



PAR56 LED black
PAR56 LED chrome

LED PAR

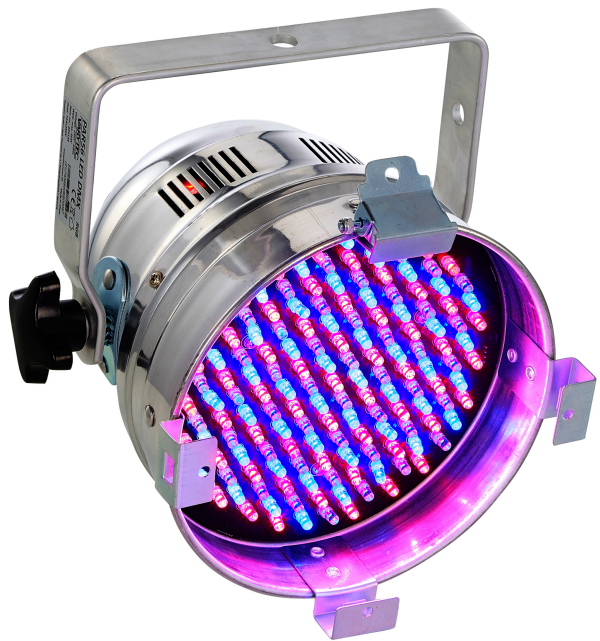
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1 General notes

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

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'*.

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 – suspended load.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used as an electronic illumination effect using LED technics. 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.

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

Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



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.



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.

3 Features

The LED PAR is particularly suitable for professional lighting applications, e.g. at events, on rock stages, in theatres and musicals or TV productions. It is characterized by a low power consumption and long life span.

Special features of this device:

- LEDs in three primary colours (RGB)
- Control via DMX or DIP switches on the unit
- Preprogrammed automatic shows
- Sound control
- Robust metal housing

4 Installation

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device 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

Always ensure 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.

Options

You can install the device in either the hanging or standing position. During use, the device must always be attached to a solid surface or to an approved support. Use the openings provided on the bracket for attaching.

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

The safety-rope must be attached to the bracket.



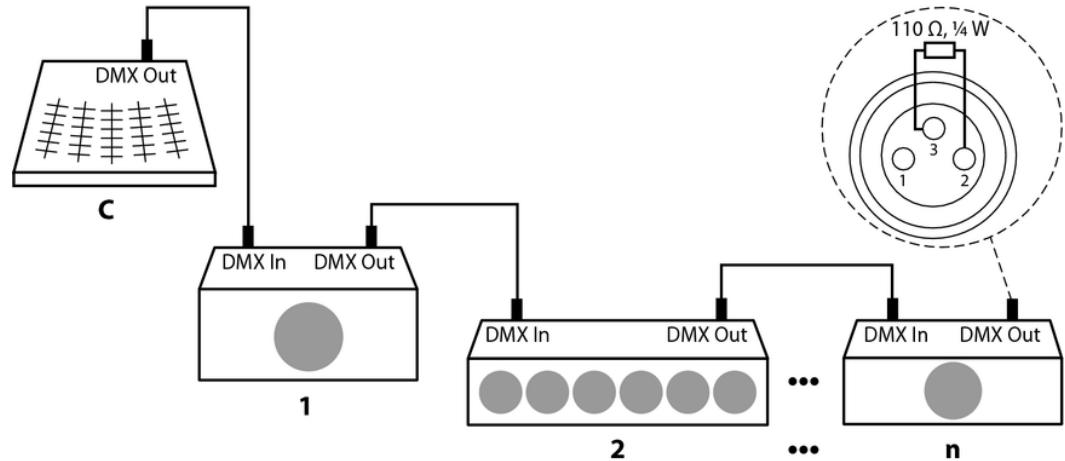
Please note that this device must not be connected to a dimmer.

5 Starting up

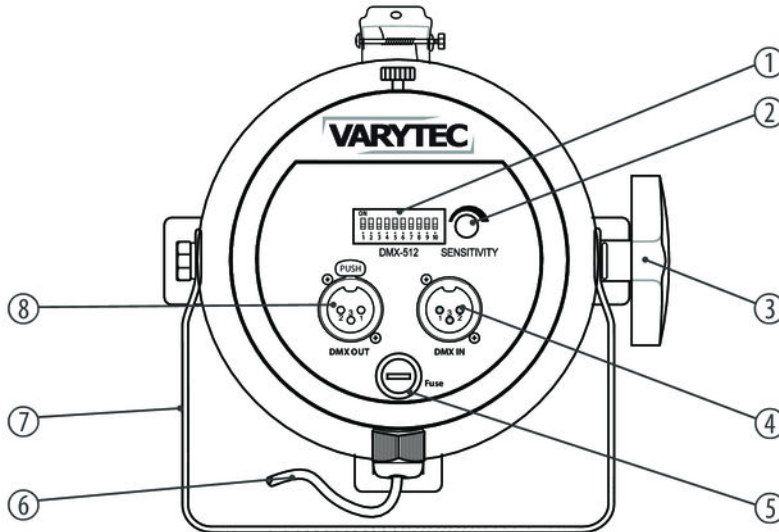
Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

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 ($110\ \Omega$, $\frac{1}{4}\text{ W}$).



