SolaHyBeam 3000 DMX Channel Map

Standard Protocol			
Channel	Function	Channel	Function
1/2	Pan	27	Prism 1/2 Selection
3/4	Tilt	28	Prism 1/2 Mode
5	Color Mix Mode	29/30	Prism 1/2
6	Cyan	31	Prism 3 Mode
7	Magenta	32/33	Prism 3
8	Yellow	34	Combined Diffusion
9	CTO	35	Light Diffusion
10	Color Wheel Mode	36	Medium Diffusion
11	Color Wheel	37	Heavy Diffusion
12	Gobo Wheel Mode	38/39	Focus
13	Gobo Wheel	40/41	Zoom
14	Gobo Mode	42	Auto Focus
15/16	Gobo	43	Auto Focus Fine
17	Blade 1 Angle A	44	Iris
18	Blade 1 Angle B	45	Strobe Mode
19	Blade 2 Angle A	46	Strobe
20	Blade 2 Angle B	47/48	Dimmer
21	Blade 3 Angle A	49	LED Animation
22	Blade 3 Angle B	50	LED Animation Speed
23	Blade 4 Angle A	51	LED Animation Xfade
24	Blade 4 Angle B	52	mSpeed
25/26	Frame Rotation	53	Control

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SolaHyBeam 3000 ■ Rev B ■ Released 2020-03

SolaHyBeam 3000 Protocol

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Defaults
1 2	Pan	Range 0° to 540° (see note *11 on page 10*)	0	65535	0%	100%	0000h	FFFFh	32767
3 4	Tilt	Range 0° to 270° (see note *11 on page 10*)	0	65535	0%	100%	0000h	FFFFh	32767
5	Color Mix Mode	Pure Mix	0	31	0%	12%	00h	1Fh	0
		Cycle	32	47	13%	18%	20h	2Fh	
		Random	48	63	19%	25%	30h	3Fh	
		Reserved (see note *5 on page 9*)	64	255	25%	100%	40h	FFh	
6 7 8	Cyan Magenta Yellow	**Pure Mix Mode**							255
		Full saturation to open	0	255	0%	100%	00h	FFh	
		Cycle & Random Modes. Speed Controlled by Cyan Channel.							
		Slow to fast	0	255	0%	100%	00h	FFh	
9	CTO	Full saturation to open	0	255	0%	100%	00h	FFh	255
10	Color Wheel Mode	Indexed	0	15	0%	6%	00h	0Fh	0
		Forward Spin	16	31	6%	12%	10h	1Fh	
		Reverse Spin	32	47	13%	18%	20h	2Fh	
		Continuous (see note *1 on page 9*)	48	63	19%	25%	30h	3Fh	
		Fast Scan	64	79	25%	31%	40h	4Fh	
		Random	80	95	31%	37%	50h	5Fh	
		Reserved (see note *5 on page 9*)	96	255	38%	100%	60h	FFh	

High End Systems Reference Guide
DMX Channel Map

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Defaults
11	Color Wheel	**Indexed Mode**							0
		1. Open (White)	0	16	0%	6%	00h	10h	
		2. Open/Red	17	32	7%	13%	11h	20h	
		3. Red	33	48	13%	19%	21h	30h	
		4. Red/Blue	49	64	19%	25%	31h	40h	
		5. Blue	65	80	25%	31%	41h	50h	
		6. Blue/Green	81	96	32%	38%	51h	60h	
		7. Green	97	112	38%	44%	61h	70h	
		8. Green/TM-30	113	128	44%	50%	71h	80h	
		9. TM-30	129	144	51%	56%	81h	90h	
		10. TM-30/Orange	145	160	57%	63%	91h	A0h	
		11. Orange	161	176	63%	69%	A1h	B0h	
		12. Orange/Dark Blue	177	192	69%	75%	B1h	C0h	
		13. Dark Blue	193	208	76%	82%	C1h	D0h	
		14. Dark Blue/Open	209	224	82%	88%	D1h	E0h	
		1. Open (White)	225	255	88%	100%	E1h	FFh	
		Scan Mode							
		1. Open/Red	0	32	0%	13%	00h	20h	
		2. Red/Blue	33	64	13%	25%	21h	40h	
		3. Blue/Green	65	96	25%	38%	41h	60h	
		6. Green/TM-30	97	128	38%	50%	61h	80h	
		5. TM-30/Orange	129	160	51%	63%	81h	A0h	
		6. Orange/Dark Blue	161	192	63%	75%	A1h	C0h	
		7. Dark Blue/Open	193	224	76%	88%	C1h	E0h	
		1. Open/Red	225	255	88%	100%	E1h	FFh	
		Spin & Random Modes							
		Stop	0	0	0%	0%	00h	00h	
		Slow to fast	1	255	0%	100%	01h	FFh	
		Continuous Mode							
		Position 0-360 degrees	0	255	0%	100%	00h	FFh	
12	Gobo Wheel Mode	Indexed (see note *1 on page 9*)	0	15	0%	6%	00h	0Fh	0
		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	
		Reserved (see note *5 on page 9*)	80	255	31%	100%	50h	FFh	

