



SZ300R

DMX Practical Table

CCT 8bit				
Channel	Function	DMX Value	Parameter	Note
1	Dimmer	0 - 255	0% - 100%	
2	CCT	0 - 255	2500K - 10000K	
3	Magenta/Green	0 - 10	Neutral/No effect	
		11 - 20	Full minus green	
		21 - 119	-50 - -1	
		120 - 145	Neutral/No effect	
		146 - 244	1 - 50	
		245 - 255	Full plus green	

HSI 8bit				
Channel	Function	DMX Value	Parameter	Note
1	Dimmer	0 - 255	0% - 100%	
2	Hue	0 - 255	0° - 360°	
3	Saturation	0 - 255	0% - 100%	

RGBW 8bit				
Channel	Function	DMX Value	Parameter	Note
1	Dimmer	0 - 255	0% - 100%	
2	Intensity red	0 - 255	0 - 255	
3	Intensity green	0 - 255	0 - 255	
4	Intensity blue	0 - 255	0 - 255	
5	Intensity white	0 - 255	0 - 255	

CCT&HSI 8bit				
Channel	Function	DMX Value	Parameter	Note
1	Dimmer	0 - 255	0% - 100%	
2	CCT	0 - 255	2500K - 10000K	
3	Magenta/Green	0 - 10	Neutral/No effect	Adapt according to whether the luminaire has a magenta/green adjust function.
		11 - 20	Full minus green	
		21 - 119	-50 - -1	
		120 - 145	Neutral/No effect	
		146 - 244	1 - 50	
		245 - 255	Full plus green	
4	Crossfade	0 - 255	0% - 100%	Dissolve from CCT to HSI, 0%=CCT, 100%=HSI.
5	Hue	0 - 255	0° - 360°	
6	Saturation	0 - 255	0% - 100%	

CCT&RGBW 8bit							
Channel	Function	DMX Value	Parameter	Note			
1	Dimmer	0 - 255	0% - 100%				
2	CCT	0 - 255	2500K - 10000K				
3	Magenta/Green	0 - 10	Neutral/No effect	Adapt according to whether the luminaire has a magenta/green adjust function.			
		11 - 20	Full minus green				
		21 - 119	-50 - -1				
		120 - 145	Neutral/No effect				
		146 - 244	1 - 50				
		245 - 255	Full plus green				
		4	Crossfade		0 - 255	0% - 100%	Dissolve from CCT to RGBW, 0%=CCT, 100%=RGBW.
		5	Intensity red		0 - 255	0 - 255	
6	Intensity green	0 - 255	0 - 255				
7	Intensity blue	0 - 255	0 - 255				
8	Intensity white	0 - 255	0 - 255				

GEL 8bit				
Channel	Function	DMX Value	Parameter	Note
1	Dimmer	0 - 255	0% - 100%	
2	CCT	0 - 127	3200K	
		128 - 255	5600K	
3	GEL type	0 - 127	R-GEL	
		128 - 255	L-GEL	
4	GEL No.	0 - 255	Refer to the related table	One value corresponds to one gel, 30 in total.
5	Save	0 - 255		
6	Save	0 - 255		

FX 8bit							
Channel	Function	Parameter	DMX Value	Note			
1	FX Mode	Dimmer	0 - 255	0% - 100%			
2	Effect	Type	0 - 9	RGB cycle			
			10 - 19	Party			
			20 - 29	Flash			
			30 - 39	Lightning			
			40 - 49	Cloudy			
			50 - 59	Broken bulb			
			60 - 69	TV			
			70 - 79	Candle			
			80 - 89	Fire			
			90 - 99	Firework			
			100 - 109	Explosion			
			110 - 119	Welding			
			120 - 129	Cop car			
			130 - 139	SOS			
			140 - 149	Preset			
			150 - 159	Preset			
			160 - 169	Preset			
			170 - 255	Preset			
			3	Parameter of RGB cycle	Speed	0-255	1-100
			4		Saturation	0-255	1-100
3	Parameter of party	Speed	0-255	1-100			
4		Saturation	0-255	1-100			
3	Parameter of Camera flash	Trigger	0-127	Auto			
			128-255	Manual			
			0-255	Trigger: Auto 1-100			
4		Speed	0-127	Trigger: Manual=off			
			128-255	Trigger: Manual=on			
			0-255	Trigger: Auto 1-100			
5	Mode		0-127	Camera flash			
			128-255	Flash bulb			
			128-255	Trigger: Manual=on			
6	Color		0-127	CCT			
			128-255	HSI			
7	CCT or HUE		0-255	2500K - 10000K			
			0-255	Hue: 0-360			
8	Magenta/Green or saturation		0 - 10	Neutral/No effect			
			11 - 20	Full minus green			
			21 - 119	-50 - -1			
			120 - 145	Neutral/No effect			
			146 - 244	1 - 50			
			245 - 255	Full plus green			
			0-255	Saturation: 0-100			
			0-127	Auto			
			128-255	Manual			
			3	Parameter of lightning	Trigger	0-127	Auto
			128-255	Manual			

