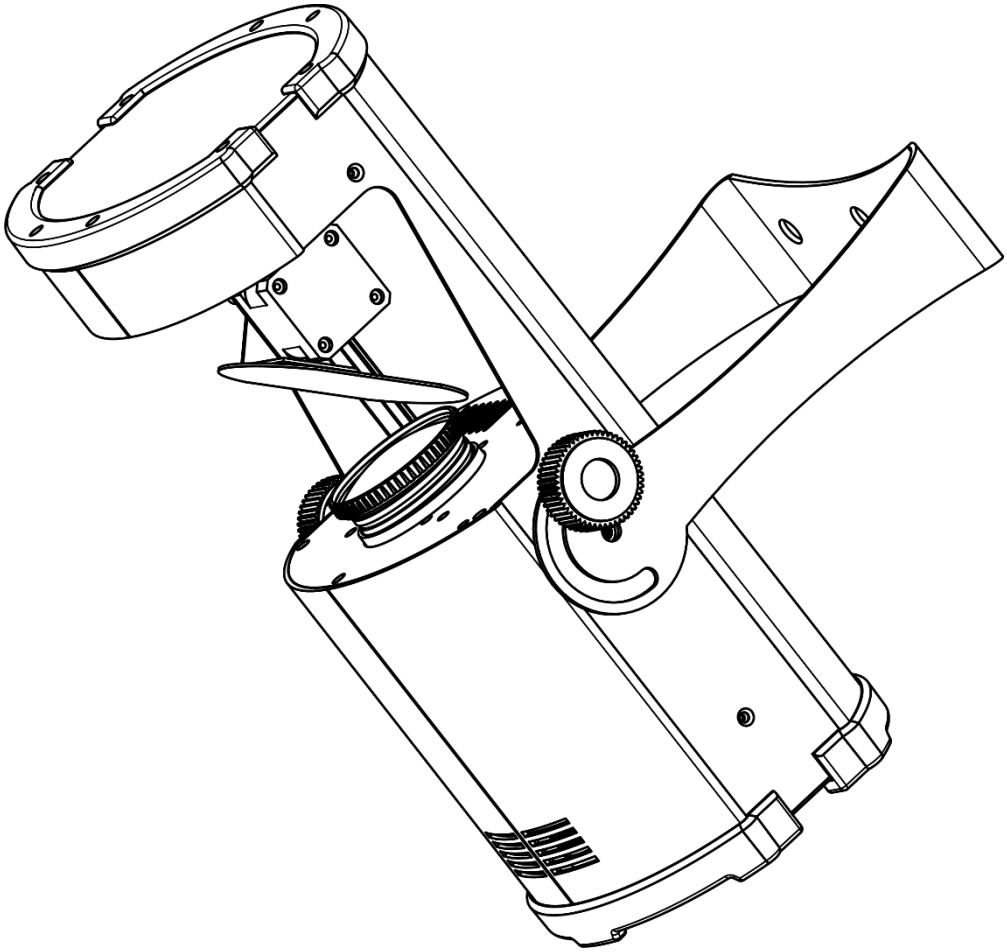
MANUAL



ENGLISH

Shark Scan One V1

Ordercode: 45025

Table of contents

Warning 2
Safety Instructions 2
Operating Determinations 4
Rigging 4
Connection with the mains 5
Return Procedure 5
Claims 5

Description of the device 6
Frontside 6
Backside 7

Installation 7

Set Up and Operation 7
Control Modes 8
One Shark (Auto mode) 8
One Shark (Sound-controlled) 8
Multiple Sharks (Master/Slave Control) 8
Multiple Sharks (DMX Control) 9
Fixture Linking 10
Data Cabling 10
Control Panel 11
DMX Control Mode 11
DMX Addressing 11
Menu Overview 12
Main Menu Options 12
1. DMX Address 13
2. DMX Channel 13
3. Running Mode 13
4. Programs 14
5. Settings 14
5.1. Calibration 15
6. System Info 15
DMX Channels 16
8 Channels 16
14 Channels 17

Maintenance 19
Replacing the Fuse 19
Replacing a Gobo From the Rotating Gobo Wheel 19

Troubleshooting 21
No Light 21
No Response to DMX 22

Product Specifications 23

Dimensions 24

Notes 25

Warning

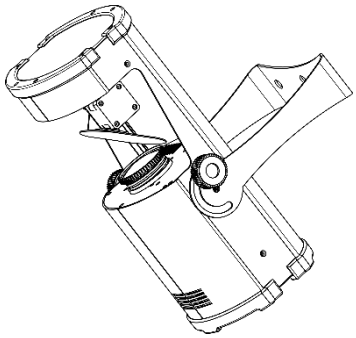
For your own safety, please read this user manual carefully before your initial start-up!

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 Shark Scan One
- Pro power to Schuko power cable (1,5 m)
- 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 qualified
- 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 your 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 written 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 remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes very hot). Allow the fixture to cool for at least 5 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the fixture after having checked that 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 case closed while operating.
- Always allow 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 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.
- If the lens is obviously damaged, it has to be replaced, so that its functions are not impaired, due to cracks or deep scratches.
- If device is 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 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. Device must be installed out of 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 Shark Scan One. 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 more than 1 meter.
- The maximum ambient temperature ta = 40°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!

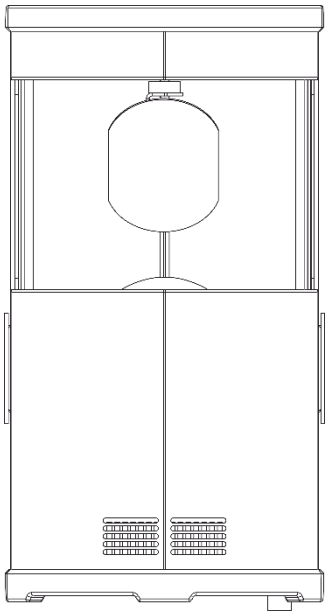
Rigging

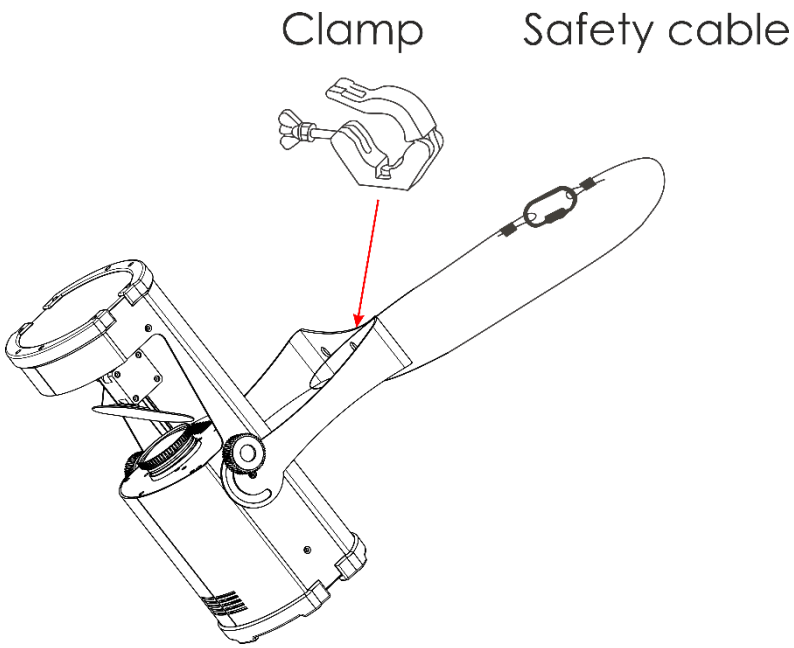
Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself !
Always let the installation be carried out by an authorized dealer !

Procedure:

- If the Shark is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the Shark, with the mounting-bracket, to the trussing system.
- The Shark 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 Shark, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.





