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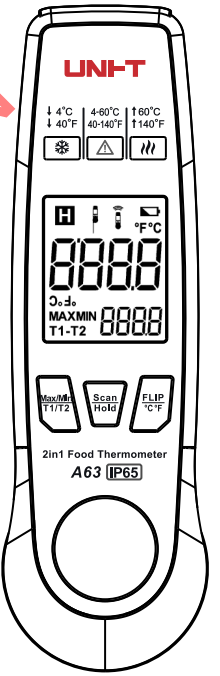

A63
2in1 Food Thermometer User Manual

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PREFACE

Thank you for purchasing the new A63 2in1 food thermometer. 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 futurereference.

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.

ABOUT

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. 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 bases for placing orders. If users have any questions, please contact customer service.

1. Overview

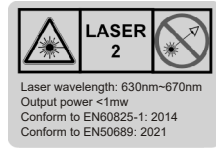
A63 ("Thermometer "or" Product ") is a 2in1 food thermometer that combines infrared and probe measurements.
Infrared measurement is used to quickly scan the surface temperature of objects. Probe measurement can accurately measure the internal temperature of food.

2. Safety Instructions

Warning

In order to prevent eye damage or personal injury, please read the following safety instructions before using the product:

- Do not point the laser directly at persons or animals or indirectly through reflective surfaces.
- Do not look directly at the laser or with optical tools (binoculars, microscopes, etc.).



- When the probe is unfolded, do not point it to persons or animals.

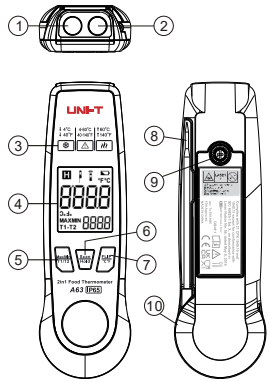
Cautions:

- If the laser irradiates the user's eyes, please close the eyes immediately and turn the head away.
- Do not disassemble or refit the product and laser without permission.
- To ensure its safety and accuracy, this product should only be repaired by professional maintenance personnel using original replacement parts.
- Replace the batteries when the low battery indicator shows to prevent incorrect measurements.
- Please check the product before using it. If it is damaged, cracked on the surface or missing plastic parts, do not use it.
- In the infrared measurement mode, highly reflective objects or transparent materials will make the actual temperature higher than the measured temperature. When measuring these objects, pay attention to the risk of burns.
- Do not use the product in an environment with flammable and explosive liquid, gas or dust.
- Do not use the product around the environment with steam, dust, or large temperature fluctuations if it is in the infrared measurement mode. It may bring inaccurate results and risks.
- Put the product in the current environment for more than 30 minutes before using it to ensure infrared measurement accuracy.
- Do not leave the thermometer on or near objects of high temperature.

3. Applications

- Food production, storage, transportation and on-site testing
- Cooking temperature control and testing
- Internal temperature measurement of liquid, paste and semisolid materials

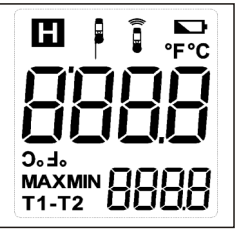
4. Product Structure



1. Infrared sensor
2. Single laser
3. HACCP inspection indicator lights
4. LCD
5. Max/MinIT1/T2
   Short press (less than 0.5s): View the maximum or minimum value
   Long press (about 1.5s): Enable the temperature difference calculation function
6. ScanIHold
   In the infrared mode: Press it to measure. Release it to hold the data.
   In the probe mode: Switch measurement state (auto measurement/hold)
7. FLIPI℃℉
   Short press (less than 0.5s): Display flipped (The Max/Min|T1/T2 function is disenabled at this time.)
   Long press (about 1.5s): Temperature unit conversion (℃/℉)
8. Probe
9. Battery cover screw
10. Probe dial

5. Screen Indicators/Icons

H	Data hold
	Infrared measurement
°F°C	Temperature units
MAXMIN	Maximum/minimum temperature
	Low battery
	Probe measurement
8888	Primary/secondary display
T1-T2	Temperature difference



