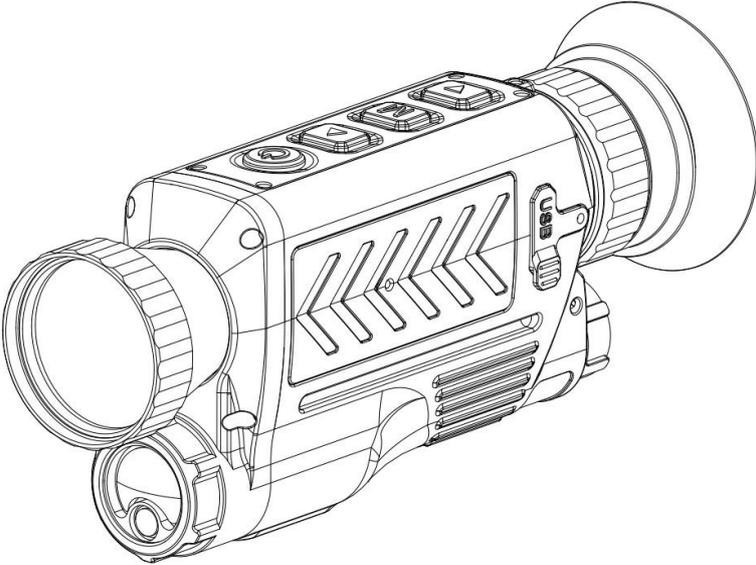
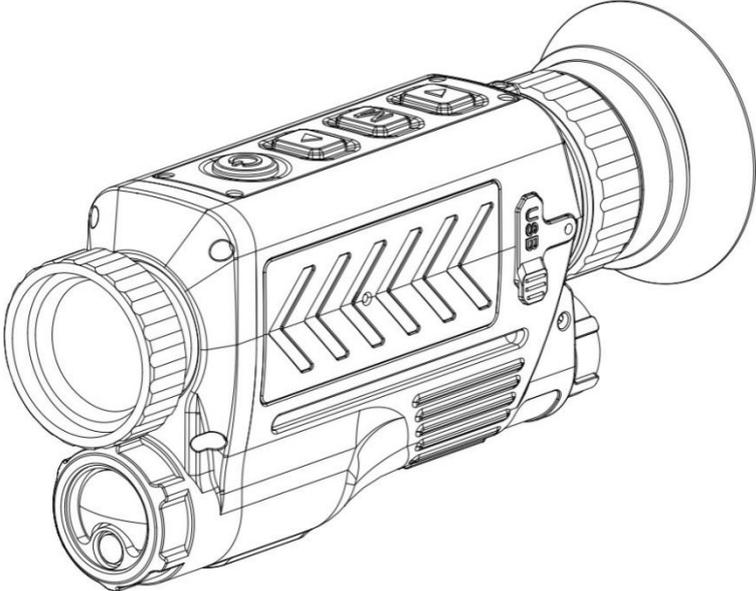


# S6412LFT-25/35 series monocular handheld infrared user manual



# S6412LFT Monocular handheld infrared telescope

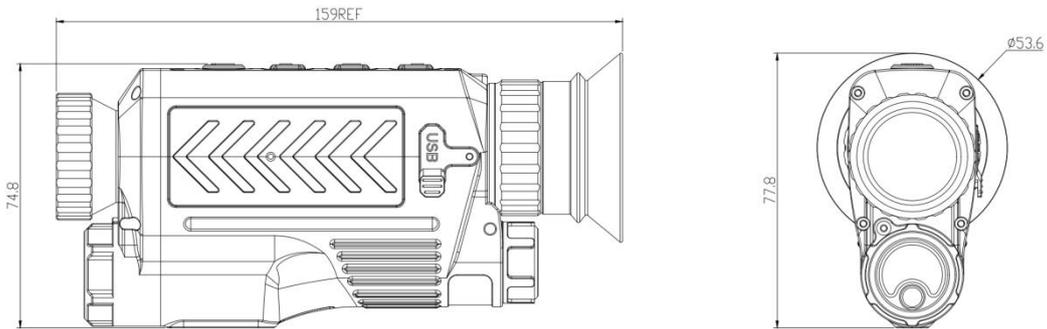
- Small size, light weight, low power consumption;
- Electronic compass, laser ranging;
- Multiple algorithms, good image quality, stable performance;
- Large capacity storage, WIFI image transmission, TYPE-C interface;

