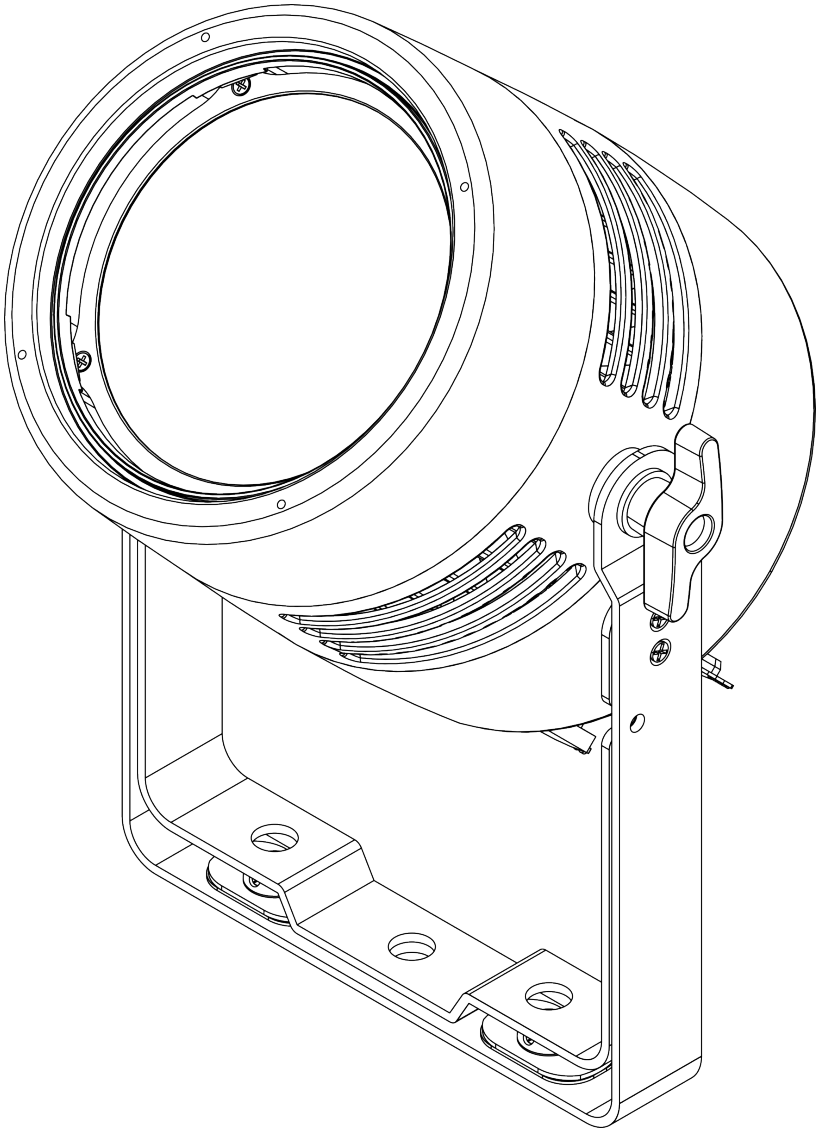
USER MANUAL

ENGLISH

V1.0



Stage Blinder 100 Blaze

Product code: 30776

Preface

Thank you for purchasing this Showtec product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Intended and non-intended use of the device
- Installation and operation of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

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

For the latest version of this document or other language versions, please visit our website www.highlite.com or contact us at service@highlite.com.

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Highlite International B.V. – Vestastraat 2 – 6468 EX Kerkrade – the Netherlands

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1. Introduction

1.1. Before Using the Product

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

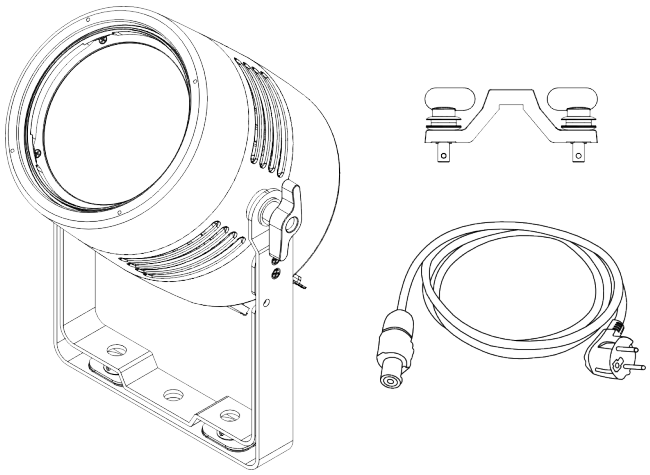
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- Showtec Stage Blinder 100 Blaze
- Quick-lock bracket
- Schuko to Power Pro True cable (1,5 m)
- User manual

Figure 1



1.2. Intended Use

This device is intended for professional use as a stage blinder. It can be installed indoors and outdoors. This device is not suitable for households and for general lighting.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

1.3. LEDs Lifespan

The light output of the LEDs gradually decreases over time (lumen depreciation). High operating temperatures contribute to this process. You can extend the lifespan of the LEDs by providing adequate ventilation and operating the LEDs at the lowest possible brightness.

1.4. Product Lifespan

This device is not designed for permanent operation.

Disconnect the device from the electrical power supply when the device is not in operation. This will reduce the wear and will improve the lifespan of the device.

1.5. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons are in bold lettering, for example "Press the **UP/DOWN** buttons"
- References: References to parts of the device are in bold lettering, for example: "turn the **adjustment handle (05)**". References to chapters are hyperlinked
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.6. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.

DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

Attention Indicates important information for the correct operation and use of the product.

Important Read and observe the instructions in this document.

Electrical hazard

Provides important information about the disposal of this product.

1.7. Symbols on the Information Label

This product is provided with an information label. The information label is located on the mounting bracket of the device.

The information label contains the following symbols:

This device shall not be treated as household waste.

Read and follow the instructions in the user manual before installing, operating or servicing the device.

This device falls under IEC protection class I.

IP65 This devices is rated IP65.

2. Safety

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

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

2.1. Warnings and Safety Instructions

DANGER
Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave any parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within the reach of children. Packaging material is a potential source of danger for children.

DANGER
Electric shock caused by dangerous voltage inside

There are areas inside the device where dangerous touch voltage may be present.

- Do not open the device or remove any covers.
- Do not operate the device if the covers or the housing are open. Before operation, check if the housing is firmly closed and all screws are tightly fastened.
- Disconnect the device from the electrical power supply before service and maintenance, and when the device is not in use.

DANGER
Electric shock caused by short-circuit

This device falls under IEC protection Class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with a ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not bypass the thermostatic switch or fuses.
- Replace fuses only with the same type and rating.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.
- Keep the connectors sealed with the rubber caps when the connectors are not in use.
- Do not connect the cables from above the connectors, if the device is installed outdoors. Make a ‘drip loop’ in the cable so that rain water cannot enter the device.

WARNING
Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.

Attention
Power supply

- Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.
- Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.

Attention
General safety

- Do not connect the device to a dimmer pack.
- Do not switch the device on and off in short intervals. This reduces the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Change the lens or the LEDs if they are visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches. Contact your Highlite International dealer for more information, as servicing can be performed only by instructed or skilled persons.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue use immediately.

Attention
For professional use only
This device must be used only for the purposes it is designed for.

