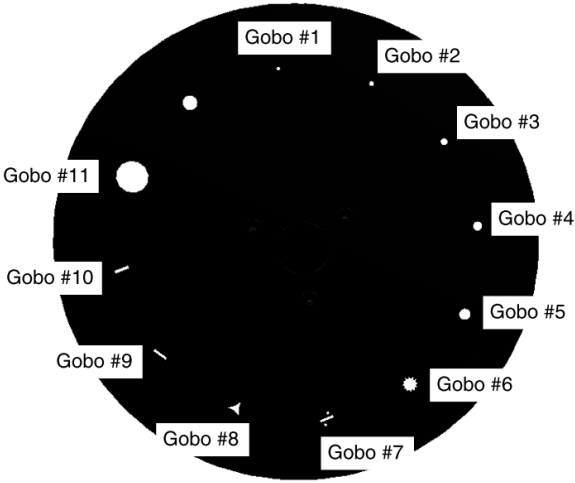
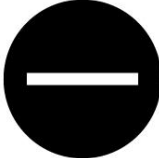
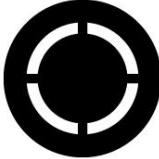
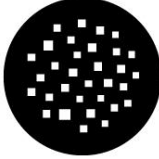
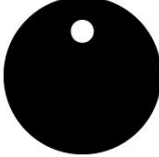
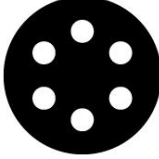

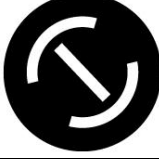


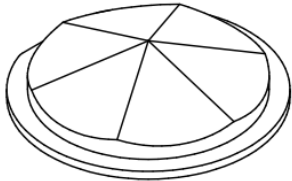
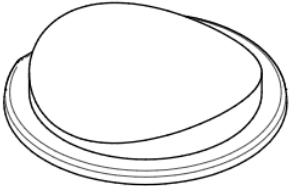
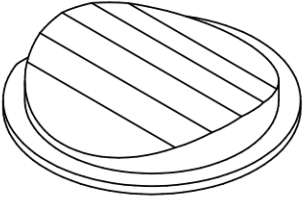
### DMX PROTOCOL

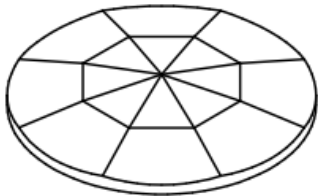
DMX Parameter number	FUNCTION
1	RED
2	RED FINE
3	GREEN
4	GREEN FINE
5	BLUE
6	BLUE FINE
7	CTO
8	SHOW-SETUP
9	DIMMER
10	DIMMER FINE
11	STOPPER / STROBE
12	STATIC GOBO CHANGE
13	ROTATING GOBO CHANGE
14	GOBO ROTATION
15	FINE GOBO ROTATION
16	PRISMS WHEEL CHANGE
17	PRISMS WHEEL ROTATION
18	PRISM INSERTION
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

DMX Parameter	DMX Value	Function
<b>1</b>		<b>RED</b>
	<b>000 – 255</b>	Linear 0 – 100%
<b>2</b>	<b>000 – 255</b>	<b>RED FINE</b> (16 bit)
<b>3</b>		<b>GREEN</b>
	<b>000 – 255</b>	Linear 0 – 100%
<b>4</b>	<b>000 – 255</b>	<b>GREEN FINE</b> (16 bit)
<b>5</b>		<b>BLUE</b>
	<b>000 – 255</b>	Linear 0 – 100%
<b>6</b>	<b>000 – 255</b>	<b>BLUE FINE</b> (16 bit)
<b>7</b>		<b>CTO</b>
	<b>000</b>	Raw mode
	<b>001 – 255</b>	Linear CTO from 8000K to 2500K
<b>8</b>		<b>SHOW-SETUP</b>
	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

DMX Parameter	DMX Value	Function	
<b>9</b>		<b>DIMMER</b>	
	000 – 255	Linear 0 – 100%	
<b>10</b>	000 – 255	<b>DIMMER FINE</b> (16 bit)	
<b>11</b>		<b>STOPPER / STROBE</b>	
	000 – 003	Light OFF	
	004 – 103	Strobe linear slow (1 flash/sec) to high (25 flash/sec)	
	104 – 107	Light ON	
	108 – 207	Pulsation 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		
<b>12</b>		<b>STATIC GOBO WHEEL</b>	
	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 slow to fast	
	169 – 177	Gobo 2 shakes slow to fast	
	178 – 186	Gobo 3 shakes slow to fast	
	187 – 194	Gobo 4 shakes slow to fast	
	195 – 203	Gobo 5 shakes slow to fast	
	204 – 212	Gobo 6 shakes slow to fast	
	213 – 221	Gobo 7 shakes slow to fast	
	222 – 229	Gobo 8 shakes slow to fast	
	230 – 238	Gobo 9 shakes slow to fast	
	239 – 247	Gobo 10 shakes slow to fast	
	248 – 255	Gobo 11 shakes slow to fast	