## Main technical parameters:

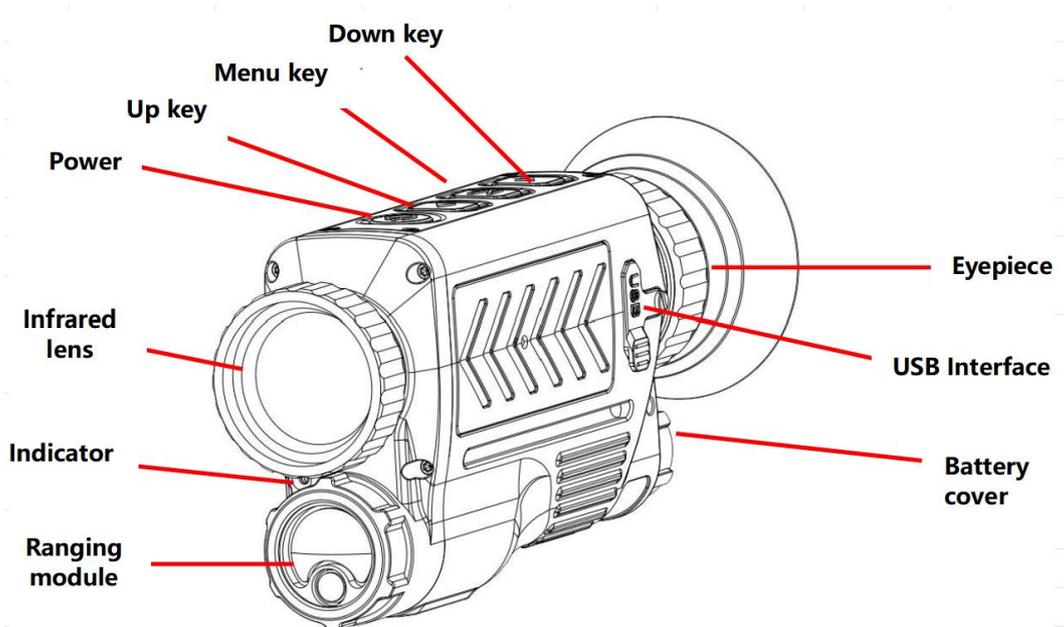
Model	S6412LFT-25/35 S3812LFT-25/35
Device type	Uncooled vanadium oxide
Resolution	640×512/384×288 @12μm
Response band	8 ~ 14μm
Noise equivalent temperature difference	≤ 50 mK
objective focal length	25/35mm F1 Manual focusing
Recognition distance	Upright adult 350m
Display type	Colorful OLED Monocular display
Display Unit	0.39 吋 1024*768
Frame frequency	50Hz
Exit pupil distance	25mm
Diopter adjustment range	-5 ~ +5
Storage capacity	64GB
Power supply mode	18650 Lithium battery (1pcs)
Working hours	3.5Hours (Room temperature)
Electrical interface	TYPE-C
Weight	400g (Battery included)
Dimension	54mm×75mm×160mm
Class of protection	IP65
Operating temperature	-40℃ ~ +55℃
Storage temperature	-55℃ ~ +70℃
Feature	Compass inclination、Target ranging、Photos、Video、WIFIC Vide、Electron amplification、Division display, false color switch, etc



Dimensional diagram:



## 1. Device introduction



## 2. Key function introduction

No.	Instructions	Preview interface		Menu interface	Playback interface
		Short press	press 3 seconds	Short press	Short press
1	Power button	Screen sleep/wake up	Power On/Power off	Back	Back
2	Up button	/	Zoom Cycle switching	Options +1	Previous file
3	Menu button	Main menu	Sighting menu	Option Settings	Play/Pause
4	Down button	Take a photo	Video start/Video stop	Options -1	Next file

