

# User Manual

Non Contact Infrared Body Thermometer

Model: HTD8808



**Please read this manual before operating this device, Important safety information inside.**

## 1. Advice For the 1<sup>st</sup> use

For stable and reliable results, it is essential to check the Non-contact Body IR thermometer and adjust as needed with the following steps:

**1<sup>st</sup> step:** Take the temperature of a person using a conventional thermometer and get the test result, 37.5°C (99.5°F) for example.

**2<sup>nd</sup> step:** Take the temperature of the same person using the Non-contact Body IR thermometer keeping 5 -15cm (2 -5.9 in) between the thermometer and the forehead (Be sure to remove any obstacle on the forehead which may affect the testing result, such as hair, perspiration etc., If you get 37.5°C (99.5°F), that is to say the Non-contact Body IR thermometer is properly set and ready for use.

If you get a lower temperature, 36.4°C (97.5°F) for example, the difference is  $37.5 - 36.4 = 1.1^{\circ}\text{C}$  ( $2.0^{\circ}\text{F}$ ).

You should adjust the temperature on the Non-contact Body IR thermometer and add the difference, e.g.  $1.1^{\circ}\text{C}$  ( $2.0^{\circ}\text{F}$ ).

To adjust the difference, short press SET button, the screen displays F1, press UP or DOWN button to add the difference, e.g.  $1.1^{\circ}\text{C}$  ( $2.0^{\circ}\text{F}$ ), then short press SET button several times until it power off automatically.

**3<sup>rd</sup> step:** Take the temperature again using the Non-contact Body IR thermometer to check whether the thermometer is properly set.

## 2.General Descriptions

The non-contact IR thermometer is specially designed for testing baby forehead temperature, it has two models: Body mode for measuring body temperature and Surface model for measuring object surface temperature, Besides baby forehead temperature, it can also test the temperatures of room, food, bath water, baby milk etc. It adopt the most advanced infrared techniques, acquire the aim temperature quickly, analyze the data intelligently and display the result within 0.5 seconds.

Note: Depending on various skin types and thickness, the test result may be different.

## 3.Safety Information

- This device must only be used for the purposes described in this instruction manual.
- Do not expose this thermometer to electric shocks.
- Do not use the device in relative humidity  $\geq 85\%$ .
- Do not use the device near large electromagnetic fields such as found with cordless or cell phones.
- Keep the device away from water and heat, including direct sunlight,
- Do not drop or knock the device, and do not use it if damaged.
- It may affect the accuracy of measurements when the forehead is covered by hair, perspiration, cap or scarf.
- If it can't measure the forehead temperature due to perspiration or other factors, please take the temperature behind the ear lobe.
- Clean the glass with cotton bud lightly moistened with 70% alcohol.

②

- When problems occur with the device, please contact the retailer, don't repair it by yourself.

## 4.Importance

- Make sure move away the hair, perspiration etc. on the forehead before measuring.
- This device must only be used in an ambient temperature between  $5^{\circ}\text{C}$  ( $41^{\circ}\text{F}$ ) and  $40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ), the best ambient temperature is  $25^{\circ}\text{C}$  ( $77^{\circ}\text{F}$ ), do not use it in extreme conditions of  $>40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ) or  $<5^{\circ}\text{C}$  ( $41^{\circ}\text{F}$ ).
- To obtain stable and reliable data, you should keep the device for 15-20 minutes to balance its own temperature before measuring when the ambient temperature change greatly, and keep it 1 minute after 2 continuous measuring.
- Select Body mode to measure the body temperature, while select Surface mode to measure the surface temperature.
- Make sure the measuring distance is 5-15cm(2-5.9in).
- The use of this thermometer is not intended as substitute for consultation with your physician, please turn to the doctor once the measuring result seems abnormal.

## 5.Features

- Multiple functions: Not only can measure body temperature, but also can measure the temperature of surface, room, bath water, food, baby milk etc.

