



Outdoor Stage PAR 12 × 3W Tri

LED PAR

Thomann GmbH

Hans-Thomann-Straße 1

96138 Burgebrach

Germany

Telephone: +49 (0) 9546 9223-0

Internet: www.thomann.de

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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'*.




Cross-references



References to other locations in this manual are identified by an arrow and the specified page number. In the electronic version of the manual, you can click the cross-reference to jump to the specified location.

Example: See ↗ *'Cross-references'* on page 8.

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 – dangerous optical radiation.

Warning signs	Type of danger
 A yellow triangular warning sign with a black border. Inside the triangle, there is a black silhouette of a person standing next to a rectangular object (representing a load) that is suspended by a hook or cable from above.	Warning – suspended load.
 A yellow triangular warning sign with a black border. Inside the triangle, there is a large black exclamation mark.	Warning – danger zone.

2 Safety

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 only 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 operating life of the device by regular breaks and by avoiding frequent switching on and off. The device is not suitable for continuous operation.

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!****Fire hazard due to exceedance of the maximum current**

The device can power other devices of identical construction. The current consumption of all other devices connected in series must not exceed the values indicated in the technical specifications. Otherwise you risk injuries and irreparable damages to the device. Only connect so many identical devices that the maximum current consumption is not exceeded. Ensure the sufficient dimensioning (wire cross section) of the power cables used for all devices connected in series.

**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 aluminium, the Outdoor Stage PAR 12 × 3W Tri is especially suitable for outdoor use. With the very bright three-colour LEDs, it is particularly suitable for professional lighting tasks.

Special features of the device:

- 12 × tri-colour LEDs (3 W)
- Control via DMX (three different modes) and via buttons and display on the unit
- 10 preprogrammed automatic shows
- Master / Slave operation
- Rugged die-cast aluminium housing
- Degree of protection IP65 (suitable for outdoor use)
- Splashproof safety plug (IP44)
- Pressure compensation element (prevents condensation inside the device)
- Sturdy double bracket for secure attachment to trusses or firm footing on the ground

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.

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 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

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.

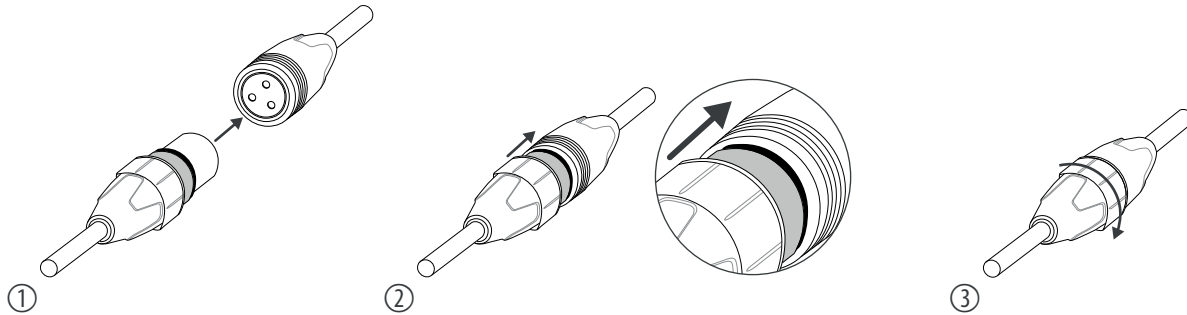
Always work from a stable platform whenever installing, moving or servicing the unit. In doing so, the area underneath the unit must be cordoned off.

The safety cable must be attached to the safety eyelet.



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

Connecting the DMX IP65 connectors



Proceed as follows to connect the DMX-IP65 connectors:

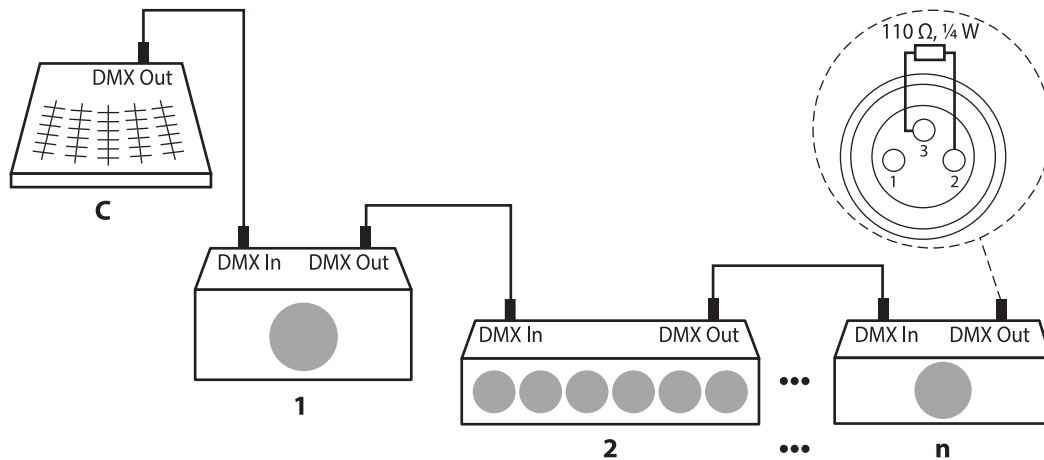
1. ➤ Insert the plug completely and straight into the coupling.
2. ➤ Make sure that the flexible sealing ring has complete contact.
3. ➤ Turn the union nut straight onto the thread of the coupling. Hand-tighten the union nut.