6 Connections and controls



1	<i>[DMX-512]</i> DIP switches for setting different functions depending on the mode.
2	<i>[SENSITIVITY]</i> Rotary control for setting the microphone sensitivity.
3	Locking screws for the mounting bracket.
4	<i>[DMX IN]</i> DMX input.
5	<i>[Fuse]</i> Fuse holder. Should the fuse have blown, disconnect the unit from the power supply and replace the fuse with a new fuse of the same type.
6	Power cord

7	Bracket for floor placement or hanging.
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8	<i>[DMX OUT]</i> DMX output.
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7 Operating

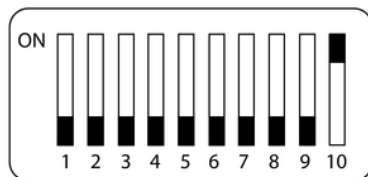
7.1 Starting the device

Connect the device to the power supply to start operation. After a few seconds the unit is ready for use.

7.2 Stand-alone operation

When the DIP switch 10 is set to 'ON', the device can be operated without a DMX controller and operates in one of the stand-alone modes.

Sound control



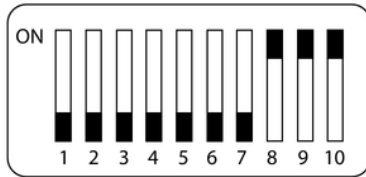
Set DIP switches 1 to 9 to 'OFF', DIP switch 10 to 'ON'. The unit is now responding to the music. The sensitivity of the built-in microphone can be adjusted with the *[SENSITIVITY]* control.

Automatic colour change



Set DIP switches 8 to 'OFF', DIP switches 9 and 10 to 'ON'. The device now shows an automatic colour change. The speed can be controlled using DIP switches 1 to 7.

Fixed colour setting



Set DIP switches 7 to 'OFF', DIP switches 8, 9 and 10 to 'ON'. Use DIP switches 1 to 6 to set the brightness of the three basic colours red, green and blue independently in steps.

DIP switches	Colour
1, 2	Red
3, 4	Green
5, 6	Blue

Switch position	Brightness
off, off	0 %
on, off	25 %
off, on	50 %
on, on	100 %

7.3 DMX mode

When DIP switch 10 is set to 'OFF', the device is controlled by a DMX controller.

Setting up the DMX address

The value of the DIP switches 1-9 is binary coded. To set the desired DMX address, set the DIP switches so that the sum of the resulting numbers yields the desired DMX address. Please orient yourself by the following table:

9	8	7	6	5	4	3	2	1	DMX address
0	0	0	0	0	0	0	0	1	1
0	0	0	0	0	0	0	1	0	2
0	0	0	0	0	0	1	0	0	4
0	0	0	0	0	1	0	0	0	8
0	0	0	0	1	0	0	0	0	16
0	0	0	1	0	0	0	0	0	32
0	0	1	0	0	0	0	0	0	64
0	1	0	0	0	0	0	0	0	128
1	0	0	0	0	0	0	0	0	256

0: DIP switch is in 'OFF' position. 1: DIP switch is in 'ON' position.

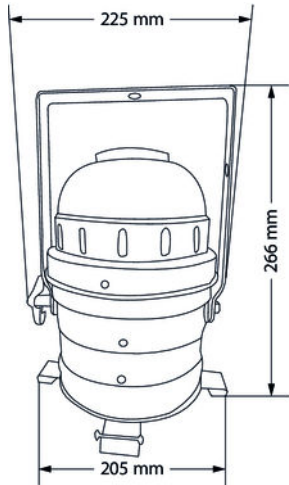
Example: To set the DMX address 10, set DIP switches 2 and 4 to 'ON', all others to 'OFF'. The highest possible DMX address is 511 (all DIP switches to 'ON').

Functions in 6-channel DMX mode

Channel	Value	Function
1	0...255	Intensity red (0 % to 100 %), if channel 6 = 0...31
2	0...255	Intensity green (0 % to 100 %), if channel 6 = 0...31
3	0...255	Intensity blue (0 % to 100 %), if channel 6 = 0...31
4	0...15	Colour macro off
	16...255	Colour macro on
5	Strobe effect	
	0...15	No stroboscope effect
	16...255	Stroboscope effect, increasing speed

Channel	Value	Function
6	Operating mode selection	
	0...31	Colour selection via channels 1 to 3
	32...63	Dimmer effect, dark / bright
	64...95	Dimmer effect, bright / dark
	96...127	Dimmer effect, dark / bright / dark
	128...159	Colour change with fade effect
	160...191	Colour change with three colours
	192...223	Colour change with seven colours
	224...255	Sound control

8 Technical specifications



LEDs	151 × high power (51 × red, 49 × green, 51 × blue)
Number of DMX channels	6
Operating supply voltage	230 V ~ 50 Hz
Power consumption	26 W
Fuse	5 mm × 20 mm, 1.0 A, 250 V, slow-blow
Dimensions	266 mm × 205 mm × 225 mm
Weight	2.0 kg

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.	Check the mains connection and the fuse.
No response to the DMX controller.	1. Check the DMX ports and cables for proper connection.
	2. Check the address settings and the DMX polarity.
	3. Try using another DMX controller.
	4. Check to see if the DMX cables run near or alongside to high voltage cables that may cause damage or interference to DMX interface circuits.

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.

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). 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.

