

ETC Reference Guide

High End Systems Lonestar DMX Channel Map

Lonestar DMX Channel Map

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

Trifusion Protocol					
Channel	Function	Channel	Function	Channel	Function
1	Pan Coarse	17	Blade 1 Angle A	33	Diffusion Heavy Coarse
2	Pan Fine	18	Blade 1 Angle B	34	Diffusion Heavy Fine
3	Tilt Coarse	19	Blade 2 Angle A	35	Diffusion Light
4	Tilt Fine	20	Blade 2 Angle B	36	Diffusion Medium
5	Color Mode	21	Blade 3 Angle A	37	Focus Coarse
6	Cyan	22	Blade 3 Angle B	38	Focus Fine
7	Magenta	23	Blade 4 Angle A	39	Zoom Coarse
8	Yellow	24	Blade 4 Angle B	40	Zoom Fine
9	CTO	25	Frame Rotation Coarse	41	Iris
10	Color Wheel Mode	26	Frame Rotation Fine	42	Strobe Mode
11	Color Wheel	27	Animation Insertion	43	Strobe
12	Rotating Gobo Wheel Mode	28	Animation	44	Dimmer Coarse
13	Rotating Gobo Wheel	29	Prism 1 Mode	45	Dimmer Fine
14	Rotating Gobo Mode	30	Prism 1 Rotate Coarse	46	mSpeed
15	Rotating Gobo Coarse	31	Prism 1 Rotate Fine	47	Control
16	Rotating Gobo Fine	32	Reserved	48	Fan



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Lonestar Standard Protocol

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default	
1/2	Pan (Coarse/Fine)	See note 6 on page 13	0	65535	0%	100%	0000h	FFFFh	32767	
3/4	Tilt (Coarse/Fine)	See note 6 on page 13	0	65535	0%	100%	0000h	FFFFh	32767	
5	Color 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 4 on page 12)	64	255	25%	100%	40h	FFh		
6	Cyan	Pure Mix								255
		Full Saturation to Open	0	255	0%	100%	00h	FFh	0	
		Cycle and Random								
		Slow to Fast	0	255	0%	100%	00h	FFh		
7	Magenta	Full Saturation to Open	0	255	0%	100%	00h	FFh	255	
8	Yellow	Full Saturation to Open	0	255	0%	100%	00h	FFh	255	
9	CTO	Full Saturation to Open	0	255	0%	100%	00h	FFh	255	
10	Color Wheel Mode	Indexed (see note 1 on page 12)	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 12)	48	63	19%	25%	30h	3Fh		
		Scan	64	79	25%	31%	40h	4Fh		
		Random	80	95	31%	37%	50h	5Fh		
		Reserved (see note 4 on page 12)	96	255	38%	100%	60h	FFh		

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Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default	
11	Color Wheel	Indexed								
		Open	0	10	0%	4%	00h	0Ah	0	
		Open/Red	11	21	4%	8%	0Bh	15h		
		Red	22	32	9%	13%	16h	20h		
		Red/Blue	33	43	13%	17%	21h	2Bh		
		Blue	44	54	17%	21%	2Ch	36h		
		Blue/Green	55	65	22%	25%	37h	41h		
		Green	66	76	26%	30%	42h	4Ch		
		Green/Yellow	77	87	30%	34%	4Dh	57h		
		Yellow	88	98	35%	38%	58h	62h		
		Yellow/Purple	99	109	39%	43%	63h	6Dh		
		Purple	110	120	43%	47%	6Eh	78h		
		Purple/TM-30	121	131	47%	51%	79h	83h		
		TM-30	132	142	52%	56%	84h	8Eh		
		TM-30/Lavender	143	153	56%	60%	8Fh	99h		
		Lavender	154	164	60%	64%	9Ah	A4h		
		Lavender/Half CTO	165	175	65%	69%	A5h	AFh		
		Half CTO	176	186	69%	73%	B0h	BAh		
		Half CTO/Full CTO	187	197	73%	77%	BBh	C5h		
		Full CTO	198	208	78%	82%	C6h	D0h		
		Full CTO/Dark Blue	209	219	82%	86%	D1h	DBh		
		Dark Blue	220	230	86%	90%	DCh	E6h		
		Dark Blue/Open	231	241	91%	95%	E7h	F1h		
		Open	242	255	95%	100%	F2h	FFh		
		Scan								
		Open/Red, Slow to Fast	0	21	0%	8%	00h	15h		
		Red/Blue, Slow to Fast	22	43	9%	17%	16h	2Bh		
		Blue/Green, Slow to Fast	44	65	17%	25%	2Ch	41h		
		Green/Yellow, Slow to Fast	66	87	26%	34%	42h	57h		
		Yellow/Purple, Slow to Fast	88	109	35%	43%	58h	6Dh		
		Purple/TM-30, Slow to Fast	110	131	43%	51%	6Eh	83h		
		TM-30/Lavender, Slow to Fast	132	153	52%	60%	84h	99h		
		Lavender/Half CTO, Slow to Fast	154	175	60%	69%	9Ah	AFh		
		Half CTO/Full CTO, Slow to Fast	176	197	69%	77%	B0h	C5h		
		Full CTO/Dark Blue, Slow to Fast	198	219	78%	86%	C6h	DBh		
		Dark Blue/Open, Slow to Fast	220	255	86%	100%	DCh	FFh		
		Spin and Random								
		Stop	0	0	0%	0%	00h	00h		
		Slow to Fast	1	255	0%	100%	01h	FFh		
		Continuous								
		Positioning from 0° to 359°	0	255	0%	100%	00h	FFh		

