



R series

Outdoor Thermal imager



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用户手册/User Manual V1.0

R series

户外红外热成像仪
Outdoor Thermal imager

R6/R6 Pro /R7/R9

DISCLAIMER

This product is prohibited for illegal use, including illegal hunting, military, chemical, biological or nuclear weapons, illegal privacy photographing, and other violations of laws and regulations. It is prohibited to transport goods prohibited by the United Nations, the European Union or the OSCE. The products are only sold in the place where the company is registered and cannot be exported.

Purchase of this machine is equivalent to accepting the constraints of this statement, equivalent to agreeing to sign the relevant liability statement. In case of any violation, the company shall not be held responsible.

LONGOT TECHNIC

Product Overview

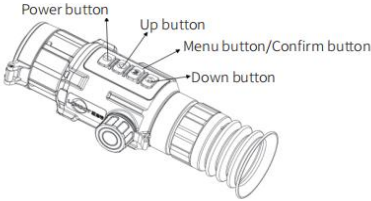
The R series infrared sight, unlike the night vision equipment based on the image enhancement tube, according to the principle of infrared thermal imaging, does not require an external light source, is not affected by strong light exposure, whether it is in bad weather conditions during the day (such as rain, snow, fog, haze, etc.) or at night, can observe the target hidden behind the obstacle (tree branches, tall grass, shrubs, etc.). The series has powerful functions, high scalability, multiple image mode switching, cold and high temperature resistance, high cost performance, and can be widely used for night hunting, observation and terrain positioning, search and rescue operations.

Model	R6	R6 Pro	R7	R9
Detector Specifications				
Detector Type	Vox	Vox	Vox	Vox
Resolution, Pixel	256×192	256×192	384×288	384×288
Pixel Size, μm	12 μm	12 μm	12 μm	12 μm
Optical Characteristics				
Objective lens, mm	19mm	25mm	25mm	35mm
Magnification, x	2.5x	3.25x	2.17x	3.03x
Digital zoom, x	1x、2x、4x、8x	1x、2x、4x、8x	1x、2x、4x、8x	1x、2x、4x、8x
Min Focus Distance, M/Y	5m/5.468yd	5m/5.468yd	5m/5.468yd	5m/5.468yd
Exit pupil distance, mm	45mm	45mm	45mm	45mm
Exit pupil Diameter, mm	6mm	6mm	6mm	6mm
Field of View (H × V), degree	9.24°×7.08°	7.03°×5.39°	10.53°×7.91°	7.53°×5.65°
Diopter, D	-3D~+5D	-3D~+5D	-3D~+5D	-3D~+5D
Identify distances, m (Target size: 1.7m×0.5m)	501 m	660 m	660 m	924 m
Electrical Characteristics				
Display Type	OLED	OLED	OLED	OLED
Resolution, pixels	1024×768	1024×768	1024×768	1024×768

Model	R6	R6 Pro	R7	R9
WiFi Frequency,GHz	2.4 GHz	2.4 GHz	2.4 GHz	2.4GHz
Video/Photo fomat	mp4/jpg	mp4/jpg	mp4/jpg	mp4/jpg
Built-in memory, GB	16G	16G	64G	64G
Power Supply, V	3~4.2V	3~4.2V	3~4.2V	3~4.2V
Battery type*QTY/Capacity, mA	18500 Battery x 1/2000mAh or 18650 Battery x 1/3200mAh	18500 Battery x 1/2000mAh or 18650 Battery x 1/3200mAh	18500 Battery x 1/2000mAh or 18650 Battery x 1/3200mAh	18500 Battery x 1/2000mAh or 18650 Battery x 1/3200mAh
External power supply, V	5~12v 2a	5~12v 2a	5~12v 2a	5~12v 2a
Others CharacteristicsSupport				
Operating time (at t=22℃) , hours	≥4hrs ≥7hrs	≥4hrs ≥7hrs	≥4hrs ≥7hrs	≥4hrs ≥7hrs
Storage temperature, ℃/°F	-30℃~+60℃	-30℃~+60℃	-30℃~+60℃	-30℃~+60℃
Body material	Aluminium alloy	Aluminium alloy	Aluminium alloy	Aluminium alloy
Degree of protection, IP code (IEC60529)	IP67	IP67	IP67	IP67
Dimension (L*W*H), mm	195.3mmx72mmx60.6 mm	195.3mmx72mmx60.6m m	195.3mmx72mmx60. 6mm	195.3mmx72mmx60. 6mm
Weight(without battery), g	434g	440g	440g	458g

Button Functions Overview

Button	In the normal display		In the menu mode	
	Short Press	Long Press	Short Press	Long Press
Power Button	Standby/Wake up	Power On/Of	Standby/Wake Up	Power On/Of
Up Button	Zoom in	Calibration	Menu Options Move Left/Up	Move Quickly
Menu Button	Shortcut Menu	Main Menu	Subordinate menu	Exit Menu
Down Button	Photo	Record/Stop recording	Menu Options Move Right/Down	Move Quickly
Up Button + Menu Button	Show/Hide Reticle	/	/	/
Up Button + Down Button	Stadiametric ranging	/	/	/



stadiametric ranging

The device can measure the distance between the target and the observation position.

