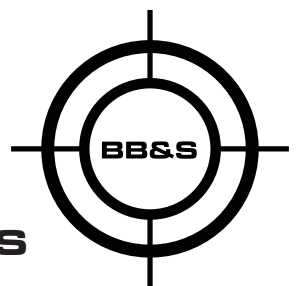




BB&S
LEDHEIMER

USER MANUAL

BROTHER, BROTHER & SONS ApS



INTRO

Brother, Brother & Sons ApS

The information in this manual is subject to change without notice.

Go to www.brothers-sons.dk for the latest version.

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User Manual Version: December 2011

Customer and Warranty service:

Contact your regional dealer. Contact information for your area can be found at www.brothers-sons.dk

RMA:

When returning an item please enclose

a.: Model and Serial number.

b.: A description of the problem

c.: The name of the owner of the equipment.

d.: If available please include a copy of your invoice to establish the date of sale and the beginning of the warranty period.

Disposing of this product:

Help preserve the environment! Ensure that this product is recycled at the end of its life.

This product is in compliance with the RoHS and WEEE directives.



In compliance with EMC standards:

EN 55103-1 & EN 55103-2:

EN 55022, EN 55103-1 Annex A, EN 55022, EN 61000-3-2, EN 61000-3-3, EN 55103-1

EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 55103-1 Annex B, EN 55103-1 Annex A, EN 61000-4-11

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CONTENTS

Intro.....	1
Index.....	2
Safety Information.....	3
Maintenance.....	3
Product Overview.....	4
Single Yoke Assembly.....	5
Yoke Array Assembly.....	6
First Time Usage / Installation.....	9
AC Power.....	10
DMX Data Link.....	10
Software Update.....	10
DMX Protocol.....	11
Software Menu.....	12
Trouble Shooting / FAQ.....	14
Specifications.....	15

SAFETY

Safety Notice:

It is important to read ALL safety information and instructions in this manual before installing and operating the product described.

Safety symbol used in this manual:



WARNING: Potential injury or damage to persons or product.



WARNING:

It is important to read ALL safety and installation instructions to avoid any damage to the product and potential injury to yourself and others.

This product is for professional use only and has been designed for indoor use. Exposure to moisture may cause damage to the product and will void your warranty.

This fixture is designed for use with a specific LED only. Use of any other type LED may be hazardous and may void warranty.

Do not operate the product if the ambient temperature exceeds 40°C / 104°F

Provide a minimum clearance of 0,1m (4 in.) around fans and air vents.

Do not mount on flammable surface.

Ensure that the fixture is electrically connected to ground (earth)

Only use this product if all cables, connectors and the product itself are undamaged.

Damage caused by inadequate cleaning or maintenance is not covered by the product warranty.

This is a product using High power LEDs. Do not stare directly into the LED at extended periods of time at a short distance without suitable protective eyewear. Do not look directly at the LED with optical instruments that concentrate the light output.

No matter the light source, blue light, depending on the wavelength, can be harmful to your eyes.

SERVICE:

Servicing is to be performed only by qualified personnel. Take precautions to avoid ESD damage during service.

Disconnect the power before servicing the product.

MAINTENANCE:

This product requires very little routine maintenance, if any, but has special cleaning instructions:

Disconnect fixture from power and allow it to cool for 10 min.

