



# Synjax Zoom 40

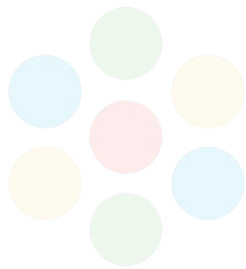
## LED Washlight

User Manual  
V 1.0



# Contents

1. Introduction	3
2. Safety instructions	4
3. Unpacking the device	6
4. Installation	6
5. DMX-Connection	7
6. Mounting the device	8
7. Control Panel	8
8. Channel assignment	11
9. Photometric data	16
10. Technical details	17
11. Service and cleaning	18
12. Notes	19



LIGHT BRIGHT

## 1. Introduction

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

The 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 damage caused by manual changes to this device is 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.**

## 2. Safety instructions

**CAUTION: Disconnect the device from the power supply before opening the device. Touching live parts 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 the 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 knock the device. Avoid brute force during installation or operation.

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

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

Ventilation openings and slits in the head and foot of the headlamp serve for ventilation. To ensure reliable operation of the device and to protect it from overheating, these openings must not be covered.

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

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

This unit must not be operated in an environment without adequate ventilation.

The device may only be operated when the housing is closed and all screws / snap connectors are firmly 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 2.0 meters.**

**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“ $\perp$

Connected loads: voltage 100-240 V, frequency 50 - 60 Hz, power max. 520W, 2.1A

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

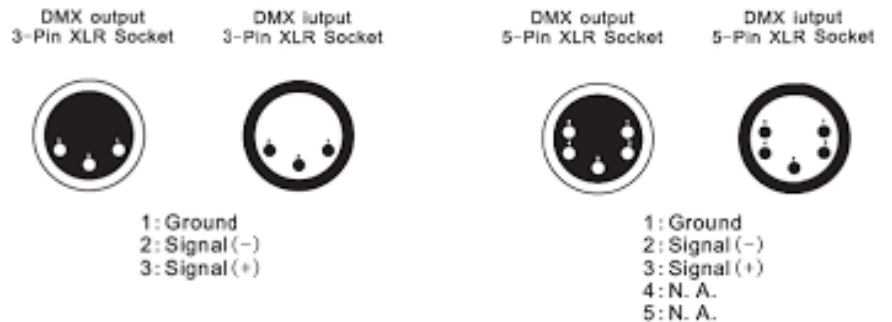
The DMX cabling (signal lines) should be done with a 2-wire cable with shielding. We recommend a DMX cable with 110 Ohm, 2x0,22mm<sup>2</sup> or 4x0,22mm<sup>2</sup>. The plugs and sockets are 3-pin XLR-connectors, which can be purchased in specialized shops.

### Pin assignment:

**Pin1 = Ground / Shielding**

**Pin2 = DMX -**

**Pin3 = DMX +**



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

**Warning: There must be a 0.5m safety distance between the light source and flammable material and a minimum distance of 2.0m between the light source and the surface to be illuminated.**

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 unit 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 system to which you attach the device complies with safety regulations. If you use a truss, always secure the headlight with a safety device that complies with national regulations. Use the safety eyelet on the device.

## 7. Control Panel

The spotlight has a display to show the set parameters and four buttons to adjust them. In addition, the Arnold460 has a "WirelessIndicator" LED, which indicates the current DMX signal reception.





## 1. DMX-ADRESS

Here you can set the DMX-address of the device. Use the "Up" and "Down" keys to the desired DMX address and confirm with "Ok".

## 2. MODE

Here you can switch the Mode for the Synjax Zoom40

### 2.1 Backlight time

Einstellen wie lange das Gerät den DMX Hold beibehält. Auswahl zwischen 15s;30s;60s oder konstant.

### 2.2 Language

Switching the Menu - language

### 2.3 Reset

For Failures you can reset the device here.

### 2.4 Calibration

You can switch the password here.

## 3. TEST

According to the current channel, all functions of the Synjax Zoom 40 can be tested manually here.

