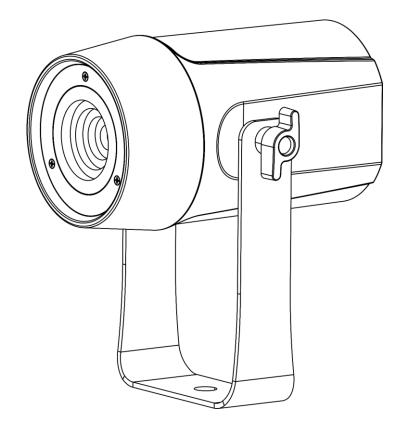


USER MANUAL



ENGLISH

Accent Spot Q4

V1

Product code: 42541

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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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 Accent Spot Q4
- Schuko to Power Pro cable (1,8 m)
- Beamshaper 10°
- Beamshaper 40°
- User manual

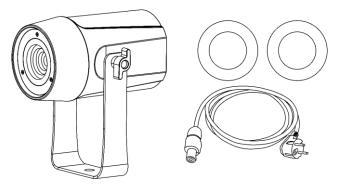


Fig. 01

1.2. Intended Use

This device is intended for professional use as an indoor spot effect. It is suitable only for indoor installation. 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. 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 device's lifespan.

1.4. 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.

1.5. 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 chapters and parts of the device are in bold lettering, for example:

"Refer to 2. Safety", "turn the adjustment handle (05)"

• 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 mounting bracket.

The information label contains the following symbols:



This device is designed for indoor use.



This device falls under IEC protection class I.



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.



Minimum distance from lighted objects.



Caution: Risk of electric shock. Do not open.

Caution: To reduce the risk of electric shock, do not remove cover. No user-

serviceable parts inside. Refer servicing to qualified personnel.



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 various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.



DANGER Electric shock caused by dangerous voltage inside

There are areas within the device where dangerous touch voltage (> 120 V DC) 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 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 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.





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 insert objects into the air vents.
- Do not connect the device to a dimmer pack.
- Do not switch the device on and off in short intervals. This decreases the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Change the lens or the LEDs if they are visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches. Contact your Highlite International dealer for more information, as servicing can be performed only by instructed or skilled persons.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue the use immediately.



Attention For professional use only This device shall be used only for the purposes it is designed for.

This device is intended for professional use as an indoor spot effect. 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, fixations 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 IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance may be carried 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 to avoid hazards associated with the installation, service and maintenance of this product.

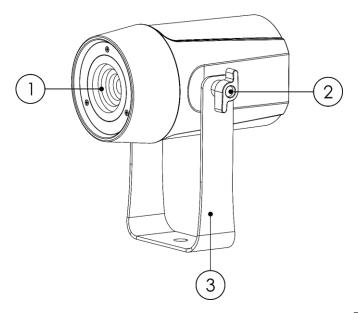
Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.



3. Description of the Device

The Showtec Accent Spot Q4 is a compact indoor spot effect. It can be used for accent lighting. The device is delivered with 2 beamshapers (10° and 40°). The device can be used in many applications, both in rental and fixed installations.

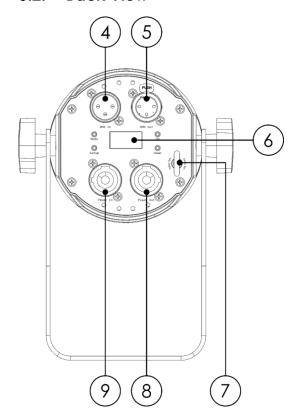
3.1. Front View



- 01) Lens
- 02) 2 x Adjustment screws
- 03) Mounting bracket

Fig. 02

3.2. Back View



- 04) 3-pin DMX signal connector IN
- 05) 3-pin DMX signal connector OUT
- 06) Control panel: OLED display and control buttons
- 07) Safety eye
- 08) Power Pro connector OUT 100– 240 V, 50/60 Hz (Gray)
- 09) Power Pro connector IN 100-240 V, 50/60 Hz (Blue)

Fig. 03

3.3. Product Specifications

| Model: | Accent Spot Q4 | |
|-------------|----------------|--|
| F | | |
| Electrical: | | |

Input voltage: 100-240 V AC, 50/60 Hz
Power consumption: 21 W

| Physical: | |
|-------------|--------------------------------|
| Dimensions: | 245 x 160 x 105 mm (L x W x H) |
| Weight: | 1,7 kg |

| Optics: | |
|------------------------|-------------------|
| Light source: | 1 x 25 W RGBW LED |
| Dimmer: | 0–100 % |
| Strobe: | 0–20 Hz |
| Beam angle (circular): | 4,5° |
| Output: | 15970 lx @ 2 m |
| | 7098 lx @ 3 m |
| | 2555 lx @ 5 m |
| Total lumen: | 572 lm |
| Lumen Red: | 233 lm |
| Lumen Green: | 245 lm |
| Lumen Blue: | 130 lm |
| Lumen White: | 350 lm |
| CRI: | 71 |
| CCT: | 1800–10000 K |
| Refresh rate: | 1000–12000 Hz |

