Infrared Thermometer Module User Manual V1.0

Features

1. With housing, can be used directly, the sensor is factory calibrated, sensor resolution 24*32 dot matrix

2, internal lithium battery 1000ma, rechargeable, mciro usb interface, interface voltage does not exceed 5v

3, response frequency 8HZ, target temperature measurement range -40-----+300 degrees, use environment 0--50 degrees

4, the emissivity can be adjusted from 0.01 to 1.00 range

5, sensor probe field angle, default 35 degrees * 55 degrees MLX90640ESF-BAB probe

6, screen 2.4 inch lcd 320 * 240 resolution, the screen shows the highest temperature, the lowest temperature, the center point temperature, display each coordinate point.

7. Measurement accuracy ±2 degrees (test condition: environment 25 degrees, measurement target: boiling water 100 degrees, distance 30cm, coordinates Guangxi)

8, with a screenshot function, you can pause the picture for analysis

9, with the screen color corresponding to the temperature adjustment function, you can set the temperature to display different colors

10, with USB data transmission interface, later upgradeable system, free update internal system, default system version 1.0

11. Dimensions 80*50*26 (length, width, height, mm, excluding the raised part)

Applications

Human body temperature detection
PCB component heating temperature detection
Floor heating temperature detection
Automotive parts temperature detection
Electrical switch temperature detection
Air conditioning, microwave oven testing

Instructions

1, ε =0.95 current emissivity (object emissivity)

2, battery power

3, the lowest temperature

4, the center of the field of view

5, the highest temperature point

6, the color shift value

7. The temperature value corresponding to the leftmost end of the color bar

8, the corresponding temperature value in the middle of the color bar

9, the temperature value corresponding to the right end of the color bar

10, the center of the field of view temperature

11, the maximum temperature in the field of view

12, the minimum temperature in the field of view

13, infrared sensor temperature

14, power on / off / menu / OK / stop button

15, plus button

16, minus button

Figure 1

Power On

Press the power button (14 in Figure 1) for more than 3 seconds to enter the boot screen.

Setting

When the camera is in operation, press the menu button (14 in Figure 1) for more than half a second, less than 3 seconds, release the button to enter the setting interface

Then press the plus/minus key to select the item to be set, red
Represents the currently selected item, press the OK button (14 in Figure 1) to enter
Changing the item value by pressing the plus/minus button, and then press the OK button returns to the project selection.
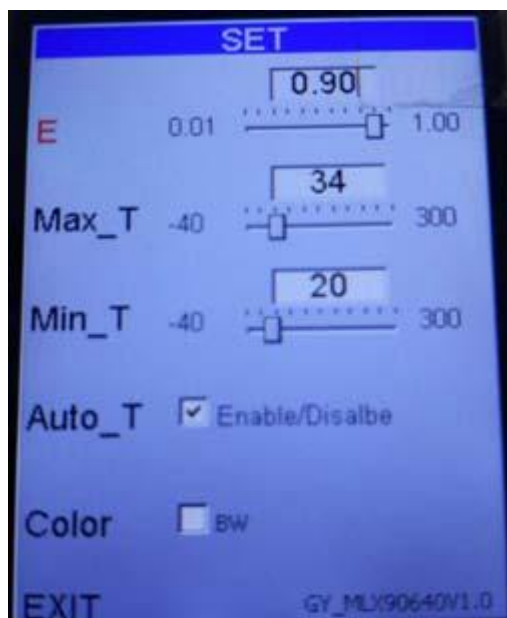Press the select button to "EXIT" and press the OK button to exit.

Figure 2

E: Emissivity (0.01 to 1.00).
Press the OK button to enter the item, press the plus/minus key to increase/decrease the value.

Max_T :
When Auto_T is not selected, the temperature value corresponding to the leftmost end of the color bar.Press the OK button to enter the item, press the plus/minus key to increase/decrease the value.

Min_T:
Auto_T The temperature value corresponding to the rightmost end of the color bar when it is not selected. Press OK button to enter the item, press the plus/minus key to increase/decrease the value.

When Auto_T is not selected

1. If the maximum temperature in the field of view is greater than Mat_T, pin H will output a high level. When the maximum temperature is less than Mat_T 3 degrees Celsius, the pin outputs a low level.

2.When the minimum temperature in the field of view is lower than Min_T, pin L will output a high level. When the minimum value is higher than Min_T 3 degrees Celsius, the pin outputs a low level.

Auto_T:

In the selected state, the maximum temperature value in the field of view corresponds to the leftmost end of the color bar, and the minimum value corresponds to the far right end of the color bar.

In the unselected state, Max_T corresponds to the leftmost end of the color bar, and Min_T corresponds to the far right end of the color bar. Press the enter key to enter the item, press the plus/minus key to select whether to select

Change the color translation value

Figure 3

When the camera is in the working state, press the plus button, the color corresponding to the center point temperature of the field of view will approach the left end of the color bar. Press the minus button and it will approach the right end.

For example, 33.2 degrees Celsius in the green circle in Figure 3 represents the temperature at the center point in the field of view. Red circle 7 indicates the offset value. When you press the plus button, the offset value will be reduced by 1,33.2 degrees Celsius. The corresponding color in the color bar will be shifted to the left, which is currently golden yellow, and will tend to be red after the offset.When the minus key is pressed, the offset value is increased by 1,33.2 degrees Celsius. The corresponding color in the color bar will be shifted to the right, that is, it is currently

golden yellow, and the offset will tend to yellow or green.

Pause function

When the camera is in operation, press the OK button and the display image will not be updated. The change color shift value function at this time can also be used. After pressing the confirmation button again, the image will continue to update.

Power Off

When long press the OK button for more than 3 seconds, the camera enters the shutdown interface, press the plus/minus button to select whether to shut down,press the Ok button to confirm.The camera will automatically save the parameters in the setup interface before shutting down.