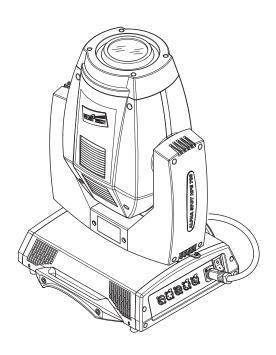
# **INSTRUCTION MANUAL**



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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.

#### SAFETY INFORMATION

ΕN

#### **SAFETY INFORMATION**

IMPORTANT: Clay Paky recommends you carefully read and keep the safety information on this product, also available in digital format at the following link:

#### http://www.claypaky.it/en

Ref: [FIS00U - Safety Information Alpha 700 series]

IT

#### **INFORMAZIONI DI SICUREZZA**

IMPORTANTE: Clay Paky raccomanda di leggere accuratamente e conservare le informazioni di sicurezza relative a questo prodotto, sempre reperibili in versione digitale al seguente link:

#### http://www.claypaky.it/en/download

Rif: [FIS00U - Safety Information Alpha 700 series]

DE

#### INFORMATIONEN ZUR SICHERHEIT

WICHTIG: Clay Paky empfiehlt, die Sicherheitsinformationen bezüglich dieses Produkts genau zu lesen und aufzubewahren. Sie sind in Digitalversion immer unter folgendem Link auffindbar:

#### http://www.claypaky.it/en/download

Ref: [FIS00U - Safety Information Alpha 700 series]

ES

#### **INFORMACIONES DE SEGURIDAD**

IMPORTANTE: Clay Paky recomienda leer detenidamente y conservar la información de seguridad relativa a este producto. Además, está disponible una versión digital de la misma en el siguiente enlace:

#### http://www.claypaky.it/en/download

Ref: [FIS00U - Safety Information Alpha 700 series]

FR

#### **CONSIGNES DE SÉCURITÉ**

IMPORTANT: Clay Paky recommande de lire attentivement et de conserver les informations de sécurité relatives à ce produit, disponibles en version digitale au lien suivant:

#### http://www.claypaky.it/en/download

Réf.: [FIS00U - Safety Information Alpha 700 series]

RU

#### ИНСТРУКЦИЮ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ

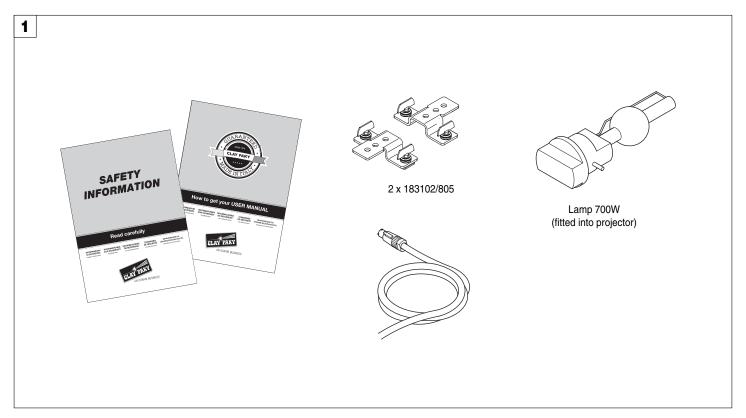
ВАЖНО: Clay Paky рекомендует внимательно прочитать и сохранить инструкцию по технике безопасности данного изделия, которая всегда доступна в электронном формате по следующей ссылке:

#### http://www.claypaky.it/en/download

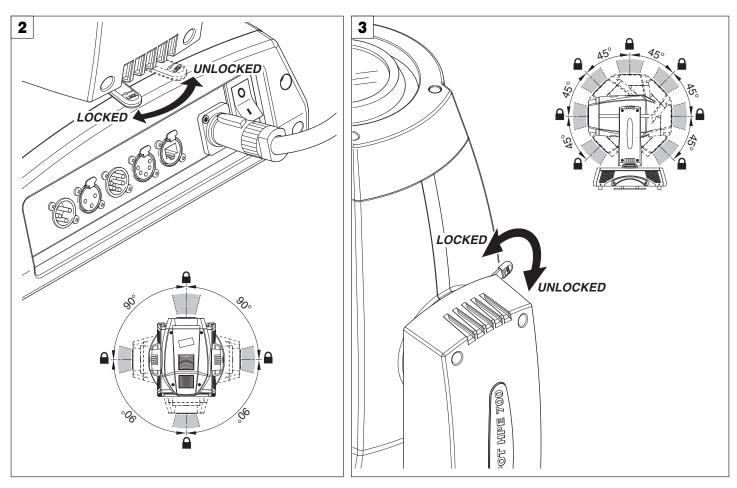
Haименовaние: [FIS00U – Safety Information Alpha 700 series]

2

# **UNPACKING AND PREPARATION**



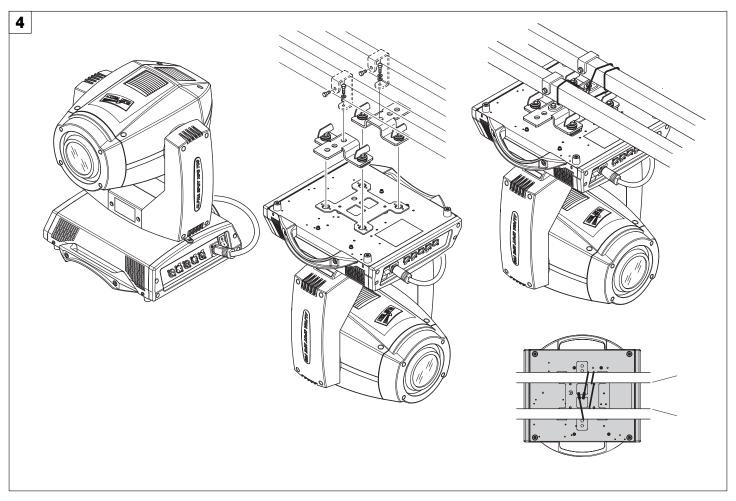
Packing contents - Fig. 1



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

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

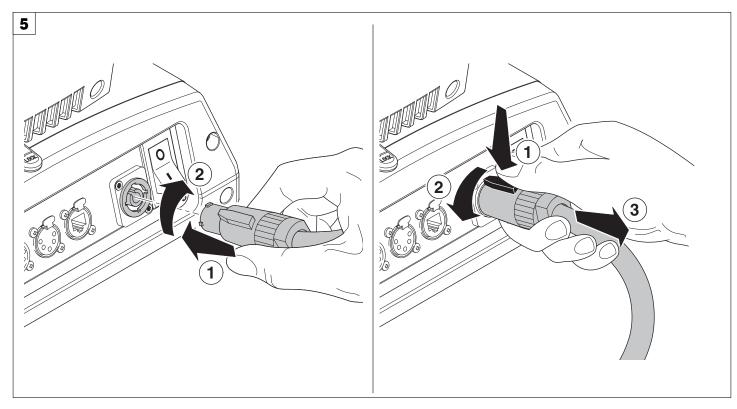
# **INSTALLATION AND START-UP**



Installing the projector - Fig. 4

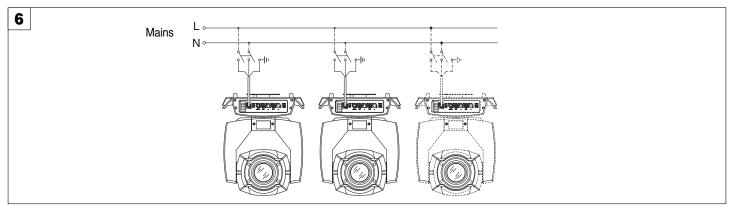
The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.

