

DMX protocol

Chan.	Value	Function
1	0-255	Dimmer, coarse, 0-100%
2	0-255	Dimmer, fine
3	Strobe	
	0-7	Off
	8-15	Open
	16-131	Strobe, slow→fast
	132-167	Fast close, slow open
	168-203	Slow close, fast open
	204-239	Pulse open and close
	240-247	Random strobe
	248-255	Open
4	Color wheel 1	
	<i>Continuous scrolling</i>	
	0	White
	1-14	White → Red
	15	Red (Color 1)
	16-29	Red → Deep Blue
	30	Deep Blue (Color 2)
	31-44	Deep Blue → Lavender
	45	Lavender (Color 3)
	46-59	Lavender → Magenta
	60	Magenta (Color 4)
	61-74	Magenta → Yellow
	75	Yellow (Color 5)
	76-89	Yellow → Orange
	90	Orange (Color 6)
	91-104	Orange → Light Green
	105	Light Green (Color 7)
	106-119	Light Green → Light blue
	120	Light blue (Color 8)
	121-134	Light blue → White
	135-160	White
	<i>Stepped scrolling</i>	
	161-163	Color 1 - Red
	164-166	Color 2 - Deep Blue
	167-169	Color 3 - Lavender
	170-172	Color 4 - Magenta

Chan.	Value	Function
	173-175	Color 5 - Yellow
	176-178	Color 6 - Orange
	179-181	Color 7 - Light Green
	182-184	Color 8 - Light blue
	185-192	White
		Continuous rotation
	193-214	Clockwise, fast→slow
	215-221	Stop
	222-243	Counter-clockwise, slow→fast
		Random color
	244-247	Fast
	248-251	Medium
	252-255	Slow
5		Color wheel 2
		Continuous scrolling
	0	White
	1-14	White → Pink
	15	Pink (Color 1)
	16-29	Pink → CTO 3200K
	30	CTO 3200K (Color 2)
	31-44	CTO 3200K → UV Purple
	45	UV Purple (Color 3)
	46-59	UV Purple → Light Yellow
	60	Light Yellow (Color 4)
	61-74	Light Yellow → Green
	75	Green (Color 5)
	76-89	Green → Aquamarine
	90	Aquamarine (Color 6)
	91-104	Aquamarine → CTO 5600K
	105	CTO 5600K (Color 7)
	106-119	CTO 5600K → Blue
	120	Blue (Color 8)
	121-134	Blue → White
	135-160	White
		Stepped scrolling
	161-163	Color 1 - Pink
	164-166	Color 2 - CTO 3200K
	167-169	Color 3 – UV Purple
	170-172	Color 4 - Light yellow
	173-175	Color 5 - Green

Chan.	Value	Function
	176-178	Color 6 - Aquamarine
	179-181	Color 7 - CTO 5600K
	182-184	Color 8 - Blue
	185-192	White
		Continuous rotation
	193-214	Clockwise, fast→slow
	215-221	Stop
	222-243	Counter-clockwise, slow→fast
		Random color
	244-247	Fast
	248-251	Medium
	252-255	Slow
6		Gobo wheel 1 (rotating gobos)
		Gobo selection
	0-4	Open
	5-9	Gobo 1
	10-14	Gobo 2
	15-19	Gobo 3
	20-24	Gobo 4
	25-29	Gobo 5
	30-34	Gobo 6
		Gobo rotation (set direction and speed on channel 7)
	35-39	Gobo 1
	40-44	Gobo 2
	45-49	Gobo 3
	50-54	Gobo 4
	55-59	Gobo 5
	60-64	Gobo 6
		Gobo shake
	65-88	Gobo 1 shake
	89-112	Gobo 2 shake
	113-136	Gobo 3 shake
	137-160	Gobo 4 shake
	161-184	Gobo 5 shake
	185-208	Gobo 6 shake
	209	No function
		Continuous wheel rotation
	210-232	clockwise, fast→slow
	233-255	counter clockwise, slow→fast

Chan.	Value	Function
7	Gobo wheel 1 indexing/rotation	
		<i>Wheel indexing</i>
	0-255	Indexed position, 0°→180°
		<i>Wheel rotation</i>
	0-2	No rotation
	3-126	Clockwise rotation, fast→slow
	127-129	Stop
	130-253	Counter-clockwise rotation, slow→fast
	254-255	Stop
8	Gobo wheel 2 (static gobos)	
		<i>Continuous scrolling</i>
	0	Open
	1-14	Open → Gobo1
	15	Gobo 1
	16-29	Gobo 1 → Gobo 2
	30	Gobo 2
	31-44	Gobo 2 → Gobo 3
	45	Gobo 3
	46-59	Gobo 3 → Gobo 4
	60	Gobo 4
	61-74	Gobo 4 → Gobo 5
	75	Gobo 5
	76-89	Gobo 5 → Gobo 6
	90	Gobo 6
	91-104	Gobo 6 → Gobo 7
	105	Gobo 7
	106-119	Gobo 7 → Open
	120-160	Open
		<i>Stepped scrolling</i>
	161-163	Gobo 1
	164-166	Gobo 2
	167-169	Gobo 3
	170-172	Gobo 4
	173-175	Gobo 5
	176-178	Gobo 6
	179-181	Gobo 7
	182-192	Open
		<i>Continuous wheel rotation</i>
	193-214	Clockwise, fast→slow
	215-221	Stop

Chan.	Value	Function
	222-243	Counter-clockwise, slow→fast
		<i>Random gobo</i>
	244-247	Fast
	248-251	Medium
	252-255	Slow
9		Prism
	0-10	Open
	11-138	Prism indexing (set angle on channel 10)
	139-255	Prism rotation (set direction and speed on channel 10)
10		Prism indexing / rotation
		<i>Prism indexing angle</i>
	0-255	Indexed position 0°→180°
		<i>Prism rotation direction and speed</i>
	0-2	No rotation
	3-126	Clockwise rotation, fast→slow
	127-129	Stop
	130-253	Counter-clockwise rotation, slow→fast
	254-255	Stop
11	0-255	Focus , infinity → near
12	0-255	Pan 0°→540°
13	0-255	Pan (fine control)
14	0-255	Tilt 0°→270°
15	0-255	Tilt (fine control)
16	Functions / fixture settings	
	0-9	<i>No function</i>
	10-14	Reset all
	15-19	Reset color
	20-24	Reset gobo
	25-29	Reset focus
	30-34	Reset prism
	35-39	Reset pan/tilt
	40-54	<i>No function</i>
	55-59	Enable calibration
	60-79	<i>No function</i>
	80-84	Pan/tilt speed = Normal
	85-89	Pan/tilt speed = Fast (default setting)
	90-94	Pan/tilt speed = Slow
	95-99	Parameter shortcuts = On (default setting)
	100-104	Parameter shortcuts = Off

Chan.	Value	Function
	105-144	<i>No function</i>
	145-149	Blackout during pan/tilt movement = On
	150-154	Blackout during pan/tilt movement = Off (default setting)
	155-159	Illuminate control panel display
	160-164	Turn off control panel display
	165-194	<i>No function</i>
	195-199	Store color wheel 1 calibration
	200-204	Store color wheel 2 calibration
	205-209	Store gobo wheel 1 wheel calibration
	210-214	Store gobo wheel 1 gobo calibration
	215-219	Store gobo wheel 2 calibration
	220-224	Store focus calibration
	225-229	Store prism calibration
	230-234	Store prism rotation calibration
	235-239	Store pan calibration
	240-244	Store tilt calibration
	245-249	Reset all calibration settings to factory defaults
	250-255	<i>No function</i>