This device is intended for professional use as a stage blinder. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households and for general lighting.
- This device is not designed for permanent operation.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixings and installation points.
- The lens is not cracked or damaged.
- The power cables are not damaged and do not show any material fatigue.

Attention
Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP65 rated. IP (Ingress Protection) 65 class means that the device is dust-tight and protected against harmful effect of water jets.

Keep the connectors sealed with the rubber caps when the connectors are not in use.

2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance may be carried out by ordinary persons. Installation and service shall be carried out only by instructed or skilled persons. Contact your Highlite International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and avoid hazards associated with the installation, service and maintenance of this product.

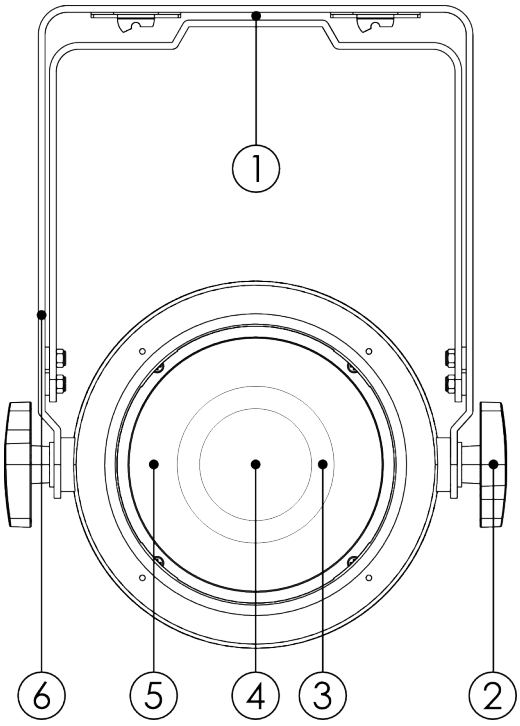
Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

3. Description of the Device

The Showtec Stage Blinder 100 Blaze is a professional, IP65-rated, 100-watt LED blinder. It has a warm white 3000 K COB LED with integrated amber LEDs for creating a tungsten dimming effect and RGB LEDs for creating a blaze effect. Control options include DMX/RDM, manual, master/slave, and automatic modes.

3.1. Front View

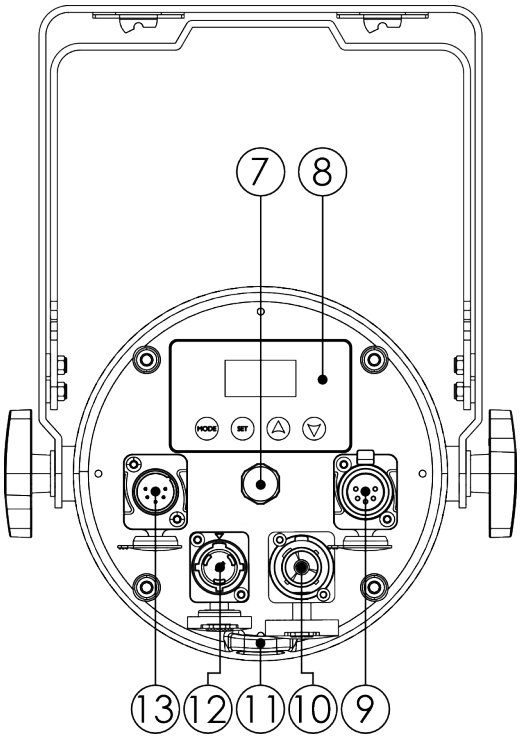
Figure 2



01) Mounting bracket
02) 2 adjustment handles
03) 12 RGB LEDs
04) 1 WW/A COB LED
05) Lens
06) Safety eye for grid accessory

3.2. Back View

Figure 3



07) Protective vent
08) Control panel
09) IP65-rated 5-pin DMX connector OUT
10) IP65-rated Power Pro connector OUT
11) Safety eye
12) IP65-rated Power Pro connector IN
13) IP65-rated 5-pin DMX connector IN

3.3. Product Specifications

Model:	Stage Blinder 100 Blaze

Source:	
Light Source Type	LED
Light Source Quantity	2
Light Source Power	100 W
LED Colour Type	A / WW / RGB
Luminous Flux (Total)	3942 lm
CRI	92

Optical:	
Beam Angle (Horizontal)	45°
Beam Angle (Vertical)	45°

Control and Programming:	
Control Mode	Auto / DMX / Manual / Master Slave / RDM
DMX Channels	1 / 4 / 5 / 5
Protocols	DMX / RDM
Display	OLED

Dynamic Effects:	
Dimmer	0–100 %
Strobe	0–20 Hz

Electrical Specifications and Connections:	
Power Supply	100–240 V AC 50/60 Hz
Power Consumption	90 W
Power Connector In	Power Pro True
Power Connector Out	Power Pro True
DMX Connector In	XLR 5P
DMX Connector Out	XLR 5P

Mechanical Specifications:	
Length (mm)	225 mm
Width (mm)	160 mm
Height (mm)	242 mm
Weight	4,1 kg
IP Rating	IP65
Material	Aluminum
Housing	Aluminum die-cast
Color	Black

Product Properties:	
Cooling	Forced Convection

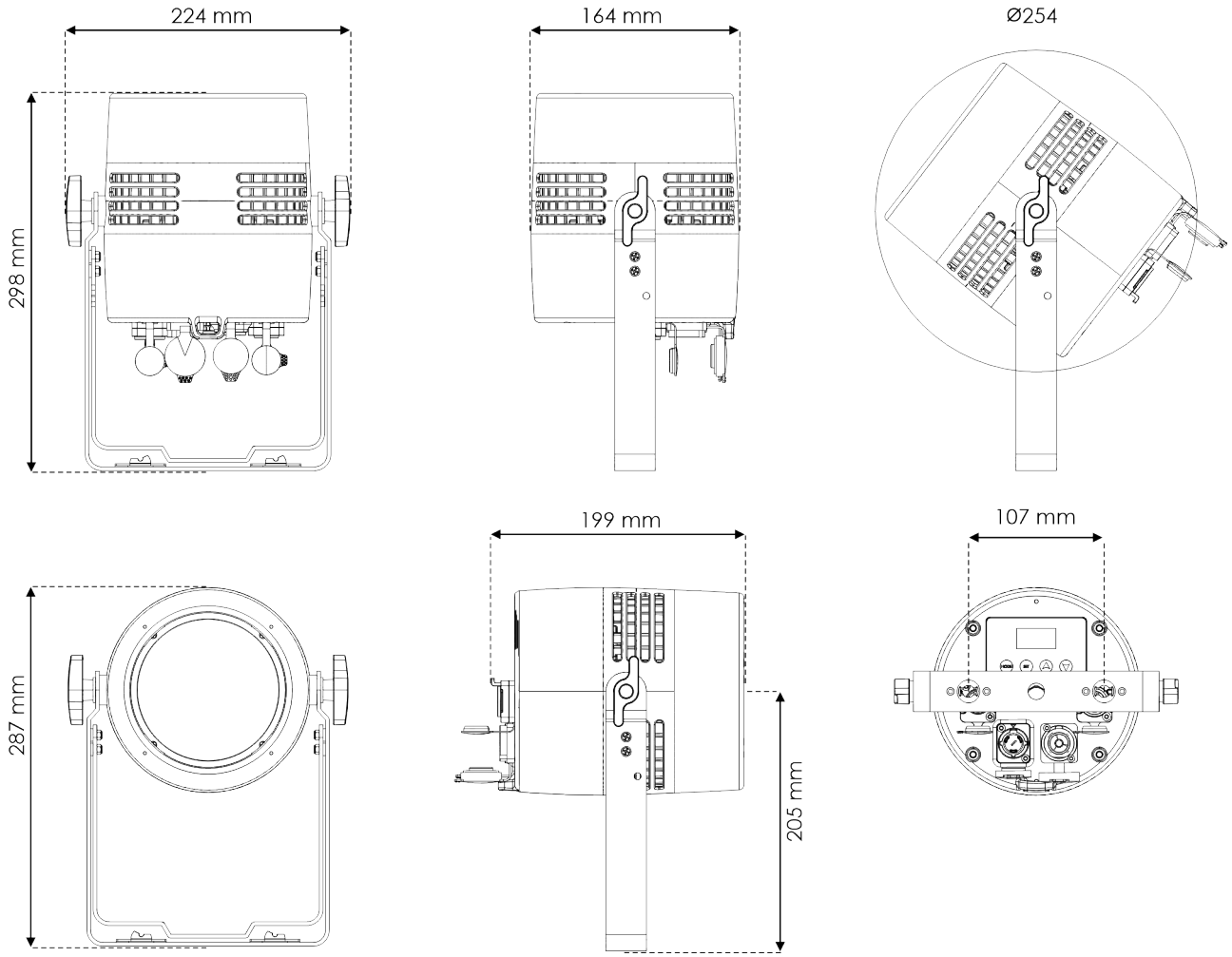
Rigging:	
Mounting Options	Clamp / Quick-Lock

