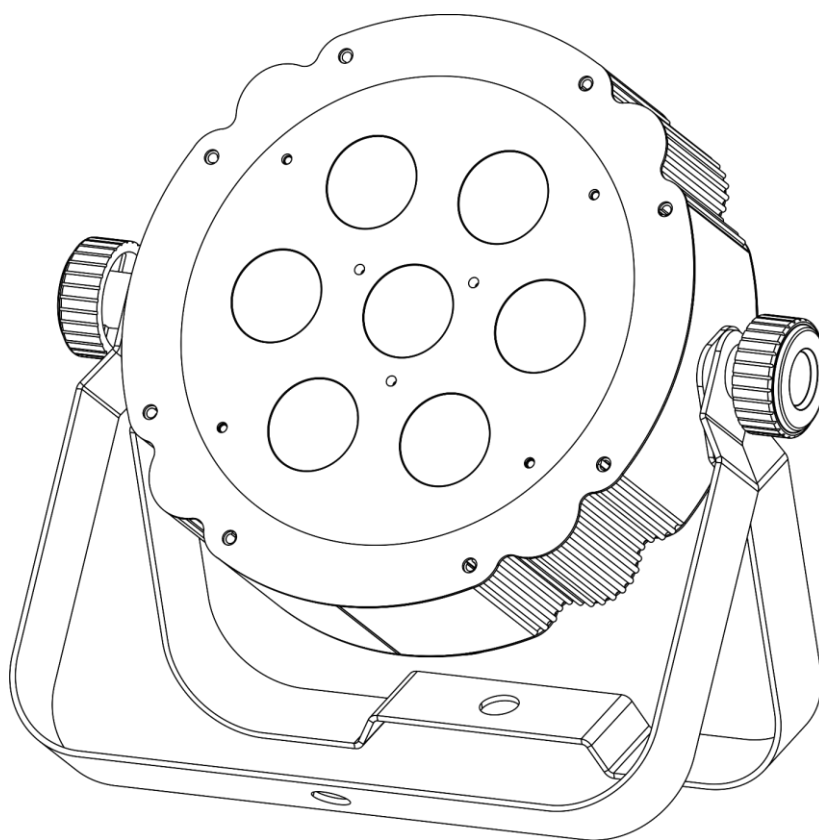




## USER MANUAL



ENGLISH

# Compact Par 7 CW/WW

# V2

Product code: 42581

## **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 Compact Par 7 CW/WW
- Schuko to IEC (C13) power cable (1,5 m)
- User manual

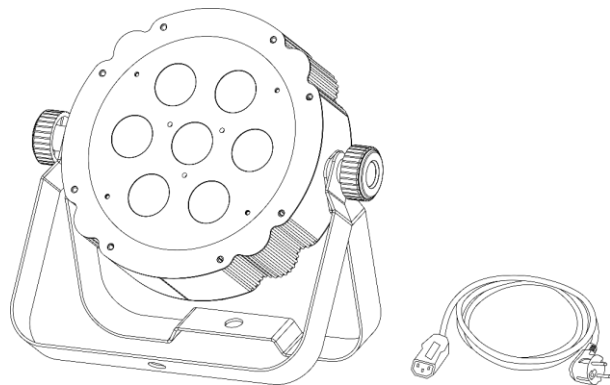


Fig. 01

### 1.2. Intended Use

This device is intended for professional use as a light 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 at the backside of the device.

The information label contains the following symbols:

-  This device is designed for indoor use.
-  This device shall not be treated as household waste.
-  This device falls under IEC protection class I.
-  Minimum distance from lighted objects.

## 2. Safety



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

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

### 2.1. Warnings and Safety Instructions



**DANGER**  
**Danger for children**

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

- Do not leave 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 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 designed to be used as a professional stage light 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.

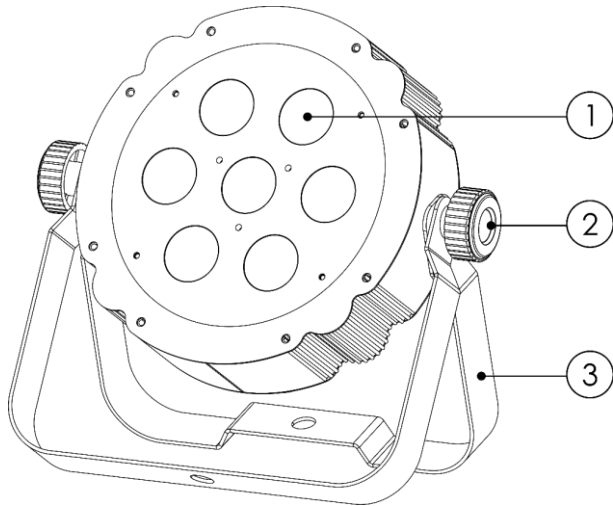
Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

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 Compact Par 7 CW/WW is a compact par, equipped with 7 x 4 W 2-in-1 CW+WW LEDs. It is suitable for indoor venues and has a double bracket for easy floor positioning. It has a fixed 40° beam angle and is perfectly suitable for short-throw 3200 K – 6000 K colour mixing

