impression[&]

X5 Compact

DMX Channel Index

-G L P-

Document revisions

Revision number	Notes	Date released
20230918-01	Corrected DMX Mode 5 overview table on page 9. Covers firmware v. 1.1.3	September 2023
20230726-01	Added DMX Mode 6. Updated various DMX commands. Covers firmware v. 1.1.3	July 2023
20230124-02	First impression X5 Compact DMX Index available Firmware v. 1.0	January 2023

Table of Contents

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 Compact's standard pixel positions are as shown below:
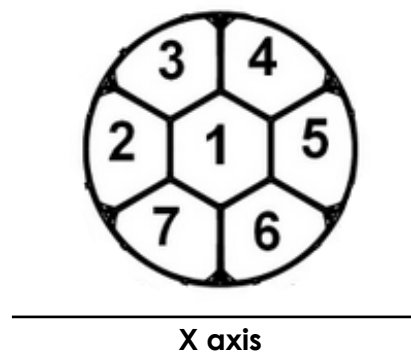
X axis

The drawing above shows the standard pixel layout with the fixture standing on the ground, pan at 50% (home position) and tilt at 50% (front).

Pixel rotation, x-axis pixel mirror and y-axis pixel mirror options are available via DMX on the Control / Settings channel and using the menus in the fixture's control panel.

3. DMX control modes overview

The impression X5 Compact offers the following DMX control modes.

DMX Mode 1: Basic

22 DMX Channels

Basic DMX Mode gives control of the fixture's main functions. Pan, 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 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.

		Mode 1 Basic	
Main module	**1.1**	Pan	1
			2
		Tilt	3
			4
		Intensity	5
			6
		Shutter	7
		Zoom	8
		Control / Settings	9
		[1] RGB – Red	10
		[2] RGBL – Red [3] x;y – x	11
		[1] RGB – Green	12
		[2] RGBL – Green [3] x;y – y	13
		[1] RGB – Blue	14
		[2] RGBL – Blue [3] x;y – not used	15
		[1] RGB – not used	16
		[2] RGBL – Lime [3] x;y – not used	17
		Color wheel	18
		CTC (Color temperature control)	19
		CQC (Color quality control)	20
		M/G shift	21
		Tungsten simulation	22

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. Pan, 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 Modules 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 7 pixels as one group.

Mode 2 Normal		

Main module	1.1	Pan	1
			2
		Tilt	3
			4
		Intensity	5
			6
		Shutter	7
		Zoom	8
		Control / Settings	9
		[1] RGB – Red	10
		[2] RGBL – Red [3] x;y – x	11
		[1] RGB – Green	12
		[2] RGBL – Green [3] x;y – y	13
		[1] RGB – Blue	14
		[2] RGBL – Blue [3] x;y – not used	15
		[1] RGB – not used	16
		[2] RGBL – Lime [3] x;y – not used	17
		Color wheel	18
		CTC (Color temperature control)	19
		CQC (Color quality control)	20
		M/G shift	21
		Tungsten simulation	22
		Mix priority	23

Sub module	1.2	Intensity Layer 2	24
			25
		Shutter Layer 2	26
		Pattern selection Layer 2	27
		Pattern step / speed Layer 2	28
		Pattern step crossfading Layer 2	29
		Pattern transition Layer 2	30
		Red, pixels 1-7	31
		Green, pixels 1-7	32
		Blue, pixels 1-7	33

DMX Mode 3: Segments

36 DMX channels

Segments 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. Pan, 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 Modules 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 two pixel groups as segments.

Mode 3 Segments			
		Pan	1
			2
		Tilt	3
			4
		Intensity	5
			6
		Shutter	7
		Zoom	8
		Control / Settings	9
Main module	1.1	[1] RGB – Red [2] RGBL – Red [3] x;y – x	10
			11
		[1] RGB – Green [2] RGBL – Green [3] x;y – y	12
			13
		[1] RGB – Blue [2] RGBL – Blue [3] x;y – not used	14
			15
		[1] RGB – not used [2] RGBL – Lime [3] x;y – not used	16
			17
		Color wheel	18
		CTC (Color temperature control)	19
		CQC (Color quality control)	20
		M/G shift	21
		Tungsten simulation	22
		Mix priority	23

