



LED PAR 14 × 8W

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'*.

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 – hot surface.

Warning signs	Type of danger
 A yellow triangular warning sign with a black border. Inside the triangle is a black silhouette of a crane hook lifting a rectangular load.	Warning – suspended load.
 A yellow triangular warning sign with a black border. Inside the triangle is a large black exclamation mark.	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 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.



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.



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.



WARNING!

Risk of burns

The surface of the device can become very hot during operation.

Do not touch the device with bare hands during operation, and after switching off wait for at least 15 minutes.



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!

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

Due to its sturdy and weather-proof housing made of die-cast aluminum, the device is especially suitable for outdoor use. With the very bright four-colour LEDs, it is particularly suitable for professional lighting tasks.

Special features of the device:

- 14 × quad-colour LEDs (red, green, blue, white, 8 W each)
- Control via DMX and via buttons and display on the unit
- Built-in automatic show programmes
- Master / Slave operation
- Rugged die-cast aluminium housing
- IP65 (suitable for outdoor use)
- Sturdy double bracket for secure attachment to trusses or firm footing on the ground
- Connectors for power supply and DMX control via splashproof screw-mountable plugs and couplings
- Mains power adapter with safety plug included

Information about protection class IP65

Equipment with protection class IP65 are dust-tight and completely protected against contact (first code number). They are also protected against splash water from any angle (second code digit). That is why this equipment can also be used outdoors. Event technology equipment is generally only designed for temporary use however (event lighting) and not for permanent use outdoors.

The specified protection class does not make a statement about the weather resistance of the equipment (resistance to changing ambient conditions as well as against the effects of sunlight and UV rays).

The seals and screw connections of the equipment must be checked regularly to ensure a fault-free operation. In cases of doubt, consult a specialist workshop in due time.

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 not exceed the limits stated in the chapter Technical Specifications of the User Manual.



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.

**NOTICE!****Possible damage due to moisture**

Moisture entering into open connectors (plugs and couplers) of DMX or power cords can cause short circuits.

Close unused connectors with end caps intended for this purpose (www.thomann.de).

Mounting options

You can install the unit in hanging or standing position. When in use, the device must always be attached to a solid surface or an approved truss. Use the openings provided on the two-piece bracket for attaching.

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-rope must be attached to the bracket.



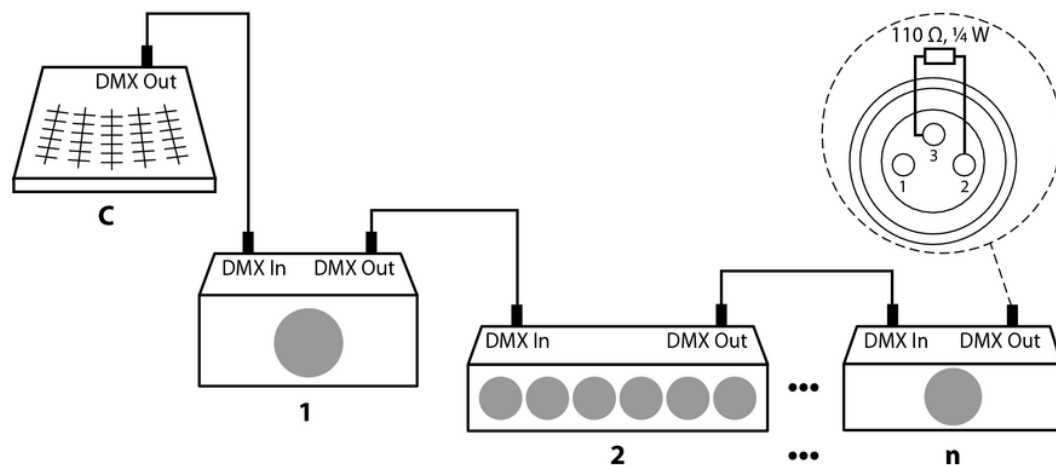
Please note that this device must not be connected to a dimmer.

