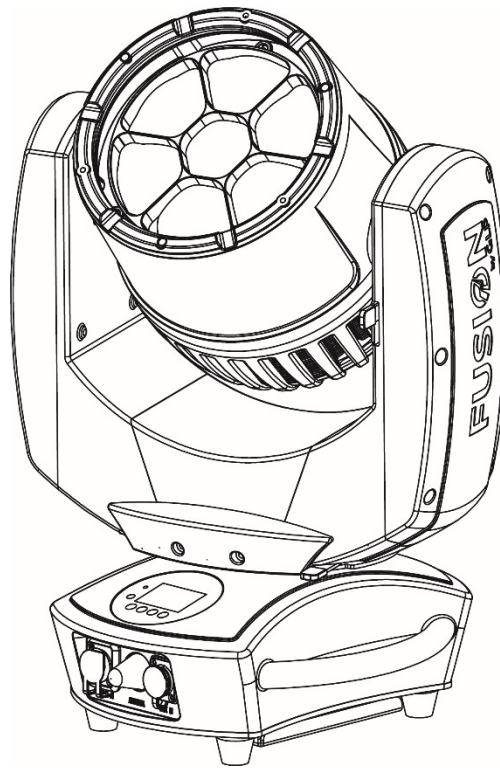


FUSION
by GLP

Fusion EXO Wash 30

DMX Channel Index



Software version V1.0.00



GLP® Fusion EXO Wash DMX Channel Index – Revision A

This document covers fixture software version V1.0.00

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1. DMX control modes overview

The following DMX control modes are available in the FP7.

DMX Mode 1: Compact

Compact Mode uses 13 DMX channels.

It provides 16-bit control of pan and tilt, dimming and a shutter with strobe and ramp up/down effects. It has a virtual color wheel effect (color presets with rotation effects) and RGBW color mixing.

Compact Mode also provides control of zoom and a control / settings channel that lets you configure the feature and adjust settings remotely via DMX.

Mode 1 Compact

1	Pan
2	Pan fine
3	Tilt
4	Tilt fine
5	Dimmer
6	Shutter
7	Virtual color wheel
8	Red
9	Green
10	Blue
11	White
12	Zoom
13	Control / Settings

DMX Mode 2: Standard

Standard Mode uses 22 DMX channels.

It provides 16-bit control of pan and tilt, 16-bit control of dimming and a shutter with strobe and ramp up/down effects. It has a virtual color wheel effect (color presets with rotation effects), color temperature control and 16-bit RGBW color mixing.

Standard Mode also gives access to a range of Pattern FX with variable speed and crossfading parameters, control of zoom and a control / settings channel that lets you configure the feature and adjust settings remotely via DMX.

Mode 2 Standard

1	Pan
2	Pan fine
3	Tilt
4	Tilt fine
5	Dimmer
6	Dimmer fine
7	Shutter
8	Virtual color wheel
9	CTC
10	Red
11	Red fine
12	Green
13	Green fine
14	Blue
15	Blue fine
16	White
17	White fine
18	Pattern
19	Pattern Speed
20	Pattern Fading
21	Zoom
22	Control / Settings

DMX Mode 3: Extended

Extended Mode uses 37 DMX channels.

It provides 16-bit control of pan and tilt, 16-bit control of dimming and a shutter with strobe and ramp up/down effects. It has a virtual color wheel effect (color presets with rotation effects), color temperature control and 16-bit RGBW color mixing.

Extended Mode also has two layers:

- Layer 1, the background layer, has 16-bit color dimming and a shutter effect that includes a random pixel strobe.
- Layer 2, the top layer, has a range of Pattern FX with 16-bit dimming, shutter effects and color control via a virtual color wheel (color presets) and 16-bit RGBW color mixing. Layer 2 also has variable speed and crossfading parameters

Extended Mode also provides control of zoom and a control / settings channel that lets you configure the feature and adjust settings remotely via DMX.

Mode 3 Extended	
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1	Pan
2	Pan fine
3	Tilt
4	Tilt fine
5	Dimmer
6	Dimmer fine
7	Shutter
8	Virtual color wheel
9	CTC
10	Red
11	Red fine
12	Green
13	Green fine
14	Blue
15	Blue fine
16	White
17	White fine
18	Layer 1 Color dimmer
19	Layer 1 Color dimmer fine
20	Layer 1 Shutter
21	Layer 2 Pattern dimmer
22	Layer 2 Pattern dimmer fine
23	Layer 2 Pattern shutter
24	Layer 2 Pattern color wheel
25	Layer 2 Pattern red
26	Layer 2 Pattern red fine
27	Layer 2 Pattern green
28	Layer 2 Pattern green fine
29	Layer 2 Pattern blue
30	Layer 2 Pattern blue fine
31	Layer 2 Pattern white
32	Layer 2 Pattern white fine
33	Layer 2 Pattern
34	Layer 2 Pattern speed
35	Layer 2 Pattern fading
36	Zoom
37	Control / Settings

DMX Mode 4: Pix

Pix Mode uses 50 DMX channels.

It provides 16-bit control of pan and tilt, 16-bit control of dimming and a shutter with strobe and ramp up/down effects. It has a virtual color wheel effect (color presets with rotation effects), color temperature control and 16-bit RGBW color mixing.

Pix Mode also gives access to a range of Pattern FX with variable speed and crossfading parameters, control of zoom and a control / settings channel that lets you configure the feature and adjust settings remotely via DMX.

Finally, Pix Mode provides independent RGBW color mixing on each of the fixture's seven pixels.

