



Quick Start Guide

V2.0

ZOOM |

**Thermal Imaging
Camera**

ZL38/ZH38/ZH50

Attention!

Please read this guide before using the product, and keep the guide for future reference.

You can scan the QR code below to enter the official website (www.infirayoutdoor.com) to view and download the detailed operating manual.



RoHS

Package Contents

- ZOOM Series Thermal Camera
- Portable bag
- IBP-1 battery pack × 2
- IBC-1 battery charger for battery pack
- Power adapter
- Data cable
- Neck strap
- Wrist strap
- Lens cleaning cloth
- Quick Start Guide

InfiRay Outdoor APP

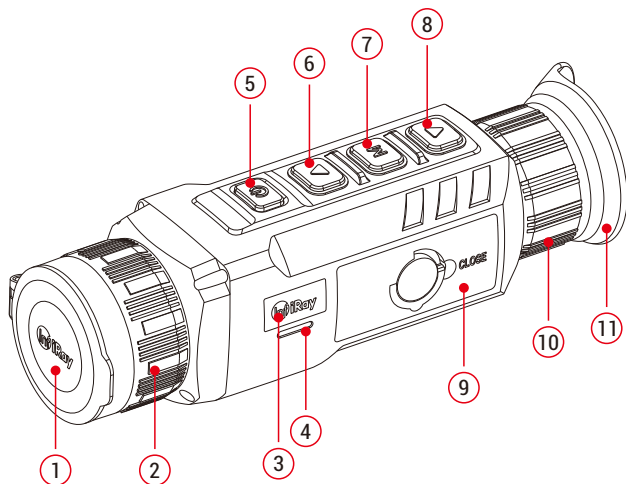
Download the InfiRay Outdoor App to transmit the image via Wi-Fi from your ZOOM to a smartphone or tablet.



InfiRay Outdoor



Components and Controls








1. Lens cap
2. Lens focus ring
3. Status lamp
4. Microphone/Altimeter
5. Power (P) button
6. UP button
7. Menu (M) button
8. Down button
9. Battery pack
10. Eyepiece
11. Eyeshade

| Getting Started

- Remove the lens cap.
- Press and hold the Power button to turn on the device.
- Rotate the diopter ring of the objective lens until the image becomes clear in the eyepiece.
- Rotate the focusing ring of the objective lens to focus on the object to be observed.
- Press the M button to enter the shortcut menu. Then, configure the image mode, display brightness, image sharpness, and image contrast to achieve the optimal visual effect.
- After completing the settings, press and hold the Power button to turn off the thermal camera.

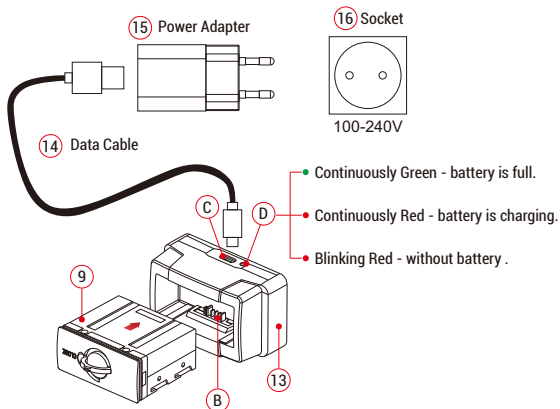
Button Operation

Button	Current status	Short press	Long press
Power button 	Powered off	--	Power on the device
	Home screen	Standby the device (the status lamp breathes)	Power off the device
	Standby mode	Wake up the device	--
	Main menu interface	Return to the upper menu without saving changes	--
Up button 	Defective pixel correction	Add/delete defective pixels	--
	Home screen	Digital zoom	Turn on/off the PIP function
	Menu interface	Navigation upwards	--
M button M	Home screen	Open the shortcut menu	Open the main menu
	Shortcut menu interface	Switch and confirm parameters	Save and back to the home screen

Button	Current status	Short press	Long press
M button M	Shortcut menu interface	Switch and confirm parameters	Save and back to the home screen
	Main menu interface	Enter the submenu / Switch and confirm the parameters	Save and back to the home screen
	Defective pixel correction interface	Confirm selection / Save position	--
Down button 	Home screen	Take a Photo	Start a video recording
	Menu interface	Navigation downwards	
	Video recording	Take a Photo	Stop and save the video
Up + M buttons  + M	Home screen	--	Turn on/off the stadiametric rangefinder function
Down + M buttons  + M	Home screen	--	Turn on/off the hotspot tracking function

