

G-7 Spot

DMX protocol

Protocol rev. 1.4



Mode
Standard (22 channels)

Valid from firmware version
1.32

Channel	Name	DMX value		DMX percentage		Description	Info	Default DMX value	Fader type
1	Shutter	0	4	0,0%	1,6%	Closed	Slow → Fast	8 (3,1%)	Snap
		5	9	2,0%	3,5%	Open			
		10	54	3,9%	21,2%	Strobe			
		55	79	21,6%	31,0%	Random Strobe			
		80	84	31,4%	32,9%	Pulse Up			
		85	89	33,3%	34,9%	Pulse Down			
		90	94	35,3%	36,9%	Pulse Up Down			
		95	139	37,3%	54,5%	Double Strobe			
		140	184	54,9%	72,2%	Triple Strobe			
		185	224	72,5%	87,8%	Reserved			
		225	229	88,2%	89,8%	Fade Wave Up			
		230	234	90,2%	91,8%	Random Pixel			
		235	239	92,2%	93,7%	Wave Up Down			
		240	244	94,1%	95,7%	Wave Up			
		245	249	96,1%	97,6%	Wave Down			
250	255	98,0%	100,0%	Open					
2	Intensity	0	255	0,0%	100,0%	Closed → Open		0 (0%)	Fade
3	Cyan	0	255	0,0%	100,0%	0% → 100%		0 (0%)	Fade
4	Magenta	0	255	0,0%	100,0%	0% → 100%		0 (0%)	Fade
5	Yellow	0	255	0,0%	100,0%	0% → 100%		0 (0%)	Fade
6	CTO	0	244	0,0%	95,7%	0% → 100% CTO		0 (0%)	Fade
		245	255	96,1%	100,0%	CTB			
7	Color Wheel	0	9	0,0%	3,5%	Open	See note ①	0 (0%)	Snap
		10	19	3,9%	7,5%	Color 1			
		20	29	7,8%	11,4%	Color 2			
		30	39	11,8%	15,3%	Color 3			
		40	49	15,7%	19,2%	Color 4			
		50	59	19,6%	23,1%	Color 5			
		60	69	23,5%	27,1%	Macro Red			
		70	79	27,5%	31,0%	Macro Green			
		80	89	31,4%	34,9%	Macro Blue			
		90	119	35,3%	46,7%	Effect Wheel Bounce			
		120	149	47,1%	58,4%	Effect Wheel Bounce Sine			
		150	150	58,8%	58,8%	Open			
		151	164	59,2%	64,3%	Fade Open → Color 1			
		165	165	64,7%	64,7%	Color 1			
		166	179	65,1%	70,2%	Fade Color 1 → Color 2			
		180	180	70,6%	70,6%	Color 2			
		181	194	71,0%	76,1%	Fade Color 2 → Color 3			
		195	195	76,5%	76,5%	Color 3			
		196	209	76,9%	82,0%	Fade Color 3 → Color 4			
		210	210	82,4%	82,4%	Color 4			
211	224	82,7%	87,8%	Fade Color 4 → Color 5					
225	225	88,2%	88,2%	Color 5					
226	240	88,6%	94,1%	Colors Bounce					
241	255	94,5%	100,0%	Colors Bounce Sinus					
8	Pan	0	65535	0,0%	100,0%	0° → 620°		32767 (50%)	Fade
9									
10	Tilt	0	65535	0,0%	100,0%	0° → 240°		32767 (50%)	Fade
11									

