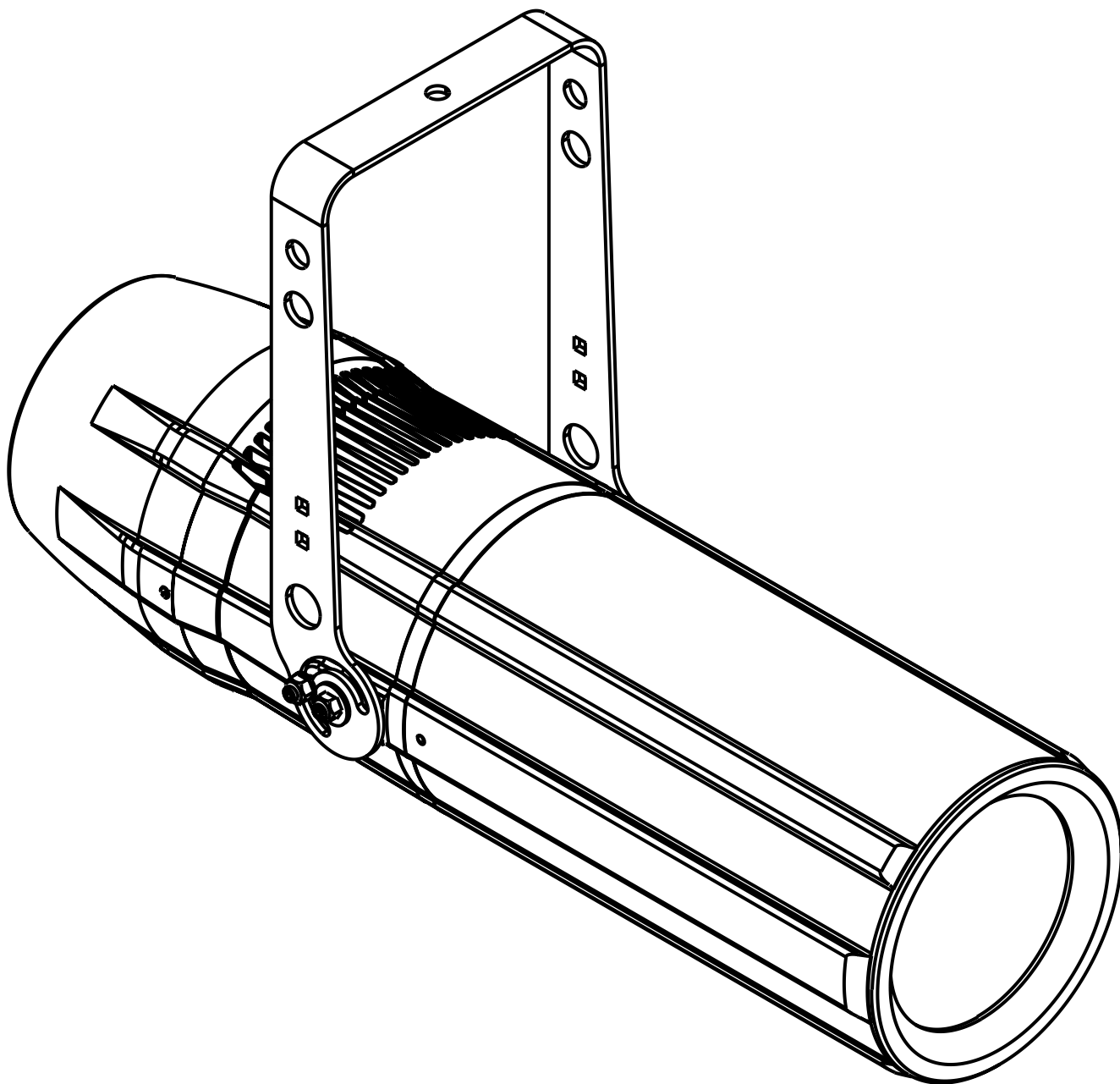


LEDKOTM

EXT Basic



USER MANUAL
vrs. 1.4 - 16.07.2024



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Congratulations on having purchased a **Coemar** product. You have assured yourself of a fixture of the highest quality, both in componentry and in the technology used. We renew our invitation to you to complete the service information on the previous page, to expedite any request for service information or spares (in case of problems encountered either during, or subsequent to, installation). This information will assist in providing prompt and accurate advice from your **Coemar** service centre. Following the instructions and procedures outlined in this manual will ensure the maximum efficiency of this product for years to come.

1. Packaging and transportation

1.1 Packaging

Open the packaging and make sure that no part of the equipment has suffered any damage during the transportation. In case of damage to the fixture, contact your carrier and your supplier immediately by telephone, fax or email, and inform them you will formally notify them in writing through registered letter.

Packing list

Ensure the packaging contains:

- 1 LEDko EXT Basic**
- 1 Instruction manual**
- 1 Frame Holder**

1.2 Transportation

The **LEDko EXT Basic** should be transported in either its original packaging or in an appropriate flight case.

2. General information

2.1 Safety information

Fire prevention:



1. Never locate the fixture on any flammable surface.
2. Minimum distance from flammable materials: 0,5 m.
3. Minimum distance from the closet illuminable surface: 0,5 m.
4. Replace any blown or damaged fuse only with those of identical values. Refer to the schematic diagram if there is any doubt.
5. Connect the projector to mains power protected by a thermal magnetic circuit breaker.

Prevention from electric shock:



1. Presence of high voltage inside of the fixture. Insulate the projector from mains supply before opening or performing any function which involves touching the inside of the fixture, including lamp replacement.
2. For the connection to the mains, adhere strictly to the guidelines outlined in this manual.

3. The level of technology of **LEDko EXT Basic** requires the use of specialised personnel for all service applications; refer all work to your authorised **Coemar** service centre.
4. A good earth connection is essential for the proper functioning of the projector. Never connect the fixture if there is no earth connection.
5. Mains cables must not come into contact with other cables.
6. Do not operate the projector with wet hands or in an area where water is present.
7. The fixture must never be located in an exposed position, or in areas of extreme humidity.

Safety:



1. The projector must always be installed with bolts, clamps, or other fixing devices which are suitably rated to support the weight of the projector.
2. Always use a secondary safety fixing device with chain or steel wire of a suitable rating to sustain the weight of the unit in case of failure of the principal fixing point.
3. The external surfaces of the unit, at various points, may reach 60°C. Never handle the unit until at least 10 minutes have elapsed since the LED was turned off.
4. Never install the fixture in an enclosed area lacking sufficient air flow; the room temperature must not exceed 40°C.
5. The projector contains electronic and electrical components which must under no circumstances be in contact with water, oil or any other liquid. Failure to do so will compromise the proper functioning of the projector.

2.2 Warranty conditions

1. The fixture is under warranty for 24 months from the purchase date against factory defections.
2. Damage owing to unskillfulness, inappropriate use, or lack of suggested maintenance are excluded from the warranty.
3. Warranty expires when the projector is opened by unauthorized personnel.
4. Warranty doesn't include the replacement of the fixture.
5. Serial number and model of the fixture are necessary to retrieve information and assistance from the dealer.

2.3 EC Norms

1. The fixture satisfies the essential requirements of the directive 2004/108/EC, 2006/95/EC, 2011/65/EC, 2002/96/EC & 2003/108/EC.
2. The fixture is in accordance with the standard EN 50419 (RoHS) and satisfies the requirements of the directive 2002/96/EC (WEEE).

