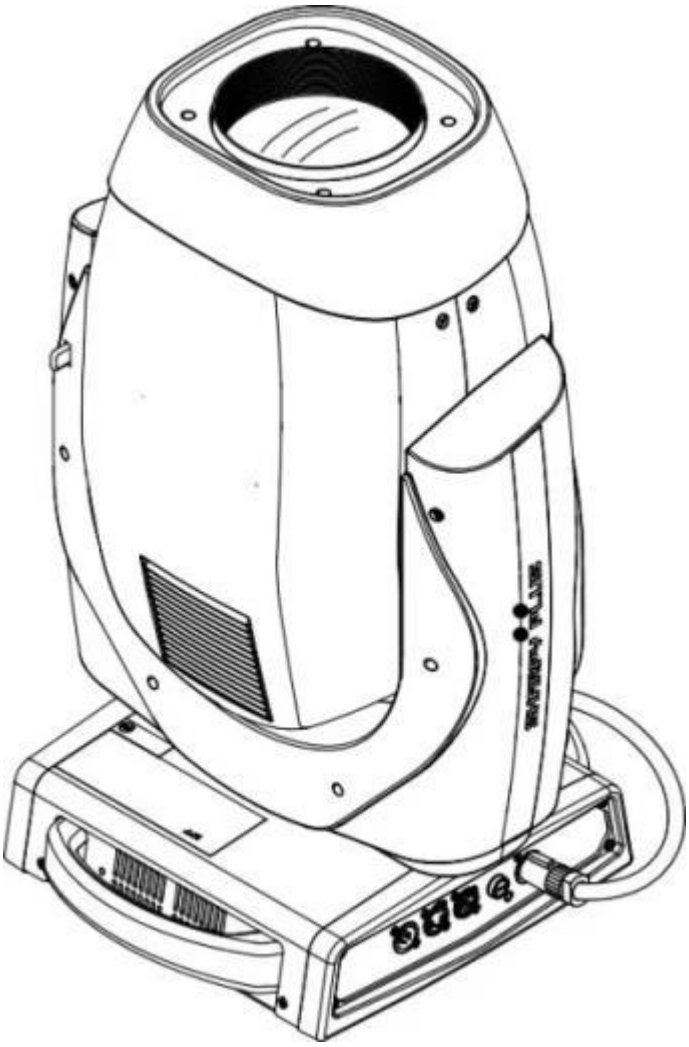
SHARPY PLUS

INSTRUCTION MANUAL

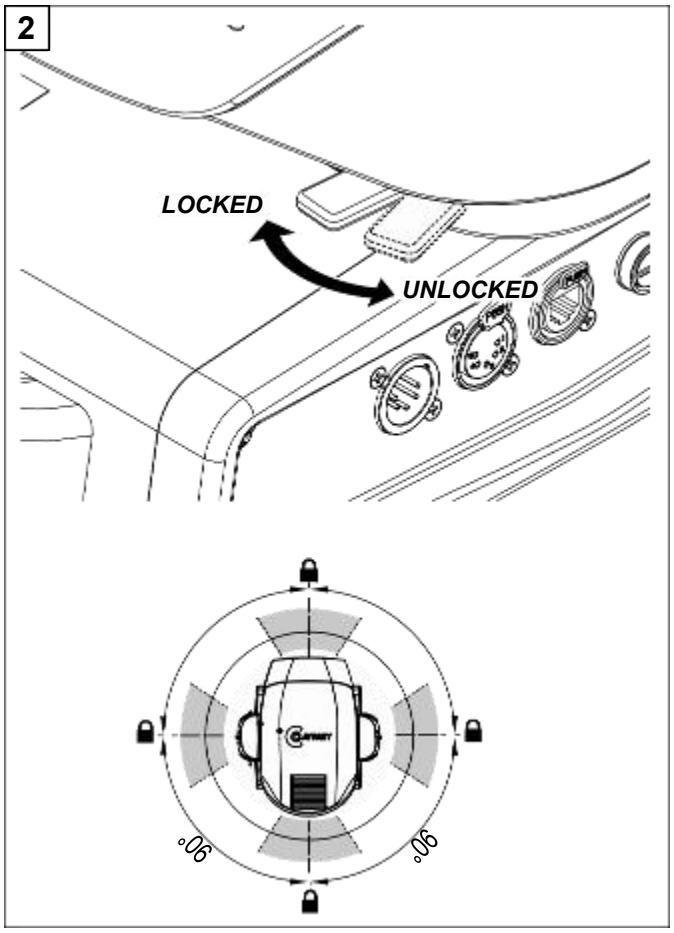


1. UNPACKING AND PREPARATION

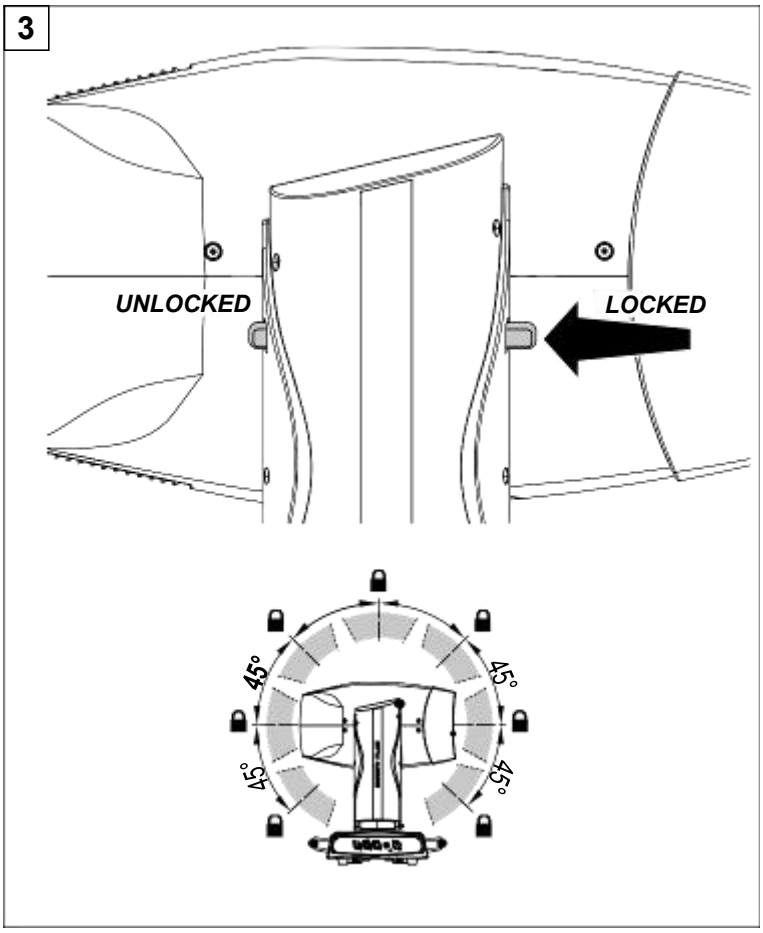
1

Packing contents - Fig. 1

2



3

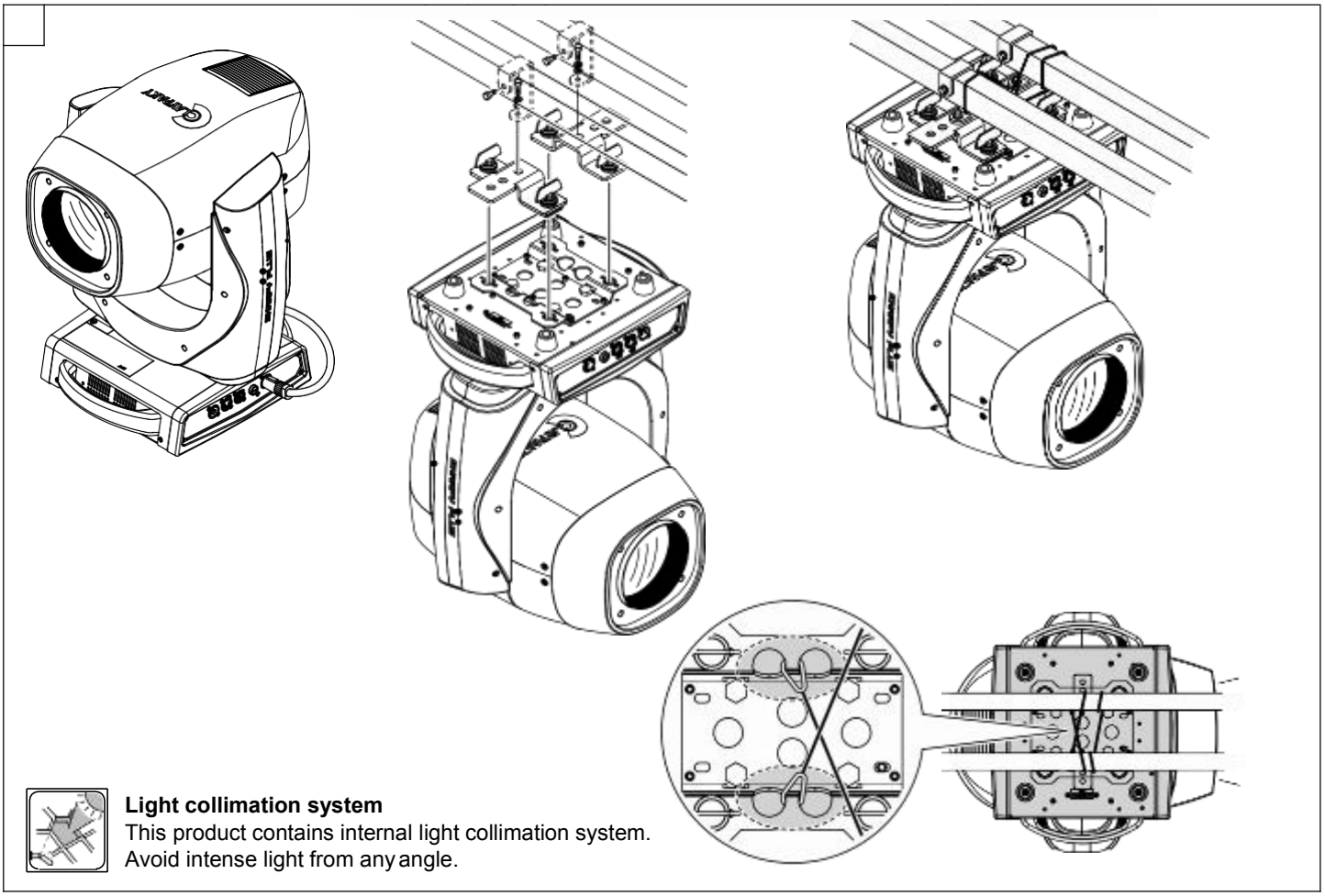


PAN Mechanism Lock and Release (every 90°) - Fig. 2