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

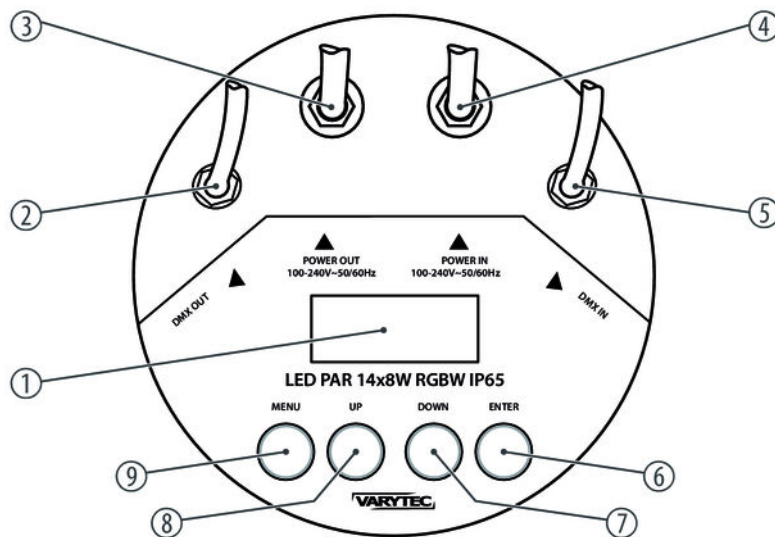
Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor ($110\ \Omega$, $\frac{1}{4}\text{ W}$).



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	Display
2	<i>[DMX OUT]</i> DMX output cable (IP65DMX coupling, screw-mountable).
3	<i>[POWER OUT]</i> Power cord for the voltage supply of a connected device (special coupling, screw-mountable).
4	<i>[POWER IN]</i> Power cord for the voltage supply of the unit (with special plug, screw-mountable).
5	<i>[DMX IN]</i> DMX input cable (IP65DMX plug, screw-mountable).
6	<i>[ENTER]</i> Selects an option of the respective operating mode.
7	<i>[DOWN]</i> Decreases the displayed value by one.

8 *[UP]*

Increases the displayed value by one.

9 *[MENU]*

Activates the main menu and toggles between menu items.

7 Operating

7.1 Starting the device

Connect the device to the power supply to start operation. After a few seconds, the display indicates that a reset is in progress. The device is then ready for use.

7.2 Main menu

Press *[MENU]* to activate the main menu. Use the buttons *[UP]* and *[DOWN]* to select a menu item. When the display shows the desired value press *[ENTER]*.

If you don't press any button for about 1 minute, the unit returns to the previously selected mode. The set values are retained even when the device is disconnected from the mains power supply.

Setting the DMX address

1. ➤ Press *[MENU]*.
2. ➤ Use *[UP]* or *[DOWN]* to select the menu item '*Addr:*'.
3. ➤ Press *[ENTER]*.
4. ➤ Now you can set the number of the first DMX channel to be used by the device (DMX address). Use the buttons *[UP]* or *[DOWN]* to select a value between 1 and 512 (the display shows '*A001*' ... '*A512*').

Brightness setting

1. ➤ Press *[MENU]*.
2. ➤ Use *[UP]* or *[DOWN]* to select one of the menu items '*or--*' (brightness red), '*gL--*' (brightness green), '*bL--*' (brightness blue) or '*oL--*' (brightness white).
3. ➤ Press *[ENTER]*.
4. ➤ Now you can adjust the brightness of the selected basic colour. Use the buttons *[UP]* or *[DOWN]* to select a value between 0 (minimum brightness) and 15 (full brightness).

Strobe effect setting

1. ➤ Press *[MENU]*.
2. ➤ Use *[UP]* or *[DOWN]* to select the menu item 'FLAS'.
3. ➤ Press *[ENTER]*.
4. ➤ Now you can set the flash rate of the stroboscope. Use the buttons *[UP]* or *[DOWN]* to select a value between 'FL00' (no strobe effect) and 'FL15' (strobe effect with highest frequency).

Start automatic colour sequence

1. ➤ Press *[MENU]*.
2. ➤ Use *[UP]* or *[DOWN]* to select the menu item 'ASC'.
3. ➤ Press *[ENTER]*.
4. ➤ Now you can select the speed of the colour sequence. Use the buttons *[UP]* or *[DOWN]* to select a value between 'AS00' (lowest speed) and 'AS15' (highest speed).

Selecting colour macro

1. ➤ Press *[MENU]*.
2. ➤ Use *[UP]* or *[DOWN]* to select the menu item 'CE--'.
3. ➤ Press *[ENTER]*.
4. ➤ Now you can select one of 16 different colour macros. Use the buttons *[UP]* or *[DOWN]* to select a value between 'CE00' and 'CE15'.

