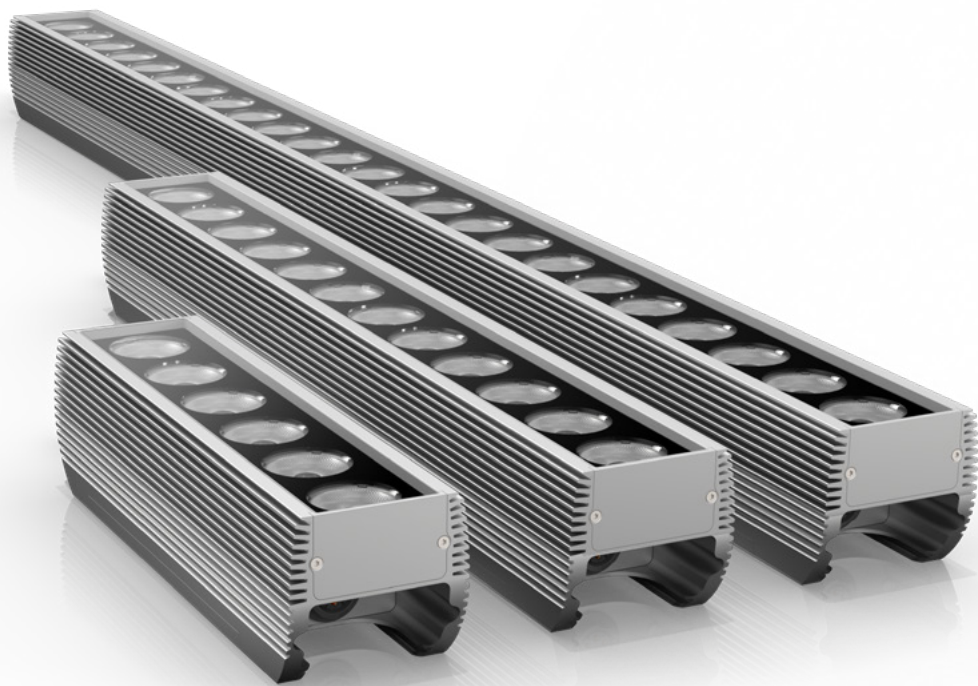


DMX PROTOCOL

POI GRAZE



3 PIXEL SEGMENTS

3 DMX MODES

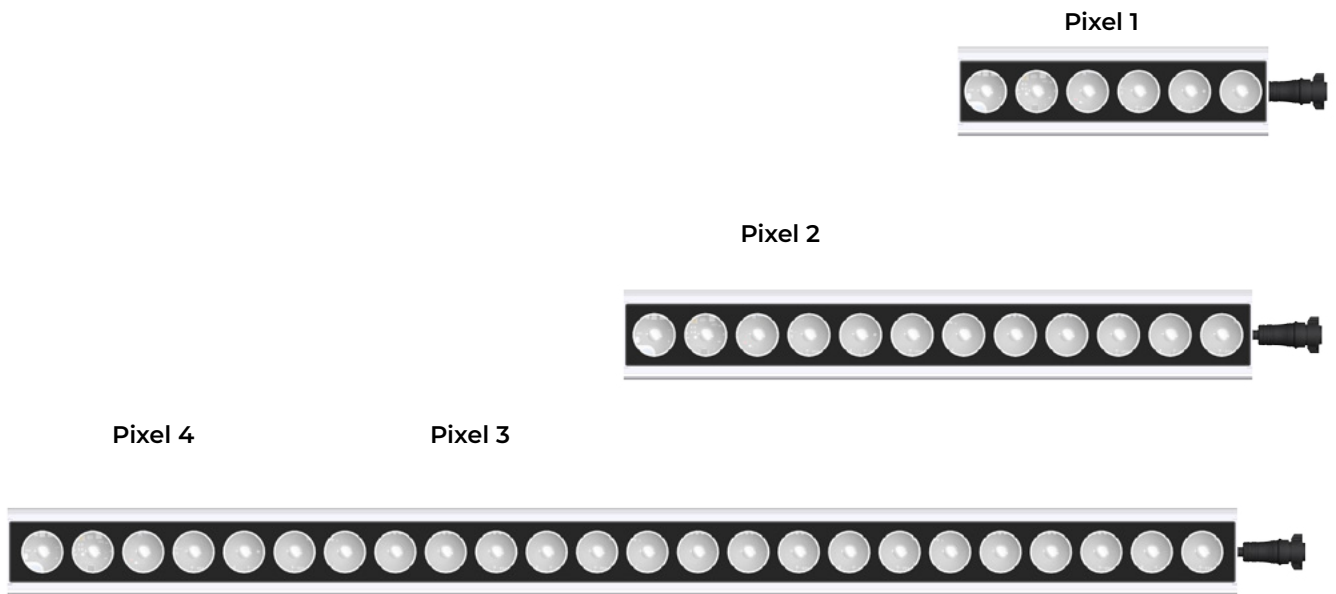
- 3 Calibrated (8 BIT)
- 3 Calibrated (16 BIT)
- 4 CTC (8-bit)
- 4 CTC (16-bit)
- 5 Pixel (8-bit)
- 6 Pixel (16-bit)
- 7 Extended

9 NOTES

- 9 Note 1**
- 9 Note 2**
- 9 Note 3**
- 9 Note 4**
- 9 Note 5**

9 CTC CHART

PIXEL SEGMENTS



DMX MODES

CALIBRATED (8 BIT)

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1	Red	0	255	0,0%	100,0%	Fade 0% → 100% Red	Fade
2	Green	0	255	0,0%	100,0%	Fade 0% → 100% Green	Fade
3	Blue	0	255	0,0%	100,0%	Fade 0% → 100% Blue	Fade

CALIBRATED (16 BIT)

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1+2	Red	0	65535	0,0%	100,0%	0% → 100% Red	Fade
3+4	Green	0	65535	0,0%	100,0%	0% → 100% Green	Fade
5+6	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	Fade

CTC (8-BIT)

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
2	CTC	0	0	0,0%	0,0%	Default Calibrated White	"Note 1"
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
3	Color path	0	127	0,0%	49,8%	SGM Standard	
		128	255	50,2%	100,0%	SGM VersaPath™	"Note 4"
4	Red	0	255	0,0%	100,0%	0% → 100% Red	Fade
5	Green	0	255	0,0%	100,0%	0% → 100% Green	Fade
6	Blue	0	255	0,0%	100,0%	0% → 100% Blue	Fade

CTC (16-BIT)

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1+2	Intensity	0	65535	0,0%	100,0%	0% → 100% Intensity	Fade
3	CTC	0	0	0,0%	0,0%	Default Calibrated White	"Note 1"
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
4	Color path	0	127	0,0%	49,8%	SGM Standard	
		128	255	50,2%	100,0%	SGM VersaPath™	"Note 4"
5+6	Red	0	65535	0,0%	100,0%	0% → 100% Red	Fade
7+8	Green	0	65535	0,0%	100,0%	0% → 100% Green	Fade
9+10	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	Fade

PIXEL (8-BIT)

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1	Red 1	0	255	0,0%	100,0%	Fade 0% → 100% Red	Pixel 1 Note 5
2	Green 1	0	255	0,0%	100,0%	Fade 0% → 100% Green	
3	Blue 1	0	255	0,0%	100,0%	Fade 0% → 100% Blue	
4	Red 2	0	255	0,0%	100,0%	Fade 0% → 100% Red	Pixel 2 Note 5
5	Green 2	0	255	0,0%	100,0%	Fade 0% → 100% Green	
6	Blue 2	0	255	0,0%	100,0%	Fade 0% → 100% Blue	
7	Red 3	0	255	0,0%	100,0%	Fade 0% → 100% Red	Pixel 3 Note 5
8	Green 3	0	255	0,0%	100,0%	Fade 0% → 100% Green	
9	Blue 3	0	255	0,0%	100,0%	Fade 0% → 100% Blue	
10	Red 4	0	255	0,0%	100,0%	Fade 0% → 100% Red	Pixel 4 Note 5
11	Green 4	0	255	0,0%	100,0%	Fade 0% → 100% Green	
12	Blue 4	0	255	0,0%	100,0%	Fade 0% → 100% Blue	

PIXEL (16-BIT)

