



# INFINIBAR

DMX Profile Specification

Controller Firmware V1.0

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**Mode 1: CCT & RGB**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
3	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
245 - 255	97 - 100	Full Plus Green		
4	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
5	0 - 255	0 - 100	<b>Red</b>	0 - 100%
6	0 - 255	0 - 100	<b>Green</b>	0 - 100%
7	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
8	0 - 19	0 - 7	<b>Strobe</b>	No Effect
	20 - 255	8 - 100		1 Hz - 25 Hz

**Mode 2: CCT**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
3	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
245 - 255	97 - 100	Full Plus Green		
4	0 - 19	0 - 7	<b>Strobe</b>	No Effect
	20 - 255	8 - 100		1 Hz - 25 Hz

**Mode 3: CCT & HSI**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
3	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect Full Minus Green - 99% - - 1% Neutral / No Effect 1% - 99% Full Plus Green
	11 - 20	5 - 8		
	21 - 119	9 - 47		
	120 - 145	48 - 57		
	146 - 244	58 - 96		
245 - 255	97 - 100			
4	0 - 255	0 - 100	<b>CCT ↔ HSI</b>	Crossfade to Color
5	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
6	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
7	0 - 19	0 - 7	<b>Strobe</b>	No Effect 1 Hz - 25 Hz
	20 - 255	80 - 100		

**Mode 4: RGB**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5	0 - 19	0 - 7	<b>Strobe</b>	No Effect 1 Hz - 25 Hz
	20 - 255	80 - 100		

**Mode 5: HSI**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	Hue	1° - 360°
3	0 - 255	0 - 100	Saturation	0 - 100%
4	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
5	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

**Mode 6: XY**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	X Coordinate	0 - 0.8
3	0 - 255	0 - 100	Y Coordinate	0 - 0.8
4	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

**Mode 7: System FX - List of Effects**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 28 29 - 32 33 - 36 37 - 100	FX Selection	Paparazzi II Lightning III TV III Fire III Faulty Bulb III Pulsing III Cop Car III Party Lights II Fireworks II Reserved
3 - 10	See FX Parameter Tables in Following Pages			

**FX Parameter: Paparazzi II**

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
4	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
5	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	0.2s - 2s
6	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	1s - 18s
7	0 - 10	0 - 5	<b>Stop / Play</b>	Stop
	11 - 127	6 - 50		Play
	128 - 255	51 - 100		Reserved

**FX Parameter: Lightning III**

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	<b>Mode Select</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 255	9 - 100		Reserved
<b>CCT</b>				
4	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
5	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
6	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	1.5s - 26s
7	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	3s - 30s

### FX Parameter: Lightning III, continued

HSI				
<b>4</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>5</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>HSI Base CCT</b>	2000 K - 10000 K
<b>7</b>	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	1.5s - 26s
<b>8</b>	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	3s - 30s
<b>9</b>	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Trigger / Play</b>	Stop Trigger Play

### FX Parameter: TV III

Channel	Value	Percent	Function	
<b>3</b>	0 - 9 10 - 19 20 - 255	0 - 4 5 - 8 9 - 100	<b>Mode Select</b>	CCT HSI Reserved
CCT				
<b>4</b>	0 - 255	0 - 100	<b>CCT Lower limit</b>	2000 K - 10000 K
<b>5</b>	0 - 255	0 - 100	<b>CCT Upper limit</b>	2000 K - 10000 K
<b>6</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>G / M</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>7</b>	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	0.5s - 5s
<b>8</b>	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	2.5s - 15s



**FX Parameter: TV III, continued**

HSI				
<b>4</b>	0 - 255	0 - 100	<b>HUE Lower limit</b>	1° - 360°
<b>5</b>	0 - 255	0 - 100	<b>HUE Lower limit</b>	1° - 360°
<b>6</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>HSI Base CCT</b>	2000 K - 10000 K
<b>8</b>	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	0.5s - 5s
<b>9</b>	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	2.5s - 15s
<b>10</b>	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Play</b>	Stop Play Reserved

