

# RELATION FUZE PFX - DMX TRAITS

Features subject to change without notice

MODE/CHANNEL		VALUE	FUNCTION	SNAP	DEFAULT	
STANDARD	EXTENDED					
1	1	0-255	<b>Pan</b>		127	
			Left → Right			
2	2	0-255	<b>Pan Fine</b>		127	
			Fine Position			
3	3	0-255	<b>Tilt</b>		127	
			Forward → Backward			
4	4	0-255	<b>Tilt Fine</b>		127	
			Fine Position			
5	5	0-255	<b>Cyan</b>		0	
			0 → 100%			
			<b>SFX</b>			
		0-170	0 → 100%			
		171-189	100% → 0%			
		190-221	Clockwise Fast → Slow			
		222-223	Stop			
224-255	Counter-clockwise Slow → Fast					
	6	0-255	<b>Cyan Fine</b>		0	
			Fine Saturation			
6	7	0-255	<b>Magenta</b>		0	
			0 → 100%			
			<b>SFX</b>			
		0-170	0 → 100%			
		171-189	100% → 0%			
		190-221	Clockwise Fast → Slow			
		222-223	Stop			
224-255	Counter-clockwise Slow → Fast					
	8	0-255	<b>Magenta Fine</b>		0	
			Fine Saturation			
7	9	0-255	<b>Yellow</b>		0	
			0 → 100%			
			<b>SFX</b>			
		0-170	0 → 100%			
		171-189	100% → 0%			
		190-221	Clockwise Fast → Slow			
		222-223	Stop			
224-255	Counter-clockwise Slow → Fast					
	10	0-255	<b>Yellow Fine</b>		0	
			Fine Saturation			
8	11		<b>CTO</b>		0	
			Open → 2700K			
	12		<b>CTO Fine</b>		0	
			Fine Adjustment			
9	13		<b>CMY Mix Mode</b>		0	
			0-127			Full
			128-255			SFX

# DMX TRAITS

MODE/CHANNEL		VALUE	FUNCTION	SNAP	DEFAULT
STANDARD	EXTENDED				
10	14		<b>Color</b>		0
		0	Open		
		1-11	Open/Color1		
		12-22	Color 1		
		23-33	Color 1/2		
		34-44	Color 2		
		45-55	Color 2/3		
		56-66	Color 3		
		67-77	Color 3/4		
		78-88	Color 4		
		89-99	Color 4/5		
		100-110	Color 5		
		111-121	Color 5/6		
		122-132	Color 6		
		133-143	Color 6/7		
		144-154	Color 7		
		155-165	Color 7/8		
		166-176	Color 8		
		177-188	Color 8/Open		
		189-192	Open		
	<b>Scroll</b>				
193-223	Clockwise Fast → Slow				
224	Stop				
	225-255	Counter-clockwise Slow → Fast			
11	15		<b>Rotating Gobo Wheel</b>		0
		0-9	Open		
		10-19	Rotating Gobo 1		
		20-29	Rotating Gobo 2		
		30-39	Rotating Gobo 3		
		40-49	Rotating Gobo 4		
		50-59	Rotating Gobo 5		
		60-69	Rotating Gobo 6		
		70-77	Rotating Gobo 7		
		78-93	Gobo 1 Shake Slow → Fast		
		94-109	Gobo 2 Shake Slow → Fast		
		110-125	Gobo 3 Shake Slow → Fast		
		126-141	Gobo 4 Shake Slow → Fast		
		142-157	Gobo 5 Shake Slow → Fast		
		158-173	Gobo 6 Shake Slow → Fast		
		174-189	Gobo 7 Shake Slow → Fast		
		190-221	Clockwise Fast → Slow		
		222-223	Stop		
	224-255	Counter-clockwise Slow → Fast			
12	16		<b>Rotating Gobo Index/Rotation</b>		0
		0-127	Index Position		
			<b>Rotate</b>		
		128-189	Clockwise Fast → Slow		
		190-193	Stop		
	194-255	Counter-clockwise Slow → Fast			
13	17	0-255	<b>Rotating Gobo Index/Rotation Fine</b> Fine Adjustment		0

