

4.0 Control channels

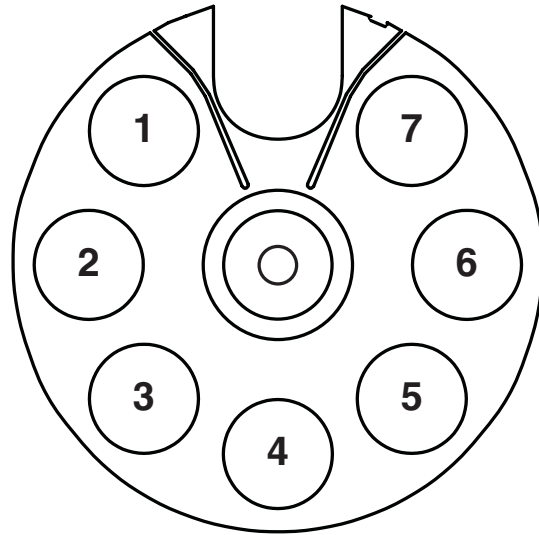
DMX Channel	Function	Description
Ch1	Pan MSB	Pan Coarse
Ch2	Pan LSB	Pan Fine
Ch3	Tilt MSB	Tilt Coarse
Ch4	Tilt LSB	Tilt Fine
Ch5	Colour	Selection of 8 colours and rainbow effect
Ch6	Cyan	White to full Cyan
Ch7	Magenta	White to full Magenta
Ch8	Yellow	White to full Yellow
Ch9	Dimmer	Dark to white linear dimmer
Ch10	Shutter/Strobe	Shutter and strobe
Ch11	Zoom	Allows the beam opening to be varied from 9° to 24° degrees
Ch12	Mspeed	Cross-fade from lighting console and Movement speed control from the Slowest to the Fastest speed
Ch13	Reset/Lamp	Remote Reset and Remote lamp On/Off from lighting console
Ch14	CTO	White to full 3200° K Linear Color correction filter.
Ch15	Color Map	CYM color combination to match the most used color Gels (Rosco and Lee gels)
Ch16	Macro	Factory made programs
Ch17	Beam Shaper	Allows to modify the shape of the projection through 2 internal framing shutters
Ch18	Shaper Rotation	Allows the beam shaper to rotate 180° degrees



4.1 Color channel -ch 5-

Giotto Wash is fitted with a color wheel comprising 7 dichroic filters. Color changes are controlled via channel 5.

DMX VALUE	CENTRE VALUE	FUNCTION	POS
0 – 20	10	White/Open	-
21 – 40	30	RED	1
41 – 60	50	BLU	2
61 – 80	70	ORANGE	3
81 – 100	90	GREEN	4
101 – 120	110	YELLOW	5
121 – 140	130	PINK	6
141 – 160	150	WOOD/UV FILTER	7
161 – 166	163	Rainbow speed 1	
167 – 172	170	Rainbow speed 2	
173 – 178	175	Rainbow speed 3	
179 – 184	181	Rainbow speed 4	
185 – 190	187	Rainbow speed 5	
191 – 196	193	Rainbow speed 6	
197 – 202	199	Rainbow speed 7	
203 – 208	205	Rainbow speed 8	
209 – 214	211	Rainbow speed 9	
215 – 220	217	Rainbow speed 10	
221 – 226	223	Rainbow speed 11	
227 – 232	229	Rainbow speed 12	
233 – 238	235	Rainbow speed 13	
239 – 244	241	Rainbow speed 14	
245 – 250	247	Rainbow speed 15	
251 – 255	253	Rainbow speed 16	



4.2 Cyan channel -ch 6-

Giotto Wash is fitted with a cyan wheel. Cyan changes are controlled via channel 6.

DMX VALUE	FUNCTION
0	WHITE/OPEN
0-255	WHITE TO FULL CYAN COLOR CONTROL
255	FULL CYAN

4.3 Magenta channel -ch 7-

Giotto Wash is fitted with a magenta wheel. Magenta changes are controlled via channel 7.

DMX VALUE	FUNCTION
0	WHITE/OPEN
0-255	WHITE TO FULL MAGENTA COLOR CONTROL
255	FULL MAGENTA

4.4 Yellow channel -ch 8-

Giotto Wash is fitted with a yellow wheel. Yellow changes are controlled via channel 8.

DMX VALUE	FUNCTION
0	WHITE/OPEN
0-255	WHITE TO FULL YELLOW COLOR CONTROL
255	FULL YELLOW



4.5 Dimmer –ch 9-

Adjustable via channel 9, allows linear regulation of luminous power. Giotto's dimmer is mechanical and ensures good linear adjustment as well as high operating speed and very low noise.

DMX VALUE	FUNCTION
0	DARK
0 - 255	DARK TO FULL WHITE/OPEN DIMMING CONTROL
255	FULL WHITE/OPEN

4.6 Shutter/strobe channel - ch 10-

The Shutter/Strobe can be regulated via channel 10. The mechanism which enables the strobe effect to be generated is the same as that used for dimming the light beam, however it's also possible to control the light's intensity while the strobe's enabled. It also enables instantaneous blackout without any light spill. High-impact visual effects such as strobe effects in sync with the bass notes and blackout during color and gobo changes can be obtained using this channel.

