CLAY PAKY

AN OSRAM BUSINESS

SHARPY

C61375

INSTRUCTION MANUAL
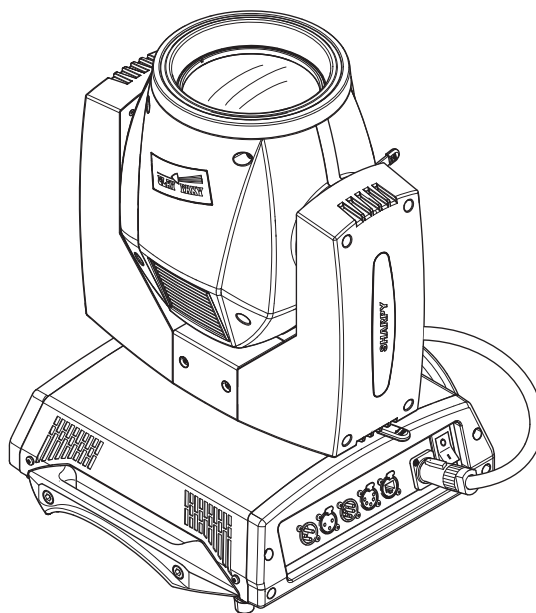
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Congratulations on choosing a Clay Paky product!
We thank you for your custom.
Please note that this product, as all the others in the rich Clay Paky range, has been designed and made with total quality to ensure excellent performance and best meet 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.

EN

SAFETY INFORMATION
IMPORTANT: Clay Paky recommends you carefully read and keep the safety information on this product, also available in digital format at the following link:
http://www.claypaky.it/en
Ref: [FIS010 – Safety Information Sharpy]

IT

INFORMAZIONI DI SICUREZZA
IMPORTANTE: Clay Paky raccomanda di leggere accuratamente e conservare le informazioni di sicurezza relative a questo prodotto, sempre reperibili in versione digitale al seguente link:
http://www.claypaky.it/en/download
Rif: [FIS010 – Safety Information Sharpy]

DE

INFORMATIONEN ZUR SICHERHEIT
WICHTIG: Clay Paky empfiehlt, die Sicherheitsinformationen bezüglich dieses Produkts genau zu lesen und aufzubewahren. Sie sind in Digitalversion immer unter folgendem Link auffindbar:
http://www.claypaky.it/en/download
Ref: [FIS010 – Safety Information Sharpy]

ES

INFORMACIONES DE SEGURIDAD
IMPORTANTE: Clay Paky recomienda leer detenidamente y conservar la información de seguridad relativa a este producto. Además, está disponible una versión digital de la misma en el siguiente enlace:
http://www.claypaky.it/en/download
Ref: [FIS010 – Safety Information Sharpy]

FR

CONSIGNES DE SÉCURITÉ
IMPORTANT: Clay Paky recommande de lire attentivement et de conserver les informations de sécurité relatives à ce produit, disponibles en version digitale au lien suivant:
http://www.claypaky.it/en/download
Réf. : [FIS010 – Safety Information Sharpy]

RU

**ИНСТРУКЦИЮ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ**
ВАЖНО: Clay Paky рекомендует внимательно прочитать и сохранить инструкцию по технике безопасности данного изделия, которая всегда доступна в электронном формате по следующей ссылке:
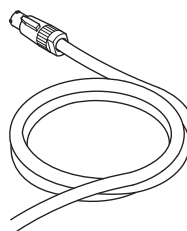**http://www.claypaky.it/en/download**
Наименование: [FIS010 – Safety Information Sharpy]

1

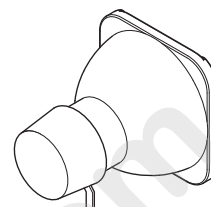SAFETY INFORMATION

Read carefully

How to get your USER MANUAL
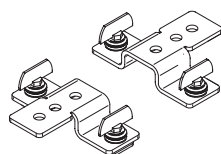
2 x 183102/805

Lamp 189W
(fitted into projector)

Packing contents - Fig. 1

2

UNLOCKED

LOCKED

90° 90°

90° 90°

3

45° 45°

45° 45°

45° 45°

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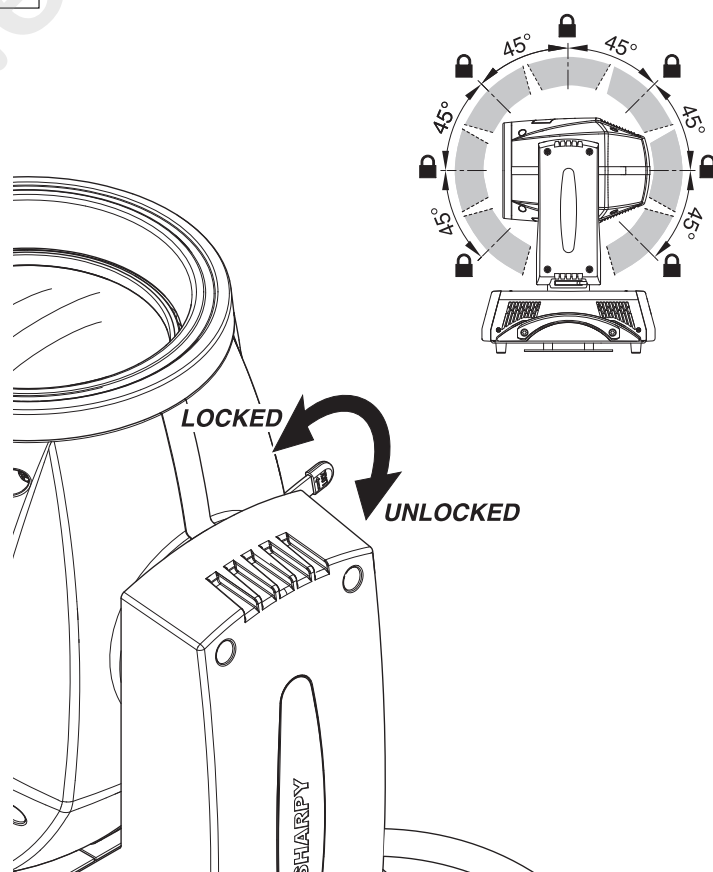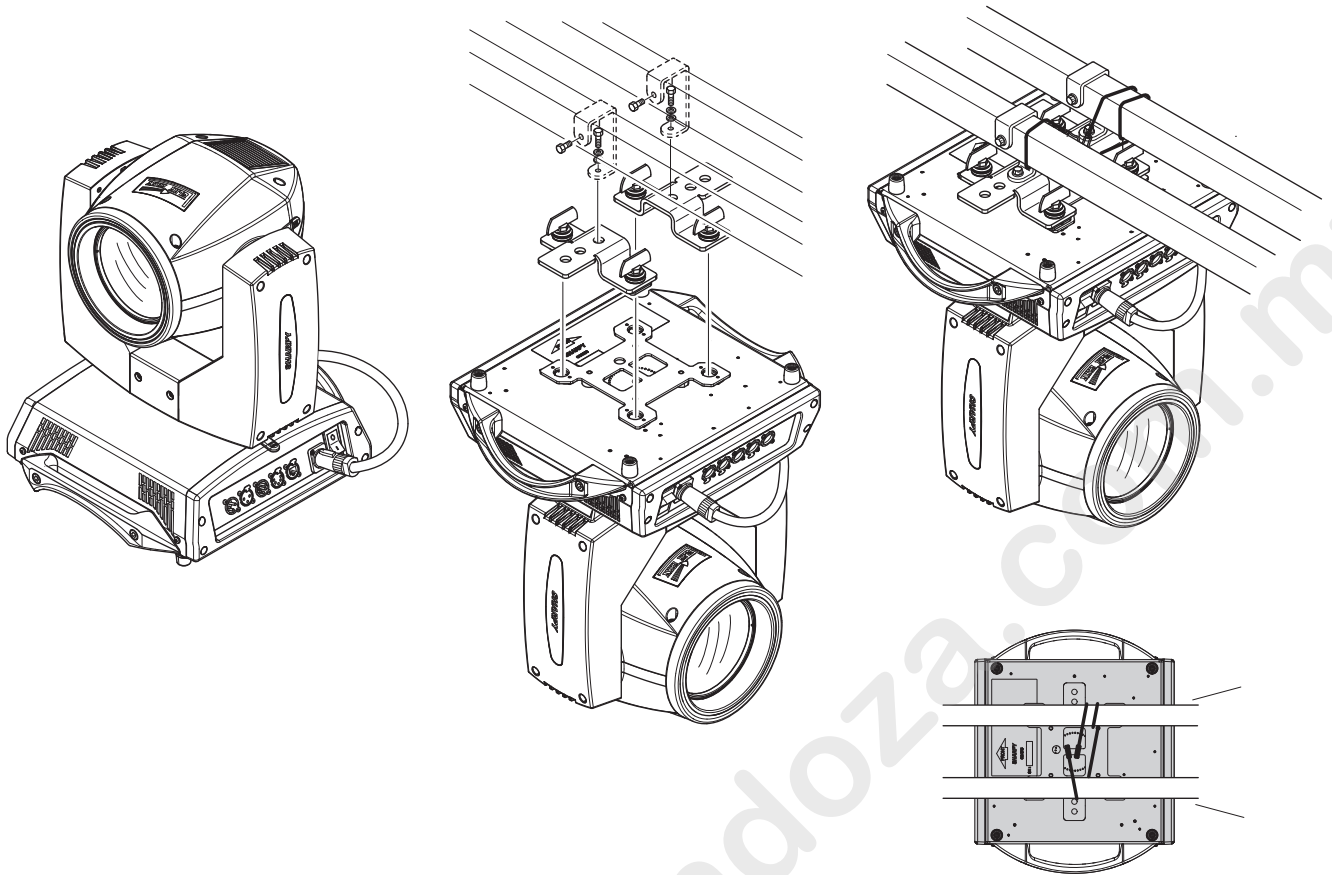
UNLOCKED
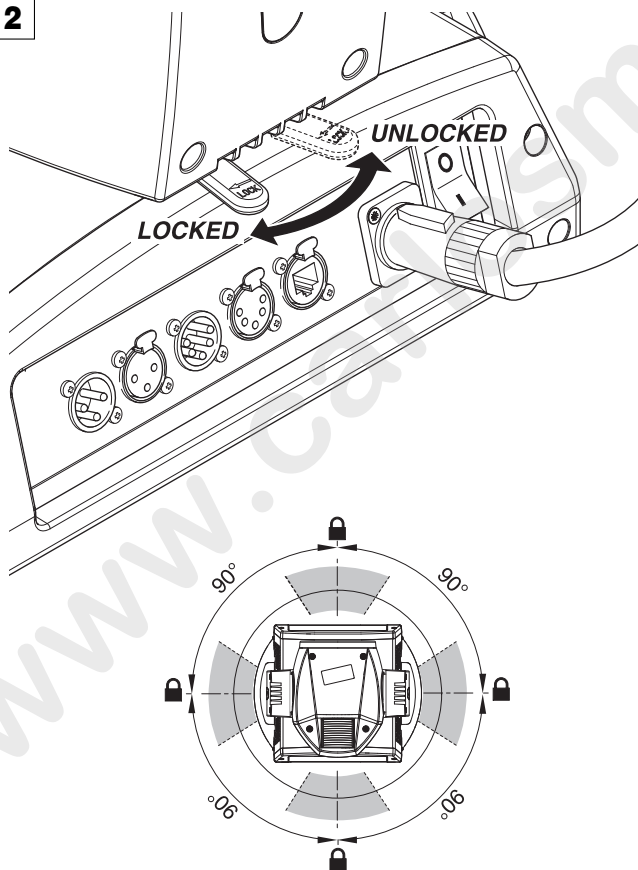
PAN Mechanism Lock and Release (every 90°) - Fig. 2

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

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
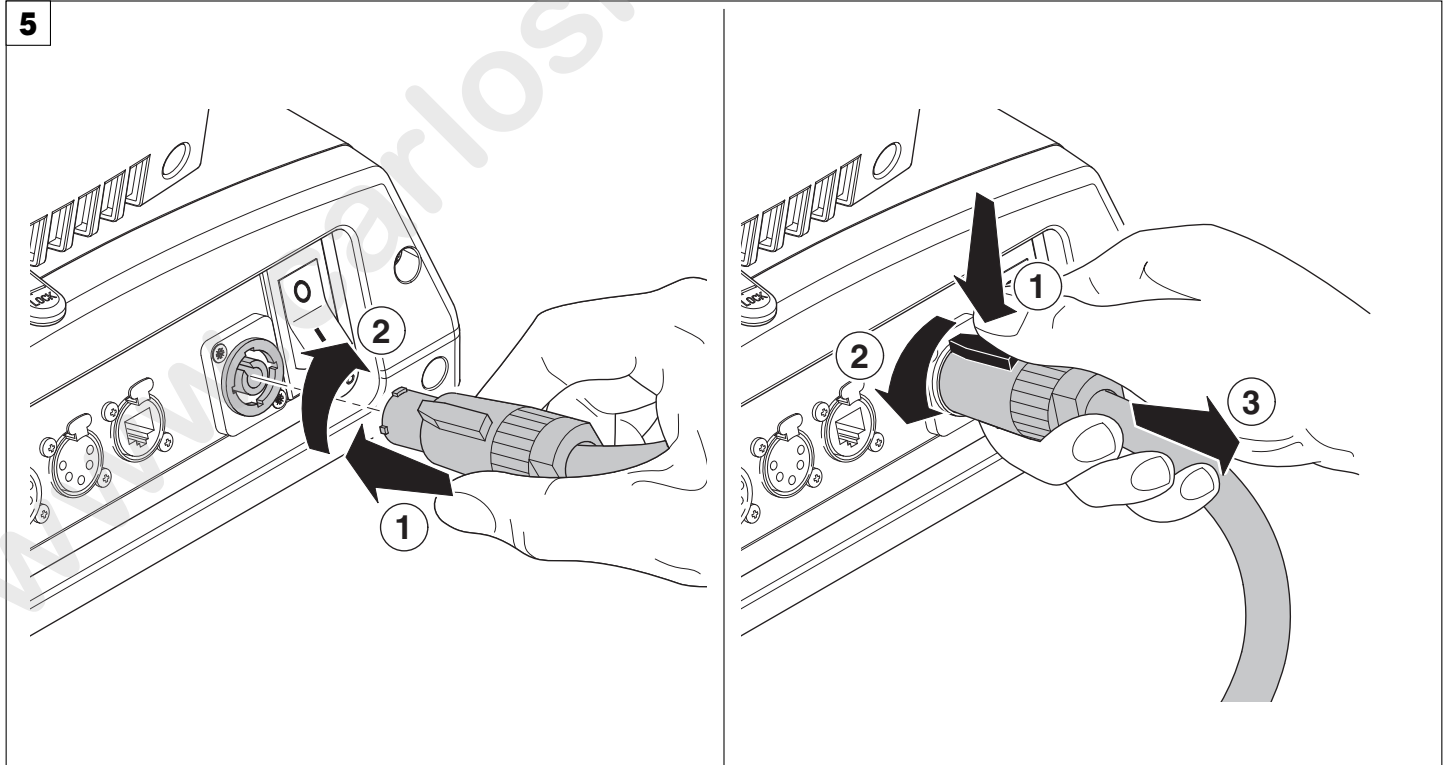
Connecting and disconnecting power cable - Fig. 5

