

UNI-T®



UTi32

Thermal Imager User Manual

P/N: 110401114695X

PREFACE

Thank you for purchasing the new UTi32 thermal imager. In order to use this product safely and correctly, please read this manual thoroughly, especially the Safety Instructions 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.

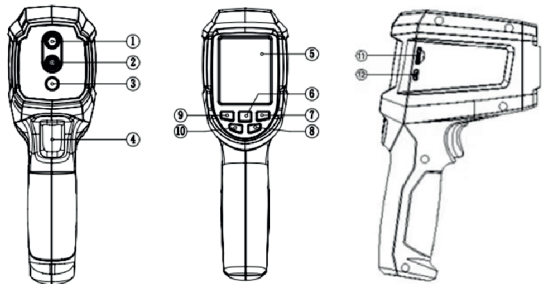
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1. Technical Specifications

Display	2.4" LCD
IR resolution	32*32 pixels
Field of view	30°*30°
NETD	0.15℃
Frame rate	9Hz
Focus mode	Focus free
Measurement range	-20℃~1000℃
Accuracy	±2% or ±2℃
Temperature display	Center point temperature, high/low temperature tracking
Units	℃/℉
Measurement resolution	0.1°
Emissivity	0.01~1.00 adjustable
Image capture	√
Visible light	√
Image modes	Thermal, visible, fusion
Palettes	3
High/low temperature tracking	√
LED flashlight	√
Battery	3.7V Li-ion (18650)
Battery life	7h
Power	power off/5/10/30min
Storage type	Mirco SD card
USB interface	Micro USB
Transport/storage environment	-20℃~60℃ (-4℉~140℉) <85%RH (non-condensing)
Operating temperature	0℃~50℃ (32℉~122℉)
Operating humidity	10%~95% RH (non-condensing)
Product size	205×124×65
Product weight	303.7g
Accessories	USB cable, user manual

2. Product Structure

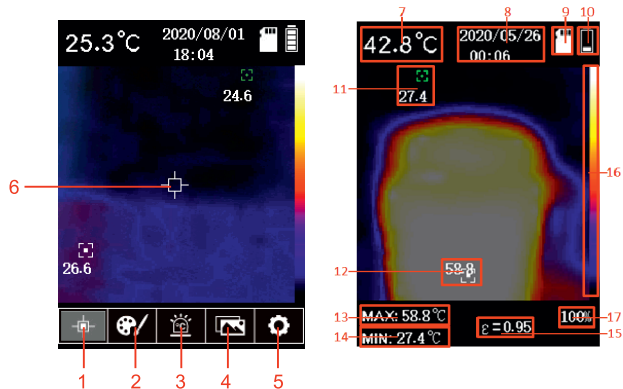


NO.	Description
1	Infrared camera lens
2	Visual light camera lens
3	LED flashlight
4	Trigger (image capture)
5	LCD
6	OK
7	Right
8	Return (LED flashlight)
9	Left
10	Power
11	SD card slot
12	USB interface

3. LCD Indicators/Icons

Display size: 2.4" (495mm×377mm)

Display resolution: 320 (vertical) × 240 (horizontal)

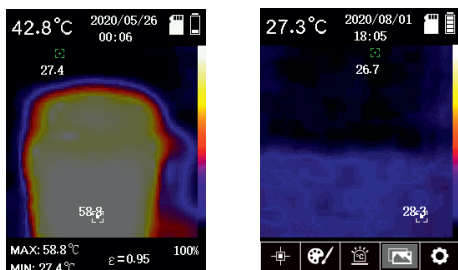


NO.	Description	NO.	Description
1	Cursor	10	Battery status
2	Palette	11	Lowest temperature spot
3	HI/LO alarm	12	Highest temperature spot
4	Image viewing	13	Current highest temperature
5	Settings	14	Current lowest temperature
6	Center point	15	Current emissivity
7	Center point temperature	16	Current palette
8	Date and time	17	Fusion rate
9	SD card		

4. Power on/off

Long press the power button to turn on/off the thermal imager.

