

DMX protocol

Std. 8-bit	Std. 16-bit	Comp. 8-bit	Comp. 16-bit	DMX Value	Percent	Function
1	1	1	1	0 - 255	0 - 100	Pan Pan 0 - 430°
2	2	2	2	0 - 255	0 - 100	Pan fine Pan fine (Least Significant Byte)
3	3	3	3	0 - 255	0 - 100	Tilt Tilt 0 - 300°
4	4	4	4	0 - 255	0 - 100	Tilt fine Tilt fine (Least Significant Byte)
5	5	5	5	0 - 7	0 - 3	General control Full LED output power (unbalanced) Fade out with fader (slow → fast) White balance 8500 K (if RGB active) Fade out with fader (slow → fast) White balance 6500 K (if RGB active) Fade out with fader (slow → fast) White balance (use with lighting desk 'color picker' function) Fade out with fader (slow → fast) <i>Safe zone: no reset or effects available</i> Camera mode, 50 Hz Camera mode, 60 Hz Camera mode, FLEX mode <i>Safe zone: no reset or effects available</i> Reset (after 1 second delay) <i>Safe zone: no reset or effects available</i>
				8 - 15	3 - 6	
				16 - 23	6 - 9	
				24 - 31	9 - 12	
				32 - 207	13 - 81	
				208 - 215	82 - 84	
				216 - 223	85 - 87	
				224 - 231	88 - 91	
				232 - 239	91 - 93	
				240 - 247	94 - 97	
248 - 255	97 - 100					
6	6	6	6	0 - 15	0 - 6	Electronic shutter effect Shutter closed Shutter open Strobe effect >10 Hz (fast → slow) Shutter open Dimmer fade time adjustment, slow → fast Shutter open Shutter closed Strobe effect <10 Hz (fast → slow) Shutter open Closing pulse (0.6 → 4.8 seconds) Shutter closed Shutter fade to 0% (0.6 → 4.8 seconds) Shutter open Shutter fade to 100% (0.6 → 4.8 seconds) Shutter closed Random shutter 100% (0.6 → 4.8 seconds) Shutter open Random shutter 0% (0.6 → 4.8 seconds) Shutter closed Random shutter fade to 0% (0.6 → 4.8 seconds) Shutter open Random shutter fade to 100% (0.6 → 4.8 seconds) Shutter open
				16 - 95	6 - 37	
				96 - 110	38 - 43	
				111	43	
				112 - 125	44 - 49	
				126	49	
				127	47	
				128 - 142	47 - 56	
				143	56	
				144 - 158	56 - 62	
				159	62	
				160 - 174	63 - 68	
				175	69	
				176 - 190	69 - 74	
				191	75	
				192 - 206	75 - 81	
				207	81	
				208 - 222	82 - 87	
				223	87	
				224 - 238	88 - 93	
239	94					
240 - 254	94 - 100					
255	100					
7	7	7	7	0 - 255	0 - 100	Dimmer Dimmer 0 → 100%
8	8	8	8	0 - 255	0 - 100	Zoom Zoom 12 → 36° (one-tenth peak angles)
9	9	9	9	0 - 255	0 - 100	Red Red 0 → 100%
	10		10	0 - 255	0 - 100	Red fine Red fine (LSB)
10	11	10	11	0 - 255	0 - 100	Green Green 0 → 100%
	12		12	0 - 255	0 - 100	Green fine Green fine (LSB)

Table 2: DMX Protocol

Std. 8-bit	Std. 16-bit	Comp. 8-bit	Comp. 16-bit	DMX Value	Percent	Function
11	13	11	13	0 - 255	0 - 100	Blue Blue 0 → 100%
	14		14	0 - 255	0 - 100	Blue fine Blue fine (LSB)
12	15	12	15	0 - 255	0 - 100	CTC CTC 0 → 100%
13	16			0 - 1 2 - 3 4 - 7 8 - 11 12 - 15 16 - 19 20 - 23 24 - 27 28 - 31 32 - 35 36 - 39 40 - 43 44 - 47 48 - 51 52 - 55 56 - 59 60 - 63 64 - 191 192 - 222 223 - 224 225 - 255	0 1 2 3 - 4 5 - 6 6 - 7 8 - 9 9 - 10 11 - 12 13 - 14 14 - 15 16 - 17 17 - 18 19 - 20 20 - 21 22 - 23 24 - 25 25 - 75 75 - 87 87 - 88 88 - 100	Color wheel effect Inactive: color mixing with RGB control White White → Red Red Red → Yellow Yellow Yellow → Magenta Magenta Magenta → Green Green Green → Amber Amber Amber → Blue Blue Blue → Cyan Cyan Cyan → White Continuous color wheel positioning Color wheel rotation effect Clockwise, fast → slow Color wheel stop Counter-clockwise, slow → fast
14	17			0 - 3 4 - 255	0 - 1 2 - 100	Pan/tilt speed Moves in real time Delayed movement, fast → slow
15	18			0 - 3 4 - 255	0 - 1 2 - 100	Effects speed Move in real time Delayed movement, fast → slow
16	19			0 - 95 96 - 127 128 - 159 160 - 223 224 - 255	0 - 37 38 - 50 50 - 62 63 - 87 88 - 100	Movement blackout No function Blackout during pan/tilt movement Blackout during color changes No function Blackout during pan/tilt movement and color changes Fade-out/fade-in times for blackouts is adjustable, slow (5 secs.) → snap

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