



Led Par 64 18x3W 3in1 RGB LED PAR

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1 General notes

This user manual contains important information on 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, include the manual for the next owner.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user 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
A	Warning – high-voltage.
	Warning – suspended load.



Warning signs	Type of danger
<u>^</u>	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.





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 cover the device nor any ventilation slots. Do not place 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 suitable for almost all applications, for example in clubs, bars, small stages and theatres. It is characterized by small size, solid construction also for use 'on tour' and enormous power.

Special features of the device:

- 18 × tri-colour High-Power LEDs (RGB)
- Control via DMX (two different modes) and via buttons and display on the unit
- Automatic mode and sound control
- Master / Slave mode
- Robust metal housing in black (item no. 325299) or silver (item no. 325301).



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.

You can install the device on the wall, ceiling or floor. A two-piece mounting bracket with locking screws is included in the package.



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.



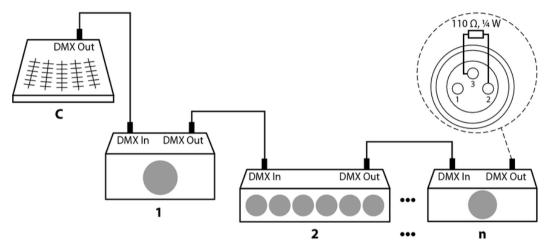
5 Starting up

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.



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 , $\frac{1}{4}$ W).





DMX indicator

With active display, a dot is lit in the first digit when the unit is in DMX mode. If the dot is not lit, no valid DMX data is received.

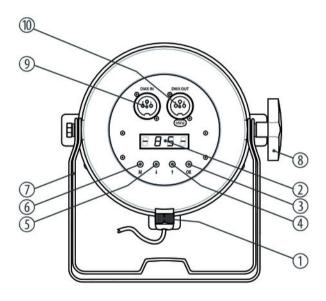
Connections in master/slave mode

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 operating elements

Rear panel





1	Power cord.	
2	Display.	
3	[OK] button	
	Confirms a selected value.	
4, 5	Buttons ↑, ↓	
	Increases / decreases the displayed value by one.	
6	[M] button	
	Calls the main menu or a submenu.	
7	Bracket for floor placement or hanging.	
8	Locking screws for the mounting bracket.	



Connections and operating elements

9	[DMX IN]
	DMX input.
10	[DMX OUT]
	DMX output



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 [M] to activate the main menu and select an operating mode. Use the arrow buttons to change the respectively displayed value. When the display shows the desired value, press the [OK] button.

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.



DMX mode

Press [M]. Press one of the arrow buttons repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow buttons repeatedly until the display shows 'dMX'. Press [OK]. Now use the arrow buttons to select one of the following DMX modes:

- '3CH' (three channels)
- '5CH' (five channels)

This setting is only relevant if the device is controlled via DMX. When the display shows the desired value, press the [OK] button to confirm the selection and then [M] to return to the parent menu. To return to the parent menu without making changes, press the [M] button.



DMX address

Press [M]. Press one of the arrow buttons repeatedly until the display shows 'AddR'. Press [OK]. Now you can set the number of the first DMX channel to be used by the device (DMX address). Use the arrow buttons to select a value between 1 and 512. (Display shows 'A001'... 'A512').

When the display shows the desired value, press the [OK] button to confirm the selection and then [M] to return to the parent menu. To return to the parent menu without making changes, press the [M] button.

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	Highest possible DMX address
3-channel	510
5-channel	508



Display blackout

Press [M]. Press one of the arrow buttons repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow buttons repeatedly until the display shows 'dISP'. Press [OK].

To enable the blackout function press one of the arrow buttons repeatedly until the display shows 'OFF'. Press [OK]. From now on the display goes out if you do not press a button within a period of two minutes. Once you press any button, the display becomes active again.

To permanently turn on the display, press one of the arrow buttons repeatedly until the display shows 'ON'. Press [OK].

To return to the parent menu, press the [M] button.

Operating mode 'Slave'

To configure the device as slave, press one of the arrow buttons repeatedly until the display shows 'SLAVE'. Press [OK] to confirm the selection. The device is now configured as slave and follows the settings of the master device to which it is connected. Ensure that for all devices configured as slave the DMX address is set to 001.

To return to the parent menu without making changes, press the [M] button.

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



Operating mode 'Show 1'

Press [M]. Press one of the arrow buttons repeatedly until the display shows 'CHAN'. Press [OK]. Now you can select one of the preprogrammed automatic shows. Use the arrow buttons to select a value for the progress speed between 0 and 255. (Display shows 'C000' ... 'C255').

