



Beam Moving Head B2R

moving head



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

22.04.2020, ID: 409533 (V3)

Table of contents

1	General information	4
	1.1 Further information.....	4
	1.2 Notational conventions.....	4
	1.3 Symbols and signal words.....	5
2	Safety instructions	6
3	Features	9
4	Installation	10
5	Starting up	12
6	Connections and controls	13
7	Operating	15
	7.1 Starting the device.....	15
	7.2 Operating modes.....	15
	7.3 System settings.....	16
	7.4 Device info, reset.....	17
	7.5 Gobos.....	18
	7.6 Menu overview.....	18
	7.7 Functions in 13-channel DMX mode.....	18
8	Maintenance	22
	8.1 Installing / replacing the illuminant.....	22
9	Technical specifications	28
10	Plug and connection assignment	29
11	Troubleshooting	30
12	Cleaning	31
13	Protecting the environment	32

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.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – hot surface.
	Warning – dangerous optical radiation.
	Warning – suspended load.
	Warning – toxic substances.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended for use as a freely moving multifunctional spotlight. 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 operating life of the device by regular breaks and by avoiding frequent switching on and off. The device is not suitable for continuous operation.

Safety



DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.



DANGER!

Electric shock caused by 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.

The load capacity of trusses or other fixtures must be sufficient for the intended number of devices. Note that the movement of the head places additional loads on the load-bearing parts.



CAUTION!

Risk of injury due to movements of the device

The head of the device can move quickly (pan, tilt) and can produce very bright light. This is also valid immediately after you turn on the device, when the device operates in automatic mode or under remote control and when you turn off a DMX controller that is connected to the device. Persons staying near the device could be injured or frightened.

Before you turn on the device and during the operation, always ensure that nobody stays close to the device. If work has to be performed in the area of movement or in the near vicinity of the device, it must remain turned off.



NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.



NOTICE!

Fire and overheating hazard

The distance between the light source and flammable materials must be greater than 12 m. The distance to non-flammable materials must be greater than 2 m.

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).



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.

The device must not be moved during use.



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!

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

The moving head is particularly suitable for professional lighting tasks, for example at events, on rock stages, in theatres and musicals or in night clubs.

Special features of the device:

- Control via DMX (13 channels) and via buttons and display on the unit
- Operating modes: Stand-Alone, Sound-Control, Master/Slave, DMX (13 channels)
- PAN movement: 540°
- TILT movement: 270°
- PAN / TILT speed adjustable
- Step motors with 16-bit resolution
- Colour wheel with 14 colours plus white
- Gobo wheel with 15 static gobos plus open
- Effects wheel with rotatable eightfold prism
- Motorised focus
- Mechanical shutter
- Two omega brackets with quick-release fastener 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.

Lift the device only at the base. When lifted at the rotatable mounting, the device may be damaged.

You can install the device standing or hanging. When in use, the device must be mounted at a solid surface or clamped to an approved truss.

Work from a stable platform whenever you install or move the device or when you perform any kind of maintenance. Block access under the work area.



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.

The load capacity of trusses or other fixtures must be sufficient for the intended number of devices. Not that the movement of the head places additional loads on the load-bearing parts.



CAUTION!

Risk of injury due to movements of the device

The head of the device can move quickly (pan, tilt) and can produce very bright light. This is also valid immediately after you turn on the device, when the device operates in automatic mode or under remote control and when you turn off a DMX controller that is connected to the device. Persons staying near the device could be injured or frightened.

Before you turn on the device and during the operation, always ensure that nobody stays close to the device. If work has to be performed in the area of movement or in the near vicinity of the device, it must remain turned off.



NOTICE!

Fire and overheating hazard

The distance between the light source and flammable materials must be greater than 12 m. The distance to non-inflammable materials must be greater than 2 m.

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).



NOTICE!

Possible damage caused by movements of the device

Always ensure that enough space is free around the device for the movements of the head (pan, tilt).



NOTICE!