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Defaults
13	Gobo Wheel	**Indexed & Scan Modes**							0
		1. Open	0	15	0%	6%	00h	0Fh	
		2. Bar	16	47	6%	18%	10h	2Fh	
		3. Starvolver	48	79	19%	31%	30h	4Fh	
		4. Pinwheel Dots	80	111	31%	44%	50h	6Fh	
		5. Tunnel	112	143	44%	56%	70h	8Fh	
		6. Seashell	144	175	56%	69%	90h	AFh	
		7. Crescents	176	207	69%	81%	B0h	CFh	
		8. Shower	208	239	82%	94%	D0h	EFh	
		1. Open	240	255	94%	100%	F0h	FFh	
		Spin & Random Modes							
		Stop	0	3	0%	1%	00h	03h	
		Slow to fast	4	255	2%	100%	04h	FFh	
14	Gobo Mode	Indexed (see note *1 on page 9*)	0	15	0%	6%	00h	0Fh	0
		Forward Rotate	16	31	6%	12%	10h	1Fh	
		Reverse Rotate	32	47	13%	18%	20h	2Fh	
		Forward Strobe Rotate (Animate)	48	63	19%	25%	30h	3Fh	
		Reverse Strobe Rotate (Animate)	64	79	25%	31%	40h	4Fh	
		Reserved (see note *5 on page 9*)	80	255	31%	100%	50h	FFh	
15 16	Gobo	**Indexed Mode**							32767
		Position 0-360 degrees	0	65535	0%	100%	0000h	FFFFh	
		Rotate & Strobe Modes							0
		Stop	0	1023	0%	1%	0000h	0303h	
		Slow to fast	1024	65535	303%	100%	0304h	FFFFh	
17	Blade 1 Angle A (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
18	Blade 1 Angle B (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
19	Blade 2 Angle A (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
20	Blade 2 Angle B (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
21	Blade 3 Angle A (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
22	Blade 3 Angle B (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
23	Blade 4 Angle A (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
24	Blade 4 Angle B (see note *6 on page 9*)	Out of the light path	0	0	0%	0%	00h	00h	0
		Full in the light path	1	255	0%	100%	01h	FFh	
25 26	Frame Rotation	Frame angle negative	0	32766	0%	50%	0000h	7EFFh	32767
		Frame angle 0 degrees	32767	32767	50%	50%	7F00h	7F00h	
		Frame angle positive	32768	65535	50%	100%	7F01h	FFFFh	

