

EAR THERMOMETER

ET001

! NOTE:

You must read this instruction manual completely before use and follow all instructions. Keep the instructions for later use. You must check the device functions according to this instruction manual prior to each use and only use this device if it is in proper working condition.

CONTENTS

1. Features	1
2. Indication for Use	1
3. Warnings and Precautions	1
4. Operating Principle	2
5. Basic Description	2
6. Explanation of Symbols	3
7. Replace the Batteries	3
8. How to Use Your Thermometer	3
9. Technical Specifications	4
10. Cleaning and Disinfection	4
11. Care and Maintenance	4
12. Troubleshooting	4
13. EMC Declaration	5
14. Warranty/service	5
15. Disposal	7

THE MANUFACTURER RESERVES THE RIGHT TO ALTER THE SPECIFICATIONS OF THE PRODUCT WITHOUT PRIOR NOTIFICATION.

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1. Features

- 1) Measuring range: 32.0°C ~ 43.0°C (89.6°F ~ 109.4°F).
- 2) Forehead, ear and ambient temperature measurement;
- 3) LCD display: three color backlight display.
- a. Green: T≤37.2°C (≤99.0°F), Normal temperature.
- b. Orange: 37.3°C≤T≤37.9°C (99.1°F~100.2°F), Moderate temperature.
- c. Red: T≥38.0°C (≥100.4°F), High temperature.
- 4) Data memory: memory of the last 10 measurements for analysis and comparison.
- 5) Fahrenheit and Celsius temperature unit setting.
- 6) Low battery detection;
- 7) Turns off automatically after 75 seconds of inactivity.

2. Indication for Use

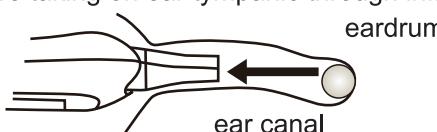
The Ear Thermometer is designed for intermittent measurement of body temperature in the auditory canal or on the surface of central forehead skin of people in all ages. It is a non-contact method for forehead temperature measurement, and the recommended measurement distance is 0-3 cm. It is suitable for consumers in the household environment and healthcare providers.

3. Warnings and Precautions

- Keep the product out of reach of children and newborns. Avoid small parts falling off and being swallowed.
- Never use the thermometer for purposes other than those it has been intended for. Please follow the general safety precautions when using on children.
- Keep the thermometer away from direct exposure to the sun and keep it in a dust-free, dry area well-ventilated place at a temperature between 10°C (50°F)-40°C (104°F). Do not use the thermometer in high humidity environments. (>85% RH)
- Do not use the thermometer if there are signs of damage on the measuring sensor or on the instrument itself. If damaged, do not attempt to repair the instrument! Please contact dealer.
- Never immerse the thermometer into water or other liquids (not waterproof). For cleaning and disinfecting please follow the instructions in the "Cleaning and Disinfection" section.
- This thermometer consists of high-quality precision parts. Do not drop the instrument. Protect it from severe impact and shock. Do not twist the instrument or the measuring sensor.
- Please consult your doctor if you see symptoms such as unexplained irritability, vomiting, diarrhea, dehydration, changes in appetite or activity, seizure, muscle pain, shivering, stiff neck, pain when urinating, etc., even in the absence of fever.
- Clean the thermometer probe after each use.
- Do not use the thermometer for continuous temperature monitoring.
- Do not take a measurement while or immediately after nursing a baby.
- Patients should not drink, eat or be physically active before/while taking the measurement.
- Avoid using it with cell phones, electrocautery and MRI equipment, etc.
- Do not use its ear temperature mode if the ear is infected with otitis or suppuration.
- The thermometer shall not be serviced or maintained while in use with a patient.
- The patient is an intended operator. The patient can use and maintain the device and its accessories according to this manual.
- The thermometer and accessories are to be disposed of according to local regulations after their service lives. Alternatively, they can be returned to the dealer or the manufacturer for recycling or proper disposal.
- No modification of this thermometer is allowed.
- The thermometer is not suitable for use in an OXYGEN RICH ENVIRONMENT.
- This device may be used for professional purposes or for personal home use.
- Do not expose this thermometer to electric shocks.
- The protective glass over the lens is the most fragile part of the thermometer. Do not touch the glass of the infrared lens with your fingers.
- The readings of the left and right ears may be different. It is recommended that the temperature of the same ear be collected when observing the changes of body temperature.
- When the ears are burning due to sleeping on the side, wearing headphones or hearing aids, long hair coverage, etc., the ear canal temperature will be temporarily higher than its true temperature. Please wait for 30 minutes before measuring again.
- The device requires no calibration.
- Manufacturer will provide circuit diagrams, component part lists, descriptions, calibration instruction to assist to SERVICE PERSONNEL in parts repair.
- Remove batteries if equipment is not likely to be used for some time.
- Before and after each use, the thermometer should be cleaned according to the requirement of this manual to avoid possible bacterial infections.
- Do not put this product in the place with direct sunlight, high temperature, high humidity, excessive dust, or the place where it may contact with corrosive gas or liquid, and do not use this product in the above environment.
- The device should no longer be reused when it reaches the expected service life (5 years, from the date of production) of the device. See chapter 15, to dispose the device.
- Electrical components and batteries have heavy metal or chemicals which may do harm to environment, please follow the local law and regulation on its disposal.
- You contact Berrcom ("manufacture") or your dealer on the following issues: If an error occurs or if ear thermometer is damaged. DO NOT attempt to repair ear thermometer yourself, as this will void the warranty. Only have repairs carried out by authorized service partners. Berrcom will provide circuit diagrams, component part lists, descriptions, calibration instructions to assist to authorized service partners in parts repair.
- If you need assistance in setting up, using, or maintaining the ear thermometer. If you have unexpected operation or events to report.