Thermal Specifications:	
Maximum Ambient Temperature	40 °C
Minimum Operating Temperature	-5 °C

Included Items:	
Included Cables	Power Pro True Cable
Included Rigging	Quick-Lock Bracket

3.4. Dimensions

Figure 4



3.5. Optional Accessories

- Product code: 30778 (Grid for Stage Blinder 100 Blaze)
- Product code: 75151 (QuickLock Bracket 2)

4. Installation

4.1. Safety Instructions for Installation

WARNING
Incorrect installation can cause serious injuries and damage of property.

If trussing systems are used, installation must be carried out only by instructed or skilled persons.

Follow all applicable European, national and local safety regulations concerning rigging and trussing.

4.2. Personal Protective Equipment

During installation, deinstallation and rigging wear personal protective equipment in compliance with the national and site-specific regulations.

4.3. Installation Site Requirements

- The device can be used indoors and outdoors.
- The minimum distance between the light output and the illuminated surface must be bigger than 2 m.
- The minimum distance to other objects must be bigger than 0,5 m.
- The maximum ambient temperature t_a = 40 °C must never be exceeded.

4.4. Rigging

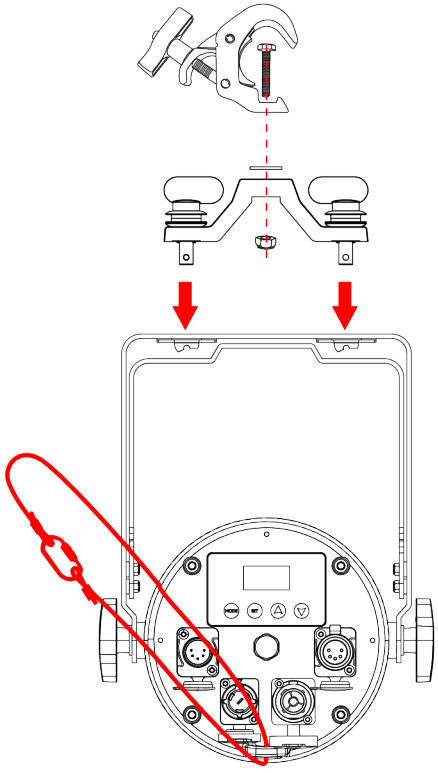
The device can be positioned on a flat surface or mounted to a truss or other rigging structure in any orientation. Make sure that all loads are within the pre-determined limits of the supporting structure.

CAUTION
Restrict the access under the work area during rigging/derigging.

To mount the device, follow the steps below:

01) Fasten the quick-lock bracket, supplied with the device, on the **mounting bracket (01)**.
02) Install a clamp. Make sure that you use a clamp suitable for attaching the device to a truss.
03) Attach the device to the supporting structure. Make sure that the device cannot move freely.
04) Secure the device with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the device. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. Put the safety cable through the **safety eye (11)**.

Figure 5



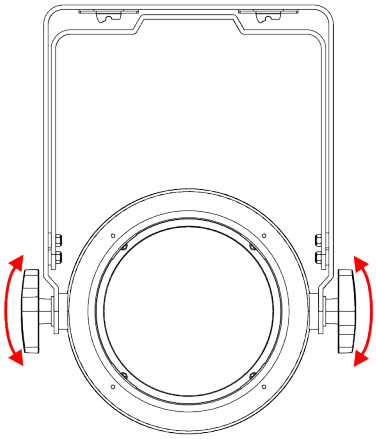
4.5. Angle Adjustment

You can adjust the angle of the device with the **2 adjustment handles (02)**.

To adjust the angle, follow the steps below:

01) Turn the **2 adjustment handles (02)** counterclockwise to loosen them.
02) Tilt the device to the desired angle.
03) Turn the **2 adjustment handles (02)** clockwise to tighten them. Make sure that the device cannot move freely after the **2 adjustment handles (02)** are tightened.

Figure 6



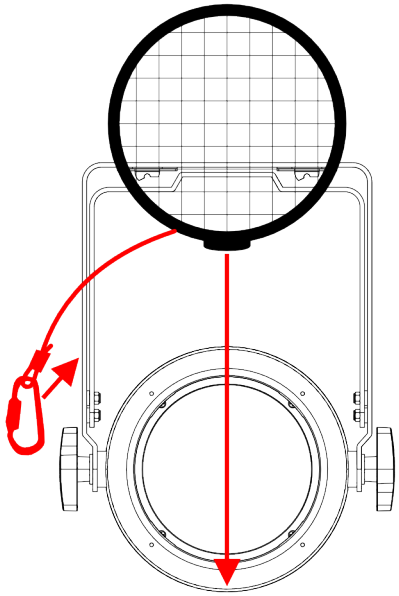
4.6. Installation of Optional Grid Accessory

The Grid for Stage Blinder 100 Blaze is an optional accessory (see 3.5. Optional Accessories on page 11) that gives the fixture the classic look of a conventional blinder. The Grid is equipped with magnets that hold it in place.

To install the Grid for Stage Blinder 100 Blaze, follow the steps below:

01) Attach the magnetic side of the Grid to the front of the device.
02) Secure the Grid to the **safety eye for grid accessory (06)** on the device with the safety cable attached to the Grid.

Figure 7



4.7. Connecting to Power Supply

DANGER
Electric shock caused by short-circuit

The device accepts AC mains power at 100–240 V and 50/60 Hz. Do not supply power at any other voltage or frequency to the device.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

Before connecting the device to the socket-outlet:
- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has a ground (earth) connection.

Connect the device to the socket-outlet with the power plug. Do not connect the device to a dimmer circuit, as this may damage the device.

