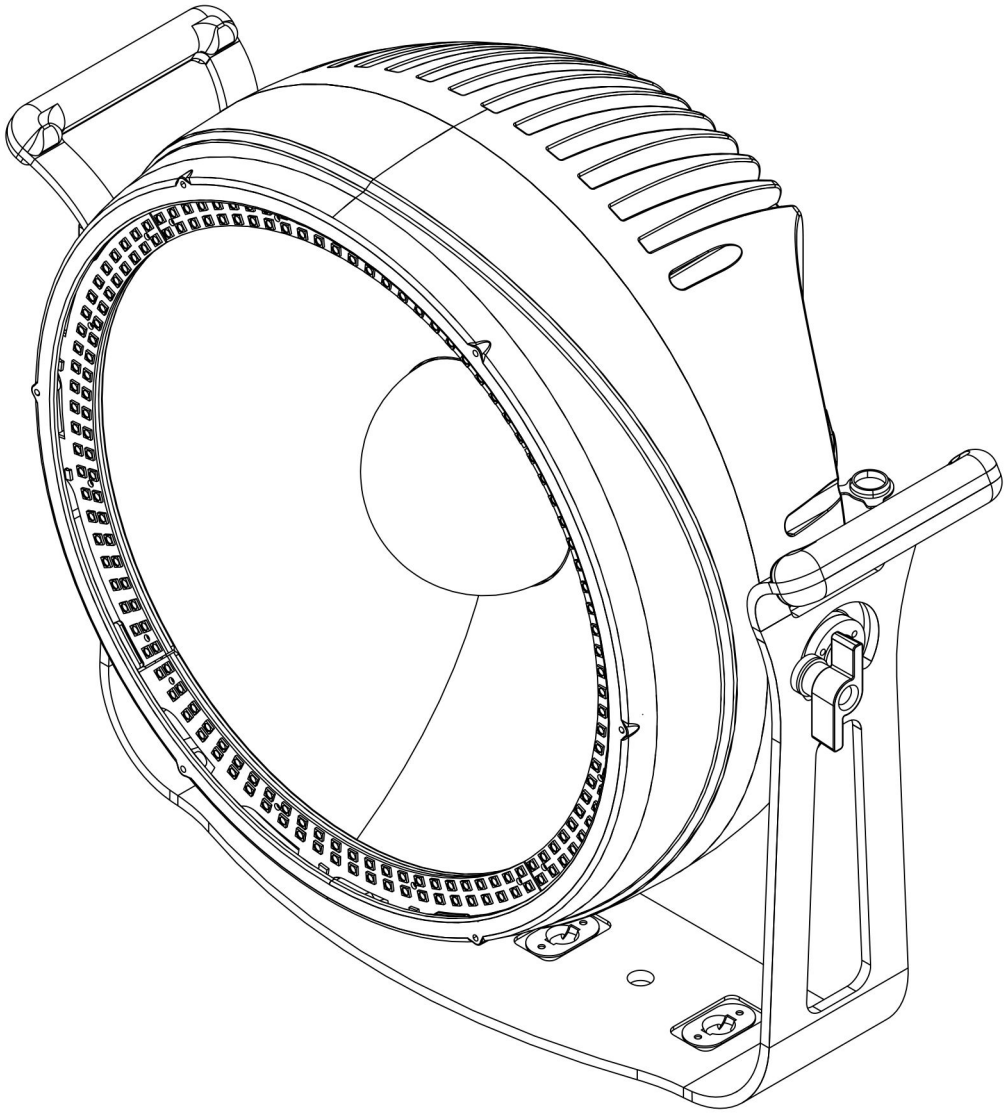
USER MANUAL

ENGLISH

V1.0



Lumina Sola

Product code: 43329

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.

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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.

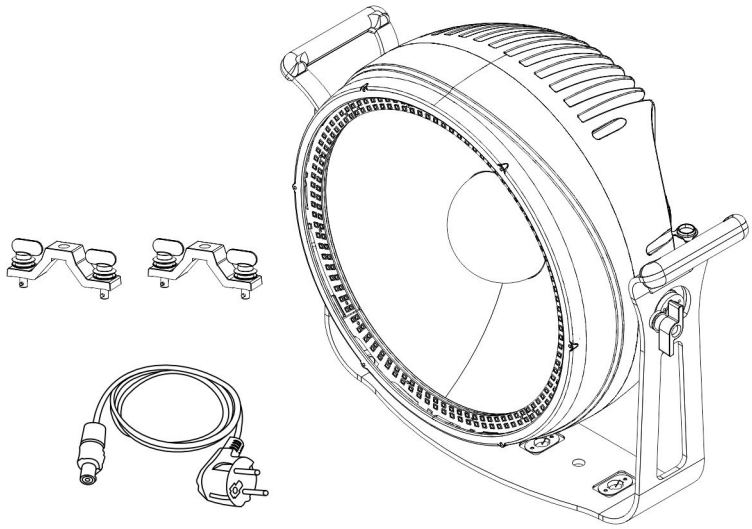
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

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

Your shipment includes:

- Showtec Lumina Sola
- 2 x Quick-lock bracket
- 1 x Schuko to Power Pro True 1 cable (1,5 m)
- User manual

Figure 1



1.2. Intended Use

This device is intended for professional use as an LED luminaire. It can be installed indoors and temporarily 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 wear and 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 back side of the device.

The information label contains the following symbols:



This device shall not be treated as household waste.

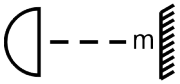


Read and follow the instructions in the user manual before installing, operating or servicing the device.

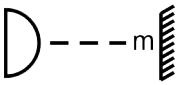


This device falls under IEC protection class I.

IP65 This devices is rated IP65.



Minimum distance from lighted objects



Minimum distance from other 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 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 an LED luminaire. 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 Lumina Sola is a high-performance outdoor LED blinder designed for large-scale events and demanding applications. At its core, a 500 W RGBAL LED engine delivers an impressive output of over 12,000 lumens with a CRI above 91, ensuring vibrant colours and natural whites. The amber LED section enables a realistic tungsten dimming effect for authentic warm fades. The Lumina Sola features a dedicated studio mode offering a CCT range from 1800K to 7000K and a Tint channel for green/magenta adjustment, making it ideal for TV and film environments.

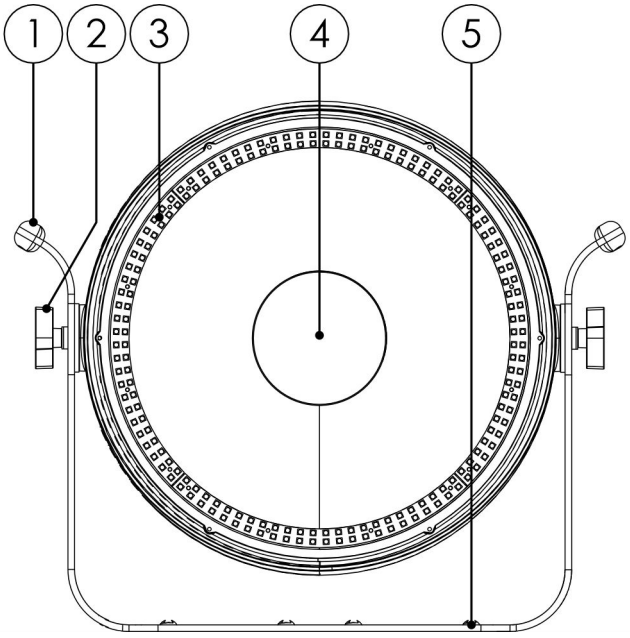
Surrounding the centre LED is a ring of 192 RGB LEDs (1.5 W each), divided into 8 controllable sections for beautiful visual effects and creative accents. With a wide beam angle of over 80°, the Lumina Sola provides smooth coverage for stages and outdoor installations. Its IP65-rated housing guarantees reliable performance in all weather conditions, while convection cooling combined with an axial fan (with adjustable modes) ensures silent and efficient operation.

Control is flexible and professional: DMX/RDM, Auto, Manual, and Master/Slave modes are supported, with up to 50 DMX channels for advanced programming. Thanks to RDM, you can remotely change the DMX address and switch DMX modes without physical access. The Lumina Sola also features 4 selectable dimming curves for precise intensity control, Power Pro True connectors, and 3 and 5-pin DMX connections for secure and robust setups. High-frequency PWM (1–25 kHz) ensures flicker-free performance for broadcast and camera applications.

A range of optional accessories is available to soften the LED appearance, modify the beam look, or create distinctive patterns for a vintage or Goliath-style appearance.

