CLAY PAKY ®

www.claypaky.it

ALPHA SPOT QWO 800
ALPHA SPOT QWO 800 "ST"

C61380

C61381

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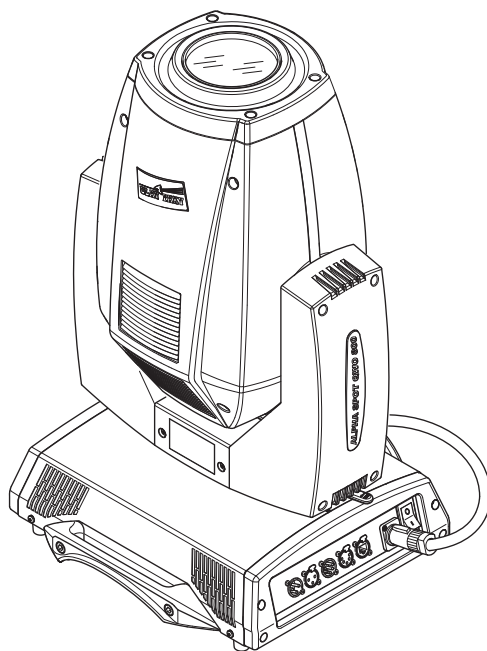
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Congratulations on choosing a Clay Paky product!
We thank you for your custom.
Please note that this product, as all the others in the rich Clay Paky range, has been designed and made with total quality to ensure excellent performance and best meet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

Carefully read this instruction manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.

CLAY PAKY S.p.A. disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this instruction manual, which must always accompany the fitting.

CLAY PAKY S.p.A. reserves the right to modify the characteristics stated in this instruction manual at any time and without prior notice.

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

800W $\quad\cdots\cdots 3 \cdots\cdots$ m

• Minimum distance of illuminated objects
The projector needs to be positioned so that the objects hit by the beam of light are at least 3 metres (10' 9") 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.

t_a 40°C

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

IP20

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

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

• Connections 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.
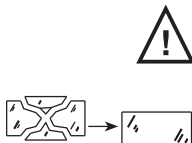
• Lamp
The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus.
- Carefully read the "operating instructions" provided by the lamp manufacturer.
- Immediately replace the lamp if damaged or deformed by heat.

• 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 referred to in this manual conform to the European Community Directives to which they are subject:
• Low Voltage 2006/95/CE
• Electromagnetic Compatibility 2004/108/CE

UNPACKING AND PREPARATION

1

099116

2 x 183102/802

Lamp 800W
(fitted into projector)

GOM000-001

Packing contents - Fig. 1

2

UNLOCKED

LOCKED

90°   90°

90°   90°

3

45°   45°

45°   45°

45°   45°

LOCKED

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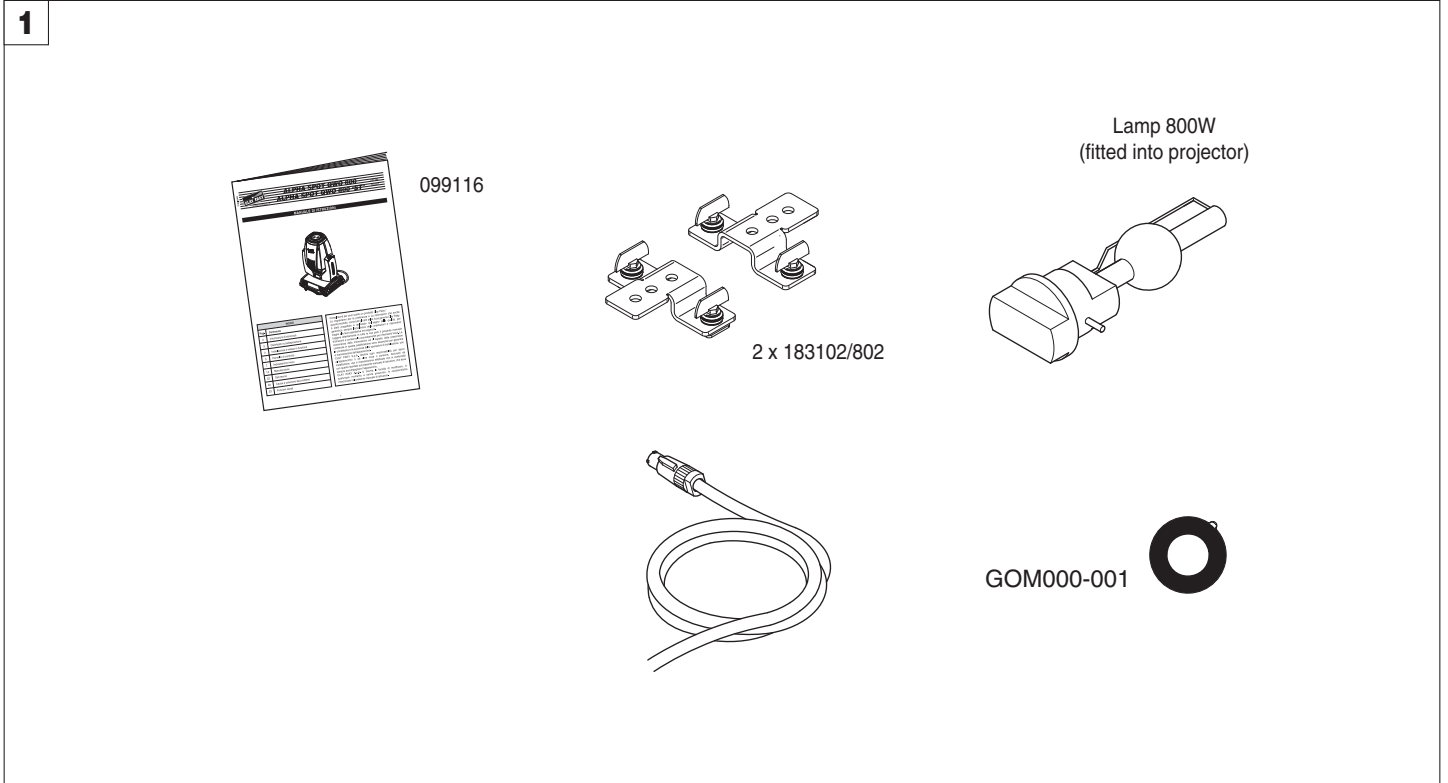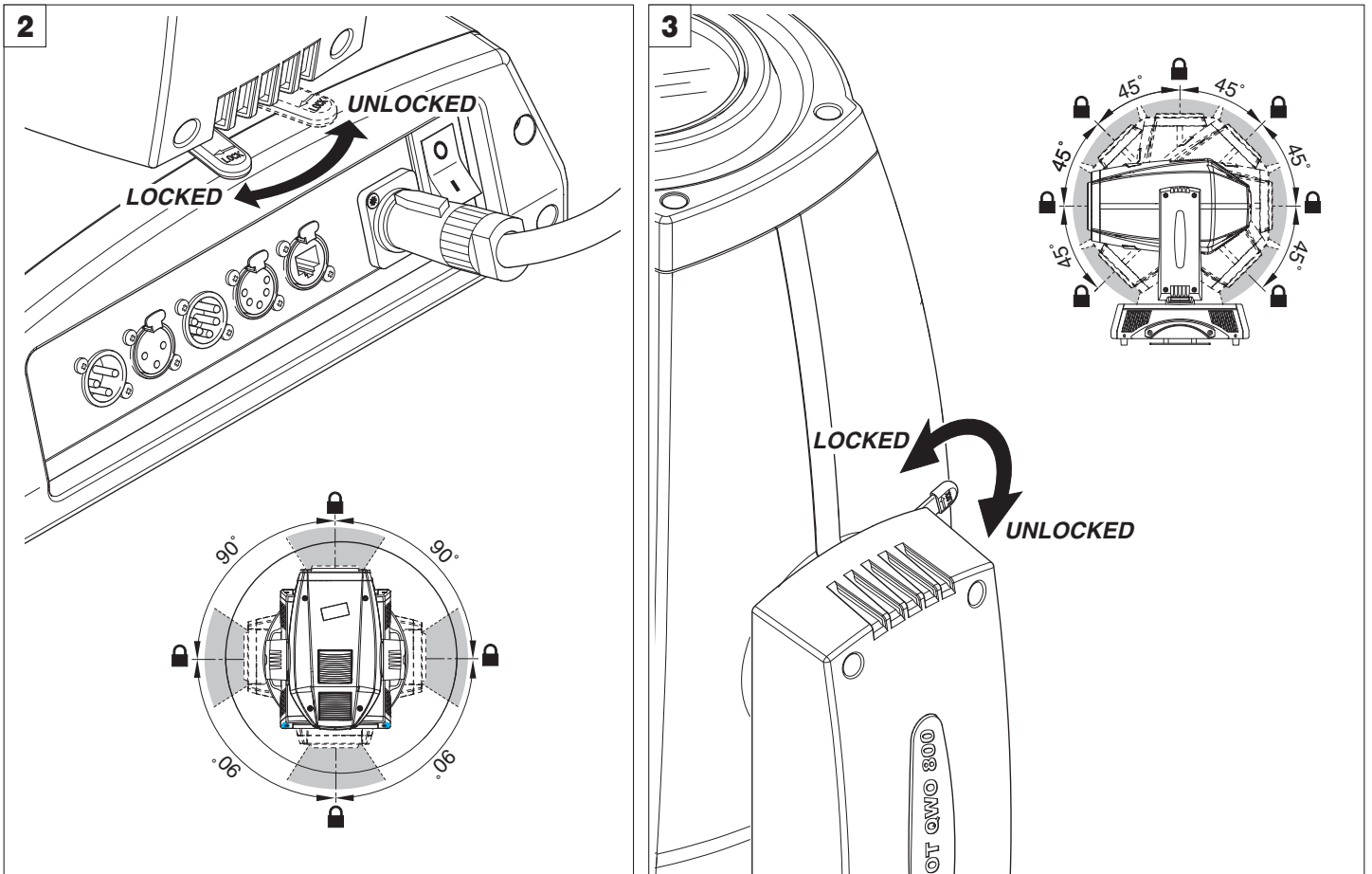
PAN Mechanism Lock and Release (every 90°) - Fig. 2

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

4
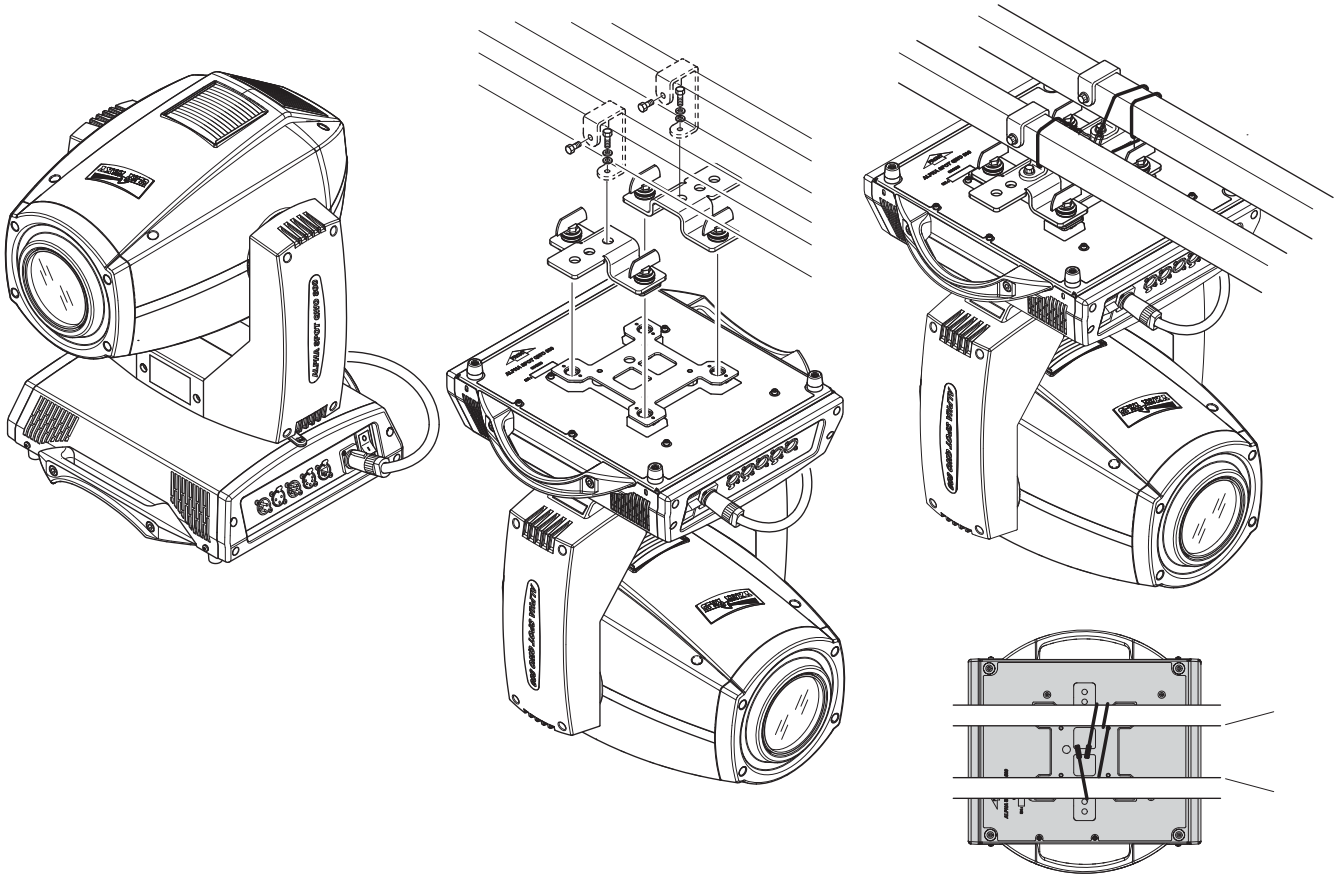
Installing the projector - Fig. 4
The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.
WARNING: *with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request).*
This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

5
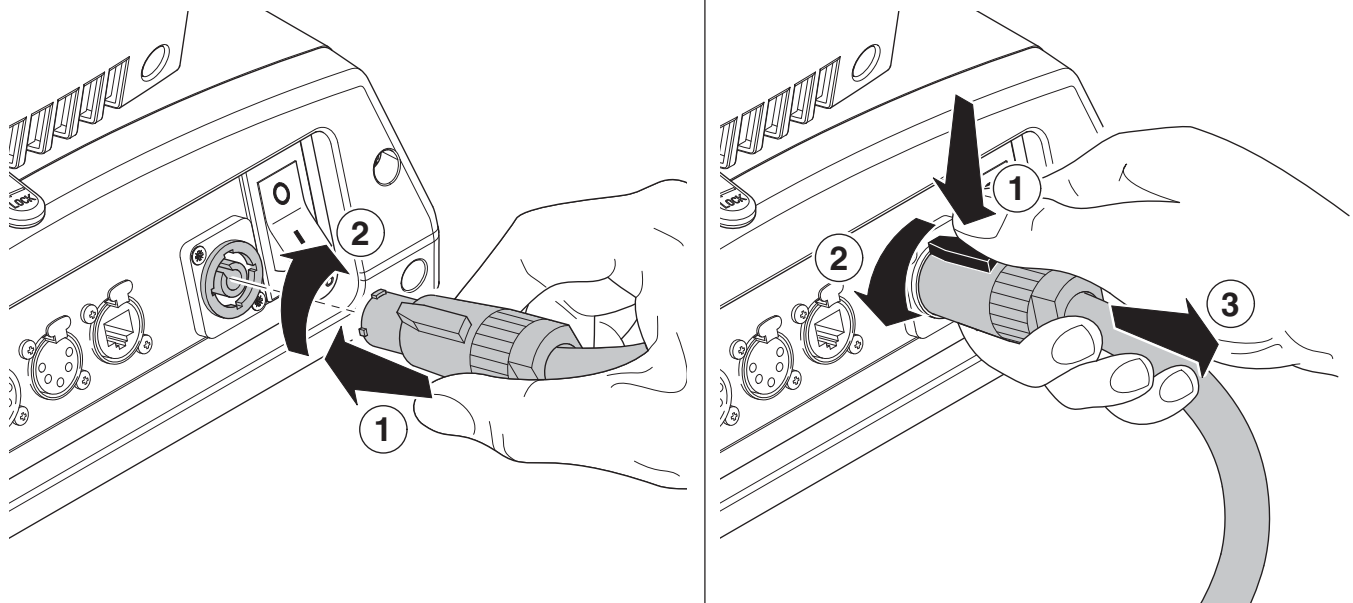
Connecting and disconnecting power cable - Fig. 5

