



Pixel Beam 160 RGBW 16x10W moving head



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



# 1.1 Further information

On our website (<u>www.thomann.de</u>) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the 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'.

**Cross-references** References to other locations in this manual are identified by an arrow and the specified page

number. In the electronic version of the manual, you can click the cross-reference to jump to

the specified location.

Example: See & 'Cross-references' on page 7.



# 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
A	Warning – high-voltage.
	Warning – dangerous optical radiation.
	Warning – suspended load.
<u>^</u>	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. 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!

### Risk of fire

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





### **Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

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

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

The device must not be moved during use.





# **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.





## **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

- LED matrix panel consisting of 16 × 4-in-1 separately controllable quad-colour LEDs (RGBW, 10 watt each)
- Continuous PAN and TILT movement
- Control via DMX (3 different channels) and via buttons, jog wheel and high-resolution colour display on the device
- Preprogrammed automatic shows
- Sound control
- Stand-alone mode
- Master / Slave mode
- Lockable connectors (Power Twist) for self-supply and for supplying further devices
- Electronic overheating protection
- suitable for wall and truss mounting
- Automatic rotation of the display for overhead installation

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!

### 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).





# 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.





### Possible staining

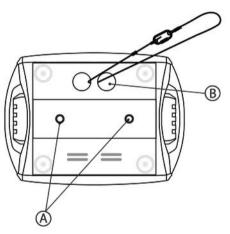
The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

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



### **Mounting options**

The quick lock openings on the housing bottom are used for secure attachment of Omega brackets. 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 housing.



- A Quick-lock openings
- B Openings for safety cable



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



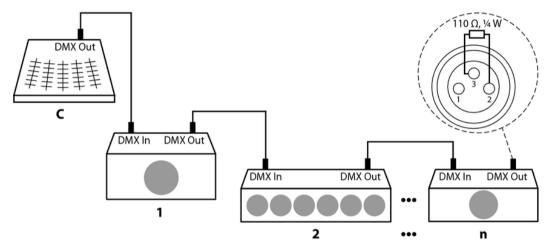
# 5 Starting up

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  $\Omega$ ,  $\frac{1}{4}$  W).





### **DMX** indicator

When the device and the DMX controller are operational, the DMX indicator in the display shows that a DMX signal is being received on the input.

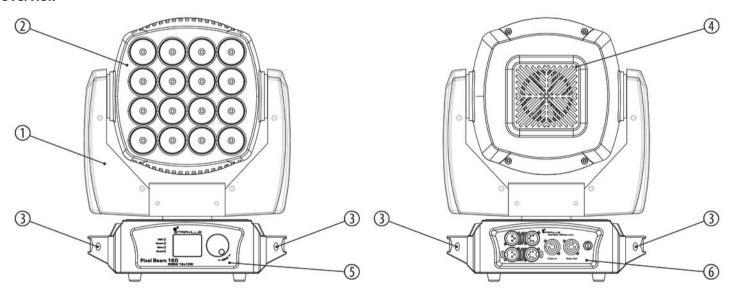
# Connections in master/slave mode

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



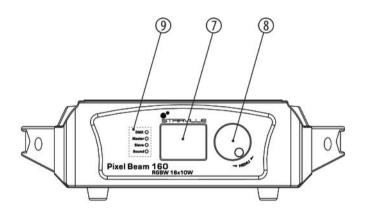


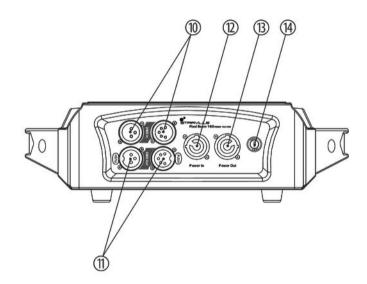
# Connections and controls

1	Moving head.
2	LEDs
3	Handles
4	Fan grids
5	Operating panel with display.
6	Connection panel with power supply, fuse holder and DMX ports.



# Control panel, connection panel





-	
/	Displays the selected mode or the selected menu item. On the bottom line the selected DMX mode and the device temperature are permanently displayed.
8	[MENU]
	Jog wheel to select a menu item or value by turning and confirming the selection by pressing.
9	Control LEDs:
	■ [DMX]: The green LED lights up when a DMX controller is connected and flashes when DMX data is transmitted.
	[Master]: The green LED lights up when the device is configured as "master".
	The green LED lights up.  [Slave]: The green LED lights up when the device is configured as "slave".
	<ul><li>[Sound]: The green LED lights up when the built-in microphone picks up a signal for the music control.</li></ul>
	The indicator LEDs go out automatically when the display is turned off.
10	[DMX In]
	DMX input, 3 and 5-pin.
11	[DMX Out]
	DMX output, 3 and 5-pin.



