

# ColorSpot 1200 AT/1200E AT- DMX protocol v.1.9

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needed processor versions: IC1 DS=2.3 ,IC2 DS=2.3

Mode / Channel			Value	Function	Type of control
1	2	3			
1	1	19	0 - 255	<b>Pan</b> Pan movement by 530°	proportional
2	2	20	0 - 255	<b>Pan Fine</b> Fine control of pan movement	proportional
3	3	21	0 - 255	<b>Tilt</b> Tilt movement by 280°	proportional
4	4	22	0 - 255	<b>Tilt fine</b> Fine control of tilt movement	proportional
5	5	23	0	<b>Pan/Tilt speed , Pan/Tilt time</b> Max. speed (tracking mode)*	step
			1 - 255	<b>P./T. speed-set Speed Mode in menu: Pan/Tilt Mode</b> Speed from max. to min. (vector mode)**	proportional
			1 - 255	<b>P./T. time - set Time Mode in menu: Pan/Tilt Mode</b> Time from 0,1 s to 25,5 s. ***	proportional
6	6	24	0 - 9	<b>Power/Special functions</b> Reserved To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 s. („Shutter,Strobe” channel 23 (30,1) must be at range: 0-31 DMX).****	step
			10 - 19	Autofocus On	step
			20 - 29	Autofocus Off	step
			30 - 49	Reserved	step
			50 - 59	Pan/Tilt speed mode	step
			60 - 69	Pan/Tilt time mode	step
			70 - 79	Blackout while pan/tilt moving	step
			80 - 89	Disabled blackout while pan/tilt moving	step
			90 - 99	Blackout while colour wheel moving	step
			100 - 109	Disabled blackout while colour wheel moving	step
			110 - 119	Blackout while gobo 1/gobo 2 moving	step
			120 - 129	Disabled blackout while gobo 1/gobo 2 moving <i>To activate following functions, stop in DMX value for at least 3 s.</i>	step
			130 - 139	Lamp On,reset(total reset except pan/tilt reset)	step
			140 - 149	Pan/Tilt reset	step
			150 - 159	Colour system reset	step
			160 - 169	Gobo system reset	step
170 - 179	Dimmer/Strobe reset	step			
180 - 189	Focus/Zoom/Frost reset	step			
190 - 199	Iris/Effect/ reset	step			
200 - 209	Total reset	step			
210 - 229	Reserved	step			
230 - 239	Lamp Off	step			
240 - 255	Reserved	step			

**Notes:** \* Range 0-255 DMX at max.speed (0 DMX):

pan=4.5 s

tilt=2.6 s

\*\* Range 0-255 DMX at min. speed (255 DMX):

pan=37min.10 s

tilt=19 min.34 s

\*\*\* Short times are not used for long tracks (e.g. 0.5s for track 0-255 DMX). Times are restricted by mechanical parameters of the fixture.

\*\*\*\* The switch-functions have priority to the equivalent functions in menu „Personality” but the setting by DMX is not saved to the memory (after switching the fixture on,the setting from menu „Personality” is loaded and after that can be changed with DMX value on the channel 6).

**DMX protocol**

**menu „Personality”**

- 10 - 19 Autofocus On
- 20 - 29 Autofocus Off
- 50 - 59 Pan/Tilt speed mode
- 60 - 69 Pan/Tilt time mode
- 70 - 79 Blackout while pan/tilt moving
- 80 - 89 Disabled blackout while pan/tilt moving
- 90 - 99 Blackout while colour wheel moving
- 100 - 109 Disabled blackout while colour wheel moving
- 110 - 119 Blackout while gobo1/gobo2 moving
- 120 - 129 Disabled blackout while gobo1/gobo2moving

- Autofocus -->On
- Autofocus -->Off
- Pan/Tilt mode--->Speed Mode
- Pan/Tilt mode--->Time Mode
- Active blackout While-->Pan/Tilt Moving-->On
- Active blackout While-->Pan/Tilt Moving-->Off
- Active blackout While-->Colour Wheel Moving-->On
- Active blackout While-->Colour Wheel Moving-->Off
- Active blackout While-->Gobo Wheels Moving-->On
- Active blackout While-->Gobo Wheels Moving-->Off



