

DMX Channel Index

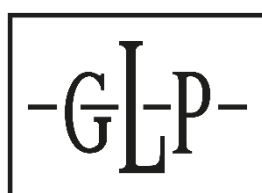
FUSION
by GLP

Fusion X-PAR 12Z



Document revision 20240624-01

Fixture software version 1.2.6



Document revisions

Revision number	Notes	Date released
20240624-01	Added functionality on Control/Settings channel. Firmware v. 1.2.6	June 2024
A	X-PAR 12Z DMX Channel Index first public release. Firmware v. 1.0.0	September 2022

GLP® Fusion X-PAR 12Z DMX Channel Index

This document covers fixture software version 1.2.6

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DMX control modes overview

The following DMX control modes are available in the X-PAR 12Z.

DMX Mode 1: Basic gives raw color control using 8-bit RGB levels, with overall dimmer and shutter controls. The Lime channel has no effect unless the fixture Color Mode is set to RGLB.

A Control / Settings channel lets you configure the fixture remotely via DMX.

Mode 1 Basic

1	Dimmer
2	Shutter
3	Zoom
4	Control / Settings
5	Red
6	Green
7	Blue
8	Lime

DMX Mode 2: Standard provides a selection of fixed colors with overall dimmer and shutter controls. If Channel 9 is set below DMX 10 (3.9%) then the color can be controlled by the RGB(L) channels - the Lime channel has no effect unless the fixture Color Mode is set to RGLB. If Channel 9 is DMX 10 or above, Channels 5-8 have no effect.

The CTC and M/G shift channels modify the color selected by the other channels.

A Control / Settings channel lets you configure the fixture remotely via DMX.

Mode 2 Standard

1	Dimmer
2	Shutter
3	Zoom
4	Control / Settings
5	Red
6	Green
7	Blue
8	Lime
9	Color Wheel
10	CTC
11	M/G shift

DMX Mode 3: Advanced provides a selection of fixed colors with overall 16-bit dimmer and a shutter control. If Channel 14 is set below DMX 10 (3.9%) then the color can be controlled by the 16-bit RGB(L) channels - the Lime channels have no effect unless the fixture Color Mode is set to RGLB. If Channel 14 is DMX 10 or above, Channels 6-13 have no effect.

The CTC and M/G shift channels modify the color selected by the other channels.

A Control / Settings channel lets you configure the fixture remotely via DMX.

Mode 3 Advanced

1	Dimmer
2	Dimmer Fine
3	Shutter
4	Zoom
5	Control / Settings
6	Red
7	Red fine
8	Green
9	Green fine
10	Blue
11	Blue fine
12	Lime
13	Lime fine
14	Color wheel
15	CTC
16	M/G shift

DMX Mode 4: RGB(L) gives raw color control using 8-bit RGB levels. The Lime channel has no effect unless the fixture Color Mode is set to RGL. There is no master dimmer control.

A Control / Settings channel lets you configure the fixture remotely via DMX.

**Mode 4
RGB(L)**

1	Zoom
2	Control / Settings
3	Red
4	Green
5	Blue
6	Lime

DMX Mode 5: White operates the fixture as a white light with controllable Color Temperature and Green/magenta shift

A Control / Settings channel lets you configure the fixture remotely via DMX.

**Mode 5
White**

1	Dimmer
2	Shutter
3	Zoom
4	Control / Settings
5	CTC
6	Green/Magenta shift

DMX Mode 6: Easy provides a simple operating mode with a fixed selection of colors and zoom.

A Control / Settings channel lets you configure the fixture remotely via DMX.

**Mode 6
Easy**

1	Dimmer
2	Zoom
3	Control / Settings
4	Color Wheel

DMX control channel layout

The tables on the following pages give the layout of the commands available in all the fixture's DMX modes.

Control/Settings channel

The following commands are available on the Control/Settings channel in all DMX modes. The channel used varies depending on DMX mode.

- Where commands are marked with an asterisk * you must send that value continuously for 3 seconds to apply the command.
- Commands marked with two asterisks ** trigger a function once. If you want to repeat that function, you must stop sending that DMX value and then resend it. All other commands toggle the function on/off.
- Commands printed in **bold type** are the default settings.

Channel	Command	DMX range	Percent	Default DMX	Fade
Channel depends on DMX mode	Idle	0-35	0-13.7%	0	Snap
	Compatibility Off*	16-20	6.3-7.8%		
	No function	21-25	8.2-9.8%		
	Compatibility X-PAR 8Z*	26-30	10.2-11.8%		
	No function	31-35	12.2-13.7%		
	Color mode RGB HO (calibrated)*	36-40	14.0-15.6%		
	Color mode RGB HQ (calibrated)*	41-45	16.0-17.6%		
	Color mode RGBL*	46-50	18.0-19.6%		
	No function	51-55	20.0-21.6%		
	Dimming speed Smooth*	56-60	22.0-23.5%		
	Dimming speed Fast*	61-65	23.9-25.5%		
	Dimming speed Snap*	66-70	25.9-27.5%		
	Dimming curve Linear*	71-75	27.8-29.4%		
	Dimming curve Theatrical*	76-80	29.8-31.4%		
	Dimming curve Square Law*	81-85	31.8-33.3%		
	Dimming curve Inverse Square Law*	86-90	33.7-35.3%		
	No Function	91-95	35.7-37.3%		
	No DMX Hold scene*	96-100	37.6-39.2%		
	No DMX Go to Blackout*	101-105	39.6-41.2%		
	No DMX Play captured scene*	106-110	41.6-43.1%		
	No function	111-115	43.5-45.1%		
	Display backlight Auto*	116-120	45.5-47.1%		
	Display backlight On*	121-125	47.5-49.0%		
	Display backlight Off*	126-130	49.4-51.2%		
	Save settings Preset 1* **	131-135	51.4-52.9%		
	Save settings Preset 2* **	136-140	53.3-54.9%		
	Save settings Preset 3* **	141-145	55.3-56.9%		
	Load settings Preset 1* **	146-150	57.3-58.8%		
	Load settings Preset 2* **	151-155	59.2-60.8%		
	Load settings Preset 3* **	156-160	61.2-62.7%		
	Load settings Defaults* **	161-165	63.1-64.7%		
	Zoom invert On*	166-170	65.1-66.7%		
	Zoom Invert Off*	171-175	67.1-68.5%		
	Zoom reset* **	176-180	69.0-70.5%		
	Fixture reset* **	181-185	71.0-72.5%		
	Zoom speed Normal*	186-190	72.9-74.5%		

