STAIRVILLE

MH-Z195 Smart White CW/WW/A

moving head

user manual

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MH-Z195 Smart WhiteCW/WW/A

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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*.

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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'*.

Text input

Text inputs that are carried out on the device are indicated by typewriter font.

Example: `2323`

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 – dangerous optical radiation.
⚠	Warning – suspended load.
⚠	Warning – danger zone.

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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. Not that the movement of the head places additional loads on the load-bearing parts.

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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!

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 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.

!

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!
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

Special features of the device:

- 3-in-1 white light LEDs (19 × 5 W)
- Control via DMX (12 or 15 channels) as well as buttons and display on the unit
- Preprogrammed automatic show programmes
- Sound control
- Master / Slave mode
- Strobe effect
- Electronic dimmer
- Electronic focus
- Robust housing
- Power supply via lockable power twist connection

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.

> **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!**
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.

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

Mounting options

The quick-lock openings on the housing bottom are used for secure attachment of the included omega bracket. To these, the flight adapters (half coupler, trigger clamps, C-hooks, etc.) are attached. The safety cable must be threaded through the cut-outs on the bottom of the device.
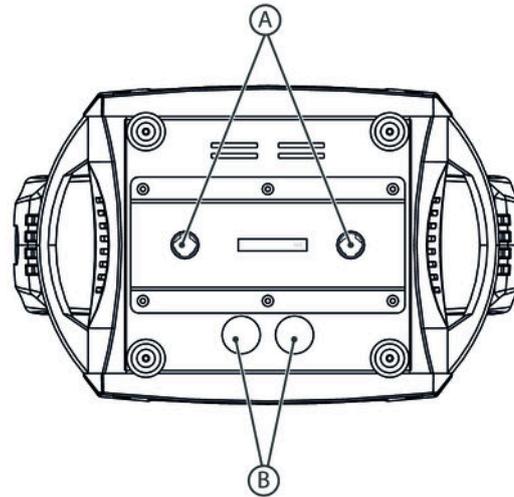
A	Quick lock openings for Omega brackets
B	Openings for safety cable

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 Ω, ¼ W).
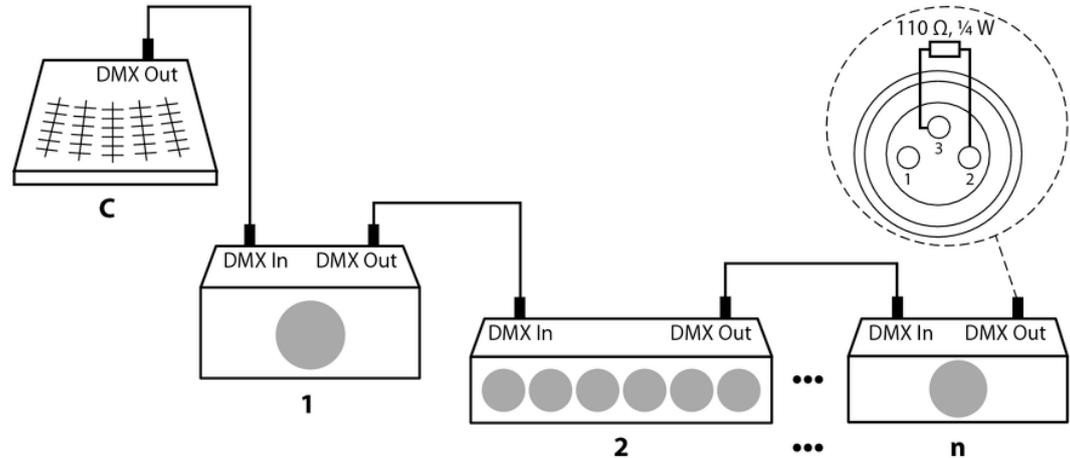
DMX indicator

If the device is correctly connected to a switched-on DMX controller, a flashing star appears in the lower row of the display in 'DMX' mode. If the device does not receive a valid DMX signal, the error message 'DMX Fail' is displayed.

