



## OPERATING MODES

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

The Basic mode has the single colour control of the LEDs, 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.

**IMPORTANT:** To Unlock the display press the buttons sequence UP – DOWN – UP – DOWN – ENTER.

## DMX MODES

<b>DMX Mode</b>	<b>Number of Parameter</b>	<b>Colour Control</b>	<b>Notes</b>
Basic RGBW	<b>12</b>	RGBW 8bit	Colour control as single layer.
Basic RGBW 16bit	<b>16</b>	RGBW 16bit	Colour control in as single layer.
Extended RGBW (Default setting)	<b>16</b>	RGBW 8bit	Colour control for the external ring and central led.
Extended RGBW 16bit	<b>24</b>	RGBW 16bit	Colour control for the external ring and central led.

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

## DMX list

<i>DMX Parameter number</i>	<i>RGBW Mode</i>	<i>RGBW 16bit Mode</i>	<i>Extended RGBW Mode</i>	<i>Extended RGBW 16bit Mode</i>
<b>1</b>	Red	Red	Red ring led	Red ring led
<b>2</b>	Green	Red fine	Green ring led	Red ring led fine
<b>3</b>	Blue	Green	Blue ring led	Green ring led
<b>4</b>	White	Green fine	White ring	Green ring led fine
<b>5</b>	CTO	Blue	Red central led	Blue ring led
<b>6</b>	Macro color	Blue fine	Green central led	Blue ring led fine
<b>7</b>	Strobe effect	White	Blue central led	White ring led
<b>8</b>	Dimmer	White fine	White central led	White ring led fine
<b>9</b>	Dimmer fine	CTO	CTO	Red central led
<b>10</b>	Zoom	Macro color	Macro color	Red central led fine
<b>11</b>	Function	Strobe effect	Strobe effect	Green central led
<b>12</b>	Reset	Dimmer	Dimmer	Green central led fine
<b>13</b>	-	Dimmer fine	Dimmer fine	Blue central led
<b>14</b>	-	Zoom	Zoom	Blue central led fine
<b>15</b>	-	Function	Function	White central led
<b>16</b>	-	Reset	Reset	White central led fine
<b>17</b>	-	-	-	CTO
<b>18</b>	-	-	-	Macro color
<b>19</b>	-	-	-	Strobe effect
<b>20</b>	-	-	-	Dimmer
<b>21</b>	-	-	-	Dimmer fine
<b>22</b>	-	-	-	Zoom
<b>23</b>	-	-	-	Function
<b>24</b>	-	-	-	Reset

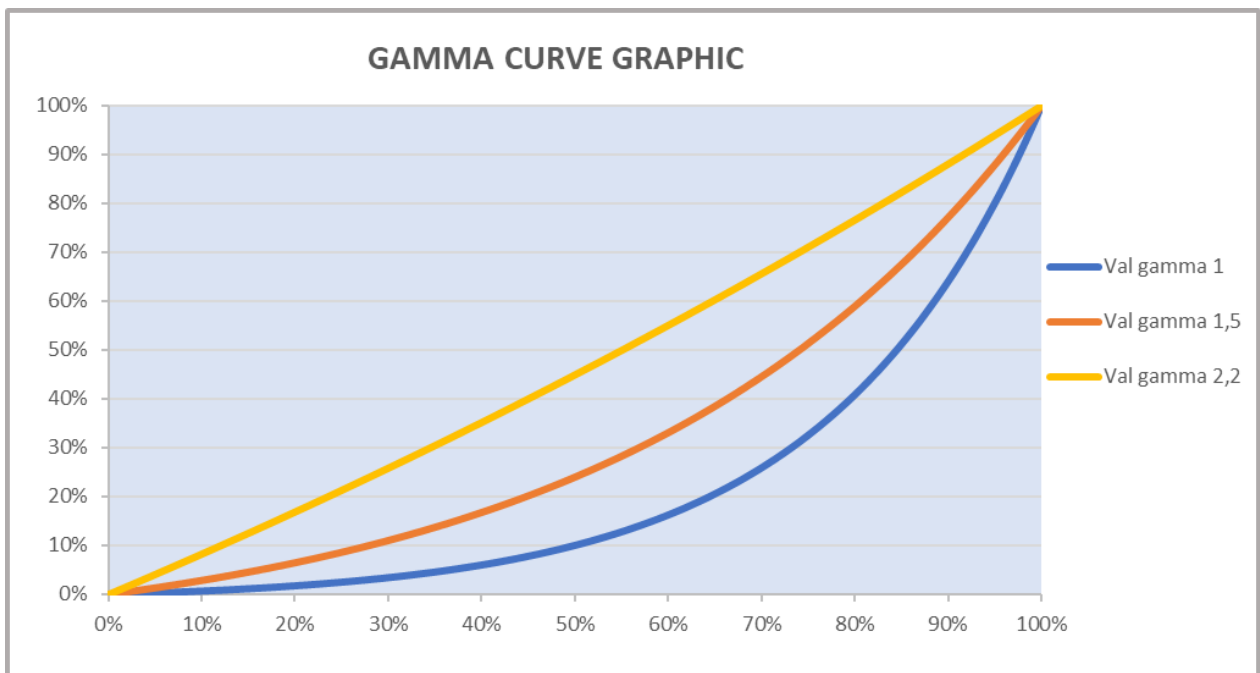
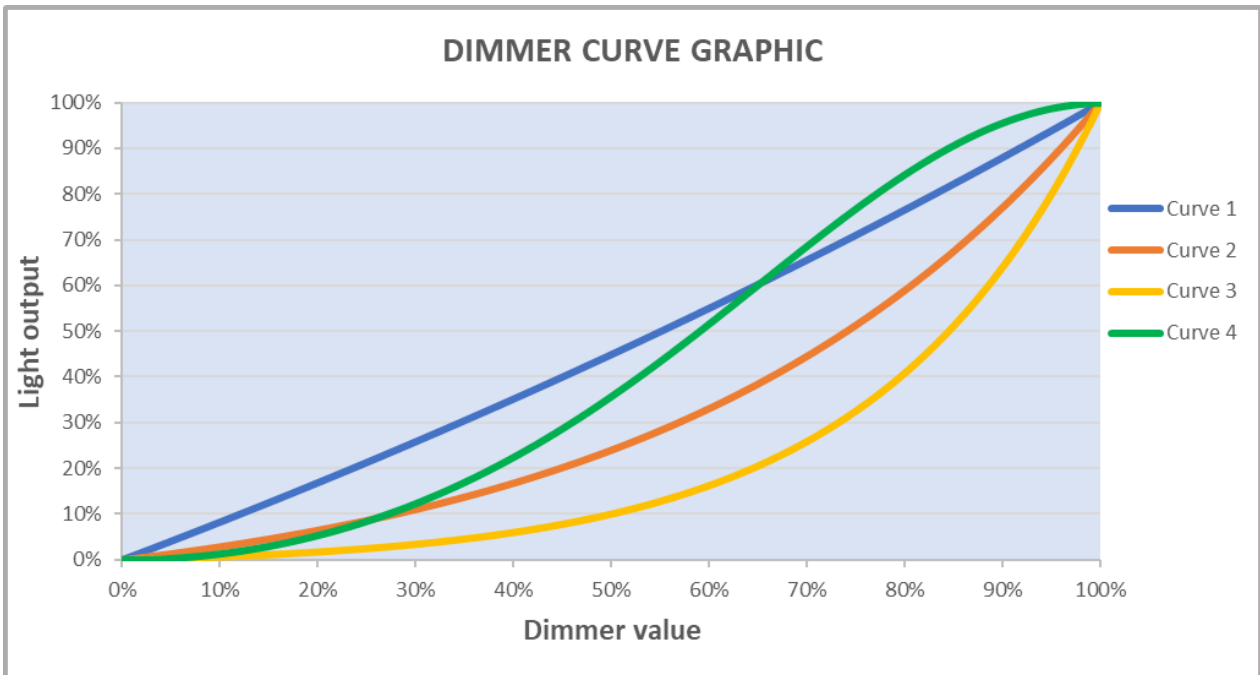
## Function details

<i>RGBW</i>	<i>RGBW 16bit</i>	<i>Extended RGBW</i>	<i>Extended RGBW 16bit</i>	<i>Bit Value</i>	<i>Function</i>
<b>1</b>	<b>1</b>	-	-	<b>0 - 255</b>	<b>RED</b> Red colour intensity linearly increases from no-light to maximum.
-	<b>2</b>	-	-	<b>0 - 255</b>	<b>RED FINE (16 Bit)</b> Red colour fine control
<b>2</b>	<b>3</b>	-	-	<b>0 - 255</b>	<b>GREEN</b> Green colour intensity linearly increases from no-light to maximum.
-	<b>4</b>	-	-	<b>0 - 255</b>	<b>GREEN FINE (16 Bit)</b> Green colour fine control.
<b>3</b>	<b>5</b>	-	-	<b>0 - 255</b>	<b>BLUE</b> Blue colour intensity linearly increases from no-light to maximum.
-	<b>6</b>	-	-	<b>0 - 255</b>	<b>BLUE FINE (16 bit)</b> Blue colour fine control.
<b>4</b>	<b>7</b>	-	-	<b>0 - 255</b>	<b>WHITE</b> White colour intensity linearly increases from no-light to maximum.
-	<b>8</b>	-	-	<b>0 - 255</b>	<b>WHITE FINE (16 bit)</b> White colour fine control.
-	-	<b>1</b>	<b>1</b>	<b>0 - 255</b>	<b>RED Ring</b> Red colour ring linearly increases from no-light to maximum intensity
-	-	-	<b>2</b>	<b>0 - 255</b>	<b>RED FINE Ring</b> Red colour ring fine control
-	-	<b>2</b>	<b>3</b>	<b>0 - 255</b>	<b>GREEN Ring</b> Green colour ring linearly increases from no-light to maximum intensity
-	-	-	<b>4</b>	<b>0 - 255</b>	<b>GREEN FINE Ring</b> Green colour ring fine control
-	-	<b>3</b>	<b>5</b>	<b>0 - 255</b>	<b>BLUE Ring</b> Blue colour ring linearly increases from no-light to maximum intensity
-	-	-	<b>6</b>	<b>0 - 255</b>	<b>BLUE FINE Ring</b> Blue colour ring fine control

