

## MAC 250 Entour DMX protocol

16 Bt (16 Bit Mode)	16 Ex (16 Bit Extended)	Value	Percent	Function
	1	0 - 19 20 - 49 50 - 72 73 - 79 80 - 99 100 - 119 120 - 127 128 - 147 148 - 167 168 - 187 188 - 190 191 - 193 194 - 196 197 - 199 200 - 202 203 - 207 208 - 217 218 - 227 228 - 237 238 - 247 248 - 255	0 - 7 8 - 19 20 - 28 29 - 31 31 - 39 39 - 47 47 - 50 50 - 58 58 - 65 66 - 73 74 - 75 75 - 76 76 - 77 77 - 78 78 - 79 80 - 81 82 - 85 85 - 89 89 - 93 93 - 97 97 - 100	<b>Shutter, Strobe, Reset, Lamp On/Off</b> Shutter closed Shutter open Strobe, fast → slow Shutter open Opening pulse, fast → slow Closing pulse, fast → slow Shutter open Random strobe, fast Random strobe, medium Random strobe, slow Shutter open Random opening pulse, fast Random opening pulse, slow Random closing pulse, fast Random closing pulse, slow Shutter open Reset fixture Shutter open Lamp on Shutter open Lamp off
	2	0 - 255	0 - 100	<b>Dimmer</b> Closed → open
	3	0-255	0-100	<b>Dimmer Fine (Lowest Significant Byte)</b> Closed → open
	4	0 11 22 33 44 55 66 77 88 99 110 121 132 143  156 - 159 160 - 163 164 - 167 168 - 171 172 - 175 176 - 179 180 - 183 184 - 187 188 - 191 192 - 195 196 - 199 200 - 203 204 - 207  208 - 226 227 - 245  246 - 248 249 - 251 252 - 255	0 4 9 13 17 22 26 30 35 39 43 47 52 56  61 - 63 63 - 64 64 - 65 66 - 67 67 - 68 69 - 70 70 - 72 72 - 73 74 - 75 75 - 76 77 - 78 78 - 79 80 - 81  82 - 88 89 - 96  96 - 97 98 - 98 99 - 100	<b>Color</b> Continuous Scroll: full color positions: White CTC Yellow 603 Blue 104 Pink 312 Green 206 Blue 108 Red 301 Magenta 507 Blue 101 Orange 306 Dark green Purple 502 White  <b>Stepped Scroll</b> White CTC Yellow 603 Blue 104 Pink 312 Green 206 Blue 108 Red 301 Magenta 507 Blue 101 Orange 306 Dark green Purple 502  <b>Continuous Rotation</b> CW, fast → slow CCW, slow → fast  <b>Random color</b> Fast Medium Slow
	5	0 - 255	0 - 100	<b>Color (Lowest Significant Byte)</b>

<sup>1</sup>If DMX Reset is disabled in the menu, a reset command can only be executed if the CTC filter is selected, the prism is on (not rotating) and the open gobo is selected.

A 5 second delay can be given to the reset command from the fixture menu under, dRES.

<sup>2</sup>If DMX Lamp Off is disabled in the menu, a lamp off command can only be executed if the CTC filter is selected, the prism is on (not rotating) and the open gobo is selected.