6
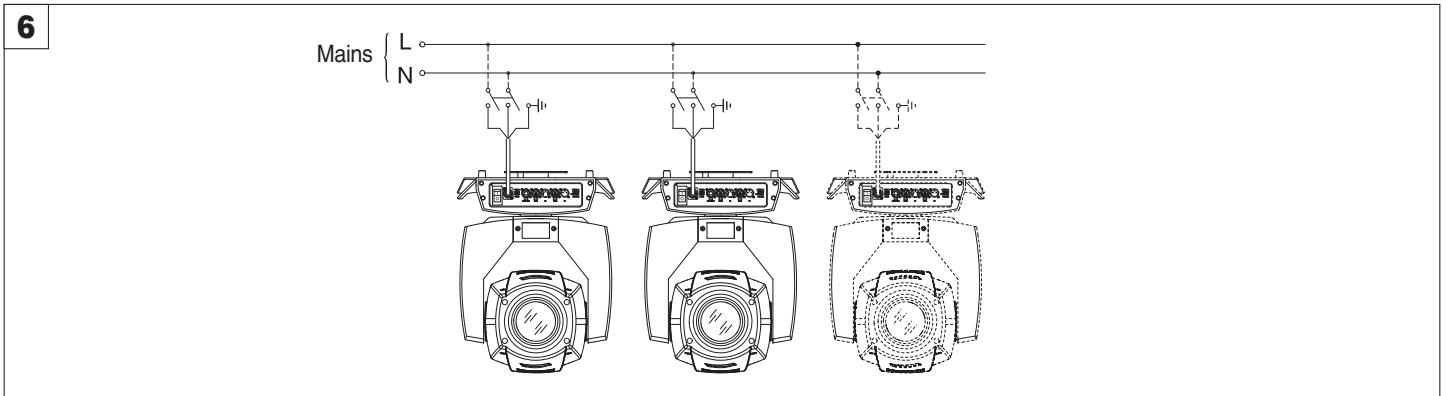
Connecting to the mains supply - Fig. 6

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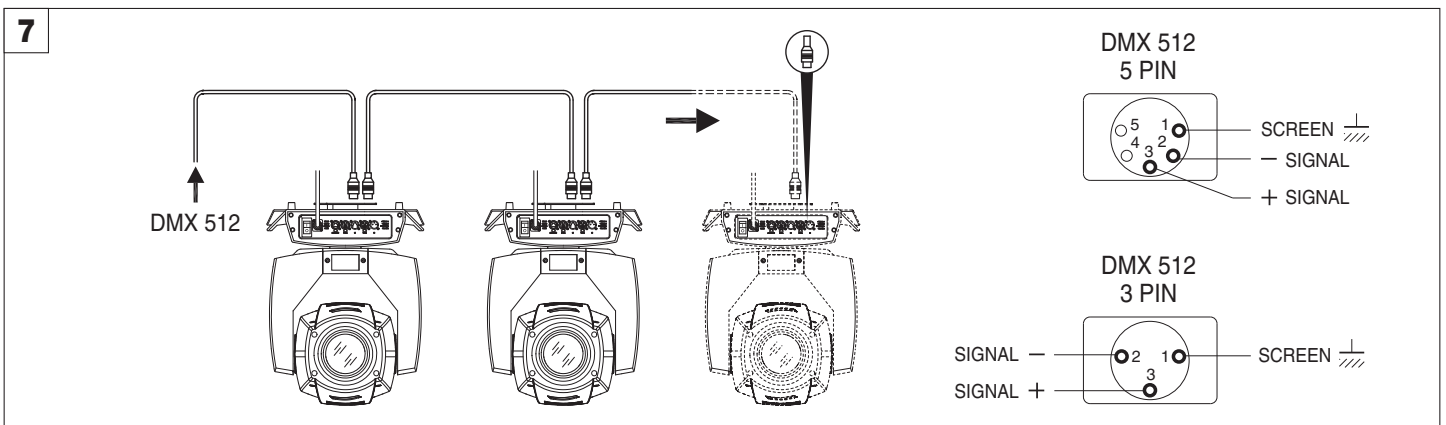
Connecting to the control signal line (DMX) - Fig. 7
Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections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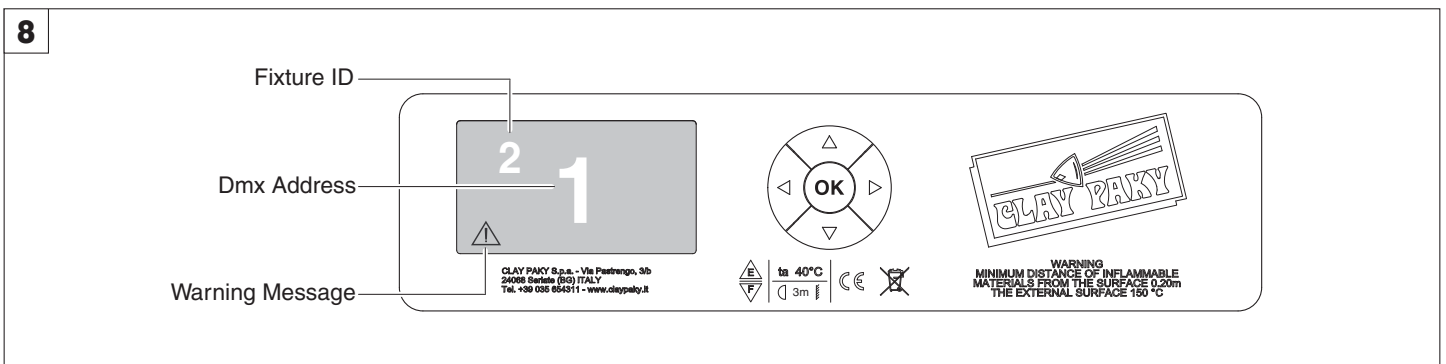
Switching on the projector - Fig. 8
Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:

	Model Alpha SPOT QWO 800	Firmware Version X.X.X Date - Hour	xxx (Fixture ID) Dmx Address xxx	System errors E: .... W: ....
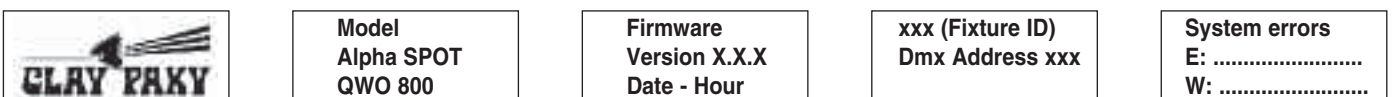
On conclusion of resetting in case of absence of the dmx signal, Pan and Tilt move to the "Home" position (Pan 50% - Tilt 50%). The control panel (Fig. 8) has a display and buttons for the complete programming and management of the projector menu. The display can be in one of two conditions: rest status 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.
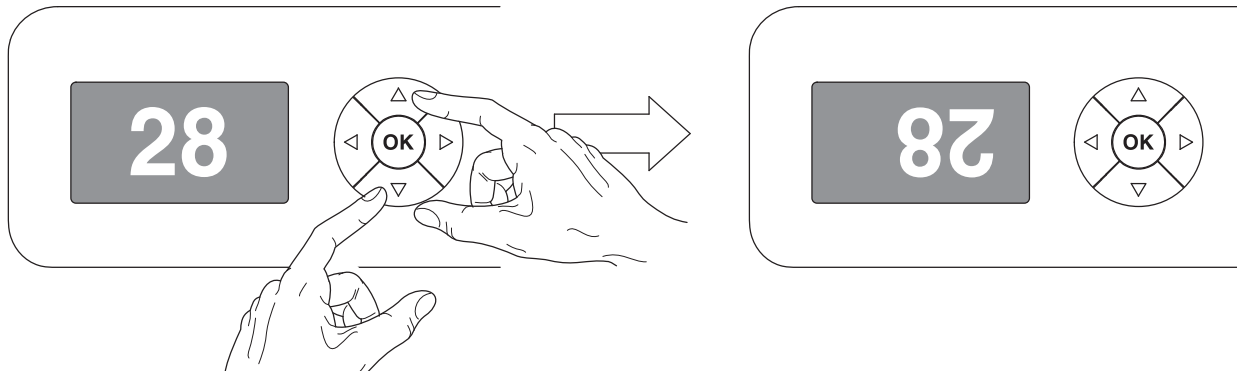
Reversal of the display - Fig. 9

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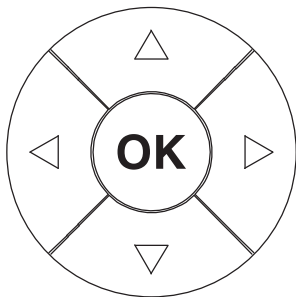
OK	Confirms the displayed value, or activates the displayed function, or enters the successive menu.
DOWN	Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.
UP	Increases the value displayed (with auto-repetitions) or passes to the previous item in a menu.
LEFT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

USING THE MENU:

1) Press ⊛ 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. 13.

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

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

Setting addresses and options with the projector disconnected

The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply.

All that is needed is to press ⊛ to momentarily activate the display and thus access the settings. Once the required operations have been carried out, the display will switch off again after a wait time of 30 seconds.

1

Set Up — Dmx Address

Channel Mode

Fixture ID

Ethernet Interface

Option

Information

Manual Control

Test

Advanced

2

Option — Lamp Dmx

Pan / Tilt — Invert Pan

Invert Tilt

Swap Pan-Tilt

Encoder Pan-Tilt

Color — Color Mixing

Color mixing curve

Fixed Wheel Shortcut

Macro Color Adjsutment

Shutter — Shutter On Error

Dimmer On Shutter

Autofocus Mode — Limited Zoom Range

Complete Zoom Range

Macro Effects — Macro group size

Macro fixture Id

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

Network params

4

Manual Control — Lamp

Reset

Channel

5

Test — Pan / Tilt

Colour

Beam

Gobo

All

6

Advanced — Access code 1234

Upload Firmware

Setup Model

Calibration

NOTE: On grey the default options

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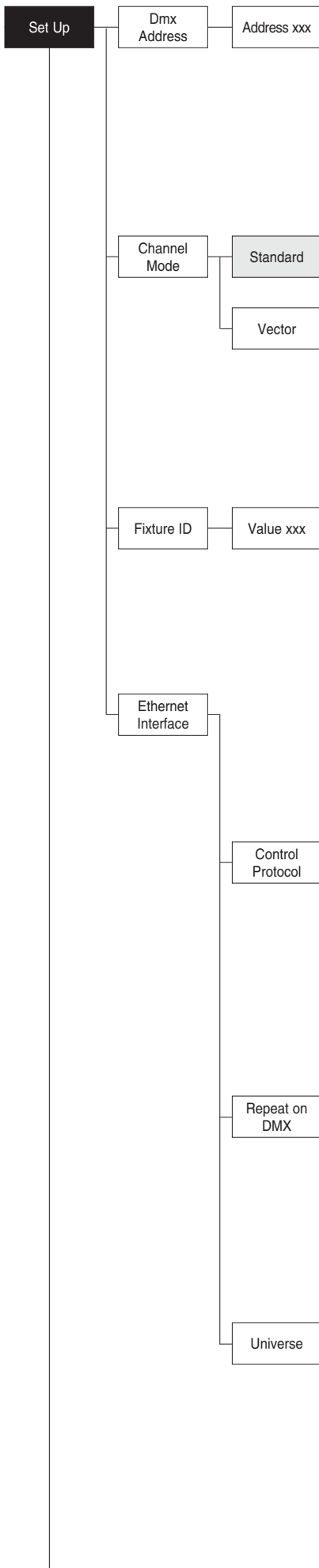
DMX ADDRESS

NOTE: without the DMX signal the Address (XXX) flashing

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

CHANNEL MODE

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

FIXTURE ID

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

ETHERNET INTERFACE

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

Control Protocol

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

Universe

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

Menu Tree (left column)

- **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
  - **Color**
    - **Color Mixing**
      - Rgb
      - Cmy
    - **Color Mixing curve**
      - Curve 1
      - Curve 2
    - **Fixwheel Shortcut**
      - On
      - Off
    - **Macro Color Adjustment**
      - On
      - Off
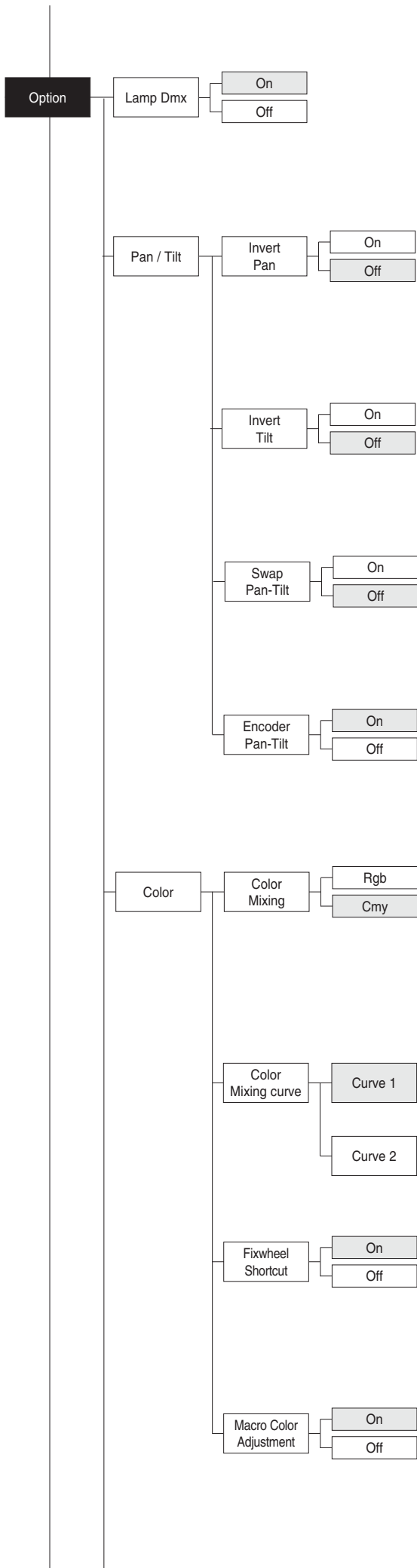
OPTIONS MENU

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 ◀ 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.

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.

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 Error	On
		Off
	Dimmer On Shutter	On
		Off
Auto-focus Mode	Limited Zoom Range	
	Complete Zoom Range	
Macro Effects		
	Macro group size	
	Macro fixture Id	
Display	On	
	Off	

SHUTTER

Shutter on error

Used for automatically closing the stop/strobe in the event of Pan/Tilt position error.

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) automatic stop/strobe closing in the event of Pan/Tilt position error.
3) Press OK 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 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 automatic closing of the dimmer.
3) Press OK 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 OK 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 OK 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 OK 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 OK
2) Use the UP ⊙, DOWN ⊙, RIGHT keys to set the number of projectors to be included in the "Macro Effect" operation.
3) Press OK 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 OK
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 OK to confirm the selection or LEFT ⊙ to keep the current setting.

