

# Instruction Manual

impression<sup>®</sup>  
X4L



from software version: v0.xx



— since 1994 —

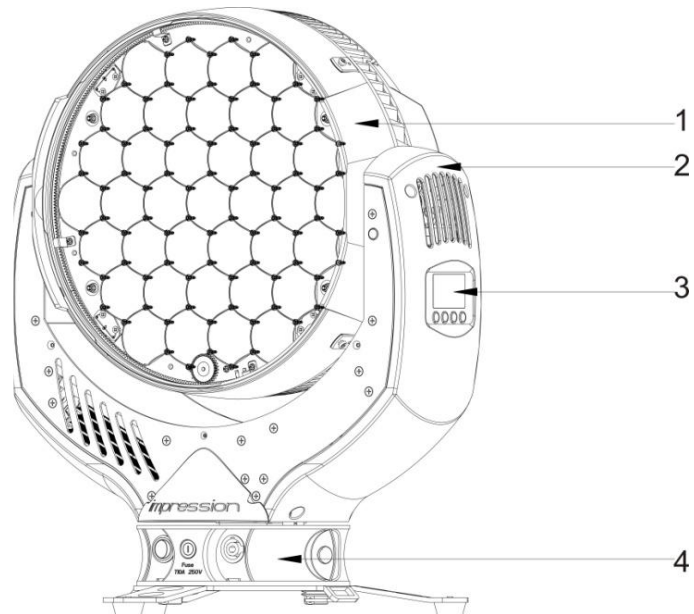
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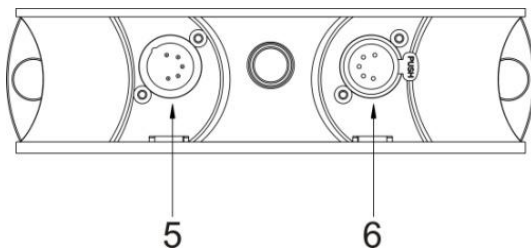
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# 1 Description of Device

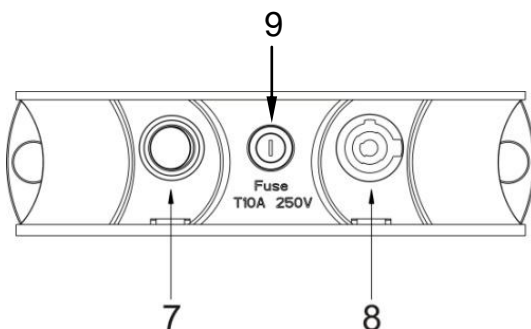
1. Moving head  
(actively and passively cooled)
2. Arm with various cooling vents
3. LCD-Display/Menu (data entry)
4. Base with various connectors and  
Camlock mounting system  
(see section 2.2 below)



## Base side view:



5. DMX Input (5 pin)
6. DMX Output (5 pin)



7. Power On/Off
8. Mains Input (powerCON)
9. Micro-fuse 5x20mm, T10A

## 1.1 Safety Instructions



The **IMPRESSION X4 L** is a High-Tech Product. To guarantee a smooth operation, it is necessary to respect the following rules.

The manufacturer of this device will not take responsibility for damages through any disregard of the information provided in this manual. Warranty claims also will be voided in the case that the fixture housing is opened.

1. Before powering on the fixture, make sure that the fixtures fans and air inlets are clean and not blocked.
2. Ensure that the fixture head can rotate unhindered throughout its complete range of pan and tilt movement. A safety distance of at least 0.5 m must be maintained between the fixture and any easily inflammable material (e.g. decoration material).
3. **Attention!** Don't touch the fixture during the operation. This can cause injuries and/or damages.
4. **The fixture doesn't contain any user serviceable parts. Opening the fixture will void all warranties.**
5. It is necessary to wait at least 15 minutes after disconnecting the mains power before handling the fixture.. Pay attention to possible hot parts of the fixture.  
**-- Danger of BURNING --**
6. **Never look directly into the beam of light or into one of the LEDs.**  
Never use optical apertures to observe the beam of light. **LED Class 2M.**  
You'll risk serious injury of your eyes and in particular of your retina.



**Attention:** LED Class 2M can cause injuries of your eyes even without optical instruments in front of them or within a distance of less than 0.5m and short exposure time.

**Hence: Avoid direct radiation into your eyes!**

7. To ensure safe operation, follow also the Installation guide described in the chapter below. Operating the **IMPRESSION X4 L** without suitable safety aids like Safety cables or clamps/hooks can increase the risk of an accident and must be avoided.
8. Repair, maintenance, and installation work shall be done by qualified or GLP certified staff only. You need to pay attention to the common rules of technology that are not explicitly mentioned in this manual.
9. Use only original GLP spare parts. Any structural modification of the system will terminate all warranty claims.
10. Please keep this instruction manual for future reference.

## 2 Preparation and Installation

### 2.1 Safety Information

The **IMPRESSION X4 L** fixture from GLP is fitted with a number of plano-convex lenses in a highly efficient collimator cluster. This type of lens can act as a strong magnifying glass.

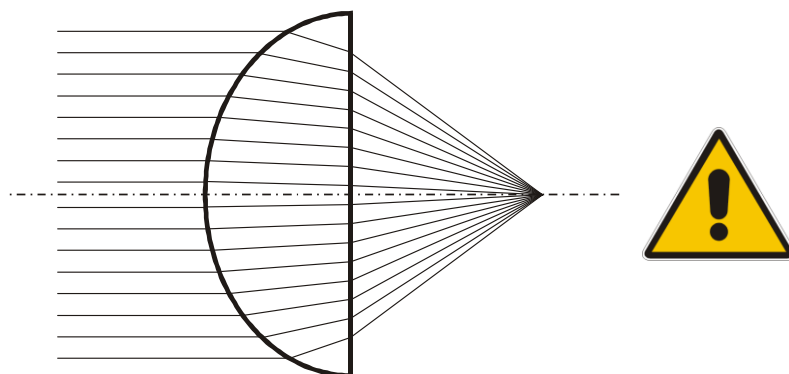
If the rays from a strong light source (such as the sun or another lighting fixture) are directed towards the front of any of these fixtures, then internal damage may occur. In a worst case scenario with a high power light source this can happen very quickly, damaging the fixture internally, potentially melting components or causing an internal fire within seconds.