6

Connecting to the mains supply - Fig. 6

7

DMX 512
5 PIN

SCREEN
– SIGNAL
+ SIGNAL

DMX 512
3 PIN

SIGNAL –
SIGNAL +
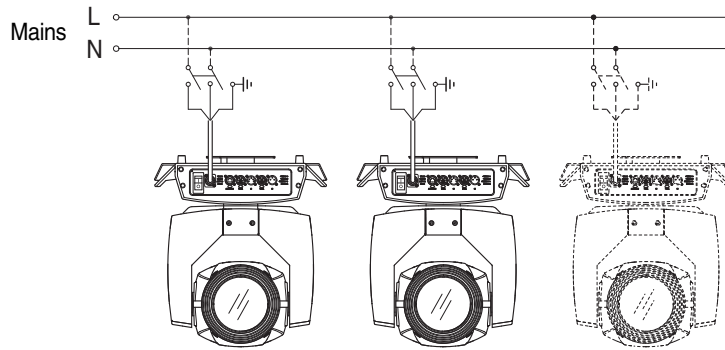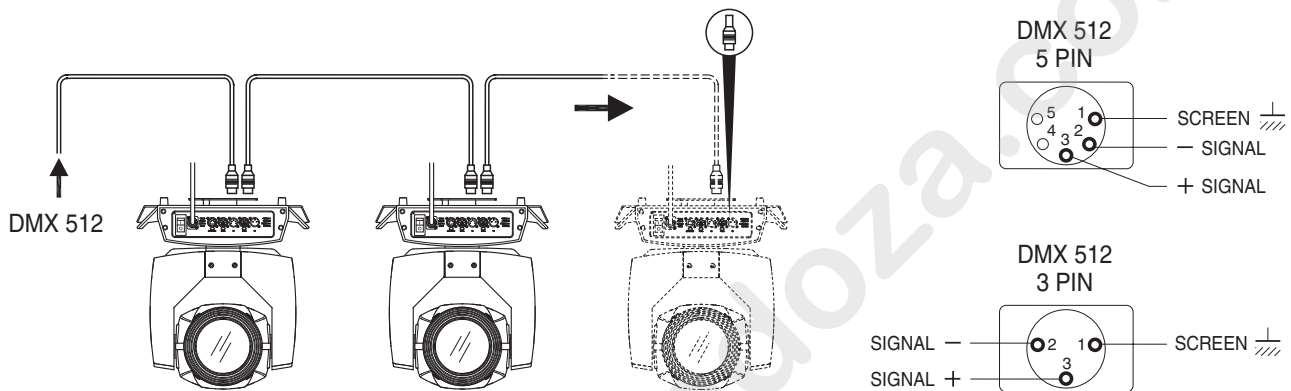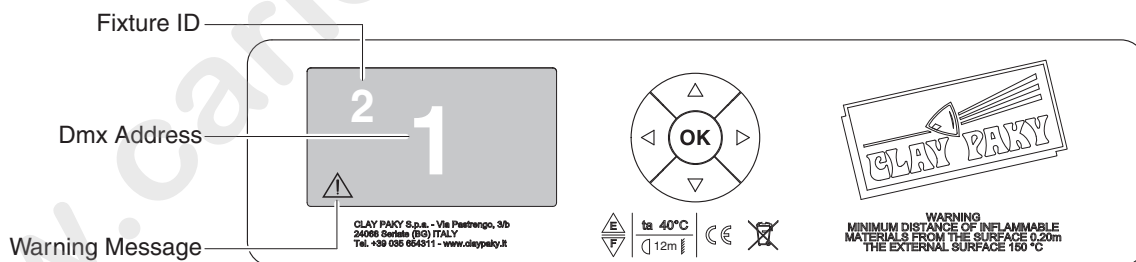SCREEN

Connecting to the control signal line - 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 3 or 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.

To prevent EMI disturbances, in some condition it might be necessary to clip around the Ethernet cable, as close as possible to the projector, an appropriate ferrite bead. Shielded cables must always be used.

8

Fixture ID

Dmx Address

Warning Message

CLAY PAKY S.p.a. - Via Pastrengo, 3/b
24068 Seriate (BG) ITALY
Tel. +39 035 654311 - www.claypaky.it

ta 40°C
12m

WARNING
MINIMUM DISTANCE OF INFLAMMABLE
MATERIALS FROM THE SURFACE 0.20m
THE EXTERNAL SURFACE 150 °C

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:

CLAY PAKY	Model SHARPY	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 than when this condition occurs, any possible value that has been modified but not yet confirmed with the ⊙⊙ key will be cancelled.

9
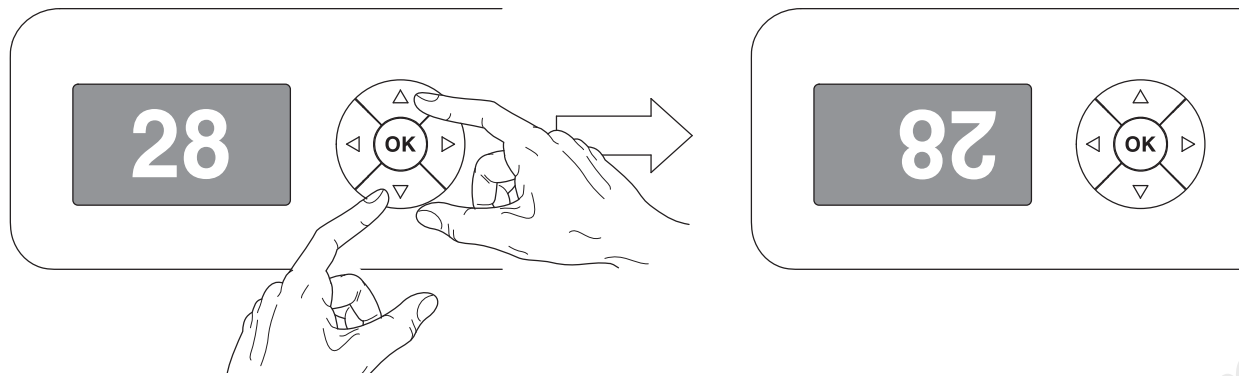
Reversal of the display - Fig. 9

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
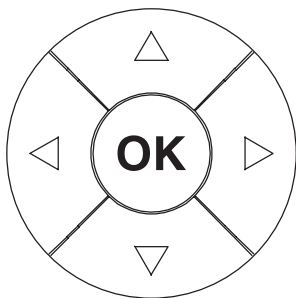
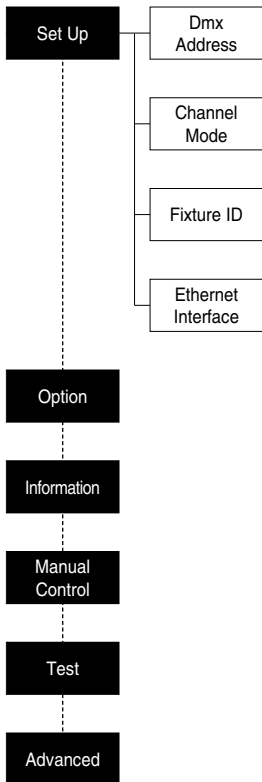|		
(OK)	Confirms the displayed value, or activates the displayed function, or enters the successive menu.
⊝ DOWN	Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.
⊕ UP	Increases the value displayed (with auto-repetitions) or passes to the previous item in a menu.
◀ LEFT	Return to the top level
▶ RIGHT	Commute from units, tens, hundreds, in the "Address", "Fixture ID" and "Calibration" menù.

USING THE MENU:

1) Press ⊛ 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 functionning of effects
   • Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.

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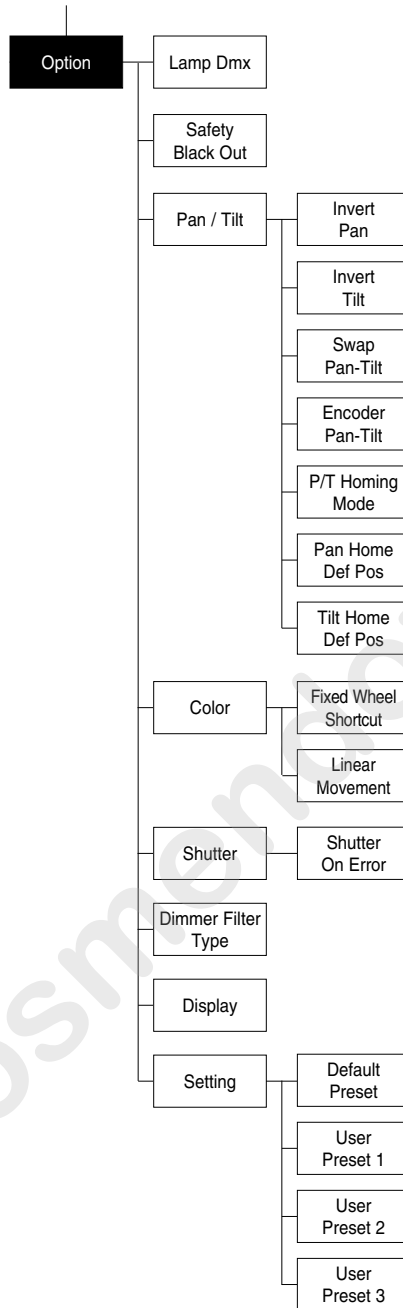
The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply. All that is needed is to press ⊛ to momentarily activate the display and thus access the settings. Once the required operations have been carried out,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

1

Set Up
- Dmx Address
- Channel Mode
- Fixture ID
- Ethernet Interface

Option

Information

Manual Control

Test

Advanced

2

Option
- Lamp Dmx
- Safety Black Out
- Pan / Tilt
  - Invert Pan
  - Invert Tilt
  - Swap Pan-Tilt
  - Encoder Pan-Tilt
  - P/T Homing Mode
  - Pan Home Def Pos
  - Tilt Home Def Pos
- Color
  - Fixed Wheel Shortcut
  - Linear Movement
- Shutter
  - Shutter On Error
- Dimmer Filter Type
- Display
- Setting
  - Default Preset
  - User Preset 1
  - User Preset 2
  - User Preset 3

3

Information
- System Errors
- Fixture Hours
- Lamp Hours
- Lamp Strikes
- System Version
- Board Diagnostic
- Dmx Monitor
- Fans Monitor
- Sensor status
- Network parameters

4

Manual Control
- Lamp
- Reset
- Channel

5

Test
- Pan / Tilt
- Colour
- Beam
- Gobo
- All

6

Advanced
- Access code 1234
  - Upload Firmware
  - Setup Model
  - Calibration
  - Menu locking

SHARPY

7

Continue →

Set Up

Dmx Address → Address xxx

Channel Mode → Standard / Vector

Fixture ID → Value xxx

Ethernet Interface

Control Protocol

Repeat on DMX

Universe

Custom IP address

Custom IP mask

SET UP MENU

DMX ADDRESS

NOTE: without the DMX signal the Address (XXX) flashing
Allows you to select the DMX ADDRESS.
1) Press ⊙K - the current DMX Adress appear on the display.
2) Use the UP ⊙ and DOWN ⊙, RIGHT ⊙ keys to plan the DMX Address.
3) Press ⊙K to confirm the selection or LEFT ⊙ to keep current settings.

CHANNEL MODE
Allows you to select a channel arrangement from the two available.
1) Press ⊙K - the current settings appear on the display (Standard or Vector).
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   - **Standard**
   - **Vector**
3) Press ⊙K to confirm the selection or LEFT ⊙ to keep current settings.

FIXTURE ID
Allows you to select the FIXTURE ID.
1) Press ⊙K - the current Fixture ID appear on the display.
2) Use the UP ⊙, DOWN ⊙, RIGHT ⊙ keys to plan the Fixture ID.
3) Press ⊙K to confirm the selection or LEFT ⊙ to keep current settings.

