

# SolaWash 37 DMX Control Protocol \*

Revision 1.0.1

20-May-15

## Revision History

Revision	Revision Notes
0.0.1	First Pass - 25 May 12
0.0.2	2nd pass - 13 Nov 12
0.0.3	Image Chase Fade removed, range corrections, RGBW removed from mapping protocol -21 Nov 12
0.0.4	color correction, control channel changed - 7 Mar 13
0.0.5	color correction changed - 19 Mar 13
0.0.6	Cycle & random color control corrected - 3 Jul 13
1.0.0	Added controller defaults to all parameters - 11 May 15
1.0.1	Protocol formatting clean up - 20 May 15

Standard Protocol	
Channel	Construct
1	Pan
2	Pan
3	Tilt
4	Tilt
5	Color Function
6	Red
7	Green
8	Blue
9	White
10	Color Correction
11	Zoom coarse
12	Zoom Fine
13	Strobe
14	Dim Coarse
15	Dim Fine
16	Image
17	Image Play Speed
18	Mspeed
19	Control
20	Indigo Highlighter Function
21	Indigo Highlighter Dim

Zones Protocol	
Channel	Construct
1	Pan
2	Pan
3	Tilt
4	Tilt
5	Color Correction
6	Zoom coarse
7	Zoom Fine
8	Strobe
9	Dim Coarse
10	Dim Fine
11	Mspeed
12	Control
13	Color Function
14	Red (zone 1)
15	Green (zone 1)
16	Blue (zone 1)
17	White (zone 1)
18	Red (zone 2)
19	Green (zone 2)
20	Blue (zone 2)
21	White (zone 2)
22	Red (zone 3)
23	Green (zone 3)
24	Blue (zone 3)
25	White (zone 3)
26	Red (zone 4)
27	Green (zone 4)
28	Blue (zone 4)
29	White (zone 4)
30	Indigo Highlighter Function
31	Indigo Highlighter Dim

Reduced Protocol	
Channel	Construct
1	Pan
2	Pan
3	Tilt
4	Tilt
5	Color Function
6	Red
7	Green
8	Blue
9	White
10	Color Correction
11	Zoom coarse
12	Zoom Fine
13	Strobe
14	Dim Coarse
15	Dim Fine
16	Mspeed
17	Control
18	Indigo Highlighter Function
19	Indigo Highlighter Dim

Mapping Protocol	
Channel	Construct
1	Pan
2	Pan
3	Tilt
4	Tilt
5	Color Correction
6	Zoom coarse
7	Zoom Fine
8	Strobe
9	Dim Coarse
10	Dim Fine
11	Mspeed
12	Control
13	LED 1 Red
14	LED 1 Green
15	LED 1 Blue
16	LED 1 White
17	LED 2 Red
18	LED 2 Green
19	LED 2 Blue
20	LED 2 White
21	LED 3 Red
22	LED 3 Green
23	LED 3 Blue
24	LED 3 White
25	LED 4 Red
26	LED 4 Green
27	LED 4 Blue
28	LED 4 White

29	LED 5 Red
30	LED 5 Green
31	LED 5 Blue
32	LED 5 White
33	LED 6 Red
34	LED 6 Green
35	LED 6 Blue
36	LED 6 White
37	LED 7 Red
38	LED 7 Green
39	LED 7 Blue
40	LED 7 White
41	LED 8 Red
42	LED 8 Green
43	LED 8 Blue
44	LED 8 White
45	LED 9 Red
46	LED 9 Green
47	LED 9 Blue
48	LED 9 White
49	LED 10 Red
50	LED 10 Green
51	LED 10 Blue
52	LED 10 White
53	LED 11 Red
54	LED 11 Green
55	LED 11 Blue
56	LED 11 White
57	LED 12 Red
58	LED 12 Green
59	LED 12 Blue
60	LED 12 White
61	LED 13 Red
62	LED 13 Green
63	LED 13 Blue
64	LED 13 White
65	LED 14 Red
66	LED 14 Green
67	LED 142 Blue
68	LED 14 White
69	LED 15 Red
70	LED 15 Green
71	LED 15 Blue
72	LED 15 White
73	LED 16 Red
74	LED 16 Green
75	LED 16 Blue
76	LED 16 White
77	LED 17 Red
78	LED 17 Green
79	LED 17 Blue
80	LED 17 White

