WALKTHROUGH METAL DETECTOR

Body Temperature Measurement

2MTHWT-HMD

Quick Guide

Manual Version: V6.1

2M® TECHNOLOGY

REV06122020

Disclaimer

The infrared temperature measuring device is the 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.

Installation precaution

1. It is recommended to install it indoor free from wind. The cold wind might influence the accuracy in windy outdoor. In this case, we have to increase the environment temperature compensation, 5° C per time.
2. The temperature measurement area should be protected from sunlight to avoid high results.
3. When it is used outdoor under special circumstances, build a shed on site. The height of the shed should be more than 2.4m (7.87ft) to ensure the stability and free from wind. People walk slowly through it to measure the temperature.

Temperature measurement module

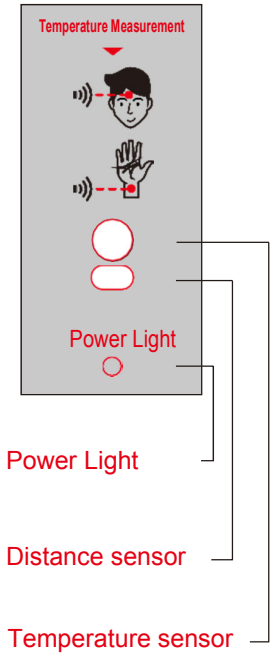
Temperature sensor:

Real time infrared thermo sensor to detect temperature, ready in 30 seconds after power on.

Distance sensor:

The distance sensor starts working when a person or object is in 20cm (7.87” in) to it. If the temperature of person or object detected is ≥ 35.5 ℃, the voice "Normal temperature" is trigged; if it's lower than 35.5 ℃, or higher than the set value with alarm, the voice "Please check again" is trigged.
When the ambient temperature is lower than 15 ℃, if the temperature of person or object detected is ≥ 34.5 ℃, the voice "Normal temperature" is trigged; if it's lower than 34.5 ℃, or higher than the set value with alarm, the voice "Please check again" is trigged.

Special attention: the distance sensor shall not be blocked, otherwise it will repeat the voice broadcast.

