CLAYPAKY
AN OSRAM BUSINESS

AN OSRAM BUSINESS

ALPHA WASH 700

C61350

INSTRUCTION MANUAL

INDEX	
Page	**Contents**
2	Safety Information
3	Unpacking and preparation
4	Installation and start-up
5	Control panel
7	Menu setting
14	Maintenance
22	Technical information
22	Cause and solution of problems
23	Channel functions

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.

SAFETY INFORMATION

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: [FIS00U – Safety Information Alpha 700 series]

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: [FIS00U – Safety Information Alpha 700 series]

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: [FIS00U – Safety Information Alpha 700 series]

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: [FIS00U – Safety Information Alpha 700 series]

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. : [FIS00U – Safety Information Alpha 700 series]
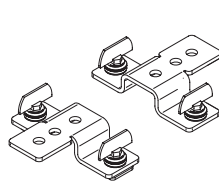
RU

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: [FIS00U – Safety Information Alpha 700 series]

UNPACKING AND PREPARATION

1

Lamp 700W
(fitted into projector)

2 x 183102/805

Packing contents - Fig. 1

2

UNLOCKED

LOCKED

90°   90°

90°   90°

3

45°   45°

45°   45°

45°   45°

LOCKED

UNLOCKED

WASH 700
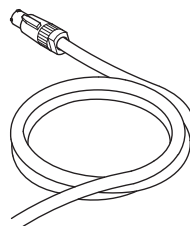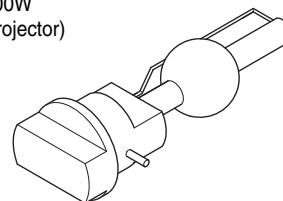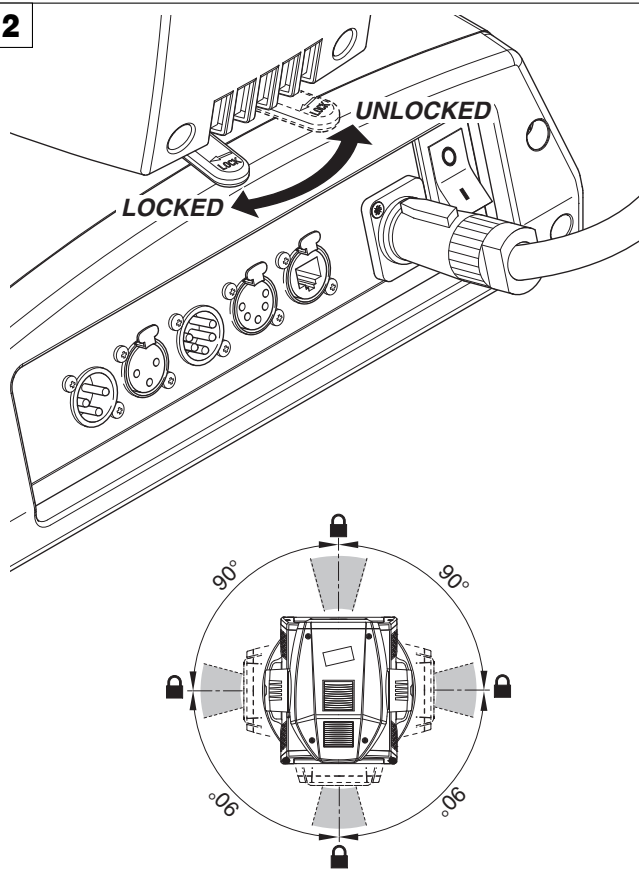
PAN Mechanism Lock and Release (every 90°) - Fig. 2

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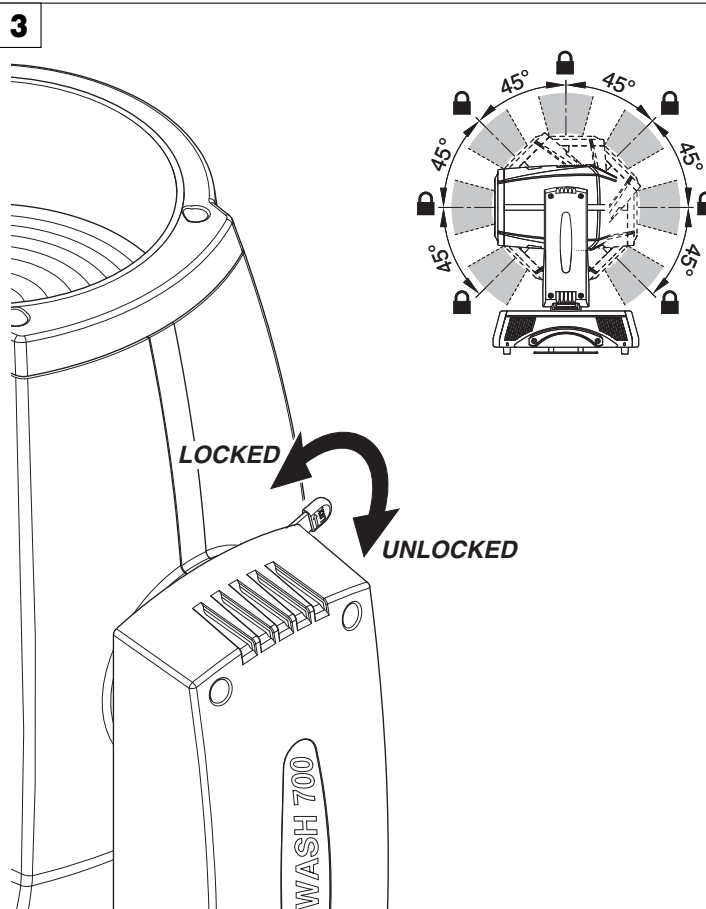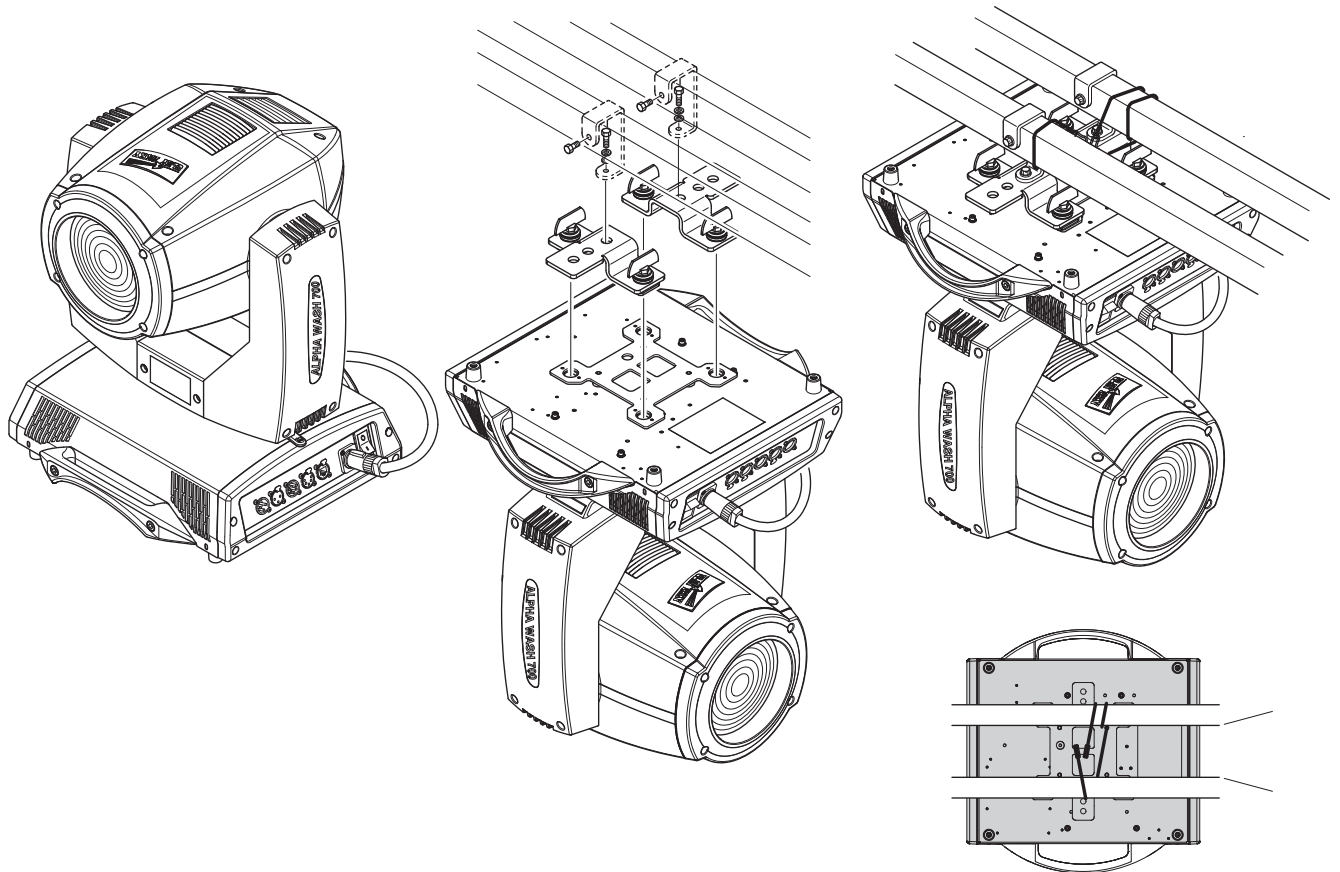**WARNING:** *with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request).*
This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

5
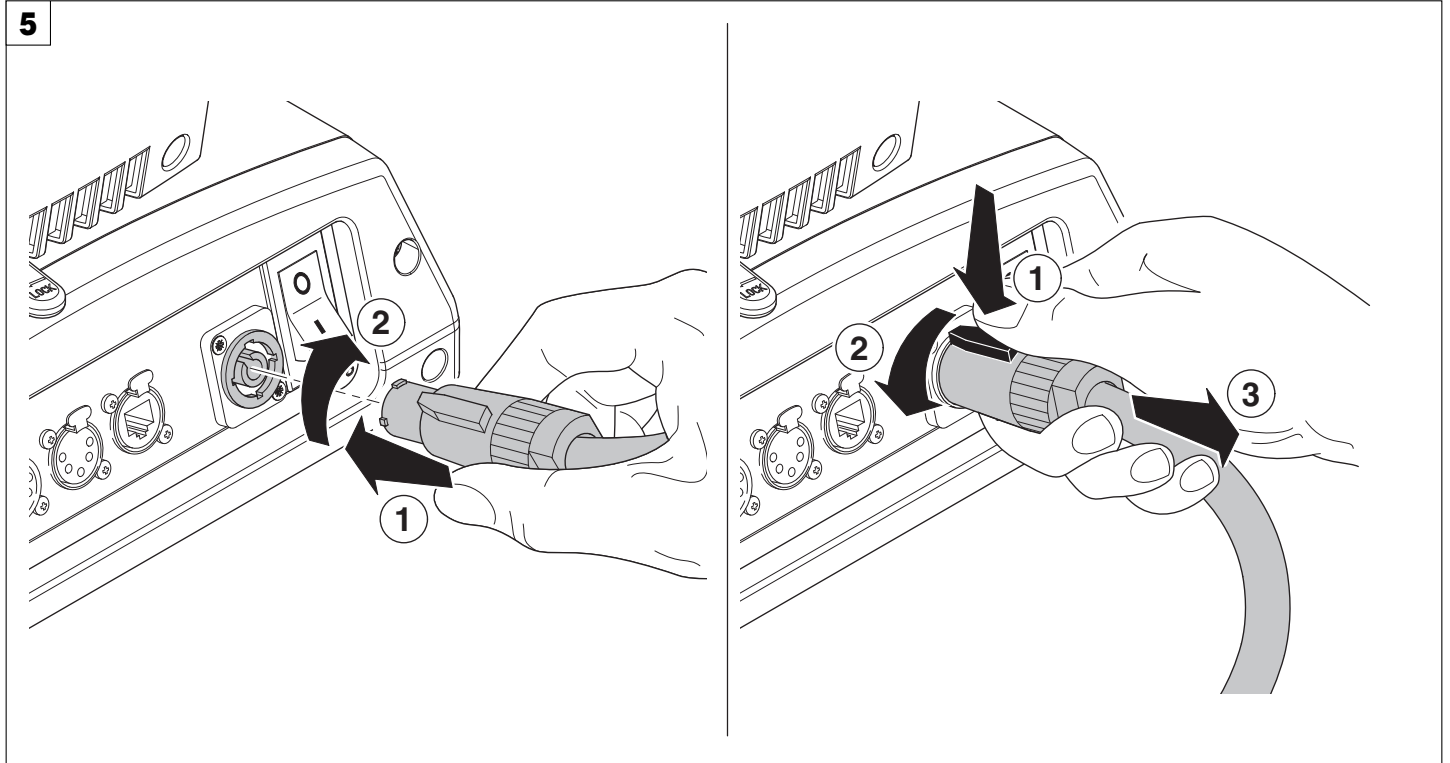
Connecting and disconnecting power cable - Fig. 5