81	LED 18 Red
82	LED 18 Green
83	LED 18 Blue
84	LED 18 White
85	LED 19 Red
86	LED 19 Green
87	LED 19 Blue
88	LED 19 White
89	LED 20 Red
90	LED 20 Green
91	LED 20 Blue
92	LED 20 White
93	LED 21 Red
94	LED 21 Green
95	LED 21 Blue
96	LED 21 White
97	LED 22 Red
98	LED 22 Green
99	LED 22 Blue
100	LED 22 White
101	LED 23 Red
102	LED 23 Green
103	LED 23 Blue
104	LED 23 White
105	LED 24 Red
106	LED 24 Green
107	LED 24 Blue
108	LED 24 White
109	LED 25 Red
110	LED 25 Green
111	LED 25 Blue
112	LED 25 White
113	LED 26 Red
114	LED 26 Green
115	LED 26 Blue
116	LED 26 White
117	LED 27 Red
118	LED 27 Green
119	LED 27 Blue
120	LED 27 White
121	LED 28 Red
122	LED 28 Green
123	LED 28 Blue
124	LED 28 White
125	LED 29 Red
126	LED 29 Green
127	LED 29 Blue
128	LED 29 White
129	LED 30 Red
130	LED 30 Green
131	LED 30 Blue
132	LED 30 White

133	LED 31 Red
134	LED 31 Green
135	LED 31 Blue
136	LED 31 White
137	LED 32 Red
138	LED 32 Green
139	LED 32 Blue
140	LED 32 White
141	LED 33 Red
142	LED 33 Green
143	LED 33 Blue
144	LED 33 White
145	LED 34 Red
146	LED 34 Green
147	LED 34 Blue
148	LED 34 White
149	LED 35 Red
150	LED 35 Green
151	LED 35 Blue
152	LED 35 White
153	LED 36 Red
154	LED 36 Green
155	LED 36 Blue
156	LED 36 White
157	LED 37 Red
158	LED 37 Green
159	LED 37 Blue
160	LED 37 White
161	Indigo Highlighter Function
162	Indigo Highlighter Dim

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## SolaWash 37 Luminaire Standard DMX Control Protocol \*

Channel	Marketing Construct	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Console Defaults
1	Pan	Pan Coarse	0	255	0%	100%	00h	FFh	128
2	Pan	Pan Fine	0	255	0%	100%	00h	FFh	0
3	Tilt	Tilt Coarse	0	255	0%	100%	00h	FFh	128
4	Tilt	Tilt Fine	0	255	0%	100%	00h	FFh	0
5	Color Function	Full Speed Control							24
		RGB	0	23	0%	9%	00h	17h	
		CMY	24	47	9%	18%	18h	2Fh	
		Cycle	48	79	19%	31%	30h	4Fh	
		Random	80	127	31%	50%	50h	7Fh	
		Reserved	128	255	50%	100%	80h	FFh	
6	Red	RGB Control							0
		Red Off	0		0%		00h		
		Red Full Saturation	255		100%		FFh		
		CMY Control							
		Cyan Off	0		0%		00h		
		Cyan Full Saturation	255		100%		FFh		
		Cycle and Random Control							
		Slow cycle	0		0%		00h		
Fast cycle	255		100%		FFh				
7	Green	RGB Control							0
		Green Off	0		0%		00h		
		Green Full Saturation	255		100%		FFh		
		CMY Control							
		Magenta Off	0		0%		00h		
		Magenta Full Saturation	255		100%		FFh		
8	Blue	RGB Control							0
		Blue Off	0		0%		00h		
		Blue Full Saturation	255		100%		FFh		
		CMY Control							
		Yellow Off	0		0%		00h		
		Yellow Full Saturation	255		100%		FFh		
9	White	Off	0		0%		00h		0
		Full Saturation	255		100%		FFh		
10	Color Correction	Off	0		0%		00h		0
		Color Temperature low to normal	1	255	0%	100%	01h	FFh	
11	Zoom coarse	Zoom In	0		0%		00h		127
		Zoom Out	255		100%		FFh		
12	Zoom Fine	Zoom In	0		0%		00h		255
		Zoom Out	255		100%		FFh		
13	Strobe	Off	0	0	0%	0%	00h	00h	0
		Synchronous strobe slow to fast	1	100	0%	39%	01h	64h	
		Random Random strobe	101	177	40%	69%	65h	B1h	
		Synchronous Random Strobe	178	254	70%	100%	B2h	FEh	
		Off	255	255	100%	100%	FFh	FFh	
14	Dim Coarse	Close	0		0%		00h		0
		Open	255		100%		FFh		
15	Dim Fine		0		0%		00h		0
			255		100%		FFh		

