

DMX protocol

Basic mode

MAC Quantum Wash firmware version 2.0.0.

Channel	DMX Value	Percent	Function	Fade type	Default value
1	0 - 19	0 - 7	Strobe/shutter effect Shutter closed	Snap	30
	20 - 49	8 - 19	Shutter open		
	50 - 200	20 - 78	Strobe, slow → fast		
	201 - 210	79 - 82	Shutter open		
	211 - 255	82 - 100	Random strobe, slow → fast		
2	0 - 65535	0 - 100	Dimmer fade (MSB) Closed → open	Fade	0
3			Dimmer fade, fine (LSB)	Fade	0
4	0 - 65535	0 - 100	Red (MSB) 0 → 100%	Fade	0
5			Red, fine (LSB)	Fade	0
6	0 - 65535	0 - 100	Green (MSB) 0 → 100%	Fade	0
7			Green, fine (LSB)	Fade	0
8	0 - 65535	0 - 100	Blue (MSB) 0 → 100%	Fade	0
9			Blue, fine (LSB)	Fade	0
10	0 - 10	0 - 4	CTC Disabled	Fade	101
	11 - 171	4 - 67	Color temp. from 2000 K to 10 000 K in 50 K steps (see Table 4 on page 29)		
	171 - 255	67 - 100	10 000 K		

Table 1: DMX Protocol - Basic mode

Channel	DMX Value	Percent	Function	Fade type	Default value
11	0 - 10	0 - 4	'Color wheel' color selection effect Open. RGB color mixing enabled	Snap	0
	11 - 12	4 - 5	Color 1 - LEE 790 - Moroccan pink		
	13 - 14	5	Color 2- LEE 157 - Pink		
	15 - 16	6	Color 3 - LEE 332 - Special rose pink		
	17 - 18	7	Color 4 - LEE 328 - Follies pink		
	19 - 20	7 - 8	Color 5 - LEE 345 - Fuchsia pink		
	21 - 22	8 - 9	Color 6 - LEE 194 - Surprise pink		
	23 - 24	9	Color 7 - LEE 181 - Congo Blue		
	25 - 26	10	Color 8 - LEE 071 - Tokyo Blue		
	27 - 28	11	Color 9 - LEE 120 - Deep Blue		
	29 - 30	11 - 12	Color 10 - LEE 079 - Just Blue		
	31 - 32	12 - 13	Color 11 - LEE 132 - Medium Blue		
	33 - 34	13	Color 12 - LEE 200 - Double CT Blue		
	35 - 36	14	Color 13 - LEE 161 - Slate Blue		
	37 - 38	14 - 15	Color 14 - LEE 201 - Full CT Blue		
	39 - 40	15 - 16	Color 15 - LEE 202 - Half CT Blue		
	41 - 42	16	Color 16 - LEE 117 - Steel Blue		
	43 - 44	17	Color 17 - LEE 353 - Lighter Blue		
	45 - 46	18	Color 18 - LEE 118 - Light Blue		
	47 - 48	18 - 19	Color 19 - LEE 116 - Medium Blue Green		
	49 - 50	19 - 20	Color 20 - LEE 124 - Dark Green		
	51 - 52	20	Color 21 - LEE 139 - Primary Green		
	53 - 54	21	Color 22 - LEE 089 - Moss Green		
	55 - 56	21 - 22	Color 23 - LEE 122 - Fern Green		
	57 - 58	22 - 23	Color 24 - LEE 738 - JAS Green		
	59 - 60	23	Color 25 - LEE 088 - Lime Green		
	61 - 62	24	Color 26 - LEE 100 - Spring Yellow		
	63 - 64	25	Color 27 - LEE 104 - Deep Amber		
	65 - 66	25 - 26	Color 28 - LEE 179 - Chrome Orange		
	67 - 68	26 - 27	Color 29 - LEE 105 - Orange		
	69 - 70	27	Color 30 - LEE 021 - Gold Amber		
	71 - 72	28	Color 31 - LEE 778 - Millennium Gold		
	73 - 74	29	Color 32 - LEE 135 - Deep Golden Amber		
	75 - 76	29 - 30	Color 33 - LEE 164 - Flame Red		
	77 - 78	30	Color 34 - Magenta		
	79 - 80	31	Color 35 - Medium Lavender		
81 - 82	32	Color 36 - White			

