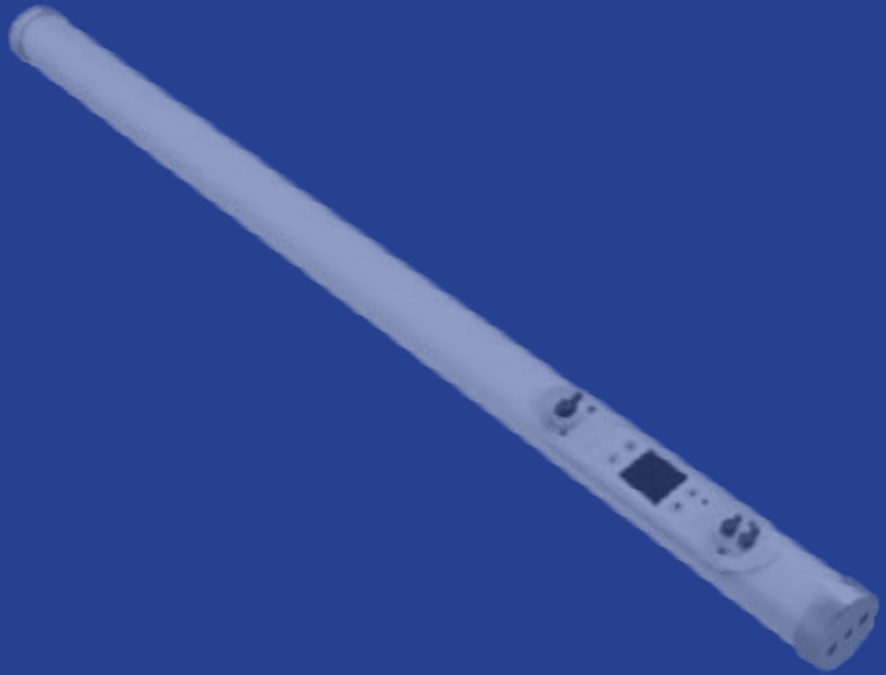




B O S
LIGHTING

P16 QUAD TUBE



MAKE LIFE BRIGHTER



CONTACT

Address

BOS Lighting
Dommelseweg 148
5554 NV Valkenswaard
The Netherlands



Online

Emergency email
Email
Website

sos@bos-lighting.nl
info@bos-lighting.nl
www.bos-lighting.nl



SECTION 1 SAFETY INSTRUCTIONS & MAINTENANCE

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This product is for professional use only. It is not for household use.

This product presents risks of severe injury or death due to fire and burn hazards, electric shock and falls. Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture. This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

If you have questions about how to operate the fixture safely, please contact us via info@bos-lighting.nl.



WARNING!

Read the safety precautions in this section before unpacking, installing, powering or operating this product.

- This luminaries are multi-environmental fixtures with an IP-rating of 65, intended for professional use only. They are not suitable for household use.
- Review the following safety precautions carefully before installing or operating the fixture. This fixture must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the fixture and the hazards involved.



WARNING!

Risk of electric shock.

- Always power off/unplug the fixture before removing any covers.
- Ensure that the power is turned off when connecting the fixture to the AC mains supply.
- Do not apply power if the fixture is in any way damaged.
- Do not immerse the fixture in water or liquid.



WARNING!

Take measures to prevent burns and fire.

- Install in a location that prevents accidental contact with the fixture.
- Install only in a well-ventilated space.
- Install at least 0.3 m (12 in.) away from objects to be illuminated.
- Install only in accordance with applicable building codes.
- Ensure a minimum clearance of 0.1 m (4 in.) around the cooling fans.
- Do not paint, cover or modify the fixture.
- Keep all flammable materials away from the fixture.
- Allow the fixture to cool for 15 minutes after operation, before touching it.
- CAUTION: Exterior surface temperature after 5 min. operation = 45 °C



WARNING!

Take measure to prevent personal injury.

