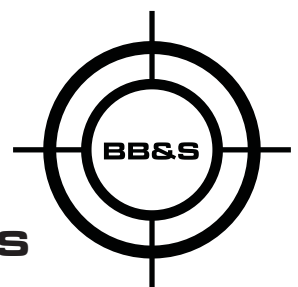




**BB&S**  
**ALEDIN 2**

**USER MANUAL**

**BROTHER, BROTHER & SONS ApS**



user manual revision 1.0

## INTRO

Brother, Brother & Sons ApS

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

Go to [www.brothers-sons.dk](http://www.brothers-sons.dk) for the latest version.

Brother, Brother & Sons ApS assumes no responsibility for any errors or inaccuracies that may appear in this manual. All information and graphics are the property of Brother, Brother & Sons ApS.

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](http://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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## 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:

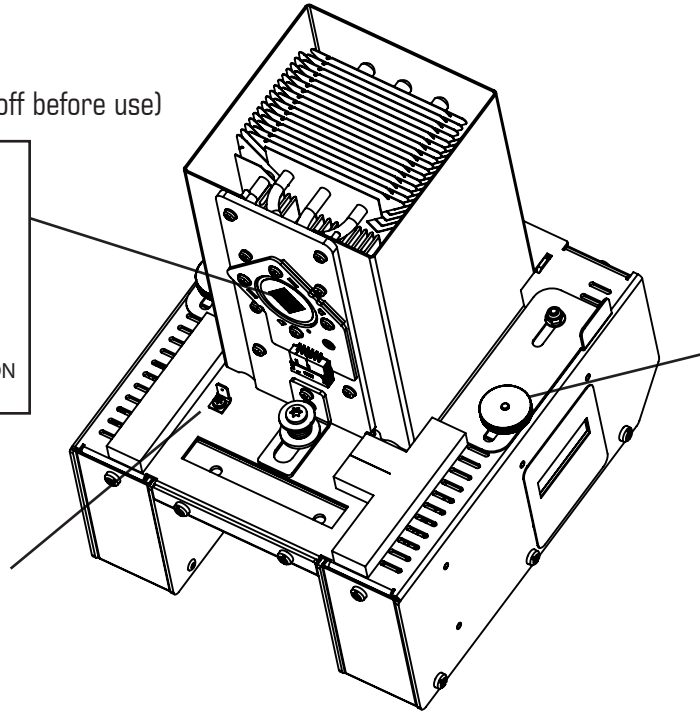
Never connect to dimmer power.

## PRODUCT OVERVIEW

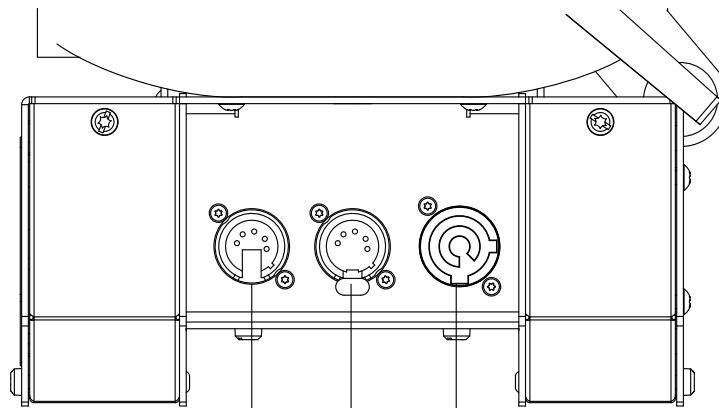
LED  
(Peel protective sticker off before use)



Ground connector



Lamp Adjustment



DMX OUT

DMX IN

POWER IN

## REBUILD



### CAUTION !!

To avoid damage to equipment take electrostatic precautions when performing the retrofitting. Disconnect fixture from power and allow it to cool for 10 min. Retrofitting should only be performed by qualified personel.