6

Mains
L
N

Connecting to the mains supply - Fig. 6

7

DMX 512
5 PIN

SCREEN
− SIGNAL
+ SIGNAL

DMX 512
3 PIN

SIGNAL −
SIGNAL +
SCREEN

DMX 512

Connecting to the control signal line (DMX) - Fig. 7
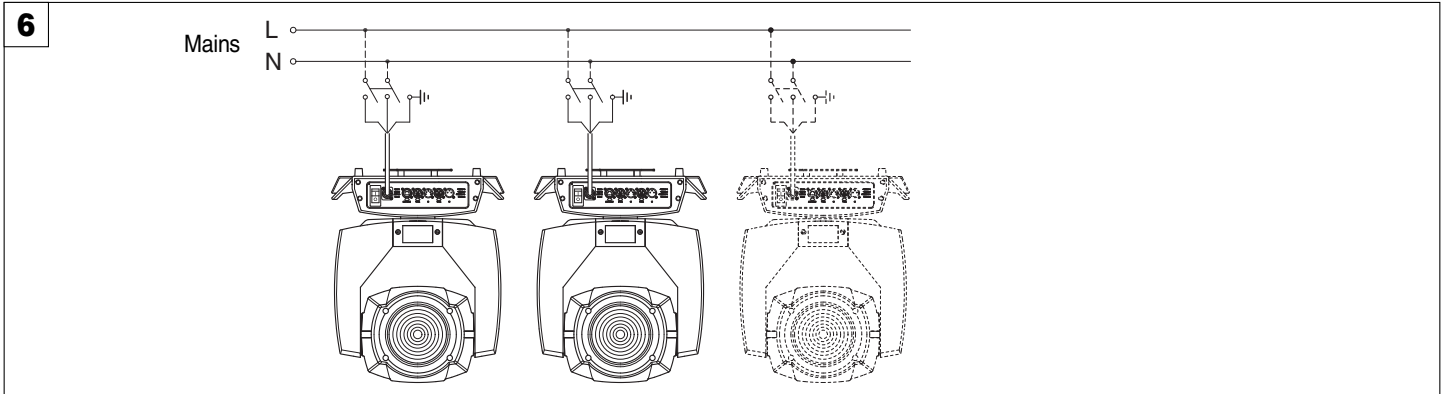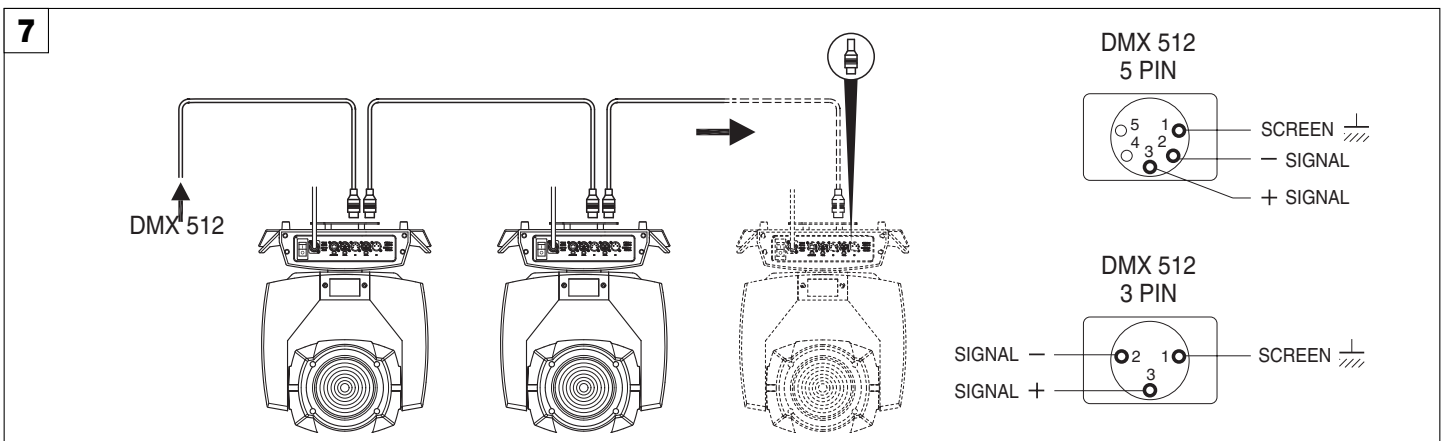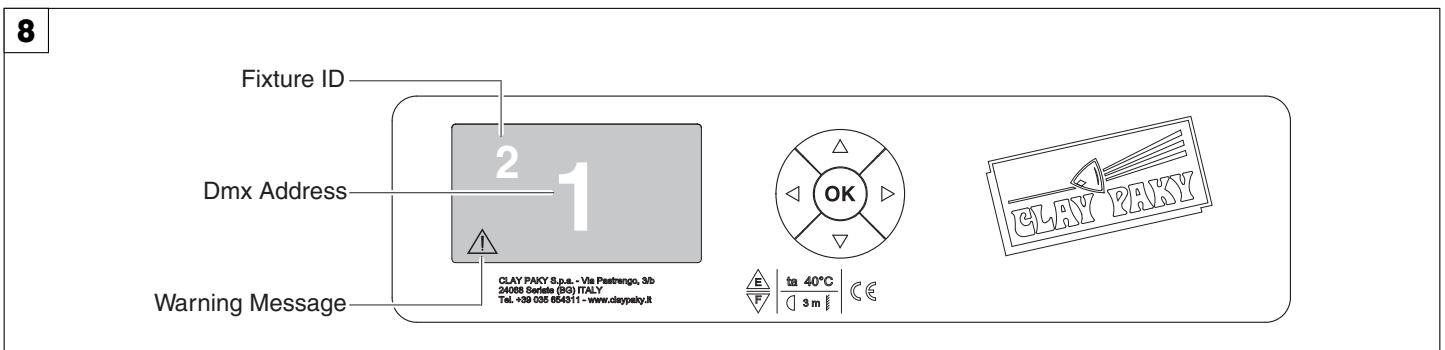Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female 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.

8

Fixture ID

Dmx Address

Warning Message

2
1

OK

CLAY PAKY

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

ta 40°C
3 m

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** **Alpha WASH** **700**	**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
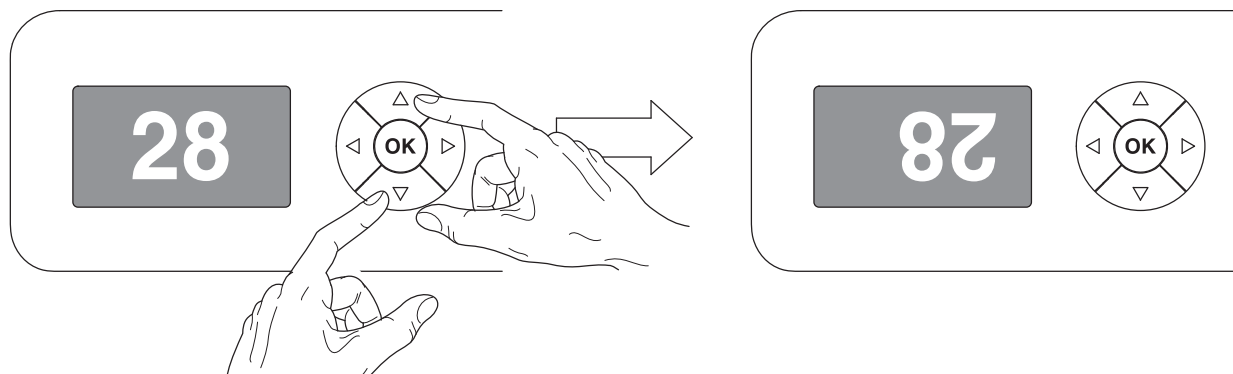
Reversal of the display - Fig. 9

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
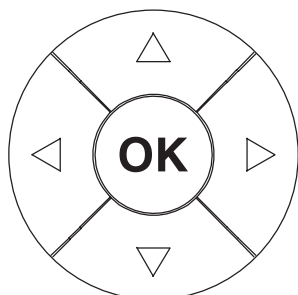
(OK)		Confirms the displayed value, or activates the displayed function, or enters the successive menu.
⊙ DOWN		Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.
⊙ UP		Increases the value displayed (with auto-repetitions) or passes to the previous item in a 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 (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 functionning of effects

   • Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.

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.

1

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

Option

Information

Manual Control

Test

Advanced

2

Option
- Lamp Dmx
- 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
  - Color Mixing
  - Color mixing curve
  - Fixed Wheel Shortcut
- Shutter
  - Shutter On Error
  - Dimmer On Shutter
- Power Mode
  - 4-700W Full fan speed
  - 400W Low fan speed
  - 4-700W Auto fan speed
- 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 Diagnost.
- Dmx Monitor
- Fans Monitor
- Sensor status
- Network params

4

Manual Control
- Lamp
- Reset
- Channel

5

Test
- Pan / Tilt
- Colour
- Beam
- All

6

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

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 ⑩ - the current DMX Adress appear on the display.
2) Use the UP ⊙ and DOWN ⊙, RIGHT ⊙ keys to plan the DMX Address.
3) Press ⑩ 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 ⑩ - 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 ⑩ to confirm the selection or LEFT ⊙ to keep current settings.

FIXTURE ID
Allows you to select the FIXTURE ID.
1) Press ⑩ - the current Fixture ID appear on the display.
2) Use the UP ⊙, DOWN ⊙, RIGHT ⊙ keys to plan the Fixture ID.
3) Press ⑩ 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 ⑩.
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 ⑩ 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 ⑩ 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 ⑩ 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 ⑩ 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.
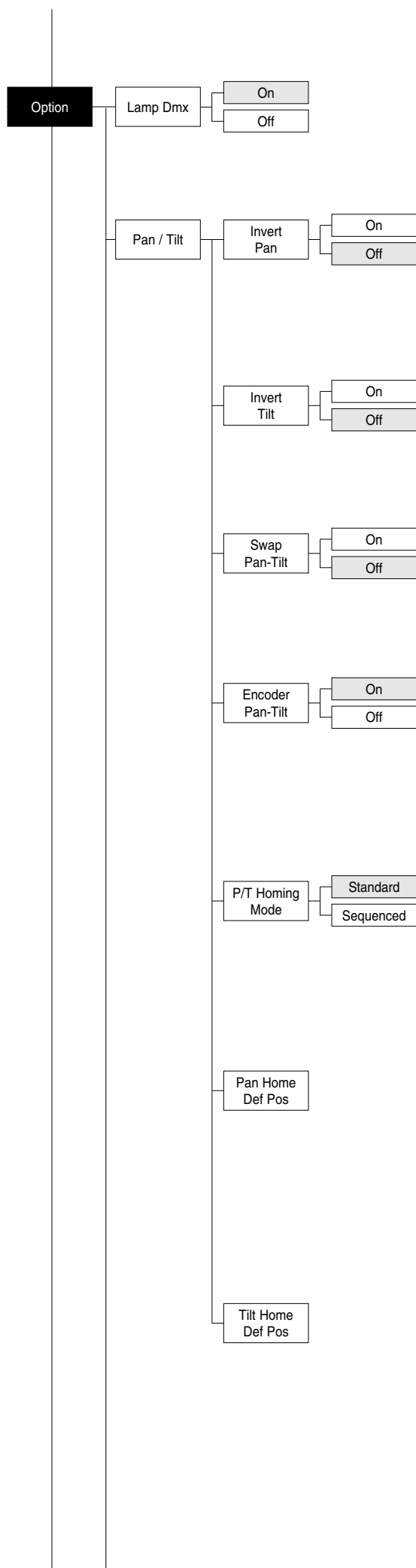1) Press ⑩ – the current Universe address appears on the display.
2) Use the UP ⊙, DOWN ⊙, RIGHT ⊙ keys to set the Universe address.
3) Press ⑩ to confirm the selection or LEFT ⊙ to keep the current setting.

