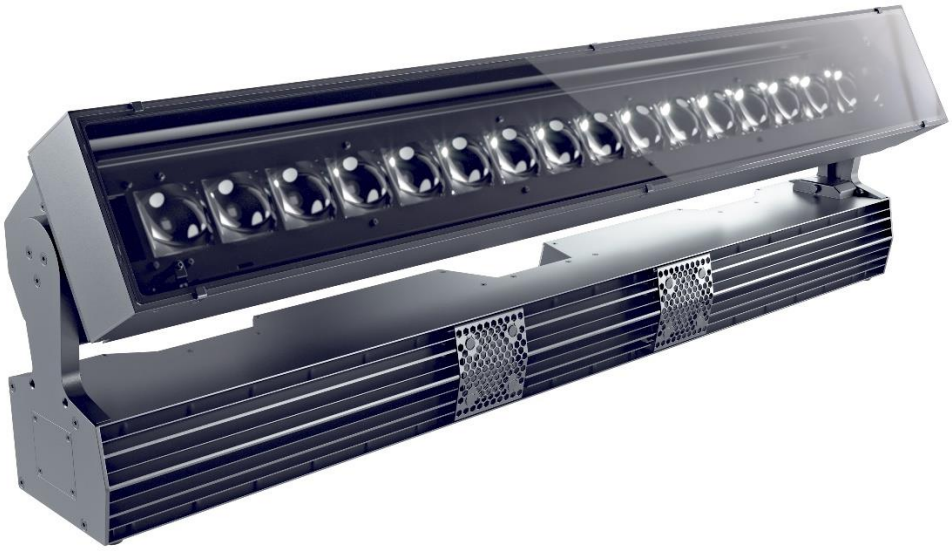
impression

X5 IP Bar 1000

DMX Channel Index



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GLP

Document revisions

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GLP® impression X5 IP Bar 1000 DMX Channel Index

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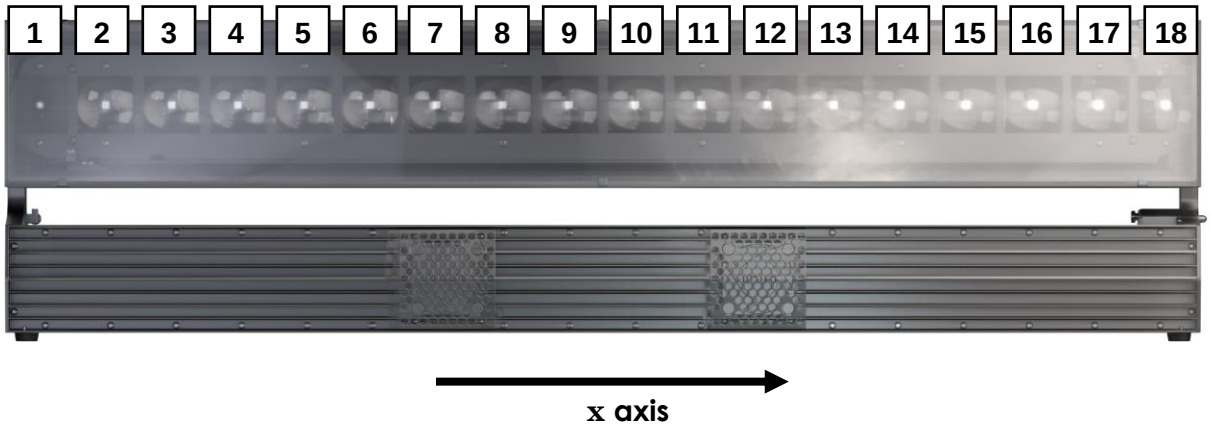
1. Main Fixture and Subfixture

Some control modes divide the fixture into two layers: a Main Fixture (or Main Module) and a Subfixture (or Sub Module). Professional controllers will handle this setup in a smart multi-fixture profile.

If Subfixture Mode is set to **Normal** (the default setting), the Subfixture channels are subordinate to the Main Fixture. This means that the intensity and shutter control channels of the Main Fixture act as global intensity and global shutter. However, if the Subfixture Mode is set to **Independent**, all the control channels of the Subfixture are completely independent of the Main Fixture, and the Subfixture acts as an independent fixture.

2. Pixel layout



The X5 IP Bar 1000 pixels are located as shown above, seen from the front of the fixture with tilt at >50% and **Pixel mirror → x-mirror** set to **Off**.

You can invert the order of the pixels if you set **Pixel mirror** to **x-mirror** in the **Fixture Settings** options available in the fixture's control panel, on the Control/Settings DMX channel or via RDM.

3. DMX control modes overview

The following five DMX control modes are available in the X5 IP Bar 1000.

DMX channels from 1 to 7 have the same functionality in all the DMX control modes.

DMX Mode 1: Basic

20 DMX Channels

Basic DMX Mode gives control of the fixture's main functions. Tilt, dimming and the color mixing channels are available with 16-bit control resolution. A shutter channel gives direct change between open and blackout plus a range of intensity effects. Zoom is also available with 8-bit resolution. The Control/Settings channel lets you adjust fixture settings via DMX.

The color control channels offer color mixing using either [1] RGB, [2] RGBL or [3] x;y color gamut coordinates, depending on which of these three methods is active. You can select the color mixing method via DMX on the Control/Settings channel, via RDM or using the fixture's control panel. Additional color options channels include a color wheel with a wide range of color presets, a CTC channel, magenta/green shift adjustment and a tungsten simulation channel. The CQC channel lets you select if the fixture should give priority to color rendering or output intensity in its white output. This channel also offers an easy way of desaturating colors.

Mode 1 Basic			
Main module	1.1	Tilt	1
			2
		Intensity	3
			4
		Shutter	5
		Zoom	6
		Control / Settings	7
		[1] RGB – Red [2] RGBL – Red [3] x;y – x	8
			9
		[1] RGB – Green [2] RGBL – Green [3] x;y – y	10
			11
		[1] RGB – Blue [2] RGBL – Blue [3] x;y – not used	12
			13
		[1] RGB – not used [2] RGBL – Lime [3] x;y – not used	14
			15
		Color wheel	16
		CTC (Color temperature control)	17
		CQC (Color quality control)	18
		M/G shift	19
		Tungsten effect	20

DMX Mode 2: Normal (default)

33 DMX channels

Normal DMX Mode is split into a **Main Module** and a **Sub Module**.

The **Main Module** gives control of the main functions, as in **Basic** DMX Mode. Tilt, dimming and the color mixing channels have 16-bit control resolution. A shutter channel gives direct change between open and blackout plus a range of intensity effects. Zoom is also available with 8-bit resolution. The Control/Settings channel lets you adjust fixture settings via DMX.

The color control channels in the Main Module offer color mixing using either [1] RGB, [2] RGBL or [3] x;y color gamut coordinates, depending on which of these three methods is active. You can select the color mixing method via DMX on the Control/Settings channel, via RDM or using the fixture's control panel. Additional color options channels include a color wheel with a wide range of color presets, a CTC channel, magenta/green shift adjustment and a tungsten simulation channel. The CQC channel lets you select if the fixture should give priority to color rendering or output intensity in its white output. This channel also offers an easy way of desaturating colors.

The Mix Priority channel defines how the output of the Main and Sub Module is merged or overlayed.

The **Sub Module** forms a second layer. The Sub Module channels provide intensity and shutter control, a powerful static and dynamic pattern effects engine with step crossfading and pattern transition options, plus RGB color control of all 18 pixels as one group.

Mode 2 Normal			
Main module	1.1	Tilt	1
			2
		Intensity	3
			4
		Shutter	5
		Zoom	6
		Control / Settings	7
		[1] RGB – Red [2] RGBL – Red [3] x;y – x	8
			9
		[1] RGB – Green [2] RGBL – Green [3] x;y – y	10
			11
		[1] RGB – Blue [2] RGBL – Blue [3] x;y – not used	12
			13
		[1] RGB – not used [2] RGBL – Lime [3] x;y – not used	14
			15
		Color wheel	16
		CTC (Color temperature control)	17
		CQC (Color quality control)	18
		M/G shift	19
		Tungsten effect	20
		Mix priority	21
Sub module (Layer 2)	1.2	Intensity	22
			23
		Shutter	24
		Pattern selection	25
		Pattern step / speed	26
		Pattern step crossfading	27
		Pattern transition	28
		Fixture quantity	29
		Fixture number	30
		Red	31
		Green	32
		Blue	33

DMX Mode 3: Segment

48 DMX channels

Segment DMX Mode is split into a Main Module and a Sub Module.

The **Main Module** gives control of the main functions, as in **Basic** DMX Mode. Tilt, dimming and the color mixing channels have 16-bit control resolution. A shutter channel gives direct change between open and blackout plus a range of intensity effects. Zoom is also available with 8-bit resolution. The Control/Settings channel lets you adjust fixture settings via DMX.

The color control channels in the Main Module offer color mixing using either [1] RGB, [2] RGBL or [3] x;y color gamut coordinates, depending on which of these three methods is active. You can select the color mixing method via DMX on the Control/Settings channel, via RDM or using the fixture's control panel. Additional color options channels include a color wheel with a wide range of color presets, a CTC channel, magenta/green shift adjustment and a tungsten simulation channel. The CQC channel lets you select if the fixture should give priority to color rendering or output intensity in its white output. This channel also offers an easy way of desaturating colors.

The Mix Priority channel defines how the output of the Main and Sub Module is merged or overlayed.

The **Sub Module** forms a second layer. The Sub Module channels provide intensity and shutter control, a powerful static and dynamic pattern effects engine with step crossfading and pattern transition options, plus RGB color control of six pixel groups as segments.

Mode 3 Segment			
Main module	1.1	Tilt	1
			2
		Intensity	3
			4
		Shutter	5
		Zoom	6
		Control / Settings	7
		[1] RGB – Red [2] RGBL – Red [3] x;y – x	8
			9
		[1] RGB – Green [2] RGBL – Green [3] x;y – y	10
			11
		[1] RGB – Blue [2] RGBL – Blue [3] x;y – not used	12
			13
		[1] RGB – not used [2] RGBL – Lime [3] x;y – not used	14
			15
		Color wheel	16
		CTC (Color temperature control)	17
		CQC (Color quality control)	18
		M/G shift	19
		Tungsten effect	20
		Mix priority	21
Sub module (Layer 2)	1.2	Intensity	22
			23
		Shutter	24
		Pattern selection	25
		Pattern step / speed	26
		Pattern step crossfading	27
		Pattern transition	28
		Fixture quantity	29
		Fixture number	30
	1.3	Red, segment 1 (pixels 01-03)	31
		Green, segment 1 (pixels 01-03)	32
		Blue, segment 1 (pixels 01-03)	33
	1.4	Red, segment 2 (pixels 04-06)	34
		Green, segment 2 (pixels 04-06)	35
		Blue, segment 2 (pixels 04-06)	36
	1.5	Red, segment 3 (pixels 07-09)	37
		Green, segment 3 (pixels 07-09)	38
		Blue, segment 3 (pixels 07-09)	39
	1.6	Red, segment 4 (pixels 10-12)	40
		Green, segment 4 (pixels 10-12)	41
		Blue, segment 4 (pixels 10-12)	42
	1.7	Red, segment 5 (pixels 13-15)	43
		Green, segment 5 (pixels 13-15)	44
		Blue, segment 5 (pixels 13-15)	45
	1.8	Red, segment 6 (pixels 16-18)	46
		Green, segment 6 (pixels 16-18)	47
		Blue, segment 6 (pixels 16-18)	48

DMX Mode 4: Multipix Advanced

84 DMX Channels

Multipix Advanced DMX Mode is split into a Main Module and a Sub Module.

The **Main Module** gives control of the main functions, as in **Basic** DMX Mode. Tilt, dimming and the color mixing channels have 16-bit control resolution. A shutter channel gives direct change between open and blackout plus a range of intensity effects. Zoom is also available with 8-bit resolution. The Control/Settings channel lets you adjust fixture settings via DMX.

The color control channels in the Main Module offer color mixing using either [1] RGB, [2] RGBL or [3] x;y color gamut coordinates, depending on which of these three methods is active. You can select the color mixing method via DMX on the Control/Settings channel, via RDM or using the fixture's control panel. Additional color options channels include a color wheel with a wide range of color presets, a CTC channel, magenta/green shift adjustment and a tungsten simulation channel. The CQC channel lets you select if the fixture should give priority to color rendering or output intensity in its white output. This channel also offers an easy way of desaturating colors.

The Mix Priority channel defines how the output of the Main and Sub Module is merged or overlayed.

The **Sub Module** forms a second layer. The Sub Module channels provide intensity and shutter control, a powerful static and dynamic pattern effects engine with step crossfading and pattern transition options, plus RGB color control of each individual pixel.

Mode 4 Multipix Advanced			
Main module	1.1	Tilt	1
			2
		Intensity	3
			4
		Shutter	5
		Zoom	6
		Control / Settings	7
		[1] RGB – Red [2] RGBL – Red [3] x;y – x	8
			9
		[1] RGB – Green [2] RGBL – Green [3] x;y – y	10
			11
		[1] RGB – Blue [2] RGBL – Blue [3] x;y – not used	12
			13
		[1] RGB – not used [2] RGBL – Lime [3] x;y – not used	14
			15
		Color wheel	16
		CTC (Color temperature control)	17
		CQC (Color quality control)	18
		M/G shift	19
		Tungsten effect	20
		Mix priority	21
Sub module (Layer 2)	1.2	Intensity	22
			23
		Shutter	24
		Pattern selection	25
		Pattern step / speed	26
		Pattern step crossfading	27
		Pattern transition	28
		Fixture quantity	29
		Fixture number	30
	1.3	Red, pixel 01	31
		Green, pixel 01	32
		Blue, pixel 01	33
	1.4 ... 1.19	RGB, pixels 02-17	34 ... 81
	1.20	Red, pixel 18	82
		Green, pixel 18	83
		Blue, pixel 18	84

DMX Mode 5: Multipix Compressed

63 DMX Channels

MultiPix Compressed DMX Mode gives control of the main functions, as in **Basic** DMX Mode. Tilt and dimming have 16-bit control resolution. A shutter channel gives direct change between open and blackout plus a range of intensity effects. Zoom is also available with 8-bit resolution. The Control/Settings channel lets you adjust fixture settings via DMX.

The CTC Channel lets you temporarily change from the fixed white point to any other color temperature. The CQC channel lets you select if the fixture should give priority to color rendering or output intensity in its white output. This channel also offers an easy way of desaturating colors.

Color mixing is carried out on the individual pixel control channels.

