



B O S
LIGHTING

P1 RGB-LAC IP



MAKE LIFE BRIGHTER



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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.

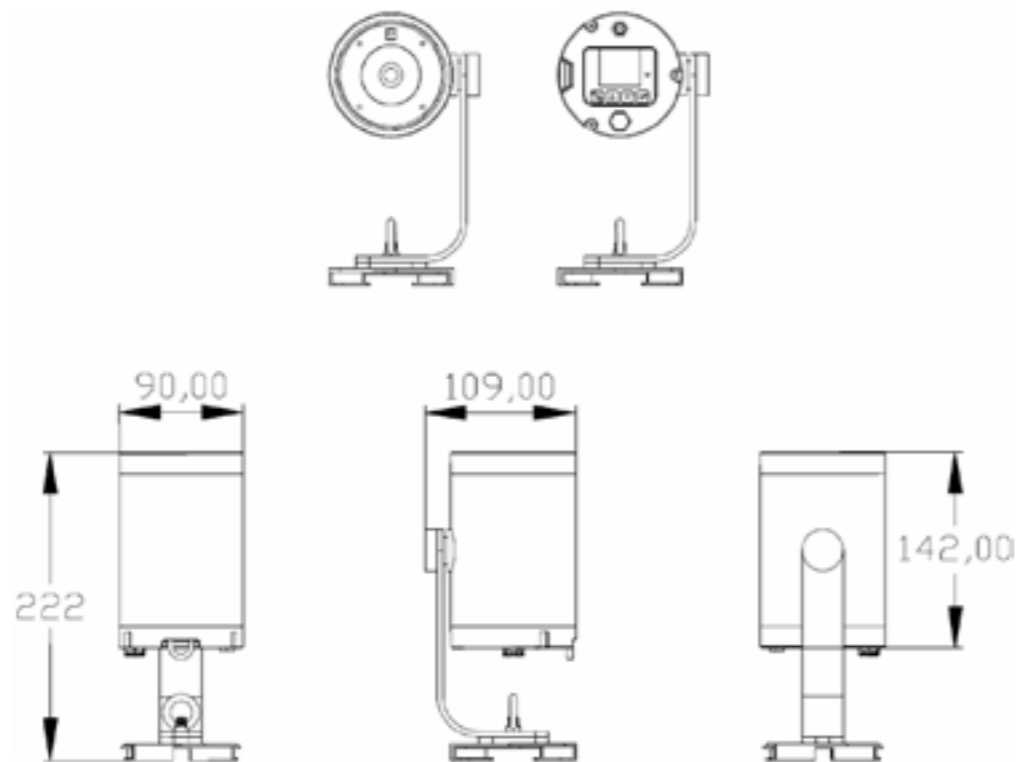
Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

SECTION 2 INSTALLATION

WHAT IS IN THE BOX?

- 1x P1
- 1x Shuko -> True1
- 1x Safety cable
- 1x Quicklock bracket for clam

DIMENSIONS P7 HEX



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 65

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 5		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.

IP65 is not waterproof – it is water resistant. Products that carry an IP65 rating cannot be submerged and maintain their protections.

The purpose of the P7 HEX IP 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:

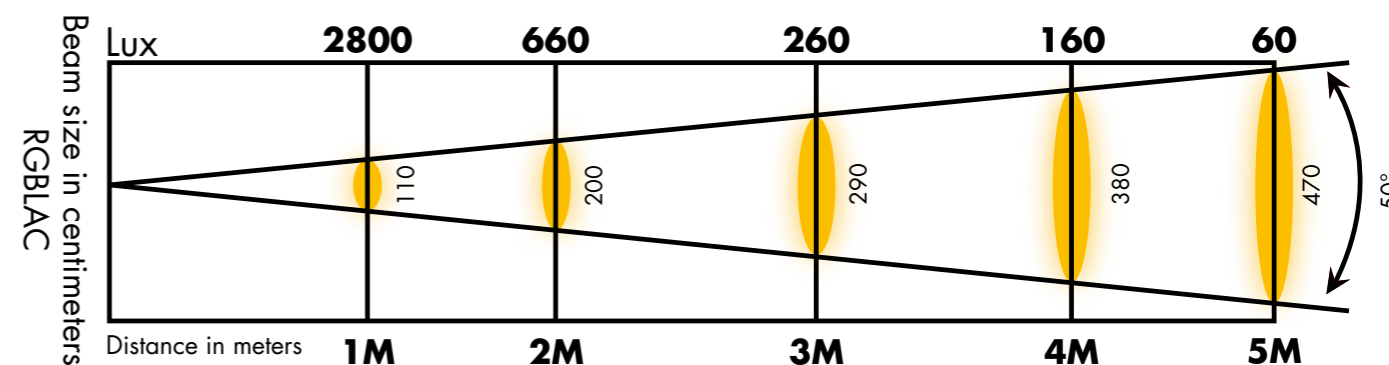
- 1. Frequency Band:** Wireless DMX systems on the 2.4GHz frequency band take advantage of the global license-free ISM (Industrial, Scientific, and Medical) band. This allows for worldwide usage without the need for additional licenses.
- 2. Interference Resistance:** Despite the prevalence of other 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.

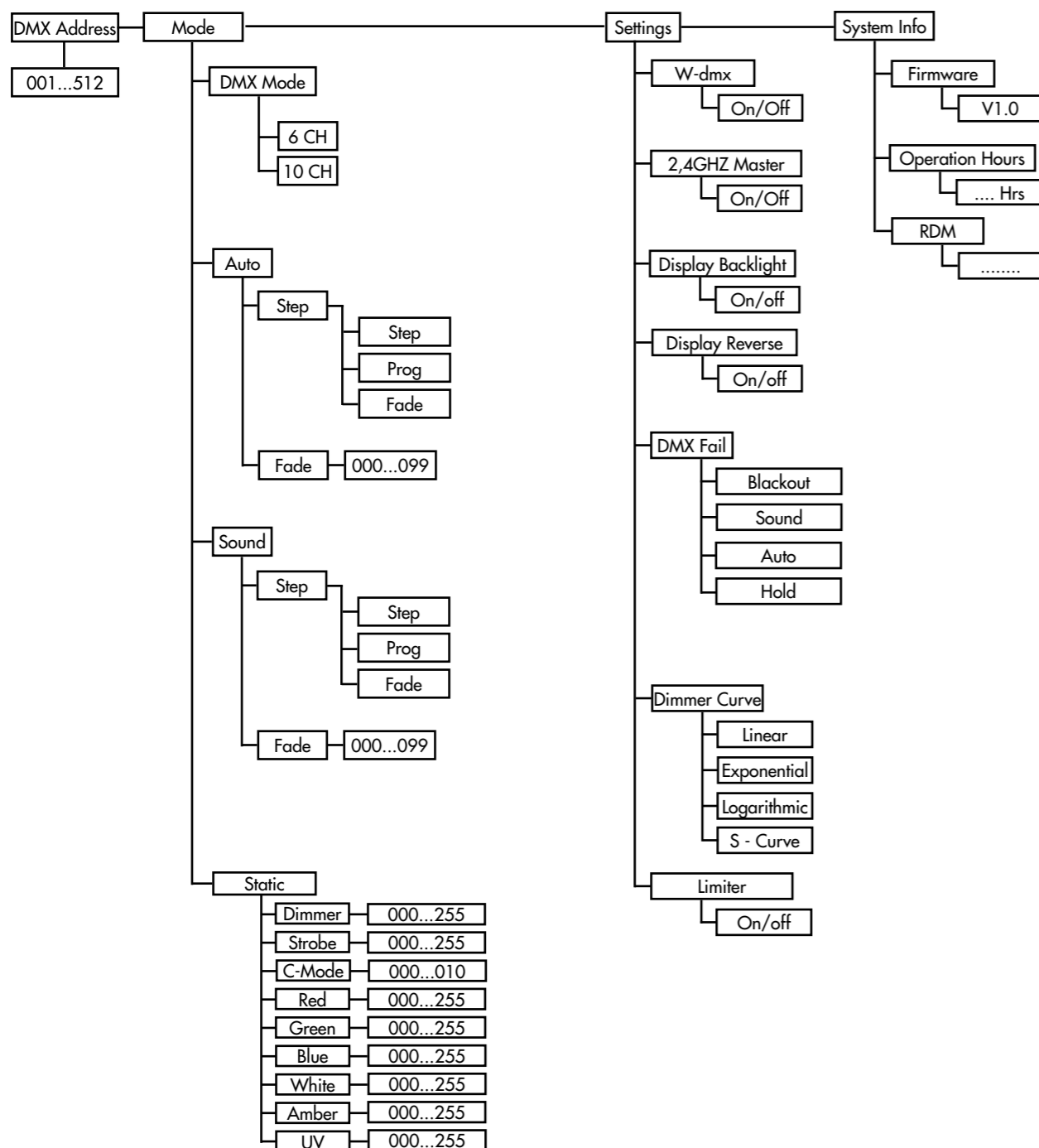
Channel	Color
1	Red
2	Green
3	yellow
4	Blue
5	Purple
6	Cyan
7	White