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 side)

- **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**
    - **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.

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
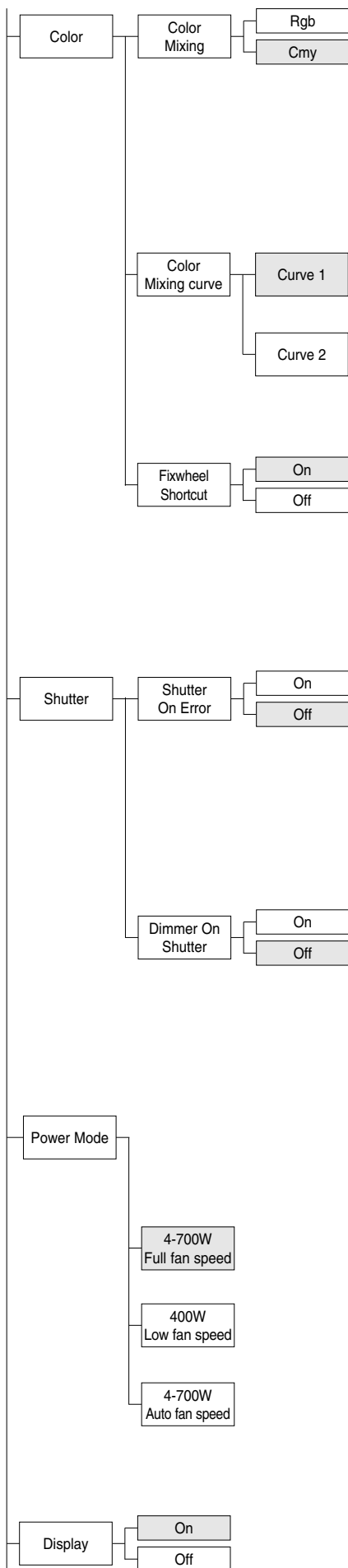Lets you assign the Tilt channel "home" position at the end of Reset, without a DMX input signal.
1) Press ⓞⓚ , the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   0%
   12.5%
   25%
   50% (default)
   75%
   87.5%
   100%
3) Press ⓞⓚ to confirm the selection or LEFT ⊙ to keep the current setting.

```
                    ┌──────────┐         ┌───────┐
┌─────────┐    ┌───│  Color   │────────│  Rgb  │
│  Color  │────┤   │ Mixing   │     ┌──┤───────┤
│         │    │   └──────────┘     └──│  Cmy  │
└─────────┘    │                       └───────┘
               │   ┌──────────┐         ┌────────┐
               ├───│  Color   │────────│ Curve 1 │
               │   │Mixing curve│    ┌──└────────┘
               │   └──────────┘     │   ┌────────┐
               │                    └──│ Curve 2 │
               │                        └────────┘
               │   ┌──────────┐         ┌───────┐
               └───│ Fixwheel │────────│  On   │
                   │ Shortcut │     ┌──├───────┤
                   └──────────┘     └──│  Off  │
                                        └───────┘
```

COLOR

Color mixing

Used for reversing the CMY color mixing system.
1) Press ⊗ - the current settings appear on the display (On or Off).
2) Use the UP ⊕ and DOWN ⊖ keys select one of the following settings:
   RGB color mixing mode
   CMY color mixing mode
3) Press ⊗ to confirm the selection or LEFT ◁ to keep current settings.

Color mixing curve

It lets you select the "Color mixing curve" from the two available.
1) Press ⊗ the current setting appears on the display.
2) Use the UP ⊕ and DOWN ⊖ keys to select one of the following settings:
   Curve 1
   Curve 2
3) Press ⊗ to confirm the selection or LEFT ◁ to keep the current setting.

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.

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 on Shutter

Enables automatic closing of the dimmer when the strobe is completely closed.
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 automatic closing of the dimmer.
3) Press ⊗ to confirm the selection, or LEFT ◁ to keep current settings.

POWER MODE
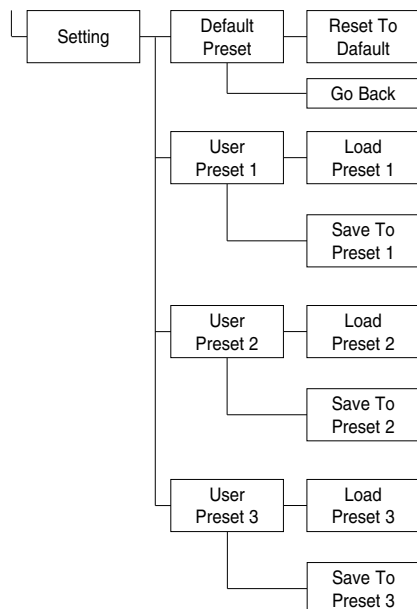
Allows you to select a Power Mode from the three available.
1) Press ⊗ - the current settings appear on the display.
2) Use the UP ⊕ and DOWN ⊖ keys to select one of the following settings:
   - **4-700W Full fan speed**: Lamp can change from full-power (700W) to half-power (400W) using the LAMP CONTROL channel. Fans always work at Full speed.
   - **400W Low fan speed**: Lamp constantly works in half-power mode (400W) while the Fan always works at Low speed. With LAMP CONTROL channel you can only switch the lamp ON and OFF.
   - **4-700W Auto fan speed**: Lamp can change from full-power (700W) to half-power (400W) using the LAMP CONTROL channel. Automatically the fans switch from Full speed to Low speed respectively.
3) Press ⊗ to confirm the selection or LEFT ◁ to keep current setting.

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.

Menu Tree (left column)

- **Setting**
  - **Default Preset**
    - Reset To Dafault
    - 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

- **Information**
  - **System Errors**
  - **Fixture Hours**
    - Total   XXX
    - Partial XXX
    - Reset...

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).

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
Invert Pan	Off
Invert Tilt	Off
Swap Pan-Tilt	Off
Encoder Pan-Tilt	On
Color mixing	CMY
Color mixing curve	Curve 1
Fixed Wheel Shortcut	On
Shutter on error	Off
Dimmer on Shutter	Off
Power Mode	4-700 Full fan speed
Display	On

INFORMATION MENU

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

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.
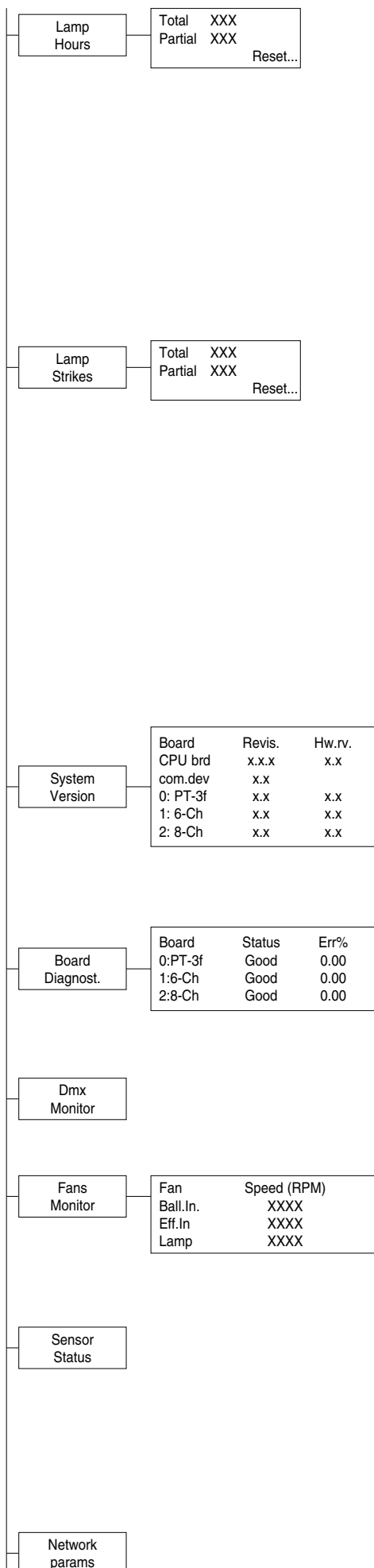2) Press ⓞⓚ to reset partial projector working hours a confirmation message (Are you sure?) appears on the display.
3) Select YES to reset partial projectors counter or NO to keep the current setting and return to the top menu level.

Lamp Hours		Total	XXX
		Partial	XXX
			Reset...

LAMP HOURS

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		Total	XXX
		Partial	XXX
			Reset...

LAMP STRIKES

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

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: 6-Ch	x.x	x.x
		2: 8-Ch	x.x	x.x

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: 6-Ch (6 channel board)

2: 8-Ch (8 channel board)

Board Diagnost.		Board	Status	Err%
		0:PT-3f	Good	0.00
		1:6-Ch	Good	0.00
		2:8-Ch	Good	0.00

BOARD DIAGNOSTIC

Used for displaying the status error of each board installed in the projector:

0: PT-3f (Pan / Tilt board)

1: 6-Ch (6 channel board)

2: 8-Ch (8 channel board)

Dmx Monitor

DMX MONITOR

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

Fans Monitor		Fan	Speed (RPM)
		Ball.In.	XXXX
		Eff.In	XXXX
		Lamp	XXXX

FANS MONITOR

Used for displaying the speed of each fan installed in the projector:

Ball. IN (Ballast IN Fan)

Eff.IN (Effects IN Fan)

Lamp (Lamp Fan)

Sensor Status

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
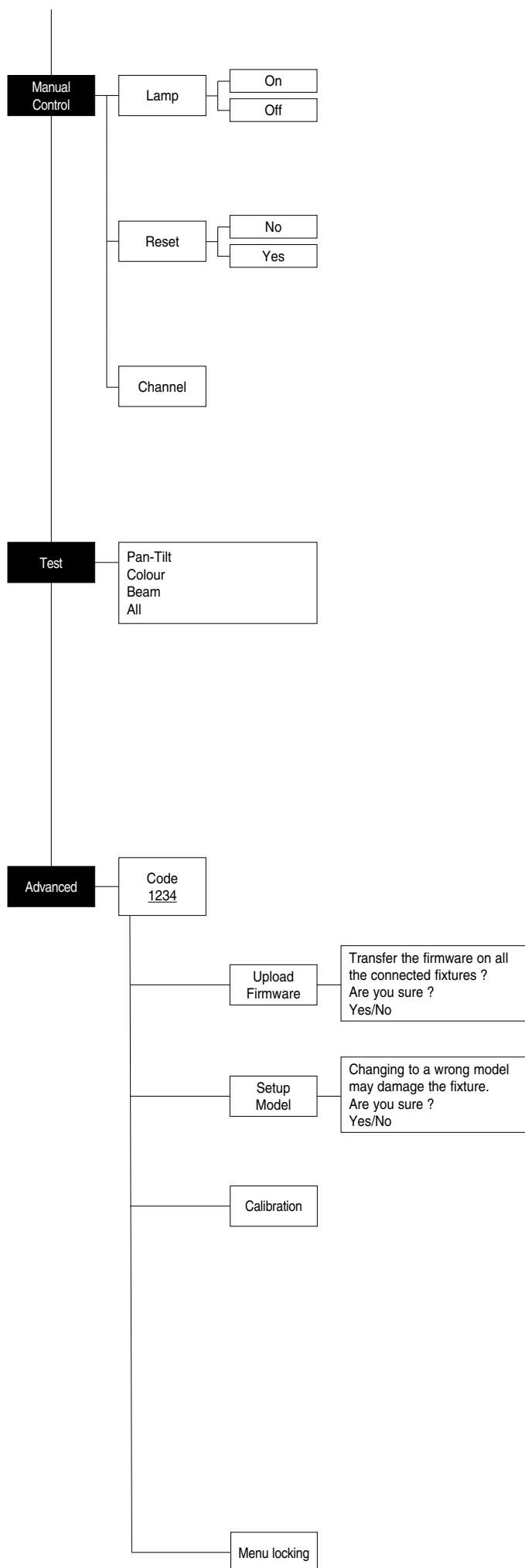
• ON= sensor working