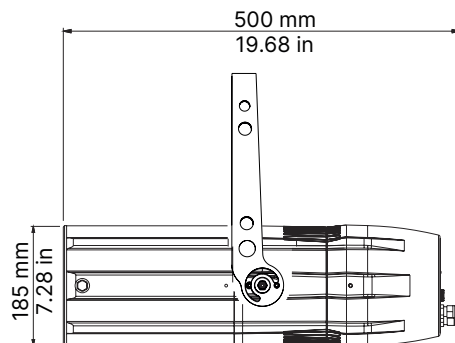
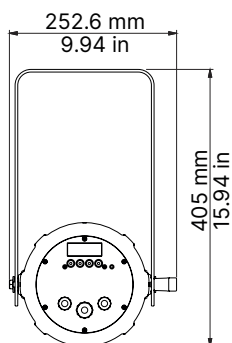
3. Product specifications

3.1 Technical characteristics

Power supply	90-305 V, auto-sensing, 50/60 Hz
Maximum current	0.6 A at 230 V, 1.27 A at 115 V
Power factor	Cosφ = 0.96
Max power consumption	140 W
Color temperature	Tungsten: 3.200 K - Daylight: 5.600 K
Color Rendering Index (CRI)	D and T models: CRI 80, CRI 90
Weight	12.1 Kg - 26.6 lbs (with 80° Optic) 12.6 Kg - 27.7 lbs (with 30°-60° Zoom Optic) 14 Kg - 30.8 lbs (with 14°-35° Zoom Optic) 15 Kg - 33.1 lbs (with 10°-25° Zoom Optic)
Storage temperature	From - 40° C / -40° F to + 85° C / +185° F
Operating temperature	From - 40° C / -40° F to + 40° C / +104° F
IP rating	65

3.2 Dimensions

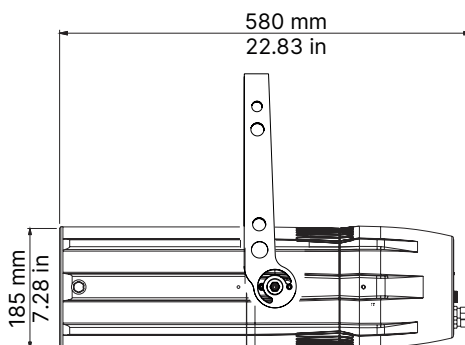
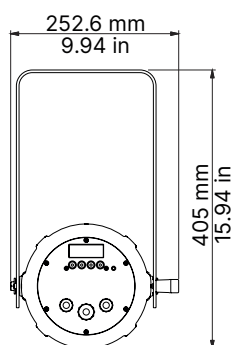
LEDko EXT 80° Optic



Length	Width	Height	Weight
500 mm 19.68 in	252.6 mm 9.94 in	185 mm 7.28 in	12.1 Kg 26.6lbs

With
bracket:
405 mm
15.94 in

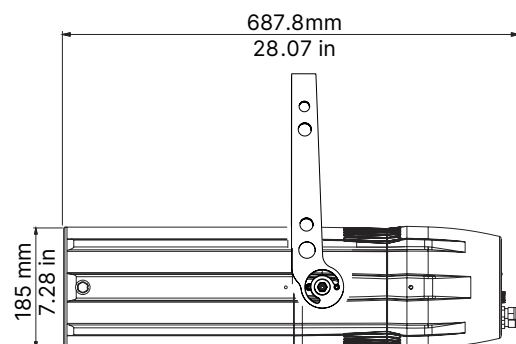
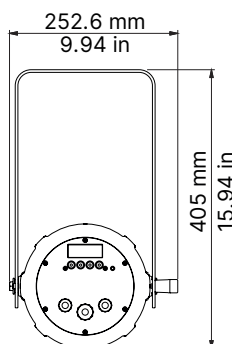
LEDko EXT 30°-60° Optic



Length	Width	Height	Weight
580 mm 22.83 in	252.6 mm 9.94 in	185 mm 7.28 in	12.6 Kg 27.7 lbs

With
bracket:
405 mm
15.94 in

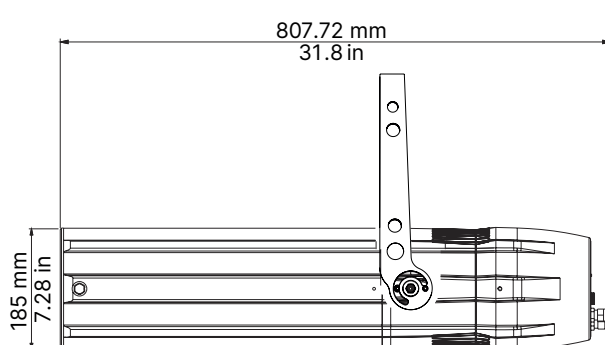
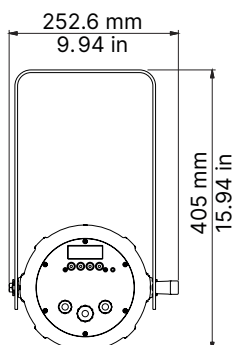
LEDko EXT 14°-35° Optic



Length	Width	Height	Weight
687.8 mm 27.07 in	252.6 mm 9.94 in	185 mm 7.28 in	14 Kg 30.8 lbs

With
bracket:
405 mm
15.94 in

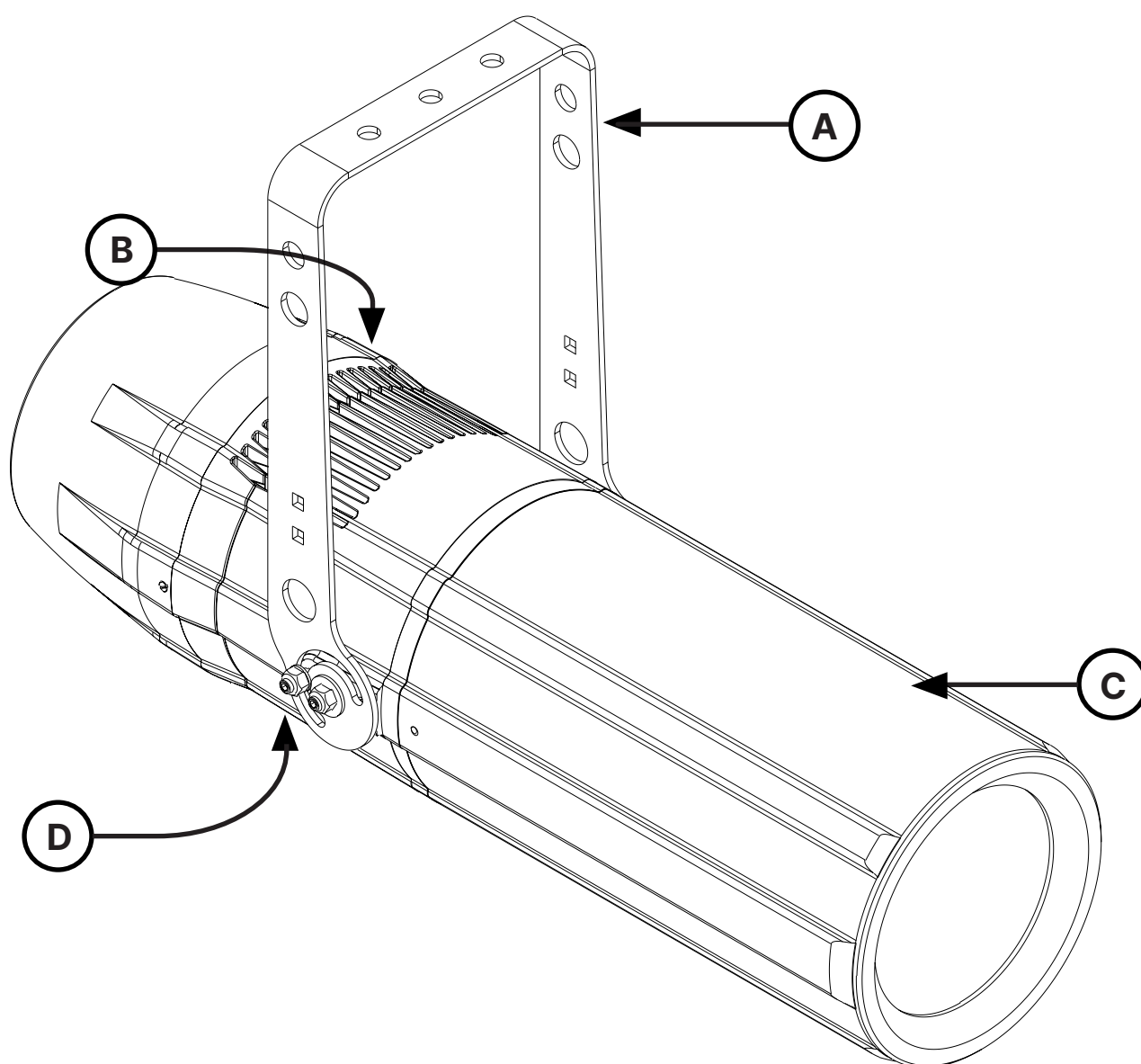
LEDko EXT 10°-25° Optic



Length	Width	Height	Weight
807.7 mm 31.8 in	252.6 mm 9.94 in	185 mm 7.28 in	15 Kg 33.1 lbs

