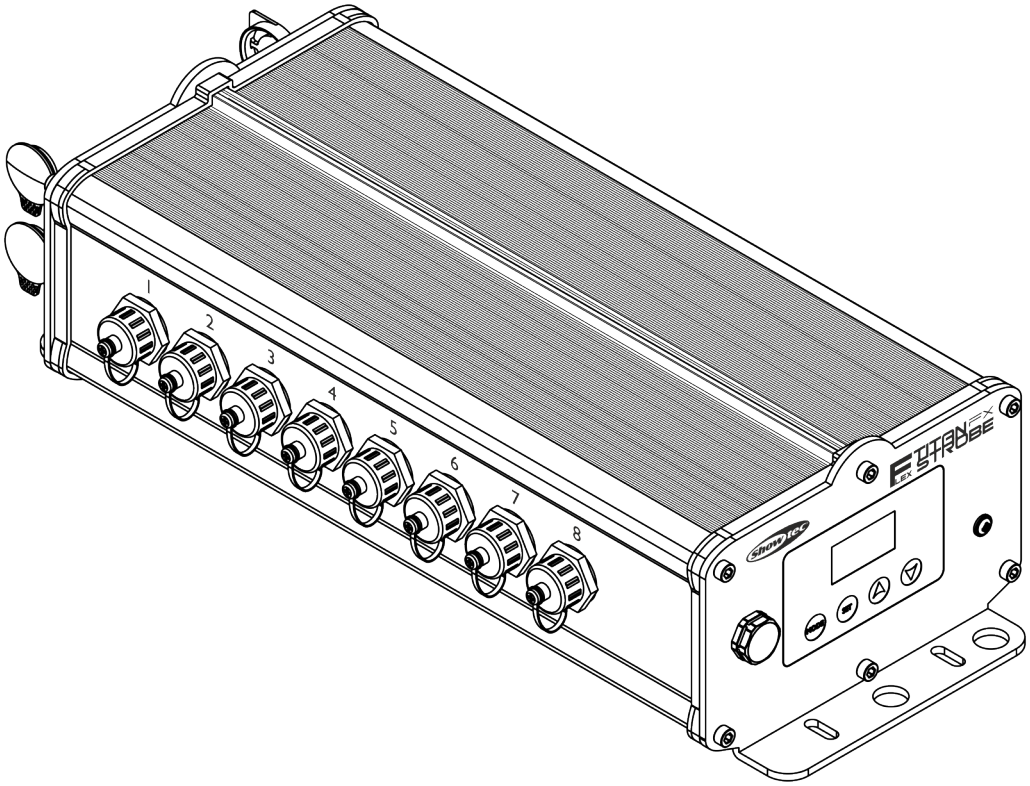
USER MANUAL

ENGLISH

V1.0



Controller for Titan Strobe FLEX FX

Product code: 40306

Preface

Thank you for purchasing this Showtec product.

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

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

This user manual contains information concerning:

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

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

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

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1. Introduction

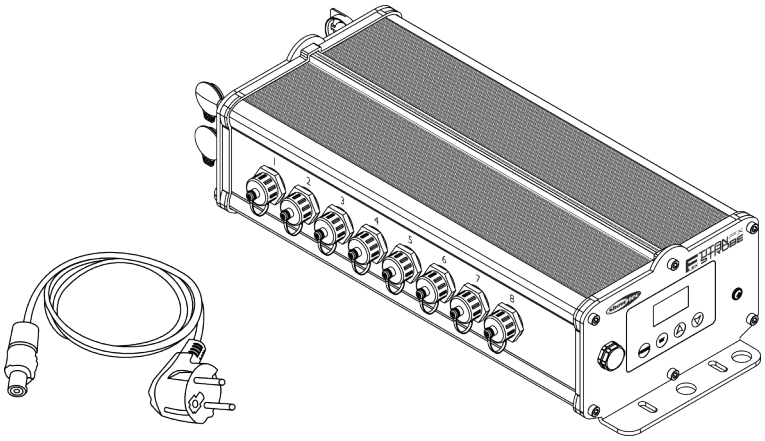
1.1. Before Using the Product

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

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

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

Figure 1



Your shipment includes:

- Showtec Controller for Titan Strobe FLEX FX
- 1x Schuko to Power Pro True 1 cable (1,5 m)
- User manual

1.2. Intended Use

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

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

1.3. Product Lifespan

This device is not designed for permanent operation.

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

1.4. 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

1.5. 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



Thermal hazard



Provides important information about the disposal of this product.

1.6. Symbols on the Information Label

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

The information label contains the following symbols:



This device shall not be treated as household waste.



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



This device falls under IEC protection class I.

IP65 This devices is rated IP65.



The surface and the inner parts of the device can become very hot during operation. Do not touch the pods during operation.

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 burns due to hot surface

The surface and the inner parts of the device can become very hot during operation.

- Do not touch the device during operation.
- Allow the device to cool down for at least 15 minutes before handling.



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 shake the device. Avoid brute force when installing or operating the device.
- 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
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 power cables are not damaged and do not show any material fatigue.



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

This device is designed to be used as a controller. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households.
- 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
Do not expose the device to conditions that exceed the rated IP class conditions.

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

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

2.2. Requirements for the User

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

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

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

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

2.3. Personal Protective Equipment

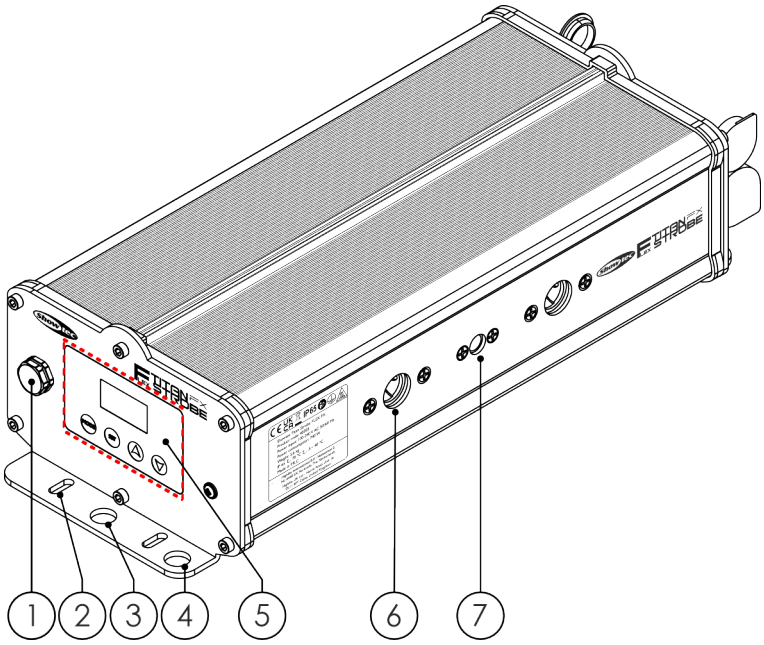
During installation, deinstallation and rigging wear personal protective equipment in compliance with the national and site-specific regulations.

3. Description of the Device

The Showtec Controller for Titan Strobe FLEX FX is a dedicated IP65-rated controller that can control up to 8 units of the Showtec Titan Strobe FLEX FX Single Pod (Product code: 40307). The device can be controlled via DMX/RDM, Art-Net, sACN and in master/slave mode.

3.1. Front View

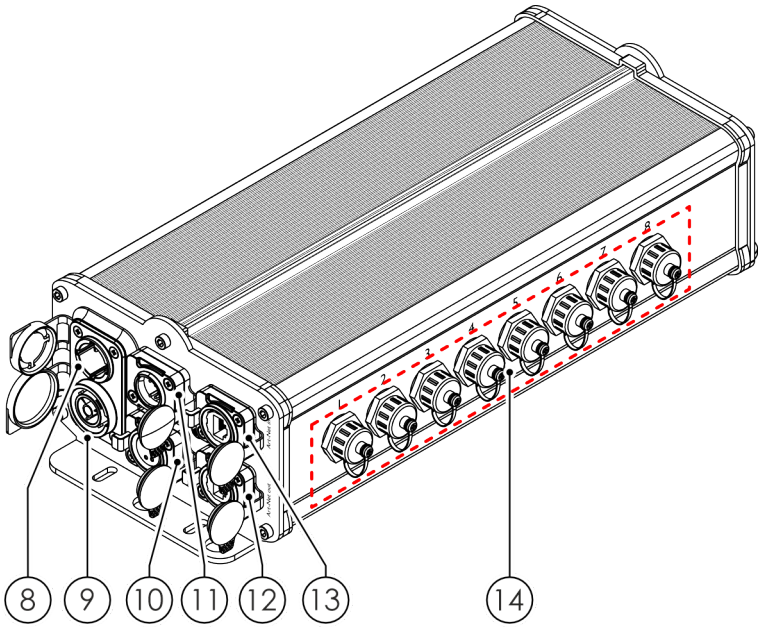
Figure 2



01) Protective valve
02) 4x Mounting holes
03) 2x Mounting holes, Ø 12,5 mm
04) Safety eye
05) Control panel: OLED display and touch buttons
06) 2x Mounting holes for a quick-lock bracket
07) Threaded insert M10

3.2. Back View

Figure 3



08) IP65-rated Seetronic power connector IN, 100–240 V
09) IP65-rated Seetronic power connector OUT, 100–240 V
10) IP65-rated 5-pin DMX signal connector OUT
11) IP65-rated 5-pin DMX signal connector IN
12) IP65-rated RJ45 connector OUT
13) IP65-rated RJ45 connector IN
14) 8x Pod connectors OUT (data and power)

3.3. Product Specifications

Model:	Controller for Titan Strobe FLEX FX

Control and Programming:	
Control mode	Art-Net / Auto / Built-in Program / DMX / Manual / RDM
Protocols	Art-Net / DMX

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

Electrical Specifications and Connections:	
Power supply	100–240 V AC 50/60 Hz
Power consumption	17,5 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
Data connector	etherCON IN/OUT
Data connector IN	etherCON
Data connector OUT	Dedicated Data Connector / etherCON

Mechanical Specifications:	
Height	103 mm
Width	171 mm
Depth	372 mm
Weight	3,72 kg
IP rating	IP65
Housing	Aluminum
Color	Black

Product Properties:	
Cooling	Forced convection

Rigging:	
Mounting options	Clamp / Quick-Lock
Safety attachment	Yes

Thermal Specifications:	
Maximum ambient temperature	40 °C
Minimum ambient temperature	-5 °C
Maximum surface temperature	62 °C

Included Items:	
Included cables	Power Pro True Cable

3.4. Optional Accessories

You can additionally purchase the following accessories:

- 30788 FLEX Cable – 2,5 m
- 30794 FLEX Cable – 5 m
- 30789 FLEX Cable – 10 m

Contact your Highlite International dealer for more information.