Short Press Menu button and Down button to enter the distance measurement interface.

Short Press Down button to enter target setting interface to set the parameters for the target.

1) Short Press Up button or Down button to select the target from Deer,Grey Wolf,Brown Bear,and Custom,and press Menu button to confirm.

2) Short Press Up button or Down button to set target height,and press Menu button to confirm.

3) Long Press Menu button to save settings and return to the distance measurement interface.

Align the center of top scale line with the edge of target top,and short press Menu button to confirm,then the top scale line flashes 3 times Align the center of bottom scale line with the edge of target bottom,short press Menu button to confirm,then the bottom scale line flashes 3 times The left top of the image displays the distance measurement result and the height of the target.The results last for 5 seconds and return to live view interface.

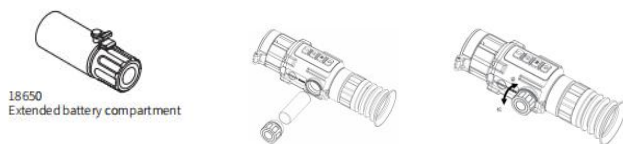
Battery Installation

As is shown in the picture: Turn the battery cover anticlockwise to loosen it and insert batteries into the battery compartment with the positive mark inward. Finally, turn the battery cover clockwise to tighten it.

When the batteries are insufficient, please change the batteries in time or use the USB cable to supply the power by connecting the power. When the device connects to external power by USB, the device will prefer using USB to supply power. Must be pulled out the batteries to avoid the batteries and device loss if don't use the device in a long time.

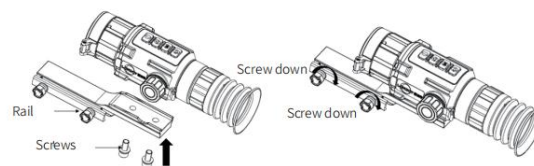
Notice: Do not charge the battery when supplying the power by USB.

When using the 18650 battery, optionally extend the battery Cover.

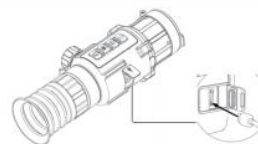


Rail Installation

Install the device to the rail as the arrow shows. Make the rail hole align with the screws and use the Allen key to insert the screws, and tighten them.



Cable Connection and Files Exporting



..Please do not connect with PC if the device is with batteries.

1. Open the cover of the Type-C interface and align it with the Type-C interface to access the USB data cable. The device can be connected to PC to view or export videos and photos in the device.

The device can also be directly powered by external power supply. When connecting a device with a cable, do not pull the cable directly.

Otherwise, the cable may be damaged or line default to affect normal use.

2. Files Exporting The device can be connected to PC to export videos and photos in the device after turning off hotspot function and turning on the device.

Open computer disk and select the disk of device after connecting it to your PC by USB cable. Go to the DCIM file. Select and copy the files to PC. Disconnect the device from your PC after finishing.

The file named after the capture year and month. For example, if you capture a picture or record a video in June 2022, go to DCIM-202206 to find the picture or video. In case of divergence of system time and actual time, the system time shall prevail.

Power On/Off

Please do not open the objective lens cover during power on until an image appears on the screen.

Power On: When the battery is sufficiently charged, long press power button to power on the device.

Power Off: When the device is turned on, long press power button to power off the device.

When the device is turned on, short press power button to enter standby mode. Short press power button again to wake up the device.

Diopter

Open the lens cover, hold the device or fix the device in the equipment. Make sure the eyepiece covers your eye and watch the image. Adjust the focus ring until the text or image is clear.

Shortcut Menu

In the observation interface, short press menu button to

show the shortcut menu.

Definition of button function under menu interface:

Short press up button or down button to select functions

Short press menu button to configure the selected function

Long press menu button to save settings and exit.

Palettes

Switching the palettes can improve the definition of image details. Different palettes can highlight different color. In the same palettes, the color of target does change with temperature.

