Robin Footsie™1 RGBW - DMX protocol

Version: 1.1 Mode 1-Standard 16-bit

Mode/Total channels **1/28**	**DMX Value**	**Function**	**Type of control**
1		**Power/Special functions**	
	0 - 9	Reserved (0=default)	
		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 18 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden.	
	10-14	DMX input: Wired DMX *	step
	15-19	DMX input: Wireless DMX *	step
		* function is active only 10 seconds after switching the fixture on	
	20-24	RGBW colour mixing mode	step
	25-29	CMY colour mixing mode	step
	30-34	White point 8000K On	step
	35-39	White point 8000K Off	step
	40-59	Reserved	
	60-64	Dimmer curve - square law	step
	65-69	Dimmer curve - linear	step
	70-79	Reserved	
	80-84	Blue positional light On	step
	85-89	Blue positional light Off	step
	90-129	Reserved	
		To activate following functions, stop in DMX value for at least 3 seconds. Corresponding menu items are temporarily overriden.	
	130-169	Reserved	
		Tungsten effect simulation for whites 2700K-4200K	
	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
	182-255	Reserved	
2		**LED frequency selection**	
		Factory display menu setting: 600Hz	
		Select PWM output frequency of LEDs. Selected PWM frequency can be fine adjusted in 127 steps up/down around selected PWM frequency on the channel below. Corresponding menu item (Frequency Setup) is temporarily overridden.	
	0-4	PWM frequency from Display menu (fixture utilizes PWM	step
		frequency set in the display menu item Frequency Setup).	
	5-9	300 Hz	step
	10-14	600 Hz (10=default)	step
	15-19	1200 Hz	step
	20-24	2400 Hz	step
	25-29	High	step
	30-255	Reserved (fixture utilizes PWM frequency set in the display menu item	
		Frequency Setup).	
3		**LED frequency fine adjusting**	

Mode/Total channels **1/28**	**DMX Value**	**Function**	**Type of control**
		Factory display menu setting: 600Hz	
		Select desired PWM output frequency of LEDs on the channel above .	
	0-1	Selected LED Frequency	step
	2	LED Frequency (step -126)	step
	3	LED Frequency (step -125)	step
	4	LED Frequency (step -124)	step
	:		
	125	LED Frequency (step -3)	step
	126	LED Frequency (step -2)	step
	127	LED Frequency (step -1)	step
	128	Selected LED Frequency (128=default)	step
	129	LED Frequency (step +1)	step
	130	LED Frequency (step +2)	step
	131	LED Frequency (step +3)	step
	:		
	252	LED Frequency (step +124)	step
	253	LED Frequency (step +125)	step
	254	LED Frequency (step +126)	step
	255	Selected LED Frequency	step
4		**Virtual colour wheel -all zones**	
	0	No function (0=default)	step
	1-2	Filter 4 (Medium Bastard Amber)	step
	3-4	Filter 25 (Sunset Red)	step
	5-6	Filter 19 (Fire)	step
	7-8	Filter 26 (Bright Red)	step
	9-10	Filter 58 (Lavender)	step
	11-12	Filter 68 (Sky Blue)	step
	13-14	Filter 36 (Medium Pink)	step
	15-16	Filter 89 (Moss Green)	step
	17-18	Filter 88 (Lime Green)	step
	19-20	Filter 90 (Dark Yellow Green)	step
	21-22	Filter 49 (Medium Purple)	step
	23-24	Filter 52 (Light Lavender)	step
	25-26	Filter 102 (Light Amber)	step
	27-28	Filter 103 (Straw)	step
	29-30	Filter 140 (Summer Blue)	step
	31-32	Filter 124 (Dark Green)	step
	33-34	Filter 106 (Primary Red)	step
	35-36	Filter 111 (Dark Pink)	step
	37-38	Filter 115 (Peacock Blue)	step
	39-40	Filter 126 (Mauve)	step
	41-42	Filter 117 (Steel Blue)	step
	43-44	Filter 118 (Light Blue)	step
	45-46	Filter 122 (Fern Green)	step
	47-48	Filter 182 (Light Red)	step
	49-50	Filter 121 (Filter Green)	step
	51-52	Filter 128 (Bright Pink)	step
	53-54	Filter 131 (Marine Blue)	step
	55-56	Filter 132 (Medium Blue)	step