Mode 5 Multipix Compressed			
Main module	1.1	Tilt	1
			2
		Intensity	3
			4
		Shutter	5
		Zoom	6
		Control / Settings	7
		CTC (Color temperature control)	8
		CQC (Color quality control)	9
Sub module (Layer 2)	1.2	Red, pixel 01	10
		Green, pixel 01	11
		Blue, pixel 01	12
	1.3 ... 1.18	RGB, pixels 02-17	13 … 60
	1.19	Red, pixel 18	61
		Green, pixel 18	62
		Blue, pixel 18	63

4. DMX control channel layout

In the following DMX channel layout tables:

- Default settings are indicated with **bold type**.
- Where commands are marked ***(3 sec.)*** *or* ***(5 sec.)***, you must send the DMX value continuously for 3 or 5 seconds to apply the command.
- Percentage equivalents are rounded up or down to the nearest 0.1%

DMX channels from 1 to 7 have the same functionality in all DMX modes.

DMX Mode 1: Basic

20 DMX Channels

Single-layer control

Channel		Command	DMX range		Percent		Default DMX	Fade
1	**Tilt coarse**	Tilt backwards > forwards (16-bit)	0	65535	0	100	32768	Fade
2	**Tilt fine**							
3	**Intensity coarse**	Global intensity 0-100% (16-bit)	0	65535	0	100	32768	Fade
4	**Intensity fine**							
5	**Shutter**	Shutter closed	0	4	0	1.6	255	Snap
		Single flash (at intensity change)	5	9	2.0	3.5		Snap
		Pulse slow > fast	10	39	3.9	15.3		Fade
		Opening pulse slow > fast	40	69	15.7	27.1		Fade
		Closing pulse slow > fast	70	99	27.5	38.8		Fade
		Double flash slow > fast	100	129	39.2	50.6		Fade
		Random pixel strobe slow > fast	130	159	51.0	62.4		Fade
		Random all strobe slow > fast	160	199	62.7	78.0		Fade
		Strobe sync all pixels 1 Hz > fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
6	**Zoom**	Zoom narrow → wide	0	255	0	100	0	Fade
7	**Control/Settings**	*See* 'Control / Settings channel' *on page 42*						
8	**RGB / RGBL / x,y color control** (see also 'Key to conversion of x and y coordinates' on page 44)	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
9		[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
10		[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
11		[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
12		[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – *not used*	0	65535	0	100	65535	Fade
13		[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - *not used*						
14		[1] RGB - *not used* [2] RGBL - Lime coarse [3] x;y - *not used*	0	65535	0	100	65535	Fade
15		[1] RGB - *not used* [2] RGBL - Lime fine [3] x;y - *not used*						
16	**Virtual color wheel** (see also 'Color wheel specifications' on page 45)	Open	0	9	0	3.5	0	Snap
		Filter 004 (Medium Bastard Amber)	10	12	3.9	4.7		
		Filter 019 (Fire)	13	15	5.1	5.9		
		Filter 025 (Sunset Red)	16	18	6.3	7.1		
		Filter 026 (Bright Red)	19	21	7.5	8.2		
		Filter 036 (Medium Pink)	22	24	8.6	9.4		
		Filter 049 (Medium Purple)	25	27	9.8	10.6		
		Filter 058 (Lavender)	28	30	11.0	11.8		
		Filter 068 (Sky Blue)	31	33	12.2	12.9		
		Filter 088 (Lime Green)	34	36	13.3	14.1		

16 ct.	**Virtual color wheel (continued)**	Filter 089 (Moss Green)	37	39	14.5	15.3	0	Snap
		Filter 090 (Dark Yellow Green)	40	42	15.7	16.5		
		Filter 102 (Light Amber)	43	45	16.9	17.6		
		Filter 103 (Straw)	46	48	18.0	18.8		
		Filter 106 (Primary Red)	49	51	19.2	20.0		
		Filter 111 (Dark Pink)	52	54	20.4	21.2		
		Filter 115 (Peacock Blue)	55	57	21.6	22.4		
		Filter 117 (Steel Blue)	58	60	22.7	23.5		
		Filter 118 (Light Blue)	61	63	23.9	24.7		
		Filter 121 (Filter Green)	64	66	25.1	25.9		
		Filter 122 (Fern Green)	67	69	26.3	27.1		
		Filter 124 (Dark Green)	70	72	27.5	28.2		
		Filter 126 (Mauve)	73	75	28.6	29.4		
		Filter 128 (Bright Pink)	76	78	29.8	30.6		
		Filter 131 (Marine Blue)	79	81	31.0	31.8		
		Filter 132 (Medium Blue)	82	84	32.2	32.9		
		Filter 134 (Golden Amber)	85	87	33.3	34.1		
		Filter 135 (Deep Golden Amber)	88	90	34.5	35.3		
		Filter 136 (Pale Lavender)	91	93	35.7	36.5		
		Filter 137 (Special Lavender)	94	96	36.9	37.6		
		Filter 138 (Pale Green)	97	99	38.0	38.8		
		Filter 140 (Summer Blue)	100	102	39.2	40.0		
		Filter 141 (Bright Blue)	103	105	40.4	41.2		
		Filter 143 (Pale Navy Blue)	106	108	41.6	42.4		
		Filter 147 (Apricot)	109	111	42.7	43.5		
		Filter 148 (Bright Rose)	112	114	43.9	44.7		
		Filter 152 (Pale Gold)	115	117	45.1	45.9		
		Filter 154 (Pale Rose)	118	120	46.3	47.1		
		Filter 157 (Pink)	121	123	47.5	48.2		
		Filter 162 (Bastard Amber)	124	126	48.6	49.4		
		Filter 164 (Flame Red)	127	129	49.8	50.6		
		Filter 165 (Daylight Blue)	130	132	51.0	51.8		
		Filter 169 (Lilac Tint)	133	135	52.2	52.9		
		Filter 170 (Deep Lavender)	136	138	53.3	54.1		
		Filter 172 (Lagoon Blue)	139	141	54.5	55.3		
		Filter 180 (Dark Lavender)	142	144	55.7	56.5		
		Filter 182 (Light Red)	145	147	56.9	57.6		
		Filter 194 (Surprise Pink)	148	150	58.0	58.8		
		Filter 197 (Alice Blue)	151	153	59.2	60.0		
		Filter 201 (Full C.T. Blue)	154	156	60.4	61.2		
		Filter 202 (Half C.T. Blue)	157	159	61.6	62.4		
		Filter 203 (Quarter C.T. Blue)	160	162	62.7	63.5		
		Filter 204 (Full C.T. Orange)	163	165	63.9	64.7		
		Filter 206 (Quarter C.T. Orange)	166	168	65.1	65.9		
		Filter 219 (Fluorescent Green)	169	171	66.3	67.1		
		Filter 247 (Filter Minus Green)	172	174	67.5	68.2		
		Filter 248 (Half Minus Green)	175	177	68.6	69.4		
		Filter 281 (Three Quarter C.T. Blue)	178	180	69.8	70.6		
		Filter 285 (Three Qrter. C.T. Orange)	181	183	71.0	71.8		
		Filter 352 (Glacier Blue)	184	186	72.2	72.9		
		Filter 353 (Lighter Blue)	187	189	73.3	74.1		
		Filter 507 (Madge)	190	192	74.5	75.3		
		Filter 778 (Millennium Gold)	193	195	75.7	76.5		
		Filter 793 (Vanity Fair)	196	198	76.9	77.6		
		Filter 798 (Chrysalis Pink)	199	201	78.0	78.8		
		Rainbow, stop at first color (violet)	202	204	79.2	80.0		
		Rainbow, continuous slow→fast	205	252	80.4	98.8		Fade
		Rainbow, stop at current color	253	255	99.2	100		Snap

17	**Color Temperature Control**	RAW	0	9	0	3.5	???	Snap
		10 000 K	10	11	3.9	4.3		
		9999→2501 K continuous reduction (stepless, interpolation)	12	254	4.7	99.6		Fade
		2500 K	255	255	100	100		Snap
18	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade	10	117	3.9	45.9		Fade
		HQ (high quality), unsaturated color	118	127	46.3	49.8		Snap
		HO (high output), unsaturated color	128	137	50.2	53.7		
		Crossfade	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
19	**M/G shift**	Off (no correction)	0	9	0	3.5	0	Snap
		Full plus magenta +100%	10	10	3.9	3.9		
		Plus magenta +99% → +1%	11	124	4.3	48.6		Fade
		Neutral / no effect	125	140	49.0	54.9		Snap
		Plus green +1% → +99%	141	254	55.3	99.6		Fade
		Full plus green +100%	255	255	100	100		Snap
20	**Tungsten effect**	Off (selected white point, no red shift or delay when dimming)	0	9	0	3.5	0	Snap
		Tungsten ACL 250W/28V	10	19	3.9	7.5		
		Tungsten Blinder 650W/120V	20	29	7.8	11.4		
		Tungsten 750W/80V	30	39	11.8	15.3		
		Tungsten 1000W/240V	40	49	15.7	19.2		
		Tungsten 1200W/240V	50	59	19.6	23.1		
		Tungsten 2000W/230V	60	69	23.5	27.1		
		Tungsten 2500W/230V	70	79	27.5	31.0		
		Tungsten 5000W/230V	80	89	31.4	34.9		
		No function (off)	90	120	35.3	47.1		
		Off (selected white point, no red shift or delay when dimming)	120	139	47.1	54.5		
		FX Tungsten ACL 250W/28V	140	149	54.9	58.4		
		FX Tungsten Blinder 650W/120V	150	159	58.8	62.4		
		FX Tungsten 750W/80V	160	169	62.7	66.3		
		FX Tungsten 1000W/240V	170	179	66.7	70.2		
		FX Tungsten 1200W/240V	180	189	70.6	74.1		
		FX Tungsten 2000W/230V	190	199	74.5	78.0		
		FX Tungsten 2500W/230V	200	209	78.4	82.0		
		FX Tungsten 5000W/230V	210	219	82.4	85.9		
		No function (off)	220	255	86.3	100		

DMX Mode 2: Normal (default DMX mode)

33 DMX Channels

Channel	Command	DMX range		Percent		Default DMX	Fade
Main Module: first layer control							
1 **Tilt coarse** **2** **Tilt fine**	Tilt backwards > forwards (16-bit)	0	65535	0	100	32768	Fade
3 **Intensity coarse** **4** **Intensity fine**	Global intensity 0-100% (16-bit)	0	65535	0	100	32768	Fade
5 **Shutter**	Shutter closed	0	4	0	1.6	255	Snap
	Dimmer flash (at intensity change)	5	9	2.0	3.5		Snap
	Pulse slow > fast	10	39	3.9	15.3		Fade
	Opening pulse slow > fast	40	69	15.7	27.1		Fade
	Closing pulse slow > fast	70	99	27.5	38.8		Fade
	Double flash slow > fast	100	129	39.2	50.6		Fade
	Random pixel strobe slow > fast	130	159	51.0	62.4		Fade
	Random all strobe slow > fast	160	199	62.7	78.0		Fade
	Strobe sync all pixels 1 Hz > fast	200	250	78.4	98.0		Fade
	Open	251	255	98.4	100		Snap
6 **Zoom**	Zoom narrow → wide	0	255	0	100	0	Fade
7 **Control/Settings**	*See* 'Control / Settings channel' *on page 42*						
8 **RGB / RGBL / x,y color control** (see also 'Key to conversion of x and y coordinates' on page 44)	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
9	[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
10	[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
11	[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
12	[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – *not used*	0	65535	0	100	65535	Fade
13	[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - *not used*						
14	[1] RGB - *not used* [2] RGBL - Lime coarse [3] x;y - *not used*	0	65535	0	100	65535	Fade
15	[1] RGB - *not used* [2] RGBL - Lime fine [3] x;y - *not used*						
16 **Virtual color wheel** (see also 'Color wheel specifications' on page 45)	Open	0	9	0	3.5	0	Snap
	Filter 004 (Medium Bastard Amber)	10	12	3.9	4.7		
	Filter 019 (Fire)	13	15	5.1	5.9		
	Filter 025 (Sunset Red)	16	18	6.3	7.1		
	Filter 026 (Bright Red)	19	21	7.5	8.2		
	Filter 036 (Medium Pink)	22	24	8.6	9.4		
	Filter 049 (Medium Purple)	25	27	9.8	10.6		
	Filter 058 (Lavender)	28	30	11.0	11.8		
	Filter 068 (Sky Blue)	31	33	12.2	12.9		
	Filter 088 (Lime Green)	34	36	13.3	14.1		

Main Module: first layer control (continued)

16 ctd.	**Virtual color wheel (continued)**	Filter 089 (Moss Green)	37	39	14.5	15.3	0	Snap
		Filter 090 (Dark Yellow Green)	40	42	15.7	16.5		
		Filter 102 (Light Amber)	43	45	16.9	17.6		
		Filter 103 (Straw)	46	48	18.0	18.8		
		Filter 106 (Primary Red)	49	51	19.2	20.0		
		Filter 111 (Dark Pink)	52	54	20.4	21.2		
		Filter 115 (Peacock Blue)	55	57	21.6	22.4		
		Filter 117 (Steel Blue)	58	60	22.7	23.5		
		Filter 118 (Light Blue)	61	63	23.9	24.7		
		Filter 121 (Filter Green)	64	66	25.1	25.9		
		Filter 122 (Fern Green)	67	69	26.3	27.1		
		Filter 124 (Dark Green)	70	72	27.5	28.2		
		Filter 126 (Mauve)	73	75	28.6	29.4		
		Filter 128 (Bright Pink)	76	78	29.8	30.6		
		Filter 131 (Marine Blue)	79	81	31.0	31.8		
		Filter 132 (Medium Blue)	82	84	32.2	32.9		
		Filter 134 (Golden Amber)	85	87	33.3	34.1		
		Filter 135 (Deep Golden Amber)	88	90	34.5	35.3		
		Filter 136 (Pale Lavender)	91	93	35.7	36.5		
		Filter 137 (Special Lavender)	94	96	36.9	37.6		
		Filter 138 (Pale Green)	97	99	38.0	38.8		
		Filter 140 (Summer Blue)	100	102	39.2	40.0		
		Filter 141 (Bright Blue)	103	105	40.4	41.2		
		Filter 143 (Pale Navy Blue)	106	108	41.6	42.4		
		Filter 147 (Apricot)	109	111	42.7	43.5		
		Filter 148 (Bright Rose)	112	114	43.9	44.7		
		Filter 152 (Pale Gold)	115	117	45.1	45.9		
		Filter 154 (Pale Rose)	118	120	46.3	47.1		
		Filter 157 (Pink)	121	123	47.5	48.2		
		Filter 162 (Bastard Amber)	124	126	48.6	49.4		
		Filter 164 (Flame Red)	127	129	49.8	50.6		
		Filter 165 (Daylight Blue)	130	132	51.0	51.8		
		Filter 169 (Lilac Tint)	133	135	52.2	52.9		
		Filter 170 (Deep Lavender)	136	138	53.3	54.1		
		Filter 172 (Lagoon Blue)	139	141	54.5	55.3		
		Filter 180 (Dark Lavender)	142	144	55.7	56.5		
		Filter 182 (Light Red)	145	147	56.9	57.6		
		Filter 194 (Surprise Pink)	148	150	58.0	58.8		
		Filter 197 (Alice Blue)	151	153	59.2	60.0		
		Filter 201 (Full C.T. Blue)	154	156	60.4	61.2		
		Filter 202 (Half C.T. Blue)	157	159	61.6	62.4		
		Filter 203 (Quarter C.T. Blue)	160	162	62.7	63.5		
		Filter 204 (Full C.T. Orange)	163	165	63.9	64.7		
		Filter 206 (Quarter C.T. Orange)	166	168	65.1	65.9		
		Filter 219 (Fluorescent Green)	169	171	66.3	67.1		
		Filter 247 (Filter Minus Green)	172	174	67.5	68.2		
		Filter 248 (Half Minus Green)	175	177	68.6	69.4		
		Filter 281 (Three Quarter C.T. Blue)	178	180	69.8	70.6		
		Filter 285 (Three Qtr. C.T. Orange)	181	183	71.0	71.8		
		Filter 352 (Glacier Blue)	184	186	72.2	72.9		
		Filter 353 (Lighter Blue)	187	189	73.3	74.1		
		Filter 507 (Madge)	190	192	74.5	75.3		
		Filter 778 (Millennium Gold)	193	195	75.7	76.5		
		Filter 793 (Vanity Fair)	196	198	76.9	77.6		
		Filter 798 (Chrysalis Pink)	199	201	78.0	78.8		

