

DMX CHANNEL FUNCTIONS AND VALUES

RELATION PROTEUS MAXIMUS™

DMX Channel Values / Functions (61 Total DMX Channels)

Supports Software Versions: ≥ 2.0.0

Features subject to change without notice.
*Rotation direction (Clockwise/Counterclockwise) and control of effects depends on head orientation and Pan/Tilt settings.

Standard	Extended	Value	Function	Hold Time	Default	Snap
1	1		PAN Movement 8bit:		127	
		0-255	Pan Movement			
2	2		Pan Fine 16bit:		127	
		0-255	Fine control of Pan movement			
3	3		TILT Movement 8bit:		127	
		0-255	Tilt Movement			
4	4		Tilt Fine 16bit:		127	
		0-255	Fine control of Tilt movement			
5	5		Cyan:			
		0-255	Cyan (0-100% Cyan)			
	6		Cyan Fine:			
		0-255	Cyan Fine			
6	7		Magenta:			
		0-255	Magenta (0-100% Magenta)			
	8		Magenta Fine:			
		0-255	Magenta Fine			
7	9		Yellow:			
		0-255	Yellow (0-100% Yellow)			
	10		Yellow Fine:			
		0-255	Yellow Fine			
8	11		CTO:			
		0-255	CTO (0-100% CTO)			
	12		CTO Fine:			
		0-255	CTO Fine			

Standard	Extended	Value	Function	Hold Time	Default	Snap
9	13		Color Wheel 1:			X
		0-19	Open			
		20-37	Red			
		38-55	Green			
		56-73	UV			
		74-91	HCRI			
		92-109	Orange			
		110-127	Medium Blue			
		128-189	Clockwise effect from fast to slow			
		190-193	No rotation			
		194-255	Counter-clockwise effect from slow to fast			
	14		Color Wheel Fine:			X
		0-255	Fine Control of Color Wheel position			
10	15		<u>Rotating Gobo</u>			X
		0-9	Open			
		10-19	Rot. gobo 1			
		20-29	Rot. gobo 2			
		30-39	Rot. gobo 3			
		40-49	Rot. gobo 4			
		50-59	Rot. gobo 5			
		60-69	Rot. gobo 6			
		70-89	Gobo 1 shake slow to fast			
		90-109	Gobo 2 shake slow to fast			
		110-129	Gobo 3 shake slow to fast			
		130-149	Gobo 4 shake slow to fast			
		150-169	Gobo 5 shake slow to fast			
		170-189	Gobo 6 shake slow to fast			
		190-221	Scroll CW fast to slow			
		222-223	Stop			
224-255	Scroll CCW slow to fast					
11	16		Rotating Gobo Index, Rotation			
		0-127	Gobo indexing			
		128-189	Clockwise gobo scroll from fast to slow			
		190-193	No rotation			
		194-255	Counter-clockwise gobo scroll from slow to fast			
12	17		Rotating gobo fine indexing:			
		0-255	Fine indexing			

Standard	Extended	Value	Function	Hold Time	Default	Snap
13	18		Fixed gobo			X
		0-9	Open			
		10-19	Gobo 1			
		20-29	Gobo 2			
		30-39	Gobo 3			
		40-49	Gobo 4			
		50-59	Gobo 5			
		60-69	Gobo 6			
		70-77	Gobo 7			
		78-93	Gobo 1 shake slow to fast			
		94-109	Gobo 2 shake slow to fast			
		110-125	Gobo 3 shake slow to fast			
		126-141	Gobo 4 shake slow to fast			
		142-157	Gobo 5 shake slow to fast			
		158-173	Gobo 6 shake slow to fast			
		174-189	Gobo 7 shake slow to fast			
		190-221	Clockwise gobo scroll from fast to slow			
		222-223	No rotation			
224-255	Counter-clockwise gobo scroll from slow to fast					
	19		Fixed gobo indexing Fine:			X
		0-255	Fine indexing			
14	20		Rotating prism,Prism/Gobo macros:			X
		0-63	Open			
		64-95	4 Prism			
		96-127	Beam Shaper			
		128-135	Macro1			
		136-143	Macro2			
		144-151	Macro3			
		152-159	Macro4			
		160-167	Macro5			
		168-175	Macro6			
		176-183	Macro7			
		184-191	Macro8			
		192--199	Macro9			
		200-207	Macro10			
		208-215	Macro11			
		216-223	Macro12			
		224-231	Macro13			
232-239	Macro14					
240-247	Macro15					
248-255	Macro16					

