CLAY PAKY ®

ALPHA SPOT HPE 1500   C61325

www.claypaky.it

INSTRUCTION MANUAL

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

1500W ⊙......5......m

• Installation
Make sure all parts for fixing the projector are in a good state of repair.
Make sure the point of anchorage is stable before positioning the projector.
The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible.
If the safety chain gets used, it needs to be replaced with a genuine spare.

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

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

• Mounting surfaces
It is permissible to mount the fitting on normally flammable surfaces.

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

t_a 40°C

IP20

• IP20 protection rating
The fitting is protected against penetration by solid bodies of over 12mm (0.47") in diameter (first digit 2), but not against dripping water, rain, splashes or jets of water (second digit 0).

• Protection against electrical shock
Connection must be made to a power supply system fitted with efficient earthing (**Class I** appliance according to standard EN 60598-1).
It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

• Connection to mains supply
Connection to the electricity mains must be carried out by a qualified electrical installer.
Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.
This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.

t_c 150°C

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

• Maintenance
Before starting any maintenance work or cleaning the projector, cut off power from the mains supply. After switching off, do not remove any parts of the fitting for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually nill. If it is necessary to replace the lamp, wait for another 20 minutes to avoid getting burnt.
The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly damaged, they have to be replaced with genuine spares.
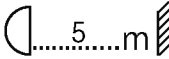
• Lamp
The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus.
- Carefully read the "operating instructions" provided by the lamp manufacturer.
- Immediately replace the lamp if damaged or deformed by heat.

• Battery
This product contains a rechargeable lead-acid or 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
Pb

CE
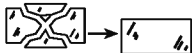
> The products to which this manual refers comply with the European Directives pursuant to:
> • 2006/95/EC - Safety of electrical equipment supplied at low voltage (LVD)
> • 2004/108/EC - Electromagnetic Compatibility (EMC)
> • 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)

UNPACKING AND PREPARATION

1

IST00C/001

2 x 183102/805

Lamp 1500W
(fitted into projector)

Packing contents - Fig. 1

2

UNLOCKED

LOCKED

90°   90°

°06   °06

3

45°   45°

45°   45°

45°   45°

LOCKED

UNLOCKED

T HPE 1500
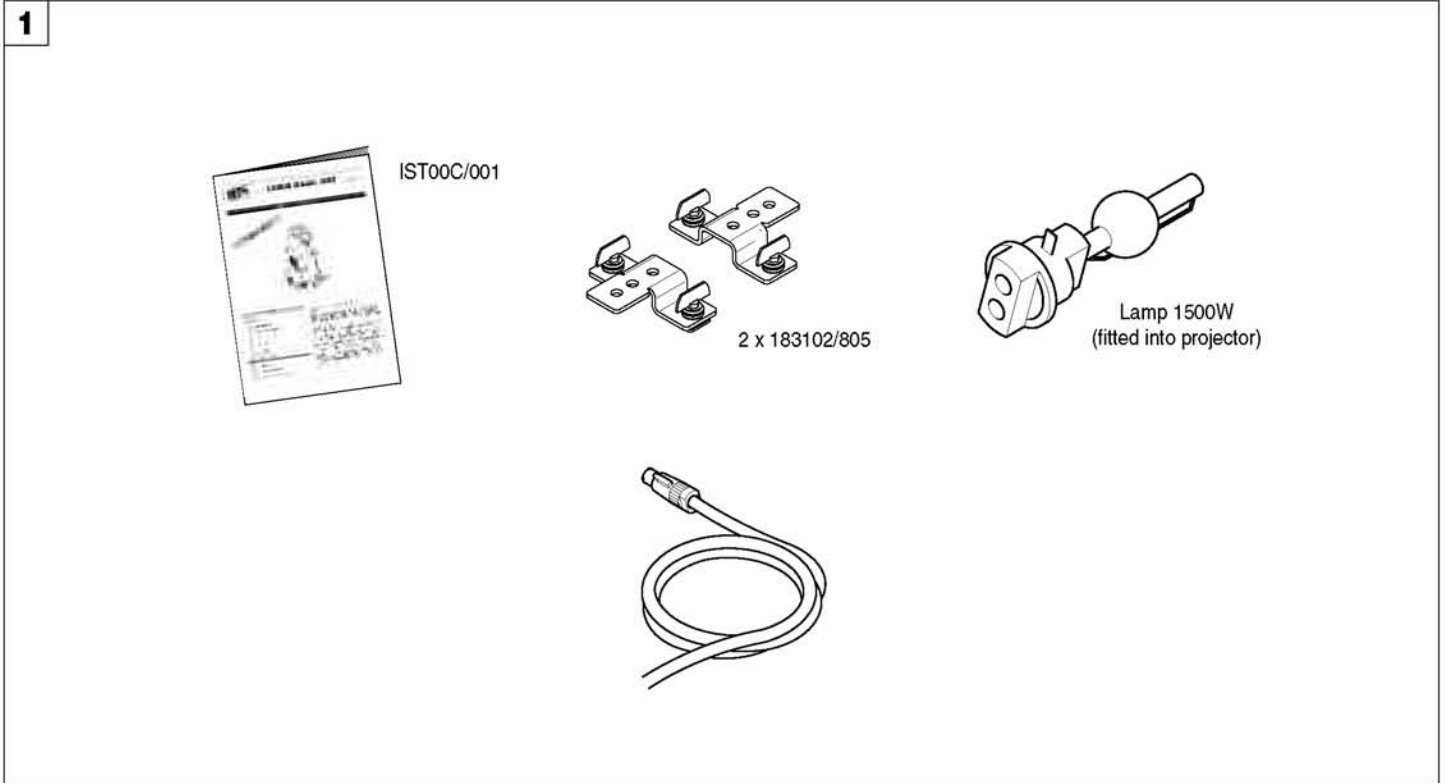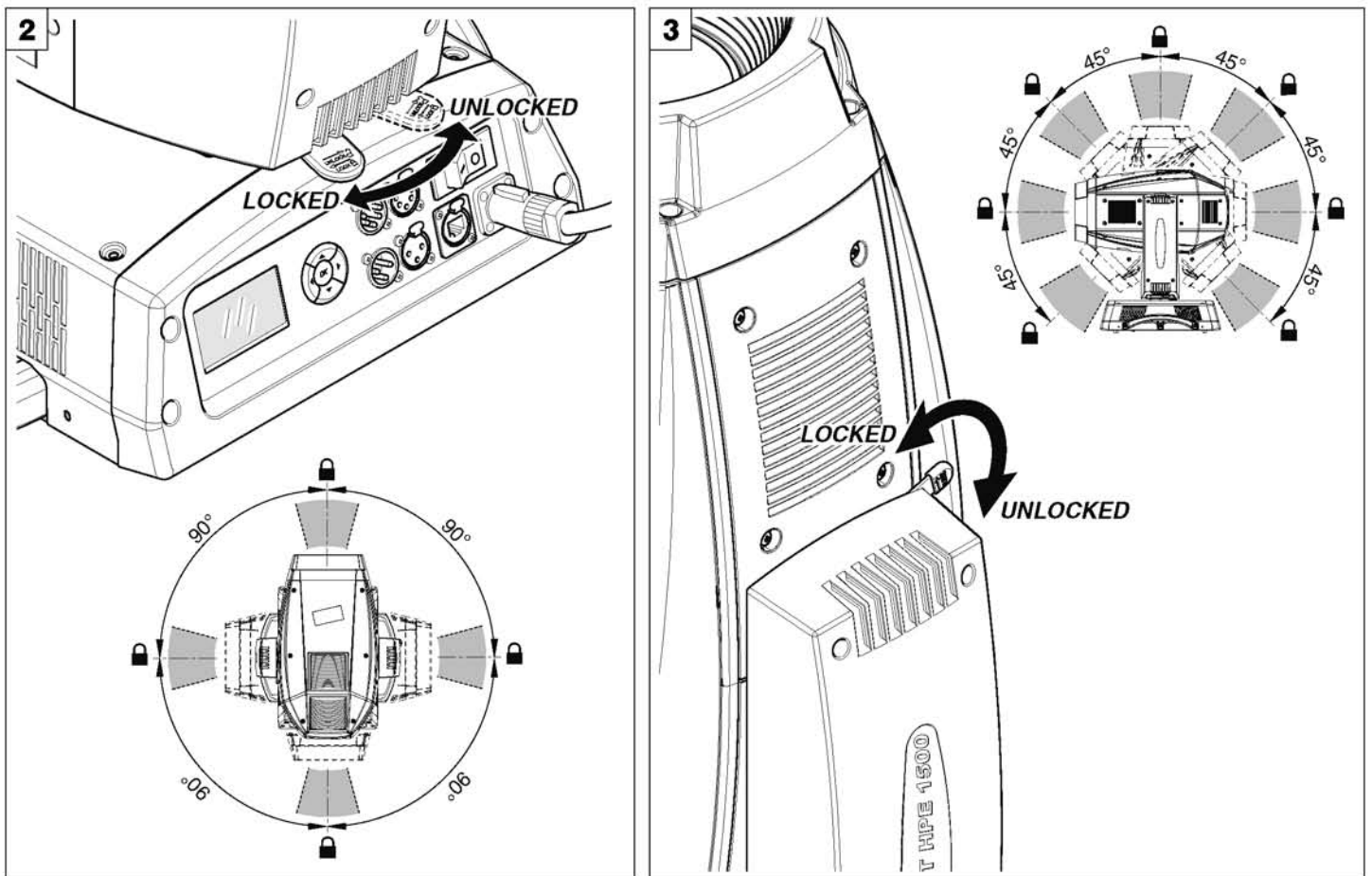
PAN Mechanism Lock and Release (every 90°) - Fig. 2

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

4
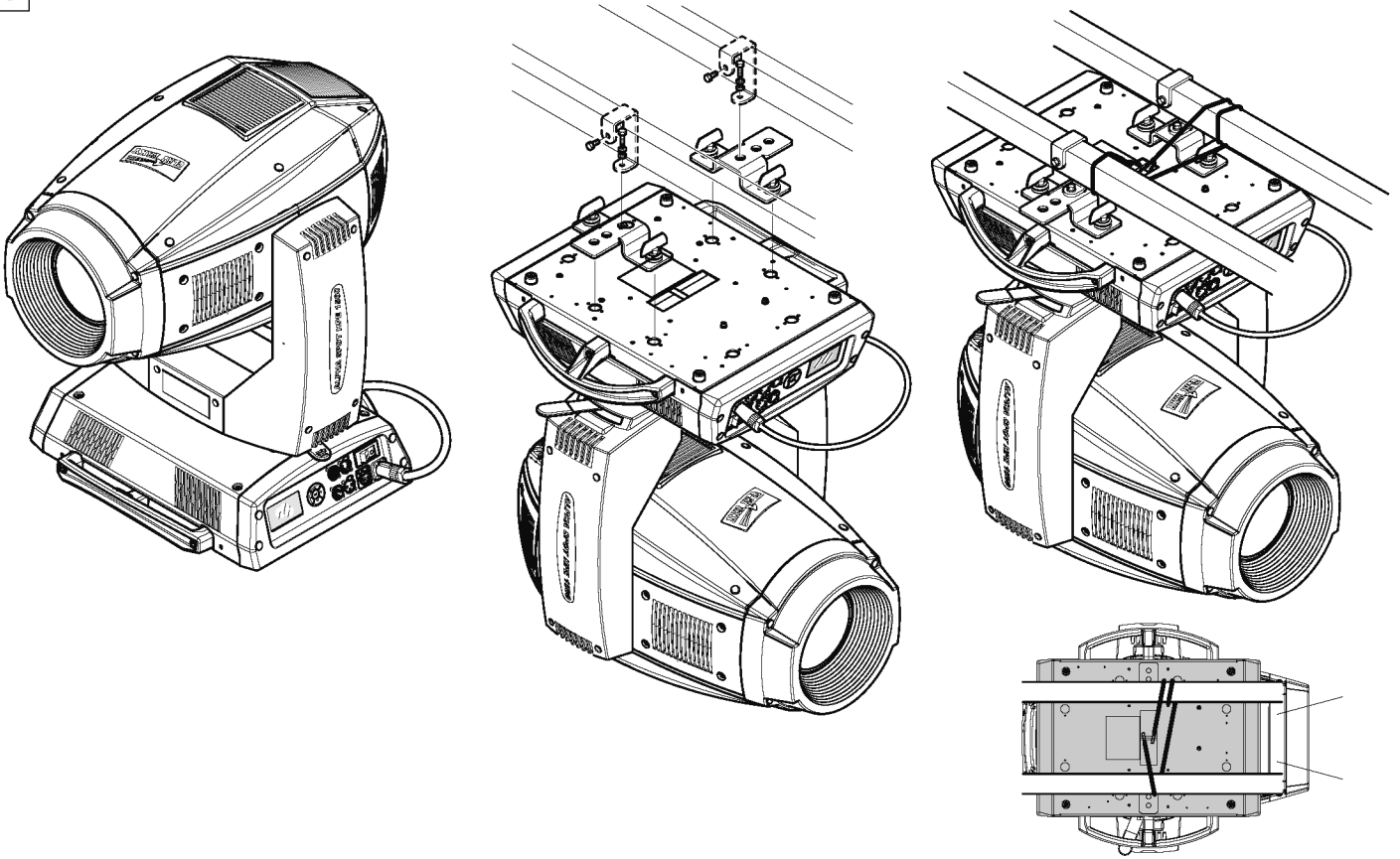
Installing the projector - Fig. 4
The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.
WARNING: *with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). This 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
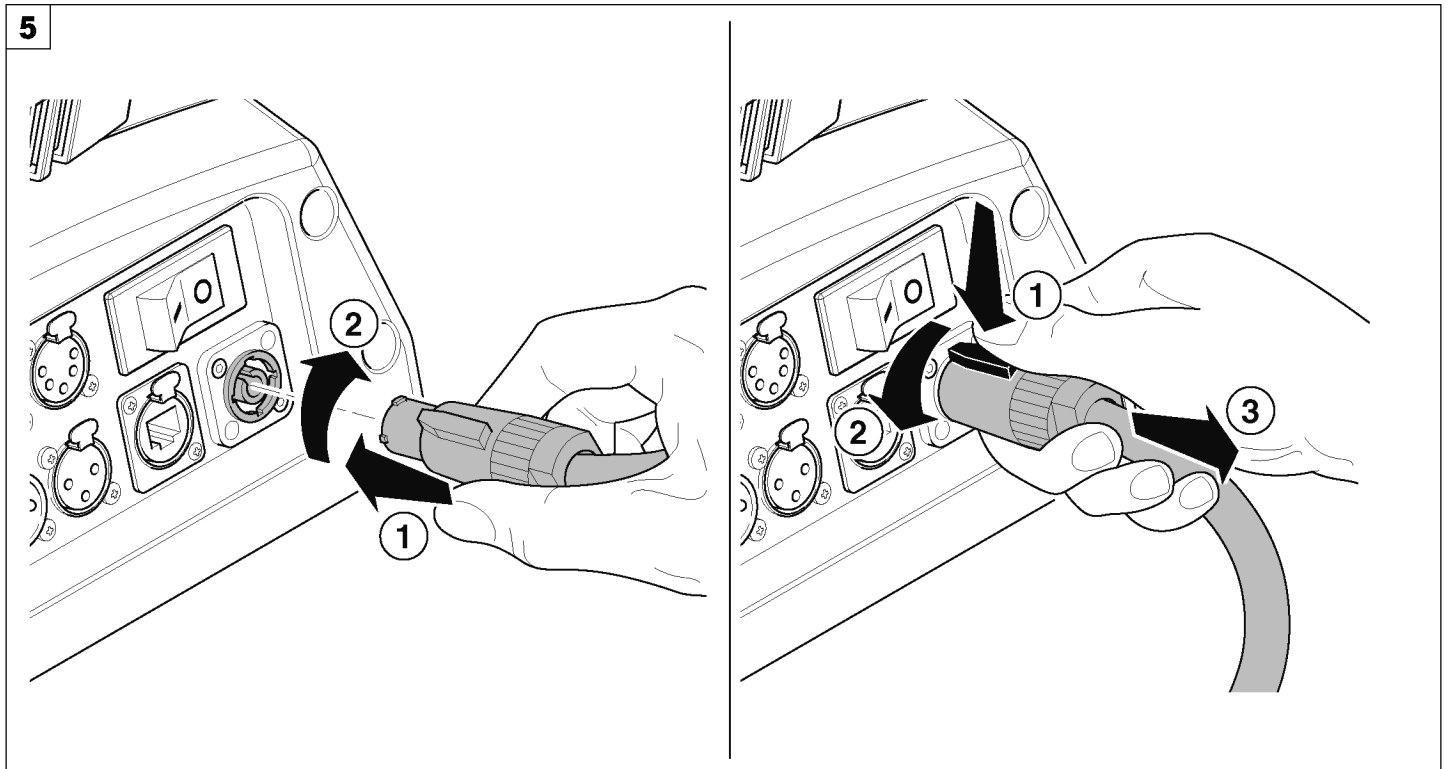
Connecting and disconnecting power cable - Fig. 5

