

Technobeam[®] Protocol

Table A-1 gives the DMX channel assignments for the Technobeam full 18-channel protocol and reduced 14-channel protocol. The column “Ch. (F)” lists channel assignments for the full protocol and the column “Ch. (R)” lists channel assignments for the reduced protocol.

Table A-1. Technobeam DMX Protocol

Ch. (F)	Ch. (R)	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
1	1	Pan (mirror) position	Coarse adjustment	0 - 255	0 - 100	00h - FFh
2	n/a	Pan (mirror) position	Fine adjustment	0 - 255	0 - 100	00h - FFh
3	2	Tilt (mirror) position	Coarse adjustment	0 - 255	0 - 100	00h - FFh
4	n/a	Tilt (mirror) position	Fine adjustment	0 - 255	0 - 100	00h - FFh
5	3	Color wheel functions Fast color change (at beginning of wheel movement) Select the function with this channel. Then use ch. 6 (F) or 4 (R) to set the position or spin speed.	Indexed (wheel snaps to center of aperture)	0 - 15	0 - 5	00h - 0Fh
			Forward spin	16 - 31	6 - 12	10h - 1Fh
			Reverse spin	32 - 47	13 - 18	20h - 2Fh
			Continuous	48 - 63	19 - 24	30h - 3Fh
			Slow scan	64 - 79	25 - 30	40h - 4Fh
			Fast scan	80 - 95	31 - 37	50h - 5Fh
			Random	96 - 111	38 - 43	60h - 6Fh
			Blink (same as index, except shutter closes between apertures)	112 - 127	44 - 49	70h - 7Fh
		Color changes set by MSpeed (use ch. 16 (F) or 13 (R) to set MSpeed time). Select the parameter with this channel. Then use ch. 6 (F) or 4 (R) to set the position or spin speed.	Indexed (wheel snaps to center of aperture)	128 - 143	50 - 56	80h - 8Fh
			Forward spin	144 - 159	57 - 62	90h - 9Fh
			Reverse spin	160 - 175	63 - 68	A0h - AFh
			Continuous	176 - 191	69 - 74	B0h - BFh
			Slow scan	192 - 207	75 - 81	C0h - CFh
			Fast scan	208 - 223	82 - 87	D0h - DFh
6	4	Color wheel position and functions Position (aperture) selection for blink or index mode (use with ch. 5 (F) or 3 (R))	Position 1 (open)	0 - 23 248 - 255	0 - 9 97 - 100	00h - 17h F8h - FFh
			Position 2	24 - 31	9 - 12	18h - 1Fh
			Position 3	32 - 39	13 - 15	20h - 27h

Table A-1. Technobeam DMX Protocol

Ch. (F)	Ch. (R)	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
			Position 4	40 - 47	16 - 18	28h - 2Fh
			Position 5	48 - 55	19 - 21	30h - 37h
			Position 6	56 - 63	22 - 24	38h - 3Fh
			Position 7	64 - 71	25 - 27	40h - 47h
			Position 8	72 - 79	28 - 30	48h - 4Fh
			Position 9	80 - 87	31 - 34	50h - 57h
			Position 10	88 - 95	35 - 37	58h - 5Fh
			Position 11	96 - 103	38 - 40	60h - 67h
			Position 12	104 - 111	41 - 43	68h - 6Fh
			Position 13	112 - 127	44 - 49	70h - 7Fh
			Half color 1 and 2	128 - 143	50 - 56	80h - 8Fh
			Half color 2 and 3	144 - 151	57 - 59	90h - 97h
			Half color 3 and 4	152 - 159	60 - 62	98h - 9Fh
			Half color 4 and 5	160 - 167	63 - 65	A0h - A7h
			Half color 5 and 6	168 - 175	66 - 68	A8h - AFh
			Half color 6 and 7	176 - 183	69 - 71	B0h - B7h
			Half color 7 and 8	184 - 191	72 - 74	B8h - BFh
			Half color 8 and 9	192 - 199	75 - 78	C0h - C7h
			Half color 9 and 10	200 - 207	79 - 81	C8h - CFh
			Half color 10 and 11	208 - 215	82 - 84	D0h - D7h
			Half color 11 and 12	216 - 223	85 - 87	D8h - DFh
			Half color 12 and 13	224 - 231	88 - 90	E0h - E7h
			Half color 13 and 1	232 - 247	91 - 96	E8h - F7h
		Color wheel continuous forward/ reverse spin (use with ch. 5 (F) or 3 (R))	No spin	0 - 3	0 - 1	00h - 03h
			Slowest spin to fastest spin	4 - 255	2 - 100	04h - FFh
		Color wheel continuous variation (wheel position is 360 * (channel dec. value / 255) Use with ch. 5 (F) or 3 (R)	Centered on position 1 (open)	0 255	0 100	00h FFh
			Centered on position 2	19	7	13h
			Centered on position 3	39	15	27h
			Centered on position 4	58	23	3Ah
			Centered on position 5	78	31	4Eh
			Centered on position 6	98	38	62h
			Centered on position 7	117	46	75h
			Centered on position 8	137	54	89h
			Centered on position 9	156	61	9Ch

