STAIRVILLE

Tri Flat PAR Profile
18×3W RGB

LED PAR

user manual

Table of contents

Tri Flat PAR Profile 18×3W RGB

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Table of contents

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
	Warning – high-voltage.

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

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2   Safety instructions

Intended use

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

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. 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.

Tri Flat PAR Profile 18×3W RGB

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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.

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3 Features

The LED PAR is particularly suitable for lighting applications in clubs and discotheques, on rock stages, in theatres and musicals.

Special features of the device:

- 18 tri-colour LEDs (3 W each)
- Control via DMX (3 different modes), with the included infrared remote control and via buttons and display on the unit
- Nine preprogrammed automatic shows
- Sound control
- Master / slave mode
- Rugged metal housing in compact design

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 adjustable mounting bracket and locking screws are 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.

Infrared receiver for remote control

The infrared sensor for the remote control signals is located on the front panel near the middle LED. Make sure that it is not covered.

Inserting the battery into the remote control
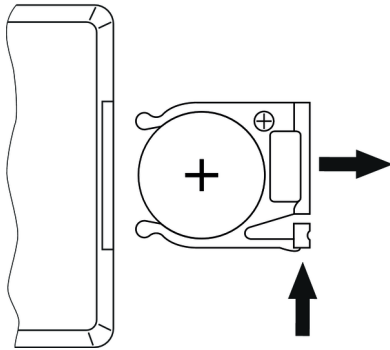
Press the lock of the battery holder to the centre of the housing and pull out the battery holder like a drawer. Insert the battery. The battery is correct if the positive pole points to the housing base of the remote control. Slide the battery holder back into the remote until it clicks into place.

When shipping, the battery is already installed in the remote and protected against discharge by a transparent plastic foil. Remove the plastic foil prior to first use.

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, ¼ W).

LED PAR
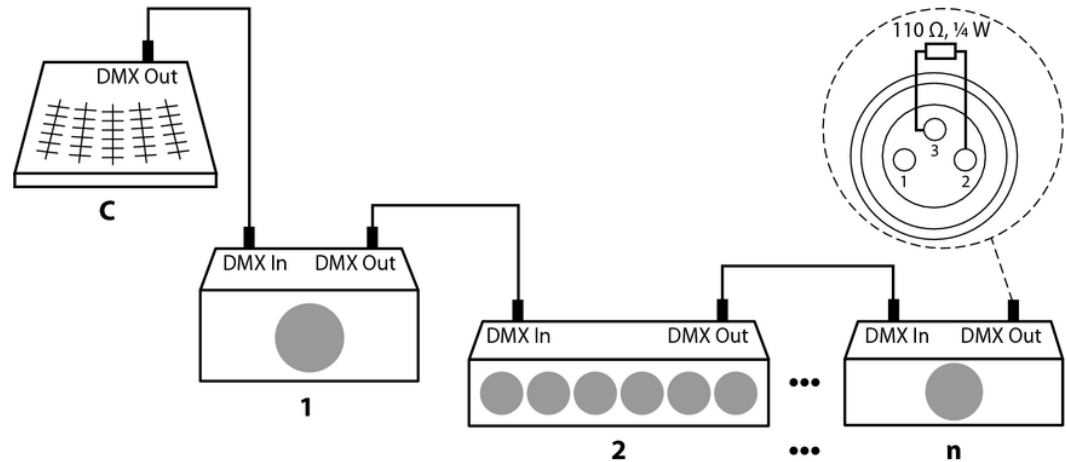
DMX indicator

If the unit is in DMX mode and a DMX controller is connected and turned on, the *'d'* flashes in the first position of the display.

