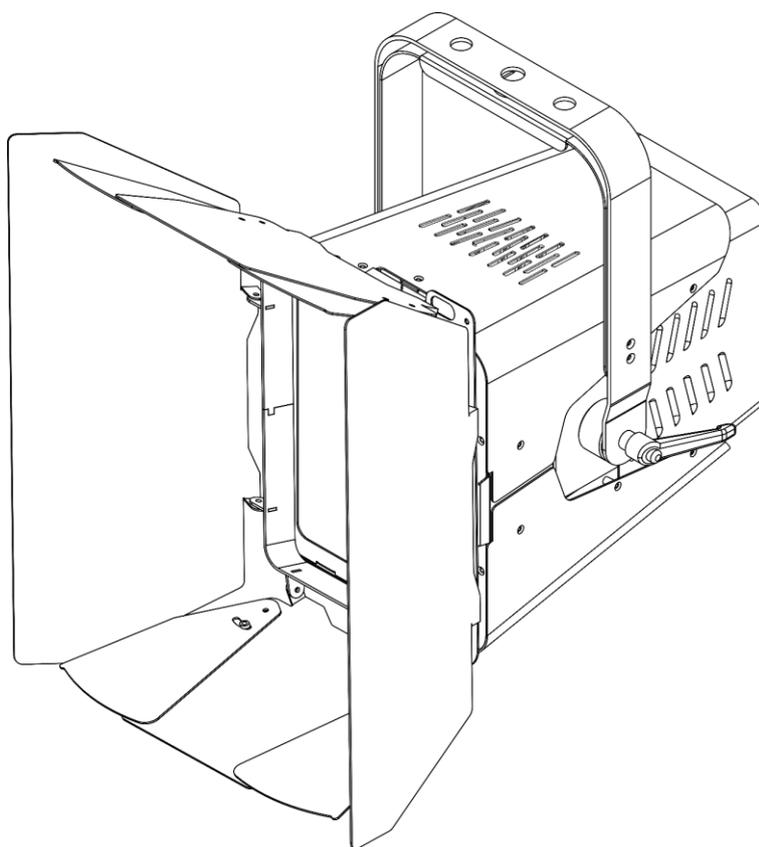




USER MANUAL



ENGLISH

ACT Flood 100 RGBW

V1

Product code: 34041

Preface

Thank you for purchasing this Showtec product.

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

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

This user manual contains information concerning:

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

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

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1. Introduction

1.1. Before Using the Product



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

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

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

Your shipment includes:

- Showtec ACT Flood 100 RGBW
- Schuko to pro-power cable (1,5 m)
- Barndoor
- User manual

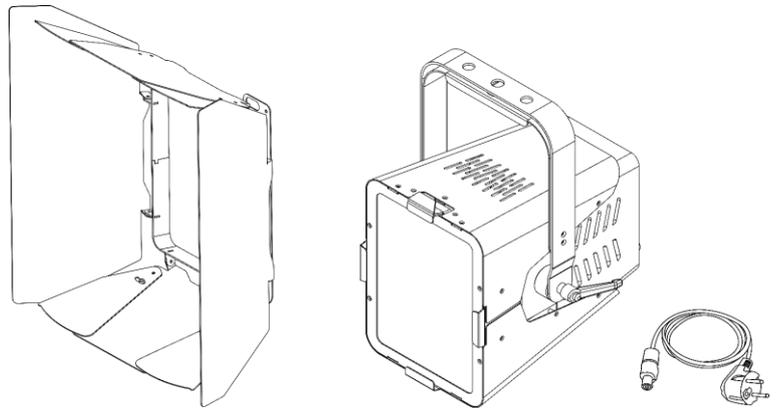


Fig. 01

1.2. Intended Use

This device is intended for professional use as a theater wash effect. It is suitable only for indoor installation. This device is not suitable for households and for general lighting.

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

1.3. Product Lifespan

This device is not designed for permanent operation. Disconnect the device from the electrical power supply when the device is not in operation. This will reduce the wear and will improve the device's lifespan.

1.4. LEDs Lifespan

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

1.5. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons are in bold lettering, for example “Press the **UP/DOWN** buttons”
- References: References to chapters and parts of the device are in bold lettering, for example: “Refer to **2. Safety**”, “turn the **adjustment handle (05)**”
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.6. Symbols and Signal Words

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

Always follow the instructions provided in this user manual.



DANGER

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



WARNING

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



CAUTION

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



Attention

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



Important

Read and observe the instructions in this document.



Electrical hazard



Provides important information about the disposal of this product.

1.7. Symbols on the Information Label

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

The information label contains the following symbols:



This device is designed for indoor use.



This device 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.

2. Safety



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

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

2.1. Warnings and Safety Instructions



DANGER
Danger for children

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

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



DANGER
Electric shock caused by dangerous voltage inside

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

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



DANGER
Electric shock caused by short-circuit

This device falls under IEC protection class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not bypass the thermostatic switch or fuses.
- For replacement use fuses of the same type and rating only.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.

**WARNING**
Risk of epileptic shock

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

**Attention**
Power supply

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

**Attention**
General safety

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

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

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

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

**Attention**

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

Make sure that:

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

**Attention**

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

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

2.2. Requirements for the User

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

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

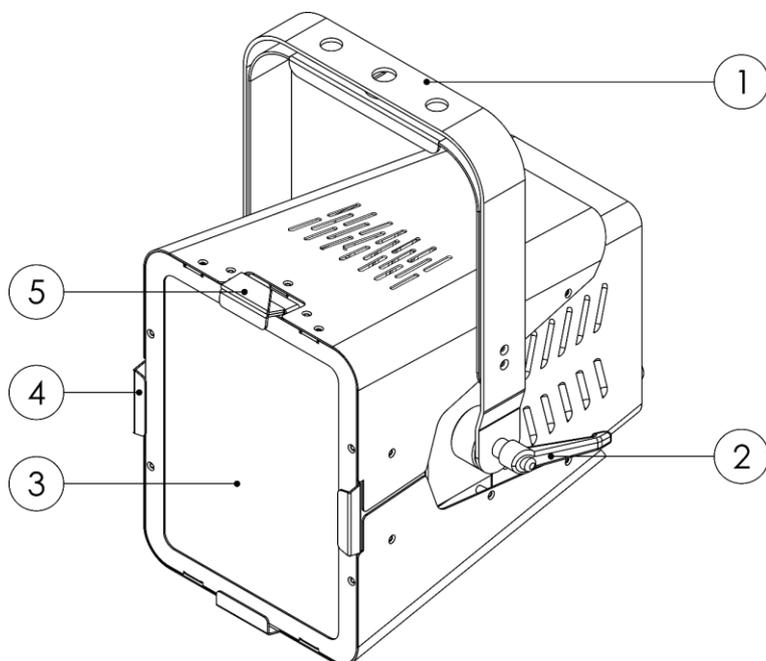
Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

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

3. Description of the Device

The Showtec ACT Flood 100 RGBW is a compact, yet powerful floodlight for indoor installation in theatres with an asymmetric high-grade reflector with a beam angle of 90° by 105°. The device is delivered with an 8-leaf barndoor.