Mode 4 Pix	
1	Pan
2	Pan fine
3	Tilt
4	Tilt fine
5	Dimmer
6	Dimmer fine
7	Shutter
8	Virtual color wheel
9	CTC
10	Red
11	Red fine
12	Green
13	Green fine
14	Blue
15	Blue fine
16	White
17	White fine
18	Pattern
19	Pattern Speed
20	Pattern Fading
21	Zoom
22	Control / Settings
23	Pixel 1 Red
24	Pixel 1 Green
25	Pixel 1 Blue
26	Pixel 1 White
27	Pixel 2 Red
28	Pixel 2 Green
29	Pixel 2 Blue
30	Pixel 2 White
31	Pixel 3 Red
32	Pixel 3 Green
33	Pixel 3 Blue
34	Pixel 3 White
35	Pixel 4 Red
36	Pixel 4 Green
37	Pixel 4 Blue
38	Pixel 4 White
39	Pixel 5 Red
40	Pixel 5 Green
41	Pixel 5 Blue
42	Pixel 5 White
43	Pixel 6 Red
44	Pixel 6 Green
45	Pixel 6 Blue
46	Pixel 6 White
47	Pixel 7 Red
48	Pixel 7 Green
49	Pixel 7 Blue
50	Pixel 7 White

2. DMX control channel layout tables

DMX Mode 1: Compact

11 DMX Channels

	Channel	Command	DMX range		Percent		Default DMX	Fade
1	Pan	Pan left-right	0	65535	0	100	32767	Fade
2	Pan fine							
3	Tilt	Tilt up-down	0	65535	0	100	32767	Fade
4	Tilt fine							
5	Dimmer	Intensity 0-100%	0	255	0	100	0	Fade
6	Shutter	Shutter closed	0	4	0	1.6	0	Snap
		Single flash when change on dimmer channel	5	9	2.0	3.5		
		Sync ramp up slow-fast	10	39	3.9	15.3		
		Sync ramp down slow-fast	40	69	15.7	27.1		
		Sync ramp up-down slow-fast	70	99	27.5	38.8		
		Sync double flash (slow-fast)	100	129	39.2	50.6		
		Random strobe pixel (slow-fast)	130	159	51.0	62.4		
		Random strobe all (slow-fast)	160	199	62.7	78.0		
		Sync strobe (1 Hz-10 Hz)	200	250	78.4	98.0		
	Shutter open	251	255	98.4	100			
7	Color wheel effect	Off (RGBW)	0	7	0	2.7	0	Snap
		Color 01 - Red	8	15	3.1	5.9		Snap
		Color 02 - Amber	16	23	6.3	9.0		Snap
		Color 03 - Warm Yellow	24	31	9.4	12.2		Snap
		Color 04 - Yellow	32	39	12.5	15.3		Snap
		Color 05 - Green	40	47	15.7	18.4		Snap
		Color 06 - Turquoise	48	55	18.8	21.6		Snap
		Color 07 - Cyan	56	63	22.0	24.7		Snap
		Color 08 - Blue	64	71	25.1	27.8		Snap
		Color 09 - Lavender	72	79	28.2	31.0		Snap
		Color 10 - Mauve	80	87	31.4	34.1		Snap
		Color 11 - Magenta	88	95	34.5	37.3		Snap
		Color 12 - Pink	96	103	37.6	40.4		Snap
		Color 13 - White 3200K	104	111	40.8	43.5		Snap
		Color 14 - White 5600K	112	119	43.9	46.7		Snap
		Color 15 - White 7200K	120	127	47.1	49.8		Snap
		Stop	128	128	50.2	50.2		Snap
		Rainbow colors crossfade slow > fast	129	223	50.6	87.5		Fade
Random colors crossfade slow > fast	224	255	87.8	100	Fade			
8	Red	Red intensity 0-100%	0	255	0	100	0	Fade
9	Green	Green intensity 0-100%	0	255	0	100	0	Fade
10	Blue	Blue intensity 0-100%	0	255	0	100	0	Fade
11	White	White intensity 0-100%	0	255	0	100	0	Fade
12	Zoom	Wide-narrow	0	255	0	100	0	Fade

13	Control / Settings	No function	0	9	0.0	3.5	0	Snap
		Dimmer curve: Extra-soft (3s hold)	10	15	3.9	5.9		
		Dimmer curve: Linear (3s hold)	16	21	6.3	8.2		
		Display mode: Auto (3s hold)	22	27	8.6	10.6		
		Display mode: On (3s hold)	28	33	11.0	12.9		
		Display mode: Off (3s hold)	34	39	13.3	15.3		
		Display orientation: Normal (3s hold)	40	45	15.7	17.6		
		Display orientation: Inverted (3s hold)	46	51	18.0	20.0		
		No DMX: Blackout (3s hold)	52	57	20.4	22.4		
		No DMX: Hold (3s hold)	58	63	22.7	24.7		
		No DMX: Stand-alone (3s hold)	64	69	25.1	27.1		
		Fan mode: Regulated (3s hold)	70	75	27.5	29.4		
		Fan mode: High (3s hold)	76	81	29.8	31.8		
		Fan mode: Medium (3s hold)	82	87	32.2	34.1		
		Fan mode: Low (3s hold)	88	93	34.5	36.5		
		Position feedback: Off (3s hold)	94	99	36.9	38.8		
		Position feedback: On (3s hold)	100	105	39.2	41.2		
		No function	106	117	41.6	45.9		
		Tilt inversion: Off (3s hold)	118	123	46.3	48.2		
		Tilt inversion: On (3s hold)	124	129	48.6	50.6		
		Pan inversion: Off (3s hold)	130	135	51.0	52.9		
		Pan inversion: On (3s hold)	136	141	53.3	55.3		
		Zoom inversion: Off (3s hold)	142	147	55.7	57.6		
		Zoom inversion: On (3s hold)	148	153	58.0	60.0		
		Defog: Off	154	159	60.4	62.4		
		Defog: On	160	165	62.7	64.7		
		Defog: Quick	166	171	65.1	67.1		
		Load Settings Preset1	172	177	67.5	69.4		
		Load Settings Preset2	178	183	69.8	71.8		
		Load Settings Preset3	184	189	72.2	74.1		
		PWM 600 Hz (5s hold)	190	195	74.5	76.5		
		PWM: 2200 Hz (5s hold)	196	201	76.9	78.8		
		PWM: 3000 Hz (5s hold)	202	207	79.2	81.2		
		PWM: 4800 Hz (5s hold)	208	213	81.6	83.5		
PWM: 9600 Hz (5s hold)	214	219	83.9	85.9				
PWM: 25 kHz (5s hold)	220	225	86.3	88.2				
No function	226	231	88.6	90.6				
Return to default settings	232	237	91.0	92.9				
Reset Pan/Tilt (3s hold)	238	243	93.3	95.3				
Reset Head (3s hold)	244	249	95.7	97.6				
Reset All (3s hold)	250	255	98.0	100				