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

Overview
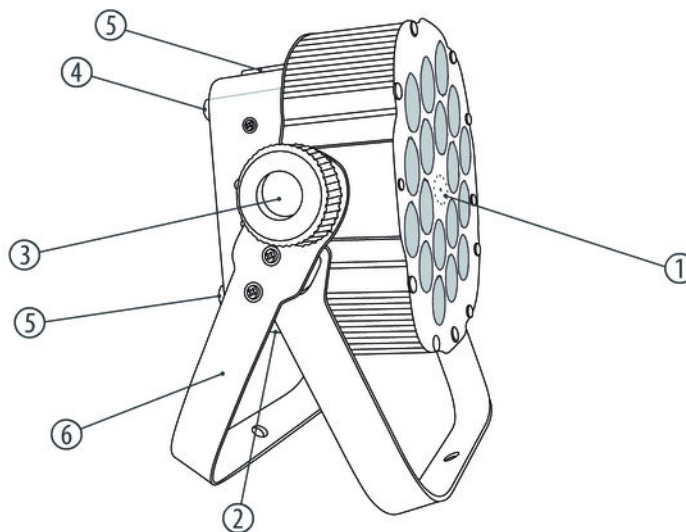
1	Infrared sensor for the remote control signals.
2	Bottom side with connections (DMX and voltage supply).
3	Locking screws for the mounting brackets.
4	Rubber foots for floor placement.
5	Top side with control elements.
6	Mounting bracket for floor placement or hanging.

Tri Flat PAR Profile 18×3W RGB

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Connector panel
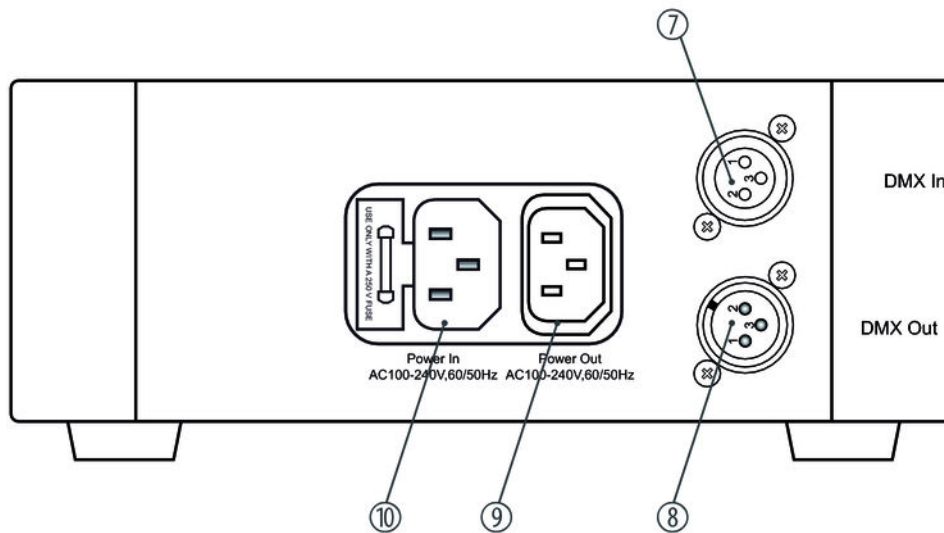
7	**DMX In**
	DMX input.
8	**DMX Out**
	DMX output.
9	**Power Out**
	IEC chassis socket for the power supply cable to the next device.
10	**Power In**
	IEC chassis plug for operating voltage supply with fuse holder.

