

# 7. SCX600 DMX PROTOCOL

Channel	Value	Percent	Function
<b>1</b>			<b>Shutter, strobe effect, music triggered shutter, reset</b>
	0-7	0-2	Shutter closed
	8-15	3-5	Shutter open
	16-95	4-37	Strobe slow → fast
	96-103	38-40	Shutter open
	104-151	41-59	Random strobe slow → fast
	152-159	60-62	Shutter open
	160-199	63-78	Music triggered shutter
	200-207	79-81	Shutter open
	208-247	82-96	Music trigger intensity
	248-251	97-98	Shutter open
	252-255	99-100	Reset (hold for 5 seconds to blackout and reset)
	<b>2</b>	0-255	0-100
<b>3</b>			<b>Color wheel positions, music triggered color chase</b>
			<b>Continuously scrolling color wheel positions</b>
	0	0	White
	12	4	Color 1 Blue B04
	24	9	Color 2 Red B14
	36	14	Color 3 Yellow B02
	48	18	Color 4 Magenta B12M
	60	23	Color 5 Cyan B05
	72	28	Color 6 Green B08
	84	33	Color 7 Orange B09
	96	37	Color 8 Congo B13
	108	42	Color 9 Pink B16
			<b>Indexed color wheel positions</b>
	120-128	47-50	White
	129-135	51-52	Color 1 Blue B04
	136-142	53-55	Color 2 Red B14
	143-149	56-58	Color 3 Yellow B02
	150-156	59-61	Color 4 Magenta B12M
	157-163	62-64	Color 5 Cyan B05
	164-170	65-66	Color 6 Green B08
	171-177	67-69	Color 7 Orange B09
	178-184	70-72	Color 8 Congo B13
	185-191	73-74	Color 9 Pink B16
			<b>Continuous color wheel rotation</b>
	192-215	75-84	CW fast → slow
	216-239	85-93	CCW slow → fast
			<b>Music triggered color chase</b>
240-245	94-96	Fast	
246-250	97-98	Medium	
251-255	99-100	Slow	

Channel	Value	Percent	Function
<b>4</b>			<b>Gobo selection, gobo shake, music trig gobo chase</b>
			<b>Select gobo (set rotation type on channel 5)</b>
	0-15	0 - 5	Open
	16-31	6-11	Gobo 1: Segments
	32-47	12-18	Gobo 2: Vortex
	48-63	19-24	Gobo 3: Cartwheel
	64-79	25-30	Gobo 4: Deltawindow
	80-95	31-37	Gobo 5: Red Petals
	96-111	38-43	Gobo 6: Straws
	112-127	44-49	Gobo 7: Flying disc
			<b>Gobo shake</b>
	128-143	50-55	Gobo 1, shake fast → slow
	144-159	56-62	Gobo 2, shake fast → slow
	160-175	63-68	Gobo 3, shake fast → slow
	176-191	69-74	Gobo 4, shake fast → slow
	192-207	75-81	Gobo 5, shake fast → slow
	208-223	82-87	Gobo 6, shake fast → slow
	224-239	88-93	Gobo 7, shake fast → slow
			<b>Music triggered gobo chase</b>
	240-245	94-96	Fast
246-250	97-98	Medium	
251-255	99-100	Slow	
<b>5</b>			<b>Gobo rotation type, music trig gobo rotation speed</b>
			<b>Gobo rotation type (select gobo on channel 4)</b>
	0-7	0 - 2	Stop
	8-77	3-29	Rotation CW slow → fast
	78-147	30-57	Rotation CCW fast→slow
	148-153	58-59	Stop
	154-223	60-87	Rotation CW slow → fast
	224-239	88-93	Rotation shake
			<b>Music triggered rotation</b>
	240-245	94-96	Fast
246-250	97-98	Medium	
251-255	99-100	Slow	
<b>6</b>	0 - 255	0 - 100	<b>Pan</b> Left → right (128 = neutral)
<b>7</b>	0 - 255	0 - 100	<b>Tilt</b> Down → up (128 = neutral)
<b>8*</b>			<b>Pan &amp; tilt macros (DMX mode 2 only)</b>
	0 - 15	0 - 5	No Macro
	16 - 31	6 - 11	Macro 1
	32 - 47	12 - 18	Macro 2
	48 - 63	19 - 24	Macro 3
	64 - 79	25 - 30	Macro 4
	80 - 95	31 - 37	Macro 5
	96 - 111	38 - 43	Macro 6
	112 - 127	44 - 49	Macro 7
	128 - 143	50 - 55	Macro 8
	144 - 159	56 - 62	Macro 9
	160 - 175	63 - 68	Macro 10
	176 - 191	69 - 74	Macro 11
192 - 207	75 - 81	Macro 12	
208 - 255	82 - 100	Reserved. No function	

Channel	Value	Percent	Function
<b>9*</b>	0 - 15	0 - 5	<b>Effects macros (DMX mode 2 only)</b> No Macro
	16 - 31	6 - 11	Macro 1
	32 - 47	12 - 18	Macro 2
	48 - 63	19 - 24	Macro 3
	64 - 79	25 - 30	Macro 4
	80 - 95	31 - 37	Macro 5
	96 - 111	38 - 43	Macro 6
	112 - 127	44 - 49	Macro 7
	128 - 143	50 - 55	Macro 8
	144 - 159	56 - 62	Macro 9
	160 - 175	63 - 68	Macro 10
	176 - 191	69 - 74	Macro 11
	192 - 207	75 - 81	Macro 12
208 - 255	82 - 100	Reserved. No function	
<b>10*</b>	0-7	0-2	<b>Pan &amp; tilt speed (DMX mode 2 only)</b> Tracking (default)
	8-240	3-94	Fast → slow
	241-245	95-96	Blackout during color and gobo changes
	246-250	97-98	Blackout during pan and tilt changes
	251-255	99-100	Blackout during color, gobo, pan and tilt changes
<b>11*</b>	0-7	0-2	<b>Effects speed (DMX mode 2 only)</b> Tracking (default)
	8-255	3-100	Fast → slow

\* Channels 8 - 11 are available in DMX mode 2 only. In DMX mode 1, pan & tilt speed and effects speed are set to tracking.