InfiRay

InfiRay

IRay Technology Co., Ltd.

Tel: 0086-400-999-3800

Email: infirayoutdoor@infiray.com

Web: www.infirayoutdoor.com

Add.: 11th Guiyang Street, YEDA, Yantai, P.R. China

InfiRay Outdoor

CE UK CA RoHS

User Manual V1.0

EYE III | **Thermal Imaging Monocular**

E3 Plus / E3 Max / E6+

IMPORTANT SAFETY INFORMATION

Environmental influences

WARNING! Never point the lens of the device directly at intense heat sources such as the sun or laser equipment. The objective lens and eyepiece can function as a burning glass and damage the interior components. The warranty does not cover damage caused by improper operation.

Ergonomics notes

Caution: Take breaks after longer periods of use to avoid wrist pain.

Risk of swallowing

Caution: Do not place this device in the hands of small children. Incorrect handling can cause small parts to come loose which may be swallowed.

Safety instructions for use

- Handle the device with care: rough handling may damage the internal battery.
- Do not expose the device to fire or high temperatures.
- Do not disassemble the device to access the battery. The battery is not meant to be replaced by the end user.
- Only use the battery charger included in the delivery package.
- Only charge the device at temperatures ranging between 0°C and 50°C.
- The battery capacity decreases when operated in a cold ambient temperature. This is not a fault and occurs for technical reasons.
- The recommended temperature for using this product is -20° to +50°.
- Temperature exceeding this range will affect the service life of the product.
- Do not store the device for long periods at temperatures below 20°C or above 50°C, or this will permanently reduce the capacity of the battery.
- Always store the device in a dry, well-ventilated space.
- If the device has been damaged or the battery is defective, send the device to our after-sales service for repair.
- Before using this product in an environment with water, ensure that the magnetic USB plug on the left of the thermal imaging monocular is tightly covered.

Safety instructions for the power supply unit

- Check the power supply unit, cable and adapter for visible damage before use.
- Do not use any defective parts. Defective components must be

replaced.

- Do not use the power supply unit in wet or humid environments.

- Only use the original cable provided with the battery charger.

- Do not make any technical modifications.

For further information and safety instructions, please refer to the Operation Manual provided. This is also available on our website in the download center: www.infirayoutdoor.com.

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

The WEEE symbol on products and/or accompanying documents indicates that used electrical and electronic products must not be mixed with ordinary household waste. For proper treatment, recovery and recycling, take these products to the appropriate collection points where they will be accepted without charge. In some countries, it may also be possible to return these products to your local retailer when you purchase a corresponding new product. The proper disposal of this product serves to protect the environment and prevents possible harmful effects on human beings and their surroundings, which

may arise as a result of incorrect handling of waste.

More detailed information on your nearest collection point is available from your local authority. In accordance with state legislation, penalties may be imposed for the improper disposal of this type of waste.

For business customers within the European Union

Please contact your dealer or supplier regarding the disposal of electrical and electronic devices. He will provide you with further information.

Information on disposal in other countries outside of the European Union

This symbol is only applicable in the European Union. Please contact your local authority or dealer if you wish to dispose of this product and ask for a disposal option.

Intended use

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

Use the device only as described in this operating manual. The manufacturer and the dealer accept no liability for damages which arise

due to non-intended or incorrect use.

Function test

- Before use, please ensure that your device has no visible damage.

- Test to see if the device displays a clear, undisturbed image.

- Check that the settings for the device are correct. See the notes in the

    section Operation.

Installing/removing the battery

The EYE III series thermal imaging monocular is equipped with a battery.

It cannot be removed.

Observation with and without glasses

Thanks to the flexible eye-shade, the EYE III series can be used with or

without glasses. It offers a full field of view in both cases.

1 Specifications

Model	E3 Plus	E3 Max	E6+
Detector Specifications			
Type	Uncooled Vox		
Resolution	384×288	384×288	640×512
Pixel size, μm	12		
NETD, mk	≤ 25		
Frame Rate, Hz	50		
Optical Specifications			
Objective Lens, mm	25	35	35
Field of View	10.5°×7.9°	7.5°×5.7°	12.5°×10°
Magnification, ×	3.5 ~ 14	5 ~ 20	3 ~ 12
Digital Zoom, ×	1 ~ 4		
Detection Range, m (Target size: 1.7m×0.5m, P(n)=99%)	1300	1800	1800
Display Specifications			
Type	OLED		
Resolution	1440 × 1080		
Battery Power Supply			
Battery Type / Capacity / Output Voltage	Built-in Li-ion battery / 4.2Ah / 3.6V		

Max. operating Time (t=22 ℃), h*	8
External Power Supply, V	5
Physical Specifications	
Ingress Protection Rating	IP67
Memory Capacity, GB	32
Wi-Fi / APP	Support (InfiRay outdoor)
Operating Temperature, °C	-20 ~ +50
Weight, g	< 500
Dimension, mm	Ø54 × 180

*   Actual operation time depends on the density of Wi-Fi use and the built-in video recorder.