Channel	Command	DMX range	Percent	Default DMX	Fade
	Zoom speed Fast*	191-195	74.9-76.2%		
	PWM frequency 600 Hz*	196-200	76.9-78.4%		
	PWM frequency 1200 Hz*	201-205	78.8-80.4%		
	PWM frequency 2200 Hz*	206-210	80.8-82.4%		
	PWM frequency 3000 Hz*	211-215	82.7-84.3%		
	PWM frequency 4800 Hz*	216-220	84.7-86.3%		
	PWM frequency 9600 Hz*	221-225	86.7-88.2%		
	PWM frequency 25 kHz*	226-230	88.6-90.2%		
	No function	231-250	90.6-98.0%		
	Fixture reset* **	251-255	98.4-100%		

DMX Mode 1: Basic

8 DMX Channels

Channel	Command	DMX range	Percent	Default DMX	Fade	
1	Master Dimmer	Intensity 0-100%	0-255	0-100%	0	Fade
2	Shutter	Closed	0-4	0-1.6%	255	Snap
		Single Flash when value changes	5-9	1.9-3.5%		Snap
		Sync Ramp Up slow→fast	10-39	3.9-15.3%		Fade
		Sync Ramp Down slow→fast	40-69	15.7-27%		Fade
		Sync Ramp Up-down slow→fast	70-99	27.4-38.9%		Fade
		Sync Double Flash slow→fast	100-129	39.2-50.6%		Fade
		Random Strobe slow→fast	130-159	51-62%		Fade
		Sync Strobe 1 Hz-10 Hz	160-239	62.8-93.7%		Fade
		Open	251-255	98.4-100%		Snap
3	Zoom	Beam angle narrow→wide	0-255	0-100%	0	Fade
4	Control / Settings – see separate table on page 5					
5	Red	Intensity 0-100%	0-255	0-100%	0	Fade
6	Green	Intensity 0-100%	0-255	0-100%	0	Fade
7	Blue	Intensity 0-100%	0-255	0-100%	0	Fade
8	Lime	Intensity 0-100%	0-255	0-100%	0	Fade

Note: Channel 8 has no effect unless Fixture Settings → Color Mode is set to RGBL

DMX Mode 2: Standard

11 DMX Channels

Channel	Command	DMX range	Percent	Default DMX	Fade	
1	Master Dimmer	Intensity 0-100%	0-255	0-100%	0	Fade
2	Shutter	Closed	0-4	0-1.6%	255	Snap
		Single Flash when value changes	5-9	1.9-3.5%		Snap
		Sync Ramp Up slow→fast	10-39	3.9-15.3%		Fade
		Sync Ramp Down slow→fast	40-69	15.7-27%		Fade
		Sync Ramp Up-down slow→fast	70-99	27.4-38.9%		Fade
		Sync Double Flash slow→fast	100-129	39.2-50.6%		Fade
		Random Strobe slow→fast	130-359	51-62%		Fade
		Sync Strobe 1 Hz-10 Hz	160-239	62.8-93.7%		Fade
		Open	251-255	98.4-100%		Snap
3	Zoom	Beam angle narrow→wide	0-255	0-100%	0	Fade
4	Control / Settings – see separate table on page 5					
5	Red	Intensity 0-100%	0-255	0-100%	0	Fade
6	Green	Intensity 0-100%	0-255	0-100%	0	Fade
7	Blue	Intensity 0-100%	0-255	0-100%	0	Fade
8	Lime	Intensity 0-100%	0-255	0-100%	0	Fade
9	Color Wheel	Open (set color on channels 5-8)	0-3	0-1.2%	0	Snap
		Preset 3200 K	4-6	1.6-2.4%		
		Preset 4200 K	7-9	2.7-3.5%		
		Preset 5600 K	10-12	3.9-4.7%		
		Preset 6500 K	13-15	5.1-5.9%		
		Filter 004 (Medium Bastard Amber)	16-18	6.3-7.1%		
		Filter 019 (Fire)	19-21	7.5-8.2%		
		Filter 025 (Sunset Red)	22-24	8.6-9.4%		
		Filter 026 (Bright Red)	25-27	9.8-10.6%		
		Filter 036 (Medium Pink)	28-30	11-11.8%		
		Filter 049 (Medium Purple)	31-33	12.2-12.9%		
		Filter 058 (Lavender)	34-36	13.3-14.1%		
		Filter 068 (Sky Blue)	37-39	14.5-15.3%		
		Filter 088 (Lime Green)	40-42	15.7-16.5%		
		Filter 089 (Moss Green)	43-45	16.9-17.6%		
		Filter 090 (Dark Yellow Green)	46-48	18-18.8%		
		Filter 102 (Light Amber)	49-51	19.2-20%		
		Filter 103 (Straw)	52-54	20.4-21.2%		
		Filter 106 (Primary Red)	55-57	21.6-22.4%		
		Filter 111 (Dark Pink)	58-60	22.7-23.5%		
		Filter 115 (Peacock Blue)	61-63	23.9-24.7%		
		Filter 117 (Steel Blue)	64-66	25.1-25.9%		
		Filter 118 (Light Blue)	67-69	26.3-27.1%		
		Filter 121 (Filter Green)	70-72	27.5-28.2%		
		Filter 122 (Fern Green)	73-75	28.6-29.4%		
		Filter 124 (Dark Green)	76-78	29.8-30.6%		
		Filter 126 (Mauve)	79-81	31-31.8%		
		Filter 128 (Bright Pink)	82-84	32.2-32.9%		
		Filter 131 (Marine Blue)	85-87	33.3-34.1%		
		Filter 132 (Medium Blue)	88-90	34.5-35.3%		
Filter 134 (Golden Amber)	91-93	35.7-36.5%				
Filter 135 (Deep Golden Amber)	94-96	36.9-37.6%				
Filter 136 (Pale Lavender)	97-99	38-38.8%				

