

appendix a
DMX PROTOCOL

DMX1	DMX2	DMX3	DMX4	Value	Percent	Function
Start code = 0						
						Shutter, Strobe, Reset, Lamp On/Off
				0 - 19	0 - 7	Shutter closed
				20 - 49	8 - 19	Open
				50 - 72	20 - 28	Strobe, fast to slow
				73 - 79	29 - 31	Open
				80 - 99	31 - 39	Opening pulse, fast to slow
				100 - 119	39 - 47	Closing pulse, fast to slow
				120 - 127	47 - 50	Open
				128 - 147	50 - 58	Random strobe, fast
	1			148 - 167	58 - 65	Random strobe, medium
				168 - 187	66 - 73	Random strobe, slow
				188 - 190	74 - 75	Open
				191 - 193	75 - 76	Random opening pulse, fast
				194 - 196	76 - 77	Random opening pulse, slow
				197 - 199	77 - 78	Random closing pulse, fast
				200 - 202	78 - 79	Random closing pulse, slow
				203 - 207	80 - 81	Open
				208 - 217	82 - 85	Reset, see note
				218 - 227	85 - 89	Open
				228 - 237	89 - 93	Lamp on
				238 - 247	93 - 97	Open
				248 - 255	97 - 100	Lamp off: time > 5 seconds, see note
	2			0 - 255	0 - 100	Dimmer Closed to open
	3			0 - 255	0 - 100	Cyan White to full cyan
	4			0 - 255	0 - 100	Magenta White to full magenta
	5			0 - 255	0 - 100	Yellow White to full yellow
						Color
				0 - 179	0 - 70	<i>Continuous scroll</i>
				0	0	White
				26	10	CTC 5500-2900K
				52	20	Pink 312
				78	31	UV
				104	41	Red 308
				130	51	Green 206
				156	61	Blue 108
						<i>Stepped scroll</i>
				180 - 183	71 - 72	Blue 108
				184 - 187	72 - 73	Green 206
				188 - 191	74 - 75	Red 308
				192 - 195	75 - 76	UV
				196 - 199	77 - 78	Pink 312
				200 - 203	78 - 80	CTC 5500-2900K
				204 - 207	80 - 81	White
						<i>Continuous rotation</i>
				208 - 226	82 - 88	CW, fast to slow
				227 - 245	89 - 96	CCW, slow to fast
						<i>Random CMY color</i>
				246 - 248	96 - 97	Fast
				249 - 251	98 - 98	Medium
				252 - 255	99 - 100	Slow

Note: To override (DMX) Reset or Lamp Off = OFF, set all 3 CMY channels to a value from 230 to 232.

DMX1	DMX2	DMX3	DMX4	Value	Percent	Function
7				0 - 255	0 - 100	Frost Open (off) to full
8				0 - 255	0 - 100	Pan Left to right (128 = neutral)
-	9	-	9	0 - 255	0 - 100	Pan Fine (LSB) Left to right (128 = neutral)
9	10	9	10	0 - 255	0 - 100	Tilt Up to down (128 = neutral)
-	11	-	11	0 - 255	0 - 100	Tilt Fine (LSB) Up to down (128 = neutral)
-	-	10	12	0 - 2 3 - 245 246 - 248 249 - 251 252 - 255	0 - 1 1 - 96 96 - 97 98 - 98 99 - 100	Pan/Tilt Speed Tracking control Vector speed, fast to slow Tracking, PTSP SLOW (override FAST) Tracking, PTSP FAST (override SLOW) Blackout while moving
-	-	11	13	0 - 2 3 - 245 246 - 248 249 - 251 252 - 255	0 - 1 1 - 96 96 - 97 98 - 98 99 - 100	Effects Speed <i>Dimmer, CMY filters</i> Tracking control Vector speed, fast to slow Tracking, SCUT OFF (overrides ON) Tracking, SCUT ON (overrides OFF) Vector speed, fast <i>Color wheel</i> Tracking control Vector speed, fast to slow Tracking, SCUT OFF (overrides ON) Tracking, SCUT ON (overrides OFF) Blackout while moving <i>Frost</i> Tracking control Vector speed, fast to slow Vector speed, fast