In order to avoid these possible problems please adhere to the following requirements:

- Do not expose the front of a fixture to direct sunlight or any other strong light sources.
- For outdoor applications during daylight make sure that the front face of any fixture is either shielded or points away from the sun, even when fixtures are not in use.
- Do not modify the front glass or lenses of any fixture.

These requirements have to be followed regardless of whether a fixture is powered on or off as the magnifying effect is an optical effect and therefore independent from the (electrical) state of the fixture.

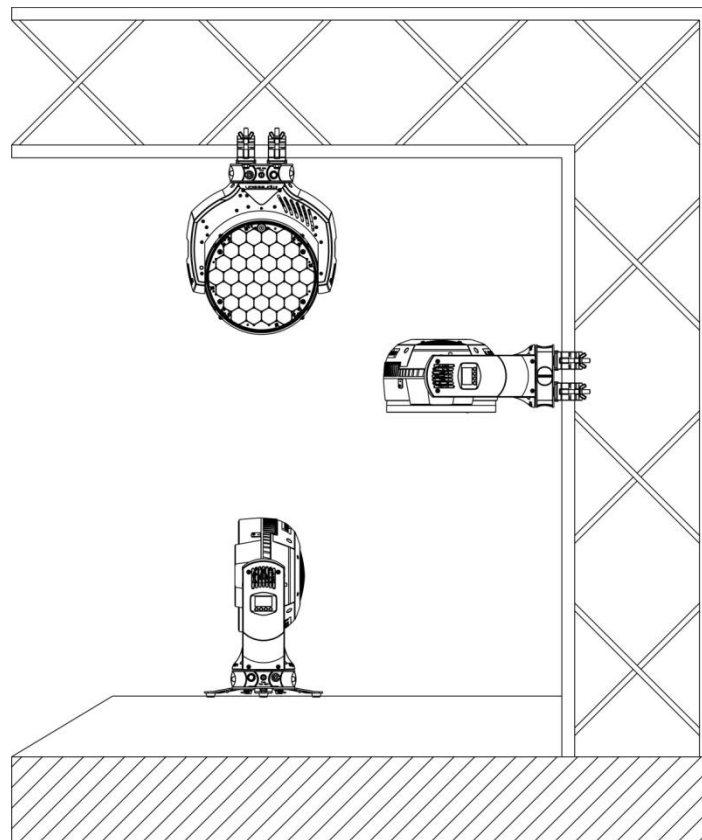
Especially when working with high powered **beam-lights**; extreme caution and observance of these safety instructions is mandatory.



Should you have any questions about the operation of your fixture then please contact your local GLP office, or their authorized distributor, a list of which can be found at [www.glp.de](http://www.glp.de).

## 2.2 Mounting

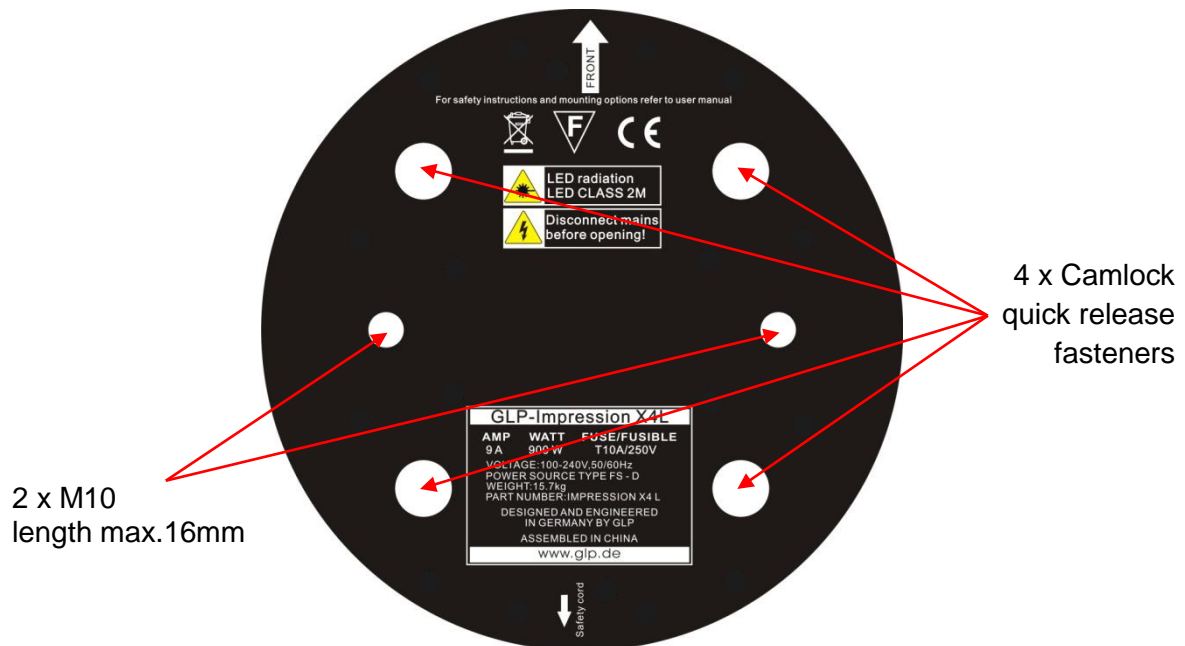
The **IMPRESSION X4 L** is fully operational whether it hangs or is mounted to the wall. It can also be operated while standing on the floor. Keep a safety distance of min. 0.5 m towards any easily inflammable materials (decoration etc.).



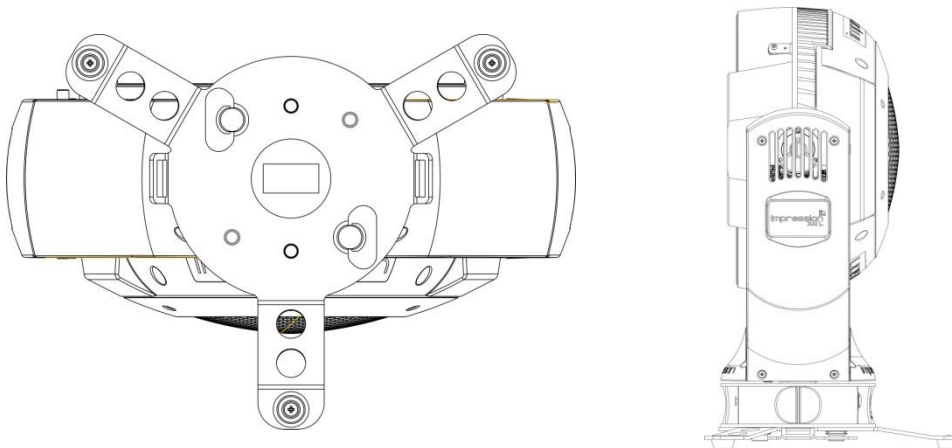
**Pay attention to the regulations of: BGV C1 (former VBG 70) and DIN VDE 0711-217.**

**The installation shall be done by qualified staff only.**

For the various mounting positions of the **IMPRESSION X4 L** (standing on the floor, sideways or hanging) different accessories kits are available. Through this a safe and firm installation is assured. You'll find dedicated connectors on the bottom side of the fixture which should be used. In addition the base is marked with a **FRONT** arrow allowing consistent orientation during installation.

