

# DMX Channel Index

impression<sup>®</sup>  
X4 Bar 20



from software version: v0.26



— since 1994 —

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## 1 Normal Mode (norm) 34 DMX Channels:

Channel	Function	Time and Value	DMX
<b>1 Tilt - High</b>	Tilt coarse	0° - 210°	0..255
<b>2 Tilt - Low</b>	Tilt fine		0..255
<b>3 Zoom</b>	Wide (flood) - narrow (spot)	50° - 7°	0..255
<b>4 CTO</b>	No CTO		0..7
	Continuous color temperature correction	Applicable for ALL colors	8..255
<b>5 Set 1 Color (fixed)</b>	Colors adjustable via RGB		0..7
	Color 01 - Red <sup>1)</sup>		8..15
	Color 02 - Amber <sup>1)</sup>		16..23
	Color 03 - Warm Yellow <sup>1)</sup>		24..31
	Color 04 - Yellow <sup>1)</sup>		32..39
	Color 05 - Green <sup>1)</sup>		40..47
	Color 06 - Turquoise <sup>1)</sup>		48..55
	Color 07 - Cyan <sup>1)</sup>		56..63
	Color 08 - Blue <sup>1)</sup>		64..71
	Color 09 - Lavender <sup>1)</sup>		72..79
	Color 10 - Malve <sup>1)</sup>		80..87
	Color 11 - Magenta <sup>1)</sup>		88..95
	Color 12 - Pink <sup>1)</sup>		96..103
	White - CTO	3200K	104..111
	White	5600K	112..119
	White - CTB	7200K	120..127
Rainbow Effect Stop <sup>2)</sup>		128	
Rainbow Effect <sup>3)</sup>	slow - fast	129..223	
Random colors	slow - fast	224..255	
<b>6 Set 1 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>7 Set 1 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>8 Set 1 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>9 Set 1 White</b>	Color mixing system - White	0 - 100%	0..255
<b>10 Set 1 Intensity</b>	Intensity	0 - 100%	0..255
<b>11 Shutter</b>	Shutter closed		0..15
	Shutter pulse random	slow – fast	16..47
	Fade on, snap off (random patterns)	slow – fast	48..79
	Snap on, fade off (random patterns)	slow – fast	80..111
	Fade on, fade off (random patterns)	slow – fast	112..143
	Strobe random	5s - 0.1s	144..199

	Strobe effect slow - fast Shutter open	1 Hz - 10 Hz	200..239 240..255
<b>12 Intensity</b>	Intensity	0 - 100%	0..255
<b>13 Special</b>	RESET	> 1 sec	250..255
<b>14 Set 2 Color</b> <sup>4)</sup>	Values see Channel 5	-	-
<b>15 Set 2 Red</b> <sup>4)</sup>	Color mixing system - Red	0 - 100%	0..255
<b>16 Set 2 Green</b> <sup>4)</sup>	Color mixing system - Green	0 - 100%	0..255
<b>17 Set 2 Blue</b> <sup>4)</sup>	Color mixing system - Blue	0 - 100%	0..255
<b>18 Set 2 White</b> <sup>4)</sup>	Color mixing system - White	0 - 100%	0..255
<b>19 Set 2 Intensity</b> <sup>4)</sup>	Intensity	0 - 100%	0..255
<b>20 Set 3 Color</b> <sup>4)</sup>	Values see Channel 5	-	-
<b>21 Set 3 Red</b> <sup>4)</sup>	Color mixing system - Red	0 - 100%	0..255
<b>22 Set 3 Green</b> <sup>4)</sup>	Color mixing system - Green	0 - 100%	0..255
<b>23 Set 3 Blue</b> <sup>4)</sup>	Color mixing system - Blue	0 - 100%	0..255
<b>24 Set 3 White</b> <sup>4)</sup>	Color mixing system - White	0 - 100%	0..255
<b>25 Set 3 Intensity</b> <sup>4)</sup>	Intensity	0 - 100%	0..255
<b>26 Crossfade</b>	0..2 seconds transistion time		0..255
<b>27 Star Effect</b>			0..255
<b>28 Set 1 Pattern Select</b>			0..255
<b>29 Set 1 Pattern Movement</b>			0..255
<b>30 Set 2 Pattern Select</b>			0..255
<b>31 Set 2 Pattern Movement</b>			0..255
<b>32 Pixel Select 1 - 8</b>			0..255
<b>33 Pixel Select 9 - 16</b>			0..255
<b>34 Pixel Select 17 - 20</b>			0..255

