

# impression<sup>®</sup>

## DMX Channel Index



from software version 1.03/03  
(manual version 0.92)



**GERMAN LIGHT  
PRODUCTS**

— since 1994 —

e-mail: [service@glp.de](mailto:service@glp.de)  
Internet: <http://www.glp.de>

## DMX Channel Selection (DMX Protocol)

### Normal-Mode 14 DMX channels

Channel	Function	Time and Value	DMX	HEX	%	
<b>1) PAN-coarse</b>	0 .. 660°		0..255	00..FF	0..100	
<b>2) PAN-fine</b>	High- Pos ... High- Pos + 2,6° (16 Bit)		0..255	00..FF	0..100	
<b>3) Tilt-coarse</b>	0 .. 300°		0..255	00..FF	0..100	
<b>4) Tilt-fine</b>	High- Pos ... High- Pos + 1,2° (16 Bit)		0..255	00..FF	0..100	
<b>5) Color (fixed)</b>	Colors adjustable via RGB		0..7	00..07	0..2,5	
	Color 01 - Red <sup>1)</sup>		8..15	08..0F	3..5,5	
	Color 02 - Amber <sup>1)</sup>		16..23	10..17	6..8,5	
	Color 03 - Warm Yellow <sup>1)</sup>		24..31	18..1F	9..12,5	
	Color 04 - Yellow <sup>1)</sup>		32..39	20..27	13..15,5	
	Color 05 - Green <sup>1)</sup>		40..47	28..2F	16..18,5	
	Color 06 - Turquoise <sup>1)</sup>		48..55	30..37	19..21,5	
	Color 07 - Cyan <sup>1)</sup>		56..63	38..3F	22..24,5	
	Color 08 - Blue <sup>1)</sup>		64..71	40..47	25..27,5	
	Color 09 - Lavender <sup>1)</sup>		72..79	48..4F	28..30,5	
	Color 10 - Mauve <sup>1)</sup>		80..87	50..57	31..34,5	
	Color 11 - Magenta <sup>1)</sup>		88..95	58..5F	35..37,5	
	Color 12 - Pink <sup>1)</sup>		96..103	60..67	38..40,5	
	White - CTO	Color temperature 3200K		104..111	68..6F	41..43,5
	White	Color temperature 5600K		112..119	70..77	44..46,5
	White - CTB	Color temperature 7200K		120..127	78..7F	47..49,5
Rainbow Effect Stop <sup>2)</sup>			128	80	50	
Rainbow Effect <sup>3)</sup>	slow - fast		129..223	81..DF	51..88	
Rainbow Effect, random colors	slow - fast		224..255	E0..FF	89..100	
<b>6) Red</b>	Color mixing system - Red	0 - 100%	0..255	00..FF	0..100	
<b>7) Green</b>	Color mixing system - Green	0 - 100%	0..255	00..FF	0..100	
<b>8) Blue</b>	Color mixing system - Blue	0 - 100%	0..255	00..FF	0..100	
<b>9) Shutter</b>	Shutter closed		0..15	00..0F	0..5,5	
	Random Pulse effect	slow - fast	16..47	10..2F	6..18,5	
	Up-dimming then Shutter closing (random patterns)	slow - fast	48..79	30..4F	19..31	
	Shutter open then down-dimming (random patterns)	slow - fast	80..111	50..6F	32..43	
	Up-dimming then down-dimming (random patterns)	slow - fast	112..143	70..8F	44..56	
	Strobe-Pause Effect	Break time 5s - 1s	144..199	90..C7	57..78	
	Strobe effect, slow - fast	1 Hz .. 10 Hz	200..239	C8..EF	79..94	
	Shutter open		240..255	F0..FF	95..100	
<b>10) Dimmer</b>	Dimmer	0 - 100%	0..255	0..FF	0..100	
<b>11) Color temperature</b>	No color temperature correction		0	0	0	
	Continuous color temperature correction between 3200k - 7200k	Applicable only for White color <sup>5)</sup>	1..255	1..FF	1..100	
<b>12) Special</b>	Max. Power-Mode <sup>4)</sup>	Max. light output without white balance	0..15	0..0F	0..5,5	
	White-Mode <sup>4)</sup>	White balance used	16..31	10..1F	6..12,5	

