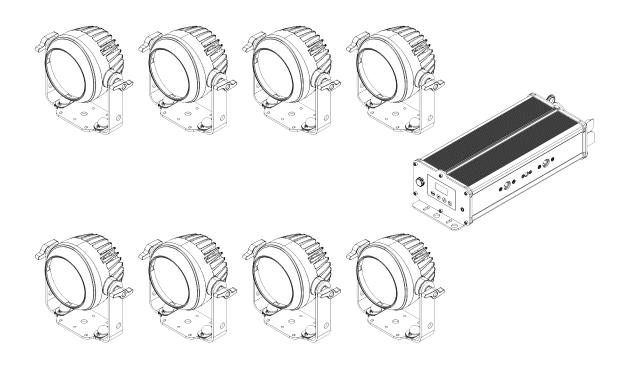


# **USER MANUAL**

ENGLISH V1.0



# Stage Blinder FLEX Blaze

Product code: 30785



### **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.

©2024 Showtec. All rights reserved.

No part of this document may be copied, published or otherwise reproduced without the prior written consent of Highlite International.

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 <a href="www.highlite.com">www.highlite.com</a> or contact us at <a href="mailto:service@highlite.com">service@highlite.com</a>.

Highlite International and its authorized service providers are not liable for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss arising from the use of, or inability to use or reliance on the information contained in this document.



# Table of contents

<ul><li>1. Introduction.</li><li>1.1. Before Using the Product.</li><li>1.2. Intended Use.</li></ul>	4
	4
1,2, 111011000 030	
1.3. Text Conventions	
1.4. Symbols and Signal Words	
1.5. Symbols on the Information Label	5
2. Safety	,
2.1. Warnings and Safety Instructions	
2.2. Requirements for the User	8
2. Description of the Device	
3. Description of the Device	
3.1. Controller	9
3.1.1. Front View	9
3.1.2. Back View	9
3.2. Pod	
3.2.1. Front View.	
3.3. Product Specifications.	
3.4. Dimensions	13
A Installation	4.4
4. Installation	
4.1. Safety Instructions for Installation	
4.2. Personal Protective Equipment	14
4.3. Installation Site Requirements	14
4.4. Rigging	
4.5. Connecting the Pods to the Controller.	
4.6. Connecting to Power Supply	
4.7. Power Linking of Multiple Devices	1 <i>6</i>
5. Setup	17
5.1. Warnings and Precautions.	
5.2. Stand-alone Setup	17
5.3. DMX Connection	17
5.3.1. DMX-512 Protocol	
5.3.2. DMX Cables	18
5.3.2. DMX Cables	18 19
5.3.2. DMX Cables	18 19
5.3.2. DMX Cables 5.3.3. DMX Linking 5.3.4. DMX Addressing.	
5.3.2. DMX Cables 5.3.3. DMX Linking 5.3.4. DMX Addressing 6. Operation	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel.	18 19 19 20 20 21 21 22 25 25 25 26 26 26
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel. 6.6.3. Halogen.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel. 6.6.3. Halogen. 6.6.3.1. Halogen All.	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel. 6.6.3.1. Halogen All. 6.6.3.2. Halogen Pixel.	18 19 19 20 20 21 21 25 25 25 26 26 27 27 27
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel. 6.6.3. Halogen. 6.6.3.1. Halogen All.	18 19 20 20 21 21 25 25 25 26 26 27 27 27
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel. 6.6.3.1. Halogen All. 6.6.3.2. Halogen Pixel.	18 19 20 20 21 21 25 25 26 26 27 27 28
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2. Color Pixel. 6.6.3. Halogen. 6.6.3.1. Halogen All. 6.6.3.2. Halogen Pixel. 6.6.4. Auto. 6.6.5. Program.	18 19 19 20 20 21 21 25 25 25 26 26 27 27 28 28 28
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2. Color Pixel. 6.6.3. Halogen. 6.6.3.1. Halogen All. 6.6.3.2. Halogen Pixel. 6.6.4. Auto. 6.6.5. Program. 6.6.5.1. Program. 6.6.5.1. Program 01	18 19 19 20 20 21 21 25 25 26 26 27 28 28 28 28 28
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel. 6.6.3. Halogen. 6.6.3.1. Halogen All. 6.6.3.2. Halogen Pixel. 6.6.4. Auto. 6.6.5. Program. 6.6.5.1. Program 01. 6.6.5.2. Program 02-16.	
5.3.2. DMX Cables 5.3.3. DMX Linking 5.3.4. DMX Addressing.  6. Operation 6.1. Safety Instructions for Operation 6.2. Control Modes 6.3. Control Panel 6.4. Start-up 6.5. Menu Overview 6.6. Main Menu Options 6.6.1. DMX 6.6.1.1. DMX Address 6.6.1.2. DMX Channel Mode 6.6.2. Manual Mode 6.6.2. Color All 6.6.2.1. Color All 6.6.2.2. Color Pixel. 6.6.3.1. Halogen All 6.6.3.2. Halogen Pixel 6.6.4. Auto 6.6.5. Program 6.6.5.1. Program 01 6.6.5.2. Program 02–16 6.6.5.2. Program 02–16 6.6.6.6. Slave	
5.3.2. DMX Cables. 5.3.3. DMX Linking. 5.3.4. DMX Addressing.  6. Operation. 6.1. Safety Instructions for Operation. 6.2. Control Modes. 6.3. Control Panel. 6.4. Start-up. 6.5. Menu Overview. 6.6. Main Menu Options. 6.6.1. DMX. 6.6.1.1. DMX Address. 6.6.1.2. DMX Channel Mode. 6.6.2. Manual Mode. 6.6.2. Manual Mode. 6.6.2.1. Color All. 6.6.2.2. Color Pixel. 6.6.3. Halogen. 6.6.3.1. Halogen All. 6.6.3.2. Halogen Pixel. 6.6.4. Auto. 6.6.5. Program. 6.6.5.1. Program 01. 6.6.5.2. Program 02-16.	