➢   Improvements may be made to the design and software of this product to enhance its features without prior notice to the customer.

2 Package Contents

- EYE III Series Thermal Imaging Monocular

- Magnetic data cable

- Power adapter

- Neck strap

- Wrist strap

- Drawstring bag

- Portable bag

- Lens cloth

- Quick Start Guide

3 Description

The EYE III series thermal imaging monocular is for outdoor use. It can be used in the day or night, or in harsh weather (such as rain, snow, fog and haze) without being affected by strong light. It requires no external light source. Even targets hidden behind obstacles (such as branches, grass, and shrubs) can be observed.

The EYE III series thermal imaging monocular is light and easy to carry, small in size, suitable for single-hand operation, comfortable to use, and rich in functions. It can be widely used for hunting, searching in various outdoor conditions.

4 Features

- Quick startup or shutdown with the lens cap opening or closing

- Controller operation, easy to use, only one hand

- 12μm self-developed detector

- High image quality

- Long detection distance

- Built-in memory space and microphone, support photographing and video recording with sound

- Built-in Wi-Fi module, support App connection

5 Units and Controls

1. Eyeshade

2. Diopter adjustment

3. Controller

4. Camera button

5. Magnetic charge port

6. Power indicator
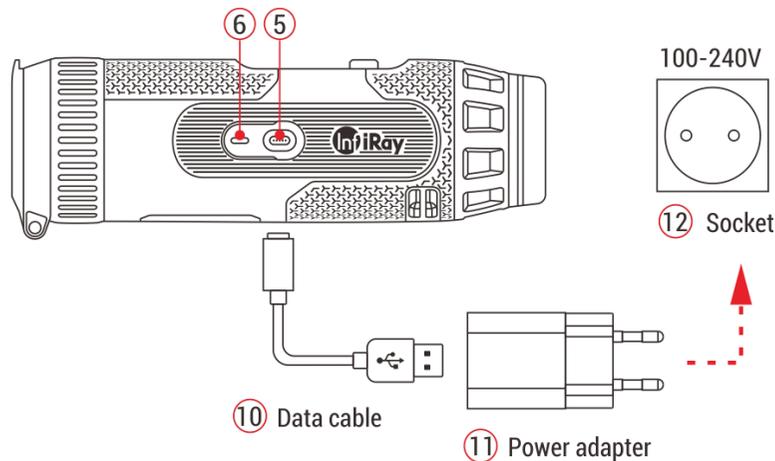
7. Lens focus ring

8. Objective lens

9. Lens cap

6 Button Descriptions

Button	Current Status	Press	Press and Hold	Rotate	
				Clockwise	**Anticlockwise**
Controller	Powered off	——	Power on the device	——	
	Home screen	Open the shortcut menu	Open the main menu	Digital zoom-in	Digital zoom-out
	Standby mode	Wake up the device		Wake up the device	
	Menu interface	Confirm selection	Return to the home screen	Navigate downwards with the menu options	Navigate upwards with the menu options
Camera button	Home screen	One time: start / stop a video recording	Photographing	——	
		Two times: standby the device			
	Standby mode	Wake up the device			
	Menu interface	Return to the home screen	——		
Controller + Camera button	Home screen	——	Power off the device	——	

7 Charging

The EYE III series is supplied with a built-in rechargeable Li-ion battery pack, which allows operation up to 8 hours. **When using the device for the first time, please fully charge it first.** The EYE III series features a magnetic charge design.

● Connect the magnetic end of the data cable **(10)** to the magnetic port **(5)** of the device.

● When in a bumpy environment, you can choose to pull out the magnetic connector and use the standard Type C cable for charging.

● Connect another port of the data cable **(10)** to the power adapter **(11)**.

● Insert the plug of the adapter to the 110-240V socket **(12)**.

● When the device is charging, the power indicator **(6)** next to the magnetic port **(5)** is red. The power indicator **(6)** is on only in the charging status. When the power indicator (6) turns green, the device is fully charged.

● When charging, a lighting icon will appear inside the battery icon on the display. The lighting icon will not disappear until the data cable **(10)** is removed or the power is cut off.