Table A-1. Technobeam DMX Protocol

Ch. (F)	Ch. (R)	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
			Centered on position 10	176	69	B0h
			Centered on position 11	196	77	C4h
			Centered on position 12	215	84	D7h
			Centered on position 13	235	92	EBh
7	5	<p>Litho wheel functions</p> <p>Fast litho changes (at beginning of wheel movement)</p> <p>Select the function with this channel. Then use chs. 8, 9 & 10 (F) or chs. 6 & 7 (R) to set other options.</p> <p>Random and scan pause time set by chs. 9 & 10 (F) or ch. 7 (R)</p>	Indexed (wheel snaps to center of aperture)	0 - 15	0 - 5	00h - 0Fh
			Forward spin	16 - 31	6 - 12	10h - 1Fh
			Reverse spin	32 - 47	13 - 18	20h - 2Fh
			Scan	48 - 63	19 - 24	30h - 3Fh
			Blink (same as index, except shutter closes between apertures)	64 - 79	25 - 30	40h - 4Fh
			Random	80 - 95	31 - 37	50h - 5Fh
			Reserved	96 - 111	38 - 43	60h - 6Fh
			Wheel spin	112 - 127	44 - 49	70h - 7Fh
		<p>Litho changes set by MSpeed (use ch. 16 (F) or 13 (R) to set MSpeed time)</p> <p>Select the parameter with this channel. Then use chs. 8, 9 & 10 (F) or chs. 6 & 7 (R) to set other options.</p> <p>Random and scan pause time set by ch. 9 (F) or ch. 7 (R)</p>	Indexed (wheel snaps to center of aperture)	128 - 143	50 - 56	80h - 8Fh
			Forward spin	144 - 159	57 - 62	90h - 9Fh
			Reverse spin	160 - 175	63 - 68	A0h - AFh
			Scan	176 - 191	69 - 74	B0h - BFh
			Blink (same as index, except shutter closes between apertures)	192 - 207	75 - 81	C0h - CFh
			Random	208 - 223	82 - 87	D0h - DFh
			Reserved	224 - 239	88 - 93	E0h - EFh
			Wheel spin	240 - 255	94 - 100	F0h - FFh
8	6	<p>Litho wheel position</p> <p>Position (aperture) selection for blink or index mode (use with ch. 5 (F) or 3 (R))</p>	Position 1 (open)	0 - 15 240 - 255	0 - 5 94 - 100	00h - 0Fh F0h - FFh
			Position 2	16 - 47	6 - 18	10h - 2Fh
			Position 3	48 - 79	19 - 30	30h - 4Fh
			Position 4	80 - 111	31 - 43	50h - 6Fh
			Position 5	112 - 143	44 - 56	70h - 8Fh
			Position 6	144 - 175	57 - 68	90h - AFh
			Position 7	176 - 207	69 - 81	B0h - CFh
			Position 8	208 - 239	82 - 93	D0h - EFh
9	7	<p>Litho rotation (coarse adjustment) and functions</p>	Angular position for blink and index modes	0 - 255	0 - 100	00h - FFh

