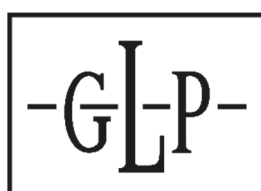


# DMX Channel Index



## JDC Line 500



## GLP® JDC Line DMX Channel Index – Preliminary

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## 1. DMX control modes overview

The following DMX control modes are available in the JDC Line 500.

### DMX Mode 1: RGBW Strobe

14 DMX Channels

Mode 1 provides a global RGBW strobe that uses all White and all RGB segments together. This strobe has flash, pulse and ramp-up/down effects as well as special intensity effects such as lightning. It offers RGBW and separate color temperature control.

As well as the global strobe, Mode 1 lets you set background colors on the RGB segments using RGB control. The global strobe will run over the top of any background color that you set.

As with all the fixture's DMX modes, a Control / Settings channel lets you configure the fixture remotely via DMX.

#### Mode 1 RGBW Strobe

##### Global RGBW strobe

1	Intensity coarse
2	Intensity fine
3	Duration
4	Flash rate (Shutter)
5	Intensity effects (Strobe mode)
6	Control / Settings
7	CTC
8	Red
9	Green
10	Blue
11	White

##### Background RGB

12	Red background
13	Green background
14	Blue background

## DMX Mode 2: W Strobe + RGB Strobe

31 DMX channels

Mode 2 provides a White strobe with an effects engine that runs on the white segments only and an RGB strobe with an effects engine that runs on the RGB segments only.

You can control a range of parameters of the FX patterns including *crossfading* (duration of changes between the steps in each pattern) and *transition* (duration of changes from one pattern to the next).

Mode 2 also lets you set background colors on the RGB segments using RGB control. The White strobe and RGB strobe will run over the top of any background color that you set.

As with all the fixture's DMX modes, a Control / Settings channel lets you configure the fixture remotely via DMX.

### Mode 2 W Strobe + RGB Strobe

#### White strobe with FX

1	Intensity coarse
2	Intensity fine
3	Duration
4	Flash rate (Shutter)
5	Intensity effects (Strobe mode)
6	Control / Settings
7	Pattern select
8	Pattern step / speed
9	Pattern step crossfading
10	Pattern transition
11	Pattern length
12	Pattern offset

#### RGB strobe with FX

13	Intensity coarse
14	Intensity fine
15	Duration
16	Flash rate (Shutter)
17	Intensity effects (Strobe mode)
18	CTC
19	Red
20	Green
21	Blue
22	Pattern select
23	Pattern step/speed
24	Pattern step crossfading
25	Pattern transition
26	Pattern length
27	Pattern offset
28	Phase

#### Background RGB

29	Red background
30	Green background
31	Blue background

### DMX Mode 3: W Strobe + RGB Pixel

72 DMX Channels

Mode 3 provides a white strobe with an effects engine that runs on the white segments only. You can control a range of parameters of the FX patterns including *crossfading* (duration of changes between the steps in each pattern) and *transition* (duration of changes from one pattern to the next).

Mode 3 also features individual pixel control of the RGB segments. The upper and lower halves of each segment are controlled together, giving 20 RGB pixels.

This mode lets you use the RGB segments for pixel mapping / pixel-level control and use the White segments as a standard strobe.

As with all the fixture's DMX modes, a Control / Settings channel lets you configure the fixture remotely via DMX.

#### Mode 3 W Strobe + RGB Pixel

##### White strobe with FX

1	Intensity coarse
2	Intensity fine
3	Duration
4	Flash rate (Shutter)
5	Intensity effects (Strobe mode)
6	Control / Settings
7	Pattern select
8	Pattern step / speed
9	Pattern step crossfade
10	Pattern transition
11	Pattern length
12	Pattern offset

##### RGB individual segments

13	Red segment 01
14	Green segment 01
15	Blue segment 01
...	...
70	Red segment 20
71	Green segment 20
72	Blue segment 20

### DMX Mode 4: RGB Strobe + W Pixel

39 DMX Channels

Mode 4 provides an RGB strobe with an effects engine that runs on the RGB segments only. You can control a range of parameters of the FX patterns including *crossfading* (duration of changes between the steps in each pattern) and *transition* (duration of changes from one pattern to the next).