- Do not look directly at the light source from close range.
- Take precautions to prevent injury due to falls when working at height.
- For permanent installation, ensure that the fixture is securely fastened to a load-bearing surface with suitable corrosion-resistant hardware.
- For temporary installation with clamps, ensure that the quarter-turn fasteners are turned fully and secured with a suitable safety cable.
- The cable must be approved for a safe working load (SWL) of 10 times the weight of the fixture, and it must have a minimum gauge of 3 mm.



CAUTION!

Disconnect from mains before starting maintenance operation

The following points have to be considered during the inspection:

1. All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2. There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
3. Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
4. The electric power supply cables must not show any damage, material fatigue or sediments.

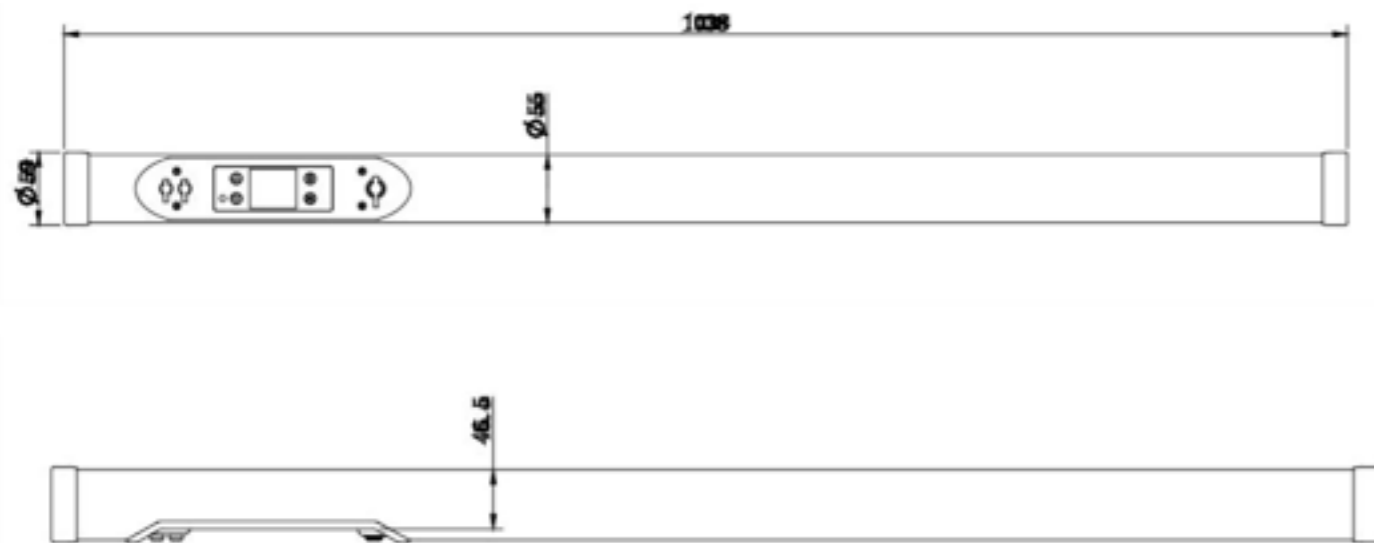
Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

SECTION 2 INSTALLATION

WHAT IS IN THE BOX?

- 1x P16 QUAD TUBE
- 1x Charger

DIMENSIONS P16 QUAD TUBE



PREPARING

Unpack the fixture and inspect it to ensure that it has not been damaged during transport. Read the manual before installation.

When selecting a location for the fixture, ensure that:

- It is situated away from public thoroughfares and protected from contact with people.
- It is not immersed in water or exposed to high-pressure water jets.
- It has adequate ventilation.



