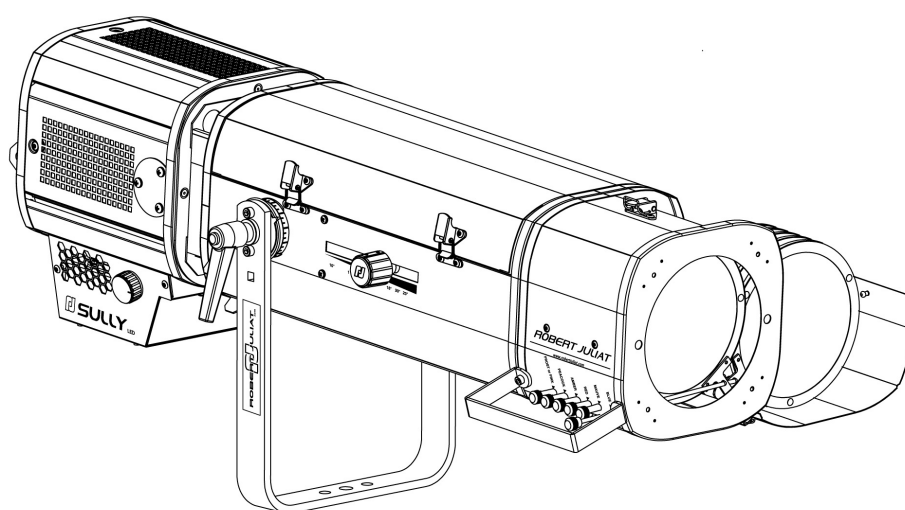


# SULLY 1156

Manual

## LED FOLLOWSPOT



### 115 W FOLLOWSPOT

Model	Standard	North American
10.5° – 22.5° Warm White	1156WW	1156CWW
10.5° – 22.5° Cool White	1156CW	1156CCW

V1

- FIRMWARE: V3.0  
- RJ-LED2 FIRMWARE PLATFORM (Node Mode) full manual is available for download at [robertjuliat.com/LED/PDF\\_PAGE](http://robertjuliat.com/LED/PDF_PAGE)

VALIDATION : 14/04/22



**ROBERT JULIAT**

**DN41202000 (EN)**

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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.

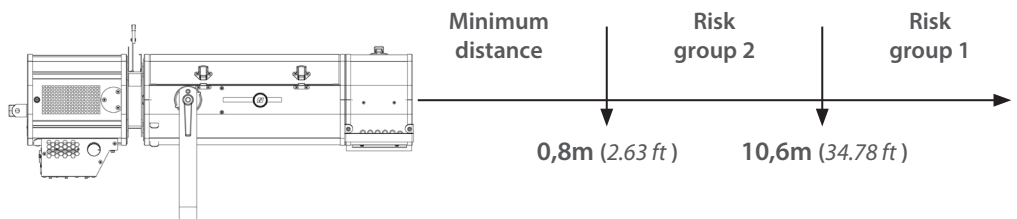
## POWER SUPPLY

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**



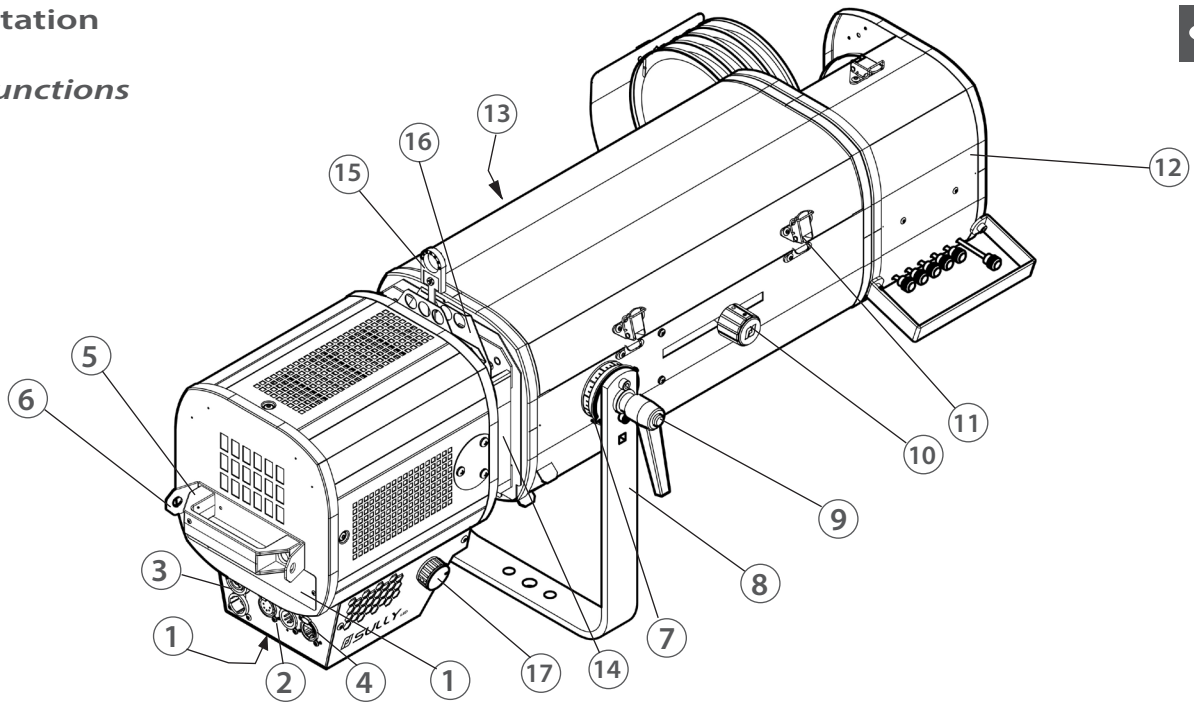
**CAUTION:** Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. Maybe harmful to the eye.

**Group risk 2. Luminaires should be positioned so that prolonged staring into luminaire at a distance closer than 10,6m is not expected.**

## 2 Presentation



### 2.1 Functions



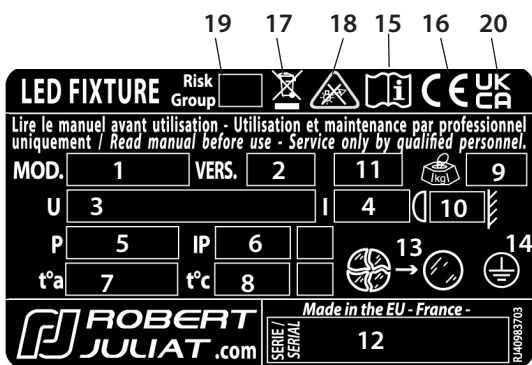
#### Description

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. Identification plates</li> <li>2. Data connector (IN and OUT)</li> <li>3. Power connector (IN and OUT)</li> <li>4. RJ45 network connector</li> <li>5. Handle</li> <li>6. Safety cable attachment point</li> <li>7. Tilt index</li> <li>8. Yoke</li> <li>9. Locking handle</li> <li>10. Focus adjustment</li> </ul> | <ul style="list-style-type: none"> <li>11. Lens tube access</li> <li>12. Colour changer</li> <li>13. Zoom adjustment</li> <li>14. Gate: slots for gobo holder and/or iris</li> <li>15. Iris</li> <li>16. Gobo holder</li> <li>17. Dimmer</li> </ul> |
|--|---|

### 2.2 Identification labels

#### 2.2.1 label on LED compartment

#### Description

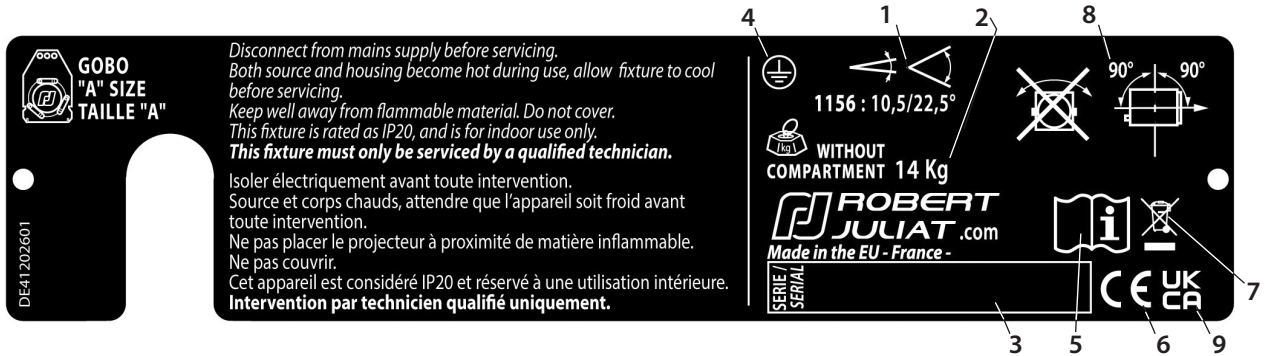


- 1. MOD.: Model
- 2. VERS.: Version
- 3. U: Nominal voltage input (V)
- 4. I: Nominal intensity (A)
- 5. P: Maximum power input (W)
- 6. IP: International Protection Rating
- 7. t<sup>a</sup>: Maximum ambient temperature (°C)
- 8. t<sup>c</sup>: Maximum external temperature of the unit (°C)
- 9. Net weight (kg)
- 10. Minimum distance between a flammable material and the lighting unit (m)
- 11. Colour temperature version
- 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

#### Units:

- Weight = kilogram (kg).
- Intensity = Ampere (A).
- Voltage = Volt (V).
- Frequency = Hertz (Hz).
- Temperature = degree Celsius (°C).

