



INFINIBAR

DMX Profile Specification

Controller Firmware V2.0

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Mode 1: CCT & RGB

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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	CCT ↔ RGB	Crossfade to Color
5	0 - 255	0 - 100	Red	0 - 100%
6	0 - 255	0 - 100	Green	0 - 100%
7	0 - 255	0 - 100	Blue	0 - 100%
8	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

Mode 2: CCT

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

Mode 3: CCT & HSI

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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	CCT ↔ HSI	Crossfade to Color
5	0 - 255	0 - 100	Hue	1° - 360°
6	0 - 255	0 - 100	Saturation	0 - 100%
7	0 - 19 20 - 255	0 - 7 80 - 100	Strobe	No Effect 1 Hz - 25 Hz

Mode 4: RGB

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

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

FX Parameter: Paparazzi II

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	CCT	2000 K - 10000 K
4	0 - 10	0 - 4	G / M	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	Intervals time Lower limit	0.2s - 2s
6	0 - 255	0 - 100	Intervals time Upper limit	1s - 18s
7	0 - 10	0 - 5	Stop / Play	Stop
	11 - 127	6 - 50		Play
	128 - 255	51 - 100		Reserved

FX Parameter: Lightning III

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Mode Select	CCT
	10 - 19	5 - 8		HSI
	20 - 255	9 - 100		Reserved
CCT				
4	0 - 255	0 - 100	CCT	2000 K - 10000 K
5	0 - 10	0 - 4	G / M	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	Intervals time Lower limit	1.5s - 26s
7	0 - 255	0 - 100	Intervals time Upper limit	3s - 30s

FX Parameter: Lightning III, continued

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

FX Parameter: TV III

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

FX Parameter: TV III, continued

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

FX Parameter: Fire III

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

FX Parameter: Fire III, continued

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

FX Parameter: Faulty Bulb III

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

FX Parameter: Faulty Bulb III, continued

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

FX Parameter: Pulsing III

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

FX Parameter: Pulsing III, continued

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

FX Parameter: Cop Car III

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

FX Parameter: Party Lights II

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	Saturation	0 - 100%
4	0 - 255	0 - 100	Speed	1s - 60s
5	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Play	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	Color Combinations	CCT HUE CCT+HUE Reserved
4	0 - 255	0 - 100	Intervals time Lower limit	0.5s - 9s
5	0 - 255	0 - 100	Intervals time Upper limit	2s - 11s
6	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Play	Stop Play Reserved

Mode 8: Pixel FX - List of Effects

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 60 61 - 120 121 - 255	0 - 5 6 - 24 25 - 47 48 - 100	Play/Pause/Stop	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	Effect Selection	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	No. of Colors	See attached table 1
5	0 - 127 128 - 255	0 - 50 51 - 100	Move	Left Right
6	0 - 255	0 - 100	Speed	1cm/s - 640cm/s
7	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Color 1 Mode	CCT HSI Black Reserved

FX Parameter: Color Fade, continued

CCT				
8	0 - 255	0 - 100	CCT	2000K - 10000K
9	0 - 10	0 - 4	Green / Magenta	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
HSI				
8	0 - 255	0 - 100	HUE	1°- 360°
9	0 - 255	0 - 100	Saturation	0 - 100%
10	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
11	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Color 2 Mode	CCT HSI Black Reserved
CCT				
12	0 - 255	0 - 100	CCT	2000K - 10000K
13	0 - 10	0 - 4	Green / Magenta	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
HSI				
12	0 - 255	0 - 100	HUE	1°- 360°
13	0 - 255	0 - 100	Saturation	0 - 100%
14	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
15	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Color 3 Mode	CCT HSI Black Reserved

