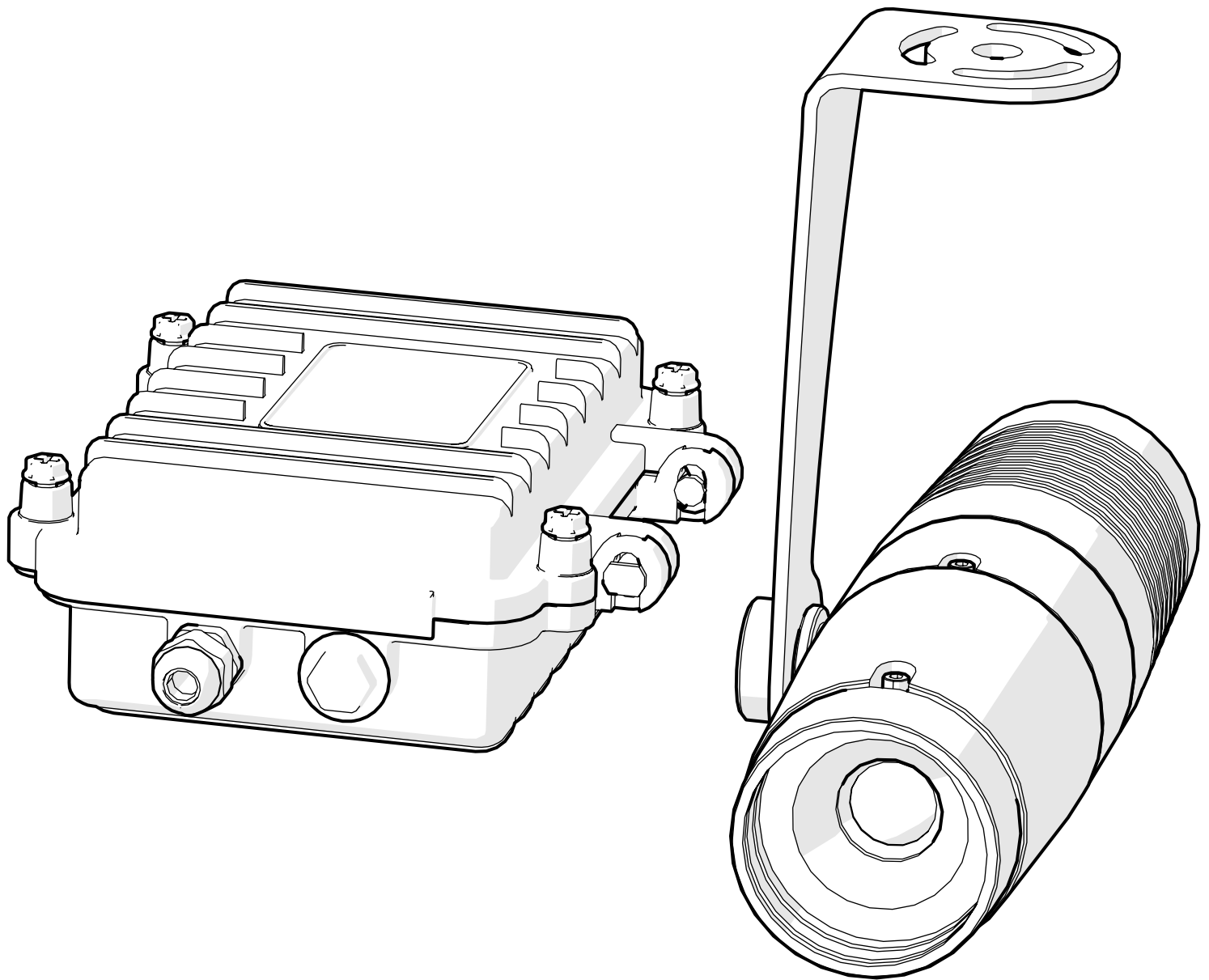


MiniLEDko Spot



USER MANUAL

vrs. 1.2 - 22.08.2023



 **coemar**

© 2023 Coemar Lighting Srl. All rights reserved.

Information subject to change without notice. Coemar and all affiliated companies disclaim liability for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. The Coemar logo, the Coemar name and all other trade-marks in this document pertaining to services or products by Coemar or its affiliates and subsidiaries are trademarks or licensed by Coemar or its affiliates or subsidiaries.

No part of this document may be used for distribution, reproduction, transmission, transcription, storage in a data retrieval system, or translated into any language in any form by any means without the prior written permission of Coemar ®. If you are downloading files from our web pages for your personal use, make sure to check for updated versions. Coemar ® cannot take any liability whatsoever for downloaded files, as technical data are subject to change without notice.

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.

Index

1. Packaging and transportation.....	Pag. 5
1.1. Packaging.....	Pag. 5
1.2. Transportation.....	Pag. 5
2. General information.....	Pag. 5
2.1 Safety informations.....	Pag. 5
2.2 Warranty conditions.....	Pag. 6
2.3 EC Norms	Pag. 6
3. Product specifications	Pag. 7
3.1 Technical characteristics.....	Pag. 7
3.2 Dimensions.....	Pag. 8
3.3 Unit's main components.....	Pag. 9
4. Installation.....	Pag. 10
4.1 Mechanical installation.....	Pag. 10
4.2 Safety chain.....	Pag. 10
4.3 Adjusting unit's tilt.....	Pag. 11
4.4 How to adjust the focus.....	Pag. 11
4.5 How to mount the gobo.....	Pag. 12
5. Powering up.....	Pag. 14
5.1 Operating voltage and frequency	Pag. 14
5.2 Connection to mains power.....	Pag. 14
6. Control signal connections.....	Pag. 16
6.1 Control signal connection by XLR5 plugs	Pag. 16
7. Turning the projector on.....	Pag. 17
8. Setup via RDM	Pag. 17
8.1 Quick guide to menu	Pag. 17
8.2 RDM Chart	Pag. 18
8.3 RDM Error Chart	Pag. 18

9. DMX chart - Fixed White version Pag. 19

9.1 DMX modes Pag. 19

9.2 DMX Chart 5/1 channels Pag. 20

10. DMX chart - VariWhite version Pag. 21

10.1 DMX modes Pag. 21

10.2 DMX Chart 5 channels Pag. 21

10.3 DMX Chart 2 / 1 channels Pag. 23

10.4 DMX Chart Sunrise mode Pag. 23

10.5 DMX Chart Raw mode Pag. 24

11. Accessories and spare parts Pag. 25

12. Maintenance..... Pag. 26

12.1 Firmware update..... Pag. 26

12.2 Periodic cleaning..... Pag. 26

12.3 Periodic controls..... Pag. 26

12.4 Fuses..... Pag. 26

13. F.A.Q. and answers..... Pag. 27

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 e-mail, and inform them you will formally notify them in writing through registered letter.

Packing list

Ensure the packaging contains:

1 MiniLEDko Spot

1 Power Box

1 Metal key for mounting gobo (BC016A010)

1 Instruction manual

1.2 Transportation

The **MiniLEDko Spot** should be transported in either its original packaging or in an appropriate flight case.

2. General information

2.1 Safety informations

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. 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 LED replacement.
2. For the connection to the mains, adhere strictly to the guidelines outlined in this manual.

3. The level of technology of **MiniLEDko** 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 ambient 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 ought 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 informations and assistance from the dealer.