### 3.Power on/off

#### 3.1 Power on

Install the battery correctly (1 battery positive electrode facing inward), press [Power button] to boot display.The default preview screen after power-on is shown in Figure 2:

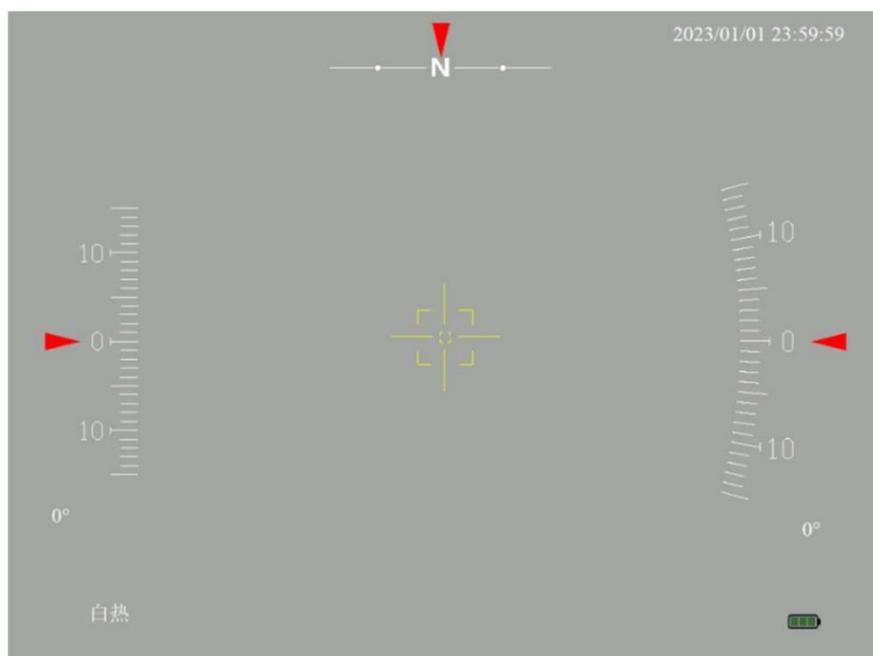


Figure 2

The preview interface is an interface for displaying images, pictures, character information, etc. Some picture descriptions are shown in Figure 3:

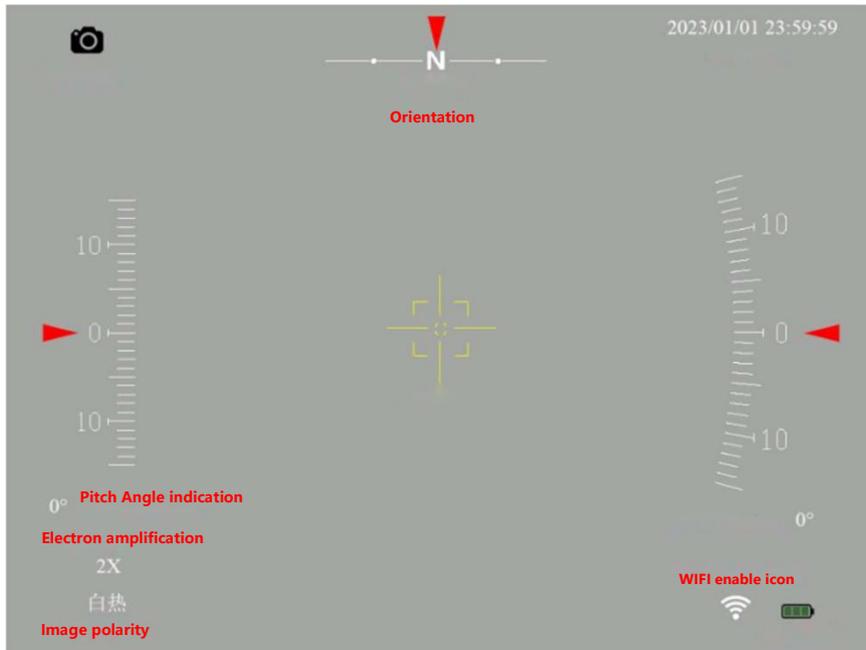


Figure 3

### 3.2 Power off

Press and hold [Power button] for 3 seconds to shut down

### 4. Preview interface button function description

4.1. Short press [Power button] : screen sleep/wake up. Press the button to hibernate the screen, and then press the button to wake up and restore the display

4.2. Long press [Power button] : Power off



Figure 4

4.3. Short press [Down button] : Take a picture, there is a mark in the upper left corner and it will be automatically hidden after completion.

