

# DMX PROTOCOL

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## P-6

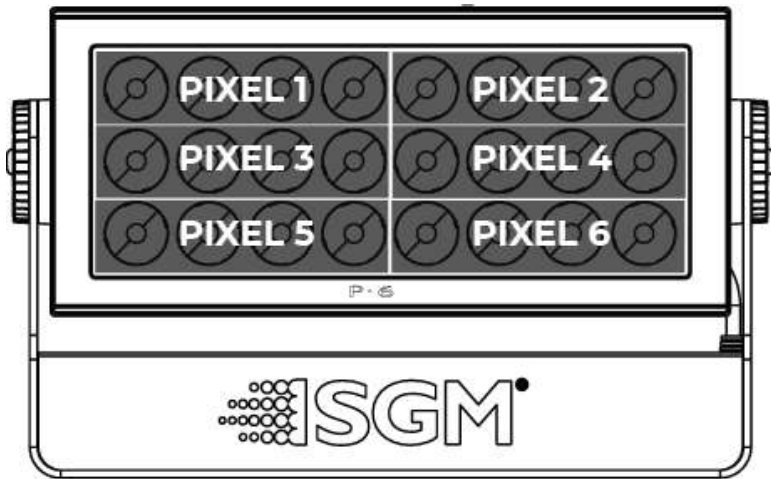


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## LEGACY MODES



### 4 CHANNEL RAW

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

### 6 CHANNEL RAW

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
		0	255	0,0%	100,0%		
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	Fast → Slow
		245	255	96,1%	100,0%	Open	Snap
2	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
3	Red	0	255	0,0%	100,0%	0% → 100% Red	
4	Green	0	255	0,0%	100,0%	0% → 100% Green	
5	Blue	0	255	0,0%	100,0%	0% → 100% Blue	
6	White	0	255	0,0%	100,0%	0% → 100% White	

## 6 CHANNEL (DEFAULT MODE)

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	Fast → Slow
		245	255	96,1%	100,0%	Open	Snap
2	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
3	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
4	Red	0	255	0,0%	100,0%	0% → 100% Red	
5	Green	0	255	0,0%	100,0%	0% → 100% Green	
6	Blue	0	255	0,0%	100,0%	0% → 100% Blue	

## 8 CHANNEL RAW

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1 + 2	Red	0	65535	0,0%	100,0%	0% → 100% Red	
3 + 4	Green	0	65535	0,0%	100,0%	0% → 100% Green	
5 + 6	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
7 + 8	White	0	65535	0,0%	100,0%	0% → 100% White	

## 9 CHANNEL STROBE

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
		0	255	0,0%	100,0%		
1	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
2	Duration	0	255	0,0%	100,0%	Strobe duration	Short → Long
3	Rate	0	255	0,0%	100,0%	Strobe rate	Slow → Fast
4	Effect	0	5	0,0%	2,0%	No effect	Snap
		6	10	2,4%	3,9%	Flicker	Note 1
		11	15	4,3%	5,9%	Random strobe pixels	
		16	20	6,3%	7,8%	Random strobe panel	
		21	25	8,2%	9,8%	Flicker colors	Note 1
		26	30	10,2%	11,8%	Random color panels	
		31	35	12,2%	13,7%	Spikes colors	
		36	40	14,1%	15,7%	Spikes panel	
		41	45	16,1%	17,6%	Pre-red	
		46	50	18,0%	19,6%	Pre-green	
		51	55	20,0%	21,6%	Pre-blue	
		56	60	22,0%	23,5%	RGB-flicker	Note 1
		61	65	23,9%	25,5%	Lightning	
		66	70	25,9%	27,5%	Circle RGB	Note 1
		71	75	27,8%	29,4%	Fire	
		76	80	29,8%	31,4%	Ice	
		81	85	31,8%	33,3%	Magenta-red-blue	
		86	90	33,7%	35,3%	Random color fade pixel	
		91	95	35,7%	37,3%	Circle CW	
		96	100	37,6%	39,2%	Circle CCW	
		101	105	39,6%	41,2%	Effect down	
106	110	41,6%	43,1%	Effect up			
111	115	43,5%	45,1%	Effect up down			
116	120	45,5%	47,1%	Effect pixel 1-6			
121	255	47,5%	100,0%	No strobe			
5		0	4	0,0%	1,6%	Open	
		5	9	2,0%	3,5%	Congo/color 1	
		10	14	3,9%	5,5%	Red/color 2	
		15	19	5,9%	7,5%	Green/color 3	
		20	24	7,8%	9,4%	Blue/color 4	
		25	29	9,8%	11,4%	Orange/color 5	
		30	34	11,8%	13,3%	Light green/color 6	
		35	39	13,7%	15,3%	Pink/color 7	
		40	44	15,7%	17,3%	Light blue/ color 8	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
5	Macro	45	49	17,6%	19,2%	Purple/color 9	
		50	54	19,6%	21,2%	Neon green/color 10	
		55	59	21,6%	23,1%	Magenta/color 11	
		60	64	23,5%	25,1%	Cyan/color 12	
		65	69	25,5%	27,1%	Yellow/color 13	
		70	74	27,5%	29,0%	CTC/color 14	
		75	79	29,4%	31,0%	Scroll (CCW)	Slow → Fast
		80	84	31,4%	32,9%	Scroll (CW)	Slow → Fast
		85	89	33,3%	34,9%	Random color	Fast → Slow
		90	180	35,3%	70,6%	Color filter emulation	See color filter chart
		181	199	71,0%	78,0%	Minus green	
		200	200	78,4%	78,4%	Neutral	
		201	219	78,8%	85,9%	Plus green	
		220	255	86,3%	100,0%	Reserved	
6	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
7	Red	0	255	0,0%	100,0%	0% → 100% Red	
8	Green	0	255	0,0%	100,0%	0% → 100% Green	
9	Blue	0	255	0,0%	100,0%	0% → 100% Blue	

# 10 CHANNEL CTC

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	Fast → Slow
		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%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
5 + 6	Red	0	65535	0,0%	100,0%	0% → 100% Red	
7 + 8	Green	0	65535	0,0%	100,0%	0% → 100% Green	
9 + 10	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	

## 6 X RGB

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1	Red 1	0	255	0,0%	100,0%	0% → 100% Red	
2	Green 1	0	255	0,0%	100,0%	0% → 100% Green	
3	Blue 1	0	255	0,0%	100,0%	0% → 100% Blue	
4	Red 2	0	255	0,0%	100,0%	0% → 100% Red	
5	Green 2	0	255	0,0%	100,0%	0% → 100% Green	
6	Blue 2	0	255	0,0%	100,0%	0% → 100% Blue	
7	Red 3	0	255	0,0%	100,0%	0% → 100% Red	
8	Green 3	0	255	0,0%	100,0%	0% → 100% Green	
9	Blue 3	0	255	0,0%	100,0%	0% → 100% Blue	
10	Red 4	0	255	0,0%	100,0%	0% → 100% Red	
11	Green 4	0	255	0,0%	100,0%	0% → 100% Green	
12	Blue 4	0	255	0,0%	100,0%	0% → 100% Blue	
13	Red 5	0	255	0,0%	100,0%	0% → 100% Red	
14	Green 5	0	255	0,0%	100,0%	0% → 100% Green	
15	Blue 5	0	255	0,0%	100,0%	0% → 100% Blue	
16	Red 6	0	255	0,0%	100,0%	0% → 100% Red	
17	Green 6	0	255	0,0%	100,0%	0% → 100% Green	
18	Blue 6	0	255	0,0%	100,0%	0% → 100% Blue	



## 21 CHANNEL STROBE

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	Fast → Slow
		245	255	96,1%	100,0%	Open	Snap
2	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
3	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
4	Red 1	0	255	0,0%	100,0%	0% → 100% Red	
5	Green 1	0	255	0,0%	100,0%	0% → 100% Green	
6	Blue 1	0	255	0,0%	100,0%	0% → 100% Blue	
7	Red 2	0	255	0,0%	100,0%	0% → 100% Red	
8	Green 2	0	255	0,0%	100,0%	0% → 100% Green	
9	Blue 2	0	255	0,0%	100,0%	0% → 100% Blue	
10	Red 3	0	255	0,0%	100,0%	0% → 100% Red	
11	Green 3	0	255	0,0%	100,0%	0% → 100% Green	
12	Blue 3	0	255	0,0%	100,0%	0% → 100% Blue	
13	Red 4	0	255	0,0%	100,0%	0% → 100% Red	
14	Green 4	0	255	0,0%	100,0%	0% → 100% Green	
15	Blue 4	0	255	0,0%	100,0%	0% → 100% Blue	
16	Red 5	0	255	0,0%	100,0%	0% → 100% Red	
17	Green 5	0	255	0,0%	100,0%	0% → 100% Green	
18	Blue 5	0	255	0,0%	100,0%	0% → 100% Blue	
19	Red 6	0	255	0,0%	100,0%	0% → 100% Red	
20	Green 6	0	255	0,0%	100,0%	0% → 100% Green	
21	Blue 6	0	255	0,0%	100,0%	0% → 100% Blue	

## 24 CHANNEL STROBE

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
2	Duration	0	255	0,0%	100,0%	Strobe duration	Short → Long
3	Rate	0	255	0,0%	100,0%	Strobe rate	Slow → Fast
4	Effect	0	5	0,0%	2,0%	No effect	Snap
		6	10	2,4%	3,9%	Flicker	Note 1
		11	15	4,3%	5,9%	Random strobe pixels	
		16	20	6,3%	7,8%	Random strobe panel	
		21	25	8,2%	9,8%	Flicker colors	Note 1
		26	30	10,2%	11,8%	Random color panels	
		31	35	12,2%	13,7%	Spikes colors	
		36	40	14,1%	15,7%	Spikes panel	
		41	45	16,1%	17,6%	Pre-red	
		46	50	18,0%	19,6%	Pre-green	
		51	55	20,0%	21,6%	Pre-blue	
		56	60	22,0%	23,5%	RGB-flicker	Note 1
		61	65	23,9%	25,5%	Lightning	
		66	70	25,9%	27,5%	Circle RGB	Note 1
		71	75	27,8%	29,4%	Fire	Note 1
		76	80	29,8%	31,4%	Ice	
		81	85	31,8%	33,3%	Magenta-red-blue	
		86	90	33,7%	35,3%	Random color fade pixel	
		91	95	35,7%	37,3%	Circle CW	
		96	100	37,6%	39,2%	Circle CCW	
101	105	39,6%	41,2%	Effect down			
106	110	41,6%	43,1%	Effect up			
111	115	43,5%	45,1%	Effect up down			
116	120	45,5%	47,1%	Effect pixel 1-6			
121	255	47,5%	100,0%	No strobe			
5	Macro	0	4	0,0%	1,6%	Open	
		5	9	2,0%	3,5%	Congo/color 1	
		10	14	3,9%	5,5%	Red/color 2	
		15	19	5,9%	7,5%	Green/color 3	
		20	24	7,8%	9,4%	Blue/color 4	
		25	29	9,8%	11,4%	Orange/color 5	
		30	34	11,8%	13,3%	Light green/color 6	
		35	39	13,7%	15,3%	Pink/color 7	
		40	44	15,7%	17,3%	Light blue/ color 8	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
5	Macro	45	49	17,6%	19,2%	Purple/color 9	
		50	54	19,6%	21,2%	Neon green/color 10	
		55	59	21,6%	23,1%	Magenta/color 11	
		60	64	23,5%	25,1%	Cyan/color 12	
		65	69	25,5%	27,1%	Yellow/color 13	
		70	74	27,5%	29,0%	CTC/color 14	
		75	79	29,4%	31,0%	Scroll (CCW)	Slow → Fast
		80	84	31,4%	32,9%	Scroll (CW)	Slow → Fast
		85	89	33,3%	34,9%	Random color	Fast → Slow
		90	180	35,3%	70,6%	Color filter emulation	See color filter chart
		181	199	71,0%	78,0%	Minus green	
		200	200	78,4%	78,4%	Neutral	
		201	219	78,8%	85,9%	Plus green	
		220	255	86,3%	100,0%	Reserved	
6	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
7	Red 1	0	255	0,0%	100,0%	0% → 100% Red	
8	Green 1	0	255	0,0%	100,0%	0% → 100% Green	
9	Blue 1	0	255	0,0%	100,0%	0% → 100% Blue	
10	Red 2	0	255	0,0%	100,0%	0% → 100% Red	
11	Green 2	0	255	0,0%	100,0%	0% → 100% Green	
12	Blue 2	0	255	0,0%	100,0%	0% → 100% Blue	
13	Red 3	0	255	0,0%	100,0%	0% → 100% Red	
14	Green 3	0	255	0,0%	100,0%	0% → 100% Green	
15	Blue 3	0	255	0,0%	100,0%	0% → 100% Blue	
16	Red 4	0	255	0,0%	100,0%	0% → 100% Red	
17	Green 4	0	255	0,0%	100,0%	0% → 100% Green	
18	Blue 4	0	255	0,0%	100,0%	0% → 100% Blue	
19	Red 5	0	255	0,0%	100,0%	0% → 100% Red	
20	Green 5	0	255	0,0%	100,0%	0% → 100% Green	
21	Blue 5	0	255	0,0%	100,0%	0% → 100% Blue	
22	Red 6	0	255	0,0%	100,0%	0% → 100% Red	
23	Green 6	0	255	0,0%	100,0%	0% → 100% Green	
24	Blue 6	0	255	0,0%	100,0%	0% → 100% Blue	

## 26 CHANNEL STROBE

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO		
		0	255	0,0%	100,0%				
1 + 2	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade		
3	Duration	0	255	0,0%	100,0%	Strobe duration	Short → Long		
4	Rate	0	255	0,0%	100,0%	Strobe rate	Slow → Fast		
5	Effect	0	5	0,0%	2,0%	No effect	Snap		
		6	10	2,4%	3,9%	Flicker	Note 1		
		11	15	4,3%	5,9%	Random strobe pixels			
		16	20	6,3%	7,8%	Random strobe panel			
		21	25	8,2%	9,8%	Flicker colors	Note 1		
		26	30	10,2%	11,8%	Random color panels			
		31	35	12,2%	13,7%	Spikes colors			
		36	40	14,1%	15,7%	Spikes panel			
		41	45	16,1%	17,6%	Pre-red			
		46	50	18,0%	19,6%	Pre-green			
		51	55	20,0%	21,6%	Pre-blue			
		56	60	22,0%	23,5%	RGB-flicker	Note 1		
		61	65	23,9%	25,5%	Lightning			
		66	70	25,9%	27,5%	Circle RGB	Note 1		
		71	75	27,8%	29,4%	Fire			
		76	80	29,8%	31,4%	Ice			
		81	85	31,8%	33,3%	Magenta-red-blue			
86	90	33,7%	35,3%	Random color fade pixel					
91	95	35,7%	37,3%	Circle CW					
96	100	37,6%	39,2%	Circle CCW					
5	Effect	101	105	39,6%	41,2%	Effect down			
		106	110	41,6%	43,1%	Effect up			
		111	115	43,5%	45,1%	Effect up down			
		116	120	45,5%	47,1%	Effect pixel 1-6			
		121	255	47,5%	100,0%	No strobe			
		6	Macro	0	4	0,0%	1,6%	Open	
				5	9	2,0%	3,5%	Congo/color 1	
10	14			3,9%	5,5%	Red/color 2			
15	19			5,9%	7,5%	Green/color 3			
20	24			7,8%	9,4%	Blue/color 4			
25	29			9,8%	11,4%	Orange/color 5			
30	34			11,8%	13,3%	Light green/color 6			
35	39			13,7%	15,3%	Pink/color 7			

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
6	Macro	40	44	15,7%	17,3%	Light blue/ color 8	
		45	49	17,6%	19,2%	Purple/color 9	
		50	54	19,6%	21,2%	Neon green/color 10	
		55	59	21,6%	23,1%	Magenta/color 11	
		60	64	23,5%	25,1%	Cyan/color 12	
		65	69	25,5%	27,1%	Yellow/color 13	
		70	74	27,5%	29,0%	CTC/color 14	
		75	79	29,4%	31,0%	Scroll (CCW)	Slow → Fast
		80	84	31,4%	32,9%	Scroll (CW)	Slow → Fast
		85	89	33,3%	34,9%	Random color	Fast → Slow
		90	180	35,3%	70,6%	Color filter emulation	See color filter chart
		181	199	71,0%	78,0%	Minus green	
		200	200	78,4%	78,4%	Neutral	
		201	219	78,8%	85,9%	Plus green	
		220	255	86,3%	100,0%	Reserved	
7	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
8	Fan mode	0	4	0,0%	1,6%	Default	
		5	255	2,0%	100%	Manual 0-100	
9	Red 1	0	255	0,0%	100,0%	0% → 100% Red	
10	Green 1	0	255	0,0%	100,0%	0% → 100% Green	
11	Blue 1	0	255	0,0%	100,0%	0% → 100% Blue	
12	Red 2	0	255	0,0%	100,0%	0% → 100% Red	
13	Green 2	0	255	0,0%	100,0%	0% → 100% Green	
14	Blue 2	0	255	0,0%	100,0%	0% → 100% Blue	
15	Red 3	0	255	0,0%	100,0%	0% → 100% Red	
16	Green 3	0	255	0,0%	100,0%	0% → 100% Green	
17	Blue 3	0	255	0,0%	100,0%	0% → 100% Blue	
18	Red 4	0	255	0,0%	100,0%	0% → 100% Red	
19	Green 4	0	255	0,0%	100,0%	0% → 100% Green	
20	Blue 4	0	255	0,0%	100,0%	0% → 100% Blue	
21	Red 5	0	255	0,0%	100,0%	0% → 100% Red	
22	Green 5	0	255	0,0%	100,0%	0% → 100% Green	
23	Blue 5	0	255	0,0%	100,0%	0% → 100% Blue	
24	Red 6	0	255	0,0%	100,0%	0% → 100% Red	
25	Green 6	0	255	0,0%	100,0%	0% → 100% Green	
26	Blue 6	0	255	0,0%	100,0%	0% → 100% Blue	

## 27 CHANNEL RAW

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	Fast → Slow
		245	255	96,1%	100,0%	Open	Snap
2	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
3	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
4	Red 1	0	255	0,0%	100,0%	0% → 100% Red	
5	Green 1	0	255	0,0%	100,0%	0% → 100% Green	
6	Blue 1	0	255	0,0%	100,0%	0% → 100% Blue	
7	White 1	0	255	0,0%	100,0%	0% → 100% White	
8	Red 2	0	255	0,0%	100,0%	0% → 100% Red	
9	Green 2	0	255	0,0%	100,0%	0% → 100% Green	
10	Blue 2	0	255	0,0%	100,0%	0% → 100% Blue	
11	White 2	0	255	0,0%	100,0%	0% → 100% White	
12	Red 3	0	255	0,0%	100,0%	0% → 100% Red	
13	Green 3	0	255	0,0%	100,0%	0% → 100% Green	
14	Blue 3	0	255	0,0%	100,0%	0% → 100% Blue	
15	White 3	0	255	0,0%	100,0%	0% → 100% White	
16	Red 4	0	255	0,0%	100,0%	0% → 100% Red	
17	Green 4	0	255	0,0%	100,0%	0% → 100% Green	
18	Blue 4	0	255	0,0%	100,0%	0% → 100% Blue	
19	White 4	0	255	0,0%	100,0%	0% → 100% White	
20	Red 5	0	255	0,0%	100,0%	0% → 100% Red	
21	Green 5	0	255	0,0%	100,0%	0% → 100% Green	
22	Blue 5	0	255	0,0%	100,0%	0% → 100% Blue	
23	White 5	0	255	0,0%	100,0%	0% → 100% White	
24	Red 6	0	255	0,0%	100,0%	0% → 100% Red	
25	Green 6	0	255	0,0%	100,0%	0% → 100% Green	
26	Blue 6	0	255	0,0%	100,0%	0% → 100% Blue	
27	White 6	0	255	0,0%	100,0%	0% → 100% White	

## 40 CHANNEL

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	Fast → Slow
		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%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
5 + 6	Red 1	0	65535	0,0%	100,0%	0% → 100% Red	
7 + 8	Green 1	0	65535	0,0%	100,0%	0% → 100% Green	
9 + 10	Blue 1	0	65535	0,0%	100,0%	0% → 100% Blue	
11 + 12	Red 2	0	65535	0,0%	100,0%	0% → 100% Red	
13 + 14	Green 2	0	65535	0,0%	100,0%	0% → 100% Green	
15 + 16	Blue 2	0	65535	0,0%	100,0%	0% → 100% Blue	
17 + 18	Red 3	0	65535	0,0%	100,0%	0% → 100% Red	
19 + 20	Green 3	0	65535	0,0%	100,0%	0% → 100% Green	
21 + 22	Blue 3	0	65535	0,0%	100,0%	0% → 100% Blue	
23 + 24	Red 4	0	65535	0,0%	100,0%	0% → 100% Red	
25 + 26	Green 4	0	65535	0,0%	100,0%	0% → 100% Green	
27 + 28	Blue 4	0	65535	0,0%	100,0%	0% → 100% Blue	
29 + 30	Red 5	0	65535	0,0%	100,0%	0% → 100% Red	
31 + 32	Green 5	0	65535	0,0%	100,0%	0% → 100% Green	
33 + 34	Blue 5	0	65535	0,0%	100,0%	0% → 100% Blue	
35 + 36	Red 6	0	65535	0,0%	100,0%	0% → 100% Red	
37 + 38	Green 6	0	65535	0,0%	100,0%	0% → 100% Green	
39 + 40	Blue 6	0	65535	0,0%	100,0%	0% → 100% Blue	

## 21 CHANNEL STUDIO

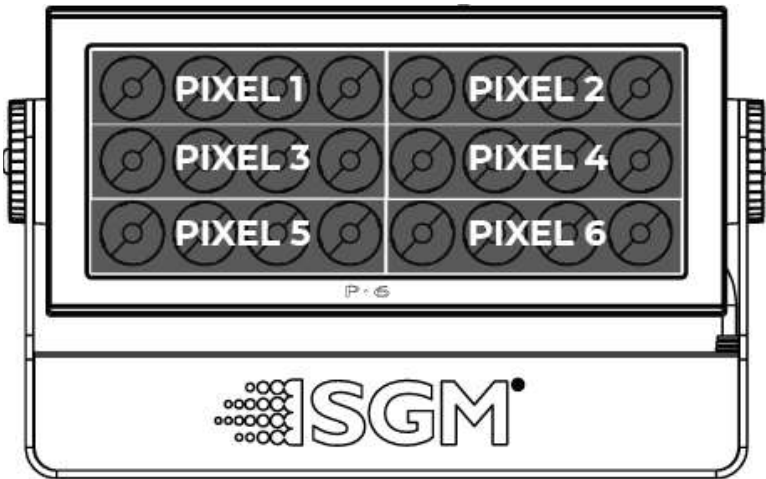
CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
		0	255	0,0%	100,0%		
1 + 2	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
3	Duration	0	255	0,0%	100,0%	Strobe duration	Short → Long
4	Rate	0	255	0,0%	100,0%	Strobe rate	Slow → Fast
5	Effect	0	5	0,0%	2,0%	No effect	Snap
		6	10	2,4%	3,9%	Flicker	Note 1
		11	15	4,3%	5,9%	Random strobe pixels	
		16	20	6,3%	7,8%	Random strobe panel	
		21	25	8,2%	9,8%	Flicker colors	Note 1
		26	30	10,2%	11,8%	Random color panels	
		31	35	12,2%	13,7%	Spikes colors	
		36	40	14,1%	15,7%	Spikes panel	
		41	45	16,1%	17,6%	Pre-red	
		46	50	18,0%	19,6%	Pre-green	
		51	55	20,0%	21,6%	Pre-blue	
		56	60	22,0%	23,5%	RGB-flicker	Note 1
		61	65	23,9%	25,5%	Lightning	
		66	70	25,9%	27,5%	Circle RGB	Note 1
		71	75	27,8%	29,4%	Fire	
		76	80	29,8%	31,4%	Ice	
		81	85	31,8%	33,3%	Magenta-red-blue	
		86	90	33,7%	35,3%	Random color fade pixel	
		91	95	35,7%	37,3%	Circle CW	
		96	100	37,6%	39,2%	Circle CCW	
		101	105	39,6%	41,2%	Effect down	
106	110	41,6%	43,1%	Effect up			
111	115	43,5%	45,1%	Effect up down			
116	120	45,5%	47,1%	Effect pixel 1-6			
121	255	47,5%	100,0%	No strobe			
6	Macro	0	4	0,0%	1,6%	Open	
		5	9	2,0%	3,5%	Congo/color 1	
		10	14	3,9%	5,5%	Red/color 2	
		15	19	5,9%	7,5%	Green/color 3	
		20	24	7,8%	9,4%	Blue/color 4	
		25	29	9,8%	11,4%	Orange/color 5	
		30	34	11,8%	13,3%	Light green/color 6	
		35	39	13,7%	15,3%	Pink/color 7	
		40	44	15,7%	17,3%	Light blue/ color 8	



CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
6	Macro	45	49	17,6%	19,2%	Purple/color 9	
		50	54	19,6%	21,2%	Neon green/color 10	
		55	59	21,6%	23,1%	Magenta/color 11	
		60	64	23,5%	25,1%	Cyan/color 12	
		65	69	25,5%	27,1%	Yellow/color 13	
		70	74	27,5%	29,0%	CTC/color 14	
		75	79	29,4%	31,0%	Scroll (CCW)	Slow → Fast
		80	84	31,4%	32,9%	Scroll (CW)	Slow → Fast
		85	89	33,3%	34,9%	Random color	Fast → Slow
		90	180	35,3%	70,6%	Color filter emulation	See color filter chart
		181	255	71,0%	100,0%	Reserved	
7	Color mode	0	4	0,0%	1,6%	CTC RGB	Snap Note 3
		5	9	2,0%	3,5%	xy Control (CIE 1931)	
		10	14	3,9%	5,5%	CTC RGBW	
		15	19	5,9%	7,5%	HSI	
		20	24	7,8%	9,4%	CMY	
		25	255	9,8%	100,0%	CTC RGB	
8	+/- Green	0	4	0,0%	1,6%	Neutral	
		5	125	2,0%	49,0%	Minus Green	
		126	134	49,4%	52,5%	Neutral	
		135	255	52,9%	100,0%	Plus Green	
9 + 10	Frequency	0	4	0,0%	0,0%	Default	
		5	65535	0,0%	100,0%	3,29kHz to 21kHz	
11	Dimming Curve	0	4	0,0%	1,6%	Default	Snap Note 4
		5	9	2,0%	3,5%	Halogen Curve	
		10	14	3,9%	5,5%	Gamma Corrected Curve	
		15	19	5,9%	7,5%	Linear Curve	
		20	255	7,8%	100,0%	Gamma Corrected Curve	
12	Fan Mode	0	4	0,0%	1,6%	Default	
		5	255	2,0%	100,0%	Manual 0→100	
13	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
14 + 15	Red	0	65535	0,0%	100,0%	0% → 100% Red	
	x	0	65535	0,0%	100,0%	x	
	Red	0	65535	0,0%	100,0%	0% → 100% Red	
	Hue	0	65535	0,0%	100,0%	Hue	
	Cyan	0	65535	0,0%	100,0%	0% → 100% Cyan	
16 + 17	Green	0	65535	0,0%	100,0%	0% → 100% Green	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
16 + 17	y	0	65535	0,0%	100,0%	y	
	Green	0	65535	0,0%	100,0%	0% → 100% Green	
	Saturation	0	65535	0,0%	100,0%	Saturation	
	Magenta	0	65535	0,0%	100,0%	0% → 100% Magenta	
18 + 19	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
	z	0	65535	0,0%	100,0%	Z	
	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
	Intensity	0	65535	0,0%	100,0%	Intensity	
	Yellow	0	65535	0,0%	100,0%	0% → 100% Yellow	
20 + 21	N/A					N/A	
	N/A					N/A	
	White	0	65535	0,0%	100,0%	0% → 100% White	
	N/A					N/A	
	N/A					N/A	

## STANDARD MODES



### 3 CHANNEL RGB

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

### 4 CHANNEL RAW

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

## 6 CHANNEL CTC (DEFAULT MODE)

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%	Strobe	Fast → Slow
		152	175	59,6%	68,6%	Pulse up	Slow → Fast
		176	199	69,0%	78,0%	Pulse down	Slow → Fast
		200	244	78,4%	95,7%	Random	Slow → Fast
		245	255	96,1%	100,0%	Open	Snap
2	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
3	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
4	Red	0	255	0,0%	100,0%	0% → 100% Red	
5	Green	0	255	0,0%	100,0%	0% → 100% Green	
6	Blue	0	255	0,0%	100,0%	0% → 100% Blue	

## 8 CHANNEL RAW

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1 + 2	Red	0	65535	0,0%	100,0%	0% → 100% Red	
3 + 4	Green	0	65535	0,0%	100,0%	0% → 100% Green	
5 + 6	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	
7 + 8	White	0	65535	0,0%	100,0%	0% → 100% White	

