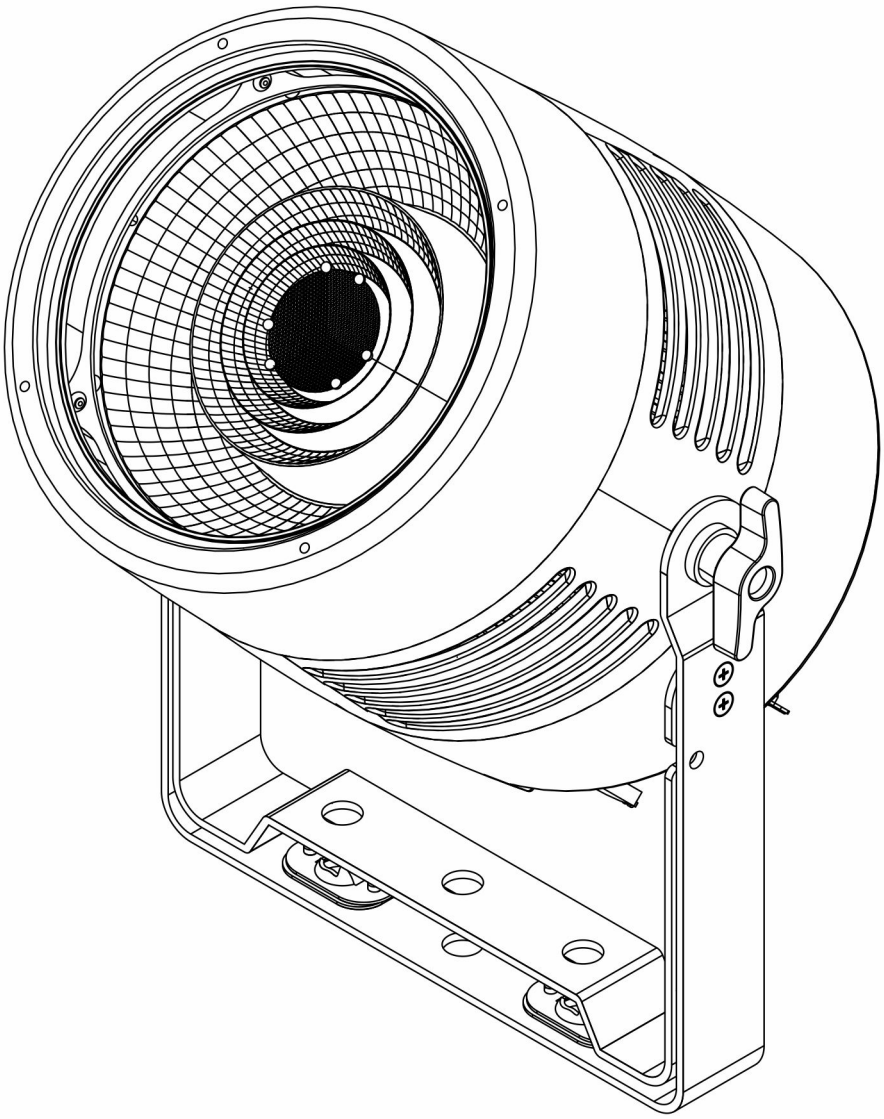
USER MANUAL

ENGLISH

V1.0



Titan Strobe 200 FX

Product code: 40304

Preface

Thank you for purchasing this Showtec product.

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

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

This user manual contains information concerning:

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

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

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

For the latest version of this document or other language versions, please visit our website www.highlite.com or contact us at service@highlite.com.

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1. Introduction

1.1. Before Using the Product

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

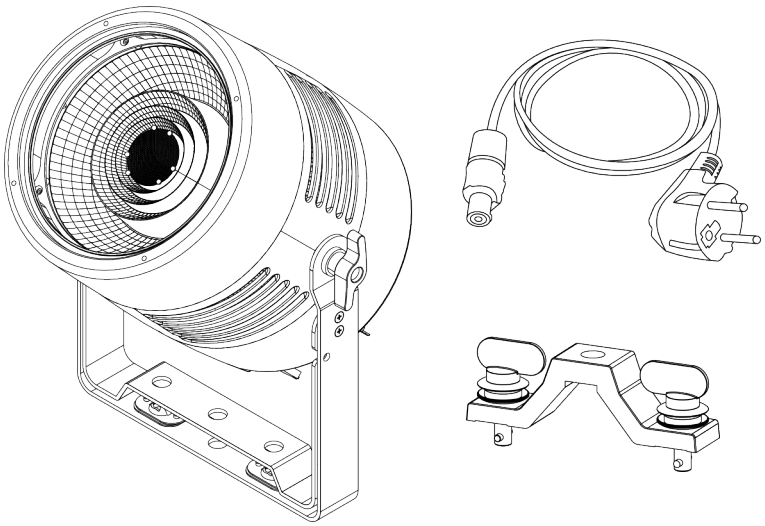
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

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

Your shipment includes:

- Showtec Titan Strobe 200 FX
- Quick-lock bracket
- 1 x Schuko to Power Pro True 1 cable (1,5 m)
- User manual

Figure 1



1.2. Intended Use

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

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

1.3. LEDs Lifespan

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

1.4. Product Lifespan

This device is not designed for permanent operation.

Disconnect the device from the electrical power supply when the device is not in operation. This will reduce the wear and will improve the lifespan of the device.

1.5. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons are in bold lettering, for example "Press the **UP/DOWN** buttons"
- References: References to parts of the device are in bold lettering, for example: "turn the **adjustment handle (05)**". References to chapters are hyperlinked

- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.6. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.


DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.


WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.


CAUTION Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.


Attention Indicates important information for the correct operation and use of the product.


Important Read and observe the instructions in this document.


Electrical hazard


Provides important information about the disposal of this product.

1.7. Symbols on the Information Label

This product is provided with an information label. The information label is located on the mounting bracket of the device.

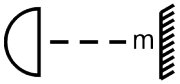
The information label contains the following symbols:


This device shall not be treated as household waste.

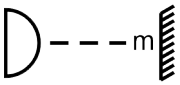

Read and follow the instructions in the user manual before installing, operating or servicing the device.


This device falls under IEC protection class I.

IP65 This devices is rated IP65.



Minimum distance from lighted objects



Minimum distance from other objects

2. Safety

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

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

2.1. Warnings and Safety Instructions

DANGER
Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave any parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within the reach of children. Packaging material is a potential source of danger for children.

DANGER
Electric shock caused by dangerous voltage inside

There are areas inside the device where dangerous touch voltage may be present.

- Do not open the device or remove any covers.
- Do not operate the device if the covers or the housing are open. Before operation, check if the housing is firmly closed and all screws are tightly fastened.
- Disconnect the device from the electrical power supply before service and maintenance, and when the device is not in use.

DANGER
Electric shock caused by short-circuit

This device falls under IEC protection Class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with a ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not bypass the thermostatic switch or fuses.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.
- Keep the connectors sealed with the rubber caps when the connectors are not in use.
- Do not connect the cables from above the connectors, if the device is installed outdoors. Make a ‘drip loop’ in the cable so that rain water cannot enter the device.

WARNING
Risk of epileptic shock

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

Attention
Power supply

- Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.
- Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.

Attention
General safety

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

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

This device is intended for professional use as a strobe pod. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households and for general lighting.
- This device is not designed for permanent operation.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixings and installation points.
- The lens is not cracked or damaged.
- The power cables are not damaged and do not show any material fatigue.

Attention
Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP65 rated. IP (Ingress Protection) 65 class means that the device is dust-tight and protected against harmful effect of water jets.

Keep the connectors sealed with the rubber caps when the connectors are not in use.

2.2. Requirements for the User

This product may be used by ordinary persons. Installation and maintenance may be carried out by ordinary persons. Service shall be carried out only by instructed or skilled persons. Contact your Highlite International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and avoid hazards associated with the installation, service and maintenance of this product.

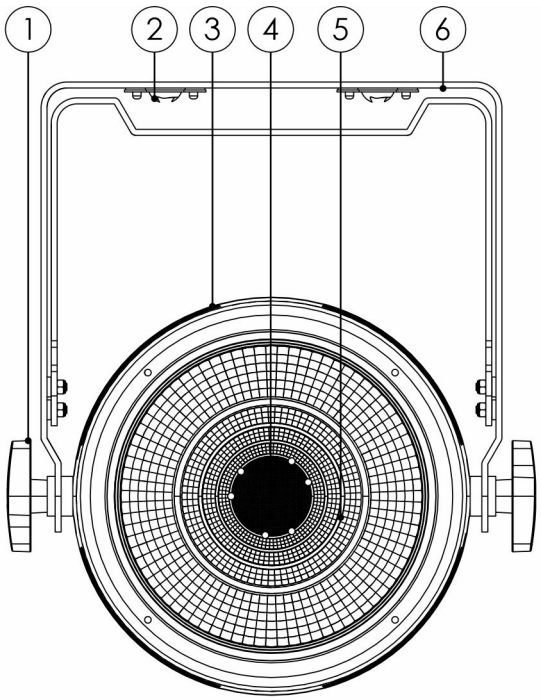
Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

3. Description of the Device

The Showtec Titan Strobe 200 FX has a cold white 200 W COB LED in the center surrounded by 2 rings of 12 individually controllable 2 W RGBW LEDs. The Fresnel lens ensures a wide beam angle. The device is IP65-rated and can be controlled via DMX/RDM, master/slave or in stand-alone mode with built-in programs. Installation is easy thanks to the included quick-lock bracket and a 12,5 mm hole for attaching the fixture to a clamp.

