

Quick Start Guide







Handheld Thermal Imaging Monocular

Thank you for choosing us! To ensure you have the best user experience, we recommend reading this user manual carefully before use. If you have any questions, please feel free to contact us.

I 01 Product Overview

This product is an advanced thermal imaging monocular designed for long-range observations in various lighting conditions. It boasts a compact design and employs advanced shutter-free technology, ensuring exceptional sensitivity and a high refresh rate. The device is well-suited for applications such as security monitoring, search and rescue, outdoor adventures, and special missions.

I 02 Package Contents

Package Dimensions	Total Packaged Weight
248×148×98mm	≤1040g
Main Unit	Lens Cleaning Cloth
	
User Manual	Carry Bag Lanyard
	

I 03 Product Appearance



I 04 Button Descriptions















Button	Long Press	Short Press	Double-Click
Power Button	Power On/Power Off	Standby/ Wake-up Mode	/
Menu Button	Enter/Exit Menu	Pseudo-color Mode Switch	Enter/ Exit Red Dot
Up Button	Start/Stop Recording and Save Video File	Move Up/ Capture and Save Photo	/
Down Button	Activate/Deactivate Outdoor Mode	Move Down/ Electronic Zoom	/

I 05 Specifications

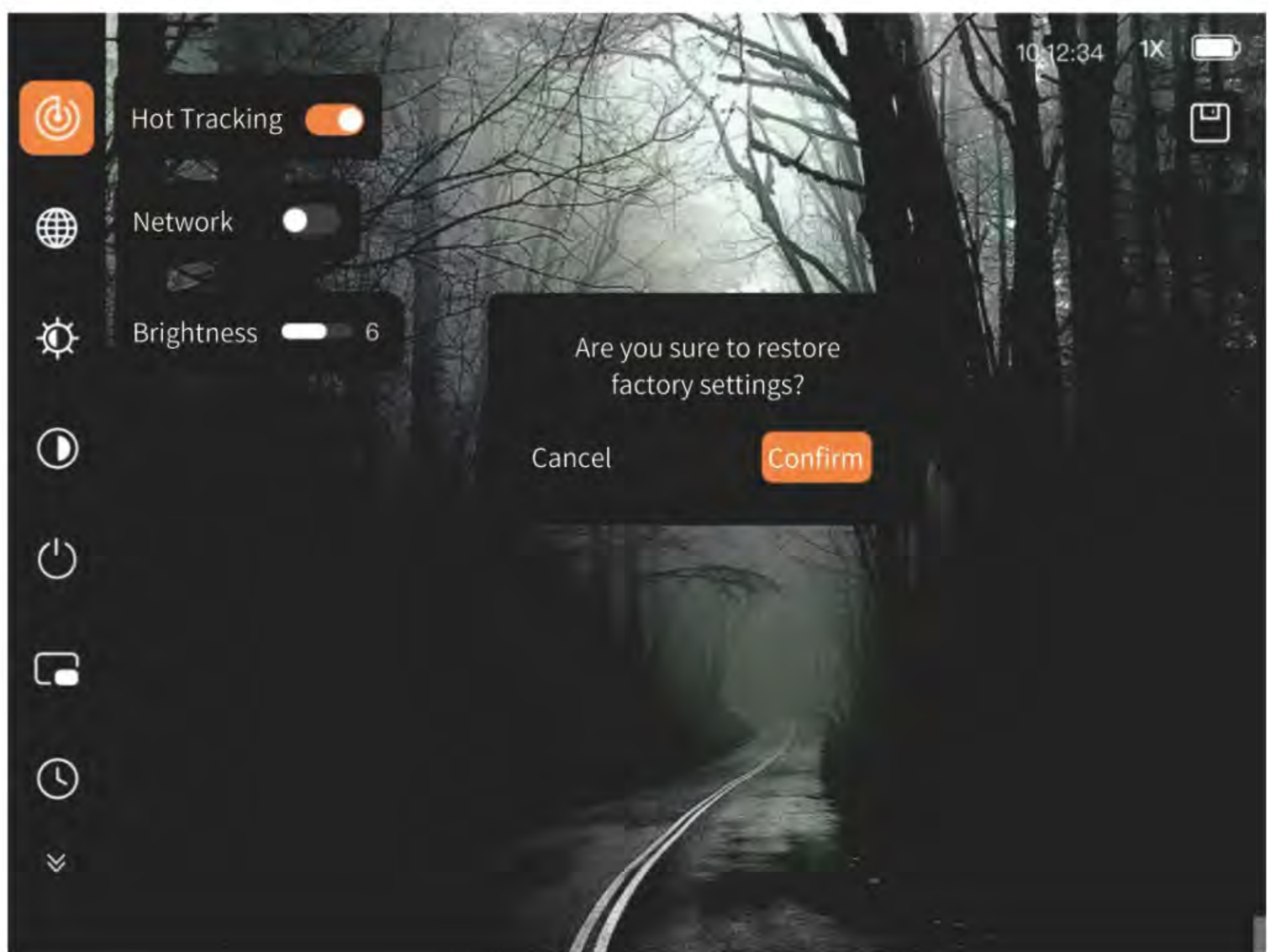
Specifications		
Model	384	640
Detector	Uncooled VOx 12 μm	
Resolution, pixels	384×288	640×512
Objective Lens	35mm (F1.0)	
Field of View	7.5°×5.7°	12.6°×10.1°
Visual Magnification	3.23~12.91	1.89~7.56
Spectral Band	8–14 μm	
Display Resolution, pixels	1024×768	
Eyepiece Diopter	−5~+5	
Eye Relief	20mm	
NETD	≤35mk	
Frame Rate, Hz	50 Hz	
Waterproof	IP 67	
Detection Range (Human)	1460m	
Detection Range (Animal)	2900m	
Power Source	3400mAh Lithium-ion Battery	
Battery Life	≥5h	
Digital Zoom	1x、 2x、 4x	
Interface	Type-C	
Weight	455g±5g	
Dimensions	196mm ×70mm ×58mm	
Operating Temperature	−20°~+50°	

