LIGHT BRIGHT

Synjax Zoom 19

LED Washlight

User Manual
V 1.0

Contents

1.   Introduction

ATTENTION: For your own safety, please read these operating instructions carefully before the first use.

This headlight has left our company in best condition. To maintain this condition and to ensure safe operation, it is absolutely necessary to observe the following safety instructions and warnings, which are described in this operating manual.

The manufacturer does not accept any liability for damage caused by not following these operating instructions or unauthorized changes to the device.

Please note that damages caused by manual changes to this device are not covered by the warranty.

ATTENTION: This device is for professional use only! Protection class IP 20 – only for use in dry environment (indoor)!

Light Bright does not authorize the use of your devices in life support systems. Life Support Systems are systems whose purpose is to maintain or stabilize life and whose defect or malfunction could result in death or injury to persons.

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2.   Safety instructions

ATTENTION: Disconnect the device from the power supply before opening the device. Touching live parts (high voltage) can cause an electric shock.

Make sure that the mains voltage to be connected is not higher than the voltage indicated on the type plate. This device should only be operated with the power source specified on the type plate.

If you are not sure what type of power supply you have, contact your dealer or your power company.

Always disconnect the device from the power supply before carrying out cleaning work, changing fuses or replacing parts.

The power plug must always be accessible after installation of the spotlight. Do not overload the sockets or extension cords as this may result in fire or electric shock. Do not place any objects on the power cord. Do not install the spotlight in such a way that people can trip over the power cord or step on it. Make sure that the power cord can never be crushed or damaged by sharp edges. Check the unit and the power cord from time to time.

Always leave maintenance work to a qualified technician.

ATTENTION: This light corresponds to protection class I. Therefore this light must be connected to a mains socket with earthing contact.

Never connect this device to a dimmable power source.

Some smoke and odor may be produced during initial operation. This is a normal procedure and does not necessarily mean that the unit is defective.

The device becomes hot during operation. Never touch the device with bare hands during operation!

When replacing fuses, only use fuses of the same type with identical values. Have fuses replaced only by a qualified technician.

ATTENTION: EYE DAMAGE! Do not look into the light source for a long time during operation. This can be harmful to the eyes. Possibly dangerous radiation.

If the device was exposed to strong temperature fluctuations (e.g. after transport), the device must not be switched on immediately. The resulting condensation water can damage your device. Leave the device switched off until it has reached room temperature.

Do not shake or bump the device. Avoid brute force during installation or operation.

This spotlight is designed for indoor use only. Do not expose this unit to rain or moisture.

When choosing the installation location, make sure that the device is not exposed to extreme heat, humidity or dust.

Ventilation openings and slots in the head and foot of the spotlight are provided for ventilation. To ensure reliable operation of the device and protect it from overheating, these openings must not be covered.

Never cover the front lens when the headlight is in use.

The openings should never be covered with fabrics or other objects so that the airways are blocked.

This device must not be operated in an environment without sufficient ventilation.

The device may only be operated when the housing is closed and all screws / snap connectors are tightened.

The device must always be secured with an additional safety device.
Make sure that the area underneath the spotlight is clear during installation, conversion and dismantling.

ATTENTION: The distance between the light emission and the illuminated surface must be at least 1.0 meter.

The front lens must be replaced if it is visibly damaged so that its function is impaired, e.g. by cracks or deep scratches!

To avoid damaging the internal parts of the lamp base, never let sunlight shine directly into the front lens.

The maximum ambient temperature of 45°C must not be exceeded.

Do not operate the device until you have familiarized yourself with its functions. Prevent operation by persons who are not qualified to use the device. Most damage is the result of improper operation!

Please use the original packaging or specially adapted flight cases when transporting the device.

3.   Unpacking the device

Contents of the package: The headlight, a Powercon connection cable and Omega brackets for mounting.

Open the packaging carefully on the top side and check the headlight and accessories for possible transport damages. These should be reported immediately to the transport company.

4.   Installation

The device comes with a ready made-up Powercon connection cable. Please use only the supplied cable or a cable of the same type assembled by a specialist. The connection of the device to the power supply must also be carried out by an authorized specialist.