Table 1: DMX Protocol - Basic mode

Channel	DMX Value	Percent	Function	Fade type	Default value
11 (cont.)	83 - 103	32 - 40	'Color wheel rotation' effect Clockwise, fast → slow Stop (this will stop wherever the color is at the time) Counter-clockwise, slow → fast	Snap	0
	104 - 106	41			
	107 - 127	42 - 50			
	128 - 129	50	Split color Color preset 1 Color preset 2 Color preset 3 Color preset 4 Color preset 5 Color preset 6 Color preset 7 Color preset 8 Color preset 9 Color preset 10 Color preset 11 Color preset 12 Color preset 13 Color preset 14 Color preset 15 Color preset 16 Color preset 17 Color preset 18 Color preset 19 Color preset 20 Color preset 21 Color preset 22 Color preset 23 Color preset 24 Color preset 25 Color preset 26 Color preset 27 Color preset 28 Color preset 29 Color preset 30 Color preset 31 Color preset 32 Color preset 33 Color preset 34 Color preset 35 Color preset 36		
	130 - 131	51			
	132 - 133	52			
	134 - 135	52 - 53			
	136 - 137	53 - 54			
	138 - 139	54			
	140 - 141	55			
	142 - 143	55 - 56			
	144 - 145	56 - 57			
	146 - 147	57			
	148 - 149	58			
	150 - 151	59			
	152 - 153	59 - 60			
	154 - 155	60 - 61			
	156 - 157	61			
	158 - 159	62			
	160 - 161	63			
	162 - 163	63 - 64			
	164 - 165	64			
	166 - 167	65			
	168 - 169	66			
	170 - 171	66 - 67			
	172 - 173	67 - 68			
	174 - 175	68			
	176 - 177	69			
	178 - 179	70			
	180 - 181	70 - 71			
	182 - 183	71			
	184 - 185	72			
	186 - 187	73			
	188 - 189	73 - 74			
	190 - 191	74 - 75			
	192 - 193	75			
194 - 195	76				
196 - 197	77				
198 - 199	77 - 78				
200 - 220	78 - 86	'Color wheel rotation' effect Clockwise, fast → slow Stop (this will stop wherever the color is at the time) Counter-clockwise, slow → fast Open			
221 - 224	86 - 88				
225 - 245	88 - 96				
246 - 255	96 - 100				
12	0 - 200 201 - 255	0 - 78 79 - 100	Zoom Flood → spot Overdrive min. → max.	Fade	200
13	0 - 65535	0 - 100	Pan, 16-bit (MSB and LSB) Left → right (32768 = neutral)	Fade	32768
14					
15	0 - 65535	0 - 100	Tilt, 16-bit (MSB and LSB) Up → down (32768 = neutral)	Fade	32768
16					

