

# SolaSpotLED Luminaire DMX Control Protocol \*

Rev 3. October 1, 2012

Channel	Marketing Construct	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High
1	Pan	Pan Coarse	0	255	0%	100%	00h	FFh
2	Pan	Pan Fine	0	255	0%	100%	00h	FFh
3	Tilt	Tilt Coarse	0	255	0%	100%	00h	FFh
4	Tilt	Tilt Fine	0	255	0%	100%	00h	FFh
5	Static Color Function	Full Speed Control						
		Indexed	0	15	0%	6%	00h	0Fh
		Forward Spin	16	31	6%	12%	10h	1Fh
		Reverse Spin	32	47	13%	18%	20h	2Fh
		Continuous	48	63	19%	25%	30h	3Fh
		Fast Scan	64	79	25%	31%	40h	4Fh
		Random	80	95	31%	37%	50h	5Fh
		TBD	96	127	38%	50%	60h	7Fh
6	Static Color Position	Indexed & Scan modes						
		Position 1 (Open)	0	15	0%	6%	00h	0Fh
		Red	16	47	6%	18%	10h	2Fh
		Blue	48	79	19%	31%	30h	4Fh
		Green	80	111	31%	44%	50h	6Fh
		Yellow	112	143	44%	56%	70h	8Fh
		Magenta	144	175	56%	69%	90h	AFh
		Orange	176	207	69%	81%	B0h	CFh
		Cyan	208	239	82%	94%	D0h	EFh
		Reserved (open)	240	271	94%	106%	F0h	#NUM!
		Position 1 (Open)	272	255	107%	100%	#NUM!	FFh
		Spin & Random modes						
		Stop	0		0%	0%	00h	00h
		Slowest to fastest	255		100%	0%	FFh	00h
Continuous mode								
Positioning from 0-360 degrees	0	255	0%	100%	00h	FFh		
7	Static Gobo Function	Full Speed Control						
		Indexed	0	15	0%	6%	00h	0Fh
		Forward Spin	16	31	6%	12%	10h	1Fh
		Reverse Spin	32	47	13%	18%	20h	2Fh
		Continuous	48	63	19%	25%	30h	3Fh
		Slow Scan	64	79	25%	31%	40h	4Fh
		Fast Scan	80	95	31%	37%	50h	5Fh
		Random	96	111	38%	44%	60h	6Fh
		Blink	112	127	44%	50%	70h	7Fh

8	Static Gobo Position	Indexed, Scan & Blink modes						
		Position 1 (Open)	0	31	0%	12%	00h	1Fh
		Position 2 (Burst)	32	63	13%	25%	20h	3Fh
		Position 3 (Bars)	64	95	25%	37%	40h	5Fh
		Position 4 (Bolt)	96	127	38%	50%	60h	7Fh
		Position 5 (Foliage)	128	159	50%	62%	80h	9Fh
		Position 6 (Tunnel)	160	191	63%	75%	A0h	BFh
		Position 7 (Stars)	192	223	75%	87%	C0h	DFh
		Position 8 (Crosshatch)	224	255	88%	100%	E0h	FFh
		Spin & Random modes						
Rotate Stop	0	3	0%	1%	00h	03h		
Slowest to fastest	4	255	2%	100%	04h	FFh		
9	Rotating Gobo Function	Full Speed Control						
		Indexed	0	15	0%	6%	00h	0Fh
		Forward Wheel Spin	16	31	6%	12%	10h	1Fh
		Reverse Wheel Spin	32	47	13%	18%	20h	2Fh
		Scan	48	63	19%	25%	30h	3Fh
		Random	64	79	25%	31%	40h	4Fh
		TBD	80	95	31%	37%	50h	5Fh
		TBD/Indexed	96	127	38%	50%	60h	7Fh
10	Rotating Gobo Position	Position 1 (Open)	0	15	0%	6%	00h	0Fh
		Position 2 (Strokes)	16	47	6%	18%	10h	2Fh
		Position 3 (Shapes)	48	79	19%	31%	30h	4Fh
		Position 4 (Psycho Tunnel)	80	111	31%	44%	50h	6Fh
		Position 5 (In Stars)	112	143	44%	56%	70h	8Fh
		Position 6 (Red Rings)	144	175	56%	69%	90h	AFh
		Position 7 (Gatlin Gun)	176	207	69%	81%	B0h	CFh
		Position 8 (PsyDye Red/Yellow)	208	255	82%	100%	D0h	FFh
		Spin & Random modes						
		Rotate Stop	0	3	0%	1%	00h	03h
Slowest to fastest	4	255	2%	100%	04h	FFh		
11	Rotating Gobo Rotate Function	Full Speed Control						
		Indexed	0	15	0%	6%	00h	0Fh
		Forward Rotate	16	31	6%	12%	10h	1Fh
		Reverse Rotate	32	47	13%	18%	20h	2Fh
		TBD	48	63	19%	25%	30h	3Fh
		Forward Animate Rotate	64	79	25%	31%	40h	4Fh
		Reverse Animate Rotate	80	95	31%	37%	50h	5Fh
		Reserved	96	127	38%	50%	60h	7Fh
12	Rotating Gobo Rotate Coarse	Indexed Mode						
		Position 0-360 degrees	0	255	0%	100%	00h	FFh
		Forward/Reverse/Forward Animate/Reverse Animate Rotate Modes						
		Rotate Stop	0	3	0%	1%	00h	03h
Rotate Slowest to Fastest	4	255	2%	100%	04h	FFh		
13	Rotating Gobo Rotate Fine	Indexed Mode						
		Low Order Byte 0-360 degrees	0	255	0%	100%	00h	FFh
14	Prisim Function	Disengaged	0	31	0%	12%	00h	1Fh
		Forward Spin	32	47	13%	18%	20h	2Fh
		Reverse Spin	48	63	19%	25%	30h	3Fh
		Reserved	64	255	25%	100%	40h	FFh