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

2. INSTALLATION AND START-UP

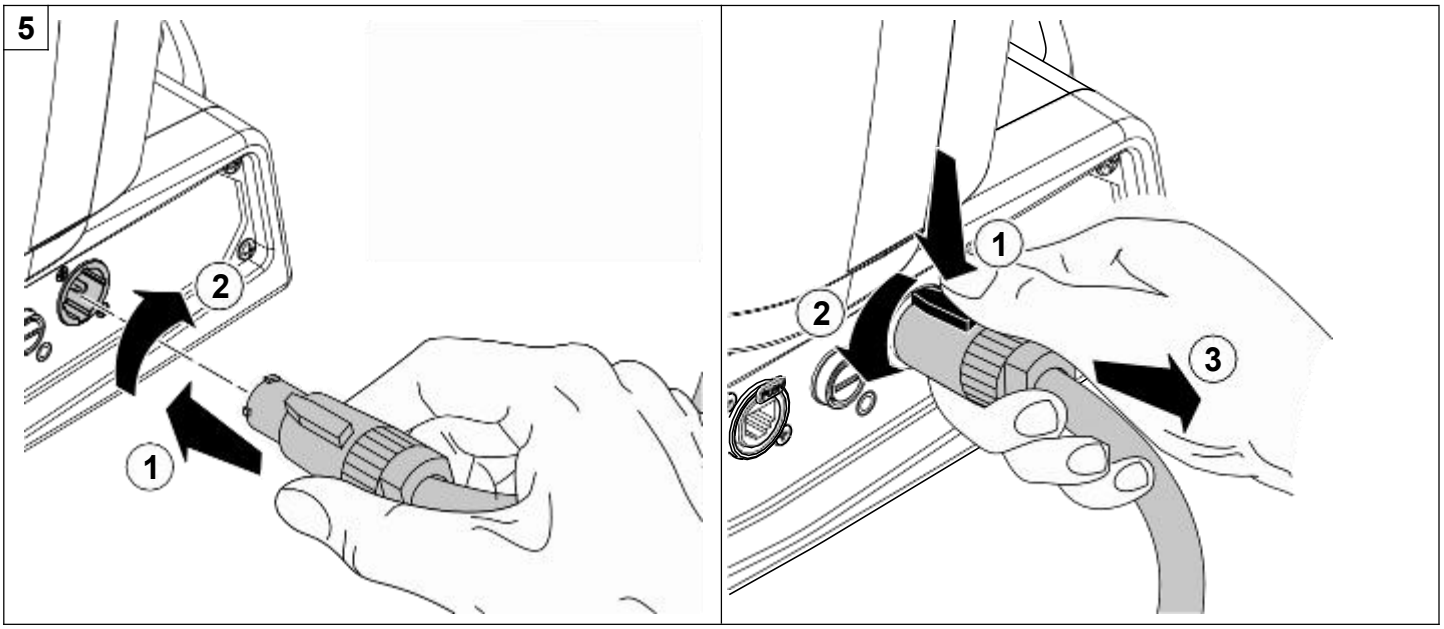
2.1 Installing the fixture



Light collimation system
This product contains internal light collimation system.
Avoid intense light from any angle.

