# GoboLED 500 CU0715

#### **User Manual**

551093 Rev. 2.0 Date: 21/12/2023

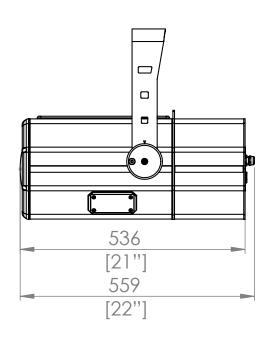


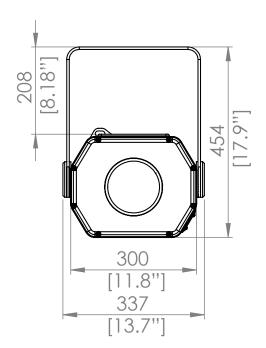




Power consumption	400 W (LED+ motors + Heater)
Nominal current	1.8 A (LED+ motors + Heater)
Power supply	100 - 240 VAC 50/60Hz
Inrush current	35 A @ 230 VAC, cold start, 1800 μs.
Power factor	cos.φ= 0.95
Electrical class	I
Weight	30 Kg
Operating temperature	-30°C to +50°C ( -22°F to 122°F )
IP rating	IP66
IK rating	IK07
Housing	Steel/alluminium, scratch resistant paint
Thermal protection	Integrated electronic thermal protection management
Cable	1.5 m
Control	USITT DMX-512, RDM
Channels	14
Source & colors	1 high output LED 8000K, 8 colours+ white wheel
Gobos	7 rotating gobos (ø27/22 mm) wheel + 4 fixed gobos plus effect wheel
Other features	2 prisms, linear 0-100% dimmer, strobe function (27.7 fps max), pulse and zap effect, electronic blackout, motorized electronic focus, motorized linear zoom

#### **Dimensions**





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#### **Important notices**

- This product must be installed in accordance with applicable national and local electrical and construction codes by a person familiar with the cor operation of the product and the hazards involved. Failure to comply with the following installation instructions may result in death or serious injury. Questo prodotto deve essere installato secondo le normative locali, da personale specializzato. La mancata osservanza delle istruzioni di installaz portare a situazioni di pericolo all'incolumità della persone.
- Do not stare at the operating light source. Non fissare la sorgente luminosa durante il suo funzionamento.
- The fixture might be damaged by excess voltage. The installation of an overvoltage protection device on the electrical system (SPD) is recommer reduce the risk of damage.

Apparecchiatura sensibile alle sovratensioni. Si consiglia l'installazione di un dispositivo di protezione delle sovratensioni (SPD) sull'impianto elettr attenuare l'intensità di questi fenomeni proteggendo gli apparecchi dal rischio che vengano danneggiati.

- The use of an adequate magnetothermic switch along the power supply line is recommended. E' consigliato l'uso di un adeguato interruttore magnetotermico/differenziale sulla linea di alimentazione.
- -Connect the fi xtures to each other only when disconnected from mains.

  Collegare tra loro i proiettori solo quando nessuno di essi è collegato alla rete elettrica.
- Never leave cables and connectors unconnected or unprotected for long periods.
   Non lasciare mai per lungo tempo agli agenti atmosferici cavi e connettori non collegati o non protetti.
- Disconnect power before installing or servicing to avoid electrical shock.

  Togliere l'alimentazione prima di effettuare qualsiasi operazione all'interno dell'apparecchiatura.
- Disconnect power before any connection operation.

  Togliere l'alimentazione prima di effettuare qualsiasi operazione di connessione tra gli apparecchi.
- Check voltage and frequency before powering the fixture. Do not exceed fixture specified voltage. Prima di connettere l'apparecchio alla rete elettrica, verificate la compatibilità di tensione e frequenza.
- Do not handle the unit with wet hands or in wet environments. Non maneggiate il prodotto con mani bagnate o in presenza di acqua.
- Apply to qualified staff for any maintenance service not described in this instructions manual.

  Rivolgersi ad un tecnico qualificato per qualsiasi operazione di manutenzione ordinaria non descritta nel presente manuale.
- Do not exceed the maximum quantity of fixtures per line in order to avoid power surges.

  Non superare il numero massimo specificato di apparecchi per linea per evitare pericolori sovraccarichi di corrente.
- Before powering the unit, ensure to use cables and connectors with proper section and length, according to its power consumption.

  Prima di effettuare le connessioni verificare la portata dei cavi / connettori e la lunghezza dei cavi tenendo conto dell'assorbimento del prodotto.
- Fix the projector by using screws, hooks or other adequate supports that can bear its weight. Fissare il proiettore con viti, ganci o altri supporti in grado di sostenerne il peso.



CAUTION: Prolonged staring at LED source should be avoided by placing the fixture in a proper position.



WARNING! fixing and connecting operations must mandatorily be carried out by qualified personnel only!



