

DMX protocol

Robin BMFL Wash - DMX protocol				
version 1.4 Mode 1 - Standard 16 bit, Mode 2 - Reduced 8 bit				
Mode/channel		DMX Value	Function	Type of control
1	2			
1	1		<b>Pan</b>	
		0 - 255	Pan movement by 540°	proportional
2	2		<b>Pan Fine</b>	
		0 - 255	Fine control of pan movement	proportional
3	3		<b>Tilt</b>	
		0 - 255	Tilt movement by 270°	proportional
4	4		<b>Tilt fine</b>	
		0 - 255	Fine control of tilt movement	proportional
5	5		<b>Pan/Tilt speed , Pan/Tilt time</b>	
		0	Standard mode	step
		1	Max. Speed Mode	step
			<b>Pan/Tilt speed mode</b>	
		2 - 255	Speed from max. to min.	proportional
			<b>Pan/Tilt time mode</b>	
		2 - 255	Time from 0.2 s to 25.5 sec.	proportional
6	6		<b>Power/Special functions</b>	
		0 - 9	Reserved	
			<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 23/20 must be at range: 0-31 DMX). Corresponding menu items are temporarily overridden except DMX Input.</i>	
		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	Graphic display On	step
		25-29	Graphic display Off	step
		30-34	Reserved	
		35-39	Lamp power 1500W	step
		40-44	Lamp power 1700W	step
		45-49	Quiet mode	step
		50-54	Dimmer curve: Square law	step
		55-59	Dimmer curve: Linear	step
		60-64	Fans mode: Auto	step
		65-69	Fans mode: High	step
		70-74	Home position on	step
		75-79	Home position off	step
		80-89	Reserved	
		90 - 94	Pan/Tilt speed mode	step
		95-99	Pan/Tilt time mode	step
		100 - 104	Blackout while pan/tilt moving	step
		105 -109	Disabled blackout while pan/tilt moving	step
		110-114	Blackout while colour wheels moving	step
		115 -119	Disabled blackout while colour wheels moving	step
		120-129	Reserved	
			<i>To activate following functions, stop in DMX value for at least 3 seconds.</i>	

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		130 - 139	Lamp On	step
		140 - 149	Pan/Tilt reset	step
		150 - 159	Colour system reset	step
		160 - 169	Reserved	step
		170 - 179	Dimmer/Shutter reset	step
		180 - 189	Zoom/frost reset	step
		190 - 199	Reserved	
		200 - 209	Total reset	step
		210 - 229	Reserved	
		230 - 239	Lamp Off	step
		240 - 255	Reserved	step
<b>7</b>	<b>7</b>		<b>Colour wheel 1</b>	
			<b><i>Continual positioning</i></b>	
		0	Open/white	proportional
		18	Deep red	proportional
		37	Deep blue	proportional
		55	Orange	proportional
		73	Green	proportional
		91	Magenta	proportional
		110	Congo blue (UV)	proportional
		128-129	White	step
			<b><i>Positioning</i></b>	
		130-139	Deep red	step
		140-149	Deep blue	step
		150-159	Orange	step
		160-169	Green	step
		170-179	Magenta	step
		180-189	Congo blue (UV)	step
		190 - 215	Forwards rainbow effect from fast to slow	proportional
		216 - 217	No rotation	step
		218 - 243	Backwards rainbow effect from slow to fast	proportional
		244 - 249	Random colour selection by audio control	step
			(Set microphone sensitivity in menu „Personality“)	
