ignition

Pure UV 710

User manual

LED PAR

Musikhaus Thomann
Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
E-mail: info@thomann.de
Internet: www.thomann.de

30.07.2020, ID: 477698

Table of contents

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'*.

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 – dangerous optical radiation.

Warning signs	Type of danger
	Warning – suspended load.
	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.

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.

Secure the barn door with a safety cable on the spotlight after installation. The safety cable must run outside the barn door and must not interfere with the light emission.

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!

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.

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.

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.

NOTICE!

Fire hazard due to exceedance of the maximum current

The device can power other devices via a lockable Power Twist output socket. The current consumption of all serially connected other devices must not exceed 16 A, otherwise you risk injuries and irreparable damages of the device.

Connect just so many devices to the output socket that the maximum current consumption is not exceeded.

Ensure the correct dimensioning (wire cross section) of the used power cords of all serially connected devices.

NOTICE!

Possible staining

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

3 Features

Special features of the device:

- 7 × 10 W UV LEDs
- Internal programmes
- Control via DMX and via buttons and display on the unit
- Master / Slave operation
- Manual operation with selectable intensity
- Including mounting bracket and barn door

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.

Secure the barn door with a safety cable on the spotlight after installation. The safety cable must run outside the barn door and must not interfere with the light emission.

NOTICE!

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.

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.

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 bracket.

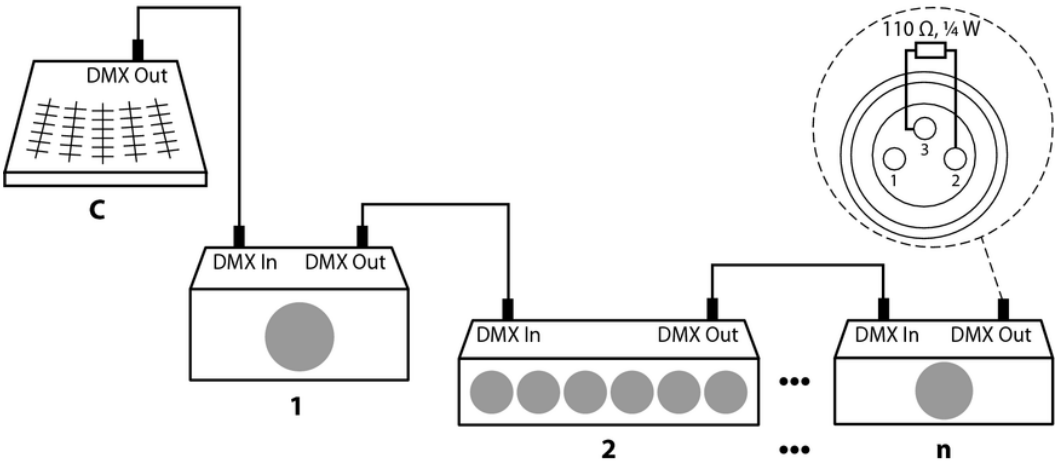
Please note that this device must not be connected to a dimmer.

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, ¼ W).

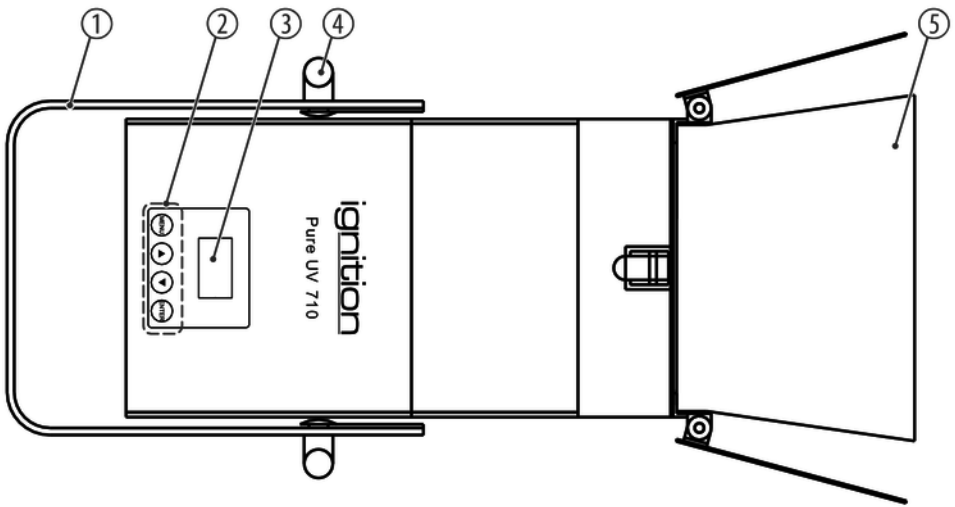


Connections in master/slave mode

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.

