

# Passive buzzer

## Overview



## Specification

Working Voltage: 3V/5V

Resistance: 16Ohm

Resonance Frequency: 2KHZ

## Pin definition

### Passive Buzzer

Long pin




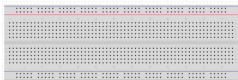

Short pin

### Arduino

-> D5

-> GND

## Hardware required

Material diagram	Material name	Number
	Passive buzzer	1
	USB Cable	1
	UNO R3	1
	Breadboard	1
	Jumper wires	Several

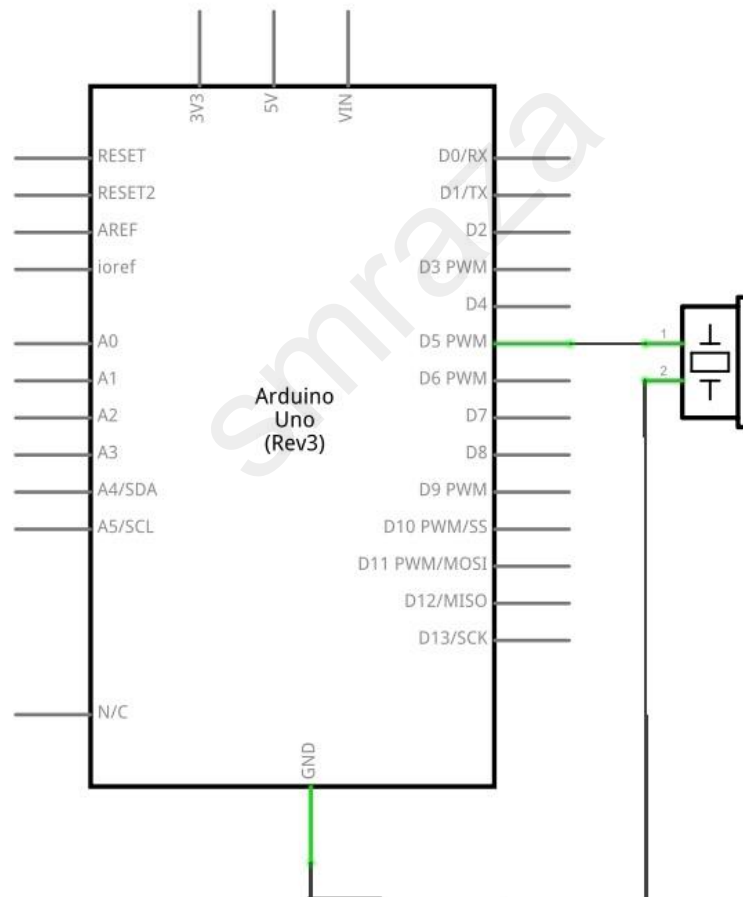
## Component Introduction

### Passive Buzzer

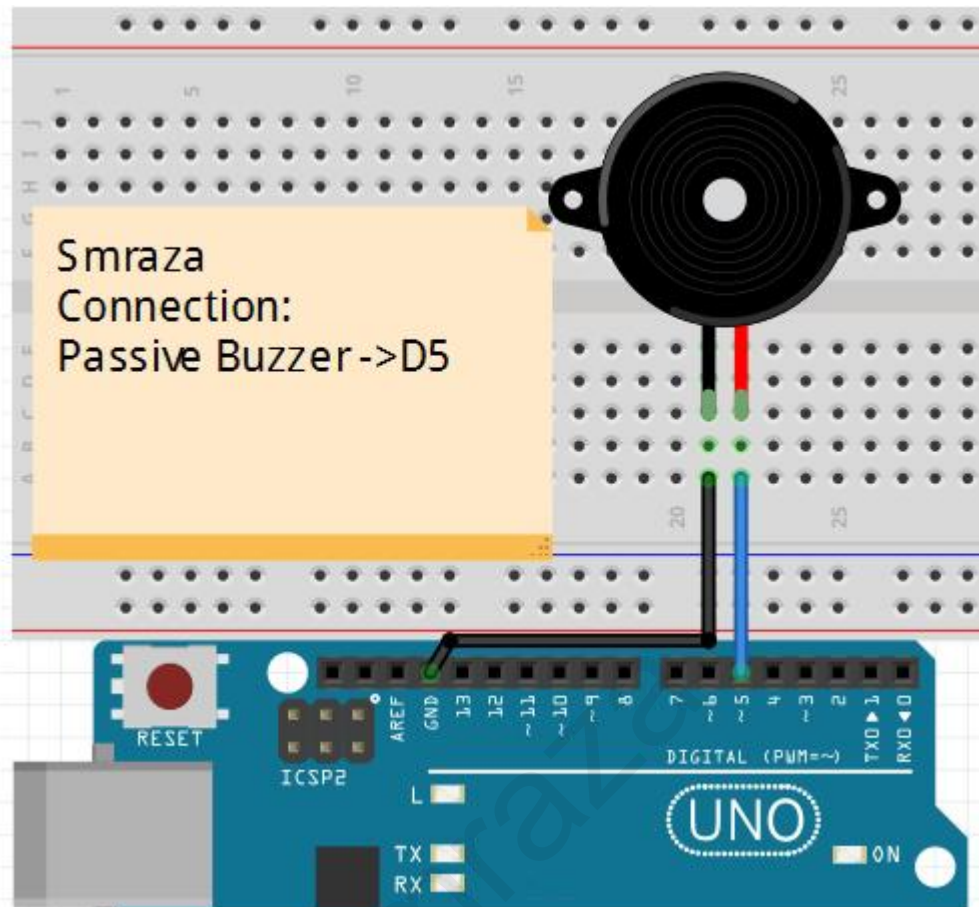
Passive buzzer, in fact, just use PWM generating audio, drives the buzzer, allowing the air to vibrate, can sound. Appropriately changed as long as the vibration frequency, it can generate different sound scale. For example, sending a pulse wave can be generated 523Hz Alto Do, pulse 587Hz can produce midrange Re, 659Hz can produce midrange Mi. If you then with a different beat, you can play a song. Here be careful not to use the Arduino analog Write () function to generate a pulse wave, because the frequency analog Write () is fixed (500Hz), no way to scale the output of different sounds.