# 10 CHANNEL CTC

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%	Strobe	Fast → Slow
		152	175	59,6%	68,6%	Pulse up	Slow → Fast
		176	199	69,0%	78,0%	Pulse down	Slow → Fast
		200	244	78,4%	95,7%	Random	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%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
5 + 6	Red	0	65535	0,0%	100,0%	0% → 100% Red	
7 + 8	Green	0	65535	0,0%	100,0%	0% → 100% Green	
9 + 10	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	

## 25 CHANNEL STANDARD

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1	Intensity	0	255	0,0%	100,0%	0% → 100% Intensity	Fade
2	Duration	0	255	0,0%	100,0%	Strobe duration	Short → Long
3	Rate	0	255	0,0%	100,0%	Strobe rate	Slow → Fast
4	Effect	0	5	0,0%	2,0%	No effect	Snap
		6	10	2,4%	3,9%	Flicker	
		11	15	4,3%	5,9%	Random strobe panels	
		16	20	6,3%	7,8%	Random strobe pixels	
		21	25	8,2%	9,8%	Flicker colors	
		26	30	10,2%	11,8%	Random color pixels	
		31	35	12,2%	13,7%	Spikes colors	
		36	40	14,1%	15,7%	Spikes panels	
		41	45	16,1%	17,6%	Pre-red	
		46	50	18,0%	19,6%	Pre-green	
		51	55	20,0%	21,6%	Pre-blue	
		56	60	22,0%	23,5%	RGB-flicker	
		61	65	23,9%	25,5%	Lightning	
		66	70	25,9%	27,5%	Circle RGB	
		71	75	27,8%	29,4%	Fire	
		76	80	29,8%	31,4%	Ice	
		81	85	31,8%	33,3%	Magenta-red-blue	
		86	90	33,7%	35,3%	Random color fade pixel	
		91	95	35,7%	37,3%	Circle CW	
		96	100	37,6%	39,2%	Circle CCW	
101	105	39,6%	41,2%	Effect down			
106	110	41,6%	43,1%	Effect up			
111	115	43,5%	45,1%	Effect up down			
116	120	45,5%	47,1%	Effect pixel 1-6			
121	184	47,5%	72,2%	Effect individual pixel	See Pixel Chart		
185	255	72,5%	100,0%	No effect			
5	Macro	0	4	0,0%	1,6%	Open	Snap
		5	9	2,0%	3,5%	Congo/color 1	
		10	14	3,9%	5,5%	Red/color 2	
		15	19	5,9%	7,5%	Green/color 3	
		20	24	7,8%	9,4%	Blue/color 4	
		25	29	9,8%	11,4%	Orange/color 5	
		30	34	11,8%	13,3%	Light green/color 6	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
5	Macro	35	39	13,7%	15,3%	Pink/color 7	
		40	44	15,7%	17,3%	Light blue/ color 8	
		45	49	17,6%	19,2%	Purple/color 9	
		50	54	19,6%	21,2%	Neon green/color 10	
		55	59	21,6%	23,1%	Magenta/color 11	
		60	64	23,5%	25,1%	Cyan/color 12	
		65	69	25,5%	27,1%	Yellow/color 13	
		70	74	27,5%	29,0%	CTC/color 14	
		75	79	29,4%	31,0%	Scroll (CCW)	Fast → Slow
		80	84	31,4%	32,9%	Scroll (CW)	Slow → Fast
		85	89	33,3%	34,9%	Random color	Fast → Slow
		90	180	35,3%	70,6%	Color filter emulation	See color filter chart
		181	199	71,0%	78,0%	Minus green	
		200	200	78,4%	78,4%	Neutral	
		201	219	78,8%	85,9%	Plus green	
		220	255	86,3%	100,0%	Open (Reserved)	Snap
6	CTC	0	0	0,0%	0,0%	5600 Kelvin	
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	See CTC chart
7	Color path	0	127	0,0%	49,8%	SGM Standard	
		128	255	50,2%	100,0%	SGM VersaPath™	Note 5
8	Red 1	0	255	0,0%	100,0%	0% → 100% Red	
9	Green 1	0	255	0,0%	100,0%	0% → 100% Green	
10	Blue 1	0	255	0,0%	100,0%	0% → 100% Blue	
11	Red 2	0	255	0,0%	100,0%	0% → 100% Red	
12	Green 2	0	255	0,0%	100,0%	0% → 100% Green	
13	Blue 2	0	255	0,0%	100,0%	0% → 100% Blue	
14	Red 3	0	255	0,0%	100,0%	0% → 100% Red	
15	Green 3	0	255	0,0%	100,0%	0% → 100% Green	
16	Blue 3	0	255	0,0%	100,0%	0% → 100% Blue	
17	Red 4	0	255	0,0%	100,0%	0% → 100% Red	
18	Green 4	0	255	0,0%	100,0%	0% → 100% Green	
19	Blue 4	0	255	0,0%	100,0%	0% → 100% Blue	
20	Red 5	0	255	0,0%	100,0%	0% → 100% Red	
21	Green 5	0	255	0,0%	100,0%	0% → 100% Green	
22	Blue 5	0	255	0,0%	100,0%	0% → 100% Blue	
23	Red 6	0	255	0,0%	100,0%	0% → 100% Red	
24	Green 6	0	255	0,0%	100,0%	0% → 100% Green	
25	Blue 6	0	255	0,0%	100,0%	0% → 100% Blue	

# 35 CHANNEL EXTENDED

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1 + 2	Intensity	0	65535	0,0%	100,0%	0% → 100% Intensity	Fade
3	Duration	0	255	0,0%	100,0%	Strobe duration	Short → Long
4	Rate	0	255	0,0%	100,0%	Strobe rate	Slow → Fast
5	Effect	0	5	0,0%	2,0%	No effect	Snap
		6	10	2,4%	3,9%	Flicker	
		11	15	4,3%	5,9%	Random strobe panels	
		16	20	6,3%	7,8%	Random strobe pixels	
		21	25	8,2%	9,8%	Flicker colors	
		26	30	10,2%	11,8%	Random color pixels	
		31	35	12,2%	13,7%	Spikes colors	
		36	40	14,1%	15,7%	Spikes panels	
		41	45	16,1%	17,6%	Pre-red	
		46	50	18,0%	19,6%	Pre-green	
		51	55	20,0%	21,6%	Pre-blue	
		56	60	22,0%	23,5%	RGB-flicker	
		61	65	23,9%	25,5%	Lightning	
		66	70	25,9%	27,5%	Circle RGB	
		71	75	27,8%	29,4%	Fire	
		76	80	29,8%	31,4%	Ice	
		81	85	31,8%	33,3%	Magenta-red-blue	
		86	90	33,7%	35,3%	Random color fade pixel	
		91	95	35,7%	37,3%	Circle CW	
		96	100	37,6%	39,2%	Circle CCW	
101	105	39,6%	41,2%	Effect down			
106	110	41,6%	43,1%	Effect up			
111	115	43,5%	45,1%	Effect up down			
116	120	45,5%	47,1%	Effect pixel 1-6			
121	184	47,5%	72,2%	Effect individual pixel	See Pixel Chart		
185	255	72,5%	100,0%	No effect			
6	Red Strobe	0	255	0,0%	100,0%		Note 2
7	Green Strobe	0	255	0,0%	100,0%		
8	Blue Strobe	0	255	0,0%	100,0%		
9	White Strobe	0	255	0,0%	100,0%		
10	Red 1	0	255	0,0%	100,0%	0% → 100% Red	
11	Green 1	0	255	0,0%	100,0%	0% → 100% Green	
12	Blue 1	0	255	0,0%	100,0%	0% → 100% Blue	



CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
13	White 1	0	255	0,0%	100,0%	0% → 100% White	
14	Red 2	0	255	0,0%	100,0%	0% → 100% Red	
15	Green 2	0	255	0,0%	100,0%	0% → 100% Green	
16	Blue 2	0	255	0,0%	100,0%	0% → 100% Blue	
17	White 2	0	255	0,0%	100,0%	0% → 100% White	
18	Red 3	0	255	0,0%	100,0%	0% → 100% Red	
19	Green 3	0	255	0,0%	100,0%	0% → 100% Green	
20	Blue 3	0	255	0,0%	100,0%	0% → 100% Blue	
21	White 3	0	255	0,0%	100,0%	0% → 100% White	
22	Red 4	0	255	0,0%	100,0%	0% → 100% Red	
23	Green 4	0	255	0,0%	100,0%	0% → 100% Green	
24	Blue 4	0	255	0,0%	100,0%	0% → 100% Blue	
25	White 4	0	255	0,0%	100,0%	0% → 100% White	
26	Red 5	0	255	0,0%	100,0%	0% → 100% Red	
27	Green 5	0	255	0,0%	100,0%	0% → 100% Green	
28	Blue 5	0	255	0,0%	100,0%	0% → 100% Blue	
29	White 5	0	255	0,0%	100,0%	0% → 100% White	
30	Red 6	0	255	0,0%	100,0%	0% → 100% Red	
31	Green 6	0	255	0,0%	100,0%	0% → 100% Green	
32	Blue 6	0	255	0,0%	100,0%	0% → 100% Blue	
33	White 6	0	255	0,0%	100,0%	0% → 100% White	
34	Frequency	0	4	0,0%	1,6%	Default (3,29KHz)	Snap
		5	255	2,0%	100,0%	3,29KHz → 21,0KHz	Min → Max
35	Dimming curve	0	4	0,0%	1,6%	Smooth Gamma Corrected	Snap Note 4
		5	9	2,0%	3,5%	Smooth Linear	
		10	14	3,9%	5,5%	Halogen Gamma Corrected	
		15	19	5,9%	7,5%	Halogen Linear	
		20	24	7,8%	9,4%	Fast Gamma Corrected	
		25	29	9,8%	11,4%	Fast Linear	
		30	34	11,8%	13,3%	Extended smooth Gamma Corrected	
		35	39	13,7%	15,3%	Extended smooth Linear	
		40	44	15,7%	17,3%	Extended halogen Gamma Corrected	
		45	49	17,6%	19,2%	Extended halogen Linear	
		50	54	19,6%	21,2%	Extended fast Gamma Corrected	
		55	59	21,6%	23,1%	Extended fast Linear	
60	255	23,5%	100,0%	Reserved (Keeps last curve, minus extended)			

## 22 CHANNEL STUDIO

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
1 + 2	Intensity	0	65535	0,0%	100,0%	0% → 100% Intensity	Fade
3	Duration	0	255	0,0%	100,0%	Strobe duration	Short → Long
4	Rate	0	255	0,0%	100,0%	Strobe rate	Slow → Fast
5	Effect	0	5	0,0%	2,0%	No effect	Snap
		6	10	2,4%	3,9%	Flicker	
		11	15	4,3%	5,9%	Random strobe panels	
		16	20	6,3%	7,8%	Random strobe pixels	
		21	25	8,2%	9,8%	Flicker colors	
		26	30	10,2%	11,8%	Random color pixels	
		31	35	12,2%	13,7%	Spikes colors	
		36	40	14,1%	15,7%	Spikes panels	
		41	45	16,1%	17,6%	Pre-red	
		46	50	18,0%	19,6%	Pre-green	
		51	55	20,0%	21,6%	Pre-blue	
		56	60	22,0%	23,5%	RGB-flicker	
		61	65	23,9%	25,5%	Lightning	
		66	70	25,9%	27,5%	Circle RGB	
		71	75	27,8%	29,4%	Fire	
		76	80	29,8%	31,4%	Ice	
		81	85	31,8%	33,3%	Magenta-red-blue	
		86	90	33,7%	35,3%	Random color fade pixel	
		91	95	35,7%	37,3%	Circle CW	
		96	100	37,6%	39,2%	Circle CCW	
101	105	39,6%	41,2%	Effect down			
106	110	41,6%	43,1%	Effect up			
111	115	43,5%	45,1%	Effect up down			
116	120	45,5%	47,1%	Effect pixel 1-6			
121	184	47,5%	72,2%	Effect individual pixel	See Pixel Chart		
185	255	72,5%	100,0%	No effect			
6	Macro	0	4	0,0%	1,6%	Open	Snap
		5	9	2,0%	3,5%	Congo/color 1	
		10	14	3,9%	5,5%	Red/color 2	
		15	19	5,9%	7,5%	Green/color 3	
		20	24	7,8%	9,4%	Blue/color 4	
		25	29	9,8%	11,4%	Orange/color 5	
		30	34	11,8%	13,3%	Light green/color 6	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
6	Macro	35	39	13,7%	15,3%	Pink/color 7	
		40	44	15,7%	17,3%	Light blue/ color 8	
		45	49	17,6%	19,2%	Purple/color 9	
		50	54	19,6%	21,2%	Neon green/color 10	
		55	59	21,6%	23,1%	Magenta/color 11	
		60	64	23,5%	25,1%	Cyan/color 12	
		65	69	25,5%	27,1%	Yellow/color 13	
		70	74	27,5%	29,0%	CTC/color 14	
		75	79	29,4%	31,0%	Scroll (CCW)	Fast → Slow
		80	84	31,4%	32,9%	Scroll (CW)	Slow → Fast
		85	89	33,3%	34,9%	Random color	Fast → Slow
		90	180	35,3%	70,6%	Color filter emulation	See color filter chart
	181	255	71,0%	100,0%	Open (Reserved)	Snap	
7	Color mode	0	4	0,0%	1,6%	CTC RGB	Snap Note 3
		5	9	2,0%	3,5%	xy (CIE 1931)	
		10	14	3,9%	5,5%	CTC RGBW	
		15	19	5,9%	7,5%	HSI	
		20	24	7,8%	9,4%	CMY	
		25	29	9,8%	11,4%	CTC RGB+W	
		30	255	11,8%	100,0%	Reserved (keeps last mode)	
8	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
9	Dimming curve	0	4	0,0%	1,6%	Smooth Gamma Corrected	Snap Note 4
		5	9	2,0%	3,5%	Smooth Linear	
		10	14	3,9%	5,5%	Halogen Gamma Corrected	
		15	19	5,9%	7,5%	Halogen Linear	
		20	24	7,8%	9,4%	Fast Gamma Corrected	
		25	29	9,8%	11,4%	Fast Linear	
		30	34	11,8%	13,3%	Extended smooth Gamma Corrected	
		35	39	13,7%	15,3%	Extended smooth Linear	
		40	44	15,7%	17,3%	Extended halogen Gamma Corrected	
		45	49	17,6%	19,2%	Extended halogen Linear	
		50	54	19,6%	21,2%	Extended fast Gamma Corrected	
		55	59	21,6%	23,1%	Extended fast Linear	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
9	Dimming curve	60	255	23,5%	100,0%	Reserved (Keeps last curve, minus extended)	
10	CTC	0	0	0,0%	0,0%	5600 Kelvin	See CTC chart
		1	4	0,4%	1,6%	Raw	
		5	255	2,0%	100,0%	2000K → 10000K	
11	Color path	0	127	0,0%	49,8%	SGM Standard	Note 5
		128	255	50,2%	100,0%	SGM VersaPath™	
12 + 13	Red	0	65535	0,0%	100,0%	0% → 100% Red	Fade
14 + 15	Green	0	65535	0,0%	100,0%	0% → 100% Green	Fade
16 + 17	Blue	0	65535	0,0%	100,0%	0% → 100% Blue	Fade
18 + 19	White	0	65535	0,0%	100,0%	0% → 100% White	Fade
20	Frequency	0	4	0,0%	1,6%	Default (3,29KHz)	Snap
		5	255	2,0%	100,0%	3,29KHz → 21,0KHz	Min → Max
21	High speed	0	9	0,0%	3,5%	Not active	Snap Note 6
		10	19	3,9%	7,5%	Mode 1	
		20	29	7,8%	11,4%	Mode 2	
		30	39	11,8%	15,3%	Mode 3	
		40	49	15,7%	19,2%	Mode 4	
		50	59	19,6%	23,1%	Mode 5	
		60	69	23,5%	27,1%	Mode 6	
		70	79	27,5%	31,0%	Mode 7	
22	Fan ctrl.	0	4	0,0%	1,6%	Default (Auto)	Snap
		5	255	2,0%	100,0%	Manual speed control	Min → Max

### NOTE 1

These effects used the Strobe Effect channel values to determine the effect rate in firmware 2.xx. In firmware 4.xx these effects will react to the Rate channel instead.

### NOTE 2

RGB(W) strobe effect on a separate layer, on top of RGBW pixels, controllable via Rate and Duration on the panel. The Red, Green, Blue and White Strobe channels can be combined to achieve a mixed RGBW strobe on top of a mixed RGBW background or RGBW pixel control. In calibrated modes, combine the Red Strobe, Green Strobe, and Blue Strobe, to achieve a calibrated White Strobe.

The White Strobe channel is only available in RAW modes that also include a White channel

### NOTE 3

- **CTC RGB** allows RGBW mixing with CTC control over white on the Red, Green and Blue channels (6300K White LED is controlled via RGB color engine).
- **CTC RGBW** allows RGBW mixing with CTC control over white on the Red, Green, Blue and White channels (6300K White LED is controlled via RGBW color engine).
- **CTC RGB+W** allows RGB mixing with CTC control over white on the Red, Green and Blue channels, plus independent control over 6300K White LED on the White channel (6300K White LED is not part of the color engine).
- **HSI** and **CMY** modes use the Red, Green and Blue channels for the color mix.
- **xy** mode does not allow CTC control.

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

### NOTE 4

Changes the dimming curve on the RGBW Panel.

- **Smooth Gamma Corrected** is compatible with previous SGM products.
- **Halogen** creates an organic delay, similar to tungsten-lamp performance when filament is heated up.
- **Extended Range** creates a low-end dimming that ignores the SGM recommended minimum level to achieve a wider threshold.

### NOTE 5

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.

When the Color Path is set to Standard, the color mixing is compatible with all SGM RGB-based products since 2009. CTC channel can only affect the RGB color mix when at least 3 primary colors have values above 000.

## **NOTE 6**

When one of the High Speed Modes is active, the Panel Intensity channel is used to turn on the white LED of the panel (6300K / CRI 70 / Brightness 100%). This requires the Panel Intensity channel to be set to a DMX value from 1 to 255. At a DMX value of 0, the Panel will turn off. Any other channel will be disabled when a High Speed Mode is active.

7 different modes are available to assure the best output depending on the ambient temperature:

- **Mode 1:** unknown or variable ambient temperature.
- **Mode 2:** temperatures up to 15°C.
- **Mode 3:** temperatures up to 20°C.
- **Mode 4:** temperatures up to 25°C.
- **Mode 5:** temperatures up to 30°C.
- **Mode 6:** temperatures up to 35°C.
- **Mode 7:** temperatures up to 40°C.

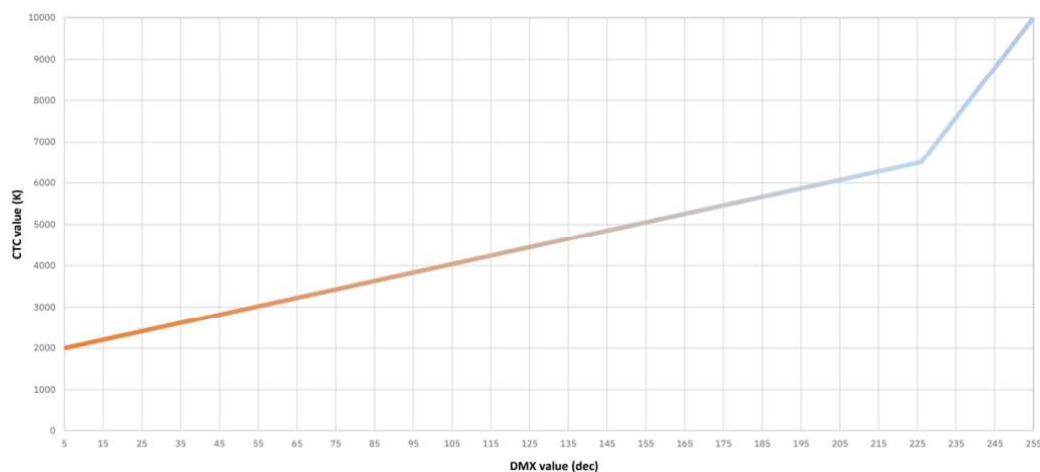
## PIXEL CHART

EFFECT	DMX	DMX PERCENTAGE	PIXEL 1	PIXEL 2	PIXEL 3	PIXEL 4	PIXEL 5	PIXEL 6
Individual Pixel Control	121	47,5%	○	○	○	○	○	○
	122	47,8%		○	○	○	○	○
	123	48,2%	○		○	○	○	○
	124	48,6%			○	○	○	○
	125	49,0%	○	○		○	○	○
	126	49,4%		○		○	○	○
	127	49,8%	○			○	○	○
	128	50,2%				○	○	○
	129	50,6%	○	○	○		○	○
	130	51,0%		○	○		○	○
	131	51,4%	○		○		○	○
	132	51,8%			○		○	○
	133	52,2%	○	○			○	○
	134	52,5%		○			○	○
	135	52,9%	○				○	○
	136	53,3%					○	○
	137	53,7%	○	○	○	○		○
	138	54,1%		○	○	○		○
	139	54,5%	○		○	○		○
	140	54,9%			○	○		○
	141	55,3%	○	○		○		○
	142	55,7%		○		○		○
	143	56,1%	○			○		○
	144	56,5%				○		○
	145	56,9%	○	○	○			○
	146	57,3%		○	○			○
	147	57,6%	○		○			○
	148	58,0%			○			○
	149	58,4%	○	○				○
	150	58,8%		○				○
	151	59,2%	○					○
	152	59,6%						○
	153	60,0%	○	○	○	○	○	
	154	60,4%		○	○	○	○	
	155	60,8%	○		○	○	○	
	156	61,2%			○	○	○	
	157	61,6%	○	○		○	○	