Table A-1. Technobeam DMX Protocol

Ch. (F)	Ch. (R)	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
		Random	Random pause time, shortest to longest	0 - 255	0 - 100	00h - FFh
		Scan	Scan rate, slowest to fastest	0 - 255	0 - 100	00h - FFh
		Litho wheel spin (use with ch. 7 (F) or ch. 5 (R))	Forward spin, fastest to slowest	0 - 119	0 - 47	0 - 77h
		Entire wheel spins, not individual lithos	No spin	120 - 135	47 - 53	78h - 87h
			Reverse spin, slowest to fastest	136 - 255	53 - 100	88h - FFh
10	n/a	Litho rotation (fine adjustment)	Angular position for blink and index modes	0 - 255	0 - 100	00h - FFh
11	8	Effects position Fast effects changes (at beginning of wheel movement) Select the position with this channel. Then use ch. 12 (F) or ch. 9 (R) to set spin direction and speed.	Position 1	0 - 25	0 - 9	00h - 19h
			Position 2	26 - 51	10 - 20	1Ah - 33h
			Position 3	52 - 76	21 - 29	34h - 4Ch
			Position 4	77 - 102	31 - 40	4Dh - 66h
			Position 5	103 - 127	41 - 49	67h - 7Fh
		Effects changes set by MSpeed (use ch. 16 (F) or 13 (R) to set MSpeed time) Select the position with this channel. Then use ch. 12 (F) or ch. 9 (R) to set spin direction and speed	Position 1	128 - 153	50 - 60	80h - 99h
			Position 2	154 - 178	61 - 69	9Ah - B2h
			Position 3	179 - 204	70 - 80	B2h - CCh
			Position 4	205 - 229	81 - 89	CDh - E5h
			Position 5	230 - 255	90 - 100	E6h - FFh
12	9	Effects spin speed (use with ch. 11 (F) or ch. 8 (R))	Forward spin fast to slow forward spin	0 - 120	0 - 47	00h - 78h
			No spin	121 - 134	48 - 52	79h - 86h
			Reverse spin slow to fast forward spin	135 - 255	53 - 100	87h - FFh
13	10	Focus	Variable focus	0 - 255	0 - 100	00h - FFh
14	11	Shutter Longest ramp time = lowest value (snap time is always short)	Closed	0 - 7	0 - 2	00h - 07h
			Periodic strobe	8 - 67	3 - 26	08h - 43h
			Random strobe	68 - 127	27 - 49	44h - 7Fh
			Ramp open, snap shut	128 - 187	50 - 73	80h - BBh
			Snap open, ramp shut	188 - 247	74 - 96	BCh - F7h
			Open	248 - 255	97 - 100	F8h - FFh
15	12	Dim	Full dark to full bright	0 - 255	0 - 100	00h - FFh
16	13	MSpeed	Movement time (see Table A-3 on page A-13)			

Table A-1. Technobeam DMX Protocol

Ch. (F)	Ch. (R)	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
17	n/a	Laser Aiming Device (LAD)	LAD off	0 - 7 120 - 127	0 - 3 47 - 49	00 - 07h 78h - 7Fh
			LAD modulate slow to fast ¹	128 - 247	50 - 96	80h - F7h
			LAD on (continuous)	248 - 255	97 - 100	F8h - FFh
		Macros	Macro 1—28 (see Table A-4 on page A-15)			
18	14	Control ²	Safe ³	0 - 7	0 - 3	00h - 07h
			Display off	24 - 26	9 - 10	18h - 1Ah
			Display dim	32 - 34	13	20h - 22h
			Display bright	40 - 42	16	28h - 2Ah
			Home ⁴	64 - 66	25 - 26	40h - 42h
			Lamp on ⁵	80 - 82	31 - 32	50h - 52h
			Lamp off ⁶	96 - 98	38	60h - 62h
			Shutdown	128 - 130	50 - 51	80h - 82h

¹ - "Slow" modulation is 4.25 times/sec and "fast" modulation is 255 times/sec, at 50% duty cycle.

² - You must set the Shutter channel to zero before accessing the Control channel.

³ - When set to Safe, the control channel has no effect if the shutter is closed.

⁴ - Hold the Control channel at this value for at least one second. Homing the fixture in this way does not change the state of the lamp (if the lamp was off, it stays off; if the lamp was on, it stays on).

⁵ - Hold the Control channel at this value for at least one second. If the lamp is currently off, turning the lamp on in this way causes the fixture to home. (If the lamp was already on, the command has no effect.)

⁶ - Hold the Control channel at this value for at least one second. The lamp will also turn on whenever you power up the fixture on a link when there is a controller present and it is sending data commands.

Technobeam-i™ Protocol

Table 2 lists the 18 Technobeam-i constructs and their corresponding DMX controller values. If you have a numeric-type controller, use the Value Decimal (dec.) column. If you have a fader-type controller, use the Value Percentage (%) column. If your controller allows you to program hex values, use the Value (hex) column. The values in the Value

Percentage (%) column may vary slightly depending on your controller's rounding convention.

