WILTRONICS

ARD 2 *Arduino Compatibles*
Controllers, Shields, Modules & Sensors

Piezo Buzzer Module   ARD2-2212

- **Perfect for DIY alarm or doorbell projects**
- **Buzzer has internal drive circuit**

Description

This buzzer module can be used to build alarm/doorbell DIY circuits. It's useful whenever you need audio feedback in a project.

Specifications

Colour	Black
Material	PCB
Voltage	5.0VDC
Operating Range	3.0–8.0VDC (20mA @ 5VDC)
Frequency	2.3kHz @ 5VDC

Pinout

Module	Arduino	Function
S	D8	Signal via Arduino Board
Middle	5V	Power Supply
–	Ground	Ground Connection

Test Code

```
int speakerPin = 8 ;/ / control horn pin
int potPin = 4 ;/ / control pin adjustable resistor
int value = 0;
void setup () {
pinMode (speakerPin, OUTPUT);
}
void loop () {
value = analogRead (potPin); //reading resistor values pin
digitalWrite (speakerPin, HIGH);
delay (value); //adjust the speaker sound of the time;
digitalWrite (speakerPin, LOW);
delay (value); //adjust the speaker does not ring a time;
}
```

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Here we use the delay adjustment potentiometer to achieve the effect of different times, thus changing the buzzer's frequency. Here we added a key switch to control the buzzer, so that we can simulate a simple doorbell. When you press the key, the speaker can make any noise. Physical connections are as follows:

Test Code

```
const int buttonPin = 4; / / button pin;
const int speakerPin = 8; / / buzzer pin;
/ / Variables will change:
int buttonState = 0; / / read the key pin a value
void setup ()
{
/ / Set button pin to input mode, the buzzer pin output mode;
pinMode (speakerPin, OUTPUT);
pinMode (buttonPin, INPUT);
}
void loop () {
/ / Read the key one initial value, where I took in the circuit is in the
default high, the initial value is high;
buttonState = digitalRead (buttonPin);
/ * If the key is high, then the buzzer did not ring; Because I just began to
take in the hardware circuit initial value is high, so the if condition is
true,the buzzer does not sound
* /
if (buttonState == HIGH) {
digitalWrite (speakerPin, LOW);
}
else {
/ / This button is low (also the key is pressed); buzzer sounded
digitalWrite (speakerPin, HIGH);
}
}
```