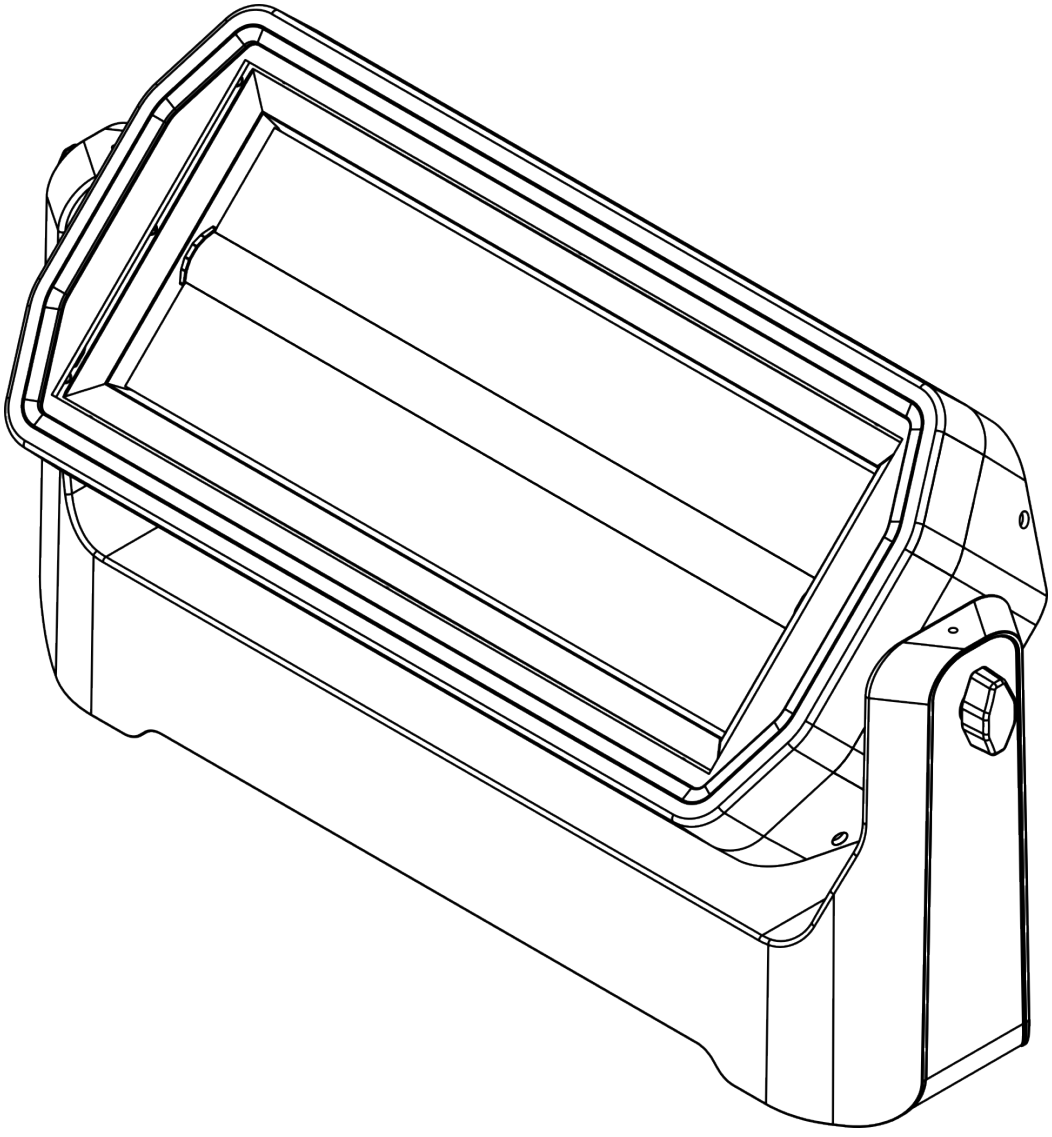
infinity

USER MANUAL

ENGLISH

V1.0



Raccoon S420/4

Product code: 200600

Preface

Thank you for purchasing this Infinity 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.

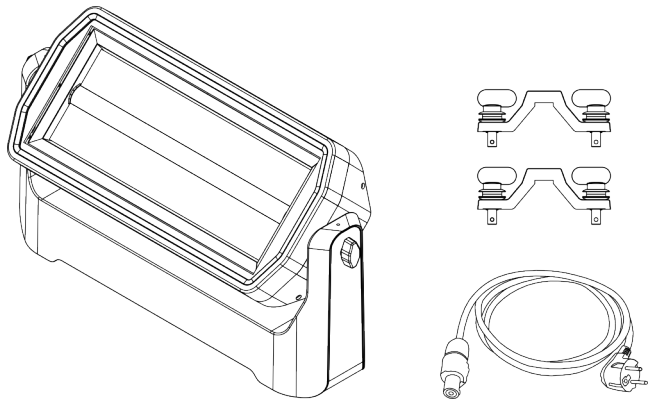
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

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

Your shipment includes:

- Infinity Raccoon S420/4
- 2 x Quick-lock brackets
- Schuko to Power Pro True cable (1,5 m)
- User manual

Figure 1



1.2. Intended Use

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

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

1.3. LEDs Lifespan

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

1.4. Product Lifespan

This device is not designed for permanent operation.

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

1.5. Text Conventions

Throughout the user manual the following text conventions are used:

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

1.6. Symbols and Signal Words

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

Always follow the instructions provided in this user manual.



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



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



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



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



Important Read and observe the instructions in this document.



Electrical hazard



Provides important information about the disposal of this product.

1.7. Symbols on the Information Label

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

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 for stage lighting. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

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



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

Make sure that:

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



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

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

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

2.2. Requirements for the User

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

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

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

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

2.3. Personal Protective Equipment

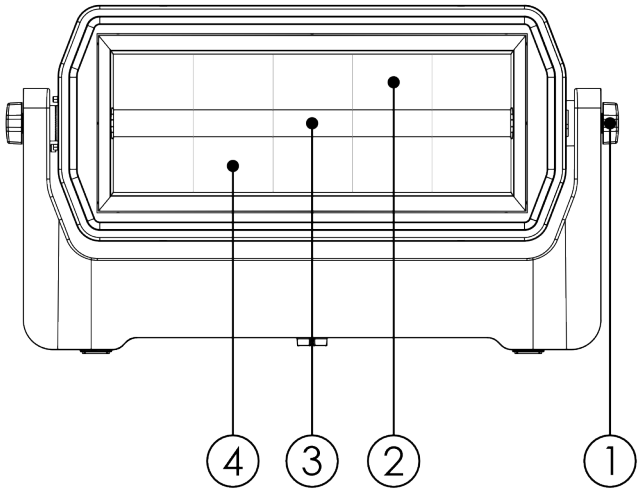
During installation, deinstallation and rigging wear personal protective equipment in compliance with the national and site-specific regulations.

3. Description of the Device

The Infinity Raccoon S420/4 is a professional, IP65-rated strobe/wash combination fixture with 35 CW strobe LEDs and 420 RGBW wash LEDs. The strobe LEDs and the top and bottom wash LEDs can each be controlled in 5 different sections. The device can be installed indoors and outdoors.

3.1. Front View

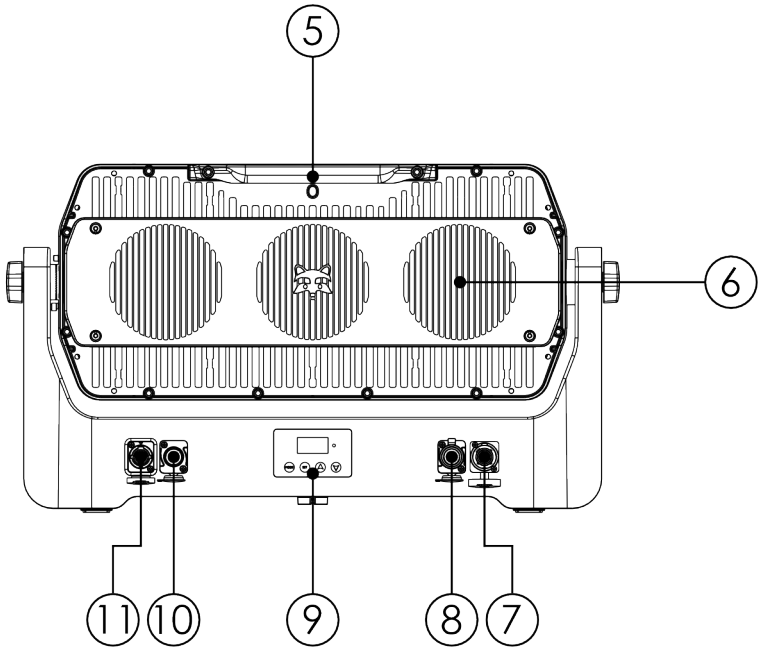
Figure 2



01) 2 x angle adjustment screws
02) 210 x 2 W RGBW wash LEDs
03) 35 x CW strobe LEDs
04) 210 x 2 W RGBW wash LEDs

