

## **Raccoon W40/4**

Product code: 200610

## Preface

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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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## 1. Introduction

### 1.1. Before Using the Product



#### Important

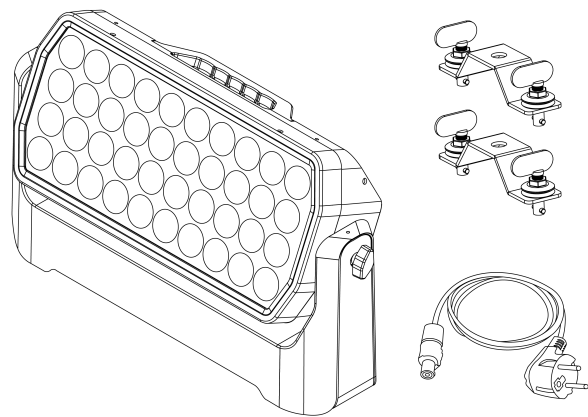
**Read and follow the instructions in this user manual before installing, operating or servicing this product.**

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 W40/4
- 2 x quick-lock bracket
- Schuko to Power Pro True cable (1,5 m)
- User manual



**Figure 1**

### 1.2. Intended Use

This device is intended for professional use as a wash light. 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 a wash light. 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 W40/4 is a powerful wash light with 40 RGBM LEDs of 15 W each, producing up to over 41,000 lumens. It has 5 individually controlled sections, has a 10-degree beam angle and uses a high 12,000 Hz refresh rate for a smooth and stable light output. Four internal dimming curves are available. It uses the same housing as the Raccoon S420/4 and is IP65-rated to withstand the elements during your show.

The fixture can be controlled wirelessly via DMX (LumenRadio G3, G4, CRMX), via wired DMX (5-pin XLR) or via manual controls and the on-board OLED display. It supports RDM and provides bi-directional communication with the lighting console.

With the optional L-bracket, the Raccoon W40/4 can be mounted vertically or at an angle while still being balanced (no torque on the mount). Other optional accessories include a top hat, a barndoor, a range of diffusers with 20°, 40°, 90° and 15 x 60° beam angles and a sturdy flight case.

#### 3.1. Front View

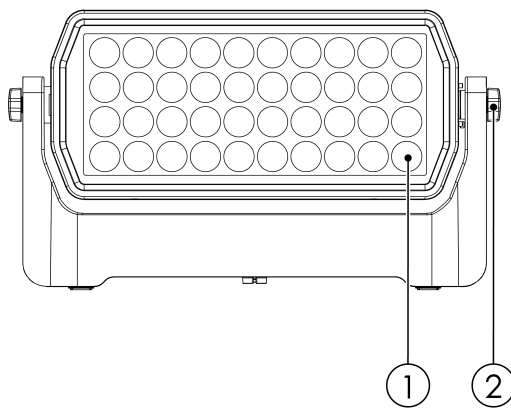


Figure 2

- 01) 40 x 15 W RGBM wash LED
- 02) 2 x angle adjustment screw

#### 3.2. Back View

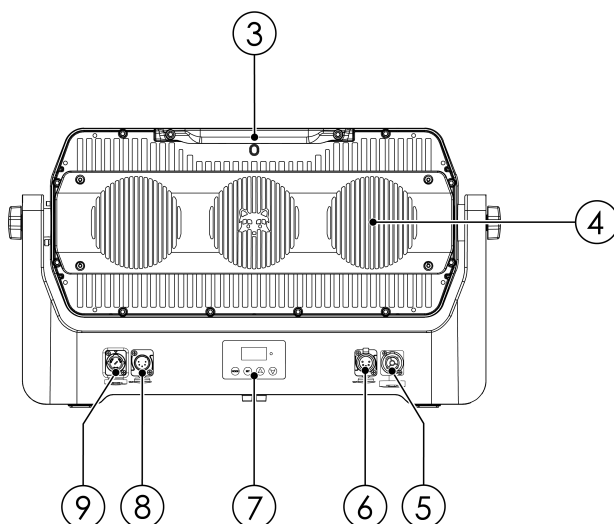
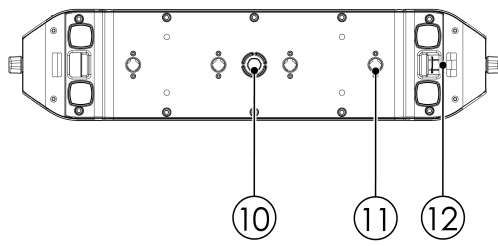


Figure 3

- 03) Carrying handle
- 04) 3 x cooling fan
- 05) IP65-rated Power Pro True power connector OUT
- 06) IP65-rated 5-pin DMX signal connector OUT
- 07) Control panel: OLED display and control buttons
- 08) IP65-rated 5-pin DMX signal connector IN
- 09) IP65-rated Power Pro True power connector IN

### 3.3. Bottom View

**Figure 4**



- 10) Protective vent (M12 x 1,5)
- 11) 4 x mounting bracket hole
- 12) 2 x safety eye

### 3.4. Product Specifications

Model:	Raccoon W40/4
<b>Source:</b>	
Light source type	LED
Light source quantity	40
Light source power	15 W
LED color type	R / G / B / M
Life expectancy	50000 h
Refresh rate	12000 Hz
Luminous flux (total)	41422 lm
Luminous flux (red)	9167 lm
Luminous flux (green)	11678 lm
Luminous flux (blue)	3169 lm
Luminous flux (mint)	20911 lm
CRI	87
<b>Optical:</b>	
Beam angle (horizontal)	10 °
Beam angle (vertical)	10 °
<b>Control and Programming:</b>	
Control mode	DMX / Manual
DMX channels	4 / 6 / 8 / 20 / 24
Protocols	DMX / RDM
Wireless	LumenRadio
Display	OLED
Fan mode	Yes
Dim curve	Linear / Square / I-Square / S-Curve
<b>Dynamic Effects:</b>	
Dimmer	0–100 %
<b>Electrical Specifications and Connections:</b>	
Power supply	100–240 V AC 50/60 Hz
Power consumption	825 W
Power connector IN	Power Pro True
Power connector OUT	Power Pro True
DMX connector	XLR 5P IN/OUT
DMX connector IN	XLR 5P
DMX connector OUT	XLR 5P
<b>Mechanical Specifications:</b>	
Width	617 mm
Height	351 mm
Depth	157 mm
Weight	16,8 kg
IP rating	IP65
Housing	Aluminum
Color	Black
<b>Product Properties:</b>	
Cooling	Convection/axial fan

**Rigging:**

Mounting options	Quick-lock
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**Thermal Specifications:**