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Defaults
27	Prism 1/2 Selection	Disengaged	0	15	0%	6%	00h	0Fh	0
		Prism 1 engaged	16	31	6%	12%	10h	1Fh	
		Prism 2 engaged	32	47	13%	18%	20h	2Fh	
		Reserved (see note *5 on page 9*)	48	255	19%	100%	30h	FFh	
28	Prism 1/2 Mode (see note *8 on page 9*)	Continuous	0	15	0%	6%	00h	0Fh	0
		Forward Spin	16	31	6%	12%	10h	1Fh	
		Reverse Spin	32	47	13%	18%	20h	2Fh	
		Forward Strobe Rotate (Animate)	48	63	19%	25%	30h	3Fh	
		Reverse Strobe Rotate (Animate)	64	79	25%	31%	40h	4Fh	
		Reserved (see note *5 on page 9*)	80	255	31%	100%	50h	FFh	
29 30	Prism 1/2	**Continuous Mode**							32767
		Position 0-360 degrees	32512	65535	50%	100%	7F00h	FFFFh	
		Spin & Strobe Modes							0
		Stop	0	1023	0%	1%	0000h	0303h	
		Slow to fast	1024	65535	1%	100%	0304h	FFFFh	
31	Prism 3 Mode (see note *8 on page 9*)	Disengaged	0	15	0%	6%	00h	0Fh	0
		Continuous	16	31	6%	12%	10h	1Fh	
		Forward Spin	32	47	13%	18%	20h	2Fh	
		Reverse Spin	48	63	19%	25%	30h	3Fh	
		Forward Strobe Rotate (Animate)	64	79	25%	31%	40h	4Fh	
		Reverse Strobe Rotate (Animate)	80	95	31%	37%	50h	5Fh	
		Reserved (see note *5 on page 9*)	96	255	38%	100%	60h	FFh	
32 33	Prism 3	**Continuous Mode**							127
		Position 0-360 degrees	32512	65535	50%	100%	7F00h	FFFFh	
		Spin & Strobe Modes							
		Stop	0	1023	0%	1%	0000h	0303h	
		Slow to fast	1024	65535	1%	100%	0304h	FFFFh	
34	Combined Diffusion (see note *9 on page 9*)	Open	0	0	0%	0%	00h	00h	0
		Hard to soft edge	1	255	0%	100%	01h	FFh	
35	Light Diffusion (see note *9 on page 9*)	**Combined Diffusion (Channel ≥ 1)**							0
		Disabled	-	-	-	-	-	-	
		Combined Diffusion (Channel = 0)							
		Open	0	0	0%	0%	00h	00h	
		Variable hard to soft edge	1	127	0%	50%	01h	7Fh	
		Strobe slow to fast	128	255	50%	100%	80h	FFh	
36	Medium Diffusion (see note *9 on page 9*)	**Combined Diffusion (Channel ≥ 1)**							0
		Disabled	-	-	-	-	-	-	
		Combined Diffusion (Channel = 0)							
		Open	0	0	0%	0%	00h	00h	
		Variable hard to soft edge	1	127	0%	50%	01h	7Fh	
		Strobe slow to fast	128	255	50%	100%	80h	FFh	

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Defaults
37	Heavy Diffusion (see note *9 on page 9*)	**Combined Diffusion (Channel ≥ 1)**							0
		Disabled	-	-	-	-	-	-	
		Combined Diffusion (Channel = 0)							
		Open	0	0	0%	0%	00h	00h	
		Variable hard to soft edge	1	127	0%	50%	01h	7Fh	
		Strobe slow to fast	128	255	50%	100%	80h	FFh	
38 39	Focus	Focus In	0	0	0%	0%	0000h	0000h	127
		Focus Out	1	65535	0%	100%	0001h	FFFFh	
40 41	Zoom	Zoom In	0	0	0%	0%	0000h	0000h	127
		Zoom Out	1	65535	0%	100%	0001h	FFFFh	
42	Auto Focus	Auto Focus off	0	15	0%	6%	00h	0Fh	0
		5m	16	31	6%	12%	10h	1Fh	
		7.5m	32	47	13%	18%	20h	2Fh	
		10m	48	255	19%	100%	30h	FFh	
43	Auto Focus Fine	Focus in fine	0	0	0%	0%	00h	00h	0
		Focus out fine	1	255	0%	100%	01h	FFh	
44	Iris	Closed to open	0	255	0%	100%	00h	FFh	255
45	Strobe Mode	Normal	0	31	0%	12%	00h	1Fh	0
		Random Strobe	32	63	13%	25%	20h	3Fh	
		Synchronous Random Strobe (see note *3 on page 9*)	64	95	25%	37%	40h	5Fh	
		Reserved (see note *5 on page 9*)	96	255	38%	100%	60h	FFh	
46	Strobe	Closed	0	23	0%	9%	00h	17h	255
		Slow to fast	24	229	9%	90%	18h	E5h	
		Open	230	255	90%	100%	E6h	FFh	
47 48	Dimmer	Off to full	0	65535	0%	100%	0000h	FFFFh	0