IP 64

SOLIDS		LIQUIDS	
1	Protected against a solid object greater than 50mm such as a hand.	1	Protected against vertical falling drops of water. Limited ingress permitted.
2	Protected against a solid object greater than 12.5mm such as a finger.	2	Protected against vertical falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.
3	Protected against a solid object greater than 2.5mm such as a screwdriver.	3	Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted.
4	Protected against a solid object greater than 1mm such as a wire.	4	Protected against water splashes from all directions. Limited ingress permitted.
5	Dust protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment.	5	Protected against jets of water. Limited ingress permitted.
6	Dust tight. No ingress of dust.	6	Protected against powerful jets of water. Limited ingress permitted.
Ingress Protection 6 4		7	Protected against the effects of immersion in water between 15cm and 1m for 30 minutes.
		8	Protected against the effects of immersion in water under pressure for long periods.



WARNING!

Make sure the manual is read, and followed, before usage of the product.

IP64 is not waterproof – it is water resistant. Products that carry an IP64 rating cannot be submerged and maintain their protections.

The purpose of the P16QUADTUBE is for temporary use. The products purpose is for e.g. festivals, theatres, indoor and outdoor concerts. Long term usage can lead to damage due to aging of the materials and affecting the coated surface, and the rubber sealings will be affected by long-term UV exposure. Tightening the screws to hard will affect the IP-rating. Please make sure the cleaning and maintaining procedures are in order for a safe environment.



SECTION 3 WIRELESS DMX CHANNELS

SECTION 4 PHOTOMETRIC DATA

Wireless DMX on the 2.4GHz Frequency

Overview:

Wireless DMX (W-DMX) technology has revolutionized the lighting industry by eliminating the need for traditional DMX cables, providing greater flexibility and ease of use. Operating on the 2.4GHz frequency, wireless DMX systems have become increasingly popular due to their versatility and compatibility with a wide range of lighting fixtures.

Key Features:

- 1. Frequency Band:** Wireless DMX systems on the 2.4GHz frequency band take advantage of the global license-free ISM (Industrial, Scientific, and Medical) band. This allows for worldwide usage without the need for additional licenses.
- 2. Interference Resistance:** Despite the prevalence of other devices, such as Wi-Fi routers and Bluetooth devices, in the 2.4GHz band, modern wireless DMX systems often utilize advanced frequency-hopping spread spectrum (FHSS) technology. This helps mitigate interference and ensures reliable communication between the transmitter and receiver.
- 3. Range and Coverage:** The 2.4GHz frequency offers a good balance between range and signal penetration. While the exact range can vary depending on the specific system and environmental factors, wireless DMX systems on the 2.4GHz band generally provide reliable communication within a substantial distance, making them suitable for both small and large-scale setups.
- 4. Ease of Setup:** Wireless DMX eliminates the need for time-consuming cable runs, simplifying the setup process for lighting installations. This is particularly beneficial in situations where running cables is impractical or aesthetically undesirable.
- 5. Compatibility:** Many lighting fixtures are equipped with built-in wireless DMX receivers or can be easily adapted with external receivers, making them compatible with 2.4GHz wireless DMX transmitters. This allows users to seamlessly integrate wireless control into their existing lighting setups.

Considerations:

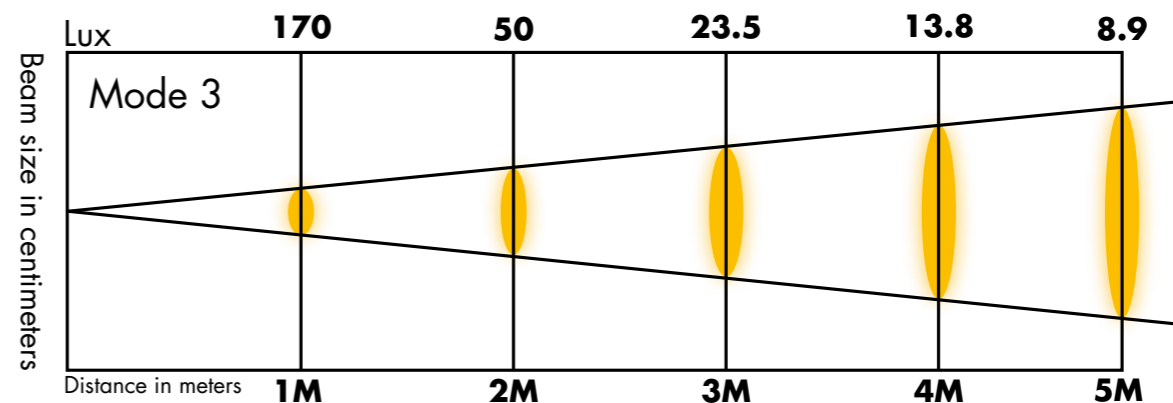
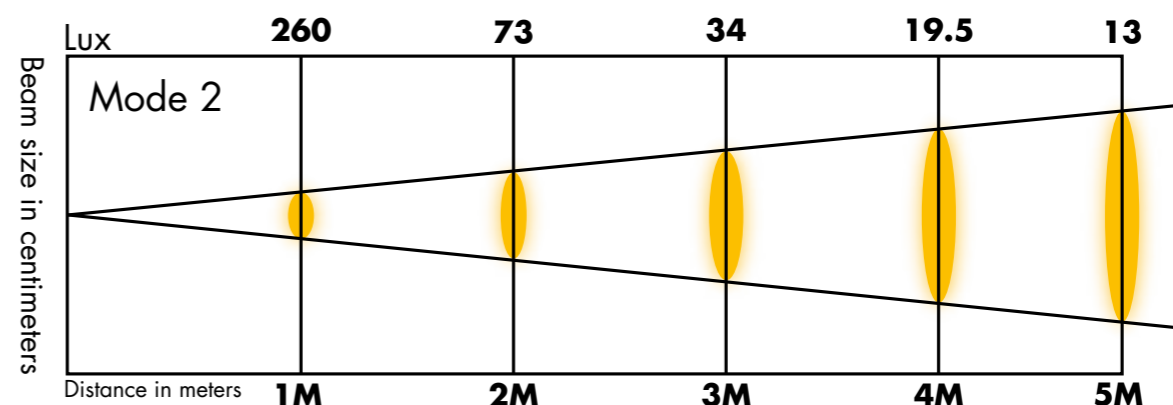
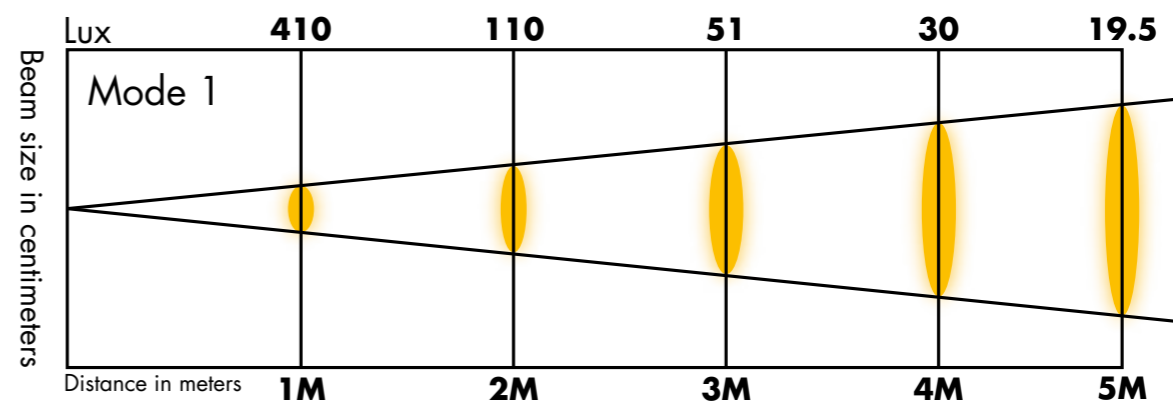
- 1. Channel Selection:** Users should be mindful of selecting the appropriate DMX channel on both the transmitter and receiver to avoid interference from nearby wireless DMX systems.
- 2. Interference Sources:** While FHSS technology helps mitigate interference, it's essential to be aware of other potential sources of interference, such as microwave ovens and cordless phones, which also operate in the 2.4GHz band.
- 3. Line of Sight:** For optimal performance, maintaining a clear line of sight between the transmitter and receiver is recommended. Obstacles such as walls and metal structures can impact signal strength and reliability.
- 4. Security:** Some wireless DMX systems offer encryption features to enhance security, preventing unauthorized access and interference.
- 5. Manufacturer Guidelines:** Always follow the manufacturer's guidelines regarding installation, channel selection, and troubleshooting to ensure optimal performance.