16	Image	Solid (all pixels)	0	0	0%	0%	00h	00h	0
		Unique Static Image	1	102	0%	40%	01h	66h	
		Unique Animation	128	131	50%	51%	80h	83h	
			132	135	52%	53%	84h	87h	
			136	139	53%	55%	88h	8Bh	
			140	143	55%	56%	8Ch	8Fh	
			144	147	56%	58%	90h	93h	
			148	151	58%	59%	94h	97h	
			152	155	60%	61%	98h	9Bh	
			156	159	61%	62%	9Ch	9Fh	
			160	163	63%	64%	A0h	A3h	
			164	167	64%	65%	A4h	A7h	
			168	171	66%	67%	A8h	ABh	
			172	175	67%	69%	ACH	AFh	
			176	179	69%	70%	B0h	B3h	
			180	183	71%	72%	B4h	B7h	
			184	187	72%	73%	B8h	BBh	
			188	191	74%	75%	BCh	BFh	
			192	195	75%	76%	C0h	C3h	
			196	199	77%	78%	C4h	C7h	
			200	203	78%	80%	C8h	CBh	
			204	207	80%	81%	CCh	CFh	
			208	211	82%	83%	D0h	D3h	
			212	215	83%	84%	D4h	D7h	
			216	219	85%	86%	D8h	DBh	
			220	223	86%	87%	DCh	DFh	
			224	227	88%	89%	E0h	E3h	
	228	231	89%	91%	E4h	E7h			
	232	235	91%	92%	E8h	EBh			
	236	239	93%	94%	ECh	EFh			
	240	243	94%	95%	F0h	F3h			
	244	247	96%	97%	F4h	F7h			
	Solid (all pixels)	248	255	97%	100%	F8h	FFh		
17	Image Play Speed	Normal Speed	0	0	0%	0%	00h	00h	128
		Stop	1	1	0%	0%	01h	01h	
		Slowest speed increasing to normal	2	127	1%	50%	02h	7Fh	
		Normal Speed	128	128	50%	50%	80h	80h	
		Normal speed increasing to fastest	129	255	51%	100%	81h	FFh	
18	Mspeed	Disable	0	3	0%	1%	00h	03h	0
		Longest (252.7 seconds)	4		2%		04h		
		Shortest (0.15 seconds)	255		100%		FFh		



19	Control	The Control channel should not be crossfaded. No shutter channel requirement.							0
		Safe (normal operation )	0	9	0%	4%	00h	09h	
		Reserved	10	19	4%	7%	0Ah	###	
		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)	29	48	11%	19%	1Dh	30h	
		Home All (send 20 packets)	49	68	19%	27%	31h	44h	
		Shutdown (send 80 packets)	69	130	27%	51%	45h	82h	
		Position Home (send 20 packets)	131	140	51%	55%	83h	8Ch	
		Other Motor Home (send 20 packets)	141	150	55%	59%	8Dh	96h	
		Audio Sync (send 20 packets)	151	160	59%	63%	97h	A0h	
		No shutter channel requirement.							
		Internal Prog 1 scene 1-8 EEPROM	161	171	63%	67%	A1h	ABh	
		Internal Prog 2 scene 9-16 EEPROM	172	182	67%	71%	ACh	B6h	
		Internal Prog 3 scene 17-24 EEPROM	183	193	72%	76%	B7h	C1h	
		Internal Prog 4 scene 25-32 EEPROM	194	204	76%	80%	C2h	CCh	
		Internal Prog 5 scene 33-40 EEPROM	205	215	80%	84%	CDh	D7h	
Internal Prog 6 scene 41-48 EEPROM	216	226	85%	89%	D8h	E2h			
Internal Prog 7 scene 49-56 EEPROM	227	237	89%	93%	E3h	EDh			
TBD	238	255	93%	100%	EEh	FFh			
20	Indigo Highlighter Function	Indigo Highlighter Dim Tracking Mode							0
		Continuous	0	15	0%	6%	00h	0Fh	
		Periodic Strobe (slow to fast)	16	41	6%	16%	10h	29h	
		Random Strobe (slow to fast)	42	67	16%	26%	2Ah	43h	
		TBD	68	127	27%	50%	44h	7Fh	
		Indigo Highlighter Independent Dim Mode							
		Continuous	128	143	50%	56%	80h	8Fh	
		Periodic Strobe (slow to fast)	144	169	56%	66%	90h	A9h	
		Random Strobe (slow to fast)	170	195	67%	76%	AAh	C3h	
TBD	196	255	77%	100%	C4h	FFh			
21	Indigo Highlighter Dim	Indigo Highslihter Off	0		0%		00h	0	
		Indigo Highlighter 100%	255		100%		FFh		