2.3 EC Norms

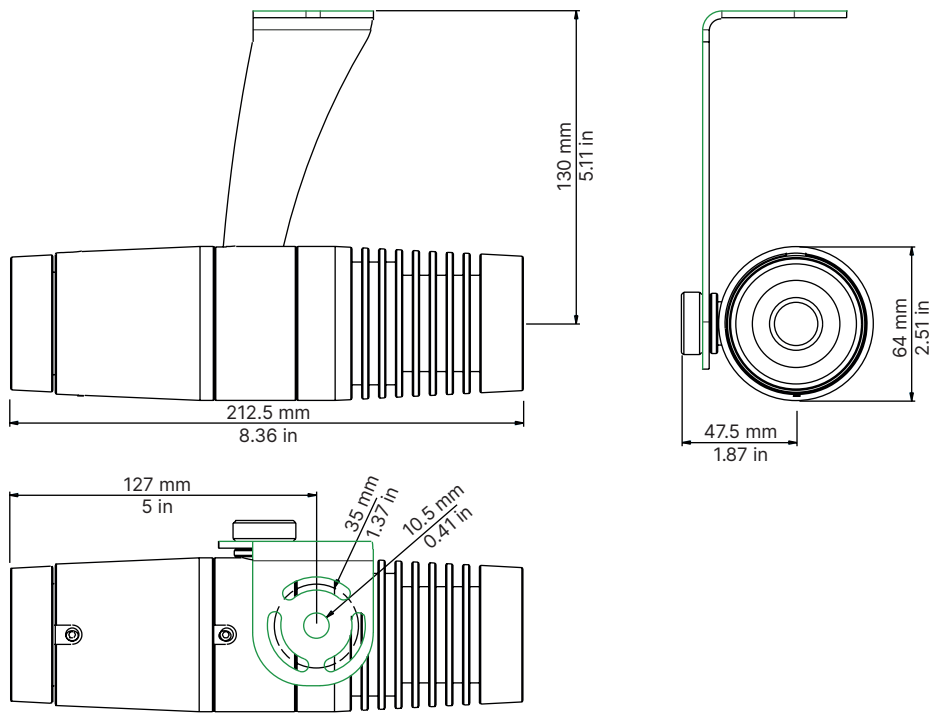
1. The fixture satisfies the essential requirements of the directive 2004/108/EC, 2006/95/EC, 2011/65/EC, 2002/96/EC & 2003/108/EC.
2. The fixture is in accordance with the standard EN 50419 (RoHS) and satisfies the requirements of the directive 2002/96/EC (WEEE).

3. Product specifications

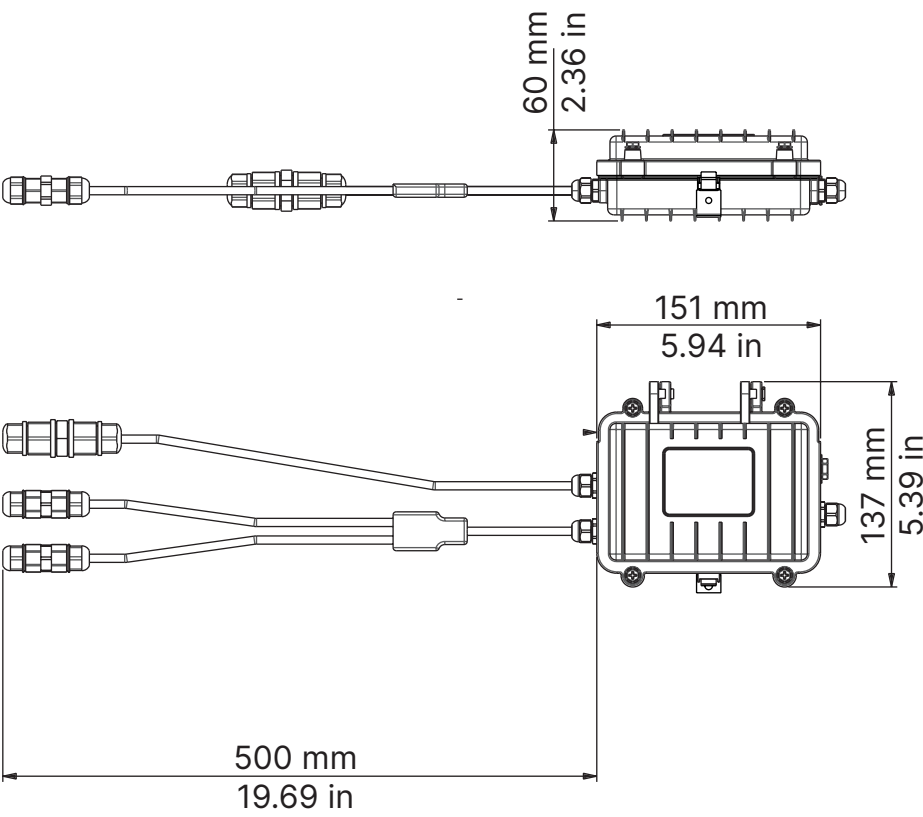
3.1 Technical characteristics

Power supply	80-264 Vac, 50/60 Hz (on request available other voltage range)
Maximum current	0.07 A at 230 V, 0.15 A at 115 V
Power factor	Cosφ = 0.9
Max power consumption	20 W Typical
LED Source	Fixed White: 25 W White COB LED VariWhite version: 35 W COB LED RGBW version (soon available): 40 W COB LED
CCT	Fixed White version: 3.000 K, 5.600 K (On request available 2.700 K, 3.500 K, 4.000 K, 5.000 K, 6.500 K) VariWhite version: 2.700 K → 5.000 K RGBW version (soon available): 2.700 K → 6.500 K
Color Rendering Index (CRI)	Fixed White version: CRI > 96 (96 @3200 K, 97 @5600 K) TLCI >98 (98 @3200 K, 99 @5600 K) VariWhite version: CRI >93 TLCI >95
Weight	1.5 Kg / 3.31 lbs
Ambient Operating Temperature	0°C - +40°C (32°F - 104°F)
IP rating	IP20 or IP65