**Base plate view:****2.2.1 Operating on the Floor (upright)**

To operate the **IMPRESSION X4 L** in an upright position, please use the dedicated tri-legged floor stand supplied with your fixture. It is fixed to the base of the fixture with fasteners called Camlock quick-release connectors. Insert the two fasteners and turn each 90° to lock them. Do the opposite to release them again. On both sides you'll find eyelets to pull through a fixing strap. This allows for additional bracing of the fixture.



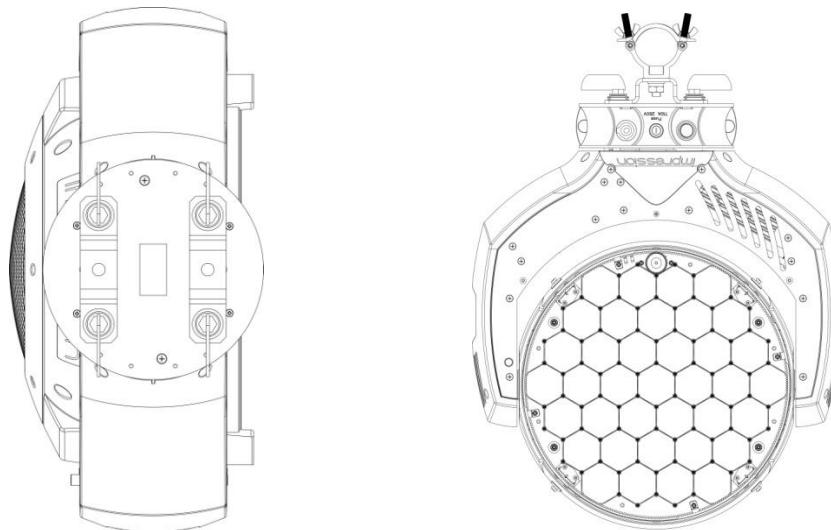


### 2.2.2 Mounting in hanging position (head down):

To operate the **IMPRESSION X4 L** in a hanging position two (2) omega brackets can be mounted directly to the bottom of the base using the four (4) Camlock connectors.

Alternatively two (2) half-couplers (clamps or hooks) can be mounted directly to the bottom side of the fixture using the two (2) M10x16 mm thread bolts.

**Attention:** Never use a longer bolt as this may damage the interior of the fixture.



## 2.3 Securing the Fixture

Regardless of the mounting method of the **IMPRESSION X4 L** you'll have to use a stipulated safety wire. Attach the safety wire through one of the two holes provided on the base of the fixture and connect it to the primary support structure. Pay attention to a safe and proper fastening. The safety cable must comply with EN 60598-2-17 Section 17.6.6 and be capable of bearing a static suspended load that is ten times the weight of the fixture and all installed accessories.



## **2.4 Connections**

### *2.4.1 Power Supply*

~100-240 Volt AC, 50-60 Hz, powerCON AC connector

Connected load 900 VA (W) <=> T10A (micro-fuse 5x20mm)

Please see printing on the case for the right electronic supply!

**Disconnect from the mains supply for changing the fuse and use only the above described micro-fuse type.**

### *2.4.2 DMX*

USITT DMX-512 Standard input/output in 5-pin connectors.

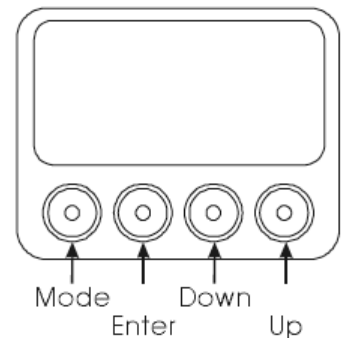
Pin 1 = [Ground] / Pin 2 = [-] / Pin 3 = [+] / Pin 4&5 N.C.

The DMX- Addressing starts at the DMX- Address [001].

### 3 The Menu Field

You'll find the control board on the side part of the arm. It allows you to make all necessary adjustments of the **IMPRESSION X4 L**.

With the Mode-key you get into the main menu. Afterwards you can navigate through the menu with the Up/Down-keys. Push the Enter-key to get in the next menu level or to confirm your settings. Make them and set functions ON/OFF with the Up/Down-keys. Confirm and save it with the Enter-key (the display shows OK). Push the Mode-key to cancel the entry and go back to the main menu.



To lock or unlock the keys of the menu field press **Mode + Enter + Up** simultaneously.

#### ← MODE - ENTER →

	Level1	Level 2	Level 3	Level 4	Remark
	DMX Start Address 001				Set the DMX start address
	Special				Advanced settings
	Set DMX Mode				Select the desired DMX Mode
← DOWN - UP →		Compressed Mode			Fixture works in "Compressed" mode → see also section 4 below
		Normal Mode			Fixture works in "Normal" mode → see also section 4 below
		Extended Mode			Fixture works in "Extended" mode → see also section 4 below
		Single Pixel Mode			Fixture works in "Single Pixel" mode → see also section 4 below
	Position feedback				Switch automatic position feedback ON/OFF
	Reverse Tilt				Invert Tilt movements: ON/OFF
	Reverse Pan				Invert Pan movements: ON/OFF
	Reset				RESET and new calibration for all functions