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Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default	
12	Rotating Gobo 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		
		Scan	48	63	19%	25%	30h	3Fh		
		Random	64	79	25%	31%	40h	4Fh		
		Reserved (see note 4 on page 12)	80	255	31%	100%	50h	FFh		
13	Rotating Gobo Wheel (see list of gobos on page 14)	Indexed and Scan							0	
		Open	0	15	0%	6%	00h	0Fh		
		Gobo 1 - Bar	16	31	6%	12%	10h	1Fh		
		Gobo 2 - Starvolver	32	47	13%	18%	20h	2Fh		
		Gobo 3 - Fracked	48	63	19%	25%	30h	3Fh		
		Gobo 4 - Broken Tunnel	64	79	25%	31%	40h	4Fh		
		Gobo 5 - Seashell	80	95	31%	37%	50h	5Fh		
		Gobo 6 - Glacial	96	111	38%	44%	60h	6Fh		
		Gobo 7 - Shower	112	127	44%	50%	70h	7Fh		
		Gobo 8 - Ice	128	143	50%	56%	80h	8Fh		
		Gobo 9 - Branch Out	144	159	56%	62%	90h	9Fh		
		Reserved (see note 4 on page 12)	160	255	63%	100%	A0h	FFh		
		Spin and Random								
		Stop	0	3	0%	1%	00h	03h		
Slow to Fast	4	255	2%	100%	04h	FFh				
14	Rotating Gobo 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		
		Forward Animate	48	63	19%	25%	30h	3Fh		
		Reverse Animate	64	79	25%	31%	40h	4Fh		
		Reserved (see note 4 on page 12)	80	255	31%	100%	50h	FFh		
15/16	Rotating Gobo (Coarse/Fine)	Indexed							32767	
		0° to 359°	0	65535	0%	100%	0000h	FFFFh		
		Spin and Animate								32767
		Stop	0	2047	0%	3%	0000h	07FFh		
Slow to Fast	2048	65535	3%	100%	0800h	FFFFh				
17	Blade 1 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
18	Blade 1 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
19	Blade 2 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
20	Blade 2 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	

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Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default	
21	Blade 3 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
22	Blade 3 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
23	Blade 4 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
24	Blade 4 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
25/26	Frame Rotation (Coarse/Fine)	-60° to 60°	0	65535	0%	100%	00h	FFFFh	32767	
27	Animation Insertion	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
28	Animation	Forward Spin, Stop to Fast	0	63	0%	25%	00h	3Fh	0	
		Reverse Spin, Stop to Fast	64	127	25%	50%	40h	7Fh		
		Forward Animate, Stop to Fast	128	191	50%	75%	80h	BFh		
		Reverse Animate, Stop to Fast	192	255	75%	100%	C0h	FFh		
29	Prism 1 Mode	Removed	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 Animate	64	79	25%	31%	40h	4Fh		
		Reverse Animate	80	95	31%	37%	50h	5Fh		
		Reserved (see note 4 on page 12)	96	255	38%	100%	60h	FFh		
30/31	Prism 1 Rotate (Coarse/Fine)	Continuous								32767
		0° to 359°	0	65535	0%	100%	0000h	FFFFh		
		Spin and Animate								0
		Stop	0	1027	0%	2%	0000h	0403h		
32	Prism 2 Mode	Removed	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 Animate	64	79	25%	31%	40h	4Fh		
		Reverse Animate	80	95	31%	37%	50h	5Fh		
		Reserved (see note 4 on page 12)	96	255	38%	100%	60h	FFh		
33/34	Prism 2 Rotate (Coarse/Fine)	Continuous								32767
		0° to 359°	0	65535	0%	100%	0000h	FFFFh		
		Spin and Animate								0
		Stop	0	1027	0%	2%	0000h	0403h		
35	Diffusion Light	Removed	0	0	0%	0%	00h	00h	0	
		Hard to Soft Edge	1	255	0%	100%	01h	FFh		
36	Diffusion Medium	Removed	0	0	0%	0%	00h	00h	0	
		Hard to Soft Edge	1	255	0%	100%	01h	FFh		

