

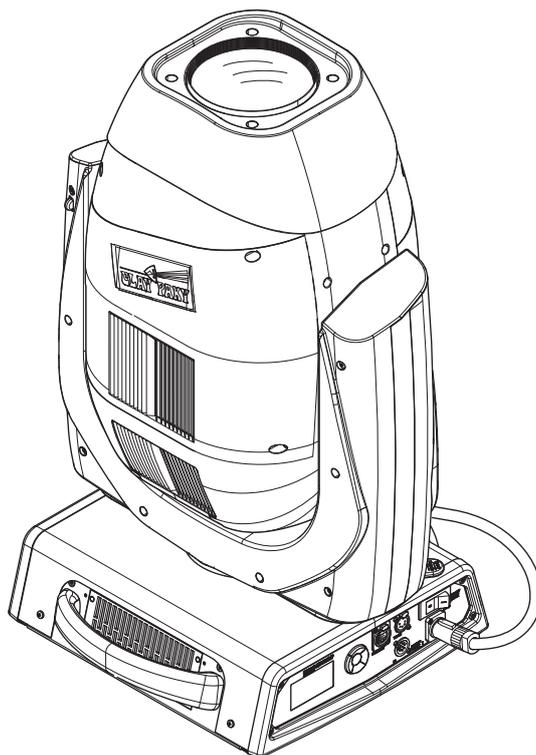


AN OSRAM BUSINESS

SCENIUS SPOT

C61500

INSTRUCTION MANUAL



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Congratulations on choosing a Clay Paky product!

We thank you for your custom.

Please note that this product, as all the others in the rich Clay Paky range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.

Carefully read this instruction manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely. CLAY PAKY S.p.A. disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this instruction manual, which must always accompany the fitting. CLAY PAKY S.p.A. reserves the right to modify the characteristics stated in this instruction manual at any time and without prior notice.

• Installation

Make sure all parts for fixing the projector are in a good state of repair.

Make sure the point of anchorage is stable before positioning the projector.

The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible.

If the safety chain gets used, it needs to be replaced with a genuine spare.

• MINIMUM DISTANCE OF ILLUMINATED OBJECTS

The projector needs to be positioned so that the objects hit by the beam of light are at least 5 metres (16'5") from the lens of the projector.



• Minimum distance from flammable materials

The projector must be positioned so that any flammable materials are at least 0.20 metres (8") from every point on the surface of the fitting.

t_a 40°C

• Maximum ambient temperature

Do not operate the fixture if the ambient temperature (T_a) exceeds 40° C (104° F).

IP20

• IP20 protection rating

The fitting is protected against penetration by solid bodies of over 12mm (0.47") in diameter (first digit 2), but not against dripping water, rain, splashes or jets of water (second digit 0).



• Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing (**Class I** appliance according to standard EN 60598-1).

It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

• Connection to mains supply

Connection to the electricity mains must be carried out by a qualified electrical installer.

Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.

t_c 150°C

• Temperature of the external surface

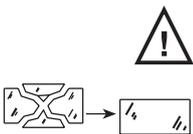
The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 150°C (302°F).

• Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply.

After switching off, do not remove any parts of the fitting for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually nill. If it is necessary to replace the lamp, wait for another 20 minutes to avoid getting burnt.

The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly damaged, they have to be replaced with genuine spares.



• Lamp

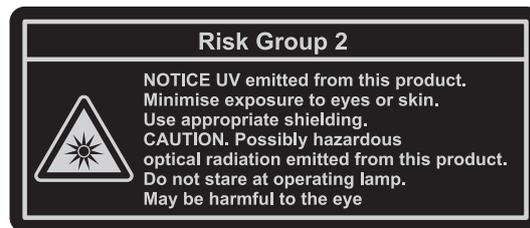
The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus.

- Carefully read the "operating instructions" provided by the lamp manufacturer.

- Immediately replace the lamp if damaged or deformed by heat.


Risk Group 2
According to
EN 62471

• **Photobiological Safety**



The fixture must be positioned so that the minimum distance between the front lens and human eye is at least 3 metres to prevent personal photobiological risks.



This product is intended for the following areas of application:
studios, stages, theaters, exhibitions, trade fairs, events, theme parks, entertainment venues, architectural lighting and similar.



Not suitable for household illumination



Not for residential use



LiFePO4

• **Battery**

This product contains a rechargeable lithium iron tetraphosphate battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.



Disposing

This product is supplied in compliance with European Directive 2012/19/EU - Waste Electrical and Electronic Equipment (WEEE). To preserve the environment please dispose/recycle this product at the end of its life according to the local regulation.



The products to which this manual refers comply with the European Directives pursuant to:

- 2006/95/EC - Safety of electrical equipment supplied at low voltage (LVD)
- 2004/108/EC - Electromagnetic Compatibility (EMC)
- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)
- 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)

EN**HOW TO GET YOUR SAFETY INSTRUCTIONS IN MULTILINGUAL VERSION**

You may always download the multilingual Safety Instruction manual for this Clay Paky product from:

<http://www.claypaky.it/en/download>

Ref: [FIS00L – Safety Information Scenius]

IT**COME OTTENERE LE INFORMAZIONI DI SICUREZZA NELLA VERSIONE MULTILINGUE**

Puoi sempre scaricare la versione multilingue delle Informazioni di Sicurezza per questo prodotto Clay Paky al seguente link:

<http://www.claypaky.it/en/download>

Rif: [FIS00L – Safety Information Scenius]

DE**SO ERHALTEN SIE IHR INFORMATIONEN ZUR SICHERHEIT IN DER MEHRSPRACHIGEN VERSION**

Sie können die mehrsprachige Version des Handbuchs mit Sicherheitshinweisen für dieses Clay Paky- Produkt unter folgendem Link herunterladen:

<http://www.claypaky.it/en/download>

Ref: [FIS00L – Safety Information Scenius]

ES**COMO OBTENER TU INFORMACIONES DE SEGURIDAD EN LA VERSION MULTILINGUE**

Siempre puedes descargar la versión multilingüe del Manual de Instrucciones de Seguridad para este producto Clay Paky en el siguiente enlace

<http://www.claypaky.it/en/download>

Ref: [FIS00L – Safety Information Scenius]

FR**COMMENT OBTENIR VOTRE CONSIGNES DE SÉCURITÉ DANS LA VERSION MULTILINGUE**

Vous pouvez toujours télécharger la version multilingue du Manuel d'Instructions de Sécurité pour ce produit Clay Paky au lien suivant :

<http://www.claypaky.it/en/download>

Réf. : [FIS00L – Safety Information Scenius]

RU**ГДЕ ДОСТАТЬ ИНСТРУКЦИЮ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ НА НЕСКОЛЬКИХ ЯЗЫКАХ**

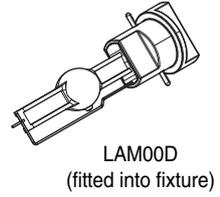
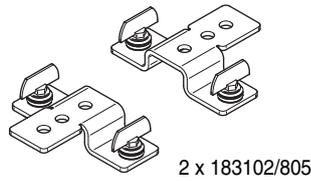
Вы всегда можете скачать многоязычную инструкцию по технике безопасности для данного изделия Clay Paky по ссылке:

<http://www.claypaky.it/en/download>

Наименование: [FIS00L – Safety Information Scenius]

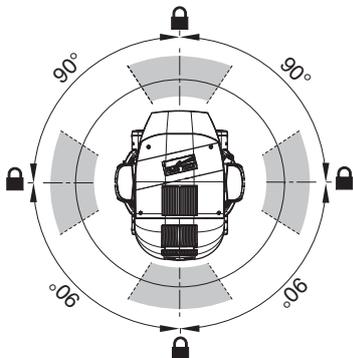
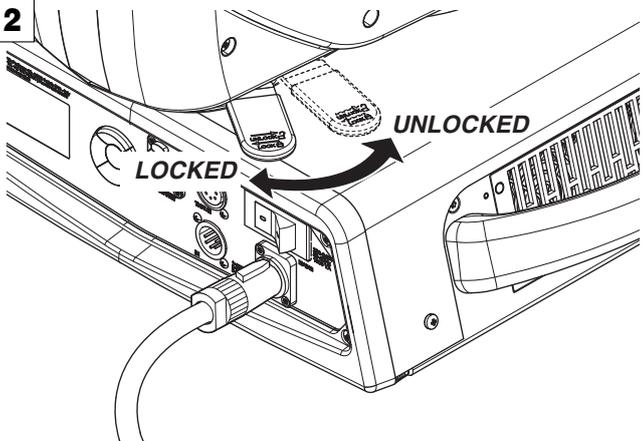
UNPACKING AND PREPARATION

1

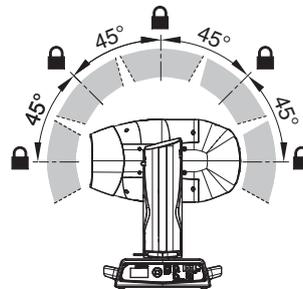
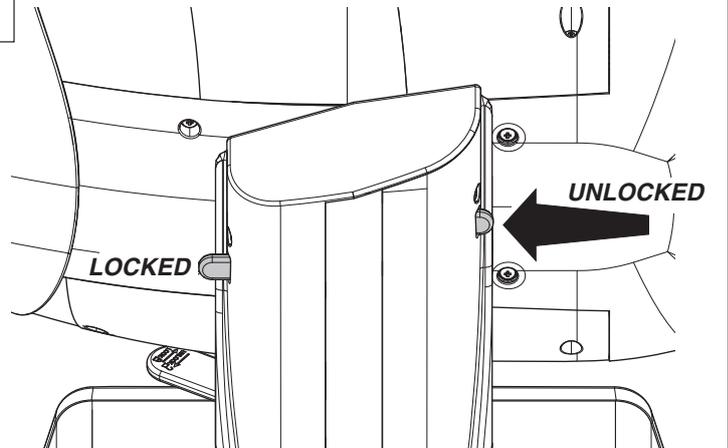


Packing contents - Fig. 1

2



3

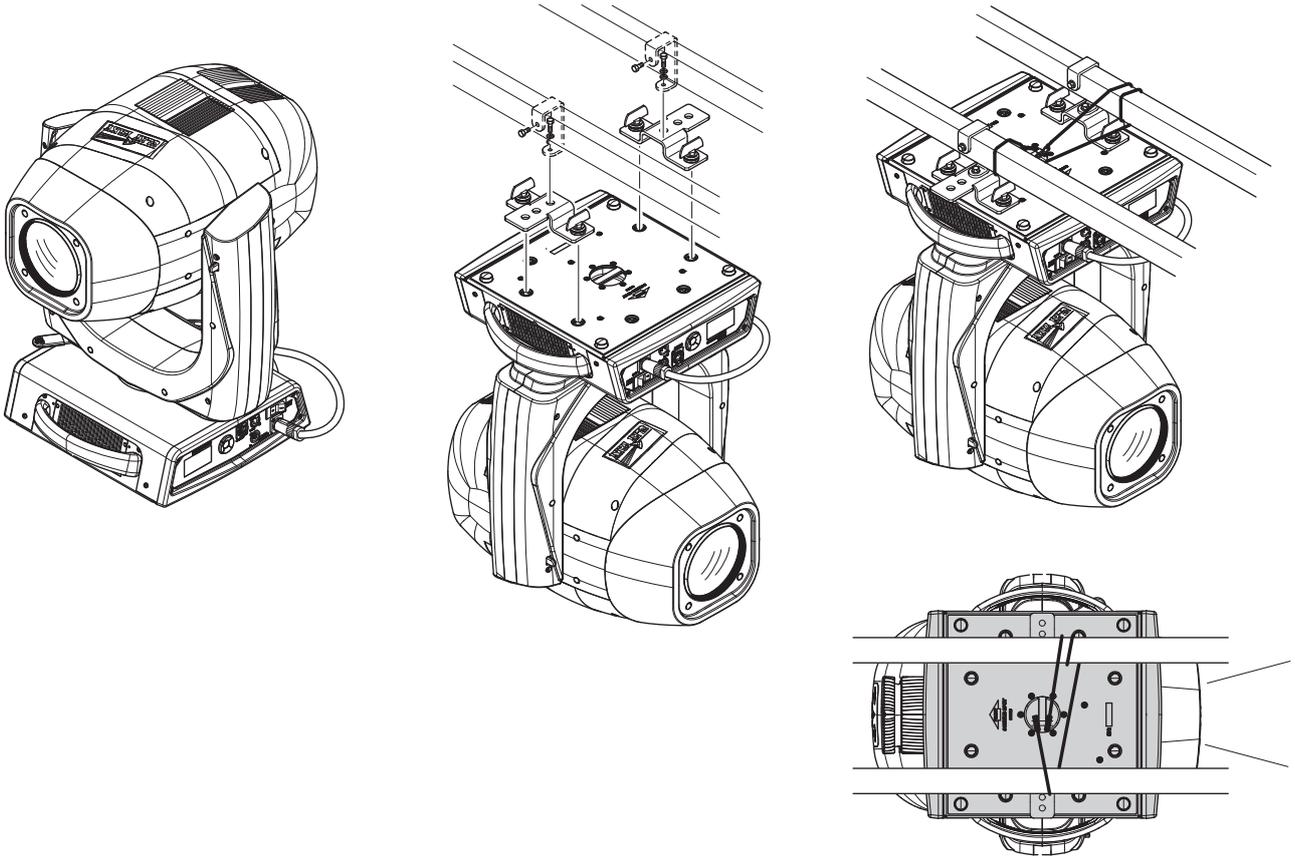


PAN Mechanism Lock and Release (every 90°) - Fig. 2

TILT Mechanism Lock and Release (every 45°) - Fig. 3

INSTALLATION AND START-UP

4

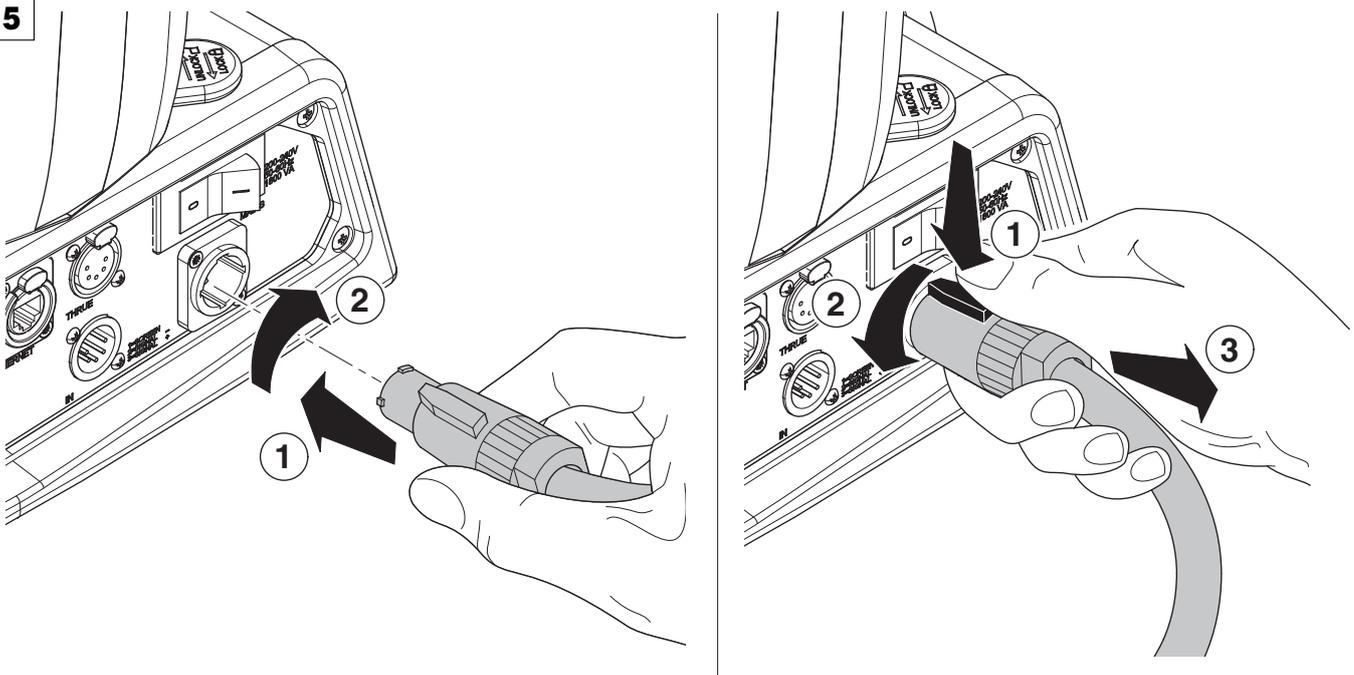


Installing the projector - Fig. 4

The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.

