DMX CHARTS

RDM Personality ID List

ID	DMX Mode	Footprint
1	STANDARD	33
2	EXTENDED	37

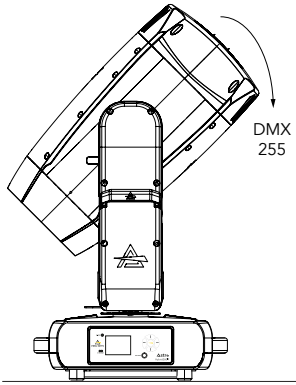
RDM Model ID

0xA031

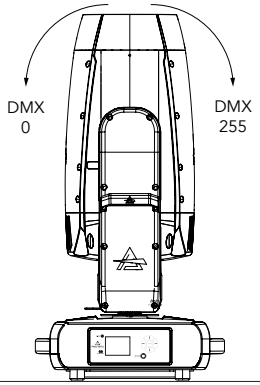
PAN/TILT POSITION RELATED TO DMX VALUES

*Home position set to CUSTOM (**Default**)*

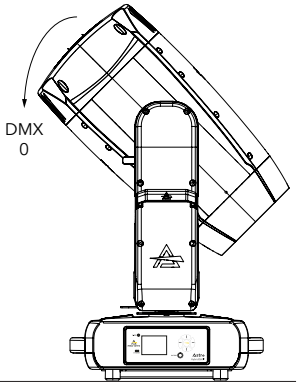
Pan = 0
Tilt = 0



Pan = 0
Tilt = 128

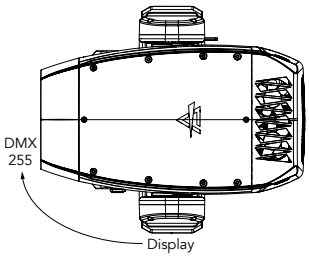


Pan = 0
Tilt = 255

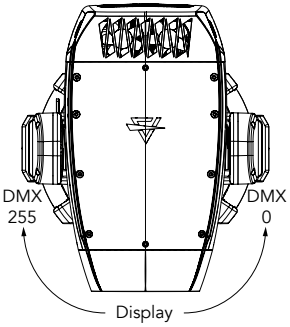


Tilt movement range: 270°
Pan movement range: 540°

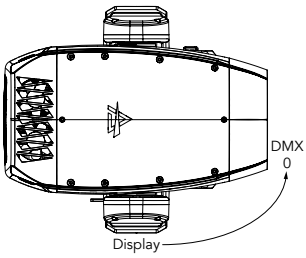
Pan = 0
Tilt = 42



Pan = 128
Tilt = 42



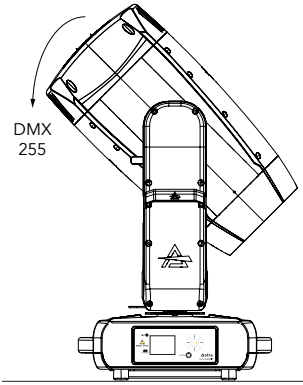
Pan = 255
Tilt = 42



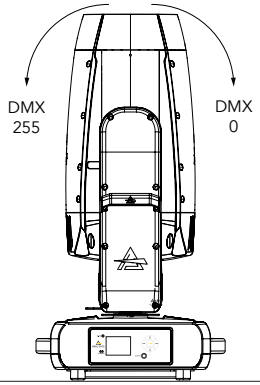
PAN/TILT POSITION RELATED TO DMX VALUES

Home position set to STANDARD (User selectable)

