



OPERATING MODES

The projector has four different operating modes: Basic RGBW, Basic RGBW 16bit, Extended RGBW and Extended RGBW 16bit.

while the Extended mode has the possibility to control different section of the Leds so is possible to manage independently the colours of the external ring and the central led.

The Basic mode enable the colour control for all the Leds of fixture, while the Extended mode has the possibility to control different section of the Leds so is possible to manage independently the colours of two leds rings plus the central led.

DMX MODES

<i>DMX Mode</i>	<i>Number of Parameter</i>	<i>Colour Control</i>	<i>Notes</i>
Basic RGBW	23	RGBW 8bit	Colour control as single layer.
Basic RGBW 16bit	30	RGBW 16bit	Colour control in as single layer.
Extended RGBW (Default setting)	43	RGBW 8bit	Colour control for the central led and the two rings.
Extended RGBW 16bit	70	RGBW 16bit	Colour control for the central led and the two rings.

IMPORTANT: The Extended RGBW is the operating mode as default setting.

Basic modes DMX list

<i>DMX Parameter number</i>	<i>RGBW</i>
1	Red
2	Green
3	Blue
4	White
5	CTO
6	Macro color
7	Strobe effect
8	Dimmer
9	Dimmer fine
10	Pan
11	Pan fine
12	Tilt
13	Tilt fine
14	Zoom
15	Color Crossfade
16	Function
17	Reset
18	LED stripe strobe
19	LED stripe dimmer
20	LED stripe dimmer fine
21	LED stripe Red
22	LED stripe Green
23	LED stripe Blue

<i>DMX Parameter number</i>	<i>RGBW 16bit</i>
1	Red
2	Red fine
3	Green
4	Green fine
5	Blue
6	Blue fine
7	White
8	White fine
9	CTO
10	Macro color
11	Strobe effect
12	Dimmer
13	Dimmer fine
14	Pan
15	Pan fine
16	Tilt
17	Tilt fine
18	Zoom
19	Color Crossfade
20	Function
21	Reset
22	LED stripe strobe
23	LED stripe dimmer
24	LED stripe dimmer fine
25	LED stripe Red
26	LED stripe Red fine
27	LED stripe Green
28	LED stripe Green fine
29	LED stripe Blue
30	LED stripe Blue fine

Extended Modes DMX list

<i>DMX Parameter number</i>	<i>Extended RGBW</i>
1	Red ring 1
2	Green ring 1
3	Blue ring 1
4	White ring 1
5	Red ring 2
6	Green ring 2
7	Blue ring 2
8	White ring 2
9	Red central led
10	Green central led
11	Blue central led
12	White central led
13	CTO
14	Macro color
15	Strobe effect
16	Dimmer
17	Dimmer fine
18	Pan
19	Pan fine
20	Tilt
21	Tilt fine
22	Zoom
23	Color Crossfade
24	Function
25	Reset
26	LED stripe strobe
27	LED stripe dimmer
28	LED stripe dimmer fine
29	LED stripe Red 1
30	LED stripe Green 1
31	LED stripe Blue 1
32 to 43	LED stripe 2 to 5

<i>DMX Parameter number</i>	<i>Extended RGBW 16 bit</i>
1	Red ring 1
2	Red fine ring 1
3	Green ring 1
4	Green fine ring 1
5	Blue ring 1
6	Blue fine ring 1
7	White ring 1
8	White fine ring 1
9	Red ring 2
10 to 16	Colour control sequence for ring 2
17	Red central led
18 to 24	Colour control sequence for central Led
25	CTO
26	Macro color
27	Strobe effect
28	Dimmer
29	Dimmer fine
30	Pan
31	Pan fine
32	Tilt
33	Tilt fine
34	Zoom
35	Color Crossfade
36	Function
37	Reset
38	LED stripe strobe
39	LED stripe dimmer
40	LED stripe dimmer fine
41	LED stripe Red 1
42	LED stripe Red fine 1
43	LED stripe Green 1
44	LED stripe Green fine 1
45	LED stripe Blue 1
46	LED stripe Blue fine 1
47 to 70	LED stripe Blue 2 to 5

Function details

RGBW	RGBW 16bit	Extended RGBW	Extended RGBW 16bit	Bit Value	Function
1	1	-	-	0 - 255	RED linear 0 - 100%
-	2	-	-	0 - 255	RED FINE (16 Bit)
2	3	-	-	0 - 255	GREEN linear 0 -100%
-	4	-	-	0 - 255	GREEN FINE (16 Bit)
3	5	-	-	0 - 255	BLUE linear 0 -100%
-	6	-	-	0 - 255	BLUE FINE (16 bit)
4	7	-	-	0 - 255	WHITE linear 0 -100%
-	8	-	-	0 - 255	WHITE FINE (16 bit)
-	-	1	1	0 - 255	RED Ring 1 linear 0 -100%
-	-	-	2	0 - 255	RED FINE Ring 1 (16 Bit)
-	-	2	3	0 - 255	GREEN Ring 1 linear 0 -100%
-	-	-	4	0 - 255	GREEN FINE Ring 1 (16 Bit)
-	-	3	5	0 - 255	BLUE Ring 1 linear 0 -100%
-	-	-	6	0 - 255	BLUE FINE Ring 1 (16 Bit)
-	-	4	7	0 - 255	WHITE Ring 1 linear 0 -100%
-	-	-	8	0 - 255	WHITE FINE Ring 1 (16 Bit)
-	-	5 to 8	9 to 15	0 - 255	RGBW Ring 2 linear 0 -100% Red (5 – 9) / Green (6 – 11) / Blue (7- 13) / White (8 - 15)
-	-	-	10 to 16	0 - 255	RGBW Ring 2 FINE (16 bit) Red 10 / Green 12 / Blue 14 / White 16
-	-	9 to 12	17 to 23	0 - 255	RGBW Central led linear 0 -100% Red (9 – 17) / Green (10 – 19) / Blue (11- 21) / White (12 - 23)
-	-	-	18 to 24	0 - 255	RGBW Central led FINE (16 bit) Red 18 / Green 20 / Blue 22 / White 24

RGBW	RGBW 16bit	Extended RGBW	Extended RGBW 16bit	Bit Value	Function
5	9	13	25		CTO Colour Temperature linear control from 8000K to 2700K Important: The CTO parameter has priority on the colour functions.
				0-9	Unused range
				10 ...	8000 K
				54 ...	7000 K
				99 ...	6000 K
				117 ...	5600 K
				144 ...	5000 K
				188 ...	4000 K
				224 ...	3200 K
				255	2700 K
6	10	14	26	0 - 255	MACRO COLOR See chart page 10 for colours details. Important: The Macro Color parameter has priority on the colour functions.
7	11	15	27		STROBE EFFECT
				0 - 3	Light OFF
				4 - 103	Strobe effect linear from low (1Hz) to fast (25Hz)
				104 - 107	Light ON
				108 - 207	Pulsation linear from slow (0.5 Hz) to fast (25 Hz)
				208 - 212	Light ON
				213 - 225	Random Slow Strobe effect
				226 - 238	Random Medium Strobe effect
				239 - 251	Random Fast Strobe effect
252 - 255	Light ON				
8	12	16	28	0 - 255	DIMMER linear 0-100%
9	13	17	29	0 - 255	DIMMER FINE (16 bit)
10	14	18	30	0 - 255	PAN Pan movement/positioning <<< CCW from 0° to 540° (Invert Pan=Off; Invert Tilt=Off)
11	15	19	31	0 - 255	PAN FINE (16 Bit)
12	16	20	32	0 - 255	TILT Tilt movement/positioning >>> CW from 0° to 220° (Invert Pan=Off; Invert Tilt=Off)
13	17	21	33	0 - 255	TILT FINE (16 Bit)




