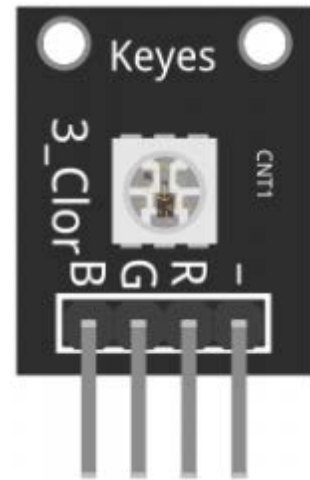


# RGB LED SMD Module

RGB full color LED Module for Arduino emits a range of colors by mixing red, green and blue. The amount of each primary color is adjusted using PWM.

The module consists of a 5050 SMD LED. It's compatible with popular electronics platforms like Arduino, Raspberry Pi and ESP8266.

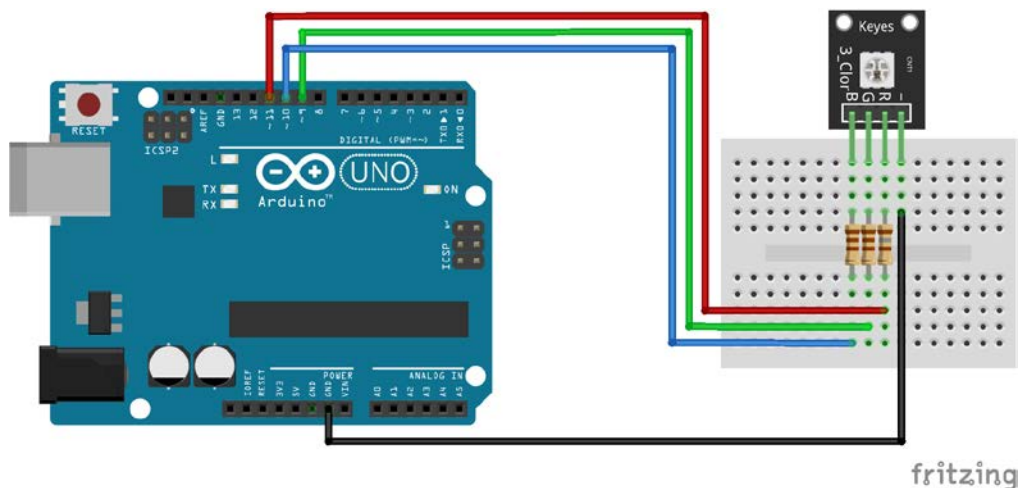


Operating Voltage	5V max Red 1.8V ~ 2.4V Green 2.8V ~ 3.6V Blue 2.8V ~ 3.6V
Forward Current	20mA ~ 30mA
Operating Temperature	-25°C to 85°C [-13°F ~ 185°F]
Dimensions	18.5mm x 15mm [0.728in x 0.591in]

## Pinout and Connection to Arduino

You need to use resistors to prevent burnout!

Module	Breadboard	Arduino
R	180Ω resistor	Pin 9
G	100Ω resistor	Pin 10
B	100Ω resistor	Pin 11
-	GND	GND



## Arduino Example Sketch

The following Arduino sketch will cycle through various colors by changing the PWM value on each of the three primary colors.

```
int redpin = 11; //select the pin for the red LED
int bluepin =10; // select the pin for the blue LED
int greenpin = 9;// select the pin for the green LED

int val;

void setup() {
  pinMode(redpin, OUTPUT);
  pinMode(bluepin, OUTPUT);
  pinMode(greenpin, OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  for(val = 255; val > 0; val--)
  {
    analogWrite(redpin, val); //set PWM value for red
    analogWrite(bluepin, 255 - val); //set PWM value for blue
    analogWrite(greenpin, 128 - val); //set PWM value for green
    Serial.println(val); //print current value
    delay(1);
  }
  for(val = 0; val < 255; val++)
  {
    analogWrite(redpin, val);
    analogWrite(bluepin, 255 - val);
    analogWrite(greenpin, 128 - val);
    Serial.println(val);
    delay(1);
  }
}
```