2M TECHNOLOGY THERMO DETECTOR

User Manual

2M®
TECHNOLOGY

Product Introduction

The mini thermo detector use the unique detecting technology of non-contact infrared surface temperature of human body, is used to detect the human body surface temperature through a high-precision temperature measurement sensor imported from Belgium. It has the function of voice warning of abnormal body temperature, which can effectively prevent large-scale disease infection, which can be used alone or widely integrated in walk through metal detector, ordinary doors, intelligent access control systems of temperature measurement, disinfection equipment and other equipment that needs to integrate temperature measurement functions.

Product Highlights

Human body temperature screening: Built-in high-precision miniature 24-hour dynamic infrared body temperature monitor, which can monitor and screen body temperature.

Non-contact temperature measurement: the detection distance is 1cm to 20cm, and the detection height can be customized by the user.

High-end components: Using original infrared detector imported from Melexis in Belgium, with high accuracy, stable performance and reliable quality, and high configuration.

Modular component design: can be used alone or integrated in different equipment and instruments to achieve temperature measurement functions.

Easy to use: Just need to plug in and ready to use, no need professional to install.

Metal material: The case is made of metal, which is durable and not easily deformed or damaged.

Product Features

Quick screening: Collect infrared temperature data actively, no human operation is required, and the temperature measurement can be completed quickly less than 1 second.

Non-contact temperature measurement: The fixed infrared temperature sensor measures the temperature of the human wrist or forehead to avoid direct contact between the temperature measurement personnel and the measured person, which may cause cross infection.

Voice alarm: After passing the temperature measurement, the person with abnormal temperature will be checked by two types of voice alarm "Your temperature is normal" and "Please check again" very quickly. And you can customize the voice in different languages.

Application environment: Low ambient temperature requirements, temperature measurement and screening can be performed normally at -10°C.

Panel display: High-brightness digital display, the panel information is clear.

Anti-high temperature false alarm: STM highly intelligent temperature measurement program can prevent false alarm caused by high temperature and direct sunlight.

Interface Specification

- Temperature display: digital display show real-time detected temperature value.
- Normal indicator: normal temperature indicator, the green light is on when the temperature is within the range of 35°C-37°C (factory setting value).
- Abnormal indicator: abnormal temperature indicator, the red light is on when the temperature is not within the range of 35°C-37°C (factory setting value).
- Distance sensor: when a person or object get into the range of about 20cm from the infrared range sensor, the infrared temperature sensor starts to work.
- Infrared sensor: detect the body temperature in real time when forehead or wrist is close to infrared sensor.
- Voice broadcast: real-time voice broadcast. "Normal temperature" is reported when detected temperature is within the range of 35°C-37°C (factory setting value), "Please check again" is reported when detected temperature is not within the range of 35°C-37°C (factory setting value).

