Manual nstruction

impression[®]



from software version: 1.0



support@glp.de www.glp.de

—G_P—	GLP • German Light Products GmbH
Notes:	

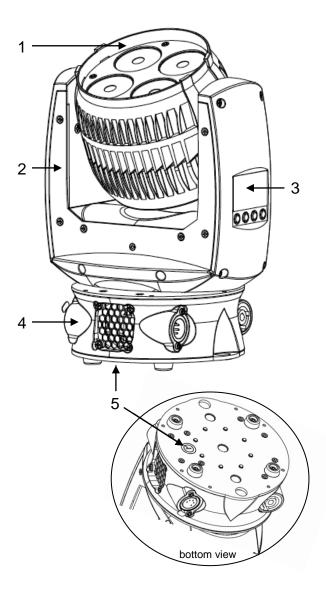
Table of contents

Description of Device4					
Safe	ety Inst	ructions	5		
Mounting			7		
	3.1.1	Operating on the Floor (Upright)			
	3.1.2	Mounting in hanging position	8		
	3.1.3	Mounting in sideways Position	9		
3.2	Securi	ing the Fixture	10		
3.3	Conne	ections			
	3.3.1	Power Supply			
	3.3.2	NEUTRIK [®] powerCON			
	3.3.3	DMX			
The	Menu I	Field			
DM)	(Chani	nel Selection (DMX Protocol)	14		
5.1	Norma	al Mode (18 DMX channels)	14		
5.2	Comp	ressed Mode (14 DMX channels)			
Mai		g and Cleaning			
Mai 6.1	ntaining	g and Cleaning			
	n taining Safety		18		
6.1 6.2	n taining Safety Mainte	regulations	18 18		
6.1 6.2 Tec	n taining Safety Mainte hnical \$	regulations enance and Interval (rule-of-thumb)			
	Safe Mou 3.2 3.3 The DM2 5.1	Safety Inst Mounting 3.1.1 3.1.2 3.1.3 3.2 Securi 3.3 Conne 3.3.1 3.2 3.3.1 3.3.2 3.3.3 The Menu I DMX Chan 5.1	Safety Instructions Mounting 3.1.1 Operating on the Floor (Upright) 3.1.2 Mounting in hanging position 3.1.3 Mounting in sideways Position 3.2 Securing the Fixture 3.3 Connections 3.3.1 Power Supply 3.3.2 NEUTRIK® powerCON 3.3.3 DMX The Menu Field DMX Channel Selection (DMX Protocol) 5.1 Normal Mode (18 DMX channels)		

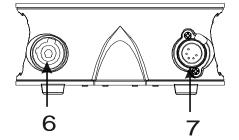
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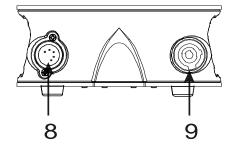
1 Description of Device

- 1. Moving head (actively and passively cooled)
- 2. Arm of device
- 3. LCD-Display/Menu (data entry)
- 4. Base with various connectors, air in/outlets and mounting system
- 5. Fuse holder (on the bottom)



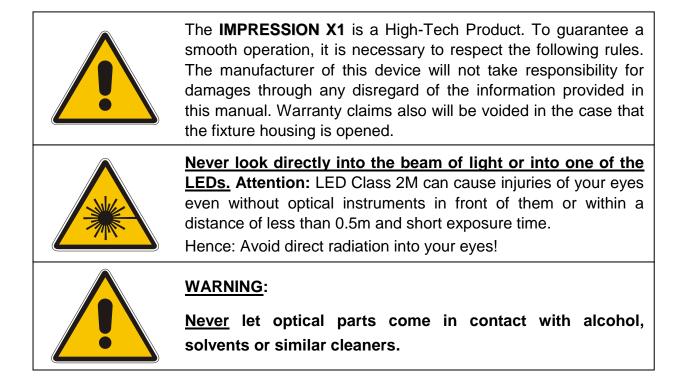
Base sideview:





- 6. Mains Out (powerCON grey)
- 7. DMX- Output (5-pin)
- 8. DMX- Input (5-pin)
- 9. Mains In (powerCON blue)

2 Safety Instructions



- 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. <u>Attention!</u> Don't touch the fixture during the operation. This can cause injuries and/or damages.