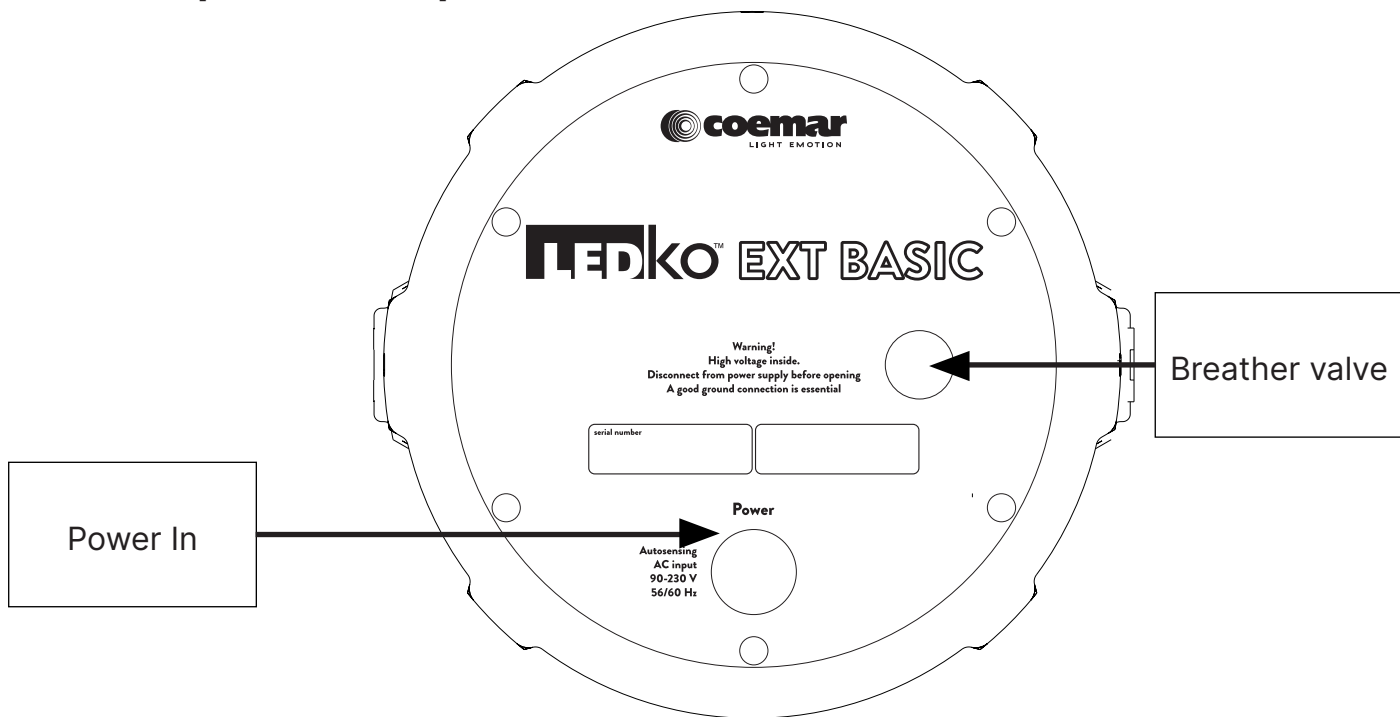
With
bracket:
405 mm
15.94 in

3.3 Unit's main components



Components description	
A	Yoke with mounting holes
B	Cooling unit
C	Optical holder tube
D	Locking screw for yoke

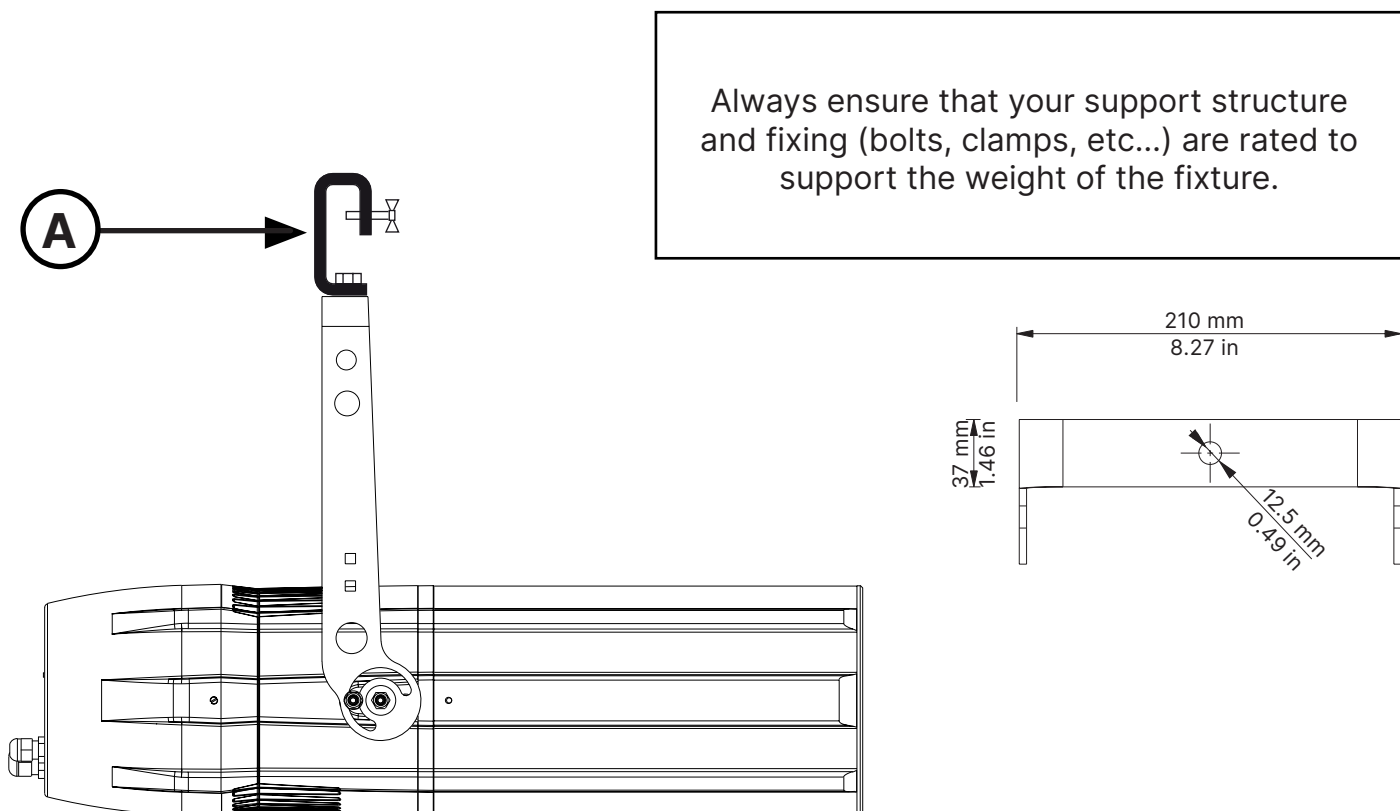
3.4 Back panel description



4. Installation

4.1 Mechanical installation

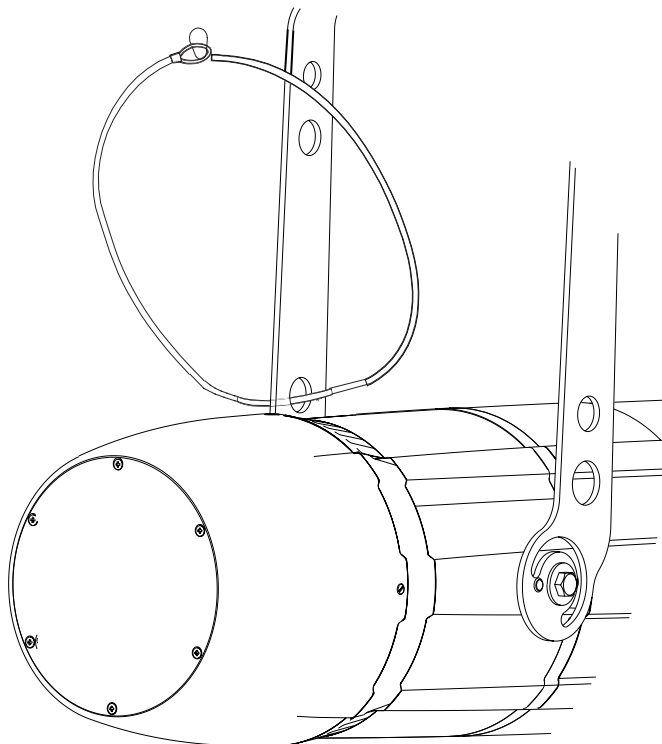
LEDko EXT Basic may be hung from an appropriate structure in any position or on tripod. If hanging the fixture from a lighting truss or similar, we recommend the use of an appropriate clamp "A", as shown in the following diagram.