Channel	Command	DMX range	Percent	Default DMX	Fade	
	Filter 137 (Special Lavender)	100-102	39.2-40%			
	Filter 138 (Pale Green)	103-105	40.4-41.2%			
	Filter 140 (Summer Blue)	106-108	41.6-42.4%			
	Filter 141 (Bright Blue)	109-111	42.7-43.5%			
	Filter 143 (Pale Navy Blue)	112-114	43.9-44.7%			
	Filter 147 (Apricot)	115-117	45.1-45.9%			
	Filter 148 (Bright Rose)	118-120	46.3-47.1%			
	Filter 152 (Pale Gold)	121-123	47.5-48.2%			
	Filter 154 (Pale Rose)	124-126	48.6-49.4%			
	Filter 157 (Pink)	127-129	49.8-50.6%			
	Filter 162 (Bastard Amber)	130-132	51-51.8%			
	Filter 164 (Flame Red)	133-135	52.2-52.9%			
	Filter 165 (Daylight Blue)	136-138	53.3-54.1%			
	Filter 169 (Lilac Tint)	139-141	54.5-55.3%			
	Filter 170 (Deep Lavender)	142-144	55.7-56.5%			
	Filter 172 (Lagoon Blue)	145-147	56.9-57.6%			
	Filter 180 (Dark Lavender)	148-150	58-58.8%			
	Filter 182 (Light Red)	151-153	59.2-60%			
	Filter 194 (Surprise Pink)	154-156	60.4-61.2%			
	Filter 197 (Alice Blue)	157-159	61.6-62.4%			
	Filter 201 (Full C.T. Blue)	160-162	62.7-63.5%			
	Filter 202 (Half C.T. Blue)	163-165	63.9-64.7%			
	Filter 203 (Quarter C.T. Blue)	166-168	65.1-65.9%			
	Filter 204 (Full C.T. Orange)	169-171	66.3-67.1%			
	Filter 206 (Quarter C.T. Orange)	172-174	67.5-68.2%			
	Filter 219 (Fluorescent Green)	175-177	68.6-69.4%			
	Filter 247 (Filter Minus Green)	178-180	69.8-70.6%			
	Filter 248 (Half Minus Green)	181-183	71-71.8%			
	Filter 281 (Three Quarter C.T. Blue)	184-186	72.2-72.9%			
	Filter 285 (Three Quarter C.T. Orange)	187-189	73.3-74.1%			
	Filter 352 (Glacier Blue)	190-192	74.5-75.3%			
	Filter 353 (Lighter Blue)	193-195	75.7-76.5%			
	Filter 507 (Madge)	196-198	76.9-77.6%			
	Filter 778 (Millennium Gold)	199-201	78-78.8%			
	Filter 793 (Vanity Fair)	202-204	79.2-80%			
	Filter 798 (Chrysalis Pink)	205-207	80.4-81.2%			
	Rainbow stop at first color	208-210	81.6-82.4%			
	Rainbow slow→fast	211-252	82.7-98.8%			
	Rainbow stop at current color	253-255	99.2-100%			
10	CTC	Open (default color temperature)	0-15	0-5.9%	0	Snap
		10000 K	16-18	6.3-7.1%		
		9900 K	19-21	7.5-8.2%		
		9800 K	22-24	8.6-9.4%		
		9700 K	25-27	9.8-10.6%		
		9600 K	28-30	11-11.8%		
		9500 K	31-33	12.2-12.9%		
		9400 K	34-36	13.3-14.1%		
		9300 K	37-39	14.5-15.3%		
		9200 K	40-42	15.7-16.5%		
		9100 K	43-45	16.9-17.6%		
		9000 K	46-48	18-18.8%		
		8900 K	49-51	19.2-20%		
		8800 K	52-54	20.4-21.2%		
		8700 K	55-57	21.6-22.4%		