Maximum ambient temperature	45 °C
Minimum operating temperature	-20 °C

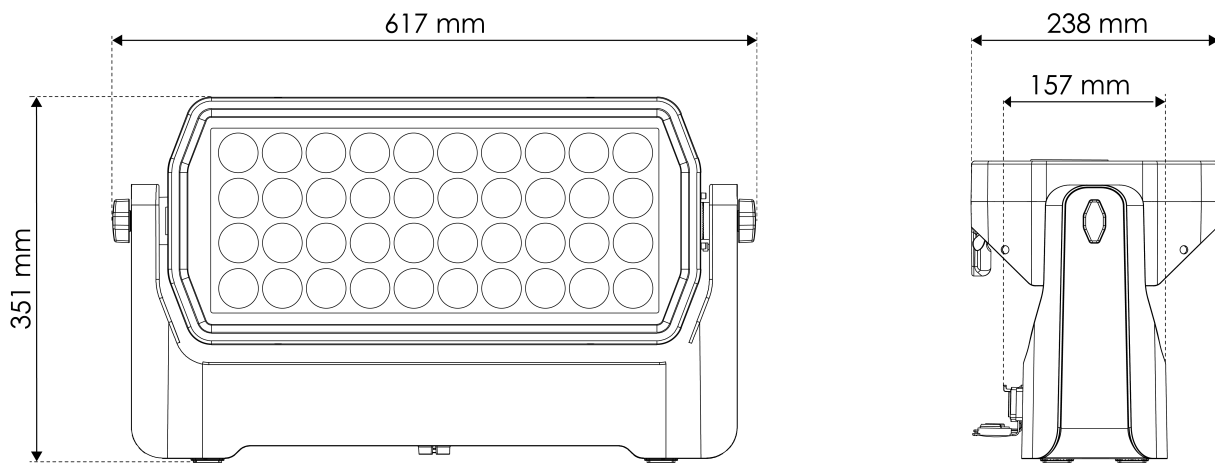
**Included Items:**

Included cables	Power Pro True cable
Included rigging	Quick-lock bracket

**Wireless Specifications:**

Wireless mode	G3 / G4 / CRMX
---------------	----------------

### 3.5. Dimensions

**Figure 5**


### 3.6. Optional Accessories

You can additionally purchase the following accessories:

- [200620](#) Top hat for Raccoon S420/4 and W40/4
- [200621](#) Barndoor for Raccoon S420/4 and W40/4
- [200622](#) L-Bracket for Raccoon S420/4 and W40/4
- [200623](#) Case for 3x Raccoon S420/4 and W40/4 with accessory compartments
- [200624](#) Case for 3x Raccoon S420/4 and W40/4
- [200625](#) Diffuser for Raccoon S420/4 and W40/4 (20°)
- [200626](#) Diffuser for Raccoon S420/4 and W40/4 (40°)
- [200627](#) Diffuser for Raccoon S420/4 and W40/4 (90°)
- [200628](#) Diffuser for Raccoon S420/4 and W40/4 (15° x 60°)
- [200629](#) Single Clamp Bracket for Raccoon S420/4 and W40/4

Contact your Highlite International dealer for more information.

## 4. Installation

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### 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.



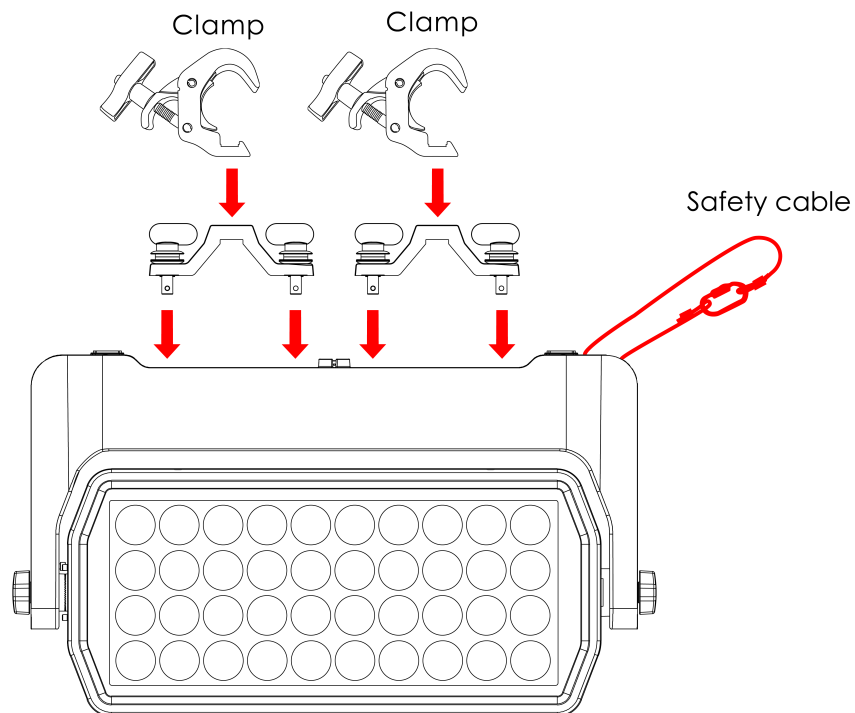
**CAUTION**

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

To mount the device, follow the steps below:

- 01) Install clamps. Make sure that you use clamps suitable for attaching the device to a truss.
- 02) Fasten the 2 quick-lock brackets, supplied with the device, on the **mounting bracket holes (11)**. Optionally, a single clamp bracket (see [4.6.5. Single Clamp Bracket Installation](#) on page 20) can be used instead.

**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 the **safety eye (12)**.

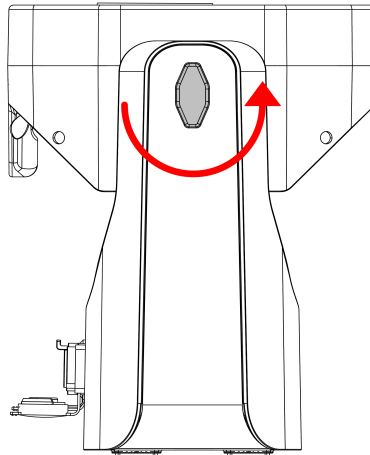
## 4.5. Angle Adjustment

You can adjust the angle of the device with the 2 **angle adjustment screws (02)**. One of the screws has interlocking teeth.

To adjust the angle, follow the steps below:

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

**Figure 7**



**Note:**

Use the 2<sup>nd</sup> 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 12).

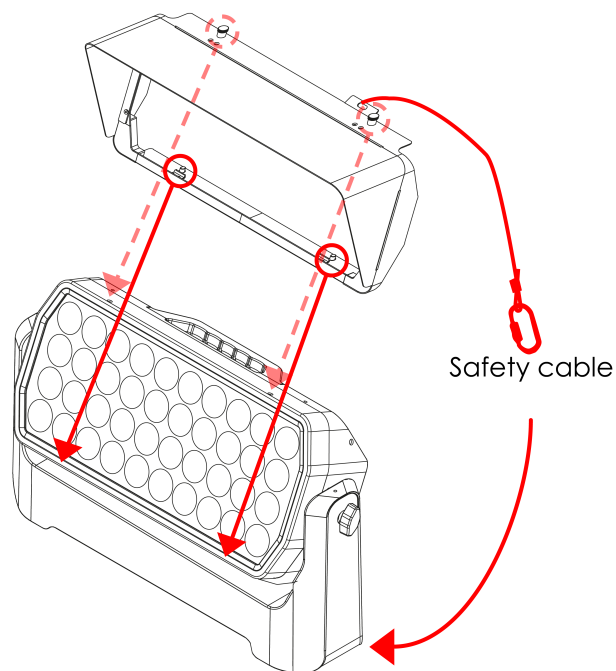
The accessories are not supplied with the device. Contact your Highlite International dealer for more information.

