innoGIO



GIOfast

MULTIFUNCTIONAL NON-CONTACT INFRARED THERMOMETER

USER MANUAL

Thanks foy your purchasing Infrared Forehead Thermometer

Be sure to read this Instruction Manual before using the unit for you to use it safely and correctly, and instruction manual should be well kept for your reference at any time.

User manual Edition: V1.0 Date of issue: 2020/09

No contraindications.

- You should stop using the device and should consult with your physicians if you experience adverse reactions from the device.
- This device can be applied to all people. No special training is needed, but the user should read the manual carefully before use.

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1. Foreword

1.1 Warnings

- This unit is used for temperature measurement without use of disease diagnosis: it cannot be used for emergency and continuous measurement in surgery.
- The patients cannot diagnose the disease and get treatment by themselves on the base of measurement result, they must follow the instruction of doctors.
- The main material of the enclosure is plastic. Be careful to the potential allergic reactions to these materials.
- Please do not use with infectious wound.
- Please do not touch with your hands or blow infrared sensor with your mouth.
- Please ask professional doctors to explain the measured value of body temperature.
- No mobile phones are allowed to use around this product. Please do not use equipment that generates electromagnetic fields near the product.
- The use of heat and cold producing devices, such as electric heating blankets, heating pads or ice packs, may impair the performance of device and increase the risk of injury to the patient.
- Do not store the unit under sunlight, at a high temperature. in high humidity or dust. Performance may be degraded.
- Please do not disassemble or repair this device by yourself including changing device.
- Please do not clean or maintain the device while using.
- Please wait for 30 minutes before use if the environment has a sudden changel e.g. from under sunlight to an air-conditioned room), or the accuracy may be influenced.
- he effects of degraded sensors and electrodes, or loosened electrodes, that can degrade performance or cause other problems.
- . DO NOT open the battery cover around any source of ignition which has the potential to ignite the batteries and cause a fire.
- Please keep the device out of reach of infants, children or pets. inhalation or swallowing of small parts is dangerous or even fatal.

1.2 Precautions

• The patient is an intended operator. The patient can measure and charge battery under normal circumstances and maintains the device and its accessories according to the user manual.

• The kids should get away from this product. If the kids are in the range from zero to twelve years old, they need to use this unit to measure under their parents help.

- The children under 12 years and those who cannot express their thoughts are prohibited from using them. Keep out of reach of unsupervised children.
- Please do not bend or stretch the device hard. Please do not impact or drop this product.
- Do not drop the thermometer or expose it to heavy shock. • Performance of the device may be degraded if: Operated or stored outside stated temperature and humidity ranges or if

the patient's temperature is below the room temperature.

- If the thermometer has been stored at below freezing temperatures, please warm it naturally to room temperature before using.
- Clean the thermometer probe before storing.

2. Device Description

2.1 Product Instruction

Infrared Forehead Thermometer intended to measure human body temperature by measuring forehead. It is suitable for displaying the body temperature of the measured object by measuring the heat radiation from the forehead.



↑ Probe: Type BF Applied part

requirements set out in European Directives.



SN Symbol for "SERIAL NUMBER". This symbol shall be accompanied by the manufacturer's serial number. Conformity indication with the essential health and safety



DATE OF MANUFACTURE. This symbol shall be accompanied by a date to indicate the date of manufacture.



Symbol for "MANUFACTURER". This symbol shall be accompanied by the name and the address of the manufacturer.



EC REP EUROPEAN COMMUNITY". This symbol shall be accompanied by the name and the address of the authorized representative in the European Community, adjacent to the symbol.



Collect separately from other household waste



Refer to user manual

2.2 Product Contents

he following items are contained in the box. If any item missed, please contact the store where you purchased the product or the nearest InnoGIO dealer.