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## SolaWash 37 Luminaire Zones DMX Control Protocol \*

Channel	Marketing Construct	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Console Defaults	
1	Pan	Pan Coarse	0	255	0%	100%	00h	FFh	128	
2	Pan	Pan Fine	0	255	0%	100%	00h	FFh	0	
3	Tilt	Tilt Coarse	0	255	0%	100%	00h	FFh	128	
4	Tilt	Tilt Fine	0	255	0%	100%	00h	FFh	0	
5	Color Correction	Off	0		0%		00h		0	
		Color Temperature low to normal	1	127	0%	50%	01h	7Fh		
		TBD	128	255	50%	100%	80h	FFh		
6	Zoom coarse	Zoom In	0		0%		00h		127	
		Zoom Out	255		100%		FFh			
7	Zoom Fine	Zoom In	0		0%		00h		255	
		Zoom Out	255		100%		FFh			
8	Strobe	Off	0	0	0%	0%	00h	00h	0	
		Synchronous strobe slow to fast	1	100	0%	39%	01h	64h		
		Random Random strobe	101	177	40%	69%	65h	B1h		
		Synchronous Random Strobe	178	254	70%	100%	B2h	FEh		
9	Dim Coarse	Close	0		0%		00h		0	
		Open	255		100%		FFh			
10	Dim Fine	Close	0		0%		00h		0	
		Open	255		100%		FFh			
11	Mspeed	Disable	0	3	0%	1%	00h	03h	0	
		Longest (252.7 seconds)	4		2%		04h			
		Shortest (0.15 seconds)	255		100%		FFh			
12	Control	The Control channel should not be crossfaded. No shutter channel requirement.								
		Safe (normal operation )	0	9	0%	4%	00h	09h		
		Reserved	10	19	4%	7%	0Ah	13h		
		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)	29	48	11%	19%	1Dh	30h		
		Home All (send 20 packets)	49	68	19%	27%	31h	44h		
		Shutdown (send 80 packets)	69	130	27%	51%	45h	82h		
		Position Home (send 20 packets)	131	140	51%	55%	83h	8Ch		
		Other Motor Home (send 20 packets)	141	150	55%	59%	8Dh	96h		
		Audio Sync (send 20 packets)	151	160	59%	63%	97h	A0h		
		No shutter channel requirement.								
		Internal Prog 1 scene 1-8 EEPROM	161	171	63%	67%	A1h	ABh		
		Internal Prog 2 scene 9-16 EEPROM	172	182	67%	71%	ACh	B6h		
		Internal Prog 3 scene 17-24 EEPROM	183	193	72%	76%	B7h	C1h		
		Internal Prog 4 scene 25-32 EEPROM	194	204	76%	80%	C2h	CCh		
Internal Prog 5 scene 33-40 EEPROM	205	215	80%	84%	CDh	D7h				
Internal Prog 6 scene 41-48 EEPROM	216	226	85%	89%	D8h	E2h				
Internal Prog 7 scene 49-56 EEPROM	227	237	89%	93%	E3h	EDh				
TBD	238	255	93%	100%	Eeh	FFh				
13	Color Function	All LEDs Control - adjust colors with channels 13-16								
		RGB (all zones)	0	23	0%	9%	00h	17h		
		CMY (all zones)	24	47	9%	18%	18h	2Fh		
		Cycle	48	79	19%	31%	30h	4Fh		
		Random	80	127	31%	50%	50h	7Fh		
		Zone Control - adjust colors with channels 13-28								
		Zone Pattern 1	128	137	50%	54%	80h	89h		128
		Zone Pattern 2	138	147	54%	58%	8Ah	93h		
		Zone Pattern 3	148	157	58%	62%	94h	9Dh		
		Zone Pattern 4	158	167	62%	65%	9Eh	A7h		
		Zone Pattern 5	168	177	66%	69%	A8h	B1h		
		Zone Pattern 6	178	187	70%	73%	B2h	BBh		
		Zone Pattern 7	188	197	74%	77%	BCh	C5h		
All Zones	200	255	78%	100%	C8h	FFh				