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Defaults
49	LED Animations (see note *2 on page 9*)	Macro off	0	3	0%	1%	00h	03h	0
		Macro 1: L to R - 1	4	7	2%	3%	04h	07h	
		Macro 2: L to R - 2	8	11	3%	4%	08h	0Bh	
		Macro 3: L to R - 3	12	15	5%	6%	0Ch	0Fh	
		Macro 4: R to L - 1	16	19	6%	7%	10h	13h	
		Macro 5: R to L - 2	20	23	8%	9%	14h	17h	
		Macro 6: R to L - 3	24	27	9%	11%	18h	1Bh	
		Macro 7: Scan - 1	28	31	11%	12%	1Ch	1Fh	
		Macro 8: Scan - 2	32	35	13%	14%	20h	23h	
		Macro 9: Scan - 3	36	39	14%	15%	24h	27h	
		Macro 10: Invert L to R - 1	40	43	16%	17%	28h	2Bh	
		Macro 11: Invert L to R - 2	44	47	17%	18%	2Ch	2Fh	
		Macro 12: Invert L to R - 3	48	51	19%	20%	30h	33h	
		Macro 13: Invert R to L - 1	52	55	20%	22%	34h	37h	
		Macro 14: Invert R to L - 2	56	59	22%	23%	38h	3Bh	
		Macro 15: Invert R to L - 3	60	63	24%	25%	3Ch	3Fh	
		Macro 16: Invert Scan - 1	64	67	25%	26%	40h	43h	
		Macro 17: Invert Scan - 2	68	71	27%	28%	44h	47h	
		Macro 18: Invert Scan - 3	72	75	28%	29%	48h	4Bh	
		Macro 19: Out/In - 2	76	79	30%	31%	4Ch	4Fh	
		Macro 20: Out/In - 4	80	83	31%	33%	50h	53h	
		Macro 21: In/Out - 2	84	87	33%	34%	54h	57h	
		Macro 22: Out/In/Out - 2	88	91	35%	36%	58h	5Bh	
		Macro 23: Alternate - 4	92	95	36%	37%	5Ch	5Fh	
		...							
		Reserved (see note *5 on page 9*)	96	255	38%	100%	60h	FFh	
50	LED Animation Speed	Stop	0	0	0%	0%	00h	00h	128
		Decreased speed	1	127	0%	50%	01h	7Fh	
		Standard speed x1	128	128	50%	50%	80h	80h	
		Increased speed	129	255	51%	100%	81h	FFh	
51	LED Animation Xfade	Stop	0	0	0%	0%	00h	00h	128
		Decreased speed	1	127	0%	50%	01h	7Fh	
		Standard speed x1	128	128	50%	50%	80h	80h	
		Increased speed	129	255	51%	100%	81h	FFh	
52	mSpeed (see note *10 on page 9*)	Disable	0	3	0%	1%	00h	03h	0
		Longest (252.7s) to shortest (0.15s)	4	255	2%	100%	04h	FFh	

High End Systems Reference Guide
DMX Channel Map

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Defaults
53	Control	**The Control channel should not be crossfaded. No shutter channel requirement.**							0
		Safe (normal operation)	0	9	0%	4%	00h	09h	
		Reserved (see note *5 on the facing page*)	10	19	4%	7%	0Ah	13h	
		Display Off (send 20 packets)	20	28	8%	11%	14h	1Ch	
		Display On (send 20 packets)	29	35	11%	14%	1Dh	23h	
		Reserved (see note *5 on the facing page*)	36	48	14%	19%	24h	30h	
		Home All (send 20 packets)	49	68	19%	27%	31h	44h	
		Shutdown (send 80 packets)	69	75	27%	29%	45h	4Bh	
		Fan Control Modes (see note *4 on the facing page*)							
		Studio fan control mode (send 20 packets)	76	82	30%	32%	4Ch	52h	
		Continuous fan control mode (send 20 packets)	83	89	33%	35%	53h	59h	
		Standard fan control mode (send 20 packets)	90	96	35%	38%	5Ah	60h	
		Studio Continuous fan control mode (see note *4 on the facing page*)	97	103	38%	40%	61h	67h	
		Disable Pan/Tilt motors	104	110	41%	43%	68h	6Eh	
		Outrig Mode On (see note *7 on the facing page*)	111	117	44%	46%	6Fh	75h	
		Outrig Mode Off (see note *7 on the facing page*)	118	124	46%	49%	76h	7Ch	
		Reserved (see note *5 on the facing page*)	125	160	49%	63%	7Dh	A0h	
		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	
		Reserved (see note *5 on the facing page*)	238	255	93%	100%	EEh	FFh	

Notes

1

Continuous/Index mode should take the quickest path from 255-0 and 0-255.
Continuous mode color wheel aperture centers are as follows:

Color	Center of Color DMX Value
Open	0
Red	36
Blue	73
Green	109
TM-30	146
Orange	182
Dark Blue	219

2

Macros operate independently. The Xfade and speed channels act as multipliers of the programmed speed in the discrete macro steps.

Speed/Xfade Channel Operation

Channel	Description
0	Stops playback or cross fade
1-127	Decreases playback speed/cross fade time (*<1)
128	Playback or cross fade speed is as programmed (*1)
129-255	Increases playback speed/cross fade time (*>1)

3

Synchronous Random Strobes are synchronous across fixtures.