3.2 Dimensions

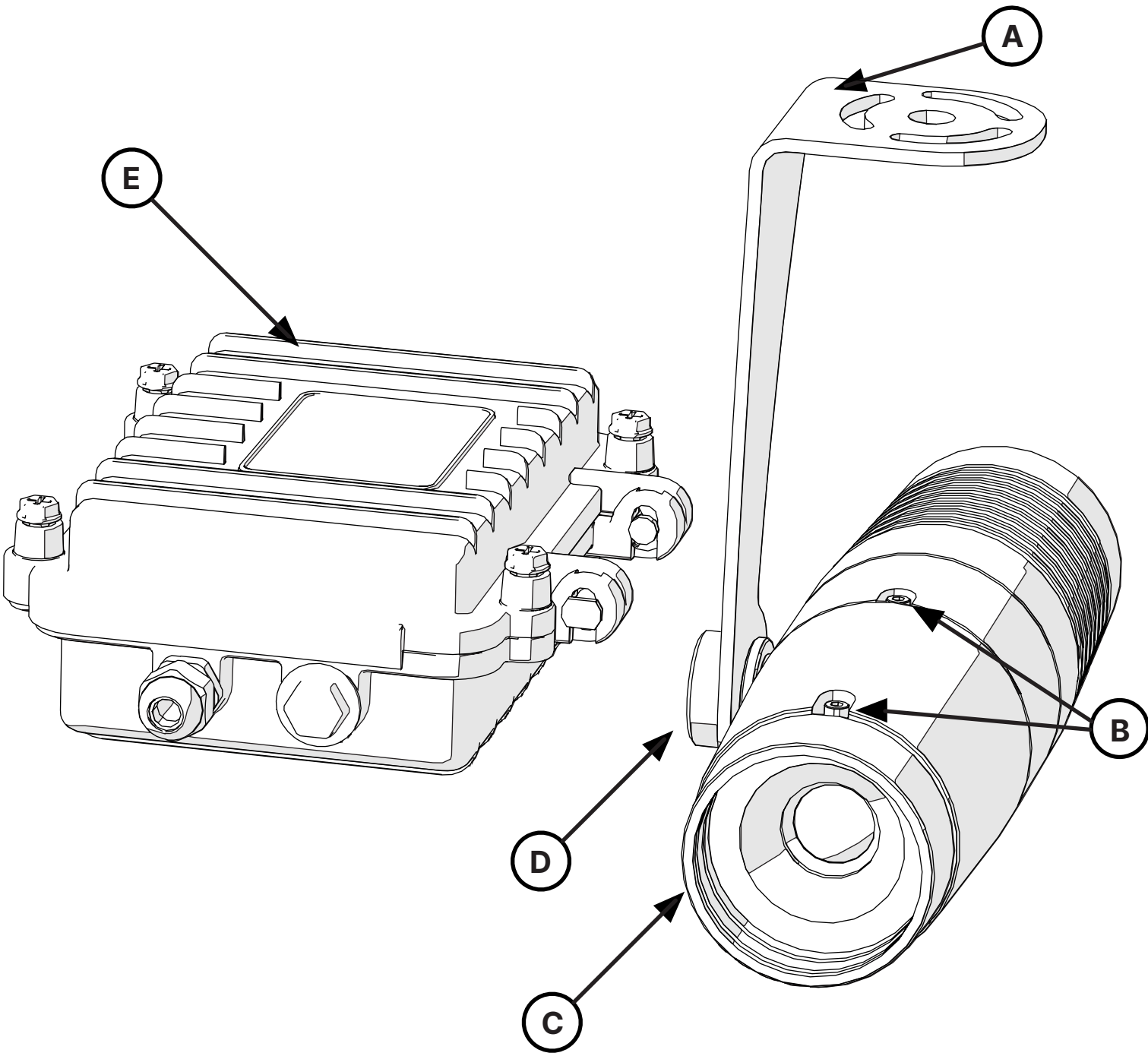


Body



Power Box

3.3 Unit's main components

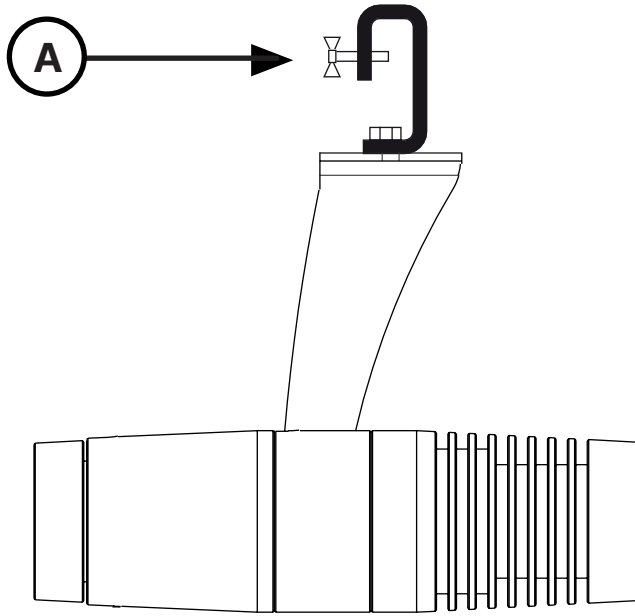


Components description	
A	Adjustable yoke
B	Optic screws
C	Lens (interchangeable)
D	Yoke adjusting screws
E	Power Box

4. Installation

4.1 Mechanical installation

MiniLEDko Spot 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.



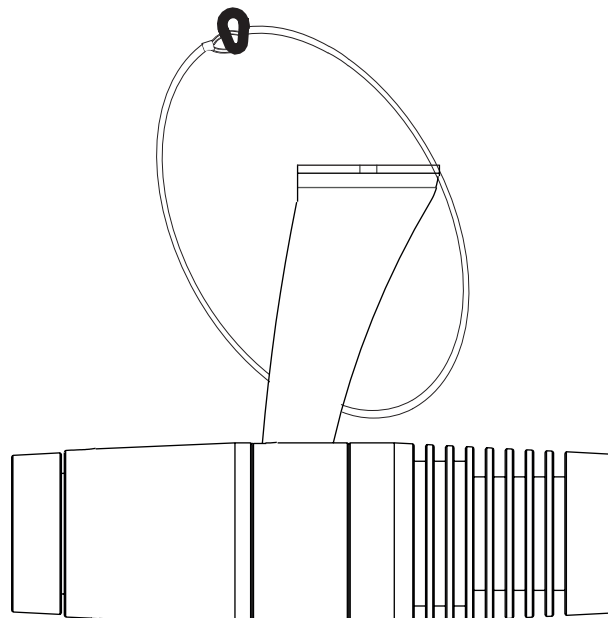
Warning!!

Always ensure that your support structure and fixing (bolts, clamps, etc...) are rated to support the weight of the fixture.

4.2 Safety chain

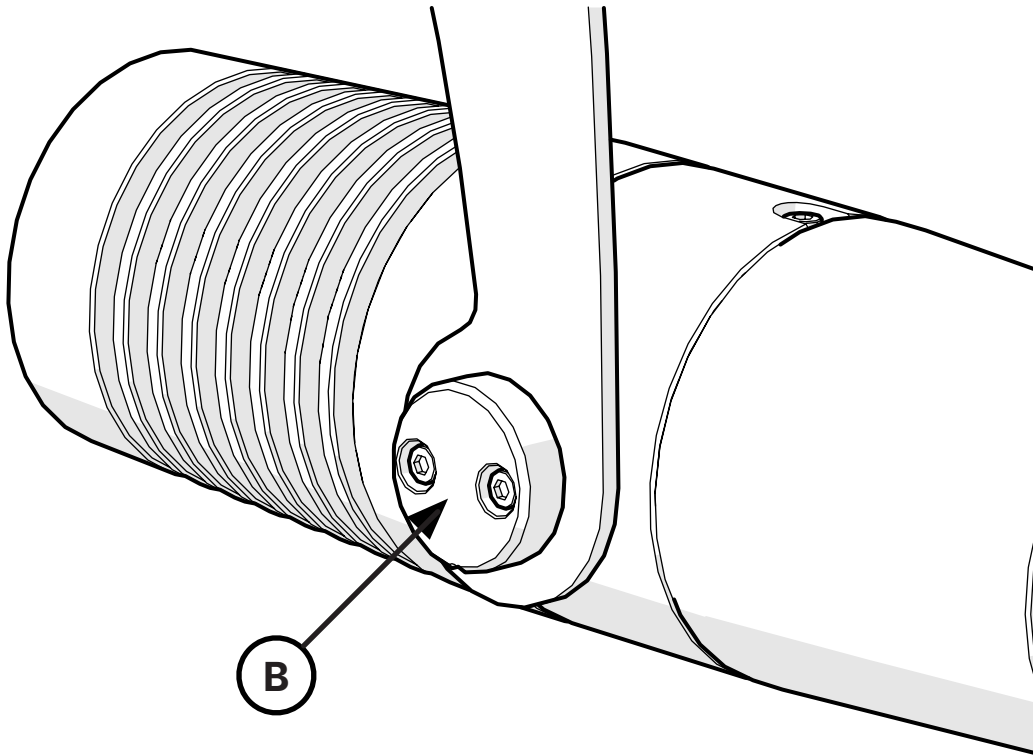
When hanging **MiniLEDko Spot** it is recommended to use a safety chain, as required by current legislation. The safety chain must pass through the handles of the unit and then attached to the structure.

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).