In summary, wireless DMX on the 2.4GHz frequency provides a convenient and reliable solution for lighting control, offering users the flexibility to create dynamic and sophisticated lighting setups without the constraints of traditional cabling.

Sweden W-DMX

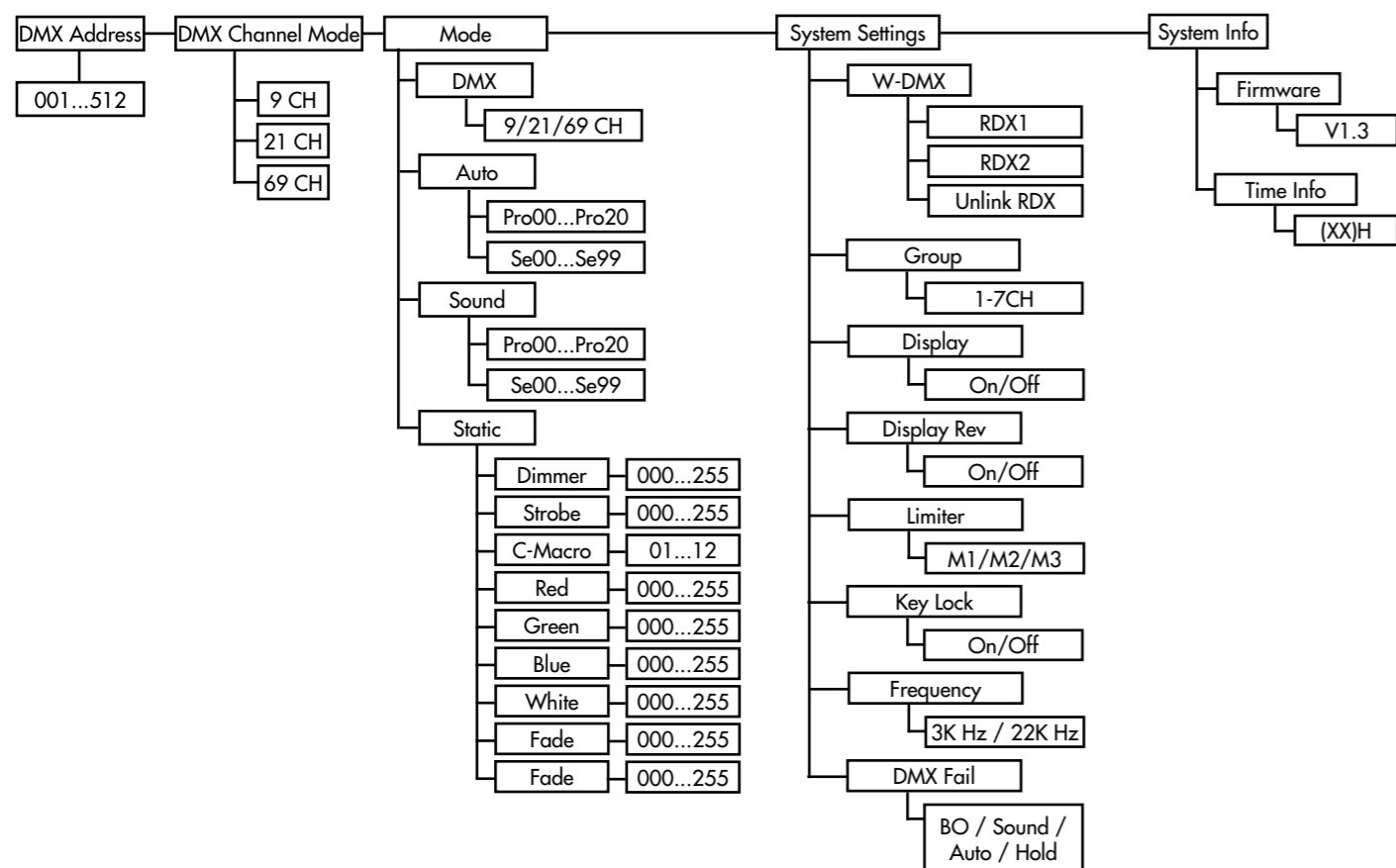
The operation method of fixture using Sweden wireless dmx as follows: Firstly, Set the fixture to DMX Mode. Secondly Set Menu(W-DMX) to Link RDX2. Thirdly Press wireless transmitter key make it paired with fixtures. The above operation can make wireless pairing successful.