4. Operating Principle

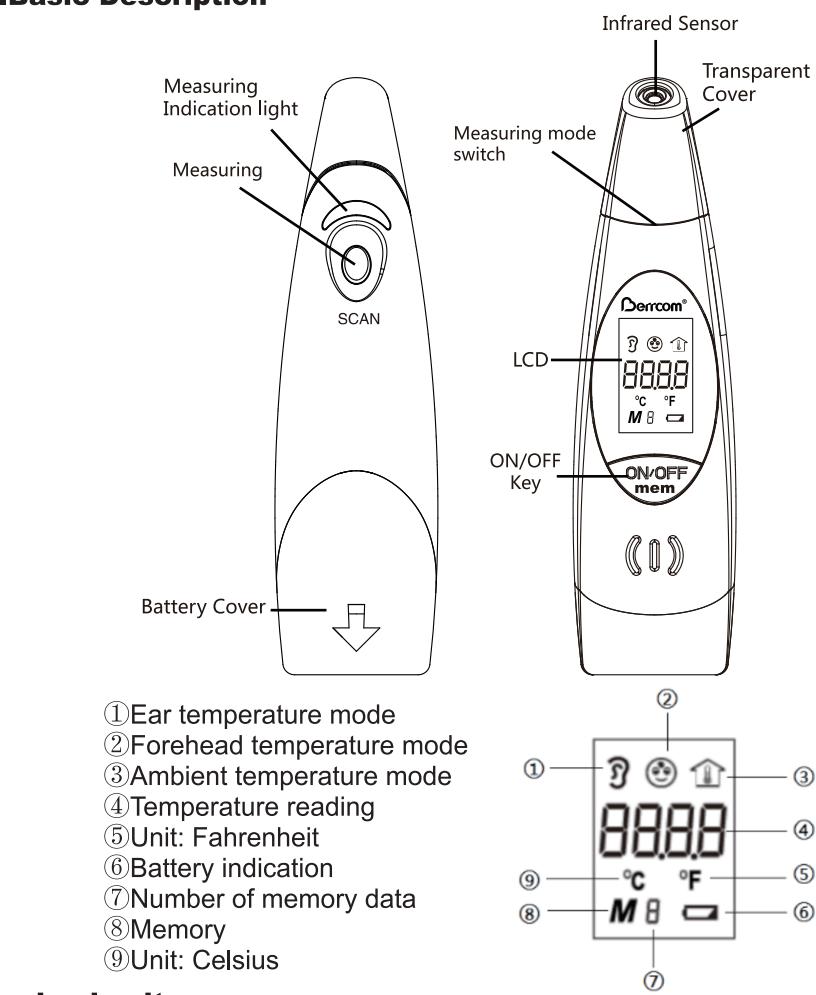
Ear temperature: Ear tympanic blood vessel connects with the hypothalamus, which is the temperature control center in human cerebral; therefore, by means of testing the ear tympanic temperature, it can figure out the accurate body temperature of human being. ET001 is such a product to detect body temperature of human being by means of temperature taking on ear tympanic through infrared sensor.



1

Forehead Temperature: The infrared sensor receives the heat energy generated by artery blood, the device figures out the precise body temperature of human being.

5. Basic Description



Packaging items:

Thermometer	1pc
User manual	1pc

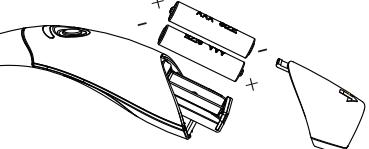
6. Explanation of Symbols

Symbol	Description of symbol
Berrcom®	Trade mark
	Application part, Type BF
	Direct current
IP22	Protected against access to hazardous parts with a finger and against vertically falling water drops when enclosure tilted up to 15°
	Refer to instruction manual / booklet
	DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
	Manufacturer
	Serial number
	The CE labelling certifies that the product complies with the essential requirements of Directive 93/42/EEC on medical device.
	Authorized representative in the European Community/European Union
	Date of manufacture
	Model number
	Medical device
	Country of manufacture

7. Replace the Batteries

Slide the battery cover off along the marked direction. Put two AAA batteries correctly into the compartment. Remove the batteries if the thermometer will not be used for more than two months.

