

impression Wash one

Instruction Manual



from software version 1.02
(Instruction version 1.02)



**GERMAN LIGHT
PRODUCTS**

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Notes:

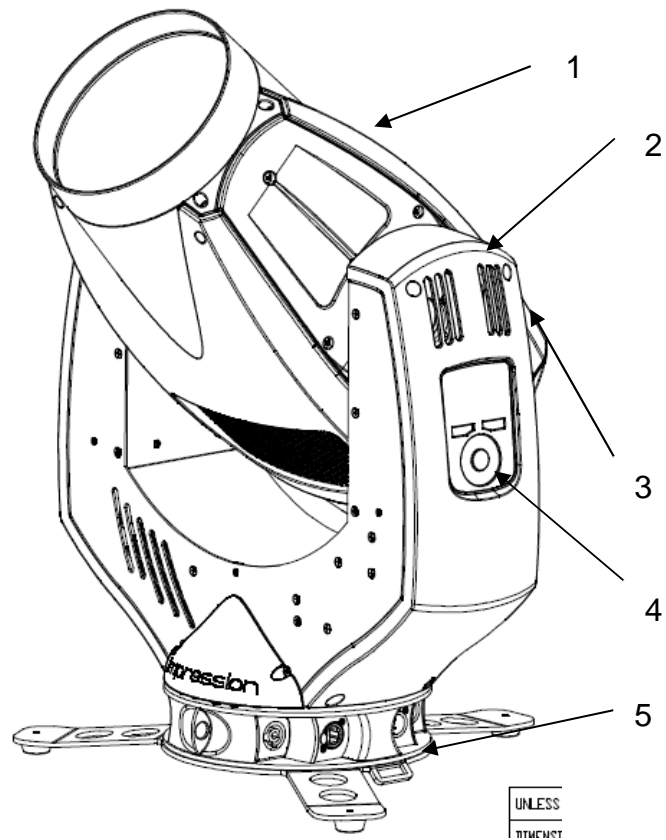
Ruled area for notes with horizontal dashed lines.

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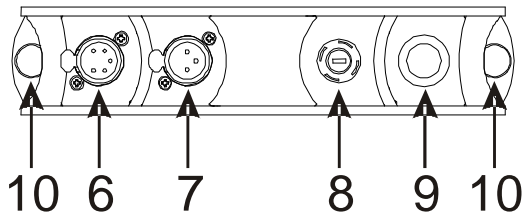
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1 Description of Device

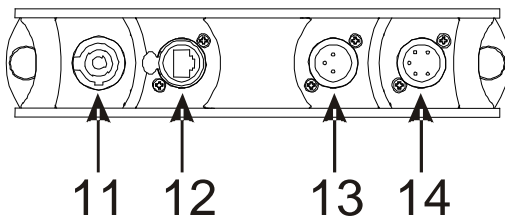
1. Moving Head
2. Arm with various cooling vents
3. Tilt-lock to secure and lock the tilt movement
4. Backlight LCD graphical menu (data entry)
5. Base with various connectors and Camlock mounting system



Base Side 1



Base Side 2



6. DMX- Output (5 Pin)
7. DMX- Output (3 Pin)
8. Micro-fuse 6.3x32mm, T8A
9. Power Switch
- 10.2x Safety wire points
11. Neutrik Powercon (Mains power input)
12. Blank panel (primed for Ethernet)
13. DMX- Input (3 Pin)
14. DMX- Input (5 Pin)

Note: Only connect one cable to the DMX Input / Output at the same time!

1.1 Safety Instructions



The **Impression Wash one** 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. Use only one DMX Input / Output at the same time.
6. **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!

