



Sky Spot 4000

ORDERCODE 40955



SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Showtec.

The Showtec Sky Spot 4000 brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.

We design and manufacture professional light equipment for the entertainment industry.

New products are being launched regularly. We work hard to keep you, our customer, satisfied.

For more information: iwant@showtec.info

You can get some of the best quality, best priced products on the market from Showtec.

So next time, turn to Showtec for more great lighting equipment.

Always get the best -- with Showtec !

Thank you!



Showtec Sky Spot 4000™ Product Guide

Warning	2
Safety-instructions.....	2
Operating Determinations.....	3
Description	5
Features and Overview	5
Installation	6
Installing the Lamp	6
Lamp Adjustment.....	8
Maintenance	9
Changing the Lamp.....	9
Replacing the Fuse.....	9
Troubleshooting	10
No Light.....	10
No Response to DMX	10
Product Specifications	11

WARNING



**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**

SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual



Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect 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 manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never run the device without lamp!
- Never ignite the lamp if the objective-lens or any housing-cover is open, as discharge lamps may expose and emit a high ultraviolet radiation, which may cause burns.
- Never look directly into the light source.
- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the lamp's life.
- If the lamp has been turned OFF, let the lamp cool down for 15 minutes, before turning the lamp ON again.
- Do not touch the device's housing bare-handed during its operation (housing becomes very hot).
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.

- Avoid flames and do not put close to flammable liquids or gases.
- Always replace the lamp, when it is damaged or deformed due to the heat.
- Always keep case closed while operating.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used, before cleaning or when replacing lamp! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the power-cord from time to time.
- If the lens is obviously damaged, it has to be replaced. So that its functions are not impaired, due to cracks or deep scratches.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. Sky Spot must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement use lamps and fuses of same type and rating only.
- Allow time to cool down, before replacing lamp.
- The user is responsible for correct positioning and operating of the Sky Spot. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.



CAUTION ! EYEDAMAGES !
Avoid looking directly into the light source.
(meant especially for epileptics) !



OPERATING DETERMINATIONS

This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.

The minimum distance between light-output and the illuminated surface must be more than 2 meters.

The maximum ambient temperature $t_a = 40^\circ\text{C}$ must never be exceeded.

The relative humidity must not exceed 50 % with an ambient temperature of 40°C .

If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc. You endanger your own safety and the safety of others!

Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

Cable	Pin	International
BROWN	FASE	L
BLUE	NUL	N
YELLOW/GREEN	EARTH	⏚

Make sure that the device is always connected properly to the earth!



Always use a 32A 3-pin plug to connect the Sky Spot

Description of the device

Features

The Showtec Sky Spot 4000 is an immensely powerful Skyspot.

- IP-23 Protection degree
- Lamp Osram XOB 4000W Xenon included (155000 Lumen)
- Move the Sky Spot, horizontally 120° (**Pan**) and vertically (**Tilt**) 40°.

Note: If the lamp has been turned OFF, let the lamp cool down for 15 minutes, before turning the lamp ON again.

Overview



Fig. 1

- 1) Fuse
- 2) Powerswitch ON / OFF

Each powerswitch is 1000W. When all the switches are On, the Sky Spot works at full power. You must start the Sky Spot at 3000W, so 3 switches set to On. After you have started the Sky Spot, you can set the Sky Spot to 1000W, 2000W, 3000W or 4000W.

Installation

Installing the Lamp

The Showtec Sky Spot 4000 uses the XOB 4000W Xenon (ordercode 80918) bulb as manufactured by all popular manufacturers. Use only the appropriate lamp for your unit.

Note that, product versions that use other lamps, may be offered in the future. Check your product specification label for information.

Always disconnect from electric mains power supply before changing lamps.

The lamp has to be replaced when it is damaged or deformed due to the heat.

Do not install lamps with a higher wattage! Lamps with a higher wattage generate temperatures the device was not designed for.

Damages caused by non-observance are not subject to warranty.

XBO lamps are at high internal pressure when cold (up to 35 bar or approximately 525 psi) and at operating temperature (up to 80 bar or approximately 1200 psi at bulb wall temperatures of 600°C to 800°C).

Therefore, XBO lamps may unexpectedly rupture resulting in the discharge of hot fragments of quartz and/or glass and metal. In the event of such a rupture, there is a risk of personal injury, burns and fire. Only handle lamps with their protective covers in place.

OSRAM XBO: These lamps use standard quartz glass and will also emit UV radiation that produces ozone. These lamps, like the W/4 types, must always be externally ventilated. With these types of lamps, health risks must always be minimized by suitably extracting the air from the lamp housing and externally venting it.