6.6.7.1.1. Patch Default	30
6.6.7.1.2. Patch Outputs	30
6.6.7.2. Curves Select	31
6.6.7.3. Display Invert	31
6.6.7.4. DMX Fail	31
6.6.7.5. Fan Mode	32
6.6.7.6. Backlight Time	32
6.6.7.7. Lock	32
6.6.7.8. Key Backlight	32
6.6.7.9. Factory Reset	
6.6.8. Information	
6.7. DMX Channels	
6.7.1. DMX Channels Overview	
6.7.2. Basic (4 Channels), Basic Strobe (5 Channels), Custom (5 Channels)	
6.7.3. Pixel (32 Channels), Pixel Strobe (33 Channels), Pixel Custom (40 Channels)	
6.7.4. Tungsten (8 Channels)	
6.8. RDM Information	
6.8.1. RDM Details	
6.8.2. Supported RDM PIDs (Parameter IDs)	38
7. Troubleshooting	39
8. Maintenance	40
8.1. Safety Instructions for Maintenance	
8.2. Preventive Maintenance	
8.3. Basic Cleaning Instructions	
8.4. Corrective Maintenance	
8.4.1. Draining Condensation Water	41
9. Deinstallation, Transportation and Storage	42
9.1. Instructions for Deinstallation	42
9.2. Instructions for Transportation	42
9.3. Storage	42
10. Disposal	42
11 Annuarial	40



#### Introduction 1.

#### 1.1. **Before Using the Product**



**Important** 

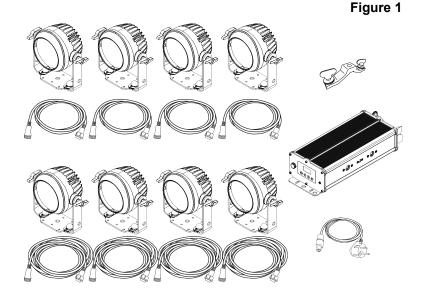
Read and follow the instructions in this user manual before installing, operating or servicing this product.

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 FLEX Blaze
- Quick-lock bracket
- 4 x Flex cable (2,5 m)
- 4 x Flex cable (5 m)
- 1 x Schuko to Power Pro True 1 cable (1,5 m)
- User manual



#### 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. **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

Note: (in bold lettering) is followed by useful information or tips Notes:

#### Symbols and Signal Words 1.4.

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.

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.

#### 1.5. Symbols on the Information Label

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

The information label contains the following symbols:



This device shall not be treated as household waste.

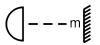


Read and follow the instructions in the user manual before installing, operating or servicing the device.

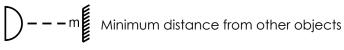


This device falls under IEC protection class I.

**IP65** This devices is rated IP65.



☐ - - m Minimum distance from lighted objects





# 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.
- 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 the 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. Installation and maintenance may be carried out by ordinary persons. 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 FLEX Blaze is a set of 8 LED audience blinders of 100 W each and a controller. The blinders and controller are IP65-rated. Each pod has a 3000 K warm white COB LED with integrated amber LEDs. The device can be controlled via DMX/RDM, Master/Slave or in stand-alone mode with built-in programs.

#### 3.1. Controller

#### 3.1.1. Front View

Figure 2

1 2 3 4 5 4

ure 2

- 01) Protective valve
- 02) Control panel: OLED Display + touch buttons
- 03) Opening for a safety cable
- 04) Mounting holes for quick-lock bracket
- 05) M10 threaded insert for attaching a clamp

3.1.2. Back View

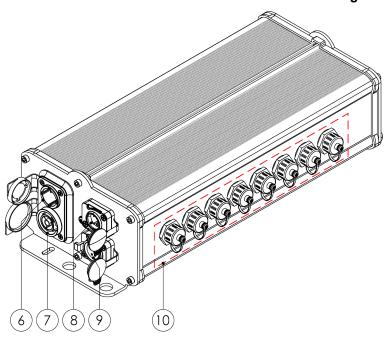


Figure 3

- 06) IP65-rated Seetronic power connector IN
- 07) IP65-rated Seetronic power connector OUT
- 08) IP65-rated 5-pin DMX signal connector IN
- 09) IP65-rated 5-pin DMX signal connector OUT
- 10) 8 x connector Data + Power OUT



#### 3.2. Pod

## 3.2.1. Front View

 $\bigcirc$ (13)(14)

Figure 4

- 11) Mounting holes for quick-lock bracket
- 13) Opening for a safety cable14) 2 x Adjustment screw

#### 3.2.2. Back View

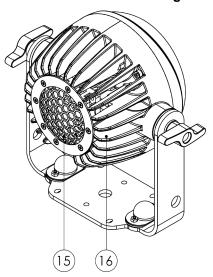


Figure 5

- 15) Fan
- 16) Passive cooling



# 3.3. Product Specifications

Model:	Stage Blinder FLEX Blaze	
Source:		

source.	
Light source type	LED
Light source quantity	8
Light source power	100 W
LED color type	A / WW / RGB
Luminous flux (Total)	5229 lm
CRI	92

Optical:		-
Beam angle (horizontal)	45°	
Beam angle (vertical)	45°	

Control and Programming:	
Control mode	Built-in Program / DMX / Master Slave / Stand Alone
DMX channels	4 / 5 / 5 / 8 / 32 / 33 / 40
Display	OLED
Protocols	DMX / RDM
Zone control (sections)	8

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

Electrical Specifications and Connections:	
Power supply	100–240 V AC, 50–60 Hz
Power consumption	700 W
Power connector IN	Power Pro True
Power connector OUT	Power Pro True
DMX connector	XLR 5P In/Out
DMX connector IN	XLR 5P
DMX connector OUT	XLR 5P

Mechanical Specifications:	
Pod length	216 mm
Pod width	115 mm
Pod height	195 mm
Controller length	372 mm
Controller width	171 mm
Controller height	103 mm
Pod weight	1,47 kg
Controller weight	3,65 kg
IP rating	IP65
Material	Aluminium / Metal
Housing	Aluminium die-cast
Color	Black

Proc	duct Properties:
*	



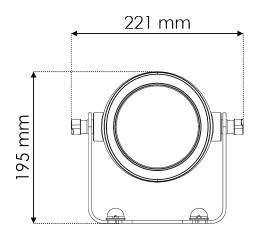
Cooling	Forced convection
Rigging:	
Mounting options	Clamp / Quick-Lock
Safety attachment	Yes
Thermal Specifications:	
Maximum ambient temperature	45 °C
Minimum operating temperature	-20 °C
Included Items:	
Included cables	Dedicated IP65 Data connection / Power Pro True cable

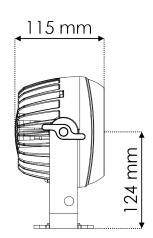
il icioded capies	Dedicated it 65 Data Confidentially 1 Ower 116 free Cable
Included accessories	Controller
Included rigging	1x Quick-Lock bracket