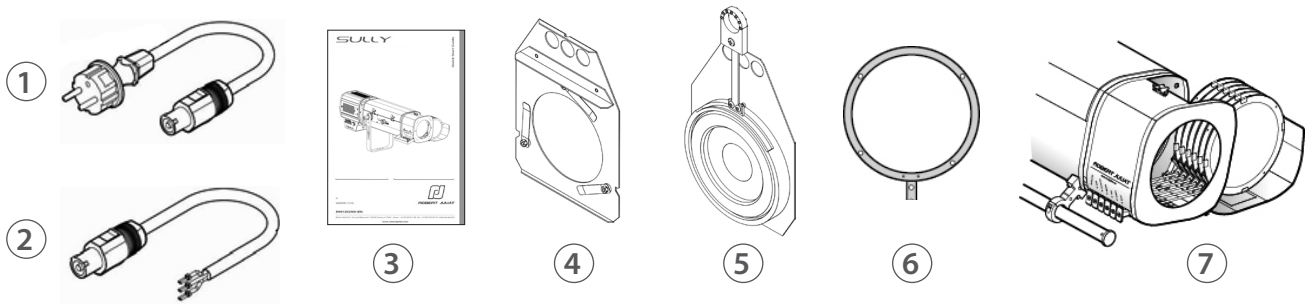
Description



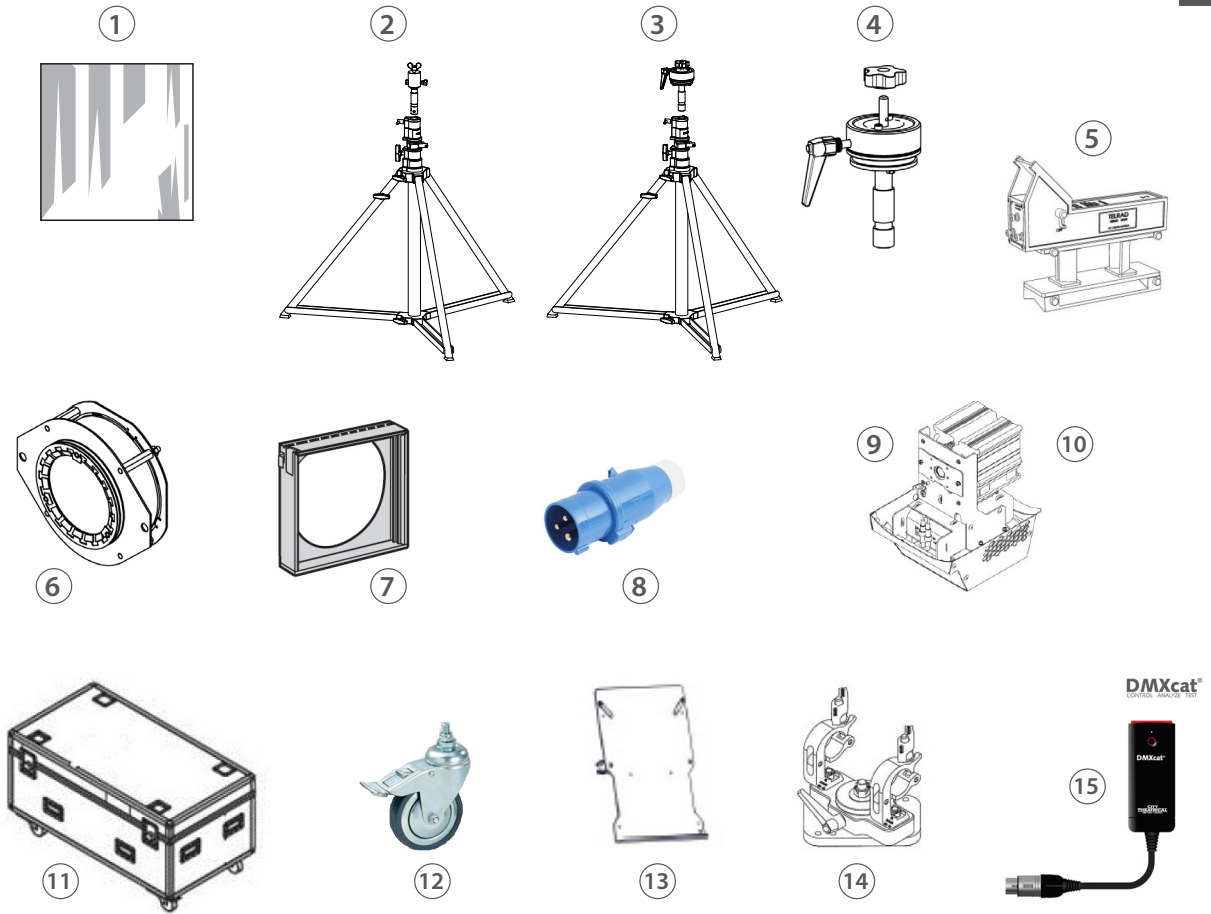
1. Model beam angles
2. Net weight (kg) without LED compartment
3. Serial number
4. Class 1 product label
5. Read manual first label
6. European conformity label
7. WEEE directive label
8. Operating positions
9. UKCA (UK Conformity Assessed) label

**Units :**  
 - Weight = kilogram (kg).  
 - Intensity = Ampere (A).  
 - Voltage = Volt (V).  
 - Frequency = Hertz (Hz).  
 - Temperature = degree Celsius (°C).

2.3 Accessories included



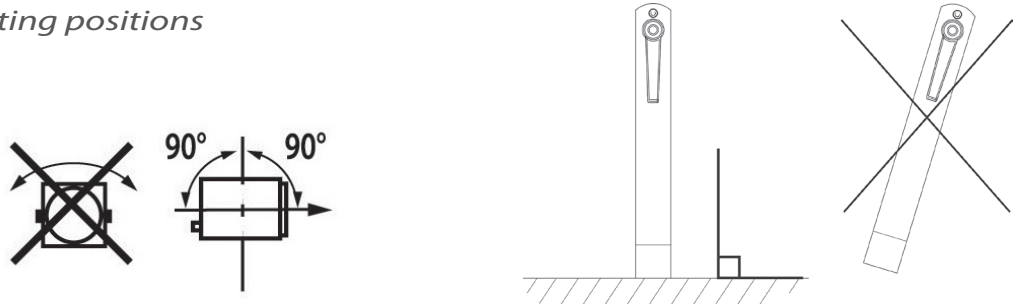
	Reference	Description
1	CAL03	Power cable with CEE 7/7 type in connectors (standard version)
2	CAL04	UL/CSA power cable without connector (North-American version)
3	DN41202400	Quick Start manual
4	SGUX	Universal "A" size gobo holder (metal, glass or frosted glass)
5	IS750	Full closing iris with holder
6	PF1114	Ø165 mm metal filter holder (x6)
7	M165TP	6-way "push/pull" colour changer



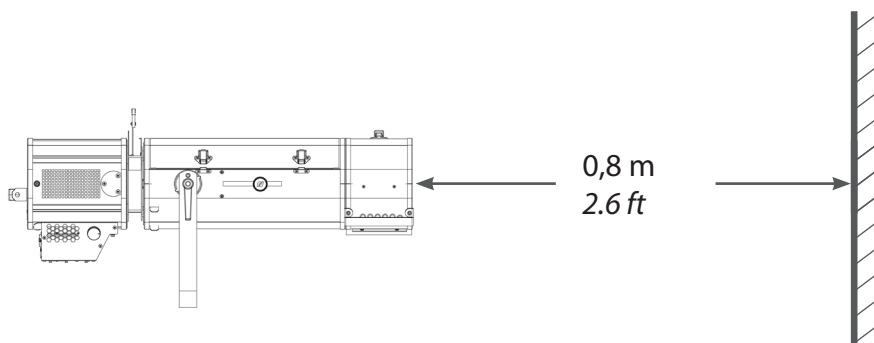
	Reference	Description
1	VD120	120 x 120 mm frosted glass
2	GT800	Tripod stand GT800 - SWL: 40 kg max. height 1550 mm
3	GT1000	Tripod stand GT1000 - SWL: 40 kg max. height 1550 mm
4	T1000	TV spigot with followspots swivel head
5	Kit TELRAD	Followspot sight with riser
6	APH 68LED	Double-condenser set for Led profile
7	CAV600A	Double slot front cassette for 180x180mm accessories
8	PCP1716A	16A blue 2P+E 6h IEC60309 power connector
9	T/1650SXCW	SULLY 115W LED compartment with potentiometer - Cool White - 3 meter power cable with CEE 7/7 (2P+T NF/SCHUKO) connector
10	T/1650SXWW	SULLY 115W LED compartment with potentiometer - Warm White - 3 meter power cable with CEE 7/7 (2P+T NF/SCHUKO) connector
11	FC1124/S	Transport flight-case for ultra compact range followspots
12	W/GT800	Set of 3 wheels for GT800/1000 stands
13	SDUP	Followspot cue sheet holder with universal mounting kit
14	T4000	Followspot mount for Ø50 mm pipe (suspension or overhead) - SWL= 100 Kg
15	DMXcat	Bluetooth DMX/RDM Multifunction test tool - City Theatrical DMXcat®

3.1 Mechanics

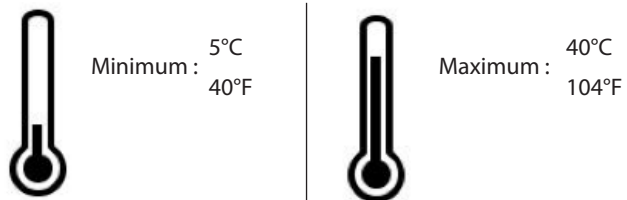
3.1.1 Operating positions



3.1.2 Minimum distance between a flammable material and the lighting unit



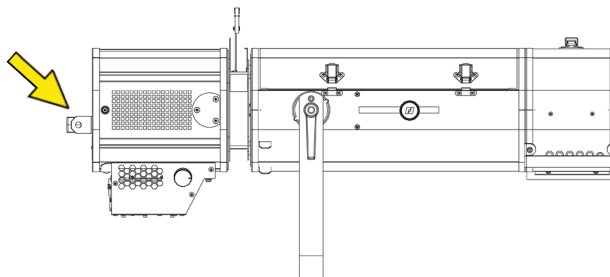
3.1.3 Instructions for use



IP20 - Indoor use only

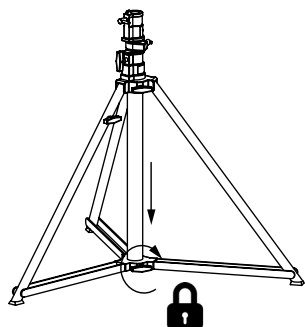
3.1.4 Lifting

• Net weight: 15.6 Kg (34,3 lbs).

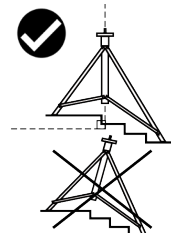
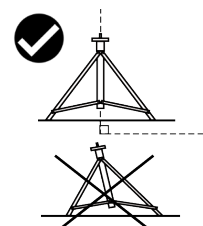
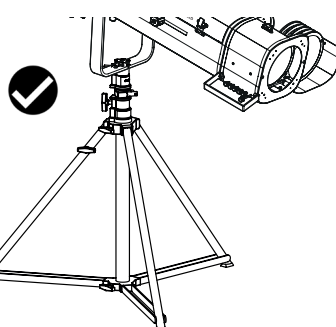


### 3.1.5 Stand set-up

- Compatible stands : GT800 & GT1000  
Please refer to the relevant user manual for further details.



↓ MAX  
40kgs/88lbs



## 3.2 Electrical information

### 3.2.1 LED source



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

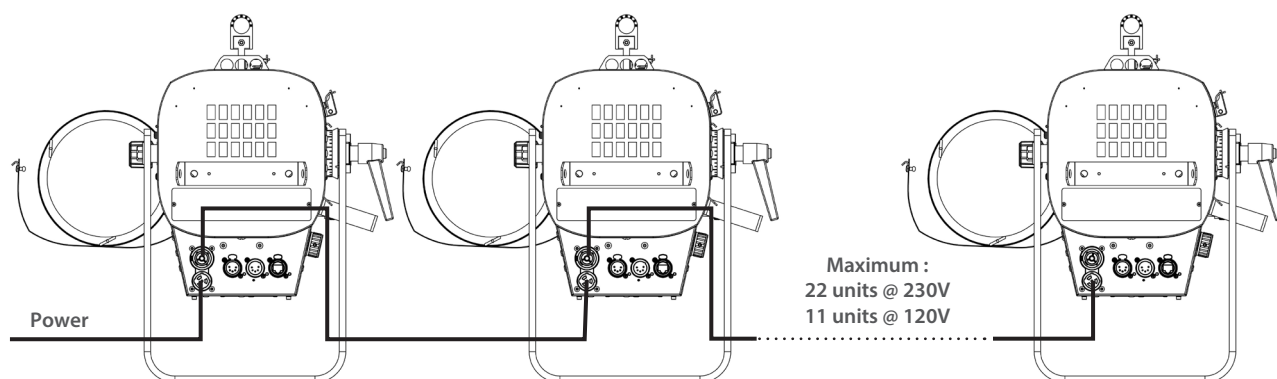
### 3.2.2 Power supply

Power supply			
Voltage	Frequency	Input power	Connectors
100 → 264 V	50-60 Hz	0,7 A / 130 W @ 230V 1,15 A / 135 W @ 120V 1,40 A / 135 W @ 100V Max: 1,5A Standby mode: 10W	Neutrik powerCON TRUE1 TOP Input : ref. NAC3FPX-TOP



- 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.