7. To ensure proper operation, you must also follow the installation guide described in chapter 2 of this manual. Operating the **Impression Wash one** without suitable mounting devices can increase the risk of an accident.
8. The **Impression Wash one** 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.
9. Repair, maintenance and installation work should only be performed by qualified or GLP certified staff. You need to pay attention to the common

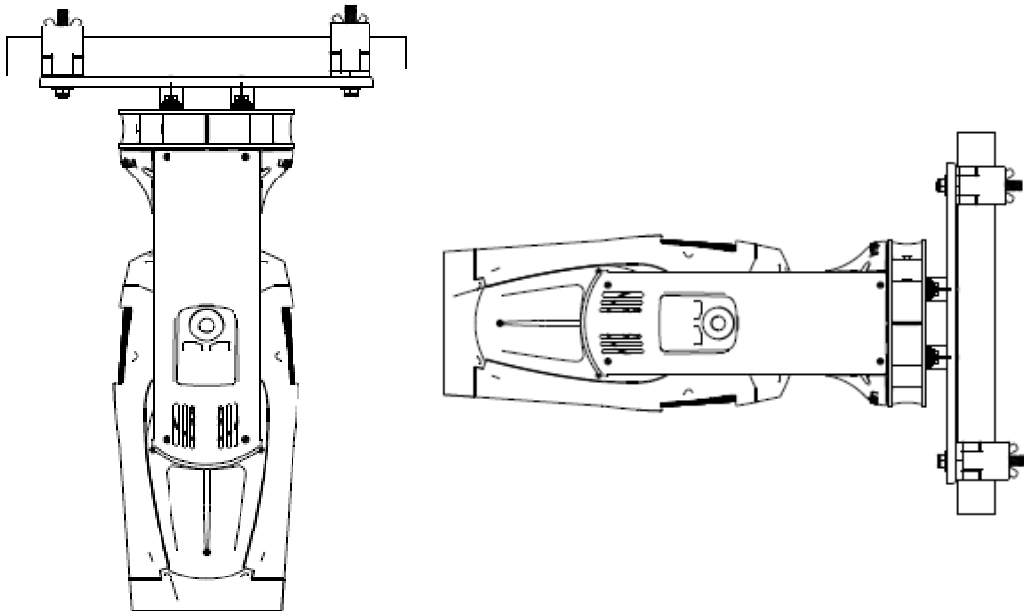
rules of technology that are not explicitly mentioned in this manual.

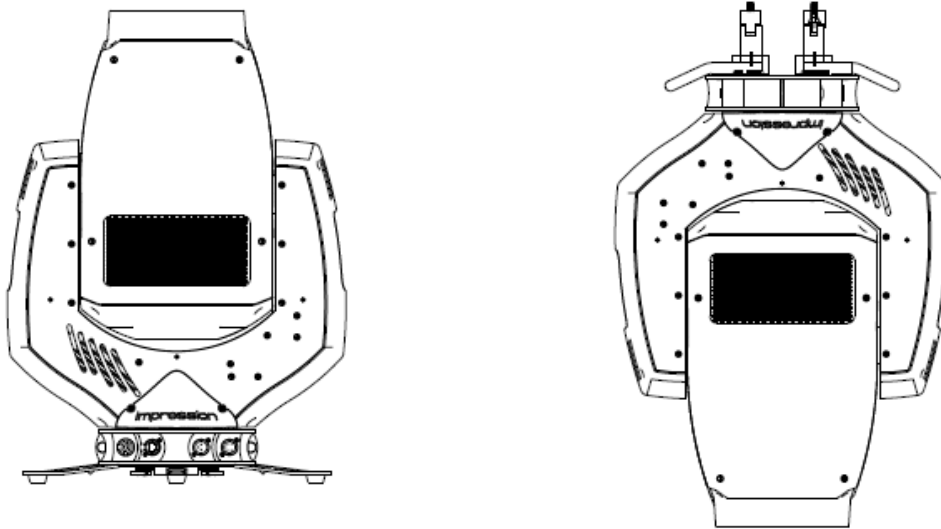
10. Use only original spare parts. Any structural modification on the system will terminate all warranty claims.
11. Please keep this instruction manual for future reference.

2 Preparation and Installation

2.1 Mounting

The **Impression Wash one** 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.).