Proper palettes can accurately orient targets for getting information sufficiently. Short press menu button to go to the shortcut menu.

Short press up button or down button to select (Palettes) and short press menu button to enter the setting interface.

Short press up button or down button to switch palettes.

Long press menu button to save settings and exit.

Contrast

The contrast level is higher, the chiaroscuro and colors contrast is more obvious. Users can adjust the contrast to highlight different targets in complex environments.

Short press menu button to go to the shortcut menu. Short press up button or down button to select (Contrast) and press menu button to enter the setting interface.

Short press up button or down button to adjust contrast.

Long press menu button to save settings and exit.

Image Brightness

The higher the brightness level, the brighter the screen. When the preview scene is too dark, you can adjust the screen light and dark.

On the preview screen, press the menu key to display the shortcut menu.

Press the Up or Down key to move to (Image Brightness), and press the Menu key to switch.

Hold down the Menu key to save and exit.

Screen brightness

The higher the brightness level, the brighter the screen. When the preview scene is too dark, you can adjust the screen light and dark.

On the preview screen, press the menu key to display the shortcut menu.

Press the Up or Down key to move to (Screen Brightness), and press the Menu key to switch.

Hold down the Menu key to save and exit.

Pattern description



Different scene modes correspond to different operating environments.

Users can select proper scene mode to get the better image effect in previewing. Short press menu button to go to the shortcut menu. Short press up button or down button to select Scene Mode and press menu button to enter the

setting interface.

Long press menu button to save settings and exit.

PIP

PIP is the image of zooming in the center of scene partially and overlapping in the preview interface; users can open the PIP to check the details of critical image.

Short press menu button to go to the shortcut menu.

Short press up button or down button to select (PIP) and press menu button to enter the setting interface.

Long press the menu button to save and exit.

When opening the reticle, PIP shows the center screen of the reticle; When the reticle is not turned on, PIP shows the center picture of the entire scene.

Reticle Memory

When there are many people sharing the equipment or there are multiple requirements for split line configuration, you can choose different ones.

The dividing line group, each dividing line group can be configured with different types of dividing lines.

Press the "Menu Key" briefly in the preview interface to bring up the shortcut menu.

Press "Up" or "Down" briefly to move to partitioned storage, and press "Menu" briefly to switch.

A-E cycle. Press and hold "Menu Key" to save and exit. Press and hold "Menu Key" to save and exit.

Reticle type&Calibration

Entering the reticle settings,short press the up button or down button to select and set the reticle's parameter.

Reticle type:short press the menu button to switch reticle style. (It has 7 kinds) .

Color:short press the menu button to switch the reticle color (6 color) Please select proper color for recognizing conveniently according to the color of environment.In white color mode,reticle has adaptive color.[Eg:the reticle color will change automatically to black if the target is too bright.)

Freezing Fix the device firmly and short press the menu button after shooting to freeze the image.Observing the impact in the freezing image,users can dose the freezing image and reoperate above step if the image effect is not ideal.After freezingthe image,

short press the menu button and the words change to blue.Short press the up button or down button to select to calibrate X-axis and short press the menu button.After the words change to blue,press the up button or down button to move the center of reticle to coincide with the point of impact After that,short press the menu button and the words change to white.Press the up button or down button to select calibrate Y-axis and short press the menu button.

After the words change to blue,press the up button or down button to move the center of reticle to coincide with the point of impact After that,short press the menu button and the words change to white.

Press the up button or downbutton to select calibrate Y-axis and short press the menu button.Af-ter the words change to blue,press the up button or down button to move the center of reticle to coincide with the point of impact.The parameter will save automatically after long pressing the menu button to show pop-up dialog.If the user would like to use the used reticle storage,they can press the up button or down button to select one-button reset to calibration again. Long press the Menu button to save and exit.

Status bar

The status bar is the auxiliary information superimposed and displayed at the bottom of the preview screen of the equipment.After it is turned on,you can know the information of the memory,power, function activation and so on of the device at any time.

Press and hold "Menu Key"under the observation interface to bring up the main menu.

Press"Up"or"Down"to move to "Status Bar"and "Menu"to turn it on/off.

Press and hold "Menu Key"to save and exit.

Calibration Settings

Flat Field Correction can correct non-uniformity of display.Users need to refresh the image in time to keep the preview interface clean.And the display image is refreshed or repaired to optimize the quality of preview interface and image details.

Long press menu button to go to the main menu.

Short press up button or down button to select (FFC) , and press menu button to confirm.

