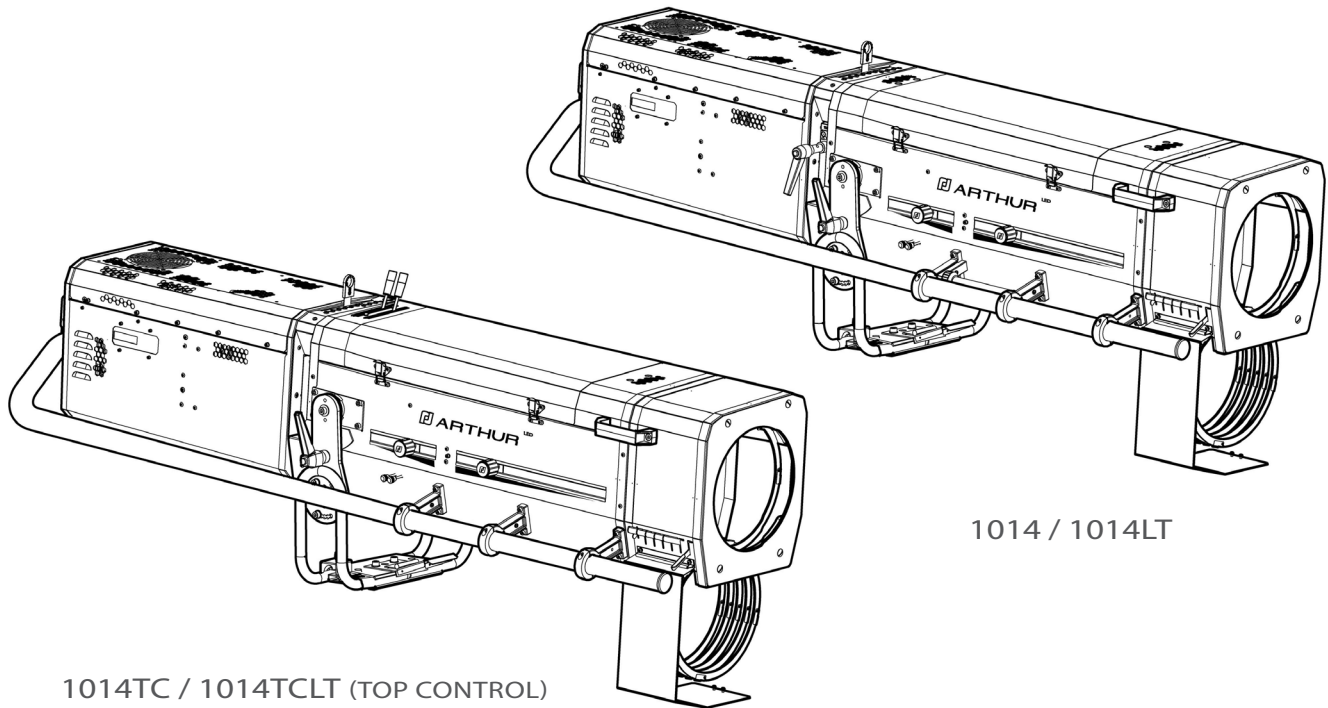


ARTHUR

LED FOLLOWSPOTS

Manual



1014TC / 1014TCLT (TOP CONTROL)

1014 / 1014LT

800 W FOLLOWSPOTS

Angles	Controls	Model	
		Standard / CE	North American
5.5° - 15°	On the side	1014	1014C
5.5° - 15°	On top	1014TC	1014CTC

Angles	Controls	Model	
		Standard / CE	North American
4° - 10°	On the side	1014LT	1014CLT
4° - 10°	On top	1014TCLT	1014CTCLT

V1

- FIRMWARE: V2.07

VALIDATION : 18/09/23

DN41195800-B



ROBERT JULIAT

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www.robertjuliat.com

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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, NF EN 60598-2-17, Low Voltage Directive 2014/35/UE & EMC Directive 2014/30/UE.
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 the LED source with your fingers.
22. To clean the optical parts, use a soft cloth in combination with distilled water or isopropyl alcohol recommended for coated optics. Do not use any cleaning product that contains solvents or abrasives, as these can cause surface damage. Dry with a soft lint-free cloth.
23. Regularly remove dust with a soft lint-free cloth.
24. If the fixture has filters, they must be cleaned frequently.

POWER SUPPLY


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

PLEASE NOTE

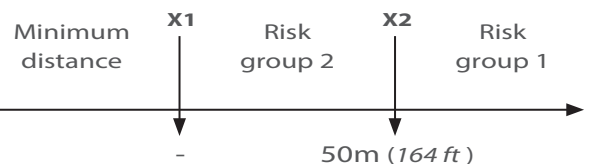
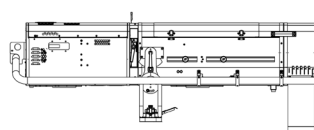
This product has been built to conform to European standards relating to professional lighting equipment. Any modification made to our products will void the manufacturers' warranty.

Photobiological safety according to EN62471

Risk group 2

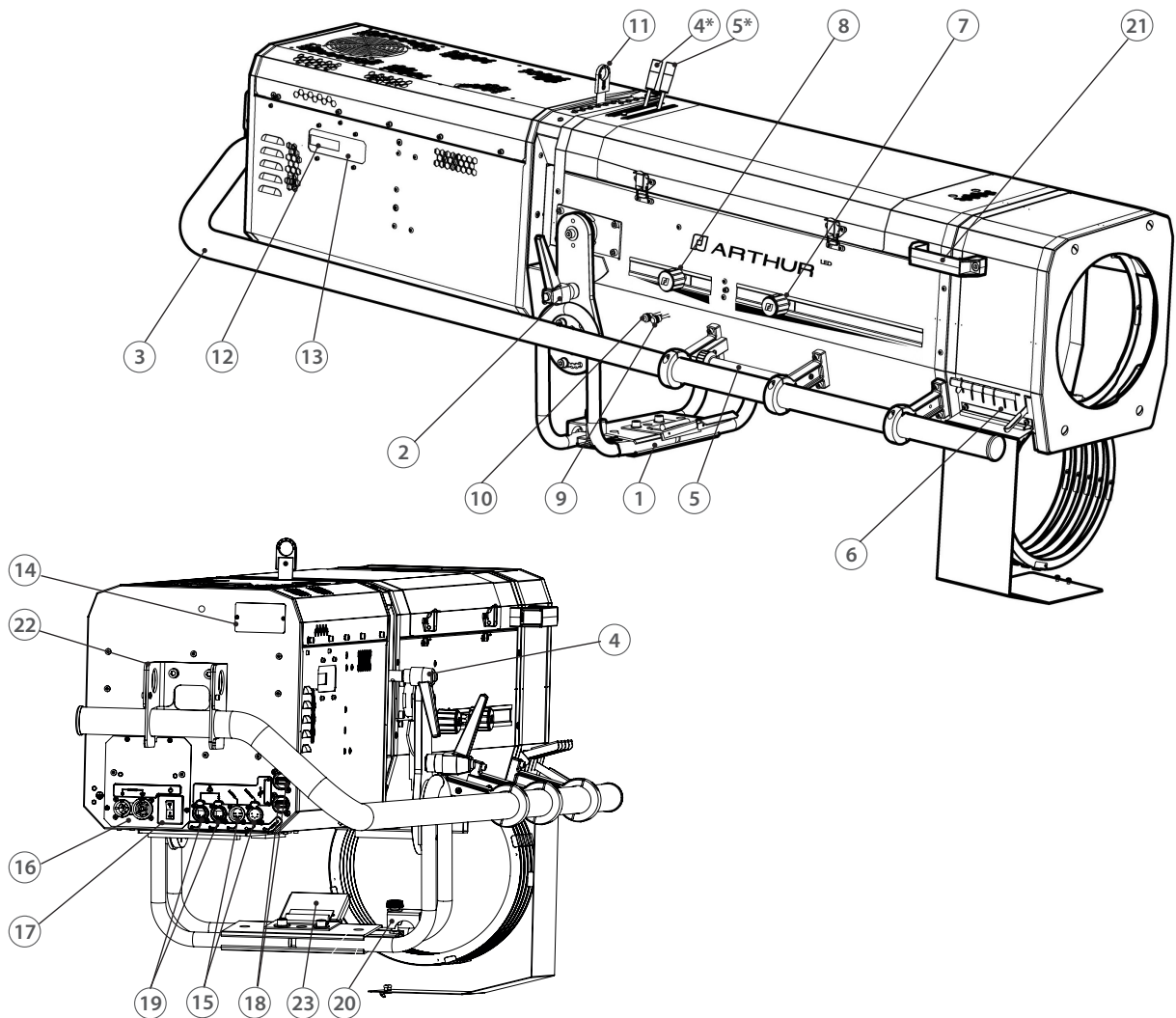


CAUTION: Possibly hazardous optical radiation emitted from this product.
Do not stare at operating lamp.
Maybe harmful to the eye.



Group risk 2. Luminaires should be positioned so that prolonged staring into luminaire at a distance closer than 50m is not expected.

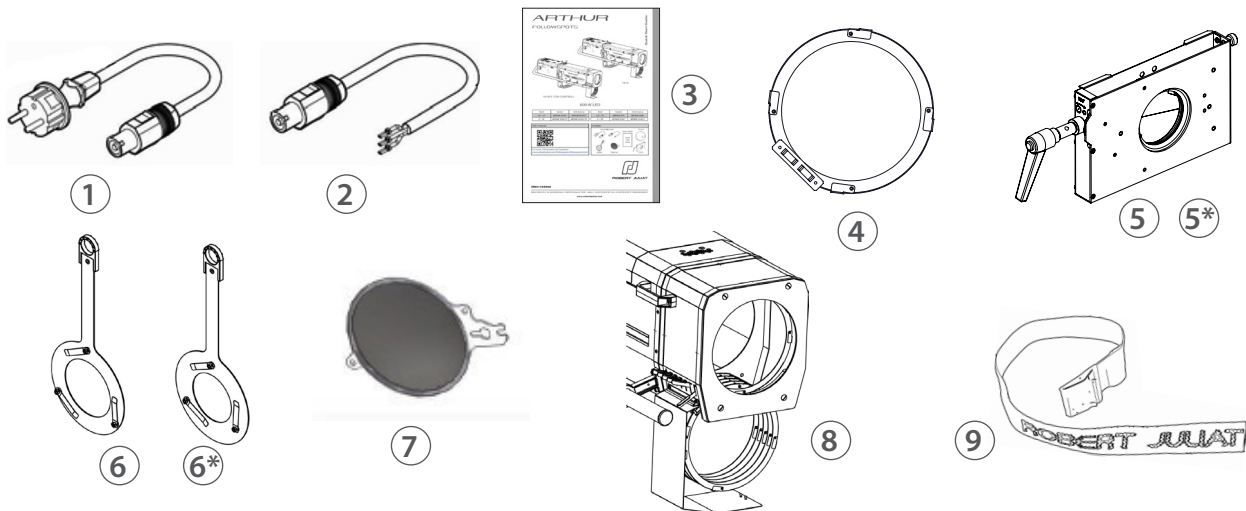
2.1 Functions



Functions	
1	Yoke
2	Tilt locking handle
3	Side operating handle
4	Iris control (1014/1014LT only)
4*	Iris control (1014TC/1014TCLT only)
5	Dimming control (1014/1014LT only)
5*	Dimming control (1014TC/1014TCLT only)
6	Colour changer
7	Zoom adjustment
8	Focus adjustment
9	Frost glass
10	Spare filter
11	Gobo holder
12	Local display
13	Keypad
14	Identification plate
15	Data connectors (OUT and IN)
16	Power connectors (IN and OUT)
17	Power switch (thermal breaker)
18	USB connectors for accessories
19	RJ45 connectors
20	Cable lock
21	Handles
22	Lifting rings
23	Tilt stopper

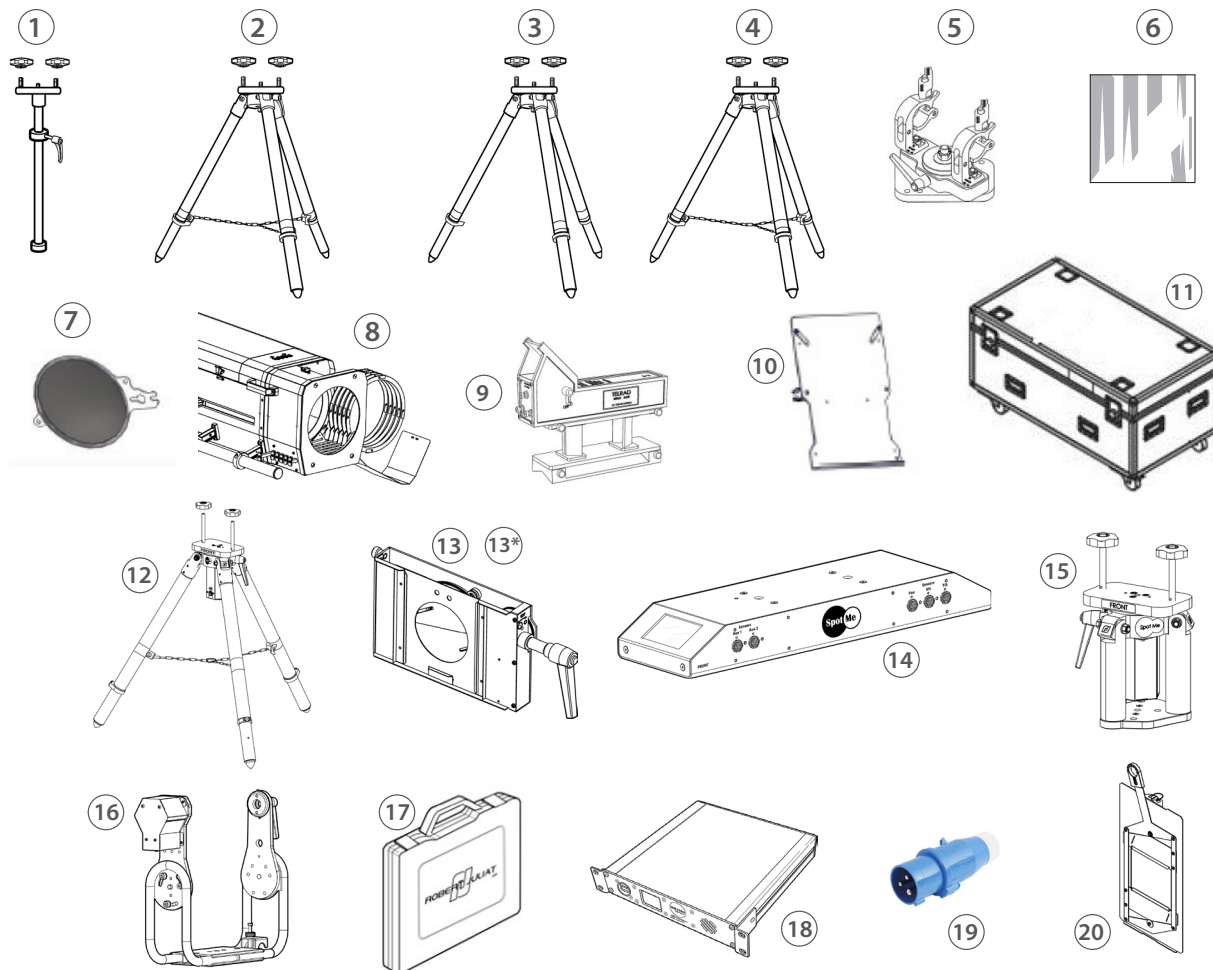
Description	
	<ol style="list-style-type: none"> 1. MOD. : Model 2. VERS. : Version 3. U : Nominal voltage input (V) 4. I : Nominal intensity (A) 5. P : Maximum power input (W) 6. IP : International Protection Rating 7. t°a : Maximum ambient temperature (°C) 8. t°c : Maximum external temperature of the unit (°C) 9. Net weight (kg) 10. Minimum distance between a flammable material and the lighting unit (m) 11. LED type 12. Serial number 13. Replace broken glass 14. Class 1 product label 15. Read manual first label 16. European conformity label 17. WEEE directive label 18. CEI-TR-62778 - Do not stare at light source 19. EN62471 - Risk group 20. UKCA (UK Conformity Assessed) label
<p>LED FIXTURE Risk Group</p> <p>Lire le manuel avant utilisation - Utilisation et maintenance par professionnel uniquement / Read manual before use - Service only by qualified personnel.</p> <p>MOD. 1 VERS. 2 11 9</p> <p>U 3 I 4 10</p> <p>P 5 IP 6</p> <p>t°a 7 t°c 8</p> <p>ROBERT JULIAT.com</p> <p>Made in the EU - France -</p> <p>SERIE / SERIAL 12</p>	
<p>Units :</p> <ul style="list-style-type: none"> - Weight = kilogram (kg). - Intensity = Ampere (A). - Voltage = Volt (V). - Frequency = Hertz (Hz). - Temperature = degree Celsius (°C). 	