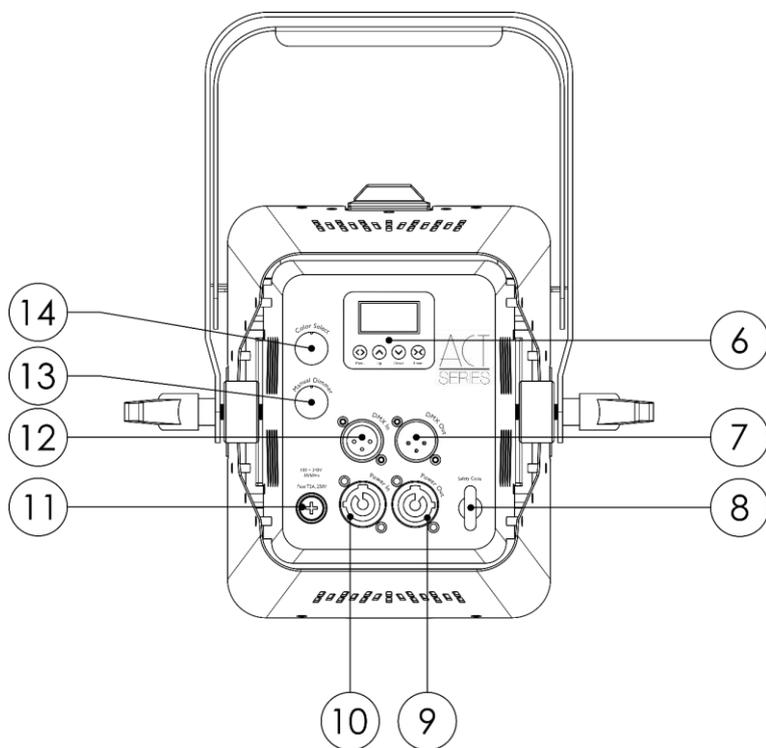
3.1. Front View



- 01) Mounting bracket
- 02) 2 x Adjustment handles
- 03) Lens
- 04) 3 x Color frame holders
- 05) Color frame clip

Fig. 02

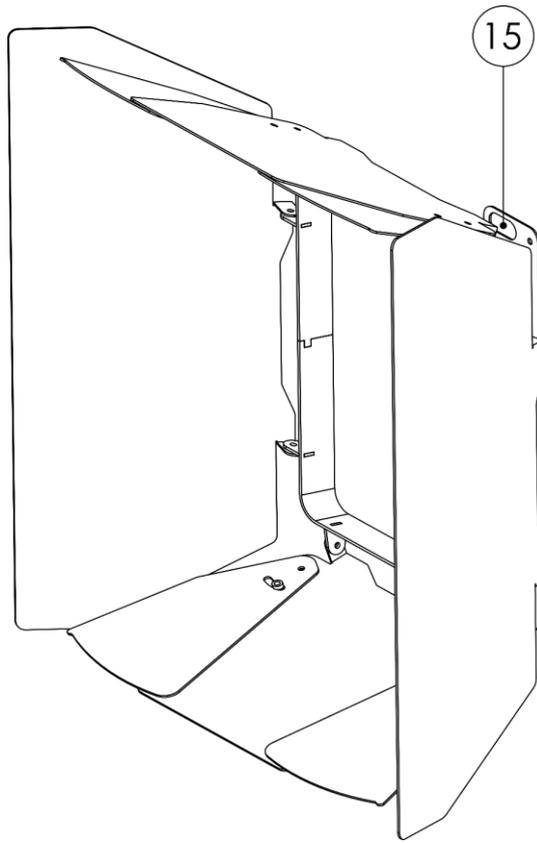
3.2. Back View



- 06) Control panel: OLED display and control buttons
- 07) 3-pin DMX signal connector OUT
- 08) Safety eye
- 09) Pro-power connector OUT 100–240 V, 50/60 Hz (Gray)
- 10) Pro-power connector IN 100–240 V, 50/60 Hz (Blue)
- 11) Fuse T2 A/250 V AC
- 12) 3-pin DMX signal connector IN
- 13) Manual dimmer control
- 14) Preset colors control

Fig. 03

3.3. Barndoor



15) Safety eye (barndoor)

Fig. 04

3.4. Product Specifications

Model:	ACT Flood 100 RGBW	
Electrical:		
Input voltage:	100–240 V AC, 50/60 Hz	
Power consumption:	100 W	
Fuse:	T2 A, 250 V	
Physical:		
Dimensions:	280 x 255 x 315 mm (L x W x H) (without the barndoor)	
Weight:	6,87 kg (with the barndoor)	
Optics:		
Light source:	103 W Quad (RGBW) LED	
Dimmer:	0–100 %	
Strobe:	0–20 Hz	
Beam angle:	90° by 105°	
Output:	634 lx @ 2 m	
	282 lx @ 3 m	
	101 lx @ 5 m	
CRI:	75	
CCT:	2800–10000 K	
Refresh rate:	1100 Hz	
Operation and control:		
Control:	Stand-alone (auto, manual) DMX-512	
DMX channels:	4, 7, 11 channels	
Control panel:	OLED display and buttons	
Manual operation:	Preset colors and preset color temperatures Dimmer	
Connections:		
Power connections:	Pro-power connectors IN/OUT	
Data connections:	3-pin DMX connectors IN/OUT	
Signal pin OUT:	Pin 1 (ground), pin 2 (-), pin 3 (+)	
Construction:		
Housing:	Aluminum	
Color:	Black	
Built-in microphone:	Yes	
IP rating:	IP20	
Cooling:	Axial fan	
Thermal:		
Maximum ambient temperature t_a :	40 °C	
Minimum distance:		
Minimum distance from flammable surfaces:	0,5 m	

3.5. Dimensions

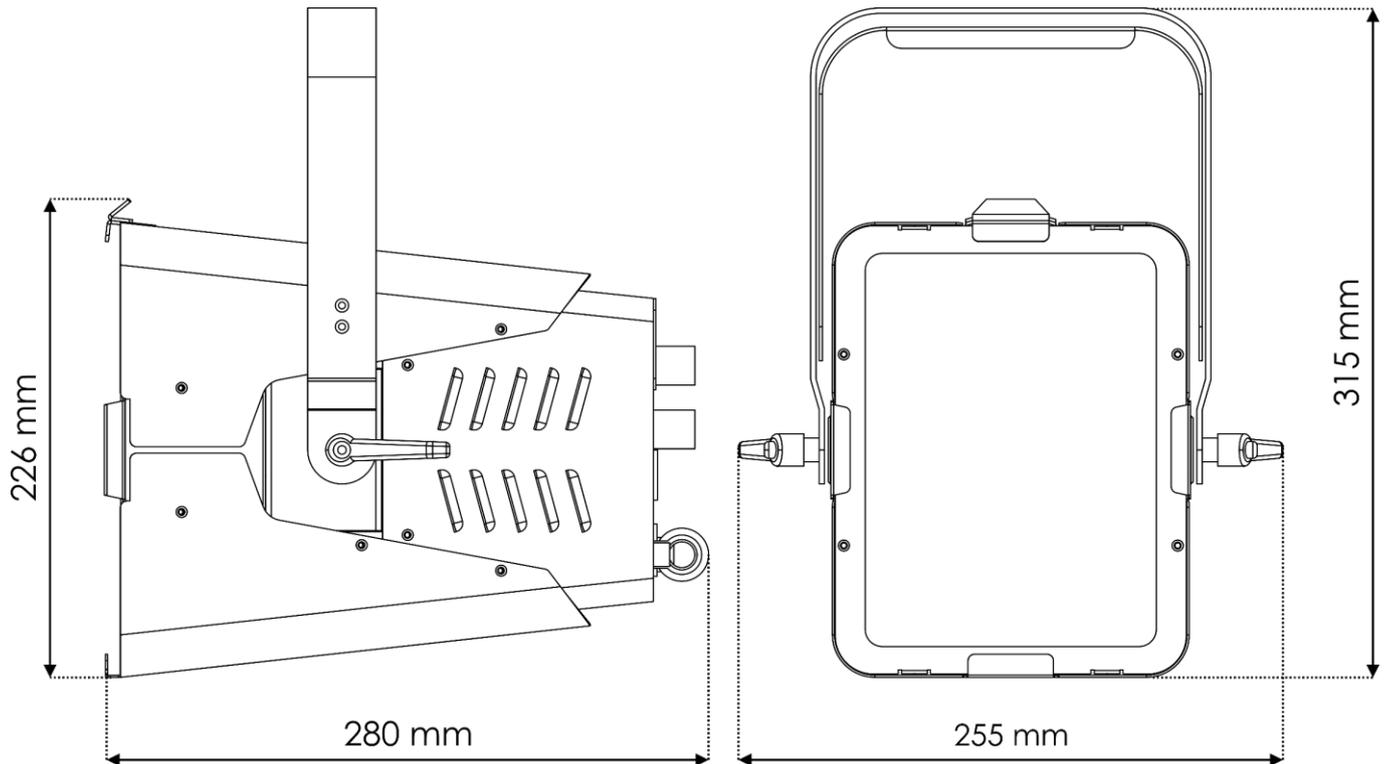


Fig. 05

4. Installation

4.1. Safety Instructions for Installation



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

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

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

4.2. Personal Protective Equipment

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

4.3. Installation Site Requirements

- The device can be used only indoors.
- The device can be mounted to a truss or another rigging structure in any orientation.
- The minimum distance to other objects must be bigger than 0,5 m.
- The maximum ambient temperature $t_a = 40\text{ °C}$ must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C .

