



LED Flood Panel 150 20° LED Flood Panel 150 40° LED floodlight

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Table of contents

1.1 Further information	1	General information	
1.3 Symbols and signal words		1.1 Further information	6
2 Safety instructions 10 3 Features 16 4 Installation 17 5 Starting up 21 6 Connections and operating elements 24 7 Operation 32 7.1 Operating controls on the device 32 7.2 Remote control 32 7.3 DMX mode 47 7.4 Menu overview 49			
3 Features 16 4 Installation 17 5 Starting up 21 6 Connections and operating elements 24 7 Operation 32 7.1 Operating controls on the device 32 7.2 Remote control 39 7.3 DMX mode 41 7.4 Menu overview 49		1.3 Symbols and signal words	7
4 Installation 17 5 Starting up 21 6 Connections and operating elements 24 7 Operation 32 7.1 Operating controls on the device 32 7.2 Remote control 39 7.3 DMX mode 41 7.4 Menu overview 49	2	Safety instructions	10
5 Starting up	3	Features	16
6 Connections and operating elements. 24 7 Operation. 32 7.1 Operating controls on the device. 32 7.2 Remote control. 39 7.3 DMX mode. 41 7.4 Menu overview. 49	4	Installation	17
7 Operation	5	Starting up	21
7.1 Operating controls on the device	6	Connections and operating elements	24
7.2 Remote control	7	Operation	32
7.3 DMX mode		7.1 Operating controls on the device	32
7.4 Menu overview		7.2 Remote control	39
8 Technical specifications 50		7.4 Menu overview	49
	8	Technical specifications	50

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Table of contents

•	Plug and connection assignments	53
10	Troubleshooting	54
1	Cleaning	57
12	Protecting the environment	58



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 <u>www.thomann.de</u>.



1.1 Further information

On our website (<u>www.thomann.de</u>) 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 tinterest 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 ho	
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.

DisplaysTexts and values displayed on the device are marked by quotation marks and italics.

Examples: '24ch', 'OFF'.

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
A	Warning – high-voltage.
	Warning – dangerous optical radiation.



Warning signs	Type of danger
	Warning – suspended load.
<u>^</u>	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 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 life of the device by regular breaks in operation and avoid switching it on and off frequently. This device is not suitable for continuous use.



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.

Do not use the device if covers, protectors or optical components are missing or damaged.





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.



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.





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.





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.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.





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.



NOTICE!

Possible damage due to installation of a wrong fuse

The use of different types of fuses can cause serious damage to the unit. Fire hazard!

Only fuses of the same type may be used.



3 Features

This LED floodlight is suitable for use in clubs, bars, theatres, exhibitions, etc.

Special features of the device:

- $150 \times 10 \text{ mm colour LEDs (RGB)}$
- Control via DMX, via buttons and display on the unit as well as an optionally available IR remote control
- 10 preprogrammed automatic shows
- Sound control
- Master / Slave mode
- Compact design

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 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.





Risk of overheating

The distance between light output and the illuminated surface must be more than 1.5 m (19.7in).

Provide 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.





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.

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 of the bracket provided for mounting.

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 bracket.





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



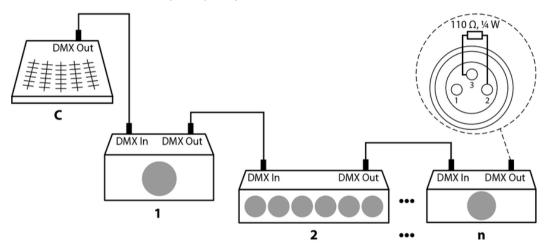
5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.