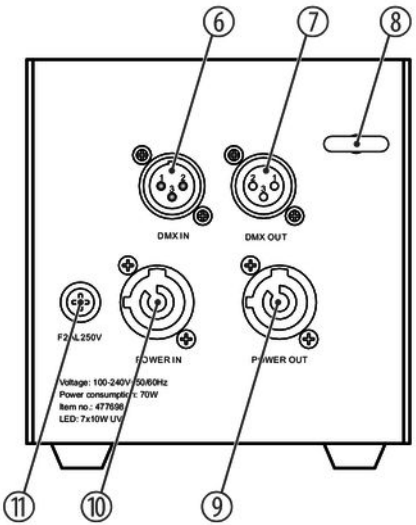
6 Connections and operating elements

Overview



1	Bracket for floor placement or hanging
2	Operating buttons
	[MENU] Calls up the main menu or a submenu.
	▲, ▼ Increases / decreases the displayed value by one.
	[ENTER] Confirms a selected value.
3	Display
4	Locking screw for the brackets
5	Barn doors

Rear panel


6
7
8
DMX IN
DMX OUT
POWER IN
POWER OUT
Voltage: 100-240V 50/60Hz
Power consumption: 70W
Item no.: 477696
LED: 7x10W UV
11
10
9

6	*[DMX IN]* DMX input
7	*[DMX OUT]* DMX output
8	Safety cable eyelet.
9	*[POWER OUT]* Lockable output socket (Power Twist) for the power supply cable to the next device (maximum output current 16 A)
10	*[POWER IN]* Lockable input socket (Power Twist) for the power supply cable
11	Fuse holder

7 Operating

7.1 Starting the device

Connect the device to the power supply to start operation. The device is immediately operational and operates in the last mode with the settings last selected.

7.2 Main menu

Menu control

Press *[MENU]* to open the main menu. Use the arrow buttons to select the desired parameter or to change the respectively displayed value. When the display shows the desired parameter or value press *[ENTER]* to enter the respective submenu or confirm a new value. To return to the previous menu level without changes, press *[MENU]*.

DMX address

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'DMX Address'*. Press *[ENTER]*. Now you can set the number of the first DMX channel to be used by the device (DMX address). Use the arrow buttons to select a value between 1 and 512 (display shows *'001'* … *'512'*). When the display shows the desired value press *[ENTER]* to confirm the selection.

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

Mode	Highest possible DMX address
1-channel mode	512
2-channel mode	511
4-channel mode	509

DMX mode

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'DMX Mode'*. Press *[ENTER]*. Now you can set the DMX mode. Use the arrow buttons to choose between 1-channel mode, 2-channel mode and 4-channel mode (display shows *'1CH'*, *'2CH'* or *'4CH'*). When the display shows the desired value press *[ENTER]* to confirm the selection.

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

Operating mode "Stand Alone"

Press the button *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Stand Alone'* . Press *[ENTER]*. Now you can set the intensity of the LEDs and the strobe effect. Press one of the arrow buttons repeatedly until the display shows *'Static'* . Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows the desired submenu and press *[ENTER]*. The following table shows the sub menus and setting options.

Menu level 2	Menu level 3	Function
'Static'	*'Dimmer 000…255'*	Intensity of LEDs from 0 to 100%
	'Dimmer Fine 000…255'	Fine adjustment for the intensity of the LEDs from 0 to 100%
	'Strobe 000…255'	Strobe effect from slow to fast

Press one of the arrow buttons repeatedly until the display shows the desired value. Press *[ENTER]* to confirm the selection.

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.

Operating mode 'Slave'

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Slave'*. Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Yes'*. Press *[ENTER]*.

The device is now working in slave mode, i.e. it will exactly copy the movement of the controlling master device, correct wiring provided. This setting is only relevant if the device is operating as Slave controlled by a Master, but not via DMX.