4.2 Safety chain

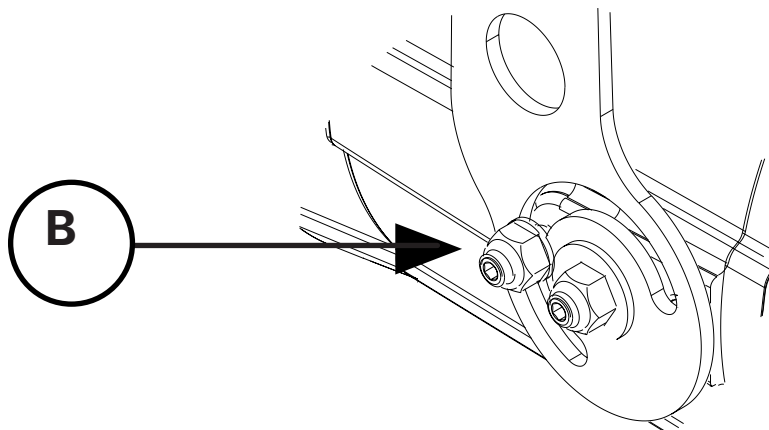
When hanging **LEDko EXT Basic** it is recommended to use a safety chain, as required by current legislation. The safety chain must pass through the handles of the unit and then attached to the structure.

If using steel cables and chains not **Coemar**'s production, make sure they are suitable to support the weight of the unit according to normative UL/ETL (required: the weight of 6 complete devices for at least one hour).



4.3 Adjusting unit's tilt

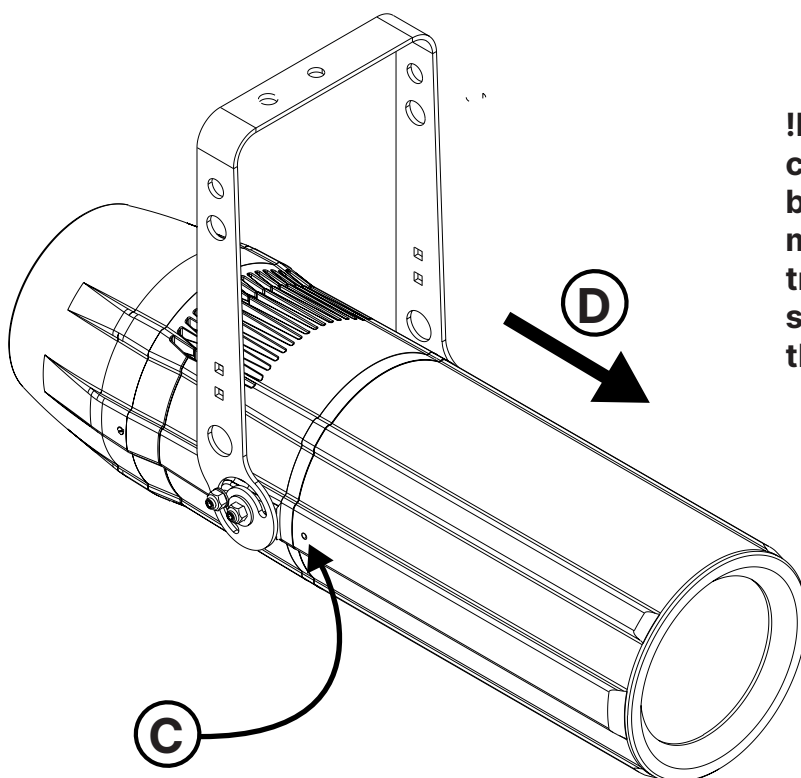
1. In order to adjust the tilt of the unit simply loose the side screw "B" on the yoke, adjust the tilt and lock the yoke by tightening the screw again.



4.4 Optical group, framing system and gobos

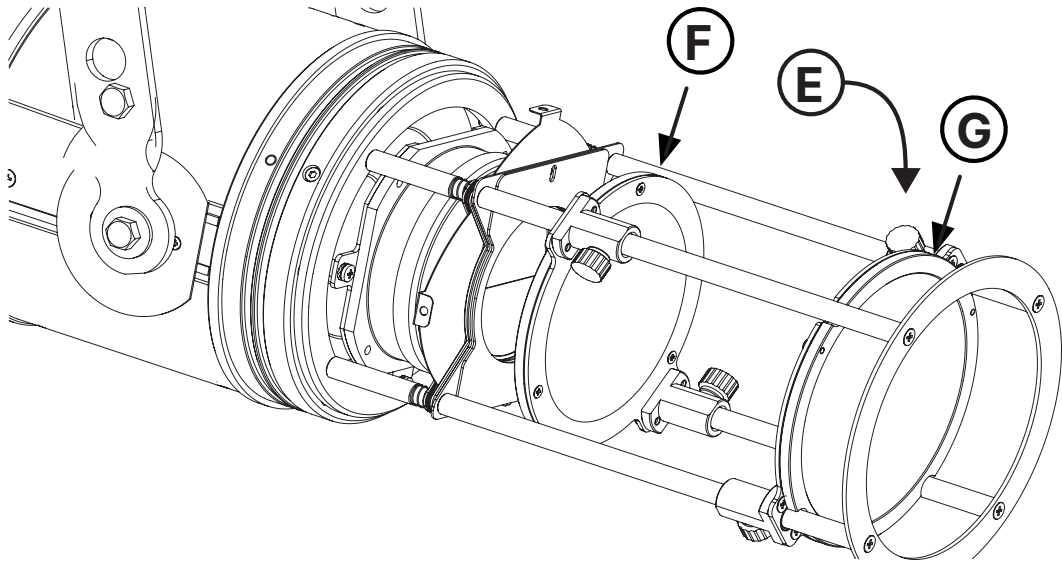
Follow these steps in order to configure the optical group properly:

1. Remove the two screws "C" placed on both sides of the optical holder tube;
2. Gently remove the optical holder tube "D" pulling it away from the body;

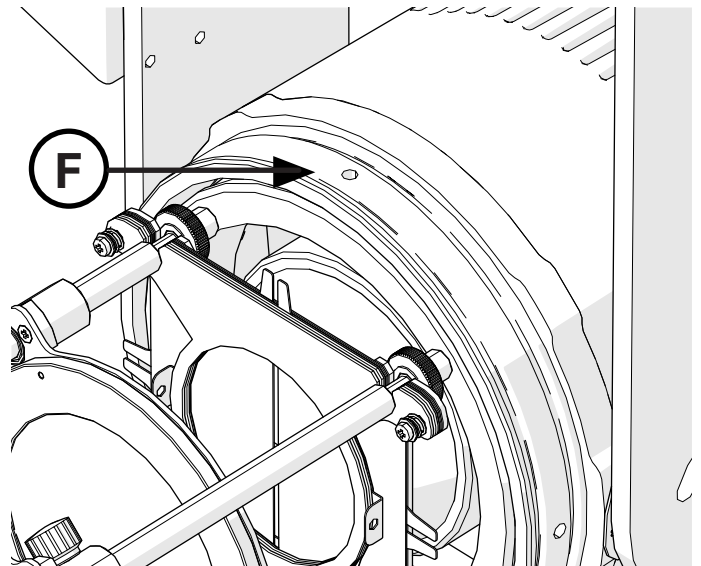
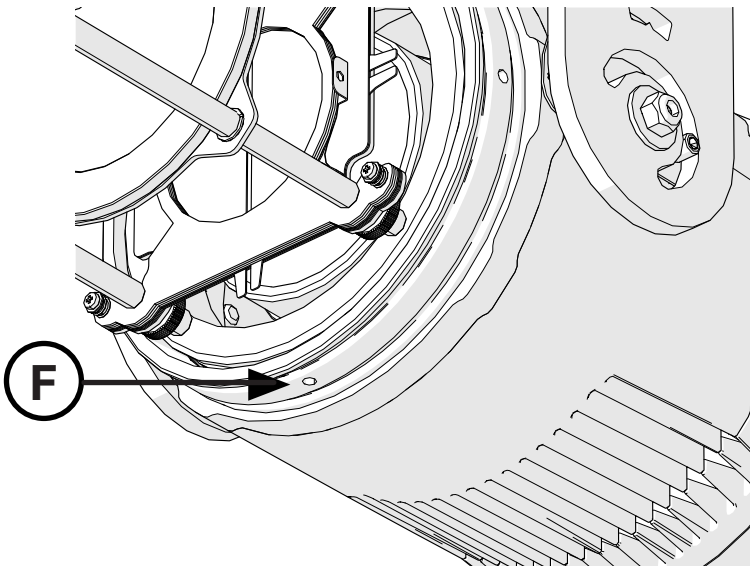


!Before closing the cover after each cleaning or adjustment, remember to heat the LEDs for at least 20 minutes, to be sure to eliminate all traces of humidity inside and make sure that the sheaths remain in their seat to avoid infiltrations.

