ignition

ACL LED Par 64

User manual

LED PAR

Table of contents

Table of contents

1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under *www.thomann.de*.

1.1 Further information

On our website (*www.thomann.de)* you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2   Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.

Displays

Texts and values displayed on the device are marked by quotation marks and italics.

Examples: *'24ch'*, *'OFF'*.

Instructions   The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

Example:

1. ▶ Switch on the device.

2. ▶ Press *[Auto]*.

⇨ Automatic operation is started.

3. ▶ Switch off the device.

1.3   Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – dangerous optical radiation.

Warning signs	Type of danger
	Warning – suspended load.
	Warning – danger zone.

2   Safety instructions

Intended use

This device is intended for use as an electronic lighting effect by means of LED technology. The device is designed for professional use and is not suitable for use in households. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Extend the life of the device by regular breaks in operation and avoid switching it on and off frequently. This device is not suitable for continuous use.

Safety

DANGER!
Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!
Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord). Do not modify the mains cable. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

WARNING!

Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.

WARNING!

Eye damage caused by high light intensity

Never look directly into the light source.

WARNING!

Risk of epileptic shock

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

NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.

!

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

!

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

!

NOTICE!

Fire hazard due to exceedance of the maximum current

The device can power other devices via a lockable Power Twist output socket. The current consumption of all serially connected other devices must not exceed 16 A, otherwise you risk injuries and irreparable damages of the device.

Connect just so many devices to the output socket that the maximum current consumption is not exceeded.

Ensure the correct dimensioning (wire cross section) of the used power cords of all serially connected devices.

!

NOTICE!

Possible damage due to installation of a wrong fuse

The use of different types of fuses can cause serious damage to the unit. Fire hazard!

Only fuses of the same type may be used.

3   Features

Special features of the device:

- 16 × 4 W Philips LEDs, warm white
- Operation in stand-alone, master / slave or DMX mode, sound control
- Electronic dimmer and shutter
- Selectable dimmer curves and modulated halogen dimming effect
- Control via DMX (two modes), via RDM or via buttons and display on the unit
- Robust metal housing with two-part bracket and colour filter holder
- Suitable for use in clubs, bars and on stages

Remote Device Management (RDM)

The device supports RDM protocol communication (Remote Device Management) according to ANSI / ESTA E1.20. It can exchange information with an RDM-compatible controller. Also observe the instruction manual of the controller.

For technological reasons, the light output of LEDs decreases over their lifetime. This effect increases with higher operating temperature. You can extend the service life of the illuminants by providing adequate ventilation and operating the LEDs with the lowest possible brightness.

4   Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

WARNING!

Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.

! **NOTICE!**
Risk of overheating

The distance between light output and the illuminated surface must be more than 1.5 m (19.7in).

Provide sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).

! **NOTICE!**
Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

! **NOTICE!**
Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

Mounting options

You can install the device hanging or on a tripod. When in use, the device must always be attached to a solid surface or an approved truss. Use the opening of the bracket provided for mounting.

Always work from a stable platform whenever installing, moving or servicing the unit. In doing so, the area underneath the unit must be cordoned off.

The safety cable must be attached to the safety eyelet.

Please note that this device must not be connected to a dimmer.

5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Connections in DMX mode

Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110 Ω, ¼ W).
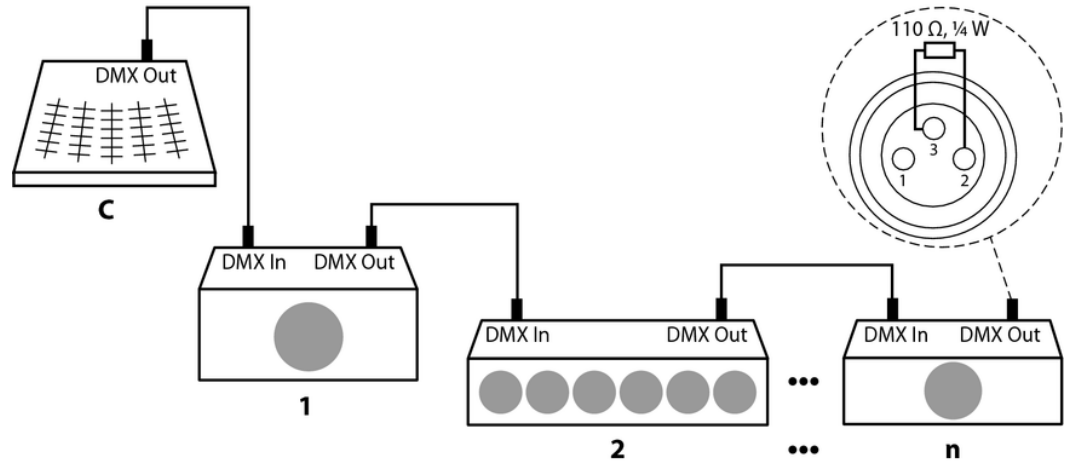
DMX indicator

