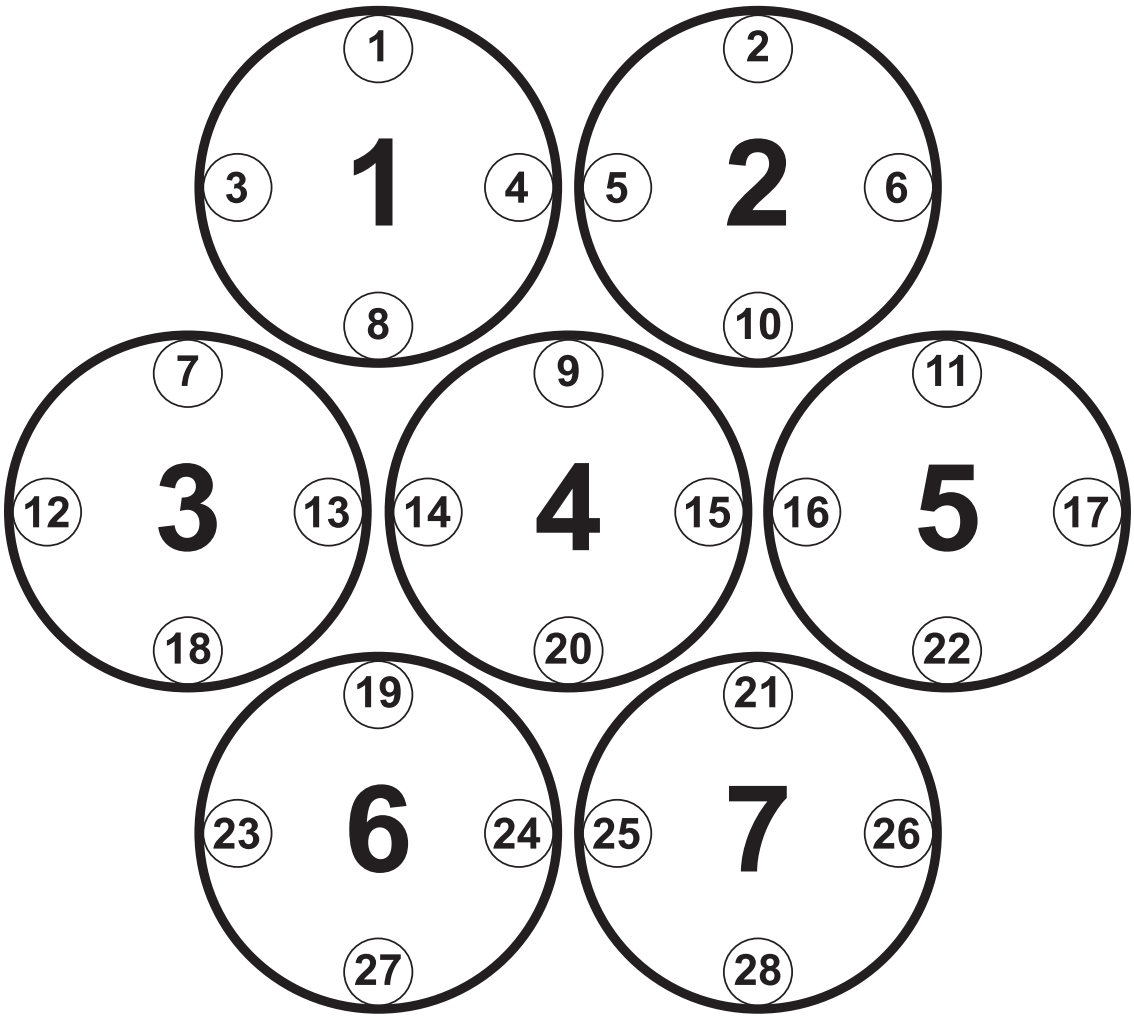
LIGHTING CONSOLE PATCHING GUIDELINES

The PROTEUS RAYZOR 760 is a versatile luminaire which combines two fixtures into one housing, allowing it to produce multiple unique lighting effects typically not found in a single lighting fixture. The DMX layout is designed to offer a variety of options for controlling each fixture efficiently.

The main fixture contains 7x 60W RGBW pixel cells, while the SparkLED fixture contains 28 x 2W white LEDs. For ease of use the DMX layout is arranged to allow lighting consoles to separate the fixture into multiple segments or parts. It is important to arrange the fixture in such segments or parts especially when using the fixture in the full extended 80 channel DMX mode. For simpler programming, reduced DMX channel modes can be used. However, for easy recall of interesting pixel animations both the RGBW and SparkLED fixtures contain two FX systems, one controls the RGBW cells, while the other is dedicated to the SparkLEDs.

The pixels are arranged in a grid pattern as illustrated below. (RGBW 1-7 | SparkLED 1-28)



LIGHTING CONSOLE PATCHING GUIDELINES

PIXEL LAYOUT	PIXEL NUMBERS
RGBW Row 1	1, 2
RGBW Row 2	3, 4, 5
RGBW Row 3	6, 7
RGBW Column 1	3
RGBW Column 2	1, 3, 6
RGBW Column 3	1, 4, 6,
RGBW Column 4	4
RGBW Column 5	2, 4, 7
RGBW Column 6	2, 5, 7
RGBW Column 7	5
SparkLED Row 1	1, 2
SparkLED Row 2	3, 4, 5, 6
SparkLED Row 3	7, 8, 9, 10, 11
SparkLED Row 4	12, 13, 14, 15, 16, 17
SparkLED Row 5	18, 19, 20, 21, 22
SparkLED Row 6	23, 24, 25, 26
SparkLED Row 7	27, 28
SparkLED Ring 1	1, 2, 6, 11, 17, 22, 26, 28, 27, 23, 18, 12, 7, 3
SparkLED Ring 2	4, 5, 10, 16, 21, 25, 24, 19, 13, 8
SparkLED Ring 3	9, 15, 20, 14

