

## ColorBeam 700E AT - DMX Protocol-version 1.0

Mode/Channel					Value	Function	Type of control
1	2	3	4	5			
1	1	1	1	1	0 - 255	<b>Pan</b> Pan movement by 540°	proportional
2	2	2	2	-	0 - 255	<b>Pan Fine</b> Fine control of pan movement	proportional
3	3	3	3	2	0 - 255	<b>Tilt</b> Tilt movement by 280°	proportional
4	4	4	4	-	0 - 255	<b>Tilt fine</b> Fine control of tilt movement	proportional
5	5	5	5	3	0	<b>Pan/Tilt speed , Pan/Tilt time</b> Max. speed (tracking mode)	step
					1 - 255	<b><i>P./T. speed-set Speed Mode in menu: Pan/Tilt Mode</i></b> Speed from max. to min. (vector mode)	proportional
					1 - 255	<b><i>P./T. time - set Time Mode in menu: Pan/Tilt Mode</i></b> Time from 0.1 s to 25.5 s.	proportional
6	6	6	6	4	0 - 49	<b>Power/Special functions</b> Reserved <i>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 30 (24..) must be at range: 0-31 DMX). Corresponding menu items are temporarily overridden).</i>	
					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 wheel moving	step
					120-129	Disabled blackout while gobo wheel 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 wheels reset	step
					170 - 179	Dimmer/strobe reset	step
					180 - 189	Focus/frost reset	step
					190 - 199	Iris/prism reset	step
					200 - 209	Total reset	step
210 - 229	Reserved	step					
230 - 239	Lamp Off						
240 - 255	Reserved	step					
7	7	-	-	-	0 - 9	<b>Pan/Tilt macro selection</b> Disabled pan/tilt macro	step
					10 - 31	Reserved	step
					32 - 63	Figure of circle (from small to large)	proportional
					64 - 95	Figure of horizontal eight (from small to large)	proportional
					96 - 127	Figure of vertical eight (from small to large)	proportional
					128 - 159	Figure of rectangle (from small to large)	proportional
					160 - 191	Figure of triangle (from small to large)	proportional
					192 - 223	Figure of star (from small to large)	proportional
					224 - 255	Figure of cross (from small to large)	proportional
8	8	-	-	-	0	<b>Pan/Tilt macro speed</b> <i>(Set pan/tilt speed (channel 5) at 0)</i> No macro generation	step
					1 - 127	Macro generation from fast to slow-forwards	proportional
					128 - 129	No macro generation	step
					130 - 255	Macro generation from slow to fast-backwards	proportional

Mode/Channel					Value	Function	Type of control
1	2	3	4	5			
9	9	7	7	5	0	<b>Colour wheel</b> <b><i>Continual positioning</i></b> Open/white	proportiona
					16	Deep red	proportiona
					32	Deep blue	proportiona
					48	Orange	proportional
					64	Green	proportional
					80	Light red	proportional
					96	Amber	proportional
					112	UV filter	proportional
					128-129	White	proportional
					130-137	<b><i>Positioning</i></b> Deep red	step
					138-145	Deep blue	step
					146-153	Orange	step
					154-163	Green	step
					164-171	Light red	step
					172-181	Amber	step
182-189	UV filter	step					
190 - 215	Forwards rainbow effect from fast to slow	proportional					
216 - 217	No rotation	step					
218 - 243	Backwards rainbow effect from slow to fast	proportional					
244 - 249	Random colour selection by audio control (Set microphone sensitivity in menu „Personality”)	step					
250 - 255	Auto random colour selection from fast to slow	proportional					
10	-	8	-	-	0 - 255	<b>Colour wheel - fine positioning</b> Fine positioning	proportional
11	10	9	8	6	0 - 255	<b>Cyan</b> Cyan (0-white, 255-full cyan)	proportional
12	11	10	9	7	0 - 255	<b>Magenta</b> Magenta (0-white, 255-full magenta)	proportional
13	12	11	10	8	0 - 255	<b>Yellow</b> Yellow (0-white, 255-full yellow)	proportional
14	13	12	11	9	0 - 255	<b>CTO filter</b> (0-6000K, 255-3200K)	proportional
15	14	13	12	10	0 - 7	<b>CMY colour macros</b> No function	step
					8 - 15	Macro 1	step
					16 -23	Macro 2	step
					24-31	Macro 3	step
					32-39	Macro 4	step
					40-47	Macro 5	step
					48-55	Macro 6	step
					56-63	Macro 7	step
					64-71	Macro 8	step
					72-79	Macro 9	step
					80-87	Macro 10	step
					88-95	Macro 11	step
					96-103	Macro 12	step
					104-111	Macro 13	step
					112-119	Macro 14	step
					120-127	Macro 15	step
					128-135	Macro 16	step
					136-143	Macro 17	step
					144-151	Macro 18	step
152-159	Macro 19	step					