DMX Mode 2: Standard

22 DMX Channels

	Channel	Command	DMX range		Percent		Default DMX	Fade		
1	Pan	Pan left-right	0	65535	0	100	32767	Fade		
2	Pan fine		3	Tilt	Tilt up-down	0	65535	0	100	32767
4	Tilt fine	5	Dimmer	Intensity 0-100%		0	65535	0	100	32767
6	Dimmer fine	7	Shutter		Shutter closed	0	4	0	1.6	0
		Single flash when change on dimmer channel		5	9	2.0	3.5			
		Sync ramp up slow-fast		10	39	3.9	15.3			
		Sync ramp down slow-fast		40	69	15.7	27.1			
		Sync ramp up-down slow-fast		70	99	27.5	38.8			
		Sync double flash (slow-fast)		100	129	39.2	50.6			
		Random strobe pixel (slow-fast)		130	159	51.0	62.4			
		Random strobe all (slow-fast)		160	199	62.7	78.0			
		Sync strobe (1 Hz-10 Hz)		200	250	78.4	98.0			
		Shutter open		251	255	98.4	100			
8	Color wheel effect	Off (RGBW)	0	7	0	2.7	0	Snap		
		Color 01 - Red	8	15	3.1	5.9		Snap		
		Color 02 - Amber	16	23	6.3	9.0		Snap		
		Color 03 - Warm Yellow	24	31	9.4	12.2		Snap		
		Color 04 - Yellow	32	39	12.5	15.3		Snap		
		Color 05 - Green	40	47	15.7	18.4		Snap		
		Color 06 - Turquoise	48	55	18.8	21.6		Snap		
		Color 07 - Cyan	56	63	22.0	24.7		Snap		
		Color 08 - Blue	64	71	25.1	27.8		Snap		
		Color 09 - Lavender	72	79	28.2	31.0		Snap		
		Color 10 - Mauve	80	87	31.4	34.1		Snap		
		Color 11 - Magenta	88	95	34.5	37.3		Snap		
		Color 12 - Pink	96	103	37.6	40.4		Snap		
		Color 13 - White 3200K	104	111	40.8	43.5		Snap		
		Color 14 - White 5600K	112	119	43.9	46.7		Snap		
		Color 15 - White 7200K	120	127	47.1	49.8		Snap		
		Stop	128	128	50.2	50.2		Snap		
		Rainbow colors crossfade slow > fast	129	223	50.6	87.5		Fade		
	Random colors crossfade slow > fast	224	255	87.8	100	Fade				
9	Color Temperature (Kelvin)	RAW	0	15	0	5.9		Snap		
		10000	16	18	6.3	7.1				
		9900	19	21	7.5	8.2				
		9800	22	24	8.6	9.4				
		9700	25	27	9.8	10.6				
		9600	28	30	11.0	11.8				
		9500	31	33	12.2	12.9				
		9400	34	36	13.3	14.1				
		9300	37	39	14.5	15.3				
		9200	40	42	15.7	16.5				
		9100	43	45	16.9	17.6				
		9000	46	48	18.0	18.8				
		8900	49	51	19.2	20.0				
		8800	52	54	20.4	21.2				
		8700	55	57	21.6	22.4				

8600	58	60	22.7	23.5
8500	61	63	23.9	24.7
8400	64	66	25.1	25.9
8300	67	69	26.3	27.1
8200	70	72	27.5	28.2
8100	73	75	28.6	29.4
8000	76	78	29.8	30.6
7900	79	81	31.0	31.8
7800	82	84	32.2	32.9
7700	85	87	33.3	34.1
7600	88	90	34.5	35.3
7500	91	93	35.7	36.5
7400	94	96	36.9	37.6
7300	97	99	38.0	38.8
7200	100	102	39.2	40.0
7100	103	105	40.4	41.2
7000	106	108	41.6	42.4
6900	109	111	42.7	43.5
6800	112	114	43.9	44.7
6700	115	117	45.1	45.9
6600	118	120	46.3	47.1
6500	121	123	47.5	48.2
6400	124	126	48.6	49.4
6300	127	129	49.8	50.6
6200	130	132	51.0	51.8
6100	133	135	52.2	52.9
6000	136	138	53.3	54.1
5900	139	141	54.5	55.3
5800	142	144	55.7	56.5
5700	145	147	56.9	57.6
5600	148	150	58.0	58.8
5500	151	153	59.2	60.0
5400	154	156	60.4	61.2
5300	157	159	61.6	62.4
5200	160	162	62.7	63.5
5100	163	165	63.9	64.7
5000	166	168	65.1	65.9
4900	169	171	66.3	67.1
4800	172	174	67.5	68.2
4700	175	177	68.6	69.4
4600	178	180	69.8	70.6
4500	181	183	71.0	71.8
4400	184	186	72.2	72.9
4300	187	189	73.3	74.1
4200	190	192	74.5	75.3
4100	193	195	75.7	76.5
4000	196	198	76.9	77.6
3900	199	201	78.0	78.8
3800	202	204	79.2	80.0
3700	205	207	80.4	81.2
3600	208	210	81.6	82.4
3500	211	213	82.7	83.5
3400	214	216	83.9	84.7
3300	217	219	85.1	85.9
3200	220	222	86.3	87.1
3100	223	225	87.5	88.2
3000	226	228	88.6	89.4
2900	229	231	89.8	90.6