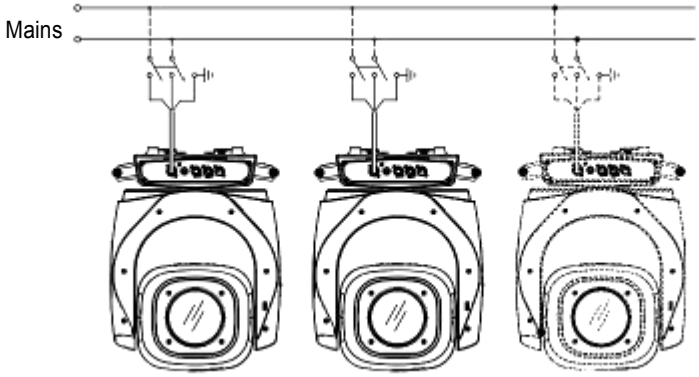
Installing the projector - Fig. 4
The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.
WARNING: ***with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). 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.***

2.2 Connecting to manis supply



Connecting and disconnecting power cable - Fig. 5

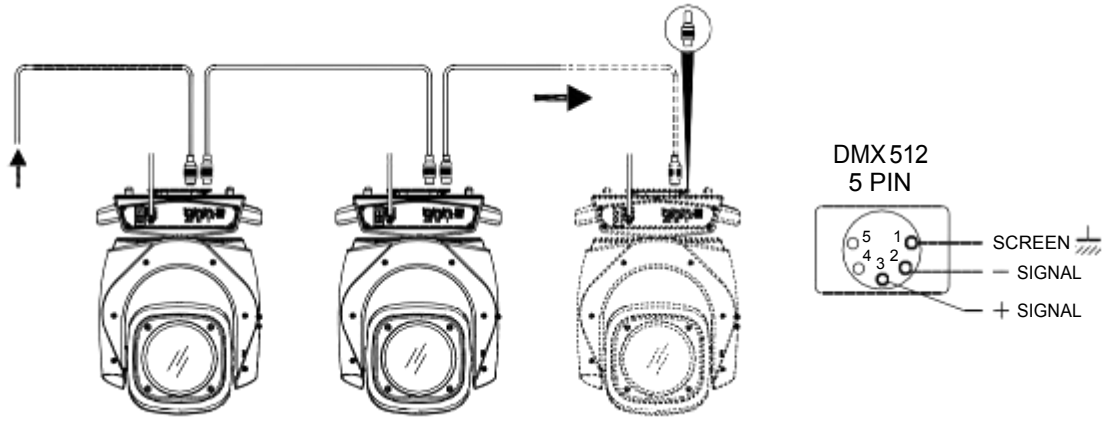
6



Connecting to the mains supply - Fig. 6

2.3 Connecting the control signal line: DMX / Art-Net

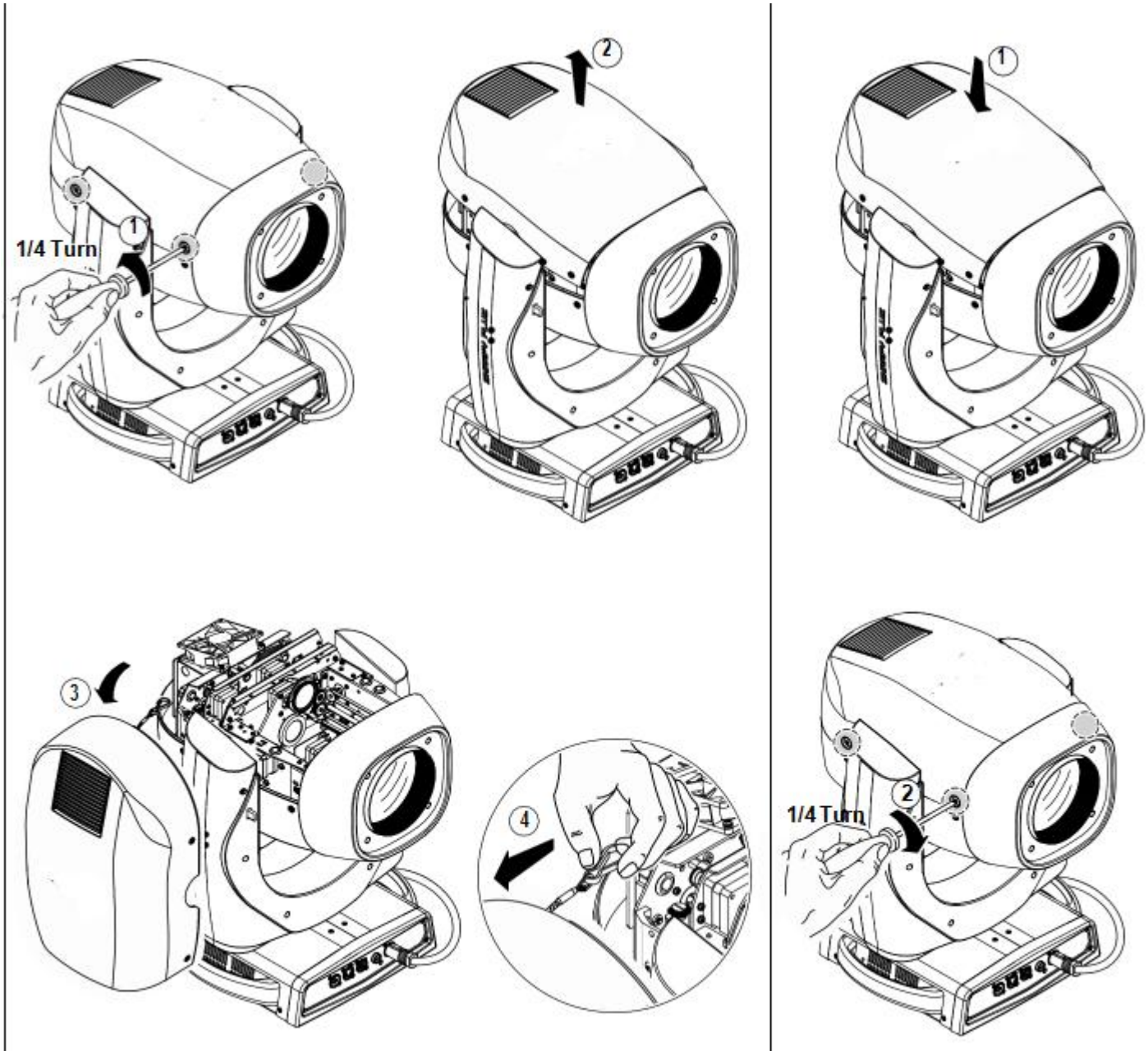
7



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.

3. MAINTENANCE

3.1 Opening the covers



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.