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Operating elements
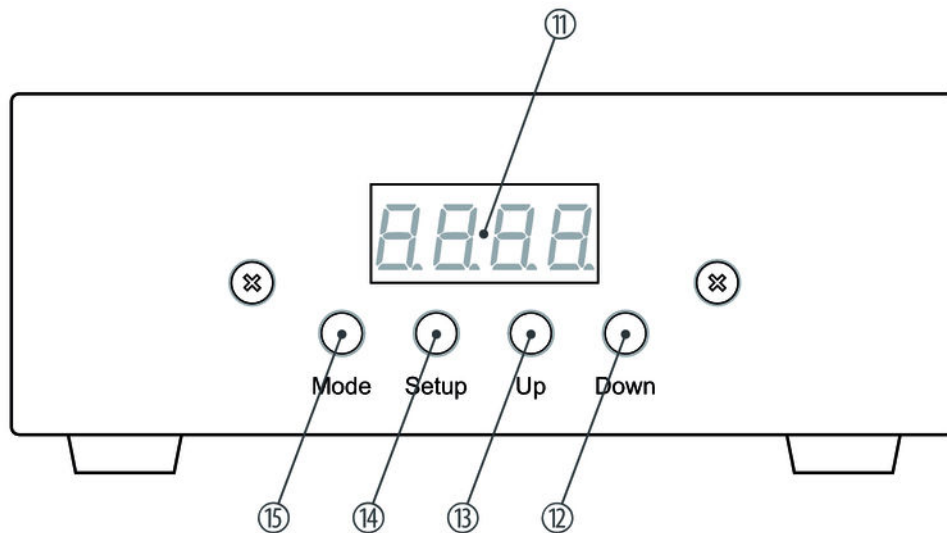
11	Display.	
12	Button *[Down]*	
	For downward navigation in a menu list. Decreases the displayed value by one.	
13	Button *[Up]*	
	For upward navigation in a menu list. Increases the displayed value by one.	
14	Button *[Setup]*	
	Selects an option of the respective operating mode.	
15	Button *[Mode]*	
	Activates the main menu and toggles between menu items.	

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Remote control
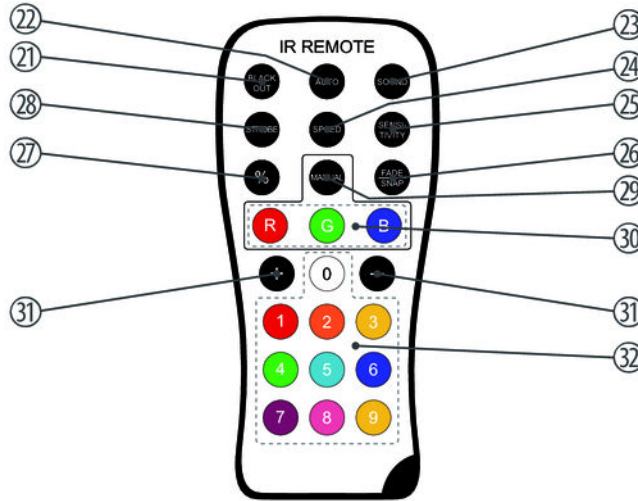
21	*[BLACK OUT]* Enables or disables blackout.
22	*[AUTO]* Enables or disables auto mode.
23	*[SOUND]* Starts the sound-controlled automatic show.
24	*[SPEED]* Allows setting the speed for the flash light function using the *[+]* and *[–]* buttons.
25	*[SENSITIVITY]* Allows setting the sensitivity for the sound control using the *[+]* and *[–]* buttons.
26	*[FADE / SNAP]* No function.
27	*[%]* Resets the displayed value to zero during value setting (flash light speed, sound control sensitivity).

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28	*[STROBE]* Enables or disables the flash light function (strobe effect) with the last selected colour.
29	*[MANUAL]* Activates the display of a constant colour that you can either mix from the basic colours using the buttons *[R]*, *[G]* and *[B]*, or select directly with one of the colour buttons.
30	*[R]*, *[G]*, *[B]* Sets the intensity of the three basic colours red, green and blue when displaying a constant colour.
31	*[+]*, *[–]* Increases or decreases the set value.
32	Direct selection button for mixed colours.

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. The display shows the operating mode that was selected when the unit was last powered off.

7.2 Main menu

Press *[Mode]* to activate the main menu and select an operating mode. Use *[Setup]* to select further options. Use *[Up]* und *[Down]* to change the respectively displayed value. The unit instantly applies the displayed value, you don't need to push a button for confirmation.

If you don't press any button for about ten seconds the display turns off. It will be reactivated to display the previously shown menu by pressing any button.

The set values are retained even when the device is disconnected from the mains power supply. To delete all settings made by you, follow the notes in chapter ↻ *'Reset to factory defaults' on page 35*.

