Instruction Manual

impression&
rgb 120-RZ

from software version 1.24/30
(Instruction version 1.5)

GLP
GERMAN LIGHT
PRODUCTS
— since 1994 —

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Notes:

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base side 1

5

6
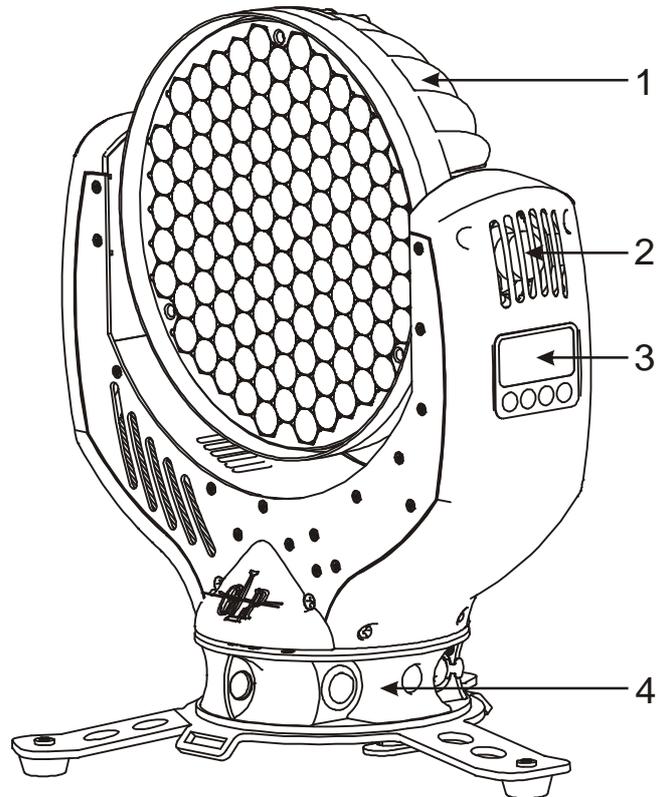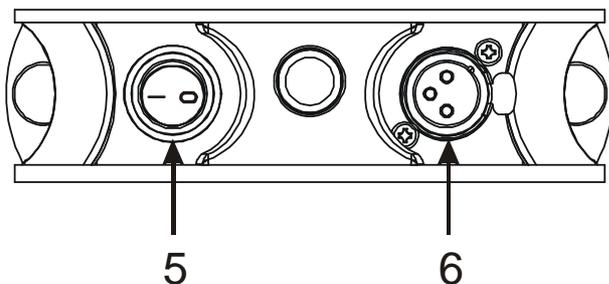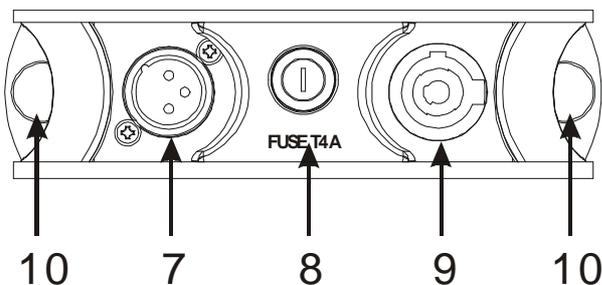
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base side 2

FUSE T4A

10   7   8   9   10

1.1   Safety Instructions

> The **IMPRESSION** is an advanced technology product. To guarantee smooth operation, it is necessary to follow the following instructions.
>
> The manufacturer of this device will not take responsibility of damages through any disregard of the information in this user manual. Warranty claims will also be cancelled in the event of the system casing being opened.

1. Make sure that before powering up the fixture, the fans and air inlets are clean and not blocked by anything.

2. Before powering up the fixture, ensure that the moving head part of the fixture can rotate unhindered through its full range of movement.

3. A safety distance of at least 0.5 m to any easily flammable material (e.g. decoration material) must be adhered to.

4. **Attention!** Don't touch the device during operation. Parts of the fixture can become hot and can cause injuries and / or damages.

5. The system doesn't contain any user serviceable parts. Opening the fixture will void the manufacturers warranty.

6. Danger of burning. Wait at least 15 minutes after disconnecting the AC power before changing the optical carrier on the fixture. Pay attention to possible hot parts of the system.

7. **Never look directly into the beam of light or one of the LEDs.** Never use optical apertures with a distance less than 0.5 m to observe the beam of light. **LED Class 2M.** Not following these precautions can result in serious injury to your eyes and in particular, 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.
>
> **Avoid direct radiation to your eyes!**

8. To ensure proper operation, you must also follow the installation guide described in chapter 2 of this manual. Operating the **IMPRESSION** without suitable mounting devices can increase the risk of an accident.