3.2. Back View

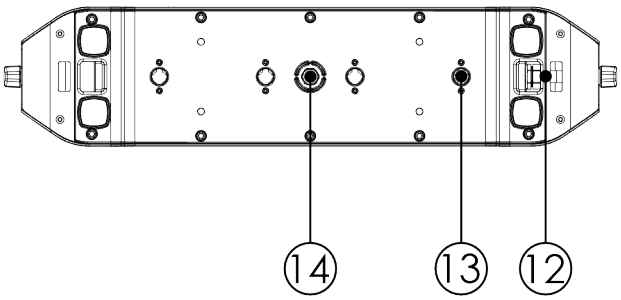
Figure 3



05) Carrying handle
06) 3 x cooling fans
07) IP65-rated Power Pro True power connector OUT
08) IP65-rated 5-pin DMX signal connector OUT
09) Control panel: OLED display and control buttons
10) IP65-rated 5-pin DMX signal connector IN
11) IP65-rated Power Pro True connector IN

3.3. Bottom View

Figure 4



12) 2 x safety eyes
13) 4 x mounting bracket holes
14) Protective vent (M12 x 1,5)

3.4. Product Specifications

Model:	Raccoon S420/4

Source:	
Light Source Type	LED
Light Source Quantity	420
Light Source Power	2 W
LED Color Type	CW / RGBW
Life Expectancy	50000 h
Refresh Rate	12000 Hz
Luminous Flux (Total)	72000 lm
Luminous Flux (Red)	5035 lm
Luminous Flux (Green)	10060 lm
Luminous Flux (Blue)	2525 lm
Luminous Flux (White)	11800 lm
CRI	92
CCT	6500 K

Control and Programming:	
Control Mode	DMX / Manual
Protocols	DMX / RDM
Wireless	LumenRadio
Display	OLED

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

Electrical Specifications and Connections:	
Power Supply	100–240 V AC 50/60 Hz
Power Consumption	860 W
Power Connector IN	Power Pro True
Power Connector OUT	Power Pro True
DMX Connector IN	XLR 5P
DMX Connector OUT	XLR 5P

Mechanical Specifications:	
Height	351 mm
Width	617 mm
Depth	157 mm
Weight	17,8 kg

IP Rating	IP65
Housing	Aluminium
Color	Black

Product Properties:	
Cooling	Convection/Axial fan

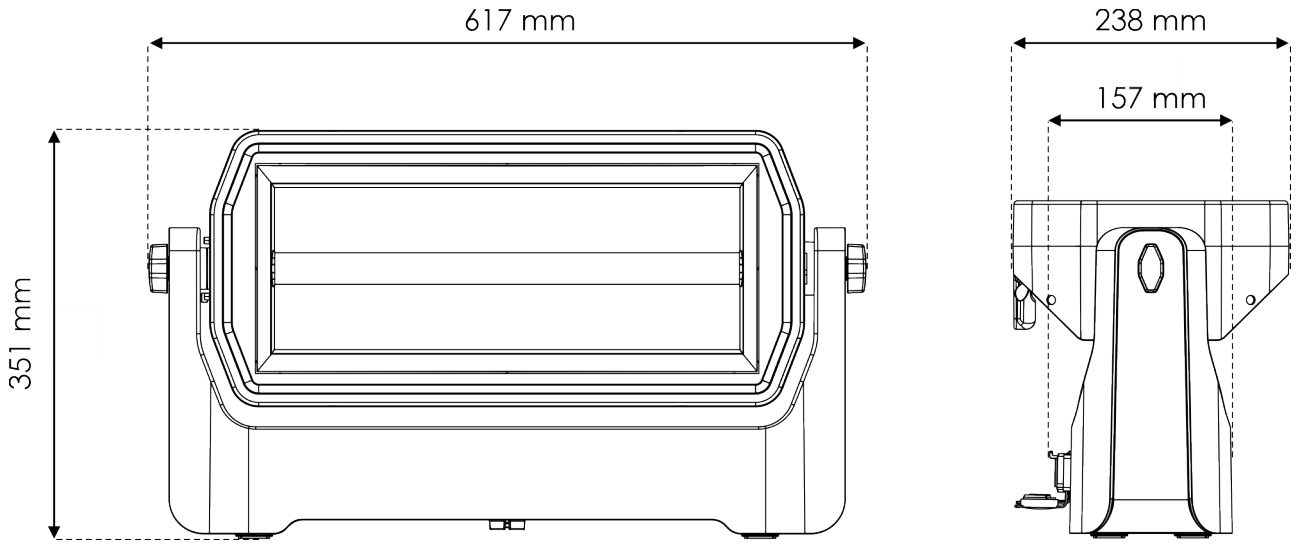
Rigging:	
Mounting Options	Quick-Lock
Safety Attachment	Yes

Thermal Specifications:	
Maximum Ambient Temperature	45 °C
Minimum Ambient Temperature	-20 °C
Minimum Operating Temperature	0 °C

Included Items:	
Included Cables	Power Pro True Cable

3.5. Dimensions

Figure 5



3.6. Optional Accessories

- Product code: 200620 (Top hat for Raccoon S420/4)
- Product code: 200621 (Barndoor for Raccoon S420/4)
- Product code: 200622 (L-Bracket for Raccoon S420/4)
- Product code: 200623 (Case for 3x Raccoon S420/4)
- Product code: 200624 (Case for 3x Raccoon S420/4)
- Product code: 200625 (20° Diffuser for Raccoon S420/4)
- Product code: 200626 (40° Diffuser for Raccoon S420/4)
- Product code: 200627 (90° Diffuser for Raccoon S420/4)
- Product code: 200628 (15° x 60° Diffuser for Raccoon S420/4)

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 device must be installed away from heating sources and direct sunlight.
- The ambient temperature must be in the range -20 and 45 °C.

4.4. Rigging

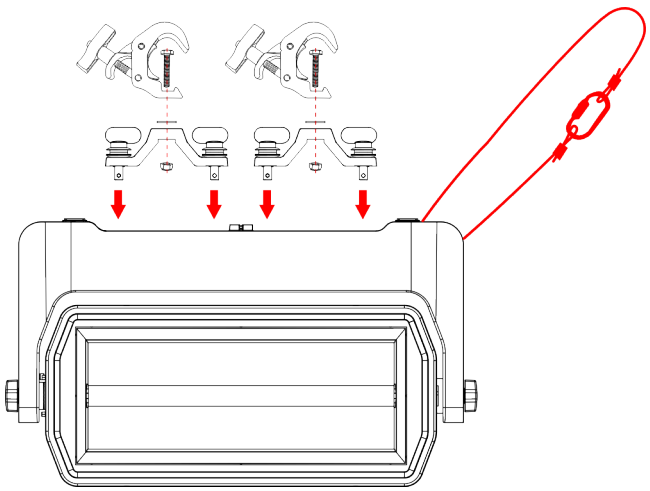
The device can be positioned on a flat surface or mounted to a truss or other rigging structure in any orientation. Make sure that all loads are within the pre-determined limits of the supporting structure.

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

To mount the device, follow the steps below:

01) Fasten the 2 quick-lock brackets, supplied with the device, on the **mounting bracket holes (13)**.
02) Install clamps. Make sure that you use clamps suitable for attaching the device to a truss.

Figure 6



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 a **safety eye (12)**.

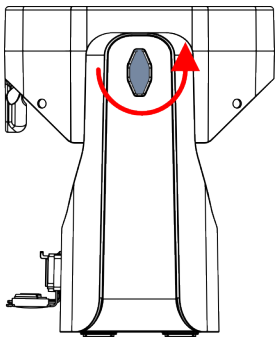
4.5. Angle Adjustment

You can adjust the angle of the device with the 2 **angle adjustment screws (01)**. One of the screws has interlocking teeth.

To adjust the angle, follow the steps below:

01) Turn the **angle adjustment screw (01)** with interlocking teeth counterclockwise to loosen it.
02) Tilt the device to the desired angle.
03) Turn the **angle adjustment screw (01)** with interlocking teeth clockwise to tighten it. Make sure that the device cannot move freely after the 2 **angle adjustment screws (01)** are tightened.

Figure 7



Note:

Use the 2nd angle adjustment screw to fine tune the tilt resistance.

4.6. Installation of Accessories

There are a number of accessories available for the device (see 3.6. Optional Accessories on page 11).

