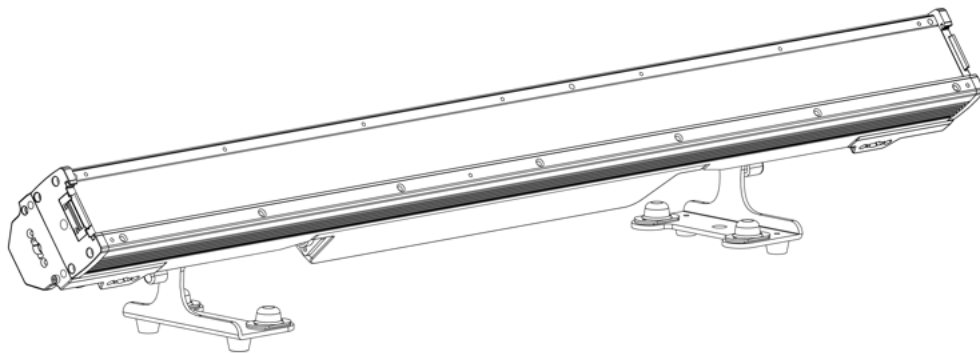


USER MANUAL

ENGLISH

V1.0



Spectra Wash

Product code: 42655

Preface

Thank you for purchasing this Showtec product.

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

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

This user manual contains information concerning:

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

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

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

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1. Introduction

1.1. Before Using the Product



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

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

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

Your shipment includes:

- Showtec Spectra Wash
- Schuko to Power Pro True cable (1,5 m)
- 2 x quick-lock bracket
- User manual

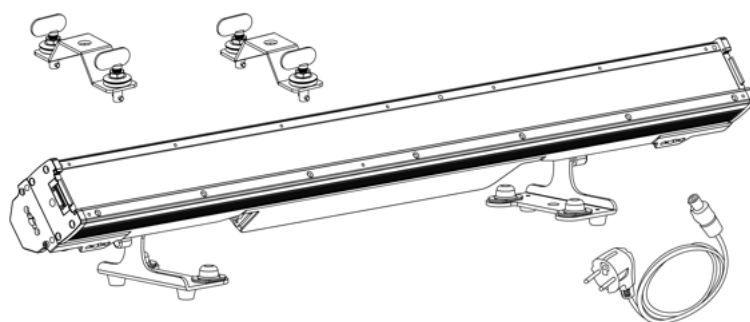


Figure 1

1.2. Intended Use

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

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

1.3. LEDs Lifespan

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

1.4. Product Lifespan

This device is not designed for permanent operation.

Disconnect the device from the electrical power supply when the device is not in operation. This will reduce 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



Eye damage hazard



Provides important information about the disposal of this product.

1.7. Symbols on the Information Label

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

The information label contains the following symbols:



This device shall not be treated as household waste.



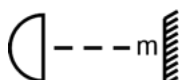
Read and follow the instructions in the user manual before installing, operating or servicing the device.



This device falls under IEC protection class I.

IP65

This device is rated IP65.



Minimum distance from lighted objects



Warning: Risk of electric shock. Do not open.

Warning: To reduce the risk of fire or electric shock do not expose this equipment to rain or moisture.

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.



WARNING
Risk of epileptic shock

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



WARNING
Possible eye damage caused by high light intensity

Possibly hazardous optical radiation emitted from this device.

- Do not look at the operating light source. May be harmful to the eye.
- Do not look at the light source with optical instruments that may concentrate the light output.
- Make sure that persons are not looking directly into the light source when the device lights up suddenly. This can happen when the device is powered on, when it receives a DMX signal, or when certain menu items are selected.
- Disconnect power before servicing.
- Wear protective goggles if looking into the light source during service or maintenance.

**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 insert objects into air vents.
- 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 bar. 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.
- There are no deformations on housings, fixings and installation points.
- 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.

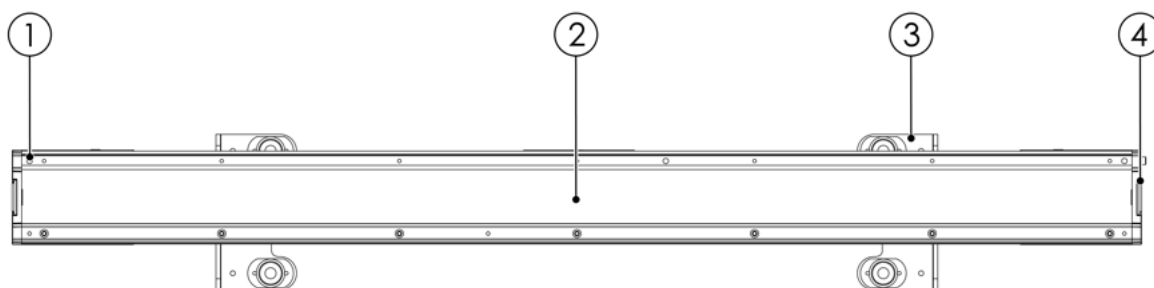
3. Description of the Device

The Showtec Spectra Wash is an IP65-rated wash bar for temporary outdoor use. It has 16 20 W RGBW LEDs to create flash and wash effects. You can control the LEDs individually or together via DMX. The device has a narrow 12° beam angle. The optionally available beam shapers change the beam angle to 15°, 25° or 10° x 40°.

The Spectra Wash runs stand-alone with built-in presets and effects, in master/slave mode and in 3-, 4-, 6-, 11-, 23-, 32-, 64- and 71-channel DMX mode with RDM support. The quick-lock system allows you to connect multiple units in horizontal or vertical direction, or suspend the device horizontally under a truss.

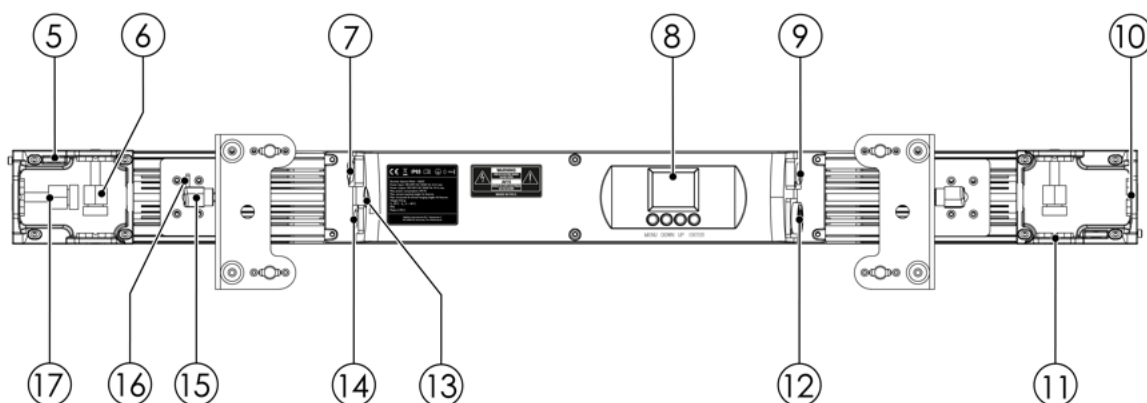
Two quick-lock brackets and a Power Pro True cable are included. Barndoors are available as an option (see [3.5. Optional Accessories](#) on page 11).

3.1. Front View

Figure 2


- 01) 4 x mounting opening for barndoor
- 02) 16 x 20 W RGBW LED
- 03) 2 x mounting bracket
- 04) Opening for beam shaper

3.2. Back View

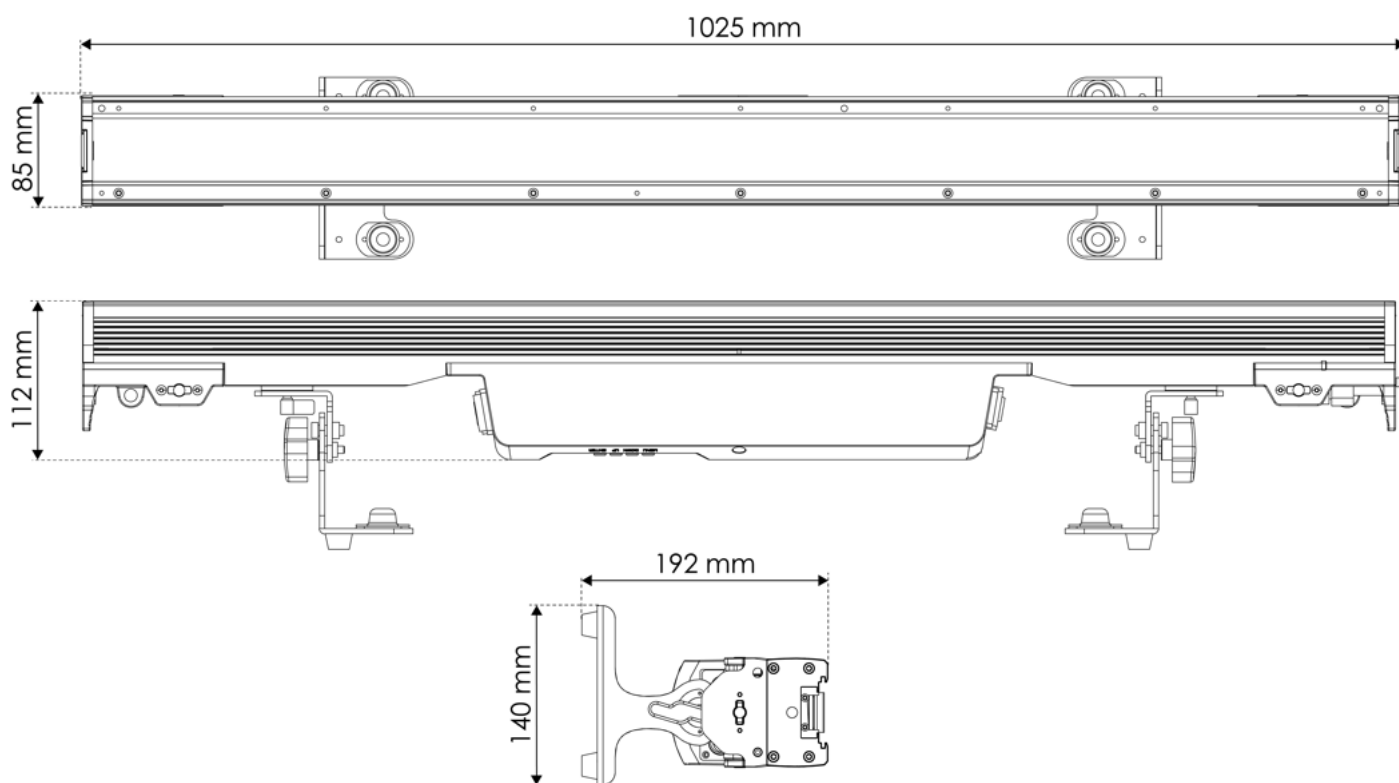
Figure 3


- 05) 2 x safety eye
- 06) 2 x quick-lock connector for horizontal mounting
- 07) IP65-rated 5-pin DMX signal connector IN
- 08) Control panel: LCD display and control buttons
- 09) IP65-rated 5-pin DMX signal connector OUT
- 10) Opening for vertical mounting
- 11) 2 x opening for horizontal mounting
- 12) IP65-rated Power Pro True connector OUT
- 13) Protective vent (M12x1,5)
- 14) IP65-rated Power Pro True connector IN
- 15) 2 x adjustment handle
- 16) 2 x locking mechanism
- 17) Quick-lock connector for vertical mounting

3.3. Product Specifications

Model:	Spectra Wash
Source:	
Light source type	LED
Light source quantity	16
Light source power	20 W
LED color type	RGBW
Refresh rate	18000 Hz
Control and programming:	
Control mode	Built-in program / DMX / manual / stand alone
DMX channels	3 / 4 / 6 / 11 / 23 / 32 / 64 / 71
Protocols	DMX / RDM
Display	LCD
Dynamic effects:	
Dimmer	0–100 %
Strobe	0–20 Hz
Electrical specifications and connections:	
Power supply	100–240 V AC 50/60 Hz
Power consumption	345 W
Power connector IN	Power Pro True
Power connector OUT	Power Pro True
DMX connector IN	XLR 5P
DMX connector OUT	XLR 5P
Mechanical specifications:	
Length	1025 mm
Width	140 mm
Height	192 mm
Weight	9,8 kg
IP rating	IP65
Housing	Aluminum die-cast
Color	Black
Product properties:	
Cooling	Passive
Rigging:	
Mounting options	Baseplate / bracket / quick-lock
Safety attachment	Yes
Thermal specifications:	
Maximum ambient temperature	40 °C
Minimum operating temperature	-5 °C
Included items:	
Included cables	Power Pro True cable
Included rigging	Quick-lock bracket

3.4. Dimensions

Figure 4

3.5. Optional Accessories

You can additionally purchase the following accessories:

- [42656](#) 15° Beamshaper for Spectra Series
- [42657](#) 25° Beamshaper for Spectra Series
- [42658](#) 10/40° Beamshaper for Spectra Series
- [42659](#) Vertical bracket for Spectra Series
- [42660](#) Base plate for Spectra Series
- [42661](#) Barndoor for Spectra Series

Contact your Highlite International dealer for more information.

