

PROTOCOL BASIC ENGINE

<i>Parameter</i>	<i>STANDARD MODE</i>	<i>STANDARD FREQ MODE</i>
1	RED	RED
2	RED FINE	RED FINE
3	GREEN	GREEN
4	GREEN FINE	GREEN FINE
5	BLUE	BLUE
6	BLUE FINE	BLUE FINE
7	WHITE	WHITE
8	WHITE FINE	WHITE FINE
9	CTO	CTO
10	MACRO COLOR	MACRO COLOR
11	MASTER SHUTTER	MASTER SHUTTER
12	MASTER DIMMER	MASTER DIMMER
13	MASTER DIMMER FINE	MASTER DIMMER FINE
14	PAN	PAN
15	PAN FINE	PAN FINE
16	TILT	TILT
17	TILT FINE	TILT FINE
18	FUNCTION	FUNCTION
19	RESET	RESET
20	ZOOM	ZOOM
21	ZOOM ROTATION	ZOOM ROTATION
22	-	FREQUENCY

Parameter	SHAPE MODE	SHAPE MODE FREQ	ADVANCED MODE
1	RED	RED	RED
2	RED FINE	RED FINE	RED FINE
3	GREEN	GREEN	GREEN
4	GREEN FINE	GREEN FINE	GREEN FINE
5	BLUE	BLUE	BLUE
6	BLUE FINE	BLUE FINE	BLUE FINE
7	WHITE	WHITE	WHITE
8	WHITE FINE	WHITE FINE	WHITE FINE
9	CTO	CTO	CTO
10	MACRO COLOR	MACRO COLOR	MACRO COLOR
11	MASTER SHUTTER	MASTER SHUTTER	MASTER SHUTTER
12	MASTER DIMMER	MASTER DIMMER	MASTER DIMMER
13	MASTER DIMMER FINE	MASTER DIMMER FINE	MASTER DIMMER FINE
14	PAN	PAN	PAN
15	PAN FINE	PAN FINE	PAN FINE
16	TILT	TILT	TILT
17	TILT FINE	TILT FINE	TILT FINE
18	FUNCTION	FUNCTION	FUNCTION
19	RESET	RESET	RESET
20	ZOOM	ZOOM	ZOOM
21	ZOOM ROTATION	ZOOM ROTATION	ZOOM ROTATION
22	SHAPE SELECTION	SHAPE SELECTION	SHAPE SELECTION
23	SHAPE SPEED	SHAPE SPEED	SHAPE SPEED
24	SHAPE FADE	SHAPE FADE	SHAPE FADE
25	SHAPE R	SHAPE R	SHAPE R
26	SHAPE G	SHAPE G	SHAPE G
27	SHAPE B	SHAPE B	SHAPE B
28	SHAPE W	SHAPE W	SHAPE W
29	SHAPE DIMMER	SHAPE DIMMER	SHAPE DIMMER
30	BACKGROUND DIMMER	BACKGROUND	BACKGROUND DIMMER
31	SHAPE TRANSITION	SHAPE TRANSITION	SHAPE TRANSITION
32	SHAPE OFFSET	SHAPE OFFSET	SHAPE OFFSET
33	FOREGROUND STROBE	FOREGROUND	FOREGROUND STROBE
34	BACKGROUND STROBE	BACKGROUND	BACKGROUND STROBE
35	BACKGROUND SELECT	BACKGROUND	BACKGROUND SELECT
36	-	FREQUENCY	L3 SHUTTER
37	-	-	L3 DIMMER

PROTOCOL PIXEL ENGINE

<i>Parameter</i>	<i>PIXEL ENGINE RGB</i>
1	RED LED 1
2	GREEN LED 1
3	BLUE LED 1
...	RED LED ..
...	GREEN LED ..
...	BLUE LED ..
55	RED LED 19
56	GREEN LED 19
57	BLUE LED 19

<i>Parameter</i>	<i>PIXEL ENGINE RGBW</i>
1	RED LED 1
2	GREEN LED 1
3	BLUE LED 1
4	WHITE LED 1
...	RED LED ..
...	GREEN LED ..
...	BLUE LED ..
...	WHITE LED ..
73	RED LED 19
74	GREEN LED 19
75	BLUE LED 19
76	WHITE LED 19

FUNCTION DETAILS

Stand	Stand Freq	Shape	Shape Freq	Adv	Default value	Bit Value	Function
1	1	1	1	1	000	000 – 255	RED Linear 0 – 100%
2	2	2	2	2	000	000 – 255	RED FINE (16 bit)
3	3	3	3	3	000	000 – 255	GREEN Linear 0 – 100%
4	4	4	4	4	000	000 – 255	GREEN FINE (16 bit)
5	5	5	5	5	000	000 – 255	BLUE Linear 0 – 100%
6	6	6	6	6	000	000 – 255	BLUE FINE (16 bit)
7	7	7	7	7	000	000 – 255	WHITE Linear 0 – 100%
8	8	8	8	8	000	000 – 255	WHITE FINE (16 bit)
9	9	9	9	9	000		CTO
						000 – 009	Unused
						010 - 255	
10	10	10	10	10	000		MACRO COLOR
						000 – 009	Macro color OFF
						010 – 010	Red
						011 – 011	Green
						012 – 012	Blue
						013 – 013	Cyan
						014 – 014	Yellow
						015 – 015	Magenta
						016 – 016	White 7000K
						017 – 017	White 3700K
						018 – 018	White 5000K
						019 – 019	Black
						020 – 022	Medium Yellow
						023 – 026	Straw Tint
						027 – 028	Surprise Peach
						029 – 029	Fire
						030 – 030	Medium Amber
						031 – 031	Gold Amber
						032 – 034	Dark Amber
						035 – 044	Sunrise Red
045 – 045	Light Pink						
046 – 048	Medium Pink						
049 – 061	Pink Carnation						
062 – 067	Light Lavender						
068 – 077	Lavender						
078 – 088	Sky Blue						
089 – 099	Just Blue						
100 – 109	Dark Yellow Green						
110 – 111	Spring Yellow						