Vacuum or gently blow away any dust from fan blades and grills

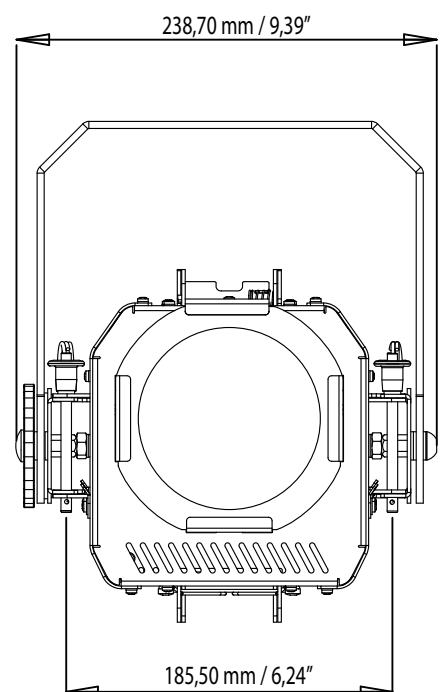
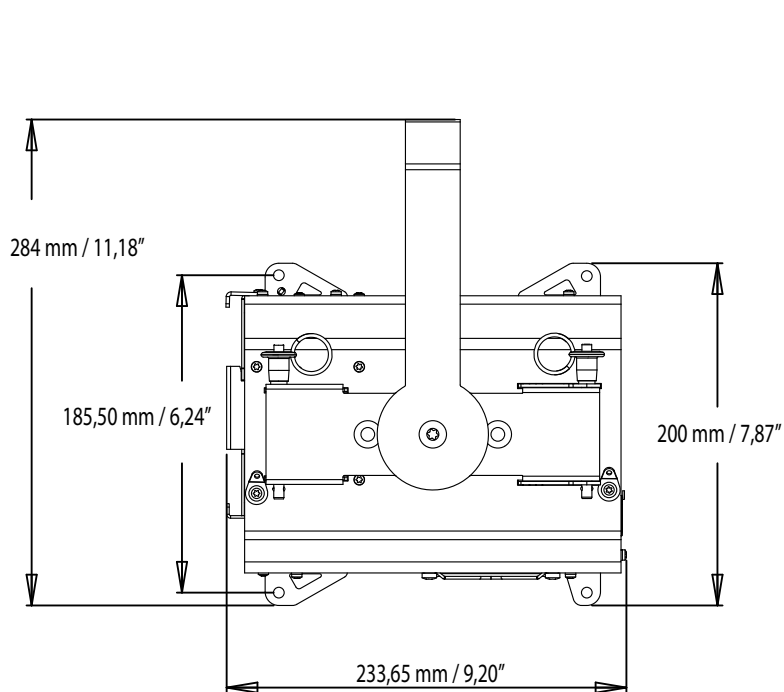
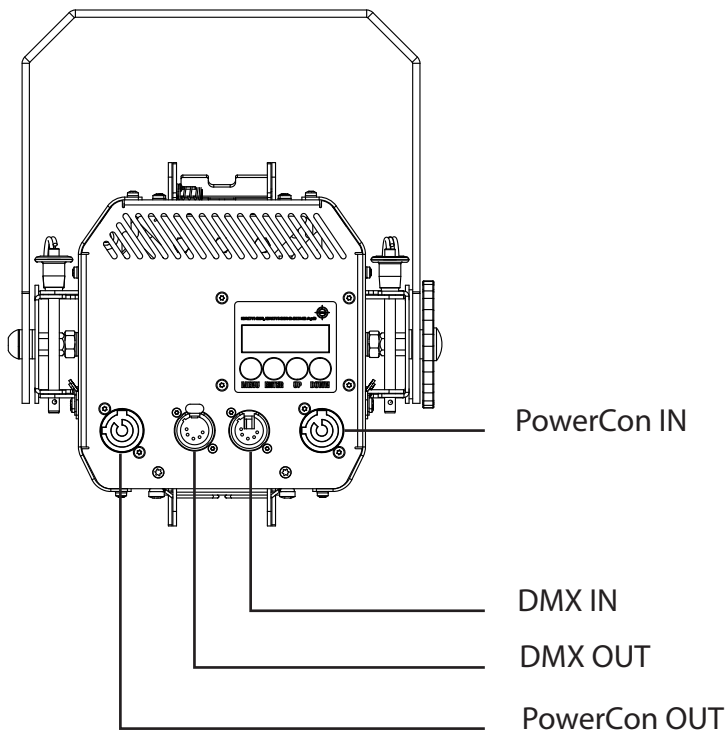
Very gently clean the LED with Isopropyl alcohol.

