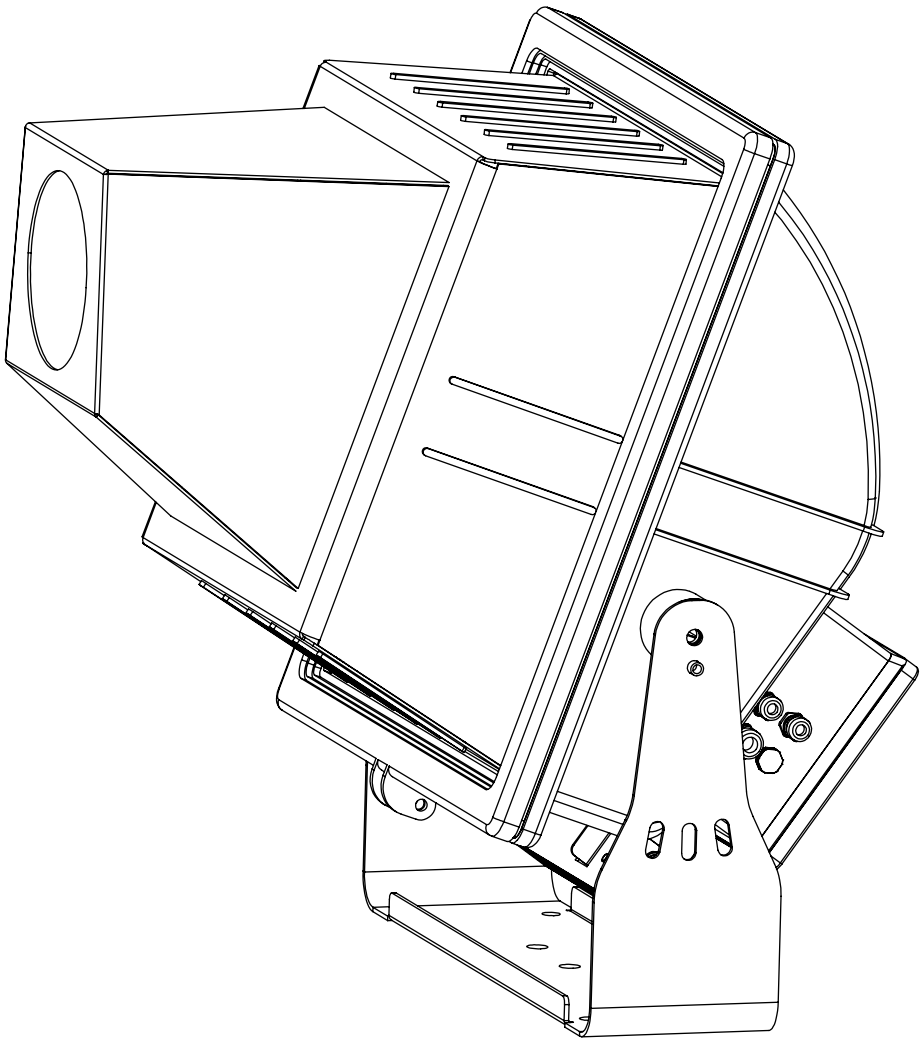
GOBOSTORM PLUS MK2

GR0660



Instruction manual

GRIVEN

world lighting challenge

INDEX

1.0 Introduction

1.1 Safety information

Warning!
This unit is suitable for professional use only, not for domestic use.

1.1.1 Protecting against electric shock
- Disconnect the unit from mains supply before servicing it or performing any other action.
- Always ground/earth the unit electrically.
- Before connecting the unit to power supplies, verify that operating voltage and frequency are compatible.
- Do not handle the unit with wet hands or in the presence of water.
- Check regularly that the power supply cable is not damaged or crushed.
- Apply to a qualified technician for any regular maintenance action not described in this manual.

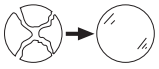
1.1.2 Installation
- Fix the unit with screws, hooks or any other support able to bear the weight of the unit itself.
- If the unit is fixed onto a suspended structure, this structure is supposed to bear at least ten times the weight of all devices to be fixed.
- The unit installation actions must be performed by a qualified staff.

1.1.3 Protection against burns and fire
- 

Suitable to be installed onto normally inflammable surfaces.
- If the projector is in a fixed position and the beams is directed towards a flammable surface, the unit should be kept at a minimum of 1 mt. If the beam is directed to people or thing at a distance lower than 2 mt, please turn the lamp immediately off.
- The unit is not to be installed in places where the ambient temperature exceeds 35° (95°F).
- The external temperature of the unit surface (front glass) can reach 80°C (176°F).
- The lamp is very hot during operations! Wait at least for 20 minutes before changing.

1.1.4 Protection against lamp explosion
- Please replace any lamp that may present any damage or deformation.
- During the lamp replacement always use adequate body and eye protection (see the lamp manufacturer instruction)

1.1.5 Weather protection
The unit is classified as device with an IP65 weather protection rate.

1.1.6 Protection against UV radiation
- Never operate the fixture with missing or damaged lenses and / or cover.
- 
Replace any damaged shields with original GRIVEN spare parts..
- *Do not stare directly into the light. Never look at an exposed lamp while it is lit.*

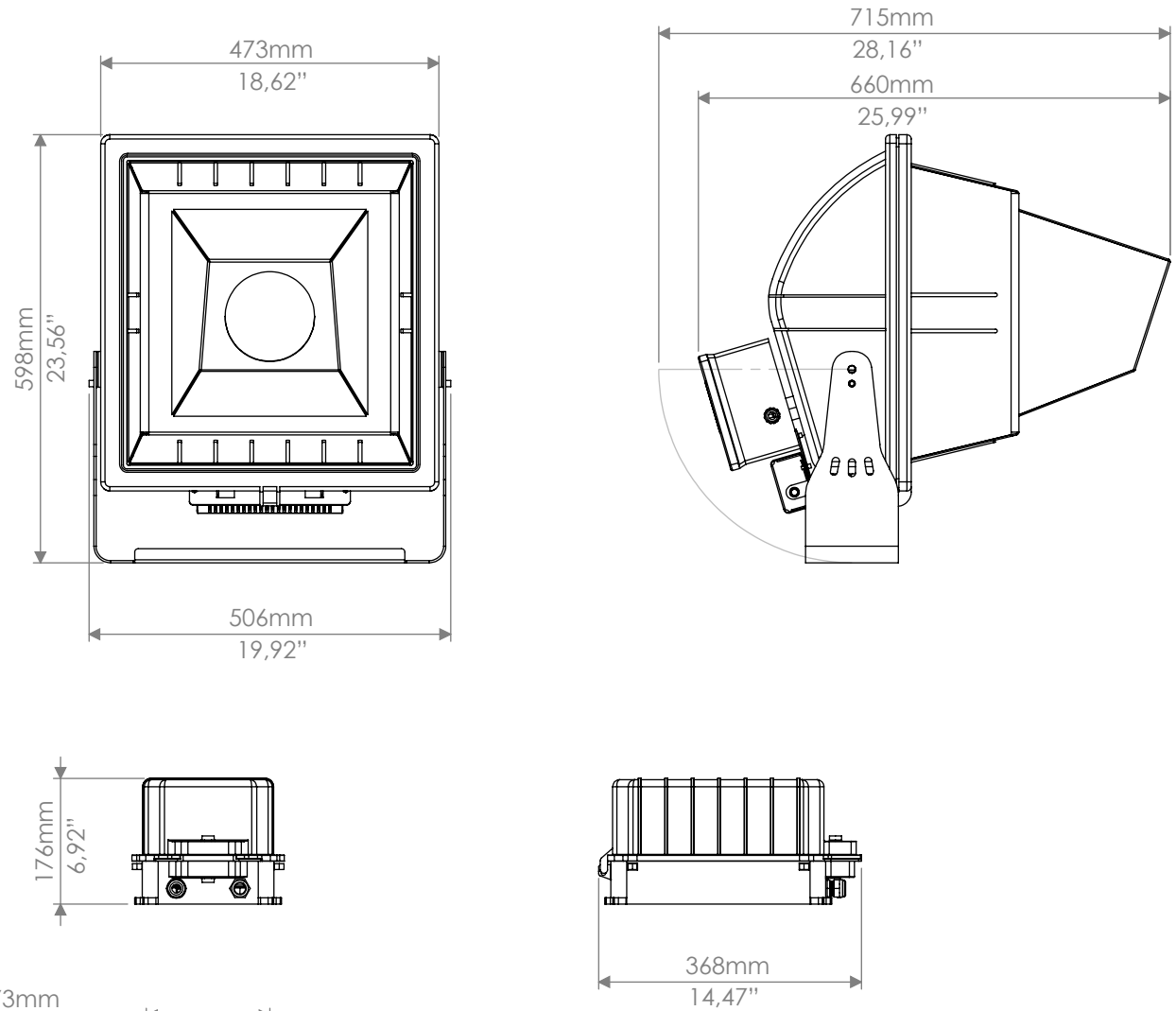
1.2 Warranty conditions
- Each product manufactured by GRIVEN srl of Italy is assembled and built in accordance to current CE conformity rules and regulations.
- Every single product and component has been tested before the final assembling and all products must pass the in-house quality control before they are shipped.
- GRIVEN srl of Italy guarantees the good quality and manufacture of the products and undertakes to repair or supply again, according to his opinion and free of charge, within the shortest time possible, any part that shows - during the guarantee period - defects of constructions, manufacture or material.
- The guarantee is valid for 12 (twelve) months starting from the delivery date of the products.
- GRIVEN srl of Italy does not respond for damages occurred to the units during transport and for irrational use and inaccuracy in regular maintenance of the products.
- The guarantee excludes all consumables.
- The customer will take care of the return of the faulty parts to GRIVEN srl of Italy, at his own charge and risk.

- The parts which have been repaired or replaced are sent by GRIVEN srl of Italy ex-factory.
- For any dispute, the Court of Mantova (Italy) will be competent and in conformity with relevant jurisdiction the Italian Law is enforced for any controversy.

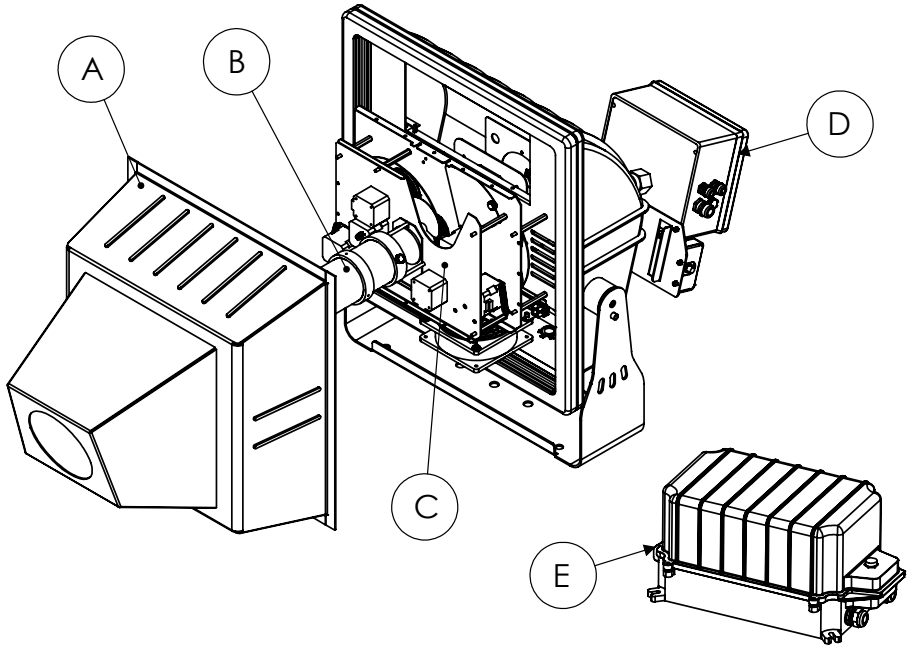
1.3 Compliance

- Product in compliance with EN60598-1 EN60598-2-17.
- Product in compliance with 2002/95/CE (RoHS).