Connection in Germany/Europe:

Conductor color	Function	Symbol
Brown	Phase	„L"
Blue	Neutral conductor	„N"
Yellow/green	Protective earth	„PE" ⏚

Connected loads: voltage 100-240 V, frequency 50 - 60 Hz, power max. 300VA

The electrical safety as well as the function of the device is only guaranteed if it is connected to a properly installed protective conductor system. It is very important that this basic safety requirement is present. In case of doubt, have the electrical installation checked by a specialist. The manufacturer cannot be held responsible for damage caused by a missing or interrupted protective conductor (e.g. electric shock)! Only use the device in a completely assembled state so that no electrical components can be touched. (**danger 100-240 V)**

If you have observed the listed points, you can plug in the devices or have them connected to the mains by a specialist.

ATTENTION: The spotlight may light up immediately if standalone operation is activated or a DMX signal is applied!
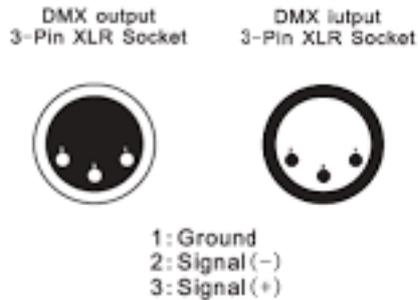
5.   DMX-Connection

The DMX cabling (signal lines) should be done with a 2-wire cable with shielding. We recommend a DMX cable with 110 Ohm, 2x0,22mm2or 4x0,22mm2. The plugs and sockets are 3-pin XLR-connectors, which can be purchased in specialized shops.

Pin assignment:

Pin1 = Ground / Shielding

Pin2 = DMX -

Pin3 = DMX +

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      DMX output          DMX lutput
   3-Pin XLR Socket    3-Pin XLR Socket


        1:Ground
        2:Signal(-)
        3:Signal(+)
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The spotlight has a DMX-in and DMX-out connection. Now connect the DMX output of your controller to the first spotlight (Controller DMX-Out -> Spotlight DMX-In). Then connect the first spotlight with the second spotlight and so on. In some cases it is advisable to plug in a so called end plug/end resistor (XLR plug with a resistor of 120 Ohm between pin 2 and pin 3). Whether or not an end plug is required depends on various factors, including the cable lengths used and the number of units. However, as long as there are no problems in the DMX line, it is not necessary.
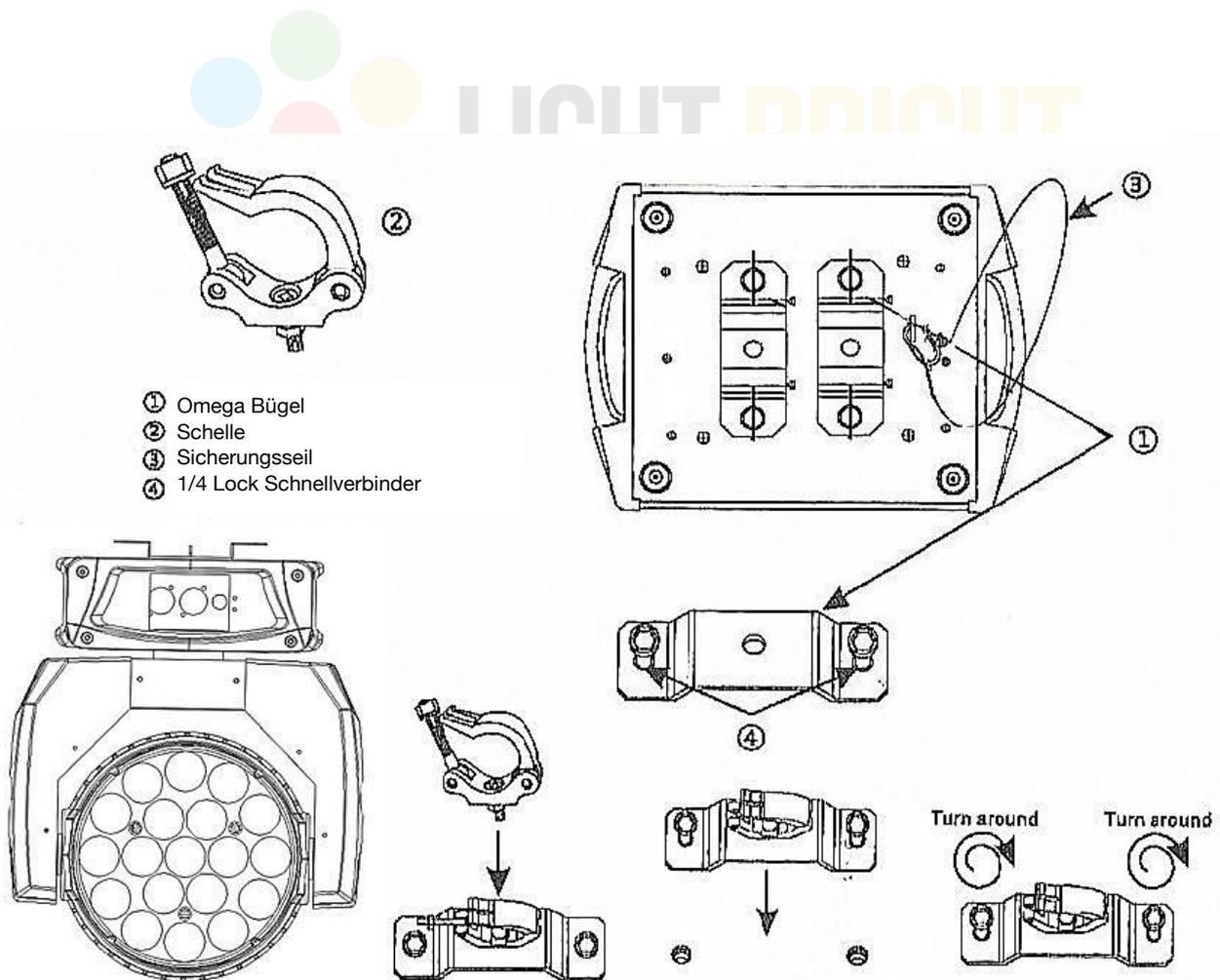
6. Mounting the device