Clean the lenses with a soft damp cloth.

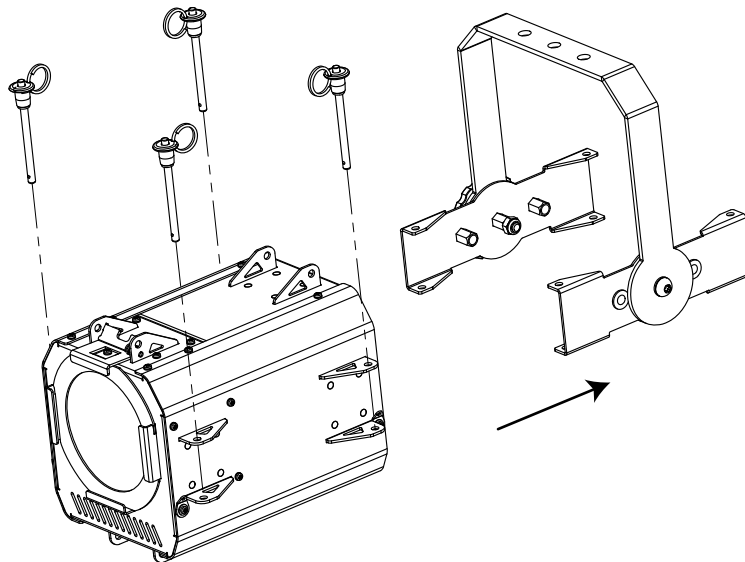
POWER:

Never connect to dimmer power.