6
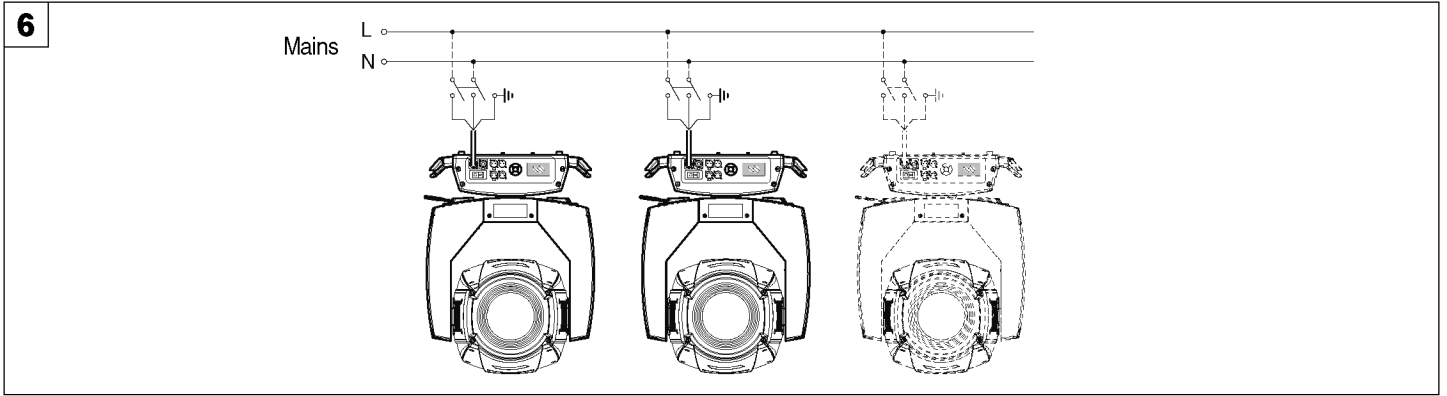
Connecting to the mains supply - Fig. 6

7

DMX 512
5 PIN

SCREEN
— SIGNAL
+ SIGNAL

DMX 512
3 PIN

SIGNAL —
SIGNAL +
SCREEN
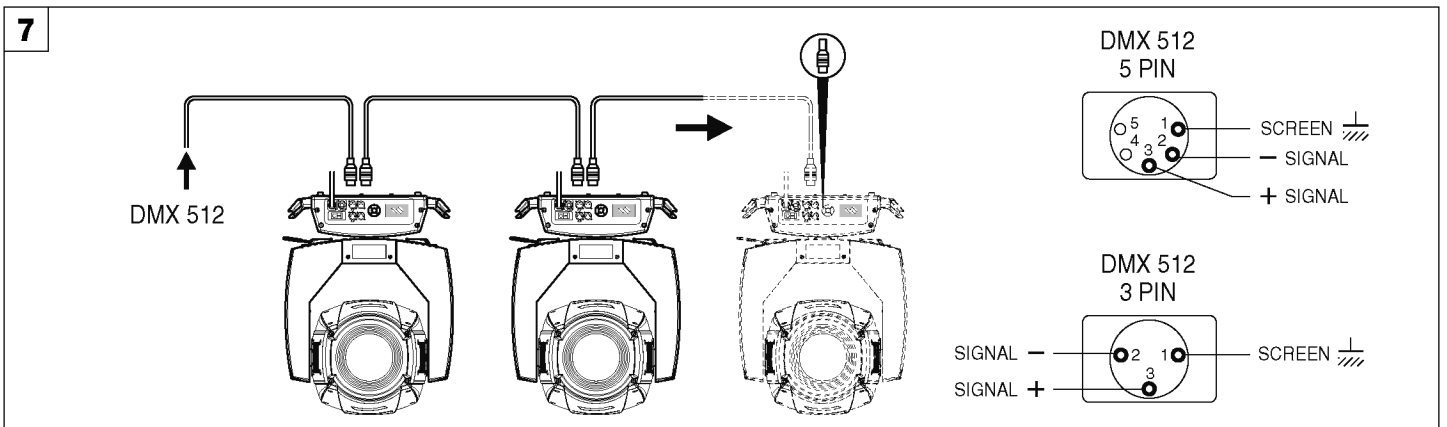
Connecting to the control signal line (DMX) - Fig. 7
Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections 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
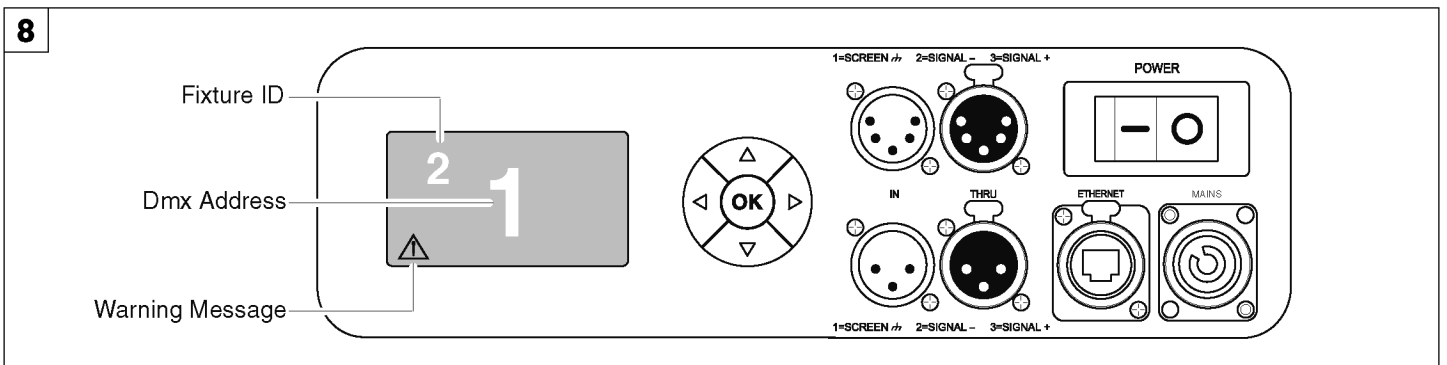
Switching on the projector - Fig. 8
Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:

	Model Alpha SPOT HPE 1500	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 dmx signal, Pan and Tilt move to the "Home" position (Pan 50% - Tilt 50%). 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.
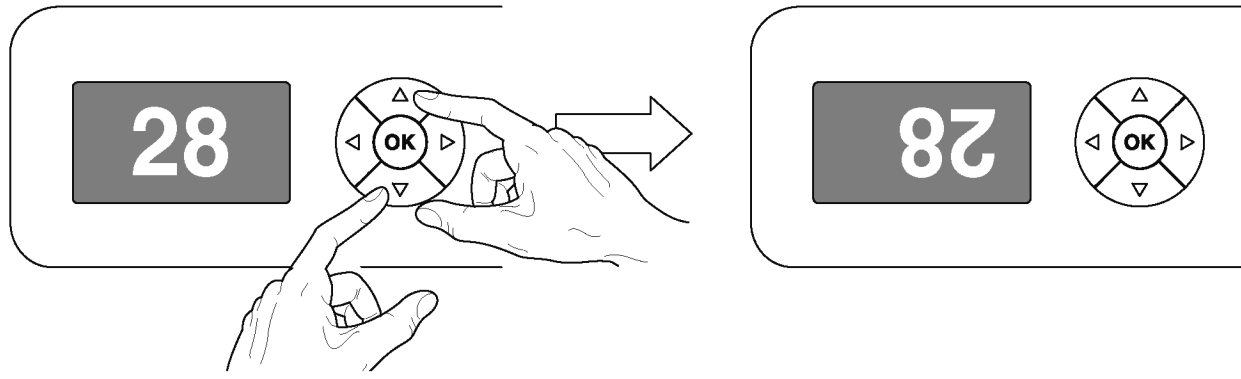
Reversal of the display - Fig. 9

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 address: see pag. 8.

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.

Setting the Fixture ID: see pag. 8.

Functions of the buttons - Using the menu
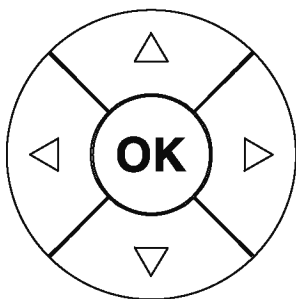
(OK)	Confirms the displayed value, or activates the displayed function, or enters the successive menu.
DOWN	Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.
UP	Increases the value displayed (with auto-repetitions) or passes to the previous item in a menu.
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.
   To enable the "Advanced" see pag. 14
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.

MAIN MENU

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
	Color	Color Mixing
		Fixed Wheel Shortcut
		Macro Color Adjustment
	Shutter	Shutter On Error
		Dimmer On Shutter
	Autofocus Mode	Limited Zoom Range
		Complete Zoom Range
	Macro Effects	Macro group size
		Macro fixture Id
	Silent Mode	Standard
		Quiet
	Power Mode	1500-1200 Full fan speed
		1200 Low fan speed
		1500-1200 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 diagnostic
	Dmx Monitor
	Fans Monitor
	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

Set Up	Dmx Address	Address xxx
	Channel Mode	Standard
		Vector
	Fixture Id	Value xxx
	Ethernet Interface	
	Control Protocol	
	Repeat on DMX	
	Universe	

SET UP MENU

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

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

Repeat on DMX
It lets you enable the transmission of the Ethernet protocol by DMX signal to all the connected projectors.
1) Press ⊙ 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 ⊙ 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 ⊙ – the current Universe address appears on the display.
2) Use the UP ⊙, DOWN ⊙, RIGHT ⊙ keys to set the Universe address.
3) Press ⊙ to confirm the selection or LEFT ⊙ to keep the current setting.

```
              ┌──────┐
              │  On  │
┌────────┐  ┌──────────┐├──────┤
│ Option │──│ Lamp Dmx │┤      │
└────────┘  └──────────┘├──────┤
    │                    │ Off  │
    │                   └──────┘
    │
    │                   ┌──────────┐   ┌──────┐
    │                   │  Invert  │   │  On  │
    │        ┌──────────┤   Pan    ├──├──────┤
    │        │          └──────────┘   │ Off  │
    │        │                        └──────┘
    │        │          ┌──────────┐   ┌──────┐
    │        │          │  Invert  │   │  On  │
    │        ├──────────┤   Tilt   ├──├──────┤
┌───┴────┐  │          └──────────┘   │ Off  │
│Pan/Tilt│──┤                        └──────┘
└────────┘  │          ┌──────────┐   ┌──────┐
    │        │          │   Swap   │   │  On  │
    │        ├──────────┤ Pan-Tilt ├──├──────┤
    │        │          └──────────┘   │ Off  │
    │        │                        └──────┘
    │        │          ┌──────────┐   ┌──────┐
    │        │          │ Encoder  │   │  On  │
    │        └──────────┤ Pan-Tilt ├──├──────┤
    │                   └──────────┘   │ Off  │
    │                                 └──────┘
    │
    │                   ┌──────────┐   ┌──────┐
    │                   │  Color   │   │ RGB  │
    │        ┌──────────┤ Mixing   ├──├──────┤
    │        │          └──────────┘   │ CMY  │
    │        │                        └──────┘
┌───┴────┐  │          ┌──────────┐   ┌──────┐
│ Color  │──┤          │ Fixwheel │   │  On  │
└────────┘  ├──────────┤ Shortcut ├──├──────┤
             │          └──────────┘   │ Off  │
             │                        └──────┘
             │          ┌──────────┐   ┌──────┐
             │          │Macro Color│  │  On  │
             └──────────┤Adjustment├──├──────┤
                        └──────────┘   │ Off  │
                                      └──────┘
```
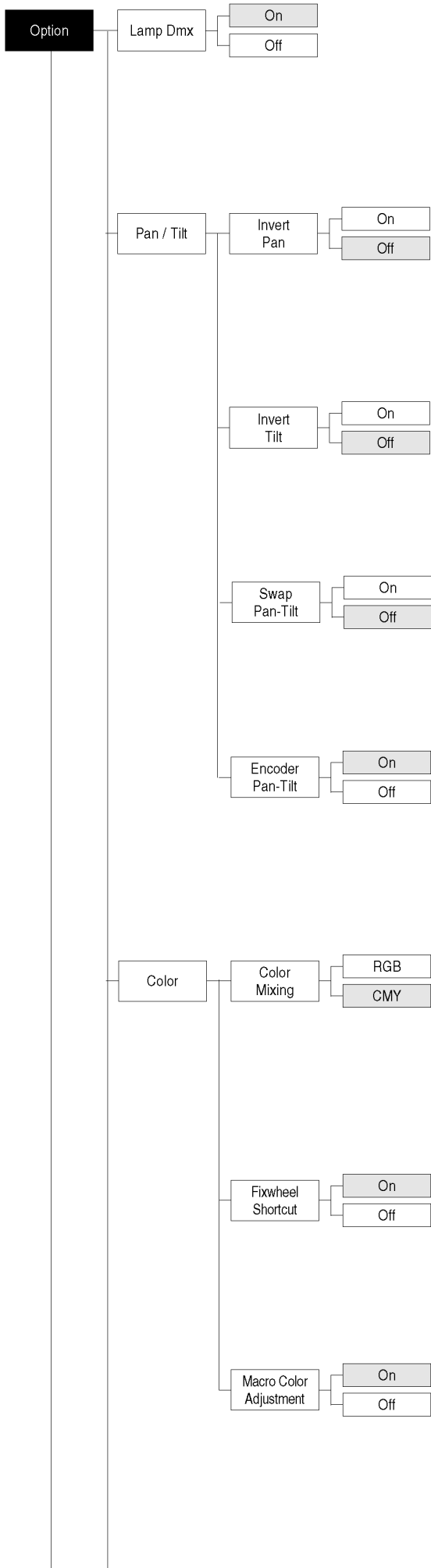
OPTIONS MENU

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 ◁ tto 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.

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.

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.

