

SHAPE MODE DESCRIPTIVE SHEET

CONCEPTS: FOREGROUND AND BACKGROUND

The powerful shapes engine embedded in the A.leda B-EYE K20, K10 and K10 EASY allows the user to set all the possible parameters relating to the pixels of the light in an organic way, with a distinction between the pixels affected by a selected "image" and the ones that are not affected by that specific image (more properly called SHAPE from now on).

The macro called "ring 3" will, as an example, involve all the pixels that compose the fourth ring of the unit, while the middle pixel and the 2 smaller rings will not be affected by the shape. The involved pixels will belong to the "Foreground" layer, while all the remaining pixels will belong to the "Background" layer.

Pixels on the foreground take the colour the user will select specifically for them using the dedicated channels, while the remaining pixels will all maintain the colours related to the washlight.

SHAPE PARAMETERS DESCRIPTION

SHAPE SELECTION	Allows to choose the kind of shape to be visualized amongst the 63 available ones. Each shape can be composed of a multitude of frames or be a single, static image.
SHAPE SPEED	Allows to set the speed at which the different frames of the selected shape are played by the unit
SHAPE FADE	In case of shapes with multiple frames, it allows to select a snap or faded variation from frame to frame of the same shape.
SHAPE R G B W	Allows to select the colour of the pixels composing the selected shape, if all are left at 000 no shape will be visualized (unless the background dimmer and normal RGBW attributes of the unit are given a value, in which case a "negative" of the macro will be shown)
SHAPE DIMMER	Allows to select the overall brightness of the pixels involved in the selected shape
BACKGROUND DIMMER	Allows to select the overall brightness of the pixels NOT involved by the selected shape. The relevant colour is set using the normal RGBW channels of the washlight.
SHAPE TRANSITION	Internal fade time between a shape and another one set via DMX. Using this "channel" when you change from a shape to a different one as if it was the console fade time will avoid the scrolling effect normally visible when having fades between eg. gobo changes in traditional lights. Fade time on the console should be set to 0.
SHAPE OFFSET	Depending on the selected shape the channel sets the "density" of the involved pixels (few random pixel, many random pixels) or enables an internal algorithm that will distribute the macro between a multitude of lights on a specific DMX line basing on their DMX starting address.
FOREGROUND STROBE	Allows to set a strobe rate for the pixels involved in a macro
BACKGROUND STROBE	Allows to set a strobe rate for the pixels NOT involved in a macro
BACKGROUND SELECT	Allows to reduce, if needed, the background to a lower amount of "rings". With selected macros this allows to mirror the image between the two halves of the fixture's head (in this case the RGBW channels of the washlight will set the colour of the mirrored half and the background will remain black.

SHAPE SELECTION

BIT VALUE	SHAPE SLOT #	SHAPE NAME	SHAPE DESCRIPTION	NOTE
0-7	0	MACRO OFF	tbd	-
8	1	Pixel 1	tbd	-
9	2	Ring 1	tbd	-
10	3	Ring 2	tbd	-
11	4	Ring 3	tbd	Not available on K10
12	5	Pixel 1+Ring 1	tbd	-
13	6	Pixel 1+Ring 2	tbd	-
14	7	Pixel 1+Ring 3	tbd	Not available on K10
15	8	Single ring (Ramp -/+)	tbd	Random colors activation with foreground R,G,B,W = 0
16	9	Filled rings (ramp -/+)	tbd	Random colors activation with foreground R,G,B,W = 0
17	10	Open/Close 1	tbd	Random colors activation with foreground R,G,B,W = 0
18	11	Open/Close 2	tbd	Random colors activation with foreground R,G,B,W = 0
19	12	Random pixels 1	tbd	Random colors activation with foreground R,G,B,W = 0
20	13	Random pixels 2	tbd	Random colors activation with foreground R,G,B,W = 0
21	14	Rainbow 1 (Variable speed)	tbd	-
22	15	Rainbow 2 (Fixed speed with variable color offset)	tbd	-
23	16	Fan	tbd	-
24	17	Bar 1	tbd	-
25	18	Half moon	tbd	-
26	19	Triangle	tbd	-
27	20	Segment 1	tbd	-
28	21	Arc 1	tbd	-
29	22	Arc 2	tbd	-
30	23	Bar 2 (Variable size)	tbd	-
31	24	Random explosion	tbd	Random colors activation with foreground R,G,B,W = 0
32	25	Segment 2	tbd	-
33	26	x Bump	tbd	Not available on K10
34	27	Image	tbd	Not available on K10
35	28	Bumping section	tbd	-
36	29	Ramp by 6	tbd	-
37	30	Ramp by 4	tbd	-
38	31	Left/Right scrolling bar	tbd	-
39	32	Up/Down scrolling bar	tbd	-
40	33	Bar 3	tbd	-
41	34	Vertical arc 1	tbd	Not available on K10
42	35	Vertical arc 2	tbd	-
43	36	Horizontal arc 1	tbd	Not available on K10
44	37	Horizontal arc 2	tbd	-
45	38	Mirrored pixel	tbd	-
46	39	Pixel animation 1	tbd	-