4.4. Rigging

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



CAUTION

Restrict the access under the work area during rigging and/or derigging.

To mount the device, follow the steps below:

- 01) Use a clamp to attach the device to the supporting structure, as shown in Fig. 06. Make sure that the device cannot move freely.
- 02) Secure the device with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the device. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. Put the safety cable through the **safety eye (08)**, as shown in Fig. 06.
- 03) If the barndoor is installed, secure the barndoor to the overhead structure with an appropriate secondary attachment, for example a safety cable. Put the safety cable through the **safety eye (15)** of the barndoor, as shown in Fig. 06.

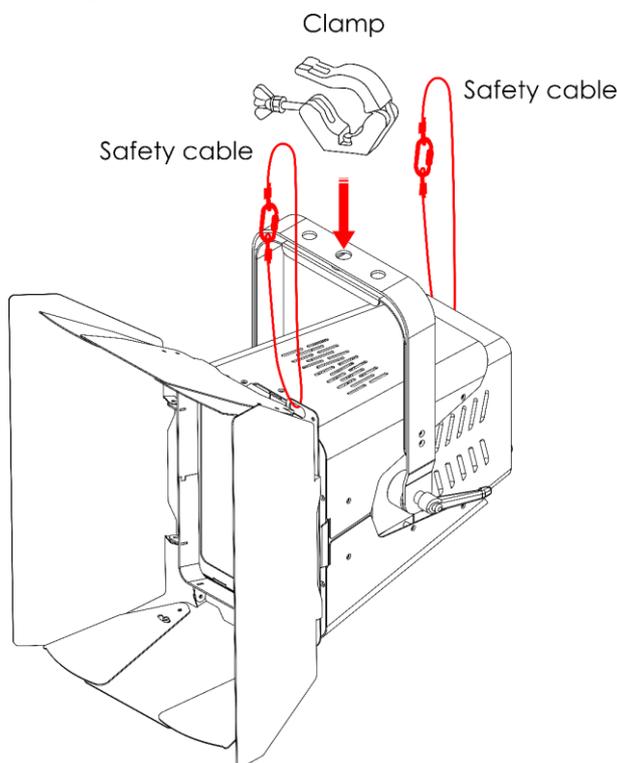


Fig. 06

4.5. Angle Adjustment

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

- 01) Turn the 2 **adjustment handles (02)** counterclockwise to release them.
- 02) Tilt the device at the desired angle (see Fig. 07).
- 03) Turn the 2 **adjustment handles (02)** clockwise to tighten them. Make sure that the device cannot move freely after the 2 **adjustment handles (02)** are tightened.

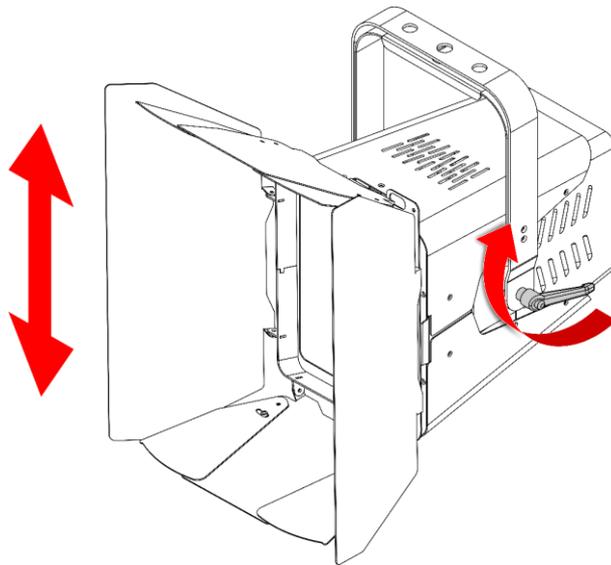


Fig. 07

4.6. Barndoor Installation

The ACT Flood 100 RGBW is delivered with a barndoor. To install the barndoor, follow the steps below:

- 01) Lift the **color frame clip (05)** and flip it backwards (see Fig. 08).
- 02) Insert the barndoor into the **color frame holders (04)** (see Fig. 09).
- 03) Pull the **color frame clip (05)** downwards (see Fig. 10). The barndoor will be locked in position.
- 04) Secure the barndoor to the overhead structure with an appropriate secondary attachment, for example a safety cable. Put the safety cable through the **safety eye (15)** of the barndoor. See **4.4. Rigging** on page 13 for more information.

Note: Make sure that the barndoor is locked in position with the color frame clip before using the device.

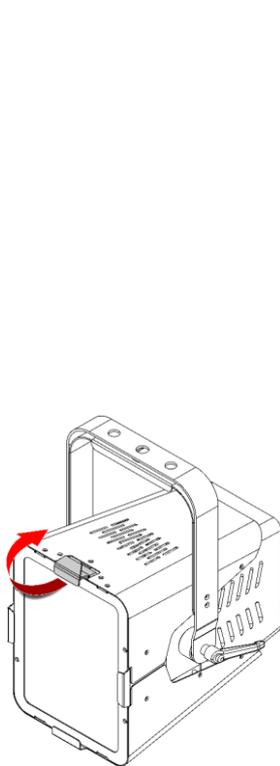


Fig. 08

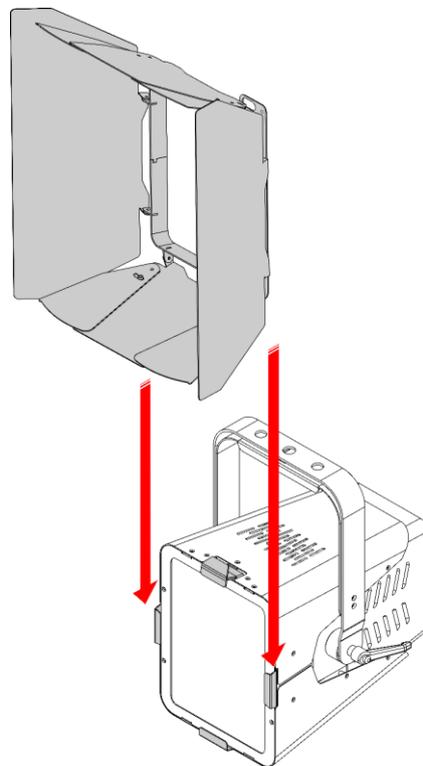


Fig. 09

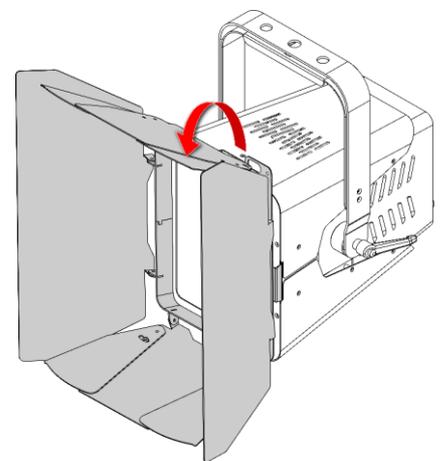


Fig. 10

4.7. Connecting to Power Supply



DANGER
Electric shock caused by short-circuit

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

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

Before connecting the device to the socket-outlet:

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

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

4.8. Power Linking of Multiple Devices

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

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



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

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

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

Maximum recommended number of devices:

- at 100–120 V: 9 devices ACT Flood 100 RGBW
- at 200–240 V: 15 devices ACT Flood 100 RGBW

5. Setup

5.1. Warnings and Precautions

**Attention**

Connect all data cables before supplying power.