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.

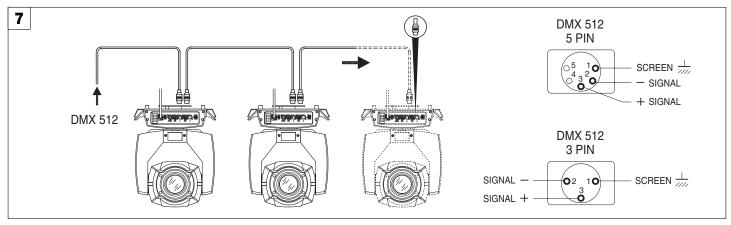


Connecting and disconnecting power cable - Fig. 5

# **CONTROL PANEL**



#### Connecting to the mains supply - Fig. 6

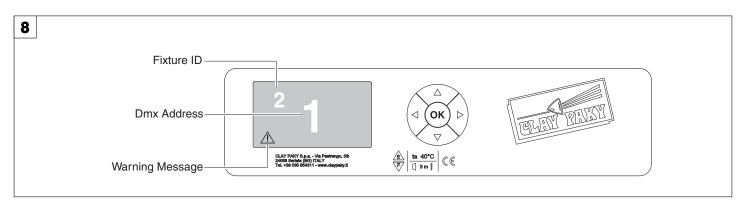


#### Connecting to the control signal line (DMX) - Fig. 7

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 1200hm 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 1200hm (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

**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.



#### Switching on the projector - Fig. 8

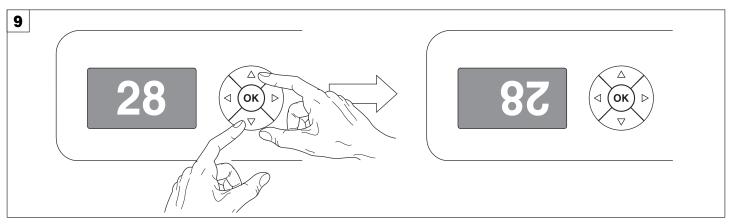
Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:



Model Alpha SPOT HPE 700 Firmware Version X.X.X Date - Hour

xxx (Fixture ID) Dmx Address xxx System errors E: ..... W: .....

On conclusion of resetting in case of absence of the dmx signal, Pan and Tilt move to the "Home" position (Pan 128 bit - Tilt 128 bit). The control panel (Fig. 8) has a display and buttons for the complete programming and management of the projector menu. The display can be in one of two conditions: rest status and setting status. When it is in the rest status, the display shows the projector's DMX address and the Fixture ID address (if set). During menu setting status, after a wait time (about 30 seconds) without any key having been pressed, the display automatically returns to rest status. It should be noted than when this condition occurs, any possible value that has been modified but not yet confirmed with the (Re) 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).

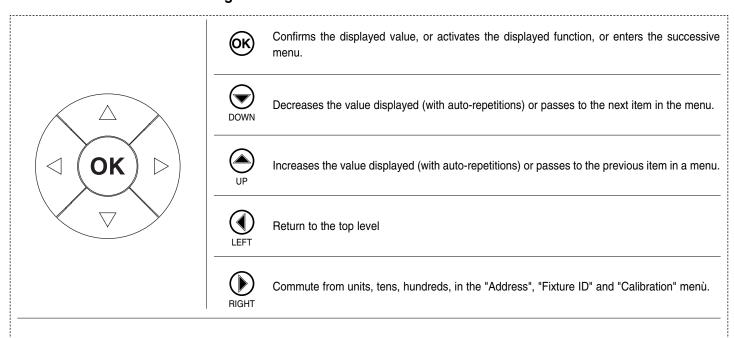
The address can also be set with the projector switched off.

#### Setting the projector Fixture ID

On each projector, the Fixture ID address must be set for an easy identification of the fixtures in an installation (ID from 1 to 255).

The Fixture ID address can be set with the projector switched off.

# Functions of the buttons - Using the menu

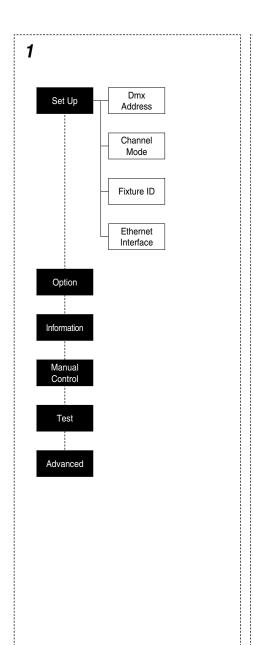


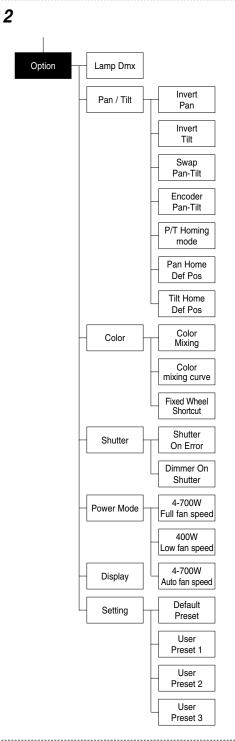
#### **USING THE MENU:**

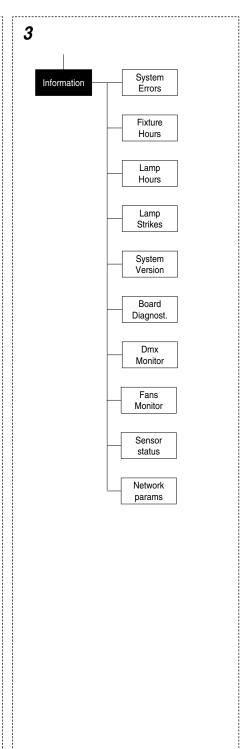
- 1) Press ( once "Main Menu" appears on the display.
- 2) Use the UP 
  and DOWN 
  keys to select the menu to be used:
  - Setup (Setup Menu): To set the setting options.
  - Option (Option Menu): To set the operating options
  - Informations (Informations Menu): To read the counters, software version and other information.
  - Manual Control (Manual control Menu): To trigger the test and manual control functions.
  - Test (Test Menu): To check the proper functionning of effects
  - · Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.
- 3) Press (x) to display the first item in the selected menu.
- 4) Use the UP 
  and DOWN 
  keys to select the MENU items.

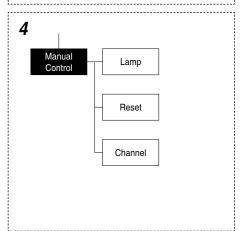
#### Setting addresses and options with the projector disconnected

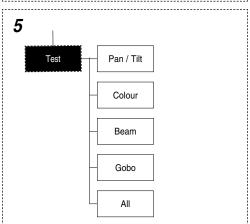
The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply. All that is needed is to press to momentarily activate the display and thus access the settings. Once the required operations have been carried out,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

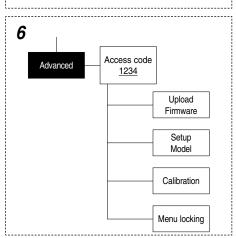




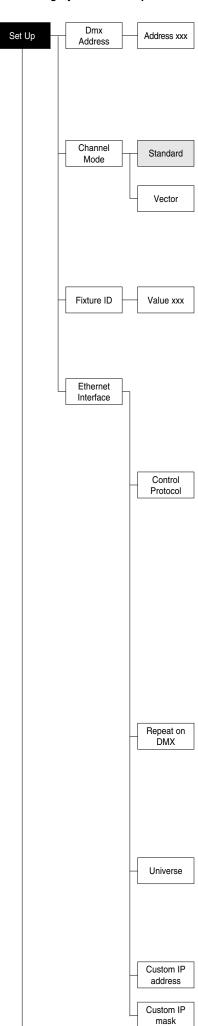








#### NOTE: On grey the default options



#### **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.
- Use the UP and 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.