Mode / Channel			Value	Function	Type of control
1	2	3			
	14		72 - 75	Macro 18	step
			76 - 79	Macro 19	step
			80 - 83	Macro 20	step
			84 - 87	Macro 21	step
			88 - 91	Macro 22	step
			92 - 95	Macro 23	step
			96 - 99	Macro 24	step
			100 - 103	Macro 25	step
			104 - 107	Macro 26	step
			108 - 111	Macro 27	step
			112 - 115	Macro 28	step
			116 - 119	Macro 29	step
			120 - 123	Macro 30	step
			124 - 127	Macro 31	step
			128 - 131	Macro 32	step
			132 - 135	Macro 33	step
			136 - 139	Macro 34	step
			140 - 143	Macro 35	step
			144 - 147	Macro 36	step
			148 - 151	Macro 37	step
			152 - 155	Macro 38	step
			156 - 159	Macro 39	step
			160 - 163	Macro 40	step
			164 - 167	Macro 41	step
			168 - 171	Macro 42	step
			172 - 175	Macro 43	step
			176 - 179	Macro 44	step
			180 - 183	Macro 45	step
			184 - 187	Macro 46	step
			188 - 191	Macro 47	step
			192 - 195	Macro 48	step
			196 - 199	Macro 49	step
		200 - 203	Macro 50	step	
		204 - 207	Macro 51	step	
		208 - 211	Macro 52	step	
		212 - 215	Macro 53	step	
		216 - 219	Macro 54	step	
		220 - 223	Macro 55	step	
		224 - 227	Macro 56	step	
		228 - 231	Macro 57	step	
		232 - 235	Macro 58	step	
		236 - 239	Macro 59	step	
		240 - 243	Macro 60	step	
		244 - 247	Macro 61	step	
		248 - 251	Macro 62	step	
		252 - 255	Macro 63	step	
12	15		0 -255	<b>Effect speed</b> From max. speed to min.speed *****	proportional
	16		0 - 31	<b>Effect speed assigning</b> Dimmer + CMY filters + correction filter Dimmer CMY filters + correction filter No function	step
			32 - 63		step
			64 - 95		step
			96 - 255		step
13	17	8		<b>Rotating gobo wheel 1</b> <b>Index - set indexing on channel(s) 14 (18,19;9,10)</b> Open/hole	step
			10 - 13	Gobo 1 - Rainbow Chips (15030012)	step
			14 - 17	Gobo 2 - Sun Man (15030013)	step
			18 - 21	Gobo 3 - Water Drops (15030014)	step
			22 - 25	Gobo 4 - Triangle Floating (15020123)	step
			26 - 29	Gobo 5 - Laser (15020124)	step
			30 - 33	Gobo 6 - Swirl Electric (15020125)	step

\*\*\*\*\* Range 0-255 DMX at min. speed (0 DMX): Cyan (magenta/yellow) = 3min, 35 s

