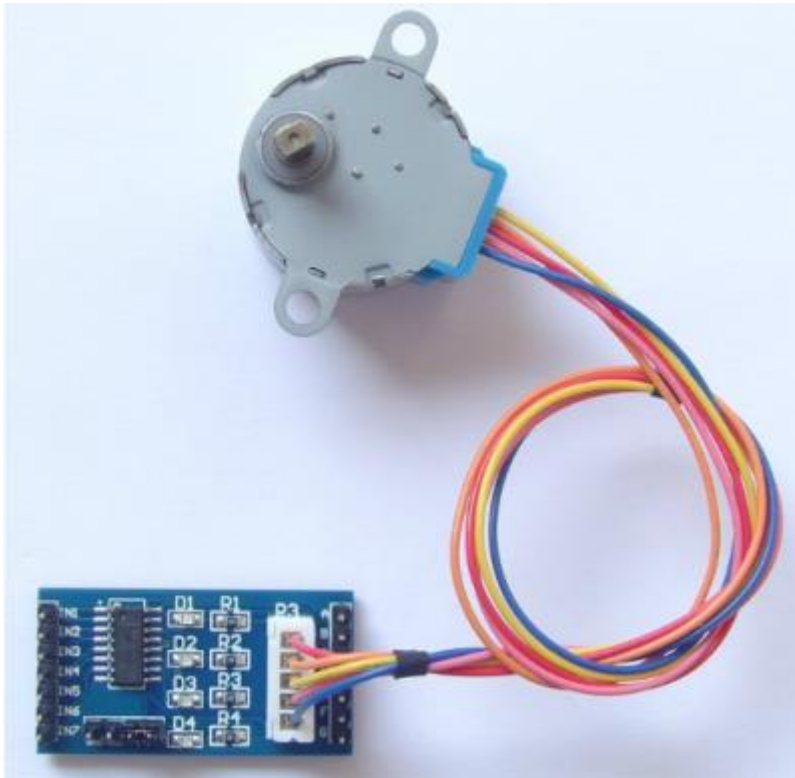


Usage

- **Stepper Control**

This usage is to drive a 28BYJ stepper. The stepper stopped when pushed the stop_button. It also can be changed to control the stepper to counterclockwise or clockwise rotate. Connect 28BYJ step motor to mini stepper driver as below:



Program Arduino as following:

```
/*
*****
it is public domain, enjoy!
it is used to control 28BYJ stepper
it can be changed to control almost all the 4-wire or 5-wire stepper.
*****/

/*
The time Series to control the stepper
--make your making more easy!
*/
byte CCW[8] = {0x09,0x01,0x03,0x02,0x06,0x04,0x0c,0x08};
byte CW[8] = {0x08,0x0c,0x04,0x06,0x02,0x03,0x01,0x09};

const int stop_key = 14; //stop_button connect to Arduino-A0
byte change_angle=64; //change the parameter to change the angle of the
stepper

void Motor_CCW() //the stepper move 360/64 angle at CouterClockwise
```

```

{
    for(int i = 0; i < 8; i++)

        for(int j = 0; j < 8; j++)
        {
            if(digitalRead(stop_key)==0)
            {
                PORTB =0xf0;
                break;
            }
            PORTB = CCW[j];
            delayMicroseconds(1150);
        }
}

void Motor_CW() //the stepper move 360/64 angle at Clockwise
{
    for(int i = 0; i < 8; i++)

        for(int j = 0; j < 8; j++)
        {
            if(digitalRead(stop_key)==0)
            {
                PORTB =0xf0;
                break;
            }
            PORTB = CW[j];
            delayMicroseconds(1150);
        }
}

void setup()
{
    pinMode(stop_key, INPUT);
    digitalWrite(stop_key, HIGH);
    Serial.begin(57600);
    DDRB=0xff;
    PORTB = 0xf0;
    for(int k=0;k<change_angle;k++)
    {
        Motor_CCW();
    }
}

void loop()
{

```

```
Motor_CCW(); //make the stepper to anticlockwise rotate  
// Motor_LR(); //make the stepper to clockwise rotate  
}
```

The connected stepper would rotate with a changing direction for this program.