The spotlight can either be positioned or suspended from a truss system. Horizontal mounting to the truss is also permitted.

If you place the unit on the floor, you may only operate the unit on a hard surface, as the air inlets in the foot must remain free!

To hang the device on a truss system, use the supplied Omega clamps with snap connectors.

Make sure that the snap connectors engage securely. Make sure that the truss construction on which you mount the device complies with the safety regulations. When installing a truss, always secure the spotlight with a safety device that complies with the national regulations. Use the safety eyelet on the device for this purpose.

① Omega Bügel
② Schelle
③ Sicherungsseil
④ 1/4 Lock Schnellverbinder

7. Control panel

The spotlight has a display to show the set parameters and four buttons to adjust them. This control panel allows you to adjust all the parameters of the spotlight according to your needs.

Operation of the menu

1. DMX ADDRESS
Here you can set the DMX address of the device.
Press "OK" to enter the DMX settings. Use the buttons "up" and "down" to set the desired DMX address and confirm with "OK".

2. WORK MODE
Here you can change the different working methods of the device.
Press "OK" to enter the settings and use the arrow keys to navigate to the sub-item "Work Mode". Confirm with "OK" and set the desired mode, which can be confirmed with "OK" again.
The following modes are available:
DMX512, Slow, Fast, Sound, Slave
"DMX512" is for controlling the fixture using an external lighting console, "Slow" and "Fast" are built-in standalone sequences, "Sound" lets the fixture automatically respond to ambient music through a built-in microphone, "Slave" is for master/slave operation where multiple fixtures can be synchronized.

3. INVERT PAN
Here you can invert the panorama movement of the device.

Press "OK" to enter the settings and use the arrow keys to navigate to the sub-item "Invert Pan". Press "OK" again and set the Invert to "Yes" or "No" to switch the inversion on or off. Confirm again with „OK".

4.   INVERT TILT
Here the tilt movement of the device can be inverted.

Press "OK" to enter the settings and use the arrow keys to navigate to the sub-item "Invert Tilt". Press "OK" again to confirm and set the Invert to "Yes" or "No" to switch the inversion on or off. Confirm again with „OK".