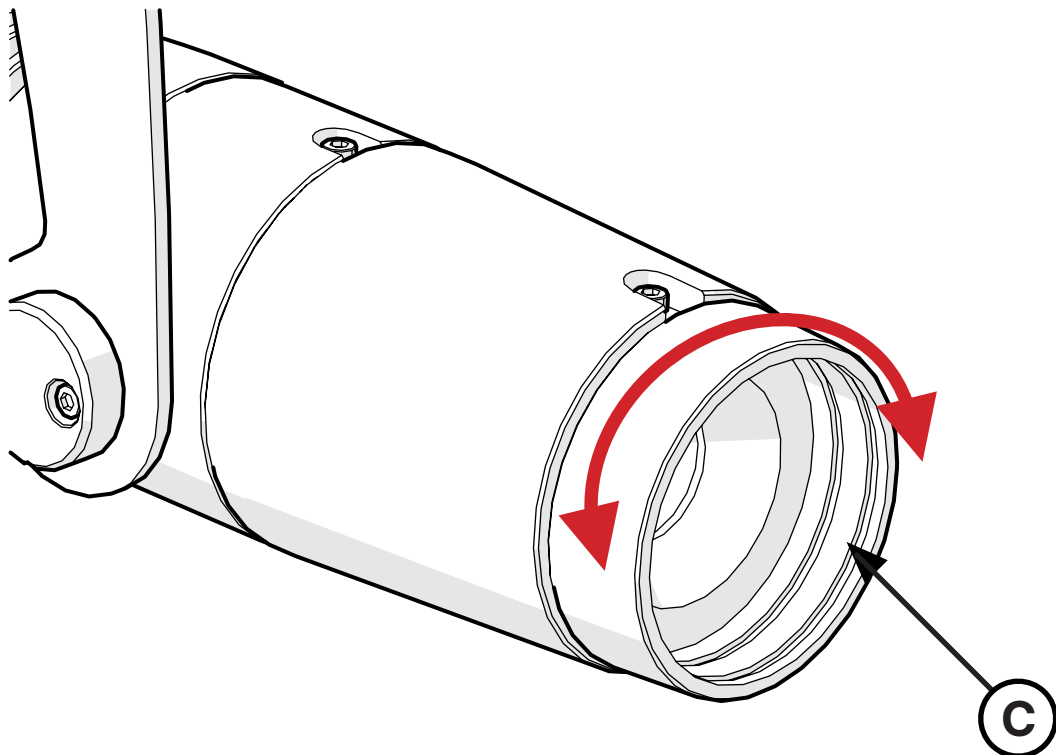
4.3 Adjusting unit's tilt

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



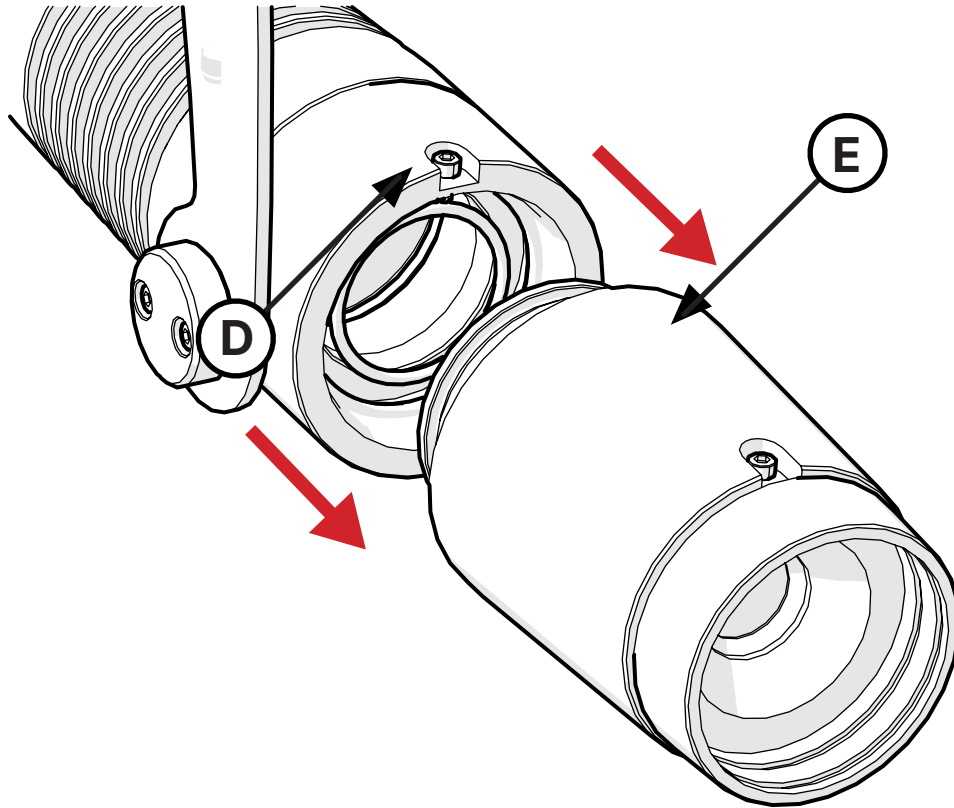
4.4 How to adjust the focus

In order to adjust the focus turn the lens "C" until you will have reached the focus desired.