Connections in DMX mode

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





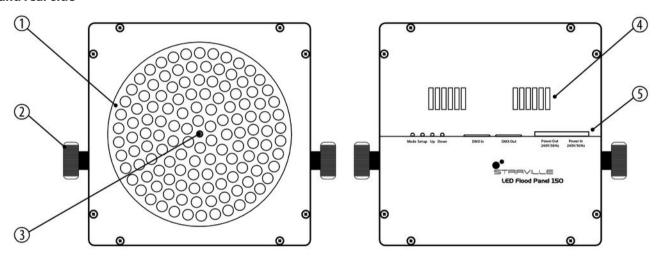
Connections in master/slave mode

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 operating elements

Front and rear side

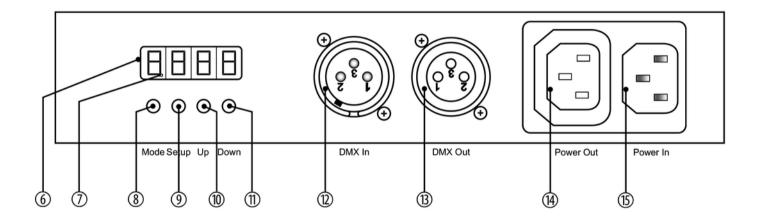




1	LEDs
2	Bracket adjustment knobs
3	Infrared sensor for the remote control signals
4	Vents
5	Control panel and connections



Control panel and connections





6	Display
7	DMX indicator: Flashes when the device is configured for 'DMX' mode, but not receiving a DMX signal. If no DMX cable is connected, the DMX indicator lights continuously.
8	[Mode]
	Activates the main menu for selecting the operating mode.
9	[Setup]
	Selects an option of the respective operating mode.
10	[Up]
	Increases the displayed value by one.
11	[Down]
	Decreases the displayed value by one.
12	[DMX In]
	DMX input
13	[DMX Out]
	DMX output



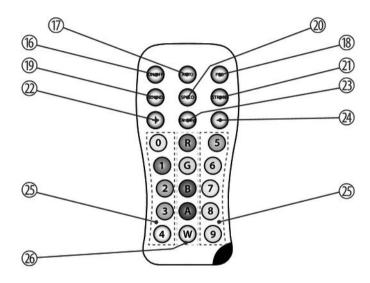
Connections and operating elements

14	[Power Out]	
	IEC chassis socket to power another device with mains voltage.	
15	[Power In]	
	IEC chassis plug for the power cable. Below, the range of the allowable operating voltage is specified.	



Remote control

A remote control is optional accessory and not included.



Connections and operating elements

16	[ON/OFF]
	Button to turn the device on and off.
17	[AUTO]
	Activates the 'Automatic' mode.
18	[PRG]
	Activates the operating mode 'Preprogrammed automatic show'.
19	[SOUND]
	Activates the sound-control.
20	[SPEED]
	Adjusts the process speed in 'Preprogrammed automatic show' mode.
21	[STROBE]
	Activates the strobe effect in 'Preprogrammed automatic show' mode.
22	[+]
	Increases the displayed value by one.



23	[Dimming]
	Enables the manual colour mixture.
24	[-]
	Decreases the displayed value by one.
25	[0] [9]
	Numeric keys.
26	Colour selection with manual colour mixture
	Use
	[R], [G], or [B] for primary colours red, green and blue,
	the coloured buttons for directly selecting a mixed colour.
	[W] and [A] are without funtion.

7 Operation

7.1 Operating controls on the device

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.

Press [Mode] to activate the main menu and select an operating mode. If you do not press any buttons for about ten seconds, the display will be blanked. Press any button to turn the display back on again. The previously called menu is displayed again.

The set values are retained during a power supply interruption.



Operating mode 'Preprogrammed automatic show'

A preprogrammed automatic show can only be activated when the unit is operating in standalone mode or as master in a master / slave combination. This setting takes effect only when the device is not operated under DMX control.

Press [Mode] repeatedly until the display shows 'Pr.xx'. Press [Setup] and use [Up] and [Down] to select a value between 'Pr.01' and 'Pr.10'. The following table shows the available programmes.