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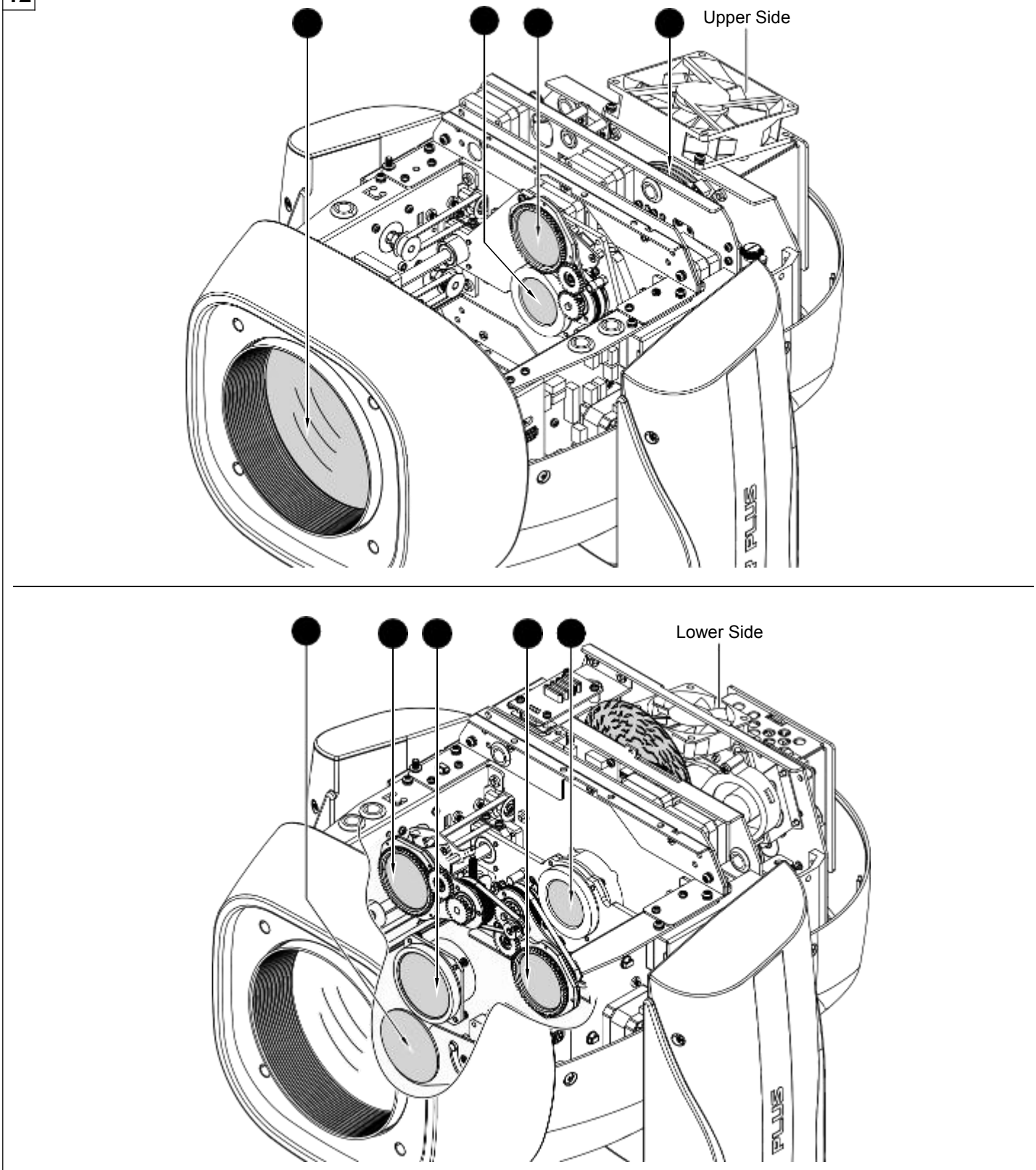
3.2 Periodical cleaning

12



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.).

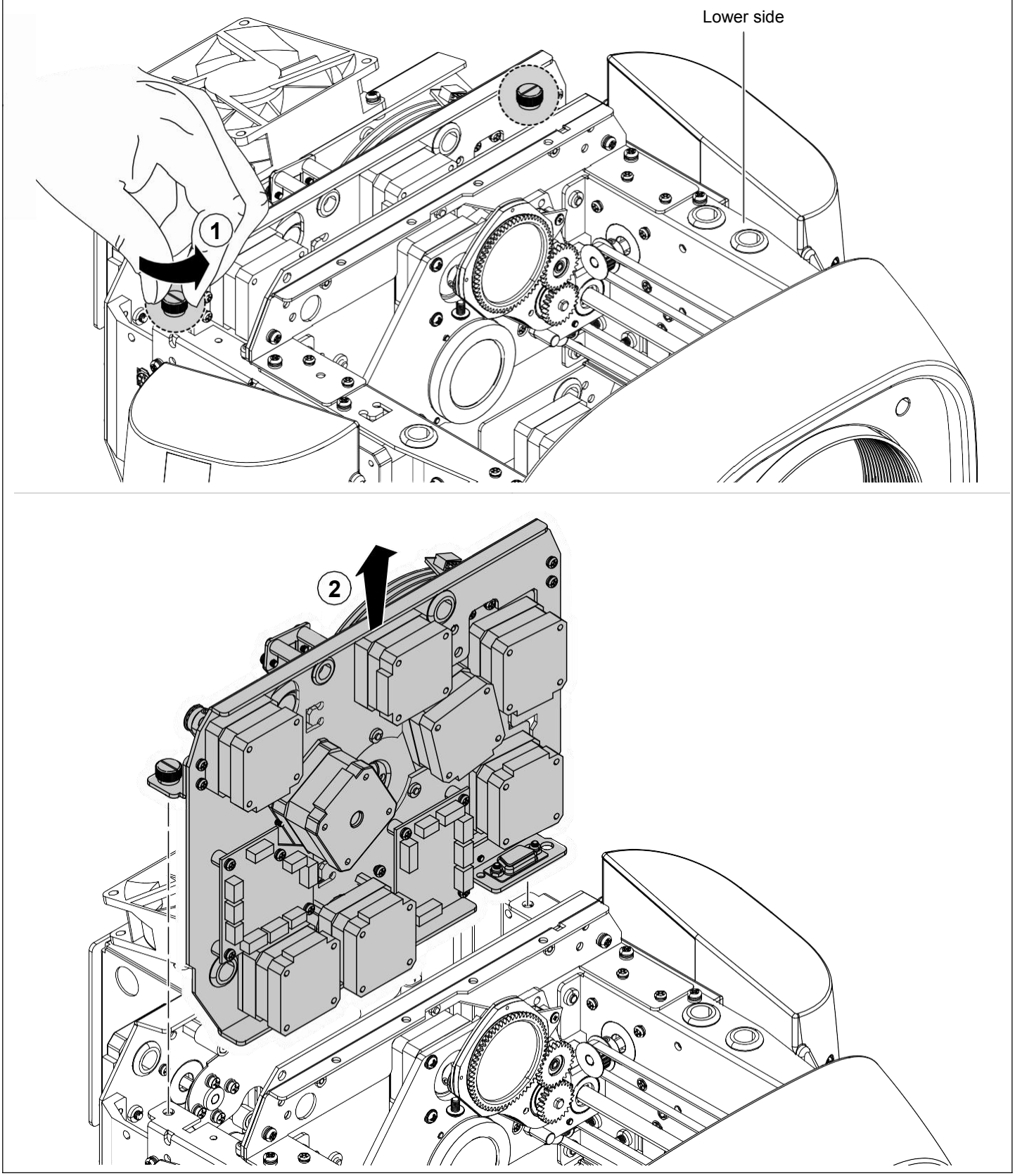
Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors, from the lenses and filters. It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:

- General cleaning of internal parts.
- Restoring lubrication of all parts subject to friction, using lubricants specifically supplied by Claypaky.
- 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.

