

3 DMX Channel Selection (DMX Protocol)

Channel	Function	Time and Value	DMX	HEX	%
1) PAN-coarse	0 .. 360°	Min. 1t/5min. Max. 4t/sec.	0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos (16 Bit)		0..255	00..FF	0..100
3) Tilt-coarse	0 .. 360°	Min. 1t/5min. Max. 4t/sec.	0..255	00..FF	0..100
4) Tilt-fine	High- Pos ... High- Pos (16 Bit)		0..255	00..FF	0..100
5) Pan-Rotation	still, positioning with channel 1 and 2		0..1		
	CW, slow - fast		2..127		
	CCW, fast - slow		128..255		
6) Tilt-Rotation	still, positioning with channel 3 and 4		0..1		
	CW, slow - fast		2..127		
	CCW, fast - slow		128..255		
7) Color	open		0..1	00..01	0,2
	open / color 1		2..3	02..03	1,0
	color 1		4..5	04..05	1,8
	color 1 / color 2		6..7	06..07	2,5
	color 2		8..9	08..09	3,3
	color 2 / color 3		10..11	0A..0B	4,1
	color 3		12..13	0C..0D	4,9
	color 3 / color 4		14..15	0E..0F	5,7
	color 4		16..17	10..11	6,5
	color 4 / color 5		18..19	12..13	7,3
	color 5		20..21	14..15	8,0
	color 5 / color 6		22..23	16..17	8,8
	color 6		24..25	18..19	9,6
	color 6 / color 7		26..27	1A..1B	10,4
	color 7		28..29	1C..1D	11,2
	color 7 / color 8		30..31	1E..1F	12,0
	color 8		32..33	20..21	12,7
	color 8 / color 9		34..35	22..23	13,5
	color 9		36..37	24..25	14,3
	color 9 / color 10		38..39	26..27	15,1
	color 10		40..41	28..29	15,9
	color 10 / color 11		42..43	2A..2B	16,7
	color 11		44..45	2C..2D	17,5
	color 11 / color 12		46..47	2E..2F	18,2
	color 12		48..49		
	color 12 / color 13		50..51		
	color 13		52..53		
	color 13 / color 14		54..55		
	color 14		56..57		
	color 14 / color 15		58..59		
	color 15		60..61		
	color 15 / color 16		62..63		
	color 16		64..65		
	color 16 / color 17		66..67		
	color 17		68..69		
	color 17 / color 18		70..71		

Channel	Function	Time and Value	DMX	HEX	%
	color 18		72..73		
	color 18 / color 19		74..75		
	color 19		76..77		
	color 19 / open		78..79		
	open		80..127		
	color rotation, slow-fast, CW	min. 1 turn/5 sec.	128..19 1	80..BF	50..75
	color rotation, fast-slow, CCW	max. 1 turn/sec.	192..25 3	C0..FD	76..98
	Audio color chaser slow	each 4 th sound impulse → new color	254	DE	99
	Audio color chaser fast	each sound impulse → new color	255	FF	100
6) Gobo	open		0..3		
	Gobo 1		4..7		
	Gobo 2		8..11		
	Gobo 3		12..15		
	Gobo 4		16..19		
	Gobo 5		20..23		
	Gobo 6		24..27		
	Gobo 7		28..31		
	Gobo 8		32..35		
	Gobo 9		36..39		
	Gobo 10		40..43		
	Gobo 11		44..47		
	Gobo 12		48..51		
	Gobo 13		52..55		
	Gobo 14		56..59		
	Gobo 15		60..63		
	Gobo 16		64..67		
	Gobo 17		68..71		
	Gobo 18		72..75		
	Gobo 19		76..79		
	open		80..127		
	Gobo rotation, slow-fast, CW	min. 1 turn/5 sec.	128..19 1	80..BF	50..75
	Gobo rotation, fast-slow, CCW	max. 1 turn/sec.	192..25 3	C0..FD	76..98
	Audio Gobo chaser slow	each 4 th sound impulse → new Gobo	254	DE	99
	Audio Gobo chaser fast	each sound impulse → new Gobo	255	FF	100
9) Shutter	Shutter closed		0..1		
	Dimmer, closed - open		2..125		
	Shutter open		126..12 7		
	Random Strobe		128..14 3		
	Audio Strobe		144..15 9		
	Strobe, slow - fast		160..13 9		

Channel	Function			Time and Value	DMX	HEX	%	
	Shutter open				240..255			
	Shutter open (lamp start)				254..255			
10) Focus	in - out				0..255	0..FF	0..100	
11) Speed	Pan/Tilt relative movement				0..1	00..01	0..0,5	
	Speed, slow - fast				2..255	02..FF	1..100	
12) Movement	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	
	13) Special	n.a.				0..63		
		Special color chaser color -> color +1			slow - fast	64..79		
		Special color chaser color -> color +2			slow - fast	80..95		
		Pan/Tilt, audio-controlled			slow	96..111		
Pan/Tilt, audio-controlled			fast	112..127				
Pan/Tilt, random positioning				128..143				
Lamp off			after 3 sec.	230..249				
Reset			after 3 sec.	250..255				