3.5. Compatibility

Attention
Product compatibility

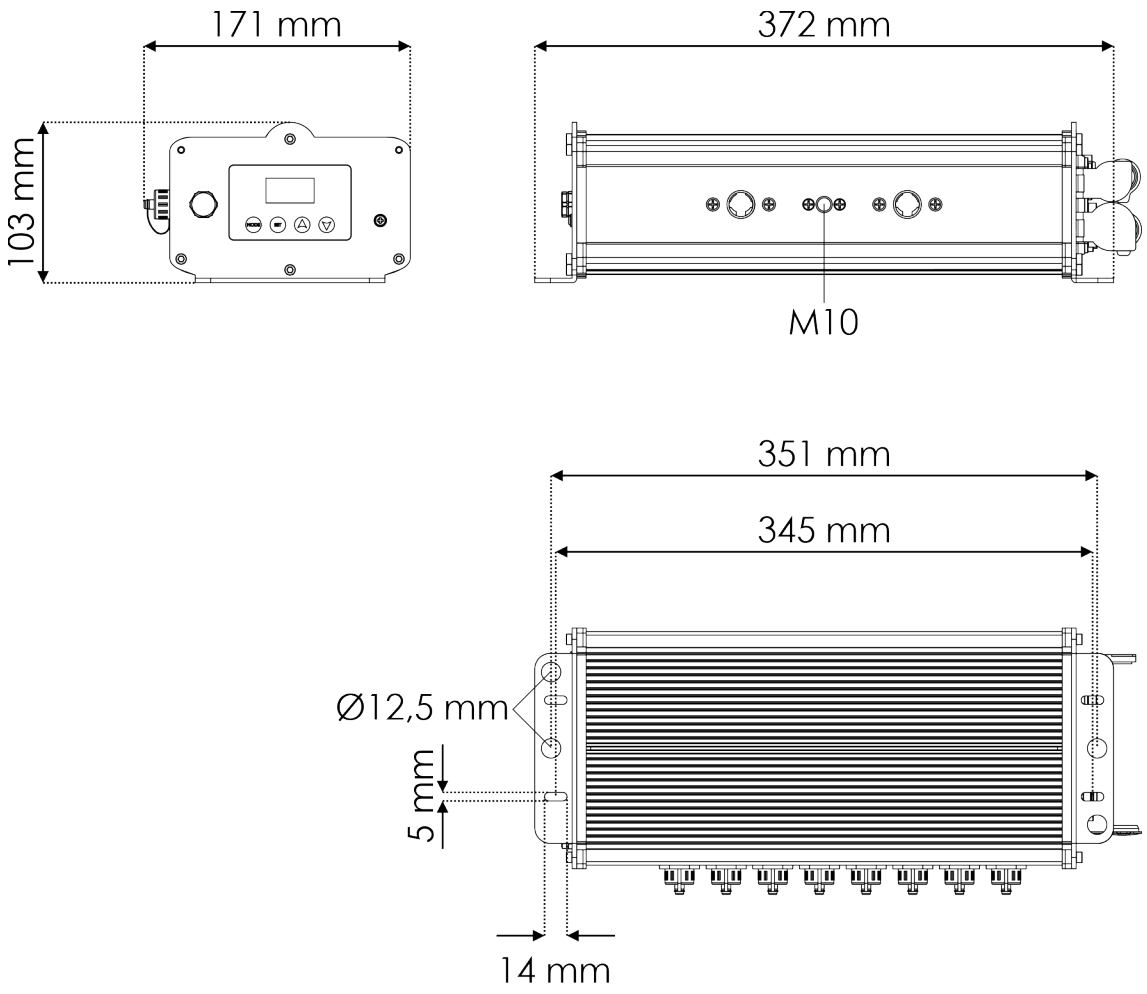
The Showtec Controller for Titan Strobe FLEX FX is designed to be operated only with the Showtec Titan Strobe FLEX FX Single Pods. You can connect up to 8 units of the Showtec Titan Strobe FLEX FX Single Pod to the device. The Titan Strobe FLEX FX Single Pods are not supplied with the Controller for Titan Strobe FLEX FX.

You need to purchase the Titan Strobe FLEX FX Single Pods separately. Contact your Highlite International dealer for more information.

Product code: 40307 (Titan Strobe FLEX FX Single Pod)

3.6. 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 ambient temperature must be in the range -5 and 40 °C.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

4.4. Rigging

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

You can position the controller on a flat surface or mount it to a rigging structure (see 4.4.1. Installation with a Clamp) or to a flat surface (see 4.4.2. Installation on a Flat Surface).

Make sure that all loads are within the pre-determined limits of the supporting structure.

4.4.1. Installation with a Clamp

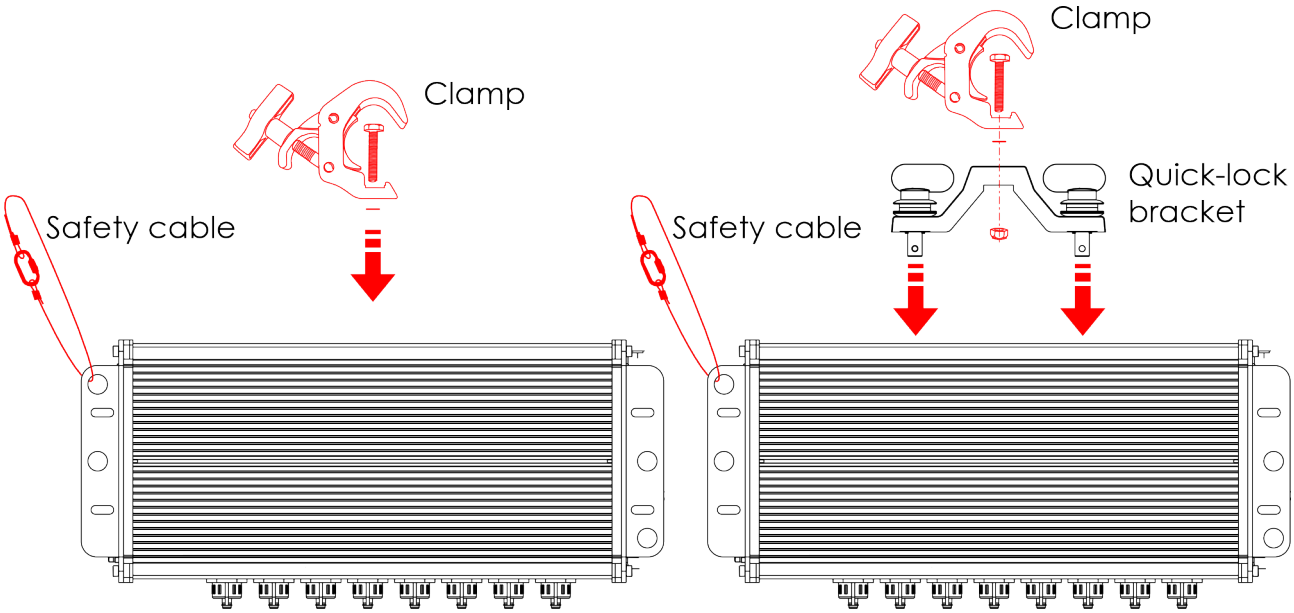
You can mount the controller to a rigging structure in 2 ways:

- With a quick-lock bracket and a clamp, using the 2 **mounting holes for a quick-lock bracket (06)**
- With a clamp, using the **threaded insert M10 (07)** or the 2 **mounting holes, Ø 12,5 mm (03)**

To mount the controller to a rigging structure:

01) Fasten the quick-lock bracket on the **mounting holes for a quick-lock bracket (06)**. Do not do step 1 if you install the device without a quick-lock bracket.
02) Attach the clamp to the quick-lock bracket or to the **threaded insert M10 (07)**. Make sure that you use a clamp suitable for attaching the controller to a truss.
03) Attach the controller to the supporting structure. Make sure that the controller cannot move freely.
04) Secure the controller with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the controller. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. Put the safety cable through the **safety eye (04)**.

Figure 5



4.4.2. Installation on a Flat Surface

You can mount the controller on a flat surface, using the 4 **mounting holes (02)**.

You need the following:

- a drill
- a drill bit (for wood or concrete), 6–7 mm long
- 4 anchors (if applicable)
- 4 screws

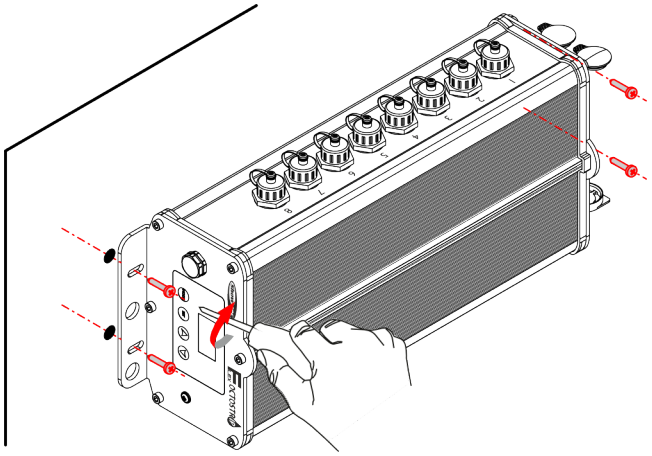
Notes:

- Make sure that the drilling location for the mounting holes is free of obstructions such as pipes, ducts, or wires.
- Do not drill into mortar joints. Screws installed in mortar joints cannot safely support the weight of the device.

To mount the controller on a flat surface follow the steps below:

01) Hold the controller against the flat surface and mark the position of the 4 **mounting holes (02)** on the flat surface.
02) Drill holes at the 4 marked locations.
03) Insert anchors into the drilled holes, if applicable.
04) Insert and tighten the 4 screws through the 4 **mounting holes (02)** into the 4 drilled holes to fasten the controller to the flat surface.

