

Keyestudio capacitive touch sensor (pad hole) red environmental protection

Module: KE0047

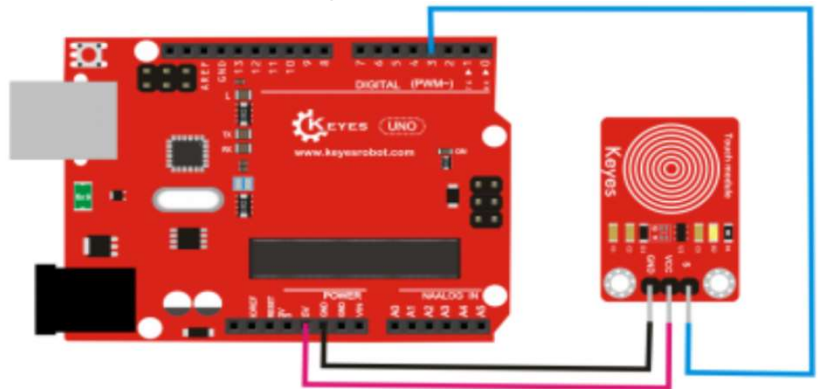
Overview:

This sensor is an arduino special sensor, and its connection port is compatible with arduino sensor expansion board. It is mainly composed of touch detection IC and so on. The touch detection IC is designed to replace the traditional button switch with variable area keys, and has the characteristics of low power consumption and wide operating voltage. After we power on, the sensor needs a stabilization time of about 0.5sec. Do not touch the key during this time period. At this time, all functions are disabled and self-calibration is always performed. When the key is not touched, the recalibration period is about 4.0sec. The sensor can be used in waterproof appliances, button switch replacements, etc. The sensor comes with 2 positioning holes for you to fix the sensor to other devices.

Specification:

1. Working voltage: 3.3-5V (DC)
2. Interface: 3PIN interface
3. Output signal: digital signal
4. Weight: 2.3g

Connection Diagram:



Test code:

```
int ledPin = 13; // Define digital port 13
int KEY = 3; // Define digital port 3
void setup ()
{
  pinMode (ledPin, OUTPUT); // Set ledPin as output
  pinMode (KEY, INPUT); // Set KEY as input
}
void loop ()
{
  if (digitalRead (KEY) == HIGH) // When the digital port 3 reads high, the LED lights up
  {
    digitalWrite (ledPin, HIGH); // LED is on
  }
  else
  {
    digitalWrite (ledPin, LOW); // LED dims
  }
}
```

Test Results:

Connect the wires according to the above figure and upload the code; after power on, press the Touch Pad, the D2 light on the sensor lights up, and the D13 indicator LED also light up on the Arduino UNO board.