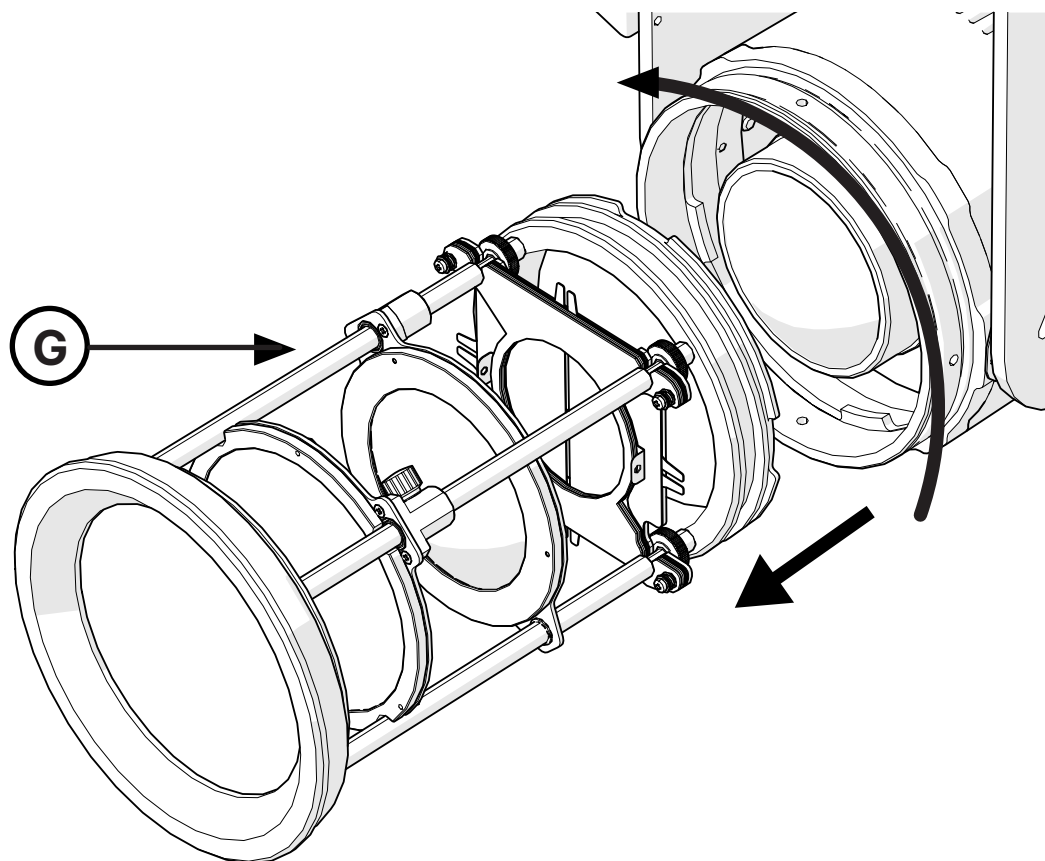
3. Loose the thumbscrews “E” of the two lenses to set them at desired position. Turn on the fixture and check if the desired focus and zoom lever are correct, then tighten the thumbscrews;



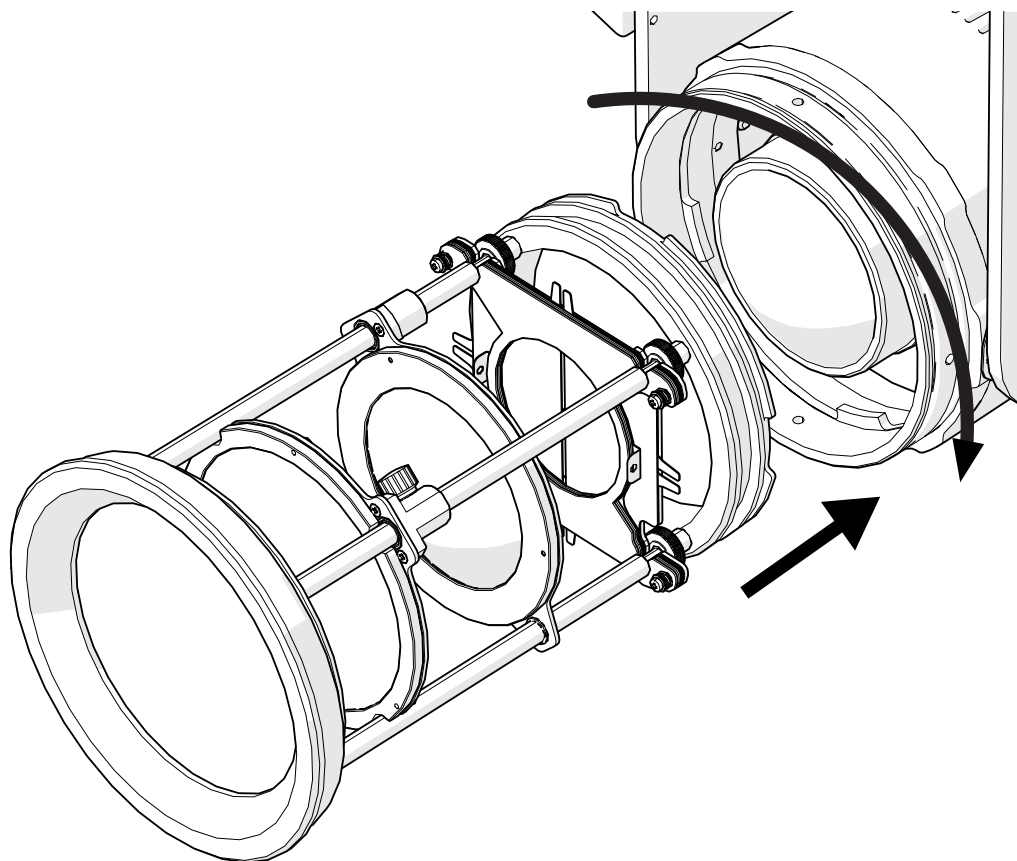
4. In order to change the optical group, once the optical holder tube is removed, loosen the two screws on the top and bottom sides “F”.



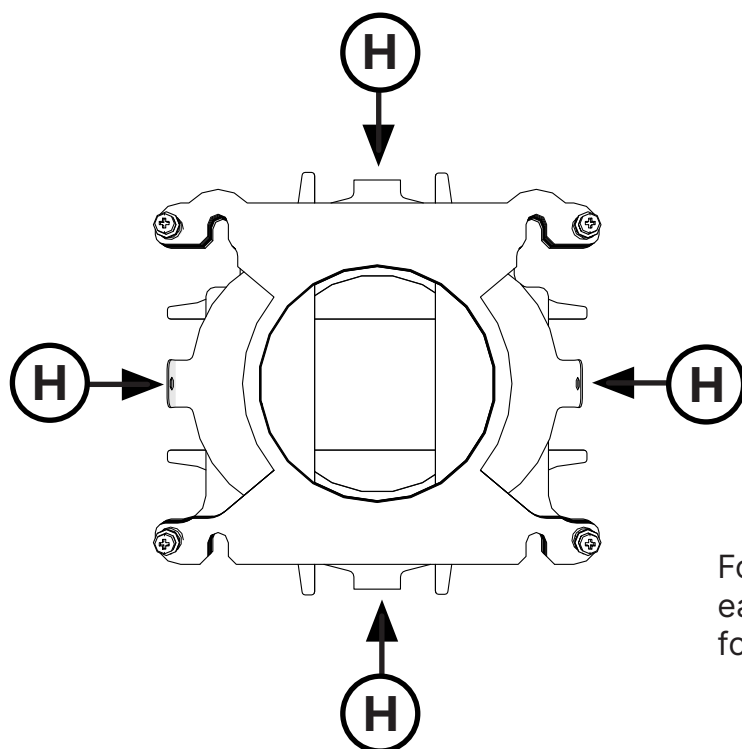
5. Turn the optical group "G" counterclockwise and pull it away.