3.1. Front View

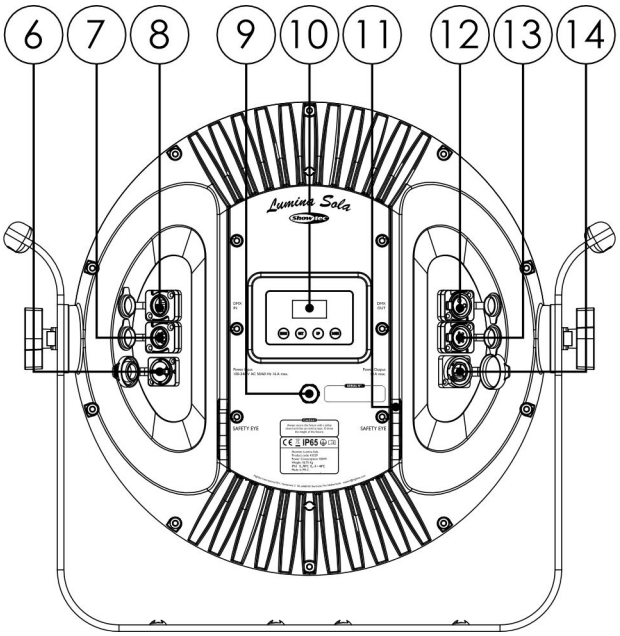
Figure 2



01) 2 x Carrying handle
02) 2 x Angle adjustment screws
03) 192 x 1,5 W RGB LEDs
04) 500 W RGBAL LED
05) 4 x mounting holes for 2 quick-lock brackets

3.2. Back View

Figure 3



06) IP65-rated Seetronic power connector IN
07) IP65-rated Seetronic 5-pin DMX signal connector IN
08) IP65-rated Seetronic 3-pin DMX signal connector IN
09) Protective vent (M12x1,5)
10) Control panel: OLED screen and control buttons
11) Opening for a safety cable
12) IP65-rated Seetronic 3-pin DMX signal connector OUT
13) IP65-rated Seetronic 5-pin DMX signal connector OUT
14) IP65-rated Seetronic power connector OUT

3.3. Product Specifications

Model:	Lumina Sola

Source:	
Light source type	LED
Light source quantity	192
Light source power	500 W
LED color type	RGBAL
Life expectancy	20000 h
Refresh rate	1000 Hz
Refresh rate (max.)	25 kHz
Luminous flux (total)	12668 lm
Luminous flux (red)	1775 lm
Luminous flux (green)	3511 lm
Luminous flux (blue)	825 lm
Luminous flux (amber)	3185 lm
CRI	91,5

Optical:	
Beam angle (horizontal)	81,2°
Beam angle (vertical)	81,2°

Control and Programming:	
Control mode	Auto / DMX / Manual / RDM
DMX channels	1, 8, 9, 12, 18, 34, 39, 50 channels
Protocols	DMX / RDM
Fan mode	Yes
Dim curve	Linear / Square / I-Square / S-Curve

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

Electrical Specifications and Connections:	
Power supply	100–240 V AC 50/60 Hz
Power consumption	450 W
Power connector IN	Power Pro True
DMX connector	XLR 5P IN/OUT
DMX connector IN	XLR 5P
DMX connector OUT	XLR 5P

Mechanical Specifications:	
Length	265 mm
Width	555 mm
Height	481 mm
Weight	21,3 kg
IP rating	IP65
Material	Aluminium
Housing	Aluminium
Color	Black

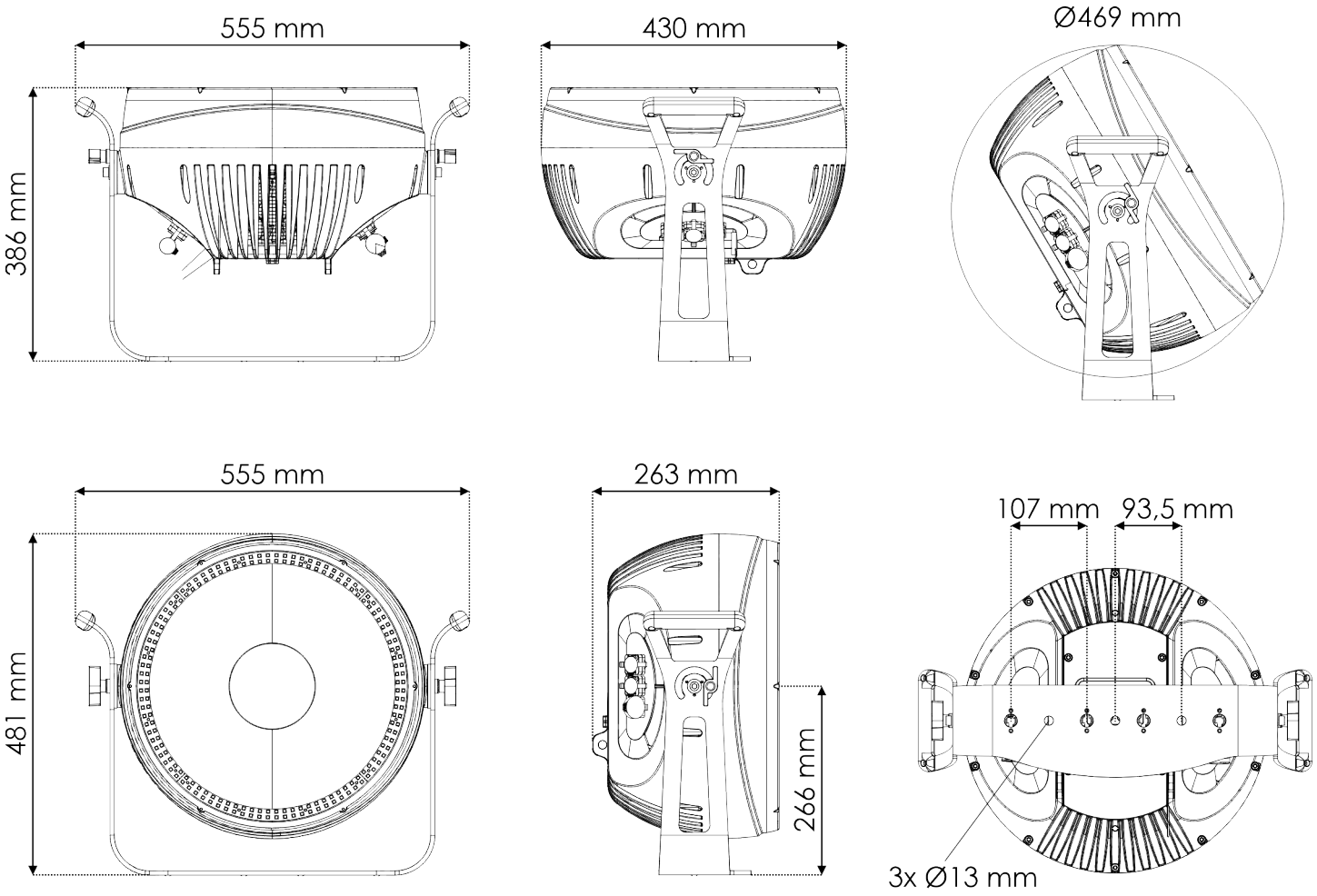
Product Properties:	
Cooling	Convection/axial fan

Thermal Specifications:	
Maximum ambient temperature	40 °C
Maximum surface temperature	70 °C

Included Items:	
Included cables	Power Pro True cable

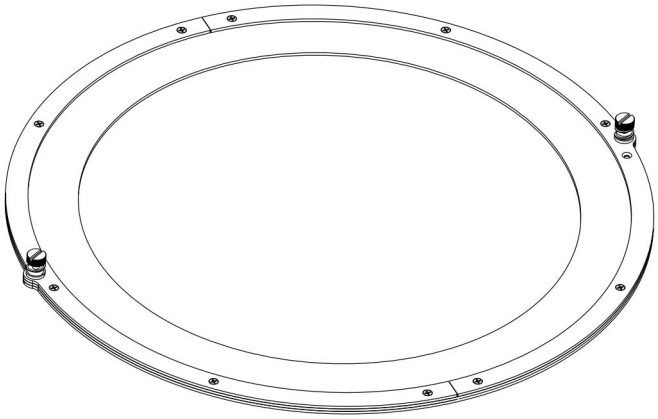
3.4. Dimensions

Figure 4

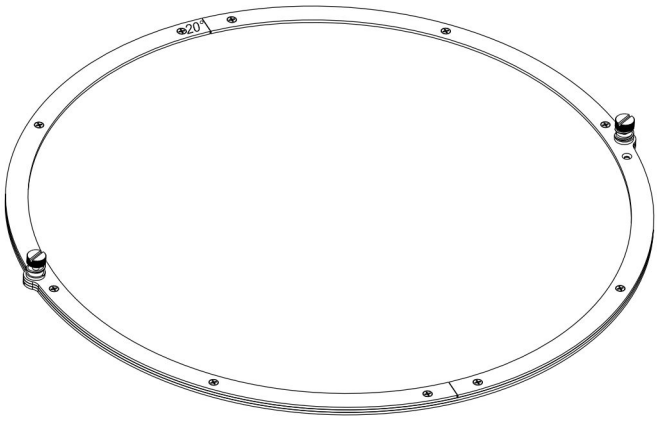


3.5. Optional Accessories

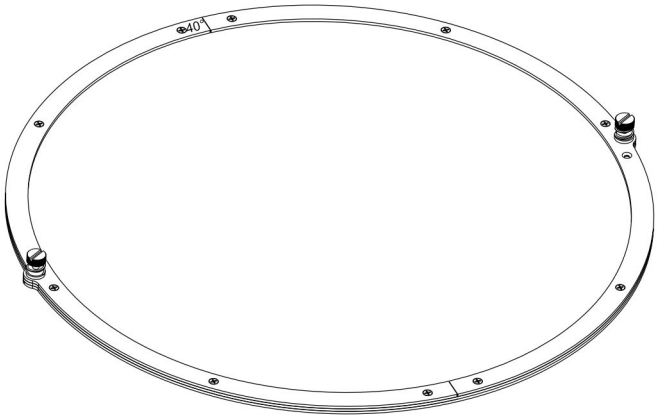
- Product code : 43340 (Ring for Lumina Sola/Beam)