Sub module	1.2	Intensity Layer 2	24
			25
		Shutter Layer 2	26
		Pattern selection Layer 2	27
		Pattern step / speed Layer 2	28
		Pattern step crossfading Layer 2	29
		Pattern transition Layer 2	30
	1.3	Red, segment 1 (pixel 01)	31
		Green, segment 1 (pixel 01)	32
		Blue, segment 1 (pixel 01)	33
	1.4	Red, segment 2 (pixels 02-07)	34
		Green, segment 2 (pixels 02-07)	35
		Blue, segment 2 (pixels 02-07)	36

DMX Mode 4: Multipix advanced

51 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. Pan, 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 Modules 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	Pan	1
			2
		Tilt	3
			4
		Intensity	5
			6
		Shutter	7
		Zoom	8
		Control / Settings	9
		[1] RGB – Red	10
		[2] RGBL – Red [3] x;y – x	11
		[1] RGB – Green	12
		[2] RGBL – Green [3] x;y – y	13
		[1] RGB – Blue	14
		[2] RGBL – Blue [3] x;y – not used	15
		[1] RGB – not used	16
		[2] RGBL – Lime [3] x;y – not used	17
		Color wheel	18
		CTC (Color temperature control)	19
		CQC (Color quality control)	20
		M/G shift	21
		Tungsten simulation	22
		Mix priority	23

Sub module	1.2	Intensity Layer 2	24
			25
		Shutter Layer 2	26
		Pattern selection Layer 2	27
		Pattern step / speed Layer 2	28
		Pattern step crossfading Layer 2	29
		Pattern transition Layer 2	30
	1.3	Red, pixel 01	31
		Green, pixel 01	32
		Blue, pixel 01	33
	1.4 … 1.8	RGB Pixels 02 – 06	34 … 48
	1.9	Red, pixel 07	49
		Green, pixel 07	50
		Blue, pixel 07	51

DMX Mode 5: Multipix compressed RGB

32 DMX Channels

MultiPix compressed DMX Mode gives control of the main functions, as in **Basic** DMX Mode. Pan, 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.

RGB color mixing is available on the individual pixel control channels.

Mode 5 Multipix Compressed RGB			
Main module	1.1	Pan	1
			2
		Tilt	3
			4
		Intensity	5
			6
		Shutter	7
		Zoom	8
		Control / Settings	9
		CTC (Color temperature control)	10
		CQC (Color quality control)	11
	1.2	Red, pixel 01	12
		Green, pixel 01	13
		Blue, pixel 01	14
	1.3 … 1.7	… RGB Pixels 02 – 06 …	15 … 29
	1.8	Red, pixel 07	30
		Green, pixel 07	31
		Blue, pixel 07	32

DMX Mode 6: Multipix compressed RGBL

39 DMX Channels

MultiPix compressed RGBL DMX Mode gives control of the main functions, as in **Basic** DMX Mode, plus RGBL color control of each individual pixel.

Pan, 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 whether 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.

RGBL color mixing is available on the individual pixel control channels.

		Mode 6 **Multipix Compressed RGBL**	
Main module	**1.1**	Pan	1
			2
		Tilt	3
			4
		Intensity	5
			6
		Shutter	7
		Zoom	8
		Control / Settings	9
		CTC (Color Temperature Control)	10
		CQC (Color Quality Control)	11
	1.2	Red, pixel 01	12
		Green, pixel 01	13
		Blue, pixel 01	14
		Lime, pixel 01	15
	1.3 ... 1.7	… RGBL Pixels 02 – 06 …	16 … 35
	1.8	Red, pixel 07	36
		Green, pixel 07	37
		Blue, pixel 07	38
		Lime, pixel 07	39

4. DMX control channel layout

In the following DMX channel layout tables:

- Default settings are indicated with **bold type**.
- Where commands are followed by (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.

Pixel positions

The X5 Compact's standard pixel layout is as shown below:
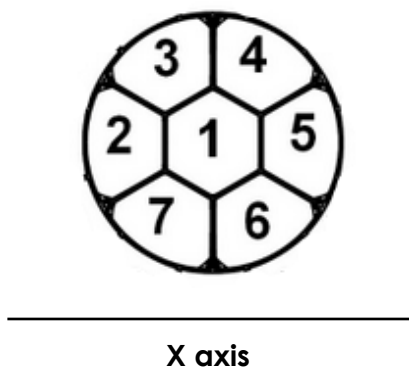
X axis

The drawing above shows the standard pixel layout with the fixture standing on the ground, pan at 50% (home position) and tilt at 50% (front).