4. Installation

4.1. Safety Instructions for Installation

**WARNING**

Incorrect installation can cause serious injuries and damage of property.

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

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

4.2. Personal Protective Equipment

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

4.3. Installation Site Requirements

- The device can be used indoors and temporarily outdoors.
- The device must be installed away from heating sources and direct sunlight.
- The ambient temperature must be in the range -5 and 40 °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.



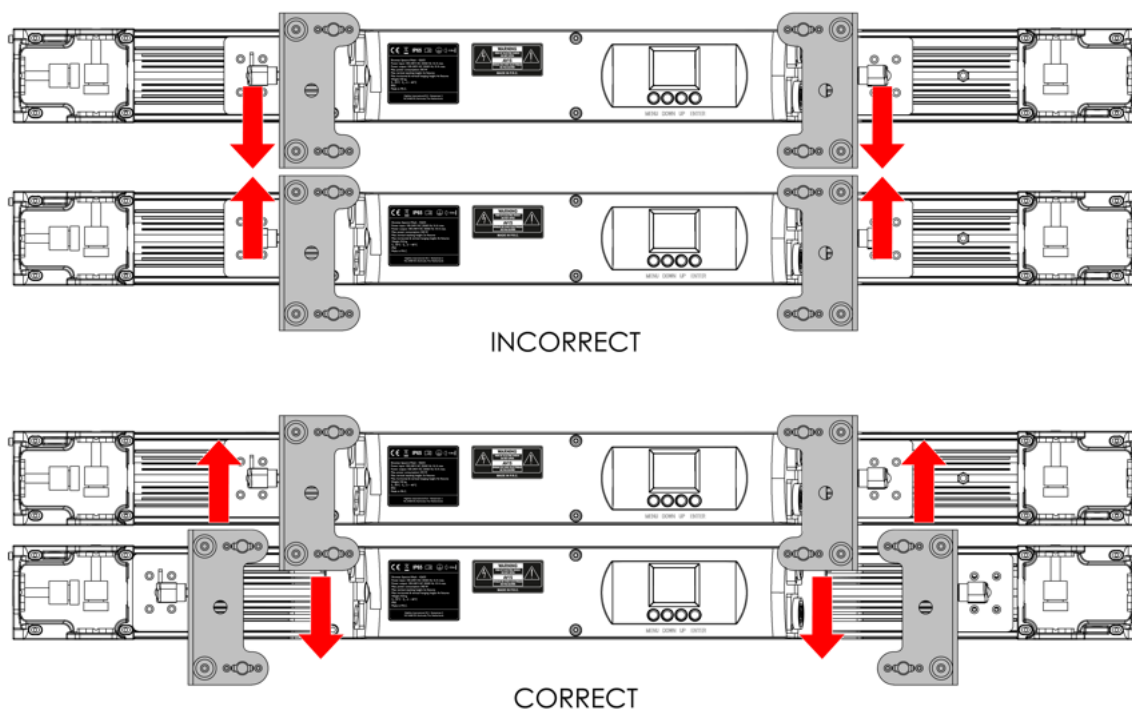
CAUTION

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

4.4.1. Adjusting the Mounting Bracket Position

The position of the **mounting brackets (03)** can be adjusted sideways for setups with multiple devices. The position of the **mounting brackets (03)** must be alternated to create enough space for horizontal stacking (see [4.4.2. Horizontal Hanging Installation](#) on page 14).

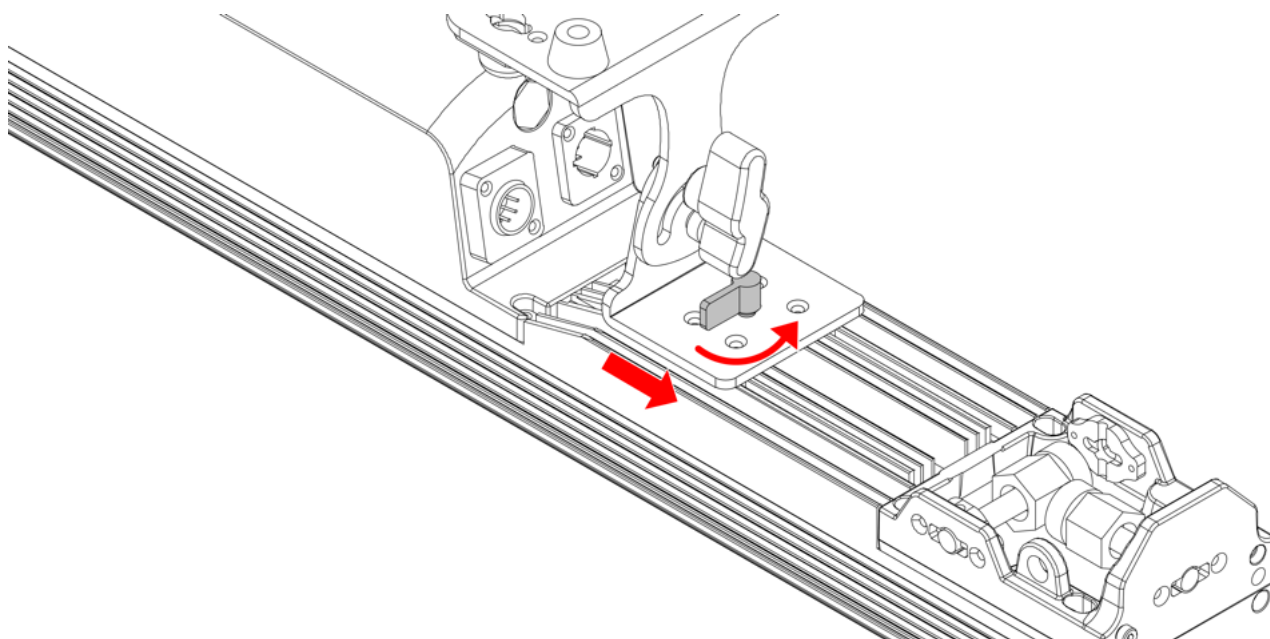
Figure 5



To adjust the position of the **mounting brackets (03)** follow the steps below:

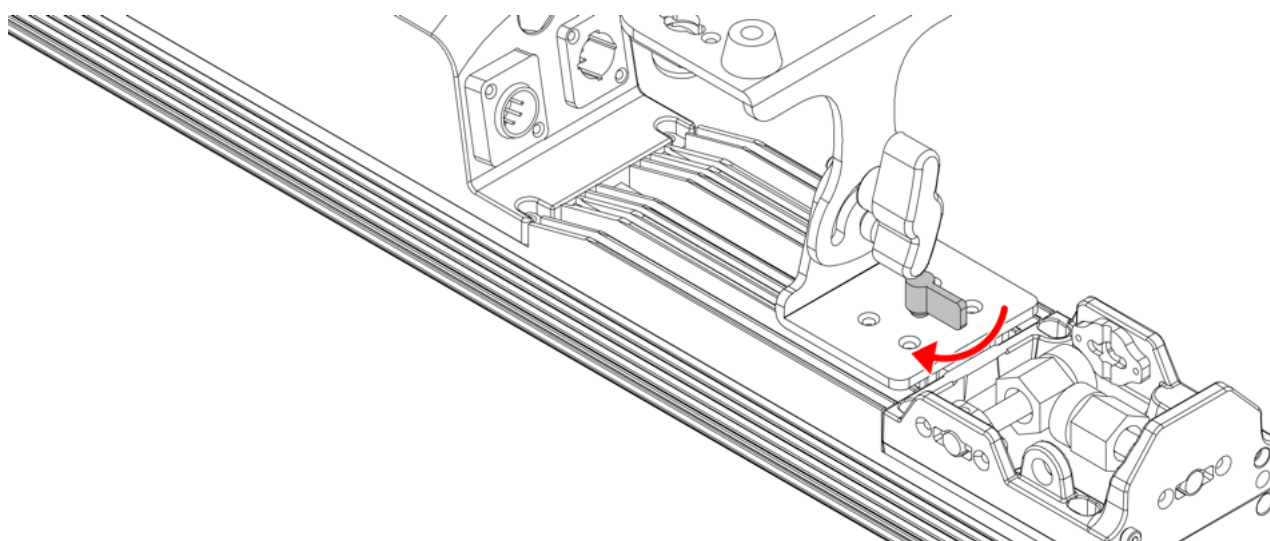
- 01) Loosen the **mounting bracket (03)** by turning the **locking mechanism (16)** counterclockwise.
- 02) Slide the **mounting bracket (03)** to the correct position.

Figure 6



03) Secure the **mounting bracket (03)** by turning the **locking mechanism (16)** clockwise.

Figure 7



04) Repeat steps 1–3 to adjust the other **mounting bracket (03)**.

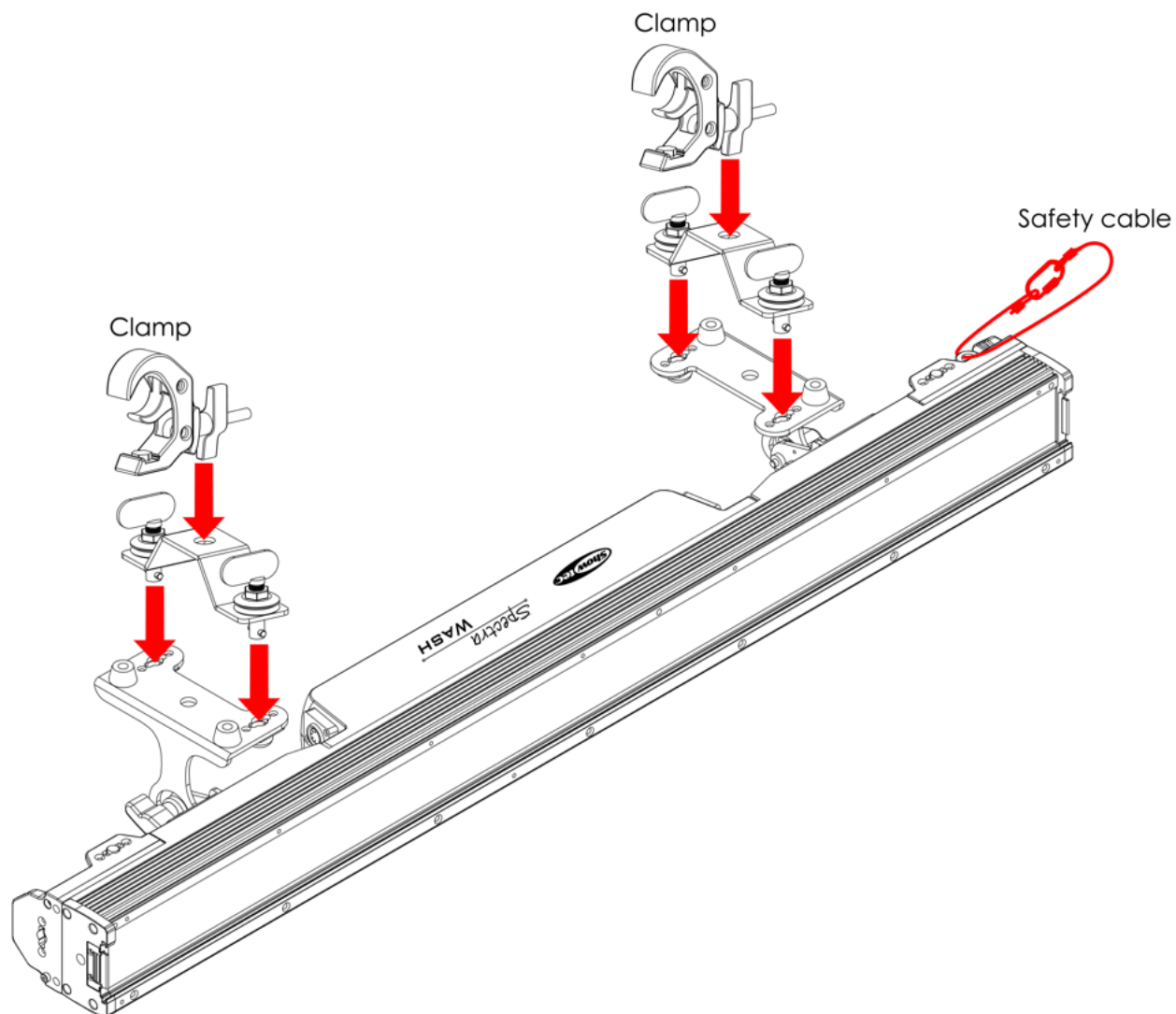
4.4.2. Horizontal Hanging Installation

The Spectra Wash can be mounted to a truss horizontally. Maximum 3 additional devices can be mounted hanging from the 1st device using the built-in quick-lock system.