## 2 Compressed Mode (*comp*) 20 DMX Channels:

Channel	Function	Time and Value	DMX
<b>1 None</b>	reserved		-
<b>2 None</b>	reserved		-
<b>3 Tilt - High</b>	Tilt coarse	0° - 210°	0..255
<b>4 Tilt - Low</b>	Tilt fine		0..255
<b>5 Set 1 Color (fixed)</b>	Colors adjustable via RGB		0..7
	Color 01 - Red <sup>1)</sup>		8..15
	Color 02 - Amber <sup>1)</sup>		16..23
	Color 03 - Warm Yellow <sup>1)</sup>		24..31
	Color 04 - Yellow <sup>1)</sup>		32..39
	Color 05 - Green <sup>1)</sup>		40..47
	Color 06 - Turquoise <sup>1)</sup>		48..55
	Color 07 - Cyan <sup>1)</sup>		56..63
	Color 08 - Blue <sup>1)</sup>		64..71
	Color 09 - Lavender <sup>1)</sup>		72..79
	Color 10 - Malve <sup>1)</sup>		80..87
	Color 11 - Magenta <sup>1)</sup>		88..95
	Color 12 - Pink <sup>1)</sup>		96..103
	White - CTO	3200K	104..111
	White	5600K	112..119
	White - CTB	7200K	120..127
	Rainbow Effect Stop <sup>2)</sup>		128
	Rainbow Effect <sup>3)</sup>	slow - fast	129..223
	Random colors	slow - fast	224..255
<b>6 Set 1 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>7 Set 1 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>8 Set 1 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>9 Set 1 White</b>	Color mixing system - White	0 - 100%	0..255
<b>10 Shutter</b>	Shutter closed		0..15
	Shutter pulse random	slow – fast	16..47
	Fade on, snap off (random patterns)	slow – fast	48..79
	Snap on, fade off (random patterns)	slow – fast	80..111
	Fade on, fade off (random patterns)	slow – fast	112..143
	Strobe random	5s - 0.1s	144..199
	Strobe effect slow - fast	1 Hz - 10 Hz	200..239
	Shutter open		240..255
<b>11 Intensity</b>	Intensity	0 - 100%	0..255

<b>12 CTO</b>	No CTO Continuous color temperature correction	Applicable for ALL colors	0..7 8..255
<b>13 Special</b>	RESET	> 1 sec	250..255
<b>14 Crossfade</b>	0..2 seconds transistion time		0..255
<b>15 Set 1 Pattern Movement</b>			0..255
<b>16 Zoom</b>	Wide (flood) - narrow (spot)	50° - 7°	0..255
<b>17 Set 1 Pattern Select</b>			0..255
<b>18 Pixel Select 1 - 8</b>			0..255
<b>19 Pixel Select 9 - 16</b>			0..255
<b>20 Pixel Select 17 - 20</b>			0..255