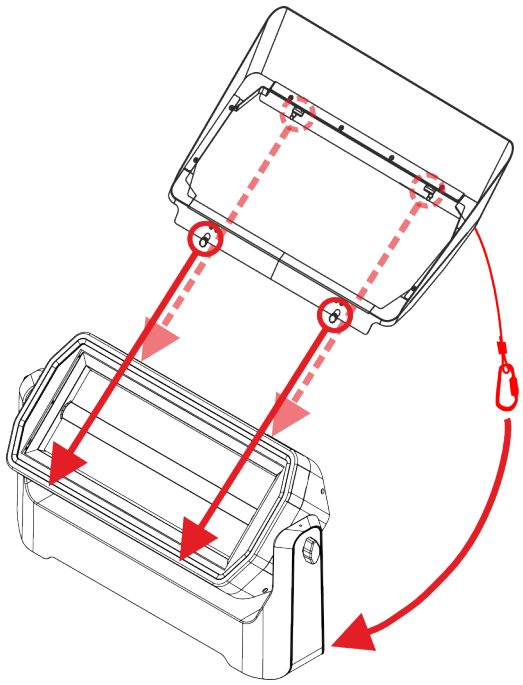
The accessories are not supplied with the device. Contact your Highlite International dealer for more information.

4.6.1. Top Hat Installation

To install the top hat, follow the steps below:

01) Align the top hat with the device.
02) Angle the top hat to insert the top or bottom screws into the accessory holes built into the device frame.
03) On the top hat, pull the spring-loaded screws not yet inserted and position them over the accessory holes on the device.
04) Release the spring-loaded screws into the accessory holes on the device to lock the top hat in position.
05) Secure the top hat to the **safety eye (12)** on the device using the included safety cable.

Figure 8

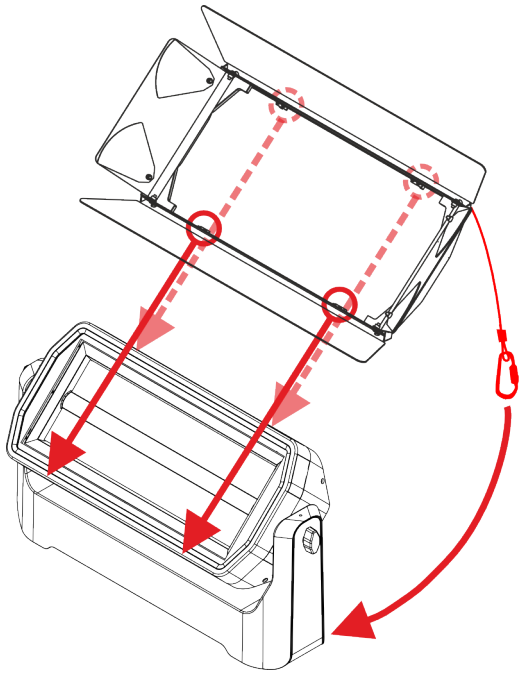


4.6.2. Barndoor Installation

To install the barndoor, follow the steps below:

01) Align the barndoor with the device.
02) Angle the barndoor to insert the top or bottom screws into the accessory holes built into the device frame.
03) On the barndoor, pull the spring-loaded screws not yet inserted and position them over the accessory holes on the device.
04) Release the spring-loaded screws into the accessory holes on the device to lock the barndoor in position.
05) Secure the barndoor to the **safety eye (12)** on the device using the included safety cable.

Figure 9



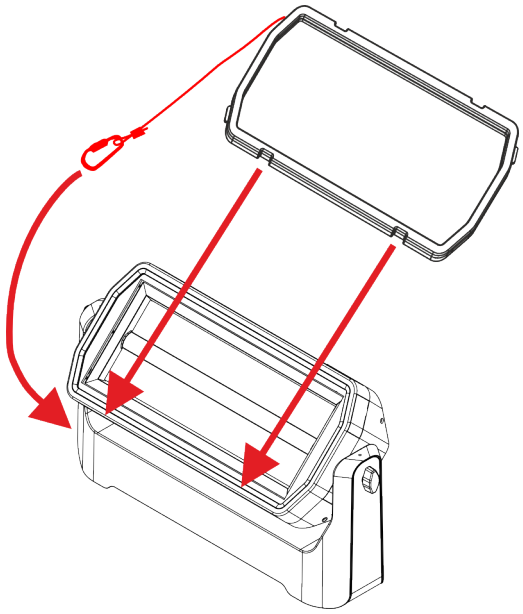
4.6.3. Diffuser Installation

The diffuser changes the beam angle of the device. The diffuser is equipped with 8 magnets to hold it in place.

To install the diffuser, follow the steps below:

01) Attach the magnetic side of the diffuser to the front of the device. The magnets hold the diffuser in position.
02) Secure the diffuser to the **safety eye (12)** on the device using the included safety cable.

Figure 10



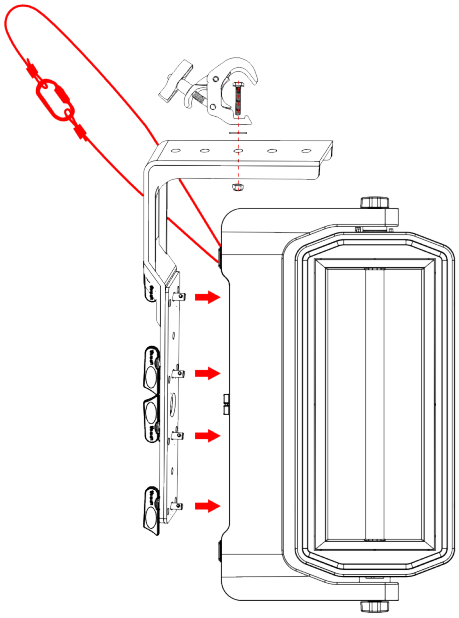
4.6.4. L-Bracket Installation

Install the L-Bracket to mount the device vertically or at an angle.

To install the L-Bracket, follow the steps below:

01) Fasten the L-Bracket on the **mounting bracket holes (13)**.
02) Install a clamp. Make sure that you use clamps suitable for attaching the device to a truss.

Figure 11



03) Attach the device to the supporting structure. Make sure that device cannot move freely.
04) Secure the device with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the device. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. Put the safety cable through the **safety eye (12)**.

Note:

The L-bracket has 5 holes that can be used to attach the clamp. The clamp and hole used affects the angle at which the device will hang. Approximate hanging angles from the inner to outer holes are: 0°, 6°, 12°, 18° and 24°.

4.7. Connecting to Power Supply



DANGER
Electric shock caused by short-circuit

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

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

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

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

This device is IP65 rated.

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

4.8. Power Linking of Multiple Devices

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

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



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

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

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

Maximum recommended number of devices:
- at 100–120 V: 3 devices Raccoon S420/4
- at 200–240 V: 6 devices Raccoon S420/4

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 Raccoon S420/4 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.

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 Raccoon S420/4 has 5-pin DMX signal IN and OUT connectors.

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

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

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

Note:

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

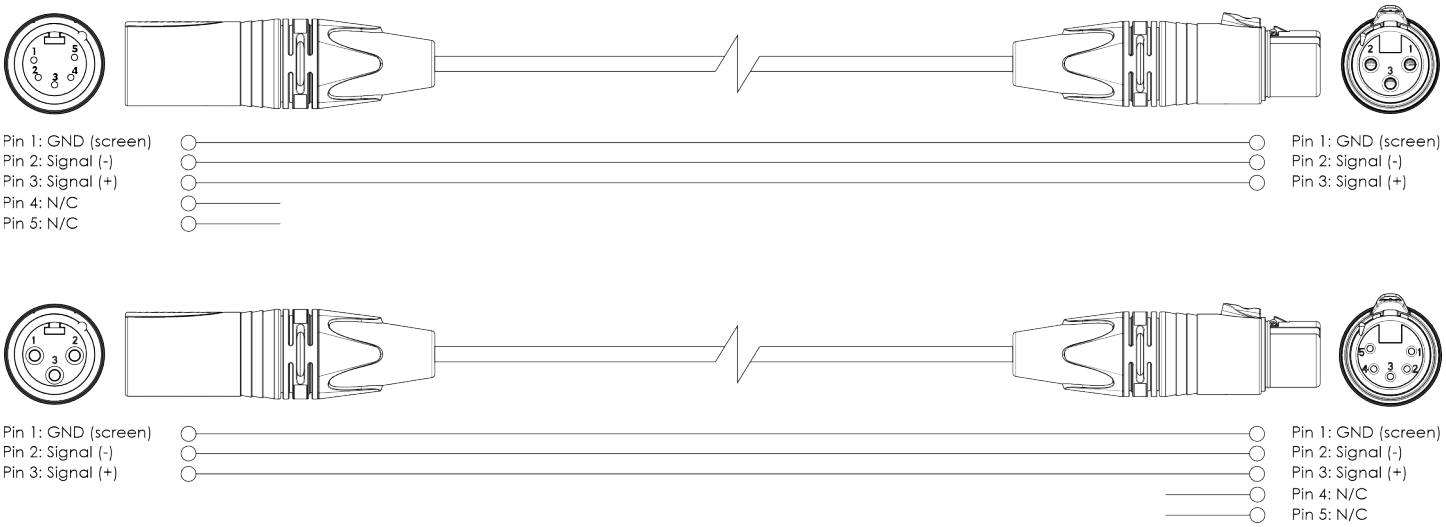
5.3.2. DMX Cables

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

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

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

Figure 12

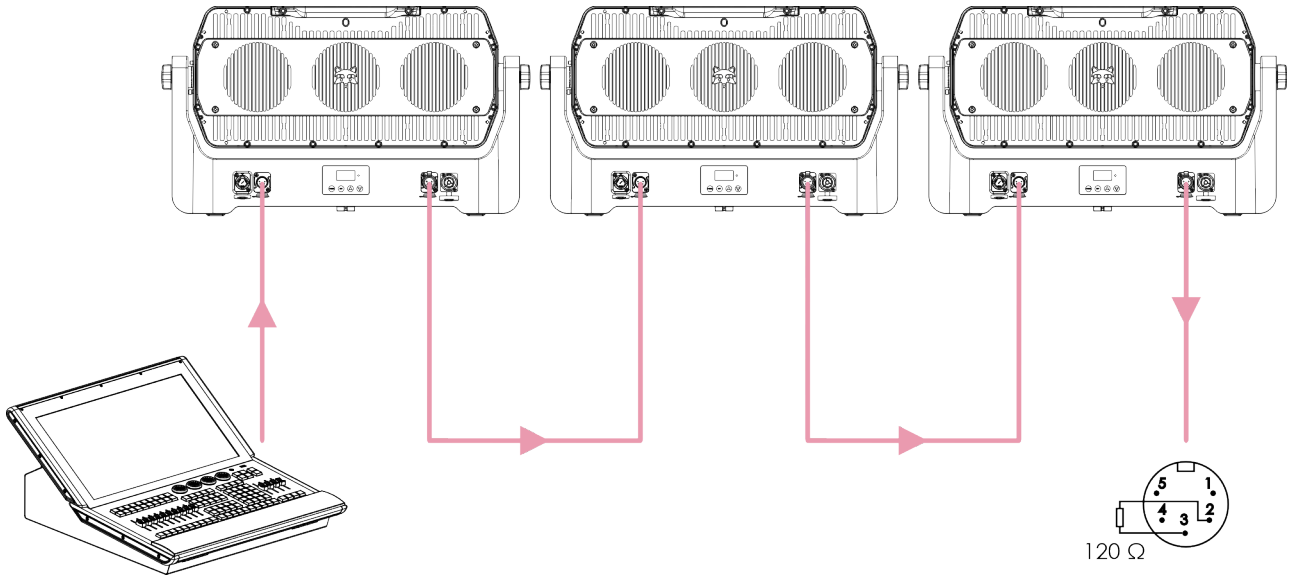


5.3.3. DMX Linking

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

Figure 13



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 Raccoon S420/4 has 6 personalities: Strobe (4 channels), Basic (13 channels), Basic FX (23 channels), Helix (29 channels), RAW (46 channels), Full (59 channels).

If you want to connect multiple devices on one data link and use them in 59-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 60 (060), as 1 + 59 = 60.
03) Set the starting address of the 3rd device on the data link to 119 (119), as 60 + 59 = 119.
04) Continue assigning the starting addresses of the remaining devices by adding 59 to the previous number each time.

Make sure that you do not have any overlapping channels in order to control each Raccoon S420/4 correctly. If two or more devices have the same DMX starting address, they operate in the same way.

5.3.5. Wireless G3 and G4s Connection

The device is equipped with a 2,4 GHz wireless receiver from LumenRadio. The W-DMX receiver is compatible only with other W-DMX devices. It can be paired only with transceivers and transmitters with a W-DMX module.

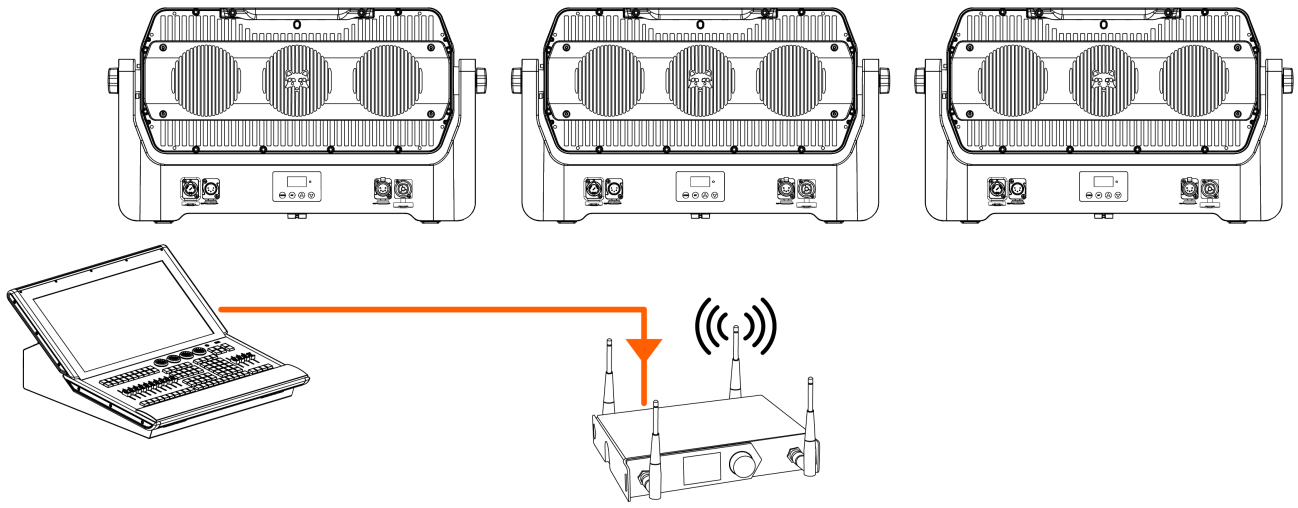
Communication distance	**Depending on the transmitting power or transmitter module**
Test conditions	WDMX TRx Transmitter module, 2 dBi Antenna, transmitting power 20 dBm (100 mW)
Range indoor	60 m
Range outdoor	250 m

Recommended transceiver: 51503 Lumenradio Stardust (G3, G4s, CRMX)

To connect multiple devices via wireless DMX, follow the steps below:

01) Set the devices to receive wireless DMX signal, refer to Control Modes (see 6.2. Control Modes on page 21).
02) Connect the transceiver/transmitter to the lighting controller.
03) Follow the user manual supplied with the transceiver to pair the devices.

Figure 14



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 for stage lighting. 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 Raccoon S420/4 can be operated with a DMX controller or as a stand-alone device.

The Raccoon S420/4 supports the following control modes:

- Stand-alone: Manual operation, auto operation mode (built-in programs, color presets)
- Master/Slave: Manual operation, auto operation mode (built-in programs, color presets)
- DMX-512: Strobe (4 channels), Basic (13 channels), Basic FX (23 channels), Helix (29 channels), RAW (46 channels), Full (59 channels)
- CRMX: Strobe (4 channels), Basic (13 channels), Basic FX (23 channels), Helix (29 channels), RAW (46 channels), Full (59 channels)

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

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

- Set up the master/slave mode in the Slave mode menu (see 6.6.8. Slave Mode on page 27)
- Select manual mode (see 6.6.5. Manual Mode on page 26) or auto mode (see 6.6.6. Auto Mode on page 26)

To operate the device with a DMX controller:

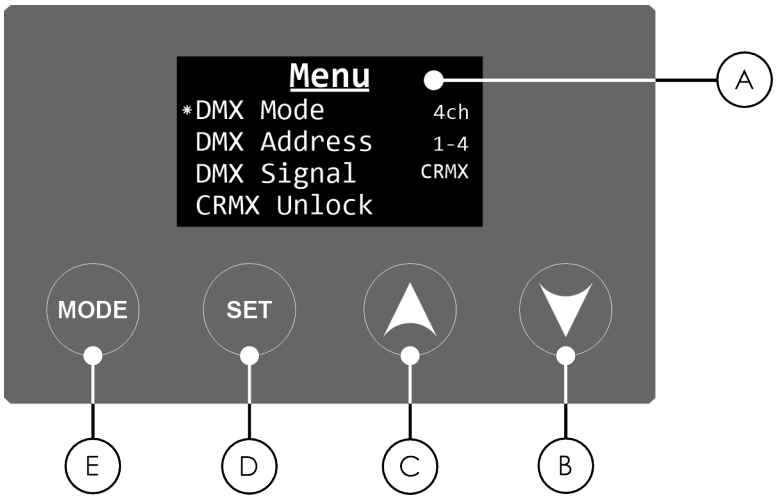
01) Select the DMX channel mode in the DMX Mode menu (see 6.6.1. DMX Mode on page 25). Refer to the DMX chart (see 6.7.1. DMX Channel Overview on page 30) for a complete overview of all DMX channels.
02) Set the DMX starting address of the device in DMX Address menu (see 6.6.2. DMX Address on page 25).
03) Set the behavior of the device in case there is no DMX signal in the DMX Lost menu (see 6.6.15. DMX Lost on page 29).