		250 - 255	Auto random colour selection from fast to slow	proportional
<b>8</b>	<b>*</b>		<b>Colour wheel 1 - fine positioning</b>	
		0 - 255	Fine positioning	proportional
<b>9</b>	<b>8</b>		<b>Colour wheel 2</b>	
			<b><i>Continual positioning</i></b>	
		0	Open/white	proportional
		18	Pink	proportional
		37	Lavander	proportional
		55	Laser green	proportional
		73	CTB	proportional
		91	minus 1/1 green	proportional
		110	minus 1/2 green	proportional
		128-129	White	step
			<b><i>Positioning</i></b>	
		130-139	Pink	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		140-149	Lavander	step
		150-159	Laser green	step
		160-169	CTB	step
		170-179	minus 1/1 green	step
		180-189	minus 1/2 green	step
		190 - 215	Forwards rainbow effect from fast to slow	proportional
		216 - 217	No rotation	step
		218 - 243	Backwards rainbow effect from slow to fast	proportional
		244 - 249	Random colour selection by audio control	step
			(Set microphone sensitivity in menu „Personality“)	
		250 - 255	Auto random colour selection from fast to slow	proportional
<b>10</b>	<b>*</b>		<b>Colour wheel 2 - fine positioning</b>	
		0 - 255	Fine positioning	proportional
<b>11</b>	<b>9</b>		<b>Cyan</b>	
		0 - 255	Cyan (0-white, 255-full cyan)	proportional
<b>12</b>	<b>10</b>		<b>Magenta</b>	
		0 - 255	Magenta (0-white, 255-full magenta)	proportional
<b>13</b>	<b>11</b>		<b>Yellow</b>	
		0 - 255	Yellow (0-white, 255-full yellow)	proportional
<b>14</b>	<b>12</b>		<b>CTO filter</b>	
		0 - 255	(0-6000K, 255-2700K)	proportional
<b>15</b>	<b>13</b>		<b>CMY +CTO + CW1+CW2 macros</b>	
			See table "Colour macros" to find components of each colour	
			The following channels are disabled: 7-14 (Mode 1,3),7-12 (Mode2,4)	
		0 - 7	No function	step
		8 - 9	Colour Macro 1	step
		10-11	Colour Macro 2	step
		12-13	Colour Macro 3	step
		14-15	Colour Macro 4	step
		16-17	Colour Macro 5	step
		18-19	Colour Macro 6	step
		20-21	Colour Macro 7	step
		22-23	Colour Macro 8	step
		24-25	Colour Macro 9	step
		26-27	Colour Macro 10	step
		28-29	Colour Macro 11	step
		30-31	Colour Macro 12	step
		32-33	Colour Macro 13	step
		34-35	Colour Macro 14	step
		36-37	Colour Macro 15	step
		38-39	Colour Macro 16	step
		40-41	Colour Macro 17	step
		42-43	Colour Macro 18	step
		44-45	Colour Macro 19	step
		46-47	Colour Macro 20	step
		48-49	Colour Macro 21	step
		50-51	Colour Macro 22	step
		52-53	Colour Macro 23	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		54-55	Colour Macro 24	step
		56-57	Colour Macro 25	step
		58-59	Colour Macro 26	step
		60-61	Colour Macro 27	step
		62-63	Colour Macro 28	step
		64-65	Colour Macro 29	step
		66-67	Colour Macro 30	step
		68-69	Filter 4 (Medium Bastard Amber)	step
		70-71	Filter 10 (Medium Yellow)	step
		72-73	Filter 19 (Fire)	step
		74-75	Filter 26 (Bright Red)	step
		76-77	Filter 58 (Lavender)	step