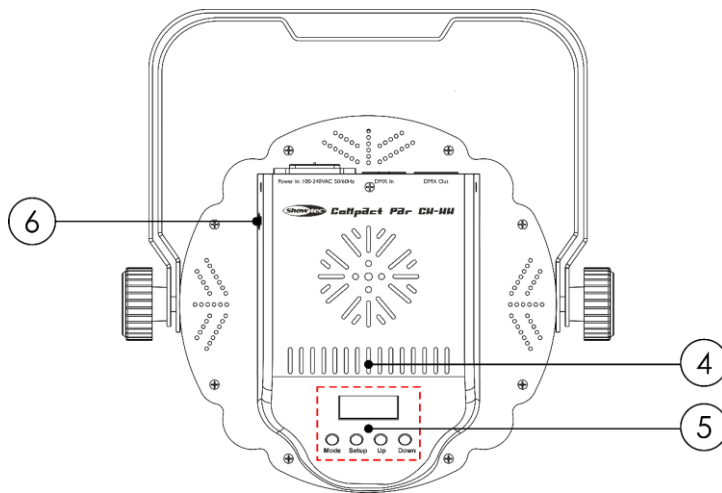
#### 3.1. Front View



- 01) 7 x 4 W 2-in-1 CW+WW LEDs
- 02) 2 x Adjustment screws
- 03) Mounting bracket

Fig. 02

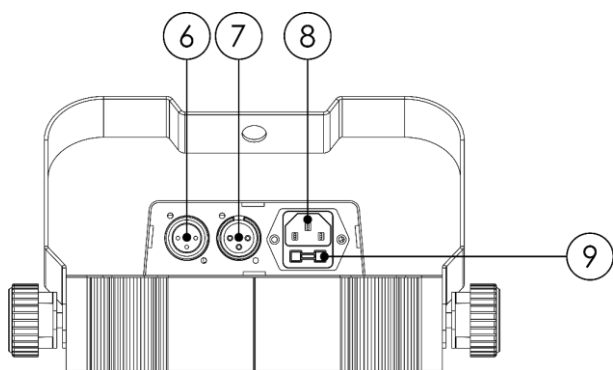
#### 3.2. Back View



- 04) Air vents
- 05) Control panel: 4-digit LED display and buttons
- 06) Ground contact

Fig. 03

#### 3.3. Top View



- 07) 3-pin DMX signal connector OUT
- 08) 3-pin DMX signal connector IN
- 09) IEC (C14) power connector IN
- 10) Fuse T 1 A, 250 V

Fig. 04

### 3.4. Product Specifications

Model:	Compact Par 7 CW/WW	
<b>Electrical:</b>		
Input voltage:	100–240 V AC, 50/60 Hz	
Power consumption:	33 W	
Fuse:	T 1 A, 250 V	
<b>Physical:</b>		
Dimensions:	275 x 258 x 92 mm (L x W x H)	
Weight:	2,16 kg	
<b>Optics:</b>		
Light source:	7 x 4 W 2-in-1 CW+WW LEDs 3200 K – 6000 K colour mixing	
Luminous flux:	365 lm	
Illuminance @ 2 m:	1142 lx	
Dimmer:	0–100 %	
Strobe:	0–20 Hz	
Beam angle:	40°	
Drive current:	330 mA	
Refresh rate:	3900 Hz	
<b>Operation and control:</b>		
Control:	Stand-alone (auto, manual) Master/Slave (auto, manual) DMX-512	
DMX channels:	2, 4 channels	
Control panel:	4-digit LED display and buttons	
<b>Connections:</b>		
Power connections:	IEC (C14) power connector IN	
Data connections:	3-pin DMX connectors IN/OUT	
Signal pinouts:	Pin 1 (ground), pin 2 (-), pin 3 (+)	
<b>Construction:</b>		
Housing:	Extruded aluminum and metal plate	
Color:	Gray and black	
IP rating:	IP20	
Cooling:	Aluminum heatsink	
<b>Thermal:</b>		
Maximum ambient temperature $t_a$ :	40 °C	
Minimum Operating Temperature	-10 °C	
<b>Minimum distance:</b>		
Minimum distance from flammable surfaces:	0,5 m	
Minimum distance to lighted object:	0,5 m	