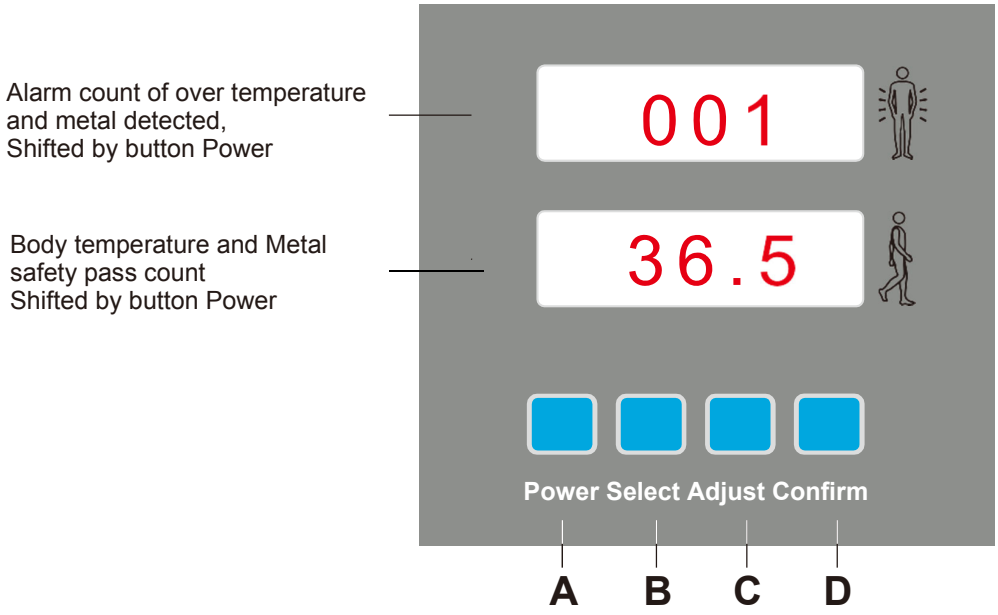


Sketch Map

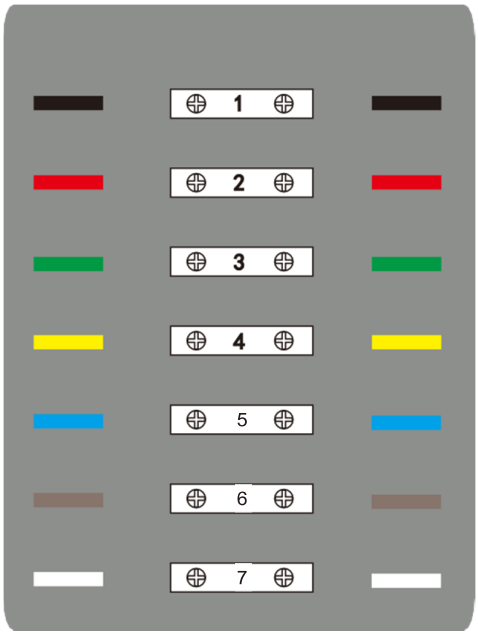
Power Light:

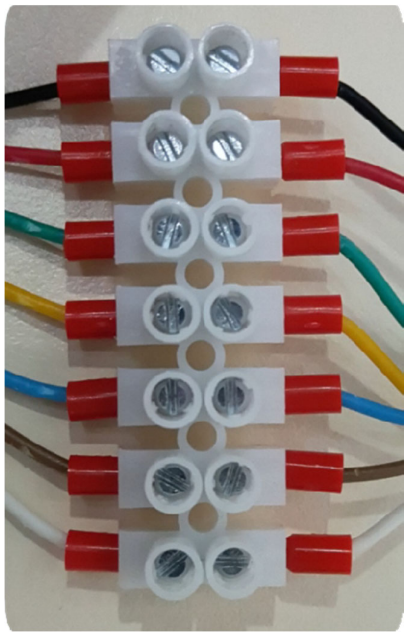
The indicator light is on when the temperature measurement module is working. When measuring the forehead temperature, the measured result is the most accurate when the middle of human eyes is right facing the temperature indicator.

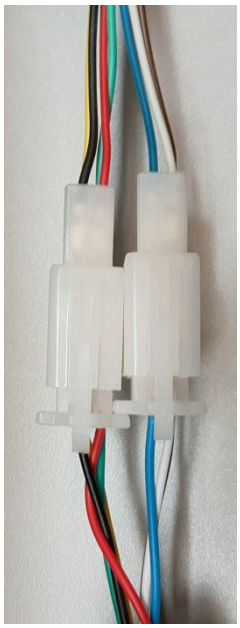
Interface



Temperature sensor Connection



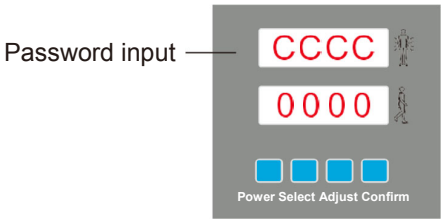




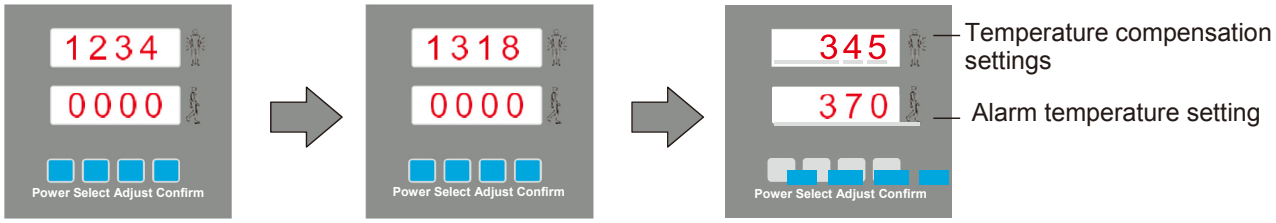
Connect the wires with the right colors one by one.
Wrong connection may damage the temperature measurement module.

Commission instruction

Step 1, press D button to enter below:



Step 2, press B to shift and C to adjust to enter the password 1318, press D button to enter below:

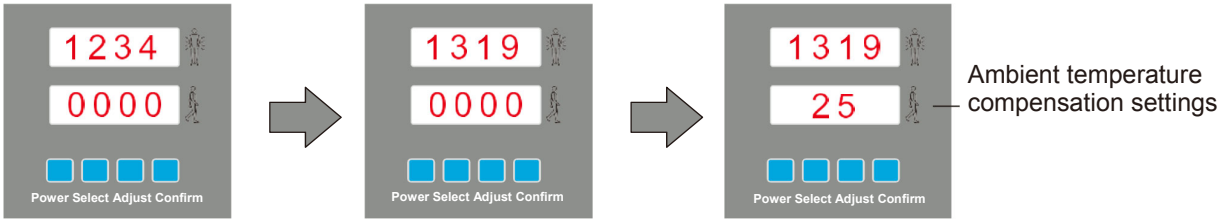


Remark:

1) “345” means the starting value of normal temperature voice broadcast is 34.5 ° C.
2) “370” means the alarm temperature is 37 ° C .
3) The default alarm value by factory is 37 ° C.

