# PHA BEAM 700

C61360

# INSTRUCTION MANUAL

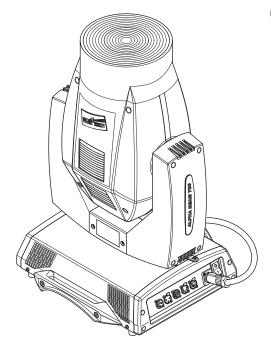


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Congratulations on choosing a Clay Paky product! We thank you for your custom.

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:

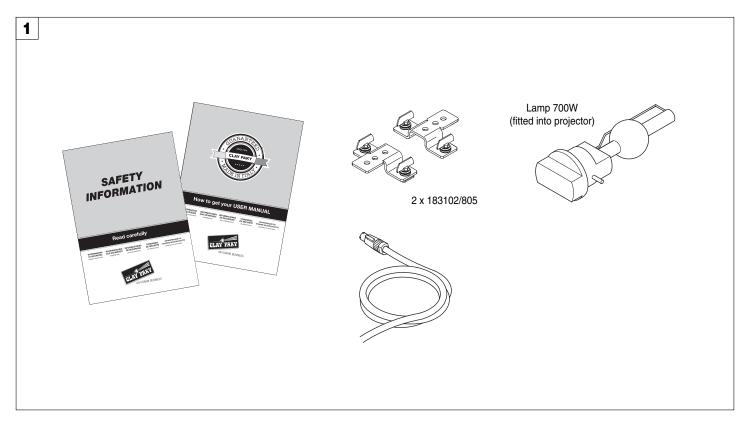
### http://www.claypaky.it/en/download

Наименование: [FIS00U – Safety Information Alpha 700 series]

