

Infra-red ear thermometer

(Using for ear canal measuring)
User's Instruction

Model: ET-100A  0197

Please read the instruction carefully before using.

The ear thermometer is a device capable of achieving infra-red temperature measurement when placed in the auditory canal of a subject. It is a safe means of measuring human body temperature through the ear.

Specification:

The standard we adopted is EN12470-5:2003 Clinical thermometers -- Part 5: Performance of infra-red ear thermometers (with maximum device).

This device complies with the requirements of IEC 60601-1, IEC 60601-1-11 and IEC 60601-1-2.

Range of displayed temperature : 34.0°C~44.0°C (93.2°F~111.2°F)

Display L°C (L°F) when the temperature is under 34.0°C (93.2°F)

Display H°C (H°F) when the temperature is over 44.0°C (111.2°F)

Operating ambient:

Temperature: 16°C~35°C (60.8°F~95.0°F)

Humidity: ≤85%RH

Atmospheric pressure : 700~1060hPa

Altitude : <2000m

Storage and transport condition:

Temperature: -25°C to 55°C (-13°F to 131°F)

Humidity: ≤85%RH

Display resolution temperature range: 0.1°C (0.1°F)


Accuracy: ±0.2°C (from 35.5°C to 42.0°C)

±0.4°F (from 95.9°F to 107.6°F)

Display: liquid crystal display, 3 1/2 digits
temperature value: display the maximum temperature
in measuring process

temperature unit: centigrade or fahrenheit

display of memory: last ten memories

low voltage warning: the LCD display  and then a beep sound is heard

Power consumption: ≤30 mW

Battery: two 1.5V alkaline batteries (AAA)

Battery life: 4000 takes

Shelf life: 3 years

Dimension: 134mm by 37mm by 67mm

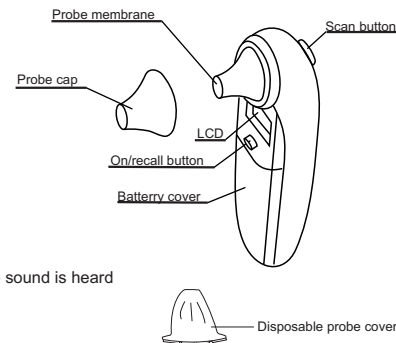
Net weight: Approx. 74g

Beeper sign: on/off, measuring finish and low voltage warning, etc.

Self-testing sequence: Press the 'on/recall' button to turn on the thermometer and all of symbol (See Fig A) should be displayed on the LCD in one second.

Calibration frequency: If used privately no calibration is needed. For professional use it is recommend to check once a year.

Manufacturing and Calibration date: See the label in the batteries box.

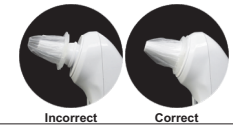


Cautions

1. Before measuring, the thermometer shall be stabilized at least 30min under operating condition.
2. New Disposable probe cover required for each measurement, otherwise inaccurate readings will occur.
3. Please keep your ear canal clear, if not, the measuring result shall be inaccurate.
4. The symbol ' ? ' on the LCD shows you can measure in the ear;
5. Please don't scratch the probe membrane, if not the thermometer shall lose the efficacy;
6. If the LCD no changes under pressing any button, please take the batteries out and put in again;
7. Please don't use the thermometer if your ear canal has been inflammation.
8. Do not expose this thermometer to electric shock.
9. Do not expose the thermometer to sunlight or to water.
10. Do not use near strong electromagnetic fields, i.e. Keep it away from any radio systems and mobile phones.
11. Do not modify this device without authorization of the manufacturer.
12. This device must always be kept in a clean, dry area.
13. If the temperature is not in the normal range, please consult your doctor in time
14. Do not impact the thermometer, otherwise it may affect the accuracy of the measurement
15. This device include small parts, don't inhale or swallow it.

Note:

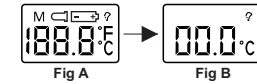
- In order to avoid spreading germs, please use a new disposable probe cover for each measurement.
 - Check to ensure probe cover is fitted on firmly before use (please see the diagrams right).
- If the probe cover is broken, discard and apply a new one immediately.