Stand	Stand Freq	Shape	Shape Freq	Adv	Default value	Bit Value	Function
10	10	10	10	10	000	112 – 112	Light Amber
						113 – 113	Straw
						114 – 114	Deep Amber
						115 – 116	Orange
						117 – 117	Light Rose
						118 – 118	English Rose
						119 – 119	Light Salmon
						120 – 120	Middle Rose
						121 – 122	Dark Pink
						123 – 124	Magenta
						125 – 125	Peacock Blue
						126 – 126	Med Blu Green
						127 – 127	Steel Blue
						128 – 128	Light Blue
						129 – 130	Dark Blue
						131 – 133	Leaf Green
						134 – 135	Dark Green
						136 – 137	Mauve
						138 – 141	Bright Pink
						142 – 144	Medium Blue
						145 – 145	Deep Golden Amber
						146 – 146	Pale Lavender
						147 – 148	Special Lavender
						149 – 150	Primary Green
						151 – 156	Bright Blue
						157 – 161	Apricot
						162 – 167	Pale Gold
						168 – 171	Deep Orange
						172 – 173	Bastard Amber
						174 – 174	Flame Red
175 – 178	Daylight Blue						
179 – 179	Lilac Tint						
180 – 183	Deep Lavender						
184 – 190	Dark Steel Blue						
191 – 206	Congo Blue						
207 – 207	Alice Blue						
208 – 208	Dirty White						
209 – 255	White						

Stand	Stand Freq	Shape	Shape Freq	Adv	Default value	Bit Value	Function
11	11	11	11	11	104	000 – 255	MASTER SHUTTER
12	12	12	12	12	255	000 – 255	MASTER DIMMER
13	13	13	13	13	255	000 – 255	MASTER DIMMER FINE
14	14	14	14	14	128	000 – 255	PAN
15	15	15	15	15		000 – 255	PAN FINE
16	16	16	16	16	128	000 – 255	TILT
17	17	17	17	17		000 – 255	TILT FINE
18	18	18	18	18	000		FUNCTION
						000 – 001	Unused range
						002 – 003	Fan SILENT mode
						004 – 007	Fan STANDARD mode
						008 – 009	Fan FULL mode
						010 – 102	Unused range
						103 – 105	Pixel map enabled
						106 – 120	Unused range
						121 – 130	Led Frequency = 36.50 - 73.50 kHz
						131 – 140	Led Frequency = 18.20 - 36.50 kHz
						141 – 150	Led Frequency = 9.19 - 18.20 kHz
						151 – 160	Led Frequency = 4.55 - 9.19 kHz
						161 – 170	Led Frequency = 2.27 - 4.55 kHz
						171 – 180	Led Frequency = 1.14 - 2.27 kHz
181 – 255	Unused range						
	All functions are activated/selected passing through unused levels range and staying in the necessary range for 5 seconds						
19	19	19	19	19	000		RESET
						000 – 025	Unused Range
						026 – 076	Effects Reset Effects Reset sequence is activated passing through the unused levels range and staying in this range for 5 seconds
						077 – 127	Pan / Tilt Reset Pan/Tilt Reset sequence passing through the unused levels range and staying in this range for 5 seconds
	Complete Reset All-effects Reset sequence passing through the unused levels range and staying in this range for 5 seconds						

Stand	Stand Freq	Shape	Shape Freq	Adv		DMX Value	Function	
20	20	20	20	20	000	000 – 255	ZOOM Narrow to Wide	
21	21	21	21	21	000	000 – 255	ZOOM ROTATION	
							Linear Zoom Rotation (indexing from 0° to 60°)	
							Linear Fast to Slow Rotation (CCW from 10RPM to 3RPH)	
							Stop	
							Linear Slow to Fast Rotation (CCW from 3RPH to 10RPM)	
-	-	22	22	22	000	000 – 255	SHAPE SELECTION	
-	-	23	23	23	000	000 – 255	SHAPE SPEED	
-	-	24	24	24	000	000 – 255	SHAPE FADE	
-	-	25	25	25	255	000 – 255	SHAPE R	
-	-	26	26	26	255	000 – 255	SHAPE G	
-	-	27	27	27	255	000 – 255	SHAPE B	
-	-	28	28	28	255	000 – 255	SHAPE W	
-	-	29	29	29	255	000 – 255	SHAPE DIMMER	
-	-	30	30	30	000	000 – 255	BACKGROUND DIMMER	
-	-	31	31	31	000	000 – 255	SHAPE TRANSITION	
-	-	32	32	32	000	000 – 255	SHAPE OFFSET	
-	-	33	33	33	104	000 – 255	BACKGROUND STROBE	
-	-	34	34	34	104		BACKGROUND STROBE	
							000 – 003	Light OFF
							004 – 103	Strobe variable frequency from slow (1 flash/sec) to fast (25 flashes/sec)
							104 – 107	Light ON
							108 – 207	Pulsation at linearly variable speed from slow to fast
							208 – 212	Light ON
							213 – 251	Random Strobe
252 – 255	Light ON							
-	-	35	35	35	000	000 – 255	BACKGROUND SELECT	
-	-	-	-	36	104	000 – 255	L3 SHUTTER	
-	22	-	36	-	000	000 – 255	FREQUENCY	
-	-	-	-	37	255	000 – 255	L3 DIMMER	

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 some minutes for the lubricant to reach optimum fluidity and all functions to reach optimum performance.