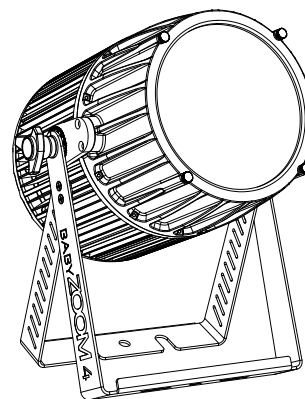


BABY **ZOOM** 4

USER MANUAL

BABY **ZOOM** 4

USER MANUAL



CONTENTS

Introduction	1	
Safety Instructions	1	
Delivery Contents	3	
Fixture Dimensions.....	3	
Installations.....	4	
Installation on the floor	4	
Installation hanging.....	4	
Safety attachment.....	4	
Omega Bracket.....	5	
Connections	6	
Mains & DMX	6	
DMX.....	7	
Wireless DMX.....	7	
Operations	8	
Menu control	8	
Menu map.....	9	
Software updates.....	13	
DMX Modes	13	
Standard Mode	14	
Advanced Mode.....	14	
Easy Mode.....	15	
RGBW Mode.....	15	
Services	16	
Trouble Shooting.....	16	
Maintenance	16	
Appendix.....	I	
Specifications.....	I	
Exploded drawing.....	II	
Spareparts	III	
eventCON®	IV	
Colourwheel table.....	VI	
Shutter Channel Table.....	VII	
Special control channel	VIII	
Dimmer Curves	IX	

Introduction

Thank you for your purchase and usage of the Ehrgeiz BabyZoom 4.

You have chosen a reliable product with outstanding features like the unique eventCON® connector system. The device is easy to use and is made of high quality components.

Every Ehrgeiz Product is checked before shipping to secure you are able to receive a great product without compromise. This is not a toy. Our ambitious aim is to get you a reliable working tool.

Safety Instructions

In General

In order to maintain the condition and to ensure a safe operation, it is important for all users to follow the safety instructions and warning notes written in this manual.

Do not operate the fixture with missing or damaged covers, shields or any optical component.

Please consider that unauthorized modifications to the device are forbidden due to safety reasons.

If the device is operated in any way that's not described in this manual, the product may suffer damage and the guarantee will become void. Furthermore, misuse may lead to dangers like short-circuit, burns, electric shock, burns due to ultraviolet radiation, lamp explosion, crash, etc.

IP67 protection rating

The fixture is protected against dust (first digit 6) and against Immersion, up to 1m depth tested for 30 minutes (second digit 7).

Prevention from electrical shock

Make sure to ground (earth) the fixture electrically. (It's essential to connect the yellow/green conductor to earth)

Main Connection

Do not apply any AC mains power to the fixture at any other voltage than that specified.

Never let the eventCON® cable come into contact with other cables. Treat the eventCON® cable and all connections with the mains with particular caution.

Make sure the eventCON® cable is never crimped or damaged by sharp edges.

Rigging

Check that all external covers and rigging hardware are securely fastened.

When choosing the installation-location, please make sure that the fixture is not exposed to extreme heat. There should not be any cables lying around. You endanger your own and the safety of others.

Make sure that the area below the installation place is cordoned off when rigging, de-rigging or servicing the fixture.

If suspending from a rigging structure, fasten the fixture to a rigging clamp with an M10 bolt screwed into the threaded hole in the center of the bracket of the fixture.

Make sure all fixtures are operated and installed by qualified personnel with the relevant national certifications.

Install as described in this manual a secondary attachment such as a safety wire that is approved by an official body.



Positioning:

The fixture must be positioned at least 0.2m minimum distance to illuminate objects.

Keep all inflammable materials at least 0.2m from this fixture.

Allow to place the fixture on an inflammable surface.

The maximum ambient temperature of 45°C may not be exceeded.

The exterior of this fixture can reach a very high temperature during operation. Avoid contact by persons and materials.

Maintenance:

This fixture is for professional use only. It is not for household use.

Always unplug the mains for any maintenance.

Risk of eye injury:

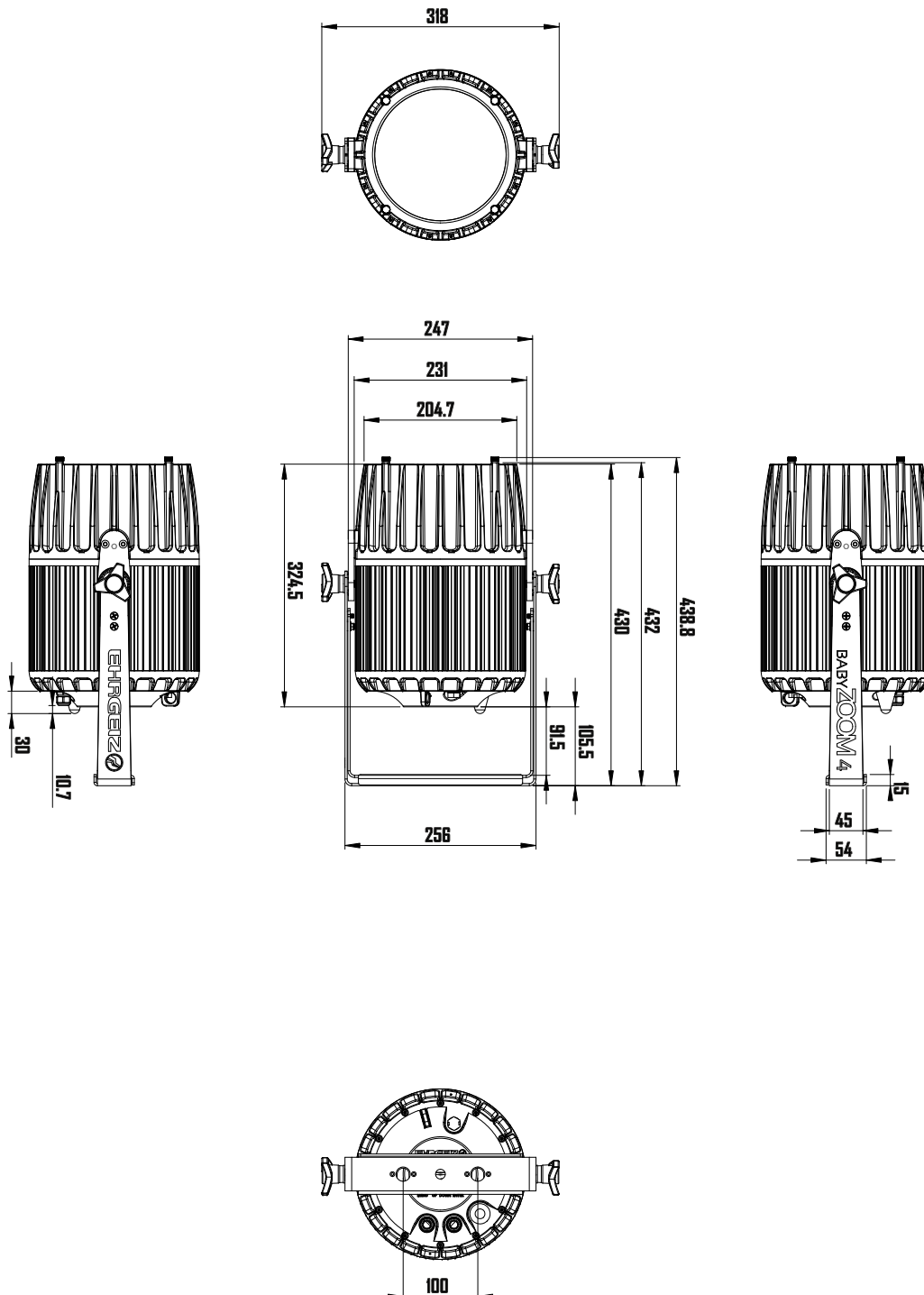
Do not stare directly into the light when it is switched on. Do not look at LEDs with magnifying glasses, telescopes, binoculars, or similar optical instruments that may concentrate the light output.