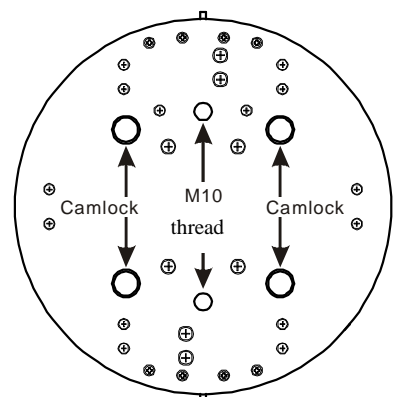
Pay attention to the regulations of: BGV C1 (former VBG 70) and DIN VDE 0711-217.

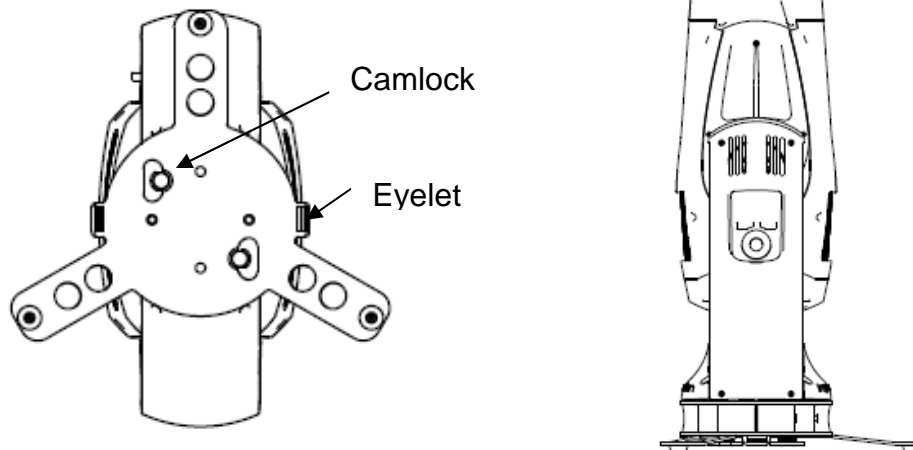
The installation shall be done by qualified personal only.

For the various mounting positions of the **Impression Wash one** (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.

2.1.1 *Mounting on the floor (upright)*

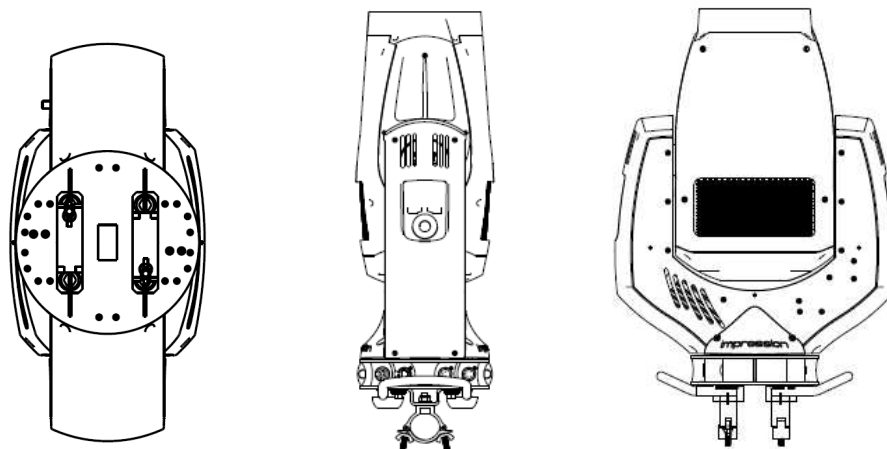
To operate the **Impression Wash one** in an upright position, please use the dedicated floor-stand which is shipped with all original fixtures. The floor stand is mounted to the base of the fixture using the two Camlock quarter turn fasteners. Line up and engage the camlock connectors from the floor 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 through a ratchet strap. This allows additional bracing of the floor-stand during upright operation.