2.0 Size



3.0 Components of the unit



Components description:
A. Front cover
B. Optic group
C. Color and gobos group
D. Electronic box
E. Ballast

4.0 Packaging and transport

4.1 Packaging

Check carefully the content of the box and, in case of damage, contact your forwarder immediately. The following items are included in the box of this unit:

n° 1 **Gobostorm Plus MK2** unit
n° 1 owner's manual
n° 1 Ballast
n° 2 Connection kit
n° 4 Gobos
n° 4 Spacers 502868 for metal gobos
n° 9 Fixing springs

Warning!

- **Griven S.r.l. liability will cease upon consignment of goods to the forwarder: claims for damage due to transport must be addressed directly to the forwarder.**
- **Griven S.r.l. will accept claims for broken or missing goods only within seven days of receipt of the goods.**
- **Returns of equipment will not be accepted without prior authorization granted by Griven S.r.l. and if not duly accompanied by relevant shipping documents.**

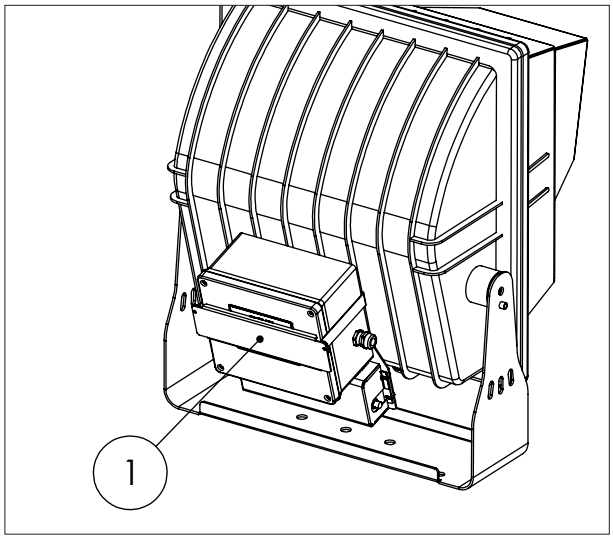
4.2 Transport

The carton box has not been designed to be used more than once, therefore, it is recommended to use one of our flight cases to transport the unit.

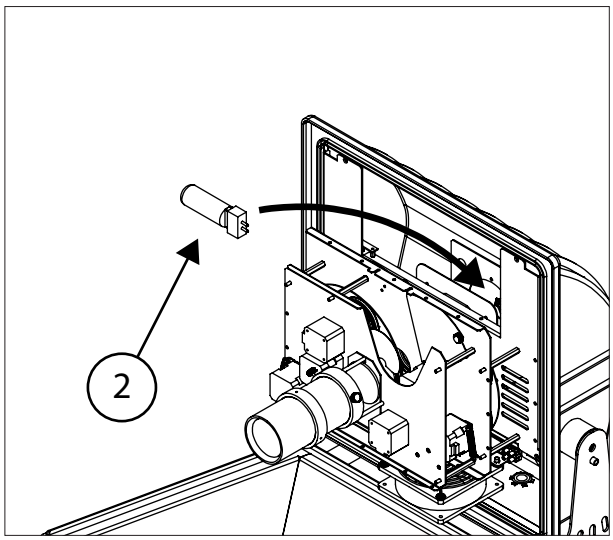
5.0 Quick turn on

In this chapter brief essential instructions for an immediate use of the unit are listed. These instructions are necessary to connect and power up the unit, but they will not describe in complete details the functions of the unit itself. All other chapters in this manual are therefore supposed to be read, in order to learn all pieces of necessary information relevant to the unit.

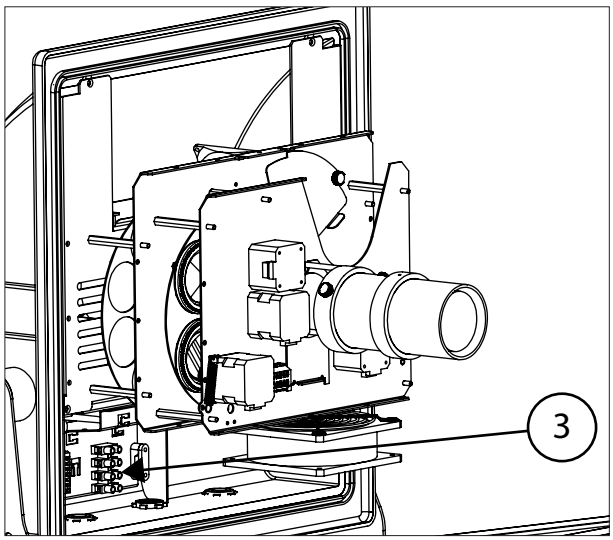
A. Open the box and check the content.
B. Install the unit.



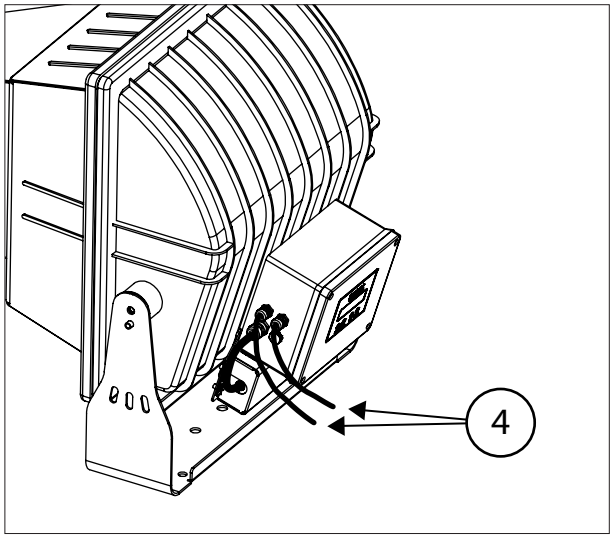
C. Remove the screen protection **"1"**.



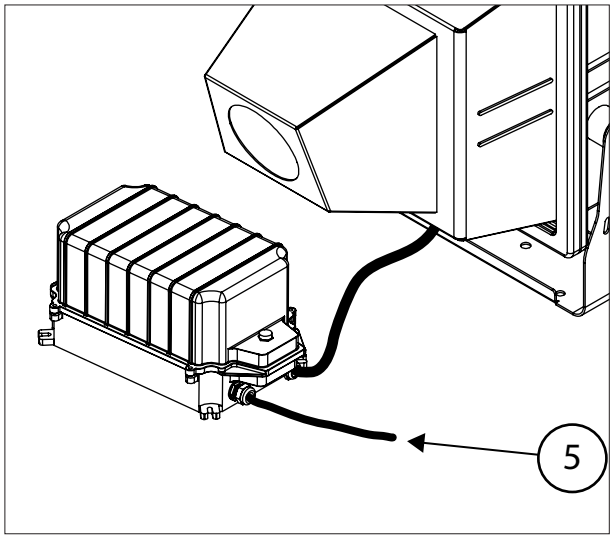
D. Install the lamp **"2"**.



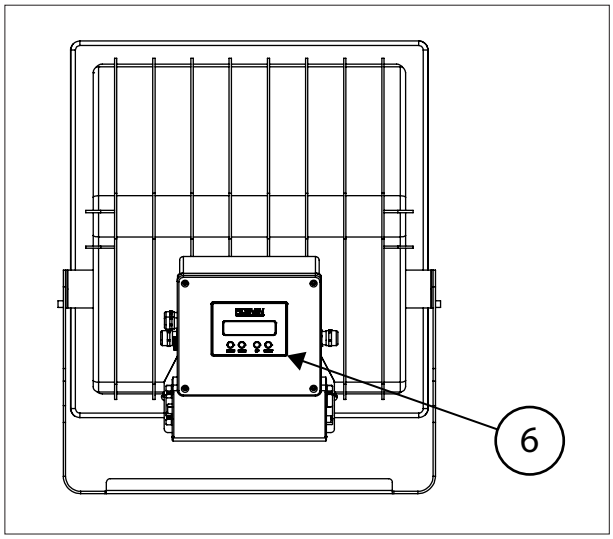
E. Connect the ballast by using the terminal **"3"**.