Procedure :

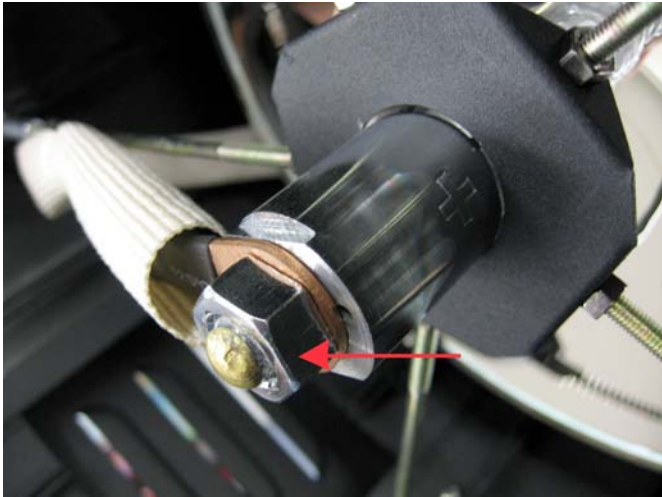
- **Always read the safety instructions that are included with the lamp.**
- **Oil on hands shortens the lamp life. (If you touch the bulb glass, wipe off the glass with a clean, lint-free towel and rubbing alcohol.)**
- **Always read all the safety warnings at the beginning of this manual, before replacing the lamp !!!**



1. Remove the 4 screws



2. Remove the screw



3. Be careful removing this screw



4. Remove all 5 lamp brackets



5. To remove the brackets, unscrew the 2 screws.



6. To remove the glass reflector unscrew this screw. Be very careful and try not to touch the glass. Do not bend or use force on the lamp, in this case the lamp can explode.



7. Very gently remove the glass reflector



8. The screw on the backside of the lamp can now be removed and you can take out the lamp.



The broken lamp must be placed in a safe spot, so it cannot fall or break, because of danger of explosion. The lamp is chemical waste and may not be thrown away. Bring this lamp to a designated collect point for chemical waste.

When installing the new lamp, pay attention to the polarity of the lamp. The lamp has a positive and a negative side. This is written on the lamp: - or +.



- Side



+ Side



Bottom of the lamp base is - side



Top of the lamp base is + side

Lamp Adjustment

You can adjust the lamp's position by turning the screw on the backside of the Sky Spot.

The lamp position is set in the factory. As the lamps, which can be used, differ from manufacturer to manufacturer, it can be necessary to readjust the position. The lamp must be readjusted e.g., if the light does not seem to be evenly distributed within the ray of light.

Ignite the lamp and focus the ray of light on an even surface (wall). If the Hot Spot appears too bright, you can weaken its intensity, by moving the lamp closer to the reflector. If the light at the outside edge of the ray of light appears brighter as in the center, the lamp is too close to the reflector. In this case move the lamp away from the reflector, until the light is evenly distributed and the ray of light appears bright enough.

Maintenance

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

1. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
2. There may not be any deformations on housings, fixations and installation spots.
3. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
4. The electric power supply cables must not show any damages or material fatigue.

The Showtec Sky Spot 4000 requires almost no maintenance. However, to keep luminous flux rate at a high level, you must clean the lamp with a soft cloth or cotton stick to wipe the mirrors.

Otherwise, the fixture's light-output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.

Clean all optics (lens and reflector) regularly to increase the Sky effect.

The cooling-fans and the lens should be cleaned monthly with a soft brush.

Please clean reflector once every 2 months with a soft cloth or a cotton stick dipped in alcohol.

Keep connections clean. Disconnect electric power, and then wipe the DMX and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Changing the Lamp

1. Disconnect the Sky Spot from the power and let the device cool down for 15 minutes.
2. Follow directions for installing a new lamp, page 6.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

The Sky Spot has 4 fuses, please check which fuse is burnt out.

1. Unplug the unit from electric power source.
2. Insert a screwdriver into the slot in the fuse cover. Turn the screwdriver to the left, at the same time gently push a bit (Turn and Push). The fuse will come out.
3. Remove the used fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Troubleshooting

No Light

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

If the light effect does not operate properly, refer servicing to a technician.

Response: Suspect three potential problem areas: the power supply, the lamp, the fuse.

1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The lamp. Replace the old lamp with a new one with the same specifications. See page 6 for replacing lamps.
3. The fuse. Replace the fuse. See page 9 for replacing the fuse.

No Response to DMX

Response: Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

1. Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
2. Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products ? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.

See next page for more problem solving.

Problem	Probable cause(s)	Remedy
Fixtures is completely dead.	No power to the fixture	·Check that power is switched on and cables are plugged in.
	Primary fuse blown.	·Replace fuse.
No light	The power supply settings do not match local AC voltage and frequency.	·Disconnect fixture. Check settings and correct if necessary.
	Lamp missing or blown	·Disconnect fixture and replace lamp.
Lamp cuts out intermittently.	Fixture is too hot.	·Allow fixture to cool. ·Clean fan. ·Make sure air vents at control panel and front lens are not blocked. ·Turn up the air conditioning.

Product Specification

Model: Showtec Sky Spot 4000

Voltage: 240V-50Hz (CE)

Power Plug : 32A 3-pin

Color Temperature: 6000° K

Waterproof: IP23 protection grade

Manual-focus

Pan: 120°

Tilt: 40°

Power: 4400W

Dimensions: 790 x 670 x 990mm (LxWxH)

Flightcase Dimensions: 755 x 885 x 1650 mm (LxWxH)

Weight: 79 kg

Lamp

Allowed lamp models*:

Osram XOB 4000W Xenon (1000 hr; 155000 Lumen) (ordercode 80918)

Minimum distance:

Minimum distance from flammable surfaces: 0.5m

Minimum distance to lighted object: 2m

*: Versions for other lamps may be produced. Please check the specification label on your product.

Design and product specifications are subject to change without prior notice.





© 2006 Showtec.