Table A-2. Technobeam-i DMX Protocol

Ch.	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)		
1	Pan (mirror) position	Coarse adjustment (8-bit)	0 - 255	0 - 100	00 - FF		
2	Pan (mirror) position	Fine adjustment (8-bit)	0 - 255	0 - 100	00 - FF		
3	Tilt (mirror) position	Coarse adjustment (8-bit)	0 - 255	0 - 100	00 - FF		
4	Tilt (mirror) position	Fine adjustment (8-bit)	0 - 255	0 - 100	00 - FF		
5	Color Function	Full Speed Control					
		Indexed	0-15	0-6	00-0F		
		Forward Spin	16-31	7-12	10-1F		
		Reverse Spin	32-47	13-18	20-2F		
		Continuous	48-63	19-25	30-3F		
		Slow Scan	64-79	26-31	40-4F		
		Fast Scan	80-95	32-37	50-5F		
		Random	96-111	38-44	60-6F		
		Blink	112-127	45-50	70-7F		
		MSpeed Control					
		Indexed	128-143	51-56	80-8F		
		Forward Spin	144-159	57-62	90-9F		
		Reverse Spin	160-175	63-69	A0-AF		
		Continuous	176-191	70-75	B0-BF		
		Slow Scan	192-207	76-81	C0-CF		
		Fast Scan	208-223	82-88	D0-DF		
		Random	224-239	89-94	E0-EF		
		Blink	240-255	95-100	F0-FF		
		6	Color Wheel Position	Indexed and Blink Modes			
				Color 1	0-23	0-9	00-17
Color 2	24-31			10-12	18-1F		
Color 3	32-39			13-15	20-27		
Color 4	40-47			16-18	28-2F		
Color 5	48-55			19-21	30-37		
Color 6	56-63			22-25	38-3F		
Color 7	64-71			26-28	40-47		
Color 8	72-79			29-31	48-4F		
Color 9	80-87			32-34	50-57		
Color 10	88-95			35-37	58-5F		
Color 11	96-103			38-40	60-67		
Color 12	104-111			41-44	68-6F		
Color 13	112-127			45-50	70-7F		
Colors 1 and 2	128-143			51-56	80-8F		
Colors 2 and 3	144-151			57-60	90-97		
Colors 3 and 4	152-159			61-62	98-9F		
Colors 4 and 5	160-167			63-66	A0-A7		
Colors 5 and 6	168-175			67-69	A8-AF		
Colors 6 and 7	176-183			70-72	B0-B7		
Colors 7 and 8	184-191	73-75	B8-BF				
Colors 8 and 9	192-199	76-78	C0-C7				
Colors 9 and 10	200-207	79-81	C8-CF				

Table A-2. Technobeam-i DMX Protocol

Ch.	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)	
6 (cont.)	Color Wheel Position (cont.)	Colors 10 and 11	208-215	82-84	D0-D7	
		Colors 11 and 12	216-223	85-88	D8-DF	
		Colors 12 and 13	224-231	89-91	E0-E7	
		Colors 13 and 1	232-247	92-97	E8-F7	
		Color 1	248-255	98-100	F8-FF	
		Continuously Variable Forward Spin Mode				
		Spin Stop	0-3	0-1	00-03	
		Spin Forward Slowest	4	2	04	
		Spin Forward Fastest	255	100	FF	
		Continuously Variable Reverse Spin Mode				
		Spin Stop	0-3	0-1	00-03	
		Spin Reverse Slowest	4	2	04	
		Spin Reverse Fastest	255	100	FF	
		Continuously Variable Mode				
		Color 1 (open)	0	0	00	
		Color 2	19	8	13	
		Color 3	39	15	27	
		Color 4	58	23	3A	
		Color 5	78	31	4E	
		Color 6	98	38	62	
		Color 7	117	46	75	
		Color 8	137	54	89	
		Color 9	156	61	9C	
		Color 10	176	69	B0	
		Color 11	196	77	C4	
		Color 12	215	84	D7	
		Color 13	235	92	EB	
		Color 1 (open)	255	100	FF	
		Scan Mode - two colors				
		Color 1 and 2	0-23	0-8	00-17	
		Color 2 and 3	24-31	9-12	18-1F	
		Color 3 and 4	32-39	13-15	20-27	
		Color 4 and 5	40-47	16-18	28-2F	
		Color 5 and 6	48-55	19-21	30-37	
		Color 6 and 7	56-63	22-25	38-3F	
		Color 7 and 8	64-71	26-28	40-47	
		Color 8 and 9	72-79	29-31	48-4F	
		Color 9 and 10	80-87	32-34	50-57	
		Color 10 and 11	88-95	35-37	58-5F	
		Color 11 and 12	96-103	38-40	60-67	
		Color 12 and 13	104-111	41-44	68-6F	
		Color 13 and 1	112-127	45-50	70-7F	
		Scan Mode - three colors				
		Color 13 and 1 and 2	128-151	51-59	80-97	
		Color 1 and 2 and 3	152-159	60-62	98-9F	
		Color 2 and 3 and 4	160-167	63-66	A0-A7	
		Color 3 and 4 and 5	168-175	67-69	A8-AF	
		Color 4 and 5 and 6	176-183	70-72	B0-B7	
		Color 5 and 6 and 7	184-191	73-75	B8-BF	
		Color 6 and 7 and 8	192-199	76-78	C0-C7	

