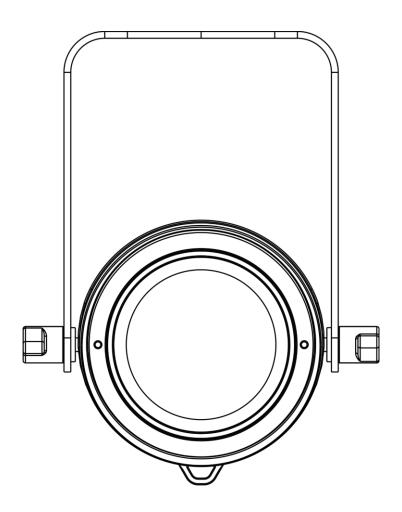


# **MANUAL**



**ENGLISH** 

Cameleon Spot Q4

**V1** 

Ordercode: 42673

## **Table of contents**

Warning	2
Safety Instructions	
Operating Determinations	
Rigging	4
Connection with the mains	
Return Procedure	
Claims	
Description of the device	7
Optional accessories	
Frontside	
Backside	
Installation	9
Set Up and Operation	0
Control Modes	
One Cameleon Spot (Auto program, Built-in programs and Manual mode)	
Multiple Cameleon Spots (Master/Slave control)	
Multiple Carrieleon Spots (Master/slave Control)	
Fixture Linking	
Data Cabling	
Control Panel	
Control Mode	
DMX Addressing	
Menu Overview	
Main Menu Options	
1. DMX Address/ DMX Configuration	
2. Manual	
3. Auto program	
4. Built-in programs	
5. Master/slave	
6. Settings	
6.1. Curves Select	
6.2. Dimmer Speed	
6.3. PWM Frequency	
6.4. DMX Fail	
6.5. DMX Sync	
6.6. Lock	
6.7. Factory	
7. Information	
DMX Channels	20
4 DMX Channels	20
6 DMX Channels	20
10 DMX Channels	21
Maintenance	23
Troubleshooting	23
No Light	
No Response to DMX	
Product Specifications	25
Dimensions	26



## Warning



For your own safety, please read this user manual carefully before your initial start-up!

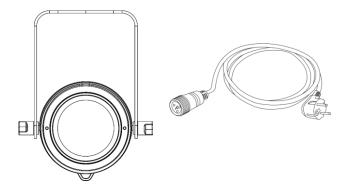


#### **Unpacking Instructions**

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

#### Your shipment includes:

- Showtec Cameleon Spot Q4
- 1x Schuko to 3-pins (IP-65) Power cable 1,5m
- User manual



## LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason, when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. If improving the lifespan is of higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.



#### **CAUTION!**

Keep this device away from rain and moisture! Unplug mains lead before opening the housing!



#### **Safety Instructions**

Every person involved with the installation, operation and maintenance of this device has to:

- be aualified
- follow the instructions of this manual



CAUTION! Be careful with your operations.

With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!





Before the initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes contained in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

#### **IMPORTANT:**

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

- Never let the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Never modify, bend, mechanically strain, put pressure on, pull or heat up the power cord.
- Never strain the cable insert or the female part in the device. There must always be sufficient cable going to the device. Otherwise, the cable will be damaged, which can cause serious damage.
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never lift the device holding it by the projector-head, as the mechanics may be damaged. Always hold the device by the transport handles.
- Never place any material over the LEDs or lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never use the device during thunderstorms, unplug the device immediately.
- Never leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach, as they are potential sources of danger.
- Do not insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmer pack.
- Do not switch the device on and off in short intervals, as this will reduce the device's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes hot). Allow the device to cool for at least 5 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only operate the device after having checked if the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep the case closed while operating.
- Always allow a free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power cord holding it by the plug. Never pull out the plug by tugging the power cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power cord is never crimped or damaged. Check the device and the power cord from time to time.
- Make sure that the core diameter of extension cords and power cords is sufficient for the required power consumption of the device.
- If the lens or LEDs are obviously damaged, it have to be replaced to prevent its functions from being impaired, due to cracks or deep scratches.
- If the external cable is damaged, it has to be replaced by a qualified technician.
- If device was dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.



- If your Showtec device fails to work properly, discontinue the use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. The device must be installed beyond the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the device. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.



# CAUTION! Eyedamages!!! Avoid looking directly into the lightsource!!! (meant especially for epileptics)!!!



#### **Operating Determinations**

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the
  device will serve you for a long time without defects.
- The minimum distance between light output and the illuminated surface must be bigger than 1 meter.
- In order to eliminate wear and improve the device's lifespan, during periods of non-use, completely disconnect from power source via breaker or by unplugging.
- The maximum ambient temperature  $t_a = 40^{\circ}$ C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40°C.
- If this device is operated in any other way than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash, etc.

You endanger your own safety and the safety of others!

#### Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

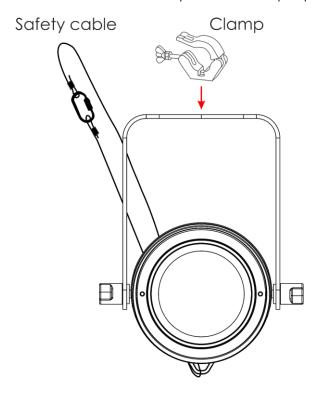
Do not attempt the installation yourself!

