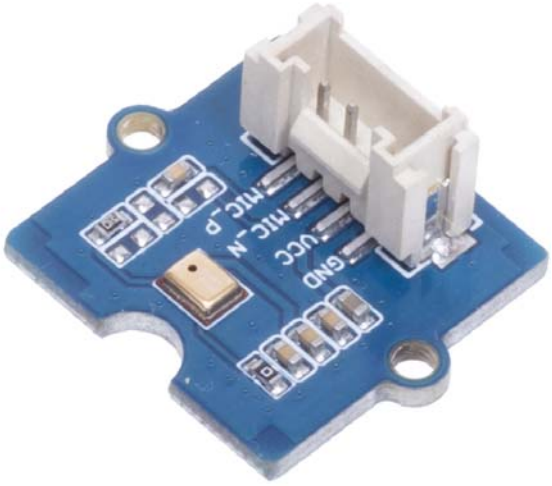


Grove - Analog Microphone (MEMS)

SKU 101020852

Grove - Analog Microphone is based on high-performance **SiSonic MEMS technology,** it offers extremely-low-noise, low-current, reliable, and it has improved performance under severe conditions with excellent sensitivity.

PRODUCT DETAILS

Features

- High-performance SiSonic MEMS technology
- Extremely-low-noise, low-current, and reliable
- Compact and elegant design

Description

Grove - Analog Microphone is based on the Knowles SPU0414HR5H-SB module using high-performance **SiSonic MEMS technology**. SiSonic MEMS is cutting edge of acoustic technology and gaining wide acceptance in many types of consumer electronics products. MEMS microphones offer an extremely-low-noise, low-current, reliable, and small microphone to opensource hardware industry, and it has improved performance under severe conditions.

Grove - Analog Microphone is an ideal choice where excellent audio performance is required. It can provide up to 20dB of gain and it also features low current, max RF protection, which makes it a perfect microphone for Arduino and Raspberry Pi. Our featured product ReSpeaker Core v2.0 and ReSpeaker USB Mic Array also adopt MEMS technology and the same microphone as Grove - Analog Microphone does. If you are going to get a high- quality microphone, here is the choice.

Specification

Parameters	Values
Dimensions	20mm x 20mm
Voltage Range	Ra1.5V - 3.6V
Operating Current	5mA
Operating Temperature Range	-40 °C to 100 °C
Sensitivity of MEMS	-2dBV/Pa@1.5V to 4dBV/Pa@3.6V

Applications

- Sound sensor
- Sound signal collecting
- Voice recognition
- Recording

Note
The recording function can only work under the condition of devices equipped with sound cards (driver).

Comparison

Details	Grove - Sound Sensor (LM386)	Grove - Sound Sensor/Noise Detector	Grove - Analog Microphone (MEMS)
Image			
Microphone	Electret Condenser Microphone	Electret Condenser Microphone	SiSonic MEMS Microphone
Voltage Range	4V - 12V	3.5V - 10V	1.5V - 3.6V
Operating Current	4mA - 5mA	/	5mA
Sensitivity	(48dB to 52dB)@1kHz	-48dB@50Hz to 66dB@2kHz	-2dB@100Hz to 4dB@10kHz
Size of Microphone	Medium	Medium	Small
Amplifier	LM386	LM2904	MEMS
Quality of Microphone	★★★	★★★	★★★★★

Part list

Items	Quantity
Grove - Analog Microphone	1
Grove Cable	1

What is Grove?

Grove makes it easier to connect, experiment, and simplify the prototyping process. No jumpers or soldering required. We have developed more than 300 Grove modules, covering a wide range of applications that can fulfil a variety of needs. Not only are these open hardware, but we also have open-source software.

Note

For all Grove users (especially beginners), we provide you with the guidance of operation. Please read the instructions through the official website before you using the product.