③

- Fast and Accurate: 0.5 seconds measuring time and the accuracy can reach  $\pm 0.2^{\circ}\text{C}$ ( $0.4^{\circ}\text{F}$ ).
- Non contact: Safe and clean, 5-15cm(2-5.9in) measuring distance.
- Easy to use: Operate with one button, very simple to use.
- Three-color backlight(color alarm): When the body temperature is normal, the backlight is Green, Yellow backlight for slight fever and Red backlight for high fever.
- Large memories: Can store 50 memories for data analysis.
- Alarm value can be set.
- $^{\circ}\text{C}$  and  $^{\circ}\text{F}$  be changeable and selectable.
- Auto shut off: 18 seconds without operation.
- Setting can be adjusted for different kinds of people(such as white people, black people, yellow people etc.)
- Display resolution is  $0.1^{\circ}\text{C}$ ( $0.1^{\circ}\text{F}$ ).
- Buzzer can be closed or opened by manual.
- Bluetooth wireless communication (Optional): can be connected to data analysis systems.
- Voice function(Optional): can be added according to client's requirements.

## 6. Usages of the thermometer

- Body temperature: Measure the body temperature for monitoring young baby's fever, women ovulatory period and so on.
- Skin temperature: Measure the temperature of people surface skin.

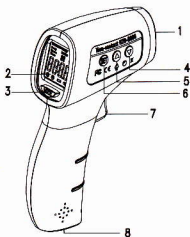
- Object temperature: Measure object surface temperature, such as tea cup, cake, food etc.
- Liquid temperature: Measure liquid temperature, such as baby milk, bath water etc.

## 7. Specifications

Measuring range	Body mode: $34-42.9^{\circ}\text{C} / 93.2-109.2^{\circ}\text{F}$ Surface mode: $0-100^{\circ}\text{C} / 32-212^{\circ}\text{F}$
Measuring Accuracy	$0.0-33.9^{\circ}\text{C} : \pm 2.0^{\circ}\text{C} \& 2\% ^{\circ}\text{C} /$ $32-93.0^{\circ}\text{F} : \pm 3.6^{\circ}\text{F} \& 2\% ^{\circ}\text{F}$ $34.0-34.9^{\circ}\text{C} : \pm 0.3^{\circ}\text{C} / 93.2-94.8^{\circ}\text{F} : \pm 0.5^{\circ}\text{F}$ $35.0-42.0^{\circ}\text{C} : \pm 0.2^{\circ}\text{C} / 95.0-107.6^{\circ}\text{F} : \pm 0.4^{\circ}\text{F}$ $42.1-42.9^{\circ}\text{C} : \pm 0.3^{\circ}\text{C} / 107.8-109.2^{\circ}\text{F} : \pm 0.5^{\circ}\text{F}$ $43.0-100^{\circ}\text{C} : \pm 2.0^{\circ}\text{C} \& 2\% ^{\circ}\text{C} /$ $109.4-212^{\circ}\text{F} : \pm 3.6^{\circ}\text{F} \& 2\% ^{\circ}\text{F}$
Measuring time	0.5 seconds
Measuring distance	5-15CM
Resolution	$\pm 0.1^{\circ}\text{C}$ ( $\pm 0.1^{\circ}\text{F}$ )
Three-color backlight (Color Alarm)	$34-37.3^{\circ}\text{C} / 93.2^{\circ}\text{F} - 99.1^{\circ}\text{F}$ : Green backlight (Normal) $37.4-38.0^{\circ}\text{C}$ (Alarm point) / $99.3^{\circ}\text{F} - 100.4^{\circ}\text{F}$ : Yellow backlight (Slight Fever) $38.1-42.9^{\circ}\text{C} / 100.6^{\circ}\text{F} - 109.2^{\circ}\text{F}$ : Red backlight (High Fever) NOTE: Three-color backlight is only for Body mode, Always Green backlight for Surface mode.
Power	DC 3V (AAA size batter x 2)
Auto shut off	18 seconds
Dimension	150 X 95 X 44 mm(L X W X H)
Weight	115g (without battery)
Operating conditions	$5-40^{\circ}\text{C}$ ( $41^{\circ}\text{F} - 104^{\circ}\text{F}$ ), RH $\leq 85\%$
Storing conditions	$-20-55^{\circ}\text{C}$ ( $-4^{\circ}\text{F} - 131^{\circ}\text{F}$ ), RH $\leq 85\%$