Disconnect power supply before connecting or disconnecting data cables.

5.2. Stand-alone Setup

When the ACT Flood 100 RGBW 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 and via the manual controls.

For more information about the control modes, refer to **6.2. Control Modes** on page 19.

For more information about the manual operation, refer to **6.7. Manual Operation** on page 28.

5.3. DMX Connection

5.3.1. DMX-512 Protocol

You need a DMX serial data link to run light shows of one or more devices using a DMX-512 controller or to run synchronized shows of two or more devices set in a master/slave operating mode.

The ACT Flood 100 RGBW has 3-pin DMX signal IN and OUT connectors.

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

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

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

Note:

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

5.3.2. DMX Cables

Shielded twisted-pair cables with 3-pin XLR connectors must be used for reliable DMX connection. You can purchase DMX cables directly from your Highlite International dealer or make your own cables.

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

When you make your own DMX cables, make sure that you connect the pins and wires correctly as shown in Fig. 11.

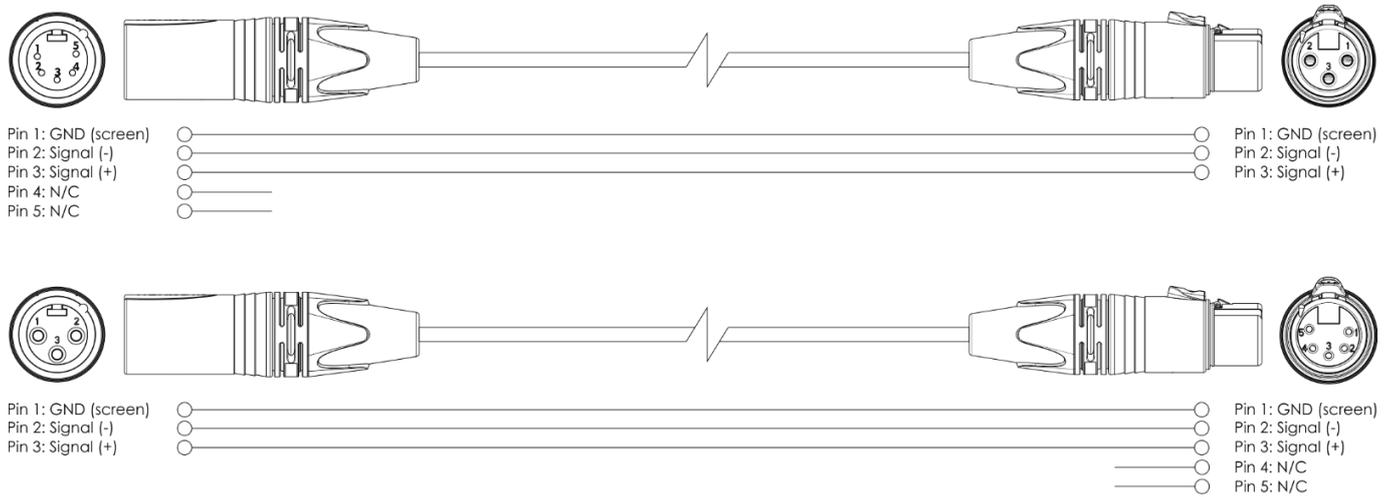


Fig. 11

5.3.3. DMX Linking

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

- 01) Use a 3-pin DMX cable to connect the DMX OUT connector of the lighting controller to the DMX IN connector of the first device.
- 02) Connect the first device's DMX OUT connector to the second device's DMX IN connector with a 3-pin DMX cable.
- 03) Repeat step 2 to connect all devices in a daisy-chain as shown in Fig. 12.
- 04) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device on the data link.

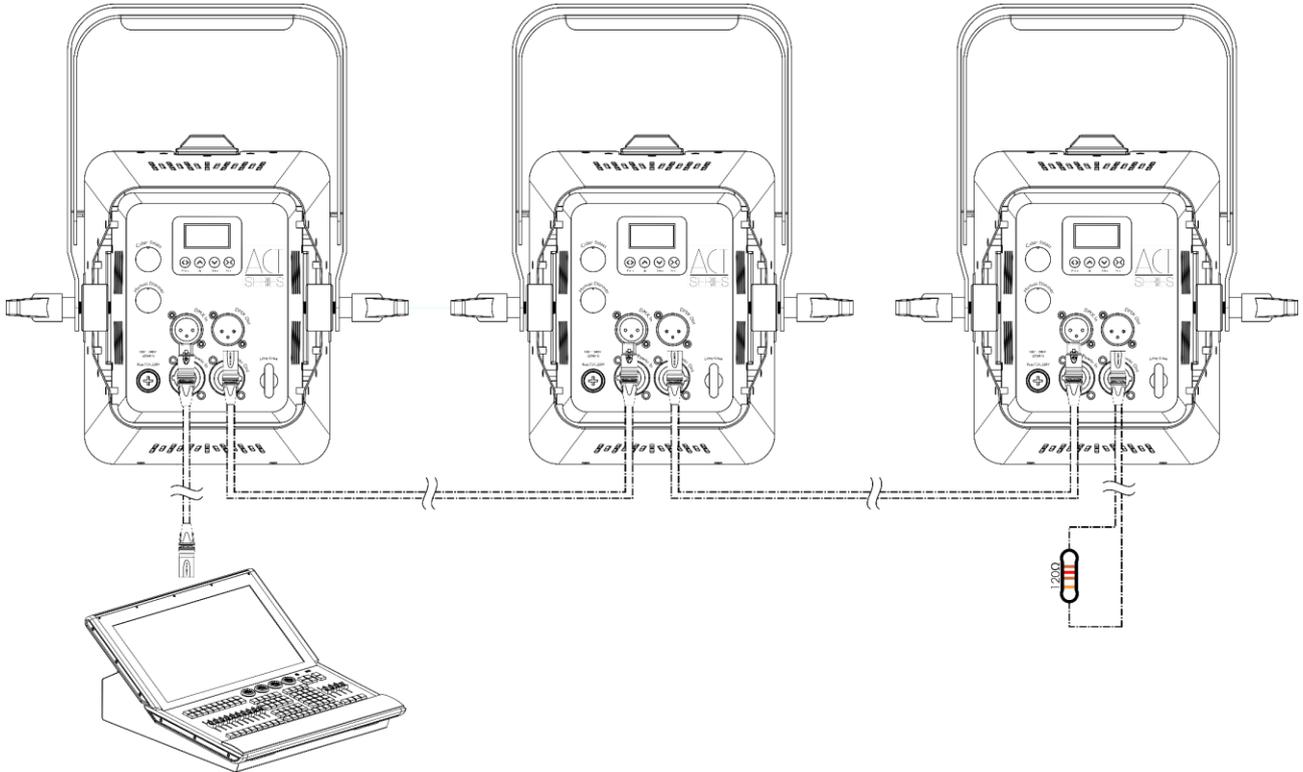


Fig. 12

5.3.4. DMX Addressing

In a setup with multiple devices, make sure that you set the DMX starting address of each device correctly. The ACT Flood 100 RGBW has 3 personalities: 4 channels, 7 channels and 11 channels.

If you want to connect multiple devices on one data link and use them in 11-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 12 (012), as $1 + 11 = 12$.
- 03) Set the starting address of the 3rd device on the data link to 23 (023) as $12 + 11 = 23$.
- 04) Continue assigning the starting addresses of the remaining devices by adding each time 11 to the previous number.

Make sure that you do not have any overlapping channels in order to control each ACT Flood 100 RGBW 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 theater wash effect. It is suitable only for indoor installation. This device is not suitable for households and for general lighting.

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



Attention

Power supply

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

6.2. Control Modes

The ACT Flood 100 RGBW can be operated with a DMX controller and as a stand-alone device.