2.3 Accessories included



Reference	Description
1 CAL03	3 meter power cable (3G1,5 HO7RNF) with Neutrik PowerCon® True1 TOP and CEE 7/7 (2P+T NF/SCHUKO) connectors (standard version)
2 CAL04	1,50m power cable UL/CSA with Neutrik® powerCON TRUE1 TOP connector (North American version)
3 DN41195900	Quick Start manual
4 PF1013	Ø270 mm metal filter holder (x6)
5 CCU1	Full closing iris cassette - Ø72 mm
5* CCU2	Full closing iris cassette - Ø55 mm for LT version
6 SGUP2	Universal "A" size gobo-holder (metal & glass)
6* SGUB3	"B" size gobo-holder (metal & glass) for LT version
7 VDM120	Ø120 mm frosted glass with holder
8 M270/2B	6-way "boomerang" colour changer
9 SAC1	RJ cable strap (25 x 500 mm) (x1)

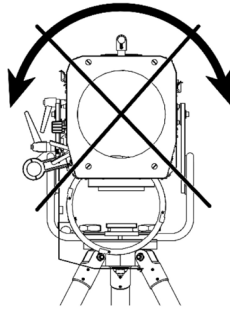
2.4 Accessories



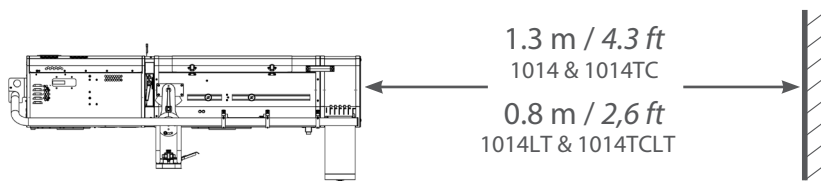
	Reference	Description
1	JPP	Monopod stand for overhead followspot
2	GT4000	Tripod stand with safety chain - SWL: 130 Kg - max. height: 1030 mm
3	GT4000S	Tripod stand without safety chain - SWL: 130 Kg - max. height: 1030 mm
4	GT4000R	Tripod stand with ball head rotation with security chain - SWL: 130 Kg - max. height: 1030 mm
5	T4000	Followspot mount for Ø50 mm pipe (suspension or overhead) - SWL= 100 Kg
6	VD120	120 x 120 mm frosted glass
7	FCM120/2	Ø120 mm 1/2 CTO correction filter (Rosco #3408) with holder
8	M270/2TM	6-way "Push/Pull" colour changer
9	Kit TELRAD	Telrad followspot sight with raiser and universal mounting kit
10	SDUP	Followspot cue sheet holder with universal mounting kit
11	FC1014/S	Flight-case for LLT range / GT stand / accessories
12	GT4000RSM	Tripod stand with safety chain - SWL: 130 Kg - max. height: 1030 mm (equipped with PAN sensor)
13	CCU1SM	Full closing iris cassette with position sensor for SpotMe system Ø72 mm
13*	CCU2SM	Full closing iris cassette with position sensor for SpotMe system Ø55 mm for LT version
14	SMS	SpotMe server + 2 sensor cables + flight case
15	T4000RSM	Followspot mount with ball head rotation and SpotMe PAN sensor SWL = 100 Kg - Weight: 8,83 Kg
16	FRO/SMCPD	Heavy duty adjustable yoke equipped with TILT SpotMe sensor (C type)
17	TCSM	SpotMe calibration tool kit
18	Maestro	Maestro server for SpotMe - rackable unit: 1U - half 19"
19	PCP1716A	16A blue 2P+E 6h IEC60309 power connector (option)
20	G80/2	Ø80 mm horizontal chopper

3.1 Mechanics

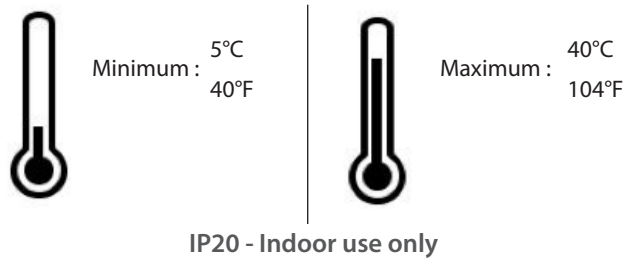
3.1.1 Operating positions



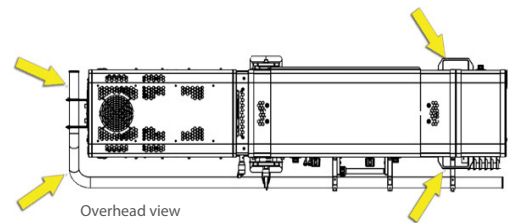
3.1.2 Minimum distance between a flammable material and the lighting unit



3.1.3 Instructions for use

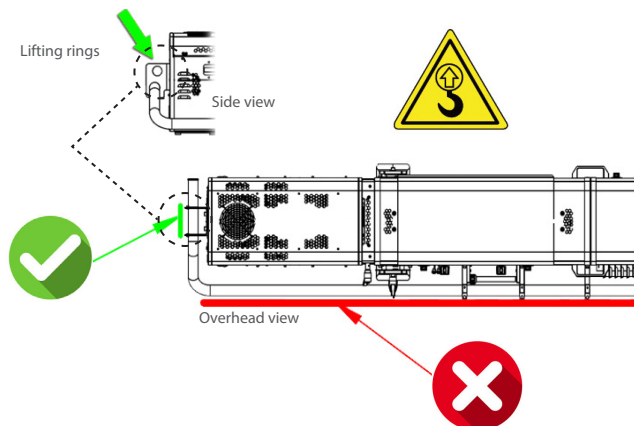


3.1.4 Handling

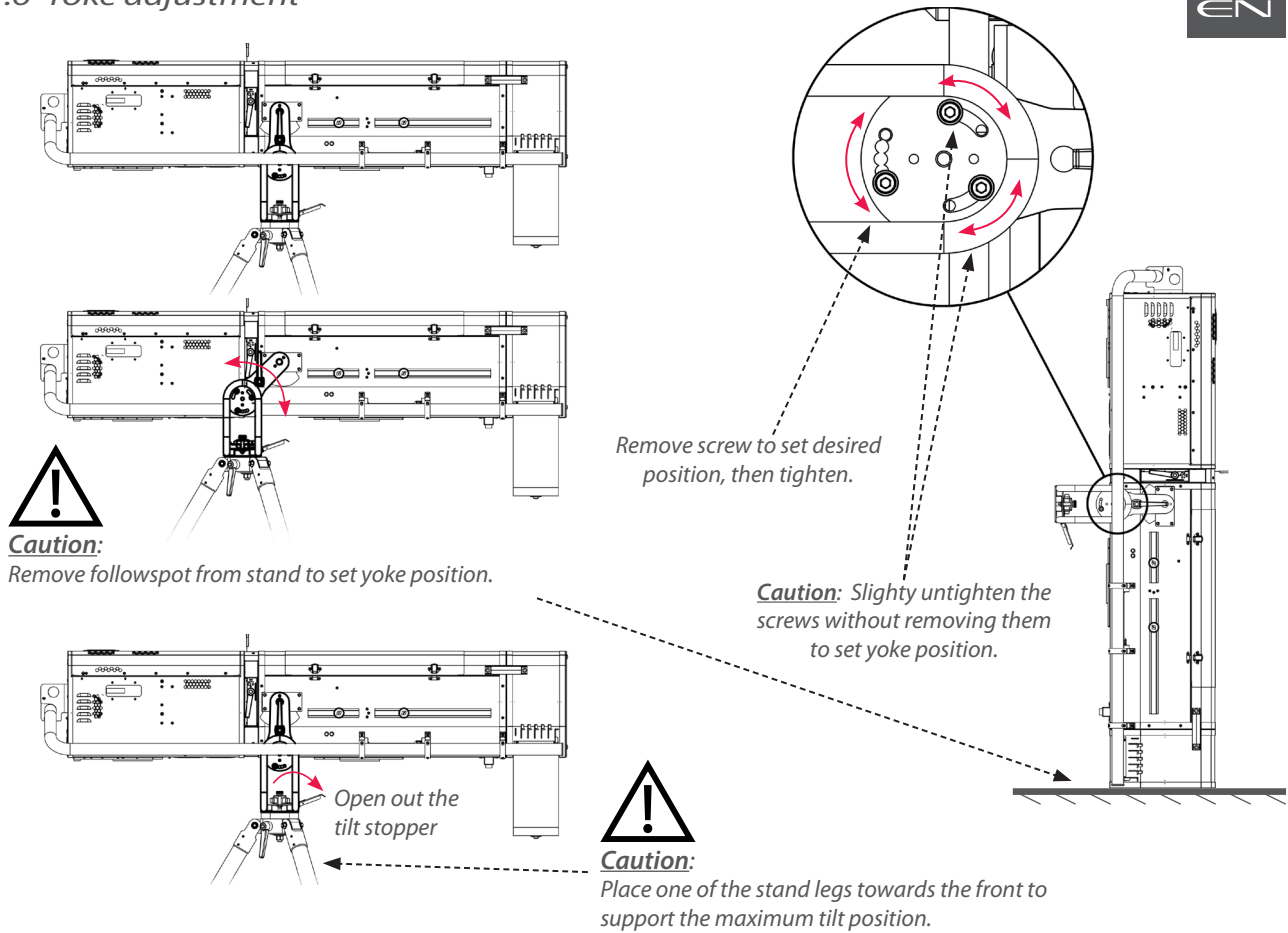


3.1.5 Lifting

- Net weight:
68.8 Kg (151.4 lbs)



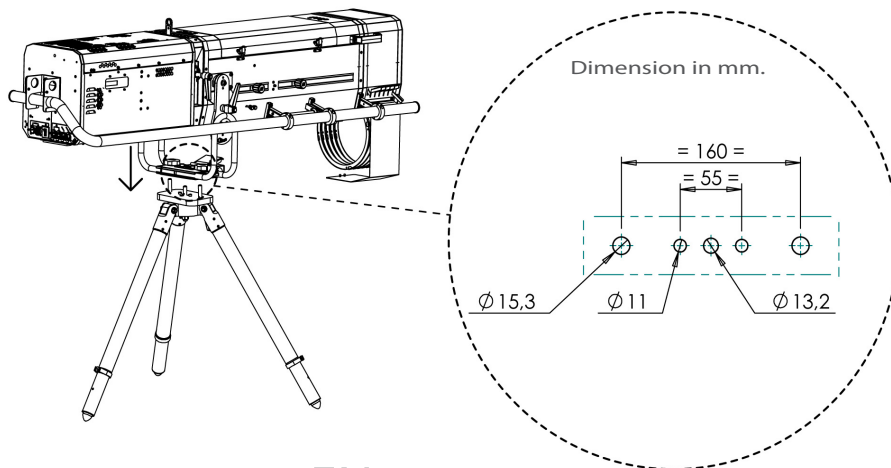
3.1.6 Yoke adjustment



3.1.7 Stand set-up

The unit must be installed only on a Robert Juliat compatible stand / head :	
JPP	Monopod stand for overhead followspot
GT4000	Tripod stand with safety chain - SWL: 130 Kg - max. height: 1030 mm
GT4000S	Tripod stand without safety chain - SWL: 130 Kg - max. height: 1030 mm
GT4000R	Tripod stand with ball head rotation with security chain - SWL: 130 Kg - max. height: 1030 mm
T4000	Followspot mount for Ø50mm pipe (suspension or overhead) - SWL= 100 Kg
GT4000RSM	Tripod stand with ball head rotation with safety chain and SpotMe PAN sensor - SWL: 130 Kg - max. height: 1030 mm
T4000RSM	Followspot mount with ball head rotation and SpotMe PAN sensor - SWL= 100 Kg

- GT4000 / GT4000S / GT4000R
Please refer to the relevant stand technical files for further details.


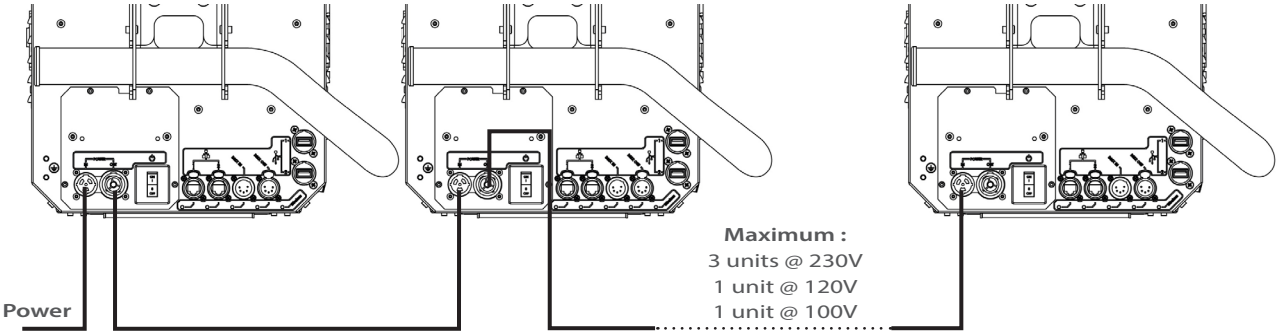


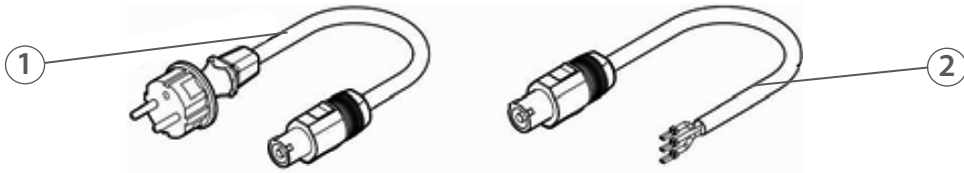

3.2.1 LED source



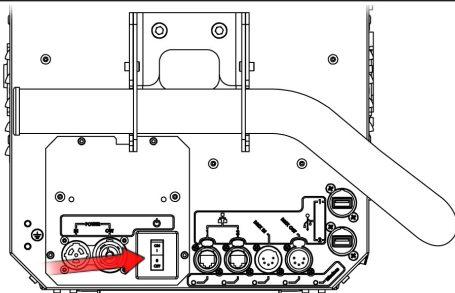
Never touch or scratch the LED surface.
 Cf. 6.1.4 LED cleaning procedure if cleaning is necessary.

3.2.2 Power supply

Power supply			
Voltage	Frequency	Input power	Connectors
100 → 240 V	50-60 Hz	4,3 A / 960 W @ 230V 8,7 A / 1030 W @ 120V 10,7 A / 1080 W @ 100V	Neutrik powerCON TRUE1 TOP Input : ref. NAC3FPX-TOP
 <ul style="list-style-type: none"> • Class 1 product. This luminaire must be earthed. • Must be connected directly to AC power. Do not connect to dimmer power. • Automatic mains voltage detection. 			
<p>Daisy chain:</p>  <p>Maximum : 3 units @ 230V 1 unit @ 120V 1 unit @ 100V</p>			

Power cable						
						
Power cable	Connector	Mains plug	Cable type	Cable length	Wiring	
1	Standard version	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
						

Power ON



3.3 DATA

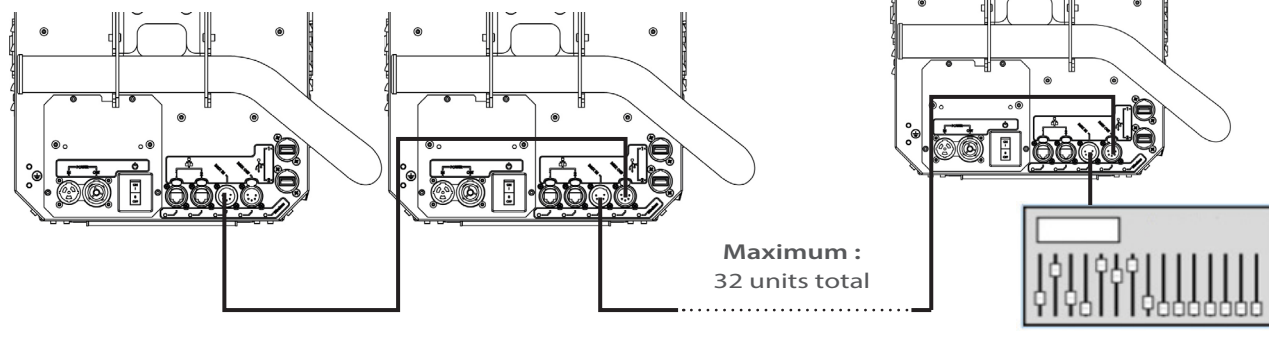
3.3.1 DMX 512-A / RDM

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

DATA connectors

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

Daisy chain:



3.3.2 Art-Net / sACN

- With external switch

Protocol	Input connector	Output connector
Art-Net sACN	RJ45 #1 or #2	-

Daisy chain:

(*) A 1000 base-T switch that supports IGMP (Internet Group Management Protocol) is necessary if the unit is connected to a network switch to control multiple devices. The usage of non IGMP switch capability can cause erratic behavior of all connected devices.
For further reading: https://en.wikipedia.org/wiki/Internet_Group_Management_Protocol

