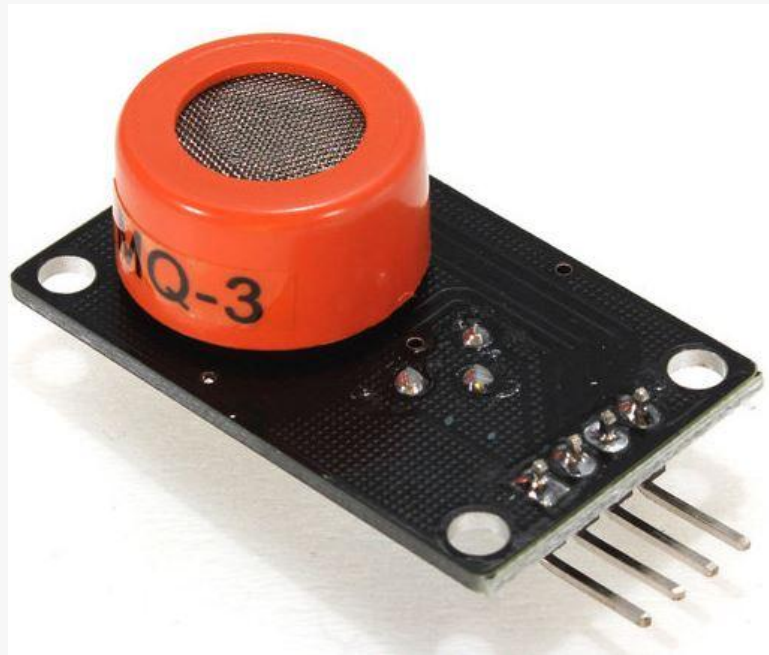
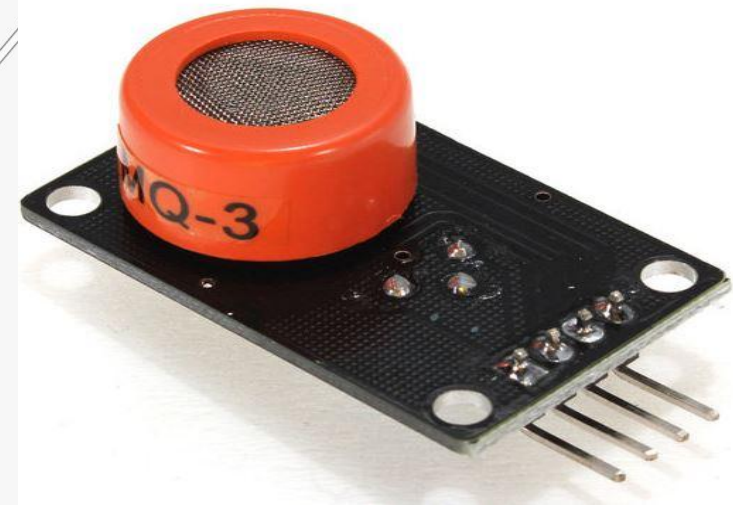


Interfacing of MQ-3 [Alcohol Sensor]





