EHRGEIZ

BABY**BEAM**4

USER MANUAL

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USER MANUAL

CONTENTS

EHRGEIZ

Introduction

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

You have chosen a reliable product with outstanding features like the unique eventCON® connector system or the Tilt Index. 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 base of the fixture. The bolt must be screwed at 20-25mm into the fixture. If the fixture is suspended by any other method, an M10 bolt must be screwed into this hole so that it is 20-25mm into 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. The safety wire must comply with EN 60598-2-17 Section 17.6.6 and be capable of bearing a static suspended load ten times the weight of the fixture.

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 switch 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 BabyBeam 4 with the following content

- BabyBeam 4   4x15W Osram LED Beamlight with 8° beam angle
- eventCON® Input cable   Input cable with Neutrik XLR and Schuko merging to Eventcon
- Diffusor kit   18°/58° Filters
- Diffusor Screws   Set of 4 Screws for Replacement

Fixture Dimensions
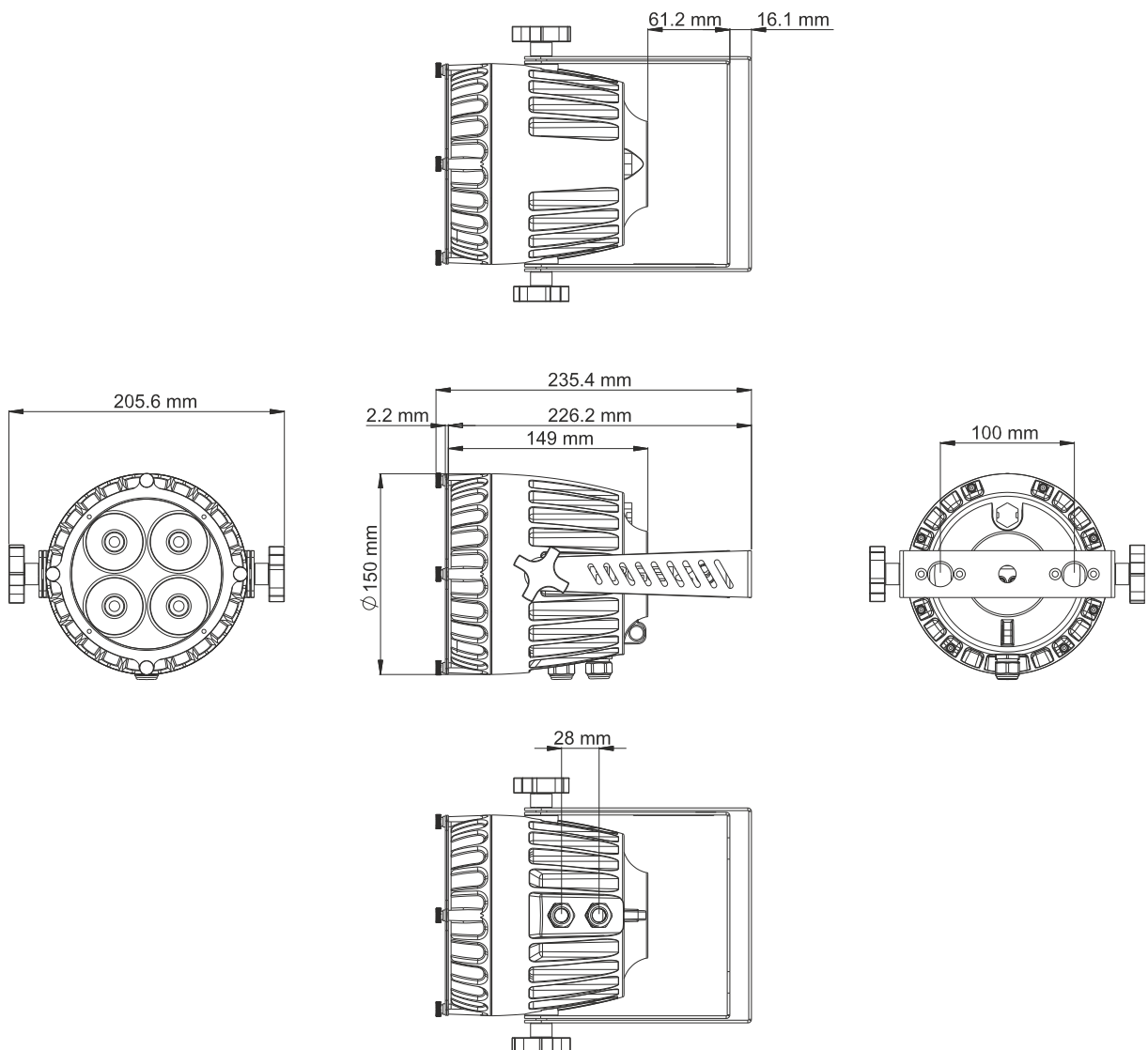
Dimensions in mm

Installations

Your BabyBeam 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 BabyBeam 4 on the floor. Please make sure the surface is plane and the reliability of the floor is sufficient.
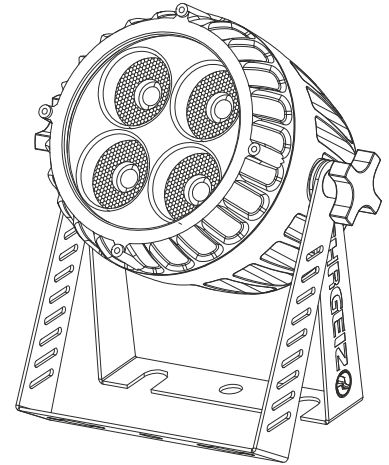
Installation hanging

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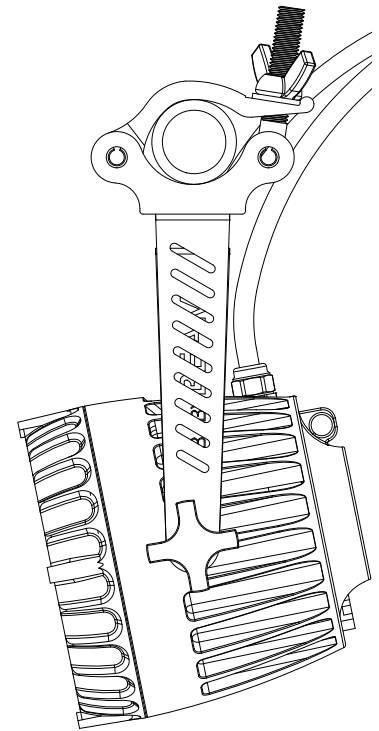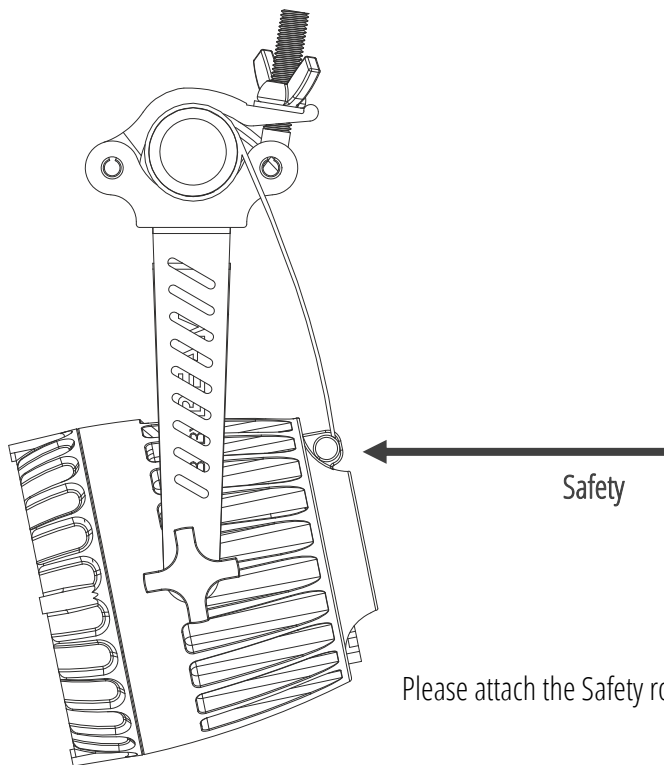
Safety

Safety attachment

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

Omega Bracket

There are optional Omega Bracket fittings available for your BabyBeam 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 BabyBeam 4 offers you an input and output.

