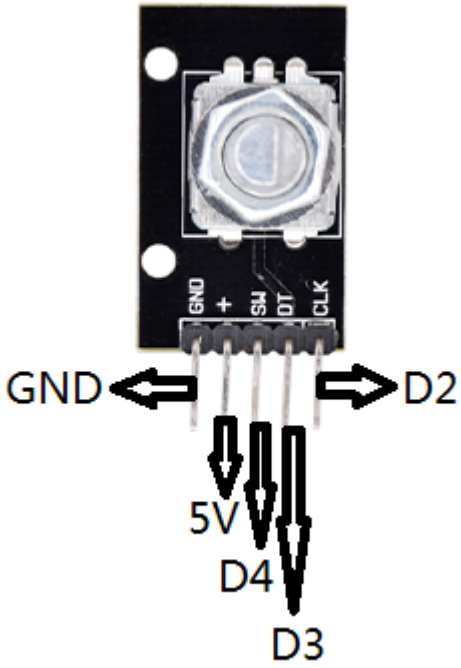
# Rotary Encoders module




**Description:**

The rotary encoder is used to measure the speed and with PWM technology can achieve rapid speed devices
With fixed bolt hole for easy installation
Great for DIY project

**Specification:**

Model: KY-040
Working voltage: 5V
Material: PCB + Brass
Weight: 10g
Size: 32 x 19 x 30mm

# CODE:

```
/*This is our website www.weikedz.com
For bulk orders, please feel free to contact
sophie@weikedz.com. If any question, for orders,
for technical problems, pls contact us.
We will response you fastest time. */
const int interruptA = 0;
const int interruptB = 1;

int CLK = 2;      // PIN2
int DAT = 3;      // PIN3
```

```
int BUTTON = 4;  // PIN4
int LED1 = 5;    // PIN5
int LED2 = 6;    // PIN6
int COUNT = 0;

void setup()
 {
  attachInterrupt(interruptA, RoteStateChanged, FALLING);
 // attachInterrupt(interruptB, buttonState, FALLING);
  pinMode(CLK, INPUT);
  digitalWrite(2, HIGH);  // Pull High Restance
  pinMode(DAT, INPUT);
  digitalWrite(3, HIGH);  // Pull High Restance
  pinMode(BUTTON, INPUT);
  digitalWrite(4, HIGH);  // Pull High Restance
  pinMode(LED1, OUTPUT);
  pinMode(LED2, OUTPUT);
   Serial.begin(9600);
 }

void loop()
{
  if  (!(digitalRead(BUTTON)))
     {
      COUNT = 0;
      Serial.println("STOP COUNT = 0");
      digitalWrite(LED1, LOW);
      digitalWrite(LED2, LOW);
      delay (2000);
     }
      Serial.println(COUNT);
}

//----------------------------------------
void RoteStateChanged() //When CLK  FALLING READ DAT
{
 if  (digitalRead(DAT)) // When DAT = HIGH IS FORWARD
    {
     COUNT++;
     digitalWrite(LED1, HIGH);
     digitalWrite(LED2, LOW);
     delay(20);
    }
 else                   // When DAT = LOW IS BackRote
    {
     COUNT--;
```

```
    digitalWrite(LED2, HIGH);
    digitalWrite(LED1, LOW);
    delay(20);
   }
}
```