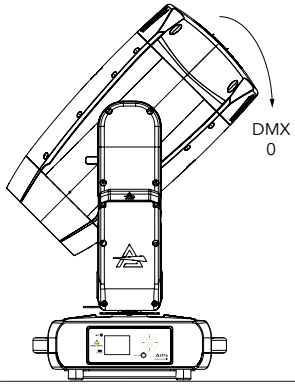
Pan = 128
Tilt = 0



Pan = 128
Tilt = 128

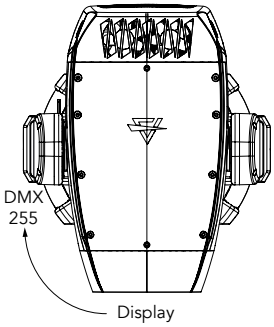


Pan = 128
Tilt = 255

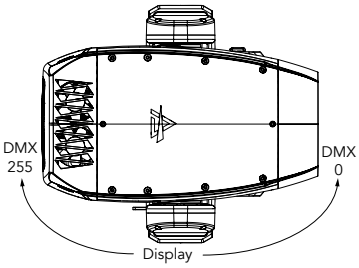


Tilt movement range: 270°
Pan movement range: 540°

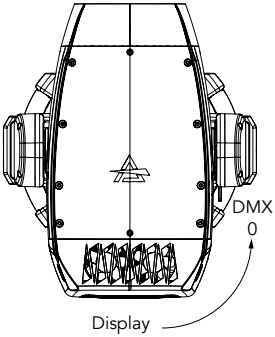
Pan = 0
Tilt = 42



Pan = 128
Tilt = 42



Pan = 255
Tilt = 42



DMX Chart Summary

DMX MODE		Function
STANDARD 33 ch	**EXTENDED 37 ch**	
1	1	Pan
2	2	Pan fine
3	3	Tilt
4	4	Tilt fine
5	5	Pan rotation
6	6	Tilt rotation
7	7	Dimmer
8	8	Dimmer Fine
9	9	Shutter
10	10	Cyan
11	11	Magenta
12	12	Yellow
-	13	CTO
-	14	Color Wheel 1
-	15	Color Wheel 1 Fine
13	-	CTO + Filters
14	16	Color Wheel 2
-	17	Color Wheel 2 Fine
15	18	Rot Gobo Wheel
16	19	Gobo Rot
-	20	Gobo Rot Fine
17	21	Fixed Gobo
18	22	FX Wheel A
19	23	Prism Wheel A Rotation
20	24	FX Wheel B
21	25	Prism Wheel B Rotation
22	26	Zoom
23	27	Zoom Fine
24	28	Focus

DMX MODE		Function
STANDARD 33 ch	**EXTENDED 37 ch**	
25	29	Focus Fine
26	30	Zoom Mode
27	31	PSZ (Pan safety zone)
28	32	PSZ fine
29	33	PSZ size
30	34	TSZ (Tilt safety zone)
31	35	TSZ fine
32	36	TSZ size
33	37	Control

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
1	1	Pan	Pan movement	0	255	128
2	2	Pan fine	Fine pan movement	0	255	128
3	3	Tilt	Tilt movement	0	255	128
4	4	Tilt fine	Fine tilt movement	0	255	128
5	5	Pan rotation	Spinout stop	0	20	0
			Shortcut stop	21	41	
			Forwards Pan rotation from fast to slow	42	142	
			No rotation	143	154	
			Backwards Pan rotation from slow to fast	155	255	
6	6	Tilt rotation	Spinout stop	0	20	0
			Shortcut stop	21	41	
			Forwards Pan rotation from fast to slow	42	142	
			No rotation	143	154	
			Backwards Pan rotation from slow to fast	155	255	
7	7	Dimmer	Dimmer intensity 0 – 100%	0	255	0
8	8	Dimmer Fine	Fine dimming	0	255	0
9	9	Shutter	Open	0	1	255
			Strobe from slow to fast	2	62	
			Open	63	64	
			Pulse in from slow to fast	65	125	
			Close	126	127	
			Pulse out from slow to fast	128	188	
			Open	189	190	
			Random from slow to fast	191	251	
			Open	252	255	
10	10	Cyan	Linear saturation 0 – 100%	0	255	0
11	11	Magenta	Linear saturation 0 – 100%	0	255	0
12	12	Yellow	Linear saturation 0 – 100%	0	255	0
	13	CTO	Linear saturation 7000K to 2700K	0	255	0
-	14	Color Wheel 1	**Color Positioning**			0
			Open	0		
			Open + UV	1	17	
			UV	18		
			UV + Congo Blue	19	35	
			Congo Blue	36		
			Congo Blue + Minus Green 1/4	37	53	
			Minus Green 1/4	54		
			Minus Green 1/4 + Minus Green 1/2	55	71	
			Minus Green 1/2	72		
			Minus Green 1/2 + CTB 1/2	73	89	
			CTB 1/2	90		
			CTB 1/2 + CTB 1/4	91	107	
			CTB 1/4	108		
			CTB 1/4 + CTB	109	125	
			CTB	126		