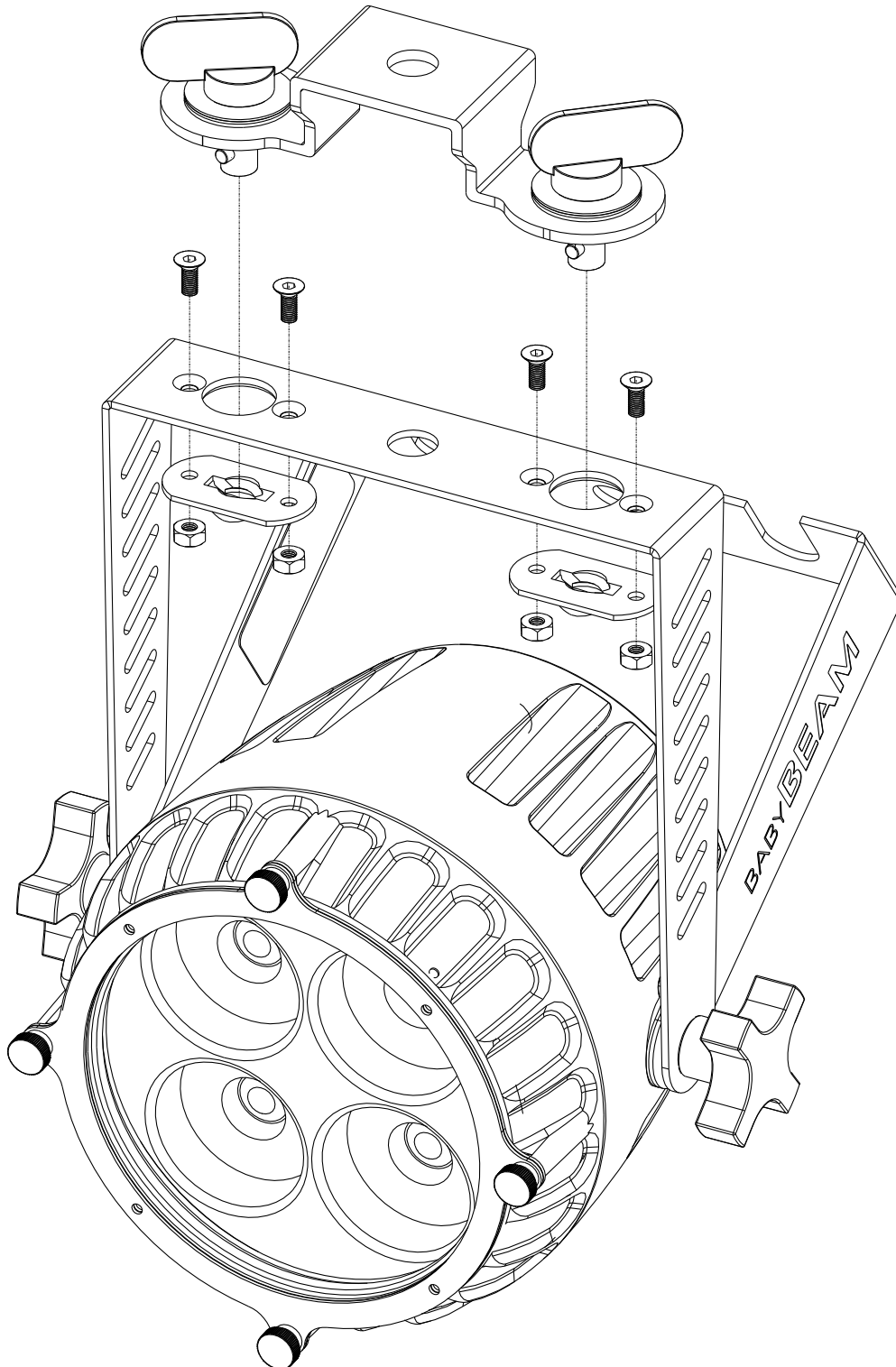The connection of the Power supply has to be done by qualified personnel only. Do not connect the BabyBeam 4 if you are not able to survey the consequences.

input   output
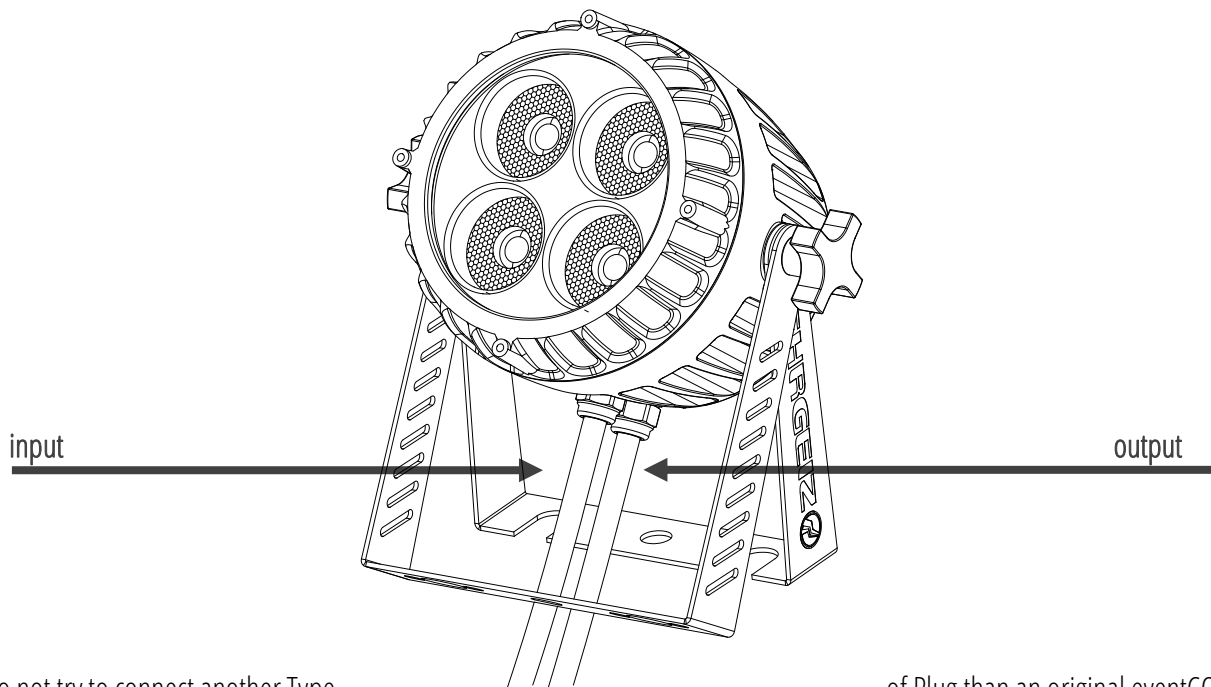
Do not try to connect another Type   of Plug than an original eventCON®. Do not use any force to connect the eventCON® plug. You could use the outlet for connecting additional devices. The internal Power wiring is done with a cable cross section of 2.5mm².