Delivery Contents

You received your BabyZoom 4 with the following content

- BabyZoom 4
 - eventCON® Input cable
 - Diffusor Screws
- 4x60W Osram LED Beamlight with 6 – 40° beam angle
Input cable with Neutrik XLR and Schuko merging to Eventcon
Set of 4 Screws

Fixture Dimensions



Dimensions in mm

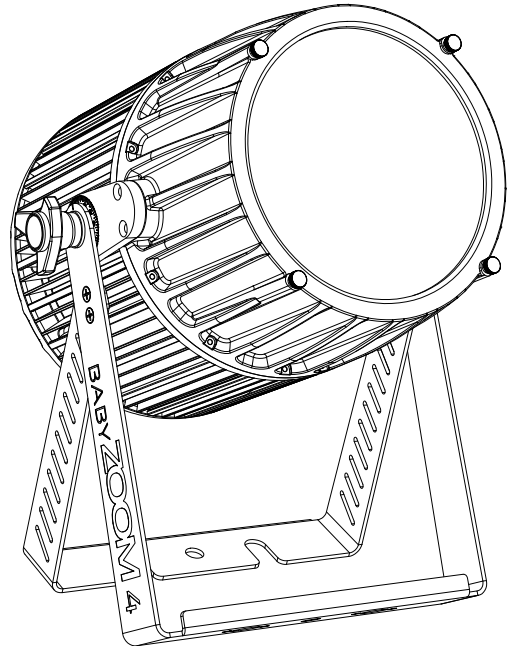


Installations

Your BabyZoom 4 can be installed in every kind of following positions. Please see the explanations and rely to the instructions for a safe operation and secure handling.

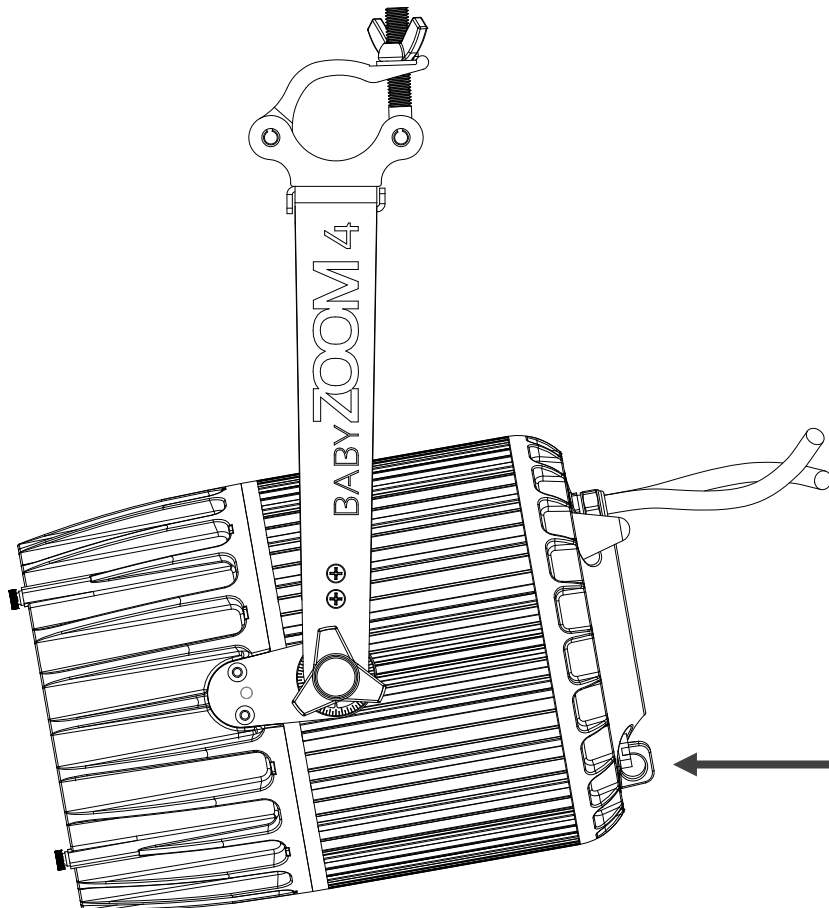
Installation on the floor

You could place the BabyZoom 4 on the floor. Please make sure the surface is plane and the reliability of the floor is sufficient.