Always let the installation be carried out by an authorized dealer!



#### Procedure:

- If the Cameleon Spot is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the Cameleon Spot, with the mounting bracket, to the trussing system.
- The Cameleon Spot must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety cable.
- When rigging, derigging or servicing the Cameleon Spot, always make sure, that the area below the installation site is secured and that there are not any unauthorized people around.



The Cameleon Spot Q4 can be placed on a flat stage floor or mounted to any kind of truss with a clamp.

Improper installation can cause serious injuries and/or damage of property!

#### Connection with the mains

Connect the device to the mains with the power-plug.

Always check if the right color cable is connected to the right.

Always check if the right color cable is connected to the right place.

<u>International</u>	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
•	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

Make sure that the device is always properly connected to the earth!

Improper installation can cause serious injuries and/or damage of property!







#### **Return Procedure**



Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail <a href="mailto:aftersales@highlite.com">aftersales@highlite.com</a> and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

# Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

#### Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to report and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless agreed otherwise in writing.

Complaints against us must be prepared in writing or sent by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement from which the obligation is resulting.



## Description of the device

#### **Features**

The Cameleon Spot Q4 is a spotlight with great output and effects. It is an extension on our Cameleon series. It's an indoor and outdoor solution for illumination of numerous objects.

- Plug and Play
- RGBW 4-in-1 Color mixing
- Touch display
- XLR 3-pin to mini 3-pin cable (42708) to connect the Cameleon to DMX, not included!
- Input voltage: 100-240V, 50/60HzPower consumption: 23W@FO
- Drive current: 900mAPower factor: 0,49
- Refresh rate: 3 KHz
- DMX Channels: 4, 6 or 10 Channels
  Light source: 1x 15W 4-in-1 RGBW LED
- Lux @2m: Red: 110
   Green: 250
   Blue: 43
   White: 287
   Full Output: 570
- Maximum distance: 10m
- Beam Angle:16°
- Protection rate: IP-65
- Control: DMX / Auto Program / Built-in programs / Master-slave/ Manual
- Dimmer: 0-100%Strobe: 0-20Hz
- Housing: Die-Cast Black Aluminum
- Connections: Dedicated Power cable IP-65 IN/OUT & Data IP-65 IN/OUT
- Lens Plate: Tempered glass
- Cooling: Convection (no fans)
- Color: black
- Dimensions: 155 x 235 x 195 mm (LxWxH incl. bracket)
- Weight: 2,0 kg

Note: Knowledge of DMX is required to fully utilize this unit.

#### Optional accessories

42698 Power end cap set Male/female for Cameleon series
42699 Data end cap set Male/female for Cameleon series
42705 Power Extension cable for Cameleon series (3m)
427056 Power Extension cable for Cameleon series (6m)
42706 Power connection cable for Cameleon series (3m)
42707 DMX Extension cable for Cameleon series (3m)
427076 DMX Extension cable for Cameleon series (6m)
42708 DMX Input cable for Cameleon series (3m)



Please make sure to obtain the XLR 3-pin to mini 3-pin cable (42708) to connect the device to DMX.





## **Frontside**

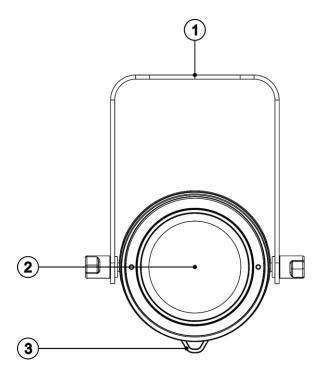
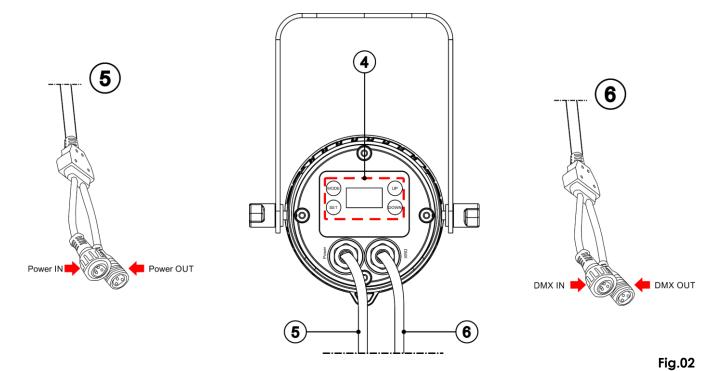


Fig.01

- 01) Mounting bracket with inclination screws
- 02) 1x 15W 4-in-1 RGBW LED
- 03) Safety eye

#### **Backside**



- 04) OLED Display + control buttons
- 05) Special mini 3-pin power cable IN/OUT IP-65
- 06) Special mini 3-pin DMX cable IN/OUT IP-65



## Installation

Remove all packing materials from the Cameleon Spot Q4. Check if all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly. Always disconnect from electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.

## **Set Up and Operation**

Follow the directions below, as they pertain to your preferred operation mode.