		78-79	Filter 68 (Sky Blue)	step
		80-81	Filter 71 (Tokyo Blue)	step
		82-83	Filter 79 (Just Blue)	step
		84-85	Filter 88 (Lime Green)	step
		86-87	Filter 90 (Dark Yellow Green)	step
		88-89	Filter 100 (Spring Yellow)	step
		90-91	Filter 101 (Yellow)	step
		92-93	Filter 102 (Light Amber)	step
		94-95	Filter 103 (Straw)	step
		96-97	Filter 104 (Deep Amber)	step
		98-99	Filter 105 (Orange)	step
		100-101	Filter 106 (Primary Red)	step
		102-103	Filter 111 (Dark Pink)	step
		104-105	Filter 115 (Peacock Blue)	step
		106-107	Filter 116 (Medium Blue-Green)	step
		108-109	Filter 117 (Steel Blue)	step
		110-111	Filter 118 (Light Blue)	step
		112-113	Filter 119 (Dark Blue)	step
		114-115	Filter 120 (Deep Blue)	step
		116-117	Filter 121 (Filter Green)	step
		118-119	Filter 128 (Bright Pink)	step
		120-121	Filter 131 (Marine Blue)	step
		122-123	Filter 132 (Medium Blue)	step
		124-125	Filter 134 (Golden Amber)	step
		126-127	Filter 135 (Deep Golden Amber)	step
		128-129	Filter 136 (Pale Lavender)	step
		130-131	Filter 137 (Special Lavender)	step
		132-133	Filter 138 (Pale Green)	step
		134-135	Filter 139 (Primary Green)	step
		136-137	Filter 141 (Bright Blue)	step
		138-139	Filter 147 (Apricot)	step
		140-141	Filter 148 (Bright Rose)	step
		142-143	Filter 152 (Pale Gold)	step
		144-145	Filter 154 (Pale Rose)	step
		146-147	Filter 157 (Pink)	step
		148-149	Filter 158 (Deep Orange)	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		150-151	Filter 162 (Bastard Amber)	step
		152-153	Filter 164 (Flame Red)	step
		154-155	Filter 165 (Daylight Blue)	step
		156-157	Filter 169 (Lilac Tint)	step
		158-159	Filter 170 (Deep Lavender)	step
		160-161	Filter 172 (Lagoon Blue)	step
		162-163	Filter 179 (Chrome Orange)	step
		164-165	Filter 180 (Dark Lavender)	step
		166-167	Filter 181 (Congo Blue)	step
		168-169	Filter 197 (Alice Blue)	step
		170-171	Filter 201 (Full C.T. Blue)	step
		172-173	Filter 202 (Half C.T. Blue)	step
		174-175	Filter 203 (Quarter C.T. Blue)	step
		176-177	Filter 204 (Full C.T. Orange)	step
		178-179	Filter 205 (Half C.T. Orange)	step
		180-181	Filter 206 (Quarter C.T. Orange)	step
		182-183	Filter 247 (Filter Minus Green)	step
		184-185	Filter 248 (Half Minus Green)	step
		186-187	Filter 281 (Three Quarter C.T. Blue)	step
		188-189	Filter 285 (Three Quarter C.T. Orange)	step
		190-191	Filter 352 (Glacier Blue)	step
		192-193	Filter 353 (Lighter Blue)	step
		194-195	Filter 715 (Cabana Blue)	step
		196-197	Filter 778 (Millennium Gold)	step
		198-199	Filter 793 (Vanity Fair)	step
		200-243	Reserved	
		244 - 249	Random macro selection by audio control (Set microphone sensitivity in menu "PErsonality")	step
		250 - 255	Auto random macro selection from fast to slow	proportional
<b>16</b>	<b>14</b>		<b>Effect Speed</b>	
			<i>Speed of CMY&amp;CTO movement</i>	
