

STARVILLE

# Beam Ball 100 Quad LED Beam Ball 100 White LED

moving head



user manual

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

10.03.2017, ID: 400480, 400502 (V2)

# **Table of contents**

1	General notes	
	1.1 Further information	
	1.2 Notational conventions	7
	1.3 Symbols and signal words	7
2	Safety	10
3	Features	
4	Installation	
5	Starting up	
6	Connections and controls	
7	Operating	27
	7.1 Starting the device	27
	7.2 Main menu	28
	7.3 Menu overview	36
	7.4 Features in 7-channel DMX mode, BeamBall 100 Quad LED	38
	7.5 Features in 11-channel DMX mode, BeamBall 100 Quad LED	41

Beam Ball 100 Quad LEDBeam Ball 100 White LED

th.mann

	7.6	Features in 15-channel DMX mode, BeamBall 100 Quad LED	44
	7.7	Features in 49-channel DMX mode, BeamBall 100 Quad LED	47
	7.8	Features in 8-channel DMX mode, BeamBall 100 White LED	51
	7.9	Features in 19-channel DMX mode, BeamBall 100 White LED	53
8	Technical specifications		56
9	Plug and connection assignment		58
10	Troubleshooting		59
11	Clea	ning	61
12	Prot	ecting the environment	62



# **General notes**

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

Beam Ball 100 Ouad LEDBeam Ball 100 White LED



th•mann

# 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.

DisplaysTexts and values displayed on the device are marked by quotation marks and italics.Examples: '24ch', 'OFF'.

# **1.3** Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.



Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a pos- sible 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 pos- sible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a pos- sible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – high-voltage.

th•mann MUSIC IS OUR PASSION

Warning signs	Type of danger
	Warning – hot surface.
	Warning – suspended load.
	Warning – danger zone.



# 2 Safety

#### Intended use

This device is intended to be used as moving-head 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.



## 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.

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.





## 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!

**Risk of epileptic shock** 

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.





## WARNING!

## **Risk of burns**

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

Do not touch the device with bare hands during operation, and after switching off wait for at least 15 minutes.



#### 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.





### **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.

th•mann MUSIC IS OUR PASSION

### 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.

The device must not be moved while it is in 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.



# 3 Features

The moving heads are suitable for lighting tasks in all show areas, for example at events, on club and rock stages, in theatres, musicals and nightclubs.

Beam Ball 100 Quad LED

- 10 × 10 watt Quad Color RGBW LEDs
- Control via DMX (7, 11, 15 or 49 channels) and via buttons and display on the unit
- Operating modes: DMX, Auto, Sound, Master / Slave
- Beam angle: 4° ... 11°
- PAN movement: 540°
- TILT movement: infinite
- PAN / TILT speed adjustable
- Dimmer and Strobe function

Beam Ball 100 White LED

- 10 × 10 watt white light LEDs, 7000 K
- Control via DMX (8 or 19 channels) and via buttons and display on the unit
- Operating modes: DMX, Auto, Sound, Master / Slave
- Beam angle: 4° ... 11°

th•mann MUSIC IS OUR PASSION

Features

- PAN movement: 540°
- TILT movement: infinite
- PAN / TILT speed adjustable
- Dimmer and Strobe function



# 4 Installation

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device 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 by falling off

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 carrying capacity of the truss or other mounting must be sufficient for the intended number of devices. Note that the movement of the head may additionally stress the load-bearing structures.





#### 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**

Always ensure sufficient ventilation.

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

th•mann MUSIC IS OUR PASSION

### 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 threads on the underside of the housing are used for secure attachment of the device with suitable tools on a truss or the like.



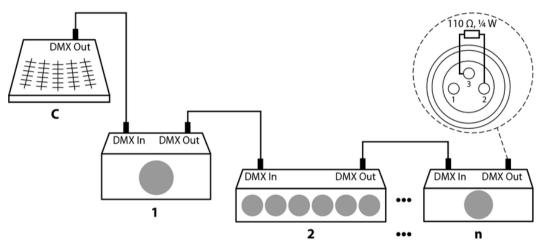
# 5 Starting up

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.



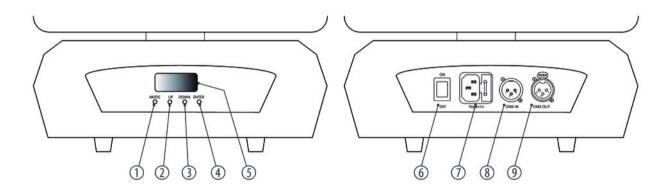
#### **Connections in DMX mode**

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  $\Omega$ , ¼ W).