Channel	Name	DMX value	DMX percentage	Description	Info	Default DMX value	Fader type		
12	Rotating Gobo Wheel	0	9	0,0%	3,5%	Open	0 (0%)	Snap	
		10	19	3,9%	7,5%	Gobo 1			
		20	29	7,8%	11,4%	Gobo 2			
		30	39	11,8%	15,3%	Gobo 3			
		40	49	15,7%	19,2%	Gobo 4			
		50	59	19,6%	23,1%	Gobo 5			
		60	69	23,5%	27,1%	Gobo 6			
		70	79	27,5%	31,0%	Open Shake			
		80	89	31,4%	34,9%	Gobo 1 Shake			Slow → Fast
		90	99	35,3%	38,8%	Gobo 2 Shake			
		100	109	3,9%	42,7%	Gobo 3 Shake			
		110	119	43,1%	46,7%	Gobo 4 Shake			
		120	129	47,1%	50,6%	Gobo 5 Shake			
		130	139	51,0%	54,5%	Gobo 6 Shake			
		140	197	54,9%	77,3%	Gobo Wheel Scroll CW			
		198	255	77,6%	100,0%	Gobo Wheel Scroll CCW			
13 14	Gobo Index / Rotation	0	511	0,0%	0,8%	No Index	0 (0%)	Fade	
		512	49151	0,8%	75,0%	0° → 620°			
		49152	57087	75,0%	87,1%	Rotation CCW			Fast → Slow
		57088	57599	87,1%	87,9%	Stop			
		57600	65535	87,9%	100,0%	Rotation CW			Slow → Fast
15	Static Gobo Wheel	0	9	0,0%	3,5%	Open	0 (0%)	Snap	
		10	19	3,9%	7,5%	Gobo 1			
		20	29	7,8%	11,4%	Gobo 2			
		30	39	11,8%	15,3%	Gobo 3			
		40	49	15,7%	19,2%	Gobo 4			
		50	59	19,6%	23,1%	Gobo 5			
		60	69	23,5%	27,1%	Gobo 6			
		70	79	27,5%	31,0%	Gobo 7			
		80	89	31,4%	34,9%	Gobo 8			
		90	99	35,3%	38,8%	Gobo 9			
		100	109	39,2%	42,7%	Open Shake			Slow → Fast
		110	119	43,1%	46,7%	Gobo 1 Shake			
		120	129	47,1%	50,6%	Gobo 2 Shake			
		130	139	51,0%	54,5%	Gobo 3 Shake			
		140	149	54,9%	58,4%	Gobo 4 Shake			
		150	159	58,8%	62,4%	Gobo 5 Shake			
		160	169	62,7%	66,3%	Gobo 6 Shake			
		170	179	66,7%	70,2%	Gobo 7 Shake			
		180	189	70,6%	74,1%	Gobo 8 Shake			
		190	199	74,5%	78,0%	Gobo 9 Shake			
		200	227	78,4%	89,0%	Gobo Wheel Scroll CW			
		228	255	89,4%	100,0%	Gobo Wheel Scroll CCW			
16	Iris	0	200	0,0%	78,4%	Open → Closed	0 (0%)	Fade	
		201	210	78,8%	82,4%	Pulse Open			
		211	220	82,7%	86,3%	Pulse Close			Slow → Fast
		221	254	86,7%	99,6%	Random			
		255	255	100,0%	100,0%	Open			
17	Prism	0	4	0,0%	1,6%	Open	0 (0%)	Fade	
		5	127	2,0%	49,8%	Index			
		128	191	50,2%	74,9%	Spin CCW			Fast → Slow
		192	192	75,3%	75,3%	No Spin			
18	Frost	0	5	0,0%	2,0%	Open	0 (0%)	Fade	
		6	255	2,4%	100,0%	0% → 100% Frost			
19	Zoom	0	255	0,0%	100,0%	0% → 100% Zoom	0 (0%)	Fade	
20	Focus	0	255	0,0%	100,0%	0% → 100% Focus	0 (0%)	Fade	
21	Macros	0	4	0,0%	1,6%	No Effect	0 (0%)	Snap	
		5	255	2,0%	100,0%	Reserved			
22	Function	0	9	0,0%	3,5%	No Function	0 (0%)	Snap	
		10	19	3,9%	7,5%	Full Reset			Hold 1 second
		20	29	7,8%	11,4%	Pan/Tilt Reset			
		30	39	11,8%	15,3%	Zoom/Focus Reset			
		40	49	15,7%	19,2%	Gobo Reset			
		50	59	19,6%	23,1%	Iris Reset			
		60	69	23,5%	27,1%	CMY-CTO Reset			
		70	79	27,5%	31,0%	Color Reset			
		80	89	31,4%	34,9%	Frost Reset			Hold 3 seconds
		90	99	35,3%	38,8%	Prism Reset			
		100	109	39,2%	42,7%	Fans Standard			
		110	119	43,1%	46,7%	Fans Silent			
		120	129	47,1%	50,6%	Fans Max			
		130	139	51,0%	54,5%	Fan Full Power			
		140	149	54,9%	58,4%	Heat Up			
150	255	58,8%	100,0%	Reserved					

Mode
Extended (29 channels)