FX Parameter: Color Fade, continued

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

FX Parameter: Color Cycle

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

FX Parameter: Color Cycle, continued

CCT				
13	0 - 255	0 - 100	CCT	2000K - 10000K
14	0 - 10	0 - 4	Green / Magenta	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
HSI				
13	0 - 255	0 - 100	HUE	1°- 360°
14	0 - 255	0 - 100	Saturation	0 - 100%
15	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
16	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Color 3 Mode	CCT HSI Black Reserved
CCT				
17	0 - 255	0 - 100	CCT	2000K - 10000K
18	0 - 10	0 - 4	Green / Magenta	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
HSI				
17	0 - 255	0 - 100	HUE	1°- 360°
18	0 - 255	0 - 100	Saturation	0 - 100%
19	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
20	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Color 4 Mode	CCT HSI Black Reserved

FX Parameter: Color Cycle, continued

CCT				
21	0 - 255	0 - 100	CCT	2000K - 10000K
22	0 - 10	0 - 4	Green / Magenta	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
HSI				
21	0 - 255	0 - 100	HUE	1°- 360°
22	0 - 255	0 - 100	Saturation	0 - 100%
23	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K

FX Parameter: One Pixel Chase

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

FX Parameter: One Pixel Chase, continued

CCT				
9	0 - 255	0 - 100	CCT	2000K - 10000K
10	0 - 10	0 - 4	Green / Magenta	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
HSI				
9	0 - 255	0 - 100	HUE	1°- 360°
10	0 - 255	0 - 100	Saturation	0 - 100%
11	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
12	0 - 255	0 - 100	Background Intensity	0 - 100%
13	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Background Color Mode	CCT HSI Black Reserved
CCT				
14	0 - 255	0 - 100	CCT	2000K - 10000K
15	0 - 10	0 - 4	Green / Magenta	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
HSI				
14	0 - 255	0 - 100	HUE	1°- 360°
15	0 - 255	0 - 100	Saturation	0 - 100%
16	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K

FX Parameter: One Pixel Chase, continued

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

FX Parameter: One Pixel Chase, continued

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

FX Parameter: Two Pixel Chase

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

FX Parameter: Two Pixel Chase, continued

CCT				
13	0 - 255	0 - 100	CCT	2000K - 10000K
14	0 - 10	0 - 4	Green / Magenta	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
HSI				
13	0 - 255	0 - 100	HUE	1°- 360°
14	0 - 255	0 - 100	Saturation	0 - 100%
15	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
16	0 - 255	0 - 100	Background Intensity	0 - 100%
17	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Background Color Mode	CCT HSI Black Reserved
CCT				
18	0 - 255	0 - 100	CCT	2000K - 10000K
19	0 - 10	0 - 4	Green / Magenta	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
HSI				
18	0 - 255	0 - 100	HUE	1°- 360°
19	0 - 255	0 - 100	Saturation	0 - 100%
20	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K

FX Parameter: Two Pixel Chase, continued

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

FX Parameter: Two Pixel Chase, continued

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

FX Parameter: Two Pixel Chase, continued

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

FX Parameter: Three Pixel Chase

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

FX Parameter: Three Pixel Chase, continued

CCT				
13	0 - 255	0 - 100	CCT	2000K - 10000K
14	0 - 10	0 - 4	Green / Magenta	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
HSI				
13	0 - 255	0 - 100	HUE	1°- 360°
14	0 - 255	0 - 100	Saturation	0 - 100%
15	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
16	0 - 9	0 - 4	Pixel 3 Mode	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
CCT				
17	0 - 255	0 - 100	CCT	2000K - 10000K
18	0 - 10	0 - 4	Green / Magenta	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				
17	0 - 255	0 - 100	HUE	1°- 360°
18	0 - 255	0 - 100	Saturation	0 - 100%
19	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
20	0 - 255	0 - 100	Background Intensity	0 - 100%
21	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Background Color Mode	CCT HSI Black Reserved
CCT				
22	0 - 255	0 - 100	CCT	2000K - 10000K
23	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	Green / Magenta	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
HSI				
22	0 - 255	0 - 100	HUE	1°- 360°
23	0 - 255	0 - 100	Saturation	0 - 100%
24	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
2 Way				
8	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Pixel 1 Mode	CCT HSI Black Reserved