5.   DISPLAY SET
Here you can adjust the backlight of the display.

Press "OK" to enter the settings and use the arrow keys to navigate to the sub-item "Display Set". Press "OK" again and set the parameter to "Yes" or "No" to switch the display backlight on or off.Confirm again with "OK". "Yes" means that the display lighting remains on, "No" switches the lighting off after approx. 20 seconds until an entry is made again.

6.   CHANNEL MODE SET
Here you can switch between the DMX modes. A 14CH-mode and a 32CH-mode are available.

Press "OK" to enter the settings and navigate to the submenu item "Channel Set" using the arrow keys. Confirm again with "OK" and set the parameter to "14CH Mode" or "32CH Mode". Confirm again with "OK".

7.   RESTORE FACTORY SETTINGS
Here you can reset all set parameters to factory settings.

Press "OK" to enter the settings and navigate to the sub-item "Restore Factory Settings" using the arrow keys. Press "OK" again to confirm and reset all settings by confirming them.

8.   RESET
Here you can reset the device manually.

Press "OK" to enter the settings and use the arrow keys to navigate to the sub-item "Reset". Confirm again with "OK" and the device will perform a complete reset after about 3 seconds.

8.   Channel assignment

Channel			Value	Funktion
14	**32**			
1	**8**			**Shutter effect**
			0-24	Shutter open
			25-229	Strobe 1 (slow-fast)
			230-244	Strobe 2 (random)
			245-255	Shutter open
2	**7**			**Beam Dimmer**
			0-255	0 - 100% Intensity
3	**6**			**Zoom**
			0-255	Wide - narrow
4	**1**			**Pan (8bit)**
			0-255	Pan movement
5	**2**			**Pan fine (16bit)**
			0-255	Pan movement fine
6	**3**			**Tilt (8bit)**
			0-255	Tilt movement
7	**4**			**Tilt fine (16bit)**
			0-255	Tilt movement fine
	5			**Position speed**
			0-255	Position speed (slow-fast)
8				**Fixture Control**
			0-9	No function
			10-14	Reset Fixture
			15-255	No function
9				**Beam Color wheel**
			0-9	Open: CMY color mixing enabled
			10-22	Red
			23-35	Green
			36-48	Blue
			49-61	White
			62-74	Yellow
			75-87	Magenta
			88-100	Light Rosé
			101-113	Cyan

Channel		Value	Funktion
14	32		
		114-126	Turquoise
		127-139	Coldwhite
		140-152	Light Cyan
		153-165	Light Magenta
		166-177	CTB
		178-234	Farbrad Rotation langsam-schnell)
		235-255	Open
10			**Beam Red**
		0-255	0 - 100% Red
11			**Beam Green**
		0-255	0 - 100% Green
12			**Beam Blue**
		0 -255	0 - 100% Blue
13			**Beam White**
		0-255	0 - 100% White
14			**Beam CTC**
		0-50	CTC deactivated
		50-99	CTB
		100-255	CTO (continuously adjustable)
			Middle - LED
	9	0-255	0-100% Red
	10	0-255	0-100% Green
	11	0-255	0-100% Blue
	12	0-255	0-100% White
			2. Ring
	13	0-255	0-100% Red
	14	0-255	0-100% Green
	15	0-255	0-100% Blue
	16	0-255	0-100% White
			Out Even
	17	0-255	0-100% Red
	18	0-255	0-100% Green

Channel		Value	Funktion
14	32		
	19	0-255	0-100% Blue
	20	0-255	0-100% Weiß
			Out Odd
	21	0-255	0-100% Red
	22	0-255	0-100% Green
	23	0-255	0-100% Blue
	24	0-255	0-100% White
	25		Free
	26		Free
	27		Free
			CTO if channel 31: 50 - 74
		0-255	**Color on channel Activate on 31: 75-99**
		0-7	Color 1
		.8 - 15	Color 2
		16 - 23	Color 3
		24 - 31	Color 4
		32 - 39	Color 5
		40 - 47	Color 6
		48 - 55	Color 7
		56 - 63	Color 8
		64 - 71	Color 9
		72 - 79	Color 10
		80 - 87	Color 11
		88 - 95	Color 12
		96 - 103	Color 13
		104 - 111	Color 14
	28	112 - 119	Color 15
		120 - 127	Color 16
		128 - 135	Color 17
		136 - 143	Color 18
		144 - 151	Color 19
		152 - 159	Color 20
		160 - 167	Color 21
		168 - 175	Color 22