To mount the device, follow the steps below:

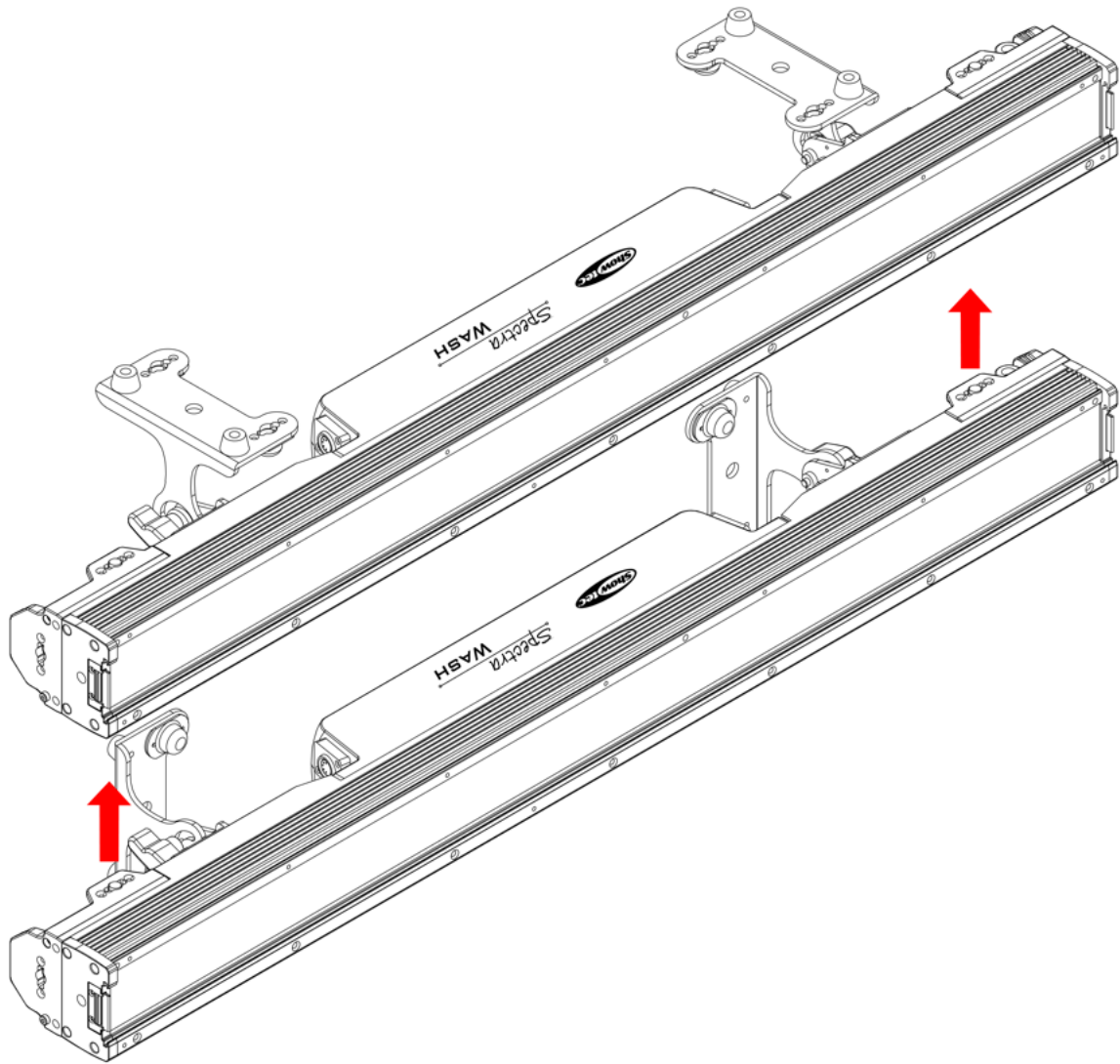
- 01) Adjust the position of the **mounting brackets (03)** for a setup with multiple devices (see [4.4.1. Adjusting the Mounting Bracket Position](#) on page 13).
- 02) Fasten the 2 quick-lock brackets, supplied with the device to the 2 **mounting brackets (03)**. This step is optional. It is possible to mount the device horizontally with or without the quick-lock brackets.
- 03) Install the clamps to the 2 quick-lock brackets (if installed) or the 2 **mounting brackets (03)**. Make sure that you use clamps suitable for attaching the device to a truss.
- 04) Attach the device to the supporting structure. Make sure that the device cannot move freely.

Figure 8



- 05) 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 (05)**.
- 06) Adjust the position of the **mounting brackets (03)** of a 2nd device (see [4.4.1. Adjusting the Mounting Bracket Position](#) on page 13).
- 07) Attach the 2 **quick-lock connectors for horizontal mounting (06)** of the 2nd device to the 2 **openings for horizontal mounting (11)** of the 1st device.
- 08) Secure the 2 **quick-lock connectors for horizontal mounting (06)** by turning the locking mechanism of the quick-lock connectors clockwise.

Figure 9



09) Repeat step 6–8 to connect a 3rd and 4th device.

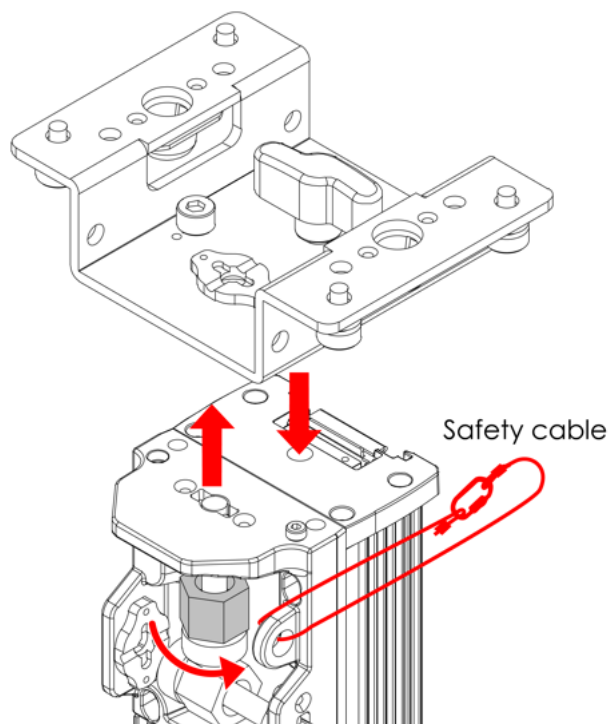
4.4.3. Vertical Hanging Installation (Optional)

The Spectra Wash can be mounted to a truss vertically using 1 included quick-lock bracket and 1 optionally available vertical bracket (see [3.5. Optional Accessories](#) on page 11). Maximum 3 additional devices can be mounted hanging from the 1st device using the built-in quick-lock system.

To mount the device, follow the steps below:

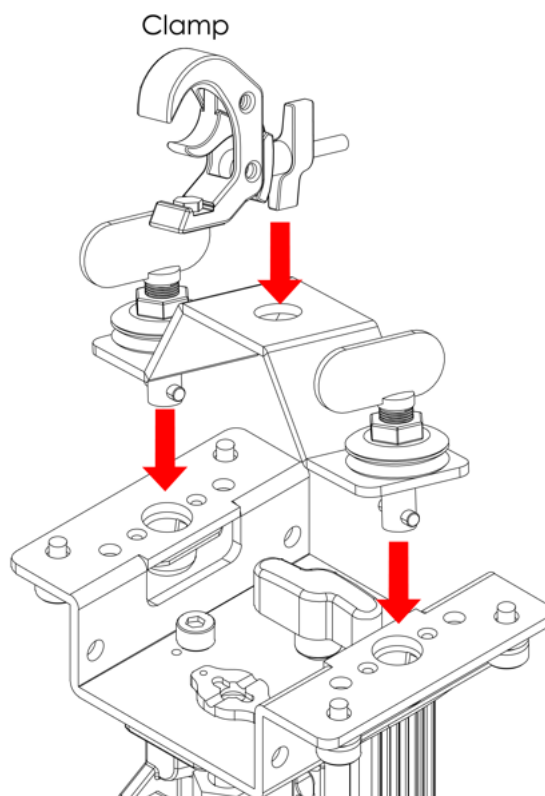
- 01) Attach the vertical bracket to the device with the **quick-lock connector for vertical mounting (17)** and the screw on the vertical bracket.
- 02) Secure the **quick-lock connector for vertical mounting (17)** by turning the locking mechanism of the quick-lock connector clockwise.

Figure 10



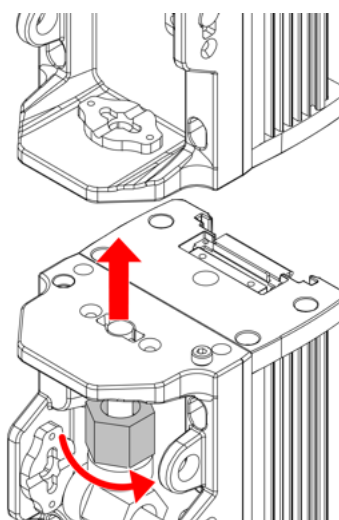
- 03) Fasten the quick-lock bracket on the vertical bracket.
- 04) Install the clamp to the quick-lock bracket. Make sure that you use a clamp suitable for attaching the device to a truss.

Figure 11



- 05) Attach the device to the supporting structure. Make sure that the device cannot move freely.
- 06) 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 (05)**.
- 07) Attach the **quick-lock connector for vertical mounting (17)** of a 2nd device to the **opening for vertical mounting (10)** of the 1st device.
- 08) Secure the **quick-lock connector for vertical mounting (17)** by turning the locking mechanism of the quick-lock connector clockwise.

Figure 12



- 09) Repeat step 7 and 8 to connect a 3rd and 4th device.

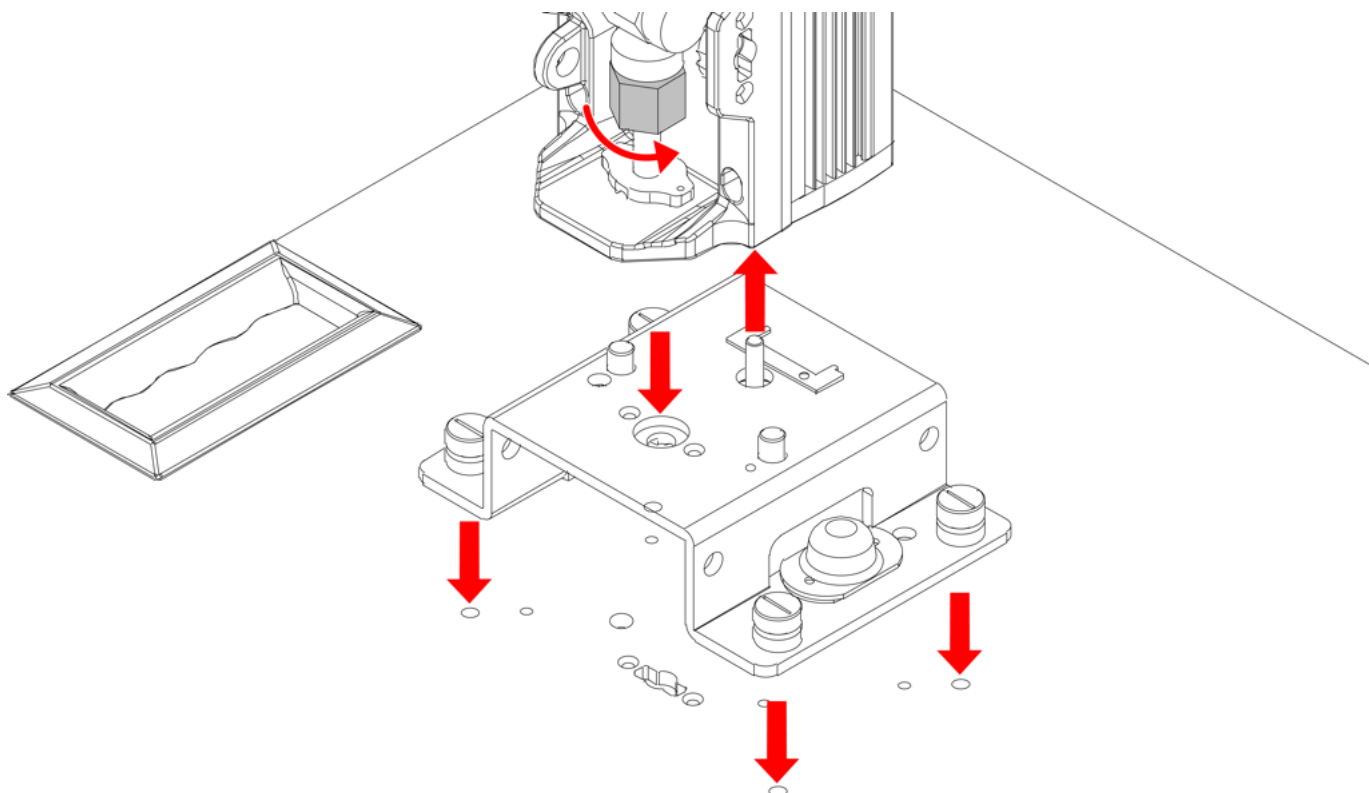
4.5. Floorstanding Installation (Optional)

The Spectra Wash can be mounted floorstanding using 1 optionally available base plate and 1 optionally available vertical bracket (see [3.5. Optional Accessories](#) on page 11). Maximum 1 additional device can be stacked on top of the 1st device (see [4.5.1. Vertical Stacking](#)) using the built-in quick-lock system.

