

Pixelation Luminaire DMX Protocol

© 2008 High End Systems all rights reserved

All product specifications subject to change without notice.

SHOWPIX™ and StudioPix™ pixelation luminaires utilize the same fixture software with the number of LEDs in the array being the only difference between them.

Standard Protocol

Standard protocol provides motion control plus full graphics engine control of color mixing and effects for two image files.

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
Motion Control						
1	Pan	Pan, coarse adjustment	0-255	0-100	128	50
2		Pan, fine adjustment	0-255	0-100	0	0
3	Tilt	Tilt, coarse adjustment	0-255	0-100	128	50
4		Tilt, fine adjustment	0-255	0-100	0	0
5	MSpeed	Disable	0-3	0-1	0	0
		Longest to Shortest	4-255	2-100		
6	Macro (Note 1)	Macro Off	0-5	0-2	0	0
		Pan sweep, small to large angle	6-62	2-24		
		Macro Off	63-65	25-25		
		Tilt sweep, small to large angle	66-122	26-48		
		Macro Off	123-125	48-49		
		Clockwise circle, small to large	126-160	49-63		
		Macro Off	161-163	63-64		
		Counterclockwise circle, small to large	164-198	64-78		
Reserved	199-255	78-100				
7	Control	The Control channel should not be crossfaded.				
		Safe (disables all Control settings)	0-9	0-4	0	0
		Set Strobe channel to 0 for the following commands.				
		Display Off (<i>send for 2 seconds</i>)	20-28	8-11	0	0
		Display Bright (<i>send for 2 seconds</i>)	40-48	16-19		
		Home All (<i>send for 2 seconds</i>)	60-68	24-27		
		Shutdown (<i>send for 5 seconds</i>)	120-130	47-51		
		No Strobe channel requirement				
		Outrig Mode	131-140	51-54	0	0
		Reserved	141-255	55-100		

Note 1: The Mspeed channel is used to control the speed of the macros: 0-4 Default speed of 2.5 seconds.
5-255 Minimum speed of 1/2 second with a maximum of 25 seconds.

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
Global Composit Mixer						
8	Strobe	No strobe (open)	0-23	0-9	0	0
		Periodic strobe slow to fast	24-53	10-21		
		Random random strobe slow to fast	54-83	22-33		
		Synchronous random strobe slow to fast	84-113	34-44		
		Reserved, No strobe (open)	114-255	45-100		
9	Dim	LEDs off to full on	0-255	0-100	0	0
10	Color Function	RGB. Standard RGB add to all pixels	0	0	NA	1
		CMY Simulates CMY by subtracting RGB	1			
		Black and White	2			
		Black and White Inverted	3			
		RGB Add non-black pixels	4			
		RGB Swap to GBR	5			
		RGB Swap to BRG	6			
		RGB Swap to BGR	7			
		RGB Swap to RBG	8			
		RGB Swap to GRB	9			
		RGB Invert: red to inverted red, green to inverted green, blue to inverted blue	10			
		RGB Invert and Swap to GBR: red to inverted green, green to inverted blue, blue to inverted red.	11			
		RGB Invert and Swap to BRG.	12			
		Solarize 1 If color value < DMX value, invert color	13			
		Solarize 2 If color value > DMX value, invert color	14			
		Solarize 3 If color value < DMX value, set color to 0	15			
		Solarize 4 If color value > DMX value, set color to 0	16			
		Color Cycle	17			
		Random Color	18			
		Scale	19			
Compress to maximum	20					
Add color to black	21					
Replace background	22					
Rainbow Color Cycle	23					
Reserved, default to RGB	24-255					
11	Red	Continuous Mode (off 0/0 full 255/255)				
		Red Coarse	0-255	0-100	0	0
		Red Fine	0-255	0-100		
12		Cycle & Random Modes. Cycle Speed is controlled by Red Coarse Channel				
		Slow to Fast rate	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default			
			(dec.)	(%)	(dec.)	(%)		
13	Green	Continuous Mode (off 0/0 full 255/255)						
		Green Coarse	0-255	0-100	0	0		
		Green Fine	0-255	0-100				
15	Blue	Continuous Mode (off 0/0 full 255/255)						
		Blue Coarse	0-255	0-100	0	0		
		Blue Fine	0-255	0-100				
17	Scale	Scale In (magnify)	0-127	0-49	128	50		
		Scale Default (1 to 1)	128	50				
		Scale Out (minify)	127-255	51-100				
18	Rotate	Indexed	0-128	0-50	0	0		
		Forward Rotate	129-191	51-74				
		Stop	192	75				
		Reverse Rotate	193-255	76-100				
19	Dampening	Disable	0	0	0	0		
		Shortest to Longest	1-255	1-100				

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
20	Transition Mode	Normal - Even Fade	0	0	0	0
		Circle In	1			
		Circle Out	2			
		Spiral In	3			
		Spiral Out	4			
		Plus In	5			
		Plus Out	6			
		Diamond In	7			
		Diamond Out	8			
		Box In	9			
		Box Out	10			
		Split Horizontal in	11			
		Split Horizontal Out	12			
		Split Vertical In	13			
		Split Vertical Out	14			
		Blinds Horizontal	15			
		Blinds Vertical	16			
		Checkerboard Horizontal	17	NA		
		Checkerboard Vertical	18			
		Comb Horizontal	19			
		Comb Vertical	20			
		Random Bars Horizontal	21			
		Random Bars Vertical	22			
		Strips Left Up	23			
		Strips Right Up	24			
		Strips Left Down	25			
		Strips Right Down	26			
		Wedge From Left	27			
		Wedge From Right	28			
		Wedge From Top	29			
		Wedge From Bottom	30			
		Wheel 1 spoke, clockwise rotation	31			
		Wheel 2 spokes, clockwise rotation	32			
Wheel 3 spokes, clockwise rotation	33					

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
20	Transition Mode	Wheel 6 spokes, clockwise rotation	34	NA	0	0
		Wheel 1 spoke, counterclockwise rotation	35			
		Wheel 2 spokes, counterclockwise rotation	36			
		Wheel 3 spokes, counterclockwise rotation	37			
		Wheel 6 spokes, ccounterclockwise rotation	38			
		Spider Spiral	39			
		Wipe Left	40			
		Wipe Right	41			
		Wipe Up	42			
		Wipe Down	43			
		Cover from left	44			
		Cover from right	45			
		Cover from top	46			
		Cover from bottom	47			
		Cover from top left	48			
		Cover from top right	49			
		Cover from bottom left	50			
		Cover from bottom right	51			
		Uncover to left	52			
		Uncover to right	53			
		Uncover to top	54			
		Uncover to bottom	55			
		Uncover to top left	56			
		Uncover to top right	57			
		Uncover to bottom left	58			
		Uncover to bottom right	59			
		Push from left	60			
		Push from right	61			
		Push from top	62			
		Push from bottom	63			
		Push from top left	64			
		Push from top right	65			
		Push from bottom left	66			
Push from bottom right	67					
Random Dissolve	68					
Fade Through Black	69					
Random Transition	70					
Snap/Transparency Enable	71					
Gothic Discus	72					
Gothic Discus2	73					
Reserved, default to Normal	74-255					

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default					
			(dec.)	(%)	(dec.)	(%)				
21	Transition	Image A Full / B out	0-126	0-49	0	0				
		Composite A and B	127	50						
		Image B Full / A out	128-255	51-100						
22	Effect Function	None	0	0	0	0				
		Background Color	1	NA						
		Pan and Tilt sync	2							
		Shake	3							
		Bar Scan	4							
		Target Scan	5							
		Curtain Scan	6							
		Mirror	7							
		Brightness and contrast	8							
		Filters	9							
		Flip	10							
		Reserved, default to None	11-255							
23	Effect Modifier 1	Adjusts the option selected in Effect Function Channel 22.	0-255		0-100	0	0			
24	Effect Modifier 2	The type of adjustment and the default value depends on the Effect chosen.	0-255	0-100	0	0				
25	Image A									
	Folder	Reserved, no selection	0	0	NA	1	1			
		Stock Pixel Art								
		Lenses	1							
		Backgrounds	2							
		Chasing	3							
		Marquee	4							
		Atmospherics	5							
		Elegant	6							
		Shimmer	7							
		Fiery	8							
		Spinning	9							
		Icons	10							
		Realistic	11							
		Flashing	12							
		Reserved	13-40							
		Custom User Folders								
		User Content	41-250	16-98				0	0	
		Reserved	251-255	99-100						

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
26	File	No selection	0	0	0	0
		Each file is designated with a unique DMX value from 1-255.	1-255	1-100		
27	Frame	Frame Selection defines a starting frame number for the selected file	0-255	0-100	0	0
28	Play Mode	Loop Forward	0	NA	0	0
		Loop Reverse	1			
		Once Forward	2			
		Once Reverse	3			
		Random	4			
		Bounce	5			
		Static Frame. Use the Frame channel to select the desired frame.	6			
		Loop Forward w/ intensity > 0	7			
		Loop Reverse w/ intensity > 0	8			
		Once Forward w/ intensity > 0	9			
		Once Reverse w/ intensity > 0	10			
		Random w/ intensity > 0	11			
		Bounce w/ intensity 0	12			
		Reserved, default to Loop Forward	13-255			
29	Play Speed	All Play Modes except Static Frame				
		Normal Speed	0	0	0	0
		Stop	1	1		
		Slowest speed increasing to normal	2	2		
		Normal Speed	128	3-49		
		Fast speeds increasing from normal	129	50		
		Play Modes with value of 4 or 11				
		Random seed	0-255	0-100	0	0
30	Scale	Scale In (magnify)	0-127	0-49	128	50
		Scale Default	128	50		
		Scale Out (minify)	129-255	51-100		
31	Rotate	Indexed	0-128	0-50	0	0
		Forward Rotate	129-191	51-75		
		Stop	192	75		
		Reverse Rotate	193-255	76-100		
32	X-Position	Maximum Left x-axis	0-127	0-49	128	50
		Center	128	50		
		Maximum Right x-axis	129-255	51-100		

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
33	Y-Position	Maximum Down Y-axis	0-127	0-49	128	50
		Center	128	50		
		Maximum Up x-axis	129-255	51-100		
34	Color Function	RGB	0	0	1	1
		CMY	1			
		BW	2			
		BW Invert	3			
		RGB Add non-black pixels	4			
		RGB Swap to GBR	5			
		RGB Swap to BRG	6			
		RGB Swap to BGR	7			
		RGB Swap to RBG	8			
		RGB Swap to GRB	9			
		RGB Invert	10			
		RGB Invert & swap to GBR	11			
		RGB Invert & swap to BRG	12			
		Solarize 1	13			
		Solarize 2	14			
		Solarize 3	15			
		Solarize 4	16			
		Color Cycle	17			
		Random Color	18			
		Scale	19			
		Compress to maximum	20			
Add color to black	21					
Replace background	22					
Rainbow Color Cycle	23					
Reserved, default to RGB.	24-255					
35	Red	Continuous Mode (off 0/0 full 255/255)				
		Red Coarse	0-255	0-100	0	0
		Red Fine	0-255	0-100		
36		Cycle & Random Modes. Cycle Speed is controlled by Red Coarse Channel				
		Slow to Fast rate	0-255	0-100	0	0
37	Green	Continuous Mode (off 0/0 full 255/255)				
		Green Coarse	0-255	0-100	0	0
		Green Fine	0-255	0-100		
38		Continuous Mode (off 0/0 full 255/255)				
		Blue Coarse	0-255	0-100	0	0
39	Blue	Continuous Mode (off 0/0 full 255/255)				
		Blue Fine	0-255	0-100		