Note: Specifications may change due to product upgrades. The parameters in this table are based on the commonly used 35mm lens, and the product also supports 19mm, 25mm, 50mm, 75mm, and other focal length lenses for diverse applications.

I 06 Menu Instructions

Name	Description	Icon
Hot Tracking	Enable/Disable Thermal Tracking	
Network	Enable/Disable Network	
Brightness	Adjust Brightness	
Contrast	Adjust Contrast	
Auto Shutdown	Auto Shutdown Settings	
Picture-in-Picture	Enable/Disable Picture-in-Picture	
Time Setting	Set Time	
OSD	Turn On/Off OSD (Time, Date, etc.)	
Restore Factory Settings	Restore Parameters to Default	
Language Selection	Support Chinese/ English Language Selection	
Version Information	Device Version Information	
Grids	Grid Line Settings	
Blind Elements Elimination	If blind spots appear during use, adjust cursor coordinate to eliminate them and save backups.	
Red Dot Settings	Red Dot Switch, Coordinate Adjustment	

I 07 Home Screen



I 08 User Guide

01 Power On

When powered on, long press the power button to start the device, and the startup screen will appear.

02 Power Off

When powered on, long press the power button. The system will display a shutdown prompt, and then power off.

03 Standby

When powered on, short press the power button to enter standby mode. In standby mode, short press the power button again to wake up the device.

04 Diopter Adjustment

Use the diopter adjustment wheel to adjust the eyepiece diopter to meet the astigmatism requirements of different users.

05 Focusing

Adjust the objective lens using the focusing wheel to observe distances from 0.5m to infinity. Rotate counter clockwise for distant focus and clockwise for near focus.