**FX Parameter: Fire III**

Channel	Value	Percent	Function	
<b>3</b>	0 - 9 10 - 19 20 - 255	0 - 4 5 - 8 9 - 100	<b>Mode Select</b>	CCT HSI Reserved
CCT				
<b>4</b>	0 - 255	0 - 100	<b>CCT Lower limit</b>	1800 K - 10000 K
<b>5</b>	0 - 255	0 - 100	<b>CCT Upper limit</b>	1800 K - 10000 K
<b>6</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>G / M</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green

### FX Parameter: Fire III, continued

HSI				
<b>4</b>	0 - 255	0 - 100	<b>HUE Lower limit</b>	1° - 360°
<b>5</b>	0 - 255	0 - 100	<b>HUE Upper limit</b>	1° - 360°
<b>6</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>HSI Base CCT</b>	2000 K - 10000 K
<b>8</b>	0 - 255	0 - 100	<b>Frequency</b>	18 - 180 /mins
<b>9</b>	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Play</b>	Stop Loop Reserved

### FX Parameter: Faulty Bulb III

Channel	Value	Percent	Function	
<b>3</b>	0 - 9 10 - 19 20 - 255	0 - 4 5 - 8 9 - 100	<b>Mode Select</b>	CCT HSI Reserved
CCT				
<b>4</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>5</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>G / M</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>6</b>	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	0.3s - 1s
<b>7</b>	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	2.5s - 15s

**FX Parameter: Faulty Bulb III, continued**

HSI				
<b>4</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>5</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>HSI Base CCT</b>	2000 K - 10000 K
<b>7</b>	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	0.3s - 1s
<b>8</b>	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	1.8s - 7.5s
<b>9</b>	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Play</b>	Stop Play Reserved

**FX Parameter: Pulsing III**

Channel	Value	Percent	Function	
<b>3</b>	0 - 9 10 - 19 20 - 255	0 - 4 5 - 8 9 - 100	<b>Mode Select</b>	CCT HSI Reserved
CCT				
<b>4</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>5</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>G / M</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green

**FX Parameter: Pulsing III, continued**

HSI				
<b>4</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>5</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>HSI Base CCT</b>	2000 K - 10000 K
<b>7</b>	0 - 255	0 - 100	<b>Pluses</b>	50 - 200 /mins
<b>8</b>	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Play</b>	Stop Play Reserved

**FX Parameter: Cop Car III**

<b>Channel</b>	<b>Value</b>	<b>Percent</b>	<b>Function</b>	
<b>3</b>	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 100	<b>Colors Combinations</b>	Red Blue Red + Blue Blue + White Red + Blue + White Reserved
<b>4</b>	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 100	<b>Frequency</b>	Single Double Quad Quint Quint all Cycle Reserved
<b>5</b>	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Play</b>	Stop Play Reserved

**FX Parameter: Party Lights II**

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
4	0 - 255	0 - 100	<b>Speed</b>	1s - 60s
5	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Play</b>	Stop Play Reserved

**FX Parameter: Fireworks II**

Channel	Value	Percent	Function	
3	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Color Combinations</b>	CCT HUE CCT+HUE Reserved
4	0 - 255	0 - 100	<b>Intervals time Lower limit</b>	0.5s - 9s
5	0 - 255	0 - 100	<b>Intervals time Upper limit</b>	2s - 11s
6	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	<b>Stop / Play</b>	Stop Play Reserved

**Mode 8: Pixel FX - List of Effects**

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 10 11 - 60 61 - 120 121 - 255	0 - 5 6 - 24 25 - 47 48 - 100	<b>Play/Pause/Stop</b>	Play Pause Stop Reserved
3	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 28 29 - 100	<b>Effect Selection</b>	Color Fade Color Cycle One Pixel Chase Two Pixel Chase Three Pixel Chase Rainbow Pixel Fire Reserved
4 - 36	See FX Parameter Tables in Following Pages			

**FX Parameter: Color Fade**

Channel	Value	Percent	Function	
4	0 - 255	0 - 100	<b>No. of Colors</b>	See attached table 1
5	0 - 127 128 - 255	0 - 50 51 - 100	<b>Move</b>	Left Right
6	0 - 255	0 - 100	<b>Speed</b>	1cm/s - 640cm/s
7	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Color 1 Mode</b>	CCT HSI Black Reserved

**FX Parameter: Color Fade, continued**

<b>CCT</b>				
<b>8</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>9</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>8</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>9</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>10</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>11</b>	0 - 9	0 - 4	<b>Color 2 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>12</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>13</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>12</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>13</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>14</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>15</b>	0 - 9	0 - 4	<b>Color 3 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved

**FX Parameter: Color Fade, continued**

<b>CCT</b>				
<b>16</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>17</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>16</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>17</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>18</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>19</b>	0 - 9	0 - 4	<b>Color 4 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>20</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>21</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>20</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>21</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>22</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K



**FX Parameter: Color Cycle**

Channel	Value	Percent	Function	
4	0 - 255	0 - 100	<b>No. of Colors</b>	See attached table 1
5	0 - 255	0 - 100	<b>Speed</b>	0.1s - 10s
6	0 - 127 128 - 255	0 - 50 51 - 100	<b>Transition</b>	Step Smooth
7	0 - 127 128 - 255	0 - 50 51 - 100	<b>Move</b>	Left Right
8	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Color 1 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
9	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
10	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
9	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
10	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
11	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
12	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Color 2 Mode</b>	CCT HSI Black Reserved

**FX Parameter: Color Cycle, continued**

<b>CCT</b>				
<b>13</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>14</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>13</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>14</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>15</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>16</b>	0 - 9	0 - 4	<b>Color 3 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>17</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>18</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>17</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>18</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>19</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>20</b>	0 - 9	0 - 4	<b>Color 4 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved

### FX Parameter: Color Cycle, continued

<b>CCT</b>				
<b>21</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>22</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>21</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>22</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>23</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K

### FX Parameter: One Pixel Chase

<b>Channel</b>	<b>Value</b>	<b>Percent</b>	<b>Function</b>	
<b>4</b>	0 - 255	0 - 100	<b>Pixel Size</b>	See attached table 2
<b>5</b>	0 - 255	0 - 100	<b>Speed</b>	1cm/s - 640cm/s
<b>6</b>	0 - 127	0 - 50	<b>Departure</b>	1 Way
	128 - 255	51 - 100		2 Way
<b>7</b>	0 - 60	0 - 24	<b>Move (1 Way)</b>	Left
	61 - 120	25 - 48		Right
	121 - 255	49 - 100		Loop
	0 - 127	0 - 50	<b>Move (2 Way)</b>	Rebound
128 - 255	51 - 100	Crossover		
<b>1 Way</b>				
<b>8</b>	0 - 9	0 - 4	<b>Pixel 1 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved

**FX Parameter: One Pixel Chase, continued**

<b>CCT</b>				
<b>9</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>10</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>9</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>10</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>11</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>12</b>	0 - 255	0 - 100	<b>Background Intensity</b>	0 - 100%
<b>13</b>	0 - 9	0 - 4	<b>Background Color Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>14</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>15</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>14</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>15</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>16</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K

**FX Parameter: One Pixel Chase, continued**

<b>2 Way</b>				
<b>8</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 1 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>9</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>10</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
<b>9</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>10</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>11</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>12</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 2 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>13</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>14</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green

**FX Parameter: One Pixel Chase, continued**

<b>HSI</b>				
<b>13</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>14</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>15</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>16</b>	0 - 255	0 - 100	<b>Background Intensity</b>	0 - 100%
<b>17</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Background Color Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>18</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>19</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
<b>18</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>19</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>20</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K

## FX Parameter: Two Pixel Chase

Channel	Value	Percent	Function	
4	0 - 255	0 - 100	<b>Pixel Size</b>	See attached table 3
5	0 - 255	0 - 100	<b>Speed</b>	1cm/s - 640cm/s
6	0 - 127 128 - 255	0 - 50 51 - 100	<b>Departure</b>	1 Way 2 Way
7	0 - 60 61 - 120 121 - 255	0 - 24 25 - 48 49 - 100	<b>Move (1 Way)</b>	Left Right Loop
	0 - 127 128 - 255	0 - 50 51 - 100	<b>Move (2 Way)</b>	Rebound Crossover
<b>1 Way</b>				
8	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 1 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
9	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
10	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
9	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
10	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
11	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
12	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 2 Mode</b>	CCT HSI Black Reserved

**FX Parameter: Two Pixel Chase, continued**

<b>CCT</b>				
<b>13</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>14</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>13</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>14</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>15</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>16</b>	0 - 255	0 - 100	<b>Background Intensity</b>	0 - 100%
<b>17</b>	0 - 9	0 - 4	<b>Background Color Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>18</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>19</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>18</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>19</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>20</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K



