



B O S
LIGHTING

FRESNEL 60



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



TABLE OF CONTENTS

SAFETY INSTRUCTIONS & MAINTENANCE	PAGE 3
INSTALLATION	PAGE 4
<i>WHAT IS IN THE BOX?</i>	PAGE 4
<i>DIMENSIONS FRESNEL 60</i>	PAGE 4
<i>PREPARING</i>	PAGE 4
DMX-512 CONTROL CONNECTIONS	PAGE 5
PHOTOMETRIC DATA	PAGE 6
MENU OVERVIEW	PAGE 7
DMX CHANNELS	PAGE 8
<i>4 CH MODE</i>	PAGE 8
<i>7 CH MODE</i>	PAGE 8
<i>COLOR TEMPRATURE MACRO</i>	PAGE 9
TROUBLESHOOTING AND CLEANING	PAGE 10
TECHNICAL SPECIFICATIONS	PAGE 11

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.



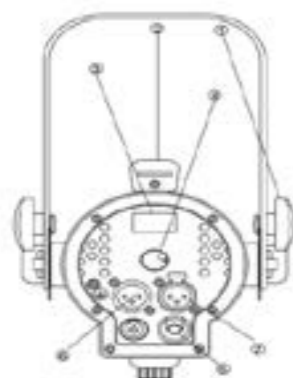
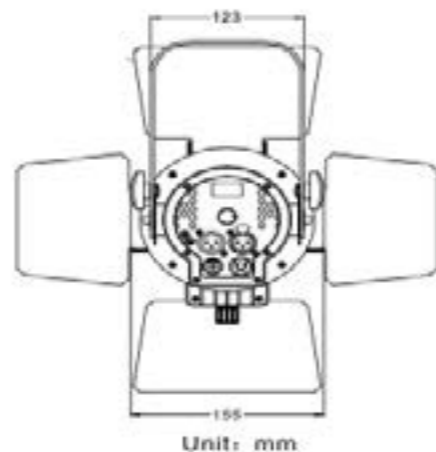
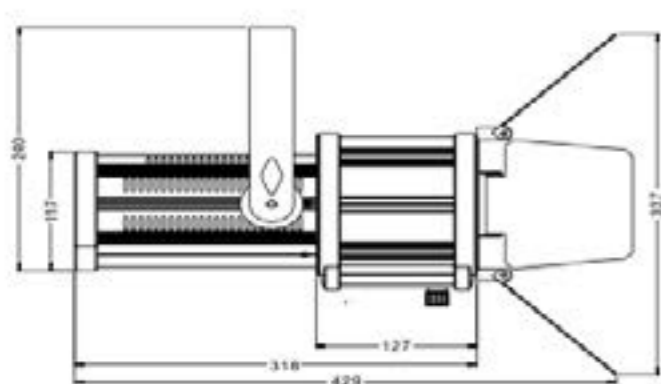
SECTION 2 INSTALLATION

SECTION 3 DMX-512 CONTROL CONNECTIONS

WHAT IS IN THE BOX?

- 1x FRESNEL 60
- 1x Shuko -> True1
- 1x Safety cable
- 1x Quicklock bracket for clamp