Macro color adjustment

It lets you enable the overwriting of a "Macro Colour" with the Cyan, Magenta, Yellow, CTO and Colour wheel channels.
Press ⓄⓀ the current setting appears on the display.
1) Use the UP ⊕ and DOWN ⊖ keys to enable (On) or disable (Off) the overwriting.
2) Press ⓄⓀ to confirm the selection or LEFT ◁ to keep the current setting.

```
┌─────────┐     ┌─────────┐     ┌─────────┐
│ Shutter │─────│ Shutter │──┬──│   On    │
└─────────┘     │ On Error│  │  └─────────┘
                └─────────┘  │  ┌─────────┐
                             └──│   Off   │
                                └─────────┘

                ┌─────────┐     ┌─────────┐
                │Dimmer On│──┬──│   On    │
                │ Shutter │  │  └─────────┘
                └─────────┘  │  ┌─────────┐
                             └──│   Off   │
                                └─────────┘

┌─────────┐     ┌─────────┐
│Auto-focus│────│ Limited │
│  Mode   │  │  │Zoom Range│
└─────────┘  │  └─────────┘
             │  ┌─────────┐
             └──│Complete │
                │Zoom Range│
                └─────────┘

┌─────────┐
│ Macro   │──┬
│ Effects │  │
└─────────┘  │  ┌─────────┐
             ├──│Macro group│
             │  │  size    │
             │  └─────────┘
             │  ┌─────────┐
             └──│Macro fixture Id│
                └─────────┘

┌─────────┐     ┌─────────┐
│ Silent  │──┬──│Standard │
│  Mode   │  │  └─────────┘
└─────────┘  │  ┌─────────┐
             └──│  Quiet  │
                └─────────┘
```

SHUTTER

Shutter on error

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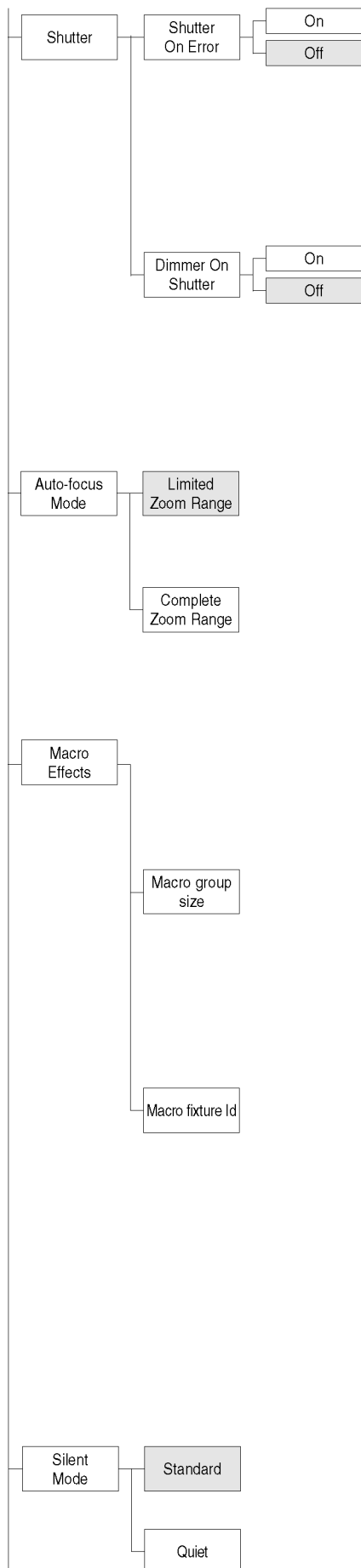
1) Press ⊙ⱽ - the current settings appear on the display (On or Off).
2) Use the UP ⊙ and DOWN ⊙ keys to enable (On) or disable (Off) automatic stop/strobe closing in the event of Pan/Tilt position error.
3) Press ⊙ⱽ to confirm the selection, or LEFT ⊙ to keep current settings.

Dimmer on Shutter

Enables automatic closing of the dimmer when the strobe is completely closed.

1) Press ⊙ⱽ – 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 ⊙ⱽ to confirm the selection or LEFT ⊙ to keep current settings.

AUTO-FOCUS MODE

It lets you select the "Auto-focus Mode" from the two available.

1) Press ⊙ⱽ the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   Limited Zoom Range: The "Autofocus" works only in the optical run that was specifically designed for the projector in question.
   Complete Zoom Range: The "Autofocus" also works in overrun
3) Press ⊙ⱽ to confirm the selection or LEFT ⊙ to keep the current setting.

MACRO EFFECTS

It lets you select the "Macro Effects" set up from the two available.

1) Press ⊙ⱽ the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:

Macro group size

It lets you set the number of projectors to be included in the macro mode operation.

1) Press ⊙ⱽ
2) Use the UP ⊙, DOWN ⊙, RIGHT keys to set the number of projectors to be included in the "Macro Effect" operation.
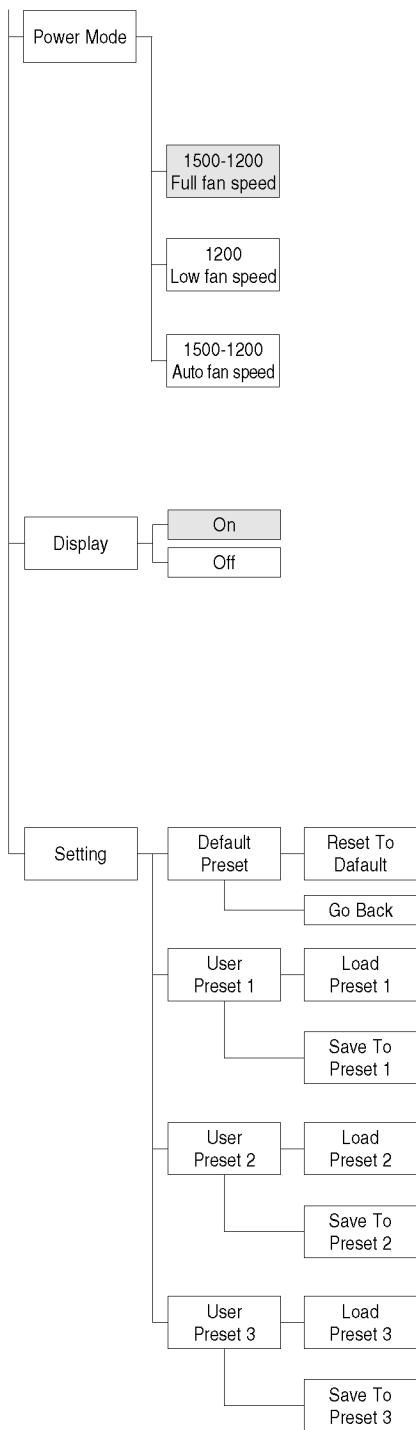3) Press ⊙ⱽ to confirm the selection or LEFT ⊙ to keep the current setting.

Macro fixture Id

It lets you attribute an ID address to the projector for the phase displacement for the scene's starting time in Macro mode.

1) Press ⊙ⱽ
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   Fixed to X. (to assign to all the projectors to be included in the Macro operation).
   Auto by DMX Address: According to the DMX address, it automatically detects the starting sequence of the scene in the Macro mode (to assign to all the projectors to be included in the Macro operation).
3) Press ⊙ⱽ to confirm the selection or LEFT ⊙ to keep the current setting.

SILENT MODE

It lets you select the "Silent Mode" from the two available.

1) Press ⊙ⱽ the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   Standard: Maximum speed and consequently maximum effects noise level.
   Quiet: reduces the speed of some effects, thereby reducing their noise level.
3) Press ⊙ⱽ to confirm the selection or LEFT ⊙ to keep the current setting.

```
Power Mode
    ┌─ 1500-1200
    │  Full fan speed
    ├─ 1200
    │  Low fan speed
    └─ 1500-1200
       Auto fan speed

Display
    ├─ On
    └─ Off

Setting
    ├─ Default      ┌─ Reset To
    │  Preset       │  Dafault
    │               └─ Go Back
    ├─ User         ┌─ Load
    │  Preset 1     │  Preset 1
    │               └─ Save To
    │                  Preset 1
    ├─ User         ┌─ Load
    │  Preset 2     │  Preset 2
    │               └─ Save To
    │                  Preset 2
    └─ User         ┌─ Load
       Preset 3     │  Preset 3
                    └─ Save To
                       Preset 3
```

POWER MODE

Allows you to select a Power Mode from the three available.

1) Press (OK) - the current settings appear on the display.
2) Use the UP (▲) and DOWN (▼) keys to select one of the following settings:
   - **1500-1200W Full fan speed**: Lamp can change from full-power (1500W) to half-power (1200W) using the LAMP CONTROL channel. Fans always work at Full speed
   - **1200W Low fan speed**: Lamp constantly works in half-power mode (1200W) while the Fan always works at Low speed. With LAMP CONTROL channel you can only switch the lamp ON and OFF.
   - **1500-1200W Auto fan speed**: Lamp can change from full-power (1500W) to half-power (1200W) using the LAMP CONTROL channel. Automatically the fans switch from Full speed to Low speed respectively.
3) Press (OK) 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 (OK) - 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 (OK) 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 (OK) - "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 (OK) - "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 (OK), 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
Colour mixing	CMY
Fixed Wheel Shortcut	On
Macro Color Adjustment	On
Shutter on error	Off
Dimmer on Shutter	Off
Auto-focus mode	Limited zoom range
Silent mode	Standard
Power mode	1500-1200w full fan speed
Display	On

INFORMATION MENU

```
┌─────────────┐   ┌──────────────┐
│ Information  ├───┤ System       │
└──────┬──────┘   │ Errors       │
       │          └──────────────┘
       │          ┌──────────────┐   ┌─────────────────────┐
       ├──────────┤ Fixture      ├───┤ Total    XXX        │
       │          │ Hours        │   │ Partial  XXX        │
       │          └──────────────┘   │              Reset…│
       │                             └─────────────────────┘
       │          ┌──────────────┐   ┌─────────────────────┐
       ├──────────┤ Lamp         ├───┤ Total    XXX        │
       │          │ Hours        │   │ Partial  XXX        │
       │          └──────────────┘   │              Reset…│
       │                             └─────────────────────┘
       │          ┌──────────────┐   ┌─────────────────────┐
       ├──────────┤ Lamp         ├───┤ Total    XXX        │
       │          │ Strikes      │   │ Partial  XXX        │
       │          └──────────────┘   │              Reset…│
       │                             └─────────────────────┘
       │          ┌──────────────┐   ┌───────────────────────────────┐
       └──────────┤ System       ├───┤ Board   Revis.   Hw.rv.       │
                  │ Version      │   │ 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         │
                                     │ 2: 8-Ch   x.x     x.x         │
                                     │ 3: 8-Ch   x.x.    x.x         │
                                     └───────────────────────────────┘
```

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
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
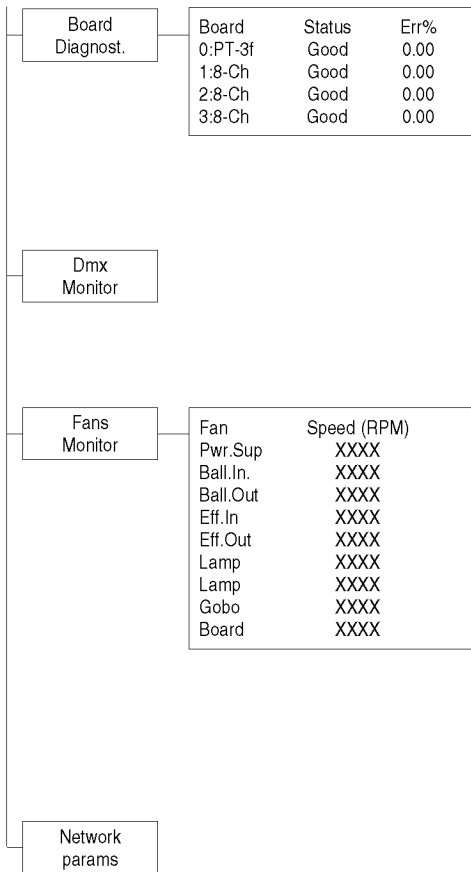
LAMP STRIKES
Used for displaying the number of times the lamp was turned on (total and partial).
1) Press ⊚ - the number of times the lamp was turned on (total and partial) appears on the display.
   Total counter
   Counts the number of times the lamp was turned on (from manufacture to date).
   Partial 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.
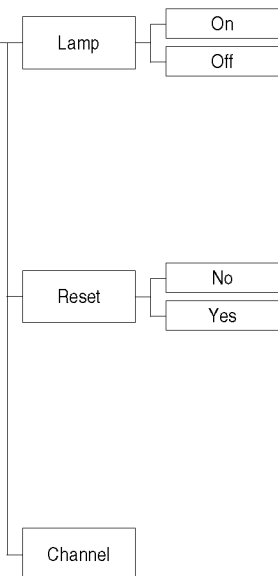3) Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

SISTEM 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)
2: 8-Ch (8 channel board)
3: 8-Ch (8 channel board)

Board Diagnost.

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

Dmx Monitor

Fans Monitor

Fan	Speed (RPM)
Pwr.Sup	XXXX
Ball.In.	XXXX
Ball.Out	XXXX
Eff.In	XXXX
Eff.Out	XXXX
Lamp	XXXX
Lamp	XXXX
Gobo	XXXX
Board	XXXX

Network params

Manual Control

Lamp	On
	Off

Reset	No
	Yes

Channel

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)
2: 8-Ch (8 channel board)
3: 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:
Pwr.Sup (Power supply Fan)
Ball. IN (Ballast IN Fan)
Ball. Out (Ballast OUT Fan)
Eff.IN (Effects IN Fan)
Eff.OUT (Effects OUT Fan)
Lamp (Lamp Fan)
Lamp (Lamp Fan)
Gobo (Gobo Fan)
Board (Yoke Board Fan)

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 ⊙ⱽ - 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)
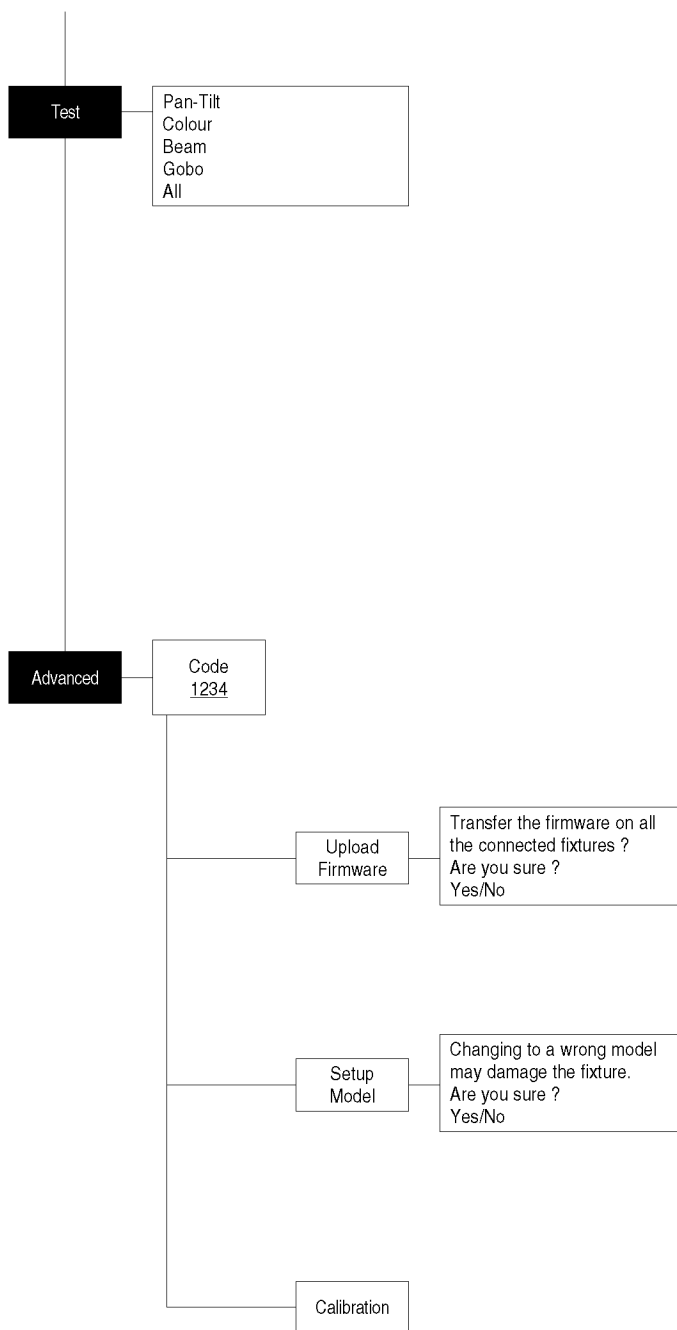3) Press ⊙ⱽ to confirm the selection or LEFT ⊙ to keep current settings and return to the top level.