#### Daisy chain (with delivered power cable):





**Power cable**

Power cable		Connector	Mains plug	Cable type	Cable length	Wiring
1	Standard version	Neutrik® powerCON TRUE1 TOP NAC3FX-W-TOP	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

### 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 <sup>st</sup> conductor of 1 <sup>st</sup> twisted pair	
3	DMX (+)	2 <sup>nd</sup> conductor of 1 <sup>st</sup> twisted pair	
4	Not used	1 <sup>st</sup> conductor of 2 <sup>nd</sup> twisted pair	
5	Not used	2 <sup>nd</sup> conductor of 2 <sup>nd</sup> twisted pair	

**Daisy chain:**

Maximum :  
31 units total

Protocol	Input connector	Output connector
Art-Net sACN	RJ45	-

**Daisy chain:**

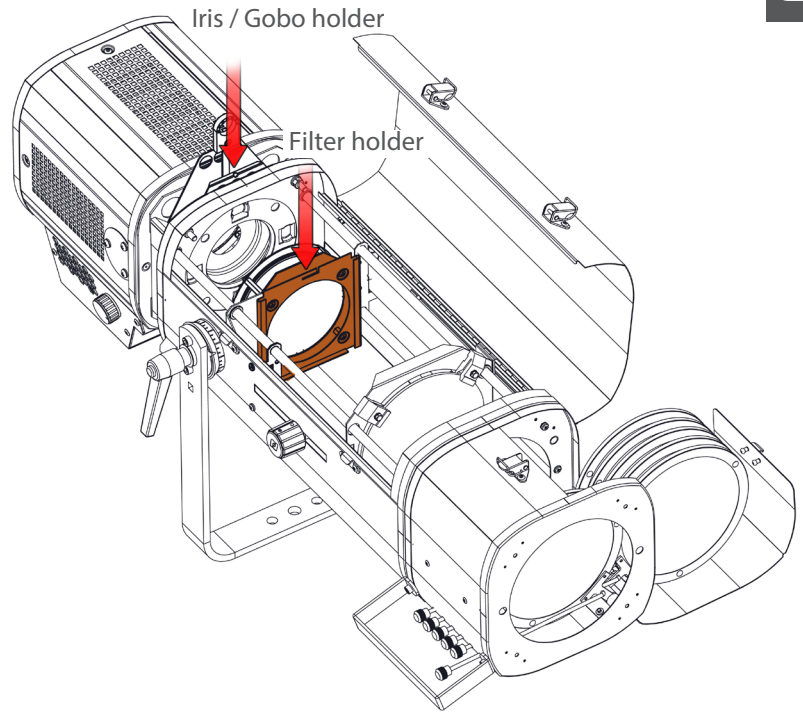
(\*) A 1000 base-T switch that supports IGMP (Internet Group Management Protocol) is necessary if the unit is connected to a network switch to control multiple devices. The usage of non IGMP switch capability can cause erratic behavior of all connected devices.  
For further reading: [https://en.wikipedia.org/wiki/Internet\\_Group\\_Management\\_Protocol](https: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

3.3.3 Ethernet / DMX node

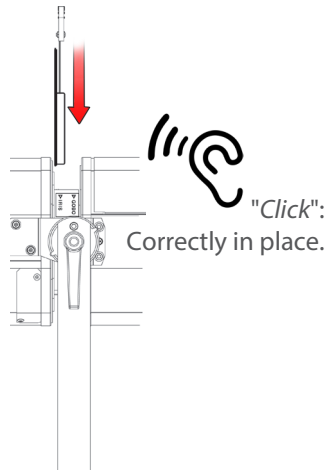
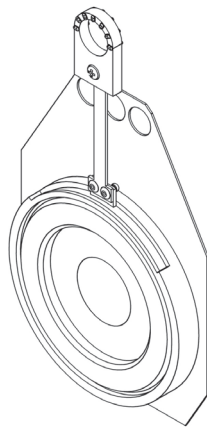
Protocol	Input connector	Output connector
Art-Net sACN	RJ45	DMX

**Daisy chain:**

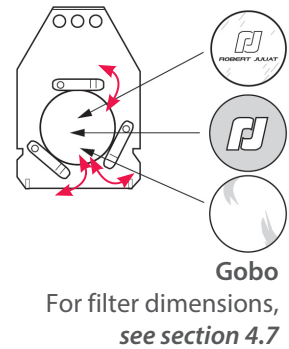
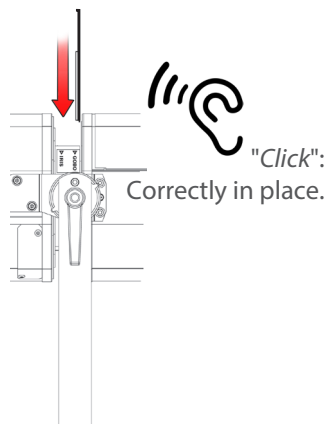
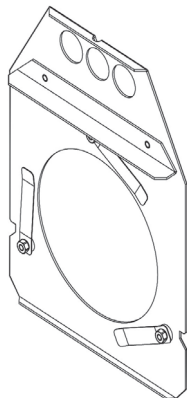
**! - Node function must be activated only on the first unit of the daisy chain (see Web Interface section of the manual).**  
**- Web interface is always available regardless of the protocol (Art-Net / sACN) selected.**