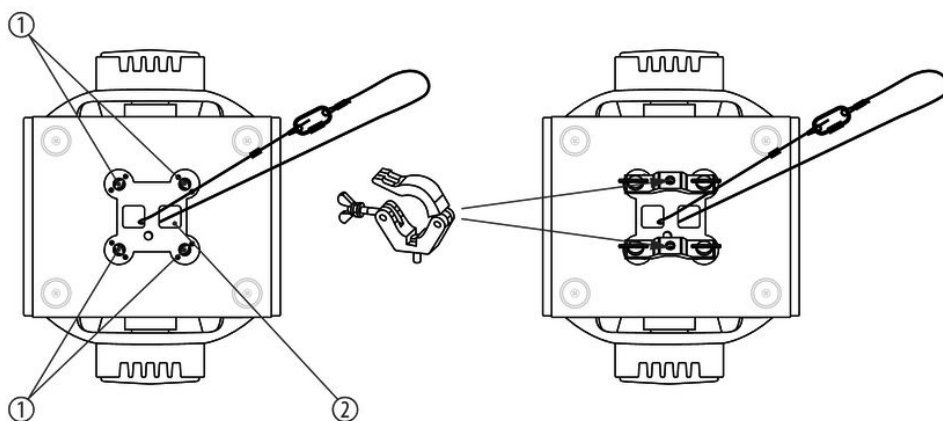
Possible data transmission errors

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

The quick lock openings on the housing bottom are used for secure attachment of the supplied Omega brackets. Here you can connect flight adapters (such as with C-hooks). The safety rope must pass through the notches on the bottom case as shown in the following figure.



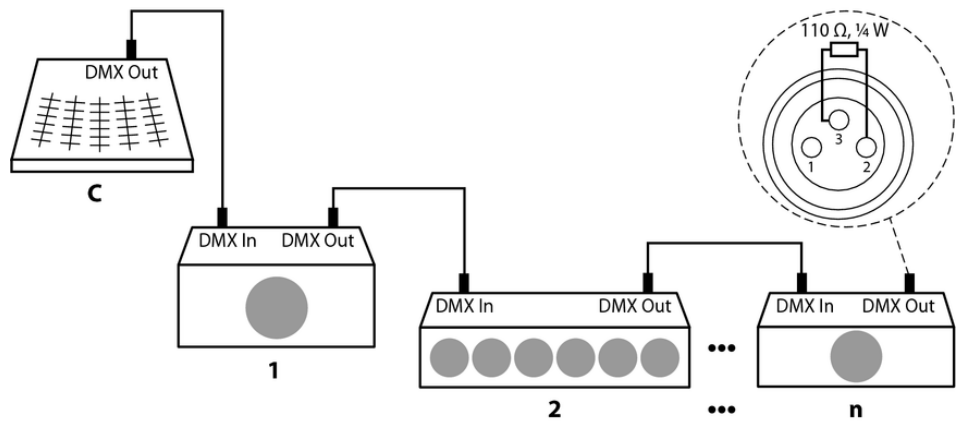
1	Quick lock openings for Omega brackets
2	Openings for safety cable

5 Starting up

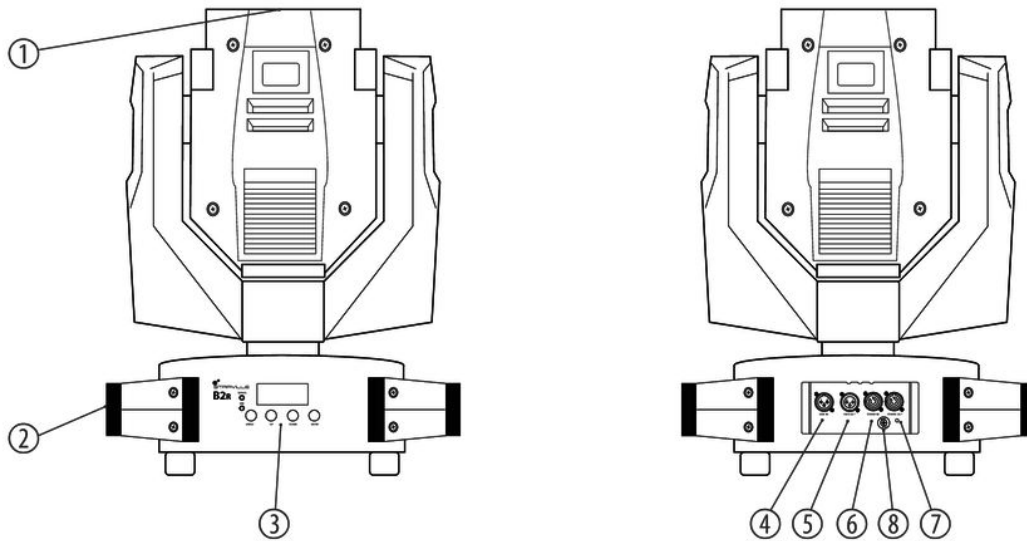
Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Connections in DMX mode

