



Infrared Forehead Thermometer

Model : FT-100A

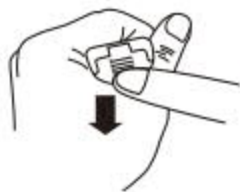
Owner' s Manual

Hangzhou Universal Electronic Co., Ltd

BEFORE YOU BEGIN

Replacing the Battery

The thermometer comes with two 1.5 V AAA alkaline batteries. The meter will display "🔋" to alert you when the meter power is getting low, please follow the steps below to replace new batteries immediately.



1. Remove the battery cover as the arrow direction accordingly.



2. Remove the old batteries and replace with two 1.5V AAA size alkaline batteries.



3. Close the battery cover.

NOTE :

1. Although the thermometer works when "🔋" appearing, we still recommend that you change the batteries to obtain an accurate result.
2. Remove the batteries if stored for a long period of time.
3. The batteries should be kept away out of children's reach.
If they are swallowed, promptly see a doctor for help.

About Normal Body Temperature & Fever

The temperature in the forehead and temple area differs from the internal temperature, which is taken orally or rectally. Vasoconstriction, an effect which constricts the blood vessels and cools the skin, can occur during the early stages of a fever. In this case, the temperature measured by the Universal Infrared Forehead thermometer may be unusually low. If the measurement therefore does not match the patient's own perception or is unusually low, repeat the measurement every 15 minutes. As a reference, you can also measure the internal body temperature using a conventional oral or rectal thermometer. Body temperature can vary from one individual/person to next. It also varies by location on the body and time of day. Below shows the statistical normal ranges from different sites. Please keep in mind that temperatures measured from different sites, even at the same time, should not be directly compared. Fever indicates that the body temperature is higher than normal. This symptom may be caused by infection, overdressing or immunization. Some people may not experience fever even when they are ill. These include, but are not limited to, infants younger than 3 months old, persons with compromised immune systems, persons taking antibiotics, steroids or antipyretics (aspirin, ibuprofen, acetaminophen), or persons with certain chronic illnesses. Please consult your physician when you feel ill even if you do not have fever.

DETAILED INFORMATION

About Normal Body Temperature & Fever

Table*¹ Body Site Normal Temperature Range

Oral	0.6°C (1°F) or more above or below 37°C (98.6°F)
Rectal/ear	0.3°C to 0.6°C (0.5°F to 1°F) higher than oral temperature
Axillary (armpit)	0.3°C to 0.6°C (0.5°F to 1°F) lower than oral temperature

*1. Body Temperature at WebMD;

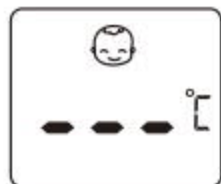
website: <http://firstaid.webmd.com/body-temperature> retrieved at 2010 Jan 7.

Using the Device

As a Body Measurement Thermometer



1. Touch "ON/SCAN" Switch to turn on the thermometer first.



2. Press the Mode button to select Body mode.

The temperature unit flashes.



3. Move the sensor close to the forehead.

Make sure the probe is flat and close to the forehead, not at an angle. Perform a forehead measurement with a distance within 2 cm. Press "ON/SCAN" button, The meter will take measurement automatically with the blue LED blinks.

PERFORM THE TEST

Using the Device



4. Read the result.

The measurement result will be done in 1 second.
The reading is shown together with green LED and three short beeps.

NOTE:

- As the forehead measurement temperature is likely to be affected by sweat, oil and the surroundings, the reading shall be taken as a reference only.
- If the probe is placed at an angle close to the forehead measurement, the reading will be affected by surrounding temperature. Babies' skin reacts very quickly to the ambient temperature. Therefore, do not take their temperature with the Universal Infrared Forehead thermometer during or after breastfeeding, because the skin temperature may then be lower than the internal body temperature.
- If the reading is $< 32^{\circ}\text{C}$ (89.6°F), the display will show together with red LED and three short beeps.
- If the reading is $\geq 37.5^{\circ}\text{C}$ (99.5°F) and $< 43^{\circ}\text{C}$ (109.4°F), the display will show together with red LED and ten short beeps.
- The thermometer will automatically turn off if left idle for 60 seconds.

