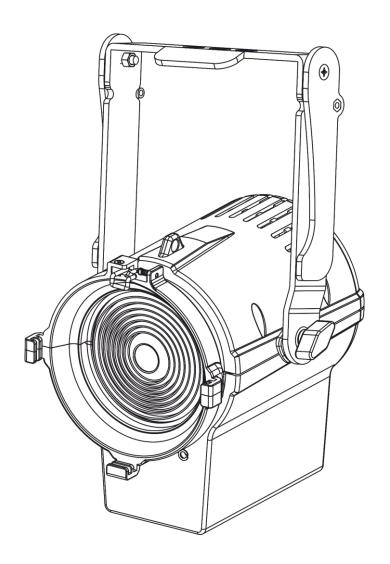


# **MANUAL**



**ENGLISH** 

# Performer Fresnel Mini DMX V1

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### Warning



# For your own safety, please read this user manual carefully before your initial start-up!

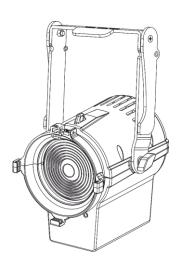


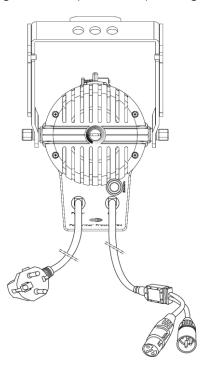
### **Unpacking Instructions**

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

### Your shipment includes:

- Showtec Performer Fresnel Mini
- 1 x safety cable
- User manual





### **LED Expected Lifespan**

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. If improving your lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.



### **CAUTION!**

Keep this device away from rain and moisture! Unplug mains lead before opening the housing!



### **Safety Instructions**

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

- be qualified
- follow the instructions of this manual





# CAUTION! Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!



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 place any material over the lens.
- 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 dimmer pack.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not touch the device's housing bare-handed during its operation. Allow the fixture to cool for at least 5 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only operate the fixture after having checked if 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 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 or before cleaning! 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. Device must be installed out of the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- The user is responsible for correct positioning and operating of the Performer Mini. 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.



- 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 lightsource!!! (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 bigger than 0,5 meter.
- The maximum ambient temperature ta = 40 °C must never be exceeded.
- In order to eliminate wear and improve the device's lifespan, during periods of non-use, completely disconnect from power source via breaker or by unplugging.
- 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, crash etc.

You endanger your own safety and the safety of others!

### Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

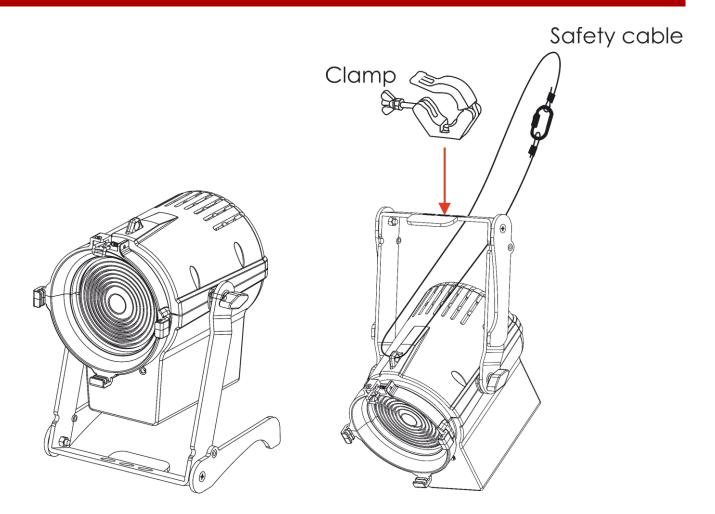
Do not attempt the installation yourself!

Always let the installation be carried out by an authorized dealer!

### Procedure:

- If the Performer Mini is lowered from the ceiling or high joists, professional trussing systems have to be used
- Use a clamp to mount the Performer Mini, with the mounting bracket, to the trussing system.
- The Performer Mini must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety cable.
- When rigging, derigging or servicing the Performer Mini, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.