| Operation and control: | | |
|--|--|--|
| Control: Stand-alone (auto, manual, built-in programs, sound-controlled) | | |
| | Master/Slave (auto, manual, built-in programs, sound-controlled) | |
| | DMX-512, RDM | |
| DMX channels: | 4, 6, 12 channels | |
| Control panel: | OLED display and buttons | |

| Connections: | |
|--------------------|--------------------------------------|
| Power connections: | Power Pro connectors IN/OUT |
| Data connections: | 3-pin DMX connectors IN/OUT |
| Signal pin OUT: | Pin 1 (ground), pin 2 (-), pin 3 (+) |

| Construction: | | |
|---------------|-------------------|--|
| Housing: | Aluminum die-cast | |
| Color: | Black | |
| IP rating: | IP20 | |
| Cooling: | Passive | |

| Thermal: | |
|---------------------------------|----------------------|
| Maximum ambient temperature ta: | From -20 °C to 45 °C |

| Minimum distance: | |
|-------------------------------------|-------|
| Minimum distance to lighted object: | 0,5 m |



3.4. Optional Accessories

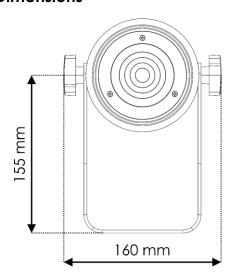
The device is delivered with the following accessories:

- Product code: 42545 (Beamshaper for Accent Spot Q4/SW (10°)
- Product code: 42547 (Beamshaper for Accent Spot Q4/SW (40°)

You can additionally purchase the following accessories:

- Product code: 42546 (Beamshaper for Accent Spot Q4/SW (20°)
- Product code: 42548 (Beamshaper for Accent Spot Q4/SW (10° x 60°)

3.5. Dimensions



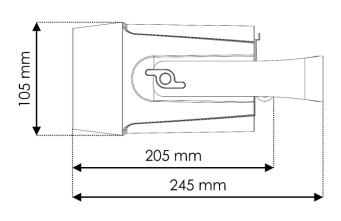


Fig. 04

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 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 only indoors.
- The device can be mounted to a truss or another rigging structure in any orientation.
- The minimum distance to other objects must be bigger than 0,5 m.
- The maximum ambient temperature t_{α} = 45 °C must never be exceeded.
- \bullet The relative humidity must not exceed 50 % with an ambient temperature of 45 °C.



4.4. Rigging

The device can be 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 and/or derigging.

To mount the device, follow the steps below:

- 01) Use a clamp to attach the device to the supporting structure, as shown in Fig. 05. Make sure that the device cannot move freely.
- 02) 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 (07)**, as shown in Fig. 05.

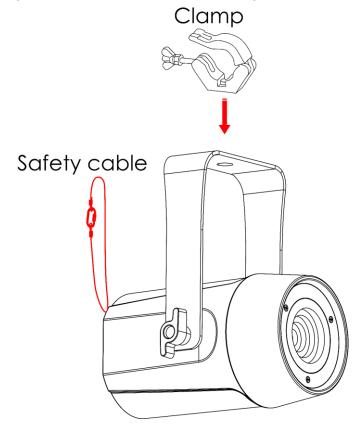


Fig. 05



4.5. Angle Adjustment

You can adjust the angle of the device with the 2 adjustment screws (02).

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

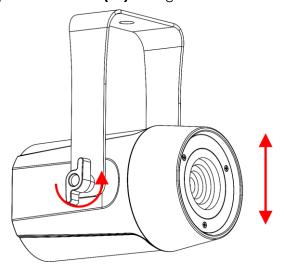


Fig. 06

4.6. Beamshaper Installation

The device is delivered with 2 beamshapers (10° and 40°). To install the beamshapers, follow the steps below:

- 01) Put the beamshaper on the lens of the device. The magnets in the beamshaper will keep it in position.
- 02) To remove the beamshaper, hold it by the edge and pull it off.

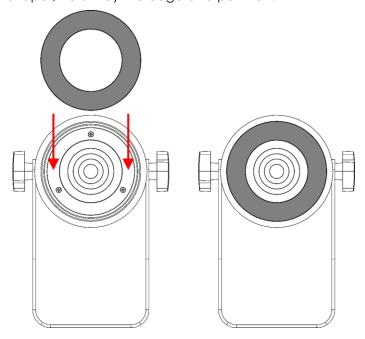


Fig. 07

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 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.

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: 50 devices at 200–240 V: 50 devices



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 Accent Spot Q4 is not connected to a controller or to other devices, it functions as a standalone device. It can be operated manually.

For more information about the control modes, refer to 6.2. Control Modes on page 18.

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 or to run synchronized shows of two or more devices set in a master/slave operating mode.

The Accent Spot Q4 has 3-pin DMX signal IN and OUT connectors.

The pin assignment is as follows: pin 1 (ground), pin 2 (-), pin 3 (+).

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

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

Note:

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



5.3.2. DMX Cables

Shielded twisted-pair cables with 3-pin 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 Fig. 08.