# **6** Connections and controls





1	[MODE]
	Activates the main menu and toggles between menu items. Closes an opened submenu.
2	[UP]
	Increases the displayed value by one.
3	[DOWN]
	Decreases the displayed value by one.
4	[ENTER]
	Selects an option of the respective operating mode, confirms the set value.
5	Display
б	[ON] / [OFF]
	Main switch to turn the device on and off.
7	[POWER IN]
	IEC chassis connector for the power supply of the device.



8	[DMX IN]
	XLR 3-pin
9	[DMX OUT]
	XLR 3-pin



# 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 mains and switch it on with the main switch. In this mode, the device performs a short self test. The display shows 'FS00'.



# 7.2 Main menu

	Press [MODE] to activate the main menu. Use the buttons [UP] and [DOWN] to select a style. When the display shows the desired submenu, press[ENTER], to open it. To close the main menu, press [MODE].
DMX address	Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] the option 'DMX Addr:' and choose [UP] or [DOWN] a value between 1 and 512.
	Once the display shows the desired option, press the <i>[ENTER]</i> button to confirm your setting and to close the menu.
	Make sure that the DMX address matches the configuration of your DMX controller.
DMX-Mode, Beam Ball 100 Quad LED	Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] the option 'DMX Addr:' and choose [UP] or [DOWN] a value between 1 and 512. '7' (7-channel mode), '11' (11-channel mode), '15' (15-channel mode) or '49' (49-channel mode). Once the display shows the desired option, press the [ENTER] button to confirm your setting and to close the menu.



DMX-Mode, Beam Ball 100 Quad LED	Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] the option 'DMX Addr:' and choose [UP] or [DOWN] a value between 1 and 512. '8' (8-channel mode)) or '19' (19-channel mode)).
	Once the display shows the desired option, press the <i>[ENTER]</i> button to confirm your setting and to close the menu.
DMX break	Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] the option 'DMX Addr:' and choose [UP] or [DOWN] a value between 1 and 512.
	<ul> <li>'Stop' (turn off device)</li> <li>'Hold' (stop device)</li> <li>'Auto' (change to auto mode)</li> <li>'Sound' (change to sound mode)</li> </ul>
	Once the display shows the desired option, press the <i>[ENTER]</i> button to confirm your setting and to close the menu.



th•mann

#### Beam Ball 100 Quad LED

In this menu, you can set various settings for scenes.

Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] subsequently the following options and change the configuration values with [UP] or [DOWN] as desired.

- 'Dimmer'
- 'PanMSB'
- 'PanLSB'
- 'PanSPD'
- 'TiltMSB'
- 'TiltLSB'
- 'TiltSPD'
- 'Strobe'
- 'Red'
- 'Green'
- 'Blue'
- 'White'

Once the display shows the desired option, press the [ENTER] button to confirm your setting and to close the menu.

thomann MUSIC IS OUR PASSION

#### Beam Ball 100 Quad LED

In this menu, you can set various settings for scenes.

Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] subsequently the following options and change the configuration values with [UP] or [DOWN] as desired.

- 'Dimmer'
- 'PanMSB'
- "PanLSB"
- 'PanSPD'
- 'TiltMSB'
- 'TiltLSB'
- 'TiltSPD'
- 'Strobe'
- 'White'

Once the display shows the desired option, press the [ENTER] button to confirm your setting and to close the menu.

th•mann

#### Menu Bank

In this menu, you can set various settings for the programs.

Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] subsequently the following options and change the configuration values with [UP] or [DOWN] as desired.

- 'Speed'
- 'Dimmer'
- 'Strobe'

Once the display shows the desired option, press the [ENTER] button to confirm your setting and to close the menu.



#### **Menu SETTINGS**

In this menu, you can configure various settings of the device and reset the device to factory default settings.

Press [MODE] to open the main menu. Then choose with [UP] or [DOWN] the menu item 'DMX'. Press [MODE]. Choose with [UP] or [DOWN] subsequently the following options and change the configuration values with [UP] or [DOWN] as desired.