Operating mode 'Preprogrammed automatic show'

A preprogrammed automatic show can only be activated when the unit is working alone or as Master in a Master / Slave combination. This setting is only relevant when the unit is not DMX-controlled.

Press *[Mode]* repeatedly until the display shows *'Pr.xx'*. Now you can select one of the preprogrammed automatic shows. Use *[Up]* and *[Down]* to select a value between *'Pr.01'* and *'Pr.09'*.

Settings for programme 01:

For *'Pr.01'*, you can choose from 10 predefined colours or blackout. Press *[Setup]*. Use *[Up]* and *[Down]* to select one of the colours (display shows *'1.__r'* to *'09.-on'*) or blackout (display shows *'0.OFF'*).

To adjust the strobe frequency, press *[Setup]* again. The display shows *'FS.xx'*. Now use *[Up]* and *[Down]* to select a value between *'FS.00'* (slow) and *'FS.99'* (fast).

Settings for programme 02 to 09:

To set the programme speed, press *[Setup]* again. The display shows *'SP.xx'*. Now use *[Up]* and *[Down]* to select a value between *'SP.01''* (slow) and *'SP.FL'* (fast).

To adjust the strobe frequency, press *[Setup]* again. The display shows *'FS.xx'*. Now use *[Up]* and *[Down]* to select a value between *'FS.00'* (slow) and *'FS.99'* (fast).

Operating mode 'Automatic'   This operating mode can only be activated when the unit is working alone or as Master in a Master / Slave combination. This setting is only relevant when the unit is not DMX-controlled.

Press *[Mode]* repeatedly until the display shows *'AUTO'*. The playback of the built-in automatic programme starts automatically.

DMX-Modus

This setting is only relevant when the unit is DMX-controlled.

Press *[Mode]* repeatedly 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 512 (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
5-channel	508
7-channel	506

Press *[Setup]*. Now use *[Up]* and *[Down]* to select one of the following DMX operating modes:

- ■ *'3-ch'* (three channels)
- ■ *'5-ch'* (five channels)
- ■ *'7-ch'* (seven channels)

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Operating mode 'Slave'

This setting is only relevant when the unit is working as Slave in a Master / Slave combination and is not DMX-controlled.

Press *[Mode]* repeatedly until the display shows *'SLAv'*.

Sound control

The sound-controlled automatic show can only be activated when the unit is working alone or as Master in a Master / Slave combination. This setting is only relevant when the unit is not DMX-controlled.

Press *[Mode]* repeatedly until the display shows *'SOud'*. This activates the sound-controlled automatic show.

Press *[Setup]* and use *[Up]* and *[Down]* to adjust the sensitivity for the sound control in a range from *'SV.00'* to *'SV.31'*.

Constant colour

A constant colour can only be activated when the unit is working alone or as Master in a Master / Slave combination. This setting is only relevant when the unit is not DMX-controlled.

Press *[Mode]* repeatedly until the display shows *'Colr'*. Press *[Setup]*. The display shows the setting for one of the basic colours (display shows *'r.xxx'*, *'G.xxx'* or *'b.xxx'*). Press *[Setup]* to toggle between colours.

Use *[Up]* and *[Down]* to adjust the colour intensity:

Display	Description
'r.000' … *'r.255'*	Red
'G.000' … *'G.255'*	Green
'b.000' … *'b.255'*	Blue

Reset to factory defaults

To reset all settings you have made to factory defaults, press *[Mode]* and *[Setup]* simultaneously for five seconds. After the reset, the unit operates in automatic mode. The display shows *'AUTO'*.