Table A-2. Technobeam-i DMX Protocol

Ch.	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
6 (cont.)	Color Wheel Position (cont.)	Color 7 and 8 and 9	200-207	79-81	C8-CF
		Color 8 and 9 and 10	208-215	82-84	D0-D7
		Color 9 and 10 and 11	216-223	85-88	D8-DF
		Color 10 and 11 and 12	224-231	89-91	E0-E7
		Color 11 and 12 and 13	232-239	92-94	E8-EF
		Color 12 and 13 and 1	240-255	95-100	F0-FF
		Random Mode			
		Random Slowest	0	0	00
	Random Fastest	255	100	FF	
7	Litho Function	Full Speed Control			
		Indexed	0-15	0-6	00-0F
		Forward Spin	16-31	7-12	10-1F
		Reverse Spin	32-47	13-18	20-2F
		Scanning	48-63	19-25	30-3F
		Blink	64-79	26-31	40-4F
		Random	80-95	32-37	50-5F
		Reserved for Future Use	96-111	38-44	60-6F
		Wheel Spin	112-127	45-50	70-7F
		MSpeed Control			
		Indexed	128-143	51-56	80-8F
		Forward Spin	144-159	57-62	90-9F
		Reverse Spin	160-175	63-69	A0-AF
		Scanning	176-191	70-75	B0-BF
		Blink	192-207	76-81	C0-CF
		Random	208-223	82-88	D0-DF
		Reserved for Future Use	224-239	89-94	E0-EF
			Wheel Spin	240-255	95-100
8	Litho Wheel Position	Indexed, Blink, Spins, and Scanning Modes			
		Litho 1 (open)	0-15	0-6	00-0F
		Litho 2	16-47	7-18	10-2F
		Litho 3	48-79	19-31	30-4F
		Litho 4	80-111	32-44	50-6F
		Litho 5	112-143	45-56	70-8F
		Litho 6	144-175	57-69	90-AF
		Litho 7	176-207	70-81	B0-CF
		Litho 8	208-239	82-94	D0-EF
	Litho 1 (open)	240-255	95-100	F0-FF	
9	Litho Rotate	Indexed Mode			
		Litho Position	0-255	0-100	00-FF
		Scan Mode			
		Slowest Scanning	0	0	00
		Fastest Scanning	255	100	FF
		Random Mode			
		Random Slowest	0	0	00
		Random Fastest	255	100	FF
		Wheel Spin Mode			
		Fastest Forward Wheel Spin	0	0	00
		Slowest Forward Wheel Spin	127	49	7F
		Slowest Reverse Wheel Spin	128	50	80
	Fastest Reverse Wheel Spin	255	100	FF	