### 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**

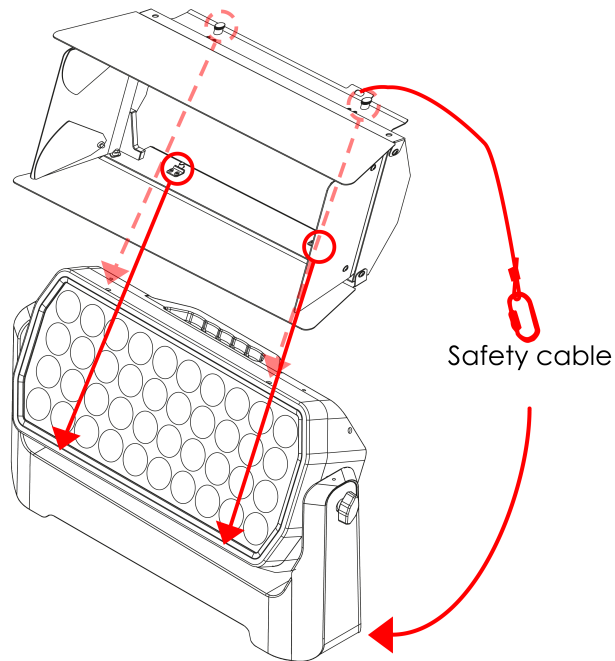


#### 4.6.2. Barndoor Installation

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**

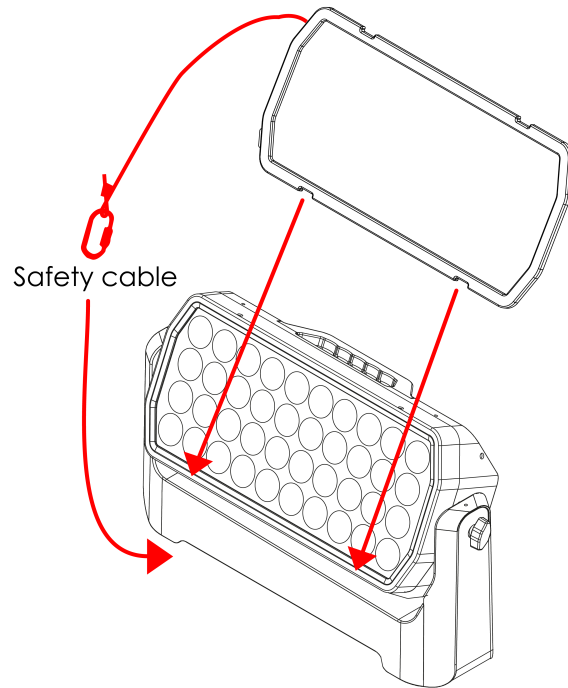


### 4.6.3. Diffuser Installation

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



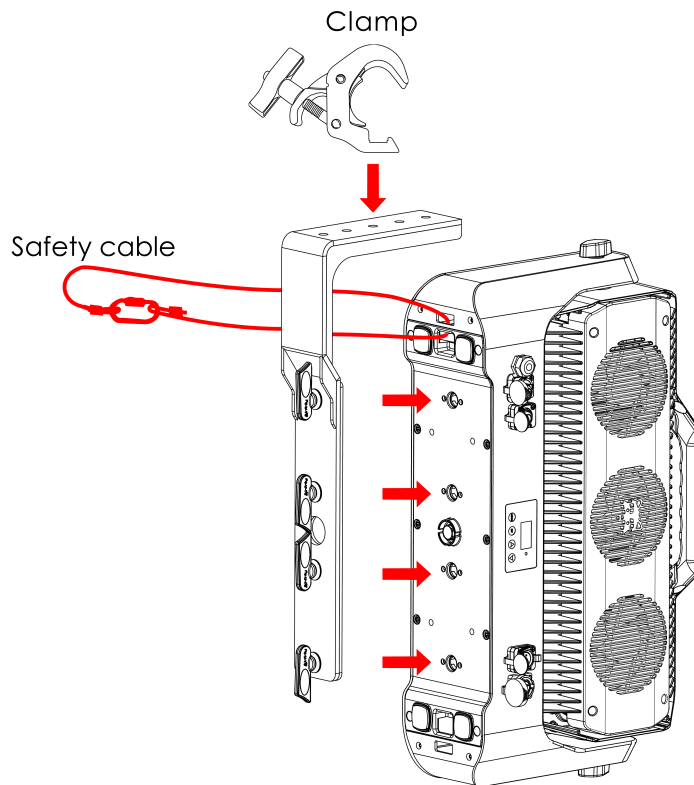
#### 4.6.4. L-Bracket Installation

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

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

- 01) Install a clamp. Make sure that you use clamps suitable for attaching the device to a truss.
- 02) Fasten the L-Bracket on the **mounting bracket holes (11)**.

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°.

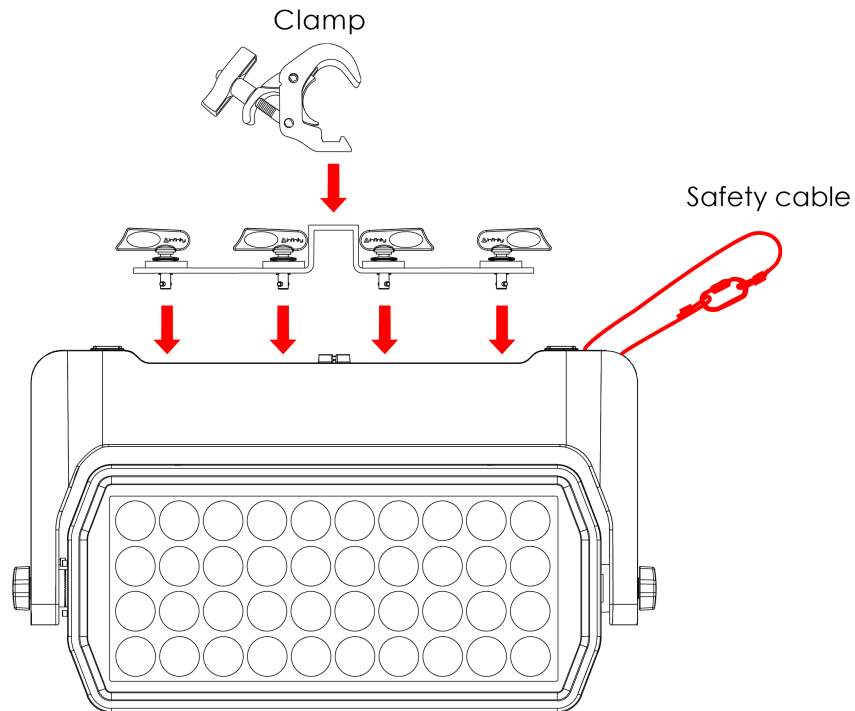
#### 4.6.5. Single Clamp Bracket Installation

Install the Single Clamp Bracket to mount the device using only 1 clamp.