Channel	Function	Time and Value	DMX	HEX	%	
	Color1-Chaser C / C+1 slow – fast		112..127	70..7F	44..49,5	
	Color1-Chaser C / C+2 slow – fast		128..143	80..8F	50..56,5	
	Fan min. as long as temp. < 60°C		224..249	E0..E5	88..89,5	
	<b>RESET (Normal Mode)</b>		<b>250..255</b>	<b>FA..FF</b>	<b>98..100</b>	
<b>13) Move- ment</b>	<b>No movement</b>		0	0	0	
	<b>Movement</b>   <b>Size</b>   <b>Phase</b>					
	PAN   1   0°		01..01	01..01	0,5	
	1   90°		02..03	02..03	1,0	
	1   180°		04..05	04..05	1,7	
	1   270°		06..07	06..07	2,5	
	PAN   2   0°		08..09	08..09	3,3	
	2   90°		10..11	0A..0B	4,1	
	2   180°		12..13	0C..0D	4,9	
	2   270°		14..15	0E..0F	5,7	
	PAN   3   0°		16..17	11..11	6,5	
	3   90°		18..19	12..13	7,3	
	3   180°		20..21	14..15	8,0	
	3   270°		22..23	16..17	8,8	
	PAN   4   0°		24..25	18..19	9,6	
	4   90°		26..27	1A..1B	10,4	
	4   180°		28..29	1C..1D	11,2	
	4   270°		30..31	1E..1F	12	
	TILT	size / phase see also PAN		32..63	20..3F	13..25
	PAN / TILT	size / phase see also PAN		64..95	40..5F	26..37
PAN / TILT (inverse)	size / phase see also PAN		96..127	60..7F	38..50	
Circle	size / phase see also PAN		128..159	80..9F	51..62	
Circle (inverse)	size / phase see also PAN		160..191	A0..BF	63..75	
Lying eight	size / phase see also PAN		192..223	C0..DF	76..87	
Random movement	size see also PAN		224..255	E0..FF	88..100	
<b>14) Speed Pan/Tilt</b>	Pan/Tilt relative movement		0..15	00..0F	0..6	
	Pan/Tilt slow – fast Use this channel 14) also for the speed of the movements (channel 13).		16..255	10..FF	7..100	

#### 4) Max. Power-Mode vs. White-Mode

The **impressionXL** can regard the white-balance adjustments for each individual color setting. Whether the White-Mode is used with RGB can be selected in the **Normal DMX-Mode** during operation with the Special DMX channel. If the Special channel is set to a value between DMX 0..15, the White-Mode is not used and the RGB goes for the maximum light output. If the Special channel is set to a value between DMX 16..31, the white balance is used for the RGB output.

Since there is no Special DMX channel in the **Compress DMX-Mode**, the possibility exists to likewise select these settings also in the display menu. Is the White-Mode set to "ON", the white-balance is activated. If the White-Mode is set to "OFF", the RGB goes for the maximum light output (Max. Power-Mode).

<sup>5)</sup> The continuous color temperature correction is applicable only for the White color i.e. if this function is selected (DMX ≥ 001) the **impressionXL** will change the color to white immediately and will then be adjustable in the color temperature in a range between 3200K and 7200K. Hence a color correction for others than white is not intended.