### 3.5. Dimensions

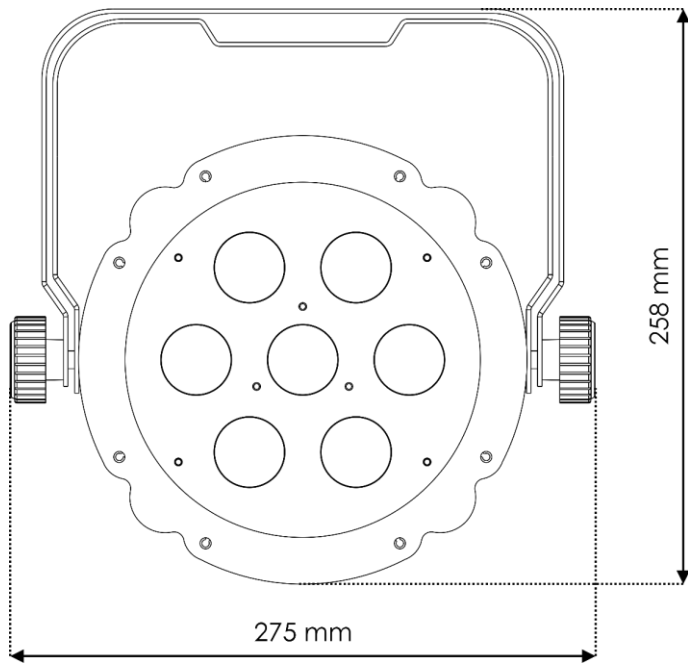


Fig. 05

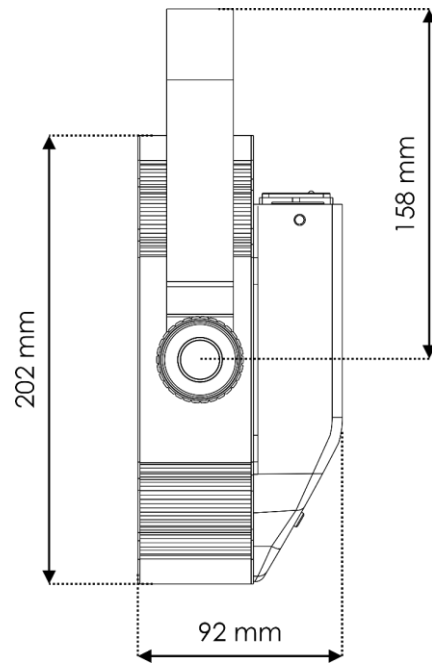


Fig. 06

## 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 other rigging structure.
- The minimum distance to other objects must be bigger than 0,5 m.
- The minimum distance between the light output and the illuminated surface 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 positioned on a flat surface or mounted to a truss or other rigging structure. 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. 07. 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 around the **mounting bracket (03)**, as shown in Fig. 07.

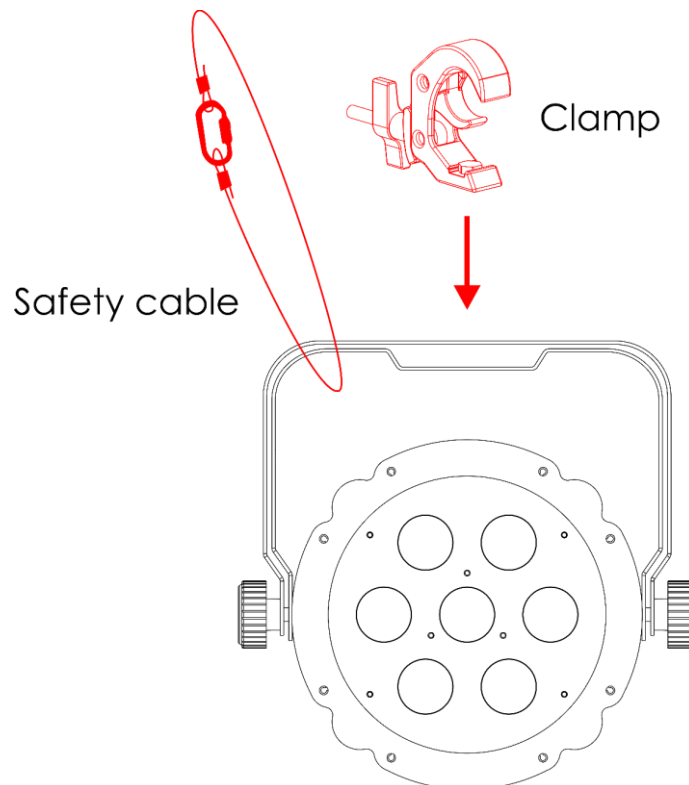


Fig. 07

### 4.4.1. Angle Adjustment

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

- 03) Turn the **adjustment screws (02)** counterclockwise to release them.
- 04) Tilt the device at the desired angle (see Fig. 08).
- 05) Turn the **adjustment screws (02)** clockwise to tighten them. Make sure that the device cannot move freely after the **adjustment screws (02)** are tightened.

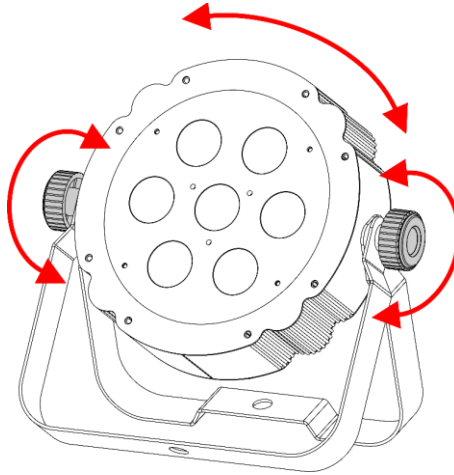


Fig. 08

### 4.5. 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.

## 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 Compact Par 7 CW/WW is not connected to a controller or to other devices, it functions as a stand-alone device. It can be operated manually, in auto mode or in sound-controlled mode.

For more information about the control modes, refer to **6.2. Control Modes** on page 17.

### 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 Compact Par 7 CW/WW 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. 09.

