

Inner Ear Thermometer

REF ET-100E

User Manual

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Introduction

Please read the instructions carefully before using.

The infrared thermometer is an electronic thermometer using an infrared sensor to measure human body temperature in people of all ages, its operation is based on measuring the natural thermal radiation emanating from the ear canal.

Support

Our manual should provide you with all the information you need to set up & use this product. If you have a question, have a look at our troubleshooting page! For further assistance, why not contact our customer care team directly? We're here to help! Our customer care team are available from 9am - 5pm, Monday to Friday (excluding bank holidays). We promise to respond to all queries and will ensure to resolve any issue you may be having. You can reach us by...

Phone

+44 1483 937 969

Live Chat

Simply visit www.kinetikwellbeing.com and send us a message.

Email

customercare@kinetikwellbeing.com




Post

Kinetik Medical Devices Ltd
Unit 11 Perrywood Business Park,
Honeycrook Lane,
Salfords,
Redhill,
RH1 5JQ

About Age-Exact™

The Kinetik Wellbeing Inner Ear Thermometer is expertly designed to deliver precise and reliable temperature readings for every stage of life. Research shows that fever thresholds vary by age*.

Our innovative Age-Exact™ technology accounts for these age-specific differences, providing a clear, colour-coded result that instantly indicates whether the temperature is normal, a low-grade fever, or a high fever.

Age Range		Green Within normal range	Yellow Low-grade fever	Red High
0-3 	Babies: Under 3 months old	$\geq 35.8 - \leq 37.4$ °C		> 37.4 °C
3-36 	Children: 3 months to 3 years	$\geq 35.4 - \leq 37.6$ °C	$> 37.6 - \leq 38.5$ °C	> 38.5 °C
36+ 	Over 36 months	$\geq 35.4 - \leq 37.7$ °C	$> 37.7 - \leq 39.4$ °C	> 39.4 °C

* Herzog L, Phillips S. Addressing Concerns About Fever. Clinical Pediatrics. 2011; 50(#5): 383-390.

Specification

This appliance conforms to the standard of ISO 80601-2-56-2017AMD.1:2018 Medical electrical equipment -- Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement. 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 'Lo' when the temperature is lower than the displayed temperature range.

Display 'Hi' when the temperature is higher than the displayed temperature range.

Operating ambient:

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

Humidity: ≤85%RH.

Atmospheric pressure: 700 ~ 1060hPa.

Altitude: <3000m.

Storage and transport condition:

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

Humidity: $\leq 85\% \text{RH}$.

Display resolution temperature range:

0.1°C (0.1°F).

Accuracy:

$\pm 0.2^{\circ}\text{C}$ ($35.0^{\circ}\text{C} \sim 42.0^{\circ}\text{C}$) / $\pm 0.4^{\circ}\text{F}$ ($95.0^{\circ}\text{F} \sim 107.6^{\circ}\text{F}$).

$\pm 0.3^{\circ}\text{C}$ ($< 35.0^{\circ}\text{C} / > 42.0^{\circ}\text{C}$) / $\pm 0.5^{\circ}\text{F}$ ($< 95.0^{\circ}\text{F} / > 107.6^{\circ}\text{F}$).

Display:

Liquid crystal illuminated display, 3 digits. Tricolor illuminated display:

Green: Normal temperature.

Orange: Low fever.

Red: High fever.

Temperature value:

Display the maximum temperature in measuring process.

Temperature unit:

Centigrade or fahrenheit.

Display of memory:

Last ten memories.

Low voltage display:

The LCD displays '☐'.

Power consumption:

≤30mW.

Battery:

Two 1.5V alkaline batteries (AA).

