THERMFOX

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Operating Instructions

Geni series

www.infirayoutdoor.com

GL35R

IMPORTANT SAFETY INFORMATION

Environmental influences

Note: Never point the lens of the device directly at intense heat sources such as the sun or laser devices. The lens and eyepiece can act as a magnifying glass that concentrates heat energy and can damage internal components.

Danger of ingestion

Please note: The device is not suitable for small children. Improper handling may cause small parts to come loose and be swallowed.

Safety instructions for use

- Do not expose the device to fire or high temperatures.
- Battery capacity is reduced when operating in cold environments. This is not a fault and is due to technical reasons.
- Always store the equipment in a transport bag in a dry, well-ventilated place. Remove the batteries for longer storage.
- Do not expose the device to extreme temperatures below -20 °C and above +50 °C.
- The product can only be connected to a USB Type-C interface.
- If the device is damaged or the battery is faulty, please send the device to our after-sales service for repair.

User information on the disposal of electrical and electronic equipment (households)

The WEEE symbol on products and/or accompanying documents means that used electrical and electronic products must not be mixed with normal household waste. For proper treatment, recovery and recycling, take these products to the appropriate collection points where they will be accepted free of charge. In some countries it may also be possible to return these products to your local retailer when buying a new product. Proper disposal of this product serves to protect the environment and prevent potential harmful effects on humans and their environment that may occur as a result of improper waste management.

For more detailed information about your nearest collection point, contact your local authority. In accordance with national legislation, fines may be imposed for improper disposal of this type of waste.

For business customers within the European Union

Contact your dealer or supplier for disposal of electrical and electronic equipment. They will provide you with further information.

Information on disposal in other countries outside the European Union

This symbol is valid only in the European Union. If you wish to dispose of this product, please contact your local authority or retailer to request disposal.

Intended use

The device is intended for displaying heat signatures in nature observation, remote hunting observations and for civilian use. The device is not a toy for children.

Use the device only as described in this manual. Neither the manufacturer nor the seller shall be liable for any damages resulting from improper or unintended use.

Functionality test

- Before use, please make sure that your device has no visible damage.
- Test that the device displays a clear, unobstructed image.
- Check that the thermal imaging camera settings are correct. See notes in

  under Observation mode.

Mounting/dismounting the battery

To use the telescope with the Geni thermal imaging system, one battery type 26650 must be installed. Please refer to the Battery Installation section for details.

Observation with and without glasses

Thanks to the flexible aperture, the Geni series can be used with glasses and without. In both cases it offers a full field of view.

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Model	Geni GL35R
Microbolometer	
Resolution, pixels	384 × 288
Pixel size, μm	12
NETD, mk	≤ 40
Frame rate, Hz	50
Optical characteristics	
Lens, mm	35
Field of view	7,5° × 5,7°
Magnification, ×	2,81-11,24
E-zoom, ×	1 / 2 / 3 / 4
Dioptric correction, D	-5 ~ +5
Detective range, m (Target size: 1.7 m × 0.5 m, P(n)=99%)	1818
Display	
Display type	OLED
Resolution, pixels	1 024 × 768
Electrical power	
supply Battery type	26650 × 1
External power supply	5 V (USB Type-C)
Max. operating time (at t=22°C), h★	7
Operating characteristics	
Max. recoil force on rifle weapon, g/s²	1 000
Degree of protection, IP	IP67
protection Built-in memory	32
size, Gb	-10 ~ +50
Operating temperature range, °C	< 600
Weight (with batteries), g	225 × 100 × 61,5
Dimensions, mm	
Rangefinder characteristics	905
Wavelength, nm	1 000
Max. measuring range, m/y★★	±1
Measurement accuracy, m	

Specifications

★ Actual run time depends on the intensity of use of Wi-Fi, VCR.

★★ The measurement range depends on the characteristics of the object being observed and the environmental conditions.

➢ Improvements can be made to the design and software of this product to enhance its useful functions.

➢ The technical parameters of the equipment may be improved without prior notice to the customer.

2 Contents of the package

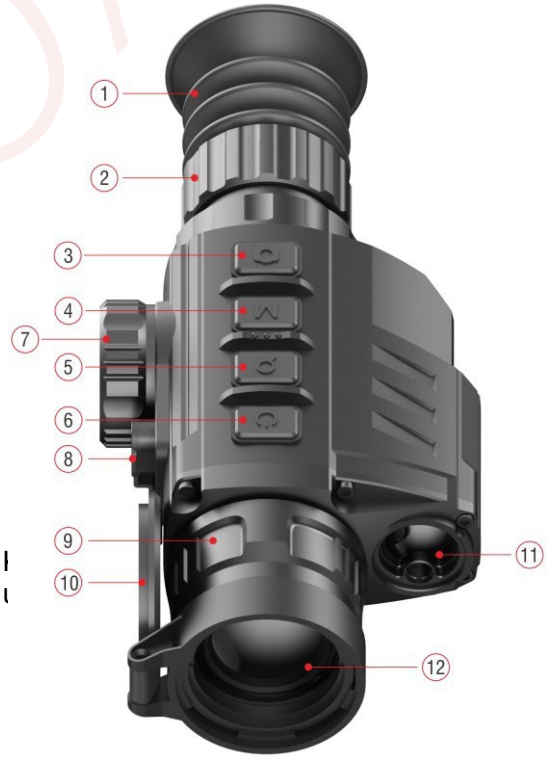
- GL35R thermal imaging binoculars
- Picatinny holder IRM-030-205-Q1
- L-shaped key
- Screws M5, 4 pieces
- Carrying bag
- Lens cloth
- Heated target for zeroing, 5 pcs

3 Description

The Geni GL35R series product is an infrared thermal imaging binocular with built-in laser rangefinder. It can be installed on various types of firearms for night hunting. It is light weight, small in size and easy to carry and features long working time, good concealment and strong penetration of thick smoke, dust or night.