Can be used when recording



Figure 5

4.4. Long press [Down button] : video recording, there is an icon and video duration display in the upper left corner. Long press [Down button] to stop recording;

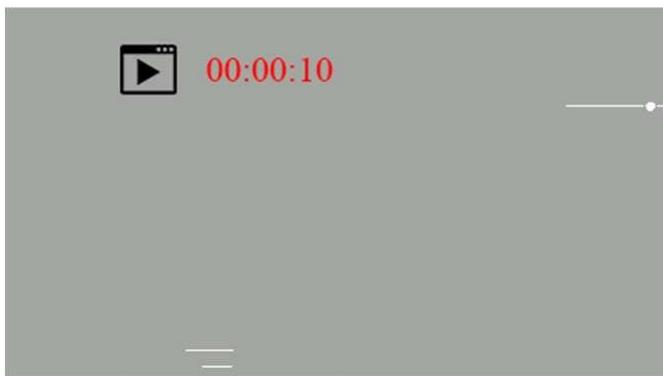


Figure 6

4.5. Short press [menu key] : Switch polarity/fake color

4.6. Long press [Menu key] to enter the main menu, short press [Power button] to exit

## 5. Menu function description

### 5.1 Main course Menu Function description

Tap [Menu] to enter the main menu. In the main menu, press [Up key], [Down key] to switch options up and down, press [menu key] to select and enter the setting submenu. Press [Power button] to exit. The name of the selected item is displayed at the top, as shown in Figure 7:

Number	function	Setting	Remark
1	enlarge	1X--4X	
2	picture-in-picture	ON/OFF	Partition 2 priority
3	Hot spot tracking	ON/OFF	
4	Image setting	Go to submenu	See 5.2 Image setup instructions
5	Partition setting	Go to submenu	See 5.3 Partition Setting Instructions

6	Setting	Go to submenu	See 5.4 Setting Instructions
7	Playback mode	Go to submenu	See 5.5 Playback Mode Description
8	External correction	External correction	Menu key execution
9	Internal correction	Internal correction	Menu key execution



Figure 7

### 5.1.1. Enlarge

Select the item to enlarge, press [menu] to select it, press [Up] and [Down] to adjust the value, the value range is 1×~4×, press [menu] to exit the setting and return to the main menu. Press [Power button] to exit the main menu.

### 5.1.2. Picture-in-Picture

Select the Picture-in-picture option, Press [Menu key] to select, press [Up key], [Down key] to turn on/off the drawing function, press [menu key] to exit the setting and return to the main menu. Press the Power button to exit the main menu.

### 5.1.3. Hot spot tracking

Select the hot spot tracking option, Press [Menu key] to select, press [Up key], [Down key] to turn on/off the hotspot tracking function, press [menu key] to exit the setting and return to the main menu. Press [Power button] to exit the main menu.

### 5.1.4. Image setting

Select the image settings option, short press the [Menu] key to select it, enter the image settings menu, and press the [Power] key to exit. Please refer to the image setting instructions for details.

### 5.1.5. Partition setting

Select the Partition setting option, press [Menu key] to select it, enter the Partition setting menu, press [Power key] to exit. See the Partition setup instructions for details

### 5.1.6. Setting

Select the settings option, short press the [Menu] button to select it, enter the settings menu, and press the [Power] button to exit. Please refer to the setting instructions for details.

### 5.1.7. Playback mode

Select the playback mode option, press [menu key] to select it, enter the playback mode menu, and press [Power key] to exit. See Playback Mode description for details.

