

Instructions for use of 180 degree servo --- Raspberry Pi

1. Raspberry Pi pin diagram

wiringPi 编码	BCM 编码	功能名	物理引脚 BOARD编码		功能名	BCM 编码	wiringPi 编码
		3.3V	1	2	5V		
8	2	SDA.1	3	4	5V		
9	3	SCL.1	5	6	GND		
7	4	GPIO.7	7	8	TXD	14	15
		GND	9	10	RXD	15	16
0	17	GPIO.0	11	12	GPIO.1	18	1
2	27	GPIO.2	13	14	GND		
3	22	GPIO.3	15	16	GPIO.4	23	4
		3.3V	17	18	GPIO.5	24	5
12	10	MOSI	19	20	GND		
13	9	MISO	21	22	GPIO.6	25	6
14	11	SCLK	23	24	CE0	8	10
		GND	25	26	CE1	7	11
30	0	SDA.0	27	28	SCL.0	1	31
21	5	GPIO.21	29	30	GND		
22	6	GPIO.22	31	32	GPIO.26	12	26
23	13	GPIO.23	33	34	GND		
24	19	GPIO.24	35	36	GPIO.27	16	27
25	26	GPIO.25	37	38	GPIO.28	20	28
		GND	39	40	GPIO.29	21	29

2. Hardware wiring

1. Connect the red wire (positive pole) of the servo to the positive pole of the 7.4V battery
2. Connect the brown wire (negative pole) of the servo to the negative pole of the 7.4V battery
3. The yellow wire (signal wire) of the servo is connected to the physical pin of the Raspberry Pi motherboard (pin 33), BCM code (13)
4. The Raspberry Pi motherboard is powered, and any GND interface on the board is connected to the negative pole of the battery.

3.Upload and run the program

Upload the servo.py file in the folder to the root directory of the Raspberry Pi and enter the following command to run

```
python servo.py
```

4.Phenomenon

After running the program. The servo will rotate from 0-45-90-135-180-135-90-45-0.