

# TechnoArc Luminaire DMX Control Protocol \*

Rev 2. March 16, 2012

Channel	Marketing Construct	Description	Decimal Low	Decimal High	Percent Low	Percent High	Hex Low	Hex High
1	Pan	Pan Coarse	0	255	0%	100%	00h	FFh
2	Pan	Pan Fine	0	255	0%	100%	00h	FFh
3	Tilt	Tilt Coarse	0	255	0%	100%	00h	FFh
4	Tilt	Tilt Fine	0	255	0%	100%	00h	FFh
5	Color Mix Function	Full Speed Control						
		Pure Mix	0	47	0%	18%	00h	2Fh
		Cycle	48	63	19%	25%	30h	3Fh
		Random	64	79	25%	31%	40h	4Fh
		TBD	80	95	31%	37%	50h	5Fh
		TBD	96	127	38%	50%	60h	7Fh
6 7 8	Cyan Magenta Yellow	Pure Mix						
		Full Saturation	0		100%		00h	
		Open	255		0%		FFh	
		Cycle & Random Modes. Scan Speed controlled by Cyan Channel						
		Slow Rate	0		0%		00h	
Fast Rate	255		100%		FFh			
9	Static Color Function	Full Speed Control						
		Indexed	0	15	0%	6%	00h	0Fh
		Forward Spin	16	31	6%	12%	10h	1Fh
		Reverse Spin	32	47	13%	18%	20h	2Fh
		Continuous	48	63	19%	25%	30h	3Fh
		Fast Scan	64	79	25%	31%	40h	4Fh
		Random	80	95	31%	37%	50h	5Fh
		TBD	96	127	38%	50%	60h	7Fh
Reserved	128	255	50%	100%	80h	FFh		
10	Static Color Position	Indexed & Scan modes						
		Position 1 (Open)	0	24	0%	9%	00h	18h
		Red	25	49	10%	19%	19h	31h
		Blue	50	74	20%	29%	32h	4Ah
		Green	75	99	29%	39%	4Bh	63h
		Yellow	100	124	39%	49%	64h	7Ch
		Amber	125	149	49%	58%	7Dh	95h
		Pink	150	174	59%	68%	96h	AEh
		Indigo	175	199	69%	78%	AFh	C7h
		CTO	200	224	78%	88%	C8h	E0h
		Position 1 (Open)	225	255	88%	100%	E1h	FFh
		Spin & Random modes						
		Stop	0		0%	0%	00h	00h
		Slowest to fastest	255		100%	0%	FFh	00h
		Continuous mode						
Positioning from 0-360 degrees	0	255	0%	100%	00h	FFh		
11	Zoom Bypass	Closed	0		0%		00h	
		Closed to fully open	1	254	0%	100%	01h	FEh
		Open	255		100%		FFh	
12	Zoom Coarse	Zoom In	0		0%		00h	
		Zoom Out	255		100%		FFh	
13	Zoom Fine	Zoom In	0		0%		00h	
		Zoom Out	255		100%		FFh	

14	Iris	Iris Closed	0		0%		00h	
		Iris Open	255		100%		FFh	
15	Shutter/ Lamp Function	Normal Shutter Functions	0	31	0%	12%	00h	1Fh
		Random Random strobe	32	63	13%	25%	20h	3Fh
		Synchronous Random Strobe	64	95	25%	37%	40h	5Fh
		Normal Shutter Functions	96	255	38%	100%	60h	FFh
16	Shutter	Normal/Random/Sync Random shutter functions.						
		Close	0	23	0%	9%	00h	17h
		Strobe Rate (slow to fast)	24	229	9%	90%	18h	E5h
		Open	230	255	90%	100%	E6h	FFh
17	Dim	Close	0		0%		00h	
		Open	255		100%		FFh	
18	Mspeed	Disable	0	3	0%	1%	00h	03h
		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
		Reserved	10	19	4%	7%	0Ah	#NAME?
		Shutter channel to 0 for access to the following commands.						
		Display Off (send 20 packets)	20	28	8%	11%	14h	1Ch
		Display On (send 20 packets)	40	48	16%	19%	28h	30h
		Home All (send 20 packets)	60	68	24%	27%	3Ch	44h
		Lamp On (send 20 packets)	80	88	31%	35%	50h	58h
		Lamp Off (send 20 packets)	90	98	35%	38%	5Ah	62h
		Shutdown (send 80 packets)	120	130	47%	51%	78h	82h
		Position Home (send 20 packets)	131	140	51%	55%	83h	8Ch
		Color Home (send 20 packets)	141	150	55%	59%	8Dh	96h
		TBD	151	160	59%	63%	97h	A0h
		Shutter & Dimmer Home (send 20 packets)	161	170	63%	67%	A1h	AAh
		Other Motor Home (send 20 packets)	171	180	67%	71%	ABh	B4h
Audio Sync (send 20 packets)	181	190	71%	75%	B5h	BEh		
No shutter channel requirement.								
TBD	191	255	75%	100%	BFh	FFh		
20	Indigo Highlighter Function	Indigo Highlighter Dim Tracking Mode						
		Continuous	0	15	0%	6%	00h	0Fh
		Periodic Strobe (slow to fast)	16	41	6%	16%	10h	29h
		TBD	42	127	16%	50%	2Ah	7Fh
		Indigo Highlighter Independent Dim Mode						
		Continuous	128	143	50%	56%	80h	8Fh
Periodic Strobe (slow to fast)	144	169	56%	66%	90h	A9h		
TBD	170	255	67%	100%	AAh	FFh		
21	Indigo Highlighter Dim	Indigo Highlighter Off	0		0%		00h	
		Indigo Highlighter 100%	255		100%		FFh	

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