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
41	Transparent	Image Transparency	0	0	0	0
		Transparent Black	1	NA		
		Transparent White	2			
		Transparent Color from mapped image colors	3-254			
		No Transparency	255			
42	Background	Off	0	0	0	0
		Background Color 1 -> 255	1-255	1-100		
43	Transition Mode	Normal	0	NA	0	0
		Fade	1			
		SnapFade	2			
		FadeSnap	3			
		Strobe	4			
		Trails	5			
		Reserved, default to Normal	6			
44	Transition Speed	Slowest to Normal	0-127	0-49	128	50
		Normal Speed	128	50		
		Normal to fastest	129-255	51-100		
45	Effect Function	None	0	0	0	0
		Strobe	1	NA		
		Pan and Tilt sync	2			
		Shake	3			
		Bar Scan	4			
		Target Scan	5			
		Curtain Scan	6			
		Mirror	7			
		Brightness and contrast	8			
		Filters	9			
		Flip	10			
		Reserved, default to None	11-255			
46	Effect Modifier 1	Adjusts the option selected in Effect Function Channel 45.	0-255	0-100	0	0
47	Effect Modifier 2	The type of adjustment and the default value depends on the Effect chosen.	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
Image B						
48	Folder	Reserved, no selection	0	0		
		Stock PixelArt				
		Lenses	1	NA	1	1
		Backgrounds	2			
		Chasing	3			
		Marquee	4			
		Atmospherics	5			
		Elegant	6			
		Shimmer	7			
		Fiery	8			
		Spinning	9			
		Icons	10			
		Realistic	11			
		Flashing	12			
		Reserved	13-40			
		Custom User Folders				
		User Content	41-250	16-98	0	0
Reserved	251-255	99-100				
49	File	No selection	0	0	0	0
		Each file is designated with a unique DMX value from 1-255.	1-255	1-100		
50	Frame	Frame Selection defines a starting frame number for the selected file	0-255	0-100	0	0
51	Play Mode	Loop Forward	0	NA	0	0
		Loop Reverse	1			
		Once Forward	2			
		Once Reverse	3			
		Random	4			
		Bounce	5			
		Static Frame. Frame selected in Frame Parameter	6			
		Loop Forward w/ intensity >0	7			
		Loop Reverse w/ intensity >0	8			
		Once Forward w/ intensity >0	9			
		Once Reverse w/ intensity >0	10			
		Random w/ intensity >0	11			
		Bounce w/ intensity >0	12			
		Reserved, default to Loop Forward	13-255			

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default			
			(dec.)	(%)	(dec.)	(%)		
52	Play Speed	All Play Modes except Static Frame						
		Normal Speed	0	0	128	50		
		Stop	1	1				
		Slowest speed increasing to normal	2-127	2-49				
		Normal Speed	128	50				
		Fast speeds increasing from normal	129-255	51-100				
		Random Frame Play Modes						
		Random seed	0					
		53	Scale	Scale In (magnify)	0-127	0-49	128	50
				Scale Default	128	50		
Scale Out (reduce size)	129-255			51-100				
54	Rotate	Indexed	0-128	0-50	0	0		
		Continuous Clockwise Rotation	129-191	51-74				
		Stop	192	75				
		Continuous Counterclockwise Rotation	193-255	76-100				
55	X-Position	Maximum Left X-axis	0-127	0-49	128	50		
		Center	128	50				
		Maximum Right X-axis	129-255	51-100				
56	Y-Position	Maximum Down Y-axis	0-127	0-49	128	50		
		Center	128	50				
		Maximum Up Y-axis	129-255	51-100				
57	Color Function	RGB	0	NA	1	1		
		CMY	1					
		BW	2					
		BW Invert	3					
		RGB Add non-black pixels	4					
		RGB Swap to GBR	5					
		RGB Swap to BRG	6					
		RGB Swap to BGR	7					
		RGB Swap to RBG	8					
		RGB Swap to GRB	9					
		RGB Invert	10					
		RGB Invert & swap to GBR	11					
		RGB Invert & swap to BRG	12					
		Solarize 1	13					
		Solarize 2	14					
		Solarize 3	15					
		Solarize 4	16					
Color Cycle	17							

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
57	Color Function	Random Color	18			
		Scale	19			
		Compress to maximum	20			
		Add color to black	21	NA	0	0
		Replace background	22			
		Rainbow Color Cycle	23			
		Reserved, default to RGB.	24-255			
58	Red	Continuous Mode (off 0/0 full 255/255)				
		Red Coarse	0-255	0-100	0	0
59		Red Fine	0-255	0-100		
		Cycle & Random Modes. Cycle Speed is controlled by Red Coarse Channel				
		Slow to Fast rate	0-255	0-100	0	0
60	Green	Continuous Mode (off 0/0 full 255/255)				
		Green Coarse	0-255	0-100	0	0
61		Green Fine	0-255	0-100		
62	Blue	Continuous Mode (off 0/0 full 255/255)				
		Blue Coarse	0-255	0-100	0	0
63		Blue Fine	0-255	0-100		
64	Transparent	Image Transparency	0	0		
		Transparent Black	1			
		Transparent White	2	NA	0	0
		Transparent Color from mapped image colors	3-254			
		No Transparency	255	100		
65	Background	Off	0	0	0	0
		Background Color 1 -> 255	1-255	1-100		
66	Transition Mode	Normal	0			
		Fade	1			
		SnapFade	2			
		FadeSnap	3	NA	0	0
		Strobe	4			
		Trails	5			
		Reserved, default to Normal	6			
67	Transition Speed	Slowest to Normal	0-127	0-49		
		Normal Speed	128	50	128	50
		Normal to fastest	129-255	51-100		

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
68	Effect Function	None	0	NA	0	0
		Strobe	1			
		Pan and Tilt sync	2			
		Shake	3			
		Bar Scan	4			
		Target Scan	5			
		Curtain Scan	6			
		Mirror	7			
		Brightness and contrast	8			
		Filters	9			
		Flip	10			
		Reserved, default to None	11-255			
		69	Effect Modifier 1			
70	Effect Modifier 2	The type of adjustment and the default value depends on the specific option.	0-255	0-100	0	0

RGB Reduced Protocol

This protocol controls motion and color mixing only. In this mode, the fixture operates as a wash light.

	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
Motion Control						
1	Pan	Pan, coarse adjustment	0-255	0-100	128	50
2		Pan, fine adjustment	0-255	0-100	0	0
3	Tilt	Tilt, coarse adjustment	0-255	0-100	128	50
4		Tilt, fine adjustment	0-255	0-100	0	0
5	MSpeed	Disable	0-3	0-1	0	0
		Longest to Shortest	4-255	2-100		
6	Macro	Macro Off	0-5	0-2	0	0
		Pan sweep, small to large angle	6-62	2-24		
		Macro Off	63-65	25-25		
		Tilt sweep, small to large angle	66-122	26-48		
		Macro Off	123-125	48-49		
		Clockwise circle, small to large	126-160	49-63		
		Macro Off	161-163	63-64		
		Counterclockwise circle, small to large	164-198	64-78		
		Reserved	199-255	78-100		
7	Control	The Control channel should not be crossfaded.				
		Safe (disables all Control settings)	0-9	0-4	0	0
		Set Strobe channel to 0 for the following commands.				
		Display Off (<i>send for 2 seconds</i>)	20-28	8-11	0	0
		Display Bright (<i>send for 2 seconds</i>)	40-48	16-19		
		Home All (<i>send for 2 seconds</i>)	60-68	24-27		
		Shutdown (<i>send for 5 seconds</i>)	120-130	47-51		
		No Strobe channel requirement				
		Outrig Mode	131-140	51-54		
TBD	141-255	55-100				
8	Strobe	No strobe (open)	0-23	0-9	0	0
		Periodic strobe slow to fast	24-53	10-21		
		Random random strobe slow to fast	54-83	22-33		
		Synchronous random strobe slow to fast	84-113	34-44		
		Reserved, No strobe (open)	114-255	45-100		
9	Dim	LEDs off to full on	0-255	0-100	0	0
10	Red	Red value for all LEDs	0-255	0-100	0	0
11	Green	Green value for all LEDs	0-255	0-100	0	0
12	Blue	Blue value for all LEDs	0-255	0-100	0	0

Pixel Mapping Protocol

In addition to motion, strobing and dimming, Pixel Mapping protocol provides individual RGB control of each of the 127 LEDs according to the array numbering shown on page 26.