DISPLAY

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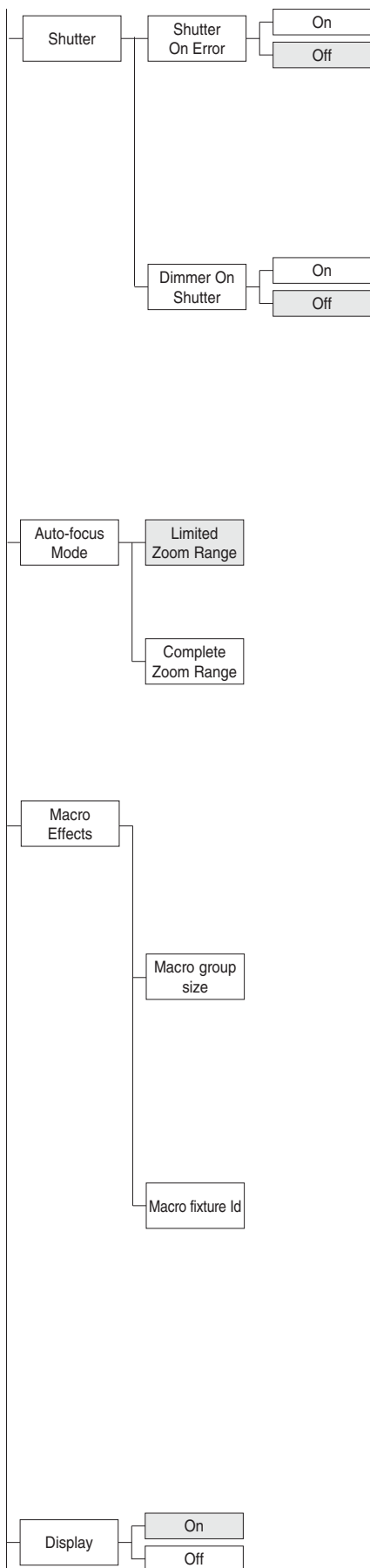
1) Press OK - the current settings appear on the display (On or Off).
2) Use the UP ⊙ and DOWN ⊙ keys to enable (On) or disable (Off) the decreasing of display brightness.
3) Press OK to confirm the selection or LEFT ⊙ to keep current settings.

Menu Diagram (left column)

```
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


Information ─── System
                Errors

            ─── Fixture ─── Total    XXX
                Hours       Partial  XXX
                                     Reset...

            ─── Lamp    ─── Total    XXX
                Hours       Partial  XXX
                                     Reset...
```
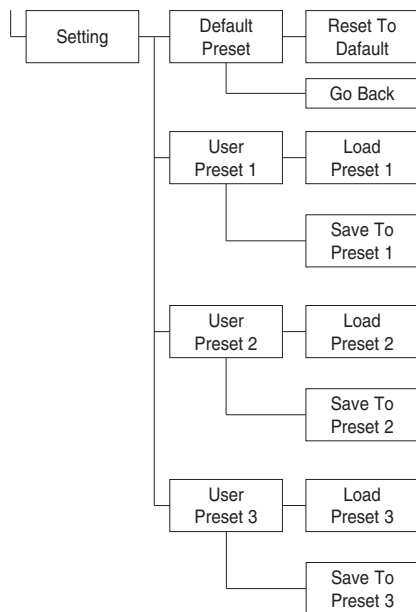
SETTING

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

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
Color mixing	CMY
Color mixing curve	Curve 2
Fixed Wheel Shortcut	On
Macro Color Adjustment	On
Shutter on error	Off
Dimmer on Shutter	Off
Auto-focus mode	Limited zoom range
Display	On

INFORMATION MENU

SYSTEM ERRORS

Shows a list of warnings and messages relevant to errors occurred since the fixtures switching-on.

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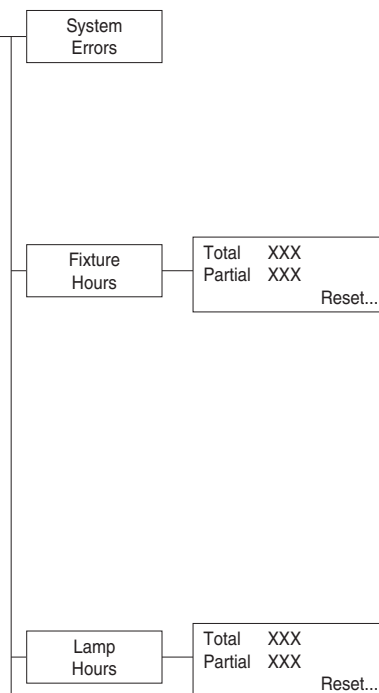
1) Press (OK) - Hours total and partial appears on the display.
   Total counter
   Counts the number of projector working hours with the lamp on (from manufacture to date).
   Partial counter
   Counts the number of lamp working hours since the last reset to date.
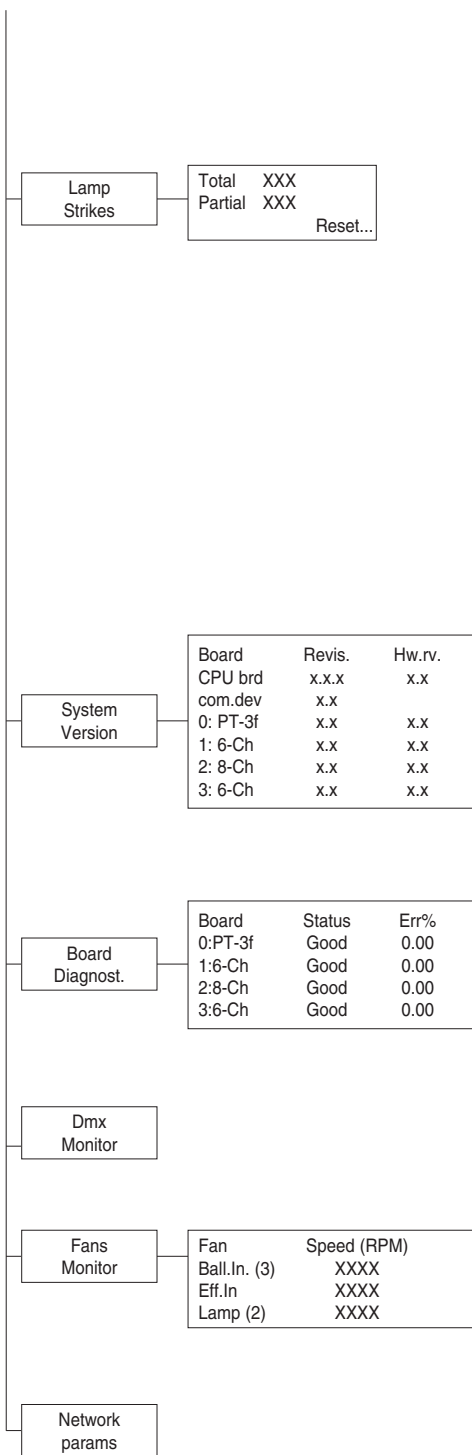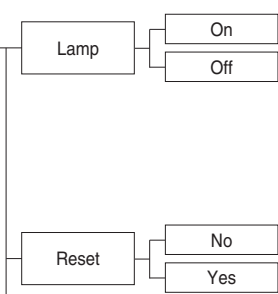
2) Press (OK) to reset partial lamp working hours, a confirmation message (Are you sure ?) appears on the display.
3) Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

LAMP STRIKES
Used for displaying the number of times the lamp was turned on (total and partial).
1) Press (OK) - 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 (OK) 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
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)
3: 6-Ch (6 channel board)

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)
3: 6-Ch (6 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:
Ball. IN (Ballast IN Fan)
Eff.IN (Effects IN Fan)
Lamp (Lamp 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 (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.

Menu tree (left column):

Lamp Strikes
Total	XXX
Partial	XXX
	Reset...

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
3: 6-Ch	x.x	x.x

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

Dmx Monitor

Fans Monitor
Fan	Speed (RPM)
Ball.In. (3)	XXXX
Eff.In	XXXX
Lamp (2)	XXXX

Network params

Manual Control
- Lamp
  - On
  - Off
- Reset
  - No
  - Yes

```
                    ┌─────────────┐
                    │   Channel   │
                    └─────────────┘
```
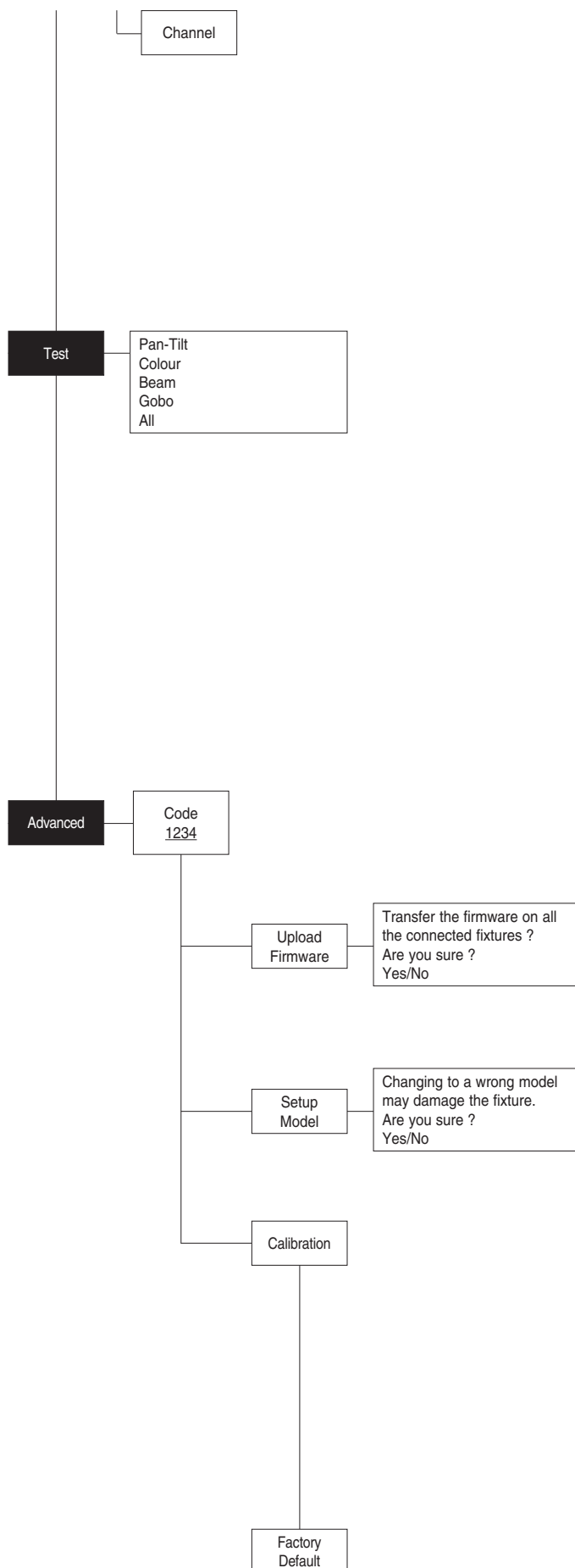
CHANNEL

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

TEST MENU

TEST

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

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

```
┌─────────┐      ┌──────────┐
│  Test   │      │ Pan-Tilt │
└─────────┘      │ Colour   │
                 │ Beam     │
                 │ Gobo     │
                 │ All      │
                 └──────────┘
```

ADVANCED MENU

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

UP LOAD FIRMWARE

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

SETUP MODEL

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

CALIBRATION

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

FACTORY DEFAULT

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

```
┌──────────┐    ┌──────┐
│ 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 │
          └─────────────┘

          ┌─────────┐
          │ Factory │
          │ Default │
          └─────────┘
```

10

1/4 Turn

11

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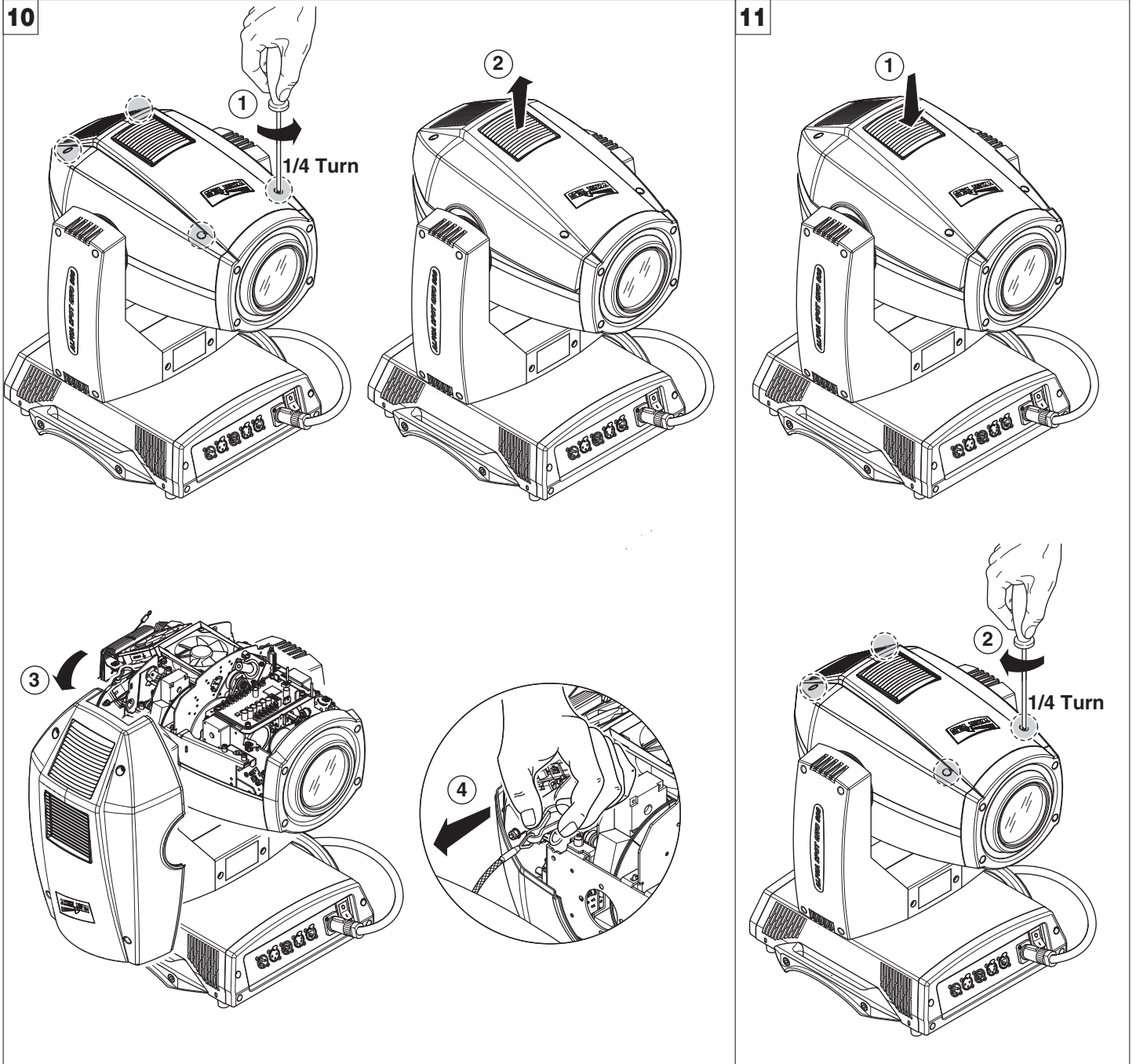
Locking and releasing Pan and Tilt movements - Refer to the instructions in the UNPACKING AND PREPARATION section.
Opening the head covers - Fig. 10.

Closing the head covers - Fig. 11.