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

#### **Control Modes**

There are 5 modes: • Auto program

• Built-in programs

Manual mode

• Master/slave

DMX-512 (4CH, 6CH, 10CH)

#### One Cameleon Spot (Auto program, Built-in programs and Manual mode)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140 / 70141).
- 03) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 04) When the Cameleon Spot is not connected with a DMX cable, it functions as a stand-alone device. Please see pages 15-16 for more information about the Auto program, Built-in programs and Manual mode.

#### Multiple Cameleon Spots (Master/Slave control)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140 / 70141).
- 03) Use a 3-p XLR cable to connect the Cameleon Spots and other devices.

The pins:



02) Signal (-)

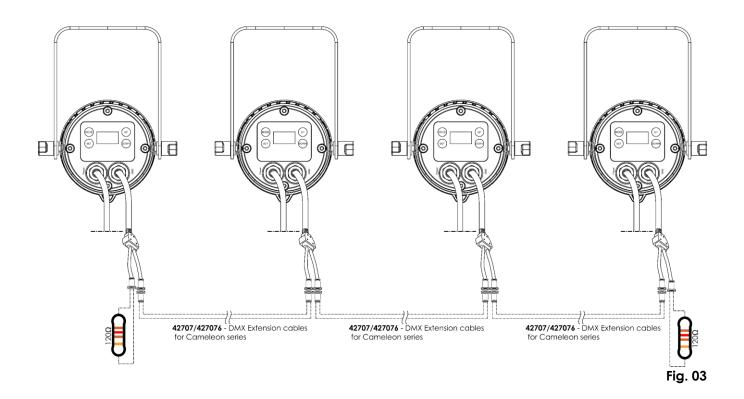
03) Signal (+)

04) Link the units as shown in Fig. 03. Connect the first unit's DMX "out" socket with the second unit's "in" socket, using the 42707/427076 – DMX Extension cable. Link the second, third and fourth unit using the 42707/427076– DMX Extension cable.

You can use the same functions on the master device as described on pages 15-16 (Auto program, Built-in programs or Manual mode). This means that you can set your desired operation mode on the master device and all slave devices will react the same as the master device.

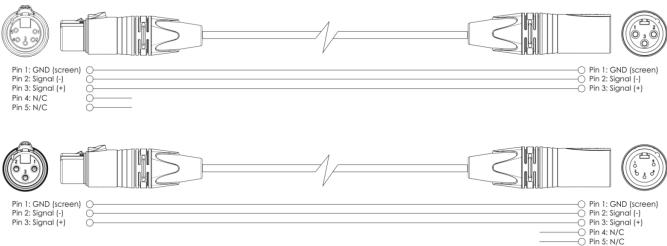


#### Multiple Cameleon Spots (Master/Slave control)



#### Multiple Cameleon Spots (DMX Control)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140 / 70141).
- 03) Use a 3-pin XLR cable to connect the Cameleon Spots and other devices.



- 04) Link the units as shown in fig. 04. Connect a light controller to the first unit's DMX "in" socket, using the 42708 DMX input cable. Connect the first unit's "out" socket with the second unit's "in" socket, using the 42707/427076 DMX Extension cable, Link the second, third and fourth unit using the 42707/427076 DMX Extension cable.
- 05) Supply electric power: Plug electric mains power cords into each unit's special IP65 power IN socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.



#### Multiple Cameleon Spots DMX Set Up

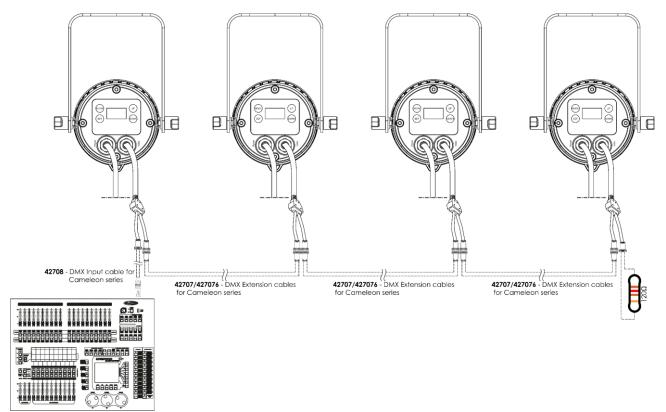


Fig. 04

Note: Link all cables before connecting electric power



Note: You cannot plug a standard DMX cable directly into the connector. Be sure to use the special cable for DMX connection (42708) and extension cables (42707/427076).



#### **Fixture Linking**

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows of two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important:

Fixtures on a serial data link must be daisy-chained in a single line. To comply with the EIA-485 standard, no more than 30 devices should be connected on one data link. Connecting more than 30 fixtures on one serial data link without the use of a DMX optically isolated splitter may result in deterioration of the digital DMX signal.