Step 3, after setting the temperatures, press D to back.

Step 4, press D button, then press B to shift and C to adjust to enter the password 1319, press D button to enter below:



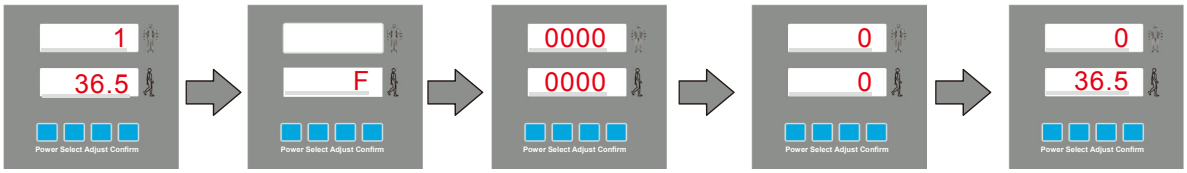
Remark:

1) The default environment temperature value by factory is 25 ° C. It's applicable in most situation and no need to adjust. If necessary, it can be adjust. If we decrease it by 10° C, the body temperature will decrease 1° C. If we increase it by 10° C, the body temperature will increase 0.5° C.

Step 5, after setting the ambient temperature, press D button for 3 seconds to back

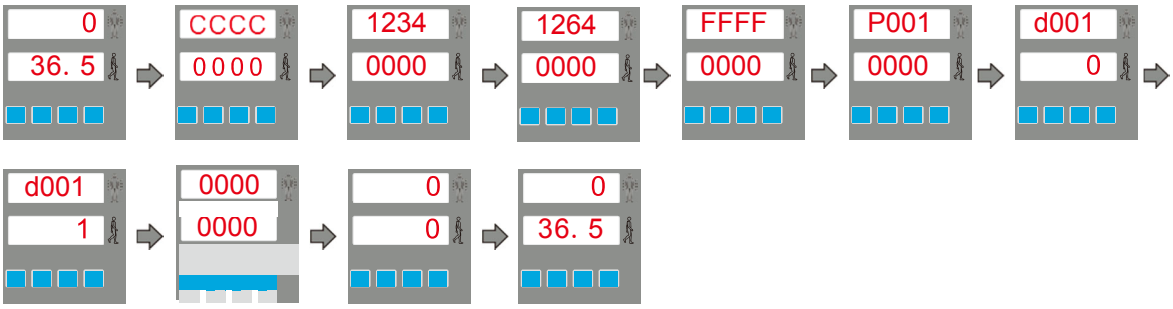
Temperature unit switching

Press B button in the main interface, it shows F or C. F represents Fahrenheit, C represents Celsius. Press A button for 3 seconds to adjusting interface. Press A button twice to main interface. Press B and A to adjust if necessary.



Restore factory settings

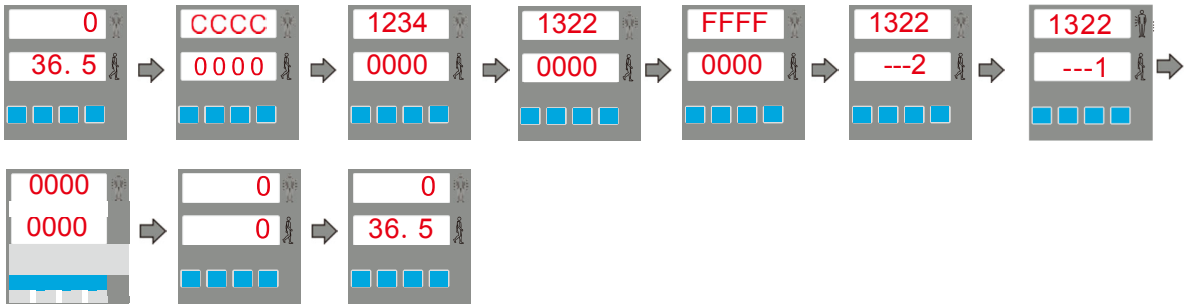
Press D button in the main interface (display CCCC). Press B button to enter the password input interface (display 1234). Press B button to shift and press C to adjust and enter the password 1264. Press D button to display FFFF, indicating the pass word is correct. Press B button to enter the function setting interface (display P001). Press B button to shift to d001. Press C button to change 0 to 1, and press D button to complete the setting (display 0000). Press A button twice to return to the main interface. When the device is not working properly, please restore factory settings.