LIGHTING CONSOLE PATCH GUIDELINES

There are also two additional parts for a master control of the PROTEUS RAYZOR 760, which creates four separate control areas for the fixture. It is recommended to create fixture groups on the lighting controller for each area of the fixture. (see below)

Main Fixture	Master Pan, Tilt, RGBW Color, Strobe, Dimmer, Zoom, FX Controls
RGBW Cells 1-7	Red, Green, Blue, White per each individual cell
SparkLED Main	Master SparkLED Strobe, Dimmer
SparkLEDs 1-28	SparkLED Dimmer per each individual LED

➔ SparkLED is not available as a mode in the fixture menu but must be provided as a console control profile for easy programming of the fixture. Use the PROTEUS RAYZOR 760 in Extended mode and patch appropriate parts of the RGBW Pixels and SparkLED fixtures on your control system to access all 80 channels.

On the lighting controller, patch the two fixture types (RGBW and SparkLED), separating the SparkLEDs into a different ID range. (see below)

RGBW Pixels for Channels 1-52

SparkLEDs for Channels 53-80

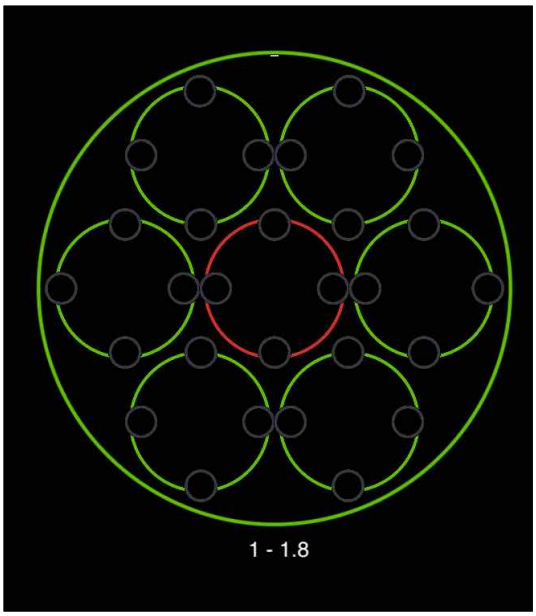
ONYX Main and Sub Fixture ID patch example below for a single PROTEUS RAYZOR 760 fixture.

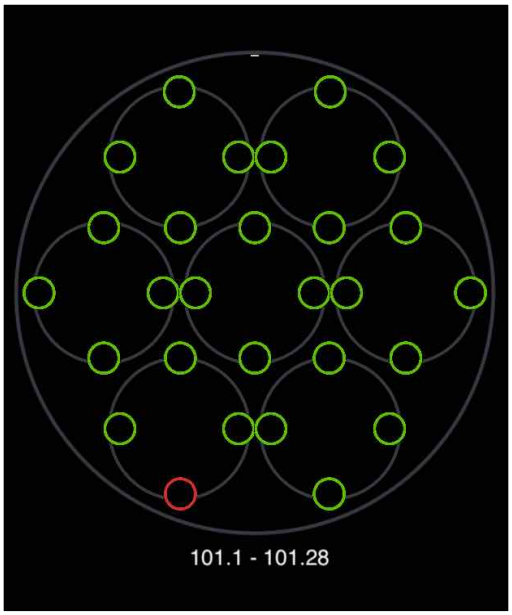
ID	Type	Address
1.0	RGBW Pixels Main	1
1.1	Pixel 1	22
1.2	Pixel 2	26
1.3	Pixel 3	30
1.4	Pixel 4	34
1.5	Pixel 5	38
1.6	Pixel 6	42
1.7	Pixel 7	46
1.8	SparkLED Main	50

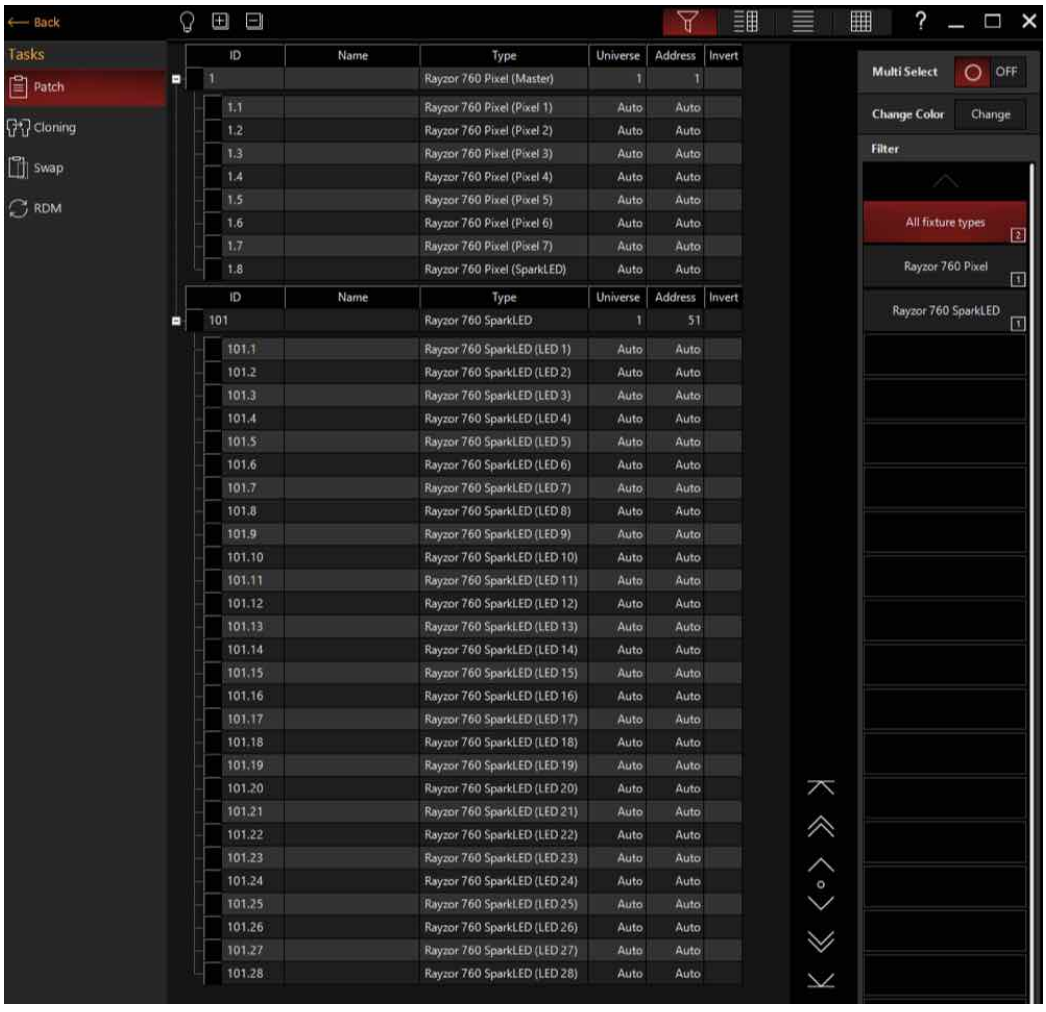
101.1	SparkLED 1	53
101.2	SparkLED 2	54
101.3	SparkLED 3	55
101.4	SparkLED 4	56
…	…	…
101.28	SparkLED 28	80