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

Overview
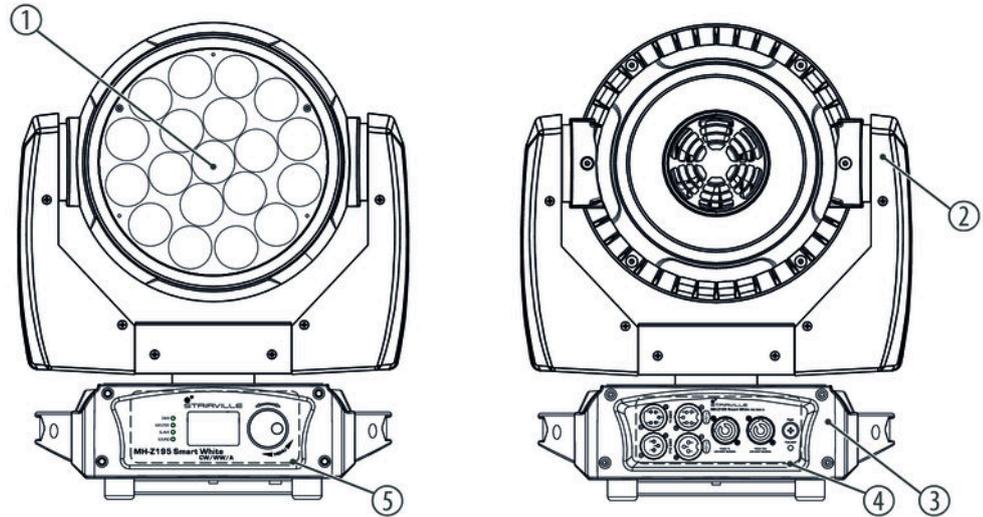
1	Spotlight head with LEDs
2	Rotatable mounting
3	Device base
4	Connections
5	Operating elements

Operating elements
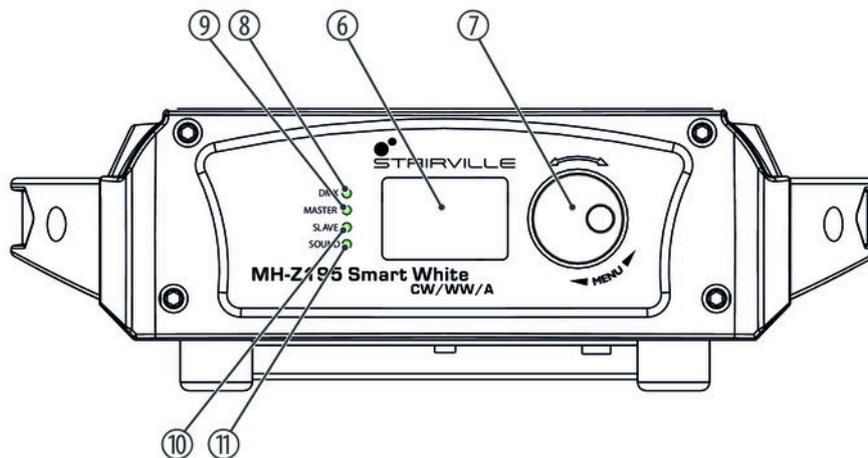
6	Display
	When the main menu is activated, the display shows the current menu item and the set option. When the main menu is closed, it shows the current operating mode and the temperature of the device. The display is dimmed a few seconds after the last keystroke.
7	*[MENU]*
	Jog wheel to select a menu item or value by turning and confirming the selection by pressing.
8	*[DMX]*
	The LED indicates that a signal is present at the DMX input.
9	*[MASTER]*
	The LED indicates that the device is in 'Master' mode.
10	*[SLAVE]*
	The LED indicates that the device is in 'Slave' mode.
11	*[SOUND]*
	In 'Music' mode, the LED indicates that a sound signal is being detected by the microphone.

Connections
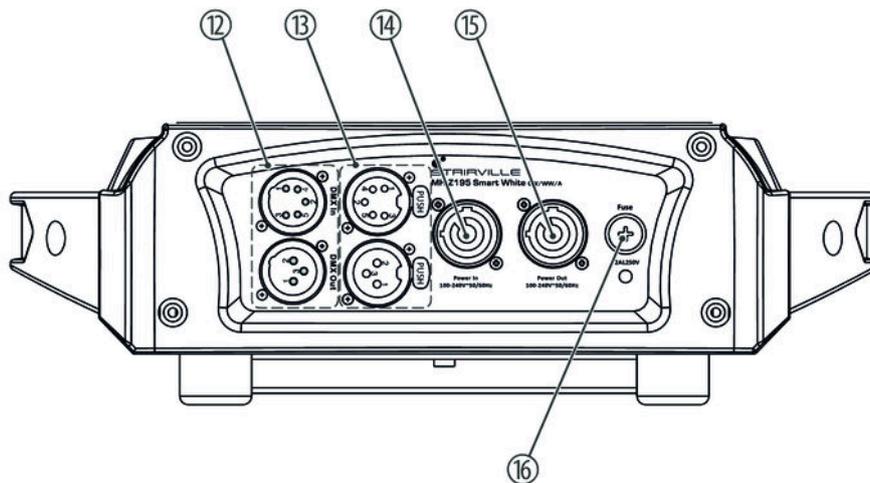
12	*[DMX In]*
	DMX input in three-pin and five-pin design.
13	*[DMX Out]*
	DMX output in three-pin and five-pin design.
14	*[POWER In]*
	Lockable input socket (Power Twist) for power supply.
15	*[POWER Out]*
	Lockable output socket (Power Twist) for the power supply of further units.
16	*[Fuse]*
	Fuse 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 grid and turn it on with the main switch to start operation.

