ERDI LASER®

Thermal Image Scope User Manual

<mark>Model:IR384K35</mark>

⋥ IMPORTANT SAFETY INFORMATION

Environmental influences

Note: Never point the lens of the device directly at intense heat sourcessuch as the sun or laser equipment. The objective lens and eyepiece canfunction as a burning glass and damage the interior components.

Risk of swallowing

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

Information on disposal in other countries outside of the EuropeanUnion

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

Safety instructions for use

- Do not expose the device to fire or hightemperatures.
- The battery capacity decreases when operated in a cold ambienttemperature. This is not a fault and occurs for technical reasons.
- Always store the device in its carrying bag in a dry, well-ventilatedspace. For prolonged storage, remove the batteries.
- Do not expose your device to extreme temperatures lower than - 20°Cand higher than + 50°C.
- The product shall only be connected to a USB Type C interface.
- If the device has been damaged or the battery is defective, send thedevice to our after-sales service for repair

⋺ PRODUCT DESCRIPTION

This product can observe the surrounding environment in complete darkness, all-weather use, set observation, ranging, magnification and other functions in one, efficient ergonomics, convenient rail adaptation to a variety of equipment, can identify potential hazards in complex environments in advance.

⋺ COMPONENTS AND CONTROLS

① Eyeshade

② Visibility control

③ UP button

④ M menu function button

⑤ DOWN button

⑥ Power button

⑦ Ranging module

⑧ Infrared lens

⋺ PRODUCT SPECIFICATION

Category	IR384K35
Parameters of Infrared Detector	
Resolution, Pixels	384×288
Pixel Size	12 μm
NETD (Noise Equivalent Temperature Difference)	≤50mk
Frame Rate	50Hz
Optical Parameters	
Objective Lens Focal Length	35mm
Objective Lens Aperture	F1.0
Objective Lens Field of View (FOV)	7.5×5.6°
Focusing Method: Manual	Manual
Eyepiece Exit Pupil Distance	55mm
Eyepiece Exit Pupil Diameter	6mm
Eyepiece Diopter Adjustment	-5D~+5D
Observation Distance (Human)	350m
Display	
Type	AMOLED
Resolution	1024×768
Size	0.39
Brightness adjustment	Support, up to 200nit
Power supply	
Battery type	Rechargeable lithium battery
Battery parameters	18650（3400mah）
Number of batteries	2
Battery voltage	Nominal 3.7V
External power supply	5V /2A USB TYPE C

Operating time (at 25℃)	10h

Peripheral devices	
Electronic compass	Support
Attitude sensor	Support
WIFI	2.4G
Laser ranging wavelength	905nm
Laser ranging accuracy	±1m
Laser ranging distance	1Km

Physical parameters	
Weight	860g (including battery)
Dimension	245mm×65mm×100mm (including lens cap)
Protection level	IP67
Impact	1000g/0.4ms
Operating temperature	-20℃~50℃

System Functions	
Recording/Photographing	Support
Video and Image Playback	Support
Electronic Zoom	1X, 2X, 4X
Internal Storage	32GByte
Hotspot Tracking	Support
Picture-in-Picture (PIP)	Support
Color Palette	White Hot, Black Hot, Red Hot, Fusion
Brightness Adjustment	Support
Contrast Adjustment	Support
Image Correction	Automatic, Manual
Target Trajectory Prediction	Support
Target Tracking	Support
Target Recognition	Support
WiFi Hotspot	Support
Standby Mode	Support
Reticle Pattern Adjustment	Support, 5 styles, 6 colors
Measurement Unit Settings	Metric, Imperial
Time Settings	Automatic, Manual

ꓤ BUTTON INSTRUCTION

Button	Status/Current Operation Mode	Short Press	Long Press
P（⏻）Button	Power off	——	Open device
	Power on	——	Shutdown device
	Menu or functional interface	Return to the upper-layer menu without saving	——
U（▲）Button	Main menu	Up navigation	——
	In intelligent aiming mode	Target locking/Relocking	——
M（M）Button	Home screen	Enter main menu	——
	Main menu	Enter submenu/Confirm selection	——
D（▼）Button	Main menu	Down navigation	——
U+M Combination	Home screen	Laser ranging	——
M+D Combination	Home screen	Start recording	——
D+U Combination	Home screen	Image calibration	——

R ICON DESCRIPTION

Icon	Function	Icon	Function
[AI]	**Artificial intelligence recognition**		**Hot tracking**
	Factory mode		**Intelligent tracking**
	Digital zoom		**Wireless network**
	Image calibration		**Time setting**
	Compass calibration		**System setting**
	Battery Indicator		**Screenshot**
	Laser ranging		**Video Recording**
	Color palette		**multi-media**
	Image setting		**Picture in picture display**
	More settings		**system information**
	Crosshair correction		**Return to main menu**

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ꙅ HOME SCREEN

Home Screen Interface

➢ **Start (the machine or engine)**
When the device is turned off, press and hold the power button for 3 seconds to turn on the power of the device, and the boot screen will appear.

➢ **switch an electrical device off**
In the power-on state, press and hold the power button for 5 seconds to turn off the power.

➢ **bide one's time**
In the power-on state, press the power button briefly to enter the standby state. When in standby, press the power button briefly again to wake up the screen.

➢ **focus**
Open the lens protection cover, and adjust the objective lens through the focusing handwheel. Turn it counterclockwise to be far focus and clockwise to be near focus.