LIGHTING CONSOLE PATCH GUIDELINES

ONYX screen shots below illustrate Main and Sub Fixture ID patch for a single PROTEUS RAYZOR 760 fixture.





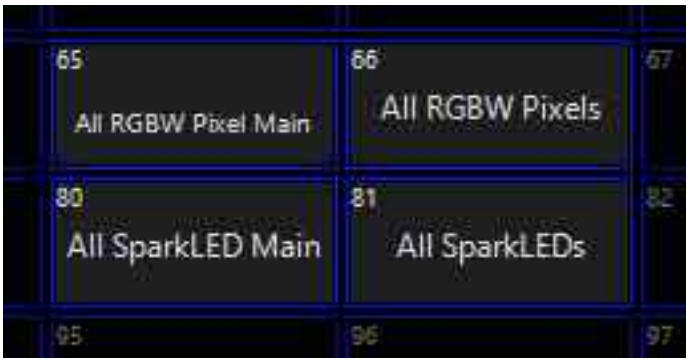


LIGHTING CONSOLE PATCH GUIDELINES

ONYX Groups example below for easier selection of a single PROTEUS RAYZOR 760 fixture.

Group Name	Group Content
All RGBW Pixels Main	1
All RGBW Pixels	1.1, 1.2, 1.3 … 1.8
All SparkLEDs Main	1.8
All SparkLEDs	101.1 ,101.2 … 101.28

ONYX screen shot below illustrates Groups for a single PROTEUS RAYZOR 760 fixture.



DMX CHANNEL FUNCTIONS AND VALUES

ELATION PROTEUS RAYZOR 760™

DMX Channel Values / Functions (80 Total DMX Channels)

Supports Software Versions: ≥ 1.2.1

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

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
Main Fixture Control							
1	1	1			**PAN**	Fade	127
				0-255	Movement		
2	2	2			**PAN FINE**	Fade	127
				0-255	Fine Movement		
3	3	3			**TILT**	Fade	127
				0-255	Movement		
4	4	4			**TILT FINE**	Fade	127
				0-255	Fine Movement		
5	5	5			**PAN ROTATE**	Fade	0
				0-2	Disabled		
				3-126	Rotating CW Fast to Slow		
				127-129	NO Rotation (Fixture stops at its current position)		
				130-253	Rotating CCW Slow to Fast		
				254-255	NO Rotation (Fixture stops at its current position)		
6	6	6			**TILT ROTATE**	Fade	0
				0-2	Disabled		
				3-126	Rotating CW Fast to Slow		
				127-129	NO Rotation (Fixture stops at its current position)		
				130-253	Rotating CCW Slow to Fast		
				254-255	NO Rotation (Fixture stops at its current position)		
7	7	7			**CTC**	Fade	0
				0-10	Disabled		
				11-171	Color Temperature (100K Steps) 2,000K to 10,000K **(See CTC Table)**		
				172-255	10,000K		

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
8	8	8			**COLOR WHEEL**	Snap	0
				0-9	Open		
				10-14	Red		
				15-19	Red Orange		
				20-24	Light Amber		
				25-29	Yellow Amber		
				30-34	Greenish Yellow		
				35-39	Light Yellow Green		
				40-44	Dark Yellow Green		
				45-49	Green		
				50-54	Teal		
				55-59	Cyan		
				60-64	Light Blue		
				65-69	Aqua		
				70-74	Dark Aqua		
				75-79	Green Blue		
				80-84	Light Lavender		
				85-89	Dark Purple		
				90-94	Medium Purple		
				95-99	Mid Rose		
				100-104	Mauve		
				105-109	Nice Magenta		
				110-114	Warm Magenta		
				115-119	Light Red		
				120-124	Straw		
				125-129	Dark CTB		
				130-134	Light Green		
				135-139	Purple		
				140-144	Lighter Purple		
				145-149	Pink		
				150-154	Rose		
				155-159	White		
				160-164	TBD		
				165-169	TBD		
				170-174	TBD		
				175-179	Open		
					COLOR SCROLL		
				180-201	CW Fast to Slow		
				202-207	Stop		
				208-229	CCW Slow to Fast		
				230-234	Open		
					RANDOM SLOTS		
				235-239	Fast		
				240-244	Medium		
				245-249	Slow		
				250-255	Open		