After a few seconds, the fans start to work, the spotlight head moves to the home positions for rotation (pan) and inclination (tilt), the screen displays a start message. After a few more seconds, the device operates in the last set mode.

7.2 Main menu

Press the jog wheel to activate the main menu. Use the jog wheel to select a submenu. When the display shows the desired submenu press the jog wheel again to open it up. Turn the jog wheel to set a value and press the jog wheel to confirm the value.

To close the submenu, select *'Exit'* or wait 20 seconds.

All previously made settings are retained even when you disconnect the device from the power grid. To restart with default values, use the function *'Factory Sets'*.

Main menu	Menu level 2	Menu level 3	
	Meaning		
'1:DMX Address'	Setting the DMX address		
	'001 - 512'		
'2:Channel Mode'	Selecting a DMX mode		
	'1:12Ch'	12 channels	
	'2:15Ch'	15 channels	
'3:Dimmer Curve'	Dimmer curve		
	'1:Square Law'	Inverted square curve with a steep profile at the beginning and flat profile at the end	
	'2:Linear'	Linear (proportional) course	
	'3:S'-Curve	Non-linear curve with a distinctive flat profile at the beginning and end	
	'4:InvSquare Law'	Inverted quadratic curve with a steep profile at the beginning and flat profile at the end	

Main menu	Menu level 2	Menu level 3	
	Meaning		
'4:Show Mode'	Preprogrammed automatic show		
	'Show01-Show08'	Selecting an automatic show	
'5:Manual Control'	Manual settings		
	'1:Pan'	'000-255'	Pan (0° … 540°)
	'2:Tilt'	'000-255'	Tilt (0° … 270°)
	'3:Strobe'	'000-255'	Strobe effect (0 Hz … 20 Hz)
	'4:Amber'	'000-255'	Intensity amber (0 % … 100 %)
	'5:Warm White'	'000-255'	Intensity warm white (0 % … 100 %)
	'6:Cool White'	'000-255'	Intensity cold white (0 % … 100 %)
	'7:Zoom'	'000-255'	Zoom (11° … 60°)
	'Exit'		

Main menu	Menu level 2	Menu level 3	
	Meaning		
'6:Slave Mode'	Slave mode		
	'Slave1'	Modus 1: The device is controlled by another device, which is configured as master. It exactly follows the movements and light effects of the master.	
	'Slave2'	Modus 2: It follows the movements and light effects of the master in reverse direction.	
'7:Sound Mode'	Sound control		
	'On'	Turned on	
	'Off'	Turned off	
	'Sose'	'000-255'	Sensitivity of the built-in microphone (0% … 100%)
	'Exit'		
'8:Pan Inverse'	Inversion of rotation direction		

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Main menu	Menu level 2	Menu level 3	
	Meaning		
	'Yes'	Turned on	
	'No'	Turned off	
'9:Tilt Inverse'	Inversion of inclination direction		
	'Yes'	Turned on	
	'No'	Turned off	
'10:DMX Clear'	Behaviour on DMX signal failure		
	'Yes'	Blackout on DMX errors	
	'No'	Retaining the current settings for DMX errors	
'11:DisplayRotate'	Display inversion		
	'1:Auto'	Automatic	
	'2:Normal'	Normal setting	
	'3:Inverted'	Inverted	

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Main menu	Menu level 2	Menu level 3	
	Meaning		
	'Exit'		
'12:Back Light'	Backlight of the display		
	'On'	Constantly turned on	
	'Off'	automatic shutoff after 15 s	
	Adjust	*'01-10'*	Backlight brightness
	'Exit'		
'13:Version'	Firmware version display		
	'Version x.yz'		
'14:Factory Sets'	Reset to factory defaults		
	'Yes'	Perform	
	'No'	Don't perform	
'15:Reset'	Motor reset for rotation, tilt and zoom		