This mode also features individual pixel control of the 20 White segments.

Besides the RGB strobe, Mode 4 also lets you set background colors on the RGB segments using RGB control. The RGB strobe will run over the top of any background color that you set.

This mode lets you use the White segments for pixel mapping / pixel level control and the RGB segments as a standard strobe.

As with all the fixture's DMX modes, a Control / Settings channel lets you configure the fixture remotely via DMX.

#### Mode 4 RGB Strobe + W Pixel

##### RGB strobe with FX

1	Intensity coarse
2	Intensity fine
3	Duration
4	Flash rate (Shutter)
5	Intensity effects (Strobe mode)
6	Control / Settings
7	CTC
8	Red
9	Green
10	Blue
11	Pattern select
12	Pattern step / speed
13	Pattern step crossfade
14	Pattern transition
15	Pattern length
16	Pattern offset

##### Background RGB

17	Red background
18	Green background
19	Blue background

##### White individual segments

20	White segment 01
...	...
39	White segment 20

## DMX Mode 5: Multipix

### 91 DMX Channels

Mode 5 provides main strobe control channels for all the White segments and main strobe control channels for all the RGB segments.

It also provides individual control of each White and each RGB segment for pixel mapping / pixel-level control. The upper and lower halves of each RGB segment are controlled together, giving 20 RGB pixels

As with all the fixture's DMX modes, a Control / Settings channel lets you configure the fixture remotely via DMX.

#### Mode 5 MultiPix

##### White strobe

1	Intensity coarse
2	Intensity fine
3	Duration
4	Flash rate (Shutter)
5	Intensity effects (Strobe mode)
6	Control / Settings

##### RGB strobe

7	Intensity coarse
8	Intensity fine
9	Duration
10	Flash rate (Shutter)
11	Intensity effects (Strobe mode)

##### White individual segments

12	White segment 01
...	...
39	White segment 20

##### RGB individual segments

40	Red segment 01
41	Green segment 01
42	Blue segment 01
...	...
89	Red segment 20
90	Green segment 20
91	Blue segment 20



## DMX Mode 6: MultiPix Advanced

### 151 DMX Channels

Mode 6 provides main strobe control channels for all the White segments and main strobe control channels for all the RGB segments.

It also features individual pixel control of the 20 White segments.

Mode 6 also features individual control of the RGB segments, but in this mode the segments are split into upper and lower halves with individual control of each half. This gives individual control of 40 RGB pixels in total.

As with all the fixture's DMX modes, a Control / Settings channel lets you configure the fixture remotely via DMX.

### Mode 6 MultiPix Advanced

#### White strobe

1	Intensity coarse
2	Intensity fine
3	Duration
4	Flash rate (Shutter)
5	Intensity effects (Strobe mode)
6	Control / Settings

#### RGB strobe

7	Intensity coarse
8	Intensity fine
9	Duration
10	Flash rate (Shutter)
11	Intensity effects (Strobe mode)

#### White individual segments

12	White segment 01
...	...
39	White segment 20

#### RGB individual segments (upper + lower)

40	Red segment 01
41	Green segment 01
42	Blue segment 01
...	...
149	Red segment 40
150	Green segment 40
151	Blue segment 40

## 2. DMX control channel layout

In the following DMX channel layout tables:

- Default settings are indicated with **bold type**.
- Where commands (3s hold) you must send that value continuously for 3 seconds (or other duration if indicated in the table) to apply the command.
- Some commands on the Control / Settings channel require the DMX value zero to be sent first and then moved directly to the DMX value required by the command concerned.