**FX Parameter: Two Pixel Chase, continued**

<b>2 Way</b>				
<b>8</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 1 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>9</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>10</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
<b>9</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>10</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>11</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>12</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 2 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>13</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>14</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green

**FX Parameter: Two Pixel Chase, continued**

<b>HSI</b>				
<b>13</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>14</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>15</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>16</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 3 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>17</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>18</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
<b>17</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>18</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>19</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>20</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 4 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>21</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>22</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green

**FX Parameter: Two Pixel Chase, continued**

<b>HSI</b>				
<b>21</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>22</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>23</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>24</b>	0 - 255	0 - 100	<b>Background Intensity</b>	0 - 100%
<b>25</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Background Color Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>26</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>27</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
<b>26</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>27</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>28</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K

### FX Parameter: Three Pixel Chase

Channel	Value	Percent	Function	
4	0 - 255	0 - 100	<b>Pixel Size</b>	See attached table 4
5	0 - 255	0 - 100	<b>Speed</b>	1cm/s - 640cm/s
6	0 - 127 128 - 255	0 - 50 51 - 100	<b>Departure</b>	1 Way 2 Way
7	0 - 60 61 - 120 121 - 255	0 - 24 25 - 48 49 - 100	<b>Move (1 Way)</b>	Left Right Loop
	0 - 127 128 - 255	0 - 50 51 - 100	<b>Move (2 Way)</b>	Rebound Crossover
<b>1 Way</b>				
8	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 1 Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
9	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
10	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
9	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
10	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
11	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
12	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 2 Mode</b>	CCT HSI Black Reserved

**FX Parameter: Three Pixel Chase, continued**

<b>CCT</b>				
<b>13</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>14</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>13</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>14</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>15</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>16</b>	0 - 9	0 - 4	<b>Pixel 3 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>17</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>18</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green

**FX Parameter: Three Pixel Chase, continued**

<b>HSI</b>				
<b>17</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>18</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>19</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>20</b>	0 - 255	0 - 100	<b>Background Intensity</b>	0 - 100%
<b>21</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Background Color Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
<b>22</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>23</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
<b>22</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>23</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>24</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>2 Way</b>				
<b>8</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Pixel 1 Mode</b>	CCT HSI Black Reserved

**FX Parameter: Three Pixel Chase, continued**

<b>CCT</b>				
<b>9</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>10</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>9</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>10</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>11</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>12</b>	0 - 9	0 - 4	<b>Pixel 2 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>13</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>14</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>13</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>14</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>15</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>16</b>	0 - 9	0 - 4	<b>Pixel 3 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved

**FX Parameter: Three Pixel Chase, continued**

<b>CCT</b>				
<b>17</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>18</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>17</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>18</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>19</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>20</b>	0 - 9	0 - 4	<b>Pixel 4 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>21</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>22</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>21</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>22</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>23</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>24</b>	0 - 9	0 - 4	<b>Pixel 5 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved



**FX Parameter: Three Pixel Chase, continued**

<b>CCT</b>				
<b>25</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>26</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>25</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>26</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>27</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K
<b>28</b>	0 - 9	0 - 4	<b>Pixel 6 Mode</b>	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
<b>CCT</b>				
<b>29</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>30</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green

**FX Parameter: Three Pixel Chase, continued**

HSI				
<b>29</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>30</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>31</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
<b>32</b>	0 - 255	0 - 100	<b>Background Intensity</b>	0 - 100%
<b>33</b>	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Background Color Mode</b>	CCT HSI Black Reserved
CCT				
<b>34</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>35</b>	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
HSI				
<b>34</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>35</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>36</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K

**FX Parameter: Rainbow**

Channel	Value	Percent	Function	
<b>4</b>	0 - 127 128 - 255	0 - 50 51 - 100	<b>Move</b>	Left Right
<b>5</b>	0 - 255	0 - 100	<b>Speed</b>	1cm/s - 640cm/s