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 the 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 BabyBeam 4 uses 8 DMX channels.
Connect the devices and increase the value of the DMX channel by 8 from one device to another

Controller   DMX Address 1   DMX Address 9   DMX Address 17
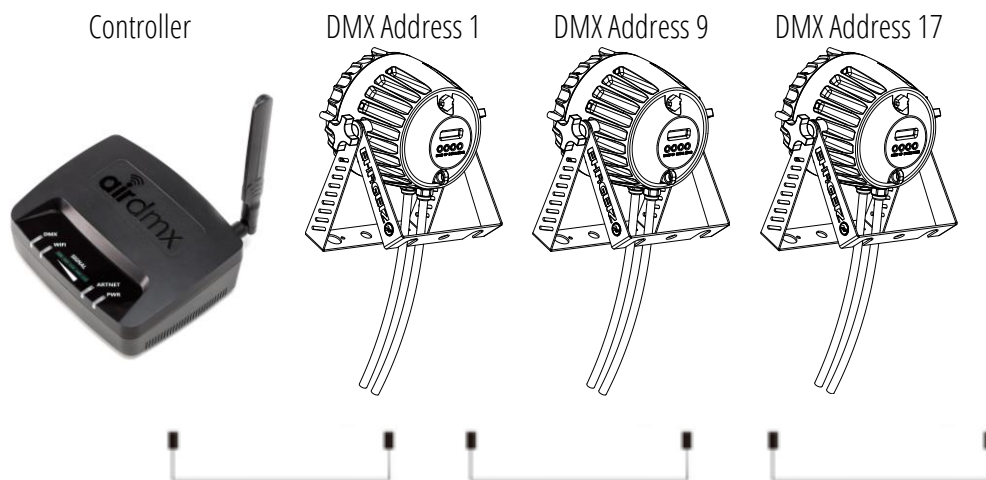
Operations

Menu control

Your BabyBeam 4 has an easy to read and setup display and Menu. It is programmed with a lot of built in functions as well as DMX Modes for different applications.

