

BROTHER, BROTHER & SONS ApS

software v: 2_0_05

INTRO

Brother, Brother & Sons ApS

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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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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

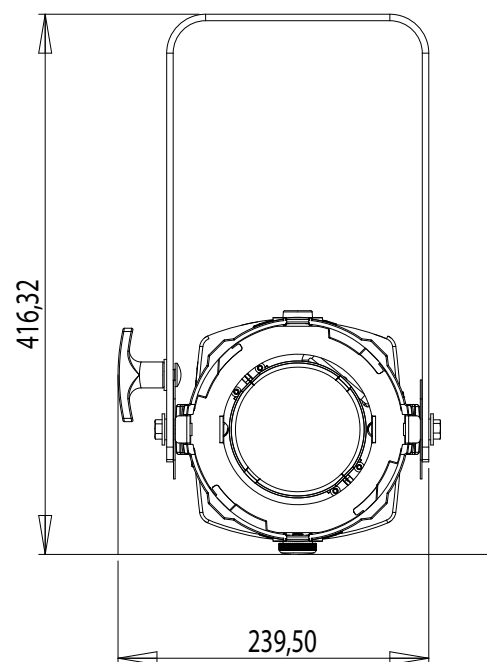
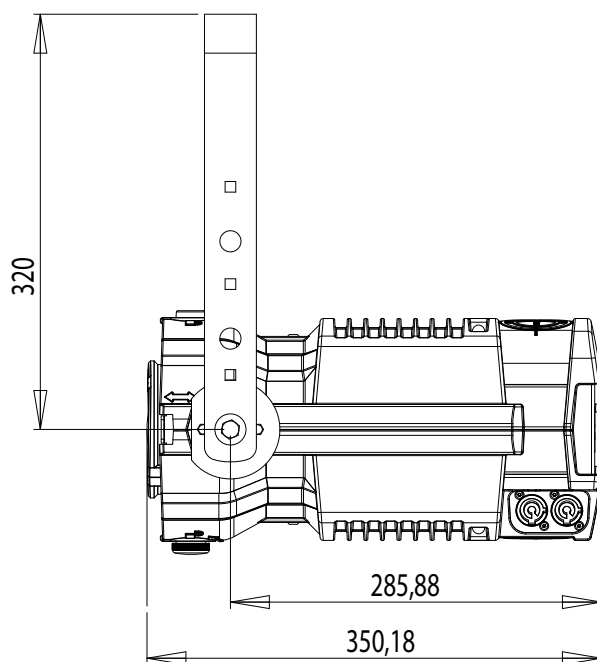
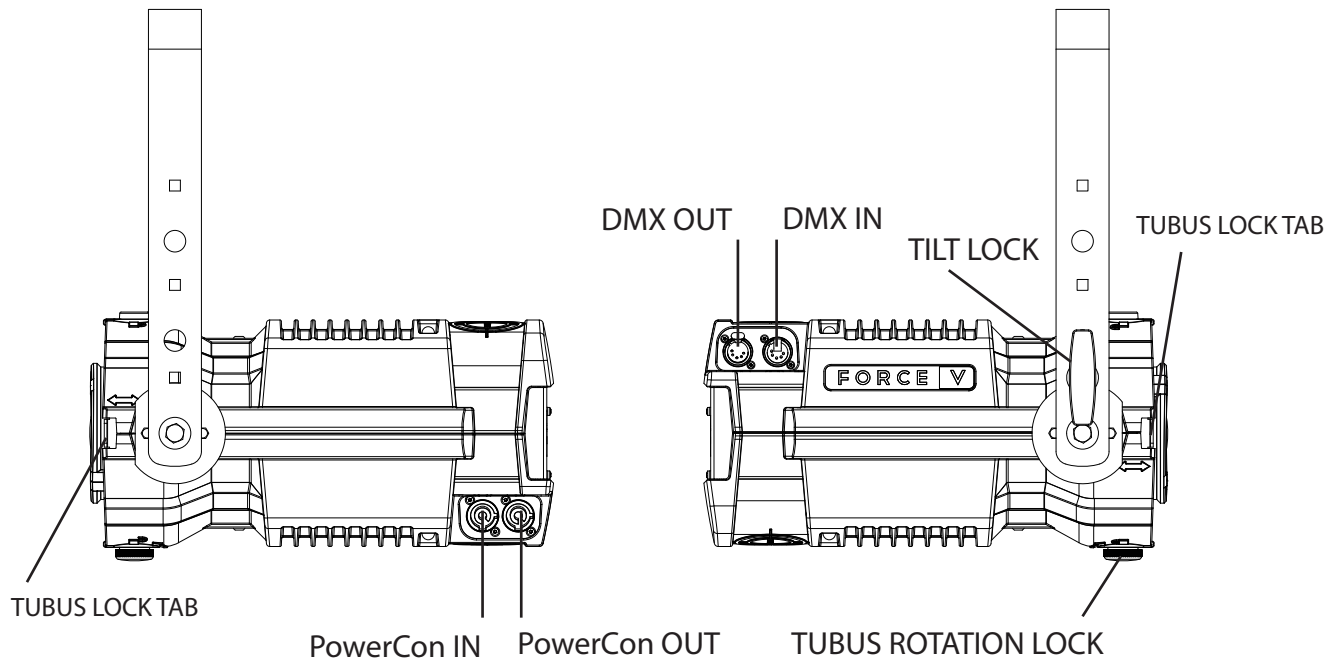
Very gently clean the LED with Isopropyl alcohol.