ETHERNET INTERFACE
It lets you set the Ethernet settings to be attributed to the projector.
1) Premere ⊙K.
2) Use the UP ⊙ and DOWN ⊙ keys to select the "Ethernet Interface" options to set:

Control Protocol
It lets you select the "Control Protocol" Art-net to assign according to the control unit used:
1) Press ⊙K the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   - Disabled
   - Art-net on IP 2
   - Art-net on IP 10
   - Art-net Custom IP
3) Press ⊙K to confirm the selection or LEFT ⊙ to keep the current setting.
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 the transmission of the Ethernet protocol by DMX signal to all the connected projectors.
1) Press ⊙K the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   - **Disabled:** DMX transmission disabled.
   - **Enabled on primary:** DMX transmission enabled.
3) Press ⊙K to confirm the selection or LEFT ⊙ to keep the current setting.

Universe
It lets you assign the "Universe" number to be assigned to a series of projectors.
1) Press ⊙K – the current Universe address appears on the display.
2) Use the UP ⊙, DOWN ⊙, RIGHT ⊙ keys to set the Universe address.
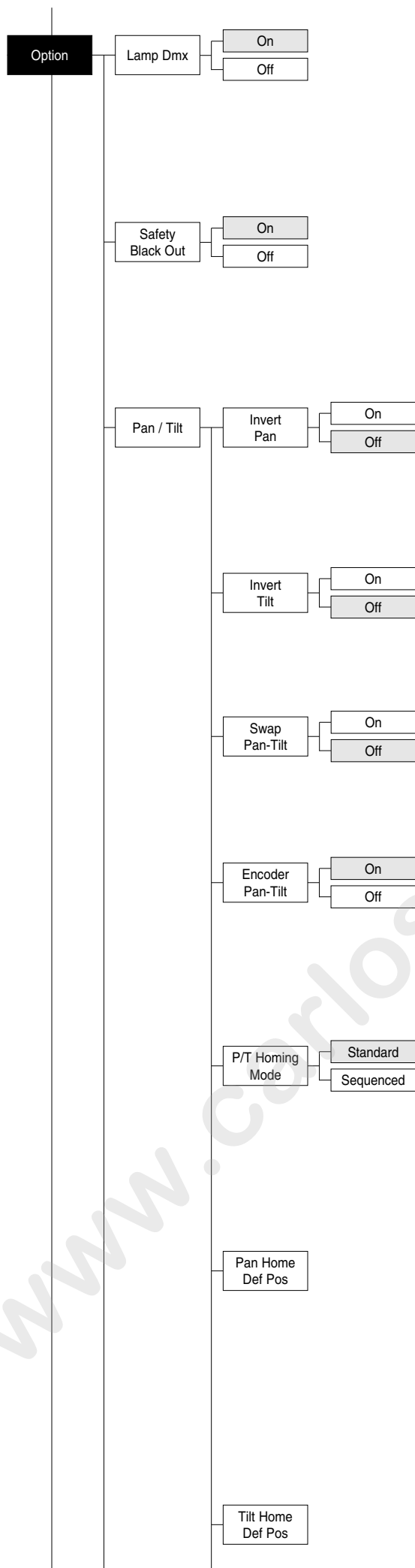3) Press ⊙K to confirm the selection or LEFT ⊙ to keep the current setting.

Custom IP address
Allows you to set the **IP address** manually by the user default.

Custom IP mask
Allows you to set manually the **Subnet Mask** by the user default.

Menu Tree (left column)

- **Option**
  - **Lamp Dmx**
    - On
    - Off
  - **Safety Black Out**
    - 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**
    - **Tilt Home Def Pos**

OPTIONS MENU

LAMP DMX

Used for enabling lamp remote control channel.

1) Press ⓞⓚ - the current settings appear on the display (On or Off).
2) Use the UP ⏶ and DOWN ⏷ keys to enable (On) or disable (Off) the lamp remote control channel.
3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep current settings.

SAFETY BLACK OUT

This allows the Dimmer's automatic lock option to be activated after 3 seconds with no incoming DMX signal.

1) Press ⓞⓚ – the current setting (On or Off) appears on the display.
2) Use the UP ⏶, DOWN ⏷ keys to enable (ON) or disable (Off) the Dimmer's lock option after 3 seconds with no incoming DMX signal.
3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep the current setting.

PAN / TILT

Invert pan

Used for reversing Pan movement.

1) Press ⓞⓚ - the current settings appear on the display (On or Off).
2) Use the UP ⏶ and DOWN ⏷ keys to enable (On) or disable (Off) PAN inversion.
3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep current settings.

Invert tilt

Used for reversing tilt movement.

1) Press ⓞⓚ - the current settings appear on the display (On or Off).
2) Use the UP ⏶ and DOWN ⏷ keys to enable (On) or disable (Off) Tilt inversion.
3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep current settings.

Swap Pan-Tilt

Used for swapping Pan and Tilt channels (as well as Pan fine and Tilt fine).

1) Press ⓞⓚ - the current settings appear on the display (On or Off).
2) Use the UP ⏶ and DOWN ⏷ keys to enable (On) or disable (Off) Pan and Tilt channel swap.
3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep current settings.

Encoder Pan-Tilt

Used for enabling the Pan / Tilt encoders.

1) Press ⓞⓚ - the current settings appear on the display (On or Off).
2) Use the UP ⏶ and DOWN ⏷ keys to enable (On) or disable (Off) Pan / Tilt encoders.
3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep current settings.

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

Lets you set the initial projector Reset mode.

1) Press ⓞⓚ, the current setting appears on the display.
2) Use the UP ⏶ and DOWN ⏷ keys to select one of the following settings:

   Standard: Pan & Tilt are simultaneously reset.

   Sequenced: Tilt is reset first followed by Pan.

3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep the current setting.

Pan Home Def Pos

Lets you assign the Pan channel "home" position at the end of Reset, without a DMX input signal.

1) Press ⓞⓚ, the current setting appears on the display.
2) Use the UP ⏶ and DOWN ⏷ keys to select one of the following settings:

   0 degree
   90 degrees
   180 degrees
   270 degrees (default)

3) Press ⓞⓚ to confirm the selection or LEFT ◀ to keep the current setting.
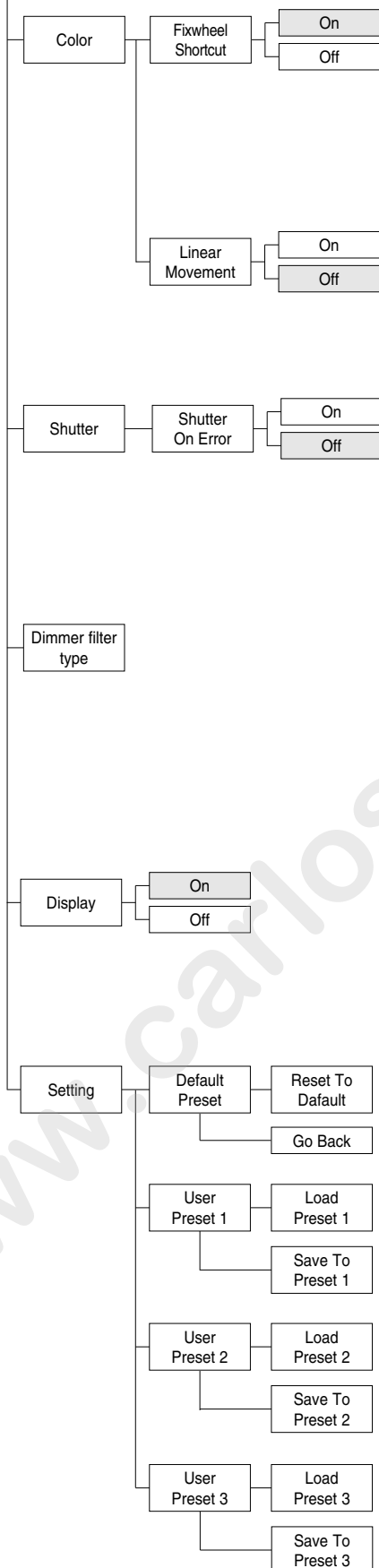
Tilt Home Def Pos

Lets you assign the Tilt channel "home" position at the end of Reset, without a DMX input signal.

Continue ➔

1) Press ⊙, the current setting appears on the display.
2) Use the UP ⬆ and DOWN ⬇ keys to select one of the following settings:
   0%
   12.5%
   25%
   50% (default)
   75%
   87.5%
   100%
3) Press ⊙ to confirm the selection or LEFT ◀ to keep the current setting.

COLOR

Fixed wheel short-cut
Used for optimizing color change time so that the disc turns in the direction that requires shorter movement.
1) Press ⊙ – the current settings appear on the display (On or Off).
2) Use the UP ⬆ and DOWN ⬇ keys to enable (On) or disable (Off) color change optimization.
3) Press ⊙ to confirm the selection, or LEFT ◀ to keep current settings.

Linear Movement
It enables the linear movement of the colour wheel.
1) Press ⊙ – the current settings appear on the display (On or Off).
2) Use the UP ⬆ and DOWN ⬇ keys to enable (On) or disable (Off) the linear movement of the colour wheel.
3) Press ⊙ to confirm the selection, or LEFT ◀ to keep current settings.

SHUTTER

Shutter on error
Used for automatically closing the stop/strobe in the event of Pan/Tilt position error.
1) Press ⊙ - the current settings appear on the display (On or Off).
2) Use the UP ⬆ and DOWN ⬇ keys to enable (On) or disable (Off) automatic stop/strobe closing in the event of Pan/Tilt position error.
3) Press ⊙ to confirm the selection, or LEFT ◀ to keep current settings.

DIMMER FILTER TYPE

It lets you best optimize the "Dimmer curve" according to that set on the control unit. One of the following 2 options can be selected:
• **DMX follower**
  Dimmer movement speed/linearity follows the DMX values set by the control desk.
• **Position dependent**
  Dimmer movement speed follows the DMX values set by the control unit taking into account the physical Dimmer starting position.

DISPLAY

Used for automatically reduce brightness on the display after about 30 seconds in idle.
1) Press ⊙ - the current settings appear on the display (On or Off).
2) Use the UP ⬆ and DOWN ⬇ keys to enable (On) or disable (Off) the decreasing of display brightness.
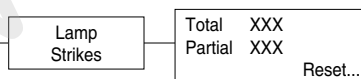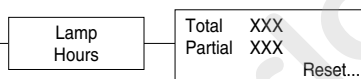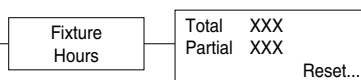3) Press ⊙ to confirm the selection or LEFT ◀ to keep current settings.

SETTING

Used to save 3 different settings of the items in the options menu and relative submenus.
1) Press ⊙ - "Default preset" appears on the display.
2) Use the UP ⬆ and DOWN ⬇ keys to select one of the following configurations:
   - Default preset (*)
   - User preset 1
   - User preset 2
   - User Preset 3
3) Press ⊙ - "Load preset X" appears on the display.
4) Use the UP ⬆ and DOWN ⬇ keys to select:
   - Load preset X to recall a previously stored configuration.
   - Save to preset X to store the current configuration.
   a confirmation message (Are you sure?) appears on the display.
5) Select YES to confirm the selection or NO to keep the current setting and return to the next higher level.
(*) DEFAULT PRESET
By pressing the RIGHT ▶ key and the LEFT ◀ key simultaneously once entered in the "main menu" it is possible to quickly (short cut) reset the default settings (DEFAULT PRESET).

Menu tree (left column):

- **Color**
  - **Fixwheel Shortcut** — On / Off
  - **Linear Movement** — On / Off
- **Shutter**
  - **Shutter On Error** — On / Off
- **Dimmer filter type**
- **Display** — On / Off
- **Setting**
  - **Default Preset** — Reset To Default / Go Back
  - **User Preset 1** — Load Preset 1 / Save To Preset 1
  - **User Preset 2** — Load Preset 2 / Save To Preset 2
  - **User Preset 3** — Load Preset 3 / Save To Preset 3

Option — **Setting**

Used for restoring default values on all options menu items and relevant submenus.
1) Press ⊛ , a confirmation message (Are you sure?) appears on the display.
2) Select YES to confirm the selction or NO to keep current setting.

OPTION	DEFAULT
Lamp DMX	On
Safety Black Out	Off
Invert Pan	Off
Invert Tilt	Off
Swap Pan-Tilt	Off
Encoder Pan-Tilt	On
P/T Homing Mode	Standard
Pan Home Def Pos	270 degrees
Tilt Home Def Pos	50%
Fixed Wheel Shortcut	On
Linear Movement	Off
Shutter on error	Off
Dimmer Filter Type	DMX follower
Display	On

INFORMATION MENU

SYSTEM ERRORS

Information — **System Errors**

Shows a list of warnings and messages relevant to errors occurred since the fixtures switching-on.
1) Pressing ⊛ you are allowed to reset the SYSTEM ERRORS list.
   A confirmation message (Are you sure you want to clear error list ?) appears on the display.
2) Select YES to reset the list or NO to go back.

FIXTURE HOURS

Fixture Hours — Total XXX / Partial XXX / Reset...