12
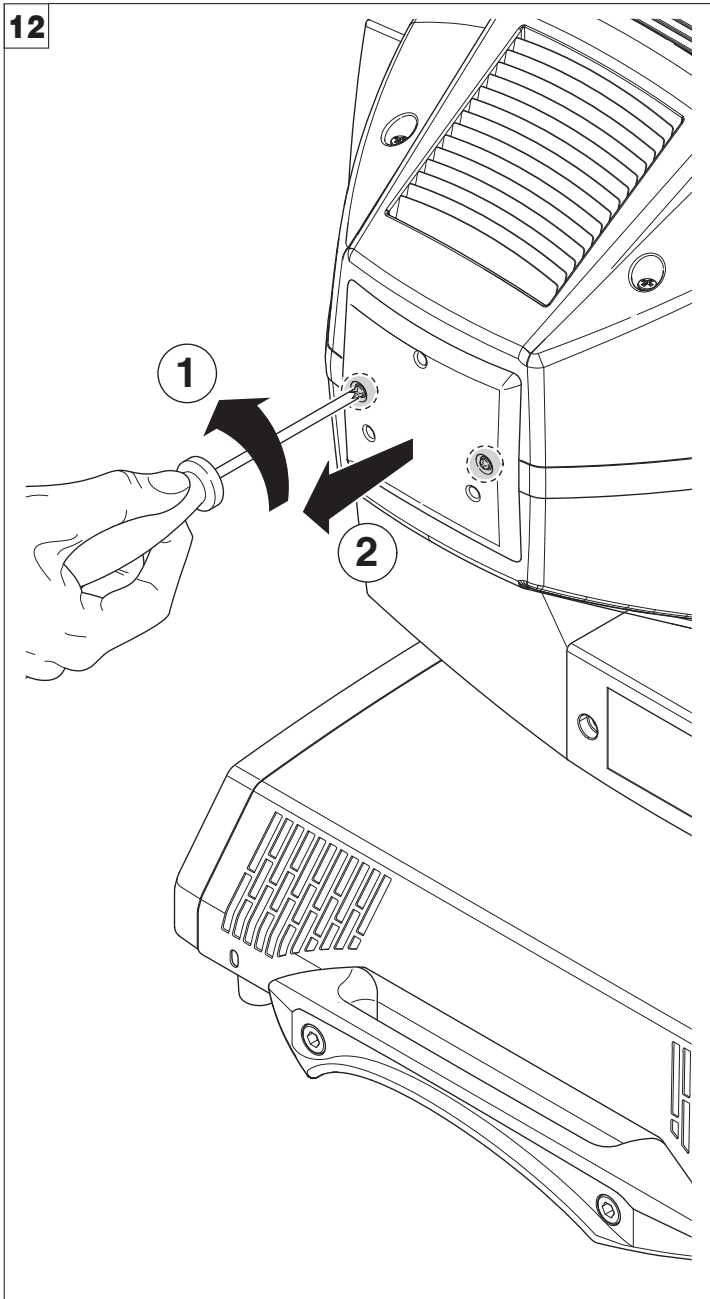
Opening and closing lamp compartment - Fig. 12

13

Upper Side

Lower Side
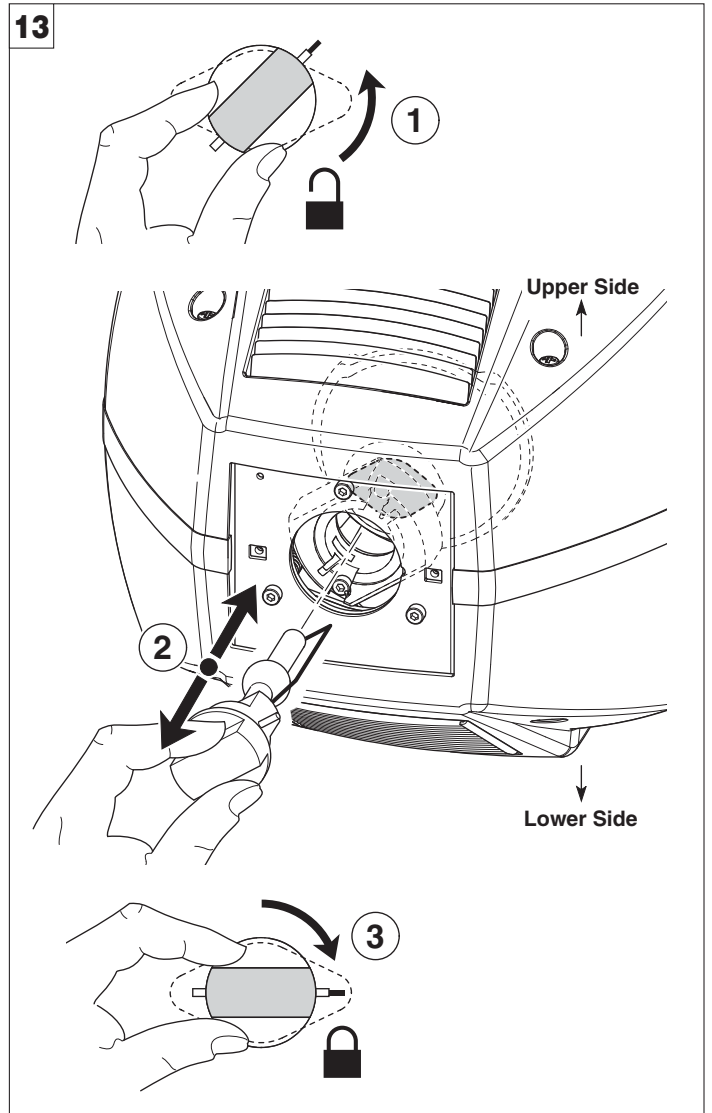
Lamp change - Fig 13
Take the new lamp out of its package and insert in the fitting.
WARNING: *do not touch the lamp's envelope with bare hands. Should this happen, clean the bulb with a cloth soaked in alcohol and dry it with a clean, dry cloth.*

14

NORMAL

HOT SPOT

Upper Side

Lower Side
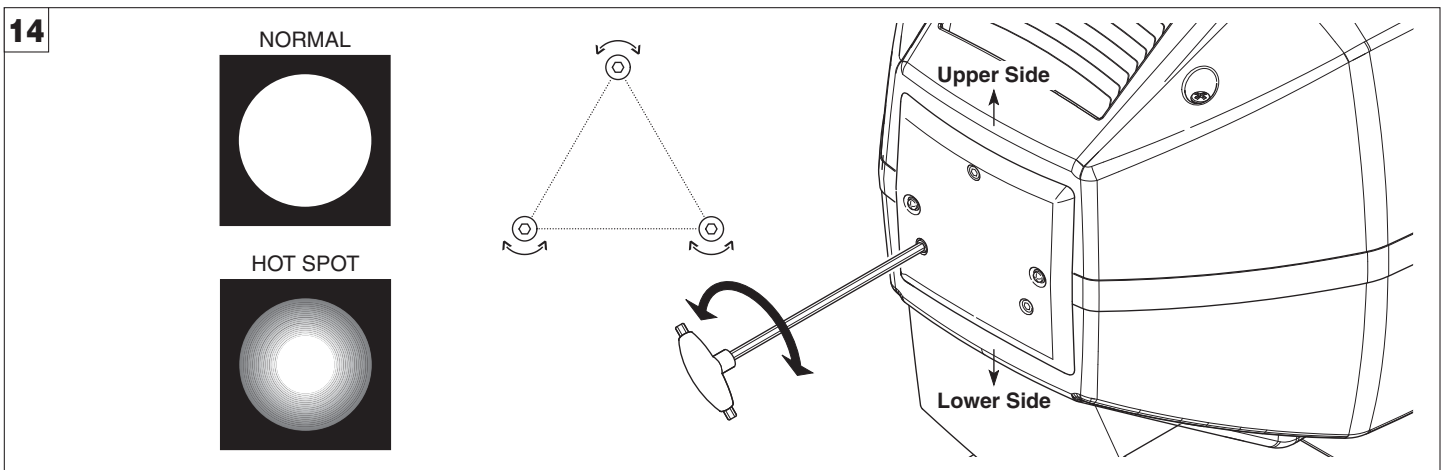
Lamp regulation - Fig. 14
To centre the lamp, turn the three adjusting screws as shown in the figure.

15

Upper Side

085204-001   085205-001

085203-001   085206-001

085202-001   085207-001

085201-001   085208-001

GOM000-001
(image 16mm)
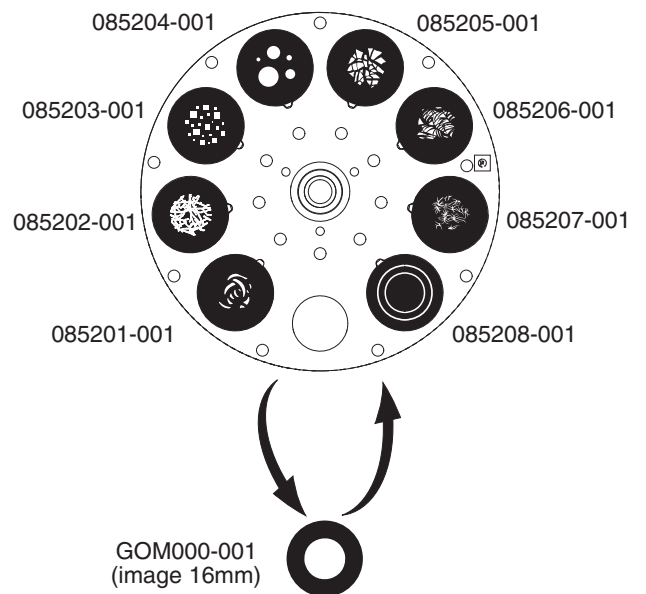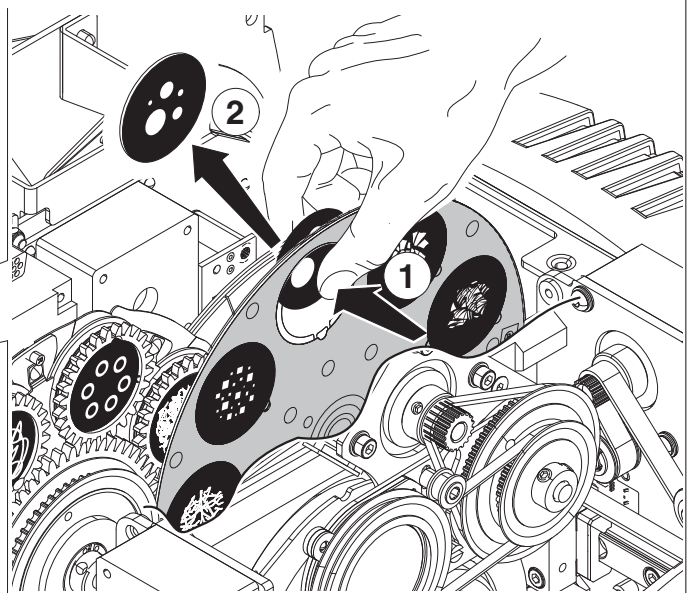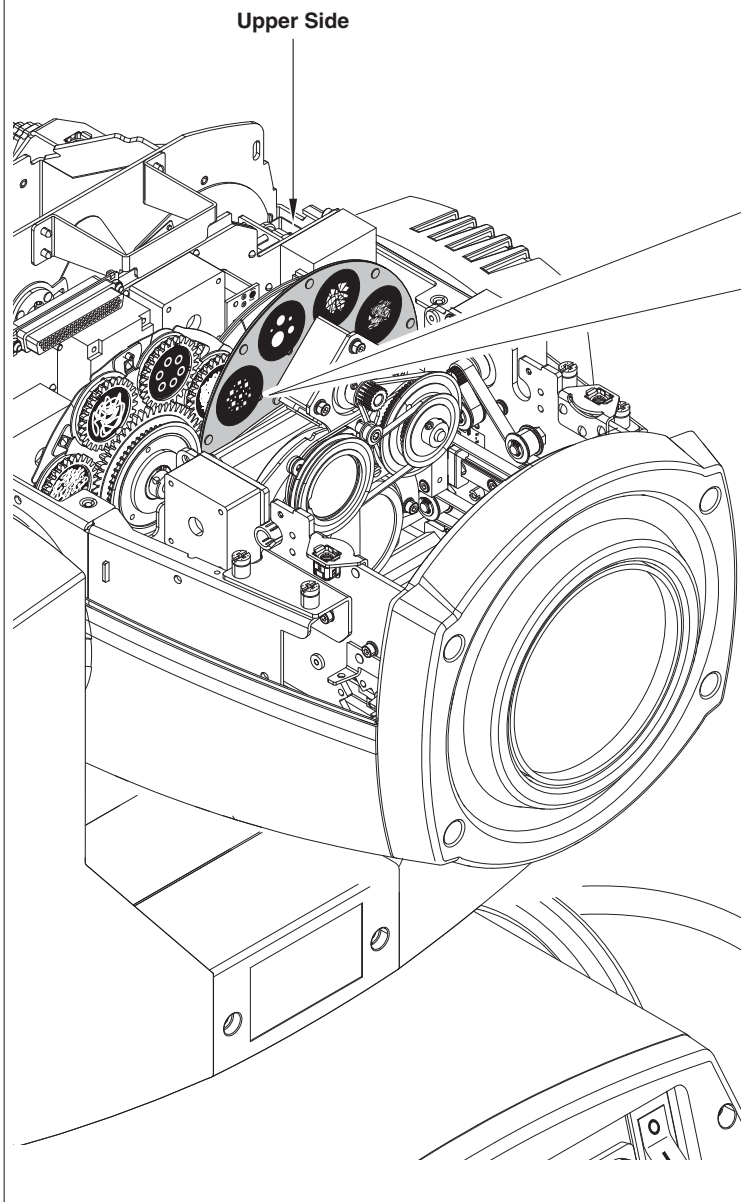
Replacing fixed gobos (ø 31.5 mm – max 19 mm image – thickness max 1.1 mm) - Fig. 15
WARNING: Before using personalised gobos contact Clay Paky.

GOM000-001 is the standard Clay Paky package supply for customers who need to make the projected beam uniform, partially reducing the beam itself. This gobo is interchangeable with any other ''fixed gobo wheel'' gobo.

16

Upper Side
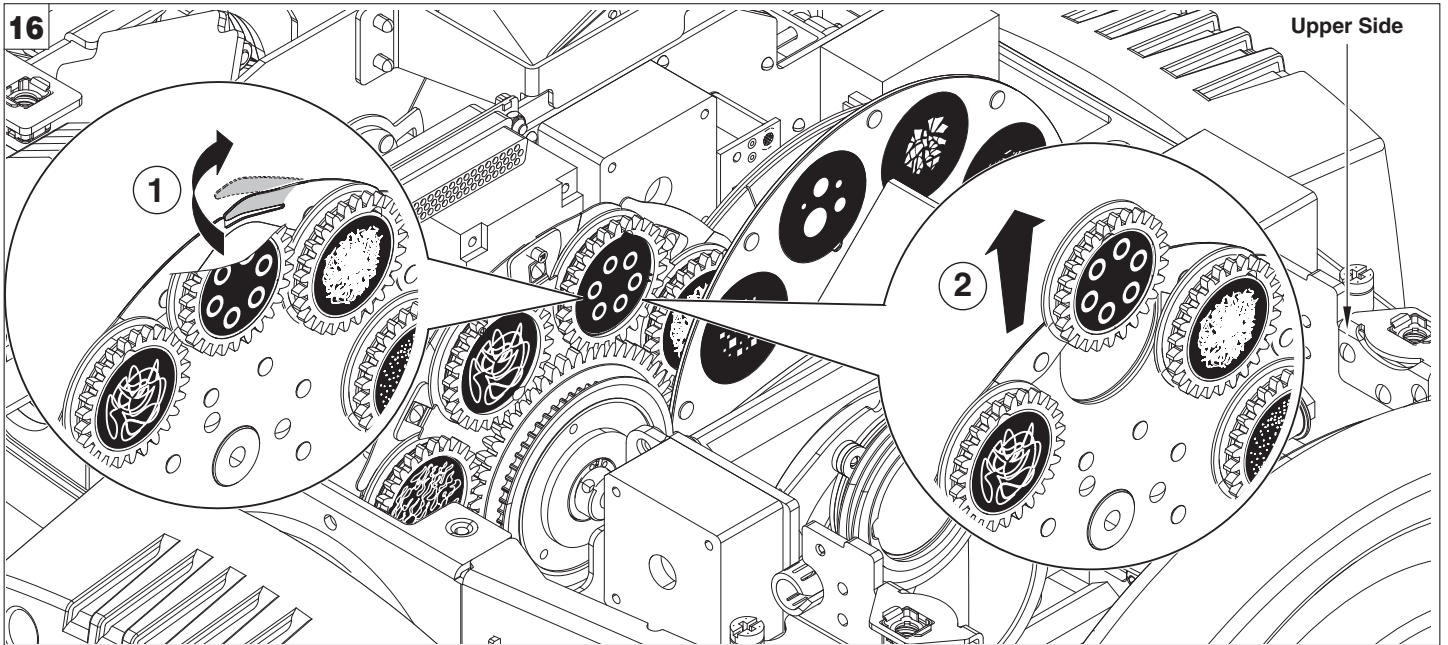
Bearing group replacement - Fig. 16