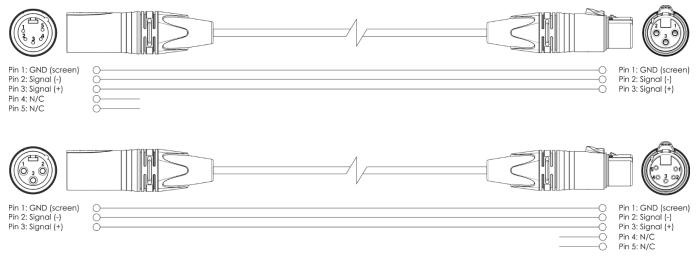


Fig. 08

5.3.3. Master/Slave Setup

The Accent Spot Q4 supports master/slave control mode. To connect multiple devices in master/slave setup, follow the steps below:

- 01) Connect the first device's DMX OUT connector to the second device's DMX IN connector.
- 02) Repeat step 1 to connect all devices as shown in Fig. 09. The first connected device will be automatically recognized as the master device.
- 03) Set all subsequent devices as slave devices. See 6.6.6. Slave Mode on page 26 for more information.
- 04) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device in the setup.

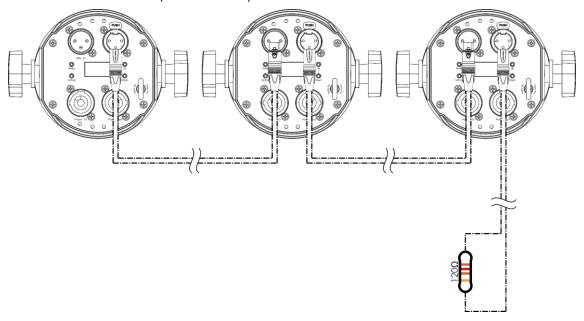


Fig. 09



5.3.4. DMX Linking

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

- 01) Use a 3-pin DMX cable to connect the DMX OUT connector of the lighting controller to the DMX IN connector of the first device.
- 02) Connect the first device's DMX OUT connector to the second device's DMX IN connector with a 3-pin DMX cable.
- 03) Repeat step 2 to connect all devices in a daisy-chain as shown in Fig. 10.
- 04) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device on the data link

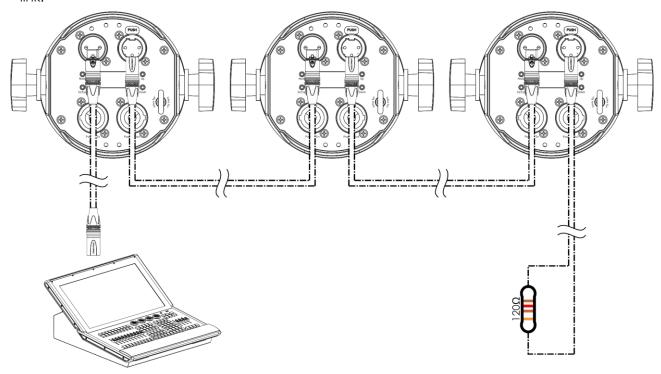


Fig. 10

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 Accent Spot Q4 has 3 personalities: 4 channels, 6 channels and 12 channels.

If you want to connect multiple devices on one data link and use them in 12-channel mode, for example, follow the steps below:

- 01) Set the starting address of the 1st device on the data link to 1 (001).
- 02) Set the starting address of the 2^{nd} device on the data link to 13 (013), as 1 + 12 = 13.
- 03) Set the starting address of the 3^{rd} device on the data link to 25 (025) as 13 + 12 = 25.
- 04) Continue assigning the starting addresses of the remaining devices by adding each time 12 to the previous number.

Make sure that you do not have any overlapping channels in order to control each Accent Spot Q4 correctly. If two or more devices are addressed similarly, they will work similarly.



6. Operation

6.1. Safety Instructions for Operation



Attention

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

This device is intended for professional use as an indoor spot effect. It is suitable only for indoor installation. 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 Accent Spot Q4 can be operated with a DMX controller and as a stand-alone device.

The Accent Spot Q4 supports the following control modes:

Stand-alone: Auto, Manual, Built-in programs, Sound-controlled
 Master/Slave: Auto, Manual, Built-in programs, Sound-controlled

DMX-512, RDM 4, 6, 12 channels

For more information about how to connect the devices, refer to 5. Setup on pages 15–17.

To run the auto program, in auto operation mode, select Auto in the Main Menu. See **6.6.3. Auto Mode** on page 24 for more information.

To operate the device manually as a stand-alone device, adjust the intensity values for the colors. See **6.6.2. Manual Mode** on page 24 for more information.

To run one of the built-in programs without a DMX controller:

- 01) Select Program Mode in the Main Menu.
- 02) Select one of the 33 static colors (Program 1) or one of the 15 built-in chases (Programs 2–16). See **6.6.4. Program Mode** on page 25 for more information.

To operate the device in the sound-controlled mode, set the sound sensitivity of the device. See **6.7.7. Sound-controlled Mode** on page 26 for more information.