9. The **IMPRESSION** features a unique small and lightweight design with no specific carrying handles. Care needs to be shown when handling the fixture to ensure that no unnecessary damage should occur. Fragile areas include the LCD display and cover on one side arm and the front bezel.

Pressure in these areas could result in damages which will not be covered by the standard warranty.

10. Repair-, maintenance- and installation work should only be performed by qualified or GLP certified staff. You need to pay attention to the common rules of technology that are not explicit mentioned in this manual.

11. Use only original spare parts. Any structural modification on the system will terminate all warranty claims.

12. Please keep this instruction manual for future reference.

2   Preparation and Installation

2.1   Mounting

The **IMPRESSION** is fully operational whether it hangs or is mounted to a wall. It can also be operated while standing on the floor. Keep a safety distance of 0.5 m from any easily inflammable materials (decoration etc.).
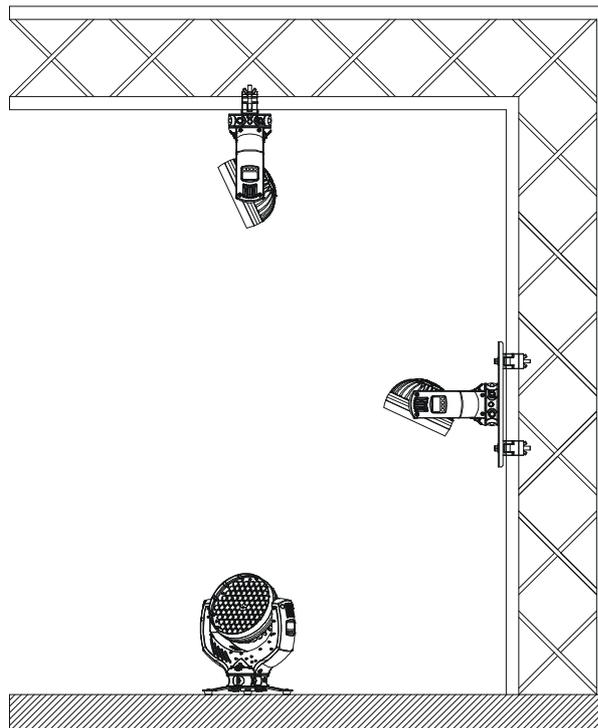
Pay attention to the regulations of: BGV C1 (former VBG 70) and DIN VDE 0711-217.
The installation shall be done by qualified personal only.

For the various mounting positions of the **IMPRESSION** (standing on the floor, sideways or hanging) different accessories kits are available. Using any required kits, along with the standard mounting connectors on the base of the fixture, will ensure a safe and firm installation.

1x M10
(length max.16mm)

2x Camlock
quick release
fasteners

front side of the fixture
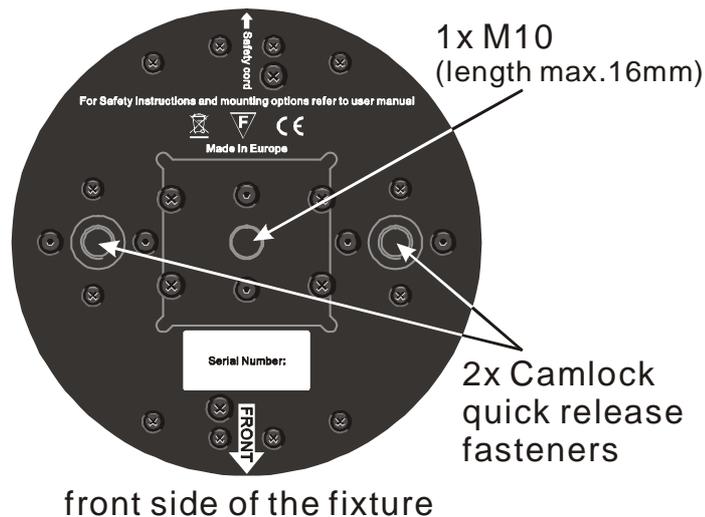
2.1.1 Mounting on the floor (upright)

To operate the **IMPRESSION** in an upright position, please use the dedicated floor-stand which ships with all original fixtures. The floor stand is mounted to the base of the fixture using the two Camlock quarter turn fasteners. Line up and engage the camlock connectors from the floor stand into the base of the fixture and turn the two fasteners 90° to lock them. Do the opposite to release them again. On both sides you'll find eyelets to pull though a fixing strap. This allows additional bracing of the floor-stand during the upright operation.