BIT VALUE	SHAPE SLOT #	SHAPE NAME	SHAPE DESCRIPTION	NOTE
47	40	Pixel animation 2	tbd	-
48	41	Pixel animation 3	tbd	-
49	42	Pixel animation 4	tbd	-
50	43	Pixel animation 5	tbd	-
51	44	Semi arc (Ramp -/+)	tbd	-
52	45	Bumping arc section	tbd	-
53	46	Pixel animation 6	tbd	-
54	47	Vertical ramp by 2	tbd	-
55	48	Following pixel by 2	tbd	-
56	49	Syncopation	tbd	-
57	50	Bumping 1	tbd	-
58	51	Bumping 2	tbd	-
59	52	Bumping 3	tbd	-
60	53	Vertical pixel scrolling	tbd	-
61	54	Random vertical section	tbd	-
62	55	Random central section	tbd	Random colors activation with foreground R,G,B,W = 0
63	56	Random ring 2	tbd	Random colors activation with foreground R,G,B,W = 0
64	57	Random ring 3	tbd	Not available on K10 Random Colours
65	58	Random ring 1+3	tbd	*2: Aleda K10: macro 65 = Random on ring 1+3; macro 66 = Random on ring 2+3 Random Colours
66	59	Random ring 2+3	tbd	*2: Aleda K10: macro 65 = Random on ring 1+3; macro 66 = Random on ring 2+3 Random colors activation with foreground R,G,B,W = 0
67	60	Single pixel ring 1	tbd	-
68	61	Single pixel ring 2	tbd	-
69	62	Single pixel ring 3	tbd	Not available on K10
70	63	Spiral	tbd	-
71-255	64	RESERVED	tbd	-

SHAPE SPEED Ę SHAPE OFFSET Ę SHAPE FADE Ę BACKGROUND SELECT

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
8-14	1-7 Pixel 1 Ring 1 Ring 2 Ring 3 Pixel 1+Ring 1 Pixel 1+Ring 2 Pixel 1+Ring 3	-	n.a.	-	n.a.	0-15	Snap effect	K10	
								0-7	Wash
								8-15	Background rings selection
						16-255	Fade effect and gamma selection	K20	
								0-7	Wash
								8-23	Background rings selection
24-255	Wash								
15-18	8-11 Single ring Filled rings Open/Close 1 Open/Close 2	0-63	Radius size, static	0-9	Continuous	0-15	Snap effect	K10	
		64-158	Maximum to minimum speed, closing effect					0-7	Wash
		159-160	Stop	8-15	Background rings selection				
		161-255	Random distribution of flash from 2 to 20 fixtures	10-255	Minimum to maximum speed, opening effect	16-255	Fade effect and gamma selection	K20	
								0-7	Wash
								8-23	Background rings selection
24-255	Wash								
19	12 RandomPixels1	0-63	Stop	0-255	Select random distribution from 2 up to 20 fixtures	0-15	Snap effect	K10	
		64-158	Maximum to min speed, Instant-on + fadeout					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed, FadeIn + FadeOut			16-255	Fade effect and gamma selection	16-254	Wash
				255	Mirror effect				
				K20					
0-7	Wash								
8-23	Background rings selection								
24-254	Wash								
255	Mirror Effect								

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
20	13 RandomPixels2	0-63	Stop	0-255	Select pixel density	0-15	Snap effect	K10	
		64-158	Maximum to minimum speed, Instant-on + fadeout.					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed, FadeIn + FadeOut					16-254	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect
21	14 Rainbow 1	0-63	Angle 0-360°, static	0-255	Angle offset from 0 to 360	0-15	Snap effect	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed, clockwise rotation					16-255	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-255	Wash
22	15 Rainbow 2	0-63	Stop	-	n.a.	0-15	Snap effect	K10	
		64-158	Anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Clockwise rotation					16-255	Wash
				The value 64-158 or 161-255 change the rainbow angle offset (the orange starting angle).					
								0-7	Wash
								8-23	Background rings selection
								24-255	Wash
23-24	16-17 Fan Bar 1	0-63	Angle offset, 0-360°	0-255	Angle offset from 0 to 360°	0-15	Snap effect	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed, clockwise rotation					16-255	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-255	Wash