Installation hanging

You can attach the BabyZoom 4 to a Truss or Pipe facing down or to the side.



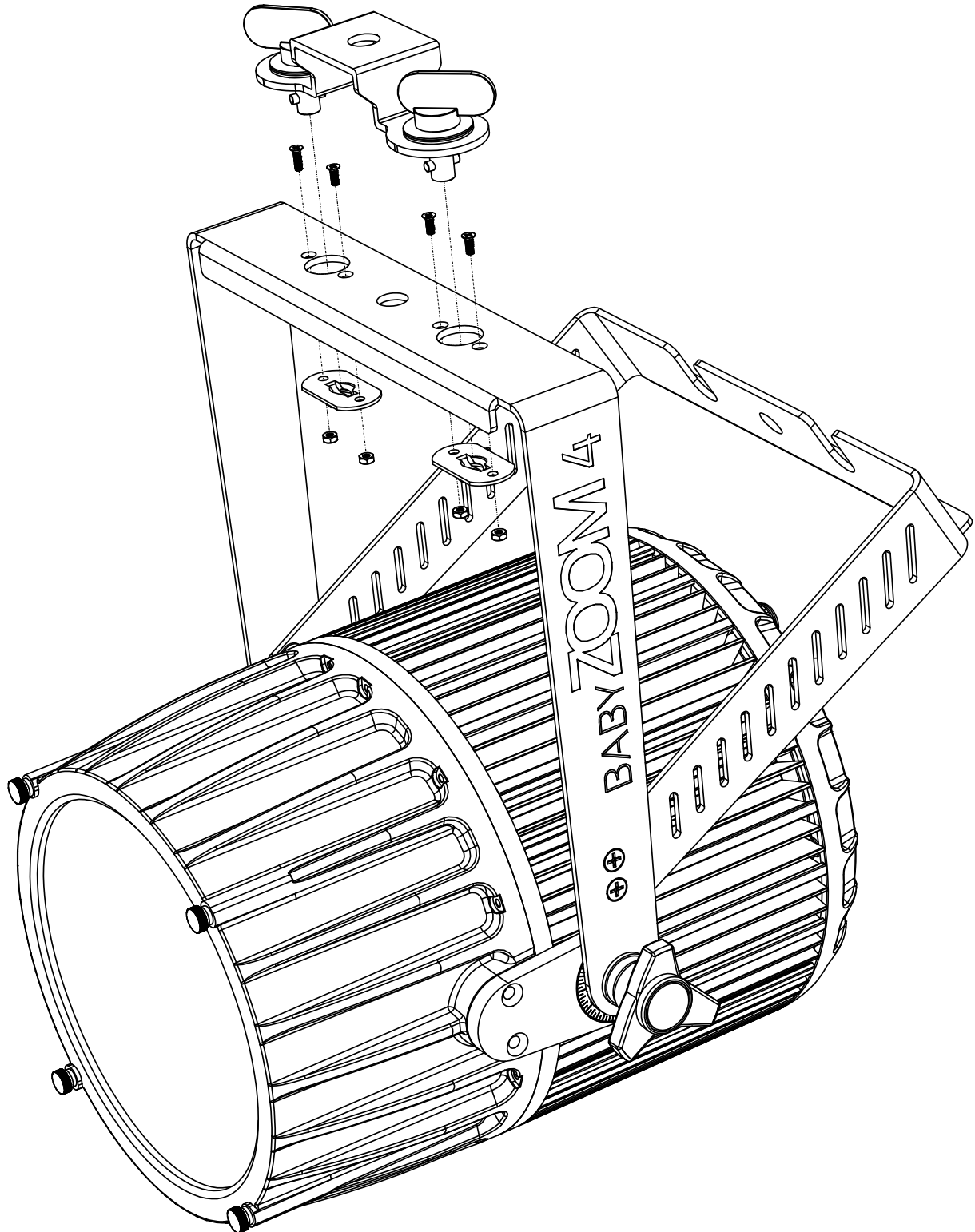
Safety attachment

Please attach the Safety rope to the dedicated eyelet integrated into the housing.

Safety

Omega Bracket

There are optional Omega Bracket fittings available for your BabyZoom 4. Attach them with the screws onto the suspension:



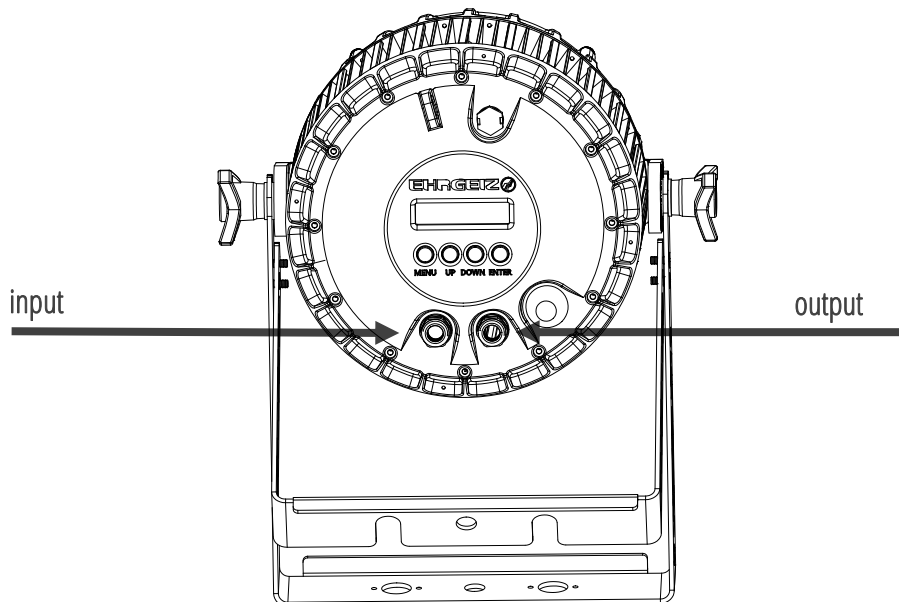


Connections

Mains & DMX

The eventCON® system is an innovative VDE certified connection system for professional use. It offers one connection for Power supply as well as the DMX signal. You will only be in need for one cable. You are able to loop through to the next device, while the BabyZoom 4 offers you an input and output.