ꙅ OPERATING INSTRUCTIONS

➢ **Main Menu**
After turning on the machine, press the M button briefly to enter the menu. Press the up and down buttons briefly to switch the main menu options. After selecting the main menu function, press the M button briefly to enter the submenu options. Refer to the menu icon for specific definitions.
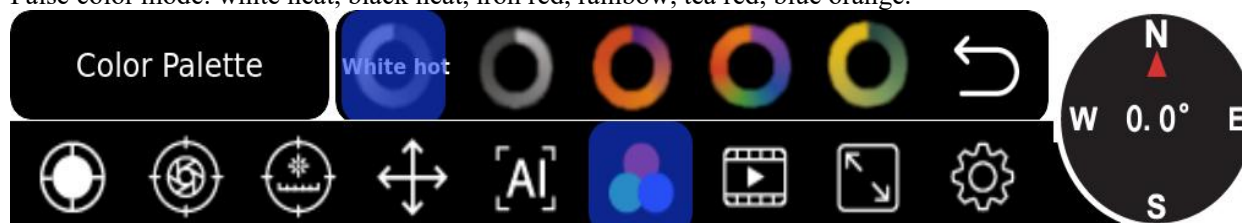
➢ **Electron zoom**
In the power-on state, electronic zoom is selected in the main menu, and short press the M button to select zoom factors, which are 1x, 2x and 4x respectively.
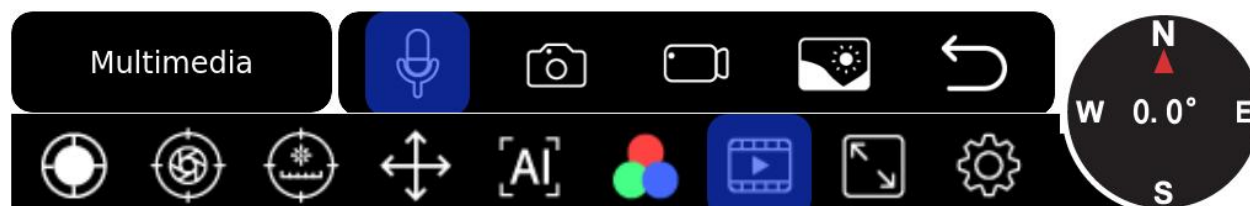
> **pallette**

Select the pseudo-color mode in the main menu, and short press the M button to switch the pseudo-color mode.
False color mode: white heat, black heat, iron red, rainbow, tea red, blue orange.

> **Taking photos/videos**

Select the photo/video function in the main menu, and press the M button +D button to take photos or video at the same time. After that, the saved prompt will be displayed in the interface.

> **Artificial intelligence recognition**

Select the artificial intelligence identification function in the main menu, and press the M button briefly to turn on intelligent identification, which can automatically identify people, cars, animals and other targets and make box selection.

> **Hot spot tracking**

Select the hotspot tracking function in the main menu, and press the M button briefly to turn it on. After turning it on, it will automatically identify the brightest spot on the screen and mark it.

> **Intelligent aiming**

Select the intelligent aiming function in the main menu, press the M button briefly to turn it on, automatically box and select the target tracking at the cross target, and predict the motion trajectory.

> **Alignment calibration**

Select the alignment function in the main menu, press the M button to enter the submenu, press the M button to select the horizontal/vertical movement function, and move the alignment position by pressing the up and down buttons.

> **laser ranging**

Select the laser ranging function in the main menu, press the M button briefly to start ranging, and the ranging distance will be displayed in the upper left corner of the screen.

> **multi-media**

Select the multimedia function in the main menu, and press the M button briefly to enter the sub-menu, where you can take photos, record videos and view pictures.

> **time calibration**

Select the alignment calibration function under the system setup menu, press the M button briefly to set the time, adjust the digital size by pressing the up and down buttons, and finally select OK to exit.

> **laser ranging**

Select the laser ranging function in the main menu, press the M button briefly to start ranging, and the ranging distance will be displayed in the upper left corner of the screen.

> **Visibility adjustment**

Adjust the eyepiece visibility by adjusting the visibility handwheel to adapt to users with different curvature requirements.

> **Baffle correction**

When the image is unclear, select the baffle correction function in the main menu, and press the M button briefly to correct the image baffle.

> **system setup**

Select the system setting function in the main menu, and press the M button briefly to enter the submenu, where you can perform operations such as picture-in-picture, WIFI, hotspot tracking, image setting, time calibration, compass correction, icon setting, system information, and factory recovery.

ꓤ TECHNICAL INSPECTION

A technical inspection of the device 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 (there should be no cracks,greasy spots, dirt or other deposits)
- Check the condition of the rechargeable battery (this should be charged)and the electrical contracts (there should be no presence of salts oroxidation).

ꓤ MAINTENANCE

Maintenance should be carried out at least twice a year and consistof the following actions：

- Wipe the external surfaces of metal and plastic parts free of dust and dirtwith a cotton cloth. Silicone grease maybe used for this.
- Clean the electrical contacts of the battery and battery slot on the unitusing a non-greasy organic solvent.
- Check the glass surfaces of the eyepiece and the lens. lf necessaryremove dust and sand from the lenses (preferably using a non-contactmethod). Cleaning of the external surfaces of the optics should be done with substances designed especially for this purpose.