2x Camlock

2x Eyelets
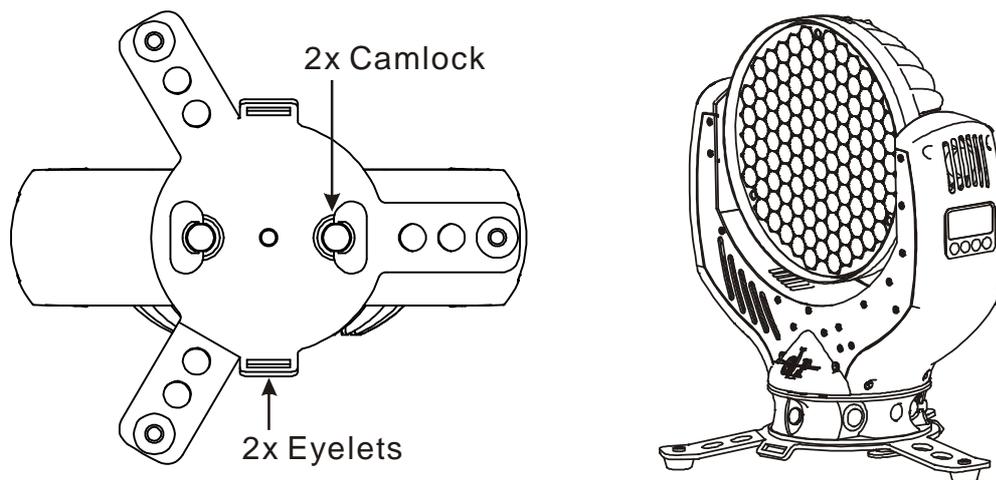
2.1.2 Mounting in hanging position (head down)

To operate the **IMPRESSION** in a hanging position, a half-coupler or similar clamp can be mounted directly to the bottom of the base using the M10x16 mm threaded socket.

M10x16
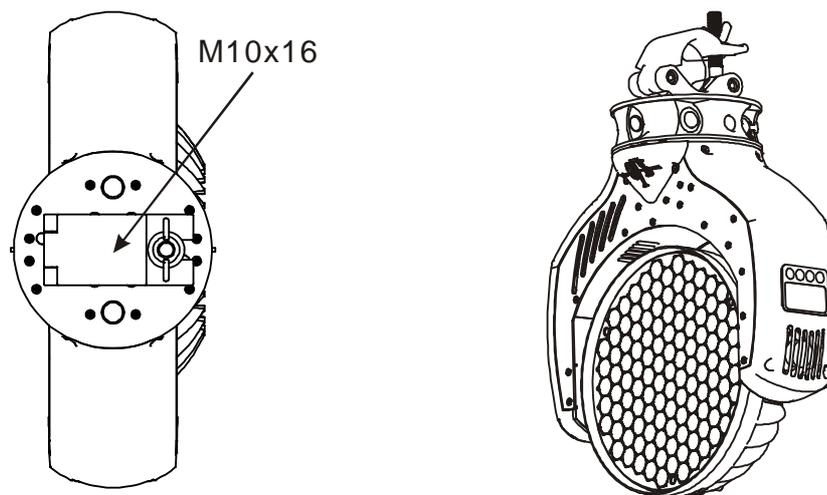
2.1.3 Mounting in a sideway position

To operate the **IMPRESSION** in a sideways position, please use an additional mounting bar, available from GLP or one of their agents.. This mounting bar is fixed via the two camlock quick-release connectors. Two half-couplers or clamps are then used to hang the mounting bar. This technique is necessary to cope with the additional torque in this mounting position. Never use the "Mounting in hanging position" technique described above to secure the fixture in a sideway position, as the fixtures base can become damaged, and a secure installation cannot be assured.