4 Components and controls

1. Eye shade
2. Eyepiece diopter correction ring
3. Camera button (C)
4. Menu button (M)
5. Zoom button (Z)
6. Power button (P)
7. Battery compartment
8. USB C port
9. Focusing ring obje
10. Lens cap
11. Laser rangefinder
12. Lens



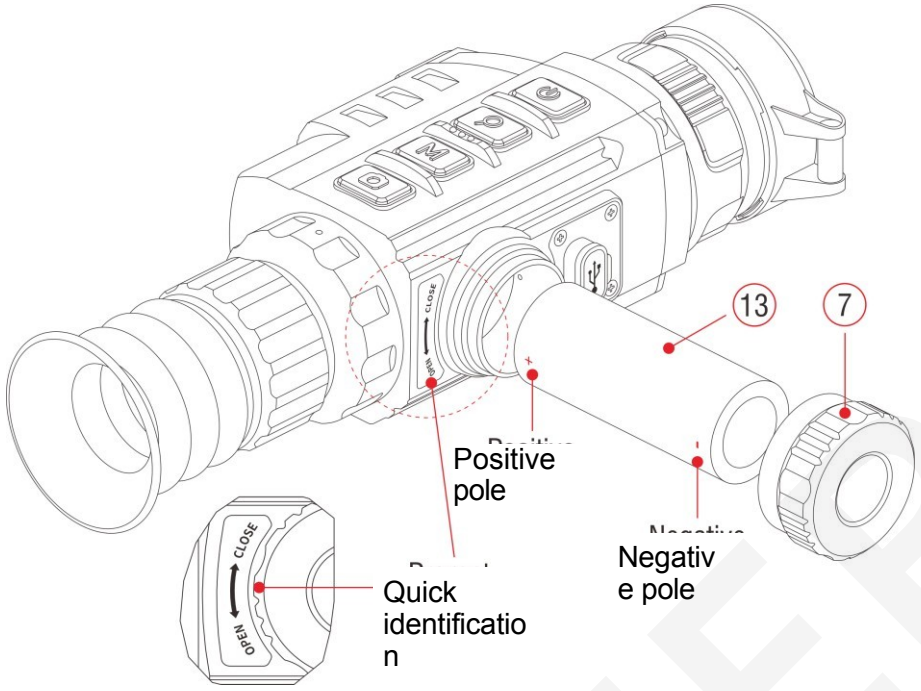
5 Explanation of icons

	Image mode: **Warm White**		Motion sensor
	Image mode: **Warm Black**		Microphone
	Image mode: **Warm Red**		Image shade
	Image mode: **Color**		Zeroing type G1 G2 G3 G4
	Display brightness		Read more
/ / /	E-zoom		Resetting
	Image sharpness		Defective pixel calibration
	Image brightness		Calibrating the compass
	Image contrast		Laser rangefinder calibration
	Ultraclear mode		Time settings
	Wi-Fi		System information
	Autocorrection mode		Restore factory settings
Out	Video output		Return to the main menu
	PIP (Picture in Picture)		Battery indicator light
	Digital compass		USB icon

6 Control description

Button	Status / Current operating mode	Short press	Long press
P (Power) power button 	The device is switched off	--	Switching on the device
	The device is switched on	Switching standby on/off	Shutting down the device
	Rangefinder mode	Exit and return to the start screen	--
	Menu and functions interface	Return to the top interface without saving	--
Z (Zoom) zoom button 	Default screen	Digital zoom	Enter rangefinder mode
	Main Menu / Shortcut Interface	Navigation to the top	--
	Simple rangefinder mode	Distance measurement	Switching the rangefinder mode
M (Menu) menu button M	Default screen	Access to the agents menu	Enter the default menu
	Local offer	Go to the next local offer page	--
	Main offer	Enter sub-offer / Confirm selection	Save and go to the top interface
	Defective pixel calibration	Change direction of movement	
C (Camera) camera button 	Default screen	Taking a photo	Start video recording
	Main offer / Offer of representatives	Navigation down	--
	Video recording	Taking a photo	Stop and save video
M + C buttons	Default screen	Shutter Correction	Background correction
Z + M + C buttons	Default screen	Switch units between cm/m and inches/yards	--

7 Installing the battery



➢ Open the battery cover **(7)** counterclockwise according to the identification on the device.

➢ Insert one battery type 26650 **(13)** correctly according to the polarity labels in the battery compartment.

➢ When finished, screw the battery cover **(7)** on firmly in a clockwise direction.