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
-	14	Color Wheel 1	CTB + Light Amber	127	143	0
			Light Amber	144	159	
			Color Slot			
			Open	160	163	
			UV	164	167	
			Congo Blue	168	171	
			Minus Green 1/4	172	175	
			Minus Green 1/2	176	179	
			CTB 1/2	180	183	
			CTB 1/4	184	187	
			CTB	188	191	
			Light Amber	192	195	
			CTO	196	199	
			Color Wheel Rotation			
			Forward rainbow - Fast to slow	200	224	
			No rotation	225	230	
			Backwards rainbow - Slow to fast	231	255	
-	15	Color Wheel 1 Fine	Fine positioning	0	255	0
13	-	CTO + Filters	Lineary CTO from 0% to 100%	0	221	0
			Light Amber	222		
			Light Amber + CTB	223	225	
			CTB	226		
			CTB + CTB 1/4	227	229	
			CTB 1/4	230		
			CTB 1/4 + CTB 1/2	231	233	
			CTB 1/2	234		
			CTB 1/2 + Minus Green 1/2	235	237	
			Minus Green 1/2	238		
			Minus Green 1/2 + Minus Green 1/4	239	241	
			Minus Green 1/4	242		
			Minus Green 1/4 + Congo Blue	243	245	
			Congo Blue	246		
			Congo Blue + UV	247	249	
			UV	250		
			UV + Open	251	253	
			Open	254	255	

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
			Color Positioning			
			Open	0		
			Open + Red	1	6	
			Red	7		
			Red + Deep Purple	8	13	
			Deep Purple	14		
			Deep Purple + Yellow	15	20	
			Yellow	21		
			Yellow + Velvet Green	22	27	
			Velvet Green	28		
			Velvet Green + Magenta	29	34	
			Magenta	35		
			Magenta + Blue	36	41	
			Blue	42		
			Blue + Orange	43	48	
			Orange	49		
			Orange + Green	50	55	
			Green	56		
			Green + Amber	57	62	
			Amber	63		
			Amber + Light Blue	64	69	
			Light Blue	70		
14	16	Color Wheel 2	Light Blue + Light Red	71	76	0
			Light Red	77		
			Light Red + Arctic Lime	78	83	
			Arctic Lime	84		
			Arctic Lime + Pink	85	90	
			Pink	91		
			Pink + Dark Green	92	97	
			Dark Green	98		
			Dark Green + Medium BLue	99	104	
			Medium BLue	105		
			Medium BLue + Dark Amber	106	111	
			Dark Amber	112		
			Dark Amber + Aquamarine	113	118	
			Aquamarine	119		
			Aquamarine + Tropical Violet	120	125	
			Tropical Violet	126		
			Tropical Violet + Slate Blue	127	132	
			Slate Blue	133		
			Slate Blue + Open	134	139	
			Open	140	159	
			Color Slot			
			Open	160	161	
			Red	162	163	

