

# Body & Surface InfraRed Thermometer User Manual



**Please read this manual before switching the unit on.  
Important safety information inside.**



*Body & Surface InfraRed Thermometer User Manual*



## Contents

|                                 | Page |
|---------------------------------|------|
| 1.General Description .....     | 4    |
| 2.Safety Information.....       | 4    |
| 3.Features.....                 | 5    |
| 4.Intended Use.....             | 5    |
| 5.Precaution Before Use.....    | 6    |
| 6.Configuration.....            | 7    |
| 7.Technical Specifications..... | 8    |
| 8.Use.....                      | 9    |
| 9.Measuring Operation.....      | 10   |
| 10.Advice.....                  | 12   |
| 11.Troubleshooting.....         | 12   |

## 1. General Description

Non-contact Body Infrared Thermometer is Specially designed to take the body temperature of a person regardless of room temperature. Depending on various skin types and thickness, there may be temperature difference.

When the room temperature is significant difference, the body infrared thermometer should be left in that room during 15 to 20 minutes before using.

## 2. Safety Information

- This device must only be used for the purposes described in this instruction manual.
  - This device must only be used in an ambient temperature range between 10°C and 40°C.
  - Do not expose this thermometer to electric shocks.
  - Do not expose this thermometer to extreme temperature conditions of >50°C or >-20°C.
  - Do not use the device in relative humidity higher than 85%RH.
  - Clean the glass with a cotton bud lightly moistened with 70 alcohol.
  - Should a problem occur with your device, please contact your retailer.
- Do not attempt to repair the device yourself.

### 3.Features

- Precise non-contact measurements
- User selectable °C or °F
- Selectable Body and Surface temp
- Set Alarm value
- Memorization of the last 32 measurements
- Automatic Data Hold & Auto power off
- Automatic selection range and Display Resolution 0.1°C(0.1°F)
- Backlight LCD display

### 4.Intended Use

The Non-contact Body Infrared Thermometer is designed for body surface and forehead temperature measurement for infants and adults without contact to human body. It can be used by consumers in household environment and doctor in clinic as reference.

It is manufactured in accordance with the ASTM 1965-1998 Standard specification for Infrared Thermometers for Intermittent Determination of Patient Temperature

#### Additional Uses

The Non-contact Body Infrared Thermometer can also be used to measure the temperature of a baby-bottle or bath, or room temperature (by using the Surface Temp function). This function is in accordance with the Directive 89/336/EEC Electromagnetic Compatibility.

The CE0197 of the Non-contact Body Infrared Thermometer is only for human body surface temperature measurement. This intended has been verified in accordance with the Medical Device Directive 93/42/EEC by Notified Body.

## 5. Precaution Before Use

- In order to obtain reliable and stable results, when changing the environment with a significant room temperature difference, it is recommended to leave the Non-contact Body Infrared Thermometer to this ambient temperature for 15 to 20 minutes before using it.
- Depending on various skin types and thickness, there may be temperature difference.
- Do not expose the thermometer to sunlight or to water.
- Allow a one minute interval between two measurement.

### Normal Temperatures According To Measurement Method

| Measurement Method      | Normal Temp °C | Normal Temp °F |
|-------------------------|----------------|----------------|
| Rectal                  | 36.6 to 38     | 97.8 to 100.4  |
| Oral                    | 35.5 to 37.5   | 95.9 to 99.5   |
| Axillary                | 34.7 to 37.3   | 94.4 to 99.1   |
| Auricular               | 35.8 to 38     | 96.4 to 100.4  |
| Temporal (Thermo Flash) | 35.8 to 37.8   | 96.4 to 100.0  |

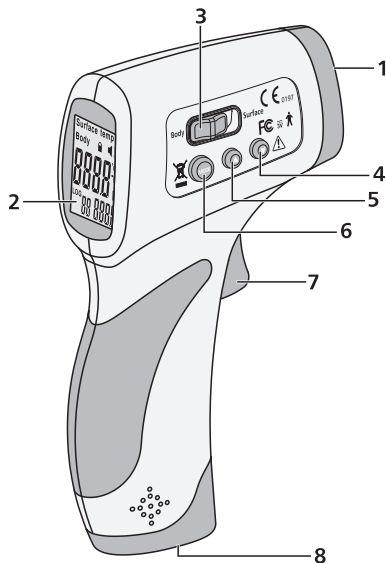
The temperature of the human body varies throughout the day. It can also be influenced by numerous external factors: age, sex, type and thickness of skin...