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Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default
37/38	Focus (Coarse/Fine)	Focus	0	65535	0%	100%	00h	FFFFh	0
39/40	Zoom (Coarse/Fine)	3.8° to 55°	0	65535	0%	100%	00h	FFFFh	0
41	Iris	Closed to Open	0	255	0%	100%	00h	FFh	255
42	Strobe Mode	Normal	0	31	0%	12%	00h	1Fh	0
		Random	32	63	13%	25%	20h	3Fh	
		Synchronous Random (see note 2 on page 12)	64	95	25%	37%	40h	5Fh	
		Reserved (see note 4 on page 12)	96	255	38%	100%	60h	FFh	
43	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	
44/45	Dimmer (Coarse/Fine)	Off to Full	0	65535	0%	100%	00h	FFFFh	0
46	mSpeed	Disabled	0	0	0%	0%	00h	00h	0
		Longest to Shortest	1	255	0%	100%	01h	FFh	
47	Control	Idle	0	15	0%	6%	00h	0Fh	0
		Reserved (see note 4 on page 12)	16	31	6%	12%	10h	1Fh	
		Display Off (hold 3 seconds)	32	47	13%	18%	20h	2Fh	
		Display On (hold 3 seconds)	48	63	19%	25%	30h	3Fh	
		Reserved (see note 4 on page 12)	64	79	25%	31%	40h	4Fh	
		Home All (hold 3 seconds)	80	95	31%	37%	50h	5Fh	
		Shutdown (hold 9 seconds)	96	111	38%	44%	60h	6Fh	
		Disable Pan/Tilt Motors (hold 9 seconds)	112	127	44%	50%	70h	7Fh	
		Dimming Mode - 2.4 kHz (hold 9 seconds)	128	143	50%	56%	80h	8Fh	
		Dimming Mode - 16 kHz (hold 9 seconds)	144	159	56%	62%	90h	9Fh	
Reserved (see note 4 on page 12)	160	255	63%	100%	A0h	FFh			
48	Fan (see note 3 on page 12)	Idle	0	15	0%	6%	00h	0Fh	0
		Set Continuous Speed - Slow to Fast	16	207	6%	81%	10h	CFh	
		Auto	208	223	82%	87%	D0h	DFh	
		Studio	224	239	88%	94%	E0h	EFh	
		Reserved (see note 4 on page 12)	240	255	94%	100%	F0h	FFh	

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Lonestar DMX Channel Map

Lonestar Trifusion Protocol

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default	
1/2	Pan (Coarse/Fine)	See note 6 on page 13	0	65535	0%	100%	0000h	FFFFh	32767	
3/4	Tilt (Coarse/Fine)	See note 6 on page 13	0	65535	0%	100%	0000h	FFFFh	32767	
5	Color 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 4 on page 12)	64	255	25%	100%	40h	FFh		
6	Cyan	Pure Mix								255
		Full Saturation to Open	0	255	0%	100%	00h	FFh	0	
		Cycle and Random								
		Slow to Fast	0	255	0%	100%	00h	FFh		
7	Magenta	Full Saturation to Open	0	255	0%	100%	00h	FFh	255	
8	Yellow	Full Saturation to Open	0	255	0%	100%	00h	FFh	255	
9	CTO	Full Saturation to Open	0	255	0%	100%	00h	FFh	255	
10	Color Wheel Mode	Indexed (see note 1 on page 12)	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 12)	48	63	19%	25%	30h	3Fh		
		Scan	64	79	25%	31%	40h	4Fh		
		Random	80	95	31%	37%	50h	5Fh		
		Reserved (see note 4 on page 12)	96	255	38%	100%	60h	FFh		