The Performer Fresnel Mini can be placed on a flat stage floor, by means of the included mounting bracket, or be mounted to any kind of truss with a clamp and a quick-lock bracket.

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.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
<b>(</b>	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

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

Improper installation can cause serious damage to people and property!





### **Return Procedure**



Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail <a href="mailto:aftersales@highlite.com">aftersales@highlite.com</a> and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

# Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 01) Your name.
- 02) Your address.
- 03) Your phone number.
- 04) A brief description of the symptoms.

### Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.



### Description of the device

### **Features**

The Showtec Performer Fresnel Mini spotlights are extremely suitable for a wide range of applications. They can be used as accent lighting on decors, at company parties, in theatres and even for TV applications. Due to their compact design, they can be used anywhere. The manual zoom ensures that the bundle is adjustable in the right size and the supplied barn door ensures the correct design of the bundle.

### There are 3 models:

- Battery version is the ideal solution for mobile solutions such as TV reports or interviews
- The DMX variant (33054) can be controlled with any DMX desk
- DDT model (33053) can be dimmed with a traditional dimmer pack and is therefore ideal for installations where you want to switch to LED light sources without adjusting the infrastructure
- Classic Compact Fresnel design
- High efficiency 30W LED source
- Fanless convection cooling
- Input voltage: 100-240 V AC, 50/60 Hz
- Power consumption: 22 W
- Lightsource: Source: 1x 30W CREE LED
- Colour Temperature: 3100KColour Rendering: >92Ra
- Lux@1m: 16500 (12°)
- Lux@1m: 4500 (40°)Control protocol: DMX / RDM
- Dim resolution: 16-bit
- DMX personality: 1 channel
- Manual Zoom: 12°-40°
- Dimmer: 0-100%
- Housing: Extruded aluminium
- Colour: Black
- Barndoor: Optional (33056)
- Cooling: Air convection
- Operation Temperature: 0 °C ~ 40 °C
- IP Rating: IP20
- Dimensions: 275 x 175 x 188 mm (LxWxH)
- Weight: 2,3 Kg

### Optional accessories

Ordercode: 33054

33056 – Barndoor for Performer Fresnel Mini



### Overview

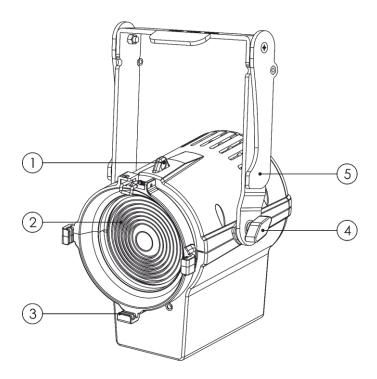


Fig. 01

- 01) Safety eye
- 02) 1x 30W LED
- 03) Filterframe
- 04) Mounting brackets with inclination screw
- 05) Adjustment screw

### Back

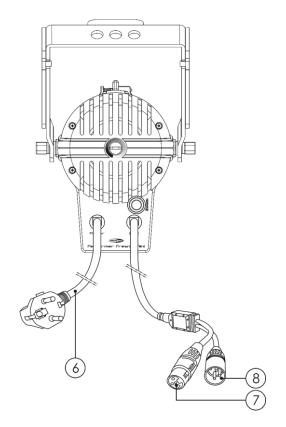


Fig. 02

- 06) Input voltage: 100–240 V AC, 50/60 Hz
- 07) DMX signal connector (OUT) 3-pin

### Installation

Remove all packing materials from the Performer Fresnel Mini. Check that all foam and plastic padding is removed. Connect all cables.

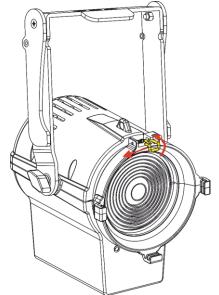
Do not supply power before the whole system is set up and connected properly.

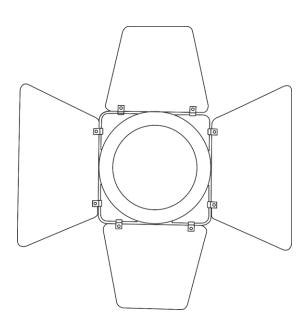
Always disconnect from electric mains power supply before cleaning or servicing.