F. Connect the DMX signal by using the cables **"4"**.



G. Power up the unit by using the cable **"5"**.

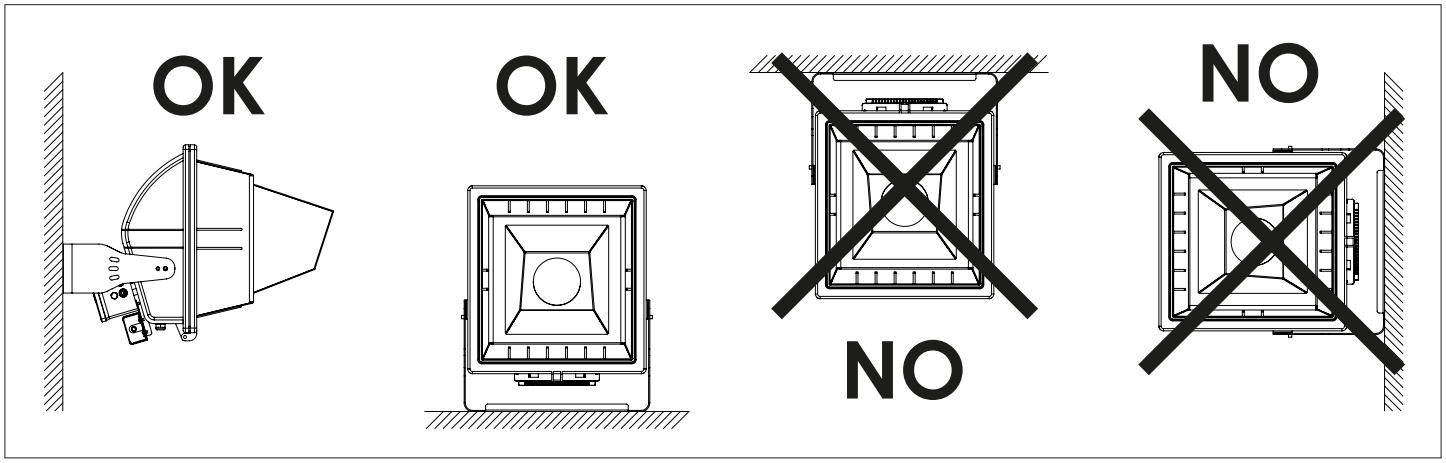


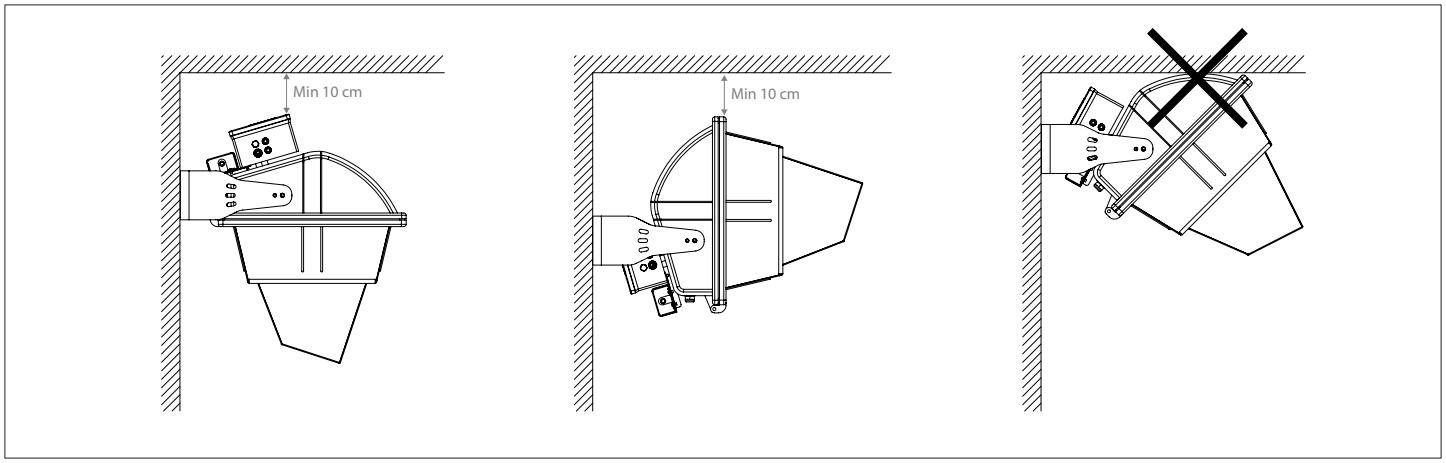
H. Adjust the DMX address and the operating mode by using the control panel **"5"** in the rear of the unit.

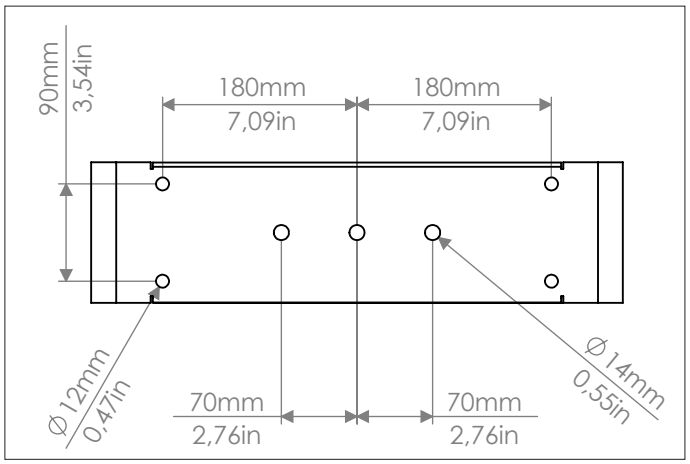
6.0 Installation

6.1 Fixing

The unit can be used both rested on floor and fixed onto a structure.
Possible mounting positions are shown in the following picture.

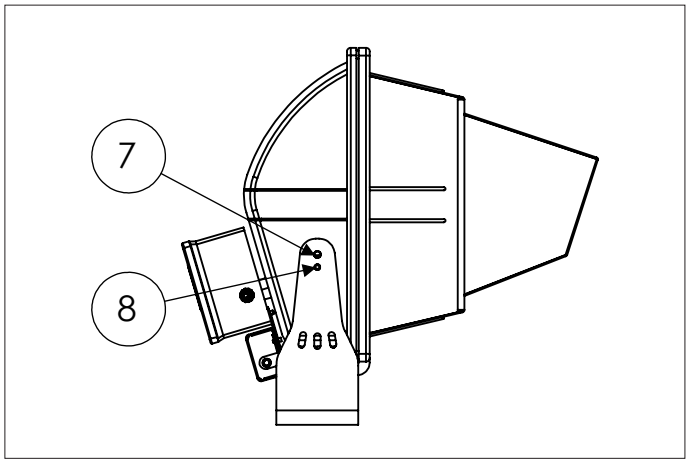




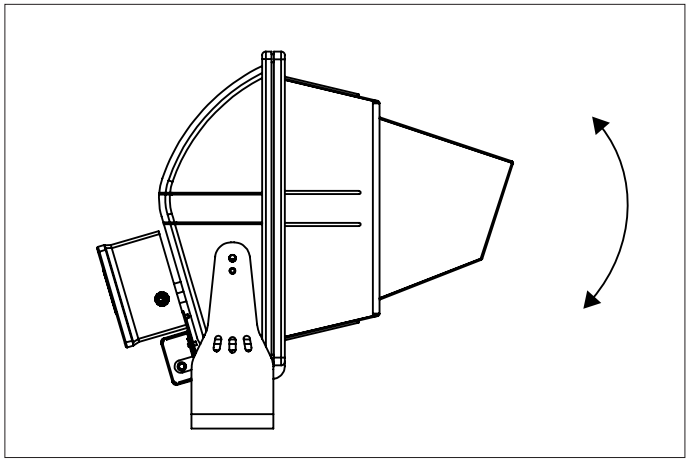


Use the holes Ø12.5 and Ø14 in the bracket to fix the unit.

6.2 Adjusting light beam direction



A. Untighten the screws **"7"** and the grain **"8"**.



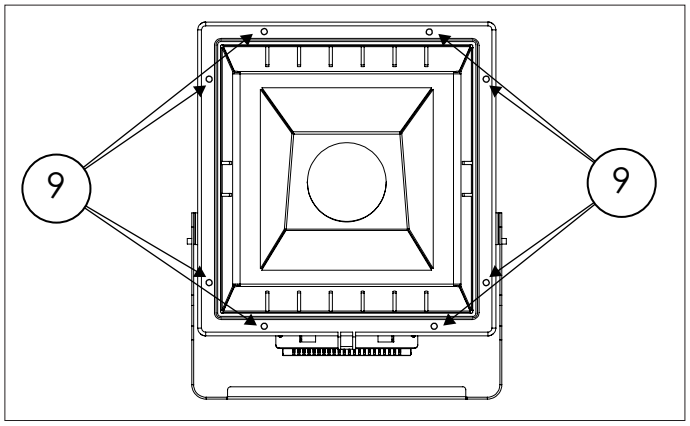
B. Rotate the body of the unit towards desired direction and tighten the screws **"7"** and the grain **"8"**.

6.3 Connection to mains power

The unit can operate with voltage from 200 to 220Vac or 230 to 240Vac and with frequency of 50 and 60Hz.

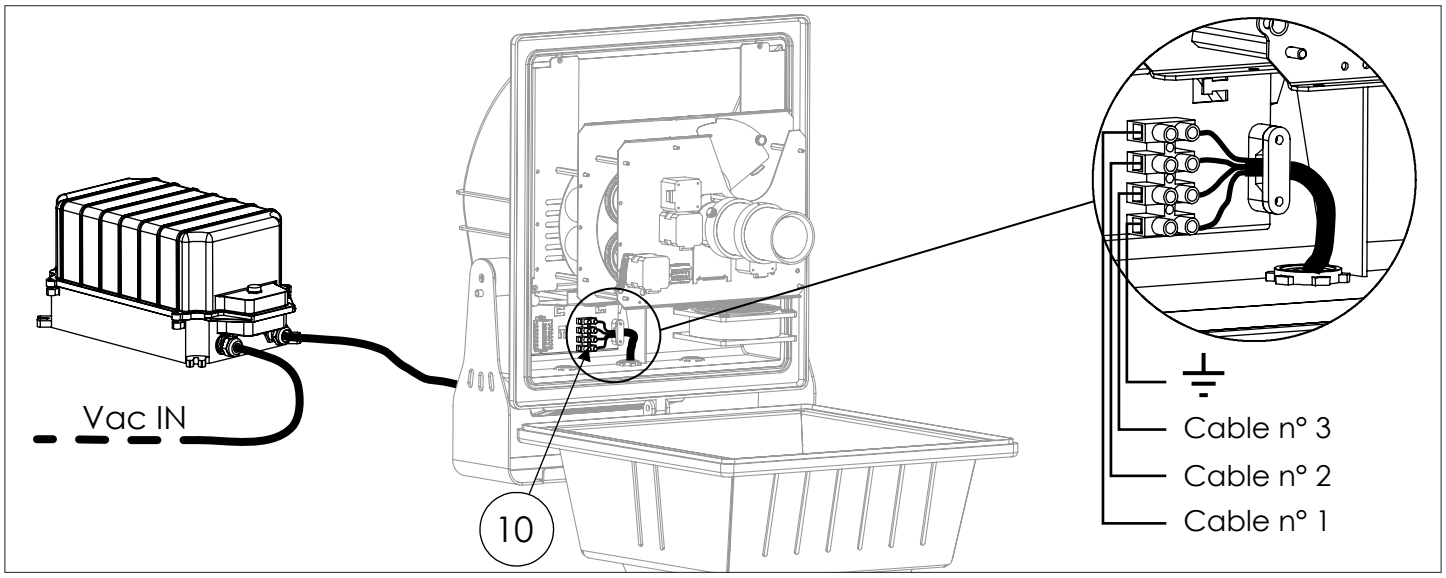
Warning!