DIMENSIONS FRESNEL 60



1. Fixation screws
2. Shutter blade
3. Display
4. Function selection knob
5. Power IN
6. DMX IN
7. DMX OUT
8. GOBO size

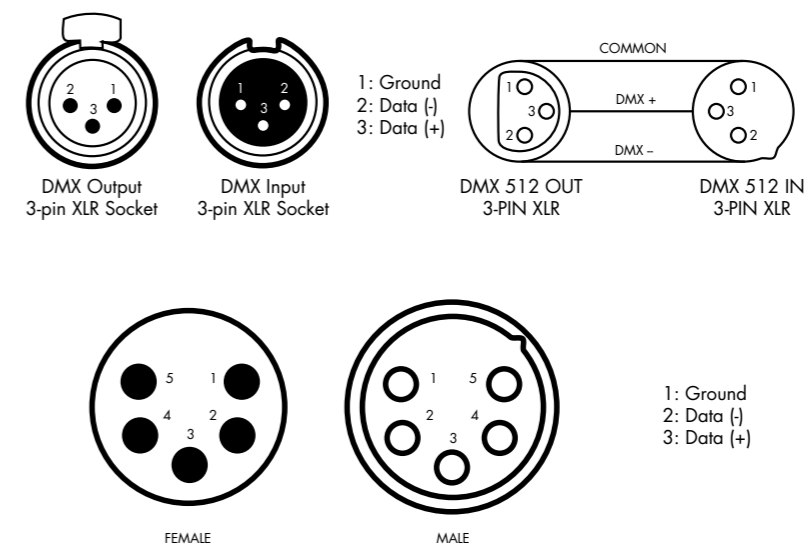
PREPARING

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:

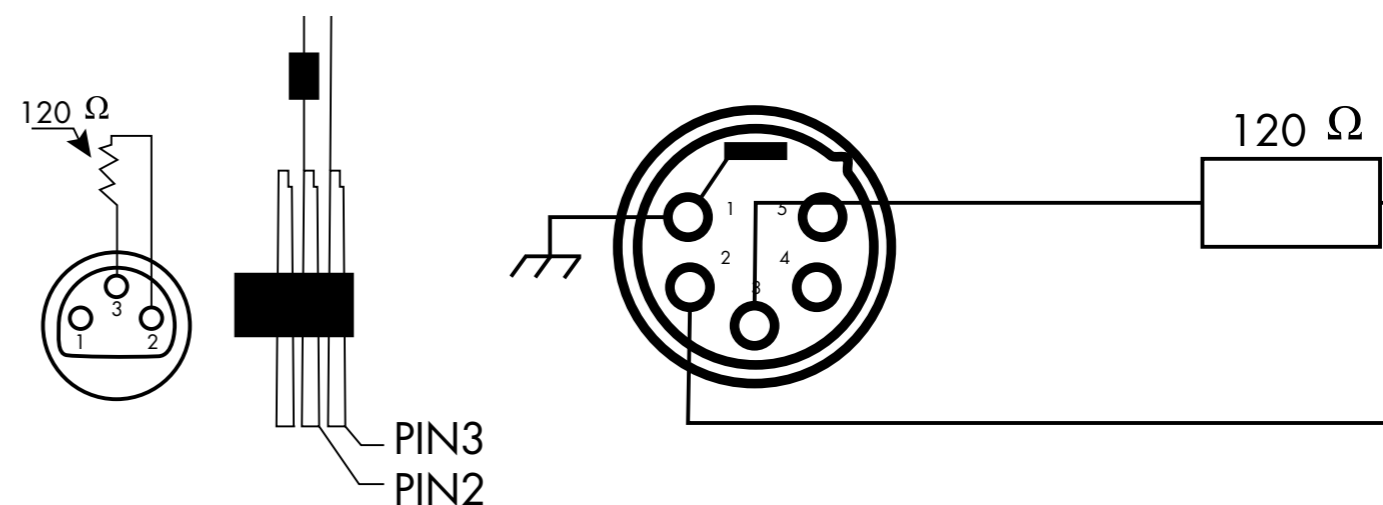
- It is situated away from public thoroughfares and protected from contact with people.
- It is not immersed in water or exposed to high-pressure water jets.
- It has adequate ventilation.

Connect the provided XLR cable to the female 3-pin XLR & 5-pin XLR output of your controller and the other side to the male 3-pin XLR & 5-pin XLR input of the moving head. You can chain multiple moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.