Basic Operation Instruction

1. Starting up
  Connect the power, press the "power" button for 1s to start the system, and the display show "O".

2. Shutdown
  Press the "power" button for 1s to power off the system.

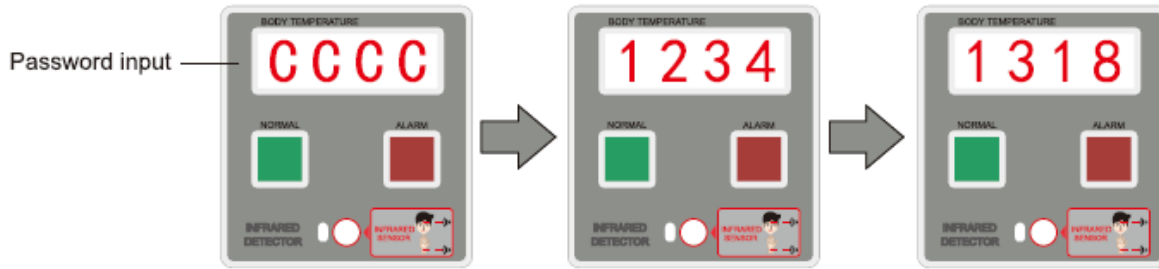**3. To view the version number of the program**
  Press the "select" button twice, the display show the version number of the program, and then press the "select" button to return to the main interface.
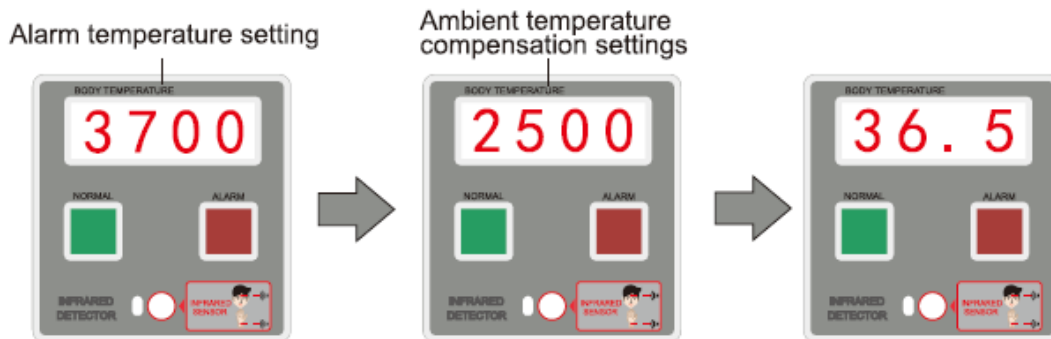
4. Check the device ID
  Press the "adjust" button twice, the display show the device ID. Then press the "select" button to return to the main interface.

Temperature Debugging Instruction

1. Press "Enter" button to the password input interface, press "Select" button to shift, press the "Adjustable" button to adjust the number, and the password is 1318.

Password input —— **CCCC** ➡ **1234** ➡ **1318**

2. Press "Enter" button to the interface of temperature alarm setting, press the "Select" button to shift and get into the interface of ambient temperature compensation factor setting. After setting, press "Enter" button to return to the main interface.

Alarm temperature setting **3700** ➡ Ambient temperature compensation settings **2500** ➡ **36.5**

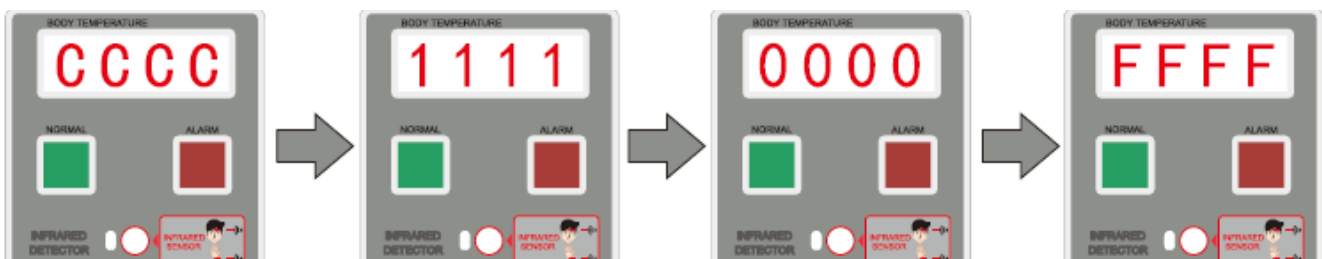Note: 1) "3700" means the alarm temperature is 37°C.

2) Factory setting value of alarm temperature is 37°C, user don't need to debug it and can use directly.

