



MC PRO

DMX Profile Specification

Controller Firmware V1.0

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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	0 - 7	Strobe	No Effect
	20 - 255	8 - 100		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	0 - 7	Strobe	No Effect
	20 - 255	8 - 100		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 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	CCT ↔ HSI	Crossfade to Color
5	0 - 255	0 - 100	Hue	1° - 360°
6	0 - 255	0 - 100	Saturation	0 - 100%
7	0 - 19	0 - 7	Strobe	No Effect 1 Hz - 25 Hz
	20 - 255	80 - 100		

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	0 - 7	Strobe	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: GEL

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 126 127 - 255	0 - 50 51 - 100	CCT	3200K 5600K
3	0 - 29 30 - 59 60 - 255	0 - 12 13 - 24 25 - 100	Rosco / Lee	Rosco Lee Reserved
4	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 100	Series	R - Col.corr. / L - Col.corr. R - CalColor / L - Col.Filters R - Storaro / L - 600 Series R - Cinelux / L - Cosmetic R - Reserved / L - 700 Series Reserved
5	0 - 255	0 - 100	Category	See GEL Category Tables in Following Pages
6	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

GEL Category 1: Rosco - Color Correction

Channel	Value	GEL Name	GEL Number
5	0 - 1	Full CTB	3202
	2 - 3	3/4 CTB	3203
	4 - 5	1/2 CTB	3204
	6 - 7	1/3 CTB	3206
	8 - 9	1/4 CTB	3208
	10 - 11	1/8 CTB	3216
	12 - 13	Double CTB	3220
	14 - 15	Full CTO	3407
	16 - 17	3/4 CTO	3411
	18 - 19	1/2 CTO	3408
	20 - 21	1/4 CTO	3409
	22 - 23	1/8 CTO	3410
	24 - 25	Double CTO	3420
	26 - 27	Full CTS	3441
	28 - 29	1/2 CTS	3442
	30 - 31	1/4 CTS	3443
	32 - 33	1/8 CTS	3444
	34 - 35	Full Plusgreen	3304
	36 - 37	1/2 Plusgreen	3315
	38 - 39	1/4 Plusgreen	3316
	40 - 41	1/8 Plusgreen	3317
	42 - 43	Full Minusgreen	3308
	44 - 45	3/4 Minusgreen	3309
	46 - 47	1/2 Minusgreen	3313
	48 - 49	1/4 Minusgreen	3314
	50 - 51	1/8 Minusgreen	3318
	52 - 53	Fluorofilter	3310
	54 - 55	industrial Vapor	3150
	56 - 57	Urban Vapor	3152
	58 - 59	Tough Y1	3107
	60 - 61	Tough MT 54	3134
	62 - 63	Tough MTY	3106
	64 - 65	Tough MT2	3102
66 - 255	Reserved		

GEL Category 2: Rosco - CalColor

Channel	Value	GEL Name	GEL Number
5	0 - 1	15 Blue	4215
	2 - 3	30 Blue	4230
	4 - 5	60 Blue	4260
	6 - 7	90 Blue	4290
	8 - 9	7 Cyan	4307
	10 - 11	15 Cyan	4315
	12 - 103	30 Cyan	4330
	14 - 15	60 Cyan	4360
	16 - 17	90 Cyan	4390
	18 - 19	15 Green	4415
	20 - 21	30 Green	4430
	22 - 23	60 Green	4460
	24 - 25	90 Green	4490
	26 - 27	15 Yellow	4515
	28 - 29	30 Yellow	4530
	30 - 31	60 Yellow	4560
	32 - 33	90 Yellow	4590
	34 - 35	15 Red	4615
	36 - 37	30 Red	4630
	38 - 39	60 Red	4660
	40 - 41	90 Red	4690
	42 - 43	15 Magenta	4715
	44 - 45	30 Magenta	4730
	46 - 47	60 Magenta	4760
	48 - 49	90 Magenta	4790
	50 - 51	15 Pink	4815
	52 - 53	30 Pink	4830
	54 - 55	60 Pink	4860
	56 - 57	90 Pink	4890
	58 - 59	15 Lavender	4915
	60 - 61	30 Lavender	4930
	62 - 63	60 Lavender	4960
	64 - 65	90 Lavender	4990
66 - 255	Reserved		

GEL Category 3: Rosco - Storaro Selection

Channel	Value	GEL Name	GEL Number
5	0 - 1	VS Red	2001
	2 - 3	VS Orange	2002
	4 - 5	VS Yellow	2003
	6 - 7	VS Green	2004
	8 - 9	VS Cyan	2005
	10 - 11	VS Azure	2006
	12 - 13	VS Blue	2007
	14 - 15	VS indigo	2008
	16 - 17	VS Violet	2009
	18 - 19	VS Magenta	2010
	20 - 255	Reserved	

GEL Category 4: Rosco - Cinelux

Channel	Value	GEL Name	GEL Number
5	0 - 1	Bastard Amber	02
	2 - 3	Pale Bastard Amber	302
	4 - 5	No Color Straw	06
	6 - 7	Pale Gold	08
	8 - 9	Daffodil	310
	10 - 11	Straw	12
	12 - 13	Light Amber	16
	14 - 15	Gallo Gold	316
	16 - 17	Light Flame	17
	18 - 19	Flame	18
	20 - 21	Mayan Sun	318
	22 - 23	Golden Amber	21
	24 - 25	Soft Golden Amber	321
	26 - 27	Orange	23
	28 - 29	Henna Sky	325
	30 - 31	Light Red	26
	32 - 33	No Color Pink	33
	34 - 35	Blush Pink	333
	36 - 37	Flesh Pink	34
38 - 39	Pale Rose Pink	37	

GEL Category 4: Rosco - Cinelux, continued

Channel	Value	GEL Name	GEL Number
5	40 - 41	Salmon	41
	42 - 43	Deep Salmon	42
	44 - 45	Middle Rose	44
	46 - 47	Light Rose Purple	47
	48 - 49	Surprise Pink	51
	50 - 51	No Color Blue	60
	52 - 53	Clearwater	360
	54 - 55	Booster Blue	62
	56 - 57	Tipton Blue	362
	58 - 59	Blue Bell	364
	60 - 61	Daylight Blue	65
	62 - 63	Tharon Delft Blue	365
	64 - 65	Cerulean Blue	375
	66 - 67	Bermuda Blue	376
	68 - 69	Green Blue	77
	70 - 71	Alice Blue	378
	72 - 73	Primary Blue	80
	74 - 75	Baldassari Blue	381
	76 - 77	Medium Blue	83
	78 - 79	Pale Yellow Green	87
	80 - 81	Light Green	88
	82 - 83	Moss Green	89
	84 - 85	Primary Green	91
	86 - 87	Turquoise	92
	88 - 89	Blue Green	93
	90 - 91	Chocolate	99
92 - 255	Reserved		

GEL Category 1: LEE - Color Correction

Channel	Value	GEL Name	GEL Number
5	0 - 1	Double CTB	200
	2 - 3	Full CTB	201
	4 - 5	3 / 4 CTB	281
	6 - 7	1 / 2 CTB	202
	8 - 9	1 / 4 CTB	203
	10 - 11	1 / 8 CTB	218
	12 - 13	Double CTO	287
	14 - 15	Full CTO	204
	16 - 17	3 / 4 CTO	285
	18 - 19	1 / 2 CTO	205
	20 - 21	1 / 4 CTO	206
	22 - 23	1 / 8 CTO	223
	24 - 25	1 1 / 2 CTB	283
	26 - 27	1 1 / 2 CTO	286
	28 - 29	Full CTS	441
	30 - 31	1 / 2 CTS	442
	32 - 33	1 / 4 CTS	443
	34 - 35	1 / 8 CTS	444
	36 - 37	Full CTO + .3 ND	207
	38 - 39	Full CTO + .6 ND	208
	40 - 41	L.C.T. Yellow (Y1)	212
	42 - 43	White Flame Green	213
	44 - 45	LEE Fluorescent Green	219
	46 - 47	Super Correction L.C.T. Yellow	230
	48 - 49	Super Correction W.F. Green	232
	50 - 51	H.M.I. (to Tungsten)	236
	52 - 53	C.I.D. (to Tungsten)	237
	54 - 55	C.S.I. (to Tungsten)	238
	56 - 57	LEE Fluorescent 5700 Kelvin	241
	58 - 59	LEE Fluorescent 4300 Kelvin	242
	60 - 61	LEE Fluorescent 3600 Kelvin	243
	62 - 63	LEE Plus Green	244
	64 - 65	1 / 2 Plus Green	245
	66 - 67	1 / 4 Plus Green	246
	68 - 69	1 / 8 Plus Green	278
70 - 71	LEE Minus Green	247	
72 - 73	1 / 2 Minus Green	248	
74 - 75	1 / 4 Minus Green	249	
76 - 77	1 / 8 Minus Green	279	
78 - 255	Reserved		

GEL Category 2: LEE - Color Filters

Channel	Value	GEL Name	GEL Number
5	0 - 1	Rose Pink	002
	2 - 3	Lavender Tint	003
	4 - 5	Medium Bastard Amber	004
	6 - 7	Pale Yellow	007
	8 - 9	Dark Salmon	008
	10 - 11	Pale Amber Gold	009
	12 - 13	Medium Yellow	010
	14 - 15	Straw Tint	013
	16 - 17	Surprise Peach	017
	18 - 19	Fire	019
	20 - 21	Medium Amber	020
	22 - 23	Gold Amber	021
	24 - 25	Dark Amber	022
	26 - 27	Scarlet	024
	28 - 29	Sunset Red	025
	30 - 31	Bright Red	026
	32 - 33	Light Pink	035
	34 - 35	Medium Pink	036
	36 - 37	Dark Magenta	046
	38 - 39	Rose Purple	048
	40 - 41	Light Lavender	052
	42 - 43	Paler Lavender	053
	44 - 45	Lavender	058
	46 - 47	Mist Blue	061
	48 - 49	Pale Blue	063
	50 - 51	Sky Blue	068
	52 - 53	Evening Blue	075
	54 - 55	Just Blue	079
	56 - 57	Deeper Blue	085
	58 - 59	Lime Green	088
	60 - 61	Moss Green	089
	62 - 63	Dark Yellow Green	090
	64 - 65	Spring Yellow	100
	66 - 67	Yellow	101
	68 - 69	Light Amber	102

GEL Category 2: LEE - Color Filter, continued

Channel	Value	GEL Name	GEL Number
5	70 - 71	Straw	103
	72 - 73	Deep Amber	104
	74 - 75	Primary Red	106
	76 - 77	Light Rose	107
	78 - 79	English Rose	108
	80 - 81	Light Salmon	109
	82 - 83	Middle Rose	110
	84 - 85	Dark Pink	111
	86 - 87	Magenta	113
	88 - 89	Peacock Blue	115
	90 - 91	Steel Blue	117
	92 - 93	Light Blue	118
	94 - 95	Deep Blue	120
	96 - 97	LEE Green	121
	98 - 99	Fern Green	122
	100 - 101	Dark Green	124
	102 - 103	Smokey Pink	127
	104 - 105	Bright Pink	128
	106 - 107	Marine Blue	131
	108 - 109	Golden Amber	134
	110 - 111	Deep Golden Amber	135
	112 - 113	Pale Lavender	136
	114 - 115	Special Lavender	137
	116 - 117	Pale Green	138
	118 - 119	Summer Blue	140
	120 - 121	Pale Violet	142
	122 - 123	Pale Navy Blue	143
	124 - 125	No Color Blue	144
	126 - 127	Apricot	147
	128 - 129	Bright Rose	148
	130 - 131	Gold Tint	151
	132 - 133	Pale Gold	152
	134 - 135	Pale Salmon	153
136 - 137	Pale Rose	154	
138 - 139	Chocolate	156	

GEL Category 2: LEE - Color Filter, continued

Channel	Value	GEL Name	GEL Number
5	140 - 141	Pink	157
	142 - 143	No Color Straw	159
	144 - 145	Slate Blue	161
	146 - 147	Bastard Amber	162
	148 - 149	Flame Red	164
	150 - 151	Daylight Blue	165
	152 - 153	Lilac Tint	169
	154 - 155	Deep Lavender	170
	156 - 157	Dark Steel Blue	174
	158 - 159	Loving Amber	176
	160 - 161	Dark Lavender	180
	162 - 163	Light Red	182
	164 - 165	Flesh Pink	192
	166 - 167	Surprise Pink	194
	168 - 169	Zenith Blue	195
	170 - 171	True Blue	196
	172 - 173	Alice Blue	197
	174 - 175	Palace Blue	198
	176 - 177	Regal Blue	199
	178 - 255	Reserved	

GEL Category 3: LEE - 600 Series

Channel	Value	GEL Name	GEL Number
5	0 - 1	Arctic White	600
	2 - 3	Silver	601
	4 - 5	Plati num	602
	6 - 7	Moonlight White	603
	8 - 9	Full CT 85	604
	10 - 11	industry Sodium	650
	12 - 13	HI Sodium	651
	14 - 15	Urban Sodium	652
	16 - 17	LO Sodium	653
	18 - 255	Reserved	

GEL Category 4: LEE - Cosmetic Filters

Channel	Value	GEL Name	GEL Number
5	0 - 1	Cosmetic Peach	184
	2 - 3	Cosmetic Silver Rose	186
	4 - 5	Cosmetic Rouge	187
	6 - 7	Cosmetic Highlight	188
	8 - 9	Cosmetic Silver Moss	189
	10 - 11	Cosmetic Aqua Blue	191
	12 - 13	Lily Frost	705
	14 - 15	Shanklin Frost	717
	16 - 17	Half Shanklin Frost	718
	18 - 19	Durham Daylight Frost	720
	20 - 21	Hampshire Rose	749
	22 - 23	Durham Frost	750
	24 - 25	Soft Amber Key 1	774
	26 - 27	Soft Amber Key 2	775
	28 - 29	Moroccan Frost	791
	30 - 31	Blue Diffusion	217
	32 - 33	Blue Frost	221
	34 - 35	Daylight Blue Frost	224
36 - 255	Reserved		

GEL Category 5: LEE - 700 Series

Channel	Value	GEL Name	GEL Number
5	0 - 1	Perfect Lavender	700
	2 - 3	Provence	701
	4 - 5	Special Pale Lavender	702
	6 - 7	Cold Lavender	703
	8 - 9	Lily	704
	10 - 11	King Fals Lavender	706
	12 - 13	Cool Lavender	708
	14 - 15	Electric Lilac	709
	16 - 17	Spir Special Blue	710
	18 - 19	Cold Blue	711
	20 - 21	Bedford Blue	712
	22 - 23	Elysian Blue	714
	24 - 25	Cabana Blue	715
	26 - 27	Mikkel Blue	716
	28 - 29	Colour Wash Blue	719
	30 - 31	Berry Blue	721
	32 - 33	Virgin Blue	723
	34 - 35	Ocean Blue	724
	36 - 37	Old Steel Blue	725
	38 - 39	Steel Green	728
	40 - 41	Liberty Green	730
	42 - 43	Dirty Ice	731
	44 - 45	Damp Squib	733
	46 - 47	JAS Green	738
	48 - 49	Bram Brown	742
	50 - 51	Dirty White	744
	52 - 53	Brown	746
	54 - 55	Easy White	747
	56 - 57	Seedy Pink	748
	58 - 59	Wheat	763
	60 - 61	Sun Colour Straw	764
	62 - 63	LEE Yellow	765
	64 - 65	Cardbox Amber	773
	66 - 67	Nectarine	776
	68 - 69	Millenium Gold	778
70 - 71	Bastard Pink	779	
72 - 73	Terry Red	781	
74 - 75	Blood Red	789	
76 - 77	Moroccan Pink	790	
78 - 79	Pretty n'Pink	794	
80 - 81	Magical Magenta	795	
82 - 255	Reserved		

Mode 7: 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 8: Source

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	INT	0 - 100%
2	0 - 2	0 - 1	Source	Tungsten Bulb
	3 - 5	2 - 3		Incandescent
	6 - 8	4 - 5		Halogen
	9 - 11	6 - 7		Antique Bulb
	12 - 14	8 - 9		Warm Antique Bulb
	15 - 17	10 - 11		Christmas Lights
	18 - 20	12 - 13		Night Light
	21 - 23	14 - 15		Infrared Heat Lamp
	24 - 26	16 - 17		Grow Light
	27 - 29	18 - 19		CFL Soft White
	30 - 32	20 - 21		CFL Bright White
	33 - 35	22 - 23		CFL Cool White
	36 - 38	24 - 25		CFL Daylight
	39 - 41	26 - 27		Cool White 1
	42 - 44	28 - 29		Cool White 2
	45 - 47	30 - 31		Cool White 3
	48 - 50	32 - 33		Warm White
51 - 53	34 - 35	CFL Blacklight		
54 - 56	36 - 37	HMI		
57 - 59	38 - 39	High Pressure Sodium		

Mode 8: Source 8-bit, continued

Channel	Value	Percent	Function	
2	60 - 62	40 - 41	Source	Low Pressure Sodium
	63 - 65	42 - 43		Mercury Vapor
	66 - 68	44 - 45		Metal Halide
	69 - 71	46 - 47		Ceramic
	72 - 74	48 - 49		Carbon Arc
	75 - 77	50 - 51		Xenon
	78 - 80	52 - 53		Candle
	81 - 83	54 - 55		Gas Fire
	84 - 86	56 - 57		Sun Direct
	87 - 89	58 - 59		Sun Overcast
	90 - 92	60 - 61		Sun Blue Hour
	93 - 95	62 - 63		Mobile Phone
	96 - 98	64 - 65		Computer Monitor
	99 - 101	66 - 67		Electroluminescence
	102 - 104	68 - 69		Blow Torch
	105 - 107	70 - 71		Road Flare
	108 - 110	72 - 73		Amber Caution
	111 - 113	74 - 75		Green Traffic Light
	114 - 116	76 - 77		Yellow Traffic Light
	117 - 119	78 - 79		Red Traffic Light
120 - 122	80 - 81	Blue Glow Stick		
123 - 125	82 - 83	Green Glow Stick		
126 - 128	84 - 85	Red Glow Stick		
129 - 131	86 - 87	Yellow Glow Stick		
132 - 135	88 - 89	Pink Glow Stick		
136 - 138	90 - 91	Violet Glow Stick		
139 - 255	92 - 100		Reserved	
3	0 - 127	0 - 49	X Coordinate	0.0000 - +0.0050
	128 - 255	50 - 100		0.0000 - - 0.0050
4	0 - 127	0 - 49	Y Coordinate	0.0000 - +0.0050
	128 - 255	50 - 100		0.0000 - - 0.0050
5	0 - 19	0 - 7	Strobe	No Effect
	20 - 255	8 - 100		1 Hz - 25 Hz

Mode 9: FX - List of Effects

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Intensity	0 - 100%
2	0 - 9	0 - 4	FX Selection	Club Lights
	10 - 19	5 - 8		Paparazzi
	20 - 29	9 - 12		Lightning
	30 - 39	13 - 16		TV
	40 - 49	17 - 20		Candle
	50 - 59	21 - 24		Fire
	60 - 69	25 - 28		Strobe
	70 - 79	29 - 32		Explosion
	80 - 89	33 - 36		Faulty Bulb
	90 - 99	37 - 40		Pulsing
	100 - 109	41 - 44		Welding
	110 - 119	45 - 48		Cop Car
	120 - 129	49 - 52		Color Chase
	130 - 139	53 - 56		Party Lights
	140 - 149	57 - 60		Firework
	150 - 255	61 - 100		Reserved
3 - 10	See FX Parameter Tables in Following Pages			

FX Parameter: Club Lights

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	No. of Colors	3
	10 - 19	5 - 8		6
	20 - 29	9 - 12		9
	30 - 39	13 - 16		12
	40 - 49	17 - 20		15
	50 - 59	21 - 24		18
	60 - 69	25 - 28		24
	70 - 79	29 - 32		36
	80 - 255	33 - 100		Reserved
4	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
5	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

FX Parameter: Paparazzi

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		- 0.9 - - 0.1
	120 - 145	48 - 57		Neutral / No Effect
	146 - 244	58 - 96		0.1 - 0.9
	245 - 255	97 - 100		Full Plus Green
5	0 - 9	0 - 4	Frequency	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
6	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

FX Parameter: Lightning

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Mode Select	CCT HSI Reserved
	10 - 19	5 - 8		
	20 - 255	9 - 100		
CCT				
4	0 - 255	0 - 100	CCT	2000 K - 10000 K
5	0 - 10	0 - 4	G / M	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		
6	0 - 9	0 - 4	Frequency	1 2 3 4 5 6 7 8 9 10 Reserved
	10 - 19	5 - 8		
	20 - 29	9 - 12		
	30 - 39	13 - 16		
	40 - 49	17 - 20		
	50 - 59	21 - 24		
	60 - 69	25 - 28		
	70 - 79	29 - 32		
	80 - 89	33 - 36		
	90 - 99	37 - 40		
	100 - 255	41 - 100		
7	0 - 9	0 - 4	Speed	1 2 3 4 5 6 7 8 9 10 Random Reserved
	10 - 19	5 - 8		
	20 - 29	9 - 12		
	30 - 39	13 - 16		
	40 - 49	17 - 20		
	50 - 59	21 - 24		
	60 - 69	25 - 28		
	70 - 79	29 - 32		
	80 - 89	33 - 36		
	90 - 99	37 - 40		
	100 - 109	41 - 44		
110 - 255	45 - 100			
8	0 - 10	0 - 5	Stop / Trigger / Loop	Stop Trigger Loop
	11 - 127	6 - 50		
	128 - 255	51 - 100		

FX Parameter: Lightning, continued

Channel	Value	Percent	Function	
HSI				
4	0 - 255	0 - 100	Hue	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
7	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 28 29 - 32 33 - 36 37 - 40 41 - 100	Frequency	1 2 3 4 5 6 7 8 9 10 Reserved
8	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 28 29 - 32 33 - 36 37 - 40 41 - 44 45 - 100	Speed	1 2 3 4 5 6 7 8 9 10 Random Reserved
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Trigger / Loop	Stop Trigger Loop

FX Parameter: TV

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 Lower limit	2000 K - 10000 K
5	0 - 255	0 - 100	CCT Upper limit	2000 K - 10000 K
6	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
8	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 109	41 - 44		Random
	110 - 255	45 - 100		Reserved
	9	0 - 10		0 - 5
11 - 127		6 - 50	Loop	
128 - 255		51 - 100	Reserved	

FX Parameter: TV, continued

Channel	Value	Percent	Function	
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 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
8	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 28 29 - 32 33 - 36 37 - 40 41 - 44 45 - 100	Speed	1 2 3 4 5 6 7 8 9 10 Random Reserved
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

FX Parameter: Candle

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	CCT Range	Warmer
	10 - 19	5 - 8		Natural
	20 - 29	9 - 12		Cooler
	30 - 255	13 - 100		Reserved
4	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
5	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

FX Parameter: Fire

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 Lower limit	1800 K - 10000 K
5	0 - 255	0 - 100	CCT Upper limit	1800 K - 10000 K
6	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
7	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
	8	0 - 10		0 - 5
11 - 127		6 - 50	Loop	
128 - 255		51 - 100	Reserved	

FX Parameter: Fire, continued

Channel	Value	Percent	Function	
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 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
8	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 28 29 - 32 33 - 36 37 - 40 41 - 100	Speed	1 2 3 4 5 6 7 8 9 10 Reserved
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

FX Parameter: Strobe

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Mode Select	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Gel
	30 - 39	13 - 16		X.Y
	40 - 49	17 - 20		Source
	50 - 59	21 - 24		RGB
	60 - 255	25 - 100		Reserved
CCT				
4	0 - 255	0 - 100	CCT	2000 K - 10000K
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 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 109	41 - 44		Random
	110 - 255	45 - 100		Reserved
	7	0 - 10		0 - 5
11 - 127		6 - 50	Loop	
128 - 255		51 - 100	Reserved	

FX Parameter: Strobe, continued

Channel	Value	Percent	Function	
HSI				
4	0 - 255	0 - 100	HUE	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6	0 - 255	0 - 100	Speed	1 - 10 - Random
7	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
GEL				
4	0 - 255	0 - 100	CCT	See Table in Mode 6: GEL
5	0 - 255	0 - 100	Rosco / LEE	
6	0 - 255	0 - 100	Series	
7	0 - 255	0 - 100	Category	
8	0 - 255	0 - 100	Speed	1 - 10 - Random
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
XY				
4	0 - 255	0 - 100	X coordinate	0 - 0.8
5	0 - 255	0 - 100	Y coordinate	0 - 0.8
6	0 - 255	0 - 100	Speed	1 - 10 - Random
7	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

FX Parameter: Strobe, continued

Channel	Value	Percent	Function	
Source				
4	0 - 255	0 - 100	Source	See Table in Mode 8: Source
5	0 - 255	0 - 100	Speed	1 - 10 - Random
6	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
RGB				
4	0 - 255	0 - 100	Red	0 - 100 %
5	0 - 255	0 - 100	Green	0 - 100 %
6	0 - 255	0 - 100	Blue	0 - 100 %
7	0 - 255	0 - 100	Speed	1 - 10 - Random
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

FX Parameter:Explosion

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Mode Select	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Gel
	30 - 39	13 - 16		X.Y
	40 - 49	17 - 20		Source
	50 - 59	21 - 24		RGB
	60 - 255	25 - 100		Reserved
CCT				
4	0 - 255	0 - 100	CCT	2000 K - 10000K
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 - 9	0 - 4	Decay	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
7	0 - 10	0 - 5	Stop / Trigger	Stop
	11 - 127	6 - 50		Trigger
	128 - 255	51 - 100		Reserved

FX Parameter: Explosion, continued

Channel	Value	Percent	Function	
HSI				
4	0 - 255	0 - 100	HUE	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
7	0 - 255	0 - 100	Decay	1 - 10
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Trigger	Stop Trigger Reserved
GEL				
4	0 - 255	0 - 100	CCT	See Table in Mode 6: GEL
5	0 - 255	0 - 100	Rosco / LEE	
6	0 - 255	0 - 100	Series	
7	0 - 255	0 - 100	Category	
8	0 - 255	0 - 100	Decay	1 - 10
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Trigger	Stop Trigger Reserved
XY				
4	0 - 255	0 - 100	X coordinate	0 - 0.8
5	0 - 255	0 - 100	Y coordinate	0 - 0.8
6	0 - 255	0 - 100	Decay	1 - 10
7	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Trigger	Stop Trigger Reserved

FX Parameter: Explosion, continued

Channel	Value	Percent	Function	
Source				
4	0 - 255	0 - 100	Source	See Table in Mode 8: Source
5	0 - 255	0 - 100	Decay	1 - 10
6	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Trigger	Stop Trigger Reserved
RGB				
4	0 - 255	0 - 100	Red	0 - 100 %
5	0 - 255	0 - 100	Green	0 - 100 %
6	0 - 255	0 - 100	Blue	0 - 100 %
7	0 - 255	0 - 100	Decay	1 - 10 - Random
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Trigger	Stop Trigger Reserved

FX Parameter: Faulty Bulb

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Mode Select	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Gel
	30 - 39	13 - 16		X.Y
	40 - 49	17 - 20		Source
	50 - 59	21 - 24		RGB
	60 - 255	25 - 100		Reserved
CCT				
4	0 - 255	0 - 100	CCT	2000 K - 10000K
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 - 9	0 - 4	Frequency	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 109	41 - 44		Random
	110 - 255	45 - 100		Reserved
7	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved

FX Parameter: Faulty Bulb, continued

Channel	Value	Percent	Function	
CCT				
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
HSI				
4	0 - 255	0 - 100	HUE	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
7	0 - 255	0 - 100	Frequency	1 - 10 - Random
8	0 - 255	0 - 100	Speed	1 - 10
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
GEL				
4	0 - 255	0 - 100	CCT	See Table in Mode 6: GEL
5	0 - 255	0 - 100	Rosco / LEE	
6	0 - 255	0 - 100	Series	
7	0 - 255	0 - 100	Category	
8	0 - 255	0 - 100	Frequency	1 - 10 - Random
9	0 - 255	0 - 100	Speed	1 - 10
10	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

Parameter: Faulty Bulb, continued

Channel	Value	Percent	Function	
XY				
4	0 - 255	0 - 100	X coordinate	0 - 0.8
5	0 - 255	0 - 100	Y coordinate	0 - 0.8
6	0 - 255	0 - 100	Frequency	1 - 10 - Random
7	0 - 255	0 - 100	Speed	1 - 10
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
Source				
4	0 - 255	0 - 100	Source	See Table in Mode 8: Source
5	0 - 255	0 - 100	Frequency	1 - 10 - Random
6	0 - 255	0 - 100	Speed	1 - 10
7	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
RGB				
4	0 - 255	0 - 100	Red	0 - 100 %
5	0 - 255	0 - 100	Green	0 - 100 %
6	0 - 255	0 - 100	Blue	0 - 100 %
7	0 - 255	0 - 100	Frequency	1 - 10 - Random
8	0 - 255	0 - 100	Speed	1 - 10
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

FX Parameter: Pulsing

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Mode Select	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Gel
	30 - 39	13 - 16		X.Y
	40 - 49	17 - 20		Source
	50 - 59	21 - 24		RGB
	60 - 255	25 - 100		Reserved
CCT				
4	0 - 255	0 - 100	CCT	2000 K - 10000K
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 - 9	0 - 4	Frequency	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
100 - 255	41 - 100	Reserved		
7	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
100 - 255	41 - 100	Reserved		

FX Parameter: Pulsing, continued

Channel	Value	Percent	Function	
8	0 - 10	0 - 5	Stop / Loop	Stop Loop Reserved
	11 - 127	6 - 50		
	128 - 255	51 - 100		
HSI				
4	0 - 255	0 - 100	HUE	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6	0 - 10	0 - 4	HSI Base CCT	6500 K 2000 K - 10000 K
	11 - 255	5 - 100		
7	0 - 255	0 - 100	Frequency	1 - 10
8	0 - 255	0 - 100	Speed	1 - 10
9	0 - 10	0 - 5	Stop / Loop	Stop Loop Reserved
	11 - 127	6 - 50		
	128 - 255	51 - 100		
GEL				
4	0 - 255	0 - 100	CCT	See Table in Mode 6: GEL
5	0 - 255	0 - 100	Rosco / LEE	
6	0 - 255	0 - 100	Series	
7	0 - 255	0 - 100	Category	
8	0 - 255	0 - 100	Frequency	1 - 10
9	0 - 255	0 - 100	Speed	1 - 10
10	0 - 10	0 - 5	Stop / Loop	Stop Loop Reserved
	11 - 127	6 - 50		
	128 - 255	51 - 100		

FX Parameter: Pulsing, continued

Channel	Value	Percent	Function	
XY				
4	0 - 255	0 - 100	X coordinate	0 - 0.8
5	0 - 255	0 - 100	Y coordinate	0 - 0.8
6	0 - 255	0 - 100	Frequency	1 - 10
7	0 - 255	0 - 100	Speed	1 - 10
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
Source				
4	0 - 255	0 - 100	Source	See Table in Mode 8: Source
5	0 - 255	0 - 100	Frequency	1 - 10
6	0 - 255	0 - 100	Speed	1 - 10
7	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
RGB				
4	0 - 255	0 - 100	Red	0 - 100 %
5	0 - 255	0 - 100	Green	0 - 100 %
6	0 - 255	0 - 100	Blue	0 - 100 %
7	0 - 255	0 - 100	Frequency	1 - 10
8	0 - 255	0 - 100	Speed	1 - 10
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

FX Parameter: Welding

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Mode Select	CCT
	10 - 19	5 - 8		HSI
	20 - 29	9 - 12		Gel
	30 - 39	13 - 16		X.Y
	40 - 49	17 - 20		Source
	50 - 59	21 - 24		RGB
	60 - 255	25 - 100		Reserved
CCT				
4	0 - 255	0 - 100	CCT	2000 K - 10000K
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 - 9	0 - 4	Frequency	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
7	0 - 255	0 - 100	Min Brightness	0 - 75%
8	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

FX Parameter: Welding, continued

Channel	Value	Percent	Function	
HSI				
4	0 - 255	0 - 100	HUE	1° - 360°
5	0 - 255	0 - 100	Saturation	0 - 100%
6	0 - 10 11 - 255	0 - 4 5 - 100	HSI Base CCT	6500 K 2000 K - 10000 K
7	0 - 255	0 - 100	Frequency	1 - 10
8	0 - 255	0 - 100	Min Brightness	0 - 75%
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
GEL				
4	0 - 255	0 - 100	CCT	See Table in Mode 6: GEL
5	0 - 255	0 - 100	Rosco / LEE	
6	0 - 255	0 - 100	Series	
7	0 - 255	0 - 100	Category	
8	0 - 255	0 - 100	Frequency	1 - 10
9	0 - 255	0 - 100	Min Brightness	0 - 75%
10	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
XY				
4	0 - 255	0 - 100	X coordinate	0 - 0.8
5	0 - 255	0 - 100	Y coordinate	0 - 0.8
6	0 - 255	0 - 100	Frequency	1 - 10
7	0 - 255	0 - 100	Min Brightness	0 - 75%
8	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

Parameter: Welding, continued

Channel	Value	Percent	Function	
Source				
4	0 - 255	0 - 100	Source	See Table in Mode 8: Source
5	0 - 255	0 - 100	Frequency	1 - 10
6	0 - 255	0 - 100	Min Brightness	0 - 75%
7	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved
RGB				
4	0 - 255	0 - 100	Red	0 - 100%
5	0 - 255	0 - 100	Green	0 - 100%
6	0 - 255	0 - 100	Blue	0 - 100%
7	0 - 255	0 - 100	Frequency	1 - 10
8	0 - 255	0 - 100	Min Brightness	0 - 75%
9	0 - 10 11 - 127 128 - 255	0 - 5 6 - 50 51 - 100	Stop / Loop	Stop Loop Reserved

FX Parameter: Cop car

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Color Combinations	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	Frequency	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
5	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

FX Parameter: Color Chase

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	Saturation	0 - 100%
4	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
5	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

FX Parameter: Party Lights

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	Saturation	0 - 100%
4	0 - 9	0 - 4	Speed	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 255	41 - 100		Reserved
5	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

FX Parameter: Fireworks

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	Color Combinations	CCT
	10 - 19	5 - 8		HUE
	20 - 29	9 - 12		CCT+HUE
	30 - 255	13 - 100		Reserved
4	0 - 9	0 - 4	Frequency	1
	10 - 19	5 - 8		2
	20 - 29	9 - 12		3
	30 - 39	13 - 16		4
	40 - 49	17 - 20		5
	50 - 59	21 - 24		6
	60 - 69	25 - 28		7
	70 - 79	29 - 32		8
	80 - 89	33 - 36		9
	90 - 99	37 - 40		10
	100 - 109	41 - 44		Random
	110 - 255	45 - 100		Reserved
5	0 - 10	0 - 5	Stop / Loop	Stop
	11 - 127	6 - 50		Loop
	128 - 255	51 - 100		Reserved

Mode 10: WWRGB

Channel	Value	Percent	Function	
1	0 - 255	0 - 100	Warm White	0 - 100%
2	0 - 255	0 - 100	Cool White	0 - 100%
3	0 - 255	0 - 100	Red	0 - 100%
4	0 - 255	0 - 100	Green	0 - 100%
5	0 - 255	0 - 100	Blue	0 - 100%

Mode 11: Ultimate Mode

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 - 79 90 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 24 25 - 28 29 - 32 33 - 36 37 - 100	Lighting Mode Selection	CCT & RGB CCT CCT & HSI RGB HSI Gel XY Source FX Reserved
3 - 11	See Lighting Mode Parameter Tables in Following Pages			

Lighting Mode Parameter: CCT & RGB

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	CCT	2000 K - 10000 K
4	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
5	0 - 255	0 - 100	CCT ↔ RGB	Crossfade to Color
6	0 - 255	0 - 100	Red	0 - 100%
7	0 - 255	0 - 100	Green	0 - 100%
8	0 - 255	0 - 100	Blue	0 - 100%
9	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

Lighting Mode Parameter: CCT

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 - 19	0 - 7	Strobe	No Effect
	20 - 255	8 - 100		1 Hz - 25 Hz

Lighting Mode Parameter: CCT & HSI

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	CCT ↔ HSI	Crossfade to Color
6	0 - 255	0 - 100	Hue	1° - 360°
7	0 - 255	0 - 100	Saturation	0 - 100%
8	0 - 19	0 - 7	Strobe	No Effect
	20 - 255	80 - 100		1 Hz - 25 Hz

Lighting Mode Parameter: RGB

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	Red	0 - 100%
4	0 - 255	0 - 100	Green	0 - 100%
5	0 - 255	0 - 100	Blue	0 - 100%
6	0 - 19 20 - 255	0 - 7 80 - 100	Strobe	No Effect 1 Hz - 25 Hz

Lighting Mode Parameter: HSI

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

Lighting Mode Parameter: GEL

Channel	Value	Percent	Function	
3	0 - 126 127 - 255	0 - 50 51 - 100	CCT	3200K 5600K
4	0 - 29 30 - 59 60 - 255	0 - 12 13 - 24 25 - 100	Rosco / Lee	Rosco Lee Reserved
5	0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 255	0 - 4 5 - 8 9 - 12 13 - 16 17 - 20 21 - 100	Series	R - Col.corr. / L - Col.corr. R - CalColor / L - Col.Filters R - Storaro / L - 600 Series R - Cinelux / L - Cosmetic R - Reserved / L - 700 Series Reserved
6	0 - 255	0 - 100	Category	See GEL Category Tables in Mode 6: GEL
7	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

Lighting Mode Parameter: XY

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	X Coordinate	0 - 0.8
4	0 - 255	0 - 100	Y Coordinate	0 - 0.8
5	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

Lighting Mode Parameter: Source

Channel	Value	Percent	Function	
3	0 - 255	0 - 100	Source Matching	See Tables in Mode 8: Source
4	0 - 127 128 - 255	0 - 49 50 - 100	X Coordinate	0.0000 - +0.0050 0.0000 - - 0.0050
5	0 - 127 128 - 255	0 - 49 50 - 100	Y Coordinate	0.0000 - +0.0050 0.0000 - - 0.0050
6	0 - 19 20 - 255	0 - 7 8 - 100	Strobe	No Effect 1 Hz - 25 Hz

Lighting Mode Parameter: FX

Channel	Value	Percent	Function	
3	0 - 9	0 - 4	FX Selection	Club Lights
	10 - 19	5 - 8		Paparazzi
	20 - 29	9 - 12		Lightning
	30 - 39	13 - 16		TV
	40 - 49	17 - 20		Candle
	50 - 59	21 - 24		Fire
	60 - 69	25 - 28		Strobe
	70 - 79	29 - 32		Explosion
	80 - 89	33 - 36		Faulty Bulb
	90 - 99	37 - 40		Pulsing
	100 - 109	41 - 44		Welding
	110 - 119	45 - 48		Cop Car
	120 - 129	49 - 52		Color Chase
	130 - 139	53 - 56		Party Lights
	140 - 149	57 - 60		Firework
150 - 255	61 - 100	Reserved		
4 - 11	See FX Parameter Tables in Mode 9: FX 8-bit			

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

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

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