- *'Reload Default'* (reset device to factory settings)
  - 'On'
  - 'Off'
- 'Reset Machine' (restart firmware)
  - 'On'
  - 'Off'
- 'Master & Alone' (Master-/Slave-, Stand-Alone)
  - 'Master'
  - 'Alone'
- 'Auto & Sound' (Auto-, sound-controlled operation)
  - 'Auto'
  - 'Sound'
- 'MICSense' (Sensitivity of the built-in microphone)
- 'Clear Display' (Display shutdown)
  - 'Always On'



- 'Delay Off'
- 'Key Lock' (code-lock)
  - 'On' (Code lock is activated 30 seconds after the last key press) To release, press [MODE], [UP], [DOWN] and [ENTER])
  - 'Off'
- 'Information'
  - 'LED'
- *'Date:'* (Date in the format mm.dd.yyyy)
- *'Time:'* (Time in the format hh: mm: ss)
- *'Machine Timer'* (machine time)
  - 'ThisTime' (current runtime)
  - 'TotlTime' (totalruntime)
  - 'Clear Total' (reset, password 001)
- 'Motor Set'
  - 'Feed Back' (follow-up movement)
- 'Move Blackout' (blackout)
  - 'On'
  - 'Off'
- 'Motor Calibrate' (motor settings, password 001)
  - 'Pan Motor'

thomann

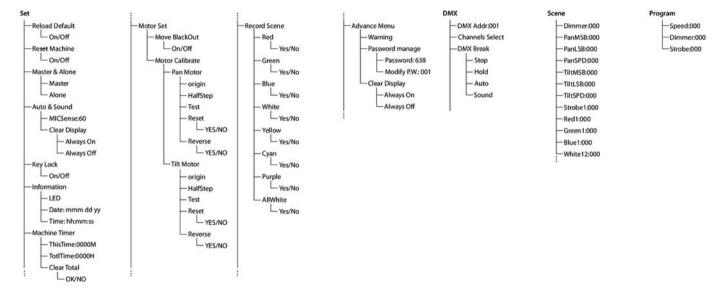
- 'Reverse' (Reverse)
- 'Tilt Motor'
- *'Record Scene'* (record)
  - 'Red' (only Beam Ball 100 Quad LED)
  - 'Green' (only Beam Ball 100 Quad LED)
  - *Blue* (only Beam Ball 100 Quad LED)
  - 'White'
  - 'Yellow' (only Beam Ball 100 Quad LED)
  - 'Cyian' (only Beam Ball 100 Quad LED)
  - 'Purple' (only Beam Ball 100 Quad LED)
  - 'AllWhite' (only Beam Ball 100 Quad LED)
- 'Advanced Menu' (enhanced)
  - 'Warning'
  - 'Password manage'
  - 'Register'

Once the display shows the desired option, press the [ENTER] button to confirm your setting and to close the menu.

th.mann

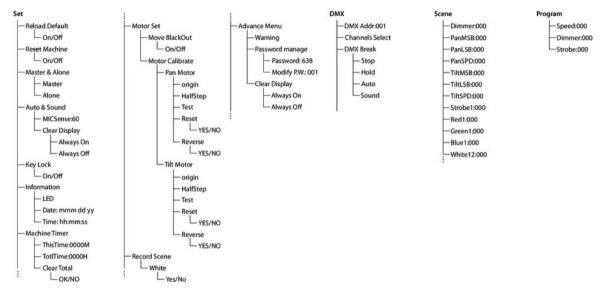
# 7.3 Menu overview

#### Beam Ball 100 Quad LED



th • mann

#### Beam Ball 100 White LED





## 7.4 Features in 7-channel DMX mode, BeamBall 100 Quad LED

Channel	Value	Function
1	0 255	Rotation (Pan)
2	Inclination (tilt)	
	0 191	Fixed position
	192 222	Endless rotation in positive direction, from fast to slow.
	223 224	Stop
	225 255	Endless rotation in positive direction, from fast to slow.
3	0 255	Engine speed, from slow to fast
4	0 255	Master dimmer
5	Stroboscope effect	
	09	No function
	10 255	Stroboscope effect from slow to fast



Channel	Value	Function
6	Scenes and banks	
	0 49	No function
	50 59	Intensity Red
	60 69	Intensity Green
	70 79	Intensity Blue
	80 89	Intensity White
	90 99	Intensity Yellow
	100 109	Intensity Cyan
	110 119	Intensity pink
	120 129	all LEDs on white
	130 139	not used
	140 149	Programme 1
	150 159	Programme 2



Channel	Value	Function
	160 169	Programme 3
	170 179	Programme 4
	180 233	not used
	234 236	Reset
	237 249	not used
	250 255	Sound control
7	0 255	Sensitivity of the built-in microphone