Mode/Total channels **1/28**	**DMX Value**	**Function**	**Type of control**
	57-58	Filter 134 (Golden Amber)	step
	59-60	Filter 135 (Deep Golden Amber)	step
	61-62	Filter 136 (Pale Lavender)	step
	63-64	Filter 137 (Special Lavender)	step
	65-66	Filter 138 (Pale Green)	step
	67-68	Filter 798 (Chrysalis Pink)	step
	69-70	Filter 141 (Bright Blue)	step
	71-72	Filter 147 (Apricot)	step
	73-74	Filter 148 (Bright Rose)	step
	75-76	Filter 152 (Pale Gold)	step
	77-78	Filter 154 (Pale Rose)	step
	79-80	Filter 157 (Pink)	step
	81-82	Filter 143 (Pale Navy Blue)	step
	83-84	Filter 162 (Bastard Amber)	step
	85-86	Filter 164 (Flame Red)	step
	87-88	Filter 165 (Daylight Blue)	step
	89-90	Filter 169 (Lilac Tint)	step
	91-92	Filter 170 (Deep Lavender)	step
	93-94	Filter 172 (Lagoon Blue)	step
	95-96	Filter 194 (Surprise Pink)	step
	97-98	Filter 180 (Dark Lavender)	step
	99-100	Filter 181 (Congo Blue)	step
	101-102	Filter 197 (Alice Blue)	step
	103-104	Filter 201 (Full C.T. Blue)	step
	105-106	Filter 202 (Half C.T. Blue)	step
	107-108	Filter 203 (Quarter C.T. Blue)	step
	109-110	Filter 204 (Full C.T. Orange)	step
	111-112	Filter 219 (Fluorescent Green)	step
	113-114	Filter 206 (Quarter C.T. Orange)	step
	115-116	Filter 247 (Filter Minus Green)	step
	117-118	Filter 248 (Half Minus Green)	step
	119-120	Filter 281 (Three Quarter C.T. Blue)	step
	121-122	Filter 285 (Three Quarter C.T. Orange)	step
	123-124	Filter 352 (Glacier Blue)	step
	125-126	Filter 353 (Lighter Blue)	step
	127-128	Filter 507 (Madge)	step
	129-130	Filter 778 (Millennium Gold)	step
	131-132	Filter 793 (Vanity Fair)	step
	133-235	Raw DMX	proportional
	236-245	Rainbow effect (with fade time) from slow-> fast	proportional
	246-255	Rainbow effect (without fade time) from slow-> fast	proportional
5		**Red/Cyan (8 bit)* - all zones**	
	0 - 255	Colour saturation control coarse 0-100% (255=default)	proportional
6		**Red/Cyan (16bit)* - all zones**	
	0 - 255	Colour saturation control fine (255=default)	proportional
7		**Green/Magenta (8 bit)* - all zones**	
	0 - 255	Colour saturation control coarse 0-100% (255=default)	proportional
8		**Green/Magenta (16bit)*- all zones**	
	0 - 255	Colour saturation control fine (255=default)	proportional