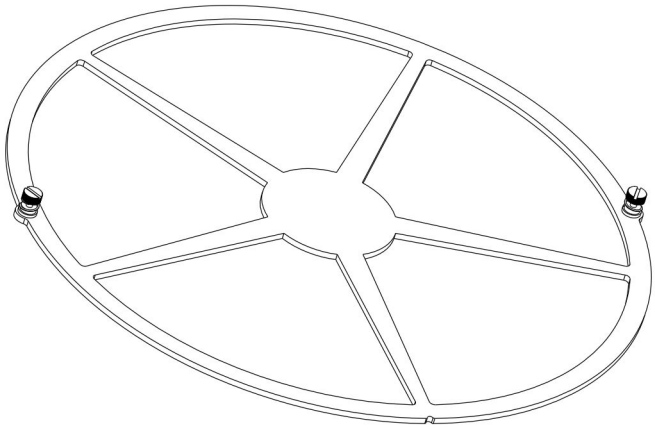
- Product code: 43341 (Beamshaper 20° for Lumina Sola/Beam)



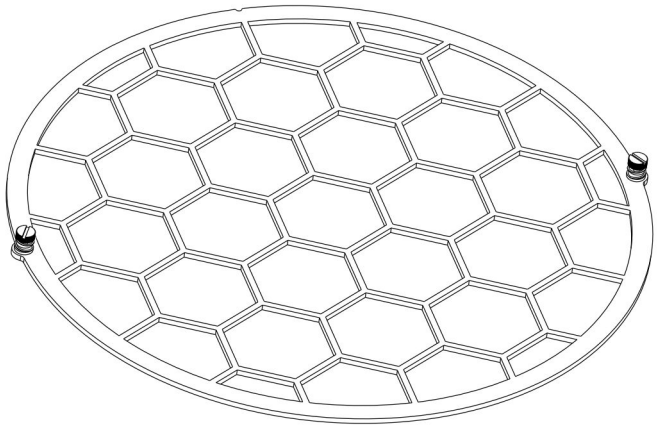
- Product code : 43342 (Beamshaper 40° for Lumina Sola/Beam)



- Product code: 43343 (Star-pattern for Lumina Sola/Beam)



- Product code : 43344 (Hexagon-pattern for Lumina Sola/Beam)



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 temporarily 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

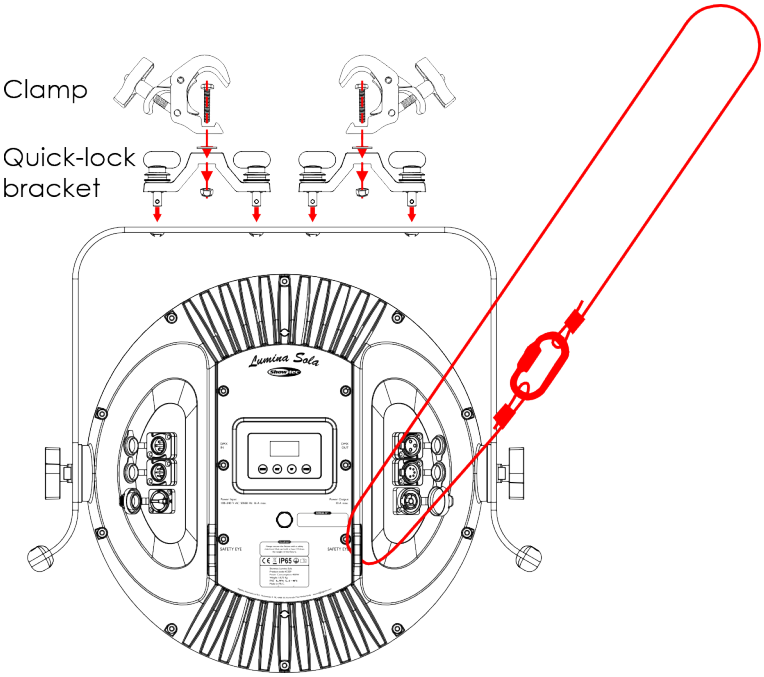
The device can be positioned on a flat surface or mounted to a truss or other rigging structure in any orientation. Make sure that all loads are within the pre-determined limits of the supporting structure.

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 holes for quick-lock bracket (05)**.
02) Install the clamp. Make sure that you use a clamp suitable for attaching the device to a truss.

Figure 5



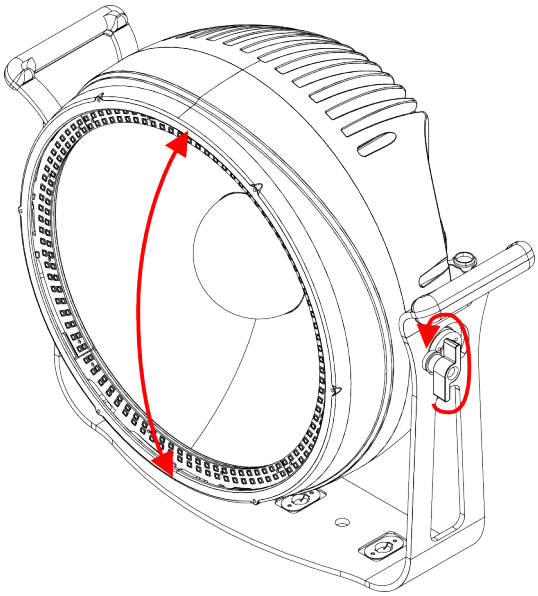
03) Attach the device to the supporting structure. Make sure that the device cannot move freely.
04) Secure the device with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the device. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. Put the safety cable through the **opening for a safety cable (11)**.

4.5. Angle Adjustment

You can adjust the angle of the device with the **2 angle adjustment screws (02)**.To adjust the angle, follow the steps below:

01) Turn the **2 angle adjustment screws (02)** counterclockwise to loosen them.
02) Tilt the device to the desired angle (see Fig. 06).
03) Turn the **2 angle adjustment screws (02)** clockwise to tighten them. Make sure that the device cannot move freely after the **2 angle adjustment screws (02)** are tightened.

Figure 6



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 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.

4.7. 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 Lumina Sola
- at 200–240 V: 4 devices Lumina Sola

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 Lumina Sola 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 21).

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 Lumina Sola has 3-pin and 5-pin DMX signal IN and OUT connectors.

The pin assignment is as follows:

- 3-pin: pin 1 (ground), pin 2 (-), pin 3 (+)
- 5-pin: 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

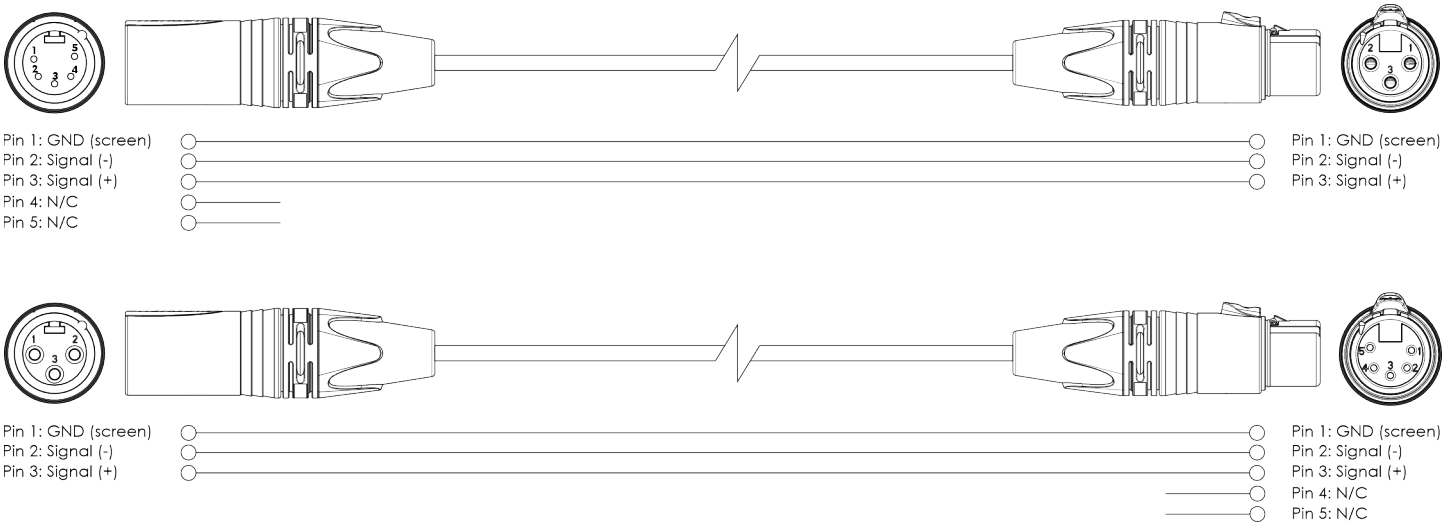
5.3.2. DMX Cables

Shielded twisted-pair cables with 3-pin/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 7

