Microphone Unit

Description

Microphone Unit is a sound sensor with a built-in omni-directional electret microphone.

The signal is amplified and output by microphone preamplifier max4466. The amplifier can effectively suppress power supply noise and common mode noise, and the output signal has high sound recovery and can be used in noisy environments.

The unit can not only output analog signals, but also output digital level signals. The built-in LM393 double voltage comparator can set the comparison voltage threshold by adjusting 10K adjustable resistance.

The sensor is very suitable for acoustic electrical conversion, audio recording / sampling, FFT acoustic feedback, voice switch and other projects..

Product Features

- Audio record/sample
- Built-in microphone preamplifier MAX4466
- Omnidirectional, 52dB sensitivity
- Digital output and analog signal
- Built-in dual independent precision voltage comparator and adjustable resistor, threshold adjustable
- Development platform: Arduino, UIFlow (Blocky, Python)
- HY2.0-4P interface
- 2X LEGO™ compatible holes

Include

- 1x Microphone Unit
- 1x Grove Cable

Applications

- FFT Spectrum Display
- Audio Sample / Record
- Voice Switch

Specification

Resources	Parameter
Microphone sensitivity / SNR	52dB/40dB
Output Signal	Analog / digital
Input Voltage	5V
Net weight	5g
Gross weight	16g
Product Size	32*24*8mm
Package Size	67*53*12mm

EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

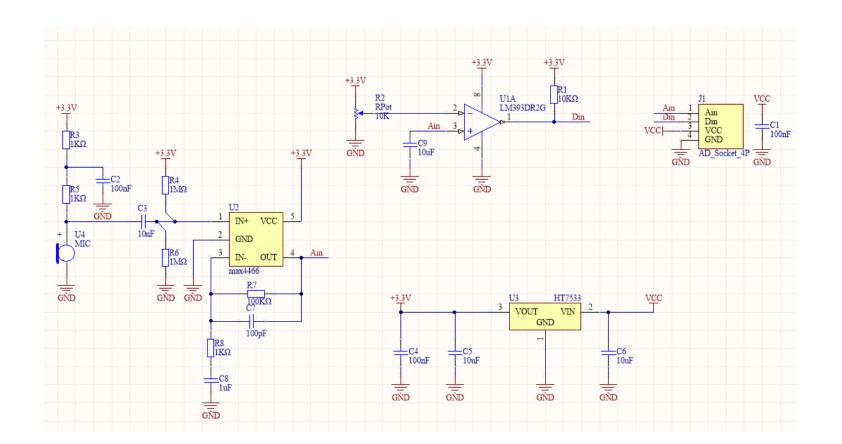Download Windows Version Easyloader　　　Download MacOS Version Easyloader

Description:
Display the AD value collected by the microphone

Related Link

- **Datasheet**
- MAX4466
- LM393

Schematic

Pin Map

M5Core(PORT B	GPIO26	GPIO36	5V	GND
Mic Unit	26	36	5V	GND

Example

Arduino

- Click here to download the Arduino example

Last updated: 2020-12-14