17

086409-001

086408-001   085548-001

240106-801   086402-001

086407-001   086410-001
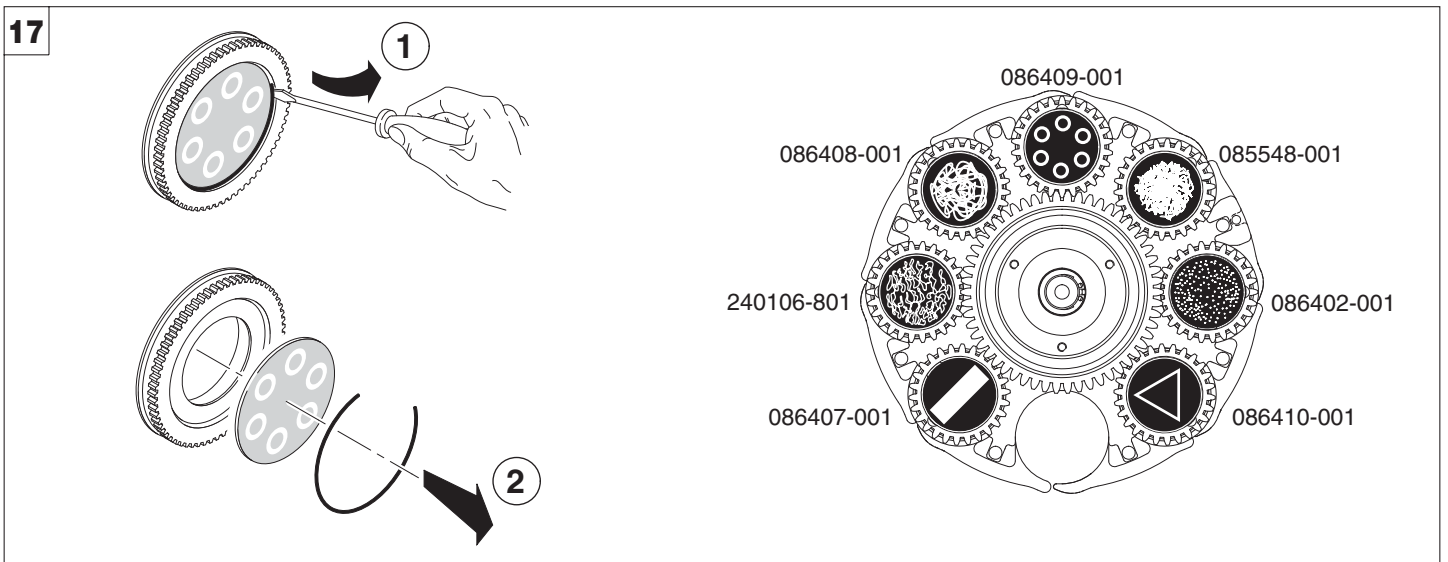
Replacing rotating gobos (ø 25.7 mm - max 19 mm image – thickness max 1.1 mm) - Fig. 17
IMPORTANT: Use only glass gobos on the rotating gobos wheel.
WARNING: Before using personalised gobos contact Clay Paky.

18

COATED GLASS GOBOS TYPE 1	COATED GLASS GOBOS TYPE 2

Grey/Black side away from lamp

Coated side towards lamp

Coated side

Uncoated side

Uncoated side

To determine which side of a godo is coated, hold an object up to it. On the uncoated side, there is a space between the object and its reflection.
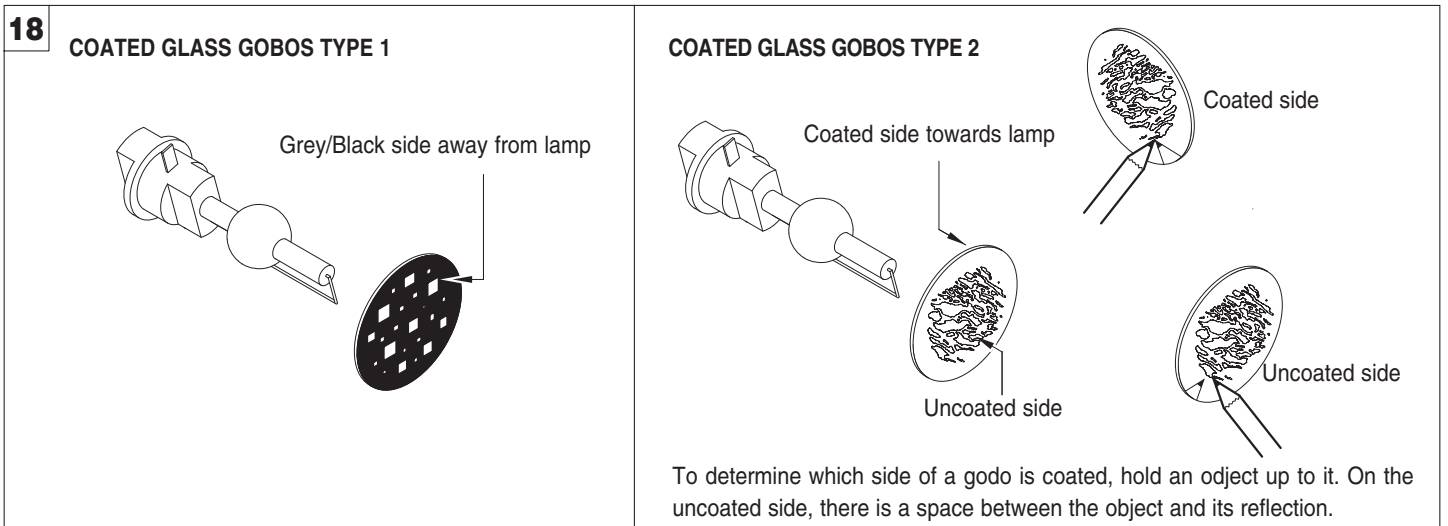
Gobo orientation - Fig. 18
The pictures shown the correct gobos orientation.

Continue ➜

19

Upper Side
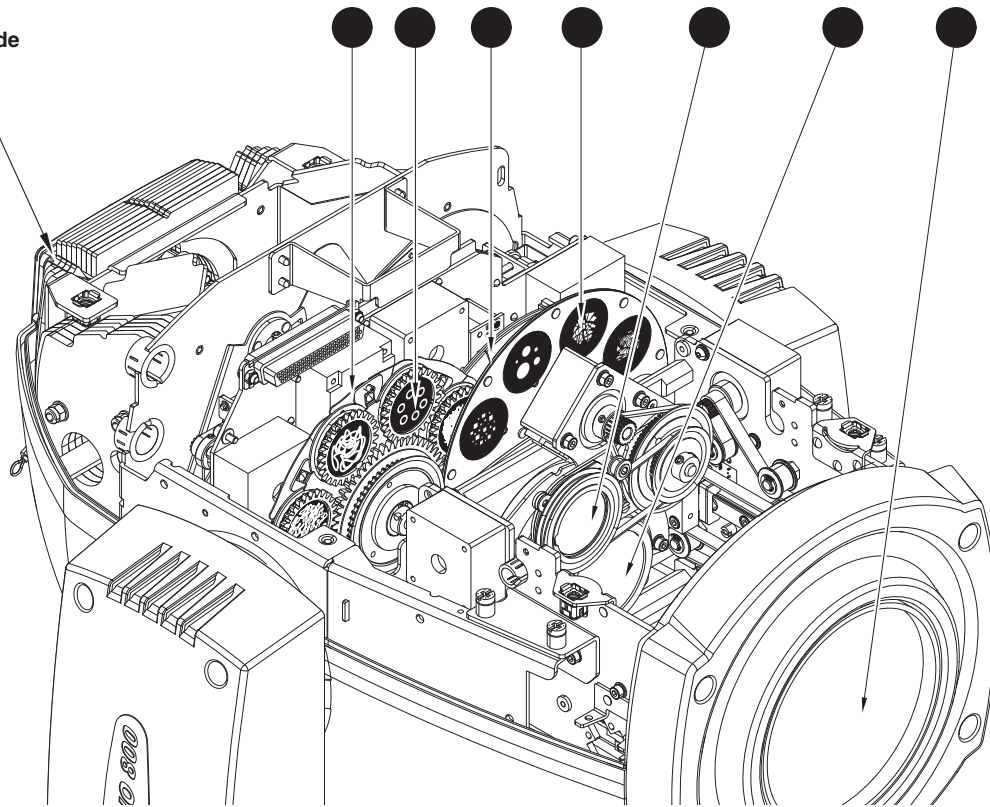
● Parts requiring frequent cleaning.

Periodical cleaning - Fig. 19

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.

20

Upper Side

Lower Side

Lower Side

Lower Side
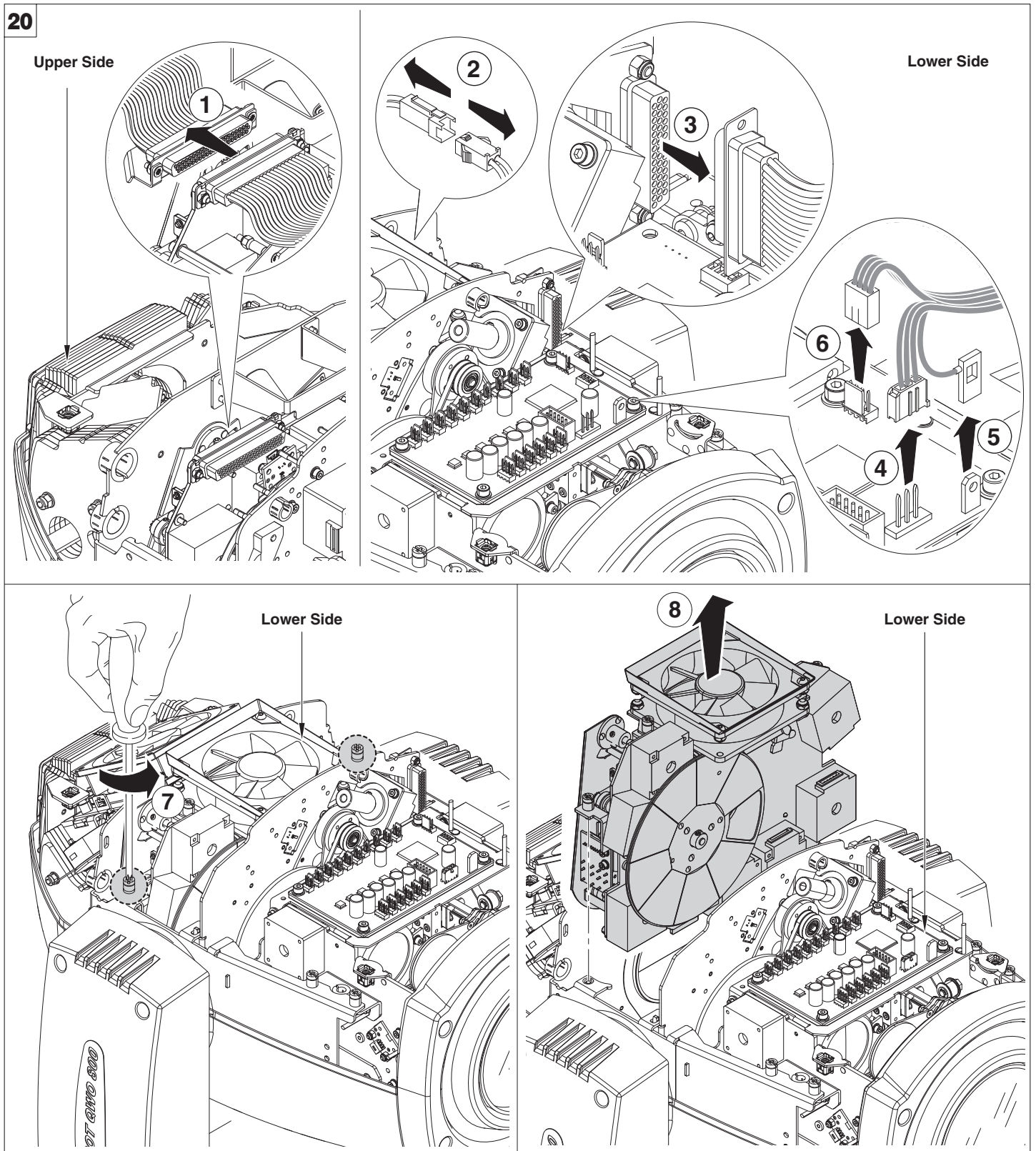
Extraction of the effect modules - Fig. 20
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 20, 21 and 22 in reverse order.

21

Lower Side

9

Upper Side

10

Upper Side

11
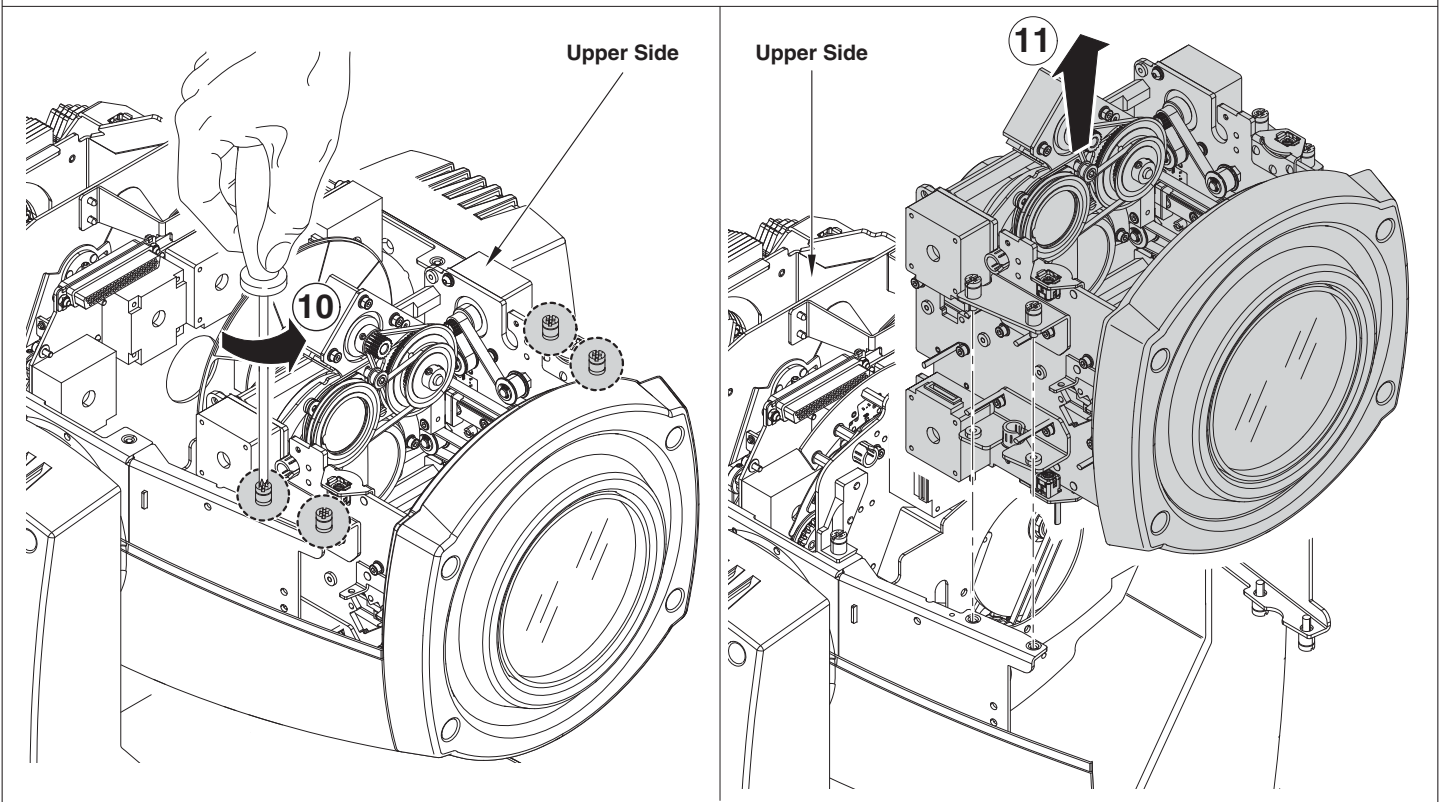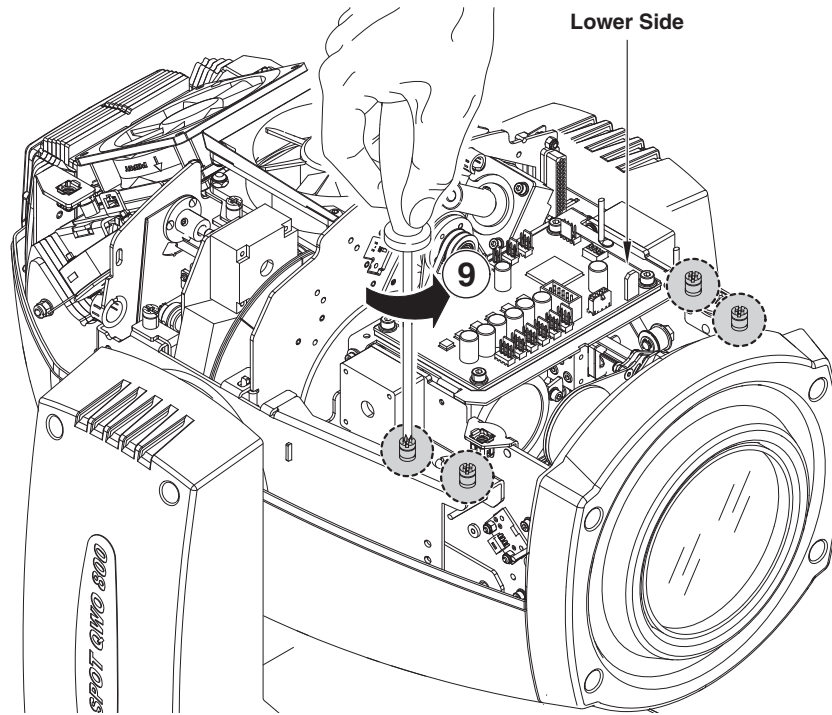
Extraction of the effect modules - Fig. 21
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 20, 21 and 22 in reverse order.