As an Object Measurement Thermometer



1. Touch "ON/SCAN" Switch to turn on the thermometer first.

2. Press the Mode button to select Object mode.
The temperature unit flashes.



3. Move the probe close to the object.

Make sure the probe is flat and close to the object, not at an angle. Perform an object measurement with a distance within 2 cm. Press "ON/SCAN" The meter will take measurement automatically with the blue LED blinks.



4. Read the result.

The measurement result will be done in 1 seconds. The reading is shown together with green LED and three short beeps.

METER MEMORY

Recalling the Memory

Your thermometer stores 20 most recent readings



1. Be sure the thermometer is OFF before recalling this memory.

2. Press Memory Button to enter the memory mode.

Each time you press the Memory Button, a result will be displayed in the order of dates (latest result shown first), together with "M" and number (from 1 to 20).

LED in green or red will appear according to the memory reading.



When the memory is full, the oldest result is deleted as the new one added. When the last record displayed in the Display, press Memory Button again to return the first record.



3. Exit the memory.

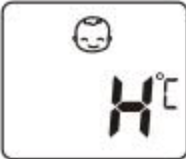



Press Set Button to exit the memory or keep the meter in idle for 60 seconds to switch off automatically.

Care & Cleaning

- The probe is not waterproof. Please wipe with a clean and dry cotton swab to clean the probe on the inside.
- The body of the thermometer is not water-resistant. Never put the thermometer under a running tap or submerge it into water. Use a soft and dry cloth to clean it. Do not use abrasive cleaners.
- Store the thermometer in a cool and dry location. Free from dust and away from direct sunlight.

SYSTEM TROUBLESHOOTING






Measurement Result

MESSAGE	WHAT IT MEANS
	<p>Measured temperature falls outside the displayed temperature range of 32°C to 43°C (89.6°F to 109.4°F), is shown on the display with red LED.</p> <ul style="list-style-type: none">• Hi-temperature $\geq 43^{\circ}\text{C}$ (109.4°F)• Lo-temperature $< 32^{\circ}\text{C}$ (89.6°F)
	
	<p>Measured temperature falls in normal reading, within the range of 32°C to 37.5°C (89.6°F to 99.5°F), is shown on the display with green LED.</p>
	<p>Measured temperature falls in fever reading, $\geq 37.5^{\circ}\text{C}$ (99.5°F) and $< 43^{\circ}\text{C}$ (109.4°F), is shown on the display with red LED.</p>

Troubleshooting

The table below shows problems you may encounter.

All error messages below would be shown together with backlight. Please follow "what to do" to resolve problems. If the problem still exists, please call your local dealer for help.

MESSAGE	WHAT IT MEANS	WHAT TO DO
	Appear when environmental temperature is below system operation range.	Put the thermometer under operating temperature range of 10°C to 40°C(60.8°F to 104°F)
	Appear when environmental temperature is above system operation range.	Put the thermometer under operating temperature range of 10°C to 40°C(60.8°F to 104°F)
	Battery is low and "  " appears on display.	Please replace batteries as soon as possible.
	If the thermometer is broken or affected by EMF.	Please contact the customer service line.

System Owner

Thank you for purchasing the Universal Infrared Forehead Thermometer. Please read this instruction manual first so you can use this thermometer safely and correctly. Please keep this instruction manual for future reference. This innovative medical device uses advanced infrared (IR) technology to measure temperature instantly and accurately on the forehead or object.







IMPORTANT SAFETY INSTRUCTIONS READ BEFORE USE

The following basic safety precautions should always be taken.

1. Close supervision is necessary when the thermometer is used by, on, or near children, handicapped persons or invalids.
2. Use the thermometer only for the intended use described in this manual.
3. Do not use the thermometer if it is not working properly, or if it has suffered any damage.