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
14	16	Color Wheel 2	Deep Purple	164	165	0
			Yellow	166	167	
			Velvet Green	168	169	
			Magenta	170	171	
			Blue	172	173	
			Orange	174	175	
			Green	176	177	
			Amber	178	179	
			Light Blue	180	181	
			Light Red	182	183	
			Arctic Lime	184	185	
			Pink	186	187	
			Dark Green	188	189	
			Medium BLue	190	191	
			Dark Amber	192	193	
			Aquamarine	194	195	
			Tropical Violet	196	197	
			Slate Blue	198	199	
			Color Wheel Rotation			
			Forward rainbow - Fast to slow	200	224	
			No rotation	225	230	
			Backwards rainbow - Slow to fast	231	255	
-	17	Color Wheel 2 Fine	Fine positioning	0	255	0
15	18	Rot Gobo Wheel	Open	0	9	0
			Gobo Indexing (set next ch)			
			GOBO 1	10	11	
			GOBO 2	12	13	
			GOBO 3	14	15	
			GOBO 4	16	17	
			GOBO 5	18	19	
			GOBO 6	20	21	
			GOBO 7	22	23	
			GOBO 8	24	25	
			GOBO 9	26	27	
			GOBO 10	28	29	
			GOBO 11	30	31	
			GOBO 12	32	33	

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
15	18	Rot Gobo Wheel	**Gobo Rotation (set next ch)**			0
			GOBO 1	34	35	
			GOBO 2	36	37	
			GOBO 3	38	39	
			GOBO 4	40	41	
			GOBO 5	42	43	
			GOBO 6	44	45	
			GOBO 7	46	47	
			GOBO 8	48	49	
			GOBO 9	50	51	
			GOBO 10	52	53	
			GOBO 11	54	55	
			GOBO 12	56	57	
			Gobo shaking - Slow to fast (Index on next channel)			
			GOBO 1	58	68	
			GOBO 2	69	79	
			GOBO 3	80	90	
			GOBO 4	91	101	
			GOBO 5	102	112	
			GOBO 6	113	123	
			GOBO 7	124	134	
			GOBO 8	135	145	
			GOBO 9	146	156	
			GOBO 10	157	167	
			GOBO 11	168	178	
			GOBO 12	179	193	
			Gobo Wheel Rotation			
			Forward wheel rotation - Fast to slow	194	223	
			No rotation	224	225	
			Backwards wheel rotation - Slow to fast	226	255	
16	19	Gobo Rot	**Gobo Indexing**			0
			Gobo index 0° - 360°	0	255	
			Gobo Rotation			0
			No rotation	0	0	
			Forward gobo rotation - Fast to slow	1	127	
			No rotation	128	128	
			Backwards gobo rotation - Slow to fast	129	255	
-	20	Gobo Rot Fine 1	Fine indexing/rotation	0	255	0

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
			Open	0	19	
			GOBO 1	20	20	
			GOBO 2	21	21	
			GOBO 3	22	22	
			GOBO 4	23	23	
			GOBO 5	24	24	
			GOBO 6	25	25	
			GOBO 7	26	26	
			GOBO 8	27	27	
			GOBO 9	28	28	
			GOBO 10	29	29	
			GOBO 11	30	30	
			GOBO 12	31	31	
			GOBO 13	32	32	
			GOBO 14	33	33	
			GOBO 15	34	34	
			GOBO 16	35	35	
			GOBO 17	36	36	
			GOBO 18	37	37	
			GOBO 19	38	38	
			GOBO 20	39	39	
			GOBO 21	40	40	
17	21	Fixed Gobo	GOBO 22	41	41	0
			GOBO 23	42	42	
			GOBO 24	43	43	
			GOBO 25	44	44	
			GOBO 26	45	45	
			GOBO 27	46	46	
			GOBO 28	47	47	
			Wide Open (Zoom Mode@Beam-Raw) Reserved (Zoom Mode@Spot)	48	48	
			Gobo shaking - Slow to fast			
			GOBO 1	49	53	
			GOBO 2	54	58	
			GOBO 3	59	63	
			GOBO 4	64	68	
			GOBO 5	69	73	
			GOBO 6	74	78	
			GOBO 7	79	83	
			GOBO 8	84	88	
			GOBO 9	89	93	
			GOBO 10	94	98	
			GOBO 11	99	103	
			GOBO 12	104	108	
			GOBO 13	109	113	