Maximum recommended DMX data link distance: 100 meters

Maximum recommended number of fixtures on a DMX data link: 30 fixtures Maximum recommended number of fixtures on a Power link: 10 units @100V Maximum recommended number of fixtures on a Power link: 20 units @240V

## **Data Cabling**

To link fixtures together, you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable, please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

#### **DAP Audio DMX Data Cables**

- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FL01150 (1,5 m), FL013 (3 m), FL016 (6 m), FL0110 (10 m), FL0115 (15 m), FL0120 (20 m).
- DAP Audio X-type data cable XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FLX0175 (0,75 m), FLX01150 (1,5 m), FLX013 (3 m), FLX016 (6 m), FLX0110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5 m), FL713 (3 m), FL716 (6 m), FL7110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL7275 (0,75 m), FL72150 (1,5 m), FL723 (3 m), FL726 (6 m), FL7210 (10 m).
- DAP Audio 110 Ohm cable with digital signal transmission. Ordercode FL0975 (0,75 m), FL09150 (1,5 m), FL093 (3 m), FL096 (6 m), FL0910 (10 m), FL0915 (15 m), FL0920 (20 m).
- DAP Audio data cable FL08 DMX/AES-EBU, XLR/M 5-pin > XLR/F 5-pin. **Ordercode** FL08150 (1,5 m), FL083 (3 m), FL086 (6 m), FL0810 (10 m), FL0820 (20 m).
- DAP Audio DMX adapter: 5-pin > 3-pin. **Ordercode** FLA29.
- DAP Audio DMX adapter: 3-pin > 5-pin. **Ordercode** FLA30.
- DAP Audio DMX Terminator 3-pin. Ordercode FLA42.
- DAP Audio DMX Terminator 5-pin. Ordercode FLA43.

**Note:** Use the special DMX cables for DMX connection.

42707 DMX Extension cable for Cameleon series (3m)

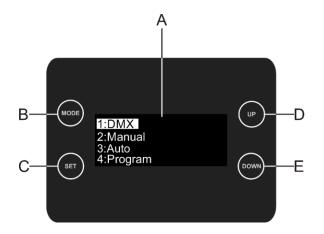
427076 DMX Extension cable for Cameleon series (6m)

42708 DMX Input cable for Cameleon series (3m)

The Cameleon Spot Q4 can be operated with a controller in **control mode** or without the controller in **stand-alone mode**.



#### **Control Panel**



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

Fig. 05

#### **Control Mode**

The fixtures are individually addressed on a data-link and connected to the controller.

The fixtures respond to the DMX signal from the controller. (When you select the DMX address and save it, the controller will display the saved DMX address, next time.)

#### **DMX Addressing**

The control panel on the front side of the base allows you to assign DMX fixture addresses, which is the first channel with which the Cameleon will respond to the controller.

Please note, when you use the controller, the unit has 10 channels.

When using multiple Cameleons, make sure you set the DMX addresses right.

Therefore, the DMX address of the first Cameleon should be **1(001)**; the DMX address of the second Cameleon should be **1+10=11 (011)**; the DMX address of the third Cameleon should be **11+10=21 (021)**, etc. Please, be sure that you do not have any overlapping channels in order to control each Cameleon correctly. If two or more Cameleons are addressed similarly, they will work similarly.

#### Controlling:

After having addressed all Cameleon fixtures, you may now start operating these via your lighting controller

**Note:** After switching on, the Cameleon will automatically detect whether DMX 512 data is received or not. If not, the problem may be:

- The XLR cable from the controller is not connected with the input of the Cameleon.
- The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

**Note:** It is necessary to insert an XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.



## Display Off after 50 seconds



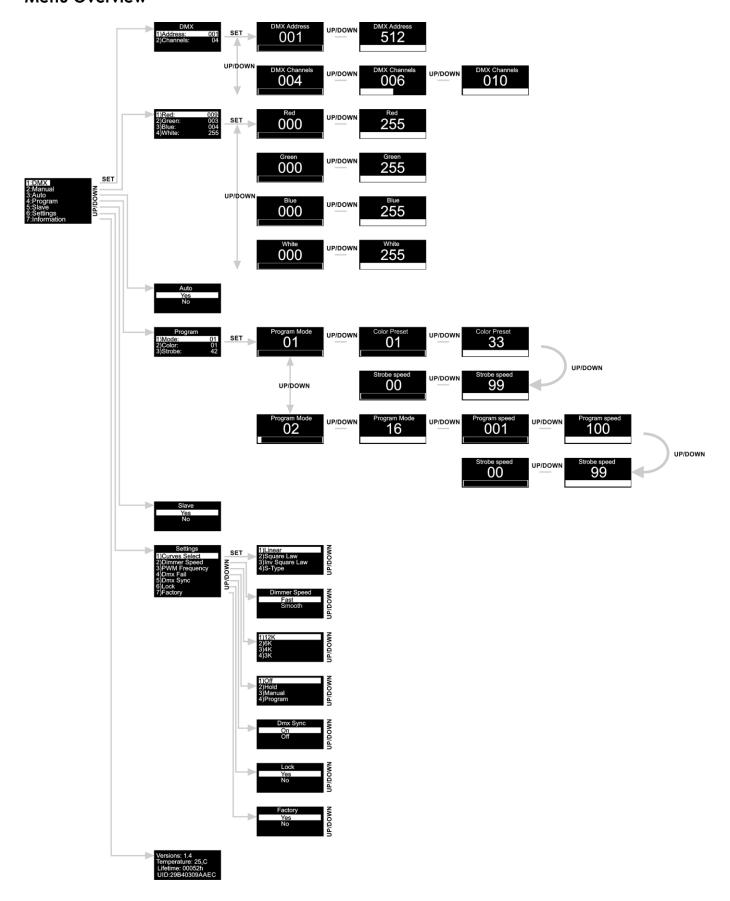
When no button is pressed for 50 seconds, the display will turn off. To light up the display, you have to press the **MODE**, **SET**, **UP** or **DOWN** button.