Channel			
14	**32**	**Value**	**Funktion**
		176 – 183	Color 23
		184 – 191	Color 24
		192 – 199	Color 25
		200 – 207	Color 26
		208 – 215	Color 27
		216 – 223	Color 28
		224 – 231	Color 29
		232 – 239	Color 30
		240 – 255	Gradient color effect with channel 30 Speed
			Effect on channel 31 Activate 100-149
			Effects
		0 – 9	Effect 1
		10 – 19	Effect 2
		20 – 29	Effect 3
		30 – 39	Effect 4
		40 – 49	Effect 5
		50 – 59	Effect 6
		60 – 69	Effect 7
		70 – 79	Effect 8
		80 – 89	Effect 9
	29	90 – 99	Effect 10
		100 – 109	Effect 11
		110 – 119	Effect 12
		120 – 129	Effect 13
		130 – 139	Effect 14
		140 – 149	Effect 15
		150 – 159	Effect 16
		160 – 169	Effect 17
		170 – 179	Effect 18
		180 – 189	Effect 19
		190 – 199	Effect 20
		200 – 255	Auto Effekt
			Effect Speed
	30	0-255	Effect Speed
			Control
		0 – 49	Channel 1 - 27 Active

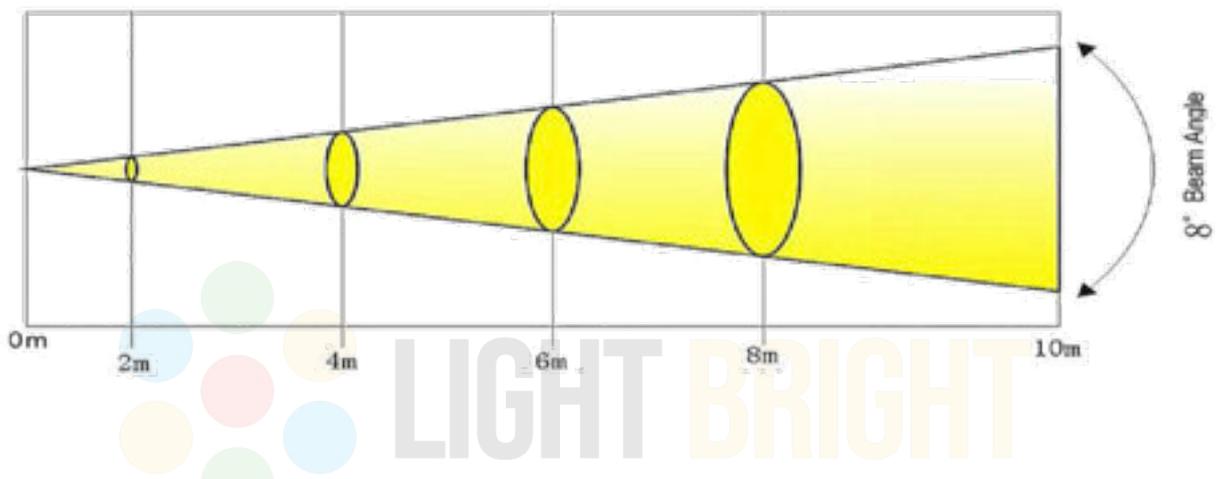| Channel			
14	32	Value	Funktion
		50 – 74	Kanal 28: CTO
		75 – 99	Static color with channel 7, 28 and 30
	31	100 – 149	Effects with channel 7, 29 and 30
		150 – 199	Auto Effect
		200 – 255	Sound to Light
			Function
	32	0-250	No function
		251-255	Reset Fixture

Ch 25-27 in 32CH mode are free for future functions via update.