### 5.1.8. External correction

Select the external correction option, press [menu key] to perform external correction of infrared image, cover the lens cover or align the infrared image with a uniform background such as a cloudless sky. Press [Power button] to exit;

### 5.1.9. Internal correction

Select the internal correction option and short press the [Menu] button to perform infrared image internal correction. Press the power button to exit

## 5.2 Image Setting Function Description

Tap [Menu] to enter the main menu. In the main menu, press [Up key] and [Down key] to switch to select the image setting item, and press [menu key] to enter the image setting submenu. Press [Power button] to exit. The name of the selected item is displayed at the top, as shown in Figure 8

Number	function	Setting	Remark
1	mode	0-3	
2	brightness	1-10	
3	contrast	1-10	
4	Sharpness	0-3	
5	GAMA	1-10	
6	Blind spot compensation	Automatic/manual	

7	Automatic correction	ON/OFF	
8	OLED	1-7	
9	Compass and attitude	Turn off display/Turn on Display/Show orientation only	

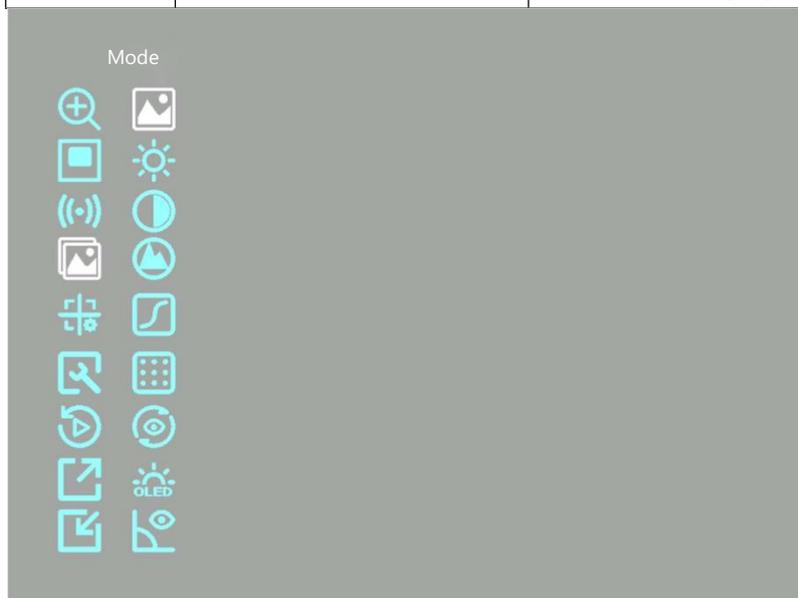


Figure 8

### 5.2.1.Mode

Select the mode item,short press the [Menu] key to select it, short press the [Up] and [Down] keys to adjust the value, with a range of 0~3. Press the [Menu] key to exit the setting, and press the [Power] key to return to the main menu;

### 5.2.2.Brightness

Select the brightness item, press [menu key] to select it, press [Up key], [Down key] to adjust the value, the value range is 1~10, press [menu key] to exit the setting, press [Power Key ] Return to the main menu

### 5.2.3.contrast

Select the contrast item, press [Menu key] to select it, press [Up key] and [Down key] to adjust the value, the value range is 1~10, press [menu key] to exit the setting, press [Power key] to return to the main menu

### 5.2.4.Sharpness

Select the sharpness item, press [menu key] to select it, press [Up key], [Down key] to adjust the value, the value range is 0~3, press [menu key] to exit the setting, press [Power key] to return to the main menu

### **5.2.5.GAMA**

Select GAMA, press [Menu key] to select, press [Up key], [Down key] to adjust the value, the value range is 1~10, press [menu key] to exit the setting, press [PowerKey] Return to the main menu

### **5.2.6.Blind spot compensation**

Select the blind spot compensation item, press [menu key] to enter automatic blind spot compensation, press [menu key] to switch automatic or manual calibration mode, press [up key] to confirm the selection

#### **5.2.6.1Automatic compensation**

Press [Up] to enter automatic compensation, [up] and [down] adjustment threshold is 512 by default, close the lens cap as prompted, and press [menu] to start automatic correction. After correcting the effect, short press [menu key] to save the calibration result and exit, long press [Menu key] to save the calibration result and exit. Press [Power button] to return to the upper-level menu

#### **5.2.6.2Manual compensation**

Press [Up key] to enter manual compensation, press [Menu] to switch operation items, press [Up key], [Down key] to adjust parameters. X is the horizontal coordinate, Y is the vertical coordinate; Repair Select Yes to correct the bad point of the midpoint of the current reticle, and No to correct the bad point. Save Select Yes to save, select No to not save.