Once you have pressed the button, the display will light up.



Ordercode: 42673

## Menu Overview

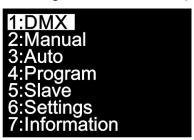


The Cameleon Spot Q4 will show the current software version, run mode and actual temperature at startup!



#### **Main Menu Options**

- 01) Press the **SET** button to open the main menu.
- 02) Press the **UP/DOWN** buttons to scroll through the menu. The display will show:

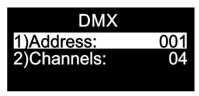


- 03) Press the SET button to open the desired menu.
- 04) Press the MODE button to return to the previous menu.

#### 1. DMX Address/ DMX Configuration

In this menu you can set the device's DMX starting address and choose a DMX channel mode.

- 01) While in main menu, press the **UP/DOWN** buttons until the display shows **DMX**.
- 02) Press the **SET** button to open the menu, the display will show:

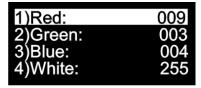


- 03) Press the **UP/DOWN** buttons to set the DMX address or the desired configuration.
- 04) If you choose the DMX address 001, press the **SET** button to open the submenu.
- 05) Press the **UP/DOWN** buttons to set the desired address. The adjustment range is between 001
- 06) If you choose the DMX configuration  $\frac{004}{1000}$ , press the **SET** button to open the submenu.
- 07) Press the **UP/DOWN** buttons to choose between 004 006 010

#### 2. Manual

In this menu you can individually set the static colors.

- 01) While in main menu, press the **UP/DOWN** buttons until the display shows **Manual**.
- 02) Press the **SET** button to open the menu, the display will show:



- 03) Press the **UP/DOWN** buttons to scroll between the static colors Red, Green, Blue and White.
- 04) If you choose the desired color, press the SET button to adjust the color intensity.



05) Press the **UP/DOWN** buttons to set the intensity from the desired colors, the adjustment ranges are between:



#### 3. Auto program

In this menu you can activate the built-in auto program.

- 01) While in main menu, press the **UP/DOWN** buttons until the display shows **Auto**.
- 02) Press the **SET** button to open the menu, the display will show:

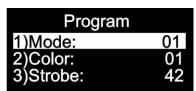


03) If you choose Yes, the Cameleon Spot will immediately start the built-in Auto program.

#### 4. Built-in programs

In this menu you can set the built-in programs.

- 01) While in main menu, press the **UP/DOWN** buttons until the display shows **Program**.
- 02) Press the SET button to open the menu, the display will show:



- O3) Press the **UP/DOWN** buttons to scroll through the built-in programs. The adjustment range is between 16
- 04) If you choose the **UP/DOWN** buttons to choose the desired color or set the strobe frequency.
- 05) Press the **UP/DOWN** buttons to choose one of the 33 available preset colors
- 06) If you choose the strobe frequency press the **SET** button to open the submenu.
- Press the **UP/DOWN** buttons to set the desired strobe frequency. The adjustment range is between 000 press the UP/DOWN buttons to set the desired strobe frequency.
- 08) If you choose 102 16 , press the **UP/DOWN** buttons to set the program speed and strobe frequency.
- 09) If you choose the program speed  $\frac{001}{1000}$ , press the **SET** button to open the submenu.
- Press the **UP/DOWN** buttons to set the desired program speed. The adjustment range is between from slow to fast.
- 11) If you choose the strobe frequency press the **SET** button to open the submenu.
- Press the **UP/DOWN** buttons to set the desired strobe frequency. The adjustment range is between frequency. from OFF to high strobe frequency.



#### 5. Master/slave

In this menu you can set the device as a slave.

- 01) While in main menu, press the **UP/DOWN** buttons until the display shows **Slave**.
- 02) Press the **SET** button to open the menu, the display will show:

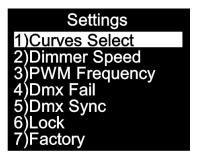


- 03) If you choose **Yes**, the device will become a slave.
- 04) If the device has not been set to slave, it is automatically classified as a master device. All slave devices will follow the master movement. If the device has been set to slave, it will react the same as its master device.

#### 6. Settings

In this menu you can set several settings of the device.

- 01) While in menu, press the **UP/DOWN** buttons until the display shows **Settings**.
- 02) Press the **SET** button to open the menu, the display will show:

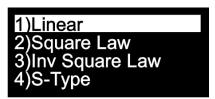


03) Press the **UP/DOWN** buttons to scroll between the following menus: Curves Select, Dimmer Speed, PWM Frequency, DMX Fail, DMX Sync, Lock and Factory.