2.1.1 Mounting in hanging position (Head down)

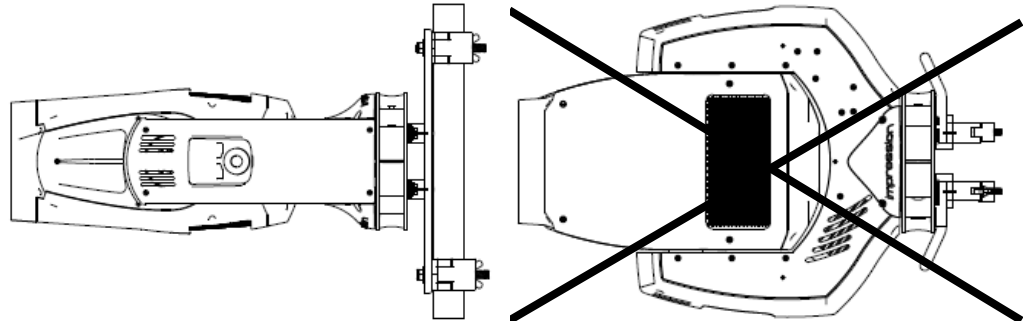
To operate the **Impression Wash one** in a hanging position, two omega brackets can be mounted directly to the bottom of the base using the four Camlock connectors.



2.1.2 Mounting in sideways position

To operate the **Impression Wash one** 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 four camlock quick-release connectors. Two half-couplers or clamps are then used to hang fixture. 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 sideways position, as

the fixtures base can become damaged, and a secure installation cannot be assured.



2.2 Securing the device

Regardless of the mounting method of the **Impression Wash one** 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

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

Connected load 450 VA (W) \Leftrightarrow T8A (micro-fuse 6.3x32mm)

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 via 3 pin and 5 pin connectors.

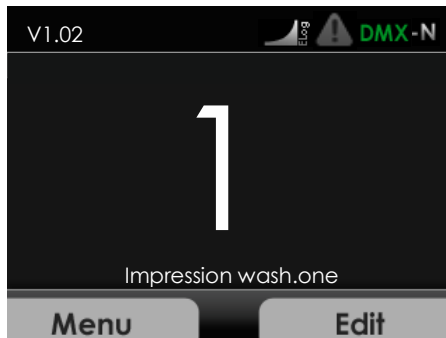
3 pole: Pin 1 = [Ground] / Pin 2 = [-] / Pin 3 = [+]

5 pole: Pin 1 = [Ground] / Pin 2 = [-] / Pin 3 = [+] / Pin 4/5 n.c.

Ethernet (Artnet II compatible, ACN ready)

Neutrik RJ-45 plug (for Neutrik EtherCon connector with body)

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 Wash One**. With the **Menu**-key you get into the main menu. Afterwards you can navigate through the menu with the **Touchwheel**. Push the **Enter**-key to get to the next menu level or to confirm your settings. Select **ON/ OFF** function settings with the **Touchwheel**. Confirm and save with the **Enter**-key. Push the **Back**-key to cancel the entry and go back to the main menu.

← Back - Enter →

Layer 1	Layer 2	Layer 3	Layer 4	Notes
DMX Start Address				Set the DMX start address
Personality	Pan/Tilt			Pan/Tilt settings
		Pan invert		Selects Inverse Pan, on or off
		Tilt invert		Selects Inverse Tilt, on or off
	Feedback		Automatic position feedback selection for pan/tilt movement	
	Color	Dimmer Curve		Set the Dimmer Curve
DMX		Address		Set the DMX start address
		Mode		Allows selection of the desired DMX Mode
			Compressed	Fixture works in "Compressed" mode → see also section 4
			Normal	Fixture works in "Normal" mode → see also section 4
			High-Resolution	Fixture works in "High Resolution" mode → see also section 4
		Hold Values		Defines whether the last DMX signal is stored, or the lamp is switched OFF in case of signal interruption
		Manual		Manual control of all system functions
			Pan	Manual control
			Tilt	Manual control
			Color	Manual control