To mount the device, follow the steps below:

- 01) Attach the device to the vertical bracket with the **quick-lock connector for vertical mounting (17)** and the screw on the vertical bracket.
- 02) Secure the **quick-lock connector for vertical mounting (17)** by turning the locking mechanism of the quick-lock connector clockwise.
- 03) Install the vertical bracket to the base plate using the 4 screws on the vertical bracket.

Figure 13

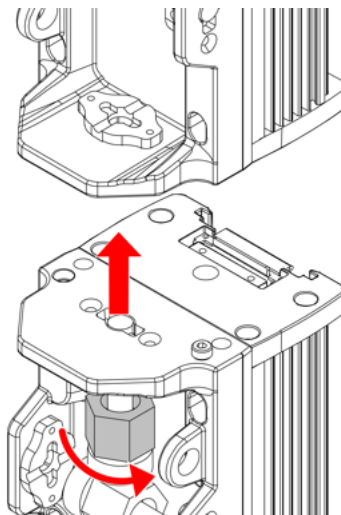


4.5.1. Vertical Stacking

The Spectra Wash can be stacked on another floorstanding device using the built-in quick-lock system. Maximum 2 devices can be stacked vertically.

- 01) Install a 1st device to the base plate (see [4.5. Floorstanding Installation \(Optional\)](#)).
- 02) Attach the **quick-lock connector for vertical mounting (17)** of a 2nd device to the **opening for vertical mounting (10)** of the 1st device.
- 03) Secure the **quick-lock connector for vertical mounting (17)** by turning the locking mechanism of the quick-lock connector clockwise.

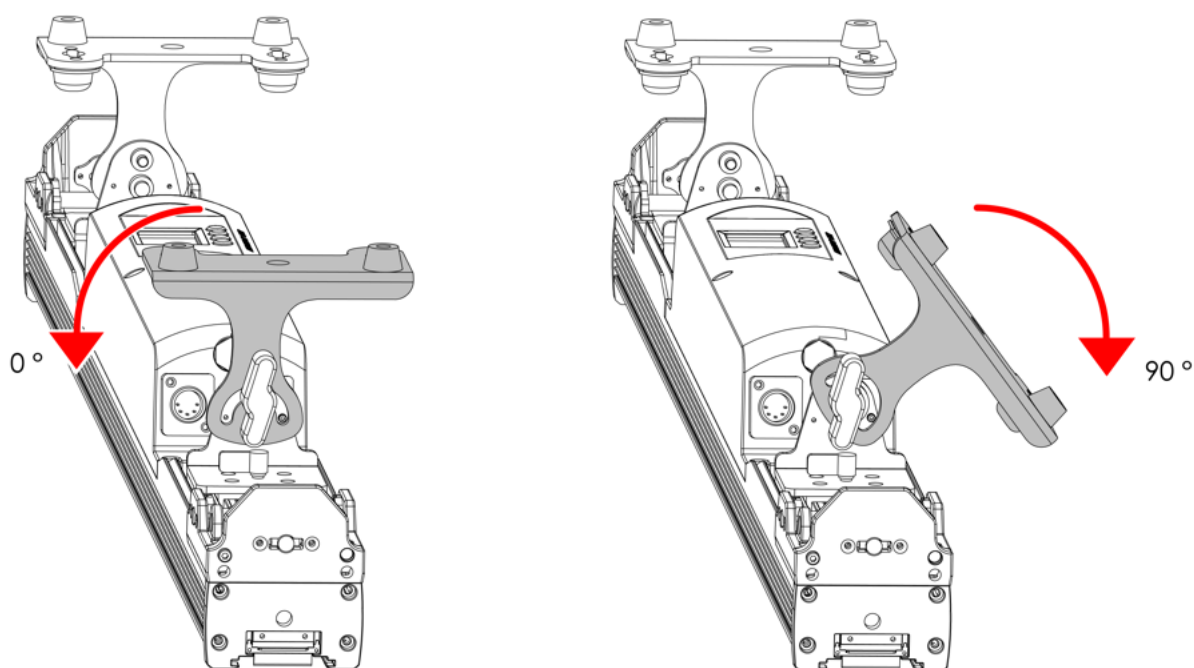
Figure 14



4.6. Angle Adjustment

You can adjust the angle of the device with the **adjustment handles (15)**. The movement of the **mounting bracket (03)** is restricted to 90° in 1 direction, but the direction of the angle adjustment can be changed.

Figure 15

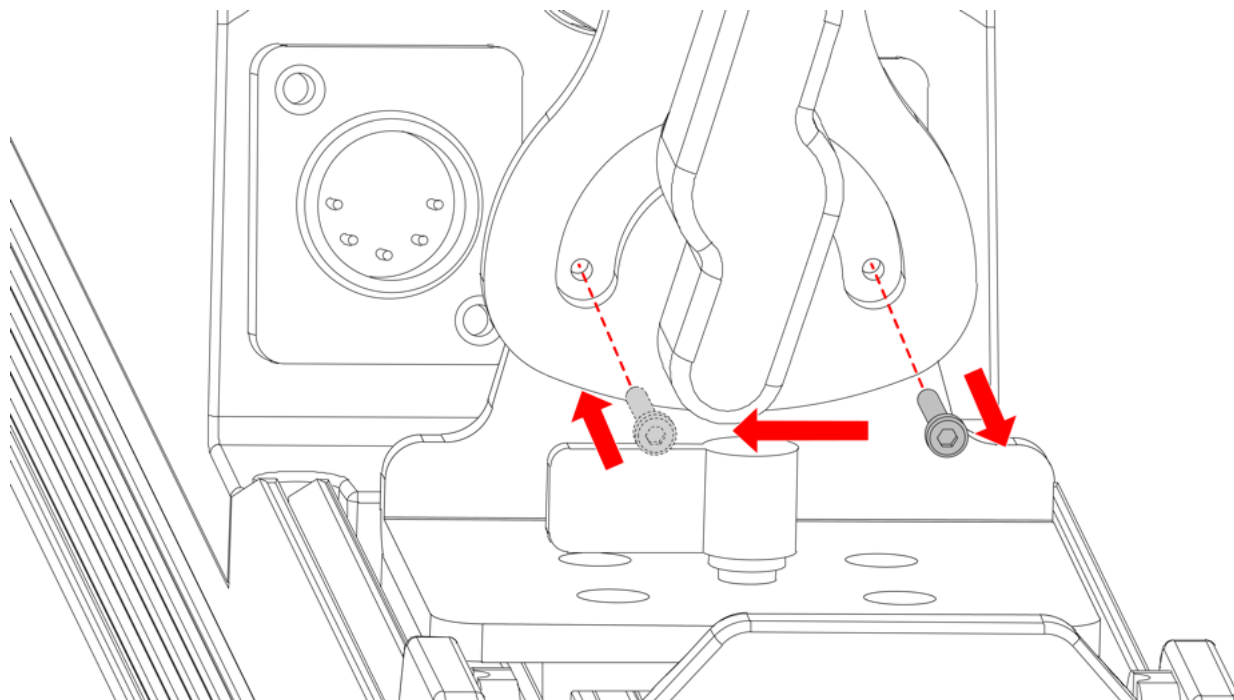


To change the direction of the angle adjustment, follow the steps below:

- 01) Use an allen key to remove the allen screw from the opening in the **mounting bracket (03)**.
- 02) Place the allen screw in the opening on the opposite side of the **mounting bracket (03)**.

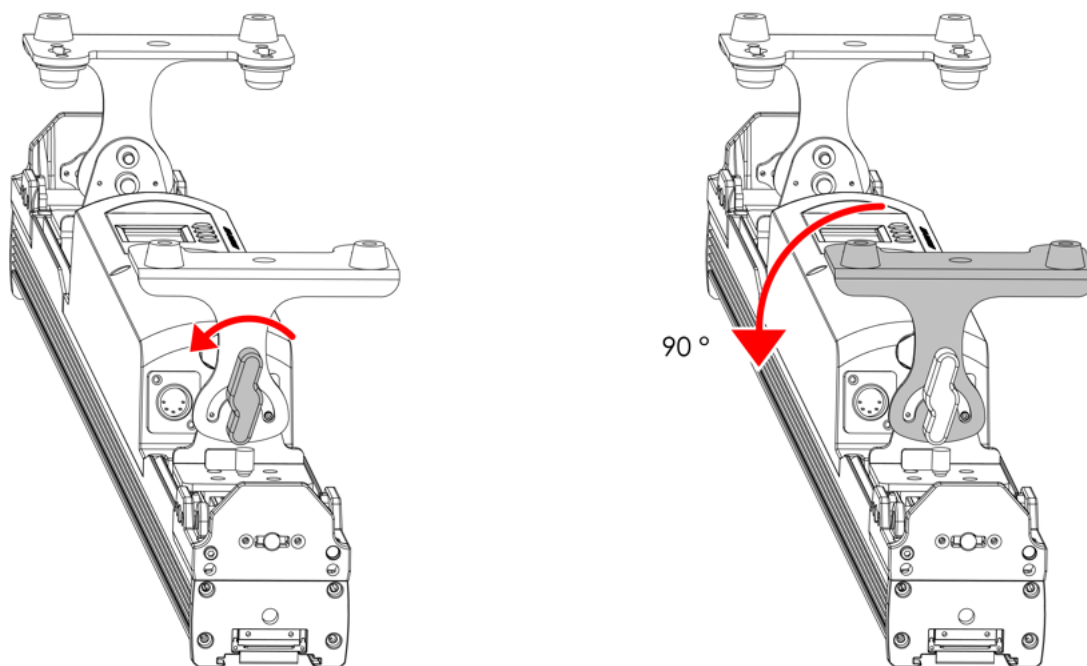
03) Use an allen key to tighten the allen screw.

Figure 16



04) Turn the **adjustment handle (15)** counterclockwise to loosen it.
 05) Tilt the device to the desired angle.

Figure 17



06) Turn the **adjustment handle (15)** clockwise to tighten it. Make sure that the device cannot move freely after the **adjustment handle (15)** is tightened.
 07) Repeat steps 1–6 to adjust the other **mounting bracket (03)**.

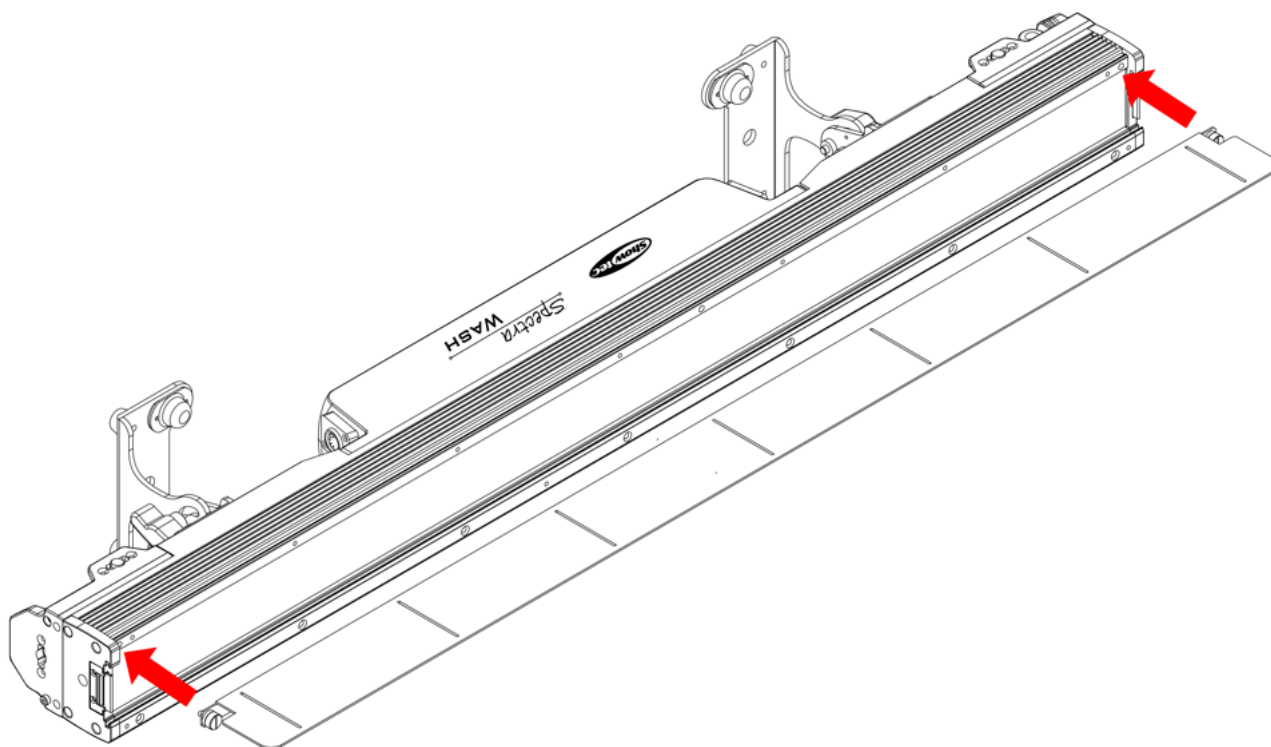
4.7. Barndoor Installation

An optional barndoor (see [3.5. Optional Accessories](#) on page 11) is available for use with the Spectra Wash.