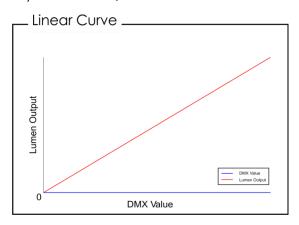
#### 6.1. Curves Select

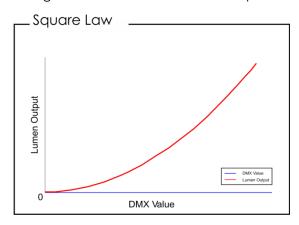
In this menu you can adjust the dimming of the device by choosing a dimming curve.

- 01) Press the **UP/DOWN** buttons until the display shows **Curves Select**.
- 02) Press the **SET** button to open the menu, the display will show:

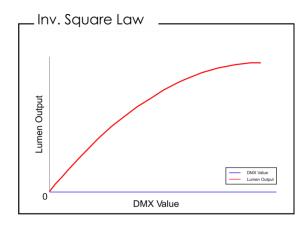


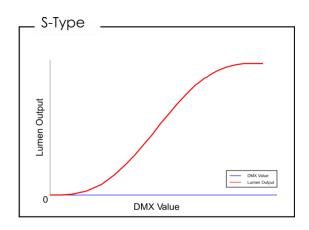
03) Press the **UP/DOWN** buttons to choose the desired dimming curve out of the 4 available options:











#### 6.2. Dimmer Speed

In this menu you can adjust the dimming speed of the device.

- 01) Press the **UP/DOWN** buttons until the display shows **Dimmer Speed**.
- 02) Press the **SET** button to open the menu, the display will show:



03) Press the UP/DOWN buttons to choose between Fast or Smooth.

#### 6.3. PWM Frequency

In this menu you can adjust the PWM Frequency of the device.

- 01) Press the **UP/DOWN** buttons until the display shows **PWM Frequency**.
- 02) Press the **SET** button to open the menu, the display will show:



03) Press the **UP/DOWN** buttons to choose between the 4 options.

#### 6.4. DMX Fail

In this menu you can adjust the behaviour of the device in case of a DMX signal error.

- 01) Press the **UP/DOWN** buttons until the display shows **Dmx Fail**.
- 02) Press the **SET** button to open the menu, the display will show:



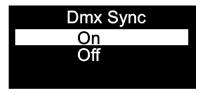
- 03) Press the **UP/DOWN** buttons to choose between the 4 options.
- 04) If you choose Off, the output will blackout when a DMX signal error occurs.
- 05) If you choose **Hold**, the device will fall back on the last properly working DMX signal from before the DMX signal error, which ensures undisrupted performance.
- 06) If you choose **Manual**, the device will fall back on the last setting in the Manual mode before the DMX signal error.
- 07) If you choose **Program**, the device will fall back on the last setting in the Program mode before the DMX signal error.



#### 6.5. DMX Sync

In this menu you can set the DMX synchronisation of the device.

- 01) Press the **UP/DOWN** buttons until the display shows **Dmx Sync**.
- 02) Press the **SET** button to open the menu, the display will show:

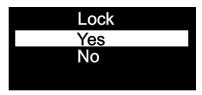


- 03) Press the **UP/DOWN** buttons to select **On** or **Off**.
- 04) The Sync option is a tool which helps to keep multiple fixtures synchronized, when using them in master slave mode.
- 05) If you choose **On**, the synchronization function is activated, this is recommended.
- 06) If you choose **Off**, the synchronization function is not activated.

#### 6.6. Lock

In this menu you can select whether the safety lock is active.

- 01) Press the **UP/DOWN** buttons until the display shows **Lock**.
- 02) Press the **SET** button to open the menu, the display will show:

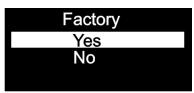


- 03) Press the **UP/DOWN** buttons to select **Yes** or **No**.
- 04) If you choose **Yes** and confirm it with the **SET** button, the device will be in Lock mode. You will need to insert the password in order to access the main menu. Press the **MODE** and **SET** button simultaneously for 3 seconds, and you will be able to access the main menu.
- 05) If you choose **No**, the main menu will remain unlocked.

#### 6.7. Factory

In this menu you can reset to the default settings.

- 01) Press the **UP/DOWN** buttons until the display shows **Factory**.
- 02) Press the **SET** button to open the menu, the display will show:



- 03) Press the **UP/DOWN** buttons to select **Yes** or **No**.
- 04) If you choose Yes and confirm it with the SET button, the device will be reset to default settings.
- 05) The device will return to the built-in Auto program.
- 06) If you choose **No**, the device will keep current settings.



#### 7. Information

In this menu you can view several pieces of information about the device.

- 01) While in main menu, press the **UP/DOWN** buttons until the display shows **Information**.
- 02) Press the **SET** button to open the menu, the display will show:

Versions: 1.4 Temperature: 25°C Lifetime: 00052h UID:29B40309AAEC

03) You can view the currently installed software version, actual temperature, lifetime of the LED and device code.