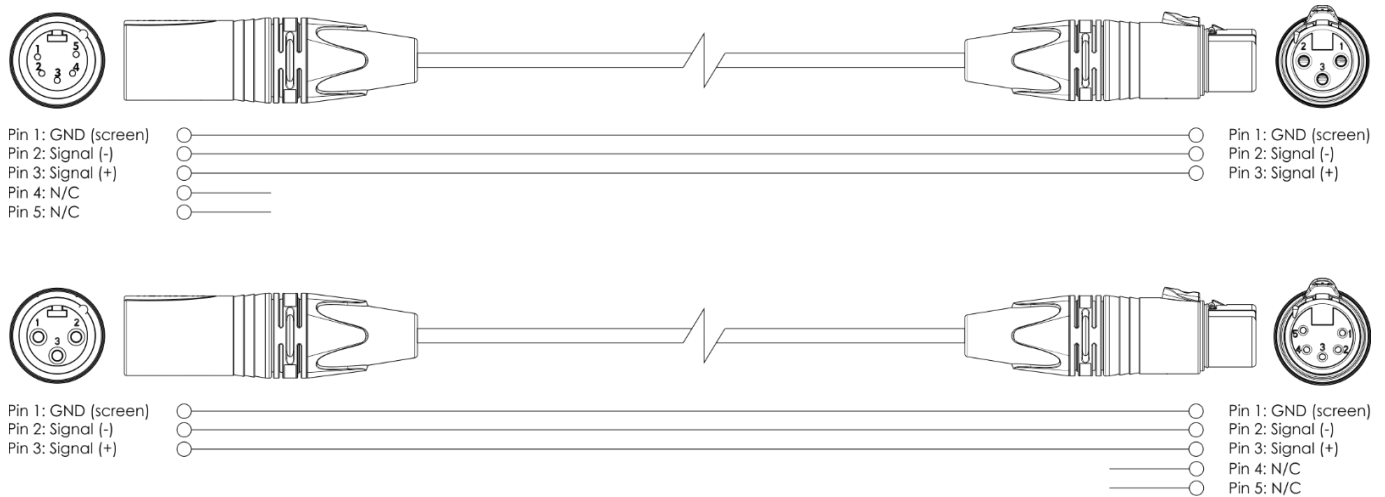


Fig. 09

## 5.3.3. Master/Slave Setup

The Compact Par 7 CW/WW supports master/slave control mode. To connect multiple devices in a master/slave setup, follow the steps below:

- 01) Connect the first device's DMX OUT connector to the second device's DMX IN connector.
- 02) Repeat step 1 to connect all devices as shown in Fig. 10. The first connected device will be automatically recognized as the master device.
- 03) Set all subsequent devices as slave devices. See **6.6.4 Master/Slave Mode** on page 22 for more information.
- 04) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device in the setup.

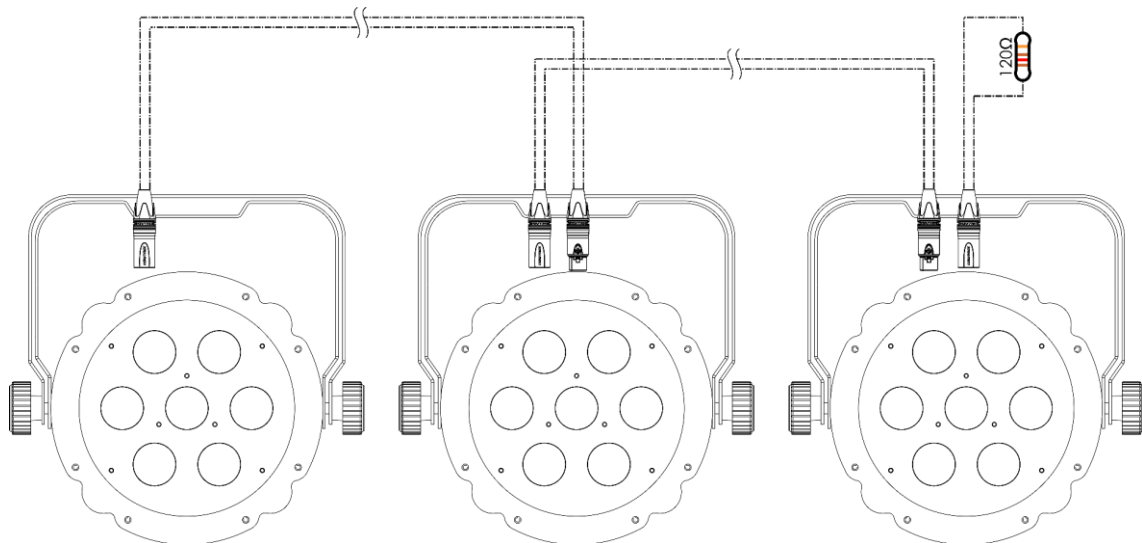


Fig. 10



## 5.3.4. 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. 11.
- 04) Connect a DMX terminator (120  $\Omega$  resistor) to the DMX OUT connector of the last device on the data link.