Figure 6



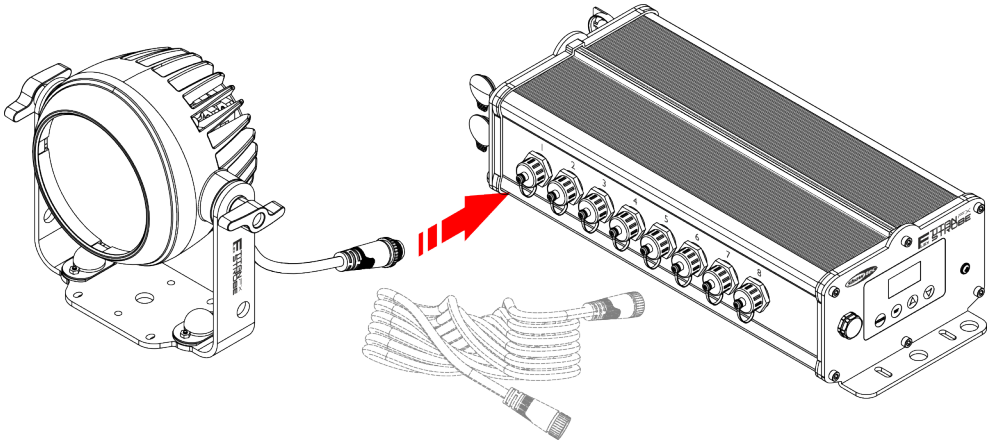
4.5. Connecting Pods to the Controller

The Showtec Controller for Titan Strobe FLEX FX is designed to be operated only with the Showtec Titan Strobe FLEX FX Single Pods (see 3.5. Compatibility on page 11). You can connect up to 8 pods to the controller. The Showtec Titan Strobe FLEX FX Single Pods are not supplied with the Showtec Controller for Titan Strobe FLEX FX.

To connect pods to the controller, follow the steps below:

01) Connect the fixed cable with connector IN of the 1st pod to the 1st **pod connector OUT (14)** on the controller. To extend the length, you can use one of the extension cables available for purchase (see 3.4. Optional Accessories on page 11). Contact your Highlite International dealer for more information.
02) Repeat step 1 to connect all pods to the controller.

Figure 7



Note:

Keep the **pod connectors OUT (14)** sealed with the plastic caps when the connectors are not in use.

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.

The maximum recommended number of devices depends on the total load of all connected pods and Controller for Titan Strobe FLEX FX devices.

The total load shall not exceed:

- at 120 V: 1800 W
- at 230 V: 3500 W

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 Controller for Titan Strobe FLEX FX is not connected to a DMX 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 23).

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 Controller for Titan Strobe FLEX 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

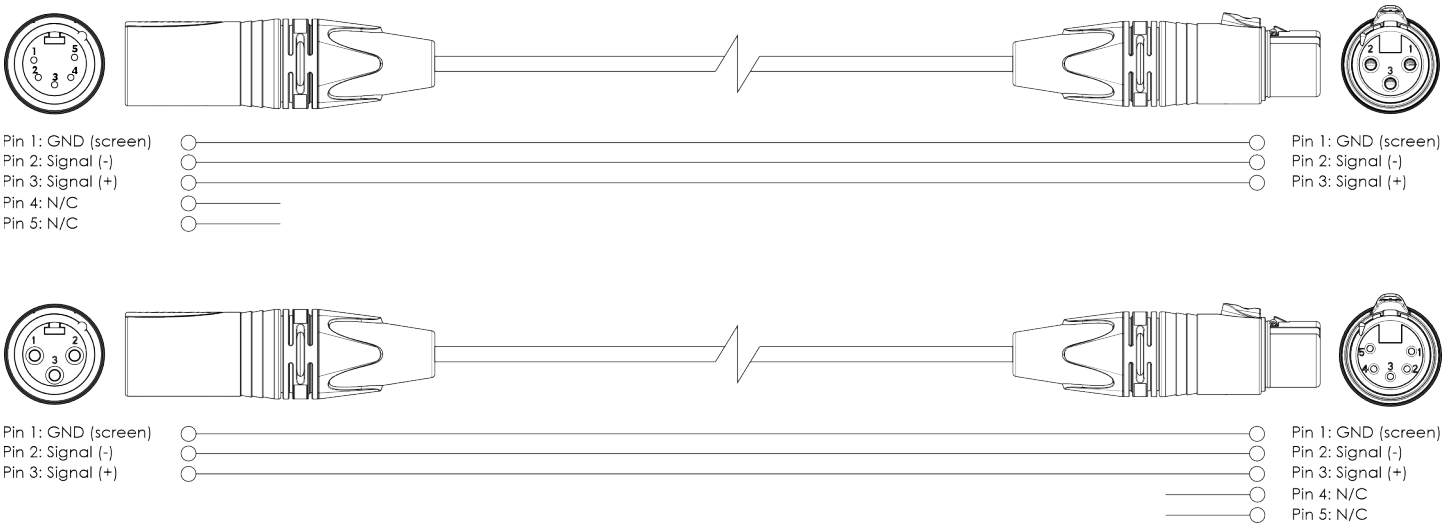
5.3.2. DMX Cables

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 8

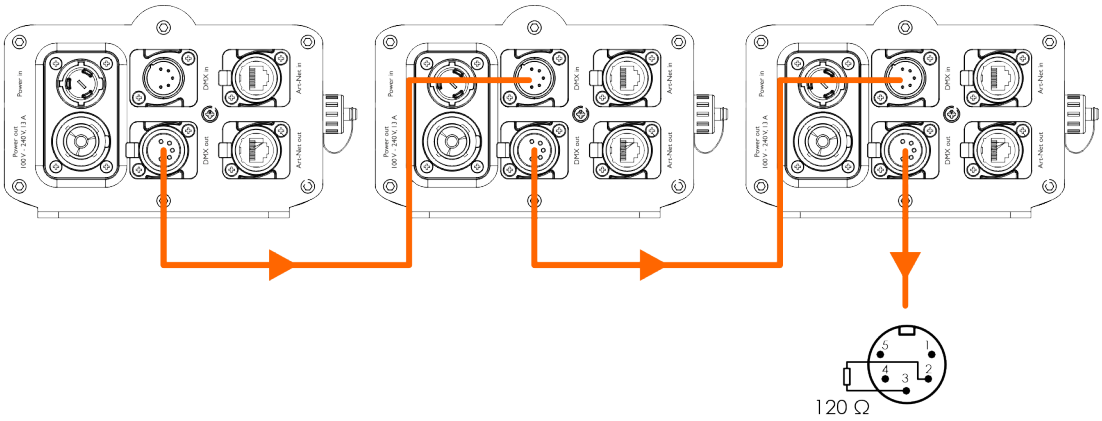


5.3.3. Master/Slave Setup

The Controller for Titan Strobe FLEX 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 (see 6.6.6. Slave on page 30).
05) Set the other devices on the data link as slave devices (see 6.6.6. Slave on page 30).

Figure 9

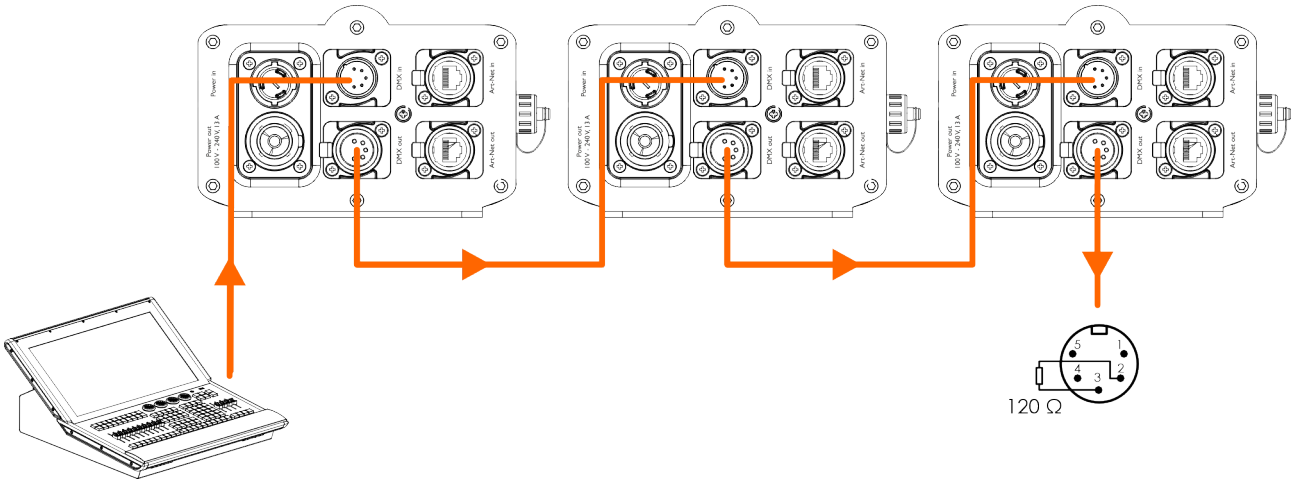


5.3.4. DMX Linking

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 10



5.3.5. DMX Addressing

In a setup with multiple devices, make sure that you set the DMX starting address of each device correctly. The Controller for Titan Strobe FLEX FX has 8 personalities: 4 channels (Strobe All), 32 channels (Strobe POD), 8 channels (Basic All), 64 channels (Basic POD), 52 channels (Pixel All), 416 channels (Pixel POD), 11 channels (FX All), 88 channels (FX POD).

If you want to connect multiple devices on one data link and use them in 88-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 89 (089), as 1 + 88 = 89.
03) Set the starting address of the 3rd device on the data link to 177 (177), as 89 + 88 = 177.
04) Continue assigning the starting addresses of the remaining devices by adding 88 to the previous number each time.

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

Note:

DMX connection is limited to 512 channels. For larger setups, connect the devices via Art-Net or sACN protocols (see 5.4. Ethernet Connection on page 20).

5.4. Ethernet Connection

5.4.1. Art-Net/sACN Protocol

Art-Net is a protocol that uses TCP/IP to transfer a large amount of DMX-512 data over an Ethernet network. Art-Net 4 can support up to 32768 universes. Art-Net™ is designed by and copyright of Artistic Licence Holdings Ltd.