### **5.2.7.Automatic correction**

Select the auto correction item, press [menu key] to select it, press [Up key], [Down key] to turn on/off the auto correction function, press [menu key] to exit the setting and return to the menu. Press [Power button] to return to the main menu

### **5.2.8.OLED**

Select the OLED item, press [menu key] to select it, press [Up key], [Down key] to adjust the OLED brightness value, the value range is 1~7, press [menu key] to exit the setting and return to the menu. Press [Power] to return to the main menu

### **5.2.8.Compass and attitude**

Select compass and attitude items, press [menu key] to select, press [Up key],

[Down key] to adjust to turn off display/turn on display/only display orientation, press [menu key] to exit the setting and return to the menu. Press [Power button] to return to the main menu;

### 5.3 Partition Settings function description

Tap [Menu] to enter the main menu. In the main menu, press [Up key] and [Down key] to switch to select the partition setting item., press [menu key] to enter the sub-menu of partition setting, and press [Power key] to exit. The name of the selected item is displayed at the top, as shown in Figure 9

Number	function	Setting	Remark
1	Partition switch	Close/Partition 1/ Partition 2/ Open display	
2	Gun type	A-J	
3	Partition 1 type	1-4	
4	Partition 1 color	1-3	
5	Partition 2 type	1-4	
6	Partition 2 color	1-3	
7	Partition brightness	1-5	
8	Partition the 2X axis		Partition 2 horizontally
9	Partition the 2Y axis		Partition 2 ordinates

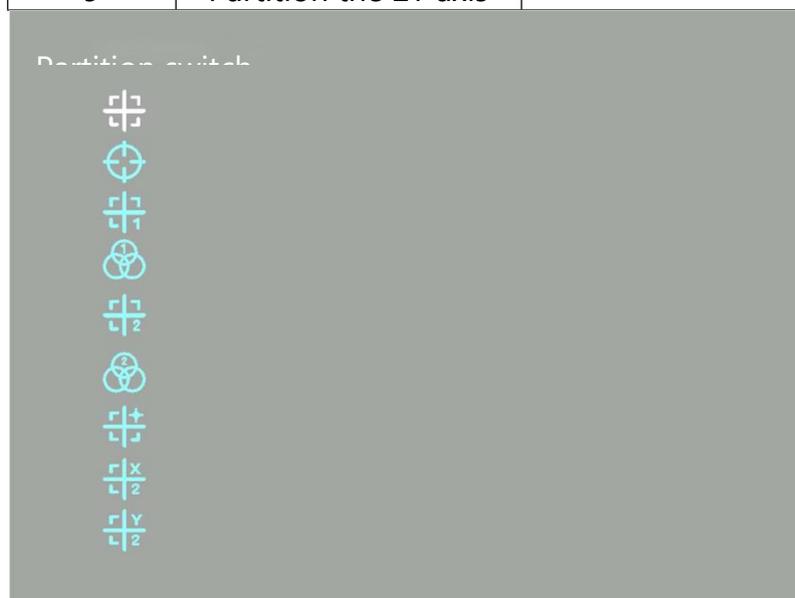


Figure 9

#### 5.3.1. Partition switch

Select the Partition switch item, press [Menu key] to select it, press [Up key], [Down key] to adjust the close/Partition 1/ Partition 2/ open display, open display as Partition 1 Partition 2 open at the same time. Press [Menu key] to exit the setting, press [Power key] to exit the main menu