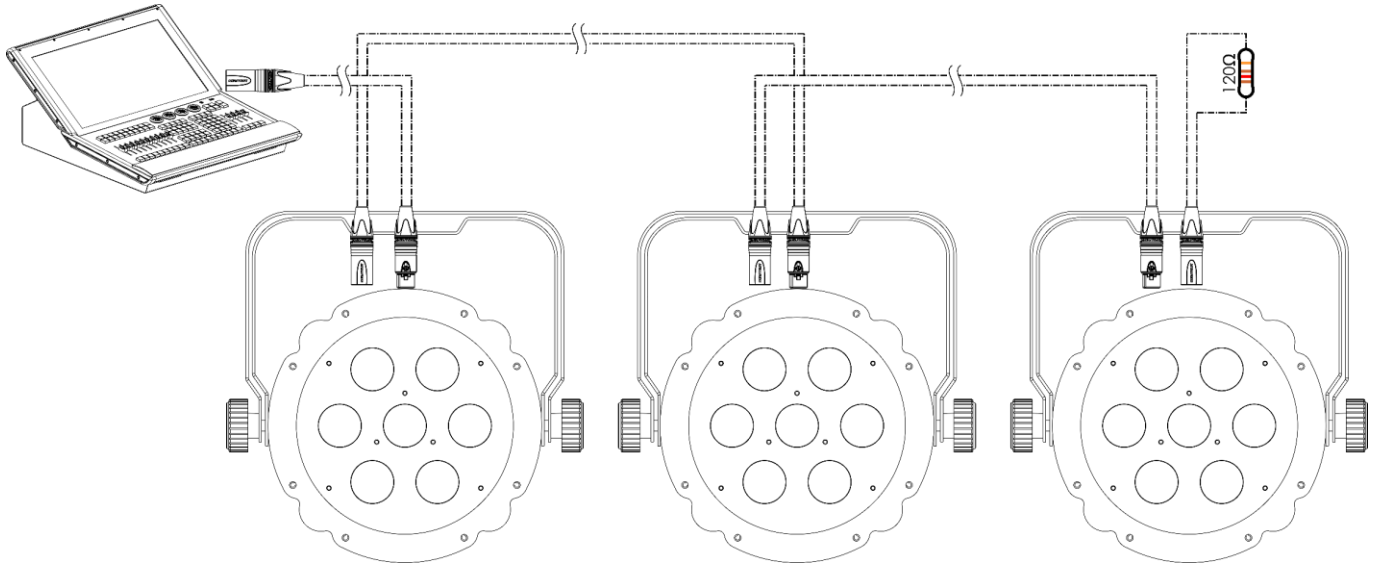


Fig. 11

## 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 Compact Par 7 CW/WW has 2 personalities: 2 and 4 channels.

If you want to connect multiple devices on one data link and use them in 4-channel mode, for example, follow the steps below:

- 01) Set the starting address of the 1<sup>st</sup> device on the data link to 1 (001).
- 02) Set the starting address of the 2<sup>nd</sup> device on the data link to 5 (005), as  $1 + 4 = 5$ .
- 03) Set the starting address of the 3<sup>rd</sup> device on the data link to 9 (009) as  $5 + 4 = 9$ .
- 04) Continue assigning the starting addresses of the remaining devices by adding each time 4 to the previous number.

Make sure that you do not have any overlapping channels in order to control each Compact Par 7 CW/WW 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 light 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 Compact Par 7 CW/WW can be operated with a DMX controller, and as a stand-alone device or in a master/slave setup without a DMX controller.

The Compact Par 7 CW/WW supports the following control modes:

- Stand-alone: Auto operation mode (auto program, built-in chases, color presets), manual color mode, sound-controlled operation mode (auto program)
- Master/Slave: Auto operation mode (auto program, built-in chases, color presets), manual color mode, sound-controlled operation mode (auto program)
- DMX-512: 2 channels and 4 channels

For more information about how to connect the devices, refer to **5. Setup** on pages 14–16.

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

- 01) Select built-in program Pr01 in the main menu.
- 02) Adjust the intensity values for the colors. See **6.6.1.1. Manual Color Mode** on page 21 for more information.
- 03) Add strobe effect. See **6.6.1.1. Manual Color Mode** on page 21 for more information.

In built-in programs mode you can select one of the built-in programs (Pr02-Pr04). To run one of the built-in programs:

- 04) Select one of the 3 built-in chases. See **6.6.1.2. Built-in Programs** on page 22 for more information.
- 05) Add strobe effect or adjust the chase speed. See **6.6.1.2. Built-in Programs** on page 22 for more information.

To operate the device with a DMX controller:

- 01) Set the DMX starting address of the device in the DMX Configuration menu. See **6.6.3. DMX Configuration** on page 22 for more information.
- 02) Select the DMX channel mode in the DMX Configuration menu. See **6.6.3. DMX Configuration** on page 22 for more information. See **6.7. DMX Channels** on page 23 for complete overview of all DMX channels.

### 6.3. Control Panel

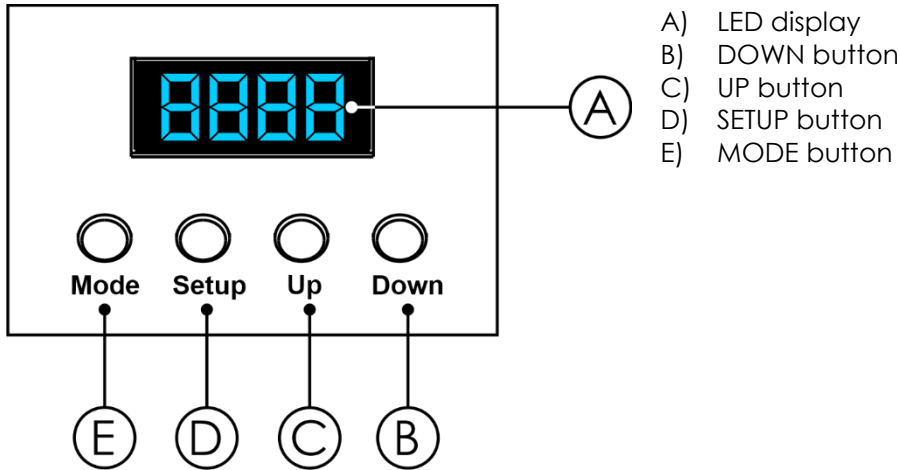


Fig. 12

- Use the **MODE** button to navigate through the main menu and to return to the main menu.
- Use the **SETUP** button to navigate through the submenus and open the submenus.
- Use the **UP/DOWN** buttons to scroll through the available options/values.

**Note:**

You do not need to confirm the selected options or values. Selecting an option or a value activates it immediately.