Main Module: first layer control (continued)

16 ctd.	**Color wheel (ctd.)**	Rainbow, stop at first color (violet)	202	204	79.2	80.0		
		Rainbow, continuous slow→fast	205	252	80.4	98.8		Fade
		Rainbow, stop at current color	253	255	99.2	100		Snap
17	**Color Temperature Control**	RAW (selected white point)	0	9	0	3.5		Snap
		10 000 K	10	11	3.9	4.3		
		9999→2501 K continuous reduction (stepless, interpolation)	12	254	4.7	99.6		Fade
		2500 K	255	255	100	100		Snap
18	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade	10	117	3.9	45.9		Fade
		HQ (high quality), unsaturated color	118	127	46.3	49.8		Snap
		HO (high output), unsaturated color	128	137	50.2	53.7		
		Crossfade	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
19	**M/G shift**	Off (no correction)	0	9	0	3.5	0	Snap
		Full plus magenta +100%	10	10	3.9	3.9		
		Plus magenta +99% → +1%	11	124	4.3	48.6		Fade
		Neutral / no effect	125	140	49.0	54.9		Snap
		Plus green +1% → +99%	141	254	55.3	99.6		Fade
		Full plus green +100%	255	255	100	100		Snap
20	**Tungsten effect**	Off (selected white point, no red shift or delay when dimming)	0	9	0	3.5	0	Snap
		Tungsten ACL 250W/28V	10	19	3.9	7.5		
		Tungsten Blinder 650W/120V	20	29	7.8	11.4		
		Tungsten 750W/80V	30	39	11.8	15.3		
		Tungsten 1000W/240V	40	49	15.7	19.2		
		Tungsten 1200W/240V	50	59	19.6	23.1		
		Tungsten 2000W/230V	60	69	23.5	27.1		
		Tungsten 2500W/230V	70	79	27.5	31.0		
		Tungsten 5000W/230V	80	89	31.4	34.9		
		No function (off)	90	120	35.3	47.1		
		Off (selected white point, no red shift or delay when dimming)	120	139	47.1	54.5		
		FX Tungsten ACL 250W/28V	140	149	54.9	58.4		
		FX Tungsten Blinder 650W/120V	150	159	58.8	62.4		
		FX Tungsten 750W/80V	160	169	62.7	66.3		
		FX Tungsten 1000W/240V	170	179	66.7	70.2		
		FX Tungsten 1200W/240V	180	189	70.6	74.1		
		FX Tungsten 2000W/230V	190	199	74.5	78.0		
		FX Tungsten 2500W/230V	200	209	78.4	82.0		
		FX Tungsten 5000W/230V	210	219	82.4	85.9		
		No function (off)	220	255	86.3	100		
21	**Mix priority**	Main Module and Sub Module HTP (highest value takes priority)	0	9	0	3.5	0	Snap
		Main only (Main Module color takes priority)	10	19	3.9	7.5		
		Sub only (Sub Module color takes priority)	20	29	7.8	11.4		
		Main and Sub additive (Sub Module color value added to Main Module color value)	30	39	11.8	15.3		
		Main minus Sub Module subtractive (Sub Module color value subtracted from Main)	40	49	15.7	19.2		
		Sub Module minus main subtractive (Main Module color value subtracted from Sub Module)	50	59	19.6	23.1		

Main Module: first layer control (continued)

		TrueColor 1: Main over Sub – snap	60	69	23.5	27.1		Snap
		TrueColor 2: Sub over Main – snap	70	79	27.5	31.0		
		TrueColor 3: Main over Sub – crossfade	80	89	31.4	34.9		Fade
		TrueColor 4: Sub over Main – crossfade	90	99	35.3	38.8		Fade
		No function	100	127	39.2	49.8		
		Main Module only	128	130	50.2	51.0		Snap
		Crossfading Main → HTP	131	190	51.4	74.5		Fade
		Main and Sub Modules (HTP)	191	192	74.9	75.3		Snap
		Crossfading HTP → Sub	193	252	75.7	98.8		Fade
		Sub Module only	253	255	99.2	100		Snap

Sub Module: second layer control

22	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
23	**Intensity fine**							
24	**Shutter**	Closed	0	4	0	1.6	0	Snap
		Single flash if value changed within the range 005 → 009	5	9	2.0	3.5		Fade
		Pulse slow → fast	10	39	3.9	15.3		Fade
		Pulse opening slow → fast	40	69	15.7	27.1		Fade
		Pulse closing slow → fast	70	99	27.5	38.8		Fade
		Double flash slow → fast	100	129	39.2	50.6		Fade
		Strobe random pixel slow → fast	130	159	51.0	62.4		Fade
		Strobe random all slow → fast	160	199	62.7	78.0		Fade
		Strobe sync all pixel slow → fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
25	**Pattern selection**	Off (all pixels active)	0	9	0	3.5	0	Snap
		Static Pattern 01	10	11	3.9	4.3		
		Static Pattern 02	12	13	4.7	5.1		
		Static Pattern 03	14	15	5.5	5.9		
		Static Pattern 04	16	17	6.3	6.7		
		Static Pattern 05	18	19	7.1	7.5		
		Static Pattern 06	20	21	7.8	8.2		
		Static Pattern 07	22	23	8.6	9.0		
		Static Pattern 08	24	25	9.4	9.8		
		Static Pattern 09	26	27	10.2	10.6		
		Static Pattern 10	28	29	11.0	11.4		
		Static Pattern 11	30	31	11.8	12.2		
		Static Pattern 12	32	33	12.5	12.9		
		Static Pattern 13	34	35	13.3	13.7		
		Static Pattern 14	36	37	14.1	14.5		
		Static Pattern 15	38	39	14.9	15.3		
		Static Pattern 16	40	41	15.7	16.1		
		Static Pattern 17	52	43	20.4	16.9		
		Static Pattern 18	44	45	17.3	17.6		
		Static Pattern 19	46	47	18.0	18.4		
		Static Pattern 20	48	49	18.8	19.2		
		Static Pattern 21	50	51	19.6	20.0		
		Static Pattern 22	52	53	20.4	20.8		
		Static Pattern 23	54	55	21.2	21.6		
		Static Pattern 24	56	57	22.0	22.4		
		Static Pattern 25	58	59	22.7	23.1		
		Static Pattern 26	60	61	23.5	23.9		
		Static Pattern 27	62	63	24.3	24.7		

Sub Module: second layer control (continued)

25	**Pattern selection (continued)**	Static Pattern 28	64	65	25.1	25.5	0	Snap
		Static Pattern 29	66	67	25.9	26.3		
		Static Pattern 30	68	69	26.7	27.1		
		Static Pattern 31	70	71	27.5	27.8		
		Static Pattern 32	72	73	28.2	28.6		
		Static Pattern 33	74	75	29.0	29.4		
		Static Pattern 34	76	77	29.8	30.2		
		Static Pattern 35	78	79	30.6	31.0		
		Static Pattern 36	80	81	31.4	31.8		
		Static Pattern 37	82	83	32.2	32.5		
		Static Pattern 38	84	85	32.9	33.3		
		Static Pattern 39	86	87	33.7	34.1		
		Static Pattern 40	88	89	34.5	34.9		
		Static Pattern 41	90	91	35.3	35.7		
		Static Pattern 42	92	93	36.1	36.5		
		Static Pattern 43	94	95	36.9	37.3		
		Static Pattern 44	96	97	37.6	38.0		
		Static Pattern 45	98	99	38.4	38.8		
		Static Pattern 46	100	101	39.2	39.6		
		Static Pattern 47	102	103	40.0	40.4		
		Static Pattern 48	104	105	40.8	41.2		
		Static Pattern 49	106	107	41.6	42.0		
		Static Pattern 50	108	109	42.4	42.7		
		Static Pattern 51	110	111	43.1	43.5		
		Static Pattern 52	112	113	43.9	44.3		
		Static Pattern 53	114	115	44.7	45.1		
		Static Pattern 54	116	117	45.5	45.9		
		Static Pattern 55	118	119	46.3	46.7		
		Static Pattern 56	120	121	47.1	47.5		
		Static Pattern 57	122	123	47.8	48.2		
		Static Pattern 58	124	125	48.6	49.0		
		Static Pattern 59	126	127	49.4	49.8		
		Dynamic Pattern 01	128	129	50.2	50.6		
		Dynamic Pattern 02	130	131	51.0	51.4		
		Dynamic Pattern 03	132	133	51.8	52.2		
		Dynamic Pattern 04	134	135	52.5	52.9		
		Dynamic Pattern 05	136	137	53.3	53.7		
		Dynamic Pattern 06	138	139	54.1	54.5		
		Dynamic Pattern 07	140	141	54.9	55.3		
		Dynamic Pattern 08	142	143	55.7	56.1		
		Dynamic Pattern 09	144	145	56.5	56.9		
		Dynamic Pattern 10	146	147	57.3	57.6		
		Dynamic Pattern 11	148	149	58.0	58.4		
		Dynamic Pattern 12	150	151	58.8	59.2		
		Dynamic Pattern 13	152	153	59.6	60.0		
		Dynamic Pattern 14	154	155	60.4	60.8		
		Dynamic Pattern 15	156	157	61.2	61.6		
		Dynamic Pattern 16	158	159	62.0	62.4		
		Dynamic Pattern 17	160	161	62.7	63.1		
		Dynamic Pattern 18	162	163	63.5	63.9		
		Dynamic Pattern 19	164	165	64.3	64.7		
		Dynamic Pattern 20	166	167	65.1	65.5		
		Dynamic Pattern 21	168	169	65.9	66.3		
		Dynamic Pattern 22	170	171	66.7	67.1		
		Dynamic Pattern 23	172	173	67.5	67.8		
		Dynamic Pattern 24	174	175	68.2	68.6		

Sub Module: second layer control (continued)

25	**Pattern selection (continued)**	Dynamic Pattern 25	176	177	69.0	69.4		
		Dynamic Pattern 26	178	179	69.8	70.2		
		Dynamic Pattern 27	180	181	70.6	71.0		
		Dynamic Pattern 28	182	183	71.4	71.8		
		Dynamic Pattern 29	184	185	72.2	72.5		
		Dynamic Pattern 30	186	187	72.9	73.3		
		Dynamic Pattern 31	188	189	73.7	74.1		
		Dynamic Pattern 32	190	191	74.5	74.9		
		Dynamic Pattern 33	192	193	75.3	75.7		
		Dynamic Pattern 34	194	195	76.1	76.5		
		Dynamic Pattern 35	196	197	76.9	77.3		
		Dynamic Pattern 36	198	199	77.6	78.0		
		Dynamic Pattern 37	200	201	78.4	78.8		
		Dynamic Pattern 38	202	203	79.2	79.6		
		Dynamic Pattern 39	204	205	80.0	80.4		
		Dynamic Pattern 40	206	207	80.8	81.2		
		Dynamic Pattern 41	208	209	81.6	82.0		
		Dynamic Pattern 42	210	211	82.4	82.7		
		Dynamic Pattern 43	212	213	83.1	83.5		
		Dynamic Pattern 44	214	215	83.9	84.3		
		Dynamic Pattern 45	216	217	84.7	85.1		
		Dynamic Pattern 46	218	219	85.5	85.9		
		Dynamic Pattern 47	220	221	86.3	86.7		
		Dynamic Pattern 48	222	223	87.1	87.5		
		Dynamic Pattern 49	224	225	87.8	88.2		
		Dynamic Pattern 50	226	227	88.6	89.0		
		Special Pattern 01	228	229	89.4	89.8		
		Special Pattern 02	230	231	90.2	90.6		
		Special Pattern 03	232	233	91.0	91.4		
		Special Pattern 04	234	235	91.8	92.2		
		Special Pattern 05	236	237	92.5	92.9		
		Special Pattern 06	238	239	93.3	93.7		
		Special Pattern 07	240	241	94.1	94.5		
		Special Pattern 08	242	243	94.9	95.3		
		Special Pattern 09	244	245	95.7	96.1		
		Special Pattern 10	246	247	96.5	96.9		
		Special Pattern 11	248	249	97.3	97.6		
		Random Pixel	250	255	98.0	100		
26	**Pattern step / speed**	Stop (first pattern step)	0	2	0.0	0.8	0	Snap
		CW fast → slow (run pattern step 1 → n)	3	63	1.2	24.7		
		Stop at current position	64	66	25.1	25.9		
		CCW slow → fast (run pattern step n → 1)	67	127	26.3	49.8		
		Pattern Step 01	128	129	50.2	50.6		
		Pattern Step 02	130	131	51.0	51.4		
		Pattern Step 03	132	133	51.8	52.2		
		Pattern Step 04	134	135	52.5	52.9		
		Pattern Step 05	136	137	53.3	53.7		
		Pattern Step 06	138	139	54.1	54.5		
		Pattern Step 07	140	141	54.9	55.3		
		Pattern Step 08	142	143	55.7	56.1		
		Pattern Step 09	144	145	56.5	56.9		
		Pattern Step 10	146	147	57.3	57.6		

Sub Module: second layer control (continued)