	Red	Manual control
	Green	Manual control
	Blue	Manual control
	Shutter	Manual control
	Dimmer	Manual control
	Color temp.	Manual control
	Special	Manual control
	Movement	Manual control
	Movement Speed	Manual control
	Zoom	Manual control
	Focus	Manual control
	Beam Shaper	Manual control
	Beam Shaper Size	Manual control
Display		Adjustments for the Display
	Blackout	Sets the display On or Off
	Auto-Rot	Display will rotate automatically
	Display Inv	Display will rotate manual
	Brightness	Display backlight
Set Default		Resetting all functions to original values
Status	Version	Shows the current software version
	Reset Hardware	Hardware reset adjust
	All	Reset all boards
	Head	Reset only headboard
	FZE	Reset only Focus Zoom
	Pan	Reset only Pan
	Tilt	Reset only Tilt
Temperatures		Display all temperatures
LED Info		Display the values for the LED's
	Red	Current value for red
	Green	Current value for green
	Blue	Current value for blue
Error Status		Shows the error status (N/A)
Timer		Shows the life time
DMX Input		Shows the current DMX signal per DMX channel
	Pan	Instantaneous value for pan
	Tilt	Instantaneous value for tilt

		Color	Instantaneous value for color
		Red	Instantaneous value for red
		Green	Instantaneous value for green
		Blue	Instantaneous value for blue
		Shutter	Instantaneous value for shutter
		Dimmer	Instantaneous value for dimmer
		Colortemp.	Instantaneous value for color temp.
		Special	Instantaneous value for special
		Movement	Instantaneous value for movement
		Movement Speed	Instantaneous value for movement speed
		Zoom	Instantaneous value for zoom
		Focus	Instantaneous value for focus
		Beam Shaper	Instantaneous value for shaper size
		Beam Shaper Size	Instantaneous value for beam shaper
	DMX Quality		Shows the DMX Quality
Service	Adjust	Enter Code	Adjustments for all functions. Use code to enter calibration. (only for authorized persons with code)
		Pan	Adjust for pan
		Tilt	Adjust for tilt
		Beam Shape Arm	Adjust for Beam Shaper arm
		Beam Shape Rot	Adjust for Beam Shaper rotation
		Beam Shape Size	Adjust for Beam Shaper size
		Super Beam	Adjust for Super Beam
		Zoom	Adjust for zoom
		Focus	Adjust for focus
		Adjust Default set	Set all adjustments to default
		Factory Adjust	Factory internal adjustments
	Testmode		Test mode(N/A)
	Diagnose		Diagnose functions (N/A)
	Error Log		Shows all errors in lifetime (N/A)

DMX Channels**Normal-Mode 18 DMX Channels**

Channel	Function	Time and Value	DMX	HEX	%	
1) PAN- coarse	0 .. 660°		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 .. 280°		0..255	00..FF	0..100	
4) Tilt-fine	High- Pos ... High- Pos + 1,2° (16 Bit)		0..255	00..FF	0..100	
5) Color (fixed)	Colors adjustable via RGB		0..7	00..07	0..2,5	
	Color 01 - Red		8..15	08..0F	3..5,5	
	Color 02 - Amber		16..23	10..17	6..8,5	
	Color 03 – Yellow warm		24..31	18..1F	9..12,5	
	Color 04 - Yellow		32..39	20..27	13..15,5	
	Color 05 – Green		40..47	28..2F	16..18,5	
	Color 06 – Turquoise		48..55	30..37	19..21,5	
	Color 07 – Cyan		56..63	38..3F	22..24,5	
	Color 08 - Blue		64..71	40..47	25..27,5	
	Color 09 - Lavender		72..79	48..4F	28..30,5	
	Color 10 - Malve		80..87	50..57	31..34,5	
	Color 11 – Magenta		88..95	58..5F	35..37,5	
	Color 12 - Pink		96..103	60..67	38..40,5	
	White - CTO	Color temp. 3200K		104..111	68..6F	41..43,5
	White	Color temp. 5600K		112..119	70..77	44..46,5
	White – CTB	Color temp. 7200K		120..127	78..7F	47..49,5
Rainbow Effect Stop			128	80	50	
Rainbow Effect	slow - fast		129..223	81..DF	51..88	
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	
	Shutter pulse random	slow – fast	16..47	10..2F	6..18,5	
	Shutter ramp up	slow – fast	48..79	30..4F	19..31	
	Shutter ramp down	slow – fast	80..111	50..6F	32..43	
	Shutter ramp up/down	slow – fast	112..143	70..8F	44..56	
	Random strobe	slow – fast	144..159	90..9F	57..62	
	Strobe effect pause	5s ...0,1s		160..199	A0..C7	63..77
	Strobe effect slow - fast	1 Hz .. 25 Hz		200..241	C8..F1	78..95
Shutter open			242..255	F2..FF	96..100	
10) Dimmer	Dimmer	0% - 100%	0..255	0..FF	0..100	
11) Color temp.	No color temperature correction		0..7	0..07	0..2,5	
	Continuous color temperature correction between 7200k - 3200k	Applicable for ALL colors ⁵⁾	8..255	08..FF	3..100	
12) Special	RESET 1		250..253	FA..FC	98..99	
	RESET 2		254..255	FD..FF	100	

