

MQ-5 LPG Natural Gas Sensor



Introduction:

This MQ5 LPG Natural Gas Sensor module is a sensor that useful for gas leakage detection. It is suitable for detecting I Methane, Propane, Butane, and other combustible gas. It can avoid noise of alcohol, cooking fumes and cigarette smoke. The sensitivity of the sensor can be adjusted by potentiometer.

Components:

- Arduino Uno Board
- MQ-5 LPG Natural Gas Sensor
- LED
- USB Cable
- Several Jump Wires

Objectives:

To detects the leakaging of gas.

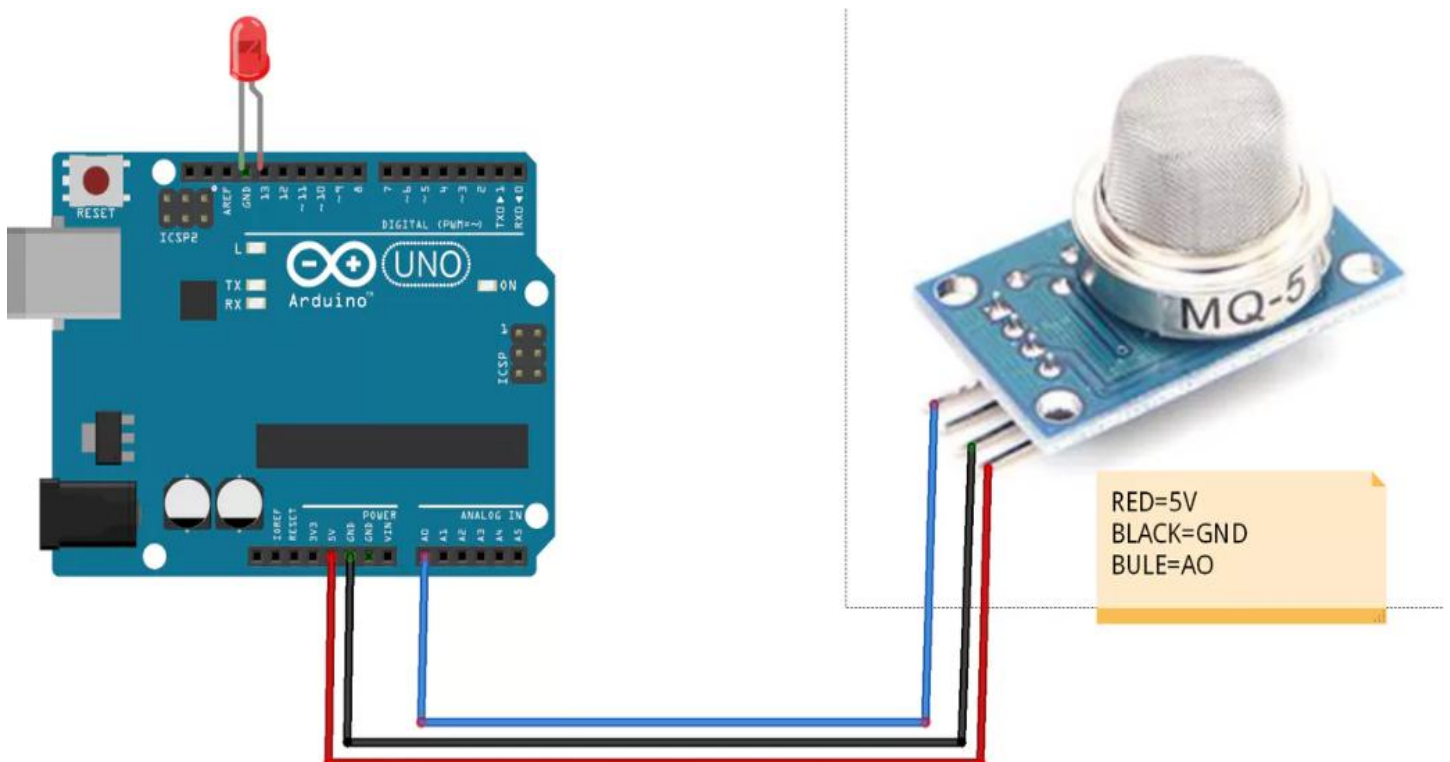
Procedure:

Step 1: Build a circuit.