26 ctd.	**Pattern step / speed ctd.**	Pattern Step 11	148	149	58.0	58.4		
		Pattern Step 12	150	151	58.8	59.2		
		Pattern Step 13	152	153	59.6	60.0		
		Pattern Step 14	154	155	60.4	60.8		
		Pattern Step 15	156	157	61.2	61.6		
		Pattern Step 16	158	159	62.0	62.4		
		Pattern Step 17	160	161	62.7	63.1		
		Pattern Step 18	162	163	63.5	63.9		
		Pattern Step 19	164	165	64.3	64.7		
		Pattern Step 20	166	167	65.1	65.5		
		Pattern Step 21	168	169	65.9	66.3		
		Pattern Step 22	170	171	66.7	67.1		
		Pattern Step 23	172	173	67.5	67.8		
		Pattern Step 24	174	175	68.2	68.6		
		Pattern Step 25	176	177	69.0	69.4		
		Pattern Step 26	178	179	69.8	70.2		
		Pattern Step 27	180	181	70.6	71.0		
		Pattern Step 28	182	183	71.4	71.8		
		Pattern Step 29	184	185	72.2	72.5		
		Pattern Step 30	186	187	72.9	73.3		
		Pattern Step 31	188	189	73.7	74.1		
		Pattern Step 32	190	191	74.5	74.9		
		Pattern Step 33	192	193	75.3	75.7		
		Pattern Step 34	194	195	76.1	76.5		
		Pattern Step 35	196	197	76.9	77.3		
		Pattern Step 36	198	199	77.6	78.0		
		Pattern Step 37	200	201	78.4	78.8		
		Pattern Step 41	208	209	81.6	82.0		
		Pattern Step 42	210	211	82.4	82.7		
		Pattern Step 43	212	213	83.1	83.5		
		Pattern Step 41	208	209	81.6	82.0		
		Pattern Step 42	210	211	82.4	82.7		
		Pattern Step 43	212	213	83.1	83.5		
		Pattern Step 44	214	215	83.9	84.3		
		Pattern Step 45	216	217	84.7	85.1		
		Pattern Step 46	218	219	85.5	85.9		
		Pattern Step 47	220	221	86.3	86.7		
		Pattern Step 48	222	223	87.1	87.5		
		Pattern Step 49	224	225	87.8	88.2		Snap
		Pattern Step 50	226	227	88.6	89.0		
		Pattern Step 51	228	229	89.4	89.8		
		Pattern Step 52	230	231	90.2	90.6		
		Pattern Step 53	232	233	91.0	91.4		
		Pattern Step 54	234	235	91.8	92.2		
		Pattern Step 55	236	237	92.5	92.9		
		Pattern Step 56	238	239	93.3	93.7		
		Pattern Step 57	240	241	94.1	94.5		
		Pattern Step 58	242	243	94.9	95.3		
		Pattern Step 59	244	245	95.7	96.1		
		Pattern Step 60	246	247	96.5	96.9		
		Pattern Step 61	248	249	97.3	97.6		
		Pattern Step 62	250	251	98.0	98.4		
		Pattern Step 63	252	253	98.8	99.2		
		Pattern Step 64	254	255	99.6	100.0		

Sub Module: second layer control (continued)

27	**Pattern step crossfading (from one step to next)**	Off (no crossfading, Snap)	0	9	0	3.5	0	Snap
		Crossfading: Snap → min. Xfade → max. Xfade (fade in and fade out times are identical)	10	127	3.9	49.8		Fade
		Off (no crossfading, Snap)	128	137	50.2	53.7		Snap
		Crossfading with tail: Snap → min. Xfade with tail → max. Xfade with tail (fade in time is shorter than fade out time)	138	255	54.1	100		Fade
28	**Pattern transition (from one pattern to next)**	Off (snap from one pattern to next)	0	9	0	3.5	0	Snap
		Normal transition (snap → fade 5s)	10	63	3.9	24.7		Fade
		Off (snap from one pattern to next)	64	73	25.1	28.6		Snap
		FOB (Fade Over Blackout) transition (snap → fade 5s)	74	127	29.0	49.8		Fade
		Off (snap from one pattern to next)	128	137	50.2	53.7		Snap
		FOF (Fade Over Full) transition (snap → fade 5s)	138	191	54.1	74.9		Fade
		No function	192	201	75.3	78.8		
		No transition time - reserved for future use	202	255	79.2	100.0		
29	**Fixture total number**	Off	0	0	0	0	0	Snap
		1 fixture in total	1	1	0.4	0.4		
		2 fixtures in total	2	2	0.8	0.8		
		3…254 fixtures in total	3	254	1.2	99.6		
		255 fixtures in total	255	255	100	100		
30	**Fixture position**	Off	0	0	0	0	0	Snap
		Fixture in position 1	1	1	0.4	0.4		
		Fixture in position 2	2	2	0.8	0.8		
		Fixture in position 3 … 254	3	254	1.2	99.6		
		Fixture in position 255	255	255	100	100		
31	**Red, pixel 01-18**	Intensity 0 → 100%	0	255	0	100	0	Fade
32	**Green, pixel 01-18**	Intensity 0 → 100%	0	255	0	100	0	Fade
33	**Blue, pixel 01-18**	Intensity 0 → 100%	0	255	0	100	0	Fade

DMX Mode 3: Segments

48 DMX Channels

Channel	Command	DMX range		Percent		Default DMX	Fade
Main Module: first layer control							
1 **Tilt coarse** **2** **Tilt fine**	Tilt backwards > forwards (16-bit)	0	65535	0	100	32768	Fade
3 **Intensity coarse** **4** **Intensity fine**	Global intensity 0-100% (16-bit)	0	65535	0	100	32768	Fade
5 **Shutter**	Shutter closed	0	4	0	1.6	255	Snap
	Dimmer flash (at intensity change)	5	9	2.0	3.5		Snap
	Pulse slow > fast	10	39	3.9	15.3		Fade
	Opening pulse slow > fast	40	69	15.7	27.1		Fade
	Closing pulse slow > fast	70	99	27.5	38.8		Fade
	Double flash slow > fast	100	129	39.2	50.6		Fade
	Random pixel strobe slow > fast	130	159	51.0	62.4		Fade
	Random all strobe slow > fast	160	199	62.7	78.0		Fade
	Strobe sync all pixels 1 Hz > fast	200	250	78.4	98.0		Fade
	Open	251	255	98.4	100		Snap
6 **Zoom**	Zoom narrow → wide	0	255	0	100	0	Fade
7 **Control/Settings**	*See* 'Control / Settings channel' *on page 42*						
8 **9** **RGB / RGBL / x,y color control** (see also 'Key to conversion of x and y coordinates' on page 4444)	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
	[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
10 **11**	[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
	[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
12 **13**	[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – *not used*	0	65535	0	100	65535	Fade
	[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - *not used*						
14 **15**	[1] RGB - *not used* [2] RGBL - Lime coarse [3] x;y - *not used*	0	65535	0	100	65535	Fade
	[1] RGB - *not used* [2] RGBL - Lime fine [3] x;y - *not used*						
16 **Virtual color wheel** (see also 'Color wheel specifications' on page 45)	Open	0	9	0	3.5	0	Snap
	Filter 004 (Medium Bastard Amber)	10	12	3.9	4.7		
	Filter 019 (Fire)	13	15	5.1	5.9		
	Filter 025 (Sunset Red)	16	18	6.3	7.1		
	Filter 026 (Bright Red)	19	21	7.5	8.2		
	Filter 036 (Medium Pink)	22	24	8.6	9.4		
	Filter 049 (Medium Purple)	25	27	9.8	10.6		
	Filter 058 (Lavender)	28	30	11.0	11.8		
	Filter 068 (Sky Blue)	31	33	12.2	12.9		
	Filter 088 (Lime Green)	34	36	13.3	14.1		

Main Module: first layer control (continued)

16 ctd.	**Virtual color wheel (continued)**	Filter 089 (Moss Green)	37	39	14.5	15.3	0	Snap
		Filter 090 (Dark Yellow Green)	40	42	15.7	16.5		
		Filter 102 (Light Amber)	43	45	16.9	17.6		
		Filter 103 (Straw)	46	48	18.0	18.8		
		Filter 106 (Primary Red)	49	51	19.2	20.0		
		Filter 111 (Dark Pink)	52	54	20.4	21.2		
		Filter 115 (Peacock Blue)	55	57	21.6	22.4		
		Filter 117 (Steel Blue)	58	60	22.7	23.5		
		Filter 118 (Light Blue)	61	63	23.9	24.7		
		Filter 121 (Filter Green)	64	66	25.1	25.9		
		Filter 122 (Fern Green)	67	69	26.3	27.1		
		Filter 124 (Dark Green)	70	72	27.5	28.2		
		Filter 126 (Mauve)	73	75	28.6	29.4		
		Filter 128 (Bright Pink)	76	78	29.8	30.6		
		Filter 131 (Marine Blue)	79	81	31.0	31.8		
		Filter 132 (Medium Blue)	82	84	32.2	32.9		
		Filter 134 (Golden Amber)	85	87	33.3	34.1		
		Filter 135 (Deep Golden Amber)	88	90	34.5	35.3		
		Filter 136 (Pale Lavender)	91	93	35.7	36.5		
		Filter 137 (Special Lavender)	94	96	36.9	37.6		
		Filter 138 (Pale Green)	97	99	38.0	38.8		
		Filter 140 (Summer Blue)	100	102	39.2	40.0		
		Filter 141 (Bright Blue)	103	105	40.4	41.2		
		Filter 143 (Pale Navy Blue)	106	108	41.6	42.4		
		Filter 147 (Apricot)	109	111	42.7	43.5		
		Filter 148 (Bright Rose)	112	114	43.9	44.7		
		Filter 152 (Pale Gold)	115	117	45.1	45.9		
		Filter 154 (Pale Rose)	118	120	46.3	47.1		
		Filter 157 (Pink)	121	123	47.5	48.2		
		Filter 162 (Bastard Amber)	124	126	48.6	49.4		
		Filter 164 (Flame Red)	127	129	49.8	50.6		
		Filter 165 (Daylight Blue)	130	132	51.0	51.8		
		Filter 169 (Lilac Tint)	133	135	52.2	52.9		
		Filter 170 (Deep Lavender)	136	138	53.3	54.1		
		Filter 172 (Lagoon Blue)	139	141	54.5	55.3		
		Filter 180 (Dark Lavender)	142	144	55.7	56.5		
		Filter 182 (Light Red)	145	147	56.9	57.6		
		Filter 194 (Surprise Pink)	148	150	58.0	58.8		
		Filter 197 (Alice Blue)	151	153	59.2	60.0		
		Filter 201 (Full C.T. Blue)	154	156	60.4	61.2		
		Filter 202 (Half C.T. Blue)	157	159	61.6	62.4		
		Filter 203 (Quarter C.T. Blue)	160	162	62.7	63.5		
		Filter 204 (Full C.T. Orange)	163	165	63.9	64.7		
		Filter 206 (Quarter C.T. Orange)	166	168	65.1	65.9		
		Filter 219 (Fluorescent Green)	169	171	66.3	67.1		
		Filter 247 (Filter Minus Green)	172	174	67.5	68.2		
		Filter 248 (Half Minus Green)	175	177	68.6	69.4		
		Filter 281 (Three Quarter C.T. Blue)	178	180	69.8	70.6		
		Filter 285 (Three Qtr. C.T. Orange)	181	183	71.0	71.8		
		Filter 352 (Glacier Blue)	184	186	72.2	72.9		
		Filter 353 (Lighter Blue)	187	189	73.3	74.1		
		Filter 507 (Madge)	190	192	74.5	75.3		
		Filter 778 (Millennium Gold)	193	195	75.7	76.5		
		Filter 793 (Vanity Fair)	196	198	76.9	77.6		
		Filter 798 (Chrysalis Pink)	199	201	78.0	78.8		

Main Module: first layer control (continued)

16 ctd.	**Virtual color wheel (ctd.)**	Rainbow, stop at first color (violet)	202	204	79.2	80.0		
		Rainbow, continuous slow→fast	205	252	80.4	98.8		Fade
		Rainbow, stop at current color	253	255	99.2	100		Snap
17	**Color Temperature Control**	RAW (selected white point)	0	9	0	3.5	???	Snap
		10 000 K	10	11	3.9	4.3		
		9999→2501 K continuous reduction (stepless, interpolation)	12	254	4.7	99.6		Fade
		2500 K	255	255	100	100		Snap
18	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade	10	117	3.9	45.9		Fade
		HQ (high quality), unsaturated color	118	127	46.3	49.8		Snap
		HO (high output), unsaturated color	128	137	50.2	53.7		
		Crossfade	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
19	**M/G shift**	Off (no correction)	0	9	0	3.5	0	Snap
		Full plus magenta +100%	10	10	3.9	3.9		
		Plus magenta +99% → +1%	11	124	4.3	48.6		Fade
		Neutral / no effect	125	140	49.0	54.9		Snap
		Plus green +1% → +99%	141	254	55.3	99.6		Fade
		Full plus green +100%	255	255	100	100		Snap
20	**Tungsten effect**	Off (selected white point, no red shift or delay when dimming)	0	9	0	3.5	0	Snap
		Tungsten ACL 250W/28V	10	19	3.9	7.5		
		Tungsten Blinder 650W/120V	20	29	7.8	11.4		
		Tungsten 750W/80V	30	39	11.8	15.3		
		Tungsten 1000W/240V	40	49	15.7	19.2		
		Tungsten 1200W/240V	50	59	19.6	23.1		
		Tungsten 2000W/230V	60	69	23.5	27.1		
		Tungsten 2500W/230V	70	79	27.5	31.0		
		Tungsten 5000W/230V	80	89	31.4	34.9		
		No function (off)	90	120	35.3	47.1		
		Off (selected white point, no red shift or delay when dimming)	120	139	47.1	54.5		
		FX Tungsten ACL 250W/28V	140	149	54.9	58.4		
		FX Tungsten Blinder 650W/120V	150	159	58.8	62.4		
		FX Tungsten 750W/80V	160	169	62.7	66.3		
		FX Tungsten 1000W/240V	170	179	66.7	70.2		
		FX Tungsten 1200W/240V	180	189	70.6	74.1		
		FX Tungsten 2000W/230V	190	199	74.5	78.0		
		FX Tungsten 2500W/230V	200	209	78.4	82.0		
		FX Tungsten 5000W/230V	210	219	82.4	85.9		
		No function (off)	220	255	86.3	100		
21	**Mix priority**	Main Module and Sub Module HTP (highest value takes priority)	0	9	0	3.5	0	Snap
		Main only (Main Module color takes priority)	10	19	3.9	7.5		
		Sub only (Sub Module color takes priority)	20	29	7.8	11.4		
		Main and Sub additive (Sub Module color value added to Main Module color value)	30	39	11.8	15.3		
		Main minus Sub Module subtractive (Sub Module color value subtracted from Main)	40	49	15.7	19.2		
		Sub Module minus main subtractive (Main Module color value subtracted from Sub Module)	50	59	19.6	23.1		

Main Module: first layer control (continued)

21 ctd.	**Mix priority (ctd.)**	TrueColor 1: Main over Sub – snap	60	69	23.5	27.1		
		TrueColor 2: Sub over Main – snap	70	79	27.5	31.0		
		TrueColor 3: Main over Sub – crossfade	80	89	31.4	34.9		Fade
		TrueColor 4: Sub over Main – crossfade	90	99	35.3	38.8		Fade
		No function	100	127	39.2	49.8		
		Main Module only	128	130	50.2	51.0		Snap
		Crossfading Main → HTP	131	190	51.4	74.5		Fade
		Main and Sub Modules (HTP)	191	192	74.9	75.3		Snap
		Crossfading HTP → Sub	193	252	75.7	98.8		Fade
		Sub Module only	253	255	99.2	100		Snap

