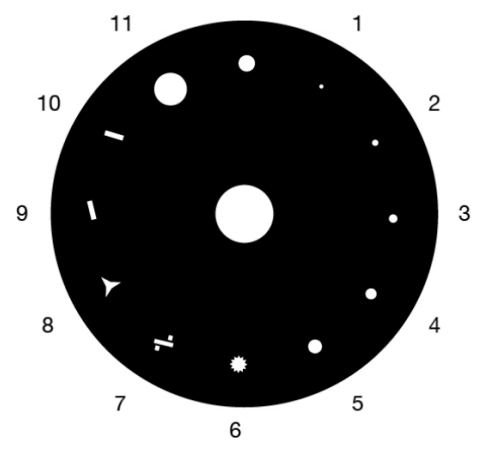
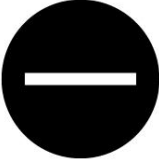

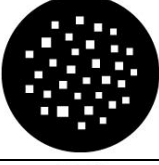
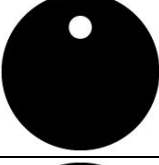
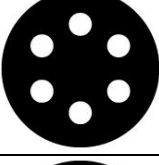
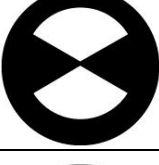



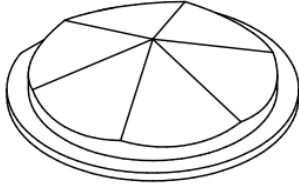
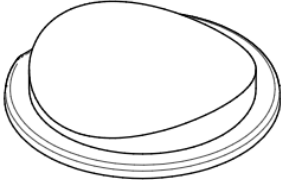
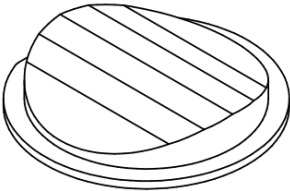
DMX PROTOCOL

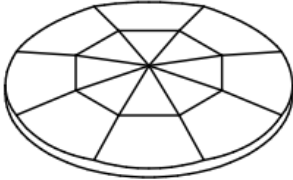
Number	CHANNEL
1	RED
2	RED FINE
3	GREEN
4	GREEN FINE
5	BLUE
6	BLUE FINE
7	CTO
8	SHOW-SETUP
9	DIMMER
10	DIMMER FINE
11	STOPPER / STROBE
12	STATIC GOBO CHANGE
13	ROTATING GOBO CHANGE
14	GOBO ROTATION
15	FINE GOBO ROTATION
16	PRISMS WHEEL CHANGE
17	PRISMS WHEEL ROTATION
18	PRISM INSERTION
19	PRISM ROTATION
20	SMART FADING
21	FOCUS
22	FOCUS FINE
23	PAN
24	PAN FINE
25	TILT
26	TILT FINE
27	FUNCTION
28	RESET
29	FUNCTION 2
30	FREQUENCY
31	BAZ FADING

Number	DMX Value	Function
1		RED
	000 – 255	Linear 0 – 100%
2		RED FINE
	000 – 255	Fine Red (16bit)
3		GREEN
	000 – 255	Linear 0 – 100%
4		GREEN FINE
	000 – 255	Fine Green (16bit)
5		BLUE
	000 – 255	Linear 0 – 100%
6		BLUE FINE
	000 – 255	Fine Blue (16bit)
7		CTO
	000	Raw mode
	001 – 255	Linear CTO from 8000K to 2500K
8		SHOW-SETUP
	000 – 011	Unused range
	012 – 016	Limited Output On
	017 – 021	Limited Output Off
	022 – 027	SOZ - HD=82ft (Smart Mode only)
	028 – 032	SOZ - HD=70ft (Smart Mode only)
	033 – 037	SOZ - HD=60ft (Smart Mode only)
	038 – 042	SOZ - HD=50ft (Smart Mode only)
	043 – 047	Check Start
	048 – 052	Check Stop
	053 – 057	BAZ - Symmetric
	058 – 062	BAZ - Pan_180
	063 – 067	BAZ - Custom – Tilt 1
	068 – 072	BAZ - Custom - Pan 1
	073 – 078	BAZ - Custom - Pan 2
	079 – 083	BAZ – Custom – Tilt 2
	084 – 093	Free
	094 – 099	BAZ – Invert Off
	100 – 104	BAZ – Invert On
	105 – 108	BAZ - Reset
	109 – 113	SOZ - Symmetric (Smart Mode only)
	114 – 118	SOZ - Pan_180 (Smart Mode only)
	119 – 123	SOZ - Custom – Tilt 1 (Smart Mode only)
	124 – 129	SOZ - Custom - Pan 1 (Smart Mode only)
	130 – 134	SOZ - Custom - Pan 2 (Smart Mode only)
	135 – 139	SOZ - Custom – Tilt 2 (Smart Mode only)
	140 - 149	Free
	150 – 154	SOZ - Invert Off (Smart Mode only)
	155 – 159	SOZ - Invert On (Smart Mode only)
	160 – 164	SOZ - Reset (Smart Mode only)
	165 – 169	Complete channel Reset
	170 – 255	Free
		All functions are activated/selected passing through the unused levels range and staying in the necessary range for 5 seconds

