

树莓派第八课 蜂鸣器控制

```
pi@raspberrypi: ~/树莓派基础套件程序资料/第八课/蜂鸣器/
树莓派基础套件程序资料/第八课/蜂鸣器 $ ls
buzzer.c
树莓派基础套件程序资料/第八课/蜂鸣器 $ nano buzzer.c
树莓派基础套件程序资料/第八课/蜂鸣器 $ gpio readall
```

| BCM | wPi | Name | Mode | V | Physical | V | Mode | Name | wPi | BCM |
|-----|-----|---------|------|---|----------|----|------|------|---------|-----|
| | | 3.3v | | | 1 | 2 | | 5v | | |
| 2 | 8 | SDA.1 | ALT0 | 1 | 3 | 4 | | 5V | | |
| 3 | 9 | SCL.1 | ALT0 | 1 | 5 | 6 | | 0v | | |
| 4 | 7 | GPIO. 7 | IN | 1 | 7 | 8 | 1 | ALT0 | TxD | 15 |
| | | 0v | | | 9 | 10 | 1 | ALT0 | RxD | 16 |
| 17 | 0 | GPIO. 0 | IN | 0 | 11 | 12 | 0 | IN | GPIO. 1 | 1 |
| 27 | 2 | GPIO. 2 | IN | 0 | 13 | 14 | | 0v | | |
| 22 | 3 | GPIO. 3 | IN | 0 | 15 | 16 | 0 | IN | GPIO. 4 | 4 |
| | | 3.3v | | | 17 | 18 | 0 | IN | GPIO. 5 | 5 |
| 10 | 12 | MOSI | ALT0 | 0 | 19 | 20 | | 0v | | |
| 9 | 13 | MISO | ALT0 | 0 | 21 | 22 | 0 | IN | GPIO. 6 | 6 |
| 11 | 14 | SCLK | ALT0 | 0 | 23 | 24 | 1 | ALT0 | CE0 | 10 |
| | | 0v | | | 25 | 26 | 1 | ALT0 | CE1 | 11 |
| 28 | 17 | GPIO.17 | IN | 0 | 51 | 52 | 0 | IN | GPIO.18 | 18 |
| 30 | 19 | GPIO.19 | IN | 0 | 53 | 54 | 0 | IN | GPIO.20 | 20 |

```
树莓派基础套件程序资料/第八课/蜂鸣器 $ gcc -Wall -o buzzer buzzer.c -lwiringPi
树莓派基础套件程序资料/第八课/蜂鸣器 $ ls
buzzer buzzer.c
树莓派基础套件程序资料/第八课/蜂鸣器 $ sudo ./buzzer
^C树莓派基础套件程序资料/第八课/蜂鸣器 $
```

图一

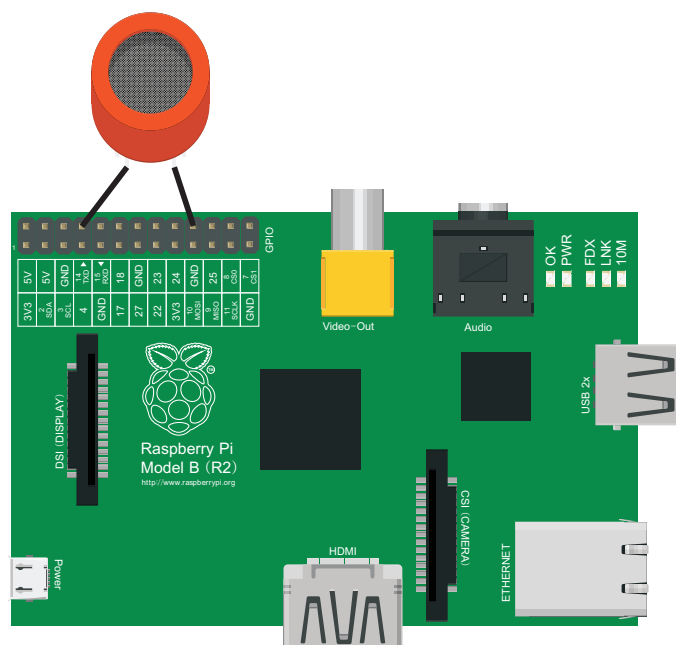
```
pi@raspberrypi: ~/...$ nano buzzer.c
GNU nano 2.2.6 File: buzzer.c

#include <wiringPi.h>

int main()
{
    wiringPiSetup();
    int i=0;
    pinMode(15,OUTPUT);
    for(;;)
    {
        for(i=0;i<100;i++)
        {
            digitalWrite(15,HIGH);
            delay(1);
            digitalWrite(15,LOW);
            delay(1);
        }
        for(i=0;i<100;i++)
        {
            digitalWrite(15,HIGH);
            delay(2);
            digitalWrite(15,LOW);
            delay(2);
        }
    }
}

^G Get Help  ^O WriteOut  ^R Read File  ^Y Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page  ^U UnCut Text ^T To Spell
```

图二



图三