Used for displaying projector operating hours (total and partial).
1) Press ⊛ - Hours total and partial appears on the display.
   Total counter
   Counts the number of projector working life hours (from manufacture to date).
   Partial counter
   Counts the number of partial projector working life hours since the last reset to date.
2) Press ⊛ to reset partial projector working hours a confirmation message (Are you sure?) appears on the display.
3) Select YES to reset partial projectors counter or NO to keep the current setting and return to the top menu level.
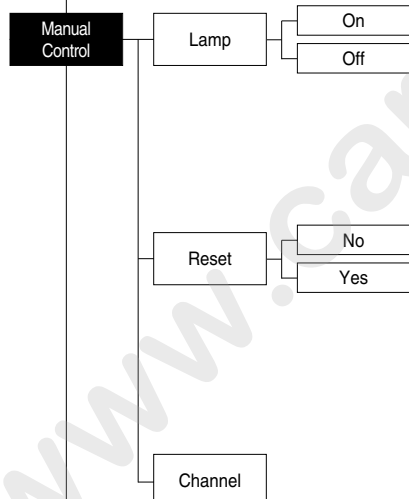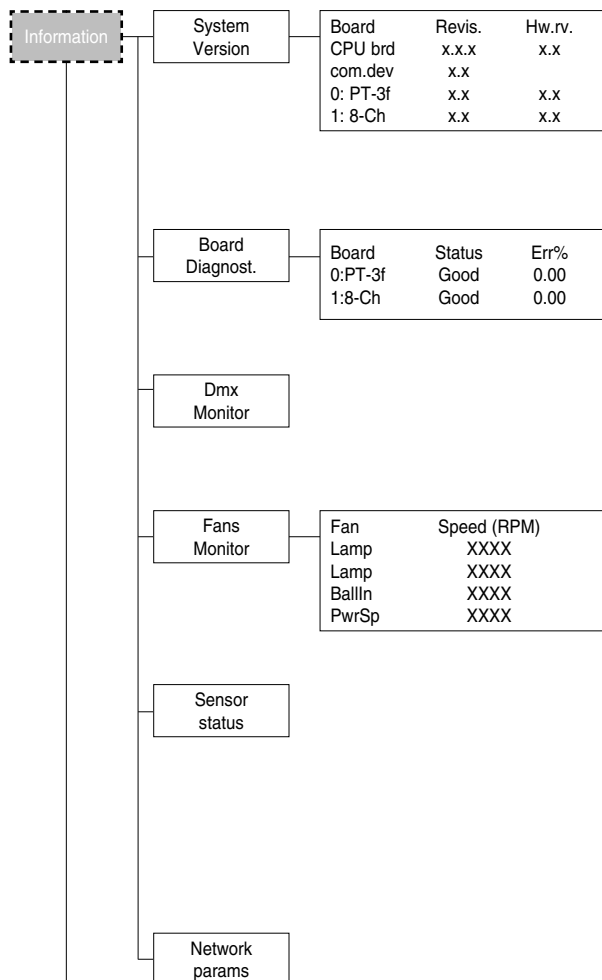
LAMP HOURS

Lamp Hours — Total XXX / Partial XXX / Reset...

Used for displaying the lamp working hours (total and partial).
1) Press ⊛ - Hours total and partial appears on the display.
   Total counter
   Counts the number of projector working hours with the lamp on (from manufacture to date).
   Partial counter
   Counts the number of lamp working hours since the last reset to date.
2) Press ⊛ to reset partial lamp working hours, a confirmation message (Are you sure ?) appears on the display.
3) Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

LAMP STRIKES

Lamp Strikes — Total XXX / Partial XXX / Reset...

Used for displaying the number of times the lamp was turned on (total and partial).
1) Press ⊛ - the number of times the lamp was turned on (total and partial) appears on the display.
   Total counter
   Counts the number of times the lamp was turned on (from manufacture to date).
   Partial counter
   Counts the number of times the lamp was turned on since the last reset to date.
2) Press ⊛ to reset partial lamp strikes hours, a confirmation message (Are you sure ?) appears on the display.
3) Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

Information	System Version		Board	Revis.	Hw.rv.
			CPU brd	x.x.x	x.x
			com.dev	x.x	
			0: PT-3f	x.x	x.x
			1: 8-Ch	x.x	x.x

	Board Diagnost.		Board	Status	Err%
			0:PT-3f	Good	0.00
			1:8-Ch	Good	0.00

Dmx Monitor

	Fans Monitor		Fan	Speed (RPM)
			Lamp	XXXX
			Lamp	XXXX
			BallIn	XXXX
			PwrSp	XXXX

Sensor status

Network params

Manual Control

Lamp — On / Off

Reset — No / Yes

Channel

SYSTEM VERSION

Used for displaying the software and hardware version of each board installed in the projector.
CPU brd (CPU board)
0: PT-3f (Pan / Tilt board)
1: 8-Ch (8 channel board)

BOARD DIAGNOSTIC

Used for displaying the status error of each board installed in the projector:
0: PT-3f (Pan / Tilt board)
1: 8-Ch (8 channel board)

DMX MONITOR

Used for displaying the projector DMX channel level in bit (Val) and in percentage (Perc).

FANS MONITOR

Used for displaying the speed of each fan installed in the projector:
Lamp (Lamp Fan)
Ball. IN (Ballast IN Fan)
PwrSp (Power Supply Fan)

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

NETWORK PARAMS

Allows the "Network" parameters of the projector to be displayed or:
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

Used for turning lamp on and off from the projector control panel.
1) Press ⊛ - the current settings appear on the display (On or Off).
2) Use the UP ⊙ and DOWN ⊙ keys to turn the lamp on (On) or off (Off)
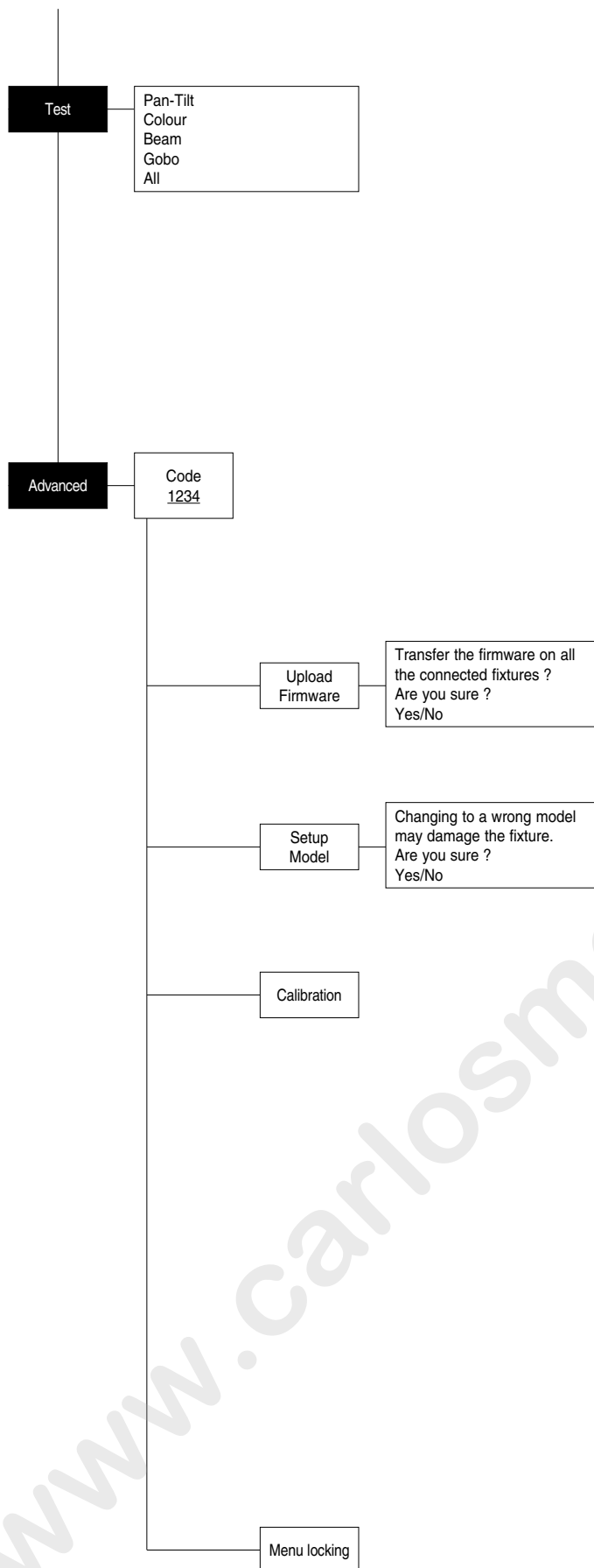3) Press ⊛ to confirm the selection or LEFT ◊ to keep current settings and return to the top level.

RESET

Used for resetting the projector.
1) Press ⊛ to reset the projectors, a confirmation message (Are you sure ?) appears on the display.
2) Select YES to starting reset the fixture or NO to keep the current setting and return to the top menu level.

CHANNEL

Used for setting channel levels from the projector control panel.
1) Press ⊛ - the first channel appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select the required channel:
3) Press ⊛ and use the UP ⊙ and DOWN ⊙ keys to select the required DMX level (value between 0 and 255).
4) Press LEFT ◊ to return to the top menu level.

```
Test   Pan-Tilt
       Colour
       Beam
       Gobo
       All
```

TEST MENU

TEST
Allows you to check the proper functioning of effects.
1) Press ⓞⓚ to return to the top menu level.
2) Use the UP ⊙ and DOWN ⊙ keys to select the required test.
3) Press ⓞⓚ to confirm the selection or LEFT ⊙ to keep current settings.

Test sequence:
Pan - Tilt effects (Pan & Tilt)
Colour effects (Colour wheel)
Beam effects (Stopper-Strobe / Dimmer / Prism / Frost)
Gobo effects (Static gobo)
All effects

```
Advanced   Code
           1234
```

ADVANCED MENU

To enable the "Advanced Menu" set up the "Access code" (1234) using the UP ⊙, DOWN ⊙, RIGHT ⊙ keys.
Press ⓞⓚ - "Menu advanced" appears on the display

```
Upload     Transfer the firmware on all
Firmware   the connected fixtures ?
           Are you sure ?
           Yes/No
```

UP LOAD FIRMWARE
Allows you to transfer the firmware from 1 fixture to all the connected fixtures.
1) Press ⓞⓚ, a confirmation message appears on the display.
2) Select YES to start the firmware loading or NO to keep the current setting and return to the top menu level

```
Setup      Changing to a wrong model
Model      may damage the fixture.
           Are you sure ?
           Yes/No
```

SETUP MODEL
Allows you to change the default model of projector.
1) Press ⓞⓚ a confirmation message appears on the display.
2) Select YES to define the model of projector or NO to keep the current setting and return to the top menu level.

```
Calibration
```

CALIBRATION
Allows you to adjust effects from the control panel to obtain perfect uniformity between the projectors.
1) Press ⓞⓚ - "channels" appears on the display.
2) Using the UP ⊙ and DOWN ⊙ keys, select the effect you wish to regulate.
3) Press ⓞⓚ and use the RIGHT ⊙, UP ⊙ and DOWN ⊙ buttons to make the adjustment by setting a value between 0 and 255.
4) Press ⓞⓚ to confirm the selection or LEFT ⊙ to keep current settings and return to the top level.

FACTORY DEFAULT
Allows you to restore default values of all channels (128).
1) Press ⓞⓚ – a confirmation message appears on the display (Reset calibration to factory default ?).
2) Select YES to reset calibration to factory default or NO to keep the current setting and return to the top menu level.
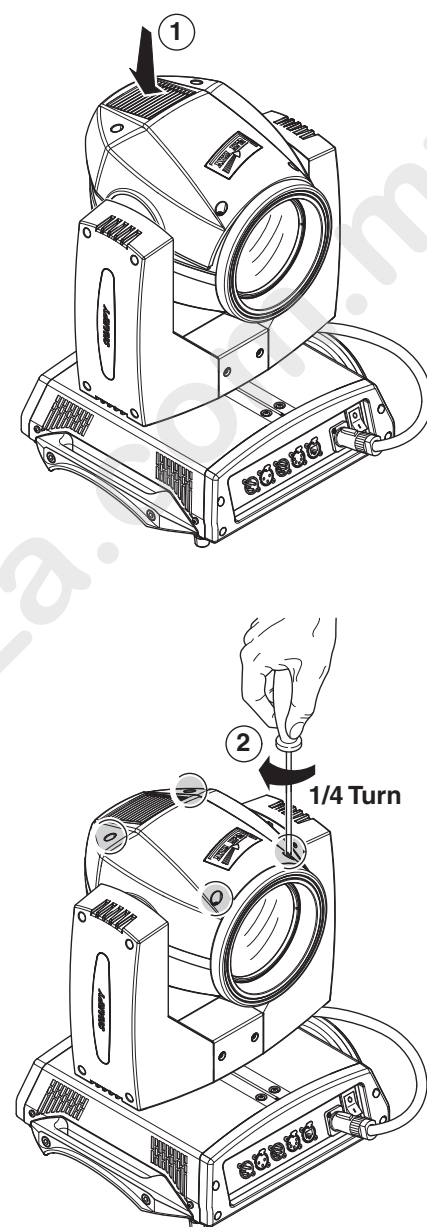
```
Menu locking
```