Battery life:

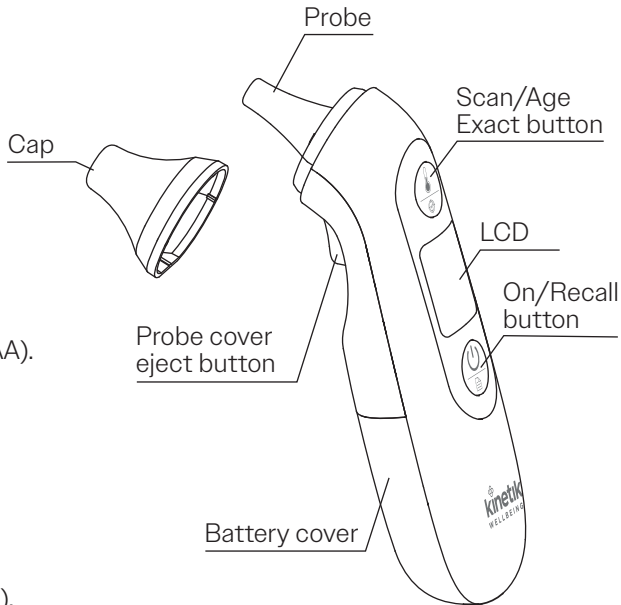
2,500 measurements.

Dimensions:

147mm x 47mm x 40mm.

Net weight:

60g (not including batteries).



Shelf life:

3 years.

Beeper sign:

On/off, measuring finish.

Self-check test:

Press the 'On/Recall' button to turn on the thermometer and all of the symbols (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 manufacturing date on label.

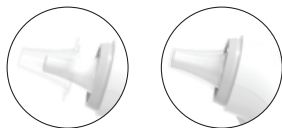
Cautions

1. Before measuring, the thermometer shall be stabilised for at least 30 minutes under operating condition.
2. A new disposable probe cover is 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 scratched the thermometer shall lose efficacy.
6. If the LCD freezes and does not change when pressing any button, please take the batteries out, wait a few seconds and reinsert them.
7. Please don't use the thermometer if your ear canal is inflamed.
8. Do not expose this thermometer to electric shock.
9. Do not expose the thermometer to direct 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.
14. Do not drop/impact the thermometer, otherwise it may affect the accuracy of the measurement.
15. This device includes small parts, don't inhale or swallow them.
16. Do not apply a strong shock to, drop, step on, or vibrate the main unit.
17. Keep out of reach of children.

Notes:

- In order to avoid spreading germs, please use a new disposable probe cover for each measurement.
- Check to ensure the 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. Remove the protective cap before using the ear thermometer and fit a new probe cover. You will hear a “click” sound then the probe cover is fitted correctly. To remove the probe cover pull the probe cover eject button.



How to take a temperature

1. Press the 'On/Recall' button to turn on the thermometer; a beep is heard, and the LCD displays all icons for 1 second (Fig A). The display then shows the Ear symbol, Age symbol and --- °C (Fig B); now it is ready for use.

Note: If the probe cover symbol is flashing on the LCD as Fig C this indicates the disposable cover is not fitted correctly. Refit the probe cover until the probe cover symbol stays off as Fig B.

2. Insert the thermometer into the ear canal, press 'Scan/Age-Exact' button then release it. When you hear a beep the measurement is complete and displays on the LCD (Fig D).
For children under 1 year. Pull the ear straight back.
For children ages 1 year to adult. Pull the ear up and back.



Fig A

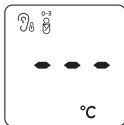


Fig B

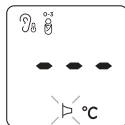


Fig C

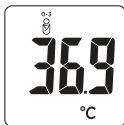
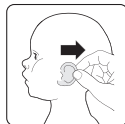
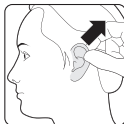


Fig D



Newborn - 1 year



1 year - adult

3. Memory Recall: Press the 'On/Recall' button to turn on the thermometer, a beep is heard, and the LCD displays all icons for 1 second. Then shows Ear symbol, Age symbol and --- °C. Press and release the 'On/Recall' button repeatedly it will scroll through the memories (Fig E).