RESET

Used for resetting the projector.
1) Press ⊙ⱽ 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 ⊙ⱽ - the first channel appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select the required channel:
3) Press ⊙ⱽ 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         │
              └─────────────┘


┌──────────┐  ┌─────────────┐
│ Advanced │──│ Code        │
└──────────┘  │ 1234        │
              └─────────────┘
                      │
                      │
                ┌──────────┐      ┌──────────────────────┐
                │ Upload   │──────│ Transfer the firmware on all │
                │ Firmware │      │ the connected fixtures ?     │
                └──────────┘      │ Are you sure ?               │
                      │           │ Yes/No                       │
                      │           └──────────────────────┘
                ┌──────────┐      ┌──────────────────────┐
                │ Setup    │──────│ Changing to a wrong model    │
                │ Model    │      │ may damage the fixture.      │
                └──────────┘      │ Are you sure ?               │
                      │           │ Yes/No                       │
                      │           └──────────────────────┘
                ┌──────────────┐
                │ Calibration  │
                └──────────────┘
```

TEST MENU

AUTOTEST

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

Test sequence:
- Pan - Tilt effects (Pan & Tilt)
- Colour effects (CMY, colour wheel)
- Beam effects (Stopper-Strobe / Dimmer / Iris / Prism / Frost / Focus / Zoom, Animation disk)
- Gobo effects (Fixed gobo / Rotating gobo)
- 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

UPLOAD 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.
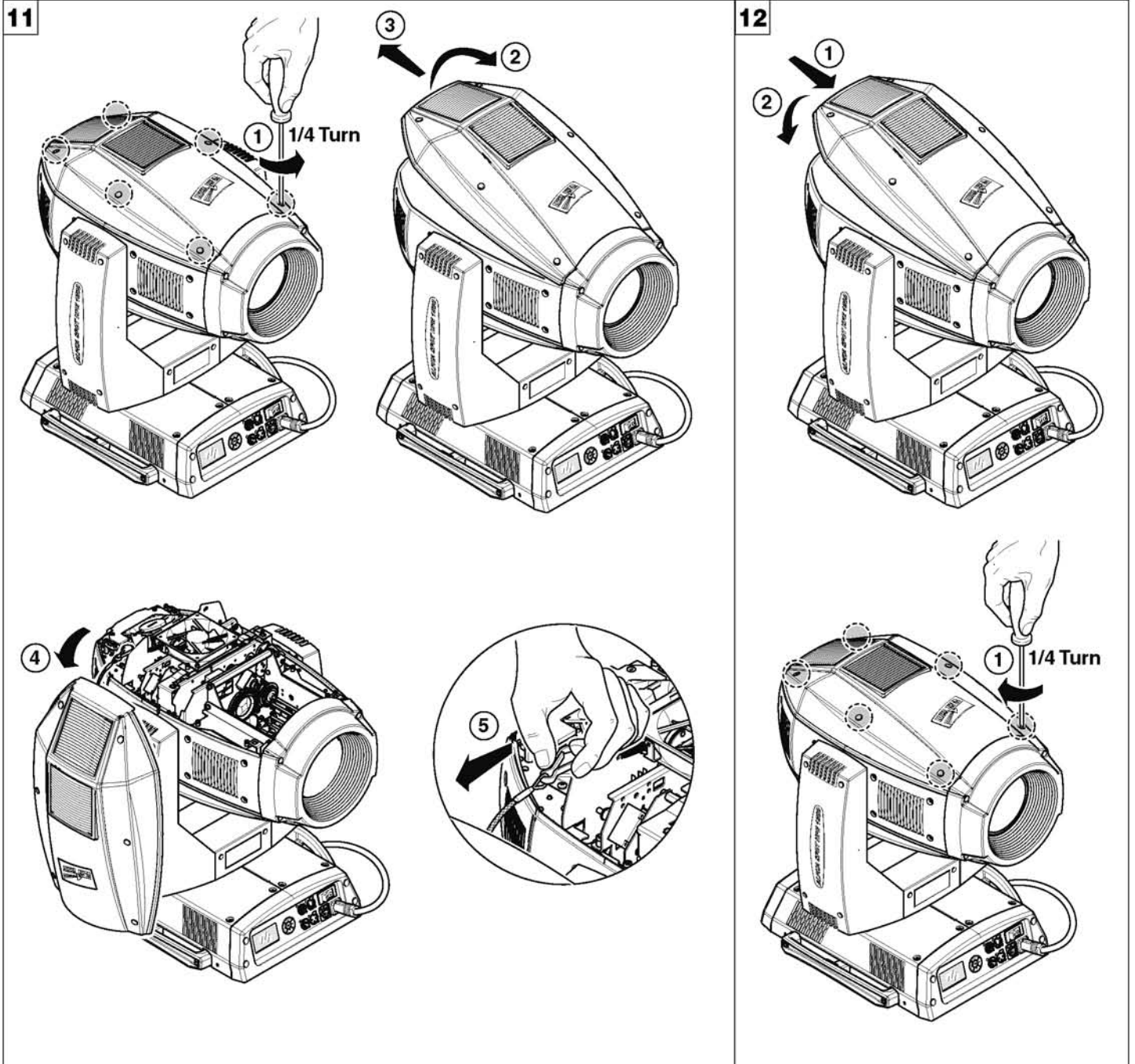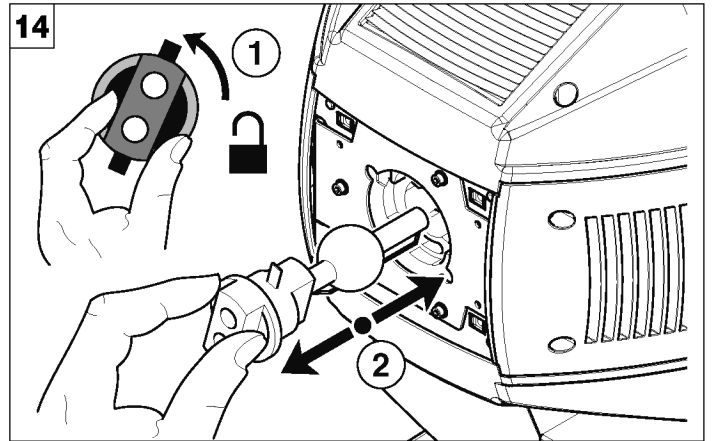
Locking and releasing Pan and Tilt movements - Refer to the instructions in the UNPACKING AND PREPARATION section.
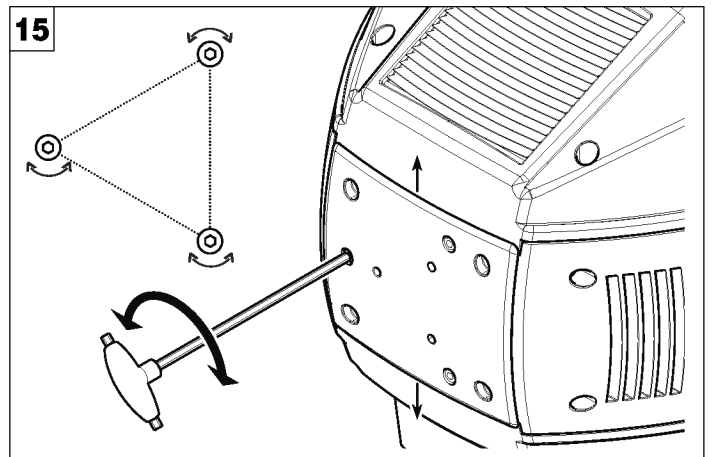**Opening the head covers** - Fig. 11.

Closing the head covers - Fig. 12.

13
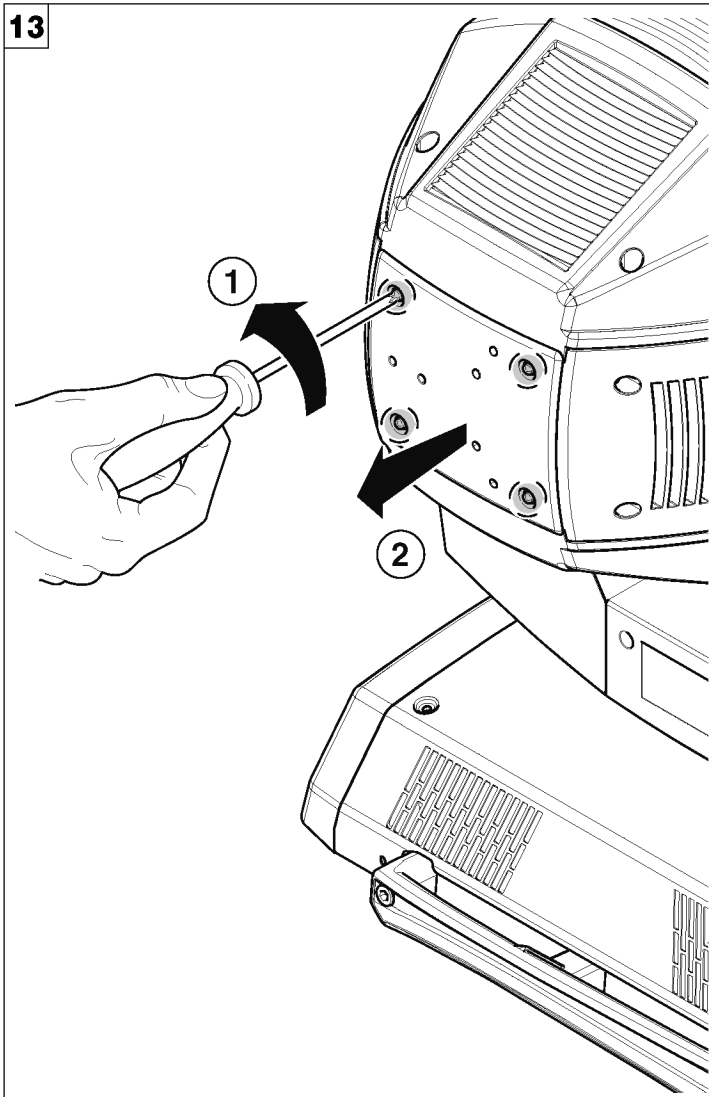
Opening and closing lamp compartment - Fig. 13
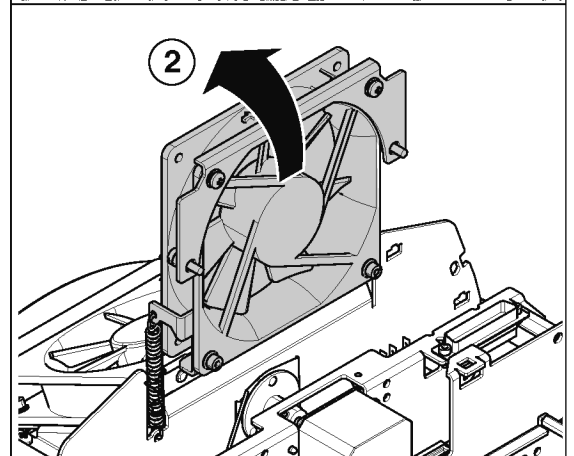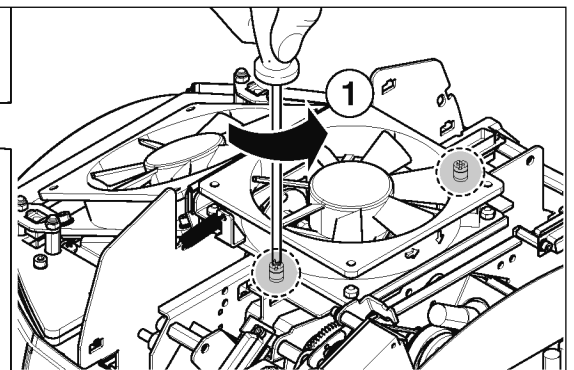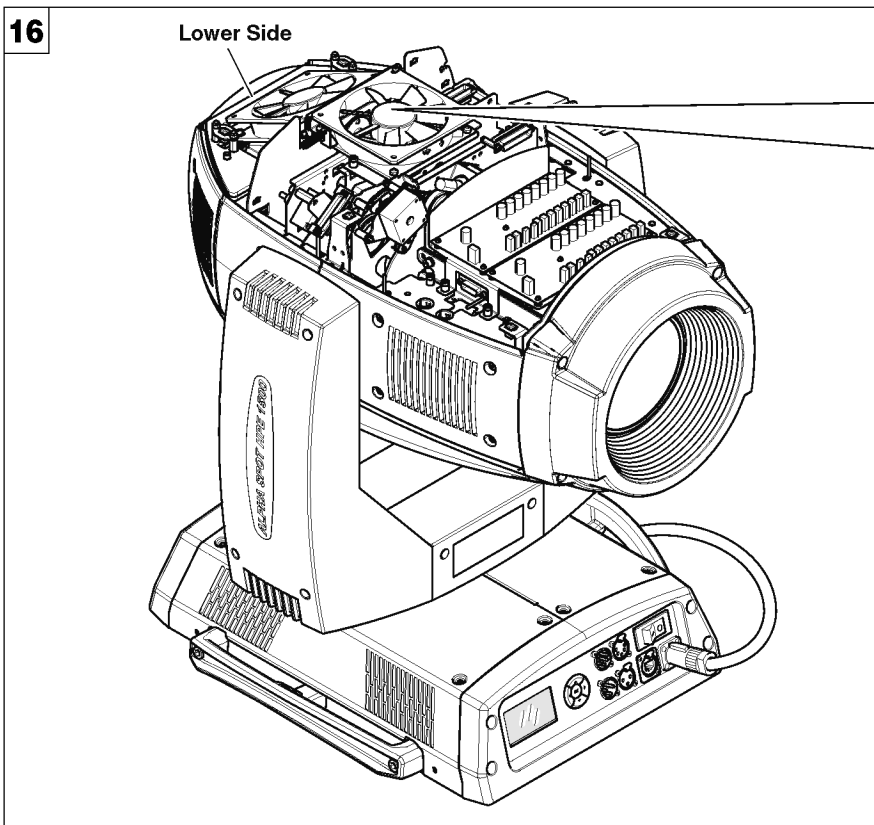
14

Lamp change - Fig 14

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.*
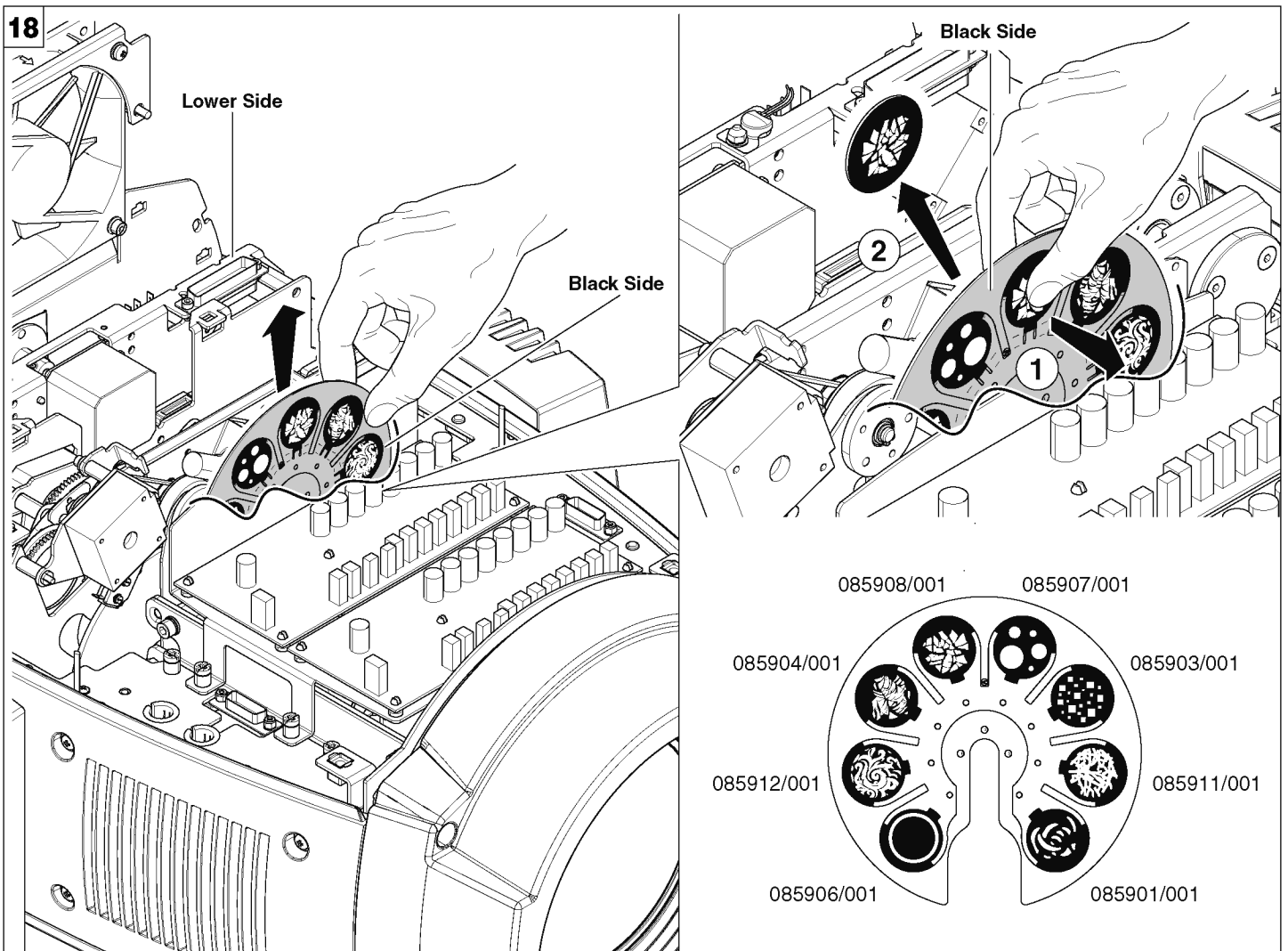
15

Lamp regulation - Fig. 15

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

16

Lower Side

Fan support plate opening and closing (Lower side) - Fig. 16
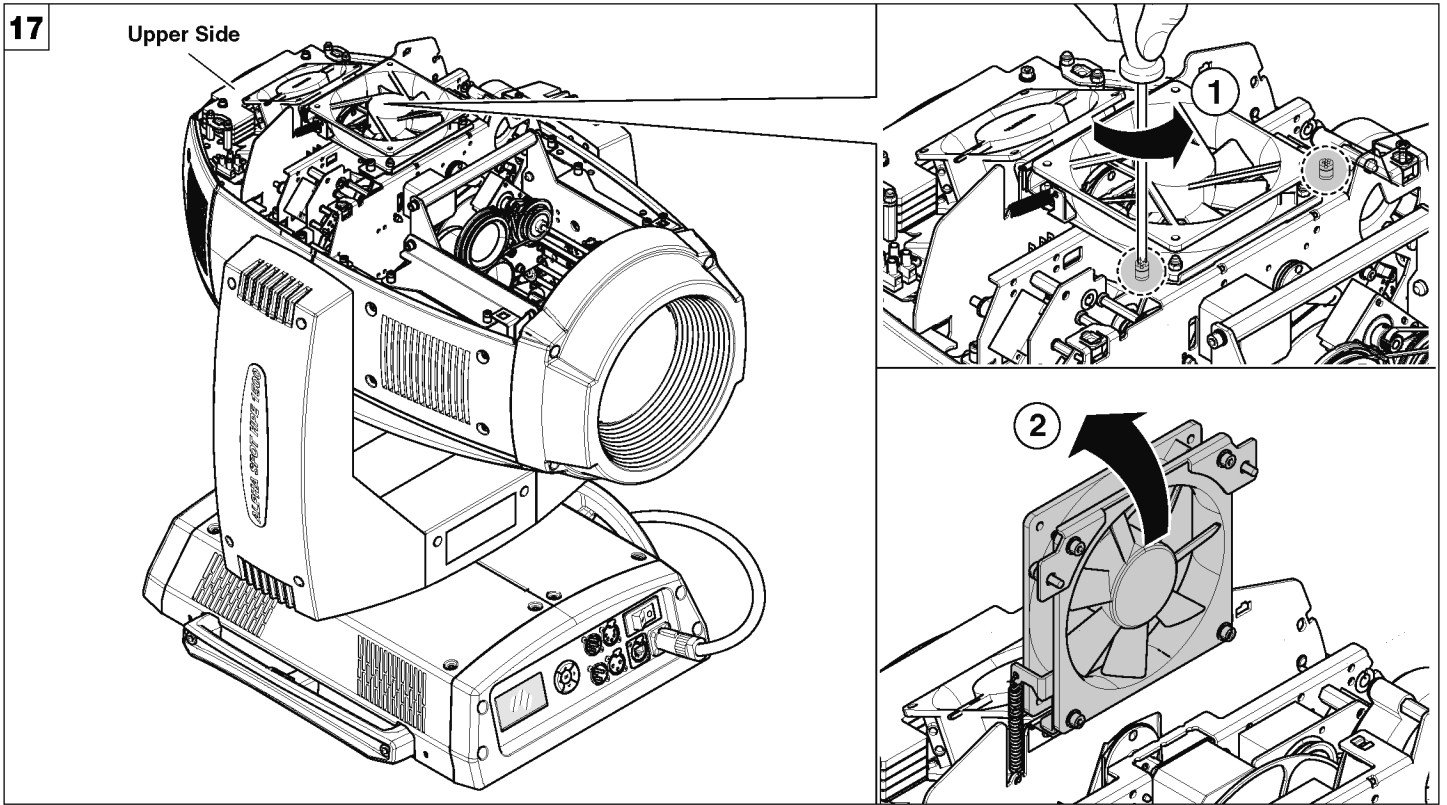
17 Upper Side

Fan support plate opening and closing (Upper side) - Fig. 17

18

Lower Side

Black Side

Black Side

085908/001   085907/001

085904/001   085903/001

085912/001   085911/001

085906/001   085901/001
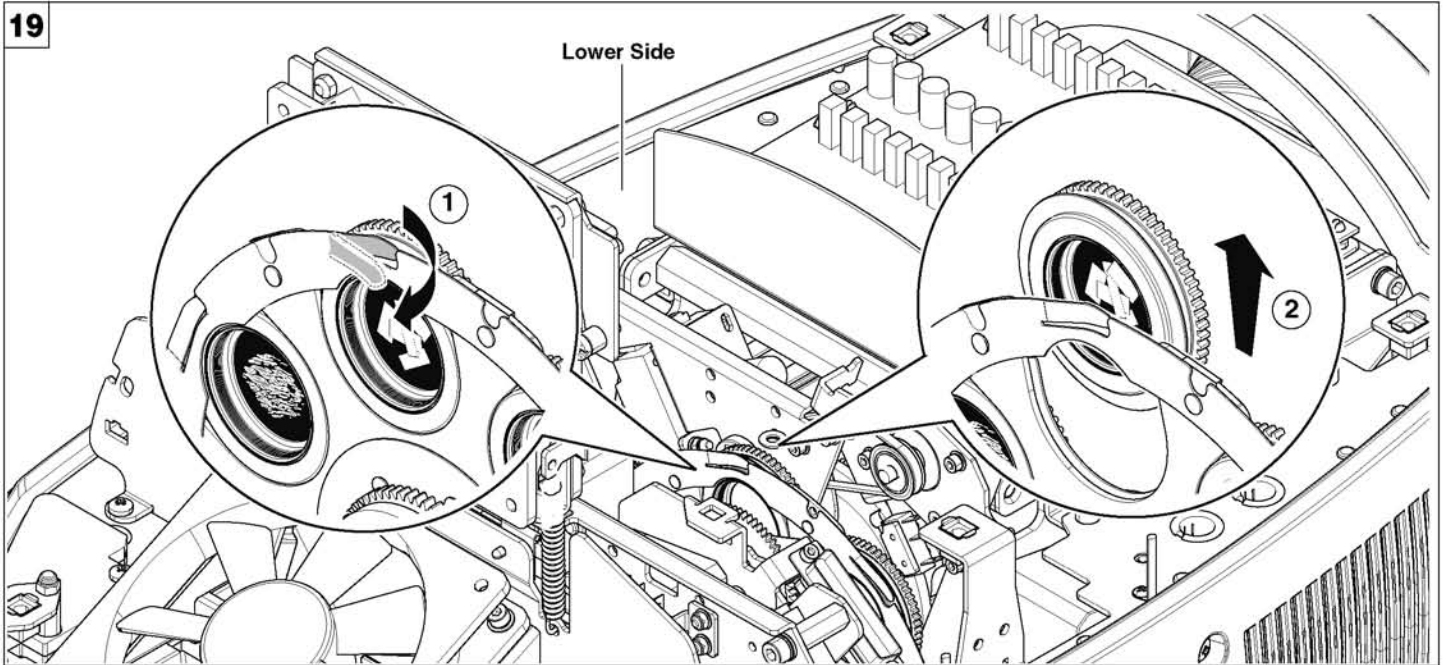
Replacing fixed gobos (ø 31.5 mm - max 25 mm image - thickness max 1 mm) - Fig. 18
IMPORTANT: Please contact CLAY PAKY before using customized gobos.
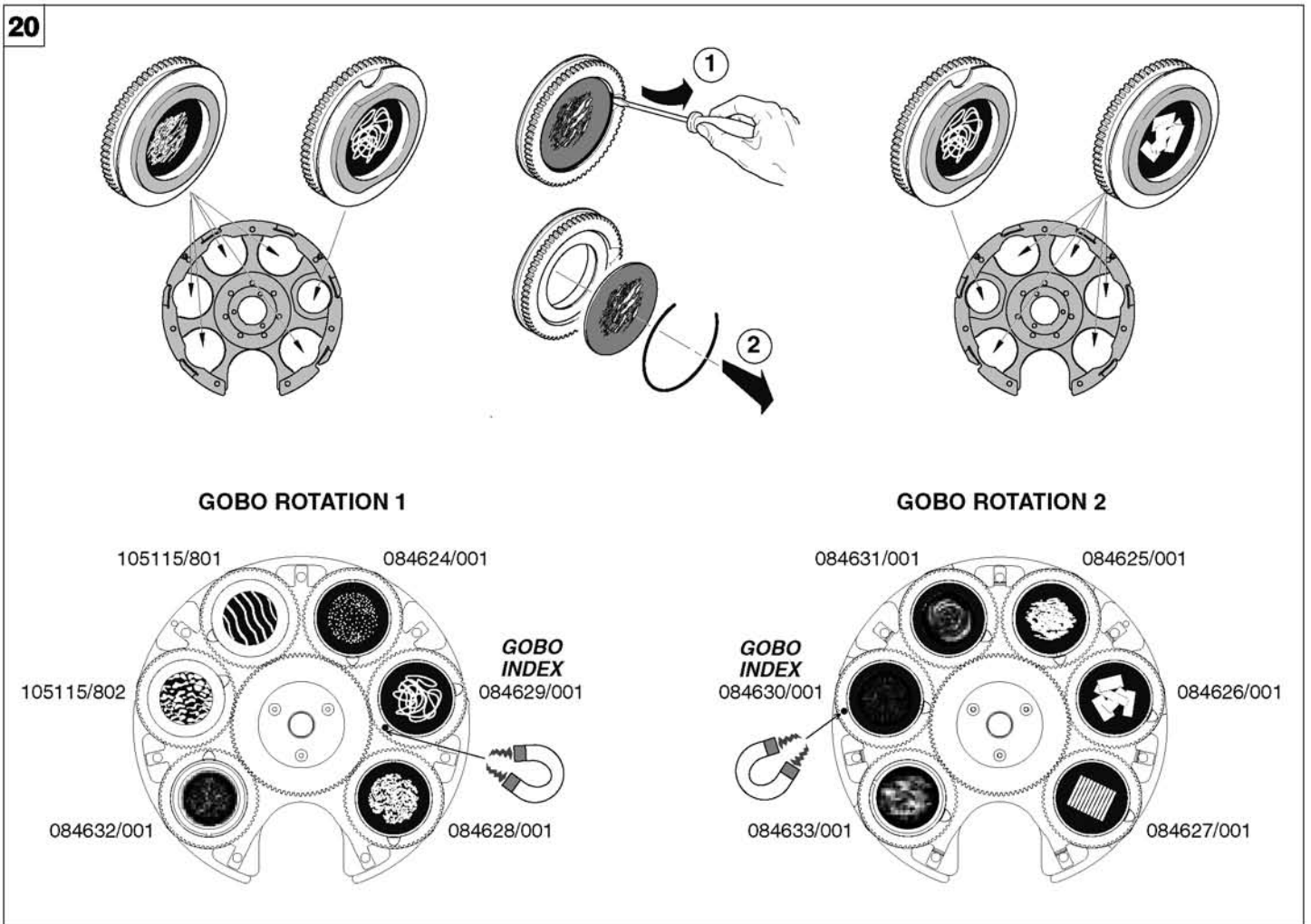To facilitate fixed gobo insertion and removal from the respective wheels. Clay Paky has created 2 templates, ATT019/001 and ATT020/001, which facilitate these operations and preserve gobo integrity. For further information please contact Clay Paky.

19

Lower Side

Bearing group replacement - Fig. 19

20

GOBO ROTATION 1

105115/801   084624/001

105115/802   *GOBO INDEX* 084629/001

084632/001   084628/001

GOBO ROTATION 2

084631/001   084625/001

GOBO INDEX 084630/001   084626/001
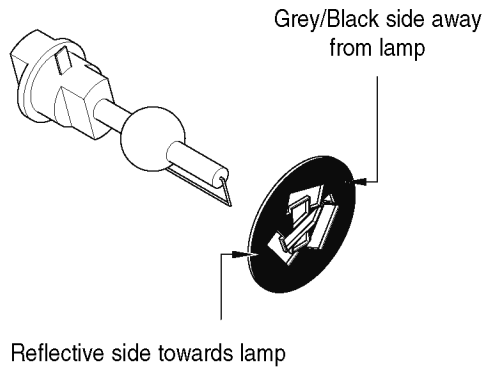
084633/001   084627/001

Replacing rotating gobos (ø 37.5 mm - max 25 mm image – thickness 1 mm) - Fig. 20
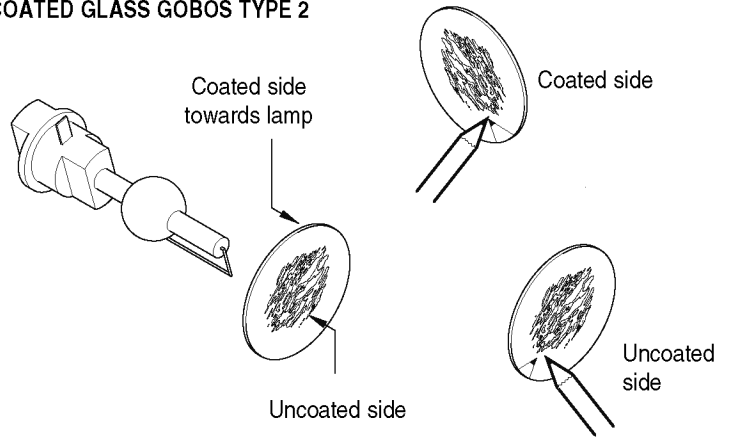IMPORTANT: Please contact CLAY PAKY before using customized gobos.
IMPORTANT: Use only glass gobos on the rotating gobos wheels.

21 COATED GLASS GOBOS TYPE 1

Grey/Black side away from lamp

Reflective side towards lamp

COATED GLASS GOBOS TYPE 2

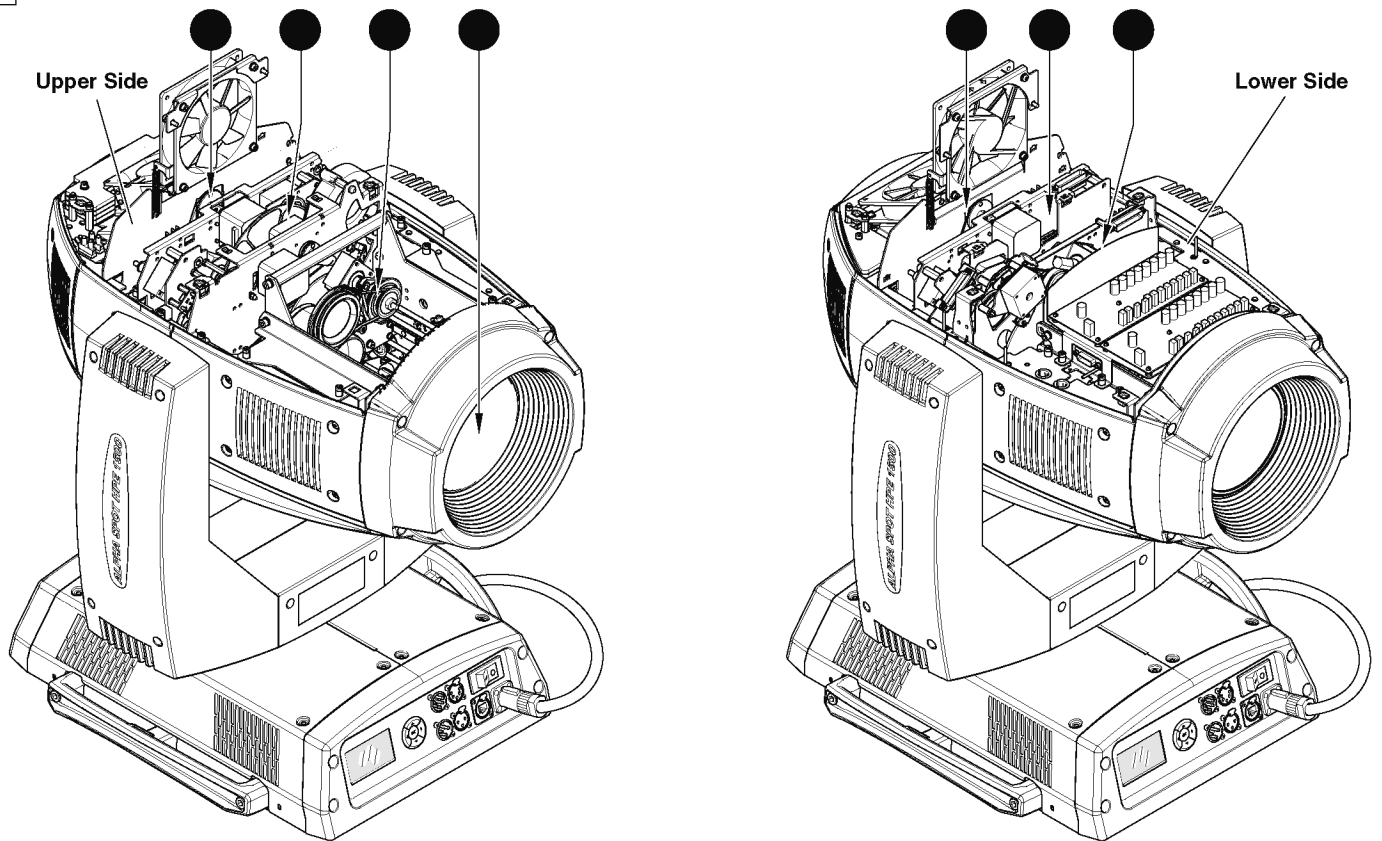Coated side towards lamp