RGBW	RGBW 16bit	Extended RGBW	Extended RGBW 16bit	BIT Value	Function	
14	18	22	34	0 - 255	ZOOM Zoom linearly moves from narrow to wide beam	
15	19	23	35	0 - 255	COLOR CROSSFADE Color cross fade speed control from Fast to Slow.	
16	20	24	36		FUNCTION Important: The setting are activated and saved holding the DMX level for three seconds.	
				0 - 1	Unused range	
				2 - 3	Fan Auto (Default)	
				4 - 5	Fan SLN	
				6 - 7	Fan Theatre	
				8 - 9	Fan Constant	
				10 - 11	Zoom Reposition On (Default)	
				12 - 13	Zoom Reposition Off	
				14 - 24	Fast Pan/Tilt speed (Default)	
				25 - 37	Standard Pan/Tilt speed	
				38 - 42	Dimmer curve 1 (Default)	
				43 - 47	Dimmer curve 2	
				48 - 52	Dimmer curve 3	Details at page 10
				53 - 55	Dimmer curve 4	
				56 - 57	Dimmer curve 5	
				58 - 62	Raw color channels gamma 1	Details at page 10
63 - 67	Raw color channels gamma 1.5					
68 - 72	Raw color channels gamma 2.2 (Default)					
73 - 77	Colour calibration Off (Default)					
78 - 82	Colour calibration adjustment					
83 - 167	Not used					
168-188	PWM frequency=600Hz					
189-199	PWM frequency=1200Hz					
200-210	PWM frequency=2000Hz (Default)					
211-221	PWM frequency=4000Hz					
222-232	Not used					
233-243	PWM frequency=25000Hz					
244-248	Display OFF (Default)					
249-253	Display ON					
254-255	Default function recall					
17	21	25	37		RESET Important: The reset sequence is activated passing through the unused levels range and staying in the selected reset range for 5 seconds	
				0 - 25	Unused range	
				26 - 76	Zoom Reset	
				77 - 127	Pan and Tilt Reset	
				128 - 255	Complete Rest	

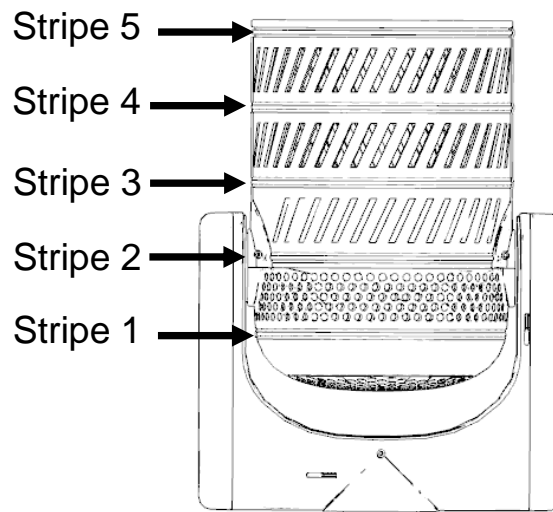
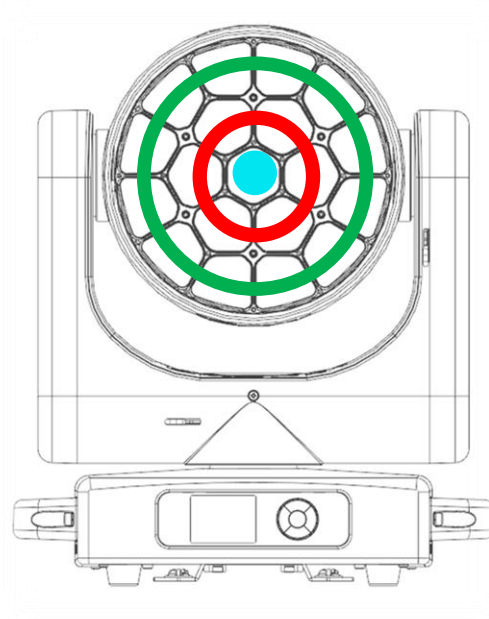
RGBW	RGBW 16bit	Extended RGBW	Extended RGBW 16bit	BIT Value	Function
18	22	26	38		STRIPE STROBE EFFECT
				0 - 3	Light OFF
				4 - 103	Strobe effect linear from low (1Hz) to fast (25Hz)
				104 - 107	Light ON
				108 - 207	Pulsation from slow (0.5 Hz) to fast (25 Hz)
				208 - 212	Light ON
				213 - 225	Random Slow Strobe effect
				226 - 238	Random Medium Strobe effect
				239 - 251	Random Fast Strobe effect
				252 - 255	Light ON
19	23	27	39	0 - 255	STRIPE DIMMER
20	24	28	40	0 - 255	STRIPE DIMMER FINE (16 bit)
21	25	-	-	0 - 255	STRIPE RED linear 0-100%
	26	-	-	0 - 255	STRIPE RED FINE (16 Bit)
22	27	-	-	0 - 255	STRIPE GREEN linear 0-100%
	28	-	-	0 - 255	STRIPE GREEN FINE (16 Bit)
23	29	-	-	0 - 255	STRIPE BLUE linear 0-100%
	30	-	-	0 - 255	STRIPE BLUE FINE (16 Bit)
		29	41	0 - 255	STRIPE RED 1 linear 0-100%
		-	42	0 - 255	STRIPE RED FINE 1 (16 Bit)
		30	43	0 - 255	STRIPE GREEN 1 linear 0-100%
		-	44	0 - 255	STRIPE GREEN FINE 1 (16 Bit)
		31	45	0 - 255	STRIPE BLUE 1 linear 0-100%
		-	46	0 - 255	STRIPE BLUE FINE 1 (16 Bit)
		32	47	0 - 255	STRIPE RED 2 linear 0-100%
		-	48	0 - 255	STRIPE RED FINE 2 (16 Bit)
		33	49	0 - 255	STRIPE GREEN 2 linear 0-100%
		-	50	0 - 255	STRIPE GREEN FINE 2 (16 Bit)
		34	51	0 - 255	STRIPE BLUE 2 linear 0-100%
		-	52	0 - 255	STRIPE BLUE FINE 2 (16 Bit)
		35	53	0 - 255	STRIPE RED 3 linear 0-100%
		-	54	0 - 255	STRIPE RED FINE 3 (16 Bit)

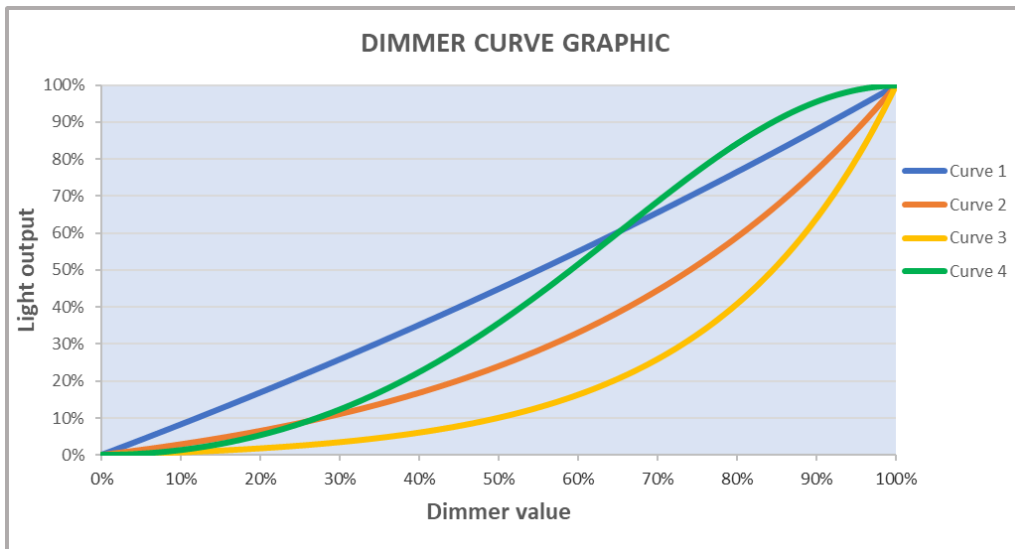
Midi B FX DMX chart

<i>RGBW</i>	<i>RGBW 16bit</i>	<i>Extended RGBW</i>	<i>Extended RGBW 16bit</i>	<i>BIT Value</i>	<i>Function</i>
		36	55	0 - 255	STRIPE GREEN 3 linear 0-100%
		-	56	0 - 255	STRIPE GREEN FINE 3 (16 Bit)
		37	57	0 - 255	STRIPE BLUE 3 linear 0-100%
		-	58	0 - 255	STRIPE BLUE FINE 3 (16 Bit)
		38	59	0 - 255	STRIPE RED 4 linear 0-100%
		-	60	0 - 255	STRIPE RED FINE 4 (16 Bit)
		39	61	0 - 255	STRIPE GREEN 4 linear 0-100%
		-	62	0 - 255	STRIPE GREEN FINE 4 (16 Bit)
		40	63	0 - 255	STRIPE BLUE 4 linear 0-100%
		-	64	0 - 255	STRIPE BLUE FINE 4 (16 Bit)
		41	65	0 - 255	STRIPE RED 5 linear 0-100%
		-	66	0 - 255	STRIPE RED FINE 5 (16 Bit)
		42	67	0 - 255	STRIPE GREEN 5 linear 0-100%
		-	68	0 - 255	STRIPE GREEN FINE 5 (16 Bit)
		43	69	0 - 255	STRIPE BLUE 5 linear 0-100%
		-	70	0 - 255	STRIPE BLUE FINE 5 (16 Bit)