• OFF= sensor defective

Network params

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

Menu Tree (left column)

- **Manual Control**
  - Lamp
    - On
    - Off
  - Reset
    - No
    - Yes
  - Channel
- **Test**
  - Pan-Tilt
    Colour
    Beam
    All
- **Advanced**
  - Code 1234
    - Upload Firmware — Transfer the firmware on all the connected fixtures ? Are you sure ? Yes/No
    - Setup Model — Changing to a wrong model may damage the fixture. Are you sure ? Yes/No
    - Calibration
    - Menu locking

MANUAL CONTROL

LAMP
Used for turning lamp on and off from the projector control panel.
1) Press ⊙OK⊙ - 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 ⊙OK⊙ to confirm the selection or LEFT ⊙ to keep current settings and return to the top level.

RESET
Used for resetting the projector.
1) Press ⊙OK⊙ 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 ⊙OK⊙ - the first channel appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select the required channel:
3) Press ⊙OK⊙ 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 MENU

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

Test sequence:
Pan - Tilt effects (Pan & Tilt)
Colour effects (CMY / CTO / Colour wheel)
Beam effects (Stopper-Strobe / Dimmer / Beam shaper / Zoom)
All effects

ADVANCED MENU

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

UP LOAD FIRMWARE
Allows you to transfer the firmware from 1 fixture to all the connected fixtures.
1) Press ⊙OK⊙ , 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 MODEL
Allows you to change the default model of projector.
1) Press ⊙OK⊙ 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
Allows you to adjust effects from the control panel to obtain perfect uniformity between the projectors.
1) Press ⊙OK⊙ - "channels" appears on the display.
2) Using the UP ⊙ and DOWN ⊙ keys, select the effect you wish to regulate.
3) Press ⊙OK⊙ and use the RIGHT ⊙, UP ⊙ and DOWN ⊙ buttons to make the adjustment by setting a value between 0 and 255.
4) Press ⊙OK⊙ 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 ⊙OK⊙ – 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.
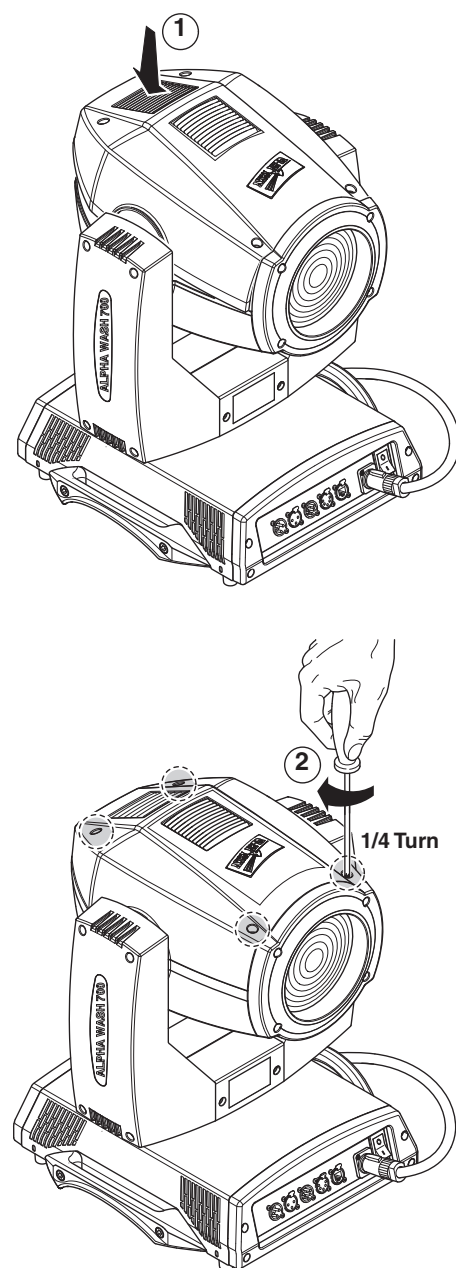
MENU LOCKING
It allows you to assign a password to lock the access to the user menu, so that only users know the password can change settings. The password is 4-digit number.
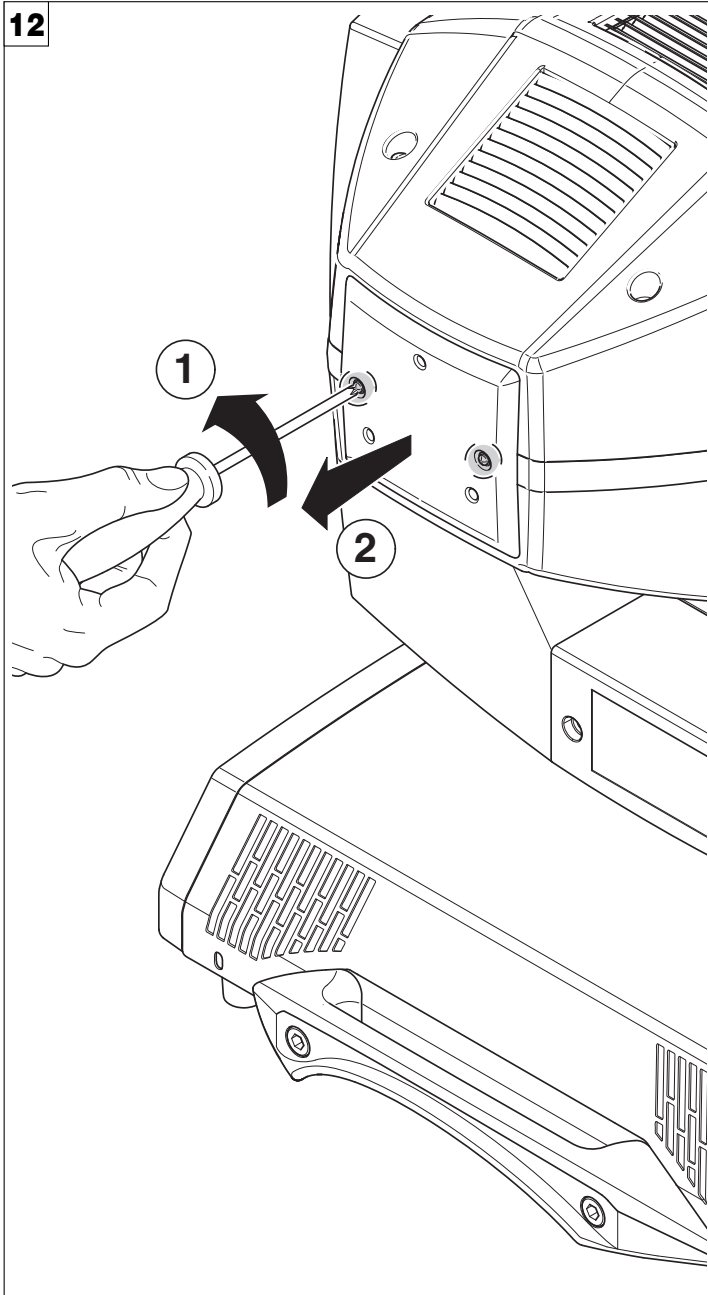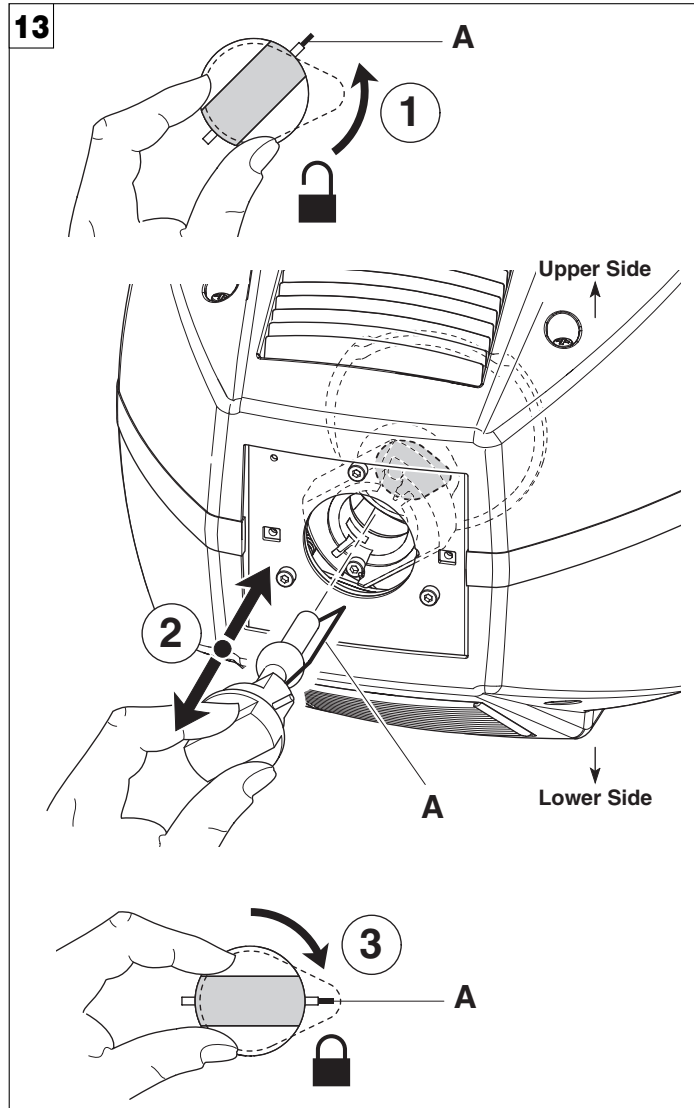
10
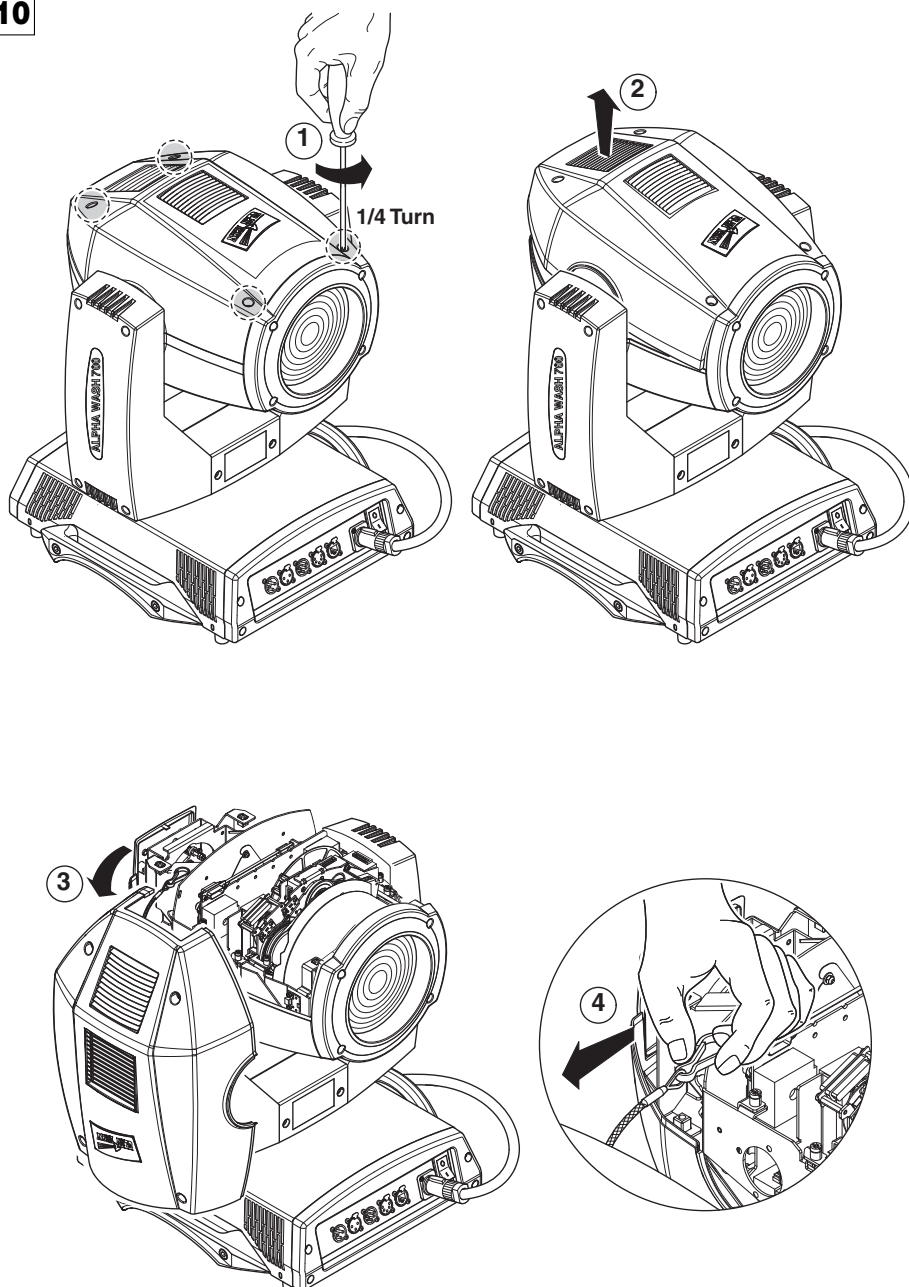
11

