

8 RGB LED PWM Driver

Description:

Controls 8 individual groups RGB LEDs with full 8-bit PWM. Each of the 8 channels, can control up to 8 LEDs, for control over 64 RGB LEDs. With few component parts.

Easy to assemble.

Great for Infinity Mirrors, Lamps, Decoration, Case Mods, Car Mods

Features:

- Individual control of 8 groups of RGB LEDs
- Controls up to 64 RGB LEDs
- Bright, vibrant colors.
- 8-bit resolution can create 16 million colors.
- Multiple functions controlled with a single push button switch.
- Remembers settings when turned On/Off
- 10 Different Patterns/Settings
- 1 Setting cycles automatically through all the patterns.
- User is notified of entering automatic mode with a every-other white pattern



Version 1

Standard Kit is designed to run 40 RGB LEDs in 8 groups.

Specification:

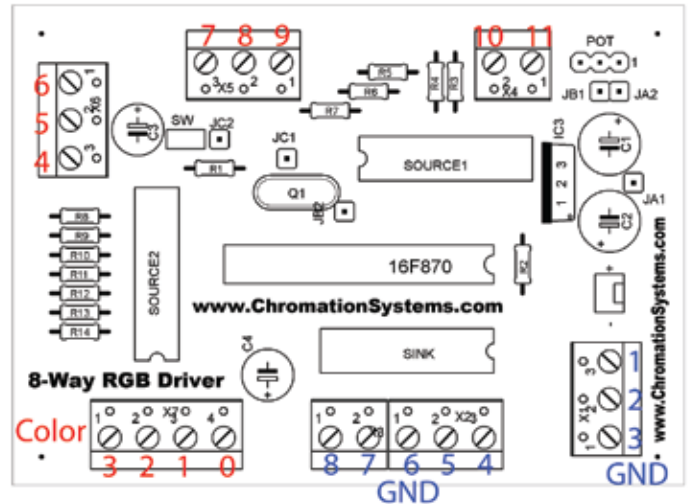
Input	5v*
Current	varies
Output	PWM for 8 RGB LEDs
Connectors	Screw Terminals
Dimension	2.5"x3.5"x1"

*Input voltage should be 5 volts, if higher input voltage is needed there is room for a 7805 to be added, but then a safe current maximum should be calculated

For Updated Information and Building Instruction visit www.Chromationsystems.com or E-Mail Support@Chromationsystems.com

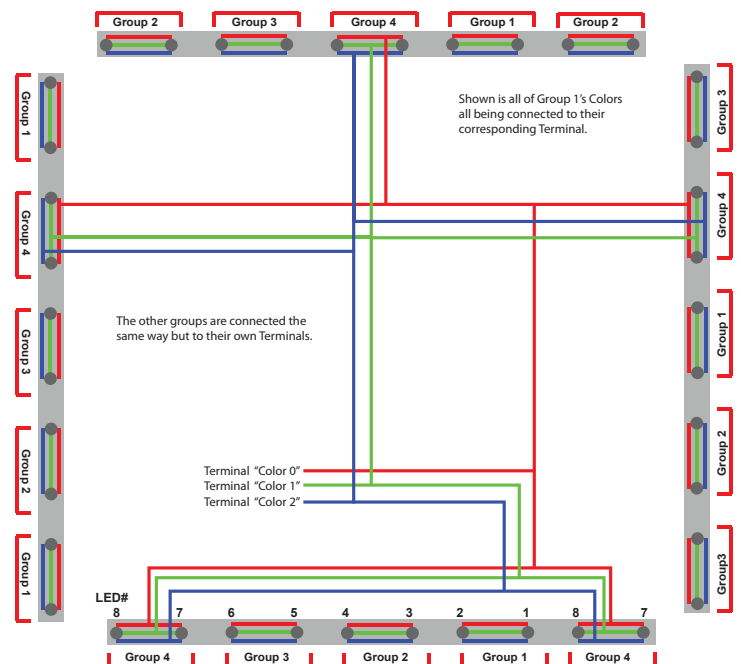
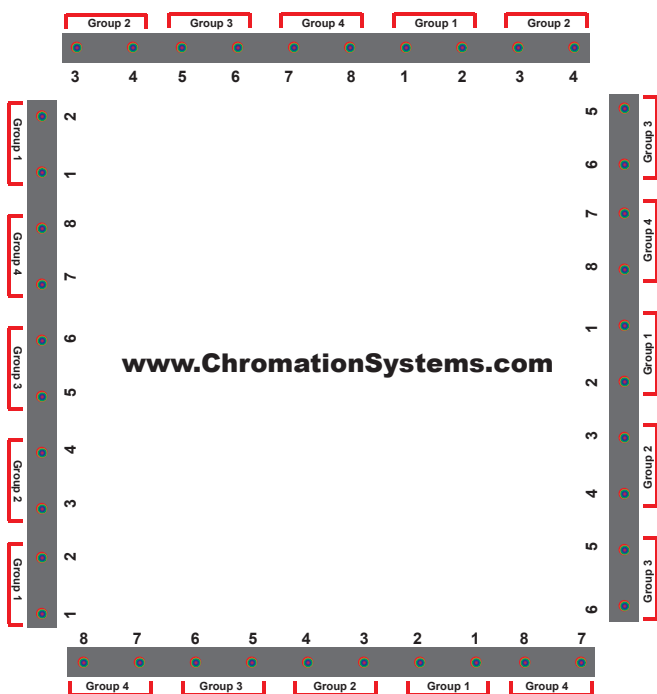
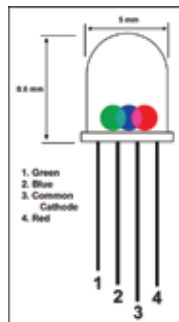
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Color LED Pin	Color LED Pin	Color LED Pin	Color LED Pin
0	R1	6	R3
1	G1	7	G3
2	B1	8	B3
3	R2	9	R4
4	G2	10	G4
5	B2	11	B4