# DMX TRAITS

MODE/CHANNEL		VALUE	FUNCTION	SNAP	DEFAULT
STANDARD	EXTENDED				
14	18		<b>Fixed Gobo Wheel</b>		0
		0-9	Open		
		10-17	Gobo 1		
		18-25	Gobo 2		
		26-33	Gobo 3		
		34-41	Gobo 4		
		42-49	Gobo 5		
		50-57	Gobo 6		
		58-65	Gobo 7		
		66-73	Gobo 8		
		74-81	Gobo 9		
		82-89	Gobo 10		
		90-97	Gobo 11		
		98-105	Gobo 1 Shake Slow → Fast		
		106-111	Gobo 2 Shake Slow → Fast		
		112-119	Gobo 3 Shake Slow → Fast		
		120-127	Gobo 4 Shake Slow → Fast		
		128-135	Gobo 5 Shake Slow → Fast		
		136-143	Gobo 6 Shake Slow → Fast		
		144-151	Gobo 7 Shake Slow → Fast		
		152-159	Gobo 8 Shake Slow → Fast		
		160-167	Gobo 9 Shake Slow → Fast		
		168-175	Gobo 10 Shake Slow → Fast		
		176-181	Gobo 11 Shake Slow → Fast		
182-189	Idle				
	<b>Scroll</b>				
190-221	Clockwise Fast → Slow				
222-223	Stop				
224-255	Counter-clockwise Slow → Fast				
15	19		<b>Prism</b>	X	0
		0-20	Open		
		20-40	Prism 1 4-Facet Linear		
		41-60	Prism 2 4-Facet Round		
		61-80	Prism 1+2		
81-255	Idle				
16	20		<b>Prism 1 Index/Rotation</b>		64
		0-127	Index Position		
			<b>Rotate</b>		
		128-189	Clockwise Fast → Slow		
		190-193	Stop		
		194-255	Counter-clockwise Slow → Fast		
	21	0-255	<b>Prism 1 Index/Rotation Fine</b> Fine Adjustment		127
17	22		<b>Prism 2 Index/Rotation</b>		64
		0-127	Index Position		
			<b>Rotate</b>		
		128-189	Clockwise Fast → Slow		
		190-193	Stop		
		194-255	Counter-clockwise Slow → Fast		
	23	0-255	<b>Prism 2 Index/Rotation Fine</b> Fine Adjustment		127

# DMX TRAITS

MODE/CHANNEL		VALUE	FUNCTION	SNAP	DEFAULT
STANDARD	EXTENDED				
18	24	0-255	<b>Focus</b> Infinity → Near		127
19	25	0-255	<b>Focus Fine</b> Fine Adjustment		127
20	26	0-255	<b>Zoom</b> Narrow → Wide		127
21	27	0-255	<b>Zoom Fine</b> Fine Adjustment		127
22	28		<b>Strobe</b>		50
		0-31	Closed		
		32-63	Open		
		64-95	Strobe effect slow to fast		
		96-127	Open		
		128-159	Pulse Effect		
		160-191	Open		
		192-223	Random Slow → Fast		
224-255	Open				
23	29	0-255	<b>Dimmer</b> 0 → 100%		0
24	30	0-255	<b>Dimmer Fine</b> Fine Adjustment		0
	31		<b>Dimmer Modes</b>	X	0
		0-20	Standard		
		21-40	Stage		
		41-60	TV		
		61-80	Architectural		
		81-100	Theatre		
		101-120	Stage 2		
			<b>Dimmer Time</b>		
		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				