The Shark Scan One can be placed on a flat stage floor or mounted to any kind of truss by means of the mounting bracket.

Improper installation can cause serious damage to people and property!

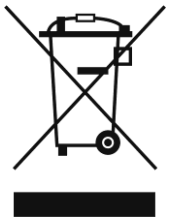
Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

International	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 connected properly to the earth!

Improper installation can cause serious damage to people and 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 aftersales@highlite.com 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 notify 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 otherwise agreed in writing.
Complaints against us must be made known in writing or 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 of which the obligation is resulting.

Description of the device

Features

The Showtec Shark Scan One is a compact scanner effect with high output and great effects.

- Light Source: 100W white LED module
- Input Voltage: 100-240 VAC, 50/60Hz (auto ranging)
- Power consumption: 130W max. at full output
- Angle: 18°
- Onboard: OLED Display
- Focus: Motorized focus
- Control protocol: DMX-512
- DMX Channels: 8 or 14 Channels
- Control modes: Auto, Sound-controlled, Master/Slave, DMX-512
- Dimmer: 0-100 % (linear dimmer)
- Strobe: 0-25 Hz
- Movement Pan: 160°
- Movement Tilt: 50°
- Housing: Black Metal & Flame-retardant plastic
- Cooling: Forced convection
- Power Connections: Pro Power connector IN/OUT
- Data Connections: 3-pin XLR IN/OUT
- Colour wheel (8 colour + White, Rainbow-flow effect)
- 7 Rotating Gobos + Open, Rotation, Gobo-shake, Gobo-flow scroll
- 3-Facet Prism
- IFS Technology
- IP20
- Ambient Temperature: -5°C ~ 40°C
- Fuse: T4AL/250V
- Dimensions: 380 x 250 x 297 mm (LxWxH)
- Weight: 6,2 kg

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

Frontside

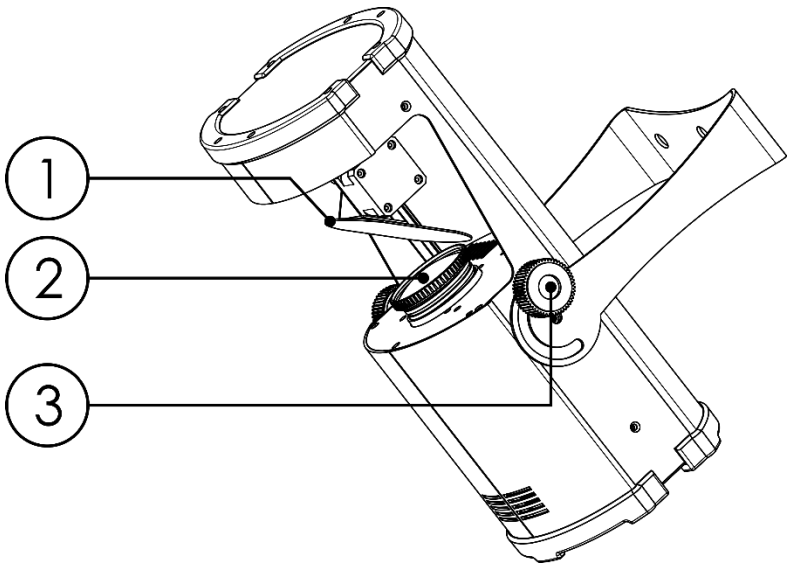


Fig. 01

01) Scanner mirror
02) 100W white LED
03) Adjustment screw

Backside

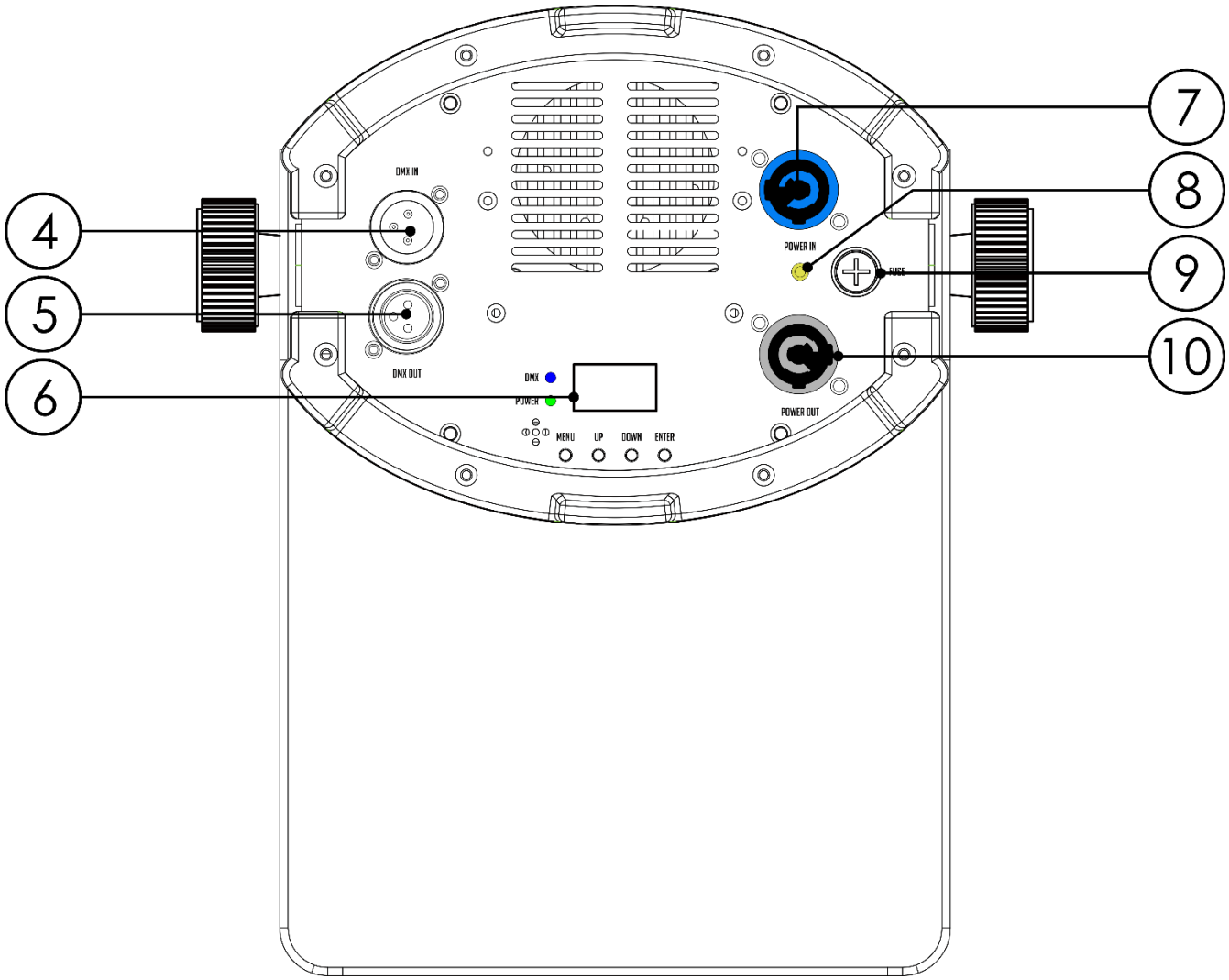


Fig. 02

04) 3-pin DMX signal connector IN
05) 3-pin DMX signal connector OUT
06) LCD Display + Menu buttons
07) Pro power connector Blue IN
08) Ground/earth connection
09) Fuse T4AL/250V
10) Pro power connector Gray OUT

Installation

Remove all packing materials from the Shark Scan One. 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 4 modes:

- Auto mode
- Sound-controlled
- Master/Slave Mode
- DMX-512 (8CH, 14CH)

One Shark (Auto 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 Shark is not connected with a DMX-cable, it functions as a stand-alone device. Please see pages 13–14 for more information about Auto mode.