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



6 Connections and controls



1 Light aperture

2 Grab handle

3 Display

[SIGNAL]

LED display. This LED lights up on incoming signal.

[MIC]

Integrated microphone for music control.

[MENU]

Activates the main menu and toggles between menu items. Closes an opened submenu.

[UP]

Increases the displayed value by one.

[DOWN]

Decreases the displayed value by one.

[ENTER]

Selects an option of the respective operating mode, confirms the set value.

4 *[DMX IN]*

DMX input to control the device via DMX.

5 *[DMX OUT]*

DMX output for connecting additional DMX units in a DMX universe.

6	<i>[POWER IN]</i> Lockable Power Twist input socket for power supply.
7	<i>[POWER OUT]</i> Lockable Power Twist output socket to supply further devices.
8	Fuse holder

7 Operating

7.1 Starting the device



CAUTION!

Risk of injury due to movements of the device

The head of the device can move quickly (pan, tilt) and can produce very bright light. This is also valid immediately after you turn on the device, when the device operates in automatic mode or under remote control and when you turn off a DMX controller that is connected to the device. Persons staying near the device could be injured or frightened.

Before you turn on the device and during the operation, always ensure that nobody stays close to the device. If work has to be performed in the area of movement or in the near vicinity of the device, it must remain turned off.

Connect the device to the power supply to start operation. After a few seconds, the fans start to work, the head moves to the home positions for rotation (pan) and inclination (tilt). After a few more seconds, the device operates in the last set mode. The last set DMX address appears in the display. About one minute after turning on the illuminant lights with full brightness.

7.2 Operating modes

DMX mode, configure the DMX address

Press *[MENU]* to open the main menu. Use *[UP]* and *[DOWN]* to select the menu item 'DMX Mode' and confirm with *[ENTER]* to open the submenu 'Address'.

Use *[UP]* and *[DOWN]* to set a DMX address between '1' ... '500' (highest possible DMX address for 13-channel operation).

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Operating mode AUTO

Press *[MENU]* to open the main menu. Use *[UP]* and *[DOWN]* to select the menu item 'AutoMode' and confirm with *[ENTER]*.

Use *[UP]* and *[DOWN]* to select the menu item 'Program' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select one of the available programmes '1' ... '9' and confirm with *[ENTER]*.

Use *[UP]* and *[DOWN]* to select the menu item 'Speed' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to set the programme sequence speed in a range from '1' ... '9'.

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Operating mode SOUND

Press *[MENU]* to open the main menu. Use *[UP]* and *[DOWN]* to select the menu item 'Sound' and confirm with *[ENTER]*.

Use *[UP]* and *[DOWN]* to select the menu item 'Program' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select one of the available programmes '1' ... '9' and confirm with *[ENTER]*.

Use *[UP]* and *[DOWN]* to select the menu item 'Sens' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to adjust the microphone sensitivity in a range from '1' ... '9'.

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Operating mode SLAVE

Press *[MENU]* to open the main menu. Use *[UP]* and *[DOWN]* to select the menu item 'Slave' and confirm with *[ENTER]*.

Now use *[UP]* and *[DOWN]* and select the option 'Yes' to put the device into slave mode, or 'No' to deactivate slave mode.

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

7.3 System settings

In this menu, you can configure several device parameters.