This device is IP65 rated.

- Do not expose the device to conditions that exceed the rated IP class conditions.
- Keep the connectors sealed with the rubber caps when the connectors are not in use.
- Do not connect the cables from above the connectors, if the device is installed outdoors. Make a 'drip loop' in the cable so that rain water cannot enter the device.
- Make sure that the cable run is not too heavy. A heavy cable run can cause damage to the connectors. If the connectors are damaged, their ingress protection (IP) can deteriorate.

4.8. Power Linking of Multiple Devices

This device supports power linking. Power can be relayed to another device via the power OUT connector. Note that the input and the output connectors have different designs: one type cannot be connected to the other.

Power linking of multiple devices must be carried out only by instructed or skilled persons.

WARNING
Incorrect power linking may lead to overload of the electrical circuit and result in serious injuries and damage of property.

To prevent overload of the electrical circuit, when power linking multiple devices:

- Use cables with sufficient current-carrying capacity. The power cable supplied with the device is not suitable for power linking of multiple devices.
- Make sure that the total current draw of the device and all connected devices does not exceed the rated capacity of the power cables and the circuit breaker.
- Do not link more devices on one power link than the maximum recommended number.

Maximum recommended number of devices:
- at 100–120 V: 5 devices Stage Blinder 100 Blaze
- at 200–240 V: 10 devices Stage Blinder 100 Blaze

5. Setup

5.1. Warnings and Precautions

DANGER
Electric shock caused by short-circuit

This device is IP65 rated.

- Do not expose the device to conditions that exceed the rated IP class conditions.
- Keep the connectors sealed with the rubber caps when the connectors are not in use.
- Do not connect the cables from above the connectors, if the device is installed outdoors. Make a 'drip loop' in the cable so that rain water cannot enter the device.
- Make sure that the cable run is not too heavy. A heavy cable run can cause damage to the connectors. If the connectors are damaged, their ingress protection (IP) can deteriorate.

Attention
Connect all data cables before supplying power.
Disconnect power supply before connecting or disconnecting data cables.

5.2. Stand-alone Setup

When the Stage Blinder 100 Blaze is not connected to a controller or to other devices, it functions as a stand-alone device. It can be operated manually via the control panel or in auto mode.

For more information refer to Control Modes (see 6.2. Control Modes on page 19).

5.3. DMX Connection

5.3.1. DMX-512 Protocol

You need a DMX serial data link to run light shows of one or more devices using a DMX-512 controller.

The Stage Blinder 100 Blaze has 5-pin DMX signal IN and OUT connectors.

The pin assignment is as follows: pin 1 (ground), pin 2 (-), pin 3 (+), pin 4 (N/C), pin 5 (N/C).

Devices on a serial data link must be daisy-chained in a single line. The number of devices that you can control on one data link is limited by the combined number of the DMX channels of the connected devices and the 512 channels available in one DMX universe.

To comply with the TIA-485 standard, no more than 32 devices should be connected on one data link. In order to connect more than 32 devices on one data link, you must use a DMX optically isolated splitter/booster, otherwise this may result in deterioration of the DMX signal.

Note:

- Maximum recommended DMX data link distance: 300 m
- Maximum recommended number of devices on a DMX data link: 32 devices

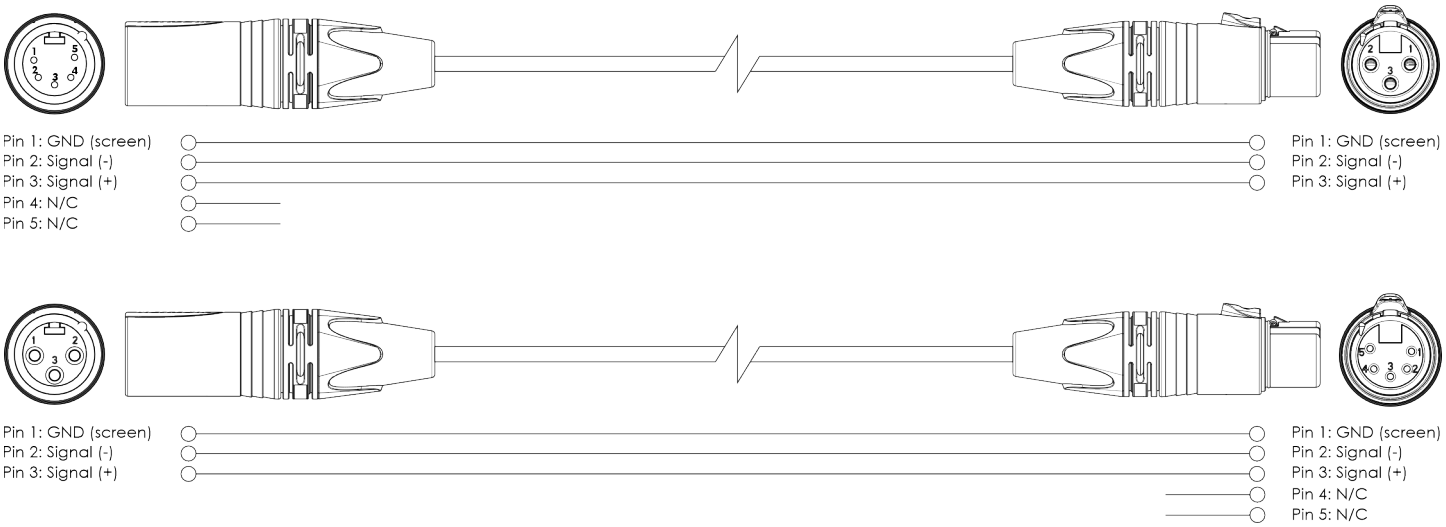
5.3.2. DMX Cables

Shielded twisted-pair cables with 5-pin XLR connectors must be used for reliable DMX connection. You can purchase DMX cables directly from your Highlite International dealer or make your own cables.

If you use XLR audio cables for DMX data transmission, this may lead to signal degradation and unreliable operation of the DMX network.

When you make your own DMX cables, make sure that you connect the pins and wires correctly as shown in the figure below.

Figure 8

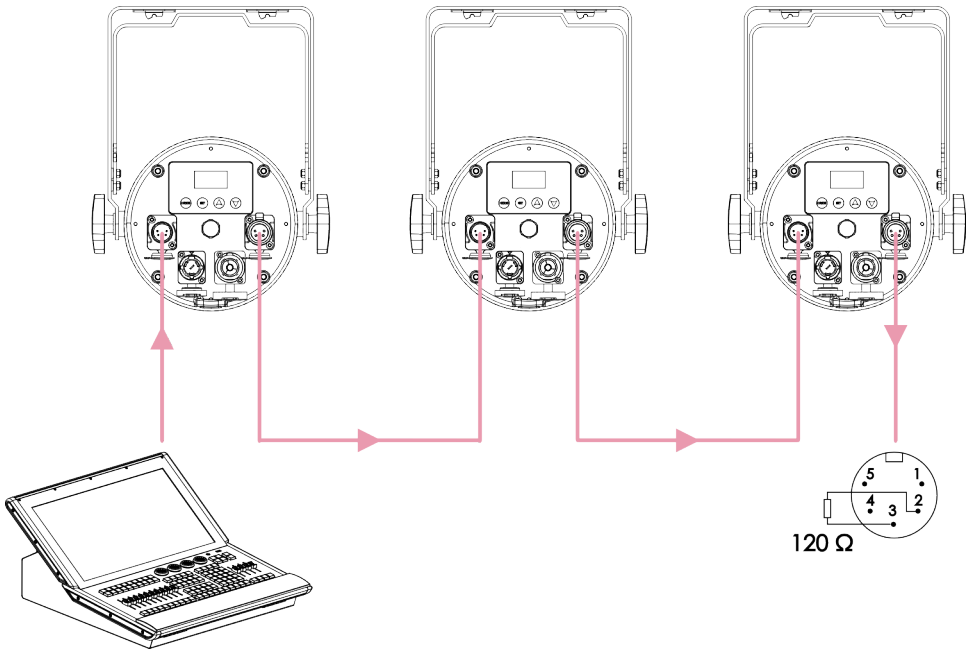


5.3.3. Master/Slave Setup

The Stage Blinder 100 Blaze supports master/slave control mode. To connect multiple devices in a master/slave setup, follow the steps below:

01) Connect the DMX OUT connector of the 1st device to the DMX IN connector of the 2nd device with a 5-pin DMX cable.
02) Repeat step 1 to connect all devices in a daisy-chain.
03) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device on the data link.
04) Set the 1st device on the data link as a master device (see 6.6.6. Slave on page 24).
05) Set the other devices on the data link as slave devices (see 6.6.6. Slave on page 24).

Figure 9

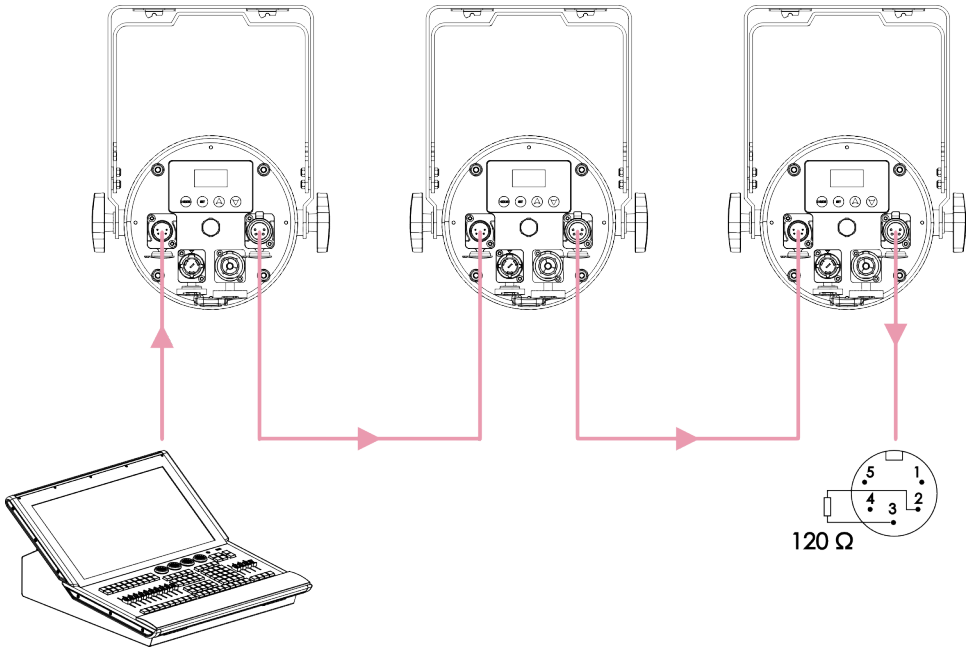


5.3.4. DMX Linking

To connect multiple devices on one DMX data link, follow the steps below:

01) Use a 5-pin DMX cable to connect the DMX OUT connector of the lighting controller to the DMX IN connector of the 1st device.
02) Connect the DMX OUT connector of the 1st device to the DMX IN connector of the 2nd device with a 5-pin DMX cable.
03) Repeat step 2 to connect all devices in a daisy-chain.
04) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device on the data link.

Figure 10



5.3.5. DMX Addressing

In a setup with multiple devices, make sure that you set the DMX starting address of each device correctly. The Stage Blinder 100 Blaze has 4 personalities: Tungsten (1 channel), Basic (4 channels), Basic S (5 channels), Custom (5 channels).

If you want to connect multiple devices on one data link and use them in 5-channel mode, for example, follow the steps below:

01) Set the starting address of the 1st device on the data link to 1 (001).
02) Set the starting address of the 2nd device on the data link to 6 (006), as 1 + 5 = 6.
03) Set the starting address of the 3rd device on the data link to 11 (011), as 6 + 5 = 11.
04) Continue assigning the starting addresses of the remaining devices by adding 5 each time to the previous number.

When addressing multiple devices on one data link, make sure that there are no overlapping channels. You cannot control devices individually if they have overlapping channels.

6. Operation

6.1. Safety Instructions for Operation

Attention
This device must be used only for the purposes it is designed for.

This device is intended for professional use as a stage blinder. It can be installed indoors and outdoors. This device is not suitable for households and for general lighting.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

Attention
Power supply

Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.

6.2. Control Modes

The Stage Blinder 100 Blaze supports the following control modes:

- DMX-512: Tungsten (1 Channel), Basic (4 Channels), Basic Strobe (5 Channels), Custom (5 Channels)
- Stand-alone: Manual operation, Halogen operation, auto operation
- Master/Slave: Master/Slave operation

To operate the device with a DMX controller:

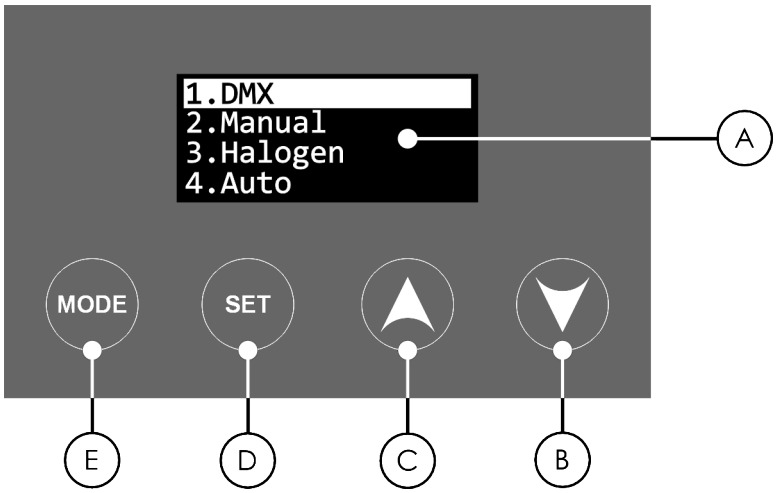
01) Select the DMX channel mode in the DMX Channels (see 6.6.1.2. Channels on page 22) menu. Refer to the DMX chart (see 6.7.1. Tungsten (1 Channel), Basic (4 Channels), Basic Strobe (5 Channels), Custom (5 Channels) on page 28) for a complete overview of all DMX channels.
02) Set the DMX starting address of the device in the DMX Address (see 6.6.1.1. Address on page 22) menu.
03) Set the behavior of the device in case there is no DMX signal in the DMX Fail (see 6.6.7.5. DMX Fail on page 26) menu.