One Shark (Sound-controlled)

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) Turn on the music. If the device is set to sound-control, then the Shark will react to the beat of the music. Please see page 13 for more information about the Sound-control options.

Multiple Sharks (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) Plug the end of the electric mains power cord into a proper electric power supply socket.
04) Use a 3-pin XLR cable to connect the Shark and other devices.
The pins:



01) Earth
02) Signal (-)
03) Signal (+)

05) Link the units as shown in (Fig.03). Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units. You can use the same functions on the master device as described on pages 13–14 (Auto mode, Sound controlled). 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 Sharks (Master/Slave Set Up)

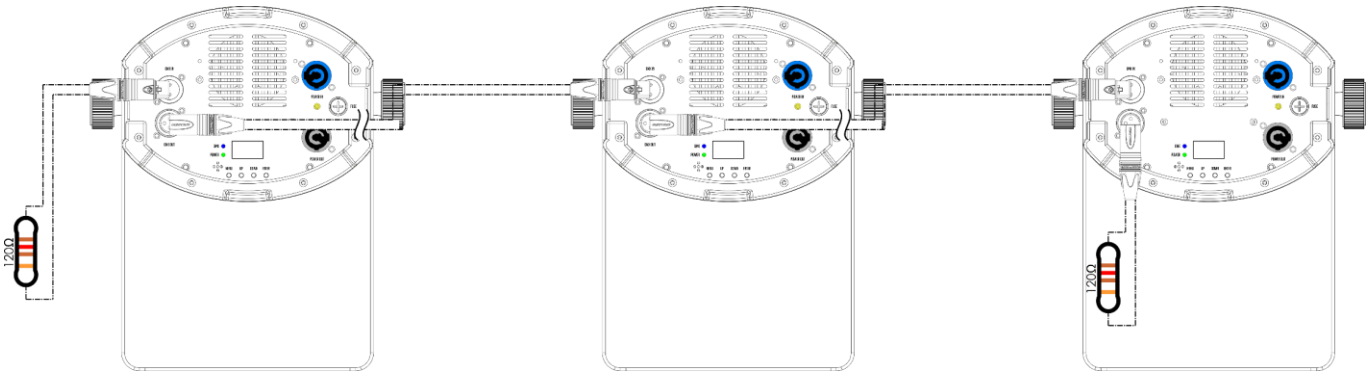
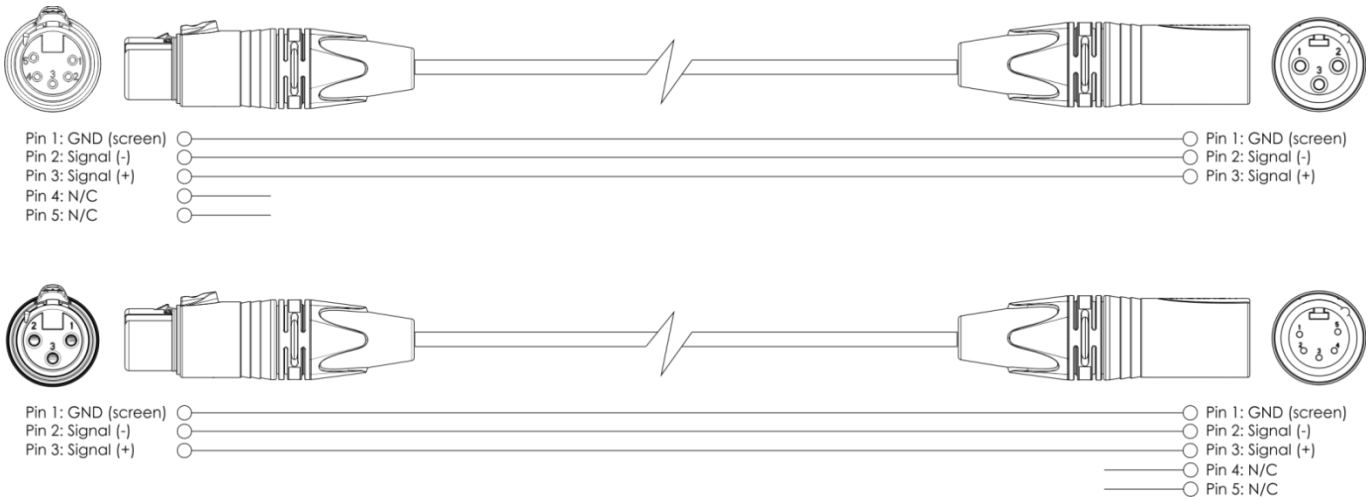


Fig. 03

Multiple Sharks (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 Sharks and other devices.



04) Link the units as shown in (Fig.04), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
05) Supply electric power: Plug electric mains power cords into each unit's IEC 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 Sharks (DMX Set Up)

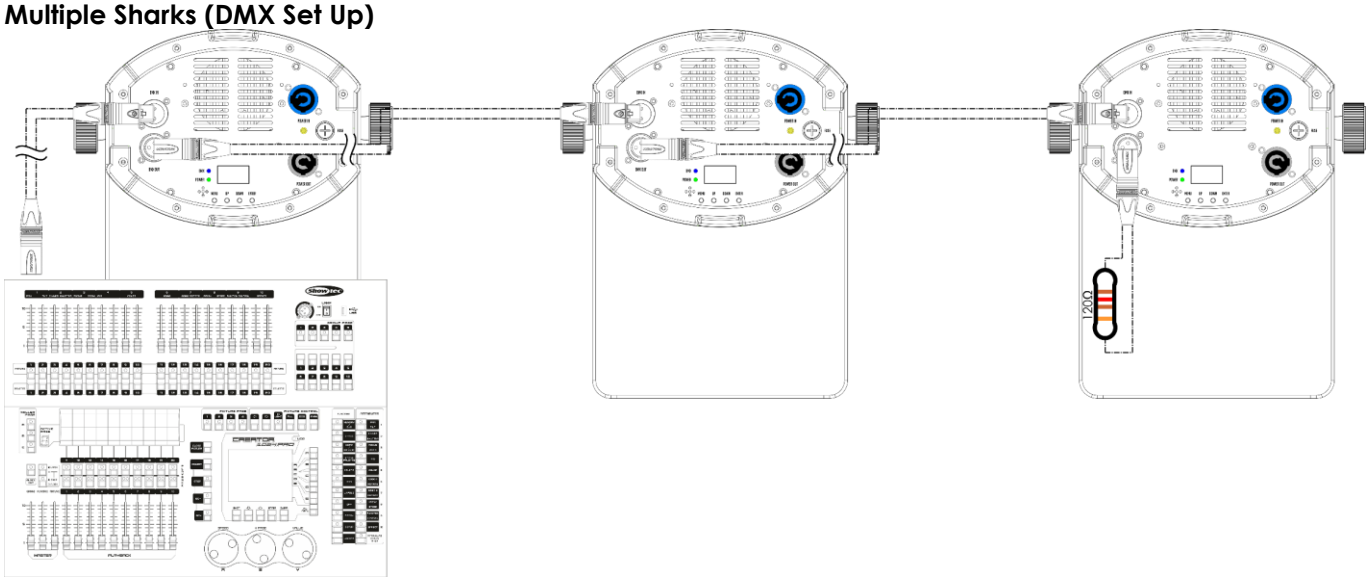


Fig. 04

Note : Link all cables before connecting electric power

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 on 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 one 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 Shark Scan One on a DMX data link: 30 fixtures
Maximum recommended number of fixtures on a power link @ 110V: 13 fixtures
Maximum recommended number of fixtures on a power link @ 240V: 25 fixtures

Data Cabling

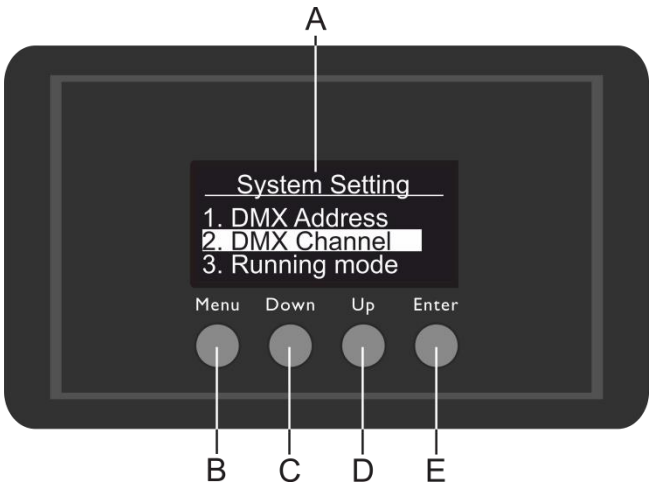
To link fixtures together you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic 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 DMX adapter: 3-pin/5-pin. **Ordercode** FLA30.

