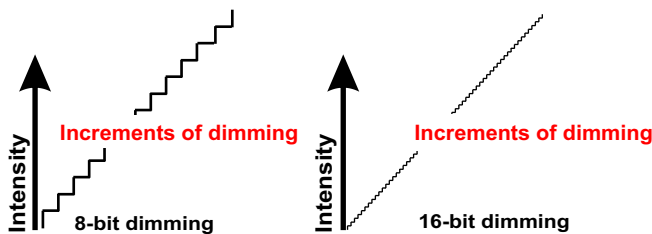


## 16 BIT DIMMING DELAY

### What is 16-bit Dimming?

Traditional halogen pars have an advantage over most LED pars when it comes to smooth dimming and cross-fading. This is due to the fact that most LED pars use an 8-bit digital dimming processor. Since there are only 256 increments of dimming with 8-bit, you can see a jittering effect when dimming. This is especially evident when the dimming is close to off (DMX value 000).

We've solved that problem with our new 16-bit dimming processor. With thousands of incremental dimming steps, it produces butter-smooth dimming that rivals halogen pars. Also, we've added a dedicated 'Dimming Delay' channel, allowing you to set a predetermined delay time. You'll find this useful for dramatic, time-delayed 'fade off', 'fade on' and 'cross-fades'.



### Delay Channel

The **Delay Channel** feature affects the rate of **Fade On**, **Fade Off**, and **Cross-Fades**. To use the Dimming Delay feature, the fixture must be set to '**Channel Mode: 8 ch.**' Using your DMX controller, adjust the value of fixture channel 8. Value 000 is the fastest (no delay) and value 255 is the slowest delay possible (approximately 2 minutes).

The fixture will raise and lower the LED intensity at the rate determined by the Dimming Delay channel (ch.8). Using this feature enables the 16-bit processor.



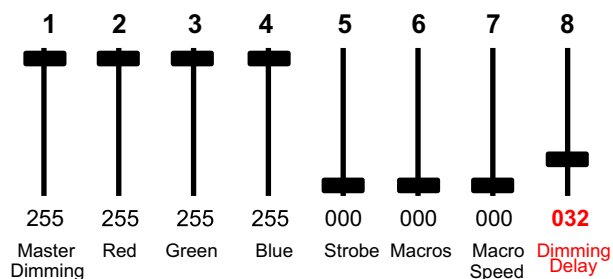
*To obtain the smoothest cross-fades possible, use the 'Delay Channel' in your fixture (16-bit), rather than the cross-fade feature within your controller. If you use the cross-fade feature within your controller, you will be limited to 8-bit (see chart).*

### Example of how to create a 5 second dimming delay

Using your controller, adjust fixture channels 1, 2, 3, 4, to value 255 (see chart below). Adjust channel 8 to value 032. Now turn off channel 1 very quickly (dimmer ch), you will see the 3 colors 'fade off' at a very smooth rate of 5 seconds. Conversely, turn channel 1 back on (255) very quickly. You will see the colors 'fade on' at the same rate of 5 seconds. Move color faders 2, 3, and 4 up and down and you will see the colors cross-fade at a smooth 5 second delay.

#### \*Dimming delay times (fixture ch. 8)

DMX value 000 = 0 seconds  
 DMX value 032 = 5 seconds  
 DMX value 064 = 10 seconds  
 DMX value 096 = 15 seconds  
 DMX value 128 = 22 seconds  
 DMX value 255 = 120 seconds



\*Delay times above are approximate