RGBW	RGBW 16bit	Extended RGBW	Extended RGBW 16bit	Bit Value	Function
-	-	4	7	0 - 255	<b>WHITE Ring</b> White colour ring linearly increases from no-light to maximum intensity
-	-	-	8	0 - 255	<b>WHITE FINE Ring</b> White colour ring fine control
-	-	5 to 8	9 to 15	0 - 255	<b>RGBW Central led</b> Red (5 – 9) – Green (6 – 11) – Blue (7 - 13) – White (8 - 15) colours central led linearly increases from no-light to maximum intensity
-	-	-	10 to 16	0 - 255	<b>RGBW Central led</b> Red (10) – Green (12) – Blue (14) – White (16) colour central led fine control.
5	9	9	17	0-9 10 ... 54 ... 99 ... 117 ... 144 ... 188 ... 224 ... 255	<b>CTO</b> Colour Temperature linear correction from 8000K to 2500K <b>Important:</b> The CTO parameter has priority on the colour functions. Unused range 8000 K 7000 K 6000 K 5600 K 5000 K 4000 K 3200 K 2500 K

RGBW	RGBW 16bit	Extended RGBW	Extended RGBW 16bit	BIT Value	Function
6	10	10	18	0 - 255	<b>MACRO COLOR</b> See chart page 7 for colours details. <b>Important:</b> The Macro Color parameter has priority on the colour functions.
7	11	11	19	0 - 3 4 - 103 104 - 107 108 - 207 208 - 212 213 - 225 226 - 238 239 - 251 252 - 255	<b>STROBE EFFECT</b> Light OFF Strobe effect linearly variable frequency from low (1Hz) to fast (25Hz) Light ON Pulsation at linearly variable speed from slow (0.5 Hz) to fast (25 Hz) Light ON Random Slow Strobe effect Random Medium Strobe effect Random Fast Strobe effect Light ON
8	12	12	20	0 - 255	<b>DIMMER</b> Light output linearly increases from off to maximum intensity.
9	13	13	21	0 - 255	<b>DIMMER FINE (16 bit)</b> Fine dimmer positioning
10	14	14	22	0 - 255	<b>ZOOM</b> Zoom linearly moves from narrow to wide beam

RGBW	RGBW 16bit	Extended RGBW	Extended RGBW 16bit	BIT Value	Function	
11	15	15	23		<b>FUNCTION</b> <b>Important:</b> The setting are activated and saved holding the DMX level for three seconds.	
				0 - 11	Unused range	
				12 - 24	Not used	
				25 - 37	Not used	
				38 - 42	Dimmer curve 1 (Default)	
				43 - 47	Dimmer curve 2	Details at page 6
				48 - 52	Dimmer curve 3	
				53 - 57	Dimmer curve 4	
				58 - 62	Raw color channels gamma 1	Details at page 6
				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	PWM frequency=6000Hz					
233-243	PWM frequency=25000Hz					
244-248	Display OFF (Default)					
249-253	Display ON					
254-255	Default function recall					
12	16	16	24		<b>RESET</b>	
				0 - 25	Unused range	
				26 - 76	Reset: The reset sequence is activated passing through the unused levels range and staying in this range for 5 seconds	
				77 - 255	Not used	



## MACRO COLOR

Bit value	LEE Filter reference	Function	Bit value	LEE Filter reference	Function
0-9	--	Macro Color OFF	126	116	Med Blu Green
10	--	Red	127	117	Steel Blue
11	--	Green	128	118	Light Blue
12	--	Blue	129-130	119	Dark Blue
13	--	Cyan	131-133	121	Leaf Green
14	--	Yellow	134-135	124	Dark Green
15	--	Magenta	136-137	126	Mauve
16	--	White 7000K	138-141	128	Bright Pink
17	--	White 3700K	142-144	132	Medium Blue
18	--	White 5000K	145	135	Deep Golden Amber
19	--	Black	146	136	Pale Lavender
20-22	10	Medium Yellow	147-148	137	Special Lavender
23-26	13	Straw Tint	149-150	139	Primary Green
27-28	17	Surprise Peach	151-156	141	Bright Blue
29	19	Fire	157-161	147	Apricot
30	20	Medium Amber	162-167	152	Pale Gold
31	21	Gold Amber	168-171	158	Deep Orange
32-34	22	Dark Amber	172-173	162	Bastard Amber
35-44	25	Sunrise Red	174	164	Flame Red
45	35	Light Pink	175-178	165	Daylight Blue
46-48	36	Medium Pink	179	169	Lilac Tint
49-61	39	Pink Carnation	180-183	170	Deep Lavender
62-67	52	Light Lavender	184-190	174	Dark Steel Blue
68-77	58	Lavender	191-206	181	Congo Blue
78-88	68	Sky Blue	207	197	Alice Blue
89-99	79	Just Blue	208	--	Dirty White
100-109	90	Dark Yellow Green	209-255	--	White
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			