To install the barndoor, do the following:

Install the barndoor to 2 of the **mounting openings for barndoor (01)** on either side of the device using the screws on the barndoor.

Figure 18



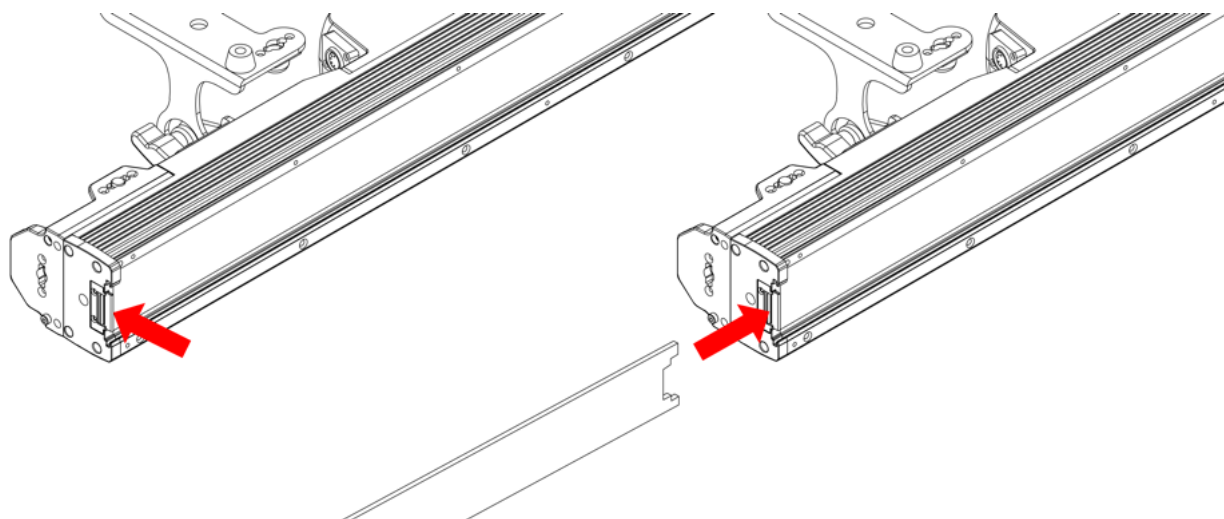
4.8. Beam Shaper Installation

Optional beamshapers (see [3.5. Optional Accessories](#) on page 11) are available for use with the Spectra Wash.

To install a beamshaper, follow the steps below:

- 01) Press down and hold the latch in the **opening for beam shaper (04)**.
- 02) Slide the beam shaper into the **opening for beam shaper (04)** until the latch snaps into place.

Figure 19



4.9. 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.

4.10. 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 Spectra Wash
- at 200–240 V: 6 devices Spectra Wash

5. Setup

5.1. Warnings and Precautions

**Attention**

Connect all data cables before supplying power.

Disconnect power supply before connecting or disconnecting data cables.

5.2. Stand-alone Setup

When the Spectra Wash 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 Spectra Wash has 5-pin DMX signal IN and OUT connectors.

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

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

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

Note:

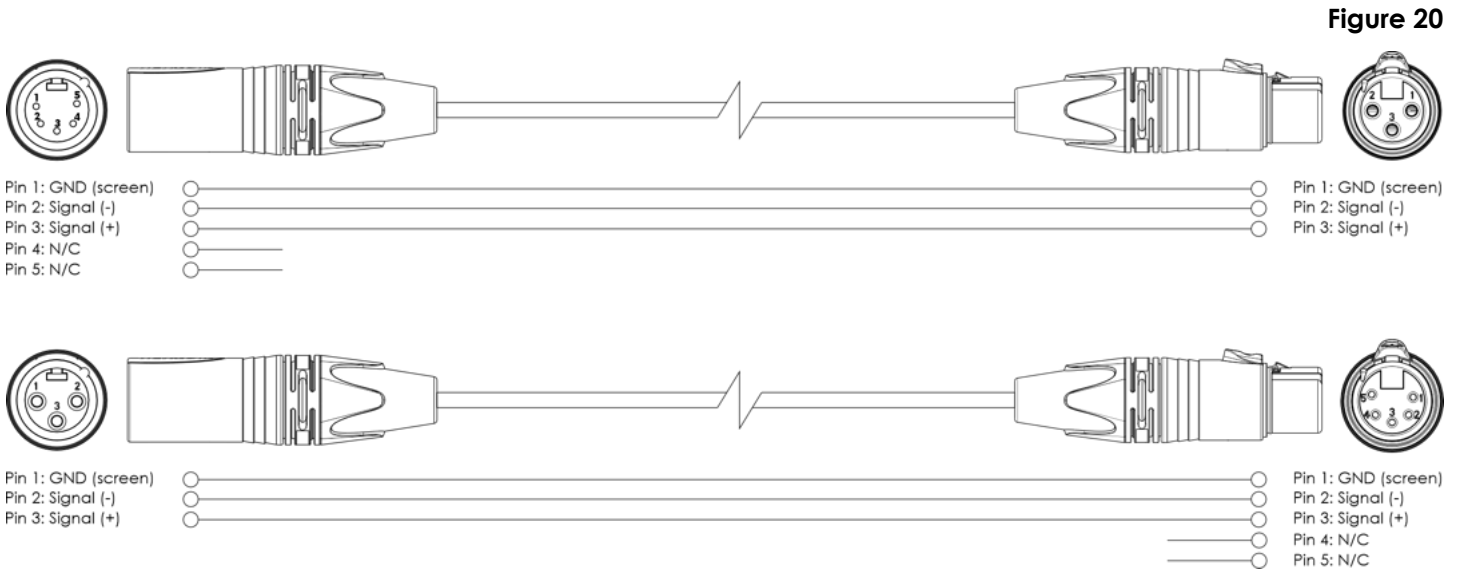
- Maximum recommended DMX data link distance: 300 m
- Maximum recommended number of devices on a DMX data link: 32 devices

5.3.2. DMX Cables

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

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

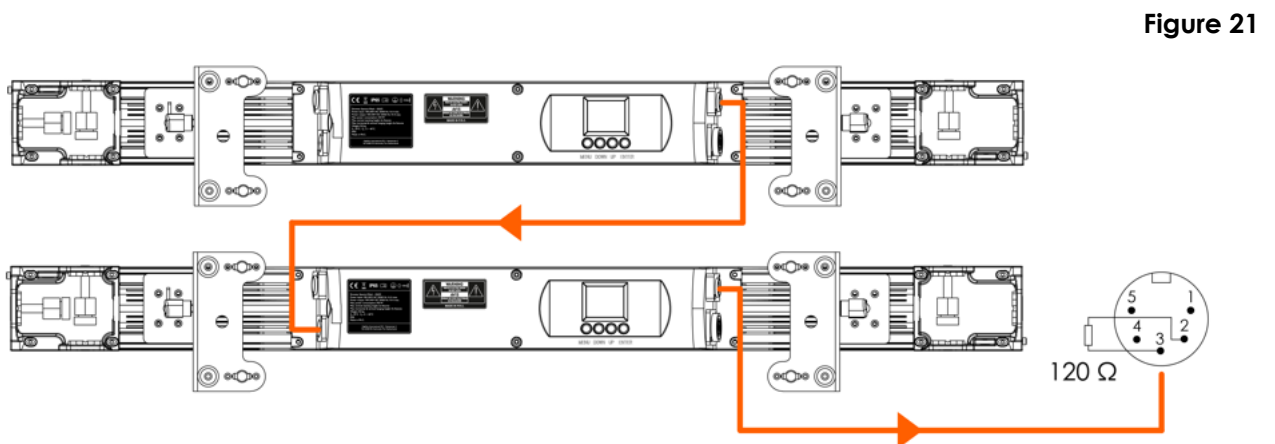
When you make your own DMX cables, make sure that you connect the pins and wires correctly as shown in the figure below.



5.3.3. Master/Slave Setup

The Spectra Wash supports master/slave control mode. To connect multiple devices in a master/slave setup, follow the steps below:

- 01) Connect the DMX OUT connector of the 1st device to the DMX IN connector of the 2nd device with a 5-pin DMX cable.
- 02) Repeat step 1 to connect all devices in a daisy-chain.
- 03) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device on the data link.
- 04) Set the 1st device on the data link as a master device (see [6.6.1.3. Slave](#) on page 33).
- 05) Set the remaining devices as slave devices (see [6.6.1.3. Slave](#) on page 33).

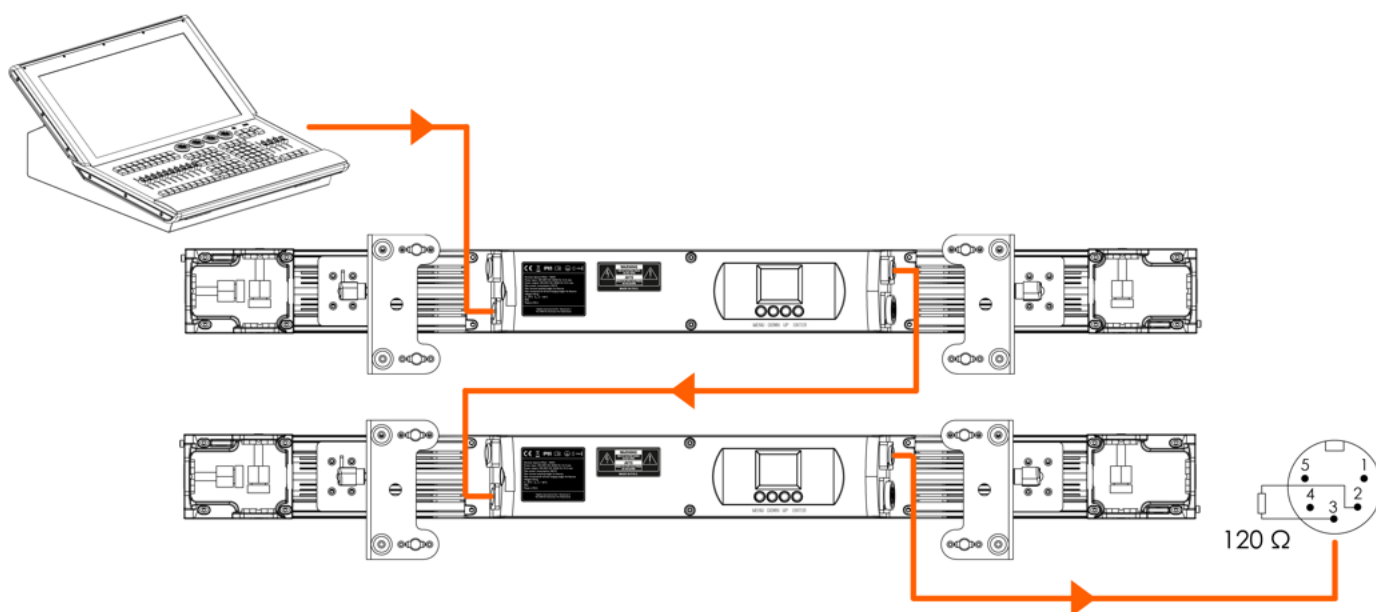


5.3.4. DMX Linking

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

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

Figure 22



5.3.5. DMX Addressing

In a setup with multiple devices, make sure that you set the DMX starting address of each device correctly. The Spectra Wash has 8 personalities: 03 CH (3 channels), 04 CH (4 channels), 06 CH (6 channels), 11 CH (11 channels), 23 CH (23 channels), 32 CH (32 channels), 64 CH (64 channels), 71 CH (71 channels).

If you want to connect multiple devices on one data link and use them in 71-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 72 (072), as $1 + 71 = 72$.
- 03) Set the starting address of the 3rd device on the data link to 143 (143), as $72 + 71 = 143$.
- 04) Continue assigning the starting addresses of the remaining devices by adding 71 each time to the previous number.

