

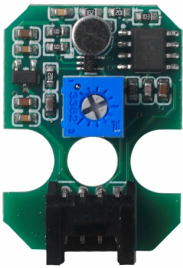
# Unit MIC

SKU:U096



LM393  
MAX4466

**GPIO**  
INTERFACE



## Description

**Unit MIC** is a sound sensor equipped with an omnidirectional electret microphone. The signal is amplified and output through the MAX4466 microphone preamplifier. This amplifier effectively suppresses power supply noise and common-mode noise, providing high-fidelity sound output, making it suitable for use in noisy environments. This unit can output both analog and digital signals. It includes a built-in LM393 dual voltage comparator, allowing the comparison voltage threshold to be set by adjusting a 10K potentiometer. This sensor is ideal for projects involving sound-to-electricity conversion and sound-activated switches.

## Features

- Sound sampling/audio recording
- Built-in MAX4466 microphone preamplifier
- Omnidirectional, 52dB sensitivity
- Analog and digital signal output
- Built-in voltage comparator and adjustable potentiometer for threshold setting
- Development platforms: Arduino, UIFlow (Blockly, Python)
- HY2.0-4P interface
- 2 x LEGO-compatible holes

## Includes

- 1 x Unit MIC
- 1 x HY2.0-4P Grove cable (20cm)