# DMX TRAITS

MODE/CHANNEL		VALUE	FUNCTION	SNAP	DEFAULT
STANDARD	EXTENDED				
25	32		<b>Iris</b>		0
		0-191	Open → Closed		
		192-223	Pulse opening fast to slow		
		224-255	Pulse closing slow to fast		
	33	0 - 255	<b>Iris Fine</b> Fine Adjustment		0
26	34	0 - 255	<b>Frost (Light)</b> Open → Max		0
27	35	0 - 255	<b>Frost (Wash)</b> Open → Max		0
28	36	0-255	<b>Blade 1 A</b> Open → Closed		0
	37	0-255	<b>Blade 1 A Fine</b> Fine Adjustment		0
29	38	0-255	<b>Blade 1 B</b> Open → Closed		0
	39	0-255	<b>Blade 1 B Fine</b> Fine Adjustment		0
30	40	0-255	<b>Blade 2 A</b> Open → Closed		0
	41	0-255	<b>Blade 2 A Fine</b> Fine Adjustment		0
31	42	0-255	<b>Blade 2 B</b> Open → Closed		0
	43	0-255	<b>Blade 2 B Fine</b> Fine Adjustment		0
32	44	0-255	<b>Blade 3 A</b> Open → Closed		0
	45	0-255	<b>Blade 3 A Fine</b> Fine Adjustment		0
33	46	0-255	<b>Blade 3 B</b> Open → Closed		0
	47	0-255	<b>Blade 3 B Fine</b> Fine Adjustment		0
34	48	0-255	<b>Blade 4 A</b> Open → Closed		0
	49	0-255	<b>Blade 4 A Fine</b> Fine Adjustment		0
35	50	0-255	<b>Blade 4 B</b> Open → Closed		0
	51	0-255	<b>Blade 4 B Fine</b> Fine Adjustment		0
36	52		<b>Framing Rotation</b>		127
		0-126	Min (-60°)		
		127-128	Parallel (0°)		
		129-255	Max (+60°)		
	53	0-255	<b>Framing Rotation Fine</b> Fine Adjustment		127
37	54		<b>Pan / Tilt Speed</b>	X	0
		0-225	Max → Min Speed		
		226-235	Blackout by movement		
		236-245	Blackout by wheel changes		
		246-255	No function		

# DMX TRAITS

MODE/CHANNEL		VALUE	FUNCTION	SNAP	DEFAULT
STANDARD	EXTENDED				
38	55		<b>Control</b>		0
		0-19	Wheel Snap		
		20-39	Wheel Fade		
			<b>Fan Mode</b>		
		40-44	Mute		
		45-49	Studio		
		50-59	Low		
		60-69	High		
		70-79	Auto		
			<b>Reset</b>		
		80-84	All		
		85-87	Pan / Tilt		
		88-90	Color		
		91-93	Gobo		
		94-96	Focus and Zoom		
		97-99	Others		
		100-168	Refresh Rate (Hz) See Table on page 26		
		169-174	<b>CMY Shortest Path</b>		
		175-179	CMY Longest Path		
		180-200	Idle		
			<b>Dimmer Curves</b>		
		201-210	Linear		
		211-220	Square		
221-230	Inverse Square				
231-240	<b>S-Curve</b>				
241-255	Idle				

# REFRESH RATE

DMX VALUE	REFRESH RATE (HZ)	DMX VALUE	REFRESH RATE (HZ)
100	900	135	1250
101	910	136	1260
102	920	137	1270
103	930	138	1280
104	940	139	1290
105	950	140	1300
106	960	141	1310
107	970	142	1320
108	980	143	1330
109	990	144	1340
110	1000	145	1350
111	1010	146	1360
112	1020	147	1370
113	1030	148	1380
114	1040	149	1390
115	1050	150	1400
116	1060	151	1410
117	1070	152	1420
118	1080	153	1430
119	1090	154	1440
120	1100	155	1450
121	1110	156	1460
122	1120	157	1470
123	1130	158	1480
124	1140	159	1490
125	1150	160	1500
126	1160	161	2500
127	1170	162	4000
128	1180	163	5000
129	1190	164	6000
130	<b>1200</b>	165	10000
131	1210	166	15000
132	1220	167	20000
133	1230	168	25000
134	1240		