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

6. Operation

6.1. Safety Instructions for Operation

**Attention**

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

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

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

**Attention****Power supply**

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

6.2. Control Modes

The Spectra Wash supports the following control modes:

- Stand-alone: Manual control, built-in programs
- Master/Slave: Manual control, built-in programs
- DMX-512: 03 CH (3 channels), 04 CH (4 channels), 06 CH (6 channels), 11 CH (11 channels), 23 CH (23 channels), 32 CH (32 channels), 64 CH (64 channels), 71 CH (71 channels)

For more information about how to connect the devices, refer to Setup (see [5. Setup](#) on page 25).

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

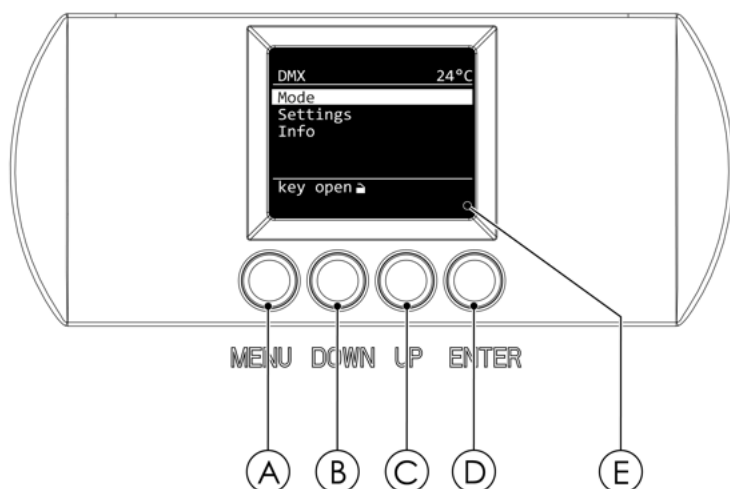
- Set up the master/slave mode in the Mode menu (see [6.6.1.3. Slave](#) on page 33).
- Adjust the parameters for manual control in the Mode menu (see [6.6.1.4. Manual](#) on page 33).
- Select a built-in program in the Mode menu (see [6.6.1.2. Auto](#) on page 33).

To operate the device with a DMX controller:

- 01) Set the DMX starting address of the device in the DMX submenu (see [6.6.1.1.1. DMX Address](#) on page 32).
- 02) Select a DMX personality in the DMX submenu (see [6.6.1.1.2. DMX Mode](#) on page 32). Refer to DMX Channels (see [6.7. DMX Channels](#) on page 37) for a complete overview of all DMX channels.

6.3. Control Panel

Figure 23



- A) MENU touch button
- B) DOWN touch button
- C) UP touch button
- D) ENTER touch button
- E) OLED display

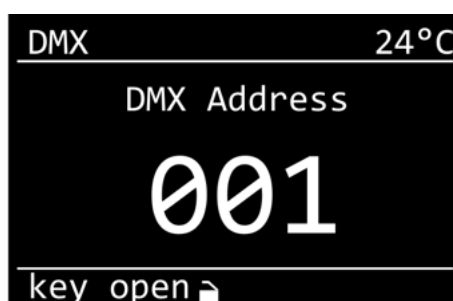
- Use the **MENU** button to exit the current submenu, to return to the Main Menu and to return to the start screen.
- Use the **UP/DOWN** buttons to navigate through the menus or to increase/decrease numeric values.
- Use the **ENTER** button to open the desired menu, to confirm your choice or to set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

6.4. Start-up

Upon start-up the display shows a splash screen with the Showtec logo and the name of the device:



Immediately afterwards, the display shows the start screen. The start screen provides information about the currently active control mode, the DMX starting address of the device and the temperature of the fixture, for example:



Press the **MENU** button to open the main menu.

Note:

If the display is locked, you need to enter a password to access the main menu. The default password is pressing the **UP/DOWN** buttons in the following order: **UP, DOWN, UP, DOWN**.

6.5. Menu Overview

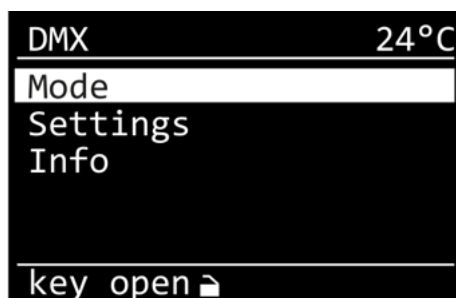
Level 1	Level 2	Level 3	Level 4
Mode (see 6.6.1. Mode on page 31)	DMX	DMX address	001–512
		DMX Mode	03 CH
			04 CH
			06 CH
			11 CH
			23 CH
			32 CH
	Auto	DMX Mode	64 CH
		DMX Mode	71 Ch
		Program	01–22
Slave	Program Speed	01–10	
	Enable		
Manual	Disable		
	Master Dimmer	000–255	
	Red	000–255	
	Green	000–255	
	Blue	000–255	
	White	000–255	
	Color	01–50	
	Strobe	00–20	
Dim Curve	Linear		
	Square Law		
	Inv Square Law		
	S-Type		
Dimmer Speed	Speed 1		
	Speed 2		
	Speed 3		
	Speed 4		
PWM	600 HZ		
	1200 HZ		
	2400 HZ		
	4800 HZ		
	9600 Hz		
	12000 Hz		
Pixel Reverse	25000 Hz		
	ON		
Disp Key	OFF		
	ON		
DMX Hold	OFF		
	Hold		
Display Timeout	Black		
	Off		
Invert Display	30S		
	Normal		
White Balance	Inverted		
	Red	000–255	
	Green	000–255	
	Blue	000–255	

Settings (see [6.6.2. Settings](#) on page 34)

Level 1	Level 2	Level 3	Level 4
Info (see 6.6.3. Info on page 36)	Factory Reset	White	000–255
		Yes	
		No	
	Software Version		
	Hardware Version		
	Total Runtime		
	RDM UID		

6.6. Main Menu Options

The main menu has the following options:



Mode
Settings
Info

01) Press the **UP/DOWN** buttons to navigate through the menu.

02) Press the **ENTER** button to open submenus.

6.6.1. Mode

In this menu you can adjust the DMX settings and control mode settings of the device.

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



- DMX (see [6.6.1.1. DMX](#))
- Auto (see [6.6.1.2. Auto](#))
- Slave (see [6.6.1.3. Slave](#))
- Manual (see [6.6.1.4. Manual](#))

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

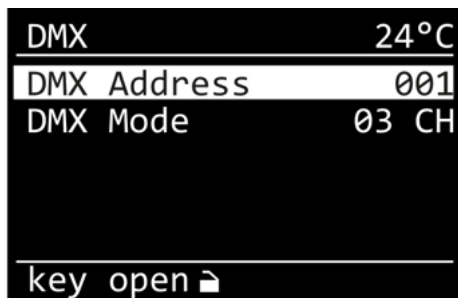
Note:

The top left corner of the menu shows the currently active control mode: DMX, Auto, Slave or Manual.

6.6.1.1. DMX

In this submenu you can set the DMX starting address of the device and change the DMX control mode.

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

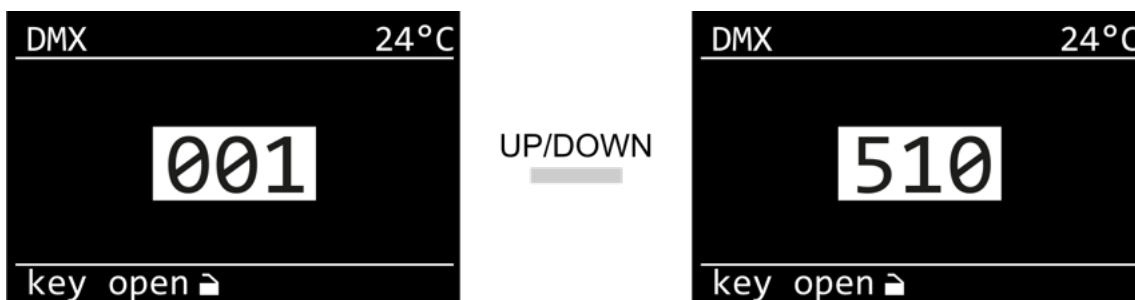


- DMX Address (see [6.6.1.1.1. DMX Address](#))
- DMX Mode (see [6.6.1.1.2. DMX Mode](#))

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

6.6.1.1.1. DMX Address

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



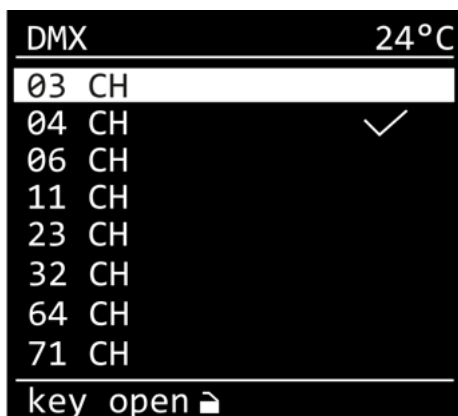
01) Press the **UP/DOWN** buttons to select the starting address of the device. The selection range is 001–512.

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

6.6.1.1.2. DMX Mode

In this submenu you can select the DMX channel mode.

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



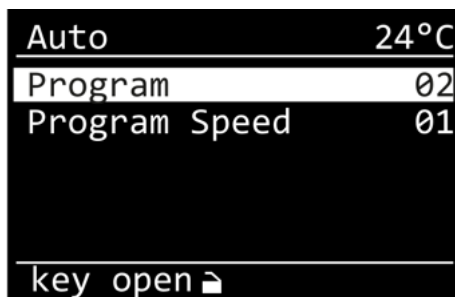
- 03 CH: 3 channels
- 04 CH: 4 channels
- 06 CH: 6 channels
- 11 CH: 11 channels
- 23 CH: 23 channels
- 32 CH: 32 channels
- 64 CH: 64 channels
- 71 CH: 71 channels

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

6.6.1.2. Auto

In this submenu you can select a built-in program and adjust the speed of the program.

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



- Program: Select one of the 22 built-in programs (01–22)
- Speed: Set the speed of the built-in program (01–10)

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

03) Press the **UP/DOWN** buttons to increase/decrease the value.

04) Press the **ENTER** button to confirm the selection.

6.6.1.3. Slave

In this submenu you can configure the device as a master or slave device.

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



- Enable: Set the device as a slave device
- Disable: Set the device as a master device or stand-alone device

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

6.6.1.4. Manual

In this submenu you can manually configure the output settings of the device.

01) Press the **UP/DOWN** buttons to select one of the 7 options:



- Master Dimmer: Set the intensity of the light output (000–255)
- Red: Set the intensity of the red LED color (000–255)
- Green: Set the intensity of the green LED color (000–255)
- Blue: Set the intensity of the blue LED color (000–255)
- White: Set the intensity of the white LED color (000–255)

- Color: Set a preset LED color (01–50)
 - Strobe: Set the intensity of the strobe in Hertz (00–20)
- 02) Press the **ENTER** button to confirm the selection.
- 03) Press the **UP/DOWN** buttons to increase/decrease the value.
- 04) Press the **ENTER** button to confirm the selection.

6.6.2. Settings

In this menu you can adjust the dimmer settings and general settings of the device.

- 01) Press the **UP/DOWN** buttons to select one of the 10 options:



- Dim Curve: Select the dimming curve of the fixture (see [6.6.2.1. Dim Curve](#))
 - Dimmer Speed: Set the dimmer speed from slow to fast (Speed 1/Speed 2/Speed 3/Speed 4)
 - PWM: Set the pulse-width modulation rate of the device (600 HZ/1200 HZ/2400 HZ/4800 HZ/9600 HZ/12000 HZ/25000 HZ)
 - Pixel Reverse: Reverse the order of the LED pixels (see [6.7.1. Section Overview](#) on page 37) of the device (ON/OFF)
 - Disp Key: Turn the display lock on or off (see [6.6.2.2. Disp Key](#))
 - DMX Hold: Set the behavior of the device in case of a DMX failure. There are 2 options: Black (the device will black out the light output) and Hold (the device will use the last received DMX signal)
 - Display Timeout: Adjust if the display turns off automatically after a period of inactivity (Off/30S)
 - Invert Display: Rotate the display at 180° (Yes/No)
 - White Balance: Adjust the color brightness of the LEDs (see [6.6.2.3. White Balance](#))
 - Factory Reset: Reset the settings of the device to the default factory settings (Yes/No)
- 02) Press the **ENTER** button to confirm the selection.
- 03) Press the **UP/DOWN** buttons to change the value.
- 04) Press the **ENTER** button to confirm the selection.

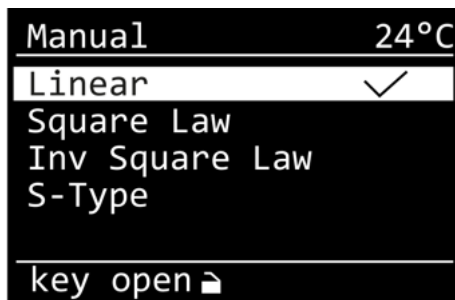
Note:

The top left corner of the menu shows the currently active control mode: DMX, Auto, Slave or Manual.

