ignition

LED Mini Studio PAR One 40°,
LED Mini Studio PAR One 20°

User Manual

LED PAR

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Table of contents

1   General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under *www.thomann.de*.

1.1   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 document.

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 – dangerous optical radiation.
	Warning – suspended load.

Warning signs	Type of danger
	Warning – danger zone.

2   Safety instructions

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!

Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.

DANGER!

Danger to life due to electric current!

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 when covers, safety equipment or optical components are missing or damaged.

DANGER!

Danger to life due to electric current!

A short circuit could lead to a fire hazard and risk of death. Do not modify the mains cable or the plug! In case of isolation damage, disconnect immediately the power supply and arrange repair. If in doubt, seek advice from a qualified electrician.

WARNING!

Risk of eye damage caused by high light intensity!

The device generates highly intense light radiation. Looking directly into the light source can damage the eyes. Never look directly into the light source.

WARNING!

Risk of epileptic fit due to flashing lights!

The device emits flashing lights (strobe effects). Flashing lights can trigger epileptic fits in specific people. If you are at risk of epilepsy, avoid spending longer periods of time subjected to flashing lights and looking into strobing light.

WARNING!

Risk of injury from falling spotlights and barn doors that were inadequately secured!

If spotlights and barn doors are not properly secured when mounted, they can cause severe injury and considerable damage by falling. When installing and operating, make sure to follow the standards and regulations that apply in your country. Always secure spotlights with a secondary safety attachment, such as a safety cable or a safety chain. Always secure the barn door with a safety cable on the spotlight. The safety cable must run outside the barn door to not interfere with the light emission.

!

NOTICE!

Risk of fire due to covered vents and neighbouring heat sources!

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can overheat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames.

!

NOTICE!

Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the "Technical specifications" chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

!

NOTICE!

Damage to the device due to high voltages!

The device can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the device matches the local power grid before plugging in the device. Only operate the device from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). As a precaution, disconnect the device from the power grid when storms are approaching or it the device will not be used for a longer period.

!

NOTICE!

Risk of fire due to installation of a wrong fuse!

Using fuses of a different type than compatible with the device may cause a fire and seriously damage the device. Only use fuses of the same type. Observe the labelling on the device casing and the information in the "Technical data" chapter.

3 Features

Special features of the device:

- 7 × 10 W RGBW 4-in-1 LED chips
- Control via DMX (3 different modes), via the buttons and display on the device, and via infrared remote control
- Pre-programmed automatic shows
- Sound control
- Master/slave mode
- Overheat protection
- Self-locking double bracket for suspension or set-up on the ground
- Remote control and colour filter holder included

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.

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 from falling spotlights and barn doors that were inadequately secured!**
>
> If spotlights and barn doors are not properly secured when mounted, they can cause severe injury and considerable damage by falling.
>
> When installing and operating, make sure to follow the standards and regulations that apply in your country.
>
> Always secure spotlights with a secondary safety attachment, such as a safety cable or a safety chain.
>
> Always secure the barn door with a safety cable on the spotlight. The safety cable must run outside the barn door to not interfere with the light emission.

!

NOTICE!

Risk of overheating and fire due to inadequate distance and bad ventilation!

If the distance between the light source and the illuminated surface is too short or the device is badly ventilated, the device can overheat and cause fires.

Make sure that illuminated surfaces are more than 2 m away.

Do not operate the device in ambient temperatures above 40 °C.

Always ensure sufficient ventilation at the operating location.

!

NOTICE!

Potential property damage due to unsuitable stands!

If the device is mounted on an unsuitable stand, there is a risk that the stand will fall over and cause damage.

Only use stands whose maximum bearing capacity is at least as high as the weight of the device. Always ensure that the stand is stable.

!

NOTICE!

Data transfer errors due to improper wiring!

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.

Mounting options

You can install the device in hanging or standing positions. When in use, the device must always be attached to a solid surface or an approved mount. Use the openings provided on the bracket for attaching.
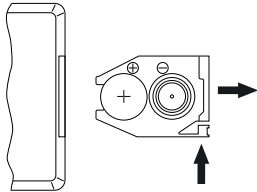
Always work from a stable platform whenever installing, moving or servicing the device. While you do this, the area underneath the device must be cordoned off.

The safety cable must be attached to the bracket.

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

Inserting batteries into the remote control

Push the lock of the battery holder towards the centre of the housing and pull out the battery holder like a drawer. Insert the batteries in the correct polarity according to the marking on the remote. Slide the battery holder back into the remote until it clicks into place.

