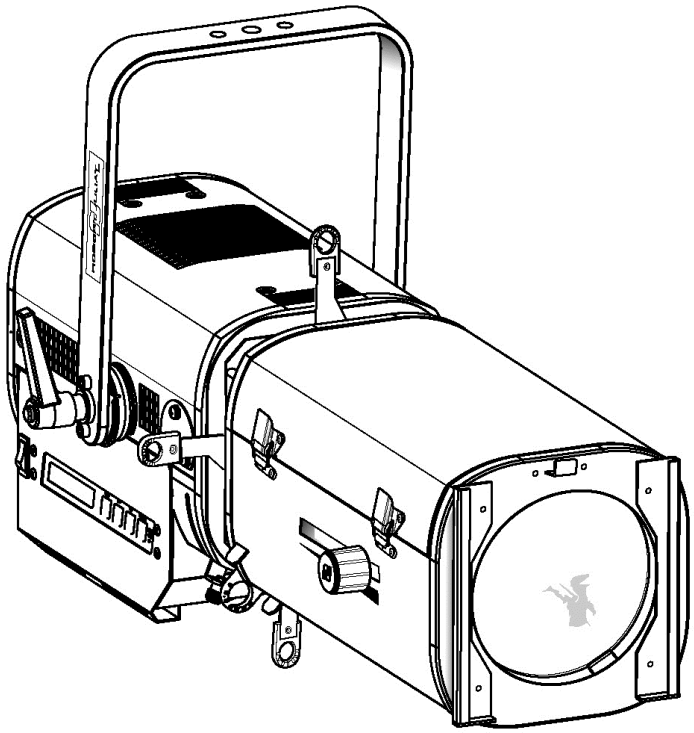
Manuel / *Manual*

ZEP

PROJECTEUR DE DéCOUPE
PROFILE SPOT



REF.	STANDARD *STANDARD*	NORD-AMéRICAIN *NORTH AMERICAN*
28 – 54°	643SX	643CSX
16 – 35°	644SX	644CSX
11 – 26°	641SX	641CSX

PROJECTEUR DE DéCOUPE LED 150W
150W LED PROFILE SPOT

ZEP - 640SX
Version V1 – 11/07/12

DN41014600 V1.1

ROBERT JULIAT

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EN

Table of contents :

1 User’s instructions

GENERAL INSTRUCTIONS

1. Not for residential use.
2. **These fixtures must only be serviced by a qualified technician.**
3. In addition to the instructions indicated on this page, relevant health and safety requirements of the appropriate EU Directives must be adhered to at all times.
4. This fixture is in compliance with section 17 - Lighting appliance for theatre stages, television, cinema and photograph studios. Standards NF EN 60598-1 and NF EN 60598-2-17.
5. This fixture is rated as IP20, and is for indoor use only.

FIXTURE

6. Ensure fixture is correctly mounted on an appropriate support.
7. Protection screens and lenses must be replaced in the event of any damage, such as cracks or deep scratches, since these might reduce performance.
8. When hung or flown the fixture must be secured by an additional hanging accessory (such as a safety cable or bond) of suitable length.
9. Safety bonds or cables must be securely attached to the back of the fixture and be as short as possible, or rolled up as necessary, to minimise travel distance should the fixture be dislodged.
10. Movable accessories (scroller, etc.) must also be secured with a suitable safety cable or bond at the front of the fixture.
11. The combined weight of both the fixture and the accessories must be considered when choosing the load-bearing capability of safety cable or bond.
12. Do not open lighting fixture when the source is on.
13. WARNING: LED source become hot during use. Allow fixture to cool before servicing.
14. Do not tamper with design of fixture nor any of its safety features.
15. Tighten electrical mains cable connections regularly and replace with one of identical specification if damaged.
16. Use only with correct power supply.

VENTILATION

17. Keep well away from flammable material.
18. Not for outdoor use. Do not cover. Do not permit fixture to get wet.
19. To avoid overheating, do not obstruct air vents.
20. Ensure any cooling fans are in correct working order. If fans are not working, turn fixture off immediately and service as necessary.

CLEANING

21. Do not touch LED source with fingers.
22. Clean all optical parts with alcohol-based cleaner.
23. Clean all filters regularly.

POWER SUPPLY

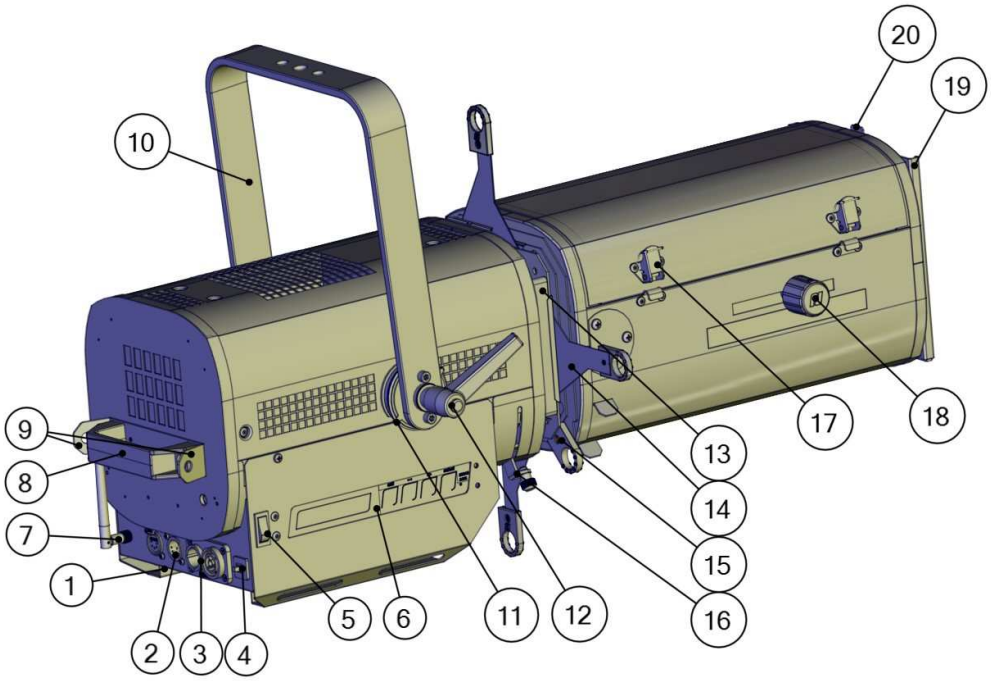
24. Disconnect from the mains before servicing.
25. Mains connection only. Do not connect to "electronic output" such as dimmer.
26. Not for outdoor use. Do not cover.
27. Ensure power supply circuit breakers, always remain accessible.

PLEASE NOTE

These products have been built to conform to European standards relating to professional lighting equipment. Any modification made to our products will void the manufacturers' warranty.

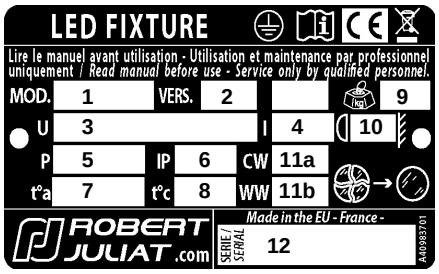
2 Presentation

2.1 Functions

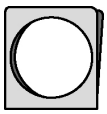


Functions :	
1. Identification plate 2. Data connectors (IN and OUT) 3. Power connectors (IN and OUT) 4. Thermal breaker 5. Power switch 6. Control board 7. Wireless DMX antenna (option) 8. Handle 9. Safety cable attachement point 10. Hanging yoke 11. Tilt index	12. Tilt locking handle 13. Gate: slots for gobo holder and/or iris 14. Shutters 15. Shutter locking system 16. Lens tube rotation locking button 17. Lens tube access 18. Zoom adjustment 19. Front slot for accessoires and gel frame holder 20. Front slot locking system

2.2 Identification plate

Description :	
	1. MOD. : Model 2. VERS. : Version 3. U : Nominal voltage input (V) 4. I : Nominal intensity (A) 5. P : Maximum power input (W) 6. IP : International Protection Rating 7. t°a : Ambiant temperature (°C) 8. t°c : Maximum external temperature of the unit (°C) 9. Net weight (Kg) 10. Minimum distance between a flammable material and the lighting unit (m) 11. Colour temperature version : • 11.a CW = Cool White • 11.b WW = Warm White 12. Serial number

2.3 Accessories included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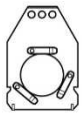
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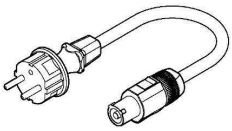
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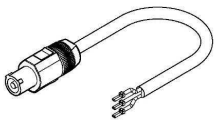
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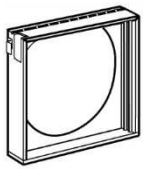
	Reference	Description
1	PF500M2	180x180 mm (7.1x7.1 in) metal filter holder
2	SGUX	Universal 'A'-size gobo holder (metal, glass,frosted glass)
3	D8	Shutters (x4)
4		Power cable with CEE7/7 type IN connectors (standard version)
5		UL/CSA Power cable without connector (North American version)