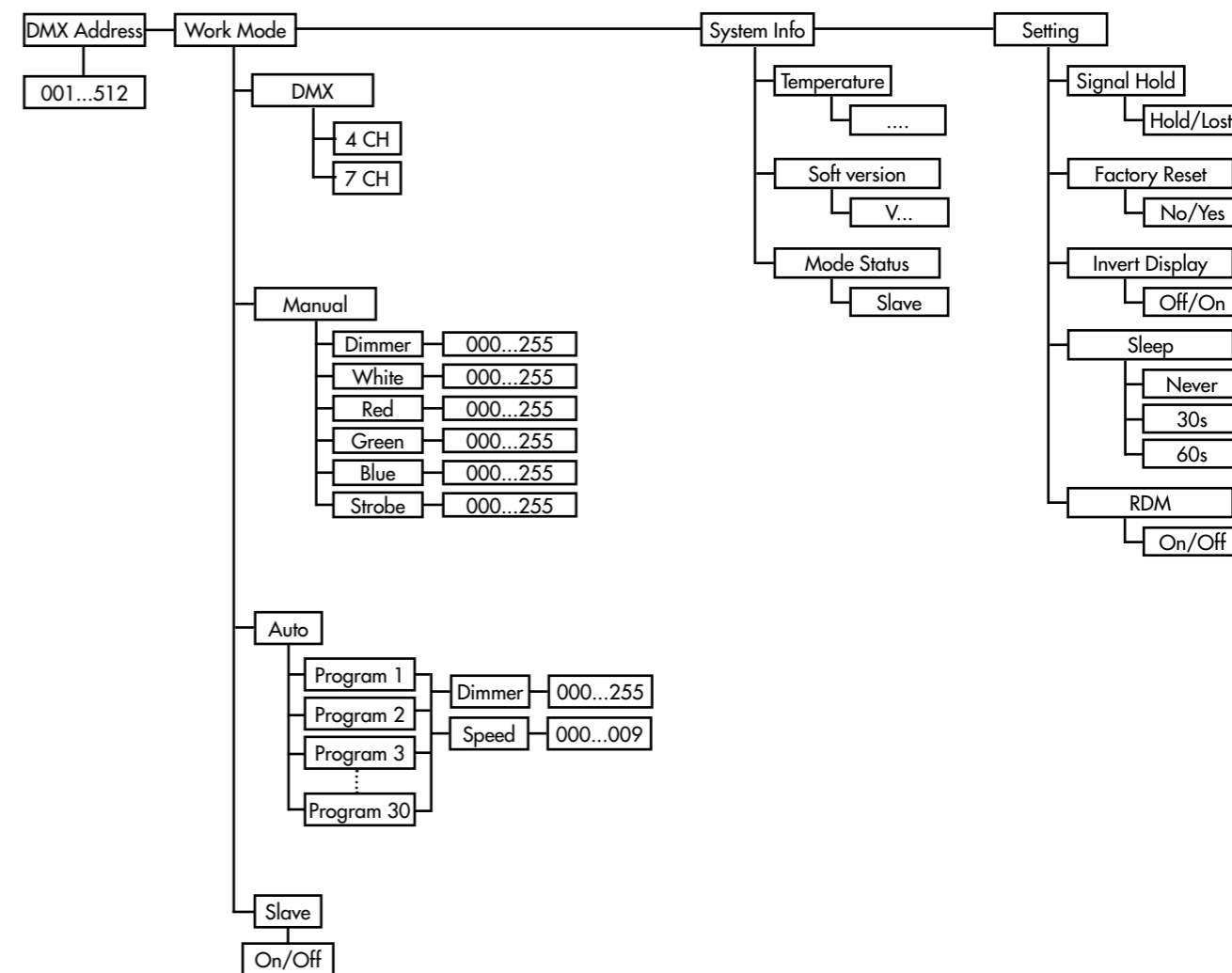
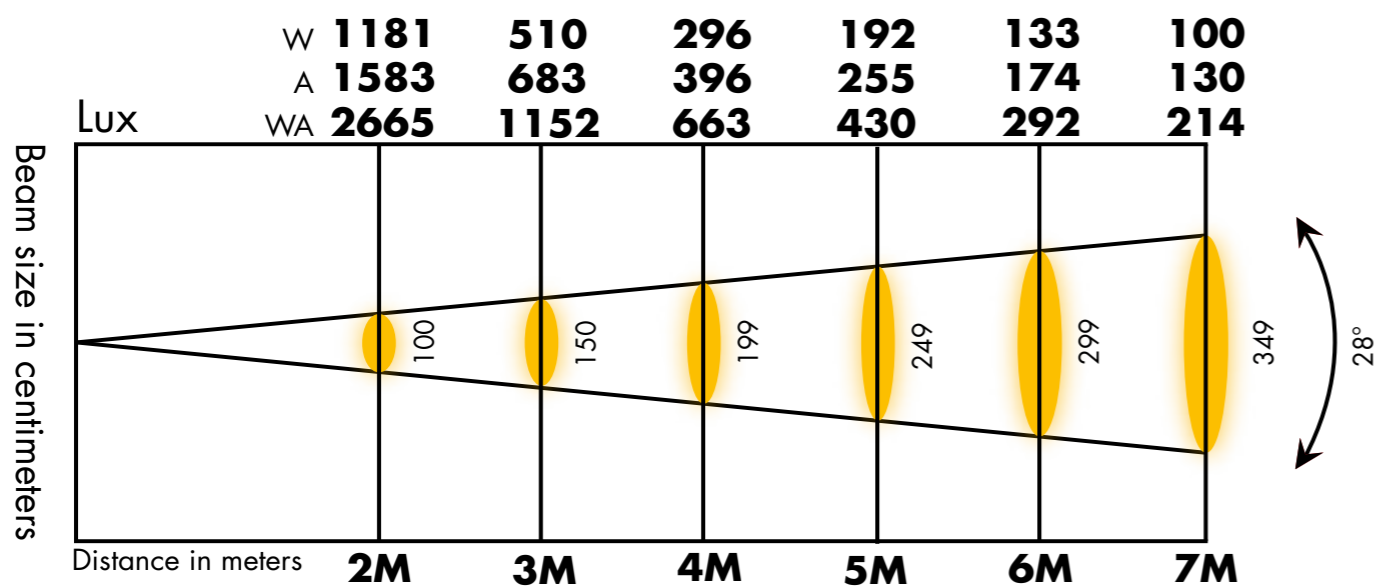
