

# SolaWash 19 DMX Control Protocol \*

Revision 1.0.0

19-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	Modified for 19 LED SolaWash
0.0.6	Modified Color Control channel - 3 Jul 13
1.0.0	Added console default values - 19 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 14 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	Indigo Highlighter Function
90	Indigo Highlighter Dim

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## SolaWash 19 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	127	0%	50%	01h	7Fh	
		TBD	128	255	50%	100%	80h	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	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.								
		Safe (normal operation)	0	9	0%	4%	00h	09h	0	
		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				

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
21	Indigo Highlighter Dim	Indigo Highlighter Off	0		0%		00h			
		Indigo Highlighter 100%	255		100%		FFh			

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## SolaWash 19 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			
		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	0		
		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	128		
		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			
		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
31	Indigo Highlighter Dim	Indigo Highslihter Off	0		0%	00h		0		
		Indigo Highlighter 100%	255		100%	FFh				

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## SolaWash 19 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	127	0%	50%	01h	7Fh	
		TBD	128	255	50%	100%	80h	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		#####
		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	
		Indigo Highlighter 100%	255		100%		FFh		

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## SolaWash 19 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		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			
		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		0	
		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	255		
15		Blue value for this LED	0	255	0%	100%	00h	FFh	255		
16		White value for this LED	0	255	0%	100%	00h	FFh	0		
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	255		
19		Blue value for this LED	0	255	0%	100%	00h	FFh	255		
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	255		
23		Blue value for this LED	0	255	0%	100%	00h	FFh	255		
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	255		
27		Blue value for this LED	0	255	0%	100%	00h	FFh	255		
28		White value for this LED	0	255	0%	100%	00h	FFh	0		

29	LED 5	Red value for this LED	0	255	0%	100%	00h	FFh	255
30		Green value for this LED	0	255	0%	100%	00h	FFh	255
31		Blue value for this LED	0	255	0%	100%	00h	FFh	255
32		White value for this LED	0	255	0%	100%	00h	FFh	0
33	LED 6	Red value for this LED	0	255	0%	100%	00h	FFh	255
34		Green value for this LED	0	255	0%	100%	00h	FFh	255
35		Blue value for this LED	0	255	0%	100%	00h	FFh	255
36		White value for this LED	0	255	0%	100%	00h	FFh	0
37	LED 7	Red value for this LED	0	255	0%	100%	00h	FFh	255
38		Green value for this LED	0	255	0%	100%	00h	FFh	255
39		Blue value for this LED	0	255	0%	100%	00h	FFh	255
40		White value for this LED	0	255	0%	100%	00h	FFh	0
41	LED 8	Red value for this LED	0	255	0%	100%	00h	FFh	255
42		Green value for this LED	0	255	0%	100%	00h	FFh	255
43		Blue value for this LED	0	255	0%	100%	00h	FFh	255
44		White value for this LED	0	255	0%	100%	00h	FFh	0
45	LED 9	Red value for this LED	0	255	0%	100%	00h	FFh	255
46		Green value for this LED	0	255	0%	100%	00h	FFh	255
47		Blue value for this LED	0	255	0%	100%	00h	FFh	255
48		White value for this LED	0	255	0%	100%	00h	FFh	0
49	LED 10	Red value for this LED	0	255	0%	100%	00h	FFh	255
50		Green value for this LED	0	255	0%	100%	00h	FFh	255
51		Blue value for this LED	0	255	0%	100%	00h	FFh	255
52		White value for this LED	0	255	0%	100%	00h	FFh	0
53	LED 11	Red value for this LED	0	255	0%	100%	00h	FFh	255
54		Green value for this LED	0	255	0%	100%	00h	FFh	255
55		Blue value for this LED	0	255	0%	100%	00h	FFh	255
56		White value for this LED	0	255	0%	100%	00h	FFh	0
57	LED 12	Red value for this LED	0	255	0%	100%	00h	FFh	255
58		Green value for this LED	0	255	0%	100%	00h	FFh	255
59		Blue value for this LED	0	255	0%	100%	00h	FFh	255
60		White value for this LED	0	255	0%	100%	00h	FFh	0
61	LED 13	Red value for this LED	0	255	0%	100%	00h	FFh	255
62		Green value for this LED	0	255	0%	100%	00h	FFh	255
63		Blue value for this LED	0	255	0%	100%	00h	FFh	255
64		White value for this LED	0	255	0%	100%	00h	FFh	0
65	LED 14	Red value for this LED	0	255	0%	100%	00h	FFh	255
66		Green value for this LED	0	255	0%	100%	00h	FFh	255
67		Blue value for this LED	0	255	0%	100%	00h	FFh	255
68		White value for this LED	0	255	0%	100%	00h	FFh	0

69	LED 15	Red value for this LED	0	255	0%	100%	00h	FFh	255	
70		Green value for this LED	0	255	0%	100%	00h	FFh	255	
71		Blue value for this LED	0	255	0%	100%	00h	FFh	255	
72		White value for this LED	0	255	0%	100%	00h	FFh	0	
73	LED 16	Red value for this LED	0	255	0%	100%	00h	FFh	255	
74		Green value for this LED	0	255	0%	100%	00h	FFh	255	
75		Blue value for this LED	0	255	0%	100%	00h	FFh	255	
76		White value for this LED	0	255	0%	100%	00h	FFh	0	
77	LED 17	Red value for this LED	0	255	0%	100%	00h	FFh	255	
78		Green value for this LED	0	255	0%	100%	00h	FFh	255	
79		Blue value for this LED	0	255	0%	100%	00h	FFh	255	
80		White value for this LED	0	255	0%	100%	00h	FFh	0	
81	LED 18	Red value for this LED	0	255	0%	100%	00h	FFh	255	
82		Green value for this LED	0	255	0%	100%	00h	FFh	255	
83		Blue value for this LED	0	255	0%	100%	00h	FFh	255	
84		White value for this LED	0	255	0%	100%	00h	FFh	0	
85	LED 19	Red value for this LED	0	255	0%	100%	00h	FFh	255	
86		Green value for this LED	0	255	0%	100%	00h	FFh	255	
87		Blue value for this LED	0	255	0%	100%	00h	FFh	255	
88		White value for this LED	0	255	0%	100%	00h	FFh	0	
89	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				
90	Indigo Highlighter Dim	Indigo Highslihter Off	0		0%		00h		0	
		Indigo Highlighter 100%	255		100%		FFh			

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