12	[Power In]
	Lockable input socket (Power Twist) for power supply.
13	[Power Out]
	Lockable output socket (Power Twist).
14	[FUSE]
	Fuse holder



# 7 Operating



### **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), the screen displays a start message. After a few more seconds, the device operates in the last set mode.



If you don't use the jog wheel for about 20 seconds, the current setting will be automatically cancelled and the display turned off. The set values are retained even when the device is disconnected from the mains power supply.



### 7.1 Main menu

Press the jog wheel to activate the main menu. Turn the jog wheel to select a sub-menu. When the desired menu is highlighted in the display, press the jog wheel again to enter the sub-menu. To close a menu without saving changes, select the menu item 'Exit' or wait 20 seconds.



As soon as you activate the main menu, the DMX control and a currently running automatic show are being interrupted. The movable head of the unit moves to its home position.

If you close the main menu without making changes, the unit continues to operate with the previous settings.

All previous settings are retained even when you disconnect the device from the mains. To restart with default values, use the function 'Factory Sets' ( $\mbox{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\e$ 



#### DMX address

Select 'DMX Address' from the main menu. Turn the jog wheel to adjust the number of the first DMX channel (DMX address) used by the device. Select a value between 1 and 512. This setting is only relevant if the device is being controlled via DMX.

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu.

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

Mode	Highest possible DMX address
9-channel	504
16-channel	497
72-channel	441



### Operating mode 'DMX'

Select 'Channel Mode' from the main menu. By turning the jog wheels you can now choose between the following DMX operating modes: 9-channel, 16-channel or 72-channel. This setting is only relevant if the device is being controlled via DMX.

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu.

#### **Auto show**

Select 'Show Mode' from the main menu. By turning the jog wheel you can now choose between two different automatic shows. The selected show will start immediately.

Automatic mode is only relevant if the device is operating alone or is the master in a master/slave configuration and is not controlled via DMX.

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu.



### **Manual settings**

Select 'Manual Control' from the main menu. By turning the jog wheel you can now choose which option you wish to set:

- "Pan": Values between 0 and 127 rotate the head in a fixed position between 0° and 540°. Values between 128 and 255 start continuous rotation. Values from 128 to 191 cause a clockwise rotation whose speed decreases with increasing values, and values from 192 to 255 cause an anti-clockwise rotation whose speed increases with increasing values.
- 'Tilt': Values between 0 and 127 tilt the head in a fixed position between 0° and 270°. Values between 128 and 255 start continuous tilting. Values from 128 to 191 cause a clockwise movement whose speed decreases with increasing values, and values from 192 to 255 cause an anti-clockwise movement whose speed increases with increasing values.
- "Red", 'Blue", 'Green", 'White": Values between 0 and 255 control the intensity of the respective colour LEDs, from switched off (0) to full brightness (255).
- "Strobe": Values between 1 and 255 cause a strobe effect with increasing speed. With a value of 0 the strobe effect is switched off (continuous light).

Manual settings are only relevant if the device is operating alone or is the master in a master/slave configuration and is not controlled via DMX.



### Operating mode 'Slave'

Select 'Slave Mode' from the main menu. By turning the jog wheel you can now choose between 'Slave1' and 'Slave2'. When set to 'Slave1', the device follows the device that is configured as the "master" exactly, when set to 'Slave2', the movement directions are reversed.

This setting is only relevant if the device is the slave in a master/slave configuration and is not controlled via DMX.

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu.

#### Sound control

Select 'Sound Control' from the main menu. By turning the jog wheel you can now switch between 'On' (start music-controlled automatic show), 'Off' (end music-controlled automatic show), 'Sose' (set the microphone sensitivity) and 'Exit' (no action). When setting the sensitivity, a value of 0 means that the integrated microphone is turned off. A value of 255 sets the highest possible sensitivity level.

The music control is only relevant if the device is the master in a master/slave configuration and is not controlled via DMX.



Pan reversal

Select 'Pan Inverse' from the main menu. By turning the jog wheel you can now select between 'No' (normal rotation direction) and 'Yes' (inverted rotation direction).

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu

**Tilt reversal** 

Select 'Tilt Inverse' from the main menu. By turning the jog wheel you can now select between 'No' (normal inclination direction) and 'Yes' (inverted inclination direction).

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu.