22

Upper Side

⑫

Upper Side

⑬
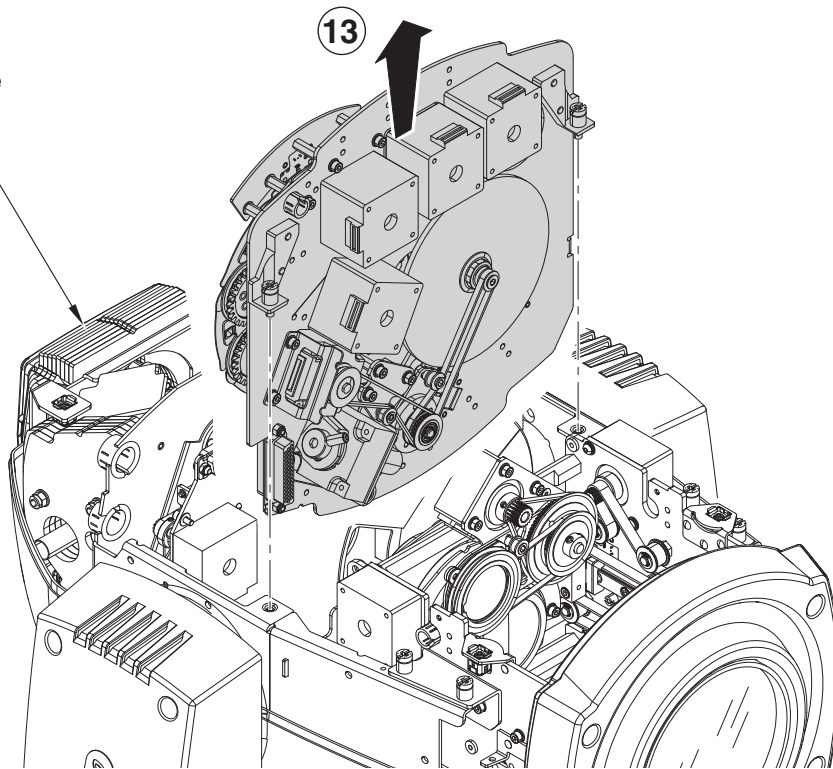
Extraction of the effect modules - Fig. 22
IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.
Insertion of the effect modules: Repeat the operations indicated in Fig. 20, 21 and 22 in reverse order.
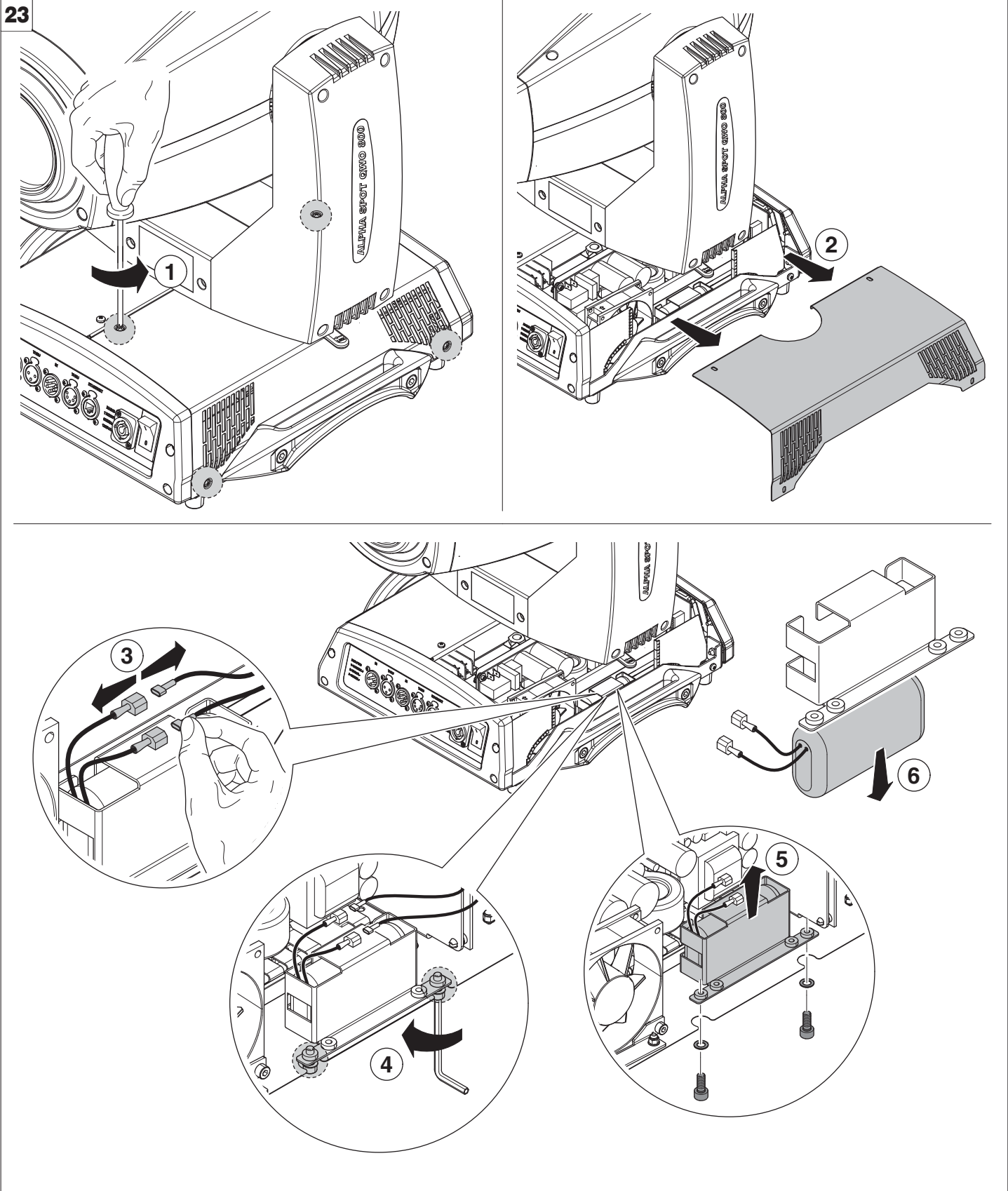
Battery removal - Fig. 23

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

24

Diffuser filter
264218 / 801

Upper Side

2x 020002/001 screws
2x 020201/002 washers
2x 020210/005 washers

Lower Side

Lower Side
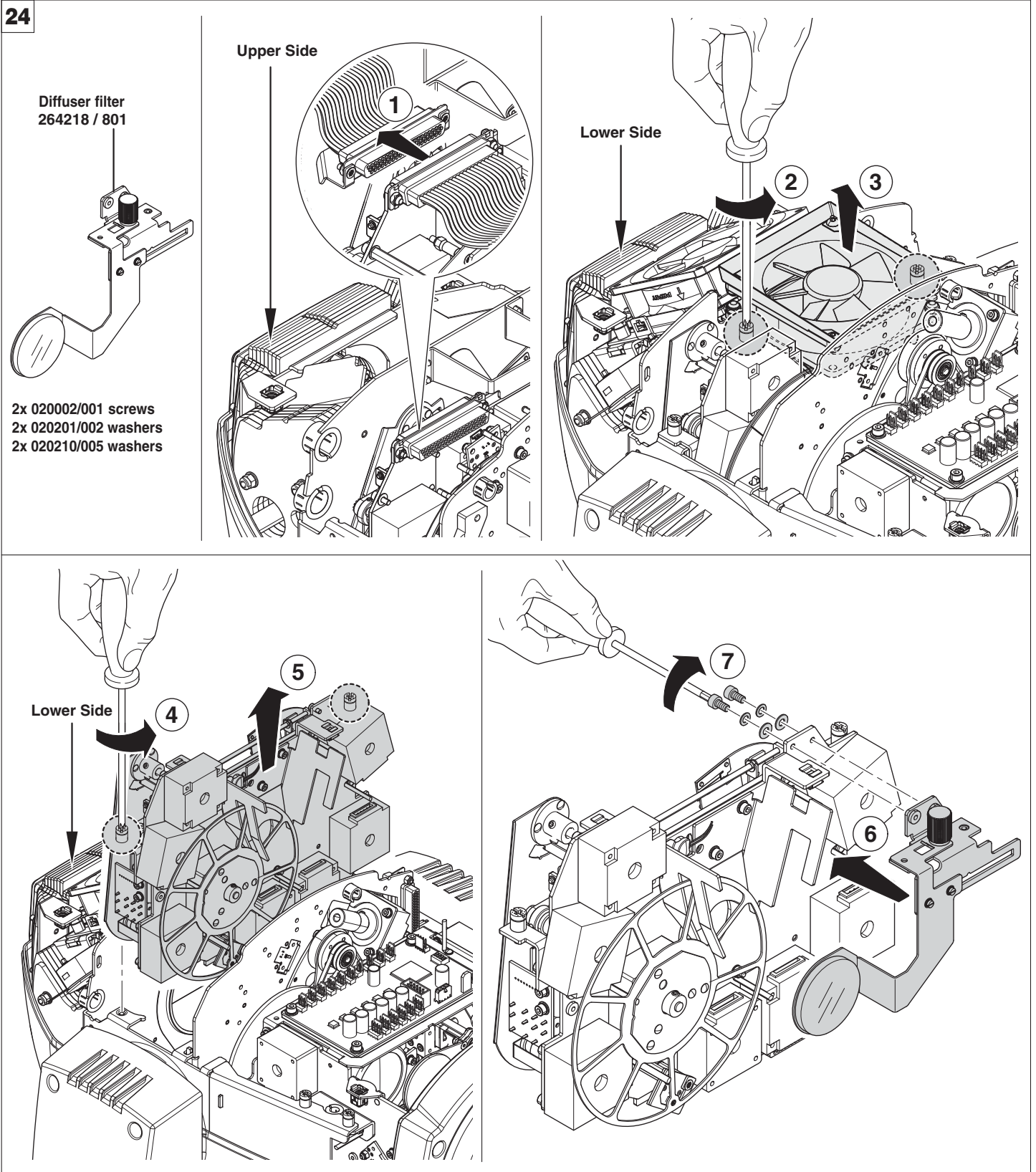
Assembling the diffuser filter - Fig. 24
The diffuser filter inserted in the light beam, improves the CMY – CTO and Dimmer projection mix; the light beam itself, with the diffuser filter inserted, loses about 25% of its luminosity.

25 NB: If the AlphaSpotQWO800 is previous to the serial number AB018974, there are no holes available to fasten the diffuser filter in place; using template no. 750931/801 it is possible to drill a hole in the correct position on the light effect card.