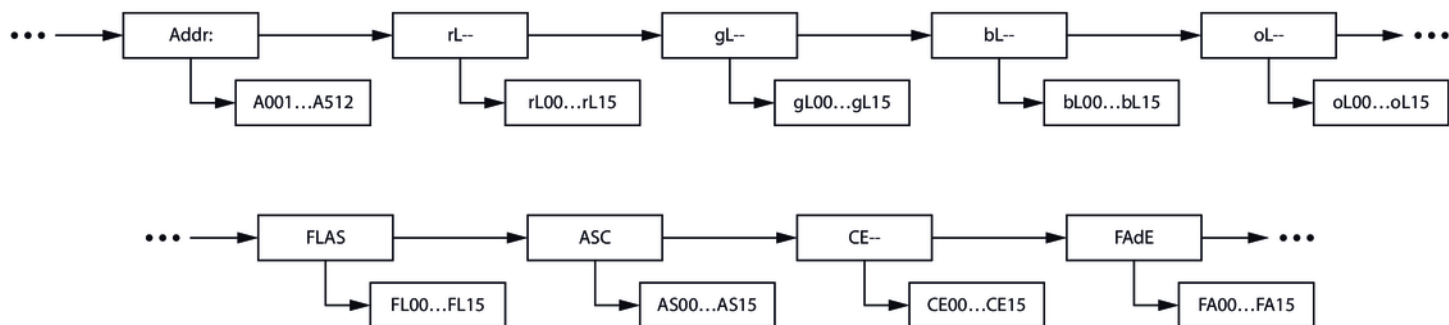
Automatic colour fade

1. ➤ Press *[MENU]*.
2. ➤ Use *[UP]* or *[DOWN]* to select the menu item 'FAde'.
3. ➤ Press *[ENTER]*.
4. ➤ Now you can set the fade speed. Use the buttons *[UP]* or *[DOWN]* to select a value between 'FA00' (lowest speed) and 'FA15' (highest speed).

Setting master / slave operation

- 1.** ➤ Connect the DMX output of the master unit to the DMX input of the first slave unit. Then connect the DMX output of the first slave unit to the DMX input of the second slave unit and so on.
- 2.** ➤ Set DMX address 1 for all units that are to follow the master unit as a slave unit.
- 3.** ➤ Select one of the automatic programmes on the master unit.

7.3 Menu overview



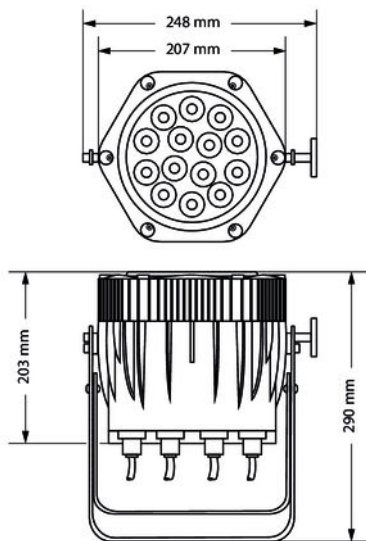
7.4 Functions in DMX mode

Channel	Value	Function
1	0...255	Dimmer (0 % to 100 %)
2	0...255	Intensity red (0 % to 100 %)
3	0...255	Intensity green (0 % to 100 %)
4	0...255	Intensity blue (0 % to 100 %)
5	0...255	Intensity white (0 % to 100 %)
6	Colour selection	
	0	Blackout
	1...14	Pure white
	15...29	White
	30...44	Light blue
	45...59	Blue

Channel	Value	Function
	60...74	Purple
	75...89	Bluish violet
	90...104	Reddish violet
	105...164	Orange
	165...179	Yellow
	180...194	Lime green
	195...209	Light green
	210...224	Green
	225...239	Blue green
	240...254	Cyan
	255	Blackout
7	0...255	Stroboscope effect with increasing speed
8	0	Constant colour, settings with channel 1 ... 7

Channel	Value	Function
	1...5	No function
	6...240	Colour fade, increasing speed
	241...254	Colour change, increasing speed
	255	Blackout

8 Technical specifications



LEDs	14 × quad-colour LEDs, 8 W
Beam angle	25 °
Number of DMX channels	8
Operating supply voltage	AC 100 – 240 V ~ 50/60 Hz
Power consumption	90 W
Protection class	IP65
Temperature range	–40 °C ... 50 °C
Dimensions (W × H × D)	248 mm × 203 mm × 290 mm
Weight	5.0 kg

9 Plug and connection assignment

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

A three-pole coupling in IP65 design is used as DMX output, a three-pole plug in IP65 design is used as DMX input. The drawing below and the table show the pin assignment of a matching coupling.



Pin	Assignment
1	Ground (shielding)
2	Signal inverted (DMX-, 'cold')
3	Signal (DMX+, 'hot')

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) 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.