## DMX Mode 1: RGBW Strobe

### 14 DMX Channels

Channel	Command		DMX range		Percent %	Default DMX	Fade	
Global RGBW Strobe								
1	RGBW intensity coarse	RGBW intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
2	RGBW intensity fine							
3	RGBW duration	Flash duration short → long	0	255	0	100	0	Fade
4	RGBW flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
5	RGBW intensity effects (Strobe mode)	Off: normal sync flashes	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		
		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
	No function	240	255	94.1	100			
6	Control /Settings	See 'Control / Settings channel' on page 23						
7	CTC (RGB)	Open	0	14	0	5.5	0	Snap
		10 000 K	15	17	5.9	6.7		
		9 900 K	18	20	7.1	7.8		
		Reduce color temp. in 100 K steps	...	...	...	...		
		2 600 K	237	239	92.9	93.8		
		2 500 K	240	255	94.1	100		
8	Red	Intensity 0 → 100%	0	255	0	100	0	Fade
9	Green	Intensity 0 → 100%	0	255	0	100	0	Fade
10	Blue	Intensity 0 → 100%	0	255	0	100	0	Fade
11	White (Strobe LEDs)	Intensity 0 → 100%	0	255	0	100	0	Fade
Background RGB								
12	Red (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade
13	Green (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade
14	Blue (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade

## DMX Mode 2: W Strobe + RGB Strobe

### 31 DMX Channels

Channel	Command	DMX range		Percent %		Default DMX	Fade	
White Strobe with FX patterns								
1	White intensity coarse	White intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
2	White intensity fine							
3	White duration	Flash duration short → long	0	255	0	100	0	Fade
4	White flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
5	White intensity effects (Strobe mode)	Off: normal sync flashes	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		
		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
		No function	240	247	94.1	96.9		
		Random pattern	248	251	97.3	98.4		
Random pixel	252	255	98.8	100				
6	Control /Settings	See 'Control / Settings channel' on page 23						
7	White pattern select	Off (White patterns inactive)	0	11	0	4.3	0	Snap
		Pattern 01	12	15	4.7	5.9		
		Patterns 02 ... 49	...	...	...	...		
		Pattern 50	208	211	81.6	82.8		
		No function	212	247	83.1	100		
8	White pattern step select / speed	Pattern step 01	0	2	0	0.8	0	Snap
		Pattern steps 02 ... 39	...	...	...	...		Snap
		Pattern step 40	117	119	45.9	46.7		Snap
		No function	120	127	47.1	49.8		Snap
		CW fast → slow (run pattern step 1 ... n)	128	190	50.2	74.5		Fade
		Stop	191	192	74.9	75.3		Snap
		CCW slow → fast (run pattern step n ... 1)	193	255	75.7	100		Fade

9	White pattern step crossfading	No crossfading, snap from one step to next	0	5	0	3.9	0	Snap
		Snap → longest crossfade (fade in and fade out times are identical)	6	127	4.3	49.0		Fade
		No crossfading, snap from one step to next	128	133	49.4	51.0		Snap
		Snap → longest crossfade with tail (fade-in time is shorter than fade out time, creates a shadow effect)	134	255	51.4	100		Fade
10	White pattern transition	No transition time, snap from one pattern to next	0	10	0	3.9	0	Snap
		Snap → 15 sec. transition time	11	68	4.3	26.7		Fade
		No transition time, snap from one pattern to next	69	73	27.1	28.6		Snap
		FOB (Fade Over Blackout) transition, Snap → 15 sec. transition time	74	130	29.0	51.0		Fade
		No transition time, snap from one pattern to next	131	135	51.4	52.9		Snap
		FOF (Fade Over Full) transition, Snap → 15 sec. transition time	136	193	53.3	75.7		Fade
		No function	194	255	76.1	100		
11	White pattern length	Off (pattern length: normal)	0	0	0	0	0	Snap
		Pattern length: 1 → 255 steps	1	255	0.4	100		Fade
12	White pattern offset	Off (pattern starts at Step 1)	0	0	0	0	0	Snap
		Pattern starts at Step 1 → Step 255	1	255	0.4	100		Fade

