



# InfraRed Thermometer

## User manual

### PRODUCT USAGE

The product is a non-contact infrared thermometer for professional measurement of surface temperature.

It can detect body temperature according to the environment. Therefore, according to the difference in ambient temperature, measurement results will be different.

(this product is not a medical device)

### NOTICE AND WARNING

1. Please measure the temperature after the thermometer has been in the environment for 5-15 minutes (when the thermometer is adapted to the environment.)
2. Please read the instruction manual carefully before using.
3. The product can be used to measure the temperature of a person's forehead. When the ambient temperature changes affect the forehead temperature or forehead sweating, please measure behind the earlobe. Also make sure that there is no hair, sweat, makeup or hat covering. Note: The measured temperature value will vary depending on the person's skin color, thickness, and body part, and when the ambient temperature changes greatly, which is normal. The reason is that the more exposed human body parts are, the more affected by the ambient temperature.
4. Please use this product at ambient temperature of 10-40 degrees.
5. Please do not place this product near a charged object.
6. Do not use this product in an environment where relative humidity is greater than 85%.

### Body Infrared Thermometer

Non-contact measuring temperature accurately  
It can reduce the risk of virus spread effectively  
Reading temperature display, response time is only 1s  
Accuracy is  $\pm 0.2^{\circ}\text{C}/0.4^{\circ}\text{F}$   
30 measuring datas can be saved



DMX-2020-02

## PRODUCT SPECIFICATION

<b>Display resolution</b>	0.1°C(0.1°F)
<b>Body temperature accuracy</b>	±0.3°C(±0.6°F)
<b>Body temperature range</b>	32~42.9°C(90~109°F)
<b>Object surface temperature range</b>	0~100°C(32~212°F)
<b>Work temperature 10~40°C</b>	3~5 cm
<b>Working Temperature</b>	10~40°C
<b>Working humidity</b>	<=80%
<b>Battery</b>	DC 1.5V 2*AAA batteries
<b>Auto power off</b>	18 seconds
<b>Product size</b>	167*44*82mm (L*W*H)
<b>Product weight</b>	110g without battery

## TIPS BEFORE USE

The infrared thermometer has a higher request to the surrounding environment, the correct use method is the key to the test accuracy.

1. This product is a professional to measure the temperature of the human body infrared thermometer, according to the difference in human skin, measured temperature will vary.
2. When the room temperature changes greatly, the infrared thermometer should be placed indoors for 20 minutes before use.
3. when the subject comes from a place with a large difference in temperature from the measuring environment, he should stay in the testing environment for at least 5 minutes, and measure again after the same temperature with the environment.
4. The environment around the subject should be stable. Can Not in the fan, the air conditioning outlet and so on airflow big place test.
5. Do not use the device outdoors or in strong sunlight.
6. Do not hold the front of the thermometer in your hand.