Coated side

Uncoated side

Uncoated side

To determine which side of a godo is coated, hold an odject up to it. On the uncoated side, there is a space between the object and its reflection.

Gobo orientation - Fig. 21
The pictures shown the correct gobos orientation.

22

Upper Side

Lower Side

Periodical cleaning - Fig. 22
To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors, such as the amount of the effects and the quality of the working environment (air humidity, presence of dust, salinity, etc.).
Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors, from the lenses and filters. It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:
• General cleaning of internal parts.
• Restoring lubrication of all parts subject to friction, using lubricants specifically supplied by Clay Paky.
• General visual check of the internal components, cabling, mechanical parts, etc.
• Electrical, photometric and functional checks; eventual repairs.

23

4

Thermostat

3

Lower Side

2

5

6

1
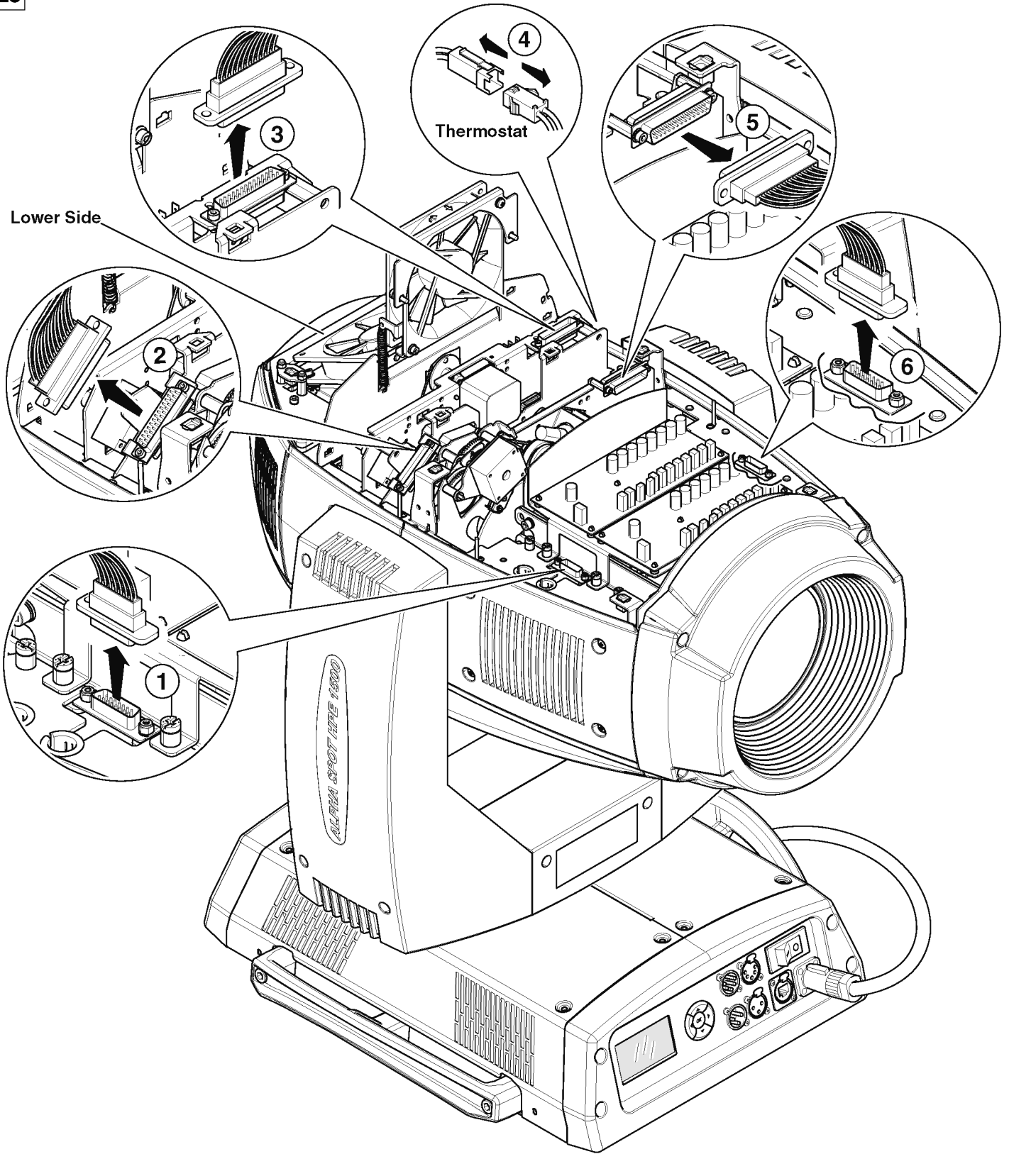
Extraction of the effect modules: Preliminary operations - Fig. 23

24

Lower Side

Upper Side

Upper Side
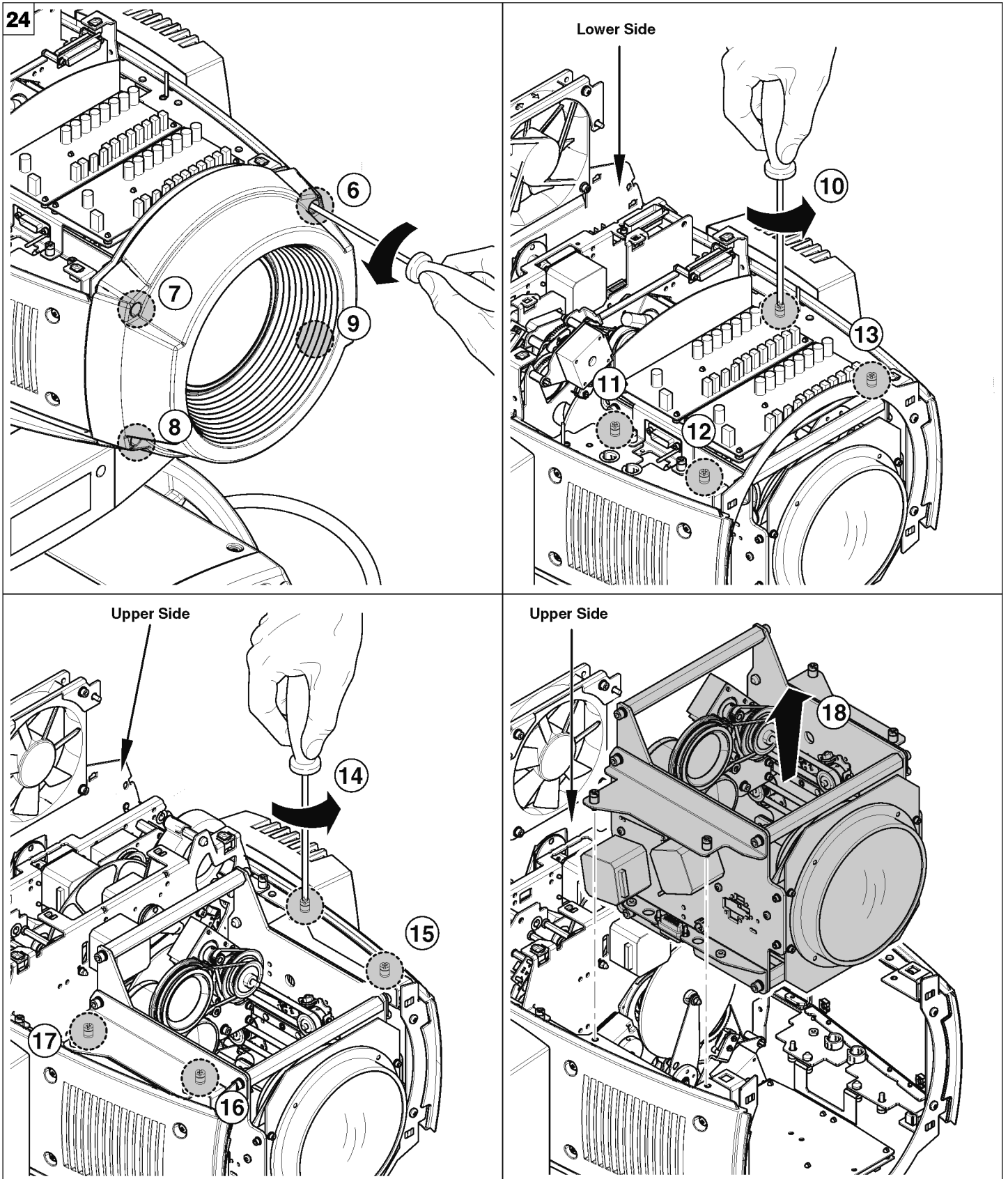
Extraction of the effect modules - Fig. 24
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 24 and 25 in reverse order

25

Upper Side

⑲

⑳

Upper Side

㉑

Upper Side

㉒

㉓

Upper Side

㉖

㉔

㉕
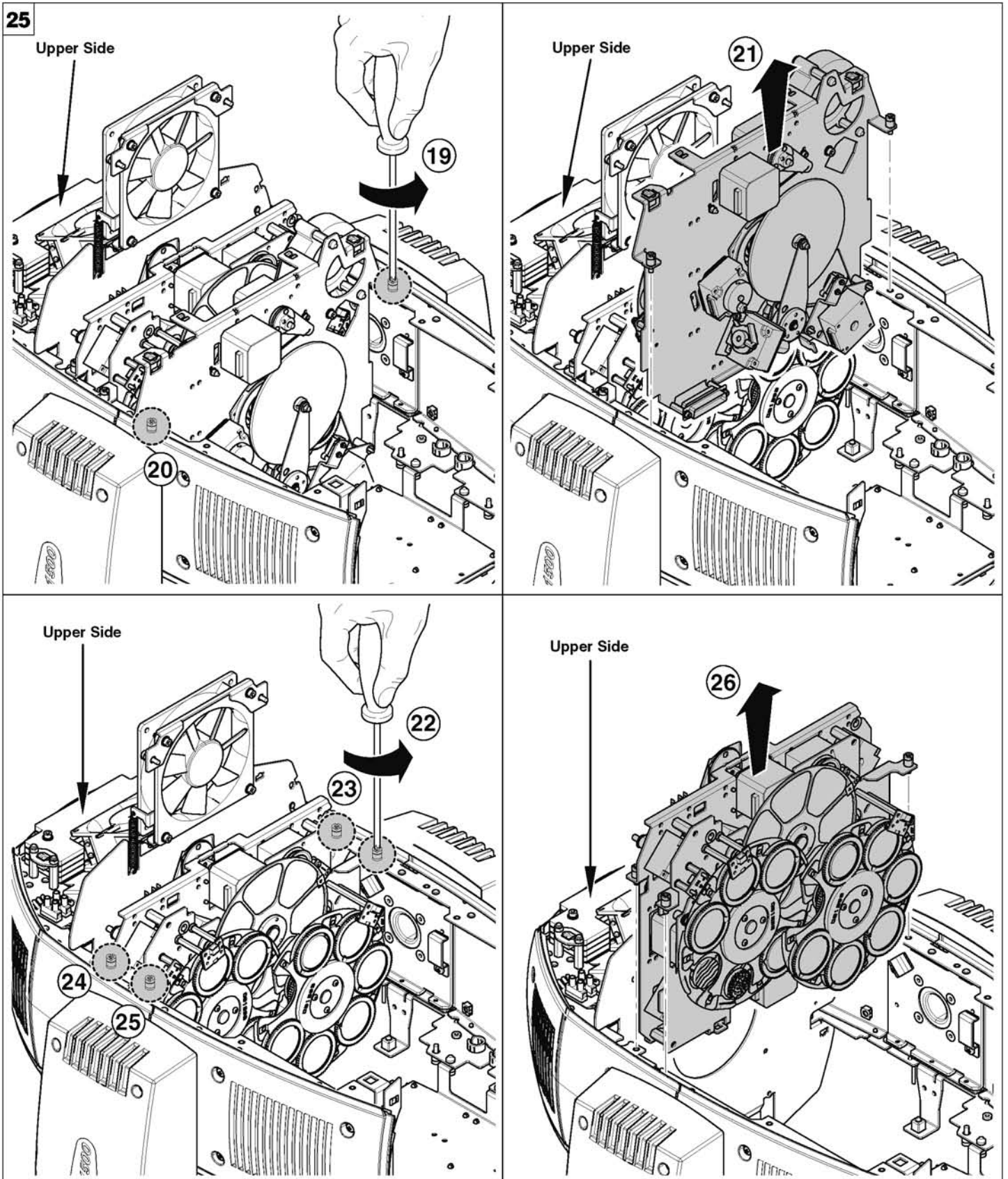
Extraction of the effect modules - Fig. 25
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 24 and 25 in reverse order
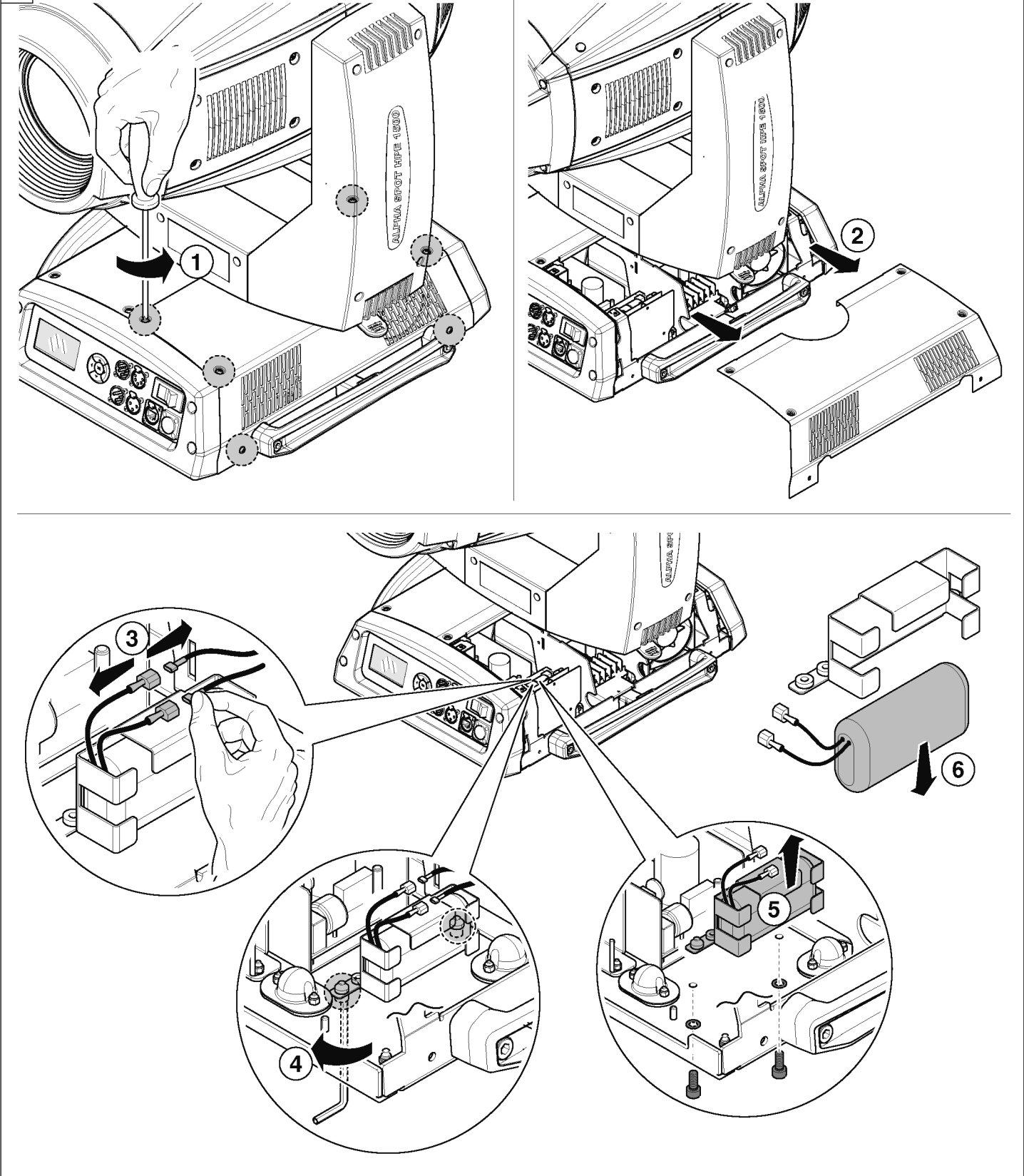
Battery removal - Fig. 26

This product contains a rechargeable lead-acid or 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
Pb

TECHNICAL INFORMATION

Power supplies available
200-240V 50/60Hz

Input power
2000VA a 230V 50Hz.

Total output
Max 27000 lumens.

Lamp
Discharge lamp.
Type HTI 1500W/60/P50-L Lok-it Osram (L10102)
- Cap PGJ50
- Colour temperature 6000 K
- Luminous flux 135000 lm
- Average life 750 h
- Any working position

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

Optical unit
Elliptic reflector with high luminous efficiency

Channels
Max 40 control channels.

Inputs
DMX 512

Movable body
• Movement by means of two stepper motors, con-
  trolled by microprocessor.
• Automatic repositioning of PAN and TILT after
  accidental movement not controlled by control
  unit.
• Travel:
  - PAN = 540°
  - TILT = 252°
• Maximum speeds:
  - PAN = 4.0 sec (360°)
  - TILT = 3.2 sec (252°)
• 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.

CE Marking
Complies with the following European Directives
- 2006/95/EC (LVD)
- 2004/108/EC (EMC)
- 2011/65/EU (RoHS).

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

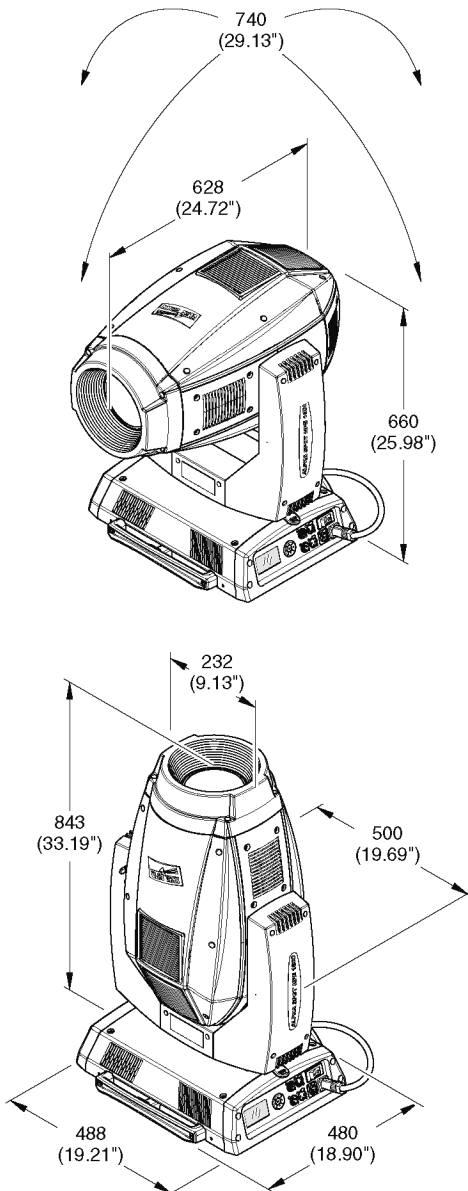**Cooling**
Forced ventilation with axial fans.

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
50.95 Kg (112lbs, 1oz).

740 (29.13")
628 (24.72")
660 (25.98")
232 (9.13")
843 (33.19")
500 (19.69")
488 (19.21")
480 (18.90")

CAUSE AND SOLUTION OF PROBLEMS

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

CHANNEL FUNCTION

ALPHA SPOT HPE 1500

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%).

CHANNEL	CHANNEL MODE	
	STANDARD	VECTOR
1	CYAN	CYAN
2	MAGENTA	MAGENTA
3	YELLOW	YELLOW
4	C.T.O	C.T.O
5	COLOUR WHEEL	COLOUR WHEEL
6	MACRO COLOURS	MACRO COLOURS
7	STOP/STROBE	STOP/STROBE
8	DIMMER	DIMMER
9	DIMMER FINE	DIMMER FINE
10	IRIS	IRIS
11	ANIMATED STAR GOBO	ANIMATED STAR GOBO
12	STATIC GOBO CHANGE	STATIC GOBO CHANGE
13	ROTATING GOBO 1 CHANGE	ROTATING GOBO 1 CHANGE
14	GOBO 1 ROTATION	GOBO 1 ROTATION
15	GOBO 1 FINE	GOBO 1 FINE
16	ROTATING GOBO2 CHANGE	ROTATING GOBO2 CHANGE
17	GOBO2 ROTATION	GOBO2 ROTATION
18	GOBO2 FINE	GOBO2 FINE
19	ANIMATION DISK INSERTION	ANIMATION DISK INSERTION
20	ANIMATION DISK ROTATION	ANIMATION DISK ROTATION
21	ROTATING PRISM INSERTION	ROTATING PRISM INSERTION
22	PRISM ROTATION	PRISM ROTATION
23	FROST INSERTION	FROST INSERTION
24	FOCUS	FOCUS
25	FOCUS FINE	FOCUS FINE
26	ZOOM	ZOOM
27	AUTOFOCUS DISTANCE	AUTOFOCUS DISTANCE
