Robin ProMotion - DMX protocol			
Version 1.9			
Channel	**DMX Value**	**Function**	**Type of control**
1		**Pan**	
	0 - 255	Pan movement by 540° (128=default)	proportional
2		**Pan fine**	
	0 - 255	Fine control of pan movement (0=default)	proportional
3		**Tilt**	
	0 - 255	Tilt movement by 260° (128=default)	proportional
4		**Tilt fine**	
	0 - 255	Fine control of tilt movement (0=default)	proportional
5		**Pan/Tilt speed , Pan/Tilt time**	
	0	Standard mode (0=default)	step
	1	Max. Speed Mode	step
		Pan/Tilt speed mode	
	2 - 255	Speed from max. to min.	proportional
		Pan/Tilt time mode	
	2 - 255	Time from 0.2 s to 25.5 sec.	proportional
6		**Special functions**	
		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 23 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden (unless otherwise stated).	
	0 -9	Reserved (0=default)	
	10-14	DMX input: Wired DMX	step
	15-19	DMX input: Wireless DMX *	step
	20-24	Graphic display: On	step
	25-29	Graphic display: Off	step
	30-31	Colour temperature: 3200K	step
	32-33	Colour temperature: 4200K	step
	34-35	Colour temperature: 5000K	step
	36-37	Colour temperature: 5500K	step
	38-39	Colour temperature: 5600K	step
	40-41	Colour temperature: 6500K	step
	42-43	Colour temperature: 7500K	step
	44-45	Colour temperature: 8000K	step
	46-47	Colour temperature: 9500K	step
	48-49	Maximum brightness	step
	50 - 59	Pan/Tilt speed mode	step
	60 - 69	Pan/Tilt time mode	step
	70 - 79	Blackout while pan/tilt moving	step
	80 - 89	Disabled blackout while pan/tilt moving	step
	90-94	Ceiling projection On	step
	95-99	Ceiling projection Off	step
	100-104	Rear projection On	step
	105-109	Rear projection Off	step
	110-114	Fans mode: Auto	step
	115-119	Fans mode: High	step
	120-121	Colour mixing mode: CMY	step
	122-123	Colour mixing mode: RGB	step

Channel	DMX Value	Function	Type of control
	124 -129	Reserved	
		To activate following functions, stop in DMX value for at least 3 seconds.	
	130-134	Keep aspect ratio On	step
	135-139	Keep aspect ratio Off	step
	140 - 149	Pan/Tilt reset	step
	150 - 179	Reserved	
	180 - 189	Focus reset	step
	190 - 199	Graphic engine reset(software update executing)	step
	200 - 209	Total reset	step
	210 -219	Internal HDMI	step
	220 -229	External HDMI	step
	230 -234	Save AutoKeystoning	step
	235 -239	Reserved	
	240 -244	Synchronization of the Local NAS content with NAS	step
		The following RoboSpot related commands are only applicable when the RoboSpot is connected:	
	245 - 246	RoboSpot enabled	step
	247 - 248	RoboSpot disabled - except handle faders and pan/tilt	step
	249 - 250	RoboSpot fully disabled	step
	251 - 255	Reserved	
7		**Digital zoom**	
	0-127	Zoom from min. -->real size	proportional
	128	Real size (128=default)	step
	129-255	Zoom from real size -->max.	proportional
8		**Focus**	
	0 - 255	Continuous adjustment from far to near (128=default)	proportional
		Fixture equipped with ADM: Focus has to be set at 0 DMX	
9		**Keystoning Vertical**	
	0-255	Vertical keystoning (128= Default)	proportional
10		**Keystoning Horizontal**	
	0 - 255	Horizontal keystoning (128= Default)	proportional
11		**Cyan (Red)**	
	0 - 255	Cyan (0%-->100%) (0=default for CMY mixing mode)	proportional
	0 - 255	Red (0%-->100%) (255=default for RGB mixing mode)	proportional
12		**Magenta (Green)**	
	0 - 255	Magenta (0%-->100%) (0=default for CMY mixing mode)	proportional
	0 - 255	Green (0%-->100%) (255=default for RGB mixing mode)	proportional
13		**Yellow (Blue)**	
	0 - 255	Yellow (0%-->100%) (0=default for CMY mixing mode)	proportional
	0 - 255	Blue (0%-->100%) (255=default for RGB mixing mode)	proportional
14		**Virtual colour wheel**	
	0-15	White (CTC according to value set at channel Special Function) (0=default)	step
	16	Blue	step
	17-55	Blue ---> Cyan	proportional
	56	Cyan	step
	57-95	Cyan ---> Green	proportional
	96	Green	step
	97-134	Green ---> Yellow	proportional
	135	Yellow	step