Input buttons

MENU UP DOWN ENTER

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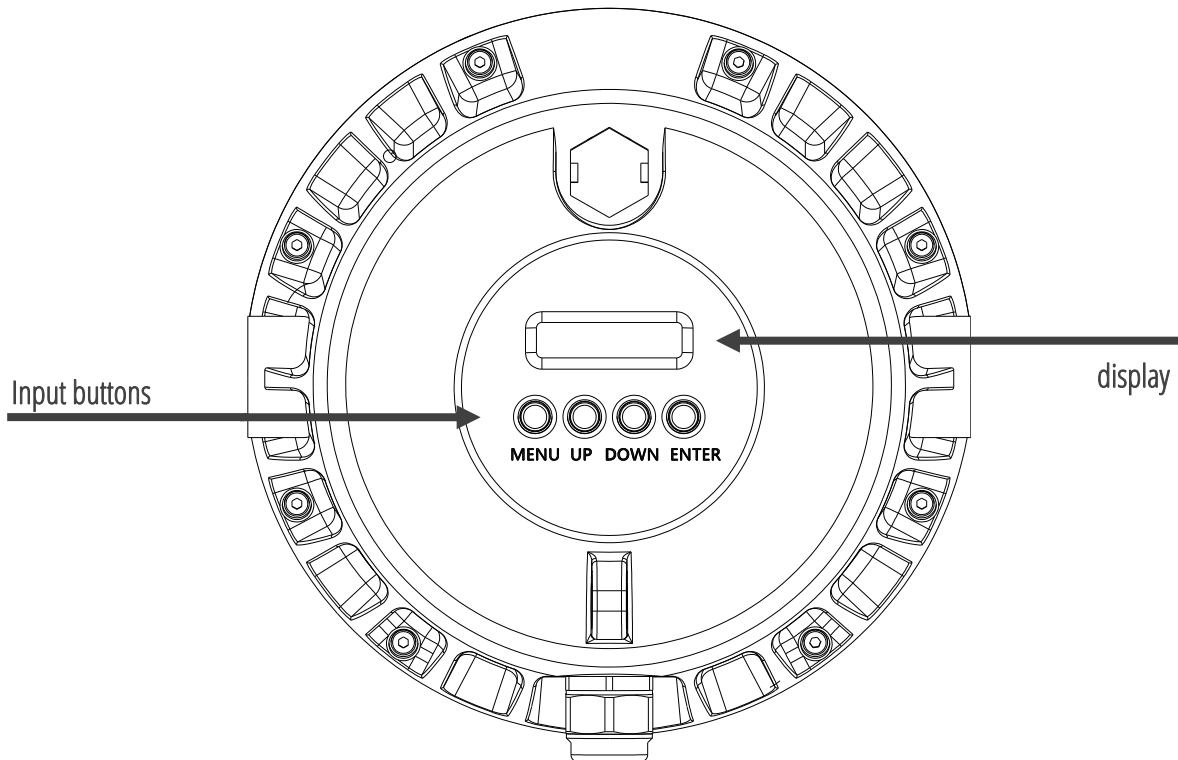
The Menu of the BabyBeam 4 is mainly intuitive. You will find a menu map on the following pages. The four buttons are used to scroll the values, select a setting or hop back in the menu structure:

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

![EHRGEIZ logo]

Menu map

Addr	1 - 512		► Choose your DMX address
Pers	Mode	Std-8	► 8 Channels with all features
		Easy-2	► 2 channels with colourwheel & dimmer
		rgb-3	► 3 Channels with RGB
		rgbw-4	► 4 Channels with RGBW
		tl1-5	► 5 Channels with RGBW & dimmer
		tl2-6	► 6 Channels with RGBW, dimmer, strobe
	dimmer_speed	smooth	► Dimmerspeed smooth
		Fast	► Dimmerspeed Fast
		triger	no / yes ► enable sound triggering of internal program
	Mic level	Std	
		low	► choose the sensitivity of the mic
		Hi	
	temp unit	Cel	► display the temperature in °Celsius
		FHt	► display the temperature in °Fahrenheit
	no dmx	Hold	► hold last output in case of signal loss
		close	► shut down output in case of signal loss
		static	► play static mode in case of signal loss
		prog1	► play prog 1 in case of signal loss
		sound1	► play prog 1 sound triggered in case of signal loss
		prog2	► play prog 2 in case of signal loss
		sound2	► play prog 2 sound triggered in case of signal loss
		prog3	► play prog 3 in case of signal loss
		sound3	► play prog 3 sound triggered in case of signal loss
	lock	off	► disable lock
		on	► enable device lock
		set	000 ► set a password
	disp_time	on	► display is always on
		1 min	► display is shut down after 1 minute
		5 min	► display is shut down after 5 minutes
		60 min	► display is shut down after 60 minutes
	boot_mode	auto	► auto
		dmx	► react to dmx after boot
		static	► play static after boot
		prog1	► play prog 1 after boot
		sound1	► play prog 1 with sound
		prog2	► play prog 2 after boot
		sound2	► play prog 2 with sound
		prog3	► play prog 3 after boot
		sound3	► play prog 3 with sound
	dmx hp	on	► if enabled, dmx is always takes highest priority
		off	

alone	test	on	► play a test sequence	
		off	► stop the test sequence	
	static	red	0-255	
		green	0-255	
		blue	0-255	
		white	0-255	► Set a colour, shutter & dimmer for the static stand alone
		dimmer	0-255	
		macro	0-255	
		shuter	0-255	
		reset	► reset the values for the static stand alone	
	salone	alone	► device runs stand alone program	
		master	► device runs the stand alone and sends slave sig	
		slave 1	► device runs slave signal 1	
		slave 2	► device runs slave signal 2	
		slave 3	► device runs slave signal 3	
	prog	play	prog 1	► Play Prog 1 (while played, speed is displayed and can be edited)
			sound1	► Play Prog 1 sound triggered
			prog 2	► Play Prog 2 (while played, speed is displayed and can be edited)
			sound 2	► Play Prog 2 sound triggered
			prog 3	► Play Prog 3 (while played, speed is displayed and can be edited)
			sound3	► Play Prog 3 sound triggered

prog → edit → prog01 → step01:

Capt	► capture and save the actual DMX input
Skip	► abort editing of this step
red (0-255)	► change the value for red
green (0-255)	► change the value for green
blue (0-255)	► change the value for blue
white (0-255)	► change the value for white
dimmer (0-255)	► change the value for dimmer
macro (0-255)	► change the value for color Wheel macro
shuter (0-255)	► change the value for shutter
save	► save the manually inserted values

hold00	► Select hold time in seconds (0 - 999)
fade00	► Select fade time in seconds (0 - 999)
step02	► see above

prog	edit	speed1	► Set default Speed for Prog 1
		prog 2	► see above
		prog 3	► see above
	reset	prog 1	► set the program 1 back to default
		prog 2	► set the program 2 back to default
		prog 3	► set the program 3 back to default

serv	default	no	► does nothing :)
		yes	► set device back to factory default settings
info	hour	XXX	► see total working time of the device
	temp	actual	XXC	► see the actual temperature
		max	XXC	► see the max temperature the device had
	firmware	_1121_	► see the firmware actually installed
	Serial	A0508	► see the serialnumber of the device

Software updates

Your BabyBeam 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 BabyBeam 4 in 6 different DMX Modes:

std-8 Standard Mode
Page11; Uses 8 DMX channels
tl1-5 Mode
Page 12; Uses 5 DMX channels
tl2-6 Mode
Page 12; Uses 6 DMX channels
RGBW-4 Mode
Page 12; Uses 4 DMX channels
RGB-3 Mode
Page 12; Uses 3 DMX channels
Easy-2 Mode
Page 12; Uses 2 DMX channels

std-8 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

tl1-5 Mode

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

tl2-6 Mode

CH	Function
1	Dimmer
2	Red
3	Green
4	Blue
5	White
6	**Shutter** (see Shutter effects chart / Appendix Page **VII**)

RGBW-4 Mode

CH	Function
1	Red
2	Green
3	Blue
4	White

RGB-3 Mode

CH	Function
1	Red
2	Green
3	Blue
4	White

Easy-2 Mode

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

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 11)
	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.
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 BabyBeam 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 BabyBeam 4.

Appendix

Specifications

Light source
- 4 x 15W Class RGBW LED
- Rated lumen output: 1.100 lm
- LED Life Expectancy: approx. 50.000 hours

Optical system
- ConsistentColor™ Optics
- Beam angle 8°

Functions
- RGBW, 8 bit color mixing (16 bit with software update)
- SteadyColor™ Dimming
- Seamless CTO
- Virtual color wheel with 39 colours including whites (2.700 K, 3.200 K, 4.200 K, 5.600 K, 7.200 K and 8.000 K)
- High resolution dimmer 0–100%
- Strobe with variable speed (max. 20Hz)
- Pre-programmed random strobe & pulse effects

Thermal
- Maximum ambient temperature: 45 ° C (113 ° F)
- Internal noiseless fan

Control and programming
- Setting & Addressing: 1x6 characters LED display & 4 buttons
- Protocol: USITT DMX-512
- Control channels: 2,3,4,5,6,8
- 6 DMX protocol modes
- 3-editable programs, each up to 25 steps
- Stand-alone mode
- Firmware update via DMX-line
- DMX In/Out: eventCON®
- Power In/Out: eventCON®

Electrical Specifications
- Electronic switching power supply with auto-sensing
- Input voltage: 100–240V AC, 50/60 Hz
- Max. power consumption: 45 W