28	AUTOFOCUS ADJUSTMENT	AUTOFOCUS ADJUSTMENT
29	MACRO EFFECTS	MACRO EFFECTS
30	PAN	PAN
31	PAN FINE	PAN FINE
32	TILT	TILT
33	TILT FINE	TILT FINE
34	FUNCTION	FUNCTION
35	RESET	RESET
36	LAMP ON/OFF (with Option "Lamp DMX" ON)	LAMP ON/OFF (with Option "Lamp DMX" ON)
37		PAN-TILT TIME
38		COLOUR TIME
39		BEAM TIME
40		GOBO TIME

NOTE: On conclusion of resetting in case of absence of DMX signal, Pan & Tilt move to the "Home" position (Pan 50% - Tilt 50%) all the others channels stay at 0%.

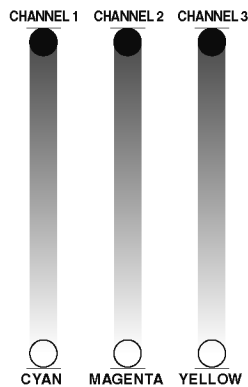## • COLOUR MIXING - channel 1 - 2 - 3

Operation with option color mixing: RGB
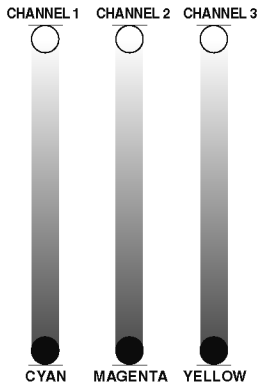
BIT	EFFECT
255	COLOUR EXCLUDED
0	COLOUR INSERTED

IMPORTANT: The lamp dim to half power 1 second after all the 3 channels stay at 0% level. The lamp goes back to full power when the channels level is put higher than 0%.

Operation with option color mixing: CMY

BIT	EFFECT
255	COLOUR INSERTED
0	COLOUR EXCLUDED

IMPORTANT: The lamp dim to half power 1 second after all the 3 channels stay at 100% level. The lamp goes back to full power when the channels level is put lower than 100%.

• C.T.O. - channel 4

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
117	BLUE
97	ORANGE
77	AQUAMARINE
58	GREEN
39	PINK
20	RED
0	WHITE

• MACRO COLOURS - channel 6

COLOR NAME	BIT	ROSCO CODE	LEE CODE	CYAN BIT	MAGENTA BIT	YELLOW BIT	CTO BIT	WHEEL BIT
Unused Range	148-255	-	-	-	-	-	-	-
Half CT straw	146-147	442	442	0	0	34	190	0
Lighter blue	144-145	353	353	226	0	149	138	0
Glacier blue	142-143	352	352	220	0	129	138	0
Fuschia pink	140-141	345	345	109	186	77	120	0
Mallard green	138-139	325	325	255	0	0	236	58
Jade	136-137	323	323	127	0	162	0	77
3/4 CT Orange	134-135	285	285	0	36	61	217	0
3/4 CTB	132-133	281	281	85	79	87	54	0
Half minus green	130-131	248	248	60	19	86	75	39
Minus green	128-129	247	247	60	71	86	75	39
1/4 CTO	126-127	206	206	62	71	123	122	0
1/2 CTO	124-125	205	205	25	26	45	131	0
Full CT Orange	122-123	204	204	0	44	58	234	0
1/4 CTB	120-121	203	203	75	54	91	109	0
1/2 CTB	118-119	202	202	85	71	84	89	0
Full CTB	116-117	201	201	94	79	80	0	0
Alice Blue	114-115	197	197	236	51	0	205	0
Congo Blue	112-113	181	181	251	241	0	255	0
Dark Lavender	110-111	180	180	195	170	0	160	0
Chrome Orange	108-109	179	179	0	98	255	255	0
Lagoon blue	106-107	172	172	224	0	121	40	79
Deep Lavender	104-105	170	170	100	129	77	120	0
Liliac tint	102-103	169	169	41	59	39	120	0
Daylight Blue	100-101	165	165	210	73	105	88	0
Flame red	98-99	164	164	0	255	227	255	97
Bastard amber	96-97	162	162	0	26	0	199	0
Deep Orange	94-95	158	158	0	148	255	255	0
Pink	92-93	157	157	0	159	0	255	0
Pale rose	90-91	154	154	0	48	0	189	0
Pale Gold	88-89	152	152	0	60	98	138	0
Bright rose	86-87	148	148	0	255	0	255	0
Apricot	84-85	147	147	0	81	55	255	0
Bright Blue	82-83	141	141	182	0	99	92	77
Primary green	80-81	139	139	0	0	0	231	58
Light green	78-79	121	121	0	0	255	0	77
Pale green	76-77	138	138	105	0	179	100	0
Special Lavender	74-75	137	137	97	105	72	90	0
Pale Lavender	72-73	136	136	73	102	44	120	0
Deep golden amber	70-71	135	135	0	255	255	255	0
Golden amber	68-69	134	134	0	142	234	110	0
Medium blue	66-67	132	132	255	152	127	0	77
Marine blue	64-65	131	131	60	0	106	73	77
Bright pink	62-63	128	128	0	255	0	197	0
Mauve	60-61	126	126	0	255	0	255	74
Fern Green	58-59	122	122	173	0	235	89	0
Leaf green	56-57	121	121	136	0	241	64	0
Deep Blue	54-55	120	120	255	229	58	128	77
Dark blue	52-53	119	119	255	161	0	0	77
Light blue	50-51	118	118	245	0	145	138	0
Steel blue	48-49	117	117	167	0	141	165	0
Medium blue green	46-47	116	116	189	0	157	91	77
Peacock blue	44-45	115	115	136	0	128	91	77
Dark pink	42-43	111	111	0	139	0	220	0
Light Salmon	40-41	109	109	50	121	58	230	0
English rose	38-39	108	108	0	62	0	247	0
Light rose	36-37	107	107	0	95	0	220	0
Primary red	34-35	106	182	0	0	0	0	20
Orange	32-33	105	105	0	182	255	76	0
Deep amber	30-31	104	104	0	26	199	223	0
Straw	28-29	103	103	58	17	104	176	0
Light amber	26-27	102	102	0	0	171	193	0
Yellow	24-25	101	101	0	0	255	149	0
Spring yellow	22-23	100	100	80	0	227	157	0
Dark Yellow Green	20-21	090	090	255	0	255	204	0
Lime green	18-19	088	088	118	0	241	124	0
