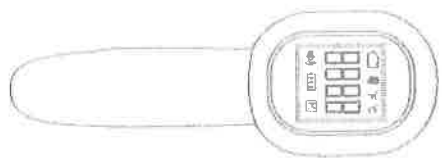


# Operation Instructions

## INFRARED FOREHEAD THERMOMETER

### CF-818



#### Use and Operation

- The product provides two main modes: body temperature measurement and physical measurement.
- Please be sure to choose the body temperature measurement mode before measuring body temperature.
- Take the measuring probe to the forehead. Before putting the probe of the probe parallel to the forehead and 1-5CM from the forehead.
- In the off state, you can start the measurement by 2) measure the temperature. When you hear a beep, the LCD display the current measurement value. In the off state, you only need to press the measurement key once to measure. For the measurement result, refer to the data in the table below.

MEASURING PART	NORMAL TEMPERATURE
ADULT	36.6-38°C
ORAL CAVITY	35.7-37.5°C
DXTER	34.7-37.3°C
EAR	35.8-38°C

Reference values for different ages:

AGE	NORMAL TEMPERATURE
0-2 YEARS	36.4-38°C
3-10 YEARS	36.1-37.8°C
11-65 YEARS	35.9-37.6°C
> 65 YEARS	35.8-37.5°C

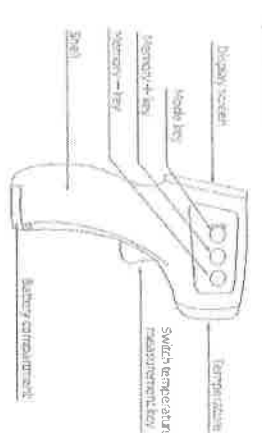
The maximum allowable error of human clinical diagnostic test accuracy is specified by the following formula:

$$TERROR = |T_1 - REF| + |T_2 - REF|$$

$$SD 3\text{C}/0.6\text{F} \text{ (FOR 95\%)}$$

T<sub>1</sub> and T<sub>2</sub> are the temperature readings of the thermometer under test twice.

#### 1) Main structures



The infrared thermometer consists of ABS plastic shell, temperature probe keys, LCD and battery.

#### 2) Introduction of display screen



Temperature display area  
Measurement mode  
Battery level  
Manual operation

#### 3) Memory reading

In the standby mode, press the "memory key", the last measurement data is displayed on the screen, and up to 32 TRF is a fixed reference temperature.

#### 4) Temperature measurement mode switching

In the standby mode, click mode to switch surface temperature, body temperature and room temperature.

#### 5) Temperature unit switching

In the standby mode, long press the mode key for two seconds, the unit temperature and unit setting are recorded after F-1 is displayed on the screen. At this time, F-1 on the screen and the unit symbol (°C or °F) blink alternately. Continue to press the mode key to switch °C and °F. Press the memory key to confirm and save. Press the memory key twice to return to the standby state. (°C by default)

#### VII. Caution

The infrared thermometer is a precise electronic product, please use it with caution.

- The infrared thermometer must be used under the working conditions required in this instruction.
- Do not remove the thermometer from the measured part until the "Beep" sound occur.
- Always keep the thermometer in the same position, because different positions may cause deviation in body temperature.
- The measured temperature will vary because of different skin color and thickness.
- Make sure the forehead is clean and free of sweat, hair or hat when measuring the temperature of the forehead. Otherwise, the temperature will be too low.
- Do not drop the probe ground or about the body.
- Do not close the outer equipment or stick it with other equipment. If it must be close to or attached with other equipment, only two fingers can be stacked.
- The display screen of temperature sensor can be wiped and disinfected with alcohol cloth. Do not put it in water or boil it in hot water for disinfection.

Note: For the following situations, three measurements are recommended. The highest reading is the final result.

- For children under three years of age with respiratory systems and for those whose behavior is significant impact.
- When the user feel seems fever to measure, he or she should measure for many times with the device until the device and can read stable data.
- If the measurement result is abnormally low.

In short, the second value read from different measurement points should not be compared. Because the measured values will vary according to the measurement site. During the day, a patient's body temperature is higher or lower and varies with the fever and waiting up in the morning.

#### VIII. Message and Solution

Screen display	Alarm prompt	Possible cause	Solution
H:	"beep"	When the measurement result is 43°C	Please read the instruction carefully and take another measurement
LO	"beep"	When the measurement result is < 32°C	

#### IX. Battery installation and Replacement

Power supply  
Direct AAA battery (not included in the standard packages)

- Please follow these steps to install the battery.
- Step 1: Push the battery cover downward to the direction indicated by the arrow.
- Step 2: Remove the battery cover.
- Step 3: Place the battery in the battery jar and pay attention to the positive and negative poles of the battery.
- Step 4: Close the battery cover.

#### X. Battery maintenance

▲ The display on the LCD means that the battery is in a low power state. The battery must be replaced as soon as possible to ensure the accuracy of the measurement.

