BB&S

FORCE V

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.
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.

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

CONTENTS

SAFETY

Safety Notice:
It is important to read ALL safety information and instructions in this manual before install-ing 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 war-ranty.
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.
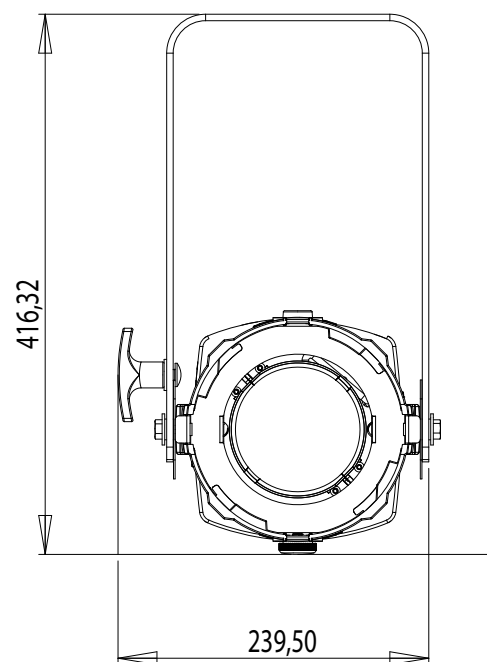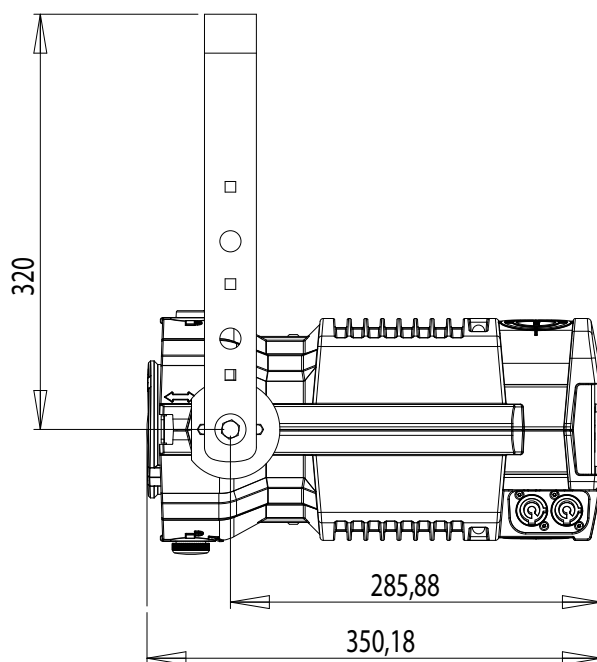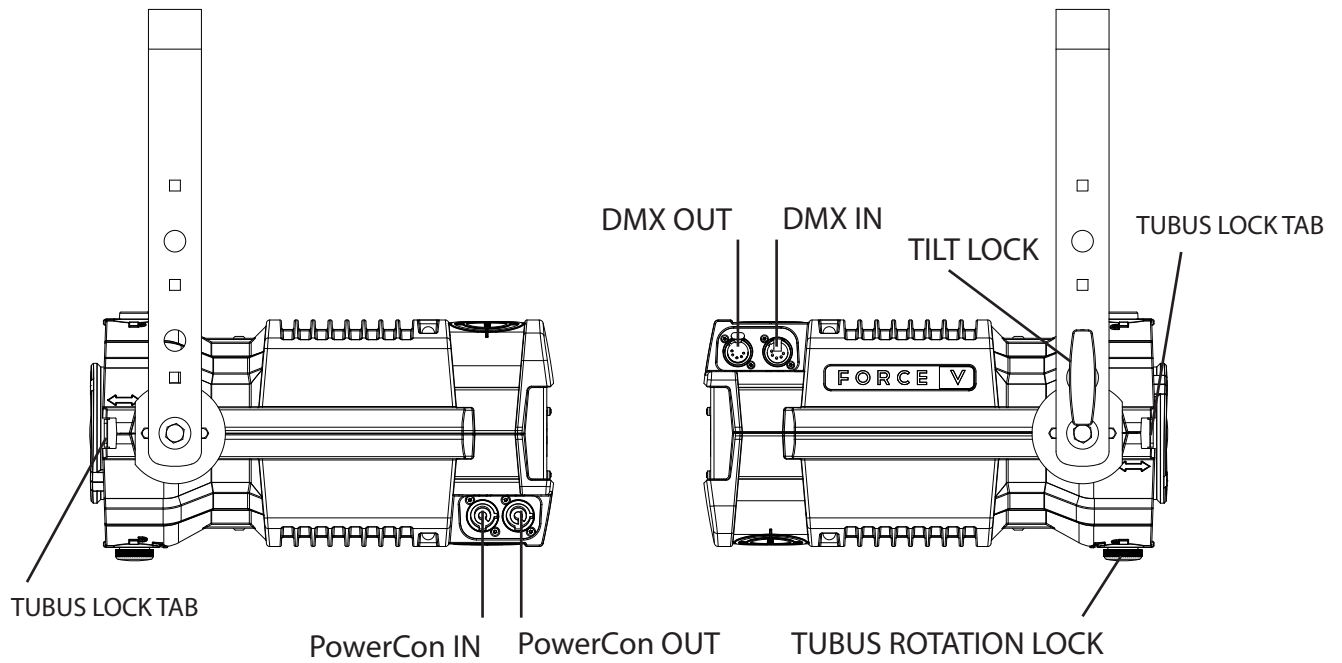Vacuum or gently blow away any dust from fan blades and grills
Very gently clean the LED with Isopropyl alcohol.
Clean the lenses with a soft damp cloth.