- Press S the current settings appear on the display (Standard or Vector).
- 2) Use the UP (a) and DOWN (b) keys to select one of the following settings:
  - Standard
  - Vector
- 3) Press (x) to confirm the selection or LEFT (1) 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  $\bigcirc$ , DOWN  $\bigcirc$ , RIGHT  $\bigcirc$  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 (a) and DOWN (b) keys to select one of the following settings:
  - Disabled
  - Art-net on IP 2
  - Art-net on IP 10
  - Art-net Custom IP
- 3) Press ( to confirm the selection or LEFT ( to keep the current setting. If the Control Protocol option is set on Disabled, when an IP address (IP2, IP10 or IP Custom) is selected, the projector immediately initializes the IP address that was just selected.

If the **Control Protocol** option is enabled (**IP2**, **IP10** or **IP Custom**) and a new one is selected that is different from the previous one, the projector must be restarted so that it will be correctly initialized.

#### Repeat on DMX

It lets you enable the transmission of the Ethernet protocol by DMX signal to all the connected projectors.

- 1) Press ( the current setting appears on the display.
- 2) Use the UP igotimes and DOWN igotimes keys to select one of the following settings:
  - Disabled: DMX transmission disabled.
  - Enabled on primary: DMX transmission enabled.
- 3) Press (x) to confirm the selection or LEFT (1) 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 

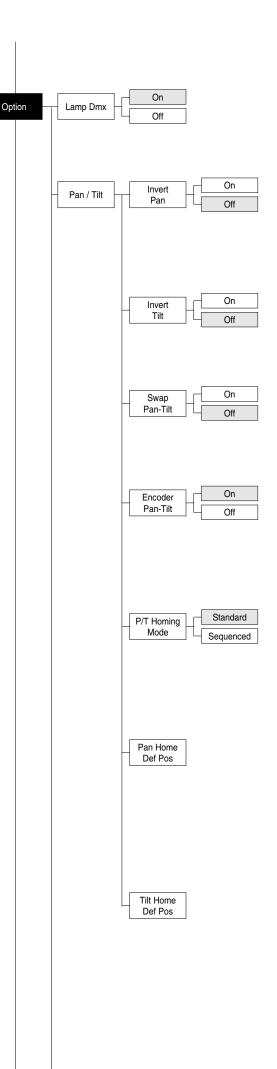
  keys to set the Universe address.
- 3) Press (x) to confirm the selection or LEFT (1) to keep the current setting.

#### **Custom IP address**

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

#### **Custom IP mask**

Allows you to set manually the Subnet Mask by the user default.



#### **OPTIONS MENU**

#### **LAMP DMX**

Used for enabling lamp remote control channel.

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

#### Invert tilt

Used for reversing tilt movement.

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

#### **Swap Pan-Tilt**

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

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

#### **Encoder Pan-Tilt**

Used for enabling the Pan / Tilt encoders.

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

You can quickly disable the Pan and Tilt Encoder by simultaneously pressing the UP ♠ and DOWN ♠ keys in the "Main Menu".

#### P/T Homing Mode

Lets you set the initial projector Reset mode.

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

Standard: Pan & Tilt are simultaneously reset.

Sequenced: Tilt is reset first followed by Pan.

3) Press (x) to confirm the selection or LEFT (1) to keep the current setting.

#### Pan Home Def Pos

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

- 1) Press (ok), the current setting appears on the display.
- 2) Use the UP 
  and DOWN 
  keys to select one of the following settings:

0 degree

90 degrees

180 degrees

270 degrees (default)

3) Press (x) to confirm the selection or LEFT (1) to keep the current setting.

#### **Tilt Home Def Pos**

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

- 1) Press ( , the current setting appears on the display.
- 2) Use the UP ♠ and DOWN ♠ keys to select one of the following settings: 0%

12.5%

25%

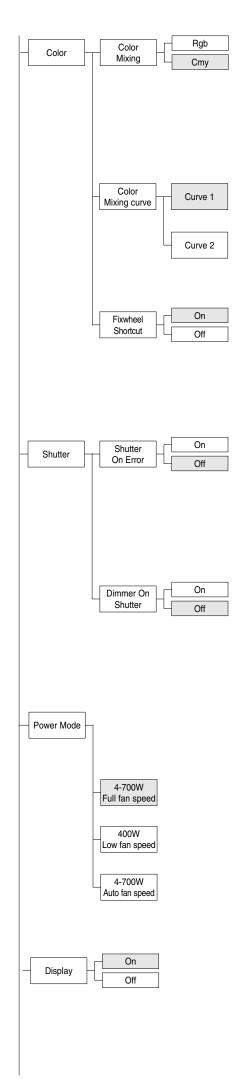
50% (default)

75%

87.5%

100%

3) Press (6) to confirm the selection or LEFT (1) to keep the current setting



#### **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.
- 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 (R) 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.
- Press ( to confirm the selection, or LEFT ( to keep current settings.

#### **SHUTTER**

#### Shutter on error

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

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

#### **Dimmer on Shutter**

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

- 1) Press (N) the current settings appear on the display (On or Off).
- 2) Use the UP 
  and DOWN 
  keys to enable (On) or disable (Off) the automatic closing of the dimmer.
- 3) Press ( to confirm the selection, or LEFT ( to keep current settings.

#### **POWER MODE**

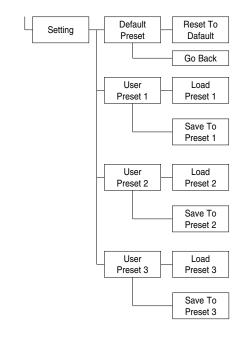
Allows you to select a Power Mode from the three available.

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

#### **DISPLAY**

Used for automatically reduce brightness on the display after about 30 seconds in idle.

- 1) Press (ok) the current settings appear on the display (On or Off).
- Use the UP and DOWN keys to enable (On) or disable (Off) the decreasing of display brightness.
- 3) Press ( to confirm the selection or LEFT ( to keep current settings.



# Fixture Hours Total XXX Partial XXX Reset...

#### **SETTING**

Used to save 3 different settings of the items in the options menu and relative submenus.

- 1) Press 🕟 "Default preset" appears on the display.
- 2) Use the UP 
  and DOWN 
  keys to select one of the following configurations:
  - Default preset (\*)
  - User preset 1
  - User preset 2
  - User Preset 3
- 3) Press (x) "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 (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 **CMY** Color mixing Color mixing curve Curve 1 Fixed Wheel Shortcut On Shutter on error Off Dimmer on Shutter Off

Power Mode 4-700 Full fan speed

Display On

#### INFORMATION MENU

#### SYSTEM ERRORS

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

- 1) Pressing (x) 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 (x) - Hours total and partial appears on the display.