## 4 DMX Chanel Selection (DMX Protocol)

### 4.1 Normal Mode (norm) 29 DMX channels:

Channel	Function	Time and Value	DMX
<b>1 Pan - High</b>	Pan coarse	0° - 660°	0..255
<b>2 Pan - Low</b>	Pan fine		0..255
<b>3 Tilt - High</b>	Tilt coarse	0° - 250°	0..255
<b>4 Tilt - Low</b>	Tilt fine		0..255
<b>5 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 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>7 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>8 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>9 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		0..7
	Continuous color temperature correction 2,500k – 10,000k	<i>Applicable for ALL colors</i>	8..255
<b>13 Special</b>	Pattern Block 1		0..3
	Pattern Block 2		4..7
	Pattern Block 3		8..11
	Pattern Block 4		12..15
	Pattern Block 5		16..19
	Pattern Block 6		20..23
	Pattern Block 7		24..27
	Pattern Block 8		28..31
	Pattern Block 9		32..35
	Pattern Block 10		26..39
	Switch Pattern to Animation		80..83
	Set Zoom normal	> 1 sec	216..219
	Set Zoom inverted	> 1 sec	220..223
	RESET	> 1 sec	250..255
<b>14 Movement</b>	No macros		0..4
<b>Macros</b>	<b>Movement</b>	<b>Speed</b>	<b>Phase</b>
			<i>Use channel 15 to adjust</i>
	Pan	1	0°
	Pan	1	90°
	Pan	1	180°
	Pan	1	270°
	Pan	2	0°
	Pan	2	90°
	Pan	2	180°
	Pan	2	270°
	Pan	3	0°
	Pan	3	90°
	Pan	3	180°
	Pan	3	270°
	Pan	4	0°
	Pan	4	90°
	Pan	4	180°
	Pan	4	270°
	Tilt	size / phase see Pan	
	Pan / Tilt	size / phase see Pan	
	Pan / Tilt (inverse)	size / phase see Pan	
	Circle	size / phase see Pan	

	Circle (inverse)	size / phase see Pan	160..191
	Lying eight	size / phase see Pan	192..223
	Random movement	size / phase see Pan	224..255
<b>15 Pan / Tilt Speed</b>	Pan/Tilt movement speed from controller		0..1
	Pan/Tilt, slow – fast		2..255
	<i>Use this channel for the speed of the macros on channel 14</i>		
<b>16 Zoom</b>	Wide (flood) - narrow (spot)	50° - 7°	0..255
<b>17 Pattern</b>	No Pattern		0
	255 pre-defined <b>patterns</b>		1..255
	255 pre-defined <b>animations</b> (only if Channel 13 is set to 80..83)		1..255
<b>18 Intensity Front</b>	Intensity foreground layer	0 - 100%	0..255
<b>19 Intensity Back</b>	Intensity background layer <sup>4)</sup>	0 - 100%	0..255
<b>20 Back Red</b>	Color mixing system - Background Red <sup>4)</sup>	0 - 100%	0..255
<b>21 Back Blue</b>	Color mixing system - Background Green <sup>4)</sup>	0 - 100%	0..255
<b>22 Back Green</b>	Color mixing system - Background Blue <sup>4)</sup>	0 - 100%	0..255
<b>23 Back White</b>	Color mixing system - Background White <sup>4)</sup>	0 - 100%	0..255
<b>24 A - Phase</b>	Animation starting point		0..255
<b>25 A - Speed</b>	Animation speed (starting from point set in Channel 24)		1..255
<b>26 Crossfade</b>	0..2 seconds transistion time		0..255
<b>27 Pattern Orientation</b>	Pan Normal / Tilt Normal	0°	0..1
	Pan Normal / Tilt Normal	60°	2..3
	Pan Normal / Tilt Normal	120°	4..5
	Pan Normal / Tilt Normal	180°	6..7
	Pan Normal / Tilt Normal	240°	8..9
	Pan Normal / Tilt Normal	300°	10..11
	Pan Normal / Tilt Inverted	0°	16..17
	Pan Normal / Tilt Inverted	60°	18..19
	Pan Normal / Tilt Inverted	120°	20..21
	Pan Normal / Tilt Inverted	180°	22..23
	Pan Normal / Tilt Inverted	240°	24..25
	Pan Normal / Tilt Inverted	300°	26..27
	Pan inverted / Tilt normal	0°	32..33
	Pan inverted / Tilt normal	60°	34..35
	Pan inverted / Tilt normal	120°	36..37
	Pan inverted / Tilt normal	180°	38..39
	Pan inverted / Tilt normal	240°	40..41
	Pan inverted / Tilt normal	300°	42..43
	Pan inverted / Tilt inverted	0°	48..49
	Pan inverted / Tilt inverted	60°	50..51

	Pan inverted / Tilt inverted	120°	52..53
	Pan inverted / Tilt inverted	180°	54..55
	Pan inverted / Tilt inverted	240°	56..57
	Pan inverted / Tilt inverted	300°	58..59
<b>28 Pattern Effect</b>	No effect		0..1
	crossfade		02..15
	random flash white	slow – fast	16..31
	random color	slow – fast	32..47
	random color background only	slow – fast	48..63
<b>29 Beam Shaper (optional)</b>	Beam Shaper position	0° - 540°	0..255

## 4.2 Compressed Mode (comp) 21 DMX Channels:

[illegible]



12 CTO	No CTO		0..7
	Continuous color temperature correction 2,500k – 10,000k	<i>Applicable for ALL colors</i>	8..255
13 Special	Pattern Block 1		0..3
	Pattern Block 2		4..7
	Pattern Block 3		8..11
	Pattern Block 4		12..15
	Pattern Block 5		16..19
	Pattern Block 6		20..23
	Pattern Block 7		24..27
	Pattern Block 8		28..31
	Pattern Block 9		32..35
	Pattern Block 10		26..39
	Switch Pattern to Animation		80..83
	Set Zoom normal	> 1 sec	216..219
	Set Zoom inverted	> 1 sec	220..223
	RESET	> 1 sec	250..255
14 Zoom	Wide (flood) - narrow (spot)	50° - 7°	0..255
15 Pattern	No Pattern		0
	255 pre-defined <b>patterns</b>		1..255
	255 pre-defined <b>animations</b> ( <i>only if Channel 13 is set to 80..83</i> )		1..255
16 A - Phase	Animation starting point		0..255
17 A - Speed	Animation speed ( <i>starting from point set in Channel 24</i> )		1..255
18 Crossfade	0..2 seconds transistion time		0..255
19 Pattern Orientation	Pan Normal / Tilt Normal	0°	0..1
	Pan Normal / Tilt Normal	60°	2..3
	Pan Normal / Tilt Normal	120°	4..5
	Pan Normal / Tilt Normal	180°	6..7
	Pan Normal / Tilt Normal	240°	8..9
	Pan Normal / Tilt Normal	300°	10..11
	Pan Normal / Tilt Inverted	0°	16..17
	Pan Normal / Tilt Inverted	60°	18..19
	Pan Normal / Tilt Inverted	120°	20..21
	Pan Normal / Tilt Inverted	180°	22..23
	Pan Normal / Tilt Inverted	240°	24..25
	Pan Normal / Tilt Inverted	300°	26..27
	Pan inverted / Tilt normal	0°	32..33
	Pan inverted / Tilt normal	60°	34..35
	Pan inverted / Tilt normal	120°	36..37
	Pan inverted / Tilt normal	180°	38..39
	Pan inverted / Tilt normal	240°	40..41
	Pan inverted / Tilt normal	300°	42..43
	Pan inverted / Tilt inverted	0°	48..49
	Pan inverted / Tilt inverted	60°	50..51
	Pan inverted / Tilt inverted	120°	52..53