Programme	Description
'Pr.01'	Constant colour
'Pr.02'	Fading seven colours
'Pr.03'	Fading three colours
'Pr.04'	Rapid change seven colours
'Pr.05'	Rapid change three colours
'Pr.06'	Random 1
'Pr.07'	Random 2
'Pr.08'	Fading red only

LED Flood Panel 150 20° LED Flood Panel 150 40°



Programme	Description
'Pr.09'	Fading green only
'Pr.10'	Fading blue only

Settings for programme 01:

For 'Pr.01', you can choose from 7 predefined colours. After programme selection, press [Setup]. Using [Up] and [Down], you can now select one of the colour settings '1.—r' to '8.00F'; see the table below.

Value	Colour setting
′1.—r′	Red
′2.–rg′	Red + green
′3g′	Green
'4gb'	Green + blue
′5.—b′	Blue



Value	Colour setting
′6.–rb′	Red + blue
′7.rgb′	Red + green + blue
′8.00F′	No function

Press [Setup] again to set the brightness of the colours and the flash frequency for the strobe effect. Depending on the mode, the display shows one of the following values: 'rxxx', 'gxxx', 'bxxx' or 'FSxx'. Use [Up] and [Down] to select a value between 'FS00' (slow) and 'FS99' (fast).

Settings for programmes 02 to 10:

After selecting the colour, press [Setup] to set the program speed. The display shows 'SP.xx'. Now use [Up] and [Down] to select a value between 'SP.01' (slow) and 'SP.99' (fast) or 'SP.FL' (strobe effect).

To set the flash frequency for the strobe effect, press [Setup] again. The display shows 'FSxx'. Use [Up] and [Down] to select a value between 'FS00' (slow) and 'FS99' (fast).



Operating mode 'Auto'

Automatic operation can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting takes effect only when the device is not operated under DMX control.

Press [Mode] repeatedly until the display shows 'Auto'. All available programmes are played in an endless loop, playback starts automatically.

Press [Setup] to set the program speed. The display shows 'SP.xx'. Using [Up] and [Down] you can now select a value between 'SP.01' (slow) and 'SP.FL' (fast).

To set the flash frequency for the strobe effect, press [Setup] again. The display shows 'FSxx'. Use [Up] and [Down] to select a value between 'FS00' (slow) and 'FS99' (fast).

To adjust the fade function, press [Setup] again. The display shows 'Fdxx'. Use [Up] and [Down] to select a value between 'Fd00' (slow fade) and 'Fd99' (fast fade).

Operating mode 'Slave'

This setting takes effect only when the device is the slave in a master/slave configuration and is not operated under DMX control.

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



Sound control

Sound control can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting takes effect only when the device is not operated under DMX control.

Press [Mode] until the display shows 'SU.xx'. This activates the sound controlled automatic show.

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



DMX mode

This setting is only relevant if the device is being controlled via DMX.

Press [Mode] until the display shows 'd.xxx'.

Now you can set the number of the first DMX channel used by the device (DMX address). Use [Up] and [Down] to select a value in the range from 'd.001'... to 'd.512'.

Make sure this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the different DMX modes.

Mode	Highest possible DMX address
3-channel	510
4-channel	509
8-channel	505

Press [Setup]. Using [Up] and [Down] you can now select one of the following DMX modes:

- '3-ch' (three channels)
- '4-ch' (four channels)
- '8-ch' (eight channels)



7.2 Remote control

If the device neither is working as Slave in a Master / Slave configuration nor is not controlled

via DMX you can control it using the remote control.

Switching on / off Use [ON/OFF] to switch the device on and off.

Operating mode 'Automatic' Press [AUTO]. The playback of 'Pr02' to 'Pr14' starts automatically.

Operating mode 'Preprogrammed automatic show'

Press [PRG]. Use [+] and [-] to select a value between 'Pr.01' and 'Pr.14'.

In the 'Preprogrammed automatic show' mode, you can activate the strobe effect. Press [STROBE] and use [+] and [-] to select a value between 'FS00' (slow) and 'FS99' (fast). Press again [STROBE] to turn the strobe effect off.