● Charging is finished when the interior of the battery icon on the display is completely green .

● During using, when the battery icon turns red , this means the power level is low, please charge the device in time to avoid the data loss.

Safety instructions for battery

● The rated voltage of the product is 5V. Please charge the device promptly when the battery is low so that the service life of the thermal imaging monocular will not reduce due to battery over-discharge.

● Don't charge the device instantly while bring the battery from cold environment to warm environment. Charging after 30-40 mins.

● Charge the device at a temperature from $0℃$ to $+50℃$, otherwise the battery life will be reduced significantly.
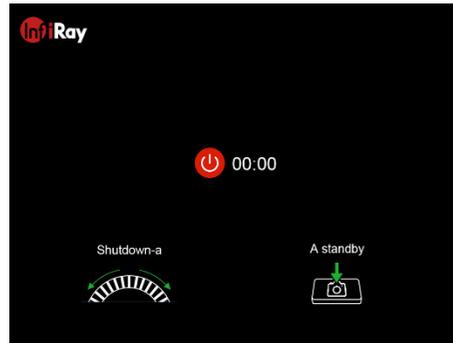
- Never use a damaged or modified charger.

- Don't leave battery unattended when charging. Don't leave the device with a charger connected to the mains longer than over 24 hours after full charge.

- Do not expose the battery to high temperature or to a naked flame.

- Don't connect external device with a current consumption that exceed permitted levels.

- The battery is short circuit protected. However, any situation that may cause short-circuiting should be avoided.

- Don't dismantle the battery from the device.

- The battery capacity may decrease when using the battery in negative temperature, that is normal, not a defect.

- Avoid using the battery at the temperature above the temperature shown in the table, this may decrease the battery's life.

- If the thermal imaging monocular is not used for a long time, recharge the device every 2 months at least and charge to 40%-50% power, then store the device in a dry and ventilated environment.

- Partial charging the battery is necessary if the battery is planned to be idled for long time. Avid fully charged or discharged.

- Keep the battery out of the reach of children.

8 Operation

- Open the lens cap **(9)** to power on the device, and the startup logo will be displayed on the device screen in 1 second. Also, the EYE III will be powered on with a long press of the **Controller (3)** for 3s.

- When an infrared image is displayed in the eyepiece, the thermal imaging monocular enters the operating status.

- Rotate the diopter adjustment knob **(2)** to adjust the resolution of the icon on the display. The diopter adjustment knob is used to adjust the eyepiece diopter for users with different degrees of myopia.

- **Shortcut menu:** On the home screen, press the **Controller (3)** to open the shortcut menu, and set the image mode (🎨), scene mode (🖼), screen brightness (☀), and image sharpness (🔺). Rotate the **Controller (3)** to switch between different functions on the shortcut menu, and press the **Controller (3)** to set parameters.

- **Main menu: O**n the home screen, press and hold the **Controller (3)** to enter the main menu interface for more functions. Rotate the **Controller (3)** to switch between different functions on the main menu, and press the **Controller (3)** to select the option.

- **Photographing / Video recording:** On the home screen, briefly press

the **Camera button (4)** to start / stop a video recording. And long press the **Camera button (4)** to take a photo.
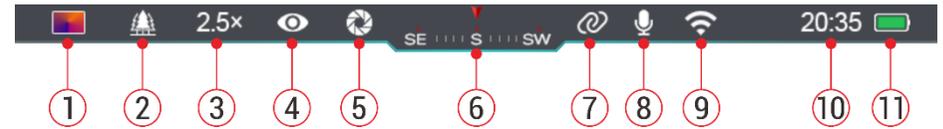
- **Power off:** After using the device, close the lens cap **(9)**, and the power-off shutdown interface will be displayed in 3s. During the shutdown countdown, rotate the **Controller (3)** or reopen the lens cap **(9)** to stop it. Alternatively, on the home screen, press and hold the **Controller (3) + Camera button (4)** at the same time to power off the device.

- **Standby:** During the power-off shutdown countdown, short press the **Camera button (4)** to active the standby mode. Alternatively, on the home screen, short press the **Camera button (4)** twice to standby the device. If there is no operation performed for 30 minutes, the product will automatically shut down.

9 Status Bar

The status bar is located at the top of the image interface and displays the information related to the current operating status of the device.