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

Channel	DMX Value	Function
14		<b>GOBO ROTATION</b>
	000 – 021	Gobo indexing: 0° to 90° range
	022 – 042	Gobo indexing: 91° to 180° range
	043 – 063	Gobo indexing: 181° to 270° range
	064 – 084	Gobo indexing: 271° to 360° range
	085 – 105	Gobo indexing: 361° to 450° range
	106 – 127	Gobo indexing: 451° to 540° range
	128 – 190	Continuous linear CW gobo rotation fast (1000 rpm) to slow (2.2 rph)
	191 – 192	Stop rotation
	193 – 255	Continuous linear CCW gobo rotation slow (2.2 rph) to fast (1000 rpm)
15		<b>FINE GOBO ROTATION</b>
	000 – 255	Fine CW Gobo Indexing
16		<b>PRISMS WHEEL CHANGE</b>
	000 – 025	Prisms / Frost OUT
	026 – 051	Prism 1 (6 Facets)
		
	052 – 077	Prism 2 (Elliptical)
		
	078 – 103	Prism 3 (6 Facets pyramidal)
		
	104 – 129	Frost
	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	

Channel	DMX Value	Function
17		<b>PRISMS WHEEL ROTATION</b>
	000 – 021	Prisms/Frost indexing: 0° to 90° range
	022 – 042	Prisms/Frost indexing: 91° to 180° range
	043 – 063	Prisms/Frost indexing: 181° to 270° range
	064 – 084	Prisms/Frost indexing: 271° to 360° range
	085 – 105	Prisms/Frost indexing: 361° to 450° range
	106 – 127	Prisms/Frost indexing: 451° 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 slow (2.2 rph) to fast (170 rpm)
18		<b>PRISM INSERTION</b>
	000 – 127	Prism OUT
	128 – 255	Multi-facets prism into the light beam 
19		<b>PRISM ROTATION</b>
	000 – 021	Prism indexing: 0° to 90° range
	022 – 042	Prism indexing: 91° to 180° range
	043 – 063	Prism indexing: 181° to 270° range
	064 – 084	Prism indexing: 271° to 360° range
	085 – 105	Prism indexing: 361° to 450° range
	106 – 127	Prism indexing: 451° to 540° range
	128 – 190	Continuous CW prism rotation at linearly variable speed from fast (170rpm) to slow (4rph)
	191 – 192	Stop rotation
193 – 255	Continuous linear CCW from slow (4rph) to fast (170rpm)	
20		<b>SMART FADING</b>
	000	No fade
	001 – 255	Linear fading (SOZ only)
21		<b>FOCUS</b>
	000 – 255	Focus linear from far to near position
22		<b>FOCUS FINE</b>
	000 – 255	Fine Focus positioning
23		<b>PAN</b>
	000 – 255	Pan CCW positioning from 0° to 540° (default setting)
24		<b>PAN FINE</b>
	000 – 255	Fine Pan positioning

Channel	DMX Value	Function
25		<b>TILT</b>
	000 – 255	Tilt CCW movement/positioning from 0° to 268° (default setting)
26		<b>TILT FINE</b>
	000 – 255	Fine Tilt positioning
27		<b>FUNCTION</b>
	000 – 011	Unused range
	012 – 024	Fast Pan/Tilt speed
	025 – 037	Normal Pan/Tilt speed
	038 – 062	Unused
	063 – 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		<b>RESET</b>
	000 – 025	Unused range
	026 – 076	Effects Reset
	077 – 127	Pan / Tilt Reset.
	128 – 255	Complete Reset
	The Reset sequence is activated passing through the unused levels range and then staying into the selected range for 5 seconds.	
29		<b>FUNCTION 2</b>
	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 then staying on the selected 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		<b>BAZ FADING</b>			
	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 DMX parameters 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 modern moving light fixtures. In cold environments, it may take few minutes for the lubricant to reach optimum fluidity and all functions to reach optimum performance.*