Channel	DMX Value	Function	Type of control
	136-174	Yellow ---> Red	proportional
	175	Red	step
	176-214	Red ---> Magenta	proportional
	215	Magenta	step
	216-246	Magenta ---> Blue	proportional
	247	Blue	step
	248-255	Reserved	
15		**Colour Effect wheel**	
	0	No function (0=default)	step
		Static effects	
	1	Horizontal linear shade, white-->black	step
	2	Horizontal Linear shade, black-->white	step
	3	Vertical linear shade, black-->white	step
	4	Vertical linear shade, white-->black	step
	5	Diagonal shade, white -->black	step
	6	Diagonal shade, black -->white	step
	7	Horizontal linear shade, white-->red	step
	8	Horizontal Linear shade, red-->white	step
	9	Vertical linear shade, red-->white	step
	10	Vertical linear shade, white-->red	step
	11	Diagonal shade, white -->red	step
	12	Diagonal shade, red -->white	step
	13	Horizontal linear shade, white-->green	step
	14	Horizontal Linear shade, green-->white	step
	15	Vertical linear shade, green-->white	step
	16	Vertical linear shade, white-->green	step
	17	Diagonal shade, white -->green	step
	18	Diagonal shade, green -->white	step
	19	Horizontal linear shade, white-->blue	step
	20	Horizontal Linear shade, blue-->white	step
	21	Vertical linear shade, blue-->white	step
	22	Vertical linear shade, white-->blue	step
	23	Diagonal shade, white -->blue	step
	24	Diagonal shade, blue -->white	step
	25	Horizontal linear shade, white-->cyan	step
	26	Horizontal Linear shade, cyan-->white	step
	27	Vertical linear shade, cyan-->white	step
	28	Vertical linear shade, white-->cyan	step
	29	Diagonal shade, white -->cyan	step
	30	Diagonal shade, cyan -->white	step
	31	Horizontal linear shade, white-->magenta	step
	32	Horizontal Linear shade, magenta-->white	step
	33	Vertical linear shade, magenta-->white	step
	34	Vertical linear shade, white-->magenta	step
	35	Diagonal shade, white -->magenta	step
	36	Diagonal shade, magenta -->white	step
	37	Horizontal linear shade, white-->yellow	step
	38	Horizontal Linear shade, yellow-->white	step
	39	Vertical linear shade, yellow-->white	step

Channel	DMX Value	Function	Type of control
	40	Vertical linear shade, white-->yellow	step
	41	Diagonal shade, white -->yellow	step
	42	Diagonal shade, yellow -->white	step
	43	RGBW shades	step
	44	CMYW shades	step
	45	RGBY shades	step
	46	RMBG shades	step
	47-49	Reserved	
		Dynamic effects	
	50	Colour changing black -->white, slowly	step
	51	Colour changing black -->white, fast	step
	52	Colour changing red -->white, slowly	step
	53	Colour changing red -->white, fast	step
	54	Colour changing green -->white, slowly	step
	55	Colour changing green -->white, fast	step
	56	Colour changing blue -->white, slowly	step
	57	Colour changing blue -->white, fast	step
	58	Colour changing yellow -->white, slowly	step
	59	Colour changing yellow -->white, fast	step
	60	Colour changing magenta -->white, slowly	step
	61	Colour changing magenta -->white, fast	step
	62	Colour changing cyan -->white, slowly	step
	63	Colour changing cyan -->white, fast	step
	64	Colour changing (slow) red -->green -->blue -->yellow	step
	65	Colour changing (fast) red -->green -->blue -->yellow	step
	66	Colour changing (fastest) red -->green -->blue -->yellow	step
	67-69	Reserved	
	70	Horizontal linear shade, white-->black and vice versa, slowly	step
	71	Horizontal linear shade, white-->black and vice versa,fast	step
	72	Vertical linear shade, white-->black and vice versa, slowly	step
	73	Vertical linear shade, white-->black and vice versa, fast	step
	74	Diagonal shade, black -->white and vice versa, slowly	step
	75	Diagonal shade, black -->white and vice versa, fast	step
	76	Shade black -->white, slow rotation, clockwise	step
	77	Shade black -->white, fast rotation, clockwise	step
	78	Shade black -->white, slow rotation, anticlockwise	step
	79	Shade black -->white, fast rotation, anticlockwise	step
	80	Horizontal linear shade, white-->red and vice versa, slowly	step
	81	Horizontal linear shade, white-->red and vice versa,fast	step
	82	Vertical linear shade, white-->red and vice versa, slowly	step
	83	Vertical linear shade, white-->red and vice versa, fast	step
	84	Diagonal shade, red -->white and vice versa, slowly	step
	85	Diagonal shade, red -->white and vice versa, fast	step
	86	Shade red -->white, slow rotation, clockwise	step
	87	Shade red -->white, fast rotation, clockwise	step
	88	Shade red -->white, slow rotation, anticlockwise	step
	89	Shade red -->white, fast rotation, anticlockwise	step
	90	Horizontal linear shade, white-->green and vice versa, slowly	step
	91	Horizontal linear shade, white-->green and vice versa,fast	step