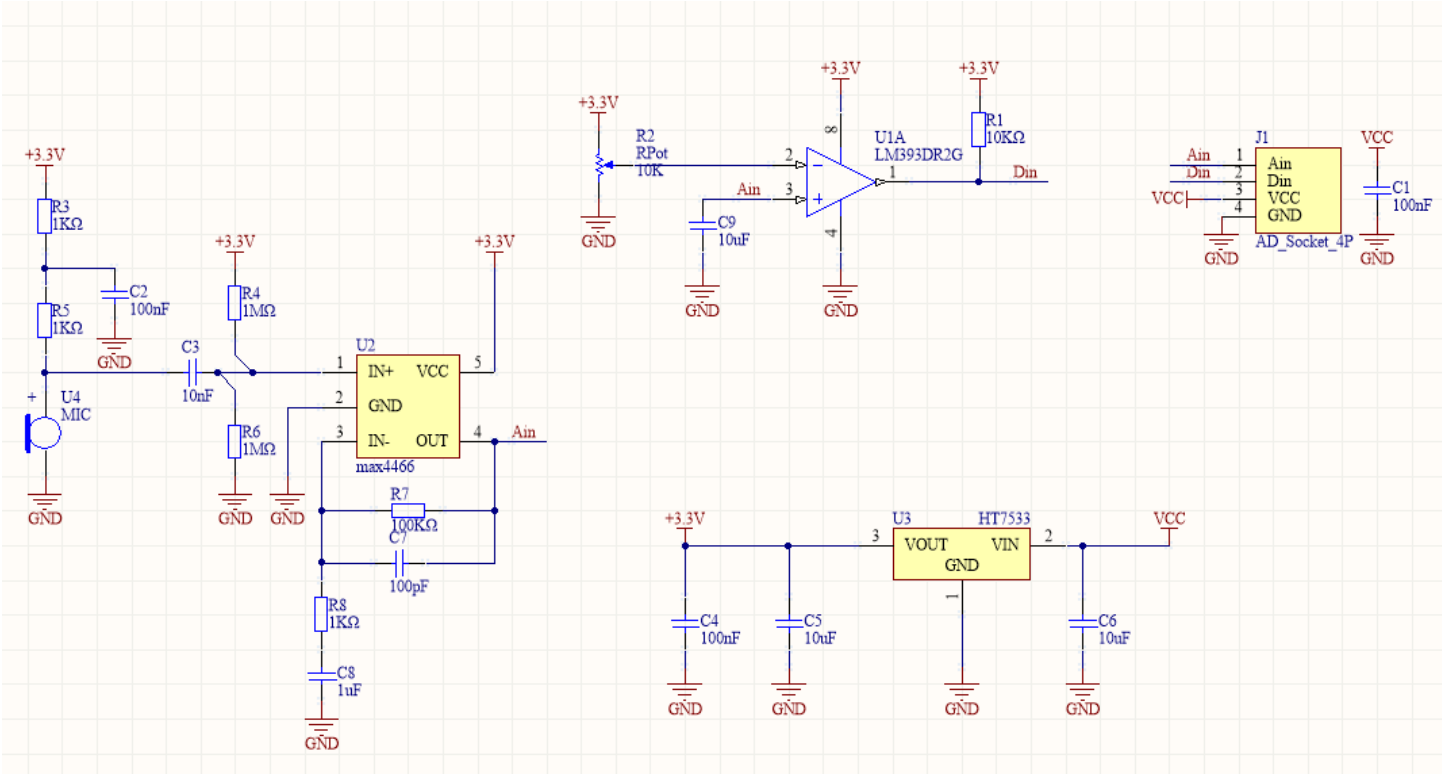
## Applications

- Sound-to-electricity conversion
- Sound-activated switches

## Specifications

Specification	Parameter
Microphone sensitivity/Signal-to-noise ratio	52dB/40dB
Output signal	Analog/Digital
Input voltage	5V
Product Size	32.0 x 24.0 x 8.0mm
Product Weight	4.6g
Package Size	138.0 x 93.0 x 9.0mm
Gross Weight	10.0g

## Schematics

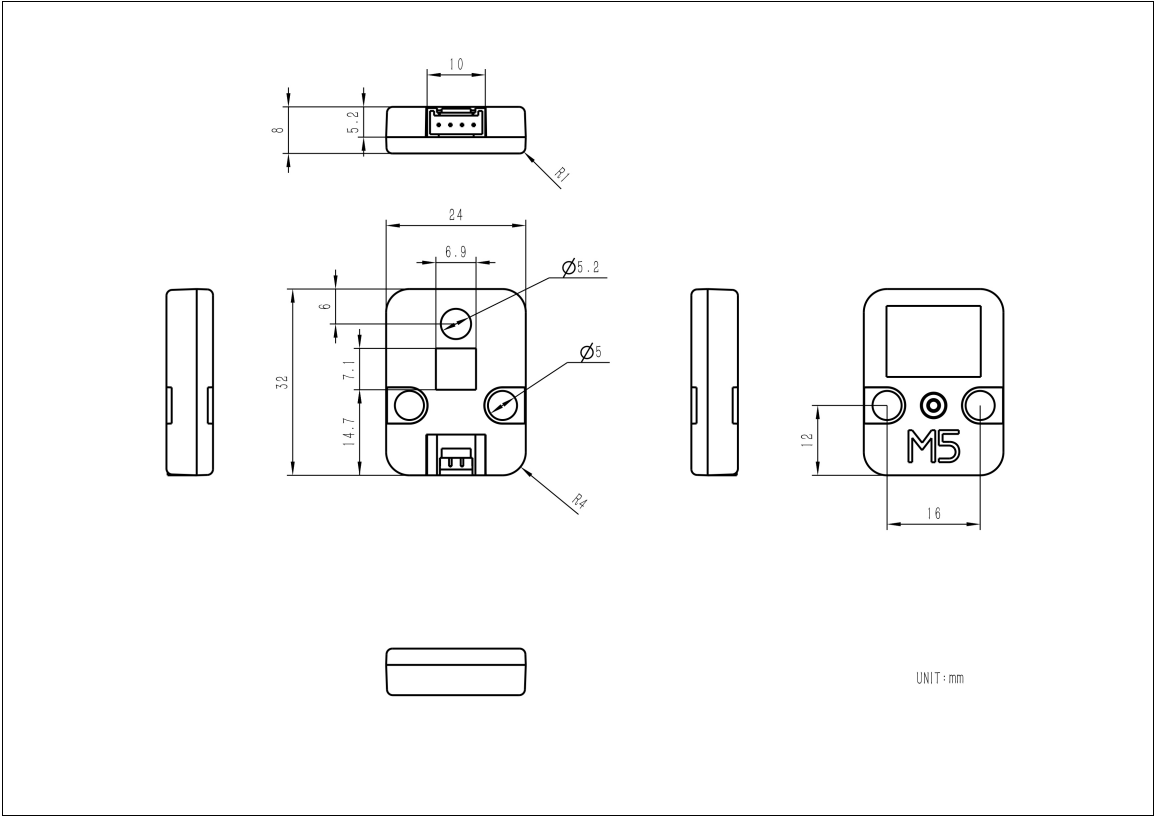


## PinMap

### Unit MIC

HY2.0-4P	Black	Red	Yellow	White
PORT.B	GND	5V	Digital Output	Analog Output

## Model Size



## Datasheets

- [MAX4466](#)
- [LM393](#)

## Softwares

### Arduino

- [Unit MIC Test Example](#)

### EasyLoader

Easyloader	Download Link	Notes
Unit MIC Test Easyloader	<a href="#">download</a>	/

## Video

- [Displaying AD values from microphone sampling](#)

[MIC.mp4](#)