The connection of the Power supply has to be done by qualified staff only. Do not connect the BabyZoom 4 if you are not able to survey the consequences.



Do not try to connect another type of plug than an original eventCON®. Do not use any force to connect the eventCON® plug. You could use the outlet for connecting additional devices. The internal power wiring is done with a cable cross section of 1.5mm².

The eventCON® System offers a big range of optional cables and mergers. For further information see Chapter eventCON® on Appendix page [IV](#)

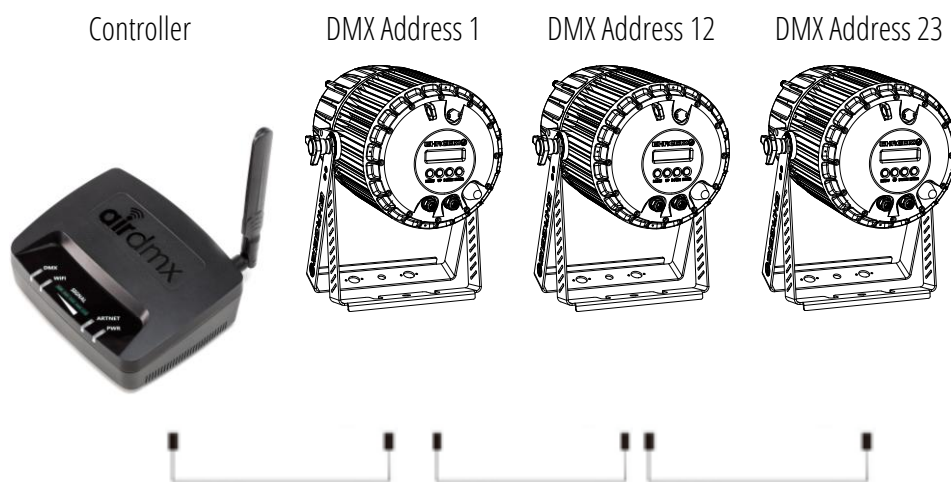
DMX

We recommend the use of High quality XLR connectors like original NEUTRIK. Please use real DMX cable with a surge impedance of 110 Ω .

Please notice that the USITT DMX Standard does allow to use a max of 32 DMX fixtures in one line. You should terminate the signal by a 120 Ω resistor.

In the Standard mode the BabyZoom 4 uses 11 DMX channels.

Connect the devices and increase the value of the DMX channel by 11 from one device to another



Wireless DMX

The device is equipped with a Wireless DMX Input from Wireless Solution Made in Sweden (W-DMX™).

To establish a connection simply use the "Link" Option in the BabyZoom 4 Menu and set your transmitter to the Link Mode.

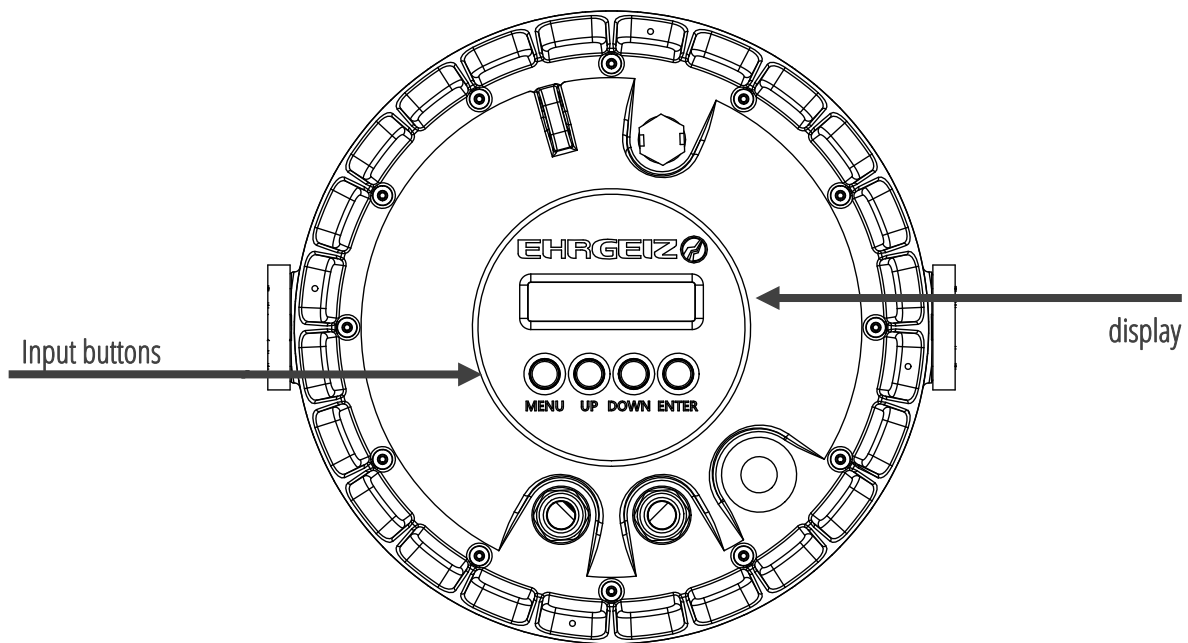
After both devices are linked you will be able to control the device via Wireless DMX, as long as the W-DMX Mode is turned on in the Menu.



Operations

Menu control

Your BabyZoom 4 has an easy to read and setup OLED display and Menu. It is programmed with a lot of built in functions as well as DMX Modes for different applications. Please notice that the display will flip automatically while you turn the fixture (Can be disabled in the menu).