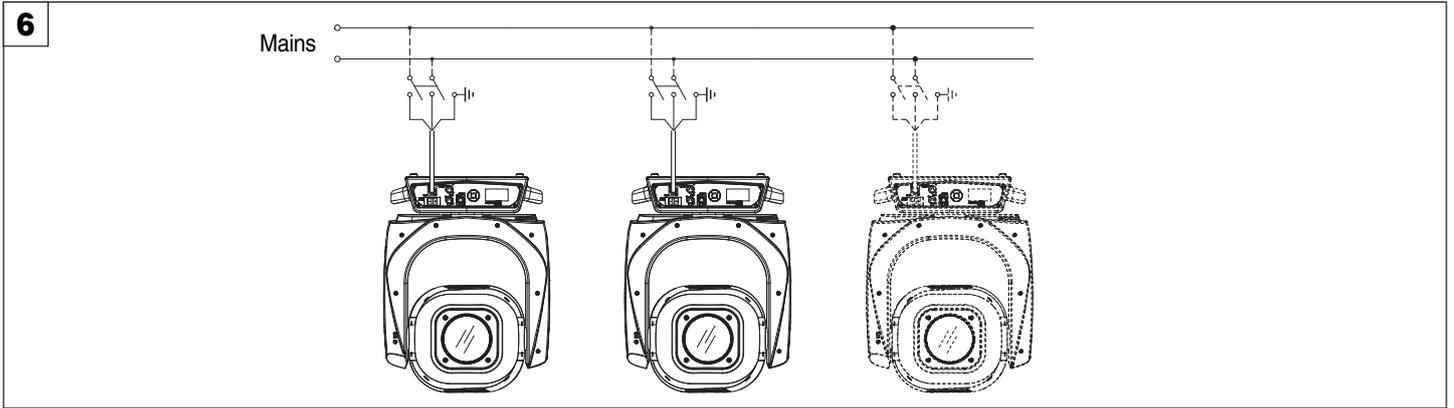
WARNING: with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

5

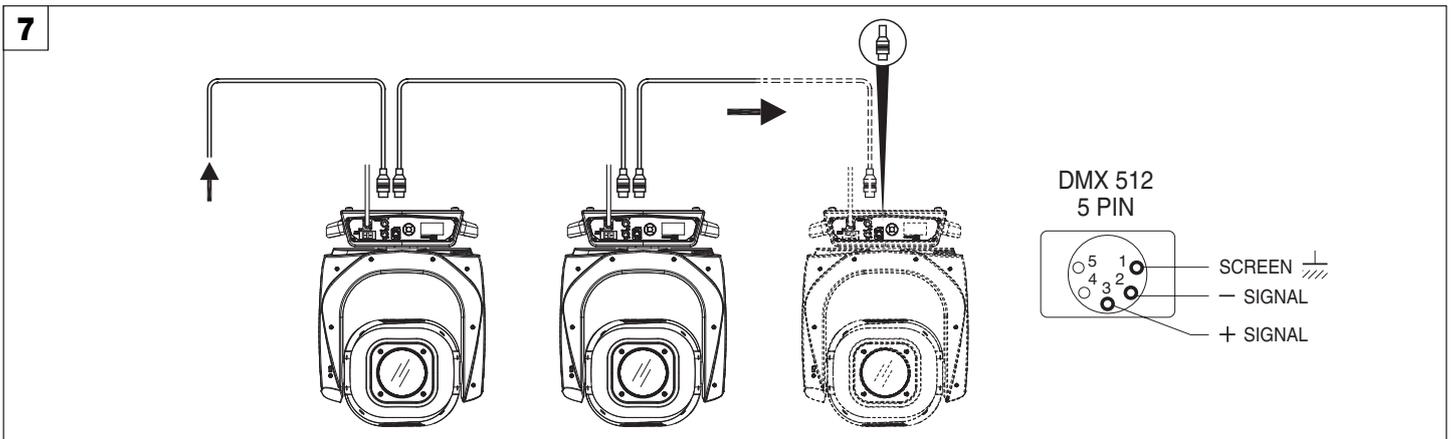


Connecting and disconnecting power cable - Fig. 5

CONTROL PANEL



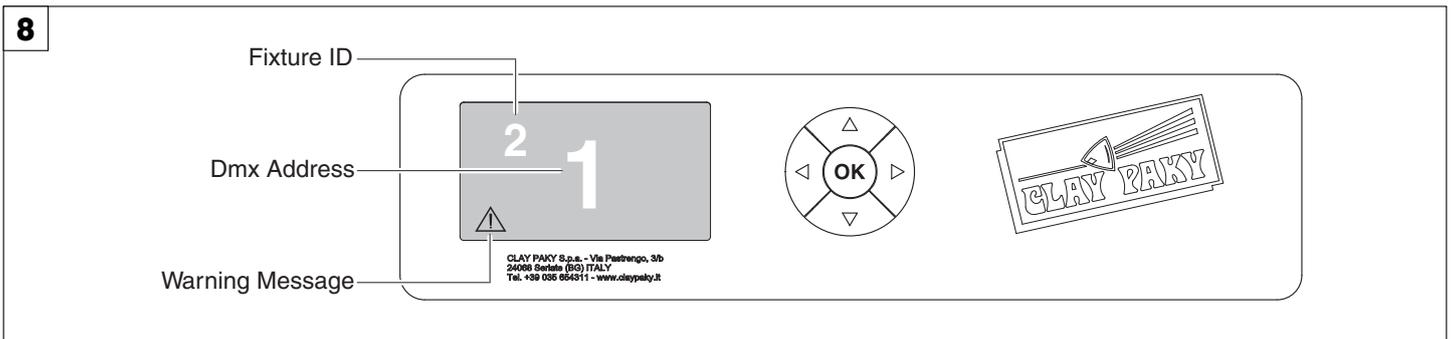
Connecting to the mains supply - Fig. 6



Connecting to the control signal line (DMX) - Fig. 7

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 5-pin male/female connectors. A terminating plug must be inserted into the last projector with a resistance of 120Ohm (minimum 1/4 W) between terminals 2 and 3.

IMPORTANT: The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.



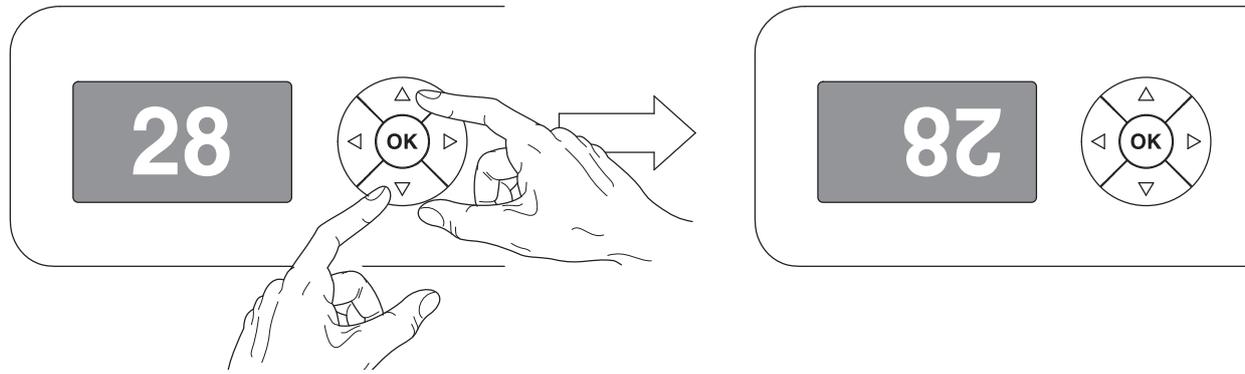
Switching on the projector - Fig. 8

Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:

	Model SCENIUS SPOT	Firmware Version X.X.X Date - Hour	xxx (Fixture ID) Dmx Address xxx	System errors E: W:
---	---	---	---	--

On conclusion of resetting in case of absence of the dmX signal, Pan and Tilt move to the “Home” position (Pan 128 bit - Tilt 128 bit). The control panel (Fig. 8) has a display and buttons for the complete programming and management of the projector menu. The display can be in one of two conditions: rest status and setting status. When it is in the rest status, the display shows the projector’s DMX address and the Fixture ID address (if set).

During menu setting status, after a wait time (about 30 seconds) without any key having been pressed, the display automatically returns to rest status. It should be noted that when this condition occurs, any possible value that has been modified but not yet confirmed with the **OK** key will be cancelled.



Reversal of the display - Fig. 9

To activate this function, press UP ▲ and DOWN ▼ keys simultaneously while the display is in the rest mode. This status will be memorised and maintained even for the next time it will be switched on. To return to the initial state, repeat the operation all over again.

Setting the projector starting address

On each projector, the starting address must be set for the control signal (addresses from 1 to 512).

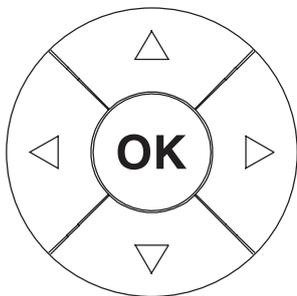
The address can also be set with the projector switched off.

Setting the projector Fixture ID

On each projector, the Fixture ID address must be set for an easy identification of the fixtures in an installation (ID from 1 to 255).

The Fixture ID address can be set with the projector switched off.

Functions of the buttons - Using the menu



Confirms the displayed value, or activates the displayed function, or enters the successive menu.



DOWN

Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.



UP

Increases the value displayed (with auto-repetitions) or passes to the previous item in a menu.



LEFT

Return to the top level



RIGHT

Commute from units, tens, hundreds, in the "Address", "Fixture ID" and "Calibration" menu.

USING THE MENU:

1) Press **OK** once – "Main Menu" appears on the display.

2) Use the UP ▲ and DOWN ▼ keys to select the menu to be used:

- Setup (Setup Menu): To set the setting options.
- Option (Option Menu): To set the operating options
- Informations (Informations Menu): To read the counters, software version and other information.
- Manual Control (Manual control Menu): To trigger the test and manual control functions.
- Test (Test Menu): To check the proper functioning of effects
- Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.

To enable the "Advanced" see pag.16.

3) Press **OK** to display the first item in the selected menu.

4) Use the UP ▲ and DOWN ▼ keys to select the MENU items.

Setting addresses and options with the projector disconnected

The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply. All that is needed is to press **OK** to momentarily activate the display and thus access the settings. Once the required operations have been carried out, the display will switch off again after a wait time of 30 seconds.

MENU SETTING

Main Menu	Level 1	Level 2	Level 3	Choices / Values		
SET UP	DMX Address	→	→	001-512		
	Channel Mode	→	→	Standard Vector		
	Fixture ID	→	→	000-255		
	Ethernet Interface	Control Protocol	→	→	Disabled Art-net IP 2.x.x.x. Art-net IP 10.x.x.x. Art-net Custom IP	
		Repeat on DMX	→	→	Disabled Enabled on primary	
		Universe	→	→	000-255	
		Custom IP Address	IP address byte 1			000-255
			IP address byte 2			000-255
IP address byte 3				000-255		
IP address byte 4				000-255		
Custom IP Mask	IP mask byte 1			000-255		
	IP mask byte 2			000-255		
	IP mask byte 3			000-255		
	IP mask byte 4			000-255		
OPTION	Lamp DMX	→	→	On / Off		
	Pan / Tilt	Invert Pan	→	→	On / Off	
		Invert Tilt	→	→	On / Off	
		Swap Pan-Tilt	→	→	On / Off	
		Encoder Pan-Tilt	→	→	On / Off	
		P/T Homing mode	→	→	Standard Sequenced	
		Pan Home Def Pos		→	→	0 degree 90 degrees 180 degrees 270 degrees
			Tilt Home Def Pos	→	→	0 % 12.5 % 25 % 50 % 75 % 87.5 % 100 %
	Color	Color Mixing	→	→	RGB / CMY	
		Fix Wheel Shortcut	→	→	On / Off	
	Shutter	Shutter On Error	→	→	On / Off	
		Dimmer On Shutter	→	→	On / Off	
	Lamp Dimming	→	→	1400W – 1200W 1200W		
	Display	→	→	On / Off		
	Animation / Fix Gobo	→	→	Animation Disc Fix Gobo Disc		
	Settings	Default Preset	Reset To Default Go Back	→	Are you sure ? Yes / No	
User Preset 1		Load preset 1 Save to preset 1	→	Are you sure ? Yes / No		
User Preset 2		Load preset 2 Save to preset 2	→	Are you sure ? Yes / No		
User Preset 3		Load preset 3 Save to preset 3	→	Are you sure ? Yes / No		

Main Menu	Level 1	Level 2	Level 3	Choices / Values
INFORMATION	System Errors	→	→	Read / Reset
	Fixture Hours	Total Hours	→	Read
		Partial Hours	→	Read / Reset
	Lamp Hours	Total Hours	→	Read
		Partial Hours	→	Read / Reset
	Lamp Strikes	Total Strikes	→	Read
		Partial Strikes	→	Read / Reset
	System Version	CPU brd	→	Fw.rev. / Hw.rev.
		com.dev	→	Fw.rev.
		0:PT-3f	→	Fw.rev. / Hw.rev.
		1:8-Ch	→	Fw.rev. / Hw.rev.
		2:8-Ch	→	Fw.rev. / Hw.rev.
		3: 8-Ch	→	Fw.rev. / Hw.rev.
	Board Diagnostic	0:PT-3f	→	Status / Err%
		1:8-Ch	→	Status / Err%
		2:8-Ch	→	Status / Err%
		3: 8-Ch	→	Status / Err%
	DMX Monitor	Channels	→	Value / Percentage
	Fans Monitor	Ball. IN	→	Speed (RPM)
		Ball. OUT	→	Speed (RPM)
		Pwr. Sp.	→	Speed (RPM)
		Pwr. Sp.	→	Speed (RPM)
		Lamp	→	Speed (RPM)
		Eff. OUT	→	Speed (RPM)
		Eff. IN	→	Speed (RPM)
		Lamp	→	Speed (RPM)
		Eff. IN	→	Speed (RPM)
	Sensor status	Channels	→	n.a / On / Off
Rot. Gobo 1 Indexing	→	→	Indexing Active Indexing Required	
Rot. Gobo 2 Indexing	→	→	Indexing Active Indexing Required	
Network parameters	→	→	IP Address	
	→	→	IP Mask	
	→	→	MAC Address	

Main Menu	Level 1	Level 2	Level 3	Choices / Values
MANUAL CONTROL	Lamp	→	→	On / Off
	Reset	→	→	Yes / No
	Channel	→	→	Value / Percentage
TEST	Pan / Tilt	→	→	n.a.
	Colour	→	→	n.a.
	Beam	→	→	n.a.
	Gobo	→	→	n.a.
	All	→	→	n.a.
ADVANCED	Access Code <u>1234</u>	Upload Firmware	<i>Transfer</i>	<i>Are you sure ?</i> Yes / No
		Setup Model	<i>Changing</i>	<i>Are you sure ?</i> Yes / No
		Calibration	Channels	000 - 255
		Rot. Gobo 1 Indexing	<i>Starting procedure</i>	Yes / No
		Rot. Gobo 1 Indexing	<i>Starting procedure</i>	Yes / No
		Menu Locking		Unlock Code XXXX

DMX ADDRESS

PLEASE NOTE: Without the DMX input signal, the displayed address (DMX Address) blinks.