Channel	Color
1	Red
2	Green
3	yellow
4	Blue
5	Purple
6	Cyan
7	White



SECTION 5 MENU OVERVIEW

SECTION 6 DMX CHANNELS



M Enter main menu
E Confirm
 ▲ Choose
 ▼ Choose

Back to previous menu
 Confirm
 Choose
 Choose

Power on by holding M button for 3 seconds
Power off by holding up and down buttons same time for 3 seconds

9 CH MODE

Channel	Function	Value	Description
1	Dimmer	000...255	From dark to bright
2	Strobe	000...008	No strobe
		009...255	Strobe from slow to fast
3	Red	000...255	From dark to bright
4	Green	000...255	From dark to bright
5	Blue	000...255	From dark to bright
6	White	000...255	From dark to bright
7	CTO	000...255	From Warm to Cold (1100K - 6500K)
7	Color Chase	129...171	Effect
8	Chace Speed	1...20	Effect Speed

21 CH MODE

Channel	Function	Value	Description
1	Dimmer	000...255	From dark to bright
2	Strobe	000...008	No strobe
		009...255	Strobe from slow to fast
3	Group 1	000...255	Section 1 Red, green, blue and white free color change
4	Group 2	000...255	Section 2 Red, green, blue and white free color change
5	...	000...255	...
18	Group 18	000...255	Section 16 Red, green, blue and white free color change
19	CTO	000...255	From Warm to Cold (1100K - 6500K)
20	Color Chase	1...20	Effect
21	Chace Speed	000...255	Chase effect from slow to fast



69 CH MODE

Channel	Function	Value	Description
1	Dimmer	000...255	From dark to bright
2	Strobe	000...008	No strobe
		009...255	Strobe from slow to fast
3	Red 1	000...255	Red 1 dimming from dark to bright
4	Green 1	000...255	Green 1 dimming from dark to bright
5	Blue 1	000...255	Blue 1 dimming from dark to bright
6	White 1	000...255	White 1 dimming from dark to bright
7
63	Red 16	000...255	Red 16 dimming from dark to bright
64	Green 16	000...255	Green 16 dimming from dark to bright
65	Blue 16	000...255	Blue 16 dimming from dark to bright
66	White 16	000...255	White 16 dimming from dark to bright
67	CTO	129...171	From dark to bright (1100K - 6500K)
68	Color Chase	1...20	Effect
69	Chace Speed	000...255	Chase effect from slow to fast

