

Control channels

DMX Channel	FUNCTION	DESCRIPTION
ch1	Pan MSB	Pan 8bit
ch2	Pan LSB	Pan 16 bit
ch3	Tilt MSB	Tilt 8 bit
ch4	Tilt LSB	Tilt 16 bit
ch5	Iris	Iris aperture control
ch6	Colore	6 colors + rainbow + music change
ch7	Gobo1	8 Gobos + rainbow + music change
ch8	Shutter/ Strobe	Shutter and strobe with music sync Black out gobo and colour change
ch9	Dimmer	Mechanical dimmer
ch10	Gobo1 rotation (MSB)	Gobo1 indexing and rotation 8 bit
ch11	Prism / Flattener	
ch12	Prism rotation	Regulation of prism rotation speed in one direction or the other
ch13	Motorized Focus	Enables images to be focussed
ch14	Zoom	Widening / narrowing of light beam (0 - 22°)
ch15	Animation Wheel	Animation Wheel
ch16	Frost	Variable frost
ch17	Mspeed	Movement speed
ch18	Reset/Lamp	
ch19	Gobo1 shake	Gobo1 shaking
ch20	Mod_col	Indexable position, hard full color change,hard half color change, rainbow 8 speed, music color change
ch21	Mod_rotg1	Gobo1 position indexing, gobo rotation , gobo shaking
ch22	Macro	Macro function
ch23	Rotation Gobo1(LSB)	GoboWheel1 indexing and rotation 16 bit
ch24	Gobo2	8 Gobos + rainbow + music change
ch25	Gobo2 rotation (MSB)	Gobo2 indexing and rotation 8 bit
ch26	Gobo2 rotation (LSB)	Gobo2 indexing and rotation 16 bit
ch27	Mod_rotg2	Gobo2 position indexing, gobo rotation , gobo shaking
ch28	Gobo2shake	Gobo2 shaking
ch29	Animation Wheel Rotation	Animation wheel rotation
ch30	Cyan	Linear Cyan insertion
ch31	Magenta	Linear Magenta insertion
ch32	Yellow	Linear Yellow insertion
ch33	CTO	Linear Cto insertion

Iris (Ch5)

DMX VALUE	FUNCTION
0 - 255	LINEAR OPENING REGULATION 0 – 100%

Color mode (Ch20)

DMX VALUE	CENTRAL VALUE	FUNCTION	
0 – 50	25	FULL COLOR	Digital color regulation on central position
51 – 101	75	HALF COLOR	Digital color regulation on intermediate position
102 – 152	125	COLOR SOFT	Analog color selection on any position
153 – 203	175	RAINBOW SOFT	Color rotation at different speed Digital
204 – 255	225	MUSIC HARD CHANGE	color music change sincronized with low frequency

Color (Ch6) with Color mode (Ch20) = Full Color

DMX VALUE	CENTRAL VALUE	FUNCTION
0 – 35	17	WHITE
36 – 71	53	RED
72 – 107	89	GREEN
108 – 145	125	BLUE
146 – 181	161	PINK
182 – 215	197	AMBER
216 – 255	233	WOOD

Color (Ch6) with Color mode (Ch20) = Half Color

DMX VALUE	CENTRAL VALUE	FUNCTION
0 - 31	15	WHITE
32 – 63	47	WHITE / RED
64 – 95	79	RED / GREEN
96 – 127	111	GREEN / BLUE
128 – 159	143	BLUE / PINK
160 – 191	175	PINK / AMBER
192 – 223	207	AMBER / WOOD
224 – 255	239	WOOD / WHITE

Color (Ch6) with Color mode (Ch20)= Color Soft

DMX VALUE		FUNCTION
Colore indicizzato LINEAR REGULATI ON del colore in ogni campo	C = 0	WHITE
	C = 36	RED
	C = 72	GREEN
	C = 108	BLUE
	C = 144	PINK
	C = 180	AMBER
C = 216		WOOD