### 3 Single Pixel Mode (*spix*) 88 DMX Channels:

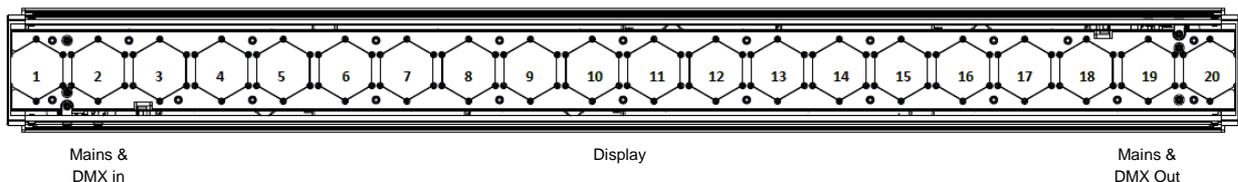
Channel	Function	Time and Value	DMX
<b>1 Tilt - High</b>	Tilt coarse	0° - 210°	0..255
<b>2 Tilt - Low</b>	Tilt fine		0..255
<b>3 Shutter</b>	Shutter closed		0..15
	Shutter pulse random	slow – fast	16..47
	Fade on, snap off (random patterns)	slow – fast	48..79
	Snap on, fade off (random patterns)	slow – fast	80..111
	Fade on, fade off (random patterns)	slow – fast	112..143
	Strobe random	5s - 0.1s	144..199
	Strobe effect slow - fast	1 Hz - 10 Hz	200..239
	Shutter open		240..255
<b>4 Intensity</b>	Intensity	0 - 100%	0..255
<b>5 CTO</b>	No CTO		0..7
	Continuous color temperature correction	Applicable for ALL colors	8..255
<b>6 Special</b>	RESET	> 1 sec	250..255
<b>7 Crossfade</b>	0..2 seconds transistion time		0..255
<b>8 Zoom</b>	Wide (flood) - narrow (spot)	50° - 7°	0..255
<b>9 Set 1 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>10 Set 1 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>11 Set 1 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>12 Set 1 White</b>	Color mixing system - White	0 - 100%	0..255
<b>13 Set 2 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>14 Set 2 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>15 Set 2 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>16 Set 2 White</b>	Color mixing system - White	0 - 100%	0..255
<b>17 Set 3 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>18 Set 3 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>19 Set 3 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>20 Set 3 White</b>	Color mixing system - White	0 - 100%	0..255
<b>21 Set 4 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>22 Set 4 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>23 Set 4 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>24 Set 4 White</b>	Color mixing system - White	0 - 100%	0..255
<b>25 Set 5 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>26 Set 5 Green</b>	Color mixing system - Green	0 - 100%	0..255

<b>27 Set 5 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>28 Set 5 White</b>	Color mixing system - White	0 - 100%	0..255
<b>29 Set 6 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>30 Set 6 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>31 Set 6 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>32 Set 6 White</b>	Color mixing system - White	0 - 100%	0..255
<b>33 Set 7 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>34 Set 7 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>35 Set 7 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>36 Set 7 White</b>	Color mixing system - White	0 - 100%	0..255
<b>37 Set 8 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>38 Set 8 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>39 Set 8 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>40 Set 8 White</b>	Color mixing system - White	0 - 100%	0..255
<b>41 Set 9 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>42 Set 9 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>43 Set 9 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>44 Set 9 White</b>	Color mixing system - White	0 - 100%	0..255
<b>45 Set 10 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>46 Set 10 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>47 Set 10 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>48 Set 10 White</b>	Color mixing system - White	0 - 100%	0..255
<b>49 Set 11 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>50 Set 11 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>51 Set 11 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>52 Set 11 White</b>	Color mixing system - White	0 - 100%	0..255
<b>53 Set 12 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>54 Set 12 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>55 Set 12 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>56 Set 12 White</b>	Color mixing system - White	0 - 100%	0..255
<b>57 Set 13 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>58 Set 13 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>59 Set 13 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>60 Set 13 White</b>	Color mixing system - White	0 - 100%	0..255
<b>61 Set 14 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>62 Set 14 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>63 Set 14 Blue</b>	Color mixing system - Blue	0 - 100%	0..255