First, open the main menu. Use *[UP]* and *[DOWN]* to select the menu item 'Settings' and confirm with *[ENTER]*. Use *[UP]* and *[DOWN]* to highlight one of the following submenus. Confirm by pressing *[ENTER]* to enter the respective submenu.

Lamp settings

Use *[UP]* and *[DOWN]* to select the menu item 'Lamp' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select the option 'On' (turn on the lamp automatically when the device is switched on) or 'Off' (turn on the lamp manually when the device is switched on).

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Reverse pan

Use *[UP]* and *[DOWN]* to select the menu item 'ReverPan' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select the option 'No' (normal rotation direction) or 'Yes' (reversed rotation direction).

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Reverse tilt

Use *[UP]* and *[DOWN]* to select the menu item 'ReverTilt' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select the option 'No' (normal tilt direction) or 'Yes' (reversed tilt direction).

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Display backlighting

Use *[UP]* and *[DOWN]* to select the menu item '*B-light*' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select the option '*On*' (turn on display backlighting) or '*Off*' (turn off display backlighting).

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

DMX failure

Use *[UP]* and *[DOWN]* to select the menu item '*DMX Fail*' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select the device's response to a DMX signal failure:

- '*Hold*': the unit continues to operate in the current mode with the last active DMX values until the signal returns.
- '*SondMod*': the unit automatically switches to Sound mode.
- '*Blackout*': all LEDs are blanked.

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Angle correction

Use *[UP]* and *[DOWN]* to select the menu item '*XYAUTO*' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select the option '*No*' (no automatic angle correction) or '*Yes*' (automatic angle correction).

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

Sensor adjustment

Use *[UP]* and *[DOWN]* to select the menu item '*Sensor*' and confirm with *[ENTER]*. Now use *[UP]* and *[DOWN]* to select the option '*No*' (no automatic sensor adjustment) or '*Yes*' (automatic sensor adjustment).

Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

7.4 Device info, reset**Firmware version**

Press *[MENU]* to open the main menu. Use *[UP]* and *[DOWN]* to select the menu item '*Info*' and confirm with *[ENTER]*.

The current firmware number is displayed in the format '*B2R X.X*'.

Press *[MENU]* to return to the previous menu level.

Reset to factory defaults

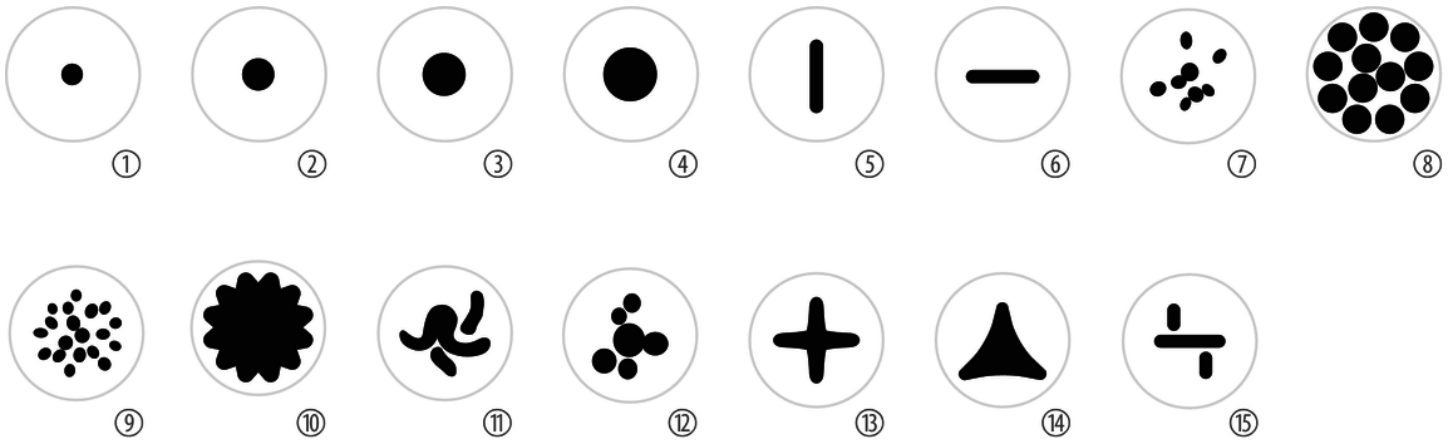
Press *[MENU]* to open the main menu. Use *[UP]* and *[DOWN]* to select the menu item '*Reset*' and confirm with *[ENTER]*.