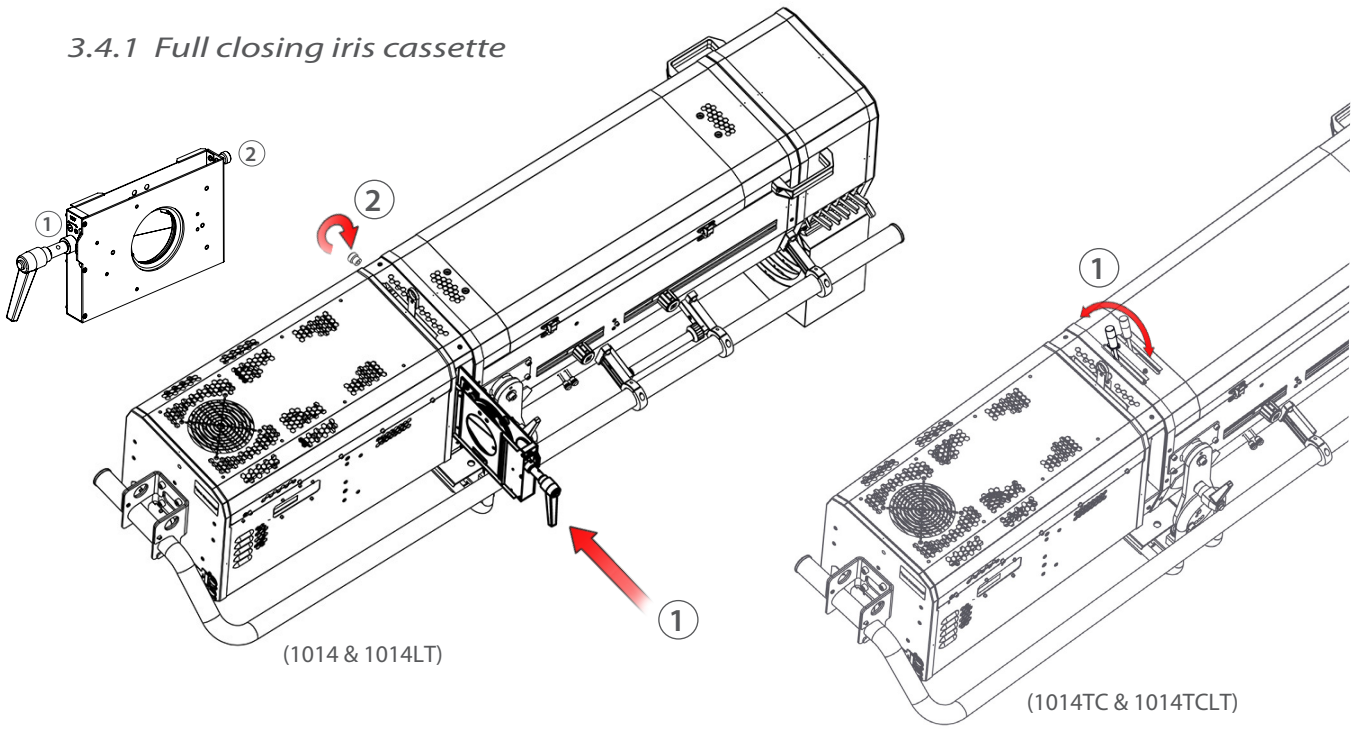
- With integrated switch

Protocol	Input connector	Output connector
Art-Net sACN	RJ45 #1	RJ45 #2

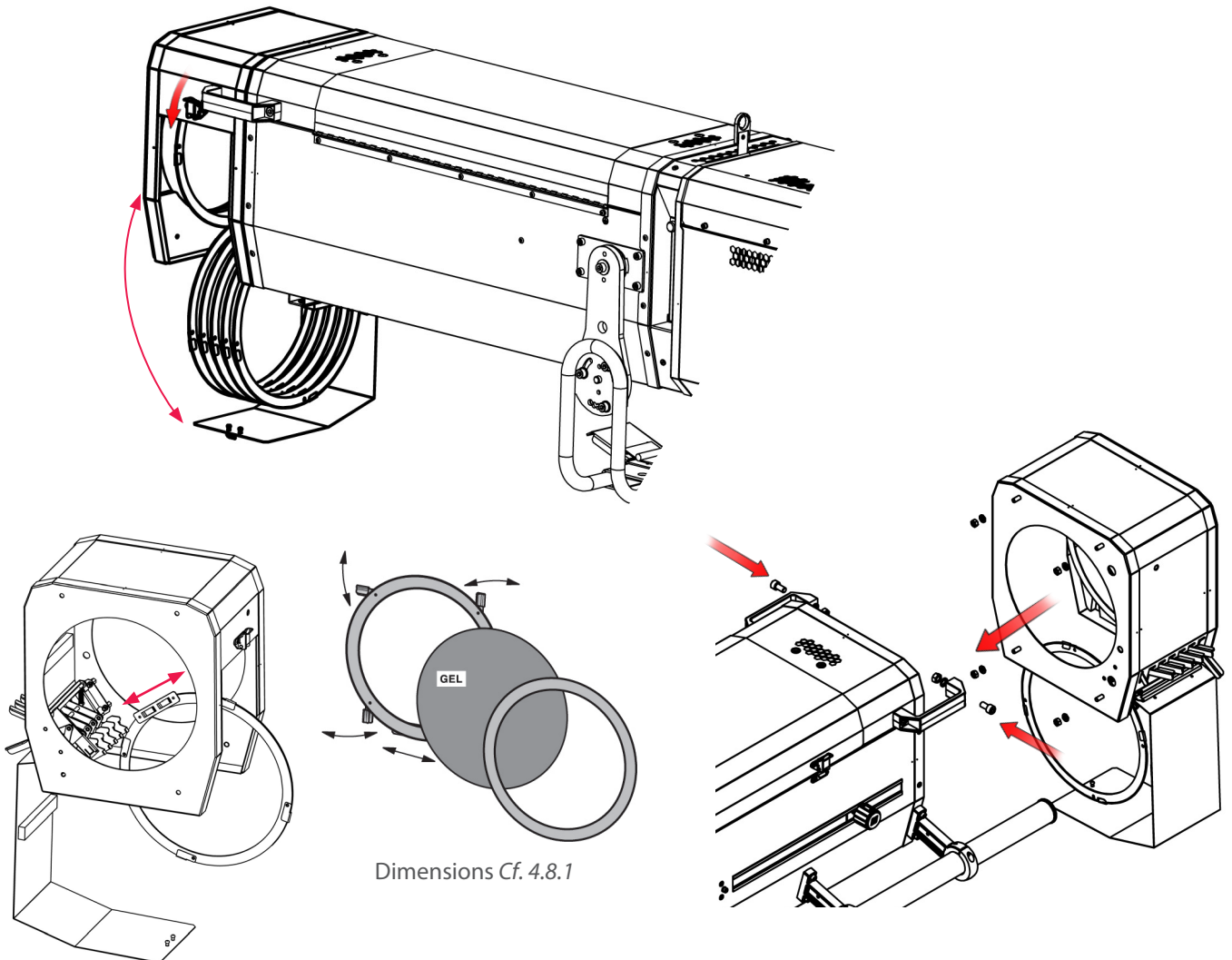
Daisy chain:

⚠ all units must be powered
Integrated switch specifications: 100 base-T unmanaged

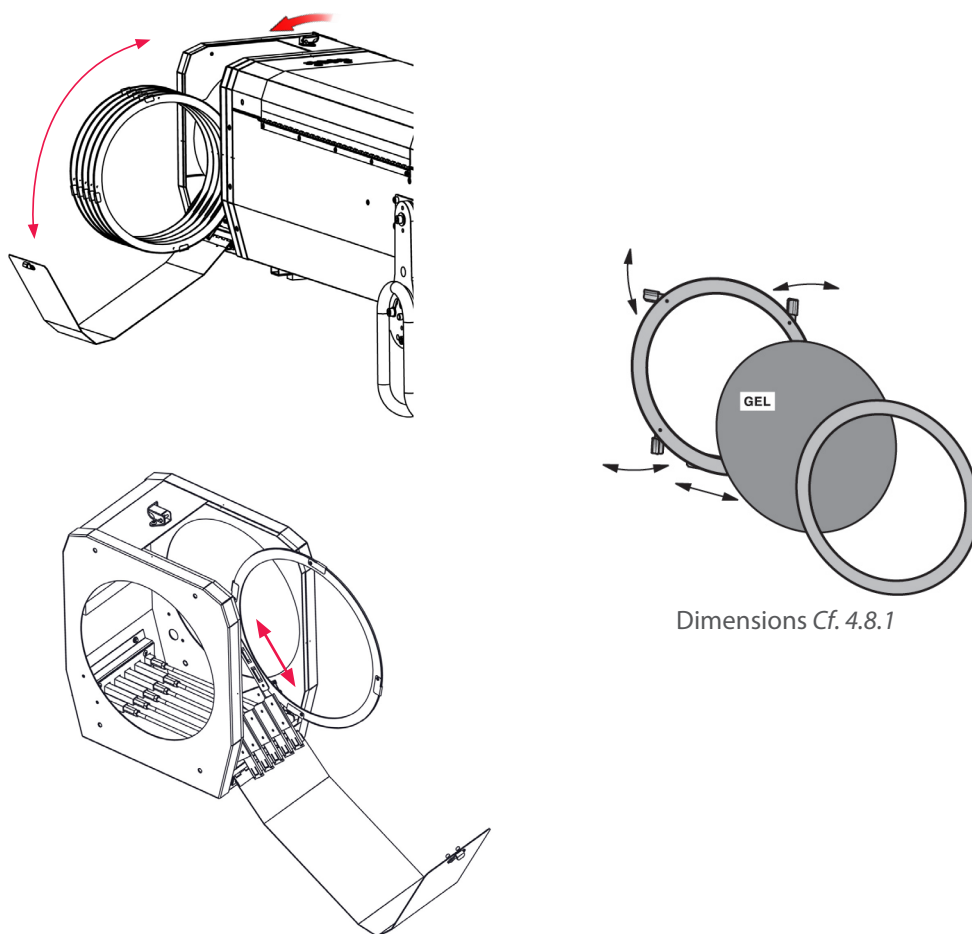
3.4.1 Full closing iris cassette



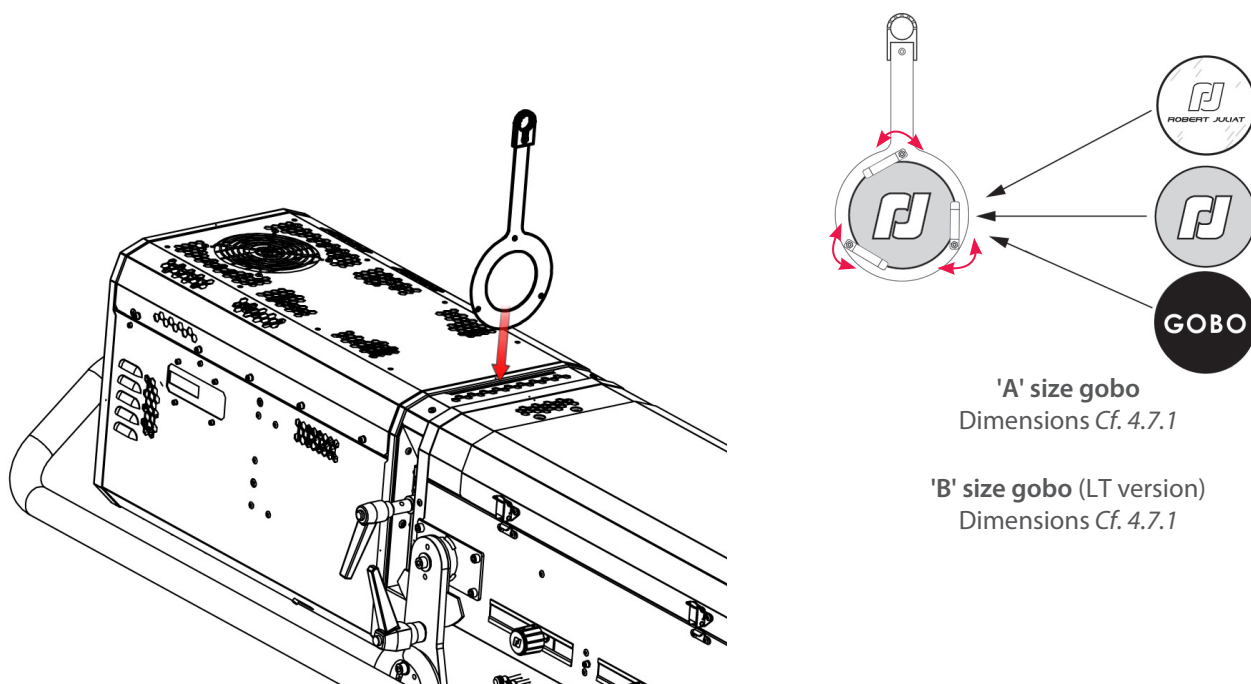
3.4.2 Colour changer unit - boomerang



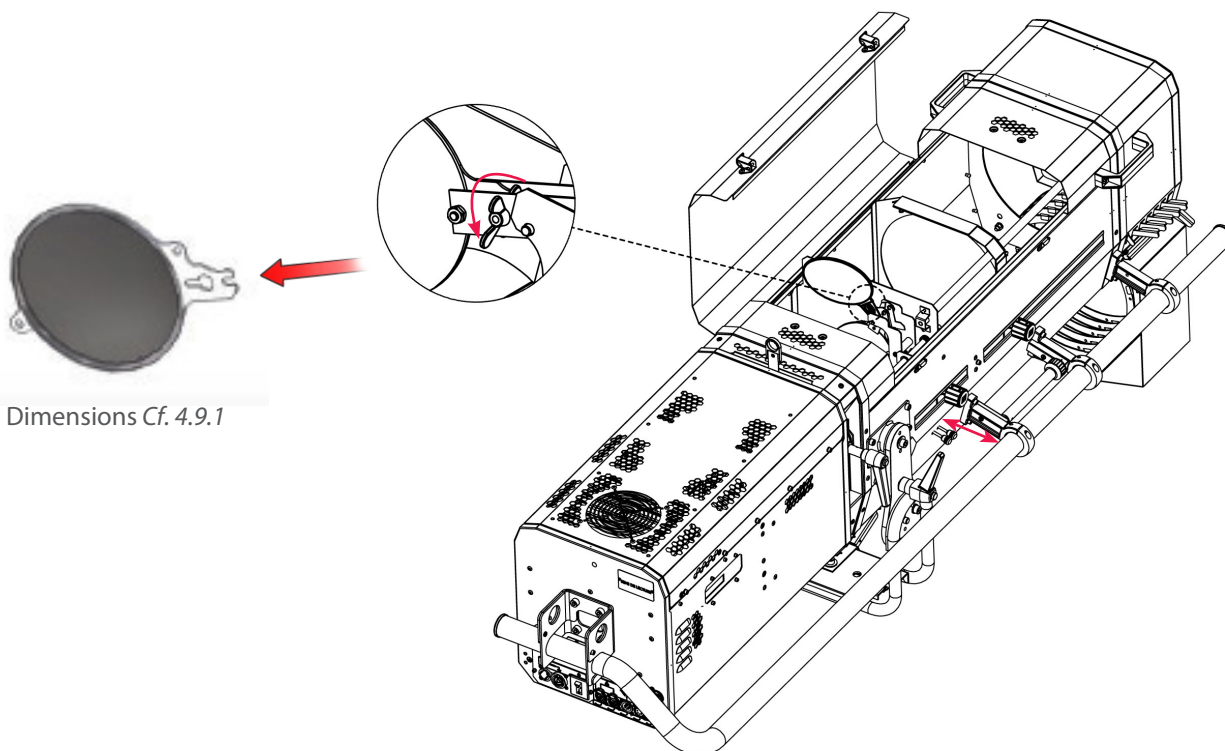
3.4.3 Colour changer unit - push-pull (option)



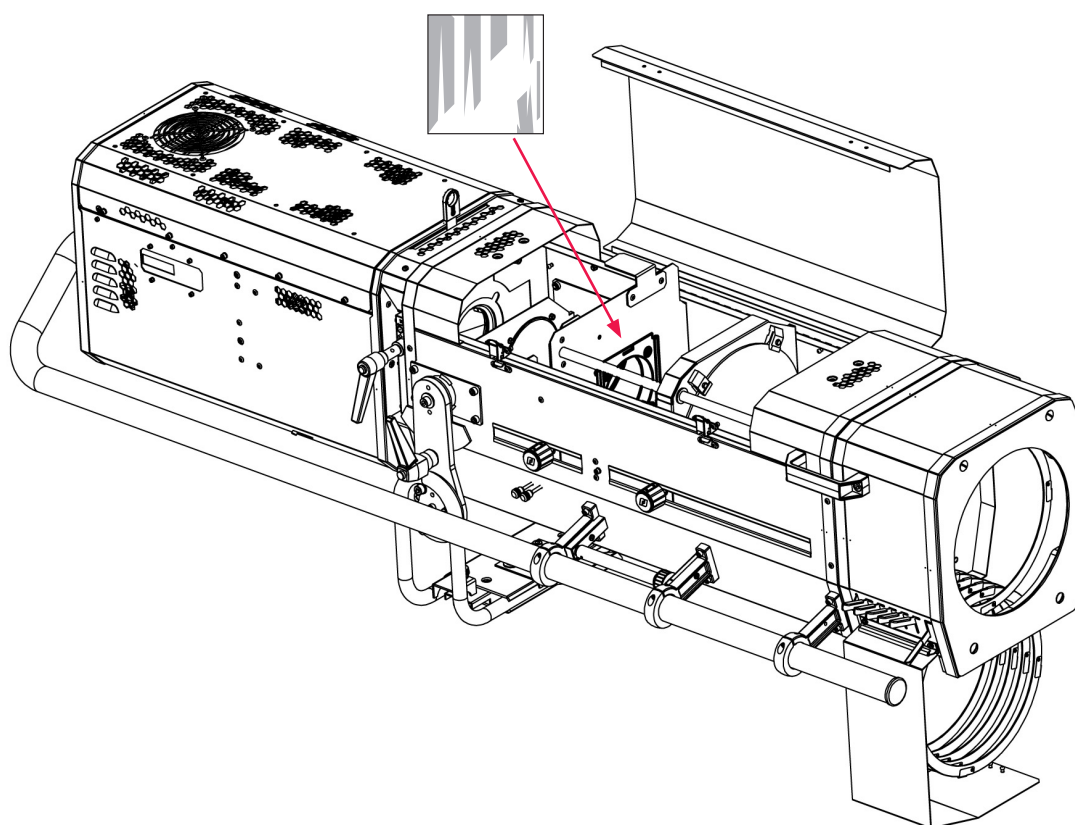
3.4.4 Gobo holder



3.4.5 Frosted / Correction filter (option)



3.4.6 Internal glass holder 120 x 120 mm (option)

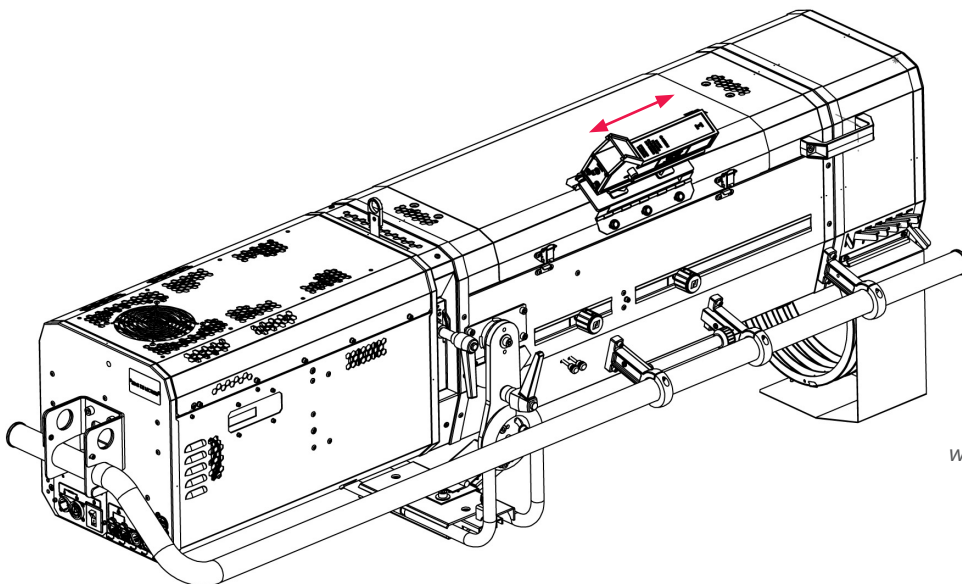


3.4.7 Stands (option)

• GT4000 Series : Please refer to the relevant stand technical files for further details.