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.

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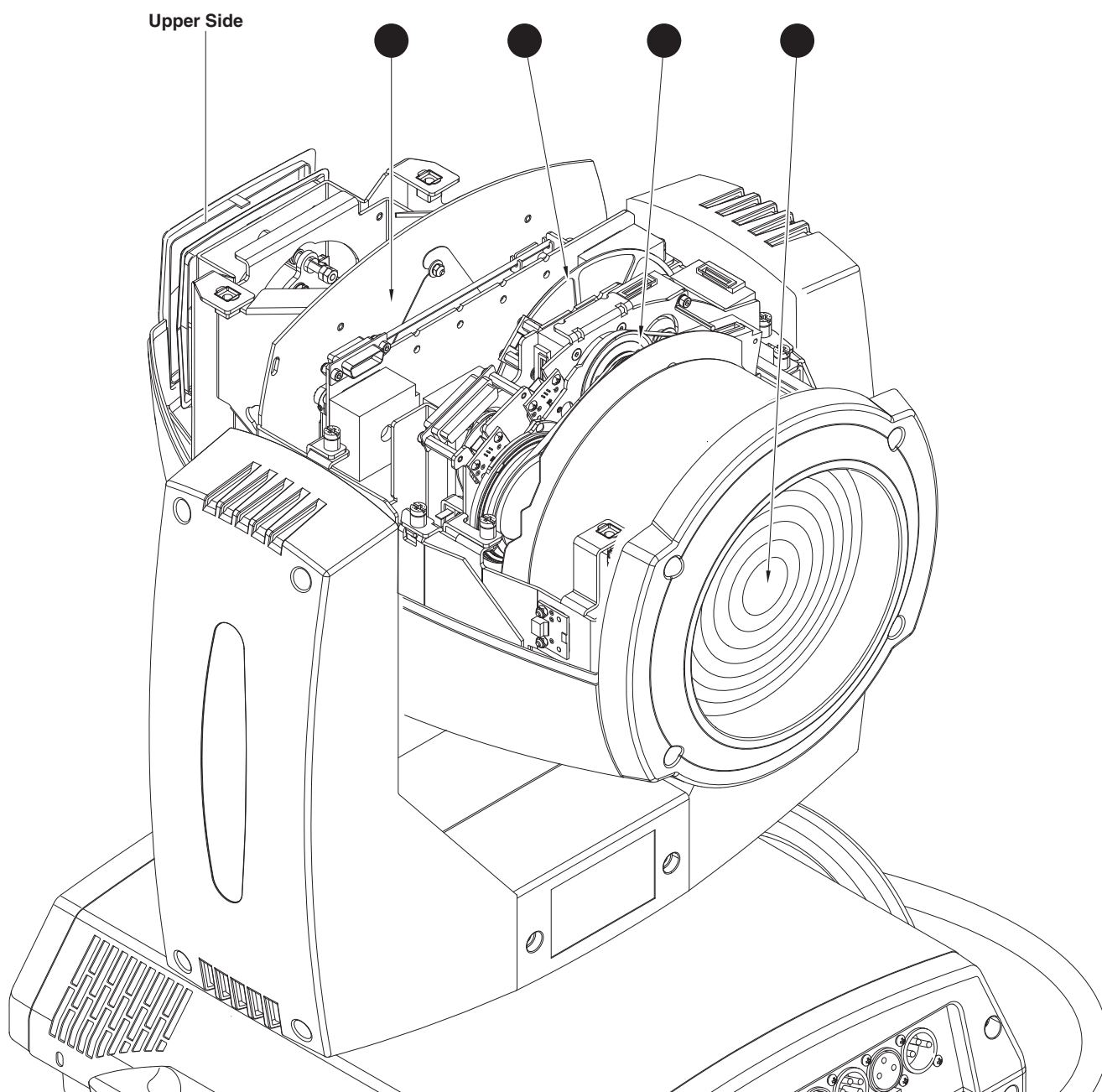
IMPORTANT: *Make sure the lamp is inserted with the external contact (A) facing the elliptical reflector's slot.*

CAUTION: Fast lamp ON-OFF cycles (for example 10 minutes ON / 10 minutes OFF) will reduce the lamp life.
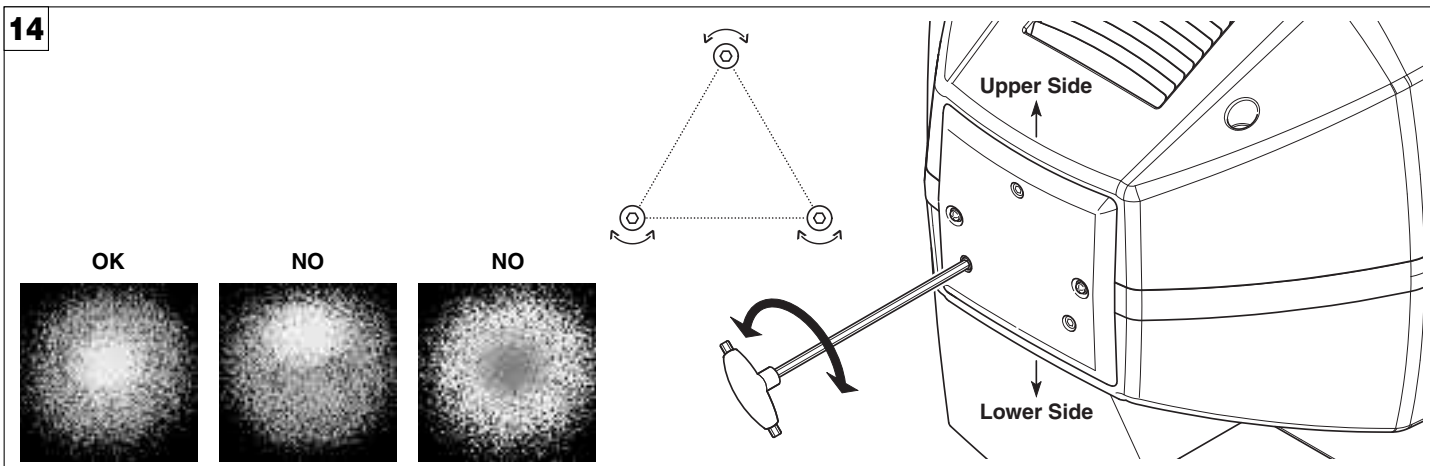
Lamp regulation - Fig. 14

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

15

Upper Side

● Parts requiring frequent cleaning.

Periodical cleaning - Fig. 15

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.

16

Lower Side

1

Thermostat

2

Upper Side

3

4
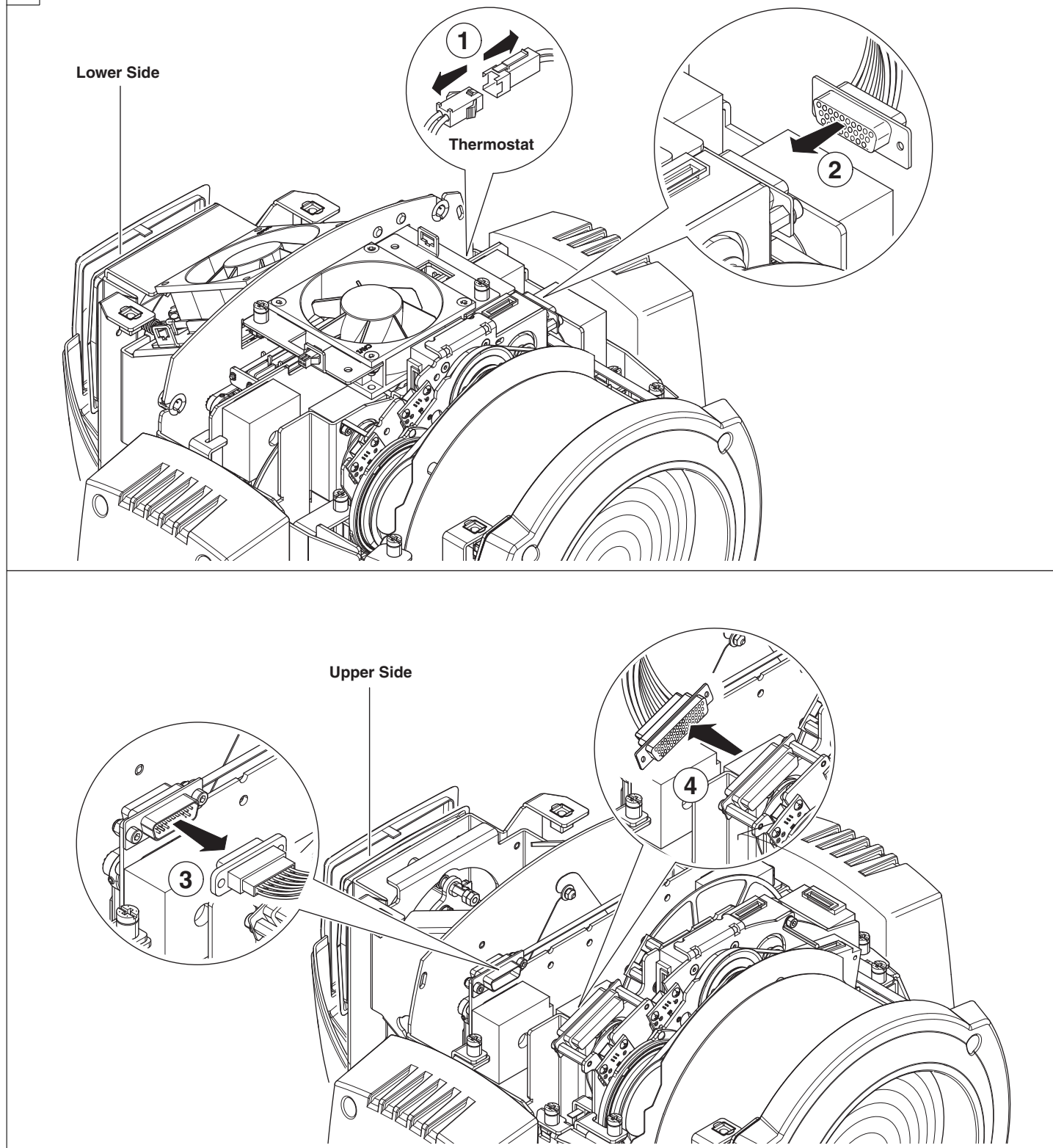
Extraction of the effect modules: Preliminary operations - Fig. 16