Note that pixel rotation, x-axis pixel mirror and y-axis pixel mirror options are available via DMX on the Control / Settings channel and using the menus in the fixture's control panel.

DMX Mode 1: Basic

22 DMX Channels

Channel	Command	DMX range		Percent %		Default DMX	Fade

Main Module Basic control

Channel	Command	DMX range		Percent %		Default DMX	Fade
1 **Pan coarse**	Pan left → right	0	65535	0	100	32768	Fade
2 **Pan fine**							
3 **Tilt coarse**	Tilt back → front	0	65535	0	100	32768	Fade
4 **Tilt fine**							
5 **Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
6 **Intensity fine**							
7 **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 pixels slow → fast	200	250	78.4	98.0		Fade
	Open	251	255	98.4	100		Snap
8 **Zoom**	Zoom narrow → wide	0	255	0	100	0	Snap
9 **Control/Settings**	*See 'Control / Settings channel' on page 43*						
10	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
11	[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
12	[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
13 **RGB / RGBL / x,y color control** (see 'Key to conversion of x and y coordinates' on page 45)	[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
14	[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – *not used*	0	65535	0	100	65535	Fade
15	[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - *not used*						
16	[1] RGB - *not used* [2] RGBL - Lime coarse [3] x;y - *not used*	0	65535	0	100	65535	Fade
17	[1] RGB - *not used* [2] RGBL - Lime fine [3] x;y - *not used*						

		Open (Selected white point)	0	9	0	3.5		
		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		
		Filter 089, Moss Green	37	39	14.5	15.3		
		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		
18	**Color Wheel** (for exact colors see 'Color wheel specifications' on page 46)	Filter 135, Deep Golden Amber	88	90	34.5	35.3	0	Snap
		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, Quartet C.T. Orange	166	168	65.1	65.9		

Main Module Basic Control (continued)

		Filter 219, Fluorescent Green	169	171	66.3	67.1		Snap
		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	179	180	69.8	70.6		
		Filter 285, Three Quarter 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 506, 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		
		HSI scroll, stop at first color	202	204	79.2	80.0		
		HSI scroll slow → fast	205	252	80.4	98.8		Fade
		HSI scroll, stop at current color	253	255	99.2	100		Snap
19	**CTC (Color Temperature Control)**	Open	0	9	0	3.5	0	Snap
		Fade through color temperatures of 10 000 K to 2 500 K stepless (interpolation)	11	11	4.3	45.9		
			12	254	4.7	49.8		Fade
			255	255	100	53.7		Snap
20	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade, saturated to unsaturated color	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, unsaturated to saturated color	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
21	**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
22	**Tungsten simulation**	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)

33 DMX Channels

Channel	Command	DMX range		Percent %		Default DMX	Fade
Main Module Basic Control							
1 **Pan coarse**	Pan left → right	0	65535	0	100	32768	Fade
2 **Pan fine**							
3 **Tilt coarse**	Tilt back → front	0	65535	0	100	32768	Fade
4 **Tilt fine**							
5 **Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
6 **Intensity fine**							
7 **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 pixels slow → fast	200	250	78.4	98.0		Fade
	Open	251	255	98.4	100		Snap
8 **Zoom**	Zoom narrow → wide	0	255	0	100	0	Snap
9 **Control/Settings**	*See 'Control / Settings channel' on page 43*						
10	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
11	[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
12	[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
13 **RGB / RGBL / x,y color control** (see 'Key to conversion of x and y coordinates' on page 45)	[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
14	[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – *not used*	0	65535	0	100	65535	Fade
15	[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - *not used*						
16	[1] RGB - *not used* [2] RGBL - Lime coarse [3] x;y - *not used*	0	65535	0	100	65535	Fade
17	[1] RGB - *not used* [2] RGBL - Lime fine [3] x;y - *not used*						

Main Module Basic Control (continued)

		Open (Selected white point)	0	9	0	3.5		
		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		
		Filter 089, Moss Green	37	39	14.5	15.3		
		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		
18	**Color Wheel** (for exact colors see 'Color wheel specifications' on page 46)	Filter 132, Medium Blue	82	84	32.2	32.9	0	Snap
		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		