3.1. Front View

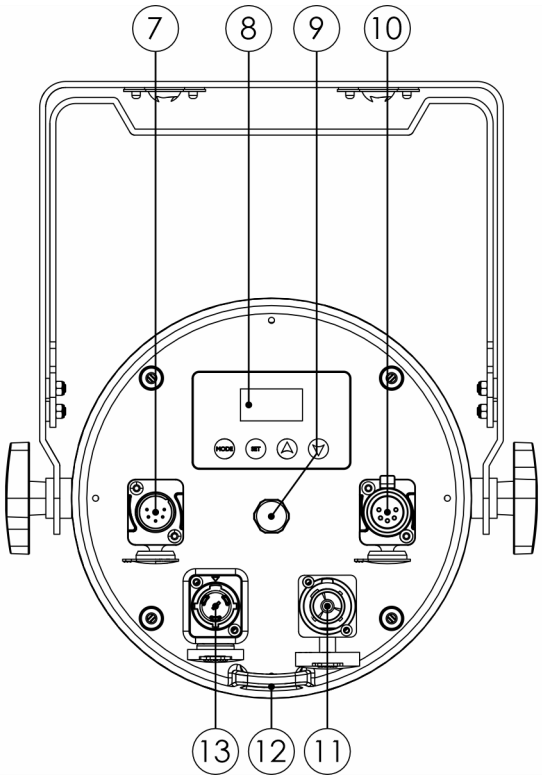
Figure 2



01) 2 x Adjustment screws
02) 2 x Mounting holes for quick-lock bracket
03) Ventilation openings
04) 200 W CW COB LED
05) 24 x 2 W RGBW LEDs (backlight, 2 rings of 12 LEDs)
06) Double mounting bracket for standing installation

3.2. Back View

Figure 3



07) IP65-rated Seetronic 5-pin DMX signal connector IN
08) Control panel: OLED screen and control buttons
09) Protective vent (M12x1,5)
10) IP65-rated Seetronic 5-pin DMX signal connector OUT
11) IP65-rated Seetronic power connector OUT
12) Opening for a safety cable
13) IP65-rated Seetronic power connector IN

3.3. Product Specifications

Model:	Titan Strobe 200 FX

Source:	
Light source type	LED
Light source quantity	1
Light source power	200 W
LED color type	CW / RGBW
Luminous flux (total)	7470 lm
CRI	92,3

Control and Programming:	
Control mode	Auto / DMX / Manual / Master Slave / RDM
DMX channels	4 / 8 / 11 / 52 / 100
Protocols	DMX / RDM
Display	OLED

Dynamic Effects:	
Dimmer	0–100 %
Strobe	0–20 Hz

Electrical Specifications and Connections:	
Power supply	100–240 V AC 50/60 Hz
Power consumption	200 W
Power connector IN	Power Pro True
Power connector OUT	Power Pro True
DMX connector	XLR 5P IN/OUT
DMX connector IN	XLR 5P
DMX connector OUT	XLR 5P

Mechanical Specifications:	
Height	264 mm
Width	184 mm
Depth	242 mm
Weight	7 kg
IP rating	IP65
Housing	Aluminum die-cast
Color	Black

Product Properties:	
Cooling	Forced convection

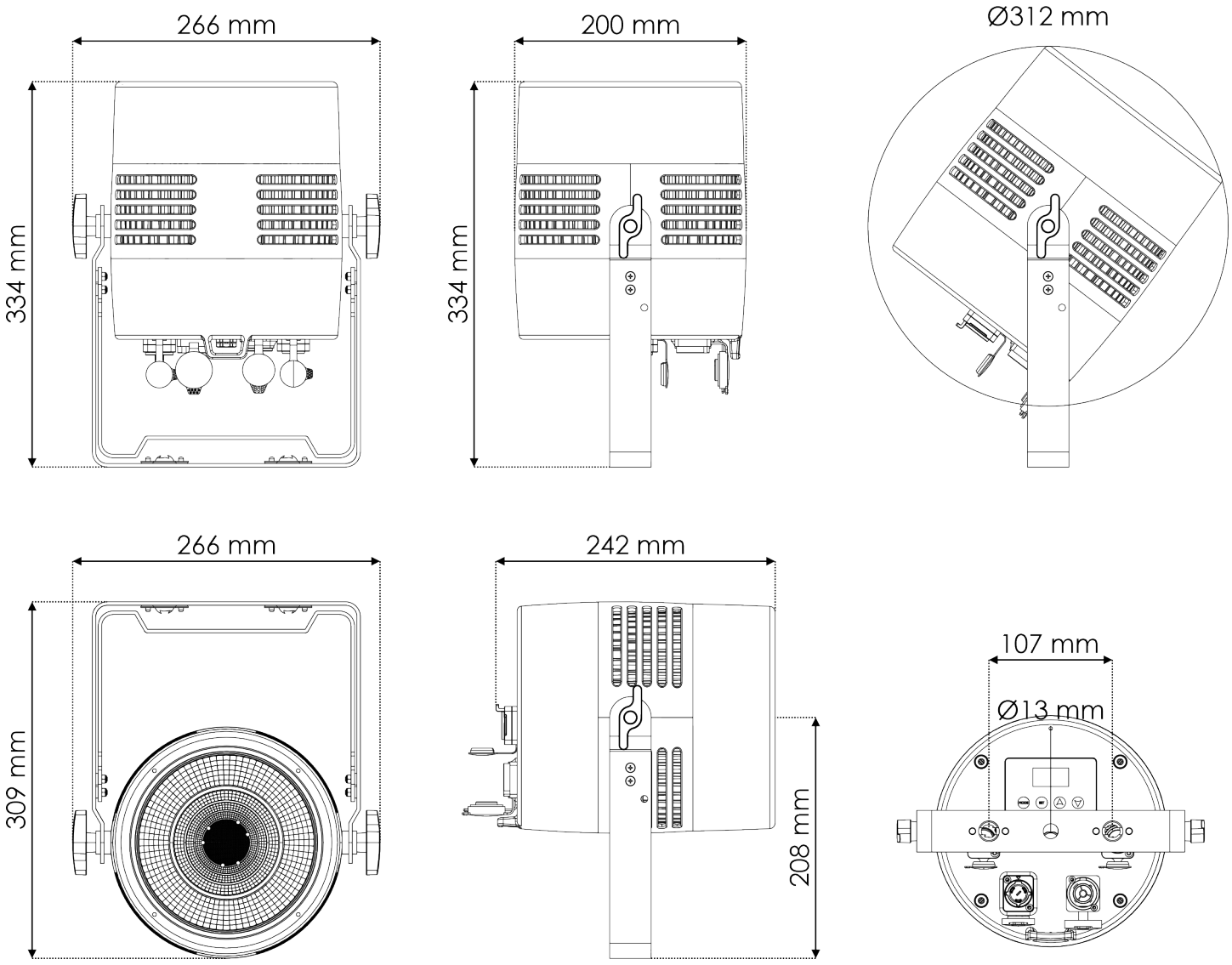
Rigging:	
Mounting options	Clamp / Quick-lock

Thermal Specifications:	
Maximum ambient temperature	40 °C
Minimum operating temperature	-5 °C

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

3.4. Dimensions

Figure 4



4. Installation

4.1. Safety Instructions for Installation

WARNING
Incorrect installation can cause serious injuries and damage of property.

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

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

4.2. Personal Protective Equipment

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

4.3. Installation Site Requirements

- The device can be used indoors and outdoors.
- The minimum distance between the light output and the illuminated surface must be bigger than 1 m.
- The minimum distance to other objects must be bigger than 0,5 m.
- The maximum ambient temperature t_a = 40 °C must never be exceeded.

4.4. Rigging

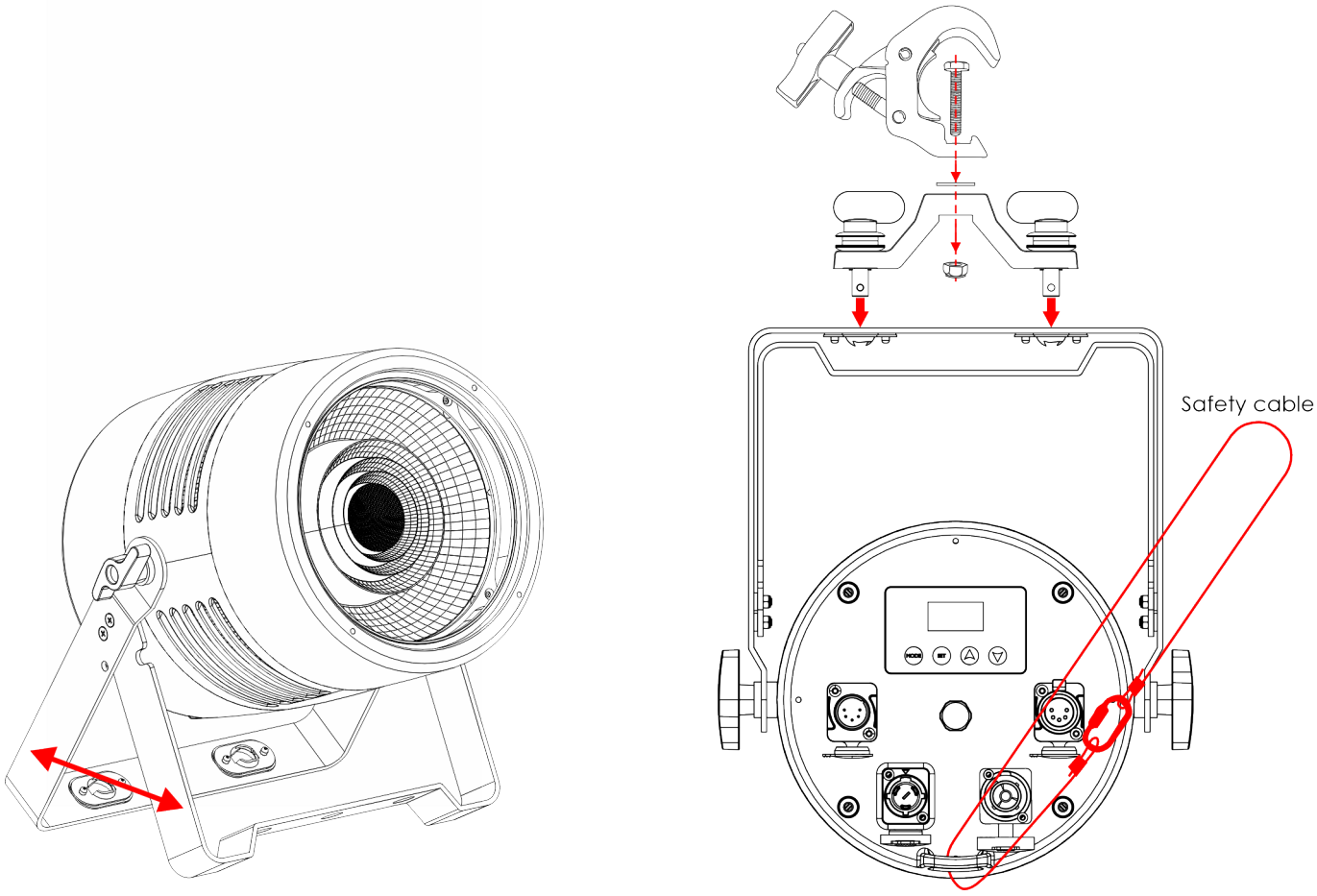
The device can be positioned on a flat surface or mounted to a truss or other rigging structure in any orientation. Make sure that all loads are within the pre-determined limits of the supporting structure.