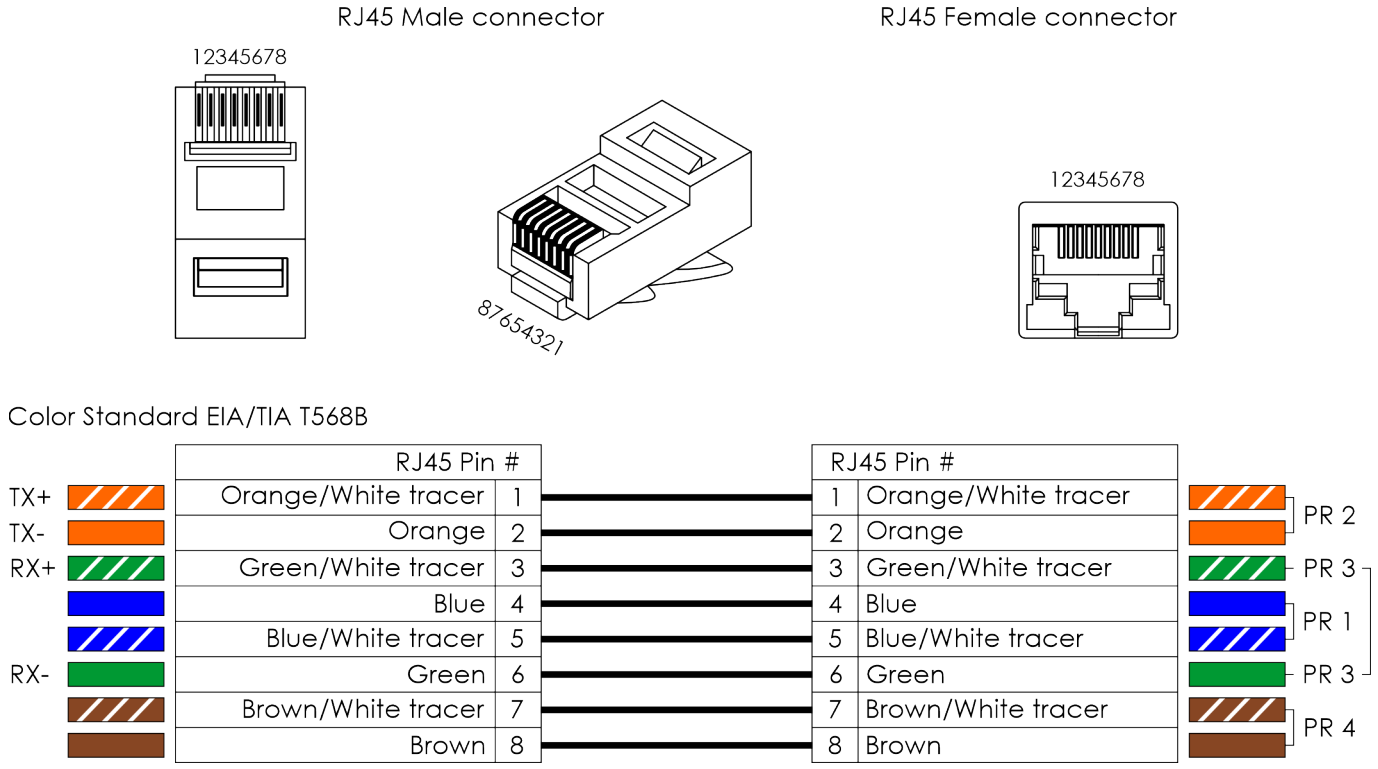
sACN (streaming Architecture for Control Networks), also known as ANSI E1.31, is a protocol developed by ESTA (Entertainment Services and Technology Association) for sending DMX-512 data over IP networks. It supports up to 63999 universes and uses multicasting.

5.4.2. Network Cables

Standard twisted-pair Ethernet cables (CAT-5E/CAT-6) can be used to connect the device to a computer or to a lighting controller that supports Art-Net or sACN.

If you make your own network cables, make sure that you connect the pins and wires correctly. Use RJ45 (8P8C) connectors and patch the cables according to the T568B color standard.

Figure 11

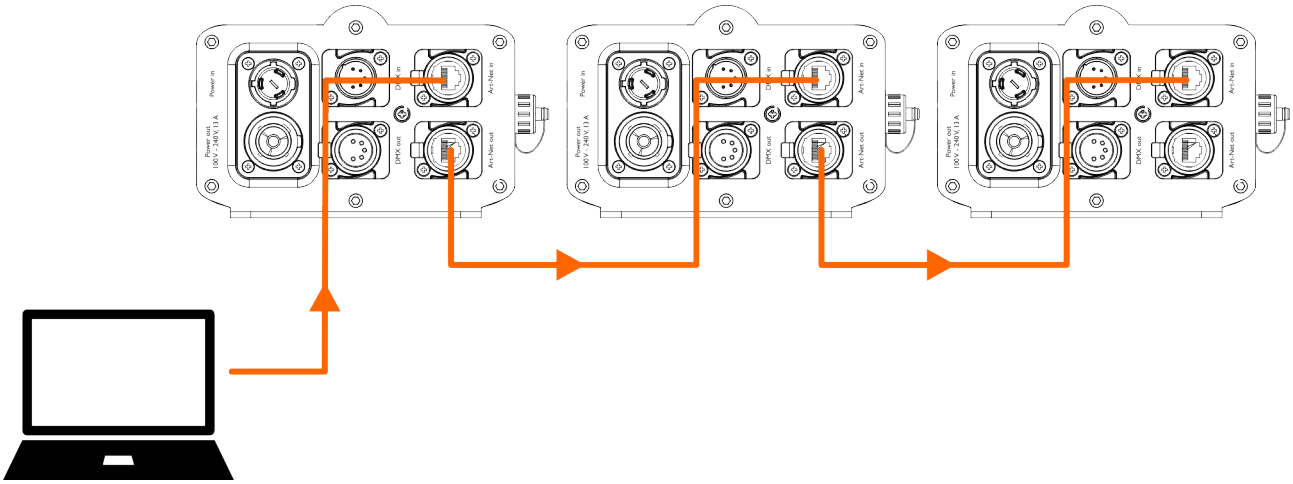


5.4.3. Art-Net/sACN Linking

To connect multiple devices on one Art-Net/sACN data link, follow the steps below:

01) Use a CAT-5E/CAT-6 cable to connect the RJ45 connector of the computer/lighting controller to one of the RJ45 connectors of the 1st device.
02) Connect the 2nd RJ45 connector of the 1st device to the 1st RJ45 connector of the 2nd device with a CAT-5E/CAT-6 cable.
03) Repeat step 2 to connect all devices in a daisy-chain.

Figure 12



5.4.4. Art-Net Settings

To operate the device using Art-Net protocol:

01) Configure the network address of your computer/lighting controller in the correct range (IP 2.x.x.x, 10.x.x.x or 192.168.x.x and Subnet 255.0.0.0). You can configure the IP address and Subnet mask of the device Network Configuration menu (see 6.6.2. NetWork Configuration on page 28). Make sure that all devices in the network have unique IP addresses.
02) Enable Art-Net Protocol in the ArtNet Enable submenu (see 6.6.2. NetWork Configuration on page 28).
03) Set the universe in the ArtNet Universe submenu (see 6.6.2. NetWork Configuration on page 28). For more information refer to Universe Numbering (see 5.4.6. Universe Numbering on page 22).

5.4.5. sACN Settings

To operate the device using sACN protocol:

01) Set the IP address of your computer/lighting controller. sACN does not have restrictions on the IP address.
02) Enable sACN protocol in the sACN Enable submenu (see 6.6.2. NetWork Configuration on page 28).
03) Set the universe in the sACN Universe submenu (see 6.6.2. NetWork Configuration on page 28). For more information refer to Universe Numbering (see 5.4.6. Universe Numbering on page 22).

5.4.6. Universe Numbering

If you want to connect 5 or more devices on one data link and use them in 88-channel mode, you need to address the devices on different universes.

01) Set the DMX starting address of the first 5 devices (see 5.3.5. DMX Addressing on page 19).
02) Set the universe number of the 6th device to 001 and the DMX starting address to 001.
03) Continue addressing the devices, each time increasing the universe number, after you reach the limit of 512 channels in one universe.

There are 512 channels (1–512) in one universe. 16 consecutive universes (0–15) make up one sub-net. 16 sub-nets (0–15) make up one net. There are 128 nets (0–127) in total.

Note:

- In Art-Net, universes are called Port Address and number from 0 to 32767. There are 32768 unique numbers.
- In sACN, universes number from 1 to 63999.

15-bit Port Address	Net (0–127)	Sub-net (0–15)	Universe (0–15)
0	0	0	0
1	0	0	1
2	0	0	2
...	...	...	...
15	0	0	15
16	0	1	0
17	0	1	1
...	...	...	...
31	0	1	15
32	0	2	0
33	0	2	1
...	...	...	...
255	0	15	15
256	1	0	0
257	1	0	1
...	...	...	...
32766	127	15	14
32767	127	15	15

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

Note:

If you use an Art-Net controller that supports Art-Net I or Art-Net II, you need to set the Art-Net net to 0. The net number is available in Art-Net 3 and higher versions of the Art-Net protocol.

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 controller. 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 Controller for Titan Strobe FLEX 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/Art-Net/sACN: 4 channels (Strobe All), 32 channels (Strobe POD), 8 channels (Basic All), 64 channels (Basic POD), 52 channels (Pixel All), 416 channels (Pixel POD), 11 channels (FX All), 88 channels (FX POD)

For more information about how to connect the devices, refer to Setup (see 5. Setup on page 17).

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

Adjust the intensity of the LED colors in the Manual Mode menu (see 6.6.3. Manual on page 29).

To run the built-in program or to select one of the custom patterns in auto operation mode without a DMX controller:

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

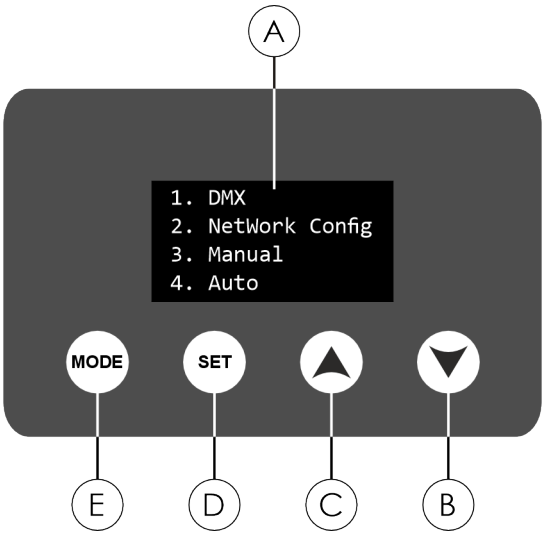
- If you select Auto (see 6.6.4. Auto on page 29), the device will run the built-in program.
- If you select Program (see 6.6.5. Program on page 30), the device will run the respective program.