#### 5.3.2. Gun type

Select gun type item, press [Menu key] to select, press [Up key], [Down key] to

adjust gun type A-J. Press [Menu key] to exit the setting, press [Power key] to exit the main menu

### **5.3.3. Partition 1 type**

Select the Partition 1 item, press [Menu key] to select it, press [Up key], [Down key] to adjust the Partition 1 type 1-4. Press [menu key] to exit the setting, press [Power key] to exit the main menu

### **5.3.4. Partition 1 color**

Select the color item of Partition 1, press [Menu key] to select it, press [Up key], [Down key] to adjust the color of Partition 1 1-3. Press [Menu key] to exit the setting, press [Power key] to exit the main menu

### **5.3.5. Partition 2 type**

Select the Partition 2 item, press [Menu key] to select it, press [Up key], [Down key] to adjust the Partition 2 type 1-4. Press [menu key] to exit the setting, press [Power key] to exit the main menu

### **5.3.6. Partition 2 color**

Select the color item of Partition 2, press [Menu key] to select it, press [Up key], [Down key] to adjust the color of Partition 2 1-3. Press [Menu key] to exit the setting, press [Power key] to exit the main menu

### **5.3.7. Partition brightness**

Select the Partition brightness item, press [Menu key] to select it, press [Up key], [Down key] to adjust the Partition brightness 1-5. Press [Menu key] to exit the setting, press [Power key] to exit the main menu

### **5.3.8. Partition the 2X axis**

Select the Partition 2X axis item, press [Menu key] to select it, and press [Up key] and [Down key] to adjust the horizontal position of Partition 2. Press [Menu key] to exit the setting, press [Power key] to exit the main menu.

### **5.3.9. Partition the 2Y axis**

Select the Partition 2Y axis item, press [Menu key] to select it, and press [Up key] and [Down key] to adjust the ordinates position of Partition 2. Press [Menu key] to exit the setting, press [Power key] to exit the main menu.

## **5.4 Setting function description**

Tap [Menu] to enter the main menu. In the main menu, press [Up key], [Down key] to switch to select the setting item, press [menu key] to enter the setting submenu.

Press [Power button] to exit. The name of the selected item is displayed at the top, as shown in Figure 10

Number	function	Setting	Remark
1	WIFI	ON/OFF	
2	Analog output	ON/OFF	
3	Compass calibration		The 8-word correction
4	Language	ZH/EN	
5	Date		
6	Time		
7	Memory card	Total capacity/Remaining capacity/Format	
8	Default setting		
9	ID		Only show