FX Parameter: Three Pixel Chase, continued

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

FX Parameter: Three Pixel Chase, continued

CCT				
17	0 - 255	0 - 100	CCT	2000K - 10000K
18	0 - 10	0 - 4	Green / Magenta	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
HSI				
17	0 - 255	0 - 100	HUE	1°- 360°
18	0 - 255	0 - 100	Saturation	0 - 100%
19	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
20	0 - 9	0 - 4	Pixel 4 Mode	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
CCT				
21	0 - 255	0 - 100	CCT	2000K - 10000K
22	0 - 10	0 - 4	Green / Magenta	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
HSI				
21	0 - 255	0 - 100	HUE	1°- 360°
22	0 - 255	0 - 100	Saturation	0 - 100%
23	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
24	0 - 9	0 - 4	Pixel 5 Mode	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved

FX Parameter: Three Pixel Chase, continued

CCT				
25	0 - 255	0 - 100	CCT	2000K - 10000K
26	0 - 10	0 - 4	Green / Magenta	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
HSI				
25	0 - 255	0 - 100	HUE	1°- 360°
26	0 - 255	0 - 100	Saturation	0 - 100%
27	0 - 10	0 - 4	CCT	6500 K
	11 - 255	5 - 100		2000K - 10000K
28	0 - 9	0 - 4	Pixel 6 Mode	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Black
	30 - 255	13 - 100		Reserved
CCT				
29	0 - 255	0 - 100	CCT	2000K - 10000K
30	0 - 10	0 - 4	Green / Magenta	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				
29	0 - 255	0 - 100	HUE	1°- 360°
30	0 - 255	0 - 100	Saturation	0 - 100%
31	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
32	0 - 255	0 - 100	Background Intensity	0 - 100%
33	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Background Color Mode	CCT HSI Black Reserved
CCT				
34	0 - 255	0 - 100	CCT	2000K - 10000K
35	0 - 10 11 - 20 21 - 119 120 - 145 146 - 244 245 - 255	0 - 4 5 - 8 9 - 47 48 - 57 58 - 96 97 - 100	Green / Magenta	Neutral / No Effect Full Minus Green -99% - -1% Neutral / No Effect 1% - 99% Full Plus Green
HSI				
34	0 - 255	0 - 100	HUE	1°- 360°
35	0 - 255	0 - 100	Saturation	0 - 100%
36	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K

FX Parameter: Rainbow

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

FX Parameter: Pixel Fire

Channel	Value	Percent	Function	
4	0 - 255	0 - 100	Fire Upper Intensity	0 - 100%
5	0 - 255	0 - 100	Frequency	1 Hz - 10 Hz
6	0 - 127 128 - 255	0 - 50 51 - 100	Move	Horizontal Vertical
7	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Fire Mode	CCT HSI Black Reserved
CCT				
8	0 - 255	0 - 100	CCT	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	Green / Magenta	Neutral / No Effect Full Minus Green -99% -- 1% Neutral / No Effect 1% - 99% Full Plus Green
HSI				
8	0 - 255	0 - 100	HUE	1° - 360°
9	0 - 255	0 - 100	Saturation	0 - 100%
10	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000K - 10000K
11	0 - 255	0 - 100	Background Intensity	0 - 100%
12	0 - 9 10 - 19 20 - 29 30 - 255	0 - 4 5 - 8 9 - 12 13 - 100	Background Color Mode	CCT HSI Black Reserved

FX Parameter: Pixel Fire, continued

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

Table 1 (PB3/PB6/PB12)

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

Table 2 (PB3)