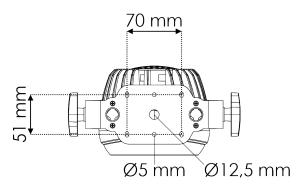


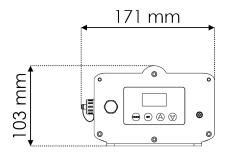
# 3.4. Dimensions

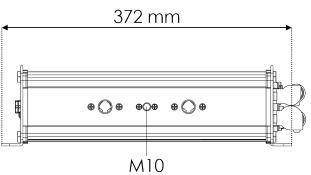
Figure 6

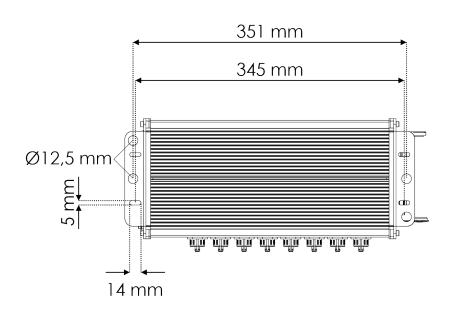














### 4. Installation

# 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  $t_{cr} = 45$  °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.

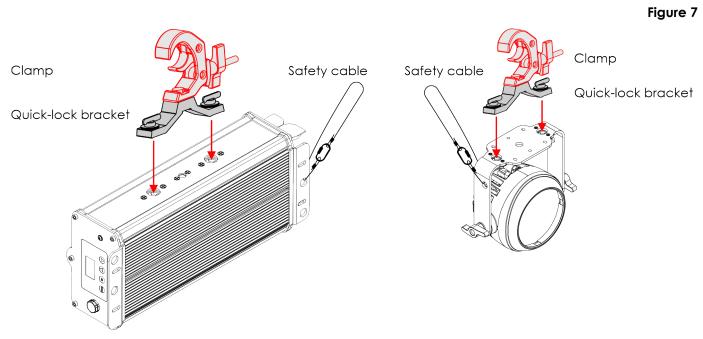


#### CAUTION

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 holes for quick-lock** brackets (04/11).
- 02) Install the clamp. Make sure that you use 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.



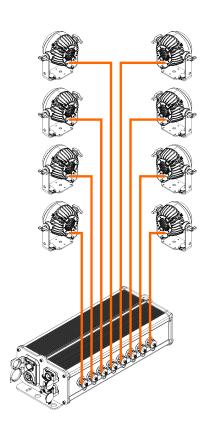
04) Secure the device with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the device. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. Put the safety cable through the openings for a safety cable (03/13).

# 4.5. Connecting the Pods to the Controller

To connect multiple pods to one controller, follow the steps below:

- 01) Connect the cable from the 1st pod to one of the connectors Data + Power OUT (10) from the controller.
- 02) Repeat step 1 to connect all pods to the controller.

Figure 8



#### Note:

- Keep the connectors Data + Power OUT (10) sealed with the plastic caps when the connectors are not in use.
- Use the included Flex cables (2,5 m and 5 m) as extension cords to expand your setup.



# 4.6. 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 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.

# 4.7. 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: 2 devices Stage Blinder FLEX Blaze
- at 200–240 V: 3 devices Stage Blinder FLEX 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 FLEX Blaze is not connected to a controller or to other devices, it functions as a standalone 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 20).

#### 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 FLEX 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

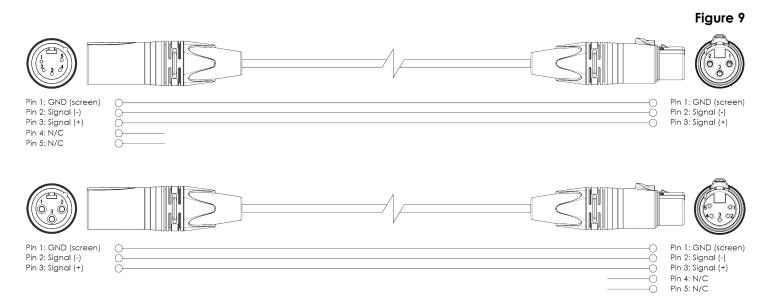


#### 5.3.2. DMX Cables

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.



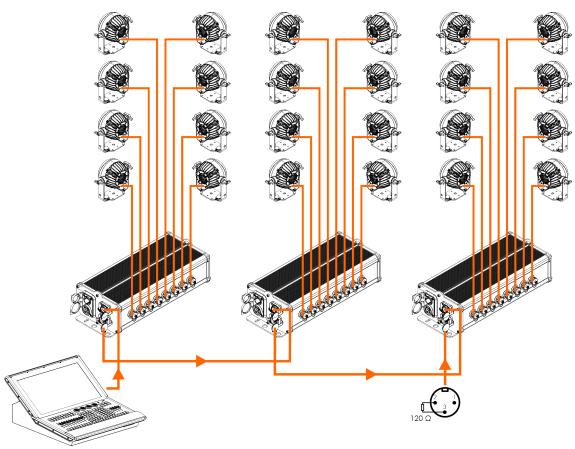


#### 5.3.3. DMX Linking

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 1<sup>st</sup> device to the DMX IN connector of the 2<sup>nd</sup> 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  $\Omega$  resistor) to the DMX OUT connector of the last device on the data link.

Figure 10



#### 5.3.4. DMX Addressing

In a setup with multiple devices, make sure that you set the DMX starting address of each device correctly. The Stage Blinder FLEX Blaze has 7 personalities: Basic (4 channels), Basic Strobe (5 channels), Custom (5 channels), Pixel (32 channels), Pixel Strobe (33 channels), Pixel Custom (40 channels), and Tungsten (8 channels).

If you want to connect multiple devices on one data link and use them in 40-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  $2^{nd}$  device on the data link to 40 (040), as 1 + 40 = 41.
- 03) Set the starting address of the  $3^{rd}$  device on the data link to 81 (057), as 41 + 40 = 81.
- 04) Continue assigning the starting addresses of the remaining devices by adding each time 40 to the previous number.

Make sure that you do not have any overlapping channels in order to control each Stage Blinder FLEX Blaze correctly. If two or more devices are addressed similarly, they will work similarly.



# 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 FLEX Blaze supports the following control modes:

Stand-alone: Auto operation mode, built-in programs, manual operation
 Master/Slave: Auto operation mode, built-in programs, manual operation

DMX-512: Basic (4 channels), Basic Strobe (5 channels), Custom (5 channels), Pixel (32 channels),

Pixel Strobe (33 channels), Pixel Custom (40 channels), Tungsten (8 channels).

For more information about how to connect the devices, refer to Setup (see <u>5. Setup</u> on page 17).