Clean the lenses with a soft damp cloth.

POWER:

Never connect to dimmer power.

PRODUCT OVERVIEW



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:

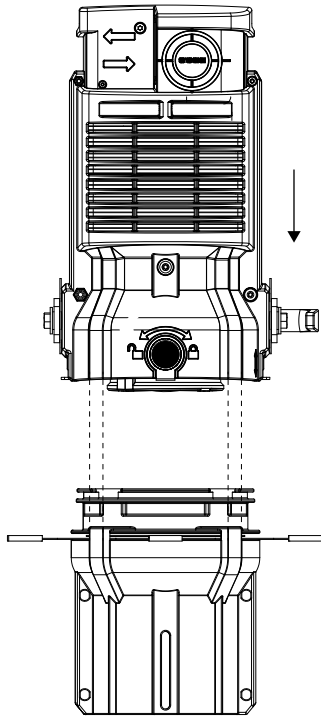
Connect a DMX cable

Navigate to Adress mode (Addr) and set the desired adress.
Other settings can be done in the Mode menu.
(refer to the “Software” chapter)

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

Use it.

MOUNTING THE TUBUS ON THE FORCE V

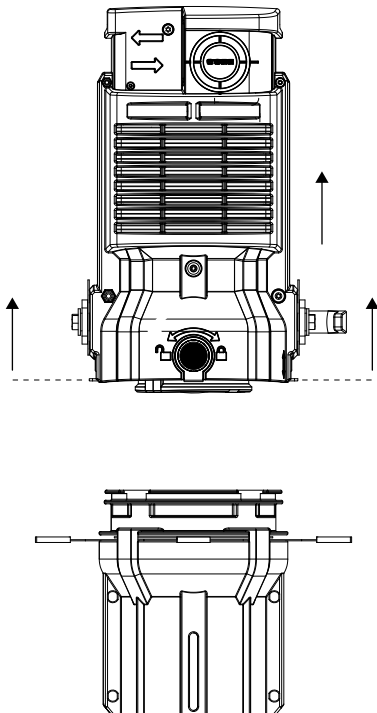


Place the Tubus on a flat surface.
Loosen the Tubus Rotation Lock knob by turning counterclockwise.
Lower the Force V on to the Tubus with the contours aligned (dashed lines).
Press slightly down on the Force V while turning it counterclockwise until the Force V drops into place.
Turn the Force V clockwise until the lock tabs snaps into place.
Tighten the Tubus Rotation Lock knob by turning it clockwise.

The designer argues that all I need to say is:
"Loosen the Tubus rotation lock if it is locked, then press the tubus and the Force V together aligned and turn till the lock snaps."