For the programmes 'Pr.01' and 'Pr.09', it is possible to adjust the process speed. Press [SPEED] and use [+] and [-] to select a value between 'SP01' (slow) and 'SPFL' (fast).

Operation

Sound control Press [SOUND]. This activates a sound controlled automatic show.

Use [+] and [-] to adjust the sensitivity of the sound control in a range from 'SV.00' to 'SV.31'.

Dimming Press [Dimming] to adjust the brightness level of the primary colours. Press [R] (red), [G] (green),

or [B] (blue) and use [+] and [-] to select a value between 0 and 255.

Colour selection Use the coloured buttons to select a colour tone in any mode. The following assignment

applies:

Button	Colour	Button	Colour	Button	Colour
0	Cyan	5	Light red	R	Red
1	Purple	6	Light green	G	Green
2	Magenta	7	Light blue	В	Blue
3	Orange	8	Yellow	A	Amber
4	Cold white	9	Warm white	W	White



7.3 DMX mode

Functions in 3-channel DMX mode

Channel	Value	Function
1	0255	Intensity red (0 %100 %)
2	0255	Intensity green (0 %100 %)
3	0255	Intensity blue (0 %100 %)

Functions in 4-channel DMX mode

Channel	Value	Function
1	0255	Dimmer (0 %100 %)
2	0255	Intensity red (0 %100 %)



Operation

Channel	Value	Function
3	0255	Intensity green (0 %100 %)
4	0255	Intensity blue (0 %100 %)

Functions in 8-channel DMX mode

In 8-channel mode, multiple devices can be grouped through an identical DMX address. Press [Setup] and assign an ID in the range from 'Id.01' to ... 'Id.66'. You can directly control single or multiple devices through the assigned ID via channel 7.

Channel	Value	Function
1	0255	Dimmer (0 %100 %)
2	0255	Intensity Red (0 %100 %), if channel 6 = 0
	If channel 6 = 12	4: Constant colour, hue is defined via channel 2
	08	Red: 255
	917	Red: 255, Green: 50



Channel	Value	Function
	1826	Red: 255, Green: 150
	2735	Red: 255, Green: 255
	3644	Red: 200, Green 255
	4553	Red: 100, Green: 255
	5462	Red: 40, Green: 255
	6371	Green: 255
	7280	Green: 255, Blue: 50
	8189	Green: 255, Blue: 150
	9098	Green: 255, Blue: 255
	99107	Green: 150, Blue: 255
	108116	Green: 50, Blue: 255
	117125	Blue: 255
	126134	Red: 50, Blue: 255

LED Flood Panel 150 20° LED Flood Panel 150 40°



Channel	Value	Function
	135143	Red: 150, Blue: 255
	144152	Red: 255, Blue: 255
	153161	Red: 220, Blue: 255
	162170	Red: 150, Green: 50, Blue: 100
	171179	Red: 50, Green: 180, Blue: 220
	180188	Red: 50, Green: 220, Blue: 100
	189197	Red: 150, Green: 220
	198206	Red: 150, Blue: 220
	207215	Green: 180, Blue: 220
	216224	Green: 220, Blue: 50
	225233	Red: 220, Green: 100, Blue: 50
	234242	Red: 220, Green: 200, Blue: 100
	243251	Red: 255, Green: 200, Blue: 150



LED floodlight

Channel	Value	Function
	252255	Red: 255, Green: 255, Blue: 255
	If channel 6 = 25	249: Programme progress speed
	0255	Slowfast
	If channel $6 = 250$.	255: Sound control response characteristic
	0255	Slowfast
3	0255	Intensity Green (0 %100 %), if channel 6 = 0
4	0255	Intensity Blue (0 %100 %), if channel 6 = 0
5	09	No function
	10255	Strobe effect flash frequency, slowfast
6	0	RGB mix, constant, colour setting via channel 24
	124	Constant colour, setting via channel 2
	2549	Programme Pr02, fading seven colours
	5074	Programme Pr03, fading three colours