It lets you select the address (DMX Address) for the control signal. A DMX address between 001 and 512 can be selected.

CHANNEL MODE

This lets you select the projector operating mode, selecting one of the two available modes:

- **Standard (32 DMX channels occupied, see DMX-Channel Function)**
 - **Vector (36 DMX channels occupied, see DMX-Channel Function)**
-

FIXTURE ID

It lets you set the "Fixture ID" to be assigned to the projector. An "ID" between 000 and 255 can be assigned.

ETHERNET INTERFACE

It lets you set Ethernet settings to be assigned to the projector as indicated below:

Control Protocol

It lets you select the "Control Protocol" Art-net to be assigned according to the control unit used; the options available are the following:

- Disabled:
- Art-net on IP 2
- Art-net on IP 10
- Art-net Custom IP

If the **Control Protocol** option is set on **Disabled**, when an IP address (**IP2**, **IP10** or **IP Custom**) is selected, the projector immediately initializes the IP address that was just selected.

If the **Control Protocol** option is enabled (**IP2**, **IP10** or **IP Custom**) and a new one is selected that is different from the previous one, the projector must be restarted so that it will be correctly initialized.

Repeat on DMX

It lets you enable/disable the transmission of the Ethernet protocol by DMX signal to all the connected projectors.

- Disabled: DMX transmission disabled.
- Enabled on primary: DMX transmission enabled.

Universe

It lets you set the "DMX Universe" to be assigned to a series of projectors with values between 000 and 255.

Custom IP Address

It lets you to set the select the "IP Address" Art-net to be assigned, according to the control unit used, with values between 000 and 255.

Custom IP Mask

It lets you to set the select the "IP Mask" Art-net to be assigned, according to the control unit used, with values between 000 and 255.

LAMP DMX

It lets you enable (ON) the lamp remote control channel. Select OFF to turn off or disable this option.

PAN / TILT

Invert Pan

It lets you enable (ON) Pan reverse movement. Select OFF to turn off or disable this option.

Invert Tilt

It lets you enable (ON) Tilt reverse movement. Select OFF to turn off or disable this option.

Swap Pan-Tilt

It lets you enable (ON) Pan and Tilt channel inversion (and simultaneously Pan fine and Tilt fine). Select OFF to turn off or disable this option.

Encoder Pan-Tilt

It lets you enable (ON) or disable (OFF) Pan and Tilt Encoder operations.

You can quickly disable the Pan and Tilt Encoder by simultaneously pressing the UP (↑) and DOWN(↓) keys in the "Main Menu".

P/T Homing Mode

It lets you set the initial Pan and Tilt Reset mode.

- **Standard:** Pan & Tilt are simultaneously reset.
- **Sequenced:** Tilt is reset first followed by Pan.

Pan Home Def Pos

It lets you assign the Pan channel "home" position at the end of Reset (without a DMX input signal), selecting one from the 4 available positions:

- **0 degree**
- **90 degrees**
- **180 degrees**
- **270 degrees (default)**

Tilt Home Def Pos

It lets you assign the Tilt channel "home" position at the end of Reset (without a DMX input signal), selecting one from the 7 available positions:

- **0%**
 - **12.5%**
 - **25%**
 - **50% (default)**
 - **75%**
 - **87.5%**
 - **100%**
-

COLOR

Color mixing

It lets you set the CMY color mixing system:

- **RGB** color mixing mode (Red Green Blue)
 - **CMY** color mixing mode (Cyan Magenta Yellow)
-

Fixed wheel short-cut

Used for optimizing color change time (select ON) so that the disc turns in the direction that requires shorter movement. Select OFF to turn off or disable this option.

SHUTTER

Shutter on error

It lets you activate (ON) automatic "Stopper/Strobe" closing in the event of Pan/Tilt positioning error. Select OFF to turn off or disable this option.

Dimmer on Shutter

Enables (select ON) the automatic closing of the Dimmer when the Strobe is completely closed. Select OFF to turn off or disable this option.

LAMP DIMMING

It allows you to select one of the two types of dimming available:

- **1400W - 1200W** lamp power operate as follows:
 - Dimmer channel @ 0bit - lamp power @ 1000W
 - Dimmer channel from 1 to 202bit - lamp power @ 1200W
 - Dimmer channel from 203 to 255bit - lamp power increase from 1200W to 1400W
 - **1200W** lamp power operate as follows:
 - Channel dimmer @ 0bit - lamp power @ 1000W
 - Dimmer channel from 1 to 255bit - lamp power @ 1200W
-

DISPLAY

It lets you activate (ON) display brightness reduction after about 30 seconds in idle status. Select OFF to turn off or disable this option.

ANIMATION / FIX GOBO

It allows you to select depending on the disc inserted into the fixture, whether to activate the electronic control of **Animation Disk** or **Fix Gobo Disk** (if selected **Fix Gobo Disk**, the channel Animation Disk Rotation is disabled).

SETTINGS

Used to save 3 different settings of the items in the option menu and relevant submenus.

- Default preset (*)
 - User preset 1
 - User preset 2
 - User Preset 3
- **Load preset 'X'** is used to recall a previously stored configuration.
 - **Save to preset 'X'** is used to save the current configuration.

(*) DEFAULT PRESET

It lets you restore default values on all option menu items and relevant submenus.

Press the left and right arrows/keys simultaneously in the "main menu" to quickly restore default values (DEFAULT PRESET).

SYSTEM ERRORS

It displays a list of errors that occurred when the projector was turned on.

To reset the SYSTEM ERRORS list, press OK. A confirmation message appears (Are you sure you want to clear error list?). Select YES to confirm reset.

FIXTURE HOURS

It lets you view projector working hours (total and partial).

Total counter

It counts the number of projector working life hours (from construction to date).

Partial counter

It counts the number of projector partial working life hours from the last reset to date.

Press OK to reset the partial counter. A confirmation message appears on the display (Are you sure ?)

Select YES to confirm reset.

LAMP HOURS

It lets you view lamp working hours (total and partial).

Total counter

It counts the number of projector working hours with the lamp on (from construction to date).

Partial counter

It counts the number of lamp partial working hours from the last reset to date.

Press OK to reset the partial counter. A confirmation message appears on the display (Are you sure ?)

Select YES to confirm reset.

LAMP STRIKES

It lets you view how many times the lamp was turned on (total and partial).

Total counter

It counts the number of times the lamp was turned on (from construction to date).

Partial counter

It counts the number of times the lamp was turned on from the last reset to date.

Press OK to reset the partial counter. A confirmation message appears on the display (Are you sure ?)

Select YES to confirm reset.

SYSTEM VERSION

It lets you view the hardware and software versions for each electronic board in the projector.

- CPU brd (CPU board)
 - 0: PT-3f (Pan / Tilt board)
 - 1: 8-Ch (8-channel board)
 - 2: 8-Ch (8-channel board)
-

BOARD DIAGNOSTIC

It lets you view the percent errors for each electronic board installed in the projector

- 0: PT-3f (Pan / Tilt board)
 - 1: 8-Ch (8-channel board)
 - 2: 8-Ch (8-channel board)
-

DMX MONITOR

It lets you view the level of projector DMX channels in bit (Val) and in percent.

FANS MONITOR

It lets you view the speed of each fan installed in the projector:

- Lamp (lamp cooling fan)
 - Pwr.Sup (PSU cooling fan)
 - Ball.IN (Ballast cooling fan, air-flow IN)
 - Ball.OUT (Ballast cooling fan, air-flow OUT)
 - Effect.IN (Effects cooling fan, air-flow IN)
 - Effect.OUT (Effects cooling fan, air-flow OUT)
-

SENSOR STATUS

It lets you check the correct operations of each "sensor" installed in the projector, each channel is associated with one of the following three parameters:

- n.a.= sensor not available
 - ON= sensor working
 - OFF= sensor defective
-

ROT GOBO 1 INDEXING

It lets you check whether the rotating gobo wheel 1 gobo indexing procedure should be run, if indexed, "Indexing Active" appears on the display, otherwise "Indexing required!" appears

If necessary, indexing should be activated from the Advanced menu.

ROT GOBO 2 INDEXING

It lets you check whether the rotating gobo wheel 2 gobo indexing procedure should be run, if indexed, "Indexing Active" appears on the display, otherwise "Indexing required!" appears

If necessary, indexing should be activated from the Advanced menu.

NETWORK PARAMS

Lets you view the projector "Network" parameters meaning:

IP address: Internet Protocol address (two projectors must not have the same IP address)

IP mask: 255.0.0.0

Mac address: Media Access Control; the projector's Ethernet Address.

MANUAL CONTROL

LAMP

It lets you turn the lamp on (ON) or off (OFF) from the projector control panel.

RESET

It lets you reset the projector from the projector control panel.

CHANNEL

It lets you set the channel DMX levels from the projector control panel (value between 0 and 255 bit or between 0% and 100%).

TEST MENU

It lets you test the correct operations of effects using saved Tests.

ADVANCED MENU

To open the "Advanced Menu", enter the code (1234)

UP LOAD FIRMWARE

It lets you transfer "firmware" from one projector to all other connected projectors. A confirmation message appears on the display (Are you sure ?) Select YES to confirm or NO to abort this operation.

SETUP MODEL

It lets you change the projector model (operation probably necessary after replacing the CPU during repairs). A confirmation message (Are you sure ?) appears on the display Select YES to confirm (the list of available and selectable projectors appears) or NO to abort this operation.

CALIBRATION

It lets you make small mechanical adjustments on some effects to perfectly align projectors from the control panel.

Factory default

It lets you restore default "Calibration" values (128 bit) on all channels.

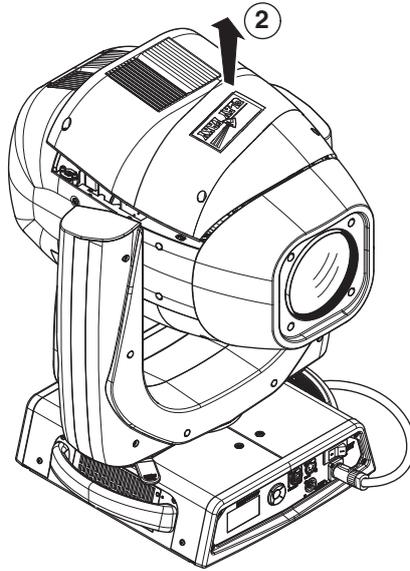
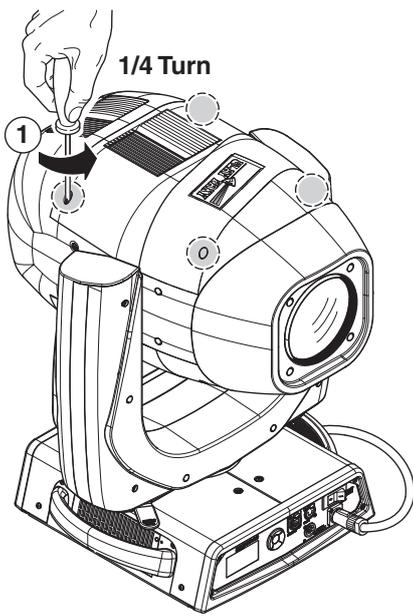
ROT GOBO INDEXING

It lets you run the rotating gobo wheel gobo indexing procedure. This operation may be necessary after projector maintenance/cleaning.

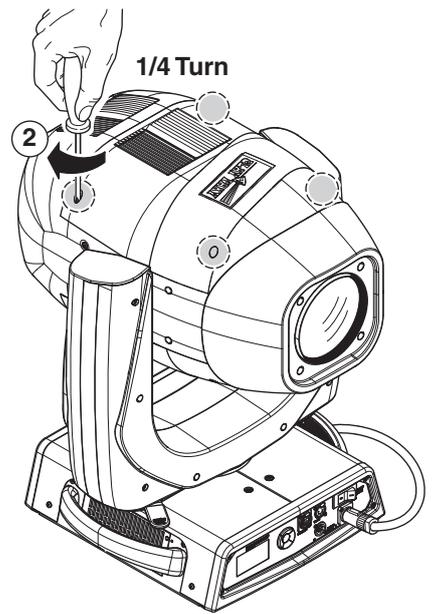
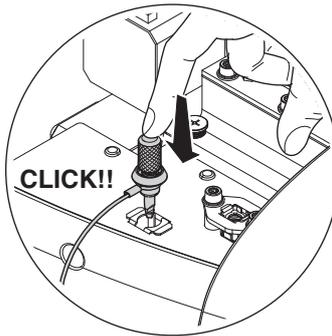
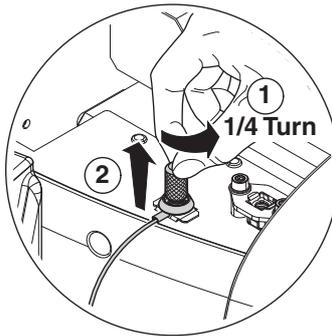
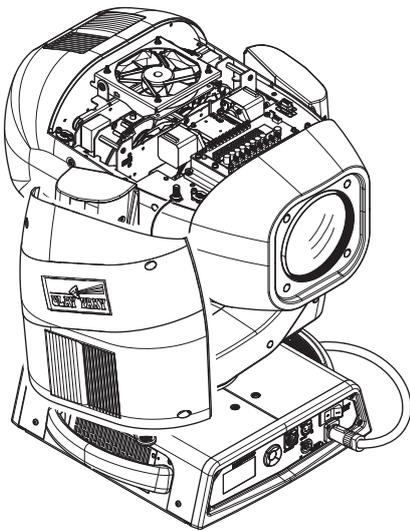
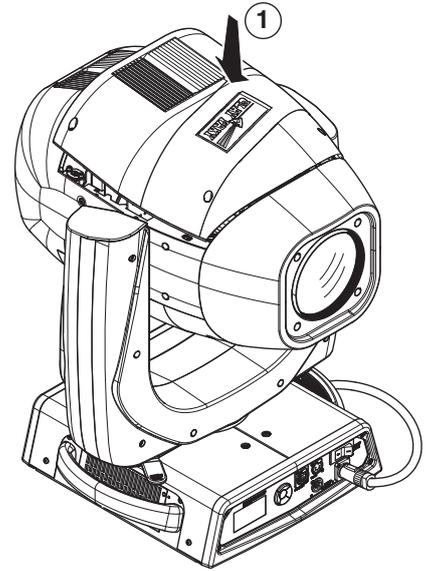
MENU LOCKING

It allows you to assign a password to lock the access to the user menu, so that only users know the password can change settings. The password is 4-digit number.