06 Menu

On the home screen, long press the M button to enter the menu. Short press the up/down buttons to navigate the main menu options. Short press the M button to enter the sub-menu options, and long press the M button to return to the previous menu or exit the main menu. For detailed definitions, consult the menu instructions.

07 Photo/Video Capture

When powered on, short press the up button to capture a photo with a saved photo notification. Long press the up button to record a video; the screen will show the recording time. Long press the up button again to stop recording, and a notification confirming the saved video will appear.

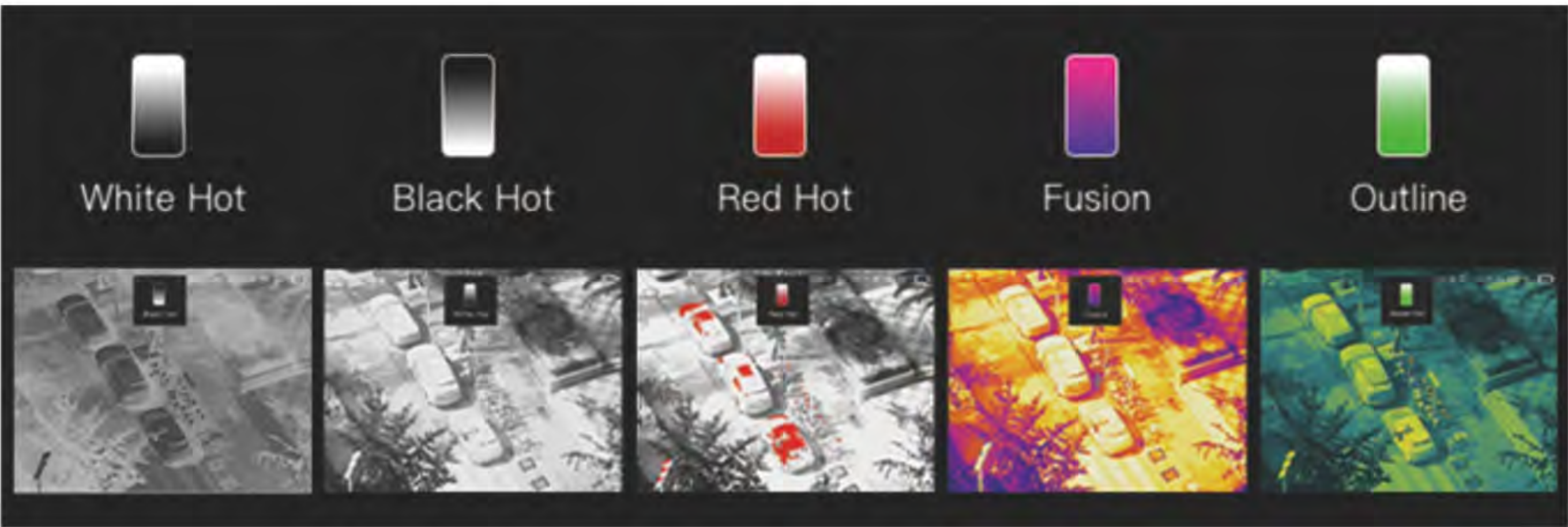
08 Digital Zoom

When powered on, short press the down button on the main screen to cycle through digital zoom, with options for 1x, 2x, and 4x.



09 Outdoor Mode

When powered on, long press the down button to activate outdoor mode; long press the down button again to deactivate outdoor mode.



10 Pseudo-Color Switch

When powered on, short press the M button to switch pseudo-color modes. Pseudo-color modes include White Hot, Black Hot, Red Hot, Fusion, and Green Hot.

