

Angle Sensor 2 Way SW-520D



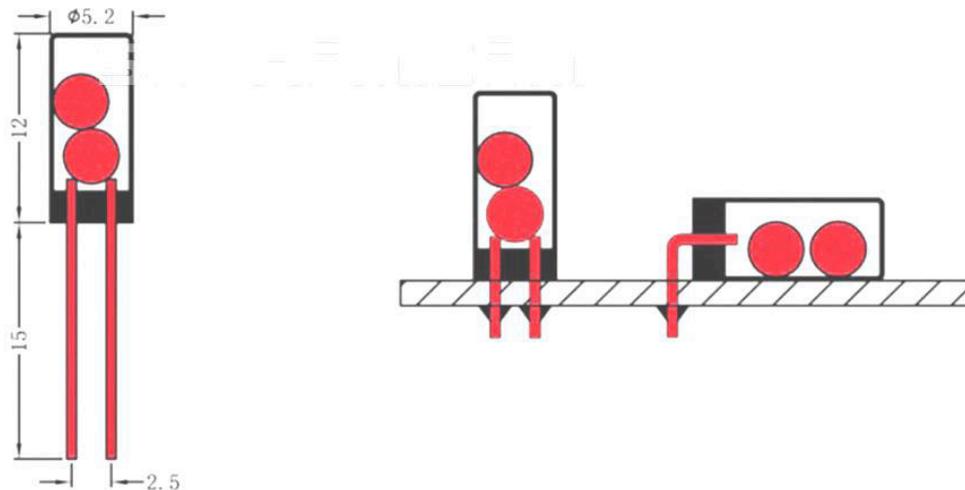
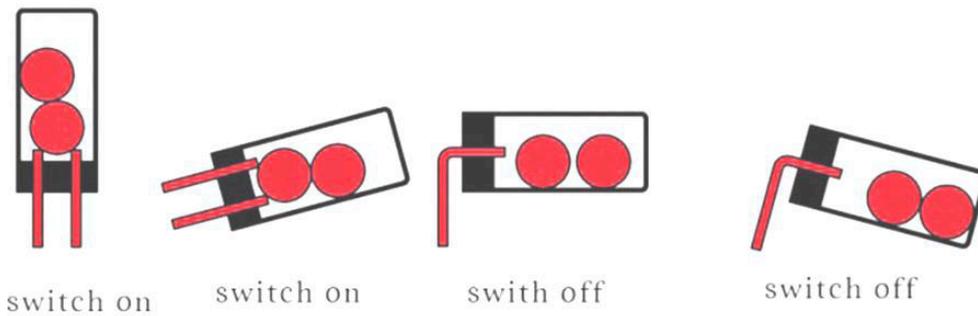
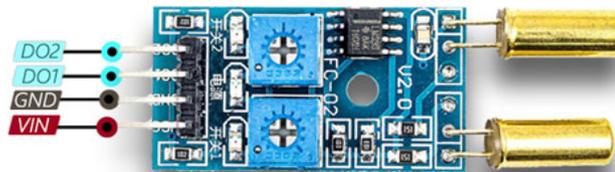
Features:

The SW-520D 2-Way Tilt Sensor Module delivers reliable dual-directional detection using two internal ball-switch mechanisms to independently sense angular motion or vibration along perpendicular axes. It features two separate digital outputs (D01 and D02) corresponding to each sensor, providing clear HIGH or LOW logic signals based on tilt orientation. Onboard LEDs indicate power and output status, and a built-in potentiometer allows sensitivity adjustment. With a compact PCB and mounting holes, it integrates easily into a range of multi-axis orientation sensing applications.

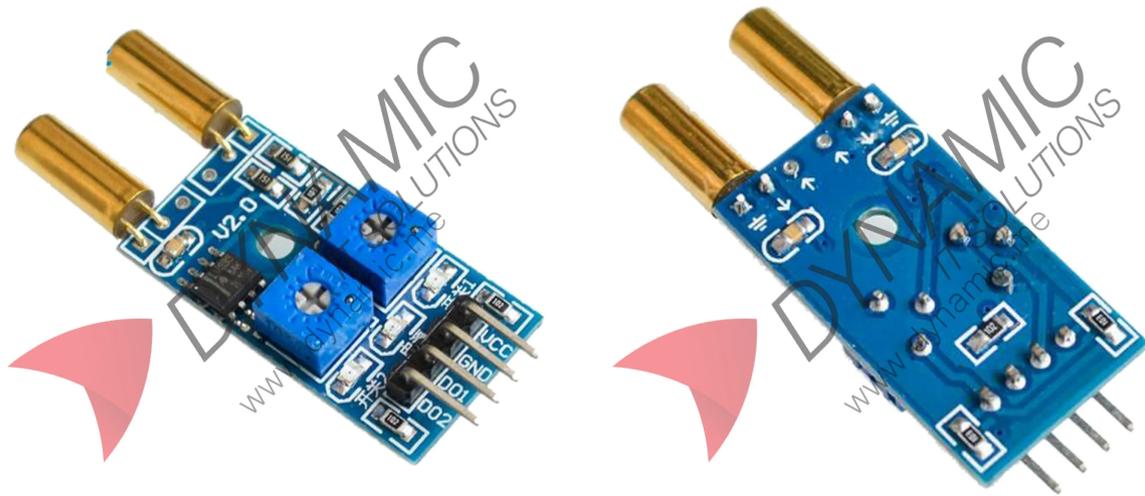
Specifications	
Operating Voltage	3.3V to 5V
Output Type Digital	(0 or 1)
Output Pins	D01 (Sensor 1), D02 (Sensor 2)
Maximum Output Current	≥15 mA
Tilt Angle Sensitivity	10° (varies with orientation)
Contact Resistance	<10 Ω
Insulation Resistance	10 MΩ
Operating Temperature	0°C to +80°C
Module Dimensions	43mm x 36mm
Sensor Dimensions	11.5mm (L) x 5.2mm (D)
Comparator IC	LM393
Life Expectancy	Up to 100,000 cycles
Comparison to 1-Way	Includes two SW-520D switches with independent outputs (D01, D02) for perpendicular tilt detection

Pinouts:

Pin Name	Type	Description
VCC	Power Input	Module power supply input (typically 3.3–5 V) — powers the comparator and LEDs
GND	Power Ground	Common ground
D01	Output	Digital output from Sensor 1: goes LOW when tilt is detected, HIGH otherwise
D2	Output	Digital output from Sensor 2: goes LOW when tilt is detected, HIGH otherwise



Product Pictures:



Circuit:

