

DMX PROTOCOL

PALCO FAMILY



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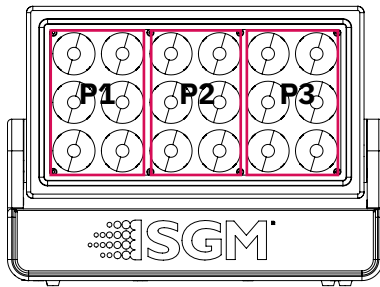
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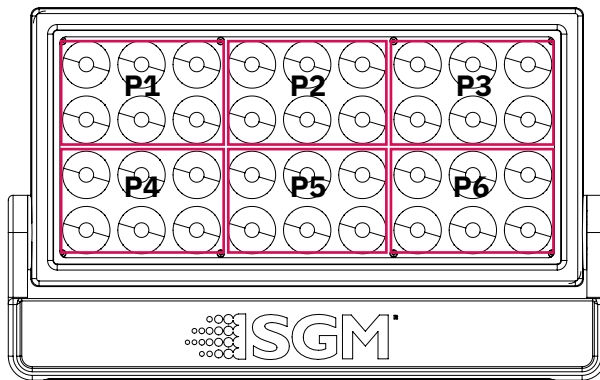
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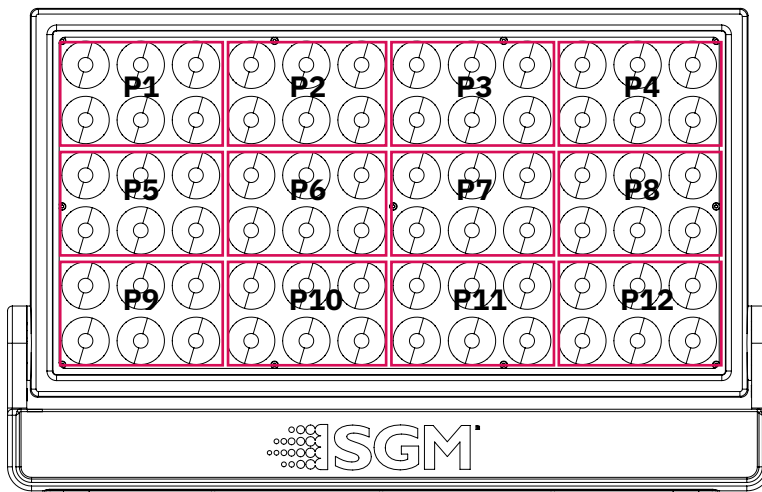
PALCO 3



PALCO 6



PALCO 12



STANDARD (10 CHANNELS)

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	Snap
		5	255	2,0%	100,0%	2000K → 10000K	"CTC Chart"
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

EXTENDED (29, 47, 83 CHANNELS)

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 1-30Hz	Slow → Fast
5	Effect	0	4	0,0%	1,6%	No Effect	Snap
		5	9	2,0%	3,5%	Flicker	
		10	14	3,9%	5,5%	RandomStrobe	
		15	19	5,9%	7,5%	RandomStrobePixels	
		20	24	7,8%	9,4%	Flicker_Color	
		25	29	9,8%	11,4%	RandomStrobeColor	
		30	34	11,8%	13,3%	SpikeColors	
		35	39	13,7%	15,3%	SpikesPanel	
		40	44	15,7%	17,6%	PreRed	
		45	49	17,6%	19,2%	PreGreen	
		50	54	19,6%	21,2%	PreBlue	
		55	59	21,6%	23,1%	RGBFlicker	
		60	64	23,5%	25,1%	Lightning	
		65	69	25,5%	27,1%	RollEffectRGB	
		70	74	27,5%	29,0%	Fire	
		75	79	29,4%	31,0%	Ice	
		80	84	31,4%	32,9%	MagentaRedBue	
		85	89	33,3%	34,9%	RandomColorFade	
		90	94	35,3%	36,9%	HalogenAttack	
		95	99	37,3%	38,8%	HalogenDecay	
		100	255	39,2%	100%	No Effect	
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%	17,6%	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	Slow → Fast
		80	84	31,4%	32,9%	Scroll (CW) Slow → Fast	Slow → Fast
		85	89	33,3%	34,9%	Random color See color filter chart	
		90	180	35,3%	70,6%	Color filter emulation	See color filter chart
		181	255	71,0%	100%	Open	
7	Dimming Curve	0	4	0,0%	1,6%	Gamma Filtered	"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%	Gamma Filtered	
8	CTC	0	0	0,0%	0,0%	Default Calibrated white	"Note 1"
		1	4	0,4%	1,6%	Raw	Snap
		5	255	2,0%	100,0%	2000K → 10000K	"CTC Chart"
9	Color path	0	127	0,0%	49,8%	SGM Standard	"Note 2"
		128	255	50,2%	100,0%	SGM VersaPath™	
10	Frequency	0	4	0,0%	1,6%	Default (2,44kHz)	Snap
		5	255	2,0%	100,0%	2.6Khz -10Khz	Min → Max
11	Fan	0	4	0,0%	1,6%	Default (Auto)	PALCO-3 PALCO-6 PALCO-12 Fade
		5	255	2,0%	100,0%	0-100%	
12+13	Red 1	0	65535	0,0%	100,0%	0% → 100% Red	
14+15	Green 1	0	65535	0,0%	100,0%	0% → 100% Green	
16+17	Blue 1	0	65535	0,0%	100,0%	0% → 100% Blue	
18+19	Red 2	0	65535	0,0%	100,0%	0% → 100% Red	
20+21	Green 2	0	65535	0,0%	100,0%	0% → 100% Green	