Sub Module: second layer control

22	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
23	**Intensity fine**							
24	**Shutter**	Closed	0	4	0	1.6	0	Snap
		Single flash if value changed within the range 005 → 009	5	9	2.0	3.5		Fade
		Pulse slow → fast	10	39	3.9	15.3		Fade
		Pulse opening slow → fast	40	69	15.7	27.1		Fade
		Pulse closing slow → fast	70	99	27.5	38.8		Fade
		Double flash slow → fast	100	129	39.2	50.6		Fade
		Strobe random pixel slow → fast	130	159	51.0	62.4		Fade
		Strobe random all slow → fast	160	199	62.7	78.0		Fade
		Strobe sync all pixel slow → fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
25	**Pattern selection**	Off (all pixels active)	0	9	0	3.5	0	Snap
		Static Pattern 01	10	11	3.9	4.3		
		Static Pattern 02	12	13	4.7	5.1		
		Static Pattern 03	14	15	5.5	5.9		
		Static Pattern 04	16	17	6.3	6.7		
		Static Pattern 05	18	19	7.1	7.5		
		Static Pattern 06	20	21	7.8	8.2		
		Static Pattern 07	22	23	8.6	9.0		
		Static Pattern 08	24	25	9.4	9.8		
		Static Pattern 09	26	27	10.2	10.6		
		Static Pattern 10	28	29	11.0	11.4		
		Static Pattern 11	30	31	11.8	12.2		
		Static Pattern 12	32	33	12.5	12.9		
		Static Pattern 13	34	35	13.3	13.7		
		Static Pattern 14	36	37	14.1	14.5		
		Static Pattern 15	38	39	14.9	15.3		
		Static Pattern 16	40	41	15.7	16.1		
		Static Pattern 17	52	43	20.4	16.9		
		Static Pattern 18	44	45	17.3	17.6		
		Static Pattern 19	46	47	18.0	18.4		
		Static Pattern 20	48	49	18.8	19.2		
		Static Pattern 21	50	51	19.6	20.0		
		Static Pattern 22	52	53	20.4	20.8		
		Static Pattern 23	54	55	21.2	21.6		
		Static Pattern 24	56	57	22.0	22.4		
		Static Pattern 25	58	59	22.7	23.1		
		Static Pattern 26	60	61	23.5	23.9		
		Static Pattern 27	62	63	24.3	24.7		

Sub Module: second layer control (continued)

25 ctd.	**Pattern selection (continued)**	Static Pattern 28	64	65	25.1	25.5	0	Snap
		Static Pattern 29	66	67	25.9	26.3		
		Static Pattern 30	68	69	26.7	27.1		
		Static Pattern 31	70	71	27.5	27.8		
		Static Pattern 32	72	73	28.2	28.6		
		Static Pattern 33	74	75	29.0	29.4		
		Static Pattern 34	76	77	29.8	30.2		
		Static Pattern 35	78	79	30.6	31.0		
		Static Pattern 36	80	81	31.4	31.8		
		Static Pattern 37	82	83	32.2	32.5		
		Static Pattern 38	84	85	32.9	33.3		
		Static Pattern 39	86	87	33.7	34.1		
		Static Pattern 40	88	89	34.5	34.9		
		Static Pattern 41	90	91	35.3	35.7		
		Static Pattern 42	92	93	36.1	36.5		
		Static Pattern 43	94	95	36.9	37.3		
		Static Pattern 44	96	97	37.6	38.0		
		Static Pattern 45	98	99	38.4	38.8		
		Static Pattern 46	100	101	39.2	39.6		
		Static Pattern 47	102	103	40.0	40.4		
		Static Pattern 48	104	105	40.8	41.2		
		Static Pattern 49	106	107	41.6	42.0		
		Static Pattern 50	108	109	42.4	42.7		
		Static Pattern 51	110	111	43.1	43.5		
		Static Pattern 52	112	113	43.9	44.3		
		Static Pattern 53	114	115	44.7	45.1		
		Static Pattern 54	116	117	45.5	45.9		
		Static Pattern 55	118	119	46.3	46.7		
		Static Pattern 56	120	121	47.1	47.5		
		Static Pattern 57	122	123	47.8	48.2		
		Static Pattern 58	124	125	48.6	49.0		
		Static Pattern 59	126	127	49.4	49.8		
		Dynamic Pattern 01	128	129	50.2	50.6		
		Dynamic Pattern 02	130	131	51.0	51.4		
		Dynamic Pattern 03	132	133	51.8	52.2		
		Dynamic Pattern 04	134	135	52.5	52.9		
		Dynamic Pattern 05	136	137	53.3	53.7		
		Dynamic Pattern 06	138	139	54.1	54.5		
		Dynamic Pattern 07	140	141	54.9	55.3		
		Dynamic Pattern 08	142	143	55.7	56.1		
		Dynamic Pattern 09	144	145	56.5	56.9		
		Dynamic Pattern 10	146	147	57.3	57.6		
		Dynamic Pattern 11	148	149	58.0	58.4		
		Dynamic Pattern 12	150	151	58.8	59.2		
		Dynamic Pattern 13	152	153	59.6	60.0		
		Dynamic Pattern 14	154	155	60.4	60.8		
		Dynamic Pattern 15	156	157	61.2	61.6		
		Dynamic Pattern 16	158	159	62.0	62.4		
		Dynamic Pattern 17	160	161	62.7	63.1		
		Dynamic Pattern 18	162	163	63.5	63.9		
		Dynamic Pattern 19	164	165	64.3	64.7		
		Dynamic Pattern 20	166	167	65.1	65.5		
		Dynamic Pattern 21	168	169	65.9	66.3		
		Dynamic Pattern 22	170	171	66.7	67.1		
		Dynamic Pattern 23	172	173	67.5	67.8		
		Dynamic Pattern 24	174	175	68.2	68.6		

Sub Module: second layer control (continued)

25	**Pattern selection (continued)**	Dynamic Pattern 25	176	177	69.0	69.4		
		Dynamic Pattern 26	178	179	69.8	70.2		
		Dynamic Pattern 27	180	181	70.6	71.0		
		Dynamic Pattern 28	182	183	71.4	71.8		
		Dynamic Pattern 29	184	185	72.2	72.5		
		Dynamic Pattern 30	186	187	72.9	73.3		
		Dynamic Pattern 31	188	189	73.7	74.1		
		Dynamic Pattern 32	190	191	74.5	74.9		
		Dynamic Pattern 33	192	193	75.3	75.7		
		Dynamic Pattern 34	194	195	76.1	76.5		
		Dynamic Pattern 35	196	197	76.9	77.3		
		Dynamic Pattern 36	198	199	77.6	78.0		
		Dynamic Pattern 37	200	201	78.4	78.8		
		Dynamic Pattern 38	202	203	79.2	79.6		
		Dynamic Pattern 39	204	205	80.0	80.4		
		Dynamic Pattern 40	206	207	80.8	81.2		
		Dynamic Pattern 41	208	209	81.6	82.0		
		Dynamic Pattern 42	210	211	82.4	82.7		
		Dynamic Pattern 43	212	213	83.1	83.5		
		Dynamic Pattern 44	214	215	83.9	84.3		
		Dynamic Pattern 45	216	217	84.7	85.1		
		Dynamic Pattern 46	218	219	85.5	85.9		
		Dynamic Pattern 47	220	221	86.3	86.7		
		Dynamic Pattern 48	222	223	87.1	87.5		
		Dynamic Pattern 49	224	225	87.8	88.2		
		Dynamic Pattern 50	226	227	88.6	89.0		
		Special Pattern 01	228	229	89.4	89.8		
		Special Pattern 02	230	231	90.2	90.6		
		Special Pattern 03	232	233	91.0	91.4		
		Special Pattern 04	234	235	91.8	92.2		
		Special Pattern 05	236	237	92.5	92.9		
		Special Pattern 06	238	239	93.3	93.7		
		Special Pattern 07	240	241	94.1	94.5		
		Special Pattern 08	242	243	94.9	95.3		
		Special Pattern 09	244	245	95.7	96.1		
		Special Pattern 10	246	247	96.5	96.9		
		Special Pattern 11	248	249	97.3	97.6		
		Random Pixel	250	255	98.0	100		
26	**Pattern step / speed**	Stop (first pattern step)	0	2	0.0	0.8	0	Snap
		CW fast → slow (run pattern step 1 → n)	3	63	1.2	24.7		
		Stop at current position	64	66	25.1	25.9		
		CCW slow → fast (run pattern step n → 1)	67	127	26.3	49.8		
		Pattern Step 01	128	129	50.2	50.6		
		Pattern Step 02	130	131	51.0	51.4		
		Pattern Step 03	132	133	51.8	52.2		
		Pattern Step 04	134	135	52.5	52.9		
		Pattern Step 05	136	137	53.3	53.7		
		Pattern Step 06	138	139	54.1	54.5		
		Pattern Step 07	140	141	54.9	55.3		
		Pattern Step 08	142	143	55.7	56.1		
		Pattern Step 09	144	145	56.5	56.9		
		Pattern Step 10	146	147	57.3	57.6		

Sub Module: second layer control (continued)

26 ctd.	**Pattern step / speed (continued)**	Pattern Step 11	148	149	58.0	58.4	0	Snap
		Pattern Step 12	150	151	58.8	59.2		
		Pattern Step 13	152	153	59.6	60.0		
		Pattern Step 14	154	155	60.4	60.8		
		Pattern Step 15	156	157	61.2	61.6		
		Pattern Step 16	158	159	62.0	62.4		
		Pattern Step 17	160	161	62.7	63.1		
		Pattern Step 18	162	163	63.5	63.9		
		Pattern Step 19	164	165	64.3	64.7		
		Pattern Step 20	166	167	65.1	65.5		
		Pattern Step 21	168	169	65.9	66.3		
		Pattern Step 22	170	171	66.7	67.1		
		Pattern Step 23	172	173	67.5	67.8		
		Pattern Step 24	174	175	68.2	68.6		
		Pattern Step 25	176	177	69.0	69.4		
		Pattern Step 26	178	179	69.8	70.2		
		Pattern Step 27	180	181	70.6	71.0		
		Pattern Step 28	182	183	71.4	71.8		
		Pattern Step 29	184	185	72.2	72.5		
		Pattern Step 30	186	187	72.9	73.3		
		Pattern Step 31	188	189	73.7	74.1		
		Pattern Step 32	190	191	74.5	74.9		
		Pattern Step 33	192	193	75.3	75.7		
		Pattern Step 34	194	195	76.1	76.5		
		Pattern Step 35	196	197	76.9	77.3		
		Pattern Step 36	198	199	77.6	78.0		
		Pattern Step 37	200	201	78.4	78.8		
		Pattern Step 41	208	209	81.6	82.0		
		Pattern Step 42	210	211	82.4	82.7		
		Pattern Step 43	212	213	83.1	83.5		
		Pattern Step 41	208	209	81.6	82.0		
		Pattern Step 42	210	211	82.4	82.7		
		Pattern Step 43	212	213	83.1	83.5		
		Pattern Step 44	214	215	83.9	84.3		
		Pattern Step 45	216	217	84.7	85.1		
		Pattern Step 46	218	219	85.5	85.9		
		Pattern Step 47	220	221	86.3	86.7		
		Pattern Step 48	222	223	87.1	87.5		
		Pattern Step 49	224	225	87.8	88.2		
		Pattern Step 50	226	227	88.6	89.0		
		Pattern Step 51	228	229	89.4	89.8		
		Pattern Step 52	230	231	90.2	90.6		
		Pattern Step 53	232	233	91.0	91.4		
		Pattern Step 54	234	235	91.8	92.2		
		Pattern Step 55	236	237	92.5	92.9		
		Pattern Step 56	238	239	93.3	93.7		
		Pattern Step 57	240	241	94.1	94.5		
		Pattern Step 58	242	243	94.9	95.3		
		Pattern Step 59	244	245	95.7	96.1		
		Pattern Step 60	246	247	96.5	96.9		
		Pattern Step 61	248	249	97.3	97.6		
		Pattern Step 62	250	251	98.0	98.4		
		Pattern Step 63	252	253	98.8	99.2		
		Pattern Step 64	254	255	99.6	100.0		

Sub Module: second layer control (continued)

27	**Pattern step crossfading (from one step to next)**	Off (no crossfading, Snap)	0	9	0	3.5	0	Snap
		Crossfading: Snap → min. Xfade → max. Xfade (fade in and fade out times are identical)	10	127	3.9	49.8		Fade
		Off (no crossfading, Snap)	128	137	50.2	53.7		Snap
		Crossfading with tail: Snap → min. Xfade with tail → max. Xfade with tail (fade in time is shorter than fade out time)	138	255	54.1	100		Fade
28	**Pattern transition (from one pattern to next)**	Off (snap from one pattern to next)	0	9	0	3.5	0	Snap
		Normal transition (snap → fade 5s)	10	63	3.9	24.7		Fade
		Off (snap from one pattern to next)	64	73	25.1	28.6		Snap
		FOB (Fade Over Blackout) transition (snap → fade 5s)	74	127	29.0	49.8		Fade
		Off (snap from one pattern to next)	128	137	50.2	53.7		Snap
		FOF (Fade Over Full) transition (snap → fade 5s)	138	191	54.1	74.9		Fade
		No function	192	201	75.3	78.8		
		No transition time - reserved for future use	202	255	79.2	100.0		
29	**Fixture total number**	Off	0	0	0	0	0	Snap
		1 fixture in total	1	1	0.4	0.4		
		2 fixtures in total	2	2	0.8	0.8		
		3…254 fixtures in total	3	254	1.2	99.6		
		255 fixtures in total	255	255	100	100		
30	**Fixture position**	Off	0	0	0	0	0	Snap
		Fixture in position 1	1	1	0.4	0.4		
		Fixture in position 2	2	2	0.8	0.8		
		Fixture in position 3 … 254	3	254	1.2	99.6		
		Fixture in position 255	255	255	100	100		
31	**Red, pixel 01-03**	Intensity 0 → 100%	0	255	0	100	0	Fade
32	**Green, pixel 01-03**	Intensity 0 → 100%	0	255	0	100	0	Fade
33	**Blue, pixel 01-03**	Intensity 0 → 100%	0	255	0	100	0	Fade
34	**Red, pixel 04-06**	Intensity 0 → 100%	0	255	0	100	0	Fade
35	**Green, pixel 04-06**	Intensity 0 → 100%	0	255	0	100	0	Fade
36	**Blue, pixel 04-06**	Intensity 0 → 100%	0	255	0	100	0	Fade
37	**Red, pixel 07-09**	Intensity 0 → 100%	0	255	0	100	0	Fade
38	**Green, pixel 07-09**	Intensity 0 → 100%	0	255	0	100	0	Fade
39	**Blue, pixel 07-09**	Intensity 0 → 100%	0	255	0	100	0	Fade
40	**Red, pixel 10-12**	Intensity 0 → 100%	0	255	0	100	0	Fade
41	**Green, pixel 10-12**	Intensity 0 → 100%	0	255	0	100	0	Fade
42	**Blue, pixel 10-12**	Intensity 0 → 100%	0	255	0	100	0	Fade

