# mail

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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Light Disc (SKU:DFR0106)



#### Introduction

This fantastic light disc consists of 7 SMD RGB LEDs. It illustrates a beautiful color combination much better than traditional RGB leds. You can control the LEDs via the RGB pins. By pulse-width-modulating the pins any color can be created by mixing different amounts of red, green, and blue. Running from a 5V source, these LEDs are painfully bright. Using a proper case, you can create a beautiful mood light in just minutes.

Ideal for Arduino lighting project. It can be powered by Arduino Digital Pin out with only USB power supply.

It has built in resistors, it will work flawlessly with Arudino 5V power.

# **Specification**

- Power Supply: 5V
- Current consumption with full 5V:
- Blue: 60ma (7 leds)
- Red: 70ma (7 leds)
- Green: 108ma (7 leds)
- 7 SMD RGB LED
- 6000 mcd

#### **Connection Diagram**



DFR0106 Connection Diagram

This Disk requires PWM pins, you may use any Pins capable of PWM output.

# Sample code

```
//This sample code use Digital Pin 3,5,6 and GND
// This code only works for V1 version which comes with a soldered cable
// www.dfrobot.com
// Last modified on 26/11/2014
int B = 3; //Connect Blue led to Digital pin 3
int R = 5;//Connect Red led to Digital pin 5
```

```
int G = 6;//Connect Green led to Digital pin 6
//Connect the 5V pin of light disc to GND Pin of Arduino
void setup()
{
    pinMode(3,OUTPUT);
    pinMode(5,OUTPUT);
    pinMode(6,OUTPUT);
}
void loop()
{
    analogWrite(B,random(255));
    analogWrite(R,random(255));
    analogWrite(G,random(255));
    delay(80);
}
```