Table 1: DMX Protocol - Basic mode

Channel	DMX Value	Percent	Function	Fade type	Default value	
17			Fixture control/settings <i>(hold for number of seconds indicated to activate)</i>			
	0 - 9	0 - 4	<i>No function (disables calibration) – 5 sec.</i>			
	10 - 14	4 - 5	Reset entire fixture – 5 sec.			
	15	6	Reset shutter/dimmer only – 5 sec.			
	16	6	Reset color only – 5 sec.			
	17	7	Reset beam only – 5 sec.			
	18	7	Reset pan and tilt only – 5 sec.			
	19 - 22	7 - 9	<i>No function</i>			
	23	9	Linear dimming curve – 1 sec. <i>(menu override, setting unaffected by power off/on)</i>			
	24	9	Square law dimming curve – 1 sec. <i>(menu override, factory default setting, setting unaffected by power off/on)</i>			
	25	10	Inverse square law dimming curve – 1 sec. <i>(menu override, setting unaffected by power off/on)</i>			
	26	10	S-curve dimming curve – 1 sec. <i>(menu override, setting unaffected by power off/on)</i>			
	27	11	<i>No function</i>			
	28	11	Fast pan and tilt speed – 1 sec. <i>(default setting, menu override - setting returns to MENU setting after power on/off)</i>			
	29	11	Smooth pan and tilt speed – 1 sec. <i>(menu override - setting returns to MENU setting after power on/off)</i>			
	30	12	Parameter shortcuts = ON (default)			
	31	12	Parameter shortcuts = OFF		Snap	0
	32 - 35	13 - 14	<i>No function</i>			
	36	14	Enable video tracking			
	37	14	Disable video tracking			
	38	15	Extended color (default)			
	39	15	Calibrated color			
	40 - 49	16 - 19	<i>No function</i>			
	50	20	Regulated fan speed, fixed intensity (default)			
	51	20	Fixed fan speed, regulated intensity			
	52	20	Turn on control panel display – 1 sec.			
	53	21	Turn off control panel display – 1 sec.			
	54 - 99	21 - 39	<i>No function</i>			
	100	39	Enable calibration – 5 sec.			
	101	39	Store pan and tilt calibration – 5 sec.			
	102	40	Store dimmer calibration – 5 sec.			
	103 - 110	40 - 43	<i>No function</i>			
111	43	Store Beam Twister calibration – 5 sec.				
112 - 113	44	<i>No function</i>				
114	45	Store zoom calibration – 5 sec.				
115	45	Store pan calibration – 5 sec.				
116	45	Store tilt calibration – 5 sec.				
117 - 198	46 - 77	<i>No function</i>				
199	78	Reset all calibration values to defaults – 5 sec.				
200 - 255	78 - 100	<i>No function</i>				

Table 1: DMX Protocol - Basic mode

MSB = Most significant byte

LSB = Least significant byte

Extended mode

MAC Quantum Wash firmware version 2.0.0.

Channel	DMX Value	Percent	Function	Fade type	Default value	
1	0 - 19	0 - 7	Strobe/shutter effect Shutter closed	Snap	30	
	20 - 49	8 - 19				Shutter open
	50 - 200	20 - 78				Strobe, slow → fast
	201 - 210	79 - 82				Shutter open
	211 - 255	82 - 100				Random strobe, slow → fast
2	0 - 65535	0 - 100	Dimmer fade (MSB) Closed → open	Fade	0	
3			Dimmer fade, fine (LSB)	Fade	0	
4	0 - 10	0 - 4	CTC Disabled	Fade	101	
	11 - 171	4 - 67				Color temp. from 2000 K to 10 000 K in 50 K steps (see Table 4 on page 29)
	171 - 255	67 - 100				10 000 K
5	0 - 10	0 - 4	'Color wheel' color selection effect Open. RGB color mixing enabled	Snap	0	
	11 - 12	4 - 5				Color 1 - LEE 790 - Moroccan pink
	13 - 14	5				Color 2 - LEE 157 - Pink
	15 - 16	6				Color 3 - LEE 332 - Special rose pink
	17 - 18	7				Color 4 - LEE 328 - Follies pink
	19 - 20	7 - 8				Color 5 - LEE 345 - Fuchsia pink
	21 - 22	8 - 9				Color 6 - LEE 194 - Surprise pink
	23 - 24	9				Color 7 - LEE 181 - Congo Blue
	25 - 26	10				Color 8 - LEE 071 - Tokyo Blue
	27 - 28	11				Color 9 - LEE 120 - Deep Blue
	29 - 30	11 - 12				Color 10 - LEE 079 - Just Blue
	31 - 32	12 - 13				Color 11 - LEE 132 - Medium Blue
	33 - 34	13				Color 12 - LEE 200 - Double CT Blue
	35 - 36	14				Color 13 - LEE 161 - Slate Blue
	37 - 38	14 - 15				Color 14 - LEE 201 - Full CT Blue
	39 - 40	15 - 16				Color 15 - LEE 202 - Half CT Blue
	41 - 42	16				Color 16 - LEE 117 - Steel Blue
	43 - 44	17				Color 17 - LEE 353 - Lighter Blue
	45 - 46	18				Color 18 - LEE 118 - Light Blue
	47 - 48	18 - 19				Color 19 - LEE 116 - Medium Blue Green
	49 - 50	19 - 20				Color 20 - LEE 124 - Dark Green
	51 - 52	20				Color 21 - LEE 139 - Primary Green
	53 - 54	21				Color 22 - LEE 089 - Moss Green
	55 - 56	21 - 22				Color 23 - LEE 122 - Fern Green
	57 - 58	22 - 23				Color 24 - LEE 738 - JAS Green
	59 - 60	23				Color 25 - LEE 088 - Lime Green
	61 - 62	24				Color 26 - LEE 100 - Spring Yellow
	63 - 64	25				Color 27 - LEE 104 - Deep Amber
	65 - 66	25 - 26				Color 28 - LEE 179 - Chrome Orange
	67 - 68	26 - 27				Color 29 - LEE 105 - Orange
	69 - 70	27				Color 30 - LEE 021 - Gold Amber
	71 - 72	28				Color 31 - LEE 778 - Millennium Gold
	73 - 74	29				Color 32 - LEE 135 - Deep Golden Amber
	75 - 76	29 - 30				Color 33 - LEE 164 - Flame Red
	77 - 78	30				Color 34 - Magenta
	79 - 80	31				Color 35 - Medium Lavender
81 - 82	32	Color 36 - White				