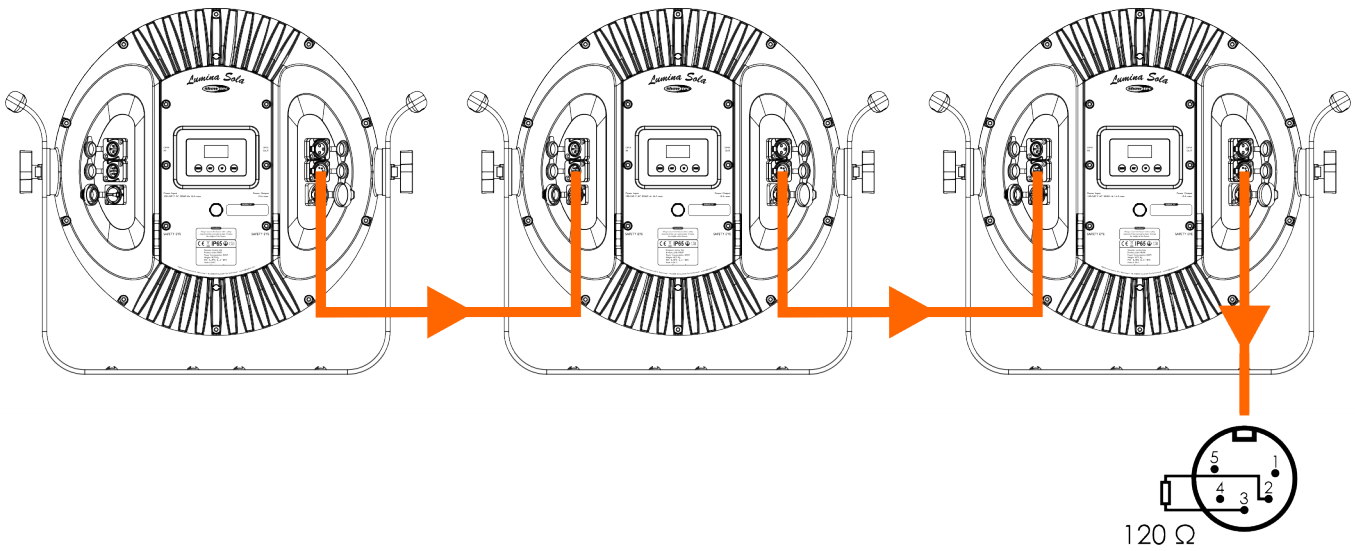


5.3.3. Master/Slave Setup

The Lumina Sola 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 3-pin/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. Refer to Slave Mode for more information.
05) Select a slave setting for the other devices on the data link. Refer to Slave Mode for more information.

Figure 8

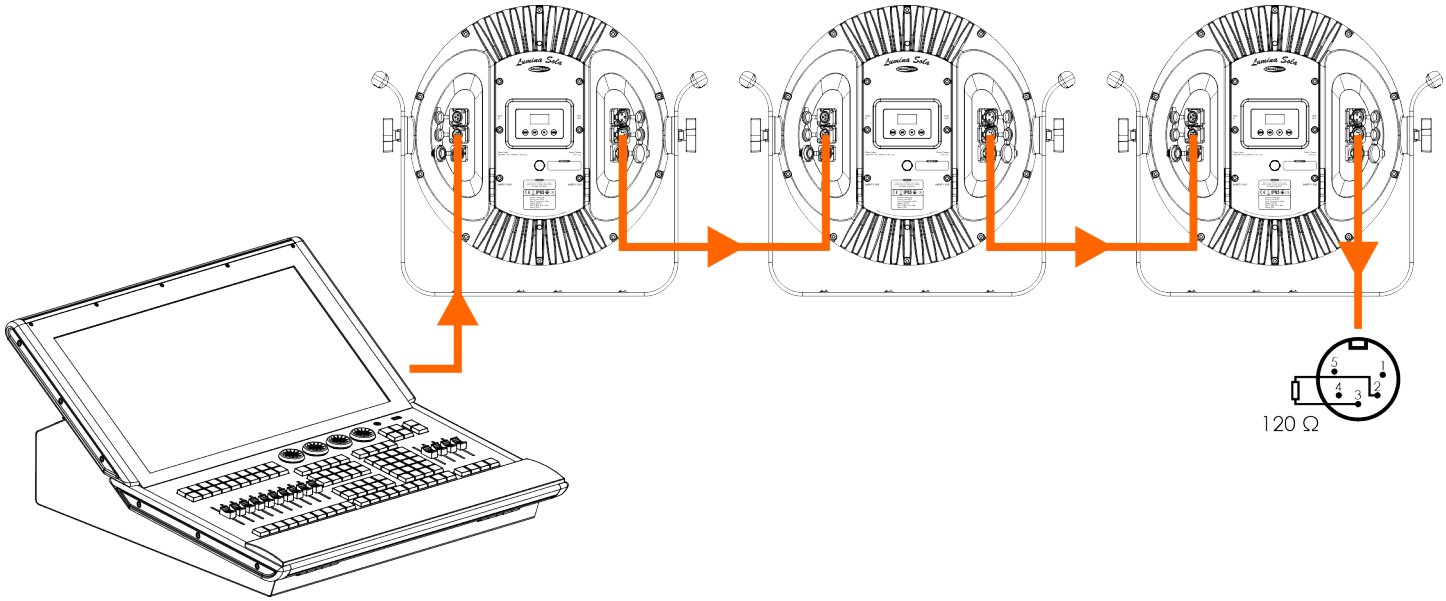


5.3.4. DMX Linking

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

01) Use a 3-pin/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 3-pin/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 9



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 Lumina Sola has 8 personalities: 1, 8, 9, 12, 18, 34, 39 and 50 channels.

If you want to connect multiple devices on one data link and use them in 50-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 51 (051), as 1 + 50 = 51.
03) Set the starting address of the 3rd device on the data link to 101 (101), as 51 + 50 = 101.
04) Continue assigning the starting addresses of the remaining devices by adding each time 50 to the previous number.

Make sure that you do not have any overlapping channels in order to control each Lumina Sola 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 an LED luminaire. It can be installed indoors and temporarily 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 Lumina Sola 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: 1, 8, 9, 12, 18, 34, 39, 50 channels

For more information about how to connect the devices, refer to Setup (see 5. Setup on page 18).

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

Adjust the colors in the Manual Mode (see 6.6.3. 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.

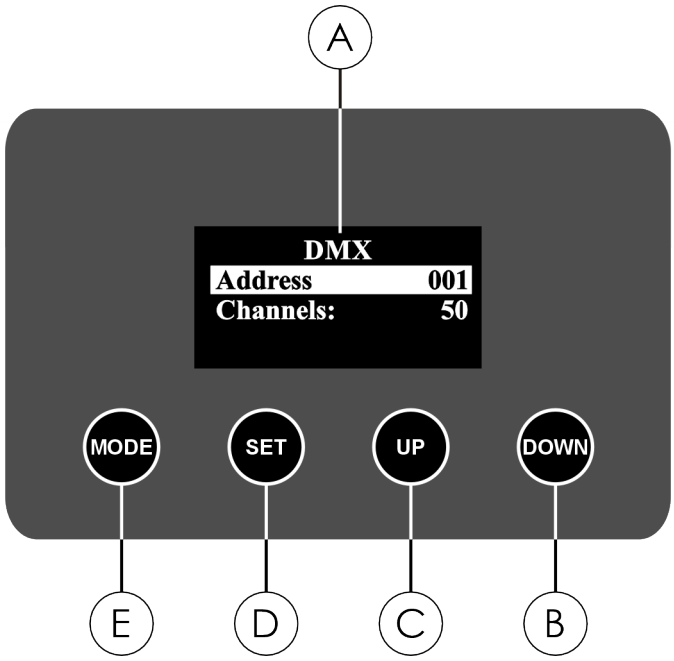
- If you select Auto (see 6.6.5. Auto on page 27), the device will run the built-in program.
- If you select Program (see 6.6.6. Program on page 28), the device will run the respective program. You can edit the programs in the Program menu.

To operate the device with a DMX controller:

01) Select DMX512 as control mode in the DMX Menu (see 6.6.1. DMX on page 25).
02) Set the DMX starting address (see 5.3.5. DMX Addressing on page 20) of the device in the DMX Address menu (see 6.6.1.1. DMX Address on page 25).
03) Select the DMX channel mode in the DMX channel mode menu (see 6.6.1.2. Channels on page 25). Refer to DMX channels (see 6.7. DMX Channels on page 34) for a complete overview of all DMX channels.