	Pan inverted / Tilt inverted	180°	54..55
	Pan inverted / Tilt inverted	240°	56..57
	Pan inverted / Tilt inverted	300°	58..59
<b>20 Pattern Effect</b>	No effect		0..1
	crossfade		02..15
	random flash white	slow – fast	16..31
	random color	slow – fast	32..47
	random color background only	slow – fast	48..63
<b>21 Beam Shaper</b> (optional)	Beam Shaper position	0° - 540°	0..255

### 4.3 Extended Mode (high) 31 DMX Channels:

Channel	Function	Time and Value	DMX
<b>1 Pan - High</b>	Pan coarse	0° - 660°	0..255
<b>2 Pan - Low</b>	Pan fine		0..255
<b>3 Tilt - High</b>	Tilt coarse	0° - 250°	0..255
<b>4 Tilt - Low</b>	Tilt fine		0..255
<b>5 Red - High</b>	Color mixing system - Red - high	0 - 100%	0..255
<b>6 Red - Low</b>	Color mixing system - Red - low	0 - 100%	0..255
<b>7 Green - High</b>	Color mixing system - Green - high	0 - 100%	0..255
<b>8 Green - Low</b>	Color mixing system - Green - low	0 - 100%	0..255
<b>9 Blue - High</b>	Color mixing system - Blue - high	0 - 100%	0..255
<b>10 Blue - Low</b>	Color mixing system - Blue - low	0 - 100%	0..255
<b>11 White - High</b>	Color mixing system - White - high	0 - 100%	0..255
<b>12 White - Low</b>	Color mixing system - White - low	0 - 100%	0..255
<b>13 Special</b>	Pattern Block 1		0..3
	Pattern Block 2		4..7
	Pattern Block 3		8..11
	Pattern Block 4		12..15
	Pattern Block 5		16..19
	Pattern Block 6		20..23
	Pattern Block 7		24..27
	Pattern Block 8		28..31
	Pattern Block 9		32..35
	Pattern Block 10		26..39
	Switch Pattern to Animation		80..83
	Set Zoom normal	> 1 sec	216..219
<b>14 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
<b>15 Intensity - High</b>	Strobe random	5s - 0.1s	144..199
	Strobe effect slow - fast	1 Hz - 10 Hz	200..239
	Shutter open		240..255
<b>16 Intensity - Low</b>	Intensity - coarse	0 - 100%	0..255
<b>17 CTO</b>	Intensity - fine	0 - 100%	0..255
<b>18 Zoom</b>	No CTO		0..7
	Continuous color temperature correction 2,500k – 10,000k	<i>Applicable for ALL colors</i>	8..255
<b>18 Zoom</b>	Wide (flood) - narrow (spot)	50° - 7°	0..255

<b>19 Pattern</b>	No Pattern		0
	255 pre-defined <b>patterns</b>		1..255
	255 pre-defined <b>animations</b> ( <i>only if Channel 13 is set to 80..83</i> )		1..255
<b>20 Intensity Front</b>	Intensity foreground layer	0 - 100%	0..255
<b>21 Intensity Back</b>	Intensity background layer <sup>4)</sup>	0 - 100%	0..255
<b>22 Back Red</b>	Color mixing system - Background Red <sup>4)</sup>	0 - 100%	0..255
<b>23 Back Blue</b>	Color mixing system - Background Green <sup>4)</sup>	0 - 100%	0..255
<b>24 Back Green</b>	Color mixing system - Background Blue <sup>4)</sup>	0 - 100%	0..255
<b>25 Back White</b>	Color mixing system - Background White <sup>4)</sup>	0 - 100%	0..255
<b>26 A - Phase</b>	Animation starting point		0..255
<b>27 A - Speed</b>	Animation speed ( <i>starting from point set in Channel 24</i> )		1..255
<b>28 Crossfade</b>	0..2 seconds transistion time		0..255
<b>29 Pattern Orientation</b>	Pan Normal / Tilt Normal	0°	0..1
	Pan Normal / Tilt Normal	60°	2..3
	Pan Normal / Tilt Normal	120°	4..5
	Pan Normal / Tilt Normal	180°	6..7
	Pan Normal / Tilt Normal	240°	8..9
	Pan Normal / Tilt Normal	300°	10..11
	Pan Normal / Tilt Inverted	0°	16..17
	Pan Normal / Tilt Inverted	60°	18..19
	Pan Normal / Tilt Inverted	120°	20..21
	Pan Normal / Tilt Inverted	180°	22..23
	Pan Normal / Tilt Inverted	240°	24..25
	Pan Normal / Tilt Inverted	300°	26..27
	Pan inverted / Tilt normal	0°	32..33
	Pan inverted / Tilt normal	60°	34..35
	Pan inverted / Tilt normal	120°	36..37
	Pan inverted / Tilt normal	180°	38..39
	Pan inverted / Tilt normal	240°	40..41
	Pan inverted / Tilt normal	300°	42..43
	Pan inverted / Tilt inverted	0°	48..49
	Pan inverted / Tilt inverted	60°	50..51
	Pan inverted / Tilt inverted	120°	52..53
	Pan inverted / Tilt inverted	180°	54..55
	Pan inverted / Tilt inverted	240°	56..57
	Pan inverted / Tilt inverted	300°	58..59
<b>30 Pattern Effect</b>	No effect		0..1
	crossfade		02..15
	random flash white	slow – fast	16..31
	random color	slow – fast	32..47
	random color background only	slow – fast	48..63
<b>31 Beam Shaper (optional)</b>	Beam Shaper position	0° - 540°	0..255