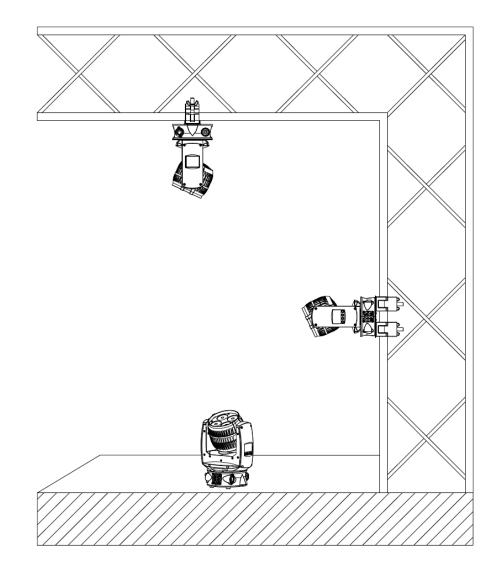
4. <u>The fixture doesn't contain any user serviceable parts. Opening the fixture will void all warranties.</u>

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.

- To ensure safe operation, follow also the Installation guide described in the chapter below. Operating the **IMPRESSION X1** without suitable safety aids like Safety cables or clamps/hooks can increase the risk of an accident and must be avoided.
- 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.
- 8. Use only original GLP spare parts. Any structural modification of the system will terminate all warranty claims.
- 9. Please keep this instruction manual for future reference.
- 10. 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.

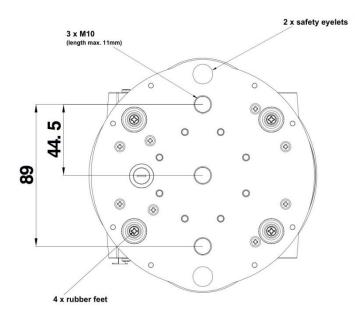
3 Mounting

The **IMPRESSION X1** 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.).





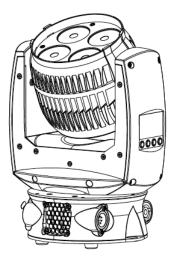
For the various mounting positions of the **IMPRESSION X1** (standing on the floor, sideways or hanging) different connectors are available. Through this a safe and firm installation is assured. You'll find dedicated M10 threads on the bottom side of the fixture which should be used. In addition the top of the base is marked with a **FRONT** arrow allowing consistent orientation during installation.



Fixture from below

3.1.1 Operating on the Floor (Upright)

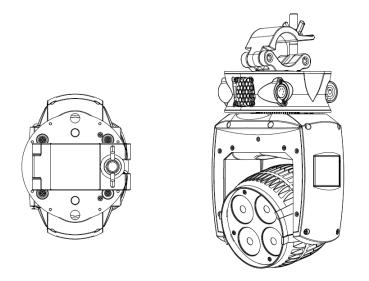
The **IMPRESSION X1** is fitted with 4x solid rubber feet which allows a stable standing of the fixture. An additional securing is usually not required. Please pay attention to an even and gripping surface.



3.1.2 Mounting in hanging position

To operate the **IMPRESSION X1** in a hanging position please use a halfcoupler (clamp). This can be mounted directly to the bottom side of the fixture. It should be attached centrically with a M10 mm thread bolt **(max. length 11mm).**

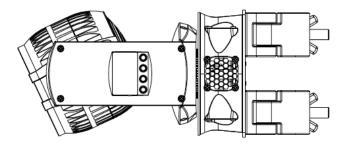
<u>Attention:</u> Never use a longer bolt as this may damage the interior of the fixture.



3.1.3 Mounting in sideways Position

To operate the **IMPRESSION X1** in a sideways position please use two half-couplers (clamps) attached to the bottom side of the base. They should be attached with M10 mm thread bolts (max. length 11mm).

This technique is necessary to cope with the torque which accrues in this mounting position. Never use the "Mounting in hanging position" technique described above to fasten the fixture in the sideways position. A safe and sound installation cannot be assured in this way. In addition this can damage the fixture base.



Attention: Always use two (2) half-couplers for sideway mounting.