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

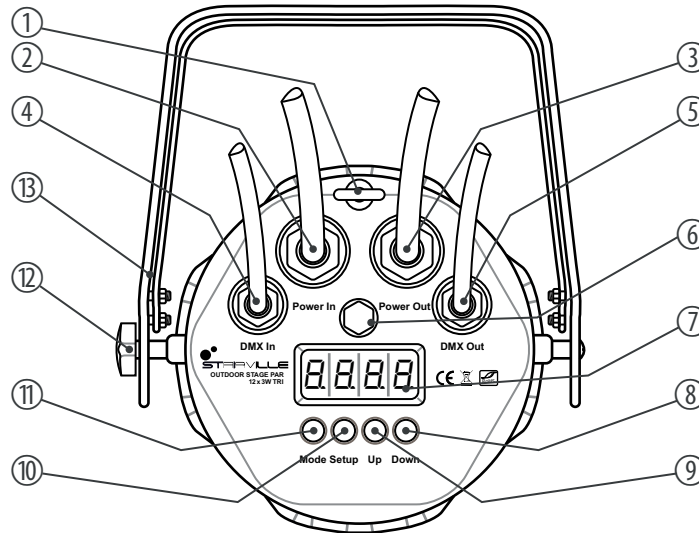


Connections in 'Master / Slave' mode

When you configure a group of devices in 'Master / Slave' mode, the first unit will control the others. This feature is especially useful to start a show without much programming. 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.

6 Connections and operating elements

Rear panel



1	Safety cable eyelet
2	<i>[Power In]</i> Mains cable for the power supply of the device
3	<i>[Power Out]</i> Mains cable for the power supply of max. 12 identical, serially connected devices
4	<i>[DMX IN]</i> DMX input cable
5	<i>[DMX OUT]</i> DMX output cable
6	Pressure compensation element
7	Display
8	<i>[Down]</i> Decreases the displayed value by one
9	<i>[Up]</i> Increases the displayed value by one
10	<i>[Setup]</i> Selects an option of the respective operating mode

- | | |
|----|--|
| 11 | <i>[Mode]</i>
Activates the main menu and toggles between menu items. |
| 12 | Locking screws for the retaining bracket |
| 13 | Retaining bracket |

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 *[MODE]* to activate the main menu and select an operating mode. Use *[UP]* and *[DOWN]* to change the respectively displayed value. When the display shows the desired value, press *[MODE]*.

If you don't press any button for about 20 seconds, 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 *[Mode]* until the display shows 'd.xxx'. Now you can set the number of the first DMX channel to be used by the device (DMX address). Use *[UP]* and *[DOWN]* to select a value between 1 and 510 (display shows 'd.001' ... 'd.512').

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
4-channel	509
8-channel	505

Confirm with *[Setup]*. Now use *[UP]* and *[DOWN]* to select one of the following DMX operating modes:

- 'd-P2' (three channels)
- 'd-P3' (four channels)
- 'd-P1' (eight channels)

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

Operating mode 'Show/Master'

Press *[Mode]* repeatedly until the display shows 'Pr.xx'. Now you can select one of the 10 pre-programmed automatic shows. Use *[UP]* and *[DOWN]* to select a value between 'Pr.01' and 'Pr.10'.

Program	Description
Pr.01	Constant colour hue
Pr.02	Slow transition, all colours
Pr.03	Slow transition, three colours
Pr.04	Fast transition, all colours
Pr.05	Fast transition, three colours
Pr.06	Random programme 1
Pr.07	Random programme 2
Pr.08	Slow transition bright / dark, red
Pr.09	Slow transition bright / dark, green
Pr.10	Slow transition bright / dark, blue

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

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 *[Setup]* to confirm the selection and then *[Mode]* to return to the parent menu. To return to the parent menu without making changes, press *[Mode]*.