To operate the device with a DMX controller:

01) Set the DMX starting address (see 5.3.5. DMX Addressing on page 19) of the device in the DMX Address submenu (see 6.6.1.1. Address on page 27).
02) Select the DMX personality in the DMX Channels submenu (see 6.6.1.2. Channels on page 27). Refer to DMX Channels for a complete overview of all DMX personalities.

6.3. Control Panel

Figure 13

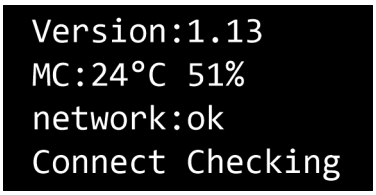


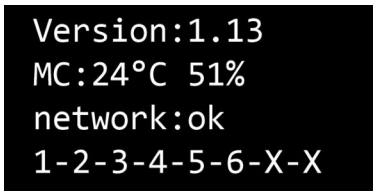
A) OLED display
B) DOWN touch button
C) UP touch button
D) SET touch button
E) MODE touch button

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

6.4. Start-up

After the device is connected to the power supply, the device performs a connectivity check. During the check, the display shows the firmware version, the temperature and the humidity percentage of the controller (MC), the status of the network connection, and that a connectivity check is ongoing. After the connectivity check is completed, the display shows information about which ports are connected to pods. Ports that are not connected show X:





After the connectivity check is completed, the device is ready to use. The display shows the start screen. The start screen provides information about the operation mode of the device, the highest temperature of the LEDs of the connected pods (L), and the temperature and the humidity percentage of the mainboard (P). If the temperature cannot be read, the display shows X:



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.

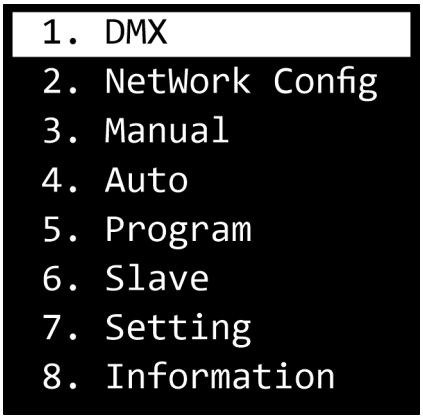
6.5. Menu Overview

Level 1	Level 2	Level 3	Level 4	Level 5
DMX (see 6.6.1. DMX on page 27)	DMX Address	001–512		
	DMX Channels	008		
		032		
		004		
		088		
		011		
		416		
		052		
		064		
NetWork Config (see 6.6.2. NetWork Configuration on page 28)	Local IP	(Set the IP address)		
	Subnet Mask	255.255.255.0		
		255.255.0.0		
		255.0.0.0		
	ArtNet Enable	On		
		Off		
	ArtNet Uni	Net	000–127	
		Sub	00–15	
		Port	00–15	
	sACN Enable	On		
		Off		
	sACN Universe	00001–63999		
	Mac Address	(Enter password: 6468)	(Set Mac Address)	
Manual (see 6.6.3. Manual on page 29)	Color All	All C White	000–255	
		All Red	000–255	
		All Green	000–255	
		All Blue	000–255	
		All White	000–255	
	Color Pixel	Spot 1	C White X Red X Green X Blue X White X	000–255 000–255 000–255 000–255 000–255
		Spot 2		
		Spot 3		
		Spot 4		
		Spot 5		
		Spot 6		
		Spot 7		
		Spot 8		
Auto (see 6.6.4. Auto on page 29)	Yes			
	No			
Program (see 6.6.5. Program on page 30)	Mode	01–17		
	Color (only mode 1)	01–15		
	Speed (only mode 2–17)	001–100		
	Strobe	00–99		
Slave (see 6.6.6. Slave on page 30)	Yes			
	No			

Level 1	Level 2	Level 3	Level 4	Level 5
Setting (see 6.6.7. Settings on page 30)	Patch	Default		
		Output 1	POD 1 POD 2 POD 3 POD 4 POD 5 POD 6 POD 7 POD 8	
		Output 2		
		Output 3		
		Output 4		
		Output 5		
		Output 6		
		Output 7		
		Output 8		
	Curves Select	Linear		
		Square Law		
		Inv Square Law		
		S-Type		
	Display	Normal		
		Inverted		
	PWM Frequency	12 K		
		6 K		
		3 K		
		1 K		
	DMX Fail	Off		
		Hold		
		Manual		
		Program		
	Fan Mode	Auto		
		High		
		Off		
	Backlight Time	5 s		
		10 s		
		20 s		
		30 s		
		On		
	Lock	On		
		Off		
	Key Backlight	On		
		Off		
	Factory	Yes		
		No		
Information (see 6.6.8. Information on page 33)				

6.6. Main Menu Options

The main menu has the following options:



1. DMX
2. NetWork Configuration
3. Manual
4. Auto
5. Program
6. Slave
7. Setting
8. Information

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

6.6.1. DMX

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

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



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

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

6.6.1.1. Address

In this submenu you can set the DMX starting address of the device (see 5.3.5. DMX Addressing on page 19).

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

6.6.1.2. Channels

In this submenu you can select the DMX channel mode. For more information to DMX Channels (see 6.7. DMX Channels on page 34).

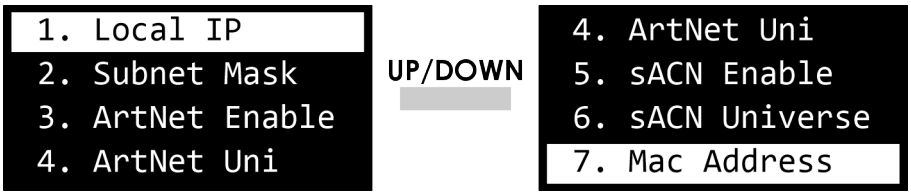
01) Press the **UP/DOWN** buttons to select a DMX channel mode. There are 8 options:
- 004: 4 channels (Strobe All)
- 032: 32 channels (Strobe POD)
- 008: 8 channels (Basic All)
- 064: 64 channels (Basic POD)
- 052: 52 channels (Pixel All)
- 416: 416 channels (Pixel POD)
- 011: 11 channels (FX All)
- 088: 88 channels (FX POD)

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

6.6.2. NetWork Configuration

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

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

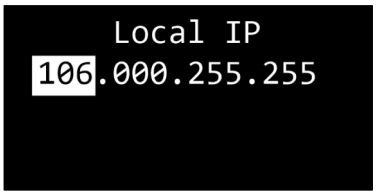


- Local IP (see 6.6.2.1. Local IP)
- Subnet Mask (see 6.6.2.2. Subnet Mask)
- ArtNet Enable: Enable ArtNet protocol (On/Off)
- ArtNet Uni (see 6.6.2.3. ArtNet Universe)
- sACN Enable: Enable sACN protocol (On/Off)
- sACN Universe: Set the sACN Universe (00001–63999)
- Mac Address: Change the MAC address of the device. This submenu requires a password. The password is 6468.

02) Press the **SET** button to confirm the selection.
03) Press the **UP/DOWN** buttons to change the values.
04) Press the **SET** button to confirm the setting.

6.6.2.1. Local IP

In this submenu you can manually configure the IP address of the device.



01) Press the **UP/DOWN** buttons to change the number of the 1st section of the IP address.
02) Press the **SET** button to confirm the change and select the next section. When a section is selected, the section is highlighted.
03) Repeat steps 1–2 to change the remaining 2 sections.

6.6.2.2. Subnet Mask

In this submenu you can set the subnet mask of the IP address.

01) Press the **UP/DOWN** buttons to select one of the 3 options:
    - 255.255.255.0
    - 255.255.0.0
    - 255.0.0.0
02) Press the **SET** button to confirm the selection.

6.6.2.3. ArtNet Universe

In this submenu can you set the Art-Net universe of the device by adjusting the values for net, sub-net and port (see 5.4.6. Universe Numbering on page 22).

01) Press the **UP/DOWN** buttons to select each of the 3 options:
    - Net: Set the net. The input range is 000–217
    - Sub: Set the sub-net. The input range is 00–15
    - Port: Set the port. The input range is 00–15
02) Press the **SET** button to confirm the selection.

6.6.3. Manual

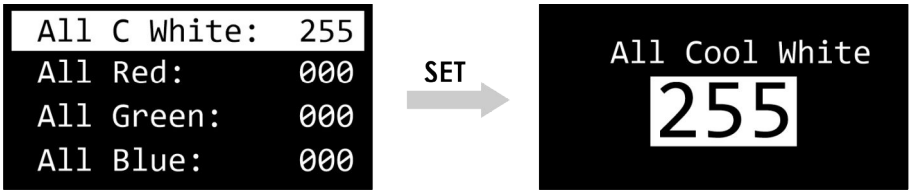
In this menu you can manually set the desired colors (white, amber, red, green, blue) for all 8 pods together or for each pod individually.

01) Press the **UP/DOWN** buttons to select one of the 2 options:
- Color All (see 6.6.3.1. Color All)
- Color Pixel (see 6.6.3.2. Color Pixel)

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

6.6.3.1. Color All

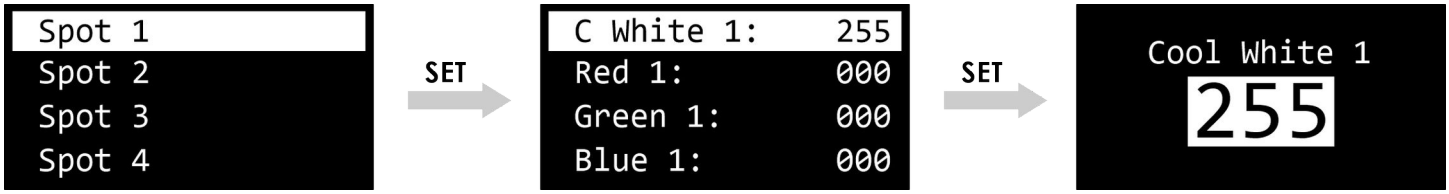
In this submenu you can adjust the intensity of each LED color in all 8 pods together.



01) Press the **UP/DOWN** buttons to select one of the 5 options: C White (Cold White), Red, Green, Blue, White.
02) Press the **SET** button to open the submenu.
03) Press the **UP/DOWN** buttons to set the intensity of each LED color. The adjustment range is 0–255, from low to high intensity.
04) Press the **SET** button to confirm the value.

6.6.3.2. Color Pixel

In this submenu you can adjust the intensity of each LED color in each pod individually.