The ACT Flood 100 RGBW supports the following control modes:

- Stand-alone: Auto operation (built-in chases, color macros), manual operation
- DMX-512: 4 channels, 7 channels and 11 channels

For more information about how to connect the devices, refer to **5. Setup** on pages 16–18.

You can operate the device manually as a stand-alone device in 2 ways:

- from the control panel and the menu, and
- with the **manual dimmer control (13)** and the **preset colors control (14)**. See **6.7. Manual Operation** on page 28 for more information.

To operate the device manually from the control panel and the menu:

- 01) Select Manually Defined in the Mode pop-up submenu. See **6.6.2.1. Mode** on page 25 for more information.
- 02) Adjust the color, strobe, and dimmer values in the Manually Defined submenu. See **6.6.5.1. Manually Defined** on page 27 for more information.

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

- 01) Select Auto in the Mode settings pop-up submenu. See **6.6.2.1. Mode** on page 25.
- 02) Select one of the 64 color macros or one of the 9 built-in chases in the Show Chase pop-up submenu. See **6.6.2.2. Show Chase** on page 25 for more information.

To operate the device with a DMX controller:

- 01) Set the DMX starting address of the device in the DMX Address menu. See **6.6.1.1. DMX Address** on page 23 for more information.
- 02) Select the behavior of the device in case there is no DMX signal in the DMX Fail pop-up submenu. See **6.6.1.3. DMX Fail** on page 24.
- 03) Select the DMX channel mode in the DMX channel mode menu. See **6.6.1.2. DMX Channel Mode** on page 23 for more information. See **6.8. DMX Channels** on pages 29–30 for complete overview of all DMX channels.

6.3. Control Panel

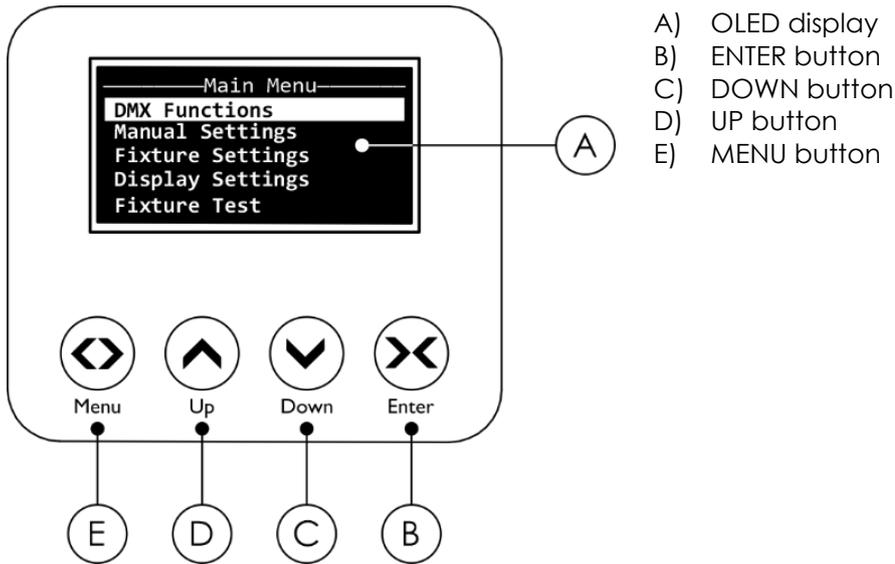


Fig. 13

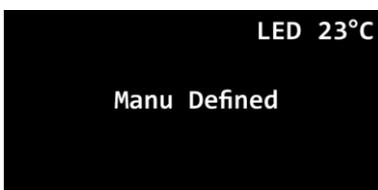
- Use the **MENU** button to exit the current submenu, to return to the Main Menu and to return to the start screen.
- Use the **UP/DOWN** buttons to navigate through the menus or to increase/decrease numeric values.
- Use the **ENTER** button to open the desired menu, to confirm your choice or to set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

6.4. Start-up

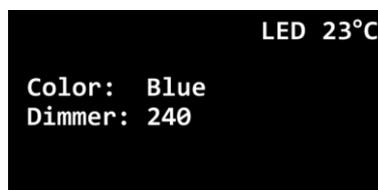
Upon start-up the display will show a splash screen with the name of the device:



Immediately afterwards the display will show the start screen. The start screen provides information about the control and operation modes of the device and the temperature of the LEDs, for example:



Manual operation (from the control panel and the menu)



Manual operation (color: blue, dimmer: 240)