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
Motion Control						
1	Pan	Pan, coarse adjustment	0-255	0-100	128	50
2		Pan, fine adjustment	0-255	0-100	0	0
3	Tilt	Tilt, coarse adjustment	0-255	0-100	128	50
4		Tilt, fine adjustment	0-255	0-100	0	0
5	MSpeed	Disable	0-3	0-1	0	0
		Longest to Shortest	4-255	2-100		
6	Macro	Macro Off	0-5	0-2	0	0
		Pan sweep, small to large angle	6-62	2-24		
		Macro Off	63-65	25-25		
		Tilt sweep, small to large angle	66-122	26-48		
		Macro Off	123-125	48-49		
		Clockwise circle, small to large	126-160	49-63		
		Macro Off	161-163	63-64		
		Counterclockwise circle, small to large	164-198	64-78		
	Reserved	199-255	78-100			
7	Control	<i>The Control channel should not be crossfaded.</i>				
		Safe (disables all Control settings)	0-9	0-4	0	0
		<i>Set Strobe channel to 0 for the following commands.</i>				
		Display Off (<i>send for 2 seconds</i>)	20-28	8-11	0	0
		Display Bright (<i>send for 2 seconds</i>)	40-48	16-19		
		Home All (<i>send for 2 seconds</i>)	60-68	24-27		
		Shutdown (<i>send for 5 seconds</i>)	120-130	47-51		
		<i>No Strobe channel requirement</i>				
		Outrig Mode	131-140	51-54		
		TBD	141-255	59-100		
8	Strobe	No strobe (open)	0-23	0-9	0	0
		Periodic strobe slow to fast	24-53	10-21		
		Random random strobe slow to fast	54-83	22-33		
		Synchronous random strobe slow to fast	84-113	34-44		
		Reserved, No strobe (open)	114-255	45-100		
9	Dim	LEDs off to full on	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
LED Control						
10	LED 1	Red value for this LED	0-255	0-100	0	0
11		Green value for this LED	0-255	0-100	0	0
12		Blue value for this LED	0-255	0-100	0	0
13	LED 2	Red value for this LED	0-255	0-100	0	0
14		Green value for this LED	0-255	0-100	0	0
15		Blue value for this LED	0-255	0-100	0	0
16	LED 3	Red value for this LED	0-255	0-100	0	0
17		Green value for this LED	0-255	0-100	0	0
18		Blue value for this LED	0-255	0-100	0	0
19	LED 4	Red value for this LED	0-255	0-100	0	0
20		Green value for this LED	0-255	0-100	0	0
21		Blue value for this LED	0-255	0-100	0	0
22	LED 5	Red value for this LED	0-255	0-100	0	0
23		Green value for this LED	0-255	0-100	0	0
24		Blue value for this LED	0-255	0-100	0	0
25	LED 6	Red value for this LED	0-255	0-100	0	0
26		Green value for this LED	0-255	0-100	0	0
27		Blue value for this LED	0-255	0-100	0	0
28	LED 7	Red value for this LED	0-255	0-100	0	0
29		Green value for this LED	0-255	0-100	0	0
30		Blue value for this LED	0-255	0-100	0	0
31	LED 8	Red value for this LED	0-255	0-100	0	0
32		Green value for this LED	0-255	0-100	0	0
33		Blue value for this LED	0-255	0-100	0	0
34	LED 9	Red value for this LED	0-255	0-100	0	0
35		Green value for this LED	0-255	0-100	0	0
36		Blue value for this LED	0-255	0-100	0	0
37	LED 10	Red value for this LED	0-255	0-100	0	0
38		Green value for this LED	0-255	0-100	0	0
39		Blue value for this LED	0-255	0-100	0	0
40	LED 11	Red value for this LED	0-255	0-100	0	0
41		Green value for this LED	0-255	0-100	0	0
42		Blue value for this LED	0-255	0-100	0	0
43	LED 12	Red value for this LED	0-255	0-100	0	0
44		Green value for this LED	0-255	0-100	0	0
45		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
46	LED 13	Red value for this LED	0-255	0-100	0	0
47		Green value for this LED	0-255	0-100	0	0
48		Blue value for this LED	0-255	0-100	0	0
49	LED 14	Red value for this LED	0-255	0-100	0	0
50		Green value for this LED	0-255	0-100	0	0
51		Blue value for this LED	0-255	0-100	0	0
52	LED 15	Red value for this LED	0-255	0-100	0	0
53		Green value for this LED	0-255	0-100	0	0
54		Blue value for this LED	0-255	0-100	0	0
55	LED 16	Red value for this LED	0-255	0-100	0	0
56		Green value for this LED	0-255	0-100	0	0
57		Blue value for this LED	0-255	0-100	0	0
58	LED 17	Red value for this LED	0-255	0-100	0	0
59		Green value for this LED	0-255	0-100	0	0
60		Blue value for this LED	0-255	0-100	0	0
61	LED 18	Red value for this LED	0-255	0-100	0	0
62		Green value for this LED	0-255	0-100	0	0
63		Blue value for this LED	0-255	0-100	0	0
64	LED 19	Red value for this LED	0-255	0-100	0	0
65		Green value for this LED	0-255	0-100	0	0
66		Blue value for this LED	0-255	0-100	0	0
67	LED 20	Red value for this LED	0-255	0-100	0	0
68		Green value for this LED	0-255	0-100	0	0
69		Blue value for this LED	0-255	0-100	0	0
70	LED 21	Red value for this LED	0-255	0-100	0	0
71		Green value for this LED	0-255	0-100	0	0
72		Blue value for this LED	0-255	0-100	0	0
73	LED 22	Red value for this LED	0-255	0-100	0	0
74		Green value for this LED	0-255	0-100	0	0
75		Blue value for this LED	0-255	0-100	0	0
76	LED 23	Red value for this LED	0-255	0-100	0	0
77		Green value for this LED	0-255	0-100	0	0
78		Blue value for this LED	0-255	0-100	0	0
79	LED 24	Red value for this LED	0-255	0-100	0	0
80		Green value for this LED	0-255	0-100	0	0
81		Blue value for this LED	0-255	0-100	0	0
82	LED 25	Red value for this LED	0-255	0-100	0	0
83		Green value for this LED	0-255	0-100	0	0
84		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
85	LED 26	Red value for this LED	0-255	0-100	0	0
86		Green value for this LED	0-255	0-100	0	0
87		Blue value for this LED	0-255	0-100	0	0
88	LED 27	Red value for this LED	0-255	0-100	0	0
89		Green value for this LED	0-255	0-100	0	0
90		Blue value for this LED	0-255	0-100	0	0
91	LED 28	Red value for this LED	0-255	0-100	0	0
92		Green value for this LED	0-255	0-100	0	0
93		Blue value for this LED	0-255	0-100	0	0
94	LED 29	Red value for this LED	0-255	0-100	0	0
95		Green value for this LED	0-255	0-100	0	0
96		Blue value for this LED	0-255	0-100	0	0
97	LED 30	Red value for this LED	0-255	0-100	0	0
98		Green value for this LED	0-255	0-100	0	0
99		Blue value for this LED	0-255	0-100	0	0
100	LED 31	Red value for this LED	0-255	0-100	0	0
101		Green value for this LED	0-255	0-100	0	0
102		Blue value for this LED	0-255	0-100	0	0
103	LED 32	Red value for this LED	0-255	0-100	0	0
104		Green value for this LED	0-255	0-100	0	0
105		Blue value for this LED	0-255	0-100	0	0
106	LED 33	Red value for this LED	0-255	0-100	0	0
107		Green value for this LED	0-255	0-100	0	0
108		Blue value for this LED	0-255	0-100	0	0
109	LED 34	Red value for this LED	0-255	0-100	0	0
110		Green value for this LED	0-255	0-100	0	0
111		Blue value for this LED	0-255	0-100	0	0
112	LED 35	Red value for this LED	0-255	0-100	0	0
113		Green value for this LED	0-255	0-100	0	0
114		Blue value for this LED	0-255	0-100	0	0
115	LED 36	Red value for this LED	0-255	0-100	0	0
116		Green value for this LED	0-255	0-100	0	0
117		Blue value for this LED	0-255	0-100	0	0
118	LED 37	Red value for this LED	0-255	0-100	0	0
119		Green value for this LED	0-255	0-100	0	0
120		Blue value for this LED	0-255	0-100	0	0
121	LED 38	Red value for this LED	0-255	0-100	0	0
122		Green value for this LED	0-255	0-100	0	0
123		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
124	LED 39	Red value for this LED	0-255	0-100	0	0
125		Green value for this LED	0-255	0-100	0	0
126		Blue value for this LED	0-255	0-100	0	0
127	LED 40	Red value for this LED	0-255	0-100	0	0
128		Green value for this LED	0-255	0-100	0	0
129		Blue value for this LED	0-255	0-100	0	0
130	LED 41	Red value for this LED	0-255	0-100	0	0
131		Green value for this LED	0-255	0-100	0	0
132		Blue value for this LED	0-255	0-100	0	0
133	LED 42	Red value for this LED	0-255	0-100	0	0
134		Green value for this LED	0-255	0-100	0	0
135		Blue value for this LED	0-255	0-100	0	0
136	LED 43	Red value for this LED	0-255	0-100	0	0
137		Green value for this LED	0-255	0-100	0	0
138		Blue value for this LED	0-255	0-100	0	0
139	LED 44	Red value for this LED	0-255	0-100	0	0
140		Green value for this LED	0-255	0-100	0	0
141		Blue value for this LED	0-255	0-100	0	0
142	LED 45	Red value for this LED	0-255	0-100	0	0
143		Green value for this LED	0-255	0-100	0	0
144		Blue value for this LED	0-255	0-100	0	0
145	LED 46	Red value for this LED	0-255	0-100	0	0
146		Green value for this LED	0-255	0-100	0	0
147		Blue value for this LED	0-255	0-100	0	0
148	LED 47	Red value for this LED	0-255	0-100	0	0
149		Green value for this LED	0-255	0-100	0	0
150		Blue value for this LED	0-255	0-100	0	0
151	LED 48	Red value for this LED	0-255	0-100	0	0
152		Green value for this LED	0-255	0-100	0	0
153		Blue value for this LED	0-255	0-100	0	0
154	LED 49	Red value for this LED	0-255	0-100	0	0
155		Green value for this LED	0-255	0-100	0	0
156		Blue value for this LED	0-255	0-100	0	0
157	LED 50	Red value for this LED	0-255	0-100	0	0
158		Green value for this LED	0-255	0-100	0	0
159		Blue value for this LED	0-255	0-100	0	0
160	LED 51	Red value for this LED	0-255	0-100	0	0
161		Green value for this LED	0-255	0-100	0	0
162		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
163	LED 52	Red value for this LED	0-255	0-100	0	0
164		Green value for this LED	0-255	0-100	0	0
165		Blue value for this LED	0-255	0-100	0	0
166	LED 53	Red value for this LED	0-255	0-100	0	0
167		Green value for this LED	0-255	0-100	0	0
168		Blue value for this LED	0-255	0-100	0	0
169	LED 54	Red value for this LED	0-255	0-100	0	0
170		Green value for this LED	0-255	0-100	0	0
171		Blue value for this LED	0-255	0-100	0	0
172	LED 55	Red value for this LED	0-255	0-100	0	0
173		Green value for this LED	0-255	0-100	0	0
174		Blue value for this LED	0-255	0-100	0	0
175	LED 56	Red value for this LED	0-255	0-100	0	0
176		Green value for this LED	0-255	0-100	0	0
177		Blue value for this LED	0-255	0-100	0	0
178	LED 57	Red value for this LED	0-255	0-100	0	0
179		Green value for this LED	0-255	0-100	0	0
180		Blue value for this LED	0-255	0-100	0	0
181	LED 58	Red value for this LED	0-255	0-100	0	0
182		Green value for this LED	0-255	0-100	0	0
183		Blue value for this LED	0-255	0-100	0	0
184	LED 59	Red value for this LED	0-255	0-100	0	0
185		Green value for this LED	0-255	0-100	0	0
186		Blue value for this LED	0-255	0-100	0	0
187	LED 60	Red value for this LED	0-255	0-100	0	0
188		Green value for this LED	0-255	0-100	0	0
189		Blue value for this LED	0-255	0-100	0	0
190	LED 61	Red value for this LED	0-255	0-100	0	0
191		Green value for this LED	0-255	0-100	0	0
192		Blue value for this LED	0-255	0-100	0	0
<i>The following Channels are availalbe in SHOWPIX™ fixture only</i>						
193	LED 62	Red value for this LED	0-255	0-100	0	0
194		Green value for this LED	0-255	0-100	0	0
195		Blue value for this LED	0-255	0-100	0	0
196	LED 63	Red value for this LED	0-255	0-100	0	0
197		Green value for this LED	0-255	0-100	0	0
198		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
199	LED 64	Red value for this LED	0-255	0-100	0	0
200		Green value for this LED	0-255	0-100	0	0
201		Blue value for this LED	0-255	0-100	0	0
202	LED 65	Red value for this LED	0-255	0-100	0	0
203		Green value for this LED	0-255	0-100	0	0
204		Blue value for this LED	0-255	0-100	0	0
205	LED 66	Red value for this LED	0-255	0-100	0	0
206		Green value for this LED	0-255	0-100	0	0
207		Blue value for this LED	0-255	0-100	0	0
208	LED 67	Red value for this LED	0-255	0-100	0	0
209		Green value for this LED	0-255	0-100	0	0
210		Blue value for this LED	0-255	0-100	0	0
211	LED 68	Red value for this LED	0-255	0-100	0	0
212		Green value for this LED	0-255	0-100	0	0
213		Blue value for this LED	0-255	0-100	0	0
214	LED 69	Red value for this LED	0-255	0-100	0	0
215		Green value for this LED	0-255	0-100	0	0
216		Blue value for this LED	0-255	0-100	0	0
217	LED 70	Red value for this LED	0-255	0-100	0	0
218		Green value for this LED	0-255	0-100	0	0
219		Blue value for this LED	0-255	0-100	0	0
220	LED 71	Red value for this LED	0-255	0-100	0	0
221		Green value for this LED	0-255	0-100	0	0
222		Blue value for this LED	0-255	0-100	0	0
223	LED 72	Red value for this LED	0-255	0-100	0	0
224		Green value for this LED	0-255	0-100	0	0
225		Blue value for this LED	0-255	0-100	0	0
226	LED 73	Red value for this LED	0-255	0-100	0	0
227		Green value for this LED	0-255	0-100	0	0
228		Blue value for this LED	0-255	0-100	0	0
229	LED 74	Red value for this LED	0-255	0-100	0	0
230		Green value for this LED	0-255	0-100	0	0
231		Blue value for this LED	0-255	0-100	0	0
232	LED 75	Red value for this LED	0-255	0-100	0	0
233		Green value for this LED	0-255	0-100	0	0
234		Blue value for this LED	0-255	0-100	0	0
235	LED 76	Red value for this LED	0-255	0-100	0	0
236		Green value for this LED	0-255	0-100	0	0
237		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
238	LED 77	Red value for this LED	0-255	0-100	0	0
239		Green value for this LED	0-255	0-100	0	0
240		Blue value for this LED	0-255	0-100	0	0
241	LED 78	Red value for this LED	0-255	0-100	0	0
242		Green value for this LED	0-255	0-100	0	0
243		Blue value for this LED	0-255	0-100	0	0
244	LED 79	Red value for this LED	0-255	0-100	0	0
245		Green value for this LED	0-255	0-100	0	0
246		Blue value for this LED	0-255	0-100	0	0
247	LED 80	Red value for this LED	0-255	0-100	0	0
248		Green value for this LED	0-255	0-100	0	0
249		Blue value for this LED	0-255	0-100	0	0
250	LED 81	Red value for this LED	0-255	0-100	0	0
251		Green value for this LED	0-255	0-100	0	0
252		Blue value for this LED	0-255	0-100	0	0
253	LED 82	Red value for this LED	0-255	0-100	0	0
254		Green value for this LED	0-255	0-100	0	0
255		Blue value for this LED	0-255	0-100	0	0
256	LED 83	Red value for this LED	0-255	0-100	0	0
257		Green value for this LED	0-255	0-100	0	0
258		Blue value for this LED	0-255	0-100	0	0
259	LED 84	Red value for this LED	0-255	0-100	0	0
260		Green value for this LED	0-255	0-100	0	0
261		Blue value for this LED	0-255	0-100	0	0
262	LED 85	Red value for this LED	0-255	0-100	0	0
263		Green value for this LED	0-255	0-100	0	0
264		Blue value for this LED	0-255	0-100	0	0
265	LED 86	Red value for this LED	0-255	0-100	0	0
266		Green value for this LED	0-255	0-100	0	0
267		Blue value for this LED	0-255	0-100	0	0
268	LED 87	Red value for this LED	0-255	0-100	0	0
269		Green value for this LED	0-255	0-100	0	0
270		Blue value for this LED	0-255	0-100	0	0
271	LED 88	Red value for this LED	0-255	0-100	0	0
272		Green value for this LED	0-255	0-100	0	0
273		Blue value for this LED	0-255	0-100	0	0
274	LED 89	Red value for this LED	0-255	0-100	0	0
275		Green value for this LED	0-255	0-100	0	0
276		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
277	LED 90	Red value for this LED	0-255	0-100	0	0
278		Green value for this LED	0-255	0-100	0	0
279		Blue value for this LED	0-255	0-100	0	0
280	LED 91	Red value for this LED	0-255	0-100	0	0
281		Green value for this LED	0-255	0-100	0	0
282		Blue value for this LED	0-255	0-100	0	0
283	LED 92	Red value for this LED	0-255	0-100	0	0
284		Green value for this LED	0-255	0-100	0	0
285		Blue value for this LED	0-255	0-100	0	0
286	LED 93	Red value for this LED	0-255	0-100	0	0
287		Green value for this LED	0-255	0-100	0	0
288		Blue value for this LED	0-255	0-100	0	0
289	LED 94	Red value for this LED	0-255	0-100	0	0
290		Green value for this LED	0-255	0-100	0	0
291		Blue value for this LED	0-255	0-100	0	0
292	LED 95	Red value for this LED	0-255	0-100	0	0
293		Green value for this LED	0-255	0-100	0	0
294		Blue value for this LED	0-255	0-100	0	0
295	LED 96	Red value for this LED	0-255	0-100	0	0
296		Green value for this LED	0-255	0-100	0	0
297		Blue value for this LED	0-255	0-100	0	0
298	LED 97	Red value for this LED	0-255	0-100	0	0
299		Green value for this LED	0-255	0-100	0	0
300		Blue value for this LED	0-255	0-100	0	0
301	LED 98	Red value for this LED	0-255	0-100	0	0
302		Green value for this LED	0-255	0-100	0	0
303		Blue value for this LED	0-255	0-100	0	0
304	LED 99	Red value for this LED	0-255	0-100	0	0
305		Green value for this LED	0-255	0-100	0	0
306		Blue value for this LED	0-255	0-100	0	0
307	LED 100	Red value for this LED	0-255	0-100	0	0
308		Green value for this LED	0-255	0-100	0	0
309		Blue value for this LED	0-255	0-100	0	0
310	LED 101	Red value for this LED	0-255	0-100	0	0
311		Green value for this LED	0-255	0-100	0	0
312		Blue value for this LED	0-255	0-100	0	0
313	LED 102	Red value for this LED	0-255	0-100	0	0
314		Green value for this LED	0-255	0-100	0	0
315		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