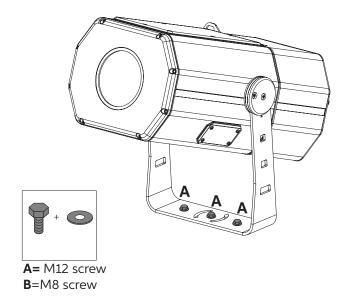
WARNING! Ensure power supply is off before connecting or disconnecting fixtures!

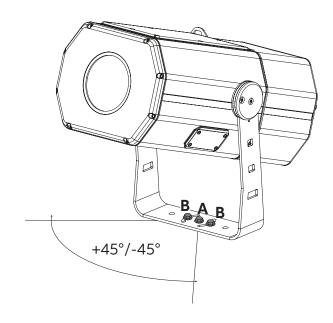


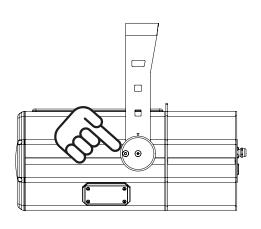
CAUTION: The fixture has a heavy weight. It is suggested to handle it by two persons.

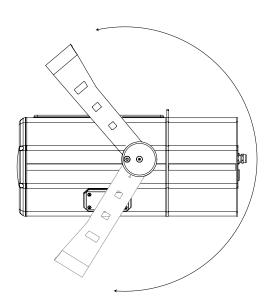


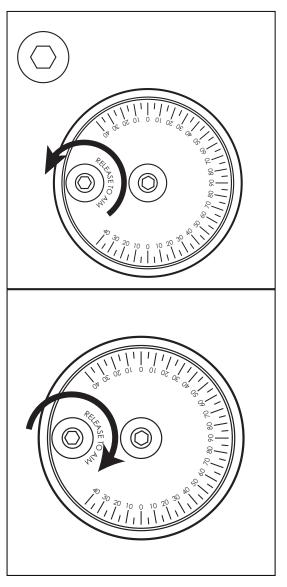
#### Installation





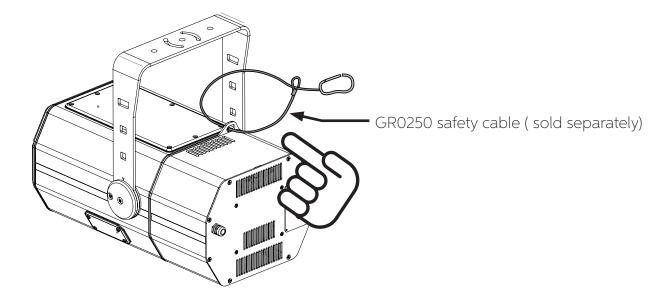






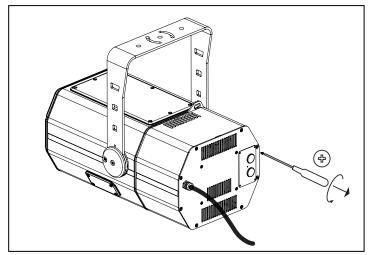


CAUTION: prolonged staring at the LED source should be avoided by placing the fixture in a proper position.

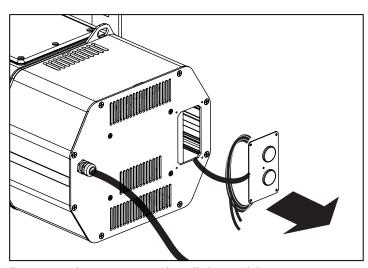


#### **Preliminary operations**

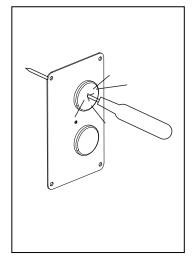
In order to connect the unit to a DMX controller, pull out the input and output DMX cables from the back of the fixture. Follow the below reported instructions.



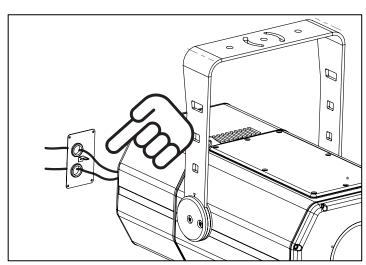
Undo the 4 screws of the metal cover.



Remove the cover and pull the cables out.

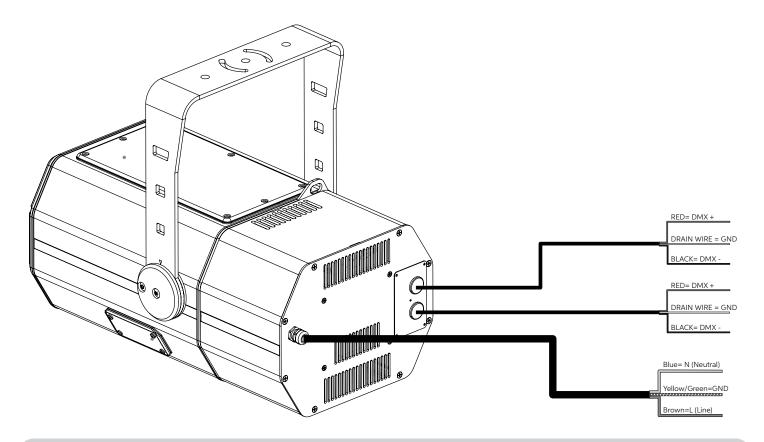


Bring the cables and pierce the two rubber seals with a screwdriver.