Channel	Command	DMX range	Percent	Default DMX	Fade
	8600 K	58-60	22.7-23.5%		
	8500 K	61-63	23.9-24.7%		
	8400 K	64-66	25.1-25.9%		
	8300 K	67-69	26.3-27.1%		
	8200 K	70-72	27.5-28.2%		
	8100 K	73-75	28.6-29.4%		
	8000 K	76-78	29.8-30.6%		
	7900 K	79-81	31-31.8%		
	7800 K	82-84	32.2-32.9%		
	7700 K	85-87	33.3-34.1%		
	7600 K	88-90	34.5-35.3%		
	7500 K	91-93	35.7-36.5%		
	7400 K	94-96	36.9-37.6%		
	7300 K	97-99	38-38.8%		
	7200 K	100-102	39.2-40%		
	7100 K	103-105	40.4-41.2%		
	7000 K	106-108	41.6-42.4%		
	6900 K	109-111	42.7-43.5%		
	6800 K	112-114	43.9-44.7%		
	6700 K	115-117	45.1-45.9%		
	6600 K	118-120	46.3-47.1%		
	6500 K	121-123	47.5-48.2%		
	6400 K	124-126	48.6-49.4%		
	6300 K	127-129	49.8-50.6%		
	6200 K	130-132	51-51.8%		
	6100 K	133-135	52.2-52.9%		
	6000 K	136-138	53.3-54.1%		
	5900 K	139-141	54.5-55.3%		
	5800 K	142-144	55.7-56.5%		
	5700 K	145-147	56.9-57.6%		
	5600 K	148-150	58-58.8%		
	5500 K	151-153	59.2-60%		
	5400 K	154-156	60.4-61.2%		
	5300 K	157-159	61.6-62.4%		
	5200 K	160-162	62.7-63.5%		
	5100 K	163-165	63.9-64.7%		
	5000 K	166-168	65.1-65.9%		
	4900 K	169-171	66.3-67.1%		
	4800 K	172-174	67.5-68.2%		
	4700 K	175-177	68.6-69.4%		
	4600 K	178-180	69.8-70.6%		
	4500 K	181-183	71-71.8%		
	4400 K	184-186	72.2-72.9%		
	4300 K	187-189	73.3-74.1%		
	4200 K	190-192	74.5-75.3%		
	4100 K	193-195	75.7-76.5%		
	4000 K	196-198	76.9-77.6%		
	3900 K	199-201	78-78.8%		
	3800 K	202-204	79.2-80%		
	3700 K	205-207	80.4-81.2%		
	3600 K	208-210	81.6-82.4%		
	3500 K	211-213	82.7-83.5%		
	3400 K	214-216	83.9-84.7%		
	3300 K	217-219	85.1-85.9%		

Channel		Command	DMX range	Percent	Default DMX	Fade
		3200 K	220-222	86.3-87.1%		
		3100 K	223-225	87.5-88.2%		
		3000 K	226-228	88.6-89.4%		
		2900 K	229-231	89.8-90.6%		
		2800 K	232-234	91-91.8%		
		2700 K	235-237	92.2-92.9%		
		2600 K	238-240	93.3-94.1%		
		2500 K	241-255	94.5-100%		
11	M/G Shift	Off (no effect)	0-9	0-3.5%	0	Snap
		Full Plus Magenta +100%	10	3.9%		Fade
		Plus Magenta +99% → + 1%	11-124	4.3-48.6%		
		Neutral / no effect	125-140	49-54.9%		Snap
		Plus Green +1% → +99%	141-254	55.3-99.6%		Fade
		Full Plus Green +100%	255-255	100-100%		Snap

Notes: Channels 5-8 have no effect unless Channel 9 is set between 0-3.
 Channel 8 has no effect unless Fixture Settings → Color Mode is set to RGBL