The Menu of the BabyZoom 4 is mainly intuitive. You will find a menu map on the following pages. The four buttons are used to scroll the values, select a setting or hop back in the menu structure:

Menu	Go back in the menu structure or leave a value as it is
Enter	Go forward in the menu structure or confirm the selected value
UP/DOWN	Scroll up / down in the menu structure or scroll the selected value

Menu map

DMX	Address	1-502	▶ Choose your DMX address		
	Mode	Standard*	▶ 11 Chanel with Standard Functions		
		Advanced	▶ 17 Chanel with 16 bit for Colour, Dimmer, Zoom		
		Easy	▶ 3 Chanel with Colour Wheel		
		RGBW	▶ 5 Chanel with RGBW & Dimmer		
	Wireless DMX	Enable	On	▶ Enable the Wireless DMX Receiver	
			Off*		
		Link	Link	▶ Set the Wireless DMX Receiver to Link Status	
			Unlink*		
	Remote DMX Addr.	On*	▶ Enable change of the DMX Startaddress via DMX		
		Off			
	Reset via DMX	On*	▶ Enable the Reset via DMX		
		Off			
	No DMX	Shutter Closed*	▶ Choose behavior in Case of DMX loss		
		Hold			
		Play Program1			
	DMX Live	DMX Refresh rate	xxx Hz	▶ Display the received DMX values	
		Color Wheel	0-255		
		Red	0-255		
		Green	0-255		
		Blue	0-255		
		White	0-255		
		Shutter	0-255		
		Dimmer	0-255		
		CTO	0-255		
		Zoom	0-255		
		Control	0-255		
		Remote DMX Addr.	0-255		



Personality	Dimmer Curve	Linear*	► Choose the Dimmer Curve		
		Theatrical			
		Square Law			
		Inverse Square			
	Dimmer Speed	Fast*	► Choose how fast the Dimmer is reacting		
		Smooth			
	Zoom Speed	Fast*	► Choose the Speed of the Zoom		
		Normal			
		Slow			
	PWM Rate Setting	600 Hz	► Set the PWM rate of the light output		
		1200 Hz*			
		2000 Hz			
		2400 Hz			
		6000 Hz			
	Display Setting	On / Off	On* / Off	► Shut off the Display	
		Shut-off time	Off*	► Set how fast the Display output is shut off	
			1 minute		
			5 minute		
			60 minute		
		No signal flash	On*	► Choose if the display is blinking if there is no DMX input	
			Off		
		Flip Display	Auto*	► Choose the alignment of the display Auto means display is aligned automatically	
			Off		
			On		
	Temperature Unit	Celsius *	► Choose the unit the temperature is displayed		
		Fahrenheit			
	Lock	*Off	► Enable the Menu Lock		
On					
Set password		****	****	► Choose a passphrase	
Boot mode	Select Mode	Auto Boot Mode*	► Select in which mode the device starts up Auto Boot Mode will start device in last status		
		DMX Mode			
		Static Mode			
		Program Play			
	DMX High Priority	On* / Off	► If set on, device will always react to DMX		

Stand-Alone	Test Sequence	Dynamic*	Run / Cancel*	▶ Run a Test sequence incl. Zoom		
		Static	Run / Cancel*	▶ Run a Test sequence without Zoom		
	Master / Slave	Alone*	▶ device runs Static or Program alone			
		Master	▶ device sends the signal for further devices for stand alone			
		Slave	Slave 1*	▶ choose slave number		
			Slave 2	e.g. If you choose slave 1, device will play program 1 sent by master		
			Slave 3			
	Static Mode	Color Wheel	0-255	▶ Set the values for static light output		
		Red	0-255			
		Green	0-255			
		Blue	0-255			
		White	0-255			
		Shutter	0-255			
		Dimmer	0-255			
		CTO	0-255			
		Zoom	0-255			
		Control	0-255			
		Reset All	Yes	▶ Reset the values of static to default		
			No			
	Program Edit	Program 1	Prog1 Max Steps	Select Step	01-30	▶ select amount of steps
				Capture DMX	Yes / Cancel	▶ capture DMX input to be saved as selected step
				Hold Time	000-999	▶ set hold time of step
				Fade Time	000-999	▶ set fade time of step
		Program 2	(See above)	▶ see above		
		Program 3	(See above)	▶ see above		
		Reset Program	Reset Program 1	▶ reset the program to default values		
			Reset Program 2			
			Reset Program 3			
	Reset All		▶ reset all programs to default values			
	Program Play	Program 1	No* / Yes	▶ play the program		
		Program 2				
		Program 3				
		Program All		▶ play all 3 programs one after the other		



Service	Reset	Fixture Reset	Reset / Cancel*	▶ Reset the internal processor		
		Zoom Reset	Reset / Cancel*	▶ Reset the Zoom motor		
	Calibration	Enable / Disable	▶ disable colour calibration for higher light output			
	Factory Default	Load	No*/Yes	▶ set all settings to factory default [does not reset the internal programs]		
Information	Fixture time	Resettable	xxx Hours	▶ show resettable hours		
		Total	xxx Hours	▶ show total device hours		
		Clear Resettable	Clear / Cancel	▶ clear resettable time		
	Fixture Temp.	Head LED	Actual	xxx C / F	▶ show the actual temperature of the led board	
			Max	xxx C / F	▶ show the maximum temperature of the led board	
			Reset Max	Reset / Cancel*	▶ reset the maximum temperature of the led board	
		Base Driver	(See above)	(See above)	▶ see above	
	Firmware version	x.x.x.x	▶ display the firmware version			
	Serial Number	xxxxxxxxx	▶ display the serial number of the device			
	Product ID	BabyZoom 4	▶ display the Product ID			

Software updates

Your BabyZoom 4 can be updated via the DMX connection, so no need to open it.

If you experience an issue which could probably be solved by a Firmware Update, please contact your Ehrgeiz Dealer for further instructions.