		2800	232	234	91.0	91.8		
		2700	235	237	92.2	92.9		
		2600	238	240	93.3	94.1		
		2500	241	255	94.5	100		
10	Red	Red intensity 0–100%	0	65535	0	100	32767	Fade
11	Red fine							
12	Green	Green intensity 0–100%	0	65535	0	100	32767	Fade
13	Green fine							
14	Blue	Blue intensity 0–100%	0	65535	0	100	32767	Fade
15	Blue fine							
16	White	White intensity 0–100%	0	65535	0	100	32767	Fade
17	White fine							
18	Pattern	Static pattern	0	51	0	20.0	0	Snap
		Chase animation	52	131	20.4	51.4		
		Fade animation	132	211	51.8	82.7		
		Random	212	255	83.1	100		
19	Pattern speed	Slow–fast	0	255	0	100	0	Fade
20	Pattern fade	Slow crossfade–snap	0	255	0	100	0	Fade
21	Zoom	Wide–narrow	0	255	0	100	0	Fade
22	Control / Settings	No function	0	9	0.0	3.5	0	Snap
		Dimmer curve: Extra-soft (3s hold)	10	15	3.9	5.9		
		Dimmer curve: Linear (3s hold)	16	21	6.3	8.2		
		Display mode: Auto (3s hold)	22	27	8.6	10.6		
		Display mode: On (3s hold)	28	33	11.0	12.9		
		Display mode: Off (3s hold)	34	39	13.3	15.3		
		Display orientation: Normal (3s hold)	40	45	15.7	17.6		
		Display orientation: Inverted (3s hold)	46	51	18.0	20.0		
		No DMX: Blackout (3s hold)	52	57	20.4	22.4		
		No DMX: Hold (3s hold)	58	63	22.7	24.7		
		No DMX: Stand-alone (3s hold)	64	69	25.1	27.1		
		Fan mode: Regulated (3s hold)	70	75	27.5	29.4		
		Fan mode: High (3s hold)	76	81	29.8	31.8		
		Fan mode: Medium (3s hold)	82	87	32.2	34.1		
		Fan mode: Low (3s hold)	88	93	34.5	36.5		
		Position feedback: Off (3s hold)	94	99	36.9	38.8		
		Position feedback: On (3s hold)	100	105	39.2	41.2		
		No function	106	117	41.6	45.9		
		Tilt inversion: Off (3s hold)	118	123	46.3	48.2		
		Tilt inversion: On (3s hold)	124	129	48.6	50.6		
		Pan inversion: Off (3s hold)	130	135	51.0	52.9		
		Pan inversion: On (3s hold)	136	141	53.3	55.3		
		Zoom inversion: Off (3s hold)	142	147	55.7	57.6		
		Zoom inversion: On (3s hold)	148	153	58.0	60.0		
		Defog: Off	154	159	60.4	62.4		
		Defog: On	160	165	62.7	64.7		
		Defog: Quick	166	171	65.1	67.1		
		Load Settings Preset1	172	177	67.5	69.4		
		Load Settings Preset2	178	183	69.8	71.8		
		Load Settings Preset3	184	189	72.2	74.1		
PWM: 600 Hz (5s hold)	190	195	74.5	76.5				
PWM: 2200 Hz (5s hold)	196	201	76.9	78.8				
PWM: 3000 Hz (5s hold)	202	207	79.2	81.2				
PWM: 4800 Hz (5s hold)	208	213	81.6	83.5				
PWM: 9600 Hz (5s hold)	214	219	83.9	85.9				

	PWM: 25 kHz (5s hold)	220	225	86.3	88.2		
	No function	226	231	88.6	90.6		
	Return to default settings	232	237	91.0	92.9		
	Reset Pan/Tilt (3s hold)	238	243	93.3	95.3		
	Reset Head (3s hold)	244	249	95.7	97.6		
	Reset All (3s hold)	250	255	98.0	100		