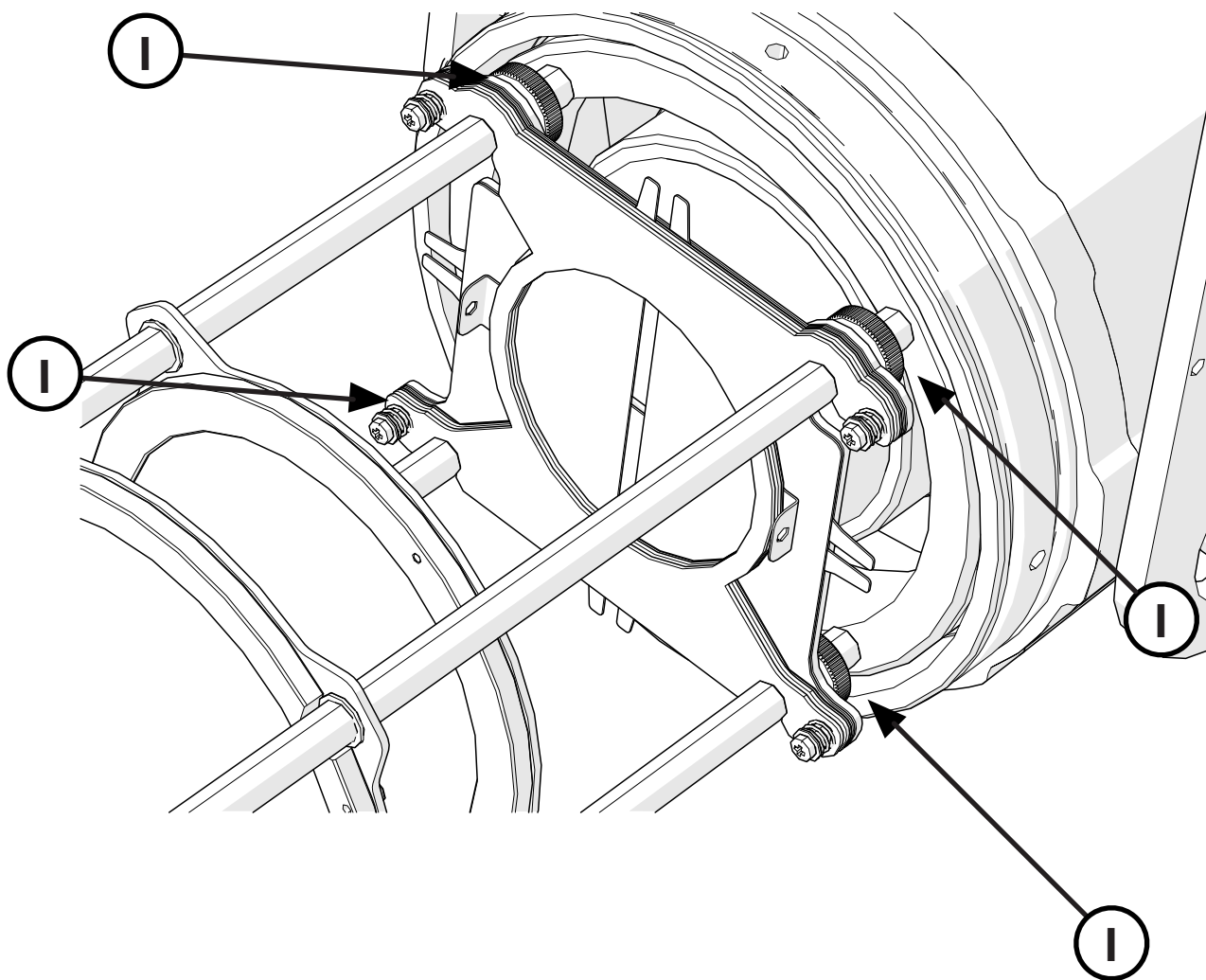
6. Choose another optical group, place it and turn it clockwise. Tighten the screws on the top and bottom sides



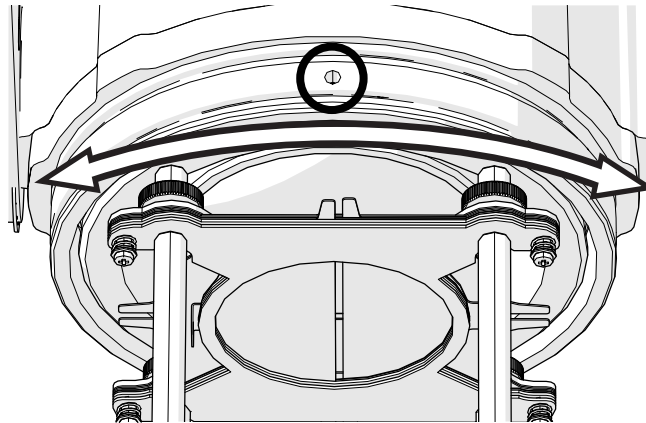
7. It is possible to regulate the shutter blades "H" to achieve the desired shape, use the four thumb screws "I" that you can see behind the shutter blades to free or block them;



Four blade framing system, each shutter blade is adjustable for radial position and angle.



8. Use the hole that you can see above and under the projectors, in it there is a screw and by unscrewing it you can adjust the optical group's position by rotating it, tighten the two screws symmetrically with each other in order to keep straight your optical group;

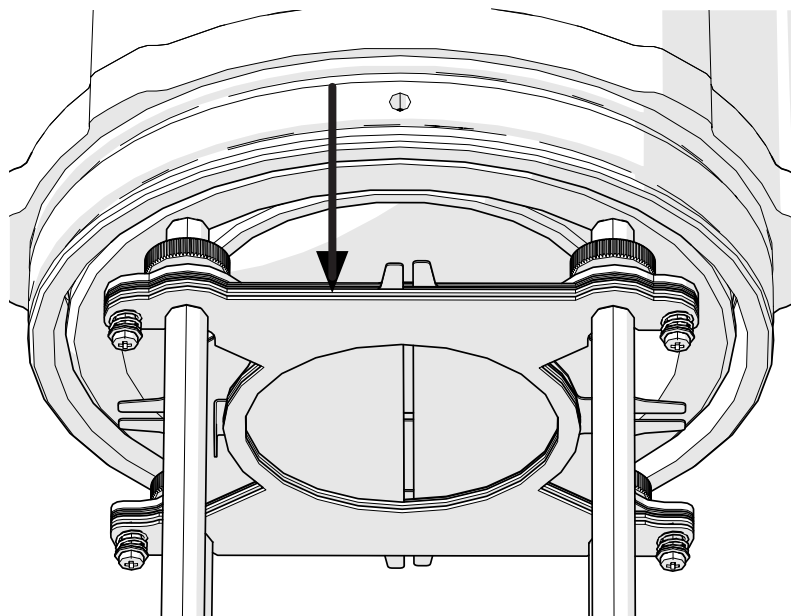
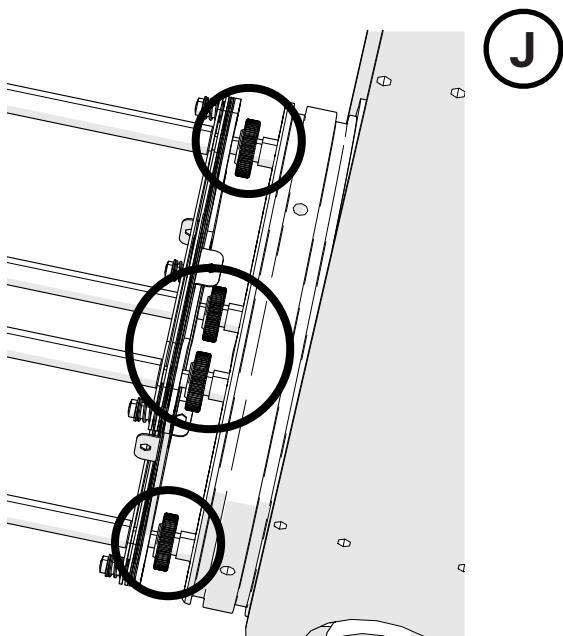


9. Reassemble the projector by pushing the optical holder tube on the optical group and tighten the screws that has been removed at the beginning.

NB: When putting the screws, be careful not to tighten too much, otherwise it may deform the base of the optical holder tube.