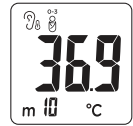


Fig E

4. Changing the Age Exact Temp Range: Press the 'On/Recall' button to turn on the thermometer, a beep is heard, and the LCD displays all icons for 1 second. Then shows Ear symbol, Age symbol and --- °C. Press and hold 'Scan/Age Exact' button for 3 seconds. 'Age Exact' symbol flashes, release button (Fig F). Press and release 'Scan/Age Exact' button to cycle through '0-3', '3-36' & '36+' age ranges. After no press of the 'Scan/Age Exact' button for 3 seconds the 'Age Exact' temp range is set. The 'Age Exact' symbol is solid and the display shows Ear symbol, Age symbol and --- °C. Insert the thermometer into the ear canal, press 'Scan/Age Exact' button then release it. When you hear a beep the measurement is complete and displays on the LCD.

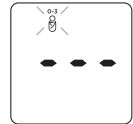


Fig F

5. Changing from Celsius to Fahrenheit: Press the 'On/Recall' button to turn on the thermometer, a beep is heard, and the LCD displays all icons for 1 second. Then shows Ear symbol, Age symbol and --- °C. To switch the display between °C and °F, press and hold the 'On/Recall' button for 3 seconds, the display will switch to C-F °F (°F icon is flashing) (Fig G), release the 'On/Recall' button at this time, the screen will display --- °C. To change back, press and hold the 'On/Recall' button again for 3 seconds, the screen will display C-F °F (°C icon is flashing), release the 'On/Recall' button at this time, the screen will display --- °C.



Fig G

6. Auto off: The thermometer shall automatically turn off if no button is pressed for one minute.
7. Manual off: To manually turn off the thermometer press and hold the 'On/Recall' button for 5 seconds (Fig H).
8. The LCD will display 'Err' and cannot display temperature when the ambient temperature is out of the range of 10°C to 40°C.



Fig H

Note: Before measuring, the thermometer shall be stabilized at the operating ambient condition for at least 30 minutes.

Product disposal

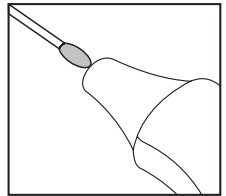
Please ensure the environmental protection. Batteries do not belong to the domestic waste. Please hand them in at the collection point or the municipal recycle material centre as special waste.

This symbol on products and/or accompanying document 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 close set collection point, please enquire with your local authorities.




Cleaning and storage

1. Store the thermometer and the disposable probe cover in a dry location free from dust and contamination and away from direct sunlight. The ambient temperature of 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.



Replacing the batteries

1. When the voltage of the batteries is low, the LCD will display the symbol '  ', please replace the batteries. The thermometer cannot work accurately under the condition of low voltage.
2. The thermometer is supplied with two 1.5V ALKALINE BATTERIES (AA). Insert the 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 alkaline 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.

Explanation of symbols



Battery is empty



Product disposal instructions for electronic devices



The battery in this product complies with the requirements stated in European Directives 2006/66/EEC

M

Memory



Type BF equipment



CE conformity marking

Lo°C or Lo°F

Subject temperature is under 34°C



Follow instructions for use



Importer's information



Date of Manufacture / Made in China

H°C or H°F

Subject temperature is above 44°C



Read IFU carefully



Authorised representative in the European Community



Manufactured by

IP22

Classification according to the degree of protection against ingress of water as detailed in IEC 60529

LOT

Lot Number

REF

Catalogue Number / Model Number

MD

Medical Device



Recyclable

SN

Serial Number

Quality warranty

This thermometer is guaranteed for one year under proper use according 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.



Hangzhou Hua'an Medical & Health Instruments Co., Ltd.
Building 2, 1 # Fuzhu Nan RD, Wuchang Town,
Yuhang District 310023 Hangzhou, Zhejiang China



Shanghai International Holding Corp. GmbH (Europe)
Eiffestrasse 80, 20537 Hamburg Germany



Share Info GmbH
Am Schulzentrum 12, 41564 Kaarst, Germany



www.kinetikwellbeing.com