Non-contact Infrared Thermometer

Instruction Manual

1. Product overview

NX-2000 non-contact infrared thermometer (hereinafter referred to as thermometer) is a thermometer that uses infrared technology to detect thermal radiation for measuring human body temperature. When in use, you can simply point the head of infrared thermometer to the forehead to quickly and accurately measure the human body temperature. The infrared thermometer is a professional instrument for quickly monitoring body temperature in traffic-intensive public sites. With advantages of non-contact, high accuracy, fast measurement, over-temperature voice alarm, it is particularly suitable for use at exit-entry ports, ports, airports, wharfs, stations, institutions, schools, theaters, etc. See figure 1.

1-Infrared detector
2-LED screen
3-Mode switch
4-Down button
5-Up button
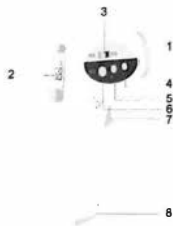6-SETUP button
7-Measure switch
8-Battery case cover

Fig.1 Non-contact infrared thermometer

2. Basic principle

Every object of a temperature higher than absolute zero will emit a portion of infrared radiation according to its own temperature. The amount and wavelength distribution of infrared energy emitted by an object are significantly correlated with its surface temperature. The infrared wavelength of human body temperature (36-37℃) is 9~13 q m, according to this principle, the infrared thermometer can accurately detect the surface temperature on the forehead to display accurate readings by inferring the actual body temperature.

3. Product features

1) Special design for measuring forehead temperature, dynamic compensation of ambient temperature and forehead temperature;
2) Exclusive use of high-precision infrared temperature probe, more stable measurement accuracy and performance;
3) Backlit LED digital display;
4) Fahrenheit and Celsius dual-mode options;
5) Select forehead thermometer mode to measure object temperature with an emissivity of 0.95 in the range of 100°.

4.Main specifications

Product name	Contactless infrared thermometer
Measurement category	Human body temperature measuring instrument
Measuring location	Frontal temperature
Measuring distance	3cm-5cm
Product weight	154g
Resolving power	0.1℃
Automatic shutdown	About 20 seconds.
Voltage	Dc3v (2 batteries in series)
Measuring range	32℃～34.9℃±0.3℃ 35℃～42℃±0.2℃ 42.1℃～42.9℃±0.3℃
Working temperature	16℃～35℃/25℃ optimum
Storage temperature	0℃～40℃
Relative humidity	10%～85%
Preset alarm temperature	38℃
Service life	2 years
Display	Three color backlight; green (normal), orange (high), red (fever)

5. Operation instructions

. Measurement mode setup:

After power on, the screen displays the current measurement mode. Press the "mode setting" button to switch the measurement mode to body temperature and surface temperature.

Press and hold the "set" key, when the " 🔔 " is displayed on the screen, the sound prompt will be turned on. Press the "set" key again, the " 🔔 " on the screen disappears, and the sound prompt will be turned off;

Long press the "set" key to switch between "Fahrenheit" (° F) or "Celsius" (° C) temperature units.

Note:
The body temperature mode is used to measure human body temperature, which is inferred from dynamic compensation of difference between ambient temperature and forehead surface.

6. Use method
Confirm the measurement mode on the screen is body temperature mode. Point the head of infrared thermometer vertically to the center of the forehead, at a distance approximately 3-5cm. Press "MEASURE" button, 1 second later you will hear a "beep" and see the readings on the screen.

If the temperature exceeds the alarm value, the infrared thermometer will prompt you with warning tone of 5 beeps.

7. The product is under on **Quality guarantee and after-sales service**
e-year warranty from the date of purchase

Note: Damage caused by non-normal use or disassembly without permission is out of the warranty.

Tips: Please keep your warranty card and purchase voucher properly for maintenance.

Note: General knowledge of infrared thermometer
Normal temperature range at different measurement positions:

Measurement position	Normal temperature ℃	Normal temperature ℉
Anus	36.6~38	97.8~100.4
Mouth	35.5~37.5	95.9~99.5
Armpit	34.7~37.3	94.4~99.1
Ear	35.8~38	96.4~100.4

Normal body temperature range for different ages:

Age range	Normal temperature ℃	Normal temperature ℉
0-2	36.4~38.0	97.5~100.4
3-10	36.1~37.8	97.0~100.0
11-65	35.9- 37.6	96.6~99.7
>65	35.8~37.5	96.4~99.5