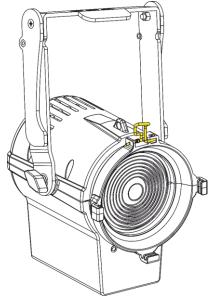
Damages caused by non-observance are not subject to warranty.

### **Installing Barndoor**

- 01) Push the upper spring lever sideways.
- 02) Pull the upper spring lever in the direction of the arrow.
- 03) Make sure the upper lever is pulled backwards and insert the barndoor (ordercode: 33056) into the lower spring lever.
- 04) Release the upper spring lever.
- 05) Make sure the barndoor is firmly positioned between the upper spring lever and the lower spring lever.







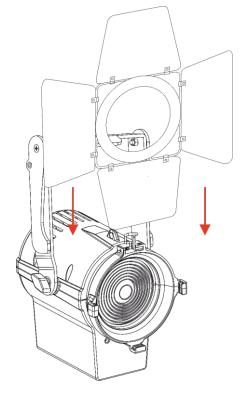


Fig. 03

### Zoom operation

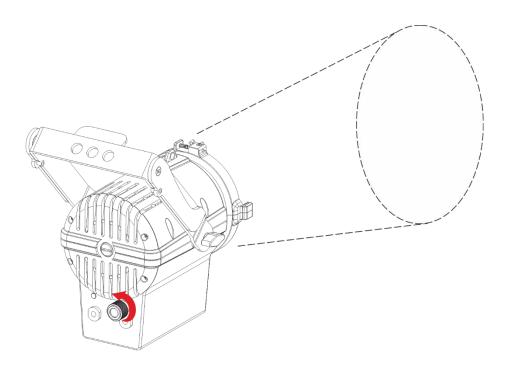


Fig. 04

Turn the zoom button counter clockwise to increase the Angle.

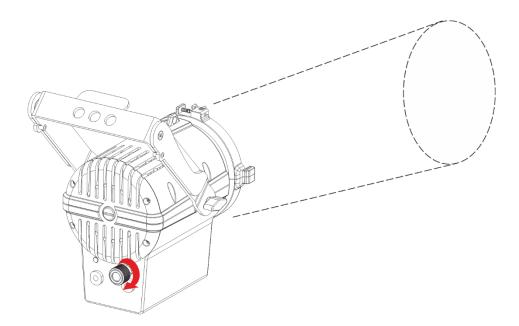
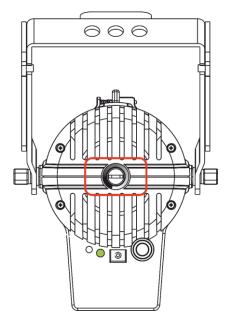
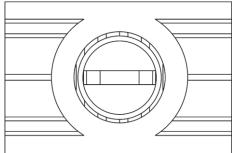


Fig. 05

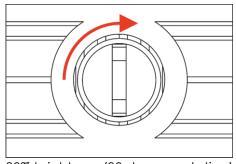
Turn the zoom button clockwise to reduce the Angle.

### **Dimmer Operation**

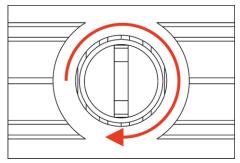




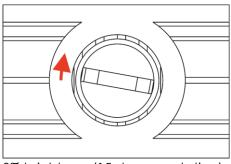
Off (0 degree rotation)



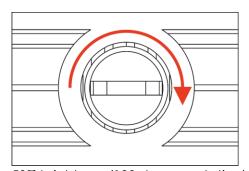
20% brightness (90 degree rotation)



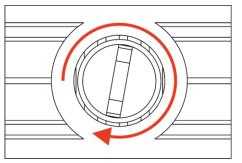
85% brightness (270 degree rotation)



3% brightness (15 degree rotation)



50% brightness (180 degree rotation)



100% brightness (285 degree rotation)

### **Set Up and Operation**

Follow the directions below, as they pertain to your preferred operation mode.

