DMX 512 Mode 2 – Enhanced Cyberlight® DMX Control

Each Cyberlight fixture in DMX mode 2 uses 20 channels of the DMX 512 protocol thus providing control for up to 25 fixtures (512 / 20 = 25.6 fixtures). Use the procedure below to control your Cyberlight with DMX mode 2:

1. Set the Cyberlight fixture to DMX mode 2 by setting address switch 7 to ON and address switch 8 to OFF.

2. Set address switches 1 through 5 to correspond to the desired fixture number, as shown in Table A-3. Note that Cyberlight CX fixtures configured for 20-channel mode work properly and can be mixed with Cyberlight fixtures; they do not respond to the color mixing, zoom, and frost constructs.

3. Refer to Table A-4 for the Cyberlight DMX mode 2 channel assignments.

Table A-3: Addressing Fixtures in 20 Channel DMX 512 Mode 2

Cyberlight Fixture	Fixture Address Switches ON	DMX Channel Number	Cyberlight Fixture	Fixture Address Switches ON	DMX Channel Number
Fixture 1	none	001	Fixture 14	1, 3, and 4	261
Fixture 2	1	021	Fixture 15	2, 3, and 4	281
Fixture 3	2	041	Fixture 16	1, 2, 3, and 4	301
Fixture 4	1 and 2	061	Fixture 17	5	321
Fixture 5	3	081	Fixture 18	1 and 5	341
Fixture 6	1 and 3	101	Fixture 19	2 and 5	361
Fixture 7	2 and 3	121	Fixture 20	1, 2, and 5	381
Fixture 8	1, 2, and 3	141	Fixture 21	3 and 5	401
Fixture 9	4	161	Fixture 22	1, 3, and 5	421
Fixture 10	1 and 4	181	Fixture 23	2, 3, and 5	441
Fixture 11	2 and 4	201	Fixture 24	1, 2, 3, and 5	461
Fixture 12	1, 2, and 4	221	Fixture 25	4 and 5	481
Fixture 13	3 and 4	241			

The “Channel Value (%)” column in Table A-4 below has values you should use if your controller has dimmer-type controls. The “Channel Value (numerical)” column has values you should use if you are using the Status Cue system or another controller that uses digital or numerical controls.

Table A-4: *Cyberlight DMX Assignments Mode 2*

Channel	Assignment	Channel Value (%)	Channel Value (numerical)	Construct Parameter
Channel 1	Pan coarse adjustment	0-100%	0-255	Position
Channel 2	Pan fine adjustment	0-100%	0-255	Position
Channel 3	Tilt coarse adjustment	0-100%	0-255	Position
Channel 4	Tilt fine adjustment	0-100%	0-255	Position
Channel 5	Color Wheel *Full Speed*	Full 98 96 94 93 91 90 88 87 85 83 82 80 79 77 76	255 250 245 240 237 232 230 224 222 217 211 209 204 201 196 194	Color 1 (open) Half color 1 and 2 Color 2 Half color 2 and 3 Color 3 Half color 3 and 4 Color 4 Half color 4 and 5 Color 5 Half color 5 and 6 Color 6 Half color 6 and 7 Color 7 Half color 7 and 8 Color 8 Half color 8 and 1
	Color Wheel *Mspeed*	74 73 71 70 68 66 65 63 62 61 59 57 56 54 52 51	189 186 181 179 173 168 166 161 158 156 150 145 143 138 133 130	Color 1 (open) Half color 1 and 2 Color 2 Half color 2 and 3 Color 3 Half color 3 and 4 Color 4 Half color 4 and 5 Color 5 Half color 5 and 6 Color 6 Half color 6 and 7 Color 7 Half color 7 and 8 Color 8 Half color 8 and 1

Table A-4: *Cyberlight DMX Assignments Mode 2*

Channel	Assignment	Channel Value (%)	Channel Value (numerical)	Construct Parameter
	Color Wheel *Spin Speed*	50 ↑ 26 25 ↑ 0 0	127 ↑ 66 64 ↑ 2 0	Forward spin speed – fastest • • • Forward spin speed – slowest Reverse spin speed – slowest • • • Reverse spin speed – fastest Color 1 (open)
Channel 6	Cyan (Red)	0-100%	0-255	Color Mix
Channel 7	Magenta (Green)	0-100%	0-255	Color Mix
Channel 8	Yellow (Blue)	0-100%	0-255	Color Mix
Channel 9	Static litho *Full Speed*	Full 98 96 94 93 91 90 88 87 85 83 82 80 79 77 76	255 250 245 240 237 232 230 224 222 217 211 209 204 201 196 194	Litho 1 (open) Litho 1 shake wide Litho 2 Litho 2 shake wide Litho 3 Litho 3 shake wide Litho 4 Litho 4 shake wide Litho 5 Litho 5 shake wide Litho 6 Litho 6 shake wide Litho 7 Litho 7 shake wide Litho 8 Litho 8 shake wide
	Static litho *Mspeed*	74 73 71 70 68 66 65 63 62 61 59 57 56 54 52 51	189 186 181 179 173 168 166 161 158 156 150 145 143 138 133 130	Litho 1 (open) Litho 1 shake narrow Litho 2 Litho 2 shake narrow Litho 3 Litho 3 shake narrow Litho 4 Litho 4 shake narrow Litho 5 Litho 5 shake narrow Litho 6 Litho 6 shake narrow Litho 7 Litho 7 shake narrow Litho 8 Litho 8 shake narrow