Tools needed to perform the retrofitting:

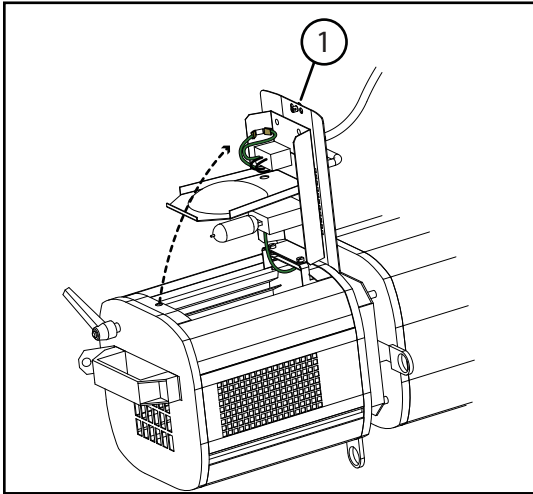


Slotted screwdriver, recommended size 6,5



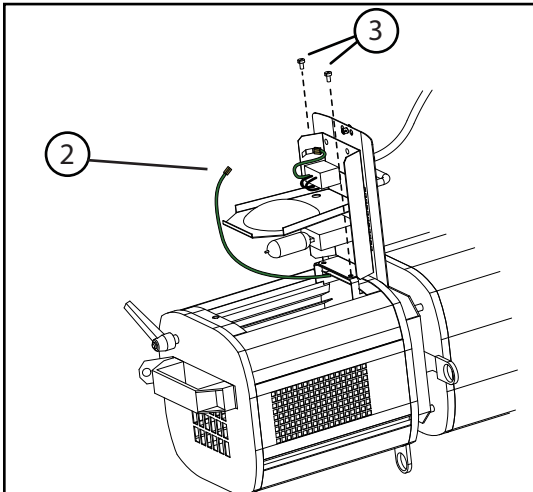
A pair of hands. Not too big or too small.

Rebuild has only been tested with a left and a right hand, but in theory two left hands could do the job. 10 thumbs is not recommended.



1

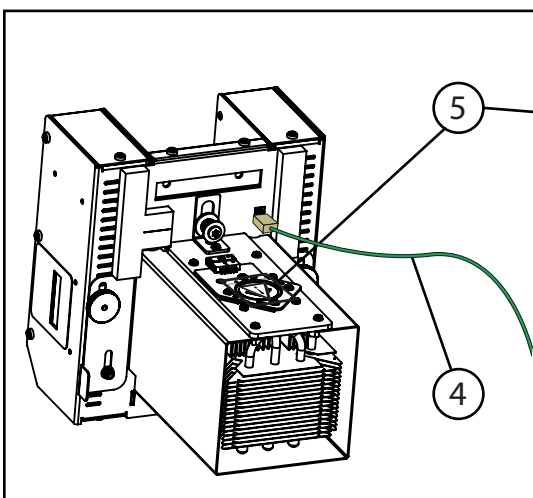
Untighten quarter turn screw (1) and open lid.



2

Disconnect ground wire (2) from lamp section.

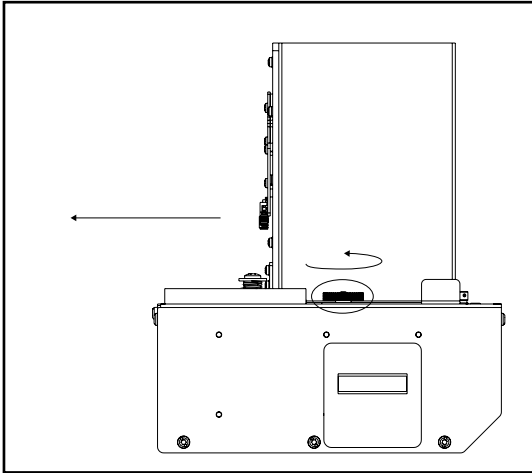
Unscrew screws (3) and remove lamp section.