**RGB Strobe with FX patterns**

13	RGB intensity coarse	RGB intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
14	RGB intensity fine							
15	RGB duration	Flash duration short → long	0	255	0	100	0	Fade
16	RGB flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
17	RGB intensity effects (Strobe mode)	Off: normal sync flashes	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		
		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
		No function	240	255	94.1	100		

18	CTC (RGB)	Open	0	14	0	5.5	0	Snap
		10 000 K	15	17	5.9	6.7		
		9 900 K	18	20	7.1	7.8		
		Reduce color temp. in 100 K steps	...	...	...	...		
		2 600 K	237	239	92.9	93.8		
		2 500 K	240	255	94.1	100		
19	Red	Intensity 0 → 100%	0	255	0	100	0	Fade
20	Green	Intensity 0 → 100%	0	255	0	100	0	Fade
21	Blue	Intensity 0 → 100%	0	255	0	100	0	Fade
22	RGB pattern select	Off (all white patterns inactive)	0	11	0	4.3	0	Snap
		Pattern 01	12	15	4.7	5.9		
		Patterns 02 ... 49	...	...	...	...		
		Pattern 50	208	211	81.6	82.8		
		No function	212	247	83.1	100		
23	RGB pattern step select / speed	Pattern step 01	0	2	0	0.8	0	Snap
		Pattern steps 02 ... 39	...	...	...	...		Snap
		Pattern step 40	117	119	45.9	46.7		Snap
		No function	120	127	47.1	49.8		Snap
		CW fast → slow (run pattern step 1 ... n)	128	190	50.2	74.5		Fade
		Stop	191	192	74.9	75.3		Snap
		CCW slow → fast (run pattern step n ... 1)	193	255	75.7	100		Fade
24	RGB pattern step crossfading	No crossfading, snap from one step to next	0	5	0	3.9	0	Snap
		Snap → longest crossfade (fade in and fade out times are identical)	6	127	4.3	49.0		Fade
		No crossfading, snap from one step to next	128	133	49.4	51.0		Snap
		Snap → longest crossfade with tail (fade-in time is shorter than fade out time, creates a shadow effect)	134	255	51.4	100		Fade
25	RGB pattern transition	No transition time, snap from one pattern to next	0	10	0	3.9	0	Snap
		Snap → 15 sec. transition time	11	68	4.3	26.7		Fade
		No transition time, snap from one pattern to next	69	73	27.1	28.6		Snap
		FOB (Fade Over Blackout) transition, Snap → 15 sec. transition time	74	130	29.0	51.0		Fade
		No transition time, snap from one pattern to next	131	135	51.4	52.9		Snap
		FOF (Fade Over Full) transition, Snap → 15 sec. transition time	136	193	53.3	75.7		Fade
		No function	194	255	76.1	100		
26	RGB pattern length	Off (pattern length: normal)	0	0	0	0	0	Snap
		Pattern length: 1 → 255 steps	1	255	0.4	100		Fade
27	RGB pattern offset	Off (pattern starts at Step 1)	0	0	0	0	0	Snap
		Pattern starts at Step 1 → Step 255	1	255	0.4	100		Fade
28	RGB pattern phase	Off	0	0	0	0	0	Snap
		Pattern phase shift 1° to 359°	1	255	0.4	100		Fade

**Background RGB**

29	Red (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade
30	Green (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade
31	Blue (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade

## DMX Mode 3: W Strobe + RGB Pixel

### 72 DMX Channels

Channel	Command		DMX range		Percent %		Default DMX	Fade
White Strobe with FX patterns								
1	White intensity coarse	White intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
2	White intensity fine							
3	White duration	Flash duration short → long	0	255	0	100	0	Fade
4	White flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
5	White intensity effects (Strobe mode)	Off (normal sync flashes)	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		
		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
		No function	240	247	94.1	96.9		
		Random pattern	248	251	97.3	98.4		
		Random pixel	252	255	98.8	100		
6	Control /Settings	See 'Control / Settings channel' on page 23						
7	White pattern select	Off (all white patterns inactive)	0	11	0	4.3	0	Snap
		Pattern 01	12	15	4.7	5.9		
		Patterns 02 ... 49	...	...	...	...		
		Pattern 50	208	211	81.6	82.8		
		No function	212	247	83.1	100		
8	White pattern step select / speed	Pattern step 01	0	2	0	0.8	0	Snap
		Pattern steps 02 ... 39	...	...	...	...		Snap
		Pattern step 40	117	119	45.9	46.7		Snap
		No function	120	127	47.1	49.8		Snap
		CW fast → slow (run pattern step 1 ... n)	128	190	50.2	74.5		Fade
		Stop	191	192	74.9	75.3		Snap
		CCW slow → fast (run pattern step n ... 1)	193	255	75.7	100		Fade

9	White pattern step crossfading	No crossfading, snap from one step to next	0	5	0	3.9	0	Snap
		Snap ... longest crossfade (fade in and fade out times are identical)	6	127	4.3	49.0		Fade
		No crossfading, snap from one step to next	128	133	49.4	51.0		Snap
		Snap → longest crossfade with tail (fade-in time is shorter than fade out time, creates a shadow effect)	134	255	51.4	100		Fade
10	White pattern transition	No transition time, snap from one pattern to next	0	10	0	3.9	0	Snap
		Snap → 15 sec. transition time	11	68	4.3	26.7		Fade
		No transition time, snap from one pattern to next	69	73	27.1	28.6		Snap
		FOB (Fade Over Blackout) transition, Snap → 15 sec. transition time	74	130	29.0	51.0		Fade
		No transition time, snap from one pattern to next	131	135	51.4	52.9		Snap
		FOF (Fade Over Full) transition, Snap → 15 sec. transition time	136	193	53.3	75.7		Fade
		No function	194	255	76.1	100		
11	White pattern length	Off (pattern length: normal)	0	0	0	0	0	Snap
		Pattern length: 1 → 255 steps	1	255	0.4	100		Fade
12	White pattern offset	Off (pattern starts at Step 1)	0	0	0	0	0	Snap
		Pattern starts at Step 1 → Step 255	1	255	0.4	100		Fade

**RGB individual segments (upper and lower halves controlled as one pixel)**

13	Red segment 01	Red intensity 0 → 100%	0	255	0	100	0	Fade
14	Green segment 01	Green intensity 0 → 100%	0	255	0	100	0	Fade
15	Blue segment 01	Blue intensity 0 → 100%	0	255	0	100	0	Fade
16	Red segment 02	RGB segments in order, intensity 0 → 100%	0	255	0	100	0	Fade
...	...							
69	Blue segment 19							
70	Red segment 20	Red intensity 0 → 100%	0	255	0	100	0	Fade
71	Green segment 20	Green intensity 0 → 100%	0	255	0	100	0	Fade
72	Blue segment 20	Blue intensity 0 → 100%	0	255	0	100	0	Fade