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Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default	
11	Color Wheel	Indexed								0
		Open	0	10	0%	4%	00h	0Ah		
		Open/Red	11	21	4%	8%	0Bh	15h		
		Red	22	32	9%	13%	16h	20h		
		Red/Blue	33	43	13%	17%	21h	28h		
		Blue	44	54	17%	21%	2Ch	36h		
		Blue/Green	55	65	22%	25%	37h	41h		
		Green	66	76	26%	30%	42h	4Ch		
		Green/Yellow	77	87	30%	34%	4Dh	57h		
		Yellow	88	98	35%	38%	58h	62h		
		Yellow/Purple	99	109	39%	43%	63h	6Dh		
		Purple	110	120	43%	47%	6Eh	78h		
		Purple/TM-30	121	131	47%	51%	79h	83h		
		TM-30	132	142	52%	56%	84h	8Eh		
		TM-30/Lavender	143	153	56%	60%	8Fh	99h		
		Lavender	154	164	60%	64%	9Ah	A4h		
		Lavender/Half CTO	165	175	65%	69%	A5h	AFh		
		Half CTO	176	186	69%	73%	B0h	BAh		
		Half CTO/Full CTO	187	197	73%	77%	BBh	C5h		
		Full CTO	198	208	78%	82%	C6h	D0h		
		Full CTO/Dark Blue	209	219	82%	86%	D1h	DBh		
		Dark Blue	220	230	86%	90%	DCh	E6h		
		Dark Blue/Open	231	241	91%	95%	E7h	F1h		
		Open	242	255	95%	100%	F2h	FFh		
		Scan								
		Open/Red, Slow to Fast	0	21	0%	8%	00h	15h		
		Red/Blue, Slow to Fast	22	43	9%	17%	16h	28h		
		Blue/Green, Slow to Fast	44	65	17%	25%	2Ch	41h		
		Green/Yellow, Slow to Fast	66	87	26%	34%	42h	57h		
		Yellow/Purple, Slow to Fast	88	109	35%	43%	58h	6Dh		
		Purple/TM-30, Slow to Fast	110	131	43%	51%	6Eh	83h		
		TM-30/Lavender, Slow to Fast	132	153	52%	60%	84h	99h		
		Lavender/Half CTO, Slow to Fast	154	175	60%	69%	9Ah	AFh		
		Half CTO/Full CTO, Slow to Fast	176	197	69%	77%	B0h	C5h		
		Full CTO/Dark Blue, Slow to Fast	198	219	78%	86%	C6h	DBh		
		Dark Blue/Open, Slow to Fast	220	255	86%	100%	DCh	FFh		
		Spin and Random								
		Stop	0	0	0%	0%	00h	00h		
		Slow to Fast	1	255	0%	100%	01h	FFh		
		Continuous								
		Positioning from 0° to 359°	0	255	0%	100%	00h	FFh		

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Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default		
12	Rotating Gobo 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			
		Scan	48	63	19%	25%	30h	3Fh			
		Random	64	79	25%	31%	40h	4Fh			
		Reserved (see note 4 on page 12)	80	255	31%	100%	50h	FFh			
13	Rotating Gobo Wheel (see list of gobos on page 14)	Indexed and Scan							0		
		Open	0	15	0%	6%	00h	0Fh			
		Gobo 1 - Bar	16	31	6%	12%	10h	1Fh			
		Gobo 2 - Starvolver	32	47	13%	18%	20h	2Fh			
		Gobo 3 - Fracked	48	63	19%	25%	30h	3Fh			
		Gobo 4 - Broken Tunnel	64	79	25%	31%	40h	4Fh			
		Gobo 5 - Seashell	80	95	31%	37%	50h	5Fh			
		Gobo 6 - Glacial	96	111	38%	44%	60h	6Fh			
		Gobo 7 - Shower	112	127	44%	50%	70h	7Fh			
		Gobo 8 - Ice	128	143	50%	56%	80h	8Fh			
		Gobo 9 - Branch Out	144	159	56%	62%	90h	9Fh			
		Reserved (see note 4 on page 12)	160	255	63%	100%	A0h	FFh			
		Spin and Random									0
		Stop	0	3	0%	1%	00h	03h			
Slow to Fast	4	255	2%	100%	04h	FFh					
14	Rotating Gobo 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			
		Forward Animate	48	63	19%	25%	30h	3Fh			
		Reverse Animate	64	79	25%	31%	40h	4Fh			
		Reserved (see note 4 on page 12)	80	255	31%	100%	50h	FFh			
15/16	Rotating Gobo (Coarse/Fine)	Indexed							32767		
		0° to 359°	0	65535	0%	100%	0000h	FFFFh			
		Spin and Animate							32767		
		Stop	0	2047	0%	3%	0000h	07FFh			
Slow to Fast	2048	65535	3%	100%	0800h	FFFFh					
17	Blade 1 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0		
18	Blade 1 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0		
19	Blade 2 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0		
20	Blade 2 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0		