## 4. RESET

Unlike in the Set Up menu, different parameters can be reset under this menu item:

### 4.1 Focus reset

Resets the zoom motor.

### 4.2 Pan/Tilt reset

Resets the pan/tilt motors.

### 4.3 Reset all

Resets all motors of the device.



## 5. INFORMATION

### 5.2 Error Messages

Displays the past and current error messages of the device.

### 5.3 DMX Data monitoring

Displays the current DMX information.

### 5.4 Software Info

Displays the currently installed version of the software.



## 8. Channel assignment

20Ch	68Ch	Value	Funktion
1	1		<b>Pan (8bit)</b>
		0-255	Pan movement
2	2		<b>Tilt (8bit)</b>
		0-255	Tilt movement
3	3		<b>Dimmer</b>
		0-255	Dimmer 0-100%
4	4		<b>Strobe</b>
		0-3	No function
		4-255	Strobe Effect slow-fast
5	5		<b>Color red</b>
		0-255	Red 0-100%
6	6		<b>Color green</b>
		0-255	Grün 0-100%
7	7		<b>Color blue</b>
		0-255	Blue 0-100%
8	8		<b>Color white</b>
		0-255	White 0-100%
9	9		<b>Focus</b>
		0-255	0% - 100% linear focus
10	10		<b>Static effects</b>
		0-3	No function
		4-7	Coloreffect 1
		...	...
		96-99	Coloreffect 24
		100-103	Non-gradable effect 1
		...	...
252-255	Non-gradable effect 39		
11	11		<b>Dynamic effects</b>
		0-3	No function
		4-7	Color effect 1
		...	...
		96-99	Color effect 24

20Ch	68Ch	Value	Funktion
		100-103	Non-gradable effect 1
		...	...
		252-255	Non-gradable effect 39
12	12		<b>Effect speed</b>
		0-63	Effect static
		64-158	Forward from fast to slow
		159-255	Backwards from slow to fast
13	13		<b>Backlight red</b>
		0-255	Red 0-100%
14	14		<b>Backlight green</b>
		0-255	Green 0-100%
15	15		<b>Backlight blue</b>
		0-255	Blue 0-100%
16	16		<b>Backlight White</b>
		0-255	White 0-100%
17	17		<b>Pan fine (16bit)</b>
		0-255	Pan movement fine
18	18		<b>Tilt fine (16bit)</b>
		0-255	Tilt movement fine
19	19		<b>Pan/Tilt Speed</b>
		0-255	Pan/Tilt speed control

20Ch	68Ch	Value	Funktion
			<b>Reset</b>
		0-229	No function
		230-235	Reset Pan/Tilt, reset console (hold for 3sec.)
		236-239	No function
		240-245	Reset focus (hold 3 sec.)
		246-250	No function
		252-255	Reset all (Hold 3 sec.)
			<b>Single pixel control</b>
	21		<b>Red 1</b>
		0-255	Red 0-100%

20Ch	68Ch	Value	Funktion
	22		<b>Green 1</b>
		0-255	Green 0-100%
	23		<b>Blue 1</b>
		0-255	Blue 0-100%
	24		<b>White 1</b>
		0-255	White 0-100%
	25		<b>Red 2</b>
		0-255	Red 0-100%
	26		<b>Green 2</b>
		0-255	Green 0-100%
	27		<b>Blue 2</b>
		0-255	Blue 0-100%
	28		<b>White 2</b>
		0-255	White 0-100%
	29		<b>Red 3</b>
		0-255	Red 0-100%
	30		<b>Green 3</b>
		0-255	Green 0-100%
	31		<b>Blue 3</b>
		0-255	Blue 0-100%
	32		<b>White 3</b>
		0-255	White 0-100%

20Ch	68Ch	Value	Funktion
	33		<b>Red 4</b>
		0-255	Red 0-100%
	34		<b>Green 4</b>
0-255		Green 0-100%	
	35		<b>Blue 4</b>