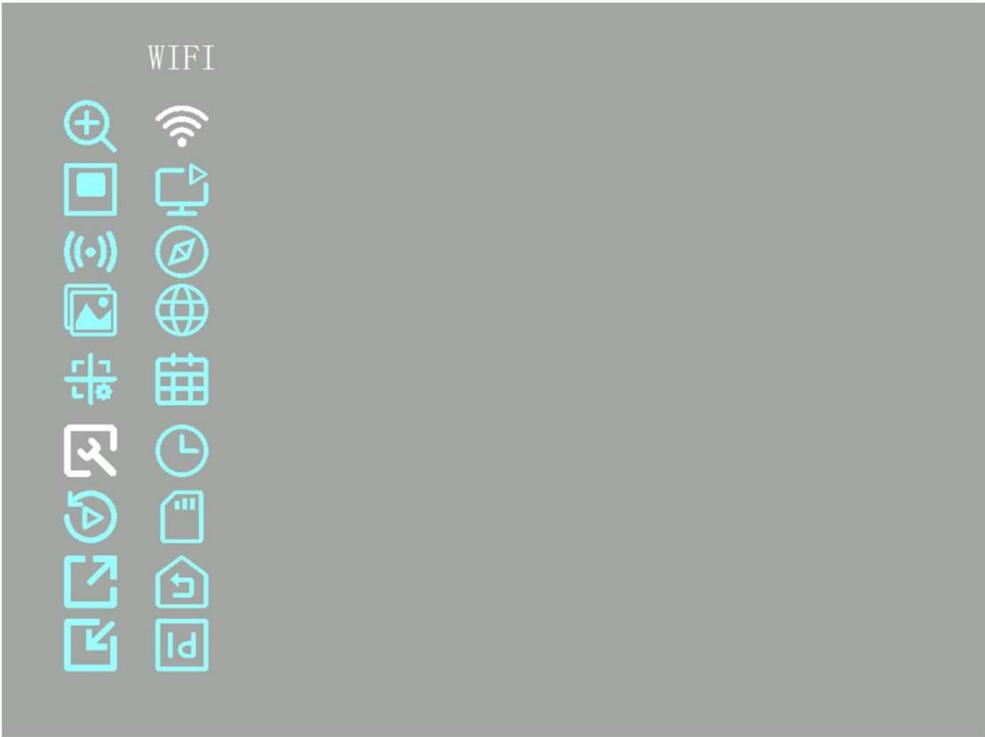


Figure 10

### 5.4.1. WIFI

Select the WIFI item, press [menu key] to select it, press [Up key], [down key] to turn on/off WIFI function, press [menu key] to exit the setting, Press [Power key] to return to the main menu

After enabling the WiFi function, there will be a WiFi icon next to the battery label in the preview interface

The phone connection point is named "XfdApxxxxxxxxxxxx" and the password is "12345678". Open the corresponding mobile APP (please consult the sales manager) for operation;

### 5.4.2. Analog output

Select the analog output item, press [menu key] to select it, press [Up key], [Down key] to turn on/off the analog output function, press [menu key] to exit the setting, Press [Power key] to return to the main menu

To enable analog output, you need to use a video cable to connect the device to the analog video display.

### 5.4.3. Compass calibration

Select the compass calibration item, Press [Menu key] to perform the operation, adopt the 8-word calibration method as shown in Figure 11, Try to point the normal direction of the device towards all 8 quadrants. When completing the calibration, a prompt box will pop up, and short press the [Power button ] to close the prompt box.

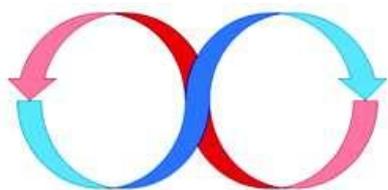


Figure 11

### 5.4.4. Language

Select the language item, press [Up] and [Down] to switch languages, press [Menu key] to set and return, press [Power key] to return to the main menu.

### 5.4.5. Date

Select the date item, press [Menu key] to switch the number position, press [Up key] and [Down key] to adjust the value, press [Power key] to return to the main menu.

### 5.4.6. Time

Select the time item, press [Menu key] to switch the number position, press [Up key] and [Down key] to adjust the value, press [Power key] to return to the main menu.

### 5.4.7. Memory card

Select the memory card item, press [menu key] to enter the memory card item, press [Up key], [Down key] to switch options

#### 5.4.7.1 Capacity

To display the total capacity, press [Power key] to return

#### 5.4.7.2 Remaining capacity

To display the remaining capacity, press [Power key] to return

### **5.4.7.3 Format**

Press [Menu key] to enter the format option, press [Up key], [Down key] to select, [menu key] to execute, press [Power key] to return

### **5.4.8. Restore default Settings**

Select Restore default Settings, press [menu key] to enter the item, press [menu key] as prompted to cancel, and long press [menu key] to confirm the restoration of default Settings

### **5.4.9. ID**

Select the ID item and press [menu key] to display the ID information. The ID is fixed in the factory and cannot be modified.

## **5.5 Playback mode specification**

Select playback mode item, press [Menu key] to select it, press [Up key] and [Down key] to select "Video" or "Photo", press [menu key] to enter. Press [Power button] to exit.

### **5.5.1 Video**

Press [Up] and [Down] to select the file, and press [Menu] to display the file in full screen. Press [Up key], [Down key] to select operation options, press [menu key] operation. Press [Power key] to return.

### **5.5.2 Photo**

Press [Up] and [Down] to select the file, and press [Menu] to display the file in full screen. Press [Up key], [Down key] to select operation options, press [menu key] operation. Press [Power button] to return to the main menu.