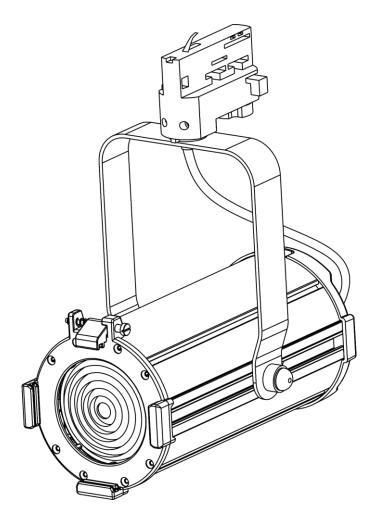


# **USER MANUAL**



# ENGLISH

# Display Track Fresnel 20 SW V1

Product code:

A0320140 – Black housing A0320141 – White housing

## Preface

Thank you for purchasing this Artecta 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.

©2020 Artecta. All rights reserved.

No part of this document may be copied, published or otherwise reproduced without the prior written consent of Highlite International.

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

For the latest version of this document, please visit our website <u>www.highlite.com</u> or contact us at <u>service@highlite.com</u>.

Highlite International and its authorized service providers are not liable for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss arising from the use of, or inability to use or reliance on the information contained in this document.



# Table of contents

1.	Introduction	
1.		
1.2		
1.: 1.4	·	
1.5		
1.0		
2.	Safety	5
	.1. Warnings and Safety Instructions	5
2.2	.2. Requirements for the User	7
3.		
3.2 3.3		
3.4		
	Installation and Deinstallation	
<b></b> 4.		
4.2	.2. Personal Protective Equipment	10
4.3		
4.4		
4.5 4.6	•	
4.0		
4.8		
4.9	.9. Connecting to Power Supply	14
5.	Operation	
	.1. Safety Instructions for Operation	
	.2. Manual Control	
	5.2.1. Beam Angle Adjustment	
6.	Troubleshooting	16
	.1. Safety Instructions for Maintenance	
	.2. Preventive Maintenance	
	.3. Corrective Maintenance	
	7.3.1. Replacing the Fuse	
8.	Transportation and Storage	
8.	.1. Instructions for Transportation	18
8.2	.2. Storage	18
9.	Disposal	
10.	Approval	



# 1. Introduction

### 1.1. Before Using the Product



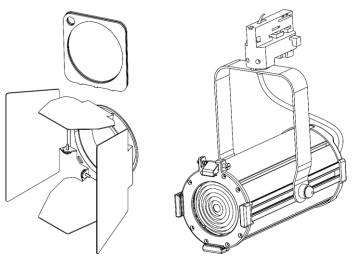
Important Read and follow the instructions in this user manual before installing, operating or servicing this product.

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:

- Artecta Display Track Fresnel 20 SW (including track adapter)
- Barndoor
- Color frame
- User manual





#### 1.2. Intended Use

This device is intended for professional use as an architectural light spot. It is suitable for indoor installation in shops, exhibition halls, showrooms and similar venues. 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. LEDs Lifespan

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

#### 1.4. Text Conventions

Throughout the user manual the following text conventions are used:

- 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



# 1.5. 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.	
<u>/</u>	Electrical 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 mounting bracket.

The information label contains the following symbols:



This device is designed for indoor use.

This device falls under IEC protection class I.

This device shall not be treated as household waste.

#### Safety 2.



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 is 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.



#### 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 . track system 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 modify, bend, mechanically strain, put pressure on, pull or heat up the interconnecting power . cable.
- Make sure that the interconnecting 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.





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.



Attention **General safety** 

- 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 fails to work properly, discontinue the use immediately.



#### Attention

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

This device is intended for professional use as an architectural light spot. It is suitable for indoor installation in shops, exhibition halls, showrooms and similar venues.

- 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

Before use, examine the device visually for any defects.

Make sure that:

- There are no deformations on housings, fixations and installation points.
- The lens is not cracked or damaged.
- The interconnecting power cable is not damaged and does 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 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.

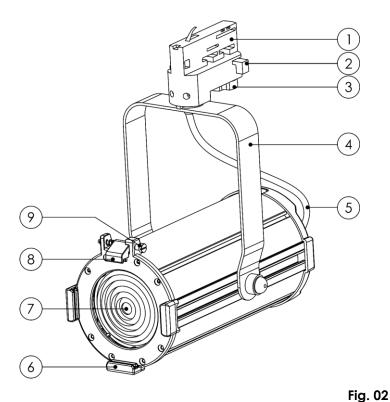


# 3. Description of the Device

The Artecta Display Track Fresnel 20 SW is a compact spot suitable for indoor venues, featuring two selectable color temperatures: warm white and cold white. It has manual zooming and a built-in, manually controllable dimmer (5 - 100 %). The device is delivered with a barndoor and a color frame.