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.
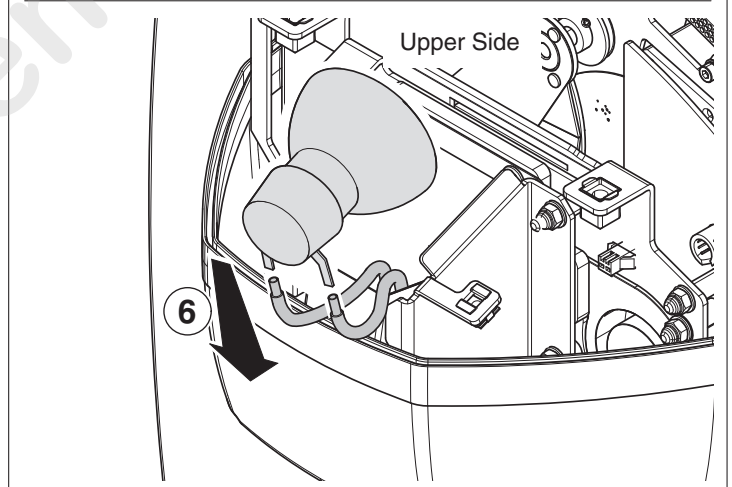
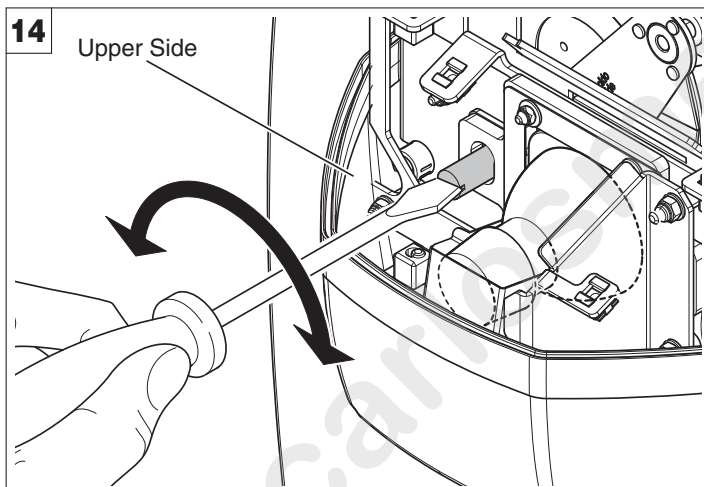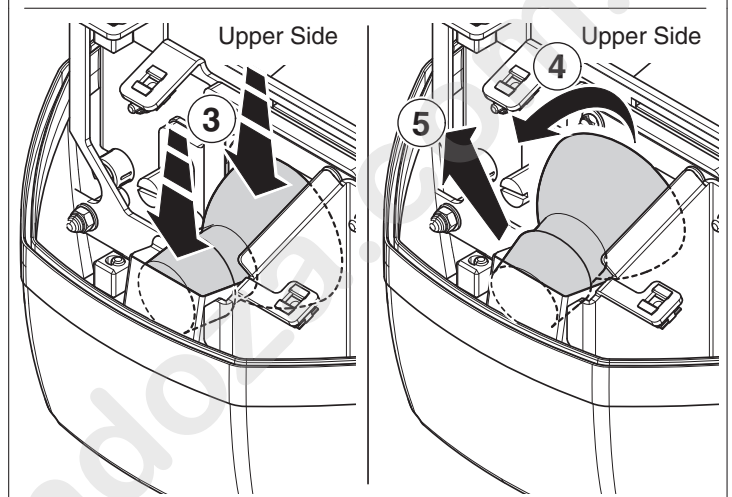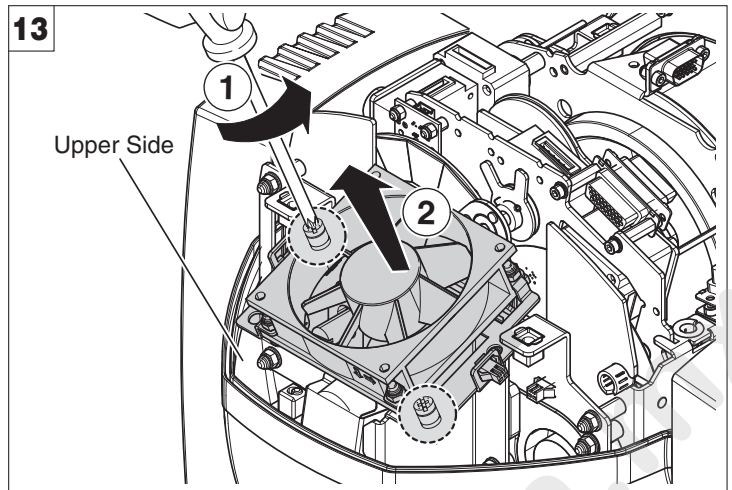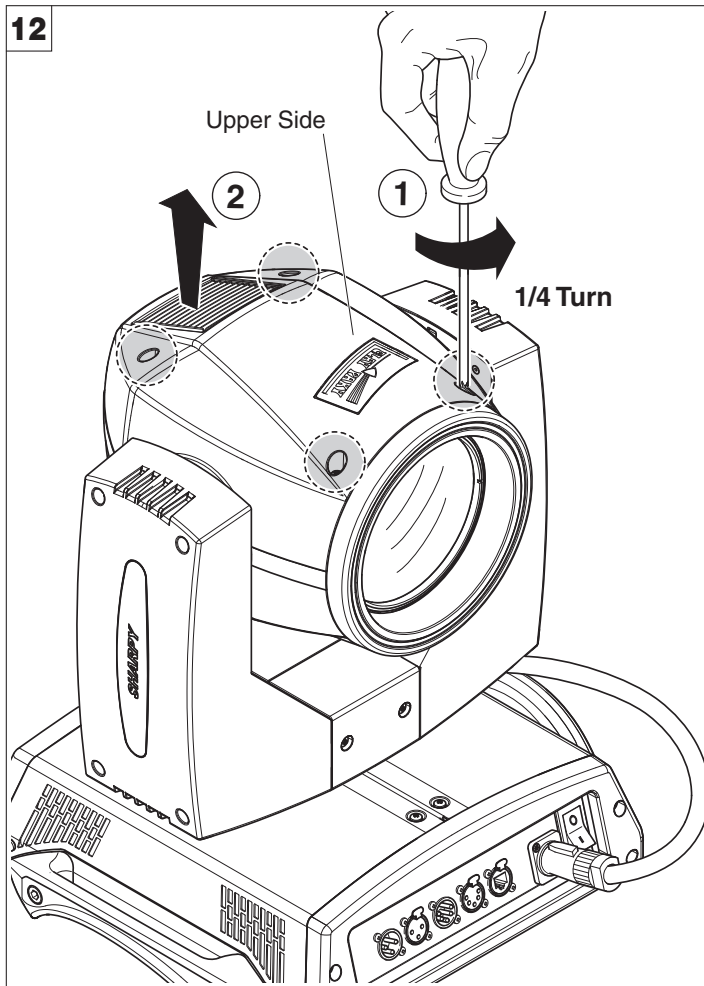**10**

1/4 Turn

11

1/4 Turn
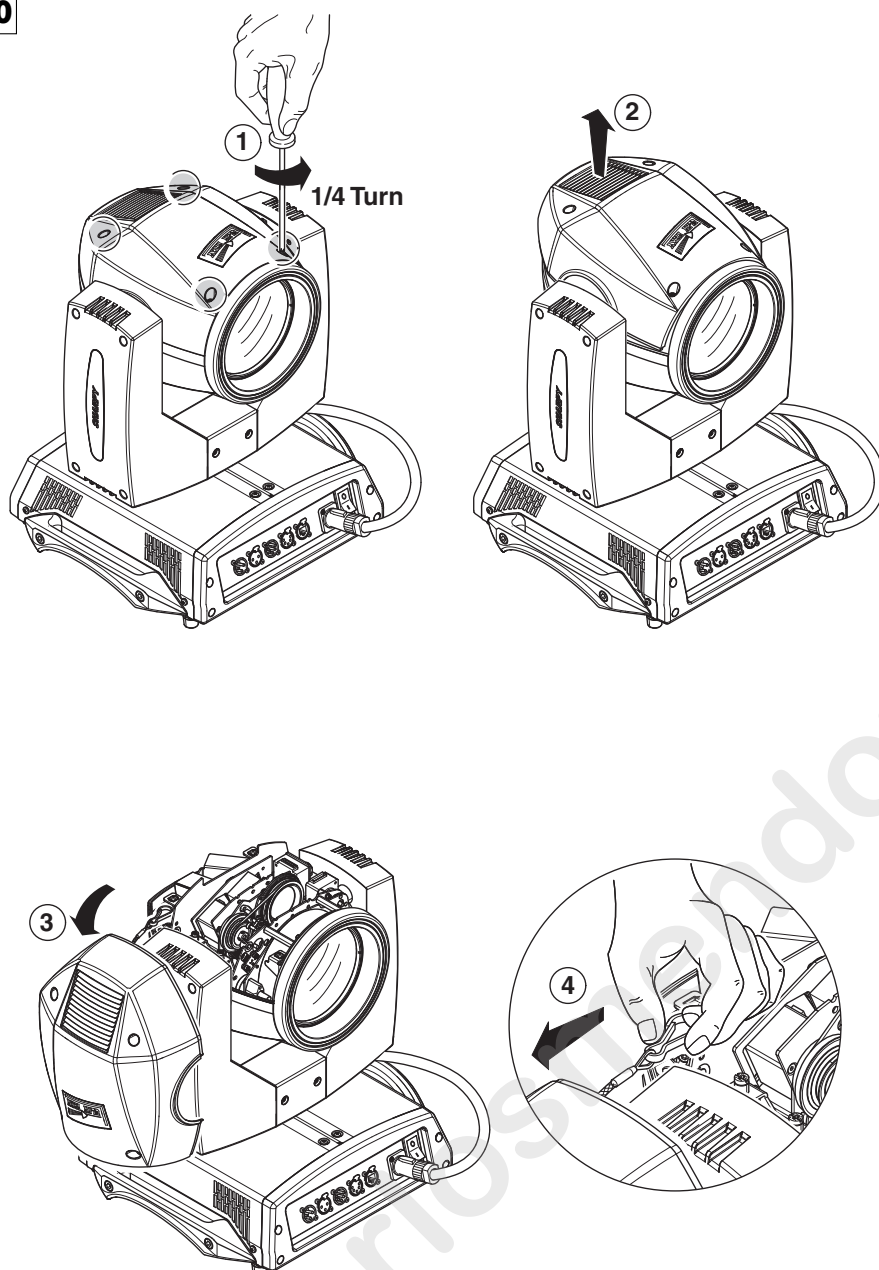
Locking and releasing Pan and Tilt movements - Refer to the instructions in the UNPACKING AND PREPARATION section.
Opening the head covers - Fig. 10.

Closing the head covers - Fig. 11.

Opening and closing lamp compartment - Fig. 12

Lamp change - Fig 13
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 - Fig. 14
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.*
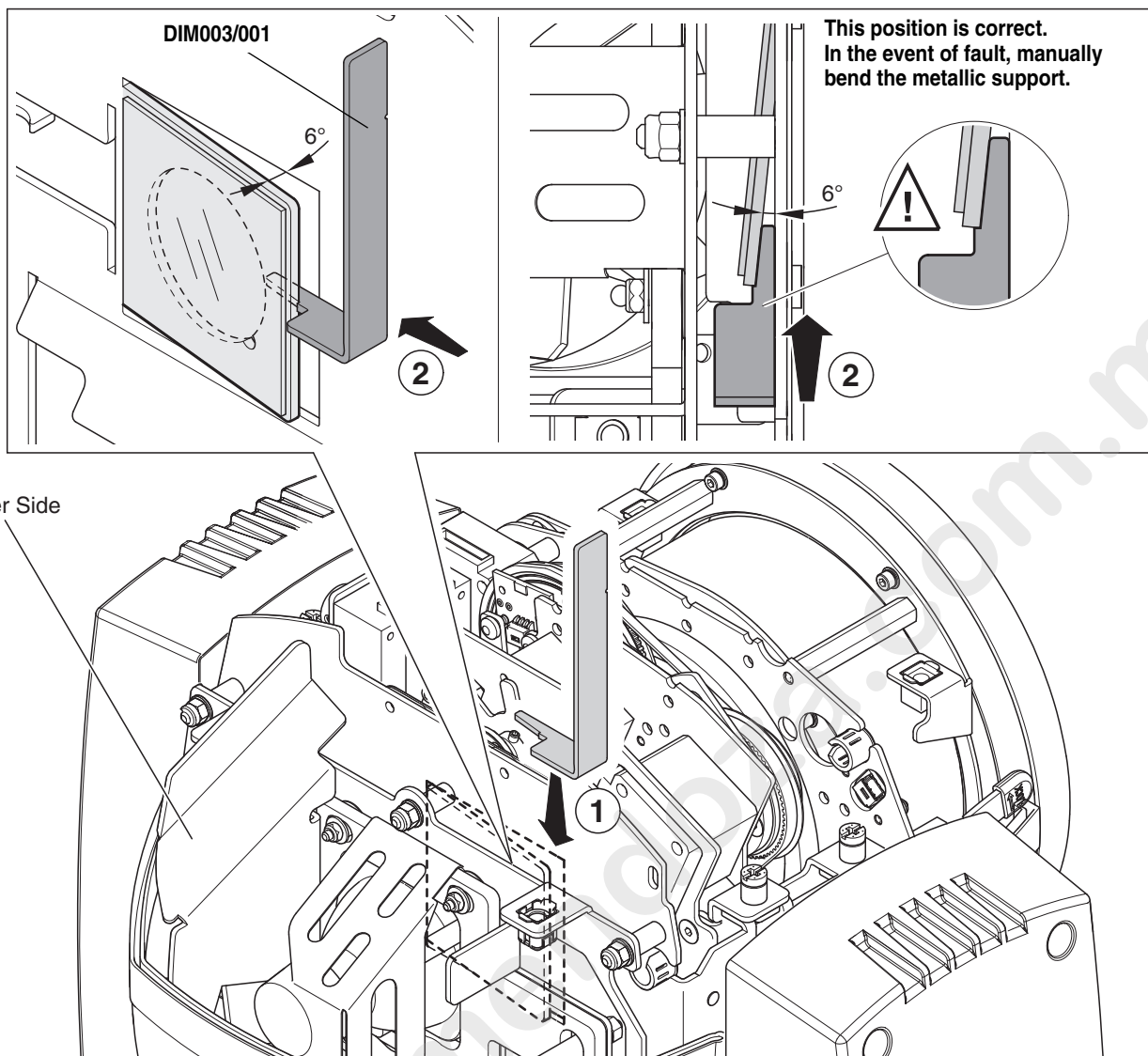**NOTE:** To adjust the lamp vertically (with regard to the Y axis) after having replaced it, it may be necessary to operate the **Calibration** in the **Menu Advanced** on the **Fixed Gobo Wheel channel**.

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

15

DIM003/001

6°

2

**This position is correct.
In the event of fault, manually
bend the metallic support.**

6°

⚠ !