Standard	Extended	Value	Function	Hold Time	Default	Snap	
15	21		Rotating prism index, rotating gobo rotation:				
		0-127	Prism indexing				
		128-189	Clockwise prism rotation from fast to slow				
		190-193	No rotation				
		194-255	Counter-clockwise prism rotation from slow to fast				
	22		Rotating prism indexing Fine :				
		0-255	Fine indexing				
16	23		Focus:		127		
			0-255				Focus edge adjustment
17	24		Focus Fine:		127		
			0-255				Focus adjustment Fine
18	25		Zoom:		127		
			0-255				Zoom adjustment from small to big
19	26		Zoom Fine:		127		
			0-255				Zoom adjustment Fine
	27		Auto Focus :			X	
		0-50	Auto Focus Off				
		51-100	5m				
		101-150	7.5m				
		151-200	10m				
		201-255	15m				
	28		AutoFocus Fine:				
		0-255	Continuous adjustment Fine				
20	29		Shutter, strobe:		50		
			0-31				Shutter closed
			32-63				No function (shutter open)
			64-95				Strobe effect slow to fast
			96-127				No function (shutter open)
			128-159				Pulse-effect in sequences
			160-191				No function (shutter open)
			192-223				Random strobe effect slow to fast
	224-255	No function (shutter open)					
21	30		Dimmer:				
			0-255				Intensity 0 to 100%
22	31		Dimmer Fine:				
			0-255				Dimmer fine

Standard	Extended	Value	Function	Hold Time	Default	Snap
23	32		Dim Modes	0s		X
		0-20	Standard			
		21-40	Stage			
		41-60	TV			
		61-80	Architectural			
		81-100	Theatre			
		101- 120	Stage 2			
			Dimmer Delay Time			
		121	0s			
		122	0.1s			
		123	0.2s			
		124	0.3s			
		125	0.4s			
		126	0.5s			
		127	0.6s			
		128	0.7s			
		129	0.8s			
		130	0.9s			
		131	1.0s			
		132	1.5s			
		133	2.0s			
		134	3.0s			
		135	4.0s			
		136	5.0s			
		137	6.0s			
138	7.0s					
139	8.0s					
140	9.0s					
141	10s					
	142 - 255	Idle				

Standard	Extended	Value	Function	Hold Time	Default	Snap
24	33		Iris:			
		0-191	Max. diameter to Min.diameter			
		192-223	Pulse opening fast to slow			
		224-255	Pulse closing slow to fast			
	34		Iris Fine:			
		0-255	Iris Fine			
25	35		Frost			
		0-127	Open to Light Frost			
		128-255	Open to Wash Frost			
26	36		Animation wheel:			
		0-7	Open			
		8-255	Animation min to max			
27	37		Animation index, animation rotation:			
		0-127	Animation indexing			
		128-189	Clockwise animation rotation from fast to slow			
		190-193	No rotation			
		194-255	Counter-clockwise animation rotation from slow to fast			
	38		Speed Of CMY & Color macro Speed:			
		0-255	Speed Max →Min			

Standard	Extended	Value	Function	Hold Time	Default	Snap
			Color macros - CMY and colour wheel:			
		0-31	OFF			
		32-39	Macro1			
		40-47	Macro2			
		48-55	Macro3			
		56-63	Macro4			
		64-71	Macro5			
		72-79	Macro6			
		80-87	Macro7			
		88-95	Macro8			
		96-103	Macro9			
		104-111	Macro10			
		112-119	Macro11			
		120-127	Macro12			
		128-135	Macro13			
	39	136-143	Macro14			X
		144-151	Macro15			
		152-159	Macro16			
		160-167	Macro17			
		168-175	Macro18			
		176-183	Macro19			
		184-191	Macro20			
		192-199	Macro21			
		200-207	Macro22			
		208-215	Macro23			
		216-223	Macro24			
		224-231	Macro25			
		232-239	Macro26			
		240-247	Macro27			
		248-255	Random CMY			

Standard	Extended	Value	Function	Hold Time	Default	Snap
28	40		Blade 1A			
		0-255	Open to Close			
	41		Blade 1A Fine			
		0-255	Open to Close Fine			
29	42		Blade 1B			
		0-255	Open to Close			
	43		Blade 1B Fine			
		0-255	Open to Close Fine			
30	44		Blade 2A			
		0-255	Open to Close			
	45		Blade 2A Fine			
		0-255	Open to Close Fine			
31	46		Blade 2B			
		0-255	Open to Close			
	47		Blade 2B Fine			
		0-255	Open to Close Fine			
32	48		Blade 3A			
		0-255	Open to Close			
	49		Blade 3A Fine			
		0-255	Open to Close Fine			
33	50		Blade 3B			
		0-255	Open to Close			
	51		Blade 3B Fine			
		0-255	Open to Close Fine			
34	52		Blade 4A			
		0-255	Open to Close			
	53		Blade 4A Fine			
		0-255	Open to Close Fine			
35	54		Blade 4B			
		0-255	Open to Close			
	55		Blade 4B Fine			
		0-255	Open to Close Fine			
36	56		Framing Rotation:			
		0-126	Min (-45 degrees)			
		127-128	Parallel (0 degrees)			
		129-255	Max (+45 degrees)			
	57		Framing Rotation Fine:			
		0-255	Framing Rotation Fine			
	58		Framing Speed:			
		0-255	Speed Max →Min			

