

UNI-T®



**UTx313MR/UTx318MR/UTx325MR
Thermal Monocular with Rangefinder
Quick Start Guide**

P/N:110401112921X

PREFACE

Thank you for purchasing the new UTx313MR/UTx318MR/UTx325MR Thermal Monocular with Rangefinder. In order to use this product safely and correctly, please read this manual thoroughly, especially the Cautions part.

After reading this manual, it is recommended to keep the manual at an easily accessible place, preferably close to the device, for future reference.

LIMITED WARRANTY AND LIABILITY

Uni-Trend guarantees that the product is free from any defect in material and workmanship within one year from the purchase date. This warranty does not apply to damages caused by accident, negligence, misuse, modification, contamination and improper handling. The dealer shall not be entitled to give any other warranty on behalf of Uni-Trend. If you need warranty service within the warranty period, please contact your seller directly.

This warranty is the only compensation you can obtain. Uni-Trend will not be responsible for any special, indirect, incidental or subsequent damage or loss caused by any reason or speculation. As some areas or countries do not allow limitations on implied warranties and incidental or subsequent damage, the above limitation of liability and stipulation may not apply to you.

 Cautions

1. Use or store the device in permitted operating or storage temperature to avoid damage.
2. Do not aim the device at strong heat sources, such as sun, laser device, spot-welder, etc.
3. Do not knock, toss, or shake the device and accessories.
4. Do not place battery in high temperature environment or close to the high temperature targets. Do not cause the battery polarity short circuit. Do not place battery into damp condition or water.
5. Do not use solvents or similar liquids on the product or cables.
6. Please refer to the following instructions to wipe the device:
 - Non-optical surface: If necessary, use a clean and soft cloth to wipe the non-optical surface of the thermal imager.
 - Optical surface: Avoid staining the optical surface of lens when using the thermal imager, and especially avoid touching lens with hands, as it can leave traces on the lens glass and may corrode (erode) the optical coating layer on the glass surface. When optical surface is stained, wipe it carefully with a dedicated lens paper.
7. Keep it stable when using the device.
8. Cover the lens when not used, and put Thermal Monocular and its accessories into the specialized package box.
9. Please do not disassemble the device to avoid product damage and loss of warranty rights.
10. Due to different batches, the materials and details of actual products may be slightly different from the graphic information. Please refer to the actual goods received.
11. The experimental data provided in this manual are theoretical values obtained from Uni-Trend's international laboratories and are for reference only. Customers should not use this data as a basis for placing orders. If you have any questions, please contact customer service for detailed consultation.

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1. Product Overview

UTx313MR/UTx318MR/UTx325MR is a Thermal Monocular with Rangefinder featured with compact design, easy-to-use operation and wide application scenes. There are built-in high-sensitivity infrared detector and integrated high-accuracy laser ranging module, sturdy and durable, suitable for mid-long distance observation, an ideal tool for night vision.

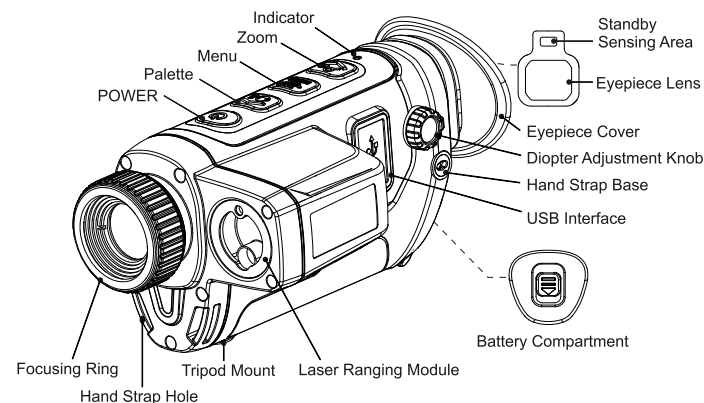
2. Product Features

High-sensitivity infrared detector, accurately detect targets.
Integrated high-accuracy laser ranging module, accurately detect targets within 1200m.
Features an OLED display screen with 1024x768 pixels, in comfortable vision.
PIP mode, highlight targets.
Connect mobile APP via Wi-Fi, real-time images projection is supported.
Ip67 rating, sturdy and durable.
Compact design, easy-to-carry.

3. Packaging List

Items	Quantity
Thermal Monocular	1
USB Cable	1
Charging Base (UT-Z040)	1
Rechargeable Li-ion Battery (UT-M21)	2
Hand Strap	1
Shoulder Strap	1
Quick Start Guide	1
Warranty Card	1

4. Product Appearance



5. Buttons

Buttons	Current Status	Short Press	Long Press
 POWER	Power off	/	Power on
	Main interface	Shutter calibration	Standby (0~3S) 、 Power off (>3S)
	Menu bar	Return	Standby (0~3S) 、 Power off (>3S)
 Palette	Main interface	Palette switch	Laser ranging ON/OFF
	Menu bar	Up	Up fast
 Menu	Main interface	Open shortcut menu	Open menu
	Menu bar	Confirm	Return
 Zoom	Main interface	Digital zoom	Photo-capture/Video-record
	Menu bar	Down	Down fast

6. Display



Items	Description	Items	Description
1	E-compass	5	Zoom
2	Wi-Fi	6	Time
3	Video Output	7	Battery Status
4	Calibration Mode	8	Distance