1. Current image mode (☀: White hot; ☾ : Black hot; 🔥 : Red hot; ▮ : Rainbow)

2. Current scene mode (🌲: Forest; 🏞: Flatland; ◉ : Focus; 🏢:City)

3. Current digital zoom (1.0× to 4.0× adjustable, with an interval of 0.5, such as 1.5×)

4. Ultra-clear mode status (displayed when the mode is on)

5. Auto calibration (displayed when it is on)

6. Compass (displayed when the compass is on)

7. Interconnection (displayed when it is connected successfully, it will not be displayed simultaneously with the Wi-Fi icon)

8. Microphone (displayed when it is on)

9. Wi-Fi status (displayed when it is on, it will not be displayed simultaneously with the Interconnection icon)

10. Clock (synchronize the time in the InfiRay Outdoor app)

11. Power status of the built-in battery pack. (When the color in the battery icon is green ▭, it indicates that the battery percentage is higher than 20%, and the power is sufficient. When the color in the icon is red ▭, the power is insufficient and need to be charged promptly. When a lightning icon ▭ is displayed in the battery icon, the device is powered by an external power supply and the battery pack is in charging)

10 Image Calibration

When the image is degraded or uneven, it can be improved by calibration. Calibration can equalize the background temperature of the detector and eliminate the image defects (such as vertical bars, phantom images, etc.). There are two calibration modes - Auto Calibration and Background Calibration.

- **Auto Calibration：** Device will calibrate automatically according to the software algorithm. There is no need to close the lens cover (the internal shutter covers the sensor). Turn on/off the auto calibration in the main menu referring to the Section **Main Menu - Auto Calibration.**

- **Background Calibration:** Close the lens cap **(9)** to perform the background calibration automatically.

11 Photography and Video Recording

EYE III series is equipped with a function for video recording and photography of the observed image which is saved on the built-in 32GB memory storage.

The photo and video files are named with time, so it is suggested to synchronize date and time in the **InfiRay Outdoor** application before using the photo and video functions.

Photography

- On the home screen, press and hold the **Camera button (4)** to take a photo.

- When taking a photo, the photo icon 📷 flashes below the status bar in the upper left corner of the screen. The photo is taken successfully when the icon disappears.

- Photos are stored in the built-in storage.

- When the exclamation mark icon ⓘ appears on the right side of the

camera icon, it prompts that the memory space is insufficient. Check and transfer videos and images to other media to free up the space.

Video Recording

- On the home screen, short press the **Camera button (4)** to start the video recording function.

- Then, the recording timer in the format of the HH: MM: SS (hour: minute: second) will appear on the upper right of the display.

- During recording, it is supported to take a photo with a long press of the **Camera button (4)**. Of course, the other operations to the device are supported during recording.

- Short press the **Camera button (4)** again to stop and save the video recording.

- All videos and photos will be saved in the build-in storage.

Note

- You can open and operate the menu during video recording.
- The images taken and the videos recorded are stored in the built-in

memory space in the format of PIC_HHMMSS.jpg (image) and VIDEO_HHMMSS.mp4 (video), with HHMMSS indicating hour/minute/second.

- The maximum duration of a video recording file is 30 minutes. When the duration is more than 30 minutes, the video will be automatically recorded onto a new file.

- The number of files is limited by the internal memory space of the device. Check the remaining space regularly, and transfer your videos and images to other media to free up the space on the memory card.

Memory Access

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

- Connect the device to a computer through the Type C data cable.

- Power on the device for operation. You can view the recorded videos and photos on the computer and charge the built-in battery pack at the same time.

- Double click "my computer" on the computer desktop - select the USB flash disk and double click to access the memory space.

- There are different folders named by time in the format of xxxx (year) xx (month) xx (day) in the memory.

- You can select required files or folders for copying or deleting operations.
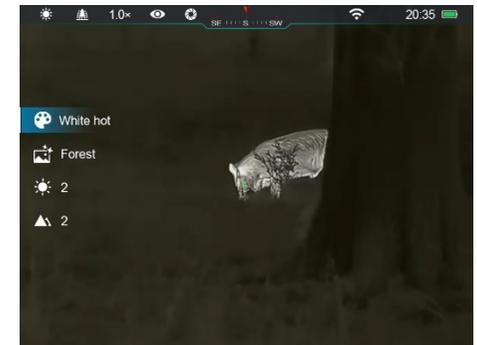
12 Digital Zoom

- EYE III series support to quickly increase the magnification by 1.5× / 2× / 2.5× / 3× / 3.5× / 4×, as well as to return to the basic magnification 1×.

- On the home screen, clockwise rotate the **Controller (3)** to digital zoom in, and rotate the **Controller (3)** anticlockwise to digital zoom out.

- The corresponding magnification is displayed in the status bar.