-Manual FFC:In the live view interface,long press up button to correct the non-uniformity of display.

-Auto FFC:The device performs FFC automatically according to the set schedule when the device is turned on.

-External FFC:Cover the lens cover,long press up button to correct the non-uniformity of display.

Long press menu button to save settings and exit.

Video Output

The device is connected to the display screen by cables,which can output video images,and it is convenient to expand the display and zoom in to view the details of the images.

The cable has been connected before the equipment is started,and the interface of the equipment is forbidden to be hot-swapped.

bring up the main menu. Press and hold "Menu Key"under the observation interface to Press "Up"or "Down"to move to ("Video Output") and "Menu"to turn it on/off.

Defective Pixel Correctio

It can correct the defective pixels (bright spots or dark spot on the screen) on the screen. It makes sure the image integrity and clarity.

DPC is only supported in the white heat mode.

Long press menu button to enter to the main menu.

Short press up button or down button to select (DPC),and short press menu button to enter DPC setting interface.

In the DPC Interface,short press menu button to select Axis,and short press menu button to switch the moving direction of the cursor.

X-axis: Short press the Up button to move to the left. Long press the Up button to quickly move to the left.

Short press the Down button to move to the right;

Long press the Down button to quickly move to the right.

Y-axis: Short press the Up button to move up;

Long press the Up button to move up quickly.

Short press the Down button to move down; Long press the Down button to move down quickly

Move the cursor to the defective pixels, long press the Menu button to correct and save and exit.

This allows users to correct a defective pixel at a time, not support correcting in batch.

Format

Please format the photos and videos in the memory when the memory is cleaned.

Before cleaning the memory,please make sure that important media files have been backed up.Please refer to photo and video export for related operations.

Press and hold the "Menu Key" in the preview interface to bring up the main menu.

Press "Up" or "Down" to move to "Format", and "Menu" to pop up two.

Confirm the second window, select Yes/No first. Operation result: Operation result: The device clears the built-in memory of eMMC, and the pop-up window prompts "Format succeeded" Press and hold "Menu Key" to save and exit.

Wi-Fi

The device supports WiFi connection. It can build the wireless connection with cellphone and mobile equipment by WiFi.

Long press menu button to go to the main menu.

Short press up button or down button to select (Wi-Fi), and short press menu button to enter the Wi-Fi setting interface.

Turn on the WiFi function of the mobile phone and select the device network to connect.

Wi-Fi name: Wlan+device serial number Wi-Fi password : 12345678

Language

Long press menu button to go to the main menu. Short press up button or down button to select (Setting), and press menu button to enter the setting interface. Short press up button or down button to select (Language) to enter the configuration interface.

Long press menu button to save settings and exit.

Time

Long press menu button to go to the main menu.

Short press up button or down button to select (Setting) and short press menu button to enter the setting interface.

Short press up button or down button to select Time Settings and short press menu button to enter the setting interface.

Restore Device

Users can one-click restore the device's parameter to ex-factory status, please cautiously use.

Long press menu button to go to the menu. Short press up button or down button to select (Setting), and short press menu button to enter the setting interface.

Short press up button or down button to select (Restore), and short press menu button to confirm.

Short press up button or down button to select Yes. Long press menu button to save settings and exit. The device will restore to defaults according to the prompt.

The result of operation: the interface will display a pop-up to remind initialization successfully completed after the parameter of device restores factory settings successfully. The device reboots.

Device Information

Users can check the model number, version and SN number and so on.

Long press menu button to go to the main menu.

Short press up button or down button to select (Setting) , and short press menu button to enter the setting interface.

Short press up button or down button to select (Version) , and short press menu button to enter the setting interface.

Long press menu button to save settings and exit.

After-sales service

Dear Customers,

Thank you for choosing our products, the devices meet industry standards and comply with Longot's quality assurance and after-sales services term. Please follow the user manual carefully.

The warranty card is an important document of sending back when users find the devices are abnormal or defective.

The device against defects and workmanship for a period of two years from the moment of production date(The modification of warranty is invalid, the production date is not equal to sales date),

Use improperly or the artificial damage is not the maintenance scope! And cases of the following is not include the warranty:

- If the device has been modified or tampered with.
- If the device has been marked with mechanical or chemical damage.
- If the device has been tampered with by unauthorized repair.
- If the device has been damaged as natural disasters.

· If the device has been damaged as a result of liquids or other substances getting inside.

· Any other damage by incorrectly used.

Any questions in your using period, please don't hesitate to contact your buyer or send an e-mail to our after-service department, the contact email is:

marina@szlongot.com.