## DMX Mode 4: RGB Strobe + W Pixel

### 39 DMX Channels

Channel	Command		DMX range	Percent %	Default DMX	Fade		
RGB Strobe with FX patterns								
1	RGB intensity coarse	RGB intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
2	RGB intensity fine							
3	RGB duration	Flash duration short → long	0	255	0	100	0	Fade
4	RGB flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
5	RGB intensity effects (Strobe mode)	Off (normal sync flashes)	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		
		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
		No function	240	255	94.1	100		
6	Control /Settings	See 'Control / Settings channel' on page 23						
7	CTC (RGB)	Open	0	14	0	5.5	0	Snap
		10 000 K	15	17	5.9	6.7		
		9 900 K	18	20	7.1	7.8		
		Reduce color temp. in 100 K steps	...	...	...	...		
		2 600 K	237	239	92.9	93.8		
		2 500 K	240	255	94.1	100		
8	Red	Intensity 0 → 100%	0	255	0	100	0	Fade
9	Green	Intensity 0 → 100%	0	255	0	100	0	Fade
10	Blue	Intensity 0 → 100%	0	255	0	100	0	Fade
11	RGB pattern select	Off (all white patterns inactive)	0	11	0	4.3	0	Snap
		Pattern 01	12	15	4.7	5.9		
		Patterns 02 ... 49	...	...	...	...		
		Pattern 50	208	211	81.6	82.8		
		No function	212	247	83.1	100		
12	RGB pattern step select / speed	Pattern step 01	0	2	0	0.8	0	Snap
		Pattern steps 02 ... 39	...	...	...	...		Snap
		Pattern step 40	117	119	45.9	46.7		Snap
		No function	120	127	47.1	49.8		Snap
		CW fast → slow (run pattern step 1 ... n)	128	190	50.2	74.5		Fade
		Stop	191	192	74.9	75.3		Snap
		CCW slow → fast (run pattern step n ... 1)	193	255	75.7	100		Fade

13	RGB pattern step crossfading	No crossfading, snap from one step to next	0	5	0	3.9	0	Snap
		Snap → longest crossfade (fade in and fade out times are identical)	6	127	4.3	49.0		Fade
		No crossfading, snap from one step to next	128	133	49.4	51.0		Snap
		Snap → longest crossfade with tail (fade-in time is shorter than fade out time, creates a shadow effect)	134	255	51.4	100		Fade
14	RGB pattern transition	No transition time, snap from one pattern to next	0	10	0	3.9	0	Snap
		Snap → 15 sec. transition time	11	68	4.3	26.7		Fade
		No transition time, snap from one pattern to next	69	73	27.1	28.6		Snap
		FOB (Fade Over Blackout) transition, Snap → 15 sec. transition time	74	130	29.0	51.0		Fade
		No transition time, snap from one pattern to next	131	135	51.4	52.9		Snap
		FOF (Fade Over Full) transition, Snap → 15 sec. transition time	136	193	53.3	75.7		Fade
		No function	194	255	76.1	100		
15	RGB pattern length	Off (pattern length: normal)	0	0	0	0	0	Snap
		Pattern length: 1 → 255 steps	1	255	0.4	100		Fade
16	RGB pattern offset	Off (pattern starts at Step 1)	0	0	0	0	0	Snap
		Pattern starts at Step 1 → Step 255	1	255	0.4	100		Fade

**Background RGB**

17	Red (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade
18	Green (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade
19	Blue (backgd.)	Intensity 0 → 100%	0	255	0	100	0	Fade

**White individual segments**

20	White segment 01	White intensity 0 → 100%	0	255	0	100	0	Fade
21	White segment 02	White segments in order: intensity 0 → 100%	0	255	0	100	0	Fade
...	...							
38	White segment 19							
39	White segment 20	White intensity 0 → 100%	0	255	0	100	0	Fade

## DMX Mode 5: Multipix

### 91 DMX Channels

Channel	Command		DMX range		Percent %	Default DMX	Fade	
White Strobe								
1	White intensity coarse	White intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
2	White intensity fine							
3	White duration	Flash duration short → long	0	255	0	100	0	Fade
4	White flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
5	White intensity effects (Strobe mode)	Off (normal sync flashes)	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		
		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
	No function	240	255	94.1	100			
6	Control /Settings	See 'Control / Settings channel' on page 23						

### RGB Strobe

7	RGB intensity coarse	RGB intensity 0 → 100% (16-bit)		0	65535	0	100	0	Fade
8	RGB intensity fine								
9	RGB duration	Flash duration short → long		0	255	0	100	0	Fade
10	RGB flash rate (Shutter)	Closed		0	4	0	1.6	0	Snap
		Flash rate slow → fast		5	250	2	97.6		Fade
		Open		251	255	98	100		Snap
11	RGB intensity effects (Strobe mode)	Off (normal sync flashes)		0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel		15	29	5.9	11.4		
		Pulse		30	44	11.8	17.3		
		Pulse opening		45	59	17.6	23.1		
		Pulse closing		60	74	23.5	29.0		
		Pulse random		75	89	29.4	34.9		
		Pulse opening random		90	104	35.3	40.8		
		Pulse closing random		105	119	41.2	46.7		
		Double flash		120	134	47.1	52.5		
		Double flash random		135	149	52.9	58.4		
		Triple flash		150	164	58.8	64.3		
		Triple flash random		165	179	64.7	70.2		