When the device and the DMX controller are in operation and a DMX signal is received at the input, the display shows *'Dmx In'*.

Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

6   Connections and controls
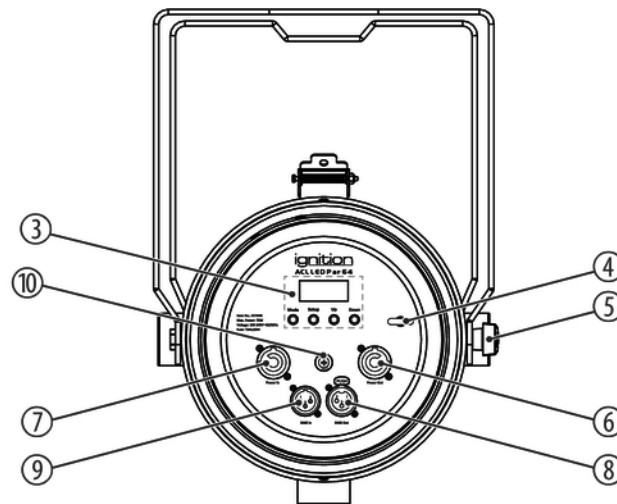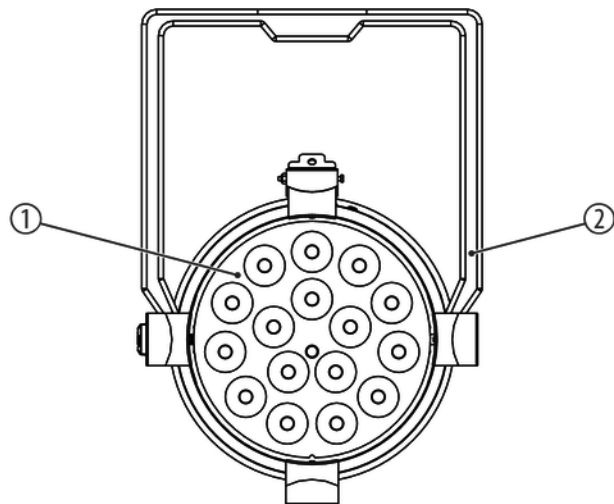
1	16 × 4 W Philips LEDs
2	two-piece bracket for hanging or floor setup
3	Display
	[Mode]
	Calls up the main menu or a submenu
	[Setup]
	Confirms a selected value.
	[Up]
	Navigates upwards in a menu list. Increases the displayed value by one.
	[Down]
	Navigates downwards in a menu list. Decreases the displayed value by one.
4	Safety cable eyelet.
5	Locking screw for the two-piece bracket

6	[POWER OUT]
	Lockable output socket (Power Twist) for the power supply of further devices (output current max. 16 A)
7	[POWER IN]
	Lockable input socket (Power Twist) for power supply
8	[DMX OUT]
	DMX output
9	[DMX IN]
	DMX input
10	Fuse holder

7   Operating

7.1 Starting the device

Connect the device to the power supply to start operation. The fan starts to work and the LED lights up. The device is immediately operational.

7.2 Operating on the unit

1. Press *[Mode]* to activate the main menu.

2. Use *[Up]* or *[Down]* to select the desired parameter or to change the respectively displayed value. To apply settings and changed values, press *[Setup]*.