DMX Mode 3: Advanced

16 DMX Channels

Channel	Command	DMX range	Percent	Default DMX	Fade	
1	Master Dimmer Coarse	Intensity 0-100% (16-bit)	0-655355	0-100%	0	Fade
2	Master Dimmer Fine					
3	Shutter	Closed	0-4	0-1.6%	255	Snap
	Single Flash when value changes	5-9	1.9-3.5%	Snap		
	Sync Ramp Up slow→fast	10-39	3.9-15.3%	Fade		
	Sync Ramp Down slow→fast	40-69	15.7-27%	Fade		
	Sync Ramp Up-down slow→fast	70-99	27.4-38.9%	Fade		
	Sync Double Flash slow→fast	100-129	39.2-50.6%	Fade		
	Random Strobe slow→fast	130-359	51-62%	Fade		
	Sync Strobe 1 Hz-10 Hz	160-239	62.8-93.7%	Fade		
4	Zoom	Open	251-255	98.4-100%	0	Snap
5	Control / Settings – see separate table on page 5					
6	Red	Intensity 0-100% (16-bit)	0-65535	0-100%	0	Fade
7	Red Fine					
8	Green	Intensity 0-100% (16-bit)	0-65535	0-100%	0	Fade
9	Green fine					
10	Blue	Intensity 0-100% (16-bit)	0-65535	0-100%	0	Fade
11	Blue fine					
12	Lime	Intensity 0-100% (16-bit)	0-65535	0-100%	0	Fade
13	Lime fine					
14	Color Wheel	Open (set color on channels 6-13)	0-3	0-1.2%	0	Snap
		Preset 3200 K	4-6	1.6-2.4%		
		Preset 4200 K	7-9	2.7-3.5%		
		Preset 5600 K	10-12	3.9-4.7%		
		Preset 6500 K	13-15	5.1-5.9%		
		Filter 004 (Medium Bastard Amber)	16-18	6.3-7.1%		
		Filter 019 (Fire)	19-21	7.5-8.2%		
		Filter 025 (Sunset Red)	22-24	8.6-9.4%		
		Filter 026 (Bright Red)	25-27	9.8-10.6%		
		Filter 036 (Medium Pink)	28-30	11-11.8%		
		Filter 049 (Medium Purple)	31-33	12.2-12.9%		
		Filter 058 (Lavender)	34-36	13.3-14.1%		
		Filter 068 (Sky Blue)	37-39	14.5-15.3%		
		Filter 088 (Lime Green)	40-42	15.7-16.5%		
		Filter 089 (Moss Green)	43-45	16.9-17.6%		
		Filter 090 (Dark Yellow Green)	46-48	18-18.8%		
		Filter 102 (Light Amber)	49-51	19.2-20%		
		Filter 103 (Straw)	52-54	20.4-21.2%		
		Filter 106 (Primary Red)	55-57	21.6-22.4%		
		Filter 111 (Dark Pink)	58-60	22.7-23.5%		
Filter 115 (Peacock Blue)	61-63	23.9-24.7%				
Filter 117 (Steel Blue)	64-66	25.1-25.9%				
Filter 118 (Light Blue)	67-69	26.3-27.1%				
Filter 121 (Filter Green)	70-72	27.5-28.2%				
Filter 122 (Fern Green)	73-75	28.6-29.4%				
Filter 124 (Dark Green)	76-78	29.8-30.6%				

Channel	Command	DMX range	Percent	Default DMX	Fade	
	Filter 126 (Mauve)	79-81	31-31.8%			
	Filter 128 (Bright Pink)	82-84	32.2-32.9%			
	Filter 131 (Marine Blue)	85-87	33.3-34.1%			
	Filter 132 (Medium Blue)	88-90	34.5-35.3%			
	Filter 134 (Golden Amber)	91-93	35.7-36.5%			
	Filter 135 (Deep Golden Amber)	94-96	36.9-37.6%			
	Filter 136 (Pale Lavender)	97-99	38-38.8%			
	Filter 137 (Special Lavender)	100-102	39.2-40%			
	Filter 138 (Pale Green)	103-105	40.4-41.2%			
	Filter 140 (Summer Blue)	106-108	41.6-42.4%			
	Filter 141 (Bright Blue)	109-111	42.7-43.5%			
	Filter 143 (Pale Navy Blue)	112-114	43.9-44.7%			
	Filter 147 (Apricot)	115-117	45.1-45.9%			
	Filter 148 (Bright Rose)	118-120	46.3-47.1%			
	Filter 152 (Pale Gold)	121-123	47.5-48.2%			
	Filter 154 (Pale Rose)	124-126	48.6-49.4%			
	Filter 157 (Pink)	127-129	49.8-50.6%			
	Filter 162 (Bastard Amber)	130-132	51-51.8%			
	Filter 164 (Flame Red)	133-135	52.2-52.9%			
	Filter 165 (Daylight Blue)	136-138	53.3-54.1%			
	Filter 169 (Lilac Tint)	139-141	54.5-55.3%			
	Filter 170 (Deep Lavender)	142-144	55.7-56.5%			
	Filter 172 (Lagoon Blue)	145-147	56.9-57.6%			
	Filter 180 (Dark Lavender)	148-150	58-58.8%			
	Filter 182 (Light Red)	151-153	59.2-60%			
	Filter 194 (Surprise Pink)	154-156	60.4-61.2%			
	Filter 197 (Alice Blue)	157-159	61.6-62.4%			
	Filter 201 (Full C.T. Blue)	160-162	62.7-63.5%			
	Filter 202 (Half C.T. Blue)	163-165	63.9-64.7%			
	Filter 203 (Quarter C.T. Blue)	166-168	65.1-65.9%			
	Filter 204 (Full C.T. Orange)	169-171	66.3-67.1%			
	Filter 206 (Quarter C.T. Orange)	172-174	67.5-68.2%			
	Filter 219 (Fluorescent Green)	175-177	68.6-69.4%			
	Filter 247 (Filter Minus Green)	178-180	69.8-70.6%			
	Filter 248 (Half Minus Green)	181-183	71-71.8%			
	Filter 281 (Three Quarter C.T. Blue)	184-186	72.2-72.9%			
	Filter 285 (Three Quarter C.T. Orange)	187-189	73.3-74.1%			
	Filter 352 (Glacier Blue)	190-192	74.5-75.3%			
	Filter 353 (Lighter Blue)	193-195	75.7-76.5%			
	Filter 507 (Madge)	196-198	76.9-77.6%			
	Filter 778 (Millennium Gold)	199-201	78-78.8%			
	Filter 793 (Vanity Fair)	202-204	79.2-80%			
	Filter 798 (Chrysalis Pink)	205-207	80.4-81.2%			
	Rainbow stop at first color	208-210	81.6-82.4%			
	Rainbow slow→fast	211-252	82.7-98.8%			
	Rainbow stop at current color	253-255	99.2-100%			
15	CTC	Open (default color temperature)	0-15	0-5.9%	0	Snap
		10000 K	16-18	6.3-7.1%		
		9900 K	19-21	7.5-8.2%		
		9800 K	22-24	8.6-9.4%		
		9700 K	25-27	9.8-10.6%		
		9600 K	28-30	11-11.8%		
		9500 K	31-33	12.2-12.9%		
		9400 K	34-36	13.3-14.1%		