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

To mount the device, follow the steps below:

01) Fasten the quick-lock bracket, supplied with the device, on the **mounting holes for quick-lock bracket (02)**.
02) Install the clamp. Make sure that you use a clamp suitable for attaching the device to a truss.

Figure 5



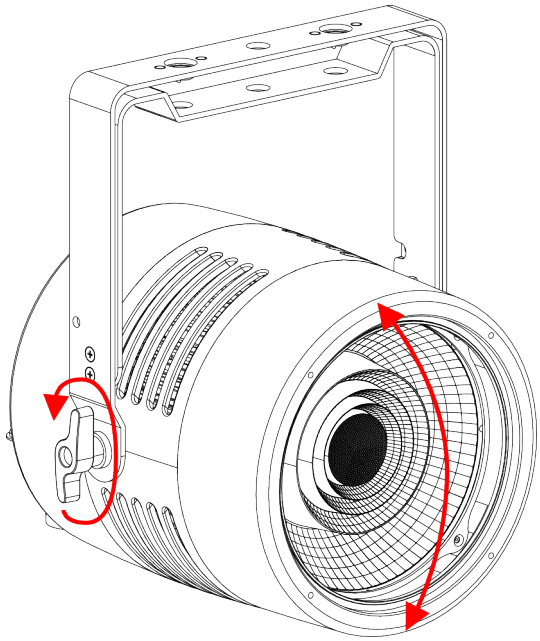
03) Attach the device to the supporting structure. Make sure that the device cannot move freely.
04) Secure the device with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the device. If possible, the secondary suspension should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

4.5. Angle Adjustment

You can adjust the angle of the device with the **2 adjustment screws (01)**.To adjust the angle, follow the steps below:

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

Figure 6



4.6. Connecting to Power Supply

DANGER
Electric shock caused by short-circuit

The device accepts AC mains power at 100–240 V and 50/60 Hz. Do not supply power at any other voltage or frequency to the device.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

Before connecting the device to the socket-outlet:
- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has a ground (earth) connection.

Connect the device to the socket-outlet with the power plug. Do not connect the device to a dimmer circuit, as this may damage the device.

This device is IP65 rated.

- Do not expose the device to conditions that exceed the rated IP class conditions.
- Keep the connectors sealed with the rubber caps when the connectors are not in use.
- Do not connect the cables from above the connectors, if the device is installed outdoors. Make a 'drip loop' in the cable so that rain water cannot enter the device.
- Make sure that the cable run is not too heavy. A heavy cable run can cause damage to the connectors. If the connectors are damaged, their ingress protection (IP) can deteriorate.

4.7. Power Linking of Multiple Devices

This device supports power linking. Power can be relayed to another device via the power OUT connector. Note that the input and the output connectors have different designs: one type cannot be connected to the other.

Power linking of multiple devices must be carried out only by instructed or skilled persons.

WARNING
Incorrect power linking may lead to overload of the electrical circuit and result in serious injuries and damage of property.

To prevent overload of the electrical circuit, when power linking multiple devices:

- Use cables with sufficient current-carrying capacity. The power cable supplied with the device is not suitable for power linking of multiple devices.
- Make sure that the total current draw of the device and all connected devices does not exceed the rated capacity of the power cables and the circuit breaker.
- Do not link more devices on one power link than the maximum recommended number.

Maximum recommended number of devices:
- at 100–120 V: 5 devices Titan Strobe 200 FX
- at 200–240 V: 10 devices Titan Strobe 200 FX

5. Setup

5.1. Warnings and Precautions

DANGER
Electric shock caused by short-circuit

This device is IP65 rated.

- Do not expose the device to conditions that exceed the rated IP class conditions.
- Keep the connectors sealed with the rubber caps when the connectors are not in use.
- Do not connect the cables from above the connectors, if the device is installed outdoors. Make a 'drip loop' in the cable so that rain water cannot enter the device.
- Make sure that the cable run is not too heavy. A heavy cable run can cause damage to the connectors. If the connectors are damaged, their ingress protection (IP) can deteriorate.

Attention
Connect all data cables before supplying power.
Disconnect power supply before connecting or disconnecting data cables.

5.2. Stand-alone Setup

When the Titan Strobe 200 FX is not connected to a controller or to other devices, it functions as a stand-alone device. It can be operated manually via the control panel or in auto mode.

For more information refer to Control Modes (see 6.2. Control Modes on page 19).

5.3. DMX Connection

5.3.1. DMX-512 Protocol

You need a DMX serial data link to run light shows of one or more devices using a DMX-512 controller.

The Titan Strobe 200 FX has 5-pin DMX signal IN and OUT connectors.

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

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

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

Note:

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

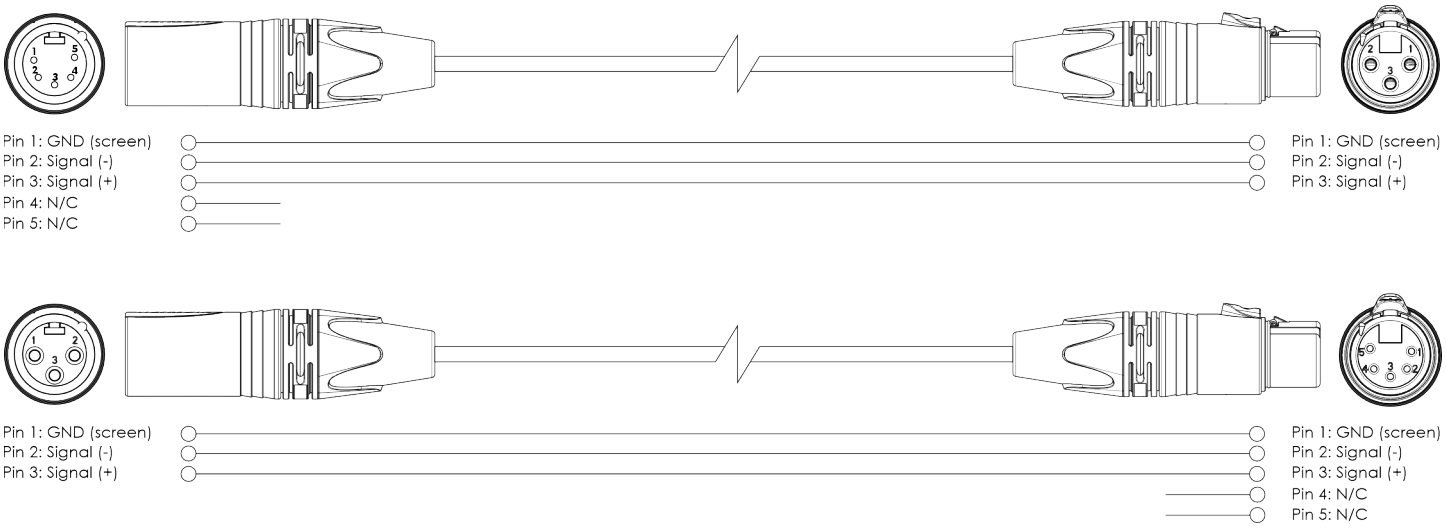
5.3.2. DMX Cables

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

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

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

Figure 7

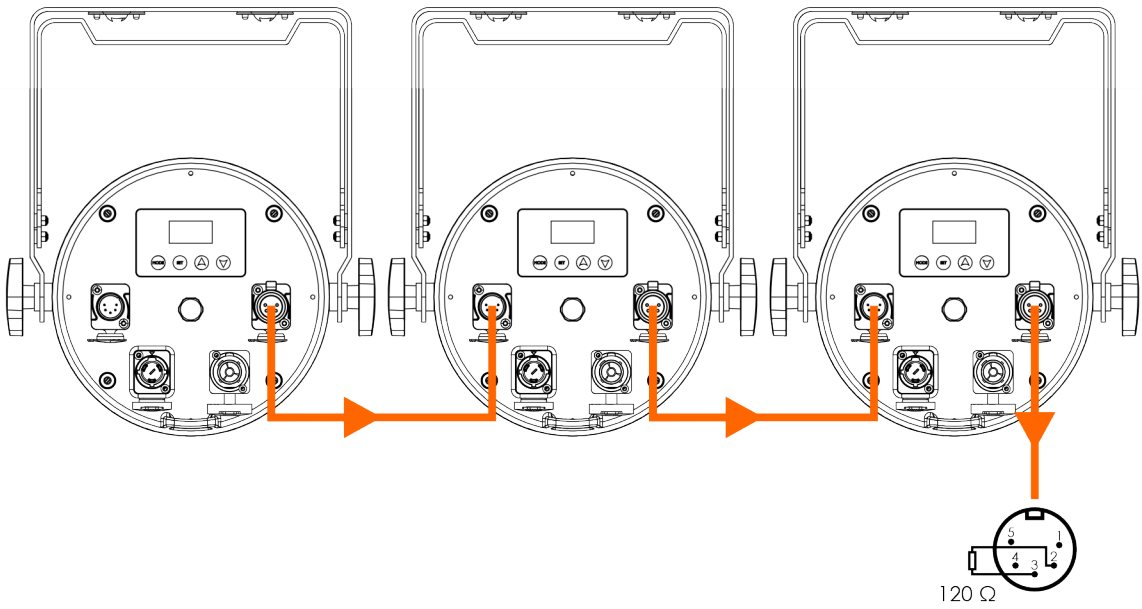


5.3.3. Master/Slave Setup

The Titan Strobe 200 FX supports master/slave control mode. To connect multiple devices in a master/slave setup, follow the steps below:

01) Connect the DMX OUT connector of the 1st device to the DMX IN connector of the 2nd device with a 5-pin DMX cable.
02) Repeat step 1 to connect all devices in a daisy-chain.
03) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device on the data link.
04) Set the 1st device on the data link as a master device. Refer to Slave Mode for more information.
05) Select a slave setting for the other devices on the data link. Refer to Slave Mode for more information.

Figure 8

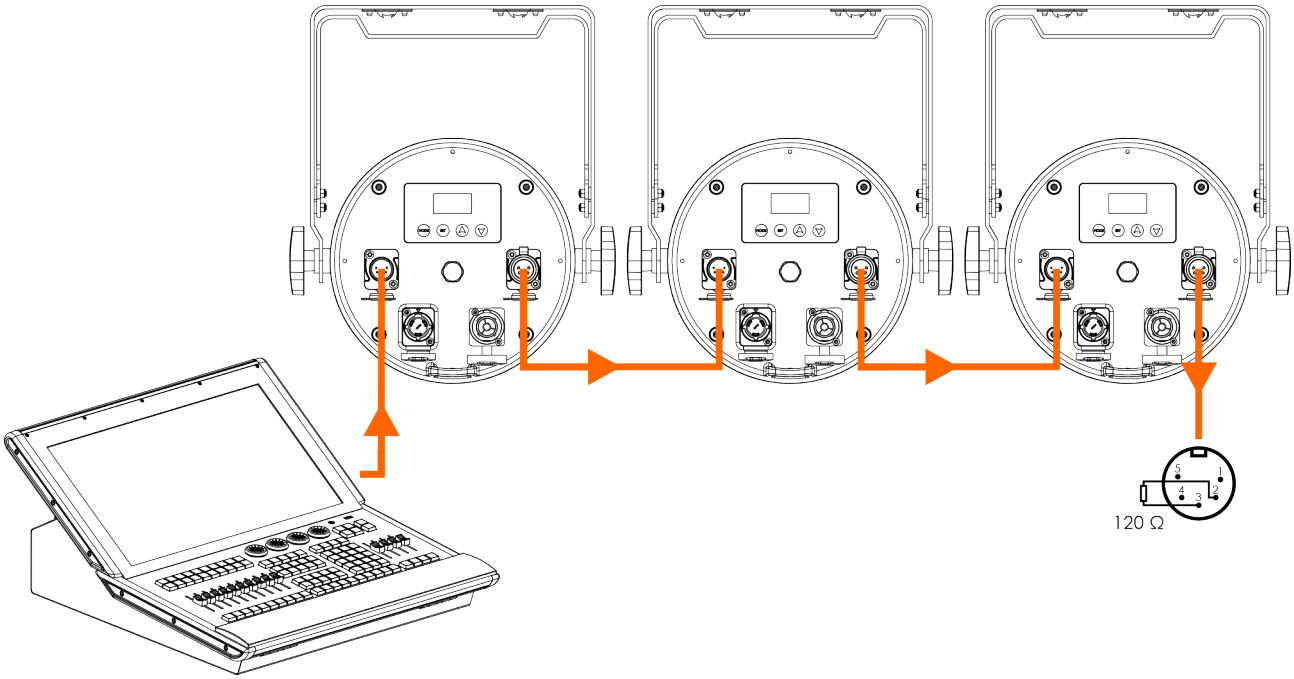


5.3.4. DMX Linking

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

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

Figure 9



5.3.5. DMX Addressing

In a setup with multiple devices, make sure that you set the DMX starting address of each device correctly. The Titan Strobe 200 FX has 5 personalities: Strobe (4 channels), Basic (8 channels), FX (11 channels), Sectional (52 channels) and Pixel (100 channels).

If you want to connect multiple devices on one data link and use them in 100-channel mode, for example, follow the steps below:

01) Set the starting address of the 1st device on the data link to 1 (001).
02) Set the starting address of the 2nd device on the data link to 101 (101), as 1 + 100 = 101.
03) Set the starting address of the 3rd device on the data link to 201 (201), as 101 + 100 = 201.
04) Continue assigning the starting addresses of the remaining devices by adding each time 100 to the previous number.

Make sure that you do not have any overlapping channels in order to control each Titan Strobe 200 FX correctly. If two or more devices are addressed similarly, they will work similarly.

6. Operation

6.1. Safety Instructions for Operation

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

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

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

Attention
Power supply

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

6.2. Control Modes

The Titan Strobe 200 FX supports the following control modes:

- Stand-alone: Auto operation mode, built-in programs, manual operation
- Master/Slave: Auto operation mode, built-in programs, manual operation
- DMX-512: Strobe (4 channels), Basic (8 channels), FX (11 channels), Sectional (52 channels) and Pixel (100 channels)

For more information about how to connect the devices, refer to Setup (see 5. Setup on page 16).

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

Adjust the colors in the Manual Mode (see 6.6.2. Manual Mode on page 24) menu.

To run the built-in program or auto mode without a DMX controller:

Select the control mode of the device in the main menu.

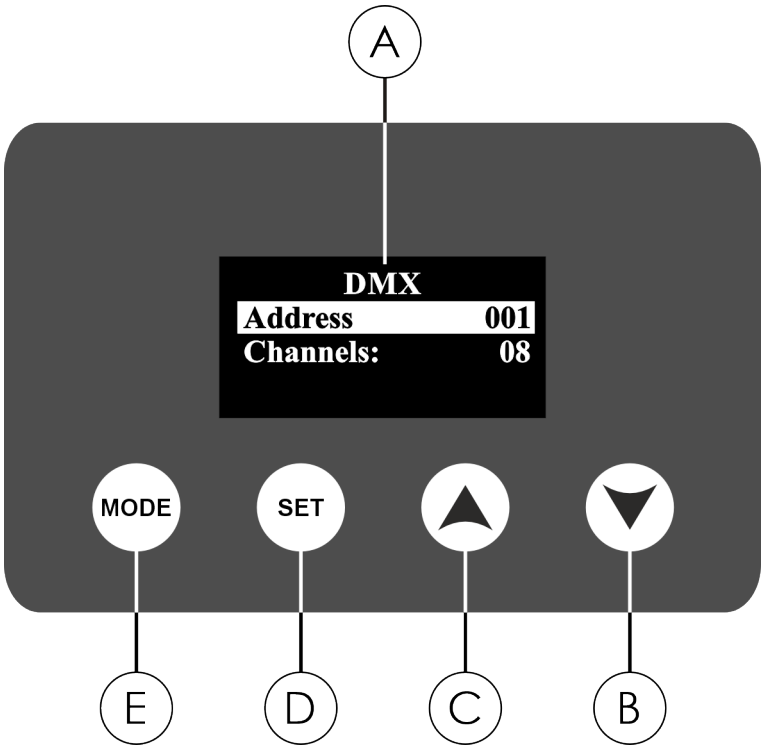
- If you select Auto (see 6.6.3. Auto on page 24), the device will run the built-in program.
- If you select Program (see 6.6.4. Program on page 25), the device will run the respective program. You can edit the programs in the Program menu.

To operate the device with a DMX controller:

01) Select DMX512 as control mode in the DMX Menu (see 6.6.1. DMX on page 23).
02) Set the DMX starting address (see 5.3.5. DMX Addressing on page 18) of the device in the DMX Address menu (see 6.6.1.1. DMX Address on page 23).
03) Select the DMX channel mode in the DMX channel mode menu (see 6.6.1.2. Channels on page 23). Refer to DMX channels (see 6.7. DMX Channels on page 31) for a complete overview of all DMX channels.

6.3. Control Panel

Figure 10

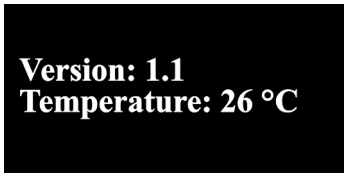


A) OLED display
B) DOWN touch button
C) UP touch button
D) SET touch button
E) MODE touch button

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

6.4. Start-up

After the device is connected to power supply, the device will perform a reset. During the reset the display shows a splash screen with the firmware version and the temperature of the LED:



After the reset is completed, the device is ready to be operated. The display shows the start screen. The start screen provides information about the temperature of the LED, the firmware version and the selected mode:

Note:

If the display is locked, press the **MODE** and **SET** buttons for 3 s at the same time to unlock the display. When the display lock is on, there is a lock symbol at the top right corner of the display.