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Main menu	Menu level 2	Menu level 3	
	Meaning		
	'Yes'	Perform	
	'No'	Don't perform	
'16:Calibrations'	Calibration		
	'Password'	Use the jog wheel to set 088 for password and press the jog wheel.	
	'1:Pan'	*'000-255'*	Pan home position
	'2:Tilt'	*'000-255'*	Tilt home position
	'3:Zoom'	*'000-255'*	Zoom home position
	'4:Default'	*'127'*	Resetting home positions to factory defaults
	'Exit'		
'17:Auto Test'	Self test		

Main menu	Menu level 2	Menu level 3	
	Meaning		
	'Test…'	Starting	
	'Exit'	Stopping	
'Exit'	Closing the main menu.		

7.3   Menu overview

Slave Mode
- Slave1
- Slave2

Sound Mode
- On
- Off
- Sose → 000 ••• 255

Pan Inverse
- No
- Yes

Tilt Inverse
- No
- Yes

DMX Clear
- Yes
- No

DisplayRotate
- Auto
- Normal
- Inverted

MENU

Back Light
- On
- Off
- Adjust → 0 ••• 10

Factory Sets
- Yes
- No

Reset
- Yes
- No

Calibrations
- Pan
- Tilt
- Zoom
- Default

Auto Test
- Test…

Version

MENU

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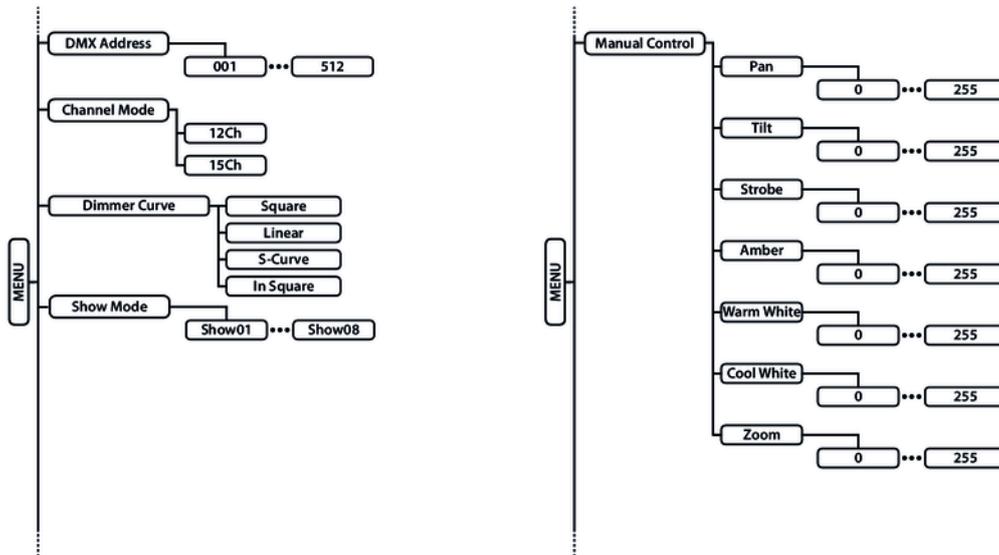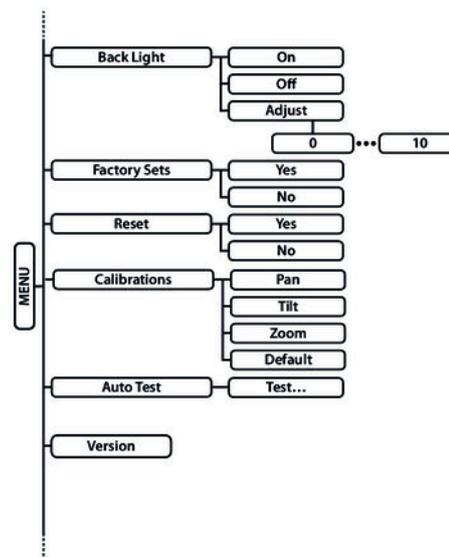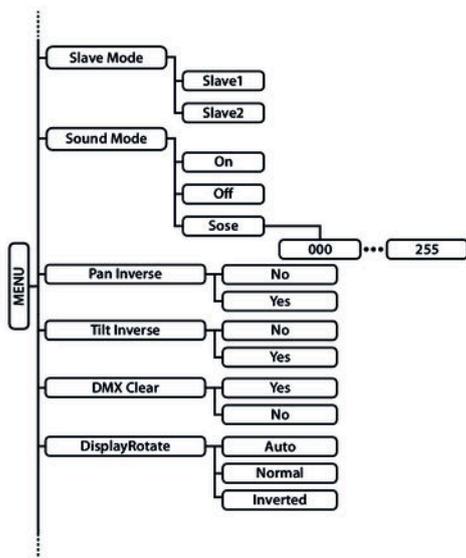
7.4 Functions in 12-channel DMX mode