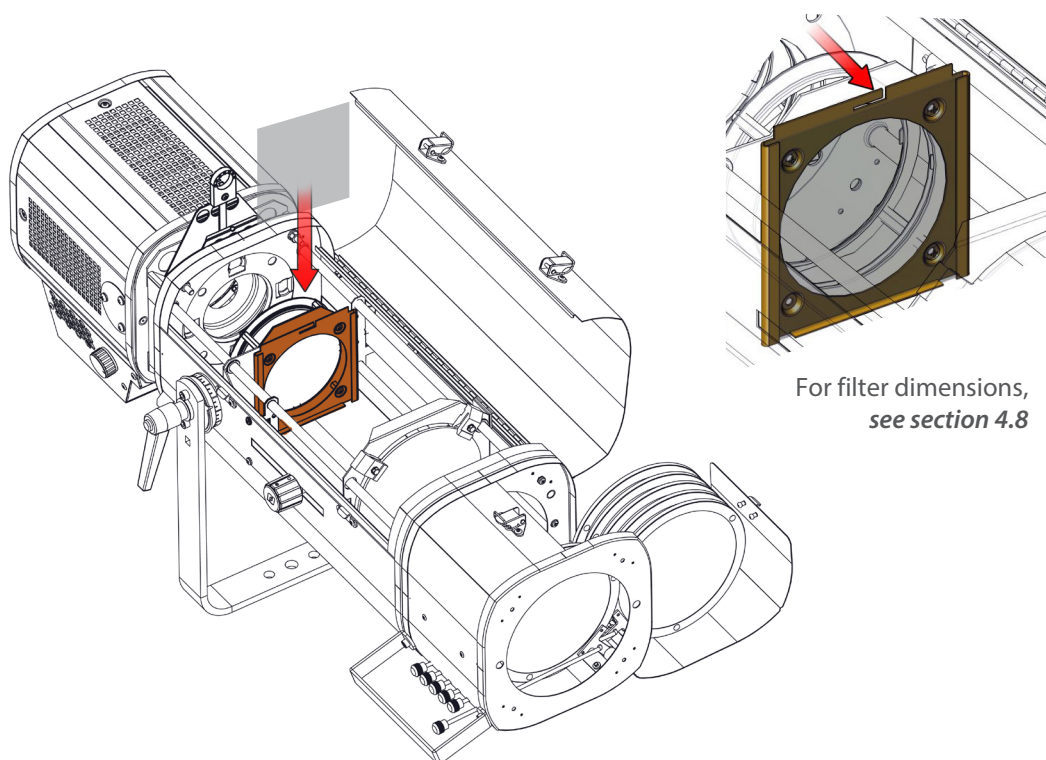
3.4.1 Iris



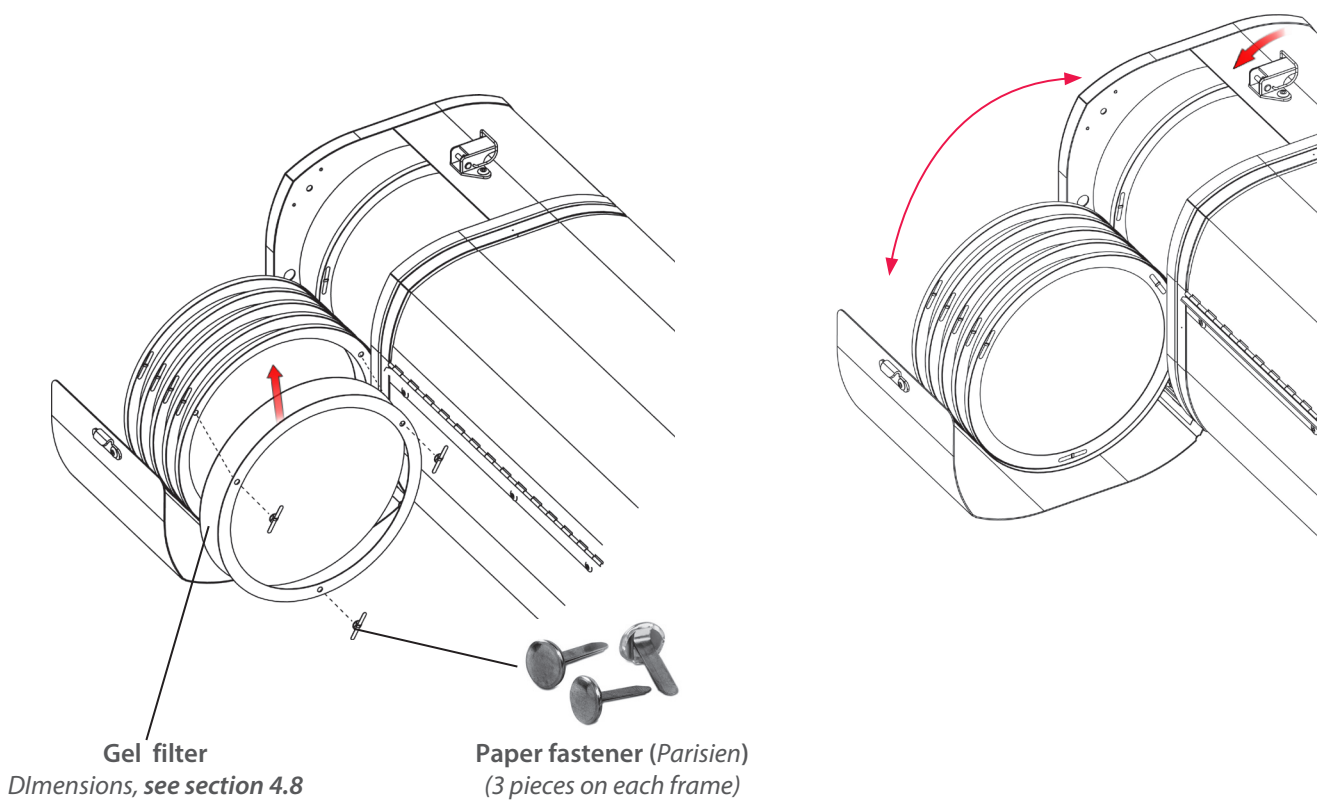
3.4.2 Gobo holder



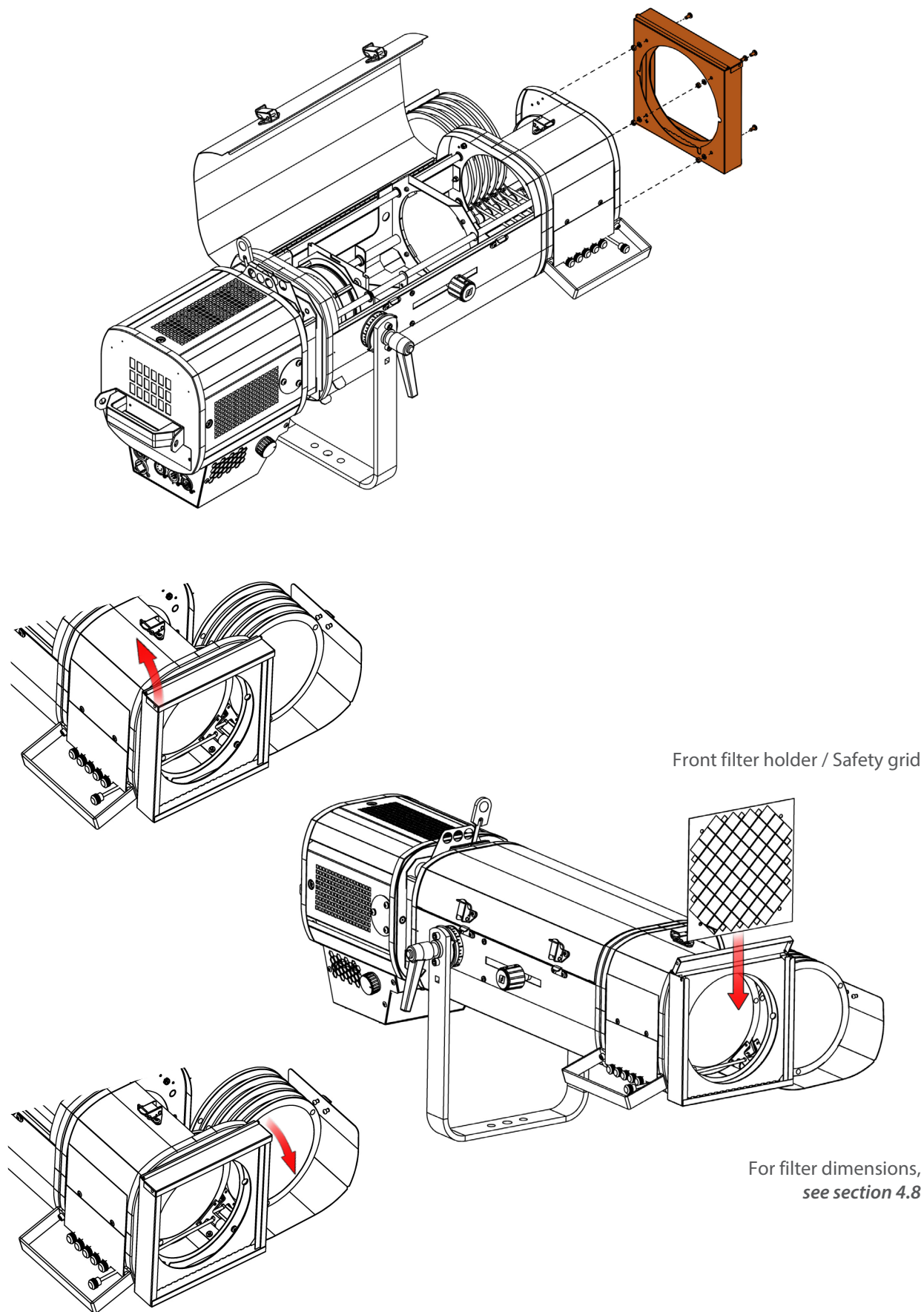
### 3.4.3 Internal filter holder



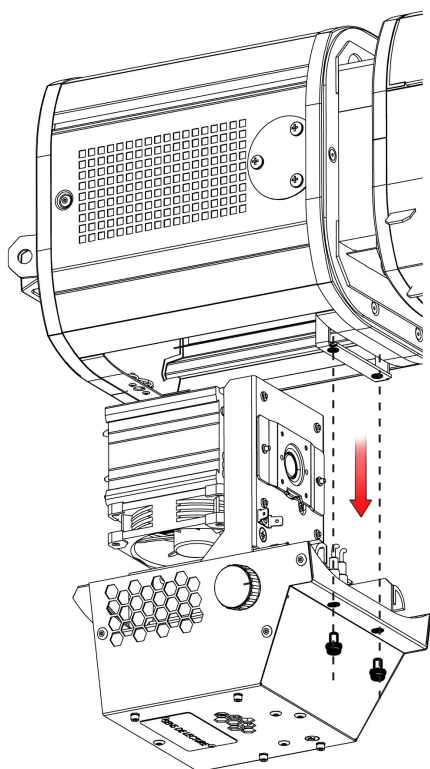
### 3.4.4 Colour changer unit - push-pull



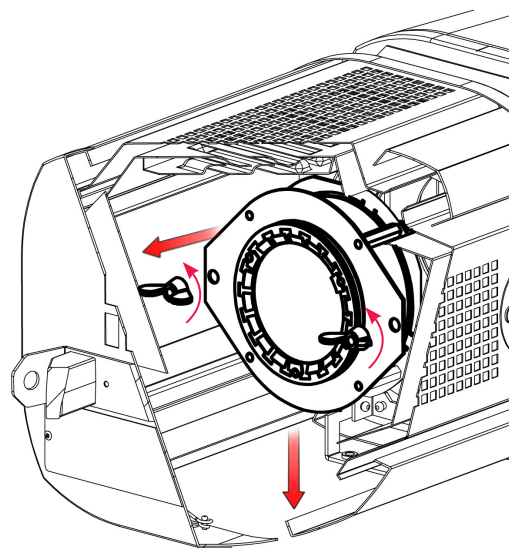
3.4.5 Double slot front cassette for front accessories (option)



### 3.4.6 Double-condenser set



For full procedure,  
see page EN-29



APH68 LED only possible with LED version  
(not with halogen).

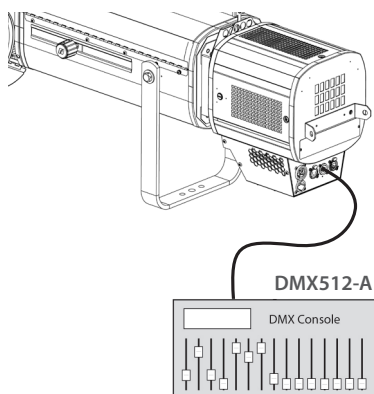
### 4.1 Light intensity

#### 4.1.1 Range

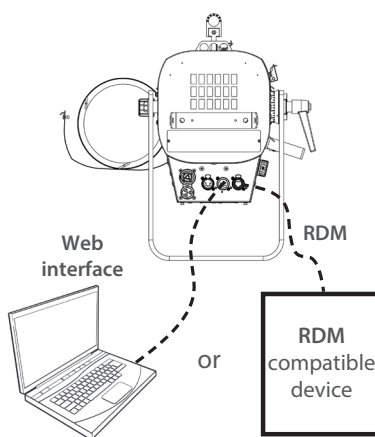


#### 4.1.2 Control

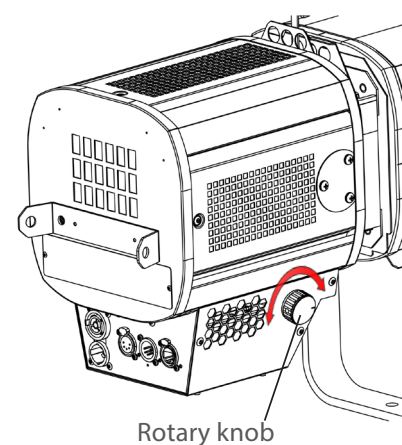
Remotely with DMX512-A / Art-Net / sACN protocols.



→ Set through RDM protocol or web interface



Locally via rotary knob



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

#### 4.1.3 Parameters

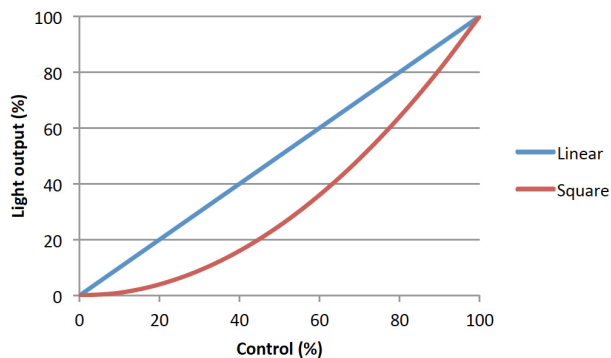
##### 4.1.3.1 Dimming resolution - DMX only

