THERMAL IMAGING SIGHTS

GM-LRF SERIES QUICK START GUIDE

Shenzhen Shi Yutong Technology Co., LTD

1. Lens Cover	2. Objective Lens	3. Lens Focusing Ring
4. Laser Rangefinder	5. Power (ON/OFF) Button	6. Record Button (REC)
7. Navigation UP Button	8. MENU Button	9. Navigation DOWN Button
10.Battery Cap (Make sure to tighten the battery cover before using the device)	11.Data Compartment	12. Dioptre Adjustment Ring
13. Eyeshade		

In The Box

- GM-LRF Thermal Imaging
- Manual
- Mount (with screws and hex-nut wrenches)
- Type-C Cable
- 5V 2A Adapter
- Battery

Quick Start

Power On and Image Settings

- Hold the power (ON/OFF) button (5) for 3 seconds to power on.
- Rotate the dioptre adjustment ring (12) to get a clear image of the icons on the display.
- Rotate the lens focusing ring (3) to get a clear image of the observed object.
- Press the navigation UP button (7) to select the operating modes (White Hot, Sky Mode, Black Hot, Red Hot, Fusion).
- Press the navigation DOWN button (9) to select digital magnification (1x, 2x, 4x, 8x).
- Press the MENU button (8) to enter the menu to select the appropriate parameter.
- Hold the power (ON/OFF) button (5) for 3 seconds to power off. The LED indicator will be turned off after the device is powered off.

|Buttons

GM Button Key Introduction

Power (ON/OFF) Button

Hold the power (ON/OFF) button for 3 seconds to power on\off. The LED indicator will be turned off after power off.
Hold the power (ON/OFF) button for 1-3 seconds to go into sleep mode. The LED indicator will be green when the
device is in sleep mode. Wake the device by shot pressing the power (ON/OFF) button.
*background correction

Record Button(REC)

When not in menu mode:Short press to take a photo.
Press and hold for more than 1.5 seconds to start recording.
Press and hold for more than 1.5 seconds turn off recording.

↑ Navigation Up Button

In menu mode : Press to switch menu items upwards.
When not in menu mode : Press to change operating mode.
Long press to turn on or off the Picture in Picture.

MENU Button

Short press to bring up the menu, move the menu options up and down, and short press the "M" key to enter the
secondary menu.
Long press to turn on/off the laser red dot, and long press to return to the previous menu level in menu mode;
When LRF is on, short press the "M" button to lock/unlock the ranging value.

↓ Navigation DOWN Button

In menu mode :Press to switch menu items downwards.
When not in menu mode : Press to change set-up zoom 1x, 2x, 4x, 8x.
Long press to turn on or off laser rangefinder.

Menu Functions

Number	Main Menu Description	Sub Menu Description
1	Operating Modes	Options: "White Hot"/"Sky Mode"/"Black Hot"/"Red Hot"/"Fusion" Default mode is "White Hot"
2	Video Output	Options: "On"/"Off" The video output function CVBS will be on/off accordingly.
3	WiFi	Options: "On"/"Off" Turn on WiFi on both the device's Menu and user's phone. On user's phone, find and connect to "Sytong-AM-XXX" WiFi network with password 12345678. Live image will be displayed on the App after the phone is connected to the device's WiFi.
4	Picture In Picture	Options: "On"/"Off"
5	Reticle Type	Options: Off/Select the preferred reticle type from 8 choices

6	Reticle Color	Options: Black, White, Gray, Red, Green
7	Reticle Profiles	Select one of the saved profiles (Max. 10 profiles).
8	Reticle Adjustment (Zeroing)	Freeze the image by pressing the MENU button. Move the reticle horizontally or vertically with the UP/DOWN buttons. Switch between horizontal and vertical adjustments by pressing REC button. After the reticle matches the point of impact, press the MENU button to save the position. Input the target distance and select the unit (Meter/Yard). The reticle profile will be saved with the distance as it's name.
9	Gyro	Options: On/Off
10	Laser Rangefinder Unit	Options: Meter/Yard
11	Laser Rangefinder Mode	1.Single distance measurement 2.Continuous distance measurement
12	OLED Brightness	Options: 1-10
13	Target Brightness	Options: 1-10
14	Contrast Ratio	Options: 1-10
15	Image Detail Boost	Options: 1-5

16	Date/Time	Move the options by pressing the MENU button. Change the value using the UP/DOWN button. Confirm the values by pressing the MENU button. Quit by holding the MENU button.
17	Language	Options: English/Chinese/Other Languages
18	Record Audio	Options: On/Off Default is off
19	Format	Options: Confirm/Cancel
20	Auto Power Off	Options: 3 Min/5 Min/Off Default : Off
21	Default	Options: Confirm/Cancel
22	Pixel Cure	Select "Pixel Cure" and press MENU button to get to the submenu. The lens should be covered with lens cover before performing the pixel cure. Press the MENU button and follow the prompts to fix the bad pixels. After repair, please remember to save it. Hold the UP/DOWN button to move X/Y position. Press the Power button to switch between X/Y/Save.
23	Image Adjustment	Options: "Cancel"/"Confirm" Select "Image Adjustment" in the main menu. Press MENU button to select "Confirm" and cover the lens if the image adjustment is required.