3.2 Securing the Fixture

Regardless of the mounting method of the **IMPRESSION X1** 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 BGI 810-3 (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.

3.3 Connections

3.3.1 Power Supply

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

Connected load 85 VA (W) <=> T2A (micro-fuse 5x20mm)

Please also see the printing on the case!

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

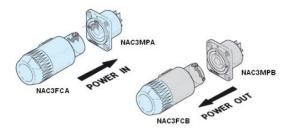
3.3.2 NEUTRIK[®] powerCON

The IMPRESSION X1 is fitted with NEUTRIK® powerCON locking 3 conductor AC connectors.

The grey connector must be used to draw AC mains power from the fixtures` throughput sockets and the blue connectors must be used to supply power at the fixtures` power input socket.

The total number of fixtures in one interconnected chain depends on your local AC mains voltage but you must never connect more than a total load of 20A to stay within the limits of the connector. The total load includes all connected fixtures including the first one in the chain.

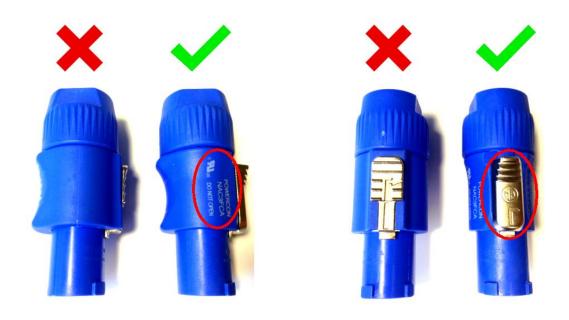
Note: The maximum allowed total load is <u>20A</u> including the first fixture in <u>one</u> interconnected daisy chain.





Please note that there are two different generations of NEUTRIK[®] powerCON connectors (Type NAC3FCA). Due to different mechanical dimensions, only the newer version of these two can be used for **impression X1** fixtures.

You can identify the correct version by the imprint on the side and the NEUTRIK[®] Logo on the lock latch.

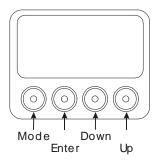


3.3.3 DMX

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].

4 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 X1.** 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.

	_			
Level1	Level 2	Level 3	Level 4	Remark
DMX Start Address 001			1	Set the DMX start address
Special	Manual DMX			Manual control of all fixture functions
		Pan		Manual control for Pan (X-movement)
		Pattern		Manual control for Pattern channel / bank
		Speed Movements		Manual control for Pan/Tilt movements
		Pan/Tilt Movements		Manual control for Pan/Tilt movements
		Special		Manual control for Special functions
		White Temperature		Manual control for Color temperature
		Dimmer		Manual control for Dimmer
		Shutter		Manual control for Shutter
		White		Manual control for White
		Blue		Manual control for blue
		Green		Manual control for green
		Red		Manual control for red
		Color Wheel		Manual control for the color wheel
		Tilt		Manual control for Tilt (Y-movement)
	Adjust			
		Key code		Use the code for entering the calibration menu
		XXXX		(for authorized persons only)
		Display Contrast		Adjustment for the Display contrast
		PWM - Frequ. Adj.		Changes PMW frequency
		Max Zoom adjust		Calibration of Zoom-offset
		Pan Offset		Calibration for Pan-offset
		Tilt Offset		Calibration for Tilt-offset
		LED 100mA/1A		Adjust dimming of the LEDs
		adjust		
		LED adjust	White adjust	
			red	Adjust intensity for red channel
			White adjust blue	Adjust intensity for blue channel
			White adjust green	Adjust intensity for green channel
		Clear EEPROM		Erase EEPROM memory

 \leftarrow mode - enter \rightarrow

		BL- Diagnose
		Diagnose
	Temperature Head	
	Default full	
	feature	
	Display Black out	
	DMX hold	
	DMX Image	
		Set image if DMX off
		Save image
	Set dimming	in memory
	mode	
	DMX input Monitor	
		Pan
		Pattern
		Speed Movements
		Pan/Tilt
		Movements
		Special White
		Temperature
		Dimmer
		Shutter White
		Blue
		Green
		Red Color Wheel
_	_	Tilt
Self test program		
Live time		
Set DMX Mode		
	Compressed Mode	
	Normal	
	Mode High Bos	
	High-Res. Mode	
Position		
feedback Reverse Pan		
Reverse Pan Reverse Tilt		
Reset		