DMX Modes

You can set up your BabyZoom 4 in 4 different DMX Modes:

Standard Mode

Page 14; Uses 11 DMX channels

Advanced Mode

Page 14; Uses 17 DMX channels

Easy Mode

Page 15; Uses 3 DMX channels

RGBW Mode

Page 15; Uses 5 DMX channels



Standard Mode

CH	Function
1	Colour Wheel (see Colour Wheel chart / Appendix Page VI)
2	Red
3	Green
4	Blue
5	White
6	Shutter (see Shutter effects chart / Appendix Page VII)
7	Dimmer
8	CTO
9	Zoom
10	Control (see Special Control channel / Appendix Page VII)
11	Remote DMX Address

Advanced Mode

CH	Function
1	Colour Wheel (see Colour Wheel chart / Appendix Page VI)
2	Red
3	Red fine
4	Green
5	Green fine
6	Blue
7	Blue fine
8	White
9	White fine
10	Shutter (see Shutter effects chart / Appendix Page VII)
11	Dimmer
12	Dimmer fine
13	CTO
14	Zoom
15	Zoom fine
16	Control (see Special Control channel / Appendix Page VII)
17	Remote DMX Address

Easy Mode

CH	Function
1	Colour Wheel (see Colour Wheel chart / Appendix Page VI)
2	Dimmer
3	Zoom

RGBW Mode

CH	Function
1	Red
2	Green
3	Blue
4	White
5	Zoom



Services

Trouble Shooting

Problem	Causes	Solutions
No Display / Not switched on	No power to fixture	Check AC mains power and connections
		Inspect connections and cables. Correct poor connections. Repair or replace damaged cables
		Check the power supply voltage.
Fixture does not respond to DMX correctly.	Incorrect fixture DMX addressing	Check the fixture is assign to correct DMX address (See Page 9)
	Incorrect DMX mode	Check fixture is set to correct DMX mode (See Page 13)
	Fault on data link	check for the data link is correctly linked from the DMX source if all cables are in good condition
	Other device on DMX link defective.	Unplug eventCON® IN and OUT connectors and connect them directly together to bypass one fixture at a time until normal operation is regained
	Data transmission lines should be terminated.	Insert termination plug in OUTPUT of the last fixture on the link.
	Device is set to Wireless DMX input	Disable the W-DMX input via Menu
LC-Display works but no light outputs can be generated.	Faulty DMX link	Run built-in test mode or static control mode to verify if LEDs are illuminated
	Broken parts / wires / LEDs	Have fixtures serviced by an Ehrgeiz service technician

Maintenance

There are no serviceable Part inside your BabyZoom 4. If problems occur, contact your Ehrgeiz dealer or a qualified Ehrgeiz Service technician.

Use a slightly moist and smooth cloth to clean the device. Do not use any aggressive detergents.

We are sure you will have a sophisticated experience with your BabyZoom 4.

Appendix

Specifications

Light source

- 4 x 60 W Osram® RGBW LEDs
- average service life: 20.000 hours

Optical system

- 6°-40° beam angle
- ConsistentColor™ Zoom Optics

Functions

- High resolution dimmer 0-100%
- Selectable dimmer curves
- Strobe with variable speed (max. 20Hz)
- Pre-programmed random strobe & pulse effects
- RGBW, 8 or 16 bit color mixing
- SteadyColor™ Dimming
- Seamless CTO
- Virtual color wheel with 39 colors including whites (2700K / 3200K / 4200K / 5600K / 7200K / 8000K)

Thermal

- Maximum ambient temperature: 45°C
- Over-temperature protection
- Convection cooling

Control and programming

- Setting & addressing: 2x 16 characters
- OLED display & 4 buttons
- Protocol: USITT DMX-512
- Control channels: 3,5,10,16
- 4 DMX protocol modes
- 3-editable programs, each up to 25 steps
- Stand-alone mode
- Sound active mode
- Wireless DMX
- Firmware update via Update cable
- DMX In/Out: eventCON®
- Power In/Out: eventCON®

Electrical Specification

- Electronic switching power supply with auto-sensing
- Input voltage: 100-240V AC, 50/60 Hz
- Max. power consumption: 200 Watt

Mechanical Specification

- IP67 rating
- Height: 304 mm (11.1")
- Width: 238mm (7.2")
- Depth: 238 mm (7.2")
- Weight: 10.0 kg (22.04 lbs)

Rigging

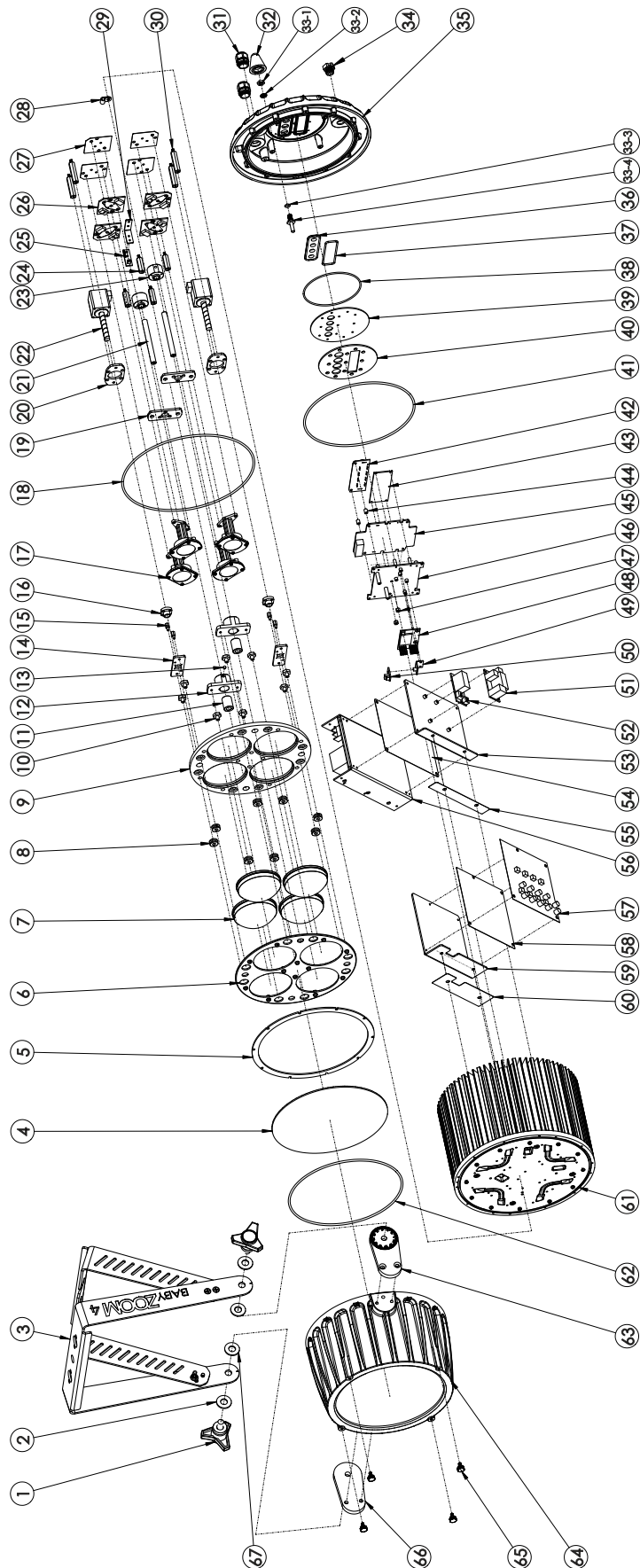
- Centered Ø12mm hole in bracket
- One attachment point for safety wire
- Preparation for one omega bracket