750931/801

① ②

Diffuser filter inserted in the light beam

⑧
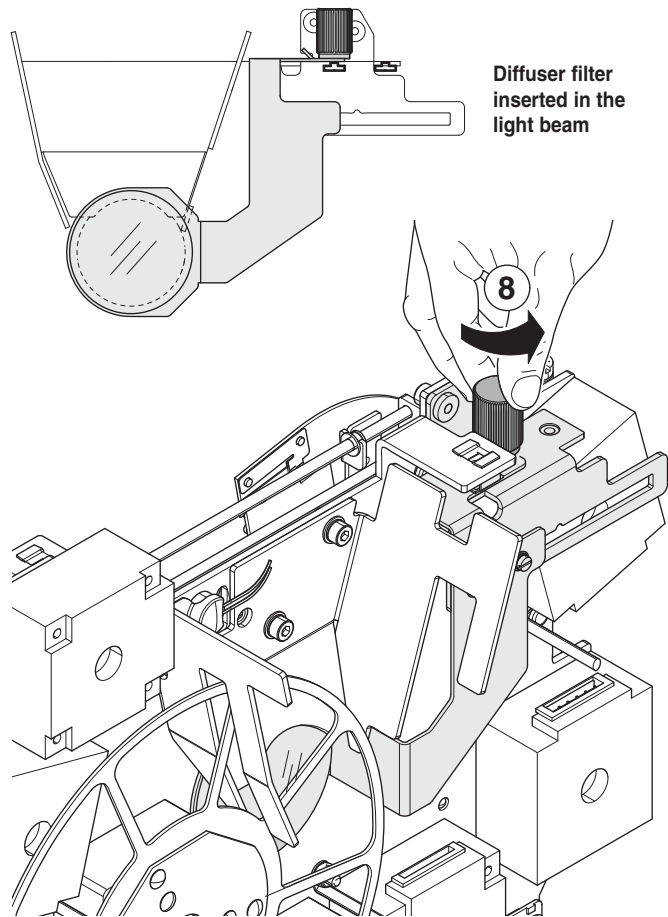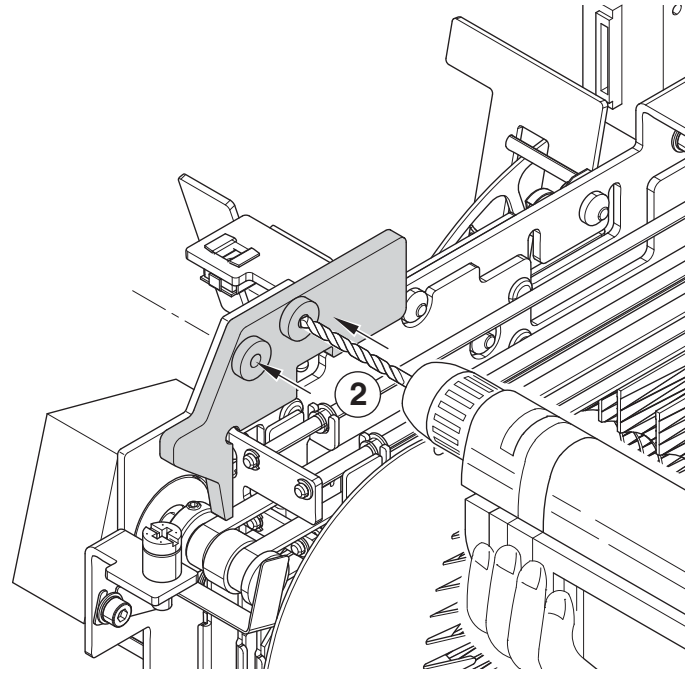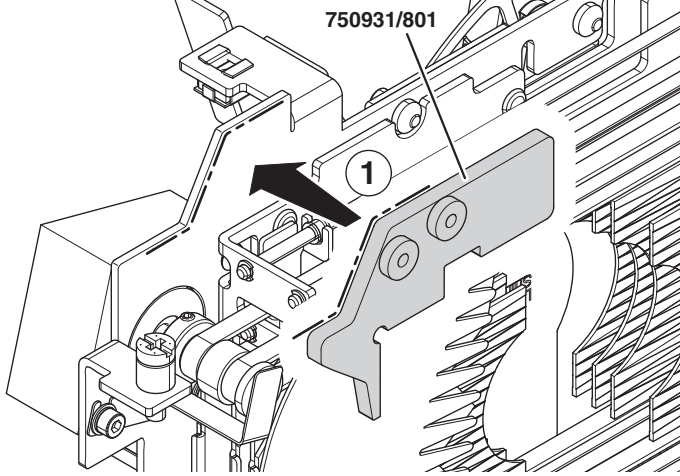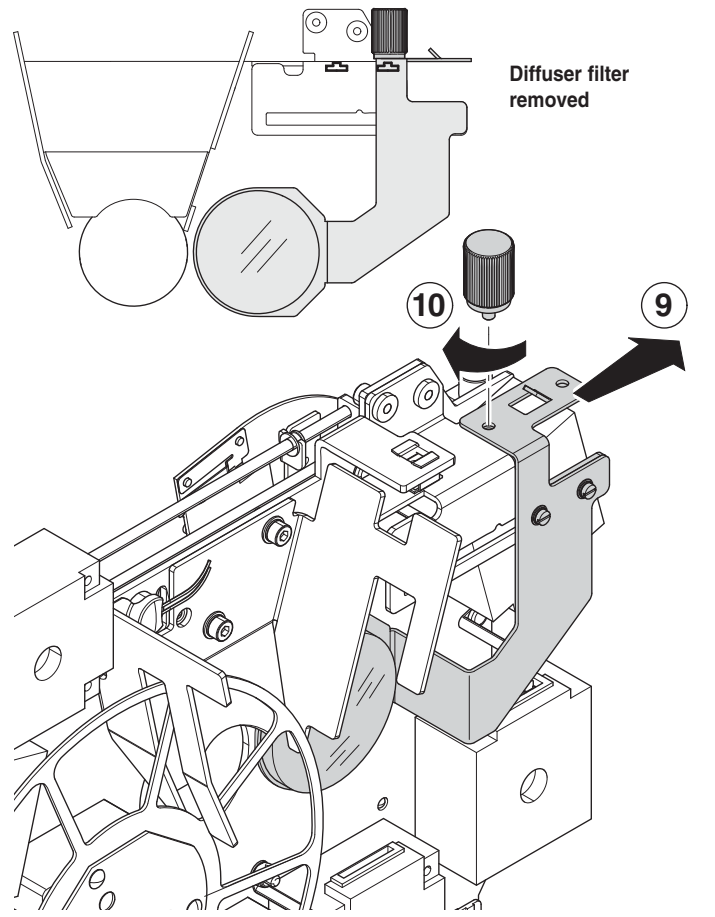
Diffuser filter removed

⑩ ⑨

Assembling the diffuser filter - Fig. 25
The diffuser filter inserted in the light beam improves the CMY – CTO and Dimmer projection mix; the light beam itself, with the diffuser filter inserted, loses about 25% of its luminosity.

TECHNICAL INFORMATION

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

Input power
1200VA a 230V 50Hz.

Lamp:
Discharge lamp.
Type MSR Platinum 35 (L10105)
- Cap PGJX36
- Colour temperature 7750 °K
- Luminous flux 54500 lm
- Average life 750 h
- Any working position

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

Optical unit
Elliptic reflector with high luminous efficiency

Channels
Max 36 control channels.

Inputs
DMX 512

Movable body:
• Movement by means of two stepper motors, controlled by microprocessor.
• Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.
• Travel:
  - PAN = 540°
  - TILT = 240°
• Maximum speeds:
  - PAN = 4.78 sec
  - TILT = 2.33 sec
• 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
In conformity with the European Union Low Voltage Directive 2006/95/CE and Electromagnetic compatibility Directive 2004/108/CE.

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.

Weight
about 30 Kg (66lbs).

530 (20,87")
455 (17,91")
525 (20,67")

210 (8,27")
650 (25.59")
390 (15,35")
385 (15,16")
405 (15.94")
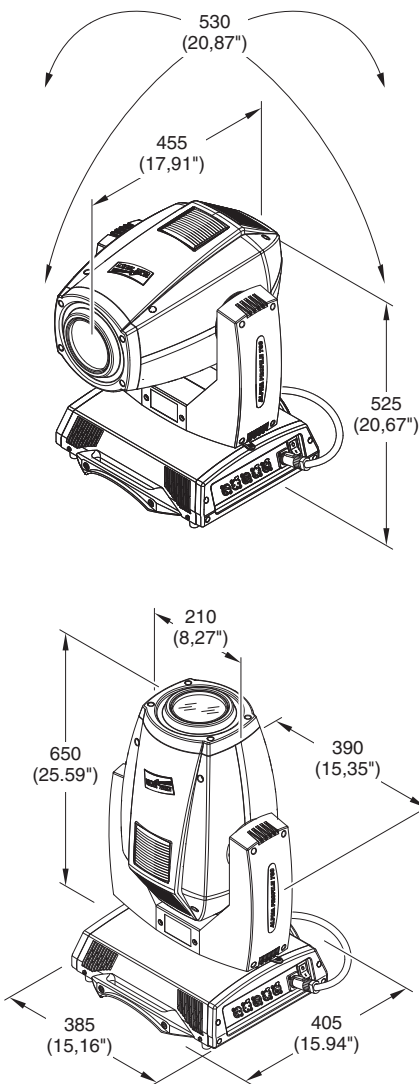
CAUSE AND SOLUTION OF PROBLEMS

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

ALPHA SPOT QWO 800 & "ST"

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	CTO	CTO
5	COLOUR WHEEL	COLOUR WHEEL
6	MACRO COLORS	MACRO COLORS
7	STOP / STROBE	STOP / STROBE
8	DIMMER	DIMMER
9	DIMMER FINE	DIMMER FINE
10	IRIS	IRIS
11	STATIC GOBO CHANGE	STATIC GOBO CHANGE
12	ROTATING GOBO CHANGE	ROTATING GOBO CHANGE
13	GOBO ROTATION	GOBO ROTATION
14	GOBO FINE	GOBO FINE
15	PRISM INSERTION	PRISM INSERTION
16	PRISM ROTATION	PRISM ROTATION
17	FROST	FROST
18	ANIMATION DISK INSERTION	ANIMATION DISK INSERTION
19	ANIMATION DISK ROTATION	ANIMATION DISK ROTATION
20	FOCUS	FOCUS
21	FOCUS FINE	FOCUS FINE
22	ZOOM	ZOOM
23	AUTOFOCUS DISTANCE	AUTOFOCUS DISTANCE
24	AUTOFOCUS ADJUSTMENT	AUTOFOCUS ADJUSTMENT
25	MACRO EFFECTS	MACRO EFFECTS
26	PAN	PAN
27	PAN FINE	PAN FINE
28	TILT	TILT
29	TILT FINE	TILT FINE
30	FUNCTION	FUNCTION
31	RESET	RESET
32	LAMP CONTROL (with Option "Lamp DMX" ON)	LAMP CONTROL (with Option "Lamp DMX" ON)
33		PAN TILT TIME
34		COLOUR TIME
35		BEAM TIME
36		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

CHANNEL 1 CHANNEL 2 CHANNEL 3

CYAN   MAGENTA   YELLOW

BIT	%	EFFECT
255	100	COLOUR EXCLUDED
0	0.0	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

CHANNEL 1 CHANNEL 2 CHANNEL 3

CYAN   MAGENTA   YELLOW

BIT	%	EFFECT
255	100	COLOUR INSERTED
0	0.0	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

CHANNEL 4

CTO

BIT	%	EFFECT
255	100	CTO INSERTED
0	0.0	CTO EXCLUDED

• COLOUR WHEEL - channel 5

BIT	%	EFFECT
255	100	FAST ROTATION (160 rpm)
128	50.0	SLOW ROTATION (0.2 rpm)
127	49.7	BLUE + WHITE
120	47.0	BLUE
112	44.0	ORANGE + BLUE
105	41.2	ORANGE
97	38.0	AQUAMARINE + ORANGE
90	35.0	AQUAMARINE
82	32.0	LAVENDER + AQUAMARINE
75	29.5	LAVENDER
67	26.2	LIGHT GREEN + LAVENDER
60	23.7	LIGHT GREEN
52	20.5	GREEN + LIGHT GREEN
45	17.5	GREEN
37	14.2	CTO 2600 + GREEN
30	11.7	CTO 2600
22	8.7	RED + CTO 2600
15	6.0	RED
8	3.2	WHITE + RED
0	0.0	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	58.0-100	-	-	-	-	-	-	-
HALF CT STRAW	146-147	57.0-57.5	442	442	0	0	34	190	0
LIGHTER BLUE	144-145	56.2-56.7	353	353	226	0	149	138	0
GLACIER BLUE	142-143	55.5-56.0	352	352	220	0	129	138	0
FUSCHIA PINK	140-141	54.7-55.0	345	345	109	186	77	120	0
MALLARD GREEN	138-139	54.0-54.2	325	325	255	0	0	236	58
JADE	136-137	53.2-53.7	323	323	127	0	162	0	77
3/4 CT ORANGE	134-135	52.5-53.0	285	285	0	36	61	217	0
3/4 CTB	132-133	51.7-52.0	281	281	85	79	87	54	0
HALF MINUS GREEN	130-131	51.0-51.2	248	248	60	19	86	75	39
MINUS GREEN	128-129	50.0-50.5	247	247	60	71	86	75	39
1/4 CTO	126-127	49.5-49.7	206	206	62	71	123	122	0
1/2 CTO	124-125	48.7-49.0	205	205	25	26	45	131	0
FULL CT ORANGE	122-123	48.0-48.2	204	204	0	44	58	234	0
1/4 CTB	120-121	47.0-47.5	203	203	75	54	91	109	0
1/2 CTB	118-119	46.2-46.7	202	202	85	71	84	89	0
FULL CTB	116-117	45.5-46.0	201	201	94	79	80	0	0
ALICE BLUE	114-115	44.7-45.0	197	197	236	51	0	205	0
CONGO BLUE	112-113	44.0-44.2	181	181	251	241	0	255	0
DARK LAVENDER	110-111	43.2-43.7	180	180	195	170	0	160	0
CHROME ORANGE	108-109	42.5-43.0	179	179	0	98	255	255	0
LAGOON BLUE	106-107	41.7-42.0	172	172	224	0	121	40	79
DEEP LAVENDER	104-105	41.0-41.2	170	170	100	129	77	120	0
LILIAC TINT	102-103	40.0-40.5	169	169	41	59	39	120	0
DAYLIGHT BLUE	100-101	39.0-39.5	165	165	210	73	105	88	0
FLAME RED	98-99	38.2-38.7	164	164	0	255	227	255	97
BASTARD AMBER	96-97	37.5-38.0	162	162	0	26	0	199	0
DEEP ORANGE	94-95	36.7-37.0	158	158	0	148	255	255	0
PINK	92-93	36.0-36.2	157	157	0	159	0	255	0
PALE ROSE	90-91	35.0-35.5	154	154	0	48	0	189	0
PALE GOLD	88-89	34.2-34.7	152	152	0	60	98	138	0
BRIGHT ROSE	86-87	33.7-34.0	148	148	0	255	0	255	0
APRICOT	84-85	33.0-33.2	147	147	0	81	55	255	0
BRIGHT BLUE	82-83	32.0-32.5	141	141	182	0	99	92	77
PRIMARY GREEN	80-81	31.2-31.7	139	139	0	0	0	231	58
LIGHT GREEN	78-79	30.5-31.0	121	121	0	0	255	0	77
PALE GREEN	76-77	29.7-30.0	138	138	105	0	179	100	0
SPECIAL LAVENDER	74-75	29.0-29.5	137	137	97	105	72	90	0
PALE LAVENDER	72-73	28.2-28.7	136	136	73	102	44	120	0
DEEP GOLDEN AMBER	70-71	27.5-28.0	135	135	0	255	255	255	0
GOLDEN AMBER	68-69	26.7-27.0	134	134	0	142	234	110	0
MEDIUM BLUE	66-67	26.0-26.2	132	132	255	152	127	0	77
MARINE BLUE	64-65	25.0-25.5	131	131	60	0	106	73	77
BRIGHT PINK	62-63	24.2-24.7	128	128	0	255	0	197	0
MAUVE	60-61	23.7-24.0	126	126	0	255	0	255	74
FERN GREEN	58-59	23.0-23.2	122	122	173	0	235	89	0
LEAF GREEN	56-57	22.0-22.5	121	121	136	0	241	64	0
DEEP BLUE	54-55	21.2-21.7	120	120	255	229	58	128	77
DARK BLUE	52-53	20.5-21.0	119	119	255	161	0	0	77
LIGHT BLUE	50-51	19.5-20.0	118	118	245	0	145	138	0
STEEL BLUE	48-49	18.7-19.0	117	117	167	0	141	165	0
MEDIUM BLUE GREEN	46-47	18.0-18.2	116	116	189	0	157	91	77
PEACOCK BLUE	44-45	17.0-17.5	115	115	136	0	128	91	77
DARK PINK	42-43	16.2-16.7	111	111	0	139	0	220	0
LIGHT SALMON	40-41	15.5-16.0	109	109	50	121	58	230	0
ENGLISH ROSE	38-39	14.7-15.0	108	108	0	62	0	247	0
LIGHT ROSE	36-37	14.0-14.2	107	107	0	95	0	220	0
PRIMARY RED	34-35	13.2-13.7	106	182	0	0	0	0	20
ORANGE	32-33	12.5-13.0	105	105	0	182	255	76	0
DEEP AMBER	30-31	11.7-12.0	104	104	0	26	199	223	0
STRAW	28-29	11.0-11.2	103	103	58	17	104	176	0
LIGHT AMBER	26-27	10.0-10.5	102	102	0	0	171	193	0
YELLOW	24-25	9.5-9.7	101	101	0	0	255	149	0
SPRING YELLOW	22-23	8.7-9.0	100	100	80	0	227	157	0
DARK YELLOW GREEN	20-21	8.0-8.2	90	90	255	0	255	204	0
LIME GREEN	18-19	7.0-7.5	88	88	118	0	241	124	0
JUST BLUE	16-17	6.2-6.7	79	79	255	77	0	204	0
TOKYO BLUE	14-15	5.5-6.0	71	71	255	255	0	180	77
SKY BLUE	12-13	4.7-5.0	068	068	245	77	64	173	0
PALE BLUE	10-11	4.0-4.2	063	063	122	0	112	127	0
LAVENDER	8-9	3.2-3.7	058	058	165	186	77	0	0
BRIGHT RED	6-7	2.5-3.0	026	026	0	255	0	255	21
MED YELLOW	4-5	1.7-2.0	010	010	48	0	239	115	0
MED BASTARD AMBER	2-3	1.0-1.2	004	004	0	62	78	159	0
RANDOM MACRO COLOR (ONLY FOR MACRO EFFECTS)	1	0.5	-	-	-	-	-	-	-
UNUSED RANGE	0	0.0	-	-	-	-	-	-	-

• STOPPER / STROBE - channel 7

BIT	%	EFFECT
252 - 255	98.7 - 100	OPEN
239 - 251	93.7 - 98.2	RANDOM FAST STROBE
226 - 238	88.7 - 93.2	RANDOM MEDIUM STROBE
213 - 225	83.7 - 88.2	RANDOM SLOW STROBE
208 - 212	81.7 - 83.2	OPEN
207	81.2	FAST PULSATION
108	42.5	SLOW PULSATION
104 - 107	41.0 - 42.0	OPEN
103	40.5	FAST STROBE (12 flash/sec)
4	1.7	SLOW STROBE (1 flash/sec)
0 - 3	0.0 - 1.2	CLOSED