Run the cables through the holes, then fix the metal cover in place.

#### Connection



#### **ATTENZIONE - WARNING**

ITA: I collegamenti dei cavi devono essere effettuati utilizzando il kit di collegamento opzionale. Seguire le istruzioni fornite insieme al kit di connessione.

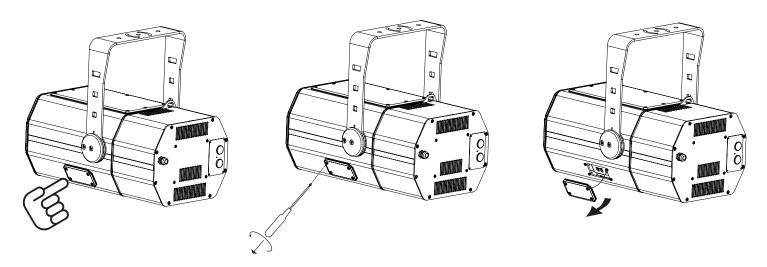
ENG: the cables connections must be carried out by using the optional connection kit. Follow the instructions provided along with the connection kit.



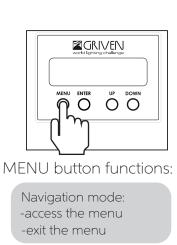
WARNING ! Fixing and connecting operations must mandatorily be carried out by qualified personnel only !

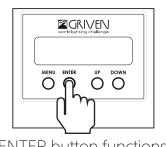
WARNING! Make sure that power supply is off before connecting or disconnecting fixtures!

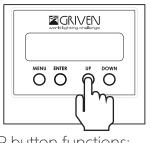
#### **Control panel operations**

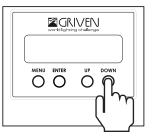


In order to access the control panel of the fixure undo the four screws as shown in the picture. After performing the operation required, close the cover by tightening the screws.









ENTER button functions: UP button functions:

DOWN button functions:

Navigation mode: -access sub-menu

Navigation mode: -scroll up the menu

Navigation mode: -scroll down the menu

Edit mode:
-exit without modifications

Edit mode:
-confirm modification

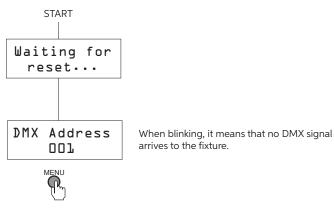
Edit mode:
-increase the selected value

Edit mode:
-decrease the selected value

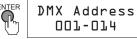
Menu explanation

>Main

Address









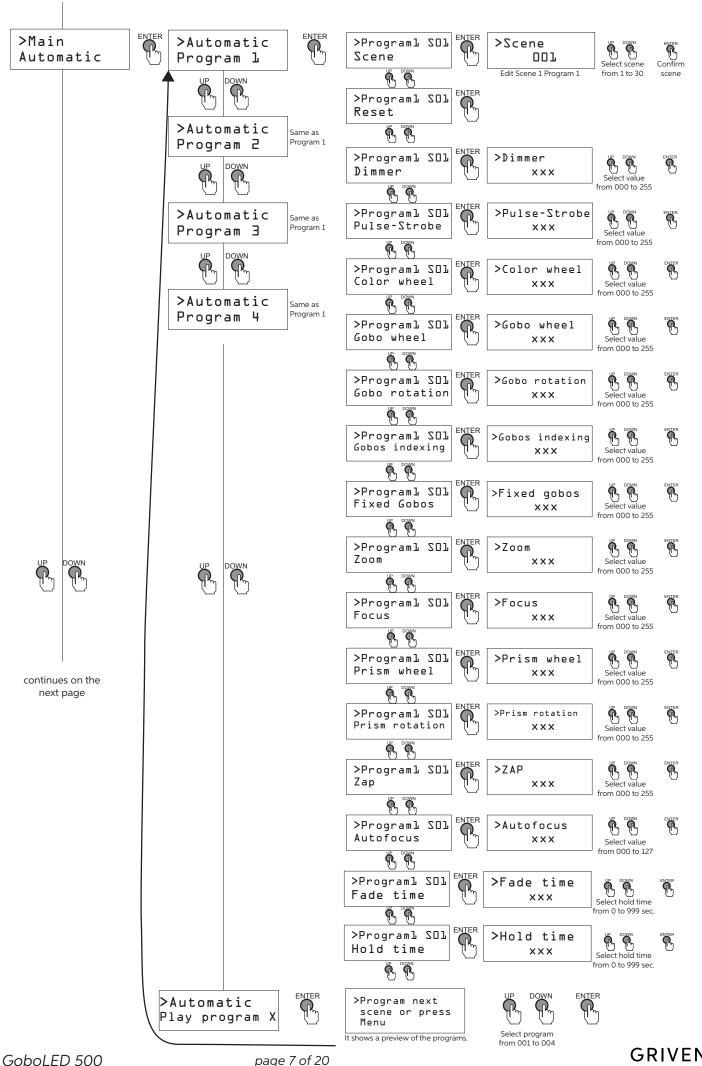
DMX Address



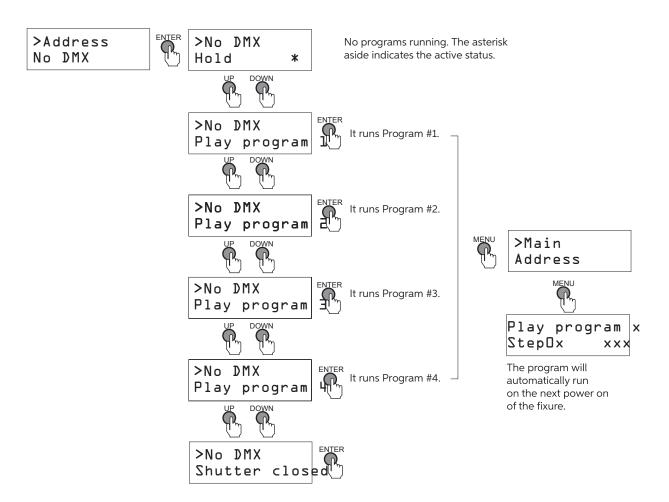




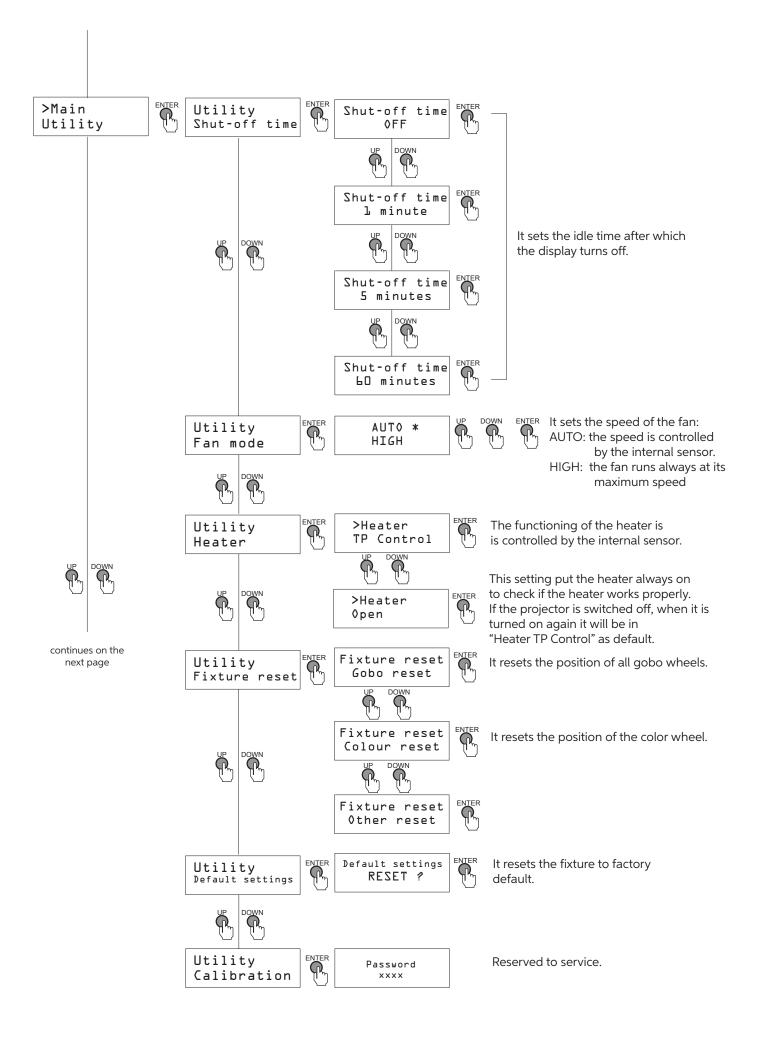
DMX address setting ( step of 14).

