Tap Sensor Module

A vibration switch, also called spring switch or shock sensor, is an electronic switch which induces shock force and transfers the result to a circuit device thus triggering it to work. It contains the following parts: conductive vibration spring, switch body, trigger pin, and packaging agent.

Knock sensor module, a digital 13 interface and built-in LED build a simple circuit to produce percussion flasher.

The knock sensor, detects the knocks and the taps. It can work like a switch. The sensor sends data momentarily to the board. To keep the LED on, the button state change codes should be used. So the sensor will work as a switch.

FEATURES:

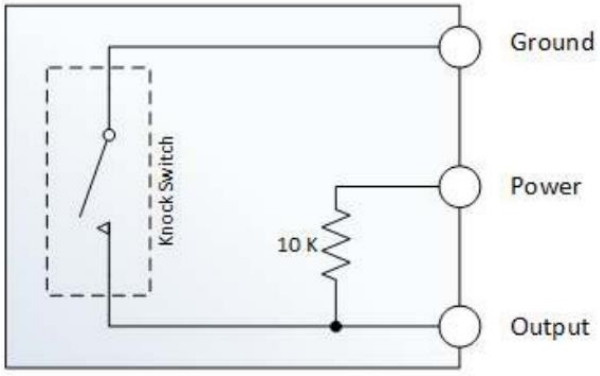
- Detect shocks with the spring and send a signal to Controller Board
- Operating voltage: 3.3V-5V
- Digital output
- Bolt holes for easy installation

SPECIFICATIONS:

- Operating voltage (v): 3.3 ~ 5
- Default Output: High
- Output Type: Digital
- Length (mm): 19.5
- Width (mm): 16
- Height (mm): 7.5
- Weight (gm): 1

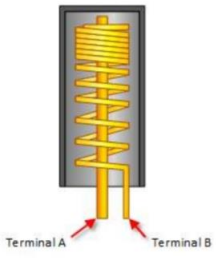
FUNCTIONAL DESCRIPTION:

- The switch primarily consists of a terminal that forms a center post and a second terminal that is a spring that surrounds the center post.



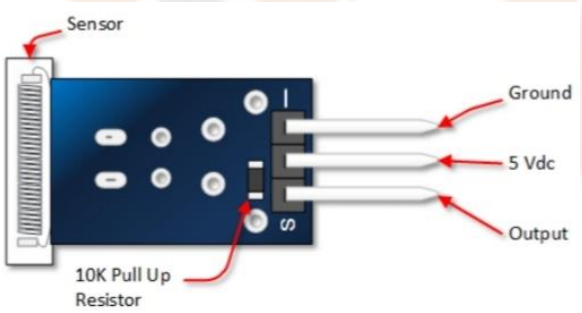
- When a sufficient force is transferred to the switch, the terminal consisting of the spring moves and shorts both terminals together.
- The connection between the terminals is momentary and will require a little thought as you implement it in your Arduino project.
- Positioning of the switch is also important. Generally speaking the switch should be physically located as close as possible to the area being monitored. Otherwise, the

vibration being detected may be dampened by other structural components in your project.



- An exception to this rule may be where you find that the switch is too sensitive for your application. In this case, moving the switch further away from the area of interest may make it less sensitive.

PIN DIAGRAM:



Connections with Arduino:

- LED +: [Pin 13]
- LED -: [Pin GND]
- Sensor signal: [Pin 10]
- Sensor +V: [Pin 5V]
- Sensor -: [Pin GND]

Connections with Raspberry Pi:

- Signal: GPIO24[Pin 18]
- +V: 3,3V[Pin 1]
- GND: GND[Pin 6]

PACKAGE INCLUDES:

1x Tap Sensor Module