To operate the device manually as a stand-alone device or in a master/slave setup:

Adjust the colors in the Manual Mode (see 6.6.2. Manual Mode on page 26) menu.

To run the built-in program or auto mode without a DMX controller:

Select the control mode of the device in the main menu.

- If you select Auto (see 6.6.4. Auto on page 28), the device will run the built-in program.
- If you select Program (see <u>6.6.5. Program</u> on page 28), the device will run the respective program. You can edit the programs in the Program menu.

To operate the device with a DMX controller:

- 01) Select DMX512 as control mode in the DMX (see 6.6.1. DMX on page 25) Menu.
- 02) Set the DMX starting address (see <u>5.3.4. DMX Addressing</u> on page 19) of the device in the DMX Address menu (see <u>6.6.1.1. DMX Address</u> on page 25).
- 03) Select the DMX channel mode in the DMX channel mode menu (see <u>6.6.1.2</u>, <u>DMX Channel Mode</u> on page 25). Refer to DMX channels (see <u>6.7</u>, <u>DMX Channels</u> on page 33) for a complete overview of all DMX channels.



### 6.3. Control Panel

DMX Address
001

MODE SET A

E
D
C
B

- Figure 11
  - A) OLED display
  - B) DOWN touch button
  - C) UP touch button
  - D) SET touch button
  - E) MODE touch button

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

### 6.4. Start-up

After the device is connected to power supply, the device will perform a reset. During the reset the display shows a splash screen with the firmware version, the temperature and the humidity percentage of the mainboard of the controller (MC):

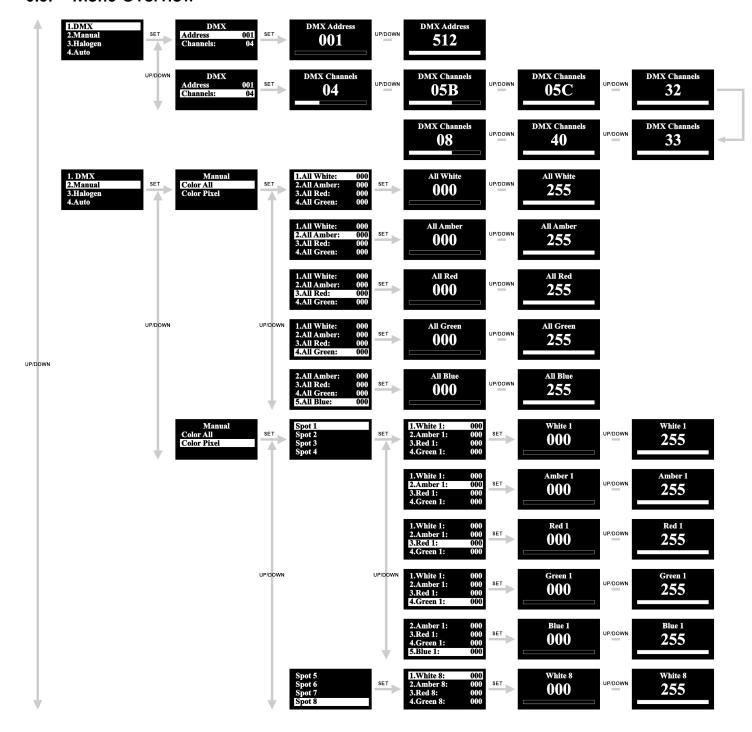


After the reset is completed, the device is ready to be operated. The display shows the start screen. The start screen provides information about the highest temperature of the LEDs of the pod (L), the highest temperature of the mainboard and the highest humidity of the mainboard (P) and the selected mode. Normally the L value shows the temperature, if something is wrong it shows X:

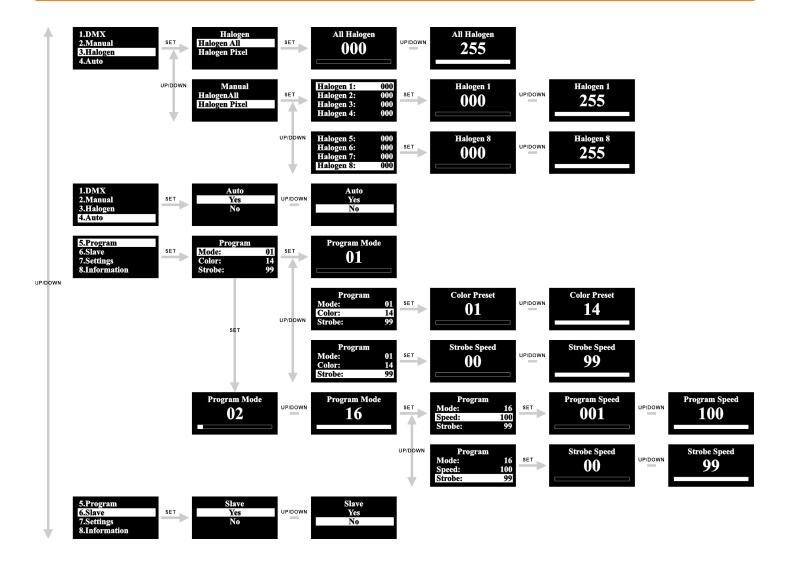




# 6.5. Menu Overview

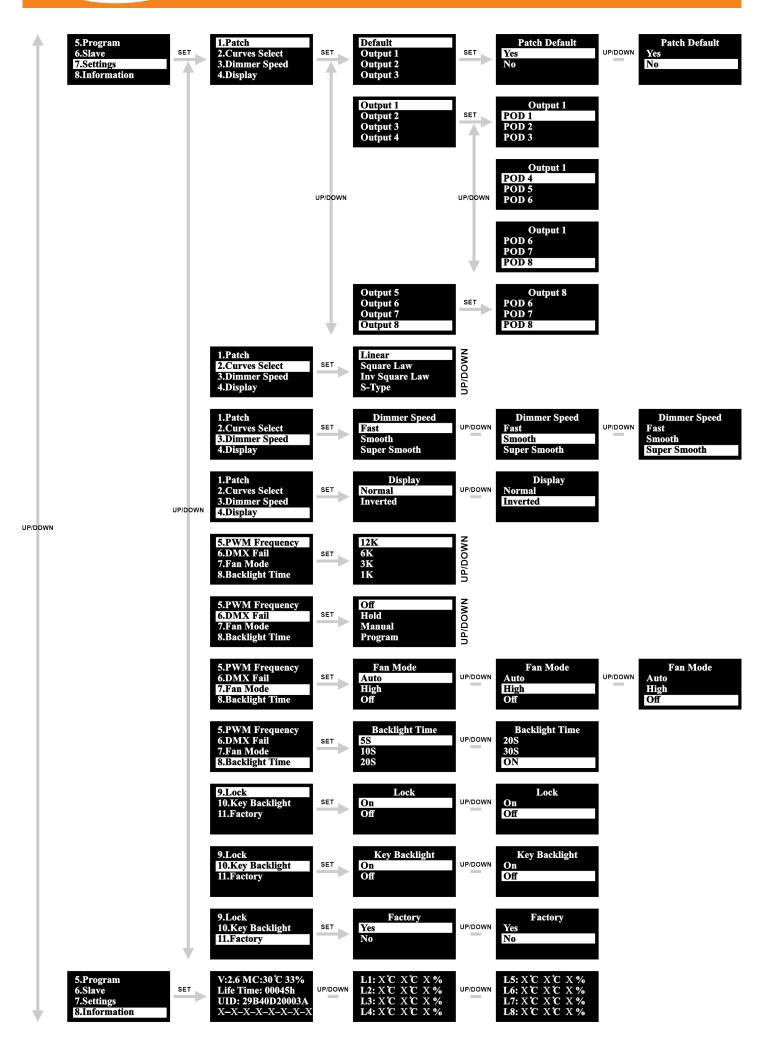






23

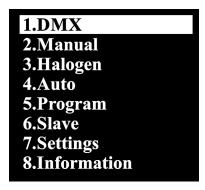






### 6.6. Main Menu Options

The main menu has the following 8 options:

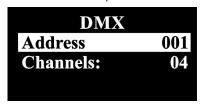


- 01) Touch the **UP/DOWN** buttons to navigate through the main menu.
- 02) Touch the SET button to open the submenus.

#### 6.6.1. DMX

In this menu you can set the DMX address and select the desired DMX channel mode.

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



- DMX Address (see <u>6.6.1.1. DMX Address</u>)
- DMX Channel Mode (see 6.6.1.2. DMX Channel Mode)
- 02) Touch the SET button to confirm the selection and open the submenu.

#### 6.6.1.1. DMX Address

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

01) Touch the **UP/DOWN** buttons to select the DMX starting address of the device. The selection range depends on the active DMX channel mode:

04: 001–509 (4 channels)
05B: 001–508 (5 channels)
05C: 001–508 (5 channels)
32: 001–481 (32 channels)
33: 001–480 (33 channels)
40: 001–473 (40 channels)
08: 001–505 (8 channels)

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

#### 6.6.1.2. DMX Channel Mode

In this submenu you can select the DMX channel mode.

01) Touch the **UP/DOWN** buttons to select the desired DMX mode. There are 7 options:

04: 4 channels
05B: 5 channels
05C: 5 channels
32: 32 channels
33: 33 channels
40: 40 channels
08: 8 channels

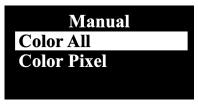
02) Touch the **SET** button to confirm the selection. For more information refer to DMX Channels (see <u>6.7. DMX</u> <u>Channels</u> on page 33).



#### 6.6.2. Manual Mode

In this menu you can manually set the desired colors (white, amber, red, green, blue) for all 8 pods together or for each pod individually.

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



- Color All (see <u>6.6.2.1. Color All</u>)
- Color Pixel (see <u>6.6.2.2. Color Pixel</u>)
- 02) Touch the SET button to confirm the selection and open the submenu.

#### 6.6.2.1. Color All

In this submenu you can set the colors (white, amber, red, green, blue) for all 8 pods together.

1.All White:	000
2.All Amber:	000
3.All Red:	000
4.All Green:	000
5.All Blue:	000

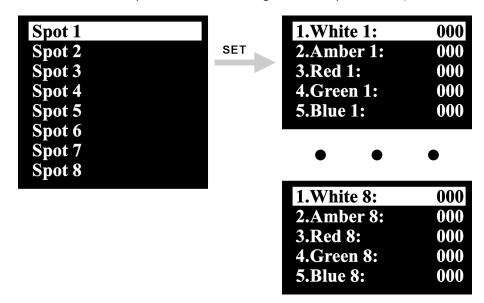
- 01) Touch the UP/DOWN buttons to select one of the 5 colors: White, Amber, Red, Green and Blue.
- 02) Touch the SET button to open the submenu.
- 03) Touch the **UP/DOWN** buttons to set the color intensity of each LED. The adjustment range for each color is 0–255, from low to high intensity.
- 04) Touch the SET button to save your settings.

#### Note:

You can combine white, amber, red, green and blue to create an infinite range of colors.

#### 6.6.2.2. Color Pixel

In this submenu you can set the colors (white, amber, red, green, blue) for each pod individually.



- 01) Touch the **UP/DOWN** buttons to select one of the 8 options:
  - Spot 1
  - Spot 2



- Spot 3
- Spot 4
- Spot 5
- Spot 6
- Spot 7
- Spot 8
- 02) Touch the SET button to confirm the output selection and open the submenu.
- 03) Touch the UP/DOWN buttons to select one of the 5 colors: White, Amber, Red, Green and Blue.
- 04) Touch the SET button to open the submenu.
- 05) Touch the **UP/DOWN** buttons to set the color intensity of each LED. The adjustment range for each color is 0–255, from low to high intensity.
- 06) Touch the SET button to save your settings.

#### Note:

You can combine white, amber, red, green and blue to create an infinite range of colors.

#### 6.6.3. Halogen

In this menu you can set the Halogen color effect (3000 K) for all 8 pods together or for each pod individually.

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



Halogen All (see <u>6.6.3.1. Halogen All</u>)
 Halogen Pixel (see <u>6.6.3.2. Halogen Pixel</u>)

02) Touch the SET button to confirm the selection and open the submenu.

#### 6.6.3.1. Halogen All

In this submenu you can set the Halogen color for all 8 pods together.

- 01) Touch the **UP/DOWN** buttons to set the LED brightness. The adjustment range for each color is 0–255, from low to high intensity.
- 02) Touch the SET button to confirm.

#### 6.6.3.2. Halogen Pixel

In this submenu you can set the Halogen color for each pod individually.

Halogen 1:	000
Halogen 2:	000
Halogen 3:	000
Halogen 4:	000
Halogen 5:	000
Halogen 6:	000
Halogen 7:	000
Halogen 8:	000

- 01) Touch the **UP/DOWN** buttons to select one of the 8 options:
  - Halogen 1
  - Halogen 2
  - Halogen 3
  - Halogen 4
  - Halogen 5
  - Halogen 6



- Halogen 7
- Halogen 8
- 02) Touch the **SET** button to confirm the selection and open the submenu.
- 03) Touch the **UP/DOWN** buttons to set the LED brightness. The adjustment range for each color is 0–255, from low to high intensity.