13 Shortcut Menu Function

On the shortcut menu, you can quickly adjust basic configurations of commonly used functions, including the image mode, scene mode, screen brightness and image sharpness.

➤ In the home screen, press the **Controller (3)** to enter the shortcut menu.

➤ Rotate the **Controller (3)** to switch among the options.

- **Image mode ( ):** Select the option and press the **Controller (3)** to change the image mode. There are four modes - White hot, Black hot, Red hot and Rainbow.

- **Scene mode ( ):** Select the option and press the **Controller (3)** to change the image mode. There are four modes - Forest, Flatland, Focus and City.

- **Screen brightness ( ):** Select the option and press the **Controller (3)** to switch the screen brightness from level 1 to 6.

- **Image sharpness ( ):** Select the option and press the **Controller (3)** to switch the image sharpness from level 1 to 4.
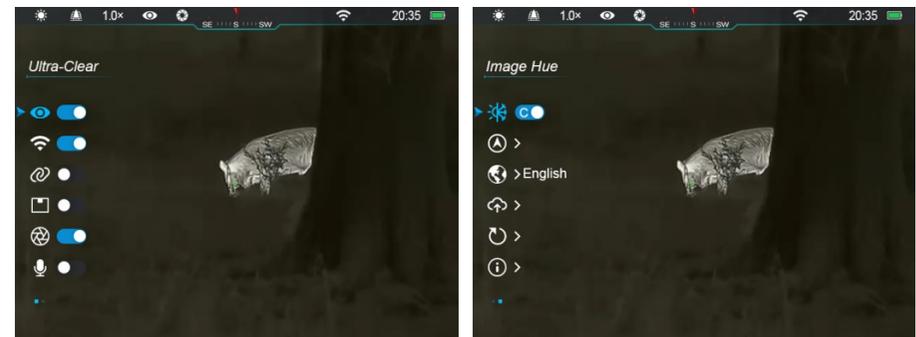
➤ Press and hold the **Controller (3)** to save the changes and return to the home screen.

➤ It will automatically save the changes and return to the home screen if there is no operation within 5s.

14 Main Menu Function

● On the home screen, press and hold the **Controller (3)** to enter the main menu interface.

● There are two pages of the function options. Rotate the **Controller (3)** to switch among the menu options.

● Menu navigation is cyclical: as soon as the last menu option of the first page is reached, it will turn to the first menu option of the second page when clockwise rotate the **Controller (3)**, and vice versa.

● Press briefly the **Controller (3)** to adjust the current parameters or

enter the sub-menus.

● In all menu interfaces, press and hold the **Controller (3)** to save and exit to the home screen, or short press the **Camera button (4)** to return to the home screen without saving.

● Automatic exiting from the menu to the home screen will occur when there is no operation within 10 seconds.

● During the continuous operation of the EYE III, when you exit from the main menu, the cursor ▶ remains at the position before exiting. When you restart the thermal imaging monocular and enter the main menu for the first time, the cursor stays at the first menu option.
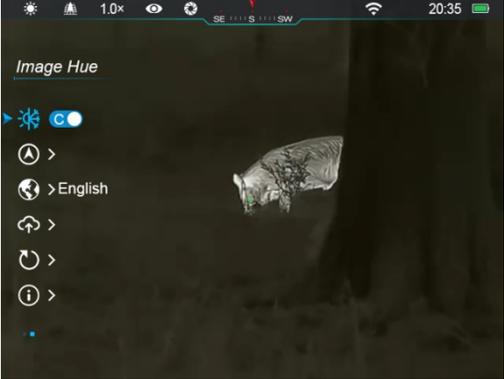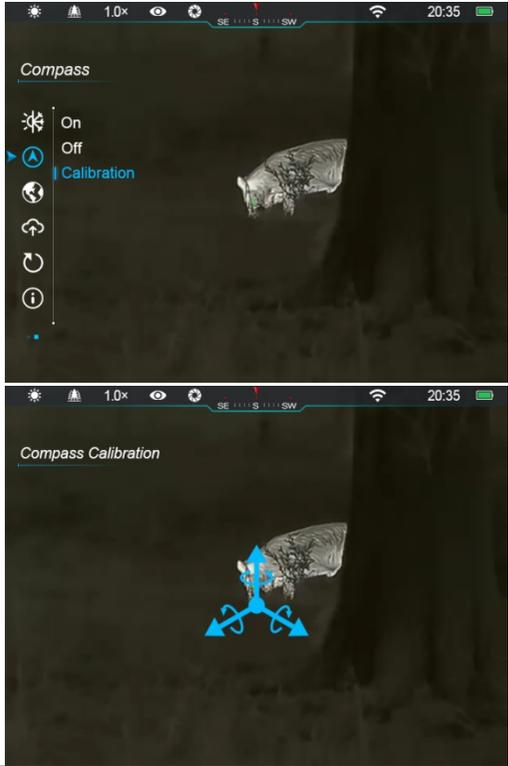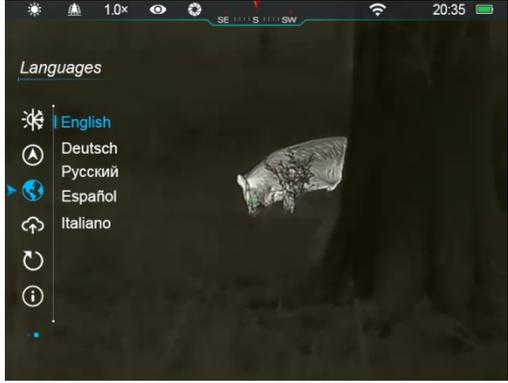