#### 4.4 Single Pixel Mode (spix) 169 DMX Channels:

Channel	Function	Time and Value	DMX
<b>1 Pan - High</b>	Pan coarse	0° - 660°	0..255
<b>2 Pan - Low</b>	Pan fine		0..255
<b>3 Tilt - High</b>	Tilt coarse	0° - 260°	0..255
<b>4 Tilt - Low</b>	Tilt fine		0..255
<b>5 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 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>7 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>8 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>9 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

12 CTO	No CTO		0..7
	Continuous color temperature correction 2,500k – 10,000k	<i>Applicable for ALL colors</i>	8..255
13 Special	Pattern Block 1		0..3
	Pattern Block 2		4..7
	Pattern Block 3		8..11
	Pattern Block 4		12..15
	Pattern Block 5		16..19
	Pattern Block 6		20..23
	Pattern Block 7		24..27
	Pattern Block 8		28..31
	Pattern Block 9		32..35
	Pattern Block 10		26..39
	Switch Pattern to Animation		80..83
	Set Zoom normal	> 1 sec	216..219
	Set Zoom inverted	> 1 sec	220..223
	RESET	> 1 sec	250..255
14 Zoom	Wide (flood) - narrow (spot)	50° - 7°	0..255
15 Pattern	No Pattern		0
	254 pre-defined <b>patterns</b>		1..254
	254 pre-defined <b>animations</b> (only if Channel 13 is set to 80.83)		1..254
	Single Pixel enabled (use channel 22-169 to set RGBW)		255
16 A - Phase	Animation starting point		0..255
17 A - Speed	Animation speed (starting from point set in Channel 24)		1..255
18 Crossfade	0..2 seconds transistion time		0..255
19 Pattern Orientation	Pan Normal / Tilt Normal	0°	0..1
	Pan Normal / Tilt Normal	60°	2..3
	Pan Normal / Tilt Normal	120°	4..5
	Pan Normal / Tilt Normal	180°	6..7
	Pan Normal / Tilt Normal	240°	8..9
	Pan Normal / Tilt Normal	300°	10..11
	Pan Normal / Tilt Inverted	0°	16..17
	Pan Normal / Tilt Inverted	60°	18..19
	Pan Normal / Tilt Inverted	120°	20..21
	Pan Normal / Tilt Inverted	180°	22..23
	Pan Normal / Tilt Inverted	240°	24..25
	Pan Normal / Tilt Inverted	300°	26..27
	Pan inverted / Tilt normal	0°	32..33
	Pan inverted / Tilt normal	60°	34..35
	Pan inverted / Tilt normal	120°	36..37

	Pan inverted / Tilt normal	180°	38..39
	Pan inverted / Tilt normal	240°	40..41
	Pan inverted / Tilt normal	300°	42..43
	Pan inverted / Tilt inverted	0°	48..49
	Pan inverted / Tilt inverted	60°	50..51
	Pan inverted / Tilt inverted	120°	52..53
	Pan inverted / Tilt inverted	180°	54..55
	Pan inverted / Tilt inverted	240°	56..57
	Pan inverted / Tilt inverted	300°	58..59
<b>20 Pattern Effect</b>	No effect		0..1
	crossfade		02..15
	random flash white	slow – fast	16..31
	random color	slow – fast	32..47
	random color background only	slow – fast	48..63
<b>21 Beam Shaper</b> (optional)	Beam Shaper position	0° - 540°	0..255
<b>22 Pixel 1 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>23 Pixel 1 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>24 Pixel 1 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>25 Pixel 1 White</b>	Color mixing system - White	0 - 100%	0..255
<b>26 Pixel 2 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>27 Pixel 2 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>28 Pixel 2 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>29 Pixel 2 White</b>	Color mixing system - White	0 - 100%	0..255
<b>30 Pixel 3 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>31 Pixel 3 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>32 Pixel 3 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>33 Pixel 3 White</b>	Color mixing system - White	0 - 100%	0..255
<b>34 Pixel 4 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>35 Pixel 4 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>36 Pixel 4 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>37 Pixel 4 White</b>	Color mixing system - White	0 - 100%	0..255
<b>38 Pixel 5 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>39 Pixel 5 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>40 Pixel 5 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>41 Pixel 5 White</b>	Color mixing system - White	0 - 100%	0..255
<b>42 Pixel 6 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>43 Pixel 6 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>44 Pixel 6 Blue</b>	Color mixing system - Blue	0 - 100%	0..255



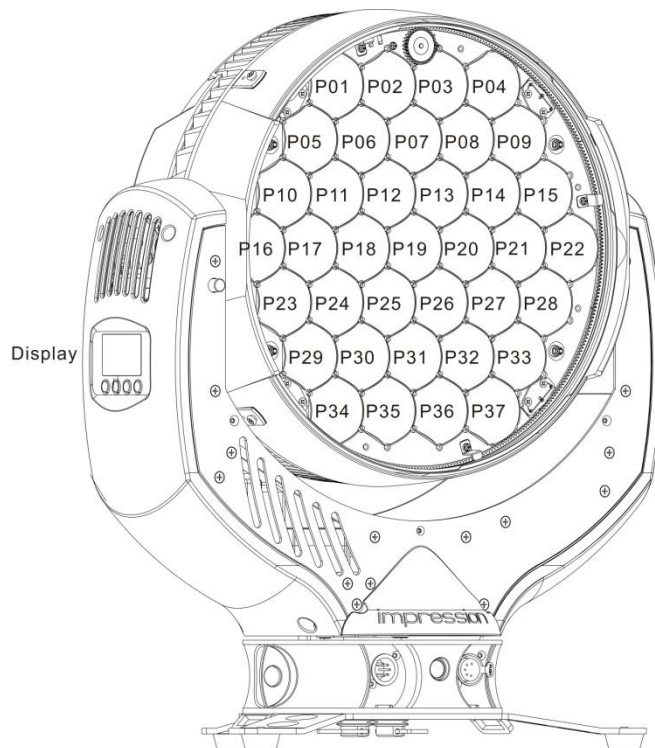
<b>45 Pixel 6 White</b>	Color mixing system - White	0 - 100%	0..255
<b>46 Pixel 7 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>47 Pixel 7 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>48 Pixel 7 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>49 Pixel 7 White</b>	Color mixing system - White	0 - 100%	0..255
<b>50 Pixel 8 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>51 Pixel 8 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>52 Pixel 8 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>53 Pixel 8 White</b>	Color mixing system - White	0 - 100%	0..255
<b>54 Pixel 9 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>55 Pixel 9 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>56 Pixel 9 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>57 Pixel 9 White</b>	Color mixing system - White	0 - 100%	0..255
<b>58 Pixel 10 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>59 Pixel 10 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>60 Pixel 10 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>61 Pixel 10 White</b>	Color mixing system - White	0 - 100%	0..255
<b>62 Pixel 11 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>63 Pixel 11 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>64 Pixel 11 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>65 Pixel 11 White</b>	Color mixing system - White	0 - 100%	0..255
<b>66 Pixel 12 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>67 Pixel 12 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>68 Pixel 12 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>69 Pixel 12 White</b>	Color mixing system - White	0 - 100%	0..255
<b>70 Pixel 13 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>71 Pixel 13 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>72 Pixel 13 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>73 Pixel 13 White</b>	Color mixing system - White	0 - 100%	0..255
<b>74 Pixel 14 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>75 Pixel 14 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>76 Pixel 14 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>77 Pixel 14 White</b>	Color mixing system - White	0 - 100%	0..255
<b>78 Pixel 15 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>79 Pixel 15 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>80 Pixel 15 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>81 Pixel 15 White</b>	Color mixing system - White	0 - 100%	0..255
<b>82 Pixel 16 Red</b>	Color mixing system - Red	0 - 100%	0..255