To operate the device wirelessly with a DMX controller in combination with a wireless transceiver:

01) Select CRMX in the DMX signal menu (see 6.6.3. DMX Signal on page 25).
02) Set the DMX starting address of the device in DMX Address menu (see 6.6.2. DMX Address on page 25).
03) Select the DMX channel mode in the DMX Mode menu (see 6.6.1. DMX Mode on page 25). Refer to the DMX chart (see 6.7.1. DMX Channel Overview on page 30) for a complete overview of all DMX channels.

6.3. Control Panel

Figure 15



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

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

6.4. Start-up

Upon start-up, the display shows a splash screen with the Infinity logo and the name of the device.



Immediately afterwards, the display shows a second splash screen. This screen provides information about the software version and the temperature and status of the wash LEDs.



Immediately afterwards, the display shows the start screen. The start screen provides information about the current DMX mode, the DMX signal (not DMX), the DMX address, the LED frequency and the temperature of the LEDs.



Note:

If no button is pressed, after 40 seconds the backlight of the display turns off. You can change this setting in the Backlight submenu (see 6.6.14. Display Backlight on page 29). If the DMX signal is lost, the display blinks.

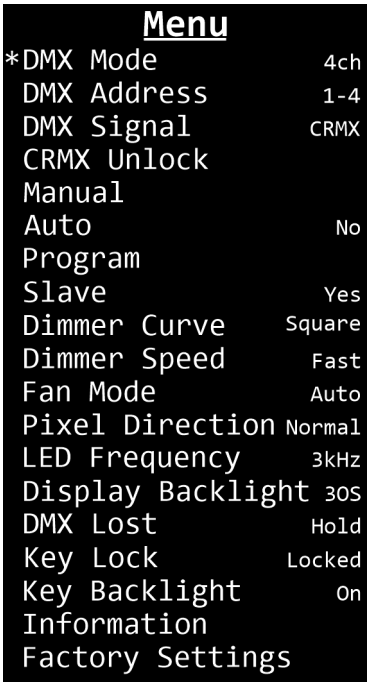
6.5. Menu Overview

Level 1	Level 2	Level 3
DMX Mode (see 6.6.1. DMX Mode on page 25)	Strobe (4)	
	Basic (13)	
	Basic FX (23)	
	Helix (29)	
	RAW (46)	
	Full (59)	
DMX Address (see 6.6.2. DMX Address on page 25)	1–512	
DMX Signal (see 6.6.3. DMX Signal on page 25)	DMX	
	CRMX	
CRMX Unlock (see 6.6.4. CRMX Unlock on page 25)	Yes	
	No	
Manual Mode (see 6.6.5. Manual Mode on page 26)	Red	0–255
	Green	0–255
	Blue	0–255
	White	0–255
	Strobe White	0–255
Auto Mode (see 6.6.6. Auto Mode on page 26)	Yes	
	No	
Program Mode (see 6.6.7. Program Mode on page 26)	Mode	1–35
	Color (Mode 1)	1–38
	Speed (Mode 2–35)	1–100
	Strobe	0–99
Slave Mode (see 6.6.8. Slave Mode on page 27)	Yes	
	No	
Dimmer Curve (see 6.6.9. Dimmer Curve on page 27)	Linear	
	Square	
	Inverse Square	
	S-Curve	
Dimmer Speed (see 6.6.10. Dimmer Speed on page 27)	Fast	
	Smooth	
Fan Mode (see 6.6.11. Fan Mode on page 28)	Auto	
	High	
	Slow	
Pixel Direction (see 6.6.12. Pixel Direction on page 28)	Normal	
	Invert	
LED Frequency (see 6.6.13. LED Frequency on page 28)	12 kHz	
	6 kHz	
	3 kHz	
	1 kHz	
Display Backlight (see 6.6.14. Display Backlight on page 29)	5 S	
	10 S	
	20 S	
	30 S	
	Stay On	
DMX Lost (see 6.6.15. DMX Lost on page 29)	Blackout	
	Hold	
	Manual	
	Program	

Key Lock (see 6.6.16. Key Lock on page 29)	Locked	
	Unlocked	
Key Backlight (see 6.6.17. Key Backlight on page 30)	On	
	Off	
Information (see 6.6.18. Information on page 30)	Version	Display
		LED U1
		LED U2
	Operating Hours	
	LED Temperature	
	RDM ID	
	Product	
	Device Label	
	Fan Speed	LED Fan 1
		LED Fan 2
		LED Fan 3
		Fan Speed
Factory Settings (see 6.6.19. Factory Settings on page 30)	Abort	
	Reset Settings	

6.6. Main Menu Options

The main menu has the following 19 options:



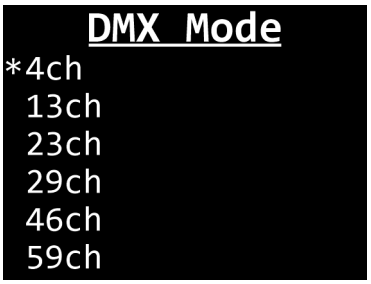
DMX Mode
DMX Address
DMX Signal
CRMX Unlock
Manual
Auto
Program
Slave
Dimmer Curve
Dimmer Speed
Fan Mode
Pixel Direction
LED Frequency
Display Backlight
DMX Lost
Key Lock
Key Backlight
Information
Factory Settings

01) Press the **DOWN button (B)** or the **UP button (C)** to navigate through the main menu.
02) Press the **SET button (D)** to open the submenus.

6.6.1. DMX Mode

In this menu, you can select the DMX channel mode.

01) Press the **DOWN button (B)** or the **UP button (C)** to navigate through the main menu. There are 6 options:



- Strobe (4): 4 channels
- Basic (13): 13 channels
- Basic FX (23): 23 channels
- Helix (29): 29 channels
- RAW (46): 46 channels
- Full (59): 59 channels

02) Press the **SET button (D)** to confirm the selection. For more information, refer to the DMX chart (see 6.7.1. DMX Channel Overview on page 30).

6.6.2. DMX Address

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

01) Press the **DOWN button (B)** or the **UP button (C)** to select the DMX starting address of the device. The selection range depends on the active DMX channel mode.
- Strobe: 001–509 (4 channels)
- Basic: 001–500 (13 channels)
- Basic FX: 001–490 (23 channels)
- Helix: 001–484 (29 channels)
- RAW: 001–467 (46 channels)
- Full: 001–454 (59 channels)

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

Note:

The display shows the DMX address range of the device. For example, "2–14" means that the DMX starting address of the device is 002 and the device is operating in a 13-channel mode. The DMX address range of the device is 002–014.



6.6.3. DMX Signal

In this menu, you can select the DMX signal.

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 2 options:
- DMX
- CRMX

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

6.6.4. CRMX Unlock

In this menu, you can unlock or lock CRMX (wireless DMX).

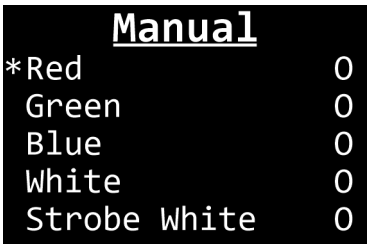
01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 2 options:
- Yes: CRMX is unlocked
- No: CRMX is locked

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

6.6.5. Manual Mode

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

01) Press the **DOWN button (B)** or **UP button (C)** to select one of the 5 options:



- Red: The adjustment range is 0–255, from low to high intensity
- Green: The adjustment range is 0–255, from low to high intensity
- Blue: The adjustment range is 0–255, from low to high intensity
- White: The adjustment range is 0–255, from low to high intensity
- Strobe White: The adjustment range is 0–255, from low to high intensity

02) Press the **SET button (D)** to confirm the selection.
03) Press the **DOWN button (B)** or **UP button (C)** to decrease or increase the values.
04) Press the **SET button (D)** to confirm the selection.