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 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	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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	CCT ↔ RGB	Crossfade to Color
5	0 - 255	0 - 100	Red	0 - 100%
6	0 - 255	0 - 100	Green	0 - 100%
7	0 - 255	0 - 100	Blue	0 - 100%
Light Engine 2				
8	0 - 255	0 - 100	Intensity	0 - 100%
9	0 - 255	0 - 100	CCT	2000 K - 10000 K
10	0 - 10	0 - 4	G / M	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
11	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
12	0 - 255	0 - 100	Red	0 - 100%
13	0 - 255	0 - 100	Green	0 - 100%
14	0 - 255	0 - 100	Blue	0 - 100%

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

Light Engine 3				
15	0 - 255	0 - 100	Intensity	0 - 100%
16	0 - 255	0 - 100	CCT	2000 K - 10000 K
17	0 - 10	0 - 4	G / M	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
18	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
19	0 - 255	0 - 100	Red	0 - 100%
20	0 - 255	0 - 100	Green	0 - 100%
21	0 - 255	0 - 100	Blue	0 - 100%
Light Engine 4				
22	0 - 255	0 - 100	Intensity	0 - 100%
23	0 - 255	0 - 100	CCT	2000 K - 10000 K
24	0 - 10	0 - 4	G / M	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
25	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
26	0 - 255	0 - 100	Red	0 - 100%
27	0 - 255	0 - 100	Green	0 - 100%
28	0 - 255	0 - 100	Blue	0 - 100%

Mode 10: Light Engine CCT & RGB 6 Pixels

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

Mode 11: Light Engine CCT & RGB 8 Pixels

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

Mode 12: Light Engine CCT & RGB 12 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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	CCT ↔ RGB	Crossfade to Color
5	0 - 255	0 - 100	Red	0 - 100%
6	0 - 255	0 - 100	Green	0 - 100%
7	0 - 255	0 - 100	Blue	0 - 100%
8 - 77	Light Engine 2 - 11			
Light Engine 12				
78	0 - 255	0 - 100	Intensity	0 - 100%
79	0 - 255	0 - 100	CCT	2000 K - 10000 K
80	0 - 10	0 - 4	G / M	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
81	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
82	0 - 255	0 - 100	Red	0 - 100%
83	0 - 255	0 - 100	Green	0 - 100%
84	0 - 255	0 - 100	Blue	0 - 100%

Mode 13: Light Engine CCT & RGB 16 Pixels

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

Mode 14: Light Engine CCT & RGB 24 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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	CCT ↔ RGB	Crossfade to Color
5	0 - 255	0 - 100	Red	0 - 100%
6	0 - 255	0 - 100	Green	0 - 100%
7	0 - 255	0 - 100	Blue	0 - 100%
8 - 161	Light Engine 2 - 23			
Light Engine 24				
162	0 - 255	0 - 100	Intensity	0 - 100%
163	0 - 255	0 - 100	CCT	2000 K - 10000 K
164	0 - 10	0 - 4	G / M	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
165	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
166	0 - 255	0 - 100	Red	0 - 100%
167	0 - 255	0 - 100	Green	0 - 100%
168	0 - 255	0 - 100	Blue	0 - 100%

Mode 15: Light Engine CCT & RGB 32 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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	CCT ↔ RGB	Crossfade to Color
5	0 - 255	0 - 100	Red	0 - 100%
6	0 - 255	0 - 100	Green	0 - 100%
7	0 - 255	0 - 100	Blue	0 - 100%
8 - 217	Light Engine 2 - 31			
Light Engine 32				
218	0 - 255	0 - 100	Intensity	0 - 100%
219	0 - 255	0 - 100	CCT	2000 K - 10000 K
220	0 - 10	0 - 4	G / M	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
221	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
222	0 - 255	0 - 100	Red	0 - 100%
223	0 - 255	0 - 100	Green	0 - 100%
224	0 - 255	0 - 100	Blue	0 - 100%

