



# Pixeldot7

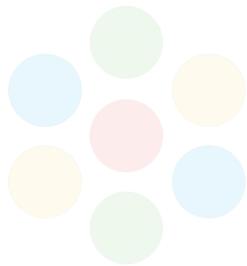
## LED Effect Spotlight

User Manual  
V 1.0



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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 accepts no liability for damage caused by failure to comply with these operating instructions or unauthorized modifications 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.**

## 2. Safety Instructions

**ATTENTION: 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 mains plug must always be accessible after installation of the spotlight. Do not overload the sockets or extension cords under any circumstances, as this could lead to 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.**

Some smoke and odour may be produced during the initial start-up. This is a normal procedure and does not necessarily mean that the device 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 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.

Carefully open the packaging on the top side and check the headlight and accessories for possible transport damage. Any damage should be reported immediately to the transport company.

### 4. Installation

A ready-made PowerCon connection cable is supplied with the device. 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:

Leiterfarbe	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. 120W, 0.9A

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

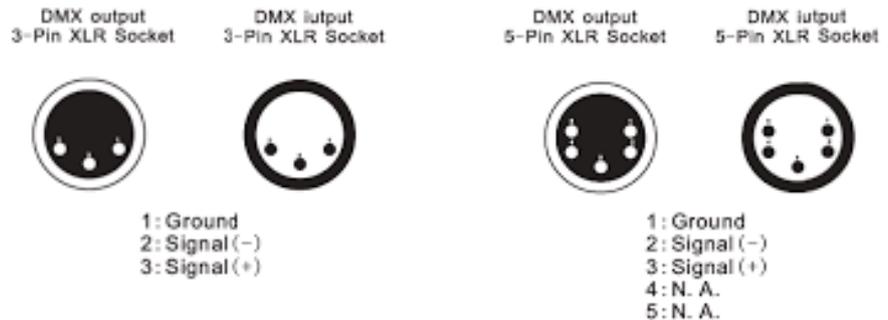
The DMX cabling (signal lines) should be done with a 2-wire cable with shielding. We recommend a DMX cable with 110 Ohm, 2x0,22mm<sup>2</sup> or 4x0,22mm<sup>2</sup>. The plugs and sockets are 3-pin XLR-connectors, which can be purchased in specialized shops.

### 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.

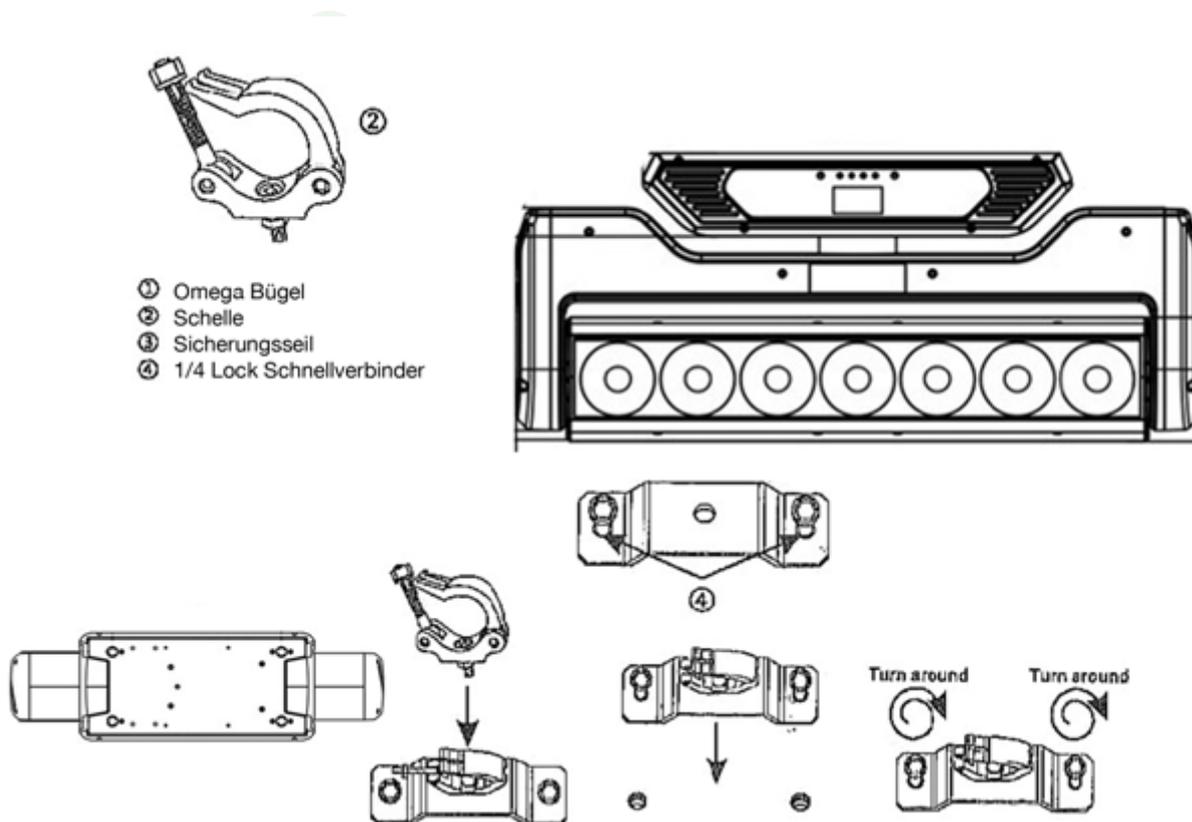
## 6. Mounting the device

**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 traverse system, use the Omega-Clamps with snap connectors supplied.