Stand set-up, refer to Cf. 3.1.7

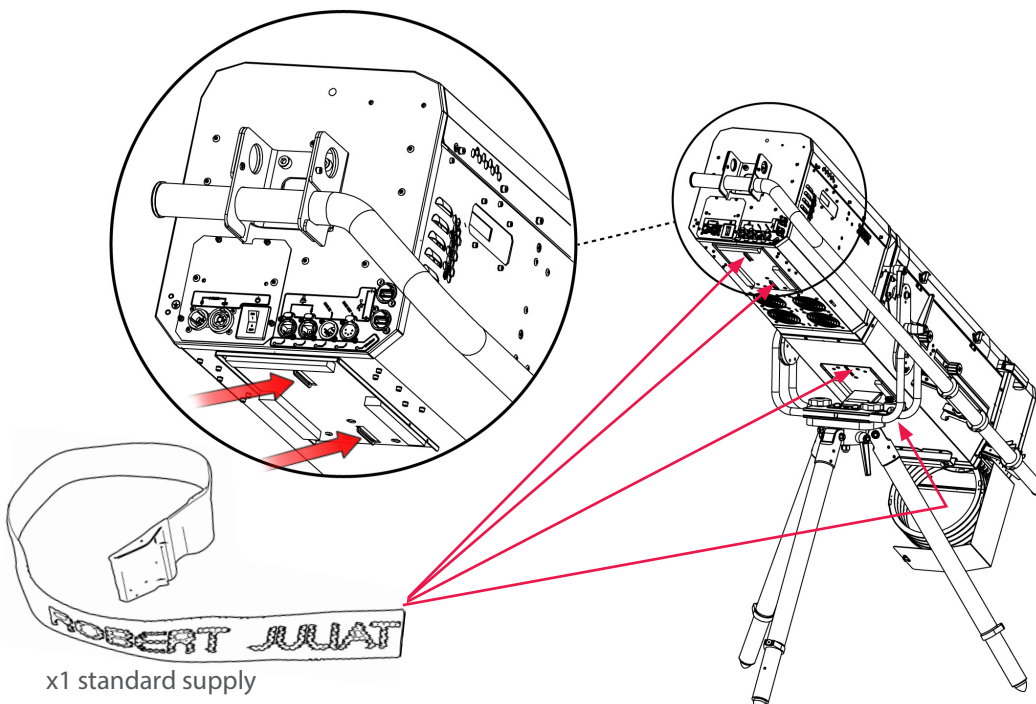
3.4.8 Telrad followspot sight (option)



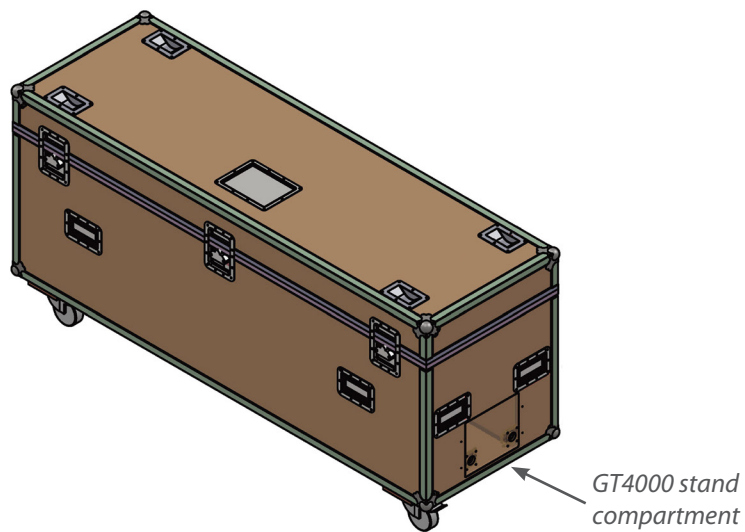
Followspot sight
guide available @
[www.robertjuliati.com/followspots/](http://www.robertjuliati.com/followspots/Accessories)
Accessories

Caution: - Do not install the followspot sight on the lamp house to avoid blocking the ventilation vents.
- Secure the sight with a suitable safety cable.

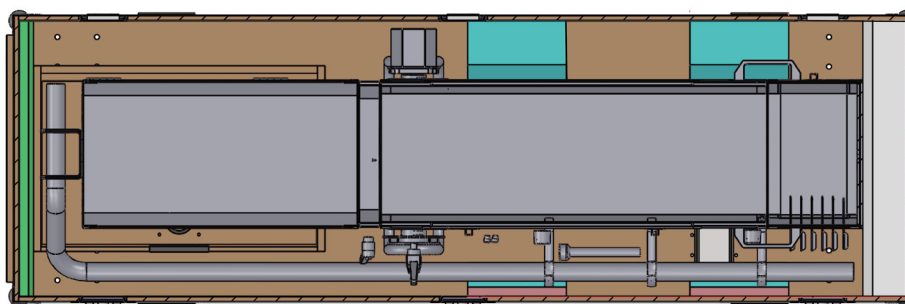
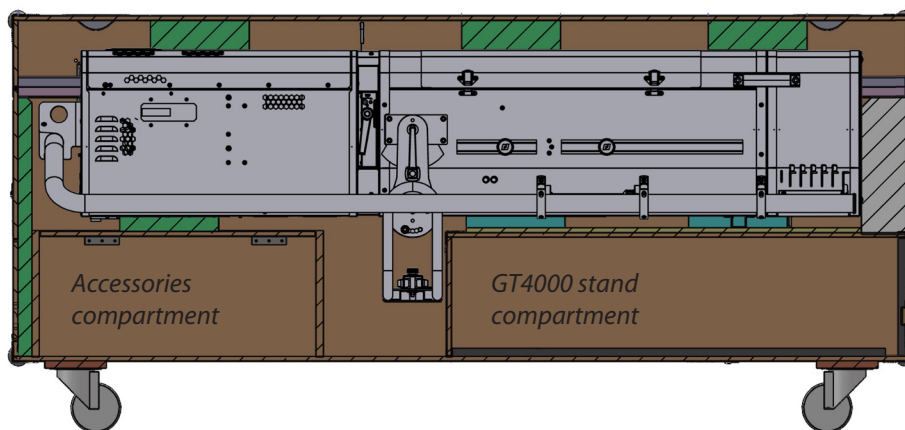
3.4.9 RJ cable strap



3.4.10 Flight-case (option)



Inner side view



Inner overhead view

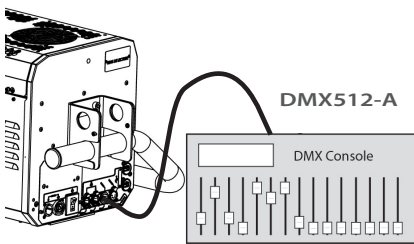
4.1 Light intensity

4.1.1 Range

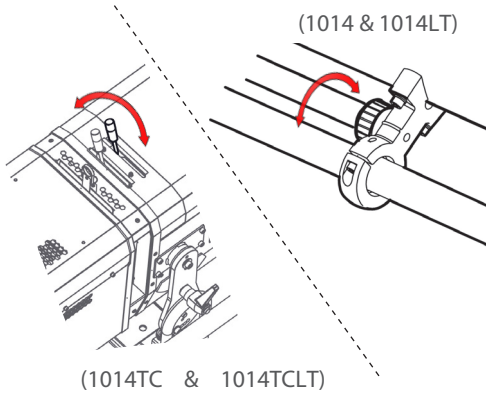


4.1.2 Control

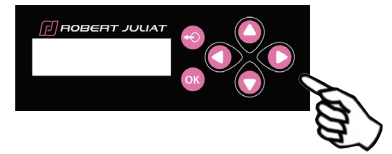
Remotely with DMX512-A protocol
Art-Net / sACN



Locally via dimming control handle



Locally via Standalone mode



→ selection in
DATA MODE / PROTOCOL /
STANDALONE

HTP mode (Highest Takes Precedence):
Light output is the highest value of DMX512 command or local control

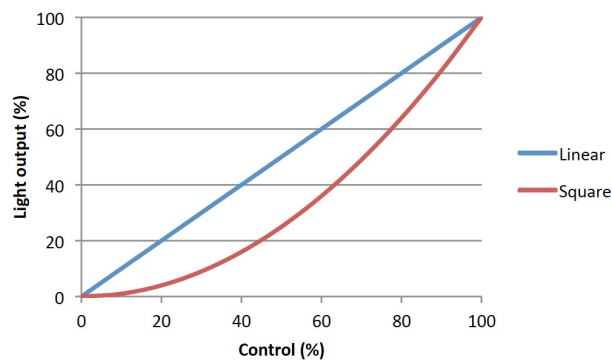
4.1.3 Parameters

4.1.3.1 Dimming resolution - DMX only

Resolution	DMX mode
8 bits – 255 steps	1 - 3 - 5
16 bits – 65 535 steps	2 - 4 - 6

4.1.3.2 Dimming curve

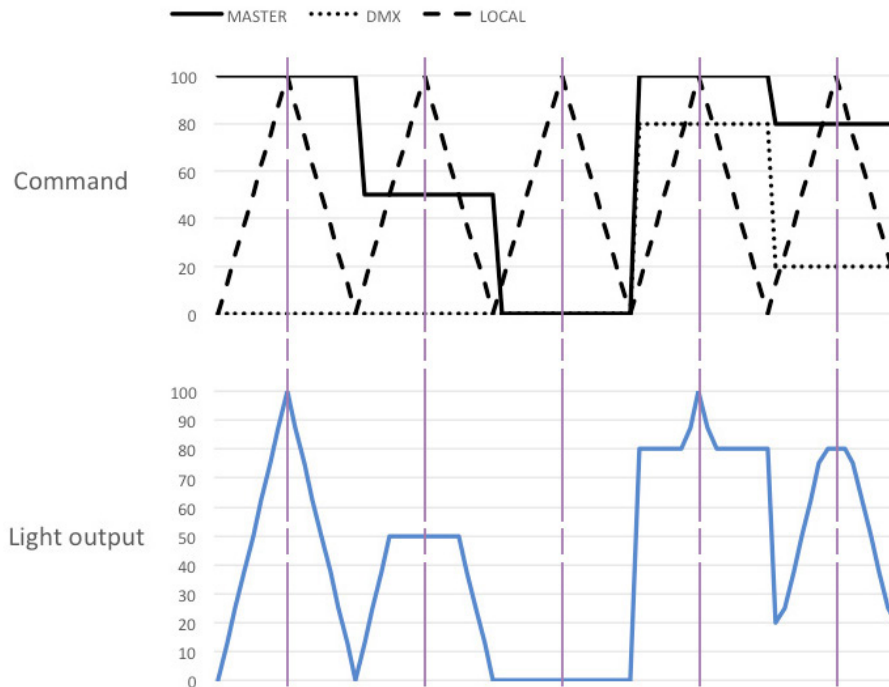
→ selection in SETUP / DIMMER / CURVE menu: LINEAR or SQUARE



4.1.3.3 Master control

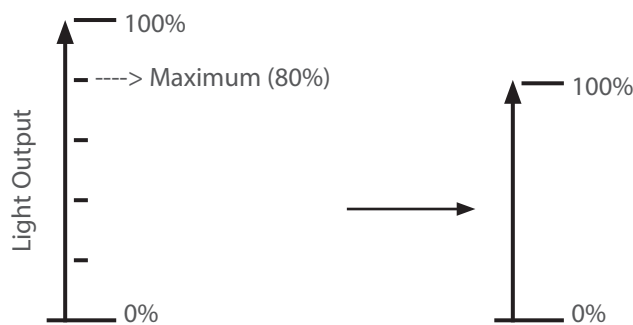
➔ DMX Mode 5 / 6

In order to supervise the operator from the console, master control DMX channel can be used. This channel limits the maximum value of the dimmer shutter. By using this function, it is possible to obtain synchronised fades with several spots or to give intensity limits (minimum and maximum) to the operator. Master is only active when DMX is detected.



4.1.3.4 Set maximum position

➔ Selection in SETUP / DIMMER / MAX menu



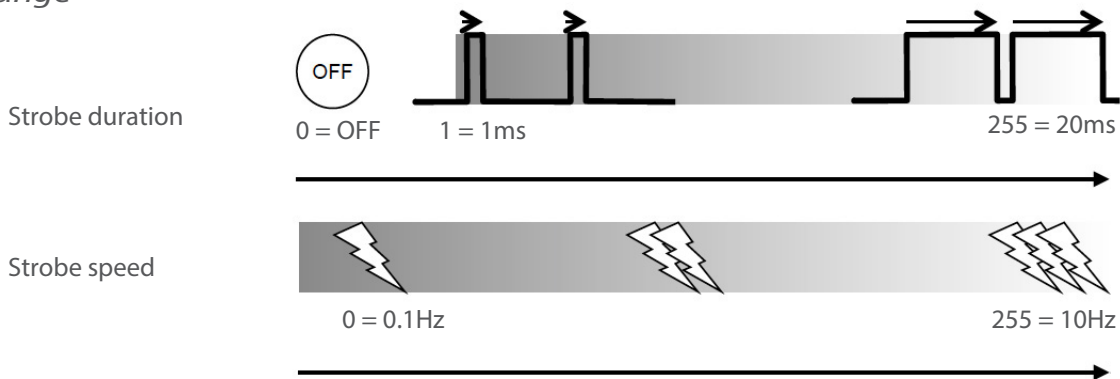
4.1.3.5 Dimming mode

➔ Selection in SETUP / DIMMER / DIMMING MODE menu

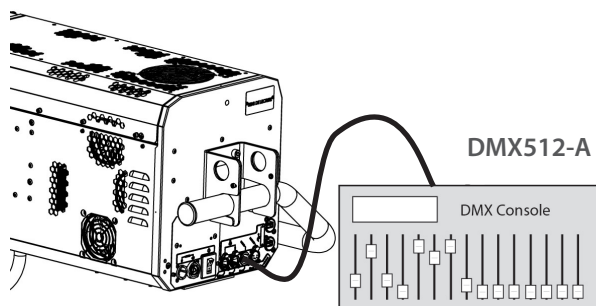
Mode	Result
Without PWM	Flicker-Free, perfect for filming
PWM 20 KHz	Good dimming quality (Default Value)
PWM 3,2 KHz	Very good dimming

4.2 Strobe

4.2.1 Range



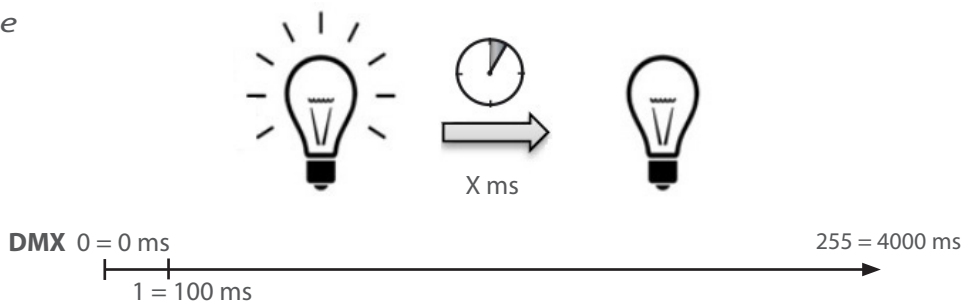
4.2.2 Control



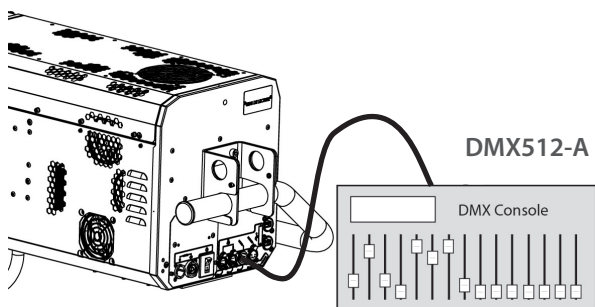
Remotely with
DMX512-A / Art-Net / sACN protocols
Mode 3 - 4 - 5 - 6