Settings programme Pr.01

For programme 'Pr.01', you can choose from three full colours and four mixed colours. Select programme 'Pr.01' first, then confirm with 'Setup'. Now you can use the [UP] and [DOWN] buttons to select one of the following options:

Value	Description
1.--r	Red
2.-rg	Red and green
3.--g	Green
4.-gb	Green and blue
5.--b	Blue
6.-rb	Red and blue
7.rgb	Red, green and blue

Confirm the selection with 'Setup'. In the following menu, you can use [UP] and [DOWN] buttons to set the intensity of the various hues.

Confirm again with 'Setup'. In the following menu, you can use [UP] and [DOWN] buttons to set the strobe speed for the various hues in a range from 'FS00' to 'FS99'.

Settings programme Pr.02 ... Pr.10

For programmes 'Pr.02' to 'Pr.01', you can additionally set the speed for the transition from one hue to the next. Use [UP] and [DOWN] to select a value between 'slow' and 'fast' (display shows 'd.001' ... 'd.512').

Operating mode 'Auto'

In automatic mode, all programmed shows are played sequentially in an endless loop.

Press *[Mode]* repeatedly until the display shows 'Auto'. Confirm the selection with *[Setup]*. Now you can use *[UP]* and *[DOWN]* buttons to select the programme speed in a range from 'slow' to 'fast' or 'Flash' (display shows 'SP.01' ... 'SP.99' ... 'SP.FL').

Confirm the selection with 'Setup'. For the option 'Flash' you can use *[UP]* and *[DOWN]* buttons in the following menu to set the strobe speed in a range from 'FS00' to 'FS99'.

Confirm again with 'Setup'. In the following menu, you can use *[UP]* and *[DOWN]* buttons to set the fade speed for the programmes in a range from 'FS00' to 'FS99'.

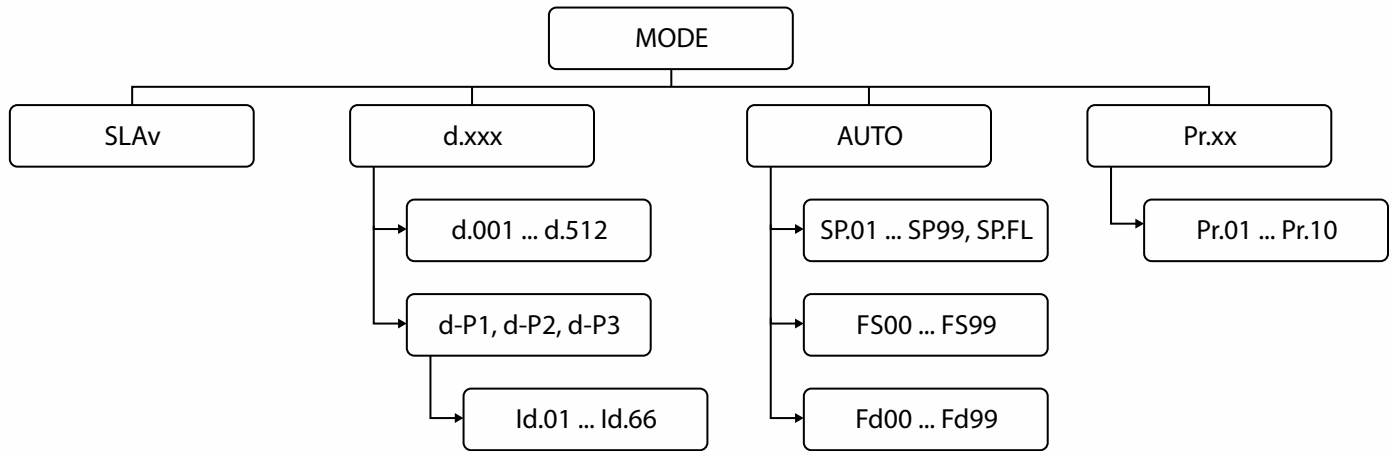
This setting is only relevant if the device is not controlled via DMX. When the display shows the desired value press *[OK]* to confirm the selection and then *[M]* to return to the parent menu. To return to the parent menu without making changes, press *[M]*.

Operating mode 'Slave'

Press *[Mode]* until the display shows 'SLAv'. Confirm with *[Setup]*.

This setting is only relevant if the device is operating as Slave controlled by a Master, but not via DMX. When the display shows the desired value, press *[Setup]* to confirm the selection and then *[Mode]* to return to the parent menu. To return to the parent menu without making changes, press *[Mode]*.