Accent Spot Q4

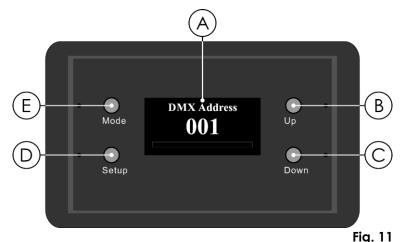
To operate multiple devices in the master/slave mode:

- 01) Use the first device as a master and use the remaining devices as slaves. See **6.6.6. Slave Mode** on page 26 for more information.
- 02) Operate the master device in the Auto mode, Manual mode, Built-in Programs mode or the Sound-controlled mode. For more information, see **6.6.3. Auto Mode** on page 24, **6.6.2. Manual Mode** on page 24, **6.6.4. Program Mode** on page 25 and **6.6.7. Sound-controlled Mode** on page 26.

To operate the device with a DMX controller:

- 01) Set the DMX starting address of the device in the Address menu. See **5.3.5. DMX Addressing** on page 17 and **6.6.1.1. DMX Address** on page 23.
- 02) Select the behavior of the device in case there is no DMX signal in the DMX Fail pop-up submenu. See **6.6.8.4. DMX Failure Settings** on page 28.
- 03) Select the DMX channel mode. See **6.6.1.2. DMX Channel Mode** on page 24 for more information. See **6.7. DMX Channels** on pages 30–31 for complete overview of all DMX channels.

6.3. Control Panel



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

- Use the MODE button to exit the current submenu and to return to the Main Menu.
- Use the **UP/DOWN** buttons to navigate through the menus or to increase/decrease numeric values.
- Use the **SETUP** 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 will show a splash screen with the software version and current temperature of the device.

Version:2.2 Temperature:33°C

Immediately afterwards, the display will show the start screen (if the device is locked) or the main menu (if the device is unlocked). The start screen provides information about the operation modes of the device, the software version, the DMX channel mode and the temperature of the LEDs.