Channel	DMX Value	Function	Type of control
	92	Vertical linear shade, white-->green and vice versa, slowly	step
	93	Vertical linear shade, white-->green and vice versa, fast	step
	94	Diagonal shade, green -->white and vice versa, slowly	step
	95	Diagonal shade, green -->white and vice versa, fast	step
	96	Shade green -->white, slow rotation, clockwise	step
	97	Shade green -->white, fast rotation, clockwise	step
	98	Shade green -->white, slow rotation, anticlockwise	step
	99	Shade green -->white, fast rotation, anticlockwise	step
	100	Horizontal linear shade, white-->blue and vice versa, slowly	step
	101	Horizontal linear shade, white-->blue and vice versa,fast	step
	102	Vertical linear shade, white-->blue and vice versa, slowly	step
	103	Vertical linear shade, white-->blue and vice versa, fast	step
	104	Diagonal shade, blue -->white and vice versa, slowly	step
	105	Diagonal shade, blue -->white and vice versa, fast	step
	106	Shade blue -->white, slow rotation, clockwise	step
	107	Shade blue -->white, fast rotation, clockwise	step
	108	Shade blue -->white, slow rotation, anticlockwise	step
	109	Shade blue -->white, fast rotation, anticlockwise	step
	110	Horizontal linear shade, white-->cyan and vice versa, slowly	step
	111	Horizontal linear shade, white-->cyan and vice versa,fast	step
	112	Vertical linear shade, white-->cyan and vice versa, slowly	step
	113	Vertical linear shade, white-->cyan and vice versa, fast	step
	114	Diagonal shade, cyan -->white and vice versa, slowly	step
	115	Diagonal shade, cyan -->white and vice versa, fast	step
	116	Shade cyan -->white, slow rotation, clockwise	step
	117	Shade cyan -->white, fast rotation, clockwise	step
	118	Shade cyan -->white, slow rotation, anticlockwise	step
	119	Shade cyan -->white, fast rotation, anticlockwise	step
	120	Horizontal linear shade, white-->magenta and vice versa, slowly	step
	121	Horizontal linear shade, white-->magenta and vice versa,fast	step
	122	Vertical linear shade, white-->magenta and vice versa, slowly	step
	123	Vertical linear shade, white-->magenta and vice versa, fast	step
	124	Diagonal shade, magenta -->white and vice versa, slowly	step
	125	Diagonal shade, magenta -->white and vice versa, fast	step
	126	Shade magenta -->white, slow rotation, clockwise	step
	127	Shade magenta -->white, fast rotation, clockwise	step
	128	Shade magenta -->white, slow rotation, anticlockwise	step
	129	Shade magenta -->white, fast rotation, anticlockwise	step
	130	Horizontal linear shade, white-->yellow and vice versa, slowly	step
	131	Horizontal linear shade, white-->yellow and vice versa,fast	step
	132	Vertical linear shade, white-->yellow and vice versa, slowly	step
	133	Vertical linear shade, white-->yellow and vice versa, fast	step
	134	Diagonal shade, yellow -->white and vice versa, slowly	step
	135	Diagonal shade, yellow -->white and vice versa, fast	step
	136	Shade yellow -->white, slow rotation, clockwise	step
	137	Shade yellow -->white, fast rotation, clockwise	step
	138	Shade yellow -->white, slow rotation, anticlockwise	step
	139	Shade yellow -->white, fast rotation, anticlockwise	step
	140	RGBW shades, slow rotation , clockwise	step