Color (Ch6) with Color mode (Ch20)= Rainbow Soft

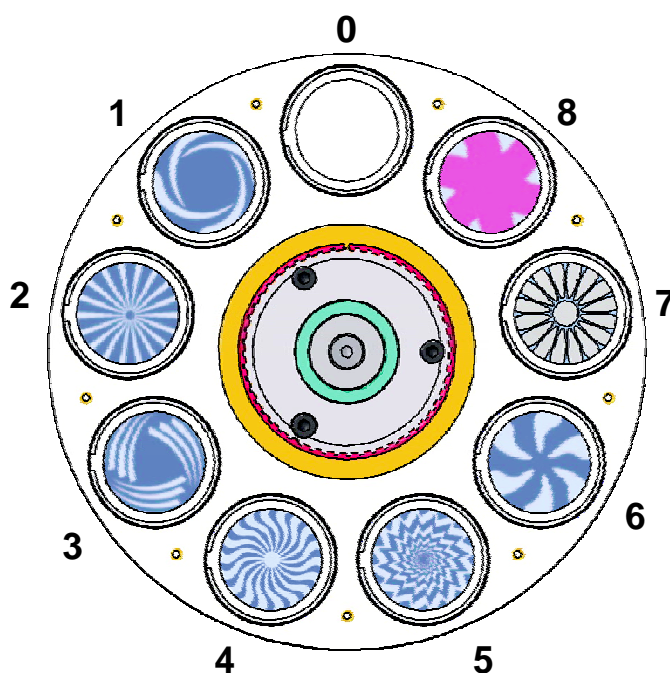
DMX VALUE	CENTRAL VALUE	FUNCTION
0 -15	8	SPEED 1
16 – 31	24	SPEED 2
32 – 47	40	SPEED 3
48 – 63	56	SPEED 4
64 – 79	72	SPEED 5
80 – 95	88	SPEED 6
96 – 111	104	SPEED 7
112 – 127	120	SPEED 8
128 – 143	136	SPEED 9
144 – 159	152	SPEED 10
160 – 175	168	SPEED 11
176 – 191	184	SPEED 12
192 – 207	200	SPEED 13
208 – 223	216	SPEED 14
224 – 239	232	SPEED 15
240 – 255	248	SPEED 16

Color (Ch6) with Color mode (Ch20)= Music hard change

DMX VALUE	FUNCTION
0 – 127	MUSIC HARD CHANGE FULL COLOR
128 – 255	MUSIC HARD CHANGE ALF COLOR

Gobos wheel 1 (Ch7)

DMX VALUE	CENTRAL VALUE	FUNCTION
0 – 20	10	WHITE
21 – 41	31	WHEEL1-GOBO 1
42 – 62	52	WHEEL1-GOBO 2
63 – 83	73	WHEEL1-GOBO 3
84 – 104	94	WHEEL1-GOBO 4
105 – 125	115	WHEEL1-GOBO 5
126 – 146	136	WHEEL1-GOBO 6
147 – 167	157	WHEEL1-GOBO 7
168 – 189	178	WHEEL1-GOBO8
190 – 196	193	RAINBOW SPEED1
197 – 203	200	RAINBOW SPEED2
204 – 210	207	RAINBOW SPEED3
211 – 217	214	RAINBOW SPEED4
218 – 224	221	RAINBOW SPEED5
225 – 231	228	RAINBOW SPEED6
232 – 238	235	RAINBOW SPEED7
239 – 245	242	RAINBOW SPEED8
246 – 255	252	GOBOS MUSIC CHANGE