#### **DMX Channels**

#### **4 DMX Channels**

Ordercode: 42673

Channel 1	– Red dimmer intensity
0-255	Gradual adjustment Red from 0-100%
	- Green dimmer intensity
0-255	Gradual adjustment Green from 0-100%
Channel 3	– Blue dimmer intensity
0-255	Gradual adjustment Blue from 0-100%
0-233	Gidabai dajosimem bibe nom 0-100%
Channel 4	- White dimmer intensity
0-255	Gradual adjustment White from 0-100%
6 DMX Cho	innels
Channel 1	– Master dimmer intensity
0-255	Gradual adjustment, from dark to brightest 0-100%
<b>Channel 2</b> 0-10	<ul> <li>Linear Strobe (CH1 and CH3, CH4, CH5 or CH6 must be set between 1-255 (A)</li> <li>Closed</li> </ul>
11-255	Strobe flash frequency, from slow to fast (0-20Hz)
	– Red dimmer intensity (CH1 must be set between 1-255 🛕 )
0-255	Gradual adjustment Red from 0-100%
	– Green dimmer intensity (CH1 must be set between 1-255 🛕 )
0-255	Gradual adjustment Green from 0-100%
Channel 5	– Blue dimmer intensity (CH1 must be set between 1-255 🛕 )
0-255	Gradual adjustment Blue from 0-100%
0 200	Ordabar dajosimorii bioc ilom o-100/0
Chammal (	White discuss a intensity (CIII mount be eat below on 1 255 A
	- White dimmer intensity (CH1 must be set between 1-255 (1)
0-255	Gradual adjustment White from 0-100%



#### 10 DMX Channels

Channel	1 _	Master	dimmer	intensity
Chamer	. –	Masiei	allille	IIIIGIISIIV

0-255 Gradual adjustment, from dark to brightest 0-100%

## Channel 2 – Linear Strobe (CH1 and CH7, CH8, CH9 or CH10 must be set between 1-255 and CH4

between 8-255 and CH5 between 16-255 **(1)** 

0-10	Closed
11-255	Strobe flash frequency, from slow to fast (0-20Hz)

## Channel 3 – Pulse Strobe (CH1 and CH7, CH8, CH9 or CH10 must be set between 1-255 and CH4

between 8-255 and CH5 between 16-255 **(A)** 

DCIWCCIIO	200 and one between to 200 Z
0-10	Closed
11-255	Pulse strobe, from slow to fast (0-20Hz)

Channel 4- Color	presets (CH1 must be set between	1-255 🗥)
•	p ( - · · · · · · · · · · · · ·	,

Channel 4	– Color presets (CH1 must be set between 1-255 🔼)
0-7	No function
8-13	Color 1 (R255, G000, B000, W000)
14-20	Color 2 (R255, G000, B000, W100)
21-27	Color 3 (R255, G000, B000, W200)
28-34	Color 4 (R255, G050, B000, W000)
35-41	Color 5 (R255, G150, B000, W000)
42-48	Color 6 (R255, G255, B000, W000)
49-55	Color 7 (R255, G255, B000, W075)
56-62	Color 8 (R000, G255, B000, W255)
63-69	Color 9 (R000, G255, B000, W150)
70-76	Color 10 (R000, G255, B000, W050)
77-83	Color 11 (R000, G255, B000, W000)
84-90	Color 12 (R000, G255, B050, W000)
91-97	Color 13 (R000, G255, B150, W000)
98-104	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	Color 21 (R075, G000, B255, W000)
154-160	Color 22 (R160, G000, B255, W000)
161-167	Color 23 (R255, G000, B255, W000)
168-174	Color 24 (R255, G000, B175, W000)
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	Color 28 (R255, G000, B025, W025)
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	Color 33 (R255, G255, B255, W255)



0-15	- Built-in programs (CH1 and CH6 must be set between 1-255 🔼)  No function
16-31	Jump 1
32-47	Jump 2
48-63	Jump 3
64-79	Jump 4
80-95	Jump 5
96-111	Jump 6
112-127	Jump 7
128-143	Jump 8
144-159	Fade 1
160-175	Fade 2
176-191	Fade 3
192-207	Fade 4
208-223	Fade 5
224-239	Fade 6
240-255	Fade 7
	<b>A</b>
	- Speed Built-in programs (CH5 must be set between 16-255 📤)  Speed adjustment, from fast to slow
	- Speed Built-in programs (CH5 must be set between 16-255 🗘) Speed adjustment, from fast to slow
0-255	Speed adjustment, from fast to slow
0-255 <b>Channel 7</b>	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 1
0-255	Speed adjustment, from fast to slow
0-255 <b>Channel 7</b>	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 1
0-255 <b>Channel 7</b> 0-255	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 1
0-255 <b>Channel 7</b> 0-255	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255   Gradual adjustment Red from 0-100%
0-255  Channel 7 - 0-255  Channel 8 -	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Red from 0-100%  - Green dimmer intensity (CH1 must be set between 1-255 )
O-255  Channel 7 - 0-255  Channel 8 - 0-255	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Red from 0-100%  - Green dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Green from 0-100%
O-255  Channel 7 - 0-255  Channel 8 - 0-255  Channel 9 -	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Red from 0-100%  - Green dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Green from 0-100%  - Blue dimmer intensity (CH1 must be set between 1-255 )
O-255  Channel 7 · 0-255  Channel 8 · 0-255  Channel 9 · 0	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Red from 0-100%  - Green dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Green from 0-100%
O-255  Channel 7 - 0-255  Channel 8 - 0-255  Channel 9 - 0-255	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Red from 0-100%  - Green dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Green from 0-100%  - Blue dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Blue from 0-100%
O-255  Channel 7 - 0-255  Channel 8 - 0-255  Channel 9 - 0-255	Speed adjustment, from fast to slow  - Red dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Red from 0-100%  - Green dimmer intensity (CH1 must be set between 1-255 )  Gradual adjustment Green from 0-100%  - Blue dimmer intensity (CH1 must be set between 1-255 )



#### Maintenance

The operator has to make sure that safety-related and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.