Now use *[UP]* and *[DOWN]* to select an option '*Reset in 10s*' (reset after a waiting time of ten seconds) or '*Reset in 00s*' (reset immediately).

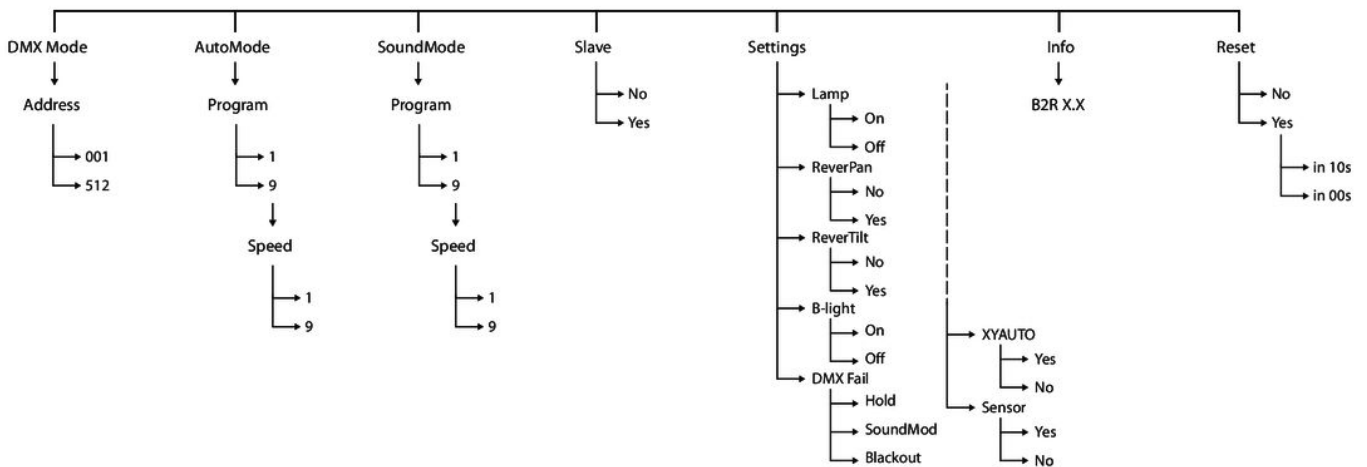
Confirm with *[ENTER]* to save your setting. Press *[MENU]* to return to the previous menu level.

7.5 Gobos

The following figure shows the available gobos as well as their numbers.



7.6 Menu overview



7.7 Functions in 13-channel DMX mode

Channel	Value	Function
1	0...255	Pan movement
2	0...255	Pan movement fine adjustment
3	0...255	Tilt movement

Channel	Value	Function
4	0...255	Tilt movement fine adjustment
5	0...255	Pan and tilt speed
6	0...255	Dimmer (0 ... 100 %)
7	0...9	Shutter closed
	10...127	Strobe effect, increasing speed
	128...249	Strobe effect with random control, increasing speed
	250...255	Shutter open
8	Colour wheel	
	0...4	White
	5...9	White + red
	10...14	Red
	15...19	Red + Orange
	20...24	Orange
	25...29	Orange + Cyan
	30...34	Cyan
	35...39	Cyan + Green
	40...44	Green
	45...49	Green + Light green
	50...54	Bright green
	55...59	Light green + Lavender
	60...64	Lavender
	65...69	Lavender + Pink
	70...74	Pink
	75...79	Pink + Yellow
	80...84	Yellow
	85...89	Yellow + Magenta
	90...94	Magenta
95...99	Magenta + Blue	
100...104	Blue	
105...109	Blue + Warm white (3500 K)	
110...114	Warm white (3500 K)	
115...119	Warm white (3500 K) + White (4000 K)	