**DMX** reset

Select 'DMX Clear' from the main menu. By turning the jog wheel you can now select between 'No' (no reset) and 'Yes' (reset possible via DMX).

Once the display shows the desired option, press the jog wheel to confirm the setting and close the menu.



### **Display reversal**

Select 'Display Rotate' from the main menu. By turning the jog wheel, you can now select between 'Auto' (automatic rotation of the display for overhead installation), 'Normal' (normal display) and 'Inverted' (the display is inverted for overhead installation).

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu.

# Brightness and running time of the display

Select 'Back Light' from the main menu. By turning the jog wheel, you can now select between 'On' (display permanently switched on), 'Off' (switches off the display if no key is pressed for 15 seconds) and 'Adjust' (adjust the display brightness). When adjusting the brightness, a value of 1 is the lowest and a value of 10 is the maximum brightness level.

Once the display shows the desired value, press the jog wheel button to confirm the setting and close the menu.

### **Software version**

Select 'Version' from the main menu. The software version of the device will now appear on the display.

To cancel the display of the software version, press the jog wheel or wait 20 seconds.



### **Loading default settings**

Select 'Factory Sets' from the main menu. By turning the jog wheel you can now select between 'No' (no action) and 'Yes' (reset all values to factory settings).

Once the display shows the desired option, press the jog wheel to confirm the setting and close the menu.

#### System reset

Select 'Reset' from the main menu. By turning the jog wheel you can now select between 'No' (no action) and 'Yes' (reset all moving axes to their starting positions).

Once the display shows the desired option, press the jog wheel to confirm the setting and close the menu

#### **Calibration**

Select 'Calibrations' from the main menu. By turning the jog wheel, you can now select between 'Pan' (calibrate the starting position for the rotation), 'Tilt' (calibrate the starting position for the tilt), 'Default' (reset to defaults) and 'Exit' (no action). During calibration, the range of values from 0 to 255 allows fine adjustment of the initial positions for pan and tilt.

Once the display shows the desired option, press the jog wheel to confirm the setting and close the menu.



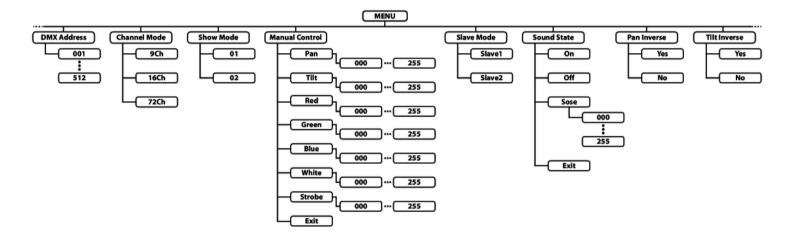
#### **Self-test**

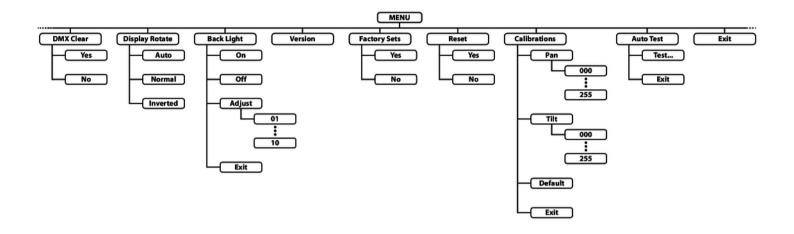
Select 'Auto Test' from the main menu. By turning the jog wheel you can now choose between 'Test...' (starts self-test) and 'Exit' (cancels self-test).

Once the display shows the desired option, press the jog wheel to confirm the setting and close the menu.



### 7.2 Menu overview







## 7.3 Functions in 9-channel DMX mode

Channel	Value	Function
1	Rotation (pan)	
	0127	Fixed position (0° to 540°)
	128191	Continuous clockwise rotation, speed decreasing
	192255	Continuous anti-clockwise rotation, speed increasing
2	Inclination (tilt)	
	0127	Fixed position (0° to 270°)
	128191	Continuous clockwise tilt movement, speed decreasing
	192255	Continuous anti-clockwise tilt movement, speed increasing
3	0255	Dimmer (0 % to 100 %)
4	0255	Intensity red (0 % to 100 %), all LEDs together
5	0255	Intensity green (0 % to 100 %), all LEDs together



Channel	Value	Function
6	0255	Intensity blue (0 % to 100 %), all LEDs together
7	0255	Intensity blue (0 % to 100 %), all LEDs together
8	Strobe effect	
	06	Strobe effect off
	7128	Strobe effect, random speed
	129255	Strobe effect, increasing speed
9	Reset	
	09	No function
	1020	Reset
	21255	No function