6.6.6. Auto Mode

In this menu, you can turn auto mode ON or OFF.

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 2 options:
- Yes: Auto mode turns on
- No: Auto mode turns off

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

6.6.7. Program Mode

In this menu, you can select one the preset programs and adjust its values.

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 3 options:



- Mode: The selection range is 1–35
- Color (Mode 1 only): The selection range is 1–38
- Speed (Modes 2–35): The selection range is 1–100
- Strobe: The selection range is 0–99

02) Press the **SET button (D)** to confirm the selection.
03) Press the **DOWN button (B)** or the **UP button (C)** to decrease or increase the values.
04) Press the **SET button (D)** to confirm the selection.

Note:

Each program mode starts with default values or the last used preset values.

To turn off program mode, select Manual or Auto Mode.

6.6.8. Slave Mode

In this menu, you can turn slave mode ON or OFF.

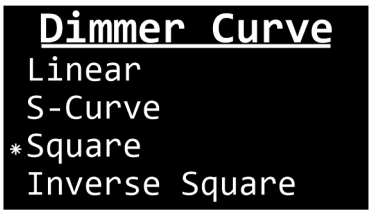
01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 2 options:
- Yes: Slave mode turns on
- No: Slave mode turns off

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

6.6.9. Dimmer Curve

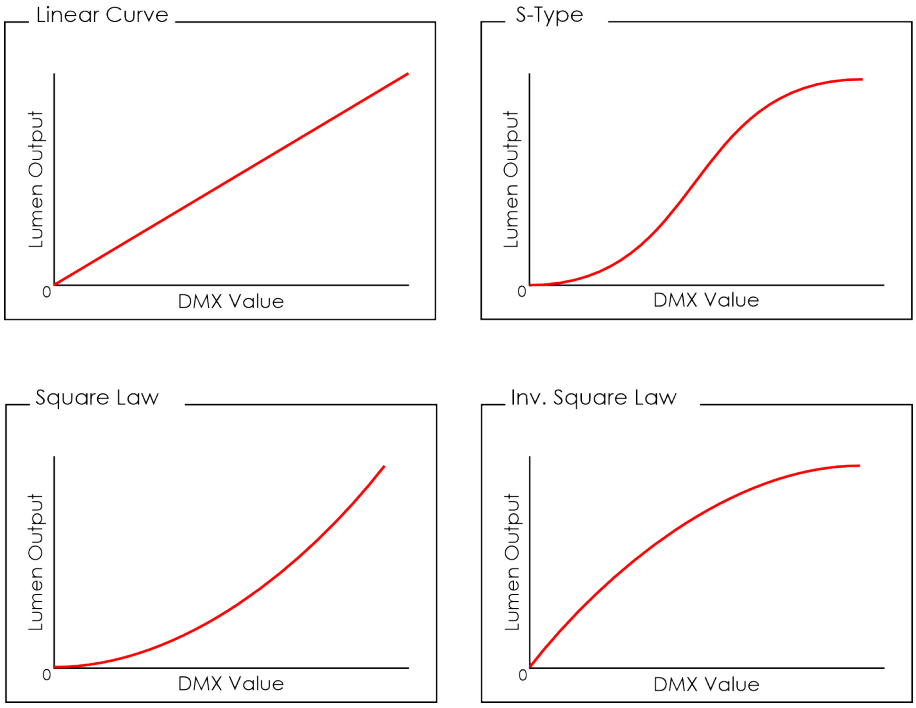
In this menu, you can select the dimming curve.

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 4 options:



- Linear
- Square
- Inverse Square
- S-Curve

Figure 16



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

6.6.10. Dimmer Speed

In this menu, you can set the dimmer speed.

01) Press the **DOWN button (B)** or the **UP button (C)** to choose one of the 2 options:
- Fast: Fast dimmer
- Smooth: Smooth dimmer

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

6.6.11. Fan Mode

In this menu, you can select the fan mode.

01) Press the **DOWN button (B)** or the **UP button (C)** to choose one of the 3 options:
- Auto: Automatic fan
- High: Fast fan
- Slow: Slow fan

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

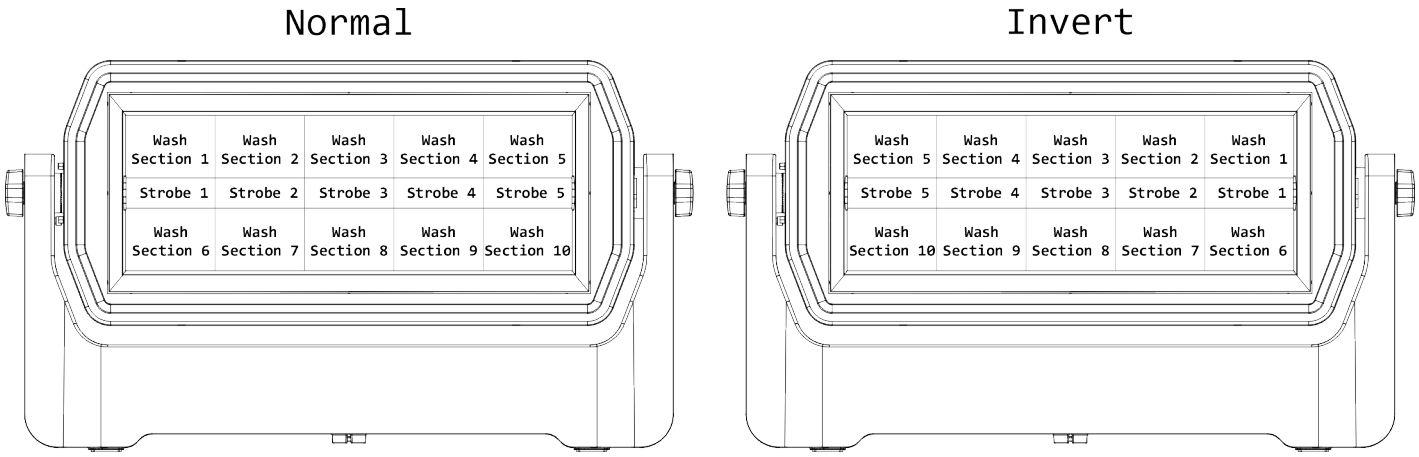
6.6.12. Pixel Direction

In this menu, you can select the pixel direction. See Figure 16.

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 2 options:
- Normal: Pixel direction is normal
- Invert: Pixel direction is inverted

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

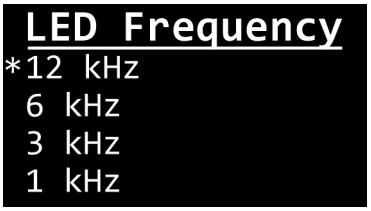
Figure 17



6.6.13. LED Frequency

In this menu, you can adjust the PWM (pulse-width modulation) frequency of the LEDs.

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 4 options:



- 12 kHz
- 6 kHz
- 3 KHz
- 1 kHz

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

6.6.14. Display Backlight

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

01) Press the **DOWN button (B)** or the **UP Button (C)** to select one of the 5 options:



- 5 s: The display returns to the start screen after 5 seconds of inactivity. After 10 seconds more, the backlight of the display turns off
- 10 s: The display returns to the start screen after 10 seconds of inactivity. After 10 seconds more, the backlight of the display turns off
- 20 s: The display returns to the start screen after 20 seconds of inactivity. After 10 seconds more, the backlight of the display turns off
- 30 s: The display returns to the start screen after 30 seconds of inactivity. After 10 seconds more, the backlight of the display turns off
- Stay On: The display returns to the start screen after 30 seconds of inactivity and the backlight remains on

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

6.6.15. DMX Lost

In this menu, you can determine the behavior of the device in case there is no DMX signal.

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 4 options:



- Blackout: The device blacks out the light output
- Hold: The device uses the last DMX signal correctly received
- Manual: The device uses the values selected in Manual Mode (see 6.6.5. Manual Mode on page 26)
- Program: The device uses the values selected in Program Mode (see 6.6.7. Program Mode on page 26)

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

6.6.16. Key Lock

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

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 2 options:
- Locked: The key lock is on. Do not press any button within 10 s of activating the lock. If you do so, the lock will be canceled. The selection remains but the keys are not locked
- Unlocked: The key lock is off

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

Note:

If the display is locked, you need to enter a password to access the main menu. The default password is pressing the **DOWN button (B)** and the **UP button (C)** in the following order: **UP**, **DOWN**, **UP**, **DOWN**.

