Infrared Forehead Thermometer Instructions

Model：TE-79

CATALOG

1、Safety Precautions

a) The warning signs and illustrations in the manual are intended to enable you to use this product safely and correctly, and to prevent harm to you and others.

b) In order to be able to use this product correctly, please read the instruction manual in detail; the instruction manual and technical manual of this product are combined, and follow the maintenance recommendations in this manual.

c) The warning signs, illustrations and their meanings are as follows.

Warning sign			
⚠ WARNING There is a possibility of death or serious injury in case of misuse.			
⚠ NOTICE There is a possibility of personal injury and property damage when used incorrectly.			
Example of figure notation			
Symbol means prohibition; The specific prohibited content is expressed in words or pictures in or nearby . The picture on the left shows "General prohibition".			
The symbol means mandatory; The specific mandatory content is expressed in words or pictures in or nearby .The picture on the left shows "General Mandatory".			
Symbol Description			
	BF type application part equipment		Up
	This symbol indicates a reference to the attached document		Afraid of rain
	Stacking layers		Separate disposal mark for waste electrical and electronic equipment (Please comply with local laws and regulations)
	fragile		CE certification mark
	Metrology mark		

⚠ Warning	
Self-judgment and treatment of measurement results are dangerous. Please follow the doctor's instructions. • Self-judgment may worsen the condition.	Mandatory  强制
High fever or long-term fever requires medical attention, especially for young children. Please consult a doctor. •Otherwise, the condition may worsen.	
Keep the battery out of the reach of children. • Otherwise, it may be swallowed by children. If you accidentally swallow the battery, please contact your doctor immediately.	

Contraindications • No contraindications.	
When not in use for a long time (more than 3 months), remove the battery. • Otherwise, it may cause battery leakage, heat generation, rupture, etc., and damage the main body.	
Keep the main body out of the reach of children. At the same time, please avoid letting children use the main body alone. •Otherwise, it may cause injury to children	
Please dispose of the used battery in accordance with the requirements of the place of residence. •If it is disposed of as combustible material, it may cause a fire due to the explosion of the battery, which may cause burns and injuries.	Prohibition 禁止

⚠ Warning	
Do not disassemble, repair or modify the main body. • It may cause errors in the measurement results or cause machine failure.	 禁止拆卸 Disassembly
The body is not waterproof. Please be careful when using it to prevent liquid (alcohol, water or hot water) from entering the body. When the main body gets wet due to exposure to steam, wait until it dries or wipe it gently with a soft dry cloth. •It may cause errors in the measurement results or cause machine failure.	prohibited  强制
If there is a temperature difference between the storage location of the main body and the place where you want to measure, please leave the main body in the room where you want to measure for more than 30 minutes to allow it to reach room temperature before measuring. • Otherwise, the measurement results may be inaccurate.	
When the detection lens becomes dirty, wipe it gently with a soft dry cloth or cotton swab. Do not wipe the detection lens with paper towels or towels. • It may cause the machine to malfunction.	
Do not violently bump, drop, step on or vibrate the main body. • Damage to the main body may cause injury.	Prohibition  禁止
Do not use the main body in places with strong static electricity or electromagnetic waves. • It may cause errors in the measurement results or cause machine failure.	
Do not touch the detection lens with your fingers or exhale into the lens. • May cause inaccurate measurement results	
Do not use it in an environment with electromagnetic interference. • May cause inaccurate measurement results	
Do not try to measure when the body is wet. • May cause inaccurate measurement results	

Statement

1. The clinical accuracy or clinical deviation of the infrared forehead thermometer has been clinically verified, and its safety and effectiveness are in compliance with relevant national regulations. The claimed performance verification method of the product can be obtained by contacting the company's customer service department.
2. If stored or used outside the temperature and humidity range specified by the manufacturer, the product may not reach the claimed performance (use environment: temperature: 10℃～40℃ relative humidity: ≤85% atmospheric pressure: 70.0kPa ～ 106.0kPa; storage environment : Temperature: -20℃～+55℃, relative humidity: ≤93%, atmospheric pressure: 70.0kPa～106.0kPa).
3. At the end of the service life of the product, there may be conditions that cannot be measured normally. Disposal of electronic medical products after being discarded may cause environmental pollution. Please dispose of the waste and residue at the end of the service life of the product in accordance with local laws and regulations.
4. This product is only suitable for temperature measurement of the forehead of adults and children, not suitable for temperature measurement of other parts of adults and children.
5. If you find any problems, you should contact the seller, and you cannot repair the product yourself. Note: If the original parts are replaced with parts not provided by the manufacturer, it may cause measurement errors.
6. After the infrared forehead thermometer is turned on, it will automatically self-test. After the automatic self-test, the full-display interface will appear and enter the state to be tested; if the normal automatic self-test cannot be performed, please do not continue to measure.