DMX Mode 3: Extended

37 DMX Channels

	Channel	Command	DMX range		Percent		Default DMX	Fade		
1	Pan	Pan left-right	0	65535	0	100	32767	Fade		
2	Pan fine		3	Tilt	Tilt up-down	0	65535	0	100	32767
4	Tilt fine	5	Dimmer	Intensity 0-100%		0	65535	0	100	32767
6	Dimmer fine	7	Shutter		Shutter closed	0	4	0	1.6	0
		Single flash when change on dimmer channel		5	9	2.0	3.5			
		Sync ramp up slow-fast		10	39	3.9	15.3			
		Sync ramp down slow-fast		40	69	15.7	27.1			
		Sync ramp up-down slow-fast		70	99	27.5	38.8			
		Sync double flash (slow-fast)		100	129	39.2	50.6			
		Random strobe pixel (slow-fast)		130	159	51.0	62.4			
		Random strobe all (slow-fast)		160	199	62.7	78.0			
		Sync strobe (1 Hz-10 Hz)		200	250	78.4	98.0			
		Shutter open		251	255	98.4	100			
8	Color wheel effect	Off (RGBW)	0	7	0	2.7	0	Snap		
		Color 01 - Red	8	15	3.1	5.9		Snap		
		Color 02 - Amber	16	23	6.3	9.0		Snap		
		Color 03 - Warm Yellow	24	31	9.4	12.2		Snap		
		Color 04 - Yellow	32	39	12.5	15.3		Snap		
		Color 05 - Green	40	47	15.7	18.4		Snap		
		Color 06 - Turquoise	48	55	18.8	21.6		Snap		
		Color 07 - Cyan	56	63	22.0	24.7		Snap		
		Color 08 - Blue	64	71	25.1	27.8		Snap		
		Color 09 - Lavender	72	79	28.2	31.0		Snap		
		Color 10 - Mauve	80	87	31.4	34.1		Snap		
		Color 11 - Magenta	88	95	34.5	37.3		Snap		
		Color 12 - Pink	96	103	37.6	40.4		Snap		
		Color 13 - White 3200K	104	111	40.8	43.5		Snap		
		Color 14 - White 5600K	112	119	43.9	46.7		Snap		
		Color 15 - White 7200K	120	127	47.1	49.8		Snap		
		Stop	128	128	50.2	50.2		Snap		
		Rainbow colors crossfade slow > fast	129	223	50.6	87.5		Fade		
		Random colors crossfade slow > fast	224	255	87.8	100		Fade		
9	Color Temperature (Kelvin)	RAW	0	15	0	5.9	Snap			
		10000	16	18	6.3	7.1				
		9900	19	21	7.5	8.2				
		9800	22	24	8.6	9.4				
		9700	25	27	9.8	10.6				
		9600	28	30	11.0	11.8				
		9500	31	33	12.2	12.9				
		9400	34	36	13.3	14.1				
		9300	37	39	14.5	15.3				
		9200	40	42	15.7	16.5				
		9100	43	45	16.9	17.6				
		9000	46	48	18.0	18.8				
		8900	49	51	19.2	20.0				
		8800	52	54	20.4	21.2				
		8700	55	57	21.6	22.4				

8600	58	60	22.7	23.5
8500	61	63	23.9	24.7
8400	64	66	25.1	25.9
8300	67	69	26.3	27.1
8200	70	72	27.5	28.2
8100	73	75	28.6	29.4
8000	76	78	29.8	30.6
7900	79	81	31.0	31.8
7800	82	84	32.2	32.9
7700	85	87	33.3	34.1
7600	88	90	34.5	35.3
7500	91	93	35.7	36.5
7400	94	96	36.9	37.6
7300	97	99	38.0	38.8
7200	100	102	39.2	40.0
7100	103	105	40.4	41.2
7000	106	108	41.6	42.4
6900	109	111	42.7	43.5
6800	112	114	43.9	44.7
6700	115	117	45.1	45.9
6600	118	120	46.3	47.1
6500	121	123	47.5	48.2
6400	124	126	48.6	49.4
6300	127	129	49.8	50.6
6200	130	132	51.0	51.8
6100	133	135	52.2	52.9
6000	136	138	53.3	54.1
5900	139	141	54.5	55.3
5800	142	144	55.7	56.5
5700	145	147	56.9	57.6
5600	148	150	58.0	58.8
5500	151	153	59.2	60.0
5400	154	156	60.4	61.2
5300	157	159	61.6	62.4
5200	160	162	62.7	63.5
5100	163	165	63.9	64.7
5000	166	168	65.1	65.9
4900	169	171	66.3	67.1
4800	172	174	67.5	68.2
4700	175	177	68.6	69.4
4600	178	180	69.8	70.6
4500	181	183	71.0	71.8
4400	184	186	72.2	72.9
4300	187	189	73.3	74.1
4200	190	192	74.5	75.3
4100	193	195	75.7	76.5
4000	196	198	76.9	77.6
3900	199	201	78.0	78.8
3800	202	204	79.2	80.0
3700	205	207	80.4	81.2
3600	208	210	81.6	82.4
3500	211	213	82.7	83.5
3400	214	216	83.9	84.7
3300	217	219	85.1	85.9
3200	220	222	86.3	87.1
3100	223	225	87.5	88.2
3000	226	228	88.6	89.4
2900	229	231	89.8	90.6

		2800	232	234	91.0	91.8		
		2700	235	237	92.2	92.9		
		2600	238	240	93.3	94.1		
		2500	241	255	94.5	100		
10	Red	Red intensity 0–100%	0	65535	0	100	32767	Fade
11	Red fine							
12	Green	Green intensity 0–100%	0	65535	0	100	32767	Fade
13	Green fine							
14	Blue	Blue intensity 0–100%	0	65535	0	100	32767	Fade
15	Blue fine							
16	White	White intensity 0–100%	0	65535	0	100	32767	Fade
17	White fine							
18	Layer 1 Dimmer	Layer 1 (background) intensity 0–100%	0	65535	0	100	32767	Fade
19	Layer 1 Dimmer fine							
20	Layer 1 Shutter	Layer 1 (background) shutter closed	0	4	0	1.6	0	Snap
		Single flash when change on dimmer channel	5	9	2.0	3.5		
		Sync ramp up slow–fast	10	39	3.9	15.3		
		Sync ramp down slow–fast	40	69	15.7	27.1		
		Sync ramp up-down slow–fast	70	99	27.5	38.8		
		Sync double flash (slow–fast)	100	129	39.2	50.6		
		Random strobe pixel (slow–fast)	130	159	51.0	62.4		
		Random strobe all (slow–fast)	160	199	62.7	78.0		
		Sync strobe (1 Hz–10 Hz)	200	250	78.4	98.0		
		Shutter open	251	255	98.4	100		
21	Layer 2 Dimmer	Layer 2 (top layer) intensity 0–100%	0	65535	0	100	32767	Fade
22	Layer 2 Dimmer fine							
23	Layer 2 Pattern Shutter	Shutter closed	0	4	0	1.6	0	Snap
		Single flash when change on dimmer channel	5	9	2.0	3.5		
		Sync ramp up slow–fast	10	39	3.9	15.3		
		Sync ramp down slow–fast	40	69	15.7	27.1		
		Sync ramp up-down slow–fast	70	99	27.5	38.8		
		Sync double flash (slow–fast)	100	129	39.2	50.6		
		Random strobe pixel (slow–fast)	130	159	51.0	62.4		
		Random strobe all (slow–fast)	160	199	62.7	78.0		
		Sync strobe (1 Hz–10 Hz)	200	250	78.4	98.0		
		Shutter open	251	255	98.4	100		
24	Layer 2 Pattern color wheel effect	Layer 2 (top layer) pattern off (RGBW)	0	7	0	2.7	0	Snap
		Color 01 - Red	8	15	3.1	5.9		Snap
		Color 02 - Amber	16	23	6.3	9.0		Snap
		Color 03 - Warm Yellow	24	31	9.4	12.2		Snap
		Color 04 - Yellow	32	39	12.5	15.3		Snap
		Color 05 - Green	40	47	15.7	18.4		Snap
		Color 06 - Turquoise	48	55	18.8	21.6		Snap
		Color 07 - Cyan	56	63	22.0	24.7		Snap
		Color 08 - Blue	64	71	25.1	27.8		Snap
		Color 09 - Lavender	72	79	28.2	31.0		Snap
		Color 10 - Mauve	80	87	31.4	34.1		Snap
		Color 11 - Magenta	88	95	34.5	37.3		Snap
		Color 12 - Pink	96	103	37.6	40.4		Snap
		Color 13 - White 3200K	104	111	40.8	43.5		Snap