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
9	9	9			**STROBE**	Snap	50
				0-31	Shutter Closed		
				32-63	Shutter Open		
				64-95	Strobe Slow to Fast		
				96-127	Fast Close, Slow Open		
				128-159	Fast Open, Slow Close		
				160-191	Pulse Effects		
				192-223	Random Strobe Slow to Fast		
				224-255	Shutter Open		
10	10	10			**DIMMER**	Fade	0
				0-255	0 → 100%		
11	11	11			**DIMMER FINE**	Fade	0
				0-255	Fine Dimming		
12	12	12			**DIM MODES**	Snap	0
				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	Pixels	Extended		Value	Function	Fade Status	Default Value
13	13	13			**ZOOM**	Fade	128
				0 -215	Zoom Wide to Narrow		
				216-255	Overdrive Min to Max		
	14	14			**ZOOM FINE**	Fade	0
				0-255	Fine Zoom		
	15	15			**PAN / TILT SPEED**	Snap	0
				0-225	Max to Min Speed		
				226-235	Blackout When Pan / Tilt Moves		
				236-245	Blackout When All Wheels Change		
				246-255	No Function		

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
14	16	16			**CONTROL**	Snap	0
				0-10	Idle		
				11-12	PanTilt Shortest Path		
				13-14	PanTilt Continue Path		
				15-16	Pan Range 540		
				17-18	Pan Range 360		
				19-20	Tilt Range 270		
				21-22	Tilt Range 360		
				23-39	Idle		
				40-59	Fan Mode Silent		
				60-79	Fan Mode Auto		
				80-84	Reset All		
				85-87	Reset Movement		
				88-91	Reset Zoom		
				92-100	Idle		
				100-168	Refresh Rate (Hz)		
				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		
				121	1110		
				122	1120		
				123	1130		
				124	1140		
				125	1150		
				126	1160		
				127	1170		
				128	1180		
				129	1190		
				130	1200		

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
14	16	16			**CONTROL**	Snap	0
				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		
				151	1410		
				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		

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
14	16	16		169-200	Idle	Snap	0
				ADDED WITH SOFTWARE UPDATE VERSION ≥1.2.2			
				169-192	Idle		
				193-194	Hibernate Off		
				195-196	Hibernate		
				197-198	Home Position Before Power Off		
				199-200	Home Position Off		
				201-210	Dimmer Curve Linear (default)		
				211-220	Dimmer Curve Square		
				221-230	Dimmer Curve Inverse Square		
				231-240	Dimmer Curve S-Curve		
				241-255	Idle		
15	17	17			**RGBW FX (See Table)**	Snap	0
				0-255	FX Selection 1 -255		
16	18	18			**RGBW FX SPEED**	Fade	160
				0–126	Rev Fast to Slow		
				127–128	Stop		
				129–255	Slow to Fast		
17	19	19			**SparkLED FX (See Table)**	Snap	0
				0-255	FX Selection 1 -255		
18	20	20			**SparkLED FX SPEED**	Fade	160
				0–126	Rev Fast to Slow		
				127–128	Stop		
				129–255	Slow to Fast		
19	21	21			**FX OFFSET**	Snap	0
				0	NO Sync		
				1	Fixture Offset 10 Degree		
				2	Fixture Offset 20 Degree		
				3-34	Fixture Offset…		
				35	Fixture Offset 350 Degree		
				36	Synchronized		
				37-100	No Function		
				101–120	Random Fixtures		
				121-140	Random Duration		
				141-255	Random Pixels		

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
RGBW Pixel Control							
20	22	22			**Red**	Fade	255
				0-255	0 → 100%		
21	23	23			**Green**	Fade	255
				0-255	0 → 100%		
22	24	24			**Blue**	Fade	255
				0-255	0 → 100%		
23	25	25			**White**	Fade	255
				0-255	0 → 100%		
	26	26			**Red 2**	Fade	255
				0-255	0 → 100%		
	27	27			**Green 2**	Fade	255
				0-255	0 → 100%		
	28	28			**Blue 2**	Fade	255
				0-255	0 → 100%		
	29	29			**White 2**	Fade	255
				0-255	0 → 100%		
	30	30			**Red 3**	Fade	255
				0-255	0 → 100%		
	31	31			**Green 3**	Fade	255
				0 - 255	0 → 100%		
	32	32			**Blue 3**	Fade	255
				0-255	0 → 100%		
	33	33			**White 3**	Fade	255
				0 - 255	0 → 100%		
	34	34			**Red 4**	Fade	255
				0-255	0 → 100%		
	35	35			**Green 4**	Fade	255
				0-255	0 → 100%		
	36	36			**Blue 4**	Fade	255
				0-255	0 → 100%		
	37	37			**White 4**	Fade	255
				0-255	0 → 100%		

Standard	Pixels	Extended		Value	Function	Fade Status	Default Value
RGBW Pixel Control							
	38	38			**Red 5**	Fade	255
				0-255	0 → 100%		
	39	39			**Green 5**	Fade	255
				0-255	0 → 100%		
	40	40			**Blue 5**	Fade	255
				0-255	0 → 100%		
	41	41			**White 5**	Fade	255
				0-255	0 → 100%		
	42	42			**Red 6**	Fade	255
				0-255	0 → 100%		
	43	43			**Green 6**	Fade	255
				0-255	0 → 100%		
	44	44			**Blue 6**	Fade	255
				0-255	0 → 100%		
	45	45			**White 6**	Fade	255
				0-255	0 → 100%		
	46	46			**Red 7**	Fade	255
				0-255	0 → 100%		
	47	47			**Green 7**	Fade	255
				0-255	0 → 100%		
	48	48			**Blue 7**	Fade	255
				0-255	0 → 100%		
	49	49			**White 7**	Fade	255
				0-255	0 → 100%		