Main Module Basic Control (continued)

#	Function	Description						
		Filter 206, Quartet C.T. Orange	166	168	65.1	65.9		Snap
		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	179	180	69.8	70.6		
		Filter 285, Three Quarter C.T. Orange	181	183	71.0	71.8		
		Filter 352, Glacier Blue	184	186	72.2	72.9	0	Snap
		Filter 353, Lighter Blue	187	189	73.3	74.1		
		Filter 506, 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		
		HSI scroll, stop at first color	202	204	79.2	80.0		
		HSI scroll slow → fast	205	252	80.4	98.8		Fade
		HSI scroll, stop at current color	253	255	99.2	100		Snap
19	**CTC (Color Temperature Control)**	Open	0	9	0	3.5	0	Snap
		Fade through color temperatures of 10 000 K to 2 500 K stepless (interpolation)	11	11	4.3	45.9		
			12	254	4.7	49.8		Fade
			255	255	100	53.7		Snap
20	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade, saturated to unsaturated color	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, unsaturated to saturated color	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
21	**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
22	**Tungsten simulation**	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		

Main Module Basic Control (continued)

		Main Module and Sub Module HTP (highest value takes priority)	0	9	0	3.5		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		
23	**Mix priority**	Sub Module minus main subtractive (Main Module color value subtracted from Sub Module)	50	59	19.6	23.1	0	
		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

24	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
25	**Intensity fine**							
		Closed	0	4	0	1.6		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
26	**Shutter**	Pulse closing slow → fast	70	99	27.5	38.8	0	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 pixels slow → fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
		Off (all pixels active)	0	9	0	3.5		
		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		
27*	**Pattern selection**	Static Pattern 05	18	19	7.1	7.5	0	Snap
		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		

Sub Module: Second Layer Control (continued)

		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		
		Static Pattern 28	64	65	25.1	25.5		
		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	0	Snap
		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		

Sub Module: Second Layer Control (continued)

		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		
		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	0	Snap
		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		

Sub Module: Second Layer Control (continued)

28	**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		
		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		

Sub Module: Second Layer Control (continued)

		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	0	Snap
		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		
29	**Pattern step crossfading (from one step to next)**	Off (no crossfading, Snap)	0	9	0	3.5		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	0	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
30	**Pattern transition (from one pattern to next)**	Off (snap from one pattern to next)	0	9	0	3.5		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	0	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		
31	**Red intensity**	Intensity 0 → 100%, Pixels 1 – 7, Second Layer	0	255	0	100	0	Fade
32	**Green intensity**	Intensity 0 → 100%, Pixels 1 – 7, Second Layer	0	255	0	100	0	Fade
33	**Blue intensity**	Intensity 0 → 100%, Pixels 1 – 7, Second Layer	0	255	0	100	0	Fade

DMX Mode 3: Segments

36 DMX Channels

Channel	Command	DMX range		Percent %		Default DMX	Fade
Main Module Basic control							
1 **Pan coarse**	Pan left → right	0	65535	0	100	32768	Fade
2 **Pan fine**							
3 **Tilt coarse**	Tilt back → front	0	65535	0	100	32768	Fade
4 **Tilt fine**							
5 **Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
6 **Intensity fine**							
7 **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 pixels slow → fast	200	250	78.4	98.0		Fade
	Open	251	255	98.4	100		Snap
8 **Zoom**	Zoom narrow → wide	0	255	0	100	0	Snap
9 **Control/Settings**	*See 'Control / Settings channel' on page 43*						
10	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
11	[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
12	[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
13 **RGB / RGBL / x,y color control** (see 'Key to conversion of x and y coordinates' on page 45)	[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
14	[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – *not used*	0	65535	0	100	65535	Fade
15	[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - *not used*						
16	[1] RGB - *not used* [2] RGBL - Lime coarse [3] x;y - *not used*	0	65535	0	100	65535	Fade
17	[1] RGB - *not used* [2] RGBL - Lime fine [3] x;y - *not used*						

Main Module Basic Control (continued)

		Open (Selected white point)	0	9	0	3.5		
		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		
		Filter 089, Moss Green	37	39	14.5	15.3		
		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		
18	**Color Wheel** (for exact colors see 'Color wheel specifications' on page 46)	Filter 131, Marine Blue	79	81	31.0	31.8	0	Snap
		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		
		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		