		Color 14 - White 5600K	112	119	43.9	46.7		Snap
		Color 15 - White 7200K	120	127	47.1	49.8		Snap
		Stop	128	128	50.2	50.2		Snap
		Rainbow colors crossfade slow > fast	129	223	50.6	87.5		Fade
		Random colors crossfade slow > fast	224	255	87.8	100		Fade
25	Layer 2 Pattern Red	Layer 2 (top layer) pattern red intensity 0–100%	0	65535	0	100	32767	Fade
26	Layer 2 Pattern Red fine							
27	Layer 2 Pattern Green	Layer 2 (top layer) pattern green intensity 0–100%	0	65535	0	100	32767	Fade
28	Layer 2 Pattern Green fine							
29	Layer 2 Pattern Blue	Layer 2 (top layer) pattern blue intensity 0–100%	0	65535	0	100	32767	Fade
30	Layer 2 Pattern Blue fine							
31	Layer 2 Pattern White	Layer 2 (top layer) pattern white intensity 0–100%	0	65535	0	100	32767	Fade
32	Layer 2 Pattern White fine							
33	Layer 2 Pattern	Layer 2 (top layer) static pattern	0	51	0	20.0	0	Snap
		Chase animation	52	131	20.4	51.4		
		Fade animation	132	211	51.8	82.7		
		Random	212	255	83.1	100		
34	Layer 2 Pattern speed	Slow–fast	0	255	0	100	0	Fade
35	Layer 2 Pattern fade	Slow crossfade–snap	0	255	0	100	0	Fade
36	Zoom	Wide–narrow	0	255	0	100	0	Fade
37	Control / Settings	No function	0	9	0.0	3.5	0	Snap
		Dimmer curve: Extra-soft (3s hold)	10	15	3.9	5.9		
		Dimmer curve: Linear (3s hold)	16	21	6.3	8.2		
		Display mode: Auto (3s hold)	22	27	8.6	10.6		
		Display mode: On (3s hold)	28	33	11.0	12.9		
		Display mode: Off (3s hold)	34	39	13.3	15.3		
		Display orientation: Normal (3s hold)	40	45	15.7	17.6		
		Display orientation: Inverted (3s hold)	46	51	18.0	20.0		
		No DMX: Blackout (3s hold)	52	57	20.4	22.4		
		No DMX: Hold (3s hold)	58	63	22.7	24.7		
		No DMX: Stand-alone (3s hold)	64	69	25.1	27.1		
		Fan mode: Regulated (3s hold)	70	75	27.5	29.4		
		Fan mode: High (3s hold)	76	81	29.8	31.8		
		Fan mode: Medium (3s hold)	82	87	32.2	34.1		
		Fan mode: Low (3s hold)	88	93	34.5	36.5		
		Position feedback: Off (3s hold)	94	99	36.9	38.8		
		Position feedback: On (3s hold)	100	105	39.2	41.2		
		No function	106	117	41.6	45.9		
		Tilt inversion: Off (3s hold)	118	123	46.3	48.2		
		Tilt inversion: On (3s hold)	124	129	48.6	50.6		
Pan inversion: Off (3s hold)	130	135	51.0	52.9				
Pan inversion: On (3s hold)	136	141	53.3	55.3				
Zoom inversion: Off (3s hold)	142	147	55.7	57.6				
Zoom inversion: On (3s hold)	148	153	58.0	60.0				
Defog: Off	154	159	60.4	62.4				

	Defog: On	160	165	62.7	64.7		
	Defog: Quick	166	171	65.1	67.1		
	Load Settings Preset1	172	177	67.5	69.4		
	Load Settings Preset2	178	183	69.8	71.8		
	Load Settings Preset3	184	189	72.2	74.1		
	PWM: 600 Hz (5s hold)	190	195	74.5	76.5		
	PWM: 2200 Hz (5s hold)	196	201	76.9	78.8		
	PWM: 3000 Hz (5s hold)	202	207	79.2	81.2		
	PWM: 4800 Hz (5s hold)	208	213	81.6	83.5		
	PWM: 9600 Hz (5s hold)	214	219	83.9	85.9		
	PWM: 25 kHz (5s hold)	220	225	86.3	88.2		
	No function	226	231	88.6	90.6		
	Return to default settings	232	237	91.0	92.9		
	Reset Pan/Tilt (3s hold)	238	243	93.3	95.3		
	Reset Head (3s hold)	244	249	95.7	97.6		
	Reset All (3s hold)	250	255	98.0	100		