13) Movement	No movement		0	0	0
	Movement	Size	Phase		
	PAN	1	0°		01..01
		1	90°		02..03
		1	180°		04..05
		1	270°		06..07
	PAN	2	0°		08..09
		2	90°		10..11
		2	180°		12..13
		2	270°		14..15
	PAN	3	0°		16..17
		3	90°		18..19
		3	180°		20..21
		3	270°		22..23
	PAN	4	0°		24..25
		4	90°		26..27
		4	180°		28..29
		4	270°		30..31
	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
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° Pan Max. 660° Tilt Min. 280° Tilt Max. 280°	2..255	02..FF	1..100
15) Zoom	Super Beam	3°	0 .. 4	00..04	0..1
	Spot - Flood	7° - 60°	5 .. 255	05..255	2..100
16) Focus	Hard - Soft	0 – 100%	0 .. 255	0..FF	0..100
17) Shaper Size	Open - Close	0 - 100%	0..255	00..FF	0..100
18) Beam Shaper	Rotate	0° - 200°	0..255	00..FF	00..100

Compress-Mode 14 DMX Channels

Channel	Function	Time and Value	DMX	HEX	%
1) PAN- coarse	0 .. 660°		0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos +(16 Bit)		0..255	00..FF	0..100
3) Tilt- coarse	0 .. 280°		0..255	00..FF	0..100
4) Tilt-fine	High- Pos ... High- Pos + (16 Bit)		0..255	00..FF	0..100
5) Color (fixed)	Colors adjustable via RGB		0..7	00..07	0..2,5
	Color 01 - Red		8..15	08..0F	3..5,5
	Color 02 - Amber		16..23	10..17	6..8,5
	Color 03 - Yellow warm		24..31	18..1F	9..12,5
	Color 04 - Yellow		32..39	20..27	13..15,5
	Color 05 - Green		40..47	28..2F	16..18,5
	Color 06 - Turquoise		48..55	30..37	19..21,5
	Color 07 - Cyan		56..63	38..3F	22..24,5
	Color 08 - Blue		64..71	40..47	25..27,5
	Color 09 - Lavender		72..79	48..4F	28..30,5
	Color 10 - Malve		80..87	50..57	31..34,5
	Color 11 - Magenta		88..95	58..5F	35..37,5
	Color 12 - Pink		96..103	60..67	38..40,5
	White - CTO	Color temp. 3200K	104..111	68..6F	41..43,5
	White	Color temp. 5600K	112..119	70..77	44..46,5
	White - CTB	Color temp. 7200K	120..127	78..7F	47..49,5
Rainbow Effect Stop		128	80	50	
Rainbow Effect	slow - fast	129..223	81..DF	51..88	
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
	Shutter pulse random	slow - fast	16..47	10..2F	6..18,5
	Shutter ramp up	slow - fast	48..79	30..4F	19..31
	Shutter ramp down	slow - fast	80..111	50..6F	32..43
	Shutter ramp up/down	slow - fast	112..143	70..8F	44..56
	Random strobe	slow - fast	144..159	90..9F	57..62
	Strobe effect pause	5s ...0,1s	160..199	A0..C7	63..77
	Strobe effect slow - fast	1 Hz .. 25 Hz	200..241	C8..F1	78..95
	Shutter open		242..249	F2..F9	95,5..96,5
	RESET 1	Only Head	250	FA	97
	RESET 2	All Funktionen	251	FB	98
	Shutter open		252..255	FC..FF	99..100
10) Dimmer	Dimmer	0% - 100%	0..255	0..FF	0..100
11) Zoom	Super Beam	3°	0 .. 4	00..04	0..1
	Spot - Flood	7° - 60°	5 .. 255	05..255	2..100
12) Focus	Hard - Soft	0 - 100%	0 .. 255	0..FF	0..100
13) Shaper Size	Open - Close	0 - 100%	0..255	00..FF	0..100
14) Beam Shaper	Rotate	0° - 200°	0..255	00..FF	00..100