3. Press again *[Mode]* to call up further menu items.

4. To activate the respectively shown menu item, press *[Setup]*.

5. To return to the previous menu level without change, press *[Mode]*.

Auto programme

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'PROGRAM'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select a value between *'Speed 001'* (slow) and *'Speed 100'* (fast) to set the speed of the automatic programme.

3. ▶ Press *[Setup]* to accept the selection.

4. ▶ Use *[Up]* or *[Down]* to select a value between *'Flash 000'* and *'Flash 099'* to set the flash frequency of the automatic programme.

5. ▶ Press *[Setup]* to accept the selection.

DMX address, DMX mode

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'DMX'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select a value between *'Address 001'* and *'Address 512'* to set the DMX address.

3. ▶ Press *[Setup]* to accept the selection.

4. ▶ Use *[Up]* or *[Down]* to select the desired DMX mode (1 or 2 channels). Depending on the selected mode, the display shows *'1-CH'* or *'2-CH'*.

5. ▶ Press *[Setup]* to accept the selection.

This setting is only relevant when the device is controlled via DMX. Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the various DMX modes.

Mode	Display	Highest possible DMX address
1-channel	*'1-CH'*	512
2-channel	*'2-CH'*	511

When the DMX mode is activated, the display shows *'Dmx In'* .

Slave mode

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SLAVE'* . Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'Yes'* and confirm with *[Setup]* to enable the Slave mode.

⇨ The device is now working in slave mode, i.e. it will exactly copy the movement of the controlling master device, correct wiring provided.

To deactivate slave mode, select *'No'* and confirm with *[Setup]*.

This setting is only relevant if the device is not controlled via DMX.

Sound control

1. ▸ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SOUND'*. Confirm with *[Setup]*.

2. ▸ Use *[Up]* or *[Down]* to select a value between *'Sensitivity 00'* and *'Sensitivity 31'* to adjust the sensitivity of the sound control.

3. ▸ Press *[Setup]* to accept the selection.

Dimmer settings

1. ▸ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'DIMMER'*. Confirm with *[Setup]*.

2. ▸ Use *[Up]* or *[Down]* to select a value between *'Dimmer Val 000'* (LEDs off) and *'Dimmer Val 255'* (full brightness) to adjust the brightness of the LEDs.

3. ▸ Press *[Setup]* to accept the selection.

4. ▸ Use *[Up]* or *[Down]* to select a value between *'Flash 000'* and *'Flash 099'* to set the flash frequency of the dimmer.

5. ▸ Press *[Setup]* to accept the selection.

Dimmer curve

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SETTINGS'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'Curves Select'*. Confirm with *[Setup]*.

3. ▶ Use *[Up]* or *[Down]* to select the desired dimmer curve. The following table shows the available options.

Menu level 2	Menu level 3	Function
'Curves Select'	*' Curves 1 linear'*	Linear course
	' Curves 2 Square'	Exponential course
	'Curves 3 Inv Squa'	Logarithmic course
	'Curves 4 S-Type'	S-curve shaped course

4. ▶ Press *[Setup]* to accept the selection.

Dimmer response

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SETTINGS'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'Dimmer Speed'*. Confirm with *[Setup]*.

3. ▶ Use *[Up]* or *[Down]* to select the desired setting for the dimmer response. The following table shows the available options.

Menu level 2	Menu level 3	Function
'Dimmer Speed'	*'D-Speed Fast:'*	Fast dimming
	'D-Speed Smooth'	Slow dimming
	'D-Speed Halogen'	The imitation of the dimming behaviour for halogen light is activated.

4. ▶ Press *[Setup]* to accept the selection.

Display illumination

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SETTINGS'* . Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'LCD back light'* . Confirm with *[Setup]*.

3. ▶ Use *[Up]* or *[Down]* to select the desired setting for the duration of the display lighting. The following table shows the available options.

Menu level 2	Menu level 3	Function
'LCD back light'	*'Time Set 10S'*	The display lighting switches off automatically after 10 seconds without pressing a button.
	'Time Set 20S'	The display lighting switches off automatically after 20 seconds without pressing a button.
	'Time Set 30S'	The display lighting switches off automatically after 30 seconds without pressing a button.