**Shutter/ strobo (Ch8)**

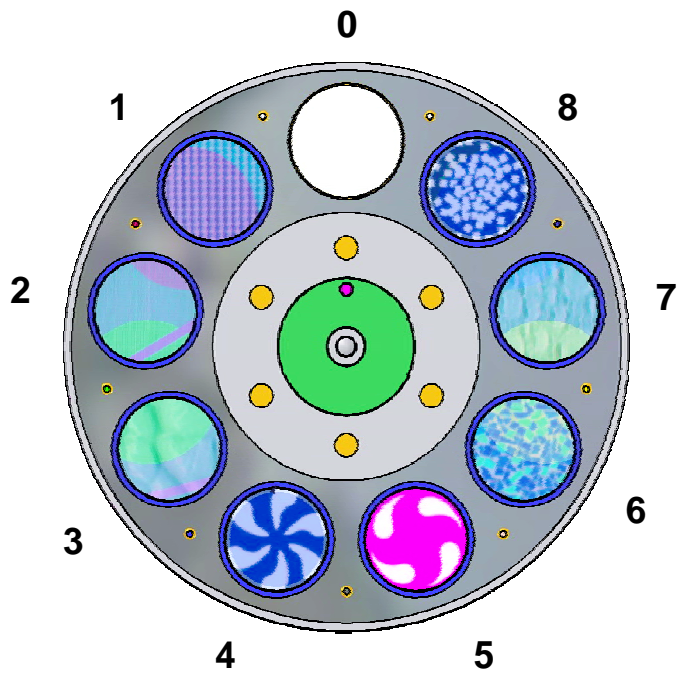
DMX VALUE	CENTRAL VALUE	FUNCTION
0 -- 7	4	CLOSED
8 --15	12	STROBE FREQUENCY OF 1HZ
16 -- 23	20	STROBE FREQUENCY OF 1,38 HZ
24 – 31	28	STROBE FREQUENCY OF 1,6 HZ
32 – 39	36	STROBE FREQUENCY OF 1,9 HZ
40 -- 47	44	STROBE FREQUENCY OF 2,3 HZ
48 -- 55	52	STROBE FREQUENCY OF 2,7 HZ
56 -- 63	60	STROBE FREQUENCY OF 3,4 HZ
64 -- 71	68	STROBE FREQUENCY OF 4 HZ
72 --79	76	STROBE FREQUENCY OF 5 HZ
80 --87	84	STROBE FREQUENCY OF 6 HZ
88 -- 95	92	STROBE FREQUENCY OF 7 HZ
96 -- 103	100	STROBE FREQUENCY OF 8 HZ
104 -- 111	108	STROBE FREQUENCY OF 9 HZ
112 -- 119	116	STROBE FREQUENCY OF 10 HZ
120 -- 136	128	SHUTTER STROBE LOW. STROBE EFFECT AT 10 HZ SINCRONIZED ON LOW AUDIO FREQUECYES
137 -- 153	145	MUSIC FLASH LOW
154 – 170	162	OPEN AUTOSHADE ON GOBOS
171 -- 187	179	OPEN AUTOSHADE ON COLORS
188 -- 204	196	OPEN AUTOSHADE ON GOBOS AND COLORI
205 -- 221	213	OPEN WITH SLOW GOBO CHANGE
222 -- 255		OPEN

Dimmer (Ch9)

DMX VALUE	FUNCTION
0 – 255	LINEAR REGULATION 0 – 100%

Gobos wheel 2 (Ch24)

DMX VALUE	CENTRAL VALUE	FUNCTION
0 – 20	10	WHITE
21 – 41	31	WHEEL 2-GOBO 1
42 – 62	52	WHEEL 2-GOBO 2
63 – 83	73	WHEEL 2-GOBO 3
84 – 104	94	WHEEL 2-GOBO 4
105 – 125	115	WHEEL 2-GOBO 5
126 – 146	136	WHEEL 2-GOBO 6
147 – 167	157	WHEEL 2-GOBO 7
168 – 189	178	WHEEL 2-GOBO 8
190 – 196	193	RAINBOW SPEED1
197 – 203	200	RAINBOW SPEED2
204 – 210	207	RAINBOW SPEED3
211 – 217	214	RAINBOW SPEED4
218 – 224	221	RAINBOW SPEED5
225 – 231	228	RAINBOW SPEED6
232 – 238	235	RAINBOW SPEED7
239 – 245	242	RAINBOW SPEED8
246 – 255	252	GOBOS MUSIC CHANGE



Gobo1 rotation mode (Ch21)

DMX VALUE	FUNCTION
0..127	GOBO1 INDEXABLE POSITION
128 .. 255	GOBO1 ROTATION AT DIFFERENT SPEED IN BOTH DIRECTIONS

gobo 1 (ch10) with gobo1 rotation mode (ch21)=gobo1 indexable position.