High Resolution (Extended)-Mode 24 DMX Channels

Channel	Function	Time and Value	DMX	HEX	%
1) PAN- coarse	0 .. 660°		0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos + (16 Bit)		0..255	00..FF	0..100
3) Tilt- coarse	0 .. 280°		0..255	00..FF	0..100
4) Tilt-fine	High- Pos ... High- Pos + (16 Bit)		0..255	00..FF	0..100
5) Color (fixed)	Colors adjustable via RGB		0..7	00..07	0..2,5
	Color 01 - Red		8..15	08..0F	3..5,5
	Color 02 - Amber		16..23	10..17	6..8,5
	Color 03 - Yellow warm		24..31	18..1F	9..12,5
	Color 04 - Yellow		32..39	20..27	13..15,5
	Color 05 - Green		40..47	28..2F	16..18,5
	Color 06 - Turquoise		48..55	30..37	19..21,5
	Color 07 - Cyan		56..63	38..3F	22..24,5
	Color 08 - Blue		64..71	40..47	25..27,5
	Color 09 - Lavender		72..79	48..4F	28..30,5
	Color 10 - Malve		80..87	50..57	31..34,5
	Color 11 - Magenta		88..95	58..5F	35..37,5
	Color 12 - Pink		96..103	60..67	38..40,5
	White - CTO	Color temp. 3200K	104..111	68..6F	41..43,5
	White	Color temp. 5600K	112..119	70..77	44..46,5
	White - CTB	Color temp. 7200K	120..127	78..7F	47..49,5
	Rainbow Effect Stop		128	80	50
	Rainbow Effect	slow - fast	129..223	81..DF	51..88
6) Red- coarse	Color mixing system - Red	0 - 100%	0..255	00..FF	0..100
7) Red-fine	Color mixing system - Red-low		0..255	00..FF	0..100
8) Green- coarse	Color mixing system - Green	0 - 100%	0..255	00..FF	0..100
9) Green- fine	Color mixing system - Green-low		0..255	00..FF	0..100
10) Blue- coarse	Color mixing system - Blue	0 - 100%	0..255	00..FF	0..100
11) Blue-fine	Color mixing system - Blue-low		0..255	00..FF	0..100
12) Shutter	Shutter closed		0..15	00..0F	0..5,5
	Shutter pulse random	slow - fast	16..47	10..2F	6..18,5
	Shutter ramp up	slow - fast	48..79	30..4F	19..31
	Shutter ramp down	slow - fast	80..111	50..6F	32..43
	Shutter ramp up/down	slow - fast	112..143	70..8F	44..56
	Random strobe	slow - fast	144..159	90..9F	57..62
	Strobe effect pause	5s ...0,1s	160..199	A0..C7	63..77
	Strobe effect slow - fast	1 Hz .. 25 Hz	200..241	C8..F1	78..95
	Shutter open		242..255	F2..FF	96..100
13) Dimmer- coarse	Dimmer	0% - 100%	0..255	0..FF	0..100
14) Dimmer- fine	Dimmer low		0..255	0..FF	0..100
15) Color temp.	No color temperature correction		0..7	0..07	0..2,5
	Continuous color temperature correction between 7200k - 3200k	Applicable for ALL colors ⁵⁾	8..255	08..FF	3..100

