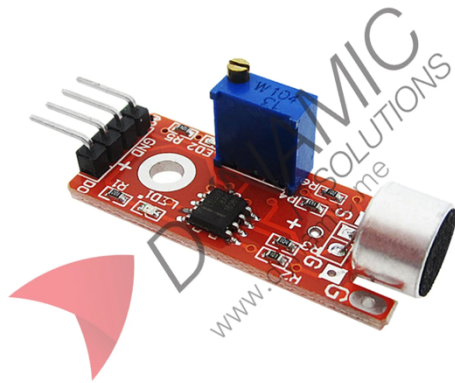


High Sensitivity Sound Detection (4 pins)



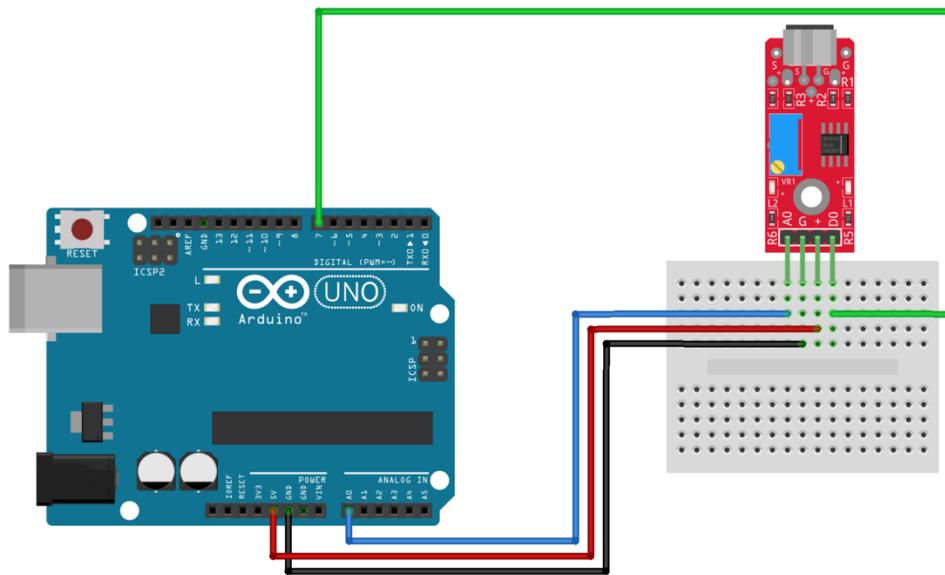
Features:

The high sensitivity sound detection module is designed to detect ambient noise levels using a CMA-6542PF electret microphone and provides both digital and analog outputs. It uses an LM393 comparator for digital threshold detection and includes an onboard potentiometer for sensitivity adjustment. The analog output reflects the real-time sound intensity, while the digital output goes HIGH when sound exceeds the set threshold. This module is compatible with microcontrollers like Arduino, ESP32, and Raspberry Pi, making it ideal for audio-based triggers and monitoring systems.

Specifications	
Operating Voltage	3.3 V to 5.5 V DC
Output Type	Digital (D0) and Analog (A0)
Microphone Type	CMA-6542PF Electret Condenser
Microphone Sensitivity	-42 dB \pm 3 dB
Comparator IC	LM393
Sensitivity Adjustment	3296W Potentiometer
Output Behavior	D0 goes HIGH when sound exceeds threshold
Current Consumption	~0.5 mA
Dimensions	36 mm \times 15 mm

Pinouts:

Pin Name	Type	Description
+	Power Input	Module supply voltage (3.3V to 5.5V DC)
G	Power Ground	Common ground reference
A0	Analog Output	Analog voltage representing sound intensity
D0	Digital Output	Goes HIGH when sound exceeds set threshold



Product Pictures:

