



VARI***LITE**

FRESNEL FC

DMX MAP

TABLE 1. SMART COLOR CONTROL (SSCC) MODE

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
1	Intensity (High)	0	0 - 65535	16-bit Intensity (Dimmer) Control
2	Intensity (Low)			0 - 100% Output
3	Strobe	0	0 - 255	Strobe S>>>>>F
			0 - 9	No Strobe Function - Shutter open
			10 - 99	Strobe S>>>>>F
			100 - 109	No Strobe Function - Shutter open
			110 - 179	Lighting Strobe S>>>>>F
			180 - 189	No Strobe Function - Shutter open
			190 - 255	Random Strobe S>>>>>F
4	Color Preset	0	0 - 255	Calibrated color presets 01 to 33 User definable color preset 01 to 20
			0 - 10	Channel OFF Color Mixing take priority
			11 - 14	Moroccan Pink
			15 - 18	Pink
			19 - 22	Flesh Pink
			23 - 26	Bright Rose
			27 - 30	Follies Pink
			31 - 34	Fuchsia Pink
			35 - 38	Surprise Pink
			39 - 42	Congo Blue
			43 - 46	Blue
			47 - 50	Virgin Blue
			51 - 54	Midnight Maya
			55 - 58	Double C.T Blue
			59 - 62	Slate Blue
			63 - 66	Regal Blue
			67 - 70	Full C.T Blue
			71 - 74	Steel Blue
			75 - 78	Lighter Blue
			79 - 82	Cyan
			83 - 86	Marine Blue
			87 - 90	Soft Green
			91 - 94	Moss Green
			95 - 98	Green
			99 - 102	Fem Green
			103 - 106	JAS Green
			107 - 110	Pale Green
			111 - 114	Spring Yellow
			115 - 118	Yellow
			119 - 122	Deep Amber
			123 - 126	Chrome Orange
			127 - 130	Orange
			131 - 134	Magenta
135 - 138	Flame Red			
139 - 142	Purple			
143 - 146	User Preset 1			
147 - 150	User Preset 2			

TABLE 1. SMART COLOR CONTROL (SSCC) MODE

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
4	Color Preset Continued	0	151 - 154	User Preset 3
			155 - 158	User Preset 4
			159 - 162	User Preset 5
			163 - 166	User Preset 6
			167 - 170	User Preset 7
			171 - 174	User Preset 8
			175 - 178	User Preset 9
			179 - 182	User Preset 10
			183 - 186	User Preset 11
			187 - 190	User Preset 12
			191 - 194	User Preset 13
			195 - 198	User Preset 14
			199 - 202	User Preset 15
			203 - 206	User Preset 16
			207 - 210	User Preset 17
			211 - 214	User Preset 18
			215 - 218	User Preset 19
219 - 222	User Preset 20			
223 - 255	Channel OFF Color Mixing take priority			
5	Fan Control	0	0 - 255	Dynamically control fan speed vs LED Output operation. Control values as follows . . .
			0-4	Automatic fan/output adjustment (Default)
			05 - 255	Linear control of fan speed and LED max output* DMX 5 =Highest Constant Fan Speed DMX 255 = Lowest Constant Fan Speed * Standard mode only
6	Control Channel	0	0 - 255	Control Channel used for full fixture settings, lamp controls, and miscellaneous modes. Set discrete value of desired effect, wait >3 seconds, then set value to 0 (Idle). **Function does not require 3 Second rule to active, setting output to value will automatically activate function
			0 - 5	Idle (Default)
			6 - 10	Full Luminaire ReCal - Also Used to Wake fixture up from shutdown
			11 - 15	Fixture Shutdown
			16 - 20	Reserved Values
			21 - 25	Display - Menu ON
			31 - 35	Tungsten Dimming On**
			36 - 40	Tungsten Dimming Off (Default)**
			41 - 45	Dimming Curve Linear**
			46 - 50	Dimming Curve S-Curve**
			51 - 55	Dimming Curve Square Law (Default)**
			56 - 60	Reserved
			61 - 65	Dimmer Snap On**
			66 - 70	Dimmer Snap Off (Default)**
71 - 75	Reserved Values			
76 - 80	Reserved Values			

TABLE 1. SSCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
6	Control Channel continued	0	91 - 95	Color Calibration On
			96 - 100	Color Calibration Off (Default)
			101 - 110	Reserved
			111 - 115	Standard Mode (Default)
			116 - 120	Studio Mode - Reduced output with lower fan
			121 - 125	Whisper Mode - Reduced output with lower fan
			126 - 135	Reserved
			136 - 140	Fan On (Default)
			141 - 145	Fan Auto
			146 - 150	Reserved
			151 - 155	Record User Color Preset**
			156 - 170	Reserved
			171 - 175	Reset defaults
			176 - 255	Reserved
7	Cyan (High)	0	0 - 65535	Cyan Color Level Control 0 - 100% Saturation
8	Cyan (Low)			6 Color LED array auto adjust to meet Cyan / mixed color point of full available color spectrum
9	Yellow (High)	0	0 - 65535	Yellow Color Level Control 0 - 100% Saturation
10	Yellow (Low)			6 Color LED array auto adjust to meet Yellow / mixed color point of full available color spectrum
11	Magenta (High)	0	0 - 65535	Magenta Color Level Control 0 - 100% Saturation
12	Magenta (Low)			6 Color LED array auto adjust to meet Magenta / mixed color point of full available color spectrum
13	CCT	75	0 - 255	Variable color temperature control channel. Channel works independent of color mixing channel and will adjust all mixed color from selected color temperature level. Values stated below are for guidance only. Channel should be mapped in such a way that level runs variable from 0 - 250
			0	1800K
			25	2700K
			50	3000K
			75	3200K (Default)
			100	4000K
			125	4500K
			150	5000K
			175	5600K
			200	6500K
			225	8000K
			250	10000K
			250 - 255	Hold 10000K

TABLE 1. SSCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
14	Green Shift	100	0 - 255	TV Camera Green Shift adjustment. Channel works
				independent of color mixing channels and will adjust all mixed colors.
			0 - 10	No Function
			11 - 29	Full Minus Green
			30 - 69	-99% -> -1%
			70 - 129	No Function
			130 - 189	+1% -> +99%
			190 - 255	Full Plus Green

TABLE 2. SQCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
1	Intensity (High)	0	0 - 65535	16bit Intensity (Dimmer) Control
2	Intensity (Low)			0 - 100% Output
3	Strobe	0	0 - 255	Control of Strobe
			0 - 9	No Strobe Function - Shutter open
			10 - 99	Strobe S>>>>F
			100 - 109	No Strobe Function - Shutter open
			110 - 179	Lighting Strobe S>>>>F
			180 - 189	No Strobe Function - Shutter open
			190 - 255	Random Strobe S>>>>F
4	Color Preset	0	0 - 255	Calibrated color presets 01 to 33 User definable color preset 01 to 20
			0 - 10	Channel OFF Color Mixing take priority
			11 - 14	Moroccan Pink
			15 - 18	Pink
			19 - 22	Flesh Pink
			23 - 26	Bright Rose
			27 - 30	Follies Pink
			31 - 34	Fuchsia Pink
			35 - 38	Surprise Pink
			39 - 42	Congo Blue
			43 - 46	Blue
			47 - 50	Virgin Blue
			51 - 54	Midnight Maya
			55 - 58	Double C.T Blue
			59 - 62	Slate Blue
			63 - 66	Regal Blue
			67 - 70	Full C.T Blue
			71 - 74	Steel Blue
			75 - 78	Lighter Blue
			79 - 82	Cyan
			83 - 86	Marine Blue
			87 - 90	Soft Green
			91 - 94	Moss Green
			95 - 98	Green
			99 - 102	Fem Green
			103 - 106	JAS Green
			107 - 110	Pale Green
			111 - 114	Spring Yellow
			115 - 118	Yellow
			119 - 122	Deep Amber
			123 - 126	Chrome Orange
			127 - 130	Orange
			131 - 134	Magenta
135 - 138	Flame Red			
139 - 142	Purple			
143 - 146	User Preset 1 Includes Intensity, Gobo and Edge Data			

TABLE 2. SQCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
4	Color Preset continued	0	147 - 150	User Preset 2 Includes Intensity, Gobo and Edge Data
			151 - 154	User Preset 3 Includes Intensity, Gobo and Edge Data
			155 - 158	User Preset 4 Includes Intensity, Gobo and Edge Data
			159 - 162	User Preset 5 Includes Intensity, Gobo and Edge Data
			163 - 166	User Preset 6 Includes Intensity, Gobo and Edge Data
			167 - 170	User Preset 7 Includes Intensity, Gobo and Edge Data
			171 - 174	User Preset 8 Includes Intensity, Gobo and Edge Data
			175 - 178	User Preset 9 Includes Intensity, Gobo and Edge Data
			179 - 182	User Preset 10 Includes Intensity, Gobo and Edge Data
			183 - 186	User Preset 11 Includes Intensity, Gobo and Edge Data
			187 - 190	User Preset 12 Includes Intensity, Gobo and Edge Data
			191 - 194	User Preset 13 Includes Intensity, Gobo and Edge Data
			195 - 198	User Preset 14 Includes Intensity, Gobo and Edge Data
			199 - 202	User Preset 15 Includes Intensity, Gobo and Edge Data
			203 - 206	User Preset 16 Includes Intensity, Gobo and Edge Data
			207 - 210	User Preset 17 Includes Intensity, Gobo and Edge Data
			211 - 214	User Preset 18 Includes Intensity, Gobo and Edge Data
			215 - 218	User Preset 19 Includes Intensity, Gobo and Edge Data
219 - 222	User Preset 20 Includes Intensity, Gobo and Edge Data			
223 - 255	Channel OFF Color Mixing take priority			

TABLE 3. SOCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
1	Intensity (High)	0	0 - 65535	16bit Intensity (Dimmer) Control
2	Intensity (Low)			0 - 100% Output
3	Strobe	0	0 - 255	Control of Strobe
			0 - 9	No Strobe Function - Shutter open
			10 - 99	Strobe S>>>>F
			100 - 109	No Strobe Function - Shutter open
			110 - 179	Lighting Strobe S>>>>F
			180 - 189	No Strobe Function - Shutter open
190 - 255	Random Strobe S>>>>F			
4	Color Preset	0	0 - 255	Calibrated color presets 01 to 33 User definable color preset 01 to 20
			0 - 10	Channel OFF Color Mixing take priority
			11 - 14	Moroccan Pink
			15 - 18	Pink
			19 - 22	Flesh Pink
			23 - 26	Bright Rose
			27 - 30	Follies Pink
			31 - 34	Fuchsia Pink
			35 - 38	Surprise Pink
			39 - 42	Congo Blue
			43 - 46	Blue
47 - 50	Virgin Blue			

TABLE 3. SOCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
4	Color Preset continued	0	51 - 54	Midnight Maya
			55 - 58	Double C.T Blue
			59 - 62	Slate Blue
			63 - 66	Regal Blue
			67 - 70	Full C.T Blue
			71 - 74	Steel Blue
			75 - 78	Lighter Blue
			79 - 82	Cyan
			83 - 86	Marine Blue
			87 - 90	Soft Green
			91 - 94	Moss Green
			95 - 98	Green
			99 - 102	Fem Green
			103 - 106	JAS Green
			107 - 110	Pale Green
			111 - 114	Spring Yellow
			115 - 118	Yellow
			119 - 122	Deep Amber
			123 - 126	Chrome Orange
			127 - 130	Orange
			131 - 134	Magenta
			135 - 138	Flame Red
			139 - 142	Purple
			143 - 146	User Preset 1 Includes Intensity, Gobo and Edge Data
			147 - 150	User Preset 2 Includes Intensity, Gobo and Edge Data
			151 - 154	User Preset 3 Includes Intensity, Gobo and Edge Data
			155 - 158	User Preset 4 Includes Intensity, Gobo and Edge Data
			159 - 162	User Preset 5 Includes Intensity, Gobo and Edge Data
			163 - 166	User Preset 6 Includes Intensity, Gobo and Edge Data
			167 - 170	User Preset 7 Includes Intensity, Gobo and Edge Data
			171 - 174	User Preset 8 Includes Intensity, Gobo and Edge Data
			175 - 178	User Preset 9 Includes Intensity, Gobo and Edge Data
179 - 182	User Preset 10 Includes Intensity, Gobo and Edge Data			
183 - 186	User Preset 11 Includes Intensity, Gobo and Edge Data			
187 - 190	User Preset 12 Includes Intensity, Gobo and Edge Data			
191 - 194	User Preset 13 Includes Intensity, Gobo and Edge Data			
195 - 198	User Preset 14 Includes Intensity, Gobo and Edge Data			
199 - 202	User Preset 15 Includes Intensity, Gobo and Edge Data			
203 - 206	User Preset 16 Includes Intensity, Gobo and Edge Data			
207 - 210	User Preset 17 Includes Intensity, Gobo and Edge Data			
211 - 214	User Preset 18 Includes Intensity, Gobo and Edge Data			
215 - 218	User Preset 19 Includes Intensity, Gobo and Edge Data			
219 - 222	User Preset 20 Includes Intensity, Gobo and Edge Data			
223 - 255	Channel OFF Color Mixing take priority			

TABLE 3. SOCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
5	Fan Control	0	0 - 255	Dynamic control of fan speed vs LED output
			0 - 4	Automatic fan/output adjustment
			5 - 255	Linear control fo fan speed and LED output*
				DMX 5 = Highest Constant Fan Speed
				DMX 255 = Lowest Constant Fan Speed
				* Standard mode only
6	Control Channel		0 - 255	Control channel used for fixture settings
				Set discrete value of desired effect, wait >3 seconds, then set value to 0 (idle)
				**Function does not require 3 second rule to activate function
			0 - 5	Idle (Default must be 0)
			6 - 10	Full luminaire ReCal - also wakes from shutdown
			11 - 15	Fixture Shutdown
			16 - 20	Reserved Values
			21 - 25	Display - Menu ON
			26 - 30	Display - Menu OFF
			31 - 35	Tungsten Dimming On**
			36 - 40	Tungsten Dimming Off (Default)**
			41 - 45	Dimming Curve Linear**
			46 - 50	Dimming Curve S-Curve**
			51 - 55	Dimming Curve Square Curve (Default)**
			56 - 60	Reserved
			61 - 65	Dimmer Snap On**
			66 - 70	Dimmer Snap Off (Default)**
			71 - 90	Reserved
			91 - 95	Color Calibration - On
			96 - 100	Color Calibration - Off (Default)
			101 - 110	Reserved
			111 - 115	Standard Mode (Default)
			116 - 120	Studio Mode - Reduced output with lower fan
			121 - 125	Whisper Mode - Reduced output with lower fan
			126 - 135	Reserved
			136 - 140	Fan On (Default)
			141 - 154	Fan Auto
			146 - 150	Reserved
			151 - 155	Record User Color Preset**
			156 - 170	Reserved
			171 - 175	Reset defaults
			176 - 255	Reserved
7	Red (High)	0	0 - 65535	Red Color Level Control 0 - 100% Saturation
8	Red (Low)			
9	Green (High)	0	0 - 65535	Green Color Level Control 0 - 100% Saturation
10	Green (Low)			
11	Blue (High)	0	0 - 65535	Blue Color Level Control 0 - 100% Saturation
12	Blue (Low)			

TABLE 3. SOCC

DMX CHANNEL	PARAMETER	DEFAULTS	RANGE DMX	DESCRIPTION
13	Amber (High)	0	0 - 65535	Amber Color Level Control 0 - 100% Saturation
14	Amber (Low)			
15	Lime (High)	0	0 - 65535	Lime Color Level Control 0 - 100% Saturation
16	Lime (Low)			
17	Cyan (High)	0	0 - 65535	Cyan Color Level Control 0 - 100% Saturation
18	Cyan (Low)			

TABLE 4. COLOR PRESETS

DMX RANGE	COLOR
0 - 255	Calibrated color presets 01 to 33 User definable color preset 01 to 20
0 - 10	Channel OFF - Color mixing priority
11 - 14	Moroccan Pink
15 - 18	Pink
19 - 22	Flesh Pink
23 - 26	Bright Rose
27 - 30	Follies Pink
31 - 34	Fuchsia Pink
35 - 38	Surprise Pink
39 - 42	Congo Blue
43 - 46	Blue
47 - 50	Virgin Blue
51 - 54	Midnight Maya
55 - 58	Double C.T. Blue
59 - 62	Slate Blue
63 - 66	Regal Blue
67 - 70	Full C.T. Blue
71 - 74	Steel Blue
75 - 78	Lighter Blue
79 - 82	Cyan
83 - 86	Marine Blue
87 - 90	Soft Green
91 - 94	Moss Green
95 - 98	Green
99 - 102	Fern Green
103 - 106	JAS Green
107 - 110	Pale Green
111 - 114	Spring Yellow
115 - 118	Yellow
119 - 122	Deep Amber
123 - 126	Chrome Orange
127 - 130	Orange
131 - 134	Magenta
135 - 138	Flame Red
139 - 142	Purple

DMX RANGE	COLOR
147 - 150	User Preset 2
151 - 154	User Preset 3
155 - 158	User Preset 4
159 - 162	User Preset 5
163 - 166	User Preset 6
167 - 170	User Preset 7
171 - 174	User Preset 8
175 - 178	User Preset 9
179 - 182	User Preset 10
183 - 186	User Preset 11
187 - 190	User Preset 12
191 - 194	User Preset 13
195 - 198	User Preset 14
199 - 202	User Preset 15
203 - 206	User Preset 16
207 - 210	User Preset 17
211 - 214	User Preset 18
215 - 218	User Preset 19
219 - 222	User Preset 20
223 - 255	Channel OFF - color mixing priority

TABLE 5. GREEN SHIFT

DMX CHANNEL	DEFAULT	DMX RANGE	FUNCTION
Green Shift	100	0 - 255	TV Camera Green Shift adjustment
			Channel works independently of color mixing channel
			Will adjust all mixed color to reduce or add green
			From -100% to +100%
			-100% similar to Lee Filter Full minus Green 247
		0 - 10	No Function
		11 - 29	Full Minus Green
		30 - 69	-99% -> -1%
		70 - 129	No Function
		130 - 189	+1% -> +99%
190 - 255	Full Plus Green		

TABLE 6. CCT CHANNEL

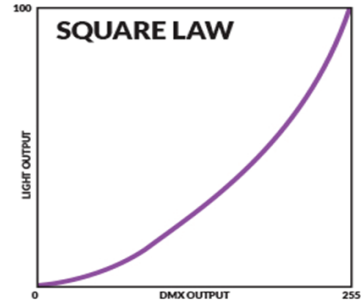
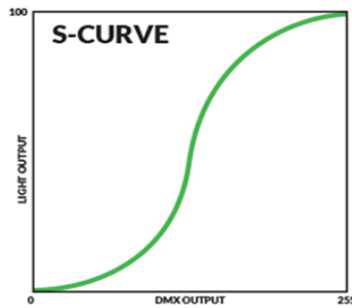
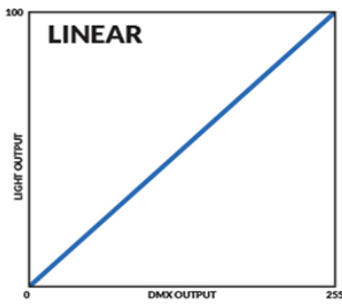
DMX CHANNEL	DEFAULT	DMX RANGE	FUNCTION
CCT	75	0 - 255	Variable color temperature control channel
			Channel works independently of color mixing channel
			Will adjust all mixed color from selected color temperature
			Value stated below are for guidance only
			Channel should be mapped to be variable from 0 - 150
		0	1800K
		25	2700K
		50	3000K
		75	3200K (Default)
		100	4000K
		125	4500K
		150	5000K
		175	5600K
		200	6500K
		225	8000K
250	10000K		
250 - 255	Hold 10000K		