The Shark Scan One can be operated with a controller in **control mode** or without the controller in **stand-alone mode**.

Control Panel



A) OLED display
B) Menu button
C) Down button
D) Up button
E) Enter button

Fig. 05

DMX 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 the next time.)

DMX Addressing

The control panel on the front side of the base allows you to assign the DMX fixture address, which is the first channel from which the Shark will respond to the controller.
Please note when you use the controller, the unit has **14** channels.
When using multiple Sharks make sure you set the DMX addresses right.
Therefore, the DMX address of the first Shark should be **1(001)**; the DMX address of the second Shark should be **1+14=15 (015**); the DMX address of the third Shark should be **15+14=29 (029)**, etc. Please, be sure that you do not have any overlapping channels in order to control each Shark correctly.
If two or more Sharks are addressed similarly, they will work similarly.

Controlling:

After having addressed all Shark fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the Shark will automatically detect whether DMX 512 data is received or not. If not, the problem may be:

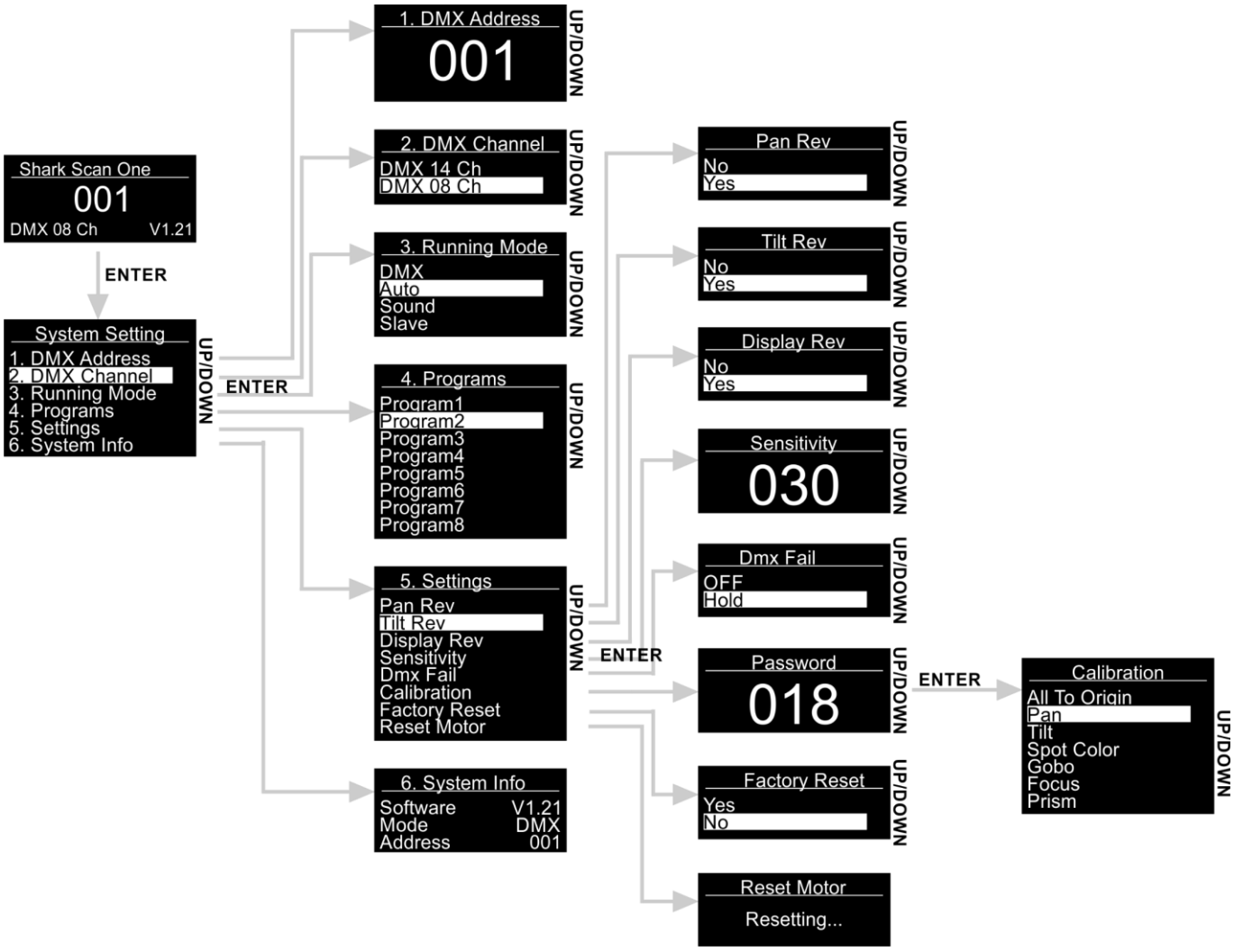
- The XLR cable from the controller is not connected with the input of the Shark.
- The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

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.

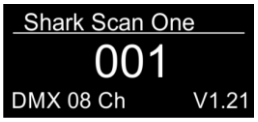
⚠ Display Off after 15 seconds ⚠

When no button is pressed for 15 seconds, the display will turn off.
To light up the display, you have to press the **Menu**, **Down**, **Up** or **Enter** button.
Once you have pressed the button, the display will light up.

Menu Overview



Main Menu Options

01) Upon start-up, the Shark will show its current version number: 

.

02) Press the **ENTER** button to open main menu.

03) Press the **UP/DOWN** buttons to scroll through the menu. The display will show:



04) Press the **ENTER** button to open the desired menu.

05) Press the **MENU** button to return to the previous menu.

1. DMX Address

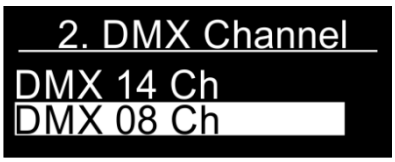
In this menu you can set the DMX address.

01) In main menu, press the **UP/DOWN** buttons until the display shows DMX ADDRESS.
02) Press the **ENTER** button to open the menu.
03) Press the **UP/DOWN** buttons to select the required address from 001–512.
04) Press the **ENTER** button to confirm the address.

2. DMX Channel

In this menu you can choose a DMX configuration.

01) In main menu, press the **UP/DOWN** buttons until the display shows DMX CHANNEL.
02) Press the **ENTER** button to open the menu. The display will show:

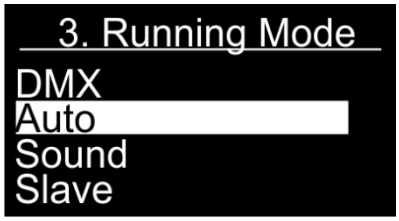


03) Press the **UP/DOWN** buttons to choose 8 or 14 DMX channels.
04) Press the **ENTER** button to confirm the desired DMX channels.

3. Running Mode

In this menu you can set the desired operation mode.

