

G Wash - DMX protocol



Protocol rev. 5

Mode
Standard (16 channels)

Valid from firmware version
1.80

Channel	Name	DMX value	DMX Percentage	Description	Info	Default DMX value	Fader type		
1	SHUTTER	0	7	0,0%	2,7%	Closed		10 (3,9%)	Snap
		8	15	3,1%	5,9%	Open 1 ('Pre-Heat' Enabled)	See note ①		
		16	116	6,3%	45,5%	Strobe	Fast -> Slow		
		117	152	45,9%	59,6%	Strobe - Random	Fast -> Slow		
		153	173	60,0%	67,8%	Pulse - Open	Slow -> Fast		
		174	194	68,2%	76,1%	Pulse - Close	Slow -> Fast		
		195	220	76,5%	86,3%	Pulse - Open Random	Slow -> Fast		
		221	246	86,7%	96,5%	Pulse - Close Random	Slow -> Fast		
		247	255	96,9%	100,0%	Open 2 ('Pre-Heat' Disabled)	See note ②		
2	INTENSITY	0	255	0,0%	100,0%	No LIGHT -> Maximum LIGHT		0 (0%)	Fade
3	RED	0	255	0,0%	100,0%	No RED -> Maximum RED		0 (0%)	Fade
4	GREEN	0	255	0,0%	100,0%	No GREEN -> Maximum GREEN		0 (0%)	Fade
5	BLUE	0	255	0,0%	100,0%	No BLUE -> Maximum BLUE		0 (0%)	Fade
6	CTC	0	0	0,0%	0,0%	≈ 5600° K	Detailed information - see separate document	182 (71,3%)	Fade
		1	4	0,4%	1,6%	No CTC (RAW)			
		5	5	2,0%	2,0%	≈ 2000° K			
		15	15	5,9%	5,9%	≈ 2200° K (High Pressure Sodium Lamp)			
		40	40	15,7%	15,7%	≈ 2700° K (Incandescent Lamp)			
		54	54	21,2%	21,2%	≈ 3000° K (Halogen / Tungsten Lamp)			
		65	65	25,5%	25,5%	≈ 3200° K (Warm Metal Halide Lamp)			
		105	105	41,2%	41,2%	≈ 4000° K (Clear Metal Halide Lamp)			
		115	115	45,1%	45,1%	≈ 4200° K (Cool White Fluorescent Lamp)			
		177	177	69,4%	69,4%	≈ 5500° K (Daylight Metal Halide Lamp)			
		216	216	84,7%	84,7%	≈ 6300° K			
238	238	93,3%	93,3%	≈ 8000° K					
255	255	100,0%	100,0%	≈ 10000° K					
7	PAN	0	65535	0,0%	100,0%	-270° to 270°	-270° = Front lens @ Mains power input (Tilt = 0)	32767 (50%)	Fade
8									
9	TILT	0	65535	0,0%	100,0%	-120° to 120°	-120° = Front lens @ Base front (Pan = 32767)	32767 (50%)	Fade
10									
11	BEAM SHAPER	0	511	0,0%	0,8%	Open		0 (0%)	Fade
		512	32768	0,8%	50,0%	Index			
		32769	49151	50,0%	75,0%	Continuous Rotation CW	Fast -> Slow		
		49152	49152	75,0%	75,0%	No rotation			
12		49153	65535	75,0%	100,0%	Continuous Rotation CCW	Slow -> Fast		
13	ZOOM	0	255	0,0%	100,0%	Wide -> Narrow		128 (50%)	Fade
14	EFFECT CHANNEL	0	4	0,0%	1,6%	No Effect		0 (0%)	Snap
		5	15	2,0%	5,9%	Reserved (No function)			
		16	26	6,3%	10,2%	Reserved (No function)			
		27	32	10,6%	12,5%	Shutter Black = RED			
		33	38	12,9%	14,9%	Shutter Black = GREEN			
		39	44	15,3%	17,3%	Shutter Black = BLUE			
		45	50	17,6%	19,6%	Shutter Black = WHITE			
		51	56	20,0%	22,0%	Shutter Black = Magenta			
		57	62	22,4%	24,3%	Shutter Black = Yellow			
		63	68	24,7%	26,7%	Shutter Black = Cyan			
69	255	27,1%	100,0%	Reserved (No function)					

