# NON-CONTACT INFRARED THERMOMETER



#### Instruction manual

Please read this instruction manual carefully before using the product and keep it in a safe place.

#### \* Keys and components



#### \* Points for temperature measurement operation

Measurement Note: If the subject or the thermometer has just entered the room from the outside, or if it is moved between air-conditioned and non-air-conditioned rooms, both the subject and the thermometer must be able to measure in the current environment for more than 30 minutes.

Measuring distance: The recommended measuring distance is 0-3 cm.

Measurement site: Point the thermometer probe at the forehead or temple and keep it vertical. The measurement site must be wiped with sweat and free of hair. The temperature is low in winter, and the collar can be lifted to measure the neck and shoulders under fever.

Measurement range: In body temperature mode, the measurement range is 32-43 degrees Celsius.

Temperature measurement times: It is recommended to measure more than 5 times for each group, and the highest one has been displayed.

The company solemnly declares that it complies with the relevant provisions of the product technical requirements 20162200513

The company solemnly declares that the product complies with the medical directive 93/42 / EEC Basic requirements and other related provisions

#### \*product description

This product is an infrared thermometer that measures the temperature of the human body and is widely used in homes.

This product is not a substitute for a doctor's diagnosis.

In order to facilitate your use, the product has been debugged and installed before leaving the factory. After you purchase, point the thermometer probe at the skin of the measurement site and directly press the trigger once to complete the startup and measurement at the same time.

After you hear the "beep" sound, you can remove the thermometer from the measurement site and read the measurement results from the LCD screen.

After about seven seconds, the thermometer will automatically shut down. If you need to measure again, press the trigger again.

If there is no special case, no other adjustment operation is needed.

### \* The meaning of various symbols appearing on the screen

Body temperature: Body temperature mode, if there is no display, it means the body temperature mode:

Small horn: a "beep" will sound when measuring;

° C: Celsius;

LO: The temperature measurement result value is lower than the normal temperature measurement range;

HI: The temperature measurement value is higher than the normal temperature measurement range:

ERR: The ambient temperature is too low to work properly (you can warm up the thermometer before measuring);

#### \*product features

The measurement temperature error does not exceed 0.2 degrees Celsius. If you find that the error is too large, you can debug it according to the method of "error adjustment".

Alarm temperature limit can be set.

Automatic shut-down.

Backlit display for use in the dark.

It can store the latest 2 sets of measurement data and beep sound function.

 $Conversion \ of \ body \ temperature \ and \ surface \ temperature \ measurement \ mode.$ 

#### \* Menu setting method

- 1. Press the "M" key momentarily to switch between the temperature measurement mode and the body temperature mode. When the screen displays "Body temperature", it means the current temperature measurement mode; if the screen does not display "Body temperature", it means the temperature measurement mode.
- 2. Simultaneously press and hold the "M and-" keys for more than 5 seconds (later release), the screen displays " $\pm$  and value" to indicate the calibration mode, and press the "-or +" key for calibration.
- 3. After turning on the trigger or short press "M" to turn on, short press "-or +" key to view historical measurement data. The data can be stored in a maximum of 2 groups. When more than 2 groups of data are stored, the last group of data will be automatically deleted.

## \* What is the relationship between the infrared thermometer and mercury thermometer measurement results?

- 1. The temperature of different parts of the human body are different. Oral and anal temperatures are both internal body temperatures, which are generally much higher than the skin surface temperature. Forehead and armpit, the degree of heat dissipation is different, the temperature is completely different, and there is no fixed temperature difference relationship.
- The infrared thermometer is only recommended for measuring the forehead. The human forehead, especially the temple part, has the aorta passing through it. The internal calculation processing and compensation and correction procedures of the infrared thermometer are designed for the human forehead.
- 3. There is no direct correspondence between the temperature measurement results of the infrared thermometer and the forehead, oral cavity, and anus of the mercury thermometer. These results are generally different. However, the infrared thermometer's temperature measurement result is based on the accurate calculation of the infrared radiation released by the frontal aorta, so it is closer to the human core temperature.

#### \*Precautions

To get stable and reliable measurement data:

- 1. The human body is a dynamic system. It constantly loses heat and constantly generates heat. The body temperature often changes slightly, and the infrared thermometer has an error of plus or minus 0.3 degrees. Therefore, even if the same temperature is continuously measured at the same location, the temperature value is also constant. There are often changes, such as: 36.5, 36.4, 36.8, 46.6, etc., the probability of the same temperature measurement result continuously is very small.
- A person's body temperature changes with different times of the day, and at the same time, it varies with age, skin color, and measurement site. The exposed parts are greatly affected by the ambient temperature.
- 3. Do not expose the product to the sun, and do not touch the water. When the temperature of the infrared thermometer changes greatly, it should be left for 30 minutes before use.
- Blowing, sweating, direct sunlight, and drastic changes in ambient temperature will obviously affect the temperature measurement results.

#### \* Normal temperature range

Normal body temperature range (frontal temperature) at different ages

0 ~ 2 years old: 36.1 ~ 38  $^{\circ}$  C 3 ~ 10 years old: 36.0 ~ 37.8  $^{\circ}$  C

11 ~ 65 years: 35.8 ~ 37.6 ° C 65 years or older: 35.5 ~ 37.5 ° C

#### \* Technical indicators

▲ Measurement range

Temperature mode: 32.0  $\sim$  43.0  $^{\circ}$  C

Object surface temperature mode: 0.0  $\sim$  100.0  $^{\circ}$  C

▲ Temperature measurement accuracy-

body temperature mode: 32  $^{\circ}$  C-34.9  $^{\circ}$  C = + /-0.3  $^{\circ}$  C

35 ° C-39 ° C = +/- 0.2 ° C

39  $^{\circ}$  C-42.9  $^{\circ}$  C = + /-0.3  $^{\circ}$  C

Object surface temperature mode:  $\pm$  1.0  $^{\circ}$  C

- ▲ The best measuring distance: 0 ~ 3cm
- ▲ Specifications: 158.5 \* 98 \* 46.5mm
- ▲ Weight: 117g (without battery)
- ▲ Automatic shutdown: about 7 seconds ▲ Service life: about 40,000 measurements
- \* Safety Code
- \*\* The optimal ambient temperature for this product is 16-35 degrees Celsius. When the ambient temperature is between 0 and 10 degrees Celsius, you can warm up the product and use it.
- ※ Please do not place the product too close to the electromagnetic range, such as radio, mobile phones, etc. Do not place the product near a live object to avoid electric shock.
- ※ Please do not bump or drop this product.
- \*\* When the battery needs to be replaced, for the 9V carbon battery pool, press and hold the battery cover with your thumb and push it in the direction of the arrow to open the battery cover.