		0-255	Speed of CMY+CTO movement from max. to min.	proportional
<b>17</b>	<b>15</b>		<b>CMY+CTO+Colour wheel time</b>	
		0	Function is off	step
		1 - 255	Time of CMY, CTO and Colour wheel movement (0.1sec-->25.5sec.)	proportional
<b>18</b>	<b>16</b>		<b>Zoom+Frost time</b>	
		0	Function is off	step
		1 - 255	Time of zoom and frost movement (0.1 sec-->25.5 sec.)	proportional
<b>19</b>	<b>17</b>		<b>Frost</b>	
		0-255	Frost from 0% to 100%	proportional
<b>20</b>	<b>18</b>		<b>Zoom</b>	
		0 - 255	Zoom from max. to min.beam angle	proportional
<b>21</b>	<b>*</b>		<b>Zoom - fine</b>	
		0-255	Fine zooming	proportional
<b>22</b>	<b>19</b>		<b>Edge colour correction</b>	
		0-255	Fine correction of the colour of the image edge	proportional
<b>23</b>	<b>20</b>		<b>Shutter/ strobe</b>	
		0 - 31	Shutter closed	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		32 - 63	Shutter open	step
		64 - 95	Strobe effect from slow --> fast (64-0.4Hz, 67 - 0.5Hz, 74-1Hz, 83 - 5Hz, 91 - 10Hz, 95 - 11Hz)	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, Electronic strobing „ZAP” from slow to fast	proportional
		192 - 223	Random strobe-effect from slow to fast	proportional
		224 - 255	Shutter open	step
<b>24</b>	<b>21</b>		<b>Dimmer intensity</b>	
		0 - 255	Dimmer intensity from 0% to 100%	proportional
<b>25</b>	<b>*</b>		<b>Dimmer intensity - fine</b>	
		0 - 255	Fine dimming	proportional
Copyright © 2015-2016 Robe Lighting s.r.o. - All rights reserved				
All Specifications subject to change without notice				

Colour macros								
Color name	CW1 DMX	CW1 fine DMX	CW2 DMX	CW2 fine DMX	Cyan DMX	Magenta DMX	Yellow DMX	CTO DMX
Colour Macro 1	0	0	0	0	0	116	0	95
Colour Macro 2	0	0	0	0	0	148	0	108
Colour Macro 3	0	0	0	0	0	196	0	108
Colour Macro 4	0	0	0	0	0	255	0	98
Colour Macro 5	0	0	0	0	0	255	0	215
Colour Macro 6	0	0	0	0	0	255	161	0
Colour Macro 7	0	0	0	0	0	255	210	0
Colour Macro 8	0	0	0	0	0	255	255	0
Colour Macro 9	0	0	0	0	0	220	255	0
Colour Macro 10	0	0	0	0	0	192	255	0
Colour Macro 11	0	0	0	0	0	144	255	0
Colour Macro 12	0	0	0	0	0	97	255	0
Colour Macro 13	0	0	0	0	0	0	255	95
Colour Macro 14	0	0	0	0	0	0	255	65
Colour Macro 15	0	0	0	0	0	0	255	0
Colour Macro 16	0	0	0	0	91	0	255	0
Colour Macro 17	0	0	0	0	152	0	255	0
Colour Macro 18	0	0	0	0	213	0	255	0
Colour Macro 19	0	0	0	0	255	0	231	0
Colour Macro 20	0	0	0	0	255	0	188	0
Colour Macro 21	0	0	0	0	255	0	90	0
Colour Macro 22	0	0	0	0	255	0	70	0
Colour Macro 23	0	0	0	0	255	0	0	0
Colour Macro 24	0	0	0	0	255	57	0	0
Colour Macro 25	0	0	0	0	255	83	0	0
Colour Macro 26	0	0	0	0	255	127	0	0
Colour Macro 27	0	0	0	0	255	166	0	0
Colour Macro 28	0	0	0	0	255	226	0	0
Colour Macro 29	0	0	0	0	255	255	0	0
Colour Macro 30	0	0	0	0	255	255	95	0
Filter 4 (Medium Bastard Amber)	0	0	0	0	0	94	107	0
Filter 10 (Medium Yellow)	0	0	0	0	110	0	255	0
Filter 19 (Fire)	0	0	0	0	0	222	236	0
Filter 26 (Bright Red)	175	0	0	0	0	255	221	255