4

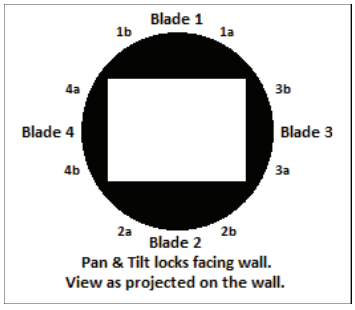
Fan control modes are retentive. When the fixture is turned off it will retain the selected fan mode.

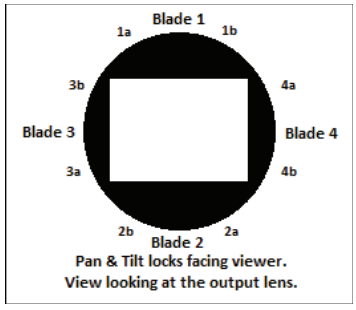
5

Reserved ranges should function according to the controller default value.

6

Framing blades are arranged according to graphics below.





7

Outrig Mode is retentive. When the fixture is turned off it will retain the selected outrig mode.

8

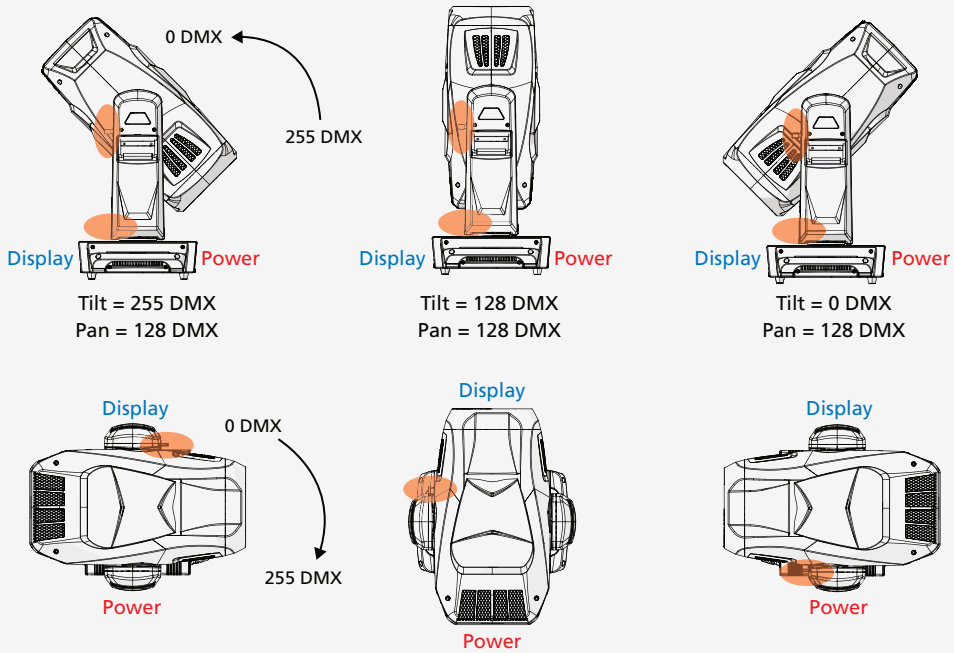
Prism 1 or 2 can be inserted simultaneously with Prism 3.

9

The Combined Diffusion channel controls all three diffusion flags, seamlessly blending them into a single variable range from hard edge to heavy diffusion. The Light, Medium, and Heavy Diffusion channels allow independent control of the diffusion flags. The combined diffusion channel has priority and must be set to 0 to allow control of the Light, Medium, and Heavy Diffusion channels.

10

mSpeed functions according to the documented mSpeed table. (See *SolaHyBeam 3000 mSpeeds on page 18*.)

11	**DMX Fixture Orientation** (Tilt Movement Range: 270°; Pan Movement Range: 540°) (Pan and tilt lock locations are highlighted in orange.) 
12	RDM Manufacturers ID: 0x4c52
13	RDM Device ID: 0x5c5

SolaHyBeam 3000 LED Macros

Macro 1: L to R - 1									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	0	0	0	0	0	0	0	0
2	0	255	0	0	0	0	0	0	0
3	0	0	255	0	0	0	0	0	0
4	0	0	0	255	0	0	0	0	0
5	0	0	0	0	255	0	0	0	0
6	0	0	0	0	0	255	0	0	0
7	0	0	0	0	0	0	255	0	0
8	0	0	0	0	0	0	0	255	0
9	0	0	0	0	0	0	0	0	255

Macro 2: L to R - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	0	0	0	0	0	0	
2	0	0	255	255	0	0	0	0	
3	0	0	0	0	255	255	0	0	
4	0	0	0	0	0	0	255	255	

