

DMX protocol

Channel		DMX value	Percent	Function	Fade status	Default value
Std.	Ext.					
1		0 - 19	0 - 7	Beam electronic shutter effect Shutter closed	Snap	22
		20 - 24	8 - 9	Shutter open		
		25 - 64	10 - 25	Strobe 1 (fast → slow)		
		65 - 69	26 - 27	Shutter open		
		70 - 84	28 - 33	Strobe 2: opening pulse (fast → slow)		
		85 - 89	34 - 35	Shutter open		
		90 - 104	36 - 41	Strobe 3: closing pulse (fast → slow)		
		105 - 109	42 - 43	Shutter open		
		110 - 124	44 - 49	Strobe 4: random strobe (fast → slow)		
		125 - 129	50 - 51	Shutter open		
		130 - 144	52 - 57	Strobe 5: random opening pulse (fast → slow)		
		145 - 149	58 - 59	Shutter open		
		150 - 164	60 - 65	Strobe 6: random closing pulse (fast → slow)		
		165 - 169	66 - 67	Shutter open		
		170 - 184	68 - 73	Strobe 7: burst pulse (fast → slow)		
		185 - 189	74 - 75	Shutter open		
		190 - 204	76 - 81	Strobe 8: random burst pulse (fast → slow)		
		205 - 209	82 - 83	Shutter open		
		210 - 224	84 - 89	Strobe 9: sine wave (fast → slow)		
		225 - 229	90 - 91	Shutter open		
	230 - 244	92 - 97	Strobe 10: burst (fast → slow)			
	245 - 255	98 - 100	Shutter open			
2		0 - 255	0 - 100	Beam dimmer 0 → 100% intensity	Fade	0
3		0 - 255	0 - 100	Zoom Wide → narrow	Fade	255
4		0 - 255	0 - 100	Pan Pan 0° - 540°	Fade	128
5		0 - 255	0 - 100	Pan fine Pan fine adjustment (Least Significant Byte)	Fade	32768
6		0 - 255	0 - 100	Tilt Tilt 0° - 232°	Fade	128
7		0 - 255	0 - 100	Tilt fine Tilt fine adjustment (Least Significant Byte)	Fade	32768

Table 2: MAC Aura DMX Protocol

Channel		DMX	Percent	Function	Fade	Default
Std.	Ext.	value			status	value
8		0 - 9	0 - 3	Fixture control settings <i>No function</i>	Snap	0
		10 - 14	4 - 5	Reset entire fixture ¹		
		15 - 39	6 - 13	<i>No function</i>		
		40 - 44	14 - 15	PTSP = NORM ²		
		45 - 49	16 - 17	PTSP = FAST ²		
		50 - 54	18 - 19	PTSP = SLOW ²		
		55 - 59	20 - 21	<i>No function</i>		
		60 - 64	22 - 23	Fan mode FULL ²		
		65 - 69	24 - 25	<i>No function</i>		
		70 - 74	26 - 27	Fan mode REGULATED ²		
		75 - 89	28 - 33	<i>No function</i>		
		90 - 94	34 - 35	Calibrated color output mode COLOR CALIB = ON ³		
		95 - 99	36 - 37	<i>No function</i>		
		100 - 104	38 - 40	Raw color output mode COLOR CALIB = OFF ³		
		105 - 109	41 - 42	<i>No function</i>		
		110 - 114	43 - 44	Fast dimming, speed of changes unrestricted ²		
		115 - 119	45 - 46	<i>No function</i>		
	120 - 124	47 - 48	Smooth dimming, speed of changes restricted slightly ²			
	125 - 249	49 - 97	<i>No function</i>			
	250 - 255	98 - 100	Illuminate display			
				¹ If DMX Reset is disabled in the menu, a reset command can only be executed if channel 2 is set to 232 and channel 1 is set to zero. These values need to be held for 5 seconds before feature is activated. Values must be "snapped to" to function.		
				² Menu override: setting unaffected by power off/on.		
				³ Value must be held for 3 seconds to activate. Setting unaffected by power off/on.		