2x 90°

Half-coupler (clamp) 1   Half-coupler (clamp) 2

without mounting bar
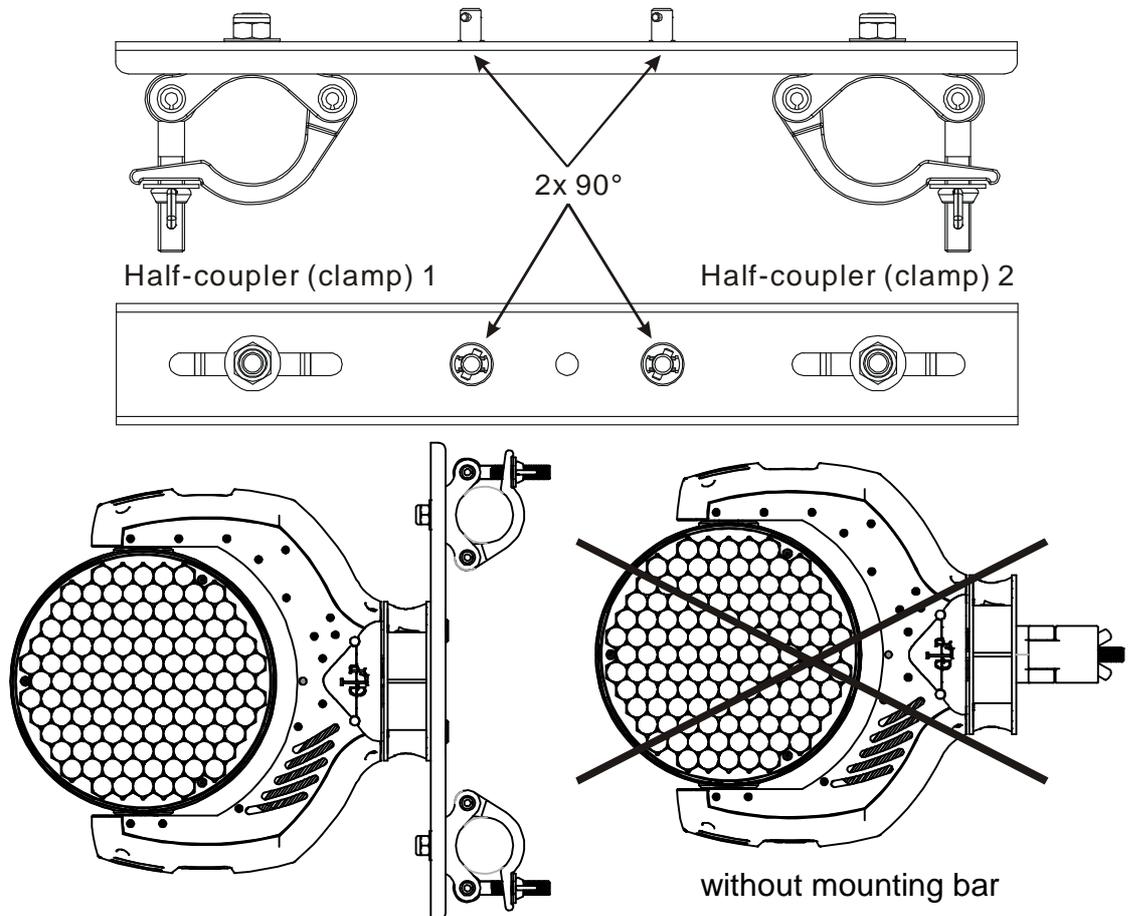
2.2 Securing the Device

Regardless of the mounting method of the **IMPRESSION** you'll have to use a secondary safety wire. This safety wire can be attached to the fixture by threading it through one of the two holes provided on the base of the fixture. Ensure that the safety wire is securely fastened through the fixture and the fixtures mounting support. Install a safety wire that can hold at least 10 times the weight of the fixture.

2.3 Connections

2.3.1 Power Supply

~100-240 Volt AC, 50-60 Hz, earth contact type plug, via Powercon

Connected load 350 VA (W) <=> T5A (micro-fuse 5x20mm)

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

2.3.2 DMX

USITT DMX-512 Standard input/output with 3 pole connectors.

3 pole: Pin 1 = [Ground] / Pin 2 = [-] / Pin 3 = [+]

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

3 The Menu Field

You'll find the control board on the side of the arm. It allows you to make all necessary adjustments of the **IMPRESSION.** 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 to the next menu level or to confirm your settings. Select **ON/ OFF** function settings with the **Up/Down-**keys. Confirm and save with the **Enter-**key (the display shows **OK**). Push the **Mode-**key to cancel the entry and go back to the main menu.