		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
		No function	240	255	94.1	100		

**White individual segments**

12	White segment 01	White intensity 0 → 100%	0	255	0	100	0	Fade
13	White segment 02	White segments in order: intensity 0 → 100%	0	255	0	100	0	Fade
...	...							
30	White segment 19							
31	White segment 20	White intensity 0 → 100%	0	255	0	100	0	Fade

**RGB individual segments (upper and lower halves controlled as one pixel)**

32	Red segment 01	Red intensity 0 → 100%	0	255	0	100	0	Fade
33	Green segment 01	Green intensity 0 → 100%	0	255	0	100	0	Fade
34	Blue segment 01	Blue intensity 0 → 100%	0	255	0	100	0	Fade
35	Red segment 02	RGB segments in order, intensity 0 → 100%	0	255	0	100	0	Fade
...	...							
88	Blue segment 19							
89	Red segment 20	Red intensity 0 → 100%	0	255	0	100	0	Fade
90	Green segment 20	Green intensity 0 → 100%	0	255	0	100	0	Fade
91	Blue segment 20	Blue intensity 0 → 100%	0	255	0	100	0	Fade

## DMX Mode 6: Multipix Advanced

### 162 DMX Channels

Channel	Command	DMX range	Percent %	Default DMX	Fade			
White Strobe								
1	White intensity coarse	White intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
2	White intensity fine							
3	White duration	Flash duration short → long	0	255	0	100	0	Fade
4	White flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
5	White intensity effects (Strobe mode)	Off (normal sync flashes)	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		
		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
No function	240	255	94.1	100				
6	Control /Settings	See 'Control / Settings channel' on page 23						

### RGB Strobe

7	RGB intensity coarse	RGB intensity 0 → 100% (16-bit)	0	65535	0	100	0	Fade
8	RGB intensity fine							
9	RGB duration	Flash duration short → long	0	255	0	100	0	Fade
10	RGB flash rate (Shutter)	Closed	0	4	0	1.6	0	Snap
		Flash rate slow → fast	5	250	2	97.6		Fade
		Open	251	255	98	100		Snap
11	RGB intensity effects / Strobe mode	Off (normal sync flashes)	0	14	0	5.5	0	Snap
		Single flash if change on flash rate channel	15	29	5.9	11.4		
		Pulse	30	44	11.8	17.3		
		Pulse opening	45	59	17.6	23.1		
		Pulse closing	60	74	23.5	29.0		
		Pulse random	75	89	29.4	34.9		
		Pulse opening random	90	104	35.3	40.8		
		Pulse closing random	105	119	41.2	46.7		
		Double flash	120	134	47.1	52.5		
		Double flash random	135	149	52.9	58.4		
		Triple flash	150	164	58.8	64.3		
		Triple flash random	165	179	64.7	70.2		

		Spikes	180	194	70.6	76.1		
		Lightning	195	209	76.5	82.0		
		Random pixel flash	210	224	82.4	87.8		
		Random fixture flash	225	239	88.2	93.7		
		No function	240	255	94.1	100		

**White individual segments**

12	White segment 01	White intensity 0 → 100%	0	255	0	100	0	Fade
13	White segment 02	White segments in order: intensity 0 → 100%	0	255	0	100	0	Fade
...	...							
30	White segment 19							
31	White segment 20	White intensity 0 → 100%	0	255	0	100	0	Fade