Notice

- Please use batteries from official manufacturers.
- The Geni series can also be connected to an external power supply using a Type-C data cable. In this case, the USB will appear in the top right corner of the screen.

8 Operation

➢ Open the lens cap **(10)**.

➢ Press and hold the **Z** button **(5)** for 3 seconds to switch on the device.

Wait 6 seconds until the display shows a thermal image.

➢ **Dioptric correction:** for sharp resolution of the icons on the display, adjust the dioptric correction ring **(2)** of the eyepiece.

➢ **Lens focus adjustment:** rotate the lens focus ring **(9)** to focus on the subject.

➢ **Calibration:** from the default screen, calibrate the image by short pressing the **M (4) + C (3)** buttons to calibrate the shutter or long press **M (4) and C (3)** buttons for background calibration.

➢ **Image settings:** adjust image mode, display brightness, digital zoom, image sharpness, image brightness, image contrast in the menu

agents (see the **Agent menu** section for more details).

➢ **Standby: Press** the **P** button **(6)** briefly to switch standby mode on/off. The standby mode can

➢ **Switching off:** to switch off the device, long press the **P** button **(6)** for 5 seconds until the option menu appears

shutdown. To switch, select "√" or "×" by briefly pressing the **Z (5) / C (3)** and confirm the selection with the button **M (4)**. Select "√" to turn off and

➢ **Switch on the crosshairs:** click the **M** button **(4)** four times in a row while holding down the **Z (5) + C (3)** buttons to call up the crosshair function for the first use, then long press the **Z (5)** buttons simultaneously **+ M (4)** + **C (3)** for 7 seconds to activate the intentional cross. This function should be activated the first time the crosshairs are enabled.

Notice

➢ When the intentional cross is disabled, all operations related to it in the menu are hidden, including editing the colour and pattern of the intentional cross (in the shortcut menu), zeroing and blind pixel correction options in the main menu.

9 Resetting

Resetting is recommended at a temperature close to the operating temperature of the device.

Before implementing the nulling settings, please make sure that the intentional cross is enabled and that the nulling type is selected in the main menu.

➢ Mount the scope on your weapon.

➢ Set the target to 100 m and switch on the binoculars.

➢ When using the telescope for the first time, make sure the crosshairs are turned on before resetting (see instructions in Section 6 **Operation**).

➢ Long press the **M** button **(4)** on the home screen to enter the main menu.

➢ Select one type of zeroing in the main menu (see **Main menu** - **Zeroing type**).

➢ Select Zeroing in the **MORE** submenu and press the **M** button **(4)** to enter the zeroing interface. The zeroing interface is

intentional cross shown as a small cross for positioning.

➢ Then aim the center of the crosshairs at a target 100 meters away and fire.

➢ After the shot, observe the actual point of impact.

➢ **If you can see a bullet hole in the scope's display:**

- While keeping the device in a fixed position, press and hold the **M (4)** and **C (3)** buttons simultaneously to freeze the image and in the top left corner of the screen ❄

the XXX snowflake icon will appear.

- Use the **Z (5) / C (3)** button to move the crosshairs to the actual position

point of impact.

- Press the **M** button **(4)** briefly to switch the direction of movement between

UP-DOWN and RIGHT-Left.

- After moving the crosshairs into the bullet hole, press and hold the **M** button **(4)** to save the position and exit.

➢ **Unless you can see the bullet hole in the scope's display:**

- Keep the position of the device fixed and measure the horizontal and vertical distance between the eye and the bullet hole.
- Depending on the measured distance, move the position of the aiming cross by long or short pressing the **Z (5) / C (3)** button until the distance marked on the scale corresponds to the measured distance.
- Briefly press the **M** button **(4)** to switch the direction of movement between UP-DOWN and RIGHT-Left.
- Once the process is complete, press and hold the **M** button **(4)** to save and exit.

Notes

- To ensure positional accuracy, re-aim the target and repeat the process until the target is hit.

- In the zeroing interface, the intentional cross is moved one pixel by briefly pressing the **Z (5) / C (3)** button in the corresponding direction, while the

ten pixels

is moved by long pressing. One pixel means a displacement of 1.29 cm at a distance of 100 metres or 0.46 inches at a distance of 100 yards.

- Simultaneously briefly press the **Z (5) + M (4) + C (3)** buttons to switch units (cm/m, inch/yard).
- There is a white dot in the zeroing interface that represents the original position of the aiming cross before the calibration process.
- After resetting, the center of all intentional crosses will change accordingly.

10 Calibration

Calibration allows you to equalize the detector temperature and eliminate image defects (such as vertical bars, phantom images, etc.). There are two ways to calibrate - automatic or manual.

➢ You can turn **Automatic Shutter** on/off in the main menu **Calibration** (see Main Menu - Auto Shutter Calibration). Once Auto Calibration is enabled, the telescope will automatically calibrate according to the software algorithm. There is no need to close the lens cap (the internal shutter covers the sensor). Before automatic calibration, a 5 second countdown prompt appears behind the shutter icon on the status bar, which can be the time to cancel this calibration during the countdown by briefly pressing the **P** button **(6)**.