Mode   Down
   Enter   Up

← MODE - ENTER →

← DOWN - UP →
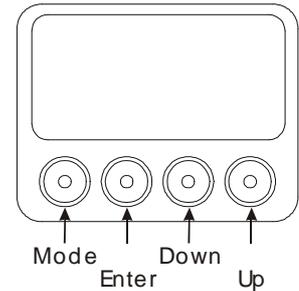
Level1	Level 2	Level 3	Level 4	Remark
DMX Start Address 001				Set the DMX start address
Special	**Manual DMX**			Manual control of all system functions
		Pan		Manual control for Pan (X-movement)
		Speed Movements		Speed adjustment for Pan/Tilt movements → see also item below
		Pan/Tilt Movements		Manual control for Pan/Tilt macro movements
		Special		Activate the White- or Full-Power Mode; see also DMX table
		White Temperature		Manual control for color temperature
		Dimmer		Manual control for dimmer
		Shutter		Manual control for shutter
		Blue		Manual control for blue
		Green		Manual control for green
		Red		Manual control for red
		Color Wheel		Manual control for the color wheel mimic
		Zoom		Manual control for zoom
		Tilt		Manual control for Tilt (Y-movement)
	Display Contrast			Adjustment for the Display contrast
	Default Set			Resetting functions
		1.10		Resetting all functions to original values (Standard). a)

← DOWN - UP →

	Full Feature		Resetting all functions to original values (Full Feature) b)
Set Dimmer Frequency			Changes PWM frequency between 600Hz and 1200Hz
LED Dimmer Version			Reads out the current LED dimmer (software) version
Impression Version			Reads out the current CPU software version
Adjust	**Key code xxxx**		Use the code to enter the calibration menu (for authorized persons only)
	Pan Offset		Calibration for Pan-Offset
	Tilt Offset		Calibration for Tilt-Offset
	Blue		Calibration for Blue
	Green		Calibration for Green
	Red		Calibration for Red
	Clear EEPROM		Erase EEPROM memory
	Diagnose		Diagnose functions
		Pos Feed Pan Delta	Internal data and function diagnose
		Anz Ti0-Int-Err	Internal data and function diagnose
		PFC Voltage	Show the present PFC voltage
		Pos Feed Tilt Delta	Internal data and function diagnose
Temperature Arm			Displays the arm temperature
Temperature Head			Displays the head temperature
PAN/TILT Motor Power			Switches power for pan/tilt motors ON or OFF
PAN/TILT Silent Mode			Reduces maximum speed for pan/tilt
Zoom Speed			Select faster zoom speed
DMX Hold			Defines whether the last DMX signal is stored, or the lamp is switched OFF in case of signal interruption
Position Feedback			Automatic position feedback selection for pan/tilt movement
White Adjust			Adjustments for a uniform white color; only in white-mode
	Red		Adjustment of red
	Blue		Adjustment of blue
	Green		Adjustment of green
Set DMX Image			Takes and stores a DMX snapshot of the current DMX input
DMX input Monitor			Displays the current DMX signal per DMX channel
	Pan		Instantaneous value for Pan

Speed Movements		Instantaneous value for speed movements
Pan/Tilt Movements		Instantaneous value for pan/tilt movements
Special		Instantaneous value for special channel
White Temperature		Instantaneous value for white temperature
Dimmer		Instantaneous value for dimmer
Shutter		Instantaneous value for shutter
Blue		Instantaneous value for blue
Green		Instantaneous value for green
Red		Instantaneous value for red
Zoom		Instantaneous value for zoom
Color Wheel		Instantaneous value for color wheel mimic
Tilt		Instantaneous value for tilt
Self test		Performs an automatic self-test
Live time		Indicates the total operation time of the system
Display		Adjust the display
	Blackout	Sets the display On or Off
Select DMX Mode		Allows selection of the desired DMX Mode
	Compressed	Fixture works in "Compressed" mode → see also sectiion 4
	Normal	Fixture works in "Normal" mode → see also section 4
	High-Resolution	Fixture works in "High Resolution" mode → see also section 4
Theater Mode		Selects Theater Mode (Fans quiet) on or off c)
K2 Mode		Selects K2 Mode (RGB looks like Impression 90) on or off d)
White Mode		Selects the activation of Adjustments for white-balance, on or off.
Reverse Pan		Selects Inverse Pan, on or off
Reverse Tilt		SelectsInverse Tilt on or off
Reset		RESET all functions

← DOWN - UP →

[a)] **Default Set 1.10**

This mode resets the **IMPRESSION** to its standards like former software versions. (DMX address reset, Pan/Tilt invert reset, PWM frequency reset, standard dimmer curve, color correction doesn´t work with RGB, no RDM)

^{b)} **Default Set "Full Feature"**

This mode resets the **IMPRESSION** to its standards and with some new features (DMX address reset, Pan/Tilt invert reset, PWM frequency reset, new dimmer curve, color correction works with RGB, RDM)

^{c)} **Theater Mode**

This mode runs the fans of the fixture slower, reducing noise.. If the temperature of the **IMPRESSION** becomes too hot the fans do not increase in speed. Instead, the LED´s will dim down from their output level to reduce the heat.