Low temperature prompt setting

Press D button (display CCCC) in the main interface, press B button to enter the password input interface (display 1234), and press B button and C button to input the password 1322. Press D button to show FFFF, indicating the password is correct. Press B button to enter the function setting interface (display _ _ _ 2), Press B button to find 2. Press C button to change 2 to 1. Press D button to complete the setting (display 0000), and press A twice to return to the main interface.

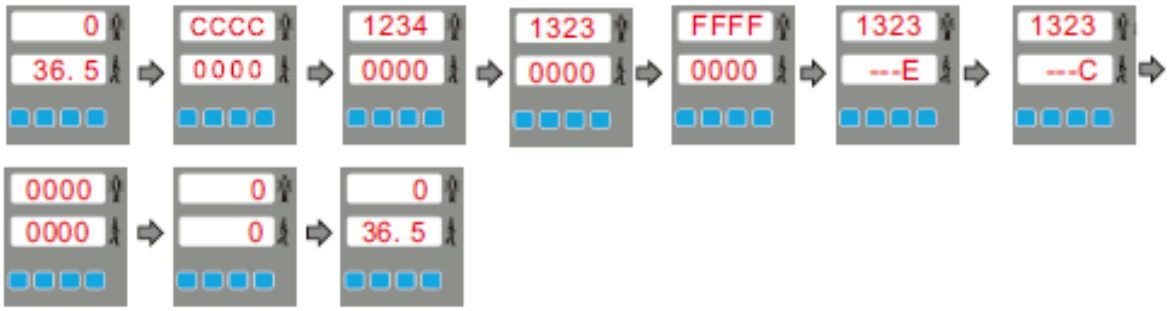
- "2" means to turn on low temperature voice broadcast "please check again";
- "1" means to turn off low temperature voice broadcast "please check again".



Language settings

Press D button in the main interface (display CCCC), press B button to enter the password input interface (display 1234), and press B button and C button to input the password 1323. Press D button to display FFFF, indicating the password is correct. Press B button to enter the function setting interface (display _ _ _ E).
Press B button to switch and find E. Press D button to change E to C. Press D button to complete the setting (display 0000). Press A twice to returns to the main interface.

- "E" means English voice broadcast;
- "C" means Chinese voice broadcast.
- More languages setting is upon request.

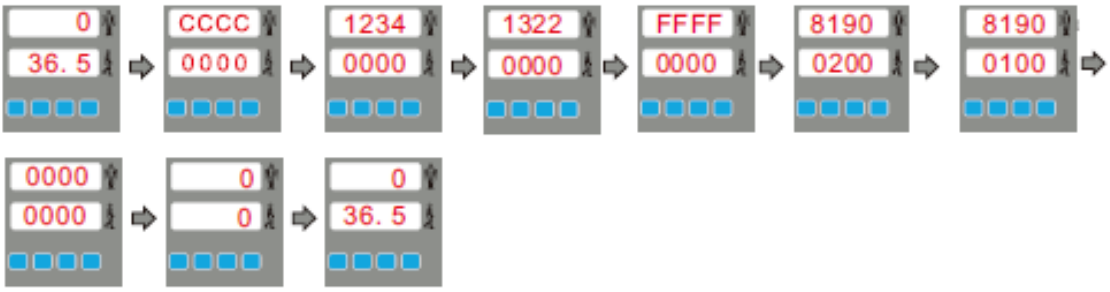


Distance sensor debugging

Press D button in the main interface (display CCCC), press B button to enter the password input interface (display 1234), and press B button and C button to input the password 1321. Press D button to display FFFF, indicating the password is correct. Press B button to enter the function setting interface (display 0200). Press B button to shift and C button to adjust the distance value. Press D button to complete the setting (display 0000). Press A button twice to return to the main interface.

- "0200" means the effective distance between the thermal sensor and the target is within 20cm (7.87” in). When a Target comes close within 20cm (7.87” in), it triggers the thermal sensor to work.
- When the distance is set to 0100, the temperature result is the most accurate.