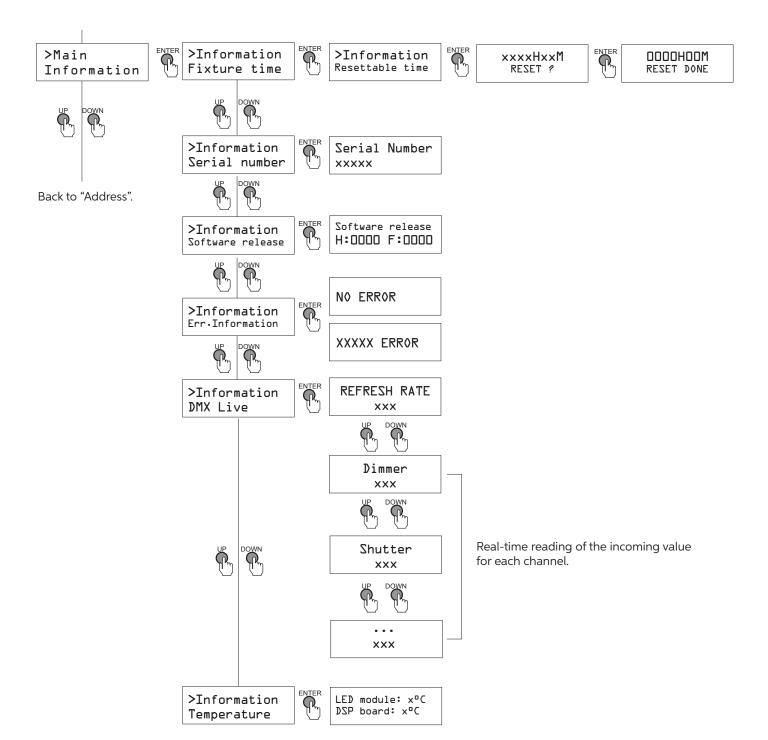


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#### **Trouble shooting**

CODE #	ERRO INFO	CHECK MEASURMENT	NOTE
E001	Spi Err	Check the welding of memory IC	
E002	Prg Err	Upgrade again	RESET
E003	BD1 Err	Check main cable ABAB(485) chip	ERROR
E004	BD2 Err		
E005	BD3 Err		
E006	P1 Err	Check cable of sensor, distance and location of ,magnets and sensor	
E007	P2 Err		
E008	Focus Err		nets
E009	Zoom Err		
E010	STGobo Err		
E011	Colour Err		
E012	Rgc Err		
E013	Rt Err		

#### **DMX Chart**

Chn.I	Function		Values
		0~5	Led off
1	DIMMING LED	6~240	Proportional dimming (Min. to Max.)
		241~255	Led On
		0~5	No effect
		6~10	Reset ( wait 5 seconds to activate )
		11~20	Pulse up 1 (slow)
		21~30	Pulse up 2
		31~40	Pulse up 3
		41~50	Pulse up 4
		51~60	Pulse up 5
		61~70	Pulse up 6
		71~80	Pulse up 7 (fast)
		81~90	Led Off
		91~100	Pulse down 1 (slow)
		101~110	Pulse down 2
2	PULSE AND	111~120	Pulse down 3
	STROBE	121~130	Pulse down 4
		131~140	Pulse down 5
		141~150	Pulse down 6
		151~160	Pulse down 7 (fast)
		161~170	Led Off
		171~180	Strobe 1 (slow)
		181~190	Strobe 2
		191~200	Strobe 3
		201~210	Strobe 4
		211~220	Strobe 5
		221~230	Strobe 6
		231~240	Strobe 7 (fast)
		241~255	No effect
	COLOR WHEEL	0~2	White
		3~12	White + Red
		13~17	Red
		18~26	Red + Blue
3		27~31	Blue
		32~40	Blue + Yellow
		41~45	Yellow
		46~54	Green + Yellow
		55~59	Green
		60~78	Green + Pink

Chn.l	Function		Values
		69~73	Pink
		74~82	Pink + Orrange
		83~87	Orange
		88~96	Orange + CTO
		97~101	СТО
		102~110	CTO + UV
		111~115	UV
		116~125	UV + White
		126~132	White
		133~183	Proportional clockwise rotation
		184~194	White
		195~244	Proportional counterclockwise rotation
		245~255	White
		0~15	Open
		16~30	Gobo 1
		31~45	Gobo 2
		46~60	Gobo 3
	GOBO	61~75	Gobo 4
4	ROTATION	76~90	Gobo 5
4	WHEEL SELECTION	91~105	Gobo 6
		106~120	Gobo 7
		121~180	Proportional clockwise rotation of the wheel (MIn. to Max.)
		181~190	Open
		191~250	Proportional counterclockwise rotation of the wheel (Max. to Min.)
		251~255	Open
		0~15	No effect
5	GOBOS ROTATION	16~130	Proportional clockwise control of the rotation (Min. to max.)
		131~140	No effect
		141~255	Proportional counterclockwise control of the rotation (Max. to min.)
	GOBOS	0~7	No effect
6	INDEXING	8~248	360° gobo indexing
		249~255	No effect
7	GOBOS FINE INDEXING	0~255	Proportional fine gobo indexing
	FIXED GOBO WHEEL	0~10	Open
8		11~20	Gobo 1
		21~30	Gobo 2