To mount the Single Clamp Bracket, follow the steps below:

- 01) Install the clamp to the opening in the Single Clamp Bracket. Make sure that you use a clamp suitable for attaching the device to a truss.
- 02) Fasten the Single Clamp Bracket on the **mounting bracket holes (11)**.

Figure 12



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

#### 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: 1 devices Raccoon W40/4
- at 200–240 V: 2 devices Raccoon W40/4

## 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 W40/4 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 (see [6.2. Control Modes](#) on page 25).

### 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 W40/4 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

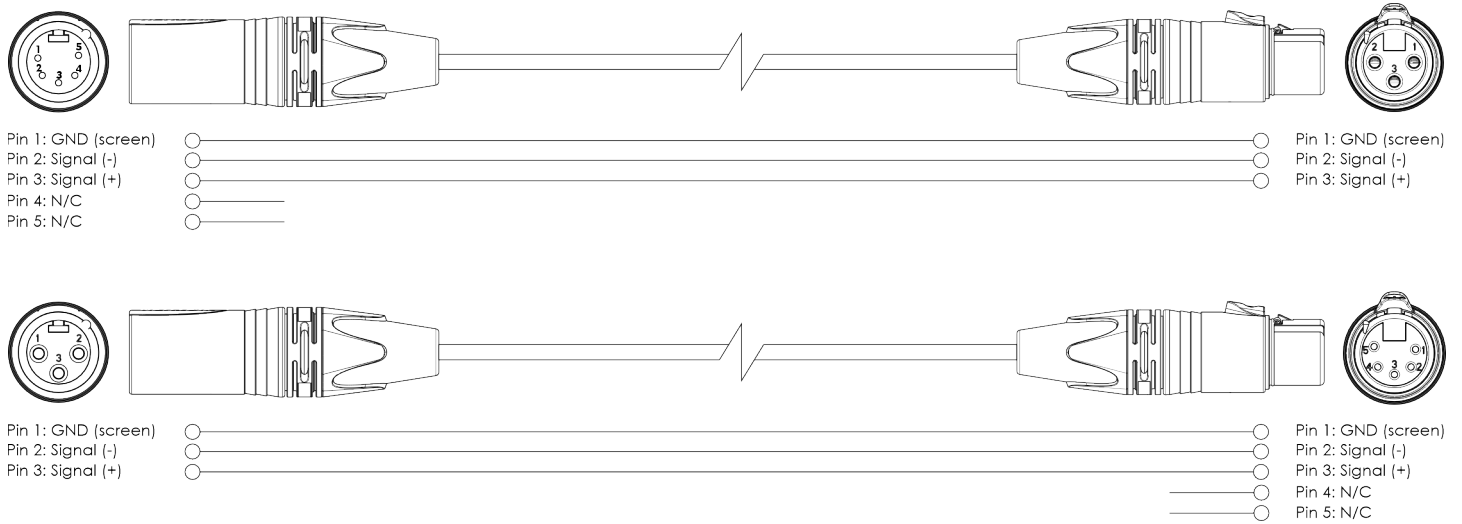
#### 5.3.2. DMX Cables

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 13

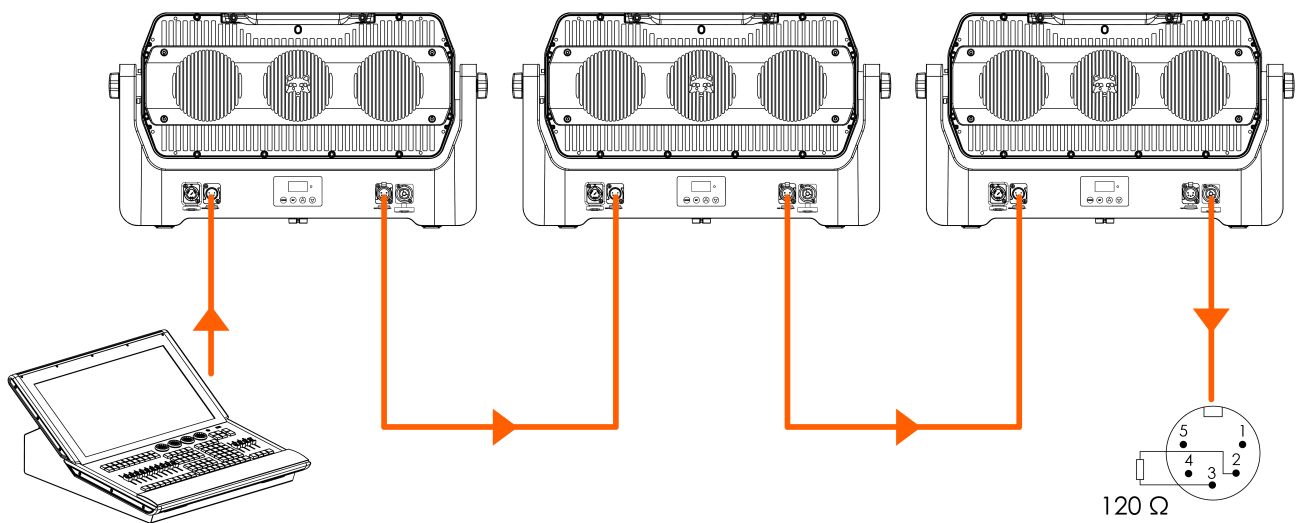


### 5.3.3. DMX Linking

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

Figure 14



### 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 W40/4 has 5 personalities: Wash (4 channels), Basic (6 channels), Basic FX (8 channels), RAW (20 channels), Full (24 channels).

If you want to connect multiple devices on one data link and use them in 24-channel mode, for example, follow the steps below:

- 01) Set the starting address of the 1<sup>st</sup> device on the data link to 1 (001).
- 02) Set the starting address of the 2<sup>nd</sup> device on the data link to 25 (025), as  $1 + 24 = 25$ .
- 03) Set the starting address of the 3<sup>rd</sup> device on the data link to 49 (049), as  $25 + 24 = 49$ .
- 04) Continue assigning the starting addresses of the remaining devices by adding each time 24 to the previous number.

Make sure that you do not have any overlapping channels in order to control each Raccoon W40/4 correctly. If two or more devices are addressed similarly, they will work similarly.