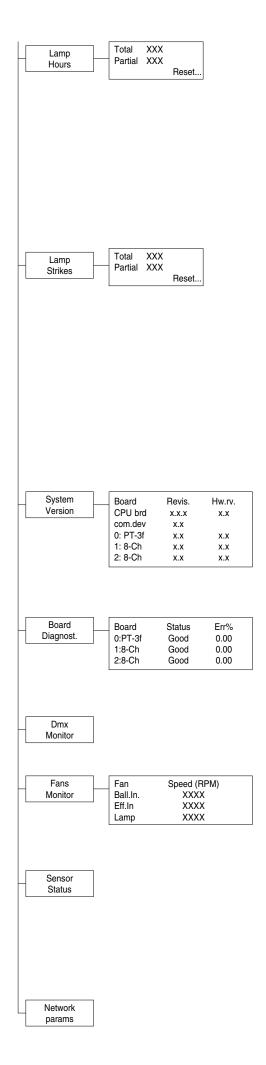
#### Total counter

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.
- 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 (x) to reset partial lamp working hours, a confirmation message (Are you sure?) appears on the display.
- 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 (x) to reset partial lamp strikes hours, a confirmation message (Are you sure?) appears on the display.
- 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: 8-Ch (8 channel board)

2: 8-Ch (8 channel board)

#### **BOARD DIAGNOSTIC**

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

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

1: 8-Ch (8 channel board)

2: 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:

Ball. IN (Ballast IN Fan)

Eff.IN (Effects IN Fan)

Lamp (Lamp Fan)

#### **SENSOR STATUS**

It lets you check the correct operations of each "sensor" installed in the projector, each channel is associated with one of the following three parameters:

- n.a.= sensor not available
- ON= sensor working
- OFF= sensor defective

#### **NETWORK PARAMS**

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

IP address: Internet Protocol address (two projectors must not have the same IP address)

IP mask: 255.0.0.0

Mac address: Media Access Control: the projector's Ethernet Address

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

#### MANUAL CONTROL

#### **LAMP**

Used for turning lamp on and off from the projector control panel.

- 1) Press ( the current settings appear on the display (On or Off).
- 2) Use the UP 
  and DOWN 
  keys to turn the lamp on (On) or off (Off)
- Press to confirm the selection or LEFT to keep current settings and return to the top level.

#### **RESET**

Used for resetting the projector.

- Press to reset the projectors, a confirmation message (Are you sure
   appears on the display.
- Select YES to starting reset the fixture or NO to keep the current setting and return to the top menu level.

#### **CHANNEL**

Used for setting channel levels from the projector control panel.

- 1) Press 🕟 the first channel appears on the display.
- 2) Use the UP  $\bigcirc$  and DOWN  $\bigcirc$  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 (1) 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 ( to keep current settings.

Test sequence:

Pan - Tilt effects (Pan & Tilt)

Colour effects (CMY, colour wheel)

Beam effects (Stopper-Strobe / Dimmer / Iris / Prism / Frost)

Gobo effects (Fixed gobo / Rotating gobo)

All effects

#### **ADVANCED MENU**

To enable the "Advanced Menu" set up the "Access code" (1234) using the UP  $\bigcirc$  , DOWN  $\bigcirc$  , RIGHT  $\bigcirc$  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

Menu locking

#### **CALIBRATION**

Allows you to adjust effects from the control panel to obtain perfect uniformity between the projectors.

- 1) Press ( 'channels' appears on the display.
- 2) Using the UP 
  and DOWN 
  keys, select the effect you wish to regulate.
- 3) Press ( and use the RIGHT ), UP ( and DOWN buttons to make the adjustment by setting a value between 0 and 255.
- 4) Press to confirm the selection or LEFT to keep current settings and return to the top level.

#### **FACTORY DEFAULT**

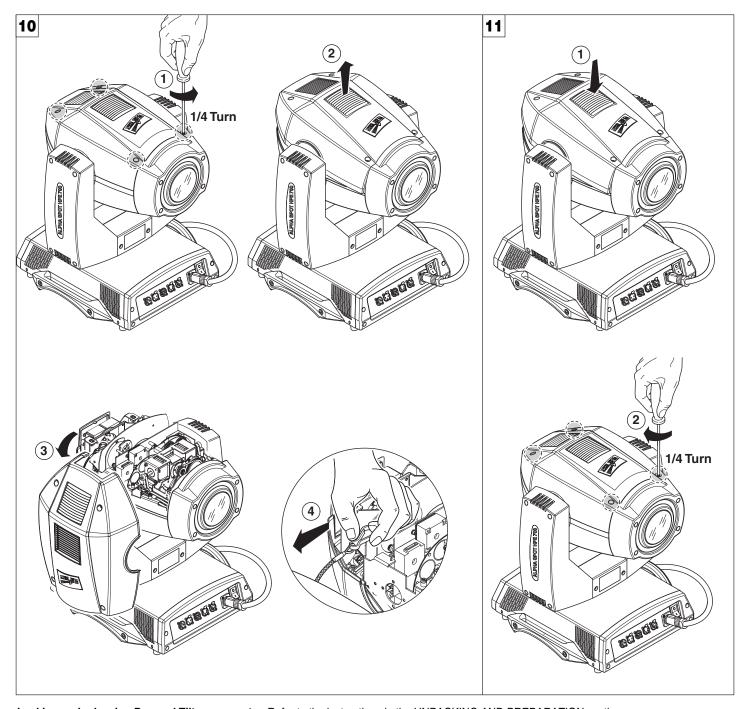
Allows you to restore default values of all channels (128).

- 1) Press 🕟 a confirmation message appears on the display (Reset calibration to factory default ?).
- 2) Select YES to reset calibration to factory default or NO to keep the current setting and return to the top menu level.

#### **MENU LOCKING**

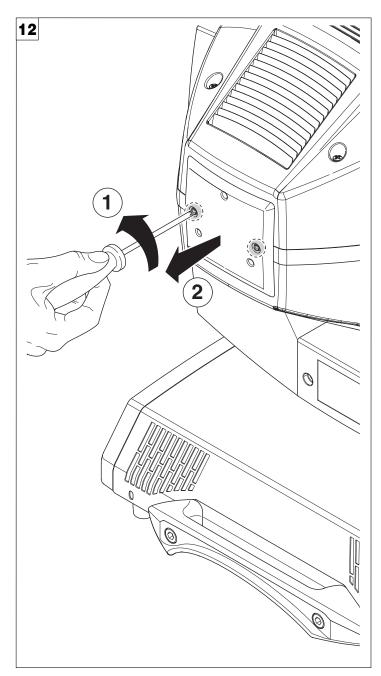
It allows you to assign a password to lock the access to the user menu, so that only users know the password can change settings. The password is 4-digit number.

# **MAINTENANCE**

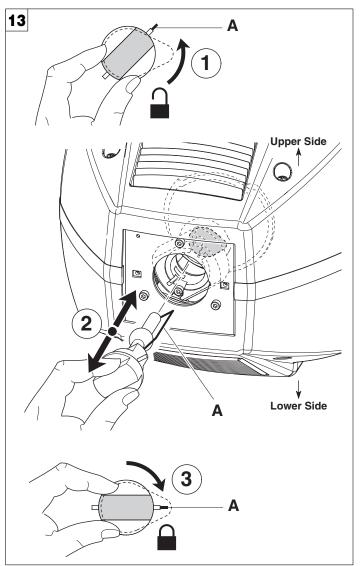


**Locking and releasing Pan and Tilt movements -** Refer to the instructions in the UNPACKING AND PREPARATION section. **Opening the head covers -** Fig. 10.