Main Module Basic Control (continued)

		Filter 206, Quartet 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	179	180	69.8	70.6		
		Filter 285, Three Quarter C.T. Orange	181	183	71.0	71.8		
		Filter 352, Glacier Blue	184	186	72.2	72.9		Snap
		Filter 353, Lighter Blue	187	189	73.3	74.1	0	
		Filter 506, 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		
		HSI scroll, stop at first color	202	204	79.2	80.0		
		HSI scroll slow → fast	205	252	80.4	98.8		Fade
		HSI scroll, stop at current color	253	255	99.2	100		Snap
19	**CTC (Color Temperature Control)**	Open	0	9	0	3.5		Snap
		Fade through color temperatures of 10 000 K to 2 500 K stepless (interpolation)	11	11	4.3	45.9	0	
			12	254	4.7	49.8		Fade
			255	255	100	53.7		Snap
20	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5		Snap
		Crossfade, saturated to unsaturated color	10	117	3.9	45.9		Fade
		HQ (high quality), unsaturated color	118	127	46.3	49.8	0	Snap
		HO (high output), unsaturated color	128	137	50.2	53.7		
		Crossfade, unsaturated to saturated color	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
21	**M/G shift**	Off (no correction)	0	9	0	3.5		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	0	Snap
		Plus green +1% → +99%	141	254	55.3	99.6		Fade
		Full plus green +100%	255	255	100	100		Snap
22	**Tungsten simulation**	Off (selected white point, no red shift or delay when dimming)	0	9	0	3.5		
		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		Snap
		Off (selected white point, no red shift or delay when dimming)	120	139	47.1	54.5	0	
		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		

Main Module Basic Control (continued)

		Main Module and Sub Module HTP (highest value takes priority)	0	9	0	3.5		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		
23	**Mix priority**	Sub Module minus main subtractive (Main Module color value subtracted from Sub Module)	50	59	19.6	23.1	0	
		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

24	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
25	**Intensity fine**							
		Closed	0	4	0	1.6		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
26	**Shutter**	Pulse closing slow → fast	70	99	27.5	38.8	0	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 pixels slow → fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
		Off (all pixels active)	0	9	0	3.5		
		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		
27*	**Pattern selection**	Static Pattern 05	18	19	7.1	7.5	0	Snap
		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		

Sub Module: Second Layer Control (continued)

		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		
		Static Pattern 28	64	65	25.1	25.5		
		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	0	Snap
		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		

Sub Module: Second Layer Control (continued)

		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	
		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	0 Snap
		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	

Sub Module: Second Layer Control (continued)

28	**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		
		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		

Sub Module: Second Layer Control (continued)

		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	0	Snap
		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		
29	**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
30	**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		
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, pixels 02 – 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
35	**Green, pixels 02 – 07**	Intensity 0 → 100%	0	255	0	100	0	Fade
36	**Blue, pixels 02 – 07**	Intensity 0 → 100%	0	255	0	100	0	Fade

DMX Mode 4: Multipix advanced

51 DMX Channels

Channel	Command	DMX range		Percent %		Default DMX	Fade
Main Module Basic control							
1 **Pan coarse**	Pan left → right	0	65535	0	100	32768	Fade
2 **Pan fine**							
3 **Tilt coarse**	Tilt back → front	0	65535	0	100	32768	Fade
4 **Tilt fine**							
5 **Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
6 **Intensity fine**							
7 **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 pixels slow → fast	200	250	78.4	98.0		Fade
	Open	251	255	98.4	100		Snap
8 **Zoom**	Zoom narrow → wide	0	255	0	100	0	Snap
9 **Control/Settings**	*See 'Control / Settings channel' on page 43*						
10	[1] RGB - Red coarse [2] RGBL - Red coarse [3] x;y - x coarse	0	65535	0	100	65535	Fade
11	[1] RGB - Red fine [2] RGBL - Red fine [3] x;y - x fine						
12	[1] RGB - Green coarse [2] RGBL - Green coarse [3] x;y – y coarse	0	65535	0	100	65535	Fade
13 **RGB / RGBL / x,y color control** (see 'Key to conversion of x and y coordinates' on page 45)	[1] RGB - Green fine [2] RGBL - Green fine [3] x;y - y fine						
14	[1] RGB – Blue coarse [2] RGBL - Blue coarse [3] x;y – not used	0	65535	0	100	65535	Fade
15	[1] RGB - Blue fine [2] RGBL - Blue fine [3] x;y - not used						
16	[1] RGB - not used [2] RGBL - Lime coarse [3] x;y - not used	0	65535	0	100	65535	Fade
17	[1] RGB - not used [2] RGBL - Lime fine [3] x;y - not used						