When the device is shipped, the batteries are already inserted in the remote control and protected against discharge by a transparent plastic film. Remove the plastic film before initial use.

NOTICE!
Risk of fire due to incorrect polarity!

Incorrectly inserted batteries may cause fires and destroy the device and the batteries.

Observe the markings on the batteries and on the device.

Ensure that proper polarity is observed when inserting batteries.

NOTICE!
Possible damage due to leaking batteries!

Batteries can leak and cause permanent damage to the device.

Take the batteries out of the device if it is not going to be used for an extended period of time.

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 Ω, ¼ W).
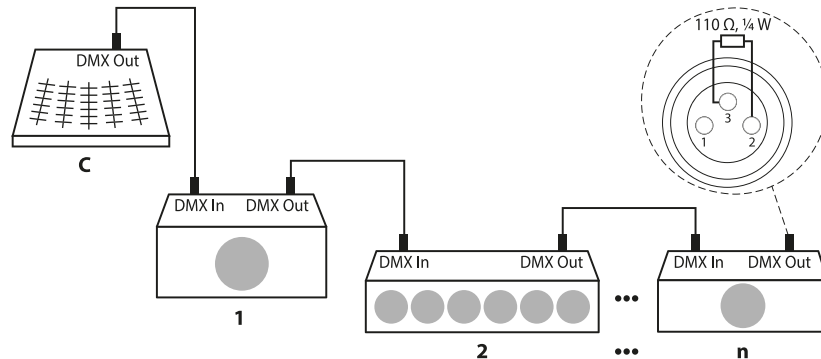
Connections in master/slave mode

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

Front panel
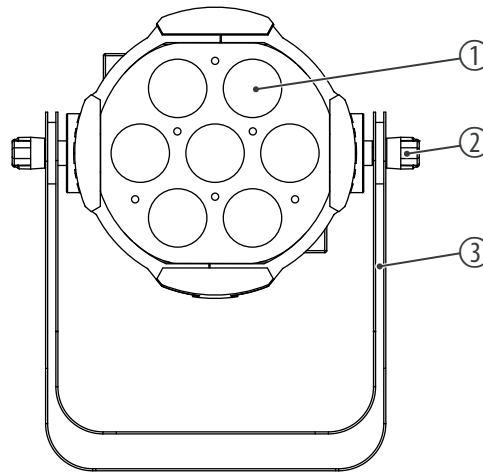
1	LEDs
2	Locking screws for the bracket
3	Bracket for suspension or set-up

Rear panel
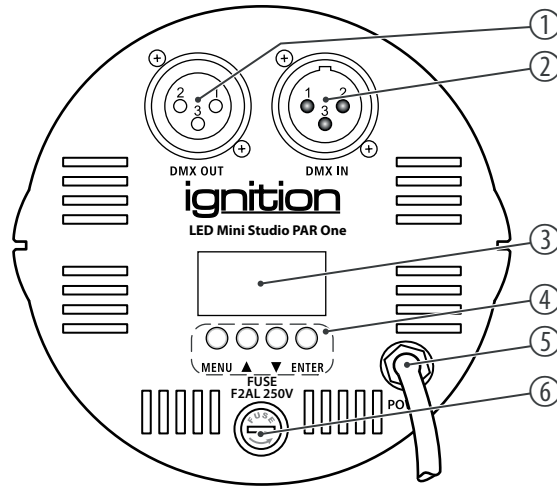
1	*[DMX OUT]* | DMX output, designed as XLR panel socket, 3-pin
2	*[DMX IN]* | DMX input, designed as XLR panel plug, 3-pin
3	Display
4	Function buttons
	[ENTER] | Confirms a selected value.
	▼ | Decreases the displayed value by one.
	▲ | Increases the displayed value by one.
	[MENU] | Activates the main menu or a submenu.
5	Power cable with safety plug
6	Fuse holder for the fuse