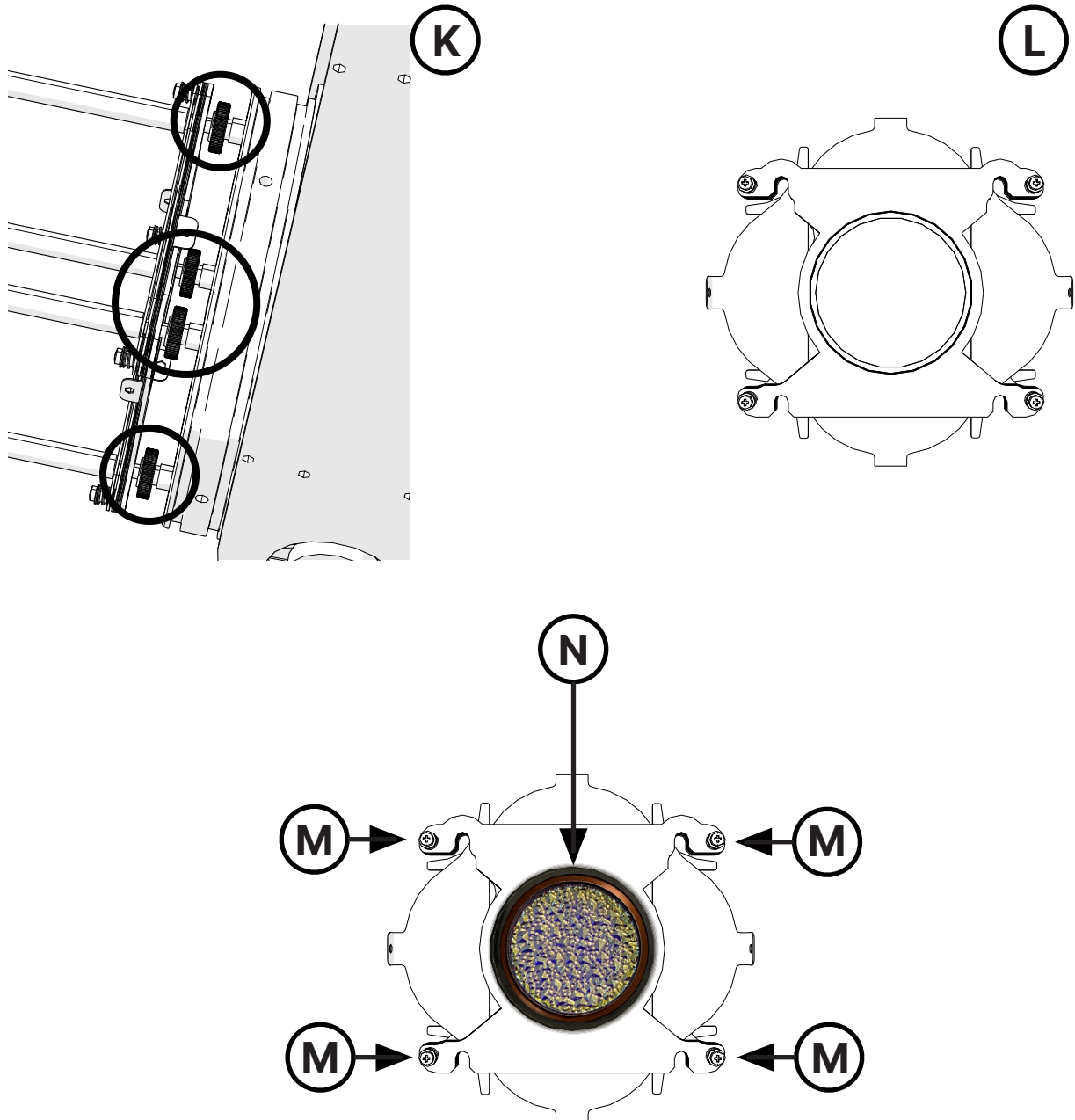
4.5 How to insert a metal gobo

To insert a metal gobo, loosen the four thumb screws “J”, insert the gobo in the frontal holder and tighten the thumb screws.



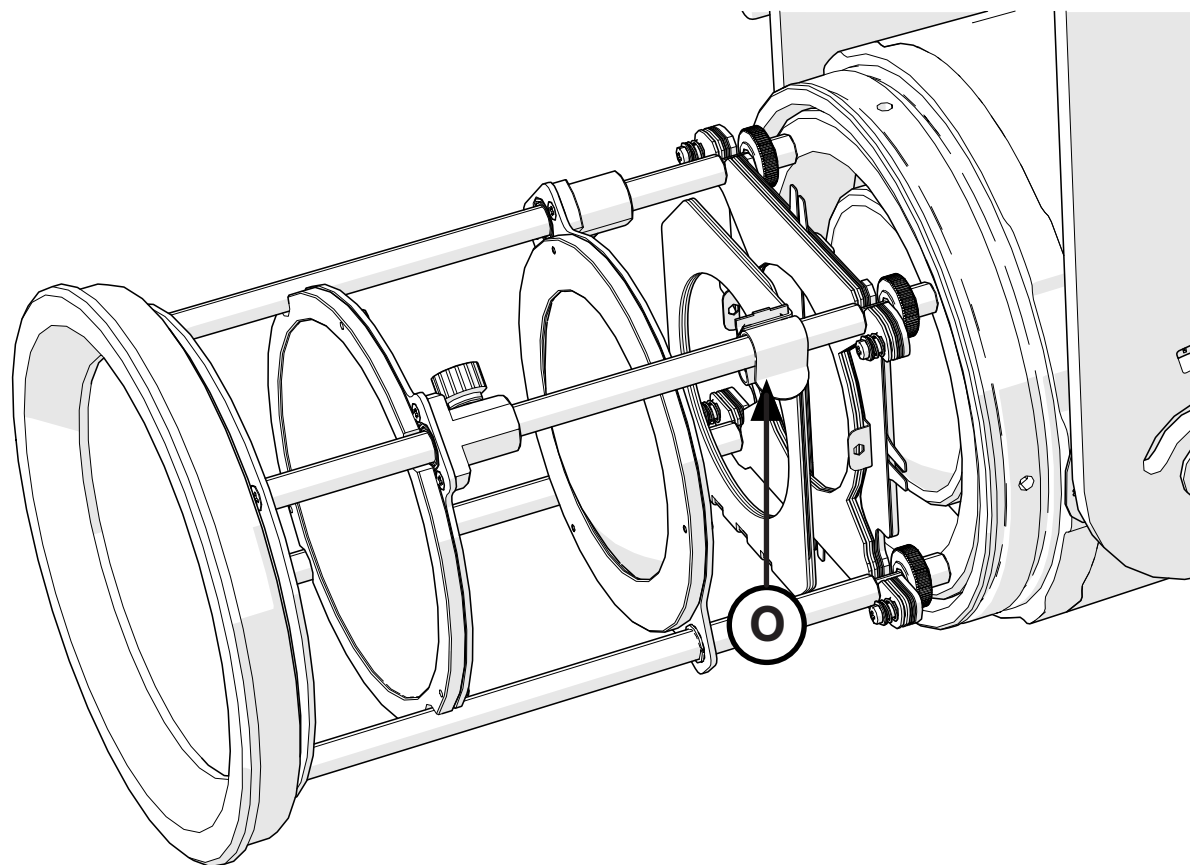
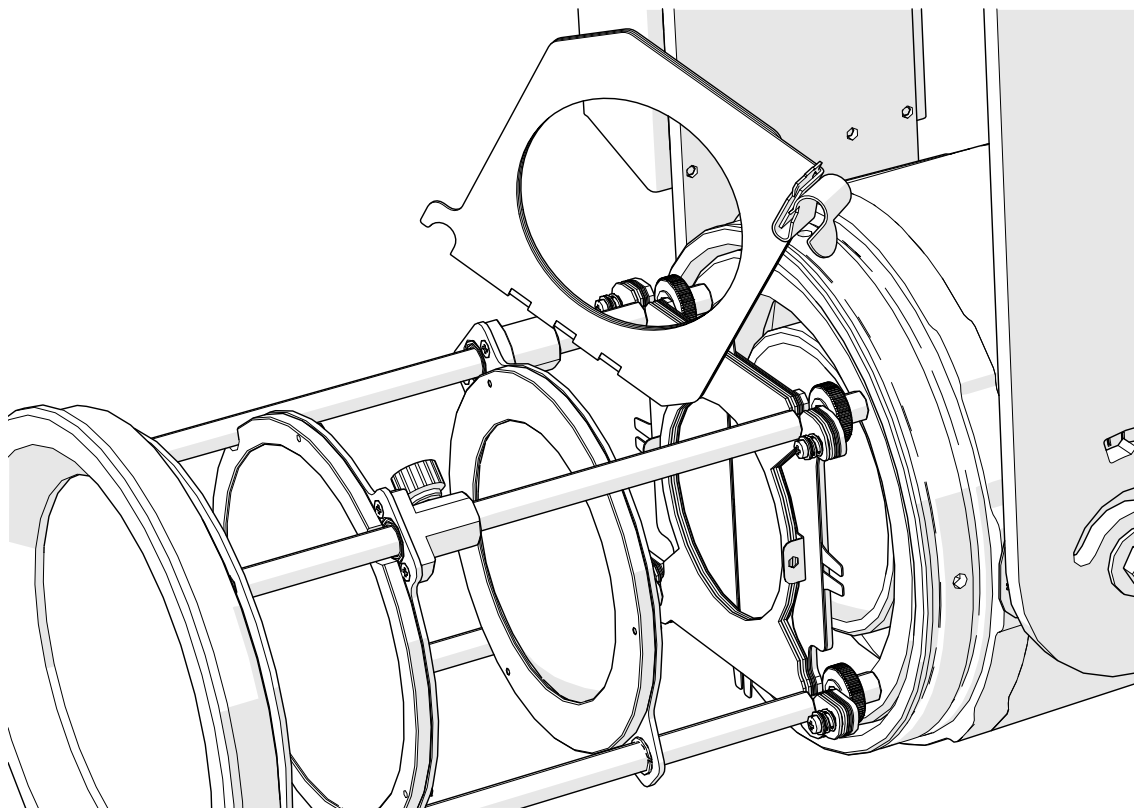
4.6 How to insert a glass gobo

It is possible to insert a glass gobo, to do so unscrew the thumb screws "K", at this point it will be possible to extract the gobo holder "L". Insert the gobo by loosening the 4 screws "M", at this point we suggest you to unscrew completely 2 of them on one side in order to lift the gobo holder and insert the desired glass gobo "N". Once done, screw all the 4 screws and reinsert the gobo holder and retighten the thumb screws.