To operate the device as a stand-alone device:

Select manual (see 6.6.2. Manual on page 23) mode, halogen (see 6.6.3. Halogen on page 23) mode or auto (see 6.6.4. Auto on page 23) mode.

6.3. Control Panel

Figure 11



A) OLED display
B) DOWN button
C) UP button
D) SET button
E) MODE button

- Use the **DOWN** button and the **UP** button to navigate through the menus or decrease/increase numeric values.
- Use the **SET** button to open the selected menu, confirm your choice or set the currently selected value.
- Use the **MODE** button to exit the current submenu and return to the Main Menu.

6.4. Start-up

Upon start-up, the display briefly shows a splash screen with the firmware version and the temperature of the main LED.

Immediately afterwards, the display shows the start screen. The start screen provides information about the current DMX mode, the DMX address, the software version and the temperature of the main LED.

Note:

When the display lock is on, a lock symbol appears in the top right corner of the display. To unlock the display, press and hold the **MODE (E)** and **SET (D)** buttons at the same time for 3 seconds.

6.5. Menu Overview

Level 1	Level 2	Level 3
DMX (see 6.6.1. DMX on page 22)	Address	001–512
	Channels	Tungsten – 1ch
		Basic – 4ch
		Basic S – 5ch
		Custom – 5ch
Manual (see 6.6.2. Manual on page 23)	White	000–255
	Amber	000–255
	Red b	000–255
	Green b	000–255
	Blue b	000–255
Halogen (see 6.6.3. Halogen on page 23)	000–255	
Auto (see 6.6.4. Auto on page 23)	Yes	
	No	
Program (see 6.6.5. Program on page 23)	Mode	01–16
	Color	01–14
	Strobe	00–99
Slave (see 6.6.6. Slave on page 24)	Yes	
	No	
Settings (see 6.6.7. Settings on page 24)	Dimmer Curve	Linear
		Square
		Inverse Square
		S-Curve
	Dimmer Speed	Fast
		Smooth
		Super Smooth
	Display Dir	Normal
		Inverted
	PWM Frequency	1kHz
		3kHz
		6kHz
		12kHz
	Dmx Fail	Off
		Hold
		Manual
		Program
	Fan Mode	Auto
		High
		Slow
		Off
	Backlight Time	5S
		10S
		20S
		30S
	Key Backlight	On
		Off

	Key Lock	Locked
		Unlocked
	Factory Reset	Yes
		No
Information (see 6.6.8. Information on page 27)	Version	
	Temperature	
	Fan Speed	
	Time	
	RDM UID	
	Error Status	

6.6. Main Menu Options

The main menu has the following 8 options:

DMX
Manual
Halogen
Auto
Program
Slave
Settings
Information

01) Press the **UP/DOWN** buttons to navigate through the main menu.
02) Press the **SET** button to open the submenus.

6.6.1. DMX

In this menu, you can select the DMX Address or Channels.

01) Press the **UP/DOWN** buttons to select one of the following 2 options:
- Address (see 6.6.1.1. Address)
- Channels (see 6.6.1.2. Channels)

02) Press the **SET** button to confirm the selection.

6.6.1.1. Address

In this submenu, you can set the DMX starting address of the device.

01) Press the **UP/DOWN** buttons to select the DMX starting address of the device. The selection range is 001–512.
02) Press the **SET** button to confirm the selection.

6.6.1.2. Channels

In this submenu, you can select the DMX channel mode:

01) Press the **UP/DOWN** buttons to select one of the following:
- Tungsten: 1 channel
- Basic: 4 channels
- Basic S: 5 channels
- Custom: 5 channels

02) Press the **SET** button to confirm the selection. For more information, refer to the DMX Chart (see 6.7. DMX Channel Overview on page 28).

6.6.2. Manual

In this menu, you can select colors and set their values.

01) Press the **UP/DOWN** buttons to select one of the 5 options:
- White: The adjustment range is 0–255, from low to high intensity
- Amber: The adjustment range is 0–255, from low to high intensity
- Red backlight: The adjustment range is 0–255, from low to high intensity
- Green backlight: The adjustment range is 0–255, from low to high intensity
- Blue backlight: The adjustment range is 0–255, from low to high intensity

02) Press the **SET** button to confirm the selection.
03) Press the **UP/DOWN** buttons to increase or decrease the values.
04) Press the **SET** button to confirm the selection.

6.6.3. Halogen

In this menu, you can set the value of the Halogen simulation.

01) Press the **UP/DOWN** buttons to increase or decrease the value. The selection range is 000–255.
02) Press the **SET** button to confirm the selection.

6.6.4. Auto

In this menu you can set Auto mode.

Touch the **UP/DOWN** buttons to select one of the 2 options:

- Yes: Play the Auto program
- No: Stop the Auto program

Note:

The Auto mode will cycle through Program 02–16, with the strobe speed set in the Program Mode 02–16.

6.6.5. Program

In this menu you can select a built-in program, add a strobe effect, and adjust the program speed. The device has 14 built-in color presets and 15 built-in programs. There are 16 options available:

- Program 01 (see 6.6.5.1. Program 01)
- Program 02–16 (see 6.6.5.2. Program 02-16)

6.6.5.1. Program 01

In this submenu you can set the color presets and the strobe for built-in program 01.

01) Touch the **UP/DOWN** buttons to select one of the 2 options:
- Color
- Strobe

02) Touch the **SET** button to confirm the selection and open the submenu.
03) If you select Color, touch the **UP/DOWN** buttons to select one of the 14 color presets. Touch the **SET** button to save the settings.
04) If you select Strobe, touch the **UP/DOWN** buttons to set the strobe frequency. The adjustment range is 0–99, from OFF to high frequency.
05) Touch the **SET** button to confirm.

6.6.5.2. Program 02-16

In this submenu you can set program speed and the strobe for built-in program 02–16.

01) Touch the **UP/DOWN** buttons to select one of the 2 options:
    - Speed
    - Strobe
02) Touch the **SET** button to confirm the selection and open the submenu.
03) If you select Speed, touch the **UP/DOWN** buttons to set the speed of the built-in programs. The adjustment range is 0–100, from slow to fast.
04) If you select Strobe, touch the **UP/DOWN** buttons to set the strobe frequency. The adjustment range is 0–99, from OFF to high frequency.
05) Touch the **SET** button to confirm.

6.6.6. Slave

In this menu you can set the device as a slave device in a master/slave setup.

01) Press the **UP/DOWN** buttons to select one of the 2 options:
    - Yes: The device is set as a slave device
    - No: The device is set as the master device
02) Press the **SET** button to confirm the selection.

6.6.7. Settings

In this menu, you can adjust the settings of the device.

01) Press the **UP/DOWN** buttons to select one of the 9 options:

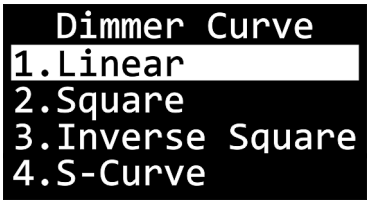
- Dimmer Curve (see 6.6.7.1. Dimmer Curve)
- Dimmer Speed (see 6.6.7.2. Dimmer Speed)
- Display Dir (see 6.6.7.3. Display Dir)
- PWM Frequency (see 6.6.7.4. PWM Frequency)
- Dmx Fail (see 6.6.7.5. DMX Fail)
- Fan Mode (see 6.6.7.6. Fan Mode)
- Backlight Time (see 6.6.7.7. Backlight Time)
- Key Backlight (see 6.6.7.8. Key Backlight)
- Key Lock (see 6.6.7.9. Key Lock)
- Factory Reset (see 6.6.7.10. Factory Reset)

02) Press the **SET** button to open the selected submenu.