Remote control

1	⏻	On / off switch
2	*[DMX]*	Activates DMX mode. Then you can enter the DMX address with the number buttons.
3	*[SLAVE]*	Activates master/slave mode
4	*[SPEED]*	Setting the running speed
5	*[UP]*, *[DOWN]*	Selecting a programme or number. *[UP]* increases the displayed value or scrolls forward. *[DOWN]* decreases the displayed value or scrolls back.
6	*[0…9]*	Selecting a programme number
	[R], *[G]*, *[B]*, *[W]*	Selecting a colour.
	[R], *[G]*, or *[B]* for the primary colours red, green and blue, *[W]* for white. Use the buttons to turn the respective colour on or off. When the colour appears on the device display, you can adjust its intensity between 0 and 255 with *[UP]* or *[DOWN]*.
7	*[STROBE]*	Activates the strobe effect. *[UP]* or *[DOWN]* changes the flash rate.
8	*[SOUND 1]*, *[SOUND 2]*	Selects sound control programmes 1 or 2. *[UP]* or *[DOWN]* changes the sensitivity of the built-in microphone.
9	*[AUTO 1]*, *[AUTO 2]*	Selects automatic programme 1 or 2. *[UP]* or *[DOWN]* changes the running speed of the selected music programme.

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

1. ▶ Press *[MENU]* to activate the main menu and select an operating mode.

2. ▶ Use the arrow buttons ▲ or ▼ to change the respectively displayed value. 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.

DMX address

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'Addr'* .

3. ▶ Confirm the selection with *[ENTER]*.

   ⇨ The display shows the current DMX address.

4. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows the desired DMX address (display shows *'A001'* … *'A512'*).

5. ▶ Confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

Make sure that this number matches the configuration of your DMX controller.

Sound control

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'SoUn'*.

3. ▶ Confirm the selection with *[ENTER]*.

4. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows the desired value for the desired sound control mode (display shows *'SoU1'* … *'SoU5'*).

5. ▶ Confirm the selection with *[ENTER]*.

6. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows the desired value for the microphone sensitivity (display shows *'Se00'* … *'Se09'*).

7. ▶ Confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

Selection of constant colour

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'CoLo'*.

3. ▶ Confirm the selection with *[ENTER]*.

4. ▶ Press the arrow buttons ▲ or ▼ to select a constant colour (*'Co01'* … *'Co51'*).

5. ▶ Confirm the selection with *[ENTER]*.

6. ▶ Press the arrow buttons ▲ or ▼ to select the strobe speed (*'SP00'* … *'SP20'*).

7. ▶ Confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

Selection of colour macro

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'CoLo'*.

3. ▶ Confirm the selection with *[ENTER]*.

4. ▶ Press the arrow buttons ▲ or ▼ to select the desired colour macro. Display: *'Co01'* … *'Co05'*.

5. ▶ When the display shows the desired value confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

Selection of mixed colour

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'CoLo'*.

3. ▶ Confirm the selection with *[ENTER]*.

4. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'AtF'*.

5. ▶ Confirm the selection with *[ENTER]*.

6. ▶ Press the arrow buttons ▲ or ▼ to select the colour you want to adjust. Display: *'rEd'* (red), *'GrEE'* (green), *'bLUE'* (blue), *'UhIE'* (white).

7. ▶ Confirm the selection with *[ENTER]*.

8. ▶ Press the arrow buttons ▲ or ▼ to assign a value between 1 and 255 to the selected colour. Display: *'r000'* … *'r255'*, *'G000'* … *'G255'*, *'b000'* … *'b255'*, *'U000'* … *'U255'*.

9. ▶ Confirm the selection with *[ENTER]*.

10. ▶ Press the arrow buttons ▲ or ▼ to select the strobe speed (*'SP00'* … *'SP20'*).

11. ▶ When the display shows the desired value confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

Automatic show

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'AUto'*.

3. ▶ Confirm the selection with *[ENTER]*.

4. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows the desired value for the desired auto show programme (*'AUt1'* … *'AUt5'*).

5. ▶ Confirm the selection with *[ENTER]*.

6. ▶ Press the arrow buttons ▲ or ▼ to select the programme speed (*'SP 1'* … *'SP 9'*).

7. ▶ When the display shows the desired value confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

Reset

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'rESt'*.

3. ▶ Confirm the selection with *[ENTER]*.

⇨ The device is reset to the factory default settings.

Software version

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'ver'*.

   ⇨ The currently installed software version is displayed.

Temperature

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'tEnP'*.

   ⇨ The device temperature is displayed.

Remote control

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'reno'*.

3. ▶ Confirm the selection with *[ENTER]*.

4. ▶ Press the arrow buttons ▲ or ▼ to select *'on'* if you want to activate remote control and *'oFF'* if you want to deactivate remote control.

5. ▶ Confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

Master / slave mode

1. ▶ Press *[MENU]* to activate the main menu.