10

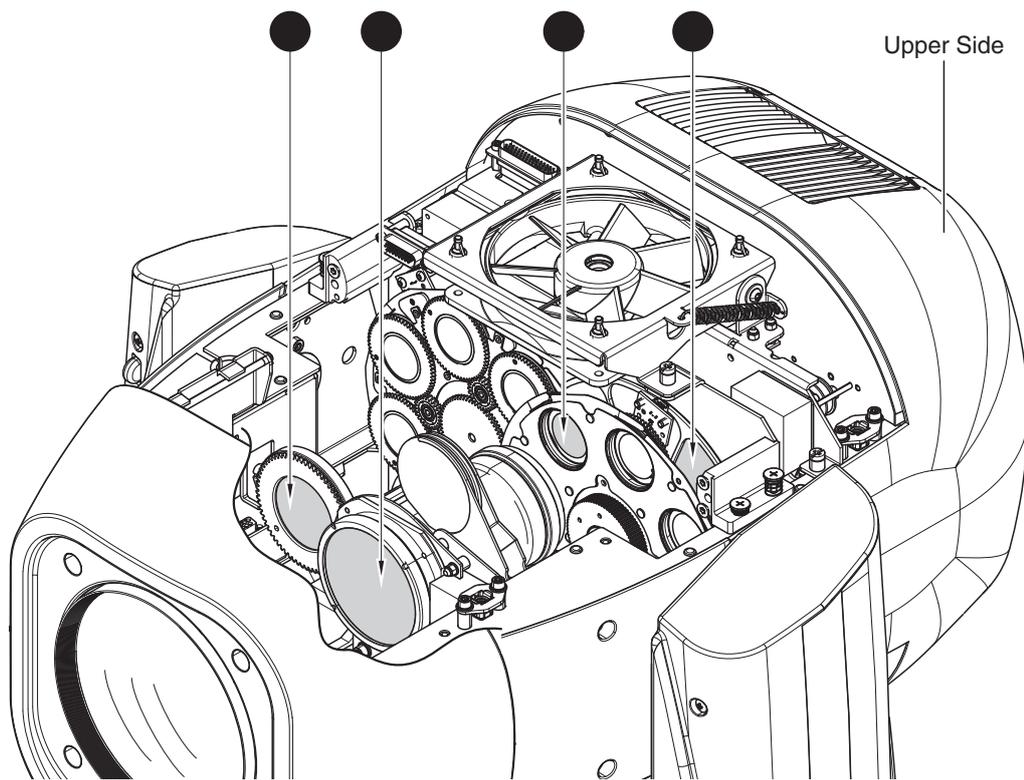
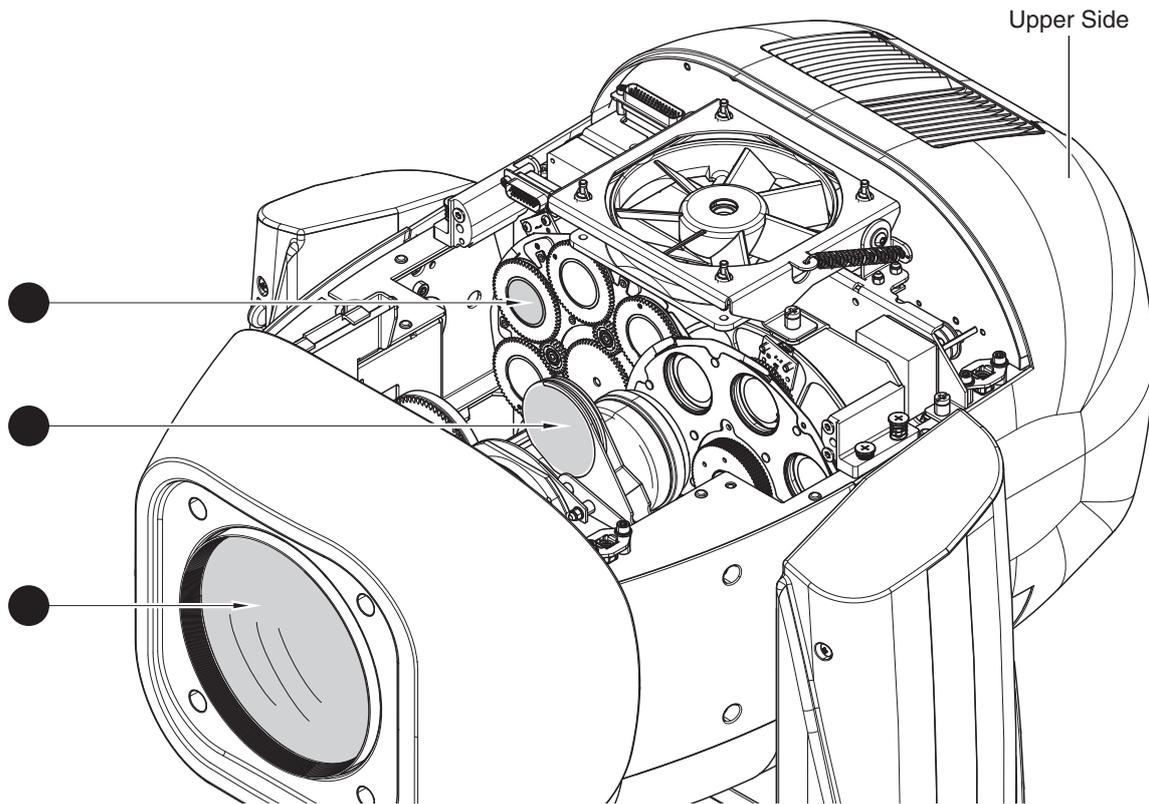


11



Locking and releasing Pan and Tilt movements - Refer to the instructions in the UNPACKING AND PREPARATION section.
Opening the head covers - Fig. 10.

Closing the head covers - Fig. 11.



Periodical cleaning - Fig. 12

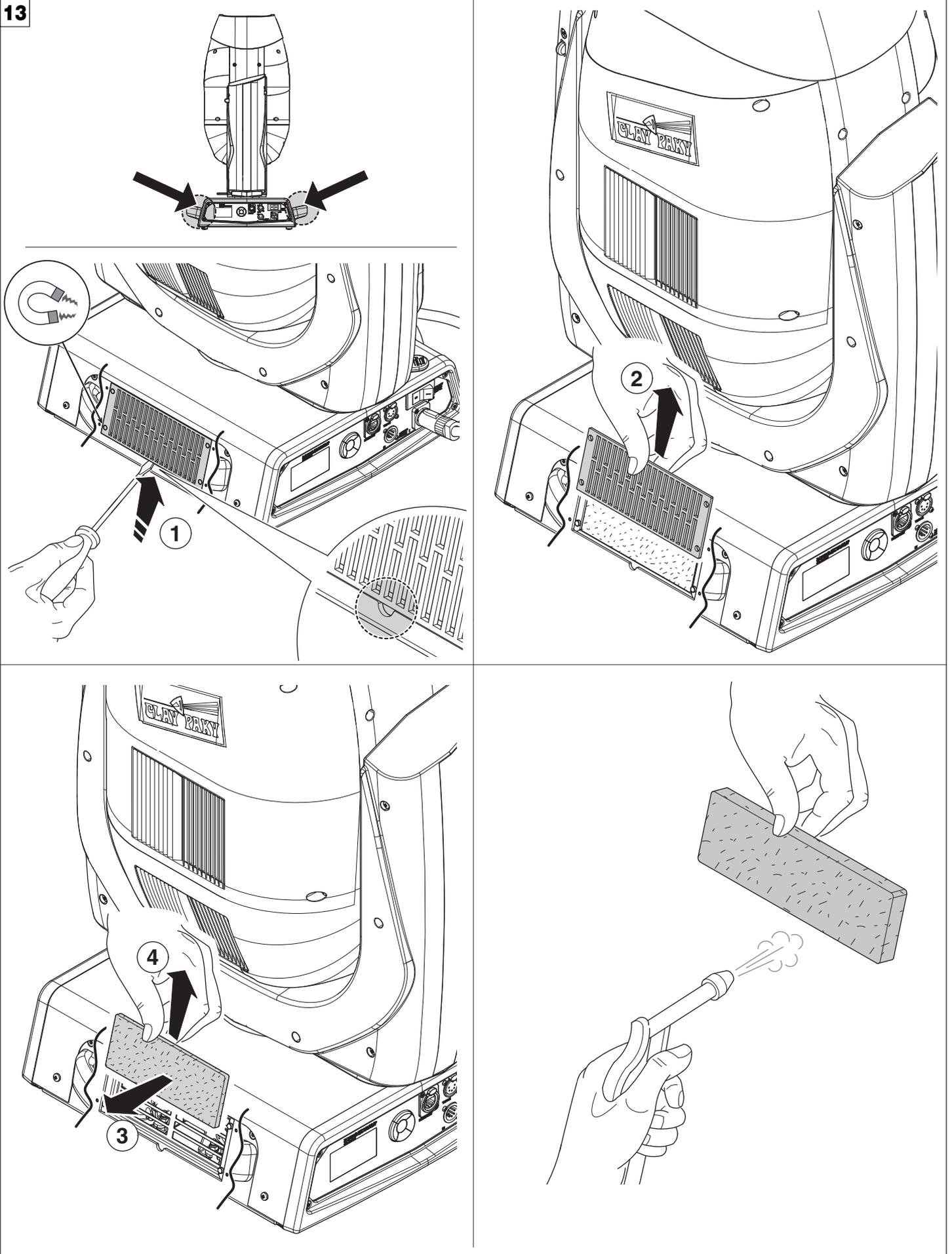
To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors, such as the amount of the effects and the quality of the working environment (air humidity, presence of dust, salinity, etc.).

Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors, from the lenses and filters. It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:

- General cleaning of internal parts.
- Restoring lubrication of all parts subject to friction, using lubricants specifically supplied by Clay Paky.
- General visual check of the internal components, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.

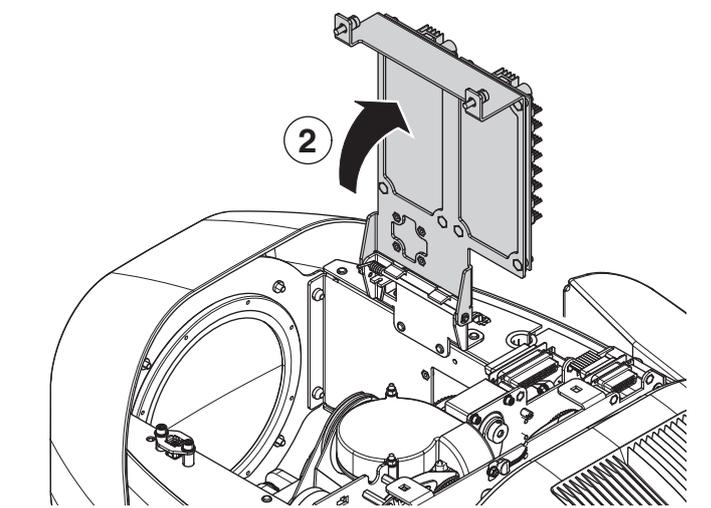
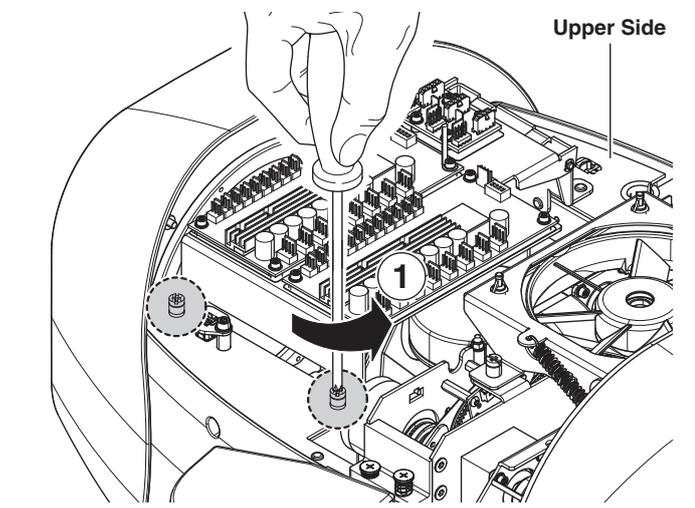
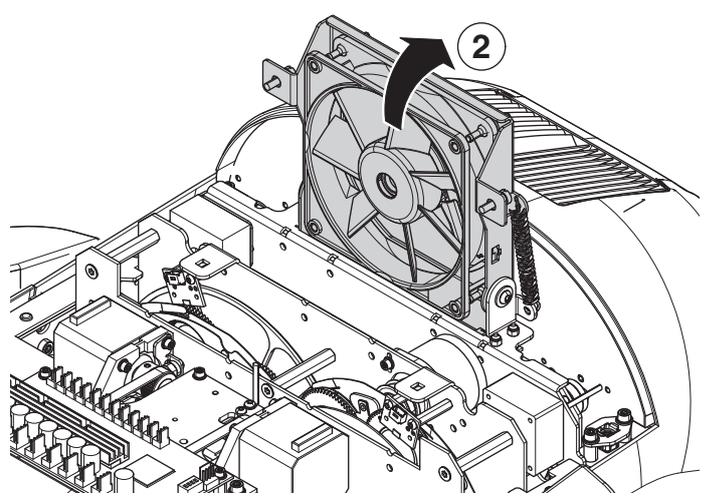
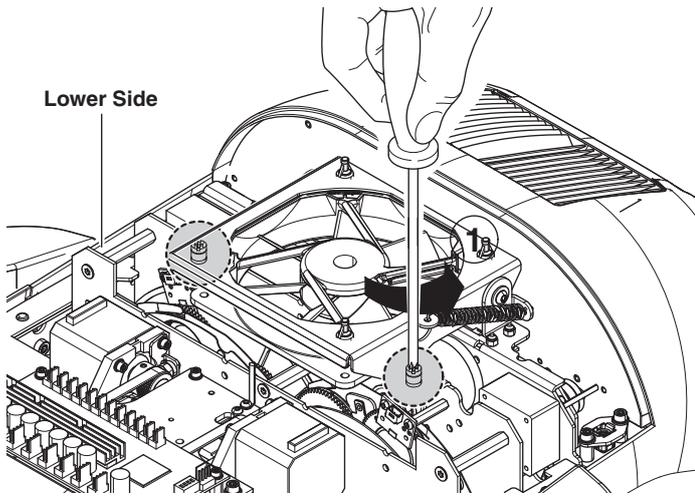
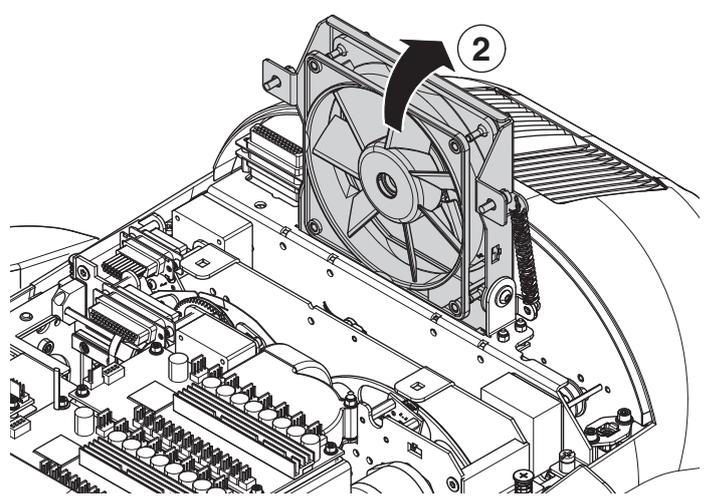
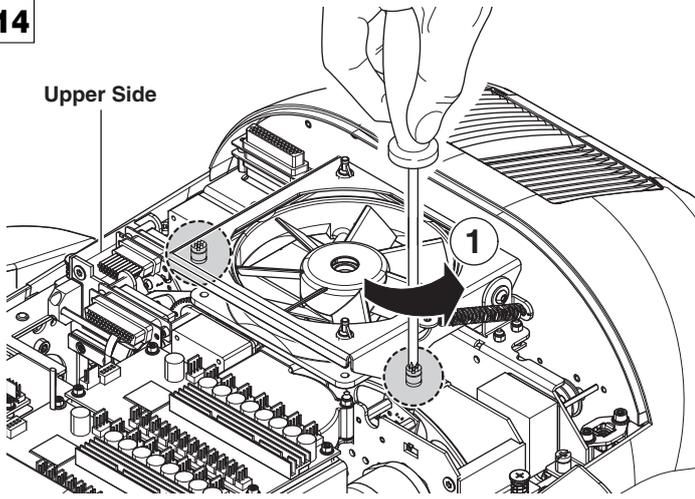
NOTE: keep a careful cleaning of the "CMY/colour filters assembly" to prevent rapid deterioration.