3.3 Effects module removal

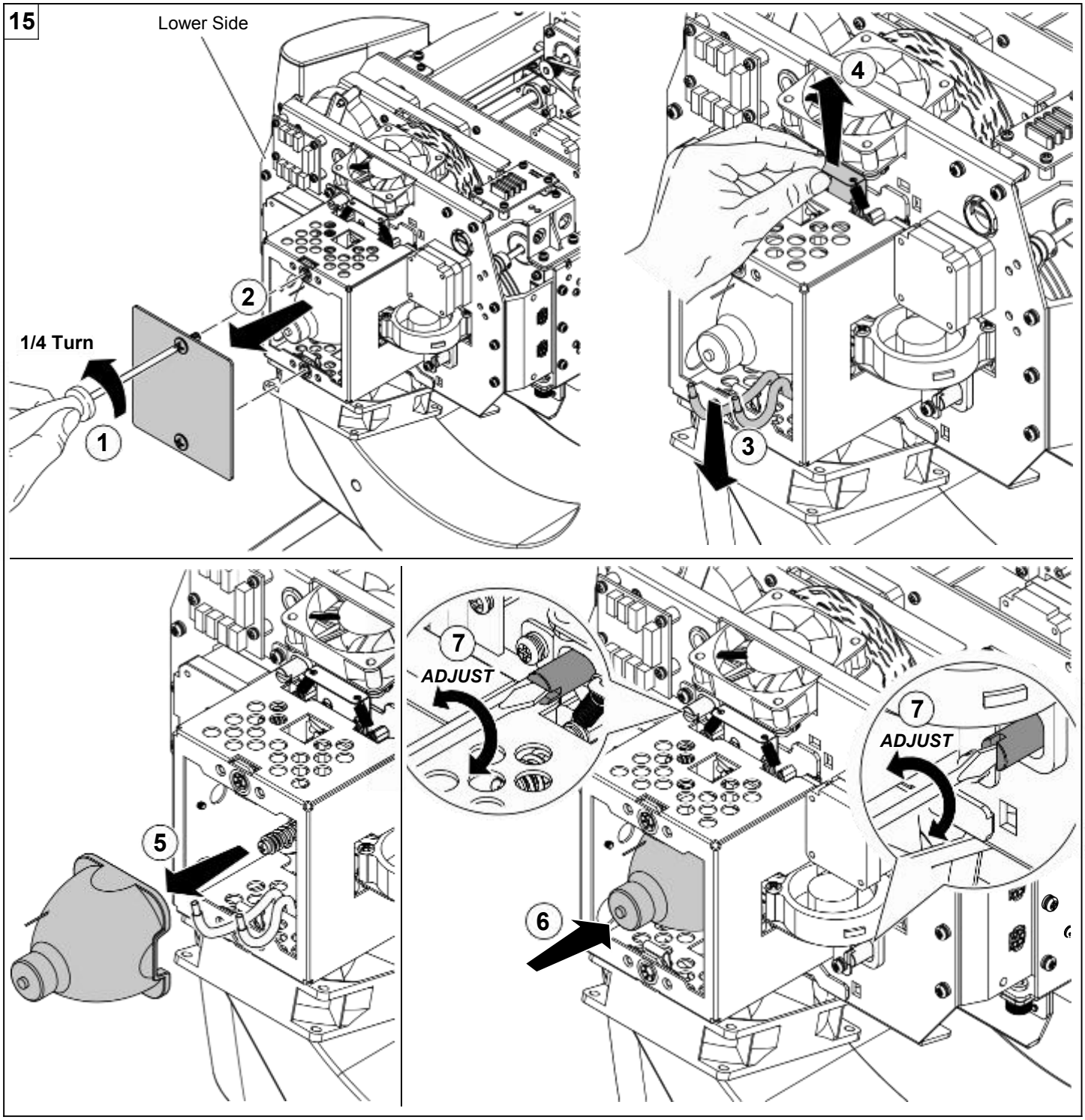
13



Extraction of the effect modules - Fig. 13.
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. 13, 14 and 15 in reverse order.

NOTE:
- Do not disconnect wiring harnesses when the fixtures is switched-on, to avoid to damage electronic boards.
- Do not switch-on the fixtures with wiring harness disconnected.

Continue ➔



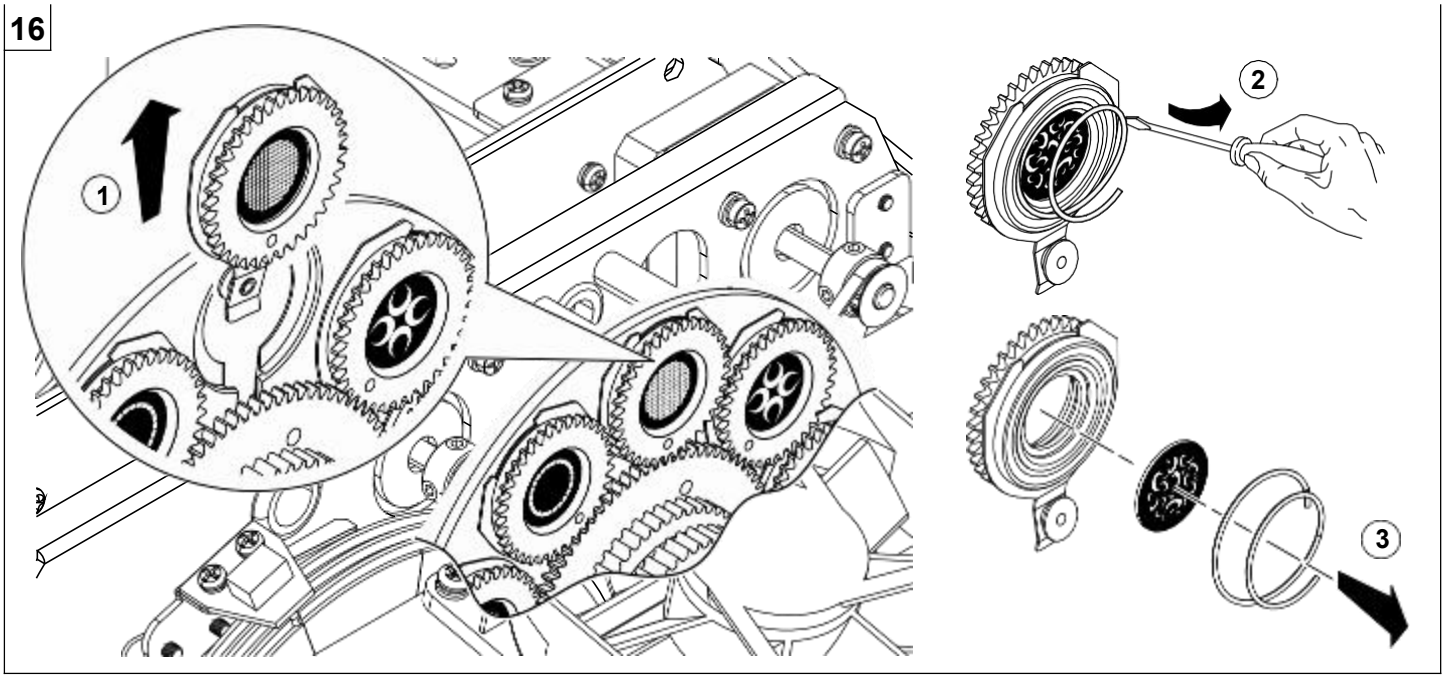
Lamp change - Fig 15.
Take the new lamp out of its package and insert in the fitting.
WARNING: ***do not touch the lamp's envelope with bare hands. Should this happen, clean the bulb with a cloth soaked in alcohol and dry it with a clean, dry cloth.***