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Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default	
21	Blade 3 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
22	Blade 3 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
23	Blade 4 Angle A (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
24	Blade 4 Angle B (see note 5 on page 12)	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
25/26	Frame Rotation (Coarse/Fine)	-60° to 60°	0	65535	0%	100%	00h	FFFFh	32767	
27	Animation Insertion	Removed to Inserted	0	255	0%	100%	00h	FFh	0	
28	Animation	Forward Spin, Stop to Fast	0	63	0%	25%	00h	3Fh	0	
		Reverse Spin, Stop to Fast	64	127	25%	50%	40h	7Fh		
		Forward Animate, Stop to Fast	128	191	50%	75%	80h	BFh		
		Reverse Animate, Stop to Fast	192	255	75%	100%	C0h	FFh		
29	Prism 1 Mode	Removed	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 Animate	64	79	25%	31%	40h	4Fh		
		Reverse Animate	80	95	31%	37%	50h	5Fh		
		Reserved (see note 4 on page 12)	96	255	38%	100%	60h	FFh		
30/31	Prism 1 Rotate (Coarse/Fine)	Continuous								32767
		0° to 359°	0	65535	0%	100%	0000h	FFFFh		
		Spin and Animate								0
		Stop	0	1027	0%	2%	0000h	0403h		
32	Reserved	Reserved for Future Use	0	255	0%	100%	00h	FFh	0	
33/34	Diffusion Heavy (Coarse/Fine)	Removed	0	0	0%	0%	0000h	0000h	0	
		Hard to Soft Edge	1	65535	0%	100%	0001h	FFFFh		
35	Diffusion Light	Removed	0	0	0%	0%	00h	00h	0	
		Hard to Soft Edge	1	255	0%	100%	01h	FFh		
36	Diffusion Medium	Removed	0	0	0%	0%	00h	00h	0	
		Hard to Soft Edge	1	255	0%	100%	01h	FFh		
37/38	Focus (Coarse/Fine)	Focus	0	65535	0%	100%	00h	FFFFh	0	
39/40	Zoom (Coarse/Fine)	3.8° to 55°	0	65535	0%	100%	00h	FFFFh	0	
41	Iris	Closed to Open	0	255	0%	100%	00h	FFh	255	

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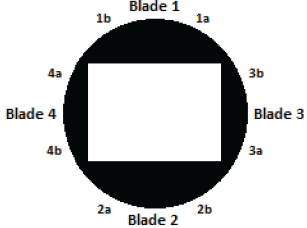
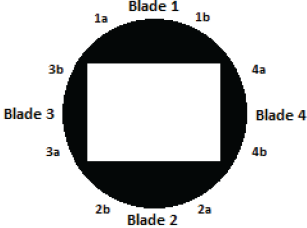
Lonestar DMX Channel Map

Channel	Function	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High	Controller Default
42	Strobe Mode	Normal	0	15	0%	6%	00h	0Fh	0
		Random	16	31	6%	12%	10h	1Fh	
		Synchronous Random (see note 2 on page 12)	32	47	13%	18%	20h	2Fh	
		Reserved (see note 4 on page 12)	48	255	19%	100%	30h	FFh	
43	Strobe	Closed	0	0	0%	0%	00h	00h	255
		Slow to Fast	1	254	0%	100%	01h	FEh	
		Open	255	255	100%	100%	FFh	FFh	
44/45	Dimmer (Coarse/Fine)	Off to Full	0	65535	0%	100%	00h	FFFFh	0
46	mSpeed	Disabled	0	0	0%	0%	00h	00h	0
		Longest to Shortest	1	255	0%	100%	01h	FFh	
47	Control	Idle	0	15	0%	6%	00h	0Fh	0
		Reserved (see note 4 on page 12)	16	31	6%	12%	10h	1Fh	
		Display Off (hold 3 seconds)	32	47	13%	18%	20h	2Fh	
		Display On (hold 3 seconds)	48	63	19%	25%	30h	3Fh	
		Reserved (see note 4 on page 12)	64	79	25%	31%	40h	4Fh	
		Home All (hold 3 seconds)	80	95	31%	37%	50h	5Fh	
		Shutdown (hold 9 seconds)	96	111	38%	44%	60h	6Fh	
		Disable Pan/Tilt Motors (hold 9 seconds)	112	127	44%	50%	70h	7Fh	
		Dimming Mode - 2.4 kHz (hold 9 seconds)	128	143	50%	56%	80h	8Fh	
		Dimming Mode - 16 kHz (hold 9 seconds)	144	159	56%	62%	90h	9Fh	
Reserved (see note 4 on page 12)	160	255	63%	100%	A0h	FFh			
48	Fan (see note 3 on page 12)	Idle	0	15	0%	6%	00h	0Fh	0
		Set Continuous Speed - Slow to Fast	16	207	6%	81%	10h	CFh	
		Auto	208	223	82%	87%	D0h	DFh	
		Studio	224	239	88%	94%	E0h	EFh	
		Reserved (see note 4 on page 12)	240	255	94%	100%	F0h	FFh	