Standard	Pixels	Extended	SparkLED	Value	Function	Fade Status	Default Value
SparkLED Control							
SparkLED is not available as a mode in the fixture menu but must be provided as a console control profile for easy programming of the fixture. Use the Rayzor 760 in Extended mode and patch appropriate parts of the RGBW Pixels and SparkLED fixtures on your control system to access all 80 channels. See the Lighting Console Patch Guidelines section for further instructions.							
24	50	50			**STROBE**	Snap	50
				0-31	Shutter CLOSED		
				32-63	Shutter OPEN		
				64-95	Strobe SLOW to FAST		
				96-127	FAST Close, SLOW Open		
				128-159	FAST Open, SLOW Close		
				160-191	Pulse Effects		
				192-223	Random Strobe ALL SLOW to FAST		
				224-254	Random Strobe Pixels SLOW to FAST		
				255	Sync Dimmer and Strobe with Main		
25	51	51			**DIMMER**	Fade	0
				0-255	0 → 100%		
	52	52			**DIMMER FINE**	Fade	0
				0-255	Fine Dimming		
		53	1		**SparkLED #1 Dimmer**	Fade	255
				0-255	0 → 100%		
		54	2		**SparkLED #2 Dimmer**	Fade	255
				0-255	0 → 100%		
		55	3		**SparkLED #3 Dimmer**	Fade	255
				0-255	0 → 100%		
		56	4		**SparkLED #4 Dimmer**	Fade	255
				0-255	0 → 100%		
		57	5		**SparkLED #5 Dimmer**	Fade	255
				0-255	0 → 100%		
		58	6		**SparkLED #6 Dimmer**	Fade	255
				0-255	0 → 100%		
		59	7		**SparkLED #7 Dimmer**	Fade	255
				0-255	0 → 100%		
		60	8		**SparkLED #8 Dimmer**	Fade	255
				0-255	0 → 100%		
		61	9		**SparkLED #9 Dimmer**	Fade	255
				0-255	0 → 100%		
		62	10		**SparkLED #10 Dimmer**	Fade	255
				0-255	0 → 100%		
		63	11		**SparkLED #11 Dimmer**	Fade	255
				0-255	0 → 100%		
		64	12		**SparkLED #12 Dimmer**	Fade	255
				0-255	0 → 100%		
		65	13		**SparkLED #13 Dimmer**	Fade	255
				0-255	0 → 100%		
		66	14		**SparkLED #14 Dimmer**	Fade	255
				0-255	0 → 100%		

Standard	Pixels	Extended	SparkLED	Value	Function	Fade Status	Default Value
SparkLED Control							
		67	15		**SparkLED #15 Dimmer**	Fade	255
				0-255	0 → 100%		
		68	16		**SparkLED #16 Dimmer**	Fade	255
				0-255	0 → 100%		
		69	17		**SparkLED #17 Dimmer**	Fade	255
				0-255	0 → 100%		
		70	18		**SparkLED #18 Dimmer**	Fade	255
				0-255	0 → 100%		
		71	19		**SparkLED #19 Dimmer**	Fade	255
				0-255	0 → 100%		
		72	20		**SparkLED #20 Dimmer**	Fade	255
				0-255	0 → 100%		
		73	21		**SparkLED #21 Dimmer**	Fade	255
				0-255	0 → 100%		
		74	22		**SparkLED #22 Dimmer**	Fade	255
				0-255	0 → 100%		
		75	23		**SparkLED #23 Dimmer**	Fade	255
				0-255	0 → 100%		
		76	24		**SparkLED #24 Dimmer**	Fade	255
				0-255	0 → 100%		
		77	25		**SparkLED #25 Dimmer**	Fade	255
				0-255	0 → 100%		
		78	26		**SparkLED #26 Dimmer**	Fade	255
				0-255	0 → 100%		
		79	27		**SparkLED #27 Dimmer**	Fade	255
				0-255	0 → 100%		
		80	28		**SparkLED #28 Dimmer**	Fade	255
				0-255	0 → 100%		

COLOR TEMPERATURE CONTROL TABLE					
Color Temperature	**DMX Value**	**Color Temperature**	**DMX Value**	**Color Temperature**	**DMX Value**
2000	11	4700	65	7400	119
2050	12	4750	66	7450	120
2100	13	4800	67	7500	121
2150	14	4850	68	7550	122
2200	15	4900	69	7600	123
2250	16	4950	70	7650	124
2300	17	5000	71	7700	125
2350	18	5050	72	7750	126
2400	19	5100	73	7800	127
2450	20	5150	74	7850	128
2500	21	5200	75	7900	129
2550	22	5250	76	7950	130
2600	23	5300	77	8000	131
2650	24	5350	78	8050	132
2700	25	5400	79	8100	133
2750	26	5450	80	8150	134
2800	27	5500	81	8200	135
2850	28	5550	82	8250	136
2900	29	5600	83	8300	137
2950	30	5650	84	8350	138
3000	31	5700	85	8400	139
3050	32	5750	86	8450	140
3100	33	5800	87	8500	141
3150	34	5850	88	8550	142
3200	35	5900	89	8600	143
3250	36	5950	90	8650	144
3300	37	6000	91	8700	145
3350	38	6050	92	8750	146
3400	39	6100	93	8800	147
3450	40	6150	94	8850	148
3500	41	6200	95	8900	149
3550	42	6250	96	8950	150
3600	43	6300	97	9000	151
3650	44	6350	98	9050	152
3700	45	6400	99	9100	153
3750	46	6450	100	9150	154
3800	47	6500	101	9200	155
3850	48	6550	102	9250	156
3900	49	6600	103	9300	157
3950	50	6650	104	9350	158
4000	51	6700	105	9400	159
4050	52	6750	106	9450	160
4100	53	6800	107	9500	161
4150	54	6850	108	9550	162
4200	55	6900	109	9600	163
4250	56	6950	110	9650	164
4300	57	7000	111	9700	165
4350	58	7050	112	9750	166
4400	59	7100	113	9800	167
4450	60	7150	114	9850	168
4500	61	7200	115	9900	169
4550	62	7250	116	9950	170
4600	63	7300	117	10000	171
4650	64	7350	118		