2.4 Optional accessories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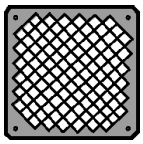
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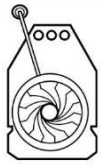
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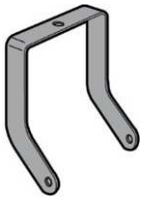
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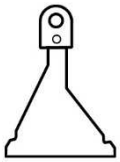
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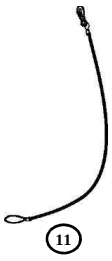
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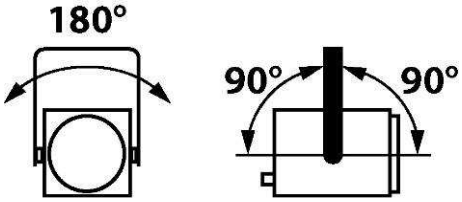
	Reference	Description
1	CAV 600 A	Double slot front cassette for 180x180mm accessories
	CAV 600 AE	Double slot front cassette for 185x185mm accessories
	CAV600 C	Double slot front cassette for 191x191mm (7-1/2") accessories
2	PCP1716A	IEC60309 6h 16A 2P+T blue (P17) power connector
3	W-DMX	W-DMX wireless DMX
4	G500	180x180mm safety grid
5	IWSX755**I**	Drop-in iris (monoplane) with holder
6	VD 120	120x120mm inner frosted glass
7		Angled yoke
8	D8	Shutter
9	876	40x10mm hook clamp with 28mm screw for Ø35 to Ø50mm
10	880	40x10mm hook clamp with 28mm screw for Ø50 to Ø63mm
11	CS2	Safety cable (length = 600mm)

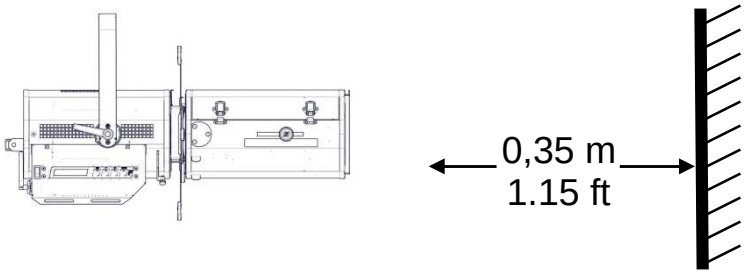
3 Set-up

3.1 Mechanics

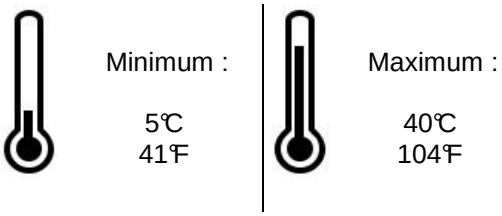
3.1.1 Operating positions



3.1.2 Minimum distance between a flammable material and the lighting unit



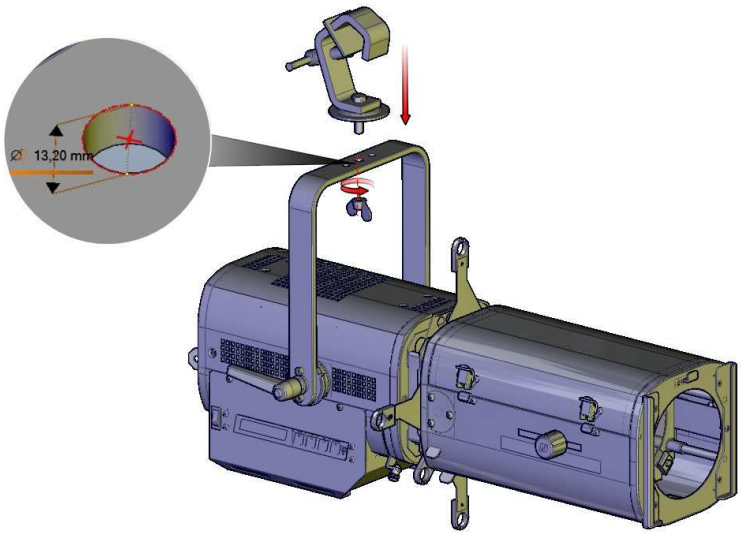
3.1.3 Instructions for use



IP20 – Indoor use only

3.1.4 Hanging

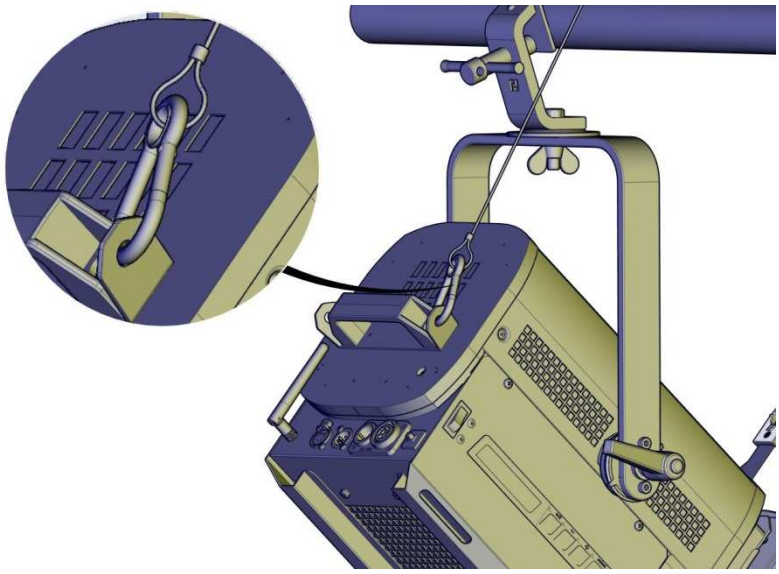
- Ensure fixture is correctly mounted on an appropriate support.



Net weight : 643SX = 15,3 kg (33.7 lbs) / 644SX = 17 kg (37.4 lbs) / 641SX = 17 kg (37.4 lbs)

3.1.5 Safety cable

- When hung or flown the fixture must be secured by an additional hanging accessory (such as a safety bond or cable) of suitable length.
- The combined weight of both the fixture and the accessories must be considered when choosing the load-bearing capability of safety cable or bond.
- Safety cables or bonds must be securely attached to the back of the fixture and be as short as possible, or rolled up as necessary, to minimise travel distance should the fixture be dislodged.



3.2 Electrical

3.2.1 LED source

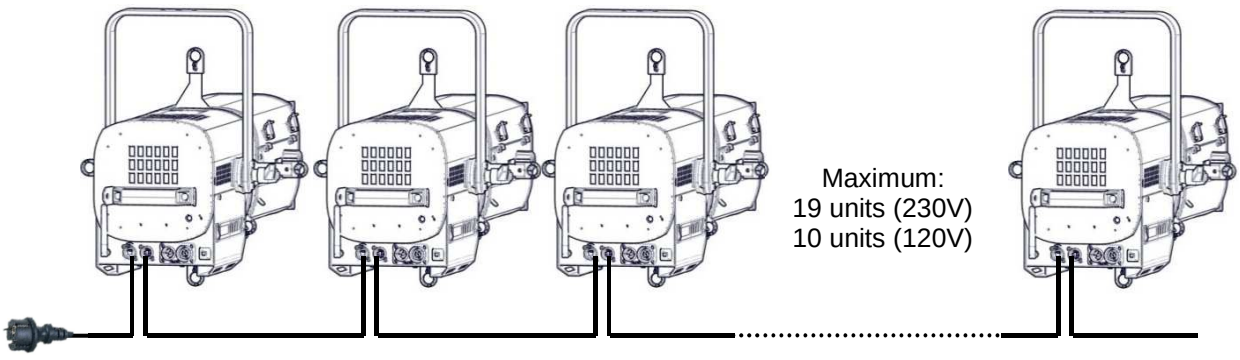
Never touch or scratch LED surface.
Never use compressed air directly on LED chip.

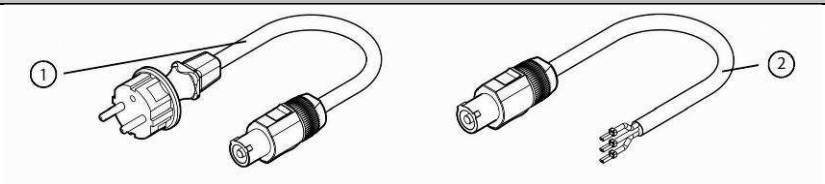
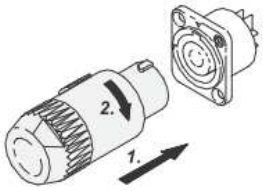
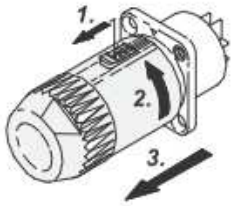
3.2.2 Power

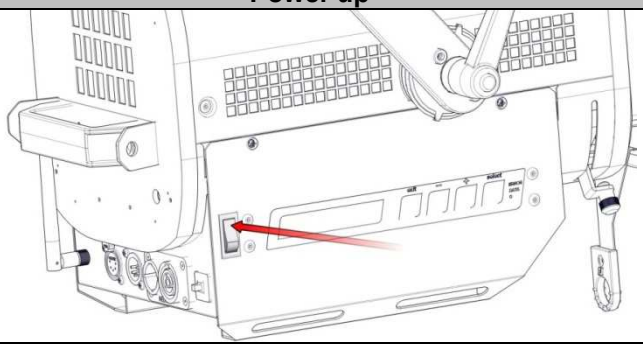
Power supply			
Voltage	**Frequency**	**Input power**	**Connectors**
90 → 264 V	47-63 Hz	0,8 A / 185 W @ 230V 1,5 A / 185 W @ 120V 1,8 A / 185 W @ 90V Max. 2.1A Standby mode: 7 W	Neutrik powerCON TRUE1 ref. NAC3PX (max. 20A)

- Class 1 product. **This luminaire must be grounded.**
- Must be connected directly to AC power. **Do not connect to dimmer power**.
- Automatic power detection.
- 4A breaker.
- **Daisy chain : maximum of 19 units (230V) / 10 units (120V)**