11 Brightness Adjustment

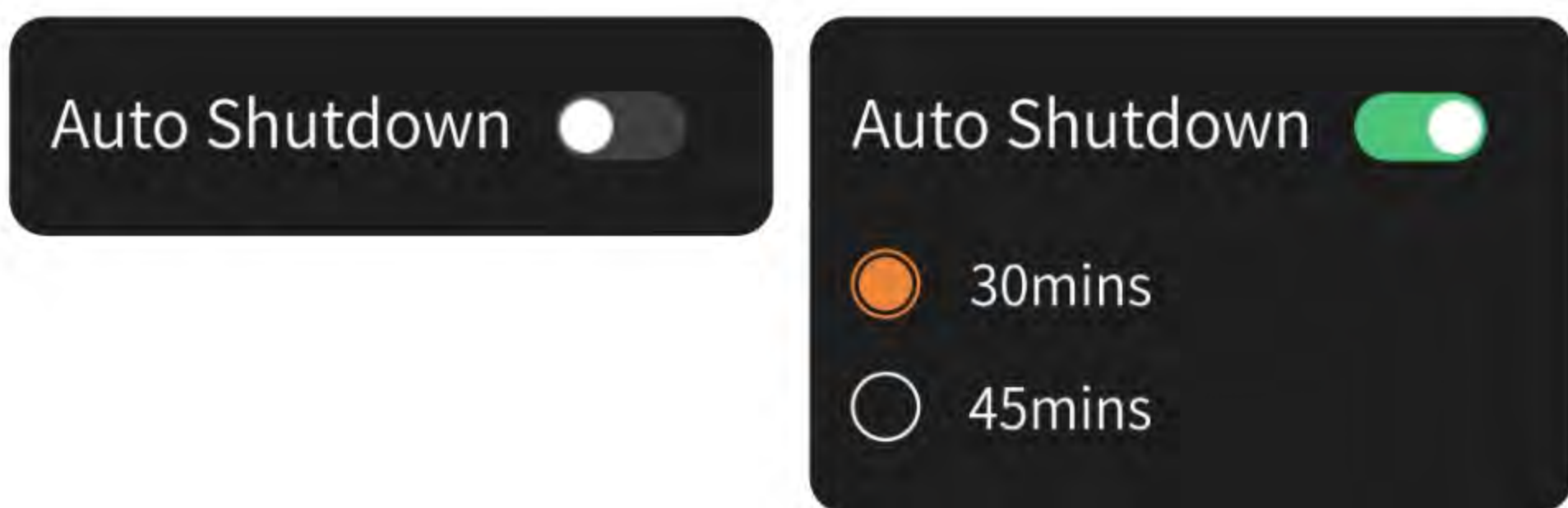
Long press the M button to enter the menu, go to brightness adjustment in the sub-menu, and use the up and down buttons to adjust brightness. Brightness range: 0 to 10, recommended setting is 7.

12 Contrast Adjustment

Long press the M button to enter the menu, go to contrast adjustment in the sub-menu, and use the up and down buttons to adjust contrast. Contrast range: 0 to 10.

