Infrared Forehead Thermometer User Manual

Reorder No. 5613

Introduction

- Thank you for purchasing this non-contact Infrared Forehead Thermometer. Please read this User Manual carefully to ensure safe and proper use of the thermometer.
- Please read and fully understand the Safety Precautions before use.
- Keep this User Manual with the thermometer for easy reference.

Contents

Safety Precautions

Read the following precautions carefully before using the thermometer.

⚠ Attention

- Take care of the temperature probe lens, which is fragile.
- Dispose of used batteries with care. To safeguard the environment, you are recommended to send the used batteries to a designated collection point.
- Remove the batteries if the thermometer will not be used for more than two months.
- Do not immerse the thermometer in water or expose it to direct sunlight.
- Do not subject the thermometer to vibration or impact.
- Normal body temperature varies from person to person. Tracking an individual's temperature on a consistent basis will help determine whether a fever is present.
- Do not take body temperature readings within 20 minutes after you do physical exercises.
- Clean the thermometer after each use.

Follow these safety precautions carefully when using the thermometer:

- Do not use the thermometer for continuous temperature monitoring purposes.
- Do not put the thermometer, which is not waterproof, into water or other liquid. Clean and disinfect the thermometer as described in "Cleaning and Disinfection".
- Do not touch the tip of the temperature probe, on which a precise temperature sensor resides.
- The ambient temperature must not be extremely high or low. To ensure accurate readings, keep the thermometer at room temperature for more than 30 minutes before use.
- Do not use the thermometer at an ambient temperature higher than 40°C (104°F) or lower than 10°C (50°F), which is beyond the operating temperature range of the thermometer.

Warning

⚠ Warning

- The thermometer is not intended to diagnose or treat any health problem or disease. The measurement results are for reference only.
- It is dangerous to make a self-diagnosis or self-treatment based on the obtained measurement results. For such purposes, please consult a physician or other medical professionals.

⃠ Do not charge an alkaline dry-cell battery or throw it in fire. Otherwise, the battery may explode.

⃠ Do not disassemble the thermometer or attempt to repair it. Otherwise, the thermometer may be damaged permanently.

⃠ During measurement, do not use a mobile phone or any other device that may cause electromagnetic interference.

⃠ Do not use the thermometer in an environment where flammable anaesthetic mixture with air or with oxygen or nitrous oxide is available.

Symbols

Symbol	Description
	Type BF applied part.
	Attention must be paid.
	The action is prohibited.
	Information about a manufacturer, such as name and address.
	Waste electrical materials should be sent to a dedicated collection point for recycling.
 Warning	A personal injury or thermometer damage may occur if the thermometer is not correctly used.
 Attention	Inaccurate reading or thermometer damage may occur if the thermometer is not correctly used.

Body Temperature Basics

Take the body temperature on the forehead. The temperature measured at different parts of the body may differ slightly.

Body Part	Normal Temperature Range*
Forehead	35.8°C–37.8°C/96.4°F–100°F

*The normal body temperature range slightly varies with age and gender. Generally, newborns or children have higher body temperatures than adults, and adults have higher body temperatures than the elderly. Women's body temperatures are approximately 0.3°C higher than men's.

Consult your physician regarding body temperatures and acceptable ranges.

Product Description

1) Overview

Non-contact Infrared Forehead Thermometer measures human body or object temperature based on the infrared energy emitted from the forehead or object (such as milk and water). You can quickly get measurement results after pointing the temperature probe to the target.

2) Structure

The thermometer consists of a shell, an LCD, buttons, a beeper, an infrared temperature sensor, and a microprocessor.

3) Operating principle

The infrared temperature sensor collects infrared energy emitted from the forehead. After being focused by a lens, the energy is converted into a temperature reading by the thermopiles and measurement circuit.

4) Application scope

The thermometer takes human body temperature for clinical or household use. It applies to all age groups and those who are suffering from a fever.

5) Prohibited use

None

Features

01 **Good safety**

- Passive infrared receiving technology, without radiation
- Non-contact measurement, preventing cross-infection

02 **Easy operation**

- Handheld design, facilitating ergonomic operation
- One-click automatic temperature measurement

03 **Quick response**

1-second measurement.