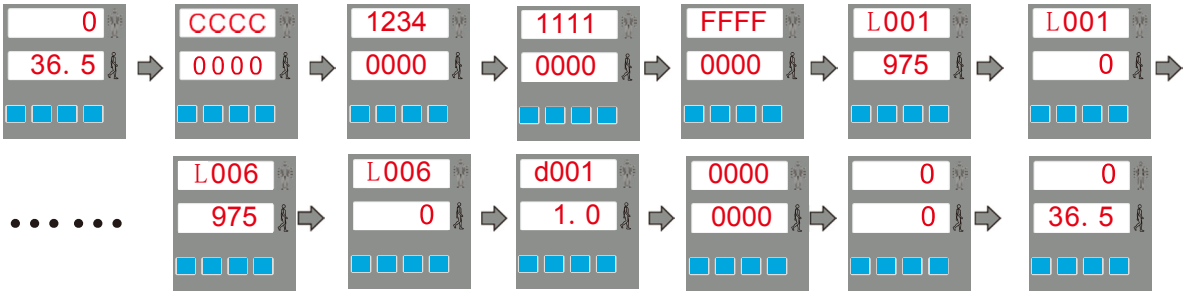
The number of 8190 or 8191, showing in the first line, is the initial value of the distance sensor, which means there is no obstruction 130cm (51.18” in) in front of the thermal sensor. In this situation, if you block the thermal sensor with your hand at 20cm (7.87” in) in the front of the thermal sensor, you will see 0200 at the second line (with an error of about 1 cm (0.39” in)).
If there is no object blocking but a different number flashes in the first line, it means that the distance sensor is interfered. In this situation, the voice of "Please check again" is repeated. We have to eliminate the interference



Metal detection off setting

Press D button in the main interface (display CCCC), press B button to enter the
Password input interface (display 1234), and press B button and C button to adjust to input the password 1111. Press D button to display FFFF, indicating the password is correct. Press B button to enter the function setting interface (display L001/975). Press B button to shift and C button to adjust to change 975 to 0.
Press B button to display L002/975, and press B button to shift and C button to adjust to change 975 to 0.
Change the second line of L003-L006 from 975 to 0 in this way.
Press B button to switch to D001, and press D button to complete the setting (display 0000). Press A button twice to return to the main interface.

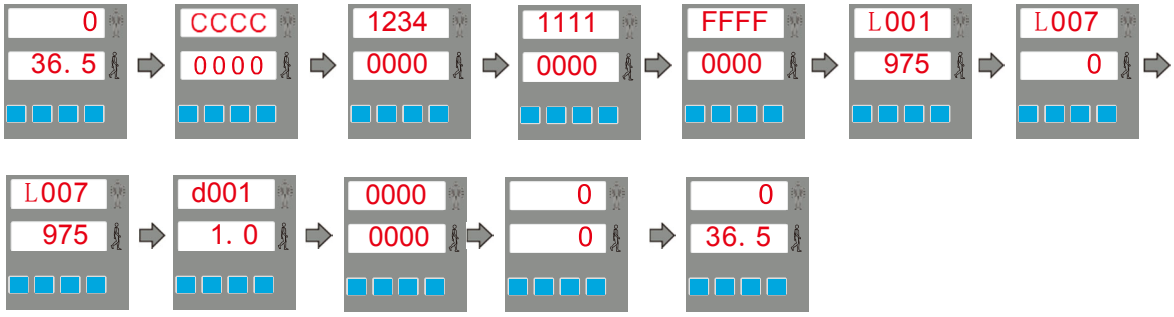
- L001-L006 of the first line is the metal detection zone from bottom to top, 975 (or other values) of the second in represents the metal detection sensitivity, high sensitivity for tiny metals.
- D001 of the first line is the alarm time setting, and 1.0 of the second line means the alarm time is 1 second.



Metal detection on setting

Press D button in the main interface (display CCCC), press B button to enter the password input interface (display 1234), and press B button to shift and C button to adjust to input the password 1111. Press D button to display FFFF, indicating the password is correct. Press B button to enter the function setting interface (display L001/975). Press B button to shift to L007/0, and press B button to shift and C button to adjust to change 0 to 975.Press B button to shift to d001 option, and press D button to complete the setting (display 0000). Press A button twice to return to the main interface.