## 7.5 Features in 11-channel DMX mode, BeamBall 100 Quad LED

Channel	Value	Function
1	0 255	Rotation (Pan)
2	Inclination (tilt)	
	0 191	Fixed position
	192 222	Endless rotation in positive direction, from fast to slow.
	223 224	Stopp
	225 255	Endless rotation in positive direction, from fast to slow.
3	0 255	Engine speed, from slow to fast
4	0 255	Master dimmer
5	Stroboscope effect	
	09	No function
	10 255	Stroboscope effect from slow to fast



Channel	Value	Function
6	0 255	Dimmer red
7	0 255	Dimmer green
8	0 255	Dimmer blue
9	0 255	Dimmer white
10	Scenes and banks	
	0 49	No function
	50 59	Intensity Red
	60 69	Intensity Green
	70 79	Intensity Blue
	80 89	Intensity White
	90 99	Intensity Yellow
	100 109	Intensity Cyan
	110 119	Intensity pink

thomann MUSIC IS OUR PASSION

Channel	Value	Function
	120 129	all LEDs on white
	130 139	not used
	140 149	Programme 1
	150 159	Programme 2
	160 169	Programme 3
	170 179	Programme 4
	180 233	not used
	234 236	Reset
	237 249	not used
	250 255	Sound control
11	0 255	Sensitivity of the built-in microphone



## 7.6 Features in 15-channel DMX mode, BeamBall 100 Quad LED

Channel	Value	Function
1	0 255	Rotation (Pan)
2	Inclination (tilt)	
	0 191	Fixed position
	192 222	Endless rotation in positive direction, from fast to slow.
	223 224	Stopp
	225 255	Endless rotation in positive direction, from fast to slow.
3	0 255	Engine speed, from slow to fast
4	0 255	Master dimmer
5	Stroboscope effect	
	09	No function
	10 255	Stroboscope effect from slow to fast



Channel	Value	Function
б	0 255	Dimmer side A (face to the display)
7	0 255	Dimmer side A (face to the display)
8	0 255	Dimmer side A (face to the display)
9	0 255	Dimmer side A (face to the display)
10	0 255	Dimmer side B (face to the terminals)
11	0 255	Dimmer side B (face to the terminals)
12	0 255	Dimmer side B (face to the terminals)
13	0 255	Dimmer side B (faceto the terminals)
14	Scenes and banks	
	0 49	No function
	50 59	Intensity Red
	60 69	Intensity Green
	70 79	Intensity Blue



Channel	Value	Function
	80 89	Intensity White
	90 99	Intensity Yellow
	100 109	Intensity Cyan
	110 119	Intensity pink
	120 129	all LEDs on white
	130 139	not used
	140 149	Programme 1
	150 159	Programme 2
	160 169	Programme 3
	170 179	Programme 4
	180 233	not used
	234 236	Reset
	237 249	not used

thomann MUSIC IS OUR PASSION

Channel	Value	Function
	250 255	Sound control
15	0 255	Sensitivity of the built-in microphone

### 7.7 Features in 49-channel DMX mode, BeamBall 100 Quad LED

Channel	Value	Function
1	0 255	Rotation (Pan)
2	0 255	Fine adjustment rotation (pan)
3	Inclination (tilt)	
	0 191	Fixed position
	192 222	Endless rotation in positive direction, from fast to slow.
	223 224	Stopp



Channel	Value	Function
	225 255	Endless rotation in positive direction, from fast to slow.
4	0 255	Fine adjustment inclination (tilt)
5	0 255	Engine speed, from slow to fast
6	0 255	Master dimmer
7	Stroboscope effect	
	0 9	No function
	10 255	Stroboscope effect from slow to fast
811	0 255	Dimmer Red, Green, Blue, White, LED 1
12 15	0 255	Dimmer Red, Green, Blue, White, LED 2
16 19	0 255	Dimmer Red, Green, Blue, White, LED 3
20 23	0 255	Dimmer Red, Green, Blue, White, LED 4
24 27	0 255	Dimmer Red, Green, Blue, White, LED 5
28 31	0 255	Dimmer Red, Green, Blue, White, LED 6

thomann MUSIC IS OUR PASSION

Channel	Value	Function
32 35	0 255	Dimmer Red, Green, Blue, White, LED 7
36 39	0 255	Dimmer Red, Green, Blue, White, LED 8
40 43	0 255	Dimmer Red, Green, Blue, White, LED 9
44 47	0 255	Dimmer Red, Green, Blue, White, LED 10
48 Scenes and banks		
	0 49	No function
	50 59	Intensity Red
	60 69	Intensity Green
	70 79	Intensity Blue
	80 89	Intensity White
	90 99	Intensity Yellow
	100 109	Intensity Cyan
	110 119	Intensity pink