Daisy chain (with delivered power cable) :

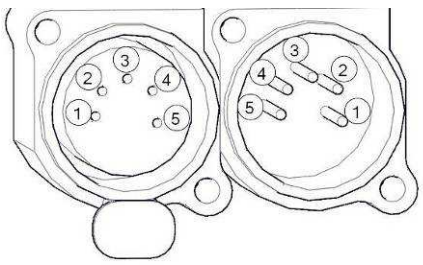


Power cable						
						
Power cable		**Connector**	**Mains plug**	**Cable type**	**Cable length**	**Wiring**
1	Standard version	Neutric PowerCon® NAC3FX	CEE7/7	3G1.5 H07RNF	3 m 9.8 ft	Live: Brown Neutral: Blue Ground : yellow/Green
2	North American version		-	14AWG SJ TYPE (UL/CSA)	1,5 m 4.9 ft	Live: Black Neutral: White Ground : Green
						
In				Out		

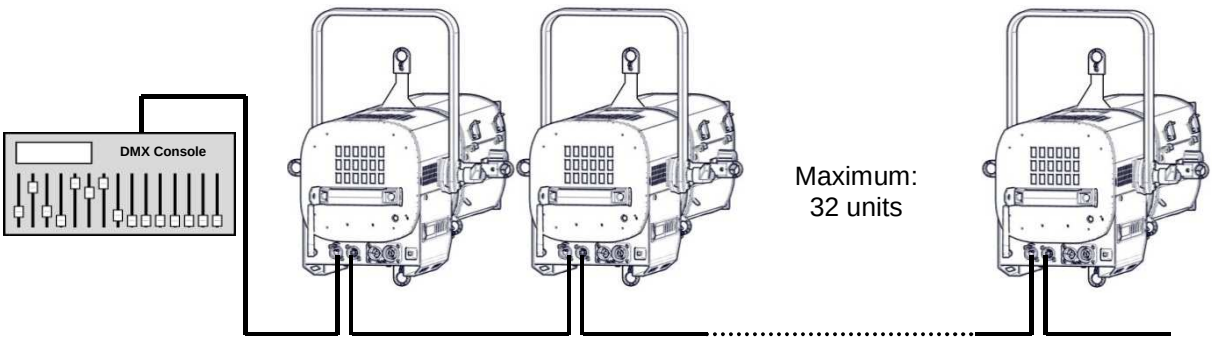
Power up


3.2.3 DATA

DATA		
Protocol	**Input connector**	**Output connector**
USITT DMX 512-A	XLR 5-pin	XLR 5-pin

DATA connectors			
PIN #	**DMX**	**Description**	
1	Shielding	Foil & Braided Shield	
2	DMX (-)	1st conductor of 1st twisted pair	
3	DMX (+)	2nd conductor of 1st twisted pair	
4	Not used	1st conductor of 2nd twisted pair	
5	Not used	2nd conductor of 2nd twisted pair	
			DMX OUT DMX IN

Daisy chain :

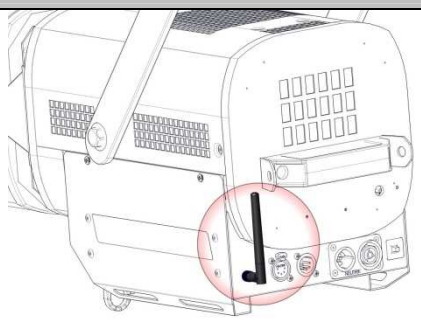


Integrated terminal plug:

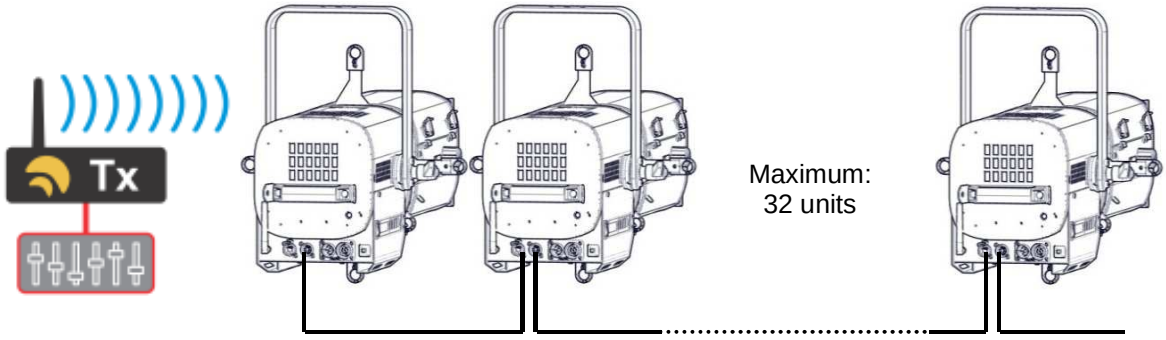
If no XLR connector is detected on DMX OUT connector, a 120Ω terminal plug is automatically activated. Additional terminal plug on the last unit is not necessary.

Wireless DMX option

- Protocol: Wireless Solution W-DMX™
- Refer to the OEM User's manual for general recommendations and use of the transmitter : http://www.wirelessdmx.com
- The antenna must be clearly visible from the transmitter
- See. *4.9.2* for activation
- **Do not connect a DMX IN data cable in case of wireless DMX use**
- In case of protocol errors, the wireless DMX is automatically deactivated. To activate the wireless DMX again, disconnect the DMX IN data cable, and then switch the unit off and on.



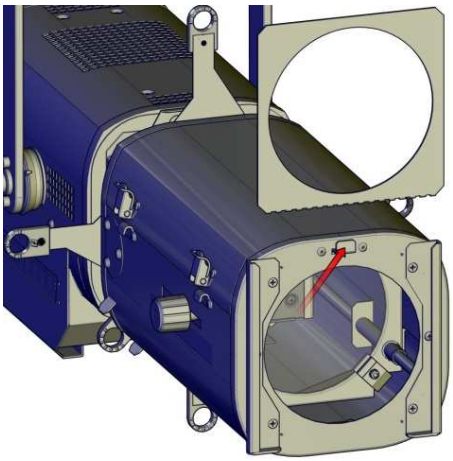
DMX mode:



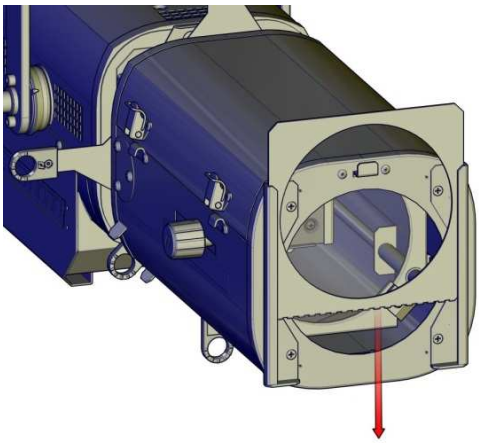
The first unit receives the DMX signal via the wireless network, then all the other units are connected to the first one via DMX data cable