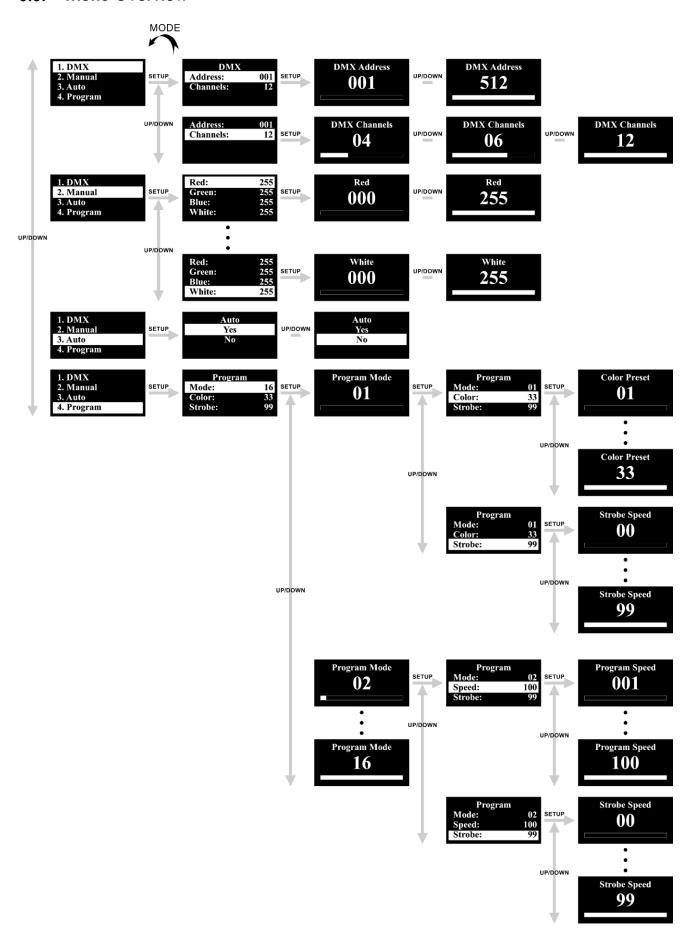


1. DMX 2. Manual 3. Auto 4. Program

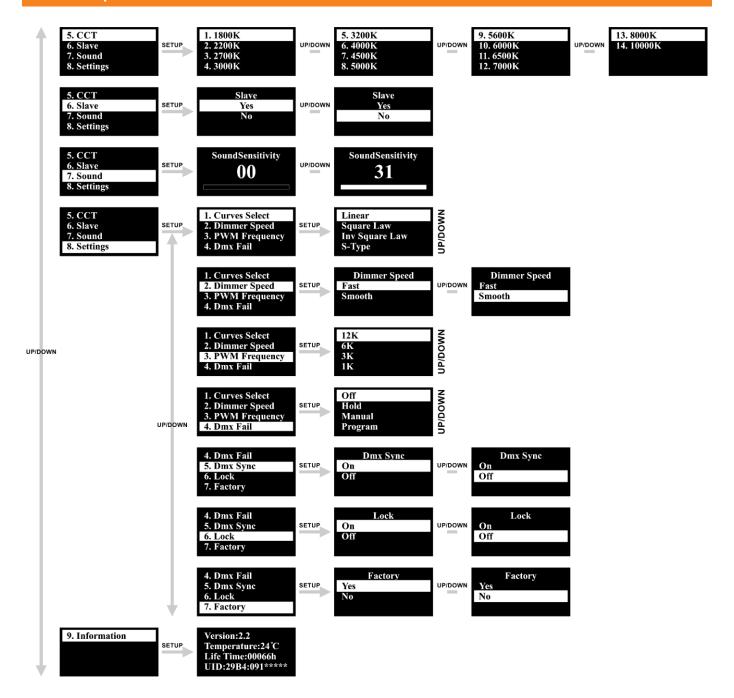
Note:

- If no button is pressed after 30 seconds of inactivity, the display will show the start screen. Press any button to return to the main menu.
- By default the display is locked. To access the main menu, you need to enter the password. Press
 and hold down the MODE and SETUP buttons for 3 seconds to unlock the display. See 6.6.8.6. Display
 Lock on page 29 for more information.

6.5. Menu Overview



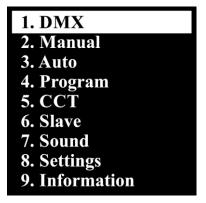
Accent Spot Q4





6.6. Main Menu Options

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

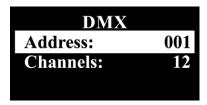


- 1. DMX
- 2. Manual
- 3. Auto
- 4. Program
- 5. CCT
- 6. Slave
- 7. Sound
- 8. Settings
- 9. Information
- 02) Press the **SETUP** button to confirm the selection.

6.6.1. DMX Settings

In this menu you can configure the DMX settings of the device.

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



Address: See 6.6.1.1. DMX Address

• Channels: See 6.6.1.2. DMX Channel Mode

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

6.6.1.1. DMX Address

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

Press the **UP/DOWN** buttons to select the DMX starting address of the device. The selection range is 001–512. Refer to **5.3.5. DMX Addressing** on page 17 for more information.





6.6.1.2. DMX Channel Mode

In this submenu you can select the DMX channel mode.

01) Press the **UP/DOWN** buttons to select the desired DMX channel mode. There are 3 options available:



- 4-channel mode
- 6-channel mode
- 12-channel mode
- 02) Press the **SETUP** button to confirm the selection.

6.6.2. Manual Mode

In this menu you can manually adjust the color.

03) Press the **UP/DOWN** buttons to scroll through following options: red, green, blue and white.

| Red: | 255 |
|--------|-----|
| Green: | 255 |
| Blue: | 255 |
| White: | 255 |
| | |

- 04) Press the **SETUP** button to confirm your selection and open the respective submenu where you can adjust the values.
- 05) Press the **UP/DOWN** buttons to adjust the values. The adjustment range is 0–255, from off to high intensity.
- 06) Press the **SETUP** button to confirm your choice.

6.6.3. Auto Mode

In this menu you can run the built-in chase.



- 01) Press the **UP/DOWN** buttons to choose between YES and NO. If you choose YES, the device will run the built-in chase.
- 02) Press the **SETUP** button to confirm your choice.



6.6.4. Program Mode

In this menu you can run the 16 built-in programs.

01) Press the **UP/DOWN** buttons to select MODE:

| Program | | |
|---------|----|--|
| Mode: | 16 | |
| Color: | 33 | |
| Strobe: | 99 | |

- 02) Press the **SETUP** button to confirm the selection.
- 03) Press the **UP/DOWN** buttons to select one of the 16 available built-in programs:

Program 1: See 6.6.4.1. Program 1
 Programs 2–16: See 6.6.4.2. Program 2–16

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

6.6.4.1. Program 1

In this built-in program you can select one of the 33 color macros and add the strobe effect.

01) Press the **UP/DOWN** buttons to select COLOR:

| Program | | | | |
|---------|----|--|--|--|
| Mode: | 01 | | | |
| Color: | 33 | | | |
| Strobe: | 99 | | | |
| | | | | |

- 02) Press the **SETUP** button to confirm the selection.
- 03) Press the **UP/DOWN** buttons to select one of the 33 available color macros.
- 04) Press the **SETUP** button to confirm the selection.
- 05) Press the **UP/DOWN** buttons to select STROBE:

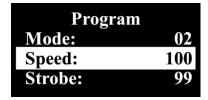
| Program | | | | |
|---------|----|--|--|--|
| Mode: | 01 | | | |
| Color: | 33 | | | |
| Strobe: | 99 | | | |

- 06) Press the **SETUP** button to confirm the selection.
- 07) Press the **UP/DOWN** buttons to set the strobe frequency. The adjustment range is 0–99, from off to high frequency (0–20 Hz).
- 08) Press the **SETUP** button to confirm the selection.

6.6.4.2. Program 2–16

In these built-in programs you can set the program speed and add the strobe effect.