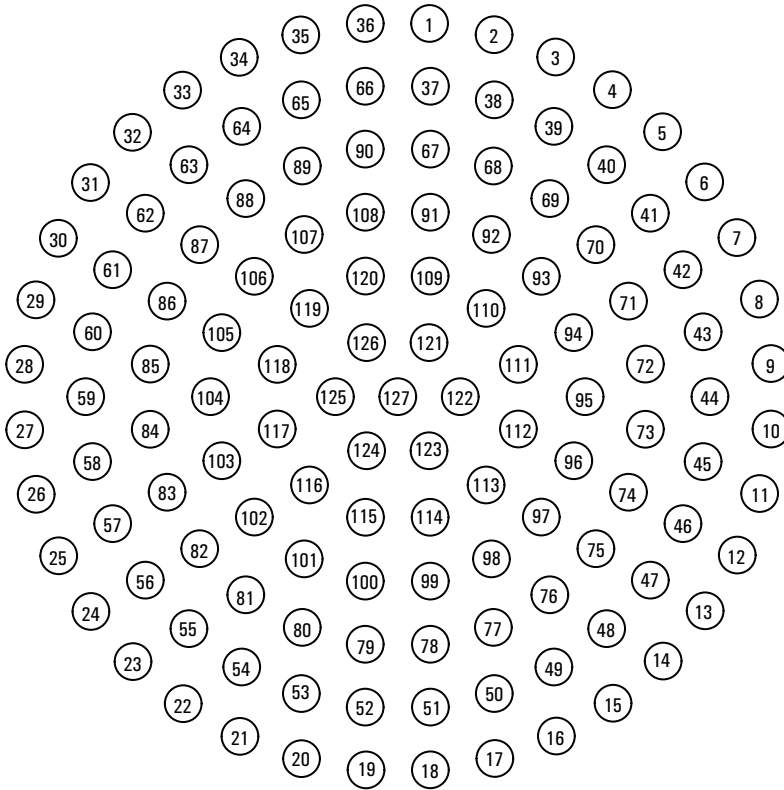
DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
316	LED 103	Red value for this LED	0-255	0-100	0	0
317		Green value for this LED	0-255	0-100	0	0
318		Blue value for this LED	0-255	0-100	0	0
319	LED 104	Red value for this LED	0-255	0-100	0	0
320		Green value for this LED	0-255	0-100	0	0
321		Blue value for this LED	0-255	0-100	0	0
322	LED 105	Red value for this LED	0-255	0-100	0	0
323		Green value for this LED	0-255	0-100	0	0
324		Blue value for this LED	0-255	0-100	0	0
325	LED 106	Red value for this LED	0-255	0-100	0	0
326		Green value for this LED	0-255	0-100	0	0
327		Blue value for this LED	0-255	0-100	0	0
328	LED 107	Red value for this LED	0-255	0-100	0	0
329		Green value for this LED	0-255	0-100	0	0
330		Blue value for this LED	0-255	0-100	0	0
331	LED 108	Red value for this LED	0-255	0-100	0	0
332		Green value for this LED	0-255	0-100	0	0
333		Blue value for this LED	0-255	0-100	0	0
334	LED 109	Red value for this LED	0-255	0-100	0	0
335		Green value for this LED	0-255	0-100	0	0
336		Blue value for this LED	0-255	0-100	0	0
337	LED 110	Red value for this LED	0-255	0-100	0	0
338		Green value for this LED	0-255	0-100	0	0
339		Blue value for this LED	0-255	0-100	0	0
340	LED 111	Red value for this LED	0-255	0-100	0	0
341		Green value for this LED	0-255	0-100	0	0
342		Blue value for this LED	0-255	0-100	0	0
343	LED 112	Red value for this LED	0-255	0-100	0	0
344		Green value for this LED	0-255	0-100	0	0
345		Blue value for this LED	0-255	0-100	0	0
346	LED 113	Red value for this LED	0-255	0-100	0	0
347		Green value for this LED	0-255	0-100	0	0
348		Blue value for this LED	0-255	0-100	0	0
349	LED 114	Red value for this LED	0-255	0-100	0	0
350		Green value for this LED	0-255	0-100	0	0
351		Blue value for this LED	0-255	0-100	0	0
352	LED 115	Red value for this LED	0-255	0-100	0	0
353		Green value for this LED	0-255	0-100	0	0
354		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