#### 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 programNo: 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 <u>6.6.5.1. Program 01</u>)
 Program 02–16 (see <u>6.6.5.2. Program 02–16</u>)

#### 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.

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

- Yes: The device is set as a slave and reacts the same as the master device
- No: The device is set as the master device



#### 6.6.7. Settings

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

01) Touch the **UP/DOWN** buttons to select one of the 11 options:

1.Patch
2.Curves Select
3.Dimmer Speed
4.Display
5.PWM Frequency
6.DMX Fail
7.Fan Mode
8.Backlight Time
9.Lock
10.Key Backlight
11.Factory

Patch (see <u>6.6.7.1. Patch</u>)

• Curves Select (see <u>6.6.7.2. Curves Select</u>)

Dimmer Speed: Select the dimmer speed: Fast, Smooth, Super Smooth

Display Invert (see <u>6.6.7.3</u>. <u>Display Invert</u>)

PWM Frequency: Set the PWM Frequency (Pulse Width Modulation): 12000 Hz, 6000 Hz, 3000 Hz,

1000 Hz

DMX Fail (see <u>6.6.7.4. DMX Fail</u>)
 Fan Mode (see <u>6.6.7.5. Fan Mode</u>)
 Backlight Time (see <u>6.6.7.6. Backlight Time</u>)

• Lock (see <u>6.6.7.7. Lock</u>)

Key Backlight (see <u>6.6.7.8. Key Backlight</u>)
 Factory Reset (see <u>6.6.7.9. Factory Reset</u>)

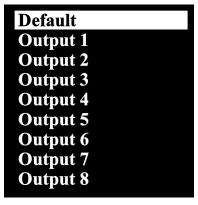
02) Touch the SET button to confirm the selection and open the submenu.



#### 6.6.7.1. Patch

In this submenu you can patch the 8 pods to the outputs of the controller.

Touch the **UP/DOWN** buttons to select one of the 9 options:



Default (see <u>6.6.7.1.1. Patch Default</u>)
Output 1–8 (see <u>6.6.7.1.2. Patch Outputs</u>)

#### 6.6.7.1.1. Patch Default

In this submenu you can set the device to its default patch setting.

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

Yes: The device is set to its default patch setting (Output 1 = Pod 1, Output 2 = Pod 2, etc.)
 No: The device is not set to its default patch setting. You can manually set the desired setting

in Patch Outputs (see <u>6.6.7.1.2</u>. Patch Outputs)

### 6.6.7.1.2. Patch Outputs

In this submenu you can set the 8 outputs to your desired patch setting. Assign a certain output to a certain pod.

- 01) Touch the **UP/DOWN** buttons to select one of the 8 options:
  - Output 1
  - Output 2
  - Output 3
  - Output 4
  - Output 5
  - Output 6
  - Output 7
  - Output 8
- 02) Touch the ENTER button to confirm the output selection and open the submenu.
- 03) Touch the **UP/DOWN** buttons to select one of the 8 options:
  - POD 1
  - POD 2
  - POD 3
  - POD 4
  - POD 5POD 6
  - POD 7
  - POD 8
- 04) Touch the **SET** button to confirm the pod selection.

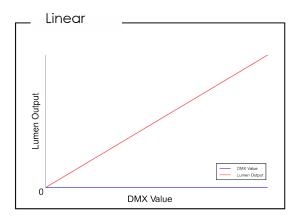


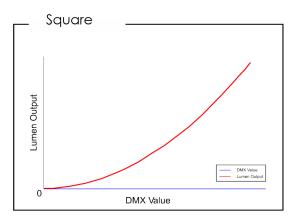
#### 6.6.7.2. Curves Select

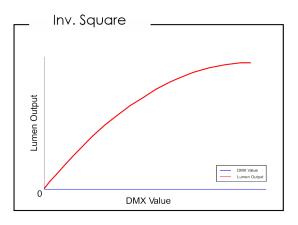
In this submenu you can set dimming curves.

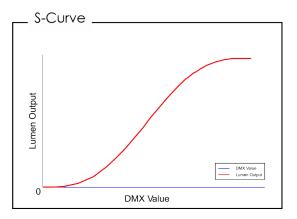
Touch the **UP/DOWN** buttons to select one of the 4 options:

- Linear
- Square
- Inv Square
- S-type









## 6.6.7.3. Display Invert

In this submenu you can set the orientation of the OLED display.

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

Normal: Normal orientation of the OLED display
 Invert: The OLED display is rotated at 180°

#### Note:

If the display is rotated at 180°, the function of the buttons on the control panel will remain the same.

#### 6.6.7.4. DMX Fail

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

Touch the **UP/DOWN** buttons to select one of the 4 options:

• Off: The device will not output any signal

Hold: The device will use the last working DMX value on the output
 Manual: The device will use the values selected in manual mode

Program: The device will start the last used built-in program



#### 6.6.7.5. Fan Mode

In this submenu you can set the speed of the fan.

Touch the **UP/DOWN** buttons to select one of the 3 options:

- Auto
- High
- Off

#### 6.6.7.6. Backlight Time

In this submenu you can set the amount of time the backlight on the display stays on, after the last button is touched on the control panel.

Touch the **UP/DOWN** buttons to select one of the following 5 options:

5 seconds: The backlight of the display turns off after 5 s of inactivity
10 seconds: The backlight of the display turns off after 10 s of inactivity
20 seconds: The backlight of the display turns off after 20 s of inactivity
30 seconds: The backlight of the display turns off after 30 s of inactivity

Always ON: The backlight of the display remains on

#### Note:

If the display is turned off, touch any button to turn the display on.

#### 6.6.7.7. Lock

In this submenu you can activate the display lock.

01) Touch the **UP/DOWN** buttons to toggle between On and Off.

• On: The display lock is on. The display will be locked after 30 seconds of inactivity.

After 5 seconds more the display will turn off. To access the main menu, you need to enter the password. The default password is pressing the **MODE** and **SET** buttons

for 3 seconds at the same time

Off: The access to the main menu remains unlocked after the display turns off

02) Touch the SET button to confirm your choice.

#### 6.6.7.8. Key Backlight

this submenu you can set whether the 4 buttons (MODE, SET, UP, DOWN) are illuminated or not.

01) Touch the **UP/DOWN** buttons to toggle between On and Off.

On: The 4 buttons (MODE, SET, UP, DOWN) are illuminated
 Off: The 4 buttons (MODE, SET, UP, DOWN) are not illuminated

02) Touch the **SET** button to confirm your choice.