Diagnose of Boot-loader
Diagnose fixture functions
Read out head temperature
Reset all settings to factory defaults
Auto switch-off display illumination after 10 seconds
Holds last DMX signal in case of signal loss
Activates a stored scene if DMX is off
Stores the scene currently sent to the unit
Linear Dimming / Extr. soft dimming / Soft dimming
Indicates the presently received DMX signal per DMX channel
Instantaneous value for Pan
Instantaneous value for Pattern channel / bank
Speed adjustment for Pan/Tilt movements → see item below
Instantaneous value for Pan/Tilt movements
Instantaneous value for Special
Adjustment of the color temperature for WHITE
Instantaneous value for Dimmer
Instantaneous value for Shutter
Instantaneous value for White
Instantaneous value for Blue
Instantaneous value for Green Instantaneous value for Red
Instantaneous value for Color Mixing unit
Instantaneous value for Tilt
Initiates a self-test program
On-time of fixture
Select the desired DMX Mode
Fixture works in "Compressed" mode \rightarrow see also section 0 unterhalb
Fixture works in "Normal" mode \rightarrow see also
section 0 unterhalb
Fixture works in "High Resolution" mode \rightarrow see
also section 0 unterhalb
Switch automatic position feedback ON/OFF
Invert Pan movements: ON/OFF
Invert Tilt movements: ON/OFF
RESET and new calibration for all functions



5 DMX Channel Selection (DMX Protocol)

Channel Function Time and Value DMX 1 Pan - High Pan coarse 0° - 660° 0..255 2 Pan - Low Pan fine 0..255 3 Tilt - High Tilt coarse 0° - 300° 0..255 4 Tilt - Low Tilt fine 0..255 Colors adjustable via RGB 5 Color (fixed) 0..7 Color 01 - Red¹⁾ 8..15 Color 02 - Amber¹⁾ 16..23 Color 03 - Warm Yellow 1) 24..31 Color 04 - Yellow 1) 32..39 Color 05 - Green 1) 40..47 Color 06 - Turquoise ¹⁾ 48..55 Color 07 - Cyan¹⁾ 56..63 Color 08 - Blue 1) 64..71 Color 09 - Lavender 1) 72..79 Color 10 - Malve 1) 80..87 Color 11 - Magenta¹⁾ 88..95 Color 12 - Pink¹⁾ 96..103 White – CTO 104..111 3200K White 5600K 112..119 White – CTB 7200K 120..127 Rainbow Effect Stop²⁾ 128 Rainbow Effect ³⁾ slow - fast 129..223 224..255 Random colors slow - fast Color mixing system - Red 0 - 100% 0..255 6 Red 7 Green Color mixing system - Green 0 - 100% 0..255 0 - 100% 0..255 8 Blue Color mixing system - Blue 9 White 0 - 100% 0..255 Color mixing system - White 10 Shutter Shutter closed 0..15 Shutter pulse random slow – fast 16..47 Fade on, snap off (random patterns) slow - fast 48..79 slow – fast 80..111 Snap on, fade off (random patterns) slow - fast 112..143 Fade on, fade off (random patterns) 5s - 0.1s 144..199 Strobe random 200..239 Strobe effect slow - fast 1 Hz - 10 Hz 240..255 Shutter open