Channel	Name	DMX value	DMX Percentage	Description	Info	Default DMX value	Fader type		
15	APERTURE	0	7	0,0%	2,7%	Intensity Optimized	See note ⑥	0 (0%)	Snap
		8	15	3,1%	5,9%	Projection Optimized			
		16	255	6,3%	100,0%	Reserved (No function)			
16	CONTROL CHANNEL	0	4	0,0%	1,6%	No Function		0 (0%)	Snap
		5	9	2,0%	3,5%	Full Reset	Hold 3 seconds		
		10	14	3,9%	5,5%	Pan Reset	Hold 3 seconds		
		15	19	5,9%	7,5%	Tilt Reset	Hold 3 seconds		
		20	24	7,8%	9,4%	N/A			
		25	29	9,8%	11,4%	Zoom Reset	Hold 3 seconds		
		30	34	11,8%	13,3%	Sleep mode	See note ③		
		35	39	13,7%	15,3%	Display Off	Hold 3 seconds		
		40	44	15,7%	17,3%	Display On	Hold 3 seconds		
		45	115	17,6%	45,1%	LED Frequency (100 kHz - 1,41 kHz)	See note ④		
		116	119	45,5%	46,7%	Capture Scene 1	See note ⑤		
		120	123	47,1%	48,2%	Capture Scene 2			
		124	127	48,6%	49,8%	Capture Scene 3			
		128	131	50,2%	51,4%	Capture Scene 4			
		132	135	51,8%	52,9%	Capture Scene 5			
		136	139	53,3%	54,5%	Capture Scene 6			
		140	143	54,9%	56,1%	Capture Scene 7			
		144	147	56,5%	57,6%	Capture Scene 8			
		148	151	58,0%	59,2%	Capture Scene 9			
		152	155	59,6%	60,8%	Capture Scene 10			
		156	159	61,2%	62,4%	Capture Scene 11			
		160	163	62,7%	63,9%	Capture Scene 12			
		164	167	64,3%	65,5%	Capture Scene 13			
		168	171	65,9%	67,1%	Capture Scene 14			
172	175	67,5%	68,6%	Capture Scene 15					
176	179	69,0%	70,2%	Capture Scene 16					
180	183	70,6%	71,8%	Capture Scene 17					
184	187	72,2%	73,3%	Capture Scene 18					
188	191	73,7%	74,9%	Capture Scene 19					
192	195	75,3%	76,5%	Capture Scene 20					
196	199	76,9%	78,0%	Capture Scene 21					
200	203	78,4%	79,6%	Capture Scene 22					
204	207	80,0%	81,2%	Capture Scene 23					
208	211	81,6%	82,7%	Capture Scene 24					
212	255	83,1%	100,0%	Reserved (No function)					

① 'Pre-Heat' Enabled = Ready for instant operation. ② 'Pre-Heat' Disabled = To perform a complete blackout, use "Open 2". This will take 400 millisecond to exit.

③ All other channels must be zero and this has to be held for 30 seconds (fixture will wake up on a full reset).

④ Set LED frequency refresh rate, see separate documentation for frequencies, see manual for details, value must be held to keep setting (default value 1,41 kHz).

⑤ Hold for 3 sec to capture scenes for internal program (stand-alone operation) see user manual for details.

⑥ Aperture settings can be set for two scenarios, optimized for maximum output and optimized for highest projection quality.

G Wash - DMX protocol

Protocol rev. 5



Mode
Extended (21 channels)

Valid from firmware version
1.80

Channel	Name	DMX value	DMX Percentage	Description	Info	Default DMX value	Fader type		
1	SHUTTER	0	7	0,0%	2,7%	Closed		10 (3,9%)	Snap
		8	15	3,1%	5,9%	Open 1 ('Pre-Heat' Enabled)	See note ①		
		16	116	6,3%	45,5%	Strobe	Fast -> Slow		
		117	152	45,9%	59,6%	Strobe - Random	Fast -> Slow		
		153	173	60,0%	67,8%	Pulse - Open	Slow -> Fast		
		174	194	68,2%	76,1%	Pulse - Close	Slow -> Fast		
		195	220	76,5%	86,3%	Pulse - Open Random	Slow -> Fast		
		221	246	86,7%	96,5%	Pulse - Close Random	Slow -> Fast		
		247	255	96,9%	100,0%	Open 2 ('Pre-Heat' Disabled)	See note ②		
2 3	INTENSITY	0	65535	0,0%	100,0%	No LIGHT -> Maximum LIGHT		0 (0%)	Fade
4 5	RED	0	65535	0,0%	100,0%	No RED -> Maximum RED		0 (0%)	Fade
6 7	GREEN	0	65535	0,0%	100,0%	No GREEN -> Maximum GREEN		0 (0%)	Fade
8 9	BLUE	0	65535	0,0%	100,0%	No BLUE -> Maximum BLUE		0 (0%)	Fade
10	CTC	0	0	0,0%	0,0%	≈ 5600° K	Detailed information - see separate document	182 (71,3%)	Fade
		1	4	0,4%	1,6%	No CTC (RAW)			
		5	5	2,0%	2,0%	≈ 2000° K			
		15	15	5,9%	5,9%	≈ 2200° K (High Pressure Sodium Lamp)			
		40	40	15,7%	15,7%	≈ 2700° K (Incandescent Lamp)			
		54	54	21,2%	21,2%	≈ 3000° K (Halogen / Tungsten Lamp)			
		65	65	25,5%	25,5%	≈ 3200° K (Warm Metal Halide Lamp)			
		105	105	41,2%	41,2%	≈ 4000° K (Clear Metal Halide Lamp)			
		115	115	45,1%	45,1%	≈ 4200° K (Cool White Fluorescent Lamp)			
		177	177	69,4%	69,4%	≈ 5500° K (Daylight Metal Halide Lamp)			
		216	216	84,7%	84,7%	≈ 6300° K			
238	238	93,3%	93,3%	≈ 8000° K					
255	255	100,0%	100,0%	≈ 10000° K					
11 12	PAN	0	65535	0,0%	100,0%	-270° to 270°	-270° = Front lens @ Mains power input (Tilt = 0)	32767 (50%)	Fade
13 14	TILT	0	65535	0,0%	100,0%	-120° to 120°	-120° = Front lens @ Base front (Pan = 32767)	32767 (50%)	Fade
15 16	BEAM SHAPER	0	511	0,0%	0,8%	Open		0 (0%)	Fade
		512	32768	0,8%	50,0%	Index			
		32769	49151	50,0%	75,0%	Continuous Rotation CW	Fast -> Slow		
		49152	49152	75,0%	75,0%	No rotation			
		49153	65535	75,0%	100,0%	Continuous Rotation CCW	Slow -> Fast		
17 18	ZOOM	0	65535	0,0%	100,0%	Wide -> Narrow		128 (50%)	Fade
19	EFFECT CHANNEL	0	4	0,0%	1,6%	No Effect		0 (0%)	Snap
		5	15	2,0%	5,9%	Reserved (No function)			
		16	26	6,3%	10,2%	Reserved (No function)			
		27	32	10,6%	12,5%	Shutter Black = RED			
		33	38	12,9%	14,9%	Shutter Black = GREEN			
		39	44	15,3%	17,3%	Shutter Black = BLUE			
		45	50	17,6%	19,6%	Shutter Black = WHITE			
		51	56	20,0%	22,0%	Shutter Black = Magenta			
		57	62	22,4%	24,3%	Shutter Black = Yellow			
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		69	255	27,1%	100,0%	Reserved (No function)			