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Notes

1	<p>Continuous/Indexed mode should take the quickest path from 255-0 and 0-255. Continuous mode color wheel aperture centers are as follows:</p> <table border="1" data-bbox="225 359 836 793"> <thead> <tr> <th>Color</th> <th>Center of Color DMX Value</th> </tr> </thead> <tbody> <tr><td>Open</td><td>0</td></tr> <tr><td>Red</td><td>26</td></tr> <tr><td>Blue</td><td>47</td></tr> <tr><td>Green</td><td>70</td></tr> <tr><td>Yellow</td><td>93</td></tr> <tr><td>Purple</td><td>116</td></tr> <tr><td>TM-30</td><td>138</td></tr> <tr><td>Lavender</td><td>161</td></tr> <tr><td>Half CTO</td><td>183</td></tr> <tr><td>Full CTO</td><td>206</td></tr> <tr><td>Dark Blue</td><td>229</td></tr> </tbody> </table>	Color	Center of Color DMX Value	Open	0	Red	26	Blue	47	Green	70	Yellow	93	Purple	116	TM-30	138	Lavender	161	Half CTO	183	Full CTO	206	Dark Blue	229
Color	Center of Color DMX Value																								
Open	0																								
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TM-30	138																								
Lavender	161																								
Half CTO	183																								
Full CTO	206																								
Dark Blue	229																								
2	Synchronous random strobes are synchronized across fixtures.																								
3	When the fixture is turned off it will retain the selected fan mode.																								
4	Reserved ranges should function according to the controller default value.																								
5	<p>Framing blades are arranged according to graphics below.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="204 951 544 1239" style="border: 1px solid black; padding: 5px;">  <p style="text-align: center;">Pan & Tilt locks facing wall. View as projected on the wall.</p> </div> <div data-bbox="592 951 932 1239" style="border: 1px solid black; padding: 5px;">  <p style="text-align: center;">Pan & Tilt locks facing viewer. View looking at the output lens.</p> </div> </div>																								

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DMX Fixture Orientation (Tilt Movement Range: 251°; Pan Movement Range: 540°) (Pan and tilt lock locations are highlighted in orange.)	
6	<p>Tilt = 255 DMX Pan = 128 DMX</p>
	<p>Tilt = 128 DMX Pan = 128 DMX</p>
	<p>Tilt = 0 DMX Pan = 128 DMX</p>
	<p>Pan = 0 DMX Tilt = 37 DMX</p>
	<p>Pan = 128 DMX Tilt = 37 DMX</p>
	<p>Pan = 255 DMX Tilt = 37 DMX</p>
7	RDM Manufacturer ID: 0x4c52
8	RDM Device ID: 0x05D0

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Lonestar Rotating Gobos

Position	Name	Image
1	Bar	
2	Starvolver	
3	Fracked	
4	Broken Tunnel	
5	Seashell	
6	Glacial	
7	Shower	
8	Ice	
9	Branch Out	

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Lonestar DMX Channel Map

Revision History

Revision	Change	Release Date
D	Corrected the Decimal High, Percent High, and Hex High values for channels 25 and 26 in both the Standard and Trifusion protocols.	May 2022
C	Added hold times to channel 47, Control, in both the Standard and Trifusion protocols.	February 2022
B	Corrected the center of color DMX values for red, blue, green, purple, TM-30, lavender, Half CTO, Full CTO, and dark blue.	October 2021
A	Initial release	August 2021