### 6.4. Start-up

Upon start-up the display will show the firmware version:



If you start up the device for the first time or after a reset, it will enter by default into auto operation mode and the display will show the following:

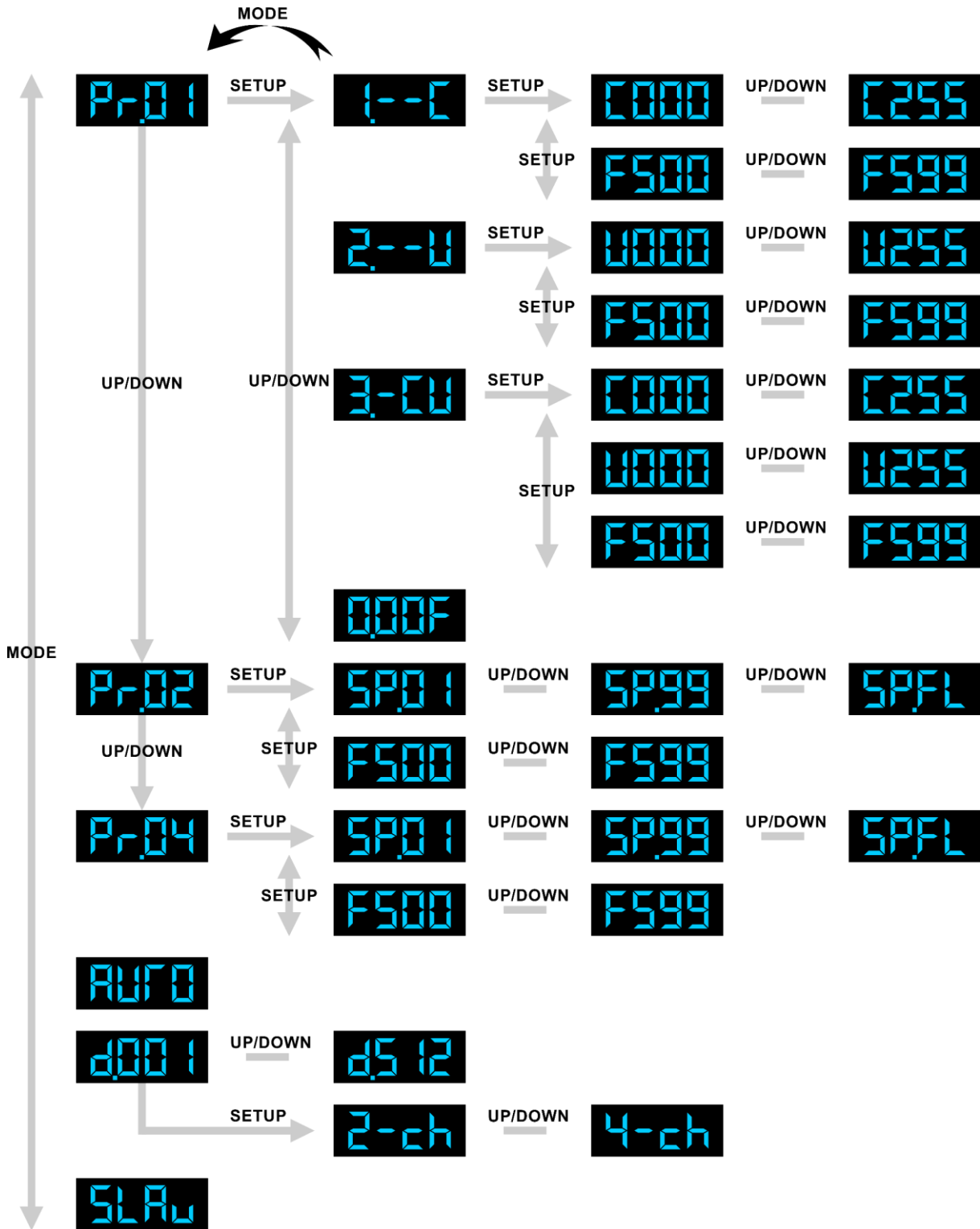


The next time you start up the device, it will enter into the last selected operation mode.

**Note:**

If no button is pressed, after 20 seconds of inactivity the display will turn off. Press any button to turn the display on.

6.5. Menu Overview



### 6.6. Main Menu Options

The main menu has the following options:

- P-01** 1. Built-in programs
- AUTO** 2. Auto mode
- d001** 3. DMX configuration
- SLAVE** 4. Master/slave mode