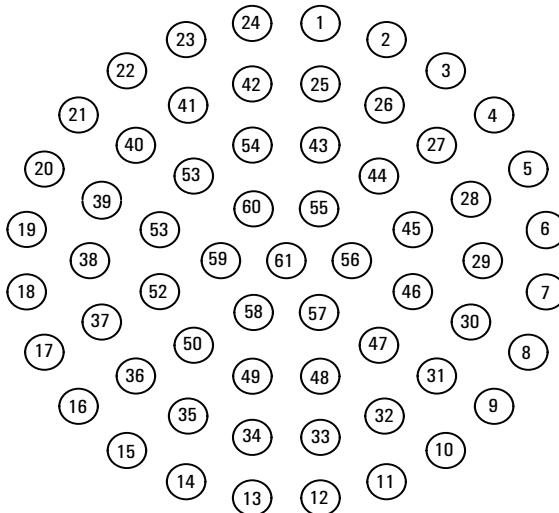
DMX Chan	Parameter	Description	DMX Value		Default	
			(dec.)	(%)	(dec.)	(%)
355	LED 116	Red value for this LED	0-255	0-100	0	0
356		Green value for this LED	0-255	0-100	0	0
357		Blue value for this LED	0-255	0-100	0	0
358	LED 117	Red value for this LED	0-255	0-100	0	0
359		Green value for this LED	0-255	0-100	0	0
360		Blue value for this LED	0-255	0-100	0	0
361	LED 118	Red value for this LED	0-255	0-100	0	0
362		Green value for this LED	0-255	0-100	0	0
363		Blue value for this LED	0-255	0-100	0	0
364	LED 119	Red value for this LED	0-255	0-100	0	0
365		Green value for this LED	0-255	0-100	0	0
366		Blue value for this LED	0-255	0-100	0	0
367	LED 120	Red value for this LED	0-255	0-100	0	0
368		Green value for this LED	0-255	0-100	0	0
369		Blue value for this LED	0-255	0-100	0	0
370	LED 121	Red value for this LED	0-255	0-100	0	0
371		Green value for this LED	0-255	0-100	0	0
372		Blue value for this LED	0-255	0-100	0	0
373	LED 122	Red value for this LED	0-255	0-100	0	0
374		Green value for this LED	0-255	0-100	0	0
375		Blue value for this LED	0-255	0-100	0	0
376	LED 123	Red value for this LED	0-255	0-100	0	0
377		Green value for this LED	0-255	0-100	0	0
378		Blue value for this LED	0-255	0-100	0	0
379	LED 124	Red value for this LED	0-255	0-100	0	0
380		Green value for this LED	0-255	0-100	0	0
381		Blue value for this LED	0-255	0-100	0	0
382	LED 125	Red value for this LED	0-255	0-100	0	0
383		Green value for this LED	0-255	0-100	0	0
384		Blue value for this LED	0-255	0-100	0	0
385	LED 126	Red value for this LED	0-255	0-100	0	0
386		Green value for this LED	0-255	0-100	0	0
387		Blue value for this LED	0-255	0-100	0	0
388	LED 127	Red value for this LED	0-255	0-100	0	0
389		Green value for this LED	0-255	0-100	0	0
390		Blue value for this LED	0-255	0-100	0	0

Pixel Array Numbering

SHOWPIX™ Fixture



StudioPix™ Fixture



Extended Protocol

Extended Protocol provides all the movement, global and image control of the Standard protocol plus individual RGB control of the 127 LEDs according to the array numbering shown on page 26.

Motion Control						
1	Pan	Pan, coarse adjustment	0-255	0-100	128	50
2		Pan, fine adjustment	0-255	0-100	0	0
3	Tilt	Tilt, coarse adjustment	0-255	0-100	128	50
4		Tilt, fine adjustment	0-255	0-100	0	0
5	MSpeed	Disable	0-3	0-1	0	0
		Longest to Shortest	4-255	2-100		
6	Macro	Macro Off	0-5	0-2	0	0
		Pan sweep, small to large angle	6-62	2-24		
		Macro Off	63-65	25-25		
		Tilt sweep, small to large angle	66-122	26-48		
		Macro Off	123-125	48-49		
		Clockwise circle, small to large	126-160	49-63		
		Macro Off	161-163	63-64		
		Counterclockwise circle, small to large	164-198	64-78		
	Reserved	199-255	78-100			
7	Control	The Control channel should not be crossfaded.				
		Safe (disables all Control settings)	0-9	0-4	0	0
		Set Strobe channel to 0 for the following commands.				
		Display Off (send for 2 seconds)	20-28	8-11	0	0
		Display Bright (send for 2 seconds)	40-48	16-19		
		Home All (send for 2 seconds)	60-68	24-27		
		Shutdown (send for 5 seconds)	120-130	47-51		
		No Strobe channel requirement				
		Outrig Mode	131-140	51-54	0	0
		Reserved	141-255	55-100		
Composit Mixer (Global)						
8	Strobe	No strobe (open)	0-23	0-9	0	0
		Periodic strobe slow to fast	24-53	10-21		
		Random random strobe slow to fast	54-83	22-33		
		Synchronous random strobe slow to fast	84-113	34-44		
		Reserved, No strobe (open)	114-255	45-100		
9	Dim	LEDs off to full on	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

10	Color Function	RGB. Standard RGB add to all pixels	0	0	NA	1	1
		CMY Simulates CMY by subtracting RGB	1				
		Black and White	2				
		Black and White Inverted	3				
		RGB Add non-black pixels	4				
		RGB Swap to GBR	5				
		RGB Swap to BRG	6				
		RGB Swap to BGR	7				
		RGB Swap to RBG	8				
		RGB Swap to GRB	9				
		RGB Invert: red to inverted red, green to inverted green, blue to inverted blue	10				
		RGB Invert and Swap to GBR: red to inverted green, green to inverted blue, blue to inverted red.	11				
		RGB Invert and Swap to BRG.	12				
		Solarize 1 If color value < DMX value, invert color	13				
		Solarize 2 If color value > DMX value, invert color	14				
		Solarize 3 If color value < DMX value, set color to 0	15				
		Solarize 4 If color value > DMX value, set color to 0	16				
		Color Cycle	17				
		Random Color	18				
		Scale	19				
		Compress to maximum	20				
		Add color to black	21				
		Replace background	22				
		Rainbow Color Cycle	23				
Reserved, default to RGB	24-255						
11	Red	Continuous Mode (off 0/0 full 255/255)					
		Red Coarse	0-255	0-100	0	0	
		Red Fine	0-255	0-100			
12		Cycle & Random Modes. Cycle Speed is controlled by Red Coarse Channel					
		Slow to Fast rate	0-255	0-100	0	0	
13	Green	Continuous Mode (off 0/0 full 255/255)					
		Green Coarse	0-255	0-100	0	0	
		Green Fine	0-255	0-100			
15	Blue	Continuous Mode (off 0/0 full 255/255)					
		Blue Coarse	0-255	0-100	0	0	
		Blue Fine	0-255	0-100			
17	Scale	Scale In (magnify)	0-127	0-49	128	50	
		Scale Default (1 to 1)	128	50			
		Scale Out (minify)	127-255	51-100			

SHOWPIX™/StudioPix™ DMX Protocol

18	Rotate	Indexed	0-128	0-50	0	0	
		Forward Rotate	129-191	51-74			
		Stop	192	75			
		Reverse Rotate	193-255	76-100			
19	Dampening	Disable	0	0	0	0	
		Shortest to Longest	1-255	1-100			
20	Transition Mode	Normal - Even Fade	0	0	NA	0	0
		Circle In	1				
		Circle Out	2				
		Spiral In	3				
		Spiral Out	4				
		Plus In	5				
		Plus Out	6				
		Diamond In	7				
		Diamond Out	8				
		Box In	9				
		Box Out	10				
		Split Horizontal in	11				
		Split Horizontal Out	12				
		Split Vertical In	13				
		Split Vertical Out	14				
		Blinds Horizontal	15				
		Blinds Vertical	16				
		Checkerboard Horizontal	17				
		Checkerboard Vertical	18				
		Comb Horizontal	19				
		Comb Vertical	20				
		Random Bars Horizontal	21				
		Random Bars Vertical	22				
		Strips Left Up	23				
		Strips Right Up	24				
		Strips Left Down	25				
		Strips Right Down	26				
		Wedge From Left	27				
		Wedge From Right	28				
		Wedge From Top	29				
		Wedge From Bottom	30				
		Wheel 1 spoke, clockwise rotation	31				
		Wheel 2 spokes, clockwise rotation	32				
		Wheel 3 spokes, clockwise rotation	33				
Wheel 6 spokes, clockwise rotation	34						

SHOWPIX™/StudioPix™ DMX Protocol

20	Transition Mode	Wheel 1 spoke, counterclockwise rotation	35	NA	0	0
		Wheel 2 spokes, counterclockwise rotation	36			
		Wheel 3 spokes, counterclockwise rotation	37			
		Wheel 6 spokes, counterclockwise rotation	38			
		Spider Spiral	39			
		Wipe Left	40			
		Wipe Right	41			
		Wipe Up	42			
		Wipe Down	43			
		Cover from left	44			
		Cover from right	45			
		Cover from top	46			
		Cover from bottom	47			
		Cover from top left	48			
		Cover from top right	49			
		Cover from bottom left	50			
		Cover from bottom right	51			
		Uncover to left	52			
		Uncover to right	53			
		Uncover to top	54			
		Uncover to bottom	55			
		Uncover to top left	56			
		Uncover to top right	57			
		Uncover to bottom left	58			
		Uncover to bottom right	59			
		Push from left	60			
		Push from right	61			
		Push from top	62			
		Push from bottom	63			
		Push from top left	64			
		Push from top right	65			
		Push from bottom left	66			
Push from bottom right	67					
Random Dissolve	68					
Fade Through Black	69					
Random Transition	70					
Snap/Transparency Enable	71					
Gothic Discus	72					
Gothic Discus2	73					
Reserved, default to Normal	74-255					