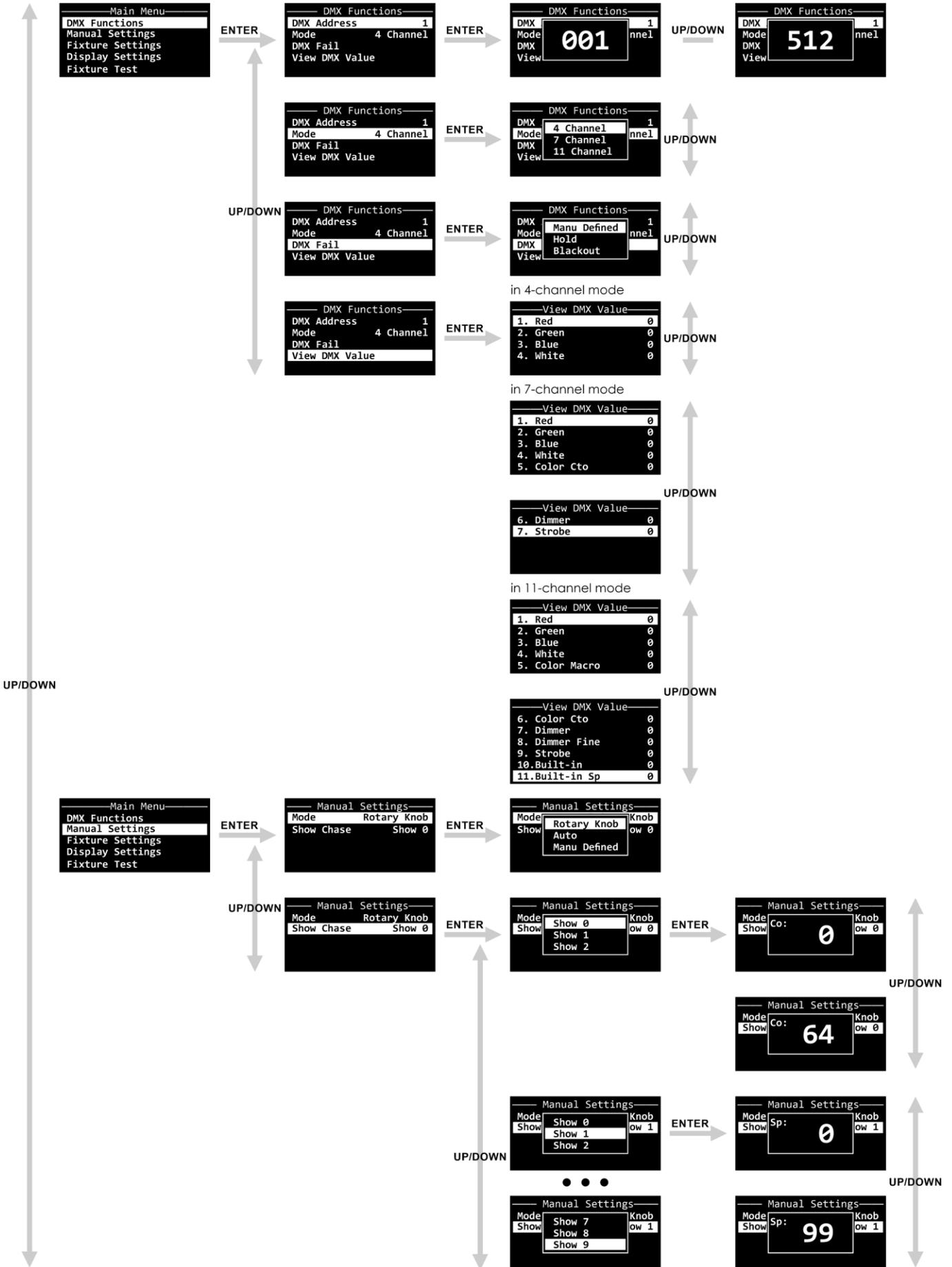


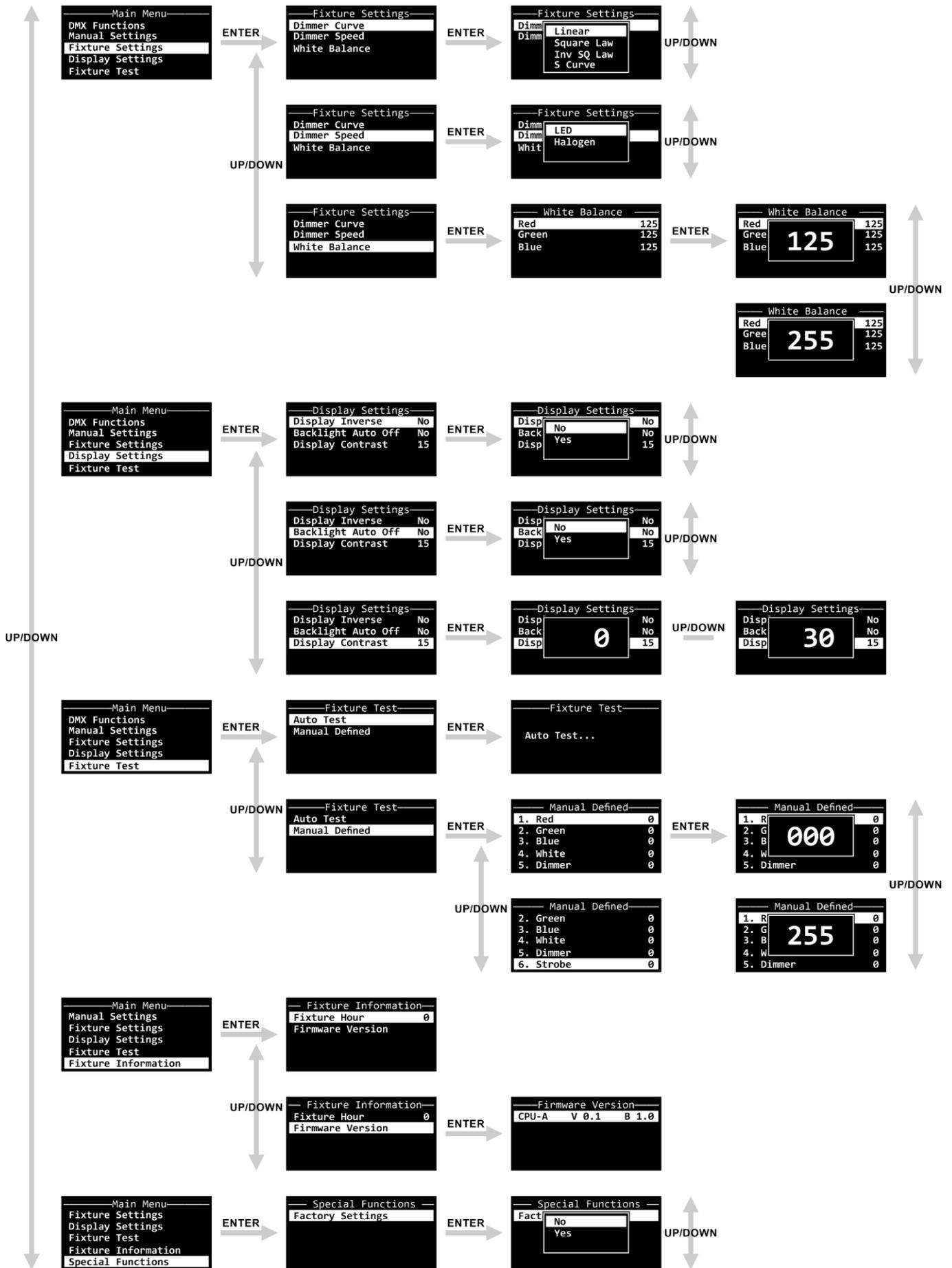
11-channel DMX mode with starting address 001

Note:

If no button is pressed, after 50 seconds of inactivity the display will turn off. Press any button to turn the display on. See **6.6.4. Display Settings** on pages 26–27 for more information.

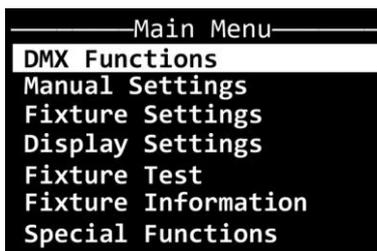
6.5. Menu Overview





6.6. Main Menu Options

The main menu has the following options:

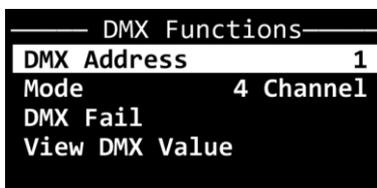


- 01) Press the **UP/DOWN** buttons to navigate through the main menu.
- 02) Press the **ENTER** button to open the submenus.

6.6.1. DMX Functions

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

- 01) Press the **UP/DOWN** buttons to scroll through the following options:



- DMX Address: See **6.6.1.1. DMX Address** for more information.
- Mode: See **6.6.1.2. DMX Channel Mode** for more information.
- DMX Fail: See **6.6.1.3. DMX Fail** for more information.
- View DMX Value: See **6.6.1.4. View DMX Value** for more information.

- 02) Press the **ENTER** button to confirm your choice.

6.6.1.1. DMX Address

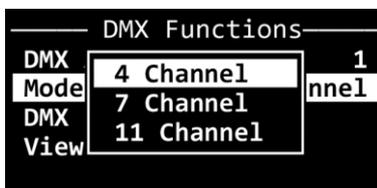
In this pop-up submenu you can set the starting DMX address of the device.

- 01) Press the **UP/DOWN** buttons to select the starting DMX address of the device. The selection range is between 1 and 512.
- 02) Press the **ENTER** button to confirm the selection.

6.6.1.2. DMX Channel Mode

In this pop-up submenu you can select the DMX channel mode.

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



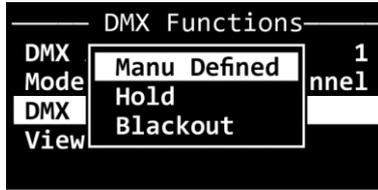
- 4-channel mode
- 7-channel mode
- 11-channel mode

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

6.6.1.3. DMX Fail

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

01) Press the **UP/DOWN** buttons to select one of the following 3 options:



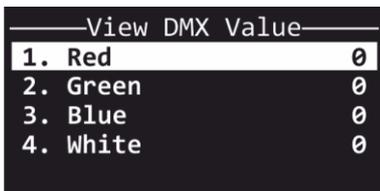
- **Manually Defined:** The device will use the manually selected values for color and color temperature. See **6.6.5.1. Manually Defined** in page 27 for more information
- **Hold:** The device will use the last DMX signal received correctly
- **Blackout:** The device will black out the light output

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

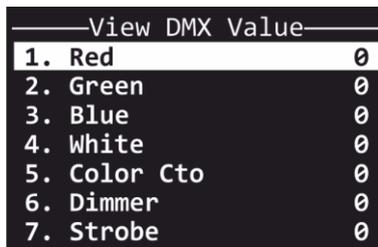
6.6.1.4. View DMX Value

In this submenu you can view the currently selected DMX value for each DMX channel.

Press the **UP/DOWN** buttons to scroll through all options:



4-channel DMX mode



7-channel DMX mode



11-channel DMX mode

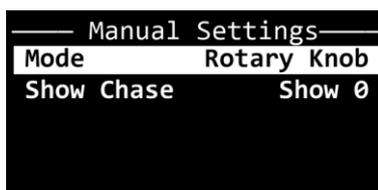
Depending on the selected DMX channel mode in the DMX Channel Mode submenu, you can see the following values:

- in 4- channel DMX mode: red, green, blue, and white;
- in 7-channel DMX mode: red, green, blue, white, color CTO, dimmer, and strobe;
- in 11-channel DMX mode: red, green, blue, white, color macro, color CTO, dimmer, dimmer fine, strobe, built-in chase, and built-in chase speed.