Main Module Basic Control (continued)

		Open (Selected white point)	0	9	0	3.5		
		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		
		Filter 089, Moss Green	37	39	14.5	15.3		
		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		
18	**Color Wheel** (for exact colors see 'Color wheel specifications' on page 46)	Filter 132, Medium Blue	82	84	32.2	32.9	0	Snap
		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		
		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, Quartet C.T. Orange	166	168	65.1	65.9		
		Filter 219, Fluorescent Green	169	171	66.3	67.1		

Main Module Basic Control (continued)

#	Function	Description						
		Filter 247, Filter Minus Green	172	174	67.5	68.2		Snap
		Filter 248, Half Minus Green	175	177	68.6	69.4		
		Filter 281, Three Quarter C.T. Blue	179	180	69.8	70.6		
		Filter 285, Three Quarter 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 506, Madge	190	192	74.5	75.3	0	
		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		
		HSI scroll, stop at first color	202	204	79.2	80.0		
		HSI scroll slow → fast	205	252	80.4	98.8		Fade
		HSI scroll, stop at current color	253	255	99.2	100		Snap
19	**CTC (Color Temperature Control)**	Open	0	9	0	3.5		Snap
		Fade through color temperatures of 10 000 K to 2 500 K stepless (interpolation)	11	11	4.3	45.9	0	
			12	254	4.7	49.8		Fade
			255	255	100	53.7		Snap
20	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5		Snap
		Crossfade, saturated to unsaturated color	10	117	3.9	45.9		Fade
		HQ (high quality), unsaturated color	118	127	46.3	49.8	0	Snap
		HO (high output), unsaturated color	128	137	50.2	53.7		
		Crossfade, unsaturated to saturated color	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
21	**M/G shift**	Off (no correction)	0	9	0	3.5		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	0	Snap
		Plus green +1% → +99%	141	254	55.3	99.6		Fade
		Full plus green +100%	255	255	100	100		Snap
22	**Tungsten simulation**	Off (selected white point, no red shift or delay when dimming)	0	9	0	3.5		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	0	Snap
		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		

Main Module Basic Control (continued)

23	**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		
		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

24	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
25	**Intensity fine**							
26	**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 pixels slow → fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
27*	**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		

Sub Module: Second Layer Control (continued)

		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		
		Static Pattern 28	64	65	25.1	25.5		
		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	0	Snap
		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		

Sub Module: Second Layer Control (continued)

		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	
		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	0 Snap
		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	

Sub Module: Second Layer Control (continued)

		Stop (first pattern step)	0	2	0.0	0.8		
		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		
		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		
28	**Pattern step / speed**	Pattern Step 22	170	171	66.7	67.1	0	Snap
		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		

Sub Module: Second Layer Control (continued)

		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	0	Snap
		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		
29	**Pattern step crossfading (from one step to next)**	Off (no crossfading, Snap)	0	9	0	3.5		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	0	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
30	**Pattern transition (from one pattern to next)**	Off (snap from one pattern to next)	0	9	0	3.5		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	0	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		
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

DMX Mode 5: Multipix compressed RGB

32 DMX Channels

Channel		Command	DMX range		Percent %		Default DMX	Fade
Main Module Basic control								
1	**Pan coarse**	Pan left → right	0	65535	0	100	32768	Fade
2	**Pan fine**							
3	**Tilt coarse**	Tilt back → front	0	65535	0	100	32768	Fade
4	**Tilt fine**							
5	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
6	**Intensity fine**							
7	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 pixels slow → fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
8	Zoom	Zoom narrow → wide	0	255	0	100	0	Snap
9	Control/Settings	*See 'Control / Settings channel' on page 43*						
10	**CTC (Color Temperature Control)**	Open	0	9	0	3.5	0	Snap
		Fade through color temperatures of 10 000 K to 2 500 K stepless (interpolation)	11	11	4.3	45.9		Snap
			12	254	4.7	49.8		Fade
			255	255	100	53.7		Snap
11	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade, saturated to unsaturated color	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		Snap
		Crossfade, unsaturated to saturated color	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
12	**Red, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	
13	**Green, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	
14	**Blue, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	
15	**Red, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	
16	**Green, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	
17	**Blue, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	
18	**Red, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	
19	**Green, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	Fade
20	**Blue, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	
21	**Red, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	
22	**Green, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	
23	**Blue, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	
24	**Red, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	
25	**Green, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	
26	**Blue, pixel 05**	Intensity 0 → 100%	0	255	0	100	0	