- L007 of the first line represents all the 6 metal detection zones. The number 975 of the second line represents the metal detection sensitivity.
- L008 of the first line is the setting to detect small size metals. The number 1 of the second line represents to detect small size metals, and 50 means not detect small size metals.
- D001 of the first line is the alarm time setting, and 1.0 of the second line means the alarm time is 1 second.



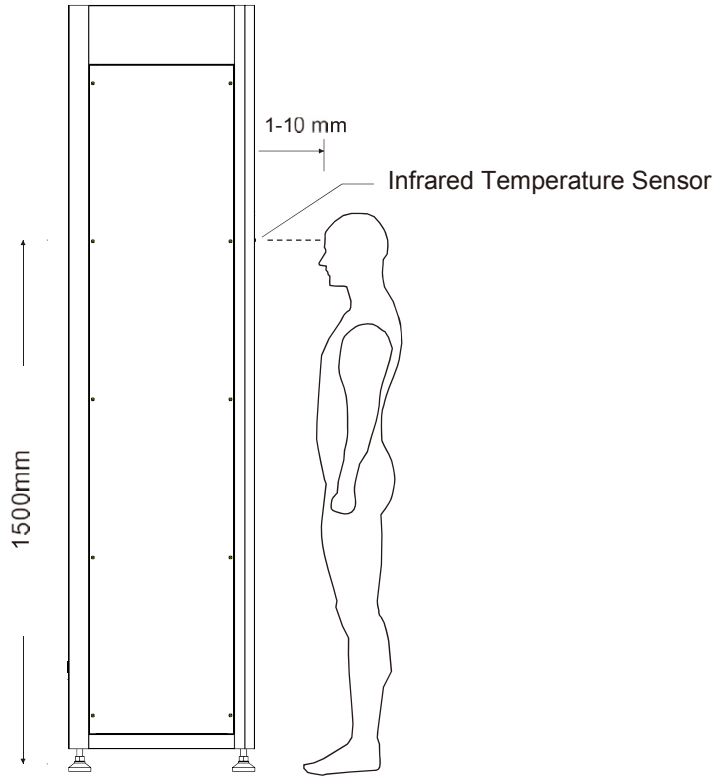
Instruction of temperature measurement

1. Power on and wait for 30 seconds, keep nothing in front of the temperature sensor.
2. Normal ambient temperature is 0°C - 35°C. When using it at - 10°C, you have to decrease the environment temperature compensation, 5°C per time, until the result difference between it and the forehead thermometer is less than ± 0.3°C.
3. Measurement method: Measure forehead or wrist surface
4. Forehead temperature and wrist surface temperature can be measured without adjusting settings.
5. Measurement area: the center of forehead or the wrist covered by sleeve.
6. Standard measurement distance: 1cm-10cm (0.39”-3.93” in). When measuring at a distance of 10-30cm (3.93”- 11.81” in), it is necessary to adjust the environment temperature compensation, 5°C per time, until the result difference between it and the forehead thermometer is less than ± 0.3°C.

7. Measurement time: 0.5 seconds. After the measurement, please leave quickly. Otherwise the measurement will be repeated.
8. During the temperature measurement, influenced by the measurement speed, the temperature might suddenly fluctuate up and down. In this case, please measure the body temperature 3-5 times continuously, and take the average value as the final measurement result.
9. The instrument automatically detects the temperature of the object in 20cm (7.87” in) in front of it. After measuring the temperature, we have to move our hand or forehead away. If we keep close to the sensor for long time, it will stop working asa protection.

Common trouble shooting

1. Metal detection does not count Processing method: press the power key to switch from the temperature measurement interface to the metal detection and counting display interface.
2. The temperature cannot be measured when the machine is started Treatment: wait for 30 seconds after power on, and then measure the temperature.
3. Low temperature measurement Processing method: check whether the value set in 1319 interface is 25, if not, change to 25. And then use the hand-held electronic infrared Thermometer comparison test, if the measured values are consistent, it means that the equipment is working normally. If there is a deviation greater than 0.5 ℃, please refer to Debugging is described on the second page.
4. Temperature measurement is not sensitive Treatment: when measuring body temperature, stay at the target measured by infrared temperature sensor for 1 second.
5. Metal detection sensitivity is too high Processing method: the setting item L008 in function setting password 1111 is changed from 1 to 50, excluding small metal parts.
6. Network connection failure Processing method: check whether the IP address of the computer is completely consistent with the instructions. If not, please set the IP address according to the instructions, if it is consistent, please refer to the video and operate again.



Schematic diagram of temperature measurement

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