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7.3 Menu overview
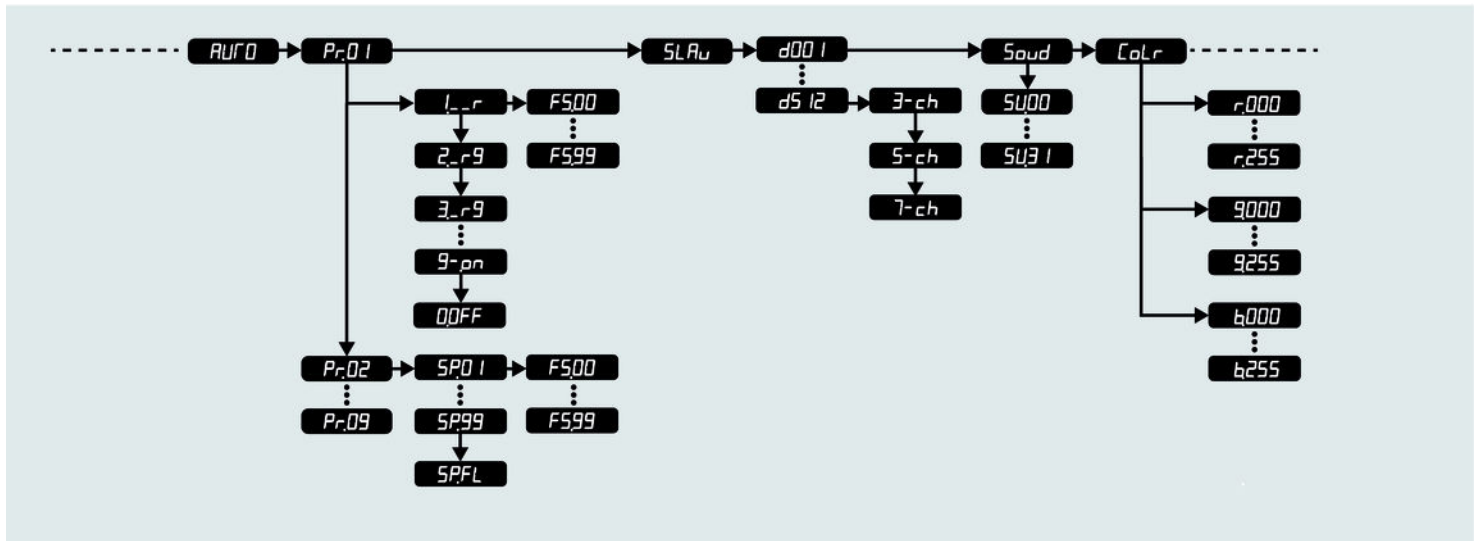
7.4 Temperature monitoring

If the temperature inside the unit gets too high, the device automatically switches off. Let the unit cool down in this case before powering it up again.

The temperature-controlled shutoff function is constantly monitored by the device. If a defect is detected, the value *'rt'* flashes in the display. In this case, please contact our service centre. Contact details can be found at *www.thomann.de*.

7.5 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 %)

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7.6 Functions in 5-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 %)
4	0…255	Dimmer (0 % to 100 %)
5	0…255	Strobe effect, increasing speed

7.7 Functions in 7-channel DMX mode

Channel	Value	Function
1	0…255	Dimmer (0 % to 100 %)
2	0…255	Intensity red (0 % to 100 %), when channel 5 = 0
3	0…255	Intensity green (0 % to 100 %), when channel 5 = 0
4	0…255	Intensity blue (0 % to 100 %), when channel 5 = 0
5	Operating mode	
	0	Manual mode; colours can be adjusted via channels 2 to 4
	1…27	Preprogrammed automatic show no. 1
	28…55	Preprogrammed automatic show no. 2
	56…83	Preprogrammed automatic show no. 3
	84…111	Preprogrammed automatic show no. 4
	112…139	Preprogrammed automatic show no. 5

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Channel	Value	Function
	140…167	Preprogrammed automatic show no. 6
	168…195	Preprogrammed automatic show no. 7
	196…223	Preprogrammed automatic show no. 8
	224…251	Preprogrammed automatic show no. 9
	252…255	Sound-controlled show
6	Constant colour, when channel 5 = 1…24:	
	0…27	Dark
	28…55	Red
	56…83	Orange
	84…111	Yellow
	112…139	Light green
	140…167	Light blue
	168…195	Blue

Channel	Value	Function
	196…223	Purple
	224…251	Pink
	252…255	Red + green + blue
	Progress speed, when channel 5 = 25…255:	
	0…255	Increasing speed
7	0…255	Strobe effect, increasing speed

7.8 Remote control

Operating mode 'Preprog-rammed automatic show'

A preprogrammed automatic show can only be activated when the unit is operating alone or as master in a master-slave combination. This setting is only relevant if the device is not controlled via DMX.