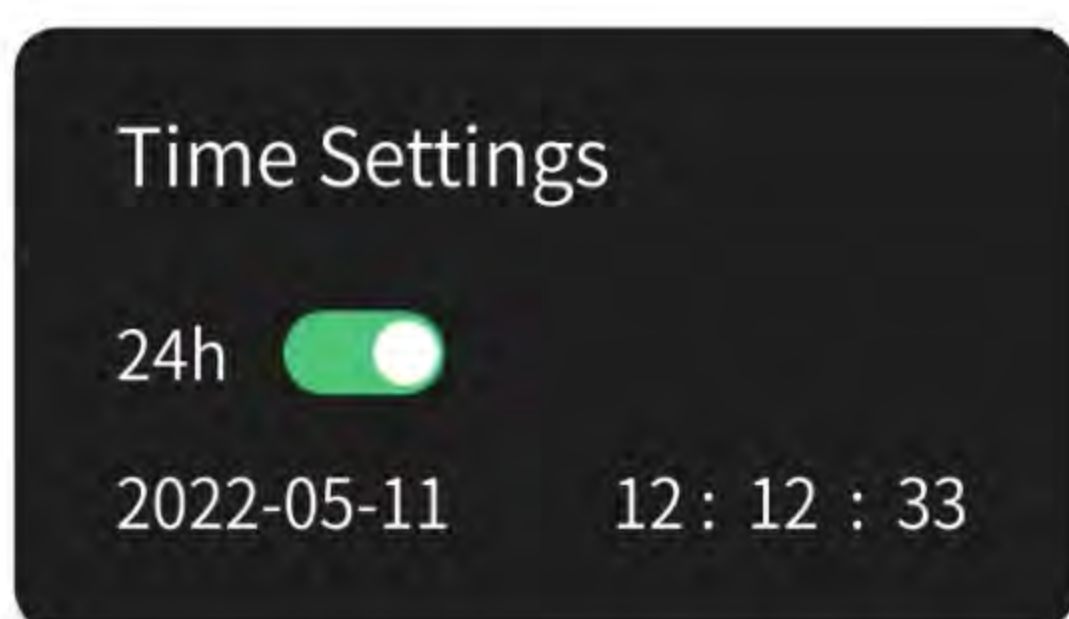
13 Auto Shutdown Settings

Long press the M button to enter the menu, go to auto shutdown settings in the sub-menu, and use the up and down buttons to select different auto shutdown durations.



14 Time Settings

Long press the M button to enter the menu, go to time settings in the sub-menu, and use the up and down buttons to adjust the time units.



15 OSD Settings

Long press the M button to enter the menu, go to OSD settings in the sub-menu, and use the up and down buttons to select the information to be displayed on screen.