PRODUCT OVERVIEW

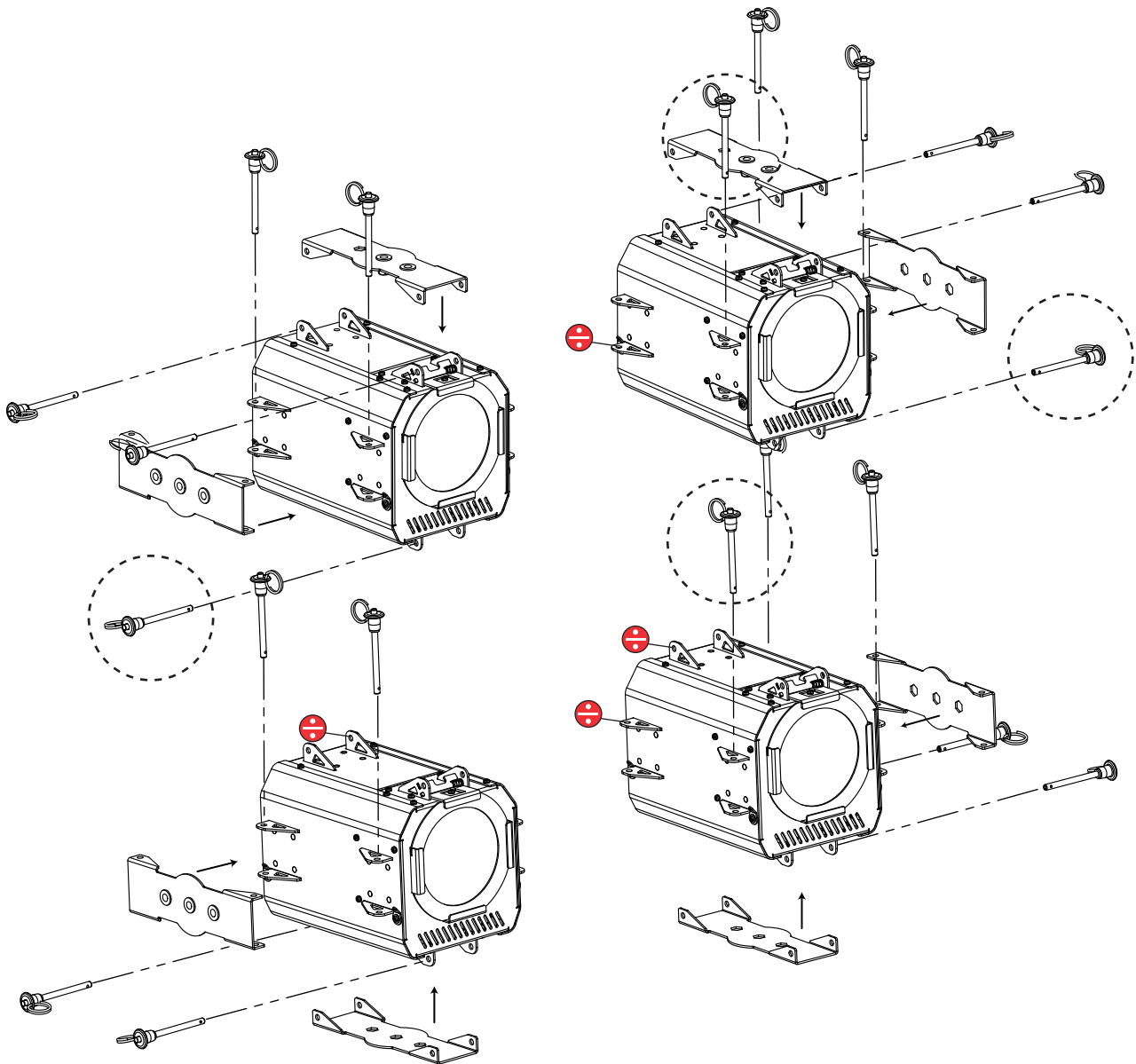


SINGLE YOKE ASSEMBLY

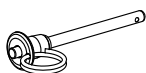
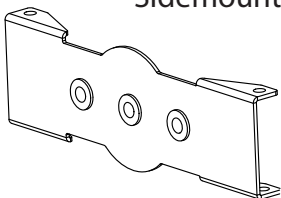


Slide the fixture in to the yoke and insert the four ballpins.

YOKE ARRAY ASSEMBLY



Sidemount




Ballpin

Place the sidemounts on the top and side or bottom and side (refer to illustration above).

Insert ballpins in the the positions as shown.

Note that, when inserting ballpins to interlock two Ledheimers, only one ballpin is used on the side in question and always the one closet to the front.

These symbols  mark the unused mounting holes.