➢ Regardless of whether auto calibration is enabled or off, the user can also calibrate the sensor manually. On the default screen, a short simultaneous press of the **M (4) + C (3)** to complete shutter calibration without closing the lens cover (the internal shutter covers the sensor), meanwhile simultaneously press and hold the **M (4) + C (3)** to perform the background calibration, when the display prompts you to close the lens hood and after 2 seconds the background calibration starts.

11 Digital zoom

The Geni series supports a quick increase to base magnification of 2×,

3× or 4×, as well as to return to base magnification.

➢ From the default screen, briefly press the **Z** button **(5)** to control the incremental digital zoom in a loop to switch multiples

magnification. At the same time, the icon in the top status bar will

change accordingly.

➢ You can also select digital zoom in the shortcut menu (see the second

the representative offer page).

12 Photography and video recording

The Geni series thermal imaging binoculars are equipped with a function for recording video and photographing the observed images on a built-in memory card.

Image and video files will be named according to the time, so it is recommended to reset the system time in **Main Menu - More - Time Setting** or synchronize the system time and date in **InfiRay Outdoor** Settings before use. For specific operations.

Photography

➢ To take a photo, briefly press the **C** button **(3)** on the default screen.

➢ The camera icon ( ) will appear in the upper right corner of the screen and the image will pause for 0.5 seconds after the

function is executed.

Video recording

➢ To start video recording, press and hold the **C** button **(3)** on the default screen.

➢ A label appears in the top right corner of the display

showing the time of the record in

MM:SS format (minutes:

seconds).

➢ The red dot in the caption flashes during recording.

➢ You can also take a photo during recording by briefly pressing the **C** button **(3)**.

➢ When recording is complete, press and hold the **C** button **(3)** again.

➢ When video recording is turned off, video and image files are saved to the built-in memory card. However, if you skip the process and

instead

suddenly turn off the device, the video will not be saved.

➢ Photos and videos can be read on a computer using a USB cable.

Note

- Note that recorded video cannot be saved if you directly turn off or turn off the device other than by long pressing the **C (3)** button to exit.
- You can enter and work with the menu while the video is being recorded.
- The recording time is accumulated in minutes until the recording stops, that is, the time shows 60:00 to 59:59.
- The maximum length of a video recording file is 10 minutes. If it is more than 10 minutes, the video will be uploaded to a new file.
- The number of files is limited by the capacity of the device's built-in memory. Regularly monitor the amount of free memory on the built-in memory card and transfer footage and photos to other media to free up memory card space.

Memory access

When the device is turned on and connected to the computer, it is recognized by the computer as a memory card that used to access the device's memory and make copies of images and videos.

➢ Turn on the device and connect it to your computer using a USB cable.

➢ On your desktop, click on "my computer" - double click to open the device called "Infiray" 

- then click and open device called "Internal Storage" 

, to to access the memory.

➢ There are different components in the memory named according to time.

➢ Recorded videos and photos are saved in the following folders in the following format: IMG_HHMMSS_XXX. jpg (for photos) and VID_HHMMSS.mp4 (for video). HHMMSS - hour/minute/second; XXX - three-digit common file counter for photos that are NOT reset.

1 Laser rangefinder functions

➢ From the default screen, press and hold the **Z** button **(5)** to turn the laser rangefinder function on/off.

➢ The aiming cursor appears on the screen.

are displayed below the battery level in the top right corner of the screen, including the measurement value and distance measurement mode.

➢ The Geni GL35R series has two S G L (single measurement) and CONT (continuous measurement). Press and hold the **Z** button **(5)**

switch between SGL mode (factory default setting) and CONT mode.

➢ In **SGL** mode, briefly press the **Z** button **(5)** to measure the distance the target to which the cursor is pointing.

➢ In **CONT** mode, the rangefinder information in the upper right corner is updated automatically every second in real time according to

the selected object without any key press.

➢ When the target distance is further than 1 000 m, **MAX** appears in the distance values.

➢ Press the **P** button **(6)** briefly to exit the laser rangefinder.

Special features of the laser rangefinder

➢ Measurement accuracy and maximum range depend on the reflection ratio on the target surface, the angle at which the emitting beam strikes the target

surface, and on environmental conditions. The reflectivity is also according to the surface texture, its color, size and shape of the object. A glossy and light surface usually shows higher reflectivity than a darker surface.

➢ Measurement accuracy can also be affected by lighting conditions, fog, smog, rain, snow, etc. Measurement performance may deteriorate in bright light or when pointed towards the sun.

➢ Measuring the distance to a small side target is more difficult than to a large target.

14 Offer of representatives

Basic settings (image palette, display brightness, digital zoom, image sharpness, image brightness and contrast, colour and crosshair pattern) can be changed using the shortcut menu.

➢ From the default screen, briefly press the **M** button **(4)** to enter the shortcut menu.

➢ Each page has four pages (when the intentional cross function is called) and two functions, one at the top and one at the bottom.

➢ On each page, short press the **Z** button **(5)** to toggle the top function options and short press the **C** button **(3)** to toggle the bottom function options. And each function has four options

➢ Press the **M** button **(4)** briefly to switch to the next page.

➢ Press the **P** button **(6)** briefly to exit the shortcut menu.