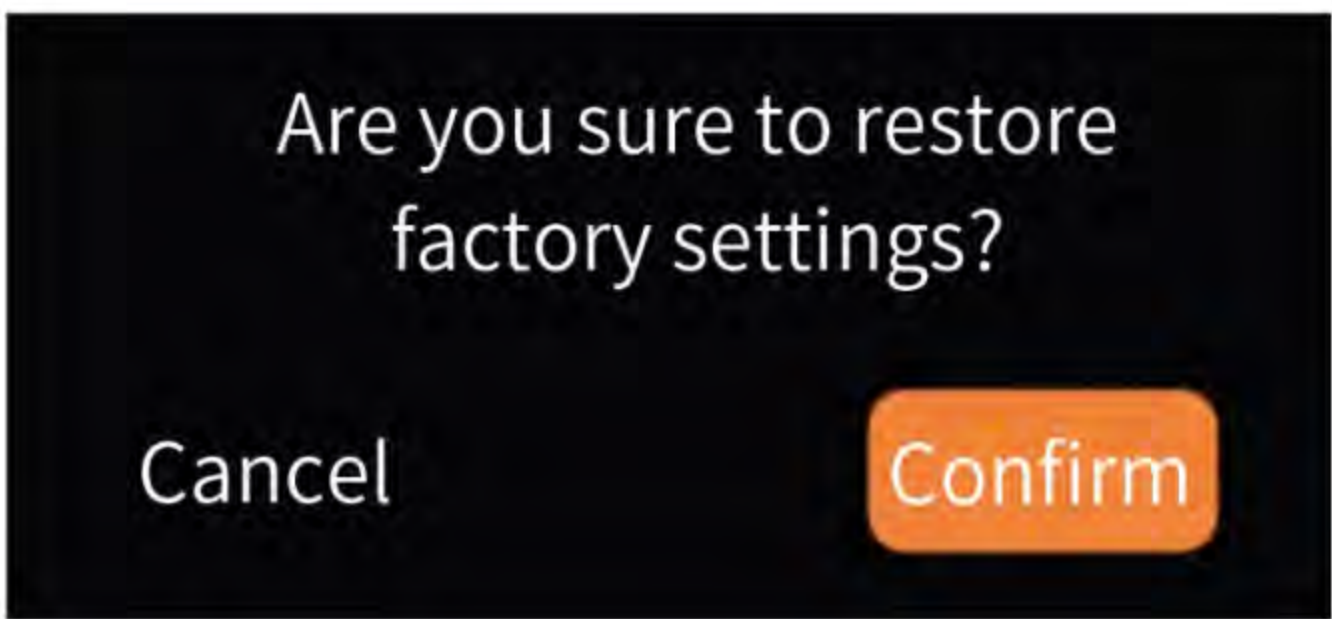


16 Picture-in-Picture Settings

Long press the M button to enter the menu, go to picture-in-picture settings in the sub-menu, and select to enable or disable picture-in-picture. In picture-in-picture mode, choose digital zoom to magnify the small window image.

17 Factory Reset

Long press the M button to enter the menu, go to factory reset in the sub-menu, and follow the prompts to select restore or cancel factory settings.



18 Language Settings

Long press the M button to enter the menu, go to language settings in the sub-menu, and use the up and down buttons to select different languages.



19 Reticle Settings and Ranging