04 **High accuracy**

- Advanced infrared temperature sensor, with high sensitivity
- Enhanced accuracy with automatic temperature calibration

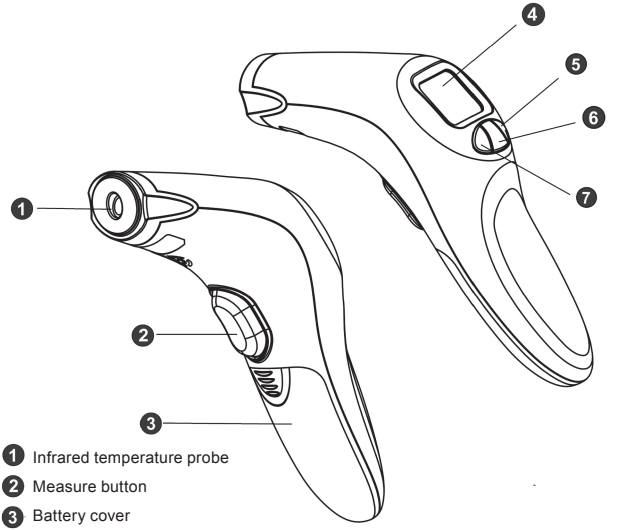
05 **Diverse functions**

- 20 temperature readings stored in memory
- Forehead/Object temperature measurement
- Automatic recording of the highest temperature during a scan
- Fever alert, with the alert threshold configurable
- Switching between ºC and ºF
- Tunable temperature compensation
- Switching between the mute/un-mute mode (measure sound notification)
- Automatic power-off saves power

06 **Extensive application scope**

Applicable to all groups of people

Structure



1. Infrared temperature probe
2. Measure button
3. Battery cover
4. LCD
5. Mute/Un-mute button
6. Mode button
7. ˚C/˚F button

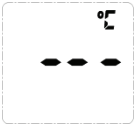
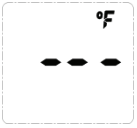
Display and Operating Instructions

Screen Display	Operating Instructions /Displayed State	Description
 	In power-off mode, press the Measure button to power on the thermometer. The temperature reading is displayed. For effective measurement, the distance between the thermometer and the target must be 1-5 cm. If you hold the Measure button, continuous measurements are taken and the highest temperature is recorded.	Forehead mode: a. The default fever alert threshold is 37.6°C. b. T indicates a temperature reading. 1. If 34.9°C ≤ T < 37.6°C, the thermometer sounds a long beep, and the white background light is on for 3 seconds. 2. If 37.6°C ≤ T ≤ 42.2°C, the thermometer sounds three quick short beeps, white background light is on for 3 seconds, and the screen flashes. Object mode: If 0.0°C ≤ T < 100.0°C, the thermometer sounds a long beep, and the white background light is on for 3 seconds.
	In object mode, temperature reading > 100°C (212.0°F)	The thermometer sounds two short beeps.

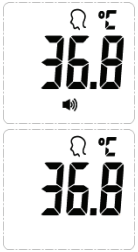
Display and Operating Instructions (continued)

Screen Display	Operating Instructions /Displayed State	Description
	In forehead mode, temperature reading > 42.2°C (109.9°F)	The thermometer sounds two short beeps.
	In object mode, temperature reading < 0°C (32.0°F)	The thermometer sounds two short beeps.
	In forehead mode, temperature reading < 34.9°C (94.8°F)	The thermometer sounds two short beeps.
	When the ambient temperature is higher than 40.0°C (104.0°F) or lower than 10.0°C (50.0°F), **"Er1"** is displayed.	The thermometer sounds two short beeps.
	When is displayed in the lower right corner of the screen, the battery level is low, but the thermometer can still be used.	
	The low-battery symbol (no flashing) displayed if the power voltage is lower than 2.5 V± 0.1V.	

Display and Operating Instructions (continued)

Screen Display	Operating Instructions /Displayed State	Description
Switching between °C and °F		
 	Hold the °C/°F button for a short while to switch between °C and °F.	
Switching between forehead and object		
 	Hold the Mode button for a short while to switch between forehead ( ) and object ( ).	

Display and Operating Instructions (continued)

Screen Display	Operating Instructions /Displayed State	Description
Switching between mute and un-mute		
	Hold the Mute/Un-mute button for a short while to switch between mute and un-mute.	The symbol is displayed in mute mode and disappears in un-mute mode.
Querying 20 readings		
	Hold the Mode button for more than 2 seconds. **"F-1"** is displayed.	Press the Measure button to return to the measurement interface.
	Press the °C/°F or button. The first reading is displayed. The sequential number of the stored reading increments every time the °C/°F button is pressed, and decrements every time the Mute/Un-mute button is pressed. The reading is displayed 1 second later. A maximum of 20 temperature readings can be recalled.	