Mode/Channel					Value	Function	Type of control
1	2	3	4	5			
15	14	13	12	10	160-167	Macro 20	step
					168-175	Macro 21	step
					176-183	Macro 22	step
					184-191	Macro 23	step
					192-199	Macro 24	step
					200 - 207	Macro 25	step
					208 - 215	Macro 26	step
					216 - 223	Macro 27	step
					224 - 231	Macro 28	step
					232 - 239	Macro 29	step
					240 - 243	Macro 30 - Random rainbow effect from fast to slow	proportional
					244 - 249	Random macro selection by audio control (Set microphone sensitivity in menu "PERs")	step
					250 - 255	Auto random macro selection from fast to slow	proportional
16	15	14	13	11	0 - 255	<b>CMY+CTO Speed</b> Speed from max. to min.	proportional
17	16	15	14	12		<b>Static gobo wheel</b> <b><u>Continual Positioning</u></b> <i>In range 0-64 DMX is possible fine gobo positioning - set value on channel 18/16</i>	
					0	Open/hole	proportional
					7	Gobo 1	proportional
					13	Gobo 2	proportional
					19	Gobo 3	proportional
					26	Gobo 4	proportional
					32	Gobo 5	proportional
					39	Gobo 6	proportional
					45	Gobo 7	proportional
					51	Gobo 8	proportional
					58	Gobo 9	proportional
					64	Open/hole	proportional
						<b><u>Positioning</u></b>	
					65 - 69	Gobo 1	step
					70 - 74	Gobo 2	step
					75 - 79	Gobo 3	step
					80 - 84	Gobo 4	step
					85 - 89	Gobo 5	step
					90 - 94	Gobo 6	step
					95 - 99	Gobo 7	step
					100 - 104	Gobo 8	step
					105 - 109	Gobo 9	step
						<b><u>Shaking gobos from slow to fast</u></b>	
					110 - 119	Gobo 1	proportional
					120 - 129	Gobo 2	proportional
					130 - 139	Gobo 3	proportional
					140 - 149	Gobo 4	proportional
					150 - 159	Gobo 5	proportional
					160 - 169	Gobo 6	proportional
					170 - 179	Gobo 7	proportional
					180 - 189	Gobo 8	proportional
					190 - 199	Gobo 9	proportional
					200 - 201	Open/hole	
202 - 221	Forwards gobo wheel rotation from fast to slow	proportional					
222 - 223	No rotation						
224 - 243	Backwards gobo wheel rotation from slow to fast	proportional					
244 - 249	Random gobo selection by audio control (Set microphone sensitivity in menu „Personality“)	step					
250 - 255	Auto random gobo selection from fast to slow	proportiona					
18	-	16	-	-	0-255	<b>Fine static gobo wheel</b> Fine positioning	proportional