3) Factory setting value of ambient temperature is 25°C, user don't need to debug it and can use directly when no special circumstances. Turn ambient temperature down 10 °C, the body temperature will turned down 1 °C; Turn ambient temperature up 10°C, the body temperature will turned up 0.5 °C
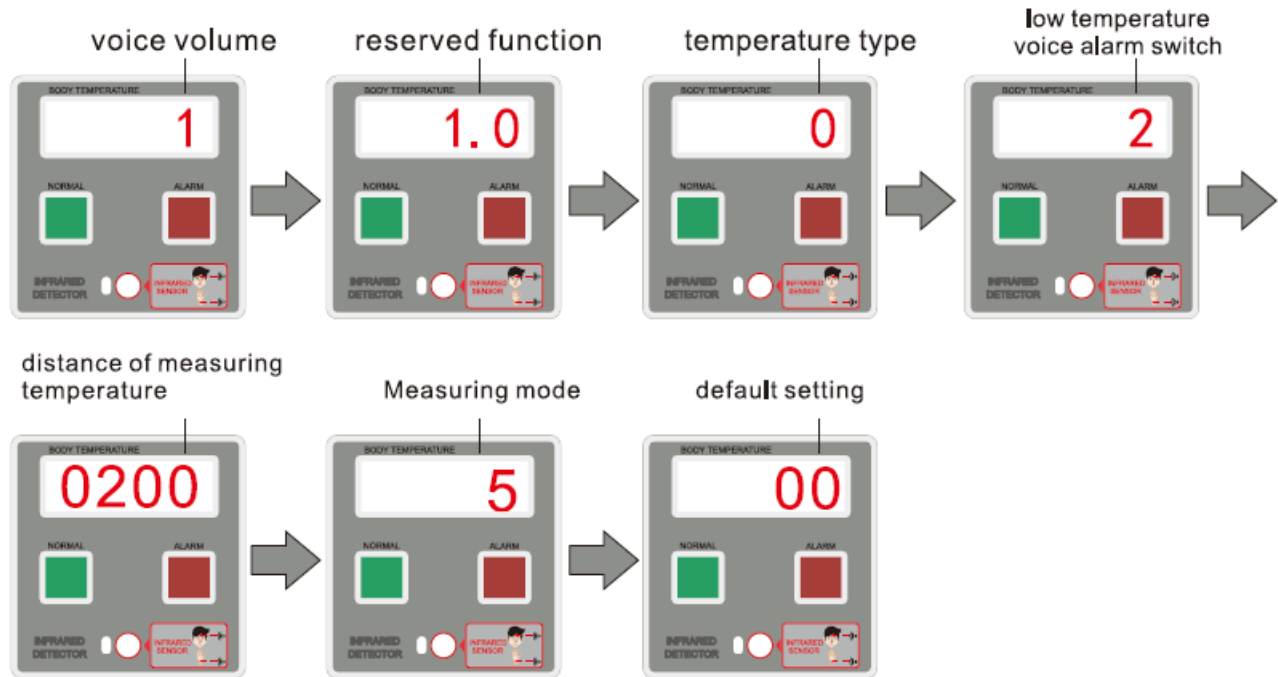
4) The temperature all is set and displayed in Celsius.

Voice Volume Instruction

1. Press "Enter" button to the password input interface, press "Select" button to shift, and press "Adjustable" button to adjust the number. Input password "1111" and press "Enter" button, the display show "0000".Press the confirmation key to display FFFF.

CCCC ➡ **1111** ➡ **0000** ➡ **FFFF**

2. Press the adjustment key to enter the volume setting interface. Press the adjustment key to adjust the number. Press the selection key to switch to the reserved function item, the temperature unit selection item and the low temperature voice alarm switch item in turn. You can adjust the value by pressing the adjustment key. After the setting is completed, press the confirmation key to return to the main interface.
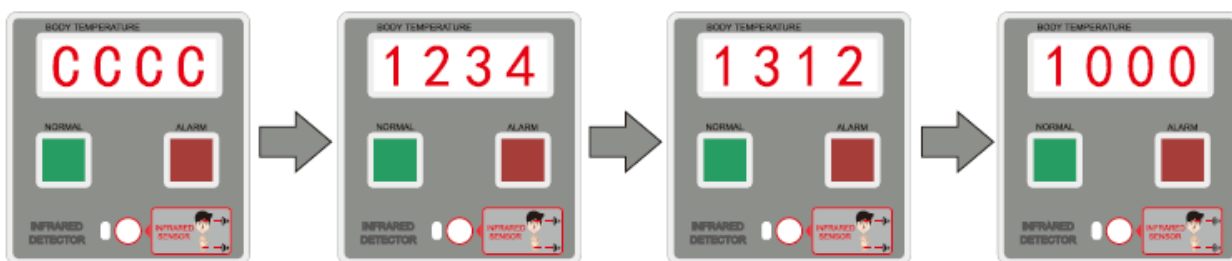

Note:

1. "1" voice volume (Volume 0-3 is optional, level 0 is mute, and volume 3 is maximum).