### 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.

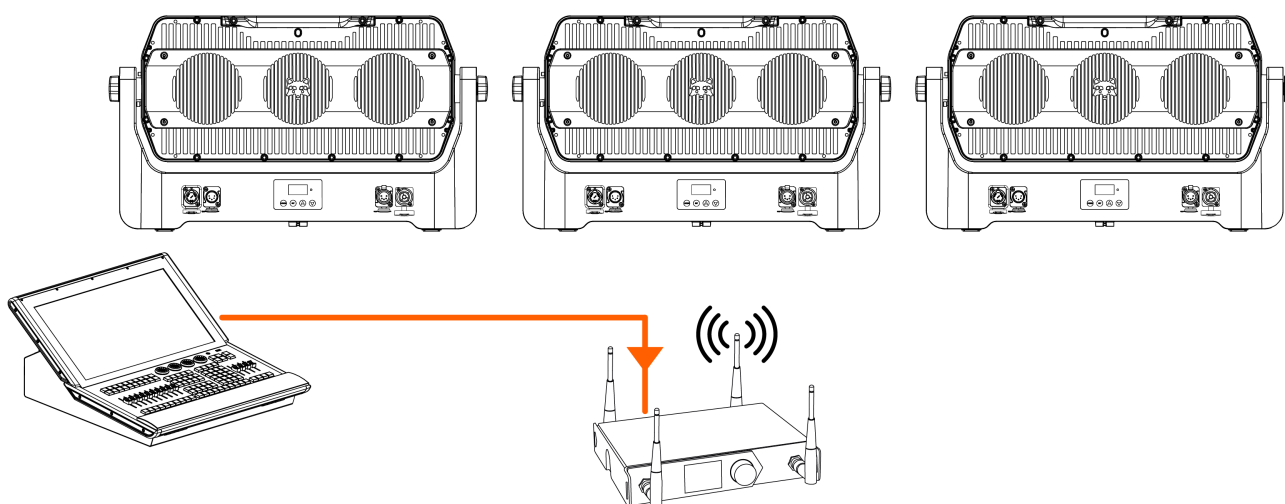
Communication distance	Depending on the transmitting power or transmitter module
Test conditions	WDMX TRx Transmitter module, 2 dBi Antenna, transmitting power 20 dBm (100 mW)
Range indoor	60 m
Range outdoor	250 m

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 25).
- 02) Connect the transceiver/transmitter to the lighting controller.
- 03) Follow the user manual supplied with the transceiver to pair the devices.

Figure 15



## 6. Operation

### 6.1. Safety Instructions for Operation



**Attention**

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

This device is intended for professional use as a wash light. 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 W40/4 can be operated with a DMX controller or as a stand-alone device.

The Raccoon W40/4 supports the following control modes:

- Stand-alone: Manual operation, auto operation mode (built-in programs, color presets)
- Master/Slave: Manual control, auto operation mode (built-in programs, color presets)
- DMX-512: Wash (4 channels), Basic (6 channels), Basic FX (8 channels), RAW (20 channels), Full (24 channels)
- CRMX: Wash (4 channels), Basic (6 channels), Basic FX (8 channels), RAW (20 channels), Full (24 channels)

For more information about how to connect the devices, refer to Setup (see [5. Setup](#) on page 22).

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 31)
- Select manual mode (see [6.6.5. Manual Mode](#) on page 30) or auto mode (see [6.6.6. Auto Mode](#) on page 30)

To operate the device with a DMX controller:

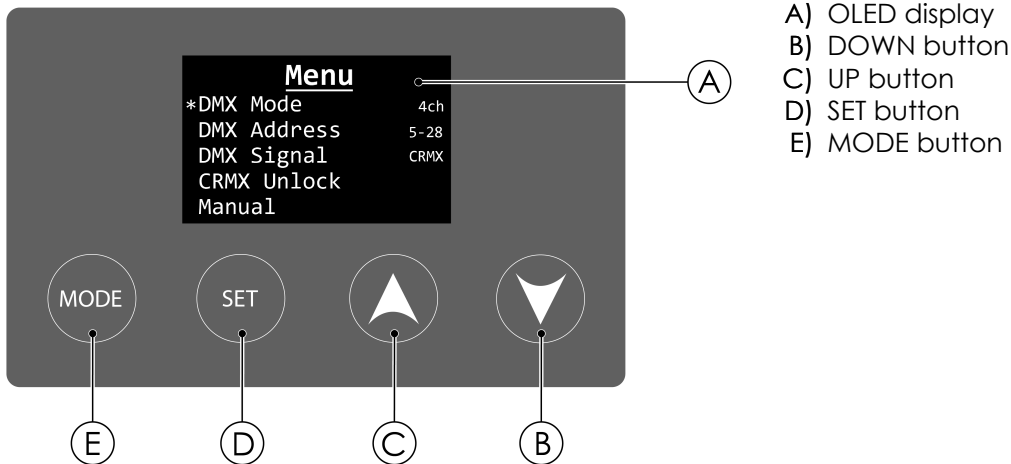
- 01) Select the DMX channel mode in the DMX Mode menu (see [6.6.1. DMX Mode](#) on page 29). Refer to the DMX chart (see [6.7.1. DMX Channel Overview](#) on page 36) for a complete overview of all DMX channels.
- 02) Set the DMX starting address of the device in DMX Address menu (see [6.6.2. DMX Address](#) on page 29).
- 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 34).

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

- 01) Select CRMX as control mode in the Control Mode menu (see [6.6.3. DMX Signal](#) on page 29).
- 02) Set the DMX starting address of the device in the DMX Address menu (see [6.6.2. DMX Address](#) on page 29).
- 03) Select the DMX channel mode in the Control Mode menu. Refer to the DMX chart (see [6.7.1. DMX Channel Overview](#) on page 36) for a complete overview of all DMX channels.

### 6.3. Control Panel

Figure 16



- 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 selected menus, 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

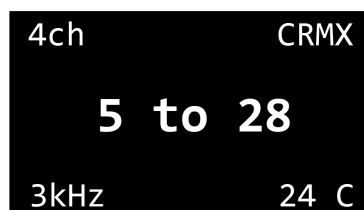
Upon start-up, the display shows a splash screen with the Infinity logo and the name of the device.



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 34). If the DMX signal is lost, the display blinks.

## 6.5. Menu Overview

Level 1	Level 2	Level 3
<b>DMX Mode</b> (see <a href="#">6.6.1. DMX Mode</a> on page 29)	Wash (4)	
	Basic (6)	
	Basic FX (8)	
	RAW (20)	
	Full (24)	
<b>DMX Address</b> (see <a href="#">6.6.2. DMX Address</a> on page 29)	1–512	
	DMX	
<b>DMX Signal</b> (see <a href="#">6.6.3. DMX Signal</a> on page 29)	CRMX	
	Yes	
<b>CRMX Unlock</b> (see <a href="#">6.6.4. CRMX Unlock</a> on page 29)	No	
	Red	0–255
<b>Manual Mode</b> (see <a href="#">6.6.5. Manual Mode</a> on page 30)	Green	0–255
	Blue	0–255
	Mint	0–255
	Yes	
<b>Auto Mode</b> (see <a href="#">6.6.6. Auto Mode</a> on page 30)	No	
	Mode	1–26
<b>Program Mode</b> (see <a href="#">6.6.7. Program Mode</a> on page 30)	Color (Mode 1)	1–38
	Speed (Mode 2–26)	1–100
	Strobe	0–99
<b>Slave Mode</b> (see <a href="#">6.6.8. Slave Mode</a> on page 31)	Yes	
	No	
<b>Dimmer Curve</b> (see <a href="#">6.6.9. Dimmer Curve</a> on page 31)	Linear	
	Square	
	Inverse Square	
	S-Curve	
<b>Dimmer Speed</b> (see <a href="#">6.6.10. Dimmer Speed</a> on page 32)	Fast	
	Smooth	
	Auto	
<b>Fan Mode</b> (see <a href="#">6.6.11. Fan Mode</a> on page 33)	High	
	Slow	
	Normal	
<b>Pixel Direction</b> (see <a href="#">6.6.12. Pixel Direction</a> on page 33)	Invert	
	12 kHz	
<b>LED Frequency</b> (see <a href="#">6.6.13. LED Frequency</a> on page 33)	6 kHz	
	3 kHz	
	1 kHz	
	5 S	
<b>Display Backlight</b> (see <a href="#">6.6.14. Display Backlight</a> on page 34)	10 S	
	20 S	
	30 S	
	Stay On	
	Blackout	
<b>DMX Lost</b> (see <a href="#">6.6.15. DMX Lost</a> on page 34)	Hold	
	Manual	
	Program	
<b>Key Lock</b> (see <a href="#">6.6.16. Key Lock</a> on page 34)	Locked	
	Unlocked	