→ Set through RDM protocol or web interface

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

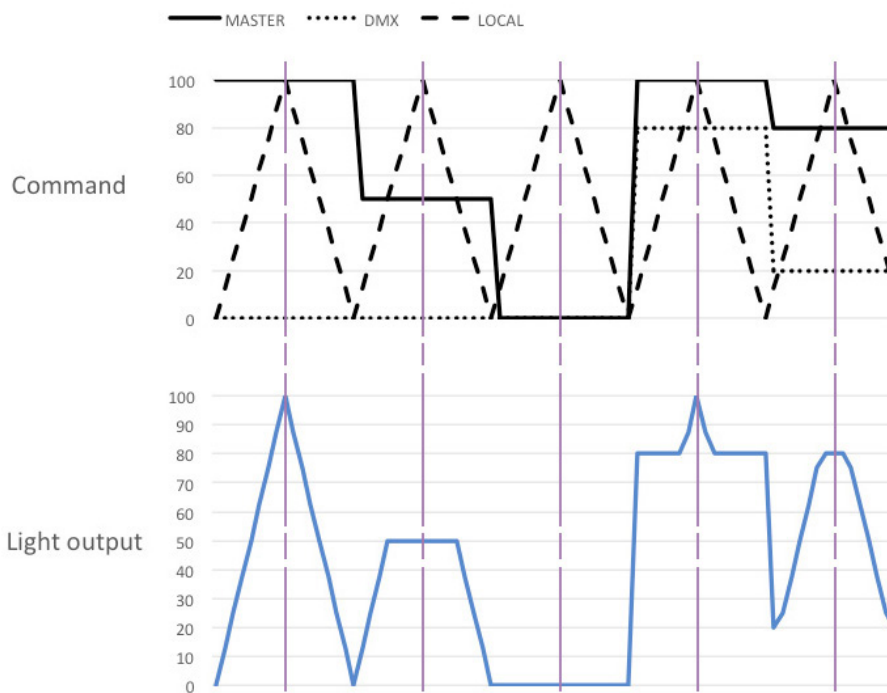
### 4.1.3.2 Dimming curve

➔ Set through RDM protocol or web interface



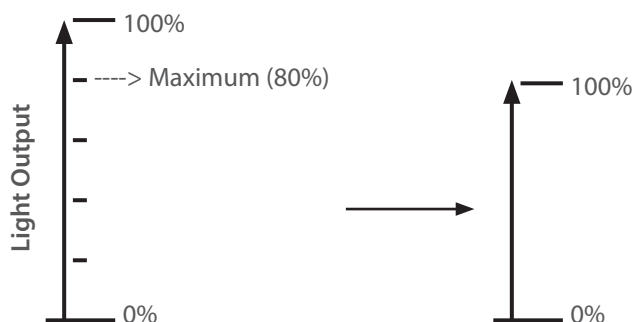
### 4.1.3.3 Master control

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

➔ Set through RDM protocol or web interface



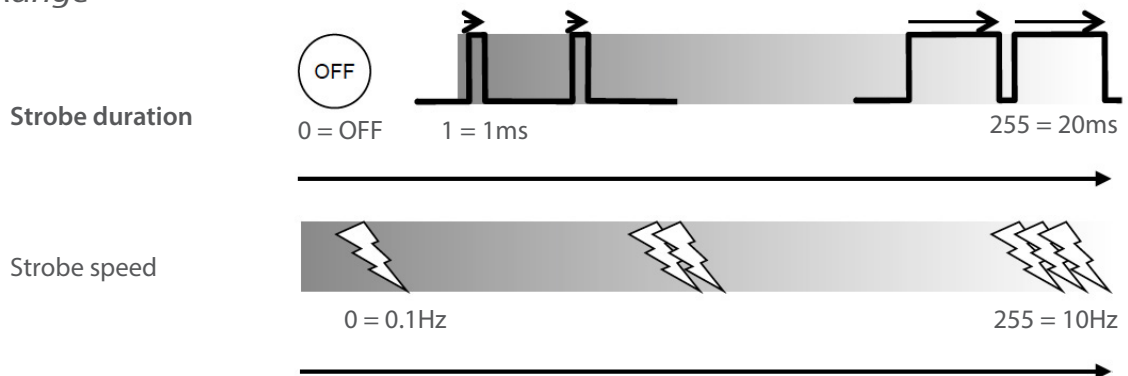


→ Set through RDM protocol or web interface

Mode	Result
Without PWM	Flicker-Free, perfect for filming
PWM 17 kHz	Good dimming quality (Default Value)
PWM 3,2 kHz	Very good dimming

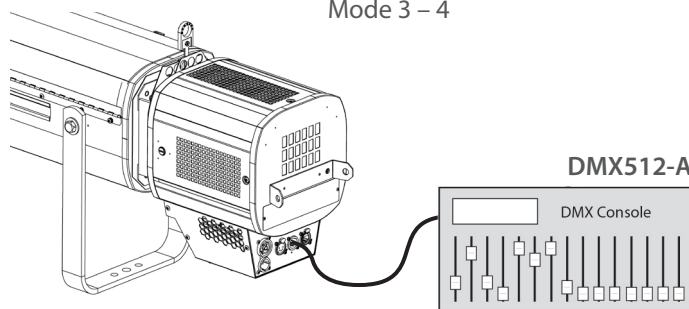
## 4.2 Strobe

### 4.2.1 Range



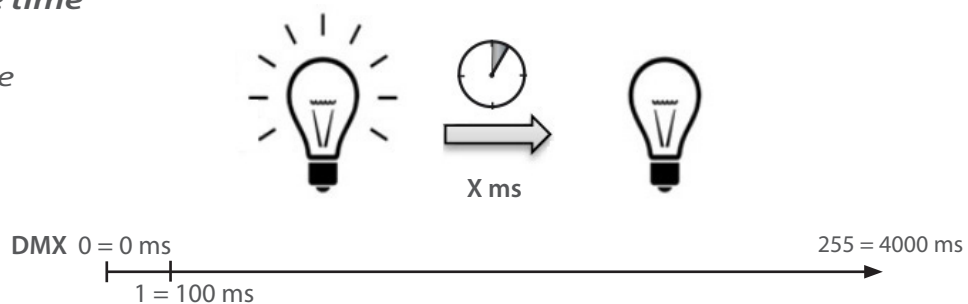
### 4.2.2 Control

→ Remotely with DMX512-A / Art-Net / sACN protocols.  
Mode 3 – 4

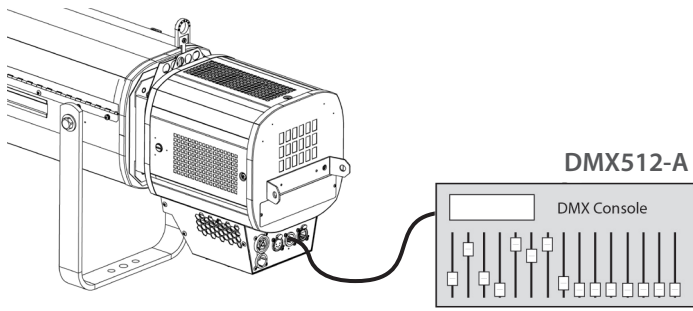


## 4.3 Response time

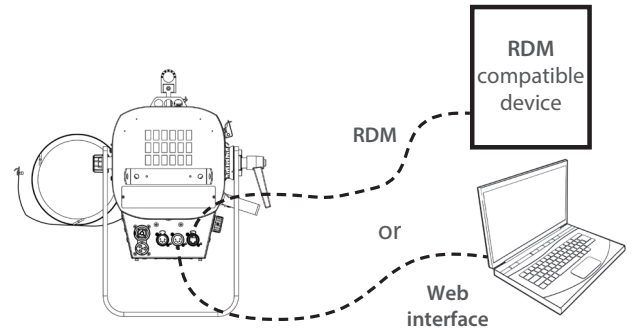
### 4.3.1 Range



### 4.3.2 Control



→ Remotely with DMX512-A / Art-Net / sACN protocols.  
Mode 3 – 4

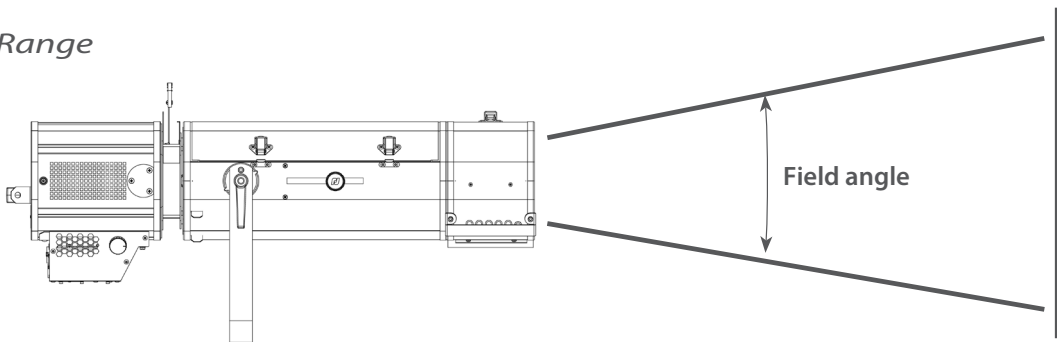


→ Set through RDM protocol or web interface

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

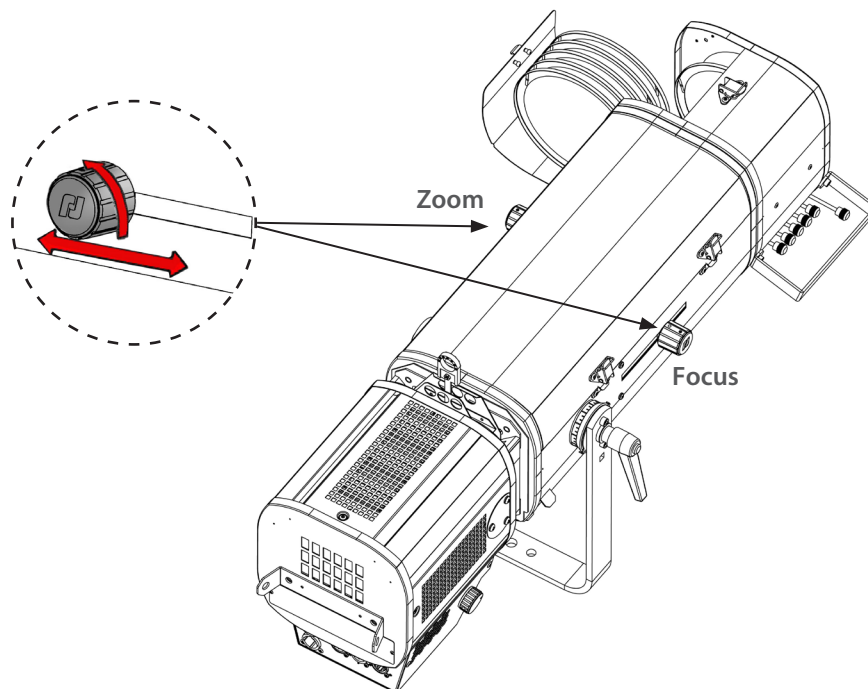
## 4.4 Beam size adjustment

### 4.4.1 Range



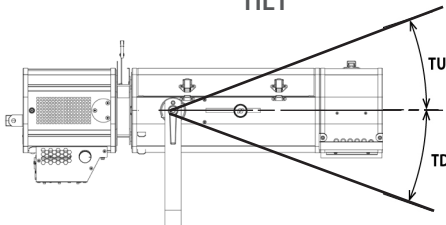
Model	Minimum angle	Maximum angle
1156	10.5°	22.5°

