

channel			function	type of control	effect	decimal		percentage	
19	10	4							
1	1	1 ²	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2	2	-	red	proportional	proportional control of the color percentage from 0 to 100%	0	- 255	0%	- 100%
3	3	-	green	proportional	proportional control of the color percentage from 0 to 100%	0	- 255	0%	- 100%
4	4	-	blue	proportional	proportional control of the color percentage from 0 to 100%	0	- 255	0%	- 100%
5	5	-	spare channel	step	no effect	0	- 255	0%	- 100%
6	6	-	lime	proportional	proportional control of the color percentage from 0 to 100%	0	- 255	0%	- 100%
7	7	-	amber	proportional	proportional control of the color percentage from 0 to 100%	0	- 255	0%	- 100%
8	-	-	strobe effect	step	no effect	0	- 9	0%	- 4%
				proportional	variable speed strobing effect, from slow to fast	10	- 57	4%	- 22%
				step	no effect	58	- 255	23%	- 100%
9			dimmer fine	proportional	fine dimmer control 16 bit	0	- 255	0%	- 100%
10	-	-	special functions	step	no effect	0	- 9	0%	- 4%
					reset all functions	10	- 71	4%	- 28%
					600 Hz	72	- 84	28%	- 33%
					no effect	85	- 108	33%	- 42%
					fan at auto-silent speed	109	- 120	43%	- 47%
				proportional	fan speed control	121	- 133	47%	- 52%
				step	enables the automatic display blackout	134	- 185	53%	- 73%
					disables the automatic display blackout	186	- 199	73%	- 78%
					LED control frequency tuning 1.000 Hz	200	- 205	78%	- 80%
					LED control frequency tuning 3.000 Hz	206	- 211	81%	- 83%
					LED control frequency tuning 6.000 Hz	212	- 217	83%	- 85%
					LED control frequency tuning 8.000 Hz	218	- 223	85%	- 87%
					LED control frequency tuning 10.000 Hz	224	- 229	88%	- 90%
					LED control frequency tuning 12.000 Hz	230	- 235	90%	- 92%
					LED control frequency tuning 14.000 Hz	236	- 241	93%	- 95%
LED control frequency tuning 16.000 Hz	242	- 247	95%		- 97%				
LED control frequency tuning 19.000 Hz	248	- 255	97%	- 100%					

11¹	-	-	red tone	step	no effect	0	-	9	0%	-	4%
					R24 - Scarlet red	10	-	34	4%	-	13%
					R02 - Bastard amber	35	-	59	14%	-	23%
					R313 - Light relief yellow	60	-	84	24%	-	33%
					R18 - Flame	85	-	109	33%	-	43%
					R331 - Shell pink	110	-	134	43%	-	53%
					R25 - Orange red	135	-	159	53%	-	62%
					R46 - Magenta	160	-	184	63%	-	72%
					R08 - Pale gold	185	-	209	73%	-	82%
					R27 - Medium red	210	-	234	82%	-	92%
R318 - Mayan sun	235	-	255	92%	-	100%					
12¹	-	-	green tone	step	no effect	0	-	9	0%	-	4%
					R4460 - Calcolor 60 green	10	-	34	4%	-	13%
					R2004 - Storaro green	35	-	59	14%	-	23%
					E730 - Liberty green	60	-	84	24%	-	33%
					E088 - Lime green	85	-	109	33%	-	43%
					R90 - Kelly green	110	-	134	43%	-	53%
					R395 - Teal green	135	-	159	53%	-	62%
					R91 - Primary green	160	-	184	63%	-	72%
					R393 - Emerald green	185	-	209	73%	-	82%
					R393 - Leaf green	210	-	234	82%	-	92%
R86 - Pea green	235	-	255	92%	-	100%					
13¹	-	-	blue tone	step	no effect	0	-	9	0%	-	4%
					R2008 - Storaro indigo	10	-	34	4%	-	13%
					E5058 - French lilac	35	-	59	14%	-	23%
					R369 - Tahitian blue	60	-	84	24%	-	33%
					R347 - Belladonna rose	85	-	109	33%	-	43%
					R381 - Baldassari blue	110	-	134	43%	-	53%
					R57 - Lavander	135	-	159	53%	-	62%
					R55 - Lilac	160	-	184	63%	-	72%
					R4790 - Calcolor 90 magenta	185	-	209	73%	-	82%
					R92 - Turquoise	210	-	234	82%	-	92%
R370 - Italian blue	235	-	255	92%	-	100%					
14	-	-	white tone	step	no effect	0	-	9	0%	-	4%
				step	2.700 K	10	-	30	4%	-	12%
				proportional	proportional value from 2.700 K to 3.200 K	31	-	52	12%	-	20%
				step	3.200 K	53	-	74	21%	-	29%
				proportional	proportional value from 3.200 K to 4.000 K	75	-	96	29%	-	38%
				step	4.000 K	97	-	118	38%	-	46%
				proportional	proportional value from 4.000 K to 5.000 K	119	-	140	47%	-	55%
				step	5.000 K	141	-	162	55%	-	64%
				proportional	proportional value from 5.000 K to 5.600 K	163	-	184	64%	-	72%
				step	5.600 K	185	-	206	73%	-	81%
proportional	proportional value from 5.600 K to 6.500 K	207	-	228	81%	-	89%				
step	6.500 K	229	-	255	90%	-	100%				
15²	-	-	green saturation	step	no effect	0			0%		
				proportional	exalts the green color in the mixing and diminishes the presence of magenta	1	-	127	0%	-	50%
				step	no effect	128			50%		
				proportional	diminishes the presence of green in the mixing and exalts the green color	129	-	254	51%	-	99%
				step	no effect	255			100%		
16³	-	-	saturation	proportional	the white tone fades to the tone built with the RGBLA channels	0	-	255	0%	-	100%