### 6.6.7.9. Factory Reset

In this submenu you can restore the default factory settings of the device.

01) Touch the **UP/DOWN** buttons to toggle between Yes and No.

Yes: Restore to default factory settings
 No: Keep current settings, no factory reset

02) Touch the SET button to confirm.

#### 6.6.8. Information

In this menu you can view the following parameters of the device: the firmware version, the highest temperature of the LEDs of the Pods (L), the temperature and the humidity percentage of the mainboard of the controller (MC), the lifetime of the LEDs and UID.



# 6.7. DMX Channels

# 6.7.1. DMX Channels Overview

Function	Basic	Basic Strobe	Custom	Pixel	Pixel Strobe	Pixel Custom	Tungsten
runction	4 CH	5 CH	5 CH	32 CH	33 CH	40 CH	8 CH
White Pod 1–8			1				
Amber Pod 1–8			2				
Tungsten Pod 1–8	1	1					
Red Pod 1–8	2	2	3				
Green Pod 1–8	3	3	4				
Blue Pod 1–8	4	4	5				
White Pod 1						1	
Amber Pod 1						2	
Tungsten Pod 1				1	1		1
Red Pod 1				2	2	3	
Green Pod 1				3	3	4	
Blue Pod 1				4	4	5	
White Pod 2						6	
Amber Pod 2						7	
Tungsten Pod 2				5	5		2
Red Pod 2				6	6	8	
Green Pod 2				7	7	9	
Blue Pod 2				8	8	10	
White Pod 3						11	
Amber Pod 3						12	
Tungsten Pod 3				9	9		3
Red Pod 3				10	10	13	
Green Pod 3				11	11	14	
Blue Pod 3				12	12	15	
White Pod 4						16	
Amber Pod 4						17	
Tungsten Pod 4				13	13		4
Red Pod 4				14	14	18	
Green Pod 4				15	15	19	
Blue Pod 4				16	16	20	
White Pod 5						21	
Amber Pod 5						22	
Tungsten Pod 5				17	17		5
Red Pod 5				18	18	23	
Green Pod 5				19	19	24	
Blue Pod 5				20	20	25	
White Pod 6						26	
Amber Pod 6						27	
Tungsten Pod 6				21	21		6
Red Pod 6				22	22	28	
Green Pod 6				23	23	29	
Blue Pod 6				24	24	30	
White Pod 7						31	
Amber Pod 7						32	
Tungsten Pod 7				25	25		7
Red Pod 7				26	26	33	<u>'</u>
Green Pod 7				27	27	34	



Function	Basic 4 CH	Basic Strobe 5 CH	Custom 5 CH	Pixel 32 CH	Pixel Strobe 33 CH	Pixel Custom 40 CH	Tungsten 8 CH
Blue Pod 7				28	28	35	
White Pod 8						36	
Amber Pod 8						37	
Tungsten Pod 8				29	29		8
Red Pod 8				30	30	38	
Green Pod 8				31	31	39	
Blue Pod 8				32	32	40	
Strobe RGBAW		5			33		



# 6.7.2. Basic (4 Channels), Basic Strobe (5 Channels), Custom (5 Channels)

Basic	Basic Strobe	Custom	Function	Value	Setting
		1	White Dimmer Pod 1–8	000–255	From low to high intensity (0–100 %)
		2	Amber Dimmer Pod 1–8	000–255	From low to high intensity (0–100 %)
1	1		Tungsten Dimmer Pod 1–8	000–255	From low to high intensity (0–100 %)
2	2	3	Red Dimmer Pod 1–8	000–255	From low to high intensity (0–100 %)
3	3	4	Green Dimmer Pod 1–8	000–255	From low to high intensity (0–100 %)
4	4	5	Blue Dimmer Pod 1–8	000–255	From low to high intensity (0–100 %)
				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)
	5	5	Strobe RGB+Tungsten	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	

# 6.7.3. Pixel (32 Channels), Pixel Strobe (33 Channels), Pixel Custom (40 Channels)

Pixel	Pixel Strobe	Pixel Custom	Function	Value	Setting
		1	White Dimmer Pod 1	000–255	From low to high intensity (0–100 %)
		2	Amber Dimmer Pod 1	000–255	From low to high intensity (0–100 %)
1	1		Tungsten Dimmer Pod 1	000–255	From low to high intensity (0–100 %)
2	2	3	Red Dimmer Pod 1	000–255	From low to high intensity (0–100 %)
3	3	4	Green Dimmer Pod 1	000–255	From low to high intensity (0–100 %)
4	4	5	Blue Dimmer Pod 1	000–255	From low to high intensity (0–100 %)
		6	White Dimmer Pod 2	000–255	From low to high intensity (0–100 %)
		7	Amber Dimmer Pod 2	000–255	From low to high intensity (0–100 %)
5	5		Tungsten Dimmer Pod 2	000–255	From low to high intensity (0–100 %)
6	6	8	Red Dimmer Pod 2	000–255	From low to high intensity (0–100 %)
7	7	9	Green Dimmer Pod 2	000–255	From low to high intensity (0–100 %)
8	8	10	Blue Dimmer Pod 2	000–255	From low to high intensity (0–100 %)
		11	White Dimmer Pod 3	000–255	From low to high intensity (0–100 %)
		12	Amber Dimmer Pod 3	000–255	From low to high intensity (0–100 %)
9	9		Tungsten Dimmer Pod 3	000–255	From low to high intensity (0–100 %)
10	10	13	Red Dimmer Pod 3	000–255	From low to high intensity (0–100 %)
11	11	14	Green Dimmer Pod 3	000–255	From low to high intensity (0–100 %)
12	12	15	Blue Dimmer Pod 3	000–255	From low to high intensity (0–100 %)
		16	White Dimmer Pod 4	000–255	From low to high intensity (0–100 %)
		17	Amber Dimmer Pod 4	000–255	From low to high intensity (0–100 %)
13	13		Tungsten Dimmer Pod 4	000–255	From low to high intensity (0–100 %)
14	14	18	Red Dimmer Pod 4	000–255	From low to high intensity (0–100 %)
15	15	19	Green Dimmer Pod 4	000–255	From low to high intensity (0–100 %)
16	16	20	Blue Dimmer Pod 4	000–255	From low to high intensity (0–100 %)