Main Module Basic Control (continued)

27	Red, pixel 06	Intensity 0 → 100%	0	255	0	100	0	
28	Green, pixel 06	Intensity 0 → 100%	0	255	0	100	0	
29	Blue, pixel 06	Intensity 0 → 100%	0	255	0	100	0	Fade
30	Red, pixel 07	Intensity 0 → 100%	0	255	0	100	0	
31	Green, pixel 07	Intensity 0 → 100%	0	255	0	100	0	
32	Blue, pixel 07	Intensity 0 → 100%	0	255	0	100	0	

DMX Mode 6: Multipix compressed RGBL

39 DMX Channels

Channel		Command	DMX range		Percent %		Default DMX	Fade
Main Module Basic control								
1	**Pan coarse**	Pan left → right	0	65535	0	100	32768	Fade
2	**Pan fine**							
3	**Tilt coarse**	Tilt back → front	0	65535	0	100	32768	Fade
4	**Tilt fine**							
5	**Intensity coarse**	Intensity 0 → 100%	0	65535	0	100	0	Fade
6	**Intensity fine**							
7	**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 pixels slow → fast	200	250	78.4	98.0		Fade
		Open	251	255	98.4	100		Snap
8	**Zoom**	Zoom narrow → wide	0	255	0	100	0	Snap
9	**Control/Settings**	*See 'Control / Settings channel' on page 43*						
10	**CTC (Color Temperature Control)**	Open	0	9	0	3.5	0	Snap
		Fade through color temperatures of 10 000 K to 2 500 K stepless (interpolation)	11	11	4.3	45.9		Snap
			12	254	4.7	49.8		Fade
			255	255	100	53.7		Snap
11	**CQC (Color Quality Control) / Saturation**	HQ (high quality), saturated color	0	9	0	3.5	0	Snap
		Crossfade, saturated to unsaturated color	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		Snap
		Crossfade, unsaturated to saturated color	138	245	54.1	96.1		Fade
		HO (high output), saturated color	246	255	96.5	100		Snap
12	**Red, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	Fade
13	**Green, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	
14	**Blue, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	
15	**Lime, pixel 01**	Intensity 0 → 100%	0	255	0	100	0	
16	**Red, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	
17	**Green, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	
18	**Blue, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	
19	**Lime, pixel 02**	Intensity 0 → 100%	0	255	0	100	0	
20	**Red, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	
21	**Green, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	
22	**Blue, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	
23	**Lime, pixel 03**	Intensity 0 → 100%	0	255	0	100	0	
24	**Red, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	
25	**Green, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	
26	**Blue, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	
27	**Lime, pixel 04**	Intensity 0 → 100%	0	255	0	100	0	

Main Module Basic Control (continued)

28	Red, pixel 05	Intensity 0 → 100%	0	255	0	100	0	
29	Green, pixel 05	Intensity 0 → 100%	0	255	0	100	0	
30	Blue, pixel 05	Intensity 0 → 100%	0	255	0	100	0	
31	Lime, pixel 05	Intensity 0 → 100%	0	255	0	100	0	
32	Red, pixel 06	Intensity 0 → 100%	0	255	0	100	0	
33	Green, pixel 06	Intensity 0 → 100%	0	255	0	100	0	
34	Blue, pixel 06	Intensity 0 → 100%	0	255	0	100	0	Fade
35	Lime, pixel 06	Intensity 0 → 100%	0	255	0	100	0	
26	Red, pixel 07	Intensity 0 → 100%	0	255	0	100	0	
37	Green, pixel 07	Intensity 0 → 100%	0	255	0	100	0	
38	Blue, pixel 07	Intensity 0 → 100%	0	255	0	100	0	
39*	Lime, pixel 07	Intensity 0 → 100%	0	255	0	100	0	

Control / Settings channel

The Control / Settings commands listed below are available on Channel 9 in every DMX mode.