### Normal Temperatures According To Age

| Age         | Temp °C      | Temp °F       |
|-------------|--------------|---------------|
| 0-2 years   | 36.4 to 38.0 | 97.5 to 100.4 |
| 3-10 years  | 36.1 to 37.8 | 97.0 to 100.0 |
| 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  |

## 6.Configuration

- 1-IR Sensor
- 2-LCD Display
- 3-Mode Selection
- 4-Down Button
- 5-Up Button
- 6-Mode Button
- 7-Measurement Trigger
- 8-Battery Cover



## 7. Technical Specifications

| Normal Conditions of Use |                                                |
|--------------------------|------------------------------------------------|
| Display Resolution       | 0.1°C (0.1°F)                                  |
| Operating Temperature    | 10 to 40°C (50 to 140°F)                       |
| Humidity Rate            | ≤85%                                           |
| Power                    | DC 3V (2 x "AAA" batteries)                    |
| Size                     | 149 x 77x 43 mm / 5.9 x 3 x 1.7 in (L x W x H) |
| Weight                   | Gross 400g / Net 172g                          |

| Measuring Range     |                                |
|---------------------|--------------------------------|
| In Body Mode        | 32.0 to 42.5 0°C (90 to 108°F) |
| In Surface Temp Mod | 0 to 60°C (32 to 140°F)        |
| Consumption         | ≤50mW                          |
| Accuracy            | ±0.3°C (0.54°F)                |
| Measuring Distance  | 5 cm – 15 cm (2 in – 5.9 in)   |
| Automatic Stop      | 7 sec.                         |

### Non-contact Body Infrared Thermometer Precision

|                                 |                |                                                    |
|---------------------------------|----------------|----------------------------------------------------|
| 32 to 35.9°C / 93.2 to 96.6°F   | ±0.3°C / 0.5°F | According to ASTM<br>Standard E1965-1998<br>(2003) |
| 36 to 39°C / 96.8 to 102.2°F    | ±0.2°C / 0.4°F |                                                    |
| 39 to 42.5°C / 102.2 to 108.5°F | ±0.3°C / 0.5°F |                                                    |

### Advice For The 1<sup>st</sup> Use

For stable and reliable results, it is essential to check the Non-contact Body Infrared Thermometer and change as needed, as follows:

- 1<sup>st</sup> step: take the temperature of a person using a conventional thermometer; you will get 37.5°C (99.5°F) for instance.
- 2<sup>nd</sup> step: take the temperature of the same person using the Non-contact Body Infrared Thermometer keeping the 5 to 15 cm (2 in to 5.9 in) distance between the thermometer and the forehead (Take care to remove any obstacle which could alter the measurement (hair, perspiration...)). If you get 37.5°C (99.5°F), the Non-contact Body Infrared Thermometer is properly set and ready for use.



If you get a lower temperature, 36.4°C (97.4°F) for example, your difference is 1.1°C (2.2°F). You should adjust the temperature on the Non-contact Body Infrared Thermometer and add the difference, i.e. 1.1°C (2.2°F).

To do it, press the **"MODE"** button for 2 seconds, the screen displays F1, press **"MODE"** button again until you get F3. Press **"UP"** button in order to add the difference (in our example, 1.1°C – 2.2°F).

3<sup>rd</sup> step: To check, take the temperature again using the Non-contact Body Infrared Thermometer.

## 8. Use

8-1. Install battery

8-2. For the first use or when inserting new batteries wait between 10 minutes for the warm-up of the apparatus and when inserting the new batteries.

8-3. Aim towards the forehead (see the diagram below for the Touch less Body Thermometer positioning), from a distance of 5 cm (2 in), press the measuring key, the temperature is displayed immediately. The temperature can also be taken behind the ear lobe.



8-4. Before taking of the temperature make sure to remove hair and perspiration from the forehead. You can also take the temperature behind the ear lobe.

## 9.Measuring Operation

### 9-1.Choosing The Temperature Unit – F1 Function

Press “MODE” button for 2 seconds, the screen displays: F1. Select “DOWN” for degrees Celsius, “UP” for degrees Fahrenheit.

### 9-2.Alarme Setup – F2 Menu

Press “MODE” touch for 2 seconds, the screen displays: F1.Press twice “MODE” touch to get F2. Select “UP” to increase the threshold by 0.1°C (0.1°F), “DOWN” to reduce it by 0.1°C (0.1°F).

**Note:** The alarm threshold default value is 38°C (100.4°F).

### 9-3.Total Difference – F3 Menu

To adjust the total variation of your the Non-contact Body Infrared Thermometer .

Press “MODE” button for 2 seconds, the screen displays: F1. Press “MODE” button two times to get F3. Select “UP” to increase the difference by 0.1°C (0.1°F), “DOWN” to reduce it by 0.1°C (0.1°F).In the cases of seasonal or environmental changes a verification and adjustment should be carried out.