3.3 Accessories

3.3.1 Front filter holder

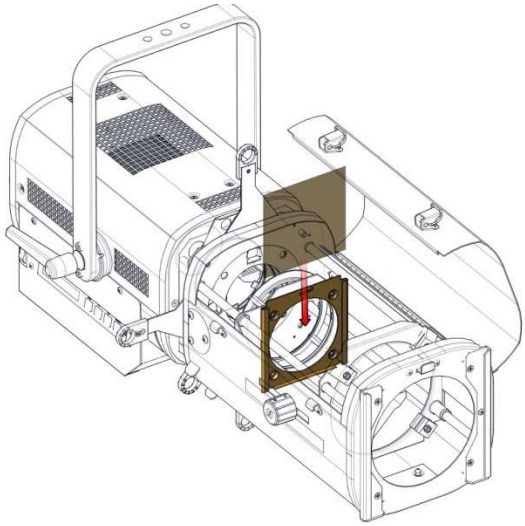


Step 1

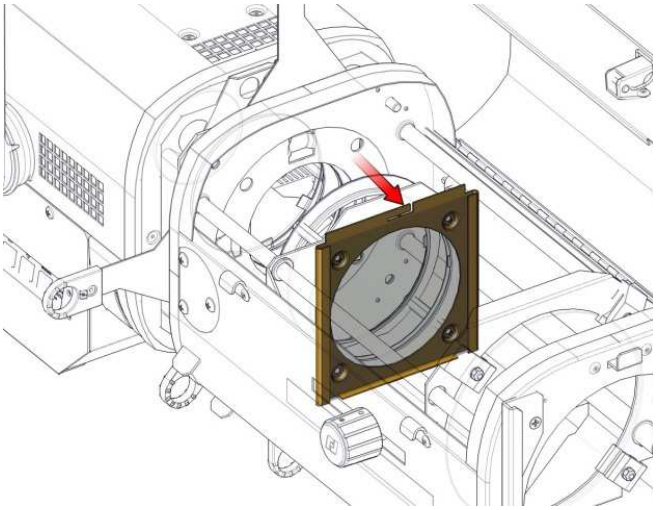


Step 2

3.3.2 Internal filter holder

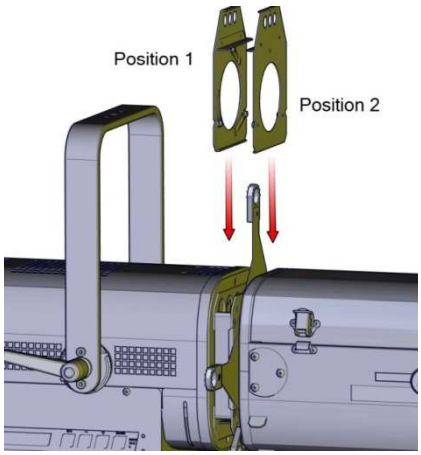


Step 1

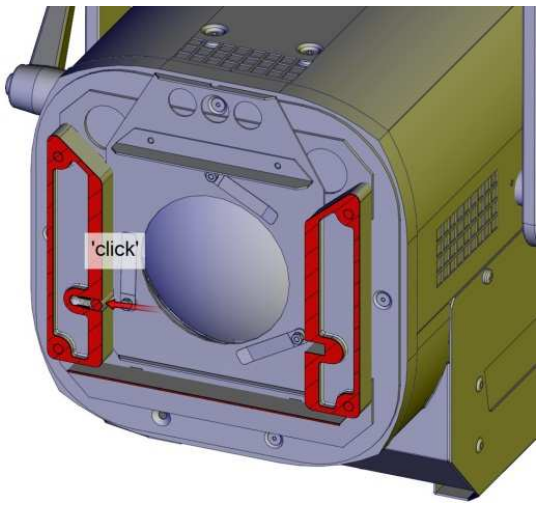


Step 2

3.3.3 Gobo holder / iris

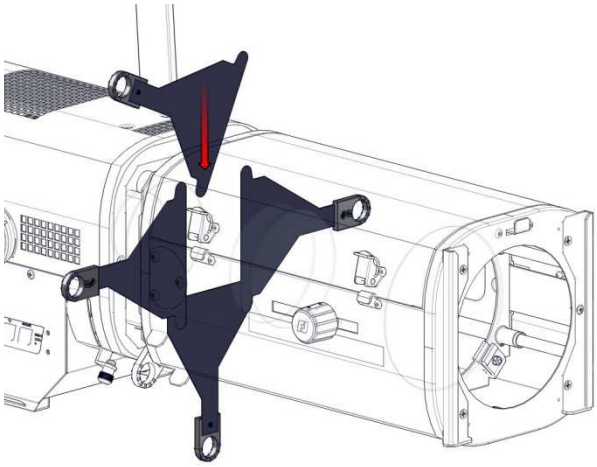


Step 1

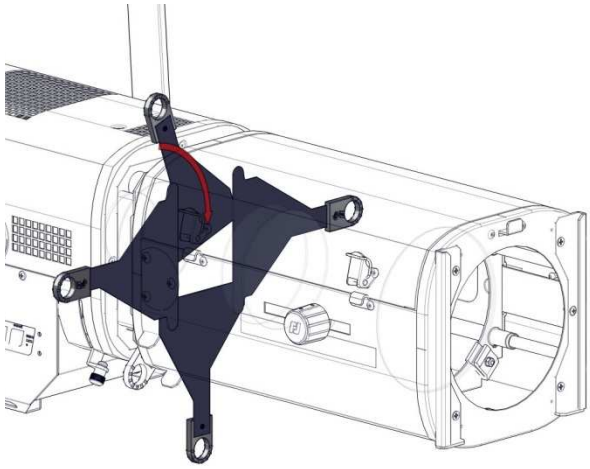


Step 2

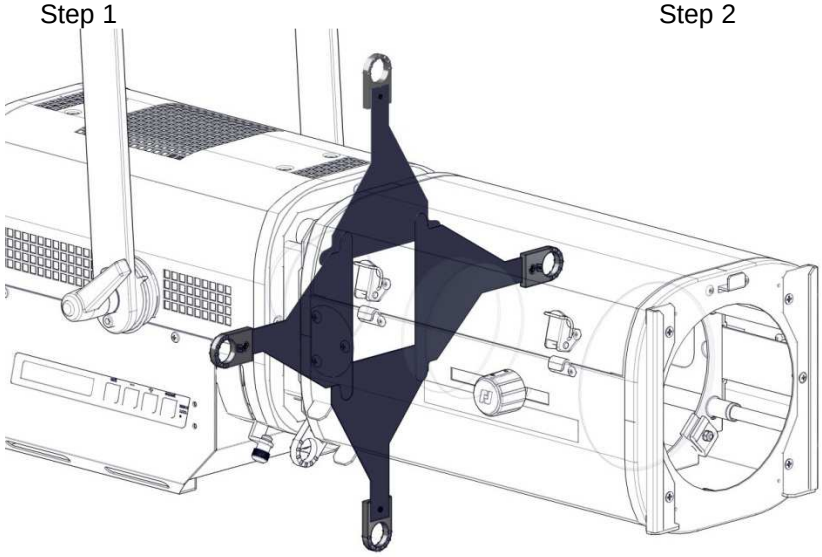
3.3.4 Shutters



Step 1



Step 2



Step 3

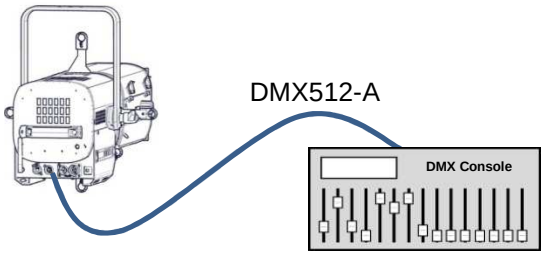
4 Operation

4.1 Light intensity

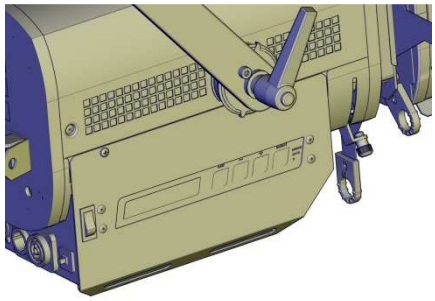
4.1.1 Range

4.1.2 Control

Remotely with DMX512-A protocol



Locally



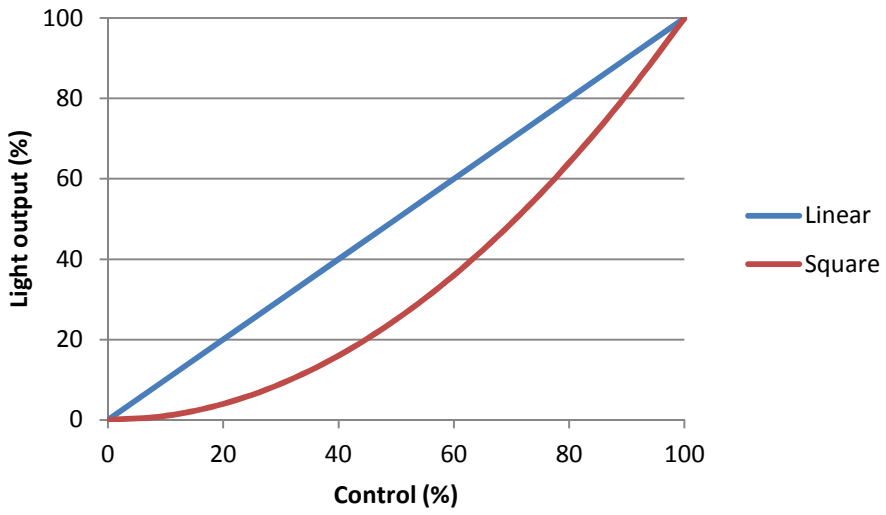
HTP mode (Highest Takes Precedence): Light output is the highest value of DMX512 command or local control
Focus mode : when standby display *1/6 DMX CONFIG.* Push *Exit* → Light output = 100% for 1 minute 2x times *Exit* → Light output = 0%

4.1.3 Parameters

- Resolution:

Mode	Resolution
8 bits	255 steps – 1 DMX channel
16 bits	65 535 steps – 2 DMX channels

- Curve: Linear / Square



- Smoothing :

Mode	Smoothing
Slow	Slow transition between 2 levels – equivalent to 1000W filament
Fast	Fast transition between 2 levels – equivalent to 600W filament
Without	Deactivated – Very fast transitions

- Dimming mode (*FLICKER MODE*):

Mode	Dimming
PWM	PWM dimming (Pulse With Modulation) – Frequency : 23.8kHz ➔ Accurate dimming
FREE	Constant current driving ➔ No flicker but less accurate on lower levels – LED switch on at 5% only
MIXTE	0 → 15% : PWM dimming (Pulse With Modulation) – Frequency : 23.8kHz 15 →100% : Constant current driving

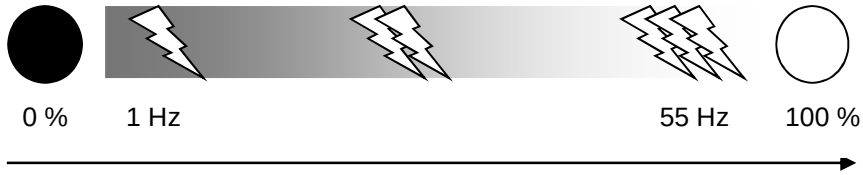
- Master mode (*MASTER CONTROL*):

DMX		Local	Light output
8/16bits	Master		
0 → 100%	100%	0%	0 → 100%
0 → 100%	50%	0%	0 → 50%
0%	100%	0 → 100%	0 → 100%
0%	50%	0 → 100%	0 → 50%
50%	100%	0 → 100%	50 → 100%
30%	80%	0 → 100%	30 → 80%

➔ Mode required when simultaneous remote and local control are necessary (example : followspot)