Mode 16: Light Engine CCT & RGB 48 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	CCT	2000 K - 10000 K
3	0 - 10	0 - 4	G / M	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	CCT ↔ RGB	Crossfade to Color
5	0 - 255	0 - 100	Red	0 - 100%
6	0 - 255	0 - 100	Green	0 - 100%
7	0 - 255	0 - 100	Blue	0 - 100%
8 - 329	Light Engine 2 - 47			
Light Engine 48				
330	0 - 255	0 - 100	Intensity	0 - 100%
331	0 - 255	0 - 100	CCT	2000 K - 10000 K
332	0 - 10	0 - 4	G / M	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
333	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
334	0 - 255	0 - 100	Red	0 - 100%
335	0 - 255	0 - 100	Green	0 - 100%
336	0 - 255	0 - 100	Blue	0 - 100%

Mode 17: Light Engine RGB 4 Pixels

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

Mode 18: Light Engine RGB 6 Pixels

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

Mode 19: Light Engine RGB 8 Pixels

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

Mode 20: Light Engine RGB 12 Pixels

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

Mode 21: Light Engine RGB 16 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 255	0 - 100	Red	0 - 100%
3	0 - 255	0 - 100	Green	0 - 100%
4	0 - 255	0 - 100	Blue	0 - 100%
5 - 60	Light Engine 2 - 15			
Light Engine 16				
61	0 - 255	0 - 100	Intensity	0 - 100%
62	0 - 255	0 - 100	Red	0 - 100%
63	0 - 255	0 - 100	Green	0 - 100%
64	0 - 255	0 - 100	Blue	0 - 100%

Mode 22: Light Engine RGB 24 Pixels

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

Mode 23: Light Engine RGB 32 Pixels

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

Mode 24: Light Engine RGB 48 Pixels

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

Mode 25: Light Engine HSI 4 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	CCT	6500 K 2000 K - 10000 K
Light Engine 2				
5	0 - 255	0 - 100	Intensity	0 - 100%
6	0 - 255	0 - 100	Hue	1°- 360°
7	0 - 255	0 - 100	Saturation	0 - 100%
8	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K

Mode 25: Light Engine HSI 4 Pixels, continued

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

Mode 26: Light Engine HSI 6 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	CCT	6500 K 2000 K - 10000 K
5 - 20	Light Engine 2 - 5			
Light Engine 6				
21	0 - 255	0 - 100	Intensity	0 - 100%
22	0 - 255	0 - 100	Hue	1°- 360°
23	0 - 255	0 - 100	Saturation	0 - 100%
24	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K

Mode 27: Light Engine HSI 8 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	CCT	6500 K 2000 K - 10000 K
5 - 28	Light Engine 2 - 7			
Light Engine 8				
29	0 - 255	0 - 100	Intensity	0 - 100%
30	0 - 255	0 - 100	Hue	1°- 360°
31	0 - 255	0 - 100	Saturation	0 - 100%
32	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K

Mode 28: Light Engine HSI 12 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	CCT	6500 K 2000 K - 10000 K
5 - 44	Light Engine 2 - 11			

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	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	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	CCT	6500 K 2000 K - 10000 K

Mode 30: Light Engine HSI 24 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	CCT	6500 K 2000 K - 10000 K
5 - 92	Light Engine 2 - 23			
Light Engine 24				
93	0 - 255	0 - 100	Intensity	0 - 100%
94	0 - 255	0 - 100	Hue	1°- 360°
95	0 - 255	0 - 100	Saturation	0 - 100%
96	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K

Mode 31: Light Engine HSI 32 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	CCT	6500 K 2000 K - 10000 K
5 - 124	Light Engine 2 - 31			
Light Engine 32				
125	0 - 255	0 - 100	Intensity	0 - 100%
126	0 - 255	0 - 100	Hue	1°- 360°
127	0 - 255	0 - 100	Saturation	0 - 100%
128	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K

Mode 32: Light Engine HSI 48 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	CCT	6500 K 2000 K - 10000 K
5 - 188	Light Engine 2 - 47			
Light Engine 48				
189	0 - 255	0 - 100	Intensity	0 - 100%
190	0 - 255	0 - 100	Hue	1°- 360°
191	0 - 255	0 - 100	Saturation	0 - 100%
192	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K