13

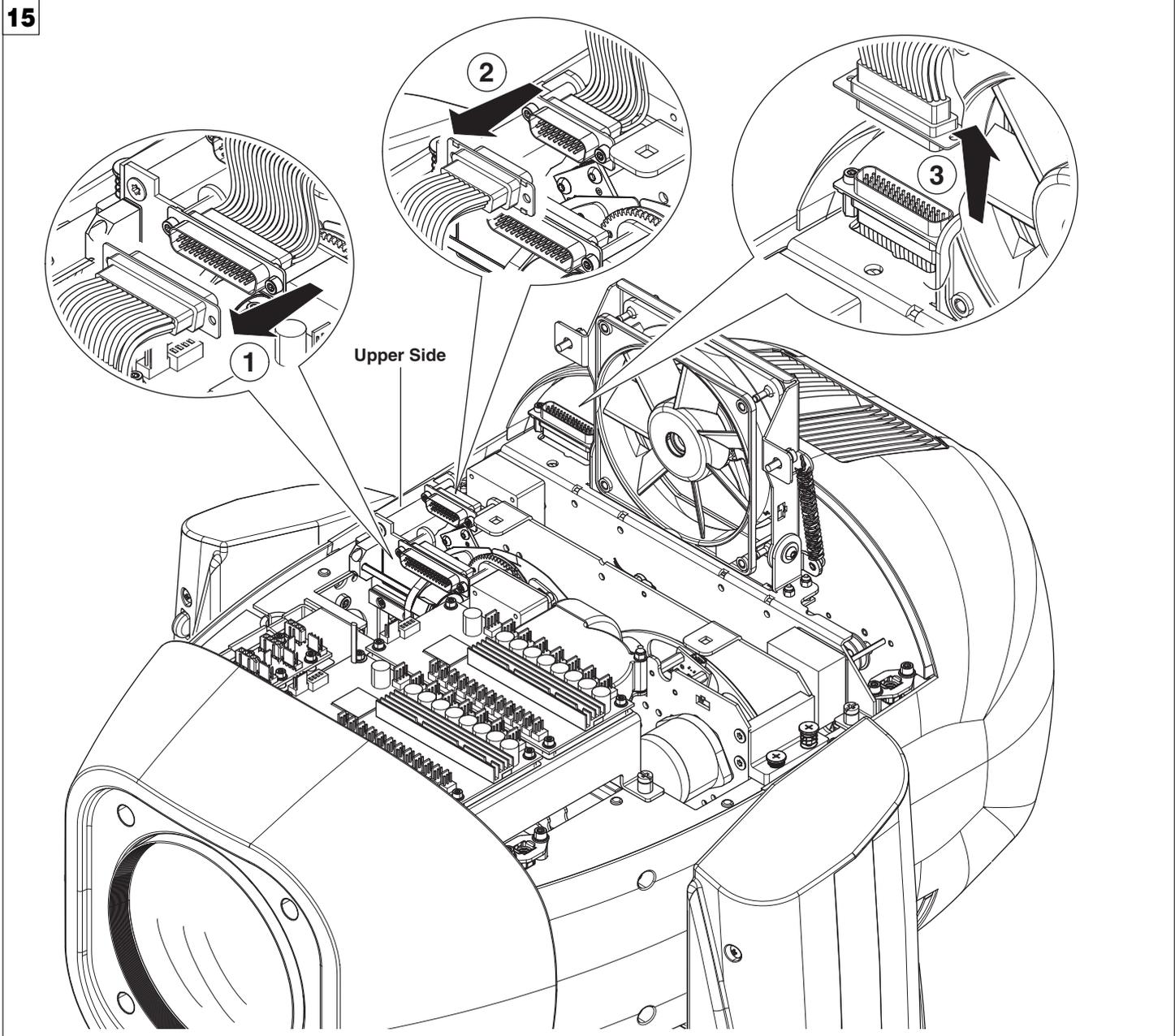


Cleaning of the filters - Fig. 13.

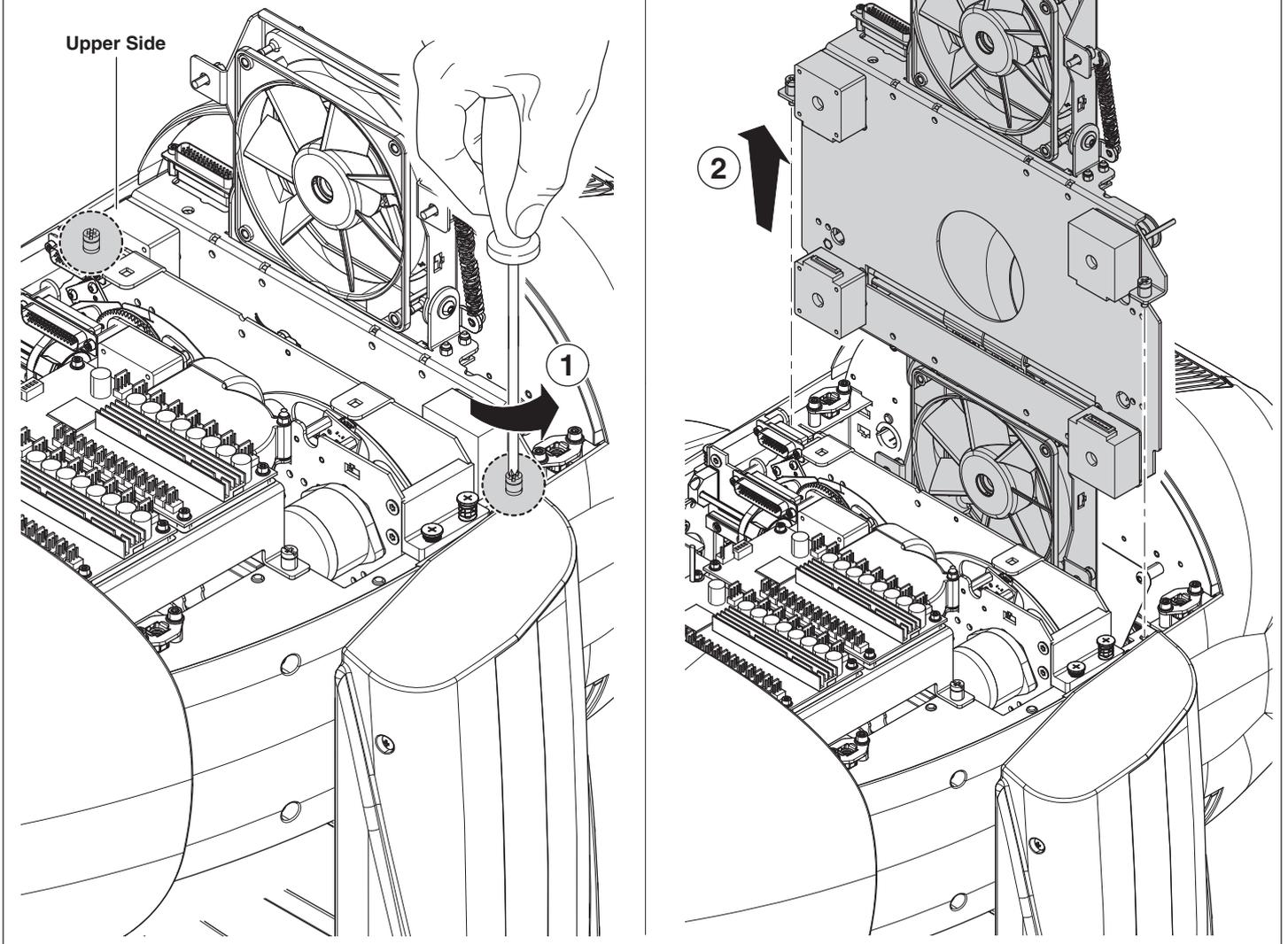
14



Extraction of the effect modules: Preliminary operations - Fig. 14.



Extraction of the effect modules: Preliminary operations - Fig. 15.



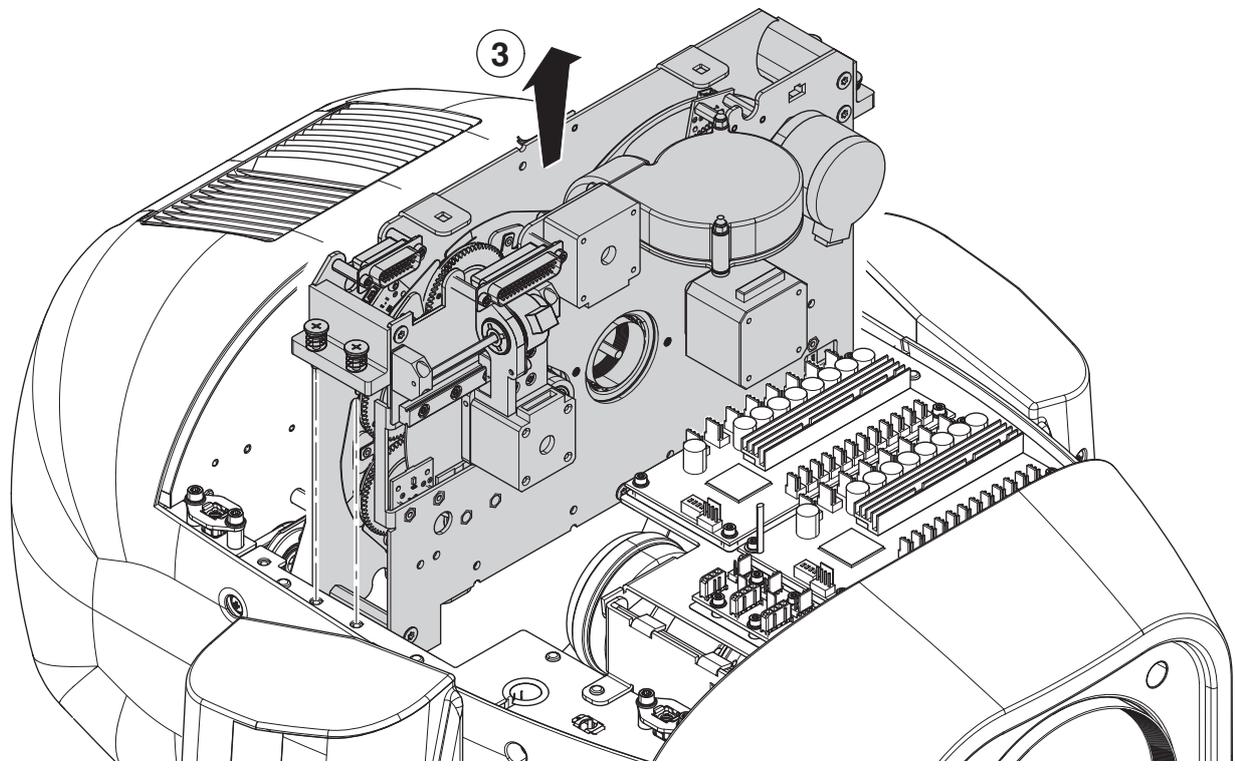
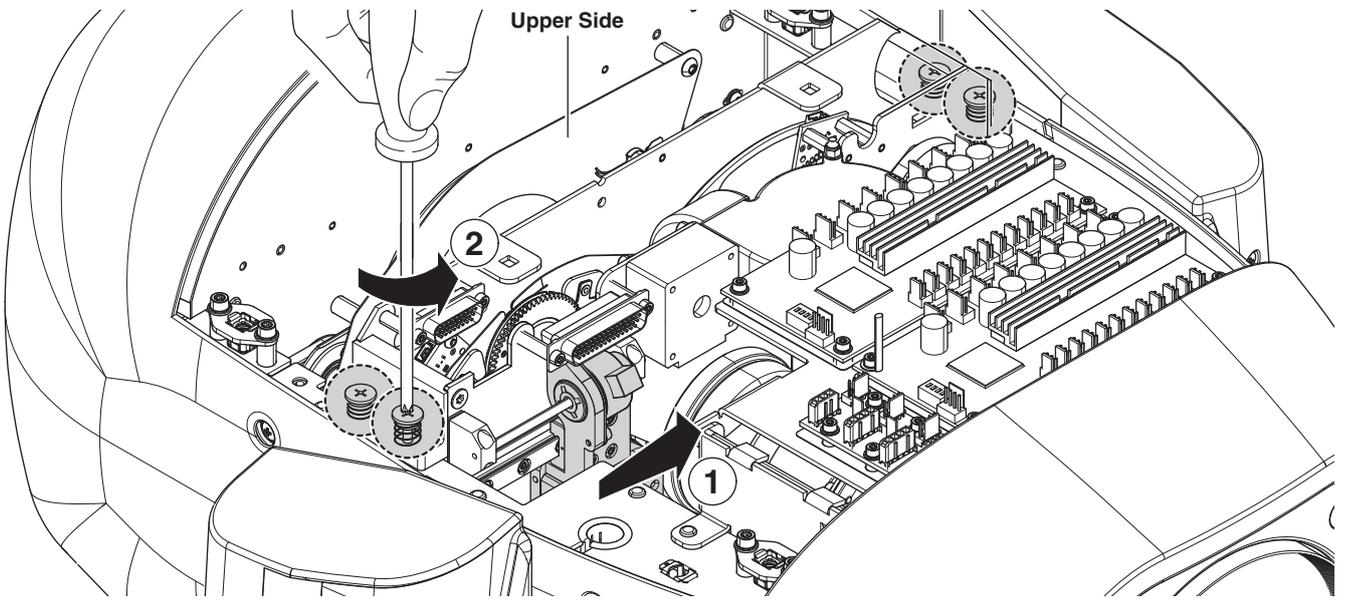
Extraction of the effect modules - Fig. 16.

IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.

Insertion of the effect modules: Repeat the operations indicated in Fig. 14, 15, 16, 17 and 18 in reverse order.

17

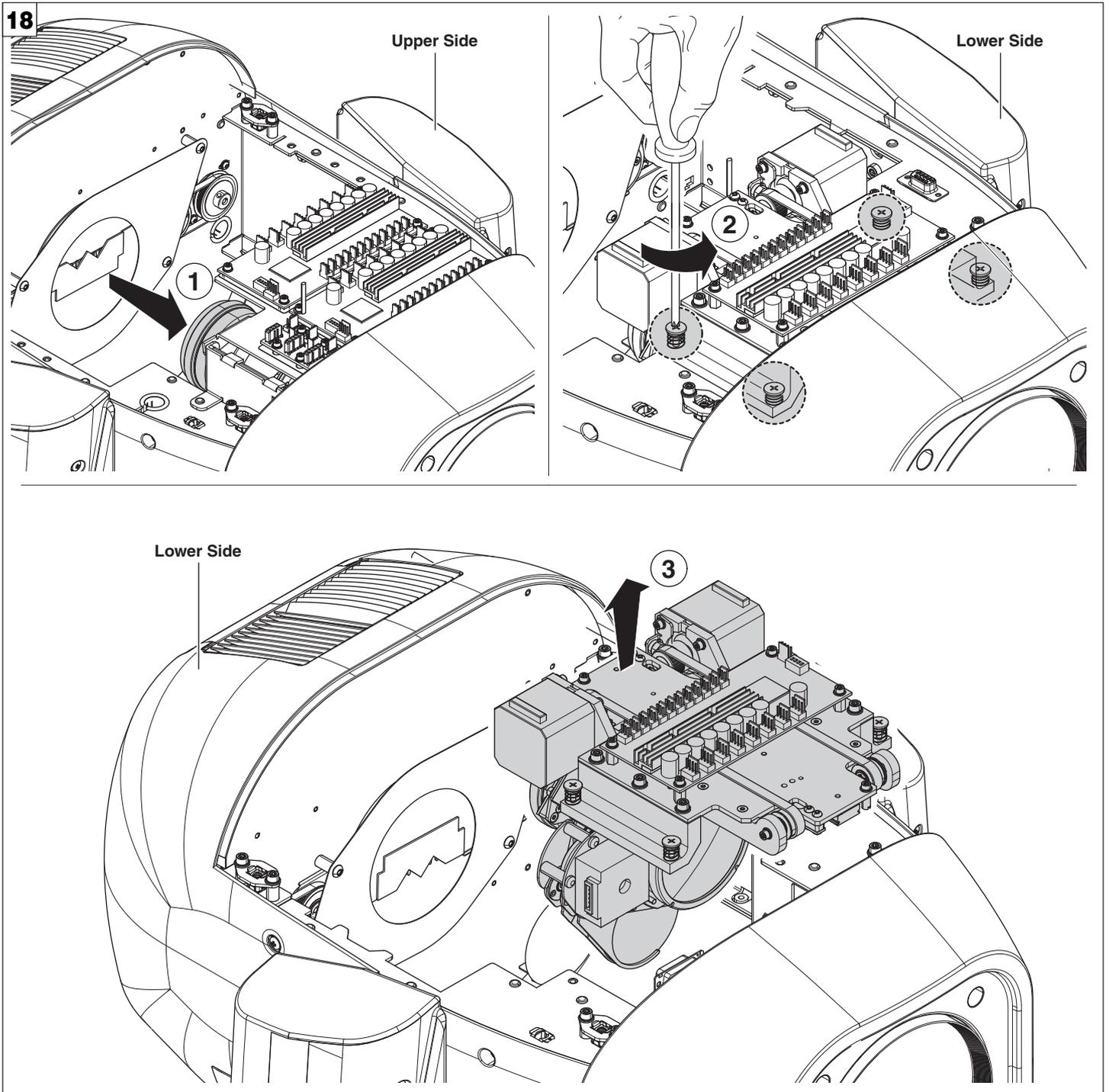
Upper Side



Extraction of the effect modules - Fig. 17.

IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.

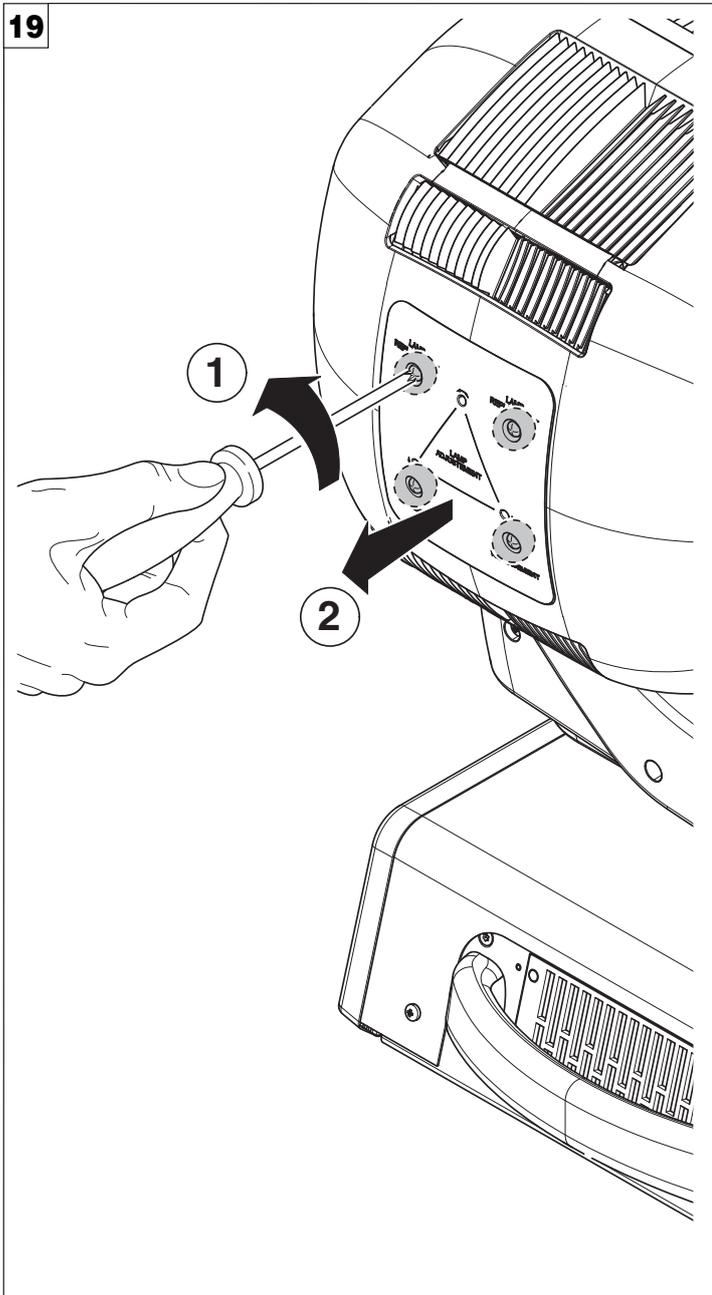
Insertion of the effect modules: Repeat the operations indicated in Fig. 14, 15, 16, 17 and 18 in reverse order.



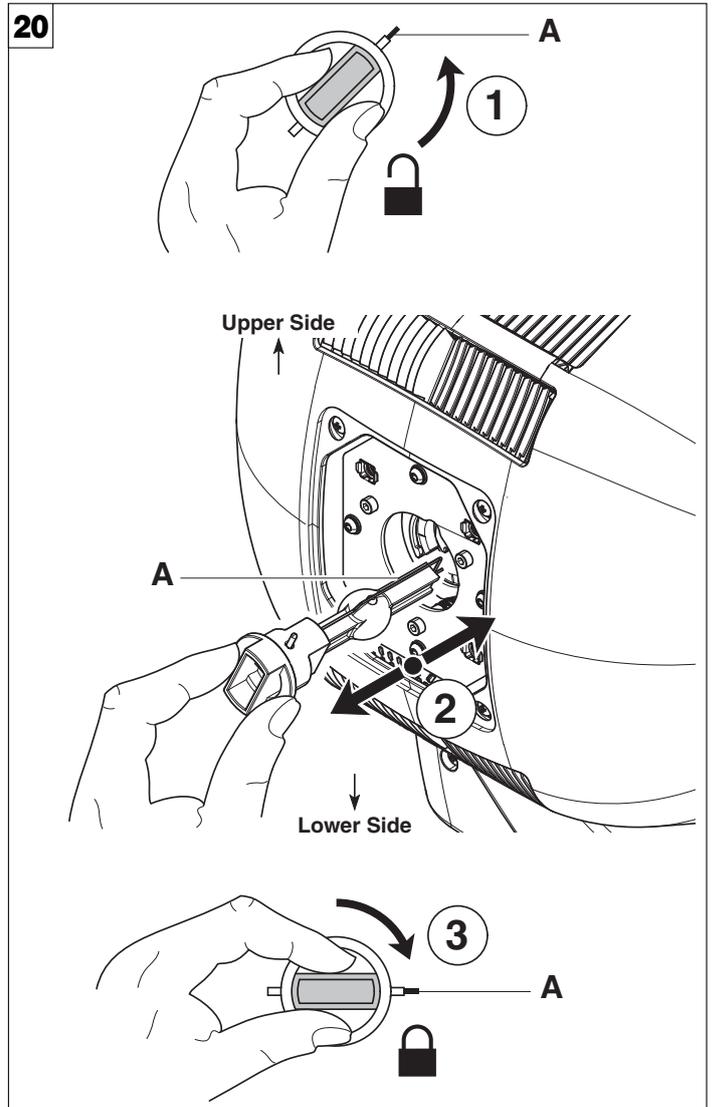
Extraction of the effect modules - Fig. 18.

IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.

Insertion of the effect modules: Repeat the operations indicated in Fig. 14, 15, 16, 17 and 18 in reverse order.



Opening and closing lamp compartment - Fig. 19



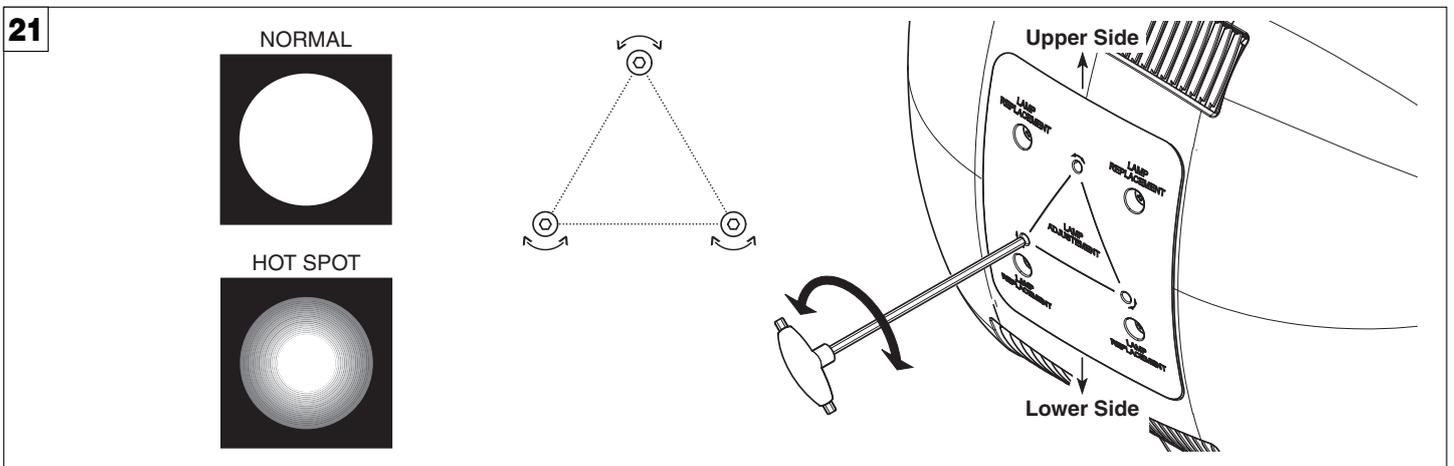
Lamp change - Fig 20

Take the new lamp out of its package and insert in the fitting.

WARNING: do not touch the lamp's envelope with bare hands. Should this happen, clean the bulb with a cloth soaked in alcohol and dry it with a clean, dry cloth.

IMPORTANT: Make sure the lamp is inserted with the external contact (A) facing the elliptical reflector's slot.

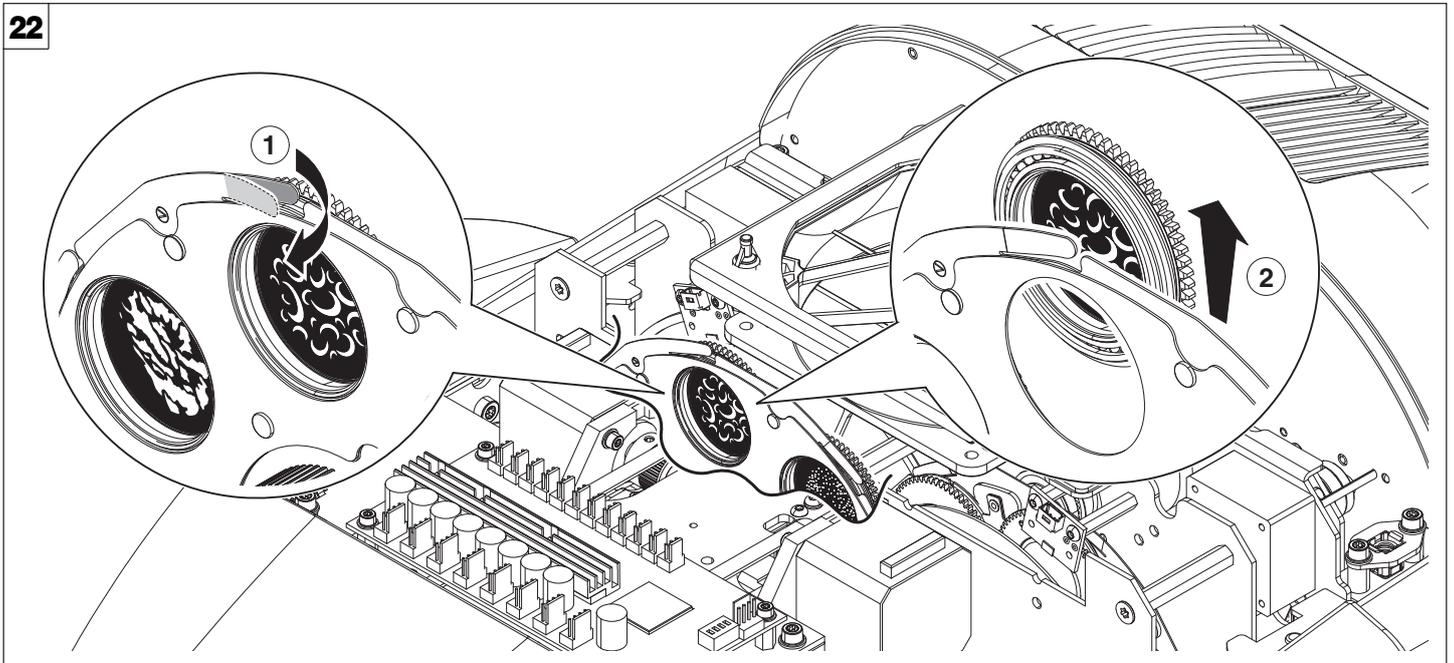
CAUTION: Fast lamp ON-OFF cycles (for example 10 minutes ON / 10 minutes OFF) will reduce the lamp life.