Sub Module: second layer control (continued)

43	**Red, pixel 13-15**	Intensity 0 → 100%	0	255	0	100	0	Fade
44	**Green, pixel 13-15**	Intensity 0 → 100%	0	255	0	100	0	Fade
45	**Blue, pixel 13-15**	Intensity 0 → 100%	0	255	0	100	0	Fade
46	**Red, pixel 16-18**	Intensity 0 → 100%	0	255	0	100	0	Fade
47	**Green, pixel 16-18**	Intensity 0 → 100%	0	255	0	100	0	Fade
48	**Blue, pixel 16-18**	Intensity 0 → 100%	0	255	0	100	0	Fade

DMX Mode 4: MultiPix Advanced

84 DMX Channels

Channel	Command		DMX range		Percent		Default DMX	Fade
Main Module: first layer control								
1	**Tilt coarse**	Tilt backwards > forwards (16-bit)	0	65535	0	100	32768	Fade
2	**Tilt fine**							
3	**Intensity coarse**	Global intensity 0-100% (16-bit)	0	65535	0	100	32768	Fade
4	**Intensity fine**							
5	**Shutter**	Shutter closed	0	4	0	1.6	255	Snap
		Dimmer flash (at intensity change)	5	9	2.0	3.5		
		Pulse slow > fast	10	39	3.9	15.3		Fade
		Opening pulse slow > fast	40	69	15.7	27.1		
		Closing pulse slow > fast	70	99	27.5	38.8		
		Double flash slow > fast	100	129	39.2	50.6		
		Random pixel strobe slow > fast	130	159	51.0	62.4		
		Random all strobe slow > fast	160	199	62.7	78.0		
		Strobe sync all pixels 1 Hz > fast	200	250	78.4	98.0		
		Open	251	255	98.4	100		Snap
6	**Zoom**	Zoom narrow → wide	0	255	0	100	0	Fade
7	**Control/Settings**	*See 'Control / Settings channel' on page 42*						
8	**RGB / RGBL / x,y color control** (see also 'Key to conversion of x and y coordinates' on page 4444)	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
9		[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
10		[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
11		[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
12		[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – *not used*	0	65535	0	100	65535	Fade
13		[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - *not used*						
14		[1] RGB - *not used* [2] RGBL - Lime coarse [3] x;y - *not used*	0	65535	0	100	65535	Fade
15		[1] RGB - *not used* [2] RGBL - Lime fine [3] x;y - *not used*						
16	**Virtual color wheel** (see also 'Color wheel specifications' on page 45)	Open	0	9	0	3.5	0	Snap
		Filter 004 (Medium Bastard Amber)	10	12	3.9	4.7		
		Filter 019 (Fire)	13	15	5.1	5.9		
		Filter 025 (Sunset Red)	16	18	6.3	7.1		
		Filter 026 (Bright Red)	19	21	7.5	8.2		
		Filter 036 (Medium Pink)	22	24	8.6	9.4		
		Filter 049 (Medium Purple)	25	27	9.8	10.6		
		Filter 058 (Lavender)	28	30	11.0	11.8		
		Filter 068 (Sky Blue)	31	33	12.2	12.9		
		Filter 088 (Lime Green)	34	36	13.3	14.1		

Main Module: first layer control (continued)

16 ctd.	**Virtual color wheel (continued)**	Filter 089 (Moss Green)	37	39	14.5	15.3	0	Snap
		Filter 090 (Dark Yellow Green)	40	42	15.7	16.5		
		Filter 102 (Light Amber)	43	45	16.9	17.6		
		Filter 103 (Straw)	46	48	18.0	18.8		
		Filter 106 (Primary Red)	49	51	19.2	20.0		
		Filter 111 (Dark Pink)	52	54	20.4	21.2		
		Filter 115 (Peacock Blue)	55	57	21.6	22.4		
		Filter 117 (Steel Blue)	58	60	22.7	23.5		
		Filter 118 (Light Blue)	61	63	23.9	24.7		
		Filter 121 (Filter Green)	64	66	25.1	25.9		
		Filter 122 (Fern Green)	67	69	26.3	27.1		
		Filter 124 (Dark Green)	70	72	27.5	28.2		
		Filter 126 (Mauve)	73	75	28.6	29.4		
		Filter 128 (Bright Pink)	76	78	29.8	30.6		
		Filter 131 (Marine Blue)	79	81	31.0	31.8		
		Filter 132 (Medium Blue)	82	84	32.2	32.9		
		Filter 134 (Golden Amber)	85	87	33.3	34.1		
		Filter 135 (Deep Golden Amber)	88	90	34.5	35.3		
		Filter 136 (Pale Lavender)	91	93	35.7	36.5		
		Filter 137 (Special Lavender)	94	96	36.9	37.6		
		Filter 138 (Pale Green)	97	99	38.0	38.8		
		Filter 140 (Summer Blue)	100	102	39.2	40.0		
		Filter 141 (Bright Blue)	103	105	40.4	41.2		
		Filter 143 (Pale Navy Blue)	106	108	41.6	42.4		
		Filter 147 (Apricot)	109	111	42.7	43.5		
		Filter 148 (Bright Rose)	112	114	43.9	44.7		
		Filter 152 (Pale Gold)	115	117	45.1	45.9		
		Filter 154 (Pale Rose)	118	120	46.3	47.1		
		Filter 157 (Pink)	121	123	47.5	48.2		
		Filter 162 (Bastard Amber)	124	126	48.6	49.4		
		Filter 164 (Flame Red)	127	129	49.8	50.6		
		Filter 165 (Daylight Blue)	130	132	51.0	51.8		
		Filter 169 (Lilac Tint)	133	135	52.2	52.9		
		Filter 170 (Deep Lavender)	136	138	53.3	54.1		
		Filter 172 (Lagoon Blue)	139	141	54.5	55.3		
		Filter 180 (Dark Lavender)	142	144	55.7	56.5		
		Filter 182 (Light Red)	145	147	56.9	57.6		
		Filter 194 (Surprise Pink)	148	150	58.0	58.8		
		Filter 197 (Alice Blue)	151	153	59.2	60.0		
		Filter 201 (Full C.T. Blue)	154	156	60.4	61.2		
		Filter 202 (Half C.T. Blue)	157	159	61.6	62.4		
		Filter 203 (Quarter C.T. Blue)	160	162	62.7	63.5		
		Filter 204 (Full C.T. Orange)	163	165	63.9	64.7		
		Filter 206 (Quarter C.T. Orange)	166	168	65.1	65.9		
		Filter 219 (Fluorescent Green)	169	171	66.3	67.1		
		Filter 247 (Filter Minus Green)	172	174	67.5	68.2		
		Filter 248 (Half Minus Green)	175	177	68.6	69.4		
		Filter 281 (Three Quarter C.T. Blue)	178	180	69.8	70.6		
		Filter 285 (Three Qtr. C.T. Orange)	181	183	71.0	71.8		
		Filter 352 (Glacier Blue)	184	186	72.2	72.9		
		Filter 353 (Lighter Blue)	187	189	73.3	74.1		
		Filter 507 (Madge)	190	192	74.5	75.3		
		Filter 778 (Millennium Gold)	193	195	75.7	76.5		
		Filter 793 (Vanity Fair)	196	198	76.9	77.6		
		Filter 798 (Chrysalis Pink)	199	201	78.0	78.8		

Main Module: first layer control (continued)

16 ctd.	**Virtual color wheel (ctd.)**	Rainbow, stop at first color (violet)	202	204	79.2	80.0		Snap
		Rainbow, continuous slow→fast	205	252	80.4	98.8		Fade
		Rainbow, stop at current color	253	255	99.2	100		Snap
17	**Color Temperature Control**	RAW (selected white point)	0	9	0	3.5	???	Snap
		10 000 K	10	11	3.9	4.3		
		9999→2501 K continuous reduction (stepless, interpolation)	12	254	4.7	99.6		Fade
		2500 K	255	255	100	100		Snap
18	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade	10	117	3.9	45.9		Fade
		HQ (high quality), unsaturated color	118	127	46.3	49.8		Snap
		HO (high output), unsaturated color	128	137	50.2	53.7		
		Crossfade	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
19	**M/G shift**	Off (no correction)	0	9	0	3.5	0	Snap
		Full plus magenta +100%	10	10	3.9	3.9		
		Plus magenta +99% → +1%	11	124	4.3	48.6		Fade
		Neutral / no effect	125	140	49.0	54.9		Snap
		Plus green +1% → +99%	141	254	55.3	99.6		Fade
		Full plus green +100%	255	255	100	100		Snap
20	**Tungsten effect**	Off (selected white point, no red shift or delay when dimming)	0	9	0	3.5	0	Snap
		Tungsten ACL 250W/28V	10	19	3.9	7.5		
		Tungsten Blinder 650W/120V	20	29	7.8	11.4		
		Tungsten 750W/80V	30	39	11.8	15.3		
		Tungsten 1000W/240V	40	49	15.7	19.2		
		Tungsten 1200W/240V	50	59	19.6	23.1		
		Tungsten 2000W/230V	60	69	23.5	27.1		
		Tungsten 2500W/230V	70	79	27.5	31.0		
		Tungsten 5000W/230V	80	89	31.4	34.9		
		No function (off)	90	120	35.3	47.1		
		Off (selected white point, no red shift or delay when dimming)	120	139	47.1	54.5		
		FX Tungsten ACL 250W/28V	140	149	54.9	58.4		
		FX Tungsten Blinder 650W/120V	150	159	58.8	62.4		
		FX Tungsten 750W/80V	160	169	62.7	66.3		
		FX Tungsten 1000W/240V	170	179	66.7	70.2		
		FX Tungsten 1200W/240V	180	189	70.6	74.1		
		FX Tungsten 2000W/230V	190	199	74.5	78.0		
		FX Tungsten 2500W/230V	200	209	78.4	82.0		
		FX Tungsten 5000W/230V	210	219	82.4	85.9		
		No function (off)	220	255	86.3	100		
21	**Mix priority**	Main Module and Sub Module HTP (highest value takes priority)	0	9	0	3.5	0	Snap
		Main only (Main Module color takes priority)	10	19	3.9	7.5		
		Sub only (Sub Module color takes priority)	20	29	7.8	11.4		
		Main and Sub additive (Sub Module color value added to Main Module color value)	30	39	11.8	15.3		
		Main minus Sub Module subtractive (Sub Module color value subtracted from Main)	40	49	15.7	19.2		
		Sub Module minus main subtractive (Main Module color value subtracted from Sub Module)	50	59	19.6	23.1		

Main Module: first layer control (continued)

21 ctd.	**Mix priority (ctd.)**	TrueColor 1: Main over Sub – snap	60	69	23.5	27.1		Snap
		TrueColor 2: Sub over Main – snap	70	79	27.5	31.0		
		TrueColor 3: Main over Sub – crossfade	80	89	31.4	34.9		Fade
		TrueColor 4: Sub over Main – crossfade	90	99	35.3	38.8		
		No function	100	127	39.2	49.8		
		Main Module only	128	130	50.2	51.0		Snap
		Crossfading Main → HTP	131	190	51.4	74.5		Fade
		Main and Sub Modules (HTP)	191	192	74.9	75.3		Snap
		Crossfading HTP → Sub	193	252	75.7	98.8		Fade
		Sub Module only	253	255	99.2	100		Snap

Sub Module: second layer control

22	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
23	**Intensity fine**							
24	**Shutter**	Closed	0	4	0	1.6	0	Snap
		Single flash if value changed within the range 005 → 009	5	9	2.0	3.5		Fade
		Pulse slow → fast	10	39	3.9	15.3		Fade
		Pulse opening slow → fast	40	69	15.7	27.1		
		Pulse closing slow → fast	70	99	27.5	38.8		
		Double flash slow → fast	100	129	39.2	50.6		
		Strobe random pixel slow → fast	130	159	51.0	62.4		
		Strobe random all slow → fast	160	199	62.7	78.0		
		Strobe sync all pixel slow → fast	200	250	78.4	98.0		
		Open	251	255	98.4	100		Snap
25	**Pattern selection**	Off (all pixels active)	0	9	0	3.5	0	Snap
		Static Pattern 01	10	11	3.9	4.3		
		Static Pattern 02	12	13	4.7	5.1		
		Static Pattern 03	14	15	5.5	5.9		
		Static Pattern 04	16	17	6.3	6.7		
		Static Pattern 05	18	19	7.1	7.5		
		Static Pattern 06	20	21	7.8	8.2		
		Static Pattern 07	22	23	8.6	9.0		
		Static Pattern 08	24	25	9.4	9.8		
		Static Pattern 09	26	27	10.2	10.6		
		Static Pattern 10	28	29	11.0	11.4		
		Static Pattern 11	30	31	11.8	12.2		
		Static Pattern 12	32	33	12.5	12.9		
		Static Pattern 13	34	35	13.3	13.7		
		Static Pattern 14	36	37	14.1	14.5		
		Static Pattern 15	38	39	14.9	15.3		
		Static Pattern 16	40	41	15.7	16.1		
		Static Pattern 17	52	43	20.4	16.9		
		Static Pattern 18	44	45	17.3	17.6		
		Static Pattern 19	46	47	18.0	18.4		
		Static Pattern 20	48	49	18.8	19.2		
		Static Pattern 21	50	51	19.6	20.0		
		Static Pattern 22	52	53	20.4	20.8		
		Static Pattern 23	54	55	21.2	21.6		
		Static Pattern 24	56	57	22.0	22.4		
		Static Pattern 25	58	59	22.7	23.1		
		Static Pattern 26	60	61	23.5	23.9		
		Static Pattern 27	62	63	24.3	24.7		

Sub Module: second layer control (continued)