14	Red (zone1)	RGB Control					0
		Red Off all LEDs	0		0%	00h	
		Red Full Saturation all LEDs	255		100%	FFh	
		CMY Control					
		Cyan Off all LEDs	0		0%	00h	
		Cyan Full Saturation all LEDs	255		100%	FFh	
		Cycle and Random Control					
		Slow cycle	0		0%	00h	
		Fast cycle	255		100%	FFh	
		Zone Control					
Red Off all zone 1 LEDs	0		0%	00h			
Red Full Saturation all zone 1 LEDs	255		100%	FFh			
15	Green (zone1)	RGB Control					0
		Green Off all LEDs	0		0%	00h	
		Green Full Saturation all LEDs	255		100%	FFh	
		CMY Control					
		Magenta Off all LEDs	0		0%	00h	
		Magenta Full Saturation all LEDs	255		100%	FFh	
		Zone Control					
Green Off all zone 1 LEDs	0		0%	00h			
Green Full Saturation all zone 1 LEDs	255		100%	FFh			
16	Blue (zone1)	RGB Control					0
		Blue Off all LEDs	0		0%	00h	
		Blue Full Saturation all LEDs	255		100%	FFh	
		CMY Control					
		Yellow Off all LEDs	0		0%	00h	
		Yellow Full Saturation all LEDs	255		100%	FFh	
		Zone Control					
Blue Off all zone 1 LEDs	0		0%	00h			
Blue Full Saturation all zone 1 LEDs	255		100%	FFh			
17	White (zone1)	RGB, CMY, Random, Cycle Control					0
		Off all LEDs	0		0%	00h	
		Full Saturation all LEDs	255		100%	FFh	
		Zone Control					
White Off all zone 1 LEDs	0		0%	00h			
White Full Saturation all zone 1 LEDs	255		100%	FFh			
18	Red (zone2)	Red Off all zone 2 LEDs	0		0%	00h	0
		Red Full Saturation all zone 2 LEDs	255		100%	FFh	
19	Green (zone2)	Green Off all zone 2 LEDs	0		0%	00h	0
		Green Full Saturation all zone 2 LEDs	255		100%	FFh	
20	Blue (zone2)	Blue Off all zone 2 LEDs	0		0%	00h	0
		Blue Full Saturation all zone 2 LEDs	255		100%	FFh	
21	White (zone2)	Off all zone 2 LEDs	0		0%	00h	0
		Full Saturation all zone 2 LEDs	255		100%	FFh	
22	Red (zone3)	Red Off all zone 3 LEDs	0		0%	00h	0
		Red Full Saturation all zone 3 LEDs	255		100%	FFh	
23	Green (zone3)	Green Off all zone 3 LEDs	0		0%	00h	0
		Green Full Saturation all zone 3 LEDs	255		100%	FFh	
24	Blue (zone3)	Blue Off all zone 3 LEDs	0		0%	00h	0
		Blue Full Saturation all zone 3 LEDs	255		100%	FFh	
25	White (zone3)	Off all zone 3 LEDs	0		0%	00h	0
		Full Saturation all zone 3 LEDs	255		100%	FFh	
26	Red (zone4)	Red Off all zone 4 LEDs	0		0%	00h	0
		Red Full Saturation all zone 4 LEDs	255		100%	FFh	
27	Green (zone4)	Green Off zone 4 LEDs	0		0%	00h	0
		Green Full Saturation zone 4 LEDs	255		100%	FFh	
28	Blue (zone4)	Blue Off zone 4 LEDs	0		0%	00h	0
		Blue Full Saturation zone 4 LEDs	255		100%	FFh	
29	White (zone4)	Off zone 4 LEDs	0		0%	00h	0
		Full Saturation zone 4 LEDs	255		100%	FFh	