6.6.17. Key Backlight

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

01) Press the **DOWN button (B)** or the **UP button (C)** to select one of the 2 options:
- On: Key backlight turns on
- Off: Key backlight turns off

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

6.6.18. Information

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

01) Press the **DOWN button (B)** or the **UP button (C) t**o select one of the 7 options:



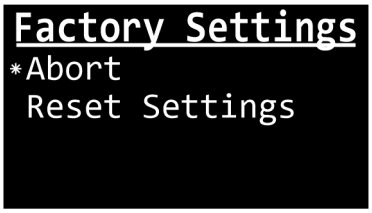
- Version: Shows the current firmware version of the display and the LEDs
- Operating Hours: Shows the total hours of operation of the device
- LED Temperature: Provides information about the temperature of the LEDs
- RDM ID: Shows the RDM identification number of the device (29B4:0AAXXXXX)
- Product: Shows the name of the device
- Device Label: Shows the RDM device label of the device
- Fan Speed: Shows the current speed and power of the fans

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

6.6.19. Factory Settings

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

01) Press the **DOWN button (B)** or the **UP button (C)** to choose one of the 2 options:



- Abort: Cancel the reset and return to the previous screen
- Reset Settings: Reset all settings

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

6.7. DMX Channels

6.7.1. DMX Channel Overview

Function	Strobe 4 CH	Basic 13 CH	Basic FX 23 CH	Helix 29 CH	RAW 46 CH	Full 59 CH
Strobe Dimmer	1	1	1	1		1
Strobe Flash Duration	2	2	2	2		2
Strobe Speed	3	3	3	3		3
Strobe Type	4	4	4	4		4
Strobe Programs			5			5
Strobe Program Speed			6			6

Function	Strobe 4 CH	Basic 13 CH	Basic FX 23 CH	Helix 29 CH	RAW 46 CH	Full 59 CH
Strobe Dimmer Section A			7		1	7
Strobe Dimmer Section B			8		2	8
Strobe Dimmer Section C			9		3	9
Strobe Dimmer Section D			10		4	10
Strobe Dimmer Section E			11		5	11
RGBW Dimmer		5	12	5		12
RGBW Flash Duration		6	13	6		13
RGBW Strobe Speed		7	14	7		14
RGBW Strobe Type		8	15	8		15
Red All		9	16			
Green All		10	17			
Blue All		11	18			
White All		12	19			
Color Preset			20			16
Color Program			21			17
Color Program Speed			22			18
Red Group 1 (1 + 6)				9		
Green Group 1 (1 + 6)				10		
Blue Group 1 (1 + 6)				11		
White Group 1 (1 + 6)				12		
Red Group 2 (2 + 7)				13		
Green Group 2 (2 + 7)				14		
Blue Group 2 (2 + 7)				15		
White Group 2 (2 + 7)				16		
...				...		
Red Group 5 (5 + 10)				25		
Green Group 5 (5 + 10)				26		
Blue Group 5 (5 + 10)				27		
White Group 5 (5 + 10)				28		
Red 1					6	19
Green 1					7	20
Blue 1					8	21
White 1					9	22
Red 2					10	23
Green 2					11	24
Blue 2					12	25
White 2					13	26
...					...	...
Red 10					42	55
Green 10					43	56
Blue 10					44	57
White 10					45	58
Control Channel		13	23	29	46	59

6.7.2. Strobe (4 Channels), Basic (13 Channels), Basic FX (23 channels)

Strobe 4 CH	Basic 13 CH	Basic FX 23 CH	Function	Value	Setting
1	**1**	**1**	**Strobe Dimmer**	000–255	From low to high intensity (0–100 %)

2	**2**	**2**	**Strobe Flash Duration**	000–255	7–500 ms
3	**3**	**3**	**Strobe Speed**	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
4	**4**	**4**	**Strobe Type**	000–005	Linear strobe
				006–042	Ramp up
				043–085	Ramp down
				086–128	Ramp up > down
				129–150	Random all
				151–171	Random sectional
				172–214	Lighting
				215–255	Spikes (flash over low light)
		5	**Strobe Programs**	000–005	No function
				006–030	Strobe white program jump 1
				031–055	Strobe white program jump 2
				056–080	Strobe white program jump 3
				081–105	Strobe white program jump 4
				106–130	Strobe white program jump 5
				131–155	Strobe white program fade 1
				156–180	Strobe white program fade 2
				181–205	Strobe white program fade 3
				206–230	Strobe white program fade 4
				231–255	Strobe white program fade 5
		6	**Strobe Program Speed**	000–255	From slow to fast (0,2–20 Hz)
		7	**Strobe Dimmer Section A**	000–255	From low to high intensity (0–100 %)
		8	**Strobe Dimmer Section B**	000–255	From low to high intensity (0–100 %)
		9	**Strobe Dimmer Section C**	000–255	From low to high intensity (0–100 %)
		10	**Strobe Dimmer Section D**	000–255	From low to high intensity (0–100 %)
		11	**Strobe Dimmer Section E**	000–255	From low to high intensity (0–100 %)
	5	**12**	**RGBW Dimmer**	000–255	From low to high intensity (0–100 %)
	6	**13**	**RGBW Flash Duration**	000–255	7–500 ms
	7	**14**	**RGBW Strobe Speed**	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
	8	**15**	**RGBW Strobe Type**	000–005	Linear strobe
				006–042	Ramp up
				043–085	Ramp down
				086–128	Ramp up > down
				129–150	Random all
				151–171	Random sectional
				172–214	Lighting
				215–255	Spikes (flash over low light)
	9	**16**	**Red All**	000–255	From low to high intensity (0–100 %)
	10	**17**	**Green All**	000–255	From low to high intensity (0–100 %)
	11	**18**	**Blue All**	000–255	From low to high intensity (0–100 %)

12	**19**	**White All**	000–255	From low to high intensity (0–100 %)
	20	**Color preset**	000–255	Color presets (see 6.7.4. Lee Color Presets on page 36)
	21	**Color program**	000–005	No function
			006–017	Program jump 1
			018–029	Program jump 2
			030–041	Program jump 3
			042–053	Program jump 4
			054–065	Program jump 5
			066–077	Program jump 6
			078–089	Program jump 7
			090–101	Program jump 8
			102–113	Program jump 9
			114–125	Program jump 10
			126–137	Program fade 1
			138–149	Program fade 2
			150–161	Program fade 3
			162–173	Program fade 4
			174–185	Program fade 5
			186–197	Program fade 6
			198–209	Program fade 7
			210–221	Program fade 8
			222–233	Program fade 9
			234–255	Program fade 10
	22	**Color Program Speed**	000–255	From slow to fast
13	**23**	**Control Channel**	000–010	No function
			011–020	Curve set to linear
			021–030	Curve set to square
			031–040	Curve set to inv square
			041–050	Curve set to s-curve
			051–060	Dimmer speed fast
			061–070	Dimmer speed smooth
			071–080	Fan speed slow
			081–090	Fan speed auto
			091–100	Fan speed high
			101–110	Pixel direction normal
			111–120	Pixel direction inverted
			121–130	PWM 1 KHz
			131–140	PWM 3 KHz
			141–150	PWM 6 KHz
			151–160	PWM 12 KHz
			161–255	Reserved/no function

6.7.3. Helix (29 Channels), RAW (46 Channels), Full (59 Channels)

Helix 29 CH	RAW 46 CH	Full 59 CH	Function	Value	Function
1		1	Strobe Dimmer	000–255	From low to high intensity (0–100 %)
2		2	Strobe Flash Duration	000–255	7–500 ms
3		3	Strobe Speed	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
4		4	Strobe Type	000–005	Linear strobe
				006–042	Ramp up
				043–085	Ramp down
				086–128	Ramp up > down
				129–150	Random all
				151–171	Random sectional
				172–214	Lighting
				215–255	Spikes (flash over low light)
		5	Strobe Programs	000–005	No function
				006–030	Strobe white program jump 1
				031–055	Strobe white program jump 2
				056–080	Strobe white program jump 3
				081–105	Strobe white program jump 4
				106–130	Strobe white program jump 5
				131–155	Strobe white program fade 1
				156–180	Strobe white program fade 2
				181–205	Strobe white program fade 3
				206–230	Strobe white program fade 4
				231–255	Strobe white program fade 5
		6	Strobe Program Speed	000–255	From slow to fast (0,2–20 Hz)
	1	7	Strobe Dimmer Section A	000–255	From low to high intensity (0–100 %)
	2	8	Strobe Dimmer Section B	000–255	From low to high intensity (0–100 %)
	3	9	Strobe Dimmer Section C	000–255	From low to high intensity (0–100 %)
	4	10	Strobe Dimmer Section D	000–255	From low to high intensity (0–100 %)
	5	11	Strobe Dimmer Section E	000–255	From low to high intensity (0–100 %)
5		12	RGBW Dimmer	000–255	From low to high intensity (0–100 %)
6		13	RGBW Flash Duration	000–255	7–500 ms
7		14	RGBW Strobe Speed	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
8		15	RGBW Strobe Type	000–005	Linear strobe
				006–042	Ramp up
				043–085	Ramp down
				086–128	Ramp up > down
				129–150	Random all
				151–171	Random sectional
				172–214	Lighting
				215–255	Spikes (flash over low light)
		16	Color preset	000–255	Color presets (see 6.7.4. Lee Color Presets on page 36)
		17	Color program	000–005	No function
				006–017	Program jump 1
				018–029	Program jump 2
				030–041	Program jump 3
				042–053	Program jump 4
				054–065	Program jump 5