Display and Operating Instructions (continued)

Screen Display	Operating Instructions /Displayed State	Description
Querying 20 readings (continued)		
	If no temperature reading has been taken, **"- - - M"** is displayed.	
Temperature compensation settings		
	When **"F-1"** is displayed, press the Mode button. Then **"F-2"** is displayed.	Press the Measure button to return to the measurement interface.
 	Press the °C/°F or 🔊 button. The compensation value is displayed. The value increases by 0.1°C/°F every time the °C/°F button is pressed, and decreases by 0.1°C/°F every time the 🔊 button is pressed. The tunable range is ±2°C/°F.	
Fever alert threshold settings		
	When **"F-2"** is displayed, press the Mode button. Then **"F-3"** is displayed.	Press the Measure or Mode button to return to the measurement interface.

Display and Operating Instructions (continued)

Screen Display	Operating Instructions /Displayed State	Description
Fever alert threshold settings (continued)		
	Press the °C/°F or 🔊 button. The fever alert threshold is displayed. The threshold value increments by 0.1°C/°F every time the °C/°F button is pressed, and decrements by 0.1°C/°F every time the 🔊 button is pressed. The tunable range is 35.0°C–42.0°C (95.0°F–107.6°F).	The default fever alert threshold is 37.6°C.

Measurement Process

01. Precautions

1) The thermometer is suitable for an indoor environment without strong air convection (for example, winds from a fan, an air-conditioner, or a heater) between the thermometer and the target.
2) Do not hold the thermometer for a long time, because it is sensitive to the ambient temperature.

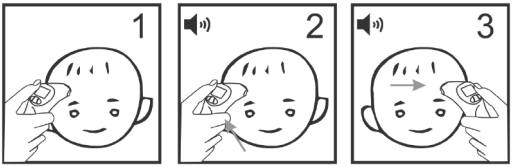
02. Select the measurement mode.

1) Press the Measure button to power on the thermometer. Select the measurement mode using the Mode button.
2) The symbol indicates the forehead mode. The symbol indicates the object mode.

03. Press the Measure button to start a measurement.

1) When taking forehead temperature, point the temperature probe to the forehead with a distance of 1-5 cm in between, and press the Measure button. After the beeper sounds once, a reading is displayed.

2) When taking object temperature, point temperature probe to the object with a distance of 1-5 cm in between, and press the Measure button.



04. Continuous measurement

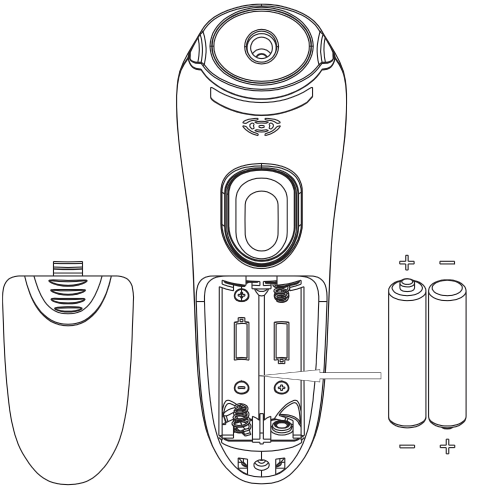
1) Hold the Measure button. Move the temperature probe while keeping the distance between the thermometer and the target unchanged. The thermometer beeps several times. In this way, the temperature of different positions of the target can be measured.
2) Release the Measure button. The highest reading during this measurement period is displayed.

05. After a measurement

1) Repeat the preceding steps to take a new measurement.
2) After each measurement, you can enter the recall mode and query earlier temperature readings by holding the Mode button. For details, see “Querying 20 readings” in the preceding table.
3) After each measurement, clean the thermometer with a dry soft cloth, and put the thermometer in a dry and well-ventilated place.
4) The thermometer automatically powers off if it is not used within 30 seconds.

Replacing Batteries

1) Slide the battery cover off along the marked direction. Put two AAA batteries correctly into the compartment (batteries included).
2) If the low-battery symbol is displayed on the screen, replace the batteries.



⚠ Ensure that the batteries are installed correctly. Otherwise, the thermometer may be damaged.

⚠ Batteries of a same type should be used. Dispose used batteries in accordance with local environmental policies.

⚠ The thermometer is shipped with batteries installed. Remove the insulation sheet before use.

Cleaning and Disinfection

Cleaning

1) Clean the temperature probe with a soft cloth. Clean the lens of the temperature probe with a cotton swab.
2) Wipe the thermometer body with a slightly damp soft cloth, and gently dry the body with a piece of tissue paper.

⚠ Keep water off the lens during the cleaning process. Otherwise, the lens may be damaged.