Channel	Value	Function
	120...124	White (4000 K)
	125...129	White (4000 K) + White (10000 K)
	130...134	White (10000 K)
	135...139	White (10000 K) + Dark blue
	140...149	Dark blue
	150...154	Dark blue + white
	155...205	Rainbow effect, increasing speed
	206...255	Rainbow effect, reversed
9	Gobos	
	0...3	Gobo open
	4...7	Gobo 1
	8...11	Gobo 2
	12...15	Gobo 3
	16...19	Gobo 4
	20...23	Gobo 5
	24...27	Gobo 6
	28...31	Gobo 7
	32...35	Gobo 8
	36...39	Gobo 9
	40...43	Gobo 10
	44...47	Gobo 11
	48...51	Gobo 12
	52...55	Gobo 13
	56...59	Gobo 14
	60...63	Gobo 15
	64...67	Gobo 15 shake
	68...71	Gobo 14 shake
	72...75	Gobo 13 shake
	76...79	Gobo 12 shake
	80...83	Gobo 11 shake
	84...87	Gobo 10 shake
	88...91	Gobo 9 shake

Channel	Value	Function
	92...95	Gobo 8 shake
	96...99	Gobo 7 shake
	100...103	Gobo 6 shake
	104...107	Gobo 5 shake
	108...111	Gobo 4 shake
	112...115	Gobo 3 shake
	116...119	Gobo 2 shake
	120...123	Gobo 1 shake
	124...127	Gobo open shake
	128...192	Rotation of the gobo wheel clockwise, increasing speed
	193...255	Rotation of the gobo wheel counter-clockwise, increasing speed
10	Prism	
	0...7	Prism off
	8...255	Prism on
11	Prism rotation	
	0...9	Prism closed
	10...91	Clockwise rotation
	92...173	Counter-clockwise rotation
	174...255	Rotation alternately clockwise/counter-clockwise
12	0...255	Focus, linear
13	Reset	
	0...79	Without function
	80...100	Auto mode
	101...127	Without function
	128...149	Lamp on
	150...180	Lamp off
	181...199	Without function
	200...255	Reset

8 Maintenance

8.1 Installing / replacing the illuminant



DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present.

Completely disconnect the device from the power supply before you open or remove covers. Mount all covers and attach them firmly before connecting the device again.

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



WARNING!

Risk of burns at the surface and inside of the device

The surface and the inner parts of the device can become very hot during operation.

After switching off the device wait for at least 15 minutes before you start any maintenance activities.



WARNING!

Danger of burns in case of inappropriate handling of the illuminant

The light source used in this device is under high pressure, especially when heated, and can explode if handled inappropriately.

Allow the illuminant to cool down for at least two hours before starting any maintenance or replacement. Always wear suitable protective gloves and safety glasses when handling the illuminant.



WARNING!

Danger of poisoning on lamp breakage

When discharge lamps break, small amounts of harmful substances (e.g. mercury) are released.

When a discharge lamp breaks within a closed room: Vacate the room immediately and ventilate adequately.

To remove the remnants of broken discharge lamps wear Nitrile protective gloves, breathing and mouth protection.

Dispose of broken or worn discharge lamps as hazardous waste according to legal regulations in a tightly closed container.

**WARNING!****Danger of burns and eye injuries caused by high light intensity**

The light source used in this device produces visible and invisible light beams of high intensity.

Never look directly into the light source.

Do not use the device when covers, shieldings, lenses or other optical components are missing or damaged. In particular, avoid prolonged direct exposure of the skin during maintenance without adequate cover of the light source.

**CAUTION!****Danger of injury in case of inappropriate handling of the illuminant**

After the specified lifetime of the used illuminant there is an increased risk of explosion.

Replace the illuminant in time, latest at the end of rated average lifetime.

When replacing the illuminant, all safety instructions for handling light sources must be observed and wear suitable protective gloves and safety glasses.

**NOTICE!****Possible damages due to dirt or finger prints**

Due to the high temperatures, even smallest pieces of dirt on the bulb can destroy the lamp when it is turned on.