Lamp regulation
To centre the lamp, turn the adjusting screw as shown in the figure.
WARNING: ***The lamp must be adjusted with the projector switched off. After adjusting, close the effects covers, switch on the projector and check that the adjustment has been correctly made. If necessary, switch off the projector, remove the effects covers and repeat lamp adjustment.***
REMARK:
- **Lifetime of the lamp will be influenced by the switching cycle.**
- **After a successful starting, attempt to keep the lamp burning for at least 15 minutes in order to complete the chemical cycle of the lamp to secure the lifetime.**
- **After switching-off the lamp wait at least 2 minutes before switching-on it again.**

Continue ➔

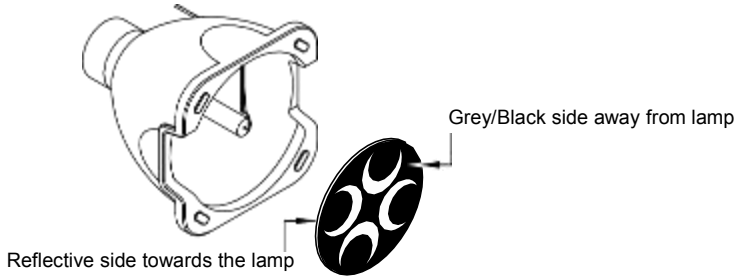
4.5 - Rotating gobos

16



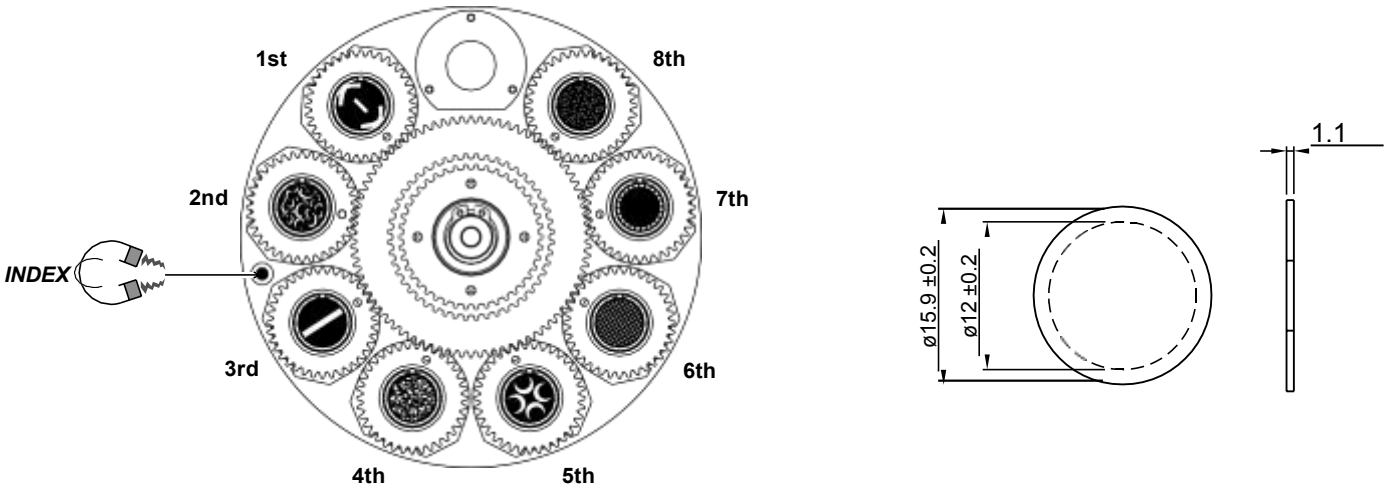
Bearing group replacement - Fig. 16

17 **COATED GLASS GOBOS**



Gobo orientation - Fig. 17
The pictures shown the correct gobos orientation.

18 **ROTATING GOBO**



Replacing rotating gobos - Fig. 18
- **Before use custom gobos contact US;**
- **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 US**

5. SPECIFICATIONS

POWER SUPPLIES
AC power input 100-240V, 50/60 Hz

INPUT POWER
470 VA @230Vac - 50Hz

LIGHT SOURCE
Source: 371W HRI Sirius Osram arc lamp(optional USHIO 390W lamp

MOTORS
Stepper motors, operating with micro-steps, totally microprocessor controlled

CHANNELS
31 control channels

INPUTS
DMX 512 – Art-Net

IP RATING
IP 20 - Protected against the entry of solid bodies larger than 12mm (0.47"); No protection against the entry of liquids.