20Ch	68Ch	Value	Funktion
	35	0-255	Blue 0-100%
	36		<b>White 4</b>
		0-255	White 0-100%
	37		<b>Red 5</b>
		0-255	Red 0-100%
	38		<b>Green 5</b>
		0-255	Green 0-100%
	39		<b>Blue 5</b>
		0-255	Blue 0-100%
	40		<b>White 5</b>
		0-255	White 0-100%
	41		<b>Red 6</b>
		0-255	Red 0-100%
	42		<b>Green 6</b>
		0-255	Green 0-100%
	43		<b>Blue 6</b>
		0-255	Blue 0-100%
	44		<b>White 6</b>
		0-255	White 0-100%
	45		<b>Red 7</b>
		0-255	Red 0-100%
	46		<b>Green 7</b>
		0-255	Green 0-100%
	47		<b>Blue 7</b>
		0-255	Blue 0-100%
	48		<b>White 7</b>
		0-255	White 0-100%
			<b>Red 8</b>

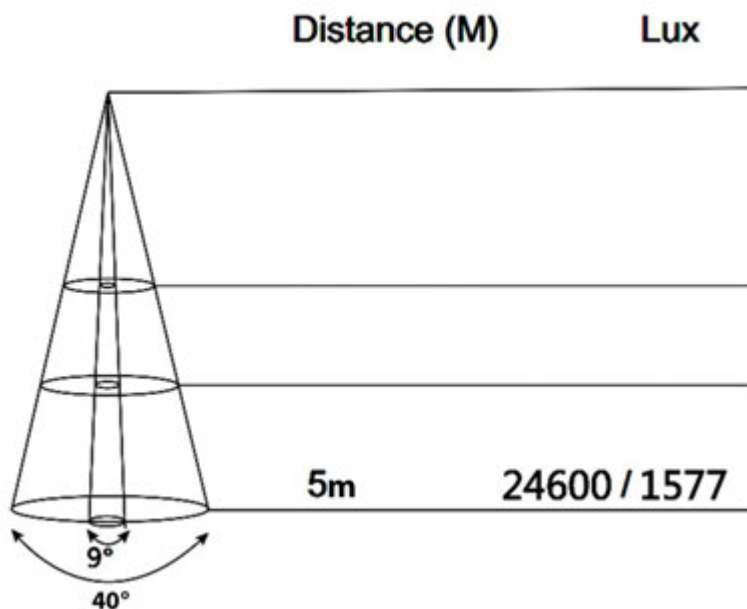
20Ch	68Ch	Value	Funktion
	49	0-255	Red 0-100%
	50		<b>Grün 8</b>
		0-255	Green 0-100%
	51		<b>Blue 8</b>
		0-255	Blue 0-100%
	52		<b>White 8</b>
		0-255	White 0-100%
	53		<b>Red 9</b>
		0-255	Red 0-100%
	54		<b>Green 9</b>
		0-255	Green 0-100%
	55		<b>Blue 9</b>
		0-255	Blue 0-100%
	56		<b>White 9</b>
		0-255	White 0-100%
	57		<b>Red 10</b>
		0-255	Red 0-100%
	58		<b>Green 10</b>
		0-255	Green 0-100%
	59		<b>Blue 10</b>
		0-255	Blue 0-100%
	60		<b>White 10</b>
		0-255	White 0-100%
	61		<b>Red 11</b>
		0-255	Red 0-100%
	62		<b>Green 11</b>
		0-255	Green 0-100%
			<b>Blue 11</b>

20Ch	68Ch	Value	Funktion
	63	0-255	Blue 0-100%
	64		<b>White 11</b>
		0-255	White 0-100%
	65		<b>Red 12</b>
		0-255	Red 0-100%
	66		<b>Green 12</b>
		0-255	Green 0-100%
	67		<b>Blue 12</b>
		0-255	Blue 0-100%
	68		<b>White 12</b>
		0-255	White 0-100%