#### XI. Important safety instructions

- The infrared thermometer measures temperature by detecting a person's forehead on the infrared energy radiated from other objects. It collects energy through a lens and converts it into a temperature value. It displays the temperature reading by detecting the human skin to get the maximum accuracy value.
- It is only for the purpose described in the instruction. The manufacturer will not assume legal liability for the damage caused by incorrect use.
- Do not immerse the device in water or other fluids.
- If the product is found to be abnormal, send the product for repair. Except for replacing the battery, do not open the device arbitrarily.

#### 5. Operation mode: continuous operation

Classification of anti-shock types: internal power supply equipment. Classification of shock types: Type 5 application part.

- Keep away from extreme temperature, shock and damp, pollution and direct sunlight, fire and cold environments.
- The device is not a substitute of doctor. This device is not water resistant. It is not for use in the bath.
- Use caution when using during the early stage of fever and the temperature of the skin decreases, so the measured temperature is abnormally low.
- If the measurement result does not match the patient's diagnosis, measurement temperature is abnormally low, repeat the measurement 15 minutes or measure another room temperature zone to verify the peak measurement result.
- This device includes sensitive components and must be treated with care storage and operating conditions are described in the "Symbols and the safety requirements in the device" section.
- It contains small parts. To avoid swallowing, children need to use it under supervision.
- Remove the battery when the device is not used for a period of time. It then save the waste battery, and please protect the environment.
- Do not use the device in the presence of flammable or explosive gas.
- Do not use the device in the presence of flammable or explosive gas with oxygen or nitrous oxide.

#### XII. Maintenance

- Keeping the surface of the thermometer clean and tidy often will help the life of the thermometer.
- If the device is dirty, wipe it with a clean soft cotton cloth. If the device is to remove, the soft cotton cloth can be washed with water or neutral detergent, and then wipe it with a dry cloth.
- Note: Do not allow liquids such as water to enter the body.

#### XIII. Notes for storage

- The thermometer contains sensitive electronic components. Avoid it directly in an environment with electromagnetic interference (such as mobile phone, microwave oven, etc.) to prevent temporarily affected accuracy.
- Do not use liquid such as volatile oil, thinner or gasoline to wipe the thermometer.
- Do not store the product in a place exposed to direct sunlight, temperature, humidity, dust, and corrosive gases.
- Please remove the battery from the product when the thermometer is used for a long time (more than 3 months).
- Do not use the thermometer for purposes other than its original design using the operation (please follow general safety precautions).
- Do not use any metal that produce or create temperature itself to charge it.
- Please do not store the thermometer to the ground hard to avoid impact and display.
- In order to avoid short circuit, please do not put the battery in the same jar with metal objects such as coin or a string of keys or with other conductive materials.
- Do not place the battery near the fire source or throw it into the fire to the battery from exploding. Do not use the device if the battery is leaked.
- Dispose of the battery or the product should be in accordance with regulations.
- During the warranty period, if the circuit diagram and necessary materials need to be provided, and for problems of electrical circuit, please contact manufacturer.

Note: If the device fails due to your failure to observe the above not storage and other proper use methods, our company will not be responsible for the quality.

#### Other Matters Needing Attention

The product's service life is 3 years (except for vulnerable and consumable parts) under the condition of complying with storage requirements. The product must be returned to the manufacturer for calibration. See certificate of quality for date of manufacture. Product transportation and storage environment for product temperature storage:  
Temperature: -20°C~50°C Relative humidity: 15~85% Atmospheric pressure: 70kPa~106kPa

#### Product Overview

Product name: Infrared thermometer  
Common name: Forehead thermometer  
Product model: CF-818 Infrared thermometer  
Measurable range: Display the temperature of the measured object by receiving the heat radiation from the forehead  
Installation: None

#### Product Performance

Temperature measurement range: Body temperature mode: 32~42°C  
9.6°F~107.6°F  
Temperature measurement time: about 2 seconds  
Resolution: 0.1°C  
air-in-air allowable error:  
within 35.0°C~42.0°C: ±0.2°C/±0.4°F;  
35.0°C~35.0°C~42.0°C: ±0.3°C/±0.5°F;  
display method: LCD  
appearance size: 113.8x44.8x9.5cm (length x width x height)  
weight: about 50g  
Infrared thermometer can achieve automatic power-off and self-check current consumption: static DRF20uA, dynamic DRK200uA  
Power supply: two AAA dry batteries (A-A batteries)

#### Working conditions

Ambient temperature: 10°C~45°C  
Relative humidity: 15%~85%  
Atmospheric pressure: 70kPa~106kPa  
Internal DC power supply: DC 3V has a relative error of ±0.2V

#### Technical characteristics

Measurement time is about two seconds  
Automatic power-off in 10 seconds  
°C/°F switching with flashing function  
With backlight, the backlight is blue and orange.

#### Memory reading function

Measurement range of infrared thermometer: (32°C~42°C)  
9.6°F~107.6°F  
Service life: more than 100,000 times normally

accuracy of Clinical Measurement and Safety Test is proved that through clinical comparison, the clinical accuracy and safety of the infrared thermometer meet the requirements of clinical use and can meet the needs of clinical application.

11 Accessories

See 11

Statement of quality: 1. During the warranty period, if the circuit diagrams and necessary materials need to be provided and for problems of electrical circuit, please contact the manufacturer.