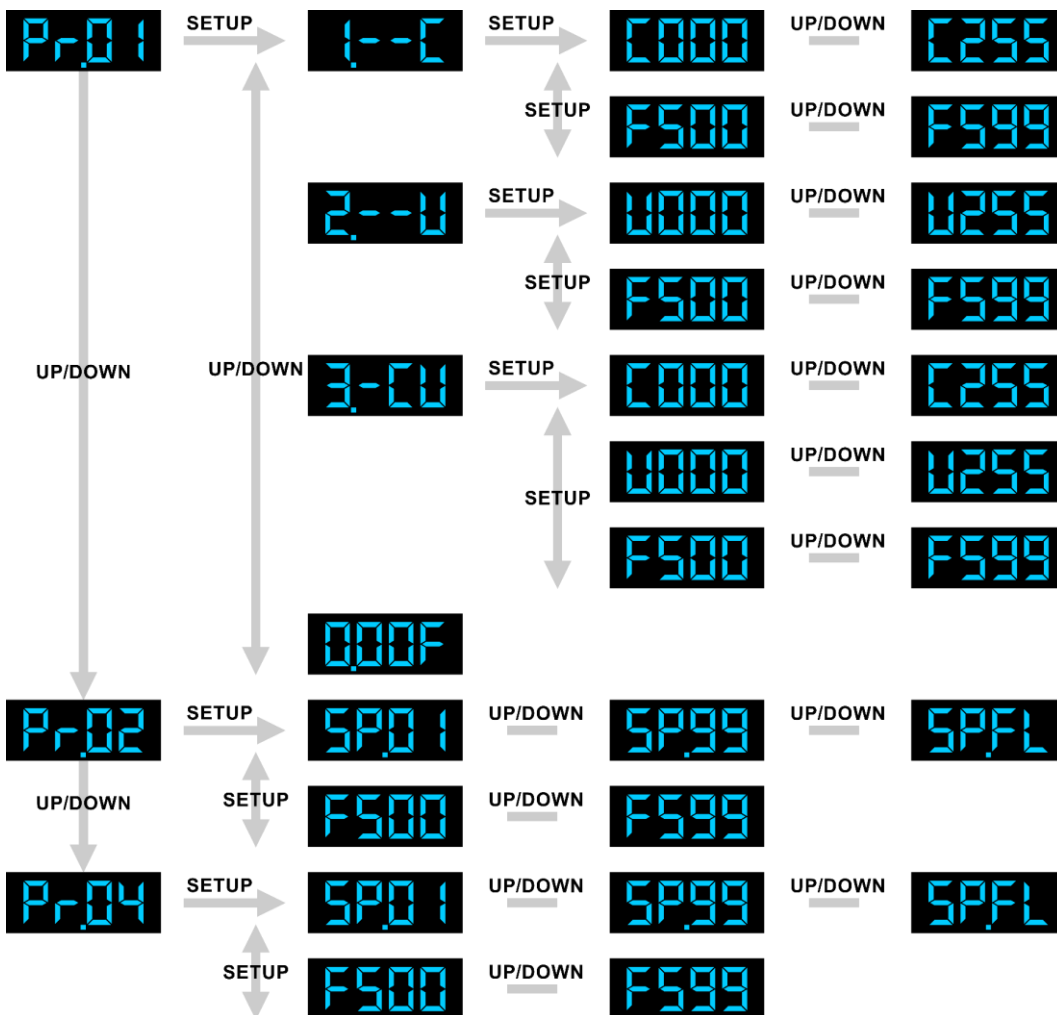
- 01) Press the **MODE** button or the **UP/DOWN** buttons to navigate through the main menu.
- 02) Press the **SETUP** button to open the submenus.

**Note:**

You do not need to confirm the selected options or values. Selecting an option or a value activates it immediately.

#### 6.6.1. Built-in Programs Mode

In this menu you can select one of the 3 color presets and OFF or run one of the 3 built-in chases.



Press the **UP/DOWN** buttons to select one of the following options. The selection range is Program 01–Program 04.

Pr.01

Pr.01

You can select one of the manual color programs. See **6.6.1.1. Manual Color Mode** on page 21 for more information

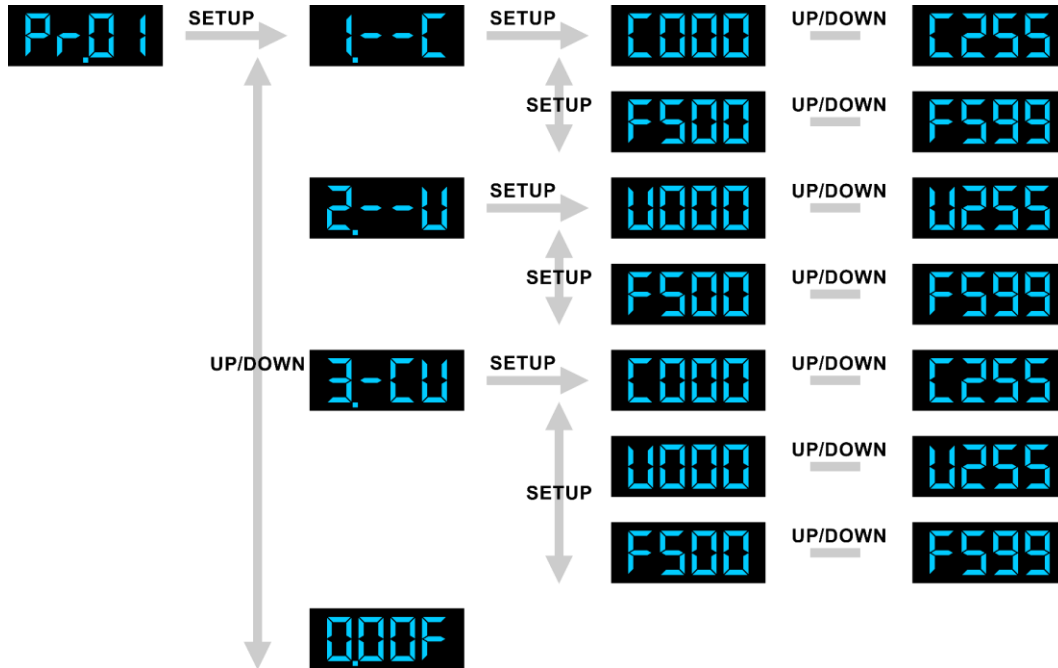
Pr.02

Pr.02–Pr.04

Programs 02–04 output the built-in chases. See **6.6.1.2. Built-in Programs** on page 22 for more information

### 6.6.1.1. Manual Color Mode

If you have selected Program 01, you can further select one of the 3 color presets and add strobe effect.