3

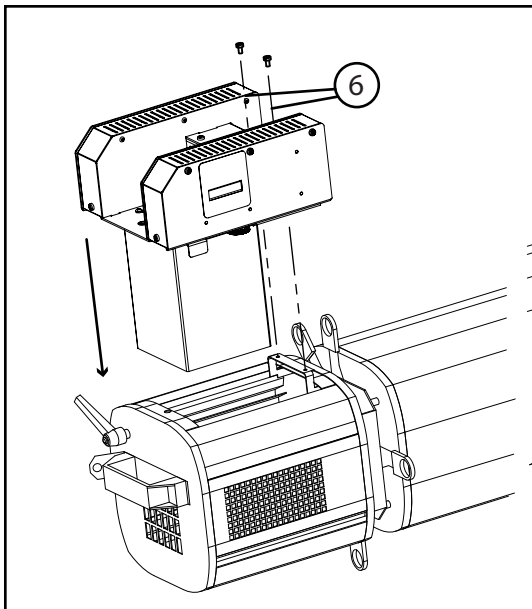


Attach ground wire (4) to the ALEDIN  
Remove protective plastic from LED (5)



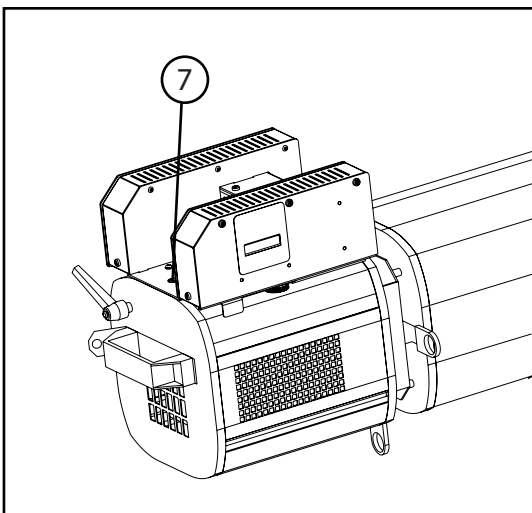
4

Before mounting the aledin position the LED tower part farthest away from the quarter turn.



5

Insert ALEDIN into the lamp housing and tighten screws (6)



6

Tighten quarter turn screw (7)



## 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:

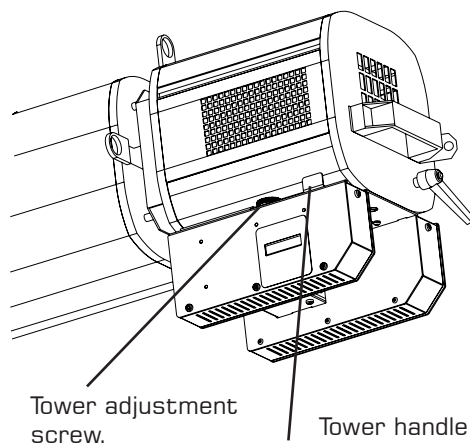
Connect a DMX cable

Navigate to Adress mode (Addr) and set the desired adress, 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)

### Beam Adjustment:



By loosening the tower adjustment screw  
the tower can be moved back and forth by sliding  
the tower handle.

This will affect the evenness vs hotspot.

