

Thank you for purchasing the BIOS Diagnostics Infrared Ear Thermometer. This infrared fever thermometer will provide quick, safe and accurate human body temperature readings from the ear canal in just 1 second.

The thermometer is powered by 2 x AAA batteries. This is a high quality product incorporating the latest technology and tested in accordance with international standards.

Indications for Use:

This digital ear thermometer (247DI) is intended to measure the human body's temperature in regular mode, within the ear canal from energy radiated from the eardrum and the surrounding tissue. This device was designed to be reusable for clinical or home use, on people over 2 years of age.

Please read these instructions carefully before using this thermometer and keep both in a safe place.

⚠ IMPORTANT SAFETY INSTRUCTIONS:

This instrument may only be used for the purposes described in this manual. The manufacturer cannot be held liable for damage caused by incorrect application.

Never immerse this instrument in water or other liquids. For cleaning please follow the instructions in the «Care and Cleaning» section.

- **Do not** use the instrument if there are any signs of damage. **Do not** attempt to repair the instrument.
- Earwax in the ear canal may cause a lower temperature reading, therefore it is important to ensure the patient's ear canal is clean.
- If the measurement result is not consistent with the patient's finding or suspiciously low, repeat the measurement every 15 minutes or double check the result by another core body temperature measurement.
- This thermometer consists of high quality precision parts. **Do not** drop this instrument. Protect it from severe impact and shock.
- Keep the thermometer away from direct exposure to the sun and keep it in a dust-free dry area.
- If the instrument is not going to be used for a prolonged period the battery should be removed.
- Battery cover should be installed correctly before use to avoid potential risk of electric shock.

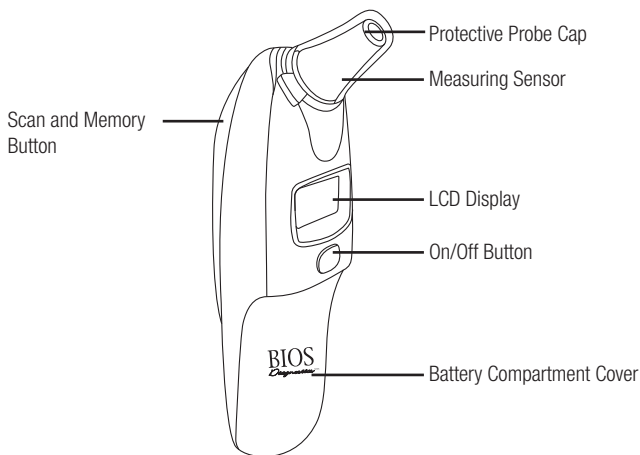
⚠ WARNING:

- Use of this thermometer is not intended as a substitute for consultation with your physician.
- Ensure that children do not use the instrument unsupervised; some parts are small enough to be swallowed.
- It is not recommended to use infrared thermometers on children under 2 years of age.
- Infrared thermometers should not be used to manage important health concerns, and therefore parents should not rely solely on temperature readings to evaluate the status of your child's health. If you have any concerns, consult with your doctor.

Using the unit in the immediate vicinity of mobile phones, microwave appliances or other devices with strong electromagnetic fields may result in impaired functioning.

Do not use this device close to strong electromagnetic fields, such as mobile telephones or radio installations. Keep a distance from such devices when using this unit.

PRODUCT DIAGRAM




DIRECTIONS FOR USE

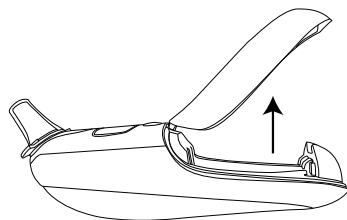
Inserting the batteries:

This infrared ear thermometer is supplied with 2 x AAA batteries.


1. Remove the battery compartment cover.
2. Insert the 2 x AAA batteries according to the correct polarity.
3. Replace the battery compartment cover.

Batteries are depleted and require changing when the  icon is flashing on the screen.

Note: Always change both batteries when replacing them. Do not mix new and old batteries.



TAKING A MEASUREMENT

1. To power the thermometer on, press the **ON/OFF** button. The unit will beep and segments of the screen will be shown for 1 second, the screen will turn blue, the last measurement taken will be displayed. (Figure 1)
2. When the thermometer is ready to take a reading you will see  on the screen, °C or °F icons, and the ear symbol icon. The unit will beep for the second time. (Figure 2)
3. Remove the protective probe cap.
4. Straighten the ear canal by gently pulling the middle of the ear back and up.
5. Place the probe firmly into the ear canal, press the **Scan/M** button, you will hear one short beep. Keep the probe in the ear until the thermometer emits a longer beep to signal the completion of the measurement.



6. Replace the protective probe cap.

NOTE:

- Always insert the thermometer in the same ear with the same direction and depth.
- Always clean the probe accordingly before and after each use. (See Care and Cleaning Section).
- It is recommended that you measure the temperature 3 times in the same ear. If the 3 measurements are different, select the highest one. (Allow 30 seconds between each measurement).
- Before measurements, remain in a stable environment and avoid exercise and bathing for 30 minutes.
- Readings from different measuring sites should not be compared as the normal body temperature varies by measuring site and time of day, being highest in the evening and lowest about one hour before waking up.