LED repetition rate (PWM)

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'*. Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Frequency'*. Press *[ENTER]*. Now you can set the LED repetition rate. Use the arrow buttons to select a frequency from slow to fast (display shows *'3K'*, *'6K'*, *'12K'* or *'24K'*). When the display shows the desired value press *[ENTER]* to confirm the selection.

Display reversion

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'*. Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Display Reverse'*. Press *[ENTER]*. Now you can set the reversal of the display. Use the arrow buttons to select *'On'* to rotate the display by 180 °. Use the arrow buttons to select *'Off'* to rotate the display to the default position. When the display shows the desired value press *[ENTER]* to confirm the selection.

Backlight of the display

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'*. Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Display Backlight'*. Press *[ENTER]*. Now you can deactivate or activate the background lighting of the display. Use the arrow buttons to select *'On'* to permanently activate the backlight of the display. Use the arrow buttons to select *'Off'* to permanently deactivate the backlight of the display. When the display shows the desired value press *[ENTER]* to confirm the selection.

Behaviour on DMX control failure

Press the button *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'* . Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'DMX Fail'* . Press *[ENTER]*. Now you can set the behaviour of the device in case the DMX control fails. Press one of the arrow buttons repeatedly until the display shows the desired submenu and press *[ENTER]*. The following table shows the sub menus and setting options.

Menu level 2	Menu level 3	Function
'DMX Fail'	*'Hold'*	If the DMX control fails, the last setting is retained.
	'Blackout'	If the DMX control fails, the device is blacked out.
	'Emergency Light'	If the DMX control fails, an emergency Light kicks in.

Press one of the arrow buttons repeatedly until the display shows the desired value. Press *[ENTER]* to confirm the selection.

Dimmer curve

Press the button *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'* . Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Dimmer Curve'* . Press *[ENTER]*. Now you can set the dimmer curve. Press one of the arrow buttons repeatedly until the display shows the desired submenu and press *[ENTER]*. The following table shows the sub menus and setting options.

Menu level 2	Menu level 3	Function
'Dimmer Curve'	*' Linear'*	Linear course
	' Exponential'	Exponential course
	'Logarithmic'	Logarithmic course
	'S Curve'	S-curve shaped course

Press one of the arrow buttons repeatedly until the display shows the desired value. Press *[ENTER]* to confirm the selection.

Dimmer response

Press the button *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'* . Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Dimmer Response'* . Press *[ENTER]*. Now you can set the response behaviour of the dimmer. Press one of the arrow buttons repeatedly until the display shows the desired submenu and press *[ENTER]*. The following table shows the sub menus and setting options.

Menu level 2	Menu level 3	Function
'Dimmer Response'	*'LED'*	The dimmer setting for LED is activated.
	'Halogen'	The imitation of the dimming behaviour for incandescent light is activated.

Press one of the arrow buttons repeatedly until the display shows the desired value. Press *[ENTER]* to confirm the selection.

Key lock

Press the button *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'* . Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'AutoLock'* . Press *[ENTER]*. Now you can activate or deactivate the key lock. Use the arrow buttons to select *'On'* to activate the key lock. Use the arrow buttons to select *'Off'* to deactivate the key lock. Press *[ENTER]* to confirm the selection.

If the key lock is activated, all keys have no function after 60 seconds. To release the key lock, press simultaneously ▲ and ▼ for 5 seconds.

Resetting the device to factory defaults

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'Settings'* . Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Factory Reset'* . Press *[ENTER]*. The display shows *'Reset Now'* . Press *[ENTER]* to reset the device to factory default settings.