Channel	Function	Parameter	DMX Value	Actual Parameter
4		Frequency	0-255	Trigger: Auto=Rnd+20c/min
			0-127	Trigger: Manual=off
			128-255	Trigger: Manual=on
			Flash times	0-255
6		CCT	0-255	2500K - 10000K
3	Parameter of cloudy	Speed	0-255	Rnd-100
4		DIM ratio	0-255	30-90%
3	Parameter of broken bulb	Speed	0-255	1-100
			Color	0-127
4			128-255	HSI
			CCT or HUE	0-255
				Hue: 0-360
			Magenta/Green or saturation	0-10
			11-20	Full minus green
			21-119	-50 - -1
			120-145	Neutral/No effect
			146-244	1 - 50
			245-255	Full plus green
			0-255	Saturation: 0-100
3	Parameter of TV	Speed	0-255	1-100
4		Color	0-127	CCT
			128-255	HSI
3	Parameter of candle	Speed	0-255	1-100
3	Parameter of fire	Speed	0-255	1-100
3	Parameter of firework	Speed	0-255	1-100
4		Embers	0-255	1-100
			0-127	Auto
3	Parameter of explosion	Trigger	128-255	Manual
			0-255	Trigger: Auto 1-100
4		Speed	0-127	Trigger: Manual=off
			128-255	Trigger: Manual=on
5		Embers	0-255	1-100
			0-127	CCT
6		Color	128-255	HSI
			0-255	Saturation: 0-100
7		CCT or HUE	0-255	2500K - 10000K
				Hue: 0-360
			Magenta/Green or saturation	0-10
			11-20	Full minus green
			21-119	-50 - -1
			120-145	Neutral/No effect
			146-244	1 - 50
			245-55	Full plus green
			0-255	Saturation: 0-100
8		CCT or HUE	0-255	2500K - 10000K
				Hue: 0-360
			Magenta/Green or saturation	0-10
			11-20	Full minus green
			21-119	-50 - -1
			120-145	Neutral/No effect
			146-244	1 - 50
			245-55	Full plus green
			0-255	Saturation: 0-100

Channel	Function	Parameter	DMX Value	Actual Parameter
3	Parameter of welding	Speed	0-255	1-100
4			Color	0-127
			128-255	HSI
			CCT or HUE	0-255
				Hue: 0-360
			Magenta/Green or saturation	0 - 10
			11 - 20	Full minus green
			21 - 119	-50 - -1
			120 - 145	Neutral/No effect
			146 - 244	1 - 50
			245 - 255	Full plus green
			0-255	Saturation: 0-100
3	Parameter of cop car	Color	0-255	One value corresponds to one color mode: R+B, R, B, B+W, B+Y, Y, R+B+W, R+B+Y.
4		Mode	0-255	Mode: 1-5
3	Parameter of SOS	Color	0-127	CCT
			128-255	HSI
4		CCT or HUE	0-255	2500K - 10000K
				Hue: 0-360
5		Magenta/Green or saturation	0 - 10	Neutral/No effect
			11 - 20	Full minus green
			21 - 119	-50 - -1
			120 - 145	Neutral/No effect
			146 - 244	1 - 50
			245 - 255	Full plus green
			0-255	Saturation: 0-100

Calculation formula:

$$\text{Brightness 8Bit} = \frac{\text{DMX value} \times \text{Brightness value}}{0.3922} \quad \text{Brightness value} = \text{DMX value} \times 0.3922$$

$$\text{CCT 8Bit} = \frac{\text{DMX value} \times \text{CCT value} \times 2500}{29.42} \quad \text{CCT value} = \text{DMX value} \times 29.42 + 2500$$