Channel	Command	DMX range	Percent	Default DMX	Fade
	9300 K	37-39	14.5-15.3%		
	9200 K	40-42	15.7-16.5%		
	9100 K	43-45	16.9-17.6%		
	9000 K	46-48	18-18.8%		
	8900 K	49-51	19.2-20%		
	8800 K	52-54	20.4-21.2%		
	8700 K	55-57	21.6-22.4%		
	8600 K	58-60	22.7-23.5%		
	8500 K	61-63	23.9-24.7%		
	8400 K	64-66	25.1-25.9%		
	8300 K	67-69	26.3-27.1%		
	8200 K	70-72	27.5-28.2%		
	8100 K	73-75	28.6-29.4%		
	8000 K	76-78	29.8-30.6%		
	7900 K	79-81	31-31.8%		
	7800 K	82-84	32.2-32.9%		
	7700 K	85-87	33.3-34.1%		
	7600 K	88-90	34.5-35.3%		
	7500 K	91-93	35.7-36.5%		
	7400 K	94-96	36.9-37.6%		
	7300 K	97-99	38-38.8%		
	7200 K	100-102	39.2-40%		
	7100 K	103-105	40.4-41.2%		
	7000 K	106-108	41.6-42.4%		
	6900 K	109-111	42.7-43.5%		
	6800 K	112-114	43.9-44.7%		
	6700 K	115-117	45.1-45.9%		
	6600 K	118-120	46.3-47.1%		
	6500 K	121-123	47.5-48.2%		
	6400 K	124-126	48.6-49.4%		
	6300 K	127-129	49.8-50.6%		
	6200 K	130-132	51-51.8%		
	6100 K	133-135	52.2-52.9%		
	6000 K	136-138	53.3-54.1%		
	5900 K	139-141	54.5-55.3%		
	5800 K	142-144	55.7-56.5%		
	5700 K	145-147	56.9-57.6%		
	5600 K	148-150	58-58.8%		
	5500 K	151-153	59.2-60%		
	5400 K	154-156	60.4-61.2%		
	5300 K	157-159	61.6-62.4%		
	5200 K	160-162	62.7-63.5%		
	5100 K	163-165	63.9-64.7%		
	5000 K	166-168	65.1-65.9%		
	4900 K	169-171	66.3-67.1%		
	4800 K	172-174	67.5-68.2%		
	4700 K	175-177	68.6-69.4%		
	4600 K	178-180	69.8-70.6%		
	4500 K	181-183	71-71.8%		
	4400 K	184-186	72.2-72.9%		
	4300 K	187-189	73.3-74.1%		
	4200 K	190-192	74.5-75.3%		
	4100 K	193-195	75.7-76.5%		
	4000 K	196-198	76.9-77.6%		

Channel	Command	DMX range	Percent	Default DMX	Fade	
	3900 K	199-201	78-78.8%			
	3800 K	202-204	79.2-80%			
	3700 K	205-207	80.4-81.2%			
	3600 K	208-210	81.6-82.4%			
	3500 K	211-213	82.7-83.5%			
	3400 K	214-216	83.9-84.7%			
	3300 K	217-219	85.1-85.9%			
	3200 K	220-222	86.3-87.1%			
	3100 K	223-225	87.5-88.2%			
	3000 K	226-228	88.6-89.4%			
	2900 K	229-231	89.8-90.6%			
	2800 K	232-234	91-91.8%			
	2700 K	235-237	92.2-92.9%			
	2600 K	238-240	93.3-94.1%			
	2500 K	241-255	94.5-100%			
16	M/G Shift	Off (no effect)	0-9	0-3.5%	0	Snap
		Full Plus Magenta +100%	10-10	3.9-3.9%		Fade
		Plus Magenta +99% → + 1%	11-124	4.3-48.6%		Snap
		Neutral / no effect	125-140	49-54.9%		Fade
		Plus Green +1% → +99%	141-254	55.3-99.6%		Snap
		Full Plus Green +100%	255-255	100-100%		Snap

Notes: Channels 6-13 have no effect unless Channel 14 is set to 0-3.
 Channels 12-13 have no effect unless Fixture Settings → Color Mode is set to RGBL

DMX Mode 4: RGB(L)

6 DMX Channels

Channel	Command	DMX range	Percent	Default DMX	Fade	
1	Zoom	Beam angle narrow→wide	0-255	0-100%	0	Fade
2	Control / Settings	No function	0-35	0-13.7%	0	Snap
3	Red	Intensity 0-100%	0-255	0-100%	0	Fade
4	Green	Intensity 0-100%	0-255	0-100%	0	Fade
5	Blue	Intensity 0-100%	0-255	0-100%	0	Fade
6	Lime	Intensity 0-100%	0-255	0-100%	0	Fade

Note: Channel 6 has no effect unless Fixture Settings → Color Mode is set to RGBL

