

**Non Contact Infrared Thermometer  
Model DIGITHERM**



• Professional • Precision • Easy Operation

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

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## 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 rely on temperature measurements alone, if you have health concerns, seek medical advice.
- Do not expose this thermometer to electric 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 3-5cm. (See part 10-4).
- When the body infrared thermometer should be left in that room during 15 to 20 minutes before using.
- 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.
- Remove the batteries if not in use for a long period.

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## Importance

- Before taking the temperature make sure to remove hair and perspiration from the forehead.
- Selecting "Body" mode to measure the body temperature, selecting "Surface" to measure the surface temperature.
- Should a problem occur with your device, please contact your retailer. Do not attempt to repair it by yourself.
- According to EMC standard, the medical electronic products should be maintained specially
- Application: This proeluct is suitable for any peoples body temperature in any age.

## 3. Features

- Precise non-contact measurements
- User selectable °C or °F
- Set Alarm value
- Memorization of the last 99 measurements
- Automatic Data Hold and auto power off
- Automatic selection range and display resolution 0.1°C(0.1°F)
- 3 colors backlight LCD display
- 2 Modes: Body and Surface Mode.

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## 4. 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.  
 It can also be used to measure the temperature of baby-bottle or both, or room temperature(by using the surface mode).

Normal Temperatures According to Measurement Method

Measurement Method	Normal Temp. °C	Normal Temp. °F
Rectal	36.6 to 38.0	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 38.0	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

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## 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



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## 6. Indicator



1. Surface mode symbol
2. Body mode symbol
3. Digital readout
4. Battery symbol
5. Memory symbol
6. Save data readout
7. Temp. °C(Celsius)/°F(Fahrenheit) scale
8. Buzzer symbol
9. Laser aiming

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## 7. Description of Symbols

CE1023	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.
3V	3V DC power supply
Person icon	Type B equipment
Recycling symbol	In order to protect the environment, please recycle the battery according to the local regulations.
Body /Surface	Indication of Mode
Warning symbol	Attention, consult accompanying documents
Recycling symbol	This manual is made of paper, which can be used circularly.

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## 8. Technical Specifications

Product Name	Non Contact Infrared Thermometer
Model	PC868
Display Resolution	0.1°C(0.1°F)
Operating Temp.	10 to 40°C (50to 104°F)
Storage Temp.	0 to 50°C (32 to 122°F)
Humidity Rate	≤85%
Power	DC 3.0V ( 2X "AAA" batteries )
Size	149(L)×95(W)×45(D) MM/ 5.9×3.7×1.8 inch
Weight	140g
Measurement Range	Body: 32.0 to 42.9°C(89.6 to 109.3°F) Surface: 0 to 100°C(32 to 212.0°F)
Precision	Human: ±0.2°C(0.4°F) 36.0 to 39.0°C(96.8 to 102.2°F) ±0.3°C(0.5°F) 32.0 to 35.9°C ( 89.6 to 96.2°F ) ±0.3°C(0.5°F) 39.0 to 42.9°C(102.2 to 109.2°F) Surface: ±1.0°C(1.8°F) 0 to 100°C(32 to 212.0°F)
Measuring Distance	3 to 5 CM
Backlight	Body mode: 32.0 to 37.4°C(86.0 to 99.3°F) Green 37.5 to 37.9°C(99.5 to 100.2°F) Orange 38.0 to 42.9°C(100.4 to 109.2°F) Red Surface mode always keep Green color
Automatic stop	7 Sec

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## 9. Advice for The First Use

For stable and reliable results, it is essential to check the Non-contact 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 device keeping the 3 to 5 cm 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 device is properly set and ready for use.  If you get a lower temperature, such as 36.4°C(97.5°F), your difference is 1.1°C(2.2°F). You should adjust the temperature on the device 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 product.