Each group has its R-G-B leads in parallel. And multiple groups of the same number also have their R-G-B pins in parallel.

GND pins (pin 3) of the same number are connected in parallel also.



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Parts List:

R12 56 ohm

R13 17 ohm

R14 20 ohm

R11 56 ohm

R9 17 ohm

R10 20 ohm

R8 56 ohm

R7 17 ohm

R6 20 ohm

R5 56 ohm

R4 17 ohm

R3 20 ohm

Terminals

2 Term. 1

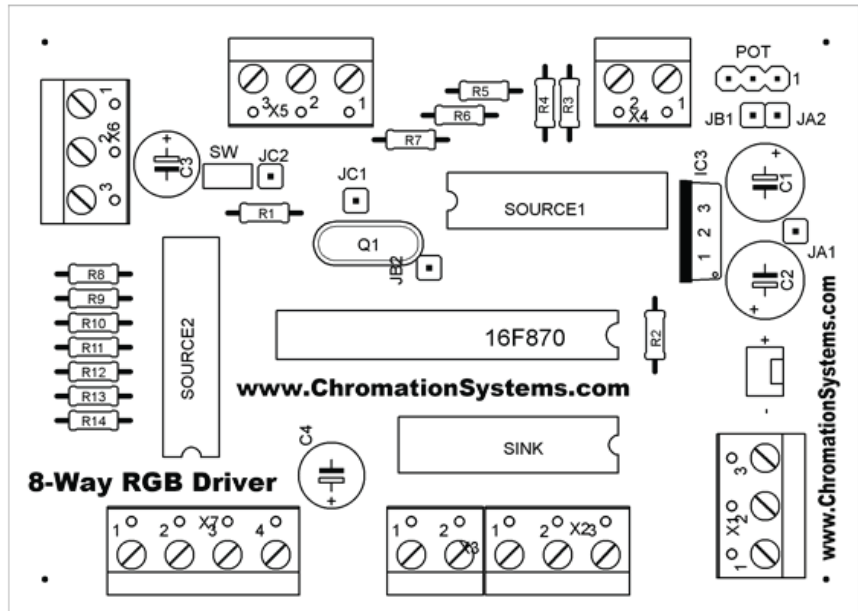
3 Term. 3

4 Term. 1

5 Term. 1

- 40x Common Cathode RGB LEDs

- 4x 17" by 4 holes wide, perforated board for RGB LED strips



R1 10kohm 1/4w

R2 10kohm 1/4w

C1 1uF capacitor

C2 1uF capacitor

C3 10uF capacitor

C4 10uF capacitor

Q1 20 mhz Series Osc

Source 1 TD62783APG

Source 2 TD62783APG

Sink TD62083APG

IC3 Optional 7805

SW Mom. Push Button

16F870 Microcontroller