25 ctd.	**Pattern selection (continued)**	Static Pattern 28	64	65	25.1	25.5	0	Snap
		Static Pattern 29	66	67	25.9	26.3		
		Static Pattern 30	68	69	26.7	27.1		
		Static Pattern 31	70	71	27.5	27.8		
		Static Pattern 32	72	73	28.2	28.6		
		Static Pattern 33	74	75	29.0	29.4		
		Static Pattern 34	76	77	29.8	30.2		
		Static Pattern 35	78	79	30.6	31.0		
		Static Pattern 36	80	81	31.4	31.8		
		Static Pattern 37	82	83	32.2	32.5		
		Static Pattern 38	84	85	32.9	33.3		
		Static Pattern 39	86	87	33.7	34.1		
		Static Pattern 40	88	89	34.5	34.9		
		Static Pattern 41	90	91	35.3	35.7		
		Static Pattern 42	92	93	36.1	36.5		
		Static Pattern 43	94	95	36.9	37.3		
		Static Pattern 44	96	97	37.6	38.0		
		Static Pattern 45	98	99	38.4	38.8		
		Static Pattern 46	100	101	39.2	39.6		
		Static Pattern 47	102	103	40.0	40.4		
		Static Pattern 48	104	105	40.8	41.2		
		Static Pattern 49	106	107	41.6	42.0		
		Static Pattern 50	108	109	42.4	42.7		
		Static Pattern 51	110	111	43.1	43.5		
		Static Pattern 52	112	113	43.9	44.3		
		Static Pattern 53	114	115	44.7	45.1		
		Static Pattern 54	116	117	45.5	45.9		
		Static Pattern 55	118	119	46.3	46.7		
		Static Pattern 56	120	121	47.1	47.5		
		Static Pattern 57	122	123	47.8	48.2		
		Static Pattern 58	124	125	48.6	49.0		
		Static Pattern 59	126	127	49.4	49.8		
		Dynamic Pattern 01	128	129	50.2	50.6		
		Dynamic Pattern 02	130	131	51.0	51.4		
		Dynamic Pattern 03	132	133	51.8	52.2		
		Dynamic Pattern 04	134	135	52.5	52.9		
		Dynamic Pattern 05	136	137	53.3	53.7		
		Dynamic Pattern 06	138	139	54.1	54.5		
		Dynamic Pattern 07	140	141	54.9	55.3		
		Dynamic Pattern 08	142	143	55.7	56.1		
		Dynamic Pattern 09	144	145	56.5	56.9		
		Dynamic Pattern 10	146	147	57.3	57.6		
		Dynamic Pattern 11	148	149	58.0	58.4		
		Dynamic Pattern 12	150	151	58.8	59.2		
		Dynamic Pattern 13	152	153	59.6	60.0		
		Dynamic Pattern 14	154	155	60.4	60.8		
		Dynamic Pattern 15	156	157	61.2	61.6		
		Dynamic Pattern 16	158	159	62.0	62.4		
		Dynamic Pattern 17	160	161	62.7	63.1		
		Dynamic Pattern 18	162	163	63.5	63.9		
		Dynamic Pattern 19	164	165	64.3	64.7		
		Dynamic Pattern 20	166	167	65.1	65.5		
		Dynamic Pattern 21	168	169	65.9	66.3		
		Dynamic Pattern 22	170	171	66.7	67.1		
		Dynamic Pattern 23	172	173	67.5	67.8		
		Dynamic Pattern 24	174	175	68.2	68.6		

Sub Module: second layer control (continued)

25	**Pattern selection (continued)**	Dynamic Pattern 25	176	177	69.0	69.4	0	Snap
		Dynamic Pattern 26	178	179	69.8	70.2		
		Dynamic Pattern 27	180	181	70.6	71.0		
		Dynamic Pattern 28	182	183	71.4	71.8		
		Dynamic Pattern 29	184	185	72.2	72.5		
		Dynamic Pattern 30	186	187	72.9	73.3		
		Dynamic Pattern 31	188	189	73.7	74.1		
		Dynamic Pattern 32	190	191	74.5	74.9		
		Dynamic Pattern 33	192	193	75.3	75.7		
		Dynamic Pattern 34	194	195	76.1	76.5		
		Dynamic Pattern 35	196	197	76.9	77.3		
		Dynamic Pattern 36	198	199	77.6	78.0		
		Dynamic Pattern 37	200	201	78.4	78.8		
		Dynamic Pattern 38	202	203	79.2	79.6		
		Dynamic Pattern 39	204	205	80.0	80.4		
		Dynamic Pattern 40	206	207	80.8	81.2		
		Dynamic Pattern 41	208	209	81.6	82.0		
		Dynamic Pattern 42	210	211	82.4	82.7		
		Dynamic Pattern 43	212	213	83.1	83.5		
		Dynamic Pattern 44	214	215	83.9	84.3		
		Dynamic Pattern 45	216	217	84.7	85.1		
		Dynamic Pattern 46	218	219	85.5	85.9		
		Dynamic Pattern 47	220	221	86.3	86.7		
		Dynamic Pattern 48	222	223	87.1	87.5		
		Dynamic Pattern 49	224	225	87.8	88.2		
		Dynamic Pattern 50	226	227	88.6	89.0		
		Special Pattern 01	228	229	89.4	89.8		
		Special Pattern 02	230	231	90.2	90.6		
		Special Pattern 03	232	233	91.0	91.4		
		Special Pattern 04	234	235	91.8	92.2		
		Special Pattern 05	236	237	92.5	92.9		
		Special Pattern 06	238	239	93.3	93.7		
		Special Pattern 07	240	241	94.1	94.5		
		Special Pattern 08	242	243	94.9	95.3		
		Special Pattern 09	244	245	95.7	96.1		
		Special Pattern 10	246	247	96.5	96.9		
		Special Pattern 11	248	249	97.3	97.6		
		Random Pixel	250	255	98.0	100		
26	**Pattern step / speed**	Stop (first pattern step)	0	2	0.0	0.8	0	Snap
		CW fast → slow (run pattern step 1 → n)	3	63	1.2	24.7		
		Stop at current position	64	66	25.1	25.9		
		CCW slow → fast (run pattern step n → 1)	67	127	26.3	49.8		
		Pattern Step 01	128	129	50.2	50.6		
		Pattern Step 02	130	131	51.0	51.4		
		Pattern Step 03	132	133	51.8	52.2		
		Pattern Step 04	134	135	52.5	52.9		
		Pattern Step 05	136	137	53.3	53.7		
		Pattern Step 06	138	139	54.1	54.5		
		Pattern Step 07	140	141	54.9	55.3		
		Pattern Step 08	142	143	55.7	56.1		
		Pattern Step 09	144	145	56.5	56.9		
		Pattern Step 10	146	147	57.3	57.6		

Sub Module: second layer control (continued)

26 ctd.	**Pattern step / speed (continued)**	Pattern Step 11	148	149	58.0	58.4	0	Snap
		Pattern Step 12	150	151	58.8	59.2		
		Pattern Step 13	152	153	59.6	60.0		
		Pattern Step 14	154	155	60.4	60.8		
		Pattern Step 15	156	157	61.2	61.6		
		Pattern Step 16	158	159	62.0	62.4		
		Pattern Step 17	160	161	62.7	63.1		
		Pattern Step 18	162	163	63.5	63.9		
		Pattern Step 19	164	165	64.3	64.7		
		Pattern Step 20	166	167	65.1	65.5		
		Pattern Step 21	168	169	65.9	66.3		
		Pattern Step 22	170	171	66.7	67.1		
		Pattern Step 23	172	173	67.5	67.8		
		Pattern Step 24	174	175	68.2	68.6		
		Pattern Step 25	176	177	69.0	69.4		
		Pattern Step 26	178	179	69.8	70.2		
		Pattern Step 27	180	181	70.6	71.0		
		Pattern Step 28	182	183	71.4	71.8		
		Pattern Step 29	184	185	72.2	72.5		
		Pattern Step 30	186	187	72.9	73.3		
		Pattern Step 31	188	189	73.7	74.1		
		Pattern Step 32	190	191	74.5	74.9		
		Pattern Step 33	192	193	75.3	75.7		
		Pattern Step 34	194	195	76.1	76.5		
		Pattern Step 35	196	197	76.9	77.3		
		Pattern Step 36	198	199	77.6	78.0		
		Pattern Step 37	200	201	78.4	78.8		
		Pattern Step 41	208	209	81.6	82.0		
		Pattern Step 42	210	211	82.4	82.7		
		Pattern Step 43	212	213	83.1	83.5		
		Pattern Step 41	208	209	81.6	82.0		
		Pattern Step 42	210	211	82.4	82.7		
		Pattern Step 43	212	213	83.1	83.5		
		Pattern Step 44	214	215	83.9	84.3		
		Pattern Step 45	216	217	84.7	85.1		
		Pattern Step 46	218	219	85.5	85.9		
		Pattern Step 47	220	221	86.3	86.7		
		Pattern Step 48	222	223	87.1	87.5		
		Pattern Step 49	224	225	87.8	88.2		
		Pattern Step 50	226	227	88.6	89.0		
		Pattern Step 51	228	229	89.4	89.8		
		Pattern Step 52	230	231	90.2	90.6		
		Pattern Step 53	232	233	91.0	91.4		
		Pattern Step 54	234	235	91.8	92.2		
		Pattern Step 55	236	237	92.5	92.9		
		Pattern Step 56	238	239	93.3	93.7		
		Pattern Step 57	240	241	94.1	94.5		
		Pattern Step 58	242	243	94.9	95.3		
		Pattern Step 59	244	245	95.7	96.1		
		Pattern Step 60	246	247	96.5	96.9		
		Pattern Step 61	248	249	97.3	97.6		
		Pattern Step 62	250	251	98.0	98.4		
		Pattern Step 63	252	253	98.8	99.2		
		Pattern Step 64	254	255	99.6	100.0		

Sub Module: second layer control (continued)

27	**Pattern step crossfading (from one step to next)**	Off (no crossfading, Snap)	0	9	0	3.5	0	Snap
		Crossfading: Snap → min. Xfade → max. Xfade (fade in and fade out times are identical)	10	127	3.9	49.8		Fade
		Off (no crossfading, Snap)	128	137	50.2	53.7		Snap
		Crossfading with tail: Snap → min. Xfade with tail → max. Xfade with tail (fade in time is shorter than fade out time)	138	255	54.1	100		Fade
28	**Pattern transition (from one pattern to next)**	Off (snap from one pattern to next)	0	9	0	3.5	0	Snap
		Normal transition (snap → fade 5s)	10	63	3.9	24.7		Fade
		Off (snap from one pattern to next)	64	73	25.1	28.6		Snap
		FOB (Fade Over Blackout) transition (snap → fade 5s)	74	127	29.0	49.8		Fade
		Off (snap from one pattern to next)	128	137	50.2	53.7		Snap
		FOF (Fade Over Full) transition (snap → fade 5s)	138	191	54.1	74.9		Fade
		No function	192	201	75.3	78.8		
		No transition time - reserved for future use	202	255	79.2	100.0		
29	**Fixture total number**	Off	0	0	0	0	0	Snap
		1 fixture in total	1	1	0.4	0.4		
		2 fixtures in total	2	2	0.8	0.8		
		3…254 fixtures in total	3	254	1.2	99.6		
		255 fixtures in total	255	255	100	100		
30	**Fixture position**	Off	0	0	0	0	0	Snap
		Fixture in position 1	1	1	0.4	0.4		
		Fixture in position 2	2	2	0.8	0.8		
		Fixture in position 3 … 254	3	254	1.2	99.6		
		Fixture in position 255	255	255	100	100		
31	**Red, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	Fade
32	**Green, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	Fade
33	**Blue, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	Fade
34	**Red, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	Fade
35	**Green, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	Fade
36	**Blue, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	Fade
37	**Red, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	Fade
38	**Green, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	Fade
39	**Blue, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	Fade
40	**Red, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	Fade
41	**Green, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	Fade
42	**Blue, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	Fade
43	**Red, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	Fade
44	**Green, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	Fade
45	**Blue, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	Fade
46	**Red, pixel 06**	Intensity 0 → 100%	0	255	0	100	0	Fade
47	**Green, pixel 06**	Intensity 0 → 100%	0	255	0	100	0	Fade
48	**Blue, pixel 06**	Intensity 0 → 100%	0	255	0	100	0	Fade
49	**Red, pixel 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
50	**Green, pixel 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
51	**Blue, pixel 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
52	**Red, pixel 08**	Intensity 0 → 100%	0	255	0	100	0	Fade
53	**Green, pixel 08**	Intensity 0 → 100%	0	255	0	100	0	Fade
54	**Blue, pixel 08**	Intensity 0 → 100%	0	255	0	100	0	Fade

Sub Module: second layer control (continued)

55	**Red, pixel 09**	Intensity 0 → 100%	0	255	0	100	0	Fade
56	**Green, pixel 09**	Intensity 0 → 100%	0	255	0	100	0	Fade
57	**Blue, pixel 09**	Intensity 0 → 100%	0	255	0	100	0	Fade
58	**Red, pixel 10**	Intensity 0 → 100%	0	255	0	100	0	Fade
59	**Green, pixel 10**	Intensity 0 → 100%	0	255	0	100	0	Fade
60	**Blue, pixel 10**	Intensity 0 → 100%	0	255	0	100	0	Fade
61	**Red, pixel 11**	Intensity 0 → 100%	0	255	0	100	0	Fade
62	**Green, pixel 11**	Intensity 0 → 100%	0	255	0	100	0	Fade
63	**Blue, pixel 11**	Intensity 0 → 100%	0	255	0	100	0	Fade
64	**Red, pixel 12**	Intensity 0 → 100%	0	255	0	100	0	Fade
65	**Green, pixel 12**	Intensity 0 → 100%	0	255	0	100	0	Fade
66	**Blue, pixel 12**	Intensity 0 → 100%	0	255	0	100	0	Fade
67	**Red, pixel 13**	Intensity 0 → 100%	0	255	0	100	0	Fade
68	**Green, pixel 13**	Intensity 0 → 100%	0	255	0	100	0	Fade
69	**Blue, pixel 13**	Intensity 0 → 100%	0	255	0	100	0	Fade
70	**Red, pixel 14**	Intensity 0 → 100%	0	255	0	100	0	Fade
71	**Green, pixel 14**	Intensity 0 → 100%	0	255	0	100	0	Fade
72	**Blue, pixel 14**	Intensity 0 → 100%	0	255	0	100	0	Fade
73	**Red, pixel 15**	Intensity 0 → 100%	0	255	0	100	0	Fade
74	**Green, pixel 15**	Intensity 0 → 100%	0	255	0	100	0	Fade
75	**Blue, pixel 15**	Intensity 0 → 100%	0	255	0	100	0	Fade
76	**Red, pixel 16**	Intensity 0 → 100%	0	255	0	100	0	Fade
77	**Green, pixel 16**	Intensity 0 → 100%	0	255	0	100	0	Fade
78	**Blue, pixel 16**	Intensity 0 → 100%	0	255	0	100	0	Fade
79	**Red, pixel 17**	Intensity 0 → 100%	0	255	0	100	0	Fade
80	**Green, pixel 17**	Intensity 0 → 100%	0	255	0	100	0	Fade
81	**Blue, pixel 17**	Intensity 0 → 100%	0	255	0	100	0	Fade
82	**Red, pixel 18**	Intensity 0 → 100%	0	255	0	100	0	Fade
83	**Green, pixel 18**	Intensity 0 → 100%	0	255	0	100	0	Fade
84	**Blue, pixel 18**	Intensity 0 → 100%	0	255	0	100	0	Fade