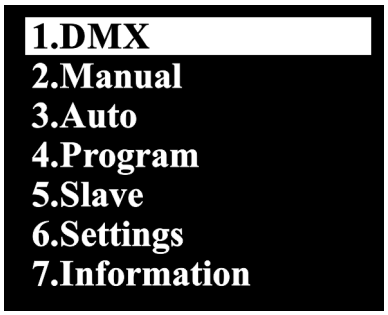
6.5. Menu Overview

Level 1	Level 2	Level 3
1.DMX (see 6.6.1. DMX)	Address	001–512
	Channels	1. Strobe-4ch
		2. Basic-8ch
		3. FX-11ch
		4. Sectional-52ch
		5. Pixel-100ch
2.Manual (see 6.6.2. Manual Mode)	1. C. White	000–255
	2. Red b	000–255
	3. Green b	000–255
	4. Blue b	000–255
	5. White b	000–255
3.Auto (see 6.6.3. Auto)	Yes	
	No	
4.Program (see 6.6.4. Program)	Mode	01–11
	Color (Mode 1)	01–15
	Program Speed (Mode 2–16)	000–100
	Strobe (Mode 1–16)	00–99
5.Slave (see 6.6.5. Slave)	Yes	
	No	
6.Settings (see 6.6.6. Settings)	1. Dimmer Curve	1. Linear
		2. Square
		3. Inverse Square
		4. S-Curve
	2. Display Dir	Normal
		Inverted
	3. PWM Frequency	1 KHz
		3 KHz
		6 KHz
		12 KHz
	4. Dmx Fail	1. Off
		2. Hold
		3. Manual
		4. Program
	5. Fan Mode	1. Auto
		2. High
		3. Slow
		4. Off
	6. Backlight Time	5S
		10S
		20S
		30S
	7. Key Backlight	On
		Off
	8. Key Lock	Locked
		Unlocked
	9. Factory Reset	Yes
		No
7.Information (see 6.6.7. Information)	1. Version	MCU S 1.1/0515
	2. Temperature	Main LED xx

		Backlight xx
		Power xx
	3. Fan Speed	Led Fan xxxxrpm
	4. Time	PowerTime xxxxxh
		Main Led xxxxxh
		Backlight xxxxxh
	5. RDM UID	29B4:101xxxxx
	6. Error Status	

6.6. Main Menu Options

The main menu has the following 7 options:



01) Touch the **UP/DOWN** buttons to navigate through the main menu.
02) Touch the **SET** button to open the submenus.

6.6.1. DMX

In this menu you can set the DMX address and select the desired DMX channel mode.

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

- DMX Address (see 6.6.1.1. DMX Address)
- Channels (see 6.6.1.2. Channels)

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

6.6.1.1. DMX Address

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

01) Touch the **UP/DOWN** buttons to select the DMX starting address of the device. The selection range is 001–512.
02) Touch the **SET** button to confirm the selection.

6.6.1.2. Channels

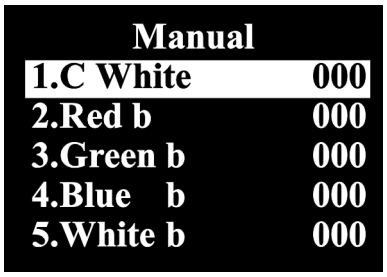
In this submenu you can select the DMX channel mode.

01) Touch the **UP/DOWN** buttons to select the desired DMX mode. There are 5 options:
    - Strobe: 4 channels
    - Basic: 8 channels
    - FX: 11 channels
    - Sectional: 52 channels
    - Pixel: 100 channels
02) Touch the **SET** button to confirm the selection. For more information refer to DMX Channels (see 6.7. DMX Channels on page 31).

6.6.2. Manual Mode

In this menu you can select colors and set their values.

01) Touch the **UP/DOWN** buttons to select one of the 5 options:



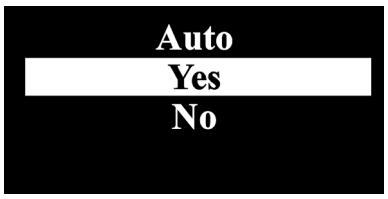
- C White: Adjust the intensity of the cold white COB LED. The adjustment range is 000–255, from low to high intensity
- Red backlight: Adjust the intensity of the red color of the backlight LEDs. The adjustment range is 000–255, from low to high intensity
- Green backlight: Adjust the intensity of the green color of the backlight LEDs. The adjustment range is 000–255, from low to high intensity
- Blue backlight: Adjust the intensity of the blue color of the backlight LEDs. The adjustment range is 000–255, from low to high intensity
- White backlight: Adjust the intensity of the white color of the backlight LEDs. The adjustment range is 000–255, from low to high intensity

02) Touch the **SET** button to confirm the selection.
03) Touch the **UP/DOWN** buttons to increase or decrease the values.
04) Touch the **SET** button to confirm the selection.

6.6.3. Auto

In this menu you can set Auto mode.

Touch the **UP/DOWN** buttons to select one of the 2 options:



- Yes: Play the Auto program
- No: Stop the Auto program

Note:

The Auto mode will cycle through Program 02–11, with the strobe speed set in the Program Mode 02–11 (see 6.6.4.2. Program 02–11 on page 25).

6.6.4. Program

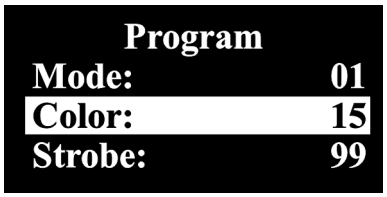
In this menu you can select a built-in program, add a strobe effect, and adjust the program speed. The device has 15 built-in color presets and 11 built-in programs available:

- Program 01 (see 6.6.4.1. Program 01)
- Program 02–11 (see 6.6.4.2. Program 02–11)

6.6.4.1. Program 01

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

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



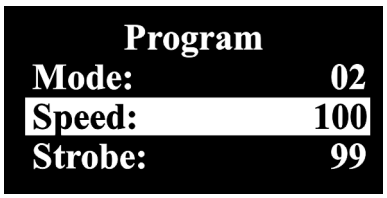
- Color
- Strobe

02) Touch the **SET** button to confirm the selection and open the submenu.
03) If you select Color, touch the **UP/DOWN** buttons to select one of the 15 color presets. Touch the **SET** button to save the settings.
04) If you select Strobe, touch the **UP/DOWN** buttons to set the strobe frequency. The adjustment range is 00–99, from OFF to high frequency.
05) Touch the **SET** button to confirm.

6.6.4.2. Program 02–11

In this submenu you can set program speed and the strobe for built-in program 02–16.

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



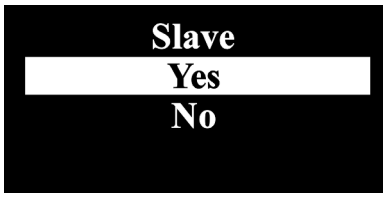
- Speed
- Strobe

02) Touch the **SET** button to confirm the selection and open the submenu.
03) If you select Speed, touch the **UP/DOWN** buttons to set the speed of the built-in programs. The adjustment range is 001–100, from slow to fast.
04) If you select Strobe, touch the **UP/DOWN** buttons to set the strobe frequency. The adjustment range is 00–99, from OFF to high frequency.
05) Touch the **SET** button to confirm.

6.6.5. Slave

In this menu you can set the device in a master/slave setup.

01) Touch the **UP/DOWN** buttons to select one of the 5 options:



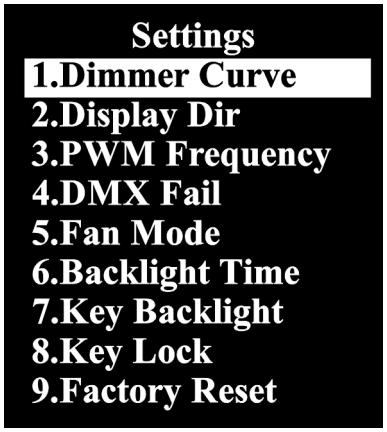
- Yes: The device is set as a slave and reacts the same as the master device
- No: The device is set as the master device

02) Touch the **SET** button to confirm the selection.