4	6	0 - 4	0 - 2	<b>Rotating Gobo selection and shake</b>
		5 - 10	2 - 4	<b>Indexing:</b> set position on channel 5 in 16 bt mode or channel 6 in 16 Ex mode
		11 - 15	4 - 6	Open gobo
		16 - 20	6 - 8	Gobo 1
		21 - 25	8 - 10	Gobo 2
		26 - 30	10 - 12	Gobo 3
		31 - 35	12 - 14	Gobo 4
		36 - 42	14 - 16	Gobo 5
				Gobo 6
				Gobo 7
				<b>Rotation:</b> set rotation speed on channel 5 in 16 bt mode or channel 6 in 16 Ex mode
		43 - 50	17 - 20	Open gobo
		51 - 58	20 - 23	Gobo 1
		59 - 65	23 - 26	Gobo 2
		66 - 73	26 - 29	Gobo 3
		74 - 81	29 - 32	Gobo 4
		82 - 89	32 - 35	Gobo 5
		90 - 96	35 - 38	Gobo 6
		97 - 104	38 - 41	Gobo 7
				<b>Rotation with shake, slow → fast:</b> set rotation speed on channel 5 in 16 bt mode or channel 6 in 16 Ex mode
		105 - 119	41 - 46	Gobo 7, Shake slow → fast
		120 - 134	47 - 52	Gobo 6, Shake slow → fast
		135 - 149	53 - 58	Gobo 5, Shake slow → fast
		150 - 164	59 - 64	Gobo 4, Shake slow → fast
		165 - 179	65 - 70	Gobo 3, Shake slow → fast
		180 - 194	70 - 76	Gobo 2, Shake slow → fast
		195 - 209	76 - 82	Gobo 1, Shake slow → fast
				<b>Continuous scroll</b>
		210 - 232	82 - 91	CW slow → fast
		233 - 255	91 - 100	CCW fast → slow
5	7	0 - 255	0 - 100	<b>Gobo rotation</b> (active when you select gobo on channel 4 in 16 bt mode or channel 5 in 16 Ex mode)
				Index position 0 - 395
				<b>Continuous rotation</b> (direction and speed)
		0 - 2	0 - 1	No rotation
		3 - 127	1 - 50	CW, slow → fast
		128 - 252	50 - 98	CCW, fast → slow
		253 - 255	99 - 100	No rotation
6	8	0 - 255	0 - 100	<b>Gobo Rotation ((Lowest Significant Byte)</b>
7	9	0 - 7	0 - 3	<b>Gobo Wheel 2 (static). Selection and Shake</b>
		8 - 15	3 - 6	Open gobo
		16 - 23	6 - 9	Gobo 1
		24 - 31	9 - 12	Gobo 2
		32 - 39	13 - 15	Gobo 3
		40 - 47	16 - 18	Gobo 4
		48 - 55	19 - 22	Gobo 5
		56 - 63	22 - 25	Gobo 6
		64 - 71	25 - 28	Gobo 7
		72 - 79	28 - 31	Gobo 8
		80 - 87	31 - 34	Gobo 9
		88 - 95	35 - 37	Gobo 10
				Open
				<b>Gobo Shake</b>
		96 - 105	38 - 41	Gobo 10 - Shake, slow → fast
		106 - 115	42 - 45	Gobo 9 - Shake, slow → fast
		116 - 125	45 - 49	Gobo 8 - Shake, slow → fast
		126 - 135	49 - 53	Gobo 7 - Shake, slow → fast
		136 - 145	53 - 56	Gobo 6 - Shake, slow → fast
		146 - 155	57 - 60	Gobo 5 - Shake, slow → fast
		156 - 165	61 - 65	Gobo 4 - Shake, slow → fast
		166 - 175	65 - 69	Gobo 3 - Shake, slow → fast
		176 - 185	69 - 73	Gobo 2 - Shake, slow → fast
		186 - 195	73 - 76	Gobo 1 - Shake, slow → fast
		196 - 205	77 - 80	Open Gobo - Shake, slow → fast
				<b>Continuous Rotation</b>
		206 - 230	81 - 90	CW slow → fast
		231 - 255	91 - 100	CCW fast → slow

8	10	0 - 255	0 - 100	<b>Focus</b> Infinity → 2 meters
	11	0 - 255	0 - 100	<b>Focus (Lowest Significant Byte)</b>
9	12	0 - 19 20 - 79 80 - 89 90 - 149 150 - 215  216 - 220 221 - 225 226 - 230 231 - 235 236 - 240 241 - 245 246 - 250 251 - 255	0 - 7 8 - 31 31 - 35 35 - 58 59 - 84  84 - 86 87 - 88 89 - 90 91 - 92 93 - 94 95 - 96 96 - 98 98 - 100	<b>Prism</b> Prism off Rotating prism, CCW fast à slow No rotation Rotating prism, CW slow à fast Prism off  <b>Prism/Gobo Macros</b> Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8
10	13	0 - 255	0 - 100	<b>Pan</b> Left → right (128 = neutral)
11	14	0 - 255	0 - 100	<b>Pan Fine (Lowest Significant Byte)</b> Left → right
12	15	0 - 255	0 - 100	<b>Tilt</b> Left → right (128 = neutral)
13	16	0 - 255	0 - 100	<b>Tilt Fine (Lowest Significant Byte)</b> Left → right
14	17	0 - 2 3 - 245 246 - 248 249 - 251 252 - 255	0 - 1 1 - 96 96 - 97 98 - 98 99 - 100	<b>Pan/Tilt Speed</b> Tracking Fast → slow Tracking, PTSP NORM (menu override) Tracking, PTSP FAST (menu override) Blackout while moving
15	18	0 - 2 3 - 245 246 - 251 252 - 255  0 - 2 3 - 245 246 - 248 249 - 251 252 - 255  0 - 245 246 - 248 249 - 251 252 - 255  0 - 2 3 - 245 246 - 251 252 - 255  0 - 251 252 - 255	0 - 1 1 - 96 96 - 98 99 - 100  0 - 1 1 - 96 96 - 97 98 - 98 99 - 100  0 - 96 96 - 97 98 - 98 99 - 100  0 - 1 1 - 96 96 - 98 99 - 100  0 - 98 99 - 100	<b>Effects Speed</b> Dimmer, focus Tracking mode Fast → slow Tracking Maximum speed  <b>Color</b> Tracking mode Speed, fast → slow Tracking, SCUT OFF (control menu override) Tracking, SCUT ON (control menu override) Blackout while moving  <b>Gobo selection</b> Normal (no blackout) Normal, SCUT OFF (control menu override) Normal, SCUT ON (control menu override) Blackout while moving  <b>Indexed gobo rotation</b> (only if gobo type = indexed) Tracking mode Fast à slow Tracking Blackout while moving  <b>Prism</b> Normal (no blackout) Blackout while moving