Mode / Channel			Value	Function	Type of control
1	2	3			
13	17		34 - 37	<b>Rotation - set rotation on channel(s) 14 (18,19;9,10)</b> Gobo 1 - Rainbow Chips (15030012)	step
			38 - 41	Gobo 2 - Sun Man (15030013)	step
			42 - 45	Gobo 3 - Water Drops (15030014)	step
			46 - 49	Gobo 4 - Triangle Floating (15020123)	step
			50 - 53	Gobo 5 - Laser (15020124)	step
			54 - 57	Gobo 6 - Swirl Electric (15020125)	step
			58 - 69	<b>Shaking gobos from slow to fast</b> Gobo 1 - Rainbow Chips (15030012)	proportional
			70 - 81	Gobo 2 - Sun Man (15030013)	proportional
			82 - 93	Gobo 3 - Water Drops (15030014)	proportional
			94 - 105	Gobo 4 - Triangle Floating (15020123)	proportional
106 - 117	Gobo 5 - Laser (15020124)	proportional			
118 - 129	Gobo 6 - Swirl Electric (15020125)	proportional			
			<b>Shaking gobos from slow to fast</b> <b>Rotation - set rotation on channel(s) 14 (18,19;9,10)</b>		
			130 - 141 Gobo 1 - Rainbow Chips (15030012)	proportional	
			142 - 153 Gobo 2 - Sun Man (15030013)	proportional	
			154 - 165 Gobo 3 - Water Drops (15030014)	proportional	
			166 - 177 Gobo 4 - Triangle Floating (15020123)	proportional	
			178 - 189 Gobo 5 - Laser (15020124)	proportional	
			190 - 201 Gobo 6 - Swirl Electric (15020125)	proportional	
			202 - 221 Forwards gobo wheel 1 rotation from fast to slow	proportional	
			222 - 223 No rotation		
			224 - 243 Backwards gobo wheel 1 rotation from slow to fast	proportional	
			244 - 249 Random gobo 1 selection by audio control (Set microphone sensitivity in menu „Personality“)	step	
			250 - 255 Auto random gobo 1 selection from fast to slow	proportional	
14	18	9	0 - 255	<b>Gobo 1 indexing and rotation</b> <b>Gobo indexing - set position on channel 13 (17;8)</b> Gobo indexing	proportional
			0	<b>Gobo rotation - set position on channel 13 (17;8)</b> No rotation	step
			1 - 127	Forwards gobo rotation from fast to slow	proportional
			128 - 129	No rotation	step
			130 - 255	Backwards gobo rotation from slow to fast	proportional
	19	10	0 - 255	<b>Gobo 1 fine indexing and rotation</b> <b>(set position on channel 13 (17;8))</b> Fine indexing (rotating)	proportional
15	20	11	0 - 9	<b>Rotating gobo wheel 2</b> <b>Index - set indexing on channel(s) 16 (21, 22;12,13)</b> Open/hole	step
			10 - 13	Gobo 1 - Diamante Spot(15040020)	step
			14 - 17	Gobo 2 - Wheel (15020126)	step
			18 - 21	Gobo 3 - Space Tunel (15020127)	step
			22 - 25	Gobo 4 - Bubbles 1 (15020128)	step
			26 - 29	Gobo 5 - 12 Dots (15020129)	step
			30 - 33	Gobo 6 - Radial Dashes (15020130)	step
			34 - 37	<b>Rotation - set rotation on channel(s) 16 (21, 22;12,13)</b> Gobo 1 - Diamante Spot (15040020)	step
			38 - 41	Gobo 2 - Wheel (15020126)	step
			42 - 45	Gobo 3 - Space Tunel (15020127)	step
			46 - 49	Gobo 4 - Bubbles 1 (15020128)	step
			50 - 53	Gobo 5 - 12 Dots (15020129)	step
			54 - 57	Gobo 6 - Radial Dashes (15020130)	step
			58 - 69	<b>Shaking gobos from slow to fast</b> <b>Index - set indexing on channel(s) 16 (21, 22;12,13)</b> Gobo 1 - Diamente Spot (15040020)	proportional
			70 - 81	Gobo 2 - Wheel (15020126)	proportional
82 - 93	Gobo 3 - Space Tunel (15020127)	proportional			
94 - 105	Gobo 4 - Bubbles 1 (15020128)	proportional			
106 - 117	Gobo 5 - 12 Dots (15020129)	proportional			
118 - 129	Gobo 6 - Radial Dashes(15020130)	proportional			

Mode / Channel			Value	Function	Type of control				
1	2	3							
15	20	11	130 - 141	<b>Shaking gobos from slow to fast</b> <b>Rotation - set rotation on channel(s) 16(21,22;12,13)</b> Gobo 1 - Diamante Spot (15040020)	proportional proportional proportional proportional proportional proportional proportional proportional step proportional step proportional				
			142 - 153	Gobo 2 - Wheel (15020126)					
			154 - 165	Gobo 3 - Space Tunnel (15020127)					
			166 - 177	Gobo 4 - Bubbles (15020128)					
			178 - 189	Gobo 5 - 12 Dots (15020129)					
			190 - 201	Gobo 6 - Radial Dashes (15020130)					
			202 - 221	Forwards gobo wheel 2 rotation from fast to slow					
			222 - 223	No rotation					
			224 - 243	Backwards gobo wheel 2 rotation from slow to fast					
			244 - 249	Random gobo 2 selection by audio control (Set microphone sensitivity in menu „Personality“)					
			250 - 255	Auto random gobo 2 selection from fast to slow					
			16	21		12	0 - 255	<b>Gobo 2 indexing and rotation</b> <b>Gobo indexing - set position on channel 15 (20;11)</b> Gobo indexing	proportional  step proportional step proportional
							0	<b>Gobo rotation - set position on channel 15 (20;11)</b> No rotation	
							1 - 127	Forwards gobo rotation from fast to slow	
128 - 129	No rotation								
130 - 255	Backwards gobo rotation from slow to fast								
	22	13	0 - 255	<b>Gobo 2 fine indexing and rotation</b> <b>(set position on channel 15 (20))</b> Fine indexing (rotating)	proportional				
17	23	14	0 - 19	<b>Effect wheel</b> <b>Index - set indexing on channel(s) 18 (24, 25;15)</b> Open/hole	step step step step step  step step step step  step step step step step step step step step step step step proportional				
			20 - 39	3-facet prism					
			40 - 59	5-facet prism					
			60 - 79	Estriado					
			80 - 99	Diamante					
			100 - 119	<b>Rotation - set rotation on channel(s) 18 (24, 25;15)</b> 3-facet prism					
			120 - 139	5-facet prism					
			140 - 159	Estriado					
			160 - 179	Diamante					
			180 - 183	<b>Prism/gobo macros</b> Macro 1					
			184 - 187	Macro 2					
			188 - 191	Macro 3					
			192 - 195	Macro 4					
			196 - 199	Macro 5					
			200 - 203	Macro 6					
			204 - 207	Macro 7					
			208 - 211	Macro 8					
			212 - 215	Macro 9					
			216 - 219	Macro 10					
			220 - 223	Macro 11					
			224 - 227	Macro 12					
			228 - 231	Macro 13					
			232 - 235	Macro 14					
			236 - 239	Macro 15					
			240 - 243	Macro 16					
			244 - 249	Random Effect selection by audio control (Set microph.sensit.)					
			250 - 255	Auto random Effect selection from fast to slow					
			18	24		15	0 - 255	<b>Effect indexing and rotation</b> <b>Effect indexing - set position on channel 17 (23;14)</b> Effect indexing	proportional  step proportional step proportional
							0	<b>Effect rotation - set position on channel 17 (23;14)</b> No rotation	
							1 - 127	Forwards Effect rotation from fast to slow	
128 - 129	No rotation								
130 - 255	Backwards Effect rotation from slow to fast								

Mode / Channel			Value	Function	Type of control
1	2	3			
	25		0 - 255	<b>Fine effect indexing and rotation (set position on channel 17 (23))</b> Fine indexing (rotating)	proportional
19	26		0 1 - 179 180 - 189 190 - 211 212 - 233 234 - 255	<b>Frost</b> Open Frost from 0% to 100% 100% frost Pulse closing from slow to fast Pulse opening from fast to slow Ramping from fast to slow	step proportional proportional proportional proportional
20	27	16	0 1 - 179 180 - 191  192 - 203 204 - 215 216 - 217 218 - 219 220 - 221 222 - 223  224 - 239 240 - 255	<b>Iris</b> Open From max. diameter to min. diameter Closed <b>Pulse effects with Iris blackout</b> Pulse opening from slow to fast Pulse closing from fast to slow Random pulse opening (fast) Random pulse opening (slow) Random pulse closing (fast) Random pulse closing (slow) <b>Pulse effects with Iris blackout and zoom</b> Pulse opening from slow to fast Pulse closing from fast to slow	step proportional step  proportional proportional step step step step  proportional proportional
21	28	18	0 - 255	<b>Zoom</b> Zoom from 42° to 13°	proportional
22	29	17	0 - 255	<b>Focus</b> Continuous adjustment from far to near	proportional
23	30	1	0 - 31 32 - 63 64 - 95 96 - 127 128 - 143 144 - 159 160 - 191  192 - 223 224 - 255	<b>Shutter, strobe</b> Shutter closed, <u>Lamp power reduced after 10 s to 700W</u> Shutter open, <u>Full lamp power</u> Strobe-effect from slow to fast (max.15 ashes/s) Shutter open, <u>Lamp power reduced to 700 W</u> Opening pulse in sequences from slow to fast Closing pulse in sequences from fast to slow Shutter open, <u>Electronic strobing „ZAP“ from slow to fast</u> (from 7 to 33 ashes/s) Random strobe-effect from slow to fast Shutter open, <u>Full lamp power</u> <b>Note:</b> <u>underlined characters</u> - ColorSpot 1200E AT only	step step proportional step proportional proportional proportional  proportional step
24	31	2	0 - 255	<b>Dimmer intensity</b> Dimmer intensity from 0% to 100% (In range 0-9 DMX, lamp power reduced to 700 W after 10 s - ColorSpot 1200E AT only)	proportional
	32		0 - 255	<b>Fine dimmer intensity</b> Dimmer intensity fine	proportional