POWER:
Never connect to dimmer power.

PRODUCT OVERVIEW

DMX OUT   DMX IN   TILT LOCK   TUBUS LOCK TAB

TUBUS LOCK TAB

PowerCon IN   PowerCon OUT   TUBUS ROTATION LOCK

320

285,88

350,18

416,32

239,50

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)
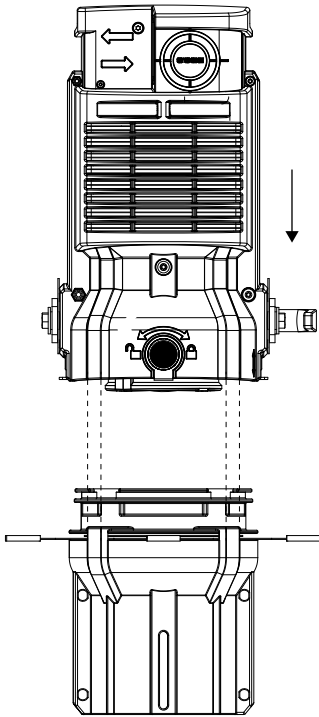
DMX operation:

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)

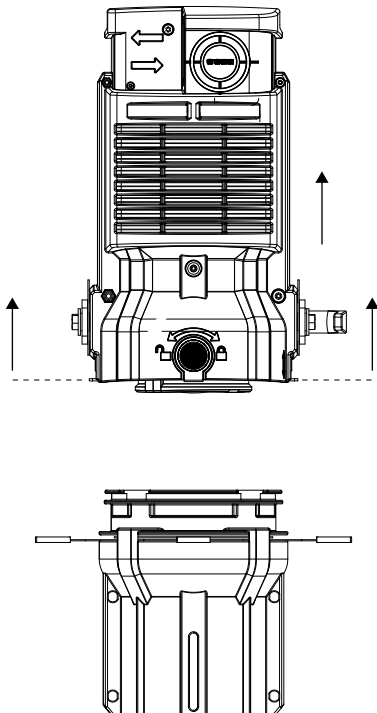Use it.

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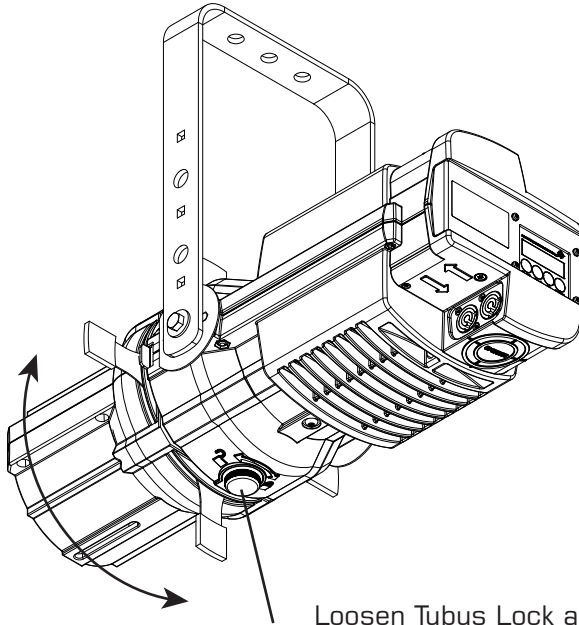
Loosen Tubus Lock and turn the tubus into the desired position and lock it again.