Channel		Command	DMX range		Percent %		Default DMX	Fade
		No function	0	11	0.0	4.3		
		IQ.Service connect	12	13	4.7	5.1		
		No function	14	19	5.5	7.5		
		Dimming curve Soft / Square, (3 sec.)	20	21	7.8	8.2		
		Dimming curve Linear, 3 sec.	22	23	8.6	9.0		
		Dimming 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 signal: Blackout (3 sec.)	46	47	18.0	18.4		
		No signal: Hold (3 sec.)	48	49	18.8	19.2		
		No signal: Play captured scene (3 sec.)	50	51	19.6	20.0		
		No signal: Capture current scene (3 sec.)	52	53	20.4	20.8		
		No function	54	55	21.2	21.6		
		Fan mode: Off (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		
9	Control / Settings	Fan mode: Low (3 sec.)	64	65	25.1	25.5	0	Snap
		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		
		Pixel mirror: y-mirror (3 sec.)	74	75	29.0	29.4		
		Pixel mirror: x-y-mirror (3 sec.)	76	77	29.8	30.2		
		Pixel rotation: off (3 sec.)	78	79	30.6	31.0		
		Pixel rotation: 60° (3 sec.)	80	81	31.4	31.8		
		Pixel rotation 120° (3 sec.)	82	83	32.2	32.5		
		Pixel rotation 180° (3 sec.)	84	85	32.9	33.3		
		Pixel rotation 240° (3 sec.)	86	87	33.7	34.1		
		Pixel rotation 300° (3 sec.)	88	89	34.5	34.9		
		No function	90	91	35.3	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		
		Pan inversion: Off (3 sec.)	102	103	40.0	40.4		
		Pan inversion: On (3 sec.)	104	105	40.8	41.2		
		Tilt disable: Off (3 sec.)	106	107	41.6	42.0		
		No function	108	109	42.4	42.7		
		Tilt disable: On (3 sec.)	110	111	43.1	43.5		
		Pan disable: Off (3 sec.)	112	113	43.9	44.3		
		No function	114	115	44.7	45.1		
		Pan disable: On (3 sec.)	116	117	45.5	45.9		

		No function	118	129	46.3	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: 8000K (3 sec.)	138	139	54.1	54.5		
		White Point: 6500K (3 sec.)	140	141	54.9	55.3		
		White Point: 5600K (3 sec.)	142	143	55.7	56.1		
		White Point: 4200K (3 sec.)	144	145	56.5	56.9		
		White Point: 3200K (3 sec.)	146	147	57.3	57.6		
		No function	148	149	58.0	58.4		
		Sub Module mode: Normal (3 sec.)	150	151	58.8	59.2		
		Sub Module mode: Independent (3 sec.)	152	153	59.6	60.0		
		No function	154	165	60.4	64.7		
		Color Mode: RGB [1] (3 sec.)	166	167	65.1	65.5		
		Color Mode: RGBL [2] (3 sec.)	168	169	65.9	66.3		
		Color Mode: x;y [3] (3 sec.)	170	171	66.7	67.1		
		No function	172	181	67.5	71.0		
		iQ. Gamut: FULL (3 sec.)	182	183	71.4	71.8		
		iQ. Gamut: Rec. 2020 (3 sec.)	184	185	72.2	72.5		
		iQ. Gamut: Rec. 706 (3 sec.)	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	195	76.1	76.5		
		Pan range: Normal	196	197	76.9	77.3	0	Snap
		Pan range : Extended	198	199	77.6	78.0		
		No function	200	201	78.4	78.8		
		Accessory: None	202	203	79.2	79.6		
		Accessory: Egg crate	204	205	80.0	80.4		
		Accessory: Snoot	206	207	80.8	81.2		
		No function	208	213	81.6	83.5		
		PWM Low (3 sec.)	214	215	83.9	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 sec.)	230	231	90.2	90.6		
		Save as User Settings Preset 2 (3 sec.)	232	233	91.0	91.4		
		Save as User Settings Preset 3 (3 sec.)	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 pan and 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		

To reduce the risk of accidentally changing settings, many commands on the Control / Settings channel must be held for 3 seconds before they are executed. These settings are marked (3 sec.) *in the above table.*

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

-G L P-