Menu Options and Descriptions

Ultra-Clear 👁	Turn Ultra-Clear mode on/off
	● Press and hold the **Controller (3)** to enter the Main Menu interface.
	● Rotate the **Controller (3)** to select the **Ultra-Clear** option. Ultra-clear option is selected by default when entering the menu

	interface for the first time after power-on.
	● Press briefly the **Controller (3)** to turn on /off the **Ultra-Clear** mode, during which you will hear a click of shutter calibration.
	● When the function is turned on/off, the icon in the status bar changes accordingly.
	● When the **Ultra-Clear** mode is on, the image contrast is enhanced, which is suitable for rainy, foggy and other harsh weather conditions.
Wi-Fi	**Turn Wi-Fi on/off** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** to select the **Wi-Fi** option. ● Press briefly the **Controller (3)** to turn on /off the **Wi-Fi** function. ● When **Wi-Fi** is on, the default password is prompted for 3s behind **Wi-Fi** function. ● The password is only displayed for the first three times. After the password is changed, it will not be displayed. ● When the function is on, the icon appears on the status bar accordingly. ● When **Wi-Fi** is on, it can be connected with mobile device such as smartphone for data transmission via Wi-Fi. **Note:** Wi-Fi function will not be enabled when the Interconnection function is on.
Interconnection	**Turn interconnection on/off** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** to select the **Interconnection** option. ● Press briefly the **Controller (3)** to turn on /off the **Interconnection** function.

	• When the function is on, it will automatically search for a WIFI hotspot named ICS and the password is 12345678. • The method for interconnection refers to the Section 16 **Method for Interconnection.** • Only when the interconnection is successful, the icon will appear on the status bar. **Note:** The Interconnection function and Wi-Fi function cannot be enabled at the same time, that is, Wi-Fi function will not be enabled when the Interconnection function is on, and vice versa.
PIP ▣	**Turn PIP function on/off** • Press and hold the **Controller (3)** to enter the Main Menu interface. • Rotate the **Controller (3)** to select the **PIP** option. • Press briefly the **Controller (3**) to turn on /off the **PIP** function. • When the **PIP** function is on, a small window and a blue box will appear on the screen. The image in the separate window is the 2x magnified image that is captured by the blue box in the main image.
Auto Calibration ⊘	**Turn auto calibration on/off** • Press and hold the **Controller (3)** to enter the Main Menu interface. • Rotate the **Controller (3)** to select the **Auto Calibration** option. • Press briefly the **Controller (3**) to turn on/off the **Auto Calibration** function. • When the **Auto Calibration** function is on, the icon appears on the status bar accordingly.

Microphone 🎤	**Turn Microphone on/off** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** to select the **Microphone** option. ● Press briefly the **Controller (3)** to turn on /off the **Microphone** function. ● When the **Microphone** function is on, the icon appears on the status bar accordingly. ● When the **Microphone** is on, the sound around the device will be synchronously collected during video recording.
Image hue ❄	**Set the image hue** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** to select the **Image Hue** option. ● Press briefly the **Controller (3)** to switch the **Image Hue** between **W** (warm) and **C** (cool). ● Cool color image is brighter and warm color image is softer and eye protection. ● The switch between the warm and cool hues is not applicable to the Rainbow mode.
Compass Ⓐ	**Set Compass** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** for select the **Compass** option. ● Short press the **Controller (3)** to enter the submenu of the **Compass** function. ● In the submenu, you can choose to turn the **Compass** function on / off, or select Calibration to calibrate the compass.