SAFETY SPECIFICATIONS
Minimum distance of illuminated objects 8 meters
Minimum distance from flammable materials 0.2 meters
Max ambient temperature 40°C (104°F)
Max temperature of the external surface 90°C (194°F)
Automatic break in power supply in case of overheating
Forced ventilation with axial fans

ELECTRONICS
Long life self-charging buffer battery
Function reset from the lighting desk
"AUTOTEST" function from menu
Electronic monitoring with status error
Cooling system monitoring
DMX level monitoring on all channels
Internal data transmission diagnostics
Firmware Upgrade via Web Server
Firmware upload from another fixture
Protocols/Functions: RDM, Web Server

OPTICS
Zoom 3°- 36°, Linear and motorized

EFFECTS SECTION
Six beam reducers (down to 0.5°)
CMY color mixing
15 colors on 3 wheels
2 CTO filters
Rotating Gobo Wheel: 8 interchangeable glass gobos
Static Gobo Wheel: 18 fixed gobos
Rotating 4-facet prism on dedicated channel
Rotating 8-facet prism on dedicated channel
Dynamic Animation disc
Linear soft edge frost filter
Dimmer and stop/strobe
Dense, Sharp, Parallel Light Beams
Extremely quick movements
Excellent visual effect projections
Wide and sharp aerial effects

CONTROL AND PROGRAMMING
DMX 512 control channels
Control signal USITT DMX 512
Protocols RDM, WebServer and Art-Net
Display Graphic LCD backlit b/w Display
Display battery Long life self-charging buffer battery
Pan/Tilt Resolution 16 bit
Focus Resolution 16 bit
Gobo Resolution 16 bit
Dimmer Resolution 16 bit
DMX signal connection 5 pole XLR input and output
Ethernet Input
Firmware update Software upload through Ethernet input

BODY
Aluminum and steel structure with plastic covers
Two side handles for transportation Device locking PAN and TILT mechanisms for transportation and maintenance

MOVING BODY
PAN range 540°
TILT range 270°

WORKING POSITION
Working in any position Hanging system: with fast-lock omega clamps (1/4 turn) on the base

CE MARKING
In conformity with the European Directives:
- 2014/35/EU - Safety of electrical equipment supplied at low voltage (LVD)
- 2014/30/EU - 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)

WEIGHT & DIMENSIONS
23.0 Kg

Sharpy Plus

DMX Channels

Number	*Function*
1	CYAN
2	MAGENTA
3	YELLOW
4	COLOUR WHEEL 1
5	COLOUR WHEEL 2
6	COLOUR WHEEL 3
7	STOPPER / STROBE
8	DIMMER
9	DIMMER FINE
10	STATIC GOBO CHANGE
11	ANIMATION DISK INSERTION
12	ANIMATION DISK ROTATION
13	ROTATING GOBO SELECT
14	GOBO ROTATION
15	GOBO ROTATION FINE
16	4 FACET PRISMS INSERTION
17	PRISMS ROTATION
18	8 FACET PRISMS INSERTION
19	PRISMS ROTATION
20	FROST
21	ZOOM
22	FOCUS
23	FOCUS FINE
24	BEAM MODE
25	PAN
26	PAN FINE
27	TILT
28	TILT FINE
29	FUNCTION
30	RESET
31	LAMP CONTROL

Sharpy Plus

DMX Channels

Number	*DMX Value*	*Function parameter*
1		**CYAN**
	000 - 255	Linear Cyan movement
2		**MAGENTA**
	000 - 255	Linear Magenta movement
3		**YELLOW**
	000 - 255	Linear Yellow movement
4		**COLOUR WHEEL 1**
	000 - 023	Empty position
	024 - 046	Empty + UV filter
	047 - 069	UV filter
	070 - 092	UV filter + Lavender
	093 - 115	Lavender
	116 - 139	Lavender + CT0 3200K
	140 - 162	CT0 3200K
	163 - 185	CT0 3200K + CT0 2500K
	186 - 208	CT0 2500K
	209 - 231	CT0 2500K + Blue Wood
	232 - 255	Blue Wood
5		**COLOUR WHEEL 2**
	000 - 023	Empty position
	024 - 046	Empty + Dark Green
	047 - 069	Dark Green
	070 - 092	Dark Green + CTB
	093 - 115	CTB
	116 - 139	CTB + Dark Blue
	140 - 162	Dark Blue
	163 - 185	Dark Blue + H.M. Green
	186 - 208	H.M. Green
	209 - 231	H.M. Green + Dark Red
	232 - 255	Dark Red

Sharpy Plus

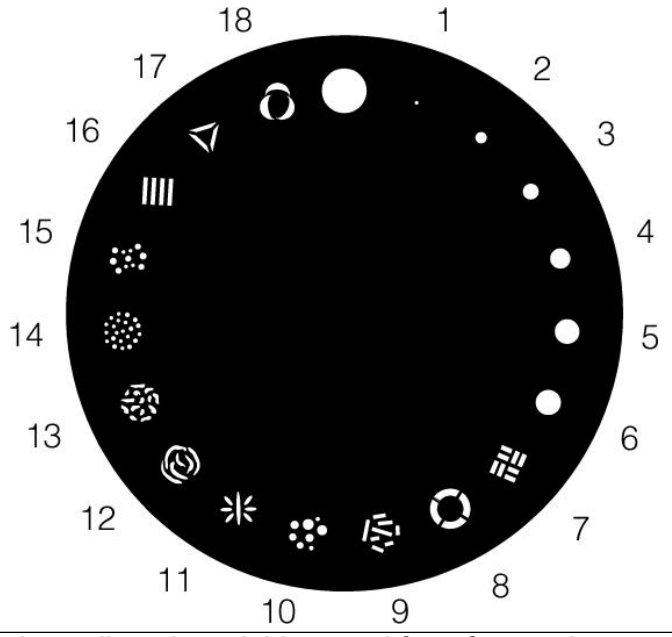
DMX Channels

Number	*DMX Value*	*Function parameter*
6		**COLOUR WHEEL 3**
	000 - 023	Empty position
	024 - 046	Empty + Light Green
	047 - 069	Light Green
	070 - 092	Light Green + Pink
	093 - 115	Pink
	116 - 139	Pink + Aquamarine
	140 - 162	Aquamarine
	163 - 185	Aquamarine + Dark Orange
	186 - 208	Dark Orange
	209 - 231	Dark Orange + Light Orange
	232 - 255	Light Orange
7		**STOP / STROBE**
	000 - 003	Light OFF
	004 - 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 (0.5 flash/sec) to fast (12 flashes/sec)
	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
8		**DIMMER**
	000 - 255	Light output linearly increase from no-light to maximum brightness
9		**DIMMER FINE**
	000 - 255	Fine Dimmer positioning

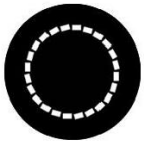
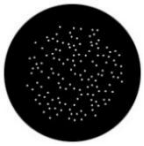
Sharpy Plus