Table 2: DMX Protocol - Extended mode

Channel	DMX Value	Percent	Function	Fade type	Default value
5 (cont.)	83 - 103	32 - 40	'Color wheel rotation' effect Clockwise, fast → slow	Snap	0
	104 - 106	41	Stop (this will stop wherever the color is at the time)		
	107 - 127	42 - 50	Counter-clockwise, slow → fast		
	128 - 129	50	Split color Color preset 1		
	130 - 131	51	Color preset 2		
	132 - 133	52	Color preset 3		
	134 - 135	52 - 53	Color preset 4		
	136 - 137	53 - 54	Color preset 5		
	138 - 139	54	Color preset 6		
	140 - 141	55	Color preset 7		
	142 - 143	55 - 56	Color preset 8		
	144 - 145	56 - 57	Color preset 9		
	146 - 147	57	Color preset 10		
	148 - 149	58	Color preset 11		
	150 - 151	59	Color preset 12		
	152 - 153	59 - 60	Color preset 13		
	154 - 155	60 - 61	Color preset 14		
	156 - 157	61	Color preset 15		
	158 - 159	62	Color preset 16		
	160 - 161	63	Color preset 17		
	162 - 163	63 - 64	Color preset 18		
	164 - 165	64	Color preset 19		
	166 - 167	65	Color preset 20		
	168 - 169	66	Color preset 21		
	170 - 171	66 - 67	Color preset 22		
	172 - 173	67 - 68	Color preset 23		
	174 - 175	68	Color preset 24		
	176 - 177	69	Color preset 25		
	178 - 179	70	Color preset 26		
	180 - 181	70 - 71	Color preset 27		
	182 - 183	71	Color preset 28		
	184 - 185	72	Color preset 29		
186 - 187	73	Color preset 30			
188 - 189	73 - 74	Color preset 31			
190 - 191	74 - 75	Color preset 32			
192 - 193	75	Color preset 33			
194 - 195	76	Color preset 34			
196 - 197	77	Color preset 35			
198 - 199	77 - 78	Color preset 36			
200 - 220	78 - 86	'Color wheel rotation' effect Clockwise, fast → slow			
221 - 224	86 - 88	Stop (this will stop wherever the color is at the time)			
225 - 245	88 - 96	Counter-clockwise, slow → fast			
246 - 255	96 - 100	Open			
6	0 - 200	0 - 78	Zoom Flood → spot	Fade	200
	201 - 255	79 - 100	Overdrive min. → max.		

