

DMX protocol

Robin SPIKle - DMX protocol				
Version: 1.0 Mode 1 -Standard 16-bit, Mode 2 -Reduced 8-bit				
Mode/channel		DMX Value	Function	Type of control
1	2			
1	1		Pan (8 bit)	
		0 - 255	Pan movement by 540°/360° (128=default)	proportional
2	2		Pan Fine (16 bit)	
		0 - 255	Fine control of pan movement (0=default)	proportional
3	3		Tilt (8 bit)	
		0 - 255	Tilt movement by 360° (128=default)	proportional
4	4		Tilt fine (16 bit)	
		0 - 255	Fine control of tilt movement (0=default)	proportional
5	5		Pan control	
		0	Pan range 540°, shortcut Off (0=default)	step
		1	Pan range 360°, shortcut On	step
		2-127	No function (Pan range 540°, shortcut Off)	
		128-189	Continuous rotation fast -> slow , Forwards	proportional
		190-193	Stop rotation (192= default)	step
		194-255	Continuous rotation slow -> fast , Backwards	proportional
6	6		Tilt control	
		0	Tilt range 360°, Shortcut Off	step
		1	Tilt range 360°, Shortcut On	step
		2-127	No function (Tilt range 360°, Shortcut Off)	
		128-189	Continuous rotation fast -> slow , Forwards	proportional
		190-193	Stop rotation (192=default)	step
		194-255	Continuous rotation slow -> fast , Backwards	proportional
7	7		Pan/Tilt speed , Pan/Tilt time	
		0	Max. speed -tracking mode (0=default)	step
			Pan/Tilt speed	
		1 - 255	Speed from max. to min. (vector mode)	proportional
			Pan/Tilt time	
		1 - 255	Time from 0.1 s to 25.5 sec.	proportional
8	8		Power/Special functions	
		0 -19	Reserved (0=default)	
			<i>To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec. („Shutter,Strobe“ channel 26/21 must be at range: 0-31 DMX). Corresponding menu items are temporarily overridden).</i>	
		20-24	Display ON	step
		25-29	Display OFF	step
		30-34	RGBW colour mixing mode	step
		35-39	CMY colour mixing mode	step
		40-44	Pan/Tilt speed mode	step
		45 - 49	Pan/Tilt time mode	step
		50 -54	Blackout while pan/tilt moving	step
		55 -59	Disabled blackout while pan/tilt moving	step
		60 - 64	Dimmer curve-square law	step
		65 - 69	Dimmer curve-linear	step
		70 - 74	Fans mode: Auto	step
		75 - 79	Fans mode: High	step
		80-84	White point 8000K ON	step
		85-89	White point 8000K OFF	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		90 -129	Reserved	
			<i>To activate following functions, stop in DMX value for at least 3 seconds.</i>	
		130 - 139	Fixture reset (except pan/tilt)	
		140 - 149	Pan/Tilt reset	step
		150 - 159	Zoom reset	step
		160 - 169	Flower effect/prism reset	step
		170-171	Tungsten effect simulation (750W) On	step
		172-173	Tungsten effect simulation (1000W) On	step
		174-175	Tungsten effect simulation (1200W) On	step
		176-177	Tungsten effect simulation (2000W) On	step
		178-179	Tungsten effect simulation (2500W) On	step
		180-181	Tungsten effect simulation Off	step
		182 - 199	Reserved	
		200 - 209	Total fixture reset	step
		210 - 255	Reserved	
9	9		Virtual colour wheel	
		0	No function (0=default)	step
		1-2	LEE 4 (Medium Bastard Amber)	step
		3-4	LEE 25 (Sunset Red)	step
		5-6	LEE 19 (Fire)	step
		7-8	LEE 26 (Bright Red)	step
		9-10	LEE 58 (Lavender)	step
		11-12	LEE 68 (Sky Blue)	step
		13-14	LEE 36 (Medium Pink)	step
		15-16	LEE 89 (Moss Green)	step
		17-18	LEE 88 (Lime Green)	step
		19-20	LEE 90 (Dark Yellow Green)	step
