KY-012 Active Piezo-Buzzer module

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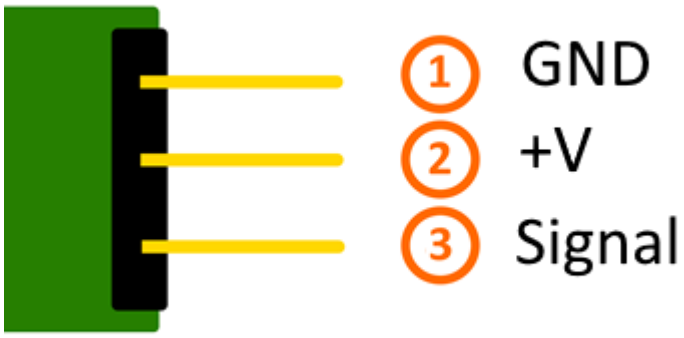
Technical data / Short description

This Buzzer creates a sound with a frequency of 2,5kHz.

The active Buzzer-module doesn't need a square wave, unlike the passiv module (KY-006), to create a sound. If it gets a minimum Voltage of 3.3V at its signal pin, the buzzer will create the square wave by itself.

Pinout



Code example Arduino

In this example, you will see how the buzzer will be ON for 4 seconds and then will be OFF for 2 seconds.

```
int Buzzer = 13;

void setup ()
{
  pinMode (Buzzer, OUTPUT); // Output pin initialization for the buzzer
}

void loop () //Main program loop
{
  digitalWrite (Buzzer, HIGH); // Buzzer will be on
  delay (4000); // Waitmode for 4 seconds
  digitalWrite (Buzzer, LOW); // Buzzer will be off
  delay (2000); // Waitmode for another 2 seconds in which the buzzer will be off
}
```

Connections Arduino:

Sensor Signal = [Pin 13]
Sensor [N.C] =
Sensor GND = [Pin GND]

Example program download:

KY-006-RPI_PWM

Code example Raspberry Pi

In this example, you will see how, with a defined output pin, the buzzer will be ON for 4 seconds and then will be OFF for 2 seconds.

```
import RPi.GPIO as GPIO
import time

GPIO.setmode(GPIO.BCM)

# Output pin declaration for the Buzzer.
Buzzer_PIN = 24
GPIO.setup(Buzzer_PIN, GPIO.OUT, initial= GPIO.LOW)

print ("Buzzer-test [press ctrl+c to end the test]")

# Main program loop
try:
        while True:
            print("Buzzer will be on for 4 seconds")
            GPIO.output(Buzzer_PIN,GPIO.HIGH) #Buzzer will be switched on
            time.sleep(4) #Waitmode for 4 seconds
            print("Buzzer wil be off for 4 seconds")
            GPIO.output(Buzzer_PIN,GPIO.LOW) #Buzzer will be switched off
            time.sleep(2) #Waitmode for another 2 seconds in which the buzzer will be off

# Scavenging work after the end of the program
except KeyboardInterrupt:
        GPIO.cleanup()
```

Connections Raspberry Pi:

Sensor Signal	=	GPIO24	[Pin 18]
Sensor [+V]	=	3.3V	[Pin 1]
Sensor GND	=	GND	[Pin 6]

Example program download

KY-012_Buzzer_RPi

To start, enter the command:

```
sudo python KY-012_Buzzer_RPi.py
```