24	Auto Ballistic Calculator (BC)	Select BC and press the MENU button to get to the sub menu: On/Off/Setting. Press 【Record Button】to move to set parameters. Press 【Up/Down Button】 to set values.
25	Version	Select "Version" to view the device's software version.

Installing The Battery

- Please use lithium chargeable 3.7V flat battery 18650. Remove battery compartment cap and make sure setting the positive polar towards to the direction inward. Put the cap back and screw it until tight. (Fail to do so may result in restarting!).

Using The Integrated Laser Rangefinder

- Hold the power (ON/OFF) button (11) for 3 seconds to power on the device.
- Hold the navigation DOWN button (6) for 3 seconds to activate the laser rangefinder.
- The rangefinder indicator (a small box) will appear at the center of the display.
- Point the rangefinding indicator at an object to measure the distance (the distance will be displayed at the top right corner of the display).
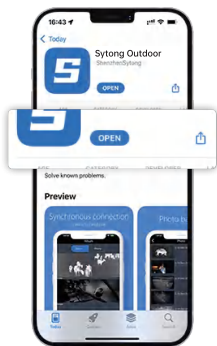
Installation Of Mount

- Attach the mount to the base of the scope using a hex-nut wrench and screws.
- The mounting holes in the base of the scope enable the mount to be installed in one of the multiple positions. The choice of the mounting position helps the user to ensure the correct eye relief depending on the device type.
- The scope is ready to be installed on a device and to be zeroed.
- Before using the device, please follow instructions in the section "Reticle Adjustment (Zeroing)".
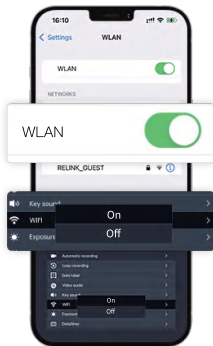
APP Connection

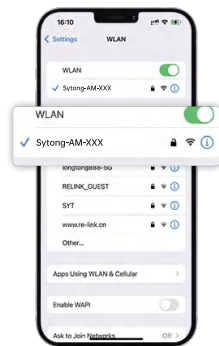Download APP by Scanning the QR code according to the mobile phone system.

Download the APP

Turn on WiFi on AM and phone

Enter APP

Choose WiFi "Sytong..." to connect WiFi

(Password: **12345678**)

GM-03LRF

Sensor

Type	Uncooled VOx	Resolution	384x288 Super Sensitive
Image Rate	50 Hz	Pixel Size	12μm
NETD	≤30mk		

Optical Characteristics

Objective Lens	35mm/50mm	Magnification	2.8X/4X
Digital Zoom	1 x/ 2x / 4x / 8x	Eye Relief	50 mm
Dioptre Adjustment	±5SD	Focus Scope Range	5m-∞
Field Of View Angle	7.5°X5.7° / 5.3°X4.0°	Detection Distance (Target Size : 1.7m x 0.5m)	1700m

Display

Image Polarity	White Hot, Sky Mode, Black Hot, Red Hot, Fusion	Display	0.39 inch / OLED / 1024X768

Operational Characteristics

3D Gyroscope	Yes	IP Grade	IP66

Power Supply	3-4.2V DC	Battery Type	18650/26650
External Power Supply	5V (USB)	Battery Life	9-11 hours
Shock Resistance	1200g, 6ms	Operating Temperature	-20°C to +50°C
Dimensions	408X96X85mm	Weight (Without Battery/Mount)	937g

Video Recorder

Video / Photo Resolution	1024x768	Video / Photo Format	.mp4 / .jpg
Storage	TF card(FAT32),max.32GB		

Wifi Channel

Wifi Frequency	2.4GHz	WiFi Standard	802.11 b/g
WiFi Signal Range	15m		

Rangefinder

Laser Wavelength	905nm	Measuring Range	800m
Measuring Accuracy	±1m		

GM-06LRF

Sensor

Type	Uncooled VOx	Resolution	640x512 Super Sensitive
Image Rate	50 Hz	Pixel Size	12μm
NETD	≤18mk		

Optical Characteristics

Objective Lens	30mm/50mm	Magnification	1.7X/2.5X
Digital Zoom	1 x/ 2x / 4x / 8x	Eye Relief	≥50 mm
Dioptre Adjustment	±5SD	Focus Scope Range	5m-∞
Field Of View Angle	12.5°X9.4°/8.8°X6.6°	Detection Distance (Target Size : 1.7m x 0.5m)	2500m

Display

Image Polarity	White Hot, Sky Mode, Black Hot, Red Hot, Fusion	Display	0.39 inch / OLED / 1024X768

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Wifi Channel

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Rangefinder

Laser Wavelength	905nm	Measuring Range	800m
Measuring Accuracy	±1m		

Notice!

Operating Instructions For Accessories

Power Adapter

Used only to charge batteries equal to or below 5V/2A.

Red Laser Pointer Adjustment

Hold the MENU button to turn on/off the red laser pointer. Adjust the position of the red laser pointer by using an inner hexagon wrench.

Connect to a Computer

Turn off the device and connect to the computter with a Type-C cable. Hold the power button to turn on the device. The computer will read the memory card of the device.

Sytong

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.

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

NOTE: 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.

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