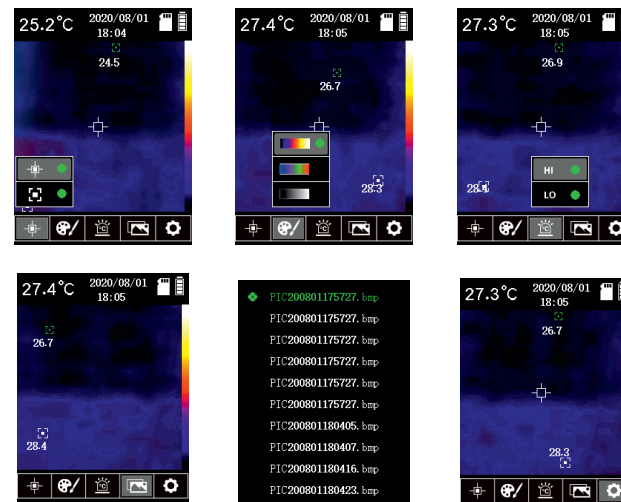
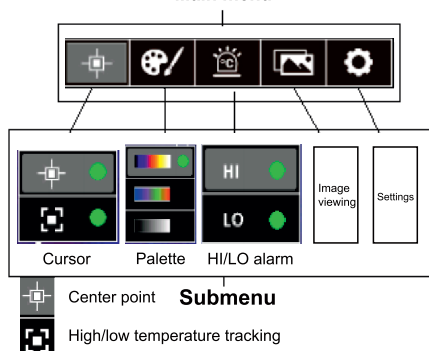
5. Menus



In the main interface:

1. Press the OK button to open the main menu.
2. Press the Left/Right button to step through submenus.
3. Press the OK button to open the selected submenu.
4. Press the Left/Right button to step through the options in the submenu.
5. Press the Return button twice to exit the menu and return to the main interface.

Main menu and submenu
Main menu



6. Image Capture and Storage

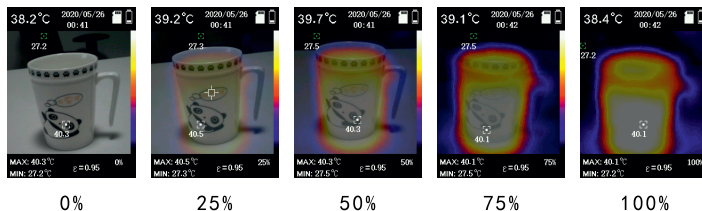


Press the trigger to capture an image. The interface will be frozen, and two options will show at the bottom of the screen. Press the Left button to select "YES" and save the captured image. Press the Right button to select "NO" and not save the image.

7. Flashlight

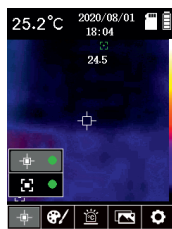
Long press the Return button  to turn on/off the flashlight.

8. Visible Light Fusion



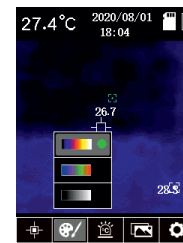
In the main interface, press the Left or Right button ( or ) to switch the image modes. The fusion rate will step through 0%>25%>50%>75%>100%.

9. Center Point and High/Low Temperature Tracking



Press the OK button to open the main menu. Press the Left/Right button to select the Cursor , and press the OK button to enter its submenu. Press the Left/Right button to step through the options in the submenu, and press the OK button to select  (Center). When a green dot appears after the option, it means that the center point cursor function is turned on. When the dot disappears, the function is turned off. Select the  (High/Low) option, and press the OK button. When a green dot appears after the option, it means that the high/low temperature tracking function is turned on. Press the Return button to return to the main menu, and press it again to return to the main interface. The highest and lowest temperatures will be displayed at the bottom left of the main interface.

10. Palette

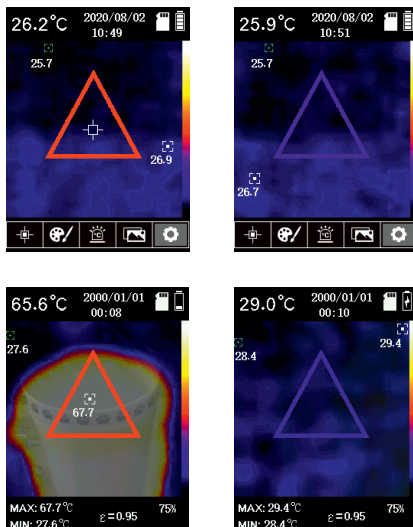


Press the OK button to open the main menu. Press the Left/Right button to select the Palette , and press the OK button to enter its submenu. Press the Left/Right button to step through three optional palettes: Iron red/Rainbow/Gray, and press the OK button to confirm. Press the Return button to return to the main menu, and press it again to return to the main interface.