6.3. Control Panel

Figure 10



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

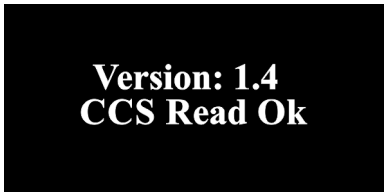
- Use the **MODE** button to exit the current submenu, to return to the Main Menu and to return to the start screen.
- Use the **UP/DOWN** buttons to navigate through the menus or to increase/decrease numeric values.
- Use the **SET** button to open the desired menu, to confirm your choice or to set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



Immediately afterwards, the display shows the next splash screen with the CCS status:



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 temperature of the LED, the firmware version, the selected mode and the DMX address:



Note:

If the display is locked, press the **MODE** and **SET** buttons for 3 s at the same time to unlock the display. When the display lock is on, there is a lock symbol at the top right corner of the display.

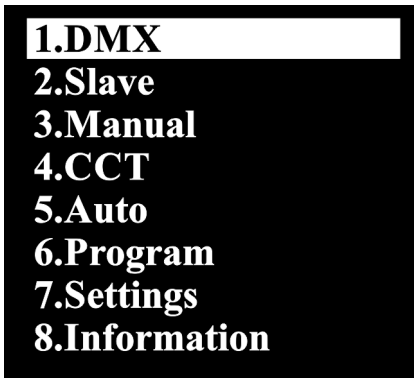
6.5. Menu Overview

Level 1	Level 2	Level 3
1.DMX (see 6.6.1. DMX on page 25)	Address	001–512
	Channels	1
		9
		8
		34
		12
		18
		39
		50
2.Slave (see 6.6.2. Slave on page 26)	Yes	
	No	
3.Manual (see 6.6.3. Manual Mode on page 26)	1. Red1	000–255
	2. Green1	000–255
	3. Blue1	000–255
	4. Amber1	000–255
	5. Lemon1	000–255
	6. Red2	000–255
	7. Green2	000–255
	8. Blue2	000–255
4.CCT (see 6.6.4. CCT on page 27)	Preset	1800 K
		2000 K
		2200 K
		2400 K
		2600 K
		2800 K
		3000 K
		3200 K
		3600 K
		4200 K
		5600 K
		6000 K
		6500 K
		7000 K
	Tint	-100% to +100% (0%)
	Mode	Brightness
		Quality
5.Auto (see 6.6.5. Auto on page 27)	Yes	
	No	
6.Program (see 6.6.6. Program on page 28)	Mode	01–33
	Color (Mode 1)	01–38
	Program Speed (Mode 2–33)	001–100
	Strobe (Mode 1–33)	00–99
7.Settings (see 6.6.7. Settings on page 29)	1.Dimmer Curve	1. Linear
		2. Square
		3. Inverse Square
		4. S-Curve
	2.Dimmer Speed	1. Auto
		2. Slow (1S)
		3. Medium (0.5S)

Level 1	Level 2	Level 3
		4. Fast
	3.Display Dir	Normal
		Inverted
	4.PWM Frequency	1 KHz
		3 KHz
		6 KHz
		12 KHz
		25 KHz
	5.Dmx Fail	1. Off
		2. Hold
		3. Manual
		4. Program
	6.Fan Mode	1. Auto
		2. High
		3. Low
		4. Off
	7.Backlight Time	5s
		10s
		20s
		30s
	8.Key Backlight	On
		Off
	9.Key Lock	Locked
		Unlocked
	10.Factory Reset	Yes
		No
8.Information (see 6.6.8. Information on page 33)	1.Version	MCU S 1.4/1205
		CCS 2.2/1207
	2.Temperature	LED1 xx °C
		LED2 xx °C
		LED3 xx °C
		LED4 xx °C
		LED5 xx °C
		Power Temp xx °C
	3.Fan Speed	Led Fan1 xxxx rpm
		Led Fan2 xxxx rpm
		PowerFan 4950 rpm
	4.Time	PowerTime xxxxxh
		Led Time xxxxxh
	5.RDM UID	29B4:11Axxxxx
	6.Error Status	

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 6.6.1.1. DMX Address)
- Channels (see 6.6.1.2. Channels)

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 is 001–512.
02) Touch the **SET** button to confirm the selection.

6.6.1.2. Channels

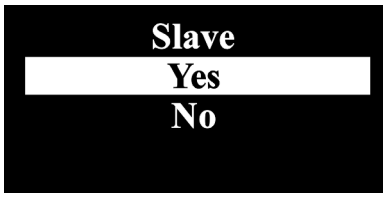
In this submenu you can select the DMX channel mode.

01) Touch the **UP/DOWN** buttons to select the desired DMX mode. There are 8 options:
    - 1 channel
    - 9 channels
    - 8 channels
    - 34 channels
    - 12 channels
    - 18 channels
    - 39 channels
    - 50 channels
02) Touch the **SET** button to confirm the selection. For more information refer to DMX Channels (see 6.7. DMX Channels on page 34).

6.6.2. Slave

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

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



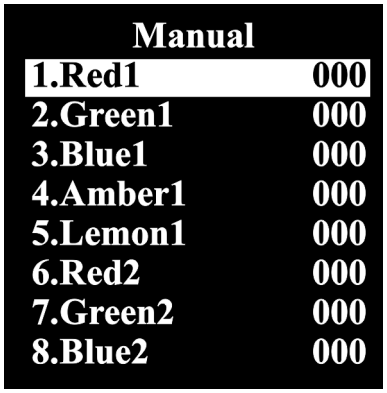
- Yes: The device is set as a slave and reacts the same as the master device
- No: The device is set as the master device

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

6.6.3. Manual Mode

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

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



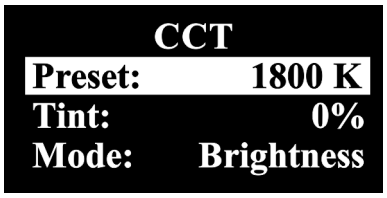
- Red1: Adjust the red intensity of the 500 W LED. The adjustment range is 000–255, from low to high intensity
- Green1: Adjust the green intensity of the 500 W LED. The adjustment range is 000–255, from low to high intensity
- Blue1: Adjust the blue intensity of the 500 W LED. The adjustment range is 000–255, from low to high intensity
- Amber1: Adjust the amber intensity of the 500 W LED. The adjustment range is 000–255, from low to high intensity
- Lemon1: Adjust the lemon intensity of the 500 W LED. The adjustment range is 000–255, from low to high intensity
- Red2: Adjust the intensity of the 192 ring LEDS. The adjustment range is 000–255, from low to high intensity
- Green2: Adjust the intensity of the 192 ring LEDS. The adjustment range is 000–255, from low to high intensity
- Blue2: Adjust the intensity of the 192 ring LEDS. The adjustment range is 000–255, from low to high intensity

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

6.6.4. CCT

In this menu you can set the CCT preset values, adjust the tint or adjust the LED performance mode.

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



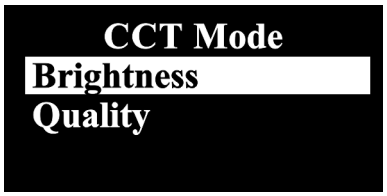
- Preset: Set the correlated color temperature: (1800 K, 2000 K, 2200 K, 2400 K, 2600 K, 2800 K, 3000 K, 3200 K, 3600 K, 4200 K, 5600 K, 6000 K, 6500 K, 7000 K)
- Tint: Set the tint from -100,0 to +100,0 %
- Mode (see 6.6.4.1. Mode)

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

6.6.4.1. Mode

In this submenu you can set the CCT performance mode.

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



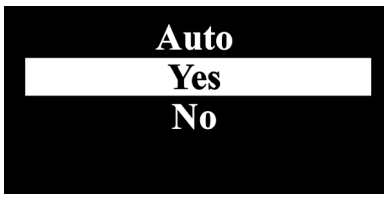
- Brightness: The CRI is reduced and depending on the color temperature, the intensity of the light output increases with 20–30 %
- Quality: The device reaches a high CRI, but reduces the intensity of the light output

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

6.6.5. 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 02–33, with the strobe speed set in the Program Mode 02–33.

6.6.6. Program

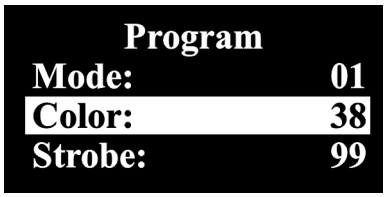
In this menu you can select a built-in program, add a strobe effect, and adjust the program speed. The device has 38 built-in color presets and 33 built-in programs available:

- Program 01 (see 6.6.6.1. Program 01)
- Program 02–33 (see 6.6.6.2. Program 02–33)

6.6.6.1. 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:



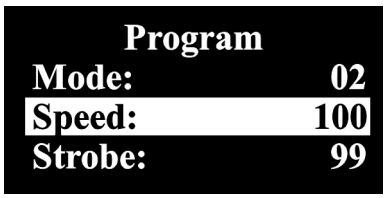
- Color
- Strobe

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 38 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 00–99, from OFF to high frequency.
05) Touch the **SET** button to confirm.