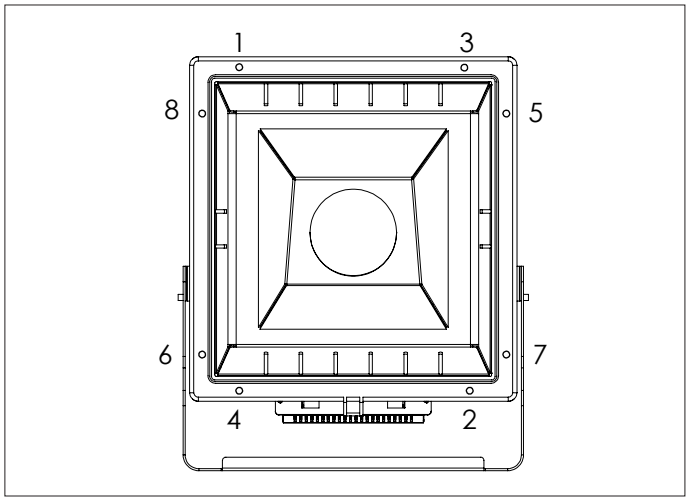
- **Before connecting the unit, verify that power supplies features are compatible with the unit features.**
- **The unit must never be installed if not grounded electrically.**
- **It is suggested to use a magnetothermic switch along the power supply line, as prescribed by in force rules.**
- **The unit must not be powered up through a dimmer power device.**
- **Wiring and connection actions are to be performed by a qualified staff.**



A. Untighten the screws **"9"** ed open the projector.

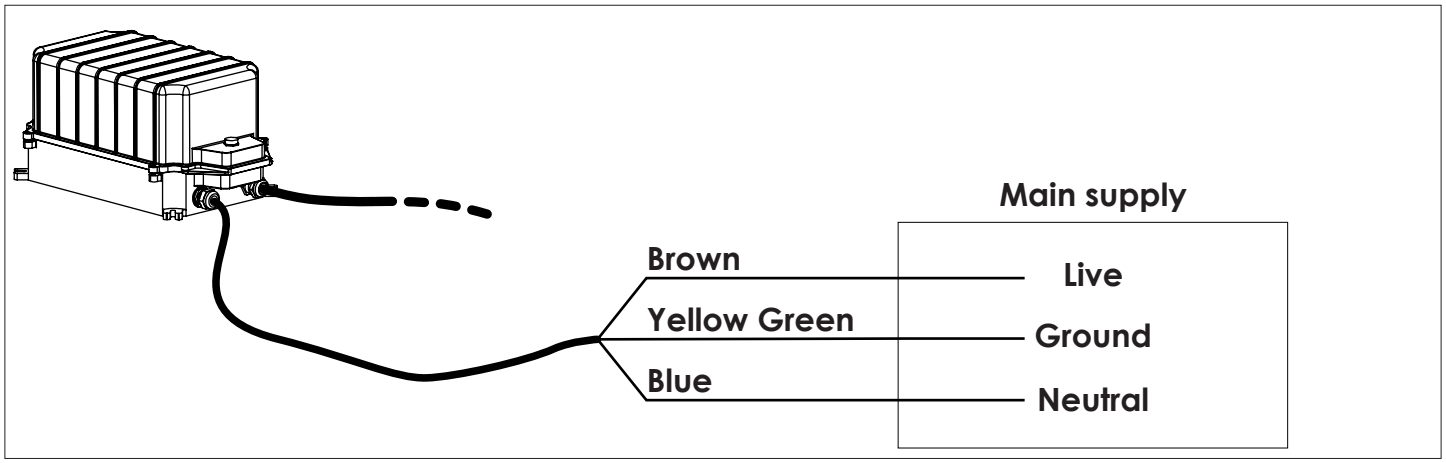
Connect the ballast by using the terminal **“10”.**





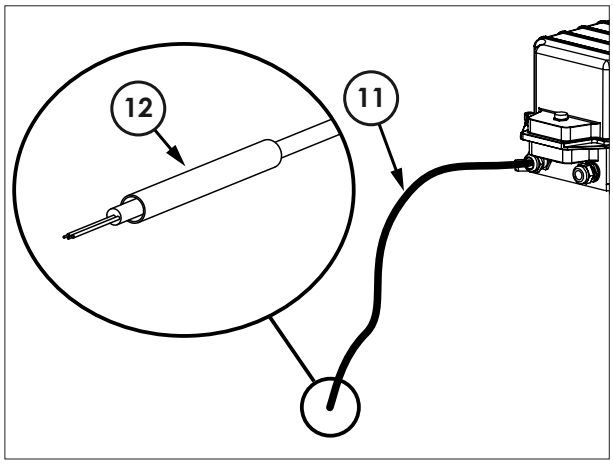
Close the projector following the numerical order shown in the picture.

Power up the ballast.

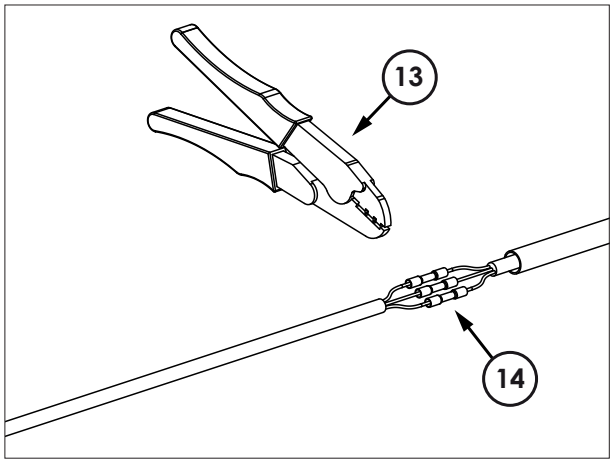


Gobostorm Plus MK2 is fitted with butt connectors and heat shrink tube which allow to perform **IP67** connections. To make the connection follow these instructions.

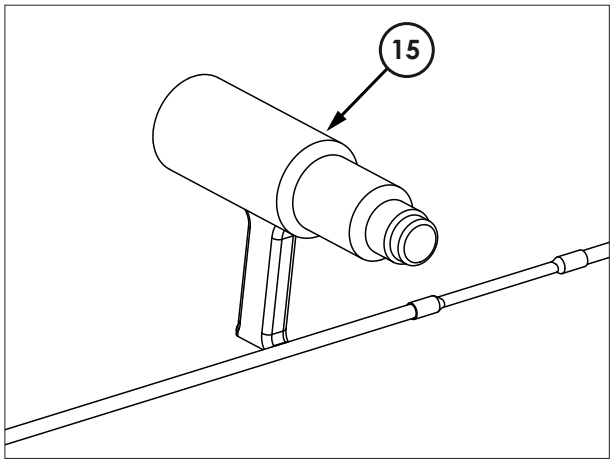
A. Open the bag with label "POWER SUPPLY".
You will find inside a piece of heat shrink tube and 4 butt connectors.



B. Insert the tube **"12"** onto the power supply cable **"11"** on the rear box of the unit.



C. Make the connection to the network by using the butt connectors **"14"**, pressing them with a proper tool **"13"**.



D. Warm up the tube by using a heater for heat shrink tubes **"15"** till the complete shrinkage.
The connection so obtained features an **IP67** protection rate.

6.4 Connection to DMX signal

The DMX signal is to be connected by using a shielded cable designed for devices RS-485.

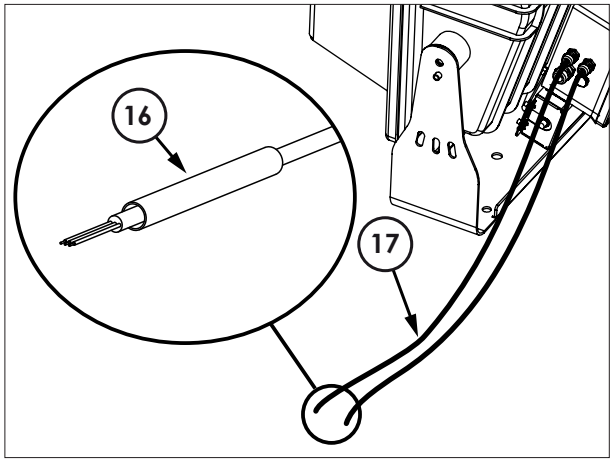
The signal cable must be connected according to the following table:
GND = Hose
DATA - = Black
DATA + = Red

Warning!

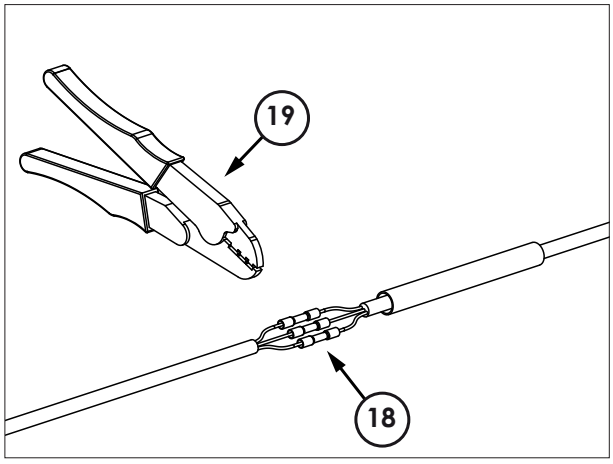
All data wires must be isolated one from another and from the shield.
The GND of the DMX signal is not to be connected to the electric ground of the unit.
Insert a terminal plug with a 120 Ω resistor connected to DATA- and DATA+ in the last unit.

Gobostorm Plus MK2 is fitted with butt connectors and heat shrink tube which allow to perform **IP67** connections. To make the connection follow these instructions.

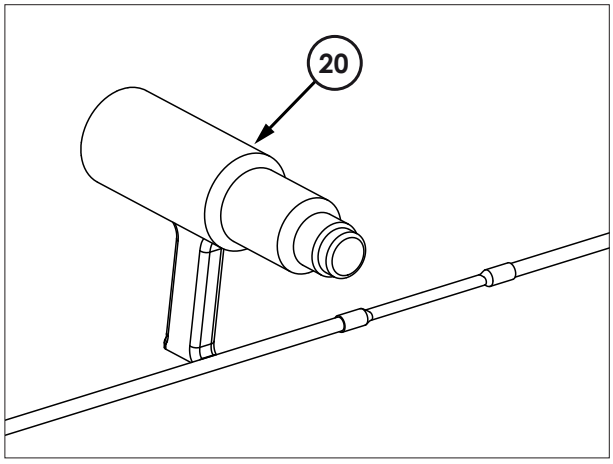
A. Open the bag with label "DMX".
You will find inside two pieces of heat shrink tube and 7 butt connectors.



B. Insert the tube **"16"** onto the dmx cable **"17"** on the side of the rear box of the unit.



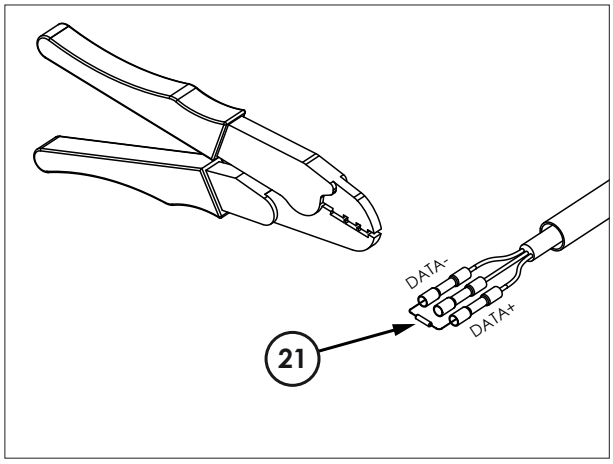
C. Make the connection to the network by using the butt connectors **"18"**, pressing them with a proper tool **"19"**.



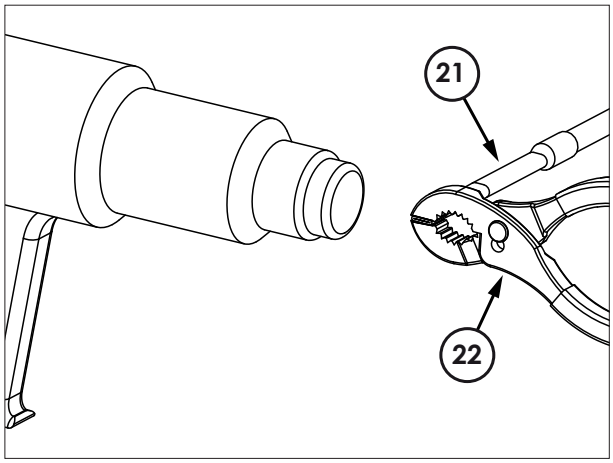
D. Warm up the tube by using a heater for heat shrink tubes **"20"** till the complete shrinkage.
The connection so obtained features an **IP67** protection rate.

