2.7   DMX Protocol

Color Force DMX Personality Mode 1:

Color Force V2.2	In mode 1 grouping is variable.	
	Mode 1	
	Color Force 72 (43ch) 7fx + 12 x HSI	Color Force 48 (31ch) 7fx + 8 x HSI
Channel 1	**Grouping** **0-100** Variable grouping range between 1-12 cells with FX running within the group. **102-206** Variable grouping range between 1-12 cells with FX running between the groups. **209-255** Variable interval grouping range for every 2nd to every 12th cells in a group.	**Grouping** **0-100** Variable grouping range between 1-8 cells with FX running within the group. **102-206** Variable grouping range between 1-8 cells with FX running between the groups. **209-255** Variable interval grouping range for every 2nd to every 8th cells in a group.
Channel 2	**Colour Speed** **0-255** Variable speed of colour scrolling. From static at 0 to maximum at 255. (Intensity Master when on Mode 7fx + 12 x RGB(A) and Ch5 at Full)	
Channel 3	**Colour Fan** **0-255** Variable fan of colour between / within groups. All units are the same colour at 0.	
Channel 4	**Colour Range** **0** Full spectrum **1-255** Variable limit of spectrum for colour scrolling. Single colour at 1, full spectrum at 255.	
Channel 5	**Colour Step** **0-255** Variable control of smoothness of colour scrolling. Smoothest is at 0. Most coarse is at 250. Rate will vary with scrolling speed. 255 will override effects and switch to RGB. (Mode 7fx + 12 x RGB(A) is activated when this Ch is at Full and Ch2 becomes Master Intensity)	
Channel 6	**Intensity Effects** **0** Static **1-63** Fade on, fade off. Variable, 63 fastest **64-127** Fade on, snap off. Variable, 127 the fastest **128-191** Snap on, fade off. Variable, 191 fastest **192-255** Snap on, snap off (strobe). Variable, 255 fastest.	
Channel 7	**Intensity Fan** 0-255 Variable fan of intensity effect between / within groups. All units at the same intensity at 0. Alternating units on & off at 255.	
Channel 8	Hue for group 1	
Channel 9	Saturation for group 1	
Channel 10	Intensity for group 1	
Channel 11	Hue for group 2	
Channel 12	Saturation for group 2	
Channel 13	Intensity for group 2	
	...and so on up to group 12	...and so on up to group 8
Total	43 DMX channels	31 DMX channels

Color Force DMX Personality Mode 2-3

Color Force V2.2	In modes 2 & 3 each cell is a group.			
	Mode 2		Mode 3 (with Magic Amber)	
	Color Force 72 (36ch) 12 x HSI	Color Force 48 (24ch) 8 x HSI	Color Force 72 (36ch) 12 x RGB	Color Force 48 (24ch) 8 x RGB
Channel 1	Hue for group 1		Red for group 1	
Channel 2	Saturation for group 1		Green for group 1	
Channel 3	Intensity for group 1		Blue for group 1	
Channel 4	Hue for group 2		Red for group 2	
Channel 5	Saturation for group 2		Green for group 2	
Channel 6	Intensity for group 2		Blue for group 2	
Channel 7	Hue for group 3		Red for group 3	
Channel 8	Saturation for group 3		Green for group 3	
Channel 9	Intensity for group 3		Blue for group 3	
Channel 10	Hue for group 4		Red for group 4	
Channel 11	Saturation for group 4		Green for group 4	
Channel 12	Intensity for group 4		Blue for group 4	
Channel 13	Hue for group 5		Red for group 5	
	...and so on up to group 12	...and so on up to group 8	...and so on up to group 12	...and so on up to group 8
Total	36 DMX channels	24 DMX channels	36 DMX channels	24 DMX channels

Color Force DMX Personality Mode 4-5.

Color Force V2.2	In modes 4-5 each cell is a group.			
	Mode 4		Mode 5 (with Magic Amber)	
	Color Force 72 (48ch) 12 x RGBA	Color Force 48 (32ch) 8 x RGBA	Color Force 72 (49ch) 1s + 12 x RGBI	Color Force 48 (33ch) 1s + 8 x RGBI
Channel 1	Red for group 1		**Intensity Effects** **0** Static **1-63** Fade on, fade off. Variable, 63 fastest **64-127** Fade on, snap off. Variable, 127 fastest **128-191** Snap on, fade off. Variable, 191 fastest. **192-255** Snap on, snap off (Strobe). Variable, 255 fastest.	
Channel 2	Green for group 1		Red for group 1	
Channel 3	Blue for group 1		Green for group 1	
Channel 4	Amber for group 1		Blue for group 1	
Channel 5	Red for group 2		Intensity for group 1	
Channel 6	Green for group 2		Red for group 2	
Channel 7	Blue for group 2		Green for group 2	
Channel 8	Amber for group 2		Blue for group 2	
Channel 9	Red for group 3		Intensity for group 2	
Channel 10	Green for group 3		Red for group 3	
Channel 11	Blue for group 3		Green for group 3	
Channel 12	Amber for group 3		Blue for group 3	
Channel 13	Red for group 4		Intensity for group 3	
	...and so on up to group 12	...and so on up to group 8	...and so on up to group 12	...and so on up to group 8
Total	48 DMX channels	32 DMX channels	49 DMX channels	33 DMX channels

Color Force DMX Personality Mode 6.