**RGB individual segments (upper and lower halves controlled separately)**

32	Red segment upper 01	Red intensity 0 → 100%	0	255	0	100	0	Fade
33	Green segment upper 01	Green intensity 0 → 100%	0	255	0	100	0	Fade
34	Blue segment upper 01	Blue intensity 0 → 100%	0	255	0	100	0	Fade
35	Red segment upper 02	RGB segments upper halves in order, then RGB segments lower halves in order, intensity 0 → 100%	0	255	0	100	0	Fade
...	...							
159	Blue segment lower 39							
160	Red segment lower 40	Red intensity 0 → 100%	0	255	0	100	0	Fade
161	Green segment lower 40	Green intensity 0 → 100%	0	255	0	100	0	Fade
162	Blue segment lower 40	Blue intensity 0 → 100%	0	255	0	100	0	Fade

## Control / Settings channel

The Control / Settings commands listed below are available on Channel 6 in every DMX mode.

Channel	Command	DMX range		Percent %		Default DMX	Fade
6	No function	0	11	0	4.3	0	Snap
	<b>Dimmer curve: Soft (square law)</b>	12	14	4.7	5.5		
	Dimmer curve: Linear	15	17	5.9	6.7		
	No function	18	26	9.4	10.2		
	Display mode: Off	27	29	10.6	11.4		
	<b>Display mode: Auto</b>	30	32	11.8	12.6		
	Display mode: On	33	35	12.9	13.7		
	No function	36	38	14.1	14.9		
	<b>Display orientation: Normal</b>	39	41	15.3	16.1		
	Display orientation: Upside-Down	42	44	16.5	17.3		
	No function	45	50	17.7	19.6		
	<b>No signal: Blackout</b>	51	53	20.0	20.8		
	No signal: Hold	54	56	21.2	22.0		
	No signal: HouseLight	57	59	22.4	23.1		
	No function	60	65	23.5	25.5		
	<b>Flash style: Normal</b>	66	68	25.9	26.7		
	Flash style: Xenon	69	71	27.1	27.8		
	No function	72	77	28.2	30.2		
	White Point: Off (RAW)	78	80	30.6	31.4		
	White Point: 8000K	81	83	31.8	32.6		
	<b>White Point: 6500K</b>	84	86	32.9	33.8		
	No function	87	140	34.1	54.9		
	<b>Pixel Mirror: Off</b>	141	143	55.3	56.1		
	Pixel Mirror: x-mirror	144	146	56.5	57.3		
	Pixel Mirror: y-mirror	147	149	57.7	58.4		
	Pixel Mirror: x-y-mirror	150	152	58.8	59.6		
	No function	153	176	60.0	69.0		
	<b>Background color: Background</b>	177	179	69.4	70.2		
	Background color: MixColor	180	182	70.6	71.4		
	No function	183	185	71.8	72.6		
	PWM 2200 Hz	186	188	72.9	73.7		
	<b>PWM 3000 Hz</b>	189	191	74.1	74.9		
	PWM 4800 Hz	192	194	75.3	76.1		
	PWM 9600 Hz	195	197	76.5	77.3		
	No function	198	200	77.7	78.4		
	PWM 25 kHz	201	203	78.8	79.6		
	No function	204	209	80.0	82.0		
	Save as Settings Preset 1 (5s hold, move directly from zero)	210	212	82.4	83.1		
	Save as Settings Preset 2 (5s hold, move directly from zero)	213	215	83.5	84.3		
	Save as Settings Preset 3 (5s hold, move directly from zero)	216	218	84.7	85.5		
	No function	219	221	85.9	86.7		
	Load Settings Preset 1 (3s hold)	222	224	87.1	87.8		
	Load Settings Preset 2 (3s hold)	225	227	88.2	89.0		
	Load Settings Preset 3 (3s hold)	228	230	89.4	90.2		
	Load Settings Default (3s hold)	231	233	90.6	91.4		
	No function	234	251	91.8	98.4		
	Reboot fixture (3s hold)	252	255	98.8	100		

Preliminary