• DIMMER - channel 8

BIT	%	EFFECT
255	100	
0	0.0	

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	100	
0	0.0	

• IRIS - channel 10

BIT	%	EFFECT
252 - 255	98.7 - 100	MAXIMUM APERTURE
251	98.2	FAST PULSATION, FAST CLOSING
212	83.2	SLOW PULSATION, FAST CLOSING
211	83	FAST PULSATION, FAST OPENING
172	67.5	SLOW PULSATION, FAST OPENING
171	67	FAST PULSATION
132	51.7	SLOW PULSATION
128 - 131	50.0 - 51.2	MAXIMUM APERTURE
0	0.0	MINIMUM APERTURE

• STATIC GOBO CHANGE - channel 11
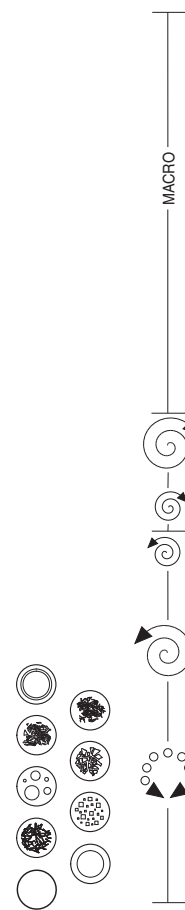
BIT	%	EFFECT
255	100	GOBO 8 SHAKE, FAST SPEED
244	95.5	GOBO 8 SHAKE, SLOW SPEED
243	95.0	GOBO 7 SHAKE, FAST SPEED
232	91.0	GOBO 7 SHAKE, SLOW SPEED
231	90.5	GOBO 6 SHAKE, FAST SPEED
220	86.2	GOBO 6 SHAKE, SLOW SPEED
219	86.0	GOBO 5 SHAKE, FAST SPEED
208	81.7	GOBO 5 SHAKE, SLOW SPEED
207	81.2	GOBO 4 SHAKE, FAST SPEED
196	76.7	GOBO 4 SHAKE, SLOW SPEED
195	76.2	GOBO 3 SHAKE, FAST SPEED
184	72.0	GOBO 3 SHAKE, SLOW SPEED
183	71.7	GOBO 2 SHAKE, FAST SPEED
172	67.5	GOBO 2 SHAKE, SLOW SPEED
171	67.0	GOBO 1 SHAKE, FAST SPEED
160	63.0	GOBO 1 SHAKE, SLOW SPEED
159	62.5	FAST ROTATION (100 rpm)
118	46.2	SLOW ROTATION (5 rpm)
114 - 117	44.7 - 46.0	STOP
113	44.2	SLOW ROTATION (5 rpm)
72	28.2	FAST ROTATION (100 rpm)
64 - 71	25.0 - 28.0	GOBO 8
56 - 63	22.0 - 24.7	GOBO 7
48 - 55	18.7 - 21.7	GOBO 6
40 - 47	15.5 - 18.2	GOBO 5
32 - 39	12.5 - 15.0	GOBO 4
24 - 31	9.5 - 12.0	GOBO 3
16 - 23	6.2 - 9.0	GOBO 2
8 - 15	3.2 - 6.0	GOBO 1
0 - 7	0 - 3.0	WHITE

• ROTATING GOBO CHANGE - channel 12
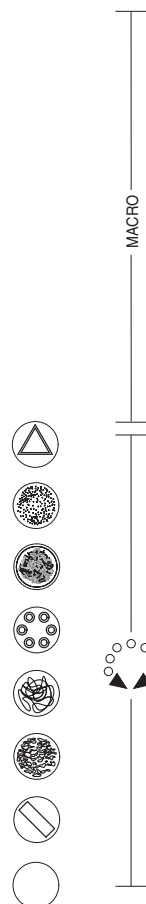
BIT	%	EFFECT
255	100	GOBO 7 SHAKE, FAST SPEED
238	93.2	GOBO 7 SHAKE, SLOW SPEED
237	93.0	GOBO 6 SHAKE, FAST SPEED
220	86.2	GOBO 6 SHAKE, SLOW SPEED
219	86.0	GOBO 5 SHAKE, FAST SPEED
202	79.0	GOBO 5 SHAKE, SLOW SPEED
201	78.7	GOBO 4 SHAKE, FAST SPEED
184	72.0	GOBO 4 SHAKE, SLOW SPEED
183	71.7	GOBO 3 SHAKE, FAST SPEED
166	65.0	GOBO 3 SHAKE, SLOW SPEED
165	64.7	GOBO 2 SHAKE, FAST SPEED
148	58.0	GOBO 2 SHAKE, SLOW SPEED
147	57.5	GOBO 1 SHAKE, FAST SPEED
130	51.0	GOBO 1 SHAKE, SLOW SPEED
114-129	44.7-50.5	GOBO 7
98-113	38.2-44.2	GOBO 6
82-97	32.0-38.0	GOBO 5
65-81	25.5-31.7	GOBO 4
49-64	19.0-25.0	GOBO 3
33-48	13.0-18.7	GOBO 2
17-32	6-7-12.5	GOBO 1
0-16	0.0-6.2	WHITE

• GOBO ROTATION - channel 13

BIT	%	EFFECT
255	100	FAST ROTATION (180 rpm)
193	75.5	SLOW ROTATION (2,2 rph)
191 - 192	74.7 - 75.0	STOP
190	74.2	SLOW ROTATION (2,2 rph)
128	50.0	FAST ROTATION (180 rpm)
127	49.7	540° POSITION
105	41.7	450° POSITION
84	33.0	360° POSITION
63	24.7	270° POSITION
42	16.2	180° POSITION
21	8.2	90° POSITION
0	0.0	0° POSITION

• GOBO FINE - channel 14

BIT	%
255	100
127	50.0
0	0.0

• PRISM INSERTION - channel 15

BIT	%	EFFECT
255	100	
		PRISM INSERTED
128	50.0	
127	49.7	
		PRISM EXCLUDED
0	0.0	

• PRISM ROTATION - channel 16

BIT	%	EFFECT
255	100	FAST ROTATION (120 rpm)
193	75.5	SLOW ROTATION (3 rph)
191 - 192	74.7 - 75.0	STOP
190	74.2	SLOW ROTATION (3 rph)
128	50.0	FAST ROTATION (120 rpm)
127	49.7	POSITION 540°
105	41.7	POSITION 450°
84	33.0	POSITION 360°
63	24.7	POSITION 270°
42	16.2	POSITION 180°
21	8.2	POSITION 90°
0	0.0	POSITION 0°

• FROST - channel 17

BIT	%	EFFECT
255	100	FROST INSERTED
0	0.0	FROST EXCLUDED

• ANIMATION DISK INSERTION - channel 18

BIT	%	EFFECT
255	100	DISK INSERTED
0	0.0	DISK EXCLUDED

• ANIMATION DISK ROTATION - channel 19

BIT	%	EFFECT
255	100	FAST ROTATION (120 rpm)
131	51.2	SLOW ROTATION (4,4 rph)
125 - 130	49.0 - 51.0	STOP
124	48.7	SLOW ROTATION (4,4 rph)
0	0.0	FAST ROTATION (120 rpm)

• FOCUS - channel 20

BIT	%	EFFECT
255	100	NEAR
0	0.0	DISTANT

Continue ➜

• FOCUS FINE -channel 21

BIT	%	EFFECT
255	100	NEAR
0	0.0	DISTANT

• ZOOM - channel 22
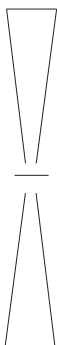
BIT	%	EFFECT
255	100	NARROW BEAM
0	0.0	WIDE BEAM

• AUTOFOCUS DISTANCE - channel 23

AUTOFOCUS priority:
1 - Rotating gobo
2 - Static gobo
3 - Iris

BIT	%	EFFECT
255	100	100 METRES
26	10.0	10 METRES
23	9.0	9 METRES
20	8.0	8 METRES
18	7.0	7 METRES
15	6.0	6 METRES
13	5.0	5 METRES
10	4.0	4 METRES
7	3.0	3 METRES
0-6	0.0-2.5	AUTOFOCUS OFF

• AUTOFOCUS ADJUSTMENT - channel 24

BIT	%	EFFECT
255	100	FOCUS FINE
128	50.0	
0	0.0	FOCUS FINE

• MACRO EFFECTS - channel 25

| BIT	%	EFFECT
232-255	91,0-100	STAND BY BLACK
220-231	86,2-90,5	RANDOM MACRO 8
208-219	81,7-86,0	RANDOM MACRO 7
196-207	76,7-81,2	RANDOM MACRO 6
184-195	72,0-76,2	RANDOM MACRO 5
172-183	67,5-71,7	RANDOM MACRO 4
160-171	63,0-67,0	RANDOM MACRO 3
148-159	58,0-62,5	RANDOM MACRO 2
136-147	53,2-57,5	RANDOM MACRO 1
112-135	44,0-53,0	STAND BY BLACK
100-111	39,0-43,7	MACRO 8
88-99	34,2-38,7	MACRO 7
76-87	29,7-34,0	MACRO 6
64-75	25,0-29,5	MACRO 5
52-63	20,5-24,7	MACRO 4
40-51	15,5-20,0	MACRO 3
28-39	11,0-15,0	MACRO 2
16-27	6,2-10,5	MACRO 1
12-15	4,7-6,0	STAND BY BLACK
8-11	3,2-4,2	STAND BY
0-7	0,0-3,0	MACRO OFF

• PAN - channel 26

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

BIT	%
255	100
0	0.0
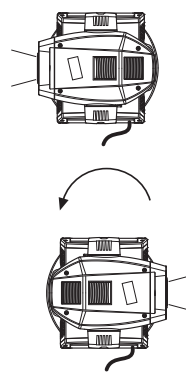
Operation with option InvertPan ↕ On
(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)
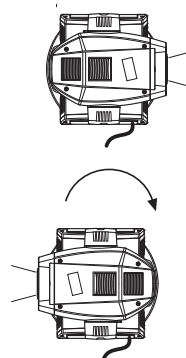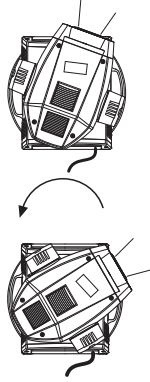
BIT	%
255	100
0	0.0

• PAN FINE - channel 27

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

BIT	%
255	100
0	0.0

Operation with option InvertPan ↕ On
(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)
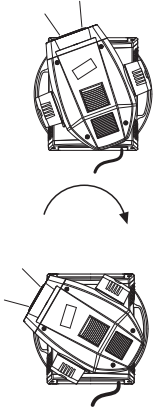
BIT	%
255	100
0	0.0

• TILT - channel 28

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

BIT	%
255	100
128	50.0
0	0.0

Operation with option Invert Tilt ↕ On
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)
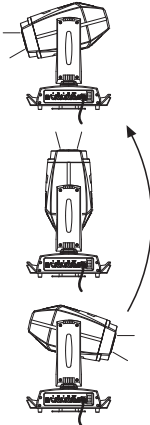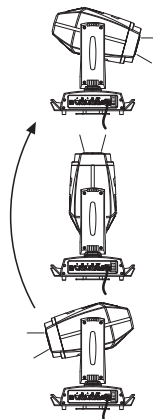
BIT	%
255	100
128	50.0
0	0.0

• TILT FINE - channel 29

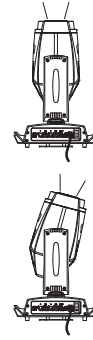*Operation with option Invert Tilt ↕ Off*
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)

BIT	%
255	100
0	0.0

Operation with option Invert Tilt ↕ On
(Pan conventionally represented at 0% and option Invert Pan ↕ Off)
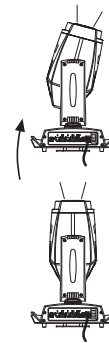
BIT	%
255	100
0	0.0

• FUNCTION - channel: 30

BIT	%	EFFECT
255	100	
		UNUSED RANGE
63	24.7	
51-62	20.0-24.2	LINEAR (Default) — DIMMER CURVE FUNCTION
38-50	14.7-19.5	CONVENTIONAL —
25-37	9.7-14.2	NORMAL — PAN-TILT FUNCTION
12-24	4.7-9.5	FAST (Default) —
0-11	0.0-4.2	UNUSED RANGE

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

• RESET - channel: 31

BIT	%	EFFECT
255	100	COMPLETE RESET
		Complete reset is activated passing throug the unused range and staying 5 seconds in complete reset levels.
128	50.0	COMPLETE RESET
127	49.7	PAN / TILT RESET
		Pan / Tilt reset is activated passing throug the unused range and staying 5 seconds in Pan / Tilt reset levels.
77	30.0	PAN / TILT RESET
76	29.7	EFFECTS RESET
		Effects reset is activated passing throug the unused range and staying 5 seconds in Effects reset levels.
26	10.0	EFFECTS RESET
25	9.7	
0	0.0	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: 32

IMPORTANT: Alpha Spot QWO 800 is not provided with hot restrike igniter

BIT	%	EFFECT
255	100	LAMP ON (FULL POWER)
		Lamp ignition after 5 s in full power levels.
		Immediate transition from half to full power.
180	70.5	LAMP ON (FULL POWER)
179	70.0	UNUSED RANGE
101	39.5	UNUSED RANGE
100	39.0	LAMP OFF
		Lamp switch off passing throug the unused range and staying 5 s in Lamp OFF levels.
26	10.0	LAMP OFF
25	9.7	UNUSED RANGE
0	0.0	

ON

ON

OFF

OFF

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

	Timing Channel	Channel function
33	Pan - Tilt time	Pan - Tilt - (Pan fine - Tilt fine)
34	Colour time	CMY - Colour wheel - CTO
35	Beam time	Dimmer - Frost - Iris - Focus - Zoom - Prism - Animation Disk
36	Gobo time	Static Gobo - Rotating Gobo Change

TIME TABLE

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

BIT	Seconds
43	8.6
44	8.8
45	9
46	9.2
47	9.4
48	9.6
49	9.8
50	10
51	10.2
52	10.4
53	10.6
54	
55	11
56	
57	12
58	
59	13
60	
61	
62	14
63	
64	15
65	
66	16
67	
68	
69	17
70	
71	
72	18
73	
74	19
75	
76	20
77	
78	
79	21
80	
81	
82	22
83	
84	23
85	

BIT	Seconds
86	
87	24
88	
89	25
90	
91	
92	26
93	
94	27
95	
96	
97	28
98	
99	29
100	
101	
102	30
103	
104	31
105	
106	
107	32
108	
109	33
110	
111	
112	34
113	
114	35
115	
116	
117	36
118	
119	37
120	
121	
122	38
123	
124	39
125	
126	
127	40
128	

BIT	Seconds
129	
130	41
131	
132	42
133	
134	
135	43
136	
137	44
138	
139	
140	45
141	
142	46
143	
144	
145	47
146	
147	48
148	
149	
150	49
151	
152	
153	50
154	
155	51
156	
157	52
158	
159	
160	53
161	
162	54
163	
164	
165	55
166	
167	56
168	
169	
170	57
171	

BIT	Seconds
172	
173	58
174	
175	
176	59
177	
178	
179	60
180	
181	65
182	
183	
184	70
185	
186	75
187	
188	
189	80
190	
191	85
192	
193	
194	90
195	
196	95
197	
198	
199	100
200	
201	110
202	
203	
204	120
205	
206	130
207	
208	
209	140
210	
211	
212	150
213	
214	160
215	

BIT	Seconds
216	
217	170
218	
219	180
220	
221	
222	190
223	
224	200
225	
226	
227	210
228	
229	220
230	
231	
232	230
233	
234	240
235	
236	
237	250
238	
239	260
240	
241	
242	270
243	
244	280
245	
246	
247	290
248	
249	300
250	
251	
252	310
253	
254	
255	Follow cue Data