Table 2: DMX Protocol - Extended mode

Channel	DMX Value	Percent	Function	Fade type	Default value
7 and 8	0 - 32768	0 - 50	Beam twister, 16-bit (MSB and LSB) Index 0 → 360	Snap	0
	32769 - 40000	50 - 61	Disable		
	40001 - 49990	61 - 77	Rotation CW Fast → CW Slow		
	49991 - 50000	77	No rotation (lens stops at its current position)		
	50001 - 59990	77 - 92	Rotation CCW Slow → CCW Fast		
	59991 - 59999	92	Disable		
	60000 - 60099	92	Position 1: Wide		
	60100 - 60199	92	Position 2: Smooth		
	60200 - 60299	92	Position 3: Texture		
	60300 - 60399	92	Position 4: Dots		
	60400 - 60499	93	Position 5: Eye		
	60500 - 60599	93	Position 6: Donut		
	60600 - 60699	93	Position 7: Beam		
	60700 - 60799	93	Position 8: Beam 2		
	60800 - 60899	93	Position 9: Beam 3		
	60900 - 60999	93	Position 10: Beam 4		
	61000 - 61099	94	Position 11: Mixed		
	61100 - 61199	94	Position 12: Separation		
	61200 - 61299	94	Position 13: Separation 2		
	61300 - 61399	94	Position 14: Rays		
61400 - 61499	94	Position 15: Halo			
61500 - 61599	94	Position 16: Two Areas			
61600 - 61699	94	Position 17: Clean Colors			
61700 - 61799	95	Position 18: Crossover			
61800 - 61999	95	<i>No function</i>			
62000 - 65355	95 - 100	Disable			
9	0 - 65535	0 - 100	Pan, 16-bit (MSB and LSB)	Fade	32768
10			Left → right (32768 = neutral)		
11	0 - 65535	0 - 100	Tilt, 16-bit (MSB and LSB)	Fade	32768
12			Up → down (32768 = neutral)		

Table 2: DMX Protocol - Extended mode

Channel	DMX Value	Percent	Function	Fade type	Default value
13			Fixture control/settings (hold for number of seconds indicated to activate)	Snap	0
	0 - 9	0 - 4	No function (disables calibration) – 5 sec.		
	10 - 14	4 - 5	Reset entire fixture – 5 sec.		
	15	6	Reset shutter/dimmer only – 5 sec.		
	16	6	Reset color only – 5 sec.		
	17	7	Reset beam only – 5 sec.		
	18	7	Reset pan and tilt only – 5 sec.		
	19 - 22	7 - 9	No function		
	23	9	Linear dimming curve – 1 sec. (menu override, setting unaffected by power off/on)		
	24	9	Square law dimming curve – 1 sec. (menu override, factory default setting, setting unaffected by power off/on)		
	25	10	Inverse square law dimming curve – 1 sec. (menu override, setting unaffected by power off/on)		
	26	10	S-curve dimming curve – 1 sec. (menu override, setting unaffected by power off/on)		
	27	11	No function		
	28	11	Fast pan and tilt speed – 1 sec. (default setting, menu override - setting returns to MENU setting after power on/off)		
	29	11	Smooth pan and tilt speed – 1 sec. (menu override - setting returns to MENU setting after power on/off)		
	30	12	Parameter shortcuts = ON (default)		
	31	12	Parameter shortcuts = OFF		
	32 - 35	13 - 14	No function		
	36	14	Enable video tracking		
	37	14	Disable video tracking		
	38	15	Extended color (default)		
	39	15	Calibrated color		
	40 - 49	16 - 19	No function		
	50	20	Regulated fan speed, fixed intensity (default)		
	51	20	Fixed fan speed, regulated intensity		
	52	20	Turn on control panel display – 1 sec.		
	53	21	Turn off control panel display – 1 sec.		
	54 - 99	21 - 39	No function		
	100	39	Enable calibration – 5 sec.		
	101	39	Store pan and tilt calibration – 5 sec.		
	102	40	Store dimmer calibration – 5 sec.		
103 - 110	40 - 43	No function			
111	43	Store Beam Twister calibration – 5 sec.			
112 - 113	44	No function			
114	45	Store zoom calibration – 5 sec.			
115	45	Store pan calibration – 5 sec.			
116	45	Store tilt calibration – 5 sec.			
117 - 198	46 -77	No function			
199	78	Reset all calibration values to defaults – 5 sec.			
200 - 255	78 - 100	No function			
14	0 - 255	0 - 100	FX1 selection (see Table 3 on page 28) Effect selection (adjust on DMX channel 15)	Snap	0
15	0 - 126	0 - 49	FX1 adjustment Effect reversed fast → slow	Fade	128
	127 - 128	50	Effect stops		
	129-255	51-100	Effect slow → fast		
16	0 - 255	0 - 100	FX2 selection (see Table 3 on page 28) Effect selection (adjust on DMX channel 17)	Snap	0
17	0 - 126	0 - 49	FX2 adjustment Effect reversed fast → slow	Fade	128
	127 - 128	50	Effect stops		
	129-255	51-100	Effect slow → fast		

