

Channel	Function	Time and Value	DMX	HEX	%
1) PAN-coarse	0 .. 530°	min. 2,65 s	0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos + 2,1° (16 Bit)		0..255	00..FF	0..100
3) Tilt-coarse	0 .. 285°	min. 1,8 s	0..255	00..FF	0..100
4) Tilt-fine	High- Pos ... High- Pos + 1,1° (16 Bit)		0..255	00..FF	0..100
5) Color	open (fast)	Chaser from color to color max. 140 BPM => 0,43 s	0..1	00..01	0,2
	open / color 1 (fast)		2..3	02..03	1,0
	color 1, Brilliant Blue (fast)		4..5	04..05	1,8
	color 1 / color 2 (fast)		6..7	06..07	2,5
	color 2, Blue (fast)		8..9	08..09	3,3
	color 2 / color 3 (fast)		10..11	0A..0B	4,1
	color 3, Blue Purple (fast)		12..13	0C..0D	4,9
	color 3 / color 4 (fast)		14..15	0E..0F	5,7
	color 4, Magenta (fast)		16..17	10..11	6,5
	color 4 / color 5 (fast)		18..19	12..13	7,3
	color 5, Pink (fast)		20..21	14..15	8,0
	color 5 / color 6 (fast)		22..23	16..17	8,8
	color 6, Orange (fast)		24..25	18..19	9,6
	color 6 / color 7 (fast)		26..27	1A..1B	10,4
	color 7, Canary (fast)		28..29	1C..1D	11,2
	color 7 / color 8 (fast)		30..31	1E..1F	12,0
	color 8, Italian Blue (fast)		32..33	20..21	12,7
	color 8 / color 9 (fast)		34..35	22..23	13,5
	color 9, Turquoise (fast)		36..37	24..25	14,3
	color 9 / color 10 (fast)		38..39	26..27	15,1
	color 10, Jade (fast)		40..41	28..29	15,9
	color 10 / color 11 (fast)		42..43	2A..2B	16,7
	color 11, Red (fast)		44..45	2C..2D	17,5
	color 11 / open (fast)		46..47	2E..2F	18,2
	open (fast)		48..63	30..3F	19,0
	open (slow)	Chaser from color to color max. 70 BPM => 0,86 s	64..65	40..41	25,3
	open / color 1 (slow)		66..67	42..43	26,1
	color 1, Brilliant Blue (slow)		68..69	44..45	26,9
	color 1 / color 2 (slow)		70..71	46..47	27,6
	color 2, Blue (slow)		72..73	48..49	28,4
	color 2 / color 3 (slow)		74..75	4A..4B	29,2
	color 3, Blue Purple (slow)		76..77	4C..4D	30,0
	color 3 / color 4 (slow)		78..79	4E..4F	30,8
color 4, Magenta (slow)		80..81	50..51	31,6	
color 4 / color 5 (slow)		82..83	52..53	32,4	
color 5, Pink (slow)		84..85	54..55	33,1	
color 5 / color 6 (slow)		86..87	56..57	33,9	
color 6, Orange (slow)		88..89	58..59	34,7	
color 6 / color 7 (slow)		90..91	5A..5B	35,5	
color 7, Canary (slow)		92..93	5C..5D	36,3	
color 7 / color 8 (slow)		94..95	5E..5F	37,1	
color 8, Italian Blue (slow)		96..97	60..61	37,8	
color 8 / color 9 (slow)		98..99	62..63	38,6	
color 9, Turquoise (slow)		100..101	64..65	39,4	
color 9 / color 10 (slow)		102..103	66..67	40,2	
color 10, Jade (slow)		104..105	68..69	41,0	
color 10 / color 11 (slow)		106..107	6A..6B	41,8	