Included accessories

- Cable Merger eventcon/Schuko + XLR-3



Exploded drawing



Spareparts

To be updated...



eventCON®

The eventCON is a new, innovative cable connector system, which combines power and DMX signal in one cable and one plug. This is the revolution of connection in lighting. The plug is IP67 certified and can be assembled in the customers need without losing the IP certification. The VDE certification attests the eventCON system a power current up to 16A.

Thanks to the future-oriented mechanism the plug just needs to be inserted into the connector and locks automatically. By turning the sleeve the connection is unlocked.

Innovative cablin solutions simplify the work in the event industry. In order that the eventCON system works with your classic fixtures we have developed adapter sets which connect classic XLR/Schuko/PowerCON with the eventCON system.

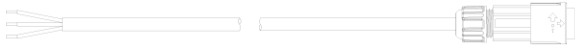
Technical Data:

Contact durability	1000
Rated voltage (Power) / V	250
Rated voltage (Signal) / V	30
Rated impulse voltage / V	2500
Rated current (Power) / A	16
Rated current (Signal) / A	2
Cable cross-section (Power) / mm ²	1,5
Cable cross-section (Signal) / mm ²	0,5
Number of poles (Power)	3
Number of poles (Signal)	3
Environmental temperature / °C	40

Upper limiting temperature / °C	105
Lower limiting temperature / °C	-40
Pollution degree	3
Insulating medium group	II
Protection class	IP67
Support structure material	PA66
Contact material	Copper base, gilded
Connection method	Solder connection
Connection type	Fee plug connector
Pull relief / mm	7,5 – 9,5

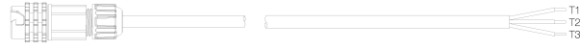
Here is an extract of the available eventCON accessories:

Adapters & Extension



eventCON Adapter Power OUT

- Power OPEN to eventCON OUT



eventCON Adapter Power OUT

- eventCON IN to power OPEN



eventCON Adapter DMX OUT

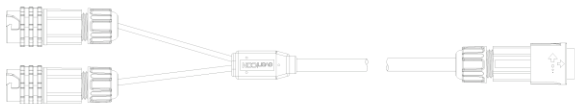
- eventCON IN to XLR-3f OUT



eventCON Extension

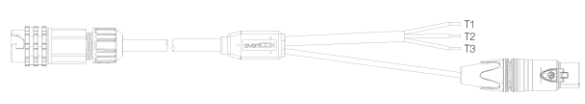
- eventCON IN to eventCON OUT

Splitter & Merger



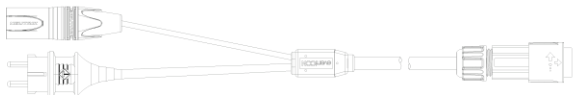
Input Merger eventCON

- PD1F/PD1M separate
2 eventCON IN to 1 eventCON OUT



Output Splitter eventCON

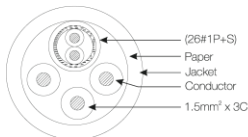
- PD1M/XLR-3/Open
eventCON IN to XLR-3 OUT & Power OPEN



Input Merger Schuko eventCON

- PD1F/XLR-3/Schuko
1 x XLR & 1 x Schuko IN to eventCON OUT

Cable & Plugs



The eventCON cables have a diameter of 9,5mm



Pin Definition

- | | |
|------------|------------|
| Signal | Power |
| • 1: GND | L: Line |
| • 2: Data- | N: Neutral |
| • 3: Data+ | ⊕ : PE |



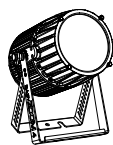
Pin Definition

- | | |
|------------|------------|
| Signal | Power |
| • 1: GND | L: Line |
| • 2: Data- | N: Neutral |
| • 3: Data+ | ⊕ : PE |



Please consider to your own safety:

Only qualified electricians are allowed to wire the eventCON system or solder plugs onto the eventCON cable. Please contact your local dealer for further information if necessary.