Just Blue	16-17	079	079	255	77	0	204	0
Tokyo Blue	14-15	071	071	255	255	0	180	77
Sky blue	12-13	068	068	245	77	64	173	0
Pale blue	10-11	063	063	122	0	112	127	0
Lavender	8-9	058	058	165	186	77	0	0
Bright Red	6-7	026	026	0	255	0	255	21
Med Yellow	4-5	010	010	48	0	239	115	0
Med bastard amber	2-3	004	004	0	62	78	159	0
Random Macro Color (only for Macro effects)	1	-	-	-	-	-	-	-
Unused Range	0,00	-	-	-	-	-	-	-

• STOP / STROBE - channel 7

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% level. The lamp goes back to full power when the channel level is put higher than 0%.

• DIMMER - channel 8

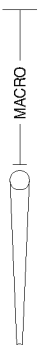| BIT	EFFECT
255	DIMMER OPEN
0	DIMMER CLOSED

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

• DIMMER FINE - channel 9

BIT	EFFECT
255	
0	

• IRIS - channel 10

BIT	EFFECT
252 - 255	MAXIMUM APERTURE
251	FAST PULSATION, FAST CLOSING
212	SLOW PULSATION, FAST CLOSING
211	FAST PULSATION, FAST OPENING
172	SLOW PULSATION, FAST OPENING
171	FAST PULSATION
132	SLOW PULSATION
128 - 131	MAXIMUM APERTURE
0	MINIMUM APERTURE

• ANIMATED STAR GOBO – channel 11

* With the "Animated star gobo" on this bit all "Macro effects" that include an Iris scene, use the "Animated Star gobo" instead of the "Iris"

BIT	EFFECT
252 - 255	MAXIMUM APERTURE
251	FAST PULSATION, FAST CLOSING
212	SLOW PULSATION, FAST CLOSING
211	FAST PULSATION, FAST OPENING
172	SLOW PULSATION, FAST OPENING
171	FAST PULSATION
132	SLOW PULSATION
128 - 131	MAXIMUM APERTURE
1*	
0	MINIMUM APERTURE

• STATIC GOBO CHANGE - channel 12

BIT	EFFECT
255	GOBO 8 SHAKE, FAST SPEED
244	GOBO 8 SHAKE, SLOW SPEED
243	GOBO 7 SHAKE, FAST SPEED
232	GOBO 7 SHAKE, SLOW SPEED
231	GOBO 6 SHAKE, FAST SPEED
220	GOBO 6 SHAKE, SLOW SPEED
219	GOBO 5 SHAKE, FAST SPEED
208	GOBO 5 SHAKE, SLOW SPEED
207	GOBO 4 SHAKE, FAST SPEED
196	GOBO 4 SHAKE, SLOW SPEED
195	GOBO 3 SHAKE, FAST SPEED
184	GOBO 3 SHAKE, SLOW SPEED
183	GOBO 2 SHAKE, FAST SPEED
172	GOBO 2 SHAKE, SLOW SPEED
171	GOBO 1 SHAKE, FAST SPEED
160	GOBO 1 SHAKE, SLOW SPEED
159	FAST ROTATION (100 rpm)
118	SLOW ROTATION (5 rpm)
114 - 117	STOP
113	SLOW ROTATION (5 rpm)
72	FAST ROTATION (100 rpm)
64 - 71	GOBO 8
56 - 63	GOBO 7
48 - 55	GOBO 6
40 - 47	GOBO 5
32 - 39	GOBO 4
24 - 31	GOBO 3
16 - 23	GOBO 2
8 - 15	GOBO 1
0 - 7	WHITE

• ROTATING GOBO 1 CHANGE - channel 13

MACRO

BIT	EFFECT
255	GOBO 6 SHAKE, FAST SPEED
235	GOBO 6 SHAKE, SLOW SPEED
234	GOBO 5 SHAKE, FAST SPEED
214	GOBO 5 SHAKE, SLOW SPEED
213	GOBO 4 SHAKE, FAST SPEED
193	GOBO 4 SHAKE, SLOW SPEED
192	GOBO 3 SHAKE, FAST SPEED
172	GOBO 3 SHAKE, SLOW SPEED
171	GOBO 2 SHAKE, FAST SPEED
151	GOBO 2 SHAKE, SLOW SPEED
150	GOBO 1 SHAKE, FAST SPEED
130	GOBO 1 SHAKE, SLOW SPEED
112-129	GOBO 6
93-111	GOBO 5
75-92	GOBO 4
56-74	GOBO 3
38-55	GOBO 2
19-37	GOBO 1
0-18	WHITE

• ROTATING GOBO 2 CHANGE - channel 16

MACRO

BIT	EFFECT
255	GOBO 6 SHAKE, FAST SPEED
235	GOBO 6 SHAKE, SLOW SPEED
234	GOBO 5 SHAKE, FAST SPEED
214	GOBO 5 SHAKE, SLOW SPEED
213	GOBO 4 SHAKE, FAST SPEED
193	GOBO 4 SHAKE, SLOW SPEED
192	GOBO 3 SHAKE, FAST SPEED
172	GOBO 3 SHAKE, SLOW SPEED
171	GOBO 2 SHAKE, FAST SPEED
151	GOBO 2 SHAKE, SLOW SPEED
150	GOBO 1 SHAKE, FAST SPEED
130	GOBO 1 SHAKE, SLOW SPEED
112-129	GOBO 6
93-111	GOBO 5
75-92	GOBO 4
56-74	GOBO 3
38-55	GOBO 2
19-37	GOBO 1
0-18	WHITE

• GOBO 1 ROTATION - channel 14

STOP

BIT	EFFECT
255	FAST ROTATION (150 rpm)
193	SLOW ROTATION (2,2 rph)
191 - 192	STOP
190	SLOW ROTATION (2,2 rph)
128	FAST ROTATION (150 rpm)
127	540° POSITION
105	450° POSITION
84	360° POSITION
63	270° POSITION
42	180° POSITION
21	90° POSITION
0	0° POSITION

540°
360°
0°

• GOBO 2 ROTATION - channel 17

STOP

BIT	EFFECT
255	FAST ROTATION (150 rpm)
193	SLOW ROTATION (2,2 rph)
191 - 192	STOP
190	SLOW ROTATION (2,2 rph)
128	FAST ROTATION (150 rpm)
127	540° POSITION
105	450° POSITION
84	360° POSITION
63	270° POSITION
42	180° POSITION
21	90° POSITION
0	0° POSITION

540°
360°
0°

• GOBO 1 FINE - channel 15

BIT
255
127
0

• GOBO 2 FINE - channel 18

BIT
255
127
0

• ANIMATION DISK INSERTION - channel 19

BIT	EFFECT
255	DISK INSERTED
0	DISK EXCLUDED