**FX Parameter: Pixel Fire**

Channel	Value	Percent	Function	
4	0 - 255	0 - 100	<b>Fire Upper Intensity</b>	0 - 100%
5	0 - 255	0 - 100	<b>Frequency</b>	1 Hz - 10 Hz
6	0 - 127 128 - 255	0 - 50 51 - 100	<b>Move</b>	Horizontal Vertical
7	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Fire Mode</b>	CCT HSI Black Reserved
<b>CCT</b>				
8	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
9	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	<b>Green / Magenta</b>	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
<b>HSI</b>				
8	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
9	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
10	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000K - 10000K
11	0 - 255	0 - 100	<b>Background Intensity</b>	0 - 100%
12	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	<b>Background Color Mode</b>	CCT HSI Black Reserved

**FX Parameter: Pixel Fire, continued**

<b>CCT</b>				
<b>13</b>	0 - 255	0 - 100	<b>CCT</b>	2000K - 10000K
<b>14</b>	0 - 10	0 - 4	<b>Green / Magenta</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		-99% - -1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>HSI</b>				
<b>13</b>	0 - 255	0 - 100	<b>HUE</b>	1° - 360°
<b>14</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>15</b>	0 - 10	0 - 4	<b>HSI Base CCT</b>	6500 K
	11 - 255	5 - 100		2000K - 10000K

**Table 1 (PB3/PB6/PB12)**

<b>Value</b>	<b>Percent</b>	<b>Function</b>
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 255	13 - 100	Reserved

**Table 2 (PB3)**

<b>Value</b>	<b>Percent</b>	<b>Function</b>
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 39	13 - 16	6
40 - 49	17 - 20	8
50 - 255	21 - 100	Reserved

**Table 2 (PB6)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 39	13 - 16	6
40 - 49	17 - 20	8
50 - 59	21 - 24	12
60 - 69	25 - 28	16
70 - 255	29 - 100	Reserved

**Table 2 (PB12)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 39	13 - 16	6
40 - 49	17 - 20	8
50 - 59	21 - 24	12
60 - 69	25 - 28	16
70 - 79	29 - 32	24
80 - 89	33 - 36	32
90 - 255	37 - 100	Reserved

**Table 3 (PB3)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 255	13 - 100	Reserved

**Table 3 (PB6)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 39	13 - 16	6
40 - 49	17 - 20	8
50 - 255	21 - 100	Reserved

**Table 3 (PB12)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 39	13 - 16	6
40 - 49	17 - 20	8
50 - 59	21 - 24	12
60 - 69	25 - 28	16
70 - 255	29 - 100	Reserved

**Table 4 (PB3)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 255	9 - 100	Reserved

**Table 4 (PB6)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 39	13 - 16	6
40 - 255	17 - 100	Reserved

**Table 4 (PB12)**

Value	Percent	Function
0 - 9	0 - 4	2
10 - 19	5 - 8	3
20 - 29	9 - 12	4
30 - 39	13 - 16	6
40 - 49	17 - 20	8
50 - 59	21 - 24	12
60 - 255	25 - 100	Reserved

**Mode 9: Light Engine CCT & RGB 4 Pixels**

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>3</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
245 - 255	97 - 100	Full Plus Green		
<b>4</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>5</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>Light Engine 2</b>				
<b>8</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>9</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>10</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
245 - 255	97 - 100	Full Plus Green		
<b>11</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>12</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>13</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>14</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%



**Mode 9: Light Engine CCT & RGB 4 Pixels, continued**

<b>Light Engine 3</b>				
<b>15</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>16</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>17</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>18</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>19</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>20</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>21</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>Light Engine 4</b>				
<b>22</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>23</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>24</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>25</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>26</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>27</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>28</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 10: Light Engine CCT & RGB 6 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>3</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>4</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>5</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>8 - 35</b>	<b>Light Engine 2 - 5</b>			
<b>Light Engine 6</b>				
<b>36</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>37</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>38</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>39</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>40</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>41</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>42</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 11: Light Engine CCT & RGB 8 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
3	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
245 - 255	97 - 100	Full Plus Green		
4	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
5	0 - 255	0 - 100	<b>Red</b>	0 - 100%
6	0 - 255	0 - 100	<b>Green</b>	0 - 100%
7	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
8 - 49	<b>Light Engine 2 - 7</b>			
<b>Light Engine 8</b>				
50	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
51	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
52	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
245 - 255	97 - 100	Full Plus Green		
53	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
54	0 - 255	0 - 100	<b>Red</b>	0 - 100%
55	0 - 255	0 - 100	<b>Green</b>	0 - 100%
56	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