DMX Channels

Number	DMX Value	Function parameter
10		**STATIC GOBO CHANGE**
	000 - 003	Empty position
	004 - 007	Gobo 1
	008 - 011	Gobo 2
	012 - 014	Gobo 3
	015 - 018	Gobo 4
	019 - 022	Gobo 5
	023 - 026	Gobo 6
	027 - 029	Gobo 7
	030 - 033	Gobo 8
	034 - 037	Gobo 9
	038 - 041	Gobo 10
	042 - 044	Gobo 11
	045 - 048	Gobo 12
	049 - 052	Gobo 13
	053 - 056	Gobo 14
	057 - 059	Gobo 15
	060 - 063	Gobo 16
	064 - 067	Gobo 17
	068 - 071	Gobo 18
	072 - 113	Continuous CCW rotation at linearly variable speed from fast to slow
	114 - 117	Stop rotation
	118 - 159	Continuous CW rotation at linearly variable speed from slow to fast
	160 - 165	Gobo 1 shakes at variable speed from slow to fast
	166 - 170	Gobo 2 shakes at variable speed from slow to fast
	171 - 175	Gobo 3 shakes at variable speed from slow to fast
	176 - 181	Gobo 4 shakes …
	182 - 186	Gobo 5 shakes …
	187 - 191	Gobo 6 shakes …
	192 - 196	Gobo 7 shakes …
	197 - 202	Gobo 8 shakes …
	203 - 207	Gobo 9 shakes …
	208 - 212	Gobo 10 shakes …
	213 - 218	Gobo 11 shakes …
	219 - 223	Gobo 12 shakes …
	224 - 228	Gobo 13 shakes …
	229 - 233	Gobo 14 shakes …
	234 - 239	Gobo 15 shakes …
	240 - 244	Gobo 16 shakes …
	245 - 249	Gobo 17 shakes …
	250 - 255	Gobo 18 shakes …
11		**ANIMATION DISK INSERTION**
	000 - 255	Linear Animation Disk Insertion
12		**ANIMATION DISK ROTATION**
	000 - 004	Stop rotation
	005 - 127	Continuous CCW rotation at linearly variable speed from slow to fast
	128 - 132	Stop rotation
	133 - 255	Continuous CW rotation at linearly variable speed from slow to fast



Sharpy Plus
DMX Channels

Number	DMX Value	Function parameter
13		**ROTATING GOBO SELECT**
	000 - 007	Empty position
	008 - 015	Gobo 1 
	016 - 023	Gobo 2 
	024 - 031	Gobo 3 
	032 - 039	Gobo 4 
	040 - 047	Gobo 5 
	048 - 055	Gobo 6 
	056 - 063	Gobo 7 
	064 - 071	Gobo 8 
	072 - 113	Continuous CCW rotation at linearly variable speed from fast to slow
	114 - 117	Stop rotation
	118 - 159	Continuous CW rotation at linearly variable speed from slow to fast
	160 - 171	Gobo 1 shakes at variable speed from slow to fast
	172 - 183	Gobo 2 shakes at variable speed from slow to fast
	184 - 195	Gobo 3 shakes at variable speed from slow to fast
	196 - 207	Gobo 4 shakes at variable speed from slow to fast
	208 - 219	Gobo 5 shakes at variable speed from slow to fast
	220 - 231	Gobo 6 shakes at variable speed from slow to fast
	232 - 243	Gobo 7 shakes at variable speed from slow to fast
	244 - 255	Gobo 8 shakes at variable speed from slow to fast

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DMX Channels

Number	DMX Value	Function parameter
14		**GOBO ROTATION**
	000 - 021	Gobo indexing CW: 0° to 90° range
	021 - 042	Gobo indexing CW: 90° to 180° range
	042 - 063	Gobo indexing CW: 180° to 270° range
	063 - 084	Gobo indexing CW: 270° to 360° range
	084 - 105	Gobo indexing CW: 360° to 450° range
	105 - 127	Gobo indexing CW: 450° to 540° range
	128 - 190	Continuous gobo rotation CW at linearly variable speed from fast to slow
	191 - 192	Stop rotation
	193 - 255	Continuous gobo rotation CCW at linearly variable speed from slow to fast
15		**GOBO ROTATION FINE**
	000 - 255	Fine Gobo Indexing CW
16		**4 FACET PRISM INSERTION**
	000 - 127	Prism out
	128 - 255	4-facet Prism into the light beam
17		**4 FACET PRISM ROTATION**
	000 - 021	Prism indexing CW: 0° to 90° range
	021 - 042	Prism indexing CW: 90° to 180° range
	042 - 063	Prism indexing CW: 180° to 270° range
	063 - 084	Prism indexing CW: 270° to 360° range
	084 - 105	Prism indexing CW: 360° to 450° range
	105 - 127	Prism indexing CW: 450° to 540° range
	128 - 190	Continuous CW rotation at linearly variable speed from fast to slow
	191 - 192	Stop rotation
	193 - 255	Continuous CCW rotation at linearly variable speed from slow to fast
18		**8 FACET PRISM INSERTION**
	000 - 127	Prism out
	128 - 255	8-facet Prism into the light beam
19		**8 FACET PRISM ROTATION**
	000 - 021	Prism indexing CW: 0° to 90° range
	021 - 042	Prism indexing CW: 90° to 180° range
	042 - 063	Prism indexing CW: 180° to 270° range
	063 - 084	Prism indexing CW: 270° to 360° range
	084 - 105	Prism indexing CW: 360° to 450° range
	105 - 127	Prism indexing CW: 450° to 540° range
	128 - 190	Continuous prism rotation CW at linearly variable speed from fast to slow
	191 - 192	Stop rotation
	193 - 255	Continuous prism rotation CCW at linearly variable speed from slow to fast
20		**FROST**
	000 - 255	Frost blades moves linearly from no-diffusion to maximum diffusion
21		**ZOOM**
	000 - 255	Zoom linearly moves from narrow to wide beam
22		**FOCUS**
	000 - 255	Focus moves linearly from far to near position
23		**FOCUS FINE**
	000 - 255	Fine Focus positioning

Sharpy Plus

DMX Channels

Number	DMX Value	Function parameter
24		**BEAM MODE**
	000 - 127	Spot mode
	128 - 255	Beam mode
25		**PAN**
	000 - 255	Pan movement/positioning CCW
26		**PAN FINE**
	000 - 255	Fine Pan positioning CCW
27		**TILT**
	000 - 255	Tilt movement/positioning CW
28		**TILT FINE**
	000 - 255	Fine Tilt positioning
29		**FUNCTION**
	000 - 110	Free
	111 - 120	Standard CMY speed
	121 - 130	Fast CMY speed
	131 - 160	Free
	161 - 170	Display OFF
	171 - 180	Display ON
	181 - 190	Dimmer Curve 1
	191 - 200	Dimmer Curve 2
	201 - 255	Free
	The functions are activated/selected staying in the necessary range for 3 seconds	
30		**RESET**
	000 - 025	Free
	026 - 076	Effects Reset The sequence is activated staying in this range for 5 seconds
	077 - 127	Pan / Tilt Reset The sequence staying in this range for 5 seconds
	128 - 255	Complete Reset The sequence staying in this range for 5 seconds
31		**LAMP CONTROL**
	000 - 025	Free
	026 - 100	**Lamp OFF** staying in this range for 3 seconds
	101 - 255	**Lamp ON** staying in this range for 3 seconds **IMPORTANT: SHARPY PLUS is not provided with hot re-strike igniter** After switching-off the lamp wait at least 2 minutes before switching-on it again

IMPORTANT NOTES
After switching-off the lamp wait at least 2 minutes before switching-on it again
To prevent accidental breakage of the effects, which could collide with each others during transport, before switching the projector OFF, check that all the fixture Channels have been excluded (DMX level = 0 bit.).
Switch-Off' the lamp few minutes before to turn off the fixture.