Do not touch the lamp directly with your fingers. Use clean gloves or a clean lint-free tissue.

**NOTICE!****Possible damages due to wrong type of lamp**

Any attempt to use the device with a lamp other than those specified in this manual can result in severe damages to the device.

Only use a lamp of the specified type.

Notes on the illuminant

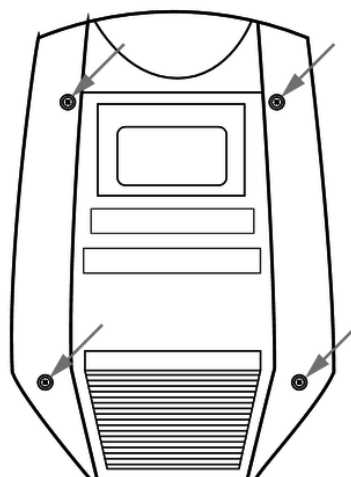
The device may only be operated with an illuminant of the type 'Osram Sirius HRI 132W' for use in stage and theatre area. Observe the safety instructions of the illuminant manufacturer.

Required tools

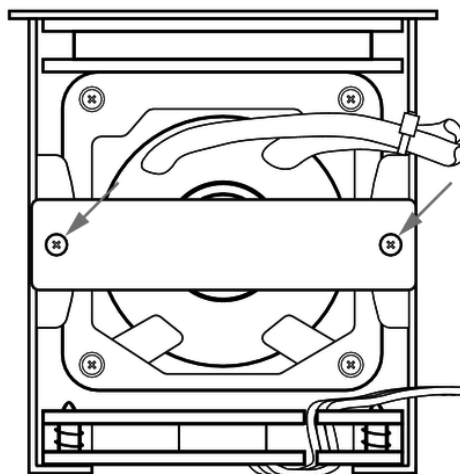
Phillips screwdriver size PH2

Requirements

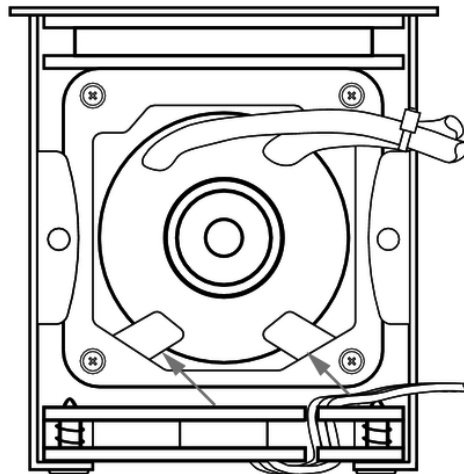
Make sure that the device is turned off, disconnected from the mains and completely cooled down.

Procedure

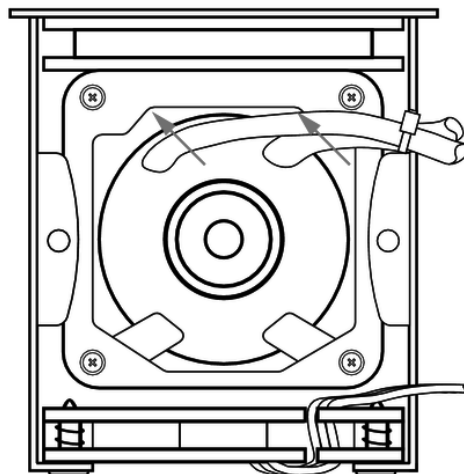
1. ➤ Remove one of the covers from the head of the unit. To do this, loosen the four cross-head screws using a suitable screwdriver. Then carefully remove the cover from the unit.
2. ➤ Tilt the head to the opposite side. Loosen the four Phillips screws and remove this cover also.