Menu level 2	Menu level 3	Function
	'Time Set 60S'	The display lighting switches off automatically after 60 seconds without pressing a button.
	'Time Set ON'	The display lighting remains on permanently.

4. ▶ Press *[Setup]* to accept the selection.

Behaviour on DMX control failure

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SETTINGS'* . Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'Dmx Fail'* . Confirm with *[Setup]*.

3. ▶ Use *[Up]* or *[Down]* to select the device behaviour on DMX signal failure. The following table shows the available options.

Menu level 2	Menu level 3	Function
'Dmx Fail'	*'Off'*	If the DMX control fails, the device is blacked out.
	'Hold'	If the DMX control fails, the last setting is retained.

4. ▶ Press *[Setup]*to accept the selection.

Calibration

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SETTINGS'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'CALIBRAT.'*. Confirm with *[Setup]*.

3. ▶ Press *[Up]* or *[Down]* until the password 088 appears in the display. Confirm with *[Setup]*.

4. ▶ Use *[Up]* or *[Down]* to select the menu item for which the calibration is to be carried out. The following table shows the available options.

Menu level 2	Menu level 3	Menu level 4	Function
'CALIBRAT.'	*'Password'* (088)	*'Dimmer Fine 000'* … *'Dimmer Fine 255'*	Dimmer fine calibration
		'White Bal 000' … *'White Bal 255'*	White balance calibration
		'Default Yes' / *'Default No'*	Default values of the device

5. ▶ Press *[Setup]* to accept the selection.

Resetting the device to factory settings

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'SETTINGS'* . Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'Factory Reset'* . Confirm with *[Setup]*.

3. ▶ Use *[Up]* or *[Down]* to select the menu item *'Yes'* to reset the device to factory defaults or select the menu item *'NO'* to retain the stored settings.

4. ▶ Press *[Setup]* to accept the selection.

Device temperature

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'INFO'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'Temperature'*. Confirm with *[Setup]*.

   ⇨ The display shows the current device temperature.

3. ▶ Press *[Setup]* to close the menu.

> **!** **NOTICE!**
> If the device overheats, the display shows *'Error'*. Switch off the device.

Software

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'INFO'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'Software Version'*. Confirm with *[Setup]*.

   ⇨ The display shows the current software Version.

3. ▶ Press *[Setup]* to close the menu.

RDM function

This device has an RDM function and supports the DMX512 standard. Any device with RDM can be recognized by the built-in UID code.

1. ▶ Press *[Mode]* and use *[Up]* or *[Down]* to select the menu item *'INFO'*. Confirm with *[Setup]*.

2. ▶ Use *[Up]* or *[Down]* to select the menu item *'RDM UID'*. Confirm with *[Setup]*.

   ⇨ The display shows the UID code.

3. ▶ Press *[Setup]* to close the menu.

Parameter ID	Recognition command	Sent command	Received command
DISC_UNIQUE_BRANCH	*		
DISC_MUTE	*		
DISC_UN_MUTE	*		
DEVICE_INFO			*
SOFTWARE_VERSION_LABEL			*

Parameter ID	Recognition command	Sent command	Received command
DMX_START_ADDRESS		*	*
IDENTIFY_DEVICE		*	*
SUPPORTED_PARAMETERS			*
SENSOR_DEFINITION			*
SENSOR_VALUE			*
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
RESET_DEVICE		*	
FACTORY_DEFAULTS		*	

7.3 Menu overview

MENU

PROGRAM
- Speed 001
- Speed 100
- Flash 000
- Flash 099

DMX
- Address 001
- Address 512
- 1-CH
- 2-CH

SLAVE
- Yes
- No

SOUND
- Sensitivity 00
- Sensitivity 31

DIMMER
- Dimmer Val 000
- Dimmer Val 255
- Flash 000
- Flash 099

SETTINGS
- Curves Select
  - Curves 1 linear
  - Curves 2 Square
  - Curves 3 Inv Squa
  - Curves 4 S-Type
- Dimmer Speed
  - D-Speed Fast
  - D-Speed Smooth
  - D-Speed Halogen
- LCD back light
  - Time Set 10S
  - Time Set 20S
  - Time Set 30S
  - Time Set 60S
  - Time Set ON