FX GENERATOR GUIDELINES

Selection and control of the integrated FX on the PROTUES RAYZOR 760 is found in the Main Fixture section. All FX are available even in the smallest DMX control modes. (see below)

Value	Function
	RGBW FX (See Table)
0-255	FX Selection 1 -255
	RGBW FX Speed
0–126	Rev Fast to Slow
127–128	Stop
129–255	Slow to Fast
	SparkLED FX (See Table)
0-255	FX Selection 1 -255
	SparkLED FX Speed
0–126	Rev Fast to Slow
127–128	Stop
129–255	Slow to Fast

FX for RGBW and SparkLED contain a selection channel to recall the desired pattern. The pattern direction and speed is then adjusted using the associated Speed channels. FX can run forward or reverse and can also be frozen at any time by using “Stop”. The FX tables show the available patterns which are grouped for easier browsing. The first 10 DMX steps of the FX channel are used to change the type of curve for smooth or steppy FX. Once a curve is selected its used for all FX recalled afterwards. When programming cues for fixtures, the user must ensure to change the curve first before selecting the pattern. The fixture defaults to the Sinewave pattern after every power cycle. (see below)

Sinewave (default)	
Step	
Sawtooth	
Ramp Up	
Ramp Down	

FX GENERATOR GUIDELINES

In addition to FX direction and speed control, a Sync channel allows to offset or randomize the fixtures or the FX steps. (see below)

Value	Function
	FX Offset
0	NO Sync
1	Fixture Offset 10 Degree
2	Fixture Offset 20 Degree
3-34	Fixture Offset…
35	Fixture Offset 350 Degree
36	Synchronized
37-100	NO Function
101–120	Random Fixture Offset
121-140	Random Pixel Order
141-255	Random Steps

A full FX cycle is 360 degrees and the fixture allows offsets in 10-degree increments. Offsetting a fixture by 180 would mean it is exactly halfway ahead through the FX cycle. Through individual offsets or utilizing lighting consoles fan functions the fixture allows a variety of spreads for impactful FX.

Three randomization options are provided:

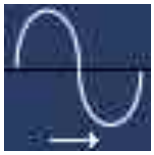
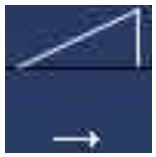
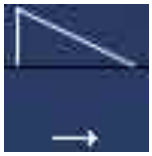
Random Fixture Offset
Every fixture randomly selects any of the 36 offset points. It will then use this until the offset is changed or random offset is selected again.

Random Pixel Order
The actual FX steps are randomized. This shuffling of the fixture order is done once, the fixture will use this shuffled order across all FX until changed.

Random Steps
Every step is randomly chosen every time, giving the most random looks possible.

To reshuffle the randomization set the channel to Idle and reselect the desired random option.

The FX system of the PROTEUS RAYZOR 760 allows many different combinations by changing the curves, offsets and speed parameters. The RGBW and SparkLED systems are separate, and by adjusting color, dimming and strobe channels there are endless creative designs possible.

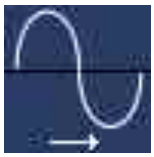
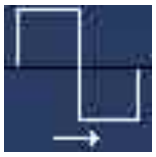
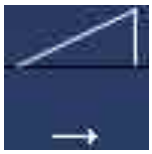
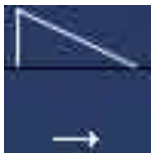
RGBW FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Waveform	0	0	OFF	
	1	1	**Sinewave (default)** 	
	2	2	**Step** 	
	3	3	**Sawtooth** 	
	4	4	**Ramp Up** 	
	5	5	**Ramp Down** 	
	6-10	6-10	No Function	

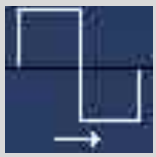
RGBW FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Waveform	**REVISED WITH SOFTWARE UPDATE VERSION ≥1.2.2**			
	0	0	OFF	
	1	1	**Sinewave Cross (default)** 	
	2	2	**Sinewave Full** 	
	3	3	**Sawtooth Cross** 	
	4	4	**Sawtooth Full** 	
	5	5	**Ramp Up** 	
	6	6	**Ramp Down** 	
	7	7	**Step** 	
	8-10	8-10	No Function	