Table 2: MAC Aura DMX Protocol

Channel		DMX	Percent	Function	Fade	Default	
Std.	Ext.	value			status	value	
	9	0 - 9 10 - 14 15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 - 74 75 - 79 80 - 84 85 - 89 90 - 94 95 - 99 100 - 104 105 - 109 110 - 114 115 - 119 120 - 124 125 - 129 130 - 134 135 - 139 140 - 144 145 - 149 150 - 154 155 - 159 160 - 164 165 - 169 170 - 174 175 - 179 180 - 201 202 - 207 208 - 229 230 - 234 235 - 239 240 - 244 245 - 249 250 - 255	0 - 2 3 - 4 4 - 5 6 - 7 8 - 9 10 - 11 12 - 13 14 - 15 16 - 17 18 - 19 20 - 21 22 - 23 24 - 25 26 - 27 28 - 29 30 - 31 32 - 33 34 - 35 36 - 37 38 - 39 40 - 41 42 - 43 44 - 45 46 - 47 48 - 49 50 - 51 52 - 53 54 - 55 56 - 57 58 - 59 60 - 61 62 - 63 64 - 65 66 - 67 68 - 69 70 - 78 79 - 80 81 - 89 90 - 91 92 - 93 94 - 95 96 - 97 98 - 100	Beam color wheel effect Open. RGBW color mixing enabled LEE 790 - Moroccan pink LEE 157 - Pink LEE 332 - Special rose pink LEE 328 - Follies pink LEE 345 - Fuchsia pink LEE 194 - Surprise pink LEE 181 - Congo Blue LEE 071 - Tokyo Blue LEE 120 - Deep Blue LEE 079 - Just Blue LEE 132 - Medium Blue LEE 200 - Double CT Blue LEE 161 - Slate Blue LEE 201 - Full CT Blue LEE 202 - Half CT Blue LEE 117 - Steel Blue LEE 353 - Lighter Blue LEE 118 - Light Blue LEE 116 - Medium Blue Green LEE 124 - Dark Green LEE 139 - Primary Green LEE 089 - Moss Green LEE 122 - Fern Green LEE 738 - JAS Green LEE 088 - Lime Green LEE 100 - Spring Yellow LEE 104 - Deep Amber LEE 179 - Chrome Orange LEE 105 - Orange LEE 021 - Gold Amber LEE 778 - Millennium Gold LEE 135 - Deep Golden Amber LEE 164 - Flame Red Open Color wheel rotation effect Clockwise, fast → slow Stop (this will stop wherever the color is at the time) Counter-clockwise, slow → fast Open Random color Fast Medium Slow Open		Snap	0
	10	0 - 255	0 - 100	Beam red Red 0 → 100%	Fade	255	
	11	0 - 255	0 - 100	Beam green Green 0 → 100%	Fade	255	
	12	0 - 255	0 - 100	Beam blue Blue 0 → 100%	Fade	255	
	13	0 - 255	0 - 100	Beam white White 0 → 100% <i>Note: if Color Calib is set to On, this channel has no effect – white LEDs are activated by RGB mixing</i>	Fade	0	
	14	0 - 19 20 - 255	0 - 7 8 - 100	Beam CTC (Color Temperature Control) CTC disabled CTC 10 000K → 2 500K	Fade	0	
-	15	0 - 255	0 - 100	FX1 select Pre-programmed effect 1 selection (see "FX: pre-programmed effects" on page 27)	Snap	0	
-	16	0 - 255	0 - 100	FX1 adjust, sync speed adjust Zero → maximum • If no sync set on channel 19, adjusts FX1 • If sync set on channel 19, adjusts synchronized FX1+FX2 speed	Fade	128	
-	17	0 - 255	0 - 100	FX2 select Pre-programmed effect 2 selection (see "FX: pre-programmed effects" on page 27)	Snap	0	

Table 2: MAC Aura DMX Protocol

Channel		DMX	Percent	Function	Fade	Default
Std.	Ext.	value			status	value
-	18	0 - 255	0 - 100	FX2 adjust Zero → maximum • If no sync set on channel 19, adjusts FX2 • If sync set on channel 19, has no effect	Fade	128
-	19	0 - 49 50 51 - 169 170 - 209 210 - 255	0 - 19 20 21 - 66 67 - 81 82 - 100	Sync (FX synchronization) No sync • FX1 and FX2 run through cycles independently • Cycle duration is regular • Channel 16 and channel 18 adjust FX1 and FX2 independently Sync • FX1 and FX2 run through cycles in sync • Cycle duration is regular • Channel 16 adjusts overall speed, channel 18 has no effect Sync shift • FX1 and FX2 run through cycles in sync • FX2 is offset (delayed) relative to FX1 • Offset is adjustable from zero → maximum • Channel 16 adjusts overall speed, channel 18 has no effect Sync random • FX1 and FX2 run through cycles in sync • Cycle duration for synchronized FX1 and FX2 is made shorter and longer at random. • Channel 16 adjusts overall speed, channel 18 has no effect No sync, random • FX1 and FX2 run through cycles independently • Cycle duration for FX1 and FX2 is made shorter and longer at random • Channel 16 and channel 18 adjust FX1 and FX2 speed independently	Snap	0