		21-22	LEE 49 (Medium Purple)	step
		23-24	LEE 52 (Light Lavender)	step
		25-26	LEE 102 (Light Amber)	step
		27-28	LEE 103 (Straw)	step
		29-30	LEE 140 (Summer Blue)	step
		31-32	LEE 124 (Dark Green)	step
		33-34	LEE 106 (Primary Red)	step
		35-36	LEE 111 (Dark Pink)	step
		37-38	LEE 115 (Peacock Blue)	step
		39-40	LEE 126 (Mauve)	step
		41-42	LEE 117 (Steel Blue)	step
		43-44	LEE 118 (Light Blue)	step
		45-46	LEE 122 (Fern Green)	step
		47-48	LEE 182 (Light Red)	step
		49-50	LEE 121 (LEE Green)	step
		51-52	LEE 128 (Bright Pink)	step
		53-54	LEE 131 (Marine Blue)	step
		55-56	LEE 132 (Medium Blue)	step
		57-58	LEE 134 (Golden Amber)	step
		59-60	LEE 135 (Deep Golden Amber)	step
		61-62	LEE 136 (Pale Lavender)	step
		63-64	LEE 137 (Special Lavender)	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		65-66	LEE 138 (Pale Green)	step
		67-68	LEE 798 (Chrysalis Pink)	step
		69-70	LEE 141 (Bright Blue)	step
		71-72	LEE 147 (Apricot)	step
		73-74	LEE 148 (Bright Rose)	step
		75-76	LEE 152 (Pale Gold)	step
		77-78	LEE 154 (Pale Rose)	step
		79-80	LEE 157 (Pink)	step
		81-82	LEE 143 (Pale Navy Blue)	step
		83-84	LEE 162 (Bastard Amber)	step
		85-86	LEE 164 (Flame Red)	step
		87-88	LEE 165 (Daylight Blue)	step
		89-90	LEE 169 (Lilac Tint)	step
		91-92	LEE 170 (Deep Lavender)	step
		93-94	LEE 172 (Lagoon Blue)	step
		95-96	LEE 194 (Surprise Pink)	step
		97-98	LEE 180 (Dark Lavender)	step
		99-100	LEE 181 (Congo Blue)	step
		101-102	LEE 197 (Alice Blue)	step
		103-104	LEE 201 (Full C.T. Blue)	step
		105-106	LEE 202 (Half C.T. Blue)	step
		107-108	LEE 203 (Quarter C.T. Blue)	step
		109-110	LEE 204 (Full C.T. Orange)	step
		111-112	LEE 219 (Fluorescent Green)	step
		113-114	LEE 206 (Quarter C.T. Orange)	step
		115-116	LEE 247 (LEE Minus Green)	step
		117-118	LEE 248 (Half Minus Green)	step
		119-120	LEE 281 (Three Quarter C.T. Blue)	step
		121-122	LEE 285 (Three Quarter C.T. Orange)	step
		123-124	LEE 352 (Glacier Blue)	step
		125-126	LEE 353 (Lighter Blue)	step
		127-128	LEE 507 (Madge)	step
		129-130	LEE 778 (Millennium Gold)	step
		131-132	LEE 793 (Vanity Fair)	step
		133-235	Reserved	
		236-245	Rainbow effect (with fade time) from slow-> fast	proportional
		246-255	Rainbow effect (without fade time) from slow-> fast	proportional
10	10		Red/Cyan (8 bit)*	
		0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
11	*		Red/Cyan (16bit)*	
		0 - 255	Colour saturation control - fine (255=default)	proportional
12	11		Green/Magenta (8 bit) *	
		0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
13	*		Green/Magenta (16bit) *	
		0 - 255	Colour saturation control - fine (255=default)	proportional
14	12		Blue/Yellow (8 bit) *	
		0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
15	*		Blue/ Yellow (16bit) *	
		0 - 255	Colour saturation control - fine (255=default)	proportional
16	13		White (8 bit)	

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
			<i>If RGBW mode is selected:</i>	
		0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
			<i>If CMY mode is selected:</i>	
		0 - 255	No function	
17	*		White (16 bit)	
		0 - 255	Colour saturation control - fine (255=default)	proportional
18	14		CTC	
			<i>If function "White Point 8000K" is ON</i>	