Press *[MANUAL]*. The display shows *'Pr.xx'*. Now you can select one of the preprogrammed automatic shows. Use *[+]* and *[–]* to select a value between *'Pr.01'* and *'Pr.09'*.

Press *[SPEED]* to adjust the programme speed. The display shows *'SP.xx'*. Use *[%]*, *[+]* and *[–]* to select a value between *'SP.01'* (slow) and *'SP.FL'* (fast).

Press *[STROBE]* to set the flash frequency. The display shows *'FS.xx'*. Use *[%]*, *[+]* and *[–]* to select a value between *'FS.00'* (slow) and *'FS.99'* (fast).

Operating mode 'Automatic'

The automatic mode can only be activated when the unit is operating alone or as master in a master-slave combination. This setting is only relevant if the device is not controlled via DMX.

Press *[AUTO]*. The display shows *'AUTO'*, the playback of the built-in automatic programme starts automatically.

Sound control

The sound-controlled automatic show can only be activated when the unit is operating alone or as master in a master-slave combination. This setting is only relevant if the device is not controlled via DMX.

Press *[SOUND]*. The display shows *'SUxx'*, the sound-controlled automatic show is activated.

Use *[%]*, *[+]* and *[–]* to set the sensitivity for the sound control in a range between *'SV.00'* and *'SV.31'*.

Constant colour

A constant colour can only be activated when the unit is operating alone or as master in a master-slave combination. This setting is only relevant if the device is not controlled via DMX.

Press *[MANUAL]*. Now you can either call up a predefined colour directly with one of the coloured buttons, or mix a colour individually from the basic colours.

Press *[R]*, *[G]* or *[B]* to mix a colour individually from the basic colours. The display shows *'r.xxx'*, *'G.xxx'* or *'b.xxx'*.

Use *[%]*, *[+]* and *[–]* to set the colour intensity:

Display	Description
'r.000' … *'r.255'*	Red
'G.000' … *'G.255'*	Green
'b.000' … *'b.255'*	Blue

Blackout

Press *[BLACKOUT]* to switch the LEDs off or on again. Then the unit continues to operate in the last selected operating mode.

The Blackout function is only available when the unit is not controlled via DMX.

8   Technical specifications

Number of DMX channels	3, 5 or 7 channels, according to operating mode
Illuminant	18 × 3 W-LEDs (RGB)
Dispersion angle	approx. 25°
Operating supply voltage	AC 100 … 240 V ∼ , 50 … 60 Hz
Power consumption	60 W
Fuse	2.0 A/250 V
Dimensions (W × D × H)	210 mm × 135 mm × 270 mm (without bracket)
Weight	2.9 kg

Tri Flat PAR Profile 18×3W RGB

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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.
No response to the DMX controller.	1. If the unit is in DMX mode and a DMX controller is connected and turned on, the *'d'* flashes in the first position of the display. If not, no valid DMX signal is received. Check that the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	2. If the display is not flashing and there is still no response, check the address settings and 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.
No response to the remote control	1. Try the remote control at a different angle to the receiver on the front of the device.
	2. Move the remote control closer to the unit.
	3. Check the remote control battery.

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

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11 Cleaning

Optical lenses

Clean the exterior of accessible optical lenses periodically to optimise 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 normal glass cleaning products.
- 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 device is subject to the European directive 2002/96/EC.

Do not dispose of the device 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

Notes