A

Table A-4: *Cyberlight DMX Assignments Mode 2*

Channel	Assignment	Channel Value (%)	Channel Value (numerical)	Construct Parameter
	Static litho *Spin Speed*	50 ↑ 26 25 ↑ 0 0	127 ↑ 66 64 ↑ 2 0	Forward spin speed – fastest • • • Forward spin speed – slowest Reverse spin speed – slowest • • • Reverse spin speed – fastest Litho 1 (open)
Channel 10	Rotating Litho *Full Speed* Select the litho to rotate (forward/reverse) with this channel. Then use Channel 11 to set the rotation speed. For rotating litho position parameters select the litho position to index with this channel. Then use Channel 11 to set the rotational position (index value) from 0 to 360 degrees.	Full 98 95 91 87 83 80 76 72 68 64 61 58 54	255 250 242 232 222 212 204 194 184 173 163 156 150 138	Position 3 (open) Reverse rotate 5 Reverse rotate 4 Reverse rotate 2 Reverse rotate 1 Forward rotate 5 Forward rotate 4 Forward rotate 2 Forward rotate 1 Position 5 Position 4 Position 3 (open) Position 2 Position 1
	Mspeed	50 46 42 39 36 32 28 24 20 17 13 10 5 0	127 117 107 99 92 82 71 61 51 43 33 26 13 0	Reverse rotate 5 Reverse rotate 4 Reverse rotate 2 Reverse rotate 1 Forward rotate 5 Forward rotate 4 Forward rotate 2 Forward rotate 1 Position 5 Position 4 Position 3 (open) Position 2 Position 1 Position 3 (open)
Channel 11	Rotate (use with Channel 10)	0-100%	0-255	For Rotating Litho rotate mode use Ch 11 to set rotate speed For Rotating Litho position mode use Ch 11 to set the index from 0 to 360 degrees
Channel 12	Zoom	0-100%	0-255	Zoom in/out
Channel 13	Focus	0-100%	0-255	Focus in/out
Channel 14	Iris	0-100%	0-255	Iris open/close

Table A-4: *Cyberlight DMX Assignments Mode 2*

Channel	Assignment	Channel Value (%)	Channel Value (numerical)	Construct Parameter
Channel 15	Effects Wheel Full Speed	Full 96 91 85 80 73 67 62 56	255 245 232 217 204 186 171 158 143	Effect 4 – (open) Effect 8 – cyan color corrector Effect 7 – diffusion Effect 6 – wide angle Effect 5 – magenta color corrector Effect 4 – (open) Effect 3 – yellow color corrector Effect 2 – CYM tri-color mosaic Effect 1 – prism
Channel 15	Effects Wheel *Mspeed*	50 44 37 33 27 21 14 8 0	127 112 94 84 69 54 36 20 0	Effect 8 – cyan color corrector Effect 7 – diffusion Effect 6 – wide angle Effect 5 – magenta color corrector Effect 4 – (open) Effect 3 – yellow color corrector Effect 2 – tri color mosaic (C-Y-M) Effect 1 – prism Effect 4 – (open)
Channel 16	Frost *Frost variable* None to full	Full ↑ 50	255 ↑ 129	Frost – frost free • • • Frost – frost full
	Frost *Full Frost Strobing* (Frost in)	50 ↑ 0 0	126 ↑ 2 0	Frost strobing – fastest • • • Frost strobing – slowest Frost – frost free
Channel 17	Shutter *Strobe* 50 % duty cycle	Full 98 97 ↑ 1 1 0	255 250 247 ↑ 4 1 0	Open Closed Strobe speed – fastest • • • Strobe speed – slowest Open Closed
Channel 18	Dim	100 ↑ 0	255 ↑ 0	No dim Full dim (blackout)
Channel 19	Motor Speed	Full ↑ 0	255-200 ↑ 21 0	Speed 99 • • • Speed 1 Speed 95

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Table A-4: *Cyberlight DMX Assignments Mode 2*

Channel	Assignment	Channel Value (%)	Channel Value (numerical)	Construct Parameter
Channel 20*	Control	50% 25%	128 64	shutdown home

* - Make sure you first follow the instructions in the section titled “Accessing Control Information” on page A-2.