17	8	2	gobos rotation speed	proportional	adjust proportionally the both gobo's speed	0	-	255	0%	-	100%
18	9	3	gobo 1 speed	step	gobo in stop	0			0%		
				proportional	control the gobo 1 speed counterclockwise (from fast to slow)	1	-	125	0%	-	49%
				step	gobo in stop	126	-	129	49%	-	51%
				proportional	control the gobo 1 speed clockwise (from slow to fast)	130	-	254	51%	-	99%
				step	gobo in stop	255			100%		
19	10	4	gobo 2 speed	step	gobo in stop	0			0%		
				proportional	control the gobo 2 speed counterclockwise (from fast to slow)	1	-	125	0%	-	49%
				step	gobo in stop	126	-	129	49%	-	51%
				proportional	control the gobo 2 speed clockwise (from slow to fast)	130	-	254	51%	-	99%
				step	gobo in stop	255			100%		

Note 1: colors macros of channels 11-12-13 can also be obtained through the mixing of channels 2-3-4-6-7.

Note 2: the rest position of green saturation is 128. Diminishing the DMX value augments the presence of the green color. Increasing the DMX value augments the presence of magenta.

Note 3: increasing the value of the saturation DMX channel the white tone (channel 14) will fade to the color selected by the channel 2-3-4-6-7.

Projector: LEDko EXT FullSpectrum RGBLA with gobo rotator	Chart name: DMX512 function	software version: 0.18 or following
Edition: 1.2	Date: 17.01.2020	

LEDko EXT FullSpectrum RGBLA with gobo rotator
 DMX chart (Studio mode)