Options and descriptions of the agents' offer

Number of presses M buttons (4)	Offer of representatives	Interpr etation	Operation
1×	Access the first page of the shortcut menu and adjust the image palette and screen brightness		➢ Short press the **Z** button **(5)** adjust the image palette between warm white, warm black, warm red, and color. ➢ Press the **C** button **(3)** briefly adjust the brightness level of the image from 1 to 4, gradually increasing.

2×	Access the second page of the local menu and adjust E-zoom and image sharpness		➢ Short press the **Z** button **(5)** perform the E-zoom parameter 1×, 2×, 3× a 4×. ➢ Press the **C** button **(3)** briefly adjust the brightness level of the image from 1 to 4, gradually increasing.
3×	Access the third page of the shortcut menu to adjust the brightness and contrast of an image		➢ Short press the **Z** button **(5)** cyclically adjust the brightness level image from 1 to 4, gradually increases. ➢ Press the **C** button **(3)** briefly adjust the brightness level of the image from 1 to 4, gradually increasing.

4×	Access the fourth page of the shortcut menu and edit the colour of the intentional cross and the pattern of the intentional cross		➢ Short press the **Z** button **(5)** adjust the colour of the intentional cross: white, black, red and green. ➢ Press the **C** button **(3)** briefly select the pattern of the intentional cross. At there are 8 patterns to choose from.
5×	To return to the default screen		--

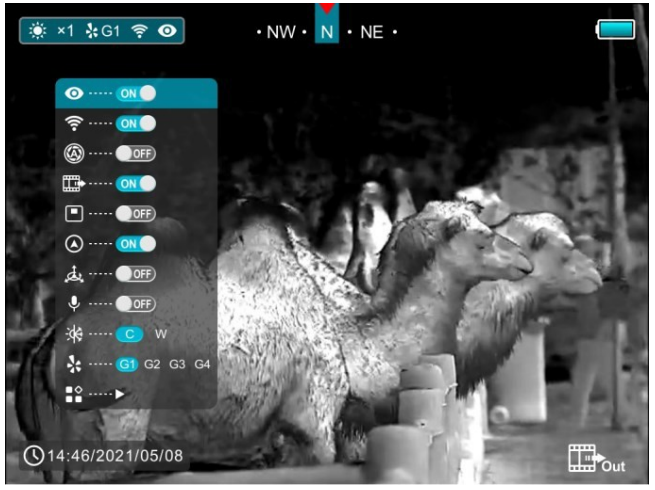
15 Main menu

➢ From the default screen, press and hold the **M** button **(4)** to enter the main menu, which includes Ultraclear mode, Wi-Fi, Auto shutter correction, video output, PIP, compass, motion sensor, microphone, image tint, zero type and more.

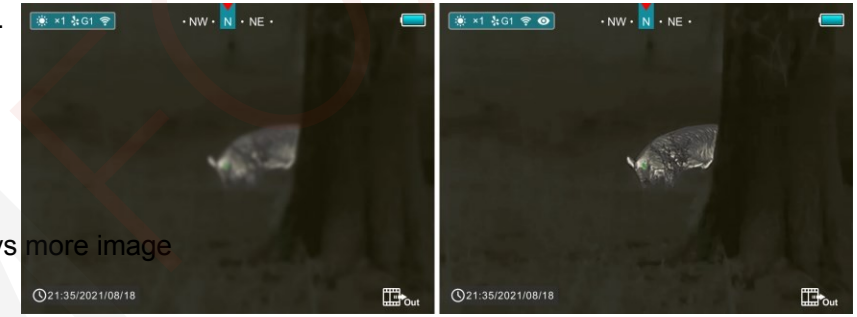
➢ Press the **Z (5) / C (3)** button to scroll through the main menu items.

➢ Press the **M** button **(4)** briefly to set the item parameter or enter the function interface.

➢ Long press the **M** button **(4)** to exit the main menu.



Options and description of the menu offers

Ultraclear	**Ultraclear mode on/off** ➢ Press and hold the **M** button **(4)** to enter the main menu. ➢ Select the Ultraclear menu option using the **Z (5) / C (3)** button. ➢ To turn Ultraclear mode on/off, briefly press the **M** button **(4)** along with the shutter calibration sound. ➢ Once Ultraclear mode is enabled, the icon will appear on the status bar in the top left corner of the screen. ➢ When there is heavy fog, rain or snow, Ultraclear mode displays more image detail. 
Wi-Fi	**To turn Wi-Fi on/off** ➢ Press and hold the **M** button **(4)** to enter the main menu. ➢ Select the Wi-Fi menu option using the **Z (5) / C (3)** button. ➢ To switch the Wi-Fi function on/off, briefly press the **M** button **(4)**. ➢ The icon appears in the status bar in the top left corner of the screen when wi-fi is on.

Automatic shutter correctio n	**Turning automatic shutter correction on/off** ➢ Press and hold the **M** button **(4)** to enter the main menu. ➢ Use the **Z (5) / C (3)** button to select the Auto Shutter Correction menu item. ➢ Press the **M** button **(4)** briefly to turn the automatic shutter correction on/off. ➢ When automatic shutter correction is enabled, an icon appears on the status line in the top left corner of the screen. ➢ Before automatic calibration, a prompt appears behind the shutter icon in the status bar for a countdown of 5 seconds, which can be the time to cancel this calibration during the countdown by briefly pressing the button **Power (3)**.  **Turning the video output on/off**
Video output	➢ Press and hold the **M** button **(4)** to enter the main menu. ➢ Use the **Z (5) / C (3)** button to select **Video Output**. ➢ Press the **M** button **(4)** briefly to switch the video on/off. ➢ Once the video output function is enabled, an icon will appear in the bottom right corner of the screen. ➢ The video output function allows connectivity to an external display or recording device.