01) Press the **UP/DOWN** buttons to select one of the 8 pods (Spot 1–8).
02) Press the **SET** button to confirm the selection.
03) Press the **UP/DOWN** buttons to select one of the 5 options: C White (Cold White), Red, Green, Blue, White.
04) Press the **SET** button to confirm the selection and open the submenu.
05) Press the **UP/DOWN** buttons to set the intensity of each LED color. The adjustment range is 0–255, from low to high intensity.
06) Press the **SET** button to confirm the value.

6.6.4. Auto

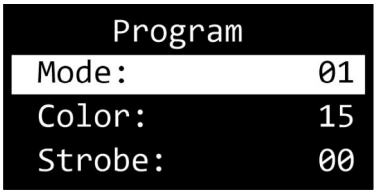
In this menu you can activate auto-run mode.

01) Press the **UP/DOWN** buttons to select one of the 2 options:
- Yes: Activate auto-run mode. The device runs the built-in programs (02–16) in a sequence with the speed and the strobe frequency selected in the Program submenu
- No: Cancel the selection or stop the auto program

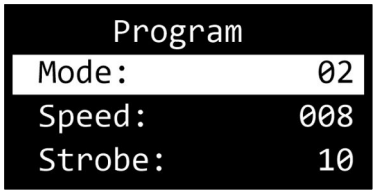
02) Press the **SET** button to confirm the selection.

6.6.5. Program

In this menu you can select a preset color or a built-in program.



Mode 01



Mode 02–17

01) Press the **UP/DOWN** buttons to select one of the following options:
- Mode: Select static colors mode (Mode 01) or one of the 16 built-in chases (Mode 02–17)
- Color: Select one of the 15 preset colors (available for Mode 01 only). The selection range is 1–15
- Speed: Adjust the speed of the built-in program (available for Mode 02–17). The adjustment range is 1–99, from slow to fast
- Strobe: Add strobe effect (Mode 01–17). The adjustment range is 0–99, from off to high frequency

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

6.6.6. Slave

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

01) Press the **UP/DOWN** buttons to select one of the 2 options:
- Yes: The device is set as a slave device
- No: The device is set as the master device

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

6.6.7. Settings

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



01) Press the **UP/DOWN** buttons to select one of the following options:
- Patch (see 6.6.7.1. Patch)
- Curves Select (see 6.6.7.2. Curves Select)
- Display (see 6.6.7.3. Display Invert)
- PWM Frequency: Set the PWM Frequency (Pulse Width Modulation): 12K (12000 Hz), 6K (6000 Hz), 3K (3000 Hz), 1K (1000 Hz)
- DMX Fail (see 6.6.7.4. DMX Fail)
- Fan Mode (see 6.6.7.5. Fan Mode)
- Backlight Time: Set whether the backlight of the display remains on (On) or turns off after the selected amount of time: 5 s, 10 s, 20 s, or 30 s
- Lock (see 6.6.7.6. Lock)
- Key Backlight: Turn the backlight of the 4 touch buttons (**MODE**, **SET**, **UP**, **DOWN**) on (On) or off (Off)
- Factory: Restore the default factory settings of the device (Yes/No)

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

6.6.7.1. Patch

In this submenu you can patch pods to the 8 **pod connectors OUT (14)** on the controller.

01) Press the **UP/DOWN** buttons to select one of the options:
- Default: Select the default patch settings (Yes/No). The default patch settings are Output 1 = Pod 1, Output 2 = Pod 2, etc.
- Output 1–8 (see 6.6.7.1.1. Output 1–8)

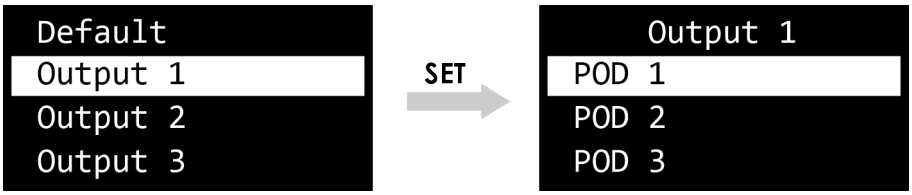
02) Press the **SET** button to confirm the selection.

Note:

The numbering of the pods in the DMX chart corresponds to the default settings. If you patch the pods in a different way (see 6.6.7.1.1. Output 1–8), controlling Pod 1 via DMX means controlling Output 1 of the controller and the respective pod patched to it.

6.6.7.1.1. Output 1–8

In this submenu you can manually patch the pods to the 8 **pod connectors OUT (14)** on the controller.



01) Press the **UP/DOWN** buttons to select one of the 8 outputs (Output 1–8).
02) Press the **SET** button to confirm the selection and open the submenu.
03) Press the **UP/DOWN** buttons to select one of the 8 pods (Pod 1–8).
04) Press the **SET** button to confirm the selection.

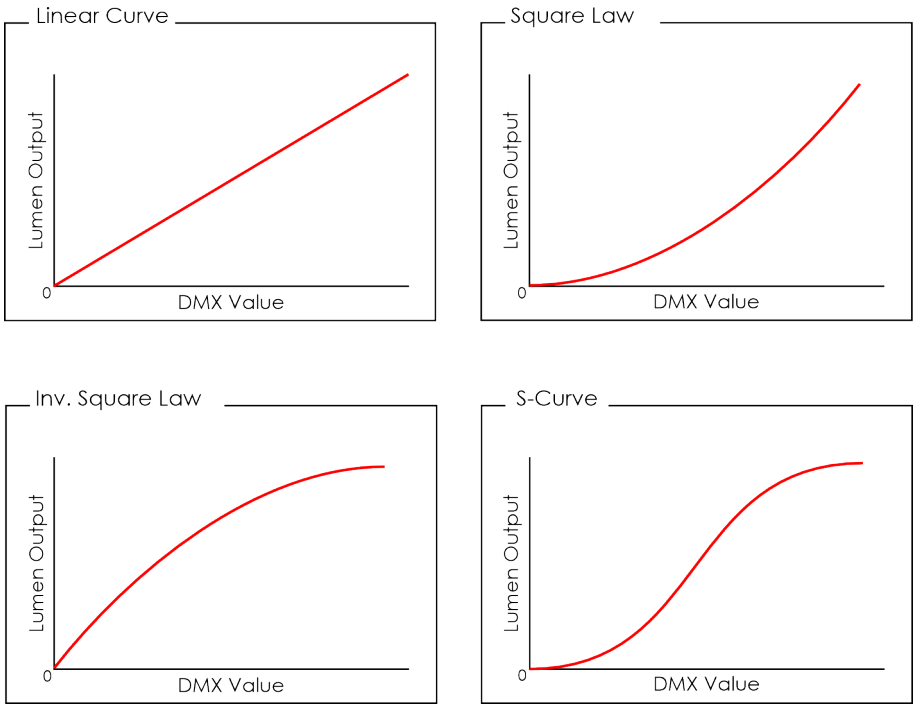
6.6.7.2. Curves Select

In this submenu you can set dimming curves.

01) Press the **UP/DOWN** buttons to select one of the 4 options:
- Linear
- Square Law
- Inv. Square law
- S-type

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

Figure 14



6.6.7.3. Display Invert

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

Press 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°

Note:

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

6.6.7.4. DMX Fail

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

01) Press the **UP/DOWN** buttons to select one of the 4 options:
- Off: The device blacks out the light output
- Hold: The device uses the last DMX signal correctly received
- Manual: The device uses the values selected in manual mode
- Program: The device uses the last used built-in program

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

6.6.7.5. Fan Mode

In this submenu you can set the speed of the fans of the 8 pods.

01) Press the **UP/DOWN** buttons to select one of the 3 options:
- Auto
- High
- Off

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

Note:

You cannot change the settings of the PSU fan of the controller.

6.6.7.6. Lock

In this submenu you can activate the display lock.

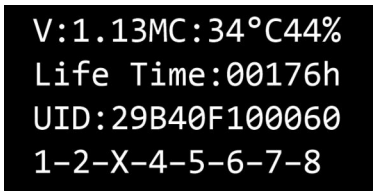
01) Press the **UP/DOWN** buttons to toggle between On and Off:
- On: The display lock is on. The display is locked after 30 s of inactivity. After 5 s more the display turns off. To access the main menu, enter the password. The default password is pressing the **MODE** and **SET** buttons for 3 s at the same time. When the display lock is on, there is a lock symbol at the top right corner of the display on the start screen
- Off: The access to the main menu remains unlocked after the display turns off

02) Press the **SET** button to confirm the choice.

6.6.8. Information

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

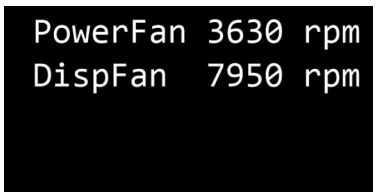
Press the **UP/DOWN** buttons to navigate through the information screens:



- Firmware version
- MC: temperature and humidity of the mainboard of the controller
- Life time: operating hours of the LEDs
- UID: Unique Identification of the device
- Connection status: ports that are not connected show X



- L1–L8: temperature of the LEDs and the PCB of the connected pods and humidity percentage in the housing of the pods



- PowerFan: rotating speed of the fan of the controller
- DispFan: rotating speed of the fan of the controller display

6.7. DMX Channels

6.7.1. DMX Channels Overview

6.7.1.1. POD and Ring LEDs Control per DMX Personality

	Strobe All 4CH	Strobe POD 32CH	Basic All 8CH	Basic POD 64CH	Pixel All 52CH	Pixel POD 416CH	FX All 11CH	FX POD 88CH
Strobe LED	All 8 pods	Individual per pod	All 8 pods	Individual per pod	All 8 pods	Individual per pod	All 8 pods	Individual per pod
Ring LEDs	All 8 pods	Individual per pod	All 8 pods	Individual per pod	Individual per pod and per LED	Individual per pod, per LED and per LED color	All 8 pods	Individual per pod

6.7.1.2. Functions per DMX Personality

	Strobe All 4CH	Strobe POD 32CH	Basic All 8CH	Basic POD 64CH	Pixel All 52CH	Pixel POD 416CH	FX All 11CH	FX POD 88CH
Strobe LED Dimmer								
Strobe flash duration (Strobe LED and Ring LEDs)								
Strobe speed (Strobe LED and Ring LEDs)								
Strobe type (Strobe LED and Ring LEDs)								
Ring LEDs: Red								
Ring LEDs: Green								
Ring LEDs: Blue								
Ring LEDs: White								
Ring LEDs: Static colors								
Ring LEDs: Patterns								
Ring LEDs: Pattern rotation								