KEEP THESE INSTRUCTIONS IN A SAFE PLACE

SYMBOL INFORMATION

SYMBOL	REFERENT
	Consult instructions for use
	Manufacturer
SN	Serial number
	Caution, consult accompanying documents
CE 0197	CE mark
	Authorized representative in the European Community
	Type BF Equipment
	Do not use if package is damaged

Model No.: FT-100A

Power Source: 2 x 1.5 V AAA alkaline batteries

Displayed temperature range:

Body.Forehead: 32°C to 43°C (89.6°F to 109.4°F) Object: 0°C to 100°C (32°F to 199.9°F)

Display resolution: 0.1 °F/0.1°C

Accuracy:

FOR BODY MODE:

±0.2°C(±0.4°F) from 35.0°C(95.0°F) to 42.0°C(107.6°F)

±0.3°C(±0.5°F) from 32.0°C(89.6°F) to 34.9°C(94.8°F)

And from 42.1°C(107.8°F) to 43.0°C(109.4°F)

FOR OBJECT MODE

±4°C(±7.2°F) from 0°C (32°F) to 4.9°C(40.8°F)

±1°C(±2°F) from 5°C (41°F) to 60°C(140.0°F)

±4°C(±7.2°F) from 60.1°C (140.1°F) to 100°C(212°F)

Temperature unit: °C or °F

Operating temperature range: 10°C to 40°C (50°F to 104°F)

Operating humidity: 85% RH or less

Storage temperature range: -25°C to 55°C (-13°F to 131°F)

Storage humidity: 95% RH or less

Memory capacity: 20 measurements

DISPOSAL

Adhere to the applicable regulations when disposing of the device.



This product must not be disposed of together with domestic waste.

All users are obliged to hand in all electrical or electronic devices, regardless of whether or not they contain toxic substances, at a municipal or commercial collection point so that they can be disposed of in an environmentally acceptable manner.

Please remove the batteries before disposing of the device/unit.

Do not dispose of old batteries with your household waste, but at a battery collection station at a recycling site or in a shop.

Device Standard:

Device Corresponds to the requirements of the standard for infrared thermometers

ASTM E1965-98:2009

ISO 80601-2-56:2017/AMD1:2018

IEC 60601-1/EN60601-1

IEC 60601-1-4:1996

IEC 60601-1-6:2010

IEC 60601-1-11

Electromagnetic Compatibility:

Device fulfills the stipulations of the standard IEC 60601-1-2:2014/EN 60601-1-2:2015

 0197

The stipulations of EU-Directive 93/42/EEC for Medical Devices Class IIa have been fulfilled.

WARRANTY

- Hangzhou Universal Electronic Co., Ltd.(Universal) warrants this product to be free of defects in workmanship and materials for a period on TWO years from the date of purchase.

- During the warranty period, if this product is found to be defective, you may bring it together with the purchase receipt and Warranty Certificate on a carry-in basis to Universal's office during normal business hours for warranty service.

We will then repair or replace defective parts or exchange the whole product as we select, at no charge to the original owner. After such repair, replacement or exchange, the product will be warranted from the date of purchase.

- This warranty is valid only if the Warranty Certificate and Warranty Registration Card are duly complete with date of purchase, serial number and dealer' s stamp, and if the Warranty Registration Card is sent to local distributor office not later than 14 days from the date of purchase.

- This warranty is void if this product has been repaired or serviced by unauthorized person. This warranty does not cover defects caused by misuse, abuse, accident, tampering, poor maintenance, fire or any other acts beyond human control.

- Except as stated in the above paragraphs, Universal disclaims all other warranties, implied or expressed, including the warranties of merchantability of fitness for a particular purpose with respect to the use of this product. Universal shall not be liable for any direct, consequential or incidental damages arising out of the use or inability to use product.