30	Indigo Highlighter Function	Indigo Highlighter Dim Tracking Mode						0	
		Continuous	0	15	0%	6%	00h		0Fh
		Periodic Strobe (slow to fast)	16	41	6%	16%	10h		29h
		Random Strobe (slow to fast)	42	67	16%	26%	2Ah		43h
		TBD	68	127	27%	50%	44h		7Fh
		Indigo Highlighter Independent Dim Mode							
		Continuous	128	143	50%	56%	80h		8Fh
		Periodic Strobe (slow to fast)	144	169	56%	66%	90h		A9h
Random Strobe (slow to fast)	170	195	67%	76%	AAh	C3h			
	TBD	196	255	77%	100%	C4h	FFh		
31	Indigo Highlighter Dim	Indigo Highslihter Off	0		0%		00h		0
		Indigo Highlighter 100%	255		100%		FFh		

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## SolaWash 37 Luminaire Reduced DMX Control Protocol \*

Channel	Marketing Construct	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Console Defaults
1	Pan	Pan Coarse	0	255	0%	100%	00h	FFh	128
2	Pan	Pan Fine	0	255	0%	100%	00h	FFh	0
3	Tilt	Tilt Coarse	0	255	0%	100%	00h	FFh	128
4	Tilt	Tilt Fine	0	255	0%	100%	00h	FFh	0
5	Color Function	Full Speed Control							24
		RGB	0	23	0%	9%	00h	17h	
		CMY	24	47	9%	18%	18h	2Fh	
		Cycle	48	79	19%	31%	30h	4Fh	
		Random	80	127	31%	50%	50h	7Fh	
Reserved	128	255	50%	100%	80h	FFh			
6	Red	RGB Control							0
		Red Off	0		0%		00h		
		Red Full Saturation	255		100%		FFh		
		CMY Control							
		Cyan Off	0		0%		00h		
		Cyan Full Saturation	255		100%		FFh		
		Cycle and Random Control							
Slow cycle	0		0%		00h				
Fast cycle	255		100%		FFh				
7	Green	RGB Control							0
		Green Off	0		0%		00h		
		Green Full Saturation	255		100%		FFh		
		CMY Control							
		Magenta Off	0		0%		00h		
Magenta Full Saturation	255		100%		FFh				
8	Blue	RGB Control							0
		Blue Off	0		0%		00h		
		Blue Full Saturation	255		100%		FFh		
		CMY Control							
		Yellow Off	0		0%		00h		
Yellow Full Saturation	255		100%		FFh				
9	White	Off	0		0%		00h		0
		Full Saturation	255		100%		FFh		
10	Color Correction	Off	0		0%		00h		0
		Color Temperature low to normal	1	255	0%	100%	01h	FFh	
11	Zoom coarse	Zoom In	0		0%		00h		127
		Zoom Out	255		100%		FFh		
12	Zoom Fine	Zoom In	0		0%		00h		255
		Zoom Out	255		100%		FFh		
13	Strobe	Off	0	0	0%	0%	00h	00h	0
		Synchronous strobe slow to fast	1	100	0%	39%	01h	64h	
		Random Random strobe	101	177	40%	69%	65h	B1h	
		Synchronous Random Strobe	178	254	70%	100%	B2h	FEh	
Off	255	255	100%	100%	FFh	FFh			
14	Dim Coarse	Close	0		0%		00h		0
		Open	255		100%		FFh		
15	Dim Fine	Close	0		0%		00h		0
		Open	255		100%		FFh		
16	Mspeed	Disable	0	3	0%	1%	00h	03h	0
		Longest (252.7 seconds)	4		2%		04h		
		Shortest (0.15 seconds)	255		100%		FFh		