01) In main menu, press the **UP/DOWN** buttons until the display shows RUNNING MODE.
02) Press the **ENTER** button to open the menu.
03) Press the **UP/DOWN** buttons to select one of the 4 operation modes. The display will show:

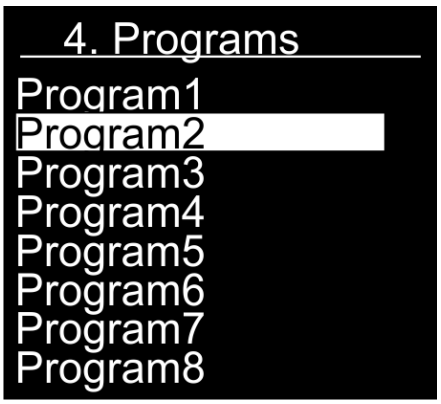


04) The operation modes are:
    - DMX: DMX mode
    - Auto: The Shark will run the built-in programs
    - Sound: The Shark will react to the beat of the background music
    - Slave: If set to Slave, the Shark will react the same as the master device
05) Press the **ENTER** button to confirm your choice.

4. Programs

In this menu you can run individual built-in programs.

01) In main menu, press the **UP**/**DOWN** buttons until the display shows PROGRAMS.
02) Press the **ENTER** button to open the menu.
03) Press the **UP**/**DOWN** buttons to select one of the 8 built-in programs. The display will show:

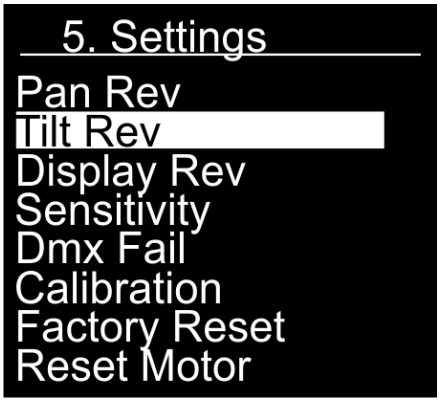


04) Press the **ENTER** button to confirm your choice.
05) The device will now run the chosen built-in program.

5. Settings

In this menu you can set the Shark's settings.

01) In main menu, press the **UP**/**DOWN** buttons until the display shows SETTINGS.
02) Press the **ENTER** button to open the menu.
03) Press the **UP**/**DOWN** buttons to select the desired submenu. The display will show:



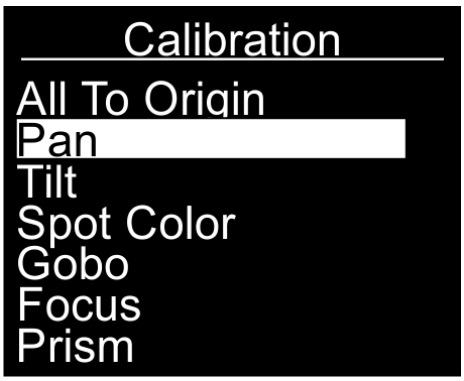
04) Press the **ENTER** button to enter the desired submenu.
05) The submenus are:
    - Pan Rev: Pan reverse. Press the **UP**/**DOWN** buttons to choose between NO/YES.
    - Tilt Rev: Tilt reverse. Press the **UP**/**DOWN** buttons to choose between NO/YES.
    - Display Rev: Display reverse. Press the **UP**/**DOWN** buttons to choose between NO/YES.
    - Sensitivity: Sound sensitivity. Press the **UP**/**DOWN** buttons to set between 0–100, from OFF to high sound sensitivity.
    - Dmx Fail: To adjust the behaviour of the device in case of a DMX signal error. Press the **UP**/**DOWN** buttons to choose between OFF and Hold. Choose OFF and the device will blackout its output, when a DMX signal error occurs. Choose Hold and the device will fall back on the last properly working DMX signal from before the DMX signal error, which ensures undisrupted performance.
    - Calibration: See page 15 for more information.
    - Factory Reset: Restore default settings. Press the **UP**/**DOWN** buttons to choose between YES/NO.
    - Reset Motor: Reset the motor responsible for the movement of the moving head.
06) Once you have adjusted the settings, press the **ENTER** button to save changes.

5.1. Calibration

In this menu you can set the initial movement and color parameters of the Shark.

01) Once you have chosen CALIBRATION (see page 14) press the **ENTER** button to open the menu.

02) You will now need to insert the password, in order to access the menu. Press the **UP**/**DOWN** buttons until the display shows **018** and press the **ENTER** button to confirm. The display will show:



03) The submenus are:

- All To Origin: Restore default calibration settings.
- Pan: Set the initial pan position.
- Tilt: Set the initial tilt position.
- Spot Color: Set the initial color.
- Gobo: Set the initial gobo.
- Focus: Set the initial focus.
- Prism: Set the initial prism position.

04) Once you have chosen the option which you would like to adjust, press the **ENTER** button to open the menu. The adjustment ranges are from 0–120 (for pan and tilt) and from 0–255 (for Spot Color, Gobo, Focus and Prism).

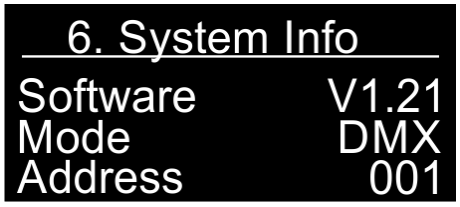
05) Press the **UP**/**DOWN** buttons to adjust settings and press the **ENTER** button to save changes.

6. System Info

In this menu you can monitor the status of the Shark.

01) In main menu, press the **UP**/**DOWN** buttons until the display shows SYSTEM INFO.

02) Press the **ENTER** button to open the menu. The display will show:



03) It is now possible to view the current software version, currently active operation mode and the DMX starting address.

DMX Channels

8 Channels

Channel 1 – Horizontal movement (Pan)
Move the slider up, in order to move head horizontally (PAN).
Gradual head adjustment from one end of the slider to the other (0–255, 128-center).
The head can be turned by 160° and stopped at any position you wish.

Channel 2 – Vertical movement (Tilt)
Move the slider up, in order to move head vertically (TILT).
Gradual head adjustment from one end of the slider to the other (0–255, 128-center).
The head can be turned by 50° and stopped at any position you wish.

Channel 3 – Pan / Tilt speed	
0–255	From Max Speed (0) to Min. Speed (255)

Channel 4 – Dimmer	
0–255	Dimmer intensity, from dark to brightest

Channel 5 – Shutter / Strobe (CH4 must be set between 1–255 ⚠)	
0–4	Shutter open
5–250	Linear strobe intensity, from slow to fast (0–25 Hz)
251–255	Shutter open

Channel 6 – Focus	
0–255	Continuous adjustment from far to near

Channel 7 – Built-in programs (CH4 must be set between 1–255 ⚠)	
0–10	No function
11–20	Program 1
21–40	Program 2
41–60	Program 3
51–70	Program 4
71–80	Program 5
81–100	Program 6
101–110	Program 7
111–130	Program 8
131–150	Program 9
151-160	Program 10
161–170	Program 11
171–180	Program 12
181–255	Sound-controlled

Channel 8 – Built-in programs (CH4 must be set between 1–255 ⚠)	
0–10	No function
11–20	X/Y Program 1
21–30	X/Y Program 2
31–40	X/Y Program 3
41–50	X/Y Program 4
51–60	X/Y Program 5
61–70	X/Y Program 6
71–80	X/Y Program 7
81–90	X/Y Program 8
91–230	X/Y Sound-controlled from low to high sensitivity
231–240	Reset (10 sec)
241–255	No function

14 Channels

Channel 1 – Horizontal movement (Pan)
Move the slider up, in order to move head horizontally (PAN).
Gradual head adjustment from one end of the slider to the other (0–255, 128-center).
The head can be turned by 160° and stopped at any position you wish.