DMX Mode 5: White

6 DMX Channels

Channel	Command	DMX range	Percent	Default DMX	Fade	
1	Master Dimmer	Intensity 0-100%	0-255	0-100%	0	Fade
2	Shutter	Closed	0-4	0-1.6%	255	Snap
		Single Flash when value changes	5-9	1.9-3.5%		Snap
		Sync Ramp Up slow→fast	10-39	3.9-15.3%		Fade
		Sync Ramp Down slow→fast	40-69	15.7-27%		Fade
		Sync Ramp Up-down slow→fast	70-99	27.4-38.9%		Fade
		Sync Double Flash slow→fast	100-129	39.2-50.6%		Fade
		Random Strobe slow→fast	130-359	51-62%		Fade
		Sync Strobe 1 Hz-10 Hz	160-239	62.8-93.7%		Fade
		Open	251-255	98.4-100%		Snap
3	Zoom	Beam angle narrow→wide	0-255	0-100%	0	Fade
4	Control / Settings – see separate table on page 5					
5	CTC	Open (default color temperature)	0-15	0-5.9%	0	Snap
		10000 K	16-18	6.3-7.1%		
		9900 K	19-21	7.5-8.2%		
		9800 K	22-24	8.6-9.4%		
		9700 K	25-27	9.8-10.6%		
		9600 K	28-30	11-11.8%		
		9500 K	31-33	12.2-12.9%		
		9400 K	34-36	13.3-14.1%		
		9300 K	37-39	14.5-15.3%		
		9200 K	40-42	15.7-16.5%		
		9100 K	43-45	16.9-17.6%		
		9000 K	46-48	18-18.8%		
		8900 K	49-51	19.2-20%		
		8800 K	52-54	20.4-21.2%		
		8700 K	55-57	21.6-22.4%		
		8600 K	58-60	22.7-23.5%		
		8500 K	61-63	23.9-24.7%		
		8400 K	64-66	25.1-25.9%		
		8300 K	67-69	26.3-27.1%		
		8200 K	70-72	27.5-28.2%		
		8100 K	73-75	28.6-29.4%		
		8000 K	76-78	29.8-30.6%		
		7900 K	79-81	31-31.8%		
		7800 K	82-84	32.2-32.9%		
		7700 K	85-87	33.3-34.1%		
		7600 K	88-90	34.5-35.3%		
		7500 K	91-93	35.7-36.5%		
7400 K	94-96	36.9-37.6%				
7300 K	97-99	38-38.8%				
7200 K	100-102	39.2-40%				
7100 K	103-105	40.4-41.2%				
7000 K	106-108	41.6-42.4%				
6900 K	109-111	42.7-43.5%				
6800 K	112-114	43.9-44.7%				
6700 K	115-117	45.1-45.9%				
6600 K	118-120	46.3-47.1%				
6500 K	121-123	47.5-48.2%				

Channel	Command	DMX range	Percent	Default DMX	Fade	
	6400 K	124-126	48.6-49.4%			
	6300 K	127-129	49.8-50.6%			
	6200 K	130-132	51-51.8%			
	6100 K	133-135	52.2-52.9%			
	6000 K	136-138	53.3-54.1%			
	5900 K	139-141	54.5-55.3%			
	5800 K	142-144	55.7-56.5%			
	5700 K	145-147	56.9-57.6%			
	5600 K	148-150	58-58.8%			
	5500 K	151-153	59.2-60%			
	5400 K	154-156	60.4-61.2%			
	5300 K	157-159	61.6-62.4%			
	5200 K	160-162	62.7-63.5%			
	5100 K	163-165	63.9-64.7%			
	5000 K	166-168	65.1-65.9%			
	4900 K	169-171	66.3-67.1%			
	4800 K	172-174	67.5-68.2%			
	4700 K	175-177	68.6-69.4%			
	4600 K	178-180	69.8-70.6%			
	4500 K	181-183	71-71.8%			
	4400 K	184-186	72.2-72.9%			
	4300 K	187-189	73.3-74.1%			
	4200 K	190-192	74.5-75.3%			
	4100 K	193-195	75.7-76.5%			
	4000 K	196-198	76.9-77.6%			
	3900 K	199-201	78-78.8%			
	3800 K	202-204	79.2-80%			
	3700 K	205-207	80.4-81.2%			
	3600 K	208-210	81.6-82.4%			
	3500 K	211-213	82.7-83.5%			
	3400 K	214-216	83.9-84.7%			
	3300 K	217-219	85.1-85.9%			
	3200 K	220-222	86.3-87.1%			
	3100 K	223-225	87.5-88.2%			
	3000 K	226-228	88.6-89.4%			
	2900 K	229-231	89.8-90.6%			
	2800 K	232-234	91-91.8%			
	2700 K	235-237	92.2-92.9%			
	2600 K	238-240	93.3-94.1%			
	2500 K	241-255	94.5-100%			
6	M/G Shift	Off (no effect)	0-9	0-3.5%	0	Snap
		Full Plus Magenta +100%	10	3.9%		
		Plus Magenta +99% → + 1%	11-124	4.3-48.6%		Fade
		Neutral / no effect	125-140	49-54.9%		Snap
		Plus Green +1% → +99%	141-254	55.3-99.6%		Fade
		Full Plus Green +100%	255-255	100-100%		Snap