Channel	DMX Value	Function	Type of control
	141	RGBW shades, fast rotation ,clockwise	step
	142	RGBW shades, slow rotation , anticlockwise	step
	143	RGBW shades, fast rotation ,anticlockwise	step
	144	Random colours slowly, black between colours	step
	145	Random colours fast, black between colours	step
	146	Random colours slowly, white between colours	step
	147	Random colours fast, white between colours	step
	148	Random colours slowly	step
	149	Random colours fast	step
	150	Horizontal black shade -->random colour, slowly	step
	151	Horizontal black shade -->random colour, fast	step
	152	Vertical black shade -->random colour, slowly	step
	153	Vertical black shade -->random colour, fast	step
	154	Diagonal black shade -->random colour, slowly	step
	155	Diagonal black shade -->random colour, fast	step
	156	Black shade -->random colour, slow rotation ,clockwise	step
	157	Black shade -->random colour, fast rotation ,clockwise	step
	158	Black shade -->random colour, slow rotation ,anticlockwise	step
	159	Black shade -->random colour, fast rotation ,anticlockwise	step
	160	Random colour in two corners, slow rotation, clockwise	step
	161	Random colour in two corners, fast rotation, clockwise	step
	162	Random colour in two corners, slow rotation, anticlockwise	step
	163	Random colour in two corners, fast rotation, anticlockwise	step
	164	Random colour in four corners, slow rotation, clockwise	step
	165	Random colour in four corners, fast rotation, clockwise	step
	166	Random colour in four corners, slow rotation, anticlockwise	step
	167	Random colour in four corners, fast rotation, anticlockwise	step
	168	Horizontal colour transition, slowly, random	step
	169	Horizontal colour transition, fast, random	step
	170	Vertical colour transition, slowly, random	step
	171	Vertical colour transition, fast, random	step
	172	Diagonal colour transition, slowly	step
	173	Diagonal colour transition, fast	step
	174	Horizontal/Vertical/Diagonal colour transition slowly	step
	175	Horizontal/Vertical/Diagonal colour transition fast	step
	176-255	Reserved	
16		**Digital gobo wheel selection**	
	0-31	Factory Digital gobo wheel (0=default)	step
	32-63	Internal Custom Digital gobo wheel	step
	64-95	External Custom Digital gobo wheel (USB memory stick)	step
	96-127	NAS content	step
	128-143	Reserved	
	144-255	Reserved (for future functions)	
17		**Digital gobo wheel**	
	0	Open (0=default)	step
		The following distribution of gobos/pictures/animations goes for factory gobos/pictures/animations only	
	1 - 103	*Colour pictures (by one DMX value: 1,2,3……103)*	proportional
	104-149	*Black and white gobos (by one DMX value: 104, 105,……149)*	proportional

Channel	DMX Value	Function	Type of control
	150-168	Black and white animations (by one DMX value: 150, 151,…..168)	proportional
	169-250	Colour animations (by one DMX value: 169, 170…..250)	proportional
		To activate following two functions, set a transition effect (1-48) at Effect Wheel - channel 21	
	251	Gobos presentation (gobos selected randomly)	step
	252	Gobos presentation (gobos selected in alphabetical order)	step
	253-254	Reserved	
	255	White	step
18		**Video speed control**	
	0	Optimal speed (0=default)	step
	1	Pause	step
	2-127	Reserved	
	128-255	Speed from original to max. (4x original speed)	proportional
19		**Digital gobo indexing and rotation**	
	0 - 127	Gobo indexing (0=default)	proportional
	128-190	Forwards gobo rotation from fast to slow	proportional
	191-192	No rotation	step
	193- 255	Backwards gobo rotation from slow to fast	proportional
20		**Digital gobo gobo indexing and rotation fine**	
	0-255	Fine indexing (rotation)	proportional
21		**Effect wheel**	
		The following effects are controlled by means of the "Effect speed/Time" channel below. Type of control is stated in the column on the right.	
	0	Open position-hole (0=default)	step
		T***ransition effects between two gobos (pictures)***	
	1	Random transition	1
	2	Transition with blending	1
	3	Transition from left --> right, horizontally	1
	4	Transition from right --> left, horizontally	1
	5	Stripe transition from left --> right, horizontally	1
	6	Stripe transition from right -->left, horizontally	1
	7	3-stripe transition from left-->right, horizontally	1
	8	3-stripe transition from right-->left, horizontally	1
	9	6-stripe transition from left-->right, horizontally	1
	10	6-stripe transition from right-->left, horizontally	1
	11	Transition up --> down, vertically	1
	12	Transition down -->up, vertically	1
	13	Stripe transition up --> down, vertically	1
	14	Stripe transition down -->up, vertically	1
	15	3-stripe transition up-->down, vertically	1
	16	3-stripe transition down-->up, vertically	1
	17	6-stripe transition up-->down, vertically	1
	18	6-stripe transition down-->up, vertically	1
	19	Transition 2 from left --> right, horizontally (diffusion edge)	1
	20	Transition 2 from right --> left, horizontally (diffusion edge)	1
	21	Transition 2 up --> down, vertically (diffusion edge)	1
	22	Transition 2 down -->up, vertically (diffusion edge)	1
	23	Iris transition out--> in	1
	24	Iris transition in--> out	1