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1+2	Red	0	65535	0,0%	100,0%	Fade 0% → 100% Red	Pixel 1 Note 5
3+4	Green	0	65535	0,0%	100,0%	Fade 0% → 100% Green	
5+6	Blue	0	65535	0,0%	100,0%	Fade 0% → 100% Blue	
7+8	Red	0	65535	0,0%	100,0%	Fade 0% → 100% Red	Pixel 1 Note 5
9+10	Green	0	65535	0,0%	100,0%	Fade 0% → 100% Green	
11+12	Blue	0	65535	0,0%	100,0%	Fade 0% → 100% Blue	
13+14	Red	0	65535	0,0%	100,0%	Fade 0% → 100% Red	Pixel 1 Note 5
15+16	Green	0	65535	0,0%	100,0%	Fade 0% → 100% Green	
17+18	Blue	0	65535	0,0%	100,0%	Fade 0% → 100% Blue	
19+20	Red	0	65535	0,0%	100,0%	Fade 0% → 100% Red	Pixel 1 Note 5
21+22	Green	0	65535	0,0%	100,0%	Fade 0% → 100% Green	
23+24	Blue	0	65535	0,0%	100,0%	Fade 0% → 100% Blue	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1	Shutter	0	7	0,0%	2,7%	Closed	Snap
		8	15	3,1%	5,9%	Open	Snap
		16	151	6,3%	59,2%	Variable Strobe	Fast → Slow
		152	175	59,6%	68,6%	Pulse - Open	Slow → Fast
		176	199	69,0%	78,0%	Pulse - Close	Slow → Fast
		200	244	78,4%	95,7%	Variable Random Strobe	Slow → Fast
		245	255	96,1%	100,0%	Open	Snap
2+3	Intensity	0	65535	0,0%	100,0%	0% → 100% Intensity	Fade
4	CTC	0	0	0,0%	0,0%	Default Calibrated White	"Note 1"
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC Chart
5	Color path	0	127	0,0%	49,8%	SGM Standard	
		128	255	50,2%	100,0%	SGM VersaPath™	"Note 4"
6	Color mode	0	4	0,0%	1,6%	CTC RGB	Snap
		5	9	2,0%	3,5%	xy (CIE 1931)	
		10	14	3,9%	5,5%	HSI	"Note 2"
		15	19	5,9%	7,5%	CMY	
7	Plus/minus green	0	4	0,0%	1,6%	Neutral	Snap
		5	125	2,0%	49,0%	Minus green	Max → Min
		126	134	49,4%	52,5%	Neutral	Snap
		135	255	52,9%	100,0%	Plus green	Min → Max
8	Frequency	0	4	0,0%	1,6%	Default (3204Hz)	Snap
		5	255	2,0%	100,0%	3204-29170Hz	Min → Max
9	Dimming Curve	0	4	0,0%	1,6%	Gamma Filtered	Snap "Note 3"
		5	9	2,0%	3,5%	Gamma Raw	
		10	14	3,9%	5,5%	Gamma Halogen	
		15	19	5,9%	7,5%	Linear Filtered	
		20	24	7,8%	9,4%	Linear Raw	
		25	29	9,8%	11,4%	Linear Halogen	
		30	255	11,8%	100,0%	Reserved	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
10+11	Red / x / H / C / Red / Red	0	65535	0,0%	100,0%	0% → 100% Red	Pixel 1 "Note 5"
12+13	Green / y / S / M / Green / Green	0	65535	0,0%	100,0%	0% → 100% Green	
14+15	Blue / NA / I / Y / Blue / Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
16+17	NA / NA / NA / NA / / White / White *	0	65535	0,0%	100,0%	0% → 100% White (only usable when CTC is set to RAW)	
18+19	Red / x / H / C / Red	0	65535	0,0%	100,0%	0% → 100% Red	Pixel 2 "Note 5"
20+21	Green / y / S / M / Green	0	65535	0,0%	100,0%	0% → 100% Green	
22+23	Blue / NA / I / Y / Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
24+25	NA / NA / NA / NA / / White / White *	0	65535	0,0%	100,0%	0% → 100% White (only usable when CTC is set to RAW)	
26+27	Red / x / H / C / Red	0	65535	0,0%	100,0%	0% → 100% Red	Pixel 3 "Note 5"
28+29	Green / y / S / M / Green	0	65535	0,0%	100,0%	0% → 100% Green	
30+31	Blue / NA / I / Y / Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
32+33	NA / NA / NA / NA / / White / White *	0	65535	0,0%	100,0%	0% → 100% White (only usable when CTC is set to RAW)	
34+35	Red / x / H / C / Red	0	65535	0,0%	100,0%	0% → 100% Red	Pixel 4 "Note 5"
36+37	Green / y / S / M / Green	0	65535	0,0%	100,0%	0% → 100% Green	
38+39	Blue / NA / I / Y / Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
40+41	NA / NA / NA / NA / / White / White *	0	65535	0,0%	100,0%	0% → 100% White (only usable when CTC is set to RAW)	