• ANIMATION DISK ROTATION - channel 20

BIT	EFFECT
255	FAST ROTATION (120 rpm)
131	SLOW ROTATION (4,4 rph)
125 - 130	STOP
124	SLOW ROTATION (4,4 rph)
0	FAST ROTATION (120 rpm)

• PRISM INSERTION - channel 21

BIT	EFFECT
255	
	PRISM INSERTED
128	
127	
	PRISM EXCLUDED
0	

• PRISM ROTATION - channel 22

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°

• FROST - channel 23

BIT	EFFECT
255	FROST INSERTED
0	FROST EXCLUDED

• FOCUS - channel 24

BIT	EFFECT
255	NEAR
0	DISTANT

• FOCUS FINE -channel 25

BIT	EFFECT
255	NEAR
0	DISTANT

• ZOOM - channel: 26

BIT	EFFECT
255	NARROW BEAM
0	WIDE BEAM

• AUTOFOCUS DISTANCE - channel 27

BIT	EFFECT
255	100 METRES
128	50 METRES
102	40 METRES
77	30 METRES
51	20 METRES
26	10 METRES
7	3 METRES
0-6	AUTOFOCUS OFF

AUTOFOCUS priority:
1) Rotating Gobo 2
2) Static Gobo
3) Rotating Gobo 1
4) Animated Star Gobo
5) Iris

• AUTOFOCUS ADJUSTMENT - channel 28
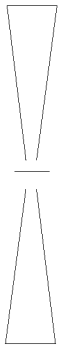
BIT	EFFECT
255	FOCUS FINE
128	
0	FOCUS FINE

• MACRO EFFECTS - channel 29

BIT	EFFECT
232-255	STAND BY BLACK
220-231	RANDOM MACRO 8
208-219	RANDOM MACRO 7
196-207	RANDOM MACRO 6
184-195	RANDOM MACRO 5
172-183	RANDOM MACRO 4
160-171	RANDOM MACRO 3
148-159	RANDOM MACRO 2
136-147	RANDOM MACRO 1
112-135	STAND BY BLACK
100-111	MACRO 8
88-99	MACRO 7
76-87	MACRO 6
64-75	MACRO 5
52-63	MACRO 4
40-51	MACRO 3
28-39	MACRO 2
16-27	MACRO 1
12-15	STAND BY BLACK
8-11	STAND BY
0-7	MACRO OFF

• PAN - channel 30

Operation with option InvertPan ↕ Off
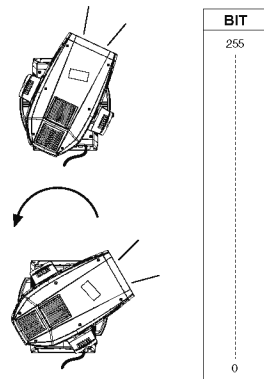*(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)*
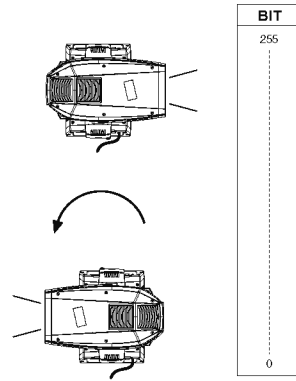
Operation with option InvertPan ↕ On
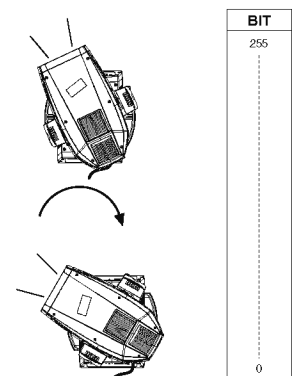*(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)*
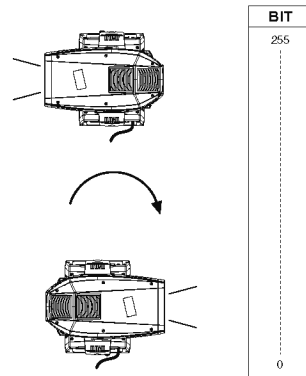
• PAN FINE - channel 31

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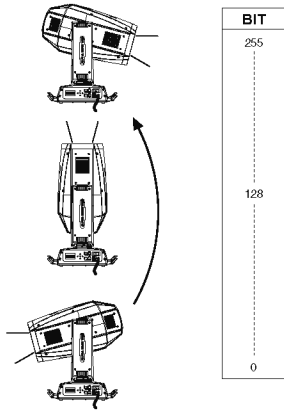*(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)*

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

• TILT - channel 32
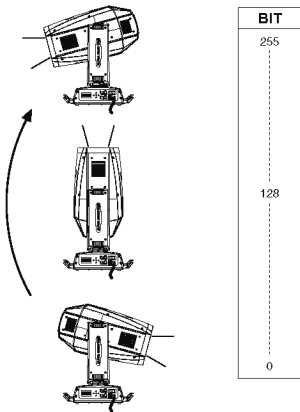
Operation with option Invert Tilt ↕ Off
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)

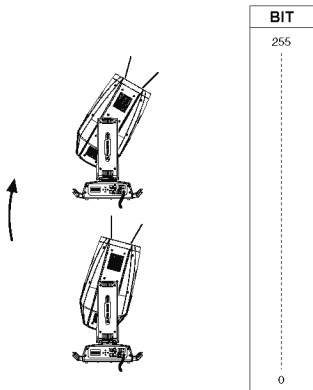*Operation with option Invert Tilt ↕ On*
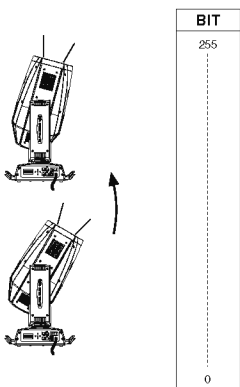*(Pan conventionally represented at 0% and option Invert Pan ↕ Off)*

• TILT FINE - channel 33

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: 34

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

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

## • RESET - channel: 35

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	
	UNUSED RANGE
0	

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

• LAMP CONTROL (only with option LAMP DMX On) - channel: 36

IMPORTANT: Alpha Spot HPE 1500 is not provided with hot restrike igniter

BIT	EFFECT
255	LAMP ON (1500 W)
	Lamp ignition after 5 s in full power levels. Immediate transition from half to full power.
180	LAMP ON (1500 W)
179	LAMP ON (1200 W)
	Immediate transition from full to half power. Lamp ignition not allowed in half power.
101	LAMP ON (1200 W)
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
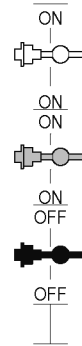
The functions are actived passing through unused range and staying 5 seconds in necessary level.

	Timing Channel	Channel function
37	Pan - Tilt time	Pan – Tilt – Pan Fine – Tilt Fine
38	Colour time	Cyan - Magenta - Yellow – C.T.O. – Color wheel
39	Beam time	Dimmer - Iris -Focus effects movment - Focus - Zoom - Frost – Rotating Prism change – Frost insertion
40	Gobo time	Gobo Fix - Rotating Gobo 1/2 change – Animation Disk insertion

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	41	174	58	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	27	136	43	179	60	223	200
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	70	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	15	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	19	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	40	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		