Filter 58 (Lavender)	0	0	0	0	200	166	0	0
Filter 68 (Sky Blue)	0	0	0	0	226	125	0	0
Filter 71 (Tokyo Blue)	145	0	0	0	241	116	0	0
Filter 79 (Just Blue)	0	0	0	0	254	149	0	0
Filter 88 (Lime Green)	0	0	155	0	89	0	134	0
Filter 90 (Dark Yellow Green)	0	0	0	0	228	0	236	0
Filter 100 (Spring Yellow)	0	0	0	0	128	0	231	0
Filter 101 (Yellow)	0	0	0	0	97	0	245	0
Filter 102 (Light Amber)	0	0	0	0	84	0	190	0
Filter 103 (Straw)	0	0	0	0	0	52	106	0
Filter 104 (Deep Amber)	0	0	0	0	0	9	218	0
Filter 105 (Orange)	0	0	0	0	0	132	242	0

Filter 106 (Primary Red)	155	0	135	0	91	255	0	255
Filter 111 (Dark Pink)	0	0	0	0	0	152	80	0
Filter 115 (Peacock Blue)	0	0	0	0	200	0	124	0
Filter 116 (Medium Blue-Green)	0	0	0	0	236	0	145	0
Filter 117 (Steel Blue)	0	0	0	0	106	7	0	0
Filter 118 (Light Blue)	0	0	0	0	196	76	0	0
Filter 119 (Dark Blue)	0	0	145	0	238	47	0	0
Filter 120 (Deep Blue)	145	0	0	0	79	1	0	0
Filter 121 (Filter Green)	0	0	0	0	182	0	225	70
Filter 128 (Bright Pink)	0	0	0	0	89	216	0	0
Filter 131 (Marine Blue)	0	0	0	0	173	0	125	0
Filter 132 (Medium Blue)	0	0	0	0	255	136	0	0
Filter 134 (Golden Amber)	0	0	0	0	0	108	176	0
Filter 135 (Deep Golden Amber)	0	0	0	0	0	193	246	0
Filter 136 (Pale Lavender)	0	0	0	0	104	105	0	0
Filter 137 (Special Lavender)	0	0	0	0	155	117	0	0
Filter 138 (Pale Green)	0	0	0	0	143	0	179	0
Filter 139 (Primary Green)	0	0	0	0	216	0	236	0
Filter 141 (Bright Blue)	0	0	0	0	217	74	0	0
Filter 147 (Apricot)	0	0	0	0	0	99	143	0
Filter 148 (Bright Rose)	0	0	0	0	0	210	110	0
Filter 152 (Pale Gold)	0	0	0	0	0	86	103	0
Filter 154 (Pale Rose)	0	0	0	0	0	93	101	0
Filter 157 (Pink)	0	0	0	0	0	159	117	0
Filter 158 (Deep Orange)	0	0	0	0	0	156	231	0
Filter 162 (Bastard Amber)	0	0	0	0	0	83	100	0
Filter 164 (Flame Red)	0	0	0	0	0	217	210	0
Filter 165 (Daylight Blue)	0	0	0	0	191	94	0	0
Filter 169 (Lilac Tint)	0	0	0	0	76	85	0	0
Filter 170 (Deep Lavender)	0	0	0	0	118	123	0	0
Filter 172 (Lagoon Blue)	0	0	0	0	191	0	80	0
Filter 179 (Chrome Orange)	0	0	0	0	0	90	251	0
Filter 180 (Dark Lavender)	0	0	0	0	206	166	0	0
Filter 181 (Congo Blue)	145	0	145	0	131	0	103	0
Filter 197 (Alice Blue)	0	0	0	0	203	137	0	0
Filter 201 (Full C.T. Blue)	0	0	0	0	123	95	0	0
Filter 202 (Half C.T. Blue)	0	0	0	0	96	75	0	0
Filter 203 (Quarter C.T. Blue)	0	0	0	0	73	59	0	0
Filter 204 (Full C.T. Orange)	0	0	0	0	0	71	142	0
Filter 205 (Half C.T. Orange)	0	0	0	0	0	49	106	0
Filter 206 (Quarter C.T. Orange)	0	0	0	0	0	12	93	0
Filter 247 (Filter Minus Green)	0	0	0	0	0	99	72	0
Filter 248 (Half Minus Green)	0	0	0	0	0	83	71	0
Filter 281 (Three Quarter C.T. Blue)	0	0	0	0	111	81	0	0
Filter 285 (Three Quarter C.T. Orange)	0	0	0	0	0	49	124	0
Filter 352 (Glacier Blue)	0	0	0	0	171	83	0	0
Filter 353 (Lighter Blue)	0	0	0	0	153	0	77	0
Filter 715 (Cabana Blue)	0	0	0	0	248	155	0	0
Filter 778 (Millennium Gold)	0	0	0	0	0	171	240	0
Filter 793 (Vanity Fair)	0	0	0	0	72	222	18	0