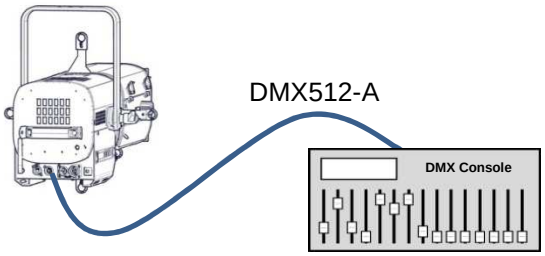
4.2 Strobe

4.2.1 Range



4.2.2 Control

Remotely with DMX512-A protocol

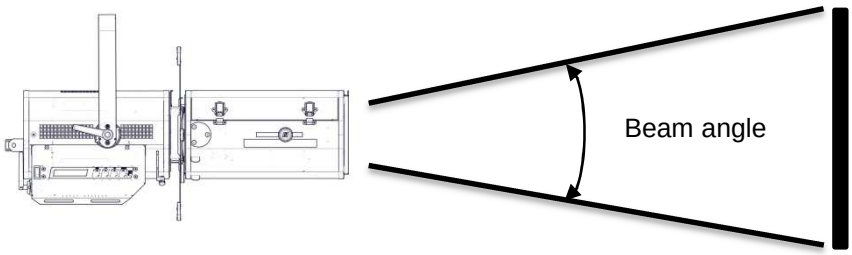


4.2.3 Parameters

Mode	Strobe
ON	1 DMX channel added to control the function
OFF	Function not activated

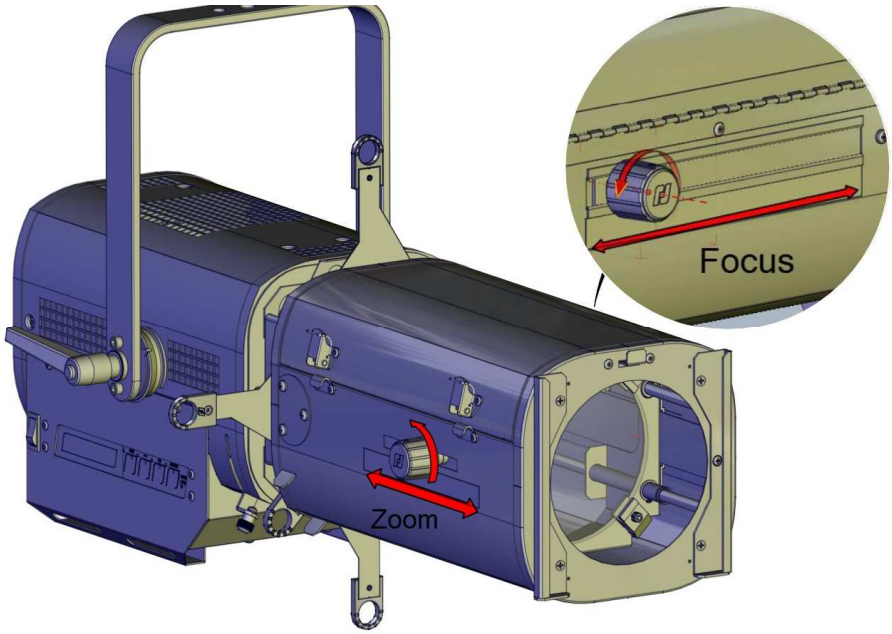
4.3 Beam size adjustment

4.3.1 Range



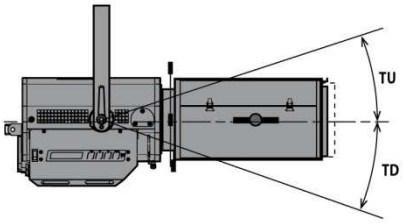
Model	Minimum beam	Maximum beam
643SX / 643CSX	28°	54°
644SX / 644CSX	16°	35°
641SX / 641CSX	11°	26°

4.3.2 Control

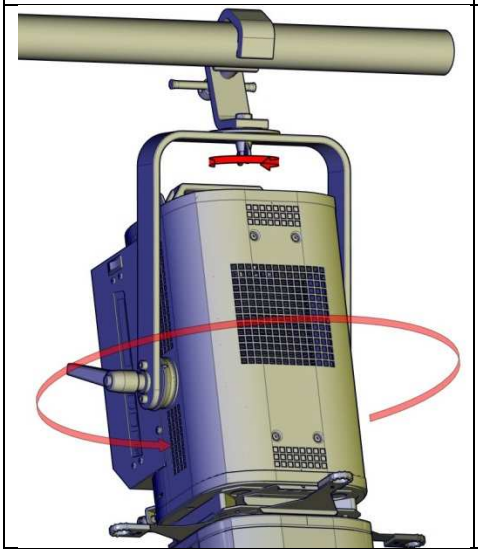
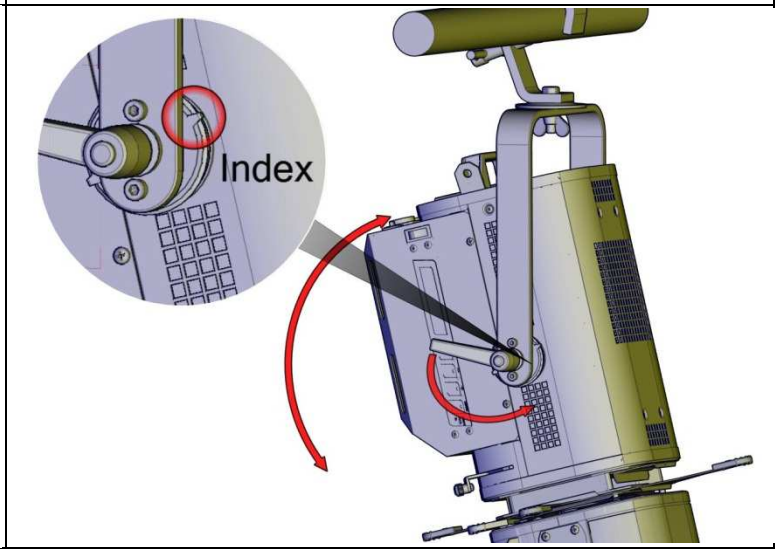


4.4 Orientation

4.4.1 Range

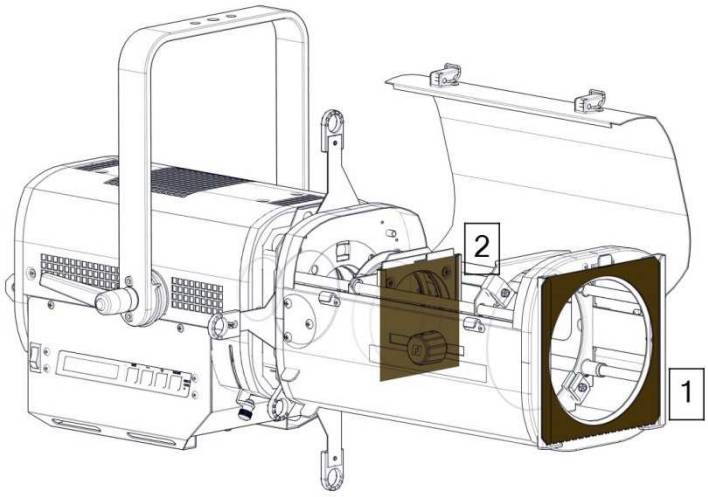
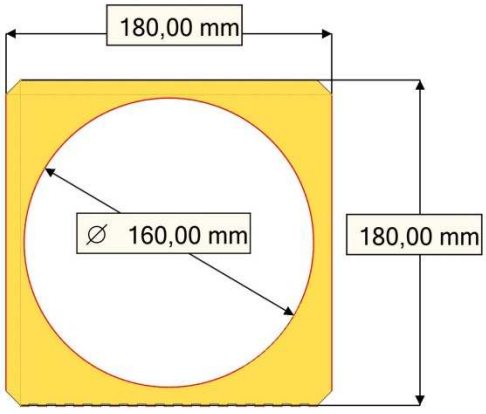
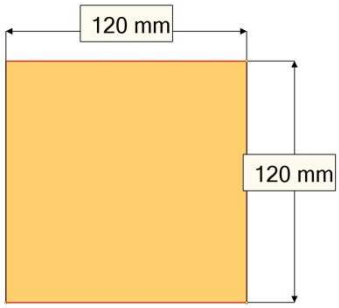
Function	Range
PAN	0 → 360°
TILT 	TU = 0 → 60° TD = 0 → 90°

4.4.2 Control

PAN	TILT
	

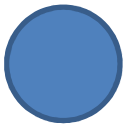
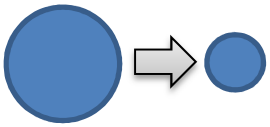
4.5 Colour

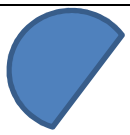
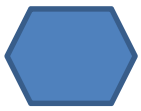
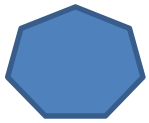
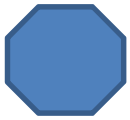
- Fixed colour:

Location		
	3. Front filter holder	**4. Internal filter holder**
Type	Standard coloured gel filter	Frosted or dichroïc glass Standard coloured gel filter
Dimensions		
Installation	See 3.3.1	