ECCN/HTS

HSCODE	8518900090
UPC	

LEARN AND DOCUMENTS

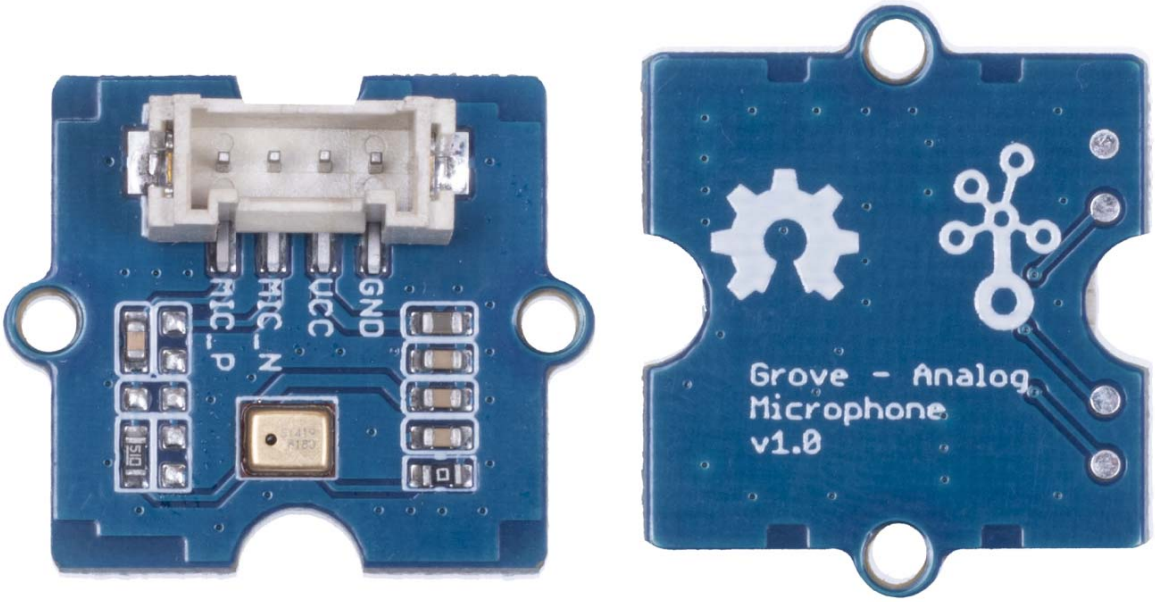
Documentations

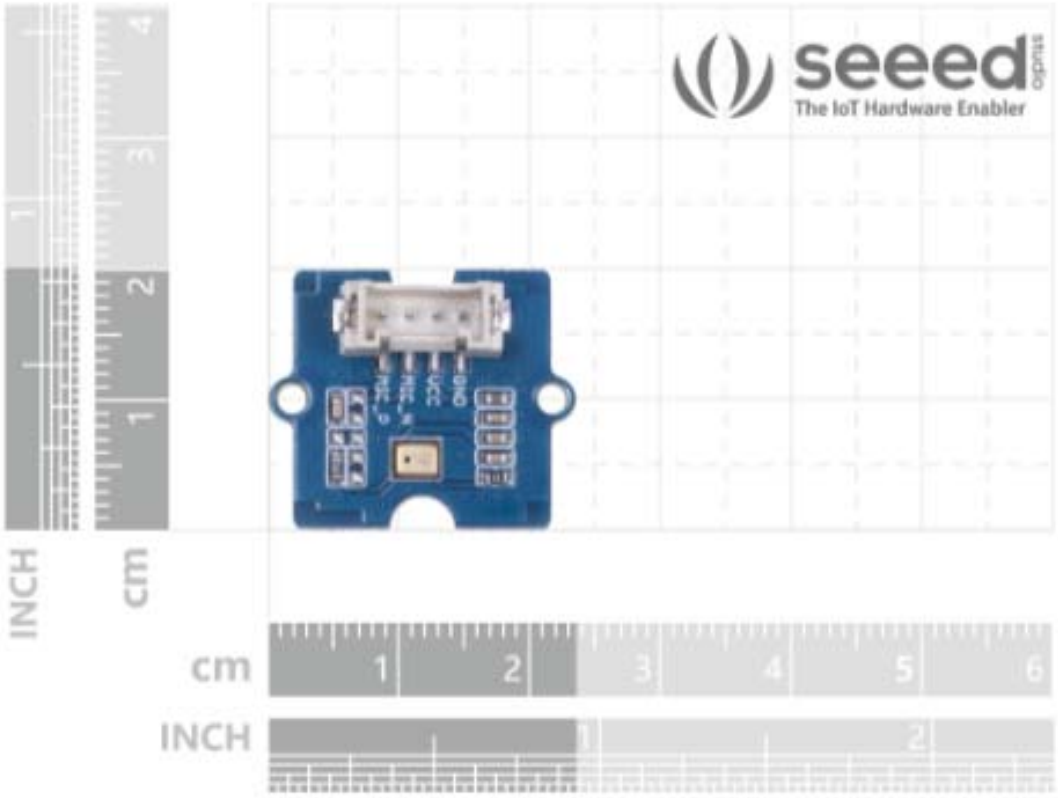
Grove-Analog Microphone Wiki

Learn

[Wiki] Grove - Analog Microphone

This is the wiki page for this product, which will show you how to use the product, as well as details about the software and hardware.





https://www.seeedstudio.com/Grove-Analog-Microphone-p-4593.html/6-4-20