^{d)} **K2 Mode**

This mode adjusts the **IMPRESSION 120 RZ RGB** to the color mixing of the **IMPRESSION 90 RGB**.

4   DMX Channel Selection (DMX Protocol)

Normal-Mode 15 DMX channels

Channel	Function	Time and Value	DMX	HEX	%
1) PAN-coarse	0 .. 660°	3,2 s	0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos + 2,6°(16 Bit)		0..255	00. .FF	0..100
3) Tilt-coarse	0 .. 300°	1,5 s	0..255	00..FF	0..100
4) Tilt-fine	High- Pos … High- Pos + 1,2°(16 Bit)		0..255	00..F F	0..100
5) Color (fixed)	Colors adjustable via RGB		0..7	00..07	0..2,5
	Color 01 - Red ¹⁾		8..15	08..0F	3..5,5
	Color 02 - Amber ¹⁾		16..23	10..17	6..8,5
	Color 03 - Warm Yellow ¹⁾		24..31	18..1F	9..12,5
	Color 04 - Yellow ¹⁾		32..39	20..27	13..15,5
	Color 05 - Green ¹⁾		40..47	28..2F	16..18,5
	Color 06 - Turquoise ¹⁾		48..55	30..37	19..21,5
	Color 07 - Cyan ¹⁾		56..63	38..3F	22..24,5
	Color 08 - Blue ¹⁾		64..71	40..47	25..27,5
	Color 09 - Lavender ¹⁾		72..79	48..4F	28..30,5
	Color 10 - Mauve ¹⁾		80..87	50..57	31..34,5
	Color 11 - Magenta ¹⁾		88..95	58..5F	35..37,5
	Color 12 - Pink ¹⁾		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 ²⁾		128	80	50
	Rainbow Effect ³⁾	slow - fast	129..223	81..DF	51..88
	Rainbow Effect, random colors	slow - fast	224.255	E=..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) Shutter	Shutter closed		0..15	00..0F	0..5,5
	Random Pulse effect	slow - fast	16..47	10..2F	6..18,5

Channel	Function	Time and Value	DMX	HEX	%
	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 .. 1s	144..199	A0..C7	57..77
	Strobe effect, slow - fast	1 Hz .. 10 Hz	200..239	C8..EF	78..94
	Shutter open		240..255	F0..FF	95..100
10) Dimmer	Dimmer	0 - 100%	0..255	0..FF	0..100
11) Color temperature	No color temperature correction		0..6	0..06	0..2
	Continuous color temperature correction between 3200k - 7200k	Applicable only for ALL colors [5]	7..255	07..FF	3..100
12) Special	Max. Power-Mode [4]	Max. light output without white balance	0..15	0..0F	0..5,5
	White-Mode [4]	White balance used	16..31	10..1F	6..12,5
	Theater Mode ON [6]	Mode ON	32..35	20..23	13..14
	Theater Mode OFF [6]	Mode OFF	36..39	24..27	14..15
	K2 Mode ON [6]	Mode ON	40..43	28..2B	16..17
	K2 Mode OFF [6]	Mode OFF	44..47	2C..2F	17,5..19
	White Mode ON [6]	Mode ON	48..51	30..33	19..20
	White Mode OFF [6]	Mode OFF	52..55	34..37	20,5..21
	RGB value spreading ON [6]	Mode ON	56..59	38..3B	22..23,5
	RGB value spreading OFF [6]	Mode OFF	60..63	3C..3F	24..25
	Reverse Tilt ON [6]	Mode ON	64..67	40..43	25,5..27
	Reverse Tilt OFF [6]	Mode OFF	68..71	44..47	27,5..28,5
	Reverse Pan ON [6]	Mode ON	72..75	48..4B	29..
	Reverse Pan OFF [6]	Mode OFF	76..79	4C..4F	30,5..31,5
	Fan min. as long as temp. < 90℃		224..229	E0..E5	88..89,5
	RESET (Normal Mode)		**250..255**	**FA..FF**	**98..100**

Channel	Movement	Size	Phase		DMX	HEX	%
13) Move-ment	**No movement**				0	00	0
	Movement	**Size**	**Phase**				
	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

Channel	Function		Time and Value	DMX	HEX	%
	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
14) Speed Pan/Tilt	Pan/Tilt relative movement			0..1	00..01	0..0,5
	Pan/Tilt slow – fast Use this channel 14) also for the speed of the movements (channel 13).		Pan Min. 660°= 200s Pan Max. 660°= 3,2s Tilt Min. 300°= 110s Tilt Max. 300°= 1,5s	2..255	02..FF	1..100
15) Zoom	Spot - Flood		10°- 26°	0…255	00…FF	0…100

[4] Max. Power-Mode vs. White-Mode

The **IMPRESSION** can use 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** by using 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. If the White-Mode is 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).