7. Shortcut Menu



Scene Modes	Bird/Forest/Rock/Custom mode.
Palette	Switch between Ironbow ,Black Hot, White Hot,Red Hot and Rainbow
Screen Brightness	Level 1-5 is adjustable
PIP	Open PIP mode
Photo/Video	Photo-capturing and video-recording
Continuous Digital Zoom	Digital zoom thermal images continuously
Stadiametric Rangefinder	Calculate the probable distance of a known target

8. Menu

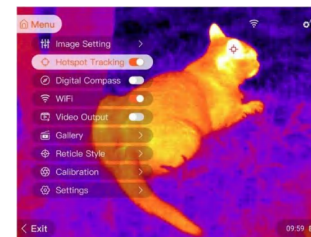


Image Setting	Thermal images' brightness, contrast and sharpness are adjustable.
Hotspot Tracking	The tracking icon shows on the screen, auto track the highest temperature point when this function ON.
Digital Compass	Compass displays on the screen when this function ON.
WiFi	Make Wi-Fi ON to connect Hotspot and use mobile APP
Video Output	Use Type-C cable to connect external screen, make video output ON and images display on the external screen.
Gallery	Enter it to preview images and videos
Reticle style	Select the center-point to mark the icon and color.
Calibration	Auto/Manual/Background calibration is optional, and the current calibration mode shows icon on the top right side of main interface.
Settings	Enter to options of languages, units, date, time and etc.



Languages	Chinese/English
Unit	m/yd
Date	Set the device's date
Time	Set the device's time
Auto Standby	Auto screen off after 3 seconds when it leaves human body and screen auto lights on when device closes to the eyes.
Auto Power	Set the auto-power-off time as per needed.
Laser Ranging	Single or continuous measurement is optional, laser indication ON/OFF.
Compass Calibration	It is used to calibrate E-compass and improve its accuracy.
Defect Pixel Calibration	It is used to calibrate dead pixels in images and keep images completed and clear.
Factory Reset	Restore the device to default settings.
Production Information	View product model, software/firmware version, etc.

9. Mobile APP

Step 1

For iOS, search "Thermal Xplorer" in APP Store.

For Android, search "Thermal Xplorer" in Google Play Store or download it from UNI-T's official website.



iOS download



Android download

Step 2

- Turn on Wi-Fi hotspot on the device.
- Search Wi-Fi name of "UTx318MR *****" on mobile phone.
- Enter password 12345678 to connect Wi-Fi.
- Enter the App to get functions of real-time image transmission, remote viewing and images download, etc.

Note: To ensure stable data transmission, please try to maintain the connection within a range of 10m and ensure there are no obstacles blocking the signal.

10. Charging

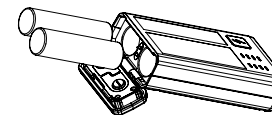
The device supports direct charge from 5V/2.5A power adapter, or use standard charging base to separately charge the battery.

Directly charge device via the Type-C cable, see indicators as following:

- Solid light in red means being charged.
- Solid light in green means charge finished.

Separately charge battery via the standard charging base, please install battery as per the instruction and see indicators as following:

- Flashing light in green means being charged.
- All light in green means charge finished.



11. Troubleshooting

Please check and repair as per suggestions in the list if any following troubles occurred. Please send the device back to factory or contact your seller if meet troubles not in the list or fail to repair by yourself.

Troubles	Possible Reasons	Solutions
Fail to power on	Too low battery	charge
Fail to charge	Charger loosen	Re-plug
	USB cable damaged	Replace USB cable
Too dark to see images	Low screen brightness	Adjust screen brightness
Unclear images, uneven lines or background	Uncalibrated	Calibrate as per the user manual
Clear icon but unclear images	No focus on lens	Rotate the focusing ring of lens to make images clear.
	Dust or freeze on lens	Use soft cloth to wipe the optical surface, or let device in warm and dry condition for at least 4 hours standing.
Fail to connect with smartphone	Incorrect Wi-Fi password	Enter correct password
	Too much Wi-Fi signal interference	Change a place to search and connect Wi-Fi
Wi-Fi signal disappeared or interrupted.	Either the phone is out of Wi-Fi hotspot coverage area or there are obstacles blocking the signal between phone and device.	Maintain the connection in range of 10m and ensure there are no obstacles blocking the signal.
Observed targets disappeared	Observe targets through the glass	Remove glass from your eyesight.
Poor image quality or short detection distance	Possibly caused by bad weather condition (rain, snow, fog)	
Poor image quality in low-temperature condition	Temperature contrast is crucial for imaging capability of thermal imaging devices. In above-zero temperature conditions, there are different temperature rises among observed objects, the environment and the background due to varying thermal conductivities. This creates higher temperature contrasts, thereby improves image quality. In below-zero conduction, observed objects, the environment, and the background typically cool to approximately same temperature, greatly decreases temperature contrasts and results in poorer image quality. This is one of characteristics of thermal imaging devices.	

12. General characteristics

Recommended usage environment : indoor
 Pollution degree : 2
 Altitude : up to 2000m
 Operating temperature : -10°C~ 50 °C
 Storage temperature : -20°C~ 60 °C

13. FCC Compliance Statement

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.

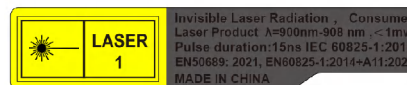
Please note that changes or modifications of this product is not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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.

14. Product Label



Class1 Laser product.

Caution

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure

The content of Quick Start Guide is subject to change without prior notice.

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