6. Specifications

Model	A63	
LCD size	33*39mm	
LCD type	FSTN 6' clock	
Infrared measurement	Measuring range	-40℃-300℃ (-40℉-572℉)
	Accuracy	-40℃≤t≤0℃: ±(1.5+0.1×|t|)℃
		0℃<t≤300℃: ±1.5℃ or ±0.015×t℃ whichever is greater
		-40℉≤t≤32℉: ±(3.0+0.1×|t-32|)℉
		32℉<t≤572℉: ±3.0℉ or ±0.015×t℉ whichever is greater
	Temperature coefficient	±0.1℃/℃ or ±0.1%/℃ whichever is greater
	Emissivity	0.95 (not adjustable)
	Distance to spot ratio (D: S)	8 : 1
	Spectral range	5μm~14μm
	Response time	≤250ms (95% of reading)
	Repeatability	1.0℃ or 1.0% whichever is greater (2.0℉ or 1.0% whichever is greater)
	Laser	Single laser (turn on/off automatically when measuring/stop measuring)
	Laser power	<1mw
	Laser wavelength	650±20nm
	Laser spot diameter	10mm≤d≤15mm at 10m

Probe measurement	Measuring range	-50℃-300℃ (-58℉-572℉)
	Accuracy	-50℃≤t<-30℃: ±1.0℃
		-30℃≤t≤100℃: ±0.5℃
		100℃<t≤300℃: ±0.01Xt℃
		-58℉≤t<-22℉: ±2.0℉
		-22℉≤t≤212℉: ±1.0℉
		212℉<t≤572℉: ±0.01Xt℉
	Probe type	NTC
	Minimum measuring depth	12.7mm
Auto power off	Infrared (not in Max /Min|T1/T2 state)	60s±5s
	Probe/infrared in Max/Min|T1/T2 state	10min±1min
Over range display	Measured value maximum range: display L0 Measured value minimum range: display -L0	
Operating temperature	0℃~50℃(32℉~122℉)	
Storage temperature	-30℃~70℃ -22℉~158℉	
Operating humidity	<90%Rh (non-condensing)	
Highest operating altitude	2000m	
Button life	10000 times	
Probe rotation life	10000 times	
IP rating	IP65	
Drop test	1m	
Battery type	2 AAA alkaline batteries	
Operating time	Infrared mode	20h (continuous measurement)
	Probe mode	80h (continuous measurement)
Low battery indication	√	
LED alarm	√	
Data hold	√	
Unit conversion (℃/℉)	√	
Max/Min/Difference	√	
Display flipped	√	

Certificates	Probe FDA certification	Conform to FDA GRAS
	Laser safety standards	EN60825-1: 2014 and EN50689: 2021, CLASS 2
	CE	EN61326-1: 2013 EN 61010-1: 2010+A1: 2019+AC: 2019
	UKCA	Based on CE certification standards
	RoHS	SGS certification standards
	EN13485	EN13485: 2001
	1935/2004/EC	(EC) 1935/2004
Product color	White + silver	
Product weight	157g (without batteries), 180g (with 2 AAA alkaline batteries)	
Product size	55*28*178mm	

7. Operation

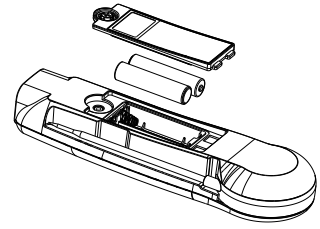
7.1 Replace Batteries

When using the product for the first time, please install the batteries first.
To remove the battery cover:

- Hold the metal ring on the screw with a hand or a tool, and turn the ring counterclockwise to unscrew the battery cover screw.
- Use a screwdriver to unscrew the battery cover.
  Battery type: 2 AAA alkaline batteries

Note:

- Pay attention to the battery polarity when installing.
- After replacing the batteries, close the battery cover and tighten the screw.



7.2 Power On/Off

- When the probe is folded, press the Scan|Hold button to turn on the thermometer and enter the infrared (non-contact) mode.
- When the probe is unfolded, it will enter the probe (contact) mode.
- In the infrared mode (not in Max/Min|T1/T2 state), the product will automatically shut down if no button press occurs for one minute.
- In the probe mode or the infrared mode (in Max/Min|T1/T2 state), the product will automatically shut down if no button press occurs for ten minutes.
- When the probe is unfolded, after the product shuts down automatically, press the Scan|Hold button to wake it up.

7.3 Temperature Measurement

Infrared mode:

Press the the Scan|Hold button to measure the temperature, and release it to stop measuring. The top left corner of the LCD displays H, and the data is held.

Probe mode:

When the probe is unfolded, the product automatically starts measuring. Insert the probe at least 12.7mm into the measured object, and wait for the value to stabilize before reading the temperature. Press the the Scan|Hold button. The top left corner of the LCD displays H, and the data is held. Press the the Scan|Hold button again to return to the auto measurement.