Lamp regulation - Fig. 21

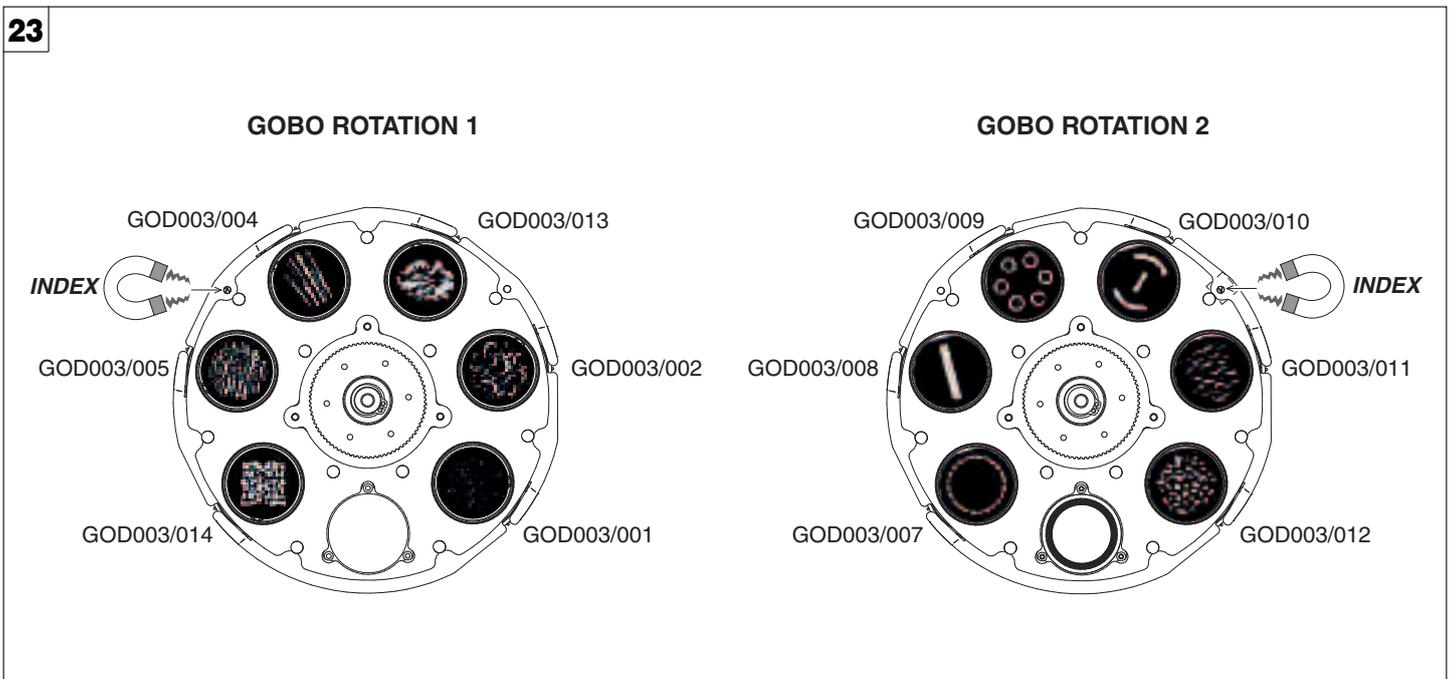
To centre the lamp, turn the three adjusting screws as shown in the figure.

22

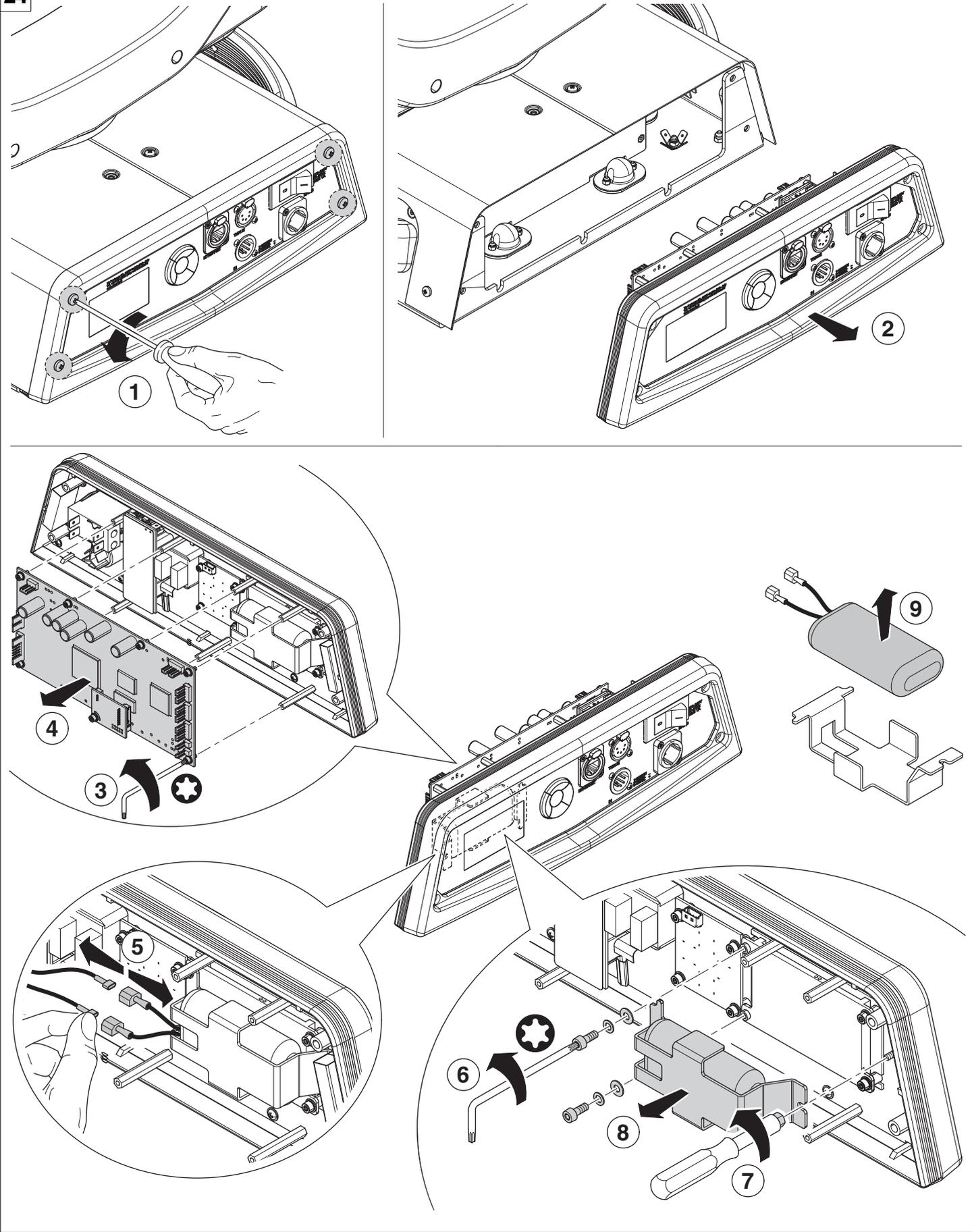


Bearing group replacement - Fig. 22

23

Replacing rotating gobos (\varnothing 32.8 mm - max 26 mm image – thickness 1.1 mm) - Fig. 23

- Before use custom gobos contact Clay Paky;
- The original gobos have a special coating designed specifically to resist to the high temperatures;
- The rotating gobo wheel only use dichroic glass gobos (it is not possible to use metal gobos);
- For more information contact Clay Paky;

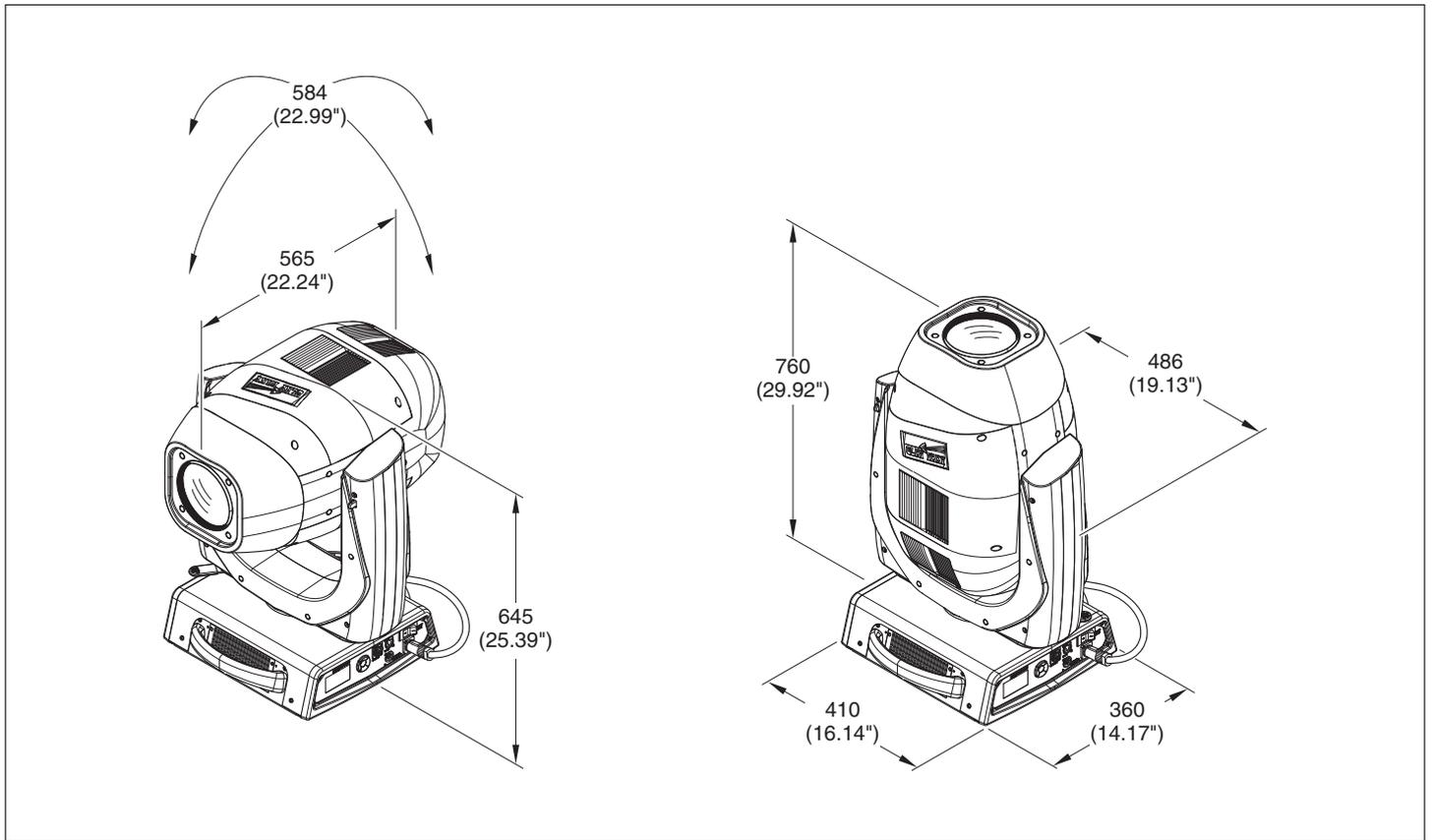


Battery removal - Fig. 24



This product contains a rechargeable lithium iron tetraphosphate battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

TECHNICAL INFORMATION



Power supplies

200/240V 50/60 Hz

Input power

1800 VA

Total lumen output

28.000lm @ 1200W mode –
31.000lm @ 1400W mode

Light source

- Lamp OSRAM Lok-it 1400-PS
- Color Temperature: 6.000 K
 - Life: 750 hrs
 - CRI 95
 - Luminous flux: 120000 lm
 - Base PGJ28 Lok-it!

Motors

23 stepper motors, operating with microsteps, totally microprocessor controlled

Channels

32 control channels – 36 Vector

Inputs

- DMX 512
- Ethernet

Moving body

Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.

Weight

38 Kg (83.6 lbs)

Dimensions

- (L x W x H): 410 x 442 x 760 mm
- (L x W x H): 16.14 x 17.4 x 29.92 inches

IP rating

- IP20
- Protected against the entry of solid bodies larger than 12mm (0.47").
- No protection against the entry of liquids.

Safety devices

- Bipolar circuit breaker with thermal protection.
- Automatic break in power supply in case of overheating or failed operation of cooling system.

Cooling

Forced ventilation with fans and heat sink.

Body

Aluminum and steel structure with plastic covers.

Working position

- Any Working Position
- Hanging system: with fast-lock omega clamps (1/4 turn) on the base.

Effects section:

- Very precise 0-100% dimmer
- CMY System + Linear CTO
- Fast stop/strobe effect
- N°1 Colour Wheel with 7 color filter
- N° 2 Wheels with 6+6 rotating gobo (image ø26 mm)
- N° 1 Graphics Wheel (Interchangeable with fixed gobo Wheel)
- N° 1 16 fast Iris (16 blades)
- N° 2 linear Frost (light and heavy)
- N° 1 Rotating Prism with 4 faces
- 8° - 50° Optical Zoom (Diameter front lens ø142 mm)

Control and programming:

- 32 or 36 DMX 512 control channels
- DMX protocol signal: USITT DMX 512
- Display: LCD 128 x 64 bit, backlit LED, white on black
- Pan and Tilt Resolution: 16 bit
- Focus Indexing Resolution: 16 bit
- Dimmer Resolution: 16 bit
- Rotation gobo Resolution: 16 bit
- Movement control: vectorial
- DMX signal connection: 5 pole XLR input and output
- Software upload through DMX input / Ethernet input

Electronics

- Long life self-charging buffer battery.
- Function reset from control unit
- ON/OFF lamp control from the lighting desk.
- Function reset from the lighting desk.
- "AUTOTEST" function from menu.
- ARTNET
- Electronic monitoring with status error.
- Cooling system monitoring.
- DMX level monitoring on all channels.
- Internal data transmission diagnostics.
- Firmware Upgrade with no power.
- Firmware upload from another fixture.

