QolorFLEX® 5x8A Dimmer
P/N 5809

Quick Start Guide

FEATURES & COMPONENT IDENTIFICATION

DMX OUT 5PIN XLRF

DMX IN 5PIN XLRM

DMX IN/OUT RJ45's

ALPHA/NUMERIC DISPLAY

DMX INPUT/OUTPUT TERMINAL BLOCK

USER CONTROLS

CHs 1-5 OUTPUT TERMINALS

COMMON (V+) OUTPUT TERMINAL

DC+ INPUT TERMINALS

DC- INPUT TERMINALS
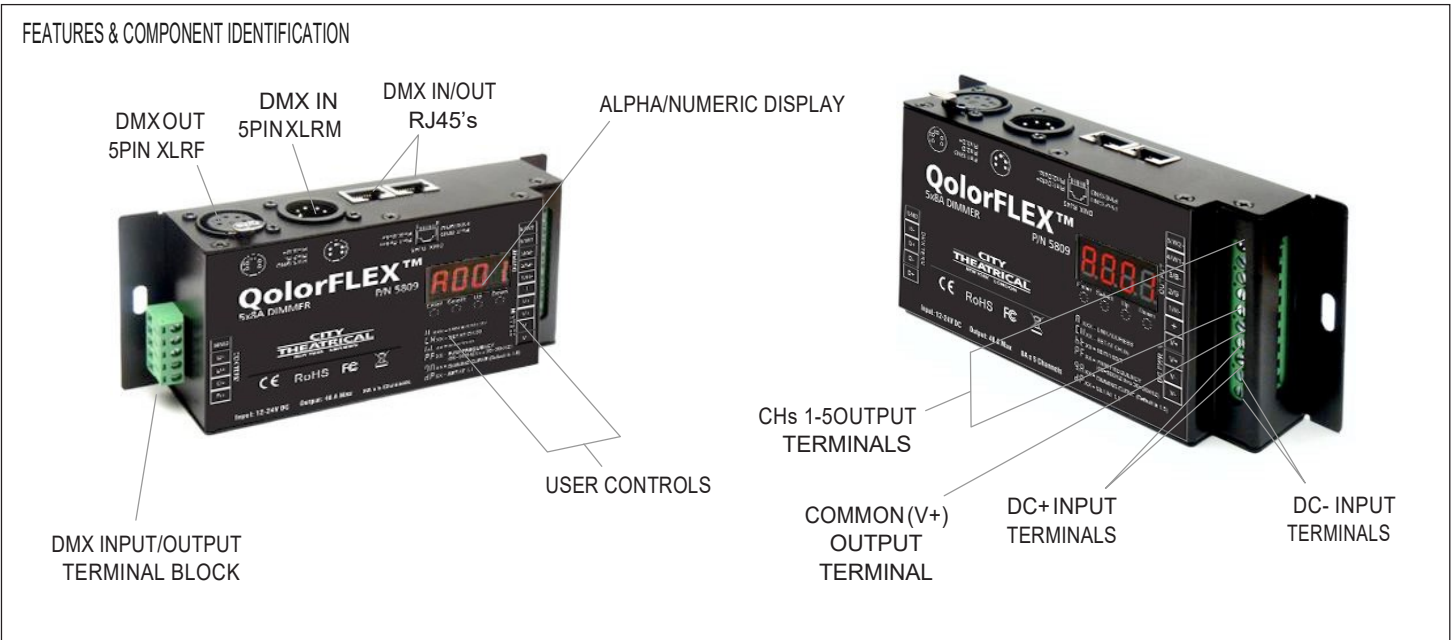
The QolorFLEX 5x8A Dimmer can control a full 40A of LED tape spread over five output channels of 8A each. This allows the control of unique combinations such as RGB tape (three channels) and bi-color tape (two channels), or RGBX tape (four channels) and a single color tape (one channel) together in one unit. The QolorFLEX 5x8A uses constant voltage technology which ensures consistent full range dimming that is especially important at low end light levels.

An easy to read onboard display and four button user interface allows selection and control of six functions: setting DMX addresses, setting quantity of DMX channels, selecting 8 or 16 bit output resolution, setting PWM frequency (500Hz to 30KHz), setting output

dimming curve values for matching the dimming curves of other dimmers in use, setting the device's operating profile, and setting standalone modes. The QolorFLEX 5x8A Dimmer is also RDM capable.

The unit requires a separate power supply providing input voltage of 12-24VDC. The maximum current load per channel is 8A with a maximum device output of 40A.