How to use (°C displays for example)

Measuring human body temperature in the Ear Canal

1. Press the 'on/recall' button to turn on the thermometer, a beep sound is heard and the LCD displays as Fig A in one second. When the LCD displays as Fig B, now ready to measure.

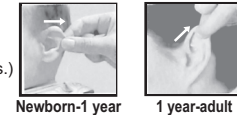


2. Straighten the ear canal by pulling the outer ear up and back to give a clear view of the eardrum.

- For children under 1 year, Pull the ear straight back.

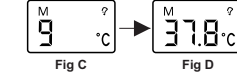
- For children ages 1 year to adult, Pull the ear up and back. (Caution: Many pediatricians suggest use of ear thermometers for children older than 6 months.)

3. While pulling the outer ear, insert the probe snugly into the ear canal (best to insert deep), press the 'scan' button, release it. When you hear a beep sound, the measurement is complete. Then remove the thermometer from the ear. The display show the measured temperature.



4. Measuring again: If measuring again, please unclinch the 'scan' button and wait for the ' ? ' symbol to display, then press 'scan' button to measure again. Advice: The time between each reading should be not less than 1min.

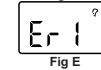
5. Memory seach: Press the 'on/recall' button, the last ten memories (NO.9-NO.0) will take turns to display on the LCD as Fig C and Fig D.



6. The LCD will displays 'Er 1' as Fig E and cannot displays temperature when the ambient temperature is out of the range of 16°C to 35°C.

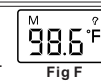
Note: Before measuring, the thermometer shall be stabilized at the operating ambient condition for a minimum of 30 min.

7. Shut off: The thermometer shall automatically shut off without manipulating in one minute.



Changing from Celsius to Fahrenheit (only for switchable type)

To switch the display between°C and°F, turn the unit on. Press and hold the on/recall button for 3 seconds, the display will show as Fig. F, the unit will prepare for a measurement.



Product disposal

Please ensure environmental protection. Batteries do not belong in the domestic waste. Please hand them in at collection point or the municipal recycle material centre as special waste.

This symbol on products and/or accompanying documents means that consumed electronic products must not be mixed with conventional domestic waste. Take these products to the corresponding collection points for correct treatment and recycling, where they will be accepted free of charge. For more information on the closest collection point, Please enquire with your local authorities.
















Cleaning and Storage


1. Store thermometer and the Disposable probe cover in a dry location free from dust and contamination and away from direct sunlight. The ambient temperature at the storage location should remain fairly constant and within the range of -25°C to 55°C.
2. Use an alcohol swab or cotton swab moistened with alcohol (70% Isopropyl) to clean the thermometer casing and the measuring probe. Ensure that no liquid enters the interior of the thermometer.
3. Never use abrasive cleaning agents, thinners or gasoline for cleaning and never immerse the instrument in water or other cleaning liquids. Take care not to scratch the surface of the probe membrane or display.



Explanation of symbols

 battery is empty	 Memory	 Read IFU carefully
 Product disposal instructions for electronic devices	 Type BF equipment	 Authorized representative in the european community
 The battery in this product complies with the requirements stated in European Directives 006/66/EEC.	 CE conformity marking	 Manufactured by
	 L°C or L°F subject temperature is under 34°C	 IP22 Classification according to the degree of protection against ingress of water as detailed in IEC 60529
	 H°C or H°F subject temperature is above 44°C	 Lot number

Replacing the batteries

1. When voltage of the batteries are low, the LCD will display '  ' symbol, please replace two new batteries in unit. The thermometer cannot work accurately under the condition of low voltage.
2. The thermometer is supplied with two 1.5V ALKALESCENCE BATTERIES (AAA). Insert new batteries when the low voltage symbol appears on the LCD.
3. Remove the battery cover and take out the old batteries.
4. Place two new batteries according to the '+' or '-'
5. The disposal of the probe cover, battery and device shall comply with the local environment requirements.
6. The disposal of the battery and the device shall comply with the local environment requirements. The lithium battery or fuel cell may lead to excessive temperatures, fire or explosion.

Quality warranty

This thermometer is guaranteed for one year under proper use according to the operating manual from the date that the product is sent out the factory. The manufacturer will make available on request circuit diagrams, component part lists, descriptions, calibration instructions, or other information that will assist service personnel to repair those parts of device.