DMX Mode 6: Easy

4 DMX Channels

Channel	Command	DMX range	Percent	Default DMX	Fade
1	Master Dimmer	Intensity 0-100%	0-255	0-100%	0 Fade
2	Zoom	Beam angle narrow→wide	0-255	0-100%	0 Fade
3	Control / Settings – see separate table on page 5				
4	Color Wheel	Open (default color temperature)	0-3	0-1.2%	0 Snap
		Preset 3200 K	4-6	1.6-2.4%	
		Preset 4200 K	7-9	2.7-3.5%	
		Preset 5600 K	10-12	3.9-4.7%	
		Preset 6500 K	13-15	5.1-5.9%	
		Filter 004 (Medium Bastard Amber)	16-18	6.3-7.1%	
		Filter 019 (Fire)	19-21	7.5-8.2%	
		Filter 025 (Sunset Red)	22-24	8.6-9.4%	
		Filter 026 (Bright Red)	25-27	9.8-10.6%	
		Filter 036 (Medium Pink)	28-30	11-11.8%	
		Filter 049 (Medium Purple)	31-33	12.2-12.9%	
		Filter 058 (Lavender)	34-36	13.3-14.1%	
		Filter 068 (Sky Blue)	37-39	14.5-15.3%	
		Filter 088 (Lime Green)	40-42	15.7-16.5%	
		Filter 089 (Moss Green)	43-45	16.9-17.6%	
		Filter 090 (Dark Yellow Green)	46-48	18-18.8%	
		Filter 102 (Light Amber)	49-51	19.2-20%	
		Filter 103 (Straw)	52-54	20.4-21.2%	
		Filter 106 (Primary Red)	55-57	21.6-22.4%	
		Filter 111 (Dark Pink)	58-60	22.7-23.5%	
		Filter 115 (Peacock Blue)	61-63	23.9-24.7%	
		Filter 117 (Steel Blue)	64-66	25.1-25.9%	
		Filter 118 (Light Blue)	67-69	26.3-27.1%	
		Filter 121 (Filter Green)	70-72	27.5-28.2%	
		Filter 122 (Fern Green)	73-75	28.6-29.4%	
		Filter 124 (Dark Green)	76-78	29.8-30.6%	
		Filter 126 (Mauve)	79-81	31-31.8%	
		Filter 128 (Bright Pink)	82-84	32.2-32.9%	
		Filter 131 (Marine Blue)	85-87	33.3-34.1%	
		Filter 132 (Medium Blue)	88-90	34.5-35.3%	
		Filter 134 (Golden Amber)	91-93	35.7-36.5%	
		Filter 135 (Deep Golden Amber)	94-96	36.9-37.6%	
Filter 136 (Pale Lavender)	97-99	38-38.8%			
Filter 137 (Special Lavender)	100-102	39.2-40%			
Filter 138 (Pale Green)	103-105	40.4-41.2%			
Filter 140 (Summer Blue)	106-108	41.6-42.4%			
Filter 141 (Bright Blue)	109-111	42.7-43.5%			
Filter 143 (Pale Navy Blue)	112-114	43.9-44.7%			
Filter 147 (Apricot)	115-117	45.1-45.9%			
Filter 148 (Bright Rose)	118-120	46.3-47.1%			
Filter 152 (Pale Gold)	121-123	47.5-48.2%			
Filter 154 (Pale Rose)	124-126	48.6-49.4%			
Filter 157 (Pink)	127-129	49.8-50.6%			
Filter 162 (Bastard Amber)	130-132	51-51.8%			
Filter 164 (Flame Red)	133-135	52.2-52.9%			
Filter 165 (Daylight Blue)	136-138	53.3-54.1%			

Channel	Command	DMX range	Percent	Default DMX	Fade
	Filter 169 (Lilac Tint)	139-141	54.5-55.3%		
	Filter 170 (Deep Lavender)	142-144	55.7-56.5%		
	Filter 172 (Lagoon Blue)	145-147	56.9-57.6%		
	Filter 180 (Dark Lavender)	148-150	58-58.8%		
	Filter 182 (Light Red)	151-153	59.2-60%		
	Filter 194 (Surprise Pink)	154-156	60.4-61.2%		
	Filter 197 (Alice Blue)	157-159	61.6-62.4%		
	Filter 201 (Full C.T. Blue)	160-162	62.7-63.5%		
	Filter 202 (Half C.T. Blue)	163-165	63.9-64.7%		
	Filter 203 (Quarter C.T. Blue)	166-168	65.1-65.9%		
	Filter 204 (Full C.T. Orange)	169-171	66.3-67.1%		
	Filter 206 (Quarter C.T. Orange)	172-174	67.5-68.2%		
	Filter 219 (Fluorescent Green)	175-177	68.6-69.4%		
	Filter 247 (Filter Minus Green)	178-180	69.8-70.6%		
	Filter 248 (Half Minus Green)	181-183	71-71.8%		
	Filter 281 (Three Quarter C.T. Blue)	184-186	72.2-72.9%		
	Filter 285 (Three Quarter C.T. Orange)	187-189	73.3-74.1%		
	Filter 352 (Glacier Blue)	190-192	74.5-75.3%		
	Filter 353 (Lighter Blue)	193-195	75.7-76.5%		
	Filter 507 (Madge)	196-198	76.9-77.6%		
	Filter 778 (Millennium Gold)	199-201	78-78.8%		
	Filter 793 (Vanity Fair)	202-204	79.2-80%		
	Filter 798 (Chrysalis Pink)	205-207	80.4-81.2%		
	Rainbow stop at first color	208-210	81.6-82.4%		
	Rainbow slow→fast	211-252	82.7-98.8%		
	Rainbow stop at current color	253-255	99.2-100%		

-GLP-