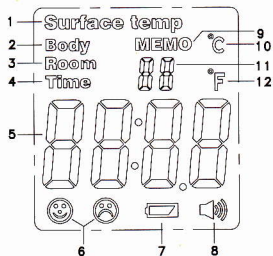
## 8. Configuration

1. IR Sensor
2. LCD Display
3. MODE Button
4. Down Button
5. Up Button
6. Set Button
7. ON/Scan Button
8. Battery Cover



## 9. LCD Indicator

1. Surface Mode
2. Body Mode
3. Ambient Temperature Mode
4. Time Mode
5. Digital Readout
6. Smile or Cry Indicator
7. Battery Indicator
8. Buzzer on/off Indicator
9. Memories
10. °C
11. Memory number
12. °F



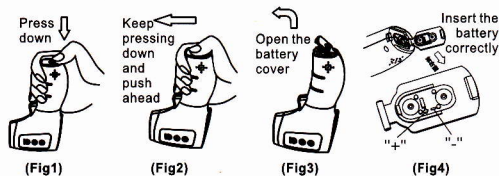
⑥

## 10. Operation

### 10-1. Install battery

Push the battery cover by the arrow, open the battery cover, insert two pieces AAA size batteries according to the "+" and "-", and close the battery cover.

Note: Make sure the right positive and negative charges of the battery.



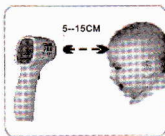
10-1-1. For the first use or when inserting new batteries, wait 10 minutes for warming up the device.

10-1-2. If the device is not used for a long time once you turn it on again, the device will test the room temperature firstly and will delay turning on for more one two seconds.

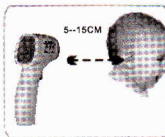
### 10-2. Measuring operation

Aim towards the forehead (see the diagram below for the positioning), from a distance of 5-15cm(2-5.9 in), press the measuring trigger, the temperature is displayed immediately, Making sure there is no hair, perspiration, cosmetic or cap covered on the forehead.

⑦



If it can't measure the forehead temperature due to perspiration or other factors, please take the temperature behind the ear lobe, make sure there is no hair, perspiration, cosmetic or cap covered.



10-2-1. The ambient temperature should be stable, don't measure the body temperature in front of fans, air outlets of the air-condition etc where the airflow is floating.

10-2-2. To obtain stable and reliable data, you should keep the device for 15-20 minutes to balance its own temperature before measuring when the ambient temperature change greatly, and keep it 1 minute after 2 continuous measuring.

10-2-3. Please don't take the body temperature if the patient is sweating or have done the cold compresses etc, because they will lower the measuring result.

10-2-4. Suggest measure the body temperature three times and be subject to the highest value.

### 10-3 Buttons operation

10-3-1. ON/SCAN button (Measuring Trigger): Press the button to power on the device and begin to measure.

10-3-2. MODE button: Switch the body mode, surface mode.

NOTE: Body mode is for body temperature, and the Surface mode is for object surface temperature, please make sure use the Body mode when taking body temperature.

10-3-3. SET button: Adjust the settings of the device, ( Please turn to the instructions of the SET button in details as followings)

10-3-4. UP and Down button: go ahead or back, increase or decrease.

### 10-4. Instructions of MODE button

When the device is ON, short press the MODE button to switch Body mode and Surface mode. The LCD will display "Body" and "Surface temp" for the Body mode and the Surface mode.

### 10-5. Instructions of SET button

The device can adjust the default settings by the SET button for different kinds of people and different ambient temperatures. We suggest keep the default setting, however, you can adjust the default settings as following instructions if necessary:

10-5-1 Offset setting(Total Difference) – F1

When the device is ON, short press the SET button, the LCD will display F1, press UP and DOWN to adjust the Offset, and press the SET buttons several times until the

device power off, the setting is finished.

#### 10-5-2 Unit setting – F2

When the device is ON, short press the SET button two times, the LCD will display F2, press UP and DOWN to choose the Unit, and press the SET buttons several times until the device power off, the setting is finished.

#### 10-5-3 Alarm setting – F3

When the device is ON, short press the SET button three times, the LCD will display F3, press UP and DOWN to set the alarm temperature, and press the SET buttons several times until the device power off, the setting is finished.

#### 10-5-4. Buzzer On/Off setting – F4

When the device is ON, short press the SET button four times, the LCD will display F4, press UP and DOWN to On or Off the buzzer, and press the SET buttons several times until the device power off, the setting is finished.