Table 2: DMX Protocol - Extended mode

Channel	DMX Value	Percent	Function	Fade type	Default value
18	0	0	FX synchronization No sync	Snap	0
	1	0	Offset shift 10°		
	2	1	Offset shift 20°		
	3	1	Offset shift 30°		
	4	2	Offset shift 40°		
	5	2	Offset shift 50°		
	6	2	Offset shift 60°		
	7	3	Offset shift 70°		
	8	3	Offset shift 80°		
	9	4	Offset shift 90°		
	10	4	Offset shift 100°		
	11	4	Offset shift 110°		
	12	5	Offset shift 120°		
	13	5	Offset shift 130°		
	14	5	Offset shift 140°		
	15	6	Offset shift 150°		
	16	6	Offset shift 160°		
	17	7	Offset shift 170°		
	18	7	Offset shift 180°		
	19	7	Offset shift 190°		
	20	8	Offset shift 200°		
	21	8	Offset shift 210°		
	22	9	Offset shift 220°		
	23	9	Offset shift 230°		
	24	9	Offset shift 240°		
	25	10	Offset shift 250°		
	26	10	Offset shift 260°		
	27	11	Offset shift 270°		
	28	11	Offset shift 280°		
	29	11	Offset shift 290°		
	30	12	Offset shift 300°		
	31	12	Offset shift 310°		
	32	13	Offset shift 320°		
	33	13	Offset shift 330°		
	34	13	Offset shift 340°		
	35	14	Offset shift 350°		
36	14	Synchronized: all fixtures start FX cycles at same time			
37 - 100	14-39	<i>Reserved</i>			
101 - 120	39-47	Random start (FX 1 adjust controls overall speed)			
121 - 140	47-55	Random duration			
141 - 255	55-100	<i>Reserved</i>			

Color - Center

19	0 - 255	0 - 100	Red 0 → 100%	Fade	255
20	0 - 255	0 - 100	Green 0 → 100%	Fade	255
21	0 - 255	0 - 100	Blue 0 → 100%	Fade	255

Color - Middle

22	0 - 255	0 - 100	Red 0 → 100%	Fade	255
23	0 - 255	0 - 100	Green 0 → 100%	Fade	255
24	0 - 255	0 - 100	Blue 0 → 100%	Fade	255

Color - Outer

25	0 - 255	0 - 100	Red 0 → 100%	Fade	255
26	0 - 255	0 - 100	Green 0 → 100%	Fade	255

Table 2: DMX Protocol - Extended mode

Channel	DMX Value	Percent	Function	Fade type	Default value
27	0 - 255	0 - 100	Blue 0 → 100%	Fade	255