17	Control	The Control channel should not be crossfaded. No shutter channel requirement.						0	
		Safe (normal operation )	0	9	0%	4%	00h		09h
		Reserved	10	19	4%	7%	0Ah		13h
		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)	29	48	11%	19%	1Dh		30h
		Home All (send 20 packets)	49	68	19%	27%	31h		44h
		Shutdown (send 80 packets)	69	130	27%	51%	45h		82h
		Position Home (send 20 packets)	131	140	51%	55%	83h		8Ch
		Other Motor Home (send 20 packets)	141	150	55%	59%	8Dh		96h
		Audio Sync (send 20 packets)	151	160	59%	63%	97h		A0h
		No shutter channel requirement.							
		Internal Prog 1 scene 1-8 EEPROM	161	171	63%	67%	A1h		ABh
		Internal Prog 2 scene 9-16 EEPROM	172	182	67%	71%	ACh		B6h
		Internal Prog 3 scene 17-24 EEPROM	183	193	72%	76%	B7h		C1h
		Internal Prog 4 scene 25-32 EEPROM	194	204	76%	80%	C2h		CCh
		Internal Prog 5 scene 33-40 EEPROM	205	215	80%	84%	CDh		D7h
Internal Prog 6 scene 41-48 EEPROM	216	226	85%	89%	D8h	E2h			
Internal Prog 7 scene 49-56 EEPROM	227	237	89%	93%	E3h	EDh			
TBD	238	255	93%	100%	EEh	FFh			
18	Indigo Highlighter Function	Indigo Highlighter Dim Tracking Mode						0	
		Continuous	0	15	0%	6%	00h		0Fh
		Periodic Strobe (slow to fast)	16	41	6%	16%	10h		29h
		Random Strobe (slow to fast)	42	67	16%	26%	2Ah		43h
		TBD	68	127	27%	50%	44h		7Fh
		Indigo Highlighter Independent Dim Mode							
		Continuous	128	143	50%	56%	80h		8Fh
		Periodic Strobe (slow to fast)	144	169	56%	66%	90h		A9h
		Random Strobe (slow to fast)	170	195	67%	76%	AAh		C3h
TBD	196	255	77%	100%	C4h	FFh			
19	Indigo Highlighter Dim	Indigo Highslihter Off	0		0%	00h		0	
		Indigo Highlighter 100%	255		100%	FFh			

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## SolaWash 37 Luminaire Mapping DMX Control Protocol \*

