

# THERMAL IMAGING

## THERMAL IMAGING CAMERA



### GS SERIES INSTRUCTION MANUAL

Shenzhen Shi Yutong Technology Co., LTD



1. Objective lens	2. Objective focusing ring	3. Lanyard
4. Power on/Standby button	5. Recording button REC	6. Navigation button UP
7. M Button menu	8. Navigation button DOWN	9. Eyepiece focusing ring
10. Laser rangefinder	11. Red dot laser	12. Eyeshade
13. Storage card compartment	14. Charging port/TV OUT	

## Packaging accessories

- GS Handheld thermal scope
- Manual
- Type-c cable
- 5V2A adapter

## Start

### Power On and Image Settings

- Long press the ON/OFF (4) button for 3 seconds to power on.
- Rotate the eyepiece adjustment ring (9) to get a clear image of the icons on the display.
- Rotate the lens focusing ring (2) to get a clear image of the observed object.
- Short press the (6) button to select the operating palettes (White Hot, Target Highlight, Black Hot, Red Hot, Fusion).
- Short press the (8) button to select the digital magnification (1x, 2x, 4x, 6x, 8x).
- Short press the (7) button to enter the menu to select the appropriate parameter.
- Long press the ON/OFF (4) button for 3 seconds to power off.

## Button



### Power button

Turn on/off the device with a long press of the power button for 3 seconds. When powered on, press and hold the power button for 1-5 seconds. When the sleep icon appears on the screen, it is regarded as standby mode, and a short press under the standby mode can activate the device.

\*Short press to switch the shutter.



### Recording button REC

Short press to take pictures (press it when the camera function is not turned on). Kind remind: Please turn on the camera and video function first. Long press the button to record the video (when the camera function is not turned on. Reminding: Please turn on the camera and video function first).



### ↑ Navigation buttons UP

Short press to select up, when there is no menu, it is to switch the display mode.



### M button menu

Short press out menu, press the up and down keys to move the menu options, short press MENU to enter the secondary menu, short press MENU to confirm the option; Long press to turn on/off the laser red dot, long press under menu mode to return to the previous menu.



### ↓ Navigation button DOWN

Short press to select down, when not in the main menu interface, press it to switch magnification 1x, 2x, 4x, 6x, 8x. Long press to turn distance measuring on or off.

## Menu function

### GS menu detailed functions

#### 1. Operating Mode

Providing 5 options (White Hot, Target Highlight, Black Hot, Red Hot, Fusion), default as White hot.



White Hot



Target Highlight



Black Hot



Red Hot



Fusion

#### 2. Camera/Video Output

Turn on the function of video recording, taking pictures, WIFI, and external screen output.

#### 3. WIFI

1. Select "On" or "Off" on the submenu, turn on the WIFI in the menu, then open the WIFI of the mobile phone and the APP in the SYTONG test software and find the mobile phone WIFI MAC address name Sytong-Thermal, click connect, enter the password 12345678.
2. Through WIFI, the real-time image can be observed after the device is connected to the mobile phone.

#### 4. Hotspot Tracking

Click M button and find the hotspot tracking function in the main menu, press M button to choose open or close.

#### 5. Distance Measurement UNIT

Distance measurement units provide with meter and yard.

#### 6. Distance Measurement MODE

1. Single distance measurement
2. Continuous distance measurement

#### 7. OLED Brightness

Select OLED brightness in the main menu, click M button to set the screen brightness from "Super dark" "Dark" "Normal" "Bright" "Super bright"; Default is Normal.

#### 8. Target Brightness

Find the target brightness in the main menu. Click M button to choose the brightness level.

#### 9. Contrast Ratio

Click the M button to enter the main menu to set the contrast by click the M button. There are 10 options.

## 10. Image Detail Boost

Click the M button to enter the main menu and select the image detail boost function. Image resolution will vary from each option. Click M button to choose your option. Default is 1.

## 11. Date/Time

Select the Date/Time in the main menu, short press M button to set the date and time. Short press Recording button to move for different options. Click UP and Down button to adjust the figure. Save the adjustment by short press the Menu button.

## 12. Language

Enter the menu language setting function, save it by short press the M button.

## 13. Record and Audio

Select Record and Audio under main menu, short click M button to enter the submenu, choose open or close to decide whether the video recording with voice and audio or not.

## 14. Format

Click M button to find Format under main menu, short press the M button to format the device. Attention, data cannot be recovered after confirmed format!

## 15. Auto Power Off

Select auto power off under main menu, short click M button to set the mode from "3 min", "5min", "close". Default is close.