Mecanical Specification
- IP67 rating
- Height including bracket: 231.8 mm (9.12")
- Height without bracket: 153.8 mm (6.05")
- Width: 205.6 mm (8.09")
- Depth: 158 mm (6.22")
- Weight: 2.7 kg (5.95 lbs)
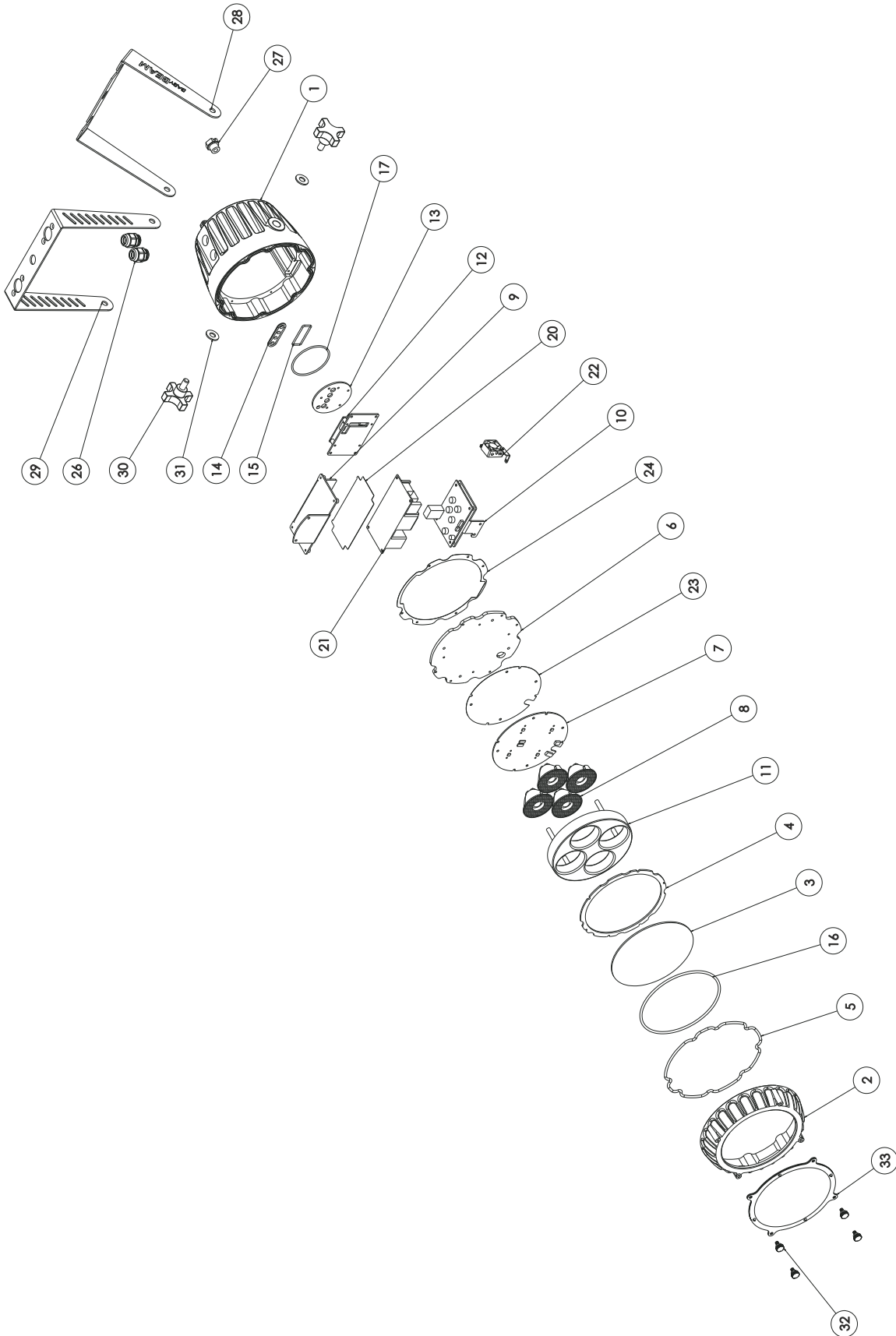
Included accessories
- Cable Merger eventCON® / Schuko + XLR-3
- Diffusion filter 18° & 58°

Available Accessoires
- Omega bracket Kit
- 1 x Diagonal Omega bracket

Exploded drawing

Spareparts

#	Description (EN)	Q'TY	Item No.
1	Fixture Housing Base	1	106270
2	Fixture Housing Top	1	106253
3	Front Lens	1	106255
4	Clamp	1	106256
5	Sealing Ring Fixture Housing	1	106260
6	LED Board Heat-Sink	1	106259
7	Babybeam4 LED Board	1	105711
8	8 Deg. LED Lens	4	106258
9	PSU Bracket	1	106263
10	Driver Board Bracket Sub Assy A	1	105712
11	Lens Holder	1	106257
12	Control Board	1	105713
13	Rear Water-sealing Plate	1	106264
14	Water-sealing Rubber for Input Button	1	106267
15	Water-sealing O-ring	1	106266
16	Top Water-sealing O-Ring-1	1	106254
17	Bottom Water-sealing O-Ring	1	106265
20	Power Isolation Mylar	1	114440
21	Power Supply Unit (PSU)	1	106261
23	Heat Transfer Pad LED Board	1	
24	Isolation Pad LED Board	1	106260
26	Waterproof PG Glands	2	106273
27	Waterproof Air Ventilation Valve	1	106271
28	Fixture Bracket A (LOGO)	1	106272
29	Fixture Bracket B	1	106274
30	Bracket Securing Screw Knob	2	106269
31	Standing Bracket Rubber Stop	2	106268
32	Diffusor Holder Screw x4	1	106252
22.1	Bracket for Fan	1	113615
22.2	Fan 25x25x10	1	113616
33.1	Diffusor 18 deg.	1	106294
33.2	Diffusor 58 deg.	1	106295

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.