Normal body temperature ranges:

- Ear: 35.4 – 37.4°C / 95.7 – 99.3°F
- Axillary / Underarm: 34.7 – 37.3°C / 94.5 – 99.1°F
- Oral: 35.5 – 37.5°C / 95.9 – 99.5°F
- Rectal: 36.6 – 38.0°C / 97.9 – 100.4°F

FEVER ALARM

If the thermometer detects a body temperature greater than 37.5°C/99.5°F, it will emit a series of beeps to warn you of a potential fever.

CHANGING BETWEEN CELSIUS AND FAHRENHEIT

1. To switch the display from °C to °F or vice versa, simply turn OFF the unit, press and hold the **SCAN/M** button for 5 seconds, the current measurement scale (°C or °F icon) will flash on the display. (Figure 3)
2. Release the **SCAN/M** button and then press it again to switch.
3. The thermometer will turn off after approximately 5 seconds.



(Figure 3)

MEMORY STORAGE

This thermometer recalls the last 32 readings.

- **Recall mode:** Press the **SCAN/M** button to enter recall mode when the power is OFF. The memory icon M with a circle around it will flash. (Figure 4)
- **Reading 32** - readings in succession: Once in recall mode, press the **SCAN/M** button consecutively to recall the last 32 readings in succession. The number of the reading will appear (Figure 5) before the stored temperature is displayed. (Figure 6)
- Pressing and releasing the **SCAN/M** button after the last 32 readings have been recalled will resume the above sequence from reading 1.



(Figure 4)



(Figure 5)









(Figure 6)

CARE AND CLEANING

- Use an alcohol swab or cotton tissue moistened with alcohol (70% Isopropyl) to clean and disinfect the thermometer casing and the measuring probe. Allow the lens to fully dry at least 1 minute before replacing the protective probe cap.
- Ensure that no liquid enters the interior of the thermometer. Never use abrasive cleaning agents, thinners or benzene for cleaning and never immerse the instrument in water or other cleaning liquids. Take care not to scratch the surface of the probe lens and the display.

ERROR MESSAGES

| Display | Error |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Measured temperature too low: Displays "L" when measured temperature is lower than 32°C/89.6°F |
|  | Measured temperature too high: Displays "H" when measured temperature is higher than 43°C/109.4°F |
|  | Error function display: The ambient temperature is not within the range of 5°C-40°C/41°F - 104°F. Allow 30 minutes for the ear thermometer to reach room temperature and try again. |
|  | Blank display: Check if the batteries have been loaded correctly. Also check polarity of the batteries. |
|  | Low battery indication: If only the  icon is shown on the display and is flashing, the batteries should be replaced immediately. |

TECHNICAL SPECIFICATIONS

| Type | Infrared Ear Thermometer 247DI |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurement Range | 32°C to 43°C / 89.6°F to 109.4°F |
| Measurement Accuracy | Laboratory: ± 0.2°C, 36.0°C to 39.0°C/ ± 0.4°F, 96.8°F to 102.0°F ± 0.3°C, 32.0°C to 35.9°C and 39.1°C to 42.2°C / ± 0.5°F 89.6°F to 96.62°F and 102.3°F to 107.9°F |
| Display | Liquid Crystal Display |
| Memory | <ul style="list-style-type: none"> • Auto-display the last measured temperature • 32 readings recall in the Memory Mode |
| Operating Temperature | 5°C to 40°C / 41°F to 104°F ≤ 80% relative humidity |
| Storage Temperature | -20°C to 55.0°C/-4°F to 131.0°F ≤ 93% relative humidity |
| Automatic Switch-Off | Approximately 1 minute |
| Battery | 3V (2 x AAA batteries) - approximately 700 measurements |
| Dimensions | 150 (L) x 58 (W) x 42 (H) mm |
| Net Weight | 89 g |
| Reference to Standards | IEC60601-1:2005+A1:2012 IEC60601-1-2:2014 ISO 13485:2016 ISO 14971:2012 EN 62304:2015 ISO10993-5:2009 ISO10993-10:2009 IEC80601-2-56 |

2 YEAR LIMITED WARRANTY

This BIOS Diagnostics™ Infrared Ear Thermometer has a 2 year limited warranty to be free of manufacturing defects for the life of the original owner.

100% Satisfaction Guarantee


If at any time, you are not completely satisfied with the performance of this device, call our BIOS Medical Hotline and speak with a customer service representative, who will make arrangements to have the device tested or replaced to your full satisfaction.

If you have questions regarding the operation of your thermometer call the BIOS Medical Hotline: **1-866-536-2289**.

Should return be necessary, send the unit with all component pieces. Enclose proof of purchase and \$5.00 for return shipping and insurance. Ship the unit prepaid and insured (at owner's option) to:

Thermor Ltd.
Returns Department
16975 Leslie Street
Newmarket, ON L3Y 9A1
www.biosmedical.com
Email: support@biosmedical.com

Please include your name, return address, phone number, and email address. Thermor will test or replace (at Thermor's option) free of charge any parts necessary to correct the defect in material or workmanship. Please allow 10 days for return shipping.

 Read the instruction manual carefully before using this device, especially the safety instructions, and keep the instruction manual for future use.

 Type BF Applied part

 Batteries and electronic devices must be disposed of in accordance with the locally applicable regulations, not with domestic waste.

IP22: Protected against solid foreign objects of 12.5 mm diameter and greater. Protected against vertically falling water drops when the device is tilted up to 15°.

