

UNI-T®



UTi720B
Thermal Imager Quick Start Guide

P/N:110401113365X

PREFACE

Thank you for purchasing the new UTi720B Thermal Imager. 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 specified operating or storage temperature to avoid damage.
2. Do not aim the product at strong heat sources, such as sun, laser device, spot-welder, etc.
3. Do not knock, toss, or shake the product and accessories.
4. Do not use dissolved or similar liquids on the product or cables.
5. Please follow 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: Do not stain the optical surface of lens when using the thermal imager. Especially not to touch lens with hands, cause it may erode the optical coating layer on the glass surface. When the optical surface is stained, wipe it carefully with a special lens paper.
6. Keep it stable when using the device.
7. Please do not disassemble the device to avoid product damage and loss of warranty rights.
8. Due to different batches, the materials and details of actual products may be slightly different from the graphic information. Please refer to the goods received.
9. The experimental data in the manual are theoretical values and all from Uni-Trend's internal laboratories, for reference only. Customers cannot use them as basis for placing orders. If users have any questions, please contact customer service.

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1. Product Overview

UTi720B Handheld Thermal Imager equips wide temperature measurement range and multiple image modes for different imaging requirements, PC software and mobile APP for images analysis and report generating, meanwhile, real-time image transmission is supported.

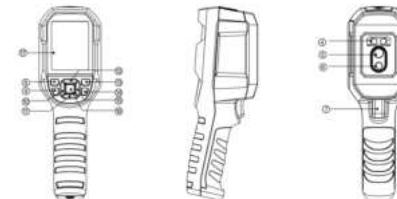
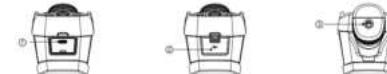
2. Product Features

- Super Resolution: 512 x 384
- T-Mix Dual-light Fusion
- Real-time Video Recording
- Equips Professional PC Analysis Software
- Equips Mobile App (iOS & Android)
- IP65 Rating
- 2m Drop-Proof

3. Packing List

Items	Quantity
Thermal Imager	1
USB Cable	1
Quick Start Guide	1

4. Product Appearance

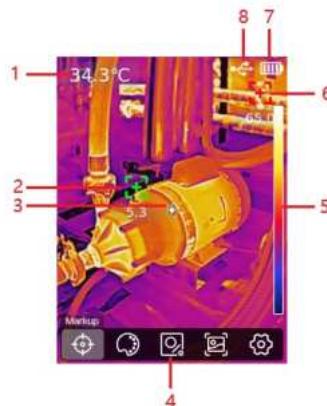


Items	Description	Items	Description
1	Type-C USB Interface	9	Lighting Lamp button
2	Protective Cover	10	LEFT
3	Tripod Mounting Hole	11	DOWN
4	LED Light	12	UP
5	Infrared Camera Lens	13	Gallery button
6	Visible-Light Camera Lens	14	RETURN
7	Trigger	15	RIGHT
8	POWER	16	SET

4.1 Buttons

1. POWER button: Long press to power on/off.
2. LED light button: Press to be lighting lamp on/off.
3. SET button: Open Menu Bar/ Confirm the selection.
4. Navigation buttons(Left/Right/Up/Down): Control to move cursor, long press for continuous move, short press for single move.
5. Gallery button: In the main interface, press to open Gallery.
6. RETURN button: Back to the previous interface.
7. Trigger: Press to capture image or take video in the main interface.

5. Display



Items	Description	Items	Description
1	Center Spot Temperature	5	Range Bar
2	Auto MIN.Temperature Tracking	6	Auto MAX.Temperature Tracking
3	Center Spot	7	Battery Status
4	Menu Bar	8	USB Icon

5.1 Menu Bar

1. Temperature Mark: Center spot, Hi/Lo spot and its temperature display.
2. Color Palettes: 7-color, Ironbow, Rainbow, Lava, White Hot, Red Hot, Black Hot, and Rainbow HC.
3. On screen analyzer: 5 points/3 rectangles can be added (up to 6 measurement tools), Preset tools add/save, Clear All (Measurement tools).
4. Image Modes: Thermal Imaging, Visual Imaging, T-Mix Fusion, PIP.
5. Settings: For system settings.

6. System Settings

Capture Mode	Single Shot/Video/Time-lapse
Super-resolution	Super-resolution ON/OFF.
Units	Temperature units (°C/K/°F) / Distance units (m/ft)
Temperature range	Auto-Range, -20~150°C, 120~550°C
Parameter	Emissivity (0.01~1.00), Ambient Temperature (-20~60°C), Reflected Temperature (-20~60°C), Humidity (0~100%RH), Distance Compensation (0.15~4.00m),
HI/LO Alert	High/Low temperature alarm, LED alarm, Buzzer alarm ON/OFF.
Language	Switch between "English/German/French/Spanish/Italian/Swedish/Polish/Czech"
Date & Time	Hour/Date/Time
Wi-Fi	Wi-Fi ON/OFF, Wi-Fi ON can modify its name and password, connects mobile to use App.
USB Mode	USB Storage/USB Projection
Brightness	Adjustable (1~100%)
Auto Power Off	Auto power off time can be set.
Factory Reset	Set to the factory default setting.
Format	Format the memory, clear the gallery.
About	Check the device information.

7. Temperature Measurement Parameters

Emissivity:

The ratio of the measured object to the black body with the same temperature, which is an essential indicator to measure the radiant energy of the object. Its value ranges from 0.01 to 1.00.

Ambient Temperature:

The ambient temperature at which the thermal camera and the measured object are located.

Reflected Temperature:

The radiant energy influence from other heat sources surrounding the measured object.

Measurement Distance:

The distance between the thermal camera and the measured object.

Relative Humidity:

The percentage of water vapor content in the air during the transmission of radiant energy from the measured object.

⚠ Note:

1. The accurate setting of the above parameters has varying degrees of influence on the final temperature measurement results.
2. Recommended Values: In case of uncertainty regarding these parameter values, the following recommended values are generally suggested:

Emissivity	0.95
Ambient Temp.	25°C
Reflected Temp.	25°C
Relative Humidity	55%RH
Distance	0.25m

3. Temperature Measurement Range : -20°C~ 550°C

4. Accuracy :

±1.5°C/±1.5% (whichever is greater, 20°C~120°C, Room temperature 25°C)

±2°C/±2% (whichever is greater, -10°C≤ Temperature < 20°C ,

120°C < Temperature≤550°C, Room temperature 25°C)

8. Mobile APP

Step 1

For iOS, search "Thermal Link" in APP Store or scan the following QR code to download.

For Android, access UNI-T's website or scan the following QR code to download "Thermal Link".



iOS



Android

Step 2

- Open Wi-Fi on the device.
- Search Wi-Fi name of "UTi720B" on mobile phone.
- Enter 12345678 to connect Wi-Fi.
- Enter the App to get functions of real-time image transmission, remote viewing and images download, etc.

Note: Please keep the connection range within 10m and no obstacles to ensure the stable data transmission.

9. 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.

10. Notes

1. Indoor use
2. Pollution degree: 2
3. Altitude: up to 2000m
4. Relative humidity: <85%, non-condensing
5. Operating temperature: -10°C~50°C
6. Storage temperature: -20°C~60°C
7. Please use a charging cable incorporating ferrite cores with this unit to ensure compliance with the Class B FCC limits.