Channel	Name	DMX value	DMX percentage	Description	Info	Default DMX value	Fader type							
1	Shutter	0	4	0,0%	1,6%	Closed	8 (3,1%)	Snap						
		5	9	2,0%	3,5%	Open								
		10	54	3,9%	21,2%	Strobe								
		55	79	21,6%	31,0%	Random Strobe			Slow → Fast					
		80	84	31,4%	32,9%	Pulse Up								
		85	89	33,3%	34,9%	Pulse Down								
		90	94	35,3%	36,9%	Pulse Up Down								
		95	139	37,3%	54,5%	Double Strobe								
		140	184	54,9%	72,2%	Triple Strobe								
		185	224	72,5%	87,8%	Reserved								
		225	229	88,2%	89,8%	Fade Wave Up								
		230	234	90,2%	91,8%	Random Pixel								
		235	239	92,2%	93,7%	Wave Up Down								
		240	244	94,1%	95,7%	Wave Up								
		245	249	96,1%	97,6%	Wave Down								
250	255	98,0%	100,0%	Open										
2 3	Intensity	0	65535	0,0%	100,0%	Closed → Open	0 (0%)	Fade						
4 5	Cyan	0	65535	0,0%	100,0%	0% → 100% Cyan	0 (0%)	Fade						
6 7	Magenta	0	65535	0,0%	100,0%	0% → 100% Magenta	0 (0%)	Fade						
8 9	Yellow	0	65535	0,0%	100,0%	0% → 100% Yellow	0 (0%)	Fade						
10 11	CTO	0	62964	0,0%	96,1%	0% → 100% CTO	0 (0%)	Fade						
62965	65535	96,1%	100,0%	CTB										
12	Color Wheel	0	9	0,0%	3,5%	Open	See note ①	0 (0%)	Snap					
		10	19	3,9%	7,5%	Color 1								
		20	29	7,8%	11,4%	Color 2								
		30	39	11,8%	15,3%	Color 3								
		40	49	15,7%	19,2%	Color 4								
		50	59	19,6%	23,1%	Color 5								
		60	69	23,5%	27,1%	Macro Red								
		70	79	27,5%	31,0%	Macro Green								
		80	89	31,4%	34,9%	Macro Blue								
		90	119	35,3%	46,7%	Effect Wheel Bounce								
		120	149	47,1%	58,4%	Effect Wheel Bounce Sinus								
		150	150	58,8%	58,8%	Open								
		151	164	59,2%	64,3%	Fade Open → Color 1								
		165	165	64,7%	64,7%	Color 1								
		166	179	65,1%	70,2%	Fade Color 1 → Color 2								
		180	180	70,6%	70,6%	Color 2								
		181	194	71,0%	76,1%	Fade Color 2 → Color 3								
		195	195	76,5%	76,5%	Color 3								
		196	209	76,9%	82,0%	Fade Color 3 → Color 4								
		210	210	82,4%	82,4%	Color 4								
		211	224	82,7%	87,8%	Fade Color 4 → Color 5								
225	225	88,2%	88,2%	Color 5										
226	240	88,6%	94,1%	Colors Bounce										
241	255	94,5%	100,0%	Colors Bounce Sine										
13 14	Pan	0	65535	0,0%	100,0%	0° → 620°	32767 (50%)	Fade						
15 16	Tilt	0	65535	0,0%	100,0%	0° → 240°	32767 (50%)	Fade						
17	Rotating Gobo Wheel	0	9	0,0%	3,5%	Open	Slow → Fast	0 (0%)	Snap					
		10	19	3,9%	7,5%	Gobo 1								
		20	29	7,8%	11,4%	Gobo 2								
		30	39	11,8%	15,3%	Gobo 3								
		40	49	15,7%	19,2%	Gobo 4								
		50	59	19,6%	23,1%	Gobo 5								
		60	69	23,5%	27,1%	Gobo 6								
		70	79	27,5%	31,0%	Open Shake								
		80	89	31,4%	34,9%	Gobo 1 Shake								
		90	99	35,3%	38,8%	Gobo 2 Shake								
		10	109	3,9%	42,7%	Gobo 3 Shake								
		110	119	43,1%	46,7%	Gobo 4 Shake								
		120	129	47,1%	50,6%	Gobo 5 Shake								
		130	139	51,0%	54,5%	Gobo 6 Shake								
		140	197	54,9%	77,3%	Gobo Wheel Scroll CW								
		198	255	77,6%	100,0%	Gobo Wheel Scroll CCW								
		18 19	Gobo Index / Rotation	0	511	0,0%				0,8%	No Index	Fast → Slow	0 (0%)	Fade
				512	49151	0,8%				75,0%	0° → 620°			
49152	57087			75,0%	87,1%	Rotation CCW								
57088	57599			87,1%	87,9%	Stop								
57600	65535			87,9%	100,0%	Rotation CW	Slow → Fast							