6.6.2. Manual Settings

In this menu you can select the operation mode and the built-in chase.

01) Press the **UP/DOWN** buttons to scroll through the following options:



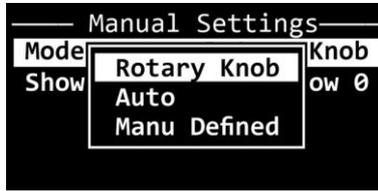
- **Mode:** Select how to operate the device manually. See **6.6.2.1. Mode** for more information.

- Show Chase: Select the built-in chase. See **6.6.2.2. Show Chase** for more information.
- 02) Press the **ENTER** button to confirm your choice.

6.6.2.1. Mode

In this pop-up submenu menu you can select how to operate the device manually.

01) Press the **UP/DOWN** buttons to select one of the following 3 options:



- Rotary Knob: You can control the device manually with the **manual dimmer control (13)** and the **preset colors control (14)**
 - Auto: The device runs one of the built-in chases.
 - Manually defined: You can control the device manually via the control panel and the menu.
- 02) Press the **ENTER** button to confirm the selection.

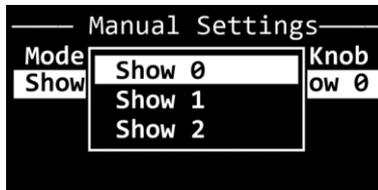
6.6.2.2. Show Chase

In this pop-up submenu menu you can select one of the 64 color macros or run one of the 9 built-in chases.

01) Press the **UP/DOWN** buttons to select one of the 10 available options:
 02) Press the **ENTER** button to confirm the selection.

The available options are:

- Show 0: Select one of the 64 color macros



- Show 1 – Show 9: Select one of the 9 built-in chases

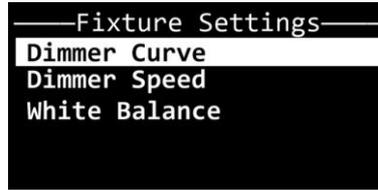
In each submenu under Show 1 to Show 9 you can further set the speed of the built-in chase. The adjustment range is 0–99.



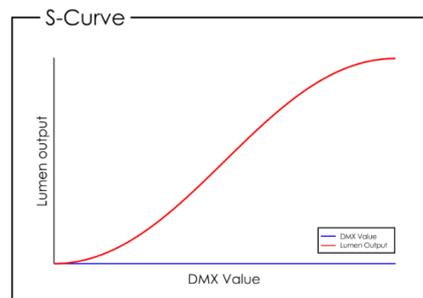
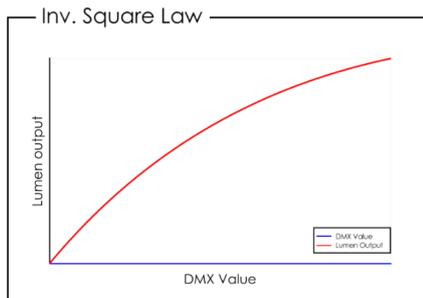
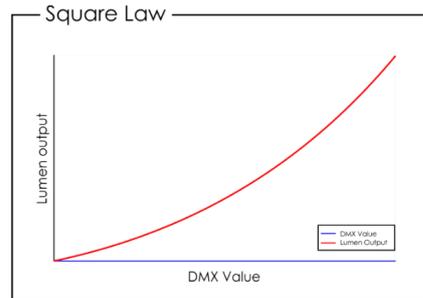
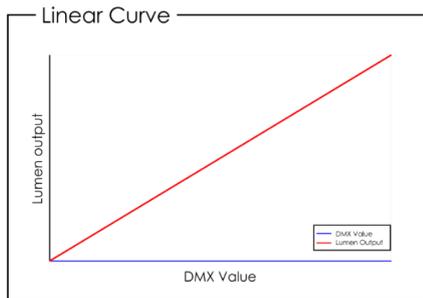
6.6.3. Fixture Settings

In this menu you can adjust the fixture settings.

01) Press the **UP/DOWN** buttons to select one of the following 3 options:



- Dimmer Curve: There are 4 options available: Linear, Square Law, Inverse Square Law and S-Curve



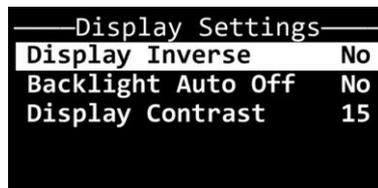
- Dimmer Speed: There are 2 options available: LED (instant dimming without delay) and Halogen (delayed dimming, imitating the behavior of a halogen lamp)
- White Balance: You can adjust the white balance of the LEDs through adjusting the values of the red, green, and blue colors. The adjustment range is 125–255

02) Press the **ENTER** button to confirm your choice.

6.6.4. Display Settings

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

01) Press the **UP/DOWN** buttons to select one of the following 3 options:



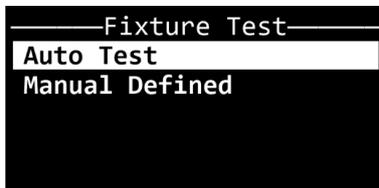
- Display Inverse: The OLED display will be rotated at 180° (NO/YES)
 - Backlight Auto Off: The backlight of the OLED display will not turn off automatically after 30 seconds of inactivity (NO/YES)
 - Display Contrast: The adjustment range is between 0 and 30 (from low to high contrast)
- 02) Press the **ENTER** button to confirm the selection and open the pop-up submenu where you can adjust the settings.

- 03) Press the **UP/DOWN** buttons to select the desired setting.
- 04) Press the **ENTER** button to confirm the selection.

6.6.5. Fixture Test

In this menu you can perform a test of the device's parameters and adjust manually the color and the dimmer and strobe values.

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



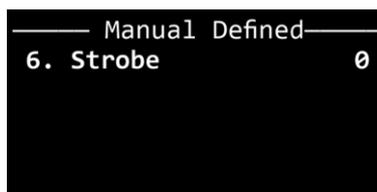
- Auto Test: The device performs an auto test of its parameters
- Manually Defined: See **6.6.5.1. Manually Defined** for more information

- 02) Press the **ENTER** button to confirm your choice.

6.6.5.1. Manually Defined

In this submenu you can manually adjust the color, the strobe, and the dimmer.

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

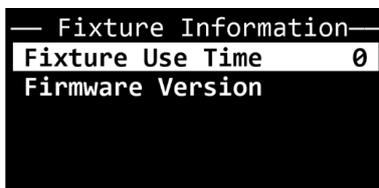


- 02) Press the **ENTER** button to confirm your selection and open the respective pop-up submenu where you can adjust the values.
- 03) Press the **UP/DOWN** buttons to adjust the values. The adjustment range is between 0 and 255.
- 04) Press the **ENTER** button to confirm your choice.

6.6.6. Fixture Information

In this menu you can view the LED operating hours and the firmware version of the device.

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



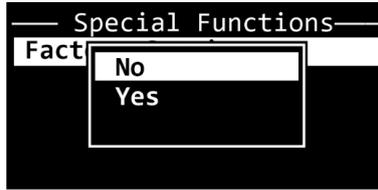
- Fixture Use Time: Provides information about the total hours of operation of the LEDs
- Firmware Version: Shows the current firmware version

- 02) Press the **ENTER** button to confirm the selection and view the information.

6.6.7. Special Functions

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

01) Press the **ENTER** button to open the pop-up submenu for the factory settings:



02) Press the **UP/DOWN** buttons to choose between NO and YES. If you choose YES, the device's settings will be reset to the default factory settings.

03) Press the **ENTER** button to confirm your choice.