Channel 2 – Pan fine 16-bit

Channel 3 – Vertical movement (Tilt)
Move the slider up, in order to move head vertically (TILT).
Gradual head adjustment from one end of the slider to the other (0–255, 128-center).
The head can be turned by 50° and stopped at any position you wish.

Channel 4 – Tilt fine 16-bit

Channel 5 – Pan / Tilt speed

0–255	From Max Speed (0) to Min. Speed (255)

Channel 6 – Dimmer

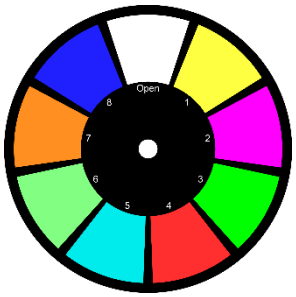
0–255	Dimmer intensity, from dark to brightest

Channel 7 – Shutter / Strobe (CH6 must be set between 1–255 ⚠)

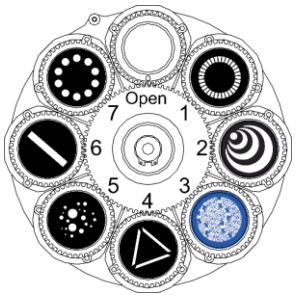
0–4	Shutter open
5–250	Linear strobe intensity, from slow to fast (0–25 Hz)
251–255	Shutter open

Channel 8 – Color wheel ⚠ Dimmer and shutter must be open ⚠

0–4	Open/White
5–12	White/Yellow
13–20	Yellow
21–28	Yellow/Pink
29–36	Pink
37–44	Pink/Green
45–528	Green
53–60	Green/Red
61–68	Red
69–76	Red/ Cyan
77–84	Cyan
85–92	Cyan/ Light Green
93–100	Light Green
101–108	Light Green/ Orange
109–116	Orange
117–124	Orange/UV
125–132	UV
133–139	Open/White
140–195	Clockwise rotation, from slow to fast
196–199	Stopl
200–255	Counterclockwise rotation, from fast to slow



Channel 9 – Gobo wheel ⚠ Dimmer and shutter must be open ⚠



0–7	Open/White
8–19	Gobo 1
20–31	Gobo 2
32–43	Gobo 3
44–55	Gobo 4
56–67	Gobo 5
68–71	Gobo 6
72–79	Gobo 7
80–88	Gobo Shake 1 from slow to fast
89–97	Gobo Shake 2 from slow to fast
98–106	Gobo Shake 3 from slow to fast
107–115	Gobo Shake 4 from slow to fast
116–124	Gobo Shake 5 from slow to fast
125–129	Gobo Shake 6 from slow to fast
130–133	Gobo Shake 7 from slow to fast
134–194	Clockwise rotation, from fast to slow
195–255	Counterclockwise rotation, from slow to fast

Channel 10 – Gobo rotation (CH9 must be set between 8–255 ⚠)

0–9	Stop
10–129	Clockwise rotation (CW), from slow to fast from fast to slow
130–134	Stop
135–255	Counter-clockwise rotation (CCW), from slow to fast

Channel 11 – Focus

0–255	Continuous adjustment from far to near

Channel 12 – Prism

0–128	Open/White
129–255	3-facet Prism Effect

Channel 13 – Built-in programs (CH6 must be set between 1–255 ⚠)

0–10	No function
11–20	Program 1
21–40	Program 2
41–60	Program 3
51–70	Program 4
71–80	Program 5
81–100	Program 6
101–110	Program 7
111–130	Program 8
131–150	Program 9
151-160	Program 10
161–170	Program 11
171–180	Program 12
181–255	Sound-controlled

Channel 14 – Built-in programs (CH6 must be set between 1-255 ⚠)

0–10	No function
11–20	X/Y Program 1
21–30	X/Y Program 2
31–40	X/Y Program 3
41–50	X/Y Program 4
51–60	X/Y Program 5
61–70	X/Y Program 6
71–80	X/Y Program 7

81–90	X/Y Program 8
91–230	X/Y Sound-controlled from low to high sensitivity
231–240	Reset (10 sec)
241–255	No function

Maintenance

The operator has to make sure that safety-relating 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-relating 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 Showtec Shark Scan One 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 and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Replacing the Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below.

01) Unplug the unit from electric power source.
02) Insert a flat-headed screwdriver into a slot in the fuse cover. Gently pry up the fuse cover. the fuse will come out.
03) Remove the used fuse. If brown or unclear, it is burned out.
04) Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse holder. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Replacing a Gobo From the Rotating Gobo Wheel

01) Disconnect mains power supply and set the switch to OFF.
02) Make sure that the gobo you want to insert has the same size. For the right size, see below.

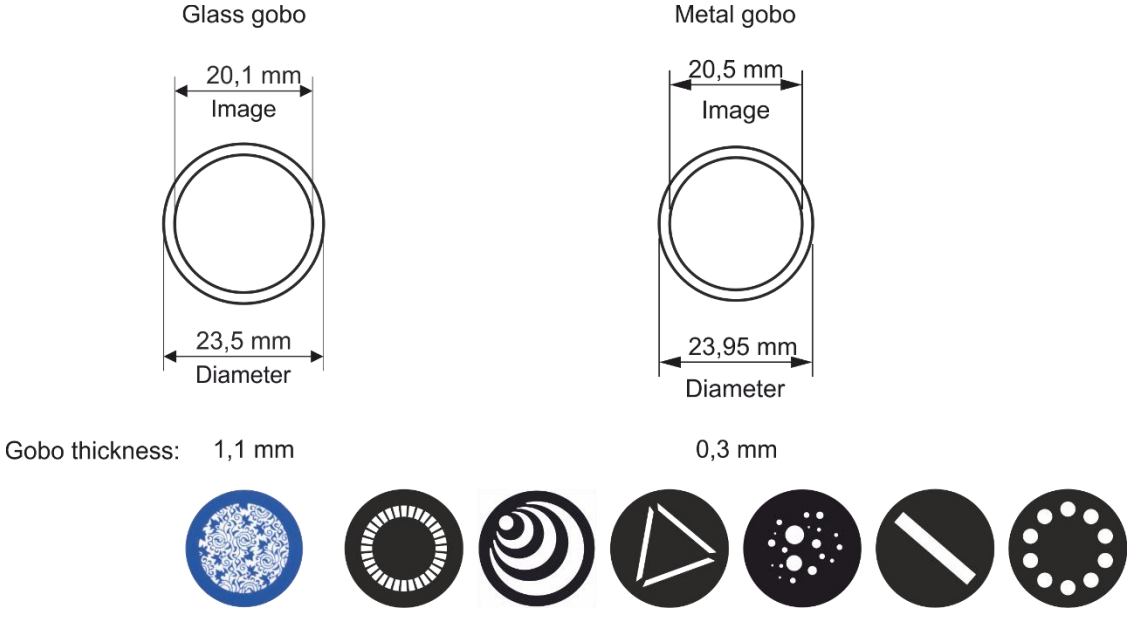


Fig. 06

03) Remove the 3 screws (A).
04) Remove the 4 screws on the backside (B).
05) Remove the small cover (C).
06) Remove the 3 screws (D).
07) Slide the metal cover upwards (E).
08) Turn the gobo wheel, with the gobo you want to remove, to the upside.
09) Gently lift up the gobo holder 10° and then gently pull out the gobo from its position.