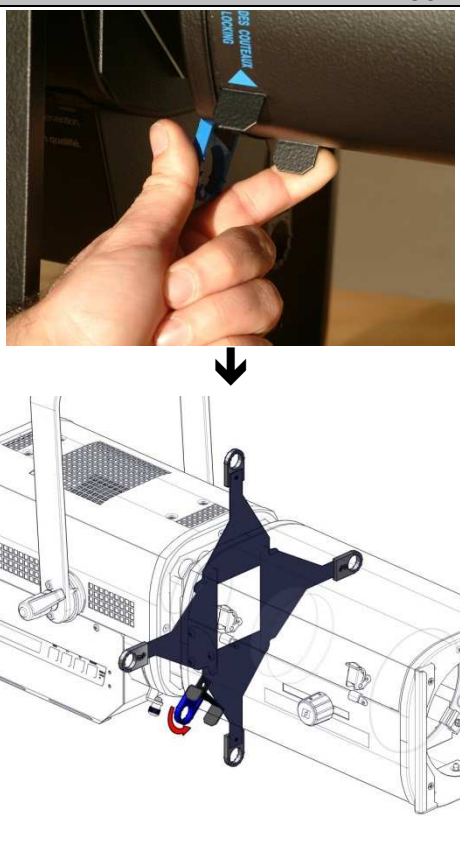
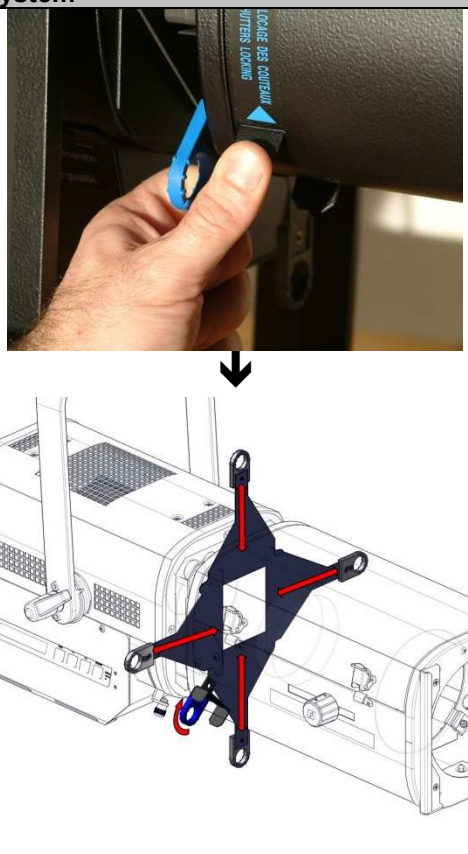
4.6 Beam shaping

4.6.1 Range

	
Open	Iris

			
1 shutter	2 shutters	3 shutters	4 shutters
			
5 shutters	6 shutters	7 shutters	8 shutters

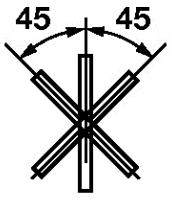
4.6.2 Control

Locking shutter system	
	
Locked	Unlocked

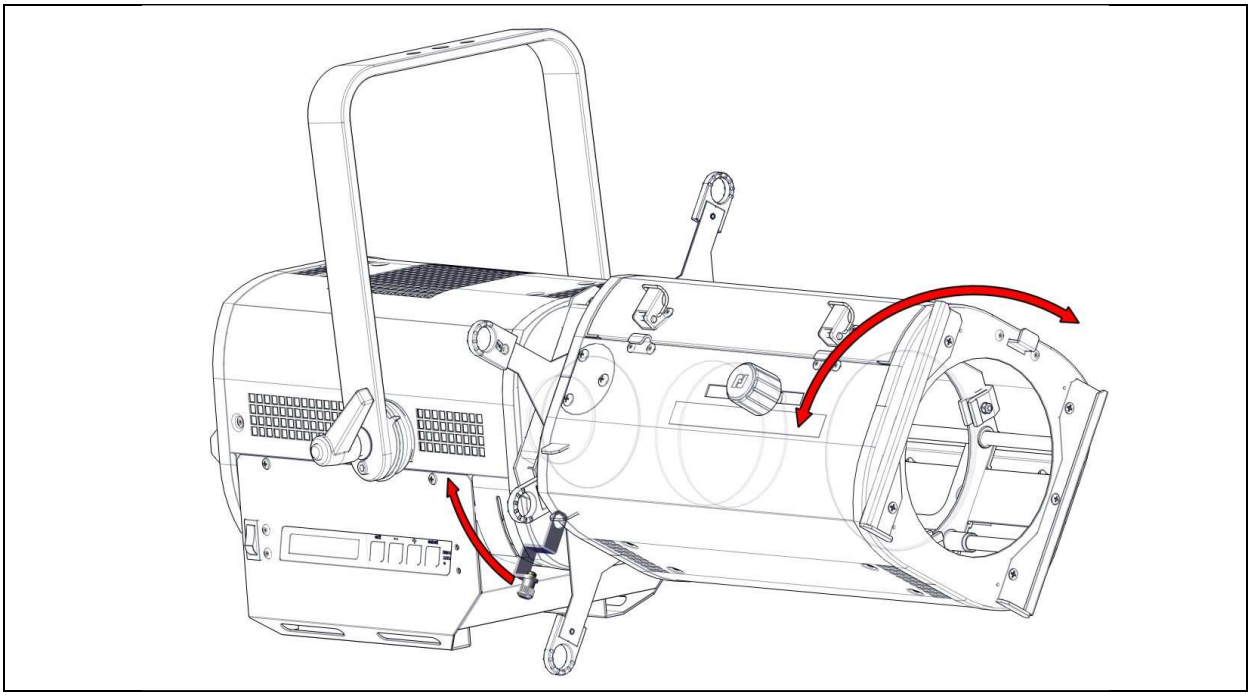
See *3.3 Accessories* for Gobo, Iris and additional shutters installation

4.7 Beam rotation

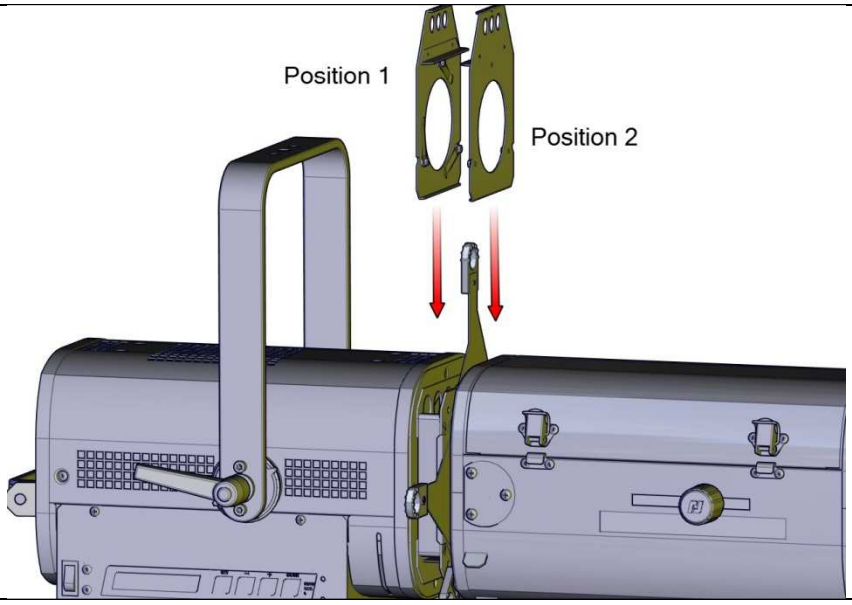
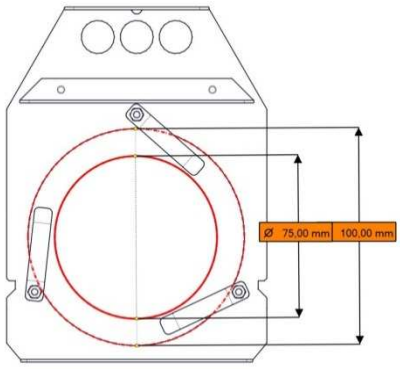
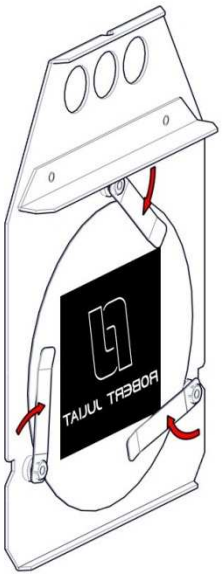
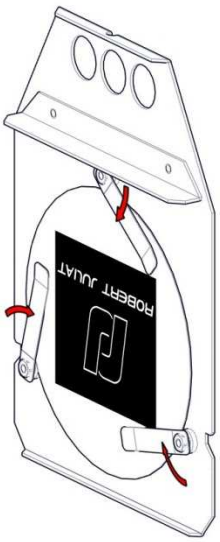
4.7.1 Range

Function		Range
		
Gobo	shutters	

4.7.2 Control

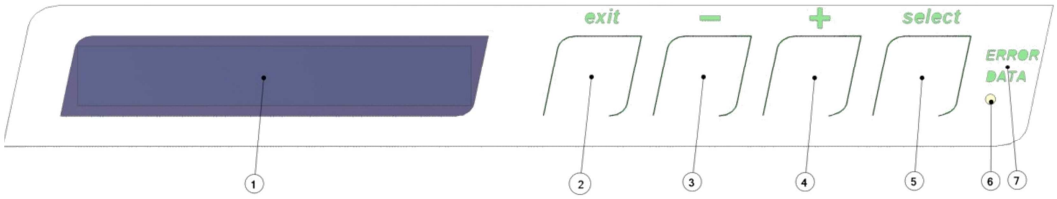


4.8 Gobos

<table>
<tr><td>Location</td><td colspan="2"> 
</td></tr>
<tr><td>Type</td><td colspan="2">Metal / Glass / Plastic</td></tr>
<tr><td>Dimensions</td><td colspan="2">A-size
 