4.7 How to insert the Frame Holder (BC10029A003)

It is possible to insert a Frame Holder in order to use: Frost Filter, Gobo or Colored Frame. Rotate a bit the Frame Holder, so it will be easier to insert it into the optical group. Once the position will be chosen, lock it thanks to the spring hook "O".



5. Powering up

5.1 Operating voltage and frequency

The unit may operate at voltage ranges from 90 to 305 V at a frequency of 50 or 60 Hz. It is not needed to effect any setup procedures: **LEDko EXT Basic** will automatically adjust its operation to suit any frequency or voltage within this range.

5.2 Connection to mains power

Mains cable characteristics

The mains cable provided is thermally resistant, complying to the most recent International standards.

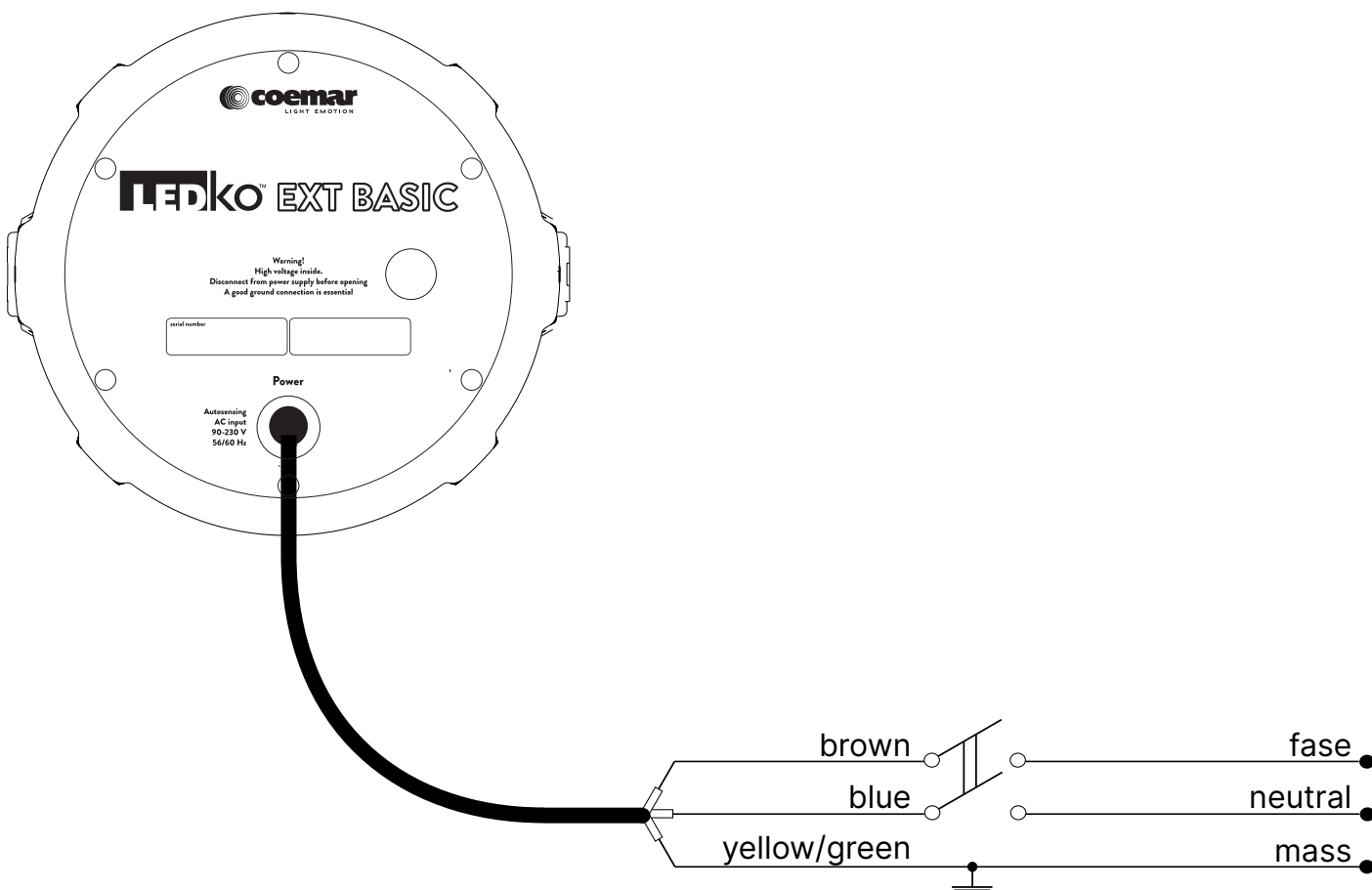
Note: in case of cable replacement, similar cable with comparable thermal resistant qualities must be used exclusively (cable 3 X 1,5 \varnothing external 10 mm, rated 300/500V, tested to 2 KV, operating temperature -40°C + 180°C, Coemar cod. CV5311).

Connection to mains power

LEDko EXT Basic is equipped with an internal cable without power plug.

The max absorption of **LEDko EXT Basic** is reported in the following table:

- 230 V 0.6 A constant during normal exercise.
- 115 V 1.27 constant during normal exercise.



Warning!!

The use of a thermal/magnetic circuit breaker is recommended. Strict adherence to regulatory norms is strongly recommended.

LEDko EXT Basic should not be powered through a dimmer as this may damage the internal switching power supply.

Prior to connecting the device to mains power, ensure that the mains characteristics are within the recommended range for the use of **LEDko EXT Basic**.

All cabling and connections should be carried out by a suitably qualified personnel.

6. Turning on the projector

After having followed the preceding steps described, proceed with the power supply and turn on the projector connecting it to the mains power.

7. Accessories and spare parts

All the components of **LEDko EXT Basic** are available as spare parts from your **Coemar** dealer or Service. Accurate description of the fixture, model number and type will assist us in providing for your requirements in an efficient and effective manner.

8. Maintenance

8.1 Firmware update

The firmware of **LEDko EXT Basic** can be updated through the RDM protocol (ANSI E1.20). Contact **Coemar** assistance to receive the software and the device updater.

8.2 Periodic cleaning

!Before closing the cover after each cleaning or adjustment, remember to heat the LEDs for at least 20 minutes, to be sure to eliminate all traces of humidity inside and make sure that the sheaths remain in their seat to avoid infiltrations.

Lenses

Even a thin layer of dust can reduce the luminous output and alter the consistency of the beam. Regularly clean all filters and lenses using a soft cotton cloth, dampened with a special lens cleaning solution.

Cleaning of the unit

Use a soft brush or a common vacuum cleaner or a source of compressed air for removing dust. For the cleaning of the housing use a soft cloth and a non-aggressive cleaner. Check that the internal fans and heat exchanger must be perfectly clean.

8.3 Periodic controls

Mechanical components

Check the correct working of the mechanical parts and, if needed, replace them. Make sure the projector is not mechanically damaged. If necessary, replace the worn parts.

Electrical components

Check all electrical connections, in particular for correct grounding and correct attachment of all extractable connectors. Press the connectors if necessary and reposition as before.

8.4 Fuses

LEDko EXT Basic has an automatic fuse that in most cases does not need to be replaced.


9. F.A.Q. and answers

The following list shows common issues that may be simply solved. If issues persist, the unit must be repaired by a qualified personnel or just contact your **Coemar** service.

Question	Possible solution
LEDko EXT Basic does not emit light	Projector not powered on: <ul style="list-style-type: none">• Make sure the power cable is plugged in or test the input voltage

User notes

[illegible]

	<p style="text-align: center;">Information on disposal of the equipment</p> <p>The equipment at the end of its useful life must be disposed of at an appropriate recycling center for waste electrical and electronic equipment. The treatment and disposal of environmentally friendly, helps prevent potential negative environmental and health and promote the reuse and / or recycling of materials making up the equipment. Illegal disposal by the user includes the application of administrative sanctions provided by law.</p>
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