DMX Mode 4: Pix
50 DMX Channels

Channel	Command	DMX range		Percent		Default DMX	Fade	
1	Pan	Pan left-right	0	65535	0	100	32767	Fade
2	Pan fine							
3	Tilt	Tilt up-down	0	65535	0	100	32767	Fade
4	Tilt fine							
5	Dimmer	Intensity 0-100%	0	65535	0	100	32767	Fade
6	Dimmer fine							
7	Shutter	Shutter closed	0	4	0	1.6	0	Snap
		Single flash when change on dimmer channel	5	9	2.0	3.5		
		Sync ramp up slow-fast	10	39	3.9	15.3		
		Sync ramp down slow-fast	40	69	15.7	27.1		
		Sync ramp up-down slow-fast	70	99	27.5	38.8		
		Sync double flash (slow-fast)	100	129	39.2	50.6		
		Random strobe pixel (slow-fast)	130	159	51.0	62.4		
		Random strobe all (slow-fast)	160	199	62.7	78.0		
		Sync strobe (1 Hz-10 Hz)	200	250	78.4	98.0		
Shutter open	251	255	98.4	100				
8	Color wheel effect	Off (RGBW)	0	7	0	2.7	0	Snap
		Color 01 - Red	8	15	3.1	5.9		Snap
		Color 02 - Amber	16	23	6.3	9.0		Snap
		Color 03 - Warm Yellow	24	31	9.4	12.2		Snap
		Color 04 - Yellow	32	39	12.5	15.3		Snap
		Color 05 - Green	40	47	15.7	18.4		Snap
		Color 06 - Turquoise	48	55	18.8	21.6		Snap
		Color 07 - Cyan	56	63	22.0	24.7		Snap
		Color 08 - Blue	64	71	25.1	27.8		Snap
		Color 09 - Lavender	72	79	28.2	31.0		Snap
		Color 10 - Mauve	80	87	31.4	34.1		Snap
		Color 11 - Magenta	88	95	34.5	37.3		Snap
		Color 12 - Pink	96	103	37.6	40.4		Snap
		Color 13 - White 3200K	104	111	40.8	43.5		Snap
		Color 14 - White 5600K	112	119	43.9	46.7		Snap
		Color 15 - White 7200K	120	127	47.1	49.8		Snap
		Stop	128	128	50.2	50.2		Snap
		Rainbow colors crossfade slow > fast	129	223	50.6	87.5		Fade
Random colors crossfade slow > fast	224	255	87.8	100	Fade			
9	Color Temperature (Kelvin)	RAW	0	15	0	5.9	Snap	
		10000	16	18	6.3	7.1		
		9900	19	21	7.5	8.2		
		9800	22	24	8.6	9.4		
		9700	25	27	9.8	10.6		
		9600	28	30	11.0	11.8		
		9500	31	33	12.2	12.9		
		9400	34	36	13.3	14.1		
		9300	37	39	14.5	15.3		
		9200	40	42	15.7	16.5		
		9100	43	45	16.9	17.6		
		9000	46	48	18.0	18.8		
		8900	49	51	19.2	20.0		
		8800	52	54	20.4	21.2		
		8700	55	57	21.6	22.4		
		8600	58	60	22.7	23.5		

8500	61	63	23.9	24.7
8400	64	66	25.1	25.9
8300	67	69	26.3	27.1
8200	70	72	27.5	28.2
8100	73	75	28.6	29.4
8000	76	78	29.8	30.6
7900	79	81	31.0	31.8
7800	82	84	32.2	32.9
7700	85	87	33.3	34.1
7600	88	90	34.5	35.3
7500	91	93	35.7	36.5
7400	94	96	36.9	37.6
7300	97	99	38.0	38.8
7200	100	102	39.2	40.0
7100	103	105	40.4	41.2
7000	106	108	41.6	42.4
6900	109	111	42.7	43.5
6800	112	114	43.9	44.7
6700	115	117	45.1	45.9
6600	118	120	46.3	47.1
6500	121	123	47.5	48.2
6400	124	126	48.6	49.4
6300	127	129	49.8	50.6
6200	130	132	51.0	51.8
6100	133	135	52.2	52.9
6000	136	138	53.3	54.1
5900	139	141	54.5	55.3
5800	142	144	55.7	56.5
5700	145	147	56.9	57.6
5600	148	150	58.0	58.8
5500	151	153	59.2	60.0
5400	154	156	60.4	61.2
5300	157	159	61.6	62.4
5200	160	162	62.7	63.5
5100	163	165	63.9	64.7
5000	166	168	65.1	65.9
4900	169	171	66.3	67.1
4800	172	174	67.5	68.2
4700	175	177	68.6	69.4
4600	178	180	69.8	70.6
4500	181	183	71.0	71.8
4400	184	186	72.2	72.9
4300	187	189	73.3	74.1
4200	190	192	74.5	75.3
4100	193	195	75.7	76.5
4000	196	198	76.9	77.6
3900	199	201	78.0	78.8
3800	202	204	79.2	80.0
3700	205	207	80.4	81.2
3600	208	210	81.6	82.4
3500	211	213	82.7	83.5
3400	214	216	83.9	84.7
3300	217	219	85.1	85.9
3200	220	222	86.3	87.1
3100	223	225	87.5	88.2
3000	226	228	88.6	89.4
2900	229	231	89.8	90.6
2800	232	234	91.0	91.8
2700	235	237	92.2	92.9