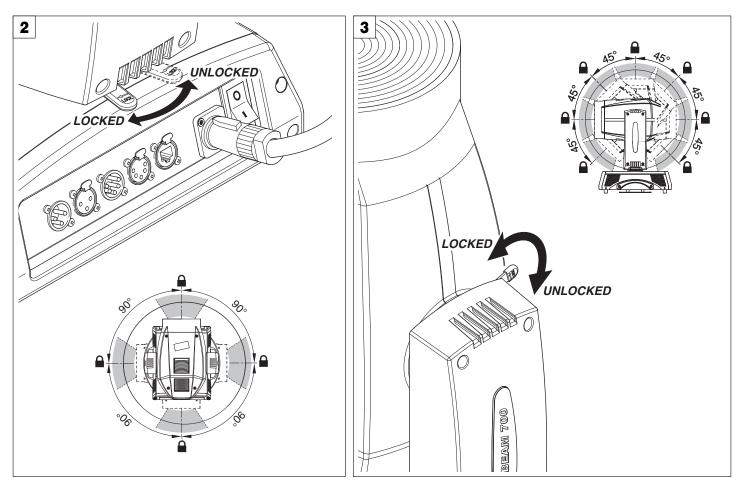
2

ALPHA BEAM 700

# **UNPACKING AND PREPARATION**



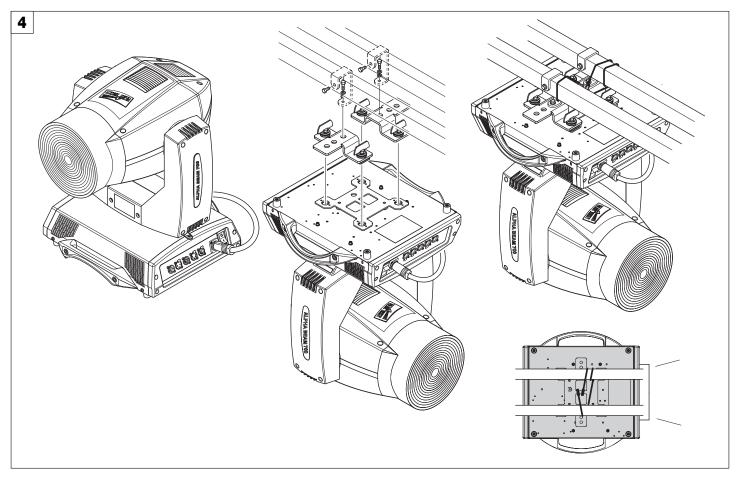
Packing contents - Fig. 1



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

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

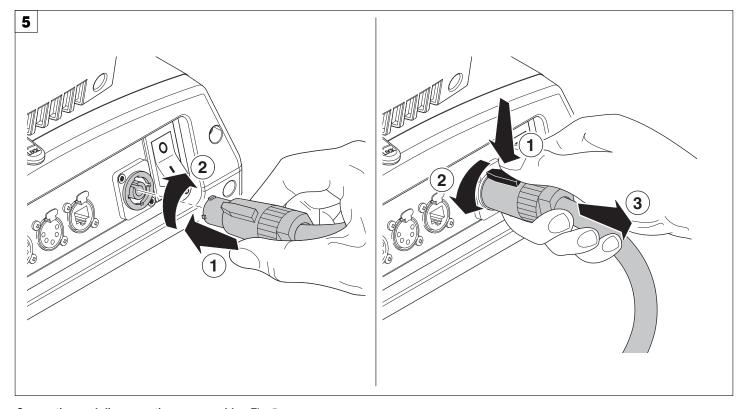
# **INSTALLATION AND START-UP**



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.

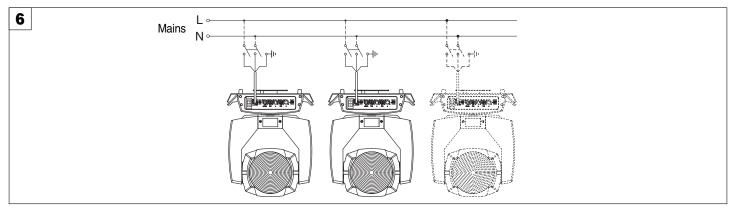


4

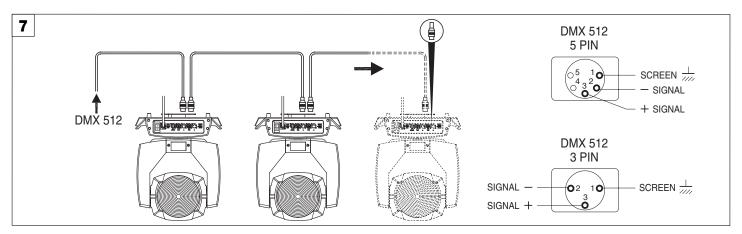
Connecting and disconnecting power cable - Fig.  $5\,$ 

ALPHA BEAM 700

### **CONTROL PANEL**



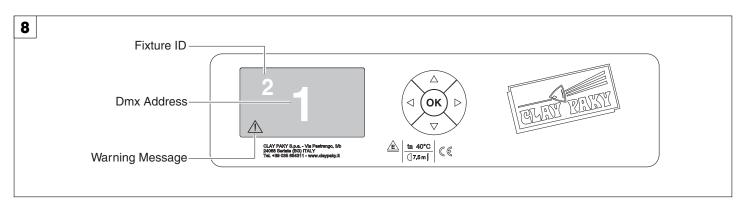
# Connecting to the mains supply - Fig. 6



### 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 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:

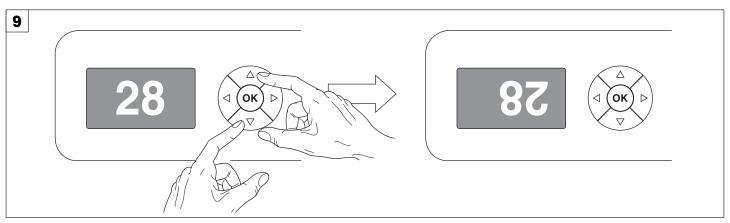


Model Alpha BEAM 700 Firmware Version X.X.X Date - Hour

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 (a) 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).

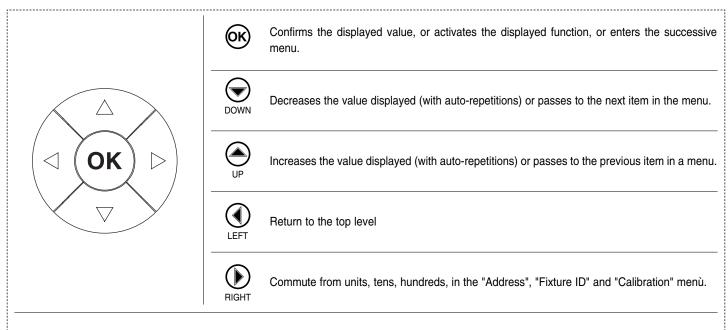
The address can also be set with the projector switched off.