17

Upper Side

1

Upper Side

2
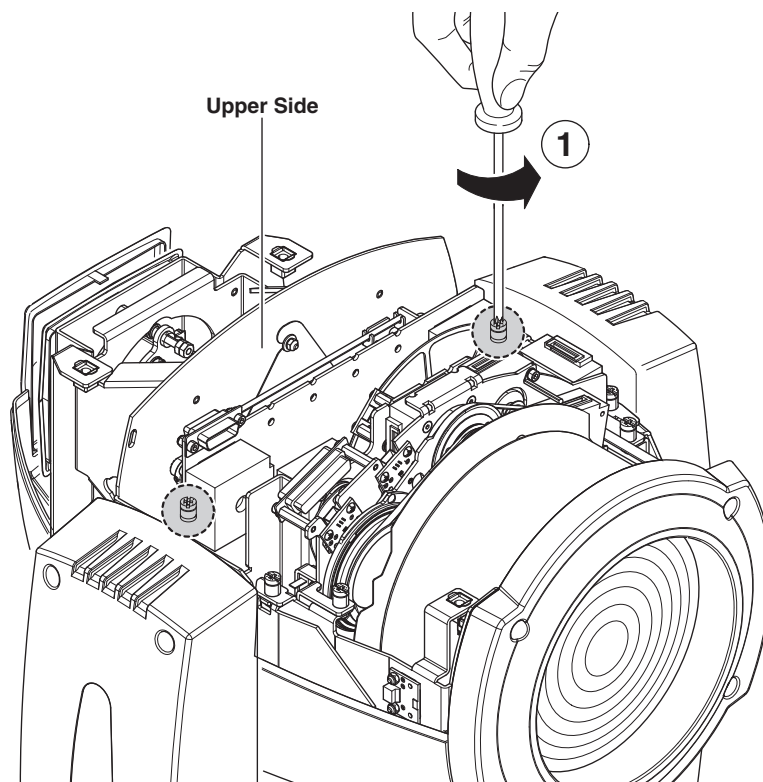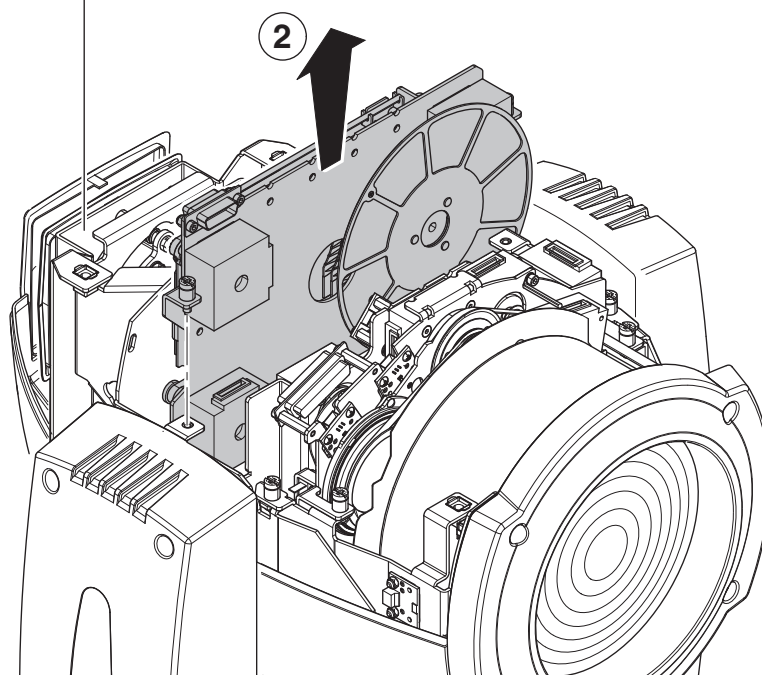
Extraction of the effect modules - Fig. 17
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 16 - 17 - 18 and 19 in reverse order.

18

Lower Side

③

Upper Side

④

Upper Side

⑤
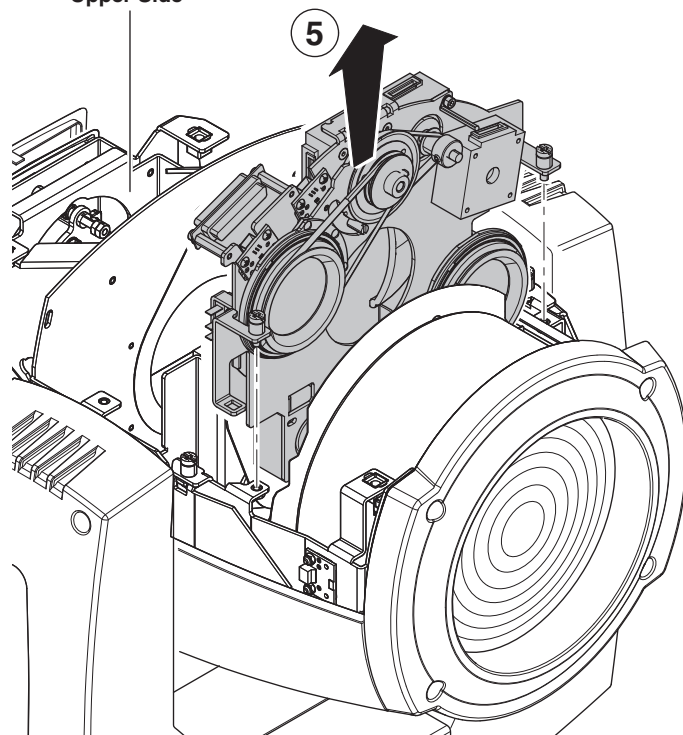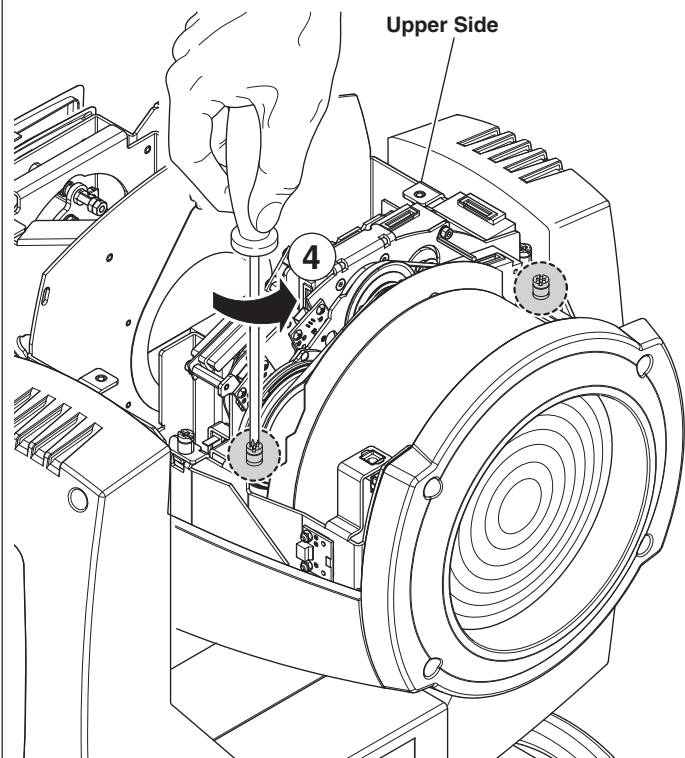
Extraction of the effect modules - Fig. 18
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 16 - 17 - 18 and 19 in reverse order.
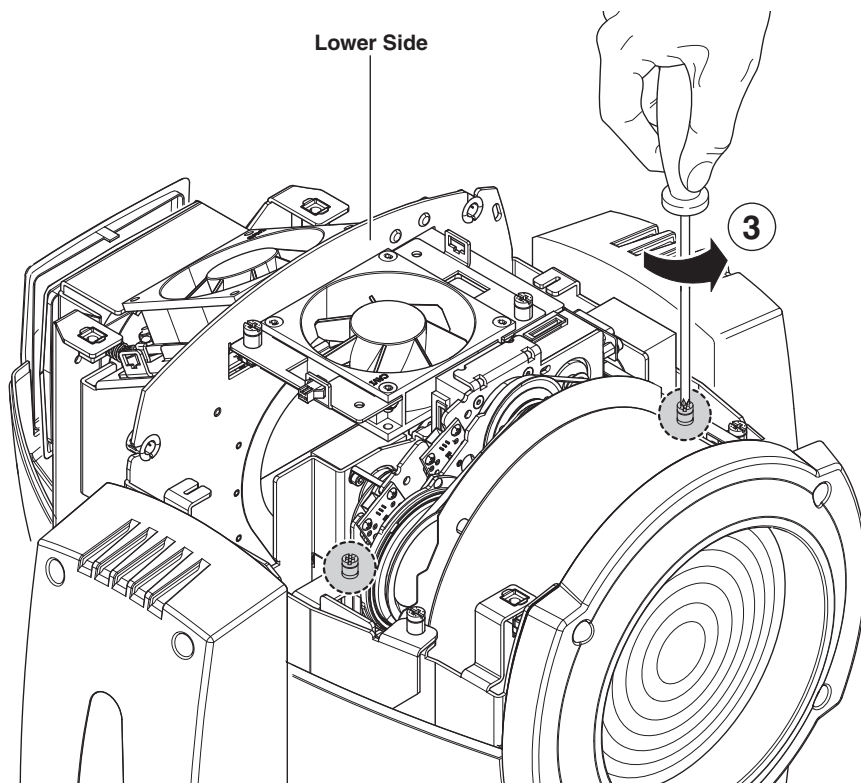
19

Lower Side

6

Upper Side

7

Upper Side

8

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. 16 - 17 - 18 and 19 in reverse order.