SHOWPIX™/StudioPix™ DMX Protocol

21	Transition	Image A Full / B out	0	0-49	0	0
		Composite A and B	127	50		
		Image B Full / A out	255	51-100		
22	Effect Function	None	0	0	0	0
		Background Color	1	NA		
		Pan and Tilt sync	2			
		Shake	3			
		Bar Scan	4			
		Target Scan	5			
		Curtain Scan	6			
		Mirror	7			
		Brightness and contrast	8			
		Filters	9			
		Flip	10			
		Reserved, default to None	11-255			
23	Effect Modifier 1	Adjusts the option selected in Effect Function Channel 22.	0-255		0-100	0
24	Effect Modifier 2	The type of adjustment and the default value depends on the Effect chosen.	0-255	0-100	0	0
25	Folder	Image A				
		Reserved, no selection	0	0		
		Stock PixelArt				
		Lenses	1	NA	1	1
		Backgrounds	2			
		Chasing	3			
		Marquee	4			
		Atmospherics	5			
		Elegant	6			
		Shimmer	7			
		Fiery	8			
		Spinning	9			
		Icons	10			
		Realistic	11			
		Flashing	12			
		Reserved	13-40			
		Custom User Folders				
		User Content	41-250	16-98	0	0
		Pixelage Content	251	99		
		Pixel Mapping	255	100		
26	File	No selection	0	0	0	0
		Each file is designated with a unique DMX value from 1-255.	1-255	1-100		

SHOWPIX™/StudioPix™ DMX Protocol

27	Frame	Frame Selection defines a starting frame number for the selected file	0-255	0-100	0	0		
28	Play Mode	Loop Forward	0	NA	0	0		
		Loop Reverse	1					
		Once Forward	2					
		Once Reverse	3					
		Random	4					
		Bounce	5					
		Static Frame Frame selected in Frame Parameter	6					
		Loop Forward w/ intensity >0	7					
		Loop Reverse w/ intensity >0	8					
		Once Forward w/ intensity >0	9					
		Once Reverse w/ intensity >0	10					
		Random w/ intensity >0	11					
		Bounce w/ intensity >0	12					
		Reserved, default to Loop Forward	13-255					
29	Play Speed	All Play Modes except Static Frame						
		Normal Speed	0	0	0	0		
		Stop	1	1				
		Slowest speed increasing to normal	2	2				
		Normal Speed	128	3-49				
		Fast speeds increasing from normal	129	50				
		Play Modes with value of 4 or 11						
		Random seed	0-255	0-100	0	0		
30	Scale	Scale In (magnify)	0-127	0-49	128	50		
		Scale Default	128	50				
		Scale Out (minify)	129-255	51-100				
31	Rotate	Indexed	0-128	0-50	0	0		
		Forward Rotate	129-191	51-75				
		Stop	192	75				
		Reverse Rotate	193-255	76-100				
32	X-Position	Maximum Left x-axis	0-127	0-49	128	50		
		Center	128	50				
		Maximum Right x-axis	129-255	51-100				
33	Y-Position	Maximum Down Y-axis	0-127	0-49	128	50		
		Center	128	50				
		Maximum Up x-axis	129-255	51-100				

SHOWPIX™/StudioPix™ DMX Protocol

34	Color Function	RGB	0	0	NA	1	1
		CMY	1				
		BW	2				
		BW Invert	3				
		RGB Add non-black pixels	4				
		RGB Swap to GBR	5				
		RGB Swap to BRG	6				
		RGB Swap to BGR	7				
		RGB Swap to RBG	8				
		RGB Swap to GRB	9				
		RGB Invert	10				
		RGB Invert & swap to GBR	11				
		RGB Invert & swap to BRG	12				
		Solarize 1	13				
		Solarize 2	14				
		Solarize 3	15				
		Solarize 4	16				
		Color Cycle	17				
		Random Color	18				
		Scale	19				
		Compress to maximum	20				
		Add color to black	21				
		Replace background	22				
		Rainbow Color Cycle	23				
Reserved, default to RGB	24-255						
35	Red	Continuous Mode (off 0/0 full 255/255)					
		Red Coarse	0-255	0-100	0	0	
36	Red	Red Fine	0-255	0-100	0	0	
		Cycle & Random Modes. Cycle Speed is controlled by Red Coarse Channel					
		Slow to Fast rate	0-255	0-100	0	0	
37	Green	Continuous Mode (off 0/0 full 255/255)					
38		Green Coarse	0-255	0-100	0	0	
		Green Fine	0-255	0-100			
39	Blue	Continuous Mode (off 0/0 full 255/255)					
40		Blue Coarse	0-255	0-100	0	0	
		Blue Fine	0-255	0-100			
41	Transparent	Image Transparency	0	0	0	0	
		Transparent Black	1	NA			
		Transparent White	2				
		Transparent Color from mapped image colors	3-254				
		No Transparency	255				100

SHOWPIX™/StudioPix™ DMX Protocol

42	Background	Off	0	0	0	0
		Background Color 1 -> 255	1-255	1-100		
43	Transition Mode	Normal	0	NA	0	0
		Fade	1			
		SnapFade	2			
		FadeSnap	3			
		Strobe	4			
		Trails	5			
		Reserved, default to Normal	6			
44	Transition Speed	Normal to slowest	0-127	0-49	128	50
		Normal Speed	128	50		
		Normal to fastest	129-255	51-100		
45	Effect Function	None	0	0	NA	0
		Strobe	1			
		Pan and Tilt sync	2			
		Shake	3			
		Bar Scan	4			
		Target Scan	5			
		Curtain Scan	6			
		Mirror	7			
		Brightness and contrast	8			
		Filters	9			
		Flip	10			
		Reserved, default to None	11-255			
46	Effect Modifier 1	Adjusts the option selected in Effect Function Channel 45.	0-255	0-100	0	0
47	Effect Modifier 2	The type of adjustment and the default value depends on the Effect chosen.	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

Image B							
48	Folder	Reserved, no selection	0	0			
		Stock PixelArt					
		Lenses	1	NA	1	1	
		Backgrounds	2				
		Chasing	3				
		Marquee	4				
		Atmospherics	5				
		Elegant	6				
		Shimmer	7				
		Fiery	8				
		Spinning	9				
		Icons	10				
		Realistic	11				
		Flashing	12				
		Reserved	13-40				
		Custom User Folders					
		User Content	41-250	16-98			
		Pixellation Content	251	99	0	0	
		Pixel Mapping	255	100			
		49	File	No selection	0	0	
Each file is designated with a unique DMX value from 1-255.	1-255			1-100	0	0	
50	Frame	Frame Selection defines a starting frame number for the selected file	0-255	0-100	0	0	
51	Play Mode	Loop Forward	0	NA	0	0	
		Loop Reverse	1				
		Once Forward	2				
		Once Reverse	3				
		Random	4				
		Bounce	5				
		Static Frame Frame selected in Frame Parameter	6				
		Loop Forward w/ intensity >0	7				
		Loop Reverse w/ intensity >0	8				
		Once Forward w/ intensity >0	9				
		Once Reverse w/ intensity >0	10				
		Random w/ intensity >0	11				
		Bounce w/ intensity >0	12				
		Reserved, default to Loop Forward	13-255				

SHOWPIX™/StudioPix™ DMX Protocol

52	Play Speed	All Play Modes except Static Frame				128	50
		Normal Speed	0	0			
		Stop	1	1			
		Slowest speed increasing to normal	2-127	2-49			
		Normal Speed	128	50			
		Fast speeds increasing from normal	129-255	51-100			
		Random Frame Play Modes					
	Random seed	0					
53	Scale	Scale In (magnify)	0-127	0-49	128	50	
		Scale Default	128	50			
		Scale Out (minify)	129-255	51-100			
54	Rotate	Indexed	0-128	0-50	0	0	
		Forward Rotate	129-191	51-74			
		Stop	192	75			
		Reverse Rotate	193-255	76-100			
55	X-Position	Maximum Left X-axis	0-127	0-49	128	50	
		Center	128	50			
		Maximum Right X-axis	129-255	51-100			
56	Y-Position	Maximum Down Y-axis	0-127	0-49	128	50	
		Center	128	50			
		Maximum Up Y-axis	129-255	51-100			
57	Color Function	RGB	0		NA	1	
		CMY	1				
		BW	2				
		BW Invert	3				
		RGB Add non-black pixels	4				
		RGB Swap to GBR	5				
		RGB Swap to BRG	6				
		RGB Swap to BGR	7				
		RGB Swap to RBG	8				
		RGB Swap to GRB	9				
		RGB Invert	10				
		RGB Invert & swap to GBR	11				
		RGB Invert & swap to BRG	12				
		Solarize 1	13				
		Solarize 2	14				
		Solarize 3	15				
		Solarize 4	16				
		Color Cycle	17				
		Random Color	18				
Scale	19						

SHOWPIX™/StudioPix™ DMX Protocol

57	Color Function	Compress to maximum	20	NA	0	0
		Add color to black	21			
		Replace background	22			
		Rainbow Color Cycle	23			
		Reserved, default to RGB.	24-255			
58	Red	Continuous Mode (off 0/0 full 255/255)				
		Red Coarse	0-255	0-100	0	0
59		Red Fine	0-255	0-100		
60	Green	Cycle & Random Modes. Cycle Speed is controlled by Red Coarse Channel				
		Slow to Fast rate	0-255	0-100	0	0
61	Green	Continuous Mode (off 0/0 full 255/255)				
		Green Coarse	0-255	0-100	0	0
		Green Fine	0-255	0-100		
63	Blue	Continuous Mode (off 0/0 full 255/255)				
		Blue Coarse	0-255	0-100	0	0
		Blue Fine	0-255	0-100		
64	Transparent	Image Transparency	0	0	0	0
		Transparent Black	1	NA		
		Transparent White	2			
		Transparent Color from mapped image colors	3-254			
		No Transparency	255	100		
65	Background	Off	0	0	0	0
		Background Color 1 -> 255	1-255	1-100		
66	Transition Mode	Normal	0	NA	0	0
		Fade	1			
		SnapFade	2			
		FadeSnap	3			
		Strobe	4			
		Trails	5			
		Reserved, default to Normal	6			
67	Transition Speed	Normal to slowest	0-127	0-49	128	50
		Normal Speed	128	50		
		Normal to fastest	129-255	51-100		

SHOWPIX™/StudioPix™ DMX Protocol

68	Effect Function	None	0	0	NA	0	0
		Background Color	1				
		Pan and Tilt sync	2				
		Shake	3				
		Bar Scan	4				
		Target Scan	5				
		Curtain Scan	6				
		Mirror	7				
		Brightness and contrast	8				
		Filters	9				
		Flip	10				
		Reserved, default to None	11-255				
69	Effect Modifier 1	Adjusts the option selected in Effect Function Channel 68.	0-255	0-100	0	0	
70	Effect Modifier 2	The type of adjustment and the default value depends on the specific option.	0-255	0-100	0	0	
Pixel Mapping (Image A Folder channel 25 or Image B Folder channel 47 must =255)							
71	LED 1	Red value for this LED	0-255	0-100	0	0	
72		Green value for this LED	0-255	0-100	0	0	
73		Blue value for this LED	0-255	0-100	0	0	
74	LED 2	Red value for this LED	0-255	0-100	0	0	
75		Green value for this LED	0-255	0-100	0	0	
76		Blue value for this LED	0-255	0-100	0	0	
77	LED 3	Red value for this LED	0-255	0-100	0	0	
78		Green value for this LED	0-255	0-100	0	0	
79		Blue value for this LED	0-255	0-100	0	0	
80	LED 4	Red value for this LED	0-255	0-100	0	0	
81		Green value for this LED	0-255	0-100	0	0	
82		Blue value for this LED	0-255	0-100	0	0	
83	LED 5	Red value for this LED	0-255	0-100	0	0	
84		Green value for this LED	0-255	0-100	0	0	
85		Blue value for this LED	0-255	0-100	0	0	
86	LED 6	Red value for this LED	0-255	0-100	0	0	
87		Green value for this LED	0-255	0-100	0	0	
88		Blue value for this LED	0-255	0-100	0	0	
89	LED 7	Red value for this LED	0-255	0-100	0	0	
90		Green value for this LED	0-255	0-100	0	0	
91		Blue value for this LED	0-255	0-100	0	0	