## Mode 12: Light Engine CCT & RGB 12 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>3</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>4</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>5</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>8 - 77</b>	<b>Light Engine 2 - 11</b>			
<b>Light Engine 12</b>				
<b>78</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>79</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>80</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>81</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>82</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>83</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>84</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 13: Light Engine CCT & RGB 16 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>3</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>4</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>5</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>8 - 105</b>	<b>Light Engine 2 - 15</b>			
<b>Light Engine 16</b>				
<b>106</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>107</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>108</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>109</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>110</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>111</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>112</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 14: Light Engine CCT & RGB 24 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>3</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>4</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>5</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>8 - 161</b>	<b>Light Engine 2 - 23</b>			
<b>Light Engine 24</b>				
<b>162</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>163</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>164</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>165</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>166</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>167</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>168</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 15: Light Engine CCT & RGB 32 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>3</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>4</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>5</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>8 - 217</b>	<b>Light Engine 2 - 31</b>			
<b>Light Engine 32</b>				
<b>218</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>219</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>220</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>221</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>222</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>223</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>224</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 16: Light Engine CCT & RGB 48 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>3</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>4</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>5</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>8 - 329</b>	<b>Light Engine 2 - 47</b>			
<b>Light Engine 48</b>				
<b>330</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>331</b>	0 - 255	0 - 100	<b>CCT</b>	2000 K - 10000 K
<b>332</b>	0 - 10	0 - 4	<b>G / M</b>	Neutral / No Effect
	11 - 20	5 - 8		Full Minus Green
	21 - 119	9 - 47		- 99% - - 1%
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		1% - 99%
	245 - 255	97 - 100		Full Plus Green
<b>333</b>	0 - 255	0 - 100	<b>CCT ↔ RGB</b>	Crossfade to Color
<b>334</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>335</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>336</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%



### Mode 17: Light Engine RGB 4 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>3</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>4</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>Light Engine 2</b>				
<b>5</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>6</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>7</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>8</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>Light Engine 3</b>				
<b>9</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>10</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>11</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>12</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
<b>Light Engine 4</b>				
<b>13</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>14</b>	0 - 255	0 - 100	<b>Red</b>	0 - 100%
<b>15</b>	0 - 255	0 - 100	<b>Green</b>	0 - 100%
<b>16</b>	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 18: Light Engine RGB 6 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5 - 20	<b>Light Engine 2 - 5</b>			
<b>Light Engine 6</b>				
21	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
22	0 - 255	0 - 100	<b>Red</b>	0 - 100%
23	0 - 255	0 - 100	<b>Green</b>	0 - 100%
24	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 19: Light Engine RGB 8 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5 - 28	<b>Light Engine 2 - 7</b>			
<b>Light Engine 8</b>				
29	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
30	0 - 255	0 - 100	<b>Red</b>	0 - 100%
31	0 - 255	0 - 100	<b>Green</b>	0 - 100%
32	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 20: Light Engine RGB 12 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5 - 44	<b>Light Engine 2 - 11</b>			
<b>Light Engine 12</b>				
45	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
46	0 - 255	0 - 100	<b>Red</b>	0 - 100%
47	0 - 255	0 - 100	<b>Green</b>	0 - 100%
48	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 21: Light Engine RGB 16 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5 - 68	<b>Light Engine 2 - 17</b>			
<b>Light Engine 18</b>				
69	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
70	0 - 255	0 - 100	<b>Red</b>	0 - 100%
71	0 - 255	0 - 100	<b>Green</b>	0 - 100%
72	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 22: Light Engine RGB 24 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5 - 92	<b>Light Engine 2 - 23</b>			
<b>Light Engine 24</b>				
93	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
94	0 - 255	0 - 100	<b>Red</b>	0 - 100%
95	0 - 255	0 - 100	<b>Green</b>	0 - 100%
96	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

### Mode 23: Light Engine RGB 32 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5 - 124	<b>Light Engine 2 - 31</b>			
<b>Light Engine 32</b>				
125	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
126	0 - 255	0 - 100	<b>Red</b>	0 - 100%
127	0 - 255	0 - 100	<b>Green</b>	0 - 100%
128	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