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
17	21	Fixed Gobo	GOBO 14	114	118	0
			GOBO 15	119	123	
			GOBO 16	124	128	
			GOBO 17	129	133	
			GOBO 18	134	138	
			GOBO 19	139	143	
			GOBO 20	144	148	
			GOBO 21	149	153	
			GOBO 22	154	158	
			GOBO 23	159	163	
			GOBO 24	164	168	
			GOBO 25	169	173	
			GOBO 26	174	178	
			GOBO 27	179	183	
			GOBO 28	184	188	
			Wide Open (Modes: Beam, Raw) Reserved (Modes: Spot)	189	193	
			Gobo Wheel Rotation			
			Forward wheel rotation - Fast to slow	194	223	
			No rotation	224	225	
			Backwards wheel rotation - Slow to fast	226	255	
18	22	FX Wheel A	Open	0	29	0
			Prism Indexing (set next ch)			
			Prism A.1	30	49	
			Prism A.2	50	69	
			Prism A.3	70	89	
			Prism A.4	90	109	
			Prism Rotation (set next ch)			
			Prism A.1	110	129	
			Prism A.2	130	149	
			Prism A.3	150	169	
			Prism A.4	170	189	
			Frost			
			Frost A.1	190	255	
19	23	Prism Wheel A Index/ Rotation	**Prism Indexing**			0
			Prism Indexing	0	255	
			Prism Rotation			
			Prism No Rotation	0	0	
			Prism forward rotation fast to slow	1	127	
			Prism No Rotation	128	128	
			Prism backwards rotation slow to fast	129	255	

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
20	24	FX Wheel B	Open	0	29	0
			Prism Indexing (set next ch)			
			Prism B.1	30	49	
			Prism B.2	50	69	
			Prism B.3	70	89	
			Prism B.4	90	109	
			Prism Rotation (set next ch)			
			Prism B.1	110	129	
			Prism B.2	130	149	
			Prism B.3	150	169	
			Prism B.4	170	189	
			Frost			
			Frost A.1	190	255	
21	25	Prism Wheel B Index/ Rotation	**Prism Indexing**			0
			Prism Indexing	0	255	
			Prism Rotation			
			Prism No Rotation	0	0	
			Prism forward rotation fast to slow	1	127	
			Prism No Rotation	128	128	
			Prism backwards rotation slow to fast	129	255	
22	26	Zoom	Zoom from min to max beam angle	0	255	128
23	27	Zoom Fine	Fine zooming	0	255	0
24	28	Focus	Focus adjustment	0	255	128
25	29	Focus Fine	Fine focusing	0	255	0
26	30	Zoom Mode	Beam Mode	0	49	0
			Spot Mode	50	99	
			Far mode	100	149	
			Raw mode	150	199	
			Reserved	200	255	
27	31	PSZ	Pan safety zone start value	0	255	0
28	32	PSZ fine		0	255	0
29	33	PSZ size	Off	0	0	0
			Safety zone size 0% to 100%	1	255	0
30	34	TSZ	Tilt safety zone start value	0	255	0
31	35	TSZ fine		0	255	0
32	36	TSZ size	Off	0	0	0
			Safety zone size 0% to 100%	1	255	0
33	37	Control	No Function/Safe	0	1	0
			PAN REVERSE ON	2	3	
			PAN REVERSE OFF	4	5	
			TILT REVERSE ON	6	7	
			TILT REVERSE OFF	8	9	
			PAN/TILT MODE FAST	10	11	
			PAN/TILT MODE MEDIUM	12	13	
			PAN/TILT MODE SLOW	14	15	