Aura control

-	20	0 - 19 20 - 24 25 - 64 65 - 69 70 - 84 85 - 89 90 - 104 105 - 109 110 - 124 125 - 129 130 - 144 145 - 149 150 - 164 165 - 169 170 - 184 185 - 189 190 - 204 205 - 209 210 - 224 225 - 229 230 - 244 245 - 255	0 - 7 8 - 9 10 - 25 26 - 27 28 - 33 34 - 35 36 - 41 42 - 43 44 - 49 50 - 51 52 - 57 58 - 59 60 - 65 66 - 67 68 - 73 74 - 75 76 - 81 82 - 83 84 - 89 90 - 91 92 - 97 98 - 100	Aura shutter and strobe effect Shutter closed Shutter open Strobe 1 (fast → slow) Shutter open Strobe 2: opening pulse (fast → slow) Shutter open Strobe 3: closing pulse (fast → slow) Shutter open Strobe 4: random strobe (fast → slow) Shutter open Strobe 5: random opening pulse (fast → slow) Shutter open Strobe 6: random closing pulse (fast → slow) Shutter open Strobe 7: burst pulse (fast → slow) Shutter open Strobe 8: random burst pulse (fast → slow) Shutter open Strobe 9: sine wave (fast → slow) Shutter open Strobe 10: burst (fast → slow) Shutter open	Snap	22
-	21	0 - 255	0 - 100	Aura dimmer 0 → 100% intensity	Fade	0

Table 2: MAC Aura DMX Protocol

Channel		DMX	Percent	Function	Fade	Default
Std.	Ext.	value			status	value
-	22	0 - 9	0 - 1	Aura color wheel effect Open. RGB color mixing enabled	Snap	0
		10 - 14	2 - 3	LEE 790 - Moroccan pink		
		15 - 19	4 - 5	LEE 157 - Pink		
		20 - 24	6 - 7	LEE 332 - Special rose pink		
		25 - 29	8 - 9	LEE 328 - Follies pink		
		30 - 34	10 - 11	LEE 345 - Fuchsia pink		
		35 - 39	12 - 13	LEE 194 - Surprise pink		
		40 - 44	14 - 15	LEE 181 - Congo Blue		
		45 - 49	16 - 17	LEE 071 - Tokyo Blue		
		50 - 54	18 - 19	LEE 120 - Deep Blue		
		55 - 59	20 - 21	LEE 079 - Just Blue		
		60 - 64	22 - 23	LEE 132 - Medium Blue		
		65 - 69	24 - 25	LEE 200 - Double CT Blue		
		70 - 74	26 - 27	LEE 161 - Slate Blue		
		75 - 79	28 - 29	LEE 201 - Full CT Blue		
		80 - 84	30 - 31	LEE 202 - Half CT Blue		
		85 - 89	32 - 33	LEE 117 - Steel Blue		
		90 - 94	34 - 35	LEE 353 - Lighter Blue		
		95 - 99	36 - 37	LEE 118 - Light Blue		
		100 - 104	38 - 39	LEE 116 - Medium Blue Green		
		105 - 109	40 - 41	LEE 124 - Dark Green		
		110 - 114	42 - 43	LEE 139 - Primary Green		
		115 - 119	44 - 45	LEE 089 - Moss Green		
		120 - 124	46 - 47	LEE 122 - Fern Green		
		125 - 129	48 - 49	LEE 738 - JAS Green		
		130 - 134	50 - 51	LEE 088 - Lime Green		
		135 - 139	52 - 53	LEE 100 - Spring Yellow		
		140 - 144	54 - 55	LEE 104 - Deep Amber		
		145 - 149	56 - 57	LEE 179 - Chrome Orange		
		150 - 154	58 - 59	LEE 105 - Orange		
		155 - 159	60 - 61	LEE 021 - Gold Amber		
		160 - 164	62 - 63	LEE 778 - Millennium Gold		
		165 - 169	64 - 65	LEE 135 - Deep Golden Amber		
		170 - 174	66 - 67	LEE 164 - Flame Red		
		175 - 179	68 - 69	Open		
		180 - 201	70 - 78	Color wheel rotation effect Clockwise, fast → slow		
		202 - 207	79 - 80	Stop (this will stop wherever the color is at the time)		
		208 - 229	81 - 89	Counter-clockwise, slow → fast		
		230 - 234	90 - 91	Open		
		235 - 239	92 - 93	Random color Fast		
		240 - 244	94 - 95	Medium		
		245 - 249	96 - 97	Slow		
		250 - 255	98 - 100	Open		
-	23	0 - 255	0 - 100	Aura red Red 0 → 100%	Fade	255
-	24	0 - 255	0 - 100	Aura green Green 0 → 100%	Fade	255
-	25	0 - 255	0 - 100	Aura blue Blue 0 → 100%	Fade	255

Table 2: MAC Aura DMX Protocol

Note: DMX values labeled "No function" will have no effect - the last functional value will be used.

If **COLOR CALIB** is set to **OFF** in the control menus, RGBW, RGB and color wheel effect output is uncalibrated. If **COLOR CALIB** is set to **ON**, output is calibrated.