Mode 33: HSIC+

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1°- 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

Mode 34: Light Engine HSIC+ 4 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
Light Engine 2				
6	0 - 255	0 - 100	Intensity	0 - 100%
7	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
8	0 - 10	0 - 4	±Green	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
9	0 - 255	0 - 100	Hue	1° - 360°
10	0 - 255	0 - 100	Saturation	0 - 100%

Mode 34: Light Engine HSIC+ 4 Pixels, continued

Light Engine 3				
11	0 - 255	0 - 100	Intensity	0 - 100%
12	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
13	0 - 10	0 - 4	±Green	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
14	0 - 255	0 - 100	Hue	1° - 360°
15	0 - 255	0 - 100	Saturation	0 - 100%
Light Engine 4				
16	0 - 255	0 - 100	Intensity	0 - 100%
17	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
18	0 - 10	0 - 4	±Green	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
19	0 - 255	0 - 100	Hue	1° - 360°
20	0 - 255	0 - 100	Saturation	0 - 100%

Mode 35: Light Engine HSIC+ 6 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6 - 25	Light Engine 2 - 5			
Light Engine 6				
26	0 - 255	0 - 100	Intensity	0 - 100%
27	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
28	0 - 10	0 - 4	±Green	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
29	0 - 255	0 - 100	Hue	1° - 360°
30	0 - 255	0 - 100	Saturation	0 - 100%

Mode 36: Light Engine HSIC+ 8 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6 - 35	Light Engine 2 - 7			
Light Engine 8				
36	0 - 255	0 - 100	Intensity	0 - 100%
37	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
38	0 - 10	0 - 4	±Green	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
39	0 - 255	0 - 100	Hue	1° - 360°
40	0 - 255	0 - 100	Saturation	0 - 100%

Mode 37: Light Engine HSIC+ 12 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6 - 55	Light Engine 2 - 11			

Light Engine 12				
56	0 - 255	0 - 100	Intensity	0 - 100%
57	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
58	0 - 10	0 - 4	±Green	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
59	0 - 255	0 - 100	Hue	1° - 360°
60	0 - 255	0 - 100	Saturation	0 - 100%

Mode 38: Light Engine HSIC+ 16 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1°- 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6 - 75	Light Engine 2 - 15			
Light Engine 16				
76	0 - 255	0 - 100	Intensity	0 - 100%
77	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
78	0 - 10	0 - 4	±Green	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
79	0 - 255	0 - 100	Hue	1°- 360°
80	0 - 255	0 - 100	Saturation	0 - 100%

Mode 39: Light Engine HSIC+ 24 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1°- 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
Light Engine 2 - 23				
Light Engine 24				
116	0 - 255	0 - 100	Intensity	0 - 100%
117	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
118	0 - 10	0 - 4	±Green	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
119	0 - 255	0 - 100	Hue	1°- 360°
120	0 - 255	0 - 100	Saturation	0 - 100%

Mode 40: Light Engine HSIC+ 32 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1°- 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
Light Engine 2 - 31				
Light Engine 32				
156	0 - 255	0 - 100	Intensity	0 - 100%
157	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
158	0 - 10	0 - 4	±Green	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
159	0 - 255	0 - 100	Hue	1°- 360°
160	0 - 255	0 - 100	Saturation	0 - 100%

Mode 41: Light Engine HSIC+ 48 Pixels

Channel	Value	Percent	Function	
Light Engine 1				
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
3	0 - 10	0 - 4	±Green	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	Hue	1°- 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
Light Engine 2 - 47				
Light Engine 48				
235	0 - 255	0 - 100	Intensity	0 - 100%
237	0 - 10 11 - 255	0 - 4 5 - 100	CCT	6500 K 2000 K - 10000 K
238	0 - 10	0 - 4	±Green	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
239	0 - 255	0 - 100	Hue	1°- 360°
240	0 - 255	0 - 100	Saturation	0 - 100%

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

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

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