Statement on the Use in Electromagnetic Environment: The infrared thermometer complies with the EMC-related guidelines and statements from the manufacturer's accompanying documents

Guide and manufacturing statement-electromagnetic emission

The infrared thermometer is intended to be used in the electromagnetic environment specified below, and the purchaser or user should ensure that it is used in the electromagnetic environment.	
Emission test	Conform to Electromagnetic environment-Guide
Radio-frequency emission GB4824	1 set The infrared thermometer uses radio frequency energy only for its normal function. Therefore, its radio-frequency emission is low and has low possibility of interfering nearby electronic equipment.
Radio-frequency emission GB4824	B Class The infrared thermometer is suitable for use in all facilities that are not connected to the public low-voltage power supply network of the residential home
Harmonic emission GB17625.1	Not applicable
Voltage fluctuation flicker emission GB17625.2	Not applicable

Guide and manufacturing statement-electromagnetic immunity

The infrared thermometer is intended to be used in the electromagnetic environment specified below, and the purchaser or user should ensure that it is used in the electromagnetic environment.

Immunity test	IEC61010 test level	Conform to the level	Electromagnetic environment-Guide
Electrostatic discharge GB17626.2	4kV contact discharge 2kV air discharge	4kV contact discharge 2kV air discharge	The face should be wiped, concrete or tile. If the face is covered with synthetic material, the relative distance should be at least 50%.
Electrofast transient pulse group GB/T17626.4	4kV to power line 1kV to input/output	Not applicable	Not applicable
Surge GB/T17626.5	4kV wave to wire 2kV wave to ground	Not applicable	Not applicable

Short circuit protection and voltage change in voltage on power input line GB/T17626.11	4kV/1.25μs on U.T. 2kV/1.25μs on U.T. 1kV/1.25μs on U.T. 500V/1.25μs on U.T. 250V/1.25μs on U.T. 125V/1.25μs on U.T.	Not applicable	Not applicable
---	--	----------------	----------------

Power frequency magnetic field GB177636.8	340mT	340mT/50Hz	If the device does not work properly, it is necessary to keep the device away from the power frequency magnetic field source.
---	-------	------------	---

Note: UT refers to the AC grid voltage before the user; voltage is applied

(Correspond to table 202 in Y0505-2012)

Parameter	IEC61010-1	EN61010-1	EN61010-2	EN61010-3	EN61010-4	EN61010-5
Electromagnetic immunity	2	2	2	2	2	2
Electromagnetic emission	2	2	2	2	2	2
Electromagnetic compatibility	2	2	2	2	2	2

Q: Please note that the test and family substance is also requires materials at the start before the experiment specified in the GB4824-2011 standard.  
 1: means starts per may not be the precise compare the package list of the test condition.  
 2: means starts per may not be the precise compare the package list of the test condition.  
 Note: User's understanding is not a substitute for the manufacturer's instructions.

The recommended isolation distance between the portable and mobile RF communication equipment and the infrared thermometer

The infrared thermometer is intended for use in electromagnetic environment where the radio-frequency electromagnetic field strength is less than 100V/m. The minimum distance between portable and mobile communication devices (specified in the infrared thermometer or recommended below).

Maximum rated output power of the transmitter W	IEC61010-1	EN61010-1	EN61010-2	EN61010-3	EN61010-4	EN61010-5
0.01	Not applicable	0.12	0.23	0.73	2.3	7.3
1	Not applicable	0.48	0.73	2.3	7.3	23
10	Not applicable	1.2	2.3	7.3	23	73
100	Not applicable	3.0	7.3	23	73	230

Note: The maximum safe output power of transmitters specified in the table above. The recommended isolation distance is in meters (m), which can be determined by the formula in the corresponding standard. Frequency values are in the maximum rated output power of the transmitter provided by the manufacturer's data sheet (in watts (W)).  
 Note 1: 1/250W and 1/250W frequency power, the formula of the higher frequency band is used.  
 Note 2: These values are not a substitute for all devices. Electromagnetic compatibility is affected by absorption and reflection from buildings, objects and people.

(Correspond to table 204 in Y0505-2012)

Guide and manufacturing statement-electromagnetic interference degree	
The infrared thermometer is intended to be used in the electromagnetic environment specified below, and the purchaser or user should ensure that it is used in the electromagnetic environment.	
Immunity test	Conform to the level
Radio frequency immunity GB17753	Not applicable

Note 1: The table and applicable frequency range, the formula of the higher frequency band is used.  
 Note 2: These values are not a substitute for all devices. Electromagnetic compatibility is affected by absorption and reflection from buildings, objects and people.

A: The infrared thermometer is intended for use in electromagnetic environment where the radio-frequency electromagnetic field strength is less than 100V/m. The minimum distance between portable and mobile communication devices (specified in the infrared thermometer or recommended below).

Warranty Card

Purchase date	Product number	(Specified by dealer)
Product number	User name	Phone
User name	User address	
Warranty record		
Date	Content	Repairer

Our always friendly line

(Correspond to table 204 in Y0505-2012)