The ballpins marked with a dotted circle comes with the mounting plates

YOKE ARRAY ASSEMBLY



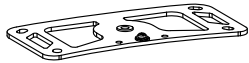
Hex screw



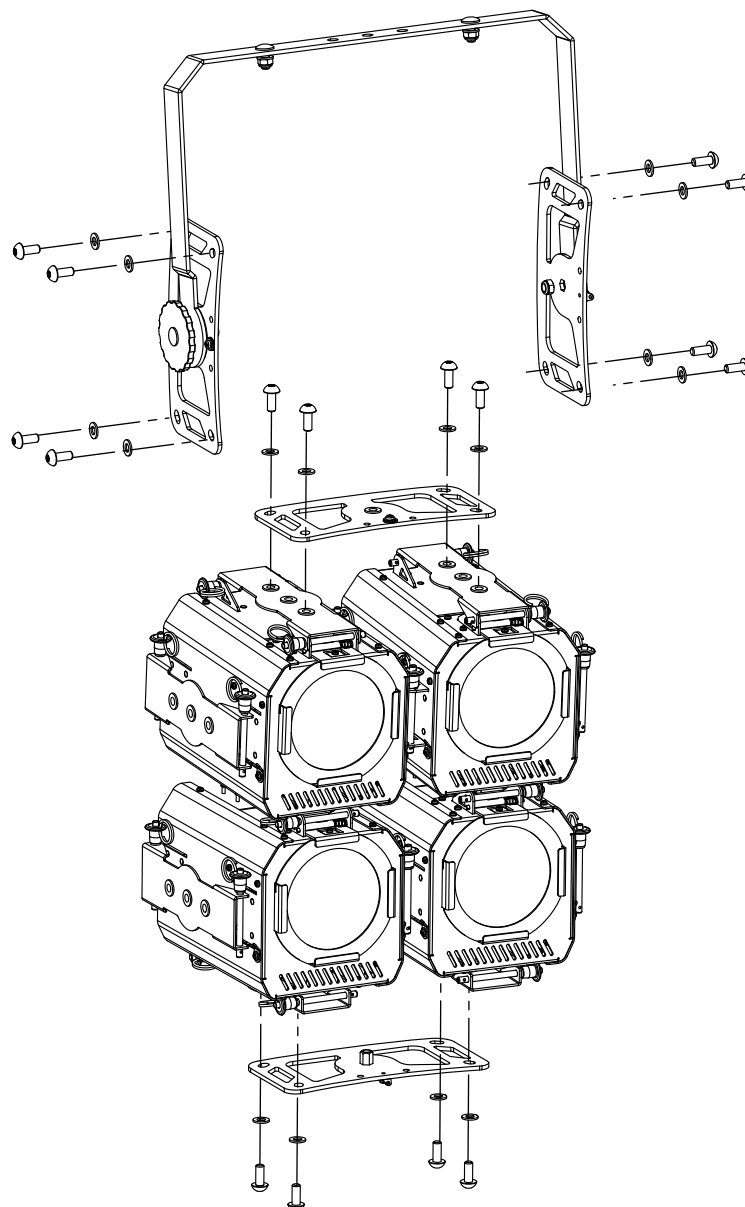
Washer

Mount each mounting plate using 4 hex screws and 4 washers as illustrated.

But do not tighten them yet.

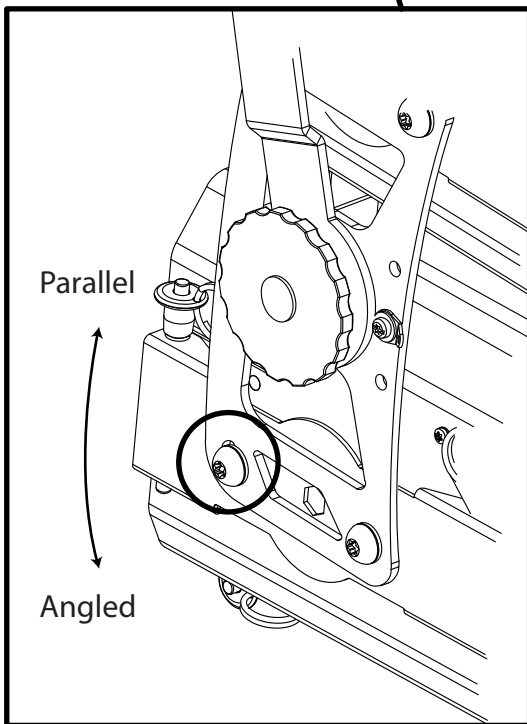
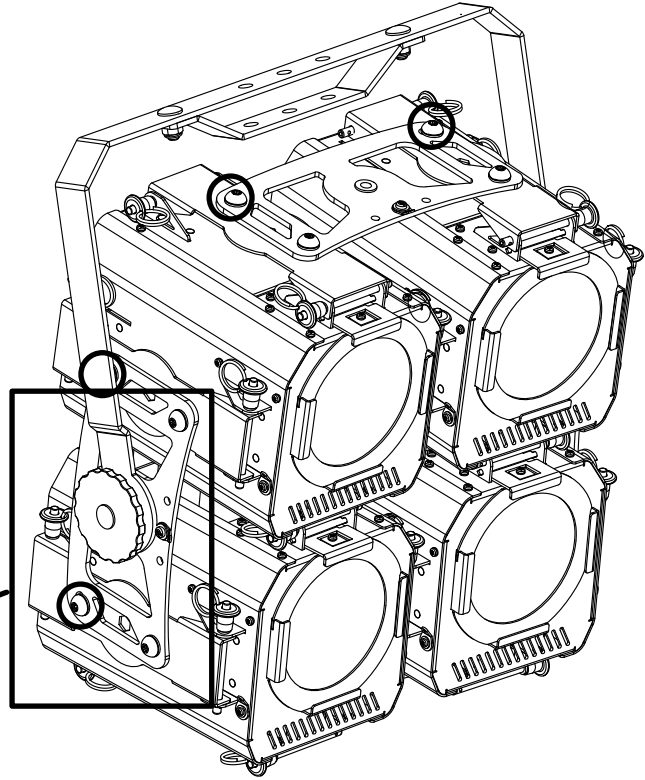