NOTE 1

When the CTC channel is set to value 000, the fixture will output a different calibrated white depending on the LED configuration of the fixture. **3000K and 4000K**

NOTE 2

- **CTC RGB** allows RGBW mixing with CTC control over white on the Red, Green and Blue channels (3000K and 4000K White LED is controlled via RGB color engine).

- **xy** mode does not allow CTC control.

CTC RGB, HSI, and CMY modes can be combined with the CTC, Color Path and Plus/Minus Green channels.

- **HSI** and **CMY** modes use the Red, Green and Blue channels for the color mix.

NOTE 3

Gamma or **Linear** corrected.

Filtered filters input signal

Raw allows for a faster response

Halogen creates an organic delay, similar to a tungsten lamp

NOTE 4

With the Color Path set to **VersaPath™**, the color emulation reacts in the same way as a physical filter over a specific native color temperature (from 2000K to 10000K), editable via the CTC channel.

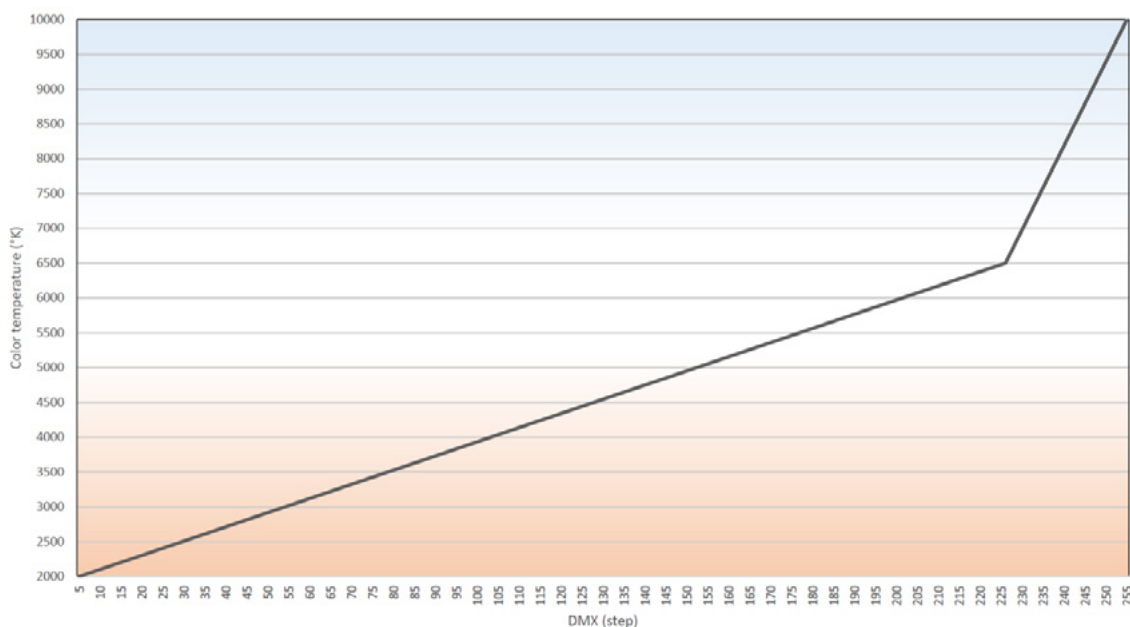
When Dimming Curve channel is set to Halogen, a “tungsten-lamp with color filter” look can be achieved.

When the Color Path is set to **VersaPath™**, the CTC channel can be used to move the RGB color mix over the black-body curve. In order to achieve this, at least 2 primary colors need to have values above 000.

NOTE 5

POI-25 Graze is one pixel, POI-50 Graze is two pixels and POI-100 Graze is four pixels

CTC CHART





SGM LIGHTING APS

Sommervej 23

8210 Aarhus V

Denmark

Tel: +45 70 20 74 00

info@sgmlighting.com

www.sgmlighting.com