Battery removal - Fig. 20
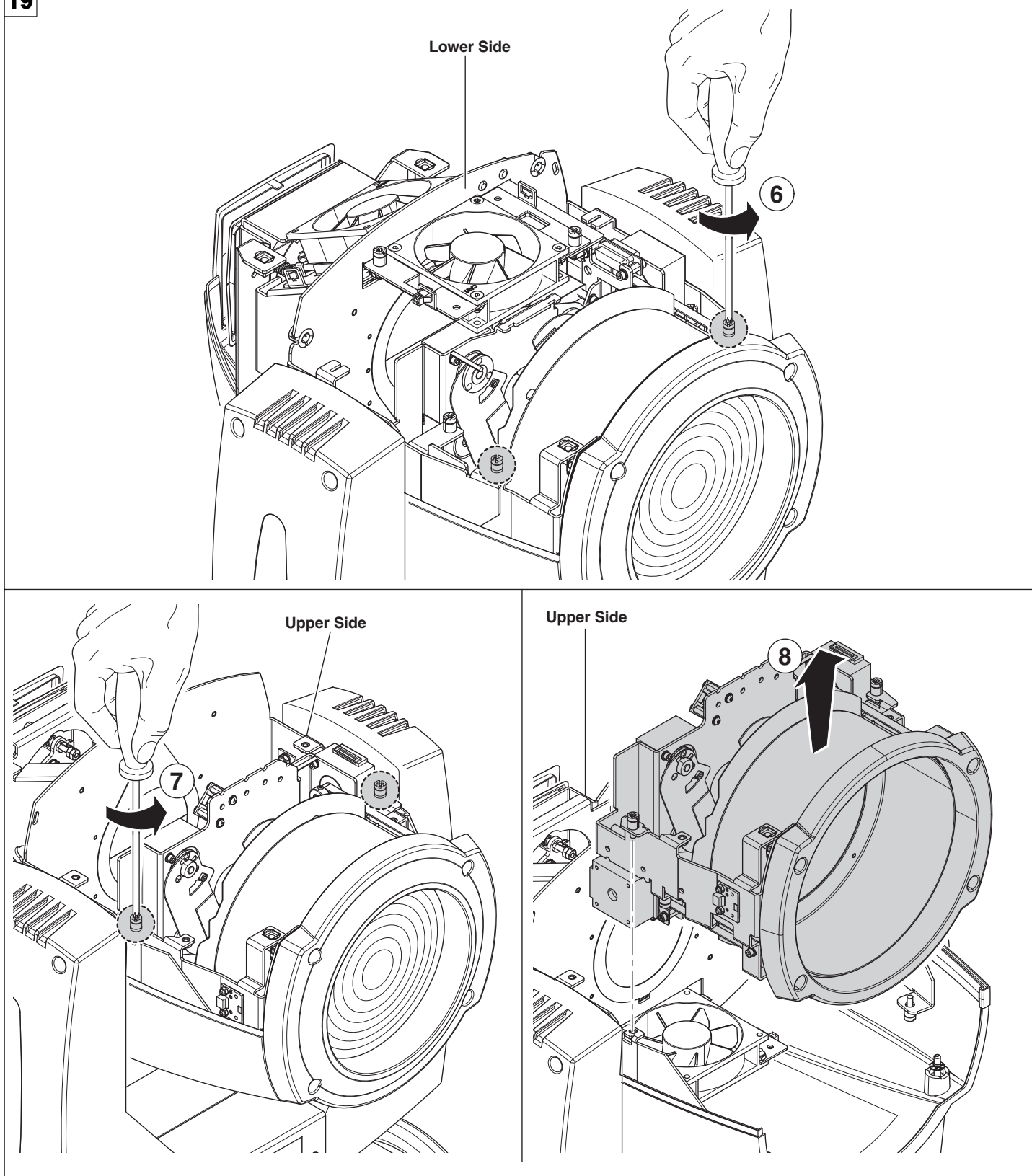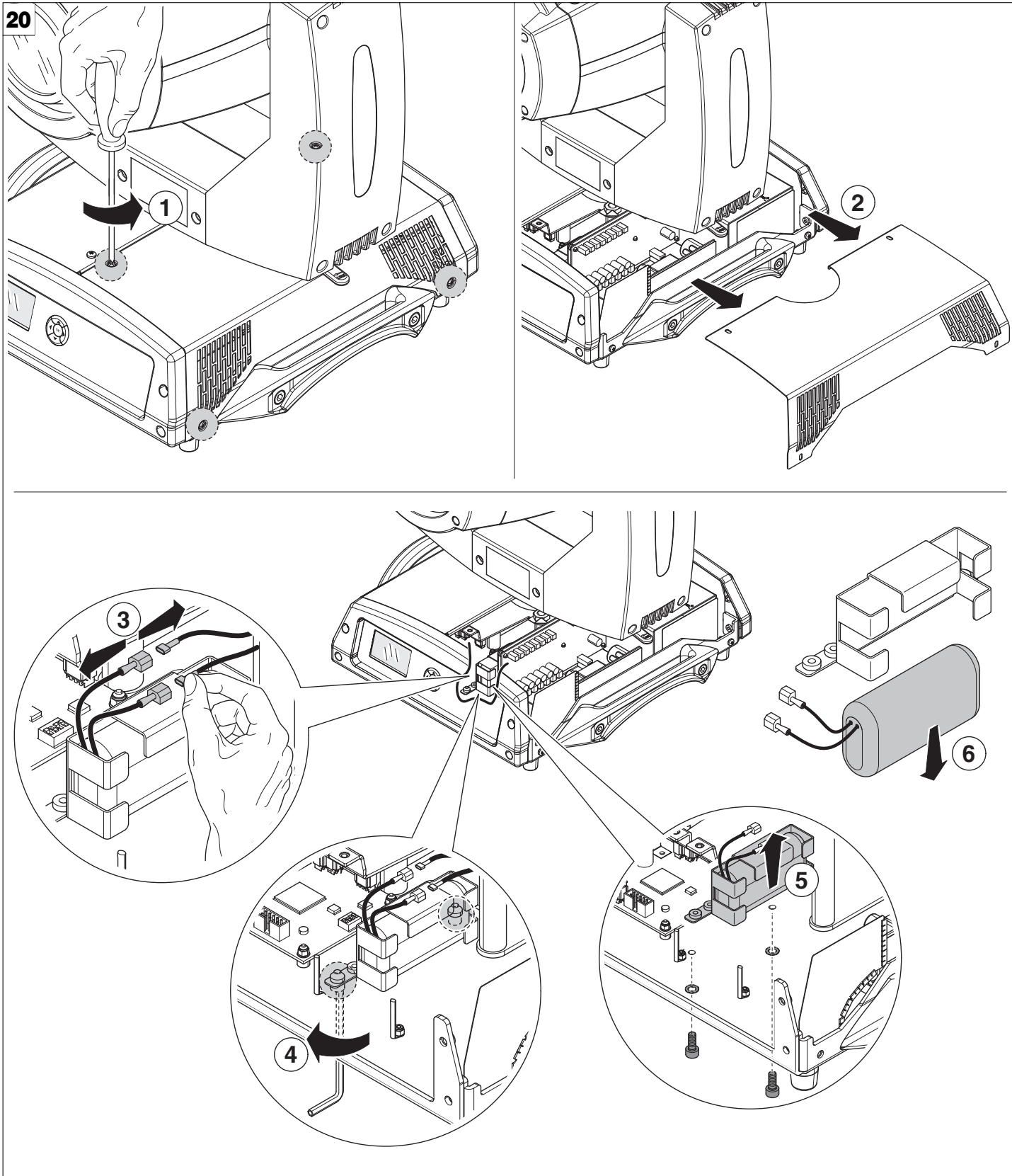
This product contains a rechargeable lithium iron tetraphosphate battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

LiFePO4

TECHNICAL INFORMATION

Power supplies available
100-120V 50/60Hz
200-240V 50/60Hz

Input power
• 1050VA a 230V 50Hz.

Lamp:
Discharge lamp.
• Type MSR Gold 700/2 Mini Fast Fit (L10098)
  - Cap PGJX28
  - Colour temperature 7250 K
  - Luminous flux 50000 lm
  - Average life 750 h
  - Any working position

• Type MSR Gold 700/1 Mini Fast Fit (LAM003)
  - Cap PGJX28
  - Colour temperature 5700 K
  - Luminous flux 54000 lm
  - Average life 750 h
  - Any working position

• Type Lok-it HTI 700W-60-P28 (LAM005)
  - Cap PGJX28
  - Colour temperature 6000 K
  - Luminous flux 50000 lm
  - Average life 750 h
  - Any working position

Motors
17 stepper motors, operating with microsteps, totally microprocessor controlled.

Optical unit
• Elliptic reflector with high luminous efficiency

Channels
Max 21 control channels.

Inputs
• DMX 512
• Ethernet

Moving 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 = 250°
• Maximum speeds:
  - PAN = 3.20 (Normal) / 2.90 (Fast)
  - TILT = 1.89 (normal) / 1.75 (Fast)
• Resolution:
  - PAN = 2.11°
  - PAN FINE = 0.008°
  - TILT = 0.98°
  - TILT FINE = 0.004°

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
Working in any position.

Weight
• 20.60 Kg (45lbs 5ozs).
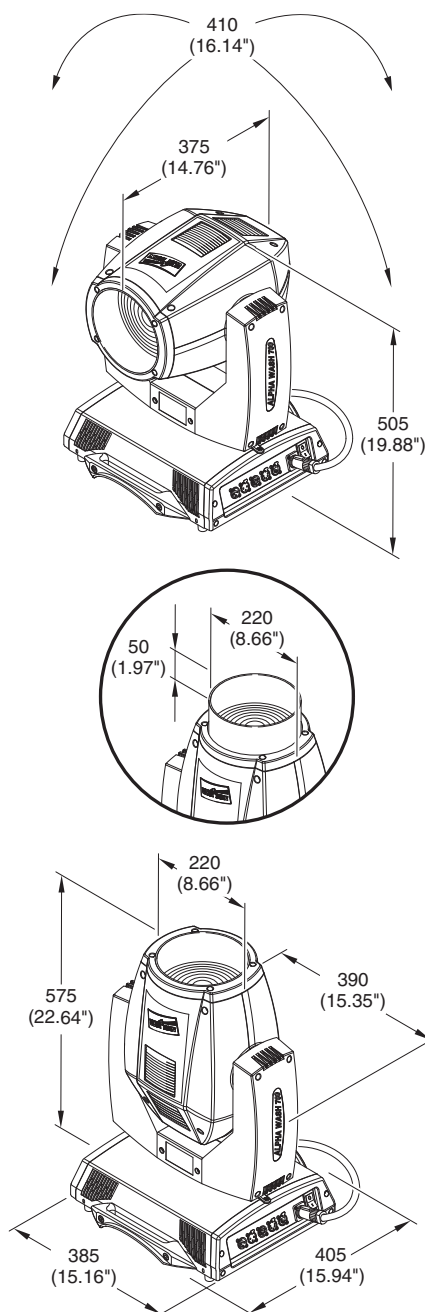
CAUSE AND SOLUTION OF PROBLEMS

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).

ALPHA WASH 700

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	CYAN
2	MAGENTA	MAGENTA
3	YELLOW	YELLOW
4	CTO	CTO
5	COLOUR WHEEL	COLOUR WHEEL
6	STOP / STROBE	STOP / STROBE
7	DIMMER	DIMMER
8	DIMMER FINE	DIMMER FINE
9	BEAM SHAPER INSERTION	BEAM SHAPER INSERTION
10	BEAM SHAPER ROTATION	BEAM SHAPER ROTATION
11	ZOOM	ZOOM
12	PAN	PAN
13	PAN FINE	PAN FINE
14	TILT	TILT
15	TILT FINE	TILT FINE
16	FUNCTION	FUNCTION
17	RESET	RESET
18	LAMP CONTROL (with Option "Lamp Dmx" ON)	LAMP CONTROL (with Option "Lamp Dmx" ON)
19		PAN - TILT TIME
20		COLOUR TIME
21		BEAM 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 MIXING - channel 1 - 2 - 3

Operation with option color mixing: RGB

BIT	EFFECT
255	COLOUR EXCLUDED
0	COLOUR INSERTED

CHANNEL 1 — CYAN
CHANNEL 2 — MAGENTA
CHANNEL 3 — YELLOW
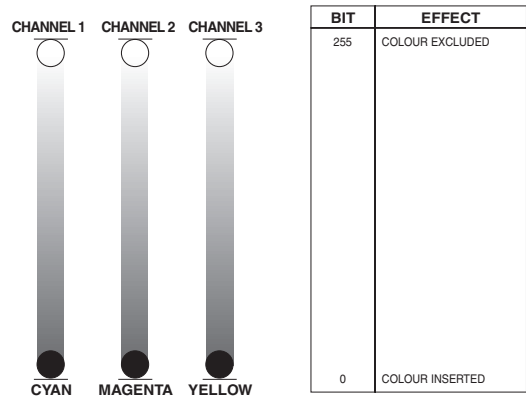
IMPORTANT: The lamp dim to half power 1 second after all the 3 channels stay at 0 bit evel. The lamp goes back to full power when the channels level is put higher than 0 bit.
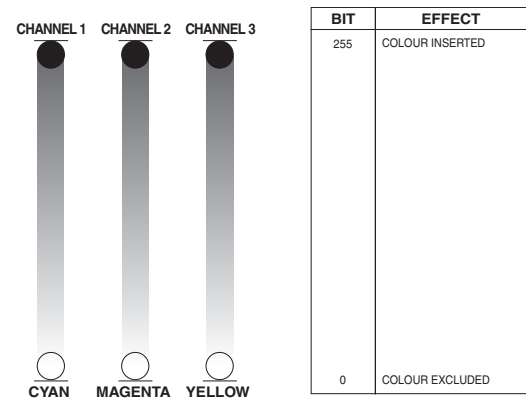
Operation with option color mixing: CMY

BIT	EFFECT
255	COLOUR INSERTED
0	COLOUR EXCLUDED

CHANNEL 1 — CYAN
CHANNEL 2 — MAGENTA
CHANNEL 3 — YELLOW

IMPORTANT: The lamp dim to half power 1 second after all the 3 channels stay at 255 bit level. The lamp goes back to full power when the channels level is put lower than 255 bit.