4.3 Response time

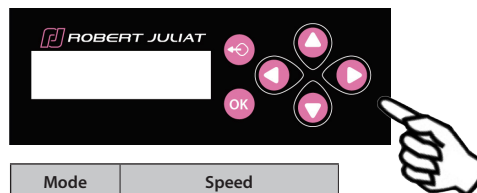
4.3.1 Range



4.3.2 Control



Remotely, with
DMX512-A / Art-Net / sACN protocols
Mode 3 - 4 - 5 - 6

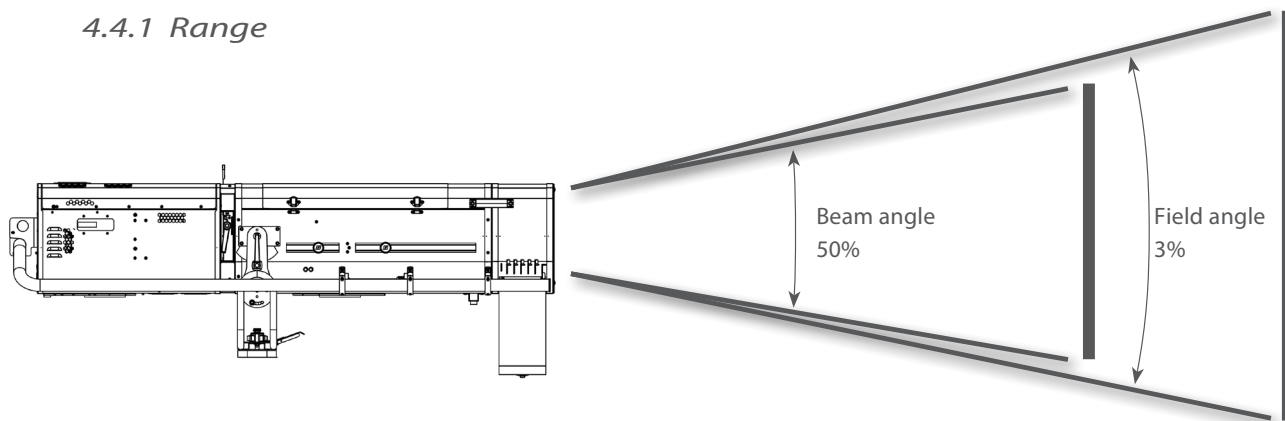


Mode	Speed
NONE	OFF
SLOW	700 ms
MEDIUM	470 ms
FAST	350 ms
CUSTOM	0 - 4000 ms

Locally, only when no DMX detected or
DMX 512-A/Art-Net/sACN protocols
Mode 1 + 2
→ selection in
SETUP / DIMMER / RESPONSE TIME

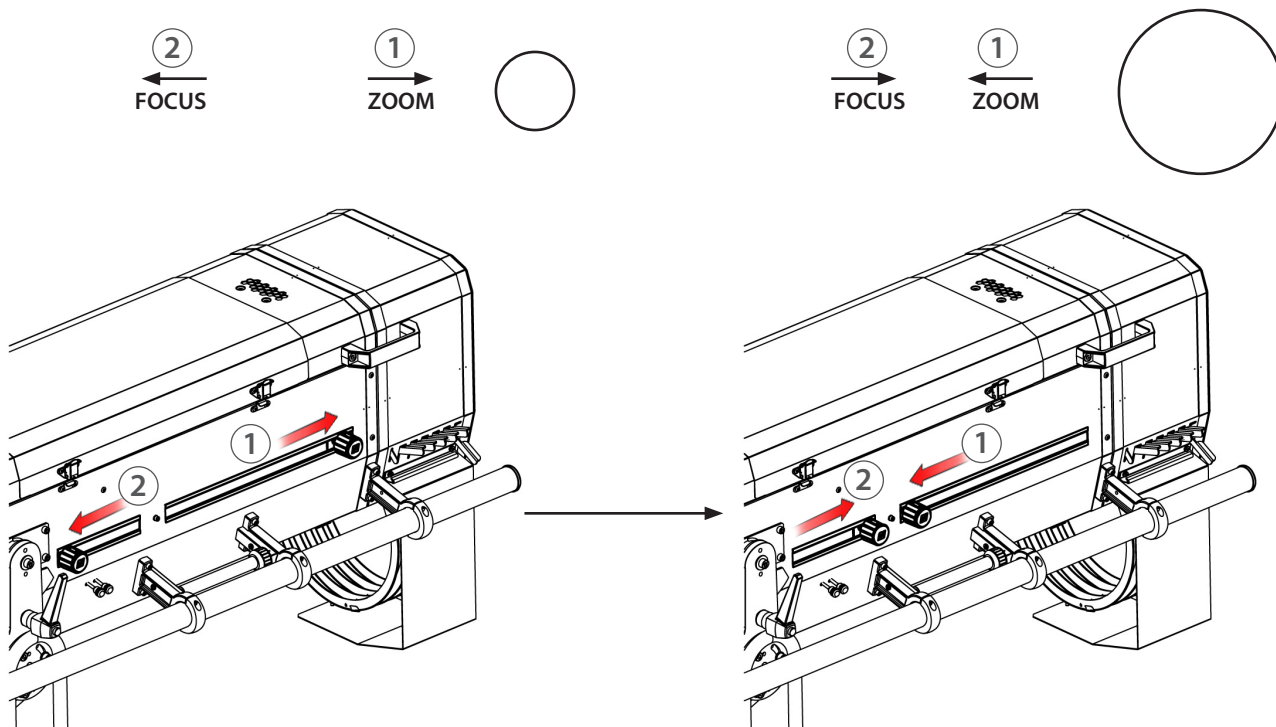
4.4 Beam size adjustment

4.4.1 Range



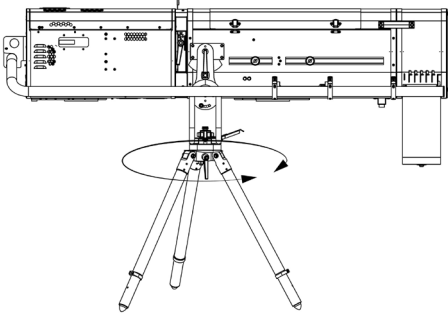
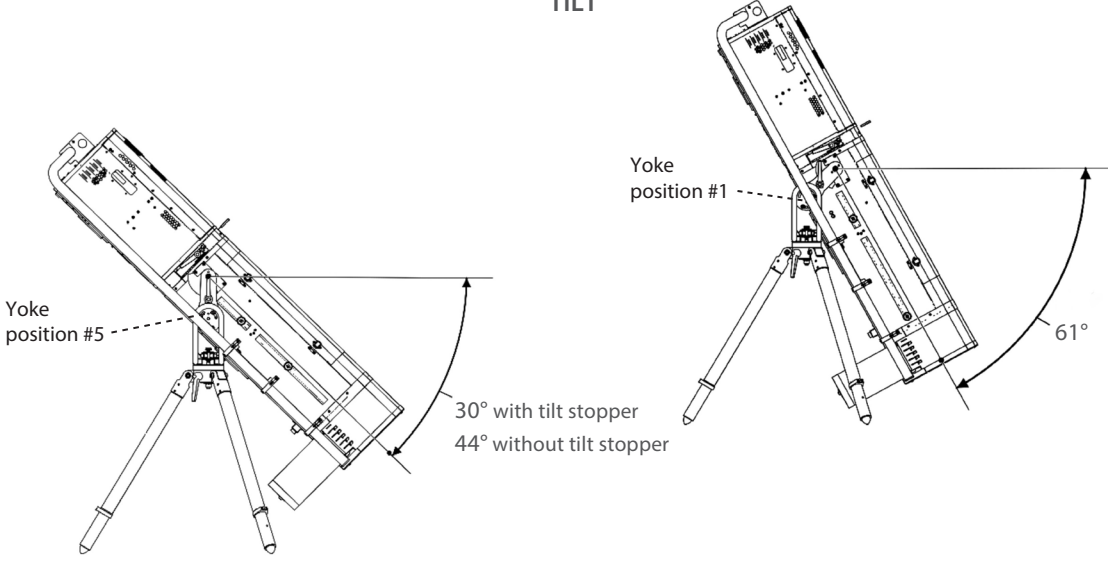
Model	Angles	Minimum angle	Maximum angle
ARTHUR 1014 & 1014TC	Beam angle	5.4°	13.2°
	Field angle	5.8°	13.6°
ARTHUR 1014LT & 1014TCLT	Beam angle	4.1°	10°
	Field angle	4.5°	10.6°

4.4.2 Control

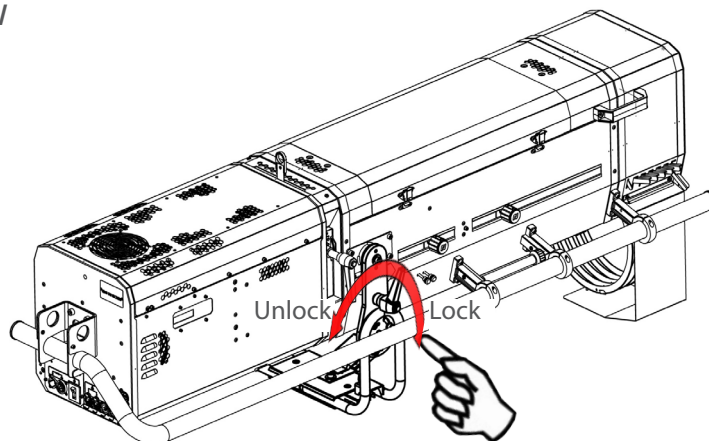


4.5 Pan / Tilt

4.5.1 Range

Function	Range
<p data-bbox="571 320 624 342">PAN</p> 	<p data-bbox="1137 495 1254 517">0 → 360°</p>
<p data-bbox="868 710 920 732">TILT</p>  <p data-bbox="320 1021 427 1066">Yoke position #5</p> <p data-bbox="951 875 1023 920">Yoke position #1</p> <p data-bbox="775 1122 991 1178">30° with tilt stopper 44° without tilt stopper</p> <p data-bbox="1374 1043 1414 1066">61°</p>	

4.5.2 Control



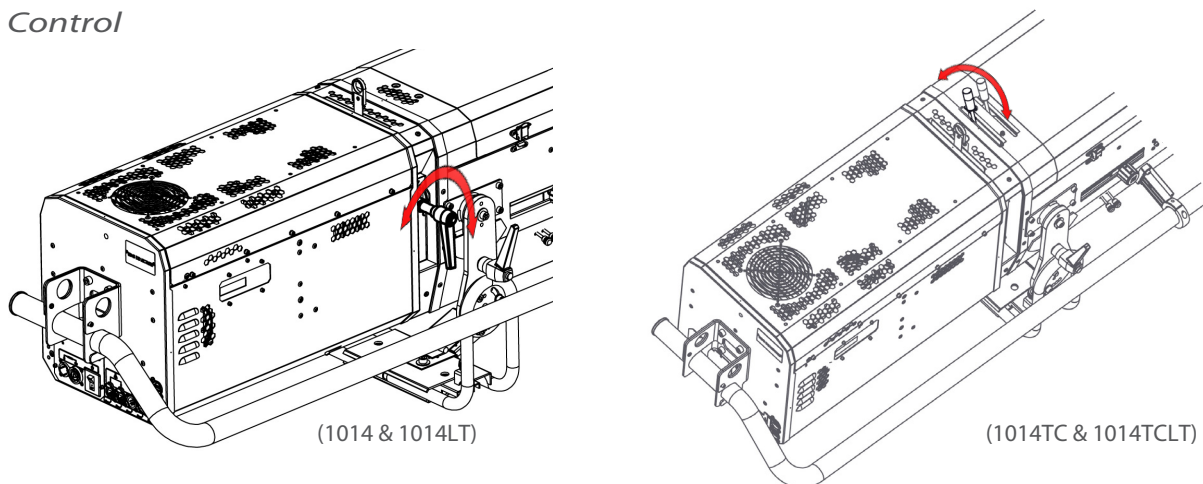
4.6 Iris

4.6.1 Range

- Irising



4.6.2 Control

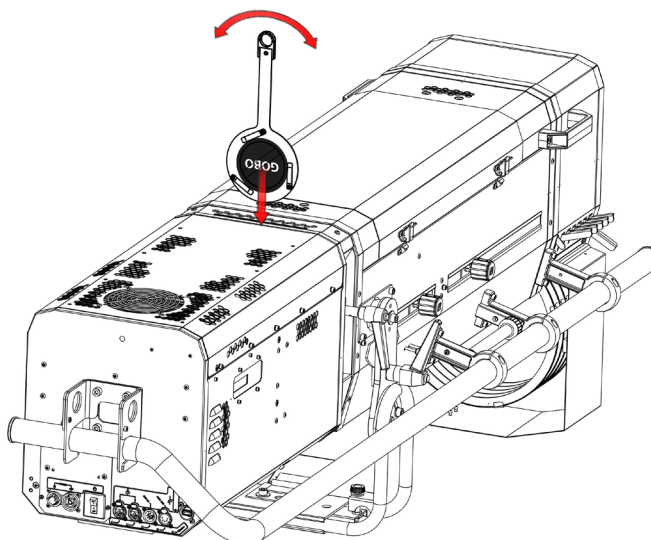


4.7 Gobo

4.7.1 Range

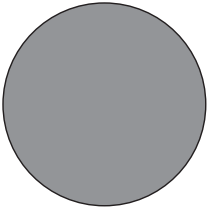
Type	Standard gobo - A size	Standard gobo - B size (for LT version)
Dimensions	<p>Ø100 mm</p> <p>Ø72 mm Maximum image size</p> <ul style="list-style-type: none"> • Metal • Glass 	<p>Ø86 mm</p> <p>Ø55 mm Maximum image size</p> <ul style="list-style-type: none"> • Metal • Glass
Installation	Cf. section: 3.4.4	

4.7.2 Control

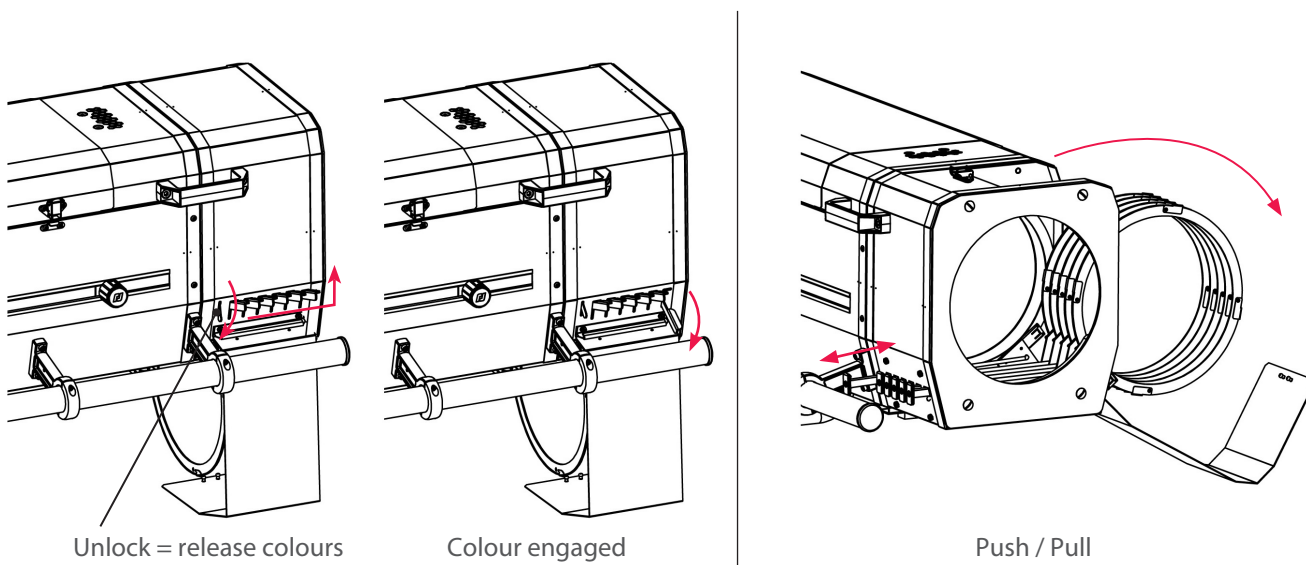


4.8 Colour

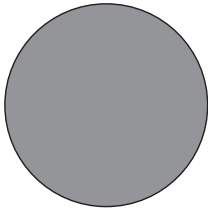
4.8.1 Range

Type	Coloured gel filter
Dimension	<p>Ø270 mm</p> 
Installation	<p>Cf. section: 3.4.2 & section 3.4.3 Place dark colours towards the front end.</p>