Macro 3: L to R - 3									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	255	0	0	0	0	0	0
2	0	255	255	255	0	0	0	0	0
3	0	0	255	255	255	0	0	0	0
4	0	0	0	255	255	255	0	0	0
5	0	0	0	0	255	255	255	0	0
6	0	0	0	0	0	255	255	255	0
7	0	0	0	0	0	0	255	255	255

Macro 4: R to L - 1									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	0	0	0	0	0	0	255
2	0	0	0	0	0	0	0	255	0
3	0	0	0	0	0	0	255	0	0
4	0	0	0	0	0	255	0	0	0
5	0	0	0	0	255	0	0	0	0
6	0	0	0	255	0	0	0	0	0
7	0	0	255	0	0	0	0	0	0
8	0	255	0	0	0	0	0	0	0
9	255	0	0	0	0	0	0	0	0

Macro 5: R to L - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	0	0	0	0	255	255	
2	0	0	0	0	255	255	0	0	
3	0	0	255	255	0	0	0	0	
4	255	255	0	0	0	0	0	0	

Macro 6: R to L - 3									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	0	0	0	0	255	255	255
2	0	0	0	0	0	255	255	255	0
3	0	0	0	0	255	255	255	0	0
4	0	0	0	255	255	255	0	0	0
5	0	0	255	255	255	0	0	0	0
6	0	255	255	255	0	0	0	0	0
7	255	255	255	0	0	0	0	0	0

Macro 7: Scan - 1									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	0	0	0	0	0	0	0	0
2	0	255	0	0	0	0	0	0	0
3	0	0	255	0	0	0	0	0	0
4	0	0	0	255	0	0	0	0	0
5	0	0	0	0	255	0	0	0	0
6	0	0	0	0	0	255	0	0	0
7	0	0	0	0	0	0	255	0	0
8	0	0	0	0	0	0	0	255	0
9	0	0	0	0	0	0	0	0	255
10	0	0	0	0	0	0	0	255	0
11	0	0	0	0	0	0	255	0	0
12	0	0	0	0	0	255	0	0	0
13	0	0	0	0	255	0	0	0	0
14	0	0	0	255	0	0	0	0	0
15	0	0	255	0	0	0	0	0	0
16	0	255	0	0	0	0	0	0	0

Macro 8: Scan - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	0	0	0	0	0	0	
2	0	0	255	255	0	0	0	0	
3	0	0	0	0	255	255	0	0	
4	0	0	0	0	0	0	255	255	
5	0	0	0	0	255	255	0	0	
6	0	0	255	255	0	0	0	0	

Macro 9: Scan - 3									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	255	0	0	0	0	0	0
2	0	255	255	255	0	0	0	0	0
3	0	0	255	255	255	0	0	0	0
4	0	0	0	255	255	255	0	0	0
5	0	0	0	0	255	255	255	0	0
6	0	0	0	0	0	255	255	255	0
7	0	0	0	0	0	0	255	255	255
8	0	0	0	0	0	255	255	255	0
9	0	0	0	0	255	255	255	0	0
10	0	0	0	255	255	255	0	0	0
11	0	0	255	255	255	0	0	0	0
12	0	255	255	255	0	0	0	0	0

Macro 10: Invert L to R - 1									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	255	255	255	255	255	255	255	255
2	255	0	255	255	255	255	255	255	255
3	255	255	0	255	255	255	255	255	255
4	255	255	255	0	255	255	255	255	255
5	255	255	255	255	0	255	255	255	255
6	255	255	255	255	255	0	255	255	255
7	255	255	255	255	255	255	0	255	255
8	255	255	255	255	255	255	255	0	255
8	255	255	255	255	255	255	255	255	0

Macro 11: Invert L to R - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	255	255	255	255	255	255	
2	255	255	0	0	255	255	255	255	
3	255	255	255	255	0	0	255	255	
4	255	255	255	255	255	255	0	0	

Macro 12: Invert L to R - 3									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	0	255	255	255	255	255	255
2	255	0	0	0	255	255	255	255	255
3	255	255	0	0	0	255	255	255	255
4	255	255	255	0	0	0	255	255	255
5	255	255	255	255	0	0	0	255	255
6	255	255	255	255	255	0	0	0	255
7	255	255	255	255	255	255	0	0	0

