AZ-Delivery
Ihr Experte für Mikroelektronik!

KY-016 LED RGB Modul
Datenblatt

Contents:

1. Overview

RGB LED module consists of a plug-in full color LED made by R, G, B three pin PWM voltage input can be adjusted Section three primary colors (red / blue / green) strength in order to achieve full color mixing effect.

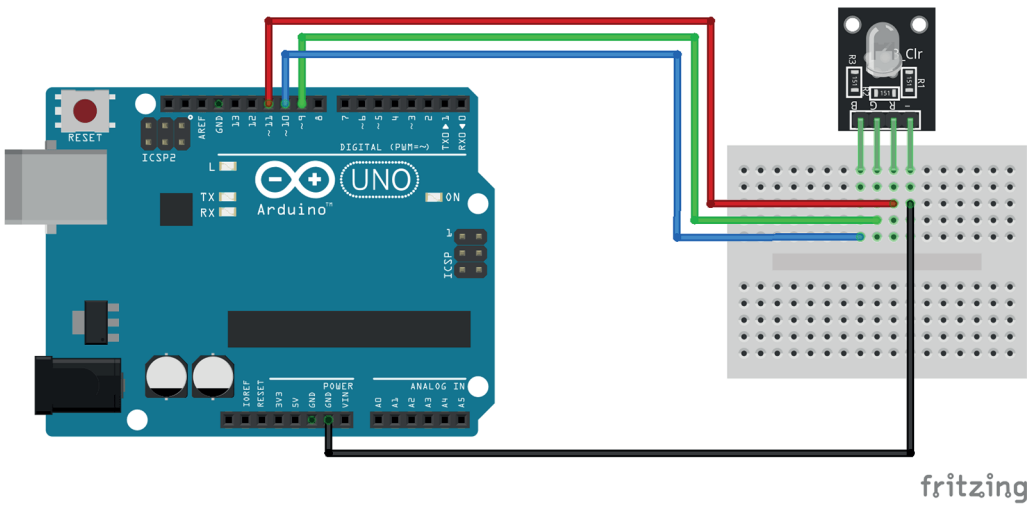
2. Specifications

- The use of plug-in full-color LED
- RGB trichromatic limiting resistor to prevent burnout
- Through the PWM adjusting three primary colors can be mixed to obtain different colors
- With a variety of single-chip interface
- The working voltage: 5V
- LED drive mode: common cathode driver

This module consists of a 5mm RGB LED and three 150Ω limiting resistors to prevent burnout. Adjusting the PWM signal on each color pin will result on different colors.

3. Schematic

Connect the red pin (R) on the KY-016 to pin 11 on the Arduino. Blue (B) to pin 10, green (G) to pin 9 and ground (-) to GND. Notice that you do not need to use limiting resistors since they are already included on the board.



4. Example Code

```
//KY016 3-color LED module
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 (11, val);
    analogWrite (10, 255-val);
    analogWrite (9, 128-val);
    delay (10);
    Serial.println (val, DEC);
  }
  for (val = 0; val <255; val ++)
  {
    analogWrite (11, val);
    analogWrite (10, 255-val);
    analogWrite (9, 128-val);
    delay (10);
    Serial.println (val, DEC);
  }
}
```