• C.T.O. - channel 4

CHANNEL 4 — CTO

BIT	EFFECT
255	FILTER INSERTED
0	FILTER EXCLUDED

• COLOUR WHEEL - channel 5

BIT	EFFECT
255	FAST ROTATION (160 rpm)
128	SLOW ROTATION (0.2 rpm)
127	BLUE + WHITE
120	BLUE
112	ORANGE + BLUE
105	ORANGE
97	AQUAMARINE + ORANGE
90	AQUAMARINE
82	LAVENDER + AQUAMARINE
75	LAVENDER
67	LIGHT GREEN + LAVENDER
60	LIGHT GREEN
52	GREEN + LIGHT GREEN
45	GREEN
37	CTB + GREEN
30	CTB
22	RED + CTB
15	RED
8	WHITE + RED
0	WHITE

• STOP / STROBE - channel 6

MACRO

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
108	SLOW PULSATION
104 - 107	OPEN
103	FAST STROBE (12 flash/sec)
4	SLOW STROBE (1 flash/sec)
0 - 3	CLOSED

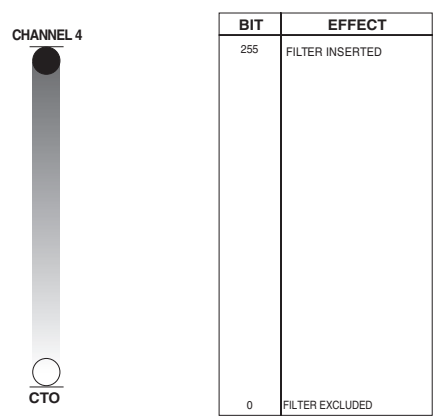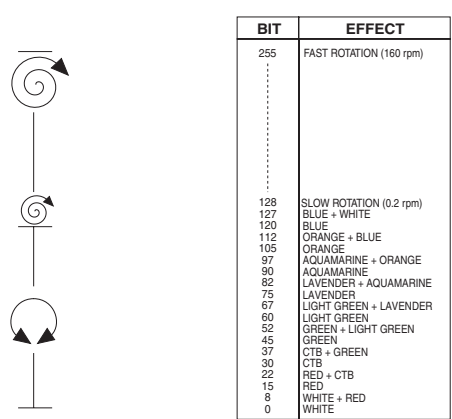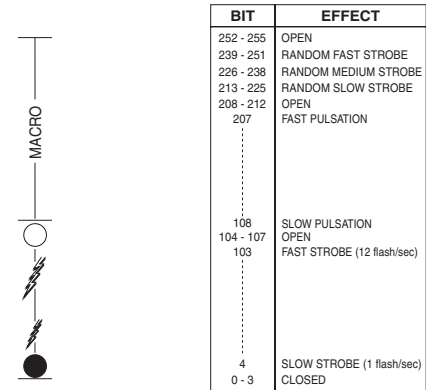**IMPORTANT:** The lamp dim to half power 1 second after the channel stay at 0 bit level. The lamp goes back to full power when the channel level is put higher than 0 bit.

• DIMMER - channel 7
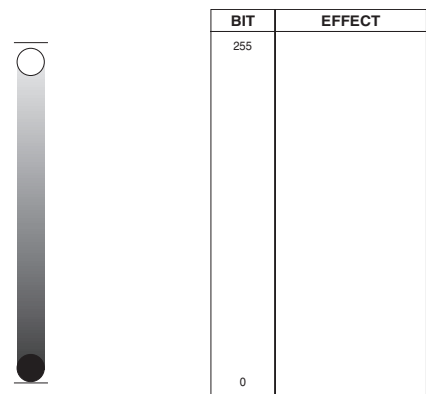
BIT	EFFECT
255	
0	

The lamp is linearly dimmed from full power to half power electronicaly and mechanically from half power to off.

• DIMMER FINE - channel 8
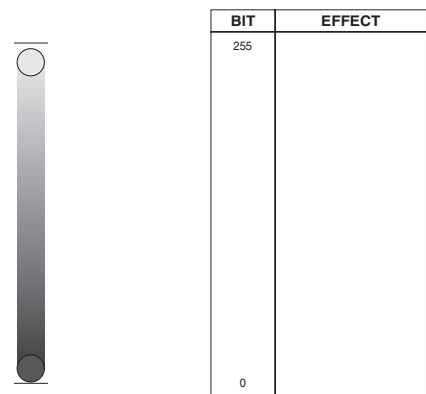
BIT	EFFECT
255	
0	

• BEAM SHAPER INSERTION - channel 9

BIT	EFFECT
170-255	SHAPER 2
85-169	SHAPER 1
0 - 84	WHITE

• BEAM SHAPER ROTATION - channel 10

BIT	EFFECT
255	FAST ROTATION (120 rpm)
193	SLOW ROTATION (3 rph)
191 - 192	STOP
190	SLOW ROTATION (3 rph)
128	FAST ROTATION (120 rpm)
127	POSITION 540°
105	POSITION 450°
84	POSITION 360°
63	POSITION 270°
42	POSITION 180°
21	POSITION 90°
0	POSITION 0°

STOP
540°
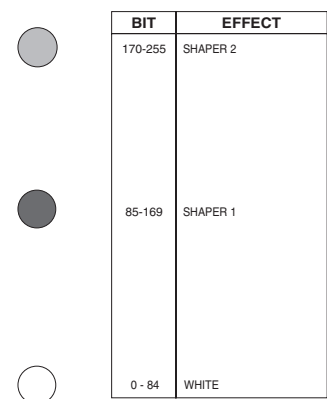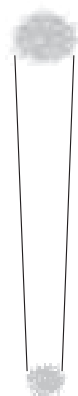360°
0°

• ZOOM - channel 11

BIT	EFFECT
255	WIDE BEAM
0	NARROW BEAM

• PAN - channel 12

Operation with option InvertPan ↕ Off
(Tilt conventionally represented at 35 bit and option Invert Tilt ↕ Off)

BIT
255

0
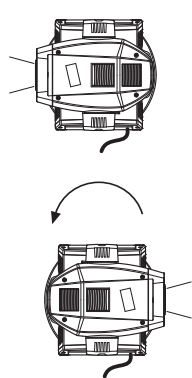
Operation with option InvertPan ↕ On
(Tilt conventionally represented at 35 bit and option Invert Tilt ↕ Off)
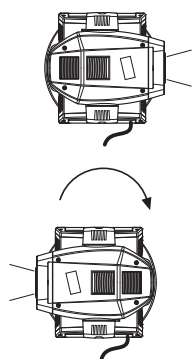
BIT
255

0

• PAN FINE - channel 13

Operation with option InvertPan ↕ Off
(Tilt conventionally represented at 35 bit and option Invert Tilt ↕ Off)

BIT
255

0
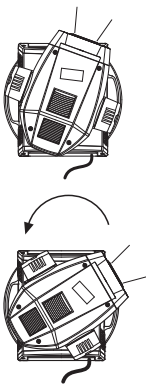
Operation with option InvertPan ↕ On
(Tilt conventionally represented at 35 bit and option Invert Tilt ↕ Off)
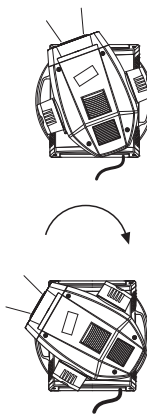
BIT
255

0

• TILT - channel 14

Operation with option Invert Tilt ↕ Off
(Pan conventionally represented at 0 bit and option Invert Pan ↕ Off)
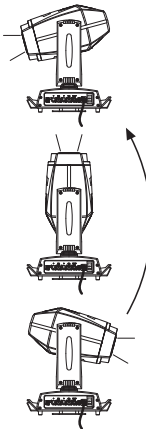
BIT
255

128

0

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

BIT
255

128

0

• TILT FINE - channel 15

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

BIT
255
0

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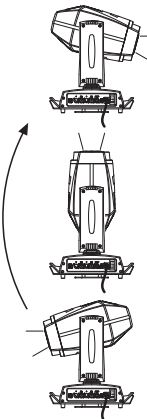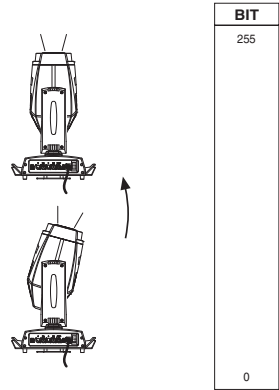*(Pan conventionally represented at 0 bit and option Invert Pan ↕ Off)*

BIT
255
0
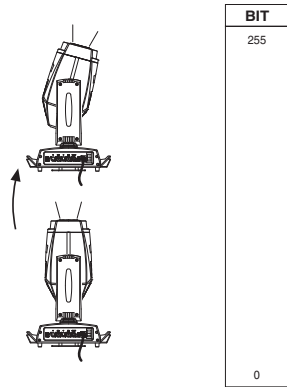
• FUNCTION - channel: 16

BIT	EFFECT	
255		
	FREE	
52		
51	LINEAR (DEFAULT)	DIMMER CURVE FUNCTION
39	CONVENTIONAL	
26	NORMAL SPEED	PAN-TILT FUNCTION
13	FAST SPEED (DEFAULT)	
0-12	UNUSED RANGE	

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

• RESET - channel: 17

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: 18

IMPORTANT: Alpha Wash 700 is not provided with hot restrike igniter

BIT	EFFECT
255	LAMP ON (FULL POWER)
	Lamp ignition after 5 s in full power levels.
	Immediate transition from half to full power.
180	LAMP ON (FULL POWER)
179	LAMP ON (HALF POWER)
	Immediate transition from full to half power.
	Lamp ignition not allowed in half power.
101	LAMP ON (HALF POWER)
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 CHANNELS

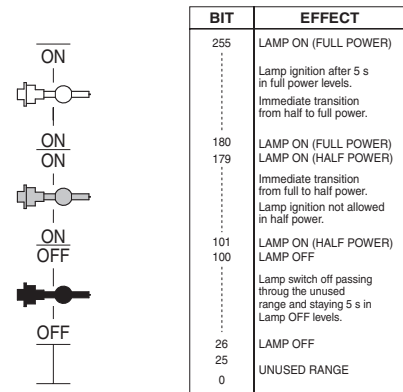|	Timing Channel	Channel function
19	Pan - Tilt time	Pan - Tilt - (Pan fine - Tilt fine)
20	Colour time	CMY - CTO - Colour wheel
21	Beam time	Dimmer - Zoom

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