</td></tr>
<tr><td>Installation</td><td>Position 1
  </td><td>Position 2
  </td></tr>
</table>

4.9 Control board

4.9.1 Display and Controls



	Function
1	Display
2	Exit the current menu option and/or go back
3	Scrolls through menus and/or Decrease blinking data value
4	Scrolls through menus and/or Increase blinking data value
5	Enter the current menu option and/or valid
6	Hard CPU reset
7	DMX and system LED feedback

4.9.2 Menus and parameters[2]

-⇳+ `1/6 DMX CONFIG.`
`Ch: 1 Val: 0%(a)`

Select `1/4 Hi.Byte CHANNEL`
`Ch.: 1 Val.: 0`

Select `1/4 Hi.Byte CHANNEL`
`Ch.: 1 Val.: 0`

-⇳+ `2/4 Lo.Byte CHANNEL`
`Ch.: 2 Val.: 0`

-⇳+ `3/4 Strobe CHANNEL`
`Ch.: 3 Val.: 255`

-⇳+ `4/4 Master CHANNEL`
`not activated`

DMX address

Data	
Ch :	DMX address
Val :	DMX level
(x) :	Highest command detected (http mode) : *a* : analog / *l* : local level *d* : DMX / *!* : thermal protection *m* : local potentiometer / *M* : master

Channel 1 : 8 bits dimmer (coarse)

Data	
Ch :	DMX address
Val :	DMX level

Parameters (-/+)	
1 - 509	DMX address

Channel 2 : 16 bits dimmer (fine)

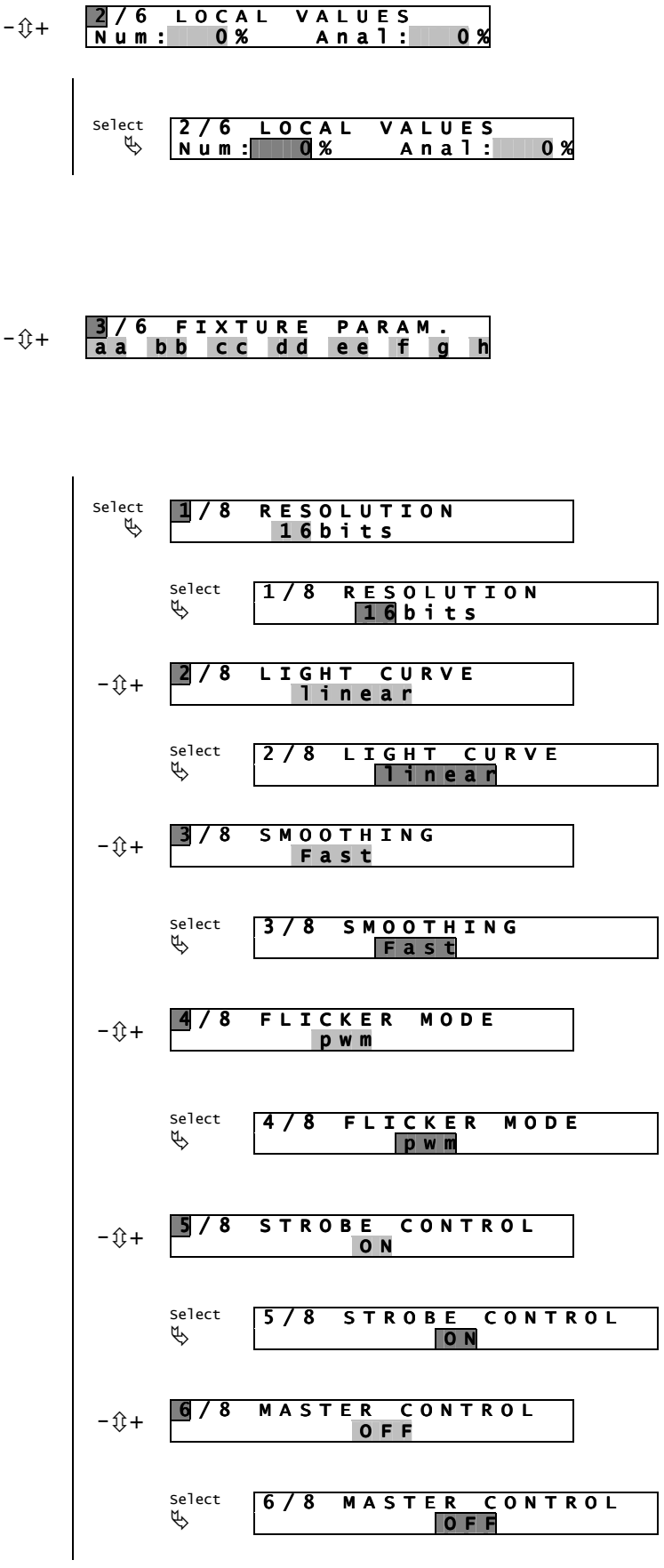
Data	
Ch :	DMX address
Val :	DMX level

Channel 3 : stroboscope

Data	
Ch :	DMX address
Val :	DMX level

Channel 4 : Function not activated in *Fixture Param.* menu

[2] *With factory settings*



Local control of light output

Data	
Num :	Local level from 0 to 100%
Anal :	local potentiometer level (option)

Parameters (-/+)	
0 - 100	Dimming level from 0 to 100%. Level stored by pressing *select*

Fixture parameters menu

Data	
aa	*Resolution* : *16*→16bits / *8*→8 bits
bb	*Light curve* : *Ln*→ Linear / *Sq*→Square
cc	*Smoothing* : *Fa*→Fast / *Sl*→Slow / *Wo*→Without
dd	*Flicker mode* : *Pw*→PWM / *Fr*→Free / *Mx*→Mixte
ee	*Strobe control* : *St*→ON / *Dm*→OFF
f	*Master control* : *M*→ON / _→OFF
g	*Analog control* : *A*→ON / _→OFF
h	*Maximum setting* : *R*→ ON / _→OFF

Choice of dimming resolution

Parameters (-/+)	
8	8 bits dimming (1 DMX channel)
16	16 bits dimming (2 DMX channels)

Choice of dimming curve

Parameters (-/+)	
linear	Linear curve
square	Square curve

Choice of smoothing mode

Parameters (-/+)	
fast	Fast transitions
slow	Slow transitions
without	Smoothing desactivated

Choice of dimming mode

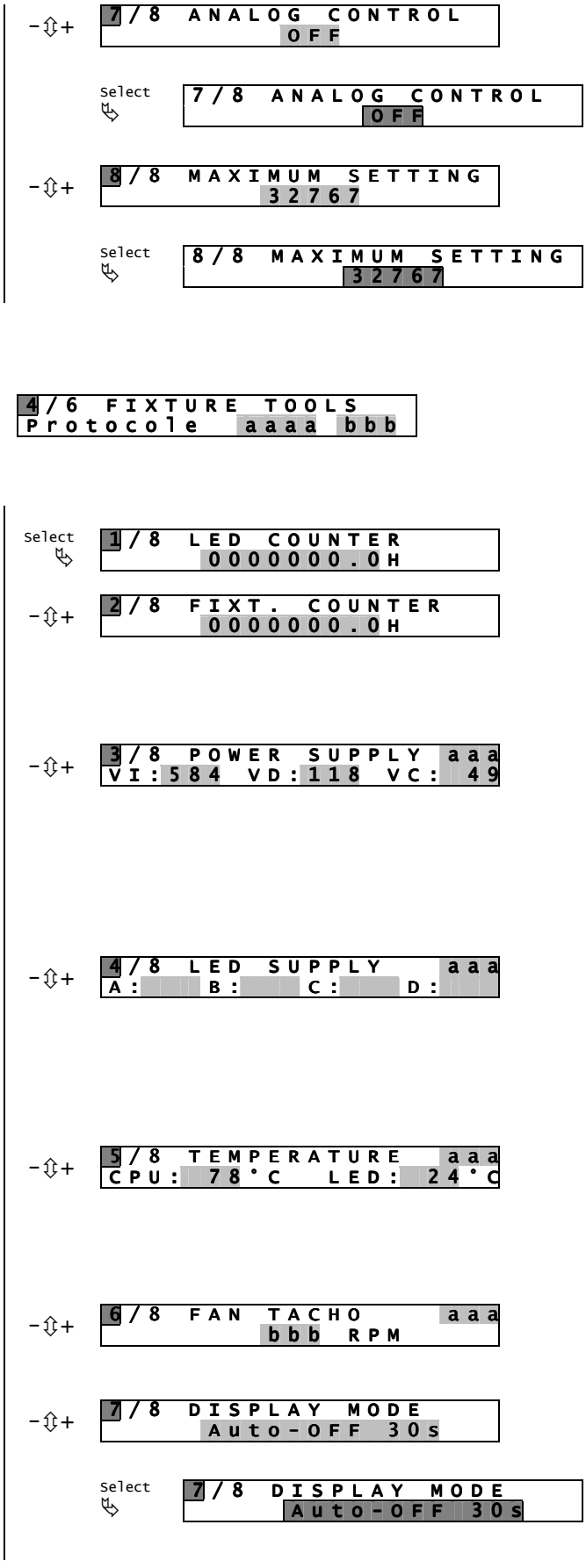
Parameters (-/+)	
pwm	PWM dimming
free	constant current driving
mixte	PWM dimming + constant current driving

Strobe mode

Parameters (-/+)	
ON	Strobe activated – 1 DMX channel added
OFF	Strobe desactivated

Master mode

Parameters (-/+)	
OFF	Master desactivated
ON	Master activated – 1 DMX channel added