**Mode 24: Light Engine RGB 48 Pixels**

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Red</b>	0 - 100%
3	0 - 255	0 - 100	<b>Green</b>	0 - 100%
4	0 - 255	0 - 100	<b>Blue</b>	0 - 100%
5 - 188	<b>Light Engine 2 - 47</b>			
<b>Light Engine 48</b>				
189	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
190	0 - 255	0 - 100	<b>Red</b>	0 - 100%
191	0 - 255	0 - 100	<b>Green</b>	0 - 100%
192	0 - 255	0 - 100	<b>Blue</b>	0 - 100%

**Mode 25: Light Engine HSI 4 Pixels**

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
3	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
4	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
<b>Light Engine 2</b>				
5	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
6	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
7	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
8	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K

### Mode 25: Light Engine HSI 4 Pixels, continued

<b>Light Engine 3</b>				
<b>9</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>10</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>11</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>12</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
<b>Light Engine 4</b>				
<b>13</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>14</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>15</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>16</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K

### Mode 26: Light Engine HSI 6 Pixels

<b>Channel</b>	<b>Value</b>	<b>Percent</b>	<b>Function</b>	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>3</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>4</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
<b>5 - 20</b>	<b>Light Engine 2 - 5</b>			
<b>Light Engine 6</b>				
<b>21</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>22</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>23</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>24</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K

### Mode 27: Light Engine HSI 8 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
3	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
4	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
5 - 28	<b>Light Engine 2 - 7</b>			
<b>Light Engine 8</b>				
29	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
30	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
31	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
32	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K

### Mode 28: Light Engine HSI 12 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
1	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
2	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
3	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
4	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
5 - 44	<b>Light Engine 2 - 11</b>			

### Mode 28: Light Engine HSI 12 Pixels, continued

Light Engine 12				
45	0 - 255	0 - 100	Intensity	0 - 100%
46	0 - 255	0 - 100	Hue	1° - 360°
47	0 - 255	0 - 100	Saturation	0 - 100%
48	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K

### Mode 29: Light Engine HSI 16 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	Hue	1° - 360°
3	0 - 255	0 - 100	Saturation	0 - 100%
4	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
5 - 60	Light Engine 2 - 15			
Light Engine 16				
61	0 - 255	0 - 100	Intensity	0 - 100%
62	0 - 255	0 - 100	Hue	1° - 360°
63	0 - 255	0 - 100	Saturation	0 - 100%
64	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K



### Mode 30: Light Engine HSI 24 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>3</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>4</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
<b>5 - 92</b>	<b>Light Engine 2 - 23</b>			
<b>Light Engine 24</b>				
<b>93</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>94</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>95</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>96</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K

### Mode 31: Light Engine HSI 32 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>3</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>4</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
<b>5 - 124</b>	<b>Light Engine 2 - 31</b>			
<b>Light Engine 32</b>				
<b>125</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>126</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>127</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>128</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K

### Mode 32: Light Engine HSI 48 Pixels

Channel	Value	Percent	Function	
<b>Light Engine 1</b>				
<b>1</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>2</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>3</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>4</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K
<b>5 - 188</b>	<b>Light Engine 2 - 47</b>			
<b>Light Engine 48</b>				
<b>189</b>	0 - 255	0 - 100	<b>Intensity</b>	0 - 100%
<b>190</b>	0 - 255	0 - 100	<b>Hue</b>	1° - 360°
<b>191</b>	0 - 255	0 - 100	<b>Saturation</b>	0 - 100%
<b>192</b>	0 - 10 11 - 255	0 - 4 5 - 100	<b>HSI Base CCT</b>	6500 K 2000 K - 10000 K

## Equations for Conversion

### CCT Conversion

8-bit

CCT	DMX Value
2700 K	22
3200 K	38
3800 K	57
4300 K	73
4800 K	89
5600 K	115
6500 K	143
7500 K	175

$$\text{DMX Value} = \frac{\text{Desired CCT} - 2000}{31.373}$$

$$\text{CCT} = (\text{DMX Value} * 31.373) + 2000$$

### x, y Coordinate to DMX Value Conversion

8-bit

$$\text{DMX}_x = \frac{\text{xValue} * 255}{0.8}$$

$$\text{DMX}_y = \frac{\text{yValue} * 255}{0.8}$$