

QolorFLEX® 4x5A Dimmer

P/N 5821

Quick Start Guide



The QolorFLEX 4x5A Dimmer can control a full 20A of LED tape spread over four channels of 5A each. It uses constant voltage technology which ensures consistent full range dimming that is especially important at low end light levels. The unit is easily surface mounted and has spring contact terminal blocks for all electrical and data connections.

An easy to read onboard display and four button user interface allows selection of Modes, 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,

Quick Start Instructions:

1. Connect the QolorFLEX 4x5A Dimmer to your DMX controller using the DMX D1+, D1-, and Ground terminals on the left end of the unit. As needed, DMX out connections can be made using the D2+, D2-, and Ground terminals.
2. Connect your load to the output channel spring 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 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 5A per channel.**
3. Connect the appropriate power supply providing 12-24VDC to the power input spring terminals. **Note*-The size of the power supply must match the tape being used in both voltage and watts. QolorFLEX™ 4x5A Dimmer's maximum output power rating is: 240W (12V) or 480W (24V).**

and setting the device's operating profile. The QolorFLEX4x5A Dimmer is also RDM capable. Both DMX and Standalone Modes are available depending on your application. The unit requires a separate power supply providing input voltage of 12-24VDC. The maximum current load per channel is 5A with a maximum device output of 20A.

The QolorFLEX 4x5A Dimmer operates perfectly with City Theatrical's QolorFLEX LED tape, the LED tape of professionals on Broadway, network television, and architectural lighting installations.

Mode - Sets the Mode to either DMX (Run 1) or Standalone (Run 2).

Control Interface



Operation:

1. Press "Up" to scroll thru menu choices
2. Press "Select" to enable programming- (display flashes)
3. Use "Up" or "Down" buttons to set values
4. Press "Enter" to save value.

The six function menus are:



DMX Address



DMX Channel Qty



Output Resolution



PWM Frequency



Dimming Curve Value



Operating Profile

Note- To restore factory defaults, press and hold both "Enter" and "Select" for five seconds until display goes out.*

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

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.**

DMX Channel Qty- (Factory default is 05)

SETTINGS:

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

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.

Output Resolution- (Factory default is 16)

Resolution determines the smoothness of the dimming. 8 bit uses 1 DMX channel, while 16 bit uses 2.

AVAILABLE SETTINGS: 08 or 16

PWM Frequency (Factory default is 05)

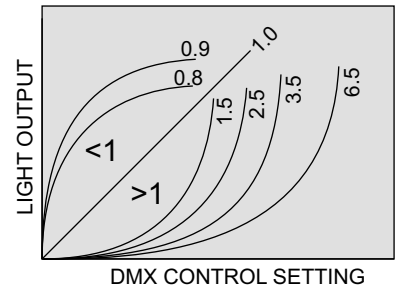
PWM frequency is used to tune the dimmer for flicker free operation when used with high speed cameras. A high PWM value produces the least amount of flicker. A low PWM value produces better dimming quality. Always perform a camera test to confirm optimal results.

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 1.1)*

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 dimming	For output 1,3 Fine dimming	For output 2,4 dimming
Channel 3	—	For output 2,4 dimming	For all output dimming
Channel 4	—	For output 2,4 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 dimming	For output 2 dimming	For output 3,4 dimming	For output 3,4 dimming
Channel 4		For output 2 Fine dimming	For all output dimming	For all output dimming
Channel 5		For output 3,4 dimming	For all output dimming	Strobe Effects
Channel 6		For output 3,4 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 dimming	For output 2 Fine dimming	For output 4 dimming	For output 4 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 dimming		
Channel 8		For output 4 Fine dimming		

Should the dimmer experience an input voltage issue or output overload the display will flash repeatedly. Once the issue is corrected, power cycle to reset the unit.