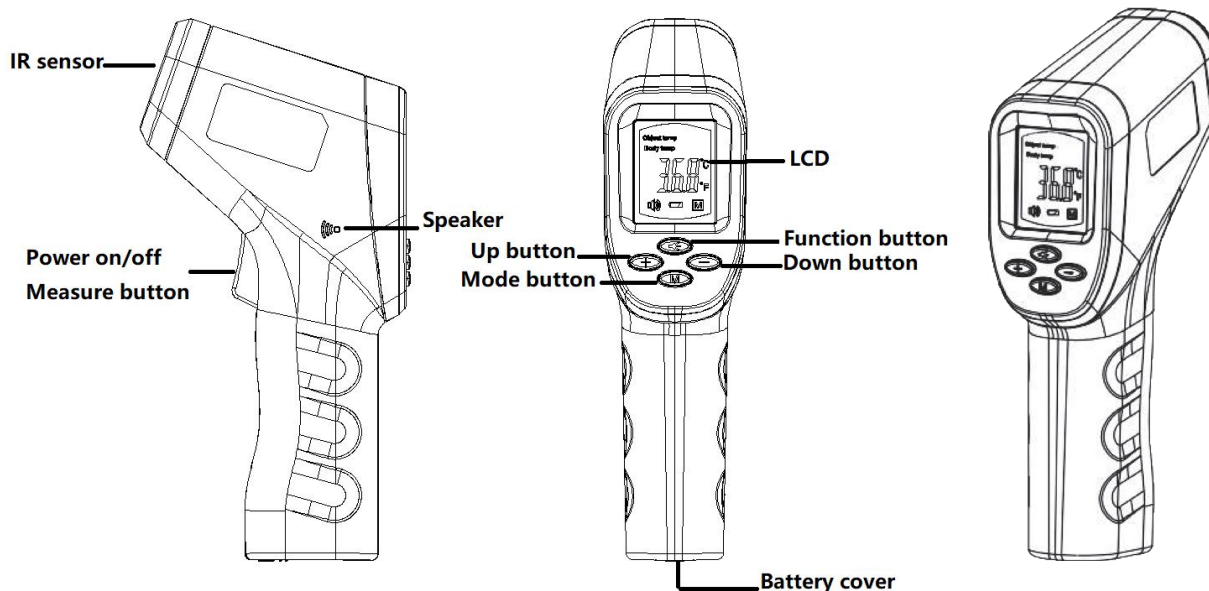
7. The measuring area should not be covered by hair. If there are sweat stains, please clean them with a dry towel and measure them. Otherwise, the measurement will be affected
8. Measures should be avoided in cases where cold forehead covering, sweating and other cooling measures may result in low results in fever patients.
9. comparison of different temperature measurement methods

The body temperature measured by different ways of temperature measurement will be different, the specific temperature differences see the table below.

Measuring position	Normal temperature range
Anal temperature	36.6°C - 38°C
Oral temperature	35.5°C - 37.5°C
Axillary temperature	34.7°C - 37.3°C
Cochlear temperature	35.8°C - 38°C
Forehead temperature	35.8°C - 37.8°C

## PRODUCT STRUCTURE

It is mainly composed of temperature measuring head, display screen and main body.



## BUTTON FUNCTIONS & SETTING

### Power on

Hold press the power button for 2 seconds to turn on thermometer, it will enter standby mode. The LCD turns on, it shows battery status icon and such.

### Mode button

Short press mode button once to switch between body temperature test and object temperature test. Long press Mode button to turn on/off the sound.

### Function button

Press the function key once to switch between degrees Celsius and Fahrenheit on the screen, it will set the value to be °C/°F.

### Up button/Down button

Press the up or down button, the screen will display the 32 sets of temperature values measured recently. Press the up or down button to sequentially display the temperature values from the 1-32 set; press the key for two seconds to delete the current record. After deleting successfully, the display jumps to the previous record.

## TEMPERATURE OFFSET SETTING

Hold press the up button to enter the engineering calibration mode. Press the up and down buttons to set the offsetting within range of  $\pm 5^{\circ}\text{C}$  ( $\pm 9^{\circ}\text{F}$ )

## IR SENSOR

Infrared non-contact measuring method.

## LCD

Display the measurement data, battery status, high and low temperature alarms which means different backlights in different temperature ranges. (three colors: green, orange and red.)

## TEMPERATURE MEASURING

Aim at the measured object, press the measure button to start the measurement, and the display will show the current measured temperature. The counter is located after "LOG" in the lower left corner of the screen. The count value is cycled from 1 to 50. Each time a valid measurement is performed, the counter will increase 1 set of measurement data, and return to 1 after 50. If the measurement result is "LO" or "HI", it is called invalid measurement, the measurement result is not entered into the memory, and the counter is not incremented.

Backlights with different colors at different body temperatures: Bright green backlights below  $37^{\circ}\text{C}$ ; bright red backlights at  $37^{\circ}\text{C} - 38^{\circ}\text{C}$  ( $99.5^{\circ}\text{F} - 100.4^{\circ}\text{F}$ ); bright yellow backlights at above  $38^{\circ}\text{C}$  ( $100.4^{\circ}\text{F}$ ).