**Note:** This function is only effective Body

### 9-4.Buzzer ON/OFF – F4(F3) Menu

Press “MODE” button for 2 seconds, the screen displays: F1. Press three(two) times “MODE” button to get F4(F3).

Select “UP” to open the buzzer (a sound icon “🔊” is displayed on the LCD screen), press “DOWN” to stop it (the icon disappear).

### 9-5.Exiting The Setting Mode

Press “MODE” button until the screen turns off.

The Non-contact Body Infrared Thermometer is specially designed to take the body temperature of a human being. For this, use the Body mode. Measurement range for Body mode: 32 to 42.5°C (86 to 108°F)

You can also use the Non-contact Body Infrared Thermometer to measure the temperature of an area or an object, a food, a liquid or a room temperature. For this, use the Surface mode. Measurement range for Surface mode: 0 to 60°C (32 to 140°F)

**Important:** The area temperature differs from the internal body temperature. To obtain the internal temperature always use the Body mode.

Please make sure to select the Body mode for an internal temperature reading and the Surface mode for an external area reading (bottle, bath, room...).

### 9-6.Data Memory

Data memory automatically after temperature measurements, which will display at the right corner of LCD. Press **"UP"** or **"DOWN"** button to display the last temperature measurement.

Under the condition of power off, press **"UP"** and **"DOWN"** button together for two seconds, to display the last temperature measurement. At this mode if change the order number to 0 and press **"MODE"** button, then delete all memory data.

### 9-7.Changing The Batteries

Display: when the LCD screen displays "🔋", the battery is used.

Operation: Open the lid and change the batteries, taking great care with the correct positioning. A mistake with this could cause damage to the apparatus and compromise the guarantee of your Non-contact Body Infrared Thermometer. Never use rechargeable batteries. Use only batteries for single usage.

### 9-8.Longevity Use

The Non-contact Body Infrared Thermometer was conceived for an intense and professional use, its longevity is guaranteed for 40.000 takings.

## 10. Advice

- The protective glass over the lens is the most important and fragile part of the thermometer, please take great care of it.
- Clean the glass with cotton fabric, wet with water or 70° alcohol.
- Do not use other batteries than mentioned batteries, do not recharge non rechargeable batteries, do not throw in fire.
- Remove the batteries when thermometer is not used for an extended period of time.
- Do not expose the thermometer to sunlight or water.
- An impact will damage the product.

## 11. Troubleshooting

If you happen to have one of the following problems while using your the Non-contact Body Infrared Thermometer please refer to this breakdown service guide to help resolve the problem. If the problem persists please contact our customer service.

### The screen displays temperature superior to 60°

The temperature is in Fahrenheit change the measurement to Celsius (by pressing the “**MODE**” button to get the F1 function key)

### The screen displays the body temperature inferior to 32°C (89.6°F)

If you're on Surface mode the 32°C (89.6°F) temperature displayed is showing the external temperature that your body releases.

### The screen displays the message “HI”

When using the Non-contact Body Infrared Thermometer the message HI can show on the screen.

The analysis is above the measurement range selected, either superior to 42.5°C (108°F) in Body mode or superior to 60°C (140°F) in Surface mode.

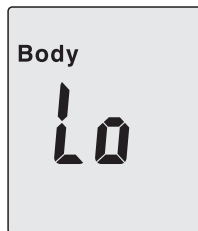
Body

HI

**The screen displays the message “LO”**

When using the Non-contact Body Infrared Thermometer the message Lo can show on the screen.

The temperature analyzed is under the measuring range selected, either less than 32°C (90°F) in Body mode or less than 0°C (32°F) in Surface mode.



**This message displays in various cases – please find below a list of the main cases: 2°F in Surface mode.**

| Reasons for LO message display                                                                        | Advice                                                                                      |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Temperature reading hampered by hair, perspiration...                                                 | Make sure that there is no obstruction prior to taking a temperature.                       |
| Temperature hampered by an air flux.                                                                  | Make sure there is no air flux as this could interfere with the infrared system.            |
| Temperature readings too close together, the Body Thermometer did not have the chance to boot itself. | Respect the pause of 15 seconds minimum between two readings – A 1 minute pause is advised. |
| The measuring distance is too far                                                                     | Please respect the measuring distance (between 5 and 15cm – 2 in and 5.9 in).               |

The manufacturer reserves the right to alter the specifications of the product without prior notification.

The manufacturer allows himself the right to modify without any preliminary opinion the technical specifications of the product.



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