Chn.I	Function		Values
		31~40	Gobo 3
		41~50	Gobo 4
		51~100	Proportional clockwise and anti-clockwise rotation, with different speed, one way till end and return to beginning.
		101~160	Proportional clockwise rotation of the wheel (Max. to min.)
		161~170	Open
		171~230	Proportional counterclockwise rotation of the wheel (Min. to max.)
		231~255	Open
9	ZOOM	0~255	Proportional linear position
10	FOCUS	0~255	Proportional linear position
		0~51	Open
11	PRISM WHEEL	52~102	Prism 1
111	SELECTION	103~153	Prism 2
		154~255	Open
		0~15	No effect
10	PRISM	16~130	Proportional clockwise control of the rotation (Min. to Max.)
12	ROTATION	131~140	No effect
		141~255	Proportional counterclockwise control of the rotation (Max. to Min.)
		0~10	No effect
		11~60	Zap: slow closing, slow opening
		61~70	No effect
	ZAP	71~120	Zap: slow closing, fast opening
13	(blackout during	121~130	No effect
	motor positioning )	131~180	Zap: fast closing, slow opening
		181~190	No effect
		191~240	Zap: fast closing, fast opening
		241~255	No effect
	AUTOFOCUS (priority and distan- ce selection)	0~27	Disable zoom/focus linking - 1 sec.
		28~52	Enable zoom/focus linking, near distance (5meters)( default setting )-1 sec
1 1		53~77	Enable zoom/focus linking, near distance (6meters)( default setting )-1 sec
14		78~102	Enable zoom/focus linking, medium distance (8meters) - 1 sec
		103~127	Enable zoom/focus linking, far distance (12meters) - 1 sec
		128~255	No effect
	- <u>.</u>		

#### **RDM functions**

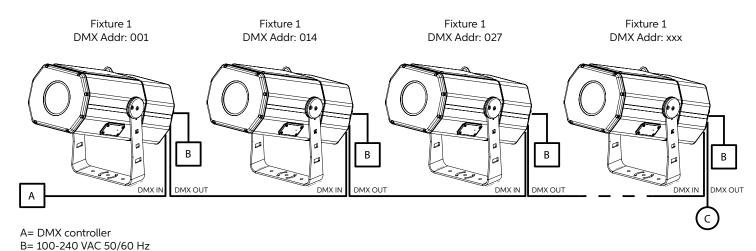
When operating in DMX mode the fixture can accept the following RDM commands:

- discovery: Upon request of the RDM controller, the fixture signals its own presence (the RDM controller will display the fixture on a list).
- DMX address reading and setting.
- Channels number reading and setting.
- On / Off identification: This command is used to identify the fixture you want to get access to (the identification happens by switching on all the LEDs at full intensity).
- Manufacturer: it displays the name of the manufacturer (Griven).
- Model description: it displays the fixture's model.
- Software version description: it displays the current version of the firmware.
- Temperature: it displays the LEDs operating temperature value.



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#### Configuration example



\*DMX cable type: 2x0.34 mmg impedance  $110\Omega$ , capacity 43pF/m, resistance  $50\Omega/Km$ .

WARNING! Use a DMX repeater on each 32nd fixture of the daisy-chain or in case the total DMX cable length exceeds 300m (1000 ft.). Install a data terminator (120 $\Omega$ ) on the DMX out cable of the last unit of the daisy-chain as described in the DMX connection kit manual.

WARNING!

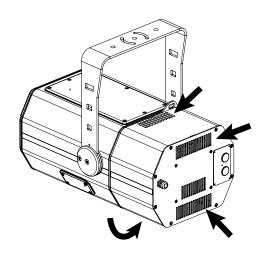
C= 120  $\Omega$  DMX Terminator

Being a mechanical equipment, it could possibly have a variation in the holographic reproduction of about 10cm (0.33 ft) on 3000cm (98.40 ft)

#### Heating and cooling system notice

GoboLed 500 is provided with an intelligent heating/cooling system that allows to operate also in very cold (down to  $-30^{\circ}\text{C}$  /-  $40^{\circ}\text{F}$ ) or hot (+50° / 122 °F) environments. When powered on at very low temperatures, the unit takes some minutes to reach the optimal internal temperature and to allow proper operation. At normal temperatures the cooling fan may start and stop automatically due to the internal temperature management system that prevents the LED from overheating .

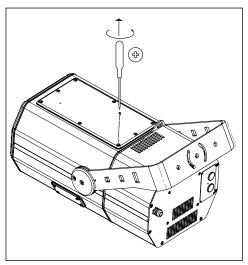
WARNING! Do not cover or obstruct any of the ventilation grid placed on the fixture. It is highly recommended regularly to inspect and clean these grids. The obstruction of the grids can seriously compromise the proper operation of the unit.