The QolorFLEX 5x8A Dimmer is designed to operate perfectly with City Theatrical's QolorFLEX LED tape, the LED tape of professionals on Broadway, network television, and architectural lighting installations.

Quick Start Instructions:

1. Connect the QolorFLEX 5x8A Dimmer to your DMX controller by using either the DMX five pin XLRM input, an RJ-45 DMX input/output, or the DMX input/output terminal block. DMX out can be either five pin XLRF output, the RJ-45 input/ output or the DMX input/output terminal block.

2. Connect your load to the output channels using the screw terminals. For single color LED tape with two connection wires, connect the V- (black) wire to any one of the four output channel terminals and the V+ (red) wire to its corresponding terminal. When using multi-color LED Tape, connect as follows: CH1-red, CH2 green, CH3 blue, CH4 fourth, CH5 fifth, color. *Note*- The V+ (common) circuit for multicolor tape will be connected to either a black or white wire. To determine which is correct, look at one of the sets of contacts on the tape itself and note which color wire is connected to the one labeled (+).* Do not exceed the maximum load capacity of 8A per channel.

3. Connect the appropriate power supply providing 12-24VDC to the power input screw terminals. Be sure not to exceed the 20A maximum rating on any one screw terminal. *Note*-The size of the power supply must match the tape being used in both voltage and watts.* The QolorFLEX 5x8A's maximum output power rating is: 480W (12V), and 960W (24V).

To Set for DMX

Power up unit. Address screen (Axxx) will be showing in DMX Mode ("run1").

In DMX Mode:

Axxx = DMX Address
CH0x = Quantity of channels controlled
Btxx = 8 or 16 bit dimming
PFxx = PWM frequency 00 to 30
gAxx = Dimming Curve 0.1 to 9.9
dPxx = DMX Profiles Note: Set DMX profile to "2.1" for 16 bit two channel dimming)

To Set for Stand Alone

Set to Stand Alone Mode by pushing "Up" button until "run1" is shown. "run1" denotes DMX mode. Hit "Enter" button, and "Up" button to select "run2", which denotes Stand Alone Mode. **Cycle power to unit.**

In Stand Alone Mode:

Run2 = Stand Alone Mode
Pxxx = Programs 1 to 31
b-xx = Brightness levels 1 to 8
SPxx = Speed Levels 1 to 16
x-xx = Individual channels @ levels

To change back to DMX Mode, select "run1" and cycle power.

DMX Start Address *(Factory default is 001)*
Sets the DMX address for the dimmer.

DMX Channel Qty *(Factory default is 05)*

SETTINGS:

CH01: DMX addresses 1,2,3,4,5 = 001
CH02: DMX addresses, 1,3 =001, 2,4,5 =002
CH03: DMX addresses, 1 =001, 2 =002, 3,4,5 =003
CH04: DMX addresses, 1 =001, 2 =002, 3 =003, 4,5 =004
CH05: DMX addresses, 1 =001, 2 =002, 3 =003, 4 =004, 5 =005

Output Resolution- *(Factory default is 16)*

Resolution determines the smoothness of the dimming. 8 bit uses 1 DMX channel, while 16 bit uses 2. Note: also change DMX profile to dp2.1

AVAILABLE SETTINGS: **08** or **16**

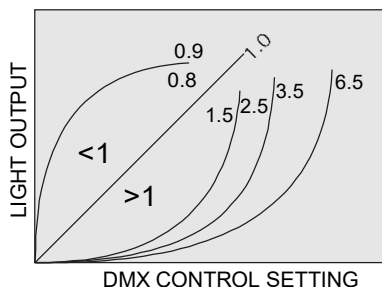### PWM Frequency *(Factory default is 05)*
PWM Frequency is used to tune the dimmer for flicker free operation when used with high speed camera. A high PWM value produces the least amount of flicker. A low PWM value produces better dimming quality. Always perform a camera test to con rm optimal results.

AVAILABLE SETTINGS: **00** thru **30**
Values: 00 = 500Hz
01 to 30 = 1kHz to 30kHz

Dimming Curve *(Factory default is 1.5)*

The Dimming Curve may be adjusted to affect the rate of rise and fall of the dimmer. Values less than 1.0 increase the rate, while values greater than 1.0 decrease the rate. (1.0 is linear)

AVAILABLE SETTINGS: **0.1** thru **9.9**

Device DMX Profiles *(Factory default is 11)*

Note: To restore factory defaults, press and hold both "Enter" and "Back" for 5 seconds until display goes out.