				066–077	Program jump 6
				078–089	Program jump 7
				090–101	Program jump 8
				102–113	Program jump 9
				114–125	Program jump 10
				126–137	Program fade 1
				138–149	Program fade 2
				150–161	Program fade 3
				162–173	Program fade 4
				174–185	Program fade 5
				186–197	Program fade 6
				198–209	Program fade 7
				210–221	Program fade 8
				222–233	Program fade 9
				234–255	Program fade 10
		18	**Color Program Speed**	000–255	From slow to fast
9			**Red group 1 (1 + 6)**	000–255	From low to high intensity (0–100 %)
10			**Green group 1 (1 + 6)**	000–255	From low to high intensity (0–100 %)
11			**Blue group 1 (1 + 6)**	000–255	From low to high intensity (0–100 %)
12			**White group 1 (1 + 6)**	000–255	From low to high intensity (0–100 %)
13			**Red group 2 (2 + 7)**	000–255	From low to high intensity (0–100 %)
14			**Green group 2 (2 + 7)**	000–255	From low to high intensity (0–100 %)
15			**Blue group 2 (2 + 7)**	000–255	From low to high intensity (0–100 %)
16			**White group 2 (2 + 7)**	000–255	From low to high intensity (0–100 %)
….			….	….	….
25			**Red group 5 (5 + 10)**	000–255	From low to high intensity (0–100 %)
26			**Green group 5 (5 + 10)**	000–255	From low to high intensity (0–100 %)
27			**Blue group 5 (5 + 10)**	000–255	From low to high intensity (0–100 %)
28			**White group 5 (5 + 10)**	000–255	From low to high intensity (0–100 %)
	6	**19**	**Red 1**	000–255	From low to high intensity (0–100 %)
	7	**20**	**Green 1**	000–255	From low to high intensity (0–100 %)
	8	**21**	**Blue 1**	000–255	From low to high intensity (0–100 %)
	9	**22**	**White 1**	000–255	From low to high intensity (0–100 %)
	10	**23**	**Red 2**	000–255	From low to high intensity (0–100 %)
	11	**24**	**Green 2**	000–255	From low to high intensity (0–100 %)
	12	**25**	**Blue 2**	000–255	From low to high intensity (0–100 %)
	13	**26**	**White 2**	000–255	From low to high intensity (0–100 %)
	….	….	….	….	….
	42	**55**	**Red 10**	000–255	From low to high intensity (0–100 %)
	43	**56**	**Green 10**	000–255	From low to high intensity (0–100 %)
	44	**57**	**Blue 10**	000–255	From low to high intensity (0–100 %)
	45	**58**	**White 10**	000–255	From low to high intensity (0–100 %)
				000–010	No function
				011–020	Curve set to linear
				021–030	Curve set to square
				031–040	Curve set to inv square
				041–050	Curve set to s-curve
29	**46**	**59**	**Control Channel**	051–060	Dimmer speed fast
				061–070	Dimmer speed smooth
				071–080	Fan speed slow
				081–090	Fan speed auto
				091–100	Fan speed high
				101–110	Pixel direction normal

111–120	Pixel direction inverted
121–130	PWM 1 kHz
131–140	PWM 3 kHz
141–150	PWM 6 kHz
151–160	PWM 12 kHz
161–255	Reserved/no function

6.7.4. Lee Color Presets

Value	Preset Color	Number	Color
000–010	Black		
011–016	Red		
017–022	Flame Red	164	
023–028	Deep Golden Amber	135	
029–034	Millennium Gold	778	
035–040	Gold Amber	021	
041–046	Orange		
047–052	Chrome Orange	179	
053–058	Deep Amber	104	
059–064	Spring Yellow	100	
065–070	Lime Green	088	
071–076	JAS Green	738	
077–082	Fern Green	122	
083–088	Moss Green	089	
089–094	Primary Green	139	
095–100	Dark Green	124	
101–106	Green		
107–112	Medium Blue Green	116	
113–118	Light Blue	118	
119–124	Lighter Blue	353	
125–130	Steel Blue	117	
131–136	Half C.T. Blue	202	
137–142	Full C.T. Blue	201	
143–148	Slate Blue	161	
149–154	Double C.T. Blue	200	
155–160	Medium Blue	132	
161–166	Just Blue	079	
167–172	Deep Blue	120	
173–178	Blue		
179–184	Congo Blue	181	
185–190	Surprise Pink	194	
191–196	Fuchsia Pink	345	
197–202	Follies Pink	328	
203–208	Special Rose Pink	332	
209–214	Pink	157	
215–220	Moroccan Pink	790	
221–226	Warm White		
227–232	Cold White		
233–255	Open White		

6.8. RDM Information

This device supports RDM (see 6.8.1. RDM Details).

6.8.1. RDM Details

- Responder: 29B4:0BBxxxxx
- Manufacturer's ID: 29B4
- Manufacturer Label: Infinity
- Model Description: Raccoon S420/4
- Model ID: 0BB
- Device Label: Raccoon S420/4

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)

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		*	*

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 the power supply and the cables are plugged in
	The 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

Problem	Probable cause(s)	Solution
The device does not respond to DMX control	The controller is not connected	• Connect the controller
	The signal is reversed. The 5-pin DMX OUT of the controller does not match the DMX IN of the device	• Install a phase-reversing cable between the controller and the device
	The controller is defective	• Try using another controller
The device responds erratically to DMX control	Connections are defective	• Examine connections and cables. Correct defective connections. Repair or replace damaged cables
	The data link is not terminated with a 120 Ω termination plug	• Insert a termination plug in the DMX OUT connector of the last device on the link
	Incorrect addressing	• Make sure that the address settings are correct
	In case of a setup with multiple devices, one of the devices is defective and disturbs data transmission on the link	• To find 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 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.

8.2.1. Basic Cleaning Instructions

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

To clean the device, follow the steps below:

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

Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.
- Make sure that the connectors are fully dry before using them.

8.3. Corrective Maintenance

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

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

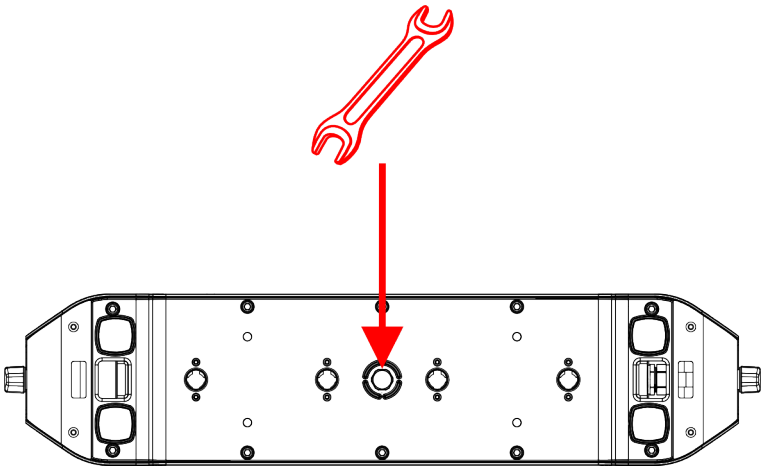
8.3.1. Draining Condensation Water

The Raccoon S420/4 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 (14)** with a wrench (16 mm).
02) Let the device operate with the lamp at full output for 60 minutes.
03) Let the device cool down for 30 minutes.
04) Reinstall the **protective vent (14)**. Make sure that you do not overtighten.

Figure 18



9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation

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

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

9.2. Instructions for Transportation

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

9.3. Storage

- Clean the device before storing (see 8.2.1. Basic Cleaning Instructions on page 38).
- 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

Hereby, Highlite International declares that the device Raccoon S420/4, product code 200600, is in compliance with Directive 2014/53/EU (RED – Radio Equipment Directive).

The full text of the EU declaration of conformity is available on the respective product page on the website of Highlite International (www.highlite.com).