If the unit which you are connecting is the last one of the DMX line, insert a 120 Ω terminal resistor connected between DATA- and DATA+, as shown and following.

Execute stages **"A"** and **"B"**, as previously described.



C. Connect the 120 Ω resistor **"21"** between DATA- and DATA+ and press the butt connectors by a proper tool.



D. Heat the tube **"21"** by using a heater for heat shrink tubes till the complete shrinkage and then press the final end of the tube with a pincer **"22"** in order to seal the connection.

7.0 Lamp installation and replacement

7.1 Lamp specifications

Gobostorm Plus MK2 is designed to be used exclusively with Philips MSD 575 or MSR 575 lamp.

Attention!
Installing any other lamp may create a safety hazard or damage the fixture!

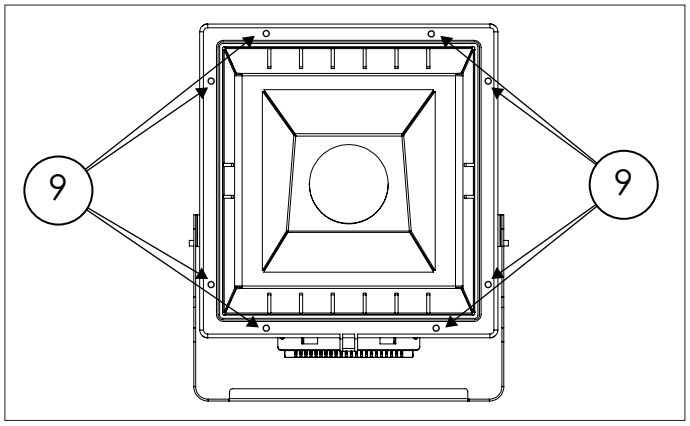
The lamps are part of the metal halide family of discharge lamps and must be handled with great care. The lamp operates at high pressure, and the slight risk of explosion of the lamp exists if operated over its recommended life. We recommend, therefore, that the lamp is replaced within the manufacturer's specified lamp life.
Every time the lamp is replaced, please reset the lamplife counter, as described in paragraph 9.5, in order to determine when to perform the next replacement.
The specification of the lamp, available via the Griven network of dealers and distributors, are shown in the table below.

Lamp	**PHILIPS MSD 575**
Griven code	LP0997
Rated lamp wattage	575W
Colour temperature	5700K ÷ 6000K
Luminous flux	46000 lm
Average service life	2000 h
CRI	75

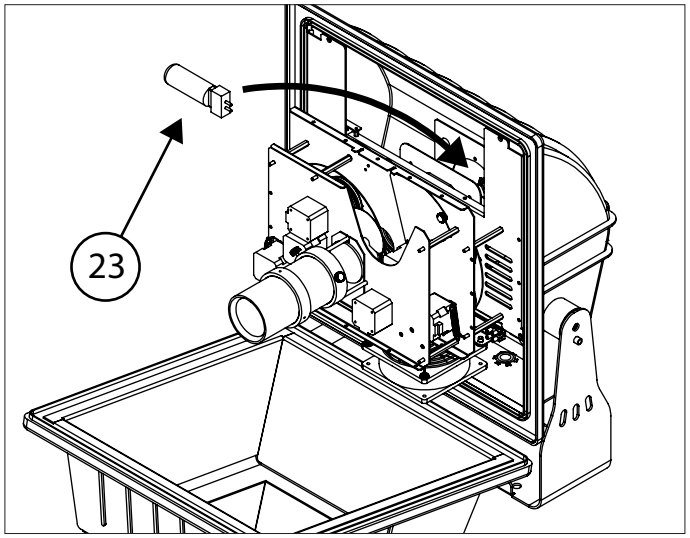
Lamp	**PHILIPS MSR 575**
Griven code	LP0550
Rated lamp wattage	575W
Colour temperature	6990K ÷ 7200K
Luminous flux	49000 lm
Average service life	1000 h
CRI	70

7.2 Lamp installation

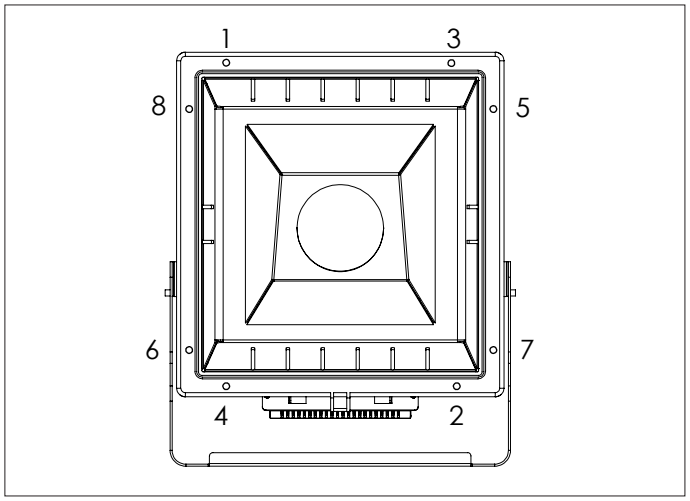
Attention!
Disconnect the unit from mains supply before servicing it or performing any other action.
The lamp is very hot during operations! Wait at least for 20 minutes before changing.



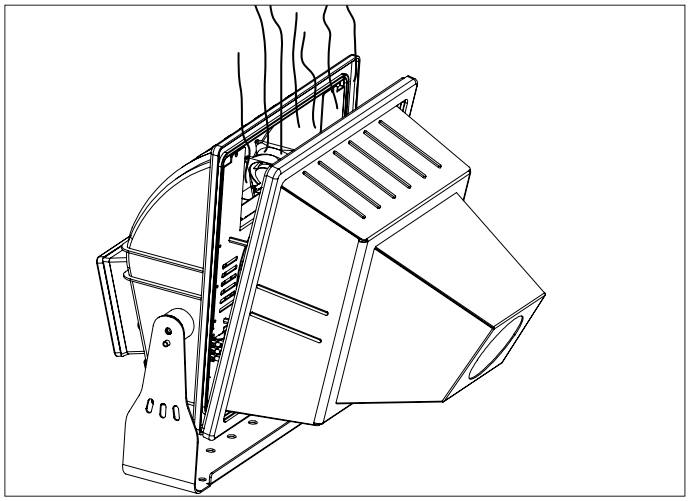
A. Untighten the screws **"9"** ed open the projector.



B. Place the lamp **"23"** transversally.



Close the projector following the numerical order shown in the picture.



Attention!

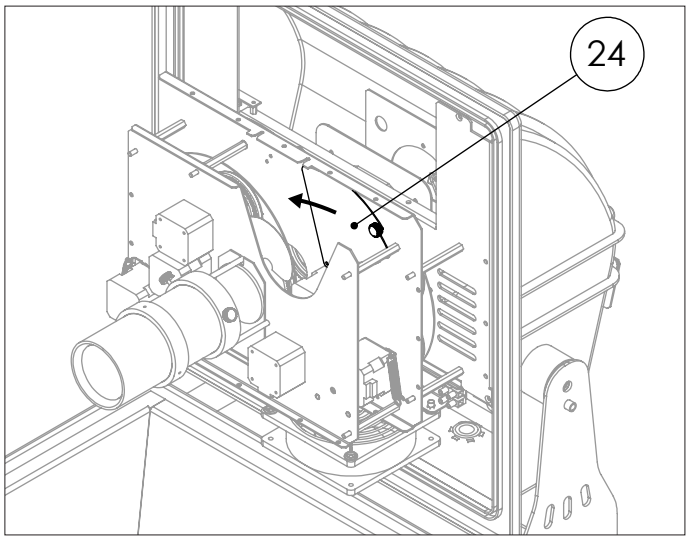
Operate the units with the front panel partially open for 30-40 minutes before closing them for permanent use.
This precaution will avoid the forming of condensation in the projector.

8.0 Replacing gobos and focus

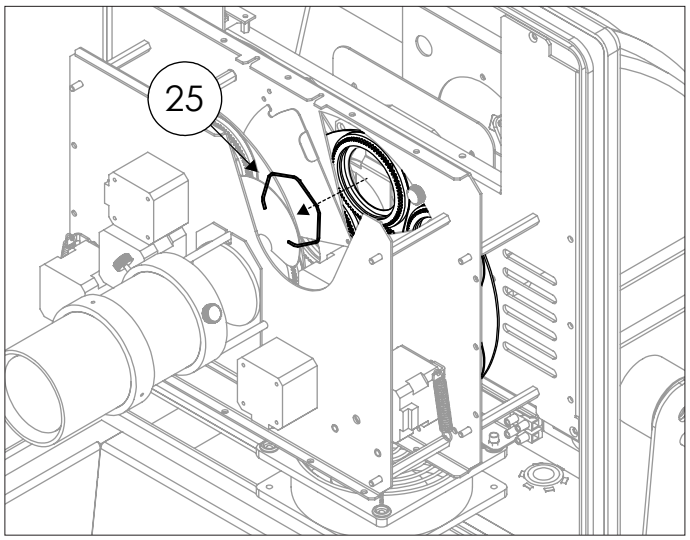
8.1 Replacing gobos

Gobostorm Plus MK2 features a gobos wheel hosting up to 5 gobos (D Size: Ext 53,3 – Int 38).

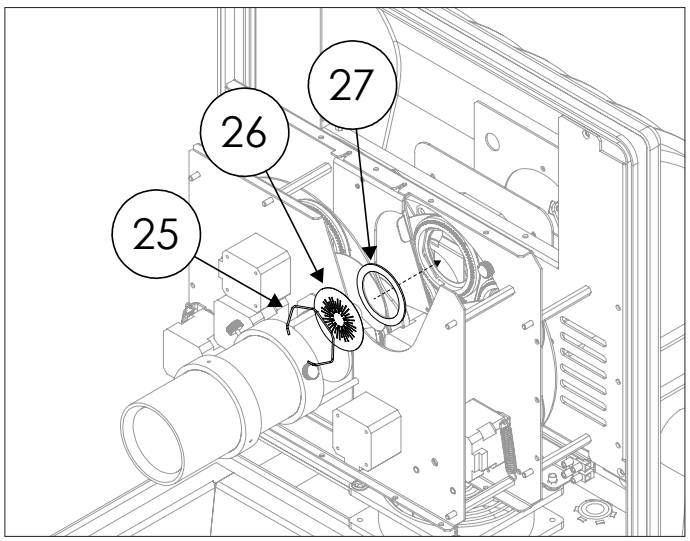
A. Untighten the screws **"9"** ed open the projector.