DMX VALUE	CENTRE VALUE	FUNCTION
0 - 17	8	Closed
18 - 36	22	Strobe 1.8Hz
37 - 54	45	Strobe 2 Hz
55 - 73	64	Strobe 2.42 Hz
74 - 91	82	Strobe 2.9 Hz
92 - 110	101	Strobe 3.46 Hz
111 - 128	119	Strobe 4.15 Hz
129 - 147	138	Strobe 4.89 Hz
148 - 165	156	Strobe 5.93 Hz
166 - 183	174	Strobe 6.91 Hz
184 - 202	193	Strobe 8.29 Hz
203 - 220	211	Strobe 9.95 Hz
221 - 238	229	Strobe 11.83 Hz
239 - 255	247	White/Open

4.7 Zoom -ch 11-

By means of this channel it's possible to widen or narrow the light beam from 9° to 24°.

DMX VALUE	FUNCTION
0	9° OPENING
0 - 255	9° TO 24° BEAM OPENING LINEAR CONTROL
255	24° OPENING

4.8 Mspeed –ch 12-

Mspeed affects PAN and TILT and is intended as the time required to complete a movement from one position to another. This means that the fixtures with the same Mspeed value will reach destination at the same instant. It's therefore possible to set movement times for each fixture which are independent of the times sent by the lighting console. The DMX values between 000-003 allow the console to control the movement, whereas with DMX value 004 a time can be allocated to the movement. To find Mspeed times, refer to the conversion table.

DMX VALUE	FUNCTION
0 -- 3	Controller crossfade
4 ... 255	Slowest ... Fastest

4.9 Remote lamp striking and reset -ch 13-

The ignition (or dousing) of the lamp can be controlled via DMX using a lighting console. In fact, after having switched on the Giotto, the lamp remains off until it receives a "lamp strike" command. This function has no effect if it's not enabled by means of the fixture's built-in microcomputer. In this case, the lamp will ignite automatically without waiting to receive the command from the lighting console. Should the lamp be accidentally switched off, it's advisable to wait at least 5 minutes before sending the ignition command. However, if the command is sent sooner, Giotto will ignite the lamp by running restrike attempts at regular 3-minute intervals.

Lastly, Giotto has a function which automatically reduces lamp power by 50% every time the shutter or dimmer is closed. This function ensures considerably better fixture cooling and increases lamp life. The lamp obviously returns to full power when the shutter or dimmer are reopened.

Should any problems occur, a reset command can be sent to the fixture in order that all the motors return to their starting positions before continuing to execute commands received from the console.

DMX512 Level range 0-- 255	FUNCTION	
0 – 60	Off	LAMP
61 – 129	Hysteresis	
130 - 179	On	
180 – 239	Hysteresis	RESET
240 – 255	Reset	

4.10 Linear CTO -ch 14-

DMX VALUE	FUNCTION
0	WHITE/OPEN
0 - 255	WHITE TO FULL 3200° K LINEAR CTO
255	FULL CTO

4.11 Color Map -ch 15-

CYM color combination to match the most used color Gels (Rosco and Lee gels)

4.12 Macro –ch 16-

Factory made programs

DMX VALUE	CENTRAL VALUE	DESCRIPTION	CHANNELS USED
0-7	4	No Macro	
8-15	12	Reserved for future use	-
16-23	20	Reserved for future use	-
24-31	28	Reserved for future use	-
32-39	36	Reserved for future use	-
40-47	44	Reserved for future use	-
48-55	52	Reserved for future use	-
56-63	60	Reserved for future use	-
64-71	68	Reserved for future use	-
72-79	76	Reserved for future use	-
80-87	84	Reserved for future use	-
88-95	92	Reserved for future use	-
96-103	100	Reserved for future use	-
104-111	108	Reserved for future use	-
112-119	116	Reserved for future use	-
120-127	124	Reserved for future use	-
128-135	132	Reserved for future use	-
136-143	140	Reserved for future use	-
144-151	148	Reserved for future use	-
152-159	156	Reserved for future use	-
160-167	164	Reserved for future use	-
168-175	172	Reserved for future use	-
176-183	180	Reserved for future use	-
184-191	188	Reserved for future use	-
192-199	196	Reserved for future use	-
200-207	204	Reserved for future use	-
208-215	212	Reserved for future use	-
216-223	220	Reserved for future use	-
224-231	228	Reserved for future use	-
232-239	236	Reserved for future use	-
240-247	244	Reserved for future use	-
248-255	252	Reserved for future use	-

*SGM reserves the right to modify any specifications without prior notice.

4.13 Beam shaper –ch 17-

DMX VALUE	FUNCTION
0	WHITE/OPEN
0 - 255	BEAM SHAPING CONTROL
255	BEAM SHAPING FULLY INSERTED

4.14 Beam shaper indexing –ch 18-

DMX VALUE	FUNCTION
0	0° POSITION
0 - 255	BEAM SHAPER INDEXING 0° - 180°
255	180° POSITION

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		