Technial Data:

|			
Contact durability	1000	Upper limiting temperature / °C	105
Rated voltage (Power) / V	250	Lower limiting temperature /°C	-40
Rated voltage (Signal) / V	30	Pollution degree	3
Rated impulse voltage / V	2500	Insulating medium group	II
Rated current (Power) / A	16	Protection class	IP67
Rated current (Signal) / A	2	Support structure material	PA66
Cable cross-section (Power) / mm²	1,5	Contact material	Copper base, gilded
Cable cross-section (Signal) / mm²	0,5	Connection method	Solder connection
Number of poles (Power)	3	Connection type	Fee plug connector
Number of poles (Signal)	3	Pull relief / mm	7,5 – 9,5
Environmental temperature / °C	40		

Here is an extract of the available eventCON accessories:

Adapters & Extension

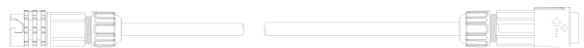**eventCON Adapter Power OUT**
• Power OPEN to eventCON OUT
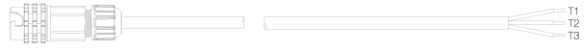
eventCON Adapter Power OUT
• eventCON IN to power OPEN

eventCON Adapter DMX OUT
• eventCON IN to XLR-3f OUT
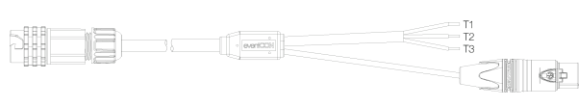
eventCON Extension
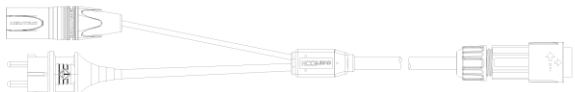• eventCON IN to eventCON OUT

Splitter & Merger

Input Merger eventCON
• PD1F/PD1M separate
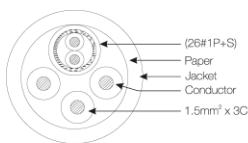 2 eventCON IN to 1 eventCON OUT

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

(26#1P+S)
Paper
Jacket
Conductor
1.5mm² x 3C

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	Coulourwheel rotation forward (fast - slow)
186 - 190	Coulourwheel rotation stop
191 - 205	Coulourwheel rotation backward (fast - slow)
206 - 210	Coulourwheel 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

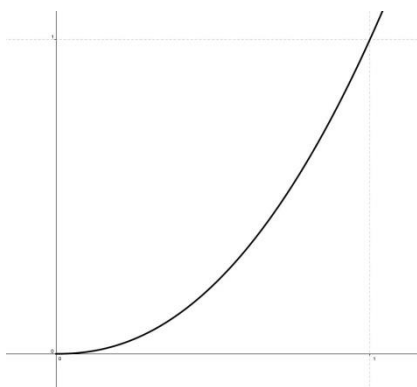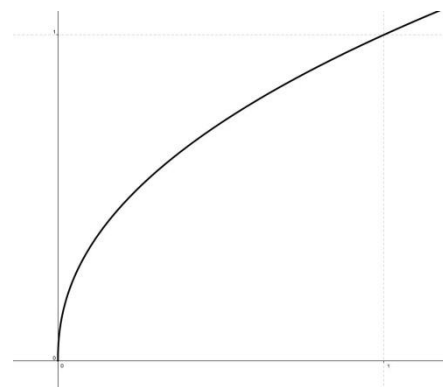| Value	Function
0 – 15	Shutter Closed
16-47	Random Strobe (slow – fast)
48-79	Ramp Up (slow – fast)
80-111	Ramp Down (slow – fast)
112-143	Ramp UP & down (slow – fast)
144-199	Strobe Pause 5s – 1s (slow – fast)
200-239	Strobe 1Hz – 20 Hz (slow – fast)
240-255	Shutter Open

Dimmer Curves
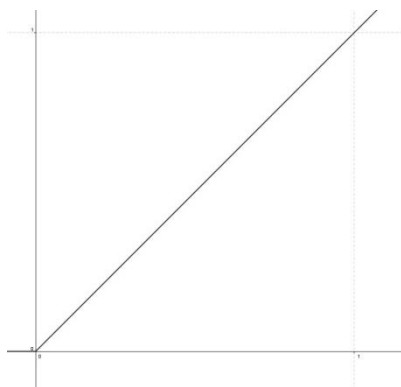
Linear
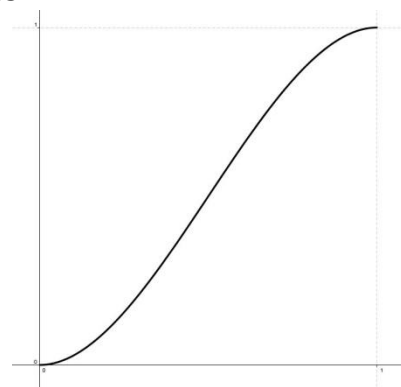
Theatrical

Square

Inverse square

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