## 7.4 Functions in 16-channel DMX mode

Channel	Value	Function
1	0255	Rotation (pan), fixed position (0° to 540°)
2	0255	Fine adjustment for rotation (pan)
3	0255	Inclination (tilt), fixed position (0° to 270°)
4	0255	Fine adjustment for inclination (tilt)
5	0255	Speed of rotation (pan) and inclination (tilt), fast to slow
6	015	No movement
	16135	Continuous clockwise rotation, speed decreasing
	136255	Continuous anti-clockwise rotation, speed increasing
7	015	No movement
	16135	Continuous clockwise tilt movement, speed decreasing
	136255	Continuous anti-clockwise tilt movement, speed increasing



Channel	Value	Function
8	0255	Dimmer (0 % to 100 %)
9	0255	Intensity red (0 % to 100 %), all LEDs together
10	0255	Intensity green (0 % to 100 %), all LEDs together
11	0255	Intensity blue (0 % to 100 %), all LEDs together
12	0255	Intensity white (0 % to 100 %), all LEDs together
13	Strobe effect	
	06	Strobe effect off
	7128	Strobe effect, random speed
	129255	Strobe effect, increasing speed
14	Auto show	
	015	Without function
	1655	Show No. 1
	5695	Show No. 2

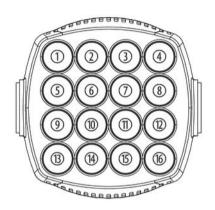


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Channel	Value	Function
	96135	Show No. 3
	136175	Show No. 4
	176215	Show No. 5
	216255	Show No. 6
15	0255	Speed of the automatic show, if channel 14 = 16255)
16	Reset	
	09	No function
	1020	Reset
	21255	No function



## 7.5 Functions in 72-channel DMX mode



The adjacent figure shows the numbering of the individually controllable LEDs.

Channel	Value	Function
1	0255	Rotation (pan), fixed position (0° to 540°)
2	0255	Fine adjustment for rotation (pan)
3	0255	Inclination (tilt), fixed position (0° to 270°)



Channel	Value	Function
4	0255	Fine adjustment for inclination (tilt)
5	0255	Speed of rotation (pan) and inclination (tilt), fast to slow
6	015	No movement
	16135	Continuous clockwise rotation, speed decreasing
	136255	Continuous anti-clockwise rotation, speed increasing
7	015	No movement
	16135	Continuous clockwise tilt movement, speed decreasing
	136255	Continuous anti-clockwise tilt movement, speed increasing
8	0255	Intensity Red (0 % to 100 %), LED 1
9	0255	Intensity Green (0 % to 100 %), LED 1
10	0255	Intensity Blue (0 % to 100 %), LED 1
11	0255	Intensity White (0 % to 100 %), LED 1
12	0255	Intensity Red (0 % to 100 %), LED 2



Channel	Value	Function
13	0255	Intensity Green (0 % to 100 %), LED 2
14	0255	Intensity Blue (0 % to 100 %), LED 2
15	0255	Intensity White (0 % to 100 %), LED 2
16	0255	Intensity Red (0 % to 100 %), LED 3
17	0255	Intensity Green (0 % to 100 %), LED 3
18	0255	Intensity Blue (0 % to 100 %), LED 3
19	0255	Intensity White (0 % to 100 %), LED 3
20	0255	Intensity Red (0 % to 100 %), LED 4
21	0255	Intensity Green (0 % to 100 %), LED 4
22	0255	Intensity Blue (0 % to 100 %), LED 4
23	0255	Intensity White (0 % to 100 %), LED 4
24	0255	Intensity Red (0 % to 100 %), LED 5
25	0255	Intensity Green (0 % to 100 %), LED 5



moving head

Channel	Value	Function
26	0255	Intensity Blue (0 % to 100 %), LED 5
27	0255	Intensity White (0 % to 100 %), LED 5
28	0255	Intensity Red (0 % to 100 %), LED 6
29	0255	Intensity Green (0 % to 100 %), LED 6
30	0255	Intensity Blue (0 % to 100 %), LED 6
31	0255	Intensity White (0 % to 100 %), LED 6
32	0255	Intensity Red (0 % to 100 %), LED 7
33	0255	Intensity Green (0 % to 100 %), LED 7
34	0255	Intensity Blue (0 % to 100 %), LED 7
35	0255	Intensity White (0 % to 100 %), LED 7
36	0255	Intensity Red (0 % to 100 %), LED 8
37	0255	Intensity Green (0 % to 100 %), LED 8
38	0255	Intensity Blue (0 % to 100 %), LED 8