		0-255	Col. temperature correction from 8000K to 2700K -for whites only (0=8000K, 64=5600K, 128=4200K, 192=3200K, 255=2700K)	proportional
			To get colour temperatures stated above, RGBW channels have to be set at the same value (e.g. 255DMX) (0=default) (To activate Tungsten effect at 2700K and 3200K , set DMX value at "Power/Special functions" channel)	
			<i>If function "White Point 8000K" is OFF</i>	
		0-255	Colour temperature correction for from cool col. to warm colour	proportional
19	15		Colour Mix control	
			<i>Defines relation between colour channels</i>	
			"Virtual" = Virtual Colours (Virtual Colour Wheel)	
			"Colour mix" = Colour channels (RGB/CMY)	
		0-9	Virtual colors (virtual has priority)	step
		10-19	Maximum mode (highest values have priority)	step
		20-29	Minimum mode (lowest values have priority)	step
		30-39	Multiply mode (multiply Global and Pixel)	step
		40-49	Addition mode (Virtual + Colour mix)	step
		50-59	Subtraction mode (Virtual – Colour mix)	step
		60-69	Inverted Subtraction mode (Virtual –Colour mix)	step
		70-128	Reserved	
		129	Virtual colors (virtual has priority)	step
		130-254	Crossfade (crossfade between Virtual and Colour mix)	proportional
		255	Colour channels ("Colour mix" has priority) -default	step
20	16		Rotating Prism	
		0	Open position-without prism (0=default)	step
		1 - 127	Prism inserted, forwards rotation from fast to slow	proportional
		128	No rotation-prism inserted	step
		129-255	Prism inserted, backwards rotation from slow to fast	proportional
21	17		Flower Effect & Prism/Flower Effect macros	
		0-19	Without Flower Effect (0=default)	step
		20-49	Flower Effect	step
			<i>In range of 50-69DMX, channels Rotating prism and Flower Effect rotation are blocked</i>	
		50-51	Macro 1	step
		52-53	Macro 2	step
		54-55	Macro 3	step
		56-57	Macro 4	step
		58-59	Macro 5	step
		60-61	Macro 6	step
		62-63	Macro 7	step
		64-65	Macro 8	step
		66-67	Macro 9	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		68-69	Macro 10	step
		70-255	Reserved	
22	18		Flower effect rotation	
		0	No rotation	step
		1 - 127	Forwards rotation from fast to slow	proportional
		128	No rotation (128=default)	step
		129-255	Backwards rotation from slow to fast	proportional
23	19		Zoom	
		0-255	Zoom from max. to min.beam angle (128=default)	proportional
24	*		Zoom - fine	
		0-255	Fine zooming (0=default)	proportional
25	20		Shutter/ strobe	
		0 - 31	Shutter closed	step
		32 - 63	Shutter open (32=default)	step
		64 - 95	Strobe-effect from slow to fast	proportional
		96 - 127	Shutter open	step
		128 - 143	Opening pulse in sequences from slow to fast	proportional
		144 - 159	Closing pulse in sequences from fast to slow	proportional
		160 - 191	Shutter open	step
		192 - 223	Random strobe-effect from slow to fast	proportional
		224 - 255	Shutter open	step
26	21		Dimmer intensity (8 bit)	
		0 - 255	Dimmer intensity from 0% to 100% (0=default)	proportional
27	*		Dimmer intensity - fine (16 bit)	
		0 - 255	Fine dimming (0=default)	proportional
* Select RGB or CMY mixing mode on channel "Power/Special functions"				
Copyright © 2016 Robe Lighting s.r.o. - All rights reserved				
All Specifications subject to change without notice				