## 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: 200 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

3 at 8bit: Dimmer w. strobe

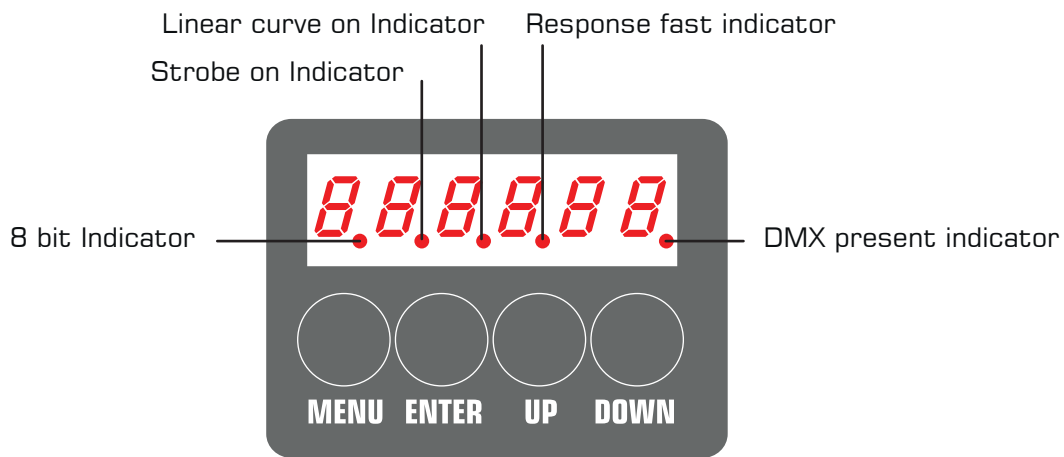
2 at 16bit: Dimmer

4 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](http://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 adress value <b>1</b> - 512
<code>Addr</code>		
Mode	Resolution	8 bit resolution <b>16 bit resolution</b>
<code>Mode</code>	<code>RESolu</code>	
	Response	<b>Slow</b> (fade between values) Fast (snap between values)
	<code>RESPon</code>	<code>SLoW</code> <code>FASt</code>
	Strobe	<b>OFF</b> On - (adds 2 strobe channels)
	<code>Strobe</code>	<code>oFF</code> <code>on</code>
	Curve	<b>Square</b> dimmer curve Linear dimmer curve
	<code>CurVE</code>	<code>SQuArE</code> <code>LI nEAR</code>
	Fan	<b>HIGH</b> - No fan speed limit LOW - Fan speed limited (Silent)
	<code>FAN</code>	<code>HI GH</code> <code>Lo</code>
	noDMX	Action when loss of DMX signal: <b>HOLD</b> - 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	<b>OFF 2n</b> - 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 MENU ....continued

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
		LE d U	LED U	LED voltage in Volts - <i>READOUT ONLY</i>
		PSU U	PSU U	PSU voltage in Volts - <i>READOUT ONLY</i>
		LE d i n t	LED int	for troubleshooting - <i>READOUT ONLY</i>
		Lo G C °	Log C°	Minimum and maximum logged temperature in °C UP and DOWN scrolls min. and max.
		o n t i n E	on time	PSU on time in hours - <i>READOUT ONLY</i>
		o n LE d	on LED	LED on time in hours - <i>READOUT ONLY</i>
		d E m o	Demo	Developer info
		d n H H Z	DMX HZ	DMX refresh rate - <i>READOUT ONLY</i>
		d n H C H	DMX CH	No. of DMX ch. transmitted by controller. - <i>READOUT ONLY</i>
		d n H b r	DMX br	Break lenght of DMX in microseconds - <i>READOUT ONLY</i>
		LE d EE	LED EE	Developer info

Manual	0		Manual intensity <b>0</b> - 100%
		MANUAL	Intensity saved when pressing ENTER (Display is always on in manual mode)

## SPECIFICATIONS

### Physical (Additional - when mounted):

Depth: 0 mm / 0"  
Width: 0 mm / 0"  
Height: 97 mm / 3,82"  
Weight: 2,3 kg / 5 lbs

### Data:

DMX Channels:  
1 ch. at 8bit / 2 ch. if strobe channel is enabled  
2 ch. at 16bit / 3 ch. if strobe channel is enabled  
Protocol: USITT DMX512-A  
Data In/Out: 5 pin locking XLR

### Electrical:

Never connect to dimmer power  
Neutric PowerCon  
AC Power: 100 – 240 V, 50/60 Hz  
Powersupply: Electronic switchmode  
Max. power consumption: 200 W.  
Max Amp.: 0,9 amps at 230V / 1.7 amps at 120V / 2 amps at 100V  
This fixture must be connected to ground.

### Thermal:

Maximum ambient temperature - t.Amb: 40° C / 104° F  
Minimum ambient temperature - t.Amb: 5° C / 41° 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

Specifications subject to change without notice. For the latest specifications see [www.brothers-sons.dk](http://www.brothers-sons.dk)