If the "—" displays on the screen, it means the battery is low and must be replaced.



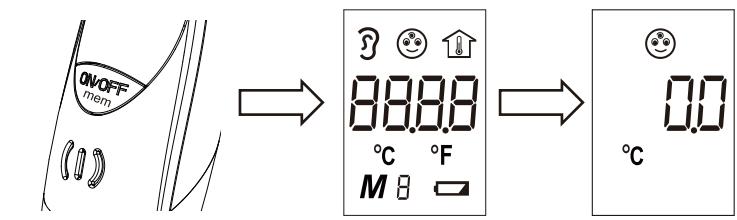
8. How to Use Your Thermometer

(1). Power on

Press "ON/OFF" button to start the device and take temperature when the screen shows up with "0.0°C" or "0.0°F".

Putting the transparent cover on the top is for measuring forehead temperature and taking it down is for ear temperature measurement.

2



(2). Ear temperature measurement

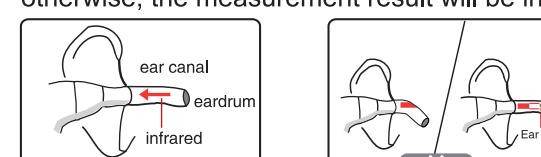
WARNING:

Please use the "forehead temperature mode" to measure your forehead temperature if your ear is infected with otitis or suppuration.

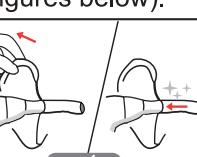
Before and after each use, the thermometer should be cleaned according to the requirement of this manual to avoid possible bacterial infections.

Take the transparent cover off, and then the screen will show up with the sign of ear "—" , which is for the ear temperature mode. Pull the ear edge, insert the probe into ear canal, point to the eardrum. Press the "Measuring scan" button, and the display will give a detecting signal like "—" and the measuring indication light will blink, then the thermometer will beep once to indicate that the measurement has been completed. The temperature reading will be displayed on the screen with backlight.

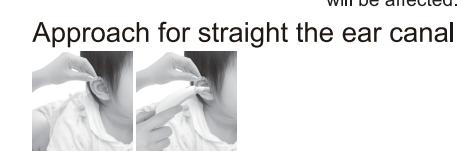
* Make sure the probe is aiming at the eardrum when it is inserted into the ear canal; otherwise, the measurement result will be inaccurate (See figures below).



The wrong method of measuring
When measuring ear temperature if the ear canal is seriously bent or something exists in the ear, the measuring results will be affected.



The right method of measuring
Please take hold of the ear to keep the ear canal smooth and at the same level with the infrared sensor. Make sure to clean the ear canal before measuring.



Newborn under 12 months: pull in outward rear direction

Child above 12 months and the adult: pull in outward upper direction

Note:
A 10-second interval is allowed between two measurements.

(3). Forehead Temperature measurement

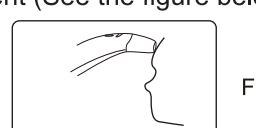
WARNING:

Please use the "forehead temperature mode" to measure your forehead temperature if your ear is infected with otitis or suppuration.

Before and after each use, the thermometer should be cleaned according to the requirement of this manual to avoid possible bacterial infections.

Put the transparent cover on when a sign of forehead like "—" shows up on the screen, which indicates forehead temperature mode. Press the "SCAN" button, and a measuring signal like "—" will show up on the screen. The thermometer will beep when the measurement is completed. The measurement result will be displayed on the screen with backlight.

* Make sure the probe is aiming at the central forehead with an ideal distance 0-3 cm during measurement (See the figure below).

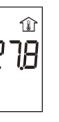


Forehead Temperature

Note:
A 10-second interval is allowed between two measurements.

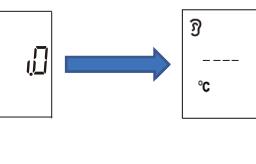
(4). Ambient temperature measurement

If there is no button input within 10 seconds after body temperature testing, the device will show up with the current ambient temperature.



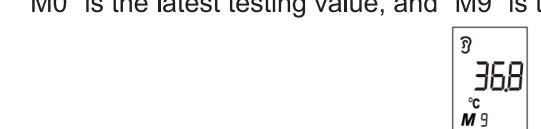
(5). Choosing the unit

In the power on state, first press and hold the "SCAN" button and then press the "ON/OFF" button for about 5 seconds, the screen will display "I.0", continue to press for about 5 seconds, it will appear $-\text{ }^{\circ}\text{C}$ or $-\text{ }^{\circ}\text{F}$. Then release "ON/OFF" and "SCAN" button, press the "SCAN" button to switch unit $^{\circ}\text{C}$ or $^{\circ}\text{F}$. After that, press "ON/OFF" button to save and exit.



(6). Memory recall

Press the "ON/OFF" button until the screen shows up with Mx the "x", of which means the group number of memories, and then displays the measuring value.



3