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
			MOVEMENT IN BLACKOUT ON	16	17	
			MOVEMENT IN BLACKOUT OFF	18	19	
			COLOR WHEEL BLACKOUT ON (index)	20	21	
			COLOR WHEEL BLACKOUT OFF (index)	22	23	
			CTO WHEEL BLACKOUT ON (index)	24	25	
			CTO WHEEL BLACKOUT OFF (index)	26	27	
			ROTATING GOBO WHEEL BLACKOUT ON (index)	28	29	
			ROTATING GOBO WHEEL BLACKOUT OFF (index)	30	31	
			FIXED GOBO WHEEL BLACKOUT ON (index)	32	33	
			FIXED GOBO WHEEL BLACKOUT OFF (index)	34	35	
			HOME MODE STANDARD	36	37	
			HOME MODE CUSTOM	38	39	
			DISPLAY ON	40	41	
			DISPLAY 10S	42	43	
			DISPLAY 20S	44	45	
			DISPLAY 30S	46	47	
			FLIP DISPLAY ON	48	49	
			FLIP DISPLAY OFF	50	51	
			FLIP DISPLAY AUTO	52	53	
33	37	Control	KEY LOCK ON	54	55	
			KEY LOCK OFF	56	57	0
			FAN MODE AUTO	58	59	
			FAN MODE SILENT	60	61	
			FAN MODE HIGH	62	63	
			NO SIGNAL HOLD	64	65	
			NO SIGNAL BLACKOUT	66	67	
			STATUS LED ON	68	69	
			STATUS LED OFF	70	71	
			DIMMER CURVE LINEAR	72	73	
			DIMMER CURVE S-CURVE	74	75	
			DIMMER CURVE SQUARE LAW	76	77	
			DIMMER CURVE INVERSE SQUARE LAW	78	79	
			DIMMER SPEED AUTO	80	81	
			DIMMER SPEED FAST	82	83	
			DIMMER SPEED MEDIUM	84	85	
			DIMMER SPEED SLOW	86	87	
			SOURCE FREQUENCY 600HZ	88	89	
			SOURCE FREQUENCY 1200HZ	90	91	
			SOURCE FREQUENCY 2000HZ	92	93	
			SOURCE FREQUENCY 4000HZ	94	95	
			SOURCE FREQUENCY 6000HZ	96	97	
			SOURCE FREQUENCY 25KHZ	98	99	

DMX MODE		Name	Function	DMX		Default
STANDARD 33 ch	EXTENDED 37 ch			FROM	TO	
33	37	Control	SOURCE FREQUENCY 50KHZ	100	101	0
			INVERT ZOOM OFF	102	103	
			INVERT ZOOM ON	104	105	
			RESET ALL	106	107	
			RESET PAN/TILT	108	109	
			RESET PAN	110	111	
			RESET TILT	112	113	
			RESET CYAN	114	115	
			RESET MAGENTA	116	117	
			RESET YELLOW	118	119	
			RESET CTO + COLORS	120	121	
			RESET COLOR WHEEL	122	123	
			RESET ROTATING GOBO	124	125	
			RESET GOBO ROTATION	126	127	
			RESET FIXED GOBO	128	129	
			RESET ZOOM	130	131	
			RESET FOCUS	132	133	
			RESET FX WHEEL 1	134	135	
			RESET FX WHEEL 2	136	137	
			RESET OTHER	138	139	
			Reserved	140	251	
			FACTORY DEFAULT OF CONTROL FUNCTIONS	252	253	
			Reserved	254	255	

SPINOUT STOP

Definition	Behavior	When to use it
The “Spinout” mode allows the fixture to reach the target position by continuing in the current rotation direction, even if this requires completing more than a full rotation.	"The goal is to never reverse the rotation direction, even at the cost of a longer travel path. "	Ideal when smoothness and elegance of movement are a priority. No sudden jumps, no visible "snapping" or reversals of motion that could interrupt the beam flow.

SHORTCUT STOP

Definition	Behavior	When to use it
The “Shortcut” mode enables the motor to take the shortest path to the new position, even if that involves an abrupt change in direction.	If the shortest route to the target requires reversing direction, the fixture will immediately change rotation direction.	Perfect when fast positioning is key. Designed for efficiency and responsiveness, even if the motion change is visible.