Aura

28	0 - 19 20 - 49 50 - 200 201 - 210 211 - 255	0 - 7 8 - 19 20 - 78 79 - 82 82 - 100	Strobe/shutter effect Shutter closed Shutter open Strobe, slow → fast Shutter open Random strobe, slow → fast	Snap	30
29	0 - 255	0 - 100	Dimmer (MSB) Closed → open	Fade	0
30	0 - 255	0 - 100	Red 0 → 100%	Fade	255
31	0 - 255	0 - 100	Green 0 → 100%	Fade	255
32	0 - 255	0 - 100	Blue 0 → 100%	Fade	255
33	0 - 10 11 - 15 16 - 20 21 - 25 26 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 86 - 90 91 - 95 96 - 100 101 - 105 106 - 110 111 - 115 116 - 120 121 - 125 126 - 130 131 - 135 136 - 140 141 - 145 146 - 150 151 - 155 156 - 160 161 - 165 166 - 170 171 - 175 176 - 180 181 - 185 186 - 190 191 - 214 215 - 219 220 - 243 244 - 247 248 - 251 252 - 255	0 - 4 4 - 6 6 - 8 8 - 10 10 - 12 12 - 14 14 - 16 16 - 18 18 - 20 20 - 21 22 - 23 24 - 25 26 - 27 28 - 29 30 - 31 32 - 33 34 - 35 36 - 37 38 - 39 39 - 41 41 - 43 43 - 45 45 - 47 47 - 49 49 - 51 51 - 53 53 - 55 55 - 57 57 - 59 59 - 61 61 - 63 63 - 64 65 - 66 67 - 68 69 - 70 71 - 72 73 - 74 75 - 84 84 - 86 86 - 95 95 - 96 97 - 98 98 - 100	'Color wheel' color selection effect Open. RGB color mixing enabled Color 1 - LEE 790 - Moroccan pink Color 2 - LEE 157 - Pink Color 3 - LEE 332 - Special rose pink Color 4 - LEE 328 - Follies pink Color 5 - LEE 345 - Fuchsia pink Color 6 - LEE 194 - Surprise pink Color 7 - LEE 181 - Congo Blue Color 8 - LEE 071 - Tokyo Blue Color 9 - LEE 120 - Deep Blue Color 10 - LEE 079 - Just Blue Color 11 - LEE 132 - Medium Blue Color 12 - LEE 200 - Double CT Blue Color 13 - LEE 161 - Slate Blue Color 14 - LEE 201 - Full CT Blue Color 15 - LEE 202 - Half CT Blue Color 16 - LEE 117 - Steel Blue Color 17 - LEE 353 - Lighter Blue Color 18 - LEE 118 - Light Blue Color 19 - LEE 116 - Medium Blue Green Color 20 - LEE 124 - Dark Green Color 21 - LEE 139 - Primary Green Color 22 - LEE 089 - Moss Green Color 23 - LEE 122 - Fern Green Color 24 - LEE 738 - JAS Green Color 25 - LEE 088 - Lime Green Color 26 - LEE 100 - Spring Yellow Color 27 - LEE 104 - Deep Amber Color 28 - LEE 179 - Chrome Orange Color 29 - LEE 105 - Orange Color 30 - LEE 021 - Gold Amber Color 31 - LEE 778 - Millennium Gold Color 32 - LEE 135 - Deep Golden Amber Color 33 - LEE 164 - Flame Red Color 34 - Magenta Color 35 - Medium Lavender Color 36 - White 'Color wheel rotation' effect Clockwise, fast → slow Stop (this will stop wherever the color is at the time) Counter-clockwise, slow → fast Random colors Fast Medium Slow	Snap	0

Table 2: DMX Protocol - Extended mode

MSB = Most significant byte
LSB = Least significant byte

FX: pre-programmed effects

The table below lists the pre-programmed dynamic effects (macros) that can be controlled using channels 14 - 18 in Extended mode.

You select effects on channels 14 and 16 by sending the values listed in the table. Adjust effect parameters such as speed and intensity on channels 15 and 17, and adjust synchronization of effects across different fixtures on channel 18.

Applicable when running MAC Quantum Wash firmware version 2.0.0.