Colourwheel table

Value	Function
0 - 5	No Function, RGBW Colour mixing
6 - 10	LEE 790-Moroccan Pink
11 - 15	LEE 157-Pink
16 - 20	LEE 332-Special Rose Pink
21 - 25	LEE 328-Follies Pink
26 - 30	LEE 345-Fuchsia Pink
31 - 35	LEE 194-Surprise Pink
36 - 40	LEE 181-Congo Blue
41 - 45	LEE 071-Tokyo Blue
46 - 50	LEE 120-Deep Blue
51 - 55	LEE 079-Just Blue
56 - 60	LEE 132-Medium Blue
61 - 65	LEE 200-Double CT Blue
66 - 70	LEE 161-Slate Blue
71 - 75	LEE 201-Full CT Blue
76 - 80	LEE 202-Half CT Blue
81 - 85	LEE 117-Steel Blue
86 - 90	LEE 353-Lighter Blue
91 - 95	LEE 118-Light Blue
96 - 100	LEE 116-Medium Blue Green
101 - 105	LEE 124-Dark Green
106 - 110	LEE 139-Primary Green
111 - 115	LEE 089-Moss Green
116 - 120	LEE 122-Fern Green
121 - 125	LEE 738-JAS Green
126 - 130	LEE 088-Lime Green
131 - 135	LEE 100-Spring Yellow
136 - 140	LEE 104-Deep Amber
141 - 145	LEE 179-Chrome Orange
146 - 150	LEE 105-Orange
151 - 155	LEE 021-Gold Amber
156 - 160	LEE 778-Mellennium Gold
161 - 165	LEE 135-Deep Golden Amber
166 - 170	LEE 164-Flame Red
Colourwheel rotation effects	
171 - 185	Colourwheel rotation forward (fast - slow)
186 - 190	Colourwheel rotation stop
191 - 205	Colourwheel rotation backward (fast - slow)
206 - 210	Colourwheel rotation stop
Random colours	
211 - 225	Fast – slow
White hue	
226 - 230	Warmwhite - 2700K
231 - 235	Warmwhite - 3200K
236 - 240	Neutralwhite - 4200K
241 - 245	Coldwhite - 5600K
246 - 250	Coldwhite - 7200K
251 - 255	Coldwhite - 8000K

Shutter Channel Table

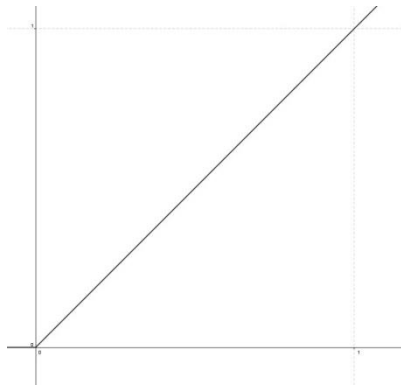
Value	Function
0 – 15	Shutter Closed
16 - 47	Random Strobe (slow – fast)
48 - 79	Ramp Up (slow – fast)
80 - 111	Ramp Down (slow – fast)
112 - 143	Ramp UP & down (slow – fast)
144 - 199	Strobe Pause 5s – 1s (slow – fast)
200 - 239	Strobe 1Hz – 20 Hz (slow – fast)
240 - 255	Shutter Open



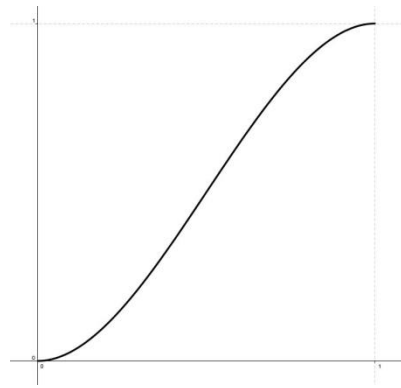
Special control channel

Value	Function
0 – 35	Reserved
36 – 40	Remote DMX Address-Low (001-256) Must work with "Remote DMX Add." channel to set with value for 1+
41 – 45	Reserved
46 – 50	Remote DMX Address-High (257-512) Must work with "Remote DMX Add." channel to set with value for 257+
51 – 55	Reserved
56 – 60	Dimmer Speed: Smooth
61 – 65	Dimmer Speed: Fast
66 – 70	Reserved
71 – 75	Dimmer Curve: Linear
76 – 80	Dimmer Curve: Theatrical
81 – 85	Dimmer Curve: Square Law
86 – 90	Dimmer Curve: Inverse Square Law
91 – 95	Reserved
96 – 100	No DMX: Hold
101 – 105	No DMX: Shutter Closed
106 – 110	No DMX: Play Program 1
111 – 115	Reserved
116 – 120	Display Backlight: ON
121 – 125	Display Backlight: OFF
126 – 135	Reserved
136 – 140	DMX Mode: Standard
141 – 145	DMX Mode: Advanced
146 – 150	DMX Mode: Easy
151 – 155	DMX Mode: RGBW
156 – 165	Reserved
166 – 170	Zoom Reset
171 – 175	Reserved
176 – 180	Fixture Reset
181 – 185	Reserved
186 – 190	Factory default (except DMX Address & Mode)
191 – 200	Reserved
201 – 205	PWM Rate 600 Hz
206 – 210	PWM Rate 1200 Hz
211 – 215	PWM Rate 2000 Hz
216 – 220	PWM Rate 2400 Hz
221 – 225	PWM Rate 6000 Hz
226 – 230	Reserved
231 – 235	Boot Mode: Auto
236 – 240	Boot Mode: DMX
241 – 245	Boot Mode: Program Play
246 – 250	Boot Mode: Static Mode
251 – 255	Reserved

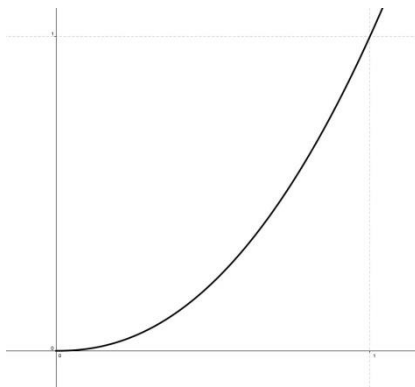
Dimmer Curves



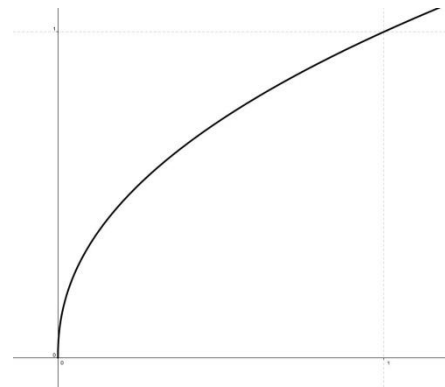
Linear



Theatrical



Square



Inverse square



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