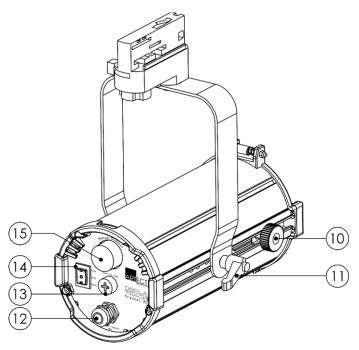
The device is equipped with a 3-phase track adapter, which is compatible with the Artecta 3-phase track systems and with the most 3-phase tracks available on the market.

### 3.1. Front View



- 01) Track adapter
- 02) Track lock
- 03) Circuit selector (OFF, 1, 2 and 3)
- 04) Mounting bracket
- 05) Interconnecting cable
- 06) 3 x Color frame holders
- 07) Fresnel lens
- 08) Color frame clip
- 09) Spring-loaded screw

3.2. Back View



10) Zoom control

- 11) Adjustment handle
- 12) Power connector IN 100-240 V, 50/60 Hz
- 13) Fuse F1 AL/250 V AC
- 14) Color temperature switch (CW, OFF, WW)
- 15) Manual dimmer control

Fig. 03



# 3.3. Product Specifications

Model:	Display Track Fresnel 20 SW				
Electrical:					
Input voltage:	100–240 V AC, 50/60 Hz				
Power consumption:	20 W				
PFC:	0,93				
Fuse:	F1 AL, 250 V AC				
Physical:					
Dimensions:	231 x 165 x 275 mm (L x W x H) (with track adapter)				
Weight:	1,6 kg (with track adapter)				
Track adapter:					
Power connection:	220–250 V, 10 A				
F max:	100 N				
Phases:	3				
Optics:					
Light source:	20 W Dual Color COB LED				
Dimmer:	5-100 %				
Zoom:	Manual				
Beam angle:	13°-57°				
Color temperature:	3000 K and 6000 K (selectable)				
Output:	3000 K and 8000 K (selectable) 3000 K – 411 lm (13°); 926 lm (57°)				
	6000 K – 537 lm (13°); 1212 lm (57°)				
CRI:	>92				
	<u> </u>				
Operation and control:					
Control:	Manual				
Construction:					
Housing:	Extruded aluminum				
Color:	Black (product code: A0320140)				
0001.	White (product code: A0320140)				
IP rating:					
	IP20 Natural convection				
Cooling: Natural convection					
Thermal:					
Maximum ambient temperature t <sub>a</sub> : 40 °C					
Minimum distance:					
Minimum distance from flammable surfaces: 0,5 m					



## 3.4. Dimensions

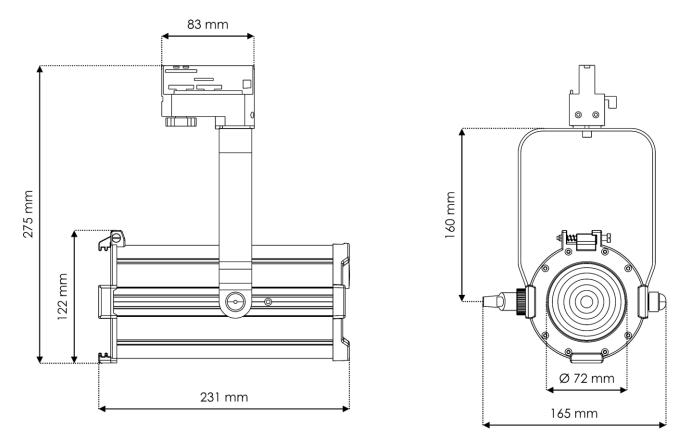


Fig. 04

# 4. Installation and Deinstallation

#### 4.1. Safety Instructions



#### WARNING

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

Installation and deinstallation of the device must be carried out only by instructed or skilled persons.

Follow all applicable European, national and local safety regulations concerning electrical installations in buildings and working at heights.

Before installing or deinstalling the device make sure that the track system is disconnected from power supply.

## 4.2. Personal Protective Equipment

During installation and deinstallation 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 only to a 3-phase track system.
- The minimum distance to other objects must be bigger than 0,5 m.
- The maximum ambient temperature  $t_a = 40$  °C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.



## 4.4. Mounting

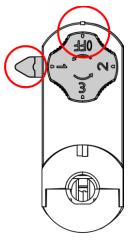
The device can be mounted only to a 3-phase track system.



#### CAUTION Restrict the access under the work area during mounting.

To mount the device, follow the steps below:

- 01) Make sure that the **circuit selector (03)** is in OFF position and the **track lock (02)** is in unlocked position, as shown in Fig. 05.
- 02) Align the flange of the track adapter (01) with the track, as shown in Fig. 06.