The 25CH mode is available for further updates, currently offers the same functions as the 14CH mode.
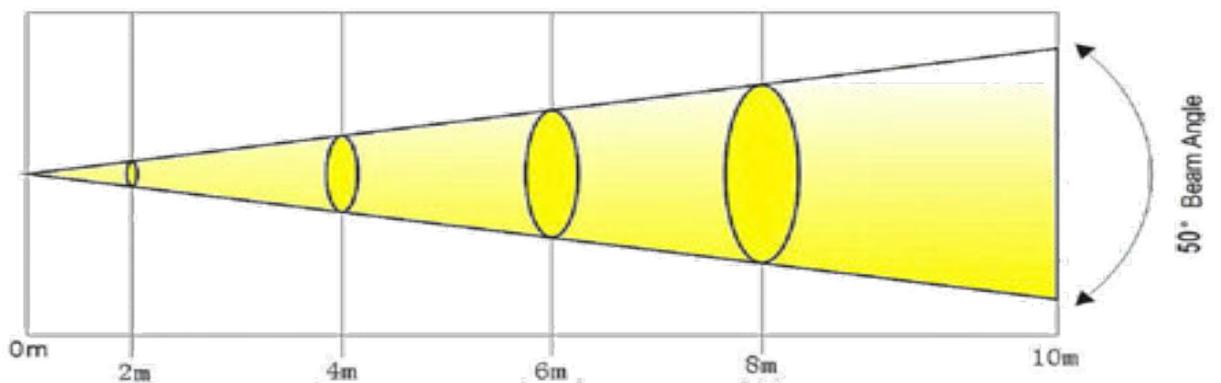
9. Photometric Data

LUX Data on 8° Beam				
	2m	**4m**	**6m**	**8m**
R	7200	1900	1000	620
G	14800	3900	1900	1200
B	14800	3950	1950	1200
W	15200	3850	1950	1200
RGBW	41100	10000	4600	2550

LUX Data on 50° Beam				
	2m	**4m**	**6m**	**8m**
R	1150	310	200	110
G	2450	710	350	200
B	2450	710	350	200
W	2350	700	320	180
RGBW	6600	2000	1200	700

10. Service and cleaning

> **ATTENTION: Always disconnect the device from the voltage source before opening it!**

You should check the function of the fans in the head and foot at regular intervals. Above all, you should make sure that the air intakes as well as the inside of the spotlight are free of lint and dust.

To do this, open the head cover and the base plate at the foot. You can clean the spotlight with a brush/cleaning cloth and a vacuum cleaner or compressor (low speed only).

Take care not to bend or damage any parts during cleaning. After cleaning is complete, close all covers again with the corresponding screws and carry out a function test.

Please use only clean cleaning cloths or brushes and cleaning agents without alcohol to clean your device. We recommend regular cleaning at least every three months.

Pay attention to damage to the device, parts of the device and the connection cables. If you notice any damage, DO NOT use the device and take it to an authorized dealer to exclude dangers by using defective devices and to repair your device professionally.

11. Information

This device complies with the CE directive:

- in terms of the directive: 2014/35/EU Low Voltage Directive,
  (Directive 2014/35/EU of the European Parliament and of the Council of
  26.02.2014 on the approximation of the laws of the Member States relating to
  electrical equipment designed for use within certain voltage limits)

- in terms of the directive: 2014/30/EU Electromagnetic Compatibility (Directive
  2014/30/EU of the European Parliament and of the Council of 26.02.2014 on the
  approximation of the laws of the Member States relating to electromagnetic
  compatibility)

The device complies with IP20 and is therefore protected against the penetration of solid
foreign bodies with a diameter of more than 12mm (first code number 2), while it is sensitive
to moisture, splash and jet water.

During operation, it is mandatory to connect the device to a power supply system equipped
with a powerful grounding (Class 1 device according to EN 60598-1). Furthermore, it is
recommended to protect the supply line of the equipment from indirect contact and/or short
circuits with correctly dimensioned residual current circuit breakers.

Only use the device if the room temperature is below 45°C.

Before starting any maintenance on the unit, it must cool down for at least 10 minutes after
disconnection from the power supply to minimize the risk of damage to the electronic
components. For maintenance or repair work on the chips, the device must cool down for at
least another 20 minutes to prevent burning.