Mode/Total channels **1/28**	**DMX Value**	**Function**	**Type of control**
9		**Blue/Yellow (8 bit)*- all zones**	
	0 - 255	Colour saturation control coarse 0-100% (255=default)	proportional
10		**Blue/ Yellow (16bit)* - all zones**	
	0 - 255	Colour saturation control fine (255=default)	proportional
11		**White (8 bit)* - all zones**	
		If RGBW mode is selected:	
	0-255	Colour saturation control coarse 0-100% (255=default)	proportional
		If CMY mode is selected:	
	0 - 255	No function	
12		**White (16 bit)* - all zones**	
	0 - 255	Colour saturation control fine (255=default)	proportional
13		**CTO (all zones)**	
		If function "White Point 8000K" is On:	
	0-255	Col. temperature correction from 8000K to 2700K -for whites only	proportional
		(0=8000K, 64=5600K, 128=4200K, 192=3200K, 255=2700K)	
		To get colour temperatures stated above, RGBW channels have to be set at the same value e.g. 255DMX (0=default)	
		If function "White Point 8000K" is Off:	
	0-255	*Colour temperature correction for from cool white to 2700K*	proportional
14		**Green correction - all zones**	
	0	Uncorrected white	step
	1-127	Minus green --> uncorrected white	proportional
	128	Uncorrected white (128=default)	step
	129-255	Uncorrected white --> Plus green	proportional
15		**Colour Mix control**	
		Defines relation between Virtual Colour wheel and Colour channels	
		"Virtual" = Virtual Colour Wheel	
		"Colour mix" = Colour channels (CMY/RGBW/CTO)	
	0-9	"Virtual " has priority over "Colour mix" (0=default)	
	10-19	Maximum mode (highest values have priority)	step
	20-29	Minimum mode (lowest values have priority)	step
	30-39	Multiply mode (multiply "Virtual" and "Colour mix")	step
	40-49	Addition mode ("Virtual" + "Colour mix")	step
	50-59	Subtraction mode ("Virtual" – "Colour mix")	step
	60-69	Inverted Subtraction mode ("Colour mix"-"Virtual")	step
	70-79	White Point Off (CTO+Green Cor.+Virtual Colour Wheel deactivated)	step
	80-128	Reserved	
	129	Crossfade "Virtual" only	step
	130-254	Crossfade between "Virtual" and "Colour mix"	proportional
	255	Crossfade "Colour mix" only	step
16		**Colour Mix control zones**	
		The channel defines relation between Virtual colour wheel + Colour channels and zones	
		"Global" = Global Colours (RGBW/CMY colours, Virtual Colour Wheel, CTO)	
		"Pixel" = Zone Colours (RGBW individual zones)	
	0-9	Global colours (Global 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 (Global + Pixel) (45=default)	step

Mode/Total channels **1/28**	**DMX Value**	**Function**	**Type of control**
	50-59	Subtraction mode (Global – Pixel)	step
	60-69	Inverted Subtraction mode (Pixel – Global)	step
	70-127	Raw DMX	proportional
	128	Global colours only (Global has priority)	step
	129-254	Crossfade (crossfade between Global and Pixel)	proportional
	255	Zone colours ("Pixel" has priority)	step
17		**Blue positional light**	
	0 - 255	Blue positional light intensity 0-100% (255=default)	proportional
18		**Shutter/ strobe -all zones**	
	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
19		**Dimmer intensity (8 bit) - all zones**	
	0 - 255	Dimmer intensity from 0% to 100% (0=default)	proportional
20		**Dimmer intensity fine (16 bit) - all zones**	
	0 - 255	Fine dimming (0=default)	proportional
21		**Red zone 1**	
	0-255	Red LEDs saturation control 0-100% (0=default)	proportional
22		**Green zone 1**	
	0-255	Green LEDs saturation control 0-100% (0=default)	proportional
23		**Blue zone 1**	
	0-255	Blue LEDs saturation control 0-100% (0=default)	proportional
24		**White zone 1**	
	0-255	White LEDs saturation control 0-100% (0=default)	proportional
25		**Red zone 2**	
	0-255	Red LEDs saturation control 0-100% (0=default)	proportional
26		**Green zone 2**	
	0-255	Green LEDs saturation control 0-100% (0=default)	proportional
27		**Blue zone 2**	
	0-255	Blue LEDs saturation control 0-100% (0=default)	proportional
28		**White zone 2**	
	0-255	White LEDs saturation control 0-100% (0=default)	proportional

*Select RGBW or CMY mixing mode on channel "Power/Special functions" .