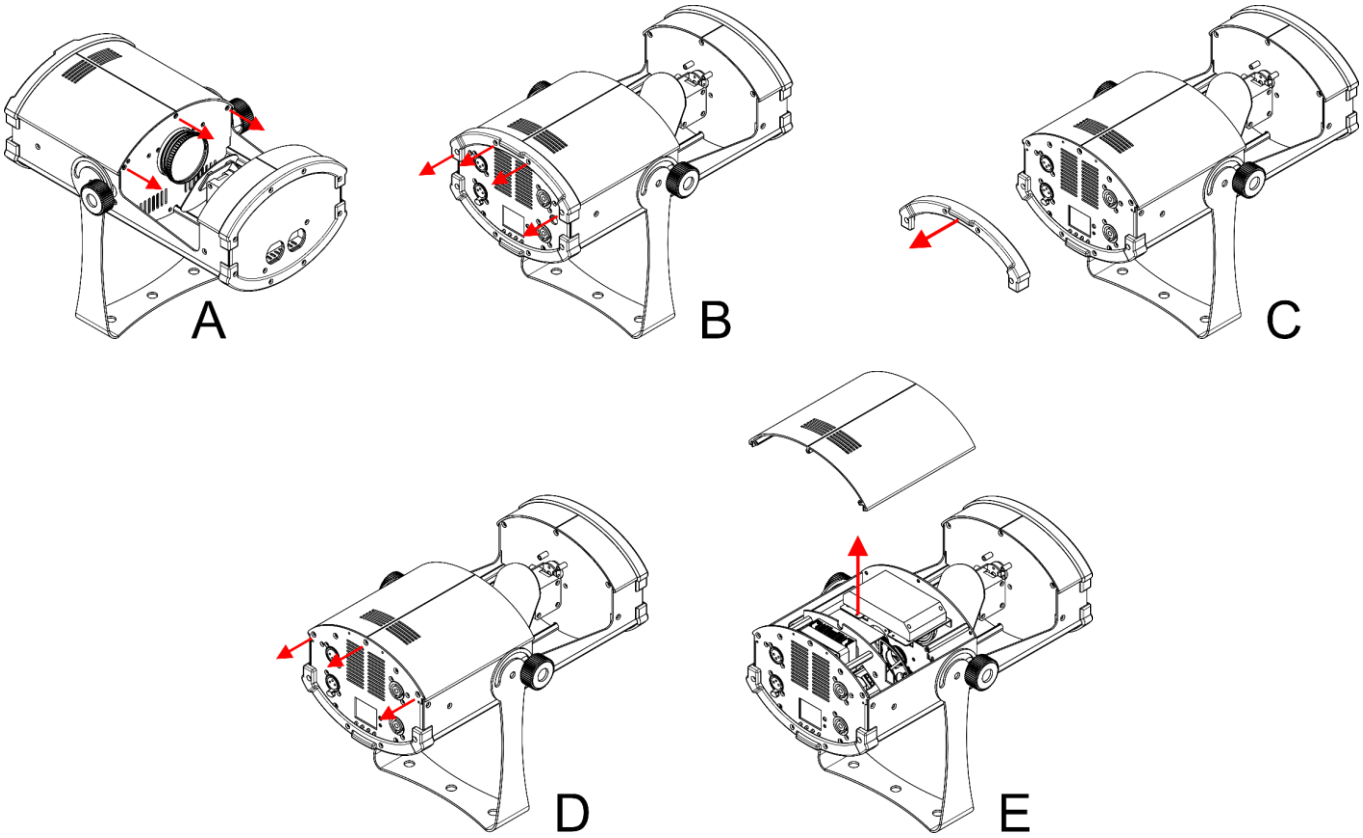


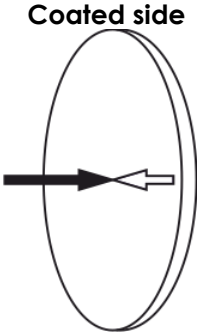
Fig. 07

10) Very carefully take the gobo out of the gobo holder with a pair of pliers.
11) Place the new gobo in the gobo holder. Carefully put the pinchcock back, gently press the pinchcock a little bit together. Possibly use a pair of pliers to press the pinchcock a little bit together.
12) Put the gobo holder back under the pressing snap and push it back.
13) Replace the maintenance caps and fasten all screws.

Glass Gobo Orientation

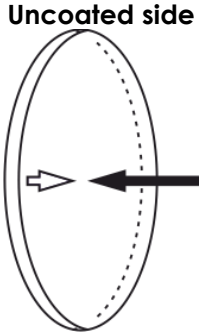
Coated glass gobos are inserted with the coating against the rim of the holder (away from the spring). Textured gobos are inserted with the smooth side against the spring. This provides the best results when combining rotating gobos.

Coated side



When an object is held up to the coated side there is no space between the object and its reflection. The back edge of the gobo cannot be seen when looking through the coated side.

Uncoated side



When an object is held up to the uncoated side there is a space between the object and its reflection. The back edge of the gobo can be seen when looking through the uncoated side.

Color wheel 1

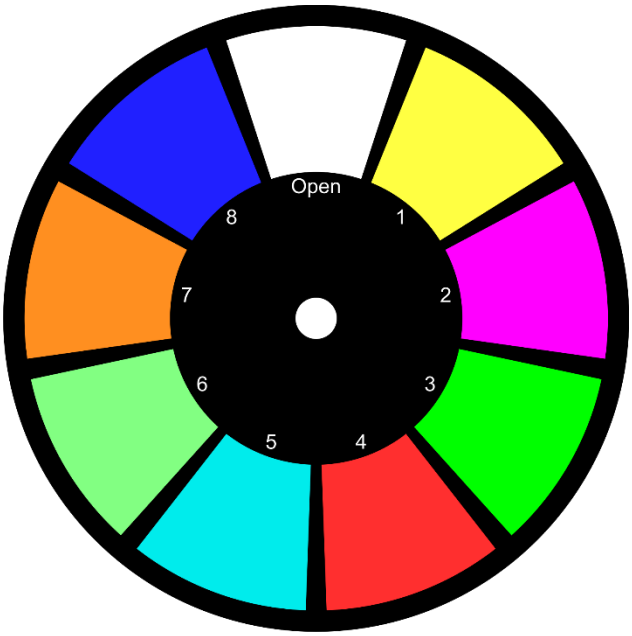


Fig. 08

Rotating gobo wheel

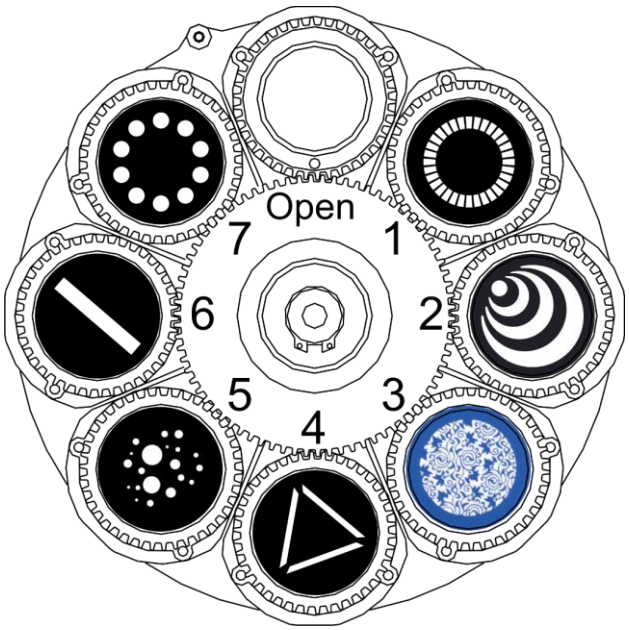


Fig. 09

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 LEDs, the fuse.

01) Power supply. Check if the unit is plugged into an appropriate power supply.
02) The LEDs. Return the Shark to your Showtec dealer.
03) The fuse. See page 19 for replacing the fuse
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 Shark, as this may damage the unit and the warranty will become void.
06) Return the device to your Showtec dealer.