## 16. Default Settings

Find default settings under main menu, short click M button to enter the submenu. Select "sure" or "cancel" to restore the default settings. Attention, the factory default settings will be restored after confirmed.

## 17. Bad Pixel Repair

Enter the bad pixel repair under the main menu, click M button to choose the option. Please cover the lens cap before repair, follow the guide, short press Menu to EXIT, long press the menu to SAVE.

## 18. Version

## APP Connection



Download APP by Scanning the QR code according to the mobile phone system.



Download APP by Scanning the QR code according to the mobile phone system.



Enter into the menu and turn on WiFi.



Enter into APP



choose with "Sytong-..." to connect WiFi (password: 12345678).

Power supply	3-4.2 V	Battery	Li-Ion Battery Pack / 6000mAh / DC 3.7V
External power supply	5V (USB)	Operating time (at t=22°C)	9 hours
Operating temperature	-20°C to +50°C	Dimensions	185X85X50mm
Weight	535g		

### Video recorder

Video / photo resolution	1024x768	Video / photo format	.mp4 / .jpg
Memory type	TF card (FAT32), max.128G		

### Wifi channel

Frequency	2.4GHz	Standard	802.11 b/g
Line-of-sight reception range	15m		

### Rangefinder

Wavelength	905nm	Max. measuring range	1000m
Measuring accuracy	+/- 1m		

## GS03

GS03 detailed parameter data sheet

### Sensor (military grade)

Type	non refoildi	Resolution, pixels	384x288 super sensitive
Frame rate	50 Hz	Pixel size	12µm
NETD	<30mK		

### Optical characteristics

Objective lens	f15/25mm, F1.0	Magnification	1.2x/2.0x
Continuous digital zoom	1x/ 2x / 4x / 6x/ 8x	Eye relief	30 mm
Dioptre adjustment	+5/-5 D	Close-up range	5m

### Display

Colour Palettes	Black Hot, White Hot, Red Hot, Fusion, Target Highlight	Type / Resolution	0.39 inch / AMOLED / 1024X768
-----------------	---	-------------------	-------------------------------

### Operational characteristics

Hotspot Tracking	yes	Waterproof rating	IP65
------------------	-----	-------------------	------

## GS06

GS06 detailed parameter data sheet

### Sensor (military grade)

Type	non refoildi	Resolution, pixels	640x480 super sensitive
Frame rate	50 Hz	Pixel size	12µm
NETD	<30mK		

### Optical characteristics

Objective lens	f25/35mm, F1.0/F1.2	Magnification	1.2x/1.7x
Continuous digital zoom	1x/ 2x / 4x / 6x/ 8x	Eye relief	30 mm
Dioptre adjustment	+5/-5 D	Close-up range	5m

### Display

Colour Palettes	Black Hot, White Hot, Red Hot, Fusion, Target Highlight	Type / Resolution	0.39 inch / AMOLED / 1024X768
-----------------	---	-------------------	-------------------------------

### Operational characteristics

Hotspot Tracking	yes	Waterproof rating	IP65
------------------	-----	-------------------	------

Power supply	3-4.2 V	Battery	Li-Ion Battery Pack / 6000mAh / DC 3.7V
External power supply	5V (USB)	Operating time (at t=22°C)	9 hours
Operating temperature	- 20°C to +50°C	Dimensions	185X85X50mm
Weight	535g		

#### Video recorder

Video / photo resolution	1024x768	Video / photo format	.mp4 / .jpg
Memory type	TF card (FAT32), max.128G		

#### Wifi channel

Frequency	2.4GHz	Standard	802.11 b/g
Line-of-sight reception range	15m		

#### Rangefinder

Wavelength	905nm	Max. measuring range	1000m
Measuring accuracy	+/- 1m		



Follow Sytong official account to learn more

## Notice!

### Accessories Use Reminder

#### Power Adapter

Only applicable to charging voltage below 5v/2A.

#### Laser pointer adjustment

Press the menu button to turn on/off the red dot indicator light and adjust the position of the red dot indicator light through the red dot indicator adjustment port of the inner hexagon wrench.

#### TF card

Whether TF card can be recognized normally, supported (8-128G), smooth and free of delay, connect USB power supply to boot, open video recording in the menu, and the flash of video label means automatic recording.

**Note: Our products are fixed on the equipment and controlled by WiFi connected app. They can't be close to human eyes and will be damaged. They can only be used fixedly, with a distance of more than 20cm from human body.**

**This product can only be used in legal fields such as scientific research, observation, emergency search and it is strictly prohibited to be used on illegal purposes. Our company reserves the right to pursue legal liability of illegal users.**

**FCC Warning Statement:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.

This device 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.

#### FCC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.