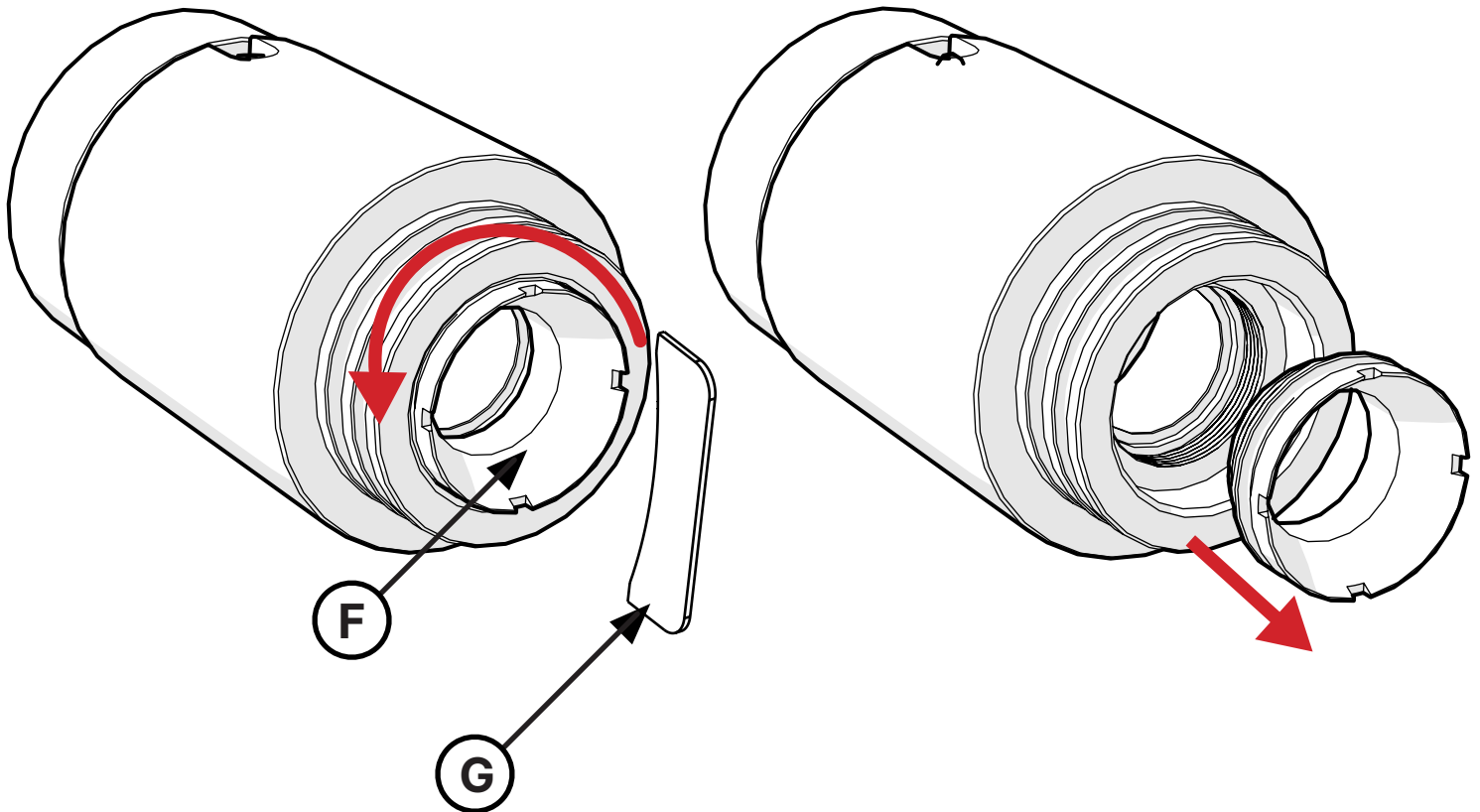


4.5 How to mount the gobo

1. To change the gobo unscrew the screw "D" and pull the optical lens tube "E".



2. Unscrew the gobo stopper "F" by using the included metal key "G" (BC016A010).



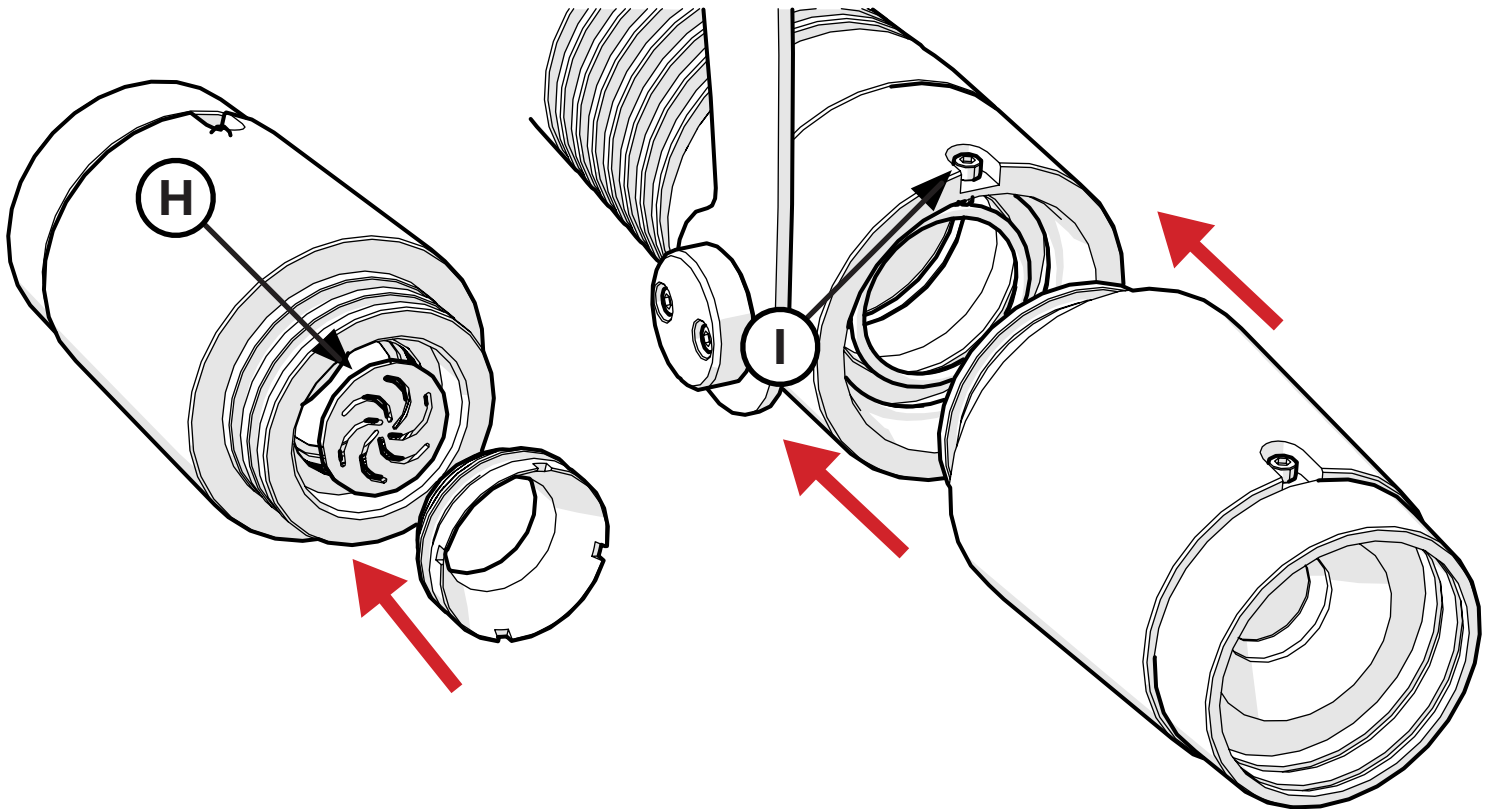
3. Insert the gobo "H" and proceed with the closing of the projector by re-mounting the gobo holder and by pushing again the optical lens tube until it will be perfectly closed, tighten the screw "I".

N.B. the gobo **must comply with the following measures**, otherwise MiniLEDko Spot may not work properly:

Gobo outside diameter= 26 mm / 1.02 in

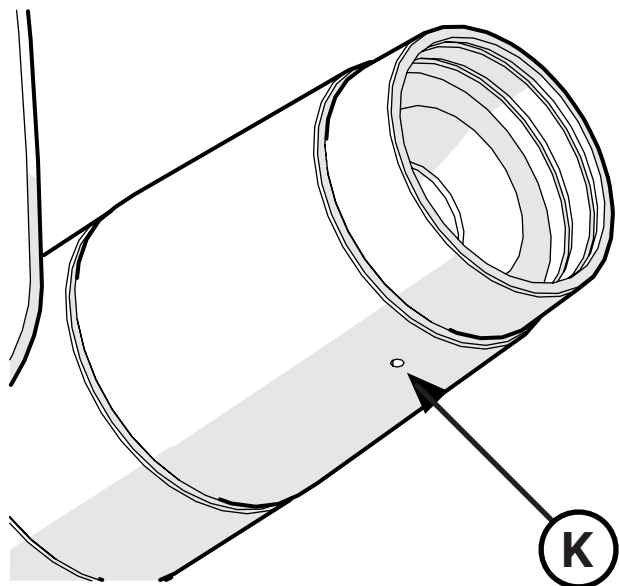
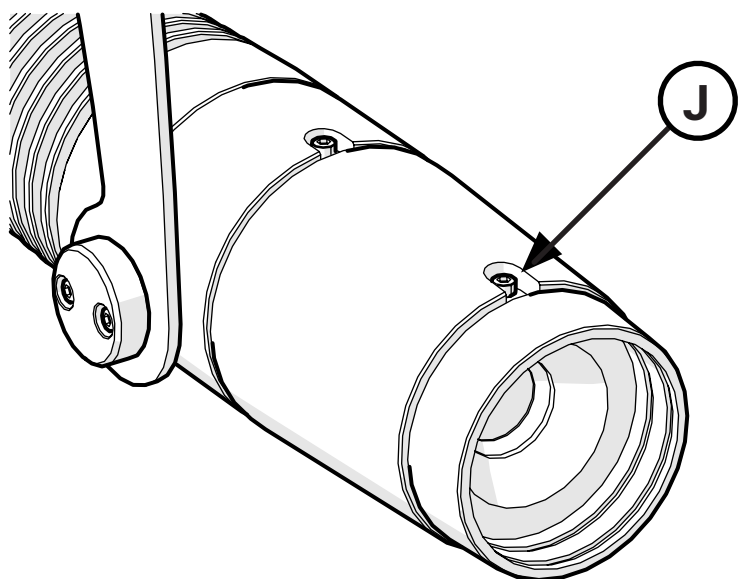
Max image diameter= 22 mm / 0.86 in

Max Gobo thickness= 2mm / 0.08 in (glass gobo)

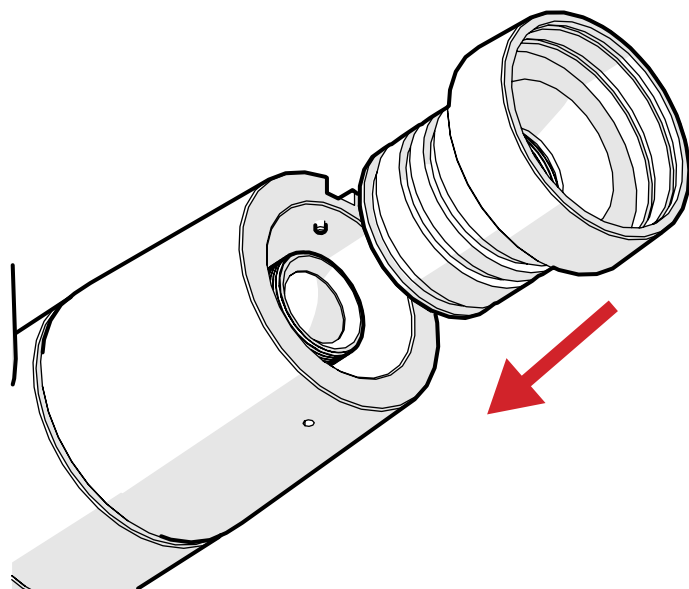
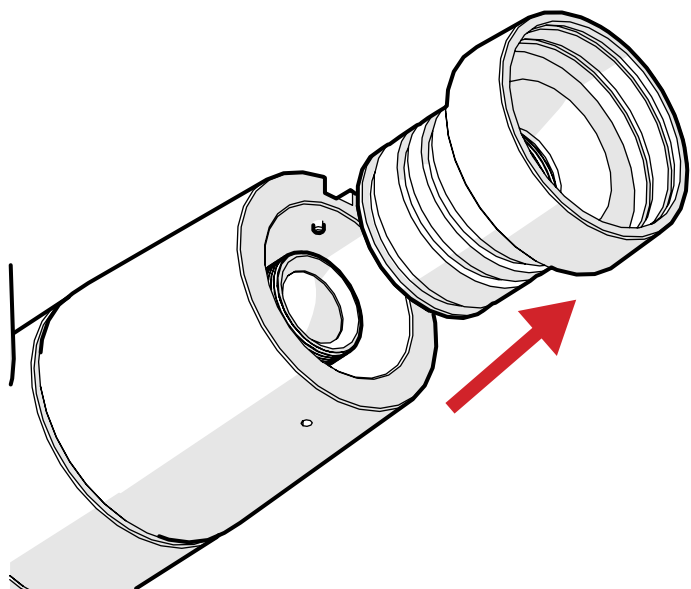