Channel	Name	DMX value	DMX Percentage	Description	Info	Default DMX value	Fader type		
20	APERTURE	0	7	0,0%	2,7%	Intensity Optimized	See note 6	0 (0%)	Snap
		8	15	3,1%	5,9%	Projection Optimized			
		16	255	6,3%	100,0%	Reserved (No function)			
21	CONTROL CHANNEL	0	4	0,0%	1,6%	No Function		0 (0%)	Snap
		5	9	2,0%	3,5%	Full Reset	Hold 3 seconds		
		10	14	3,9%	5,5%	Pan Reset	Hold 3 seconds		
		15	19	5,9%	7,5%	Tilt Reset	Hold 3 seconds		
		20	24	7,8%	9,4%	N/A			
		25	29	9,8%	11,4%	Zoom Reset	Hold 3 seconds		
		30	34	11,8%	13,3%	Sleep	See note 3		
		35	39	13,7%	15,3%	Display Off	Hold 3 seconds		
		40	44	15,7%	17,3%	Display On	Hold 3 seconds		
		45	115	17,6%	45,1%	LED Frequency (100 kHz - 1,41 kHz)	See note 4		
		116	119	45,5%	46,7%	Capture Scene 1	See note 5		
		120	123	47,1%	48,2%	Capture Scene 2			
		124	127	48,6%	49,8%	Capture Scene 3			
		128	131	50,2%	51,4%	Capture Scene 4			
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		140	143	54,9%	56,1%	Capture Scene 7			
		144	147	56,5%	57,6%	Capture Scene 8			
		148	151	58,0%	59,2%	Capture Scene 9			
		152	155	59,6%	60,8%	Capture Scene 10			
		156	159	61,2%	62,4%	Capture Scene 11			
		160	163	62,7%	63,9%	Capture Scene 12			
		164	167	64,3%	65,5%	Capture Scene 13			
		168	171	65,9%	67,1%	Capture Scene 14			
172	175	67,5%	68,6%	Capture Scene 15					
176	179	69,0%	70,2%	Capture Scene 16					
180	183	70,6%	71,8%	Capture Scene 17					
184	187	72,2%	73,3%	Capture Scene 18					
188	191	73,7%	74,9%	Capture Scene 19					
192	195	75,3%	76,5%	Capture Scene 20					
196	199	76,9%	78,0%	Capture Scene 21					
200	203	78,4%	79,6%	Capture Scene 22					
204	207	80,0%	81,2%	Capture Scene 23					
208	211	81,6%	82,7%	Capture Scene 24					
212	255	83,1%	100,0%	Reserved (No function)					

1 'Pre-Heat' Enabled = Ready for instant operation. 2 'Pre-Heat' Disabled = To perform a complete blackout, use "Open 2". This will take 400 millisecond to exit.

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4 Set LED frequency refresh rate, see separate documentation for frequencies, see manual for details, value must be held to keep setting (default value 1,41 kHz).

5 Hold for 3 sec to capture scenes for internal program (stand-alone operation) see user manual for details.

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