TABLE 7. CONTROL CHANNEL

DMX RANGE	ITEMS	DESCRIPTION	POWER CYCLE RULES	FUNCTION SELECTION VIA UI
0 - 255	Control Channel	Control channel used for fixture settings Set discrete value of desired effect, wait >3 seconds, then set value to 0 (idle) **Function does not require 3 second rule to activate function	N/A	N/A
0 - 5	Idle (Default)	Default value used to active functions. Should default to 0	N/A	N/A
6 - 10	Full Luminaire ReCal	Recalibrates all functions in the luminaire. Also used to wake from shutdown	N/A	Yes
11 - 15	Fixture Shutdown	Shuts down all fixture output and turns off all fans. Fixture can be re-activated by a power cycle or via the ReCal command	Will restart normally	Yes, press Menu twice to wake
16 - 20	Reserved			
21 - 25	Display - Menu On	Switches UI display on remotely - Display will time out as set in UI	N/A	Button press turns display on
26 - 30	Display - Menu Off	Switched UI display off remotely if on.	N/A	N/A
31 - 35	Tungsten Dimming On**	Enables Tungsten dimming color shift	Holds setting on power cycle	Yes
36 - 40	Tungsten Dimming Off (Default)**	Disables Tungsten dimming color shift	Holds setting on power cycle	Yes
41 - 45	Dimming Curve Linear**	Selects Linear Dimming Curve	Holds setting on power cycle	Yes
46 - 50	Dimming Curve S-Curve**	Selects S-Law Dimming Curve	Holds setting on power cycle	Yes
51 - 55	Dimming Curve Square Law (Default)**	Selects Square Law Dimming Curve	Holds setting on power cycle	Yes
56 - 60	Reserved			
61 - 65	Dimmer Snap On**	Allows for fastest output changes between levels but reduces smoothness of dimming and color	Holds setting on power cycle	Yes
66 - 70	Dimmer Snap Off (Default)**	Ensure fades between levels remain smooth and flicker free but limits instand snaps	Holds setting on power cycle	Yes
71 - 90	Reserved			
91 - 95	Color Calibration On	Turns color calibration on for fixture to fixture color matching on all mixed and preset colors. Limits highest output and max saturation of some colors	Holds setting on power cycle	Yes
96 - 100	Color Calibration Off (Default)	Turns color calibration off for maximum output and color access	Holds setting on power cycle	Yes
101 - 110	Reserved			
111 - 115	Standard Mode (Default)	Standard mode - Full LED output + full continuous fan at max speed (loudest setting). Fan remains at constant speed (unless in fan auto mode). NC40	Holds setting on power cycle	Yes
116 - 120	Studio Mode	Studio mode - Fan speed reduced to reduce dB levels 10% of full speed and LED output approximatly 80% of standard. Fan remains constant speed (unless in fan auto mode). NC35	Holds setting on power cycle	Yes
121 - 125	Whisper Mode	Whisper Mode - Fan speed reduced to reduce dB levels 30% of full speed and LED output approximatly 60% of standard. Fan remains constant speed (unless in fan auto mode). NC25	Holds setting on power cycle	Yes
126 - 135	Reserved			
136 - 140	Fan On (Default)	Fan runs at continuous speed for selected output mode	Holds setting on power cycle	Yes

TABLE 7. CONTROL CHANNEL

DMX RANGE	ITEMS	DESCRIPTION	POWER CYCLE RULES	FUNCTION SELECTION VIA UI
141 - 145	Fan Auto	Fans will increase/decrease speed based on LED operation	Holds stting on power cycle	Yes
146 - 150	Reserved			
151 - 155	Record User Color Preset**	Takes current color mixing values and stores to next available blank User color preset. If all presets are full, will not record. Preset will have to be cleared at UI	N/A	Yes
156 - 170	Reserved			
171 - 175	Reset default	Resets all paramters to factory default with the exception of DMX address and fixture DMX Mode	N/A	Yes, but will reset DMX address and DMX Mode
176 - 255	Reserved			



TECHNICAL SUPPORT

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