[5] Color Temperature

At anytime the **IMPRESSION** can be used in a color correction mode, where by it over rides the values from the individual RGB color channels. You can choose to activate the white mode via the DMX signal using the Special channel.

[6] Special Channel functionality

The Special channel allows you to edit some fixture functionality via the DMX signal. For all operations on the Special Channel you must first ensure that both the dimmer and shutter channels are set to 0. All commands from the Special channel must be held for at least 0.5 seconds for them to take effect.

For example:

To invert the tilt channel via DMX from the lighting desk, first send a value of 0 to both the dimmer and shutter channels. Then send a value of 64-67 percent for a minimum of 0.5s, on the special channel.

To return the tilt to normal operation, you need to send a value of 68-71 percent on the special channel.

It is possible to change multiple functions using the special channel in this way.

Changes from the special channel will not be saved into the default settings of the **IMPRESSION**.

Compress-Mode 11 DMX channels

Channel	Function	Time and Value	DMX	HEX	%
1) PAN-coarse	0 .. 660°	3,2 s	0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos + 2,6°(16 Bit)		0..255	00. .FF	0..100
3) Tilt-coarse	0 .. 300°	1,5 s	0..255	00..FF	0..100
4) Tilt-fine	High- Pos … High- Pos + 1,2°(16 Bit)		0..255	00..F F	0..100
5) Color (fixed)	Colors adjustable via RGB		0..7	00..07	0..2,5
	Color 01 - Red [1]		8..15	08..0F	3..5,5
	Color 02 - Amber [1]		16..23	10..17	6..8,5
	Color 03 - Warm Yellow [1]		24..31	18..1F	9..12,5
	Color 04 - Yellow [1]		32..39	20..27	13..15,5
	Color 05 - Green [1]		40..47	28..2F	16..18,5
	Color 06 - Turquoise [1]		48..55	30..37	19..21,5
	Color 07 - Cyan [1]		56..63	38..3F	22..24,5
	Color 08 - Blue [1]		64..71	40..47	25..27,5
	Color 09 - Lavender [1]		72..79	48..4F	28..30,5
	Color 10 - Mauve [1]		80..87	50..57	31..34,5
	Color 11 - Magenta [1]		88..95	58..5F	35..37,5
	Color 12 - Pink [1]		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 [2]		128	80	50
	Rainbow Effect [3]	slow - fast	129..223	81..DF	51..88
	Rainbow Effect, 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) 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
	RESET	**Min. 3 Sec.**	**250**	**FA**	**98**
	Shutter open		251..255	FB..FF	99..100
10) Dimmer	Dimmer	0 - 100%	0..255	0..FF	0..100
11) Zoom	Spot - Flood	10°- 26°	0…255	00…FF	0…100

High Resolution (Extended) -Mode 14 DMX Channels

Channel	Function	Time and Value	DMX	HEX	%
1) PAN-coarse	0 .. 660°	3,2 s	0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos + 2,6°(16 Bit)		0..255	00. .FF	0..100
3) Tilt-coarse	0 .. 300°	1,5 s	0..255	00..FF	0..100
4) Tilt-fine	High- Pos … High- Pos + 1,2°(16 Bit)		0..255	00..F F	0..100
5) Red-coarse	Color mixing system – Red	0 - 100%	0..255	00..FF	0..100
6) Red-fine	Color mixing system – Red-Low		0..255	00..FF	0..100
7) Green-coarse	Color mixing system – Green	0 - 100%	0..255	00..FF	0..100
8) Green-fine	Color mixing system – Green-Low		0..255	00..FF	0..100
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) 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 to 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
	RESET	**Min. 3 Sec.**	**250**	**FA**	**98**
	Shutter open		251..255	FB..FF	99..100
12) Dimmer-coarse	Dimmer	0 - 100%	0..255	0..FF	0..100
13) Dimmer-fine	Dimmer - Low		0..255	0..FF	0..100
14) Zoom	Spot - Flood	10°- 26°	0…255	00…FF	0…100

[1] The predefined colors can be used as start colors for the Rainbow effect. First select a desired start color, then activate the rainbow effect. All **IMPRESSIONS** will then begin from that color and execute the rainbow effect synchronously. Different **IMPRESSIONS** can have different start colors but will still execute the rainbow effect synchronously. If you choose a color different from the ones marked with [1] in the tables above the rainbow start-color will be red.