<b>Key Backlight</b> (see <a href="#">6.6.17. Key Backlight</a> on page 35)	On	
	Off	
<b>Information</b> (see <a href="#">6.6.18. Information</a> on page 35)	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		
<b>Factory Settings</b> (see <a href="#">6.6.19. Factory Settings</a> on page 35)	Abort	
	Reset Settings	

## 6.6. Main Menu Options

The main menu has the following 19 options:

<u>Menu</u>	
*DMX Mode	4ch
DMX Address	5-28
DMX Signal	CRMX
CRMX Unlock	
Manual	
Auto	No
Program	
Slave	Yes
Dimmer Curve	Square
Dimmer Speed	Fast
Fan Mode	Auto
Pixel Direction	Normal
LED Frequency	3kHz
Display Backlight	30s
DMX Lost	Hold
Key Lock	Locked
Key Backlight	On
Information	
Factory Settings	

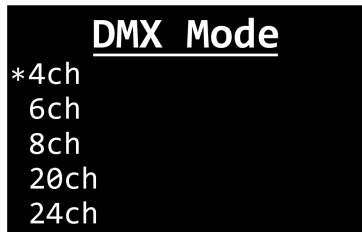
DMX Mode  
 DMX Address  
 DMX Signal  
 CRMX Unlock  
 Manual  
 Auto  
 Program  
 Slave  
 Dimmer Curve  
 Dimmer Speed  
 Fan Mode  
 Pixel Direction  
 LED Frequency  
 Display Backlight  
 DMX Lost  
 Key Lock  
 Key Backlight  
 Information  
 Factory Settings

- 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 5 options:



- Wash (4): 4 channels
- Basic (6): 6 channels
- Basic FX (8): 8 channels
- RAW (20): 20 channels
- Full (24): 24 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 36).

### 6.6.2. DMX Address

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

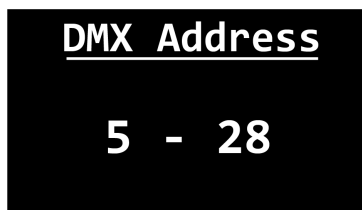
01) Press the **DOWN button (B)** or the **UP button (C)** to select the DMX starting address of the device. The selection range depends on the active DMX channel mode.

- Wash: 001–509 (4 channels)
- Basic: 001–507 (6 channels)
- Basic FX: 001–505 (8 channels)
- RAW: 001–493 (20 channels)
- Full: 001–489 (24 channels)

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

#### Note:

The display shows the DMX address range of the device. For example, "5–28" means that the DMX starting address of the device is 005 and the device is operating in a 24-channel mode. The DMX address range of the device is 005–028.



### 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:

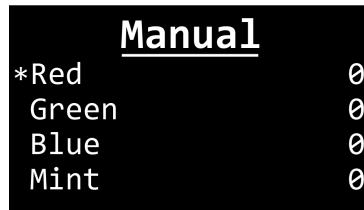
- Yes: CRMX is unlocked
- No: CRMX is locked

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 4 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
- Mint: 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 a built-in program, add a strobe effect, and adjust the program speed. The device has 38 built-in color presets and 26 built-in programs available:

- Program 01 (see [6.6.7.1. Program 01](#))
- Program 02–35 (see [6.6.7.2. Program 02–26](#))

#### Note:

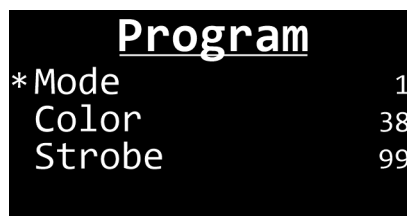
Each program mode starts with default values or the last used preset values.

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

#### 6.6.7.1. Program 01

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

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



- Color
- Strobe

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

03) If you select Color, touch the **DOWN button (B)** or the **UP button (C)** to select one of the 38 color presets. Touch the **SET button (D)** to save the settings.

04) If you select Strobe, touch the **DOWN button (B)** or the **UP button (C)** to set the strobe frequency. The adjustment range is 00–99, from OFF to high frequency.

05) Touch the **SET button (D)** to confirm.

### 6.6.7.2. Program 02–26

In this submenu you can set program speed and the strobe for built-in program 02–35.

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

<u>Program</u>	
* Mode	2
Speed	100
Strobe	99

- Speed
- Strobe

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

03) If you select Speed, touch the **DOWN button (B)** or the **UP button (C)** 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 **DOWN button (B)** or the **UP button (C)** to set the strobe frequency. The adjustment range is 00–99, from OFF to high frequency.

05) Touch the **SET button (D)** to confirm.

### 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

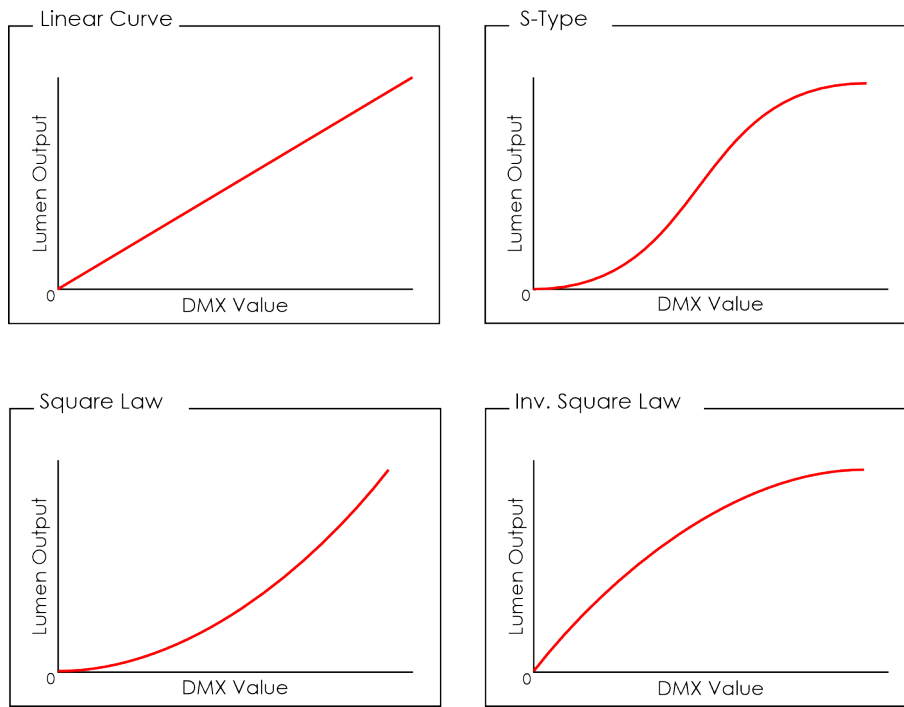
In this menu, you can select the dimming curve.