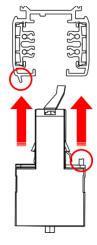
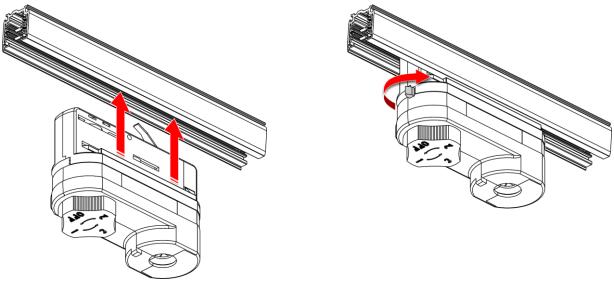




Fig. 06

- 03) Insert the **track adapter (01)** in the track and push it until it snaps into place.
- 04) Turn the **track lock (02)** clockwise to lock the device in the track, as shown in Fig. 08.

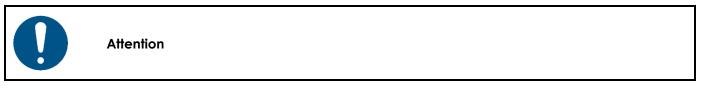








05) Select the circuit with the **circuit selector (03)**. You can select 1-, 2- and 3-phase circuit, as shown in Fig. 09.



Do not slide the track adapter in the track to adjust the position of the device (see Fig. 10). This can damage the connectors. Remove the device from the track and install it at the new place. For more information on how to remove the device from the track, refer to **4.8**. **Dismounting** on page 14.

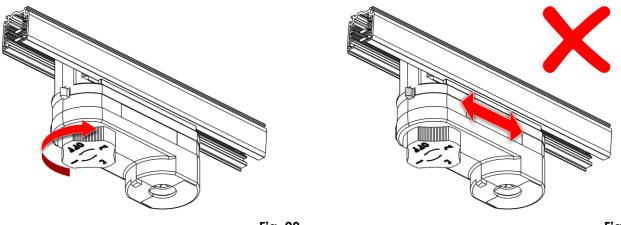


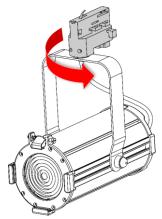


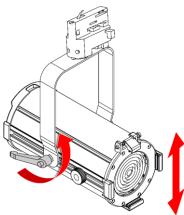
Fig. 10

### 4.5. Direction Adjustment

To adjust the angle of the device and the direction of the beam, follow the steps below:

- 01) Pivot the device around the track adapter (01) to adjust the direction of the beam (see Fig. 11).
- 02) Turn the adjustment handle (11) counterclockwise to release it.
- 03) Tilt the device at the desired angle (see Fig. 12).
- 04) Turn the **adjustment handle (11)** clockwise to tighten it. Make sure that the device cannot move freely after the **adjustment handle (11)** is tightened.







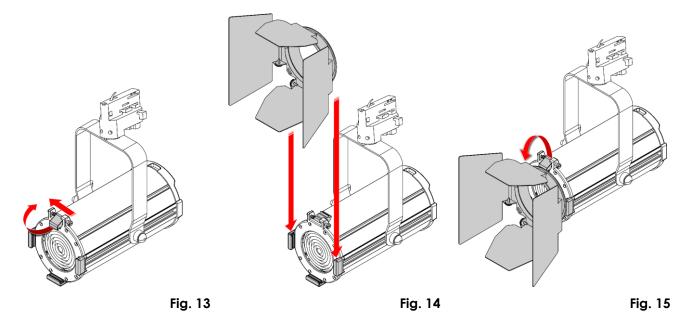


## 4.6. Barndoor Installation

The Display Track Fresnel 20 SW is delivered with a barndoor. To install the barndoor, follow the steps below:

- 01) Push the **spring-loaded screw (09)** and at the same time lift and flip backwards the **color frame clip (08)** (see Fig. 13).
- 02) Insert the barndoor into the color frame holders (06) (see Fig. 14).
- 03) Pull the **color frame clip (08)** downwards to release the **spring-loaded screw (09)** (see Fig. 15). The barndoor will be locked in position.

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



### 4.7. Color Frame Installation

The Display Track Fresnel 20 SW is delivered with a color frame. You can insert a color gel or a diffusion filter into the color frame. To install the color frame, follow the steps below:

- 01) Push the **spring-loaded screw (09)** and at the same time lift and flip backwards the **color frame clip (08)** (see Fig. 16).
- 02) Insert a color gel or a diffusion filter into the color frame.
- 03) Insert the color frame into the color frame holders (06) (see Fig. 17).
- 04) Pull the color frame clip (08) downwards to release the spring-loaded screw (09) (see Fig. 18). The color frame will be locked in position.