Analog control

Parameters (-/+)	
OFF	Analog control deactivated
ON	Analog control activated

Maximum light output level

Parameters (-/+)	
16383 → 32767	Maximum light level from 50 to 100%

Feedback information

Data	
aaaa	*DMX protocol:* *DMX→OK* *NONE→no DMX detected* *ERROR→ protocol problem*
bbb	*Quantity of DMX channels detected*

LED hour counter

PSU hour counter

Fixture PSU

Data	
aaa	*PSU feedback : OK / NOK*
VI :	PSU voltage (x10V) 54V < Vi < 61V
VD :	Fan voltage (x10V) 11V < Vd < 13V
VC :	Auxiliary voltage (x10V) 4.5V < Vc < 5.5V

LED PSU

Data	
aaa	*LED feedback : OK / NOK*
A :	1st row voltage (x10V)
B :	2nd row volateg (x10V)
C :	3rd row volage (x10V)
D :	4th row volage (x10V))

Heat sensor

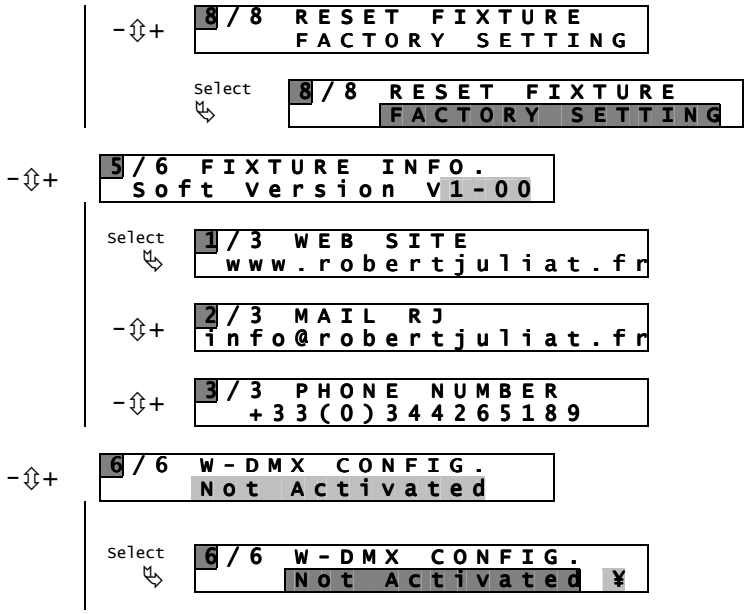
Data	
aaa	*Heat feedback : OK / NOK*
CPU :	PCB card temperature (°C) T°< 110°C
LED :	LED module temperature (°C) 5°C < T°< 80°C

Fan speed

Data	
aaa	*Fan feedback : OK / NOK*
bbb :	Fan speed rpm (>370 rpm)

Display backlighting

Parameters (-/+)	
Auto-OFF 30s	Off after 30s
Always ON	Always on



Parameters reset (factory settings)

Unit reset by pressing *select*

Software version

Wireless DMX parameters

Parameters (-/+)	
Not activated	Wireless DMX deactivated
Enable	Wireless DMX activated

Data	
Disable	Wireless DMX is deactivated if data errors are detected
¥	Wireless DMX feedback - see *4.7.3. Feedback information*

4.9.3 DMX remote control

8 bits mode*				
	Channel	**Value**	**Percent**	**Function**
Dimmer	1	0 - 255	0 - 100	Course dimming

** Resolution=8bits / strobe=OFF*

8 bits with strobe mode*				
	Channel	**Value**	**Percent**	**Function**
Dimmer	1	0 - 255	0 - 100	Course dimming
Strobe	2	0	0	Light output = 0% - strobe desactivated
		1 - 254	1 - 99	Strobe : slow → fast
		255	100	Light output = 100% - strobe activated

** Resolution=8bits / strobe=ON*

16 bits mode*				
	Channel	**Value**	**Percent**	**Function**
Dimmer	1	0 - 65535	0 - 100	Course dimming
	2			Fine dimming

** Resolution=16bits / strobe=OFF*

16 bits with strobe mode*				
	Channel	**Value**	**Percent**	**Function**
Dimmer	1	0 - 65535	0 - 100	Course dimming
	2			Fine dimming
Strobe	3	0	0	Light output = 0% - strobe desactivated
		1 - 254	1 - 99	Strobe : slow → fast
		255	100	Light output = 100% - strobe activated

** Resolution=16bits / strobe=ON*

→ 1 DMX channel added when using Master mode

4.9.4 Reset

- Reset to default settings:
  Menu: *4/6 Fixture tools* → 8/8 R*eset fixture* → *select*
- Hard reset (parameters saved):
  Push *Hard CPU reset* button *(6)*

4.9.5 Feedback information

- DMX and system LED feedback (7):
  - Green= DMX512 frame detected
  - Red = Problem on DMX512 frame and/or system default – details available in *4/6 Fixture Tools* menu

- *If DMX512 data lost, the following message is displayed :*
  "Push select to reset DMX values"
  The last received DMX values are stored but it is possible to inactivate the current values by pressing the Select key (as well as the Master function) in order to get a total control of the fixture locally. When a DMX signal is detected, the DMX control is active again.

- ¥ signal indicates a wireless DMX

Signal	Information
Switched off – no symbol	The fixture is not paired with a transmitter
Slow intermittent display	The fixture is paired with a transmitter but the DMX signal is not detected
Continuous display	The fixture is paired with a transmitter and the DMX signal is detected
Rapid intermittent display	Lost connection with the transmitter or in connection with the transmitter

5 Service

5.1 Preventive maintenance

5.1.1 Frequency

General maintenance should be performed at least once a year or more frequently if the equipment is operated in adverse conditions (smoke, heat, humidity, touring, etc.).

5.1.2 General cleaning

Remove dust from the unit (air vents, printed circuit boards, etc.).

During cleaning:

- LED must be protected to avoid dust on it.
- Fan blades must be locked.

See *5.1.4 LED access* for cleaning access to LED and fan

5.1.3 General visual check

- No trace of heat.
- No loose contacts.
- No missing parts.
- Tighten mechanical assemblies (screws, bolts and nuts, ground connections, etc.).

5.1.4 LED access

- Prior to any intervention, power supply disconnection is compulsory. Power connectors are exposed live items.
- The compartment is held by 4 screws.
- The compartment must be put in and out in a vertical position, avoiding contact with the LED module and its power supply connector.
- The braided earth wire must be disconnected.

5.1.5 LED source

• Do not touch the surface of the LED source (no contact with your hands or any tools).
• Do not put compressed air directly on the source.
• Contact a certified RJ distributor in case of residuals or other objects located on the surface of the LED source.

5.1.6 Optics

The cleaning of optical parts (lenses) shall be carried out with solutions containing alcohol.

5.2 Analysis

If there is still a problem after the troubleshooting procedures (see part 6.), contact RJ distributor with the following information:

- Model, version and serial number of the product.
- Software version (available in menu *Tools → Ver.*)
- Description of the problem.

5.3 LED reaction according to LED temperature

LED temperature	Fan
5℃ → 65℃	Fan rotation at minimum level
65℃ → 75℃	Fan rotation increases progressively
75℃ → 90℃	Fan at maximum speed LED intensity dims to zero output (overheating protection) DMX and system LED feedback (7) is red and temperature is available in *4/6 Fixture Tools menu*

5.4 Thermal protection

In case of thermal protection start ④:

- Remove the LED compartment (See *5.1.4 Dismantling the LED compartment).*
- Control possible overheating indications.
- Reassemble the LED compartment.
- Reset the thermal protection by pressing the button.

5.5 Adjusting the maximum light output level

The maximum intensity level of the LED source can be adjusted in the *Fixture Param. → Maximum setting* menu in order to have a consistent fixture fleet. The dimming level is then recalculated depending on the limitation.

5.6 Exploded view / Spare parts list

➔ Available on www.robertjuliat.com

6 Troubleshooting

SYMPTOMS		POSSIBLE REASONS	SOLUTIONS	
Display OFF	Display switches on when button is pressed	Display auto off mode activated	*Fixture tools* menu → D*isplay mode* (see 4.9.2)	
	Display still off when button is pressed	No power	Check : • power supply • thermal protection • the power supply connector must be properly interlocked	
System and data display ⑦ switched on in red		Problem with the DMX512 received signal and/or system default – details available in *4/6 Fixture Tools* menu	Failure details are available in *4/6 Fixture Tools* menu	
The unit cannot controlled via DMX (inactivated wireless DMX)	Data display ⑦ switched on in red	DMX protocol problem	Check data signal	The received data protocol can be checked in the *Fixture tools* menu
		Data cabling problem	Check cabling and data connectors	
	Data display ⑦ switched on in green	DMX address	Check the DMX address	
		The strobe is active and the channel value is void	The value must be 255 (100%) in order to have the light intensity dimmed	
When using several units, dimming are not synchronized		Different *Resolution*	All the units must have the same resolution (See 4.9.2 Fixture param. → *Resolution*)	
		Different *smoothing*	All the units must have the same smoothing (See 4.9.2 Fixture param menu → *Smoothing*)	
		Different *Dimming curve*	All the units must have the same dimming curve (See 4.9.2 Fixture param menu → Light *Curve*)	
Light switches on when powered on		Manual value is operating when DMX is not connected	*Local values* must be at zero	
Light switches on when using the control board		Use of the Focus mode	See *4.1.2*	
Strobe function doesn't work		Strobe function inactive	Strobe must be activated in Fixture param. menu → *Strobe Control*	
		Strobe function active	Control channel must be higher than 0	