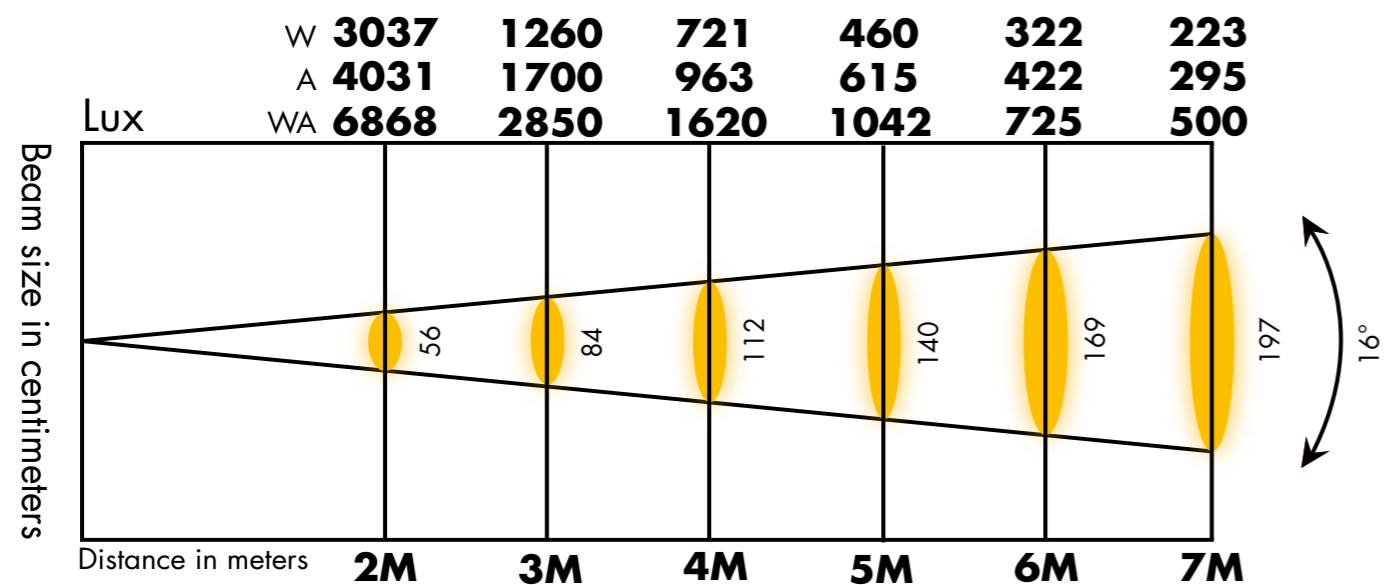
Please see illustrations below.





