

WIRINGPI

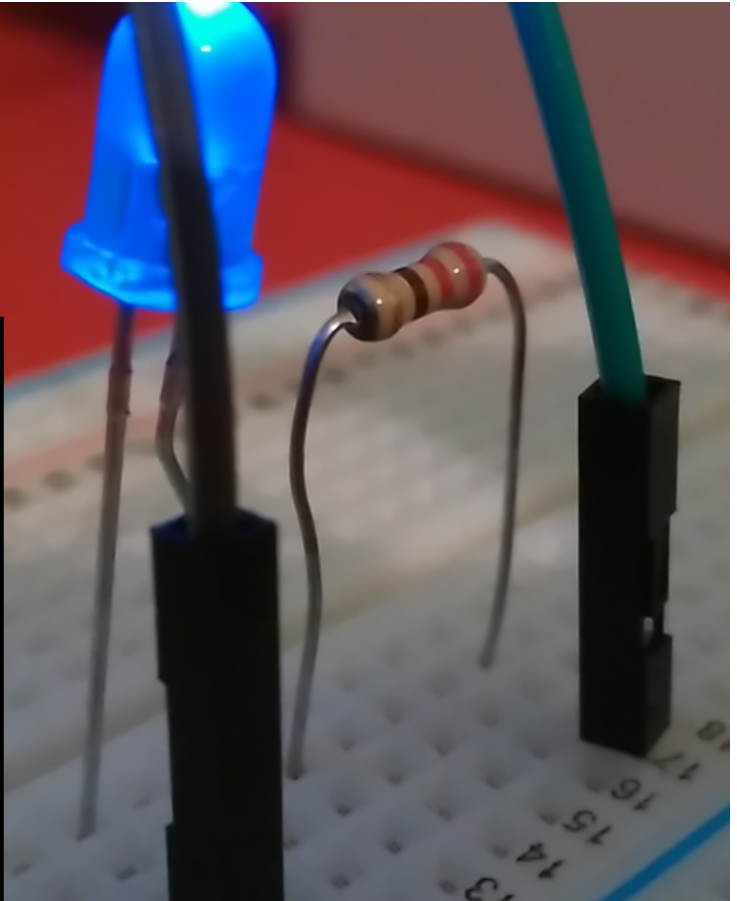
library installation

```
#include <wiringPi.h>
#include <stdio.h>
#define LedPin 0

int main(void)
{
wiringPiSetup();

pinMode(LedPin, OUTPUT);

while(1){
digitalWrite(LedPin, LOW); //led on
printf("led on...\n");
delay(500);
digitalWrite(LedPin, HIGH); //led off
printf("...led off\n");
delay(500);
}
return 0;
```



Download:

git clone [git://git.drogon.net/wiringPi](https://git.drogon.net/wiringPi)

Installation:

```
cd wiringPi
git pull origin
./build
```

Testing:

```
gpio -v
gpio readall
```

C Library to get access to the GPIO pins

To be able to write a program in C for a physical project like the “Blinking LED”, you need to install one of the C libraries that have been written to access the GPIO pins of the Raspberry Pi.

The most common library used for this job is “wiringPi”.

WiringPi is a Wiring library written in C and should be usable from C, C++ and many other languages with suitable wrappers.

If you have ever used an Arduino before, you will know they are composed of two things. One is the hardware platform, and the other is the software platform. Part of the software side of things is a tool called Wiring. Wiring is the core of the input and output for the Arduino system.

Pin numbering

WiringPi supports both an Arduino style pin numbering scheme as well as the Raspberry Pi’s native BCM GPIO pin numbering scheme.

wiringPi Pin	BCM GPIO	Name	Header	Name	BCM GPIO	wiringPi Pin
–	–	3.3v	1 2	5v	–	–
8	R1:0/R2:2	SDA0	3 4	5v	–	–
9	R1:1/R2:3	SCL0	5 6	0V	–	–
7	4	GPIO7	7 8	TXD	14	15
–	–	0V	9 10	RXD	15	16
0	17	GPIO0	11 12	GPIO1	18	1
2	R1:21/R2:27	GPIO2	13 14	0V	–	–
3	22	GPIO3	15 16	GPIO4	23	4
–	–	3.3v	17 18	GPIO5	24	5
12	10	MOSI	19 20	0V	–	–
13	9	MISO	21 22	GPIO6	25	6
14	11	SCLK	23 24	CE0	8	10
–	–	0V	25 26	CE1	7	11
30	0	SDA. 0	27 28	SCL. 0	1	31
21	5	GPIO. 21	29 30	0V	–	–
22	6	GPIO. 22	31 32	GPIO. 26	12	26
23	13	GPIO. 23	33 34	0V	–	–
24	19	GPIO. 24	35 36	GPIO. 27	16	27
25	26	GPIO. 25	37 38	GPIO. 28	20	28
		0V	39 40	GPIO. 29	21	29
wiringPi Pin	BCM GPIO	Name	Header	Name	BCM GPIO	wiringPi Pin

For RPi B

For RPi B+ / 2 model B