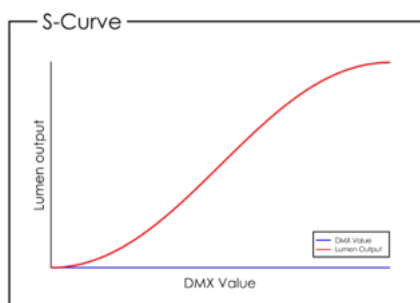
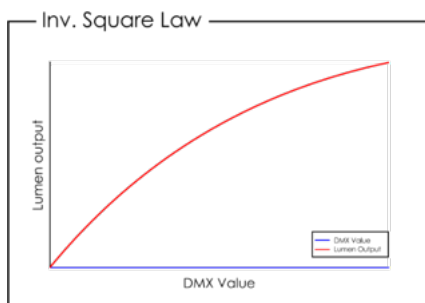
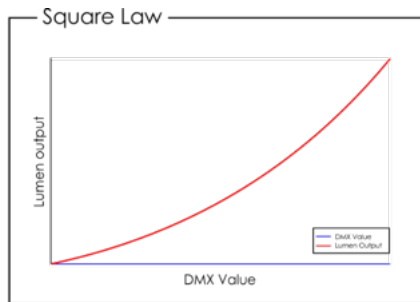
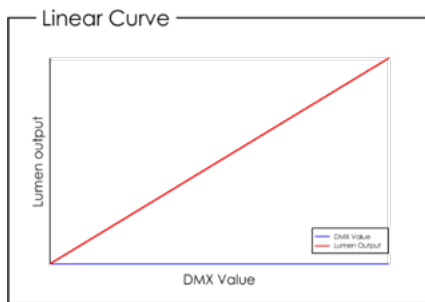
6.6.2.1. Dim Curve

In this submenu you can select the dimming curve.

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



- Linear
- Square
- Inverse Square
- S-Curve



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

6.6.2.2. Disp Key

In this submenu you can activate the display lock.

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



- OFF: The access to the main menu remains unlocked
- ON: The display 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 display is not locked

02) Press the **ENTER** button 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 **UP/DOWN** buttons in the following order: **UP, DOWN, UP, DOWN.**

6.6.2.3. White Balance

In this submenu you can adjust color brightness of the LEDs.

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

White Balance	24°C
Red	255
Green	255
Blue	255
White	255
key open ↵	

- Red: Set the intensity of the red LED color (000–255)
- Green: Set the intensity of the green LED color (000–255)
- Blue: Set the intensity of the blue LED color (000–255)
- White: Set the intensity of the white LED color (000–255)

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

03) Press the **UP/DOWN** buttons to change the value.

04) Press the **ENTER** button to confirm the selection.

6.6.3. Info

In this menu you can view the UID, the LED operating hours and the firmware version of the device.

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

Manual	24°C
Software Version	
Hardware Version	
Total Runtime	
RDM UID	
key open ↵	

- Software Version: View the current software version of the device
- Hardware Version: View the current hardware version of the device
- Total Runtime: View the total runtime of the device
- RDM UID: View the unique identification (UID) number of the device

02) Press the **ENTER** button to view an option.

Note:

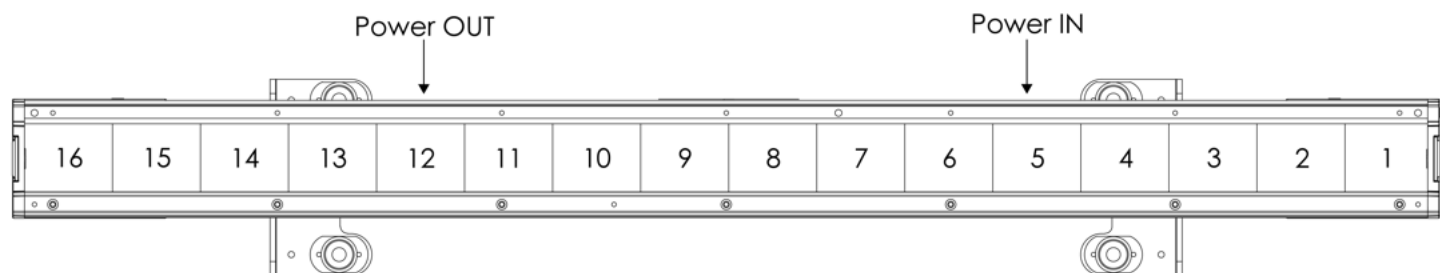
The top left corner of the menu shows the currently active control mode: DMX, Auto, Slave or Manual.

6.7. DMX Channels

6.7.1. Section Overview

The following table shows the order of the RGBW LEDs when viewing the Spectra Wash from the front.

Figure 24



6.7.2. DMX Channels Overview

Function	03 CH	04 CH	06 CH	11 CH	23 CH	32 CH	64 CH	71 CH
Master Dimmer	1							
Color Macro (1-50)	2							
All Red		1	1	1	1			
All Green		2	2	2	2			
All Blue		3	3	3	3			
All White		4	4	4	4			
Strobe Speed	3		5	5	5			1
Master Dimmer			6	6	6			2
Control Channel				7				3
Color Macro (1-50)				8	7			4
Auto Program				9				5
Auto Program Speed				10				6
Dimmer Fade				11				7
LED Dimmer 1-16					8-23			
LED 1 (RGBW)						1-4	1-4	8-11
LED 2 (RGBW)						1-4	5-8	12-15
LED 3 (RGBW)						5-8	9-12	16-19
LED 4 (RGBW)						5-8	13-16	20-23
LED 5 (RGBW)						9-12	17-20	24-27
LED 6 (RGBW)						9-12	21-24	28-31
LED 7 (RGBW)						13-16	25-28	32-35
LED 8 (RGBW)						13-16	29-32	36-39
LED 9 (RGBW)						17-20	33-36	40-43
LED 10 (RGBW)						17-20	37-40	44-47
LED 11 (RGBW)						21-24	41-44	48-51
LED 12 (RGBW)						21-24	45-48	52-55
LED 13 (RGBW)						25-28	49-52	56-59
LED 14 (RGBW)						25-28	53-56	60-63
LED 15 (RGBW)						29-32	57-60	64-67
LED 16 (RGBW)						29-32	61-64	68-71

6.7.3. 03 CH (3 Channels)

03 CH	Function	Value	Setting
1	Master Dimmer	000–255	From low to high intensity (0–100%)
2	Color Macro (1–50)	000–255	Color macro (see 6.7.7. Color Channel on page 41)
3	Strobe Speed	000–005	No function
		006–060	Linear strobe speed (0–20 Hz)
		061–110	Ramp up (slow to fast)
		111–160	Ramp down (slow to fast)
		161–210	Random linear strobe (slow to fast)
		211–255	Random sectional (slow to fast)

6.7.4. 04 CH (4 Channels), 06 CH (6 Channels), 11 CH (11 Channels), 23 CH (23 Channels)

04 CH	06 CH	11 CH	23 CH	Function	Value	Setting
1		1	1	All Red	000–255	Red intensity for all LEDs from low to high (0–100%)
2		2	2	All Green	000–255	Green intensity for all LEDs from low to high (0–100%)
3		3	3	All Blue	000–255	Blue intensity for all LEDs from low to high (0–100%)
4		4	4	All White	000–255	White intensity for all LEDs from low to high (0–100%)
	5	5	5	Strobe Speed	000–005	No function
					006–060	Linear strobe speed (0–20 Hz)
					061–110	Ramp up (slow to fast)
					111–160	Ramp down (slow to fast)
					161–210	Random linear strobe (slow to fast)
					211–255	Random sectional (slow to fast)
	6	6	6	Master Dimmer	000–255	From low to high intensity (0–100%)
	7			Control Channel	000–255	Control channel (see 6.7.9. Control Channel on page 43)
	8	7		Color Macro (1–50)	000–255	Color macro (see 6.7.7. Color Channel on page 41)
	9			Auto Program	000–255	Auto program (see 6.7.8. Auto Program on page 42)
	10			Auto Program Speed	000–255	From slow to fast (0–100%)
	11			Dimmer Fade	000–255	For internal programs only
		8		LED Dimmer 1	000–255	From low to high intensity (0–100%)
		9		LED Dimmer 2	000–255	From low to high intensity (0–100%)
		10		LED Dimmer 3	000–255	From low to high intensity (0–100%)
		11		LED Dimmer 4	000–255	From low to high intensity (0–100%)
		12		LED Dimmer 5	000–255	From low to high intensity (0–100%)
		13		LED Dimmer 6	000–255	From low to high intensity (0–100%)
		14		LED Dimmer 7	000–255	From low to high intensity (0–100%)
		15		LED Dimmer 8	000–255	From low to high intensity (0–100%)
		16		LED Dimmer 9	000–255	From low to high intensity (0–100%)
		17		LED Dimmer 10	000–255	From low to high intensity (0–100%)
		18		LED Dimmer 11	000–255	From low to high intensity (0–100%)
		19		LED Dimmer 12	000–255	From low to high intensity (0–100%)
		20		LED Dimmer 13	000–255	From low to high intensity (0–100%)
		21		LED Dimmer 14	000–255	From low to high intensity (0–100%)
		22		LED Dimmer 15	000–255	From low to high intensity (0–100%)
		23		LED Dimmer 16	000–255	From low to high intensity (0–100%)

6.7.5. 32 CH (32 Channels)

32 CH	Function	Value	Setting
1	LED 1 & 2	000–255	Red intensity from low to high (0–100%)
2	LED 1 & 2	000–255	Green intensity from low to high (0–100%)
3	LED 1 & 2	000–255	Blue intensity from low to high (0–100%)
4	LED 1 & 2	000–255	White intensity from low to high (0–100%)
5	LED 3 & 4	000–255	Red intensity from low to high (0–100%)
6	LED 3 & 4	000–255	Green intensity from low to high (0–100%)
7	LED 3 & 4	000–255	Blue intensity from low to high (0–100%)
8	LED 3 & 4	000–255	White intensity from low to high (0–100%)
9	LED 5 & 6	000–255	Red intensity from low to high (0–100%)
10	LED 5 & 6	000–255	Green intensity from low to high (0–100%)
11	LED 5 & 6	000–255	Blue intensity from low to high (0–100%)
12	LED 5 & 6	000–255	White intensity from low to high (0–100%)
13	LED 7 & 8	000–255	Red intensity from low to high (0–100%)
14	LED 7 & 8	000–255	Green intensity from low to high (0–100%)
15	LED 7 & 8	000–255	Blue intensity from low to high (0–100%)
16	LED 7 & 8	000–255	White intensity from low to high (0–100%)
17	LED 9 & 10	000–255	Red intensity from low to high (0–100%)
18	LED 9 & 10	000–255	Green intensity from low to high (0–100%)
19	LED 9 & 10	000–255	Blue intensity from low to high (0–100%)
20	LED 9 & 10	000–255	White intensity from low to high (0–100%)
21	LED 11 & 12	000–255	Red intensity from low to high (0–100%)
22	LED 11 & 12	000–255	Green intensity from low to high (0–100%)
23	LED 11 & 12	000–255	Blue intensity from low to high (0–100%)
24	LED 11 & 12	000–255	White intensity from low to high (0–100%)
25	LED 13 & 14	000–255	Red intensity from low to high (0–100%)
26	LED 13 & 14	000–255	Green intensity from low to high (0–100%)
27	LED 13 & 14	000–255	Blue intensity from low to high (0–100%)
28	LED 13 & 14	000–255	White intensity from low to high (0–100%)
29	LED 15 & 16	000–255	Red intensity from low to high (0–100%)
30	LED 15 & 16	000–255	Green intensity from low to high (0–100%)
31	LED 15 & 16	000–255	Blue intensity from low to high (0–100%)
32	LED 15 & 16	000–255	White intensity from low to high (0–100%)

6.7.6. 64 CH (64 Channels), 71 CH (71 Channels)

64 CH Mode	71 CH Mode	Function	Value	Setting
	1	Strobe Speed	000–005	No function
			006–060	Linear strobe speed (0–20 Hz)
			061–110	Ramp up
			111–160	Ramp down
			161–210	Random linear strobe (slow to fast)
			211–255	Random sectional (slow to fast)
	2	Master Dimmer	000–255	From low to high intensity (0–100%)
	3	Control Channel	000–255	Control channel (see 6.7.9. Control Channel on page 43)
	4	Color Macro (1–50)	000–255	Color macro (see 6.7.7. Color Channel on page 41)
	5	Auto Program	000–255	Auto program (see 6.7.8. Auto Program on page 42)