### 9. Photometric data

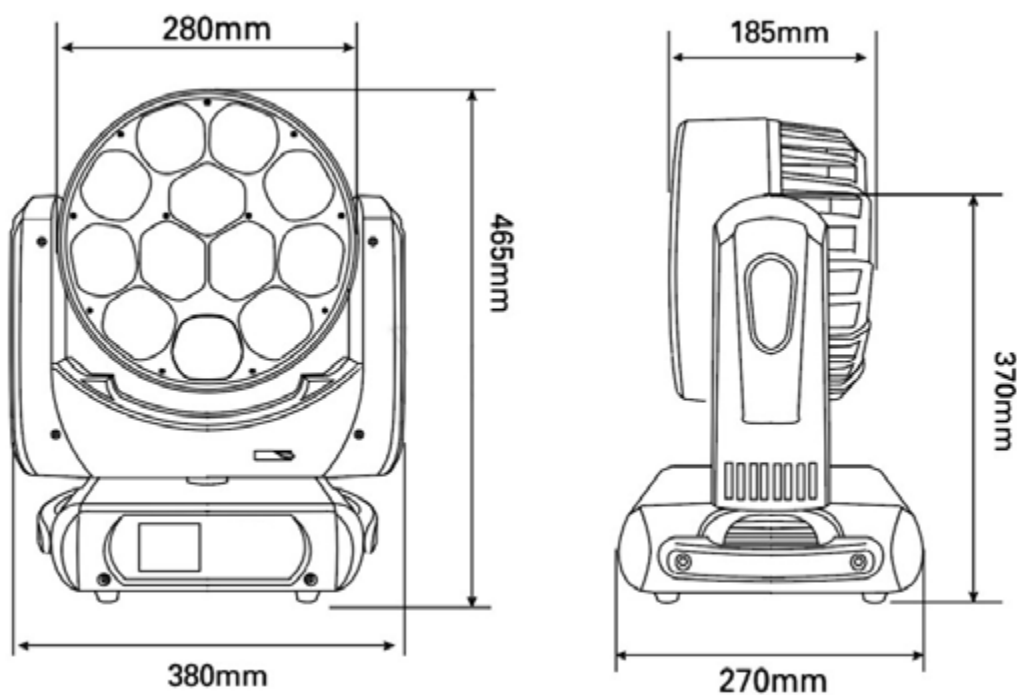
Radiation	angle distance	Lux
9°	5m	24600
40°	5m	1577





## 10. Technical details

- Light source: 12x40 RGBW multichip LEDs
- Power supply: AC100-240V 50/60Hz with switch switch
- PowerCon In/out
- Inrush current approx. 520W
- Pan from 540° (16bit)
- Tilt from 270° (16bit)
- DMX 20 and 68 channel
- Motorized Focus
- Single pixel control
- Lineares Dimmen von 0-100%
- CMY Mixing
- Linear zoom from 8° - 60
- Pan/Tilt adjustment manual
- RDM capable
- Dimensions: 380 x 465 x 280mm
- Weight: 15kg



## 11. Service and cleaning

**WARNING: Disconnect the device from the power supply before opening it!**

You should check the function of the fans in the head and base at regular intervals. Above all, you should make sure that the air inlets and the inside of the headlight are free of lint and dust.

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

Make sure that you do not bend or damage any parts during cleaning. After cleaning is complete, close all covers again with the associated screws and perform a function test.

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

Look for damage to the device, parts of the device and connection cables. If you notice any damage, DO NOT use the device and take it to an authorized dealer to eliminate any danger from using defective equipment and to have your device professionally repaired.

## 12. Notes

This device complies with the CE directive:

- within the meaning of 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 harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits).
- within the meaning of 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 thus protected against the ingress of solid foreign bodies with a diameter greater than 12mm (first code number 2), while it is sensitive to humidity, splashing and jetting water.

During operation, it is obligatory to connect the device to a power supply system equipped with an efficient grounding (class 1 device according to EN 60598-1 directive). Furthermore, it is recommended to protect the supply line of the devices against indirect contact and/or short circuits with correctly rated residual current circuit breakers.

Use the device only when the room temperature is below 45°C.

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