6.6.6.2. Program 02–33

In this submenu you can set program speed and the strobe for built-in program 02–33.

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 001–100, from slow to fast.
04) If you select Strobe, touch the **UP/DOWN** buttons to set the strobe frequency. The adjustment range is 00–99, from OFF to high frequency.
05) Touch the **SET** button to confirm.

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:



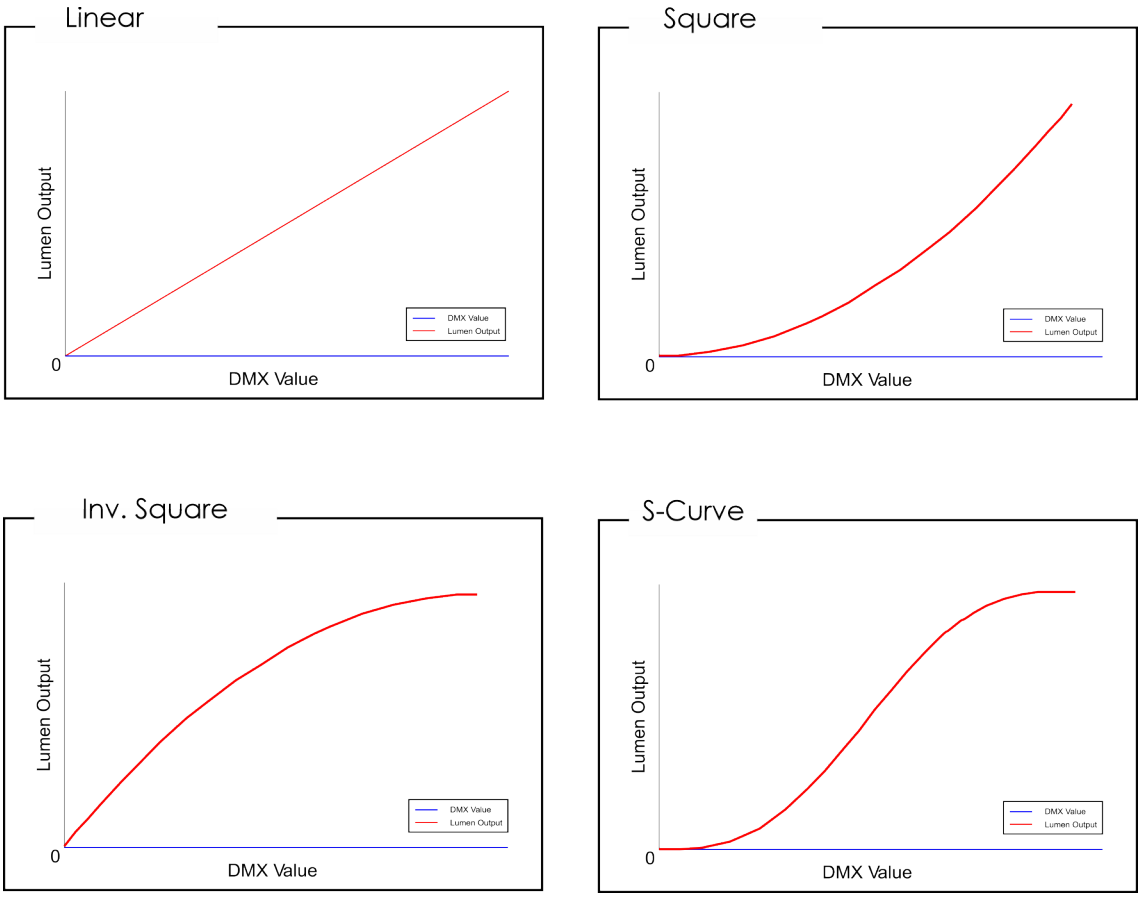
- Dimmer Curve (see 6.6.7.1. Dimmer Curve)
- Dimmer Speed (see 6.6.7.2. Dimmer Speed)
- Display Dir (see 6.6.7.3. Display Dir)
- PWM Frequency: Set the PWM Frequency (Pulse Width Modulation): 1kHz, 3 kHz, 6 kHz, 12 kHz, 25 kHz
- DMX Fail (see 6.6.7.4. DMX Fail)
- Fan Mode (see 6.6.7.5. Fan Mode)
- Backlight Time (see 6.6.7.6. Backlight Time)
- Key Backlight (see 6.6.7.7. Key Backlight)
- Key Lock (see 6.6.7.8. Key Lock)
- Factory Reset (see 6.6.7.9. Factory Reset)

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

6.6.7.1. Dimmer Curve

In this submenu you can set dimming curves.

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



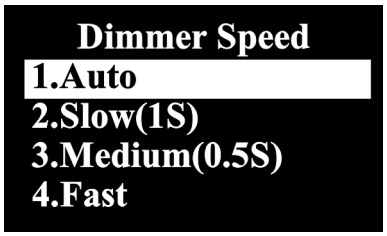
- Linear
- Square
- Inverse Square
- S-Curve

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

6.6.7.2. Dimmer Speed

In this submenu, you can set the dimmer speed.

01) Touch the **UP/DOWN** buttons to choose one of the 4 options:



- Auto: Automatic dimmer speed
- Slow (1s): Slow dimmer speed
- Medium (0,5 s): Medium dimmer speed
- Fast: Fast dimmer speed

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

6.6.7.3. Display Dir

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

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



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

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

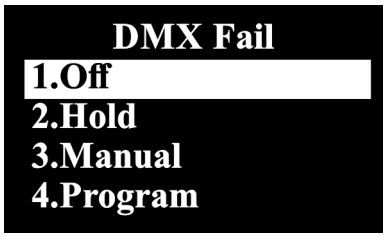
Note:

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

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



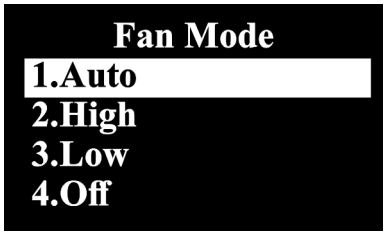
- Off: The device does not output any signal
- Hold: The device uses the last working DMX value on the output
- Manual: The device uses the values selected in manual mode
- Program: The device starts the last used built-in program

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

6.6.7.5. Fan Mode

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

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



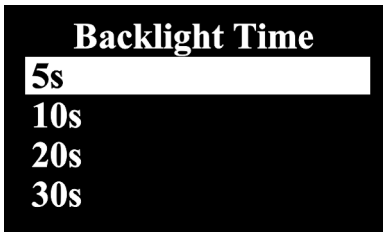
- Auto: The fan is in automatic mode
- High: The fan is in high mode
- Low: The fan is in low mode
- Off: The fan is off

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

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.

01) Touch the **UP/DOWN** buttons to select one of the 4 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

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

Note:

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

6.6.7.7. Key Backlight

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

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



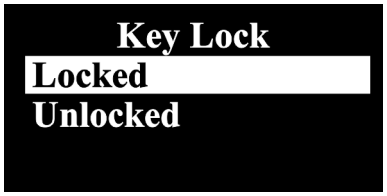
- On: The 4 buttons (**MODE**, **SET**, **UP**, **DOWN**) are illuminated
- Off: The 4 buttons (**MODE**, **SET**, **UP**, **DOWN**) are not illuminated

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

6.6.7.8. Key Lock

In this submenu you can activate the display lock.

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



- Locked: The display lock is on. The display will be locked after 30 s of inactivity. After 5 s 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 s at the same time
- Unlocked: The access to the main menu remains unlocked after the display turns off

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

6.6.7.9. Factory Reset

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

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



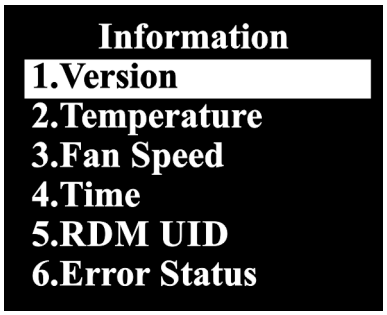
- Yes: Restore to default factory settings
- No: Keep current settings, no factory reset

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

6.6.8. Information

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

01) Touch 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 LEDS 1–5 and the PSU temperature
- Fan Speed: Shows the current speed of the fan
- Time: Shows the total time the device and the LEDs have been running
- RDM UID: Shows the RDM identification number of the device (29B4:11Axxxxx)
- Error Status: Shows the current error status, if applicable

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

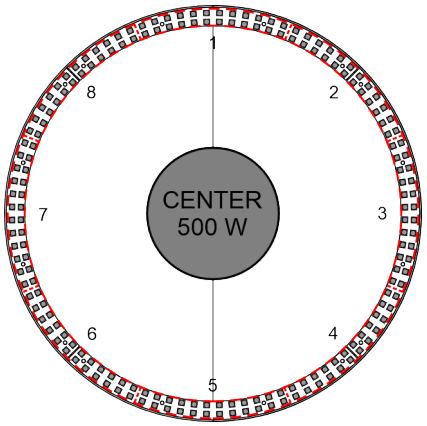
Note:

For more information about the complete list of error messages (see 7.1. Error Messages on page 44), refer to Error Messages. If you can not solve the problem, discontinue the use of the device and contact your Highlite International dealer for more information.