64 CH Mode	71 CH Mode	Function	Value	Setting
	6	Auto Program Speed	000-255	From slow to fast (0-100%)
	7	Dimmer Fade	000-255	For internal programs only
1	8	LED 1	000-255	Red intensity from low to high (0-100%)
2	9	LED 1	000-255	Green intensity from low to high (0-100%)
3	10	LED 1	000-255	Blue intensity from low to high (0-100%)
4	11	LED 1	000-255	White intensity from low to high (0-100%)
5	12	LED 2	000-255	Red intensity from low to high (0-100%)
6	13	LED 2	000-255	Green intensity from low to high (0-100%)
7	14	LED 2	000-255	Blue intensity from low to high (0-100%)
8	15	LED 2	000-255	White intensity from low to high (0-100%)
9	16	LED 3	000-255	Red intensity from low to high (0-100%)
10	17	LED 3	000-255	Green intensity from low to high (0-100%)
11	18	LED 3	000-255	Blue intensity from low to high (0-100%)
12	19	LED 3	000-255	White intensity from low to high (0-100%)
13	20	LED 4	000-255	Red intensity from low to high (0-100%)
14	21	LED 4	000-255	Green intensity from low to high (0-100%)
15	22	LED 4	000-255	Blue intensity from low to high (0-100%)
16	23	LED 4	000-255	White intensity from low to high (0-100%)
17	24	LED 5	000-255	Red intensity from low to high (0-100%)
18	25	LED 5	000-255	Green intensity from low to high (0-100%)
19	26	LED 5	000-255	Blue intensity from low to high (0-100%)
20	27	LED 5	000-255	White intensity from low to high (0-100%)
21	28	LED 6	000-255	Red intensity from low to high (0-100%)
22	29	LED 6	000-255	Green intensity from low to high (0-100%)
23	30	LED 6	000-255	Blue intensity from low to high (0-100%)
24	31	LED 6	000-255	White intensity from low to high (0-100%)
25	32	LED 7	000-255	Red intensity from low to high (0-100%)
26	33	LED 7	000-255	Green intensity from low to high (0-100%)
27	34	LED 7	000-255	Blue intensity from low to high (0-100%)
28	35	LED 7	000-255	White intensity from low to high (0-100%)
29	36	LED 8	000-255	Red intensity from low to high (0-100%)
30	37	LED 8	000-255	Green intensity from low to high (0-100%)
31	38	LED 8	000-255	Blue intensity from low to high (0-100%)
32	39	LED 8	000-255	White intensity from low to high (0-100%)
33	40	LED 9	000-255	Red intensity from low to high (0-100%)
34	41	LED 9	000-255	Green intensity from low to high (0-100%)
35	42	LED 9	000-255	Blue intensity from low to high (0-100%)
36	43	LED 9	000-255	White intensity from low to high (0-100%)
37	44	LED 10	000-255	Red intensity from low to high (0-100%)
38	45	LED 10	000-255	Green intensity from low to high (0-100%)
39	46	LED 10	000-255	Blue intensity from low to high (0-100%)
40	47	LED 10	000-255	White intensity from low to high (0-100%)
41	48	LED 11	000-255	Red intensity from low to high (0-100%)
42	49	LED 11	000-255	Green intensity from low to high (0-100%)
43	50	LED 11	000-255	Blue intensity from low to high (0-100%)
44	51	LED 11	000-255	White intensity from low to high (0-100%)
45	52	LED 12	000-255	Red intensity from low to high (0-100%)
46	53	LED 12	000-255	Green intensity from low to high (0-100%)

64 CH Mode	71 CH Mode	Function	Value	Setting
47	54	LED 12	000-255	Blue intensity from low to high (0-100%)
48	55	LED 12	000-255	White intensity from low to high (0-100%)
49	56	LED 13	000-255	Red intensity from low to high (0-100%)
50	57	LED 13	000-255	Green intensity from low to high (0-100%)
51	58	LED 13	000-255	Blue intensity from low to high (0-100%)
52	59	LED 13	000-255	White intensity from low to high (0-100%)
53	60	LED 14	000-255	Red intensity from low to high (0-100%)
54	61	LED 14	000-255	Green intensity from low to high (0-100%)
55	62	LED 14	000-255	Blue intensity from low to high (0-100%)
56	63	LED 14	000-255	White intensity from low to high (0-100%)
57	64	LED 15	000-255	Red intensity from low to high (0-100%)
58	65	LED 15	000-255	Green intensity from low to high (0-100%)
59	66	LED 15	000-255	Blue intensity from low to high (0-100%)
60	67	LED 15	000-255	White intensity from low to high (0-100%)
61	68	LED 16	000-255	Red intensity from low to high (0-100%)
62	69	LED 16	000-255	Green intensity from low to high (0-100%)
63	70	LED 16	000-255	Blue intensity from low to high (0-100%)
64	71	LED 16	000-255	White intensity from low to high (0-100%)

6.7.7. Color Channel

Function	Value
No Function	000-005
2700K	006-009
3200K	010-013
3500K	014-017
4000K	018-021
4500K	022-025
5000K	026-029
5600K	030-033
6000K	034-037
6500K	038-041
7000K	042-045
7500K	046-049
8000K	050-053
Color 1	054-057
Color 2	058-061
Color 3	062-065
Color 4	066-069
Color 5	070-073
Color 6	074-077
Color 7	078-081
Color 8	082-085
Color 9	086-089
Color 10	090-093
Color 11	094-097
Color 12	098-101
Color 13	102-105

Function	Value
Color 14	106-109
Color 15	110-113
Color 16	114-117
Color 17	118-121
Color 18	122-125
Color 19	126-129
Color 20	130-133
Color 21	134-137
Color 22	138-141
Color 23	142-145
Color 24	146-149
Color 25	150-153
Color 26	154-157
Color 27	158-161
Color 28	162-165
Color 29	166-169
Color 30	170-173
Color 31	174-177
Color 32	178-181
Color 33	182-185
Color 34	186-189
Color 35	190-193
Color 36	194-197
Color 37	198-201
Color 38	202-205
Color 39	206-209
Color 40	210-213
Color 41	214-217
Color 42	218-221
Color 43	222-225
Color 44	226-229
Color 45	230-233
Color 46	234-237
Color 47	238-241
Color 48	242-245
Color 49	246-249
Color 50	250-255

6.7.8. Auto Program

Function	Value
No Function	000-010
Auto 1	011-020
Auto 2	021-030
Auto 3	031-040
Auto 4	041-050
Auto 5	051-060

Function	Value
Auto 6	061-070
Auto 7	071-080
Auto 8	081-090
Auto 9	091-100
Auto 10	101-110
Auto 11	111-120
Auto 12	121-130
Auto 13	131-140
Auto 14	141-150
Auto 15	151-160
Auto 16	161-170
Auto 17	171-180
Auto 18	181-190
Auto 19	191-200
Auto 20	201-210
Auto 21	211-220
Auto 22	221-230
No Function	231-255

6.7.9. Control Channel

Function	Value
No Function	000-044
Dimmer Off	045-049
No Function	050-054
Dimmer Speed 1	055-059
Dimmer Speed 2	060-064
Dimmer Speed 3	065-069
Dimmer Speed 4	070-074
No Function	075-089
Enable White Balance Function	090-094
No Function	095-099
Disable White Balance Function	100-104
No Function	105-114
600 Hz Refresh Rate	115-119
1200 Hz Refresh Rate	120-124
2400 Hz Refresh Rate	125-129
4800 Hz Refresh Rate	130-134
9600 Hz Refresh Rate	135-139
12000 Hz Refresh Rate	140-144
25000 Hz Refresh Rate	145-149
No Function	150-255

6.8. RDM Information

This device supports RDM (see [6.8.2. Supported RDM PIDs \(Parameter IDs\)](#)).

6.8.1. RDM Details

- Responder ID: 29B4:0EFxxxxx
- Manufacturer's ID: Showtec (Highlite International B.V.)
- Manufacturer Label: Showtec
- Model Description: Spectra Wash
- Model ID: 239 (0EF hexadecimal)
- Device Label: Spectra Wash

Note:

An RDM responder ID consists of 3 parts:

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

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

6.8.2. Supported RDM PIDs (Parameter IDs)

RDM Parameter ID	Value	Required	GET	SET
SUPPORTED_PARAMETERS	0x0050	*	*	
PRODUCT_DETAIL_ID_LIST	0x0070		*	
DEVICE_MODEL_DESCRIPTION	0x0080		*	
MANUFACTURER_LABEL	0x0081		*	
DEVICE_LABEL	0x0082		*	*
FACTORY_DEFAULTS	0x0090		*	*
DMX_PERSONALITY	0x00E0		*	*
DMX_PERSONALITY_DESCRIPTION	0x00E1		*	
DMX_START_ADDRESS	0x00F0	*	*	*
SENSOR_DEFINITION	0x0200		*	
SENSOR_VALUE	0x0201		*	*
CURVE	0x0343		*	*
CURVE_DESCRIPTION	0x0344	*	*	
OUTPUT_RESPONSE_TIME	0x0345		*	*
OUTPUT_RESPONSE_TIME_DESCRIPTION	0x0346	*	*	
DEVICE_HOURS	0x0400		*	*
DEVICE_POWER_CYCLES	0x0405		*	*
DISPLAY_INVERT	0x0500		*	*
RESET_DEVICE	0x1001			*

7. Troubleshooting

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

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

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

Problem	Probable cause(s)	Solution
The device does not function at all	No power to the device	<ul style="list-style-type: none"> Make sure that the device is connected to power supply
	The LEDs are defective	<ul style="list-style-type: none"> Contact your Showtec dealer
The device responds erratically	The factory settings of the device are changed	<ul style="list-style-type: none"> Reset the parameters of the device to the default factory settings
The device does not respond to DMX control	The controller is not connected	<ul style="list-style-type: none"> Check if the fixture is connected to the controller
	The signal is reversed. The 5-pin DMX Out of the controller does not match the DMX In of the device	<ul style="list-style-type: none"> Install a phase-reversing cable between the controller and the device
	The controller is defective	<ul style="list-style-type: none"> Try using another controller
The device responds erratically to DMX control	Connections are defective	<ul style="list-style-type: none"> Examine connections and cables. Correct defective connections. Repair or replace damaged cables
	The data link is not terminated with a 120 Ω termination plug	<ul style="list-style-type: none"> Insert a termination plug in the DMX OUT connector of the last device on the link
	Incorrect addressing	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> To find out the defective device, bypass one device at a time until normal operation is restored
No lights or LEDs cut out intermittently	The LEDs are defective	<ul style="list-style-type: none"> Disconnect the device and contact your Showtec dealer
	The input power parameters of the device do not match local AC voltage frequency	<ul style="list-style-type: none"> 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.
- There are no deformations on housings, fixings and installation points.
- 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 DMX and other connections with a damp cloth.



Attention

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

Make sure that the connections are fully dry before connecting the device to the power supply and to other devices.

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. Replacing the Fuse



DANGER
Electric shock caused by short-circuit

- Do not bypass the thermostatic switch or fuses.
- Replace fuses only with the same type and rating.

Power surges, short-circuit or incorrect electrical power supply may cause a fuse to burn out. If the fuse burns out, the device will not function anymore. If this happens, 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) Loosen the fuse cover with a screwdriver and remove the fuse holder.
- 04) If the fuse is brown or unclear, it is burned out. Remove the old fuse.
- 05) Insert a new fuse in the fuse holder. Make sure that the type and the rating of the replacement fuse are the same as the ones specified on the information label of the product.
- 06) Replace the fuse holder in the opening and tighten the fuse cover.

8.3.2. Draining Condensation Water

The Spectra Wash 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 (13)** 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 (13)**. Make sure that you do not overtighten.

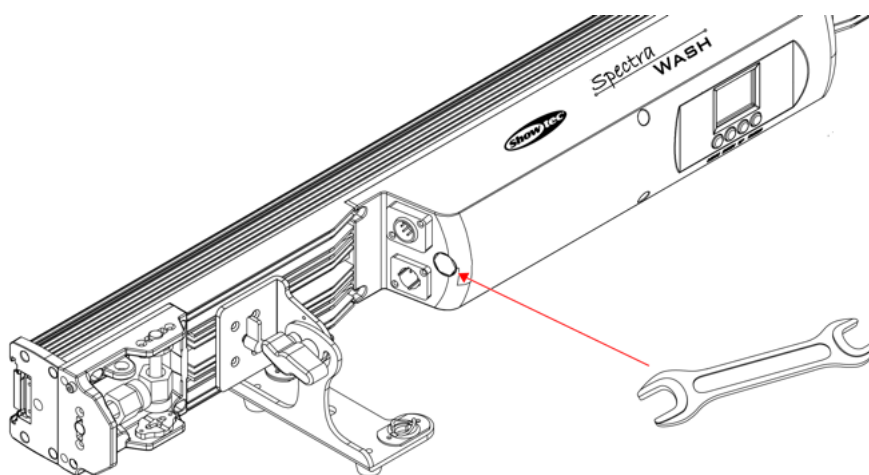


Figure 25

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 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 46).
- Store the device in the original packaging, if possible.

10. Disposal

Correct disposal of this product



Waste Electrical and Electronic Equipment

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

11. Approval



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