Channel	Value	Function
39	0255	Intensity White (0 % to 100 %), LED 8
40	0255	Intensity Red (0 % to 100 %), LED 9
41	0255	Intensity Green (0 % to 100 %), LED 9
42	0255	Intensity Blue (0 % to 100 %), LED 9
43	0255	Intensity White (0 % to 100 %), LED 9
44	0255	Intensity Red (0 % to 100 %), LED 10
45	0255	Intensity Green (0 % to 100 %), LED 10
46	0255	Intensity Blue (0 % to 100 %), LED 10
47	0255	Intensity White (0 % to 100 %), LED 10
48	0255	Intensity Red (0 % to 100 %), LED 11
49	0255	Intensity Green (0 % to 100 %), LED 11
50	0255	Intensity Blue (0 % to 100 %), LED 11
51	0255	Intensity White (0 % to 100 %), LED 11



moving head

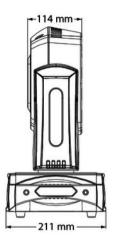
Channel	Value	Function
52	0255	Intensity Red (0 % to 100 %), LED 12
53	0255	Intensity Green (0 % to 100 %), LED 12
54	0255	Intensity Blue (0 % to 100 %), LED 12
55	0255	Intensity White (0 % to 100 %), LED 12
56	0255	Intensity Red (0 % to 100 %), LED 13
57	0255	Intensity Green (0 % to 100 %), LED 13
58	0255	Intensity Blue (0 % to 100 %), LED 13
59	0255	Intensity White (0 % to 100 %), LED 13
60	0255	Intensity Red (0 % to 100 %), LED 14
61	0255	Intensity Green (0 % to 100 %), LED 14
62	0255	Intensity Blue (0 % to 100 %), LED 14
63	0255	Intensity White (0 % to 100 %), LED 14
64	0255	Intensity Red (0 % to 100 %), LED 15

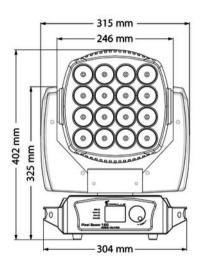


Channel	Value	Function
65	0255	Intensity Green (0 % to 100 %), LED 15
66	0255	Intensity Blue (0 % to 100 %), LED 15
67	0255	Intensity White (0 % to 100 %), LED 15
68	0255	Intensity Red (0 % to 100 %), LED 16
69	0255	Intensity Green (0 % to 100 %), LED 16
70	0255	Intensity Blue (0 % to 100 %), LED 16
71	0255	Intensity White (0 % to 100 %), LED 16
72	Reset	
	09	No function
	1020	Reset
	21255	No function



# 8 Technical specifications





# Technical specifications

Light source	16 × RGBW LED, each 10 W	
Light source properties	Light power	80000 Lux
Optical properties	Beam angle	8°
Rotation angle (pan), max.		540° or endless
Inclination angle (tilt), max.		270° or endless
Dimmer	electronic, 0100 %	
Control protocol	DMX 512	
Control	DMX	
Number of DMX channels	9, 16, 72	
Input connections	Voltage supply	Lockable input socket (Power Twist)
	DMX control	XLR chassis socket, 3-pin
		XLR chassis socket, 5-pin
Output connections	Voltage supply	Lockable output socket (Power Twist).
	DMX control	XLR chassis socket, 3-pin



moving head

		XLR chassis socket, 5-pin
Power consumption	213 W	
Supply voltage	100 − 240 V ~ 50/60 Hz	
Fuse	$5 \text{ mm} \times 20 \text{ mm}$ , $4 \text{ A}$ , $250 \text{ V}$ , slow-blow	
Degree of protection	IP20	
Mounting options	Wall mounting, truss mounting	
Dimensions (W $\times$ H $\times$ D)	315 mm × 211 mm × 402 mm	
Weight	8.4 kg	
Ambient conditions	Temperature range	0 °C40 °C
	Relative humidity	50 %, non condensing



# Technical specifications

### **Further information**

Light source	LED
Colour mixture	RGBW
Gobo wheel	No
Prism	No
Motorized focus	No
Motorized zoom	No



# 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+)

# 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
Device not working, no light	1. Check the mains connection and the main fuse.
	2. Check the settings in manual operation.
No response to the DMX controller	1. 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.
	2. Try using another DMX controller.

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



# 11 Cleaning

### **Optical lenses**

Clean the optical lenses, that are accessible from the outside, regularly in order to optimize the light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

#### 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.