2. ▶ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'SLAv'*.

3. ▶ Confirm the selection with *[ENTER]*.

4. ▶ Press the arrow buttons ▲ or ▼ to select *'SLA'* if you want to activate slave mode.

5. ▶ Confirm the selection with *[ENTER]*.

   ⇨ The slave device now copies exactly the settings of the master device.

6. ▶ To exit the menu, press *[MENU]*.

This setting is only relevant if the device is operating as Slave controlled by a Master, but not via DMX.

DMX mode

1. ▸ Press *[MENU]* to activate the main menu.

2. ▸ Press the arrow buttons ▲ or ▼ repeatedly until the display shows *'Chnd'*.

3. ▸ Confirm the selection with *[ENTER]*.

4. ▸ Press the arrow buttons ▲ or ▼ repeatedly until the display shows the desired DMX channel mode (*'1Ch'* = 1 channel, *'4Ch'* = 4 channels, *'7Ch'* = 7 channels).

5. ▸ Confirm the selection with *[ENTER]*. To exit the menu, press *[MENU]*.

This setting is only relevant when the device is controlled via DMX.

7.3 Menu overview
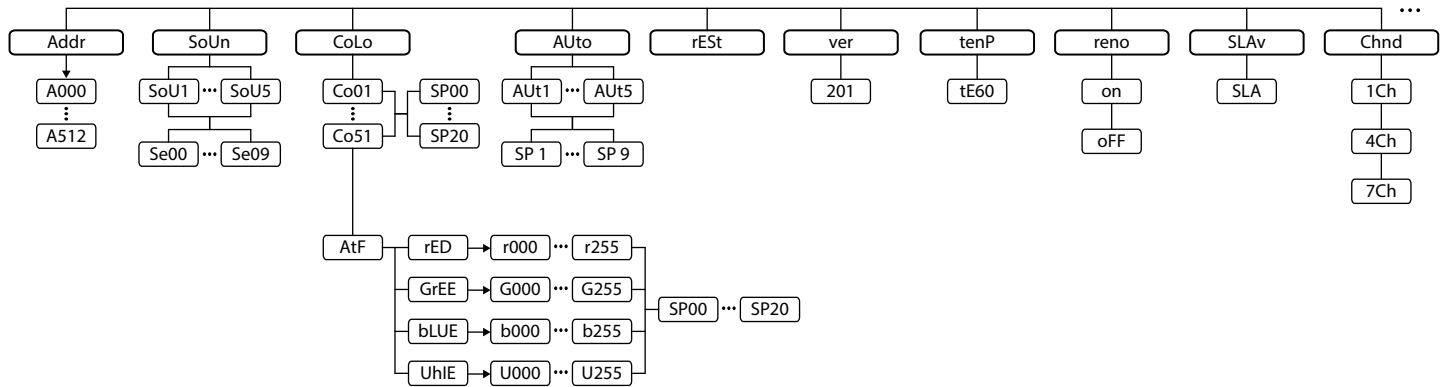
7.4 Functions in 1-channel DMX mode

Channel	Value	Function
1	1…4	Without function
	5…9	Red
	10…14	Green
	15…19	Blue
	20…24	White
	25…29	Colour macro 1
	30…34	Colour macro 2
	35…39	Colour macro 3
	40…44	Colour macro 4
	45…49	Colour macro 5
	50…54	Colour macro 6
	55…59	Colour macro 7
	60…64	Colour macro 8
	65…69	Colour macro 9

Channel	Value	Function
	70…74	Colour macro 10
	75…79	Colour macro 11
	80…84	Colour macro 12
	85…89	Colour macro 13
	90…94	Colour macro 14
	95…99	Colour macro 15
	100…104	Colour macro 16
	105…109	Colour macro 17
	110…114	Colour macro 18
	115…119	Colour macro 19
	120…124	Colour macro 20
	125…129	Colour macro 21
	130…134	Colour macro 22
	135…139	Colour macro 23
	140…144	Colour macro 24
	145…149	Colour macro 25

Channel	Value	Function
	150…154	Colour macro 26
	155…159	Colour macro 27
	160…164	Colour macro 28
	165…169	Colour macro 29
	170…174	Colour macro 30
	175…179	Colour macro 31
	180…184	Colour macro 32
	185…189	Colour macro 33
	190…194	Colour macro 34
	195…199	Colour macro 35
	200…204	Colour macro 36
	205…209	Colour macro 37
	210…214	Colour macro 38
	215…219	Colour macro 39
	220…224	Colour macro 40
	225…229	Colour macro 41