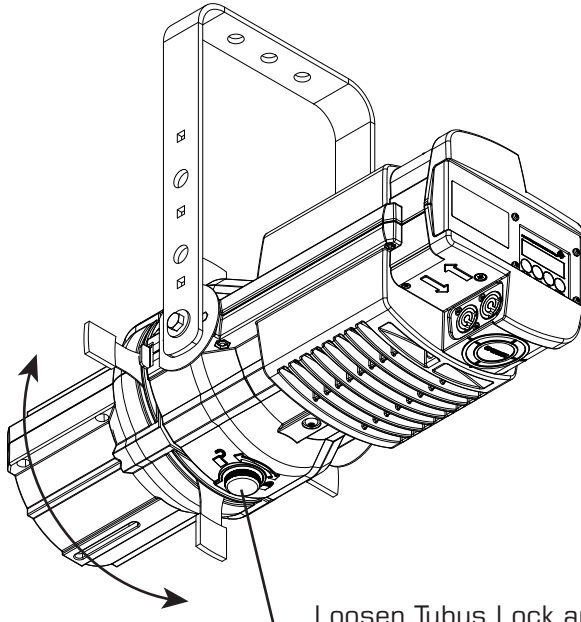
He has got a point but I found this to be the easiest way to connect them and as I am the one writing this.....

DISMOUNTING THE TUBUS FROM THE FORCE V



Place the fixture on a flat surface.
Loosen the Tubus Rotation Lock knob by turning counterclockwise.
Retract the Tubus Lock Tabs and turn the Force V approx. 15 degrees counterclockwise.
Lift the Force V off.

ROTATING THE TUBUS



Loosen Tubus Lock and turn the tubus into the desired position and lock it again.

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: 137 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

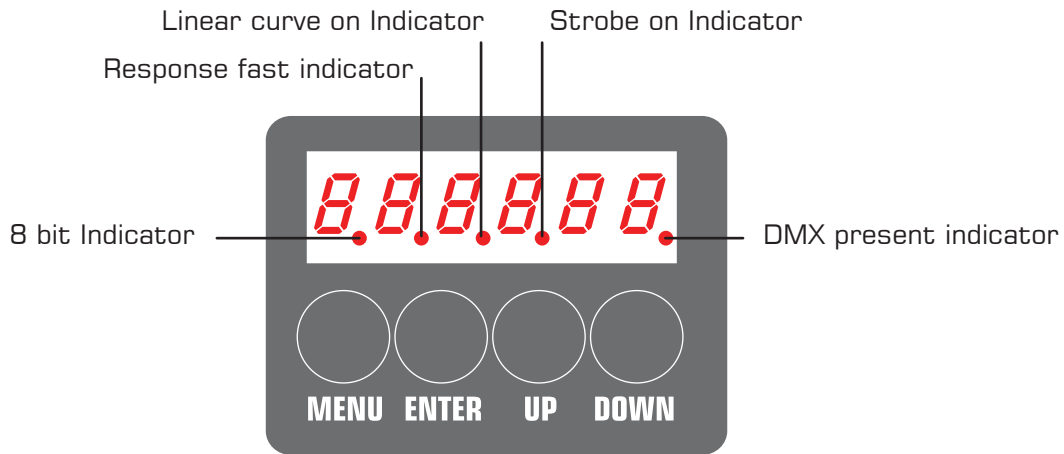
2 at 16bit: Dimmer

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.



- 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	2	Dimmer	0 - 255	0 - 100	Coarse Dimming
		Strobe	0 - 5	0	Open
		mode	6 - 125	1 - 49	Slow to Fast Strobe
			126 - 130	50	Open
			131 - 250	51 - 99	Slow to Fast Random
3	Strobe length	0	0 - 100	Open 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	0 - 5	0	Open
		mode	6 - 125	1 - 49	Slow to Fast Strobe
			126 - 130	50	Open
			131 - 250	51 - 99	Slow to Fast Random
4	Strobe length	0	0 - 100	Open 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 approx. 17 (7%)