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

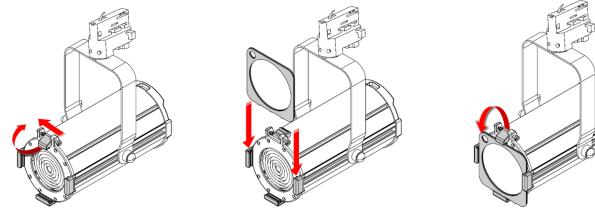


Fig. 16

Fig. 17





## 4.8. Dismounting

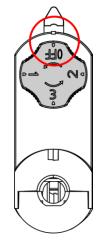


#### CAUTION

Restrict the access under the work area during dismounting.

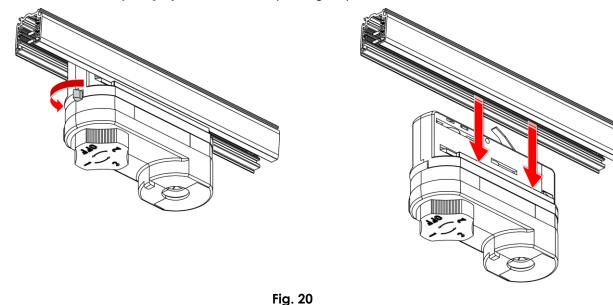
To dismount the device, follow the steps below:

- 01) Set the color temperature switch (14) to OFF position to turn the device off.
- 02) Let the device cool down before dismounting.
- 03) Make sure that the circuit selector (03) is in OFF position, as shown in Fig. 19.



#### Fig. 19

- 04) Turn the track lock (02) counterclockwise to unlock the device (see Fig. 20).
- 05) Pull the track adapter (01) from the track (see Fig. 21).



### 4.9. Connecting to Power Supply

This device is suitable for mounting only to a 3-phase track system. The device is connected to power supply when it is mounted to the track system.

# 5. Operation

#### 5.1. 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 an architectural light spot. It is suitable for indoor installation in shops, exhibition halls, showrooms and similar venues. This device is not suitable for.

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

#### 5.2. Manual Control

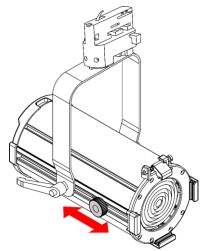
The Display Track Fresnel 20 SW can be operated only manually. The device is equipped with a color temperature switch and a manual dimmer control.

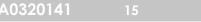
- Set the color temperature switch (14) to CW or WW position to turn the device on.
  - CW (cold white) position the light will turn on with a predefined color temperature of 6000 K
  - WW (warm white) position the light will turn on with a predefined color temperature of 3000 K
- Turn the **manual dimmer control (15)** to adjust the light intensity. The adjustment range is 5–100 %.
- Set the color temperature switch (14) to OFF position to turn the device off.

#### 5.2.1. Beam Angle Adjustment

The beam angle of the Display Track Fresnel 20 SW can be adjusted manually in the range 13°–57°. To adjust the beam angle, follow the steps below:

- 01) Turn the **zoom control (10)** counterclockwise to loosen it.
- 02) Slide the zoom control (10) forwards or backwards to achieve the desired beam angle (see Fig. 22).
- 03) After adjusting the beam angle, turn the **zoom control (10)** clockwise to tighten it. Do not overtighten it.







# 6. 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
	No power to the device	<ul> <li>Check if the track system is connected to the power supply</li> </ul>
The device does not function	Main fuse is blown	<ul> <li>Replace the fuse. See 7.3.1. Replacing the Fuse on page 17</li> </ul>
	LEDs are damaged	<ul> <li>Disconnect the device and contact your Highlite International dealer</li> </ul>
No light or LEDs cut out intermittently	The power supply settings do not match local AC voltage and frequency	• Disconnect the device. Check the settings and correct, if necessary

## 7. Maintenance

#### 7.1. Safety Instructions for Maintenance



DANGER Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

#### 7.2. Preventive Maintenance



Attention Before 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.
- There are no deformations on housings, fixations and installation points.
- The lens is not cracked or damaged.
- The interconnecting power cable is not damaged and does not show any material fatigue.



#### 7.2.1. 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 a 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.



Attention

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

#### 7.3. 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.

#### 7.3.1. 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.
- 01) Allow the device to cool down for at least 15 minutes.
- 02) Loosen the fuse cover with a screwdriver and remove the fuse holder.
- 03) If the fuse is brown or unclear, it is burned out. Remove the old fuse.
- 04) 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.
- 05) Replace the fuse holder in the opening and tighten the fuse cover.



# 8. Transportation and Storage

#### 8.1. 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".

## 8.2. Storage

- Clean the device before storing. Follow the cleaning instructions in chapter 7.2.1. Basic Cleaning Instructions on page 17.
- Store the device in the original packaging, if possible.

# 9. 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.

# 10. Approval

# CE

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