Channel	Value	Function
	230…234	Colour macro 42
	235…239	Colour macro 43
	240…244	Colour macro 44
	245…249	Colour macro 45
	250…255	Colour macro 46

7.5 Functions in 4-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	Intensity white (0 % to 100 %)

7.6 Functions in 7-channel DMX mode

Channel	Value	Function
1	0…255	Master dimmer (0 % bis 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	0…7	Preset
	8…255	Strobe (0 Hz…20 Hz
	0…255	Process speed for programmes in channel 7
7	0…15	Dimmer
	16…31	Colour change 1
	32…47	Colour change 2
	48…63	Colour change 3
	64…79	Colour change 4
	80…95	Colour change 5

Channel	Value	Function
	96…111	Multicolour strobe effect
	112…127	Fade effect
	128…143	Colour synchronization
	144…159	Colour change, shutter closing
	160…175	Fade out and colour change
	176…191	Fade in and colour change
	192…207	Fade-in-out effect
	208…223	Colour change mixed colours
	224…239	Sound-control 1
	240…255	Sound-control 2

8 Technical specifications
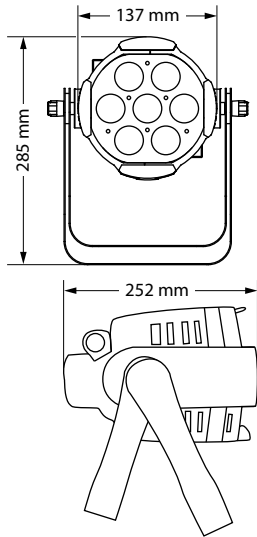
	LED Mini Studio PAR One 20° (item no. 455597)	LED Mini Studio PAR One 40° (item no. 455442)
Light source	7 × RGBW 4in1 LED, 10 W	
Optical properties	Beam angle	20°	40°
Control	DMX	
	Infrared remote control	
Control protocol	DMX 512	
Number of DMX channels	1, 4 or 7	
Input connections	DMX control	XLR panel plug, 3-pin
Output connections	DMX control	XLR panel socket, 3-pin
Power consumption	70 W	
Supply voltage	100 - 240 V ～ 50/60 Hz	
Fuse	5 mm × 20 mm, 2 A, 250 V, fast blow	
International Protection Rating	IP20	

(Note: table header has two product columns; "Beam angle" row shows 20° and 40° in the respective product columns.)

		LED Mini Studio PAR One 20° (item no. 455597)	LED Mini Studio PAR One 40° (item no. 455442)
Battery remote control	Battery type	Lithium button cell, 3 V, CR 2025	
Mounting options	standing, hanging		
Dimensions (W × H × D)	137 mm × 285 mm × 252 mm		
Weight	1.4 kg		
Ambient conditions	Temperature range	0 °C…40 °C	
	Relative humidity	20%…80% (non-condensing)	

Further information

	LED Mini Studio PAR One 20° (item no. 455597)	LED Mini Studio PAR One 40° (item no. 455442)
Colour mix	RGBW	RGBW
LED type	x-in-1	x-in-1
Floor housing	Yes	Yes
Fanless	No	No
Remote control	Included	Included
Wireless DMX	No	No
Housing colour	Black	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!**
Data transfer errors due to improper wiring!

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.

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 device does not work, no light	Check the mains connection and the fuse.
No response to the DMX Controller	1. 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 whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.

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.

Fan grids

The fan grids of the device must be cleaned of any contamination, such as dust, etc. on a regular basis. Before cleaning, switch off the device and disconnect mains-operated devices from the mains. Only use pH-neutral, solvent-free and non-abrasive cleaning agents. Clean the unit with a slightly damp lint-free cloth.

12 Protecting the environment

Disposal of the packing material
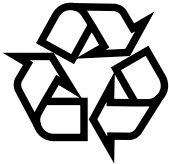
Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

Do not dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the instructions and markings on the packaging.
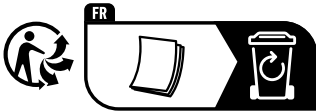
Observe the disposal note regarding documentation in France.

Disposal of your old device
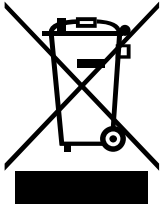
This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on *www.thomann.de*.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal.

If your old device contains personal data, delete those data before disposing of it.

Notes

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