6.7. DMX Channels

6.7.1. 1, 9, 8, 12, 18 Channels

Figure 11



RGBWAL LED Order

1CH	9CH	8CH	12CH	18CH	Function	Value	Setting
			1	1	**Dimmer**	000–255	From low to high intensity (0–100 %)
			2		**Dimmer Fine**	000–255	From low to high intensity (0–100 %)
1	1				**Tungsten simulation dimmer**	000–255	From low to high intensity (0–100 %)
		1		3	**Center Red**	000–255	From low to high intensity (0–100 %)
					Center Red Fine	000–255	From low to high intensity (0–100 %)
		2		4	**Center Green**	000–255	From low to high intensity (0–100 %)
					Center Green Fine	000–255	From low to high intensity (0–100 %)
		3		5	**Center Blue**	000–255	From low to high intensity (0–100 %)
					Center Blue Fine	000–255	From low to high intensity (0–100 %)
		4		6	**Center Amber**	000–255	From low to high intensity (0–100 %)
					Center Amber Fine	000–255	From low to high intensity (0–100 %)
		5		7	**Center Lemon**	000–255	From low to high intensity (0–100 %)
			3	2	**Center Strobe**	000–009	No Function
						010–099	Linear strobe, from off to high frequency (0–20 Hz)
						100–149	Pulse strobe, from low to high frequency
						150–255	Random strobe, from low to high frequency
			4		**CCT**	000–005	No function
						006–023	1800 K
						024–041	2000 K
						042–059	2200 K
						060–077	2400 K
						078–095	2600 K
						096–113	2800 K
						114–131	3000 K
						132–149	3200 K
						150–167	3600 K
						168–185	4200 K
						186–203	5600 K
						204–221	6000 K
						222–239	6500 K
						240–255	7000 K

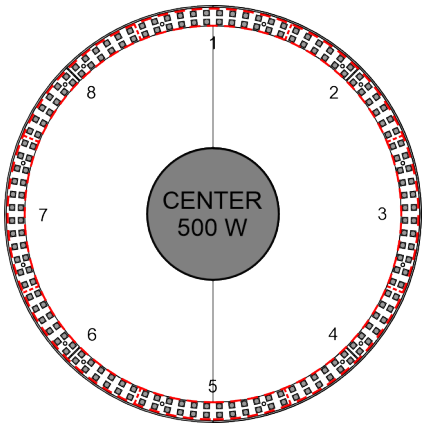
1CH	9CH	8CH	12CH	18CH	Function	Value	Setting
			5		Tint	000–005	No function
						006–127	-100% to 0% (magenta to neutral)
						128	0% (neutral)
						129–255	0% to +100% (neutral to green)
	2		6	8	Color Preset	000–010	No function
						011–016	Dark Salmon
						017–022	Medium Yellow
						023–028	Blood Red
						029–034	Rose Purple
						035–040	Ocean Blue
						041–046	Summer Blue
						047–052	Lime Green
						053–058	Dark Yellow Green
						059–064	Spring Yellow
						065–070	Medium Amber
						071–076	ALD Gold
						077–082	Dark Pink
						083–088	Cool LED Bright Pink
						089–094	Special Steel Blue
						095–100	Mist Blue
						101–106	Steel Blue
						107–112	Moss Green
						113–118	Golden Amber
						119–124	Deep Golden Amber
						125–130	Pale Green
						131–136	LEE Green
						137–142	Bright Rose
						143–148	Pale Salmon
						149–154	Dark Amber
						155–160	Flame Red
						161–166	Daylight Blue
						167–172	Deep Lavender
						173–178	Robertson Blue
						179–184	Congo Blue
						185–190	Flesh Pink
						191–196	True Blue
						197–202	LCT Yellow
						203–208	White Flame Green
						209–214	Special Rose Pink
						215–220	Lighter Blue
						221–226	Light Amber
						227–232	Magical Magenta
						233–238	Moonlight White
						239–244	Blue
						245–250	Red
						251–255	Green
	3		7	9	Ring Dimmer	000–255	From low to high intensity (0–100 %)
	4		8	10	Ring Strobe	000–009	No Function
						010–099	Linear strobe, from off to high frequency (0–20 Hz)
						100–149	Pulse strobe, from low to high frequency

1CH	9CH	8CH	12CH	18CH	Function	Value	Setting
						150–199	Random strobe, from low to high frequency
						200–255	Random Strobe Sections, from low to high frequency
	5	**6**	**9**	**11**	**Ring Red**	000–255	From low to high intensity (0–100 %)
	6	**7**	**10**	**12**	**Ring Green**	000–255	From low to high intensity (0–100 %)
	7	**8**	**11**	**13**	**Ring Blue**	000–255	From low to high intensity (0–100 %)
						000–009	No Function
						010–049	Macro 1
						050–099	Macro 2
						100–109	Macro 3
						110–119	Macro 4
						120–129	Macro 5
						130–139	Macro 6
						140–149	Macro 7
	8			**14**	**Ring Macro**	150–159	Macro 8
						160–169	Macro 9
						170–179	Macro 10
						180–189	Macro 11
						190–199	Macro 12
						200–209	Macro 13
						210–219	Macro 14
						220–227	Macro 15
						228–255	Macro 16
	9			**15**	**Macro Speed**	000–255	From slow to fast
						000–009	No function
						010–049	Macro 1
						050–099	Macro 2
						100–109	Macro 3
						110–119	Macro 4
						120–129	Macro 5
						130–139	Macro 6
						140–149	Macro 7
				16	**RGB Color Effect**	150–159	Macro 8
						160–169	Macro 9
						170–179	Macro 10
						180–189	Macro 11
						190–199	Macro 12
						200–209	Macro 13
						210–219	Macro 14
						220–227	Macro 15
						228–255	Macro 16
				17	**Color Effect Speed**	000–255	From slow to fast
						000–049	No Function
						050–054	Dimmer Curve: Linear
						055–059	Dimmer Curve: Square
						060–064	Dimmer Curve: Inverse Square
			12	**18**	**Function (if DMX value is present for 3 seconds)**	065–069	Dimmer Curve: S-Curve
						070–074	Dimmer Speed: Auto
						075–079	Dimmer Speed: Slow
						080–084	Dimmer Speed: Medium

1CH	9CH	8CH	12CH	18CH	Function	Value	Setting
						085–089	Dimmer Speed: Fast
						090–109	No Function
						110–114	Display Direction: Normal
						115–119	Display Direction: Inverted
						120–124	PWM Frequency: 1 kHz
						125–129	PWM Frequency: 3 kHz
						130–134	PWM Frequency: 6 kHz
						135–139	PWM Frequency: 12 kHz
						140–144	No Function
						145–149	Fan Mode: Auto
						150–154	Fan Mode: High
						155–159	No Function
						160–164	Fan Mode: Low
						165–169	Fan Mode: Off
						170–255	No Function

6.7.2. 34, 39, 50 Channels

Figure 12



RGBWAL LED Order

34CH	39CH	50CH	Function	Value	Setting
	1	1	Dimmer	000–255	From low to high intensity (0–100 %)
	2	2	Dimmer Fine	000–255	From low to high intensity (0–100 %)
1	4	4	Center Red	000–255	From low to high intensity (0–100 %)
2	5	5	Center Red Fine	000–255	From low to high intensity (0–100 %)
3	6	6	Center Green	000–255	From low to high intensity (0–100 %)
4	7	7	Center Green Fine	000–255	From low to high intensity (0–100 %)
5	8	8	Center Blue	000–255	From low to high intensity (0–100 %)
6	9	9	Center Blue Fine	000–255	From low to high intensity (0–100 %)
7	10	10	Center Amber	000–255	From low to high intensity (0–100 %)
8	11	11	Center Amber Fine	000–255	From low to high intensity (0–100 %)
9	12	12	Center Lemon	000–255	From low to high intensity (0–100 %)
10	13	13	Center Lemon Fine	000–255	From low to high intensity (0–100 %)
	3	3	Center Strobe	000–009	No Function
				010–099	Linear strobe, from off to high frequency (0–20 Hz)
				100–149	Pulse strobe, from low to high frequency
				150–255	Random strobe, from low to high frequency
		14	CTO	000–005	No function
				006–255	1800 K–7000 K
	14	15	CCT	000–005	No function
				006–023	1800 K
				024–041	2000 K
				042–059	2200 K
				060–077	2400 K
				078–095	2600 K
				096–113	2800 K
				114–131	3000 K
				132–149	3200 K
				150–167	3600 K
				168–185	4200 K
				186–203	5600 K
				204–221	6000 K
				222–239	6500 K
				240–255	7000 K
		16	Tint	000–005	No function
				006–127	-100% to 0% (magenta to neutral)