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
25-26	18-19 Half Moon Triangle	0-63	Angle offset, 0-360°	0-255	Angle offset from 0 to 360°	0-15	Snap effect	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed, clockwise rotation					16-254	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror Effect with background color
27-29	20-22 Segment 1 Arc 1 Arc 2	0-63	Angle offset, 0-360°	0-255	Angle offset from 0 to 360°	0-15	Snap effect	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed, clockwise rotation					16-254	Wash
								255	Show Alternative Color
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Show Alternative Color
30	23 Bar 2	0-63	Stop, indexed speed	0-255	Select shape width	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation.					16-254	Wash
								255	Mirror effect with background color
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
31	24 Random expl.	0-63	Stop, indexed speed	0-255	Select random distribution	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-255	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-255	Wash
32	25 Segment 2	0-63	Stop, indexed speed	0-255	Select shape width	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
33-35	26-28 x Bump Image Bump. section	0-63	Stop, indexed speed	0-255	Select macro offset	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
36-39	29-32 Ramp by 6 Ramp by 4 L/R scroll bar U/D scroll bar	0-63	Stop, indexed speed	0-255	Select shape width	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
40-44	33-37 Bar 3 Vertical arc 1 Vertical arc 2 Horizontal arc 1 Horizontal arc 2	0-63	Stop, indexed speed	0-255	Select macro offset	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
45-51	38-44 Mirrored pixel Pixel anim. 1 Pixel anim. 2 Pixel anim. 3 Pixel anim. 4 Pixel anim. 5 Semi arc	0-63	Stop, indexed speed	0-255	Select shape width	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
								K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
52-53	45-46 Bump Arc Sect. Pixel anim. 6	0-63	Stop, indexed speed	0-255	Select shape offset	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
						1-255	Linear fade	K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
54-55	47-48 Vert. ramp by2 Foll. pixel by2	0-63	Stop, indexed speed	0-255	Select shape width	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
						1-255	Linear fade and wake length	K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
56-59	49-52 Syncopation Bumping 1 Bumping 2 Bumping 3	0-63	Stop, indexed speed	0-255	Select shape offset	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
						1-255	Linear fade	K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
60	53 Vert.PixelScroll	0-63	Stop, indexed speed	0-255	Select shape width	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
						1-255	Linear fade and wake length	K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
61-66	54-59 Ran.Ver.Sec. Ran.Cen.Sec. RandomRing 2 RandomRing 3 RandRing 1+3 RandRing 2+3	0-63	Stop, indexed speed	0-255	Select random distribution	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
						1-255	Linear fade	K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
67-69	60-62 SinglePixRing1 SinglePixRing2 SinglePixRing3	0-63	Stop, indexed speed	0-255	Select the number of rotating led in the ring. Available options: 1, 2, 3, 6, 9. The number of led depends on the ring size.	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
		159-160	Stop					8-15	Background rings selection
		161-255	Minimum to maximum speed clockwise rotation					16-254	Wash
								255	Mirror effect with background color
						1-255	Linear fade and wake length	K20	
								0-7	Wash
								8-23	Background rings selection
								24-254	Wash
								255	Mirror effect with background color
								Macro 60, 61, 62: the mirror effect is available only for options 1, 3, 9	

SHAPE SELECTION	SHAPE SLOT	SHAPE SPEED		SHAPE OFFSET		SHAPE FADE		BACKGROUND SELECT	
BIT	# / NAME	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT	BIT	EFFECT
70	63 Spiral	0-63	Stop, indexed speed	0-255	Select shape width	0	No fade	K10	
		64-158	Maximum to minimum speed, anticlockwise rotation					0-7	Wash
								8-15	Background rings selection
								16-254	Wash
		255	Mirror effect with background color			K20			
		159-160	Stop			1-255	Linear fade and wake length	0-7	Wash
		161-255	Minimum to maximum speed clockwise rotation					8-23	Background rings selection
								24-254	Wash
255	Mirror effect with background color								

A.leda B-EYE K10 Ë BACKGROUND SELECT

BIT	EFFECT
0 - 8	Unused range
9	Pixel 1
10	Ring 1
11	Ring 2
12	Pixel 1 + Ring 1
13	Pixel 1 + Ring 2
14	Pixel 1 + Ring 1 + Ring 2
15	Ring 1 + Ring 2
16 - 255	Unused range

A.leda B-EYE K20 - BACKGROUND SELECT

BIT	EFFECT
8	Unused range
9	Pixel 1
10	Ring 1
11	Ring 2
12	Ring 3
13	Pixel 1 + Ring 1
14	Pixel 1 + Ring 1 + Ring 2
15	Pixel 1 + Ring 1 + Ring 2 + Ring 3
16	Ring 1 + Ring 2 + Ring 3
17	Ring 2 + Ring 3
18	Pixel 1 + Ring 3
19	Ring 1 + Ring 2
20	Pixel 1 + Ring 2
21	Ring 1 + Ring 3
22	Pixel 1 + Ring 2 + Ring 3
23	Pixel 1 + Ring 1 + Ring 3
24-255	Unused range

• SHAPE TRANSITION

BIT	EFFECT
255	4 sec
216	3 sec
171	2 sec
113	1 sec
73	0,5 sec
5	100 ms
0-4	No fade

• SHAPE RGBW SHAPE DIMMER BACKGROUND DIMMER



BIT	EFFECT
255	LED ON
0	LED OFF

- FOREGROUND STROBE - BACKGROUND STROBE



BIT	EFFECT
252 - 255	OPEN
239 - 251	RANDOM FAST STROBE
226 - 238	RANDOM MEDIUM STROBE
213 - 225	RANDOM SLOW STROBE
208 - 212	OPEN
207	FAST PULSATION (25 flash/sec)
108	SLOW PULSATION (0,5 flash/sec)
104 - 107	OPEN
103	FAST STROBE (25 flash/sec)
4	SLOW STROBE (1 flash/sec)
0 - 3	CLOSED