11. HI/LO Alarm

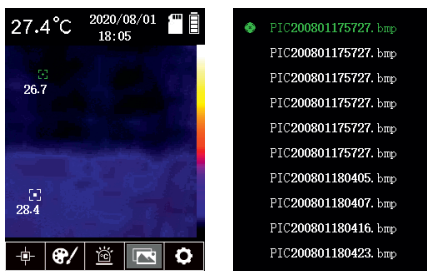


Press the OK button to open the main menu. Press the Left/Right button to select the HI/LO Alarm , and press the OK button to enter its submenu. Press the Left/Right button to step through the options in the submenu, and press the OK button to select  (HI alarm). When a green dot appears after the option, it means that the HI alarm function is turned on. When the dot disappears, the function is turned off. Select the  (LO alarm) option, and press the OK button. When a green dot appears after the option, it means that the LO alarm function is turned on. Press the Return button to return to the main menu, and press it again to return to the main interface.



When the HI alarm function is turned on and the measured temperature exceeds the HI value, a red triangle will pop up. When the LO alarm function is turned on and the measured temperature is lower than the LO value, a blue triangle will pop up.

12. Image Viewing

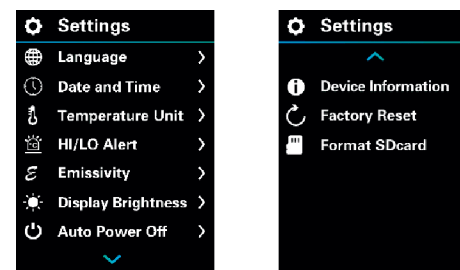


In the main menu, select the Image Viewing option , and press the OK button to open its submenu. Press the Left/Right button to step through all the images. Press the OK button to view the selected image. Press the Return button to return to the previous menu, and press it again to return to the main menu.



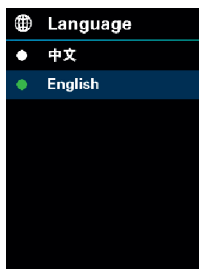
When viewing an image, press the OK button, and a box "Delete picture?" will pop up. Press the Left button to select "Yes", and press the Right button to select "No". Press the Return button to return to the main menu, and press it again to return to the main interface.

13. Settings



In the main menu, select Settings , and press the OK button to open its submenu. Press the Left/Right button to step through all the options. Press the OK button to enter the interface of the selected option. Press the Return button to return to the previous menu, and press it again to return to the main menu.

14. Language



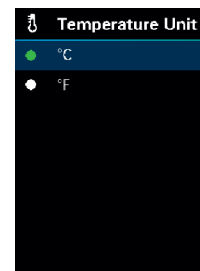
In the Settings interface, select Language, and press the OK button to enter the language setting interface. Press the Left/Right button to step through English/Chinese, and press the OK button to select a language. Press the Return button to return to the Settings interface.

15. Date and Time



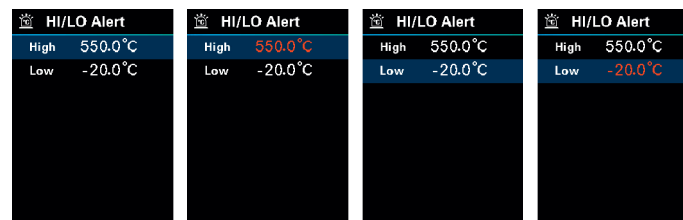
In the Settings interface, select Date and Time, and press the OK button to enter its setting interface. Press the Left/Right button to select the parameter to be adjusted. The selected parameter will change from white to blue. And then press the OK button. The parameter will change from blue to red and can be adjusted at this point. Press the Left/Right button to add or subtract the value of this parameter. Press the OK button to save the adjusted value, and the parameter color will return to blue. Press the Return button to return to the Settings interface.

16. Temperature Unit



In the Settings interface, select Temperature Unit, and press the OK button to enter the unit setting interface. Press the Left/Right button to step through °C/°F, and press the OK button to select a unit. Press the Return button to return to the Settings interface.

17. HI/LO Alert



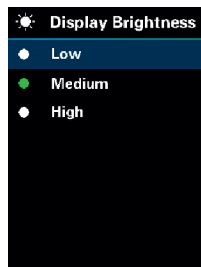
In the Settings interface, select HI/LO Alert, and press the OK button to enter its setting interface. Press the Left/Right button to step through High/Low. When selecting High or Low, users can press the OK button to adjust the temperature. At this time, the value will turn red. Then press the Left/Right button to add/subtract the value, and press the OK button to confirm. Press the Return button to return to the Settings interface.