- Dmx Fail
  - Off
  - Hold
- CALIBRAT.
- Password
  - Dimmer Fine
    - 000
    - 255
  - White Bal
    - 000
    - 255
  - Default
    - Yes
    - No
- Factory Reset
  - Yes
  - No

INFO
- Temperature
  - xxC/Error
- Software Version
  - Vx.x
- RDM UID
  - xxxxxxxx

7.4   Functions in 1-channel DMX mode

Channel	Value	Function
1	0 … 255	Dimmer (0 % to 100 %)

7.5   Functions in 2-channel DMX mode

Channel	Value	Function
1	0 … 255	Dimmer (0 % to 100 %)
2	0	No function
	001 … 180	Even stroboscope effect, increasing speed
	181 … 255	Random stroboscope effect, increasing speed

8 Technical specifications
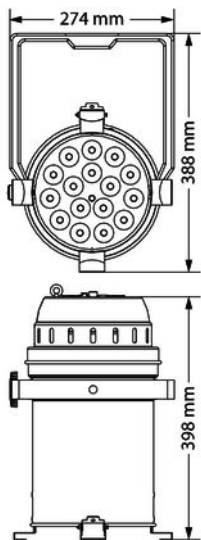
Light source	16 × Philips LEDs, 4 W	
Light source properties	Colour temperature	2700 K
	Colour rendering index	CRI Ra 80
	Light output	24000 lx
Optical properties	Beam angle	4°
	Dimmer	0 … 100 %
	Strobe	0 … 20 Hz
Control	DMX, buttons and display on the unit	
Number of DMX channels	1 or 2	
Input connections	Voltage supply	lockable input socket (Power Twist)
	DMX control	XLR chassis plug, 3-pin

Output connections	Power supply for further devices	lockable output socket (Power Twist)
		Output current 16 A max.
	DMX control	XLR chassis socket, 3-pin
Power consumption	max. 70 W	
Operating supply voltage	100 – 240 V ∼ 50/60 Hz	
Fuse	5 mm × 20 mm, 3 A, 250 V, slow-blow	
Protection class	IP20	
Mounting options	hanging, standing	
Dimensions (W × H × D)	274 mm × 388 mm × 398 mm	
Weight	3.4 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	50 %, non-condensing

Further information

Construction	Par64
Colour mixture	WW
LED type	Unicoloured
Floor housing	Yes
Fanless	No
Remote control	Not possible
wireless DMX	No
Housing colour	black

9 Plug and connection assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

DMX connections

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.

Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX–, 'cold signal')
3	Signal (DMX+, 'hot signal')

10   Troubleshooting

> **!** **NOTICE!**
> **Possible data transmission errors**
>
> For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.
>
> Never connect the DMX input or output to audio devices such as mixers or amplifiers.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The unit does not work, no light, the display is dark	Check the mains connection and the main fuse.
Apparently no function despite proper power supply	Check whether the device is in DMX mode. If so, check the unit in another mode.
No response to the DMX controller	1. Check the DMX connectors and cables for proper connection.
	2. If the unit is in DMX mode with a DMX controller connected and turned on, the display shows *'Dmx In'*. If it doesn't, no valid DMX signal is received. Check whether the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	3. If the display shows *'Dmx In'* but there is still no response, check the address settings and the DMX polarity.

Symptom	Remedy
	4. Try using another DMX controller.
	5. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at *www.thomann.de*.

11   Cleaning

Optical lenses   Clean the optical lenses, that are accessible from the outside, regularly in order to optimize the light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

Fan grids   The fan grids of the device must be cleaned of any contamination, such as dust, etc. on a regular basis. Before cleaning, switch off the device and disconnect mains-operated devices from the mains. Only use pH-neutral, solvent-free and non-abrasive cleaning agents. Clean the unit with a slightly damp lint-free cloth.

12   Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

Notes