## Connection

### Schematic



## Connection diagram



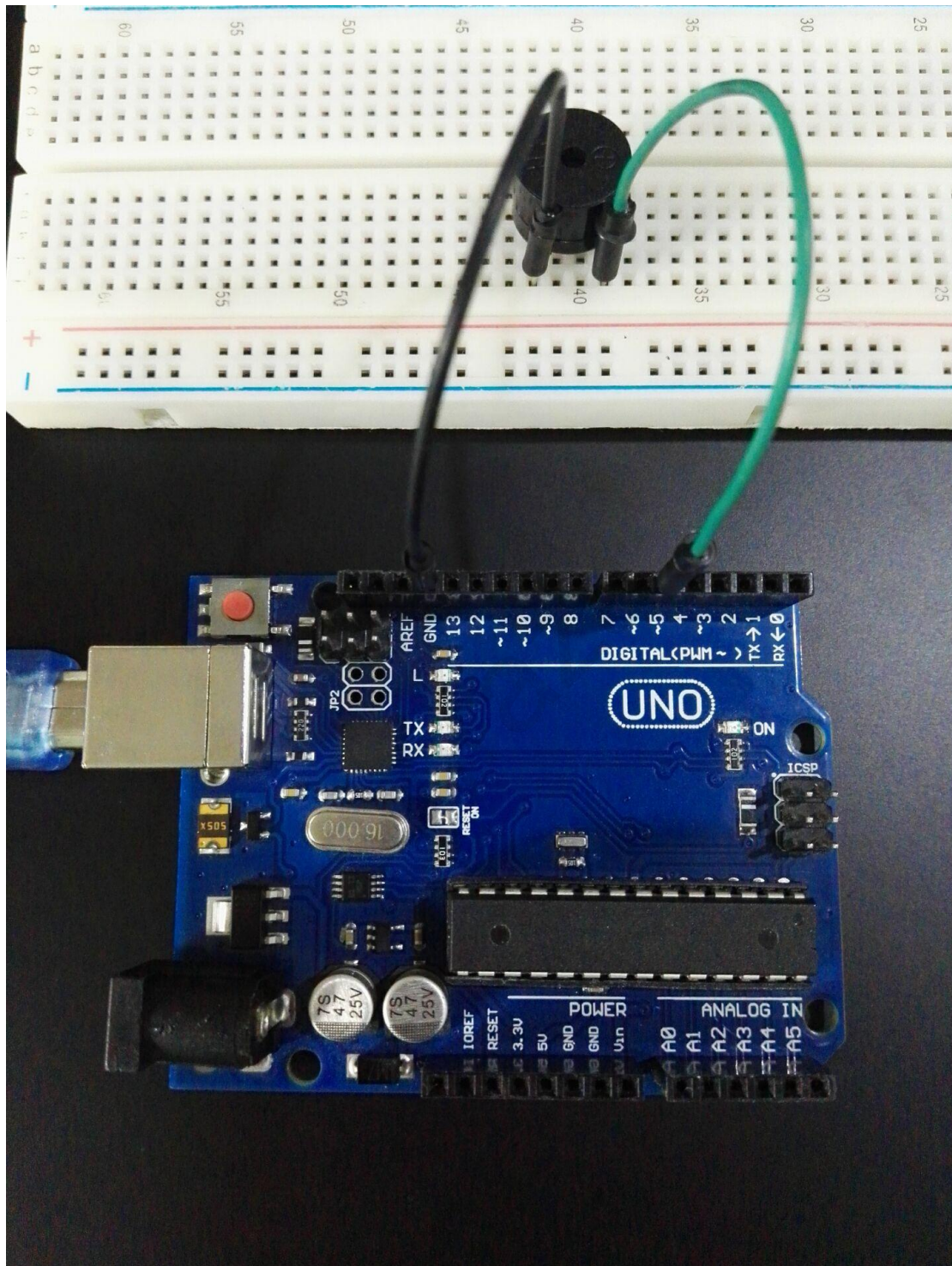
## Sample code

Note: sample code under the **Sample code** folder

```
#define buzzer 5
void setup()
{
    // generates a 400Hz tone in output pin 8 with 2000ms of duration
    tone(buzzer, 400, 2000);
}
void loop()
{
}
}
```

//Tips: Changing frequency(400Hz) can make different sounds.

## Example picture



## Language reference

**Tips** : click on the following name to jump to the web page.

If you fail to open, use the Adobe reader to open this document.

[#define](#)

[tone\(\)](#)

## Application effect

When the upload process is complete, the buzzer sounds for 2 seconds.

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