

DMX-512 Wash Light Driver

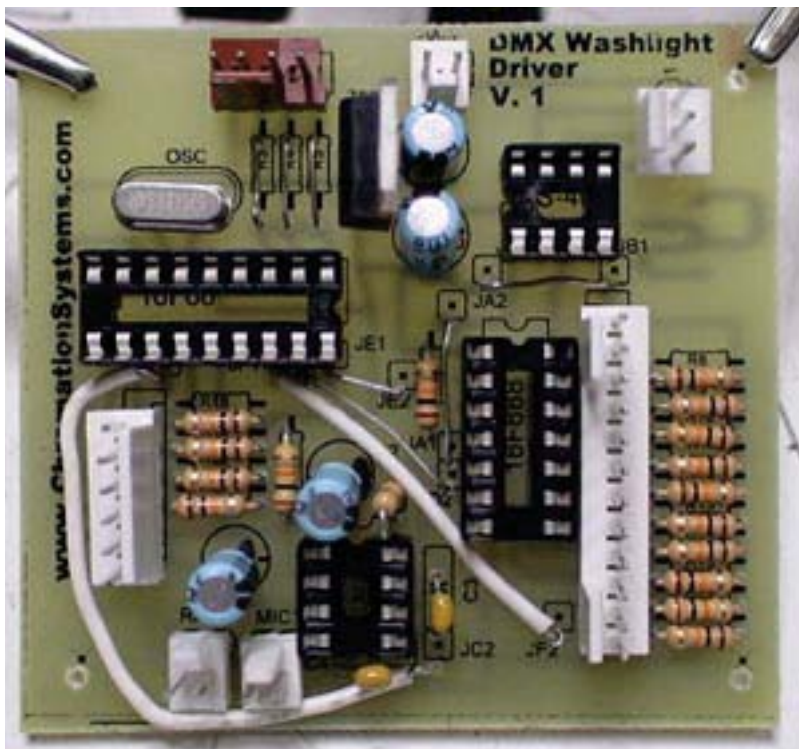
Description:

Provides a TTL signal output to control red, green, & blue LEDs with multiple functions. An output board is chosen based on the type of LEDs to be controlled. To allow for many different configurations of LEDs.

(Schematics for output boards below)

Features:

- DMX-512 Input
- 5 DMX Channels
 - Red, Green, Blue, Mode, Speed
- 5 Stand-Alone Functions
 - Auto Fade /w speed control via dial
 - Auto Flash /w speed control via dial
 - DMX, 512 Address
 - Manual Select via a dial
 - Sound Reactivity, w/ sensitivity adjust
- Output boards allow for most any current, voltage, LED type configuration.
 - Example:
 - 3x Constant Current Regulator
 - Common Anode RGB LED(s)
 - Common Cathode RGB LED(s)
 - Single red, single blue, single green parallel or series.
- Free help with choosing the right output board for you(Support@Chromationsystems.com)



Specification:

Input	7v-24v*
Current	less than 100ma
Output	TTL (5v)
Connectors	0.1" Pitch
Dimension	2.5"x2.75"x~1"

*A 5 volt input could be used if the 7805 voltage regulator was not installed on the board and proper jumpers were placed

The driver board can only power a single 5mm RGB LED. Driver must be paired with an output board. Schematics Below

Parts List & Layout

Jumpers are Ran from Jx1 to Jx2
 ex: JC1 is jumped to JC2
 JF1 is jumped to JF2, ect.....

6 Pin Header Pinout

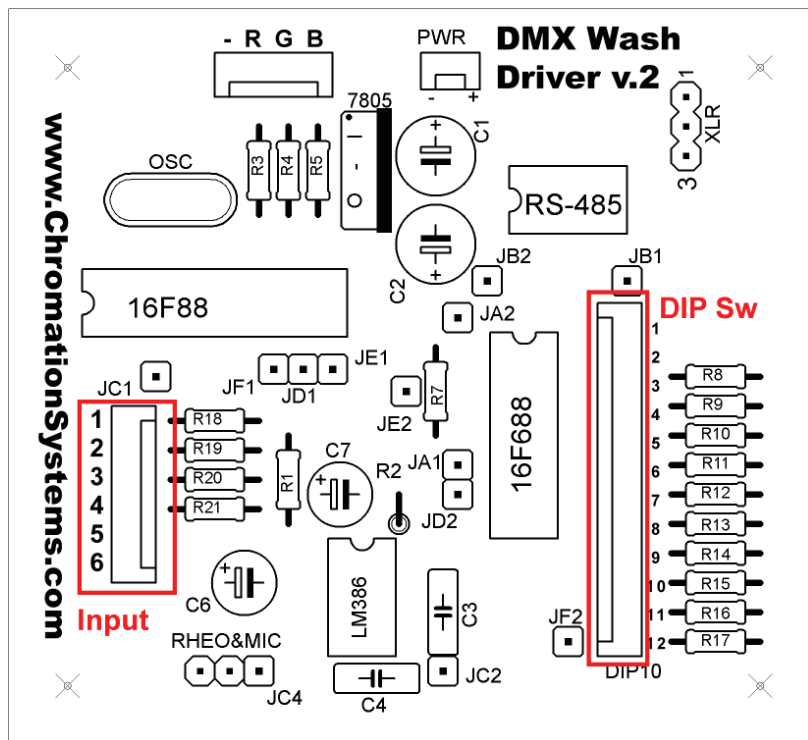
1. Control Pot. Center Tap
2. DMX Select
3. Auto Select
4. Manual/Audio Select
5. Negative, 0 volts
6. Positive, +5 volts