SECTION 7 DMX VALUES

Function	Value	Description
Color	000...015	No function
	016...031	Red
	032...047	Green
	048...063	Blue
	064...079	White
	080...095	Yellow
	096...111	Magenta
	112...127	Baby Pink
	128...143	Cyan
	144...159	Fern Green
	160...175	Lavender
	176...191	CTB
	192...207	Light Yellow
	208...223	Pink
	224...239	Baby Blue
	240...255	FULL White

STATIC COLOR MACRO

Function	Value	Description
Color	01	Orange
	02	Groen
	03	Blauw
	04	Orange
	05	Cyan
	06	Magenta
	07	Yellow
	08	Light Blue
	09	Purple
	10	Fern Green
	11	Magenta

STATIC COLOR CTO

Function	Value	Description
Color	001	Warm
	002	Middle
	003	Cold



SECTION 8 TROUBLESHOOTING AND CLEANING



CAUTION!

Disconnect from mains before starting maintenance operation

The lamp contains professional components such as microcomputer circuit board and high-voltage power supply. For your safety and product life, non-professionals should not disassemble the lamp and related accessories without authorization.

The light beam appears dim

Possible cause: The bulb has been used for a long time or the light path is not clean, the treatment is as follows:

- Check whether the bulb has reached the end of its life, and replace it with a new one
- Check whether the optical components or bulbs are clean, and whether there is dust on the bulbs and other optical components.
- Regular cleaning and maintenance of the bulbs and components in the lamps are required.

The lamps work intermittently

Possible cause: The internal circuit enters the protection state, and the treatment is as follows

- Check whether the fan is operating normally or whether it is dirty, causing the internal temperature of the lamp to rise
- Check whether the internal temperature control switch is closed
- Check whether the bulb has reached the end of its service life, and replace it with a new one.

After the lamp is reset normally, it does not accept the control of the console

Possible cause: signal line failure or abnormal lamp parameter setting, the treatment is as follows:

- Check the start address code and check the connection of the DMX signal line (whether the signal line cable is intact, and whether the connection of the head is loose)
- Add signal amplifier, add 120 ohm terminal resistance.

The lamp can't start

Possible cause: bad power line, the treatment is as follows:

- Check whether the fuse on the power input socket is fused, replace the fuse.
- Lamps have poor line contact due to vibration during long-distance transportation.
- Check the input power, computer board and other plug-in devices.



CAUTION!

Disconnect from mains before starting cleaning operation

To maintain optimal performance, regular cleaning is essential. Cleaning schedules will vary depending on the operating environment, and the installation should therefore be checked at frequent intervals within the first few weeks of operation to see whether cleaning is necessary. This procedure will allow you to assess cleaning requirements in your particular situation. Clean the fixture using a soft cloth dampened with a solution of water and a mild detergent. Do not use products that contain solvents, abrasives or caustic agents for cleaning, as they can cause damage to both hardware, cables and connectors.

SECTION 9 TECHNICAL SPECIFICATIONS

Light Source	128 x 0.25W RGBW 4in1, 16 pixel zone control	
Optical properties	Repetition rate	3 khz or 22 Khz
Control	DMX	
	Buttons and display	
	Infrared remote control	
Number of DMX channels	9CH, 21CH, 69CH	
Power connections	DC plug for charging 12V	
Control connections	DMX control	Mini-jack in/out or wireless
Power consumption	40W	
Operating supply voltage	100 – 240 V 50/60 Hz	
Protection class	IP64	
Dimensions (diameter x length)	55 mm x 1038 mm	
Weight	2.2 kg	
Ambient conditions	Temperature range	-30 °C...50 °C
	Relative humidity	20 %...80 % (non-condensing)
Construction	Outdoor housing	
Number of LEDs	128	
Color mixture	RGBW	
LED type	4 -in- 1	
Mounting options	Hanging, standing, all optional.	
Fanless	Yes	
Wireless DMX	Yes	
Housing color	White	
Battery	Charge time	5 hours (Lithium Ion Battery 12V 8000mAh)
	Battery life	8 hours (all colors), 20 hours (single color)