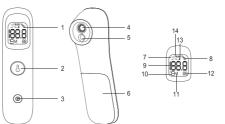
Manual

Termometer

2.3 Name of parts

(d)

Pictures and text of the main engine of the forehead thermometer

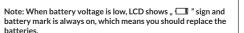


- 1. LCD Display
- 2. Measurement/ Memory Button
- 3. Power / Mode Button
- 4. Thermosensor
- Distance Sensor 6. Battery Cover
- 7. Boby Mode

- 8. Object Mode Test result
- 10. °F 7 °C/CM
- 11. Memory 12. Memory Times/
- Remaining time 13. Battery Power
- 14. Measure Distance

3. Using instructions

- 1. Press battery cover, the battery cover will bounce automatically.
- 2. Prepare 2 pieces of 1.5 AAA batteries, install it into the battery chamber according to correct positive and negative poles.



3.1 The switch of °F or °C

In the battery jar, presso F/°C change button to switch between Fahrenheit degree (°F) and Celsius degree (°C).



3.2 Memory storage function

In OFF status, press " (8) " button for 1 second, the product can read and save 30 sets of measurement values in order (as below picture shows). It will turn off automatically without operating for 30 seconds or press "Power" button to turn off this product with your hands.

Note: Thermometer stores body temperature only, no object temperature.





3.3 Display Screen

Backlight Color	Temperature	Meaning	
Green	<37,5°C	Normal	
Yellow	>37,5°C i ≤38,0°C	Low fever	
Red	>38,0°C	High fever	

- Press "Power" button to start the device to enter the measurement mode of forehead temperature.
- 2. Then aim the thermosensor at the forehead center and measurement distance should bes ≤3 cm.

Note: If the distance is more than 3 cm. the device will not measure the temperature and error message will be displayed on the screen, you need to adjust the measuring distance.



High fever

- 3. The forehead temperature can be measured directly by pressing " (8) " button.
- 4. When the measurement is done, you can hear the buzzer and you can see the result of the measurement on the LCD display.



within 5 seconds.



Note: Continuous measurement cannot be carried out

If the " (8) " button was pressed again within

5 seconds no measurement will be done, and

a number in the lower right corner will blink to

indicate the seconds left for next measurement.

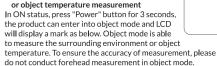


• About thermosensor (probe), if there are dust or other dirt in

cloth to avoid scratching of the product. (Note: please do not clean the product directly with water.)

technique to detect the temperature of the target object. Any dust paste not only can affect the measurement accuracy, but also can cause bacteria infection. We suggest that you should do cleaning job well as the picture shows after you used everytime.

temperature with the distance larger than 3 cm can result in the halt of the measurement. consequently no beep can be heard. Please move the device closer to forehead and measure again. Object Mode: Surrounding environment or object temperature measurement In ON status, press "Power" button for 3 seconds.



do not conduct forehead measurement in object mode Note: No matter what mode it is before turning off, it defaults is always body mode after turning on.

Turn off the device

If you did not hear the beep sound, which

represents the temperature measurement

has not yet been completed. Please do not

until you hear the beep sound. Measuring

move the thermometer away from forehead

It will turn off automatically without operation for 30 seconds or press "Power" button for 5 seconds to turn off this product with your hands.

4. Cleaning and Disinfection

4.1 Cleaning and Disinfection

- the mirror or tunnel of the sensor, please clean the probe with a cotton swab dipped anhydrous alcohol. (Note: please don't place the product directly under the faucet to wash.)
- This product itself: please wipe the product with a soft and dry

Note: Because infrared temperature adopts highly sensitive

4.2 Maintenance

- Before every use, check the device. Do not use the device if it is damaged in any way. The continuous use of a damaged unit may cause injury, improper results, or serious danger.
- Storage and use the device at the cool, dry and ventilated environment. Avoid to approach to the fire and the heat source, or it will cause the battery explode.
- If you have any problems with this device, such as setting up. maintaining or using, please contact with SERVICE of InnoGIO Don't open or repair the device by yourself.
- Please report to InnoGIO if any unexpected operation or events occur.

