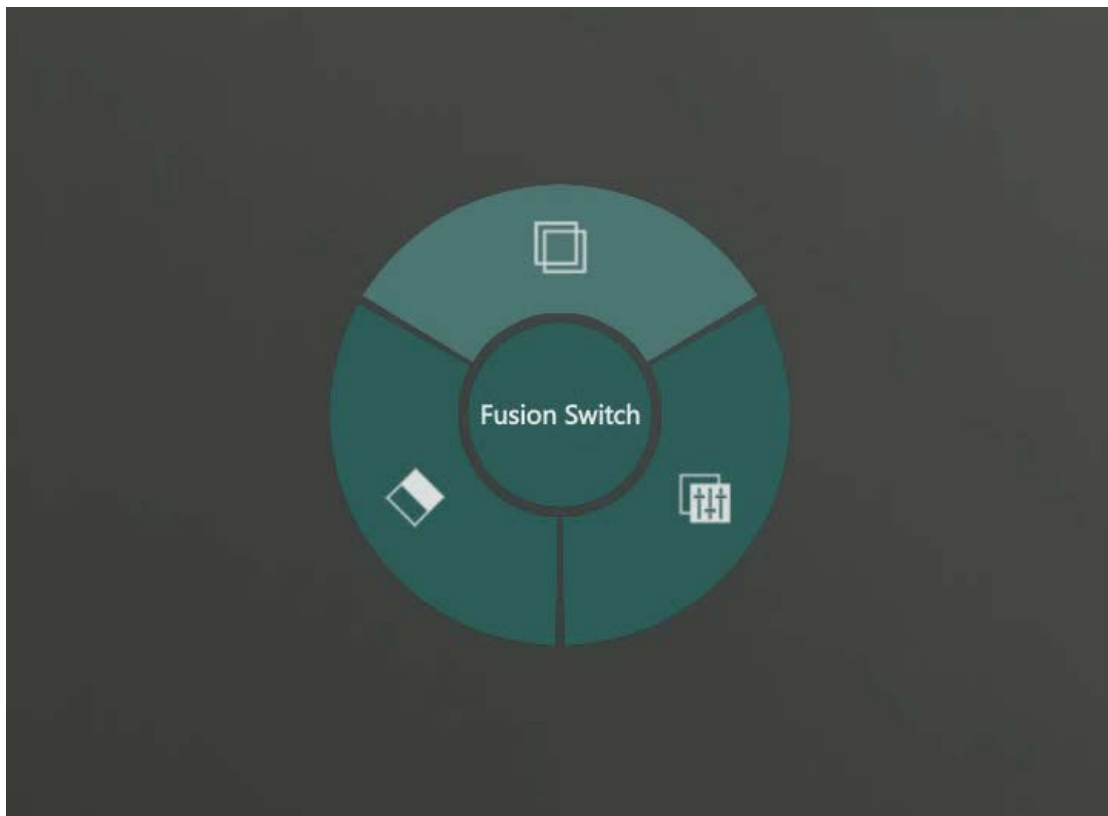
**Red Trigger:** -100 ~ 100 adjustable, which can be adjusted according to the site environment.



**Image Mode:** Natural/Enhanced/Highlight, can be used for rainy, foggy and other special scenes.

**Note:** In Enhance/Highlight mode, the contrast and brightness cannot be adjusted.

**\* 4.4 Fusion Menu (this menu function can only be used after the visible light module is connected)**



**Figure 6. Fusion Menu**



**Fusion Switch:** After the fusion switch is turned on, the color code can be switched to the fusion mode (ocean, forest, desert) and low-light mode through the middle of the roller in the main interface. When the fusion switch is turned off, the color scale switching will be switched in the color scale of the infrared mode.



**Fusion Parameters:** The fusion image is a visible image superimposed with an infrared image. Adjust the fusion parameters to set the relative position and width

of the visible image, so that it overlaps with the infrared image to achieve the best fusion effect.



**Fusion Scene:** day/night can be adjusted, and the fusion scene can be adjusted according to the use time to obtain better image effect.

### **USB charging/data interface**

- When charging, open the Type-C interface cover of the instrument and plug in the USB charging cable (voltage DC5V/2A) for charging.
- Open the interface cover of the instrument, connect the USB cable to the computer, and copy the photos and video data files.

### **Real-time video output**

- When using, pull out the cover of the Type-C interface of the instrument and insert the configured cable to access the display on the monitor or other long-distance transmission.

### **Precautions**

- Because the uncooled infrared telescope uses a very sensitive thermal sensor, under no circumstances (power on or off) should the lens be directly aimed at a strong radiation source (such as the sun, laser beam direct or reflection, etc.), otherwise it will cause permanent damage to the uncooled infrared telescope!
- Use lens cloth and clean water to gently wipe clean, do not use organic solvents or sharp hard objects to clean the infrared lens, so as not to cause the lens film to fall off and so on!
- After the laser ranging function is turned on, do not irradiate the eyes to avoid injury!
- Please check the power when using the instrument for the first

time. If necessary, charge the instrument for three hours before use. When charging the USB, please place the instrument at room temperature.

- Do not open the enclosure or modify it without authorization, and the maintenance can only be carried out by the authorized personnel of the company.

#### FCC Statement

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.

To assure continued compliance, any changes or modifications not expressly approved by the party. Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment 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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The SAR limit adopted by USA and Canada is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The highest SAR value reported to the Federal Communications Commission (FCC) the Industry Canada (IC) for this device type when it is tested for the properly worn on the body is under 1g 1.6W/Kg.

The device complies with the RF specifications when the device is used near your at a distance of 0 mm from your body. Ensure that the device accessories such as a device case and a device holster are not composed of metal components. Keep your device away from your body to meet the requirement earlier mentioned.

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0 mm must be maintained between the user's body and the product, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.