<b>83 Pixel 16 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>84 Pixel 16 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>85 Pixel 16 White</b>	Color mixing system - White	0 - 100%	0..255
<b>86 Pixel 17 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>87 Pixel 17 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>88 Pixel 17 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>89 Pixel 17 White</b>	Color mixing system - White	0 - 100%	0..255
<b>90 Pixel 18 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>91 Pixel 18 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>92 Pixel 18 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>93 Pixel 18 White</b>	Color mixing system - White	0 - 100%	0..255
<b>94 Pixel 19 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>95 Pixel 19 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>96 Pixel 19 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>97 Pixel 19 White</b>	Color mixing system - White	0 - 100%	0..255
<b>98 Pixel 20 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>99 Pixel 20 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>100 Pixel 20 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>101 Pixel 20 White</b>	Color mixing system - White	0 - 100%	0..255
<b>102 Pixel 21 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>103 Pixel 21 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>104 Pixel 21 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>105 Pixel 21 White</b>	Color mixing system - White	0 - 100%	0..255
<b>106 Pixel 22 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>107 Pixel 22 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>108 Pixel 22 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>109 Pixel 22 White</b>	Color mixing system - White	0 - 100%	0..255
<b>110 Pixel 23 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>111 Pixel 23 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>112 Pixel 23 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>113 Pixel 23 White</b>	Color mixing system - White	0 - 100%	0..255
<b>114 Pixel 24 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>115 Pixel 24 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>116 Pixel 24 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>117 Pixel 24 White</b>	Color mixing system - White	0 - 100%	0..255
<b>118 Pixel 25 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>119 Pixel 25 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>120 Pixel 25 Blue</b>	Color mixing system - Blue	0 - 100%	0..255

<b>121 Pixel 25 White</b>	Color mixing system - White	0 - 100%	0..255
<b>122 Pixel 26 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>123 Pixel 26 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>124 Pixel 26 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>125 Pixel 26 White</b>	Color mixing system - White	0 - 100%	0..255
<b>126 Pixel 27 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>127 Pixel 27 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>128 Pixel 27 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>129 Pixel 27 White</b>	Color mixing system - White	0 - 100%	0..255
<b>130 Pixel 28 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>131 Pixel 28 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>132 Pixel 28 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>133 Pixel 28 White</b>	Color mixing system - White	0 - 100%	0..255
<b>134 Pixel 29 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>135 Pixel 29 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>136 Pixel 29 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>137 Pixel 29 White</b>	Color mixing system - White	0 - 100%	0..255
<b>138 Pixel 30 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>139 Pixel 30 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>140 Pixel 30 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>141 Pixel 30 White</b>	Color mixing system - White	0 - 100%	0..255
<b>142 Pixel 31 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>143 Pixel 31 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>144 Pixel 31 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>145 Pixel 31 White</b>	Color mixing system - White	0 - 100%	0..255
<b>146 Pixel 32 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>147 Pixel 32 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>148 Pixel 32 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>149 Pixel 32 White</b>	Color mixing system - White	0 - 100%	0..255
<b>150 Pixel 33 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>151 Pixel 33 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>152 Pixel 33 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>153 Pixel 33 White</b>	Color mixing system - White	0 - 100%	0..255
<b>154 Pixel 34 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>155 Pixel 34 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>156 Pixel 34 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>157 Pixel 34 White</b>	Color mixing system - White	0 - 100%	0..255
<b>158 Pixel 35 Red</b>	Color mixing system - Red	0 - 100%	0..255

<b>159 Pixel 35 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>160 Pixel 35 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>161 Pixel 35 White</b>	Color mixing system - White	0 - 100%	0..255
<b>162 Pixel 36 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>163 Pixel 36 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>164 Pixel 36 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>165 Pixel 36 White</b>	Color mixing system - White	0 - 100%	0..255
<b>166 Pixel 37 Red</b>	Color mixing system - Red	0 - 100%	0..255
<b>167 Pixel 37 Green</b>	Color mixing system - Green	0 - 100%	0..255
<b>168 Pixel 37 Blue</b>	Color mixing system - Blue	0 - 100%	0..255
<b>169 Pixel 37 White</b>	Color mixing system - White	0 - 100%	0..255

The Pixel are numbered left to right / top to bottom 1 – 37 as shown below.  
Tilt DMX Value = 0 & “Display” 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 L** will then start from that color and will execute the rainbow effect synchronously. Different **IMPRESSION X4 L** 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> The background layer is only visible on the unlit pixel of the foreground layer if a pattern is applied.

