

### 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

<b>Parameter</b>	<b>SHAPE MODE</b>	<b>SHAPE MODE FREQ</b>	<b>ADVANCED MODE</b>
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

### PIXEL ENGINE

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

<i>Parameter</i>	<i>PIXEL ENGINE RGBW</i>
<b>1</b>	RED LED 1
<b>2</b>	GREEN LED 1
<b>3</b>	BLUE LED 1
<b>4</b>	WHITE LED 1
...	RED LED ..
...	GREEN LED ..
...	BLUE LED ..
...	WHITE LED ..
<b>73</b>	RED LED 19
<b>74</b>	GREEN LED 19
<b>75</b>	BLUE LED 19
<b>76</b>	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 range (RAW)
						010 - 255	Coldest to Warmest temperature
10	10	10	10	10	000		<b>MACRO COLOR</b>
						000 – 009	Macro color OFF
						010 – 010	Red
						011 – 011	Green
						012 – 012	Blue
						013 – 013	Cyan
						014 – 014	Yellow
						015 – 015	Magenta 1
						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						
112 – 112	Light Amber						
113 – 113	Straw						

Stand	Stand Freq	Shape	Shape Freq	Adv	Default value	Bit Value	Function
10	10	10	10	10	000	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 2
						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						
11	11	11	11	11	104		<b>MASTER SHUTTER</b>
						000 – 003	Stop
						004 – 103	Strobe (Slow to Fast)
						104 – 107	Open
						108 – 207	Pulse (Slow to Fast)
						208 – 212	Open
						213 – 251	Random Strobe (Slow to Fast)
252 – 255	Open						

Stand	Stand Freq	Shape	Shape Freq	Adv	Default value	Bit Value	Function
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	000 – 255	PAN FINE
16	16	16	16	16	128	000 – 255	TILT
17	17	17	17	17	000	000 – 255	TILT FINE
18	18	18	18	18	000		<b>FUNCTION</b>
						000 – 001	Unused range
						002 – 003	Fan AUTO mode
						004 – 007	Fan SILENT mode
						008 – 009	Fan CONSTANT mode
						010 - 011	Fan THEATRE mode
						010 – 062	Unused range
						063 - 065	Display ON
						066 - 067	Display OFF
						068 - 092	Unused range
						093 - 097	Pixel map disabled
						098 - 102	RGB Pixel mode
						103 – 105	RGBW Pixel mode
						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		<b>RESET</b>
						000 – 025	Unused Range
						026 – 076	Zoom Reset
						077 – 127	Pan and Tilt Reset
						128 – 255	Complete Reset
The Reset sequence is activated passing through the unused levels range and staying in this range for 5 seconds.							
20	20	20	20	20	000	000 – 255	<b>ZOOM</b> Narrow to Wide
21	21	21	21	21	000		<b>ZOOM ROTATION</b>
						000 – 127	Linear Rotation (from 0° to 60°)
						128 – 190	CCW Rotation (Fast to Slow)
						191 – 255	Stop
000 – 255	CW Rotation (Slow to Fast)						

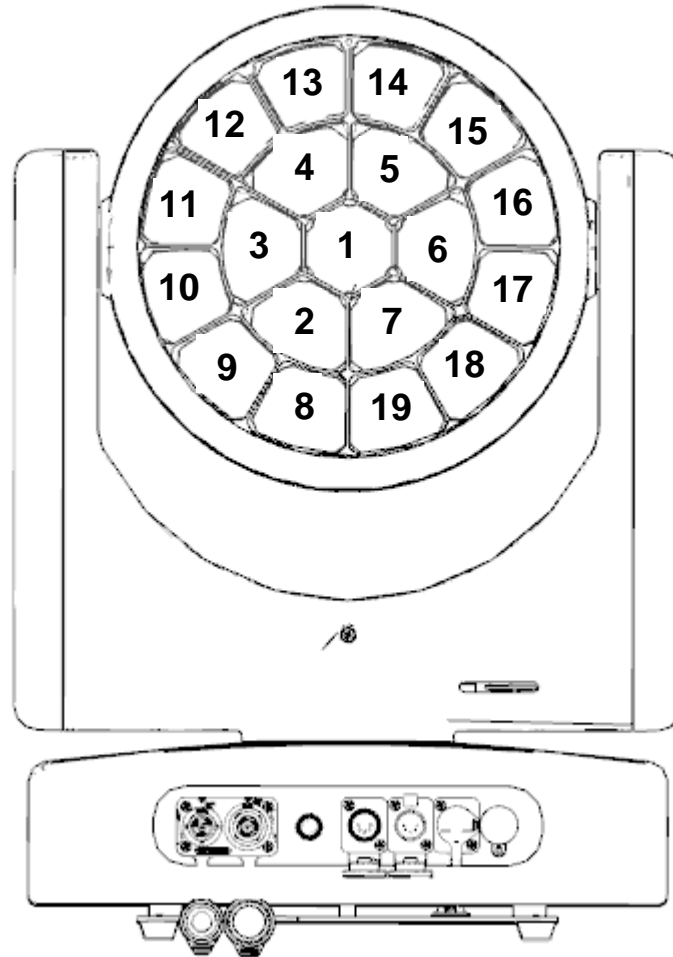
Stand	Stand Freq	Shape	Shape Freq	Adv	Default Value	DMX Value	Function
-	-	22	22	22	000		<b>SHAPE SELECTION</b>
						000 – 007	Macro OFF
						008 – 008	Ring 1
						009 – 009	Ring 2
						010 – 010	Ring 3
						011 – 011	No Ring
						012 – 012	Ring 1 + Ring 2
						013 – 013	Ring 1 + Ring 3
						014 – 014	No Ring
						015 – 015	Ring Opening
						016 – 016	Ring Opening Full
						017 – 017	Ring Opening + Closing
						018 – 018	Ring Opening + Closing Full
						019 – 019	Random Pixel 1
						020 – 020	Random Pixel 2
						021 – 021	Rainbow 1 variable speed
						022 – 022	Rainbow 2 max speed
						023 – 023	Fan
						024 – 024	Bar 1
						025 – 025	Half moon
						026 – 026	Triangle
						027 – 027	Segment 1
						028 – 028	Arc 1
						029 – 029	Arc 2
						030 – 030	Bar 2
						031 – 031	Random Explosion
						032 – 032	Segment 2
						033 – 034	Reserved
						035 – 035	Alternating Slice
						036 – 036	Ramp by 6
						037 – 037	Ramp by 4
						038 – 038	Left/Right Scrolling Bar
039 – 039	Up/Down Scrolling Bar						
040 – 040	Bar 3						
041 – 041	Reserved						
042 – 042	Vertical Arc 2						
043 – 043	Reserved						
044 – 044	Horizontal Arc 2						
045 – 045	Mirrored Pixel						
046 – 046	Pixel Animation 1						
047 – 047	Pixel Animation 2						
048 – 048	Pixel Animation 3						
049 – 049	Pixel Animation 4						
050 – 050	Pixel Animation 5						

