

# DMX Channel Index

impression<sup>®</sup>  
X4S



from software version: 1.16  
(Instruction version: 1.1)



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## DMX Channel Selection (DMX Protocol)

### Normal-Mode 18 DMX channels

Channel	Function	Time and Value	DMX	HEX	%	
1) PAN-coarse			0..255	00..FF	0..100	
2) PAN-fine			0..255	00..FF	0..100	
3) Tilt-coarse			0..255	00..FF	0..100	
4) Tilt-fine			0..255	00..FF	0..100	
5) Color (fixed)	Colors adjustable via RGBW		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 - Malve (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	3200K		104..111	68..6F	41..43.5
	White	5600K		112..119	70..77	44..46.5
	White - CTB	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	
Random colors	slow - fast		224..255	E0..FF	89..100	
6) Red	Color mixing system - Red	0 - 100%	0..255	00..FF	0..100	
7) Green	Color mixing system - Green	0 - 100%	0..255	00..FF	0..100	
8) Blue	Color mixing system - Blue	0 - 100%	0..255	00..FF	0..100	
9) White	Color mixing system - White	0 - 100%	0..255	00..FF	0..100	
10) Shutter	Shutter closed		0..15	00..0F	0..5.5	
	Shutter pulse random	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 effect pause	5s - 0.1s		160..199	A0..C7	63..77
	Strobe effect slow - fast	1 Hz - 10 Hz		200..239	C8..EF	78..94
	Shutter open		240..255	F0..FF	95..100	
11) Dimmer	Dimmer	0 - 100%	0..255	0..FF	0..100	
12) CTO	No CTO		0..7	0..07	0..2.5	
	Continuous color temperature correction	Applicable for ALL colors	8..255	08..FF	3..100	
13) Special	Pattern Block 1 → channel 17		0..3	00..03	0..1	
	Change PWM frequency		100..200	64..C8	40..78	
	<b>RESET</b>		250..255	FA..FF	98..100	
14) Movement macros	<b>No macros</b>		0	00	0	
	<b>Movement</b>	<b>Size</b>	Use "Speed" to adjust			
	PAN	1	0°	01..01	01..01	0.5

Channel	Function	Time and Value	DMX	HEX	%
	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	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	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	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 PAN	32..63	20..3F	13..25
	PAN / TILT	size / phase see PAN	64..95	40..5F	26..37
	PAN / TILT (inverse)	size / phase see PAN	96..127	60..7F	38..50
	Circle	size / phase see PAN	128..159	80..9F	51..62
	Circle (inverse)	size / phase see PAN	160..191	A0..BF	63..75
	Lying eight	size / phase see PAN	192..223	C0..DF	76..87
	Random movement	size / phase see PAN	224..255	E0..FF	88..100
<b>15) Speed</b>	Pan/Tilt movement speed from controller		0..1	00..01	0..0.5
<b>Pan/Tilt</b>	Pan/Tilt, slow – fast Use this channel also for the speed of the movements (channel 14).		02..255	02..FF	1..100
<b>16) Zoom</b>	Wide - narrow (spot)		0...255	00...FF	0...100
<b>17) Pattern</b>	No pattern		0..2	00..02	0..1
	Pre-defined patterns		03..253	03..FD	2..99
	Activates direct access to LED Pattern		254..255	FE..FF	100
<b>18) Pattern Byte 1</b>	Direct access to Pattern of LED 1..7		0...255	00...FF	0...100

### Compress-Mode 14 DMX channels

Channel	Function	Time and Value	DMX	HEX	%
<b>1) PAN-coarse</b>			0..255	00..FF	0..100
<b>2) PAN-fine</b>			0..255	00..FF	0..100
<b>3) Tilt-coarse</b>			0..255	00..FF	0..100
<b>4) Tilt-fine</b>			0..255	00..FF	0..100
<b>5) Color (fixed)</b>	Colors adjustable via RGBW		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

Channel	Function	Time and Value	DMX	HEX	%
	Color 10 - Malve (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) White</b>	Color mixing system - White	0 - 100%	0..255	00..FF	0..100
<b>10) 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 effect pause	5s .. 1s	144..199	A0..C7	57..77
	Strobe effect, slow - fast	1 Hz .. 10 Hz	200..239	C8..EF	78..94
	Shutter open		240..249	F0..F9	95..97.5
	Shutter open		251..255	FB..FF	99..100
<b>11) Dimmer</b>	Dimmer	0 - 100%	0..255	0..FF	0..100
<b>12) Zoom</b>	Wide - narrow (spot)		0..255	00..FF	0..100
<b>13) Special</b>	Pattern Block 1 → channel 14		0..3	00..03	0..1
	Change PWM frequency		100..200	64..C8	40..78
	<b>RESET</b>		250..255	FA..FF	98..100
<b>14) Pattern</b>	No pattern		0..2	00..02	0..1
	Pre-defined patterns		03..253	03..FD	2..99

### High Resolution (Extended) -Mode 19 DMX Channels

Channel	Function	Time and Value	DMX	HEX	%
<b>1) PAN-coarse</b>			0..255	00..FF	0..100
<b>2) PAN-fine</b>			0..255	00..FF	0..100
<b>3) Tilt-coarse</b>			0..255	00..FF	0..100
<b>4) Tilt-fine</b>			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

Channel	Function	Time and Value	DMX	HEX	%
9) Blue-coarse	Color mixing system – Blue	0 - 100%	0..255	00..FF	0..100
10) Blue-fine	Color mixing system – Blue-Low		0..255	00..FF	0..100
11) White-coarse	Color mixing system – White	0 - 100%	0..255	00..FF	0..100
12) White-fine	Color mixing system – White-Low		0..255	00..FF	0..100
13) Shutter	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 effect pause	5s - 1s	144..199	A0..C7	57..77
	Strobe effect, slow - fast	1 Hz - 10 Hz	200..239	C8..EF	78..94
	Shutter open		240..249	F0..F9	95..97.5
	Shutter open		251..255	FB..FF	99..100
14) Dimmer-coarse	Dimmer	0 - 100%	0..255	0..FF	0..100
15) Dimmer-fine	Dimmer - Low		0..255	0..FF	0..100
16) Zoom	Spot - Flood		0..255	00..FF	0..100
17) Special	Pattern Block 1 → channel 18		0..3	00..03	0..1
	Change PWM frequency		100..200	64..C8	40..78
	<b>RESET</b>		250..255	FA..FF	98..100
18) Pattern	No pattern		0..2	00..02	0..1
	Pre-defined patterns		03..253	03..FD	2..99
	Activates direct access to LED Pattern		254..255	FE..FF	100
19) Pattern Byte 1	Direct access to Pattern of LED 1..7		0..255	00..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 **IMPRESSION X4S** will then start from that color and will execute the rainbow effect synchronously. Different **IMPRESSION X4S** 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).

#### **Locking and unlocking the Control Panel**

Please lock and unlock the control panel by pressing the menu keys **MODE & ENTER & UP** at the same time.

**Additional Display Indications**

As a default you'll find the following additional information in the first row of the LCD display:

Vxx/xx/xx/xx/x