RGBW FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Intensity	11	11	Single	Reverse, Stop, Forward
	12	12	Single Bounce	Reverse, Stop, Forward
	13	13	Snake	Reverse, Stop, Forward
	14	14	Snake Bounce	Reverse, Stop, Forward
	15	15	Rows	Reverse, Stop, Forward
	16	16	Rows Bounce	Reverse, Stop, Forward
	17	17	Column	Reverse, Stop, Forward
	18	18	Column Bounce	Reverse, Stop, Forward
	19	19	Columns 2	Reverse, Stop, Forward
	20	20	Slash	Reverse, Stop, Forward
	21	21	Backslash	Reverse, Stop, Forward
	22	22	Slash Back	Reverse, Stop, Forward
	23	23	<>	Reverse, Stop, Forward
	24	24	><	Reverse, Stop, Forward
	25	25	>>	Reverse, Stop, Forward
	26	26	<<	Reverse, Stop, Forward
	27	27	Rotating Bar	Reverse, Stop, Forward
	28	28	Rotating Dot	Reverse, Stop, Forward
	29	29	Rotating 2 Dot	Reverse, Stop, Forward
	30	30	Ring 2 Cell	Reverse, Stop, Forward
	31	31	Ring 2 Cell Overlap	Reverse, Stop, Forward
	32	32	Ring 3 Cell Blend	Reverse, Stop, Forward
	33	33	Ring - Center Fade	Reverse, Stop, Forward
	34	34	X - Bar	Reverse, Stop, Forward
	35	35	Diagonals	Reverse, Stop, Forward
	36	36	Arrow Left	Reverse, Stop, Forward
	37	37	Arrow Right	Reverse, Stop, Forward
	38	38	2 Pixels	Reverse, Stop, Forward
	39	39	3 Pixels	Reverse, Stop, Forward
	40	40	4 Pixels	Reverse, Stop, Forward
	41	41	1,2,3,4 pixels	Reverse, Stop, Forward
	42	42	Ring Build	Reverse, Stop, Forward
	43	43	Ring Build Erase	Reverse, Stop, Forward
	44	44	Ring Build Erase 2	Reverse, Stop, Forward
	45	45	Chase 1	Reverse, Stop, Forward
	46	46	Chase 2	Reverse, Stop, Forward
	47	47	Chase 3	Reverse, Stop, Forward
	48	48	Chase 4	Reverse, Stop, Forward
	49	49	Chase 5	Reverse, Stop, Forward
	50	50	Chase 6	Reverse, Stop, Forward
	51	51	Chase 7	Reverse, Stop, Forward
	52	52	Chase 8	Reverse, Stop, Forward
	53	53	Chase 9	Reverse, Stop, Forward
	54	54	Chase 10	Reverse, Stop, Forward
	55-59	55-59	No Function	No Function
	60	60	Center Chase	Reverse, Stop, Forward
	61	61	Center Chase 2	Reverse, Stop, Forward
	62-100	62-100	No Function	No Function

RGBW FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Intensity	**REVISED WITH SOFTWARE UPDATE VERSION ≥1.2.2**			
	55	55	Center Chase	Reverse, Stop, Forward
	56	56	Center Chase 2	Reverse, Stop, Forward
	57	57	Alternate	Reverse, Stop, Forward
	58	58	Burst SparkLED	Reverse, Stop, Forward
	59	59	Burst RGBW	Reverse, Stop, Forward
	60	60	Strobe Alternate	Reverse, Stop, Forward
	62	62	Lens/SparkLED Alternate	Reverse, Stop, Forward
	66-100	66-100	No Function	No Function
Static Patterns	101	101	Top 2	Disabled
	102	102	Center 3	Disabled
	103	103	Bottom 2	Disabled
	104	104	Top and Bottom	Disabled
	105	105	X	Disabled
	106	106	Ring	Disabled
	107	107	Center Dot	Disabled
	108	108	Slash	Disabled
	109	109	Backslash	Disabled
	110	110	Arrow Left	Disabled
	111	111	Arrow Right	Disabled
	112	112	<	Disabled
	113	113	>	Disabled
	114-130	114-130	No Function	No Function

RGBW FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
	131-255	131-255	No Function	No Function
Color	**REVISED WITH SOFTWARE UPDATE VERSION ≥1.2.2**			
	131	131	RGBW Cells	Reverse, Stop, Forward
	132	132	RGBWCMY Cells	Reverse, Stop, Forward
	133	133	Color Wheel Cells	Reverse, Stop, Forward
	134	134	RGBW Rows	Reverse, Stop, Forward
	135	135	RGBWCMY Rows	Reverse, Stop, Forward
	136	136	Color Wheel Rows	Reverse, Stop, Forward
	137	137	RGBW Columns	Reverse, Stop, Forward
	138	138	RGBWCMY Columns	Reverse, Stop, Forward
	139	139	Color Wheel Columns	Reverse, Stop, Forward
	140	140	RGBW Single Row	Reverse, Stop, Forward
	141	141	RGBWCMY Single Row	Reverse, Stop, Forward
	142	142	Color Wheel Single Row	Reverse, Stop, Forward
	143	143	RGBW Single Columns	Reverse, Stop, Forward
	144	144	RGBWCMY Single Columns	Reverse, Stop, Forward
	145	145	Color Wheel Single Columns	Reverse, Stop, Forward
	146	146	RGB Rows	Reverse, Stop, Forward
	147	147	RGB Columns	Reverse, Stop, Forward
	148	148	Red White Cells	Reverse, Stop, Forward
	149	149	Green White Cells	Reverse, Stop, Forward
	150	150	Blue White Cells	Reverse, Stop, Forward
	151	151	Red Green Cells	Reverse, Stop, Forward
	152	152	Red Blue Cells	Reverse, Stop, Forward
	153	153	Blue Green Cells	Reverse, Stop, Forward
	154	154	Ring - Center Mix to Color Wheel	Reverse, Stop, Forward
	155	155	Random White Cell	Reverse, Stop, Forward
	156	156	Random White Row	Reverse, Stop, Forward
	157	157	Random White Column	Reverse, Stop, Forward
	158	158	White Flash	Reverse, Stop, Forward
	159	159	Red Flash	Reverse, Stop, Forward
	160	160	Green Flash	Reverse, Stop, Forward
	161	161	Blue Flash	Reverse, Stop, Forward
	162	162	Color Wheel Flash	Reverse, Stop, Forward
	163	163	Alternate Color	Reverse, Stop, Forward
	164-255	164-255	No Function	No Function

SparkLED FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Waveform	0	0	OFF	
	1	1	**Sinewave (default)** 	
	2	2	**Step** 	
	3	3	**Sawtooth** 	
	4	4	**Ramp Up** 	
	5	5	**Ramp Down** 	
	6-10	6-10	No Function	

SparkLED FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Waveform	**REVISED WITH SOFTWARE UPDATE VERSION ≥1.1.1**			
	0	0	OFF	
	1	1	**Sinewave Cross (default)** 	
	2	2	**Sinewave Full** 	
	3	3	**Sawtooth Cross** 	
	4	4	**Sawtooth Full** 	
	5	5	**Ramp Up** 	
	6	6	**Ramp Down** 	
	7	7	**Step** 	
	8-10	8-10	No Function	