B. Slide the metal plate **"24"** as shown by the arrow.



C. Remove the fixing ring **"25"** and proceed with the replacement of the gobo.



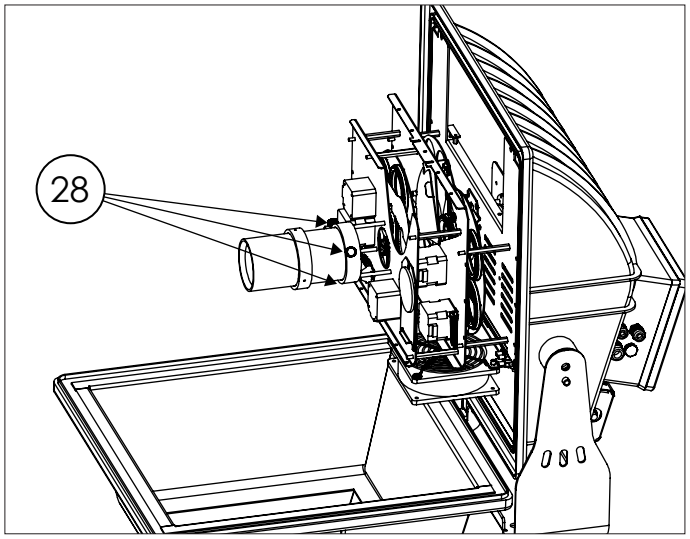
D. WARNING! The spacer 502868 **"27"** (provided along with the fixture) must be placed between the **metal** gobos and the gear, as shown in the picture

"25" Fixing ring
"26" METAL gobo
"27" Spacer 502868

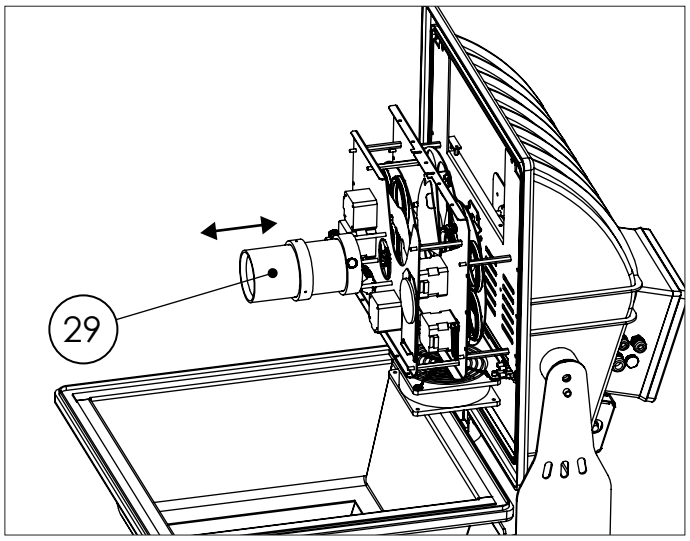
E. Re-insert the fixing ring and put back the metal plate **"24"** in its original position.

8.2 Focus

The standard beam angle is 9°. By adjusting the objective it is possible to modify the focusing.



A. Loosen the knobs **"28".**

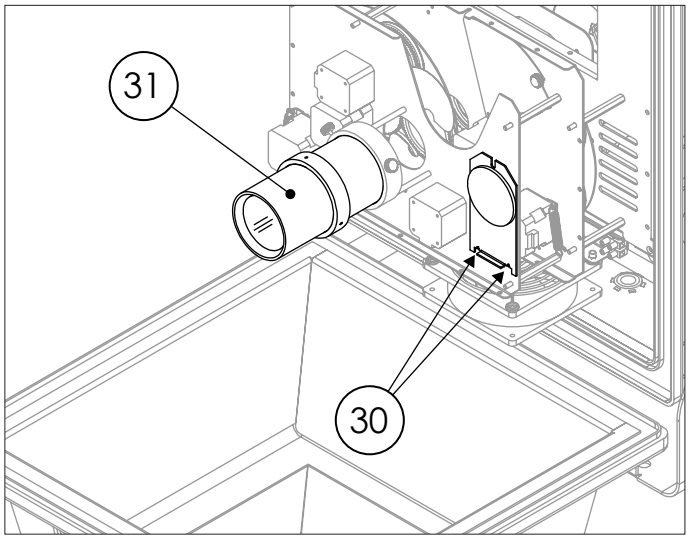


B. Act on the objective **"29"** to reach the desired focus .

C. Tighten the Knobs **"28"**.

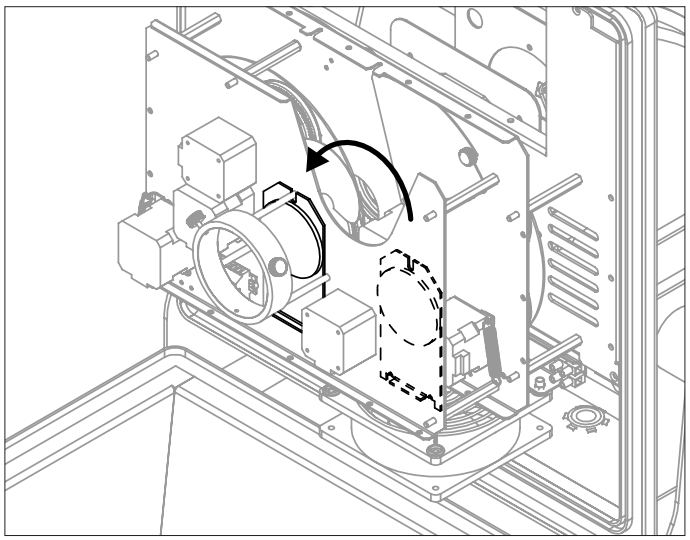
8.3 Mounting the optional 16° Angle lens

By installing the optional lens (provided along with the fixture), the projector will achieve a 16° beam angle.

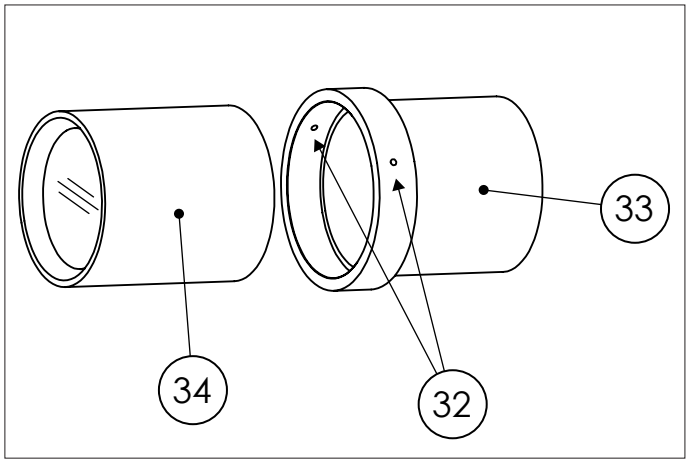


A. Undo the screws **"30".**

B. Remove the objective **"31".**

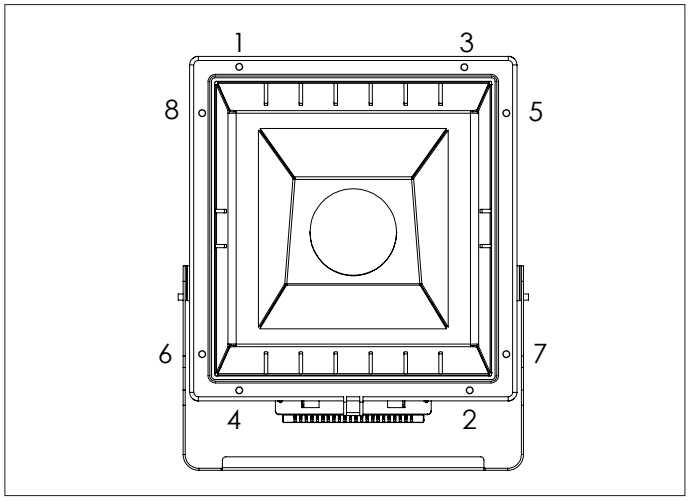


C. Place the lens as shown in the picture and secure it by using the screws previously removed.



D. Loosen the screws **"32"** and remove the spacer **"33".**

E. Install the objective **"34"** in its seat and perform the focusing.



Close the projector following the numerical order shown in the picture.

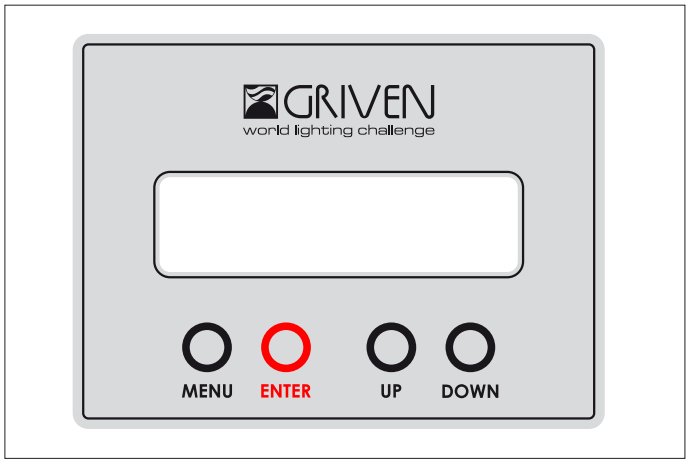
9.0 Use of the unit

9.1 Setting operating mode

By the control panel it is possible to select one of the following operating modes:

- **using DMX512 signal control mode**
  Each fixture is controlled from DMX512 signal control.
  (see chapter **10.0 DMX function**)
- **MASTER-SLAVE or AUTOMATIC mode**
  The projector operates independently, without DMX512 signal control.
  (see chapter **11.0 MASTER/SLAVE and AUTOMATIC function**)

9.2 Unit control panel



After 20 seconds of inactivity, the display will show a message about the projector status. 3 different status can be shown:

- DMX OFF
- DMX ON
- AUTO ON

9.2.1 Reading the display and using controls

MENU button:
By pushing the "MENU" button the display will show the main menu or you can exit from function and go back to main menu.

By pushing the "MENU" button when is show the DMX address, you will enter in the main menu.

- **ADDRESS SETTING**
- **AUTOMATIC**
- **LAMP SETTING**
- **UTILITY**
- **RELEASE SOFTWARE**

UP and **DOWN** buttons:
By pushing the "UP" and "DOWN" buttons, values of the function which is shown in the display can be changed.

ENTER button:
Press "ENTER" to select, or to memorize the function which is shown on the display.

9.3 DMX Address setting

When the projector is in "AUTOMATIC" mode the menu "ADDRESS SETTING" is not visible.

Press ENTER when the display shows **ADDRESS SETTING.**
By using the buttons UP and DOWN select the desired value (ON or OFF) and press ENTER to confirm.

9.4 AUTOMATIC mode

Press ENTER when the display shows **AUTOMATIC.**
This mode allows you to run or to create programs. A maximum number of 4 programs is available; each program can perform up to 50 scenes.

- **PROGRAM 1**
- **PROGRAM 2**
- **PROGRAM 3**
- **PROGRAM 4**
- **RUN PROGRAMS**

9.4.1 Programs execution

Press ENTER when the display shows **RUN PROGRAMS.**

By selecting "ON" the programs execution is enabled.
By selecting "OFF" the programs execution is disabled.