CHANNEL	NAME	DMX		DMX PERCENTAGE		DESCRIPTION	INFO
22+23	Blue 2	0	65535	0,0%	100,0%	0% → 100% Blue	PALCO-3 PALCO-6 PALCO-12 Fade
24+25	Red 3	0	65535	0,0%	100,0%	0% → 100% Red	
26+27	Green 3	0	65535	0,0%	100,0%	0% → 100% Green	
28+29	Blue 3	0	65535	0,0%	100,0%	0% → 100% Blue	
30+31	Red 4	0	65535	0,0%	100,0%	0% → 100% Red	PALCO-6 PALCO-12 Fade
32+33	Green 4	0	65535	0,0%	100,0%	0% → 100% Green	
34+35	Blue 4	0	65535	0,0%	100,0%	0% → 100% Blue	
36+37	Red 5	0	65535	0,0%	100,0%	0% → 100% Red	
38+39	Green 8	0	65535	0,0%	100,0%	0% → 100% Green	
40+41	Blue 5	0	65535	0,0%	100,0%	0% → 100% Blue	
42+43	Red 6	0	65535	0,0%	100,0%	0% → 100% Red	
44+45	Green 6	0	65535	0,0%	100,0%	0% → 100% Green	
46+47	Blue 6	0	65535	0,0%	100,0%	0% → 100% Blue	PALCO-12 Fade
48+49	Red 7	0	65535	0,0%	100,0%	0% → 100% Red	
50+51	Green 7	0	65535	0,0%	100,0%	0% → 100% Green	
52+53	Blue 7	0	65535	0,0%	100,0%	0% → 100% Blue	
54+55	Red 8	0	65535	0,0%	100,0%	0% → 100% Red	
56+57	Green 8	0	65535	0,0%	100,0%	0% → 100% Green	
58+59	Blue 8	0	65535	0,0%	100,0%	0% → 100% Blue	
60+61	Red 9	0	65535	0,0%	100,0%	0% → 100% Red	
62+63	Green 9	0	65535	0,0%	100,0%	0% → 100% Green	
64+65	Blue 9	0	65535	0,0%	100,0%	0% → 100% Blue	
66+67	Red 10	0	65535	0,0%	100,0%	0% → 100% Red	
68+69	Green 10	0	65535	0,0%	100,0%	0% → 100% Green	
70+71	Blue 10	0	65535	0,0%	100,0%	0% → 100% Blue	
72+73	Red 11	0	65535	0,0%	100,0%	0% → 100% Red	
74+75	Green 11	0	65535	0,0%	100,0%	0% → 100% Green	
76+77	Blue 11	0	65535	0,0%	100,0%	0% → 100% Blue	
78+79	Red 12	0	65535	0,0%	100,0%	0% → 100% Red	
80+81	Green 12	0	65535	0,0%	100,0%	0% → 100% Green	
82+83	Blue 12	0	65535	0,0%	100,0%	0% → 100% Blue	

NOTE 1

When the CTC channel is set to value 000, the fixture will output a 5600 Kelvin white.

NOTE 2

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 3

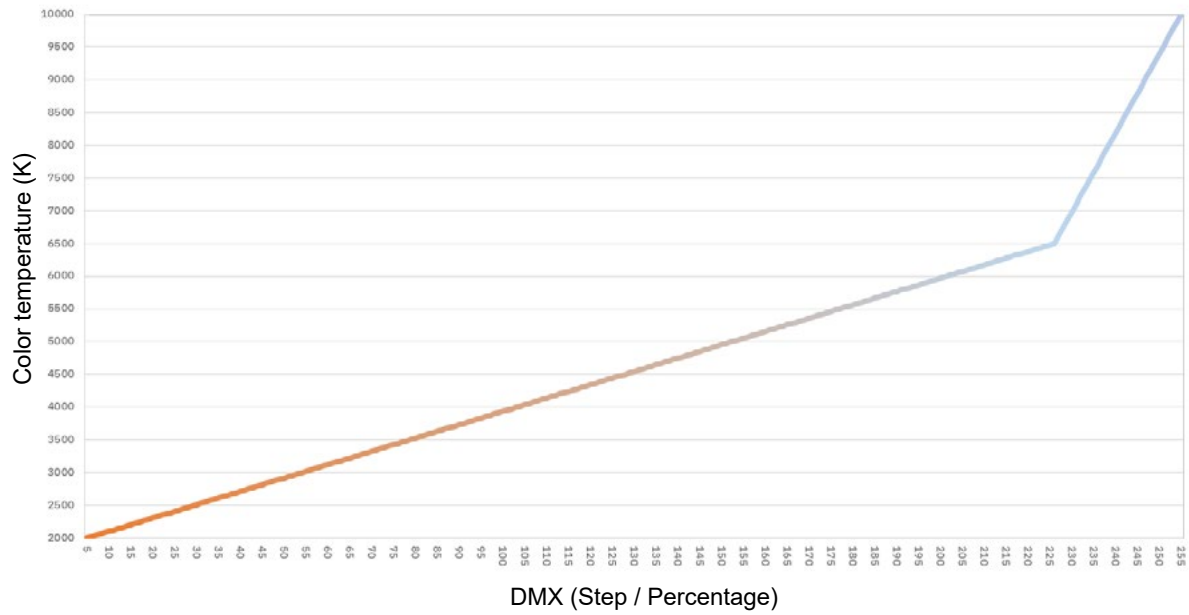
Gamma or **Linear** corrected.

Filtered filters input signal

Raw allows for a faster response

Halogen creates an organic delay, similar to a tungsten lamp

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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