7.3 Menu overview



7.4 Functions in 3-channel DMX mode

Channel	Value	Function
1	0...255	Intensity red (0 % to 100 %)
2	0...255	Intensity green (0 % to 100 %)
3	0...255	Intensity blue (0 % to 100 %)

7.5 Functions in 4-channel 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 %)

7.6 Functions in 8-channel DMX mode

In 8-channel DMX mode, you can assign a device ID in the range from '1d.01' to '1d.66' via DMX menu (↻ 'DMX mode' on page 26). By assigning such an ID, several devices that work with the same DMX address can be grouped. One or more connected devices can then be controlled through channel 7.

Channel	Value	Function
1	0...255	Dimmer (0 % to 100 %)
2	0...255	Intensity Red (0 % to 100 %), if channel 6 = 0
	Constant hue, if channel 6 = 1...24	
	0...8	Red: 255
	9...17	Red: 255, Green: 50
	18...26	Red: 255, Green: 150
	27...35	Red: 255, Green: 255
	36...44	Red: 200, Green: 255
	45...53	Red: 100, Green: 255
	54...62	Red: 40, Green: 255

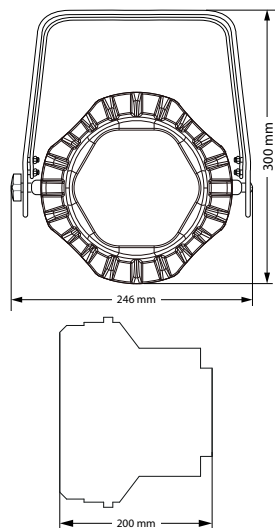
Channel	Value	Function
	63...71	Green: 255
	72...80	Green: 255, Blue: 50
	81...89	Green: 255, Blue: 150
	90...98	Green: 255, Blue: 255
	99...107	Green: 150, Blue: 255
	108...116	Green: 50, Blue: 255
	117...125	Blue: 255
	126...134	Red: 50, Blue: 255
	135...143	Red: 150, Blue: 250
	144...152	Red: 255, Blue: 255
	153...161	Red: 220, Blue: 50
	162...170	Red: 150, Green: 50, Blue: 100
	171...179	Red: 50, Green: 180, Blue: 220
	180...188	Red: 50, Green: 220, Blue: 100
	189...197	Red: 150, Green: 220
	198...206	Red: 150, Blue: 220

Channel	Value	Function
	207...215	Green: 180, Blue: 220
	216...224	Green: 220, Blue: 50
	225...233	Red: 220, Green: 100, Blue: 50
	234...242	Red: 220, Green: 200, Blue: 100
	243...251	Red: 255, Green: 200, Blue: 150
	252...255	Red: 255, Green: 255, Blue: 255
	Process speed, if channel 6 = 25...255	
	0...255	Slow...fast
3	Channel 6 = 0	Intensity Green 0...255 (0 % to 100 %)
	Channel 6 = 1... 255	Without function
4	Channel 6 = 0	Intensity Blue 0...255 (0 % to 100 %)
	Channel 6 = 1... 255	Without function
5	0...9	Without function
	10...255	Strobe effect, Speed slow...fast

Channel	Value	Function
6	0	Constant RGB mix, depending on channels 2, 3 and 4
	1...24	Constant colour, depending on channel 2
	25...49	Pr.02
	50...74	Pr.03
	75...99	Pr.04
	100...124	Pr.05
	125...149	Pr.06
	150...174	Pr.07
	175...199	Pr.08
	200...224	Pr.09
	225...255	Pr.10
7	Control of all devices that use the same DMX address	
	0...9	All IDs
	10...19	ID1
	20...29	ID2
	...	

Channel	Value	Function
	200...209	ID20
	210	ID21
	211	ID22
	...	
	255	ID66
8	0...250	Fast response faders 1, 2, 3 and 4
	251...255	Delayed response faders 1, 2, 3 and 4

8 Technical specifications



Light source		12 × 3in1 LED, 3 W each
Optical properties	Beam angle	30 °
Control		DMX
Number of DMX channels		3, 4, 8
Input connections	Power supply	Mains cable with IP65 screw connector and IP44 splashproof safety plug
	DMX control	DMX cable with IP65 XLR plug, 3-pin
Output connections	Power supply	Mains cable with IP65 screw connector for the power supply of max. 12 identical, serially connected devices
	DMX control	DMX cable with IP65 XLR socket, 3-pin
Power consumption		42 W
Supply voltage		110 - 230 V ~ 50/60 Hz
Degree of protection		IP65
Mounting options		Hanging, standing
Dimensions (W × H × D)		246 mm × 300 mm × 200 mm

Weight		3.5 kg
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

Further information

Outdoor housing shape	Studio housing
Colour mixture	RGB
LED type	x-in-1
Base housing	Yes
Fanless	Yes
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.	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.

