

DMX Control of Functions

Studio Color may be controlled by either by 8- or 16-bit DMX controllers. Chapter 2 discusses all Studio Color functions in detail. Use the following table to control Studio Color functions via DMX.

Table 1.3: DMX Control

DMX Chan.	Function	Description	Decimal	Fader percent	Hex
1	Pan MSB	<i>coarse positioning, 8 bit; 8-bit controllers use only high byte</i>	0-255	0-100	00-ffh
2	Pan LSB	<i>fine positioning</i>	0-255	0-100	00-ffh
3	Tilt MSB	<i>coarse positioning, 8 bit; 8-bit controllers use only high byte</i>	0-255	0-100	00-ffh
4	Tilt LSB	<i>fine positioning</i>	0-255	0-100	00-ffh

Table 1.3: DMX Control

DMX Chan.	Function	Description	Decimal	Fader percent	Hex
5	Color functions	<i>default- color wheel continuous</i> <i>F1- allows the color mixing wheels to make two complete rotations</i> <i>F2- locks dim, color, and effect systems to MSpeed</i> <i>F3- enables forward color spins on the fixed color wheel or synchronized color mix sequences</i> <i>F4- enables reverse color spins on the fixed color wheel or random color mix cycling from the subtractive color wheels</i> <i>F5- color wheel color lock and quickest path</i>			
		default	0	0	00
		F3	16	8	10h
		F4	32	14	20h
		F5	48	20	30h
		F1	64	26	40h
		F1 and F3	80	33	50h
		F1 and F4	96	39	60h
		F1 and F5	112	45	70h
		F2	128	51	80h
		F2 and F3	144	58	90h
		F2 and F4	160	64	a0h
		F2 and F5	176	70	b0h
		F1 and F2	192	76	c0h
		F1, F2, and F3	208	83	d0h
		F1, F2, and F4	224	89	e0h
		F1, F2, and F5	240	95	f0h

Table 1.3: DMX Control

DMX Chan.	Function	Description	Decimal	Fader percent	Hex	
6	Color wheel	<i>default- continuously variable</i>				
		pos 0 - open	0 & 255	0 & 100	00 & ffh	
		pos 1 - CTO	44	17	2ch	
		pos 2 - pink	86	34	56h	
		pos 3 - magenta	128	50	80h	
		pos 4 - red	170	66	aah	
		pos 5 - aqua	213	83	d5h	
		<i>F3- variable forward spins/synchronized color mix sequences</i>				
		<i>spin stop</i>	0-3	0-1	00-03h	
		spin forward slowest	4	2	04h	
		spin forward fastest	127	48	7fh	
		color mix sequence slowest	128	50	80h	
		color mix sequence fastest	255	100	ffh	
		<i>F4- variable reverse spins /random color mix cycling</i>				
		<i>spin stop</i>	0-3	0-1	00-03h	
		spin reverse slowest	4	2	04h	
		spin reverse fastest	127	48	7fh	
		color mix cycle slowest	128	50	80h	
		color mix cycle fastest	255	100	ffh	
		<i>F5- color lock and quickest path</i>				
pos 0 - open	0-43	0-17	0-2bh			
pos 1 - CTO	44-85	18-33	2ch-55h			
pos 2 - pink	86-127	34-50	56h-79h			
pos 3 - magenta	128-169	51-66	80h-a9h			
pos 4 - red	170-212	67-83	aah-d4h			
pos 5 - aqua	213-255	84-100	d5h-ffh			
7	Cyan mix	<i>red subtractive</i> cyan in cyan out	0 255	0 100	00h ffh	
8	Magenta mix	<i>green subtractive</i> magenta in magenta out	0 255	0 100	00h ffh	
9	Yellow mix	<i>blue subtractive</i> yellow in yellow out	0 255	0 100	00h ffh	

Table 1.3: DMX Control

DMX Chan.	Function	Description	Decimal	Fader percent	Hex
10	Lens wheel (effects wheel 1)	<i>full rotation, continuously variable</i> open wide angle filter narrow horizontal shaping center axis wide vertical shaping center axis	0 & 255 64 128 192	0 & 100 25 50 75	00 & ffh 40h 80h c0h
11	Frost wheel (effects wheel 2)	<i>full rotation, continuously variable</i> open frost narrow vertical shaping center axis wide horizontal shaping center axis	0 & 255 64 128 192	0 & 100 25 50 75	00 & ffh 40h 80h c0h
12	Shutter	closed strobe slowest strobe fastest random strobe-low saturation random strobe-high saturation open	0-7 8 127 128 247 248-255	0-2 3 49 50 96 97-100	00h-07h 08h 7fh 80h f7h f8h-ffh
13	Dimmer	<i>iris</i> closed open	0 255	0 100	0h ffh
14	MSpeed	<i>movement speed</i> controller cross fade slowest fastest	0-3 4 255	0-1 2 100	00-03h 04h ffh
15	Control ¹	safe home shutdown ²	0 64 128	0 25 50	0h 40h 80h
16	Check-sum	set to default value (00)	00	0	00h

¹ Note: the shutter must be closed to access control channel. The fixture must receive the value for 0.5 second before it instigates a Control function.

² Note: only available on the 575-S.