Pixel	Pixel Strobe	Pixel Custom	Function	Value	Setting
		21	White Dimmer Pod 5	000–255	From low to high intensity (0–100 %)
		22	Amber Dimmer Pod 5	000–255	From low to high intensity (0–100 %)
17	17		Tungsten Dimmer Pod 5	000–255	From low to high intensity (0–100 %)
18	18	23	Red Dimmer Pod 5	000–255	From low to high intensity (0–100 %)
19	19	24	Green Dimmer Pod 5	000–255	From low to high intensity (0–100 %)
20	20	25	Blue Dimmer Pod 5	000–255	From low to high intensity (0–100 %)
		26	White Dimmer Pod 6	000–255	From low to high intensity (0–100 %)
		27	Amber Dimmer Pod 6	000–255	From low to high intensity (0–100 %)
21	21		Tungsten Dimmer Pod 6	000–255	From low to high intensity (0–100 %)
22	22	28	Red Dimmer Pod 6	000–255	From low to high intensity (0–100 %)
23	23	29	Green Dimmer Pod 6	000–255	From low to high intensity (0–100 %)
24	24	30	Blue Dimmer Pod 6	000–255	From low to high intensity (0–100 %)
		31	White Dimmer Pod 7	000–255	From low to high intensity (0–100 %)
		32	Amber Dimmer Pod 7	000–255	From low to high intensity (0–100 %)
25	25		Tungsten Dimmer Pod 7	000–255	From low to high intensity (0–100 %)
26	26	33	Red Dimmer Pod 7	000–255	From low to high intensity (0–100 %)
27	27	34	Green Dimmer Pod 7	000–255	From low to high intensity (0–100 %)
28	28	35	Blue Dimmer Pod 7	000–255	From low to high intensity (0–100 %)
		36	White Dimmer Pod 8	000–255	From low to high intensity (0–100 %)
		37	Amber Dimmer Pod 8	000–255	From low to high intensity (0–100 %)
29	29		Tungsten Dimmer Pod 8	000–255	From low to high intensity (0–100 %)
30	30	38	Red Dimmer Pod 8	000–255	From low to high intensity (0–100 %)
31	31	39	Green Dimmer Pod 8	000–255	From low to high intensity (0–100 %)
32	32	40	Blue Dimmer Pod 8	000–255	From low to high intensity (0–100 %)
				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)
	33		Strobe RGB+Tungsten	104–152	Ramp Down, from off to high frequency (0–20 Hz)
			J	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



# 6.7.4. Tungsten (8 Channels)

Tungsten	Function	Value	Setting
1	Tungsten Dimmer Pod 1	000–255	From low to high intensity (0–100 %)
2	Tungsten Dimmer Pod 2	000–255	From low to high intensity (0–100 %)
3	Tungsten Dimmer Pod 3	000–255	From low to high intensity (0–100 %)
4	Tungsten Dimmer Pod 4	000–255	From low to high intensity (0–100 %)
5	Tungsten Dimmer Pod 5	000–255	From low to high intensity (0–100 %)
6	Tungsten Dimmer Pod 6	000–255	From low to high intensity (0–100 %)
7	Tungsten Dimmer Pod 7	000–255	From low to high intensity (0–100 %)
8	Tungsten Dimmer Pod 8	000–255	From low to high intensity (0–100 %)



### 6.8. RDM Information

This device supports RDM (see <u>6.8.2. Supported RDM PIDs (Parameter IDs)</u>).

### 6.8.1. RDM Details

Responder ID: 29B4:0D2XXXXX

Manufacturer's ID: Showtec (Highlite International B.V.)

Manufacturer Label: Showtec

Model Description: Stage Blinder FLEX Blaze
 Model ID: 210 (0D2 hexadecimal)
 Device Label: Stage Blinder FLEX Blaze

#### Note:

An RDM responder ID consists of 3 parts:

• 1<sup>st</sup> part – 4 digits – Manufacturer's ID

2<sup>nd</sup> part – 3 digits – Model ID

• 3<sup>rd</sup> 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	*	*	
PARAMETER_DESCRIPTION	0x0051	*	*	
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			*
OUTPUT_1	0xC00C		*	*
OUTPUT_2	0xC00D		*	*
OUTPUT_3	0xC00E		*	*
OUTPUT_4	0xC00F		*	*
OUTPUT_5	0xC010		*	*
OUTPUT_6	0xC011		*	*
OUTPUT_7	0xC012		*	*
OUTPUT_8	0xC013		*	*



# 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	<ul> <li>Make sure that the device is connected to power supply and the cables are plugged in</li> </ul>		
ioriction at all	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	<ul> <li>Reset the parameters of the device to the default factory settings (see <u>6.6.7.9. Factory</u> <u>Reset</u> on page 32)</li> </ul>		
	The controller is not connected	Connect the controller		
The device does not respond to DMX control	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		
	Connections are defective	Examine connections and cables. Correct defective connections. Repair or replace damaged cables		
The device responds	The data link is not terminated with a 120 $\Omega$ termination plug	Insert a termination plug in the DMX OUT connector of the last device on the link		
erratically to DMX control	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		
	LEDs are damaged	Disconnect the device and contact your Highlite International dealer		
No light or LEDs cut out intermittently	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		



# 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.

## 8.3. Basic Cleaning Instructions

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 5 minutes.
- 03) Clean the device with a soft, lint-free cloth.



#### **Attention**

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

### 8.4. 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.



### 8.4.1. Draining Condensation Water

The Stage Blinder FLEX 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 bellow to remove the condensation water:

- 01) Carefully remove the **protective valve (01)** with a wrench (16 mm).
- 02) Let the device operate with all LEDs at full output for 60 minutes.
- 03) Let the device cool down for 30 minutes.
- 04) Install the protective vent (01) back. Make sure that you do not overtighten it.

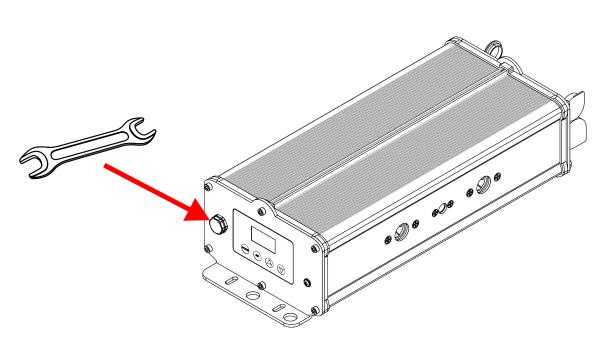


Figure 12



# 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 <u>8.3. Basic Cleaning Instructions</u> on page 40).
- 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



Check the respective product page on the website of Highlite International (<a href="https://www.highlite.com">www.highlite.com</a>) for an available declaration of conformity.

42