### 4.4.2 Control

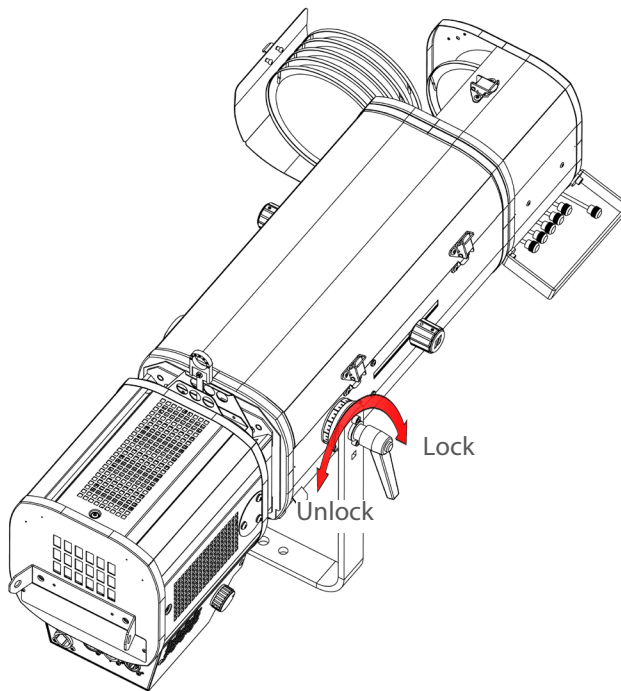


## 4.5 Orientation

### 4.5.1 Range

Function	Range
PAN	0 → 360°
TILT	 TU = 0 → 38° TD = 0 → 56°

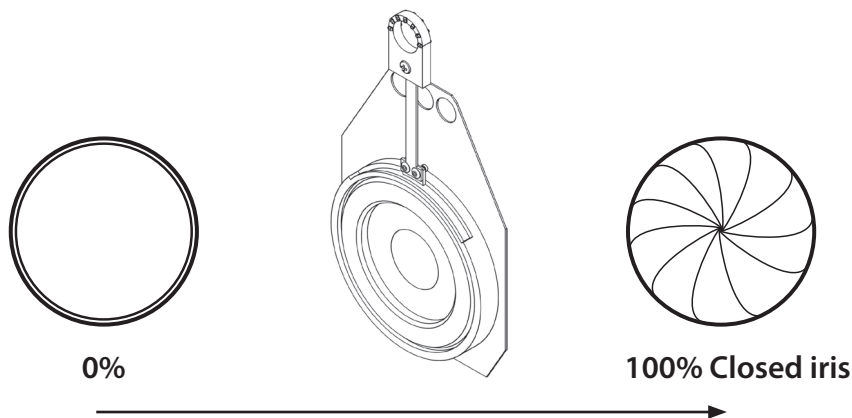
### 4.5.2 Control



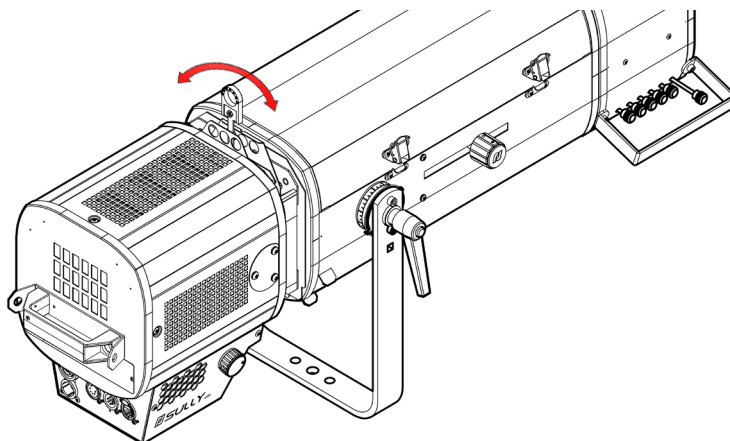
4.6 Iris

4.6.1 Range

- Irising



4.6.2 Control



4.7 Gobo

4.7.1 Range

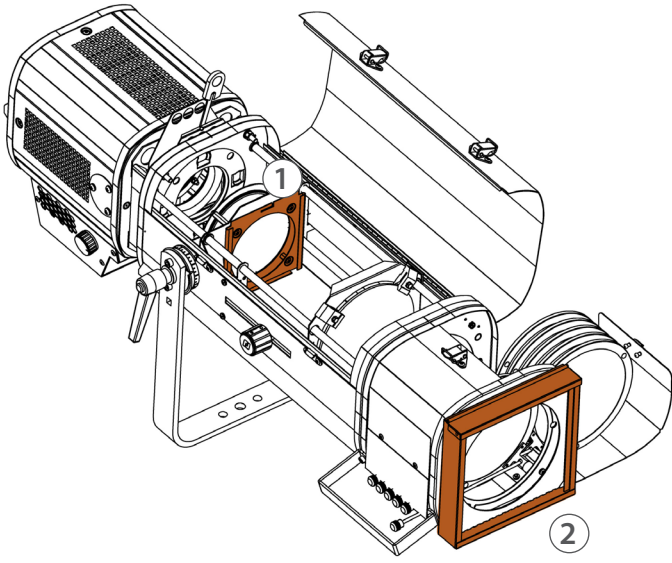
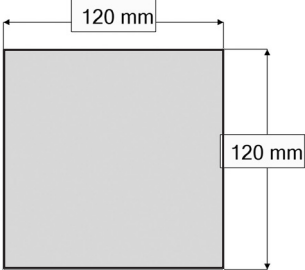
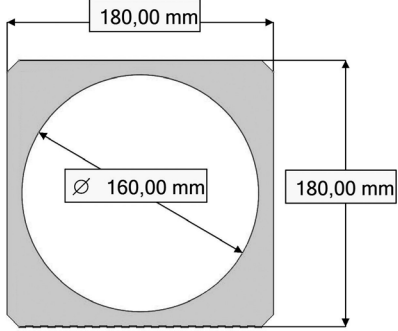
Type	Standard gobo - A size	
Dimensions		<p>100 mm</p> <ul style="list-style-type: none"> <li>• Metal</li> <li>• Glass</li> </ul> <p><i>Values are in millimeters (mm)</i></p>
Installation	See 3.4.3	

4.8 Colour

- Fixed colour: place dark colours towards the rear end.

4.8.1 Range

Type	Coloured gel filter	
Dimension	<p>165 mm</p>	
Installation	See 3.4.4	

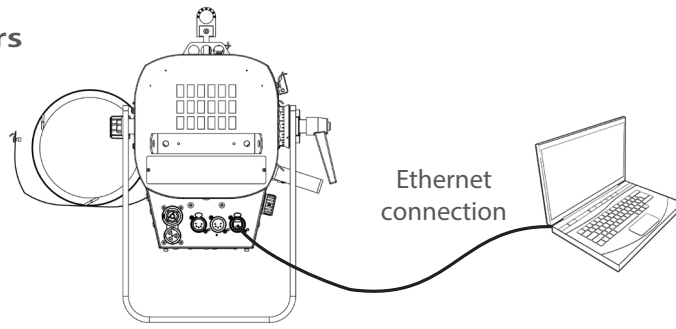
<p>Location</p>		
	<p>1. Internal filter holder</p>	<p>2. Front filter cassette (option)</p>
<p>Type</p>	<p>Frosted or dichroic glass</p>	<p>Coloured gel filter (option)</p>
<p>Dimensions</p>		
<p>Installation</p>	<p>See 3.4.3</p>	<p>See 3.4.5</p>

## 5 Controls and parameters



### 5.1 Web interface

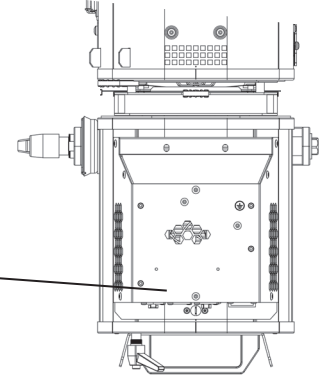
#### 5.1.1 Control



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

#### 5.1.2 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).

#### 5.1.3 Network IP of the computer

The computer must be on the same network as the Sully 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  $YYY \neq XXX$

Do not use the same IP address as the Sully followspot

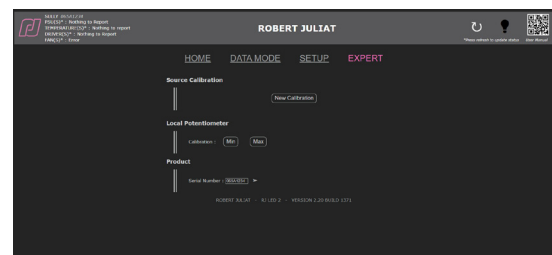
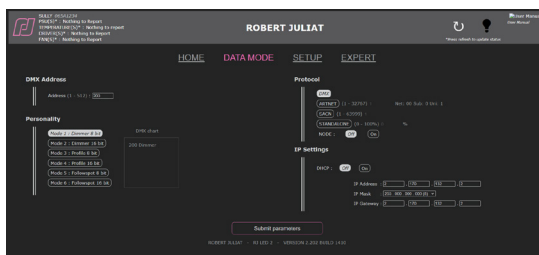
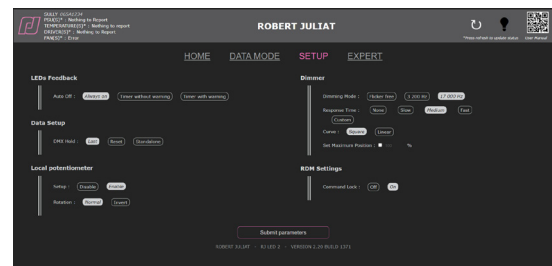
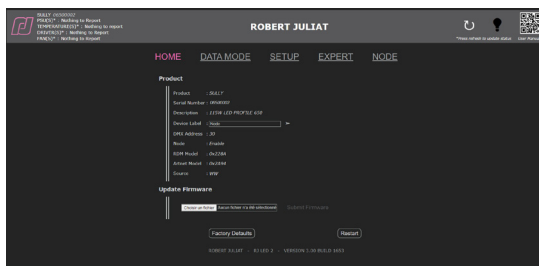
2 - MASK = 255.0.0.0

#### 5.1.4 Connect to web interface

1 - Open a web browser (Microsoft Edge, Firefox, Apple Safari...)

2 - Enter the URL address of the Sully fixture: <http://2.XXX.XXX.XXX>

3 - All parameters can be now modified





After updating your device with firmware V3.0, we strongly recommend that you update the source type (CCT) either to CW (Cold White) or WW (Warm White) by following the procedure described in the section below: **5.1.5 CCT selection**

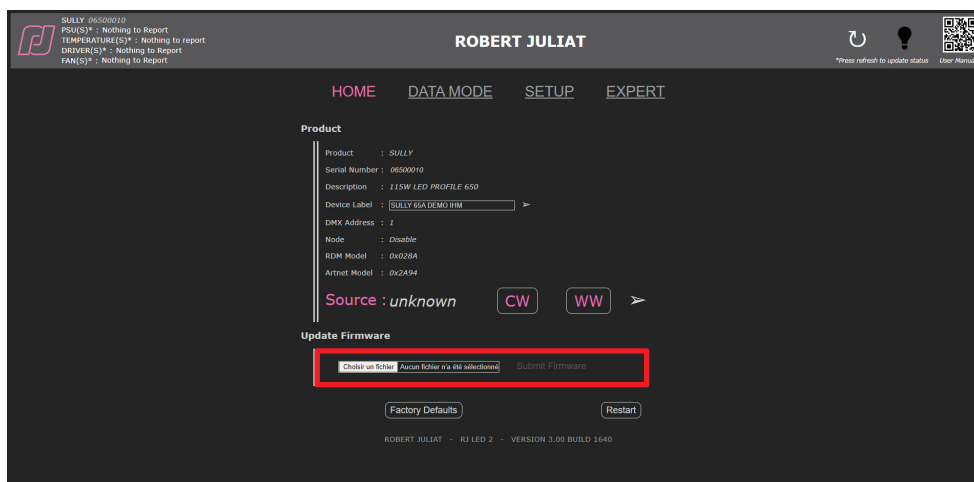
### 5.1.5 CCT selection

Until now, the CCT of the LED source was not taken into account. From V3.0, your device will be automatically recognized as CW or WW source.

Devices shipped with firmware prior to V3.0 do not have a designated CCT. After updating to V3.0, it is highly recommended to specify the CCT of your device. For this you will have to stay on the Web Page that you used for the update.

In the **Source** section of the HOME tab, the CCT of your device is indicated.

- If "unknown", please select the CCT of your device and click on icon **CW** or **WW** then on the arrow **>**.