channel	function	type of control	effect	decimal	percentage
1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0 - 255	0% - 100%
2	white tone	step	3.200 K	0 - 10	0% - 4%
			2.700 K	11 - 16	4% - 6%
			2.800 K	17 - 22	7% - 9%
			2.900 K	23 - 28	9% - 11%
			3.000 K	29 - 34	11% - 13%
			3.100 K	35 - 40	14% - 16%
			3.200 K	41 - 46	16% - 18%
			3.300 K	47 - 52	18% - 20%
			3.400 K	53 - 58	21% - 23%
			3.500 K	59 - 64	23% - 25%
			3.600 K	65 - 70	25% - 27%
			3.700 K	71 - 76	28% - 30%
			3.800 K	77 - 82	30% - 32%
			3.900 K	83 - 88	33% - 35%
			4.000 K	89 - 94	35% - 37%
			4.100 K	95 - 100	37% - 39%
			4.200 K	101 - 106	40% - 42%
			4.300 K	107 - 112	42% - 44%
			4.400 K	113 - 118	44% - 46%
			4.500 K	119 - 124	47% - 49%
			4.600 K	125 - 130	49% - 51%
			4.700 K	131 - 136	51% - 53%
			4.800 K	137 - 142	54% - 56%
			4.900 K	143 - 148	56% - 58%
			5.000 K	149 - 154	58% - 60%
			5.100 K	155 - 160	61% - 63%
			5.200 K	161 - 166	63% - 65%
			5.300 K	167 - 172	65% - 67%
5.400 K	173 - 178	68% - 70%			
5.500 K	179 - 184	70% - 72%			
5.600 K	185 - 190	73% - 75%			
5.700 K	191 - 196	75% - 77%			
5.800 K	197 - 202	77% - 79%			
5.900 K	203 - 208	80% - 82%			
6.000 K	209 - 214	82% - 84%			
6.100 K	215 - 220	84% - 86%			
6.200 K	221 - 226	87% - 89%			
6.300 K	227 - 232	89% - 91%			
6.400 K	233 - 238	91% - 93%			
6.500 K	239 - 244	94% - 96%			
5.600 K	245 - 255	96% - 100%			
3¹	green saturation	step	no effect	0	0%
		proportional	exalts the green color in the mixing and diminishes the presence of magenta	1 - 127	0% - 20%
		step	no effect	128	50%
		proportional	diminishes the presence of green in the mixing and exalts the green color	129 - 254	51% - 99%
		step	no effect	255	100%
4²	saturation	proportional	the white tone fades to the tone built with the hue channel	0 - 255	0% - 100%

5	hue	proportional	reproduce the color crossfades around the color space	0	-	255	0%	-	100%
6	dimmer fine	proportional	fine dimmer control 16 bit	0	-	255	0%	-	100%
7	special functions	step	no effect	0	-	9	0%	-	4%
			reset all functions	10	-	71	4%	-	28%
			600 Hz	72	-	84	28%	-	33%
			no effect	85	-	108	33%	-	42%
			fan at auto-silent speed	109	-	120	43%	-	47%
		proportional	fan speed control	121	-	133	47%	-	52%
			enables the automatic display blackout	134	-	185	53%	-	73%
			disables the automatic display blackout	186	-	199	73%	-	78%
			LED control frequency tuning 1.000 Hz	200	-	205	78%	-	80%
			LED control frequency tuning 3.000 Hz	206	-	211	81%	-	83%
		step	LED control frequency tuning 6.000 Hz	212	-	217	83%	-	85%
			LED control frequency tuning 8.000 Hz	218	-	223	85%	-	87%
			LED control frequency tuning 10.000 Hz	224	-	229	88%	-	90%
			LED control frequency tuning 12.000 Hz	230	-	235	90%	-	92%
			LED control frequency tuning 14.000 Hz	236	-	241	93%	-	95%
			LED control frequency tuning 16.000 Hz	242	-	247	95%	-	97%
			LED control frequency tuning 19.000 Hz	248	-	255	97%	-	100%
8	gobos rotation speed	proportional	adjust proportionally the both gobo's speed	0	-	255	0%	-	100%
9	gobo 1 speed	step	gobo in stop	0			0%		
		proportional	control the gobo 1 speed counterclockwise (from fast to slow)	1	-	125	0%	-	49%
		step	gobo in stop	126	-	129	49%	-	51%
		proportional	control the gobo 1 speed clockwise (from slow to fast)	130	-	254	51%	-	99%
		step	gobo in stop	255			100%		
10	gobo 2 speed	step	gobo in stop	0			0%		
		proportional	control the gobo 2 speed counterclockwise (from fast to slow)	1	-	125	0%	-	49%
		step	gobo in stop	126	-	129	49%	-	51%
		proportional	control the gobo 2 speed clockwise (from slow to fast)	130	-	254	51%	-	99%
		step	gobo in stop	255			100%		
Note 1: the rest position of green saturation is 128. Diminishing the DMX value augments the presence of the green color. Increasing the DMX value augments the presence of magenta.									
Projector: LEDko EXT FullSpectrum RGBLA with gobo rotator				Chart name: DMX512 function			software version: 0.18 or following		
Edition: 1.2				Date: 17.01.2020					