- **If the DMX signal is present (Input), it won't be possible to enable the Automatic Mode and the display will show "DMX LINE BUSY**

9.4.2 Programs setting

Select, by using the buttons UP and DOWN, the program (from #1 to #4) to be modified/run and then press ENTER.
You will access a sub-menu with the following options:

- **PROGRAMMING**
- **PLAY**

Programs execution "PLAY":
By selecting ON the programs execution is enabled
By selecting "OFF" the programs execution is disabled

Program settings "PROGRAMMING":
Select **PROGRAMMING** by using the buttons UP and DOWN and then pressing ENTER.
By selecting the scene (**SCENE 01 SCENE 02**…) through the buttons UP and DOWN and then pressing ENTER, you will access a sub-menu with the following options:

- **CREATE / EDIT**

If the scene does not exist the display will show CREATE, otherwise EDIT.
By pressing ENTER you will get the programming menu, while pressing MENU you will go back to the previous menu

The display will show the following message:

P1-SCENE 01
CREATE

Where P1 refers to the program and SCENE 01 to the scene to be created.

- **DELETE**

Select YES or NO through the buttons UP and DOWN to delete the scene
The display will show the following message

P1-SCENE 01
DELETE? NO
If the scene does not exist the display won't show the option DELETE.

By selecting the scene programming the following functions will be requested in sequence:

Select the DMX value corresponding to the required function. The program number, the scene number and the function you are programming will appear in the first line. In the second line the DMX value (to be selected through the UP and DOWN buttons) will be shown.

- Dimmer programming **DIMMER**
- Color wheel programming **COLOR**
- Gobo wheel programming **GOBO W**
- Gobo Rotation programming **GOBO ROT**.
- Gobo index programming **GOBO IDX**
- Effects wheel programming **EFFECT W**
- Effects rotation programming **EFFECT ROT**
- Effects index programming **EFFECT IDX**
- ZAP effect programming **ZAP**
- SHAKE effect programming **SHAKE**
- Scene time programming **TIME** (select 1 – 999 sec)

When the scene programming is completed, you will be asked to create or edit/delete the next scene.

9.5 Lamp setting

Press ENTER when the display shows **LAMP SETTING**.

- **MANUAL LAMP ON**
  Values: ON / OFF
  By selecting ON the lamp will always turn on, independently from the DMX value of the channel 1.
  By selecting OFF the lamp will be controlled by the DMX channeel 1
- **LAMP LIFE**
  By selecting this function the display will show the lamp life counter.
- **RESET LAMP LIFE**
  Values: YES/NO
  By selecting YES the counter will be reset to zero.

9.6 Utility

Press ENTER when the display shows **UTILITY**.

- **DEFAULT SETTING**
  Values: CANCEL / RESET
  It allows you to upload the default settings. RESET will restore the factory settings.
- **FIXTURE RESET**
  Values: CANCEL / RESET
  By selcting RESET the fixture will reset all motors. The lamp will remain in its current status
- **RESERVED 1**
  The access to this menu is allowed to GRIVEN engineers only.
- **FIXTURE TEST**
  Values: YES / NO
  A test of all the projector functions will be performed; the display will show the test currently underway.
- **FIXTURE LIFE**
  By selecting this function the projector life counter will be shown on the display.
- **RESERVED 2**
  The access to this menu is allowed to GRIVEN engineers only.

9.7 Software release

Press ENTER when the display shows the menu **RELEASE SOFTWARE.**

The software releases installed (Master, Slave) will be displayed in sequence.

10.0 DMX function mode

10.1 DMX channels

Each unit use **11** DMX channels.
In case of more units, the first unit will be set with address 001, the second unit with address 0012, the third unit with address 023, etc.

10.2 DMX functions

Channel	Function	Value	Description
1	Lamp ON/OFF	0-63	Lamp off (OFF) the lamp will switch off after 10 seconds
		64-127	Motors reset (the reset will start after 10 seconds) (The lamp remains in its current status)
		128-255	Lamp on (ON)
2	Blackout Dimmer Strobo	0-5	Blackout closed (if it remains closed for more than 30 second, any motor will stop until the next modification of the DMX value of the motors channel).
		6-127	0-100% proportional control of the black-out
		128-159	Open
		160-239	0-100% proportional control of strobe effect
		240-255	Open
3	Color wheel	0-10	White
		11-20	Yellow
		21-30	Orange
		31-40	Red
		41-50	Violet
		51-60	Magenta
		61-70	Green
		71-80	Cyan
		81-90	Blue
		91-100	White
		101-160	Proportional clockwise rotation (excluding channel 10 for colors repositioning)
		161-170	White
		171-230	Proportional anticlockwise rotation (excluding channel 10 for colors repositioning)
		231-255	White
4	Gobos selection	0-24	Gobo 1
		25-48	Gobo 2
		49-72	Gobo 3
		73-96	Gobo 4
		97-120	Gobo 5
		121-180	Proportional clockwise rotation of the wheel (excluding channel 10 for Gobo repositioning)
		181-190	Gobo 1
		191-250	Proportional anticlockwise rotation of the wheel (excluding channel 10 for Gobo repositioning)
		251-255	Gobo 1

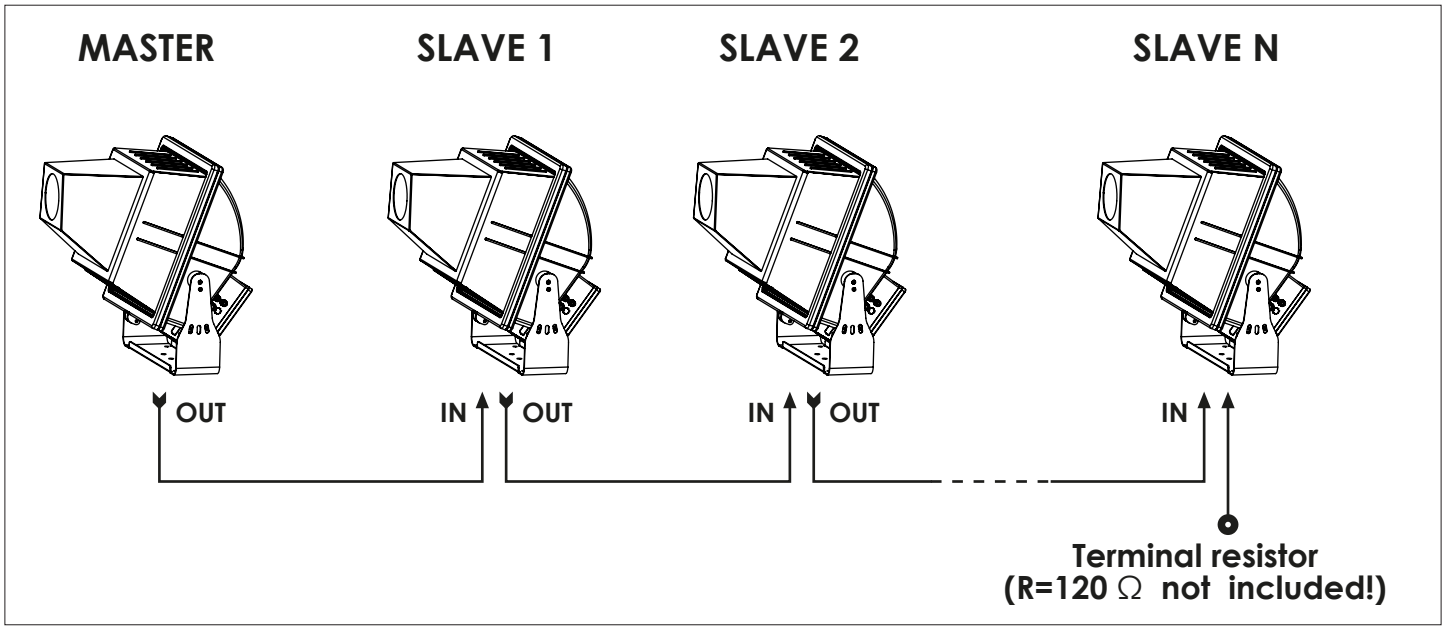
Canale	Funzione	Valore	Descrizione
5	Gobos rotation	0-15	No effect
		16-130	Proportional clockwise control of the rotation
		131-140	No effect
		141-255	Proportional anticlockwise control of the rotation
6	Gobo indexing	0-7	No effect
		8-248	360° Gobo indexing (excluding channel 5 for gobos rotation)
		249-255	No effect
7	Effects selection	0-24	Effect 1
		25-48	Effect 2
		49-72	Effect 3
		73-96	Effect 4
		97-120	Effect 5
		121-180	Proportional clockwise rotation of the wheel (excluding channel 10 for effects repositioning)
		181-190	Effect 1
		191-250	Proportional anticlockwise rotation of the wheel (excluding channel 10 for effects repositioning)
		251-255	Effect 1
8	Effects rotation	0-15	No effect
		16-130	Proportional clockwise control of the rotation
		131-140	No effect
		141-255	Proportional anticlockwise control of the rotation
9	Effects indexing	0-7	Nessun effetto
		8-248	360° effects indexing
		249-255	No effect
10	Zap effect	0-10	No effect
		11-80	Proportional ZAP effect with opening and closing at the same speed
		81-90	No effect
		91-160	Proportional ZAP effect with slow closing and quick opening
		161-170	No effect
		171-240	Proportional ZAP effect with quick closing and slow opening
		241-255	No effect
11	Shake effect	0-10	No effect
		11-80	Proportional shake effect on Gobos
		81-90	No effect
		91-160	Proportional shake effect on effects
		161-170	No effect
		171-240	Shake effect on Gobos and effects
		241-255	No effect

10.3 DMX signal interruption
If the DMX signal is absent the shutter will close and the motors will stop in 5 minutes from the last signal reception.

10.4 Lamp management by DMX signal
In the presence of DMX, the lamp is controlled by the 1st channel dmx.
To turn off the lamp via DMX you need to stay at least 4 seconds in the 0-63 area of the DMX channel 1.
To turn on the lamp, allow at least 20 s after switching off.

11.0 Master-Slave and Automatic function

Gobostorm Plus MK2 can operate without DMX signal (in AUTOMATIC mode) and can be set so that a single MASTER unit will command a series of SLAVE units. This function is particularly useful when more units are desired to execute the same programme in synchrony.
The following picture shows an example of a Master-Slave layout.



11.1 AUTOMATIC configuration
See paragraph 9.4 AUTOMATIC configuration.

11.2 MASTER configuration
To set up the unit as MASTER the same instructions for the set up as AUTOMATIC must be followed (see paragraph 9.4 AUTOMATIC configuration).

11.3 SLAVE configuration
To set up the unit as SLAVE set the DMX address 001. See paragraph 9.3 DMX setting

12.0 RDM function

When operating in DMX mode, the projector can accept the following RDM commands:

- discovery
  Upon request of the RDM controller, the projector adverts its own presence (the RDM controller will display the projector between a list).
- DMX address reading and setting.
- Channels number reading
- On / Off identification
  This command is used to identify the projector you want to get access to (the identification happens by switching on strobe effect).
- Manufacturer
  The name of the manufacturer (Griven) is displayed.
- Model description
  The projector model (Gobostorm Plus MK2) is displayed.
- Software version description
  The version of the master firmware in use on the projector (Gobostorm Plus MK2 v.x.xx) is displayed.
- Display hours of lamp life
  This displays the value of the hours of lamp life.
- Display projector working life hours
  This displays the value of the hours of the life of the projector.
- Alarm display
  Displayed alarm active on the projector.