DMX VALUE	FUNCTION
0 .. 255	LINEAR GOBOWHEEL1 POSITION REGULATION FOR 360 (MSB)

gobo 1 rotation (ch23) with gobo1 rotation mode (ch21)=gobo1 indexable position.

DMX VALUE	FUNCTION
0..255	LINEAR GOBOWHEEL1 POSITION REGULATION FOR 360 (LSB)

gobo1 rotation (ch10) with gobo1 rotation mode (ch21)=gobo1 rotation at different speed in both directions.

DMX VALUE	FUNCTION
0..111	DOWN ROTATION [MAX . . .MIN]
112 – 144	FIXED
145..255	UP ROTATION [MIN ... MAX]

Gobo2 rotation mode (Ch27)

DMX VALUE	FUNCTION
0..127	GOBO2 INDEXABLE POSITION
128 .. 255	GOBO2 ROTATION AT DIFFERENT SPEED IN BOTH DIRECTIONS

gobo2 rotation msb (ch25) with gobo2 rotation mode(ch27)=gobo2 indexable position

DMX VALUE	FUNCTION
0 .. 255	LINEAR GOBOWHEEL2 POSITION REGULATION FOR 360 (MSB)

gobo2 rotation lsb (ch26) with gobo2 rotation mode(ch27)=gobo2 indexable position

DMX VALUE	FUNCTION
0 .. 255	LINEAR GOBOWHEEL1 POSITION REGULATION FOR 360 (LSB)

gobo2 rotation (ch25) with gobo2 rotation mode (ch27)=gobo2 rotation at different speed in both directions

DMX VALUE	FUNCTION
0 .. 111	DOWN ROTATION [MAX .. MIN]
112 - 144	FIXED
145 .. 255	UP ROTATION [MIN ... MAX]

Zoom (Ch14)

DMX VALUE	FUNCTION
0	ZOOM IN (ANGOLO 12°)
0 – 255	LINEAR VARIATION
255	ZOOM OUT (ANGOLO 22°)

Prism / Flattener (Ch11)

DMX VALUE	FUNCTION
0 – 63	NO PRISM - NO FLATTENER
64 - 127	FLATTENER INSERTED
128 - 191	PRISM INSERTED
192 – 255	PRISM INSERTED - FLATTENER INSERTED

Prism rotation (Ch12)

DMX VALUE	FUNCTION
0 .. 111	DOWN ROTATION [MAX .. MIN]
112 – 143	FERMO
144 .. 255	UP ROTATION [MIN .. MAX]

Animation wheel (Ch15)

DMX VALUE	FUNCTION
0 – 127	NOT INSERTED.
128 – 255	INSERTED.

Animation wheel rotation (Ch29)

DMX VALUE	FUNCTION
0 .. 111	ROTATION DOWN [MAX .. MIN]
112 – 143	ANIMATION WHEEL FERMA
144 .. 255	ROTATION UP [MAX .. MIN]

Motorized focus (Ch13)

DMX VALUE	FUNCTION
0 – 255	LINEAR REGULATION 0 – 100%

Frost (Ch16)

DMX VALUE	FUNCTION
0	FROST DISABLED
0 – 255	LINEAR VARIATION
255	FROST FULLY INSERTED

Gobo1 shake (Ch19)

DMX VALUE	CENTRAL VALUE	FUNCTION
0 – 47		GOBOSHAKE DISABLED
48 – 60	54	GOBOSHAKE SPEED 1
61 – 73	67	GOBOSHAKE SPEED 2
74 – 86	80	GOBOSHAKE SPEED 3
87 – 99	93	GOBOSHAKE SPEED 4
100 – 112	106	GOBOSHAKE SPEED 5
113 – 125	119	GOBOSHAKE SPEED 6
126 – 138	132	GOBOSHAKE SPEED 7
139 – 151	145	GOBOSHAKE SPEED 8
152 – 164	158	GOBOSHAKE SPEED 9
165 – 177	171	GOBOSHAKE SPEED 10
178 – 190	184	GOBOSHAKE SPEED 11
191 – 203	197	GOBOSHAKE SPEED 12
204 – 216	210	GOBOSHAKE SPEED 13
217 – 229	223	GOBOSHAKE SPEED 14
230 – 242	236	GOBOSHAKE SPEED 15
243 – 255	249	GOBOSHAKE SPEED 16