EFFECT	DMX	DMX PERCENTAGE	PIXEL 1	PIXEL 2	PIXEL 3	PIXEL 4	PIXEL 5	PIXEL 6
Individual Pixel Control	158	62,0%		o		o	o	
	159	62,4%	o			o	o	
	160	62,7%				o	o	
	161	63,1%	o	o	o		o	
	162	63,5%		o	o		o	
	163	63,9%	o		o		o	
	164	64,3%			o		o	
	165	64,7%	o	o			o	
	166	65,1%		o			o	
	167	65,5%	o				o	
	168	65,9%					o	
	169	66,3%	o	o	o	o		
	170	66,7%		o	o	o		
	171	67,1%	o		o	o		
	172	67,5%			o	o		
	173	67,8%	o	o		o		
	174	68,2%		o		o		
	175	68,6%	o			o		
	176	69,0%				o		
	177	69,4%	o	o	o			
	178	69,8%		o	o			
	179	70,2%	o		o			
	180	70,6%			o			
	181	71,0%	o	o				
	182	71,4%		o				
	183	71,8%	o					
	184	72,2%						



## CTC CHART



CTC	DMX	DMX PERCENTAGE	COLOR TEMPERATURE
2000K → 10000K	5	2,0%	2000K
	15	5,9%	2200K
	25	9,8%	2400K
	35	13,7%	2600K
	45	17,6%	2800K
	55	21,6%	3000K
	65	25,5%	3200K
	75	29,4%	3400K
	85	33,3%	3600K
	95	37,3%	3800K
	105	41,1%	4000K
	115	45,1%	4200K
	125	49,0%	4400K
	135	53,0%	4600K
	145	56,9%	4800K
	155	60,8%	5000K
	165	64,7%	5200K
	175	68,6%	5400K
	185	72,6%	5600K
	195	76,5%	5900K
205	80,4%	6100K	
215	84,3%	6300K	
225	88,2%	6500K	
235	92,2%	7500K	
245	96,1%	8800K	
255	100%	10000K	

## COLOR FILTER EMULATION CHART

MACRO	DMX	DMX PERCENTAGE	COLOR NAME	FILTER
Color Filter Emulation	90	35,3%	Med Bast Amber	LEE 004
	91	35,7%	Med Yellow	LEE 010
	92	36,1%	Straw Tint	LEE 013
	93	36,5%	Surprise Peach	LEE 017
	94	36,9%	Fire	LEE 019
	95	37,3%	Med Amber	LEE 020
	96	37,6%	Gold Amber	LEE 021
	97	38,0%	Dark Amber	LEE 022
	98	38,4%	Sunset red	LEE 025
	99	38,8%	Bright red	LEE 026
	100	39,2%	Light Pink	LEE 035
	101	39,6%	Med Pink	LEE 036
	102	40,0%	Medium Purple	LEE 049
	103	40,4%	Lt Lavender	LEE 052
	104	40,8%	Lavender	LEE 058
	105	41,2%	Sky Blue	LEE 068
	106	41,6%	Tokyo Blue	LEE 071
	107	42,0%	Just Blue	LEE 079
	108	42,4%	Lime Green	LEE 088
	109	42,7%	Moss Green	LEE 089
	110	43,1%	Dk Yellow/Green	LEE 090
	111	43,5%	Spring Yellow	LEE 100
	112	43,9%	Lt Amber	LEE 102
	113	44,3%	Straw	LEE 103
	114	44,7%	Deep Amber	LEE 104
	115	45,1%	Orange	LEE 105
116	45,5%	Primary Red	LEE 106	
117	45,9%	Lt. Rose	LEE 107	
118	46,3%	English Rose	LEE 108	
119	46,7%	Lt. Salmon	LEE 109	
120	47,1%	Middle Rose	LEE 110	
121	47,5%	Dark Pink	LEE 111	
122	47,8%	Magenta	LEE 113	
123	48,2%	Peacock Blue	LEE 115	
124	48,6%	Med Blue-Green	LEE 116	
125	49,0%	Steel Blue	LEE 117	
126	49,4%	Light Blue	LEE 118	

MACRO	DMX	DMX PERCENTAGE	COLOR NAME	FILTER
Color Filter Emulation	127	49,8%	Dark Blue	LEE 119
	128	50,2%	Deep Blue	LEE 120
	129	50,6%	Lee Green	LEE 121
	130	51,0%	Fern Green	LEE 122
	131	51,4%	Dark Green	LEE 124
	132	51,8%	Mauve	LEE 126
	133	52,2%	Bright Pink	LEE 128
	134	52,5%	Marine Blue	LEE 131
	135	52,9%	Med Blue	LEE 132
	136	53,3%	Golden Amber	LEE 134
	137	53,7%	Deep Golden Amber	LEE 135
	138	54,1%	Pale Lavender	LEE 136
	139	54,5%	Spec Lavender	LEE 137
	140	54,9%	Pale Green	LEE 138
	141	55,3%	Primary Green	LEE 139
	142	55,7%	Summer Blue	LEE 140
	143	56,1%	Bright Blue	LEE 141
	144	56,5%	Pale Navy Blue	LEE 143
	145	56,9%	Apricot	LEE 147
	146	57,3%	Bright Rose	LEE 148
	147	57,6%	Pale Gold35	LEE 152
	148	58,0%	Pale Rose	LEE 154
	149	58,4%	Pink	LEE 157
	150	58,8%	Deep Orange	LEE 158
	151	59,2%	Slate Blue	LEE 161
	152	59,6%	Bastard Amber	LEE 162
	153	60,0%	Flame Red	LEE 164
	154	60,4%	Daylight Blue	LEE 165
	155	60,8%	Lilac Tint	LEE 169
	156	61,2%	Deep Lavender	LEE 170
157	61,6%	Lagoon Blue	LEE 172	
158	62,0%	Dk Steel Blue	LEE 174	
159	62,4%	Chrome Orange	LEE 179	
160	62,7%	Dark Lavender	LEE 180	
161	63,1%	Congo Blue	LEE 181	
162	63,5%	Light Red	LEE 182	
163	63,9%	Surprise Pink	LEE 194	
164	64,3%	Alice Blue	LEE 197	
165	64,7%	Double C.T. Blue	LEE 200	

MACRO	DMX	DMX PERCENTAGE	COLOR NAME	FILTER
Color Filter Emulation	166	65,1%	Full C.T. Blue36	LEE 201
	167	65,5%	1/2 C.T. Blue	LEE 202
	168	65,9%	1/4 C.T. Blue	LEE 203
	169	66,3%	Full C.T. Orange	LEE 204
	170	66,7%	1/4 C.T. Orange	LEE 206
	171	67,1%	Fluorescent Green	LEE 219
	172	67,5%	Lee Minus Green	LEE 247
	173	67,8%	1/2 Minus Green	LEE 248
	174	68,2%	3/4 C.T. Blue	LEE 281
	175	68,6%	3/4 C.T. Orange	LEE 285
	176	69,0%	Follies Pink	LEE 328
	177	69,4%	S Spec Rose Pink	LEE 332
	178	69,8%	Fuchsia Pink	LEE 345
	179	70,2%	Glacier Blue	LEE 352
	180	70,6%	Lighter Blue	LEE 353



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