2

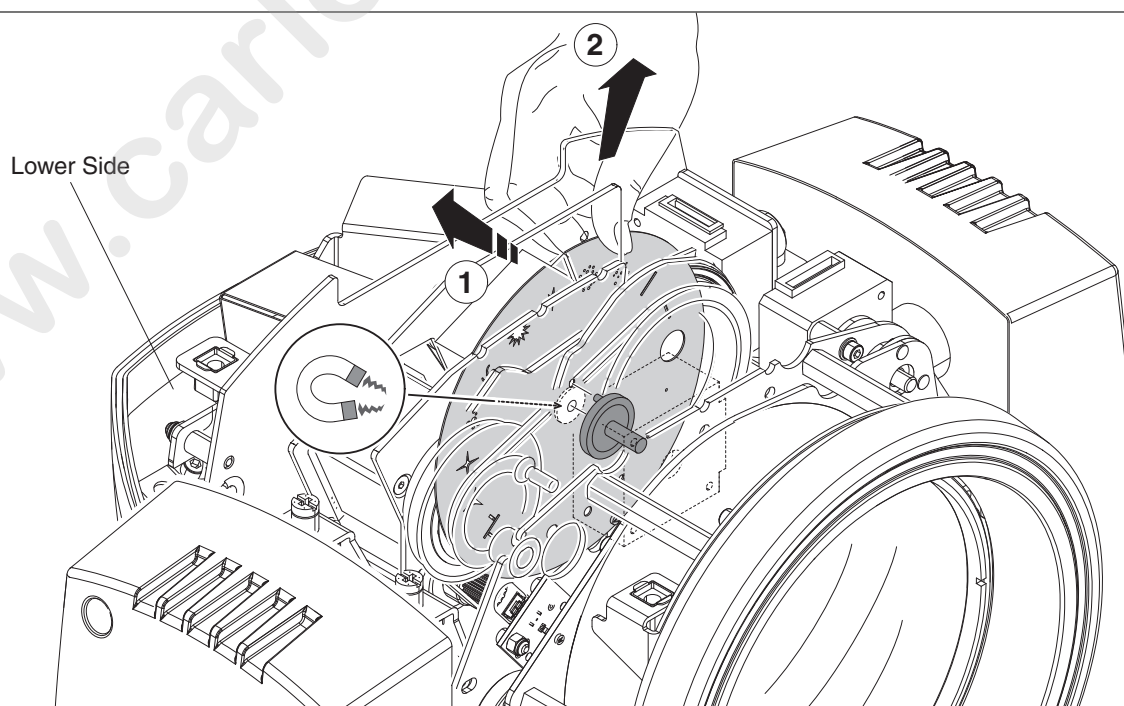Lower Side

1

Anti IR/UV filter support template - Fig. 15
WARNING:
During maintenance and lamp replacement, we recommend you pay close attention to correct anti IR/UV filter support tilt. Incorrect tilt compromises lamp performance.
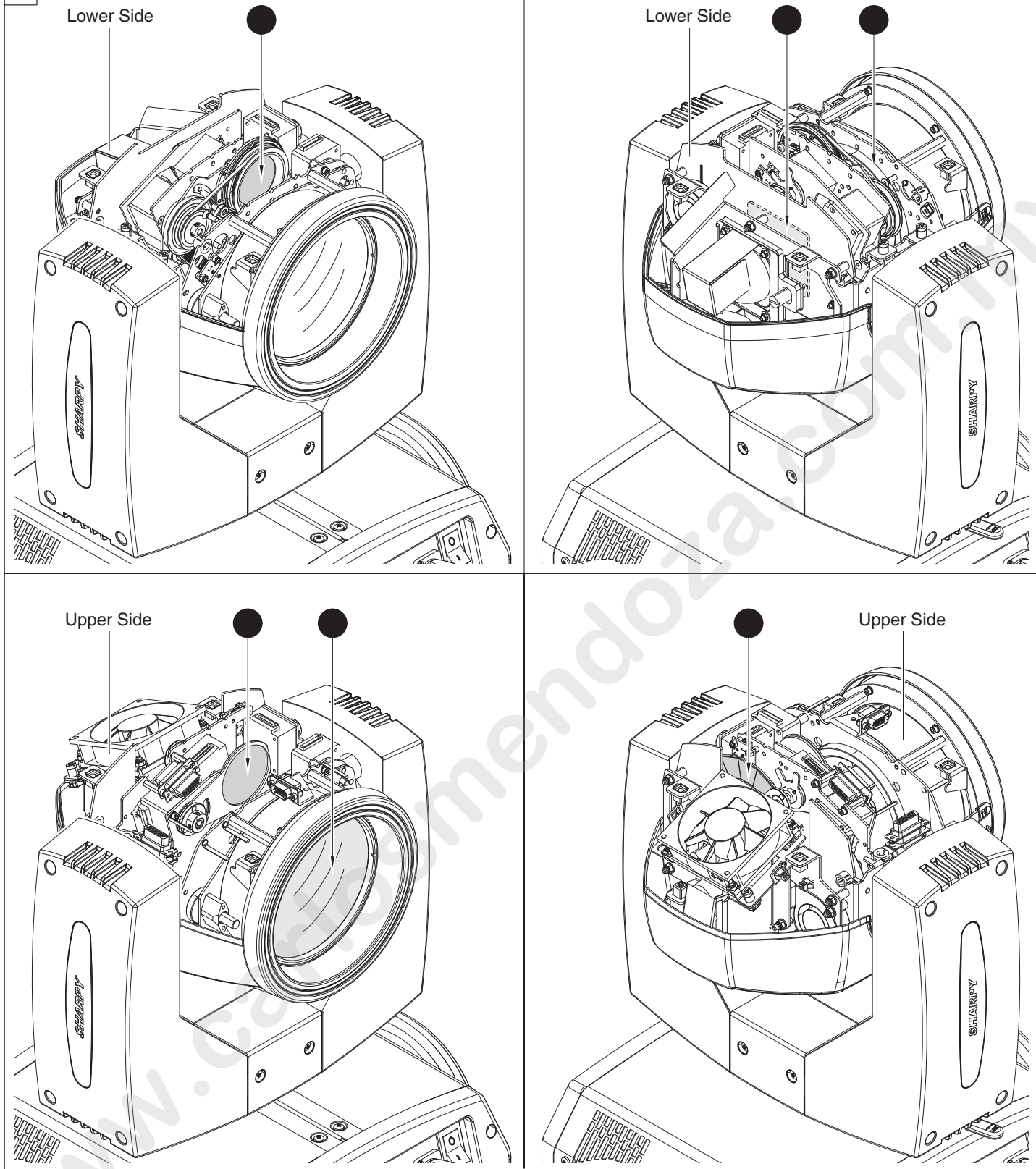
16

2

Lower Side

1

Replacing fixed gobos wheel - Fig. 16
WARNING: Before using personalised gobos wheel contact Clay Paky.

17

Lower Side ●

Lower Side ● ●

Upper Side ● ●

Upper Side ●

Periodical cleaning - Fig. 17

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 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.

18

Upper Side
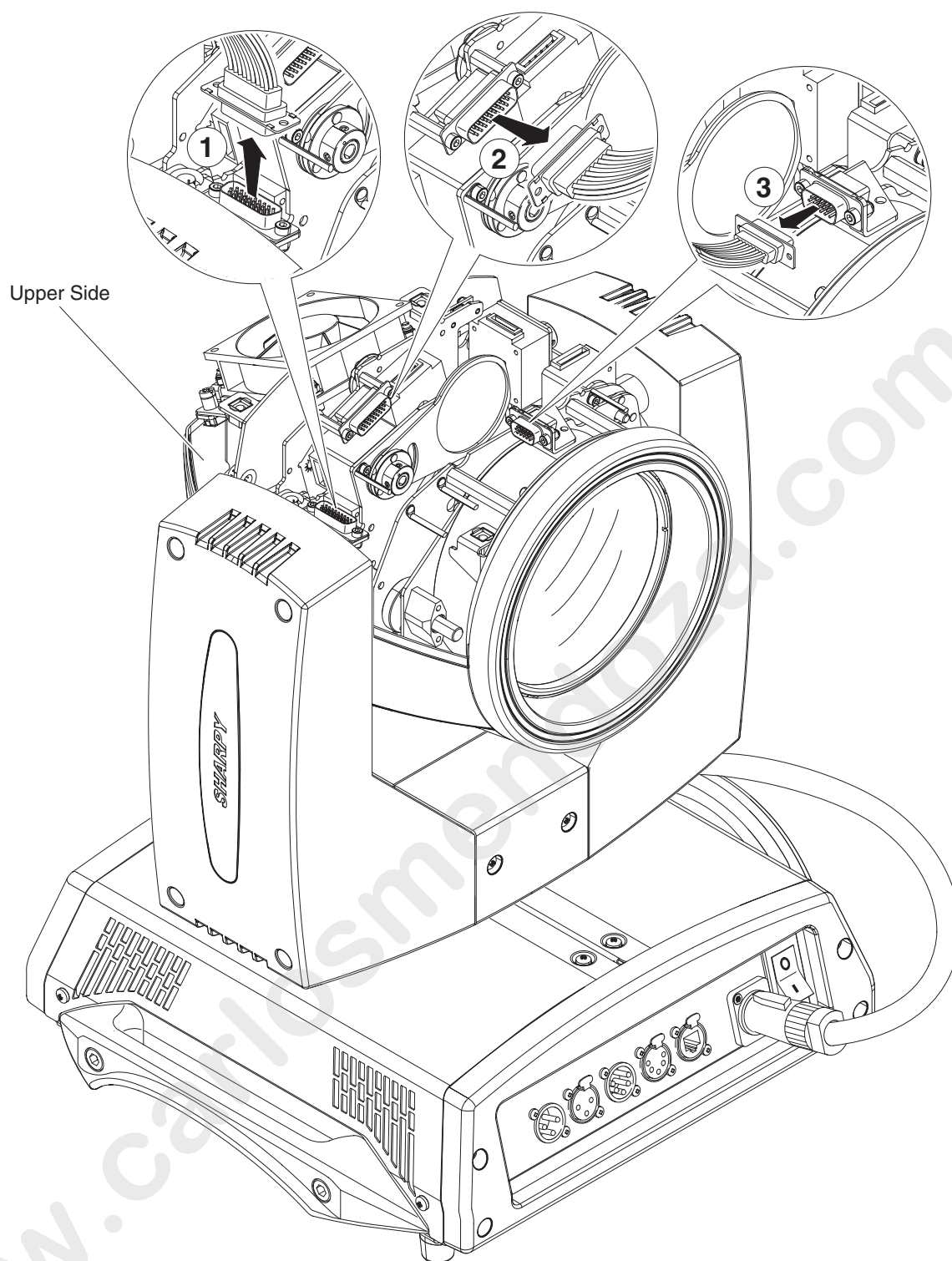
Extraction of the effect modules: Preliminary operations - Fig. 18