2. "1.0" reserved function.

3. "0" main interface temperature type (0 is Celsius °C, 1 is Fahrenheit °F).

4. "2" low temperature voice alarm switch, below 35°C is the low temperature value (2 is to turn on the low temperature voice alarm, 3 is to turn off the low temperature voice alarm)

5. "0200" means the distance of measuring temperature, (the effective distance=the value in the device-50; for example 0200 means the effective measuring distance is 150mm, 0300 means the effective measuring temperature distance is 250mm.

6. "5" Measuring mode(5 means measuring body temperature, 4 means measuring ambient temperature)

7. "00" it is default setting(no need to change the value)

ID Number Setting Instruction

1. Press "Enter" button to the password input interface, press "Select" button to shift, and press "Adjustable" button to adjust the number. Input password "1312" and press "Enter" button, the display show "0000", then the ID number can be modified, press "Enter" button twice to save and return to the main interface.

Note: need set ID number only when adding optional network(LAN) function.
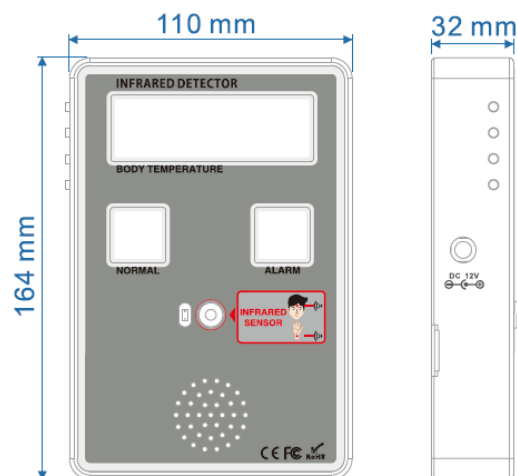
Installation Note

1. Install device in windless indoor, Cold wind could interfere thermo detection, we need turn up the ambient temperature compensation factor (5 °C each time)
2. Sunshine could interfere thermo detection.

Thermo Detection Instruction

1. Normal use environment temperature: 0°C- 35°C; when using at a temperature of about -10°C, the ambient temperature compensation value needs to be increased each time (Adjust 5°C), until the error between the measured value and the forehead gun is within ± 0.3, and then measure. If multiple body temperature measurements occur Low, you can also use this method to calibrate.
2. Measurement method: forehead temperature measurement or wrist temperature measurement in same mode .
3. The best measurement distance is 1-10cm.
4. Measurement time is 0.5s, please move forehead or wrist after detection to avoid repetitive measurement or non-responsive situation.
5. Environment could affect the thermo detection, the measurement accuracy is ±0.3°C.

Specifications

Product Weight	Weight 0.6kg
Weight	less than 8W
Working Temperature	-10 ~ 45 °C
Operating Humidity	95%, non-condensing
Power Consumption	Power consumption
External Power Supply	AC100~240V, 50/60Hz
Working Voltage	12V
Temperature Measurement Speed	Less than 1 second
Temperature Measurement Accuracy	± 0.3°C
Temperature Measurement Distance	1+20 cm
Dimensions	164 x 110 x 32mm (excluding bracket and power adapter)

DISCLAIMER

The infrared temperature measuring device is a human body surface temperature screening instrument. The test results only reflect the real-time temperature evaluation of objects or people in a specific environment. The selling company and the manufacturer shall not bear any responsibility for the direct or indirect loss caused by the use of the test results.

2M ®
TECHNOLOGY

802 Greenview Dr.
Grand Prairie TX. 75050 USA
Toll Free: 1-866-708-5401
Fax: (+1) 972-999-4113
sales@2MTechnology.net