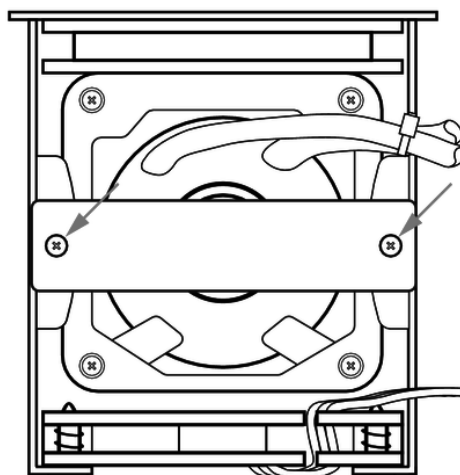
3. ➤ Remove the small metal plate on the back by unscrewing the two screws.



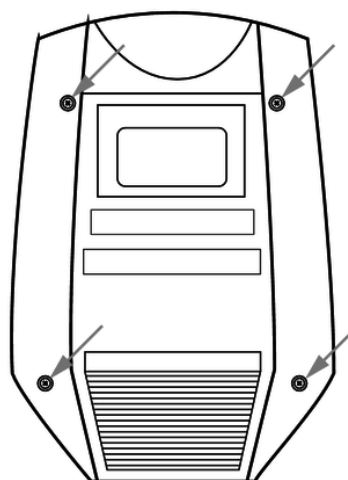
4. ▶ Align the head of the unit so that the metal brackets of the illuminant are aligned as shown in the figure.
5. ▶ Carefully press down on the illuminant from above, so that the retainers slightly bend back. Tilt the illuminant slightly towards you to release it from the bracket.
6. ▶ Carefully guide the illuminant upwards out of the bracket. Unscrew the power supply cables from the old illuminant and connect the power cables to the new illuminant. When installing the new illuminant, make sure that the sensitive front part is not touching the housing.



7. ▶ Re-insert the illuminant into the retainers. Be sure to keep the illuminant at the corners under the bracket.

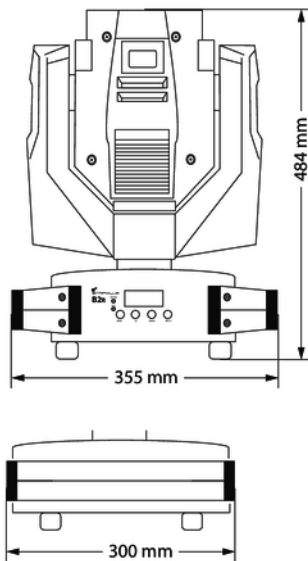


- 8.** ➤ Fasten the small metal plate with the two screws on the back.



- 9.** ➤ Close the housing with the two covers and secure them with four cross-head screws each.

9 Technical specifications



Light source	Discharge lamp type Osram Sirius HRI, 132 W	
Light source properties	Colour temperature	8500 K
Optical properties	Beam angle	3°
Rotation angle (pan), max.	540°	
Inclination angle (tilt), max.	270°	
Dimmer	0 ... 100 %, linear	
Shutter	0.5 ... 9 Hz	
Control	Buttons and display on the unit, DMX	
Number of DMX channels	13	
Input connections	Power supply	Lockable input socket (Power Twist)
	DMX control	XLR chassis socket, 3-pin
Output connections	Power supply	Lockable output socket (Power Twist)
	DMX control	XLR chassis socket, 3-pin
Power consumption	150 W	
Supply voltage	100 – 230 V ~ 50/60 Hz	
Degree of protection	IP20	
Mounting options	Hanging, standing	
Dimensions (W × H × D)	355 mm × 484 mm × 300 mm	
Weight	9 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	50 %, non-condensing

Further information

Light output	132 W
Colour mixture	Colour wheel
Gobo wheel	Yes
Prism	Yes
Motorized focus	Yes
Motorized zoom	No

10 Plug and connection assignment

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')

11 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, the fan does not run	Check the mains connection and the main fuse.
No response to the DMX controller	1. The set DMX address should appear continuously in the display. If the address flashes in the display, check the DMX connectors and cables for correct connection.
	2. If the set DMX address is displayed continuously but 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.

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

12 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.

13 Protecting the environment

Disposal of the packaging material



For the 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.

Dispose of discharge lamps

Dispose of broken or worn discharge lamps as hazardous waste according to legal regulations in a tightly closed container.