5. Trouble Shooting

5.1 Trouble Shooting

Problem	Possible causes	Try this Solution	
No display	Batteries are not in proper direction or out of power	Make sure that the batteries are installed in the proper direction or change a new batteries.	
Display is not cleat	Low power	Change new batteries.	
Abnormal results	Probe is not tightened properly or its position is incorrect.	Check it the probe is positio- ned properly, over the mea- surement procedure again.	
	The probe is dirty and the measure time is not adequate	Take the measurement again with the proper measurement time.	
	The probe is damaged	Contact with service personnel	
	Operating environment is beyond the working range.	Use and store the device under its working and storage environment.	
	The measurement interval is too small.	The interval for each measurement should be above 5 seconds.	

Note: Contact your local agent if you: a) Need assistance in device setting up, using or maintaining. b) Need to report unexpected operation or events.

5.2 Specifications

Product Name Model Power Consumption Max. 50 mW in measurement mode Rating 2x1.5V AAA alkaline batteries Battery Life More than 1000 Times of continuous operation Auto power-off 30 seconds Dimension 149(L) x 34(W) x 52(H) mm Weight Approx. 95g (not include batteries)

Display Screen Green <37.5°C - Normal Yellow 237.5°C and 538.0°C - Low fever Red 238.0°C - High fever

Object Mode 0°C~100°C (32°F~212°F)

Minimum Scale

Measurement +0.2°C, for range 35.0°C~42.0°C Accuracy +0.3°C, outside this temperature range At Standard room temperature

30 memories

Memory Two buttons: Power /Model Button. Button Measurement/Memory Button Approx. 5 seconds sound when peak Alarm

temperature reached

No need for calibration before use. But to ensure the measurement accuracy. please use and store the device in appropriate environment described bellow.

Working Environment Storage and

Calibration

Transportation Environment

Infrared Forehead Thermometer

Measurement Range | Body Mode 132°C~43°C (89.6°F~109.4°F

Measurement Mode Body Mode/Object Mode

0.1°C/0.1°F

of 25°C (77.0°F)

Temperature: 15°C~40°C (59°F~104°F) Relative humidity: 15%RH-93%RH Pressure: 70KPa to 106KPa Temperature: -25°C~60°C (-13°F~140°F)

Relative humidity: 0%RH-90%RH, noncondensing, Pressure: 70KPa to 106KPa

Expected Service Life | 5 years

6. Disposal

DO NOT disposes the batteries in domestic waste. Dispose of the batteries according to the local regulations dealing with the disposal of these special materials (e.g. to the collecting points). The device made of a combination of plastic and stainless steal. Be sure to dispose of it in accordance with local regulations as unsorted municipal waste. You may recycle it at your local community or appliance recycling center.

7. Kompatybilność elektromagnetyczna

Infrared Forehead Thermometer has been tested and found to comply with the electromagnetic compatibility (EMC) limits for medical devices. These limits are designed to provide reasonable protection against harmful interference in a typical medical

CAUTION: Do not use this device simultaneously with devices having high EMI levels.

Manufacturer's declaration - electromagnetic emissions

The infrared thermometer is intended for using in the electromagnetic environment specified below. The customer or the user of the infrared thermometer should assure that it is used in such an environment

thermometer should assure that it is used in such an environment.			
Emissions test	Compliance	Electromagnetic environment – guidance	
RF emissions CISPR 11	Group 1	The infrared thermometer uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause and interference in nearby electronic equipment.	
RF emissions CISPR 11	Class B	The infrared thermometer is suitable for use in all establishments other than domestic and those directly connected	
Harmonic emissions IEC 61000-3-2	Class A	to the public low-voltage power supply network that supplies buildings used for domestic purposes.	
Voltage fluctuations /flicker emissions IEC 61000-3-3	Complies		

Manufacturer's declaration - electromagnetic immunity

Immunity test | IEC 60601 | Comliance | Electromagnetic

test level level

Infra-red Forehead Thermometer is intended for use in the electromagnetic environment specified below. The customer or the user of Infrared Forehead Thermometer should assure that it is used in such an environment.