		2600	238	240	93.3	94.1		
		2500	241	255	94.5	100		
10	Red	Red intensity 0–100%	0	65535	0	100	32767	Fade
11	Red fine							
12	Green	Green intensity 0–100%	0	65535	0	100	32767	Fade
13	Green fine							
14	Blue	Blue intensity 0–100%	0	65535	0	100	32767	Fade
15	Blue fine							
16	White	White intensity 0–100%	0	65535	0	100	32767	Fade
17	White fine							
18	Pattern	Static pattern	0	51	0	20.0	0	Snap
		Chase animation	52	131	20.4	51.4		
		Fade animation	132	211	51.8	82.7		
		Random	212	255	83.1	100		
19	Pattern speed	Slow–fast	0	255	0	100	0	Fade
20	Pattern fade	Slow crossfade–snap	0	255	0	100	0	Fade
21	Zoom	Wide–narrow	0	255	0	100	0	Fade
22	Control / Settings	No function	0	9	0.0	3.5	0	Snap
		Dimmer curve: Extra-soft (3s hold)	10	15	3.9	5.9		
		Dimmer curve: Linear (3s hold)	16	21	6.3	8.2		
		Display mode: Auto (3s hold)	22	27	8.6	10.6		
		Display mode: On (3s hold)	28	33	11.0	12.9		
		Display mode: Off (3s hold)	34	39	13.3	15.3		
		Display orientation: Normal (3s hold)	40	45	15.7	17.6		
		Display orientation: Inverted (3s hold)	46	51	18.0	20.0		
		No DMX: Blackout (3s hold)	52	57	20.4	22.4		
		No DMX: Hold (3s hold)	58	63	22.7	24.7		
		No DMX: Stand-alone (3s hold)	64	69	25.1	27.1		
		Fan mode: Regulated (3s hold)	70	75	27.5	29.4		
		Fan mode: High (3s hold)	76	81	29.8	31.8		
		Fan mode: Medium (3s hold)	82	87	32.2	34.1		
		Fan mode: Low (3s hold)	88	93	34.5	36.5		
		Position feedback: Off (3s hold)	94	99	36.9	38.8		
		Position feedback: On (3s hold)	100	105	39.2	41.2		
		No function	106	117	41.6	45.9		
		Tilt inversion: Off (3s hold)	118	123	46.3	48.2		
		Tilt inversion: On (3s hold)	124	129	48.6	50.6		
		Pan inversion: Off (3s hold)	130	135	51.0	52.9		
		Pan inversion: On (3s hold)	136	141	53.3	55.3		
		Zoom inversion: Off (3s hold)	142	147	55.7	57.6		
		Zoom inversion: On (3s hold)	148	153	58.0	60.0		
		Defog: Off	154	159	60.4	62.4		
		Defog: On	160	165	62.7	64.7		
		Defog: Quick	166	171	65.1	67.1		
		Load Settings Preset1	172	177	67.5	69.4		
		Load Settings Preset2	178	183	69.8	71.8		
		Load Settings Preset3	184	189	72.2	74.1		
		PWM: 600 Hz (5s hold)	190	195	74.5	76.5		
		PWM: 2200 Hz (5s hold)	196	201	76.9	78.8		
PWM: 3000 Hz (5s hold)	202	207	79.2	81.2				
PWM: 4800 Hz (5s hold)	208	213	81.6	83.5				
PWM: 9600 Hz (5s hold)	214	219	83.9	85.9				
PWM: 25 kHz (5s hold)	220	225	86.3	88.2				
No function	226	231	88.6	90.6				
Return to default settings	232	237	91.0	92.9				

		Reset Pan/Tilt (3s hold)	238	243	93.3	95.3		
		Reset Head (3s hold)	244	249	95.7	97.6		
		Reset All (3s hold)	250	255	98.0	100		
23	Pixel 1 Red	Intensity 0-100%	0	255	0	100	0	Fade
24	Pixel 1 Green	Intensity 0-100%	0	255	0	100	0	Fade
25	Pixel 1 Blue	Intensity 0-100%	0	255	0	100	0	Fade
26	Pixel 1 White	Intensity 0-100%	0	255	0	100	0	Fade
27	Pixel 2 Red	Intensity 0-100%	0	255	0	100	0	Fade
28	Pixel 2 Green	Intensity 0-100%	0	255	0	100	0	Fade
29	Pixel 2 Blue	Intensity 0-100%	0	255	0	100	0	Fade
30	Pixel 2 White	Intensity 0-100%	0	255	0	100	0	Fade
31	Pixel 3 Red	Intensity 0-100%	0	255	0	100	0	Fade
32	Pixel 3 Green	Intensity 0-100%	0	255	0	100	0	Fade
33	Pixel 3 Blue	Intensity 0-100%	0	255	0	100	0	Fade
34	Pixel 3 White	Intensity 0-100%	0	255	0	100	0	Fade
35	Pixel 4 Red	Intensity 0-100%	0	255	0	100	0	Fade
36	Pixel 4 Green	Intensity 0-100%	0	255	0	100	0	Fade
37	Pixel 4 Blue	Intensity 0-100%	0	255	0	100	0	Fade
38	Pixel 4 White	Intensity 0-100%	0	255	0	100	0	Fade
39	Pixel 5 Red	Intensity 0-100%	0	255	0	100	0	Fade
40	Pixel 5 Green	Intensity 0-100%	0	255	0	100	0	Fade
41	Pixel 5 Blue	Intensity 0-100%	0	255	0	100	0	Fade
42	Pixel 5 White	Intensity 0-100%	0	255	0	100	0	Fade
43	Pixel 6 Red	Intensity 0-100%	0	255	0	100	0	Fade
44	Pixel 6 Green	Intensity 0-100%	0	255	0	100	0	Fade
45	Pixel 6 Blue	Intensity 0-100%	0	255	0	100	0	Fade
46	Pixel 6 White	Intensity 0-100%	0	255	0	100	0	Fade
47	Pixel 7 Red	Intensity 0-100%	0	255	0	100	0	Fade
48	Pixel 7 Green	Intensity 0-100%	0	255	0	100	0	Fade
49	Pixel 7 Blue	Intensity 0-100%	0	255	0	100	0	Fade
50	Pixel 7 White	Intensity 0-100%	0	255	0	100	0	Fade