4.6 How to change the optic

1. To change the optic unscrew the screw "J" and the screw underneath the front barrel "K".

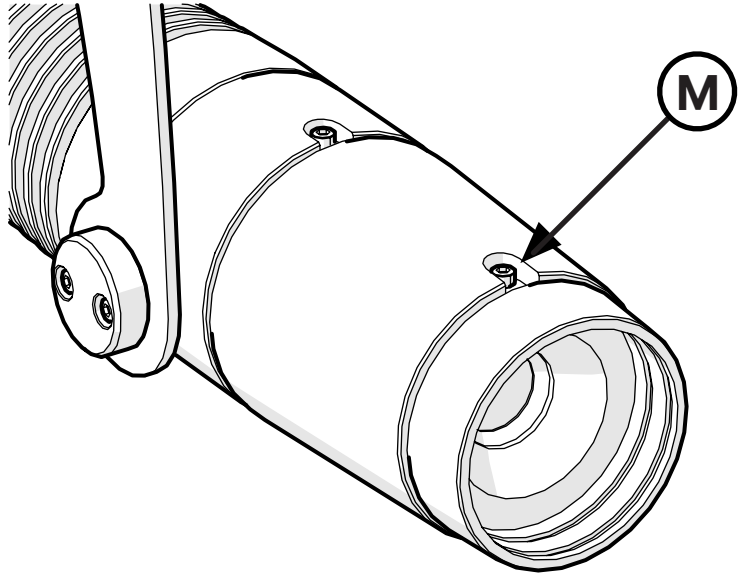
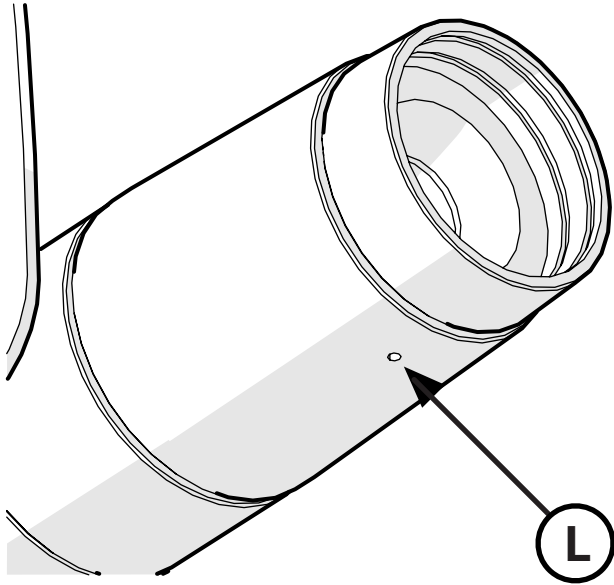


2. Now the optic will come off, chose the optic that you want to use and insert it into the barrel.



3. Once remounted the optic, tighten the screw underneath the front barrel "L" and the screw on top "M".

N.B. pay attention when you tighten the screw "L", proceed by slightly tightening the screw until it reaches the end of the screw stroke without over-tightening, then try moving the optic half a turn, now try tightening the screw again to check that the screw was really at the end of the stroke, if not, complete by tightening the screw.



5. Powering up

5.1 Operating voltage and frequency

The unit may operate at voltage ranges from 80 to 264 Vac at a frequency of 50 or 60 Hz (on request available other voltage range). It is not needed to effect any setup procedures: **MiniLEDko Spot** 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.

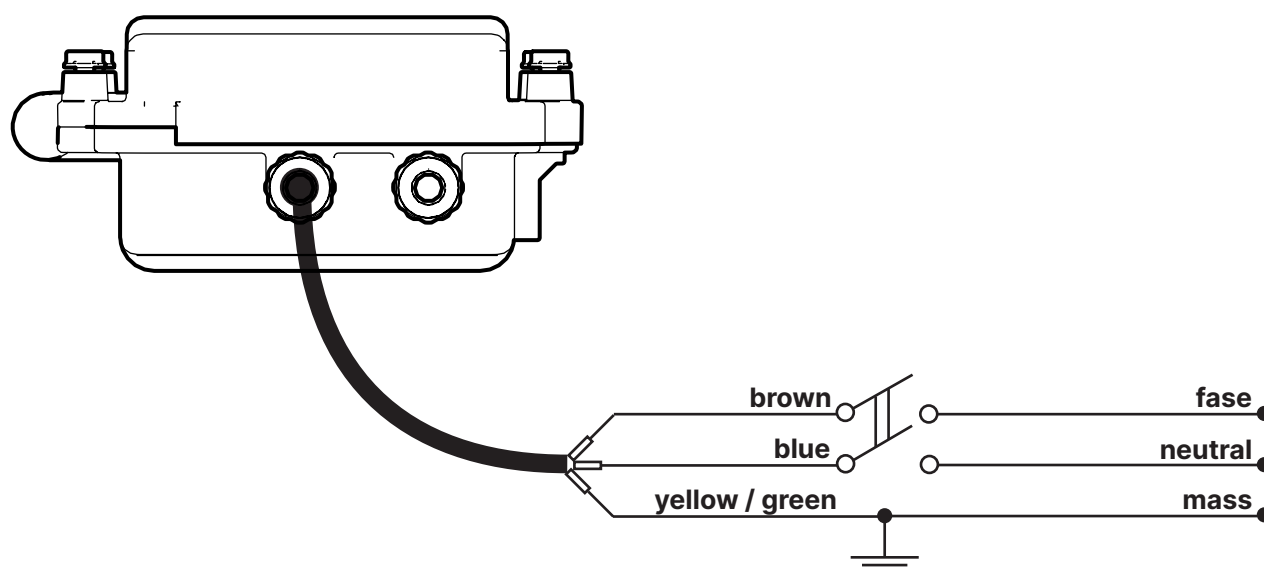
Note: in case of cable replacement, similar cable with comparable thermal resistant qualities must be used exclusively (cable 3 X 1,5 ø external 10 mm, rated 300/500V, tested to 2 KV, operating temperature -40°C + 180°C, Coemar cod. CV5311).

Connection to mains power

MiniLEDko Spot is equipped with one power connector.

The max absorption of **MiniLEDko Spot** is reported in the following table:

- 0.07 A @ 230 VaC constant during normal exercise.
- 0.15 A @ 115 VaC constant during normal exercise.



Warning!!