SHOWPIX™/StudioPix™ DMX Protocol

92	LED 8	Red value for this LED	0-255	0-100	0	0
93		Green value for this LED	0-255	0-100	0	0
94		Blue value for this LED	0-255	0-100	0	0
95	LED 9	Red value for this LED	0-255	0-100	0	0
96		Green value for this LED	0-255	0-100	0	0
97		Blue value for this LED	0-255	0-100	0	0
98	LED 10	Red value for this LED	0-255	0-100	0	0
99		Green value for this LED	0-255	0-100	0	0
100		Blue value for this LED	0-255	0-100	0	0
101	LED 11	Red value for this LED	0-255	0-100	0	0
102		Green value for this LED	0-255	0-100	0	0
103		Blue value for this LED	0-255	0-100	0	0
104	LED 12	Red value for this LED	0-255	0-100	0	0
105		Green value for this LED	0-255	0-100	0	0
106		Blue value for this LED	0-255	0-100	0	0
107	LED 13	Red value for this LED	0-255	0-100	0	0
108		Green value for this LED	0-255	0-100	0	0
109		Blue value for this LED	0-255	0-100	0	0
110	LED 14	Red value for this LED	0-255	0-100	0	0
111		Green value for this LED	0-255	0-100	0	0
112		Blue value for this LED	0-255	0-100	0	0
113	LED 15	Red value for this LED	0-255	0-100	0	0
114		Green value for this LED	0-255	0-100	0	0
115		Blue value for this LED	0-255	0-100	0	0
116	LED 16	Red value for this LED	0-255	0-100	0	0
117		Green value for this LED	0-255	0-100	0	0
118		Blue value for this LED	0-255	0-100	0	0
119	LED 17	Red value for this LED	0-255	0-100	0	0
120		Green value for this LED	0-255	0-100	0	0
121		Blue value for this LED	0-255	0-100	0	0
122	LED 18	Red value for this LED	0-255	0-100	0	0
123		Green value for this LED	0-255	0-100	0	0
124		Blue value for this LED	0-255	0-100	0	0
125	LED 19	Red value for this LED	0-255	0-100	0	0
126		Green value for this LED	0-255	0-100	0	0
127		Blue value for this LED	0-255	0-100	0	0
128	LED 20	Red value for this LED	0-255	0-100	0	0
129		Green value for this LED	0-255	0-100	0	0
130		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

131	LED 21	Red value for this LED	0-255	0-100	0	0
132		Green value for this LED	0-255	0-100	0	0
133		Blue value for this LED	0-255	0-100	0	0
134	LED 22	Red value for this LED	0-255	0-100	0	0
135		Green value for this LED	0-255	0-100	0	0
136		Blue value for this LED	0-255	0-100	0	0
137	LED 23	Red value for this LED	0-255	0-100	0	0
138		Green value for this LED	0-255	0-100	0	0
139		Blue value for this LED	0-255	0-100	0	0
140	LED 24	Red value for this LED	0-255	0-100	0	0
141		Green value for this LED	0-255	0-100	0	0
142		Blue value for this LED	0-255	0-100	0	0
143	LED 25	Red value for this LED	0-255	0-100	0	0
144		Green value for this LED	0-255	0-100	0	0
145		Blue value for this LED	0-255	0-100	0	0
146	LED 26	Red value for this LED	0-255	0-100	0	0
147		Green value for this LED	0-255	0-100	0	0
148		Blue value for this LED	0-255	0-100	0	0
149	LED 27	Red value for this LED	0-255	0-100	0	0
150		Green value for this LED	0-255	0-100	0	0
151		Blue value for this LED	0-255	0-100	0	0
152	LED 28	Red value for this LED	0-255	0-100	0	0
153		Green value for this LED	0-255	0-100	0	0
154		Blue value for this LED	0-255	0-100	0	0
155	LED 29	Red value for this LED	0-255	0-100	0	0
156		Green value for this LED	0-255	0-100	0	0
157		Blue value for this LED	0-255	0-100	0	0
158	LED 30	Red value for this LED	0-255	0-100	0	0
159		Green value for this LED	0-255	0-100	0	0
160		Blue value for this LED	0-255	0-100	0	0
161	LED 31	Red value for this LED	0-255	0-100	0	0
162		Green value for this LED	0-255	0-100	0	0
163		Blue value for this LED	0-255	0-100	0	0
164	LED 32	Red value for this LED	0-255	0-100	0	0
165		Green value for this LED	0-255	0-100	0	0
166		Blue value for this LED	0-255	0-100	0	0
167	LED 33	Red value for this LED	0-255	0-100	0	0
168		Green value for this LED	0-255	0-100	0	0
169		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

170	LED 34	Red value for this LED	0-255	0-100	0	0
171		Green value for this LED	0-255	0-100	0	0
172		Blue value for this LED	0-255	0-100	0	0
173	LED 35	Red value for this LED	0-255	0-100	0	0
174		Green value for this LED	0-255	0-100	0	0
175		Blue value for this LED	0-255	0-100	0	0
176	LED 36	Red value for this LED	0-255	0-100	0	0
177		Green value for this LED	0-255	0-100	0	0
178		Blue value for this LED	0-255	0-100	0	0
179	LED 37	Red value for this LED	0-255	0-100	0	0
180		Green value for this LED	0-255	0-100	0	0
181		Blue value for this LED	0-255	0-100	0	0
182	LED 38	Red value for this LED	0-255	0-100	0	0
183		Green value for this LED	0-255	0-100	0	0
184		Blue value for this LED	0-255	0-100	0	0
185	LED 39	Red value for this LED	0-255	0-100	0	0
186		Green value for this LED	0-255	0-100	0	0
187		Blue value for this LED	0-255	0-100	0	0
188	LED 40	Red value for this LED	0-255	0-100	0	0
189		Green value for this LED	0-255	0-100	0	0
190		Blue value for this LED	0-255	0-100	0	0
191	LED 41	Red value for this LED	0-255	0-100	0	0
192		Green value for this LED	0-255	0-100	0	0
193		Blue value for this LED	0-255	0-100	0	0
194	LED 42	Red value for this LED	0-255	0-100	0	0
195		Green value for this LED	0-255	0-100	0	0
196		Blue value for this LED	0-255	0-100	0	0
197	LED 43	Red value for this LED	0-255	0-100	0	0
198		Green value for this LED	0-255	0-100	0	0
199		Blue value for this LED	0-255	0-100	0	0
200	LED 44	Red value for this LED	0-255	0-100	0	0
201		Green value for this LED	0-255	0-100	0	0
202		Blue value for this LED	0-255	0-100	0	0
203	LED 45	Red value for this LED	0-255	0-100	0	0
204		Green value for this LED	0-255	0-100	0	0
205		Blue value for this LED	0-255	0-100	0	0
206	LED 46	Red value for this LED	0-255	0-100	0	0
207		Green value for this LED	0-255	0-100	0	0
208		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

209	LED 47	Red value for this LED	0-255	0-100	0	0
210		Green value for this LED	0-255	0-100	0	0
211		Blue value for this LED	0-255	0-100	0	0
212	LED 48	Red value for this LED	0-255	0-100	0	0
213		Green value for this LED	0-255	0-100	0	0
214		Blue value for this LED	0-255	0-100	0	0
215	LED 49	Red value for this LED	0-255	0-100	0	0
216		Green value for this LED	0-255	0-100	0	0
217		Blue value for this LED	0-255	0-100	0	0
218	LED 50	Red value for this LED	0-255	0-100	0	0
219		Green value for this LED	0-255	0-100	0	0
220		Blue value for this LED	0-255	0-100	0	0
221	LED 51	Red value for this LED	0-255	0-100	0	0
222		Green value for this LED	0-255	0-100	0	0
223		Blue value for this LED	0-255	0-100	0	0
224	LED 52	Red value for this LED	0-255	0-100	0	0
225		Green value for this LED	0-255	0-100	0	0
226		Blue value for this LED	0-255	0-100	0	0
227	LED 53	Red value for this LED	0-255	0-100	0	0
228		Green value for this LED	0-255	0-100	0	0
229		Blue value for this LED	0-255	0-100	0	0
230	LED 54	Red value for this LED	0-255	0-100	0	0
231		Green value for this LED	0-255	0-100	0	0
232		Blue value for this LED	0-255	0-100	0	0
233	LED 55	Red value for this LED	0-255	0-100	0	0
234		Green value for this LED	0-255	0-100	0	0
235		Blue value for this LED	0-255	0-100	0	0
236	LED 56	Red value for this LED	0-255	0-100	0	0
237		Green value for this LED	0-255	0-100	0	0
238		Blue value for this LED	0-255	0-100	0	0
239	LED 57	Red value for this LED	0-255	0-100	0	0
240		Green value for this LED	0-255	0-100	0	0
241		Blue value for this LED	0-255	0-100	0	0
242	LED 58	Red value for this LED	0-255	0-100	0	0
243		Green value for this LED	0-255	0-100	0	0
244		Blue value for this LED	0-255	0-100	0	0
245	LED 59	Red value for this LED	0-255	0-100	0	0
246		Green value for this LED	0-255	0-100	0	0
247		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