5.1 Normal Mode (18 DMX channels)

11	Intensity	Dimmer			0 - 100%	0255
12	СТО	No CTO			Applicable	07
		Continuously 2,500	k – 10,000	k	for ALL colors	8255
13	Special	RESET			> 1 sec	250255
14	Movement	No macros			•	00
	Macros	Movement	Speed	Phase	Use channel 15	to adjust
		Pan	1	0°		0101
		Pan	1	90°		0203
		Pan	1	180°		0405
		Pan	1	270°		0607
		Pan	2	0°		0809
		Pan	2	90°		1011
		Pan	2	180°		1213
		Pan	2	270°		1415
		Pan	3	0°		1617
		Pan	3	90°		1819
		Pan	3	180°		2021
		Pan	3	270°		2223
		Pan	4	0°		2425
		Pan	4	90°		2627
		Pan	4	180°		2829
		Pan	4	270°		3031
		Tilt	size / p	hase see Pan		3263
		Pan / Tilt	size / p	hase see Pan		6495
		Pan / Tilt (inverse)	size / p	hase see Pan		96127
		Circle	size / p	hase see Pan		128159
		Circle (inverse)	size / p	hase see Pan		160191
		Lying eight	size / p	hase see Pan		192223
		Random movement	size / p	hase see Pan		224255
15	Pan / Tilt	Pan/Tilt movement	speed from	n controller		01
	Speed	Pan/Tilt, slow – fast				2255
		Use this channel for	the speed	l of the macros	on channel 14	
16	None	reserved				-
17	Pan - rotation	No rotation				05
		Pan rotation CW			slow – fast	6130
		Pan rotation CCW			fast - slow	131255
18	Tilt - rotation	No rotation				05
		Tilt rotation CW			slow – fast	6130
		Tilt rotation CCW			fast - slow	131255

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Ch	annel	Function	Time and Value	DMX
1	Pan - High	Pan coarse	0° - 660°	0255
2	Pan - Low	Pan fine		0255
3	Tilt - High	Tilt coarse	0° - 300°	0255
4	Tilt - Low	Tilt fine		0255
5	Color (fixed)	Colors adjustable via RGB		07
		Color 01 - Red ¹⁾		815
		Color 02 - Amber ¹⁾		1623
		Color 03 - Warm Yellow ¹⁾		2431
		Color 04 - Yellow ¹⁾		3239
		Color 05 - Green ¹⁾		4047
		Color 06 - Turquoise ¹⁾		4855
		Color 07 - Cyan ¹⁾		5663
		Color 08 - Blue ¹⁾		6471
		Color 09 - Lavender ¹⁾		7279
		Color 10 - Malve ¹⁾		8087
		Color 11 - Magenta ¹⁾		8895
		Color 12 - Pink ¹⁾		96103
		White – CTO	3200K	104111
White		White	5600K	112119
		White – CTB	7200K	120127
		Rainbow Effect Stop ²⁾		128
		Rainbow Effect ³⁾	slow - fast	129223
		Random colors	slow - fast	224255
6	Red	Color mixing system - Red	0 - 100%	0255
7	Green	Color mixing system - Green	0 - 100%	0255
8	Blue	Color mixing system - Blue	0 - 100%	0255
9	White	Color mixing system - White	0 - 100%	0255
10	Shutter	Shutter closed		015
		Shutter pulse random	slow – fast	1647
		Fade on, snap off (random patterns)	slow – fast	4879
		Snap on, fade off (random patterns)	slow – fast	80111
		Fade on, fade off (random patterns)	slow – fast	112143
		Strobe random	5s - 0.1s	144199
		Strobe effect slow - fast	1 Hz - 10 Hz	200239
		Shutter open		240255
11	Intensity	Dimmer	0 - 100%	0255

5.2 Compressed Mode (14 DMX channels)

12	Special	RESET	> 1 sec	250255
13	Pan - rotation	No rotation		05
		Pan rotation CW	slow – fast	6130
		Pan rotation CCW	fast - slow	131255
14	Tilt - rotation	No rotation		05
		Tilt rotation CW	slow – fast	6130
		Tilt rotation CCW	fast - slow	131255

¹⁾ 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 X1** will then start from that color and will execute the rainbow effect synchronously. Different **IMPRESSION X1** 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 from the current color.

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

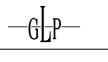
Locking and unlocking the Control Panel

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

Additional Display Indications

As a default you'll find the following additional information in the first row of the LCD display: Vxx/xx/xx/xx/x (e.g. V1.16/10/16/NN/NS)

- \downarrow NS (DMX Mode = Normal / Dimmer Mode = Soft)
 - → NN (Pan Mode =Normal; Tilt Mode = Normal)
- → 16 LED driver version
 - → 1.16 Main CPU version



6 Maintaining and Cleaning

The **IMPRESSION X1** 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!



Attention:

Under <u>no</u> circumstances should alcohol or solvents be used to clean the lenses!

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, fat, alcohol or similar solvents.
- Before running the fixture wait until all parts are dry.
- Never touch lenses with bare fingers.