PIP (Picture in Picture)

To turn Picture-in-Picture on/off

➢ Press and hold the **M** button **(4)** to enter the main menu.

➢ Select the PIP option using the **Z (5) / C (3)** button.

➢ Press the **M** button **(4)** briefly to turn PIP on/off.

➢ When PIP is turned on, a small window will appear at the top of the display.

Compass

Switching the digital compass function on/off

➢ Press and hold the **M** button **(4)** to enter the main menu.

➢ Select the **Compass** menu option using the **Z (5) / C (3)** button.

➢ Press the **M** button **(4)** briefly to switch the digital compass on/off.

➢ Once the compass function is enabled, it will be displayed in the middle of the top status bar.

Motion sensor

Switching the motion sensor on/off

➢ Press and hold the **M** button **(4)** to enter the main menu.

➢ Use the **Z (5) / C (3)** button to select the **Motion Sensor** menu option.

➢ Press the **M** button **(4)** briefly to switch the motion sensor on/off.

➢ Once the motion sensor is turned on, two scales will appear on the right side of the screen.

➢ The horizontal scale shows the angle of inclination and the vertical scale shows the angle of climb.

MicrophoneMicrophone on/off

➢ Press and hold the **M** button **(4)** to enter the main menu.

➢ Select **Microphone** using the Z (5) / C (3) button.

➢ Press the **M** button **(4)** briefly to switch the microphone function on/off.

➢ Once the microphone is switched on, the icon will appear on the status bar in the top left corner of the screen.

Image shade

Selecting the tint of the image

➢ Press and hold the **M** button **(4)** to enter the main menu.

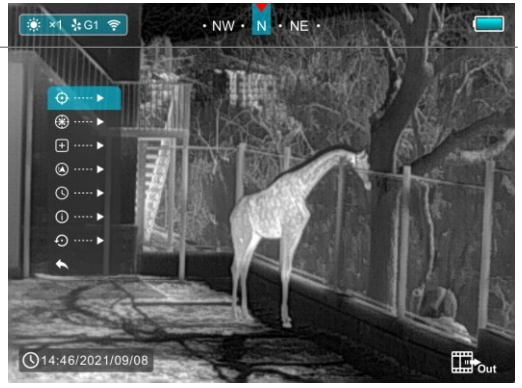
➢ Select **Image Hue** using the **Z (5) / C (3)** button.

➢ Press the **M** button **(4)** briefly to select C or W. C is

is for a cold shade and W is for a warm shade.

Zeroi ng type

Zeroing type selection



➢ Press and hold the **M** button **(4)** to enter the main menu.

➢ Select **Zeroing Type** using the **Z (5) / C (3)** button.

➢ There are four choices.

➢ Short press the **M** button **(4)** to select one type of zeroing.

More

Enter the secondary menu for further settings

➢ Press and hold the **M** button **(4)** to enter the main menu.

➢ Select the **More** menu option using the **Z (5) / C (3)** button.

➢ Briefly press the **M** button **(4)** to enter the secondary menu for further settings, including zeroing, rangefinder calibration, calibration

faulty pixels, compass calibration, time settings, system information, factory reset and return to the main menu.

Resetting your device

Resetting

The Geni series supports a zeroing distance of 100 m. To zero the telescope, you must first set the zero type.

➢ Select **Zeroing** using the **Z (5) / C (3)** button in the **More** submenu.

➢ Press the **M** button **(4)** briefly to enter the reset interface.

➢ Then aim the center of the crosshairs at a target 100 meters away and fire.

➢ Find the bullet hole after the shot.

➢ Then zero your telescope according to the **Zeroing** section.

➢ Press and hold the **M** button **(4)** to save and return to the submenu **More**.

Calibrating the rangefinder cursor

Calibrating the rangefinder at

In general, the calibration of the rangefinder scope is done before leaving the factory, and it is not necessary to make a correction for 1,000 bullet impacts, but if calibration is necessary, you can use the following method:

➢ Select **Rangefinder Calibration** using the **Z (5) / C (3)** button in the **More** submenu.

➢ Press the **M** button **(5)** briefly to enter the rangefinder calibration interface.

		➢ If you do not have professional calibration equipment, find a building 100 m away with a large distance between the front and back (e.g. a large building in an open area). ➢ Move the device slowly from left to right so that the building appears in the field of view gradually. Meanwhile, watch the rangefinder in the upper right corner. When looking for a critical data change point of the rangefinder, such as a point changing from - m to the measured number, press the **Z** button **(5)** / **C (3)** to move the rangefinder cursor left/right to the boundary between the building and the background to complete the calibration of the left and right positions. ➢ Use the same operation above to complete the calibration of the upper and of the lower position. ➢ Press the **M** button **(5)** briefly to switch the direction of cursor movement. ➢ After calibration, press and hold the **M** button **(5)** to save and return to the **More** submenu.
	Defective pixel calibration	**Pixel defect calibration** Defective pixels are pixels that do not change brightness compared to others in the image - are either brighter or darker than the surrounding pixels. The Geni series offers the possibility of software removal of any defective pixels on the sensor and also cancellation of any erasure.