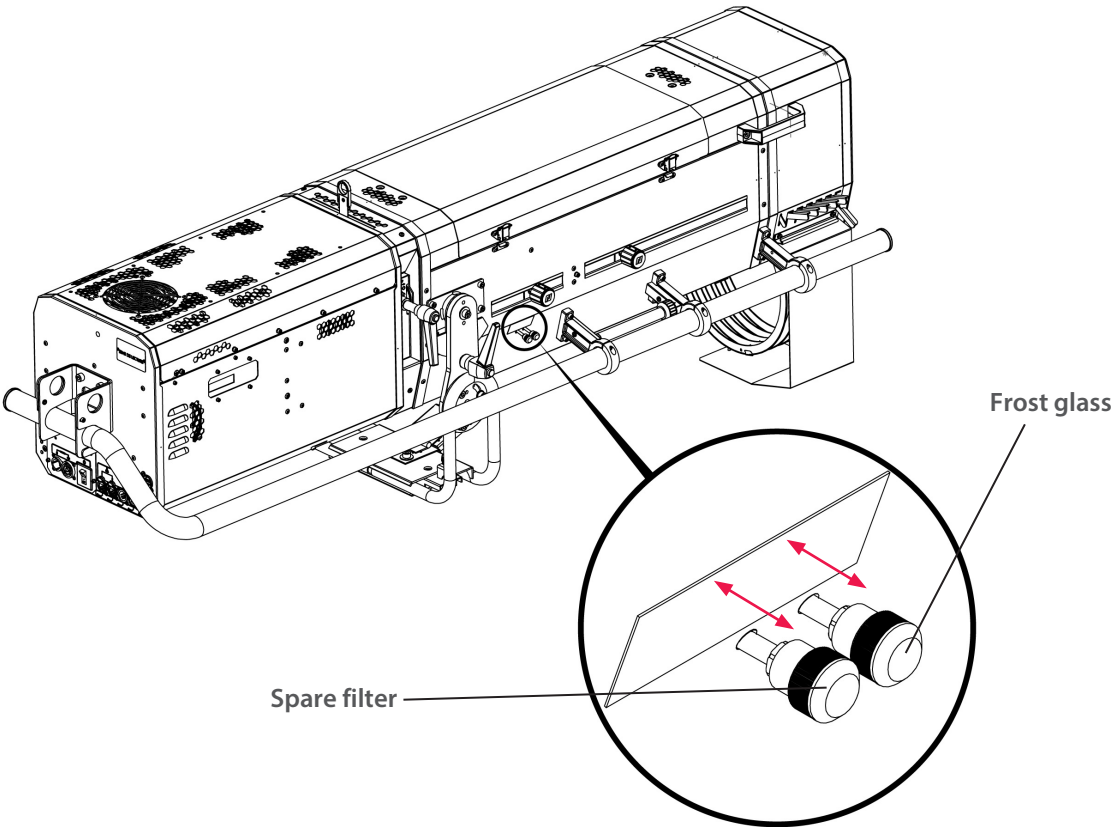
4.8.2 Control



4.9.1 Range

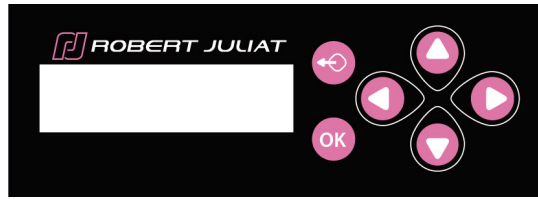
Type	Frost or Correction filter
Dimension	Ø120 mm 
Installation	Cf. section: 3.4.6

4.9.2 Control



5.1 Local display and controls

5.1.1 Display

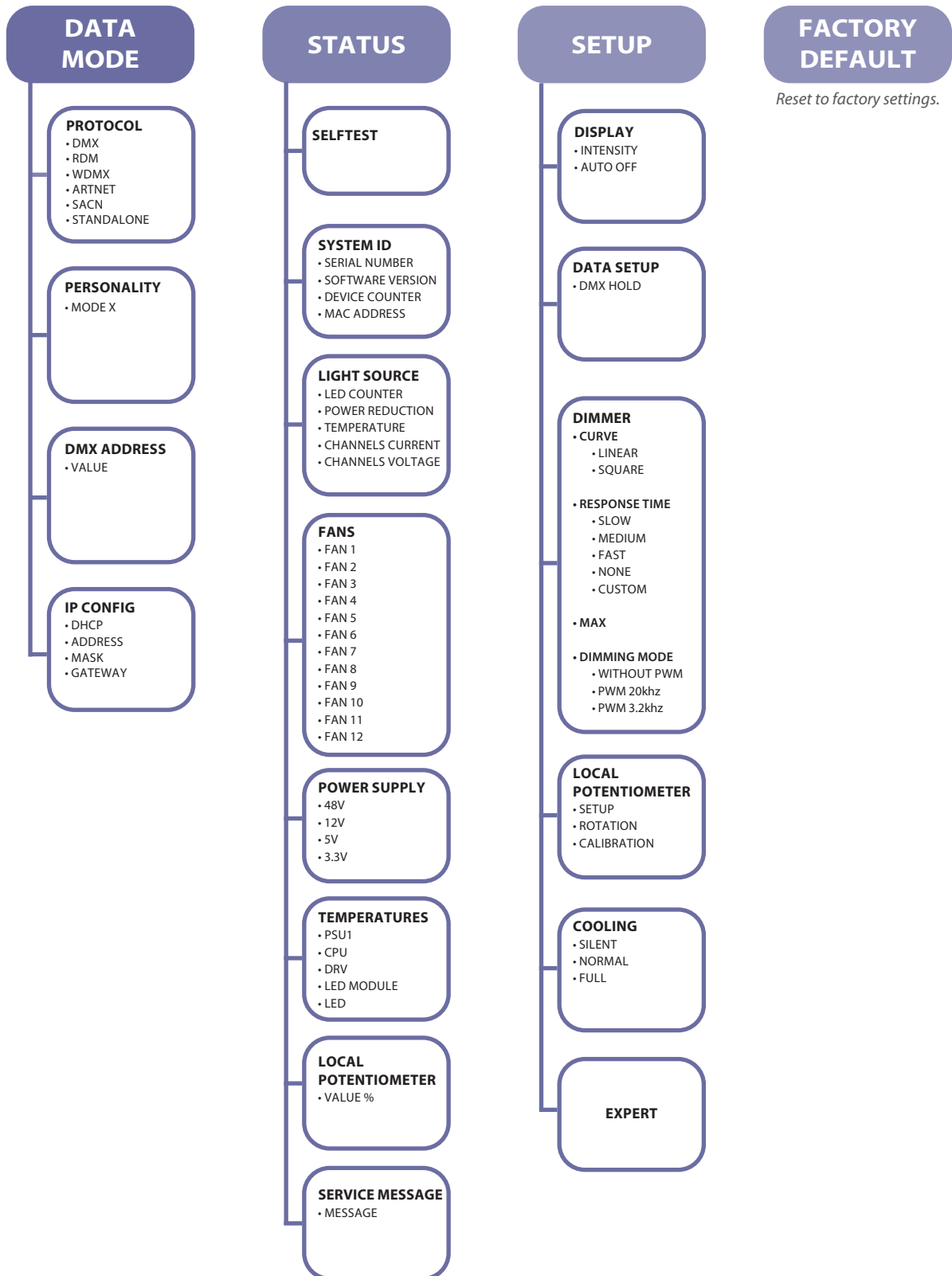


Function	
	Exit the current menu option and/or go back
	Enter the current menu option and/or valid
	Scroll through menus and/or Increase data value
	Scroll through menus and/or Decrease data value
	Scroll through menus and/or Increase data value
	Scroll through menus and/or Decrease data value

5.1.2 Home screen

Display	Mode	Description
	Home	Main display (home screen)
	 x1 push	Diagnostics
	 x1 push	Network information
	 x2 push	DMX information

5.1.3 Menu



5.1.4.1 Intensity

➔ Selection in SETUP / DISPLAY / INTENSITY menu

Display	Mode	Description
	Intensity	Adjust the intensity of the screen To change value, press buttons : press OK to validate

5.1.4.2 Auto-OFF

➔ Selection in SETUP / DISPLAY / AUTO OFF menu

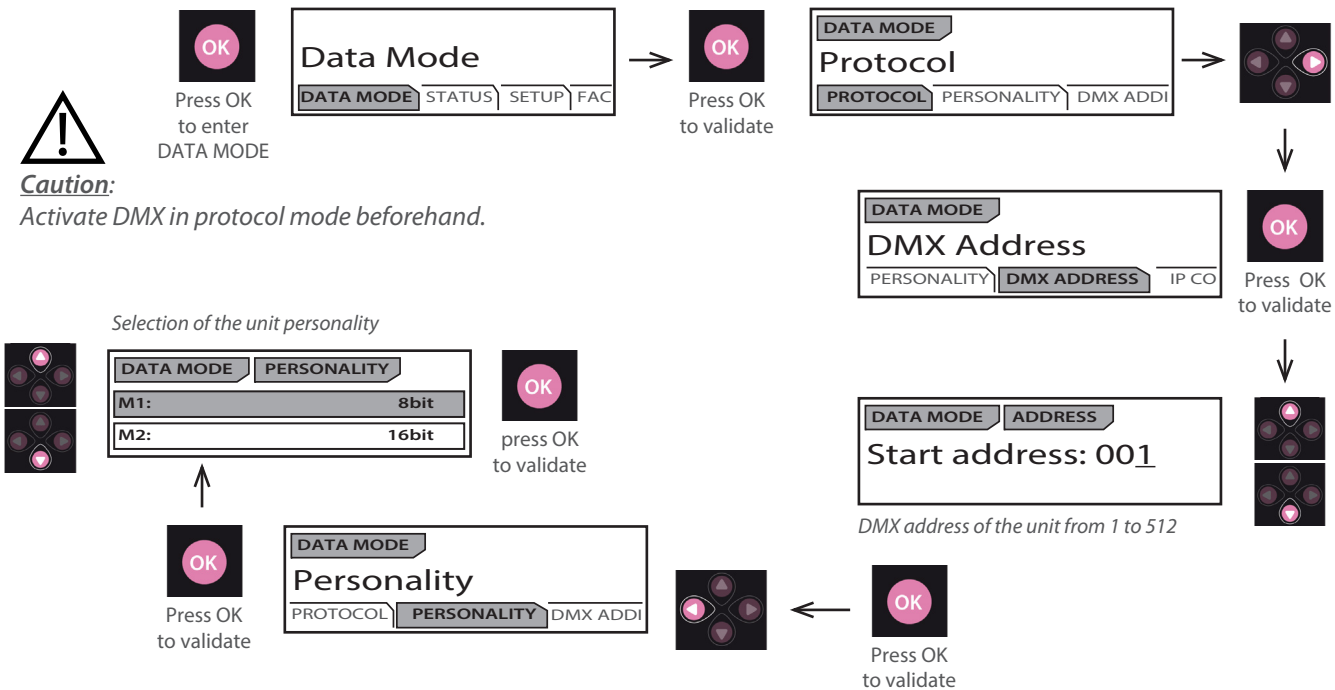
Display	Mode	Description
	Always ON	Main display, always ON press OK to validate
	Timer without warning	Main display OFF after 20 seconds press OK to validate
	Timer with warning	Main display OFF after 20 seconds, ON if warning information occurs press OK to validate

5.2 DMX512 - A remote control

5.2.1 Protocol

E1.11 – 2008, USITT DMX512-A

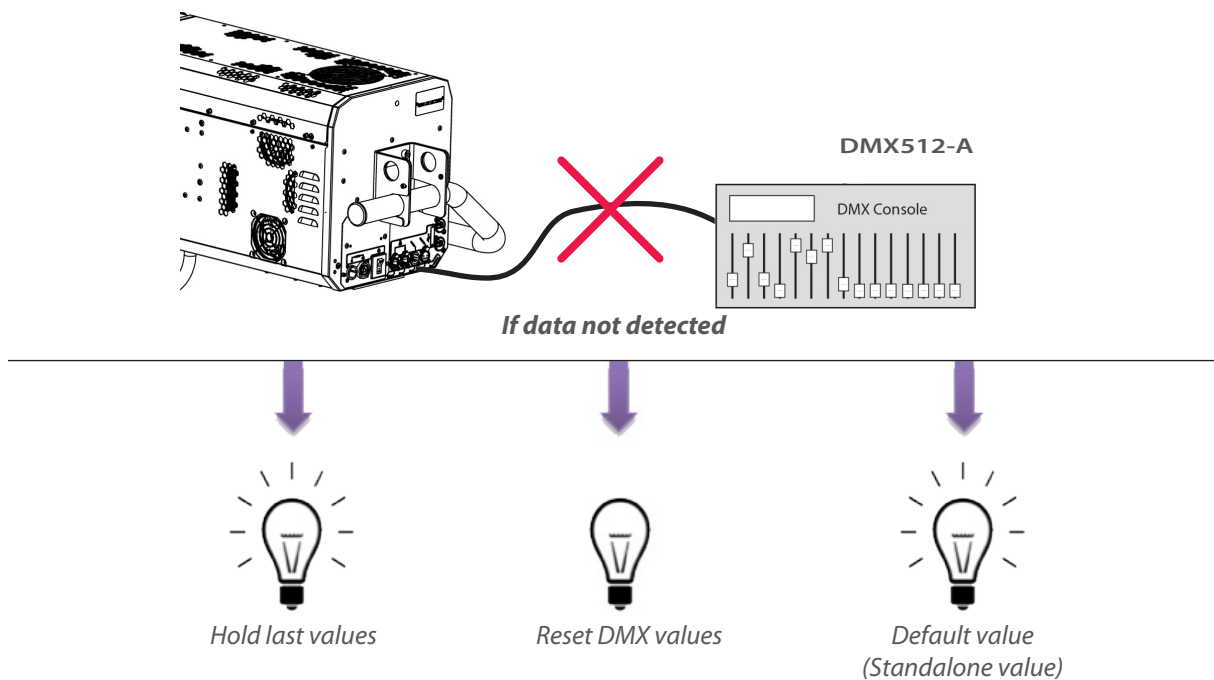
5.2.2 Configuration



5.2.3 Parameters

5.2.3.1 DMX Hold

→ Selection in SETUP / Data Setup / DMX HOLD menu



DMX Channel	Mode 1: Dimmer8B	Mode 2: Dimmer16B	Mode 3: Profile8B	Mode 4: Profile16b	Mode 5: Followspot8b	Mode 6: Followspot16b
1	Dimmer	Dimmer	Dimmer	Dimmer	Dimmer	Dimmer
2		Dimmer fine	Strobe duration	Dimmer fine	Master	Dimmer fine
3			Strobe speed	Strobe duration	Strobe duration	Master
4			Response time	Strobe speed	Strobe speed	Master fine
5			Control mode	Response time	Response time	Strobe duration
6				Control mode	Control mode	Strobe speed
7						Response time
8						Control mode

5.2.5 DMX ranges

5.2.5.1 Strobe duration

Range min	Range max	Function
0	0	Strobe OFF
1	255	Strobe ON - 1 ms → 20 ms

5.2.5.2 Strobe speed

Range min	Range max	Function
0	255	Frequency: 0,1 Hz → 10 Hz

5.2.5.3 Response time

Range min	Range max	Function
0	0	OFF
1	255	Response time: 0,1 s → 4 s

5.2.5.4 Control mode

Range min	Range max	Function
0	0	
1	10	RDM disabled
11	20	RDM enabled
21	100	Not used
101	110	Cooling mode: Silent
111	120	Cooling mode: Normal
121	130	Cooling mode: Full power
131	255	Not used

Function activated after 5 seconds - need to go back to zero to activate second function.

5.3 RDM remote control

5.3.1 Protocol

ANSI E1.20 – 2010 / ANSI E1.37 - 1 / ANSI E1.37 - 2

For more information about RDM protocol: <http://www.rdmprotocol.org/>

PID	Function description	ARTHUR 800W LED FOLLOWSPOT			V2.07	
		Get	Set	Queued Message		
Network Management						
00	01	DISCOVERY_UNIQUE_BRANCH				X
00	02	DISCOVERY_MUTE		X		X
00	03	DISCOVERY_UNMUTE		X		X
00	15	COMMUNICATION_STATUS	X	X		X
Status Collection						
00	20	QUEUED_MESSAGE	X			X
00	30	STATUS_MESSAGES	X			X
00	31	STATUS_ID_DESCRIPTION	X			X
00	32	CLEAR_STATUS_ID		X		X
RDM Information						
00	50	SUPPORTED_PARAMETERS	X			X
00	51	PARAMETER_DESCRIPTION	X			X
Product Information						
00	60	DEVICE_INFO	X		X	X
00	70	PRODUCT_DETAIL_ID_LIST	X			X
00	80	DEVICE_MODEL_DESCRIPTION	X			X
00	81	MANUFACTURER_LABEL	X			X
00	82	DEVICE_LABEL	X	X	X	X
00	90	FACTORY_DEFAULTS	X	X	X	X
00	C0	SOFTWARE_VERSION_LABEL	X		X	X
00	C2	BOOT_SOFTWARE_VERSION_LABEL	X			X
DMX512 Setup						
00	E0	DMX512_PERSONALITY	X	X	X	X
00	E1	DMX512_PERSONALITY_DESCRIPTION	X			X
00	F0	DMX512_STARTING_ADDRESS	X	X	X	X
01	20	SLOT_INFO	X			X
01	21	SLOT_DESCRIPTION	X			X
Sensors						
02	00	SENSOR_DEFINITION	X			X
02	01	SENSOR_VALUE	X			X
DMX Settings						
03	40	DIMMER_INFO	X			X
03	42	MAXIMUM_LEVEL	X	X	X	X
03	43	CURVE	X	X	X	X
03	44	CURVE_DESCRIPTION	X			X
03	45	OUTPUT_RESPONSE_TIME	X	X	X	X
03	46	OUTPUT_RESPONSE_TIME_DESCRIPTION	X			X
03	47	MODULATION_FREQUENCY	X	X	X	X
03	48	MODULATION_FREQUENCY_DESCRIPTION	X			X
Power / Lamp Settings						
04	00	DEVICE_HOURS	X			X
04	01	LAMP_HOURS	X	X		X
Display Settings						
05	01	DISPLAY_LEVEL	X	X	X	X