13.0 Maintenance

Attention!
Always remove mains power prior to opening up the fixture.

To ensure maximum functionality and light output it is recommended to follow these instructions:

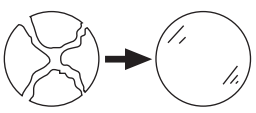
13.1 Cleaning the unit

The unit must be cleaned regularly. Cleaning regularity will depend especially on the environment where the unit will operate: deposits of dust, smokes or other wastes will reduce the light output performances.

- Clean regularly the glass and the mirror of the unit.
- Be careful when cleaning the components. Operate in a clean, properly illuminated environment.
- Do not use solvents which could damage painted surfaces.
- Remove left particles by a cotton towel dampened with a glass-cleaning liquid or distilled water.
- Dry out by a clean, soft, non-scratching towel or by compressed air.

13.2 Regular checks

- Check electrical connections, especially the ground wiring and the power supply cable.
- Check that the unit is not damaged mechanically. Replace those components which have got deteriorated.
- Replace the lenses, the mirrors and the dichroic filters if they are visibly damaged.
- Replace any lamp that may present any damage or deformation.We recommend, therefore, that the lamp be replaced within the manufacturer's specified lamp life.



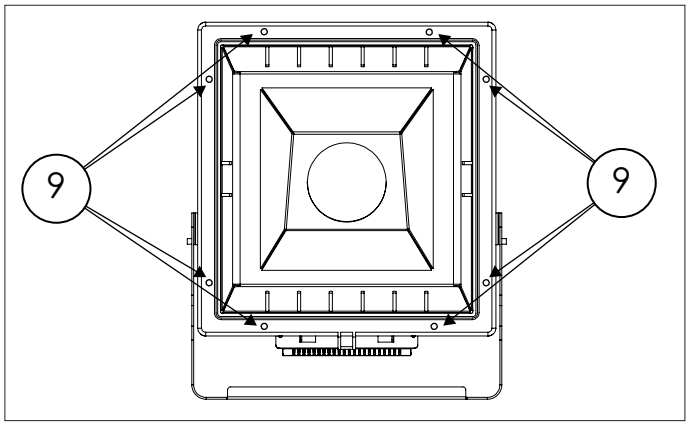
Replace any damaged shield.

13.3 Gears lubrication

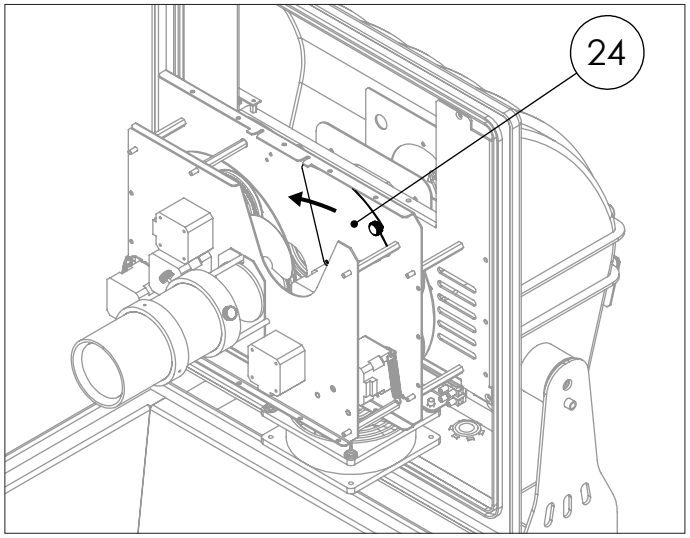
If the rotation of the Gobos or prisms is not smooth and linear, the gears must be lubricated.

Warning!

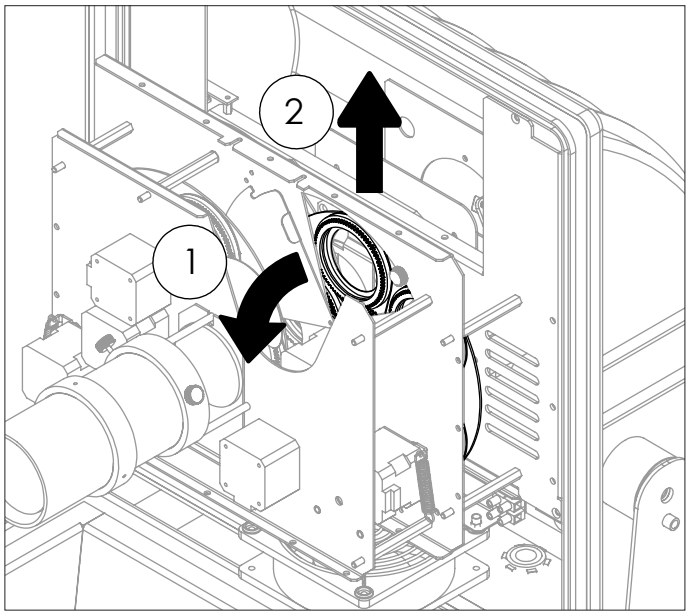
- **the gears must be exclusively lubricated with perfluoropolyether UNIFLOR™ 8470 also available through GRIVEN authorized dealers network.**
- **This procedure must be exclusively performed by authorized and qualified staff.**



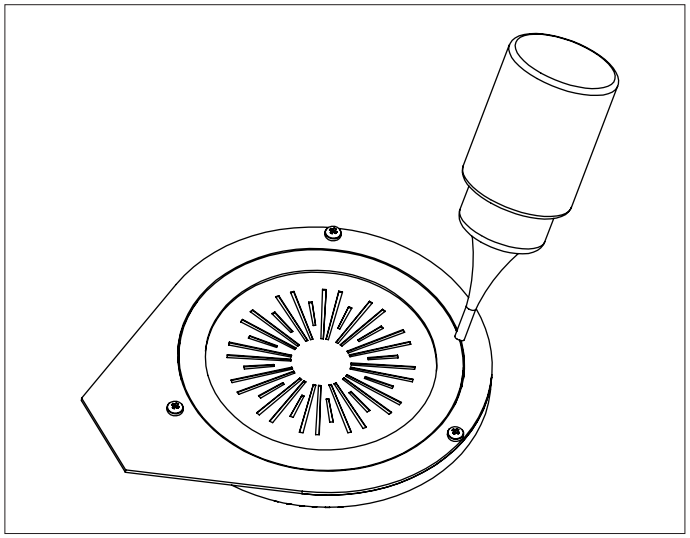
A. Untighten the screws **"9"** ed open the projector.



B. Slide the metal plate **"24"** as shown by the arrow.



C. Remove the Gobo holder slightly pulling it first outward and then upward.



B. Lubricate the fissure between the gobo holder and the gear as shown in the picture.

C. Re-insert the gobo holder in the wheel

Warning!
The gobo holder must perfectly adhere to the Gobo wheel.

14.0 Spare parts

All components of the unit are available as spare parts at **Griven** dealers.
Exploded views, wiring diagrams, electronic layouts and advertising brochures are available on request.
To make the job of assistance centres easier, specify serial number and model of the unit which spare parts are requested for.

15.0 Disposal

The European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE), requires that old lighting fixtures must not be disposed of the normal unsorted municipal waste stream. Old appliances must be collected separately in order to optimise the recovery and recycling of the materials they contain and reduce the impact on human health and the environment.

The crossed out "wheeled bin" symbol on the product reminds you of your obligation, that when you dispose of the appliance it the must be separately collected.
Consumer should contact their local authority or retailer for information concerning the correct disposal of their old appliance.

16.0 Message errors

The unit display can point out faulty functionings by visualizing error codes. Such a visualization is possible only when the display is at rest condition (visualization of the dmx address).

Message	Description	Projector's action
SLAVE COMM. ERROR	Communication with slave microprocessor interrupted.	Motors set to zero. Lamp turns off. the alarm will subside if communication restarts working properly.
GOBO WHEEL ERROR	Gobo wheel sensor. The reset failed	None
GOBO INDEXING ERROR	Gobo rotation sensor. The reset failed	None
EFFECT WHEEL ERROR	Effects wheel sensor. The reset failed	None
EFFECT INDEXING ERROR	Effects rotation sensor. The reset failed.	None
COLOR WHEEL ERROR	Color wheel sensor. The reset failed	None
IGNITION ERROR	The lamp, after several attempts, did not switch on	None
OVERHEATING	The internal temperature of the projector is too high.	The lamp will be switched off until the projector has completed its cooling process.
HEATING	The internal temperature of the projector is too low.	No program will be executed until the projector reaches its working temperature.

17.0 Troubleshooting

Inconvenience	Possibile Cause	Action
The fixture is completely dead	No power to fixture.	Check that power is switched on and cables are plugged in.
The unit does not respond properly to the DMX control.	Incorrect DMX cable connection.	Check connections and wires. Rectify inefficient connections. Repair or replace damaged wires.
	Unfinished data connection.	Insert a terminal plug in the output jack of the last unit of the connection.
	Incorrect address assignment to the units.	Check the addresses of the units and the protocol settings.
	One of the unit is faulty and it is affecting the data transmission along the connection.	Short-circuit units singularly, one by one, since regular working is restored.
No light output	Lamp blown	Disconnect fixture and replace lamp.
	Lamp not installed	Disconnect fixture and install lamp.
	Blackout closed	Verify the DMX channels value
Lamp cuts out intermittently.	Fixture is too hot.	Let the fixture cool down. Ensure that the ambient temperature is below 40 °C.

18.0 Technical specifications

Projector mechanical features
Height . . . . . .598m (23.56")
Width . . . . . .506mm (19.92")
Depth . . . . . .660mm (26")
Weight 24Kg (53Lbs)
Ballast mechanical features
Height . . . . . .176mm (6.92")
Width . . . . . .213mm (8.39")
Depth . . . . . .368 (14.47")
Weight . . . . . .10Kg (22 Lbs)
Thermal features
Maximum ambient temperature . . . . . .35°C (95°F)
Minimum ambient temperature . . . . . .-40°C (-40°F)
Maximum surface temperature . . . . . .100°C (176°F)
Thermal protection . . . . . Electronic
Electrical features
Voltage . . . . . .200-220Vac or 230-240Vac 50/60Hz
Nominal current . . . . . 3.9A @ 230V / 5.6A @ 208V
Maximum power . . . . . 656W @ 230V / 820W @ 208V
Light output source
Lamp . . . . . .575W discharge lamp
Approved models . . . . . PHILIPS MSD/MSR 575 W
Optics
Optical system . . . . . Lenses
Control
Protocol . . . . . USITT DMX-512
Control channel . . . . . 11 channels
Construction
Unit body . . . . . Iron/Aluminium
Treatment . . . . . Scratch resistant black paint
Weather protection rate IP65

NOTES

Via Bulgaria, 16 - 46042 CASTEL GOFFREDO (MN) - Italy
Telefono 0376/779483 - Fax 0376/779682 - 0376/779552
http://www.griven.com/ e-mail griven@griven.com
http://www.griven.it/ e-mail griven@griven.it

User's manual rel. 1.30