Closing the head covers - Fig. 11.



Opening and closing lamp compartment - Fig. 12



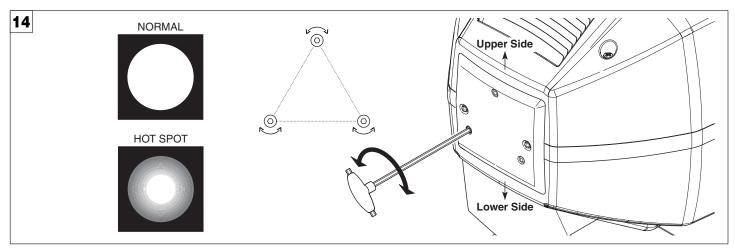
Lamp change - Fig 13

Take the new lamp out of its package and insert in the fitting.

WARNING: do not touch the lamp's envelope with bare hands. Should this happen, clean the bulb with a cloth soaked in alcohol and dry it with a clean, dry cloth.

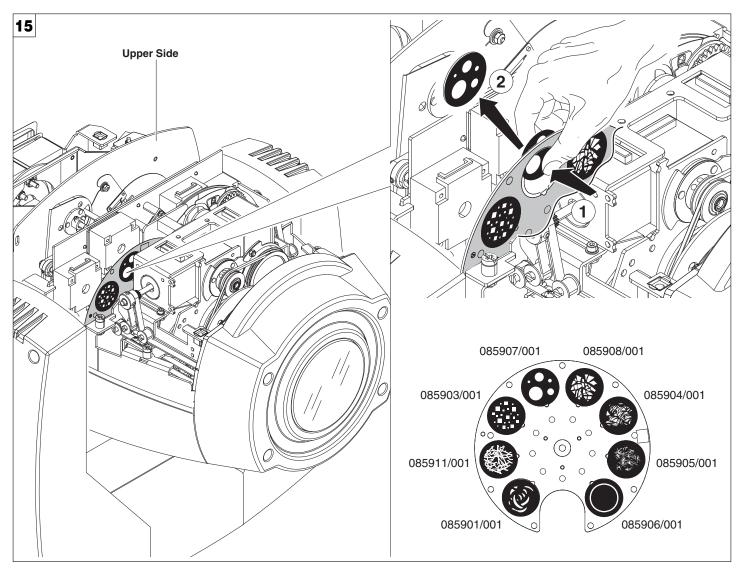
IMPORTANT: Make sure the lamp is inserted with the external contact (A) facing the elliptical reflector's slot.

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

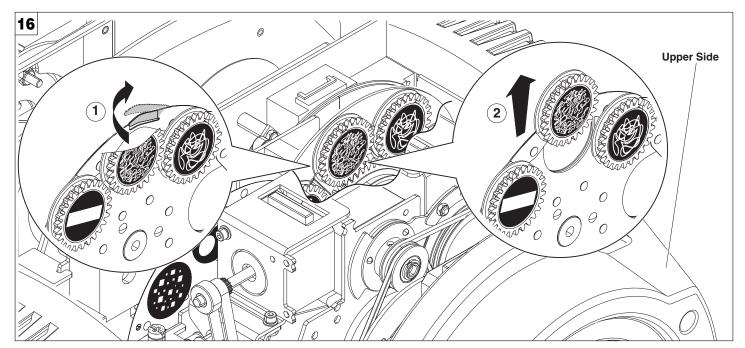


Lamp regulation - Fig. 14

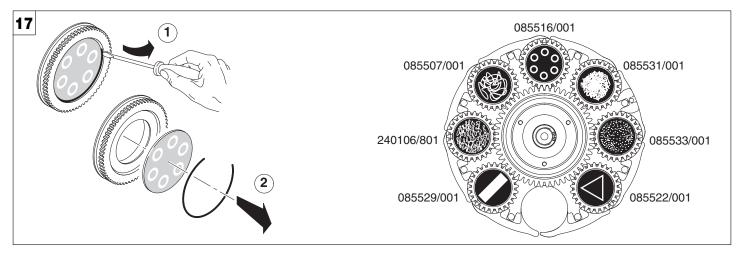
To centre the lamp, turn the three adjusting screws as shown in the figure.



Replacing fixed gobos (ø 31.5 mm – max 23 mm image – thickness max 1.1 mm) - Fig.~15 WARNING: Before using personalised gobos contact Clay Paky.

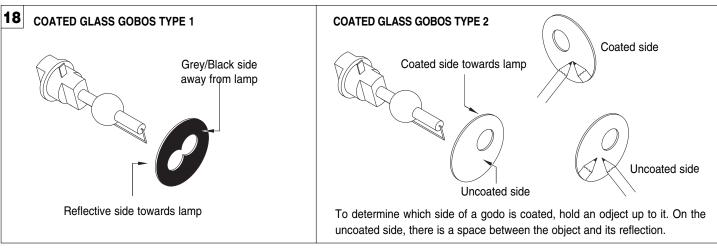


Bearing group replacement - Fig. 16



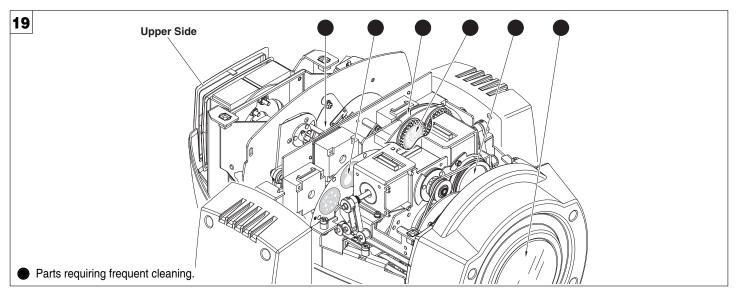
Replacing rotating gobos (ø 25.7 mm - max 23 mm image – thickness max 1.1 mm) - Fig. 17 IMPORTANT: Use only glass gobos on the rotating gobos wheel.

WARNING: Before using personalised gobos contact Clay Paky.



Gobo orientation - Fig. 18

The pictures shown the correct gobos orientation.

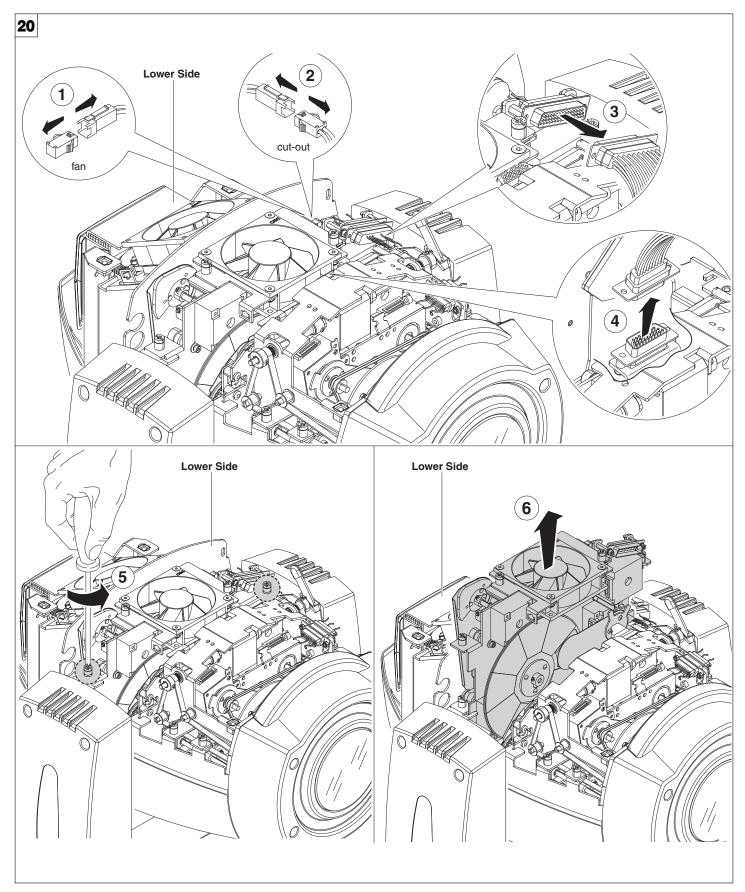


#### Periodical cleaning - Fig. 19

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:

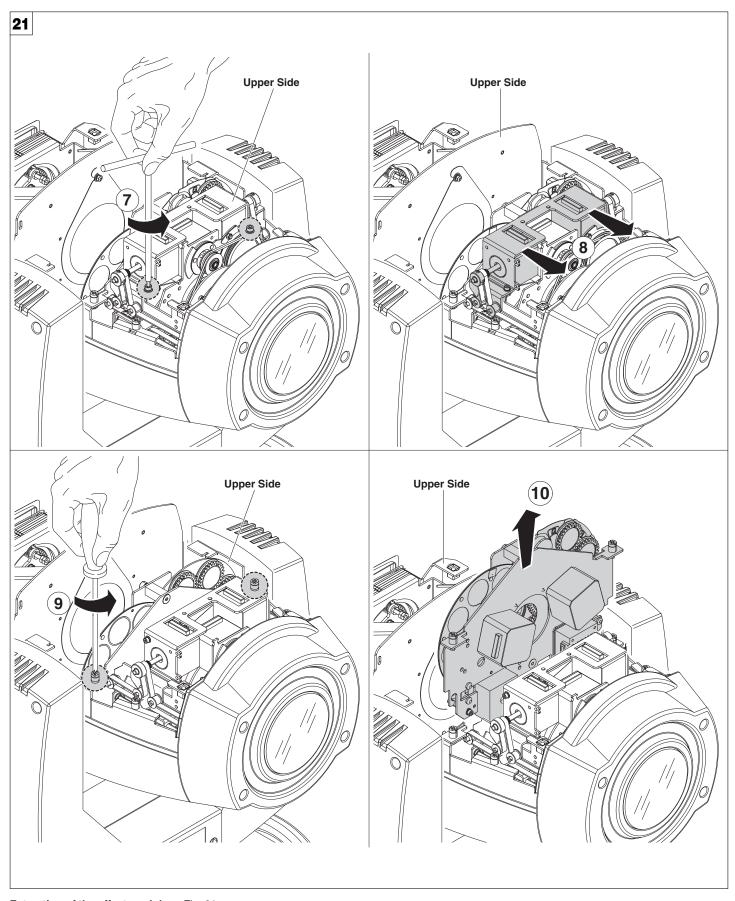
- General cleaning of internal parts.
- Restoring lubrication of all parts subject to friction, using lubricants specifically supplied by Clay Paky.
- General visual check of the internal components, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.



Extraction of the effect modules - Fig. 20

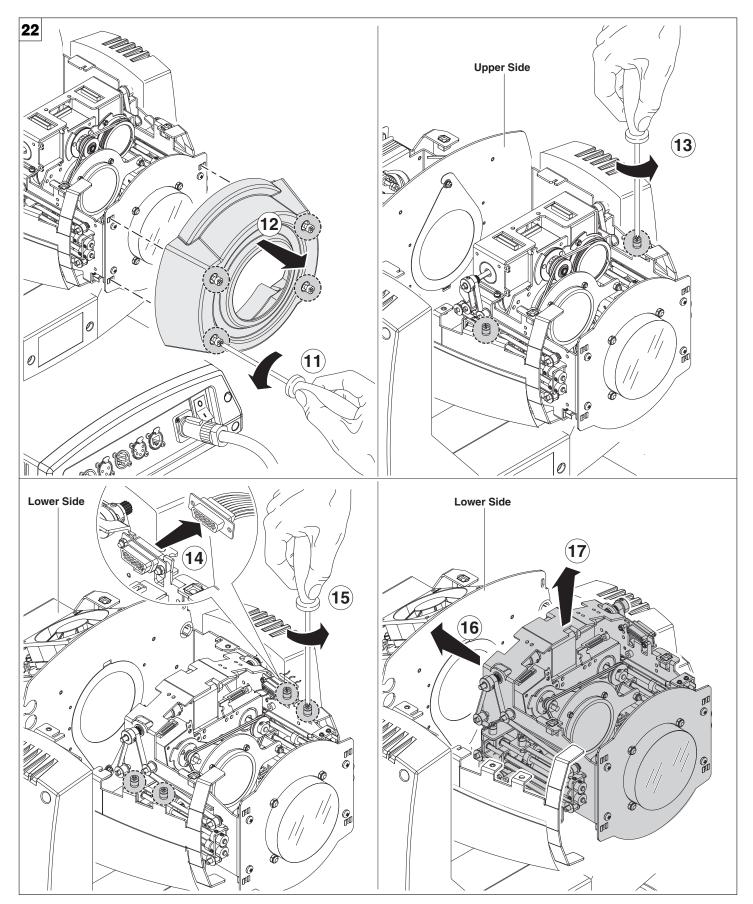
**IMPORTANT:** Grasp the modules using the support structure and not the details which could get damaged. **Insertion of the effect modules:** Repeat the operations indicated in Fig. 20, 21 and 22 in reverse order.

Continue →



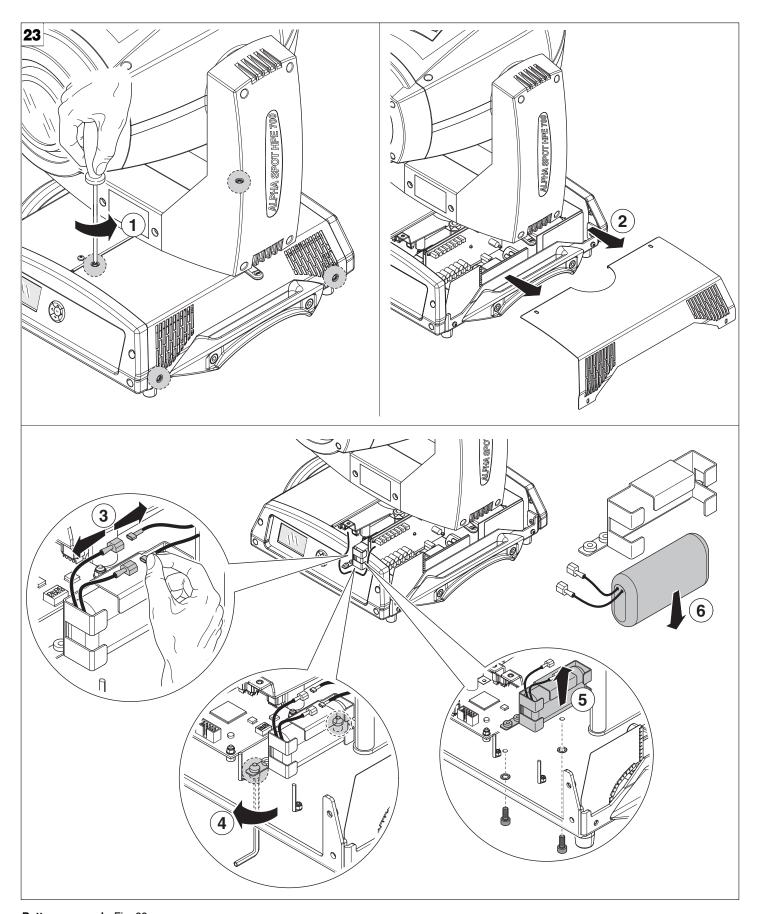
Extraction of the effect modules - Fig. 21

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.