PID	Function description	ARTHUR 800W LED FOLLOWSPOT			V2.07	
		Get	Set	Queued Message		
Control						
10	00	IDENTIFY_DEVICE	X	X		X
10	01	RESET_DEVICE		X	X	X
10	20	PERFORM_SELFTEST	X	X		X
10	21	SELF_TEST_DESCRIPTION				X
RDMnet Management						
07	00	LIST_INTERFACES	X			X
07	01	INTERFACE_LABEL	X			X
07	02	INTERFACE_HARDWARE_ADRESS_TYPE1	X			X
07	03	IPV4_DHCP_MODE	X	X	X	X
07	05	IPV4_CURRENT_ADDRESS	X		X	X
07	06	IPV4_STATIC_ADDRESS	X	X		X
07	08	INTERFACE_RELEASE_DHCP		X		
07	09	INTERFACE_APPLY_CONFIGURATION		X		X
07	0A	IPV4_DEFAULT_ROUTE	X	X	X	X
07	0B	DNS_IPV4_NAME_SERVER	X	X	X	X
07	0C	DNS_HOSTNAME	X	X		
PID Manufacturer						
85	58	SELFTEST_RESULT	X			X
85	59	CURRENT_IP_ADDRESS	X		X	X
85	5A	CURRENT_NETMASK	X		X	X
85	5B	CURRENT_DRIVER_STATUS	X		X	X
85	5C	CUSTOM_RESPONSE_TIME_DESCRIPTION	X			X
85	5D	CUSTOM_RESPONSE_TIME_VALUE	X	X	X	X
85	60	DATA_MODE_DESCRIPTION	X			X
85	61	DATA_MODE_VALUE	X	X	X	X
85	62	STANDALONE_VALUE_DESCRIPTION	X			X
85	63	STANDALONE_VALUE	X	X	X	X
85	64	SACN_UNIVERSE_VALUE_DESCRIPTION	X			X
85	65	SACN_UNIVERSE_VALUE	X	X	X	X
85	66	ARTNET_UNIVERSE_VALUE_DESCRIPTION	X			X
85	67	ARTNET_UNIVERSE_VALUE	X	X	X	X
85	68	SERIAL_DESCRIPTION	X			X
85	69	SERIAL	X	X		X
85	6A	DMX_HOLD_DESCRIPTION	X			X
85	6B	DMX_HOLD	X	X	X	X
85	6C	COMMAND_LOCK_DESCRIPTION	X			X
85	6D	COMMAND_LOCK_VALUE	X	X	X	X
85	6E	DRIVER_CALIBRATE_DESCRIPTION	X			X
85	6F	DRIVER_CALIBRATE_VALUE	X	X	X	X
85	6E	DRIVER_CALIBRATE_DESCRIPTION	X			X
85	6F	DRIVER_CALIBRATE_VALUE	X	X		X
85	70	NODE_DESCRIPTION	X			X
85	71	NODE_VALUE	X	X		X

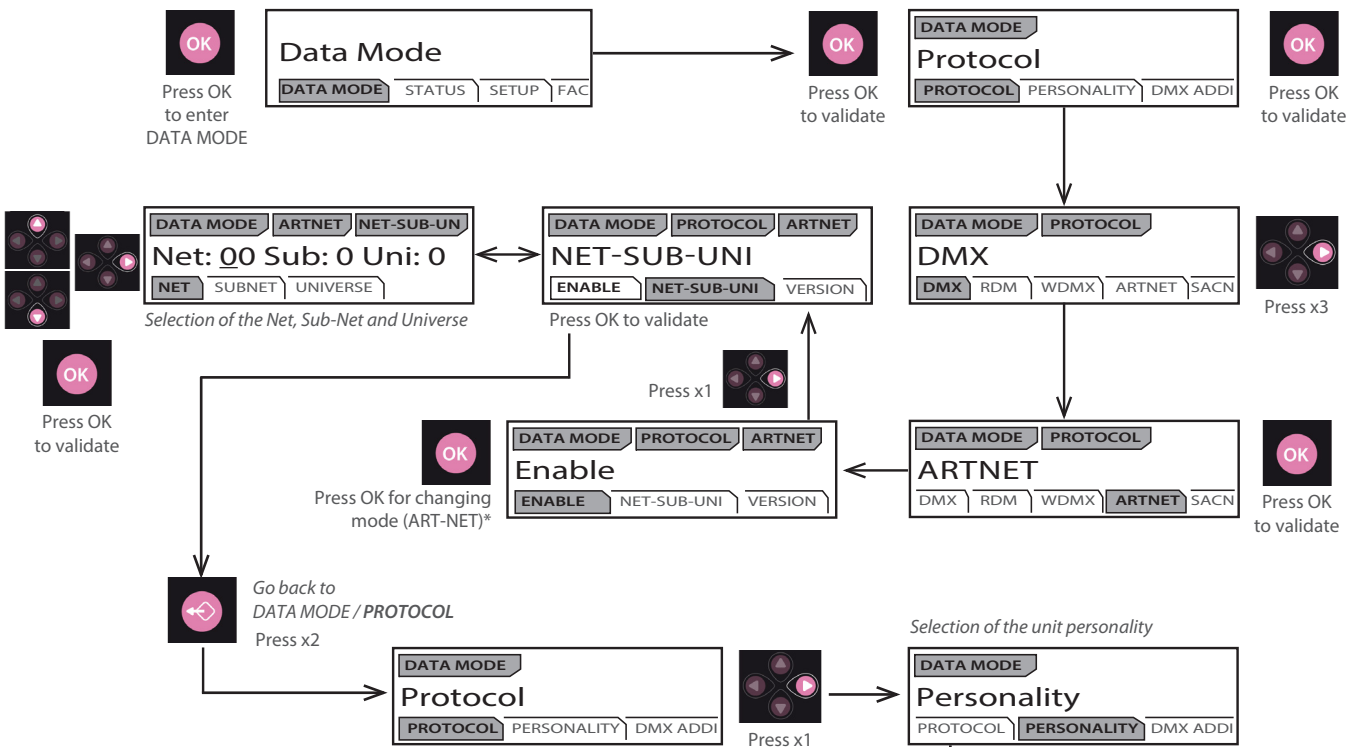
5.4.1 Protocol **Artistic Licence Art-Net v3.**

For more information about Art-Net protocol: <http://art-net.org.uk/>

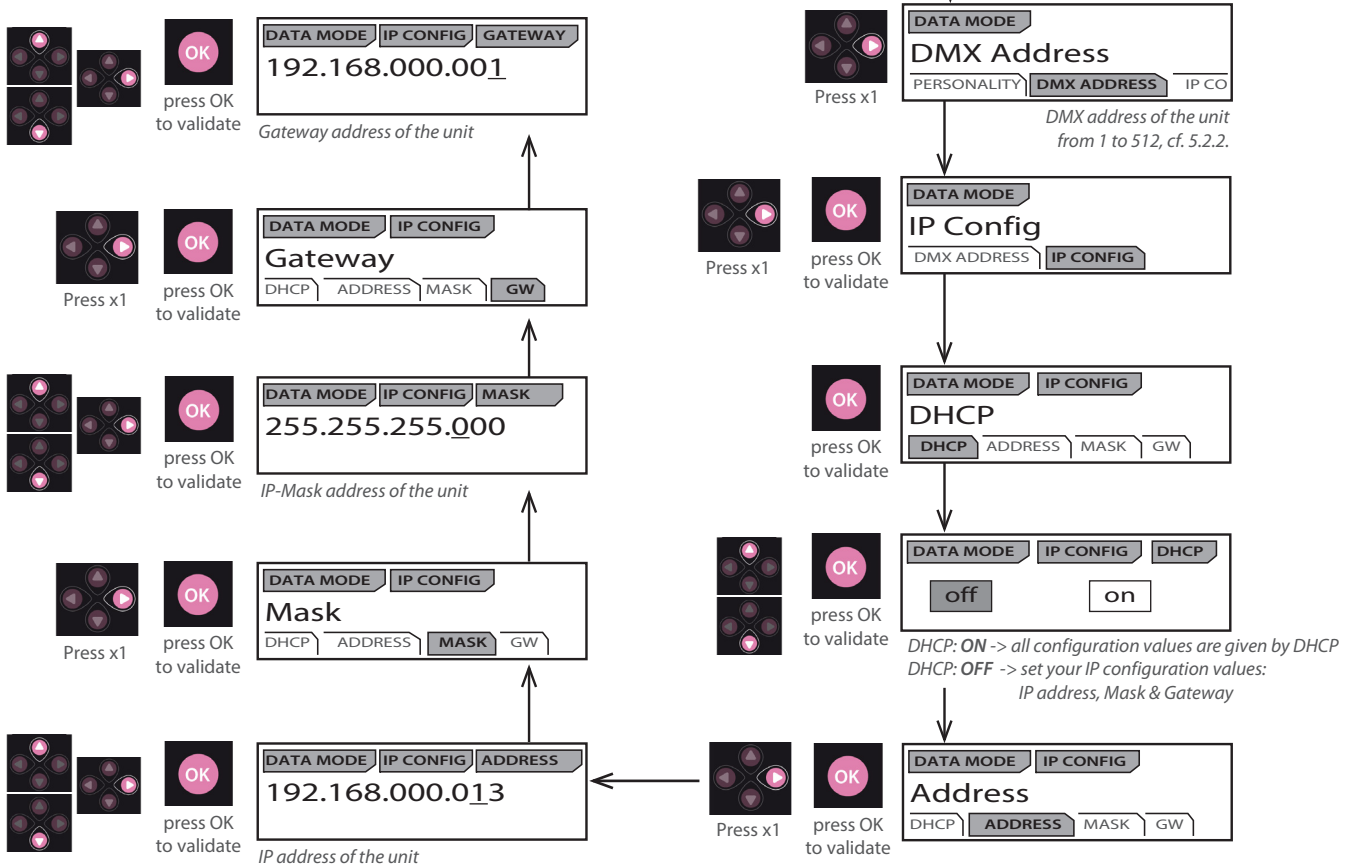
5.4.2 Configuration



(*) **Caution:**
Activate Art-Net in protocol mode beforehand.



NOTA: To go back to another active mode, select: DMX or sACN and press OK to validate.



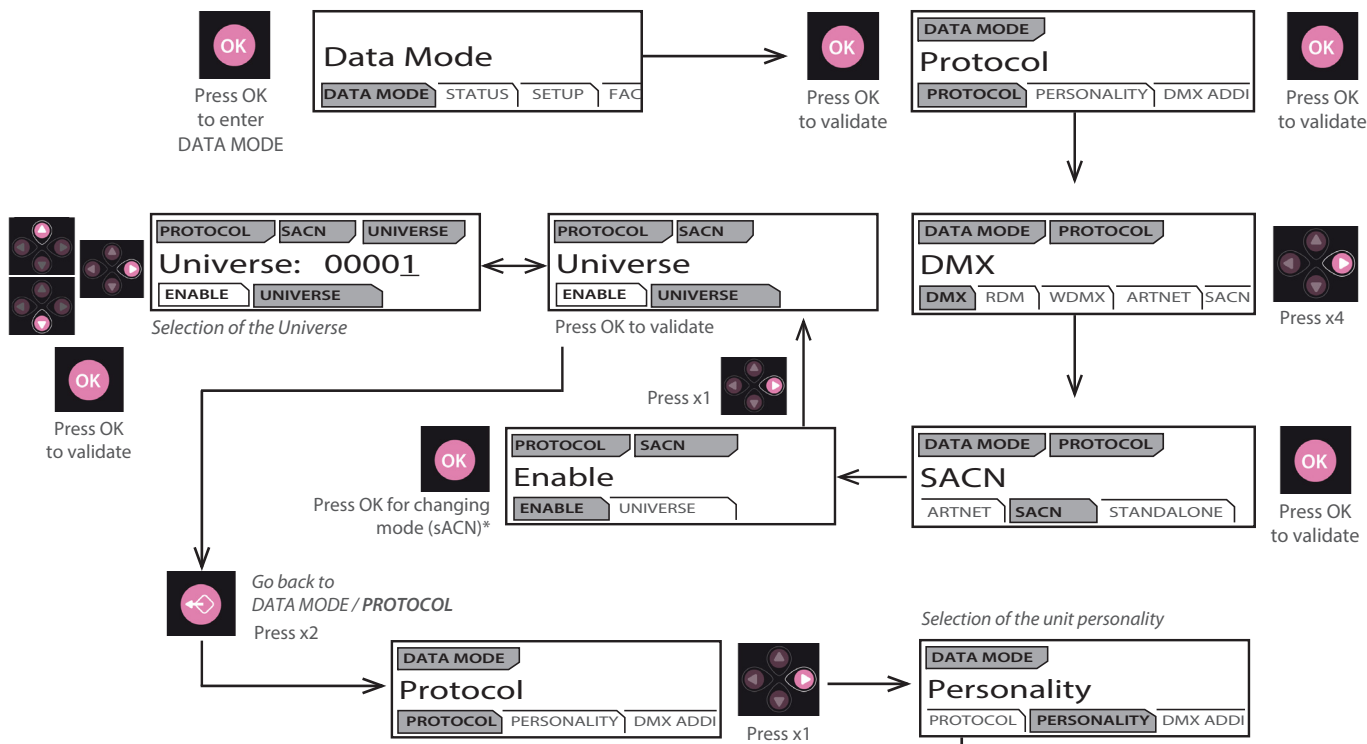
5.5 sACN remote control

5.5.1 Protocol ANSI E1.31 – 2009 sACN (Streaming-ACN)

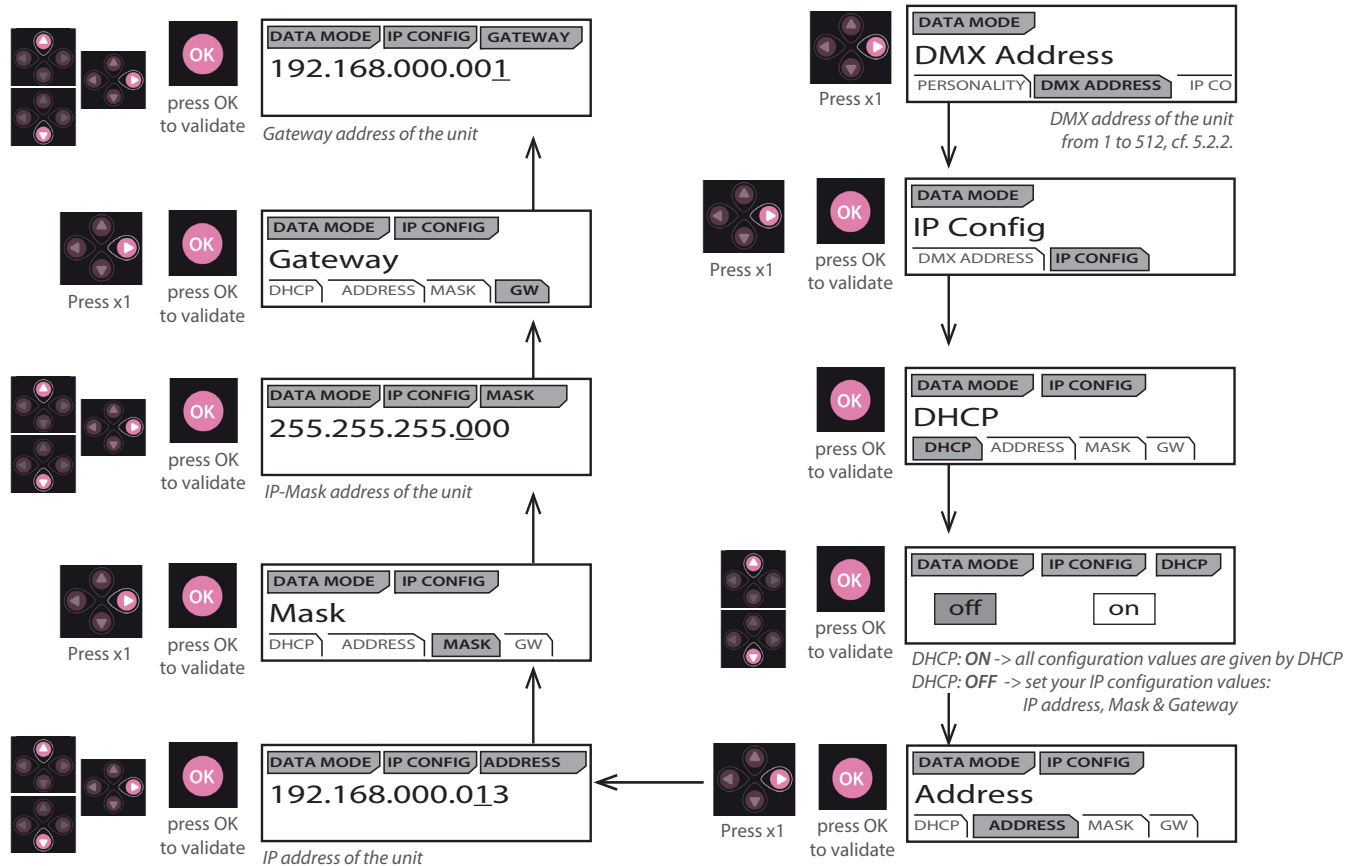
5.5.2 Configuration








(*) **Caution:**
Activate sACN in protocol mode beforehand.



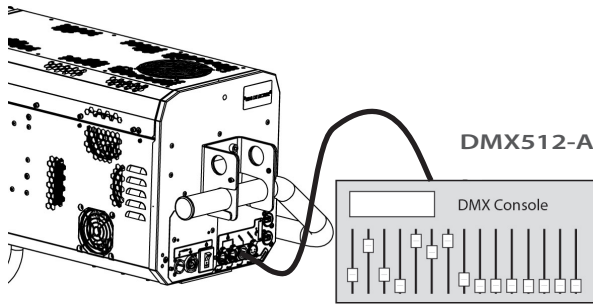
NOTA: To go back to another active mode, select: DMX or Art-Net and press OK to validate.