SparkLED FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
SparkLED FX	11	11	Starfield	Reverse, Stop, Forward
	12	12	1 Pixel	Reverse, Stop, Forward
	13	13	2 Pixels	Reverse, Stop, Forward
	14	14	3 Pixels	Reverse, Stop, Forward
	15	15	4 pixels	Reverse, Stop, Forward
	16	16	5 pixels	Reverse, Stop, Forward
	17	17	7 pixels	Reverse, Stop, Forward
	18	18	14 pixels	Reverse, Stop, Forward
	19	19	Single Row	Reverse, Stop, Forward
	20	20	3 Rows	Reverse, Stop, Forward
	21	21	Single Column	Reverse, Stop, Forward
	22	22	3 Column	Reverse, Stop, Forward
	23	23	Pixel Ring Chase	Reverse, Stop, Forward
	24	24	Pixel Row Chase	Reverse, Stop, Forward
	25	25	Pixel Ring Chase 2	Reverse, Stop, Forward
	26	26	Center Out	Reverse, Stop, Forward
	27	27	Fireworks	Reverse, Stop, Forward
	28	28	Ring	Reverse, Stop, Forward
	29	29	Row	Reverse, Stop, Forward
	30	30	Snake	Reverse, Stop, Forward
	31-90	31-90	No Function	No Function
SparkLED Lens Combos	91	91	No Function	No Function
	92	92		
	93	93		
	94	94		
	95	95		
	96	96		
	97	97		
	98	98		
	99	99		
	100	100		

SparkLED FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Full Lens Patterns (all SparkLED in the lens # turn on together)	101	101	Single	Reverse, Stop, Forward
	102	102	Single Bounce	Reverse, Stop, Forward
	103	103	Snake	Reverse, Stop, Forward
	104	104	Snake Bounce	Reverse, Stop, Forward
	105	105	Rows	Reverse, Stop, Forward
	106	106	Rows Bounce	Reverse, Stop, Forward
	107	107	Column	Reverse, Stop, Forward
	108	108	Column Bounce	Reverse, Stop, Forward
	109	109	Columns 2	Reverse, Stop, Forward
	110	110	Slash	Reverse, Stop, Forward
	111	111	Backslash	Reverse, Stop, Forward
	112	112	Slash Back	Reverse, Stop, Forward
	113	113	<>	Reverse, Stop, Forward
	114	114	><	Reverse, Stop, Forward
	115	115	>>	Reverse, Stop, Forward
	116	116	<<	Reverse, Stop, Forward
	117	117	Rotating Bar	Reverse, Stop, Forward
	118	118	Rotating Dot	Reverse, Stop, Forward
	119	119	Rotating 2 Dot	Reverse, Stop, Forward
	120	120	Ring 2 Cell	Reverse, Stop, Forward
	121	121	Ring 2 Cell Overlap	Reverse, Stop, Forward
	122	122	Ring 3 Cell Blend	Reverse, Stop, Forward
	123	123	Ring - Center Fade	Reverse, Stop, Forward
	124	124	X - Bar	Reverse, Stop, Forward
	125	125	Diagonals	Reverse, Stop, Forward
	126	126	Arrow Left	Reverse, Stop, Forward
	127	127	Arrow Right	Reverse, Stop, Forward
	128	128	2 Pixels	Reverse, Stop, Forward
	129	129	3 Pixels	Reverse, Stop, Forward
	130	130	4 Pixels	Reverse, Stop, Forward
	131	131	1,2,3,4 pixels	Reverse, Stop, Forward
	132	132	Ring Build	Reverse, Stop, Forward
	133	133	Ring Build Erase	Reverse, Stop, Forward
	134	134	Ring Build Erase 2	Reverse, Stop, Forward
	135	135	Chase 1	Reverse, Stop, Forward
	136	136	Chase 2	Reverse, Stop, Forward
	137	137	Chase 3	Reverse, Stop, Forward
	138	138	Chase 4	Reverse, Stop, Forward
	139	139	Chase 5	Reverse, Stop, Forward
	140	140	Chase 6	Reverse, Stop, Forward
	141	141	Chase 7	Reverse, Stop, Forward
	142	142	Chase 8	Reverse, Stop, Forward
	143	143	Chase 9	Reverse, Stop, Forward
	144	144	Chase 10	Reverse, Stop, Forward
	145	145	Center Chase	Reverse, Stop, Forward
	146	146	Center Chase 2	Reverse, Stop, Forward
	147-200	147-200	No Function	No Function

SparkLED FX TABLE				
Type	**Slot**	**DMX**	**Name**	**FX Adjustment**
Full Lens Static Patterns (all SparkLEDs in lens turn on together)	201	201	Top 2	Disabled
	202	202	Center 3	Disabled
	203	203	Bottom 2	Disabled
	204	204	Top and Bottom	Disabled
	205	205	X	Disabled
	206	206	Ring	Disabled
	207	207	Center Dot	Disabled
	208	208	Slash	Disabled
	209	209	Backslash	Disabled
	210	210	Arrow Left	Disabled
	211	211	Arrow Right	Disabled
	212	212	<	Disabled
	213	213	>	Disabled
	214-225	214-225	No Function	No Function
SparkLED Pattern	226	226	Row 1	Disabled
	227	227	Row 2	Disabled
	228	228	Row 3	Disabled
	229	229	Row 4	Disabled
	230	230	Row 5	Disabled
	231	231	Row 6	Disabled
	232	232	Row 7	Disabled
	233	233	Column 1	Disabled
	234	234	Column 2	Disabled
	235	235	Column 3	Disabled
	236	236	Column 4	Disabled
	237	237	Column 5	Disabled
	238	238	Column 6	Disabled
	239	239	Column 7	Disabled
	240	240	Ring 1	Disabled
	241	241	Ring 2	Disabled
	242	242	Ring 3	Disabled
	243-255	243-255	No Function	No Function