Mode/Channel					Value	Function	Type of control				
1	2	3	4	5							
19	17	17	15	13	0-3	Open/hole	step				
					4-7	Gobo 1	step				
					8-11	Gobo 2	step				
					12-15	Gobo 3	step				
					16-19	Gobo 4	step				
					20-23	Gobo 5	step				
					24-27	Gobo 6	step				
					28-31	Gobo 7	step				
					<b>Rotation - set rotation on channel 20 (18,16,14)</b>						
					32-35	Gobo 1	step				
					36-39	Gobo 2	step				
					40-43	Gobo 3	step				
					44-47	Gobo 4	step				
					48-51	Gobo 5	step				
					52-55	Gobo 6	step				
					56-59	Gobo 7	step				
					<b>Shaking gobos from slow to fast</b>						
					<b>Index - set indexing on channel 20 (18,16,14)</b>						
					60-69	Gobo 1	proportional				
					70-79	Gobo 2	proportional				
					80-89	Gobo 3	proportional				
					90-99	Gobo 4	proportional				
					100-109	Gobo 5	proportional				
					110-119	Gobo 6	proportional				
					120-129	Gobo 7	proportional				
<b>Positioning - Shaking gobos from slow to fast</b>											
<b>Rotation - set rotation on channel 20 (18,16,14)</b>											
130 - 139	1	proportional									
140 - 149	Gobo 2	proportional									
150 - 159	Gobo 3	proportional									
160 - 169	Gobo 4	proportional									
170 - 179	Gobo 5	proportional									
180 - 189	Gobo 6	proportional									
190 - 199	Gobo 7	proportional									
200 - 201	Open/hole	step									
202 - 221	Forwards gobo wheel rotation from fast to slow	proportional									
222 - 223	No rotation	step									
224 - 243	Backwards gobo wheel rotation from slow to fast	proportional									
244 - 249	Random gobo selection by audio control (Set microphone sensitivity in menu „Personality“)	step									
250 - 255	Auto random gobo selection from fast to slow	proportional									
20	18	18	16	14	0 - 255	<b>Rot. gobo indexing and rotation</b> <b>Gobo indexing - set position on channel 19 (17...)</b> Gobo indexing	proportional				
					0	<b>Gobo rotation - set position on channel 19 (17...)</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				
21	-	19	-	-	0-255	<b>Gobo fine indexing</b> Fine indexing	proportional				
					0 - 19	<b>Prism</b> Open position (hole)	step				
22	19	20	17	15	20 - 127	3-facet rotating prism	step				
					128 - 255	<b>Prism/gobo macros</b>					
					128 - 135	Macro 1	step				
					136 - 143	Macro 2	step				

Mode/Channel					Value	Function	Type of control
1	2	3	4	5			
22	19	20	17	15	144 - 151 152 - 159 160 - 167 168 - 175 176 - 183 184 - 191 192 - 199 200 - 207 208 - 215 216 - 223 224 - 231 232 - 239 240 - 247 248 - 255	Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Macro 15 Macro 16	step step step step step step step step step step step step step step step
23	20	21	18	16	0 1 - 127 128 - 129 130 - 255	<b>Prism rotation</b> No rotation Forwards rotation from fast to slow proportional No rotation Backwards rotation from slow to fast	step proportional step proportional
24	21	22	19	17	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 step proportional proportional proportional
25	-	23	-	-	0-255	<b>Frost fine</b> Smooth frosting	proportional
26	22	24	20	18	0 1 - 179 180 - 191 192 - 219 220 - 247 248 - 249 250 - 251 252 - 253 254 - 255	<b>Iris</b> Open From max.diameter to min.diameter Closed <i>Pulse effects with Iris blackout:</i> 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)	step proportional step proportional proportional step step step step
27	-	25	-	-	0 - 255	<b>Iris fine</b> Iris fine	proportional
28	23	26	21	19	0 - 255	<b>Focus</b> Continuous adjustment from far to near	proportional
29	-	27	-	-	0- 255	<b>Focus fine</b> Focus fine	proportional
30	24	28	22	20	0 - 31 32 - 63 64 - 95 96 - 127 128 - 143 144 - 159 160 - 191 192 - 223 224 - 255	<b>Shutter, strobe</b> Shutter closed, Lamp power reduced to 350 W (after 10 s*) Shutter open, Full lamp power Strobe-effect from slow to fast (max.12 flashes/s) Shutter open, Lamp power reduced to 350 W Opening pulse in sequences from slow to fast Closing pulse in sequences from fast to slow Shutter open, Electronic strobing „ZAP“ from slow to fast (from 7 to 33 flashes/sec) Random strobe-effect from slow to fast Shutter open, Full lamp power	step step proportional step proportional proportional proportional proportional step

Mode/Channel					Value	Function	Type of control
1	2	3	4	5			
31	25	29	23	21	0 - 255	<b>Dimmer intensity</b> Dimmer intensity from 0% to 100% (In range of 0-8 DMX,lamp power reduced to 350 W)	proportional
32	-	30	-	-	0 - 255	<b>Fine dimmer intensity</b> Dimmer intensity fine	proportional

\* 10s=default time delay,this value can be changed in the "Lamp Low Power Delay" menu.