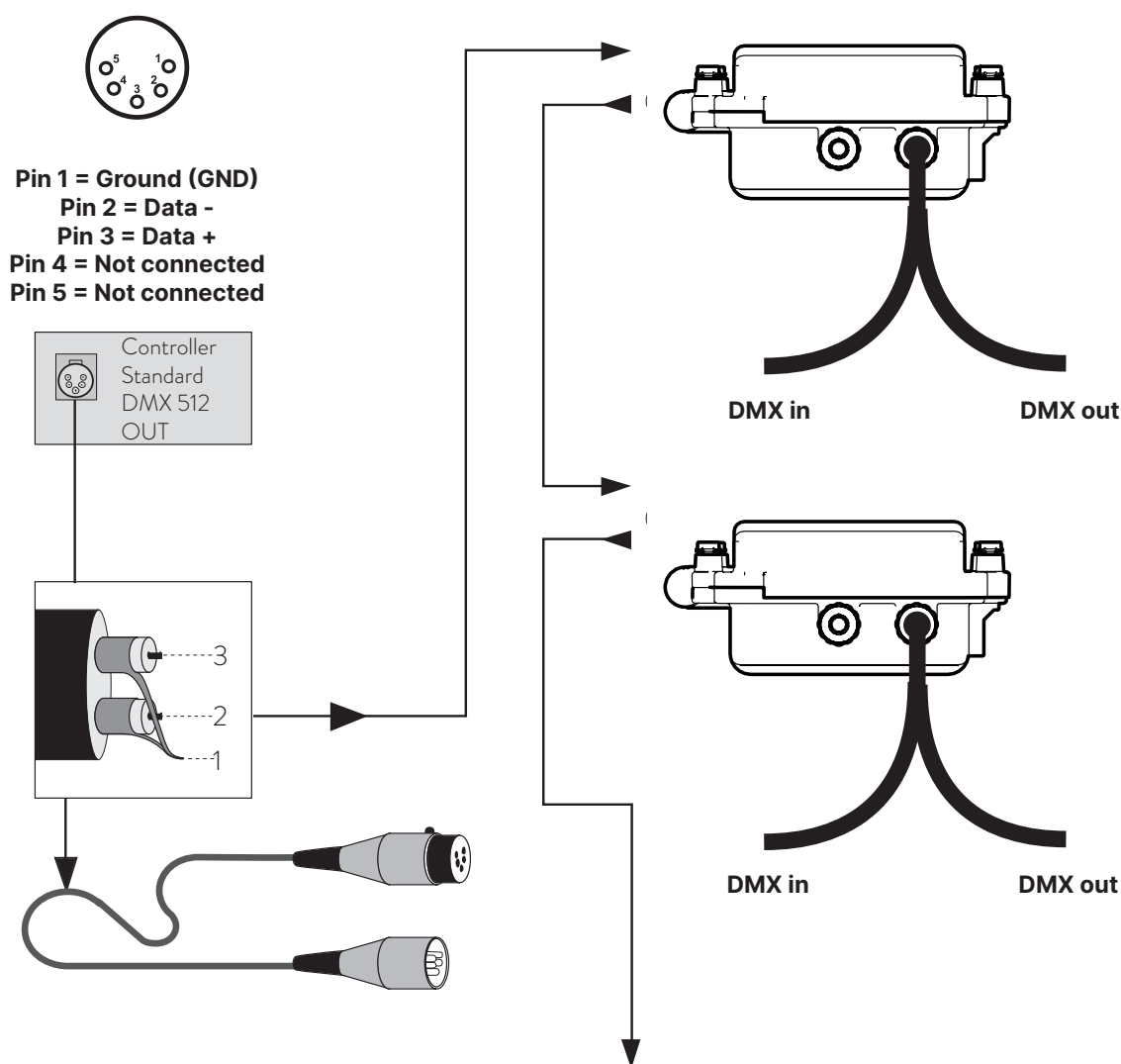
- The use of a thermal/magnetic circuit breaker is recommended. Strict adherence to regulatory norms is strongly recommended.
- **Mini LEDko Spot** should not be powered through a dimmer as this may damage the internal switching power supply.
- Prior to connecting the device to mains power, ensure that the mains characteristics are within the recommended range for the use of **Mini LEDko Spot**.
 - All cabling and connections should be carried out by a suitably qualified personnel.

6. Control signal connections

6.1 Control signal connection by XLR5 plugs

The digital control signal is transmitted to the projector via a two pole cable screened as per International standards for the transmission of DMX 512 data. The connection must be serial, using connectors XLR5 male and female located on the back of **MiniLEDko Spot** labelled DMX512 IN e OUT (see diagram). Connectors equipped on **MiniLEDko Spot** are IP rated, which ensures protection against water and dust. In order to keep this rating they must be connected exclusively to other IP rated connectors.

N.B. In case of loss of the signal the MiniLEDko Spot will activate automatically dimmer at full and CCT at 4.000 K. The maximum number of products that can be connected when using with DMX is 32 MiniLEDko Spot.



Note: Once the connection of the line is completed and the last projector's DMX OUT connector is unused, you need to put on the DMX end of line closure cap received (RME34/G), indispensable for the last projector of the line.

Warning!

Make sure that screening and conductors are not in contact one another or with the metal housing of the connector. Pin#1 and housing never must be connected to the power supply unit.

7. Turning the projector on

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

8. Setup via RDM

8.1 Quick guide to menu

The **MiniLEDko Spot** required RDM (Remote Device Management) to set up fixtures. Using an RDM compliant DMX controller, you can communicate with all the fixtures on a data link without needing to connect to each fixture individually. RDM lets you set the DMX addresses of all the fixtures on the link, carry out fixture configuration and retrieve fixture data including details of any error that has been logged. If two or more identical fixtures are set up with the same DMX address and in the same DMX mode, they will receive the same instructions and behave identically. Setting up identical fixtures with the same address is a good tool for troubleshooting unexpected behavior and an easy way to achieve synchronized action. Setting DMX addresses via RDM involves running a scan to identify the fixtures that are present on the data link and then allocating addresses either automatically or manually.

To use RDM:

1. Obtain an RDM-compatible controller such as the RDM UPGRADE INTERFACE B (cod. AC10011A001) application running on a Windows PC.
2. Use a USB cable to connect the PC to a USB/DMX interface box
3. Connect the interface box to the data link.
4. Power the fixture on and carry out an RDM discovery / scan in your RDM-compatible controller.
5. You can then configure or retrieve data from the fixtures on the data link.

N.B. The maximum number of products that can be connected when using with RDM is 32 MiniLEDko Spot.

8.2 RDM Chart

PARAMETER	DESCRIPTION
DMX ADDRESS	Set DMX Address: (1-512)
CURVE	Set Dimming Curve: Linear, Logarithmic, Exponential, Halogen, Standard
FREQUENCY	Set Pwm Frequency: 600Hz-1500Hz-2000Hz-5000Hz-20.000Hz
LOCK PIN	Set Lock Pin
LOCK STATE	Set Screen Lock
FACTORY DEFAULT	Factory Reset
PERSONALITY	Set Personality: 5/1 Ch (Fixed White version) 5/2/1/Sunrise/Raw (VariWhite version)
SENSOR	Visualize Sensor
LED HOURS	Visualize Led Life Hours
DEVICE HOURS	Visualize Device Life Hours
SMOOTH FUNCTION	Fast (standard), Slow e Very Slow

8.3 RDM Error Chart

ERROR	DESCRIPTION	SOLUTION
MEMORY	Memory Reading Error	Perform A "Factory Reset"
HW MEMORY	Memory Hardware Error	Contact Coemar
DMX ADDR	DMX Addressing Error	The Personality Dimension Exceeds 512 Channels
NTC ERROR	Temperature Sensor Disconnected	Check Wiring NTC Led
SHORT NTC	Short-Circuited Temperature Sensor	Check Wiring NTC Led
OVER TEMP	Electronic Board Overtemperature	Ambient temperature too high, place the projector in an environment with temperature below 40°C

9. DMX chart - Fixed White version

9.1 DMX modes

DMX channels ↓	5 channels	1 channel
1	Master Dimmer	Master Dimmer
2	Spare Channel	
3	Dimmer Fine	
4	Strobe	
5	Special Function	

