Non-Contact

Forehead
InfraRed Thermometer

User Manual

CONTENTS

1.GENERAL DESCRIPTION

Non-Contact Forehead IR 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.

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 and 40°C
- Do not expose this thermometer to electic shocks.
- Do not expose this thermometer to extreme temperature conditions of >50°C or <0°C
- Do not use the device in relative humidity higher than 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 if damaged.
- It may affect the accuracy of measurements when the forehead is covered by hair, perspiration, cap or scarf.(See Part 10-4)
- Keep the Measuring distance as 3cm - 5cm(1.2in - 2in) (See Part 10-4)
- It may affect the accuracy of measurements when the forehead is covered by perspiration or other factors, please take the temperature behind the ear lobe. (See Part 10-5)
- Clean the glass with a cotton bud lightly moistened with 70% alcohol.

Importance:
- Before taking of the temperature make sure to remove hair and perspiration from the forehead.
- Selecting "Body" mode to measure the body temperature; Selecting "Surface" mode to measure the surface temperature.
- Use of this thermometer is not intended as a substitute for consultation with your physician.
- Should a problem occur with your device,please contact your retailer. Do not attempt to repair the device yourself.
- According to EMC standard, the medical electronic products should be maintained specially.

3.FEATURES

- Precise non-contact measurements
- User selectable ºC or ºF
- 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 0.1ºC(0.1ºF)
- Backlight LCD display

INTENDED USE

Non-Contact Forehead IR Thermometer is designed for body surface and forehead temperature measurement for infants and adults without contact to human body.

Non-Contact Forehead IR Thermometer can also be used to measure the temperature of a baby-bottle or bath, or room temperature (by using the Surface Temp function).

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
Ear	35.8 to 38	96.4 to 100.4

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

5.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
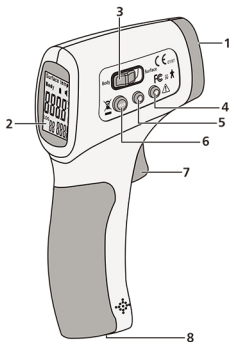
DESCRIPTION OF SYMBOLS

$C\epsilon_{0197}$	The device is in accordance with Medical Device Directive 93/42/EEC
FC	The device is in accordance with FCC Part 15 Subpart B:2007/Radio Frequency Devices IC Regulation ICEC-003: 2004 Interference-causing Equipment Standard-Digitial Apparatus
3V===	3V DC power supply
↑	Type B equipment
☒	In order to protect the environment, please recycle the battery according to the local regulations
Body Surface	Indication of Mode
⚠	Attention,consult accompanying documents

8.TECHNICAL SPECIFICATIONS

Normal Conditions of Use	
Display Resolution	0.1°C (0.1°F)
Operating Temperature	10 to 40°C (50 to 104°F)
Storage Temperature	0 to 50°C (32 to 122°F)
Humidity Rate	<85%
Power	DC 3V (2 x "AAA" batteries)

Measuring Range	
In Body Mode	32.0 to 42.5°C (90 to 108°F)
In Surface Temp Mod	0 to 60°C (32 to 140°F)
Accuracy	±0.3°C (0.54°F)
Measuring Distance	3cm-5cm (1.2in-2in)
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 Standard E1965-1998 (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 1ST USE

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

1st step: take the temperature of a person using a conventional thermometer; you will get 37.5°C (99.5°F) for instance.

2nd 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).

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

10. USE

10-1.   Install battery

10-2.   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.

10-3.   If the device is not used for a long time, once you turn it on
        again, the device will test the room temperature first and will
        delay turning on for one or two seconds.

10-4.   Aim towards the forehead (see the diagram below for the
        positioning), from a distance of 5cm(2in), press the measuring
        key, the temperature is displayed immediately. Making sure
        there is no hair, perspiration, cosmetic or cap covered on the
        forehead.
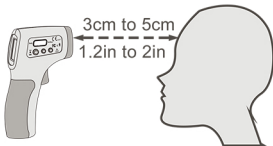
10-5.   When the room temperature is significant difference, or there
        is perspiration on the forehead, You can take the temperature
        behind the ear lobe. Making sure there is no hair, perspiration,
        cosmetic or cap covered.
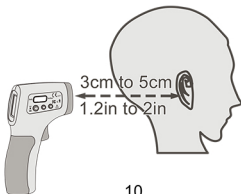
11.MEASURING OPERATION

11-1.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.

11-2.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).

11-3.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 itby 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

11-4.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).

11-5.Exiting The Setting Mode
Press "MODE" button until the screen turns off.

11-6. 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…).

11-7.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.

11-8.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.
Remove the battery from the instrument if it is not required for extended periods of time in order to avoid damage to the thermometer resulting from a leaking battery.

11-9.Longevity Use

The Non-contact Body Infrared Thermometer was conceived for an intense and professional use, its longevity is guaranteed for 40000 takings.

12.Advice

- The protective glass over the lens is the most important and fragile part of the thermometer, please take great care of it.
- Do not recharge non rechargeable batteries, do not throw in fire.
- Do not expose the thermometer to sunlight or water.

13.Maintenance and Cleaning

- The Infrared Sensor is the most precise part, must be protected carefully.
- Clean the device with a cotton bud lightly moistened with 70% alcohol.
- Do not clean the device with corrosive detergent.
- Keep the device away from water or other liquid.
- Store the device in a dry environment, and keep it away from dust and direct sunlight.

14.TROUBLESHOOTING

If you happen to have one of the following problems while using your the non-contact forehead IR 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 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.

Body

Lo

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This message displays in various cases – please find below a list of the main cases.

Reasons for "LO" or "HI" 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.
The measuring distance is too far.	Please respect the measuring distance (between 3cm to 5cm, 1.2in to 2in).
From high/low temperature condition to room temperature	Waiting for 10 minutes before taking the body temperature

15.THIS APPLIANCE CONFORMS TO THE FOLLOWING STANDARDS:

- EN 980: Graphical symbols for use in the labeling of medical devices
- EN 1041:Information supplied by the manufacturer with medical diveces
- EN 60601-1: Medical electrical equipmen
  Part 1: General requirements for safety (IEC:60601-1:1998)
- EN 60601-1-2: Medical electrical equipment Part 1-2: General requirements for safety Collateral standard Electromagnetic compatibility Requirements and test (IEC 60601-1-2:2001)

EMC STATEMENT

This device has been tested and homologated in accordance with EN60601-1-2:2007 for EMC. This does not guarantee in any way that the device will not be affected by electromagnetic interference. Avoid using the device in high electromagnetic environment.

The MEDICAL DELECTRICAL EQUIPMENT needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the ACCOMPANYING DOCUMENTS.

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.