Mounting plate



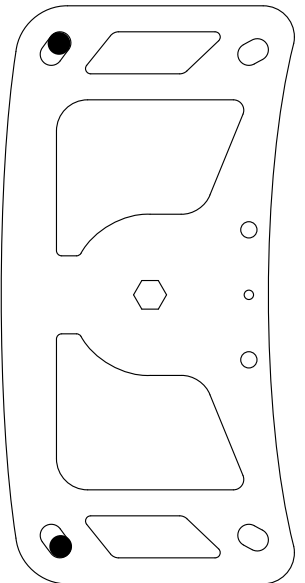
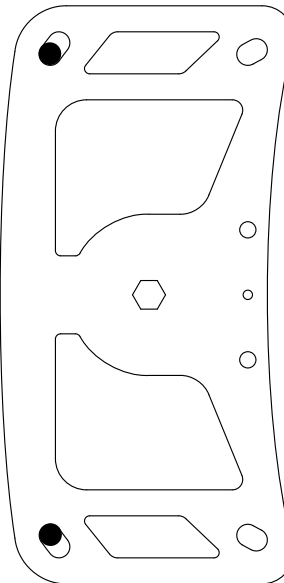
YOKE ARRAY ASSEMBLY

Before tightening the screws that connects the fixtures to the mounting plates, you will need to position the fixtures according to the illustrations and your desired setup.



Parallel

Angled



INSTALLATION



Do not operate the product if the ambient temperature exceeds 40° C / 104°F

Provide a minimum clearance of 0,1m (4 in.) around fans and air vents.

This fixture must be connected to ground.
This fixture is for indoor use only.

Read the “Safety” and “Specifications” chapters first.

Applying power:

Never connect to dimmer power.

Make sure the local power voltage is within the range specified.
If so; connect a power cable and turn the power on.

Standalone operation:

Using the navigation buttons and display readout (refer to the “Software Menu” chapter)
navigate to Manual and set the desired intensity.
(additional operations see “Software Menu” chapter)

DMX operation:

Connect a DMX cable

Navigate to Adress mode (Addr) and set the desired address, resolution, response, strobe,
curve settings and in Personality (PErS) set the desired Fan, No DMX and Display settings.
(refer to the “Software Menu” and “DMX Protocol” chapters)

Connect to DMX controller.
(refer to the “DMX Protocol” chapter)

Use it.

AC Power

This fixture must be connected to ground.

Electrical:

AC Power: 100 – 240 V nominal, 50/60 Hz

Powersupply: Electronic switchmode

Max power consumption: 132 w

DMX Data link

This product uses a 5-pin XLR for dmx input and output.

Use shielded data cables.

Do not overload the daisy chain. Up to a maximum of 32 devices can be used on a single dmx chain.

DMX Channels:

1 at 8bit: Dimmer

2 at 8bit: Dimmer w. strobe

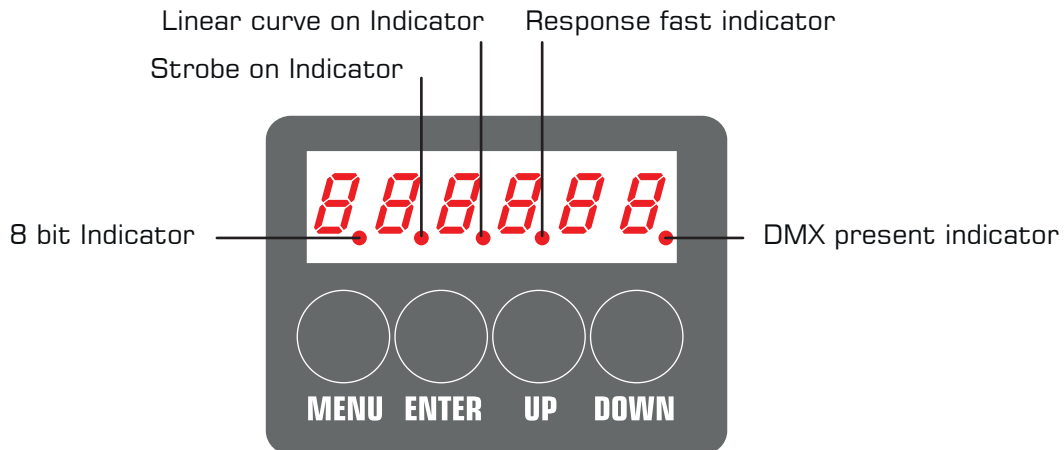
2 at 16bit: Dimmer

3 at 16bit: Dimmer w. strobe

Protocol: USITT DMX512-A

SOFTWARE UPDATE

Software can be updated via DMX512 with UPLOADER from Brother, Brother & Sons ApS and the latest software version can be found on www.brothers-sons.dk.



- MENU Open menu / Go back
- ENTER Select / Confirm
- UP Scrolling UP / Increase value
- DOWN Scrolling DOWN / Decrease value

DMX Channels

Mode	Channel	Parameter	Value	Percent	Function	
8 Bit	1	Dimmer	0 - 255	0 - 100	Coarse dimming	
8 Bit w. Strobe	1	Dimmer	0 - 255	0 - 100	Coarse Dimming	
		Strobe mode	0 - 5	0	Open	
			6 - 125	1 - 49	Slow to Fast Strobe	
			126 - 130	50	Open	
			131 - 250	51 - 99	Slow to Fast Random	
	251 - 255		100	Open		
3	Strobe length	0	0 - 100	Short to Long Flash		
16 Bit	1	Dimmer	0 - 255	0 - 100	Coarse dimming	
	2	Dimmer	0 - 255	0 - 100	Fine dimming	
16 Bit w. Strobe	1	Dimmer	0 - 255	0 - 100	Coarse dimming	
		Dimmer	0 - 255	0 - 100	Fine dimming	
			Strobe mode	0 - 5	0	Open
				6 - 125	1 - 49	Slow to Fast Strobe
				126 - 130	50	Open
	131 - 250			51 - 99	Slow to Fast Random	
251 - 255	100	Open				
3	Strobe length	0	0 - 100	Short to Long Flash		

Note: Beware, when using Strobe Length, that if the Strobe Length is equal to or longer than the flash and interval between flashes, the unit will not strobe.
If maximum strobe length is used the fastest strobe possible will be 17 (7%)