● Rotate the **Controller (3)** for select the option and press the **Controller (3)** to confirm your selection.

● When the **Compass** is on, it will be displayed on the middle of the status bar on the top.

Compass Calibration

● When **Calibration** option is selected, short press the **Controller (3)** to enter the compass calibration interface. An icon like a triaxial coordinate system appears on the screen.

● In the 15 seconds, rotate the scope along the three axes indicated by the icon, with each axis rotating at least 360°.

● After 15s, the calibration is finished automatically and exit to the Main Menu interface.

Language 🌐	**Set the GUI Language** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** for select the **Language** option. ● Short press the **Controller (3)** to enter the submenu of the language. ● EYE III series supports five languages, that are English, German, Russian, Spanish and Italian. ● Rotate the **Controller (3)** to select the desired language.

	● Confirm your selection with a short press of the **Controller (3)** and return to the Main Menu interface automatically. **Note:** The language is not be restored when the device is reset to the factory settings.
Firmware **Update** ⌂↑	**Firmware update** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** to select the **Firmware Update** option. ● Press briefly the **Controller (3)** to open the submenu of the firmware update function. ● Rotate the **Controller (3)** to select Yes or No and press the **Controller (3)** to confirm the selection. ● When select Yes, it will automatically search for the update file in the folder named update in the memory space and update it. ● For details about how to update, please refer to the Section 17 **Firmware Update**. **Note:** Please ensure that the power of the device is sufficient before the update.
Factory Reset ↻	**Reset to the factory settings** ● Press and hold the **Controller (3)** to enter the Main Menu interface. ● Rotate the **Controller (3)** to select **Factory Reset** option. ● Press the **Controller (3)** to open the submenu of the **Factory Reset**. ● Rotate the **Controller (3)** to select **Yes** for restoring factory settings or **No** for canceling the operation. ● Press the **Controller (3)** to confirm the selection.

- If **Yes** is selected, the scope will restart automatically.

- If **No** is selected, it will be back to the upper menu automatically.

The following functions will be restored to their default settings:

- **Image Mode**: White hot	- **Auto Calibration**: On	- **Interconnection:** Off
- **Scene Mode**: Forest	- **Image Hue**: C	- **PIP:** Off
- **Screen Brightness**: level 2	- **Ultra-Clear Mode**: Off	- **Microphone:** Off
- **Image Sharpness**: level 3	- **Wi-Fi:** Off	- **Compass:** Off
- **Magnification**: 1×	- **Wi-Fi Password**: 12345678	

Info

(i)

Show device information

- Press and hold down the **Controller (3)** to enter the Main Menu interface.

- Turn the controller for select the **Info** option.

- The relevant information of the device will be shown by a short press of the

  Controller (3).

- This item allows the user to view the following information: the product model, SN

  number, PN number, hardware version, software version and the FPGA version.

- Press the **Camera button (4)** briefly to return to the home screen.

15 Wi-Fi Function

The EYE III series can be can connect with the mobile device (laptop or mobile phone) for data transmission via Wi-Fi function.
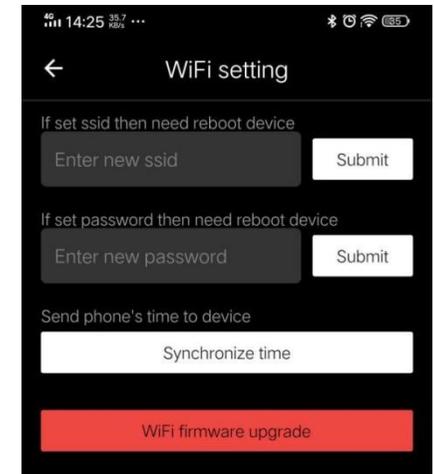
- On the main menu, turn on the Wi-Fi function (refer to **Main Menu - Wi-Fi** for details).

- After the Wi-Fi function is on, search for the Wi-Fi signal with the name "EYEIII_XXXXX-XXXXXX" on the mobile device, XXXXX-XXXXXX is the serial number of your device composed with digits and letters.

- Select the Wi-Fi and enter the password to connect. The initial password is 12345678.

- When Wi-Fi is successfully connected, it supports to control the device via the **InfiRay Outdoor** App downloaded in the mobile device.

Setting Wi-Fi Name and Password

The name and password of the Wi-Fi in EYE III series can reset on the **InfiRay Outdoor** App.

- After the device is connected to the mobile device, locate and click the **'Settings'** icon ⚙ on the **InfiRay Outdoor** image screen to enter the **Settings** interface.