16) Special	RESET 1		250..253	FA..FC	98..99
	RESET 2		254..255	FD..FF	100
17) Zoom coarse	Super Beam	3°	0 .. 4	00..04	0..1
	Spot - Flood	7° - 60°	5 .. 255	05..255	2..100
18) Zoom fine	Zoom low	(0% - 100%)	0..255	0..FF	0..100
19) Focus coarse	Hard - Soft	0% - 100%	0 .. 255	0..FF	0..100
20) Focus fine	Focus low	(0% - 100%)	0..255	0..FF	0..100
21) Shaper Size coarse	Open - Close	0 - 100%	0..255	00..FF	0..100
22) Shaper Size fine	Shaper low	(0% - 100%)	0..255	00..FF	00..100
23) Beam Shaper coarse	Rotate	0° - 200°	0..255	00..FF	00..100
24) Beam Shaper fine	Iris low	(0% - 100%)	0..127	00..7F	00..50

Locking and unlocking the Control Panel

The Display will auto lock automatically if the Touch Panel will not use for 10s. To unlock the Touch Panel you have to press one of the menu buttons for 2s..

¹⁾ Colors

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 **Impression Wash One** will then begin from that color and execute the rainbow effect synchronously. Different **Impression Wash One** 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).

⁴⁾ Attention:

Please note that shutter frequencies over 10 Hz are prohibited in some countries. Especially frequencies in the range of 5 - 12 Hz can possibly cause epileptic seizures → continuous blink irritation with a latency period of min. 70 ms. Please also refer to the relevant legislation of each country (For Germany for example: BGI 810-4 (Anhang 2) "Sicherheit bei Produktionen und Veranstaltungen - Scheinwerfer").

⁵⁾ Color Temperature

At anytime the **Impression Wash One** can be used the color correction for every RGB color.

4 Maintaining and Cleaning the Impression Wash one

The **Impression Wash one** is a low maintenance fixture. It is only necessary to clean the lenses, air inlets and outlets 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. **Under no circumstances should alcohol or solvents be used to clean the fixture or its lenses!**

4.1 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.

4.2 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
Outside optic	weekly	soft cloth and glass cleaning fluid
Inside lens	yearly	soft cloth <u>no</u> glass cleaning fluid
Fan and air channel	monthly	vacuum cleaner, airbrush, etc.
Moveable parts	yearly	suitable fatty oil

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.**

5 Technical Specifications

Power supply	
Power consumption	700 VA (Watt)
Power input	Auto sensing 100-240 V AC, 50-60 Hz
Fuse protection	Micro-fuse 6.3x32 mm, T8A
Operational Parameters	
Max. ambient temp.	45°C / 113°F (integrated overheating switch)
Mounting position	Any (See Mounting chapter)
Lighting System - Additive Color mixing	
LED type	400W RGB LED Chipset
Lifetime	20.000 h
Shutter / Dimmer (8/16 Bit)	
Strobe Effect with variable speed between 1 & 50 flashes per second, Random strobe, Pulse effects	
Continuous dimmer 0 - 100%	
Zoom (8/16 Bit)	
Zoom range 3° - 60°	
Focus (8/16 Bit)	
Motor driven focus from near (2 mtr.) to infinity	
DMX Control	
Standard USITT DMX-512, 3/5 pole XLR; [+] = Pin 3 [-] = Pin 2 [Ground] = Pin 1.	
Pan / Tilt (8/16 Bit) - 3 phase stepper motor	
Pan- movement	660° (Position Feedback)
Tilt- movement	280° (Position Feedback)
Weights and Measures	
Width of the base	472 mm / 18.6 inch.
Length of the base	230mm / 9 inch.
Height (head vertical)	615mm / 24,2 inch.
Fixture weight	22 kg / 48.5 lbs.
Floor stand weight	2 kg / 4.4 lbs.

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