Number	DMX Value	Function	
9		DIMMER	
	000 – 255	Linear 0 – 100%	
10		DIMMER FINE	
	000 – 255	Fine Dimmer (16bit)	
11		STOPPER / STROBE	
	000 – 003	Light OFF	
	004 – 103	Strobe linear from slow (1 flash/sec) to high (25 flashes/sec)	
	104 – 107	Light ON	
	108 – 207	Pulsation linear from slow to fast	
	208 – 212	Light ON	
	213 – 225	Random Strobe at low frequency	
	226 – 238	Random Strobe at medium frequency	
	239 – 251	Random Strobe at high frequency	
	252 – 255	Light ON	
12		STATIC GOBO CHANGE	
	000 – 005	Empty position	
	006 – 011	Gobo 1	
	012 – 017	Gobo 2	
	018 – 023	Gobo 3	
	024 – 029	Gobo 4	
	030 – 035	Gobo 5	
	036 – 041	Gobo 6	
	042 – 047	Gobo 7	
	048 – 053	Gobo 8	
	054 – 059	Gobo 9	
	060 – 065	Gobo 10	
	066 – 071	Gobo 11	
			
	072 – 113	Continuous rotation CCW at linearly variable speed from fast to slow	
	114 – 117	Stop	
	118 – 159	Continuous rotation CW at linearly variable speed from fast to slow	
	160 – 168	Gobo 1 shakes from slow to fast	
	169 – 177	Gobo 2 shakes from slow to fast	
	178 – 186	Gobo 3 shakes from slow to fast	
	187 – 194	Gobo 4 shakes from slow to fast	
	195 – 203	Gobo 5 shakes from slow to fast	
	204 – 212	Gobo 6 shakes from slow to fast	
	213 – 221	Gobo 7 shakes from slow to fast	
	222 – 229	Gobo 8 shakes from slow to fast	
	230 – 238	Gobo 9 shakes from slow to fast	
	239 – 247	Gobo 10 shakes from slow to fast	
	248 – 255	Gobo 11 shakes from slow to fast	

Number	DMX Value	Function
13		ROTATING GOBO CHANGE
	000 – 016	Empty position
	017 – 032	Gobo #1 
	033 – 048	Gobo #2 
	049 – 064	Gobo #3 
	065 – 081	Gobo #4 
	082 – 097	Gobo #5 
	098 – 113	Gobo #6 
	114 – 129	Gobo #7 
	130 – 147	Gobo 1 shakes from slow to fast
	148 – 165	Gobo 2 shakes from slow to fast
	166 – 183	Gobo 3 shakes from slow to fast
	184 – 201	Gobo 4 shakes from slow to fast
	202 – 219	Gobo 5 shakes from slow to fast
220 – 237	Gobo 6 shakes from slow to fast	
238 – 255	Gobo 7 shakes from slow to fast	

Number	DMX Value	Function
14		GOBO ROTATION
	000 – 021	Gobo indexing: 0° to 90° range
	021 – 042	Gobo indexing: 90° to 180° range
	042 – 063	Gobo indexing: 180° to 270° range
	063 – 084	Gobo indexing: 270° to 360° range
	084 – 105	Gobo indexing: 360° to 450° range
	105 – 127	Gobo indexing: 450° to 540° range
	128 – 190	Continuous linear CW gobo rotation from fast (1000 rpm) to slow (2.2 rph)
	191 – 192	Stop rotation
	193 – 255	Continuous linear CCW gobo rotation from slow (2.2 rph) to fast (1000 rpm)
15		FINE GOBO ROTATION
	000 – 255	Fine CW Gobo Indexing
16		PRISMS WHEEL CHANGE
	000 – 025	Prisms / Frost out of the light beam
	026 – 051	Prism 1 (6 Facets)
		
	052 – 077	Prism 2 (Elliptical)
		
		Prism 3 (6 Facets pyramidal)
	078 – 103	
		104 – 129
	130 – 161	Prism 1 shakes at variable speed from slow to fast
162 – 192	Prism 2 shakes at variable speed from slow to fast	
193 – 224	Prism 3 shakes at variable speed from slow to fast	
225 – 255	Frost shakes at variable speed from slow to fast	