248	LED 60	Red value for this LED	0-255	0-100	0	0
249		Green value for this LED	0-255	0-100	0	0
250		Blue value for this LED	0-255	0-100	0	0
251	LED 61	Red value for this LED	0-255	0-100	0	0
252		Green value for this LED	0-255	0-100	0	0
253		Blue value for this LED	0-255	0-100	0	0
The following Channels are available in SHOWPIX™ fixture only						
254	LED 62	Red value for this LED	0-255	0-100	0	0
255		Green value for this LED	0-255	0-100	0	0
256		Blue value for this LED	0-255	0-100	0	0
257	LED 63	Red value for this LED	0-255	0-100	0	0
258		Green value for this LED	0-255	0-100	0	0
259		Blue value for this LED	0-255	0-100	0	0
260	LED 64	Red value for this LED	0-255	0-100	0	0
261		Green value for this LED	0-255	0-100	0	0
262		Blue value for this LED	0-255	0-100	0	0
263	LED 65	Red value for this LED	0-255	0-100	0	0
264		Green value for this LED	0-255	0-100	0	0
265		Blue value for this LED	0-255	0-100	0	0
266	LED 66	Red value for this LED	0-255	0-100	0	0
267		Green value for this LED	0-255	0-100	0	0
268		Blue value for this LED	0-255	0-100	0	0
269	LED 67	Red value for this LED	0-255	0-100	0	0
270		Green value for this LED	0-255	0-100	0	0
271		Blue value for this LED	0-255	0-100	0	0
272	LED 68	Red value for this LED	0-255	0-100	0	0
273		Green value for this LED	0-255	0-100	0	0
274		Blue value for this LED	0-255	0-100	0	0
275	LED 69	Red value for this LED	0-255	0-100	0	0
276		Green value for this LED	0-255	0-100	0	0
277		Blue value for this LED	0-255	0-100	0	0
278	LED 70	Red value for this LED	0-255	0-100	0	0
279		Green value for this LED	0-255	0-100	0	0
280		Blue value for this LED	0-255	0-100	0	0
281	LED 71	Red value for this LED	0-255	0-100	0	0
282		Green value for this LED	0-255	0-100	0	0
283		Blue value for this LED	0-255	0-100	0	0
284	LED 72	Red value for this LED	0-255	0-100	0	0
285		Green value for this LED	0-255	0-100	0	0
286		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

287	LED 73	Red value for this LED	0-255	0-100	0	0
288		Green value for this LED	0-255	0-100	0	0
289		Blue value for this LED	0-255	0-100	0	0
290	LED 74	Red value for this LED	0-255	0-100	0	0
291		Green value for this LED	0-255	0-100	0	0
292		Blue value for this LED	0-255	0-100	0	0
293	LED 75	Red value for this LED	0-255	0-100	0	0
294		Green value for this LED	0-255	0-100	0	0
295		Blue value for this LED	0-255	0-100	0	0
296	LED 76	Red value for this LED	0-255	0-100	0	0
297		Green value for this LED	0-255	0-100	0	0
298		Blue value for this LED	0-255	0-100	0	0
299	LED 77	Red value for this LED	0-255	0-100	0	0
300		Green value for this LED	0-255	0-100	0	0
301		Blue value for this LED	0-255	0-100	0	0
302	LED 78	Red value for this LED	0-255	0-100	0	0
303		Green value for this LED	0-255	0-100	0	0
304		Blue value for this LED	0-255	0-100	0	0
305	LED 79	Red value for this LED	0-255	0-100	0	0
306		Green value for this LED	0-255	0-100	0	0
307		Blue value for this LED	0-255	0-100	0	0
308	LED 80	Red value for this LED	0-255	0-100	0	0
309		Green value for this LED	0-255	0-100	0	0
310		Blue value for this LED	0-255	0-100	0	0
311	LED 81	Red value for this LED	0-255	0-100	0	0
312		Green value for this LED	0-255	0-100	0	0
313		Blue value for this LED	0-255	0-100	0	0
314	LED 82	Red value for this LED	0-255	0-100	0	0
315		Green value for this LED	0-255	0-100	0	0
316		Blue value for this LED	0-255	0-100	0	0
317	LED 83	Red value for this LED	0-255	0-100	0	0
318		Green value for this LED	0-255	0-100	0	0
319		Blue value for this LED	0-255	0-100	0	0
320	LED 84	Red value for this LED	0-255	0-100	0	0
321		Green value for this LED	0-255	0-100	0	0
322		Blue value for this LED	0-255	0-100	0	0
323	LED 85	Red value for this LED	0-255	0-100	0	0
324		Green value for this LED	0-255	0-100	0	0
325		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

326	LED 86	Red value for this LED	0-255	0-100	0	0
327		Green value for this LED	0-255	0-100	0	0
328		Blue value for this LED	0-255	0-100	0	0
329	LED 87	Red value for this LED	0-255	0-100	0	0
330		Green value for this LED	0-255	0-100	0	0
331		Blue value for this LED	0-255	0-100	0	0
332	LED 88	Red value for this LED	0-255	0-100	0	0
333		Green value for this LED	0-255	0-100	0	0
334		Blue value for this LED	0-255	0-100	0	0
335	LED 89	Red value for this LED	0-255	0-100	0	0
336		Green value for this LED	0-255	0-100	0	0
337		Blue value for this LED	0-255	0-100	0	0
338	LED 90	Red value for this LED	0-255	0-100	0	0
339		Green value for this LED	0-255	0-100	0	0
340		Blue value for this LED	0-255	0-100	0	0
341	LED 91	Red value for this LED	0-255	0-100	0	0
342		Green value for this LED	0-255	0-100	0	0
343		Blue value for this LED	0-255	0-100	0	0
344	LED 92	Red value for this LED	0-255	0-100	0	0
345		Green value for this LED	0-255	0-100	0	0
346		Blue value for this LED	0-255	0-100	0	0
347	LED 93	Red value for this LED	0-255	0-100	0	0
348		Green value for this LED	0-255	0-100	0	0
349		Blue value for this LED	0-255	0-100	0	0
350	LED 94	Red value for this LED	0-255	0-100	0	0
351		Green value for this LED	0-255	0-100	0	0
352		Blue value for this LED	0-255	0-100	0	0
353	LED 95	Red value for this LED	0-255	0-100	0	0
354		Green value for this LED	0-255	0-100	0	0
355		Blue value for this LED	0-255	0-100	0	0
356	LED 96	Red value for this LED	0-255	0-100	0	0
357		Green value for this LED	0-255	0-100	0	0
358		Blue value for this LED	0-255	0-100	0	0
359	LED 97	Red value for this LED	0-255	0-100	0	0
360		Green value for this LED	0-255	0-100	0	0
361		Blue value for this LED	0-255	0-100	0	0
362	LED 98	Red value for this LED	0-255	0-100	0	0
363		Green value for this LED	0-255	0-100	0	0
364		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

365	LED 99	Red value for this LED	0-255	0-100	0	0
366		Green value for this LED	0-255	0-100	0	0
367		Blue value for this LED	0-255	0-100	0	0
368	LED 100	Red value for this LED	0-255	0-100	0	0
369		Green value for this LED	0-255	0-100	0	0
370		Blue value for this LED	0-255	0-100	0	0
371	LED 101	Red value for this LED	0-255	0-100	0	0
372		Green value for this LED	0-255	0-100	0	0
373		Blue value for this LED	0-255	0-100	0	0
374	LED 102	Red value for this LED	0-255	0-100	0	0
375		Green value for this LED	0-255	0-100	0	0
376		Blue value for this LED	0-255	0-100	0	0
377	LED 103	Red value for this LED	0-255	0-100	0	0
378		Green value for this LED	0-255	0-100	0	0
379		Blue value for this LED	0-255	0-100	0	0
380	LED 104	Red value for this LED	0-255	0-100	0	0
381		Green value for this LED	0-255	0-100	0	0
382		Blue value for this LED	0-255	0-100	0	0
383	LED 105	Red value for this LED	0-255	0-100	0	0
384		Green value for this LED	0-255	0-100	0	0
385		Blue value for this LED	0-255	0-100	0	0
386	LED 106	Red value for this LED	0-255	0-100	0	0
387		Green value for this LED	0-255	0-100	0	0
388		Blue value for this LED	0-255	0-100	0	0
389	LED 107	Red value for this LED	0-255	0-100	0	0
390		Green value for this LED	0-255	0-100	0	0
391		Blue value for this LED	0-255	0-100	0	0
392	LED 108	Red value for this LED	0-255	0-100	0	0
393		Green value for this LED	0-255	0-100	0	0
394		Blue value for this LED	0-255	0-100	0	0
395	LED 109	Red value for this LED	0-255	0-100	0	0
396		Green value for this LED	0-255	0-100	0	0
397		Blue value for this LED	0-255	0-100	0	0
398	LED 110	Red value for this LED	0-255	0-100	0	0
399		Green value for this LED	0-255	0-100	0	0
400		Blue value for this LED	0-255	0-100	0	0
401	LED 111	Red value for this LED	0-255	0-100	0	0
402		Green value for this LED	0-255	0-100	0	0
403		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

404	LED 112	Red value for this LED	0-255	0-100	0	0
405		Green value for this LED	0-255	0-100	0	0
406		Blue value for this LED	0-255	0-100	0	0
407	LED 113	Red value for this LED	0-255	0-100	0	0
408		Green value for this LED	0-255	0-100	0	0
409		Blue value for this LED	0-255	0-100	0	0
410	LED 114	Red value for this LED	0-255	0-100	0	0
411		Green value for this LED	0-255	0-100	0	0
412		Blue value for this LED	0-255	0-100	0	0
413	LED 115	Red value for this LED	0-255	0-100	0	0
414		Green value for this LED	0-255	0-100	0	0
415		Blue value for this LED	0-255	0-100	0	0
416	LED 116	Red value for this LED	0-255	0-100	0	0
417		Green value for this LED	0-255	0-100	0	0
418		Blue value for this LED	0-255	0-100	0	0
419	LED 117	Red value for this LED	0-255	0-100	0	0
420		Green value for this LED	0-255	0-100	0	0
421		Blue value for this LED	0-255	0-100	0	0
422	LED 118	Red value for this LED	0-255	0-100	0	0
423		Green value for this LED	0-255	0-100	0	0
424		Blue value for this LED	0-255	0-100	0	0
425	LED 119	Red value for this LED	0-255	0-100	0	0
426		Green value for this LED	0-255	0-100	0	0
427		Blue value for this LED	0-255	0-100	0	0
428	LED 120	Red value for this LED	0-255	0-100	0	0
429		Green value for this LED	0-255	0-100	0	0
430		Blue value for this LED	0-255	0-100	0	0
431	LED 121	Red value for this LED	0-255	0-100	0	0
432		Green value for this LED	0-255	0-100	0	0
433		Blue value for this LED	0-255	0-100	0	0
434	LED 122	Red value for this LED	0-255	0-100	0	0
435		Green value for this LED	0-255	0-100	0	0
436		Blue value for this LED	0-255	0-100	0	0
437	LED 123	Red value for this LED	0-255	0-100	0	0
438		Green value for this LED	0-255	0-100	0	0
439		Blue value for this LED	0-255	0-100	0	0
440	LED 124	Red value for this LED	0-255	0-100	0	0
441		Green value for this LED	0-255	0-100	0	0
442		Blue value for this LED	0-255	0-100	0	0

SHOWPIX™/StudioPix™ DMX Protocol

443	LED 125	Red value for this LED	0-255	0-100	0	0
444		Green value for this LED	0-255	0-100	0	0
445		Blue value for this LED	0-255	0-100	0	0
446	LED 126	Red value for this LED	0-255	0-100	0	0
447		Green value for this LED	0-255	0-100	0	0
448		Blue value for this LED	0-255	0-100	0	0
449	LED 127	Red value for this LED	0-255	0-100	0	0
450		Green value for this LED	0-255	0-100	0	0
451		Blue value for this LED	0-255	0-100	0	0