The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
- 02) There may not be any deformations on housings, fixations and installation spots.
- 03) Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
- 04) The electric power supply cables must not show any damages or material fatigue.

The Cameleon Spot Q4 requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light-output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.

The front lens will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light-output very quickly.

Keep connections clean. Disconnect electric power, and then wipe the DMX connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

## **Troubleshooting**

This troubleshooting guide is meant to help solve simple problems.

If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

## No Light

If the light effect does not operate properly, refer servicing to a technician.

Suspect three potential problem areas as: the power supply, the LED, the internal fuse.

- 01) Power supply. Check that the unit is plugged into an appropriate power supply.
- 02) The LED. Return the Cameleon Spot to your Showtec dealer.
- 03) The internal fuse. Return the Cameleon Spot to your Showtec dealer.
- 04) If all of the above appears to be O.K., plug the unit in again.
- 05) If you are unable to determine the cause of the problem, do not open the Cameleon Spot, as this may damage the unit and the warranty will become void.
- 06) Return the device to your Showtec dealer.

#### No Response to DMX

Ordercode: 42673

Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

- 01) Check the DMX setting. Make sure that DMX addresses are correct.
- 02) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
- 03) Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.



Problem	Probable cause(s)	Solution		
One or more fixtures do not function at all	No power to the fixture	Check if power is switched on and cables are plugged in		
	Internal fuse blown	Return the Cameleon Flood to your Showtec dealer		
Fixtures reset	The controller is not connected	Connect controller		
correctly, but all respond erratically or not at all to the controller	3-pin XLR Out of the controller does not match XLR Out of the first fixture on the link (i.e. signal is reversed)	Install a phase reversing cable between the controller and the first fixture on the link		
	Poor data quality	Check data quality. If much lower than 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective fixture disturbing the link		
	Bad data link connection	<ul> <li>Inspect connections and cables.</li> <li>Correct poor connections. Repair or replace damaged cables</li> </ul>		
Fixtures reset correctly, but	Data link not terminated with 120 Ohm termination plug	Insert termination plug in output jack of the last fixture on the link		
some respond erratically or not at all to the controller	One of the fixtures is defective and disturbs data transmission on the link	<ul> <li>Check address setting</li> <li>Bypass one fixture at a time until normal operation is restored: unplug both connectors and connect them directly together.</li> <li>Have the defective fixture serviced by a qualified technician</li> </ul>		
	3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed)	<ul> <li>Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture that behaves erratically</li> </ul>		
No light or LED cuts out intermittently	Fixture is too hot	<ul> <li>Allow the fixture to cool down</li> <li>Clean the fan</li> <li>Make sure air vents in control panel and the front lens are not blocked</li> <li>Turn up the air conditioning</li> </ul>		
,	LED damaged	Disconnect the fixture and return it to your dealer		
	The power supply settings do not match local AC voltage and frequency	Disconnect fixture. Check settings and correct if necessary		



## **Product Specifications**

Model:	Showtec Cameleon Spot Q4	
Input Voltage:	100-240 VAC, 50/60Hz	
Power consumption:	23W@FO	
DMX linking:	30 pcs	
Drive current:	900mA	
Power factor:	0,49	
Protection rate:	IP-65	
Dimensions:	155 x 235 x 195 mm (LxWxH incl. bracket)	
Weight:	2,0 kg	
Operating and Programming:		
Signal pin OUT:	Pin 1 (earth), pin 2 (-), pin 3 (+)	
DMX Mode:	4, 6 or 8 Channels	
Signal input:	3-pin DMX IN IP65	
Signal output:	3-pin DMX OUT IP65	
Electro-mechanical effects:		
Light source:	1x 15W 4-in-1 RGBW LED	
Lux @2m:	Red: 110	
LUX @ZIII.	Green: 250	
	Blue: 43	
	White: 287	
	Full Output: 570	
Beam angle:	16°	
Connections:	Dedicated Power cable IP-65 IN/OUT & Data IP-65	
Commoditions.	IN/OUT	
Dimmer:	0-100%	
Strobe:	0-20Hz	
Control:	DMX / Auto Program / Built-in programs / Master-slave/	
	Manual	
Cooling:	Convection (no fans)	
Lens Plate:	Tempered glass	
Housing:	Die-cast Aluminum	
Color:	Black	
Max. ambient temperature $t_a$ :	40°C	
Max. housing temperature $t_B$ :	80°C	
Minimum distance:		
Minimum distance from flammable surfaces:	0,5 m	
Minimum distance to lighted object:	1 m	

Design and product specifications are subject to change without prior notice.



Website: <u>www.Showtec.info</u> Email: <u>service@highlite.com</u>



# Dimensions