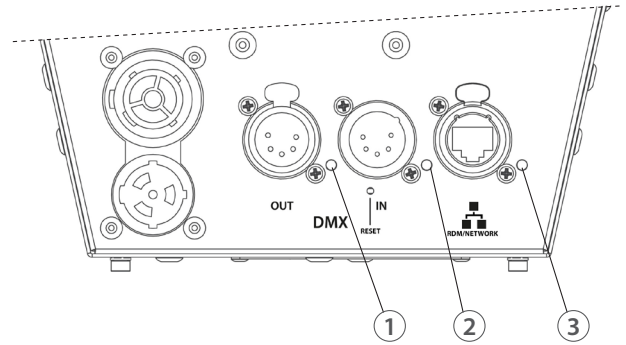
- Changing the source type changes the Model\_ID as well. It is used in libraries to recognize devices automatically and for an Auto-Patch.
- If the source type has to be changed or in case of typing error, it will be always possible to change the source type in the Expert mode which is protected by a password.

## 5.2 LEDs Feedback

### 5.2.1 Trouble shooting

• During unit initialisation (power up) – up to 5 seconds:

1 DMX OUT	2 DMX IN	3 Network	Description
Ⓟ	Ⓟ	Ⓟ	Unit OFF
Ⓡ	Ⓡ	Ⓡ	Unit error
Ⓢ	Ⓢ	Ⓢ	Unit has been reset successfully
Ⓟ	Ⓟ	Ⓡ or Ⓢ or Ⓟ	RDM protocol activated



• After initialisation - Node mode "OFF":

1 DMX OUT	2 DMX IN	3 Network	Description
Ⓟ	Ⓟ	Ⓟ	Display auto-off
Ⓟ	Ⓢ	Ⓡ	No ethernet
Ⓟ		Ⓢ	Ethernet detected (link)
Ⓟ		Ⓟ	Ethernet detected + data
Ⓟ	Ⓟ	Ⓡ	No ethernet
Ⓟ		Ⓢ	Ethernet detected (link)
Ⓟ		Ⓟ	Ethernet detected + data
Ⓟ	Ⓡ	Ⓡ	No ethernet
Ⓟ		Ⓢ	Ethernet detected (link)
Ⓟ		Ⓟ	Ethernet detected + data
Ⓡ	Ⓡ	Ⓡ	Unit error

• After initialisation - Node mode "ON":

1 DMX OUT	2 DMX IN	3 Network	Description
Ⓟ	Ⓟ	Ⓟ	Display auto-off
Ⓢ	Ⓢ	Ⓡ	No ethernet
		Ⓢ	Ethernet detected (link)
		Ⓟ	Ethernet detected + data
Ⓟ	Ⓢ	Ⓡ	No ethernet
		Ⓢ	Ethernet detected (link)
		Ⓟ	Ethernet detected + data
Ⓡ	Ⓢ	Ⓡ	No ethernet
		Ⓢ	Ethernet detected (link)
		Ⓟ	Ethernet detected + data
Ⓡ	Ⓢ	Ⓡ	No ethernet
		Ⓢ	Ethernet detected (link)
		Ⓟ	Ethernet detected + data
Ⓡ	Ⓡ	Ⓡ	Unit error

### 5.2.2 Parameters

#### 5.2.2.1 Intensity

➔ Set through RDM protocol or web interface

Mode	Description
Display level	Adjust the intensity of the feedback LEDs

#### 5.2.2.2 Auto-OFF

➔ Set through RDM protocol or web interface

Mode	Description
Always ON	Feedback LED, always ON
Timer without warning	Feedback LED OFF after 20 seconds
Timer with warning	Feedback LED OFF after 20 seconds, ON, if warning information occurs

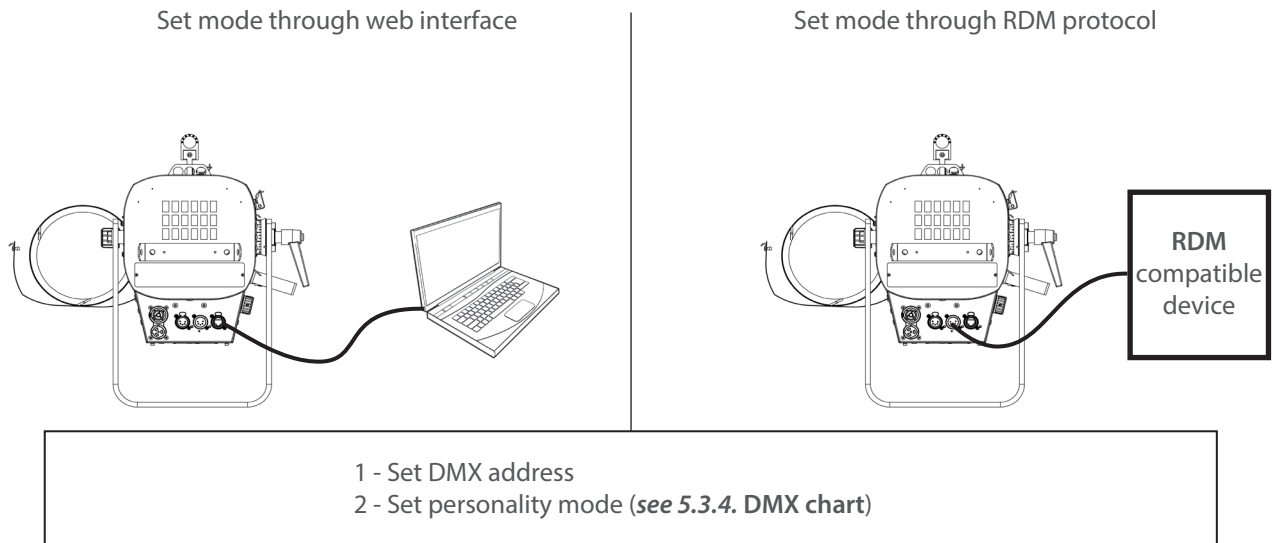


### 5.3 DMX512 - A remote control

#### 5.3.1 Protocol

E1.11 – 2008, USITT DMX512-A

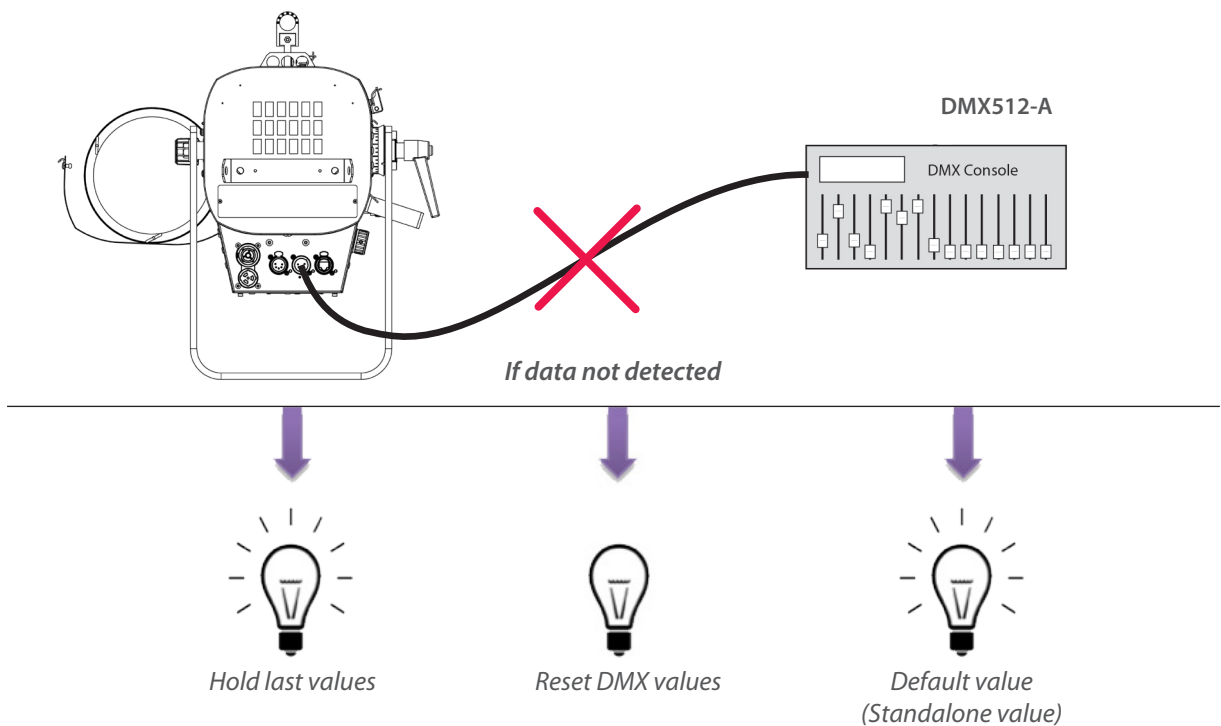
#### 5.3.2 Configuration



#### 5.3.3 Parameters

##### 5.3.3.1 DMX Hold

➔ Set through RDM protocol or web interface



### 5.3.4 DMX chart

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

### 5.3.5 DMX ranges

#### 5.3.5.1 Strobe duration

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

#### 5.3.5.2 Strobe speed

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

#### 5.3.5.3 Response time

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

#### 5.3.5.4 Control mode\*

Range min	Range max	Function	
		By default	If activated in web interface/RDM
0	0	-	-
1	10	-	RDM OFF
11	20	-	RDM ON
21	30	-	RESET DEVICE

(\*) Function activated after 5 seconds - needs to go back to zero to activate second function.

## 5.4.1 Protocol

## ANSI E1.20 – 2010 / ANSI E1.37 - 1

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

## 5.4.2 Functions

PID	Function description	115W LED PROFILE			V3	
		Get	Set	Queued Message		
<b>Network Management</b>						
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
<b>Status Collection</b>						
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
<b>RDM Information</b>						
00	50	SUPPORTED_PARAMETERS	X			X
00	51	PARAMETER_DESCRIPTION	X			X
<b>Product Information</b>						
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
<b>DMX512 Setup</b>						
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
<b>Sensors</b>						
02	00	SENSOR_DEFINITION	X			X
02	01	SENSOR_VALUE	X			X
<b>DMX Settings</b>						
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
<b>Power / Lamp Settings</b>						
04	00	DEVICE_HOURS	X			X
04	01	LAMP_HOURS	X	X		X
<b>Display Settings</b>						
05	01	DISPLAY_LEVEL	X	X	X	X

PID	Function description	115W LED PROFILE			V3	
		Get	Set	Queued Message		
<b>Control</b>						
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
<b>RDMnet Management</b>						
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		
<b>PID Manufacturer</b>						
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

## 5.5 Art-Net remote control

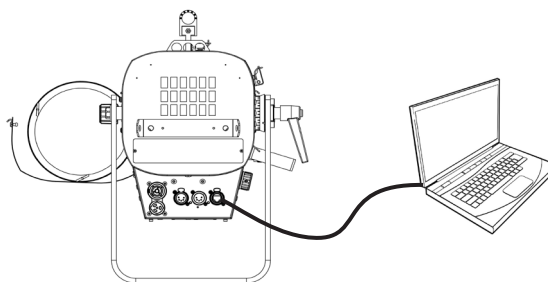
### 5.5.1 Protocol

#### Artistic Licence Art-Net v3.

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

### 5.5.2 Configuration

Set mode through web interface  
(see 5.1 Web interface)



- 1 - If necessary, change IP settings
- 2 - Set ArtNet parameters : Net / SubNet / Universe
- 3 - Set DMX address
- 2 - Set personality mode (see 5.3.4. DMX chart)