DMX Address is 001,CH01

	dp1.1	dp2.1
Channel 1	For all output dimming	For all output dimming
Channel 2	———	For all output Fine dimming

DMX Address is 001,CH02

	dp1.1	dp2.1	dp3.2
Channel 1	For output 1&3 dimming	For output 1&3 dimming	For output 1&3 dimming
Channel 2	For output 2,4&5 dimming	For output 1&3 Fine dimming	For output 2,4&5 dimming
Channel 3	———	For output 2,4&5 dimming	For all output dimming
Channel 4	———	For output 2,4&5 Fine dimming	———

DMX Address is 001,CH03

	dp1.1	dp2.1	dp4.3	dp5.3
Channel 1	For output 1 dimming	For output 1 dimming	For output 1 dimming	For output 1 dimming
Channel 2	For output 2 dimming	For output 1 Fine dimming	For output 2 dimming	For output 2 dimming
Channel 3	For output 3,4&5 dimming	For output 2 dimming	For output 3,4&5 dimming	For output 3,4&5 dimming
Channel 4		For output 2 Fine dimming	For all output dimming	For all output dimming
Channel 5		For output 3,4&5 dimming	For all output dimming	Strobe Effects
Channel 6		For output 3,4&5 Fine dimming		

DMX Address is 001,CH04

	dp1.1	dp2.1	dp5.4	dp6.4
Channel 1	For output 1 dimming	For output 1 dimming	For output 1 dimming	For output 1 dimming
Channel 2	For output 2 dimming	For output 1 Fine dimming	For output 2 dimming	For output 2 dimming
Channel 3	For output 3 dimming	For output 2 dimming	For output 3 dimming	For output 3 dimming
Channel 4	For output 4&5 dimming	For output 2 Fine dimming	For output 4&5 dimming	For output 4&5 dimming
Channel 5		For output 3 dimming	For all output dimming	For all output dimming
Channel 6		For output 3 Fine dimming		Strobe Effects
Channel 7		For output 4&5 dimming		
Channel 8		For output 4&5 Fine dimming		

DMX Address is 001,CH05

	dp1.1	dp2.1	dp6.5	dp7.5
Channel 1	For output 1 dimming	For output 1 dimming	For output 1 dimming	For output 1 dimming
Channel 2	For output 2 dimming	For output 1 Fine dimming	For output 2 dimming	For output 2 dimming
Channel 3	For output 3 dimming	For output 2 dimming	For output 3 dimming	For output 3 dimming
Channel 4	For output 4 dimming	For output 2 Fine dimming	For output 4 dimming	For output 4 dimming
Channel 5	For output 5 dimming	For output 3 dimming	For output 5 dimming	For output 5 dimming
Channel 6		For output 3 Fine dimming	For all output dimming	For all output dimming
Channel 7		For output 4 dimming		Strobe Effects
Channel 8		For output 4 Fine dimming		
Channel 9		For output 5 dimming		
Channel 10		For output 5 Fine dimming		

Stand Alone Mode Chases

Default is RUN1 for DMX mode.
Arrow to RUN1. Hit Enter.

When Blinking, Arrow to RUN2. Hit Enter. Hit Back. Power Cycle.

Once you are set to RUN2:

You can set a channel (1-5) at a level 0-FL. Hit Enter and Back.

You can also set a Chase with the P-00. The 1-5 Channel Levels will override the chase.

P-00 is Program (Hit Enter Arrow up/down)

P-01	Red	P-16	Blink RGB
P-02	Green	P-17	Pulse R A LtG G Cyan Blue
P-03	Blue	P-18	Bounce R A LtG G Cyan Blue
P-04	Lime Green Mix	P-19	Snap R A LtG G Cyan Blue
P-05	Amber Mix	P-20	Static Red Chase G/B
P-06	Cyan Mix	P-21	Chase Red/Blue Static Green
P-07	Purple Mix	P-22	Static Blue Chase Red/Green
P-08	All Full	P-23	Static Red Chase Green
P-09	Rainbow Chase	P-24	Static Red Chase Blue
P-10	Random Chase	P-25	Chase Red Static Green
P-11	Random Chase	P-26	Chase Blue Static Green
P-12	Random Chase	P-27	Chase Red Static Blue
P-13	Snap RGB	P-28	Chase Green Static Blue
P-14	Bounce RGB	P-29	Chase Red Static Green
P-15	Blink RGB	P-30	Red/Blue chase
		P-31	Green/Blue chase

SP-01 (Slow) to 09 (Fast)   Speed Channel Slow to Fast (Hit Enter Arrow up/down)

b-01 (12%) to 08 (Full)   Intensity Dim to Full (Hit Enter Arrow up/down)

Always hit Enter and Back to save the setting.