2、Features

1) The human body measurement range is 32.0℃～43.0℃
2) 1 second measurement
3) Large screen display
4) There are 32 groups of memory function
5) Fever reminder function.
6) Automatic shutdown function for 15 seconds without operation.

3、Body temperature and measurement principle

All objects in nature whose temperature is higher than absolute zero (-273° C) will radiate infrared rays, and the energy of the radiated infrared rays is proportional to the temperature. Using this relationship, the temperature of the object can be calculated by measuring the infrared intensity of the object. This product uses an infrared sensor to aim at the forehead to measure human body temperature. Measuring the human body temperature through the forehead can accurately reflect the core temperature of the human body.

Tips: The normal body temperature of the human body is not constant. There are differences in the body temperature of different parts of the human body in the morning and evening and between men and women, and there is a relatively stable range. It is normal to measure the same part after a few minutes, and there may be a few tenths of a degree Celsius change; Especially the child's temperature control function has not been fully developed, and the temperature changes will be more frequent. It is recommended to measure several times and take the highest value. If you find that the child's temperature is abnormal, you should seek medical attention in time.

Notes:

1: The above clinical accuracy data is the result of comparison of the clinical test between this product and the CRW-23 glass thermometer produced by Jiangsu Chenyu Medical Equipment Co., Ltd.

2: The clinical accuracy or clinical deviation of the infrared forehead thermometer has been clinically verified, and its safety and effectiveness are in compliance with relevant national regulations. The claimed performance verification method of the product can be obtained by contacting the company's customer service department.

4、Product scope/structure composition

This product is composed of a plastic shell, a sensor, an LED display, an alkaline battery, a control circuit and a buzzer. It is suitable for displaying the temperature of the human body by measuring the thermal radiation of the human forehead.

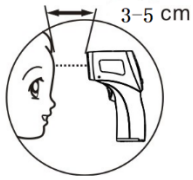
5、Instructions

5. 1Measure forehead temperature

Press the measurement key to turn on the full display and then stand by.

Aim the product at the measurement key 3-5cm on the forehead of the human body, and you hear a beep to indicate that the measurement is complete, and the measurement value will be displayed on the display.

Automatically shut down without operation or long press for 3 seconds to shut down.



Notes:

When changing the place of use and the temperature changes too much before and after, the quick screen instrument should be placed in the environment before use and adapt to the ambient temperature for at least 30 minutes in advance.

The subject should be in the use environment for at least 20 minutes, allowing the body temperature to balance before the measurement.

After strenuous exercise, you should rest for at least 30 minutes before taking the measurement.

When taking the temperature, make sure that there is no hair, sweat, hat or makeup on your forehead.

The environment around the tested person must be stable, and it cannot be measured in places with large airflow changes such as fans and air conditioners.

In order to avoid human error, it is recommended to measure multiple times, and display at most one set of data as the standard.

5. 2 Fever reminder

When the measured forehead temperature is higher than the alarm setting value, the user will be reminded of whether they have a fever.

Temperature range ℃	Temperature range ℉	Backlight color of temperature measurement button	Beep
＜37.5℃	＜99.5℉	Green	1 times short beep
37.5--38.5℃	99.5℉ --101.3℉	Yellow	2 times and 2 short beeps. "BI-BI...BI-BI...BI-BI..."
＞38.5℃	＞101.3℉	Red	3 times and 3 short beeps. "BI-BI...BI-BI...BI-BI..."

5. 3 Memory/Mute button

In standby mode, short press to query memory, long press for 2 seconds to mute.

5. 4Clear memory

The memory is cleared when the battery is disconnected.

5. 5 Material temperature mode

Material temperature mode: In the shutdown state, press and hold the "memory/mute key" and "measurement key" at the same time for 3 seconds, and when the full display is released, it will enter, and the icon will light up. The default value or after power off is the forehead temperature.