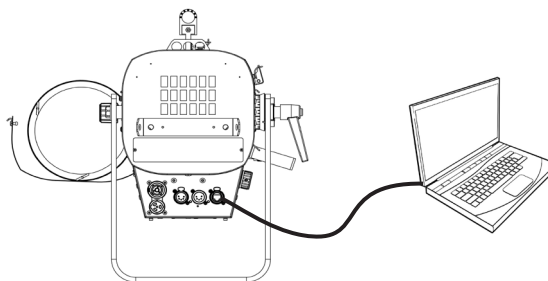
## 5.6 sACN remote control

### 5.6.1 Protocol

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

### 5.6.2 Configuration

Set mode through web interface  
(see 5.1 Web interface)



- 1 - If necessary, change IP settings
- 2 - Set sACN universe
- 3 - Set DMX address
- 2 - Set personality mode (see 5.3.4. DMX chart)

## 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

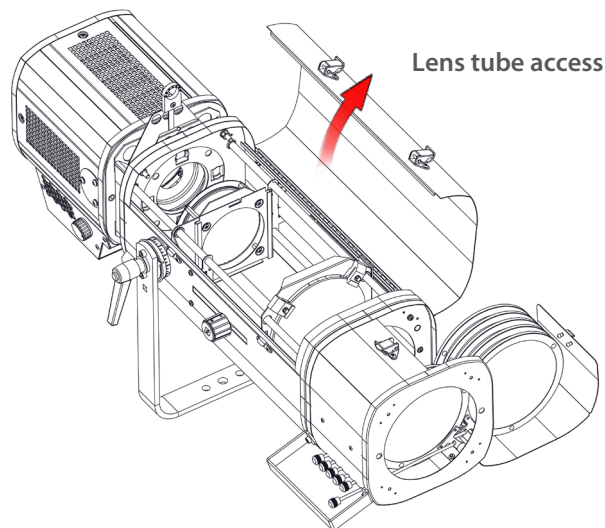


- Do not touch the surface of the LED source (no contact with your hands or any tools).
- Do not put compressed air directly on the source.
- Contact a certified RJ distributor in case of residuals or other objects located on the surface of the LED source.

### 6.1.5 Optics

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

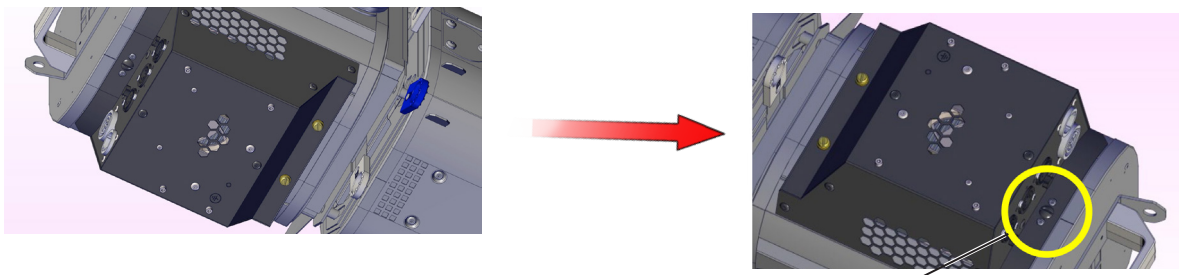
- To clean the optical parts, use a soft cloth in combination with distilled water or isopropyl alcohol recommended for coated optics. Do not use any cleaning product that contains solvents or abrasives, as these can cause surface damage.
- Dry with a soft lint-free cloth.



### 6.1.6 LED house cleaning

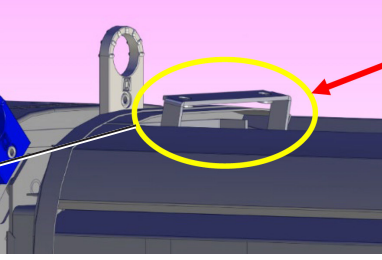
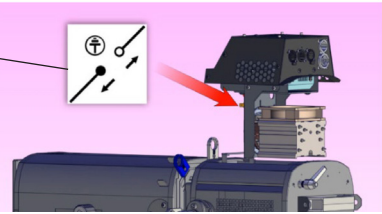
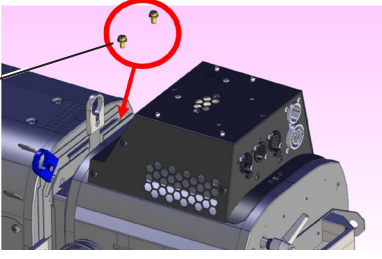
Inner parts & lens holder access:

- 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.
- The double condenser system (aspheric and biconvex lenses) can easily be removed, without tools, by loosening the two wing nuts. The complete holder can then be removed for cleaning.



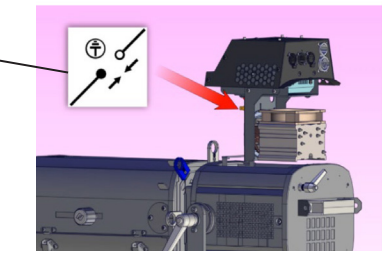
### How to remove the Sully LED compartment for cleaning:

1. We recommend you place your luminaire on a flat clean surface.  
**Disconnect from the mains before servicing.**
2. Unlock the quarter turn screw with a flat screwdriver.
3. Remove the two screws with a flat screwdriver.
4. Slightly slide out the LED compartment and remove the earth attachment before removing it completely from it's housing.
5. Carefully place the LED compartment on a flat clean surface.



### Sully LED compartment installation:

6. Extend the hinge to its maximum position to make it easily accessible. Insert the LED compartment into your luminaire, making sure it is positioned vertically to enable the LED compartment to enter the lamp house correctly.
7. Connect the ground connection (faston tab terminal) to the Sully LED compartment.
8. Once the LED compartment is fully inserted, remount tightly the two screws nearest the shutter gate. Re-tighten the quarter turn screw located at the back of the lamp base to lock the LED compartment securely into your luminaire.



### 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
- Description of the problem.



## 6.3 Electronic thermal management system

In case of overheating, light intensity will be reduced by the system.  
Power reduction and temperature values are available by using a RDM protocol compatible device.

## 6.4 Firmware update



After updating your device with firmware V3.0, we strongly recommend that you update the source type (CCT) either to CW (Cold White) or WW (Warm White) by following the procedure described in the section below: **CCT selection**

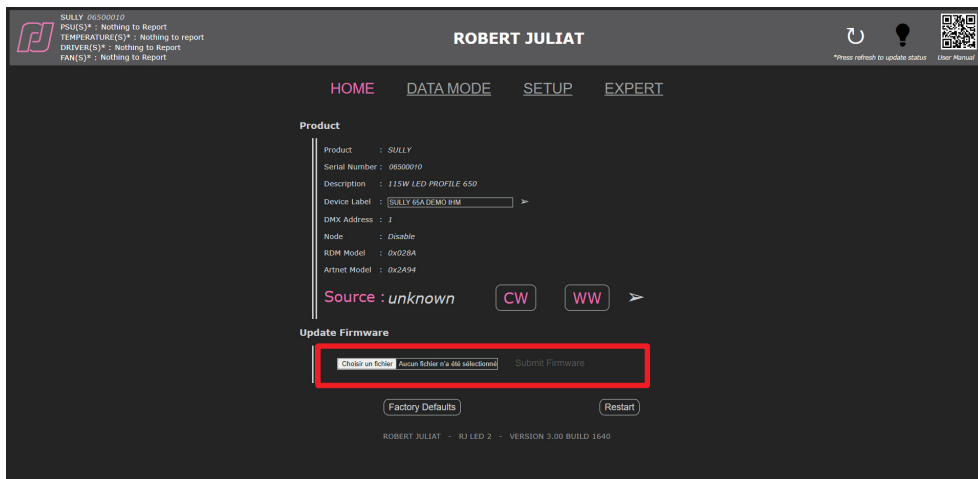
### CCT selection

Until now, the CCT of the LED source was not taken into account. From V3.0, your device will be automatically recognized as CW or WW source.

Devices shipped with firmware prior to V3.0 do not have a designated CCT.  
After updating to V3.0, it is highly recommended to specify the CCT of your device.  
For this you will have to stay on the Web Page that you used for the update.

In the **Source** section of the HOME tab, the CCT of your device is indicated.

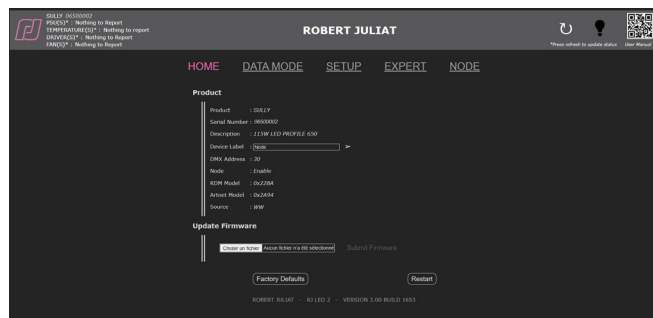
- If "unknown", please select the CCT of your device and click on icon **CW** or **WW**, then on the arrow **>**.



- Changing the source type changes the Model\_ID as well. It is used in libraries to recognize devices automatically and for an Auto-Patch.
- If the source type has to be changed or in case of typing error, it will be always possible to change the source type in the Expert mode which is protected by a password.



1. Firmware available on [www.robertjuliat.com/followspots/SULLY\\_1156](http://www.robertjuliat.com/followspots/SULLY_1156)
2. Download and unzip the file  
There are 4 files:
  - Firmware (.upd2 format)
  - Firmware History
  - Update Procedure
  - User Manual from firmware V3.0
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 5.1*)
7. Upload your firmware file (.upd2) in the "Update firmware" section and then click on 'Submit firmware'



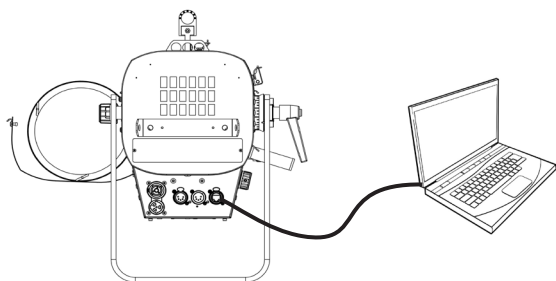
## 6.5 Factory defaults

### 6.5.1 Modes

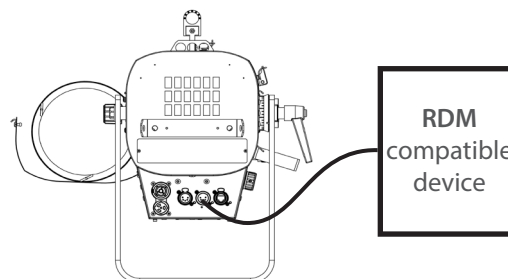
Mode	Description
Restart	Software reset – all user parameters are kept
Factory defaults	Set all user parameters to factory default value

### 6.5.2 Control

Set to factory defaults / reset through web interface (Home page)



Set to factory defaults / reset through RDM protocol



➔ If IP address unknown (due to a previous modification), IP address can be read from RDM protocol or a **hard reset** must be done:

The diagram shows the back panel of the unit with four ports: OUT, DMX, IN, and RDM NETWORK. A dashed arrow points from the 'Reset' label to a small button located between the DMX and IN ports.

While holding down the **reset** button with a paper clip, connect the unit to power and continue to hold the reset button until the 3 status light turn green.  
The system is then ready for setup.