Channel	Value	Function
	120 129	all LEDs on white
	130 139	not used
	140 149	Programme 1
	150 159	Programme 2
	160 169	Programme 3
	170 179	Programme 4
	180 233	not used
	234 236	Reset
	237 249	not used
	250 255	Sound control
49	0 255	Sensitivity of the built-in microphone



## 7.8 Features in 8-channel DMX mode, BeamBall 100 White LED

Channel	Value	Function	
1	0 255	Rotation (Pan)	
2	Inclination (tilt)		
	0 191	Fixed position	
	192 222	Endless rotation in positive direction, from fast to slow.	
	223 224	Stop	
	225 255	Endless rotation in positive direction, from fast to slow.	
3	0 255	Engine speed, from slow to fast	
4	Stroboscope effect		
	09	No function	
	10 255	Stroboscope effect from slow to fast	
5	0 255	Dimmer side A (face to the display)	



Channel	Value	Function
6	0 255	Dimmer side B (faceto the terminals)
7	Scenes and banks	
	0 49	No function
	50 59	Intensity White
	60 139	not used
	140 149	Programme 1
	150 159	Programme 2
	160 169	Programme 3
	170 179	Programme 4
	180 233	not used
	234 236	Reset
	237 249	not used

th•mann MUSIC IS OUR PASSION

Channel	Value	Function
	250 255	Sound control
8	0 255	Sensitivity of the built-in microphone

### 7.9 Features in 19-channel DMX mode, BeamBall 100 White LED

Channel	Value	Function
1	0 255	Rotation (Pan)
2	0 255	Fine adjustment rotation (pan)
3	Inclination (tilt)	
	0 191	Fixed position
	192 222	Endless rotation in positive direction, from fast to slow.
	223 224	Stop



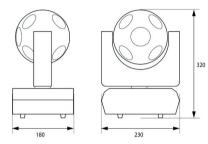
Channel	Value	Function	
	225 255	Endless rotation in positive direction, from fast to slow.	
4	0 255	Fine adjustment inclination (tilt)	
5	0 255	Stroboscope effect from slow to fast	
6	0 255	Master dimmer	
7	Stroboscope effect		
	09	No function	
	10 255	Stroboscope effect from slow to fast	
8 17	0 255	Dimmer LED 1 LED 10	
18	Scenes and banks		
	0 49	No function	
	50 59	Intensity White	
	60 139	not used	
	140 149	Programme 1	



Channel	Value	Function
	150 159	Programme 2
	160 169	Programme 3
	170 179	Programme 4
	180 233	not used
	234 236	Reset
	237 249	not used
	250 255	Sound control
19	0 255	Sensitivity of the built-in microphone



# 8 Technical specifications



	Beam Ball 100 Quad LED	Beam Ball 100 White LED
Number of DMX channels	7, 11, 15, 49	8, 19
LED configuration	10 × 10 Watt Quad-Color- RGBW-LEDs	$10 \times 10$ Watt white light- LEDs, 7000 K
Beam angle	4°11°	
Light power	$5500 \times 409 \times 2 \text{ m}$	
Maximum rotation angle (pan)	540°	
Maximum inclination angle (tilt)	endlessly	
Dimmer	0 100 %, linear	
Strobe	1 20 Hz	
Operating supply voltage	100-240 V ~, 50/60 Hz	
Fuse	5 mm $\times$ 20 mm, 2 A, fast blow	N

moving head

th.mann

	Beam Ball 100 Quad LED	Beam Ball 100 White LED
Power consumption	130 W	
Dimensions (W $\times$ H $\times$ D)	230 cm $\times$ 180 cm $\times$ 320 cm	
Weight	5 kg	



## 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.



mann

Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX–, 'cold signal')
3	Signal (DMX+, 'hot signal')

## 10 Troubleshooting

#### NOTICE!

#### Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

### Beam Ball 100 Quad LEDBeam Ball 100 White LED

th•mann

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 con- troller	1. Check the DMX connectors and cables for proper connection.
	2. 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 <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 on a regular basis to remove dust and dirt. Before cleaning, switch off the device and disconnect AC-powered devices from the mains. Use a lint-free damp cloth for cleaning. Never use solvents or alcohol for cleaning.



## 12 Protecting the environment

Disposal of the packaging material



#### Disposal of your old device



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.

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE). 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.

Musikhaus Thomann • Hans-Thomann-Straße 1 • 96138 Burgebrach • Germany • www.thomann.de