6.6.6. Settings

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

01) Touch the **UP/DOWN** buttons to select one of the 9 options:



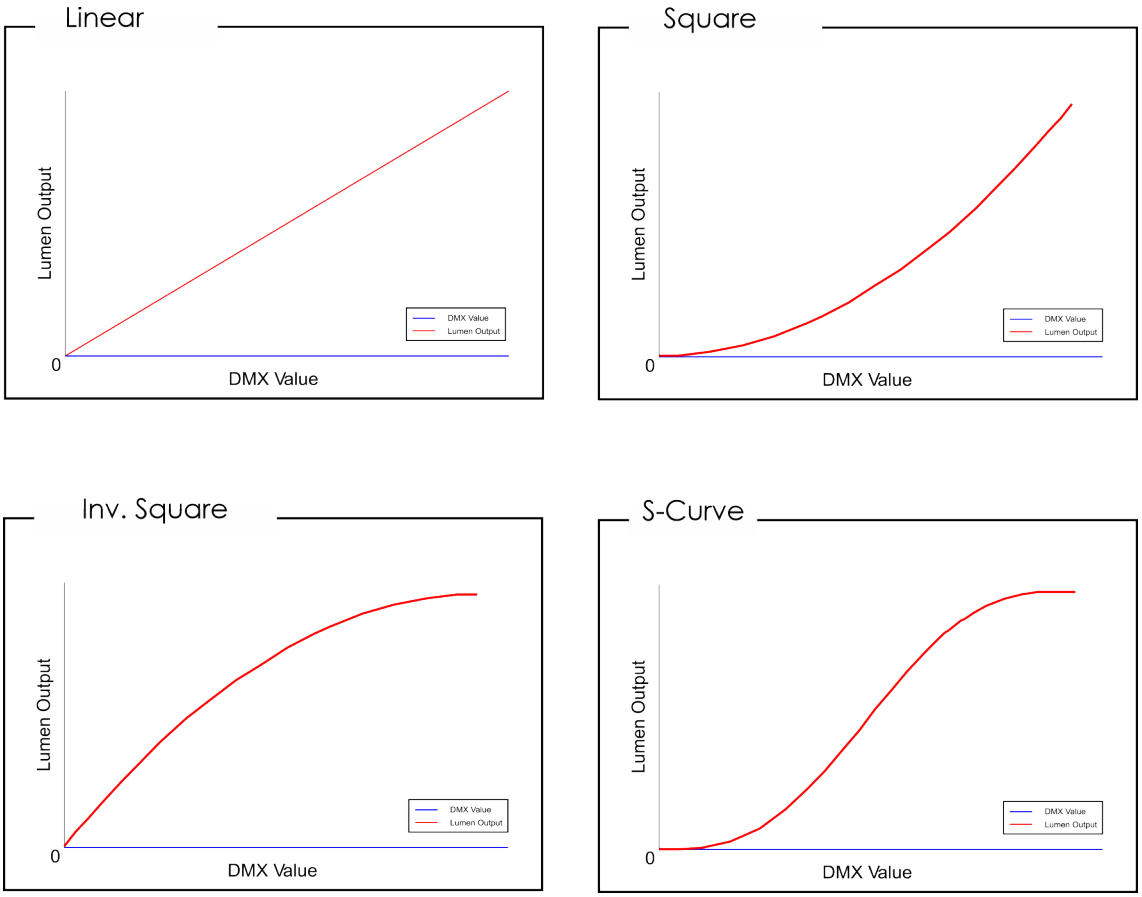
- Dimmer Curves (see 6.6.6.1. Curves Select)
- Display Dir (see 6.6.6.2. Display Dir)
- PWM Frequency: Set the PWM Frequency (Pulse Width Modulation): 1kHz, 3 kHz, 6 kHz, 12 kHz
- DMX Fail (see 6.6.6.3. DMX Fail)
- Fan Mode (see 6.6.6.4. Fan Mode)
- Backlight Time (see 6.6.6.5. Backlight Time)
- Key Backlight (see 6.6.6.6. Key Backlight)
- Key Lock (see 6.6.6.7. Key Lock)
- Factory Reset (see 6.6.6.8. Factory Reset)

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

6.6.6.1. Curves Select

In this submenu you can set dimming curves.

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



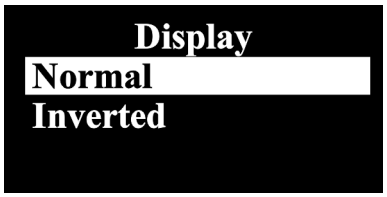
- Linear
- Square
- Inverse Square
- S-Curve

02) Touch the **SET** button to confirm the selection.

6.6.6.2. Display Dir

In this submenu you can set the orientation of the OLED display.

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



- Normal: Normal orientation of the OLED display
- Inverted: The OLED display is rotated at 180°

02) Touch the **SET** button to confirm the selection.

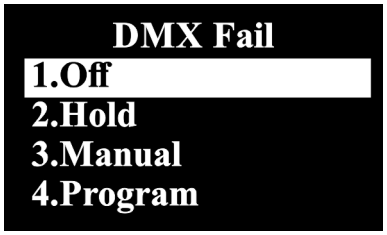
Note:

If the display is rotated at 180°, the function of the buttons on the control panel remains the same.

6.6.6.3. DMX Fail

In this submenu you can set the behavior of the device in case of a DMX failure.

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



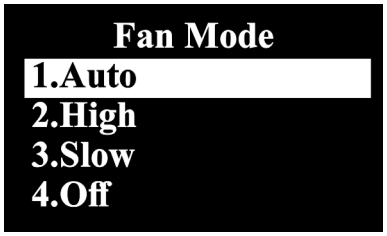
- Off: The device does not output any signal
- Hold: The device uses the last working DMX value on the output
- Manual: The device uses the values selected in manual mode
- Program: The device starts the last used built-in program

02) Touch the **SET** button to confirm the selection.

6.6.6.4. Fan Mode

In this submenu you can set the speed of the fan.

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



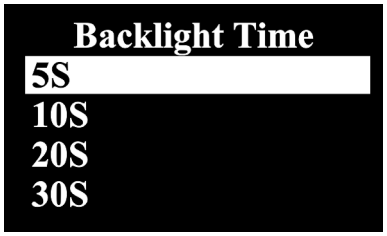
- Auto: The fan is in automatic mode
- High: The fan is in high mode
- Slow: The fan is in slow mode
- High: The fan is in high mode
- Off: The fan is off

02) Touch the **SET** button to confirm the selection.

6.6.6.5. Backlight Time

In this submenu you can set the amount of time the backlight on the display stays on, after the last button is touched on the control panel.

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



- 5 seconds: The backlight of the display turns off after 5 s of inactivity
- 10 seconds: The backlight of the display turns off after 10 s of inactivity
- 20 seconds: The backlight of the display turns off after 20 s of inactivity
- 30 seconds: The backlight of the display turns off after 30 s of inactivity

02) Touch the **SET** button to confirm the selection.

Note:

If the display is turned off, touch any button to turn the display on.

6.6.6.6. Key Backlight

In this submenu you can set whether the 4 buttons (**MODE**, **SET**, **UP**, **DOWN**) are illuminated or not.

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

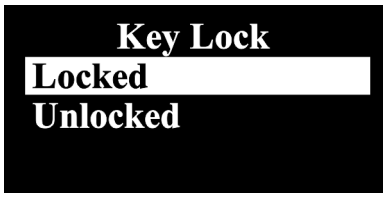
- On: The 4 buttons (**MODE**, **SET**, **UP**, **DOWN**) are illuminated
- Off: The 4 buttons (**MODE**, **SET**, **UP**, **DOWN**) are not illuminated

02) Touch the **SET** button to confirm your choice.

6.6.6.7. Key Lock

In this submenu you can activate the display lock.

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



- On: The display lock is on. The display will be locked after 30 s of inactivity. After 5 s more the display will turn off. To access the main menu, you need to enter the password. The default password is pressing the **MODE** and **SET** buttons for 3 s at the same time
- Off: The access to the main menu remains unlocked after the display turns off

02) Touch the **SET** button to confirm your choice.

6.6.6.8. Factory Reset

In this submenu you can restore the default factory settings of the device.

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

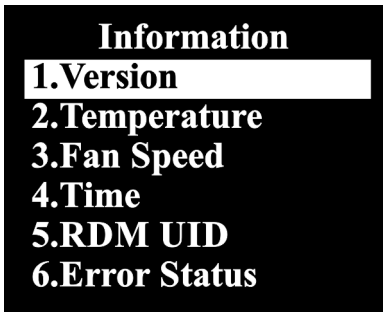
- Yes: Restore to default factory settings
- No: Keep current settings, no factory reset

02) Touch the **SET** button to confirm.

6.6.7. Information

In this menu, you can view the parameters of the device.

01) Press the **UP/DOWN** buttons to select one of the 6 options:



- Version: Shows the current firmware version of the device
- Temperature: Shows the temperature of the main LED PCB, the backlight PCB and the power PCB
- Fan Speed: Shows the current speed of the fan
- Time: Shows the total time the device, the main LED and the backlight have been running
- RDM UID: Shows the RDM identification number of the device (29B4:1010002B)
- Error Status: Shows the current error status, if applicable

02) Press the **SET** button to open the submenu and view the parameters.

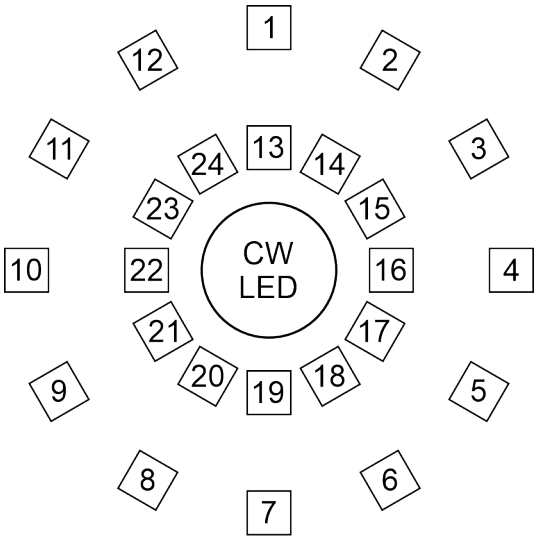
Note:

For more information about the complete list of error messages (see 7.1. Error Messages on page 38), refer to Error Messages. If you can not solve the problem, discontinue the use of the device and contact your Highlite International dealer for more information.