LEDko EXT FullSpectrum RGBLA with dual gobo rotator
DMX chart (RGB mode)

channel	function	type of control	effect	decimal	percentage
1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0 - 255	0% - 100%
2	dimmer fine	proportional	fine dimmer control 16 bit	0 - 255	0% - 100%
3	red	proportional	proportional control of the color percentage from 0 to 100%	0 - 255	0% - 100%
4	green	proportional	proportional control of the color percentage from 0 to 100%	0 - 255	0% - 100%
5	blue	proportional	proportional control of the color percentage from 0 to 100%	0 - 255	0% - 100%
6	white tone	step	no effect	0 - 9	0% - 4%
		step	2.700 K	10 - 30	4% - 12%
		proportional	proportional value from 2.700 K to 3.200 K	31 - 52	12% - 20%
		step	3.200 K	53 - 74	21% - 29%
		proportional	proportional value from 3.200 K to 4.000 K	75 - 96	29% - 38%
		step	4.000 K	97 - 118	38% - 46%
		proportional	proportional value from 4.000 K to 5.000 K	119 - 140	47% - 55%
		step	5.000 K	141 - 162	55% - 64%
		proportional	proportional value from 5.000 K to 5.600 K	163 - 184	64% - 72%
		step	5.600 K	185 - 206	73% - 81%
		proportional	proportional value from 5.600 K to 6.500 K	207 - 228	81% - 89%
		step	6.500 K	229 - 255	90% - 100%
7	saturation	proportional	the white tone fades to the tone built with the hue channel	0 - 255	0% - 100%
8	strobe effect	step	no effect	0 - 9	0% - 4%
		proportional	variable speed strobing effect, from slow to fast	10 - 57	4% - 22%
		step	no effect	58 - 255	23% - 100%

9	special functions	step	no effect	0 - 9	0% - 4%
			reset all functions	10 - 71	4% - 28%
			600 Hz	72 - 84	28% - 33%
			no effect	85 - 108	33% - 42%
			fan at auto-silent speed	109 - 120	43% - 47%
		proportional	fan speed control	121 - 133	47% - 52%
			enables the automatic display blackout	134 - 185	53% - 73%
			disables the automatic display blackout	186 - 199	73% - 78%
		step	LED control frequency tuning 1.000 Hz	200 - 205	78% - 80%
			LED control frequency tuning 3.000 Hz	206 - 211	81% - 83%
			LED control frequency tuning 6.000 Hz	212 - 217	83% - 85%
			LED control frequency tuning 8.000 Hz	218 - 223	85% - 87%
			LED control frequency tuning 10.000 Hz	224 - 229	88% - 90%
			LED control frequency tuning 12.000 Hz	230 - 235	90% - 92%
			LED control frequency tuning 14.000 Hz	236 - 241	93% - 95%
			LED control frequency tuning 16.000 Hz	242 - 247	95% - 97%
LED control frequency tuning 19.000 Hz	248 - 255	97% - 100%			
10	gobos rotation speed	proportional	adjust proportionally the both gobo's speed	0 - 255	0% - 100%
11	gobo 1 speed	step	gobo in stop	0	0%
		proportional	control the gobo 1 speed counterclockwise (from fast to slow)	1 - 125	0% - 49%
		step	gobo in stop	126 - 129	49% - 51%
		proportional	control the gobo 1 speed clockwise (from slow to fast)	130 - 254	51% - 99%
		step	gobo in stop	255	100%
12	gobo 2 speed	step	gobo in stop	0	0%
		proportional	control the gobo 2 speed counterclockwise (from fast to slow)	1 - 125	0% - 49%
		step	gobo in stop	126 - 129	49% - 51%
		proportional	control the gobo 2 speed clockwise (from slow to fast)	130 - 254	51% - 99%
		step	gobo in stop	255	100%
Projector: LEDko EXT FullSpectrum RGBLA with gobo rotator			Chart name: DMX512 function		software version: 0.18 or following
Edition: 1.2			Date: 17.01.2020		