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

<u>Dimmer Curve</u>	
*Linear	
Square	
Inverse Square	
S-Curve	

- Linear
- Square
- Inverse Square
- S-Curve

Figure 17



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

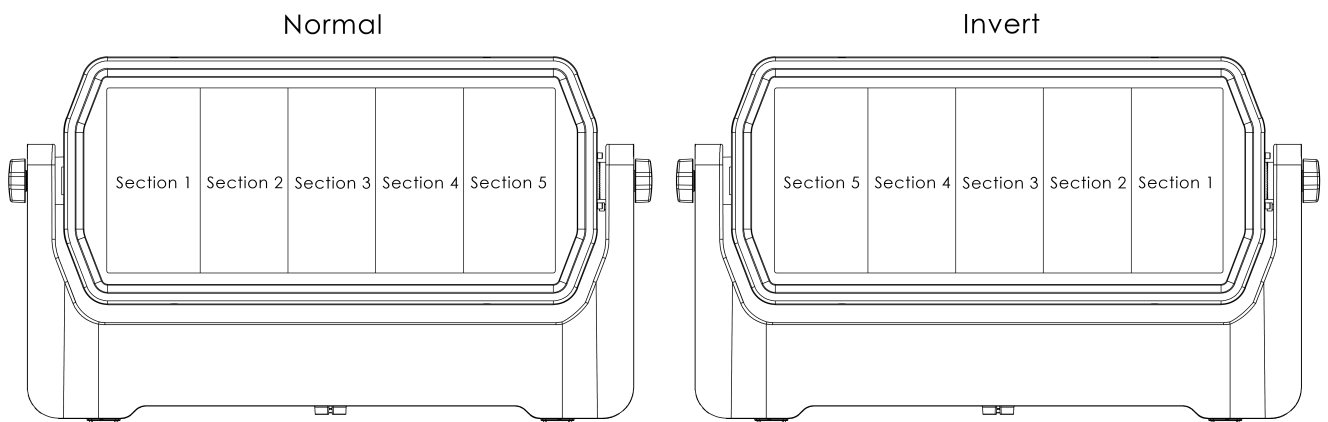
In this menu, you can select the pixel direction. See the figure below.

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.

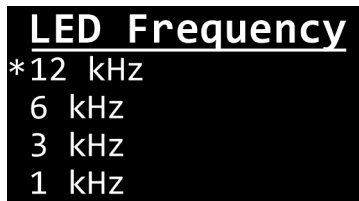
**Figure 18**



### 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:



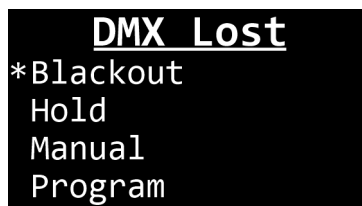
- 5 s: The display returns to the start screen after 5 seconds of inactivity. After 10 seconds more, the backlight of the display turns off
- 10 s: The display returns to the start screen after 10 seconds of inactivity. After 10 seconds more, the backlight of the display turns off
- 20 s: The display 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
- Program: The device uses the values selected in Program Mode

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:

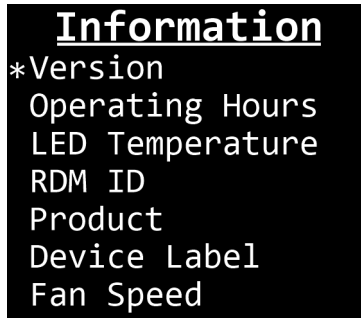
- On: Key backlight turns on
- Off: Key backlight turns off

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)** to select one of the 7 options:



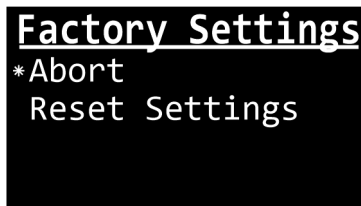
- Version: Shows the current firmware version of the display and the LEDs
- Operating Hours: Shows the total hours of operation of the device
- LED Temperature: Provides information about the temperature of the LEDs
- RDM ID: Shows the RDM identification number of the device (29B4:0AAXXXXX)
- Product: 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	Wash 4 CH	Basic 6 CH	Basic FX 8 CH	RAW 20 CH	Full 24 CH
Dimmer		1	1		1
Strobe		6	8		2
Color preset			7		3
Color program			6		4
Red All	1	2	2		
Green All	2	3	3		
Blue All	3	4	4		
Mint All	4	5	5		
Red 1				1	5
Green 1				2	6
Blue 1				3	7
Mint 1				4	8
Red 2				5	9
Green 2				6	10
Blue 2				7	11
Mint 2				8	12
Red 3				9	13
Green 3				10	14
Blue 3				11	15
Mint 3				12	16
Red 4				13	17
Green 4				14	18
Blue 4				15	19
Mint 4				16	20
Red 5				17	21
Green 5				18	22
Blue 5				19	23
Mint 5				20	24

### 6.7.2. Wash (4 Channels), Basic (6 Channels), Basic FX (8 Channels)

Wash 4 CH	Basic 6 CH	Basic FX 8 CH	Function	DMX Value	Setting
	1	1	<b>Dimmer</b>	000–255	From low to high intensity (0–100 %)
				000–004	No function
	6	8	<b>Strobe</b>	005–127	Linear strobe (slow–fast)
				128–189	Random all (slow–fast)
				190–255	Random sectional (slow–fast)
		7	<b>Color Preset</b>	000–255	Color presets (see <a href="#">6.7.4. Lee Color Presets</a> on page 38)
		6	<b>Color Program</b>	000–005	No function
				006–015	Program jump 1
				016–025	Program jump 2
				026–035	Program jump 3
				036–045	Program jump 4
				046–055	Program jump 5
				056–065	Program jump 6