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
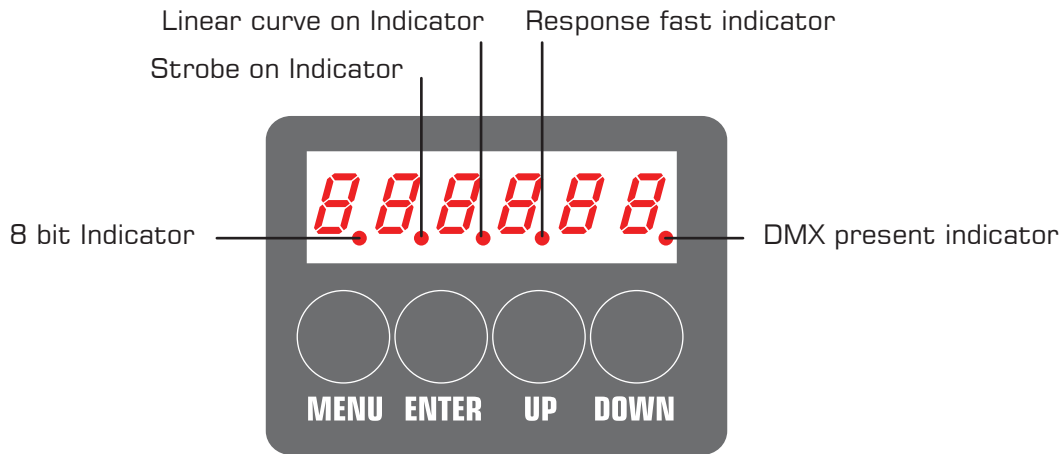4 at 16bit: Dimmer w. strobe
Protocol: USITT DMX512-A

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.

Linear curve on Indicator

Response fast indicator

Strobe on Indicator

8 bit Indicator

DMX present indicator

MENU **ENTER** **UP** **DOWN**

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
	2	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
	2	Dimmer	0 - 255	0 - 100	Fine dimming
	3	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 Lenght, that if the Strobe Lenght is egual 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 `Addr`	1		DMX adress value **1** - 512
Mode `ModE`	Resolution `rESoLu`		8 bit resolution **16 bit resolution**
	Response `rESPon`	`SLoU` `FASt`	**Slow** (fade between values) Fast (snap between values)
	Strobe `StrobE`	`oFF` `on`	**OFF** On - (adds 2 strobe channels)
	Curve `CurUE`	`SquArE` `LInEAr`	**Square** dimmer curve Linear dimmer curve
	Fan `FAn`	`HIGH` `Lo`	**HIGH** - No fan speed limit LOW - Fan speed limited (Silent)

	noDMX `no dMH`	`HoLd`
		`oFF`
		`MAn`
			Action when loss of DMX signal:
			HOLD - last received DMX value
			OFF - Sets output to zero
			MAN - Go to Manual DMX value

	Display `dISP`	`oFF 2n` `on`	**OFF 2n** - Display off after 2 minutes ON - Display always on
Tools `tooLS`	Ver `UEr`		Shows software version - *READOUT ONLY*
	HW Ver `HU UEr`		Shows hardware version - *READOUT ONLY*
	Temp `tEnP`		LED temperature - *READOUT ONLY*
	DMX In `dMH In`		3 first digits shows DMX adress - *READOUT ONLY* 3 last digits shows DMX value - *READOUT ONLY*
	Reset `rESEt`	`ConFIr`	Confirm (Reset unit by pressing enter)
	test Fan `tStFAn`		Fan test First 2 digits - set fan speed level 0 - 31 Last 3 digits - RPS (rounds per second) - *READOUT ONLY*
	test display `tStdSP`		Display test - all seven segments of each digit on - *READOUT ONLY*

SOFTWARE MENU   ....continued

Default values indicated by **bold** font

Log			
`LoG`	`nAHFAn`	Max Fan	Maximum fan speed logged. (in RPS) - *READOUT ONLY*
	`FAnrPS`	Fan RPS	Current fan speed (in RPS) - *READOUT ONLY*
	`EEProM`	EEProm	Developer info
	`LEd U`	LED U	LED voltage in Volts - *READOUT ONLY*
	`PSu U`	PSU U	PSU voltage in Volts - *READOUT ONLY*
	`LEdI nt`	LED int	for troubleshooting - *READOUT ONLY*
	`LoG Cᵒ`	Log C°	Minimum and maximum logged temperature in °C
			UP and DOWN scrolls min. and max.
	`ontI ME`	on time	PSU on time in hours - *READOUT ONLY*
	`on LEd`	on LED	LED on time in hours - *READOUT ONLY*
	`dEMo`	Demo	Developer info
	`dMH H2`	DMX HZ	DMX refresh rate - *READOUT ONLY*
	`dMH CH`	DMX CH	No. of DMX ch. transmitted by controller. - *READOUT ONLY*
	`dMH br`	DMX br	Break lenght of DMX in microseconds - *READOUT ONLY*
	`LEd EE`	LED EE	Developer info

Manual	0	Manual intensity **0** - 100%
`MAnuAL`		Intensity saved when pressing ENTER
		(Display is always on in manual mode)

FAQ - TROUBLESHOOTING

To be implemented

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.

WWW.BROTHERS-SONS.DK

12

software v: 1_3_00 / hardware v. 10 / user manual v. 1.0

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