SECTION 4 PHOTOMETRIC DATA

SECTION 5 MENU OVERVIEW



SECTION 6 DMX CHANNELS

4 CH MODE

Channel	Value	Function
1	000...255	3200K - Dimmer intensity for center LED from dark (0) to bright (255)
2	000...255	5600K - Dimmer intensity for center LED from dark (0) to bright (255)
3	000...255	CCT - from warm 3200K (0) to cold 5600K (255)
4	000...255	Master level dimming

7 CH MODE

Channel	Value	Function
1	000...255	3200K - Dimmer intensity for center LED from dark (0) to bright (255)
2	000...255	5600K - Dimmer intensity for center LED from dark (0) to bright (255)
3	000...255	CCT - from warm 3200K (0) to cold 5600K (255)
4	000...009	No strobe
	010...255	Levels strobe function
5	000...063	1st level delay function
	064...127	2nd level delay function
	128...191	3rd level delay function
	192...255	4th level delay function
6	000...255	Master level dimming
7	000...255	Levels dimming fine

COLOR TEMPRATURE MACRO

Value	Function
001...012	3200K - 3300K
012...022	3300K - 3400K
022...033	3400K - 3500K
033...044	3500K - 3600K
044...055	3600K - 3700K
055...066	3700K - 3800K
066...075	3800K - 3900K
075...086	3900K - 4000K
086...096	4000K - 4100K
096...107	4100K - 4200K
107...118	4200K - 4300K
118...128	4300K - 4400K
128...139	4400K - 4500K
139...149	4500K - 4600K
149...160	4600K - 4700K
160...171	4700K - 4800K
171...181	4800K - 4900K
181...192	4900K - 5000K
192...203	5000K - 5100K
203...213	5100K - 5200K
213...224	5200K - 5300K
224...235	5300K - 5400K
235...245	5400K - 5500K
245...255	5500K - 5600K



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.

BOS LIGHTING
BOS Lighting FRESNEL 60
Page 10
Version: v1 // 2023

SECTION 8 TECHNICAL SPECIFICATIONS

Light Source	1x COB 60W (Cool white + Warm white)	
Optical properties	Beam angle	16° - 28°
	Repetition rate	20000Hz
Control	DMX	
	Buttons and display	
Number of DMX channels	4CH, 7CH	
Power connections	Lockable PowerCON In/Out	
Control connections	DMX control	3-pin XLR In/Out or 5-pin XLR In/Out
Power consumption	60W	
Operating supply voltage	100 - 240 V 50/60 Hz	
Protection class	IP20 - indoor	
Mounting options	Hanging	
Dimensions (W x H x D), with bracket	155 mm x 140 mm x 318 mm	
Weight	3.5 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)
Construction	Indoor housing, Fresnell Rotating barndoors	
Number of LEDs	2	
Color mixture	3200K - 5600K	
LED type	2 -in- 1 3200K - 5600K COB	
Fanless	No	
Wireless DMX	No	
Housing color	Black	