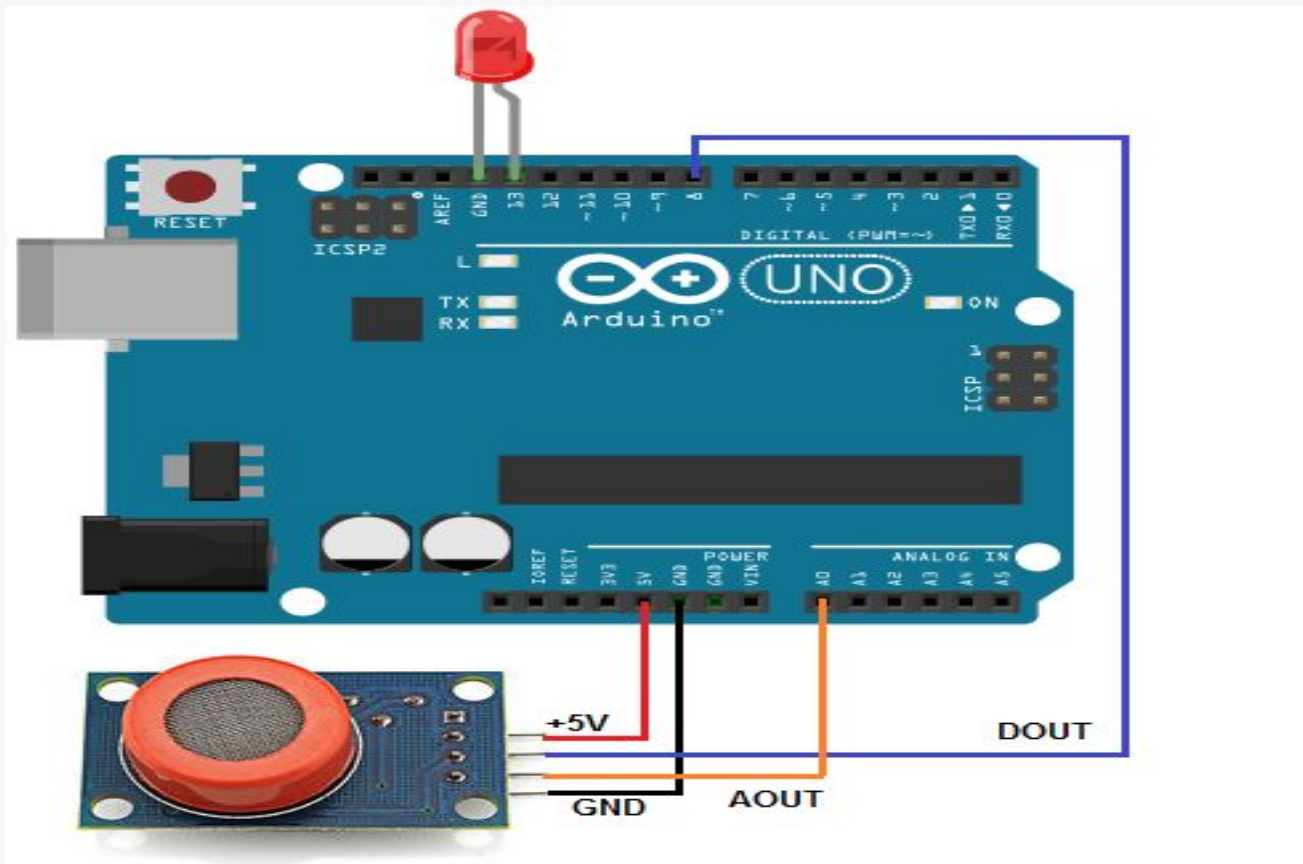
MQ-3 [Alcohol Sensor]

- This is a sensor that is not only sensitive to alcohol, particularly ethanol, which is the type of alcohol which is found in wine, beer, and liquor.
- This type of sensor circuit can be used as a breathalyzer to check a person's blood alcohol level. Just as we exhale carbon dioxide when we breathe out, we also will breathe out some alcohol if we have alcohol in our blood.
- The more ethanol in your blood, the more there is in the air on exhalation. This alcohol content gives a good indication for if a person is drunk and how drunk they are.

Components Required

- Arduino UNO
- MQ-3 [Alcohol Sensor]
- LED
- Jumper Wires

Connection Diagram






1 = +5V
2 = DOUT
3 = AOUT
4 = GND

Connections

- Connect **Vcc** of MQ-3 with +5 V of Arduino UNO.
- Connect **DOUT** of MQ-3 with pin 8 of Arduino UNO.
- Connect **AOUT** of MQ-3 with Ao of Arduino UNO.
- Connect **GND** of MQ-3 with GND of Arduino UNO.
- Connect positive pin of LED with pin 13 of Arduino UNO and LED's negative with GND of Arduino UNO.

After uploading done

- Open Serial Window at the upper-right hand corner of the Arduino IDE, when no gas is detected, the sensor will export 1 (high voltage) to the serial monitor and the LED will be turned on.
- When gas generated by the lighter nears the sensor, it will export 0 (low voltage) and the LED will turn off.



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Code

Interfacing_of_MQ-3_Alcohol_Sensor_| Arduino 1.8.19

File Edit Sketch Tools Help



Interfacing_of_MQ-3_Alcohol_Sensor_\$.

```
const int AOUTpin=0;//the AOUT pin of the alcohol sensor goes into analog pin A0 of the arduino
const int DOUTpin=8;//the DOUT pin of the alcohol sensor goes into digital pin D8 of the arduino
const int ledPin=13;//the anode of the LED connects to digital pin D13 of the arduino
```

```
int limit;
int value;
```

```
void setup() {
  Serial.begin(115200);//sets the baud rate
  pinMode(DOUTpin, INPUT);//sets the pin as an input to the arduino
  pinMode(ledPin, OUTPUT);//sets the pin as an output of the arduino
}
void loop()
{
  value= analogRead(AOUTpin);//reads the analog value from the alcohol sensor's AOUT pin
  limit= digitalRead(DOUTpin);//reads the digital value from the alcohol sensor's DOUT pin
  Serial.print("Alcohol value: ");
  Serial.println(value);//prints the alcohol value
  Serial.print("Limit: ");
  Serial.print(limit);//prints the limit reached as either LOW or HIGH (above or underneath)
  delay(100);
  if (limit == HIGH){
    digitalWrite(ledPin, HIGH);//if limit has been reached, LED turns on as status indicator
  }
  else{
    digitalWrite(ledPin, LOW);//if threshold not reached, LED remains off
  }
}
```

Project Link :