Stand	Stand Freq	Shape	Shape Freq	Adv	Default value	DMX Value	Function
-	-	22	22	22	000	051 – 051	Arrow Sequence
						052 – 052	Alternating sequence 2 LED Ring 3
						053 – 053	Pixel Animation 6
						054 – 054	Vertical Ramp by 2 LED
						055 – 055	Following Pixel by 2
						056 – 056	Syncopation
						057 – 057	Bumping 1
						058 – 058	Bumping 2
						059 – 059	Bumping 3
						060 – 060	Vertical Pixel Scrolling
						061 – 061	Random Pixel Vertical Section
						062 – 062	Random Pixel Central Section
						063 – 063	Random Pixel Ring 3
						064 – 064	Reserved
						065 – 065	Random Pixel Ring 1 + Ring 3
						066 – 066	Random Pixel Ring 2 + Ring 3
						067 – 067	Single Pixel Ring 2
						068 – 068	Single Pixel Ring 3
						069 – 069	Reserved
070 – 070	Spiral						
071 – 255	Unused Range						
-	-	23	23	23	000		<b>SHAPE SPEED</b>
						000 – 063	Index
						064 – 158	CCW Rotation (Fast to slow)
						159 – 160	Stop
						161 – 255	CW Rotation (Slow to fast)
-	-	24	24	24	000		<b>SHAPE FADE</b>
						000 – 015	Snap
						016 – 245	Smooth, fading curve gamma 0.5 < 2
						246 – 255	Smooth, fading curve gamma auto
-	-	25	25	25	255	000 – 255	<b>SHAPE RED</b> Linear 0 – 100%
-	-	26	26	26	255	000 – 255	<b>SHAPE GREEN</b> Linear 0 – 100%
-	-	27	27	27	255	000 – 255	<b>SHAPE BLUE</b> Linear 0 – 100%
-	-	28	28	28	255	000 – 255	<b>SHAPE WHITE</b> Linear 0 – 100%
-	-	29	29	29	255	000 – 255	<b>SHAPE DIMMER</b>
-	-	30	30	30	000	000 – 255	<b>BACKGROUND DIMMER</b>
-	-	31	31	31	000		<b>SHAPE TRANSITION</b>
						000 – 004	No Fade
						005 – 255	Transition from 100ms to 4sec
-	-	32	32	32	000	000 – 255	<b>SHAPE OFFSET</b>



Stand	Stand Freq	Shape	Shape Freq	Adv	Default value	DMX Value	Function
-	-	33	33	33	104		<b>BACKGROUND STROBE</b>
						000 – 003	Stop
						004 – 103	Strobe (Slow to Fast)
						104 – 107	Open
						108 – 207	Pulse (Slow to Fast)
						208 – 212	Open
						213 – 251	Random Strobe (Slow to Fast)
252 – 255	Open						
-	-	34	34	34	104		<b>BACKGROUND STROBE</b>
						000 – 003	Stop
						004 – 103	Strobe (Slow to Fast)
						104 – 107	Open
						108 – 207	Pulse (Slow to Fast)
						208 – 212	Open
						213 – 251	Random Strobe (Slow to Fast)
252 – 255	Open						
-	-	35	35	35	000		<b>BACKGROUND SELECT</b>
						000 – 007	Unused Range
						008 – 008	No Ring
						009 – 009	Ring 1
						010 – 010	Ring 2
						011 – 011	Ring 3
						012 – 012	Ring 1 + Ring 3
						013 – 013	Ring 1 + Ring 2
						014 – 014	Ring 1 + Ring 2 + Ring 3
						015 – 015	Ring 2 + Ring 3
						016 – 254	Unused Range
255 – 255	Mirror effect						
-	-	-	-	36	104		<b>L3 SHUTTER</b>
						000 – 003	Stop
						004 – 103	Strobe (Slow to Fast)
						104 – 107	Open
						108 – 207	Pulse (Slow to Fast)
						208 – 212	Open
						213 – 251	Random Strobe (Slow to Fast)
252 – 255	Open						
-	22	-	36	-	000		<b>FREQUENCY</b>
						000 – 255	from low to high frequency in the selected range
-	-	-	-	37	255	000 – 255	<b>L3 DIMMER</b>

## PIXEL REFERENCE



### 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.*