# **UT305R** Infrared Thermometer User Manual

#### **Dear Users**

Thank you for purchasing the new infrared thermometer. In order to use this product safely and correctly, please read this manual thoroughly, especially the *Precautions* 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**

The manufacturer 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 damage caused by accident, negligence, misuse, modification, contamination or improper handling. The dealer shall not be entitled to give any other warranty on behalf of the manufacturer. If you need warranty service within the warranty period, please contact your seller directly.

The manufacturer will not be responsible for any special, indirect, incidental or subsequent damage or loss causad by using this device.

#### Introduction

The UT305R infrared thermometer (hereinafter referred to as the thermometer) can quickly and accurately determine the surface temperature by measuring the infrared energy radiated from the target surface. It is suitable for non-contact temperature measurement.

### ⚠ Precautions

- To ensure proper use of the thermometer, please read this manual carefully before use.
- To ensure safety and accuracy of the thermometer, it should only be repaired by a qualified professional using original replacement parts.
- If the battery symbol on the LCD flashes, please replace the battery immediately to prevent inaccurate measurement.
- Inspect the case before using the thermometer. Do not use the thermometer if it appears damaged. Look for cracks or missing plastic.
- Avoid keeping the thermometer near high temperature environments for long periods
- To ensure measurement accuracy, please use the thermometer in the operating environment [15°C~30°C, <85% RH (non-condensing)].</li>
- Please use the thermometer indoors.
- The ambient temperature of the measured object must be stable, and it should not be measured in places with large airflow such as fans and air outlets.
- When changing to a new environment, please leave the thermometer for 30 minutes before
- When the measured object comes from a place with a large temperature difference from the measurement environment, keep it in the measurement environment for 10 to 30 minutes before measuring.
- Do not use the thermometer in places with strong sunlight or electromagnetic interference. • After measuring extremely high or low temperature objects, please leave the thermometer for 10 minutes before next use
- It is recommended to measure three times at a time, whichever is the most displayed set of data
- Make the sensor window directly face the measured object during measurement, otherwise it will cause the measured temperature to be different from the actual temperature.
- Not for medical use

#### **Specifications**

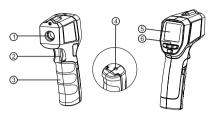
Model	UT305R	
Measuring range	32°C~42.9°C (89.6°F~109.2°F)	
LCD size	30mm*30mm	
LCD display	TN LCD	
Accuracy	±0.3°C (±0.6°F)	
Optimal measuring distance	5cm~10cm	
Repeatability	0.3°C (0.6°F)	
Response time	≤250ms (95% of reading)	
Spectral response	8μm~14μm	
Auto power off	15s	
Low battery indication	√	
High temperature LED alarm	>37.2°C: orange light alarm (≤37.2°C: green light)	
High temperature audible alarm	>37.2°C: audible alarm	
Data hold	√	
Unit conversion (°C/°F)	√	
Operating environment	15°C~30°C (59°F~86°F), <85% RH	
Transportation/Storage environment	-20°C~60°C (-4°F~140°F), <85% RH	
Battery type	9V battery (6F22)	
Battery life	Continuous temperature measurement: ≥9 hours for the alkaline battery; ≥4 hours for the carbon battery	
Accessories	Battery, user manual	

# **Product Features**

- Bright, easy-to-read, and high-contrast display
- With two-color (orange and green) LED and buzzer alarm functions
- With tripod mounting hole (¼ inch)

#### **External Structure**

1	Infrared sensor window	
2	Trigger	
3	Battery cover	
4	Tripod mounting hole	
5	LCD display	
6	Buttons	



# **LCD Description**

Buzzer indicator	
Temperature measurement alarm indicator	1
Low battery indicator	
Temperature measurement indicator	
HOLD Temperature hold indicator	
°C°F Temperature unit indicator	
Display of the measured temperature	1
	Temperature measurement alarm indicator Low battery indicator Temperature measurement indicator Temperature hold indicator Temperature unit indicator



#### **Operating Instructions**

### Power On

In the off state, short press the trigger to turn on the thermometer.

#### Power Off

In the HOLD mode, if there is no operation for 15s, the thermometer will automatically power off.

**Manual Measurement** 

- 1. Pull and hold the trigger after aiming at the measured object. The SCAN icon will be flashing indicating that the target temperature is being measured. The measurement result will be  $\ensuremath{\mathsf{E}}$ updated on the LCD.
- $\dot{\text{2}}$ . Release the trigger, the SCAN icon disappears, and the HOLD icon appears, indicating that the measurement has been stopped and the last measured value is held.
- 3. When the measured temperature exceeds 37.2°C, the HI icon is displayed and the orange light gives an alarm.

# **Temperature Unit Setting**

In the HOLD interface, short press the SET button to enter the temperature unit setting interface, and switch between °C and °F by pressing the ▼ button or ▲ button.

# **Audible Alarm Setting**

In the HOLD interface, short press the SET button twice to enter the audible alarm setting interface, and turn on/off the audible alarm by pressing the  $\blacksquare$  button or  $\blacktriangle$  button.

#### **Maintenance**

#### **General Maintenance**

As the thermometer is reusable apparatus, please pay attention to cleaning and maintenance before use. If it is not in use for a long time, please keep its lens clean and dust free

- 1. Clean the case: Wipe dirt with a clean soft cloth or cotton swab dipped in medical alcohol or
- 2. Clean the lens: Use clean compressed air to blow off loose particles. Carefully wipe the surface with a cotton swab dipped in medical alcohol or water.

### **Battery Replacement**

⚠ If the thermometer is not in use for a long time, please remove the battery to prevent battery leakage. Dispose of used batteries properly in accordance with local regulations.

To replace the battery:

- 1. Open the battery cover.
- 2. Replace with a 9V battery (6F22), noting the polarity.
- 3. Close the battery cover

# **Troubleshooting**

Symptom	Cause	Action	
HI appears	Measured value is greater than the maximum range	Stop measuring	
LO appears	Measured value is less than the minimum range	Stop measuring	
Err appears at booting	Exceeding the minimum or maximum operating temperature	Place the thermometer in a 0°C~50°C (32°F~122°F) environment for 30 minutes	
Battery symbol flashes	Low battery	Replace the battery	