Macro 13: Invert R to L - 1									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	255	255	255	255	255	255	0
2	255	255	255	255	255	255	255	0	255
3	255	255	255	255	255	255	0	255	255
4	255	255	255	255	255	0	255	255	255
5	255	255	255	255	0	255	255	255	255
6	255	255	255	0	255	255	255	255	255
7	255	255	0	255	255	255	255	255	255
8	255	0	255	255	255	255	255	255	255
9	0	255	255	255	255	255	255	255	255

Macro 14: Invert R to L - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	255	255	255	255	0	0	
2	255	255	255	255	0	0	255	255	
3	255	255	0	0	255	255	255	255	
4	0	0	255	255	255	255	255	255	

Macro 15: Invert R to L - 3									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	255	255	255	255	0	0	0
2	255	255	255	255	255	0	0	0	255
3	255	255	255	255	0	0	0	255	255
4	255	255	255	0	0	0	255	255	255
5	255	255	0	0	0	255	255	255	255
6	255	0	0	0	255	255	255	255	255
7	0	0	0	255	255	255	255	255	255

Macro 16: Invert Scan - 1									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	255	255	255	255	255	255	255	255
2	255	0	255	255	255	255	255	255	255
3	255	255	0	255	255	255	255	255	255
4	255	255	255	0	255	255	255	255	255
5	255	255	255	255	0	255	255	255	255
6	255	255	255	255	255	0	255	255	255
7	255	255	255	255	255	255	0	255	255
8	255	255	255	255	255	255	255	0	255
9	255	255	255	255	255	255	255	255	0
10	255	255	255	255	255	255	255	0	255
11	255	255	255	255	255	255	0	255	255
12	255	255	255	255	255	0	255	255	255
13	255	255	255	255	0	255	255	255	255
14	255	255	255	0	255	255	255	255	255
15	255	255	0	255	255	255	255	255	255
16	255	0	255	255	255	255	255	255	255

Macro 17: Invert Scan - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	255	255	255	255	255	255	
2	255	255	0	0	255	255	255	255	
3	255	255	255	255	0	0	255	255	
4	255	255	255	255	255	255	0	0	
5	255	255	255	255	0	0	255	255	
6	255	255	0	0	255	255	255	255	

Macro 18: Invert Scan - 3									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	0	255	255	255	255	255	255
2	255	0	0	0	255	255	255	255	255
3	255	255	0	0	0	255	255	255	255
4	255	255	255	0	0	0	255	255	255
5	255	255	255	255	0	0	0	255	255
6	255	255	255	255	255	0	0	0	255
7	255	255	255	255	255	255	0	0	0
8	255	255	255	255	255	0	0	0	255
9	255	255	255	255	0	0	0	255	255
10	255	255	255	0	0	0	255	255	255
11	255	255	0	0	0	255	255	255	255
12	255	0	0	0	255	255	255	255	255

Macro 19: Out/In - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	0	0	0	0	0	0	0	255
2	0	255	0	0	0	0	0	255	0
3	0	0	255	0	0	0	255	0	0
4	0	0	0	255	0	255	0	0	0
5	0	0	0	0	255	0	0	0	0

Macro 20: Out/In - 4									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	0	0	0	0	255	255	
2	0	0	255	255	255	255	0	0	

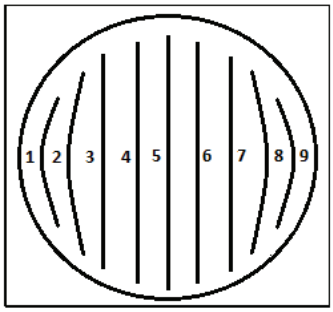
Macro 21: In/Out - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	0	0	0	0	255	0	0	0	0
2	0	0	0	255	0	255	0	0	0
3	0	0	255	0	0	0	255	0	0
4	0	255	0	0	0	0	0	255	0
5	255	0	0	0	0	0	0	0	255

Macro 22: Out/In/Out - 2									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	0	0	0	0	0	0	0	255
2	0	255	0	0	0	0	0	255	0
3	0	0	255	0	0	0	255	0	0
4	0	0	0	255	0	255	0	0	0
5	0	0	0	0	255	0	255	0	0
6	0	0	0	255	0	255	0	0	0
7	0	0	255	0	0	0	255	0	0
8	0	255	0	0	0	0	0	255	0

Macro 23: Alternate - 4									
Step	LED1	LED2	LED3	LED4	LED5	LED6	LED7	LED8	LED9
1	255	255	255	255	0	0	0	0	0
2	0	0	0	0	0	255	255	255	255

LED Macro Notes

LED branches are defined left to right when the fixture is sitting on a table and the pan lock is facing you. LED1 is on the left; LED 9 is on the right.