Color Force	In mode 6 all cells are a group (All)
V2.2	Mode 6 Color Force 72 & 48 (9ch) 6fx + HSI
Channel 1	**Colour Speed** **0-255** Variable speed of colour scrolling. From static at 0 to maximum at 255. (This channel becomes Intensity Master when on Mode 6fx + 12 x RGB(A) and Ch4 at Full)
Channel 2	**Colour Fan** **0-255** Variable fan of colour between groups. All units are the same colour at 0.
Channel 3	**Colour Range** **0** Full spectrum **1-255** Variable limit of spectrum for colour scrolling. Single colour at 1, full spectrum at 255.
Channel 4	**Colour Step** **0-255** Variable control of smoothness of colour scrolling. Smoothest is at 0. Most coarse is at 250. Rate will vary with scrolling speed. 255 will override effects and switch to RGB. (Mode 6fx + 12 x RGB(A) is activated when this Ch is at Full and Ch1 becomes Master Intensity)
Channel 5	**Intensity Effects** **0** Static **1-63** Fade on, fade off. Variable, 63 fastest **64-127** Fade on, snap off. Variable, 127 fastest **128-191** Snap on, fade off. Variable, 191 fastest. **192-255** Snap on, snap off (strobe). Variable, 255 fastest
Channel 6	**Intensity Fan** 0-255 Variable fan of intensity effect between groups. All units at the same intensity at 0. Alternating units on and off at 255.
Channel 7	Hue
Channel 8	Saturation
Channel 9	Intensity
Total	**9 DMX channels**

Color Force DMX Personality Mode 7-9

Color Force	In modes 7-9 all cells are a group (All)		
V2.2	Mode 7 (3ch) Color Force 72 & 48 HSI	Mode 8 (3ch) Color Force 72 & 48 RGB (with Magic Amber)	Mode 9 (4ch) Color Force 72 & 48 RGBA
Channel 1	Hue	Red	Red
Channel 2	Saturation	Green	Green
Channel 3	Intensity	Blue	Blue
Channel 4			Amber
Total	**3 DMX channels**	**3 DMX channels**	**4 DMX channels**

Color Force DMX Personality Mode 10

Color Force	In mode 10 all cells are a group (All)			
V2.2	**Mode 10** **Color Force 72 & 48 (5ch)** **1s + RGBI (with Magic Amber)**			
Channel 1	**Intensity Effects** **0** Static **1-63** Fade on, fade off. Variable range, 63 the fastest **64-127** Fade on, snap off. Variable range, 127 the fastest **128-191** Snap on, fade off. Variable range, 191 the fastest. **192-255** Snap on, snap off (strobe). Variable range, 255 the fastest.			
Channel 2	Red			
Channel 3	Green			
Channel 4	Blue			
Channel 5	Intensity			
Total	**5 DMX channels**			

Color Force DMX Personality Mode 11

Color Force V2.2	Mode 11 Color Force 72 & 48 (1ch) Look Select		
Channel 1	Channel levels and the corresponding Look numbers:		

Channel Level (%)	Look	Description
0	OFF	
1–2	1	Full Colour Scroll (5 sec)
3–5	2	Full Colour Scroll (10 sec)
6–9	3	Full Colour Scroll (30 sec)
10–11	4	Warm Colour Scroll (5 sec)
12–15	5	Warm Colour Scroll (10 sec)
16–19	6	Warm Colour Scroll (30 sec)
20–22	7	Cold Colour Scroll (5 sec)
23-25	8	Cold Colour Scroll (10 sec)
26–27	9	Color Colour Scroll (30 sec)
29-32	10	Red Full
33–35	11	Pink Full
36-38	12	Orange Full
39-42	13	Light Orange Full
43-45	14	Yellow Full
46-48	15	Light Yellow Full
49-51	16	Green Full
52-54	17	Light Green Full
56-58	18	Cyan Full
59-61	19	Light Cyan Full
62-64	20	Blue Full
65-68	21	Light Blue Full
69-71	22	3200 White
72-74	23	5600 White
75-78	24	Empty
79-81	25	Empty
83-85	26	Empty
86-88	27	Empty
89-91	28	Empty
92-94	29	Empty
95-97	30	Empty
98-100	31	Empty

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