Channel	Function	Time and Value	DMX	HEX	%
	color 11, Red (slow)		108..109	6C..6D	42,5
	color 11 / open (slow)		110..111	6E..6F	43,3
	open (slow)		112..127	70..7F	44,1
	color rotation, slow-fast, CW	min. 1,4 turns/h	128..191	80..BF	50..75
	color rotation, fast-slow, CCW	max. 2,9 turns/sec.	192..253	C0..FD	76..98
	Audio color chaser slow	each 4th sound impulse → new color	254	FE	99
	Audio color chaser fast	each sound impulse → new color	255	FF	100
6) Gobo	Gobo 1 (open, fast)	Chaser from gobo to gobo max. 100 BPM => 0,6 s	0..3	00..03	0..1
	Gobo 2 (fast)		4..7	04..07	2..3
	Gobo 3 (fast)		8..11	08..0B	3..4
	Gobo 4 (fast)		12..15	0C..0F	5..6
	Gobo 5 (fast)		16..19	10..13	6..7
	Gobo 6 (fast)		20..23	14..17	8..9
	Gobo 7 (fast)		24..27	18..1B	9..10
	Gobo 8 (fast)		28..31	1C..1F	11..12
	Gobo 9 (fast)		32..35	20..23	13..14
	Gobo 1 (open, fast)		36..39	24..27	14..15
	Gobo 1 (open, slow)	Chaser from gobo to gobo max. 40 BPM => 1,51 s	40..65	28..41	16..25
	Gobo 2 (slow)		66..67	42..43	26
	Gobo 3 (slow)		68..71	44..47	27..28
	Gobo 4 (slow)		72..75	48..4B	28..29
	Gobo 5 (slow)		76..80	4C..50	30..31
	Gobo 6 (slow)		81..83	51..53	32..33
	Gobo 7 (slow)		84..87	54..57	33..34
	Gobo 8 (slow)		88..91	58..5B	35..36
	Gobo 9 (slow)		92..95	5C..5F	36..37
	Gobo 1 (open, slow)		96..99	60..63	38..39
	Gobo rotation, slow-fast, CW	min. 1,4 turns/h	100..103	64..67	39..40
	Gobo rotation, fast-slow, CCW	max. 1.0 turns/sec.	104..107	68..6B	41..42
	Audio gobo chase, slow	each 4th sound impulse → new gobo	108..191	6C..BF	42..75
	Audio gobo chase, fast	each sound impulse → new gobo	192..253	C0..FD	75..98
7) Shutter	Shutter closed		0..15	00..0F	0..6
	Random Strobe (different pattern)		16..31	10..1F	7..11,9
	Strobe Pulse effect , slow - fast	min. frequent 0,7 Hz	32..47	20..2F	12..12,9
	Strobe effect , slow - fast	max. frequent 10 Hz	48..239	30..EF	13..93
	Shutter open (lamp start)		240..255	F0..FF	94..100
8) Dimmer	Dimmer closed (0%)		0..3	0..3	0..1
	Dimmer 1%...99%	movement time 0,3 sec.	4..251	4..FB	2..98
	Dimmer open (100%)		252..255	FC..FF	99..100
9) Special	no function		0..15	00..0F	0..6
	Gobo-seesaw +/- 10° slow – fast	3,5 moves / min. up to 60 moves / max.	16..31	10..1F	7..12
	Gobo-seesaw +/- 20° slow – fast	3,5 moves / min. up to 60 moves / max.	32..47	20..2F	13..18
	Gobo-seesaw +/- 30° slow – fast	3,5 moves / min. up to 60 moves / max.	48..63	30..3F	19..24
	Color-chaser C / C+1 slow – fast	0,7 BPS ... 2,3 BPS => 1,43 s ... 0,43 s	64..79	40..4F	25..31
	Color-chaser C / C+2 slow – fast	0,7 BPS ... 2,0 BPS => 1,43 s ... 0,5 s	80..95	50..5F	32..37

Channel	Function	Time and Value	DMX	HEX	%		
	Audio Pan / Tilt slow	each 4th sound impulse → new position	96..111	60..6F	38..43		
	Audio Pan / Tilt fast	each sound impulse → new position	112..127	70..7F	44..50		
	no function		128..249	80..E5	50..97		
	Lamp OFF (3 sec.)		230..249	E6..F9	92..97		
	Reset		250..255	FA..FF	98..100		
10) Move- ment	no movement		0	00	0		
	Movement	Size	Phase				
	PAN	1	0°		01..01	01..01	0,5
		1	90°		02..03	02..03	1,0
		1	180°		04..05	04..05	1,7
		1	270°		06..07	06..07	2,5
	PAN	2	0°		08..09	08..09	3,3
		2	90°		10..11	0A..0B	4,1
		2	180°		12..13	0C..0D	4,9
		2	270°		14..15	0E..0F	5,7
	PAN	3	0°		16..17	11..11	6,5
		3	90°		18..19	12..13	7,3
		3	180°		20..21	14..15	8,0
		3	270°		22..23	16..17	8,8
	PAN	4	0°		24..25	18..19	9,6
		4	90°		26..27	1A..1B	10,4
		4	180°		28..29	1C..1D	11,2
4		270°		30..31	1E..1F	12	
TILT	size / phase see also PAN		32..63	20..3F	13..25		
PAN / TILT	size / phase see also PAN		64..95	40..5F	26..37		
PAN / TILT (inverse)	size / phase see also PAN		96..127	60..7F	38..50		
Circle	size / phase see also PAN		128..159	80..9F	51..62		
Circle (inverse)	size / phase see also PAN		160..191	A0..BF	63..75		
lying eight	size / phase see also PAN		192..223	C0..DF	76..87		
random movement	size see also PAN		224..255	E0..FF	88..100		
11) Speed Pan/Tilt	Pan/Tilt relative movement		0..15	00..0F	0..6		
	Pan/Tilt slow – fast Use this channel 14) also for the speed of the movements (channel 13).	Pan min. 530° = 200 s Pan max. 530° = 2,65 s Tilt min. 285° = 110 s Tilt max. 285° = 1,8 s	16..255	10..FF	7..100		
12) Laser	Laser OFF		0..15	00..0F	0..6		
	Laser flashing random		16..31	10..1F	7..12		
	Audio Laser		32..47	20..2F	13..18		
	Blinking slow - fast		48..127	30..7F	19..50		
	Flashing slow - fast		128..239	80..EF	51..93		
	Laser ON		240..255	FO..FF	94..100		
Lamp ON	Shutter open		240..255	F0..FF	94..100		
Lamp OFF	Channel 9 (min. 3 sec.) (only if shutter is closed, channel 7 = 0 ..15)		230..249	6E..9F	92..97		