6.7. Manual Operation

To operate the device manually with the **manual dimmer control (13)** and the **preset colors control (14)**:

01) Select Rotary Knob in the Mode pop-up submenu. See **6.6.2.1. Mode** on page 25 for more information.

02) Exit the submenu and return to the start screen. The start screen shows:



03) Turn the **manual dimmer control (13)** to adjust the intensity of the light. The adjustment range is between 0 and 255 (from 0 to 100 %). The current value of the dimmer is displayed on the screen.

04) Turn the **preset colors control (14)** to select one of the preset color macros. The following options are available: red, green, blue, white, pink, magenta, yellow, orange, cyan, 2800 K, 3200 K, 4400 K, 5600 K, 7200 K, and 10000 K. The current color is displayed on the screen.

Note:

- The **manual dimmer control (13)** and the **preset colors control (14)** are not functional, if you do not exit the menu and return to the start screen.
- It is not possible to add strobe effect in this mode.

6.8. DMX Channels

4 CH	7 CH	11 CH	Function	Value	Setting
1	1	1	Red	000–255	From low to high intensity (0–100 %)
2	2	2	Green	000–255	From low to high intensity (0–100 %)
3	3	3	Blue	000–255	From low to high intensity (0–100 %)
4	4	4	White	000–255	From low to high intensity (0–100 %)
				000	No function
				001–004	Color 1
				005–008	Color 2
				009–012	Color 3
				013–016	Color 4
				017–020	Color 5
				021–024	Color 6
				025–028	Color 7
				029–032	Color 8
				033–036	Color 9
				037–040	Color 10
				041–044	Color 11
				045–048	Color 12
				049–052	Color 13
				053–056	Color 14
				057–060	Color 15
				061–064	Color 16
				065–068	Color 17
				069–072	Color 18
				073–076	Color 19
				077–080	Color 20
				081–084	Color 21
				085–088	Color 22
		5	Color Macros	089–092	Color 23
				093–096	Color 24
				097–100	Color 25
				101–104	Color 26
				105–108	Color 27
				109–112	Color 28
				113–116	Color 29
				117–120	Color 30
				121–124	Color 31
				125–128	Color 32
				129–132	Color 33
				133–136	Color 34
				137–140	Color 35
				141–144	Color 36
				145–148	Color 37
				149–152	Color 38
				153–156	Color 39
				157–160	Color 40
				161–164	Color 41
				165–168	Color 42
				169–172	Color 43
				173–176	Color 44
				177–180	Color 45
				181–184	Color 46
				185–188	Color 47

4 CH	7 CH	11 CH	Function	Value	Setting
				189–192	Color 48
				193–196	Color 49
				197–200	Color 50
				201–204	Color 51
				205–208	Color 52
				209–212	Color 53
				213–216	Color 54
				217–220	Color 55
				221–224	Color 56
				225–228	Color 57
				229–232	Color 58
				233–236	Color 59
				237–240	Color 60
				241–244	Color 61
				245–248	Color 62
				249–252	Color 63
				253–255	Color 64
	5	6	Color Temperature	000–007	No function
				008–255	Color temperature from 2800 K to 10000 K
	6	7	Master Dimmer	000–255	From low to high intensity (0–100 %)
		8	Dimmer Fine	000–255	Fine adjustment
	7	9	Strobe	000–019	Closed (No light output)
				020–024	Open
				025–064	Strobe, from low to high frequency
				065–069	Open
				070–084	Pulse strobe: fast close, slow open
				085–089	Open
				090–104	Pulse strobe: slow close, fast open
				105–109	Open
				110–124	Random strobe
				125–129	Open
				130–144	Random strobe: fast close, slow open
				145–149	Open
				150–164	Random strobe: slow close, fast open
				165–169	Open
				170–184	Burst pulse strobe
				185–189	Open
				190–204	Random burst pulse strobe
				205–209	Open
				210–224	Pulse strobe: slow close, fast open
				225–229	Open
	230–244	Frequent bursts strobe			
	245–255	Open			
	10		Chases	000–003	No function
				004–127	Color 1 – Color 32
				128–191	Color switch 1–16
				192–255	Color fade 1–16
	11		Speed	000–255	Speed adjustment of the chases, from slow to fast

Note:

- Make sure that the Strobe channel and the Master Dimmer channel are open in 7-CH and 11-CH mode in order to see the light output.
- If you play the built-in chases in 11-CH mode, the strobe (CH 9) and the master dimmer (CH 7) are not functional.

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	<ul style="list-style-type: none"> Check if power is switched on and cables are plugged in
	Main fuse is blown	<ul style="list-style-type: none"> Replace the fuse. See 8.3.1. Replacing the Fuse on page 33
The device responds erratically	The factory settings of the device are changed	<ul style="list-style-type: none"> Reset the device's parameters to the default factory settings. See 6.6.7. Special Functions on page 28
The device does not respond to DMX control	The controller is not connected	<ul style="list-style-type: none"> Connect the controller
	The signal is reversed. The 3-pin DMX OUT of the controller does not match the DMX IN of the device	<ul style="list-style-type: none"> Install a phase-reversing cable between the controller and the device
	The controller is defective	<ul style="list-style-type: none"> Try using another controller
The device responds erratically to DMX control	Bad data link connection	<ul style="list-style-type: none"> Examine connections and cables. Correct poor connections. Repair or replace damaged cables
	The data link is not terminated with a 120 Ω termination plug	<ul style="list-style-type: none"> Insert a termination plug in the DMX OUT connector of the last device on the link
	Incorrect addressing	<ul style="list-style-type: none"> Check address settings and correct, if necessary
	In case of a setup with multiple devices, one of the devices is defective and disturbs data transmission on the link	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Disconnect the device and contact your Highlite International dealer
	The power supply settings do not match local AC voltage and frequency	<ul style="list-style-type: none"> Disconnect the device. Check the settings and correct, if necessary

8. Maintenance

8.1. Safety Instructions for Maintenance



DANGER
Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

8.2. Preventive Maintenance



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

Make sure that:

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

8.2.1. Basic Cleaning Instructions

The external lens of the device must be cleaned periodically in order to optimize the light output. The cleaning schedule depends on the conditions at the site where the device is installed. When smoke or fog machines are used at the site, the device will need more frequent cleaning. On the other hand, if the device is installed in well-ventilated area, it will need less frequent cleaning. To establish a cleaning schedule, examine the device at regular intervals during the first 100 hours of operation.

To clean the device, follow the steps below:

- 01) Disconnect the device from the electrical power supply.
- 02) Allow the device to cool down for at least 15 minutes.
- 03) Remove the dust collected on the external surface with dry compressed air and a soft brush.
- 04) Clean the lens with a damp cloth. Use a mild detergent solution.
- 05) Dry the lens carefully with a lint-free cloth.
- 06) Clean the DMX and other connections with a damp cloth.



Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.
- Make sure that the connections are fully dry before connecting the device to the power supply and to other devices.

8.3. Corrective Maintenance

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

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

8.3.1. Replacing the Fuse



DANGER
Electric shock caused by short-circuit

- Do not bypass the thermostatic switch or fuses.
- For replacement use fuses of the same type and rating only.

Power surges, short-circuit or incorrect electrical power supply may cause a fuse to burn out. If the fuse burns out, the device will not function anymore. If this happens, follow the steps below:

- 01) Disconnect the device from the electrical power supply.
- 02) Allow the device to cool down for at least 15 minutes.
- 03) Loosen the fuse cover with a screwdriver and remove the fuse holder.
- 04) If the fuse is brown or unclear, it is burned out. Remove the old fuse.
- 05) Insert a new fuse in the fuse holder. Make sure that the type and the rating of the replacement fuse are the same as the ones specified on the information label of the product.
- 06) Replace the fuse holder in the opening and tighten the fuse cover.

9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation



WARNING

Incorrect deinstallation can cause serious injuries and damage of property.

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

9.2. Instructions for Transportation

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

9.3. Storage

- Clean the device before storing. Follow the cleaning instructions in chapter **8.2.1. Basic Cleaning Instructions** on page 32.
- 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.



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