

Thank you for purchasing BIOS Diagnostics™ Instant Response Fever Thermometer. To correctly utilize all the advantages of this product, please familiarize yourself with these operating instructions before using the thermometer for the first time. Keep the instructions in a safe place for future reference.



Indications for Use:

This digital thermometer (237DI) is intended to measure the human body's temperature in regular mode, orally, rectally or under the arm. This device was designed to be reusable for clinical or home use, on people of all ages.

This thermometer is designed to measure human body temperature by detecting heat from three different body sites: Oral, Axillary (underarm) and Rectal. The accurate measurement is obtained by using a unique probe, which measures the heat flow from blood vessels and converts it to body temperature. The temperature reading range is from 35.0°C to 42.0°C (95.0°F to 107.6°F). The time of measurement is 2 seconds on average.

SAFETY WARNINGS:

-  This thermometer is not a toy and should be kept out of children's reach when not in use.
- Do not drop the thermometer or expose to heavy shock. The unit is not shockproof.
 - Do not immerse thermometer in water or any other liquid. The unit is not waterproof.
 - Do not store the unit in direct sunlight, high humidity, high temperature, or dust.
 - Performance of the device may be degraded should one or more of the following occur:
 - Operation outside statement temperature and humidity range.
 - Storage outside statement temperature and humidity range.
 - Mechanical shock.
 - Patient temperature is below ambient temperature.
 - Stop using the thermometer if it operates erratically or if display malfunctions.
 - Clean the thermometer probe before storing.
 - Do not attempt to disassemble the unit except to replace the batteries.

1. WHAT IS “NORMAL” BODY TEMPERATURE?

“Normal” body temperature varies from person to person and changes according to time of day and body location. The following table shows the temperature ranges:

	What is a fever temperature?	Average normal temperature ranges
Rectal*	Over 38°C /100.4°F	36.3°C-38°C / 97.3°F-100.4°F
Oral (mouth)*	Over 37.8°C /100.0°F	36.1°C-37.8°C / 97.0°F-100.0°F
Axillary (underarm)*	Over 37.2°C /99.0°F	35.2°C-37.2°C / 95.4°F-99.0°F

*Fever definitions according to the American Medical Association
IMPORTANT: It is recommended to measure the body temperature when healthy to establish the specific “normal” temperature
WARNING! A high temperature requires seeking immediate medical attention

2. MEASURING GUIDELINES

- It is recommended that for 15 minutes prior to use, to avoid eating or drinking, exercising, taking a shower or a bath, or smoking.
 - If the thermometer has been stored at a very low or very high temperature, allow the unit to adjust naturally to room temperature before using.
 - Wait at least 1 minute between consecutive measurements for the unit to readjust to room temperature.
- NOTE:** Measurement time may vary based on measuring conditions

3. OPERATING THE THERMOMETER

For first use: Remove the protective case from probe tip and the LCD protective sticker.
1. Turn the unit on by pressing the **POWER** button  you will hear a short beep. Wait 2 seconds for the unit to get ready.

During these 2 seconds the following sequence will be displayed on the LCD:

- A.** All segments will appear

B. The display will show last measurement

C. The hourglass will disappear and the display will show the scale and body icon. This will indicate the thermometer is now ready for measurement.



- 2.** Select your preferred measurement location (oral / rectal / axillary) by using the **MODE** button.



- 3.** Place the probe tip at the desired location. The temperature reading will be displayed within 2 seconds. One long beep will indicate that the measurement is completed.
- If you want to take another measurement, turn off the thermometer and wait 1 minute between consecutive measurements to allow the unit to readjust to room temperature.

Please note:

Oral Use

- 1.** It is important to place the tip of the thermometer well under the tongue in the heat pocket (this is the area beneath the tongue, along the gums and next to the rear - most molar) to get a good, accurate reading. Keep mouth closed and sit still to help ensure an accurate measurement. Instruct children not to bite down on the probe.

Axillary (underarm) Use

- 1.** Wipe the underarm with a clean towel.
- 2.** Place the probe tip under the arm so the tip is touching the skin and bring arm down against the body. With a young child, it is sometimes helpful to hug the child to keep their arm next to their body.

Rectal Use

- 1.** Cover the thermometer's tip with a probe cover and lubricate with a water-soluble jelly for easier insertion.
- 2.** Lay the patient on his/her side. If the patient is an infant, the proper position is to lay on its stomach with legs hanging down, either across your knees or at the edge of a bed or a changing table. This positions the infant's rectum for safe and easy insertion of the thermometer.
- 3.** Gently insert the probe tip into the rectum no more than 0.5 inch. If you detect resistance, stop. **Hold** the thermometer in place during measurement.

Dual Color Display

- In case the device detects a high heat flow from the patient's body- the LCD backlight color will turn red. Otherwise, the LCD backlight color will display a green light.
- The LCD backlight color is an additional alert to the displayed temperature, which indicates the patient's condition (please refer to section 1. What is “normal” body temperature?)

WARNING! A high temperature requires immediate medical attention

Turning The Unit Off

Turn the thermometer off by pressing the **POWER** button  If you forgot to turn it off, the thermometer will automatically turn off after 1 minute.

4. SWITCH °F TO °C SCALES

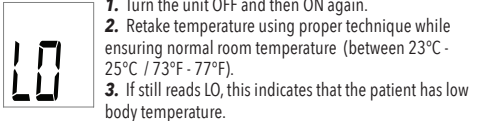
- To alternate °F to °C and vice versa:
- 1.** With the thermometer off, press simultaneously on the **MODE** button and the **POWER** button  until you see the scale alternate.
- 2.** Release both buttons and wait 5 seconds. The correct scale and the body icon will appear and you can take a new measurement.