6.7.2. Strobe All (4 CH), Basic All (8 CH), FX All (11 CH)

Strobe All 4CH	Basic All 8CH	FX All 11CH	Function	Value	Setting
1	1	1	**Strobe LED Dimmer**	000–255	From low to high intensity (0–100 %)
2	2	2	**Strobe flash duration**	000–255	7–500 ms
3	3	3	**Strobe speed**	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
4	4	4	**Strobe type**	000–004	Linear strobe
				006–042	Ramp up
				043–085	Ramp down
				086–128	Ramp up to ramp down
				129–150	Random all LEDs
				151–171	Random individual LEDs
				172–214	Lightning strobe
				215–255	Spikes (flash over low light)
	5	5	**Ring LEDs: Red**	000–255	From low to high intensity (0–100 %)
	6	6	**Ring LEDs: Green**	000–255	From low to high intensity (0–100 %)
	7	7	**Ring LEDs: Blue**	000–255	From low to high intensity (0–100 %)
	8	8	**Ring LEDs: White**	000–255	From low to high intensity (0–100 %)
		9	**Ring LEDs: Static colors**	000–013	Full
				014–026	White
				027–039	Red
				040–052	Green
				053–065	Blue
				066–078	Yellow
				079–091	Magenta
				092–104	Cyan
				105–117	Pink
				118–130	Light Pink
				131–143	Light Blue
				144–156	Turquoise
				157–169	Light Green
				170–182	Dark Yellow
				183–195	Orange
				196–208	Light Orange
				209–221	Light Red
				222–234	CTO
				235–247	CTB
				248–255	Reserved
		10	**Ring LEDs: Patterns**	000–030	No function
				031–055	Pattern 1
				056–080	Pattern 2
				081–105	Pattern 3
				106–130	Pattern 4
				131–155	Pattern 5
				156–180	Pattern 6
				181–205	Pattern 7
				206–230	Pattern 8
				231–255	Pattern 9
		11	**Ring LEDs: Pattern rotation**	000–044	Pattern indexing

Strobe All 4CH	Basic All 8CH	FX All 11CH	Function	Value	Setting
				045–125	Clockwise rotation, from fast to slow
				126–129	No function
				130–210	Counterclockwise rotation, from slow to fast
				211–255	45° bounce, from slow to fast

6.7.3. Strobe POD (32 CH)

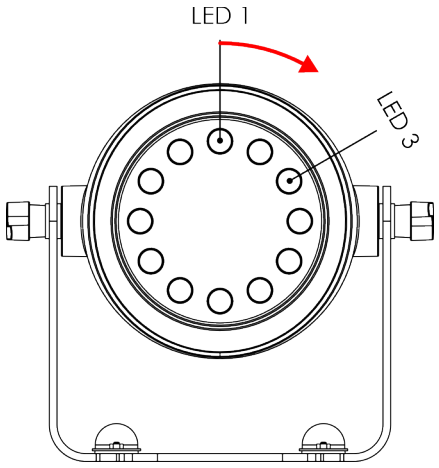
Strobe POD 32CH	POD	Function	Value	Setting
1	POD 1	Strobe LED Dimmer	000–255	From low to high intensity (0–100 %)
2	POD 1	Strobe flash duration	000–255	7–500ms
3	POD 1	Strobe speed	000–004	No function
			005–255	From slow to fast (0,2–20 Hz)
4	POD 1	Strobe type	000–004	Linear strobe
			006–042	From low to high frequency
			043–085	From high to low frequency
			086–128	From high to low to high frequency
			129–150	Random all LEDs
			151–171	Random individual LEDs
			172–214	Lightning strobe
			215–255	Spikes (flash over low light)
5	POD 2	Strobe LED Dimmer	000–255	From low to high intensity (0–100 %)
6	POD 2	Strobe flash duration	000–255	7–500ms
7	POD 2	Strobe speed	000–004	No function
			005–255	From slow to fast (0,2–20 Hz)
8	POD 2	Strobe type	000–004	Linear strobe
			006–042	From low to high frequency
			043–085	From high to low frequency
			086–128	From high to low to high frequency
			129–150	Random all LEDs
			151–171	Random individual LEDs
			172–214	Lightning strobe
			215–255	Spikes (flash over low light)
[...]				
29	POD 8	Strobe LED Dimmer	000–255	From low to high intensity (0–100 %)
30	POD 8	Strobe flash duration	000–255	7–500ms
31	POD 8	Strobe speed	000–004	No function
			005–255	From slow to fast (0,2–20 Hz)
32	POD 8	Strobe type	000–004	Linear strobe
			006–042	From low to high frequency
			043–085	From high to low frequency
			086–128	From high to low to high frequency
			129–150	Random all LEDs
			151–171	Random individual LEDs
			172–214	Lightning strobe
			215–255	Spikes (flash over low light)

Note:

The numbering of the pods in the DMX chart corresponds to the default patch settings (see 6.6.7.1. Patch on page 31). If you patch the pods in a different way (see 6.6.7.1.1. Output 1–8 on page 31), controlling Pod 1 via DMX means controlling Output 1 of the controller and the respective pod patched to it.

6.7.4. Pixel All (52 CH)

Figure 15



Pixel All 52CH	Ring LED	Function	Value	Setting
1		**Strobe LED Dimmer**	000–255	From low to high intensity (0–100 %)
2		**Strobe flash duration**	000–255	7–500ms
3		**Strobe speed**	000–004	No function
			005–255	From slow to fast (0,2–20 Hz)
4		**Strobe type**	000–004	Linear strobe
			006–042	From low to high frequency
			043–085	From high to low frequency
			086–128	From high to low to high frequency
			129–150	Random all LEDs
			151–171	Random individual LEDs
			172–214	Lightning strobe
			215–255	Spikes (flash over low light)
5	**LED 1**	**Red**	000–255	From low to high intensity (0–100 %)
6	**LED 1**	**Green**	000–255	From low to high intensity (0–100 %)
7	**LED 1**	**Blue**	000–255	From low to high intensity (0–100 %)
8	**LED 1**	**White**	000–255	From low to high intensity (0–100 %)
9	**LED 2**	**Red**	000–255	From low to high intensity (0–100 %)
10	**LED 2**	**Green**	000–255	From low to high intensity (0–100 %)
11	**LED 2**	**Blue**	000–255	From low to high intensity (0–100 %)
12	**LED 2**	**White**	000–255	From low to high intensity (0–100 %)
			[...]	
49	**LED 12**	**Red**	000–255	From low to high intensity (0–100 %)
50	**LED 12**	**Green**	000–255	From low to high intensity (0–100 %)
51	**LED 12**	**Blue**	000–255	From low to high intensity (0–100 %)
52	**LED 12**	**White**	000–255	From low to high intensity (0–100 %)

6.7.5. Basic POD (64 CH) and FX POD (88 CH)

Basic POD 64CH	FX POD 88CH	POD	Function	Value	Setting
1	1	POD 1	Strobe LED Dimmer	000–255	From low to high frequency
2	2	POD 1	Strobe flash duration	000–255	7–500ms
3	3	POD 1	Strobe speed	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
4	4	POD 1	Strobe type	000–004	Linear strobe
				006–042	From low to high frequency
				043–085	From high to low frequency
				086–128	From high to low to high frequency
				129–150	Random all LEDs
				151–171	Random individual LEDs
				172–214	Lightning strobe
				215–255	Spikes (flash over low light)
5	5	POD 1	Ring LEDs: Red	000–255	From low to high intensity (0–100 %)
6	6	POD 1	Ring LEDs: Green	000–255	From low to high intensity (0–100 %)
7	7	POD 1	Ring LEDs: Blue	000–255	From low to high intensity (0–100 %)
8	8	POD 1	Ring LEDs: White	000–255	From low to high intensity (0–100 %)
	9	POD 1	Ring LEDs: Static colors	000–013	Full
				014–026	White
				027–039	Red
				040–052	Green
				053–065	Blue
				066–078	Yellow
				079–091	Magenta
				092–104	Cyan
				105–117	Pink
				118–130	Light Pink
				131–143	Light Blue
				144–156	Turquoise
				157–169	Light Green
				170–182	Dark Yellow
				183–195	Orange
				196–208	Light Orange
				209–221	Light Red
				222–234	CTO
				235–247	CTB
				248–255	Reserved
	10	POD 1	Ring LEDs: Patterns	000–030	No function
				031–055	Pattern 1
				056–080	Pattern 2
				081–105	Pattern 3
				106–130	Pattern 4
				131–155	Pattern 5
				156–180	Pattern 6
				181–205	Pattern 7
				206–230	Pattern 8
				231–255	Pattern 9
	11	POD 1	Ring LEDs: Pattern rotation	000–044	Pattern indexing

Basic POD 64CH	FX POD 88CH	POD	Function	Value	Setting
				045–125	Clockwise rotation, from fast to slow
				126–129	No function
				130–210	Counterclockwise rotation, from slow to fast
				211–255	45° bounce, from slow to fast
9	**12**	**POD 2**	**Strobe LED Dimmer**	000–255	From low to high frequency
10	**13**	**POD 2**	**Strobe flash duration**	000–255	7–500ms
11	**14**	**POD 2**	**Strobe speed**	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
12	**15**	**POD 2**	**Strobe type**	000–004	Linear strobe
				006–042	From low to high frequency
				043–085	From high to low frequency
				086–128	From high to low to high frequency
				129–150	Random all LEDs
				151–171	Random individual LEDs
				172–214	Lightning strobe
				215–255	Spikes (flash over low light)
13	**16**	**POD 2**	**Ring LEDs: Red**	000–255	From low to high intensity (0–100 %)
14	**17**	**POD 2**	**Ring LEDs: Green**	000–255	From low to high intensity (0–100 %)
15	**18**	**POD 2**	**Ring LEDs: Blue**	000–255	From low to high intensity (0–100 %)
16	**19**	**POD 2**	**Ring LEDs: White**	000–255	From low to high intensity (0–100 %)
	20	**POD 2**	**Ring LEDs: Static colors**	000–013	Full
				014–026	White
				027–039	Red
				040–052	Green
				053–065	Blue
				066–078	Yellow
				079–091	Magenta
				092–104	Cyan
				105–117	Pink
				118–130	Light Pink
				131–143	Light Blue
				144–156	Turquoise
				157–169	Light Green
				170–182	Dark Yellow
				183–195	Orange
				196–208	Light Orange
				209–221	Light Red
				222–234	CTO
				235–247	CTB
				248–255	Reserved
	21	**POD 2**	**Ring LEDs: Patterns**	000–030	No function
				031–055	Pattern 1
				056–080	Pattern 2
				081–105	Pattern 3
				106–130	Pattern 4
				131–155	Pattern 5
				156–180	Pattern 6
				181–205	Pattern 7