Long press the M button to enter the menu, go to reticle settings in the sub-menu, and use the up and down buttons to pick different reticle styles. Select the rangefinding reticle for probabilistic distance measurement of the target.



20 Blind Pixel Elimination

Long press the M button to enter the menu, go to blind pixel elimination in the sub-menu, and use the up and down buttons to adjust the X/Y axis coordinates to the blind pixel position. Short press the up/down button to undo, clear blind pixels, and save operations.



21 Red Dot Settings

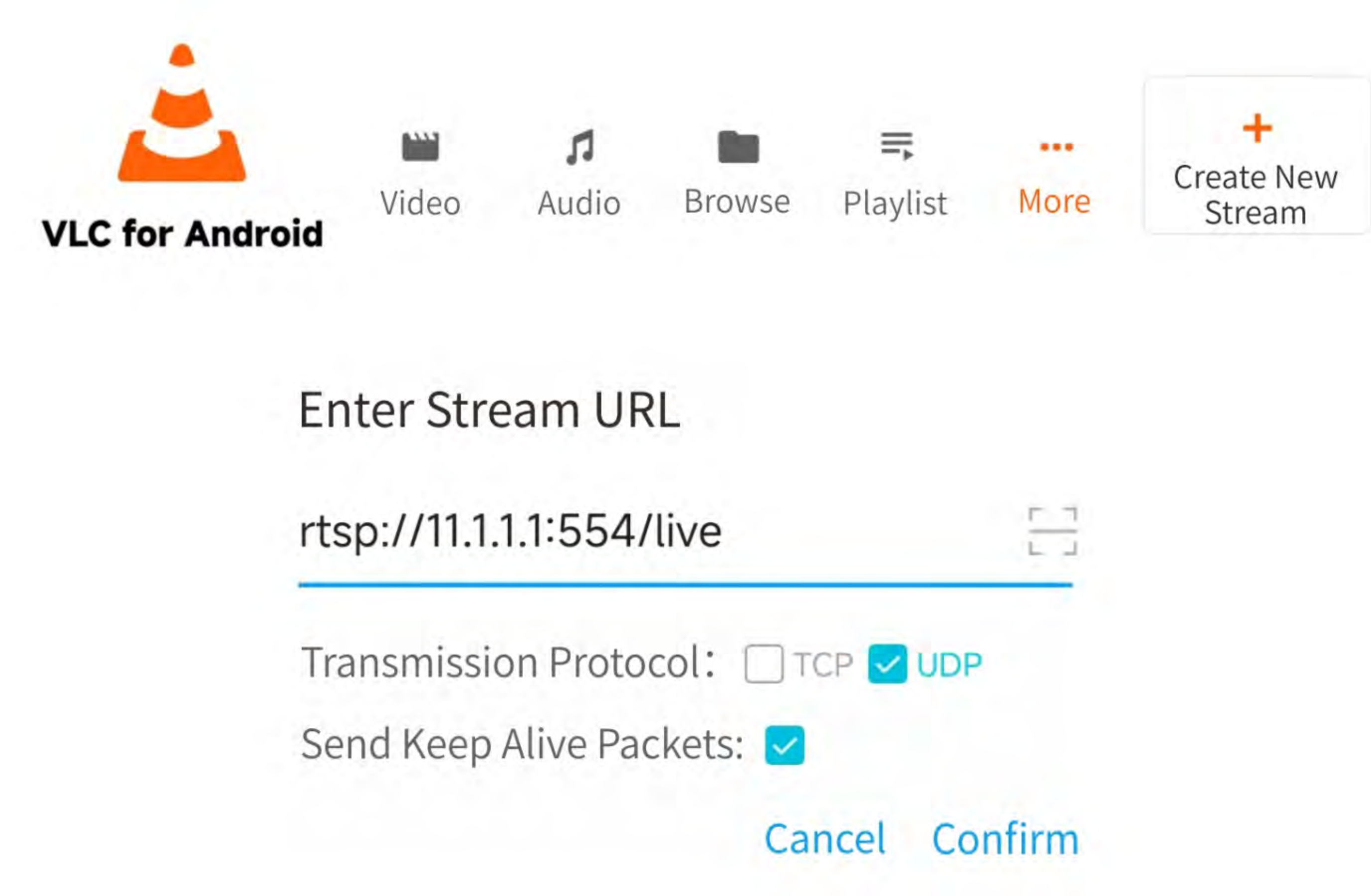
Long press the M button to enter the menu, go to red dot settings in the sub-menu, and adjust X/Y axis coordinates with the up/down buttons. Short press the up/down button to save all operations in the save option.