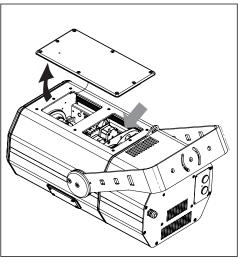
#### Gobos replacing (rotating gobo wheel)



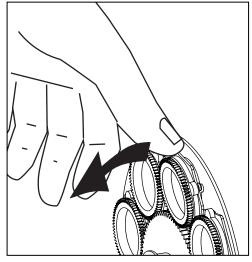
# $_{\Delta}$ WARNING! Disconnect the unit from mains supply prior to servicing.



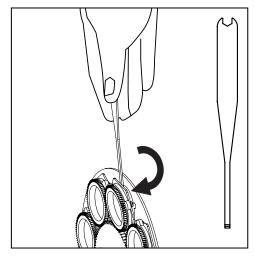
Undo the six screws to remove the cover.



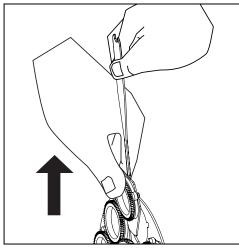
Locate the rotating gobo wheel.



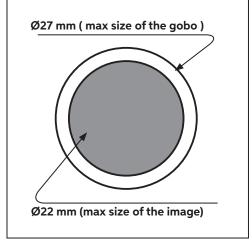
Lift the desired gobo holder.



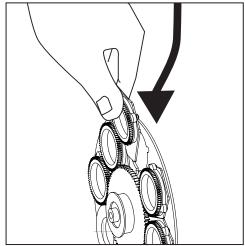
Put the tool provided along with the unit under the gobo holder as shown above.



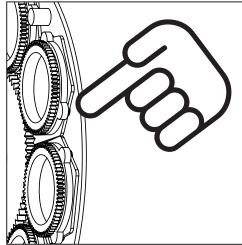
Pull out the gobo holder.



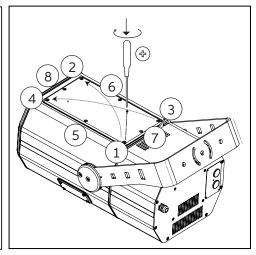
Gobo Led 500's gobos must comply with the above reported sizes.



Put the new gobo in its slot, make sure that its flat side goes under the spring beneath the cog wheel.



The gobo holder must perfectly fit in its slot.

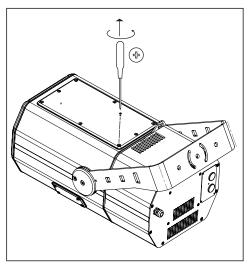


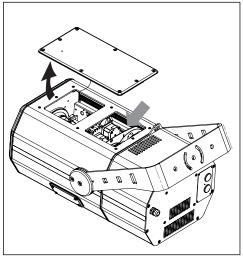
At the end of the operations, close the cover by well cross-tightening the screws.

### Fixed gobo wheel replacing



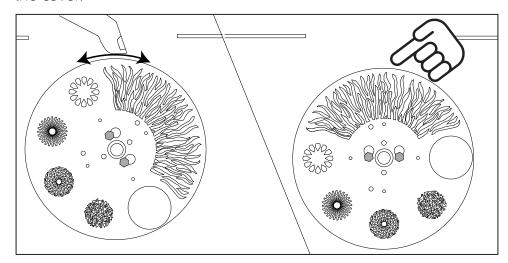
## $\cancel{\rlap/4}$ WARNING! Disconnect the unit from mains supply prior to servicing.

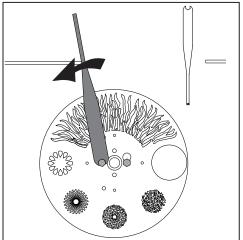




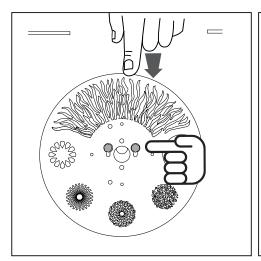
Undo the six screws to remove the cover.

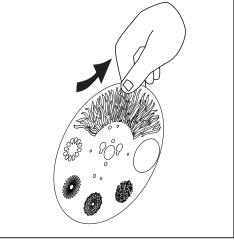
Locate the fixed gobo wheel.





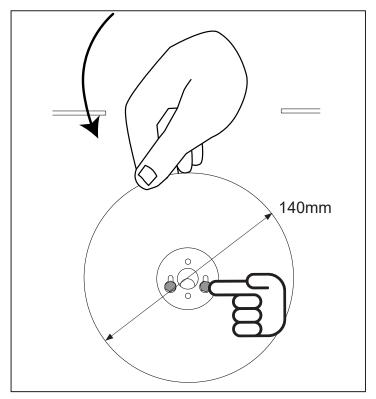
Rotate the wheel manually until it reaches the position shown above, then loosen the two screws by using the tool provided.