01) Press the **UP/DOWN** buttons to select SPEED:

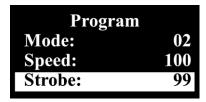


02) Press the **SETUP** button to confirm the selection.



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- 03) Press the **UP/DOWN** buttons to set the program speed. The adjustment range is 1–100, from slow to fast.
- 04) Press the **SETUP** button to confirm the selection.
- 05) Press the **UP/DOWN** buttons to select STROBE:



- 06) Press the **SETUP** button to confirm the selection.
- 07) Press the **UP/DOWN** buttons to set the strobe frequency. The adjustment range is 0–99, from off to high frequency (0–20 Hz).
- 08) Press the **SETUP** button to confirm the selection.

6.6.5. Correlated Color Temperature

In this menu you can set the color temperature.

01) Press the **UP/DOWN** buttons to select one of the 14 color temperature presets:

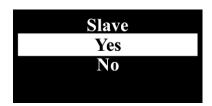


The available CCT presets are: 1800 K, 2200 K, 2700 K, 3000 K, 3200 K, 4000 K, 4500 K, 5000 K, 5600 K, 6000 K, 7000 K, 8000 K and 10000 K.

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

6.6.6. Slave Mode

In this menu you can set the slave mode of the device.



- 01) Press the **UP/DOWN** buttons to choose between YES and NO. If you choose YES, the device will operate as a slave in the master/slave mode.
- 02) Press the **SETUP** button to confirm the selection.

6.6.7. Sound-controlled Mode

In this menu you can set the sound sensitivity of the device.

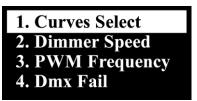
- 01) Press the **UP/DOWN** buttons to set the sound sensitivity. The adjustment range is 0–31, from off to high sound sensitivity.
- 02) Press the **SETUP** button to confirm the selection. The device will now react to the beat of the background music.



6.6.8. Settings

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

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



The available options are:

1. Curves Select: See 6.6.8.1. Selecting Dimming Curves
2. Dimmer Speed: See 6.6.8.2. Setting Dimmer Speed
3. PWM Frequency: See 6.6.8.3. Setting PWM Frequency
4. DMX Fail: See 6.6.8.4. DMX Failure Settings
5. DMX Sync: See 6.6.8.5. DMX Synchronization

• 6. Lock: See 6.6.8.6. Display Lock

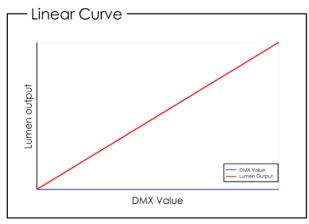
• 7. Factory: See **6.6.8.7. Restoring Factory Settings**

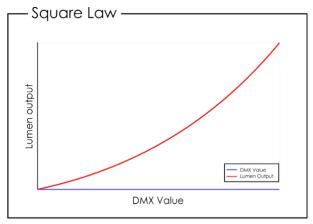
02) Press the **SETUP** button to confirm the selection.

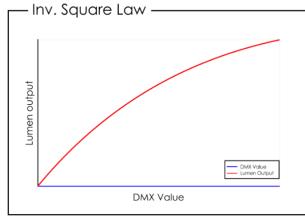
6.6.8.1. Selecting Dimming Curves

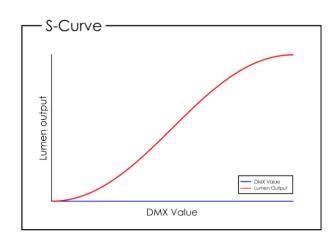
In this submenu you can select dimming curves.

01) Press the **UP/DOWN** buttons to select one of the following 4 options: Linear, Square Law, Inverse Square Law and S-Curve





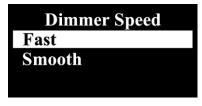




02) Press the **SETUP** button to confirm the selection.

6.6.8.2. Setting Dimmer Speed

In this submenu you can set the dimmer speed.



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

• Fast: Light output will follow DMX dimmer value directly

• Smooth: Light output will follow DMX dimmer value with fade time to create smooth

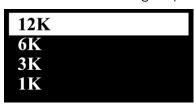
transitions

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

6.6.8.3. Setting PWM Frequency

In this submenu you can set the PWM frequency.

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

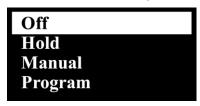


02) Press the **SETUP** button to confirm the selection.

6.6.8.4. DMX Failure Settings

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

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



Off: The device will black out the light output

Hold: The device will use the last correctly received DMX signal

• Manual: The device will use the manually selected values for color. See **6.6.2. Manual Mode**

on page 24 for more information

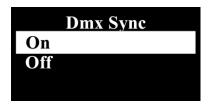
• Program: The device will run the built-in programs

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



6.6.8.5. DMX Synchronization

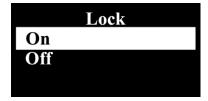
In this submenu you can determine behavior of the device, when using multiple Accent Spots in the master/slave mode.