### 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

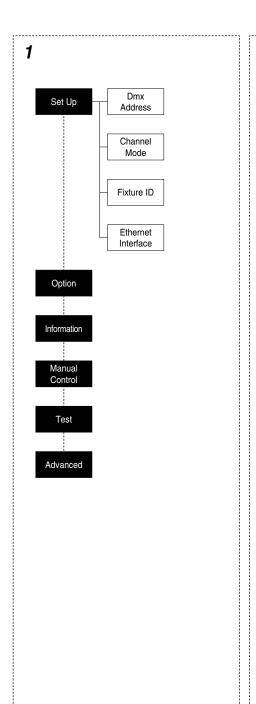


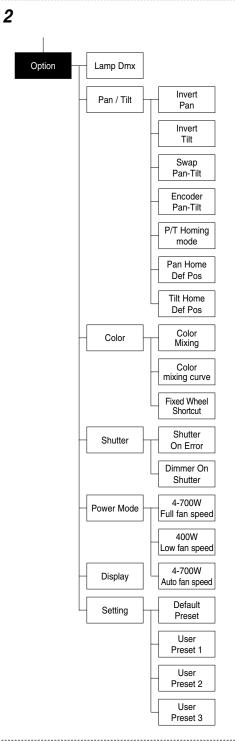
### **USING THE MENU:**

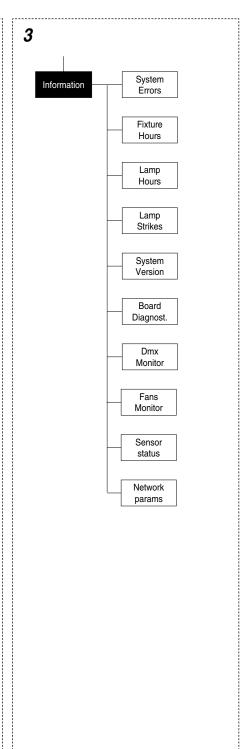
- 1) Press on once "Main Menu" appears on the display.
- 2) Use the UP  $\bigcirc$  and DOWN  $\bigcirc$  keys to select the menu to be used:
  - Setup (Setup Menu): To set the setting options.
  - Option (Option Menu): To set the operating options
  - Informations (Informations Menu): To read the counters,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

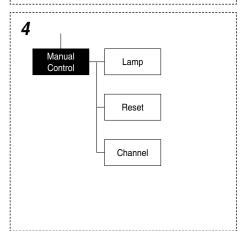
# Setting addresses and options with the projector disconnected

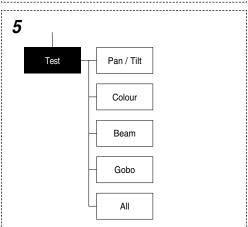
The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply. All that is needed is to press (a) to momentarily activate the display and thus access the settings. Once the required operations have been carried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

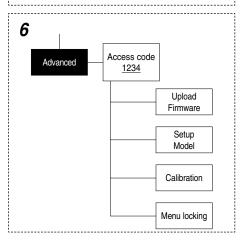




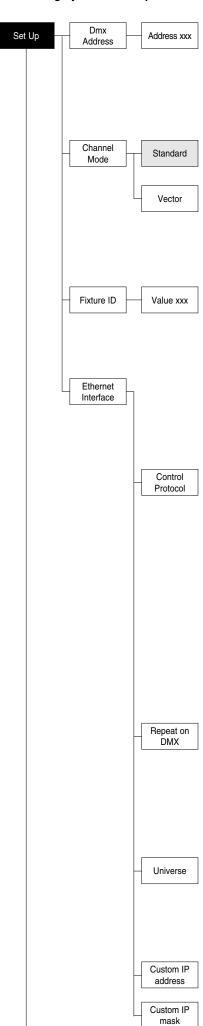








### NOTE: On grey the default options



### **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 (x) to confirm the selection or LEFT (1) to keep current settings.

### **CHANNEL MODE**

Allows you to select a channel arrangement from the two available.

- 1) Press ( the current settings appear on the display (Standard or Vector)
- Use the UP 
   and DOWN 
   keys to select one of the following settings:
  - Standard
  - Vector
- 3) Press ( to confirm the selection or LEFT ( to keep current settings.