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## 10. Use

- 10-1 Install batteries
- 10-2 For the first use or when inserting new batteries, please wait about 10 minutes for the warm-up of the apparatus.
- 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 Select body mode, 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, accompanied by a beep sound. 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.  
 If the measurement is 38.0°C or more(can be setting, refer to 11-2), the sound should be be-be-be-be 5 rapid sounds.  
 10-6 Select object mode for measuring room temperature, liquid temperature, ect.

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## 11. Setting Operation

Mode Code	Name	Operation
11-1 F1	Set °C/°F scale	Press MODE button for 2 seconds, the screen will display F1 on the bottom right, press UP or DOWN button can change or °C
11-2 F2	Set Alarm temp.	Press MODE button for 2 seconds, the screen display F1, press MODE button to get F2, Select UP to increase the threshold by 0.1°C(0.1°F), DOWN to reduce it by. The alarm threshold default value is 38.0°C(100.4°F)
11-3 F3	Set difference	Press MODE button for 2 seconds, enter into F1, Press 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 case of seasonal or environmental changes a verification and adjustment should be carried out. Note: This function is only effective body.
11-4 F4	Set Buzzer on/off	Press MODE button for 2 seconds, the screen displays F1, Press 3 times MODE button to get F4. Select UP to turn on the buzzer, press DOWN to stop it.
11-5 F5	Set laser aiming on/off	Press MODE button for 2 seconds, the screen displays F1, Press 4 times MODE, enter into F5, Select UP or DOWN to open or close the laser aiming function.

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11-6	Measurement Mode	There are 3 measurement modes for this device. That is Body, Surface. It is able to take the body temperature of human beings, take the temperature of an area or an object, a food, a liquid or a room.
		Body mode: Put the mode button on the left, Measurement range 32.0 to 42.9°C (86.0 to 109.2°F).
11-7	3 Colors Backlight	Surface mode: Put the mode button in the middle, Measurement rang 0 to 100°C(32.0 to 212.0°F)
		In body mode, the device is able to judge whether a fever or not by different color of backlight: 32.0 to 37.4°C (86.0 to 99.3°F) Green 37.5 to 37.9°C (99.5 to 100.2°F) Orange 38.0 to 42.9°C (100.4 to 109.2°F) Red In surface mode, the backlight always keeps green.
11-8	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.

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## 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. Care and Cleaning

- The infrared sensor is the most delicate part of the device, it has to be clean and intact to ensure accurate readings.
- Clean the device gently with a cotton swab or soft cloth moistened with 70% alcohol
- Use a soft, dry cloth to clean the thermometer display and exterior.
- Do not use abrasive cleaners, Never submerge the thermometer in water or any other liquid.
- Store the device in a dry environment, and keep it away from dust and direct sunlight.
- Always keep the thermometer out of reach of children.

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## 14. Trouble shooting

Trouble	Reason	Solution
No response	Batteries used up? Batteries in wrong polarity?	Replace new batteries Adjust batteries to proper polarity
Lo, Hi	Exceed measurement range Body mode: < 32.0 °C display Lo > 42.9°C display HI Surface mode: < 0°C display Lo > 100°C display HI	1. Make sure the probe is clean and there is no air flux as this could interfere with the infrared system. 2. Make sure there is no air flux as this could interfere with the infrared system. 3. Make sure the measuring distance is not too far.
Err	Ambient temperature too low or too high	Allow the device to remain in a room for 20 minutes where the temperature is range from 10 to 40°C
	The batteries are running low	Replace 2 new AAA batteries

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## 15. This appliance conforms to the following standards

ASTM E1965-1998  
 -EN980: Graphical symbols for use in the labelling of medical devices  
 -EN1041: Information supplied by the manufacturer with medical devices  
 -EN60601-1: Medical electrical equipment part 1-General requirements for safety(IEC60601-1:1998)  
 -EN60601-1-2: Medical electrical equipment part 1-2: General requirements for safety collateral standard electromagnetic compatibility requirements and test(IEC60601-1-2:2001)

EMC statement  
 This device has been tested and homologated in accordance with EN60601-1-2 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 electrical 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.

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