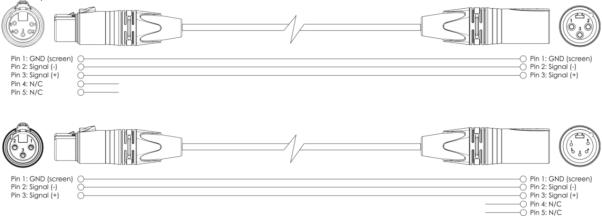
Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

### **Control Mode**

There is only 1 mode: • DMX

### Multiple Performers (DMX512 Mode)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 03) Use a 3-p XLR cable to connect the Performer and other devices.



- 04) Link the units as shown in (Fig. 03), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second and third units.
- 05) Supply electric power: Plug electric mains power cords into each unit's IEC socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

### Multiple Performers DMX Set Up

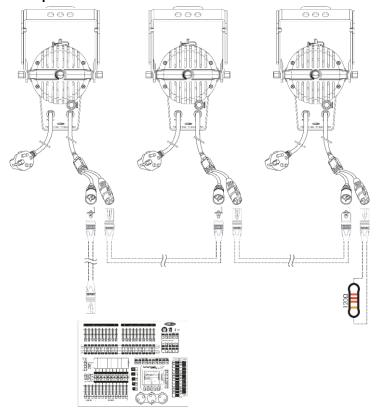


Fig. 07

Note: Link all cables before connecting electric power!



### **Fixture Linking**

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

The Performer Fresnel Mini uses 1 channel.

Important: Fixtures on a serial data link must be daisy-chained in a single line. To comply with the

EIA-485 standard, no more than 30 devices should be connected on one data link.

Connecting more than 30 fixtures on one serial data link without the use of a DMX optically

isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended DMX data link distance: 100 meters
Maximum recommended number of fixtures on a DMX data link: 30 fixtures



### **Data Cabling**

To link fixtures together you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

### **DAP Audio DMX Data Cables**

- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FL01150 (1,5 m), FL013 (3 m), FL016 (6 m), FL0110 (10 m), FL0115 (15 m), FL0120 (20 m).
- DAP Audio X-type data cable XLR/M 3-pin > XLR/F 3-pin. Ordercode FLX0175 (0,75 m), FLX01150 (1,5 m), FLX013 (3 m), FLX016 (6 m), FLX0110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5 m), FL713 (3 m), FL716 (6 m), FL7110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL7275 (0,75 m), FL72150 (1,5 m), FL723 (3 m), FL726 (6 m), FL7210 (10 m).
- DAP Audio 110 Ohm cable with digital signal transmission. Ordercode FL0975 (0,75 m), FL09150 (1,5 m), FL093 (3 m), FL096 (6 m), FL0910 (10 m), FL0915 (15 m), FL0920 (20 m).
- DAP Audio DMX adapter: 3-pin/5-pin. Ordercode FLA30.



### **Set DMX address**

To set the DMX address you have to use an RDM controller, example:

50550-RDM Commander 50409-RDM Touch V1-E

### Connecting the Performer to an RDM device

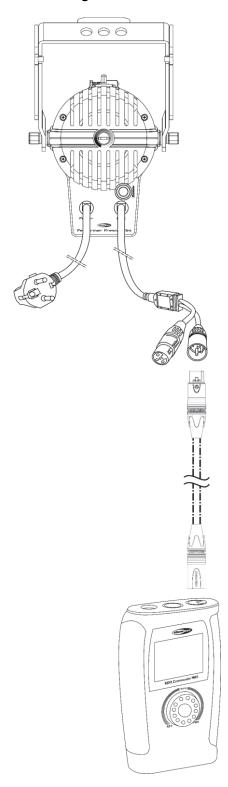


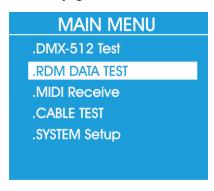
Fig. 08

- 01) To set the DMX address of your Performer you have to use a separate device.
- 02) Use a 3-p XLR cable to connect the Performer to the RDM Commander.



