

VG100 Intro to Engineering Lab

VG100 Tech TA Group

University of Michigan - Shanghai Jiaotong University

Joint Institute

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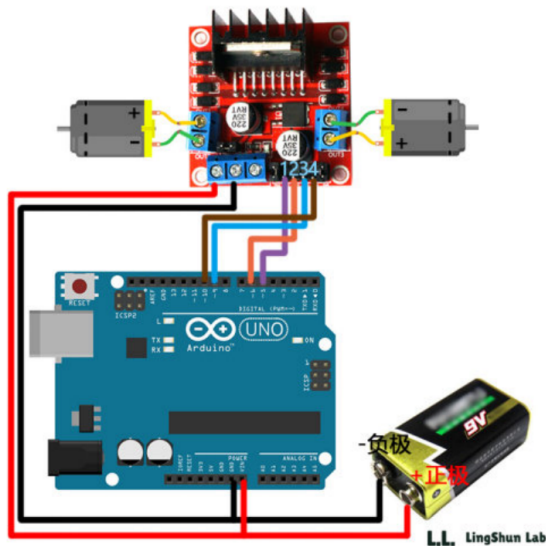
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DC Motor





DC Motor

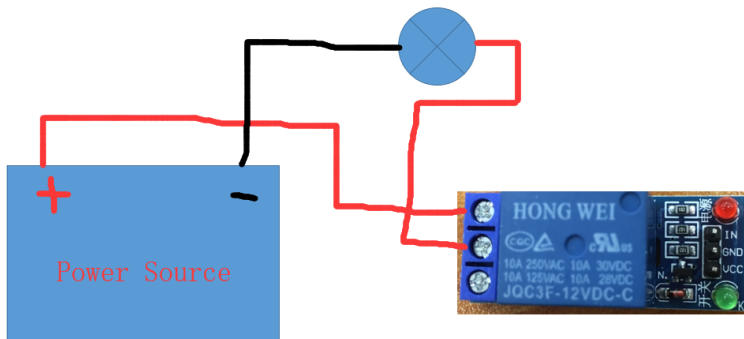
```
1 int input1 = 5;
2 int input2 = 6;
3 int input3 = 9;
4 int input4 = 10;
5
6 void setup()
7 {
8     pinMode(input1 ,OUTPUT);
9     pinMode(input2 ,OUTPUT);
10    pinMode(input3 ,OUTPUT);
11    pinMode(input4 ,OUTPUT);
12 }
```



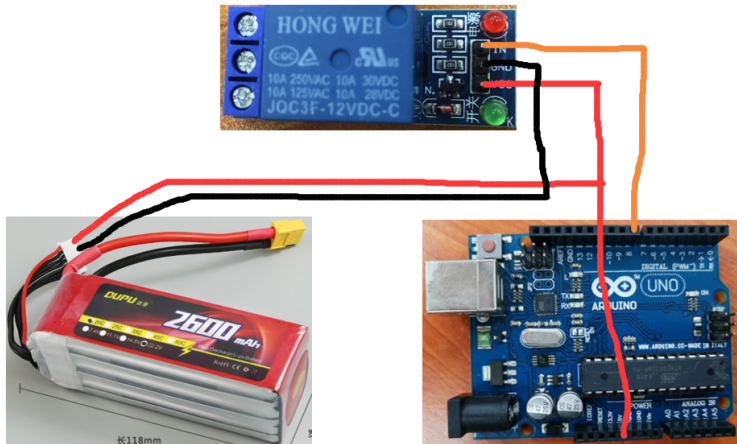
DC Motor

```
1 void loop()  
2 {  
3     digitalWrite(input1 , HIGH);  
4     digitalWrite(input2 , LOW);  
5     digitalWrite(input3 , HIGH);  
6     digitalWrite(input4 , LOW);  
7     delay(1000);  
8  
9     digitalWrite(input1 , LOW);  
10    digitalWrite(input2 , LOW);  
11    digitalWrite(input3 , LOW);  
12    digitalWrite(input4 , LOW);  
13    delay(1000);  
14 }
```

Relay



Relay





Relay

```
1 int relay = 8;
2 char val;
3
4 void setup()
5 {
6     pinMode(relay,OUTPUT);
7     Serial.begin(9600);
8 }
```




Relay

```
1 void loop()  
2 {  
3     if (val == 'A')  
4     {  
5         digitalWrite(relay, HIGH);  
6         delay(2000);  
7     }  
8     if (val == 'B')  
9     {  
10        digitalWrite(relay, LOW);  
11        delay(2000);  
12    }  
13 }
```