Channel	DMX Value	Function	Type of control
	25	Iris transition out--> in (Diffusin edge)	1
	26	Iris transition in--> out (Diffusion edge)	1
	27	Iris transition 3 out--> in (more diffusion edge)	1
	28	Iris transition 3 in--> out (more diffusion edge)	1
	29	Moving transition from left --> right	1
	30	Moving transition from left --> right	1
	31	Moving transition up --> down	1
	32	Moving transition from down --> up	1
	33	Drop transition	1
	34	Simple transition	1
	35	Pixel transition	1
	36	Transition via blending	1
	37	Transition with white output	1
	38	Crossing transition	1
	39	Picture in picture transition	1
	40	Direct transition	1
	41	Transition with vertical rotation	1
	42	Transition with horizontal rotation	1
	43	Transition with diagonal rotation	1
	44	Transition with diagonal rotation-opposite direction	1
	45	Zoom out transition	1
	46	Zoom in transition	1
	47	Zoom transition in horizontal direction	1
	48	Zoom transition in vertical direction	1
	49-79	Reserved	
		Effects applied at one gobo (picture)	
	80	Kaleidoscope 1	3
	81	Kaleidoscope 2	3
	82	Kaleidoscope 3	3
	83	Kaleidoscope 4	3
	84	Kaleidoscope 5	3
	85	Sunflower Kaleidoscope (coarse)	3
	86	Sunflower Kaleidoscope (soft)	3
	87	Sunflower kaleidoscope (slow)	4
	88	Sunflower kaleidoscope (faster)	4
	89	Sunflower kaleidoscope (fastest)	4
	90-99	Reserved	
	100	Circle Iris in/out	2
	101	Circle Iris in/out (diffusion edge)	2
	102	Vertical Ellipse Iris in/out	2
	103	Horizontal Ellipse Iris in/out	2
	104	Colour -> Black-and-white -> Colour	2
	105	Colour -> Black-and-white inverted -> Colour	2
	106	Black-and-white ->Black-and-white inverted -> Black-and-white	2
	107	Colour -> Colour inverted -> Colour	2
	108	Pixalation	2
	109-179	Reserved	
		Manual effects	
	180	Circular Iris	5

Channel	DMX Value	Function	Type of control
	181	Elliptical Iris -vertical	5
	182	Elliptical Iris-horizontal	5
	183	Black mask	6
	184	Inverse black mask	6
	185	White mask	6
	186	Inverse white mask	6
	187	Gobo/video movement in horizontal (X) axis	7
	188	Gobo/video movement in vertical (Y) axis	7
	189	Reserved	
	190	Crossfade effect	8
	191	Addition effect	8
	192	Substraction effect	8
	193	Multiplication effect	8
	194	Minimum effect	8
	195	Maximum effect	8
	196-255	Reserved	
22		**Effect Speed/Time**	
		Type of control 1	
	0	Presentation* (time=0.8 sec) (0=default)	step
	1-250	Time from 0,1 sec. to 25 sec.	proportional
	251-255	Stop	step
		*Presentation serves for showing effect	
		Type of control 2	
	0	Presentation (time=0.8 sec)	step
	1-126	Time from 0,1 sec. to 12,6 sec.	proportional
	127-128	Stop	step
	129-254	Time from 12.6 sec to 0.1 sec. - opposite direction	proportional
	255	Stop	step
		Type of control 3	
	0	Presentation	step
	1-255	Effect speed from min. to max.	proportional
		Type of control 4	
	0	Presentation (4 corners)	step
	1-255	Number of corners from min. to max.	proportional
		Type of control 5	
	0	Open	step
	1-255	Iris from open to close	proportional
		Type of control 6	
	0	Open	step
	1-255	Mask effect from min. level to max. level	proportional
		Type of control 7	
	0-127	Movement from edge to centre	proportional
	128	Centre	step
	129--255	Movement from centre to edge	proportional

Channel	DMX Value	Function	Type of control
		Type of control 8	
	0-255	Continuous effect changing	proportional
23		**Grey box correction**	
	0	Open (0=default)	step
	1 - 255	From max.diameter to min.diameter	proportional
24		**Shutter/ strobe**	
	0 - 15	Shutter closed, LEDs Off	step
	16 - 31	Shutter closed, LEDs On	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
25		**Dimmer**	
	0	Dimmer closed, LEDs Off (0=default)	step
	1 - 255	Dimmer intensity from min. to max., LEDs On	proportional
* function is active only 10 seconds after switching the fixture on			
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