### How to set the DMX address

01) Turn the jog wheel to select RDM Data Test



- 02) Press the jog wheel to open the desired menu.
- 03) The display shows:



- 04) Select Get&Set RDM Parameter.
- 05) Press the jog wheel, the display shows:



- 06) If no fixture is detected, please check the cables and connections.
- 07) If a fixture is detected, the display shows:



Ordercode: 33054

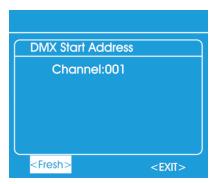
08) The display shows real-time info about the fixture.



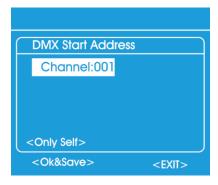
09) Turn the jog wheel to select Para, you can obtain info and control the connected fixture.



- 10) Press the jog wheel to open the desired menu.
- 11) The display shows real-time info about the fixture.
- 12) The parameters that can be selected depend on which fixture is connected. The parameters are for example **Identify Device**, **Device Info**, **DMX Start Address** etc.
- 13) Select **DMX Start Address** and press the jog wheel to open this menu
- 14) Select **Set Parameter** and press the jog wheel, the display shows:



- 15) Select Fresh to update the info or Exit to return to the previous submenu.
- 16) Press the jog wheel to confirm.
- 17) Select **Set Parameter** and press the jog wheel, the display shows:



- 18) Press the jog wheel to activate the DMX address.
- 19) Turn the jog wheel to set the DMX address.
- 20) Select Only Self to choose three different options; Only Self, Same mfrs or All Device.
  - Select Only self: only the connected fixture will be selected.
  - Select Same mfrs: only the same fixtures from the same manufacturer will be selected.
  - Select All Device: all fixtures which are linked to the connected fixture, will be selected.
- 21) Turn the jog wheel to select **Ok&Save** to store the DMX address.
- 22) Press the jog wheel to confirm.
- 23) Select **Exit** to return to the previous submenu. Press the jog wheel to confirm.

### **DMX Channels**

### Channel 1 -Dimmer

0-255 Dimmer, from closed to open (0-100%)



### Maintenance

The Showtec Performer Fresnel Mini requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light output will be significantly reduced. Disconnect the mains power supply and then wipe the cover with a damp cloth. Wipe the front glass panel clean with glass cleaner and a soft cloth. Do not use alcohol or solvents. The front glass panel will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light output very quickly. Do not immerse in liquid. 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.

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

The operator has to make sure that safety-related 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:

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

### **Troubleshooting**

### No Light

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

Suspect three potential problem areas as: the power supply, the LEDs, the internal fuse.

- 01) Power supply. Check if the unit is plugged into an appropriate power supply.
- 02) The LEDs. Return the Performer Fresnel Mini to your Showtec dealer.
- 03) The internal fuse. Return the Performer Fresnel Mini to your Showtec dealer.
- 04) If all appears to be O.K., plug the unit in again.
- 05) If you are unable to determine the cause of the problem, do not open the Performer Fresnel Mini, as this may damage the unit and the warranty will become void.
- 06) Return the device to your Showtec dealer.

### No Response to DMX

- 01) Check the DMX setting. Make sure that DMX addresses are correct.
- 02) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
- 03) 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.



Problem	Probable cause(s)	Remedy
One or more fixtures do not function at all	No power to the fixture	Check if power is switched on and cables are plugged in
	Internal fuse blown	Return the device to your Showtec dealer
Fixtures reset correctly, but all respond erratically or not at all to the controller	The controller is not connected	Connect controller
	5-pin XLR Out of the controller does not match XLR In of the first fixture on the link (i.e. signal is reversed)	<ul> <li>Install a phase reversing cable between the controller and the first fixture on the link</li> </ul>
Fixtures reset correctly, but some respond erratically or not at all to the controller	Poor data quality	Check data quality. If much lower than 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective fixture disturbing the link
	Bad data link connection	<ul> <li>Inspect connections and cables.</li> <li>Correct poor connections. Repair or replace damaged cables</li> </ul>
	Data link not terminated with 120 Ohm termination plug	<ul> <li>Insert termination plug in output jack of the last fixture on the link</li> </ul>
	Incorrect addressing of the fixtures	Check address setting
	One of the fixtures is defective and disturbs data transmission on the link	<ul> <li>Bypass one fixture at a time until normal operation is regained: unplug both connectors and connect them directly together</li> <li>Have the defective fixture serviced by a qualified technician</li> </ul>
	5-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed)	<ul> <li>Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture, that behaves erratically</li> </ul>
No light or LEDs cuts out intermittently	Fixture is too hot	<ul> <li>Allow the fixture to cool down</li> <li>Make sure air vents are not blocked</li> <li>Turn up the air conditioning</li> </ul>
	LEDs damaged	Disconnect fixture and return to your dealer
	The power supply settings do not match local AC voltage and frequency	Disconnect fixture. Check settings and correct if necessary