Channel	Marketing Construct	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Console Defaults	
1	Pan	Pan Coarse	0	255	0%	100%	00h	FFh	128	
2	Pan	Pan Fine	0	255	0%	100%	00h	FFh	0	
3	Tilt	Tilt Coarse	0	255	0%	100%	00h	FFh	128	
4	Tilt	Tilt Fine	0	255	0%	100%	00h	FFh	0	
5	Color Correction	Off	0		0%		00h	00h	0	
		Color Temperature low to normal	1	255	0%	100%	01h	FFh		
6	Zoom coarse	Zoom In	0		0%		00h		127	
		Zoom Out	255		100%		FFh			
7	Zoom Fine	Zoom In	0		0%		00h		255	
		Zoom Out	255		100%		FFh			
8	Strobe	Off	0	0	0%	0%	00h	00h	0	
		Synchronous strobe slow to fast	1	100	0%	39%	01h	64h		
		Random Random strobe	101	177	40%	69%	65h	B1h		
		Synchronous Random Strobe	178	254	70%	100%	B2h	FEh		
		Off	255	255	100%	100%	FFh	FFh		
9	Dim Coarse	Close	0		0%		00h		0	
		Open	255		100%		FFh			
10	Dim Fine	Close	0		0%		00h		0	
		Open	255		100%		FFh			
11	Mspeed	Disable	0	3	0%	1%	00h	03h	0	
		Longest (252.7 seconds)	4		2%		04h			
		Shortest (0.15 seconds)	255		100%		FFh			
12	Control	The Control channel should not be crossfaded. No shutter channel requirement.								
		Safe (normal operation )	0	9	0%	4%	00h	09h		
		Reserved	10	19	4%	7%	0Ah	13h		
		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)	29	48	11%	19%	1Dh	30h		
		Home All (send 20 packets)	49	68	19%	27%	31h	44h		
		Shutdown (send 80 packets)	120	130	47%	51%	78h	82h		
		Position Home (send 20 packets)	131	140	51%	55%	83h	8Ch		
		Other Motor Home (send 20 packets)	141	150	55%	59%	8Dh	96h		
		Audio Sync (send 20 packets)	151	160	59%	63%	97h	A0h		
		No shutter channel requirement.								
		Internal Prog 1 scene 1-8 EEPROM	161	171	63%	67%	A1h	ABh		
		Internal Prog 2 scene 9-16 EEPROM	172	182	67%	71%	ACH	B6h		
		Internal Prog 3 scene 17-24 EEPROM	183	193	72%	76%	B7h	C1h		
Internal Prog 4 scene 25-32 EEPROM	194	204	76%	80%	C2h	CCh				
Internal Prog 5 scene 33-40 EEPROM	205	215	80%	84%	CDh	D7h				
Internal Prog 6 scene 41-48 EEPROM	216	226	85%	89%	D8h	E2h				
Internal Prog 7 scene 49-56 EEPROM	227	237	89%	93%	E3h	EDh				
TBD	238	255	93%	100%	EEh	FFh				
13	LED 1	Red value for this LED	0	255	0%	100%	00h	FFh	255	
14		Green value for this LED	0	255	0%	100%	00h	FFh		
15		Blue value for this LED	0	255	0%	100%	00h	FFh		
16		White value for this LED	0	255	0%	100%	00h	FFh		
17	LED 2	Red value for this LED	0	255	0%	100%	00h	FFh	255	
18		Green value for this LED	0	255	0%	100%	00h	FFh		
19		Blue value for this LED	0	255	0%	100%	00h	FFh		
20		White value for this LED	0	255	0%	100%	00h	FFh	0	
21	LED 3	Red value for this LED	0	255	0%	100%	00h	FFh	255	
22		Green value for this LED	0	255	0%	100%	00h	FFh		
23		Blue value for this LED	0	255	0%	100%	00h	FFh		
24		White value for this LED	0	255	0%	100%	00h	FFh	0	
25	LED 4	Red value for this LED	0	255	0%	100%	00h	FFh	255	
26		Green value for this LED	0	255	0%	100%	00h	FFh		
27		Blue value for this LED	0	255	0%	100%	00h	FFh		
28		White value for this LED	0	255	0%	100%	00h	FFh	0	







149	LED 35	Red value for this LED	0	255	0%	100%	00h	FFh	255	
150		Green value for this LED	0	255	0%	100%	00h	FFh		
151		Blue value for this LED	0	255	0%	100%	00h	FFh		
152		White value for this LED	0	255	0%	100%	00h	FFh	0	
153	LED 36	Red value for this LED	0	255	0%	100%	00h	FFh	255	
154		Green value for this LED	0	255	0%	100%	00h	FFh		
155		Blue value for this LED	0	255	0%	100%	00h	FFh		
156		White value for this LED	0	255	0%	100%	00h	FFh	0	
157	LED 37	Red value for this LED	0	255	0%	100%	00h	FFh	255	
158		Green value for this LED	0	255	0%	100%	00h	FFh		
159		Blue value for this LED	0	255	0%	100%	00h	FFh		
160		White value for this LED	0	255	0%	100%	00h	FFh	0	
161	Indigo Highlighter Function	Indigo Highlighter Dim Tracking Mode								0
		Continuous	0	15	0%	6%	00h	0Fh		
		Periodic Strobe (slow to fast)	16	41	6%	16%	10h	29h		
		Random Strobe (slow to fast)	42	67	16%	26%	2Ah	43h		
		TBD	68	127	27%	50%	44h	7Fh		
		Indigo Highlighter Independent Dim Mode								
		Continuous	128	143	50%	56%	80h	8Fh		
		Periodic Strobe (slow to fast)	144	169	56%	66%	90h	A9h		
		Random Strobe (slow to fast)	170	195	67%	76%	AAh	C3h		
TBD	196	255	77%	100%	C4h	FFh				
162	Indigo Highlighter Dim	Indigo Highslihter Off	0		0%		00h		0	
		Indigo Highlighter 100%	255		100%		FFh			

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