18. Emissivity



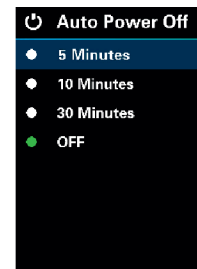
In the Settings interface, select Emissivity, and press the OK button to enter the emissivity setting interface. Press the OK button again, and the value will turn red. Press the Left/Right button to adjust the emissivity, and press the OK button to save. Press the Return button to return to the Settings interface. The range of the emissivity is 1.01~ 1.00 and the default value is 0.95.

19. Display Brightness



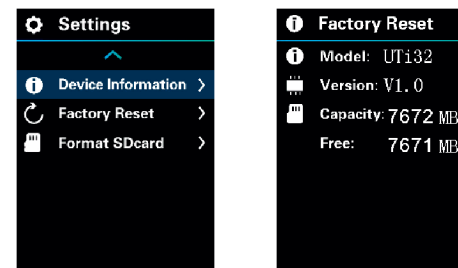
In the Settings interface, select Display Brightness, and press the OK button to enter the brightness setting interface. Press the Left/Right button to step through Low/Medium/High, and press the OK button to confirm. Press the Return button to return to the Settings interface.

20. Auto Power Off



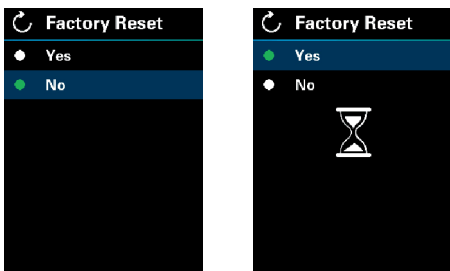
In the Settings interface, select Auto Power Off, and press the OK button to enter its setting interface. Press the Left/Right button to step through 5 Minutes/10 Minutes/30 Minutes/OFF, and press the OK button to confirm. Press the Return button to return to the Settings interface.

21. Device Information



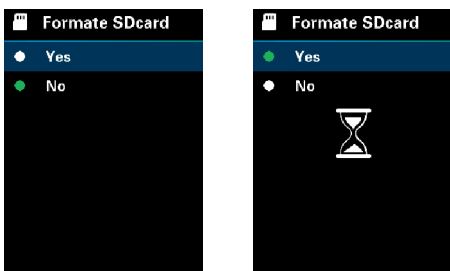
In the Settings interface, select Device Information, and press the OK button to enter its setting interface. Press the Return button to return to the Settings interface.

22. Factory Reset



In the Settings interface, select Factory Reset, and press the OK button to enter its setting interface. Press the Left/Right button to step through Yes/No, and press the OK button to confirm. When selecting "Yes", a sand clock icon will show on the screen. The factory reset operation is complete when the icon disappears. Press the Return button to return to the Settings interface.

23. Format SD Card



In the Settings interface, select Format SD Card, and press the OK button to enter its setting interface. Press the Left/Right button to step through Yes/No, and press the OK button to confirm. When selecting "Yes", a sand clock icon will show on the screen. The icon will disappear after SD formatting (it takes a long time). Press the Return button to return to the Settings interface.

24. Maintenance

Use a wet cloth or weak soap solution to clean the outer shell of the device. Do not use abrasives, isopropyl alcohol or solvents to clean the outer shell, lens or window.

25. Safety Instructions

In order to ensure the accuracy, please read the instructions carefully. Please use this product in accordance with the manual; otherwise the free warranty will not be carried out if the product is damaged. Please do not use this device in flammable, explosive, steamy, humid or corrosive environments. Please do not continue to use the device when it is damaged, broken or corrected, so as to avoid incorrect test results. Please refer to the emissivity information to confirm the actual temperature; otherwise the measured temperature will be inaccurate. Charging will cause the internal temperature of the machine to rise, thereby affecting the measurement accuracy. Therefore, it is recommended not to take measurements when charging the product.

To avoid damaging the battery:

- Do not place the battery in high-temperature environments or near high-temperature objects, such as in an unattended vehicle under direct sunlight.
- Do not short-circuit the positive and negative terminals of the battery; do not place the battery in humid environments or water, as this will lead to damage to the device's battery.
- Do not charge the thermal imager for more than 24 hours; otherwise, the battery life may be shortened.
- Charge the battery for at least two hours every six months to ensure maximum battery life.
- Always use the device within the specified temperature range.
- Do not incinerate this product and/or its battery.

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