⚠ The lens may be scratched if it is cleaned with a piece of tissue paper, resulting in inaccurate readings.

⚠ Do not clean the thermometer with corrosive cleansers. During the cleaning process, do not touch the lens using hard objects, immerse any part of the thermometer into liquid, or allow liquid to enter the thermometer.

Disinfection

1) Disinfect the thermometer body and the area around the temperature probe with a cloth slightly moistened with 75% medical alcohol.

⚠ Do not use hot steam or ultraviolet radiation for disinfection. Otherwise, the thermometer may be damaged or quickly aged.

Maintenance

1) After each use, clean the temperature probe as described in “Cleaning and Disinfection”.
2) Store the thermometer in a dry, dust-free, and well-ventilated place. Ensure that the thermometer is not exposed to sunlight. Ensure that the storage and transportation environments meet the requirements
3) Check whether safety risks exist on a regular basis.
4) Remove the batteries if the thermometer will not be used for more than two months.

Troubleshooting

Symptom	Possible Cause	Solution
The thermometer fails to power on.	The battery level is extremely low.	Use new batteries of the same model or specifications.
	Polarities of the batteries are reversed.	Ensure that the batteries are correctly installed according to the polarity symbols in the battery compartment.
	The thermometer is faulty.	If the warranty period does not expire, contact Dynarex or a local distributor.
Only the battery symbol is displayed after the thermometer powers on.	The battery level is low.	Use new batteries of the same model or specifications.
"Er1" is displayed.	The ambient temperature is lower than 10°C (50.0°F) or higher than 40°C (104°F).	Take a measurement under an ambient temperature between 10°C (50.0°F) and 40°C (104°F).
"Er4" is displayed.	An error occurs when data is being read from or written into the memory, or the temperature correction is not complete.	Contact Dynarex.
The temperature reading is lower than the typical body temperature range.	The lens of the temperature probe is dirty.	Clean the lens using a cotton swab.
	The distance between the temperature probe and the target is too long.	Move the thermometer closer to the target.
	The thermometer is not used within 30 minutes after being taken from a cold environment.	Wait for more than 30 minutes after the thermometer is moved into the measurement environment.

Troubleshooting (continued)

Symptom	Possible Cause	Solution
The temperature reading is higher than the typical body temperature range.	The temperature probe is faulty.	Contact Dynarex.

Specifications

Product Name	Infrared Forehead Thermometer
Product Model	Reorder No. 5613
Power Supply Mode	Internal power supply
Operating Voltage	DC 3V
Battery Model	AAA x 2
Battery Life	Alkaline dry battery for around 20,000 measurements
Operating Mode	Continuous operating
Power Consumption	< 60 mW
Display	Segment LCD
Duration of Each Measurement	Around 1 second
Emissivity	0.95
Measuring Distance	1-5 cm
Measuring Range	Forehead: 34.9°C–42.2°C(94.8°F–107.9°F) Object: 0.0°C–100.0°C (32.0°F–212.0°F)
Accuracy	±0.3°C (±0.6°F)
Resolution	0.1°C (0.1°F)
Memory	20 temperature readings
Low-battery Alert	The low-battery symbol is displayed if the power voltage is lower than 2.5 V±0.1V.
Automatic Power-off	The thermometer automatically powers off if it is not used within 30±1 seconds.
Outer dimensions (mm)	160×56×46

Specifications (continued)

Weight (g)	97.4 g (with batteries)
Operating Environment	Temperature: 10°C–40°C (50°F–104°F)
	Humidity: 15%–85% RH, non-condensing
	Atmospheric pressure: 86–106 kPa
Storage and Transportation	Temperature: –10°C to +50°C (14°F–122°F)
	Humidity < 93% RH, non-condensing Atmospheric pressure: 50–106 kPa
Waterproof level	IPX0

Security Category

Anti-electric shock type: internally powered device.
Anti-electric shock degree (■): Type BF applied part.

Storage and Transportation

1) Transportation

The thermometer can be transported using general transportation tools. Severe vibration, shock, or rain must be avoided during transportation.

2) Storage

The thermometer must be packaged and then stored in a well-ventilated room without corrosive gas. The ambient temperature must be –10°C to +50°C（14°F–122°F）, the relative humidity must be lower than 93% (non-condensing), and the atmospheric pressure must be 50–106 kPa.

List of Accessories

No.	Name	Quantity	Remarks
1	Non-contact Infrared Thermometer	1	
2	Storage bag	1	
3	Dry-cell battery (AAA)	2	Consumable
4	User Manual	1	
See the label for the manufacture date. The service life of the thermometer is 2 years after leaving factory.			

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