7.4 Function Settings

Max/Min:

- When the measured data is held, press the Max/Min|T1/T2 button to step through the Max, Min (the last continuous measurement) and exit viewing Max/Min on the secondary display.
- If the temperature is measured when the Max/Min function is enabled, the Max and Min of the current continuous measurement are displayed The Max/Min function is convenient for users to control and adjust the temperature.

Temperature difference:

- After the thermometer is turned on for measurement, long press the Max/Min|T1/T2 button to step through T1>T2>T1-T2>T1 on the secondary display. Long press the button again to exit.
- The T1/T2 function can compare two temperatures that are not measured at the same time. For example, to compare the food surface temperature and internal temperature, first measure the food surface temperature in the infrared mode and record the measured value as T1, and then measure the food internal temperature in the probe mode and record the measured value as T2.

Temperature units:

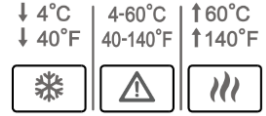
- Long press the FLIPI℃℉ button to step through temperature units.

Display flipped:

- Press the FLIPI℃℉ button to flip the screen 180°. Press the button again to exit.
- When the Max/Min|T1/T2 function is enabled, the screen automatically exits the flip mode.

HACCP inspection:

- This thermometer has HACCP inspection function. When the measured temperature is within the safe refrigerated temperature (4℃/ 40℉) or heat storage temperature (60℃/ 140℉), the green indicator is on. When the measured temperature is within the dangerous HACCP range (4℃~60℃/40℉~140℉), the red indicator is on. At this time, microbial reproduction is most rapid and it is necessary to evaluate safe food storage or handling options.

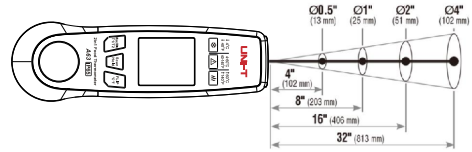


- During the measurement, the indicator light will flash. When H is displayed on the screen after stopping measuring, the indicator light will stop flashing.

8. Infrared Measurement

8.1 D: S (Distance to Spot Ratio)

As the distance (D) between the thermometer and the measured target increases, the light spot diameter (S) of the measured area also increases. The relationship between measurement distance and light spot diameter is shown in the figure below.



8.2 Field of View

When measuring, make sure that the measured target is larger than the light spot diameter. The smaller the target, the closer the test distance should be (refer to D: S for the detailed light spot diameter). It is recommended that the measured target be larger than twice the light spot diameter of the thermometer.

8.3 Emissivity

Emissivity represents the ability of the measured object to emit infrared energy. Infrared measurement is to measure the infrared energy to determine the temperature. Objects of different materials have different emissivity. The default emissivity of A63 2in1 food thermometer is 0.95. The emissivity is best for measuring the temperature of food (hot, frozen, refrigerated food or food in plastic containers), water, oil, sludge, paint, ceramics, rubber and paper.

9. Maintenance and Cleaning

- The ingress protection rating of A63 2in1 food thermometer is IP65. The shell and probe can be cleaned with a moist sponge or soft cloth or sprayed with a moderate amount of detergent under running water. Please dry the product after cleaning.
- Use a cotton swab soaked in water or medical alcohol to clean the surface of the lens.

10. Troubleshooting

Phenomenon	Cause	Measure
Display OL	Measured value maximum range	Stop measuring
Display -OL	Measured value minimum range	Stop measuring
Display Err (startup)	Exceed the minimum/ maximum operating temperature or infrared sensor damage	Place the thermometer at -10℃-50℃ (32°F-122°F) for 30 minutes.
Battery symbol flashes	Low battery	Replace batteries
Display Er0 (startup)	Internal damage	Restart the product or reinstall the batteries and then restart it. If the product still does not operate normally, repair it.
Inaccurate infrared measurement	Too far measurement distance, diameter of the measurement target 12mm	Refer to Field of View, D:S and other instructions in this manual.
Inaccurate probe measurement	Probe damage, insert the probe less than 12.7mm into the measured object	Repair the probe if it is damaged.

11. Notice for Use

The infrared mode measures the surface temperature, and the probe mode measures the internal temperature of food.

Infrared measurement:

- If the ambient temperature changes (e.g., from indoor to outdoor), the thermometer should be allowed at least 30 minutes to stabilize, otherwise error may be caused.
- If there is dust or foreign matter on the lens of the infrared sensor, clean the lens according to the method (9. Maintenance and Cleaning) and continue to measure after the lens surface is dry.
- Make sure there are no other obstacles between the product and the measured object.
- For vacuum packed food, please do not measure the package.

Probe measurement:

- The probe has a minimum penetration depth of 12.7mm.
- Do not use the product in corrosive acids or alkalis.