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.

## 7. Control Panel



The spotlight has a display to show the set parameters and four buttons to adjust them.

### 1. DMX-ADRESS

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

### 2. RESET

Resets all motors of the device.

### 3. MANUAL

Manual control for each value of Pixeldot7. These include Pan/Tilt; Red; Green; Blue; White and Strobe.

## 4. MODE

Here you can set different modes of the Pixeldot7. Selectable are:

### 4.1 12Ch Basic

### 4.2 15Ch Basic

### 4.3 39 Ch Extended

### 4.4 Auto Alone

### 4.5 Auto Master

Runs an auto program stored in the headlamp

### 4.6 Music Alone

### 4.7 Music Master

Controls the headlight by means of a built-in microphone alone.



## 5. OPTION

### 5.1 Option Display

Selection between display on or off.

### 5.2 Option lost DMX

Selection between blackout or DMX-hold.

## 6. ADVANCED

### 6.1 Advanced Code

The lock-password for the single headlight can be changed here. By default 008.

### 6.2 Advanced Adjust

Fine adjustment for Pan/Tilt.

### 6.3 Advanced Mic Sets

Sets the microphone sensitivity for the SoundtoLight mode.

## 7. VIEW

### 7.1 Hours view

Insight into the total running time of the device.

### 7.2 View DMX/Value

Displays the current address and channel mode

### 7.3 Show Version

Shows the currently installed software version.

## 8. DEFAULT

Here the headlight can be reset to factory settings.

## 8. Channel assignment



12Ch	15Ch	39Ch	Value	Function
1	1	1		<b>Pan movement (8bit)</b>
			0-255	Pan movement
*	2	2		<b>Pan movement fine (16bit)</b>
			0-∞	Pan movement fine
2	3	3		<b>Tilt movement (8bit)</b>
			0-255	Tilt movement
*	4	4		<b>Tilt movement fine (16bit)</b>
			0-255	Tilt movement fine endless
	5	5		<b>Pan/Tilt Speed</b>
			0-255	Speed (fast-slow)
3	6	6		<b>Continue pan rotation</b>
			0-9	No function
			10-129	Forward (fast-slow)
			130-135	Stop

12Ch	15Ch	39Ch	Value	Function
			136-255	Backwards (slow-fast)
4	7	7		<b>Continue Tilt Rotation</b>
			0-9	No function
			10-129	Forward (fast-slow)
			130-135	Stop
			163-255	Backwards (slow-fast)
5	8	8		<b>Dimmer</b>
			0-9	Closed
			10-255	Dimmer from 0% -100
6	9	9		<b>Strobe</b>
			0-31	Closed
			32-63	Open
			64-95	Strobe from slow to fast
			96-127	Open
			128-159	Random strobe from slow to fast
			160-191	Open
			192-223	Random strobe from slow to fast
224-255	Open			

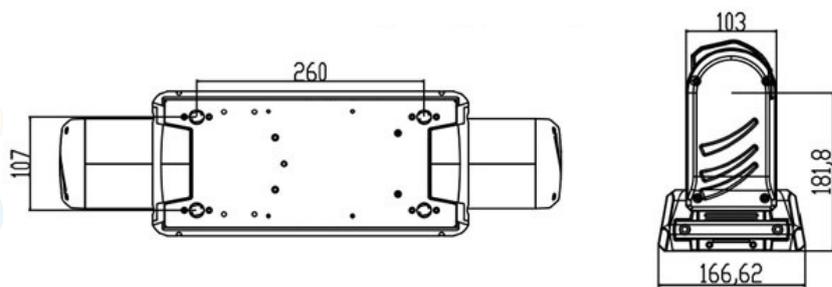
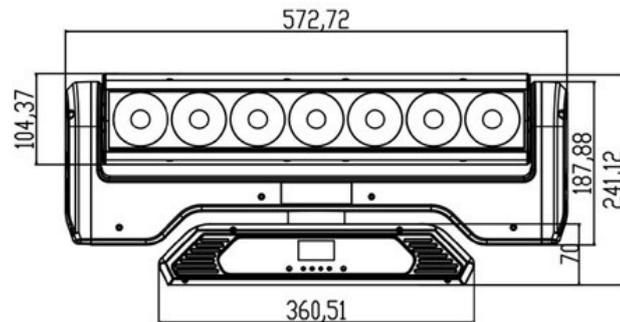
12Ch	15Ch	39Ch	Value	Funktion
7	10	10		<b>LED Macro</b>
			0-9	No function
			10-75	static macro
			76-95	Dynamic Macro1 from slow to fast
			96-115	Dynamic Macro2 from slow to fast
			116-135	Dynamic Macro3 from slow to fast
			136-155	Dynamic Macro4 from slow to fast
			156-175	Dynamic Macro5 from slow to fast
			176-195	Dynamic Macro6 from slow to fast
			196-215	Dynamic Macro7 from slow to fast
			216-235	Dynamic Macro8 from slow to fast
			236-255	Dynamic Macro All from slow to fast
8	11	11		<b>All Red : (LED macro dependent)</b>
			0-255	Color red 0% - 100%
9	12	12		<b>All Green : (LED macro dependent)</b>
			0-255	Color Green 0-100%
10	13	13		<b>All Blue : (LED macro dependent)</b>
			0-255	Blue color 0-100%.
11	14	14		<b>All White : (LED macro dependent)</b>
			0-255	Color white 0-100%
*	*	11		<b>Red LED-array 1 : (CH10 ineffective)</b>
			0-255	Color red 0-100%
*	*	12		<b>Green LED-array 1 : (CH10 ineffective)</b>
			0-255	Color green 0-100%
*	*	13		<b>Blue LED-array 1 : (CH10 ineffective)</b>
			0-255	Color blue 0-100%
*	*	14		<b>White LED-array 1 : (CH10 ineffective)</b>
			0-255	Color white 0-100%