NOTE: For every setting, you should keep short pressing the SET buttons until it is Off automatically, the setting is finished, otherwise, the setting is still the previous settings, not the new settings.

#### 10-6. Data memory

Data will be memorized automatically after measuring, it will display at the right corner LCD. Press UP or DOWN button to check all the memorized data.

10-6-1, Short press the UP or Down button to check all the memories.

10-6-2, Keep pressing the UP or Down button to delete all the memories.

## 11. Change the battery

When the battery is low, please change new batteries.

11-1. Please take out the batteries to avoid battery leaking if the device will not be used for a long time.

11-2. Please make sure the correct positioning, a mistake with this will cause damage to the device and compromise the guarantee of the device.

11-3. Never use rechargeable batteries, use only batteries for single usage.

## 12. Life-span of the device

The device is conceived for an intense and professional use, its life-span is guaranteed for 40000 takings.

## 13. Maintenance and Cleaning

13-1. The protective glass over the lens is the most important and fragile part of the device, please take great care of it.

13-2. Clean the glass with cotton fabric of 70% alcohol.

13-3. Do not expose the thermometer to sunlight or water.

13-4. Do not clean the device with corrosive detergent.

13-5. The Sensor is the most sensitive part of the device, please take great care of it too.

## 14. Troubleshooting

If you happen to have one of the following problems while using the device, please refer to this breakdown service guide to help resolve the problem, If the problem persists, please contact our customer service.



14-1. LCD display "HI": The device tells you that the aim object temperature is out of the measuring range, either above 42.9°C(109.2°F) in Body mode or above 100°C(212°F) in Surface mode.

14-2. LCD display "LO": The device tells you that the aim object temperature is out of the measuring range, either below 32°C(89.6°F) in Body mode or below 0°C(32°F).

14-3. Reasons for "HI" and "LO", and suggestions to solve:

Possible reasons	Maintenance Suggestions
Testing results affected by hair, perspiration etc.	Make sure that there is no obstacles in front of the forehead.
Testing results affected by floating airflow	Make sure far away from floating airflow
The measuring distance is too far.	Make sure the measuring distance is 5-15cm(2-5.9in).
From outside to inside, or from low ambient temperature to high ambient temperature.	Keep the device in the new ambient for 15-20 minutes before measuring.
The measuring values are too close each other.	Keep the device left for 15 seconds after 2 continuous measuring, one minute will be better.

## 15. General Knowledge of Body Temperature

Human body is a very complicated comprehensive system, and the body temperature is a very important indicator of the body health conditions. We can take the temperatures of our forehead, ear, oral, auxiliary etc to check our health conditions. Different temperature will be for different body parts, please kindly check the values as belowings:

Measurement	Normal Temperature (°C)	Normal Temperature (°F)
Rectal	36.6 to 38	97.8 to 100.4
Oral	35.5 to 37.5	95.9 to 99.5

Oral	35.5 to 37.5	95.9 to 99.5
Auxiliary	34.7 to 37.3	94.4 to 99.1
Auricular	35.8 to 38	96.4 to 100.4
Forehead/Temporal (Thermo Flash)	34.7 to 37.8	94.5 to 100.0

The human body temperature also varies throughout the day, it can also be influenced by numerous external factors: age, sex, type and thickness of skin.....  
Normal Temperature According to Age:

Age	Normal Temperature (°C)	Normal Temperature (°F)
0-2 years	36.4 to 38.0	97.5 to 100.4
3-10 years	36.1 to 37.8	97 to 100
11-65 years	35.9 to 37.6	96.6 to 99.7
>65 years	35.8 to 37.5	96.4 to 99.5

Women body temperature is also different from the men body temperature, usually higher than that of men's by 0.3°C(0.5°F), moreover, the women body temperature who is under ovulatorytime is usually higher by 0.3°C(0.5°F) to 0.5°C(0.9°F) than that of the body temperature when she is not under ovulatorytime. Basing on this knowledge, many women take their body temperature every morning and draw out the diagraph of their base body temperature, which will clearly show when the women is under ovulatorytime, then the women can plan their babies or contraceptions.

## 16.Special declarations:

The manufacture reserve the right to explain,revise and change the specifications, technical datas,usages etc. without notice.