19

Lower Side

Lower Side

Lower Side

Lower Side
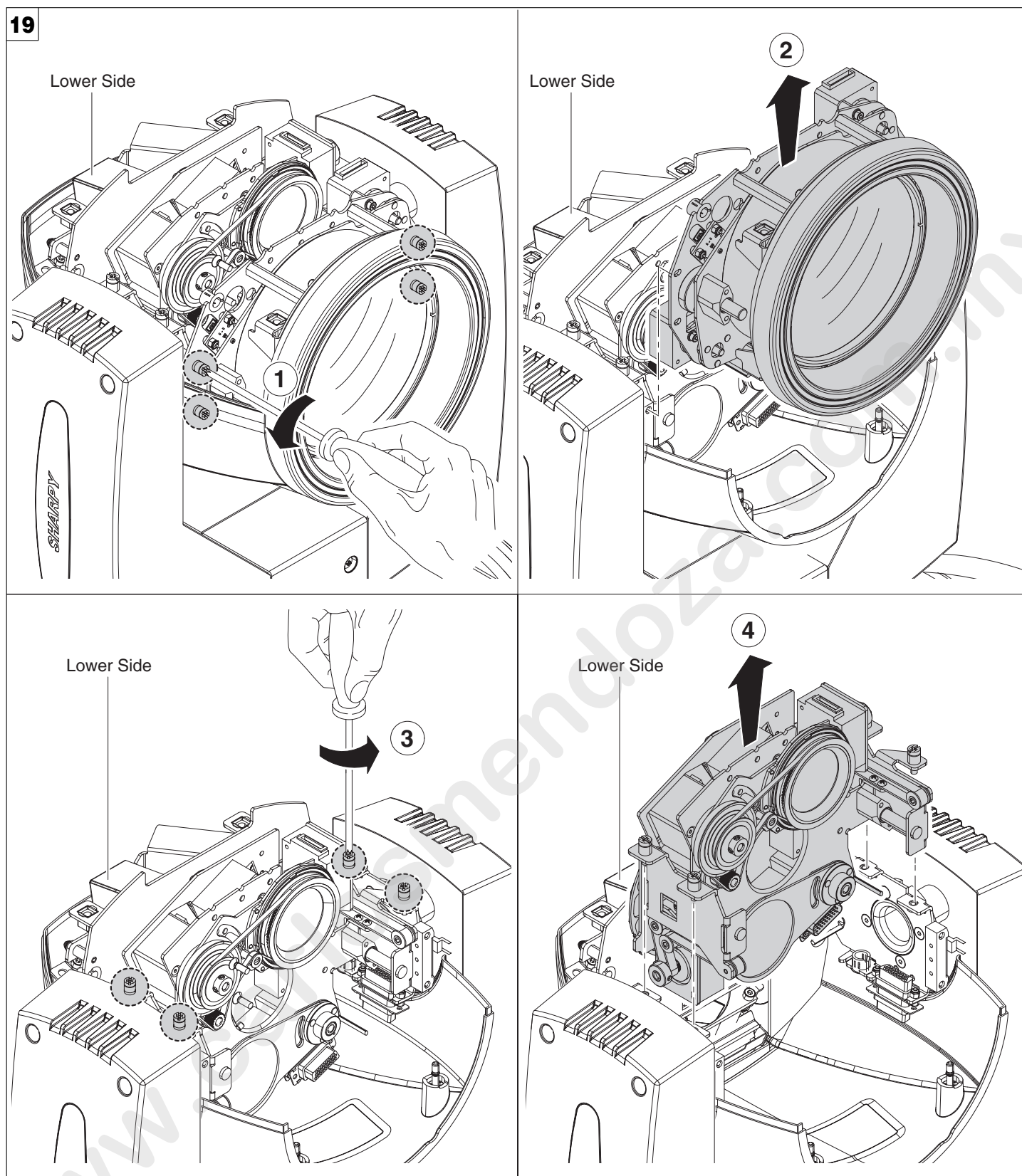
Extraction of the effect modules - Fig. 19
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 17 and 18 in reverse order.
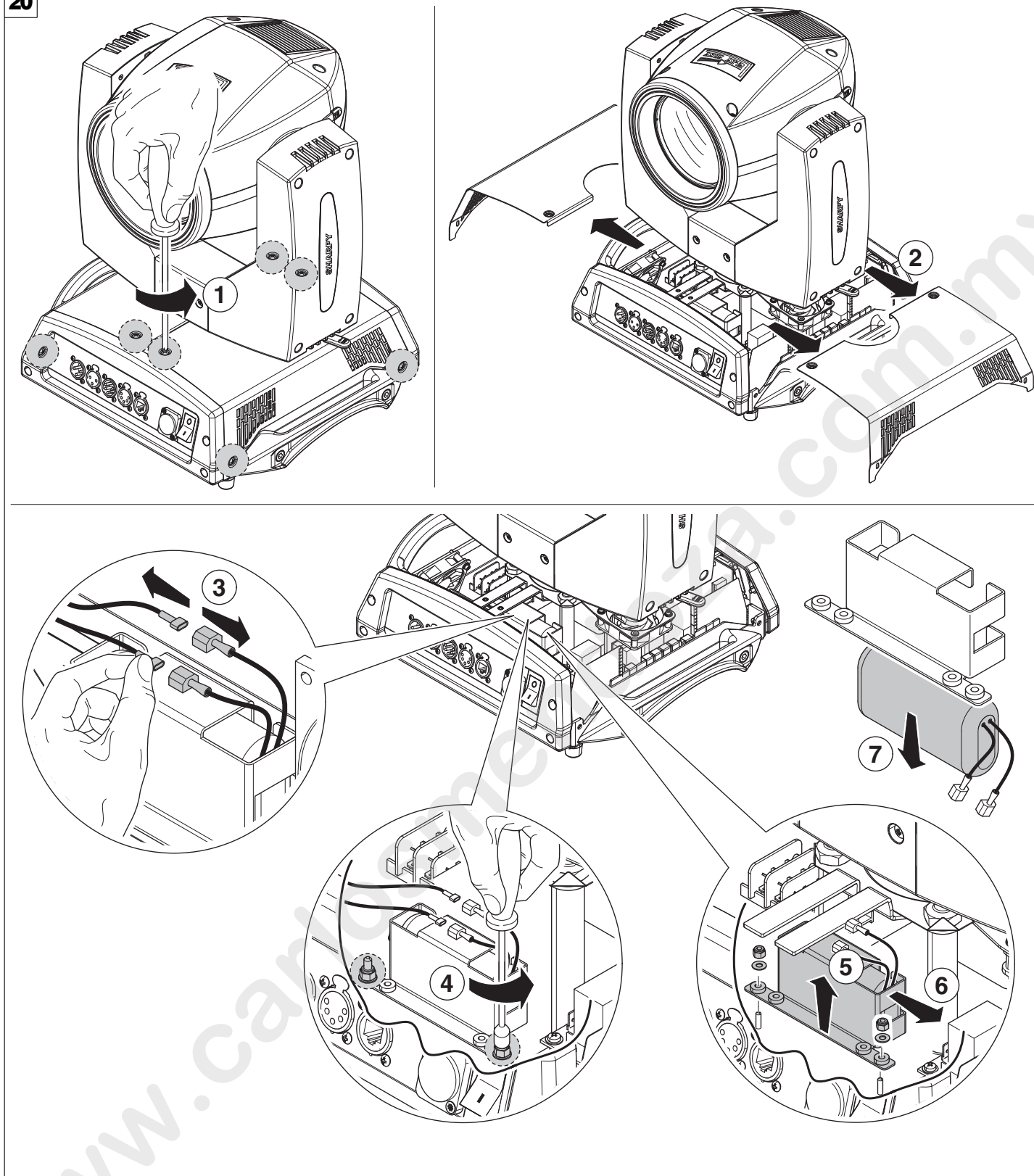
Battery removal - Fig. 20

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.

LiFePO4
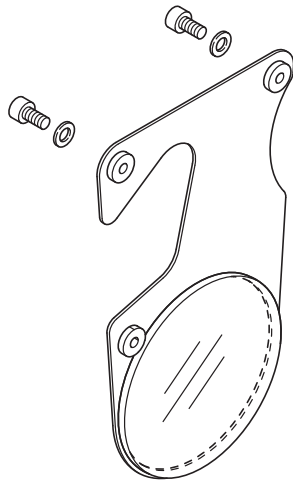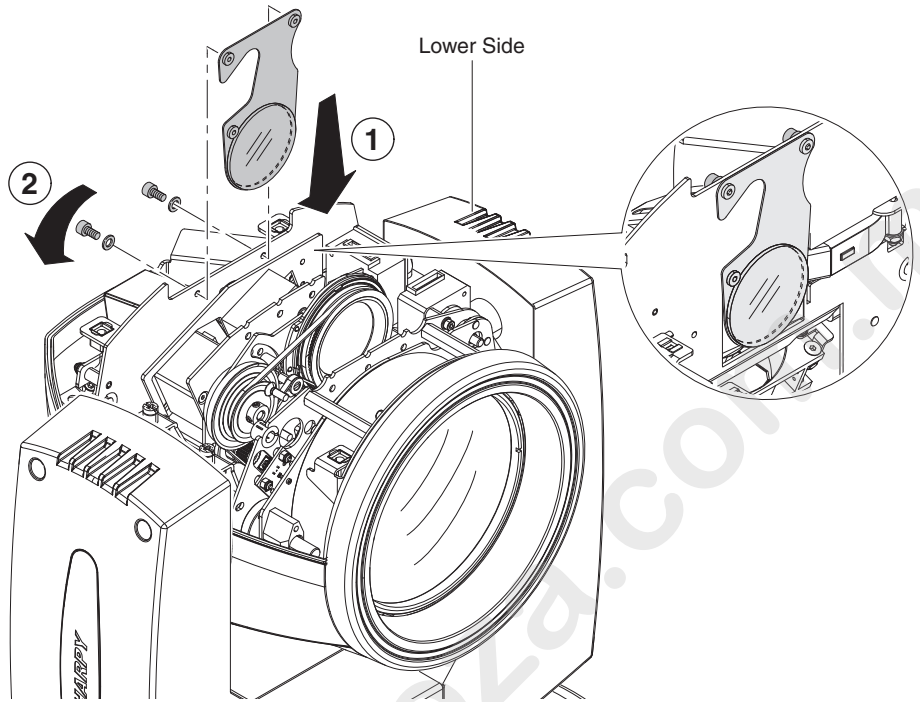
Heat screen filter - Fig. 21
An optional filter kit is also available when the SHARPY projector is used in environments that do not meet the minimum allowed distance of **12 metres** from illuminated objects; when this kit is assembled, the projector can be used at a minimum distance of **8 metres** from illuminated objects.
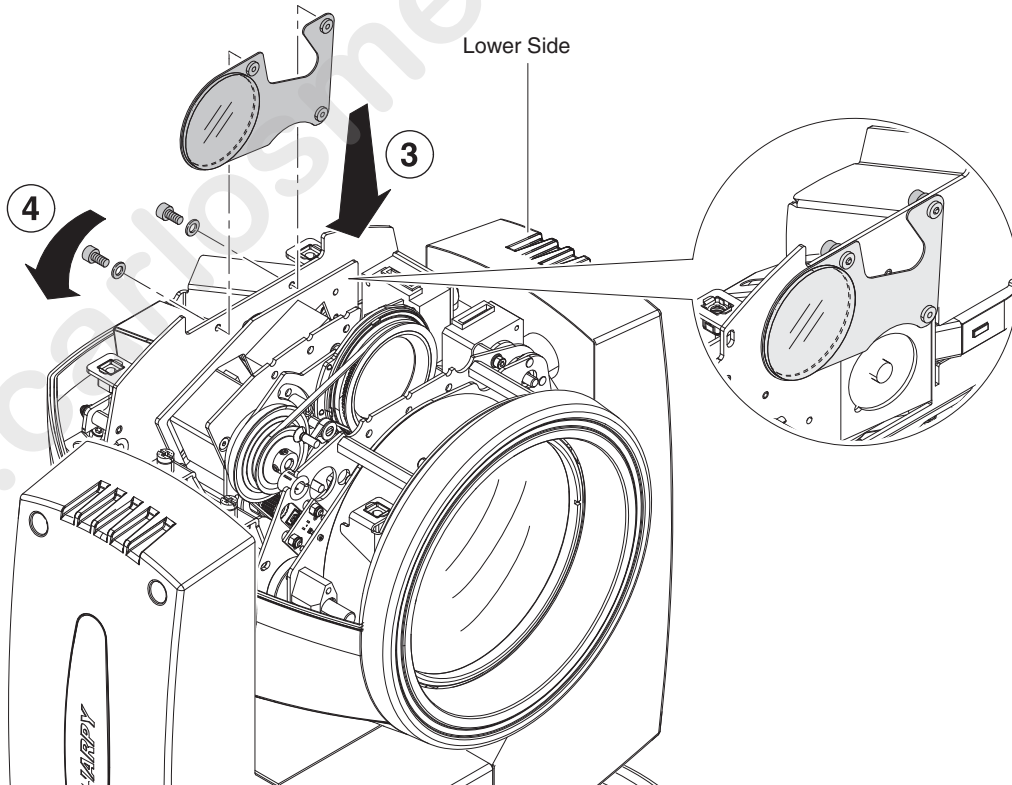
C61190 accessory can be placed inside the projector when not in use - Fig. 22

TECHNICAL INFORMATION

Power supplies available
115/230V 50/60Hz

Input power:
350VA a 230V 50Hz.

Total output
Max 8000 lumens

Lamp:
Lamp system with a short arc burner in a reflector
Philips MSD Platinum 5R (L10103)
- Output Lamp power: 189W
- Colour temperature 8000 K
- Luminous flux 7950lm
- Average life 2000 h
- Any working position

Osram Sirius HRI 190+ (LAM002)
- Output Lamp power: 190W
- Colour temperature 8200 K
- Luminous flux 8100lm
- Average life 3000h
- Any working position

Motors:
13 stepper motors, operating with microsteps,
totally microprocessor controlled.

Channels:
Max 20 control channels.

Inputs:
DMX 512
Ethernet

Movable body:
• Movement by means of two stepper motors, controlled by microprocessor.
• Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.
• Travel:
  - PAN = 540°
  - TILT = 252°
• Maximum speeds:
  - PAN = 2.45 sec
  - TILT = 1.30 sec

• Resolution:
  - PAN = 2.11°
  - PAN FINE = 0.008°
  - TILT = 0.98°
  - TILT FINE = 0.004°
• Accuracy:
  - Resolution ± 0,15° (Range 0,3°)

IP20 protection rating:
• 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 axial fans.

Body:
• Aluminium structure with die-cast plastic cover.
• Two side handles for transportation.
• Device locking PAN and TILT mechanisms for transportation and maintenance.

Working position
Functioning in any position.

Weights:
about 19 Kg (41lbs 13ozs).

---

315 (12.40")
280 (11.02")
450 (17.72")

185 (7.28")
345 (13.58")
475 (18.70")
330 (12.99")
405 (15.94")
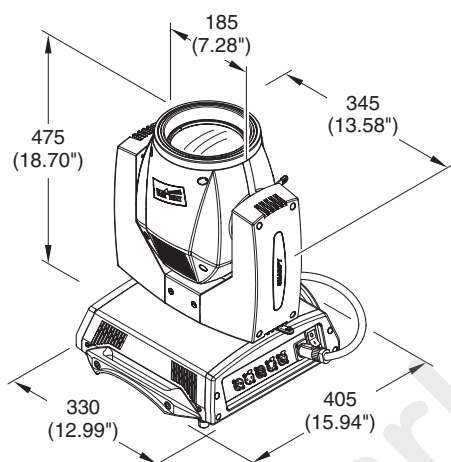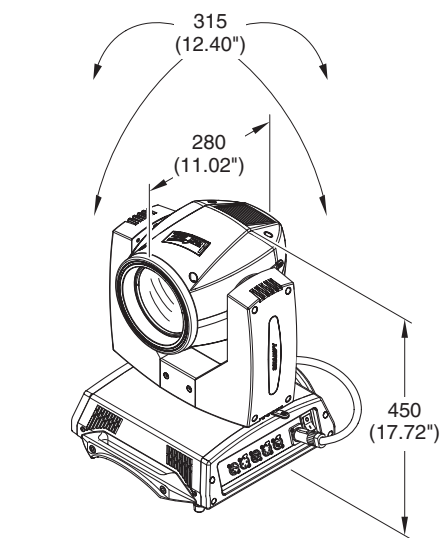
CAUSE AND SOLUTION OF PROBLEMS

THE PROJECTOR WILL NOT SWITCH ON					
	ELECTRONICS NON-OPERATIONAL				**PROBLEMS**
		DEFECTIVE PROJECTION			
			REDUCED LUMINOSITY		
				POSSIBLE CAUSES	*CHECKS AND REMEDIES*
●				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).