34CH	39CH	50CH	Function	Value	Setting
				128	0% (neutral)
				129–255	0% to +100% (neutral to green)
				000–010	No function
				011–016	Dark Salmon
				017–022	Medium Yellow
				023–028	Blood Red
				029–034	Rose Purple
				035–040	Ocean Blue
				041–046	Summer Blue
				047–052	Lime Green
				053–058	Dark Yellow Green
				059–064	Spring Yellow
				065–070	Medium Amber
				071–076	ALD Gold
				077–082	Dark Pink
				083–088	Cool LED Bright Pink
				089–094	Special Steel Blue
				095–100	Mist Blue
				101–106	Steel Blue
				107–112	Moss Green
				113–118	Golden Amber
				119–124	Deep Golden Amber
		17	**Color Preset**	125–130	Pale Green
				131–136	LEE Green
				137–142	Bright Rose
				143–148	Pale Salmon
				149–154	Dark Amber
				155–160	Flame Red
				161–166	Daylight Blue
				167–172	Deep Lavender
				173–178	Robertson Blue
				179–184	Congo Blue
				185–190	Flesh Pink
				191–196	True Blue
				197–202	LCT Yellow
				203–208	White Flame Green
				209–214	Special Rose Pink
				215–220	Lighter Blue
				221–226	Light Amber
				227–232	Magical Magenta
				233–238	Moonlight White
				239–244	Blue
				245–250	Red
				251–255	Green
				000–009	No Function
				010–099	Linear strobe, from off to high frequency (0–20 Hz)
		21	**Ring Strobe**	100–149	Pulse strobe, from low to high frequency
				150–199	Random strobe, from low to high frequency
				200–255	Random Strobe Sections, from low to high frequency
		18	**Ring Red**	000–255	From low to high intensity (0–100 %)
		19	**Ring Green**	000–255	From low to high intensity (0–100 %)

34CH	39CH	50CH	Function	Value	Setting
		20	**Ring Blue**	000–255	From low to high intensity (0–100 %)
				000–009	No Function
				010–049	Macro 1
				050–099	Macro 2
				100–109	Macro 3
				110–119	Macro 4
				120–129	Macro 5
				130–139	Macro 6
				140–149	Macro 7
		22	**Ring Macro**	150–159	Macro 8
				160–169	Macro 9
				170–179	Macro 10
				180–189	Macro 11
				190–199	Macro 12
				200–209	Macro 13
				210–219	Macro 14
				220–227	Macro 15
				228–255	Macro 16
		23	**Macro Speed**	000–255	From slow to fast
				000–009	No function
				010–049	Macro 1
				050–099	Macro 2
				100–109	Macro 3
				110–119	Macro 4
				120–129	Macro 5
				130–139	Macro 6
				140–149	Macro 7
		24	**RGB Color Effect**	150–159	Macro 8
				160–169	Macro 9
				170–179	Macro 10
				180–189	Macro 11
				190–199	Macro 12
				200–209	Macro 13
				210–219	Macro 14
				220–227	Macro 15
				228–255	Macro 16
		25	**Color Effect Speed**	000–255	From slow to fast
11	**15**	**26**	**Ring 1 Red**	000–255	From low to high intensity (0–100 %)
12	**16**	**27**	**Ring 1 Green**	000–255	From low to high intensity (0–100 %)
13	**17**	**28**	**Ring 1 Blue**	000–255	From low to high intensity (0–100 %)
14	**18**	**29**	**Ring 2 Red**	000–255	From low to high intensity (0–100 %)
15	**19**	**30**	**Ring 2 Green**	000–255	From low to high intensity (0–100 %)
16	**20**	**31**	**Ring 2 Blue**	000–255	From low to high intensity (0–100 %)
17	**21**	**32**	**Ring 3 Red**	000–255	From low to high intensity (0–100 %)
18	**22**	**33**	**Ring 3 Green**	000–255	From low to high intensity (0–100 %)
19	**23**	**34**	**Ring 3 Blue**	000–255	From low to high intensity (0–100 %)
20	**24**	**35**	**Ring 4 Red**	000–255	From low to high intensity (0–100 %)
21	**25**	**36**	**Ring 4 Green**	000–255	From low to high intensity (0–100 %)
22	**26**	**37**	**Ring 4 Blue**	000–255	From low to high intensity (0–100 %)
23	**27**	**38**	**Ring 5 Red**	000–255	From low to high intensity (0–100 %)
24	**28**	**39**	**Ring 5 Green**	000–255	From low to high intensity (0–100 %)

34CH	39CH	50CH	Function	Value	Setting
25	**29**	**40**	**Ring 5 Blue**	000–255	From low to high intensity (0–100 %)
26	**30**	**41**	**Ring 6 Red**	000–255	From low to high intensity (0–100 %)
27	**31**	**42**	**Ring 6 Green**	000–255	From low to high intensity (0–100 %)
28	**32**	**43**	**Ring 6 Blue**	000–255	From low to high intensity (0–100 %)
29	**33**	**44**	**Ring 7 Red**	000–255	From low to high intensity (0–100 %)
30	**34**	**45**	**Ring 7 Green**	000–255	From low to high intensity (0–100 %)
31	**35**	**46**	**Ring 7 Blue**	000–255	From low to high intensity (0–100 %)
32	**36**	**47**	**Ring 8 Red**	000–255	From low to high intensity (0–100 %)
33	**37**	**48**	**Ring 8 Green**	000–255	From low to high intensity (0–100 %)
34	**38**	**49**	**Ring 8 Blue**	000–255	From low to high intensity (0–100 %)
				000–049	No Function
				050–054	Dimmer Curve: Linear
				055–059	Dimmer Curve: Square
				060–064	Dimmer Curve: Inverse Square
				065–069	Dimmer Curve: S-Curve
				070–074	Dimmer Speed: Auto
				075–079	Dimmer Speed: Slow
				080–084	Dimmer Speed: Medium
				085–089	Dimmer Speed: Fast
				090–109	No Function
	39	**50**	**Function (if DMX value is present for 3 seconds)**	110–114	Display Direction: Normal
				115–119	Display Direction: Inverted
				120–124	PWM Frequency: 1 kHz
				125–129	PWM Frequency: 3 kHz
				130–134	PWM Frequency: 6 kHz
				135–139	PWM Frequency: 12 kHz
				140–144	No Function
				145–149	Fan Mode: Auto
				150–154	Fan Mode: High
				155–159	No Function
				160–164	Fan Mode: Low
				165–169	Fan Mode: Off
				170–255	No Function

6.8. RDM Information

This device supports RDM (see 6.8.2. Supported RDM PIDs (Parameter IDs)).

6.8.1. RDM Details

- Responder ID: 29B4:11AXXXXX
- Manufacturer's ID: Showtec (Highlite International B.V.)
- Manufacturer Label: Showtec
- Model Description: Lumina Sola
- Model ID: 282 (11A hexadecimal)
- Device Label: Lumina Sola

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		*	*
CURVE	0x0343		*	*
CURVE_DESCRIPTION	0x0344	*	*	
MODULATION_FREQUENCY	0x0347		*	*
MODULATION_FREQUENCY_ DESCRIPTION	0x0348	*	*	

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 6.6.7.9. Factory Reset on page 33)
The device does not respond to DMX control	The controller is not connected	• Connect the controller
	The signal is reversed. The 3-pin/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 (see 6.6.8. Information on page 33). 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.

8.3. 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.

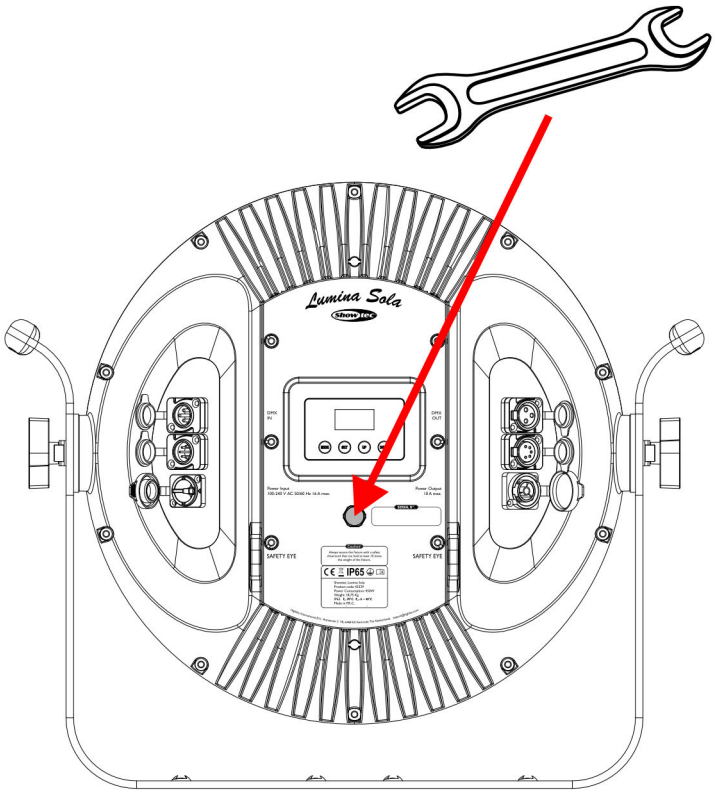
8.4.1. Draining Condensation Water

The Lumina Sola 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 (09)** 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 (09)** back. Make sure that you do not overtighten it.

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 8.3. Basic Cleaning Instructions on page 45).
- 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.