## BATTERY INSTALLATION AND REPLACEMENT

The device uses 1.5V 2\*AAA batteries, under normal circumstances battery can be used more than 4,000 times continuously. When the battery symbol appears and flashes in the upper right corner of the screen, it indicates that the battery is insufficient and needs to be replaced as soon as possible. When open the battery cover to

replace the battery, pay attention to the position of the positive and negative electrodes to be placed correctly. The product design has the battery anti-reverse connection device, even if the battery polarity is reversed, it will not cause damage to the product, but will not work. Please do not use rechargeable batteries, should use disposable batteries, try to use alkaline batteries.

The static current is very small when the instrument is not working, but it is recommended to take out the battery when it is not used for a long time, so as not to damage the product due to battery leakage.

Notes:

1. Open the battery cover to replace the battery, pay special attention to the polarity of the battery, misplacement may lead to product damage.
2. When not in use for a long time, please take out the battery to prevent the thermometer from being damaged by battery leakage
3. Don't use batteries when they leak or become moldy
4. Do not put the battery near the fire source or into the fire, lest the battery explosion
5. Don't store batteries in hot or humid conditions
6. To avoid short circuits, do not put the battery in the same pocket or other container with metal objects such as coins or keys that could short circuit the battery.

## VIEW HISTORICAL DATA

After each test, the instrument will automatically record test data, which can record up to 50 sets of historical measurement data. If you want to view these data, press "+" or "-" to display the most recently measured temperature. Press "+" to record the farthest time. Press "+" or "-" again to cycle.

## AUTO POWER OFF

In the setting state, you can directly exit the setting by depressing the board machine. If there is no operation for 60 seconds, the machine will automatically shut down.

## MAINTENANCE

During the use of the product, please follow the prompts when you find the following conditions.

1. Body dirty: Wipe the dirt with a clean soft cloth, or wipe with a cotton swab moistened with medical alcohol. Wiping with medical alcohol can also have sterilization and disinfection. Take care not to add too much water or alcohol to prevent damage to the inside of the product.
2. Internal contamination: The lens of the internal probe is an important device. Do not touch or press it with your fingers or other objects, otherwise it will affect the preparation of the measured value. When the lens surface is found to be dirty, wipe the lens surface with a cotton swab moistened with 95% or more absolute alcohol. Tips: Do not use 75% disinfectant alcohol to wipe the lens (there will be traces of residual water). Do not use other chemical wipes to wipe the lens (which will cause damage to the lens>).
3. Storage: Keep in a dry and dark place out of direct sunlight.







## TROUBLESHOOTING

If you encounter the following problems during use, please refer to the following guide to help solve the problem. If the problem is still not resolved, please call our after-sales service:

1. The measurement temperature is too high. Do not hold the front part of the thermometer to hold the probe, which will cause the temperature to be too high.
2. The screen displays HI information. In the "body temperature" mode, when the measured temperature exceeds 42.9 degrees, the product will display HI. First check whether the measured part of the human body is. If there is no external heat source, please call our after-sales service.
3. LO information is displayed on the screen. In "body temperature" mode, when the measured temperature is lower than 32 degrees, the instrument will display LO. Follow the prompts in the form below to find the cause. If it is confirmed that it is not the cause in the form, you need to call our after-sales service.

L0 problem causes	Solution
There is hair or sweat covering forehead	Remove the hair or sweat
There is cold air blowing forehead	Make sure the air is stable while measuring.
Forehead has been cold applied	Test 10min after cold applied
Measuring distance is too far	Best distance is 3~5cm

## Explanation of graphics, symbols, abbreviations, etc. used in medical devices

Symbols	Description
	BF type equipment
	Reference
	Refer to the instructions
	Class II equipment
	Afraid of the rain
	No hand hooks
	Fragile
	Up

## ACCESSORIES

DC 1.5V AAA battery x2, instruction manual, warranty card, certificate of conformity