Gobo2 shake (Ch28)

DMX VALUE	CENTRAL VALUE	FUNCTION
0 – 47		GOBOSHAKE DISABLED
48 – 60	54	GOBOSHAKE SPEED 1
61 – 73	67	GOBOSHAKE SPEED 2
74 – 86	80	GOBOSHAKE SPEED 3
87 – 99	93	GOBOSHAKE SPEED 4
100 – 112	106	GOBOSHAKE SPEED 5
113 – 125	119	GOBOSHAKE SPEED 6
126 – 138	132	GOBOSHAKE SPEED 7
139 – 151	145	GOBOSHAKE SPEED 8
152 – 164	158	GOBOSHAKE SPEED 9
165 – 177	171	GOBOSHAKE SPEED 10
178 – 190	184	GOBOSHAKE SPEED 11
191 – 203	197	GOBOSHAKE SPEED 12
204 – 216	210	GOBOSHAKE SPEED 13
217 – 229	223	GOBOSHAKE SPEED 14
230 – 242	236	GOBOSHAKE SPEED 15
243 – 255	249	GOBOSHAKE SPEED 16

Cyano (Ch30)

DMX VALUE	FUNCTION
0	OPEN
0 - 255	LINEAR VARIATION [0...100%]
255	CYANO FULLY INSERTED

Magenta (CH31)

DMX VALUE	FUNCTION
0	OPEN
0 - 255	LINEAR VARIATION [0...100%]
255	MAGENTA FULLY INSERTED

Yellow (CH32)

DMX VALUE	FUNCTION
0	OPEN
0 - 255	LINEAR VARIATION [0...100%]
255	YELLOW FULLY INSERTED

Cto (CH33)

DMX VALUE	FUNCTION
0	OPEN
0 - 255	LINEAR VARIATION [0...100%]
255	CTO FULLY INSERTED

Mspeed (Ch17)

DMX VALUE	FUNCTION
0 .. 3	CONTROLLER CROSS FADE
4 .. 255	SLOWEST .. FASTEST

Remote lamp striking and reset (Ch18)

DMX VALUE	FUNCTION	
10 – 60	OFF	LAMP
61 – 129	HYSTERESIS	
130 -- 179	ON	
180 – 239	HYSTERESIS	RESET
240 – 255	RESET	

Macro (Ch22)

DMX VALUE	CENTRAL VALUE	DESCRIPTION	CHANNELS USED
0 – 7	4		
8 – 15	12	Slow dimmer opening ramp and fast closing	Dimmer Shutter
16 – 23	20	Slow dimmer closing ramp and fast opening	Dimmer Shutter
24 – 31	28	Odd-numbered fixtures run a slow dimmer opening ramp. Even-numbered fixtures run a slow dimmer closing ramp	Dimmer Shutter
32 – 39	36	Odd-numbered fixtures run a slow dimmer opening ramp and even-numbered fixtures' shutters are closed. Then even-numbered fixtures run a slow dimmer opening ramp and odd-numbered fixtures' shutters are closed.	Dimmer Shutter
40 – 47	44	Odd-numbered fixtures run a slow dimmer closing ramp while even-numbered fixtures' shutters are open. Then even-numbered fixtures run a slow dimmer closing ramp and even-numbered fixtures' shutters are open	Dimmer Shutter
48 – 55	52	Slow iris opening ramp and fast closing	Iris
56 – 63	60	Slow iris closing ramp and fast opening	Iris
64 – 71	68	Fast iris closing and opening	iris
72 – 79	76	Odd-numbered fixtures run a slow iris opening ramp, even-numbered fixtures run a slow iris closing ramp	iris
80 – 87	84	Odd-numbered fixtures run a slow iris opening ramp whereas even-numbered fixtures' irises are closed. Then even-numbered fixtures run a slow iris opening ramp and even-numbered fixtures' irises are closed	Iris
88 – 95	92	Odd-numbered fixtures run a slow iris closing ramp whereas even-numbered fixtures' irises are open. Then even-numbered fixtures run a slow iris closing ramp and odd-numbered fixtures' irises are open	Iris
96 – 103	100	Even-numbered fixtures close their irises, whereas odd-numbered fixtures open them and vice versa	Iris
104 – 111	108	Random strobe	Shutter
112 – 119	116	Slow Frost insertion ramp followed by slow removal ramp	Frost
120 – 127	124	Slow Frost insertion ramp followed by fast removal	Frost
128 – 135	132	Slow Frost insertion ramp on even-numbered fixtures, whereas Frost is disabled on odd-numbered units. Then slow Frost insertion ramp on odd-numbered fixtures and Frost disabled on even-numbered fixtures	Frost
136 – 143	140		
144 – 151	148		
152 – 159	156		
160 – 167	164		
168 – 175	172		
176 – 183	180		
184 – 191	188		
192 – 199	196		
200 – 207	204		
208 – 215	212		
216 – 223	220		
224 – 231	228		
232 – 239	236		
240 – 247	244		
248 – 255	252		