6.6.7.1. Dimmer Curve

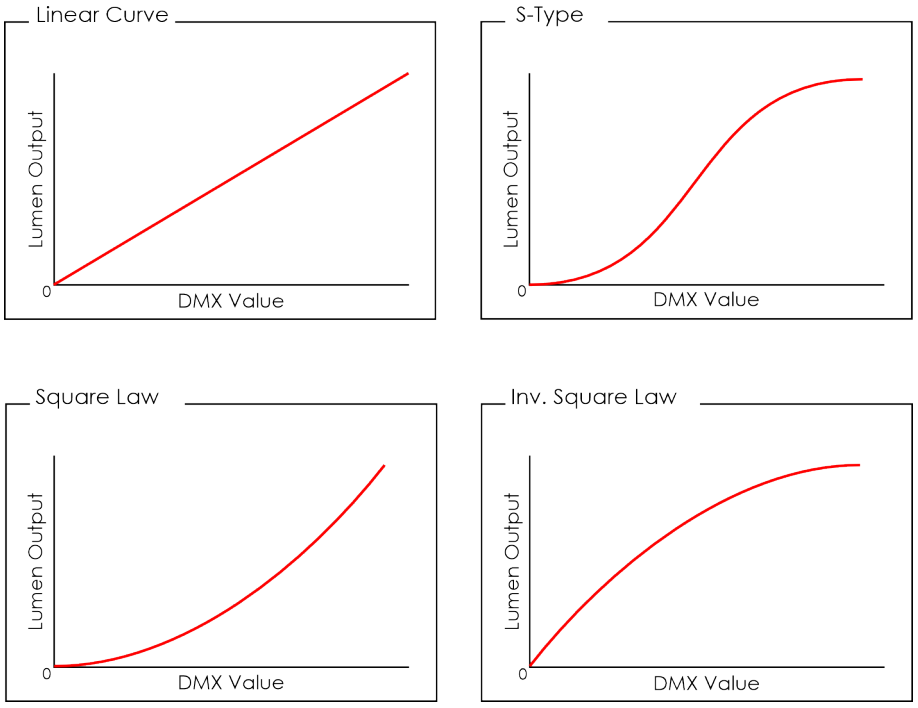
In this submenu, you can select the dimming curve.

01) Press the **UP/DOWN** buttons to select one of the 4 options:



- Linear
- Square
- Inverse Square
- S-Curve

Figure 12



02) Press the **SET** button to confirm the selection.

6.6.7.2. Dimmer Speed

In this submenu, you can set the dimmer speed.

01) Press the **UP/DOWN** buttons to choose one of the 3 options:
- Fast
- Smooth
- Super Smooth

02) Press the **SET** button to confirm the selection.

6.6.7.3. Display Dir

In this submenu, you can set the orientation of the display:

01) Press the **UP/DOWN** buttons to select one of the 2 options:
- Normal: The display direction is normal
- Inverted: The display direction is inverted

02) Press the **SET** button to confirm the selection.

Note:

To change the display orientation quickly, you can also press and hold the **UP/DOWN** buttons at the same time for 3 seconds. This action changes the display between normal and inverted.

6.6.7.4. PWM Frequency

In this submenu, you can adjust the PWM (Pulse Width Modulation) frequency of the LEDs.

01) Press the **UP/DOWN** buttons to select one of the 4 options.
- 1 kHZ
- 3 kHz
- 6 kHz
- 12 kHz

02) Press the **SET** button to confirm the selection.

6.6.7.5. DMX Fail

In this submenu, you can determine the behavior of the device in case of a DMX failure.

01) Press the **UP/DOWN** buttons to select one of the 4 options:
- Off: The device blacks the light output
- Hold: The device uses the last DMX signal correctly received
- Manual: The device uses the values selected in Manual (see 6.6.2. Manual on page 23) Mode
- Program: The device uses the last used program in Program (see 6.6.5. Program on page 23) Mode

02) Press the **SET** button to confirm the selection.

6.6.7.6. Fan Mode

In this submenu, you can select the speed of the fan.

01) Press the **UP/DOWN** buttons to select one of the 4 options:
- Auto: The fan speed is automatic
- High: The fan speed is fast
- Slow: The fan speed is slow
- Off: The fan is off

02) Press the **SET** button to confirm the selection.

6.6.7.7. Backlight Time

In this submenu, you can adjust the behavior of the display.

01) Press the **UP/DOWN** buttons to select one of the 4 options:
- 5s: The display turns off after 5 seconds of inactivity
- 10s: The display turns off after 10 seconds of inactivity
- 20s: The display turns off after 20 seconds of inactivity
- 30s: The display turns off after 30 seconds of inactivity

02) Press the **SET** button to confirm the selection.

6.6.7.8. Key Backlight

In this submenu, you can turn the key backlight ON or OFF.

01) Press the **UP/DOWN** buttons to select one of the 2 options:
- On: The key backlight turns on
- Off: The key backlight turns off

02) Press the **SET** button to confirm the selection.

6.6.7.9. Key Lock

In this submenu, you can turn the key lock ON and OFF.

01) Press the **UP/DOWN** buttons to select one of the 2 options:
- Locked: The key lock is on.
- Unlocked: The key lock is off

02) Press the **SET** button to confirm the selection.

Note:

When the key lock is on, a lock symbol appears in the top right corner of the display. To unlock the display, press and hold the **SET** and **MODE** buttons at the same time for 3 seconds.

6.6.7.10. Factory Reset

In this submenu, you can reset the settings of the device to the default factory settings.

01) Press the **UP/DOWN** buttons to choose one of the 2 options:
- Yes: Reset the device to the default factory settings
- No: Do not reset the device

02) Press the **SET** button to confirm the selection.

6.6.8. Information

In this menu, you can view the parameters of the device.

01) Press the **UP/DOWN** buttons to select one of the 6 options
- Version: Shows the current firmware version of the device
- Temperature: Shows the temperature of the main LED, the backlight and the internal power supply
- Fan Speed: Shows the current speed of the fan
- Time: Shows the total time of use for the internal power supply, the main LED and the backlight
- RDM UID: Shows the RDM identification number of the device (29B4:0AAXXXXX)
- Error Status: Shows the current error status, if applicable

02) Press the **SET** button to open the submenu and view the parameters.

6.7. DMX Channel Overview

6.7.1. Tungsten (1 Channel), Basic (4 Channels), Basic Strobe (5 Channels), Custom (5 Channels)

Tungsten	Basic	Basic Strobe	Custom	Function	Value	Setting
1	**1**	**1**		**Tungsten Simulation Dimmer**	000–255	From low to high intensity (0–-100 %)
			1	**White**	000–255	From low to high intensity (0–-100 %)
			2	**Amber**	000–255	From low to high intensity (0–-100 %)
	2	**2**	**3**	**Red**	000–255	From low to high intensity (0–-100 %)
	3	**3**	**4**	**Green**	000–255	From low to high intensity (0–-100 %)
	4	**4**	**5**	**Blue**	000–255	From low to high intensity (0–-100 %)
		5		**Strobe RGBAW**	000–005	No function
					006–054	Linear Strobe, from off to high frequency (0–20 Hz)
					055–103	Ramp Up, from off to high frequency (0–20 Hz)
					104–152	Ramp Down, from off to high frequency (0–20 Hz)
					153–201	All LEDs, Random Strobe, from off to high frequency (0–20 Hz)
					202–250	Sectional LEDs, random strobe, from off to high frequency (0–20 Hz)
					251–255	Open

6.8. RDM Information

This device supports RDM.