Material temperature range：0-93.2℃(0-199.9℉)

5. 6 Shut down

Manual shutdown: In the standby state, press and hold for 3 seconds to shut down.

Automatic shutdown: No operation for 15 seconds to automatic shutdown.

5. 5 Bluetooth function (if available)

The Bluetooth symbol flashes, indicating that the Bluetooth connection is in progress; the Bluetooth symbol is long on, indicating that the Bluetooth connection is successful.

6. Replacement battery

This product uses 2 AAA alkaline batteries.

When the screen displays "  ", it means the battery is low, please replace the battery as follows:

a) Push the battery cover at the bottom of the infrared forehead thermometer in the direction indicated by the arrow.

b) Take out the old battery, press the positive "+" and negative "-" of the battery to install the battery correctly.

c) Close the battery cover. If you will not use it for more than 3 months, please take out the battery to prevent battery liquid from leaking out.

This product is part of the internal power supply type B application equipment

7、Cleaning and maintenance

Preventive inspection: Check whether the battery is sufficient before each use. If the battery is low, it is recommended to replace the battery before testing.Before each use, please check whether the device shell is damaged. If it is damaged, it is recommended to stop using it.

- After each use, the user shall wipe it with a dry and soft cloth. When the pollution is serious, please use a cloth dampened with water or neutral detergent, wring it out and wipe it, and then wipe it with a dry cloth.

When not in use for a long period of time (more than 3 months), please take out the battery and put it in the collection box for storage.

It is recommended to use alcohol for cleaning before and after each use. This product does not need to be disinfected.

Notes:

- Do not expose this product to strong sunlight, dust and pollution.
- Please place this product at normal room temperature. If placed in an outdoor environment, its temperature should be in +5～+40℃
- Please do not use gasoline, volatile oil, thinner, alcohol and other chemical solvents to wipe the product. If necessary, wipe it with a damp cloth, but avoid water entering the body to avoid damage to the internal electronic components.

□

8、Abnormal message

Prompt information	Reason	Measure
	Low battery	Replacement battery
H	The measurement temperature result is high	Check whether it is aimed at the body part
L	The measurement temperature result is low	Check whether it is aimed at the body part
EH	High ambient temperature	Check whether the ambient temperature is within the specifications, move the product to the ambient temperature required by the specifications for half an hour before measuring.
EL	Low ambient temperature	Check whether the ambient temperature is within the specifications, move the product to the ambient temperature required by the specifications for half an hour before measuring.
ErA	Unstable ambient temperature	When the ambient temperature changes, please place the product in the current environment for half an hour before using it.
Err	System error	Please place the product and try again, if it is still abnormal, please contact your local dealer
No display	The battery is exhausted	Please replace the battery

9、Product specification

Product name	Infrared Forehead Thermometer
model	TE-79
Measuring range	32.0℃～43.0℃
Measurement error	±0.4℉, 96.8~102.2℉ (±0.2℃, 36.0~39.0℃) , Outside the range: ±0.5℉ (±0.3℃)
Display resolution	0.1℃/ 0.2℉
Memory	Automatically display the last temperature measurement result
Operating environment conditions	Temperature: 10℃～40℃ Relative humidity≤85%RH Atmospheric pressure: 70.0kPa～106.0kPa
Storage/transportation environmental conditions	Temperature: -20℃～+55℃ Relative humidity≤93%RH Atmospheric pressure: 70.0kPa～106.0kPa
Power supply	d.c. 3V two AAA1.5V alkaline batteries
Size	157 (length) × 45 (width) × 35 (height) mm
Weight	91 g (including battery)
Classified according to the type of electric shock protection: equipment powered by internal power supply;	
Classified according to the degree of protection against electric shock: it belongs to the BF type application part;	
Classified according to the degree of protection against harmful ingress of liquids: ordinary equipment;	
Classified according to the degree of safety when used with flammable anesthetic gas mixed with air or flammable anesthetic gas mixed with oxygen or nitrous oxide: equipment that cannot be used under these two conditions;	
Classified by operation mode: it belongs to continuous operation equipment;	
Classified according to the disinfection and sterilization methods specified by the manufacturer: clean according to the method recommended by the manufacturer.	
Electromagnetic compatibility is classified into Group 1 Class B according to GB4824-2013 "Industrial, Scientific, and Medical (ISM) Radio Frequency Equipment, Disturbance Characteristics, Limits and Measurement Methods".	