LED Flood Panel 150 20° LED Flood Panel 150 40°



Channel	Value	Function
	7599	Programme Pr04, rapid change seven colours
	100124	Programme Pr05, rapid change three colours
	125149	Programme Pr06, random 1
	150174	Programme Pr07, random 2
	175199	Programme Pr08, fading red only
	200224	Programme Pr09, fading green only
	225249	Programme Pr10, fading blue only
	250255	Sound control
7	You can directly co	ontrol single or multiple devices of a group via channel 7 by assigning the same ID.
	09	ID1ID66
	1019	ID1
	2029	ID2
	3039	ID3



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Channel	Value	Function
	4049	ID4
	5059	ID5
	6069	ID6
	7079	ID7
	8089	ID8
	9099	ID9
	100109	ID10
	110119	ID11
	120129	ID12
	130139	ID13
	140149	ID14
	150159	ID15
	160169	ID16

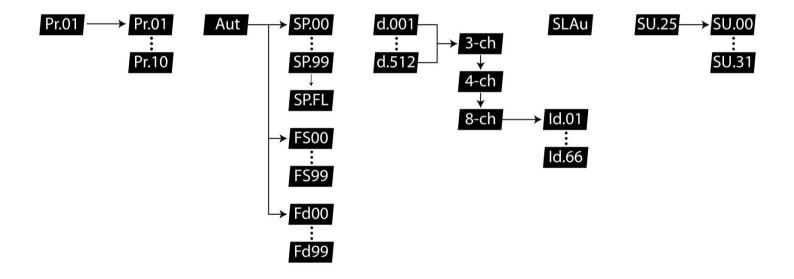
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Channel	Value	Function
	170179	ID17
	180189	ID18
	190199	ID19
	200209	ID20
	210	ID21
	211	ID22
	212	ID23
	254	ID65
	255	ID66
8	0250	No function
	251255	Delayed LED power-up

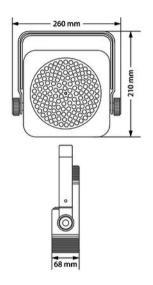


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7.4 Menu overview



8 Technical specifications



		LED Flood Panel 150 20°	LED Flood Panel 150 40°
		Item no. 235358	Item no. 235359
Light source	$150 \times 10 \text{ mm LEDs}$ (48 × red, 51 × green, 51 × blue)		
Optical properties	Beam angle	20°	40°
Control	DMX		
	Remote control (optional)		
Number of DMX channels	3, 4, 8		
Input connections	Voltage supply	IEC chassis plug C14	
	DMX control	XLR chassis socket, 3-pin	
Output connections	Voltage supply IEC chassis plug C13		
	DMX control	XLR chassis socket, 3-pin	



		LED Flood Panel 150 20°	LED Flood Panel 150 40°
		Item no. 235358	Item no. 235359
Power consumption	18 W		
Supply voltage	100 − 240 V ~ 50/60 Hz		
Fuse	5 mm × 20 mm, 1 A, 250 V, slow-blow		
Degree of protection	IP20		
Mounting options	Hanging, standing		
Dimensions (W \times H \times D)	260 mm × 210 mm × 68 mm		
Weight	1.8 kg		
Ambient conditions	Temperature range	0 °C…40 °C	
	Relative humidity	50 %, non condensir	ng



Further information

	LED Flood Panel 150 20°	LED Flood Panel 150 40°
	Item no. 235358	Item no. 235359
Design	Flat PAR	Flat PAR
Colour mixture	RGB	RGB
LED type	Unicoloured	Unicoloured
Base housing	Yes	Yes
Fanless	Yes	Yes
Remote control	Optional	Optional
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!

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 LED (6) behind the first digit of the display will flash. If it doesn't, 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 but there is still no response, 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.
No response to the remote control	1. Try using the remote control at a different angle to the IR sensor on the front panel of the device.

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Symptom	Remedy	
	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 <u>www.thomann.de</u>.



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.