[2] Rainbow-effect Stop will pause this function. After resuming the rainbow-effect will be continued with the current color.

[3] The Rainbow-effect will run synchronously only if it is started from one of the predefined colors (see also [1] before).

Locking and unlocking the Control Panel

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

Additional shortcut features when switching on the fixture

a) 1200Hz Mode (Hold down the **UP- button** during power ON)

After switching on, the fixture the LEDs will be operated with a Pulse Width Modulation (PWM) of 1200Hz.

In addition, all standard settings will be loaded (DMX start address [001], Normal Mode).

b) 600Hz Mode (Hold down the **DOWN- button** during power ON)

After switching on, the fixture the LEDs will be operated with a Pulse Width Modulation (PWM) of 600Hz.

In addition, all standard settings will be loaded (DMX start address [001], Normal Mode).

c) Standard Mode (Hold down the **ENTER- button** during power ON)

After switching on the fixture, the DMX start address will be set to [001]. All other settings will remain unchanged.

Additional Display Indications

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

XX/X/XX

↳ 06 = 600Hz / 12 = 1200Hz

→ N = Normal Mode / C = Compressed Mode / H = High Res. Mode

→ N = Tilt normal / I = Tilt inverted

→ N = Pan normal / I = Pan inverted
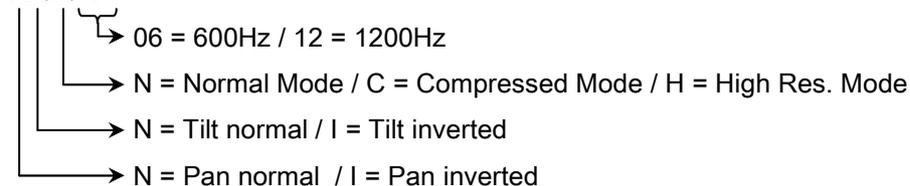
5 Maintaining and Cleaning the IMPRESSION

The **IMPRESSION** is a low maintenance fixture. 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. If they do, the fixture's light output will be significantly reduced, and damages to the fixture may occur. Regular cleaning will not only ensure the maximum light output, but will also allow the fixture to operate reliably throughout its entire life.

A soft lint-free cloth moistened with any good glass cleaning fluid is recommended. Under no circumstances should alcohol or solvents be used to clean the fixture or its lenses!

5.1 Safety regulations

- **Disconnect the fixture from the mains power before commencing any maintenance work!**

- Wait minimum 15 minutes after removing the power to allow the fixture to cool down.

5.2 Maintenance Intervals (rule-of-thumb)

The maintenance schedule of any given fixture depends on the installation environment. Hence no specific guidelines can be given. The cleaning intervals given below are suggestions, based on practical experience. We suggest that you start with these and develop your own maintenance schedule as you see the fixtures performance in your specific environment.

Maintenance Task	Interval	How
Cleaning of LED lenses and optical system	weekly	soft brush /lint-free cloth
Cleaning of fans and air channels	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 touch dry.**
- **Never touch lenses with bare fingers.**

6 Technical Specifications

Power supply	
Power consumption	350 VA (Watt)
Power input	~100-240 V AC, 50-60 Hz (auto sensing input)
Fuse protection	Micro-fuse 5x20 mm, T5A
Operational Parameters	
Max. Ambient Temperature	45°C / 113°F (integrated overheating switch)
Mounting Position	Any (see chapter mounting)
Lighting System - Additive Color mixing	
LED Type	120 x Rebel High power LED's
Lifetime	50,000 hours
42x green LEDs, 36x blue LEDs, 42x red LEDs Wavelength optimized for maximum presentable color space	
Optical System	
High efficiency collimator cluster	
Motorized optical lens plate with a range of 10°- 26°	
Shutter / Dimmer (8/16 Bit)	
Strobe- Effect with variable speed between 1 - 10 flashes per second, Random-Strobe, Pulse-Effects	
Continuous Dimmer 0 - 100%	
DMX Control	
Standard USITT DMX-512, 3 pole XLR; [+] = Pin 3, [-] = Pin 2, [Ground] = Pin 1.	
Pan / Tilt (8/16 Bit)	
Pan- movement	**660° in minimum 3.2 seconds, with position feedback**
Tilt- movement	**300° in minimum 1.5 seconds, with position feedback**
Weights and Dimensions	
Width	**340 mm / 13.4 inches**
Depth	**145 mm / 5.7 inches**
height (head vertical)	**370 mm / 14.6 inches**
Weight (net)	**8.0 kg / 17.6 lbs.**

7 Index