10、Fault analysis and troubleshooting

Failure phenomenon	Reason analysis	Troubleshooting method	Remarks
LCD display is not complete	LCD frame is not pressed tightly	Tighten the screws of the LCD frame	/
Temperature measurement is too high	The sensor is blocked	Reinstall the sensor, in the center position	/

11、Calibration mode conversion method

Reference5.5

12、Warranty commitment

1.From the date of purchase, the product can enjoy a one-year free warranty and lifetime maintenance with the purchase invoice.
2. We will not provide free warranty service for the following failures caused by users. Such as:
A. Failures caused by unauthorized disassembly, modification or alteration of the product.
B. Failure caused by accidental fall during use and handling.
C. Failure caused by lack of reasonable maintenance.
D. Failures caused by failure to follow the correct instructions in the instruction manual.
3. When requesting free warranty service, you must have a warranty card with the date of purchase and the stamp of the shop where you purchased it. Please be sure to ask the clerk to stamp the warranty card when purchasing this product.
4. When requesting warranty service, please take this product to the sales shop for repair.
5. The accuracy of this infrared forehead thermometer has been rigorously tested. It is generally recommended to check and calibrate the thermometer once a year. Find the manufacturer or a qualified third-party organization to verify the accuracy of the product to ensure that the infrared forehead thermometer function is normal and the measurement is accurate.
6. During the warranty service, if necessary, the product circuit diagram and repairable component data can be provided to the qualified technical personnel identified by us.

生产许可证号：粤食药监械生产许 20112064 号
Production license number：Guangdong Food and Drug Administration Apparatus Production License No. 20112064

注册证号/技术要求编号：粤械注准 20162201225
Registration number/technical requirement number：Guangdong Machinery Note 20162201225

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注册人/生产企业：东莞市森普实业有限公司

Registrant/Manufacturer：Dongguan simple industrial Co.,Ltd.

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13、Electromagnetic compatibility statement

Notes:

- TE-79 infrared forehead thermometer accord the relevant requirements of YY0505 standard electromagnetic compatibility;
- Users should install and use according to the electromagnetic compatibility information provided by the accompanying documents;
- Portable and mobile RF communication equipment may affect the performance of TE-79 infrared forehead thermometer. Avoid strong electromagnetic interference when using it, such as close to mobile phones, microwave ovens, etc.;
- The guidelines and manufacturer's declaration are detailed in the attachment.

Warning:

- TE-79 infrared forehead thermometer should not be used close to or stacked with other equipment. If it must be used close or stacked, it should be observed to verify that it can operate normally under the configuration used;

Annex:

Guidelines and manufacturer's declaration-electromagnetic emissions		
The TE-79 infrared forehead thermometer is expected to be used in the following electromagnetic environment. The purchaser or user of the TE-79 infrared forehead thermometer should ensure that it is used in this electromagnetic environment:		
Launch test	Compliance	Electromagnetic environment-guidelines
Radio frequency emission GB 4824	1 group	TE-79 infrared forehead thermometer uses radio frequency energy only for its internal function. Therefore, its radio frequency emission is very low, and the possibility of causing interference to nearby electronic equipment is very small
Radio frequency emission GB 4824	Type B	TE-79 infrared forehead thermometer is suitable for use in all facilities, including domestic facilities and directly connected to the

Harmonic emission GB 17625.1	Not applicable	public low-voltage power supply network of households
Voltage fluctuation/flicker emission GB 17625.2	Not applicable	

Guidelines and manufacturer's declaration-electromagnetic immunity			
The TE-79 infrared forehead thermometer is expected to be used in the following electromagnetic environment. The purchaser or user of the TE-79 infrared forehead thermometer should ensure that it is used in this electromagnetic environment:			
Immunity test	**IEC 60601 test level**	**Coincidence level**	Electromagnetic environment-guidelines
Electrostatic discharge GB/T 17626.2	±6 kV Contact discharge±8 kV Air discharge	±6 kV Contact discharge±8 kV Air discharge	The floor should be wood, concrete or ceramic tiles. If the floor is covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient burst GB/T 17626.4	±2kV To the power cord ±1kV For input/output lines	Not applicable	Not applicable
Surge GB/T 17626.5	±1 kV Differential Mode Voltage ±2 kV Common mode voltage	Not applicable	Not applicable