➢ Select **Pixels Defect Calibration** using the **Z (5) / C** button **(3)** in the **More** submenu.

➢ Press the **M** button **(4)** briefly to enter the pixel defect calibration interface.

➢ A small crosshair appears in the centre of the screen instead of the intentional cross.

➢ A Picture in Picture (PIP) window appears in the lower left corner of the screen. A tooltip appears at the bottom of the screen that shows the number of calibrated blank pixels, direction of movement, and location.

➢ Short or long press the **Z (5) / C (3)** button to move the cursor so that it is aligned with the defective pixel. Short press to move one pixel at a time and long press to move ten pixels once.

➢ Switch the direction of movement by briefly pressing the **M** button **(4)**.

➢ After selecting the blank pixel, long press the **Z (5) + C (3)** button to calibrate the faulty pixel and press the same button again to cancel.

➢ Repeat the above processes until all blank pixels are calibrated.

➢ Press and hold the **M** button **(4)** to save the calibration and return to the **More** submenu.

Calibrating the compass

Digital compass calibration

➢ Select **Compass Calibration** using the **Z (5) / C (3)** button in the submenu **More**.

➢ Briefly press the **M** button **(4)** to enter the compass calibration interface.

➢ The icon appears on the screen as a three-axis coordinate system.

➢ Follow the icon instructions to rotate the telescope along the three axes at least 360 degrees in each axis within 30 seconds.

➢ After 30 seconds, the calibration is complete and the system returns to the default screen.

Time settings

Resetting the system date and time

➢ Use the **Z (5) / C (3)** button to select **Time Setting** in the **MORE** submenu

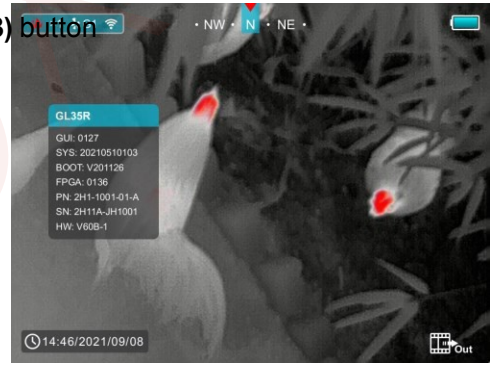
➢ Press the **M** button **(4)** briefly to enter the time setting interface.

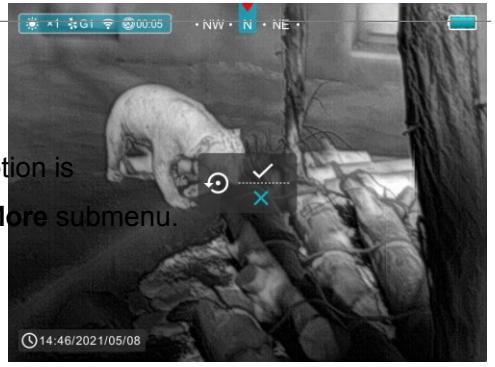
➢ The order from left to right is year, month, day, hour and minute. The time is in 24-hour format.

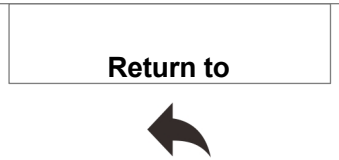
➢ Short press the **M** button **(4)** to switch between year, month, day, hour and minute. The selected item will turn blue and two triangle icons will appear above and below the value.

➢ Select the correct value by briefly pressing the **Z (5) / C (3)** button.

		➢ Save the settings and return to the **More** submenu by long pressing the **M** button **(4)**. **Displaying device information**
	System information	➢ Select the **System Information** menu option using the **Z (5) / C (3)** button in the **More** submenu. ➢ The relevant telescope information is displayed by briefly pressing the **M** button **(4)**. ➢ This item allows the user to view the following information about the binoculars: product model, graphic version Interface, SYS Info, Startup version, FPGA, serial number of the telescope and hardware version. ➢ Press and hold the **M** button **(4)** to return to the submenu. **Resetting to factory settings** ➢ Select **Factory Reset** using the **Z (5) / C (3)** button in the **More** submenu.
	Factory settings	➢ After briefly pressing the **M** button **(4)**, a prompt window will appear on the screen. ➢ Press the **Z (5) / C (3)** button briefly to select an option. The "√" option is to restore the default settings and "×" to cancel and return to the **More** submenu. ➢ Confirm the selection by briefly pressing the **M** button **(4)**.







Return to the main menu

➢ Use the **Z (5) / C (3)** button to select **Return**.

➢ Press the **M** button **(4)** briefly to return to the main menu.

16 PIP function

➢ From the default screen, press and hold the **M** button **(4)** to enter the main menu.

➢ Select the PIP option using the **Z (5) / C (3)** button.

➢ Press the **M** button **(4)** briefly to turn PIP on/off.

➢ When PIP is turned on, a small window will appear at the top of the display.

➢ The image in the small window is a 2x magnified image centered on the intentional cross.