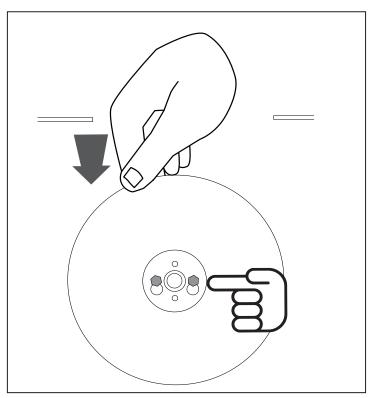


Push down the wheel (until the heads of the two screws reach the bigger slots ) to remove it.

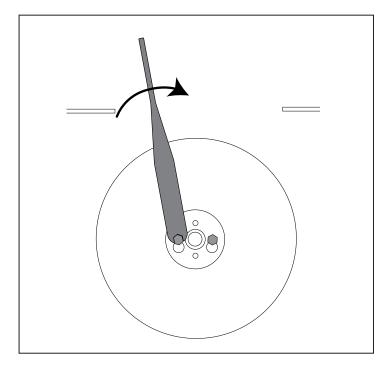
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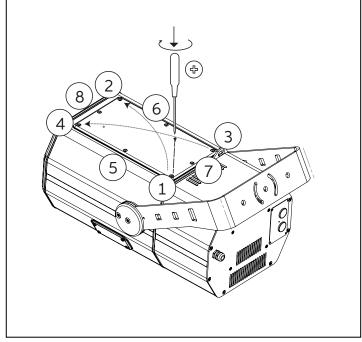
Insert the heads of the screws in the bigger slots of the new wheel.



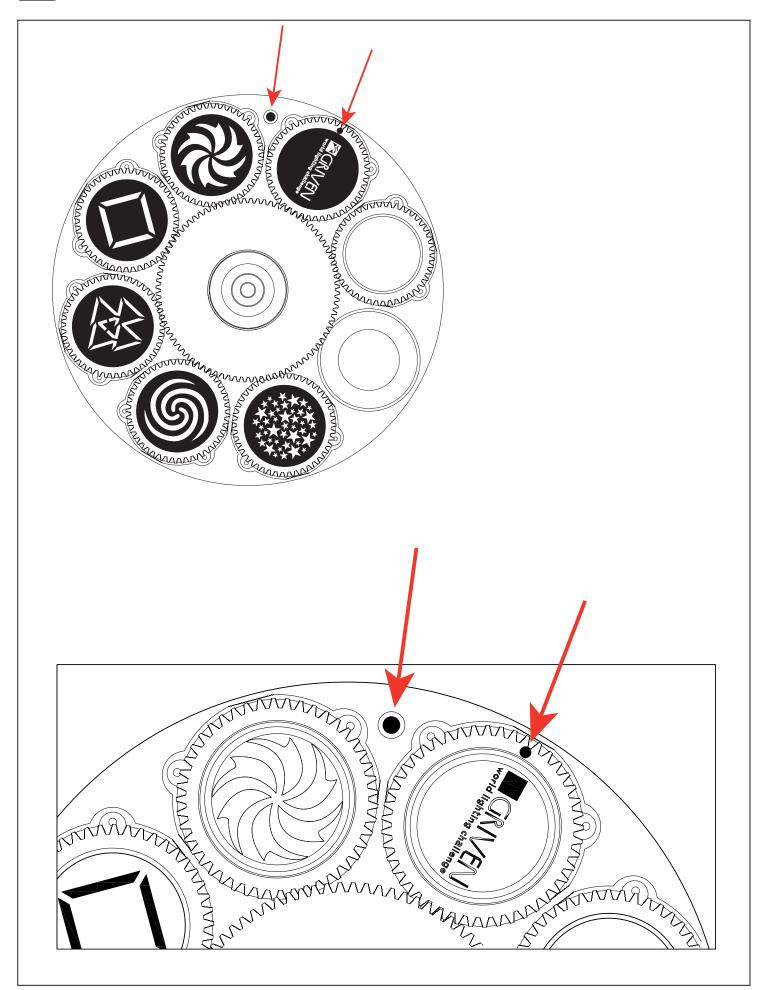
Push the wheel until the screws reach the end of the slots.



Tight the two screws by using the tool provided.



At the end of the operations, close the cover by well cross-tightening the screws.

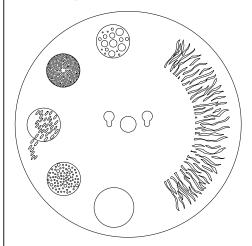


#### Gobos

7 integrated dichroic gobos available with the interchangeable rotating gobos wheel.



4 printed gobos available with the fixed gobos + animation effect wheel.



Additional metal gobos shipped with GOBOLED 500



NOTE