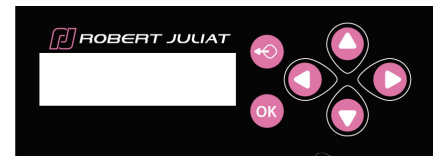
5.6.1 Range

Modes	Silent	Normal	Full
 Cooling Ambient temperature: 30°C	 < 35 dB(A)	 < 37 dB(A)	 < 39 dB(A)
 Brightness	90%	98%	100%

5.6.2 Control

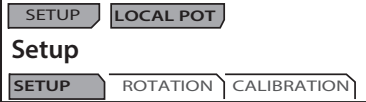

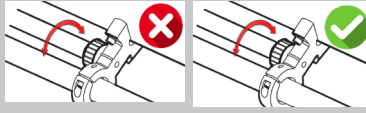
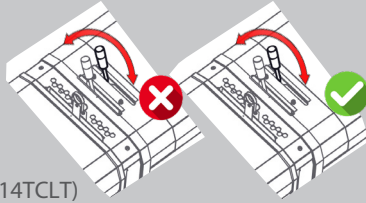
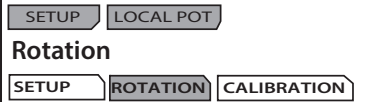

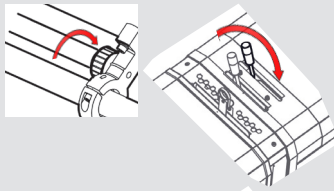
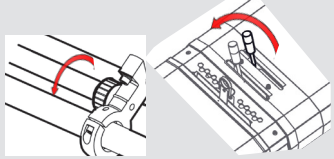




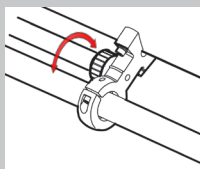
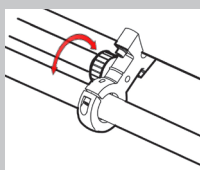


Remotely by DMX512-A
Mode 3 – 4 – 5 – 6



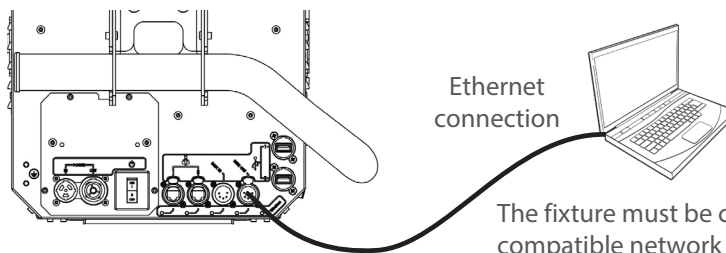
Locally → selection in
SETUP / COOLING

→ selection in SETUP / LOCAL POTENTIOMETER

Function	Parameters	Description
<p>Setup</p> 	 <p>Disable Enable</p>	<p>(1014 & 1014LT)</p> <p>Disable</p>   <p>(1014TC & 1014TCLT)</p>
<p>Rotation</p> 	 <p>Normal(CW) Invert (CCW)</p>	<p>Normal (CW): Clockwise</p>  <p>Invert (CCW): Anticlockwise</p> 
<p>Calibration</p> 	 <p>Min Max</p>   <p>Min Max</p>	<p>Adjust to the minimum position</p>  <p>Adjust to the maximum position</p> 

5.8 Web interface

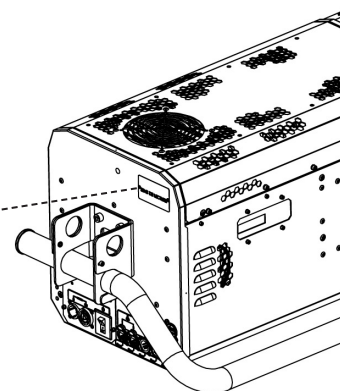
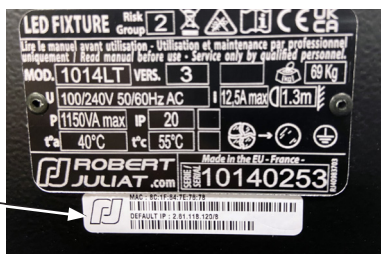
5.8.1 Control



The fixture must be connected to a compatible network or directly to a computer using an ethernet cable.

5.8.2 Default IP address

By default:
 DHCP = OFF
 Address = 2.XXX.XXX.XXX
 Mask = 255.0.0.0



→ If IP address unknown (due to a previous modification), a hard reset must be done (see 6.5 Factory defaults).

5.8.3 Network IP of the computer

The computer must be on the same network as the Arthur followspot.
 Please refer to your computer Operating System to change IPV4 parameters :

- **Microsoft Windows:** <https://support.microsoft.com/en-us/windows/change-tcp-ip-settings-bd0a07af-15f5-cd6a-363f-ca2b6f391ace>
- **MAC OS:** <https://support.apple.com/en-gb/guide/mac-help/mchlp2718/10.15/mac/10.15>

- 1 - ADDRESS = 2.XXX.XXX.YYY with YYY ≠ XXX
 Do not use the same IP address as the Arthur followspot
- 2 - MASK = 255.0.0.0

IP configuration available on *Network* screen view:

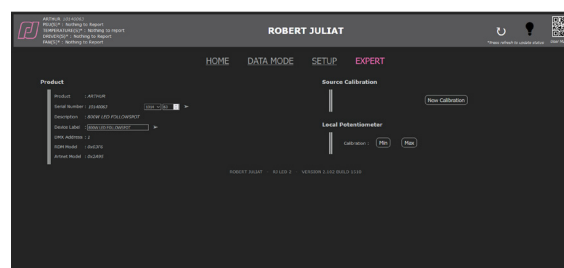
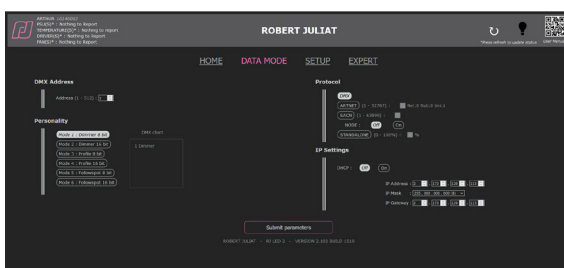
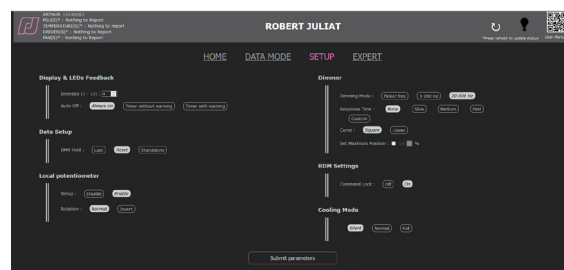
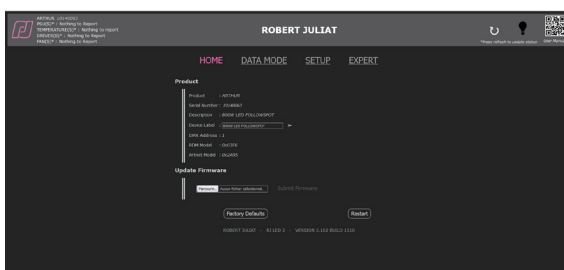


x1 push

Link status :	NOK	DHCP :	OFF
IP	192.168.000.013		
MASK	255.255.255.000		
GW	192.168.000.001		

5.8.4 Connect to web interface

- 1 - Open a web browser (Microsoft Edge, Firefox, Apple Safari...)
- 2 - Enter the URL address of the Arthur followspot: <http://2.XXX.XXX.XXX>
- 3 - All parameters can be now modified



6.1 Preventive maintenance

6.1.1 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.).

6.1.2 General cleaning

Remove dust from the unit.

Front glasses can be cleaned with solutions containing alcohol.

6.1.3 General visual check

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

6.1.4 LED source

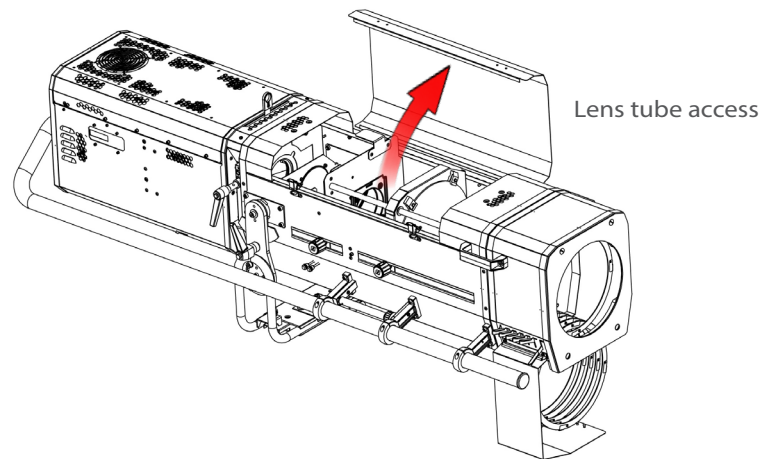


- Do not touch the surface of the LED source (no contact with your hands or any tools).
- Do not put compressed air directly on the source.
- Contact a certified RJ distributor in case of residuals or other objects located on the surface of the LED source.

6.1.5 Optics

Only use solutions containing alcohol to clean optical parts (lenses).

- To clean the optical parts, use a soft cloth in combination with distilled water or isopropyl alcohol recommended for coated optics. Do not use any cleaning product that contains solvents or abrasives, as these can cause surface damage.
- Dry with a soft lint-free cloth.

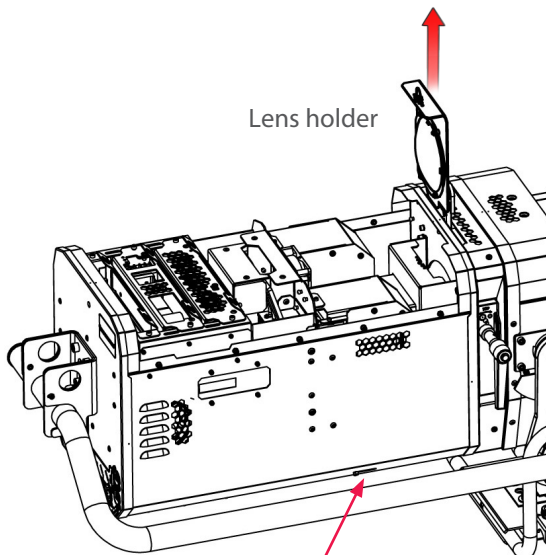
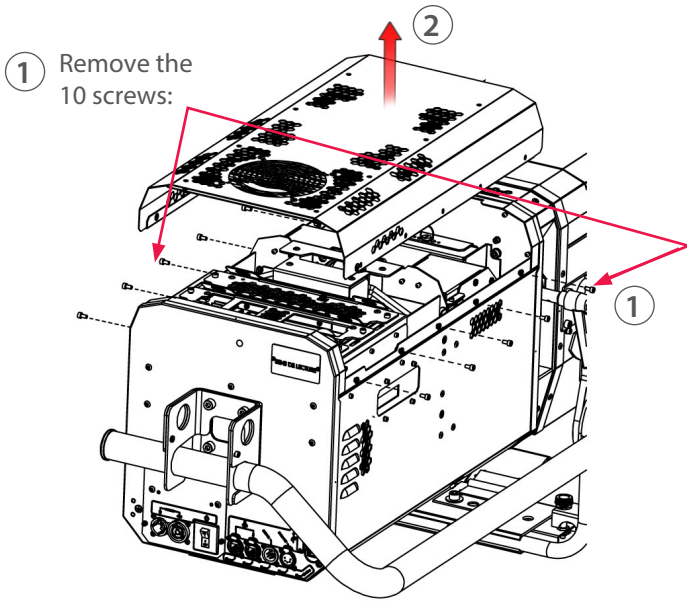


6.1.6 LED house cleaning

Inner parts & lens holder access.

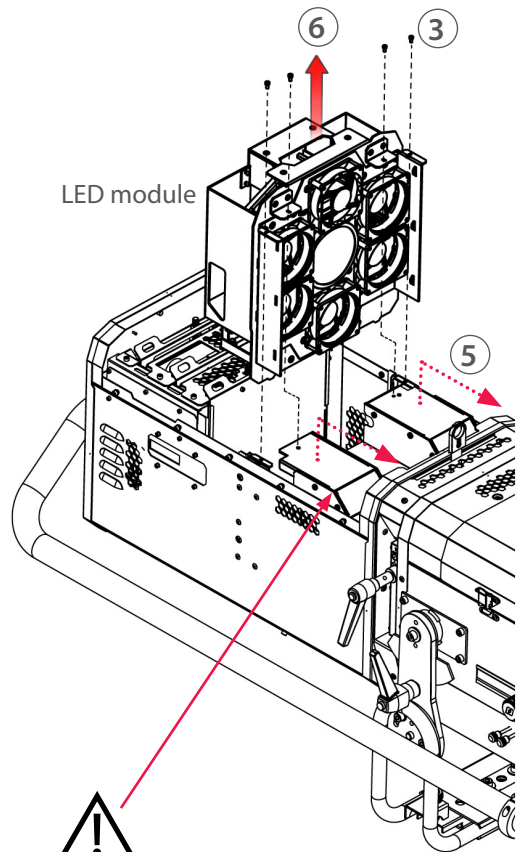
- To clean the optical parts, use a soft cloth in combination with distilled water or isopropyl alcohol recommended for coated optics. Do not use any cleaning product that contains solvents or abrasives, as these can cause surface damage.
- Dry with a soft lint-free cloth.

Removing the LED housing cover: 1 → 2



Release the screw on each side.

Removing the LED module: 3 → 4 → 5 → 6



After removing the 4 screws (step #3) and releasing the 2 screws (step #4), **push** forward the LED protection unit (step #5). Now you can remove the LED module (step #6).



LED module set-up procedure:

6.2 Analysis

In case of problem, contact RJ distributor with the following information:

- Model, version and serial number of the product.
- From the menu status:
 - Software version
 - LED board IDs
 - Device hours
 - Picture of the Selftest Report (Cf. section 6.6 Selftest)
- Description of the problem.



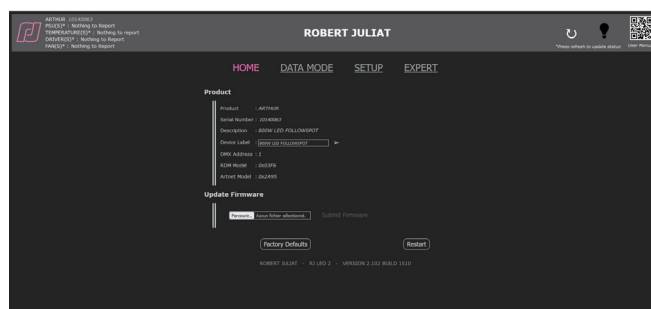
6.3 Electronic thermal management system

In case of overheating, light intensity will be reduced by the system.

"Power reduction X%" will be shown on the display with the reducing percentage.

6.4 Firmware update

1. Firmware available on www.robertjuliat.com/followspots/Arthur
2. Download and unzip the file
There are 4 files:
 - Firmware (.upd2 format)
 - Firmware History
 - Update Procedure
 - User Manual for firmware V2.x
 - Art RDM Node Manual
3. Switch on the unit
4. Connect Network from computer to the unit
5. Open a web browser (Internet Explorer, Firefox, Chrome...)
6. Enter the URL address to connect to the web interface (*see 5.8*)
7. Upload your firmware file (.upd2) in the "Update firmware" section and then click on 'Submit firmware'




6.5 Factory defaults

Select FACTORY DEFAULT in the main menu to reset all values and parameters

6.6 Selftest

Select SELFTEST in the main menu :


Press OK
to start
SELFTEST



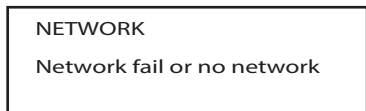
Fan Test



PSU Test



Temperature Test



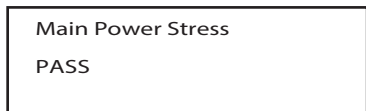
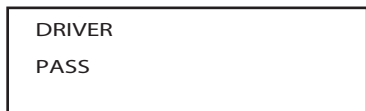
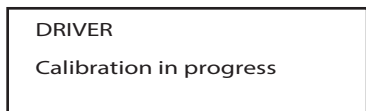
Network Test

A data connection is required.




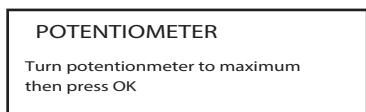
Driver Test

Each driver is tested individually and a calibration is launched if required.



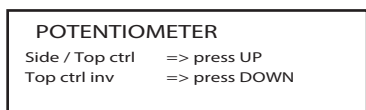
48V PSU Stress Test


Press OK



Dimmer Potentiometer Test

Follow the instructions.



DMX IN
DMX IN fail or NO DMX

DMX OUT
Plug DMX OUT then press OK

DMX OUT
DMX OUT fail or NO DMX

DMX Test

DMX data is required to complete this test.

LEDS
green

LEDS
blue

LEDS
red

Signal Leds Test

test report: Fail P=Pass F=Fail

fans	P	pow	P	temp	P	dmxi	P
dmxo	F	net	F	drv	P	pot	P

Test Report

To be communicated to **RJ Service** if requested :
service@robertjuliati.fr