DMX Mode 5: MultiPix Compressed

63 DMX Channels

Channel		Command	DMX range		Percent		Default DMX	Fade
Single-layer control								
1	**Tilt coarse**	Tilt backwards > forwards (16-bit)	0	65535	0	100	32768	Fade
2	**Tilt fine**							
3	**Intensity coarse**	Global intensity 0-100% (16-bit)	0	65535	0	100	32768	Fade
4	**Intensity fine**							
5	**Shutter**	Shutter closed	0	4	0	1.6	255	Snap
		Dimmer flash (at intensity change)	5	9	2.0	3.5		Snap
		Pulse slow > fast	10	39	3.9	15.3		Fade
		Opening pulse slow > fast	40	69	15.7	27.1		Fade
		Closing pulse slow > fast	70	99	27.5	38.8		Fade
		Double flash slow > fast	100	129	39.2	50.6		Fade
		Random pixel strobe slow > fast	130	159	51.0	62.4		Fade
		Random all strobe slow > fast	160	199	62.7	78.0		Fade
		Strobe sync all pixels 1 Hz > fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
6	**Zoom**	Zoom narrow → wide	0	255	0	100	0	Fade
7	**Control/Settings**	*See* 'Control / Settings channel' *on page 42*						
8	**Color Temperature Control**	RAW (selected white point)	0	9	0	3.5		Snap
		10 000 K	10	11	3.9	4.3		
		9999→2501 K continuous reduction (stepless, interpolation)	12	254	4.7	99.6		Fade
		2500 K	255	255	100	100		Snap
9	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade	10	117	3.9	45.9		Fade
		HQ (high quality), unsaturated color	118	127	46.3	49.8		Snap
		HO (high output), unsaturated color	128	137	50.2	53.7		
		Crossfade	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
10	**Red, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	Fade
11	**Green, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	Fade
12	**Blue, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	Fade
13	**Red, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	Fade
14	**Green, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	Fade
15	**Blue, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	Fade
16	**Red, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	Fade
17	**Green, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	Fade
18	**Blue, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	Fade
19	**Red, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	Fade
20	**Green, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	Fade
21	**Blue, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	Fade
22	**Red, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	Fade
23	**Green, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	Fade
24	**Blue, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	Fade
25	**Red, pixel 06**	Intensity 0 → 100%	0	255	0	100	0	Fade
26	**Green, pixel 06**	Intensity 0 → 100%	0	255	0	100	0	Fade
27	**Blue, pixel 06**	Intensity 0 → 100%	0	255	0	100	0	Fade
28	**Red, pixel 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
29	**Green, pixel 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
30	**Blue, pixel 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
31	**Red, pixel 08**	Intensity 0 → 100%	0	255	0	100	0	Fade
32	**Green, pixel 08**	Intensity 0 → 100%	0	255	0	100	0	Fade

33	**Blue, pixel 08**	Intensity 0 → 100%	0	255	0	100	0	Fade
34	**Red, pixel 09**	Intensity 0 → 100%	0	255	0	100	0	Fade
35	**Green, pixel 09**	Intensity 0 → 100%	0	255	0	100	0	Fade
36	**Blue, pixel 09**	Intensity 0 → 100%	0	255	0	100	0	Fade
37	**Red, pixel 10**	Intensity 0 → 100%	0	255	0	100	0	Fade
38	**Green, pixel 10**	Intensity 0 → 100%	0	255	0	100	0	Fade
39	**Blue, pixel 10**	Intensity 0 → 100%	0	255	0	100	0	Fade
40	**Red, pixel 11**	Intensity 0 → 100%	0	255	0	100	0	Fade
41	**Green, pixel 11**	Intensity 0 → 100%	0	255	0	100	0	Fade
42	**Blue, pixel 11**	Intensity 0 → 100%	0	255	0	100	0	Fade
43	**Red, pixel 12**	Intensity 0 → 100%	0	255	0	100	0	Fade
44	**Green, pixel 12**	Intensity 0 → 100%	0	255	0	100	0	Fade
45	**Blue, pixel 12**	Intensity 0 → 100%	0	255	0	100	0	Fade
46	**Red, pixel 13**	Intensity 0 → 100%	0	255	0	100	0	Fade
47	**Green, pixel 13**	Intensity 0 → 100%	0	255	0	100	0	Fade
48	**Blue, pixel 13**	Intensity 0 → 100%	0	255	0	100	0	Fade
49	**Red, pixel 14**	Intensity 0 → 100%	0	255	0	100	0	Fade
50	**Green, pixel 14**	Intensity 0 → 100%	0	255	0	100	0	Fade
51	**Blue, pixel 14**	Intensity 0 → 100%	0	255	0	100	0	Fade
52	**Red, pixel 15**	Intensity 0 → 100%	0	255	0	100	0	Fade
53	**Green, pixel 15**	Intensity 0 → 100%	0	255	0	100	0	Fade
54	**Blue, pixel 15**	Intensity 0 → 100%	0	255	0	100	0	Fade
55	**Red, pixel 16**	Intensity 0 → 100%	0	255	0	100	0	Fade
56	**Green, pixel 16**	Intensity 0 → 100%	0	255	0	100	0	Fade
57	**Blue, pixel 16**	Intensity 0 → 100%	0	255	0	100	0	Fade
58	**Red, pixel 17**	Intensity 0 → 100%	0	255	0	100	0	Fade
59	**Green, pixel 17**	Intensity 0 → 100%	0	255	0	100	0	Fade
60	**Blue, pixel 17**	Intensity 0 → 100%	0	255	0	100	0	Fade
61	**Red, pixel 18**	Intensity 0 → 100%	0	255	0	100	0	Fade
62	**Green, pixel 18**	Intensity 0 → 100%	0	255	0	100	0	Fade
63	**Blue, pixel 18**	Intensity 0 → 100%	0	255	0	100	0	Fade

Control / Settings channel

The Control / Settings commands listed below are available on Channel 7 in every DMX mode.

Channel		Command	DMX range		Percent		Default DMX	Fade
7	**Control / Settings**	No function	0	11	0	4.3	0	Snap
		iQ.Service connect: On	12	13	4.7	5.1		
		No function	14	19	5.5	7.5		
		Dimmer curve: Soft (square) (3 sec.)	20	21	7.8	8.2		
		Dimmer curve: Linear (3 sec.)	22	23	8.6	9.0		
		Dimmer curve: S-Curve (3 sec.)	24	25	9.4	9.8		
		No function	26	29	10.2	11.4		
		Display mode: Off (3 sec.)	30	31	11.8	12.2		
		Display mode: Auto (3 sec.)	32	33	12.5	12.9		
		Display mode: On (3 sec.)	34	35	13.3	13.7		
		No function	36	37	14.1	14.5		
		Display orientation: Auto (3 sec.)	38	39	14.9	15.3		
		Display orientation: Normal (3 sec.)	40	41	15.7	16.1		
		Display orientation: Inverted (3 sec.)	42	43	16.5	16.9		
		No function	44	45	17.3	17.6		
		No DMX: Blackout (3 sec.)	46	47	18.0	18.4		
		No DMX: Hold (3 sec.)	48	49	18.8	19.2		
		No DMX: Captured scene (3 sec.)	50	51	19.6	20.0		
		Capture Scene (3 sec.)	52	53	20.4	20.8		
		No function	54	55	21.2	21.6		
		Fan mode: Minimum (3 sec.)	56	57	22.0	22.4		
		Fan mode: Regulated (3 sec.)	58	59	22.7	23.1		
		Fan mode: High (3 sec.)	60	61	23.5	23.9		
		Fan mode: Medium (3 sec.)	62	63	24.3	24.7		
		Fan mode: Low (3 sec.)	64	65	25.1	25.5		
		No function	66	69	25.9	27.1		
		Pixel mirror: Off (3 sec.)	70	71	27.5	27.8		
		Pixel mirror: x-mirror (3 sec.)	72	73	28.2	28.6		
		No function	74	91	29.0	35.7		
		Position feedback: Off (3 sec.)	92	93	36.1	36.5		
		Position feedback: On (3 sec.)	94	95	36.9	37.3		
		No function	96	97	37.6	38.0		
		Tilt inversion: Off (3 sec.)	98	99	38.4	38.8		
		Tilt inversion: On (3 sec.)	100	101	39.2	39.6		
		No function	102	129	40.0	50.6		
		Performance: Fast (3 sec.)	130	131	51.0	51.4		
		Performance: Normal (3 sec.)	132	133	51.8	52.2		
		Performance: Smooth (3 sec.)	134	135	52.5	52.9		
		No function	136	137	53.3	53.7		
		White point 8000 K	138	139	54.1	54.5		
		White point 6500 K	140	141	54.9	55.3		
		White point 5600 K	142	143	55.7	56.1		
		White point 4200 K	144	145	56.5	56.9		
		White point 3200 K	146	147	57.3	57.6		
		No function	148	149	58.0	58.4		

7 ctd.	**Control / Settings (continued)**	**Subfixture mode: Normal**	150	151	58.8	59.2	0	Snap
		Subfixture mode: Independent	152	153	59.6	60.0		
		No function	154	165	60.4	64.7		
		Color mode: RGB [1]	166	167	65.1	65.5		
		Color mode: RGBL [2]	198	169	77.6	66.3		
		Color mode: x:y [3]	170	171	66.7	67.1		
		No function	172	181	67.5	71.0		
		iQ gamut: FULL	182	183	71.4	71.8		
		iQ gamut: Rec. 2020	184	185	72.2	72.5		
		iQ gamut: Rec. 706	186	187	72.9	73.3		
		No function	188	189	73.7	74.1		
		Hibernation Off (3 sec., fixture will reset)	190	191	74.5	74.9		
		Hibernation On (3 sec.)	192	193	75.3	75.7		
		No function	194	215	76.1	84.3		
		PWM Optimal (3 sec.)	216	217	84.7	85.1		
		PWM High 1 (3 sec.)	218	219	85.5	85.9		
		PWM High 2 (3 sec.)	220	221	86.3	86.7		
		PWM Max. (3 sec.)	222	223	87.1	87.5		
		No function	224	229	87.8	89.8		
		Save as User Settings Preset 1 (3 s.)	230	231	90.2	90.6		
		Save as User Settings Preset 2 (3 s.)	232	233	91.0	91.4		
		Save as User Settings Preset 3 (3 s.)	234	235	91.8	92.2		
		No function	236	237	92.5	92.9		
		Load User Settings Preset 1 (3 sec.)	238	239	93.3	93.7		
		Load User Settings Preset 2 (3 sec.)	240	241	94.1	94.5		
		Load User Settings Preset 3 (3 sec.)	242	243	94.9	95.3		
		Load Settings Default (3 sec.)	244	245	95.7	96.1		
		No function	246	249	96.5	97.6		
		Reset tilt (3 sec.)	250	251	98.0	98.4		
		Reset head (3 sec.)	252	253	98.8	99.2		
		Reset ALL (3 sec.)	254	255	99.6	100		

5. Key to conversion of x and y coordinates

The following formulas are used when converting DMX values to x/y coordinates on the RGB and RGBL color mixing channels:

8-bit

$$\text{DMX}\,x = \frac{x \text{ co-ordinate x } 255}{0.8}$$

$$\text{DMX}\,y = \frac{y \text{ co-ordinate x } 255}{0.8}$$

16-bit

$$\text{DMX}\,x = \frac{x \text{ co-ordinate x } 65535}{0.8}$$

$$\text{DMX}\,y = \frac{y \text{ co-ordinate x } 65535}{0.8}$$

6. Color wheel specifications

The following table gives the color gamut co-ordinates of the color presets available on the color wheel effect.

Filter 004, Medium Bastard Amber	0.37;0.335
Filter 019, Fire	0.664;0.31
Filter 025, Sunset Red	0.566;0.359
Filter 026, Bright Red	0.712;0.281
Filter 036, Medium Pink	0.36;0.268
Filter 049, Medium Purple	0.283;0.101
Filter 058, Lavender	0.212;0.099
Filter 068, Sky Blue	0.151;0.128
Filter 088, Lime Green	0.356;0.511
Filter 089, Moss Green	0.259;0.547
Filter 090, Dark Yellow Green	0.184;0.641
Filter 102, Light Amber	0.434;0.44
Filter 103, Straw	0.336;0.359
Filter 106, Primary Red	0.699;0.285
Filter 111, Dark Pink	0.389;0.215
Filter 115, Peacock Blue	0.134;0.296
Filter 117, Steel Blue	0.223;0.278
Filter 118, Light Blue	0.149;0.113
Filter 121, Filter Green	0.302;0.534
Filter 122, Fern Green	0.234;0.543
Filter 124, Dark Green	0.123;0.586
Filter 126, Mauve	0.287;0.082
Filter 128, Bright Pink	0.401;0.151
Filter 131, Marine Blue	0.199;0.305
Filter 132, Medium Blue	0.137;0.11
Filter 134, Golden Amber	0.501;0.371
Filter 135, Deep Golden Amber	0.667;0.326
Filter 136, Pale Lavender	0.288;0.254
Filter 137, Special Lavender	0.231;0.175
Filter 138, Pale Green	0.331;0.433
Filter 140, Summer Blue	0.201;0.245
Filter 141, Bright Blue	0.129;0.159
Filter 143, Pale Navy Blue	0.17;0.205
Filter 147, Apricot	0.446;0.381
Filter 148, Bright Rose	0.482;0.238
Filter 152, Pale Gold	0.37;0.332
Filter 154, Pale Rose	0.35;0.318
Filter 157, Pink	0.457;0.272
Filter 162, Bastard Amber	0.348;0.328
Filter 164, Flame Red	0.659;0.302

Filter 165, Daylight Blue	0.159;0.158
Filter 169, Lilac Tint	0.294;0.281
Filter 170, Deep Lavender	0.278;0.211
Filter 172, Lagoon Blue	0.141;0.22
Filter 180, Dark Lavender	0.191;0.072
Filter 182, Light Red	0.67;0.313
Filter 194, Surprise Pink	0.24;0.183
Filter 197, Alice Blue	0.164;0.118
Filter 201, Full C.T. Blue	0.228;0.233
Filter 202, Half C.T. Blue	0.261;0.273
Filter 203, Quarter C.T. Blue	0.285;0.294
Filter 204, Full C.T. Orange	0.437;0.392
Filter 206, Quartet C.T. Orange	0.346;0.34
Filter 219, Fluorescent Green	0.219;0.334
Filter 247, Filter Minus Green	0.325;0.279
Filter 248, Half Minus Green	0.317;0.297
Filter 281, Three Quarter C.T. Blue	0.239;0.258
Filter 285, Three Quarter C.T. Orange	0.4;0.387
Filter 352, Glacier Blue	0.171;0.19
Filter 353, Lighter Blue	0.193;0.246
Filter 506, Madge	0.662;0.337
Filter 778, Millennium Gold	0.606;0.382
Filter 793, Vanity Fair	0.419;0.17
Filter 798, Chrysalis Pink	0.191;0.061


GLP