22 Data Retrieval

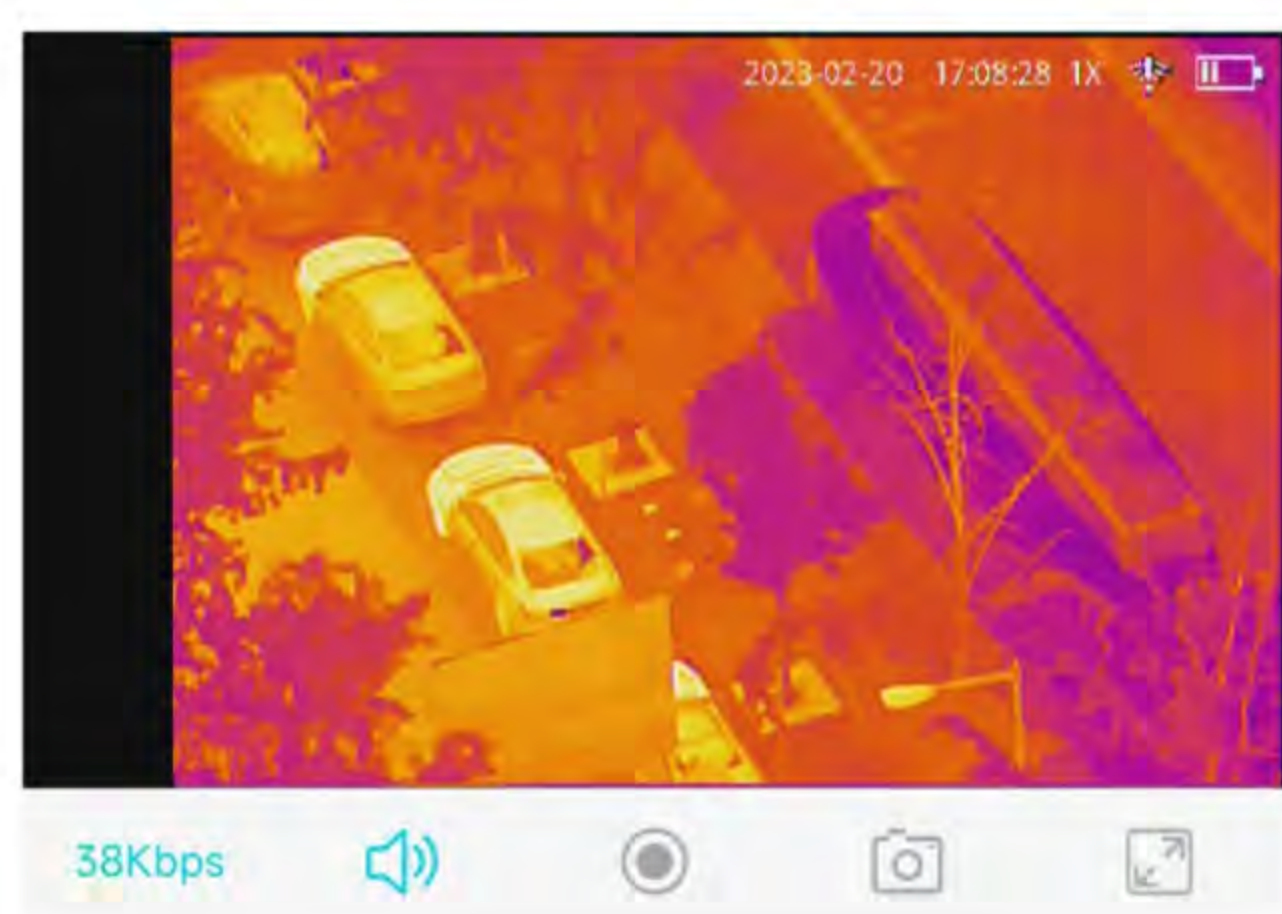
Open the Type-C interface cover, insert the Type-C data cable, connect the other end to the computer to access photos/videos stored in the SD card. Note: Photos stored in the "image" folder; Videos stored in the "video" folder.

23 Exploring Through the App

Active the hotspot feature in the main menu and enable Wi-Fi on your phone. Connect to the YNOE network with password 87654321. Launch the VLC App (available for download from the App store or browser), click on more options, and create a new stream.



Enter the address and click “connect” to observe the core image in real-time on the mobile device.



24 Charging

When the thermal imager indicates low battery, please charge it promptly. Open the Type-C interface cover, insert the charging cable, and connect to the power source for charging.

I 09 Important Safety Information

1. The rated charging voltage for this product is 5V. Please avoid overcharging. Charge the device promptly when the battery is low to prevent over discharging, which may affect the lifespan of the thermal imager.
2. Avoid extended use in high-temperature environments, as the thermal imager will enter a high-temperature protection mode and shut down automatically.
3. It is recommended to use this product within a temperature range of -20°C to $+50^{\circ}\text{C}$. Do not charge the device in an environment exceeding 40°C .
4. When using this product in a humid environment, ensure that the Type-C interface cover is tightly closed.
5. Avoid aiming the thermal imager directly at strong radiation sources such as sunlight or lasers to prevent irreversible damage.
6. Routine user maintenance involves cable inspection, periodic cleaning, and functional checks to keep the device in optimal condition.
7. During long periods of non-use, please recharge the device at least every two months and store it in a dry and well-ventilated environment.
8. If the device malfunctions, do not attempt to dismantle the module. Contact us for troubleshooting before taking any further action.

FCC Warning
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.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Specific Absorption Rate (SAR) information
This device meets the government's requirements for FCC exposure limits set forth for an uncontrolled environment. This device was tested for typical body-worn operations with the back of the Handheld Thermal Imaging Monocular kept 0 mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain an 0 mm separation distance between the user's body and the back of the Handheld Thermal Imaging Monocular. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.