Number	DMX Value	Function
17		PRISMS WHEEL ROTATION
	000 – 021	Prisms/Frost indexing: 0° to 90° range
	021 – 042	Prisms/Frost indexing: 90° to 180° range
	042 – 063	Prisms/Frost indexing: 180° to 270° range
	063 – 084	Prisms/Frost indexing: 270° to 360° range
	084 – 105	Prisms/Frost indexing: 360° to 450° range
	105 – 127	Prisms/Frost indexing: 450° to 540° range
	128 – 190	Continuous linear CCW Prisms/Frost rotation from fast (170 rpm) to slow (2.2 rph)
	191 – 192	Stop rotation
193 – 255	Continuous linear CW Prisms/Frost rotation from slow (2.2 rph) to fast (170 rpm)	
18		PRISM INSERTION
	000 – 127	Prism out
	128 – 255	Multi-facets prism into the light beam 
19		PRISM ROTATION
	000 – 021	Prism indexing: 0° to 90° range
	021 – 042	Prism indexing: 90° to 180° range
	042 – 063	Prism indexing: 180° to 270° range
	063 – 084	Prism indexing: 270° to 360° range
	084 – 105	Prism indexing: 360° to 450° range
	105 – 127	Prism indexing: 450° to 540° range
	128 – 190	Continuous linear CW prism rotation from fast (170rpm) to slow (4rph)
	191 – 192	Stop rotation
193 – 255	Continuous Linear CCW prism rotation from slow (4rph) to fast (170rpm)	
20		SMART FADING
	000	No fade
	001 – 255	Linear fading (SOZ only)
21		FOCUS
	000 – 255	Focus linear from far to near position
22		FOCUS FINE
	000 – 255	Fine Focus positioning
23		PAN
	000 – 255	Pan CCW positioning from 0° to 540° (default setting)
24		PAN FINE
	000 – 255	Fine Pan positioning

Number	DMX Value	Function
25		TILT
	000 – 255	Tilt CCW positioning from 0° to 268° (default setting)
26		TILT FINE
	000 – 255	Fine Tilt positioning
27		FUNCTION
	000 – 011	Unused range
	012 – 024	Fast Pan/Tilt speed
	025 – 037	Normal Pan/Tilt speed
	038 – 050	Pan/Tilt speed Xtylos Aqua like Off
	051 – 062	Pan/Tilt speed Xtylos Aqua like On
	036 – 075	Display Off
	076 – 088	Display On
	089 – 255	Free
		The functions are activated/selected passing through the unused levels range and staying in the necessary range for 5 seconds
28		RESET
	000 – 025	Unused range
	026 – 076	Effects Reset sequence is activated passing through the unused levels range and staying in this range for 5 seconds
	077 – 127	Pan/Tilt Reset sequence passing through the unused levels range and staying in this range for 5 seconds.
	128 – 255	All-effects Reset sequence passing through the unused levels range and staying in this range for 5 seconds.
29		FUNCTION 2
	000 – 011	Unused range
	012	Base Frequency= 4700 Hz
	013	Base Frequency= 6000 Hz
	014	Base Frequency= 7300 Hz
	015	Base Frequency= 8600 Hz
	016	Base Frequency= 10000 Hz
	017	Base Frequency= 12000 Hz
	018	Base Frequency= 15000 Hz
	019	Base Frequency= 17578 Hz
	020	Base Frequency= 20000 Hz
	021	Base Frequency= 22000 Hz
		The functions are activated/selected passing through the unused levels range and staying in the necessary range for 5 seconds

Channel	DMX Value	Function			
30	000 – 255	FREQUENCY			
		Base Frequency (see Function 2)	Min Freq. @ 0 bit	Frequency @ 128 bit	Max Freq. @ 255 bit
		4700 Hz	4060 Hz	4700 Hz	5335 Hz
		6000 Hz	5360 Hz	6000 Hz	6635 Hz
		7300 Hz	6660 Hz	7300 Hz	7935 Hz
		8600 Hz	7960 Hz	8600 Hz	9235 Hz
		10000 Hz	9360 Hz	10000 Hz	10635 Hz
		12000 Hz	10720 Hz	12000 Hz	13270 Hz
		15000 Hz	13336 Hz	15000 Hz	16651 Hz
		17578 Hz	16682 Hz	17578 Hz	18467 Hz
		20000 Hz	18720 Hz	20000 Hz	21270 Hz
		22000 Hz	21360 Hz	22000 Hz	22635 Hz
31		BAZ FADING			
	000	No fade			
	001 – 255	Linear fading (BAZ only)			

IMPORTANT NOTE

To prevent accidental breakage of the effects, which could collide with each other's during transport, before switching the projector OFF check that all the projector Channels have been excluded (DMX level = 0 bit.).

To preserve the Light engine, it is suggested to set the Dimmer @ 0bit a few minutes before turning off the fixture.

To ensure reliable operation of the effects, it is suggested to keep the Light of the fixture On, for few minutes before moving the effects. Claypaky use a high-performance lubricant that is designed to work within the high temperature environment in Claypaky's modern moving light fixtures. In cold environments, it may take several minutes for the lubricant to reach optimum fluidity and all functions to reach optimum performance.