SolaHyBeam 3000 mSpeeds

DMX	Time (seconds)	DMX	Time (seconds)	DMX	Time (seconds)
0	mSpeed Off	42	182.01	84	117.36
1	mSpeed Off	43	180.31	85	115.99
2	mSpeed Off	44	178.61	86	114.64
3	mSpeed Off	45	176.92	87	113.28
4	252.69	46	175.24	88	111.94
5	250.68	47	173.57	89	110.61
6	248.68	48	171.91	90	109.28
7	246.69	49	170.25	91	107.96
8	244.7	50	168.61	92	106.65
9	242.73	51	166.97	93	105.35
10	240.76	52	165.33	94	104.05
11	238.8	53	163.71	95	102.77
12	236.85	54	162.1	96	101.49
13	234.9	55	160.49	97	100.22
14	232.97	56	158.89	98	98.95
15	231.04	57	157.3	99	97.7
16	229.12	58	155.71	100	96.45
17	227.21	59	154.14	101	95.21
18	225.3	60	152.57	102	93.98
19	223.41	61	151.01	103	92.76
20	221.52	62	149.46	104	91.55
21	219.64	63	147.92	105	90.34
22	217.77	64	146.38	106	89.14
23	215.9	65	144.86	107	87.95
24	214.05	66	143.34	108	86.77
25	212.2	67	141.82	109	85.59
26	210.36	68	140.32	110	84.43
27	208.53	69	138.83	111	83.27
28	206.7	70	137.34	112	82.12
29	204.89	71	135.86	113	80.98
30	203.08	72	134.39	114	79.84
31	201.28	73	132.93	115	78.72
32	199.49	74	131.47	116	77.6
33	197.7	75	130.02	117	76.49
34	195.93	76	128.59	118	75.38
35	194.16	77	127.15	119	74.29
36	192.4	78	125.73	120	73.2
37	190.65	79	124.32	121	72.13
38	188.9	80	122.91	122	71.06
39	187.17	81	121.51	123	69.99
40	185.44	82	120.12	124	68.94
41	183.72	83	118.74	125	67.89

DMX	Time (seconds)	DMX	Time (seconds)	DMX	Time (seconds)
126	66.85	170	29.11	214	6.89
127	65.82	171	28.43	215	6.56
128	64.8	172	27.76	216	6.25
129	63.79	173	27.1	217	5.94
130	62.78	174	26.45	218	5.64
131	61.78	175	25.8	219	5.34
132	60.79	176	25.17	220	5.06
133	59.81	177	24.54	221	4.78
134	58.84	178	23.92	222	4.52
135	57.87	179	23.3	223	4.25
136	56.91	180	22.7	224	4
137	55.96	181	22.1	225	3.76
138	55.02	182	21.51	226	3.52
139	54.09	183	20.93	227	3.29
140	53.16	184	20.36	228	3.07
141	52.24	185	19.79	229	2.86
142	51.33	186	19.23	230	2.66
143	50.43	187	18.69	231	2.46
144	49.54	188	18.14	232	2.27
145	48.65	189	17.61	233	2.09
146	47.77	190	17.09	234	1.92
147	46.9	191	16.57	235	1.75
148	46.04	192	16.06	236	1.6
149	45.19	193	15.56	237	1.45
150	44.34	194	15.07	238	1.31
151	43.51	195	14.58	239	1.18
152	42.68	196	14.1	240	1.05
153	41.85	197	13.63	241	0.94
154	41.04	198	13.17	242	0.83
155	40.23	199	12.72	243	0.73
156	39.44	200	12.28	244	0.64
157	38.65	201	11.84	245	0.55
158	37.87	202	11.41	246	0.47
159	37.09	203	10.99	247	0.41
160	36.33	204	10.58	248	0.35
161	35.57	205	10.17	249	0.29
162	34.82	206	9.77	250	0.25
163	34.08	207	9.39	251	0.21
164	33.34	208	9	252	0.19
165	32.62	209	8.63	253	0.17
166	31.9	210	8.27	254	0.15
167	31.19	211	7.91	255	0.15
168	30.49	212	7.56		
169	29.8	213	7.22		

Revision History

Revision B - Updated channel 34 from "Diffusion Mode" to "Combined Diffusion." Updated channel 35 from "Diffusion" to "Light Diffusion." Added "Medium Diffusion" (channel 36) and "Heavy Diffusion" (channel 37). Incremented all channel numbers after channel 37. Updated text in note 9 to reflect the updated/new diffusion modes. (February 2020)

Revision A - Initial release. (January 2020)