6.7. DMX Channels

6.7.1. Strobe (4 Channels), Basic (8 Channels), FX (11 Channels)

Figure 11



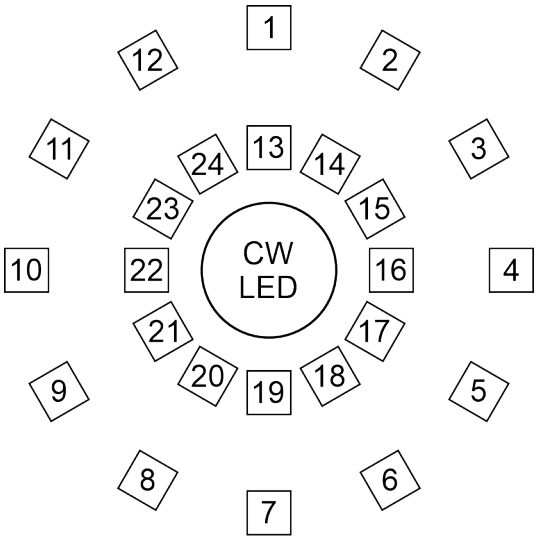
RGBW LED Order

Strobe 4 CH	Basic 8 CH	FX 11 CH	Function	Value	Setting
1	**1**	**1**	**Cold White**	000–255	From low to high intensity (0–100 %)
2	**2**	**2**	**Strobe Flash Duration**	000–255	Flash Duration 7–500ms
3	**3**	**3**	**Strobe Speed**	000–004	No Function
				005–255	From slow to fast
4	**4**	**4**	**Strobe**	000–005	Linear strobe, from off to high frequency (0–20 Hz)
				006–042	Ramp Up (slow fade in, fast close), from low to high frequency
				043–085	Ramp Down, from low to high frequency
				086–128	Ramp Up -> Down
				129–150	Random strobe, from low to high frequency
				151–171	Random sectional strobe, from low to high frequency
				172–214	Lighting-pulse strobe, from low to high frequency
				215–255	Spikes
	5	**5**	**Red 1–24**	000–255	From low to high intensity (0–100 %)
	6	**6**	**Green 1–24**	000–255	From low to high intensity (0–100 %)
	7	**7**	**Blue 1–24**	000–255	From low to high intensity (0–100 %)
	8	**8**	**White 1–24**	000–255	From low to high intensity (0–100 %)
		9	**Backlight pattern color**	000–013	Full (R255, B255, G255, W255)
				014–026	White (R000, G000, B000, W255)
				027–039	Red (R255, G000, B000, W000
				040–052	Green (R000, G255, B000, W000)
				053–065	Blue (R000, G000, B255, W000)
				066–078	Yellow (R255 G198, B000, W000
				079–091	Magenta (R196, G000, B255, W000)
				092–104	Cyan (R000, G211, B255, W000
				105–117	Pink (R255, G000, B094, W000)
				118–130	Light Pink (R255, G000, B094, W141)

				131–143	Light Blue (R000, G000, B255, W 089)
				144–156	Turquoise (R000, G255, B127, W033)
				157–169	Light Green (R000, G255, B000, W032)
				170–182	Dark Yellow (R255 G092, B000, W000
				183–195	Orange (R255, G083, B000, W000)
				196–208	Light orange (255, G083, B000, W024)
				209–221	Light Red (R255, G000, B000, W073)
				222–234	CTO (R255, G095, B000, W122)
				235–247	CTB (R000, G132, B255, W255)
				248–255	Reserved
		10	**Backlight pattern**	000–021	No function
				022–039	Pattern 1 (LED 1)
				040–057	Pattern 2 (LED 11, 12)
				058–075	Pattern 3 (LED 12, 1, 2)
				076–093	Pattern 4 (LED 11, 12, 1, 2, 3)
				094–111	Pattern 5 (LED 10, 11, 12, 1, 2, 3, 4)
				112–129	Pattern 6 (LED 1, 7)
				130–147	Pattern 7 (LED 2, 3, 8, 9)
				148–165	Pattern 8 (LED 12, 1, 2, 6, 7, 8)
				166–183	Pattern 9 (LED 1, 4, 7, 10)
				184–201	Pattern 10 (LED 1)
				202–219	Pattern 11 (LED 10)
				220–237	Pattern 12 (LED 11, 12)
				238–255	Pattern 13 (LED 2, 3)
		11	**Backlight pattern rotation**	000–044	Pattern indexing
				045–125	Clockwise rotation (CW), from fast to slow
				126–129	Stop
				130–210	Counterclockwise rotation (CCW), from slow to fast
				211–255	45° bounce, from slow to fast

6.7.2. Sectional (52 Channels), Pixel (100 Channels)

Figure 12



RGBW LED Order

Sectional 52 CH	Pixel 100 CH	Function	Value	Setting
1	1	Cold White	000–255	From low to high intensity (0–100 %)
2	2	Strobe Flash Duration	000–255	Flash Duration 7–500ms
3	3	Strobe Speed	000–004	No Function
			005–255	From slow to fast
4	4	Strobe	000–005	Linear strobe, from off to high frequency (0–20 Hz)
			006–042	Ramp Up (slow fade in, fast close), from low to high frequency
			043–085	Ramp Down, from low to high frequency
			086–128	Ramp Up -> Down
			129–150	Random strobe, from low to high frequency
			151–171	Random sectional strobe, from low to high frequency
			172–214	Lighting--Pulse strobe, from low to high frequency
			215–255	Spikes
5	5	Red 1	000–255	From low to high intensity (0–100 %)
6	6	Green 1	000–255	From low to high intensity (0–100 %)
7	7	Blue 1	000–255	From low to high intensity (0–100 %)
8	8	White 1	000–255	From low to high intensity (0–100 %)
9	9	Red 2	000–255	From low to high intensity (0–100 %)
10	10	Green 2	000–255	From low to high intensity (0–100 %)
11	11	Blue 2	000–255	From low to high intensity (0–100 %)
12	12	White 2	000–255	From low to high intensity (0–100 %)
13	13	Red 3	000–255	From low to high intensity (0–100 %)
14	14	Green 3	000–255	From low to high intensity (0–100 %)
15	15	Blue 3	000–255	From low to high intensity (0–100 %)
16	16	White 3	000–255	From low to high intensity (0–100 %)
17	17	Red 4	000–255	From low to high intensity (0–100 %)
18	18	Green 4	000–255	From low to high intensity (0–100 %)
19	19	Blue 4	000–255	From low to high intensity (0–100 %)

20	**20**	**White 4**	000–255	From low to high intensity (0–100 %)
21	**21**	**Red 5**	000–255	From low to high intensity (0–100 %)
22	**22**	**Green 5**	000–255	From low to high intensity (0–100 %)
23	**23**	**Blue 5**	000–255	From low to high intensity (0–100 %)
24	**24**	**White 5**	000–255	From low to high intensity (0–100 %)
25	**25**	**Red 6**	000–255	From low to high intensity (0–100 %)
26	**26**	**Green 6**	000–255	From low to high intensity (0–100 %)
27	**27**	**Blue 6**	000–255	From low to high intensity (0–100 %)
28	**28**	**White 6**	000–255	From low to high intensity (0–100 %)
29	**29**	**Red 7**	000–255	From low to high intensity (0–100 %)
30	**30**	**Green 7**	000–255	From low to high intensity (0–100 %)
31	**31**	**Blue 7**	000–255	From low to high intensity (0–100 %)
32	**32**	**White 7**	000–255	From low to high intensity (0–100 %)
33	**33**	**Red 8**	000–255	From low to high intensity (0–100 %)
34	**34**	**Green 8**	000–255	From low to high intensity (0–100 %)
35	**35**	**Blue 8**	000–255	From low to high intensity (0–100 %)
36	**36**	**White 8**	000–255	From low to high intensity (0–100 %)
37	**37**	**Red 9**	000–255	From low to high intensity (0–100 %)
38	**38**	**Green 9**	000–255	From low to high intensity (0–100 %)
39	**39**	**Blue 9**	000–255	From low to high intensity (0–100 %)
40	**40**	**White 9**	000–255	From low to high intensity (0–100 %)
41	**41**	**Red 10**	000–255	From low to high intensity (0–100 %)
42	**42**	**Green 10**	000–255	From low to high intensity (0–100 %)
43	**43**	**Blue 10**	000–255	From low to high intensity (0–100 %)
44	**44**	**White 10**	000–255	From low to high intensity (0–100 %)
45	**45**	**Red 11**	000–255	From low to high intensity (0–100 %)
46	**46**	**Green 11**	000–255	From low to high intensity (0–100 %)
47	**47**	**Blue 11**	000–255	From low to high intensity (0–100 %)
48	**48**	**White 11**	000–255	From low to high intensity (0–100 %)
49	**49**	**Red 12**	000–255	From low to high intensity (0–100 %)
50	**50**	**Green 12**	000–255	From low to high intensity (0–100 %)
51	**51**	**Blue 12**	000–255	From low to high intensity (0–100 %)
52	**52**	**White 12**	000–255	From low to high intensity (0–100 %)
5	**53**	**Red 13**	000–255	From low to high intensity (0–100 %)
6	**54**	**Green 13**	000–255	From low to high intensity (0–100 %)
7	**55**	**Blue 13**	000–255	From low to high intensity (0–100 %)
8	**56**	**White 13**	000–255	From low to high intensity (0–100 %)
9	**57**	**Red 14**	000–255	From low to high intensity (0–100 %)
10	**58**	**Green 14**	000–255	From low to high intensity (0–100 %)
11	**59**	**Blue 14**	000–255	From low to high intensity (0–100 %)
12	**60**	**White 14**	000–255	From low to high intensity (0–100 %)
13	**61**	**Red 15**	000–255	From low to high intensity (0–100 %)
14	**62**	**Green 15**	000–255	From low to high intensity (0–100 %)
15	**63**	**Blue 15**	000–255	From low to high intensity (0–100 %)
16	**64**	**White 15**	000–255	From low to high intensity (0–100 %)
17	**65**	**Red 16**	000–255	From low to high intensity (0–100 %)
18	**66**	**Green 16**	000–255	From low to high intensity (0–100 %)
19	**67**	**Blue 16**	000–255	From low to high intensity (0–100 %)