- 01) Press the **SETUP** button to enable the built-in program selection.
- 02) Press the **UP/DOWN** buttons to select one of the 3 color presets or OFF. The device will output the selected color.
- 03) Press the **SETUP** button to enable the manual color adjustment.
- 04) Press the **UP/DOWN** buttons to adjust the color intensity. The adjustment range is 000–255, from low to high intensity.
- 05) Press the **SETUP** button to enable the strobe frequency adjustment.
- 06) Press the **UP/DOWN** buttons to adjust the frequency of the strobe effect. The adjustment range is 00–99, from low to high frequency.

### 6.6.1.2. Built-in Programs

If you have selected one of the Programs 02–04, you can additionally adjust the speed and add strobe effect.



Press the **SETUP** button to enable the speed adjustment

- 01) Press the **SETUP** button to enable the speed adjustment.
- 02) Press the **UP/DOWN** buttons to adjust the speed of the built-in chase. The selection range is 01–99 and SP.FL, from low to high speed.
- 03) Press the **SETUP** button to enable the strobe frequency adjustment.
- 04) Press the **UP/DOWN** buttons to adjust the frequency of the strobe effect. The adjustment range is 00–99, from low to high frequency.

### 6.6.2. Auto Mode

In this menu you can activate the auto operation mode. When you select auto mode, the device will output the auto program.





### 6.6.3. DMX Configuration

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



- 01) Press the **UP/DOWN** buttons to select the DMX starting address of the device. The selection range is 001–512.
- 02) Press the **SETUP** button to enable the DMX channel mode selection.
- 03) Press the **UP/DOWN** buttons to select the DMX channel mode. There are 2 options available:

 2-channel mode

 4-channel mode

See **6.7. DMX Channels** on page 23 for complete description of the DMX channels and values.

### 6.6.4. Master/Slave Mode

In this menu you can set the device as a slave device in master/slave mode. When you select this menu option, the device will operate as a slave device in a master/slave setup.



6.7. DMX Channels

2 CH	4 CH	Function	Value	Setting
1	1	Cool White	000-255	From low to high intensity (0-100 %)
2	2	Warm White	000-255	From low to high intensity (0-100 %)
	3	Linear Strobe	000-009	No function
			010-255	From low to high frequency
			000	No function
			001-004	Color 1
			005-009	Color 2
			010-014	Color 3
			015-019	Color 4
			020-024	Color 5
			025-029	Color 6
			030-034	Color 7
			035-039	Color 8
			040-044	Color 9
			045-049	Color 10
			050-054	Color 11
			055-059	Color 12
			060-064	Color 13
			065-069	Color 14
			070-074	Color 15
			075-079	Color 16
			080-084	Color 17
			085-089	Color 18
			090-094	Color 19
			095-099	Color 20
			100-104	Color 21
			105-109	Color 22
			110-114	Color 23
			115-119	Color 24
	4	Macro Colors	120-124	Color 25
			125-129	Color 26
			130-134	Color 27
			135-139	Color 28
			140-144	Color 29
			145-149	Color 30
			150-154	Color 31
			155-159	Color 32
			160-164	Color 33
			165-169	Color 34
			170-174	Color 35
			175-179	Color 36
			180-184	Color 37
			185-189	Color 38
			190-194	Color 39
			195-199	Color 40
			200-204	Color 41
			205-209	Color 42
			210-214	Color 43
			215-219	Color 44
			220-224	Color 45
			225-229	Color 46
			230-234	Color 47
			235-239	Color 48
			240-244	Color 49
			245-255	Color 50



## 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"> <li>Check if power is switched on and cables are plugged in</li> </ul>
	Main fuse is blown	<ul style="list-style-type: none"> <li>Replace the fuse. See <b>8.3.1. Replacing the Fuse</b> on page 26</li> </ul>
The device does not respond to DMX control	The controller is not connected	<ul style="list-style-type: none"> <li>Connect the controller</li> </ul>
	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"> <li>Install a phase-reversing cable between the controller and the device</li> </ul>
	The controller is defective	<ul style="list-style-type: none"> <li>Try using another controller</li> </ul>
The device responds erratically to DMX control	Bad data link connection	<ul style="list-style-type: none"> <li>Examine connections and cables. Correct poor connections. Repair or replace damaged cables</li> </ul>
	The data link is not terminated with a 120 $\Omega$ termination plug	<ul style="list-style-type: none"> <li>Insert a termination plug in the DMX OUT connector of the last device on the link</li> </ul>
	Incorrect addressing	<ul style="list-style-type: none"> <li>Check address settings and correct, if necessary</li> </ul>
	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"> <li>To find out which device is defective, bypass one device at a time until normal operation is restored</li> </ul>
No light or LEDs cut out intermittently	LEDs are damaged	<ul style="list-style-type: none"> <li>Disconnect the device and contact your Highlite International dealer</li> </ul>
	The power supply settings do not match local AC voltage and frequency	<ul style="list-style-type: none"> <li>Disconnect the device. Check the settings and correct, if necessary</li> </ul>

## 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:

- 07) Disconnect the device from the electrical power supply.
- 08) Allow the device to cool down for at least 15 minutes.
- 09) Pry up the integrated fuse holder with a flat-blade screwdriver.
- 10) If the fuse is brown or unclear, it is burned out. Remove the old fuse.
- 11) 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.
- 12) Replace the integrated fuse holder in the opening and push it gently back in its place.

## 9. Deinstallation, Transportation and Storage

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### 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 25.
- Store the device in the original packaging, if possible.

## 10. Disposal

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### 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

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









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