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Rotary Encoder module



Introduction

The rotary encoder can count the pulse outputting times during the process of its rotation in positive and reverse direction by rotating. This rotating counting is unlimited, not like potential counting. It can be restored to initial state to count from 0.

Specification

Power Supply: 5V

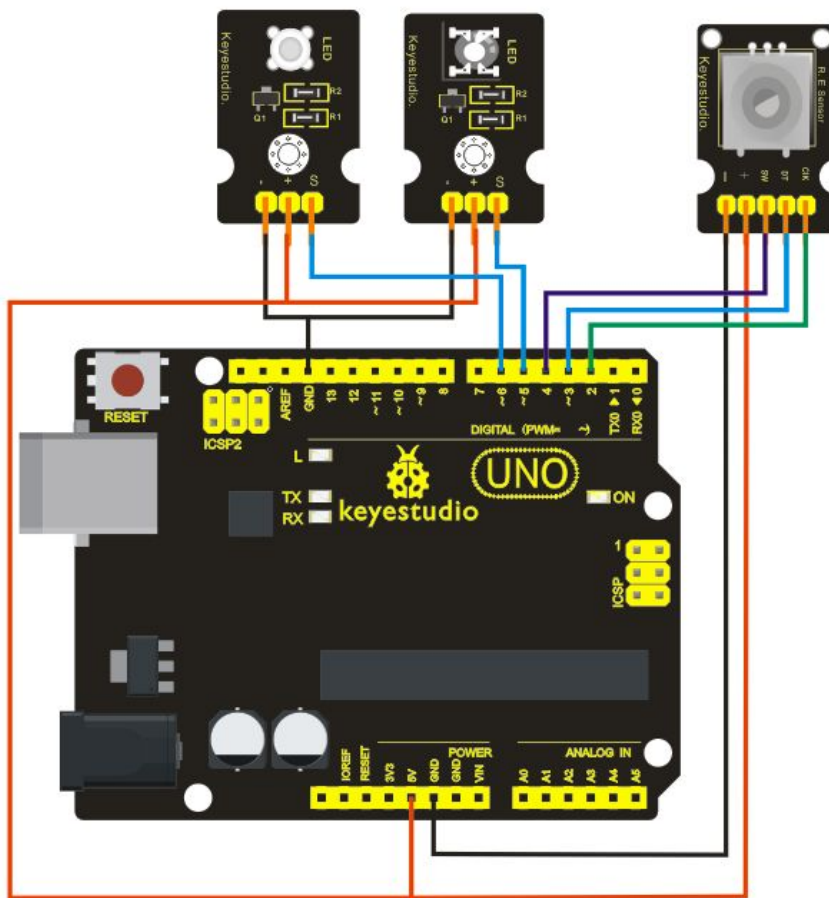
Interface: Digital

Size: 30*20mm

Weight: 7g

Connection Diagram

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Sample Code

```
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
```

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```
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);
  }
}
```