**Compress-Mode 10 DMX channels**

Channel	Function	Time and Value	DMX	HEX	%	
<b>1) PAN-coarse</b>	0 .. 660°		0..255	00..FF	0..100	
<b>2) PAN-fine</b>	High- Pos ... High- Pos + 2,6° (16 Bit)		0..255	00..FF	0..100	
<b>3) Tilt-coarse</b>	0 .. 300°		0..255	00..FF	0..100	
<b>4) Tilt-fine</b>	High- Pos ... High- Pos + 1,2° (16 Bit)		0..255	00..FF	0..100	
<b>5) Color (fixed)</b>	Colors adjustable via RGB		0..7	00..07	0..2,5	
	Color 01 - Red <sup>1)</sup>		8..15	08..0F	3..5,5	
	Color 02 - Amber <sup>1)</sup>		16..23	10..17	6..8,5	
	Color 03 - Warm Yellow <sup>1)</sup>		24..31	18..1F	9..12,5	
	Color 04 - Yellow <sup>1)</sup>		32..39	20..27	13..15,5	
	Color 05 - Green <sup>1)</sup>		40..47	28..2F	16..18,5	
	Color 06 - Turquoise <sup>1)</sup>		48..55	30..37	19..21,5	
	Color 07 - Cyan <sup>1)</sup>		56..63	38..3F	22..24,5	
	Color 08 - Blue <sup>1)</sup>		64..71	40..47	25..27,5	
	Color 09 - Lavender <sup>1)</sup>		72..79	48..4F	28..30,5	
	Color 10 - Mauve <sup>1)</sup>		80..87	50..57	31..34,5	
	Color 11 - Magenta <sup>1)</sup>		88..95	58..5F	35..37,5	
	Color 12 - Pink <sup>1)</sup>		96..103	60..67	38..40,5	
	White - CTO	Color temperature 3200K		104..111	68..6F	41..43,5
	White	Color temperature 5600K		112..119	70..77	44..46,5
White - CTB	Color temperature 7200K		120..127	78..7F	47..49,5	
Rainbow Effect Stop <sup>2)</sup>			128	80	50	
Rainbow Effect <sup>3)</sup>	slow - fast		129..223	81..DF	51..88	
Rainbow Effect, random colors	slow - fast		224..255	E0..FF	89..100	
<b>6) Red</b>	Color mixing system - Red	0 - 100%	0..255	00..FF	0..100	
<b>7) Green</b>	Color mixing system - Green	0 - 100%	0..255	00..FF	0..100	
<b>8) Blue</b>	Color mixing system - Blue	0 - 100%	0..255	00..FF	0..100	
<b>9) Shutter</b>	Shutter closed		0..15	00..0F	0..5,5	
	Random Pulse effect	slow - fast	16..47	10..2F	6..18,5	
	Up-dimming then Shutter closing (random patterns)	slow - fast	48..79	30..4F	19..31,5	
	Shutter open then down-dimming (random patterns)	slow - fast	80..111	50..6F	32..43	
	Up-dimming then down-dimming (random patterns)	slow - fast	112..143	70..8F	44..56	
	Strobe-Pause Effect	Break time 5s - 1s		144..199	90..C7	57..78
	Strobe effect, slow - fast	1 Hz .. 10 Hz		200..239	C8..EF	79..94
	Shutter open			240..249	F0..F9	95..97,5
	<b>RESET</b>	<b>Min. 3 Sec.</b>		<b>250</b>	<b>FA</b>	<b>98</b>
	Shutter open			251..255	FB..FF	99..100
<b>10) Dimmer</b>	Dimmer	0 - 100%	0..255	0..FF	0..100	

**High Resolution (Extended)- Mode 13 DMX Channels**

Channel	Function	Time and Value	DMX	HEX	%
<b>1) PAN-coarse</b>	0 .. 660°		0..255	00..FF	0..100
<b>2) PAN-fine</b>	High- Pos ... High- Pos + 2,6° (16 Bit)		0..255	00..FF	0..100
<b>3) Tilt-coarse</b>	0 .. 300°		0..255	00..FF	0..100
<b>4) Tilt-fine</b>	High- Pos ... High- Pos + 1,2° (16 Bit)		0..255	00..FF	0..100
<b>5) Red-coarse</b>	Color mixing system – Red	0 - 100%	0..255	00..FF	0..100
<b>6) Red-fine</b>	Color mixing system – Red-Low		0..255	00..FF	0..100
<b>7) Green-coarse</b>	Color mixing system – Green	0 - 100%	0..255	00..FF	0..100
<b>8) Green-fine</b>	Color mixing system – Green-Low		0..255	00..FF	0..100
<b>9) Blue-coarse</b>	Color mixing system – Blue	0 - 100%	0..255	00..FF	0..100
<b>10) Blue-fine</b>	Color mixing system – Blue-Low		0..255	00..FF	0..100
<b>11) Shutter</b>	Shutter closed		0..15	00..0F	0..5,5
	Random Pulse effect	slow - fast	16..47	10..2F	6..18,5
	Up-dimming then Shutter closing (random patterns)	slow - fast	48..79	30..4F	19..31,5
	Shutter open then down-dimming (random patterns)	slow - fast	80..111	50..6F	32..43
	Up-dimming then down-dimming (random patterns)	slow - fast	112..143	70..8F	44..56
	Strobe-Pause Effect	Break time 5s - 1s	144..199	90..C7	57..78
	Strobe effect, slow - fast	1 Hz .. 10 Hz	200..239	C8..EF	79..94
	Shutter open		240..249	F0..F9	95..97,5
	<b>RESET</b>	<b>Min. 3 Sec.</b>	<b>250</b>	<b>FA</b>	<b>98</b>
	Shutter open		251..255	FB..FF	99..100
<b>12) Dimmer-coarse</b>	Dimmer	0 - 100%	0..255	0..FF	0..100
<b>13) Dimmer-fine</b>	Dimmer - Low		0..255	0..FF	0..100

<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 **impressionXL** will afterwards start from that color and will execute the rainbow effect synchronously. Different **impressionXL** can certainly have different start-colors but will still execute the rainbow effect synchronously. If you choose a color different from the once 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 with the current color.

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