Channel	Value	Function
1	0…255	Rotation (pan) (0° to 540°)
2	0…255	Fine adjustment for rotation (pan)
3	0…255	Inclination (tilt) (0° to 270°)
4	0…255	Fine adjustment for inclination (tilt)
5	0…255	Speed of rotation (pan) and inclination (tilt), fast to slow
6	0…255	Dimmer (0 % to 100 %)
7	Strobe effect	
	0…10	Strobe effect off
	11…128	Random Strobe effect, increasing speed
	129…255	Strobe effect, increasing speed
8	0…255	Focus (zoom)

Channel	Value	Function
9	Special settings	
	0…9	No function
	10…20	Reset after five seconds
	21…255	No function
10	0…255	Intensity amber (0 % … 100 %, if channel 8 = 0…7 and channel 9 = 0…15)
11	0…255	Intensity warm white (0 % … 100 %, if channel 8 = 0…7 and channel 9 = 0…15)
12	0…255	Intensity cold white (0 % … 100 %, if channel 8 = 0…7 and channel 9 = 0…15)

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7.5 Functions in 15-channel DMX mode

Channel	Value	Function
1	0…255	Rotation (pan) (0° to 540°)
2	0…255	Fine adjustment for rotation (pan)
3	0…255	Inclination (tilt) (0° to 270°)
4	0…255	Fine adjustment for inclination (tilt)
5	0…255	Speed of rotation (pan) and inclination (tilt), fast to slow
6	0…255	Dimmer (0 % to 100 %)
7	Strobe effect	
	0…10	Strobe effect off
	11…128	Random Strobe effect, increasing speed
	129…255	Strobe effect, increasing speed
8	Selecting a pre-defined colour	

Channel	Value	Function
	0…7	No function, colour mixing with channels 13, 14 and 15
	008…013	Colour 1 (A:255, S:000, W:000)
	014…020	Colour 2 (A:255, S:050, W:000)
	021…027	Colour 3 (A:255, S:100, W:000)
	028…034	Colour 4 (A:255, S:150, W:000)
	035…041	Colour 5 (A:255, S:200, W:000)
	042…048	Colour 6 (A:255, S:255, W:000)
	049…055	Colour 7 (A:200, S:255, W:000)
	056…062	Colour 8 (A:150, S:255, W:000)
	063…069	Colour 9 (A:100, S:255, W:000)
	070…076	Colour 10 (A:050, S:255, W:000)
	077…083	Colour 11 (A:000, S:255, W:000)
	084…090	Colour 12 (A:000, S:255, W:050)

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Channel	Value	Function
	091…097	Colour 13 (A:000, S:255, W:100)
	098…104	Colour 14 (A:000, S:255, W:150)
	105…111	Colour 15 (A:000, S:255, W:200)
	112…118	Colour 16 (A:000, S:255, W:255)
	119…125	Colour 17 (A:000, S:200, W:255)
	126…132	Colour 18 (A:000, S:150, W:255)
	133…139	Colour 19 (A:000, S:100, W:255)
	140…146	Colour 20 (A:000, S:050, W:255)
	147…153	Colour 21 (A:000, S:000, W:255)
	154…160	Colour 22 (A:050, S:000, W:255)
	161…167	Colour 23 (A:100, S:000, W:255)
	168…174	Colour 24 (A:150, S:000, W:255)
	175…181	Colour 25 (A:200, S:000, W:255)

Channel	Value	Function
	182…188	Colour 26 (A:255, S:000, W:255)
	189…195	Colour 27 (A:255, S:000, W:200)
	196…202	Colour 28 (A:255, S:000, W:150)
	203…209	Colour 29 (A:255, S:000, W:100)
	210…216	Colour 30 (A:255, S:000, W:050)
	217…223	Colour 31 (A:255, S:000, W:020)
	224…230	Colour 32 (A:255, S:150, W:020)
	231…255	Colour 33 (A:255, S:255, W:255)
9	Colour change effect	
	0…15	No function, colour mixing with channels 13, 14 and 15
	16…31	Jump 1
	32…47	Jump 2
	48…63	Jump 3