The auto show can only be activated on the master device.

This setting is only relevant if the device is not controlled via DMX. The device can operate in stand-alone mode or control connected devices of the same type, that must be configured as slaves. When the display shows the desired value, press the [OK] button to confirm the selection and then [M] to return to the parent menu. To return to the parent menu without making changes, press the [M] button.

Operating mode 'Show 2'

Press [M]. Press one of the arrow buttons repeatedly until the display shows 'MIX'. Press [OK]. Now you can select one of the preprogrammed automatic shows. Use the arrow buttons to select a value for the progress speed between 0 and 255. (Display shows 'M000'...'M255').

The auto show can only be activated on the master device.

This setting is only relevant if the device is not controlled via DMX. The device can operate in stand-alone mode or control connected devices of the same type, that must be configured as slaves. When the display shows the desired value, press the [OK] button to confirm the selection and then [M] to return to the parent menu. To return to the parent menu without making changes, press the [M] button.



Sound control

Press [M]. Press one of the arrow buttons repeatedly until the display shows 'SOUd'. Press [OK]. The device now shows an automatic colour change in the rhythm of the music.

This setting is only relevant if the device is not controlled via DMX. Press [M] to return to the parent menu.

Manual test

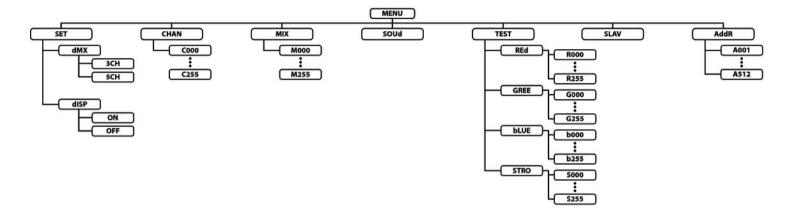
Press [M]. Press one of the arrow buttons repeatedly until the display shows 'TEST'. Press [OK]. Press one of the arrow buttons repeatedly until the display shows 'REd', 'GREE', 'bLUE' or 'STRO'. Press [OK]. Now you can separately set the brightness of the LEDs for each colours red, green and blue in a range from 0 to 255, or select the strobe rate from a range of 0 to 255.

This mode is also suitable to mix constant or flashing light from the three LED colours without DMX control.

When the display shows the desired value, press the [OK] button to confirm the selection and then [M] to return to the parent menu. To return to the parent menu without making changes, press the [M] button.



7.3 Menu overview



7.4 Functions in 3-channel DMX mode

Channel	Value	Function
1	0255	Intensity Red (0 % to 100 %)
2	0255	Intensity Green (0 % to 100 %)
3	0255	Intensity Blue (0 % to 100 %)

7.5 Functions in 5-channel DMX mode

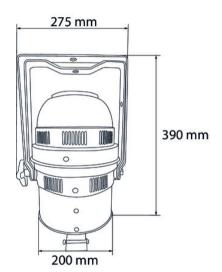
Channel	Value	Function
1	0255	Intensity Red (0 % to 100 %), if channel $4 = 0127$, otherwise without function
2	0255	Intensity Green (0 % to 100 %), if channel $4 = 0127$, otherwise without function
3	0255	Intensity Blue (0 % to 100 %), if channel $4 = 0127$, otherwise without function
4	Operating mode selection	



Channel	Value	Function
	0127	Constant colour, the hue is set by channels 1-3
	128223	Automatic colour change with 8 colours, channels 1-3 without function
	224255	Sound-controlled colour change
5	Effects speed	
	0255	Automatic colour change as set by channel 4, increasing speed from slow to fast



8 Technical specifications



LEDs	18 × tri-colour LEDs (RGB), 3 W each
Dispersion angle	40°
Number of DMX channels	3, 5
Operating supply voltage	230 V ∼ 50 Hz
Power consumption	58 W
Housing colour	Black (item no. 325299)
	Silver (item no. 325301)
Dimensions	275 mm x 390 mm x 200 mm
Weight	2.92 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 main fuse.
Apparently no function despite proper power supply	Check if the unit is in DMX mode or in 'slave' mode. If so, check the unit in another mode.
No response to the DMX controller	1. With active display, a dot is lit in the first digit when the unit is in DMX mode. If the dot is not lit, no valid DMX data is received. Then check that the DMX controller is switched on. Check the DMX connectors 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 <u>www.thomann.de</u>.

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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 on a regular basis to remove dust and dirt. Before cleaning, switch off the device and disconnect AC-powered devices from the mains. Use a lint-free damp cloth for cleaning. Never use solvents or alcohol for cleaning.



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.