6.8.1. RDM Details

- Responder ID: 29B4:0FEXXXXX
- Manufacturer's ID: Showtec (Highlite International B.V.)
- Manufacturer Label: Showtec
- Model Description: Stage Blinder 100 Blaze
- Model ID: 254 (OFE hexadecimal)
- Device Label: Stage Blinder 100 Blaze

Note:

An RDM responder ID consists of 3 parts:

- 1st part – 4 digits – Manufacturer's ID
- 2nd part – 3 digits – Model ID
- 3rd part – 5 digits – Unique ID

The RDM responder IDs of all products of Highlite International start with the same 4 digits. The first 7 digits of the RDM responder ID for each model are the same. The last 5 digits are different for each device.

6.8.2. Supported RDM PIDs (Parameter IDs)

RDM Parameter ID	Value	Required	GET	SET
SUPPORTED_PARAMETERS	0x0050	*	*	
DEVICE_MODEL_DESCRIPTION	0x0080		*	
MANUFACTURER_LABEL	0x0081		*	
DEVICE_LABEL	0x0082		*	*
FACTORY_DEFAULTS	0x0090		*	*
DMX_PERSONALITY	0x00E0		*	*
DMX_PERSONALITY_DESCRIPTION	0x00E1		*	
DMX_START_ADDRESS	0x00F0	*	*	*
SENSOR_DEFINITION	0x0200		*	
SENSOR_VALUE	0x0201		*	*
RESET_DEVICE	0x1001			*

7. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts.

Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

Problem	Probable cause(s)	Solution
The device does not function at all	No power to the device	• Make sure that the device is connected to power supply and the cables are plugged in
	Internal fuse is blown	• Disconnect the device and contact your Highlite International dealer
The device responds erratically	The factory settings of the device are changed	• Reset the parameters of the device to the default factory settings (see 6.6.7.10. Factory Reset on page 27)
The device does not respond to DMX control	The controller is not connected	• Connect the controller
	The signal is reversed. The 5-pin DMX OUT of the controller does not match the DMX IN of the device	• Install a phase-reversing cable between the controller and the device
	The controller is defective	• Try using another controller
The device responds erratically to DMX control	Connections are defective	• Examine connections and cables. Correct defective connections. Repair or replace damaged cables
	The data link is not terminated with a 120 Ω termination plug	• Insert a termination plug in the DMX OUT connector of the last device on the link
	Incorrect addressing	• Make sure that the address settings are correct
	In case of a setup with multiple devices, one of the devices is defective and disturbs data transmission on the link	• To find out the defective device, bypass one device at a time until normal operation is restored
No light or LEDs cut out intermittently	LEDs are damaged	• Disconnect the device and contact your Highlite International dealer
	The input power parameters of the device do not match the local AC voltage and frequency	• Disconnect the device. Make sure that the local current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device

7.1. Error Messages

In this submenu you can view whether there are any system errors.

If you have selected Error Status and there are no errors the display shows:

In case one of the error messages below appear on the error information screen, refer to Information. If you can not solve the problem, discontinue the use of the device and contact your Highlite International dealer for more information.

Error code	Explanation
Main LED Temp	Temperature detection error, the device automatically enters protection mode and reduces its power. Reason for the error: The temperature sensor is damaged or the temperature sensor is not connected properly. (Please repair in time to ensure the normal use of this device)
Backlight Temp	
Power Temp	
LED Fan	LED fan error. Reason for the error: The fan keeps rotating or does not rotate at all

8. Maintenance

8.1. Safety Instructions for Maintenance

DANGER
Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

8.2. Preventive Maintenance

Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixings and installation points.
- The lens is not cracked or damaged.

The power cables are not damaged and do not show any material fatigue.

8.2.1. Basic Cleaning Instructions

The external lens of the device must be cleaned periodically in order to optimize the light output. The cleaning schedule depends on the conditions at the site where the device is installed. When smoke or fog machines are used at the site, the device will need more frequent cleaning. On the other hand, if the device is installed in well-ventilated area, it will need less frequent cleaning. To establish a cleaning schedule, examine the device at regular intervals during the first 100 hours of operation.

To clean the device, follow the steps below:

01) Disconnect the device from the electrical power supply.
02) Allow the device to cool down for at least 15 minutes.
03) Remove the dust collected on the external surface with dry compressed air and a soft brush.
04) Clean the lens with a damp cloth. Use a mild detergent solution.
05) Dry the lens carefully with a lint-free cloth.
06) Clean the connectors with a damp cloth.

Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.

Make sure that the connectors are fully dry before using them.

8.3. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

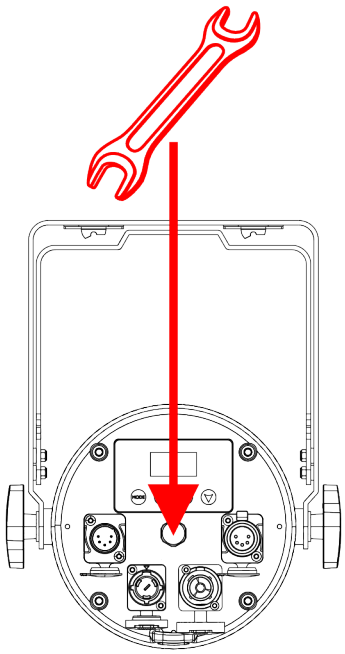
8.4. Draining Condensation Water

The Stage Blinder 100 Blaze is IP65 rated. The device can resist water jets. If the device is exposed to extreme humid conditions during use, condensation may collect inside the device. This can happen also during transportation, if the device is exposed to extreme temperature variations.

If condensation water collects inside the device, follow the steps below to remove the condensation water:

01) Carefully remove the **protective vent (06)** with a wrench (16 mm).
02) Let the device operate with the lamp at full output for 60 minutes.
03) Let the device cool down for 30 minutes.
04) Reinstall the **protective vent (06)**. Make sure that you do not overtighten.

Figure 13



9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation

WARNING
Incorrect deinstallation can cause serious injuries and damage of property.

- Let the device cool down before dismounting.
- Disconnect power supply before deinstallation.
- Always observe the national and site-specific regulations during deinstallation and derigging of the device.
- Wear personal protective equipment in compliance with the national and site-specific regulations.

9.2. Instructions for Transportation

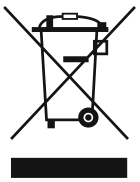
- Use the original packaging to transport the device, if possible.
- Always observe the handling instructions printed on the outer carton box, for example: "Handle with care", "This side up", "Fragile".

9.3. Storage

- Clean the device before storing (see 8.2.1. Basic Cleaning Instructions on page 32).
- Store the device in the original packaging, if possible.

10. Disposal

Correct disposal of this product



Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

11. Approval

CE

Check the respective product page on the website of Highlite International (www.highlite.com) for an available declaration of conformity.