

DMX protocol

ERA 800 Performance firmware version 1.1.0.

Channel	DMX Value	Function	Fade type	Default value
1	0 - 19	Strobe/shutter effect Shutter closed	Snap	0
	20 - 24	Shutter open		
	25 - 64	Strobe, fast → slow		
	65 - 69	Shutter open		
	70 - 84	Opening pulse, slow → fast		
	85 - 89	Shutter open		
	90 - 104	Closing pulse, slow → fast		
	105 - 109	Shutter open		
	110 - 124	Random strobe, slow → fast		
	125 - 129	Shutter open		
	130 - 144	Random opening pulse, slow → fast		
	145 - 255	Shutter open		
	2	0 - 65535		
3	Dimmer fade, fine (LSB)		Fade	0
4	0 - 65535	Cyan (MSB) 0 → 100%	Fade	0
5		Cyan fine (LSB) 0 → 100%	Fade	0
6	0 - 65535	Magenta (MSB) 0 → 100%	Fade	0
7		Magenta fine (LSB) 0 → 100%	Fade	0
8	0 - 65535	Yellow (MSB) 0 → 100%	Fade	0
9		Yellow fine (LSB) 0 → 100%	Fade	0
10	0 - 65535	CTO (MSB) 0 → 100%	Fade	0
11		CTO fine (LSB) 0 → 100%	Fade	0

Table 1: DMX Protocol

Channel	DMX Value	Function	Fade type	Default value			
12	0 - 6	Color wheel	Fade	0			
	7 - 13	Indexing					
	14 - 20	<i>Solid colors</i>					
	21 - 27	Open					
	28 - 34	Color 1 (Red)					
	35 - 41	Color 2 (Medium Blue)					
	42 - 48	Color 3 (Deep Green)					
	49 - 51	Color 4 (Lavender)					
	52 - 61	Color 5 (Deep Orange)					
	62	Color 6 (Deep Blue)					
	63 - 72	<i>Split colors (continuous color wheel indexing)</i>					
	73	Open					
	74 - 83	Open → Color 1					
	84	Color 1 (Red)					
	85 - 94	Color 1 → Color 2					
	95	Color 2 (Medium Blue)					
	96 - 105	Color 2 → Color 3					
	106	Color 3 (Deep Green)					
	107 - 116	Color 3 → Color 4					
117	Color 4 (Lavender)						
118 - 127	Color 4 → Color 5						
128 - 190	Color 5 (Deep Orange)						
191 - 192	Color 5 → Color 6						
193 - 255	Color 6 (Deep Blue)						
13	0 - 6	Color wheel	Snap	0			
	7 - 13	Indexing					
	14 - 20	<i>Solid colors</i>					
	21 - 27	Open					
	28 - 34	Color 1 (Red)					
	35 - 41	Color 2 (Medium Blue)					
	42 - 48	Color 3 (Deep Green)					
	49 - 55	Color 4 (Lavender)					
	56 - 62	Color 5 (Deep Orange)					
	63 - 69	Color 6 (Deep Blue)					
	70 - 76	Open					
	77 - 83	Open → Color 1					
	84 - 90	Color 1 (Red)					
	91 - 171	Color 1 → Color 2					
	172 - 174	Color 2 (Medium Blue)					
	175 - 255	Color 2 → Color 3					
	14	0 - 127			Gobo wheel 1 (rotating gobos)	Snap	0
		128 - 190			Gobo selection		
		191 - 192			Open		
193 - 255		Gobo 1 (Ray Brush)					
		Gobo 2 (Too Many Doctors)					
15	0 - 255	Gobo wheel 1	Fade	0			
		Gobo indexing/rotation					
		Gobo indexing 0 - 360°					
		Gobo rotation CW fast → slow					
		Stop					