DMX value	Effect	DMX value	Effect	DMX value	Effect
1	AURAALLSYNCCENTER	35	AURA RAMP	161	EYE CANDY 2
2	AURAALLSYNCMIDDLE	36	AURARAMP BEAMFLASH	162	EYE CANDY 3
3	AURAALLSYNCOUTSIDE	37	BEAMRAMP AURAFLASH	163	EYE CANDY 4
4	AURA COLOR OFFSET	38	BEAMAURA RAMP	164	EYE CANDY 5
5	DIMMER SYNC	39	RING RAND STROBE UNI	165	EYE CANDY 6
6	STROBE SYNC	46	ELECTRIC ARC	166	EYE CANDY 7
7	DIMMERSTROBE SYNC	47	THUNDERSTORM ATOMIC	167	EYE CANDY 8
9	BEAM COLOR TUNER	48	THUNDERSTORM	168	EYE CANDY 9
10	RING CHASE FADE	49	WELDING	169	EYE CANDY 10
11	RING CHASE RAMP	50	RAINBOW FADE	170	EYE CANDY 11
12	SINEWAVE ROLL	51	RAINBOW SOLID	171	EYE CANDY 12
13	RING CHASE FADE RAND	52	RAINBOW ROLL	172	EYE CANDY 13
14	RING PULSE VU	53	RGB FADE	173	EYE CANDY 14
15	RING ROLL	54	RGB STEP	174	EYE CANDY 15
16	RING STROBE	55	RGB ROLL	175	EYE CANDY 16
17	RING STROBE RAND	56	CMY FADE	176	EYE CANDY 17
18	RING RAND STROBE MIDFAST	57	CMY STEP	177	EYE CANDY 18
19	RING CHASE UNI STROBE	58	CMY ROLL	178	EYE CANDY 19
20	RING RAND STROBE UNI	59	BEAM RED WHITE BLUE WHITE	179	EYE CANDY 20
21	RING CHASE RAND STROBE	60	BEAM RED WHITE	180	EYE CANDY 21
22	RING RAND STROBE RAND	61	BEAM WHITE CHASE	181	EYE CANDY 22
23	RING RAND STROBE MIDFAST UNI	62	BEAM RANDOM WHITE CHASE	182	EYE CANDY 23
24	FLASH RINGSCROLL	63	BEAM RANDOM COLOR RINGS	210	ANI TWIST FADE
25	STROBE ALTERNATE1	64	BEAM COLOR FLICKER	211	ANI TWIST ALL
26	STROBE ALTERNATE2	80	TWISTER ANIMATE 1	212	ANI TWIST RINGS
27	STROBE ALTERNATE3	81	TWISTER ANIMATE 2	213	TWIST AURA
28	3STEP STROBE	90	ZOOM RAMP	214	CRAZY TWISTER
29	TICK TOCK	91	ZOOM SAWTOOTH		
30	TICK TOCK RAND	92	ZOOM DIM RAMP		
32	BEAM PULSE	93	ZOOM DIM SAWTOOTH		
33	BEAM RAMP	94	ZOOM SAW COLOR WHITE		
34	AURA PULSE	160	EYE CANDY 1		

Table 3: FX in the MAC Quantum Wash

Color temperature control data

The table below gives the color temperatures obtained when specific DMX values are sent on the color temperature control channel.

DMX value	Col. temp.	DMX value	Col. temp.	DMX value	Col. temp.	DMX value	Col. temp.
11	2000	51	4000	91	6000	131	8000
12	2050	52	4050	92	6050	132	8050
13	2100	53	4100	93	6100	133	8100
14	2150	54	4150	94	6150	134	8150
15	2200	55	4200	95	6200	135	8200
16	2250	56	4250	96	6250	136	8250
17	2300	57	4300	97	6300	137	8300
18	2350	58	4350	98	6350	138	8350
19	2400	59	4400	99	6400	139	8400
20	2450	60	4450	100	6450	140	8450
21	2500	61	4500	101	6500	141	8500
22	2550	62	4550	102	6550	142	8550
23	2600	63	4600	103	6600	143	8600
24	2650	64	4650	104	6650	144	8650
25	2700	65	4700	105	6700	145	8700
26	2750	66	4750	106	6750	146	8750
27	2800	67	4800	107	6800	147	8800
28	2850	68	4850	108	6850	148	8850
29	2900	69	4900	109	6900	149	8900
30	2950	70	4950	110	6950	150	8950
31	3000	71	5000	111	7000	151	9000
32	3050	72	5050	112	7050	152	9050
33	3100	73	5100	113	7100	153	9100
34	3150	74	5150	114	7150	154	9150
35	3200	75	5200	115	7200	155	9200
36	3250	76	5250	116	7250	156	9250
37	3300	77	5300	117	7300	157	9300
38	3350	78	5350	118	7350	158	9350
39	3400	79	5400	119	7400	159	9400
40	3450	80	5450	120	7450	160	9450
41	3500	81	5500	121	7500	161	9500
42	3550	82	5550	122	7550	162	9550
43	3600	83	5600	123	7600	163	9600
44	3650	84	5650	124	7650	164	9650
45	3700	85	5700	125	7700	165	9700
46	3750	86	5750	126	7750	166	9750
47	3800	87	5800	127	7800	167	9800
48	3850	88	5850	128	7850	168	9850
49	3900	89	5900	129	7900	169	9900
50	3950	90	5950	130	7950	170	9950
						171	10000

Table 4: DMX Values and color temperature