Conversion table

DMX VALUE	MSPEED (in seconds)	DMX VALUE	MSPEED (in seconds)	DMX VALUE	MSPEED (in seconds)	DMX VALUE	MSPEED (in seconds)
0 -- 1	cross fade	65	150	129	72	193	17
2	cross fade	66	149	130	70	194	17
3	cross fade	67	147	131	69	195	16
4	243	68	146	132	68	196	16
5	241	69	145	133	67	197	15
6	240	70	143	134	66	198	15
7	238	71	142	135	65	199	14
8	236	72	141	136	64	200	14
9	234	73	139	137	63	201	13
10	233	74	138	138	62	202	13
11	231	75	137	139	61	203	12
12	229	76	135	140	60	204	12
13	227	77	134	141	59	205	12
14	226	78	133	142	58	206	11
15	224	79	131	143	57	207	11
16	222	80	130	144	56	208	10
17	221	81	129	145	55	209	10
18	219	82	128	146	54	210	10
19	217	83	126	147	53	211	9
20	216	84	125	148	52	212	9
21	214	85	124	149	51	213	9
22	213	86	122	150	50	214	8
23	211	87	121	151	49	215	8
24	209	88	120	152	48	216	8
25	208	89	119	153	47	217	7
26	206	90	117	154	46	218	7
27	205	91	116	155	45	219	7
28	203	92	115	156	45	220	6
29	202	93	114	157	44	221	6
30	200	94	112	158	43	222	6
31	199	95	111	159	42	223	6
32	197	96	110	160	41	224	5
33	195	97	109	161	40	225	5
34	194	98	108	162	39	226	5
35	192	99	106	163	38	227	5
36	191	100	105	164	38	228	4
37	189	101	104	165	37	229	4
38	188	102	103	166	36	230	4
39	187	103	101	167	35	231	4
40	185	104	100	168	34	232	4
41	184	105	99	169	34	233	3
42	182	106	98	170	33	234	3
43	181	107	97	171	32	235	3
44	179	108	95	172	31	236	3
45	178	109	94	173	30	237	3
46	176	110	93	174	30	238	3
47	175	111	92	175	29	239	3
48	173	112	91	176	28	240	2
49	172	113	90	177	28	241	2
50	171	114	88	178	27	242	2
51	169	115	87	179	26	243	2
52	168	116	86	180	25	244	2
53	166	117	85	181	25	245	2
54	165	118	84	182	24	246	2
55	164	119	83	183	23	247	2
56	162	120	82	184	23	248	2
57	161	121	80	185	22	249	2
58	159	122	79	186	22	250	2
59	158	123	78	187	21	251	2
60	157	124	77	188	20	252	2
61	155	125	76	189	20	253	2
62	154	126	75	190	19	254	2
63	153	127	74	191	19	255	2
64	151	128	73	192	18		