XLR Pinout -RGB Pinout

- | | |
|----------|-------------|
| 1. Pin 2 | R. Red |
| 2. Pin 3 | G. Green |
| 3. Pin 1 | B. Blue |
| | -. Negative |

DIP Sw Pinout

1. Positive, +5v
2. Negative, 0v
3. Address Bit 0
4. Address Bit 1
5. Address Bit 2
6. Address Bit 3
7. Address Bit 4
8. Address Bit 5
9. Address Bit 6
10. Address Bit 7
11. Address Bit 9
12. DIP10, mode select



R1	10k ohm
R2	1k ohm
R3	***
R4	***
R5	***
R7 -	
R21	10k ohm
C1	10 uF
C2	1 uF
C3	0.1 uF
C4	0.1 uF
C6	10 uF
C7	10 uF

RS-485	SN75176
16F88	Main Processor
16F688	DMX Decoder
LM386	Audio-Amp
PWR	2 Pin Header
Rheo/XLR	3 Pin Header
- R G B	4 Pin Header
Input	6 Pin Header
DIP Sw	12 Pin Header
OSC	20 mhz Series

*** - R3, R4 & R5 are jumped.

Functions:

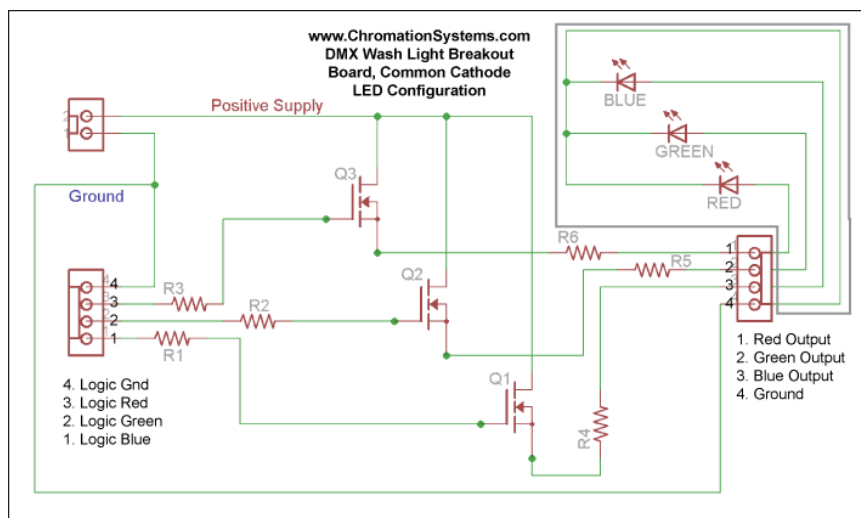
1. Manual - Switch, DIP10 off
2. Sound Reactive - Switch, DIP10 on
3. Auto Fade Cycle - Switch, DIP10 off
4. Auto Flash Cycle - Switch, DIP10 on
5. DMX Control - Switch, DIP10 on/off

DMX-512 Interface

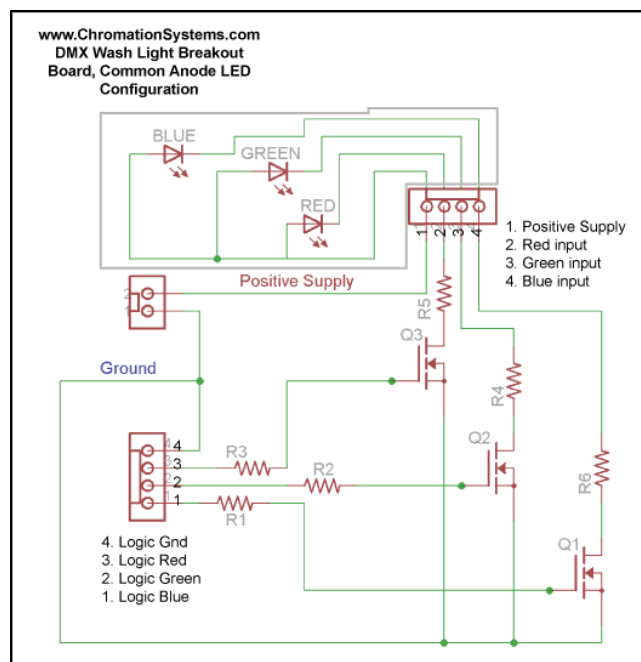
Channel:	Function:
1. 0 - 255	Red
2. 0 - 255	Green
3. 0 - 255	Blue
4. 0 - 10	Color Select w/ Chans 1-3
11 - 128	Fade /w Speed select
129 - 255	Flash /w Speed select
5. 0 - 255	Speed Adjust for Fade/Flash

Breakout Schematics

One of these boards would be used in conjunction with the Wash Light Driver Board.



Common Cathode LED Configuration



Common Anode LED Configuration