				066–075	Program jump 7
				076–085	Program jump 8
				086–095	Program fade 1
				096–105	Program fade 2
				106–115	Program fade 3
				116–125	Program fade 4
				126–135	Program fade 5
				136–145	Program fade 6
				146–155	Program fade 7
				156–165	Section jump 1
				166–175	Section jump 2
				176–185	Section jump 3
				186–195	Section jump 4
				196–205	Section jump 5
				206–215	Section fade 1
				216–225	Section fade 2
				226–235	Section fade 3
				236–245	Section fade 4
				246–255	Section fade 5
<b>1</b>	<b>2</b>	<b>2</b>	<b>Red All</b>	000–255	From low to high intensity (0–100 %)
<b>2</b>	<b>3</b>	<b>3</b>	<b>Green All</b>	000–255	From low to high intensity (0–100 %)
<b>3</b>	<b>4</b>	<b>4</b>	<b>Blue All</b>	000–255	From low to high intensity (0–100 %)
<b>4</b>	<b>5</b>	<b>5</b>	<b>Mint All</b>	000–255	From low to high intensity (0–100 %)

### 6.7.3. RAW (20 Channels), Full (24 Channels)

RAW 20 CH	Full 24 CH	Channel Name	DMX Value	Function
	<b>1</b>	<b>Dimmer</b>	000–255	0~100%
	<b>2</b>	<b>Strobe</b>	000–004	No function
			005–127	Linear strobe (slow to fast)
			128–189	Random all (slow to fast)
			190–255	Random sectional (slow to fast)
	<b>3</b>	<b>Color Preset</b>	000–255	Color presets (see <a href="#">6.7.4. Lee Color Presets</a> on page 38)
	<b>4</b>	<b>Color Program</b>	000–005	No function
			006–015	Program jump 1
			016–025	Program jump 2
			026–035	Program jump 3
			036–045	Program jump 4
			046–055	Program jump 5
			056–065	Program jump 6
			066–075	Program jump 7
			076–085	Program jump 8
			086–095	Program fade 1
			096–105	Program fade 2
			106–115	Program fade 3
			116–125	Program fade 4
			126–135	Program fade 5
			136–145	Program fade 6
			146–155	Program fade 7
			156–165	Section jump 1
	166–175	Section jump 2		
	176–185	Section jump 3		

			186–195	Section jump 4
			196–205	Section jump 5
			206–215	Section fade 1
			216–225	Section fade 2
			226–235	Section fade 3
			236–245	Section fade 4
			246–255	Section fade 5
<b>1</b>	<b>5</b>	<b>Red 1</b>	000–255	From low to high intensity (0–100%)
<b>2</b>	<b>6</b>	<b>Green 1</b>	000–255	From low to high intensity (0–100%)
<b>3</b>	<b>7</b>	<b>Blue 1</b>	000–255	From low to high intensity (0–100%)
<b>4</b>	<b>8</b>	<b>Mint 1</b>	000–255	From low to high intensity (0–100%)
<b>5</b>	<b>9</b>	<b>Red 2</b>	000–255	From low to high intensity (0–100%)
<b>6</b>	<b>10</b>	<b>Green 2</b>	000–255	From low to high intensity (0–100%)
<b>7</b>	<b>11</b>	<b>Blue 2</b>	000–255	From low to high intensity (0–100%)
<b>8</b>	<b>12</b>	<b>Mint 2</b>	000–255	From low to high intensity (0–100%)
<b>9</b>	<b>13</b>	<b>Red 3</b>	000–255	From low to high intensity (0–100%)
<b>10</b>	<b>14</b>	<b>Green 3</b>	000–255	From low to high intensity (0–100%)
<b>11</b>	<b>15</b>	<b>Blue 3</b>	000–255	From low to high intensity (0–100%)
<b>12</b>	<b>16</b>	<b>Mint 3</b>	000–255	From low to high intensity (0–100%)
<b>13</b>	<b>17</b>	<b>Red 4</b>	000–255	From low to high intensity (0–100%)
<b>14</b>	<b>18</b>	<b>Green 4</b>	000–255	From low to high intensity (0–100%)
<b>15</b>	<b>19</b>	<b>Blue 4</b>	000–255	From low to high intensity (0–100%)
<b>16</b>	<b>20</b>	<b>Mint 4</b>	000–255	From low to high intensity (0–100%)
<b>17</b>	<b>21</b>	<b>Red 5</b>	000–255	From low to high intensity (0–100%)
<b>18</b>	<b>22</b>	<b>Green 5</b>	000–255	From low to high intensity (0–100%)
<b>19</b>	<b>23</b>	<b>Blue 5</b>	000–255	From low to high intensity (0–100%)
<b>20</b>	<b>24</b>	<b>Mint 5</b>	000–255	From low to high intensity (0–100%)

#### 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: 29B4:0AAXXXXX
- Manufacturer's ID: 29B4
- Manufacturer Label: Infinity
- Model Description: Raccoon Wash
- Model ID: 0AA
- Device Label: Raccoon Wash

#### Note:

An RDM responder ID consists of 3 parts:

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

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

### 6.8.2. Supported RDM PIDs (Parameter IDs)

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 (see <a href="#">6.6.19. Factory Settings</a> on page 35)
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 (see <a href="#">6.6.2. DMX Address</a> on page 29)
	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 wireless connection	The device is not connected to the transmitter, when the green W-DMX indicator on the display of the device is off	Create a wireless connection, refer to Wireless Connection (see <a href="#">5.3.5. Wireless G3 and G4s Connection</a> on page 24)
	The device is trying to connect to the transmitter, when the green W-DMX indicator on the display is blinking quickly. This will take 30 seconds	Create a wireless connection, refer to Wireless Connection (see <a href="#">5.3.5. Wireless G3 and G4s Connection</a> on page 24)
	This device cannot receive a wireless DMX signal and a DMX cable signal at the same time	Remove the DMX cable

## 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.

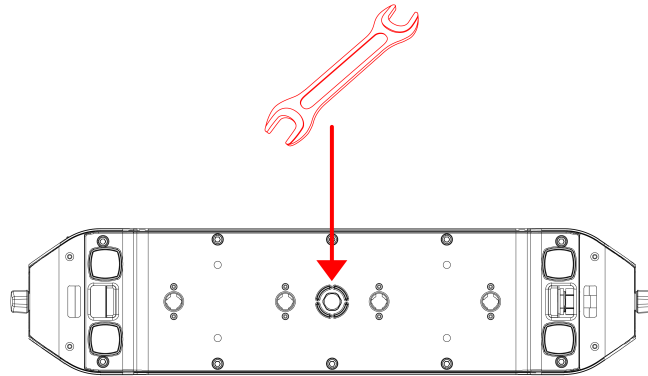
#### 8.3.1. Draining Condensation Water

The Raccoon W40/4 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 (10)** 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 (10)**. Make sure that you do not overtighten.

Figure 19



## 9. Deinstallation, Transportation and Storage

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### 9.1. Instructions for Deinstallation



**WARNING**

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

- Let the device cool down before dismantling.
- 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".

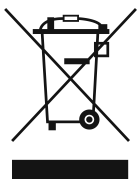
### 9.3. Storage

- Clean the device before storing (see [8.2.1. Basic Cleaning Instructions](#) on page 42).
- Store the device in the original packaging, if possible.

## 10. Disposal

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### 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

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Hereby, Highlite International declares that the device Raccoon W40/4, product code 200610, 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](http://www.highlite.com)).