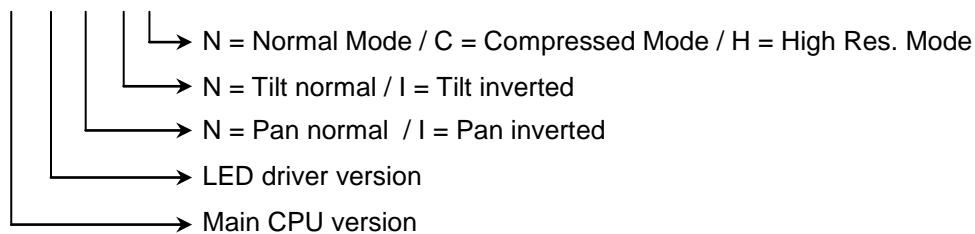
### **Locking and unlocking the Control Panel**

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



## 5 Accessories

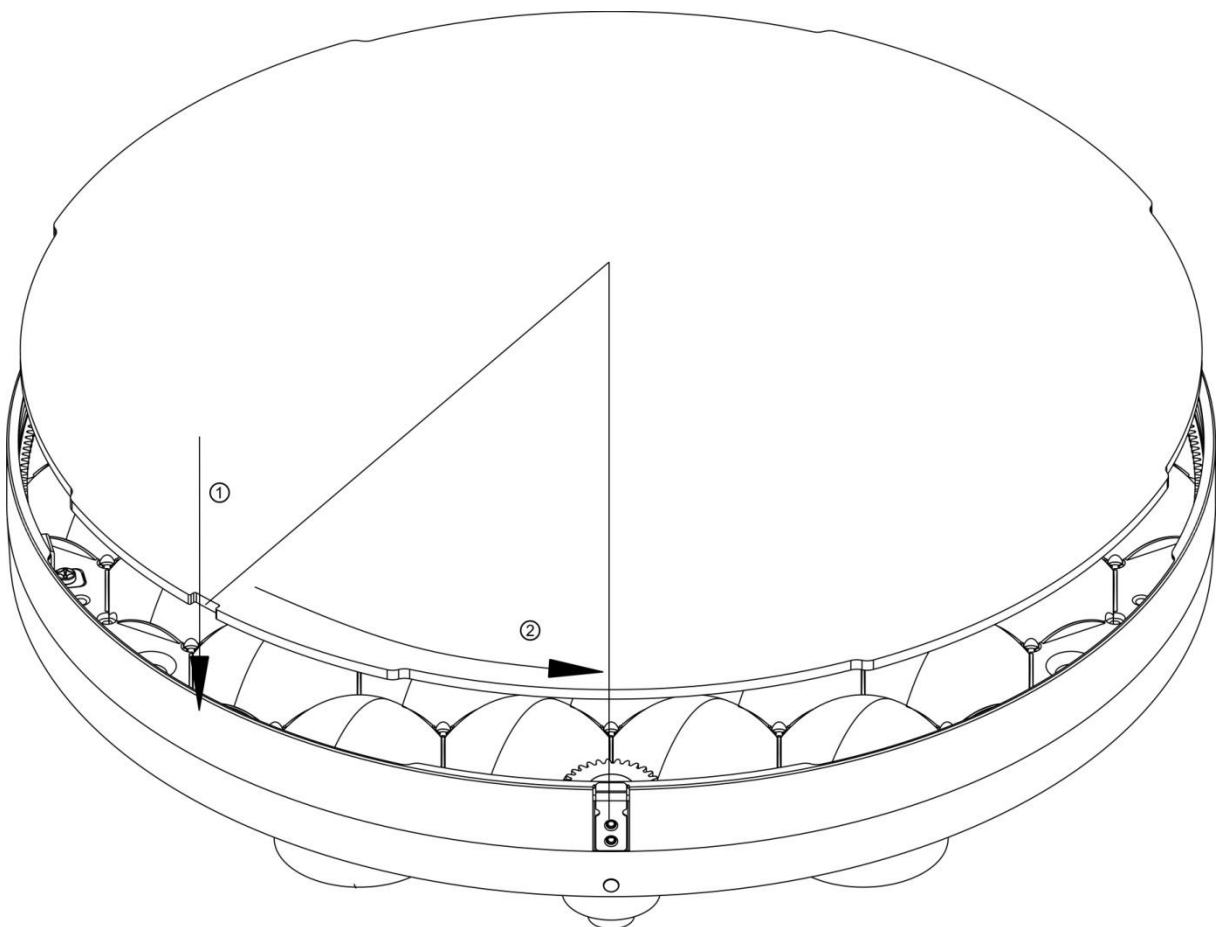
### 5.1 Optional Beam-Shaper:

The **IMPRESSION X4 L** can be equipped with an optional beam-shaper.

Please contact your local GLP dealer for further information about this accessory part.

To install the beam-shaper lens please locate the little cutout (see 1 below) and twist the lens carefully until the latch (see 2 below) locks in.

To remove the lens again simply pull the latch and twist the beam-shaper lens until you can lift it out of the fixture.



## 6 Maintaining and Cleaning

The **IMPRESSION X4 L** is a fixture of very low maintenance. It is only necessary to clean the air inlets and outlets as well as the optical LED lenses from time to time. For safe operation it is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on, or within the fixture. Otherwise the fixture's light-output will be significantly reduced or damages can occur. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to operate reliably throughout its life.

**A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!**

### 6.1 Safety regulations

- **Pull out the mains power plug!**
- Wait min. 15 minutes after disconnecting power to allow the fixture to cool down.

### 6.2 Maintenance and Interval (rule-of-thumb)

The contamination of the fixture depends on the environment details. Hence no general guidelines can be given. The intervals given below are only suggestions from our experience.

Position	Interval	In this way
LED reflector and optical system	weekly	soft brush /lint-free cloth
Fan and air channel	monthly	vacuum cleaner, airbrush, etc.

#### **Attention:**

- **Never let optical parts come into contact with oil or fat.**
- **Before running the fixture wait until all parts are dry.**
- **Never touch lenses with bare fingers.**



## 7 Technical Specifications:

<b>Power supply</b>	
<b>Power consumption</b>	900 VA (Watt)
<b>Power Input</b>	Auto sensing 100-240 V AC, 50-60 Hz
<b>Fuse protection</b>	Micro-fuse 5x20 mm, T10A
<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)
<b>Lighting System - Additive Color mixing</b>	
<b>LED Type</b>	37 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	
Beam-Shaper – positionable and rotateable (optional)	
<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 high speed zoom	
<b>Optical Patterns</b>	
Several hundred pre-defined beam patterns with direct access and manipulation.	
Free control of every pixel, color and intensity	
<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>Pan / Tilt (8/16 Bit)</b>	
<b>Pan- movement</b>	660° in min. 2 seconds (Position Feedback)
<b>Tilt- movement</b>	250° in min. 1 second (Position Feedback)
<b>Weights and Measures</b>	
<b>Width</b>	430 mm / 16.9"
<b>Length</b>	185 mm / 7.3"
<b>Height (head vertical)</b>	530 mm / 20.9" (incl. standing foot/tripod)
<b>Weight (net)</b>	31.0 kg / 36.4 lbs

## 8 Dimensions