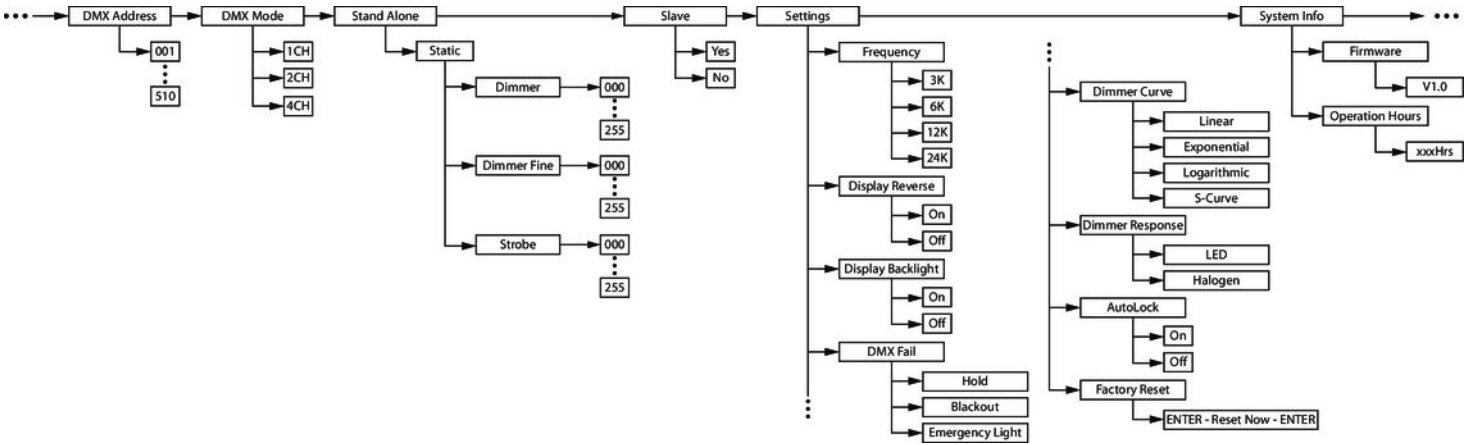
Firmware

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'System Info'* . Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Firmwre'* . Press *[ENTER]*. The display shows the currently used firmware version.

Operating hours

Press *[MENU]*. Press one of the arrow buttons repeatedly until the display shows *'System Info'*. Press *[ENTER]*. Press one of the arrow buttons repeatedly until the display shows *'Operation Hours'*. Press *[ENTER]*. The display shows the number of operation hours.

7.3 Menu overview



7.4 Functions in 1-channel DMX mode

Channel	Value	Function
1	000… 255	Dimmer (0 % to 100 %)

7.5 Functions in 2-channel DMX mode

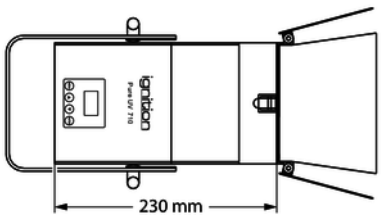
Channel	Value	Function
1	000… 255	Dimmer (0 % to 100 %)
2	000… 005	LEDs on
	006… 250	Strobe effect, speed increasing from 1 Hz to 20 Hz

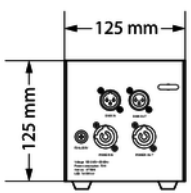
7.6 Functions in 4-channel DMX mode

Channel	Value	Function
1	000… 255	Dimmer (0 % to 100 %)
2	Strobe	
	000 … 005	LEDs on
	006 … 010	LEDs off (blackout)
	011 … 033	Random impulses, increasing speed
	034 … 056	Randomly increasing brightness, increasing speed
	057 … 0079	Randomly decreasing brightness, increasing speed
	080 … 102	Random Strobe effect, increasing speed
	103 … 127	Interrupt effect, 5 s to 1 s
	128 … 250	Strobe effect, speed increasing from 1 Hz to 20 Hz
	251 … 255	LEDs on

Channel	Value	Function
3	Dimmer response	
	000 … 005	Without function
	006 … 127	Dimmer behaviour LED
	128 … 255	Dimming behaviour incandescent light
4	Dimmer curves	
	000 … 005	Without function
	006 … 063	Linear course
	064 … 127	Exponential course
	128 … 191	Logarithmic course
	192 … 255	S-curve shaped course

8 Technical specifications





Light source	7 × UV-LED, 10 W	
Optical properties	Beam angle	20°
	Wave length	396 nm
Control	DMX	
	Buttons and display on the unit	
Number of DMX channels	1, 2, 4	
Input connections	Voltage supply	Lockable input socket (Power Twist)
	DMX control	XLR chassis plug, 3-pin
Output connections	Voltage supply	Lockable output socket (Power Twist) Output current 16 A max.
	DMX control	XLR chassis socket, 3-pin

Power consumption	70 W	
Operating supply voltage	100 – 240 V ~ 50/60 Hz	
Fuse	5 mm × 20 mm, 2 A, 250 V, fast-acting	
Protection class	IP20	
Mounting options	hanging, standing	
Dimensions (W × H × D)	125 mm × 125 mm × 230 mm	
Weight	3.5 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	50 %, non-condensing

Further information

Type	UV
Rechargeable battery operation	No

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.

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 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.