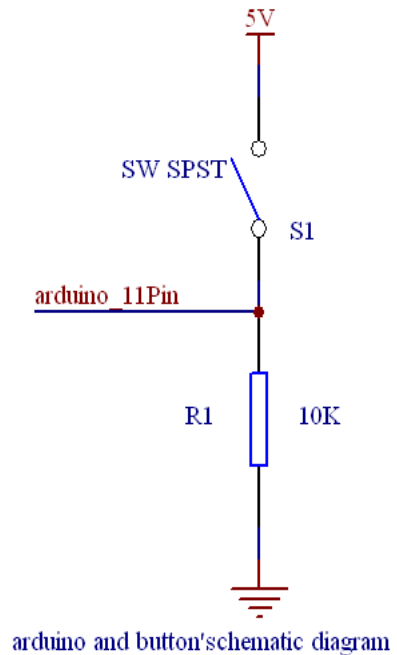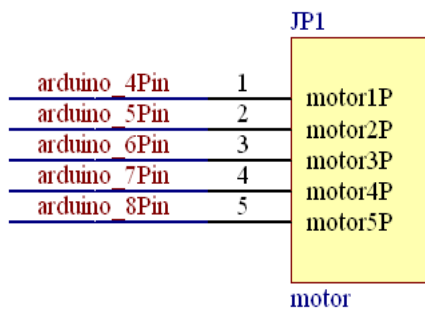# 5V 4-Phase 5-Wire Stepper Motor work with Arduino

Connection diagram with Arduino board:

NOTE: Motor pin number is defined from left to right.

DC 5V Step Motor Connection with Arduino Diagram

arduino and button'schematic diagram

Demo Code

This Procedure code can adjust the stepper motor's speed. As long as adjusting the delay functions if(key==1) or if(key==0), and then the speed will change accordingly.The accurate speed regulation should accord to the stepper motor characteristics and related calculation formula。

```
char motorPin[]={4,5,6,7};

int i;

int key = 0;

int button = 11;

  void motor1()

 {

    digitalWrite(motorPin[0],LOW);

    digitalWrite(motorPin [1],HIGH);

    digitalWrite(motorPin [2],HIGH);

    digitalWrite(motorPin [3],HIGH);

    }
  void motor2()
{
    digitalWrite(motorPin [0],HIGH);
    digitalWrite(motorPin [1],LOW);
    digitalWrite(motorPin [2],HIGH);
    digitalWrite(motorPin [3],HIGH);
     }
```

```
  void motor3()
  {
     digitalWrite(motorPin [0],HIGH);
     digitalWrite(motorPin [1],HIGH);
     digitalWrite(motorPin [2],LOW);
digitalWrite(motorPin [3],HIGH);
  }
     void motor4()
  {
     digitalWrite(motorPin [0],HIGH);
     digitalWrite(motorPin [1],HIGH);
     digitalWrite(motorPin [2],HIGH);
     digitalWrite(motorPin [3],LOW);
  }
     void motor5()
  {
     digitalWrite(motorPin [0],HIGH);
     digitalWrite(motorPin [1],HIGH);
     digitalWrite(motorPin [2],HIGH);
     digitalWrite(motorPin[3],HIGH);
      }
  void setup()
{
Serial.begin(9600);
for(i=0;i<4;i++)
pinMode(motorPin [i],OUTPUT);
pinMode(button,INPUT);
}
void loop()
{
   key = digitalRead(button);
   if(key==LOW)
{
motor1();
   delay(5);
   motor2 ();
   delay(5);
   motor3();
   delay(5);
   motor4();
```

```
    delay(5);
    }
   if(key==HIGH)
   {
  motor4();
   delay(10);
   motor3();
   delay(10);
   motor2();
   delay(10);
  motor1();
delay(10);
   }
 }
```