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.

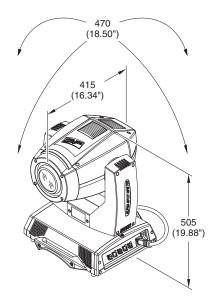


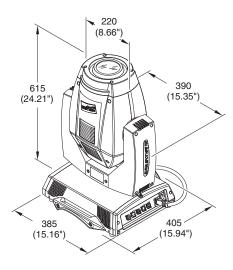
Battery removal - Fig. 23

**ALPHA SPOT HPE 700** 



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





#### **TECHNICAL INFORMATION**

#### Power supplies available

100-120V 50/60Hz 200-240V 50/60Hz

#### Input power

1050VA a 230V 50Hz.

#### Lamp:

Discharge lamp.

- Type MSR Gold 700/2 Mini Fast Fit (L10098)
- Cap PGJX28
- Colour temperature 7250 K
- Luminous flux 50000 lm
- Average life 750 h
- Any working position
- Type MSR Gold 700/1 Mini Fast Fit (LAM003)
- Cap PGJX28
- Colour temperature 5700 K
- Luminous flux 54000 lm
- Average life 750 h
- Any working position
- Type Lok-it HTI 700W-60-P28 (LAM005)
- Cap PGJX28
- Colour temperature 6000 K
- Luminous flux 50000 lm
- Average life 750 h
- Any working position

#### Motors

20 stepper motors, operating with microsteps, totally microprocessor controlled.

#### Optical unit

Elliptic reflector with high luminous efficiency

#### Channels

Max 29 control channels.

#### Inputs

- DMX 512
- Ethernet

#### Moving head

- Movement by means of two stepper motors, controlled by microprocessor.
- Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.
- Travel:
- PAN = 540°
- TILT = 250°
- Maximum speeds:
- PAN = 3.77 (normal) / 3.20 (fast)
- TILT = 2.19 (normal) / 1.89 (fast)
- Resolution:
- $PAN = 2.11^{\circ}$
- PAN FINE = 0.008°
- TILT = 0.98°
- TILT FINE = 0.004°

#### IP20 protection rating

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

#### **Safety Devices**

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

#### Cooling

Forced ventilation with axial fans.

#### Body

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

#### **Working position**

Working in any position.

#### Weight

about 22.90 Kg (50lbs 6ozs).

### **CAUSE AND SOLUTION OF PROBLEMS**

	THE PROJECTOR WILL NOT SWITCH ON					
	ELECTRONICS NON-OPERATIONAL			TRONICS NON-OPERATIONAL	BRODI EME	
	DEFECTIVE PROJECTION			FECTIVE PROJECTION		PROBLEMS
		REDUCED LUMINOSITY				
	POSSIBLE CAUSES CHECKS AND REMEDIES		EMEDIES			
•				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.	ctronic 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 700**

NB: To prevent accidental breakage of the effects, which could collide with each other during transport, before switching the projector OFF check that all the projector Channels have been excluded (DMX level = 0 bit).

OLIANINE	CHANNEL MODE			
CHANNEL	STANDARD	VECTOR		
1	CYAN	CYAN		
2	MAGENTA	MAGENTA		
3	YELLOW	YELLOW		
4	UNIFORM FIELD LENS	UNIFORM FIELD LENS		
5	COLOUR WHEEL	COLOUR WHEEL		
6	STOP / STROBE	STOP / STROBE		
7	DIMMER	DIMMER		
8	DIMMER FINE	DIMMER FINE		
9	IRIS	IRIS		
10	STATIC GOBO CHANGE	STATIC GOBO CHANGE		
11	ROTATING GOBO CHANGE	ROTATING GOBO CHANGE		
12	GOBO ROTATION	GOBO ROTATION		
13	GOBO FINE	GOBO FINE		
14	PRISM INSERTION	PRISM INSERTION		
15	PRISM ROTATION	PRISM ROTATION		
16	FROST	FROST		
17	FOCUS	FOCUS		
18	ZOOM	ZOOM		
19	PAN	PAN		
20	PAN FINE	PAN FINE		
21	TILT	TILT		
22	TILT FINE	TILT FINE		
23	FUNCTION	FUNCTION		
24	RESET	RESET		
25	LAMP CONTROL (with Option "Lamp Dmx" ON)	LAMP CONTROL (with Option "Lamp Dmx" ON)		
26		PAN - TILT TIME		
27		COLOUR TIME		
28		BEAM TIME		
29		GOBO TIME		

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

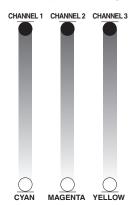
Operation with option color mixing: RGB



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%.

#### • UNIFORM FIELD LENS - channel 4

BIT	EFFECT
255 128 127	LENS INSERTED
0	

#### • COLOUR WHEEL - channel 5



BIT	EFFECT
255	FAST ROTATION (160 rpm)
128 127 120 112 105 97 90 82 75 67 60 52 45 37 30 22 15 8	SLOW ROTATION (0.2 rpm) BLUE + WHITE BLUE BLUE ORANGE + BLUE ORANGE AQUAMARINE + ORANGE AQUAMARINE GREEN + AQUAMARINE GREEN + AQUAMARINE GREEN + GREEN CTO 3200 CTO 3200 TO 3200 HALF MINUS GREEN + CTO 2500 WHITE + RED WHITE + RED

#### • STOPPER / STROBE - channel 6



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 - 107 103	OPEN FAST STROBE (12 flash/sec)
103	PAST STRUCE (12 liash/sec)
4	SLOW STROBE (1 flash/sec)
0 - 3	CLOSED

#### • DIMMER - channel 7



BIT	EFFECT
255	
0	

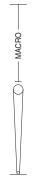
The lamp is linearly dimmed from full power to half power electronicaly and mechanically from half power to off.

#### • DIMMER FINE - channel 8



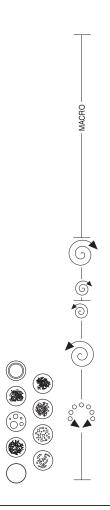
BIT	EFFECT
255	LITEO
0	

#### • IRIS - channel 9



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

#### • STATIC GOBO CHANGE - channel 10



BIT	EFFECT
255	GOBO 7 SHAKE, FAST SPEED
240 239	GOBO 7 SHAKE, SLOW SPEED GOBO 6 SHAKE, FAST SPEED
224 223	GOBO 6 SHAKE, SLOW SPEED GOBO 5 SHAKE, FAST SPEED
208 207	GOBO 5 SHAKE, SLOW SPEED GOBO 4 SHAKE, FAST SPEED
192 191	GOBO 4 SHAKE, SLOW SPEED GOBO 3 SHAKE, FAST SPEED
176 175	GOBO 3 SHAKE, SLOW SPEED GOBO 2 SHAKE, FAST SPEED
160 159	GOBO 2 SHAKE, SLOW SPEED FAST ROTATION (100 rpm)
118 114-117 113	SLOW ROTATION (5 rpm) STOP 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 CHANGE - channel 11