Channel	Name	DMX value	DMX percentage	Description	Info	Default DMX value	Fader type		
20	Static Gobo Wheel	0	9	0,0%	3,5%	Open	0 (0%)	Snap	
		10	19	3,9%	7,5%	Gobo 1			
		20	29	7,8%	11,4%	Gobo 2			
		30	39	11,8%	15,3%	Gobo 3			
		40	49	15,7%	19,2%	Gobo 4			
		50	59	19,6%	23,1%	Gobo 5			
		60	69	23,5%	27,1%	Gobo 6			
		70	79	27,5%	31,0%	Gobo 7			
		80	89	31,4%	34,9%	Gobo 8			
		90	99	35,3%	38,8%	Gobo 9			
		100	109	39,2%	42,7%	Open Shake			
		110	119	43,1%	46,7%	Gobo 1 Shake			Slow → Fast
		120	129	47,1%	50,6%	Gobo 2 Shake			
		130	139	51,0%	54,5%	Gobo 3 Shake			
		140	149	54,9%	58,4%	Gobo 4 Shake			
		150	159	58,8%	62,4%	Gobo 5 Shake			
		160	169	62,7%	66,3%	Gobo 6 Shake			
		170	179	66,7%	70,2%	Gobo 7 Shake			
		180	189	70,6%	74,1%	Gobo 8 Shake			
		190	199	74,5%	78,0%	Gobo 9 Shake			
		200	227	78,4%	89,0%	Gobo Wheel Scroll CW			
		228	255	89,4%	100,0%	Gobo Wheel Scroll CCW			
21	Iris	0	200	0,0%	78,4%	Open → Closed	0 (0%)	Fade	
		201	210	78,8%	82,4%	Pulse Open			
		211	220	82,7%	86,3%	Pulse Close			
		221	254	86,7%	99,6%	Random			
		255	255	100,0%	100,0%	Open			
22	Prism	0	4	0,0%	1,6%	Open	0 (0%)	Fade	
		5	127	2,0%	49,8%	Index			
		128	191	50,2%	74,9%	Spin CCW			Fast → Slow
		192	192	75,3%	75,3%	No Spin			
		193	255	75,7%	100,0%	Spin CW			Slow → Fast
23	Frost	0	5	0,0%	2,0%	Open	0 (0%)	Fade	
		6	255	2,4%	100,0%	0% → 100% Frost			
24	Zoom	0	65535	0,0%	100,0%	0% → 100% Zoom	0 (0%)	Fade	
26	Focus	0	65535	0,0%	100,0%	0% → 100% Focus	0 (0%)	Fade	
27									
28	Macros	0	4	0,0%	1,6%	No Macro	0 (0%)	Snap	
		5	255	2,0%	100,0%	Reserved			
		0	9	0,0%	3,5%	No Function			
29	Function	10	19	3,9%	7,5%	Full Reset	0 (0%)	Snap	
		20	29	7,8%	11,4%	Pan/Tilt Reset			
		30	39	11,8%	15,3%	Zoom/Focus Reset			
		40	49	15,7%	19,2%	Gobo Reset			
		50	59	19,6%	23,1%	Iris Reset			
		60	69	23,5%	27,1%	CMY-CTO Reset			
		70	79	27,5%	31,0%	Color Reset			
		80	89	31,4%	34,9%	Frost Reset			
		90	99	35,3%	38,8%	Prism Reset			
		100	109	39,2%	42,7%	Fans Standard			
		110	119	43,1%	46,7%	Fans Silent			
		120	129	47,1%	50,6%	Fans Max			
		130	139	51,0%	54,5%	Fan Full Power			
		140	149	54,9%	58,4%	Heat Up			See note ②
		150	255	58,8%	100,0%	Reserved			

Notes:

- ① Macro colors will override any CMY values.
- ② Use for optimal functionality in cold environments.