9.2 DMX Chart 5/1 channels

channel		function	type of control	effect	decimal		percentage	
1	1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2	-	spare channel	step	no effect	0	- 255	0%	- 100%
3	-	dimmer fine	proportional	fine dimmer control 16 bit	0	- 255	0%	- 100%
4	-	strobe	step	no effect	0	- 9	0%	- 4%
			proportional	variable speed strobing effect, from slow to fast	10	- 57	4%	- 22%
			step	stop strobe	58	- 59	23%	- 23%
			proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	60	- 108	24%	- 42%
			step	stop strobe	109	- 110	43%	- 43%
			proportional	sequenced pulse effect, fast closing, slow opening (variable speed pulsing, from slow to fast)	111	- 159	44%	- 62%
			step	stop strobe	160	- 161	63%	- 63%
			proportional	random strobe effect with variable speed from slow to fast	162	- 207	64%	- 81%
			step	stop strobe	208	- 209	82%	- 82%
			proportional	random strobe effect with variable speed from slow to fast	210	- 255	82%	- 100%
5	-	special functions	step	park	0	- 9	0%	- 4%
				600 Hz	10	- 22	4%	- 9%
				no effect	23	- 199	9%	- 78%
				LED control frequency tuning 1.500 Hz	200	- 205	78%	- 80%
				LED control frequency tuning 2.000 Hz	206	- 211	81%	- 83%
				LED control frequency tuning 5.000 Hz	212	- 217	83%	- 85%
				no effect	218	- 240	85%	- 94%
				LED control frequency tuning 20.000 Hz	241	- 255	95%	- 100%

10. DMX chart - VariWhite version

10.1 DMX modes

DMX channels ↓	5 channels	2 channels	1 channel	Sunrise mode	Raw mode
1	Master Dimmer	Master Dimmer	Master Dimmer	Master Dimmer	Warm White Led
2	Dimmer Fine	White Tone		Dimmer Fine	Warm White Led Fine
3	White Tone			Proportional CCT	Cold White Led
4	Strobe			Step CCT	Cold White Led Fine
5	Special Function			Special Function	

10.2 DMX Chart 5 channels

channel	function	type of control	effect	decimal		percentage	
1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2	dimmer fine	proportional	fine dimmer control 16 bit	0	- 255	0%	- 100%
3	white tone	step	2.700 K	0	- 6	0%	- 2%
		proportional	proportional value from 2.700 K to 3.200 K	7	- 33	3%	- 13%
		step	3.200 K	34	- 60	13%	- 24%
		proportional	proportional value from 3.200 K to 4.000 K	61	- 87	24%	- 34%
		step	4.000 K	88	- 114	35%	- 45%
		proportional	proportional value from 4.000 K to 5.000 K	115	- 141	45%	- 55%
		step	5.000 K	142	- 255	56%	- 100%
4	strobe effect	step	no effect	0	- 9	0%	- 4%
		proportional	variable speed strobing effect, from slow to fast	10	- 57	4%	- 22%
		step	stop strobe	58	- 59	23%	- 23%
		proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	60	- 108	24%	- 42%
		step	stop strobe	109	- 110	43%	- 43%
		proportional	sequenced pulse effect, fast closing, slow opening (variable speed pulsing, from slow to fast)	111	- 159	44%	- 62%
		step	stop strobe	160	- 161	63%	- 63%
		proportional	random strobe effect with variable speed from slow to fast	162	- 207	64%	- 81%
		step	stop strobe	208	- 209	82%	- 82%
		proportional	random strobe effect with variable speed from slow to fast	210	- 255	82%	- 100%
5	special functions	step	park	0	- 9	0%	- 4%
			600 Hz	10	- 22	4%	- 9%
			no effect	23	- 199	9%	- 78%
			LED control frequency tuning 1.500 Hz	200	- 205	78%	- 80%
			LED control frequency tuning 2.000 Hz	206	- 211	81%	- 83%
			LED control frequency tuning 5.000 Hz	212	- 217	83%	- 85%
			no effect	218	- 240	85%	- 94%
			LED control frequency tuning 20.000 Hz	241	- 255	95%	- 100%

10.3 DMX Chart 2 / 1 channels

channel		function	type of control	effect	decimal		percentage	
1	1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2	-	white tone	proportional	proportional value from 2.700 K to 5.000 K	0	- 255	0%	- 100%

10.4 DMX Chart Sunrise mode

channel		function	type of control	effect	decimal		percentage	
1		master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2		dimmer fine	proportional	fine dimmer control 16 bit	0	- 255	0%	- 100%
3	proportional cct	proportional	proportional	2.700 K	0		0%	
				proportional value from 2.700 K to 4000 K	1	- 86	0%	- 34%
				4.000 K	87		34%	
				proportional value from 4.000 to 5.000 K	88	- 152	35%	- 60%
				5.000K	255		100%	
4	step cct	step	step	no effect	0	- 9	0%	- 4%
				2.700 K	10	- 50	4%	- 20%
				3.200K	51	- 91	20%	- 36%
				4.000K	92	- 132	36%	- 52%
				5.000K	133	- 255	52%	- 100%
5	special functions	step	step	park	0	- 9	0%	- 4%
				600 Hz	10	- 22	4%	- 9%
				no effect	23	- 199	9%	- 78%
				LED control frequency tuning 1.500 Hz	200	- 205	78%	- 80%
				LED control frequency tuning 2.000 Hz	206	- 211	81%	- 83%
				LED control frequency tuning 5.000 Hz	212	- 217	83%	- 85%
				no effect	218	- 240	85%	- 94%
				LED control frequency tuning 20.000 Hz	241	- 255	95%	- 100%

Note 1: If channels 3 and 4 are used simultaneously, channel 4 prevails.

10.5 DMX Chart Raw mode

channel	function	type of control	effect	decimal			percentage		
1	warm white led	proportional	adjust luminous output intensity of warm white led from 0 to 100%	0	-	255	0%	-	100%
2	warm white led fine	proportional	warm white led fine control 16 bit	0	-	255	0%	-	100%
3	cold white led	proportional	adjust luminous output intensity of cold white led from 0 to 100%	0	-	255	0%	-	100%
4	cold white led fine	proportional	cold white led fine control 16 bit	0	-	255	0%	-	100%

11. Accessories and spare parts

MiniLEDko Spot is a very versatile fixture, optional accessories for its customization are available under request:

Accessory name	Code
Lens 16°	BC016A000
Lens 22°	BC016A001
Lens 27°	BC016A002
Front Barrel for Lens 16° and 22°	BC016A100
Front Barrel for Lens 27°	BC016A110
Metal key for mounting gobo	BC016A010
DMX end of line closure cap, indispensable for the last projector of the line (included)	RME34/G

All the components of **MiniLEDko Spot** 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.

12. Maintenance

12.1 Firmware update

The firmware of **MiniLEDko Spot** can be updated through the RDM protocol (ANSI E1.20). Contact Coemar assistance to receive the software and the device updater (AC10011A000).

12.2 Periodic cleaning

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.

12.3 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.

13. 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 near you.

Question	Possible solution
MiniLEDko Spot does not emit light	Projector not powered on: <ul style="list-style-type: none">• Make sure the power cord is plugged in or test the input voltage. Wrong DMX address: <ul style="list-style-type: none">• Check the DMX Address setting and the output signal of the controller.
MiniLEDko Spot is not responding to DMX signal	DMX signal may not reach MiniLEDko Spot: <ul style="list-style-type: none">• Inspect the cable connection, correct poor connections or inefficient repair or replace damaged cables.• Check DMX address of the unit.

Help from Coemar Technical Services

If you are having difficulties and your problem is not addressed by this document, contact Coemar Technical Services directly at one of this email address:

info@coemar.com / service@coemar.com

Or call the number **+39 0376 1514412**

When calling for help, take these steps first:

- Prepare a detailed description of the problem
- Go near the equipment for troubleshooting

User notes

This image shows a full page of primary-ruled paper. It features 20 horizontal rows. Each row is defined by two parallel dotted lines. A single dashed vertical line runs through the center of each row, creating three columns: a narrow left margin, a wide central writing area, and a narrow right margin. The pattern repeats consistently across the entire page.



Information on disposal of the equipment

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.



Coemar Lighting s.r.l.

Via Carpenedolo 90

46043 Castiglione delle Stiviere, Mantova, Italy

phone. +39 0376/1514412 - fax +39 0376/1514380

info@coemar.com

Coemar reserves the right to change specifications without prior notice