Basic POD 64CH	FX POD 88CH	POD	Function	Value	Setting
				206–230	Pattern 8
				231–255	Pattern 9
	22	POD 2	Ring LEDs: Pattern rotation	000–044	Pattern indexing
				045–125	Clockwise rotation, from fast to slow
				126–129	No function
				130–210	Counterclockwise rotation, from slow to fast
				211–255	45° bounce, from slow to fast
[...]					
57	78	POD 8	Strobe LED Dimmer	000–255	From low to high frequency
58	79	POD 8	Strobe flash duration	000–255	7–500ms
59	80	POD 8	Strobe speed	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
60	81	POD 8	Strobe type	000–004	Linear strobe
				006–042	From low to high frequency
				043–085	From high to low frequency
				086–128	From high to low to high frequency
				129–150	Random all LEDs
				151–171	Random individual LEDs
				172–214	Lightning strobe
				215–255	Spikes (flash over low light)
61	82	POD 8	Ring LEDs: Red	000–255	From low to high intensity (0–100 %)
62	83	POD 8	Ring LEDs: Green	000–255	From low to high intensity (0–100 %)
63	84	POD 8	Ring LEDs: Blue	000–255	From low to high intensity (0–100 %)
64	85	POD 8	Ring LEDs: White	000–255	From low to high intensity (0–100 %)
	86	POD 8	Ring LEDs: Static colors	000–013	Full
				014–026	White
				027–039	Red
				040–052	Green
				053–065	Blue
				066–078	Yellow
				079–091	Magenta
				092–104	Cyan
				105–117	Pink
				118–130	Light Pink
				131–143	Light Blue
				144–156	Turquoise
				157–169	Light Green
				170–182	Dark Yellow
				183–195	Orange
				196–208	Light Orange
				209–221	Light Red
				222–234	CTO
				235–247	CTB
				248–255	Reserved
	87	POD 8	Ring LEDs: Patterns	000–030	No function
				031–055	Pattern 1
				056–080	Pattern 2
				081–105	Pattern 3

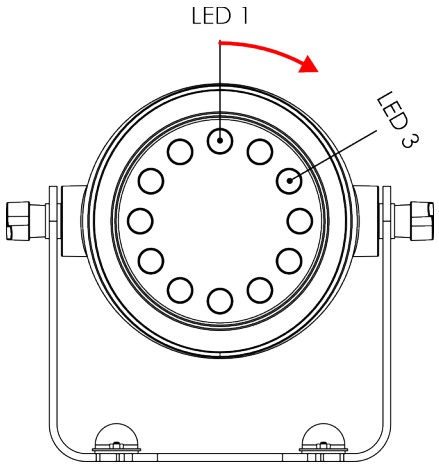
Basic POD 64CH	FX POD 88CH	POD	Function	Value	Setting
				106–130	Pattern 4
				131–155	Pattern 5
				156–180	Pattern 6
				181–205	Pattern 7
				206–230	Pattern 8
				231–255	Pattern 9
	88	POD 8	Ring LEDs: Pattern rotation	000–044	Pattern indexing
				045–125	Clockwise rotation, from fast to slow
				126–129	No function
				130–210	Counterclockwise rotation, from slow to fast
				211–255	45° bounce, from slow to fast

Note:

The numbering of the pods in the DMX chart corresponds to the default patch settings (see 6.6.7.1. Patch on page 31). If you patch the pods in a different way (see 6.6.7.1.1. Output 1–8 on page 31), controlling Pod 1 via DMX means controlling Output 1 of the controller and the respective pod patched to it.

6.7.6. Pixel POD (416 CH)

Figure 16



Pixel POD 416CH	POD	Ring LED	Function	Value	Setting
1	**POD 1**		**Strobe LED Dimmer**	000–255	From low to high intensity (0–100 %)
2	**POD 1**		**Strobe flash duration**	000–255	7–500ms
3	**POD 1**		**Strobe speed**	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
4	**POD 1**		**Strobe type**	000–004	Linear strobe
				006–042	From low to high frequency
				043–085	From high to low frequency
				086–128	From high to low to high frequency
				129–150	Random all LEDs
				151–171	Random individual LEDs
				172–214	Lightning strobe
				215–255	Spikes (flash over low light)
5	**POD 1**	**LED 1**	**Red**	000–255	From low to high intensity (0–100 %)
6	**POD 1**	**LED 1**	**Green**	000–255	From low to high intensity (0–100 %)
7	**POD 1**	**LED 1**	**Blue**	000–255	From low to high intensity (0–100 %)
8	**POD 1**	**LED 1**	**White**	000–255	From low to high intensity (0–100 %)
9	**POD 1**	**LED 2**	**Red**	000–255	From low to high intensity (0–100 %)
10	**POD 1**	**LED 2**	**Green**	000–255	From low to high intensity (0–100 %)
11	**POD 1**	**LED 2**	**Blue**	000–255	From low to high intensity (0–100 %)
12	**POD 1**	**LED 2**	**White**	000–255	From low to high intensity (0–100 %)
			[...]		
49	**POD 1**	**LED 12**	**Red**	000–255	From low to high intensity (0–100 %)
50	**POD 1**	**LED 12**	**Green**	000–255	From low to high intensity (0–100 %)
51	**POD 1**	**LED 12**	**Blue**	000–255	From low to high intensity (0–100 %)
52	**POD 1**	**LED 12**	**White**	000–255	From low to high intensity (0–100 %)
53	**POD 2**		**Strobe LED Dimmer**	000–255	From low to high intensity (0–100 %)
54	**POD 2**		**Strobe flash duration**	000–255	7–500ms
55	**POD 2**		**Strobe speed**	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
56	**POD 2**		**Strobe type**	000–004	Linear strobe
				006–042	From low to high frequency
				043–085	From high to low frequency
				086–128	From high to low to high frequency
				129–150	Random all LEDs

Pixel POD 416CH	POD	Ring LED	Function	Value	Setting
				151–171	Random individual LEDs
				172–214	Lightning strobe
				215–255	Spikes (flash over low light)
57	**POD 2**	**LED 1**	**Red**	000–255	From low to high intensity (0–100 %)
58	**POD 2**	**LED 1**	**Green**	000–255	From low to high intensity (0–100 %)
59	**POD 2**	**LED 1**	**Blue**	000–255	From low to high intensity (0–100 %)
60	**POD 2**	**LED 1**	**White**	000–255	From low to high intensity (0–100 %)
61	**POD 2**	**LED 2**	**Red**	000–255	From low to high intensity (0–100 %)
62	**POD 2**	**LED 2**	**Green**	000–255	From low to high intensity (0–100 %)
63	**POD 2**	**LED 2**	**Blue**	000–255	From low to high intensity (0–100 %)
64	**POD 2**	**LED 2**	**White**	000–255	From low to high intensity (0–100 %)
			[...]		
101	**POD 2**	**LED 12**	**Red**	000–255	From low to high intensity (0–100 %)
102	**POD 2**	**LED 12**	**Green**	000–255	From low to high intensity (0–100 %)
103	**POD 2**	**LED 12**	**Blue**	000–255	From low to high intensity (0–100 %)
104	**POD 2**	**LED 12**	**White**	000–255	From low to high intensity (0–100 %)
			[...]		
365	**POD 8**		**Strobe LED Dimmer**	000–255	From low to high intensity (0–100 %)
366	**POD 8**		**Strobe flash duration**	000–255	7–500ms
367	**POD 8**		**Strobe speed**	000–004	No function
				005–255	From slow to fast (0,2–20 Hz)
368	**POD 8**		**Strobe type**	000–004	Linear strobe
				006–042	From low to high frequency
				043–085	From high to low frequency
				086–128	From high to low to high frequency
				129–150	Random all LEDs
				151–171	Random individual LEDs
				172–214	Lightning strobe
				215–255	Spikes (flash over low light)
369	**POD 8**	**LED 1**	**Red**	000–255	From low to high intensity (0–100 %)
370	**POD 8**	**LED 1**	**Green**	000–255	From low to high intensity (0–100 %)
371	**POD 8**	**LED 1**	**Blue**	000–255	From low to high intensity (0–100 %)
372	**POD 8**	**LED 1**	**White**	000–255	From low to high intensity (0–100 %)
373	**POD 8**	**LED 2**	**Red**	000–255	From low to high intensity (0–100 %)
374	**POD 8**	**LED 2**	**Green**	000–255	From low to high intensity (0–100 %)
375	**POD 8**	**LED 2**	**Blue**	000–255	From low to high intensity (0–100 %)
376	**POD 8**	**LED 2**	**White**	000–255	From low to high intensity (0–100 %)
			[...]		
413	**POD 8**	**LED 12**	**Red**	000–255	From low to high intensity (0–100 %)
414	**POD 8**	**LED 12**	**Green**	000–255	From low to high intensity (0–100 %)
415	**POD 8**	**LED 12**	**Blue**	000–255	From low to high intensity (0–100 %)
416	**POD 8**	**LED 12**	**White**	000–255	From low to high intensity (0–100 %)

Note:

The numbering of the pods in the DMX chart corresponds to the default patch settings (see 6.6.7.1. Patch on page 31). If you patch the pods in a different way (see 6.6.7.1.1. Output 1–8 on page 31), controlling Pod 1 via DMX means controlling Output 1 of the controller and the respective pod patched to it.

6.8. RDM Information

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

6.8.1. RDM Details

- Responder ID: 29B4:0F1XXXXX
- Manufacturer's ID: Showtec (Highlite International B.V.)
- Manufacturer Label: Showtec
- Model Description: Controller for Titan Strobe FLEX FX
- Model ID: 241(0F1 hexadecimal)
- Device Label: Controller for Titan Strobe FLEX 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)

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		*	*

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 the power supply and the cables are plugged in
	The 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 6.6.7. Settings on page 30)
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 the defective device, bypass one device at a time until normal operation is restored

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 power cables are not damaged and do not show any material fatigue.

8.2.1. 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) Remove the dust collected on the external surface with dry compressed air and a soft brush.



Attention

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

8.3. Corrective Maintenance

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

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

9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation

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

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

9.2. Instructions for Transportation

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

9.3. Storage

- Clean the device before storing (see 8.2. Preventive Maintenance on page 47).
- Store the device in the original packaging, if possible.

10. Disposal

Correct disposal of this product

Waste Electrical and Electronic Equipment

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

11. Approval

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