15	Prism Rotate	Forward/Reverse/Forward Animate/Reverse Animate Rotate Modes						
		Rotate Stop	0	3	0%	1%	00h	03h
16	Focus Coarse	Rotate Slowest to Fastest	4	255	2%	100%	04h	FFh
		Focus In	0		0%		00h	
17	Focus Fine	Focus Out	255		100%		FFh	
		Focus In	0		0%		00h	
18	Zoom Coarse	Focus Out	255		100%		FFh	
		Zoom In	0		0%		00h	
19	Zoom Fine	Zoom Out	255		100%		FFh	
		Zoom In	0		0%		00h	
20	Iris	Zoom Out	255		100%		FFh	
		Iris Closed	0		0%		00h	
21	Shutter/ Lamp Function	Iris Open	255		100%		FFh	
		Normal Shutter Functions	0	31	0%	12%	00h	1Fh
		Random Random strobe	32	63	13%	25%	20h	3Fh
		Synchronous Random Strobe	64	95	25%	37%	40h	5Fh
22	Shutter	Normal Shutter Functions	96	255	38%	100%	60h	FFh
		Normal/Random/Sync Random shutter functions.						
		Close	0	23	0%	9%	00h	17h
		Strobe Rate (slow to fast)	24	229	9%	90%	18h	E5h
23	Dim Coarse	Open	230	255	90%	100%	E6h	FFh
		Close	0		0%		00h	
24	Dim Fine	Open	255		100%		FFh	
		Close	0		0%		00h	
25	Mspeed	Open	255		100%		FFh	
		Disable	0	3	0%	1%	00h	03h
		Longest (252.7 seconds)	4		2%		04h	
26	Control	Shortest (0.15 seconds)	255		100%		FFh	
		The Control channel should not be crossfaded. No shutter channel requirement.						
		Safe (normal operation )	0	9	0%	4%	00h	09h
		Shutter channel to 0 for access to the following commands.						
		Display Off (send 20 packets)	20	28	8%	11%	14h	1Ch
		Display On (send 20 packets)	40	48	16%	19%	28h	30h
		Home All (send 20 packets)	60	68	24%	27%	3Ch	44h
		Lamp On (send 20 packets)	80	88	31%	35%	50h	58h
		Lamp Off (send 20 packets)	90	98	35%	38%	5Ah	62h
		Shutdown (send 80 packets)	120	130	47%	51%	78h	82h
		Position Home (send 20 packets)	131	140	51%	55%	83h	8Ch
		Color Home (send 20 packets)	141	150	55%	59%	8Dh	96h
		Gobo Home (send 20 packets)	151	160	59%	63%	97h	A0h
		Shutter & Dimmer Home (send 20 packets)	161	170	63%	67%	A1h	AAh
		Other Motor Home (send 20 packets)	171	180	67%	71%	ABh	B4h
		Audio Sync (send 20 packets)	181	190	71%	75%	B5h	BEh
27	Indigo Highlighter Function	No shutter channel requirement.						
		TBD	191	255	75%	100%	BFh	FFh
		Indigo Highlighter Dim Tracking Mode						
		Continuous	0	15	0%	6%	00h	0Fh
		Periodic Strobe (slow to fast)	16	41	6%	16%	10h	29h
		TBD	42	127	16%	50%	2Ah	7Fh
		Indigo Highlighter Independent Dim Mode						
Continuous	128	143	50%	56%	80h	8Fh		
Periodic Strobe (slow to fast)	144	169	56%	66%	90h	A9h		
28	Indigo Highlighter Dim	TBD	170	255	67%	100%	AAh	FFh
		Indigo Highslighter Off	0		0%		00h	
		Indigo Highlighter 100%	255		100%	FFh		

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