SHARPY

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	COLOUR WHEEL	COLOUR WHEEL
2	STOP / STROBE	STOP / STROBE
3	DIMMER	DIMMER
4	STATIC GOBO CHANGE	STATIC GOBO CHANGE
5	PRISM INSERTION	PRISM INSERTION
6	PRISM ROTATION	PRISM ROTATION
7	EFFECTS MOVEMENT	EFFECTS MOVEMENT
8	FROST	FROST
9	FOCUS	FOCUS
10	PAN	PAN
11	PAN FINE	PAN FINE
12	TILT	TILT
13	TILT FINE	TILT FINE
14	FUNCTION	FUNCTION
15	RESET	RESET
16	LAMP CONTROL (with Option "Lamp Dmx" ON)	LAMP CONTROL (with Option "Lamp Dmx" ON)
17		PAN - TILT TIME
18		COLOUR TIME
19		BEAM TIME
20		GOBO TIME

NOTE: On conclusion of resetting in case of absence of DMX signal, Pan & Tilt move to the "Home" position (Pan 128 bit - Tilt 128 bit) all the others channels stay at 0 bit.

• COLOUR WHEEL - channel 1

BIT	EFFECT
255	FAST ROTATION (160 rpm)
128	SLOW ROTATION (0.2 rpm)
124	BLUE + WHITE
120	BLUE
116	CTB 8000 + BLUE
111	CTB 8000
107	CTO 190 + CTB 8000
103	CTO 190
99	CTO 260 + CTO 190
94	CTO 260
90	CYAN + CTO 260
86	CYAN
82	MAGENTA + CYAN
77	MAGENTA
73	YELLOW + MAGENTA
69	YELLOW
64	PINK + YELLOW
60	PINK
56	LAVENDER + PINK
52	LAVENDER
47	LIGHT GREEN + LAVENDER
43	LIGHT GREEN
39	GREEN + LIGHT GREEN
35	GREEN
30	AQUAMARINE + GREEN
26	AQUAMARINE
22	ORANGE + AQUAMARINE
18	ORANGE
13	RED + ORANGE
9	RED
5	WHITE + RED
0	WHITE

• STOP / STROBE - channel 2

BIT	EFFECT
252 - 255	OPEN
239 - 251	RANDOM FAST STROBE
226 - 238	RANDOM MEDIUM STROBE
213 - 225	RANDOM SLOW STROBE
208 - 212	OPEN
207	FAST PULSATION (360 bpm)
108	SLOW PULSATION (30 bpm)
104 - 107	OPEN
103	FAST STROBE (12 flash/sec)
4	SLOW STROBE (1 flash/sec)
0 - 3	CLOSED

• DIMMER - channel 3

BIT	EFFECT
255	
	0%-100%: 0.02 sec
0	

• STATIC GOBO CHANGE - channel 4

BIT	EFFECT
255	GOBO 16 SHAKE FAST SPEED (600 bpm)
250	GOBO 16 SHAKE, SLOW SPEED (24 bpm)
249	GOBO 15 SHAKE FAST SPEED
244	GOBO 15 SHAKE, SLOW SPEED
243	GOBO 14 SHAKE FAST SPEED
237	GOBO 14 SHAKE, SLOW SPEED
236	GOBO 13 SHAKE FAST SPEED
231	GOBO 13 SHAKE, SLOW SPEED
230	GOBO 12 SHAKE FAST SPEED
224	GOBO 12 SHAKE, SLOW SPEED
223	GOBO 11 SHAKE FAST SPEED
218	GOBO 11 SHAKE, SLOW SPEED
217	GOBO 10 SHAKE FAST SPEED
212	GOBO 10 SHAKE, SLOW SPEED
211	GOBO 9 SHAKE FAST SPEED
205	GOBO 9 SHAKE, SLOW SPEED
204	GOBO 8 SHAKE FAST SPEED
199	GOBO 8 SHAKE, SLOW SPEED
198	GOBO 7 SHAKE FAST SPEED
192	GOBO 7 SHAKE, SLOW SPEED
191	GOBO 6 SHAKE FAST SPEED
186	GOBO 6 SHAKE, SLOW SPEED
185	GOBO 5 SHAKE FAST SPEED
180	GOBO 5 SHAKE, SLOW SPEED
179	GOBO 4 SHAKE FAST SPEED
173	GOBO 4 SHAKE, SLOW SPEED
172	GOBO 3 SHAKE FAST SPEED
167	GOBO 3 SHAKE, SLOW SPEED
166	GOBO 2 SHAKE FAST SPEED
160	GOBO 2 SHAKE, SLOW SPEED
159	FAST ROTATION (60 rpm)
118	SLOW ROTATION (5 rpm)
114-117	STOP
113	SLOW ROTATION (5 rpm)
72	FAST ROTATION (60 rpm)
68-71	GOBO 17
64-67	GOBO 16
60-63	GOBO 15
56-59	GOBO 14
52-55	GOBO 13
48-51	GOBO 12
44-47	GOBO 11
40-43	GOBO 10
36-39	GOBO 9
32-35	GOBO 8
28-31	GOBO 7
24-27	GOBO 6
20-23	GOBO 5
16-19	GOBO 4
12-15	GOBO 3
8-11	GOBO 2
4-7	GOBO 1
0-3	WHITE

• PRISM INSERTION - channel 5

BIT	EFFECT
255	
	PRISM INSERTED 0%-100%: 0.36 sec
128	
127	
	PRISM EXCLUDED
0	

• PRISM ROTATION - channel 6

BIT	EFFECT
255	FAST ROTATION (43 rpm)
193	SLOW ROTATION (1.1 rph)
191 - 192	STOP
190	SLOW ROTATION (1.1 rph)
128	FAST ROTATION (43 rpm)
127	POSITION 540°
105	POSITION 450°
84	POSITION 360°
63	POSITION 270°
42	POSITION 180°
21	POSITION 90°
0	POSITION 0°

SHARPY

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• **EFFECTS MOVEMENT - channel 7**

BIT	EFFECT
255	
	0%-100%: 0.33 sec
0	

• **FROST - channel 8**

BIT	EFFECT
255	FROST INSERTED
	0%-100%: 0.12 sec
0	FROST EXCLUDED

• **FOCUS - channel 9**

BIT	EFFECT
255	NEAR
	0%-100%: 1.11 sec
0	DISTANT

• **PAN - channel 10**

Operation with option InvertPan ↕ Off
(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)

BIT
255
0
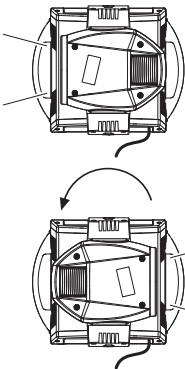
Operation with option InvertPan ↕ On
(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)

BIT
255
0

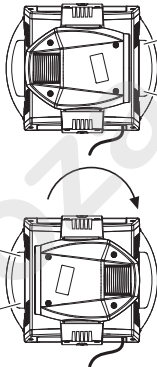• **PAN FINE - channel 11**

Operation with option InvertPan ↕ Off
(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)

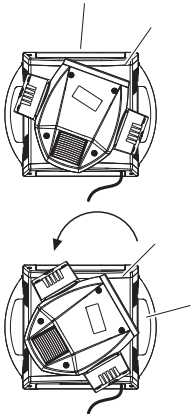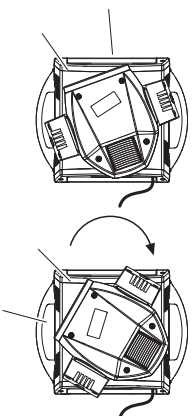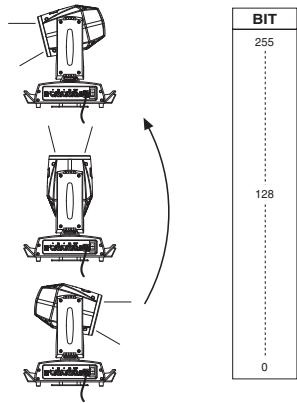| BIT |
|-----|
| 255 |
| 0 |

Operation with option InvertPan ↕ On
(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)

BIT
255
0

• TILT - channel 12

Operation with option Invert Tilt ↕ Off
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)

Operation with option Invert Tilt ↕ On
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)

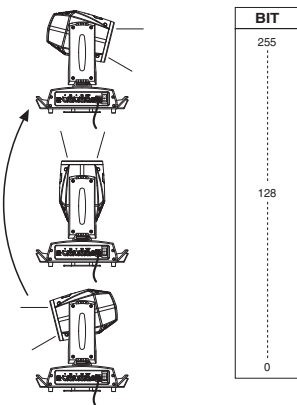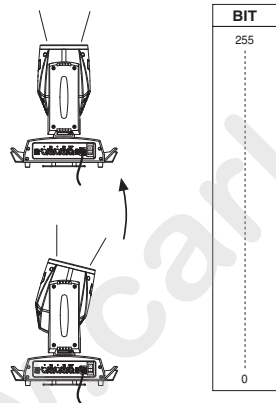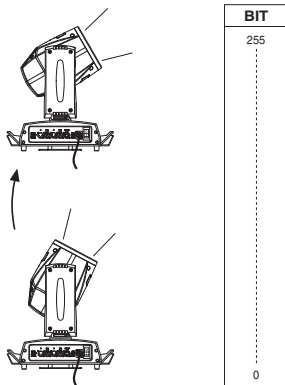## • TILT FINE - channel 13

Operation with option Invert Tilt ↕ Off
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)

Operation with option Invert Tilt ↕ On
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)

• FUNCTION - channel: 14

BIT	EFFECT	
255		
⋮	FREE	
63		
51-62	LINEAR (Default)	DIMMER CURVE FUNCTION
38-50	CONVENTIONAL	
25-37	NORMAL	PAN-TILT FUNCTION
12-24	FAST (Default)	
0-11	UNUSED RANGE	

The functions are actived passing through the unused range and staying 5 seconds in necessary level.

• RESET - channel: 15

BIT	EFFECT
255	COMPLETE RESET
	Complete reset is activated passing throug the unused range and staying 5 seconds in complete reset levels.
128	COMPLETE RESET
127	PAN / TILT RESET
	Pan / Tilt reset is activated passing throug the unused range and staying 5 seconds in Pan / Tilt reset levels.
77	PAN / TILT RESET
76	EFFECTS RESET
	Effects reset is activated passing throug the unused range and staying 5 seconds in Effects reset levels.
26	EFFECTS RESET
25	
0	UNUSED RANGE

The functions are actived passing through the unused range and staying 5 seconds in necessary level.

• LAMP CONTROL (only with option LAMP DMX On) - channel: 16

IMPORTANT: SHARPY is not provided with hot restrike ignition

BIT	EFFECT
255	LAMP ON
	Lamp switch-on passing through the unused range and staying 5 sec in Lamp ON levels.
101	LAMP ON
100	LAMP OFF
	Lamp switch off passing throug the unused range and staying 5 s in Lamp OFF levels.
26	LAMP OFF
25	
0	UNUSED RANGE

The functions are actived passing through the unused range and staying 5 seconds in necessary level.

	Timing Channel	Channel function
17	Pan - Tilt time	Pan - Tilt - (Pan fine - Tilt fine)
18	Colour time	Colour wheel
19	Beam time	Dimmer - Frost - Prism
20	Gobo time	Static Gobo

TIME TABLE

BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds
0	Full	43	8.6	86	24	129	41	172	58	216	170
1	0.2	44	8.8	87		130		173		217	
2	0.4	45	9	88	25	131		174		218	180
3	0.6	46	9.2	89		132	42	175	59	219	
4	0.8	47	9.4	90		133		176		220	
5	1	48	9.6	91	26	134	43	177	60	221	190
6	1.2	49	9.8	92		135		178		222	
7	1.4	50	10	93	27	136		179		223	
8	1.6	51	10.2	94		137	44	180	65	224	200
9	1.8	52	10.4	95		138		181		225	
10	2	53	10.6	96	28	139	45	182		226	210
11	2.2	54	11	97		140		183	70	227	
12	2.4	55		98		141		184		228	
13	2.6	56	12	99	29	142	46	185	75	229	220
14	2.8	57		100		143		186		230	
15	3	58	13	101	30	144	47	187		231	230
16	3.2	59		102		145		188	80	232	
17	3.4	60		103		146		189		233	
18	3.6	61	14	104	31	147	48	190	85	234	240
19	3.8	62		105		148		191		235	
20	4	63	15	106	32	149	49	192		236	
21	4.2	64		107		150		193	90	237	250
22	4.4	65		108		151		194		238	
23	4.6	66	16	109	33	152	50	195	95	239	260
24	4.8	67		110		153		196		240	
25	5	68	17	111	34	154	51	197		241	
26	5.2	69		112		155		198	100	242	270
27	5.4	70		113		156		199		243	
28	5.6	71	18	114	35	157	52	200	110	244	280
29	5.8	72		115		158		201		245	
30	6	73	19	116	36	159	53	202		246	
31	6.2	74		117		160		203	120	247	290
32	6.4	75		118		161		204		248	
33	6.6	76	20	119	37	162	54	205		249	300
34	6.8	77		120		163		206	130	250	
35	7	78	21	121	38	164	55	207		251	
36	7.2	79		122		165		208	140	252	310
37	7.4	80		123		166		209		253	
38	7.6	81	22	124	39	167	56	210		254	
39	7.8	82		125		168		211	150	255	Follow cue Data
40	8	83	23	126	40	169	57	212			
41	8.2	84		127		170		213			
42	8.4	85		128		171		214	160		
								215			