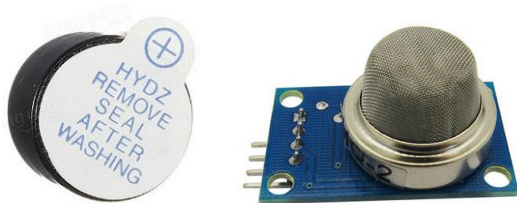


Smoke Alarm System

Overview



This lesson will teach you how to make a Smoke Alarm System. It can detect smoke and methane gas in air.

Specification


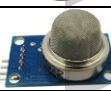


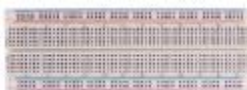

Please view "MQ-2-datasheet.pdf"

Path: \Public_materials\Datasheet\ MQ-2-datasheet.pdf

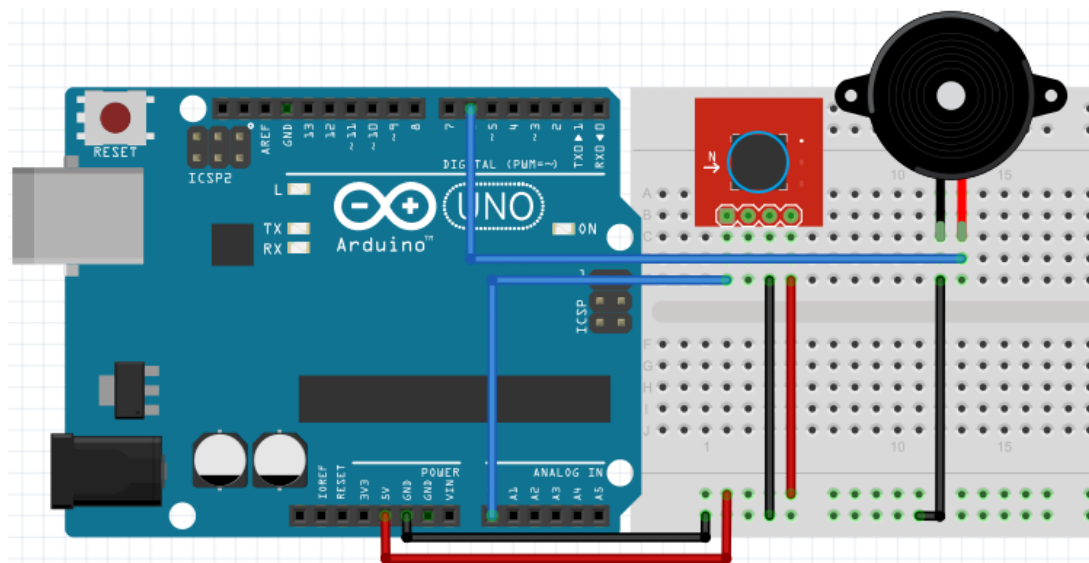
Pin definition

MQ-2		UNO R3
VCC	->	+5V
GND	->	GND
D0	->	Null
A0	->	A0

Hardware required

Material diagram	Material name	Number
	Active buzzer	1
	Analog Gas Sensor	1
	USB Cable	1
	UNO R3	1
	Breadboard	1
	Jumper wires	Several

Connection diagram



MQ-2		UNO R3
VCC	->	+5V
GND	->	GND
D0	->	Null
A0	->	A0
PassiveBuzzer->		D6

Note : The longest active buzzer of the pin is connected to the digital signal port 6 (D6).

Sample code

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

```
int gas_sensor =A0;
int Buzzer=6;
void setup()
{
  pinMode(Buzzer,OUTPUT);
  Serial.begin(9600);
}
void loop()
{
  int val;
  val=analogRead(gas_sensor);
  Serial.println(val,DEC);
  while(val<500)    // According to the serial data to adjust.
  {
    digitalWrite(Buzzer,HIGH);
    val=analogRead(0);
    Serial.println(val,DEC);
  }
}
```

V1.0

```
}  
digitalWrite(Buzzer,LOW);  
}
```

Language reference

Null

Application effect

We can use butane lighter and make the lighter into probe below, probe will detect the release of butane gas, we can observe data through the serial port.

smraza