- In the text box, enter and submit the new Wi-Fi name (SSID) and password.

- It needs to reboot the device to take the new name and password effect.

Note: If the device is reset to the factory settings, the name and password of the Wi-Fi will also be restored to the default settings.

16 Method for Interconnection

Interconnection with Mobile Device

- Turn on the personal hotspot on the mobile device and modify its name and password to ICS and 12345678.

- Turn the interconnection on in the Main Menu referring to the **Main Menu - Interconnection** for details.

- When the interconnection function is on, it will automatically search for the hotspot named ICS and the password is 12345678.

- When the interconnection icon is displayed on the status bar and the prompt '**Sending Data**' appears on the upper left conner of the display, it means that the interconnection between the two device is successful.

- Then, open the InfiRay Outdoor App on the mobile device, you can control the device in the InfiRay Outdoor without affecting the Internet function of the mobile device.

Interconnection Between EYE III

Two EYE III devices could also be interconnected manually.

- First, turn on the Wi-Fi function on one device. And turn on the interconnection function on the other device.

- For faster interconnectivity, please modify the Wi-Fi name and password to ICS and 12345678 in the InfiRay Outdoor App before interconnection.

- Simultaneously short press the **Camera button (4) + Controller (3)** for the two devices to start the pairing.

- When two EYE III are connected, the one whose Wi-Fi is enabled is the data sender and the other one that the interconnection is on is the data receiver. The screen image of the date sender will be displayed on the screen of the receiver.

- The prompt of 'Sending Data' or 'Receiving Data' and the default Wi-Fi name will appear on the upper left conner of the two screens.

- Short press the **Camera button (4)** to switch between the data sender and receiver.

- During image transmission, you can still perform the operation on the EYE III, except photographing and video recording.

- Note that after the Internet function is turned on, the device cannot turn on the Wi-Fi function.

17 Firmware Update

- Notifications about updates will be posted on the official website or social media or InfiRay Outdoor APP.

- Download the update file in the official website (www.infirayoutdoor.com) and store it to the folder named "update" in the memory space of EYE III.

- Press and hold the **Controller (3)** to enter the Main Menu interface.

- Rotate the **Controller (3)** to select the **Firmware Update** option.

- Short press the **Controller (3)** to enter the submenu of the firmware update.

- Rotate the **Controller (3)** to select "**Yes**", and press the **Controller (3)** to confirm the selection.

- The device will automatically search for the update file stored in the folder named "update" in the memory space of EYE III.

- Please make sure the device is fully charged before updating.

18 InfiRay Outdoor

- EYE III series thermal imaging monocular support **InfiRay Outdoor** technology, which allows you to transmit the image from the monocular to smartphone or tablet via Wi-Fi in real time mode.

- You can find the detailed instruction about **InfiRay Outdoor** at the site www.infirayoutdoor.com.

- Download and install the **InfiRay Outdoor** at the official website (www.infirayoutdoor.com) or app store or scanning the QR code below.

19 Technical Inspection

It is recommended to carry out a technical inspection each time before using the monocular. Check the following:

- The appearance (there should be no cracks on the body).
- The condition of the object lens and eyepiece (there should be no cracks, greasy spots, dirt or other deposits).
- The battery status (it should be charged).
- The controller/button should be in working order.

20 Maintenance

The maintenance should be carried out at least twice a year and includes the following steps:

- Wipe the surface of metal and plastic parts to clear off dust and dirt with a cotton cloth. Silicone grease may be used for cleaning process.
- Clean the electric contacts and battery slots on the device using a non-greasy organic solvent.
- Check the glass surface of the eyepiece and lens. If necessary, clear off the dust and sand on the lens (it is perfect to use a non-contact method).

Use a specialized wiping tool and solvent to clean the optical surfaces.

21 Legal and Regulatory Information

Wireless transmitter module frequency range:

WLAN: 2.412-2.472GHz (For EU)

Wireless transmitter module power < 20dBm (only for EU)

IRay Technology Co., Ltd. thus declares that the EYE III series thermal imaging monocular complies with the directives 2014/53/EU and 2011/65/EU. The full text of the EU declaration of conformity as well as additional information are available at: www.infirayoutdoor.com.

This device may be operated in all member states of the EU.

FCC Statement

FCC ID: 2AYGT-2K-00

Labeling requirements

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.

Information to the user

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

Note: The manufacturer is not responsible for any radio or TV interference 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, 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 equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

Body-worn Operation

This device was tested for typical body-support operations. To comply with RF exposure requirements, a minimum separation distance of 0.5cm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.