<b>64 Set 14 White</b>	Color mixing system - White	0 - 100%	0..255
<b>65 Set 15 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>66 Set 15 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>67 Set 15 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>68 Set 15 White</b>	Color mixing system - White	0 - 100%	0..255
<b>69 Set 16 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>70 Set 16 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>71 Set 16 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>72 Set 16 White</b>	Color mixing system - White	0 - 100%	0..255
<b>73 Set 17 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>74 Set 17 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>75 Set 17 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>76 Set 17 White</b>	Color mixing system - White	0 - 100%	0..255
<b>77 Set 18 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>78 Set 18 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>79 Set 18 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>80 Set 18 White</b>	Color mixing system - White	0 - 100%	0..255
<b>81 Set 19 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>82 Set 19 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>83 Set 19 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>84 Set 19 White</b>	Color mixing system - White	0 - 100%	0..255
<b>85 Set 20 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>86 Set 20 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>87 Set 20 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>88 Set 20 White</b>	Color mixing system - White	0 - 100%	0..255

The pixel are numbered left to right 1 – 20 as shown below.

Tilt DMX Value = 0 / “Display” to the front / “Power & DMX In” to the left.



<sup>1)</sup> The predefined colors can be used as start-colors for the Rainbow effect. Please select first a desired start-color before you activate the rainbow effect. All **IMPRESSION X4 Bar** will then start from that color and will execute the rainbow effect synchronously. Different **IMPRESSION X4 Bar** can have different start-colors but will still execute the rainbow effect synchronously. If you choose a color different from the ones marked with <sup>1)</sup> in the tables above the rainbow start-color will be red.

<sup>2)</sup> Rainbow-effect Stop will pause this function. After resuming the rainbow-effect will be continued from the current color.

<sup>3)</sup> The Rainbow-effect will run synchronously only if started from one of the predefined colors (see also <sup>1)</sup> before).

<sup>4)</sup> Set 1 is the main layer while Set 2 and Set 3 are background layers. Thus Set 2 is only visible on the unlit pixel of layer 1 if a pattern is applied and Set 3 is only visible on the unlit pixel of layer 1 and 2 if there are patterns applied.

## 4 Technical Specifications:

<b>Power supply</b>	
<b>Power consumption</b>	450 VA (Watt)
<b>Power Input</b>	Auto sensing 100-240 V AC, 50-60 Hz
<b>Fuse protection</b>	Micro-fuse 5x20 mm, T5A
<b>Operational Parameters</b>	
<b>Max. Ambient Temperature</b>	5° - 45°C (integrated overheating switch) 40°-113°F
<b>Mounting Position</b>	Any (see relevant chapter in the manual)
<b>Lighting System - Additive Color mixing</b>	
<b>LED Type</b>	20 x Osram Ostar RGBW multi-chip
<b>Lifetime</b>	50,000 h
Wavelength optimized for maximum presentable color space	
<b>Optical System</b>	
Full RGBW / High efficient Collimator cluster	
<b>Shutter / Dimmer (8/16 Bit)</b>	
Strobe- Effect with variable speed between 1-10 flashes per second, Random- & Pulse-Effects	
Continuous Dimmer 0 - 100%	
<b>Zoom</b>	
7 to 50 degree continuous zoom	
<b>Optical Patterns</b>	
Several pre-defined beam patterns with direct access and manipulation	
<b>DMX Control</b>	
Standard USITT DMX-512, 5 pin XLR: [+]=Pin 3 / [-]=Pin 2 / [Ground]=Pin 1 / Pin 4&5 N.C. The DMX- Addressing starts at the DMX channel [001].	
<b>Tilt (8/16 Bit)</b>	
<b>Tilt- movement</b>	<b>210° in min. 1.5 seconds (Position Feedback)</b>
<b>Weights and Measures</b>	
<b>Length</b>	<b>1000 mm / 39.4''</b>
<b>Width</b>	<b>100 mm / 3.9''</b>
<b>Height</b>	<b>240 mm / 9.4''</b>
<b>Weight (net)</b>	<b>14.5 kg / 32 lbs</b>
<b>Weight with 2 brackets</b>	<b>16 kg / 35 lbs</b>

## 5 Dimensions