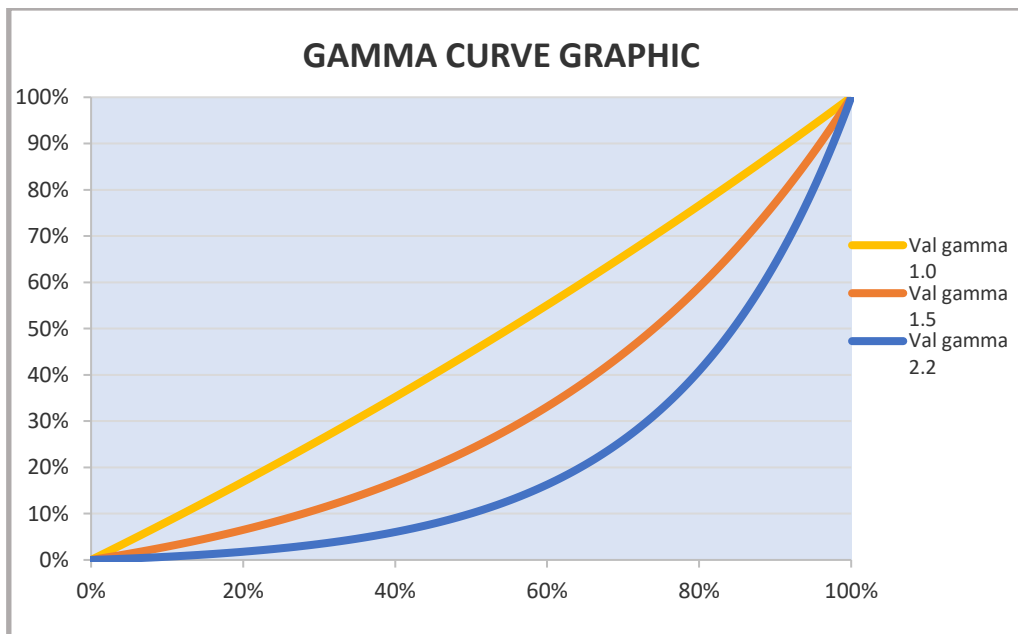
Leds reference

-  = Ring leds 1
-  = Ring leds 2
-  = Central led





Note: The Dimmer Curve 5 is the same as Curve 1 only has all the Leds synchronized for a balanced behavior in white.



MACRO COLOR reference

Bit value	LEE Filter reference	Function
0-9	--	Macro Color OFF
10	--	Red
11	--	Green
12	--	Blue
13	--	Cyan
14	--	Yellow
15	--	Magenta
16	--	White 7000K
17	--	White 3700K
18	--	White 5000K
19	--	Black
20-22	10	Medium Yellow
23-26	13	Straw Tint
27-28	17	Surprise Peach
29	19	Fire
30	20	Medium Amber
31	21	Gold Amber
32-34	22	Dark Amber
35-44	25	Sunrise Red
45	35	Light Pink
46-48	36	Medium Pink
49-61	39	Pink Carnation
62-67	52	Light Lavender
68-77	58	Lavender
78-88	68	Sky Blue
89-99	79	Just Blue
100-109	90	Dark Yellow Green
110-111	100	Spring Yellow
112	102	Light Amber
113	103	Straw
114	104	Deep amber
115-116	105	Orange
117	107	Light Rose
118	108	English Rose
119	109	Light Salmon
120	110	Middle Rose
121-122	111	Dark Pink
123-124	113	Magenta
125	115	Peacock Blue

Bit value	LEE Filter reference	Function
126	116	Med Blu Green
127	117	Steel Blue
128	118	Light Blue
129-130	119	Dark Blue
131-133	121	Leaf Green
134-135	124	Dark Green
136-137	126	Mauve
138-141	128	Bright Pink
142-144	132	Medium Blue
145	135	Deep Golden Amber
146	136	Pale Lavender
147-148	137	Special Lavender
149-150	139	Primary Green
151-156	141	Bright Blue
157-161	147	Apricot
162-167	152	Pale Gold
168-171	158	Deep Orange
172-173	162	Bastard Amber
174	164	Flame Red
175-178	165	Daylight Blue
179	169	Lilac Tint
180-183	170	Deep Lavender
184-190	174	Dark Steel Blue
191-206	181	Congo Blue
207	197	Alice Blue
208	--	Dirty White
209-255	--	White