SOFTWARE MENU

Default values indicated by **bold** font

Addr	1	DMX adress value 1 - 512
Mode	Resolution	8 bit resolution 16 bit resolution
	Response	Slow (fade between values) Fast (snap between values)
	Curve	Square dimmer curve Linear dimmer curve
	Strobe	OFF On - (adds 2 strobe channels)
	Fan	HIGH - No fan speed limit LOW - Fan speed limited (Silent)
	noDMX	<i>Action when loss of DMX signal:</i> HOLD - last received DMX value OFF - Sets output to zero MAN - Go to Manual DMX value
	Display	OFF 2n - Display off after 2 minutes ON - Display always on
	Tools	Ver
HW Ver		Shows hardware version
L Temp		LED temperature
DMX In		3 first digits shows DMX adress 3 last digits shows DMX value
Reset		Confirm (Reset unit by pressing enter)
test Fan		Fan test First 2 digits - set fan speed level 0 - 31 Last 3 digits - RPS (rounds per second)
test display		Display test - cycles through all segments of the display
Log		Log C° Minimum and maximum logged temperature in °C UP and DOWN scrolls min. and max.
		on time PSU on time in hours
		on LED LED on time in hours
	on Cnt Counts number of times unit has been switched on	
	Serial Internal serial number used as service number	
	PSU U PSU voltage in Volts	
	DMX HZ DMX refresh rate	
	DMX CH No. of DMX ch. transmitted by controller	
	DMX br Break lenght of DMX in microseconds	
Manual	0	Manual intensity 0 - 100% Intensity saved when pressing ENTER (Display is always on in manual mode)

POWER UP

After power ON, the unit will be operational after 10 seconds.
During the power up the unit will do selftests, including fan test.

SPECIAL FUNCTIONS

Within the first 10 seconds PRESS and HOLD...

...ENTER till the display reads "MAN 00" to reset stored manual value to zero.
...MENU till the display reads "RESET" to reset all modes and adress settings to default.
...DOWN till the menua reads "INTRO" to show the units Software Version.

DISPLAY ORIENTATION

To flip orientation off display press UP and DOWN simultaneously.

MODE FEATURES EXPLAINED (Default settings in bold)

Resolution:	8 bit:	Less DMX channels used.
	16 bit:	Smoother fades.
Response:	Slow:	Fades between values. Smoother fades.
	Fast:	Snaps between values. Fast operation.
Curve:	Square:	Dimmer curve designed for LEDs
	Linear:	Standard dimmer curve
Strobe:	OFF:	Less DMX channels used.
	ON:	Strobe function added.
noDMX:	HOLD:	If DMX signal is lost, the unit will maintain the last value received.
	OFF:	If DMX signal is lost, the unit will go to 0% light level.
	MAN:	If DMX signal is lost, the unit will go to the saved manual light level
Display:	OFF 2n:	The display will switch off after 2 minutes of idle operation.
	ON:	The display will always be on.

FAQ - TROUBLESHOOTING

At upstart the display keeps changing between bl_x_xx and 4551

1. Software upload has been interrupted.
Upload new software.

The luminaire does not respond to DMX

1. Check - that the cable is properly connected to DMX IN
2. Check - that the DMX present indicator is on.
3. Check - "DMX IN" in the menu to see if the luminaire receives any DMX data.

The luminaire is flashing

1. Check your strobe settings vs. your patch

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SPECIFICATIONS

Physical: (Force V NOT attached to tubus)

Depth: 350,18 mm / 13,79"
Width: 239,50 mm / 9,43"
Height: 416,32 mm / 16,39"
Weight: 6,5 kg / 14,33 lbs

Data:

DMX Channels:
1 or 3 at 8bit:
2 or 4 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: 137 W.
This fixture must be connected to ground.

Thermal:

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

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

CHANGES

SW Changes:

Optimized software delay on keys to prevent "double clicking"

New Functions:

Added a serial number as a service number. Not the actual fixture serial number.

Added warning if supply voltage is out of range, for advanced troubleshooting.

Added menu Power On Count, counts number of times fixture has been turned on.

Bugs:

Updated the timer, Fixture On Cnt and LED On Cnt, to increase counter stability

Temperature warning when at minus temperatures changed to only show the temperature.