environment -

±8 kV contact ±2 kV. ±4 kV.	±8kV contact	Floors should be
±8 KV, ±15 kV air		wood, concrete or ceramic tile. If floor are covered with synthetic material, the relative humidity should be at least 30%.
±2kV for power supply lines ±1kV for input/ output lines	Not applicable	Not applicable
±1kV differential mode +2kV common mode	Not applicable	Not applicable
<5% UT (>95% dip in UT) for 5 sec	Not applicable	Not applicable
30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
	power supply lines ±1kV for input/ output lines ±1kV for input/ output lines ±1kV common mode +2kV common mode -25% UT (>95% dip in UT)	powery supply lines ±1kV for input/ output lines ±1kV differential mode +2kV common mode <5% UT (>95% dip in UT) for 5 sec applicable applicable Applicable ap

Infra-red Forehead Thermometer is intended for use in the electromagnetic environment specified below. The customer or the user of Infrared Forehead Thermometer should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Comliance level	Electromagnetic envi- ronment - guidance
Conducted RF IEC 61000-4-6	3 Vrms 150kHz to 80MHz	Not applicable	Portable and mobile RF communications equipment should be used no closer to
	6 Vrms in ISM bands	Not applicable	any part of Infrared Fore- head Thermometer, indu- ding cables, than the reco mmended separation dis- tance calculated from the equation application to the frequency of the transmitte
Conducted RF IEC 61000-4-3	3V/m 80MHz to 2,5GHz	3V/m 80MHz to 2,5GHz	$\begin{array}{ll} \text{Recommended} \\ \text{separation} \\ \text{distance} & d = \left[\frac{7}{E_1}\right] \sqrt{I} \end{array}$
			$d = \left[\frac{3.5}{v_1}\right] \sqrt{P}$ $d = \left[\frac{3.5}{E_1}\right] \sqrt{I}$
	385MHz-57 86MHz Test specification for ENCLO- SURE POR IMMUNITY to RF wireless communica- tion equip- ment (refer to table 9 IEC 60601-1-2: 2014)	385MHz-57 86MHz Test specification for ENCLO- SURE POR IMMUNITY to RF wireless communica- tion equip- ment (refer to table 9 IEC 60601-1-2: 2014)	Where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacture and d is the recommende separation distance in metres(m).b Field strengths form fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic is affected by absorption and reflection from structures. objects and people.

Manufacturer's declaration - electromagnetic

due to fixed RF transmitters, an electromagnetic site survey should be
considered. If the measured field strength in the location in which the
thermometer is used exceeds the applicable RF compliance level above
the thermometer should be observed to verify normal operation.
If abnormal performance is observed, additional measures may be
necessary, such as reorienting or relocating the thermometer.
b
Over the frequency range 150kHz to 80MHz, field strengths should be
less than 3V/m.

Field strengths from fixed transmitters, such as base stations for radio

(cellular/cordless) telephones and land mobile radios, amateur radio.

theoretically with accuracy. To assess the electromagnetic environment

AM and FM radio broadcast and TV broadcast cannot be predicted

Recommended separation distances between portable and mobile RF communications equipment and the EOUIPMENT or SYSTEM - For EOUIPMENT and SYSTMES that are not LIFE - SUPPORTING

The infrared thermometer is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the infrared thermometer can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the infrared thermometer as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
Rated maximum output power of transmitter W	150kHz to 80MHz $d = \left[\frac{3.5}{v_1}\right] \sqrt{P}$	$\begin{array}{c} 80 \text{MHz} \\ \text{to } 800 \text{MHz} \\ \text{d} = \left[\frac{3.5}{E_1}\right] \sqrt{P} \end{array}$	800MHz to 2,5GHz $d = \left[\frac{7}{E_1}\right] \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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Manufacturer: Vapo Healthcare Co., Ltd. Southern unit of third floor, building B, No. 99 Yudai West Rd, High tech district, Kunshan, Suzhou, 215301, Jiangsu P.R. China

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