Standard	Extended	Value	Function	Hold Time	Default	Snap
	59		Framing Macro:			
		0-7	OFF			
		8-15	Macro1			
		16-23	Macro2			
		24-31	Macro3			
		32-39	Macro4			
		40-47	Macro5			
		48-55	Macro6			
		56-63	Macro7			
		64-71	Macro8			
		72-79	Macro9			
		80-87	Macro10			
		88-95	Macro11			
		96-103	Macro12			
		104-111	Macro13			
		112-119	Macro14			
		120-127	Macro15			X
		128-135	Macro16			
		136-143	Macro17			
		144-151	Macro18			
		152-159	Macro19			
		160-167	Macro20			
		168-175	Macro21			
		176-183	Macro22			
		184-191	Macro23			
		192-199	Macro24			
		200-207	Macro25			
		208-215	Macro26			
		216-223	Macro27			
		224-231	Macro28			
		232-239	Macro29			
	240-247	Macro30				
	248-255	Macro31				
	60		Pan / Tilt Speed:			
		0-225	Max to min speed			
		226-235	Blackout by movement			X
		236-245	Blackout by all wheel changing			
		246-255	No function			

Standard	Extended	Value	Function	Hold Time	Default	Snap
37	61		Control:	0s		X
		0-19	Color change normal			
		20-29	Color change to any position			
		30-39	Color & gobo change to any position			
		40-59	Fan Mode Low			
		60-69	Fan Mode High			
		70-79	Fan Mode Auto			
		80-84	All motor reset	3s		
		85-87	Pan / Tilt reset			
		88-90	Color reset			
		91-93	Gobo reset			
		94-96	Focus and Zoom reset			
		97-99	Other motor reset			
		100-168	Refresh Rate (Hz)	1s		
		100	900			
		101	910			
		102	920			
		103	930			
		104	940			
		105	950			
		106	960			
		107	970			
		108	980			
		109	990			
		110	1000			
		111	1010			
		112	1020			
		113	1030			
		114	1040			
		115	1050			
		116	1060			
		117	1070			
118	1080					
119	1090					
120	1100					

Standard	Extended	Value	Function	Hold Time	Default	Snap
37	61	121	1110	1s		X
		122	1120			
		123	1130			
		124	1140			
		125	1150			
		126	1160			
		127	1170			
		128	1180			
		129	1190			
		130	1200			
		131	1210			
		132	1220			
		133	1230			
		134	1240			
		135	1250			
		136	1260			
		137	1270			
		138	1280			
		139	1290			
		140	1300			
		141	1310			
		142	1320			
		143	1330			
		144	1340			
		145	1350			
		146	1360			
		147	1370			
		148	1380			
		149	1390			
		150	1400			

Standard	Extended	Value	Function	Hold Time	Default	Snap
37	61	151	1410	1s		
		152	1420			
		153	1430			
		154	1440			
		155	1450			
		156	1460			
		157	1470			
		158	1480			
		159	1490			
		160	1500			
		161	2500			
		162	4000			
		163	5000			
		164	6000			
		165	10000			
		166	15000			
		167	20000			
		168	25000			
		169-172	Idle	3s		
		173-174	Hibernation Off			
		175-176	Hibernation			
		177-178	Sun Protection Position			
		179-180	Sun Protection Off			
		181-190	PanTilt Smooth (default)			
		191-200	PanTilt Fast			
		201-210	Dimmer Curve Linear (default)			
		211-220	Dimmer Curve Square			
		221-230	Dimmer Curve Inverse Square			
		231-240	Dimmer Curve S-Curve			
		241	Internal program 1 (scene1~8)			
		242	Internal program 2 (scene9~16)			
		243	Internal program 3 (scene17~24)			
		244	Internal program 4 (scene25~32)			
245	Internal program 5 (scene33~40)					
246	Internal program 6 (scene41~48)					
247	Internal program 7 (scene49~56)					
248-249	Cmy Normal					
250-251	Cmy Fast (default)					
252-255	Idle					