# **Product Specifications**

Model:	Showtec Performer Fresnel Mini	
Input voltage:	100-240V AC, 50/60 Hz	
Power consumption:	22 W	
Dimensions:	275 x 175 x 188 mm (LxWxH)	
Weight:	2,54 kg (excl. adapter)	
	2,86 kg (incl. adapter)	
Electro-mechanical effects:		
Light source:	1x High efficiency 30W CREE LED	
Colour Temperature:	3100K	
Colour Rendering:	>92Ra	
Lux@1m:	16500 (12°)	
Lux@1m:	4250 (40°)	
Dimmer:	0-100%	
Manual Zoom:	12°-40°	
Battery:	Lithium-ion	
Battery voltage:	44,2 V	
Battery storage:	2,6 Ah	
Battery life time:	6 h @ Full	
Charging cycle:	7 h	
IP rating:	IP20	
Housing:	Extruded aluminium	
Fixture connection:	DC charger input	
Cooling:	Air convection	
Barndoor:	Optional (33056)	
Working temperature:	0°C ~ 40°C	
Max. ambient temperature $t_a$ : 40 °C	Max. housing temperature $t_B$ : 70 °C	
Max. ambieni temperature 1 <sub>a</sub> . 40 °C	Max. Housing temperature 18, 70 °C	
Minimum distance:		
Minimum distance from flammable surfaces:	0,5 m	
Minimum distance to lighted object:	1 m	

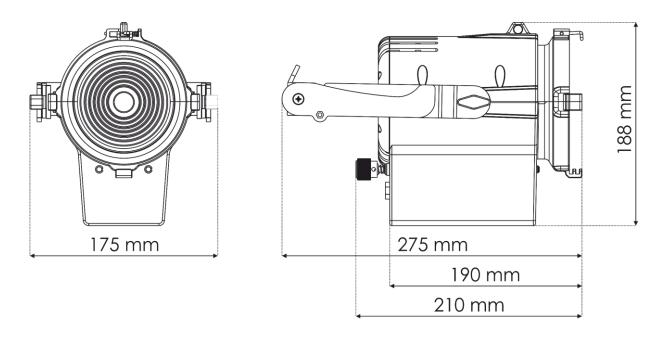
Design and product specifications are subject to change without prior notice.

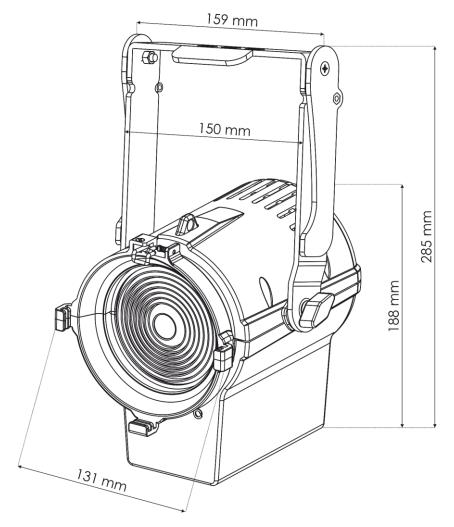


Website: <a href="www.Showtec.info">www.Showtec.info</a>
Email: <a href="mailto:service@highlite.com">service@highlite.com</a>



# **Dimensions**





# Notes



Performer Fresnel Mini DMX