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Channel	Value	Function
	64…79	Jump 4
	80…95	Jump 5
	96…111	Jump 6
	112…127	Jump 7
	128…143	Jump 8
	144…159	Fade 1
	160…175	Fade 2
	176…191	Fade 3
	192…207	Fade 4
	208…223	Fade 5
	224…239	Fade 6
	240…255	Fade 7
10	0…255	Colour change speed

Channel	Value	Function
11	0…255	Focus (zoom)
12	Special settings	
	0…9	No function
	10…20	Reset after five seconds
	21…255	No function
13	0…255	Intensity amber (0 % … 100 %, if channel 8 = 0…7 and channel 9 = 0…15)
14	0…255	Intensity warm white (0 % … 100 %, if channel 8 = 0…7 and channel 9 = 0…15)
15	0…255	Intensity cold white (0 % … 100 %, if channel 8 = 0…7 and channel 9 = 0…15)

8 Technical specifications
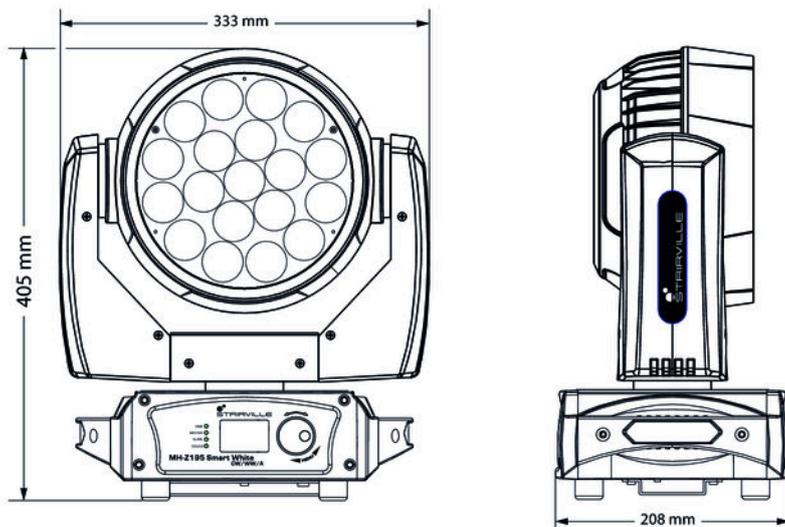
Light source		19 × 3in1 LED, 5 W (warm white, cold white, amber)
Optical properties	Beam angle	20°
	Colour temperature	2100 K…6100 K
	Dimmer	electronic, 0…100 %
	Shutter	electronic, 0…20 Hz
Rotation angle (pan), max.		540°
Inclination angle (tilt), max.		270°
Control protocol		DMX 512
Control		DMX
Number of DMX channels		12, 15
Input connections	Voltage supply	Lockable input socket (Power Twist)
	DMX control	XLR chassis socket, 3-pin
		XLR chassis socket, 5-pin

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Output connections	Voltage supply	Lockable output socket (Power Twist).
	DMX control	XLR chassis socket, 3-pin
		XLR chassis socket, 5-pin
Power consumption		123 W
Supply voltage		100 – 240 V ∿ 50/60 Hz
Fuse		5 mm × 20 mm, 2 A, 250 V, slow-blow
Degree of protection		IP20
Mounting options		Hanging, standing
		Omega bracket
Dimensions (W × H × D)		333 mm × 405 mm × 208 mm
Weight		9.4 kg
Ambient conditions	Temperature range	0 ℃…40 ℃
	Relative humidity	50 %, non condensing

Further information

Design	Wash
Colour mixture	CC/WW/A
Motorized zoom	Yes
Motorized focus	No
Rotating gobos	No
Static gobos	No
Number of colour wheels	0
Iris	No
Prism	No

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9 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')

DMX connections

A five-pin XLR socket serves as DMX output, a five-pin XLR plug serves as DMX input. The drawing below and the table show the pin assignment of a matching coupling.

Pin	Assignment
1	Ground (shielding)
2	Signal inverted (DMX−, 'cold')
3	Signal (DMX+, 'hot')
4	unused / second connection (DMX−)
5	unused / second connection (DMX+)

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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, the fan does not run	Check the mains connection and the main fuse.
No response to the DMX controller	1. A flashing star should appear in the display on data transmission. If not, check the DMX connectors and cables to see if they are properly linked.
	2. If a flashing star appears in the display 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*.

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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.

Notes

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