Table 1: DMX Protocol

Channel	DMX Value	Function	Fade type	Default value
16	0 - 6	Gobo wheel 2 (static gobos)	Snap	0
	7 - 13	Gobo selection		
	14 - 20	Open		
	21 - 27	Gobo 1 (Ray Flowers)		
	28 - 34	Gobo 2 (Brick It)		
	35 - 41	Gobo 3 (Happy)		
	42 - 48	Gobo 4 (Mikado)		
	49 - 55	Gobo 5 (Dots)		
	56 - 62	Gobo 6 (Lasercone Single)		
	63 - 69	Gobo 7 (Squares)		
70 - 76	Gobo 1 shake			
77 - 83	Gobo 2 shake			
84 - 90	Gobo 3 shake			
91 - 97	Gobo 4 shake			
98 - 104	Gobo 5 shake			
	Gobo 6 shake			
	Gobo 7 shake			
	Continuous gobo wheel rotation			
105 - 178	CCW fast → slow			
179 - 182	Stop (wheel stops at current position)			
183 - 255	CW slow → fast			
17	0 - 5	Animation	Snap	0
	6 - 128	Open		
	129 - 191	Indexing CCW 0° → 540°		
	192	Continuous rotation CW fast → slow		
	193 - 255	Stop		
18	0 - 255	Frost 1: Light frost No frost → full frost	Fade	0
19	0 - 255	Frost 2: Heavy frost No frost → full frost	Fade	0
20	0 - 10	Rotating Prism 1 deployment	Snap	0
	11 - 255	Off On		
21	0 - 127	Rotating Prism 1 movement	Snap	0
	128 - 190	Indexing 0° - 360°		
	191 - 192	Rotation CW fast → slow		
	193 - 255	Stop Rotation CCW slow → fast		
22	0 - 10	Rotating Prism 2 deployment	Snap	0
	11 - 255	Off On		
23	0 - 127	Rotating Prism 2 movement	Snap	0
	128 - 190	Indexing 0° - 360°		
	191 - 192	Rotation CW fast → slow		
	193 - 255	Stop Rotation CCW slow → fast		
24	0 - 255	Iris Open → closed	Fade	0
25	0 - 65535	Zoom (MSB) Wide → narrow	Fade	0
26		Zoom fine (LSB)	Fade	0
27	0 - 65535	Focus (MSB) Infinity → near	Fade	0
28		Focus fine (LSB)	Fade	0
29	0 - 255	Framing blade 1: position Out → in	Fade	0
30	0 - 126	Framing blade 1: angle	Fade	127
	127 - 128	Angle - Parallel		
	129 - 255	Angle +		
31	0 - 255	Framing blade 2: position Out → in	Fade	0

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Channel	DMX Value	Function	Fade type	Default value
32	0 -126 127 - 128 129 - 255	Framing blade 2: angle Angle – Parallel Angle +	Fade	127
33	0 - 255	Framing blade 3: position Out → in	Fade	0
34	0 -126 127 - 128 129 - 255	Framing blade 3: angle Angle – Parallel Angle +	Fade	127
35	0 - 255	Framing blade 4: position Out → in	Fade	0
36	0 -126 127 - 128 129 - 255	Framing blade 4: angle Angle – Parallel Angle +	Fade	127
37	0 -126 127 - 128 129 - 255	Framing module angle Minimum (-60°) 0° Maximum (+60°)	Fade	127
38	0 - 65535	Pan (MSB) Left → right	Fade	32768
39		Pan, fine (LSB)		
40	0 - 65535	Tilt (MSB) Up → down	Fade	32768
41		Tilt, fine (LSB)		
42	0 - 9 10 - 14 15 16 17 18 19 - 22 23 24 25 26 27 28 29 30 - 51 52 53 54 55 56 -255	Fixture control/settings <i>(hold for number of seconds indicated to activate)</i> <i>No function (disables calibration) – 5 sec.</i> Reset entire fixture – 5 sec. <i>No function</i> Reset color – 5 sec. Reset beam only – 5 sec. Reset pan and tilt only – 5 sec. <i>No function</i> Linear dimming curve – 1 sec. (menu override, setting unaffected by power off/on) Square law dimming curve – 1 sec. (menu override, default setting, setting unaffected by power off/on) Inverse square law dimming curve – 1 sec. (menu override, setting unaffected by power off/on) S-curve dimming curve – 1 sec. (menu override, setting unaffected by power off/on) <i>No function</i> Fast pan and tilt speed – 1 sec. (default setting, menu override - setting returns to MENU setting after power on/off) Smooth pan and tilt speed – 1 sec. (menu override - setting returns to MENU setting after power on/off) <i>No function</i> Control panel display = ON – 1 sec. Control panel display = OFF – 1 sec. Regulated fan speed, fixed light output intensity (default) – 1 sec. Full fan speed, regulated light output intensity – 1 sec. <i>No function</i>	Snap	0

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