---------------------------------- Wiring -----------------------------------------

Matrix keyboard R1 - 4 connect 21 20 16 12 C1 - 4 connect 26 19 13 6 (see Key.cpp)

Photosensitive AO DO DO output ---23 vcc 5v

Temperature and humidity bus----17 vcc 5v

Buzzer level pin 18

--------------------------------- Steps -------------------------------------

Start Bluetooth scanning, Bluetooth debugging assistant link

sudo rfcomm watch hci0

After the connection is completed, use the command to compile and execute

g++ -std=c++17 -o test /home/pi/main.cpp Delay.cpp DHT11.cpp Key.cpp -lgpiodcxx // (already compiled, you can ignore and execute test directly)

./test //Execute command

The callback interface can be seen in the execution window to update the temperature and humidity, status value [callback style output]

-------------------------------- Control ------------------------------

From top to bottom, from left to right, there are eight buttons in total

1-Manual mode

2and3-Control status switch

4-Automatic mode (in this mode, the switch is judged by temperature and humidity) condition if(tem>20 && hum>40) open

5-Clock setting hours (n hours later than the current time)

6-Clock setting half hours (n half hours later than the current time, n>=2 automatically carries over to hours)

7-Clock confirmation setting, output the set clock time, and the alarm will sound when the time is up (buzzer sounds)

8-Buzzer off

In addition, the temperature is too high, and the buzzer is on. Bluetooth sends 0 off, 1 on (hex)