CAUSE AND SOLUTION OF PROBLEMS

THE PROJECTOR WILL NOT SWITCH ON			<i>PROBLEMS</i>
ELECTRONICS NON-OPERATIONAL			
DEFECTIVE PROJECTION			
REDUCED LUMINOSITY			
		<i>POSSIBLE CAUSES</i>	<i>CHECKS AND REMEDIES</i>
●		No mains supply.	Check the power supply voltage.
●	●	Lamp exhausted or defective.	Replace the lamp. (See instructions).
●		Signal transmission cable faulty or disconnected.	Replace the cables.
●		Incorrect addressing.	Check addresses (see instructions).
●		Fault in the electronic circuits.	Call an authorised technician.
	●	Lenses or reflector broken	Call an authorised technician.
	● ●	Dust or grease deposited.	Clean (see instructions).

CHANNEL FUNCTION

SCENIUS SPOT

NB: To prevent accidental breakage of the effects, which could collide with each other during transport, before switching the projector OFF check that all the projector Channels have been excluded (DMX level = 0 bit).

CHANNEL	CHANNEL MODE	
	STANDARD	VECTOR
1	CYAN WHEEL	CYAN WHEEL
2	MAGENTA WHEEL	MAGENTA WHEEL
3	YELLOW WHEEL	YELLOW WHEEL
4	CTO	CTO
5	COLOUR	COLOUR
6	STOPPER / STROBE	STOPPER / STROBE
7	DIMMER	DIMMER
8	DIMMER FINE	DIMMER FINE
9	IRIS	IRIS
10	ROTATING GOBO 1 CHANGE	ROTATING GOBO 1 CHANGE
11	GOBO 1 ROTATION	GOBO 1 ROTATION
12	FINE GOBO 1 ROTATION	FINE GOBO 1 ROTATION
13	ROTATING GOBO 2 CHANGE	ROTATING GOBO 2 CHANGE
14	GOBO 2 ROTATION	GOBO 2 ROTATION
15	FINE GOBO 2 ROTATION	FINE GOBO 2 ROTATION
16	ANIMATION DISK INSERTION or STATIC GOBO WHEEL	ANIMATION DISK INSERTION or STATIC GOBO WHEEL
17	ANIMATION DISK ROTATION	ANIMATION DISK ROTATION
18	PRISM INSERTION	PRISM INSERTION
19	PRISM ROTATION	PRISM ROTATION
20	FROST	FROST
21	FOCUS	FOCUS
22	FOCUS FINE	FOCUS FINE
23	ZOOM	ZOOM
24	MACRO ZOOM	MACRO ZOOM
25	AUTOFOCUS ADJUSTMENT	AUTOFOCUS ADJUSTMENT
26	PAN	PAN
27	FINE PAN	FINE PAN
28	TILT	TILT
29	FINE TILT	FINE TILT
30	FUNCTION	FUNCTION
31	RESET	RESET
32	LAMP CONTROL	LAMP CONTROL
33	-	PAN-TILT TIME
34	-	COLOUR TIME
35	-	BEAM TIME
36	-	ROTATING GOBO TIME

Channel Mode		DMX Value	Function
Standard	Vector		
1	1		CYAN COLOUR WHEEL
		0 - 255	Linear Cyan movement
2	2		MAGENTA COLOUR WHEEL
		0 - 255	Linear Magenta movement
3	3		YELLOW COLOUR WHEEL
		0 - 255	Linear Yellow movement
4	4		CTO COLOUR WHEEL
		0 - 255	Linear CTO movement
5	5		COLOUR
		0 - 15	Color 1 tbd
		16 - 31	Color 2 tbd
		32 - 47	Color 3 tbd
		48 - 63	Color 4 tbd
		64 - 79	Color 5 tbd
		80 - 95	Color 6 tbd
		96 - 111	Color 7 tbd
		112 - 127	Color 8 tbd
128 - 255	Continuous Colour Wheel rotation at linearly variable speed from slow (4.4 rph) to fast (160 rpm)		
6	6		STOPPER / STROBE
		0 - 3	Light OFF
		4 - 103	Strobe at linearly variable frequency from low (1 flash/sec) to high (12 flashes/sec)
		104 - 107	Light ON
		108 - 207	Pulsation at linearly variable speed from slow to fast
		208 - 212	Light ON
		213 - 225	Random Strobe at low frequency
		226 - 238	Random Strobe at medium frequency
		239 - 251	Random Strobe at high frequency
252 - 255	Light ON		
7	7		DIMMER
		0 - 255	Light output linearly increase from no-light to maximum brightness. Dimmer blades move from totally closed to totally open in xxx seconds at maximum speed.
8	8		DIMMER FINE
		0 - 255	Fine Dimmer positioning
9	9		IRIS
		0 - 131	Iris linearly open from minimum to maximum aperture
		132 - 171	Iris pulsation from slow to fast speed
		172 - 211	Iris pulsation from slow to fast speed with fast opening
		212 - 251	Iris pulsation from slow to fast speed with fast closing
252 - 255	Maximum aperture		

Channel Mode		DMX Value	Function
Standard	Vector		
10	10		ROTATING GOBO 1 CHANGE
		0 - 18	Empty position
		19 - 37	Gobo 1
		38 - 56	Gobo 2
		57 - 74	Gobo 3
		75 - 92	Gobo 4
		93 - 111	Gobo 5
		112 - 129	Gobo 6
		130 - 150	Gobo 1 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		151 - 171	Gobo 2 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		172 - 192	Gobo 3 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		193 - 213	Gobo 4 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		214 - 234	Gobo 5 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		235 - 255	Gobo 6 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
11	11		GOBO 1 ROTATION
		0 - 21	Gobo indexing: 0° to 90° range
		21 - 42	Gobo indexing: 90° to 180° range
		42 - 63	Gobo indexing: 180° to 270° range
		63 - 84	Gobo indexing: 270° to 360° range
		84 - 105	Gobo indexing: 360° to 450° range
		105 - 127	Gobo indexing: 450° to 540° range
		128 - 190	Continuous gobo rotation at linearly variable speed from fast (180 rpm) to slow (2.2 rph)
		191 - 192	Stop rotation
193 - 255	Continuous gobo rotation at linearly variable speed from slow (2.2 rph) to fast (180 rpm)		
12	12		FINE GOBO 1 ROTATION
		0 - 255	Fine Gobo Indexing
13	13		ROTATING GOBO 2 CHANGE
		0 - 18	Empty position
		19 - 37	Gobo 1
		38 - 56	Gobo 2
		57 - 74	Gobo 3
		75 - 92	Gobo 4
		93 - 111	Gobo 5
		112 - 129	Gobo 6
		130 - 150	Gobo 1 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		151 - 171	Gobo 2 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		172 - 192	Gobo 3 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		193 - 213	Gobo 4 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		214 - 234	Gobo 5 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
		235 - 255	Gobo 6 shakes at variable speed from slow (xx bpm) to fast (xx bpm)
14	14		GOBO 2 ROTATION
		0 - 21	Gobo indexing: 0° to 90° range
		21 - 42	Gobo indexing: 90° to 180° range
		42 - 63	Gobo indexing: 180° to 270° range
		63 - 84	Gobo indexing: 270° to 360° range
		84 - 105	Gobo indexing: 360° to 450° range
		105 - 127	Gobo indexing: 450° to 540° range
		128 - 190	Continuous gobo rotation at linearly variable speed from fast (180 rpm) to slow (2.2 rph)
		191 - 192	Stop rotation
193 - 255	Continuous gobo rotation at linearly variable speed from slow (2.2 rph) to fast (180 rpm)		

Channel Mode		DMX Value	Function
Standard	Vector		
15	15		FINE GOBO 2 ROTATION
		0 - 255	Fine Gobo Indexing
16	16		ANIMATION DISK INSERTION or STATIC GOBO WHEEL
		0 - 255	Linear Animation Disk Insertion
17	17		ANIMATION DISK ROTATION
		0 - 124	Continuous animation disk clockwise rotation at linearly variable speed from fast (180 rpm) to slow (4.4 rph)
		125 - 130	Stop rotation
		131 - 255	Continuous animation disk counter-clockwise rotation at linearly variable speed from slow (4.4 rph) to fast (180 rpm)
18	18		PRISM INSERTION
		0 - 127	Prism out
		128 - 255	Prism into the light beam
19	19		PRISMS ROTATION
		0 - 21	Prism indexing: 0° to 90° range
		21 - 42	Prism indexing: 90° to 180° range
		42 - 63	Prism indexing: 180° to 270° range
		63 - 84	Prism indexing: 270° to 360° range
		84 - 105	Prism indexing: 360° to 450° range
		105 - 127	Prism indexing: 450° to 540° range
		128 - 190	Continuous prism rotation at linearly variable speed from fast (80 rpm) to slow (3 rph)
		191 - 192	Stop rotation
193 - 255	Continuous prism rotation at linearly variable speed from slow (3 rph) to fast (80 rpm)		
20	20		FROST
		0 - 255	Frost moves linearly into the light beam Frost blades move from no-diffusion to maximum diffusion
21	21		FOCUS
		0 - 255	Focus moves linearly from far to near position
22	22		FOCUS FINE
		0 - 255	Fine Focus positioning
23	23		ZOOM
		0 - 255	Zoom linearly moves from narrow to wide beam
24	24		MACRO ZOOM
		0 - 6	Autofocus disabled
		7 - 255	Autofocus from 4mt. (bit 7) to 100mt. (bit 255)
25	25		AUTOFOCUS ADJUSTMENT
		0 - 127	Focus Fine
		128	Stop
		129 - 255	Focus Fine
26	26		PAN
		0 - 255	Pan movement/positioning from 0° to 540° <ul style="list-style-type: none"> • Fast Speed: xxx sec • Normal Speed: xxx sec
27	27		FINE PAN
		0 - 255	Fine Pan positioning
28	28		TILT
		0 - 255	Tilt movement/positioning from 0° to 268° <ul style="list-style-type: none"> • Fast Speed: xxx sec • Normal Speed: xxx sec

Channel Mode		DMX Value	Function
Standard	Vector		
29	29		FINE TILT
		0 - 255	Fine Tilt positioning
30	30		FUNCTION
		0 - 11	Unused range
		12 - 24	Fast Pan / Tilt speed (default)
		25 - 37	Normal Pan / Tilt speed
		38 - 50	Conventional Dimmer curve
		51 - 62	Linear Dimmer curve (default)
		63 - 75	CMY Full Range (default)
		76 - 87	CMY Limited range
		88 - 101	CMY shortcut ON (default)
		102 - 113	CMY shortcut OFF
		114 - 127	1500HPE like dimmer curve
		128 - 140	Standard Dimmer curve
		141 - 255	Unused range
	The functions are activated/selected passing through the unused levels range and staying in the necessary range for 5 seconds.		
31	31		RESET
		0 - 25	Unused range
		26 - 76	Zoom Reset Zoom Reset sequence is activated passing through the unused levels range and staying in this range for 5 seconds
		77 - 127	Pan / Tilt Reset Pan/Tilt Reset sequence passing through the unused levels range and staying in this range for 5 seconds.
	128 - 255	Complete Reset All-effects Reset sequence passing through the unused levels range and staying in this range for 5 seconds.	
32	32		LAMP CONTROL
		0 - 25	Unused range
		26 - 100	Lamp OFF Lamp switch-off passing through the unused levels range and staying in this range for 5 seconds.
	101 - 255	Lamp ON Lamp switch-on passing through the unused levels range and staying in this range for 5 seconds.	
-	33		PAN-TILT TIME
		0 - 255	Pan - Fine Pan - Tilt - Fine Tilt tbd
-	34		COLOUR TIME
		0 - 255	Cyan - Magenta – Yellow tbd
-	35		BEAM TIME
		0 - 255	Dimmer - Frost - Prism – Focus – Zoom tbd
-	36		GOBO TIME
		0 - 255	Rotating Gobo tbd

TIME TABLE

BIT	Seconds
0	Full
1	0.2
2	0.4
3	0.6
4	0.8
5	1
6	1.2
7	1.4
8	1.6
9	1.8
10	2
11	2.2
12	2.4
13	2.6
14	2.8
15	3
16	3.2
17	3.4
18	3.6
19	3.8
20	4
21	4.2
22	4.4
23	4.6
24	4.8
25	5
26	5.2
27	5.4
28	5.6
29	5.8
30	6
31	6.2
32	6.4
33	6.6
34	6.8
35	7
36	7.2
37	7.4
38	7.6
39	7.8
40	8
41	8.2
42	8.4

BIT	Seconds
43	8.6
44	8.8
45	9
46	9.2
47	9.4
48	9.6
49	9.8
50	10
51	10.2
52	10.4
53	10.6
54	11
55	12
56	13
57	14
58	15
59	16
60	17
61	18
62	19
63	20
64	21
65	22
66	23
67	24
68	25
69	26
70	27
71	28
72	29
73	30
74	31
75	32
76	33
77	34
78	35
79	36
80	37
81	38
82	39
83	40
84	41
85	42

BIT	Seconds
86	24
87	25
88	26
89	27
90	28
91	29
92	30
93	31
94	32
95	33
96	34
97	35
98	36
99	37
100	38
101	39
102	40
103	41
104	42
105	43
106	44
107	45
108	46
109	47
110	48
111	49
112	50
113	51
114	52
115	53
116	54
117	55
118	56
119	57
120	58
121	59
122	60
123	61
124	62
125	63
126	64
127	65
128	66

BIT	Seconds
129	41
130	42
131	43
132	44
133	45
134	46
135	47
136	48
137	49
138	50
139	51
140	52
141	53
142	54
143	55
144	56
145	57
146	58
147	59
148	60
149	61
150	62
151	63
152	64
153	65
154	66
155	67
156	68
157	69
158	70
159	71
160	72
161	73
162	74
163	75
164	76
165	77
166	78
167	79
168	80
169	81
170	82
171	83

BIT	Seconds
172	58
173	59
174	60
175	61
176	62
177	63
178	64
179	65
180	66
181	67
182	68
183	69
184	70
185	71
186	72
187	73
188	74
189	75
190	76
191	77
192	78
193	79
194	80
195	81
196	82
197	83
198	84
199	85
200	86
201	87
202	88
203	89
204	90
205	91
206	92
207	93
208	94
209	95
210	96
211	97
212	98
213	99
214	100
215	101

BIT	Seconds
216	170
217	180
218	190
219	200
220	210
221	220
222	230
223	240
224	250
225	260
226	270
227	280
228	290
229	300
230	310
231	320
232	330
233	340
234	350
235	360
236	370
237	380
238	390
239	400
240	410
241	420
242	430
243	440
244	450
245	460
246	470
247	480
248	490
249	500
250	510
251	520
252	530
253	540
254	550
255	Follow cue Data