20	**68**	**White 16**	000–255	From low to high intensity (0–100 %)
21	**69**	**Red 17**	000–255	From low to high intensity (0–100 %)
22	**70**	**Green 17**	000–255	From low to high intensity (0–100 %)
23	**71**	**Blue 17**	000–255	From low to high intensity (0–100 %)
24	**72**	**White 17**	000–255	From low to high intensity (0–100 %)
25	**73**	**Red 18**	000–255	From low to high intensity (0–100 %)
26	**74**	**Green 18**	000–255	From low to high intensity (0–100 %)
27	**75**	**Blue 18**	000–255	From low to high intensity (0–100 %)
28	**76**	**White 18**	000–255	From low to high intensity (0–100 %)
29	**77**	**Red 19**	000–255	From low to high intensity (0–100 %)
30	**78**	**Green 19**	000–255	From low to high intensity (0–100 %)
31	**79**	**Blue 19**	000–255	From low to high intensity (0–100 %)
32	**80**	**White 19**	000–255	From low to high intensity (0–100 %)
33	**81**	**Red 20**	000–255	From low to high intensity (0–100 %)
34	**82**	**Green 20**	000–255	From low to high intensity (0–100 %)
35	**83**	**Blue 20**	000–255	From low to high intensity (0–100 %)
36	**84**	**White 20**	000–255	From low to high intensity (0–100 %)
37	**85**	**Red 21**	000–255	From low to high intensity (0–100 %)
38	**86**	**Green 21**	000–255	From low to high intensity (0–100 %)
39	**87**	**Blue 21**	000–255	From low to high intensity (0–100 %)
40	**88**	**White 21**	000–255	From low to high intensity (0–100 %)
41	**89**	**Red 22**	000–255	From low to high intensity (0–100 %)
42	**90**	**Green 22**	000–255	From low to high intensity (0–100 %)
43	**91**	**Blue 22**	000–255	From low to high intensity (0–100 %)
44	**92**	**White 22**	000–255	From low to high intensity (0–100 %)
45	**93**	**Red 23**	000–255	From low to high intensity (0–100 %)
46	**94**	**Green 23**	000–255	From low to high intensity (0–100 %)
47	**95**	**Blue 23**	000–255	From low to high intensity (0–100 %)
48	**96**	**White 23**	000–255	From low to high intensity (0–100 %)
49	**97**	**Red 24**	000–255	From low to high intensity (0–100 %)
50	**98**	**Green 24**	000–255	From low to high intensity (0–100 %)
51	**99**	**Blue 24**	000–255	From low to high intensity (0–100 %)
52	**100**	**White 24**	000–255	From low to high intensity (0–100 %)

6.8. RDM Information

This device supports RDM (see 6.8.2. Supported RDM PIDs (Parameter IDs)).

6.8.1. RDM Details

- Responder ID: 29B4:101XXXXX
- Manufacturer's ID: Showtec (Highlite International B.V.)
- Manufacturer Label: Showtec
- Model Description: Titan Strobe 200 FX
- Model ID: 257 (101 hexadecimal)
- Device Label: Titan Strobe 200 FX

Note:

An RDM responder ID consists of 3 parts:

- 1st part – 4 digits – Manufacturer's ID
- 2nd part – 3 digits – Model ID
- 3rd part – 5 digits – Unique ID
- The RDM responder IDs of all products of Highlite International start with the same 4 digits. The first 7 digits of the RDM responder ID for each model are the same. The last 5 digits are different for each device.

6.8.2. Supported RDM PIDs (Parameter IDs)

RDM Parameter ID	Value	Required	GET	SET
SUPPORTED_PARAMETERS	0x0050	*	*	
DEVICE_MODEL_DESCRIPTION	0x0080		*	
MANUFACTURER_LABEL	0x0081		*	
DEVICE_LABEL	0x0082		*	*
FACTORY_DEFAULTS	0x0090		*	*
DMX_PERSONALITY	0x00E0		*	*
DMX_PERSONALITY_DESCRIPTION	0x00E1		*	
DMX_START_ADDRESS	0x00F0	*	*	*
SENSOR_DEFINITION	0x0200		*	
SENSOR_VALUE	0x0201		*	*
RESET_DEVICE	0x1001			*

7. Troubleshooting

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

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

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

Problem	Probable cause(s)	Solution
The device does not function at all	No power to the device	• Make sure that the device is connected to power supply and the cables are plugged in
	Internal fuse is blown	• Disconnect the device and contact your Highlite International dealer
The device responds erratically	The factory settings of the device are changed	• Reset the parameters of the device to the default factory settings (see 6.6.6.8. Factory Reset on page 29)
The device does not respond to DMX control	The controller is not connected	• Connect the controller
	The signal is reversed. The 5-pin DMX OUT of the controller does not match the DMX IN of the device	• Install a phase-reversing cable between the controller and the device
	The controller is defective	• Try using another controller
The device responds erratically to DMX control	Connections are defective	• Examine connections and cables. Correct defective connections. Repair or replace damaged cables
	The data link is not terminated with a 120 Ω termination plug	• Insert a termination plug in the DMX OUT connector of the last device on the link
	Incorrect addressing	• Make sure that the address settings are correct
	In case of a setup with multiple devices, one of the devices is defective and disturbs data transmission on the link	• To find out the defective device, bypass one device at a time until normal operation is restored
No light or LEDs cut out intermittently	LEDs are damaged	• Disconnect the device and contact your Highlite International dealer
	The input power parameters of the device do not match the local AC voltage and frequency	• Disconnect the device. Make sure that the local current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device

7.1. Error Messages

In this submenu you can view whether there are any system errors.

If you have selected Error Status and there are no errors the display shows:

In case one of the error messages below appear on the error information screen, refer to Information (see 6.6.7. Information on page 30). If you can not solve the problem, discontinue the use of the device and contact your Highlite International dealer for more information.

Error code	Explanation
Main LED Temp	Temperature detection error, the device automatically enters protection mode and reduces its power. Reason for the error: The temperature sensor is damaged or the temperature sensor is not connected properly. (Please repair in time to ensure the normal use of this device)
Backlight Temp	
Power Temp	
LED Fan	LED fan error. Reason for the error: The fan keeps rotating or does not rotate at all

8. Maintenance

8.1. Safety Instructions for Maintenance

DANGER
Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

8.2. Preventive Maintenance

Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixings and installation points.
- The lens is not cracked or damaged.
- The power cables are not damaged and do not show any material fatigue.

8.3. Basic Cleaning Instructions

To clean the device, follow the steps below:

01) Disconnect the device from the electrical power supply.
02) Allow the device to cool down for at least 5 minutes.
03) Clean the device with a soft, lint-free cloth.

Attention

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

8.4. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

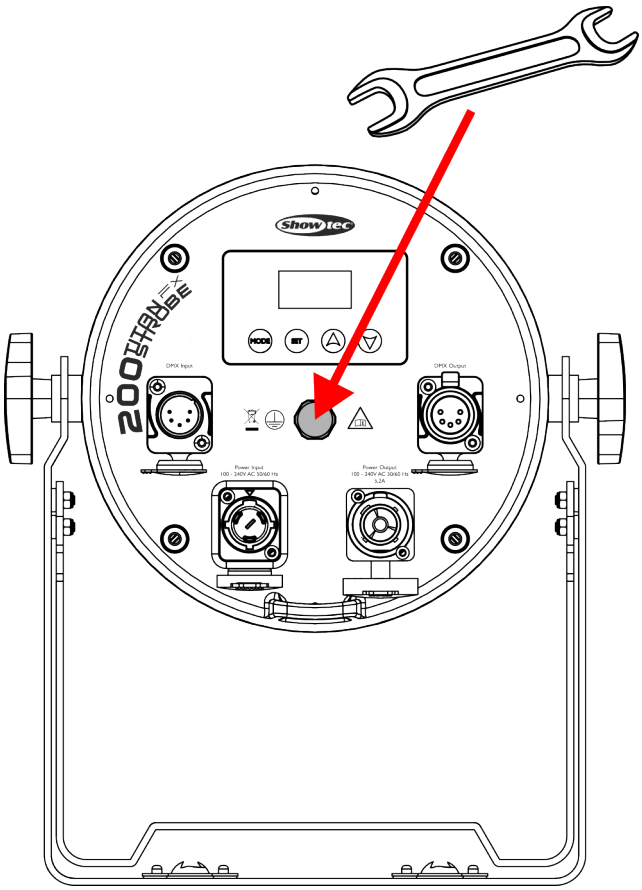
8.4.1. Draining Condensation Water

The Titan Strobe 200 FX is IP65 rated. The device can resist water jets. If the device is exposed to extreme humid conditions during use, condensation may collect inside the device. This can happen also during transportation, if the device is exposed to extreme temperature variations.

If condensation water collects inside the device, follow the steps below to remove the condensation water:

01) Carefully remove the **protective vent (09)** with a wrench (16 mm).
02) Let the device operate with all LEDs at full output for 60 minutes.
03) Let the device cool down for 30 minutes.
04) Install the **protective vent (09)** back. Make sure that you do not overtighten it.

Figure 13



9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation

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

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

9.2. Instructions for Transportation

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

9.3. Storage

- Clean the device before storing (see 8.3. Basic Cleaning Instructions on page 39).
- Store the device in the original packaging, if possible.

10. Disposal

Correct disposal of this product

Waste Electrical and Electronic Equipment

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

11. Approval

CE

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