- 01) Press the **UP/DOWN** buttons to choose between ON and OFF. If you choose ON, the device will perform the same action as the other connected devices, without delays.
- 02) Press the **SETUP** button to confirm the selection.

6.6.8.6. Display Lock

In this submenu you can set the display lock.

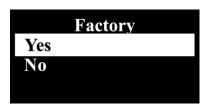


- 01) Press the **UP/DOWN** buttons to choose between ON and OFF. If you choose ON, the device will lock the display on each start-up and when no button is pressed after 30 seconds of inactivity.
- 02) Press the **SETUP** button to confirm the selection.

Note: To unlock the display, press and hold down the MODE and SETUP buttons for 3 seconds.

6.6.8.7. Restoring Factory Settings

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



- 01) Press the **UP/DOWN** buttons to choose between YES and NO. If you choose YES, the default factory settings will be restored.
- 02) Press the **SETUP** button to confirm the selection.



6.6.9. Device Information

In this menu you can view the firmware version, the temperature of the LEDs, the total operating hours and the ID of the device.

Version:2.2 Temperature:24°C Life Time:00066h UID:29B4:091****

• Version: Shows the current firmware version

• Temperature: Shows the current temperature of the LEDs

• Life Time: Shows the information about the total operation time of the LEDs

• UID: Shows the unique ID number of the device (29B4:091*****)

6.7. DMX Channels

| 4 CH | 6 CH | 12 CH | Function | Value | Setting | | |
|------|------|------------------|--------------------|----------|---|--|--|
| | 1 | 1 | Master Dimmer | 000–255 | From low to high intensity (0–100 %) | | |
| | 2 | 2 | Linear Strobe | 000–010 | No function | | |
| | | Z Z Lineal shope | | 011–255 | Linear strobe, from low to high frequency | | |
| | | 3 | FX Strobe | 000–010 | No function | | |
| | | 3 | LY 2110DE | 011–255 | Random strobe, from low to high frequency | | |
| 1 | 3 | | Red | 000–255 | From low to high intensity (0–100 %) | | |
| 2 | 4 | | Green | 000–255 | From low to high intensity (0–100 %) | | |
| 3 | 5 | | Blue | 000–255 | From low to high intensity (0–100 %) | | |
| 4 | 6 | | White | 000–255 | From low to high intensity (0–100 %) | | |
| | | | | 000-009 | | | |
| | | | | 010–024 | | | |
| | | | | 025–039 | 2200 K | | |
| | | | | 040–054 | | | |
| | | | ССТ | 055–069 | | | |
| | | 4 | | 070–084 | · | | |
| | | | | 085-099 | 4000 K | | |
| | | | | 100–114 | 4500 K | | |
| | | | | 115–129 | | | |
| | | | 130–144 145–159 | | | | |
| | | | | 160–174 | 6000 K 6500 K | | |
| | | | | 175–189 | 7000 K | | |
| | | | | 190–204 | 8000 K | | |
| | | | | 205–255 | 10000 K | | |
| | | | | 000-007 | No function | | |
| | | | | 008-013 | Color 1 (R255 G000 B000 W000) | | |
| | | | | 014–020 | Color 2 (R255 G000 B000 W100) | | |
| | | | | 021–027 | Color 3 (R255 G000 B000 W200) | | |
| | | | | 028–034 | Color 4 (R255 G050 B000 W000) | | |
| | | _ | | 035–041 | Color 5 (R255 G150 B000 W000) | | |
| | | 5 | Color Presets | 042–048 | Color 6 (R255 G255 B000 W000) | | |
| | | | | <u> </u> | Color 7 (R255 G255 B000 W075) | | |
| | | | | 056–062 | Color 8 (R000 G255 B000 W255) | | |
| | | | | 063–069 | | | |
| | | | | 070–076 | Color 10 (R000 G255 B000 W050) | | |
| | | | | 077–083 | Color 11 (R000 G255 B000 W000) | | |