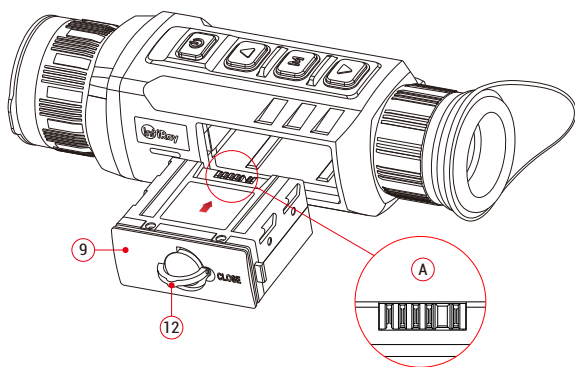
Battery Pack Charging

- Align the pins **(A)** of the battery pack **(9)** with the groove **(B)** of the battery charger **(13)**, and insert the battery pack **(9)** into the battery charger **(13)**.
- Connect the Type-C plug of the data cable to the port **(C)** of the battery charger **(13)**.
- Connect the other plug of the data cable to the USB port of the power adapter **(15)**.
- Insert the power adapter **(15)** to a 100V - 240V power socket **(16)** to charge the battery pack.
- Upon installation, the LED indicator **(D)** on the battery pack charger **(13)** will start to glow or blink.
- After fully charged, remove the battery pack from the battery charger **(13)**.



Battery Pack Installation

- Pull out the ring-pull (12) from the battery pack (9), rotate it clockwise until it is in the horizontal direction with the battery pack (9).
- Align the pins (A) of the battery pack (9) with the groove of the device to install the battery pack (9) into the ZOOM series thermal camera.
- When the battery pack (9) is fully inserted into the case of the ZOOM series thermal camera, rotate the ring-pull (12) 90 degrees counter-clockwise to lock the battery pack (9). The ring-pull (12) is in the vertical position.
- Upon installation, flip down the ring-pull (12). When the bulge on the ring-pull (12) points to 'CLOSE' on the battery pack (9), the battery pack (9) is installed.



Specifications

Model	ZL38	ZH38	ZH50
Detector Specifications			
Type	Uncooled Vox		
Resolution, pixels	384×288	640×512	
Pixel size, um	12		
NETD, mK	≤ 25		
Frame rate, Hz	50		
Optical Specifications			
Objective lens, mm	19 / 38	19 / 38	25 / 50
F-number	0.9 / 1.2	0.8 / 1.0	0.88 / 1.1
Field of View, °	13.9 × 10.4 / 6.9 × 5.2	22.9 × 17.2 / 11.5 × 8.7	17.5 × 13.1 / 8.7 × 6.6
Magnification, ×	2.7 ~ 21.3	1.6 ~ 12.8	2.2 ~ 17.6
Detection Range, m (Target size: 1.7mx0.5m, P(n)=99%)	987 / 1974	987 / 1974	1298 / 2596
E-zoom	1× / 2× / 3× / 4×		
Exit Pupil Distance, mm	20		
Exit Pupil Diameter, mm	5.5		
Diopter, D	-5 ~ +5		

Model	ZL38	ZH38	ZH50
Display			
Type	FHD OLED		
Resolution, pixels	1440 × 1080		
Dimension, inch	0.4		
Battery			
Battery Type	Li-ion Battery Pack IBP-1 / 4400mAh / DC3.7V		
Working Voltage, V	3 ~ 4.2		
External Voltage, V	5 (Type C USB)		
Physical Specifications			
Battery Life*, h	12	10	
Memory Capacity, GB	32		
Operating Temperature, °C	-20 ~ +50		
Weight, g	≤ 540	≤ 580	≤ 650
Dimension, mm	190 × 65 × 60		195 × 65 × 60

★ The actual operating time depends on the density of Wi-Fi use, photographing, video recording, etc.

- Improvements may be made to the design and software of this product to enhance its features.
- If there is any change to the technical specifications of the product, it will be made without prior notice to the user.

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