The connection between the MQ-5 LPG Natural Gas Sensor and the Arduino Uno Board:

MQ-5 LPG Natural Gas Sensor	Arduino Uno
VCC	5V
GND	GND
A0	A0

LED	Arduino Uno
POSITIVE (+)	13
NEGATIVE (-)	GND



Step 2: Insert the sample programming provided below by copy and paste it into Arduino IDE.

```
/* MQ-8 MQ5 LPG Natural Gas Sensor Circuit with Arduino */

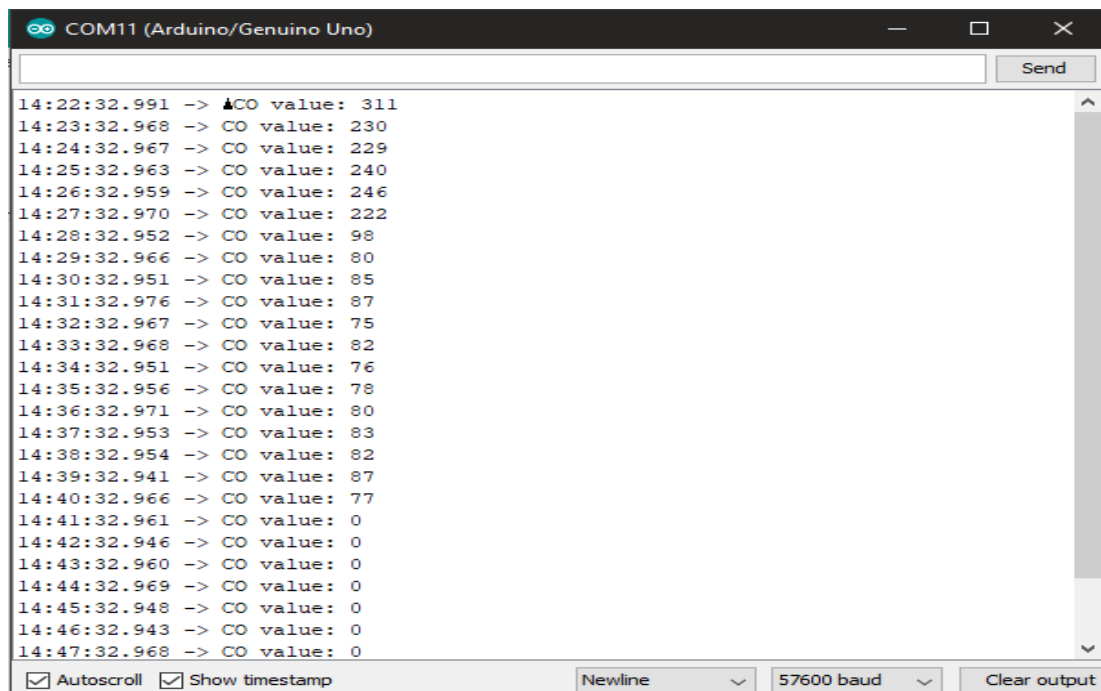
const int AOUTpin= 0;//the AOUT pin of the CO sensor goes into analog pin A0 of the
arduino
int value;

void setup()

{
Serial.begin(57600);//sets the baud rate
pinMode(AOUTpin, INPUT);//sets the pin as an input to the arduino
}

void loop()
{
value= analogRead(AOUTpin);//reads the analaog value from the CO sensor's AOUT pin
Serial.print("CO value: ");
Serial.println(value);//prints the CO value
delay(60000);
}
```

Step 3: Open the serial monitor to observe the result as shown below.



```
COM11 (Arduino/Genuino Uno)
14:22:32.991 -> ▲CO value: 311
14:23:32.968 -> CO value: 230
14:24:32.967 -> CO value: 229
14:25:32.963 -> CO value: 240
14:26:32.959 -> CO value: 246
14:27:32.970 -> CO value: 222
14:28:32.952 -> CO value: 98
14:29:32.966 -> CO value: 80
14:30:32.951 -> CO value: 85
14:31:32.976 -> CO value: 87
14:32:32.967 -> CO value: 75
14:33:32.968 -> CO value: 82
14:34:32.951 -> CO value: 76
14:35:32.956 -> CO value: 78
14:36:32.971 -> CO value: 80
14:37:32.953 -> CO value: 83
14:38:32.954 -> CO value: 82
14:39:32.941 -> CO value: 87
14:40:32.966 -> CO value: 77
14:41:32.961 -> CO value: 0
14:42:32.946 -> CO value: 0
14:43:32.960 -> CO value: 0
14:44:32.969 -> CO value: 0
14:45:32.948 -> CO value: 0
14:46:32.943 -> CO value: 0
14:47:32.968 -> CO value: 0
```