SOFTWARE MENU

Default values indicated by **bold** font

Addr	1	DMX address value 1 - 512
<code>Addr</code>		
Mode	Resolution	8 bit resolution 16 bit resolution
<code>Mode</code>	<code>RESOLU</code>	
	Response	Slow (fade between values) Fast (snap between values)
	<code>RESPON</code>	<code>SLOW</code> <code>FAST</code>
	Strobe	OFF On - (adds 2 strobe channels)
	<code>Strobe</code>	<code>OFF</code> <code>on</code>
	Curve	Square dimmer curve Linear dimmer curve
	<code>Curve</code>	<code>SQUARE</code> <code>LINEAR</code>
	Fan	HIGH - No fan speed limit LOW - Fan speed limited (Silent)
	<code>FAN</code>	<code>HIGH</code> <code>Lo</code>
	noDMX	Action when loss of DMX signal: HOLD - last received DMX value OFF - Sets output to zero MAN - Go to Manual DMX value
	<code>no dMX</code>	<code>Hold</code> <code>OFF</code> <code>MAN</code>
	Display	OFF 2n - Display off after 2 minutes ON - Display always on
	<code>di SP</code>	<code>OFF 2n</code> <code>on</code>
Tools	Ver	Shows software version - <i>READOUT ONLY</i>
<code>tools</code>	<code>Ver</code>	
	HW Ver	Shows hardware version - <i>READOUT ONLY</i>
	<code>HW Ver</code>	
	Temp	LED temperature - <i>READOUT ONLY</i>
	<code>TEMP</code>	
	DMX In	3 first digits shows DMX adress - <i>READOUT ONLY</i> 3 last digits shows DMX value - <i>READOUT ONLY</i>
	<code>DMX In</code>	
	Reset	Confirm (Reset unit by pressing enter)
	<code>RESET</code>	<code>CONFIR</code>
	test Fan	Fan test First 2 digits - set fan speed level 0 - 31 Last 3 digits - RPS (rounds per second) - <i>READOUT ONLY</i>
	<code>testFAN</code>	
	test display	Display test - all seven segments of each digit on - <i>READOUT ONLY</i>
	<code>testdSP</code>	

...continues on next page

SOFTWARE MENUcontinued

Default values indicated by **bold** font

Log	Log		
	nAHFA n	Max Fan	Maximum fan speed logged. (in RPS) - <i>READOUT ONLY</i>
	FA n r PS	Fan RPS	Current fan speed (in RPS) - <i>READOUT ONLY</i>
	EEP r o n	EEProm	Developer info
	LEd U	LED U	LED voltage in Volts - <i>READOUT ONLY</i>
	PSu U	PSU U	PSU voltage in Volts - <i>READOUT ONLY</i>
	LEd i n t	LED int	for troubleshooting - <i>READOUT ONLY</i>
	LoG C°	Log C°	Minimum and maximum logged temperature in °C
	o n t i m e	on time	UP and DOWN scrolls min. and max.
	o n L E d	on LED	PSU on time in hours - <i>READOUT ONLY</i>
	d E m o	Demo	LED on time in hours - <i>READOUT ONLY</i>
	d n H H Z	DMX HZ	Developer info
	d n H C H	DMX CH	DMX refresh rate - <i>READOUT ONLY</i>
	d n H b r	DMX br	No. of DMX ch. transmitted by controller. - <i>READOUT ONLY</i>
	LEd EE	LED EE	Break lenght of DMX in microseconds - <i>READOUT ONLY</i>
			Developer info
Manual	0	Manual intensity	0 - 100%
MANUAL			Intensity saved when pressing ENTER (Display is always on in manual mode)

FAQ - TROUBLESHOOTING

Problem:

Possible Cause:

Solution:

*Brother, Brother & Sons ApS - The information in this manual is subject to change without notice.
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SPECIFICATIONS

Physical:

Depth: 234 mm / 9,20"
Width: 239 mm / 9,39"
Height: 284 mm / 11,18"
Weight: 4,8 kg / 10,58 lbs

Data:

DMX Channels:
1 or 2 at 8bit:
2 or 3 at 16bit:
Protocol: USITT DMX512-A

Electrical:

Never connect to dimmer power
AC Power: 100 – 240 V nominal, 50/60 Hz
Powersupply: Electronic switchmode
Max. power consumption: 132 W.
This fixture must be connected to ground.

Thermal:

Maximum ambient temperature - t.Amb: 40° C / 104° F
Cooling t. Case (temperature as shown in display):
Below 64° C / 147,2° F Convection cooled
Above 64° C / 147,2° F Forced silent fan cooling
Above 70° C / 158° F Forced dimming
Above 73° C / 163,4° F Forced Lamp Off

Accessories:

Uploader: BBS Software Uploader
City Theatrical Tophat AC-Lighting 2402
CCT Minuette barndoor AC-Lighting ZOB46
City Theatrical colorframe AC-Lighting 2302

Specifications subject to change without notice. For the latest specifications see www.brothers-sons.dk