5. TROUBLESHOOTING AND SPECIAL INDICATIONS

The thermometer has been designed to display feedback-warnings to ensure proper usage and accurate temperature measurement. In the event of a malfunction or incorrect temperature measurement, the following warnings will be displayed:

Display: Flickering LO (unit will beep 7 times)

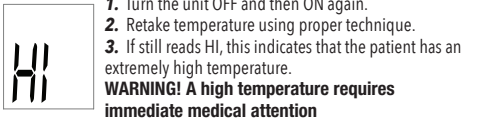
Indication: The measured temperature is below 35°C (95°F).
Instruction:



WARNING! A low body temperature requires immediate medical attention

Display: Flickering HI (unit will beep 7 times)

Indication: The measured temperature is above 42°C (107.6°F)
Instruction:



Display: ER 1 (unit will beep 5 times and power off automatically)

Indication: The thermometer is too cold or too hot to operate.
Instructions:
1. Verify room temperature within product range 16°C - 40°C (60.8°F-104°F).
2. Retake temperature using proper technique.

Display: ER 2 (unit will beep 5 times and power off automatically)

Indication: Temperature did not register because of poor contact, patient movement or poor placement.
Instruction:
1. Turn the unit OFF, wait 1 minute, turn it ON again and retake temperature using proper technique. (See section 3 - Operating the Thermometer)

Display: ER 3 (unit will beep 5 times and power off automatically)

Indication: Unit malfunctioned.
Instruction:
1. Do not use the thermometer - contact service. (See section 9 - Warranty and Service Information)

Display: Flickering battery (after displaying the last temperature measurement)

Indication: Low battery
Instruction:
1. The battery has enough remaining life for approximately 10 more measurements. It is recommended to replace the battery as soon as possible.



INSTANT RESPONSE THERMOMETER
237DI

Display: Battery icon is on (unit will beep 5 times and power off automatically)



Indication: Drained battery.
Instruction:
1. The battery is drained - replace battery. (See section 7 - Installing and Replacing the Batteries)

6. CARE AND CLEANING

- Wipe the tip and probe with an alcohol swab or a cotton swab moistened with 70% isopropyl alcohol before & after each use. After cleaning, wait at least 2 minutes before taking a measurement for the unit to readjust to room temperature.
- Use only a soft dry cloth to clean the body of the thermometer (if necessary). Never use an abrasive cleanser or submerge the thermometer in water or other liquids.
- Do not expose the thermometer to extreme temperatures, humidity, direct sunlight or shock.
- Store at room temperature.

7. INSTALLING AND REPLACING THE BATTERIES

The thermometer uses one 2032 Li 3V Coin Battery. To install/replace, first switch off the device:

- 1.** Remove the battery cover by pressing the latch and sliding it out of its housing.
- 2.** Firmly attach the battery to it's place, make sure polarity is correct, + side should be facing up.
- 3.** Slide the battery cover back into place. Make sure the latch is firmly closed.

IMPORTANT: It is recommended to remove the battery from the thermometer when it is not used for a long period.

WARNING: Do not dispose of batteries in fire, recharge, put in backwards, disassemble, mix with used or other battery types – they may explode or leak and cause injury. Waste batteries should be discarded in a batteries recycling trash only.

8. SPECIFICATIONS

Measurement time: 2 seconds
Measurement locations: Axillary, Oral, Rectal
Measurement range: 35°C - 42°C (95°F - 107.6°F)
Operating environment: 16°C - 40°C (60.8°F - 104°F)
Humidity: 15-95% (noncondensing).
Storage environment: -20°C - 50°C (-4°F - 122°F)
Humidity: 15-95% (noncondensing).
Measurement readout: Celsius or Fahrenheit
Accuracy: Complies with ASTM E1112-11 standard requirements, In monitoring mode tested in a water bath +/- 0.1°C/ 0.2°F between 37°C - 39°C /98.6°F - 102.2°F
Battery: 2032 Li 3V Coin Battery
Battery life: Minimum 1000 full duty cycles over 24 months period
Display size: 15.9*18.6mm
Weight: 13.90 gr (including battery)
Dimensions: Length 131mm* Width 28.5 mm* Depth 14.5 mm
Memory: Last reading display when turned on
Auto shut off: After 60 seconds
Device main housing material: Food grade ABS plastic
Probe material: Stainless steel 304, food grade TPR
Warranty: One year

9. WARRANTY AND SERVICE INFORMATION

This product is warrantied to be free from defects in material or workmanship for 1 year of the original owner. It will be tested or replaced without charge upon receipt of the unit prepaid with \$5.00 to cover handling, packaging and return postage to the address below. Please include your full name, address and daytime phone number or email address.

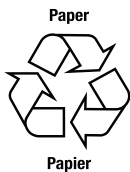
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 Follow Instructions for Use. This document provides important product operation and safety information. Please read this document thoroughly before using the device and keep for future reference.

 Type BF Applied Part

 Batteries and electronic devices must be disposed of in accordance with the local 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°.



BIOS I Medical
MANUFACTURED BY /FABRIQUÉ PAR :
THERMOR LTD.
16975 LESLIE STREET
NEWMARKET, ON L3Y 9A1
MADE IN CHINA /FABRIQUÉ EN CHINE
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Propriétaire-exploitant canadien à 100 %