12Ch	15Ch	39Ch	Value	Funktion
*	*	15		<b>Red LED - array 2</b>
			0-255	Color red 0-100%
*	*	16		<b>Green LED - array 2</b>
			0-255	Color Green 0-100%
*	*	17		<b>Blue LED - array 2</b>
			0-255	Blue color 0-100%.
*	*	18		<b>White LED - array 2</b>
			0-255	Color white 0-100%
*	*	19		<b>Red LED - array 3</b>
			0-255	Color red 0-100%
*	*	20		<b>Green LED - array 3</b>
			0-255	Color Green 0-100%
*	*	21		<b>Blue LED - array 3</b>
			0-255	Blue color 0-100%.
*	*	22		<b>White LED - array 3</b>
			0-255	Color white 0-100%
*	*	23		<b>Red LED - array 4</b>
			0-255	Color red 0-100%
*	*	24		<b>Green LED - array 4</b>
			0-255	Color Green 0-100%
*	*	25		<b>Blue LED - array 4</b>
			0-255	Blue color 0-100%.
*	*	26		<b>White LED - array 4</b>
			0-255	Color white 0-100%
*	*	27		<b>Red LED - array 5</b>
			0-255	Color red 0-100%
*	*	28		<b>Green LED - array 5</b>
			0-255	Color Green 0-100%
*	*	29		<b>Blue LED - array 5</b>
			0-255	Blue color 0-100%.
*	*	30		<b>White LED - array 5</b>
			0-255	Color white 0-100%

12Ch	15Ch	39Ch	Value	Funktion
*	*	31		<b>Rot LED - array 6</b>
			0-255	Color red 0-100%
*	*	32		<b>Grün LED - array 6</b>
			0-255	Color Green 0-100%
*	*	33		<b>Blau LED - array 6</b>
			0-255	Blue color 0-100%.
*	*	34		<b>Weiß LED - array 6</b>
			0-255	Color white 0-100%
*	*	35		<b>Rot LED - array 7</b>
			0-255	Color red 0-100%
*	*	36		<b>Grün LED - array 7</b>
			0-255	Color Green 0-100%
*	*	37		<b>Blau LED - array 7</b>
			0-255	Blue color 0-100%.
*	*	38		<b>Weiß LED - array 7</b>
			0-255	Color white 0-100%
*	*	39		<b>Function</b>
			0-24	No function
			25-49	Reset (5 seconds)
			50-74	No function
			75-99	No function
			100-124	No function
			125-149	No function
			150-174	No function
175-255	Music Control			

## 9. Technical details

- Light source: 7x15W Multichip-LED RGBW
- Power supply: AC100-240V  
50/60Hz with switch
- Inrush current approx. 120W
- Pan movement: endless
- Tilt movement: endless
- CMY color mixing
- DMX 12Ch;15Ch;39Ch
- Linear dimming 0-100%
- Abstraction angle : 4,5°
- SoundtoLight
- Automatic mode
- Master Slave
- Pan/Tilt adjustment manual
- PowerCon In/Out
- DMX In/Out 3pol / 5pol
- dimensions: 580 x 170 x 250mm
- weight: 11kg



## 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).

Be careful not to bend or damage any parts when cleaning. After cleaning is complete, close all covers 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, to parts of the device and to 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 directive). 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 device, it must cool down for at least 10 minutes after disconnecting the power supply to minimize the risk of damage to the chips. For maintenance or repair work on the chips, the unit must cool down for at least another 20 minutes to prevent burning.