➢ Once the main image is zoomed in using the **Z** button **(5)**, the PIP image is zoomed in 2x synchronously.

17 Wi-Fi features

The device allows wireless communication with external devices

(computer, smartphone) via Wi-Fi.

➢ From the default screen, press and hold the **M** button **(4)** to enter the menu.

➢ Select the Wi-Fi option using the **Z (5) / C (3)** button.

➢ Press the **M** button **(4)** briefly to turn on Wi-Fi.

➢ The device is recognized by the external device under the designation Geni_xxxxx-xxxxxx', xxxxx-xxxxxx is the SN

code of the device.

➢ Enter the password on the external device and make the connection. The default password is 12345678.

➢ And then the device can be controlled via InfiRay Outdoor.

Set the Wi-Fi name and password

The Wi-Fi name and password of your device can be set in the APP.

➢ Click on the "Settings" icon in the APP to enter the settings interface.

➢ Enter and submit the name (SSID) and password of the new Wi-Fi in the text box.

➢ The device must be restarted for the new name and password to take effect.

18 A APP update and technology

In order to continuously improve product performance and provide a better user experience, the software program as well as the parameters and operating instructions will be continuously updated. To download and update, users can go to the official website (www.infirayoutdoor.com). The Geni series supports app technology and can be connected to a smartphone or tablet via Wi-Fi for real-time image transmission, control and program updates.

About InfiRay Outdoor

➢ You can download and install the Infi Ray Outdoor app on **www.infirayoutdoor.com** or in the App store. Otherwise, you can also download the app by scanning the QR code.

GET IT ON Google Play

Download on the App Store

➢ Once installation is complete, open the **InfiRay Outdoor** app.

➢ If your device is already connected to a mobile device, turn on mobile data on your mobile device. Once connected, the update is detected done automatically with a prompt in the application. Click **Now** to download the updates or click **Later** to update later.

➢ **The InfiRay Outdoor** app automatically saves the last connected facility. Therefore, if your device has not connected to your mobile device but has previously connected to **InfiRay Outdoor**, you will be prompted to update if there is an update when you turn on **InfiRay Outdoor**. You can first download the update via mobile Wi-Fi and then connect your device to your mobile device to complete the update.

➢ Once the update is complete, the device will restart.

➢ **The InfiRay Outdoor user** manual can also be downloaded from the official website.

19 Technical inspection

A technical inspection of the equipment is recommended before use.

➢ Check the external appearance of the device (there should be no cracks in the casing).

➢ Check the condition of the lens and eyepiece (no cracks, grease spots, dirt or other deposits).

➢ Check the condition of the rechargeable battery (it should be charged) and the electrical contacts (no salts or oxidation present).

20 Maintenance

Maintenance should be carried out at least twice a year and consist of the following tasks.

➢ Wipe the outer surfaces of metal and plastic parts clean of dust and dirt with a cotton cloth. Silicone lubricant can be used for this.

➢ Clean the battery electrical contacts and battery compartments on the device with a non-greasy organic solvent.

➢ Check the glass surfaces of the eyepiece and lens. If necessary, remove dust and sand from the lenses (preferably using a non-contact method).

Cleaning of the outer surfaces of the optics should be carried out by means specifically designed for this purpose.

21 Legal and regulatory information

Frequency range of the wireless transmitter module:

WLAN: 2.412-2.472GHz (for EU)

Wireless Transmitter Module Power <20 dBm (EU only) IRay Technology Co., Ltd. hereby declares that the Geni GL35 product complies with Directives 2014/53/EU and 2011/65/EU.

The full EU Declaration of Conformity and additional information is available at: www.infirayoutdoor.com.

This equipment can be operated in all EU Member States.

FCC STATEMENT

FCC-ID: 2AYGT-2H1

Marking requirements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this equipment must not cause harmful interference and (2) this equipment must withstand any interference received, including interference that may cause undesired operation.

Information for users

Any changes or modifications not expressly approved by the Compliance Officer may result in the termination of the user's right to use the equipment.

Note: The manufacturer is not responsible for any interference to the radio or television caused by unauthorized modifications to this equipment. Such modifications 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 under Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a home 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 can be no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception, which can be detected by turning the equipment off and on, the user is advised to try to correct the interference by one or more of the following measures:

- Redirect or relocate the receiving antenna.
- Place the device at a greater distance from the receiver.
- Connect the device to an outlet on a different circuit than the circuit to which the receiver is connected.
- Get advice from an experienced radio/TV technician.

This equipment complies with FCC radio frequency exposure limits for uncontrolled environments.

Operation on the body of a person

This device has been tested for typical body support operations. To meet RF exposure requirements, a minimum distance of 0.5 cm must be maintained between the user's body and the handset, including the antenna. Belt buckles, holsters and similar third-party accessories used by this device should not contain any metal components. Accessories on a person's body/clothing that do not meet these requirements may not meet RF exposure requirements and should be avoided. Use only the supplied or

an approved antenna.

We, IRay Technology Co., Ltd., hereby declare that this product has been tested in accordance with applicable FCC rules to the most accurate measurement standards and that all necessary steps have been taken and are in effect to ensure that the production units of the same equipment will continue to meet the Commission's requirements.