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| 4 CH | 6 CH | 12 CH | Function | Value | Setting |
|------|------|-----------|---------------------------------|----------------|---|
| | | | | 084-090 | Color 12 (R000 G255 B050 W000) |
| | | | | 091–097 | Color 13 (R000 G255 B150 W000) |
| | | | | 098–104 | Color 14 (R000 G255 B255 W000) |
| | | | | 105–111 | Color 15 (R000 G255 B255 W075) |
| | | | | 112–118 | Color 16 (R000 G255 B255 W150) |
| | | | | 119–125 | Color 17 (R000 G100 B255 W255) |
| | | | | 126–132 | Color 18 (R000 G000 B255 W100) |
| | | | | 133–139 | Color 19 (R000 G000 B255 W050) |
| | | | | 140–146 | Color 20 (R000 G000 B255 W000) |
| | | | | 147–153 | · |
| | | | | 154–160 | |
| | | | | 161–167 | · |
| | | | | 168–174 | |
| | | | | 175–181 | Color 25 (R255 G000 B100 W000) |
| | | | | 182–188 | Color 26 (R255 G000 B100 W050) |
| | | | | 189–195 | Color 27 (R255 G000 B025 W050) |
| | | | | 196–202 | |
| | | | | 203–209 | Color 29 (R255 G000 B025 W000) |
| | | | | 210–216 | Color 30 (R000 G000 B000 W255) |
| | | | | 217–223 | Color 31 (R075 G075 B000 W255) |
| | | | | 224–230 | Color 32 (R000 G000 B100 W255) |
| | | | | 231–255 | · |
| | | | | 000–015 | No function |
| | | | | 016-031 | Color switch 1 |
| | | | | 032-047 | Color switch 2 |
| | | | | 048-063 | Color switch 3 |
| | | | | 064–079 | Color switch 4 |
| | | | 080-095 | Color switch 5 | |
| | | , Color : | | 096-111 | Color switch 6 |
| | | | Color Switch / | 112–127 | Color switch 7 |
| | | 6 | Color Flow | 128–143 | Color switch 8 |
| | | | | 144–159 | Color flow 1 |
| | | | | 160–175 | Color flow 2 |
| | | | | 176–191 | Color flow 3 |
| | | | | 192–207 | Color flow 4 |
| | | | | 208–223 | Color flow 5 |
| | | | | 224–239 | Color flow 6 |
| | | | | 240–255 | Color flow 7 |
| | | 7 | Color Switch / Color Flow Speed | 000–255 | Speed adjustment, from slow to fast |
| | | | Sound- | 000–050 | No function |
| | | 8 | controlled Mode | 051–255 | Sound sensitivity, from low to high sensitivity |
| | | 9 | Red | 000–255 | From low to high intensity (0–100 %) |
| | | 10 | Green | 000–255 | From low to high intensity (0–100 %) |
| | | 11 | Blue | 000–255 | From low to high intensity (0–100 %) |
| | | 12 | White | 000–255 | From low to high intensity (0–100 %) |

Note: Make sure that the Strobe channel and the Master Dimmer channel are open in 6-CH and 12-CH mode to see the light output.



6.8. RDM Information

This device supports RDM. Refer to 6.9.2. Supported RDM PIDs for the Device for more information.

6.8.1. RDM Details

Responder ID: 29B4:091XXXXX

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

Manufacturer Label: Showtec

Model Description: Accent Spot Q4
 Model ID: 145 (091 hexadecimal)
 Device Label: Accent Spot Q4

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 for the Device

| Parameter ID | Value | Required | GET | SET |
|-----------------------------|--------|----------|-----|-----|
| DISC_UNIQUE_BRANCH | 0x0001 | * | | |
| DISC_MUTE | 0x0002 | * | | |
| DISC_UN_MUTE | 0x0003 | * | | |
| SUPPORTED_PARAMETERS | 0x0050 | * | * | |
| DEVICE_INFO | 0x0060 | * | * | |
| DEVICE_MODEL_DESCRIPTION | 0x0080 | | * | |
| MANUFACTURER_LABEL | 0x0081 | | * | |
| DEVICE_LABEL | 0x0082 | | * | * |
| FACTORY_DEFAULTS | 0x0090 | | * | * |
| SOFTWARE_VERSION_LABEL | 0x00C0 | * | * | |
| DMX_PERSONALITY | 0x00E0 | | * | * |
| DMX_PERSONALITY_DESCRIPTION | 0x00E1 | | * | |
| DMX_START_ADDRESS | 0x00F0 | * | * | * |
| SENSOR_DEFINITION | 0x0200 | | * | |
| SENSOR_VALUE | 0x0201 | | * | * |
| IDENTIFY_DEVICE | 0x1000 | * | * | * |
| 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 | No power to the device | Check if power is switched on and cables are plugged in | | |
| function at all | Internal fuse is blown | Disconnect the device and contact your Highlite International dealer | | |
| The device responds erratically | The factory settings of the device are changed | Reset the device's parameters to the default factory settings. See 6.6.8.7. Restoring Factory Settings on page 29 | | |
| | The controller is not connected | Connect the controller | | |
| The device does not respond to DMX control | The signal is reversed. The 3-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 | | |
| | Bad data link connection | Examine connections and cables. Correct poor connections. Repair or replace damaged cables | | |
| The device responds erratically to DMX | 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 | | |
| control | Incorrect addressing | Check address settings and correct, if necessary | | |
| | In case of a setup with multiple devices, one of the devices is defective and disturbs data transmission on the link | To find out the defective device, bypass one device at a time until normal operation is restored | | |
| No light or LEDs cut | LEDs are damaged | Disconnect the device and contact your Highlite International dealer | | |
| out intermittently | The power supply settings do not match local AC voltage and frequency | Disconnect the device. Check the settings and correct, if necessary | | |



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, fixations 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 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.

9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation



WARNING

Incorrect deinstallation can cause serious injuries and damage of property.

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

9.2. Instructions for Transportation

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

9.3. Storage

- Clean the device before storing. Follow the cleaning instructions in chapter 8.2.1. Basic Cleaning Instructions on page 34.
- 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 (<u>www.highlite.com</u>) for an available declaration of conformity.









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