Voltage sag, short-term interruption and voltage change on the power input line GB/T 17626.11	<5% U_T for 0.5 cycle (On U_T, >95% dip) 40% U_T for 5 cycle (On U_T, >60% dip) 70% U_T for 25 cycle (On U_T, >30% dip) <5% U_T for 5s (On U_T, >95% dip)	Not applicable	Not applicable
Power frequency magnetic field (50/60Hz) GB/T 17626.8	3A/m	3A/m,50/60Hz	The power frequency magnetic field should have the level characteristics of the power frequency magnetic field in a typical place in a typical commercial or hospital environment.
Note: U_T refers to the AC network voltage before the test voltage is applied			

Guidelines and manufacturer's declaration-electromagnetic immunity			
The TE-79 infrared forehead thermometer is expected to be used in the following electromagnetic environment. The purchaser or user of the TE-79 infrared forehead thermometer should ensure that it is used in this electromagnetic environment:			
Immunity test	**IEC 60601 test level**	**Coincidence level**	Electromagnetic environment-guidelines
Radio frequency conduction GB/T 17626.6	3 V (Effective value) 150 kHz～80 MHz 3 V/m	Not applicable 3 V/m	Portable and mobile RF communication equipment should not be used closer to any part of the TE-79 infrared forehead thermometer than the recommended isolation distance, including cables. The distance should be calculated by the formula corresponding to the transmitter frequency. **Recommended isolation distance** $d = 1.2\sqrt{P}$

Radio frequency radiation GB/T 17626.3	80 MHz～2.5 GHz		$d = 1.2\sqrt{P}$ 80 MHz～800 MHz $d = 2.3\sqrt{P}$ 800 MHz～2.5 GHz In the formula: P —According to the maximum rated output power of the transmitter provided by the transmitter manufacturer, in watts (W) d —The recommended isolation distance is in meters (m) as the unit[b]. The field strength of the fixed radio frequency transmitter is determined by surveying the electromagnetic field[c], and in each frequency range[d] should be lower than the compliance level.  Interference may occur in the vicinity of equipment marked with the following symbols.

Note 1：At 80MHz and 800MHz, the higher frequency band formula is used.
Note 2：These guidelines may not be suitable for all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects, and humans.

a Stationary transmitters, such as base stations for wireless (cellular/cordless) telephones and terrestrial mobile radios, amateur radios, AM and FM radio broadcasts, and television broadcasts, whose field strength cannot be accurately predicted in theory. In order to assess the electromagnetic environment of fixed radio frequency transmitters, electromagnetic field surveys should be considered. If the measured field strength of the TE-79 infrared forehead thermometer is higher than the above applicable radio frequency compliance level, the TE-79 infrared forehead thermometer should be observed to verify its normal operation. If abnormal performance is observed, supplementary measures may be necessary, such as readjusting the direction or position of the infrared forehead thermometer.
b In the entire frequency range of 150KHz～80MHz, the field strength should be lower than 3 V/m.

Recommended isolation distance between portable and mobile radio frequency communication equipment and infrared forehead thermometer

The TE-79 infrared forehead thermometer is expected to be used in an electromagnetic environment where radio frequency radiation disturbance is controlled. According to the maximum rated output power of the communication device, the purchaser or user can prevent electromagnetic interference by maintaining the minimum distance between the portable and mobile radio frequency communication device (transmitter) and the TE-79 infrared forehead thermometer as recommended below.

Rated maximum output power of the transmitter/W	Corresponding to the isolation distance of the transmitter at different frequencies/m		
	150 kHz ～ 80 MHz $d = 1.2\sqrt{P}$	80 MHz ～ 800 MHz $d = 1.2\sqrt{P}$	800 MHz～ 2.5 GHz $d = 2.3\sqrt{P}$
0.01	Not applicable	0.12	0.23
0.1	Not applicable	0.38	0.73
1	Not applicable	1.2	2.3
10	Not applicable	3.8	7.3
100	Not applicable	12	23

For the transmitter rated maximum output power not listed in the above table, the recommended isolation distance d, in meters (m), can be determined by the formula in the corresponding transmitter frequency column, Here P is the maximum output rated power of the transmitter provided by the transmitter manufacturer, in watts (W).

Note 1: At 80 MHz and 800 MHz, the higher frequency range formula is used.

Note 2: These guidelines may not be suitable for all situations. Electromagnetic propagation is affected by absorption and reflection from buildings, objects, and humans.

FCC warning:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.