BIT	EFFECT	
255	GOBO 7 SHAKE, FAST SPEED	
238 237	GOBO 7 SHAKE, SLOW SPEED GOBO 6 SHAKE, FAST SPEED	
220 219	GOBO 6 SHAKE, SLOW SPEED GOBO 5 SHAKE, FAST SPEED	
202 201	GOBO 5 SHAKE, SLOW SPEED GOBO 4 SHAKE, FAST SPEED	
184 183	GOBO 4 SHAKE, SLOW SPEED GOBO 3 SHAKE, FAST SPEED	
166 165	GOBO 3 SHAKE, SLOW SPEED GOBO 2 SHAKE, FAST SPEED	
148 147	GOBO 2 SHAKE, SLOW SPEED GOBO 1 SHAKE, FAST SPEED	
130	GOBO 1 SHAKE, SLOW SPEED	
114-129	GOBO 7	
98-113	GOBO 6	
82-97	GOBO 5	
65-81	GOBO 4	
49-64	GOBO 3	
33-48	GOBO 2	
17-32	GOBO 1	
0-16	WHITE	

#### • GOBO ROTATION - channel 12









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

#### • GOBO FINE - channel 13









BIT
255
127
0
U

#### • PRISM INSERTION - channel 14

BIT	EFFECT
255	PRISM INSERTED
128 127	PRISM EXCLUDED
0	

#### • PRISM ROTATION - channel 15









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

#### • FROST - channel 16

BIT	EFFECT
255	FROST INSERTED
128 127	FROST EXCLUDED
0	11.13.1

#### • FOCUS - channel 17



BIT	EFFECT
255	NEAR
0	DISTANT

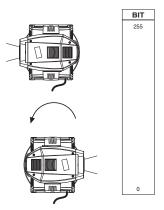
#### • ZOOM - channel 18



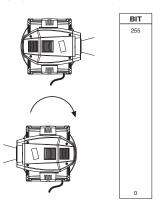
BIT	EFFECT
255	NARROW BEAM
0	WIDE BEAM

#### • PAN - channel 19

Operation with option InvertPan  $\,\,\hat{\circ}\,$  Off (Tilt conventionally represented at 14% and option Invert Tilt  $\,\,\hat{\circ}\,$  Off)

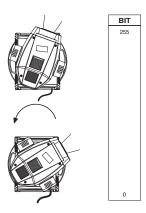


Operation with option InvertPan  $\,\hat{\circ}\,$  On (Tilt conventionally represented at 14% and option Invert Tilt  $\,\hat{\circ}\,$  Off)

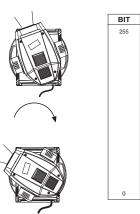


#### • PAN FINE - channel 20

Operation with option InvertPan  $\,\,\hat{\circ}\,$  Off (Tilt conventionally represented at 14% and option Invert Tilt  $\,\,\hat{\circ}\,$  Off)

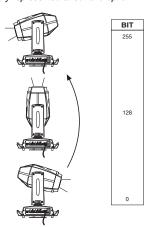


Operation with option InvertPan  $\,\hat{\circ}\,$  On (Tilt conventionally represented at 14% and option Invert Tilt  $\,\,\hat{\circ}\,$  Off)

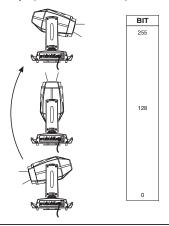


#### • TILT - channel 21

Operation with option Invert Tilt  $\,\hat{\circ}\,$  Off (Pan conventionally represented at 0% and option Invert Pan  $\,\hat{\circ}\,$  Off)

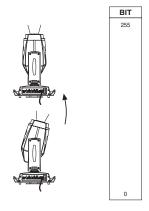


Operation with option Invert Tilt  $\, \hat{\circ} \,$  On (Pan conventionally represented at 0% and option Invert Pan  $\, \hat{\circ} \,$  Off)

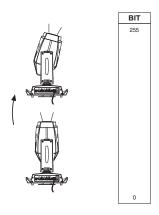


#### • TILT FINE - channel 22

Operation with option Invert Tilt  $\,\,\hat{\circ}\,$  Off (Pan conventionally represented at 0% and option Invert Pan  $\,\,\hat{\circ}\,$  Off)



Operation with option Invert Tilt  $\, \hat{\circ} \,$  On (Pan conventionally represented at 0% and option Invert Pan  $\, \hat{\circ} \,$  Off)



#### • FUNCTION - channel: 23

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

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

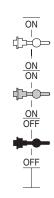
#### • RESET - channel: 24

BIT	EFFECT
243 - 255	COMPLETE RESET
	Complete reset is activated passing throug the unused
	range and staying 5 seconds in complete reset levels.
240 - 242	Rotating Gobo OFFSET 13
237 - 239	Rotating Gobo OFFSET 12
234 - 236	Rotating Gobo OFFSET 11
231 - 233	Rotating Gobo OFFSET 10
228 - 230	Rotating Gobo OFFSET 9
225 - 227	Rotating Gobo OFFSET 8
222 - 224	Rotating Gobo OFFSET 7
219 - 221	Rotating Gobo OFFSET 6
216 - 218	Rotating Gobo OFFSET 5
213 - 215	Rotating Gobo OFFSET 4
210 - 212	Rotating Gobo OFFSET 3
207 - 209	Rotating Gobo OFFSET 2
204 - 206	Rotating Gobo OFFSET 1
128 - 203	COMPLETE RESET
	Complete reset is activated passing throug the unused range and staying 5 seconds in complete reset levels.
77 - 127	PAN/TILT RESET
	Pan/Tilt reset is activated passing throug the unused range and staying 5 seconds in Pan/Tilt reset levels.
26 - 76	EFFECTS RESET
	Effects reset is activated passing throug the unused range and staying 5 seconds in Effects reset levels.
0 - 25	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: 25

IMPORTANT: Alpha Spot HPE 700 is not provided with hot restrike igniter



EFFECT	
LAMP ON (FULL POWER)	
Lamp ignition after 5 s in full power levels.	
Immediate transition from half to full power.	
LAMP ON (FULL POWER)	
LAMP ON (HALF POWER)	
Immediate transition from full to half power.	
Lamp ignition not allowed in half power.	
LAMP ON (HALF POWER) LAMP OFF	
Lamp switch off passing throug the unused	
range and staying 5 s in Lamp OFF levels.	
LAMP OFF	
UNUSED RANGE	

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

# **TIMING CHANNELS**

	Timing Channel	Channel function
26	Pan - Tilt time	Pan - Tilt - (Pan fine - Tilt fine)
27	Colour time	CMY - Colour wheel
28	Beam time	Dimmer - Frost - Iris - Focus - Zoom - Prism
29	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 2.2		
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	11		
55	11		
56	12		
57	14		
_58_	13		
59	10		
_60_			
_61_	14		
_62_			
_63_	15		
64			
65			
66	16		
67			
_68_	17		
69			
70	, -		
71	18		
72			
73	19		
74			
75			
76	20		
77			
78	0.1		
79	21		
80			
81	22		
82			
83			
84	23		

BIT	Seconds
86	24
87	
_88_	
89	25
90	
91	26
92	
_93_	
94	27
95	
_96_	28
97	
_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	
125	39
126	
127	40
128	70

BIT	Seconds		
129			
130	41		
131			
132	40		
133	42		
134			
135	43		
136			
137	4.4		
138	44		
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