Table A-2. Technobeam-i DMX Protocol

Ch.	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
10	Iris	Close	0	0	00
		Variable Iris	1-127	1-50	01-7F
		Open	128-135	51-53	80-87
		Periodic Strobe	136-151	54-59	88-97
		Random Strobe	152-167	60-66	98-A7
		Ramp Open/Snap Shut	168-183	67-72	A8-B7
		Snap Open/Ramp Shut	184-199	73-78	B8-C7
		Ramp Open/Ramp Shut	200-215	79-84	C8-D7
		Random Ramp Open/Snap Shut	216-231	85-91	D8-E7
		Random Snap Open/Ramp Shut	232-247	92-97	E8-F7
	Open	248-255	98-100	F8-FF	
11	Effects Wheel Position	Full Speed Control			
		Effect 1	0-25	0-10	00-19
		Effect 2	26-51	11-20	1A-33
		Effect 3	52-76	21-30	34-4C
		Effect 4	77-102	31-40	4D-66
		Effect 5	103-127	41-50	67-7F
		MSpeed Control			
		Effect 1	128-153	51-60	80-99
		Effect 2	154-178	61-70	9A-B2
		Effect 3	179-204	71-80	B3-CC
		Effect 4	205-229	81-90	CD-E5
		Effect 5	230-255	91-100	E6-FF
12	Effects Rotate	Rotate Clockwise Fastest	0	0	00
		Rotate Clockwise Slowest	120	47	78
		No rotation	121-134	48-52	79-86
		Rotate Counter-Clockwise Slowest	135	53	87
		Rotate Counter-Clockwise Fastest	255	100	FF
13	Focus	Focus In	0	0	00
		Focus Out	255	100	FF
14	Shutter	Close	0-7	0-3	00-07
		Periodic Strobe	8-67	4-26	08-43
		Random Strobe	68-127	27-50	44-7F
		Ramp Open, Snap Shut	128-187	51-73	80-BB
		Snap Open, Ramp Shut	188-247	74-97	BC-F7
		Open	248-255	98-100	F8-FF
15	Dim	Close	0	0	00
		Continuously Variable	1-254	1-99	01-FE
		Open	255	100	FF
16	MSpeed	See Table A-3 on page A-13 for MSpeed times			
17	Macro/LAD™	LAD Off	0-7	0-3	00-07
		Macro 1	8-11	3-4	08-0B
		Macro 2	12-15	5-6	0C-0F
		Macro 3	16-19	6-8	10-13
		Macro 4	20-23	8-9	14-17
		Macro 5	24-27	9-11	18-1B
		Macro 6	28-31	11-12	1C-1F
		Macro 7	32-35	13-14	20-23
		Macro 8	36-39	14-15	24-27

Table A-2. Technobeam-i DMX Protocol

Ch.	Construct	Parameter	Value (dec.)	Value (%)	Value (hex)
17 (cont.)	Macro/LAD™ (cont.)	Macro 9	40-43	16-17	28-2B
		Macro 10	44-47	17-18	2C-2F
		Macro 11	48-51	19-20	30-33
		Macro 12	52-55	20-22	34-37
		Macro 13	56-59	22-23	38-3B
		Macro 14	60-63	24-25	3C-3F
		Macro 15	64-67	25-26	40-43
		Macro 16	68-71	27-28	44-47
		Macro 17	72-75	28-29	48-4B
		Macro 18	76-79	30-31	4C-4F
		Macro 19	80-83	31-33	50-53
		Macro 20	84-87	32-34	54-57
		Macro 21	88-91	34-36	58-5B
		Macro 22	92-95	36-37	5C-5F
		Macro 23	96-99	38-39	60-63
		Macro 24	100-103	39-40	64-67
		Macro 25	104-107	41-42	68-6B
		Macro 26	108-111	42-44	6C-6F
		Macro 27	112-115	44-45	70-73
		Macro 28	116-119	46-47	74-77
	LAD Off	120-127	47-50	78-7F	
	LAD Modulate Slowest	128	50	80	
	LAD Modulate Fastest	247	97	F7	
	LAD On Continuously	248-255	97-100	F8-FF	
18	Control Note: Shutter (channel 14) must be set to "0" to access the control functions.	Safe	0-7	0-3	00-07
		Display Off	24-26	9-10	18-1A
		Display Dim	32-34	12-13	20-22
		Display Bright	40-42	16-17	28-2A
		Home	64-66	25-26	40-42
		Lamp On	80-82	31-32	50-52
		Lamp Off	96-98	37-38	60-62
		Shutdown	128-130	50-51	80-82

MSpeed Movement Times

Use Table A-3 to determine the MSpeed (motor/mirror) movement times for Technobeam, Technopro or Technoray in seconds.

An MSpeed (motor/mirror speed) change occurs smoothly over the entire MSpeed time value. For example, if you choose a numerical DMX value of 202 for an MSpeed color change from position 2 to position 4, that means the color wheel changes gradually to position 4 over 11.41 seconds.

Note The values displayed in the "Value (%)" , "Value (hex)" and "Value (num)" columns may vary slightly depending on your controller's rounding conventions.