No Response to DMX

Response: 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)	Remedy
One or more fixtures are completely dead.	No power to the fixture.	• Check that power is switched on and cables are plugged in.
	Primary fuse blown.	• Replace fuse.
Fixtures reset correctly, but all respond erratically or not at all to the controller.	The controller is not connected.	• Connect 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.
Fixtures reset correctly, but some respond erratically or not at all to the controller.	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	• Inspect connections and cables. Correct poor connections. Repair or replace damaged cables.
	Data link not terminated with 120 Ohm termination plug.	• Insert termination plug in output jack of the last fixture on the link.
	Incorrect addressing of the fixtures.	• Check address setting.
	One of the fixtures is defective and disturbs data transmission on the link.	• Bypass one fixture at a time until normal operation is regained: unplug both connectors and connect them directly together. • Have the defective fixture serviced by a qualified technician.
	3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed).	• Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture, that behaves erratically.
Shutter closes suddenly	The color wheel, gobowheel or a gobo has lost its index position and the fixture is resetting the effect.	• Contact a technician for servicing the problem persists.
No light or LEDs cuts out intermittently	Fixture is too hot.	• Allow fixture to cool. • Make sure air vents are not blocked. • Turn up the air conditioning .
	LEDs damaged	• Disconnect fixture and return 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

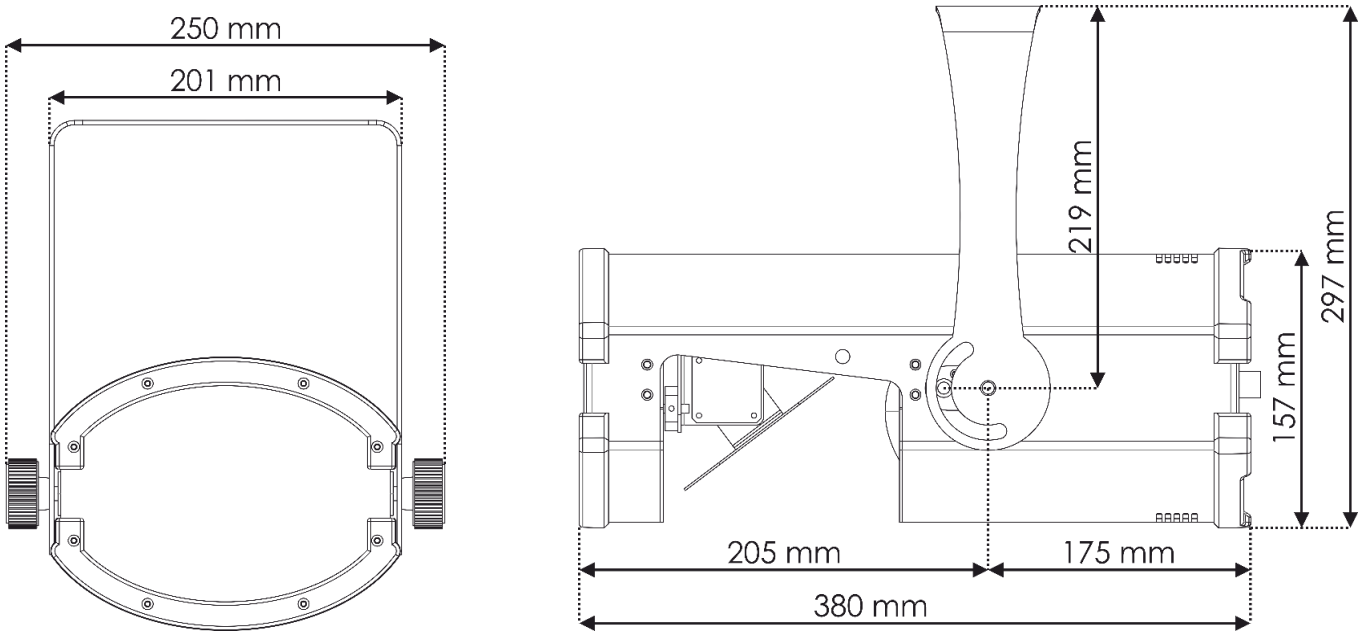
Model:	Showtec Shark Scan One
Input Voltage:	100-240 VAC, 50/60Hz
Power consumption:	137W max. at full output
DMX linking:	30pcs
Fuse:	F4AL/250V
Dimensions:	380 x 250 x 297 mm (LxWxH)
Weight:	6,6 kg
Operating and Programming:	
Signal pin OUT:	Pin 1 (earth), pin 2 (-), pin 3 (+)
DMX Mode:	8, 14 channels
Signal input:	3-pin XLR male
Signal output:	3-pin XLR female
Electro-mechanical effects:	
Light Source:	100W white LED module
Beam angle:	18°
Pan:	0-160°
Tilt:	0-360°
Pan/Tilt resolution:	16 bit
Dimmer:	0-100% (linear dimmer)
Strobe:	0-25Hz
Control protocol:	DMX-512
DMX-control:	via standard DMX-controller
On Board:	OLED display for easy setup
Focus: Motorized focus	
Control modes:	Auto, Sound-controlled, Master/Slave, DMX-512
Housing:	Black Metal & Flame-retardant plastic
Cooling:	Forced convection
Power Connections:	Pro Power connector IN/OUT
Data Connections	3-pin XLR IN and OUT
Colour wheel	(8 colour + White, Rainbow-flow effect)
IGobowheel	7 Rotating Gobos + Open, Rotation, Gobo-shake, Gobo-flow scrol
3-Facet Prism	
IFS Technology	
IP20	
Max. ambient temperature t_a:	-5°C ~ 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

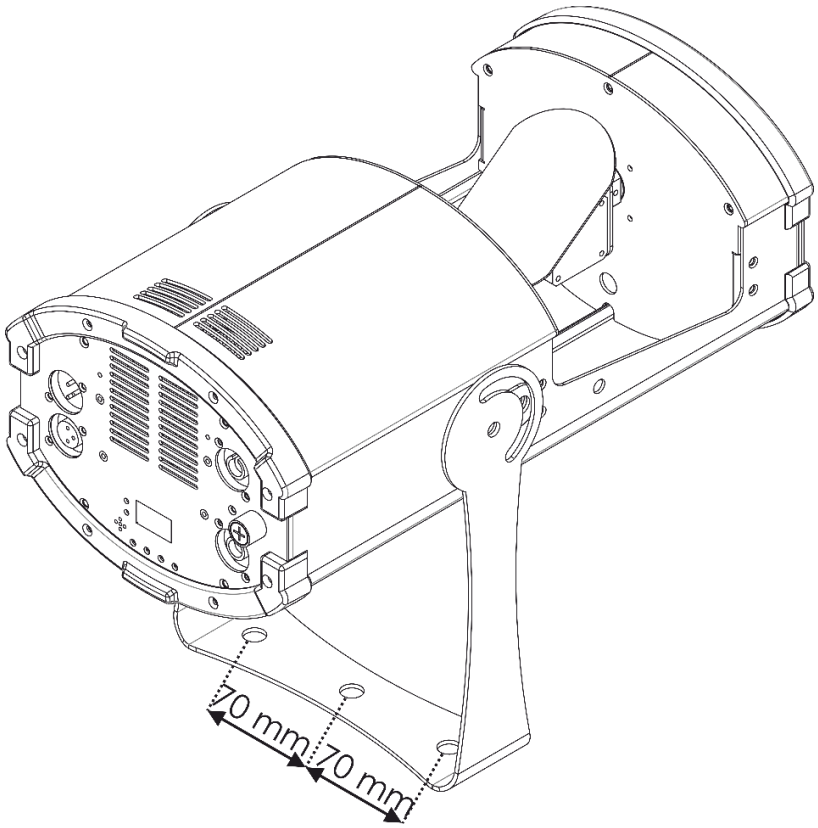
Design and product specifications are subject to change without prior notice.

CE

Website: www.Showtec.info
Email: service@highlite.com

Dimensions





Notes

©2019 Showtec