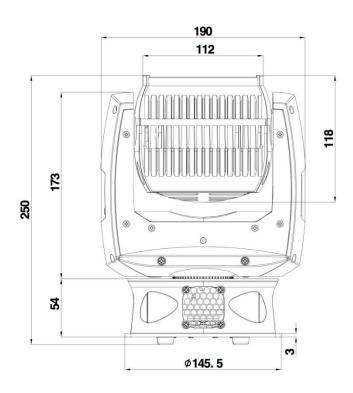


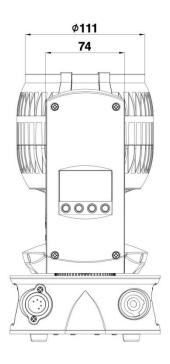
7 Technical Specifications

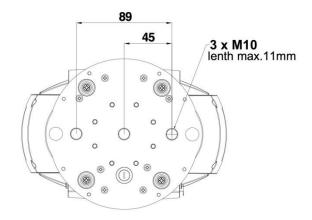
Power supply	
Power consumption	85 VA (Watt)
Power Input	Auto sensing 100-240 V AC, 50-60 Hz
Power connectors	NEUTRIK [®] powerCON
	Power-in: NAC3FCA / NAC3MPA (blue)
	Power-out: NAC3FCB / NAC3MPB (grey)
Fuse protection	Micro-fuse 5x20 mm, T2A
Operational Parameters	
Max. Ambient	5° - 45°C (integrated overheating switch)
Temperature	40°-113°F
Mounting Position	Any (see relevant chapter)
Lighting System - Additive	ve Color mixing
LED Type	4 x Osram Ostar RGBW multi-chip
Lifetime	50,000 h
Wavelength optimized for	maximum presentable color space
Optical System	
Full RGBW / High efficient	
Interchangeable lens carrie	er with 7° beam angle as standard option
Shutter / Dimmer (8/16 B	it)
Strobe- Effect with variable	e speed between 1-10 flashes per second, Random & Pulse-Effects
Continuous Dimmer 0 - 10	0%
DMX Control	
	, 5 pin XLR: [+]=Pin 3 / [-]=Pin 2 / [Ground]=Pin 1 / Pin 4 & 5 N.C.
v	ts at the DMX channel [001].
Pan / Tilt (8/16 Bit)	
Pan- movement	660° in min. 2 seconds (Position Feedback)
Pan - rotation	endless pan-rotation with adjustable speed
Tilt- movement	360° in min. 0.9 seconds (Position Feedback)
Tilt - rotation	endless tilt-rotation with adjustable speed
Weights and Measures	
Width	140 mm / 5.5″
Length	190 mm / 7.5″
Height (head vertical)	250 mm / 9.9″
Weight (net)	3.1 kg / 6.8 lbs



8 Dimensions







9 Index

В	
BGV C1	7
С	
Cleaning	18
D	
Description of Device	4
Dimensions	20
DIN VDE 0711-217	7
Display Indications	17
DMX	
E	
9	
e-mail	
EN 60598-2-17	10
	10
EN 60598-2-17	10
EN 60598-2-17 Enter-key	10 12
EN 60598-2-17 Enter-key	10 12
EN 60598-2-17 Enter-key <i>M</i> Maintenance	10 12
EN 60598-2-17 Enter-key Maintenance Menu Field	10 12
EN 60598-2-17 Enter-key Maintenance Menu Field Micro-fuse	10 12
EN 60598-2-17 Enter-key Maintenance Menu Field Micro-fuse Mode-key	10 12 18 12 10 12
EN 60598-2-17 Enter-key Maintenance Menu Field Micro-fuse Mode-key Mounting Mounting in hanging Position Mounting in sidewise Position	10 12
EN 60598-2-17 Enter-key Maintenance Menu Field Micro-fuse Mode-key Mounting Mounting in hanging Position	10 12

N

NEUTRIK [®] powerCON	10
Normal-Mode	14

0
Optical parts
Р
Pan- Movement
S
Safety distance7Safety Instructions5Secure the Device10Software Version1
Т
Technical Specifications
U
Up/Down-keys12
V
VBG 707
W
Warranty claims