SECTION 5 MENU OVERVIEW

SECTION 6 DMX CHANNELS



6 CH MODE

Channel	Value	Function
1	000...255	RED dimmer
2	000...255	GREEN dimmer
3	000...255	BLUE dimmer
4	000...255	CYAN dimmer
5	000...255	LEMMON dimmer
6	000...255	AMBER dimmer

10 CH MODE

Channel	Value	Function
1	001...255	RGBCLA dimmer
2	005...255	Strobe from slow to fast
3	001...255	RED dimmer
4	001...255	GREEN dimmer
5	001...255	BLUE dimmer
6	001...255	CYAN dimmer
7	001...255	LEMON dimmer
8	001...255	AMBER dimmer
9	000...004	No function
	005...080	Color macro
	081...150	Color jump
	151...220	Color fade
	221...255	Sound Active
10	0	No function
	001...255	Color Speed from slow to fast



SECTION 7 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 bulb does not light up (except LED light source)

Possible cause: The bulb is not completely cooled, or the bulb has reached the end of its life, the treatment is as follows:

- Due to abnormal operation, the bulb is not completely cooled down, so let the lamp body cool down for more than 10 minutes to make the inside completely return to normal state, and then turn on the power again.
- Check whether the bulb has reached the end of its life, and replace it with a new one.
- Check whether the bulb and the lighter circuit are leaking, falling off, or having poor contact.
- Replace with a new light source.

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.

Blurred pattern projection

Possible cause: Lenses are dirty or electronic focus is defect:

- Check if lenses are clean.
- Check whether the electronic focus channel value is suitable for the current projection distance.

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

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

1. Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
2. Clean the fan each week.
3. A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".
Should you need any spare parts, please order genuine parts from your local dealer.

SECTION 8 TECHNICAL SPECIFICATIONS

Light Source	1 × 6in1 RGBCLA, 20 W	
Optical properties	Beam angle	12°
	Repetition rate	3000 Hz
Control	DMX	
	Buttons and display	
	Infrared remote control	
Number of DMX channels	6CH, 10CH	
Power connections	Lockable True1 In/Out	
Control connections	DMX control	Wireless
Power consumption	20W	
Operating supply voltage	110 – 250 V 50/60 Hz	
Protection class	IP65	
Mounting options	Hanging, standing	
Dimensions (W × H × D), with bracket	240 mm×273 mm×201 mm	
Weight	1.5 kg	
Ambient conditions	Temperature range	0 °C...35 °C
	Relative humidity	20 %...80 % (non-condensing)
Construction	Outdoor housing, Pin spot	
Number of LEDs	1	
Color mixture	RGBCLA	
LED type	6 -in- 1	
Floor housing	Yes	
Fanless	Yes	
Wireless DMX	Yes	
Housing color	Black	
Accu	6-10 hours	