Two-Year Warranty Registration Card

Complete this warranty card and mail it promptly

Name

Street Address

APT#

City

Country

State / Zip

Home Telephone

Meter Serial Number
(See label on back of meter)

Date of Purchase
(Month-Day-Year)

I would like to receive special offers and updates from Universal

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BEFORE YOU BEGIN

Cautions and Warnings

- As with any thermometer, proper technique is crucial to obtaining accurate temperature readings. Please read this manual thoroughly and carefully before using.
- Always operate the thermometer in an operating temperature range 10°C to 40°C 50°F to 104°F, and relative humidity less than 85%.
- Always store the thermometer in a cool and dry place -25°C to 55°C (-13°F to 131°F) and relative humidity less than 95%.
- Avoid direct sunlight.
- Avoid dropping the thermometer, if it happens and you think the thermometer may be damaged, please contact customer services immediately.
- Do not touch the lens.
- Do not disassemble the thermometer.
- Basic safety precautions should always be observed, especially when the thermometer is used on or near children and disabled persons.
- This thermometer is not intended to substitute for a consultation with your physician.
- This thermometer and the subject must remain in a stable environment for at least 30 minutes before measuring the temperature.
- When the measured temperature falls within the fever temperature range of $\geq 37.5^{\circ}\text{C}$ (99.5°F) and $< 43^{\circ}\text{C}$ (109.4°F), as indicated by the red LED on display, please consult with your physician immediately.

Restrictions of Use

This thermometer is clinically proven to produce accurate temperature measurements. However, please be advised that the accuracy cannot be ensured when the thermometer is not clean. Check that the probe is clean before taking a measurement.

Intended Use

Universal Infrared Forehead Thermometer is intended for the intermittent measurement and monitoring of human body temperature from forehead measurement at home.

A control measurement using a conventional thermometer is recommended in the following cases:

1. If the reading is surprisingly low,
2. For new-born infants up to 100 days old,
3. For children under three years of age who have a weakened immune system or who react unusually in the presence or absence of fever.

BEFORE YOU BEGIN

How does it work

The thermometer measures the infrared heat generated by the surface of the skin over the vessel and its surrounding tissue. The thermometer then converts it into a temperature value.

NOTE: The thermometer does not emit any infrared signal.

Highlighted Features

- Non-contact measurement that does not require probe cover, thereby saving cost of replacement.
- Automatically power off if left idle for 1 minute.
- Memory function allows you to recall previous results up to 20 previous results.
- Easy to read LCD with blue backlight in a dark environment.
- Color visible indication of alarm (red) and measurement in progress (blue).
- Button-free power on and auto-sense measurement within 2 cm.

Package Content

Thermometer



User' s Manual



AAA batteries

Meter Overview

1. Sensor
2. 3-color LED
3. Display Screen
4. °C/°F, Set Button
5. Mode/Memory Button
6. ON/SCAN Button
7. Battery Cover

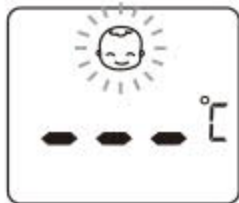
BEFORE YOU BEGIN

Display Screen

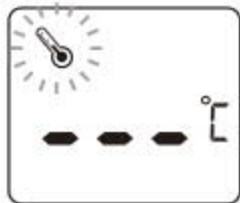


1. Body temperature indicator
2. Object temperature indicator
3. Memory mode
4. Temperature reading
5. Temperature unit
6. Low battery indicator

Display Mode



Body mode



Object mode

Two modes can be selected.

1. Body Mode

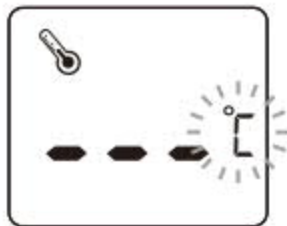
This mode is used to measure the forehead temperature.

2. Object Mode

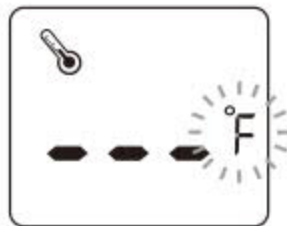
This mode is used to measure the object temperature.

Select the Temperature Unit

This meter provides two measurement units used for indicating the body/object temperature, °C or °F, for your preferred selection.



Celsius/°C



Fahrenheit/°F

1. Touch ON/SCAN Switch to turn on the thermometer first.

2. Press °C/°F button to select. °C or °F unit.