### **FIXTURE ID**

Allows you to select the FIXTURE ID.

- 1) Press 🕟 the current Fixture ID appear on the display.
- 2) Use the UP 

  , DOWN 
  , RIGHT 
  keys to plan the Fixture ID.
- 3) Press (ix) to confirm the selection or LEFT (1) to keep current settings.

### **ETHERNET INTERFACE**

It lets you set the Ethernet settings to be attributed to the projector.

- 1) Premere (%).
- 2) Use the UP and DOWN keys to select the "Ethernet Interface" options to set:

### **Control Protocol**

It lets you select the "Control Protocol" Art-net to assign according to the control unit used:

- 1) Press ( the current setting appears on the display.
- 2) Use the UP 
  and DOWN 
  keys to select one of the following settings:
  - Disabled
  - Art-net on IP 2
  - Art-net on IP 10
  - Art-net Custom IP
- 3) Press (Note to confirm the selection or LEFT (1) 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  $\bigcirc$  and DOWN  $\bigcirc$  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.

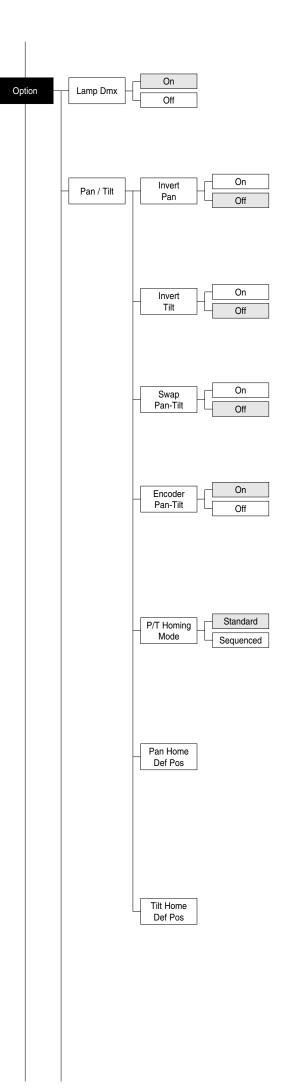
- 1) Press 🕟 the current Universe address appears on the display.
- 2) Use the UP (A), DOWN (D), RIGHT (D) keys to set the Universe address.
- 3) Press (ix) to confirm the selection or LEFT (1) to keep the current setting.

### **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 ( ) 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).
- 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 (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 ( 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 (x) to confirm the selection or LEFT (1) 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).
- 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 (0k), the current setting appears on the display.
- 2) Use the UP (and DOWN) we keys to select one of the following settings:

Standard: Pan & Tilt are simultaneously reset.

Sequenced: Tilt is reset first followed by Pan.

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

0 degree

90 degrees

180 degrees

270 degrees (default)

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

### **Tilt Home Def Pos**

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

- 1) Press (ix), 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%

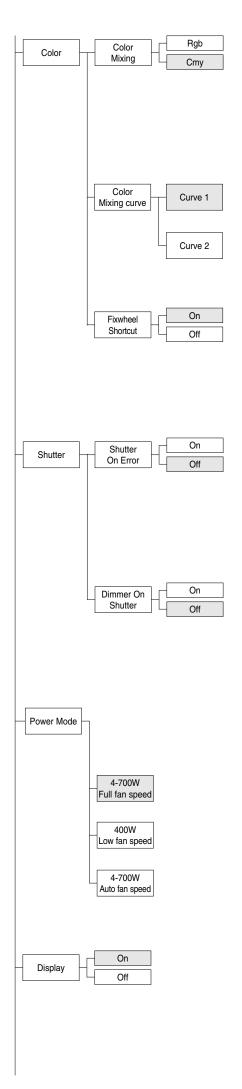
50% (default)

75%

87.5%

100%

3) Press (3) 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.

Curve 2

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

### **SHUTTER**

### Shutter on error

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

- 1) Press 🕟 the current settings appear on the display (On or Off).
- 2) Use the UP 
  and DOWN 
  keys to enable (On) or disable (Off) automatic stop/strobe closing in the event of Pan/Tilt position error.
- Press (N) 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 (Ox) the current settings appear on the display (On or Off).
- 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**

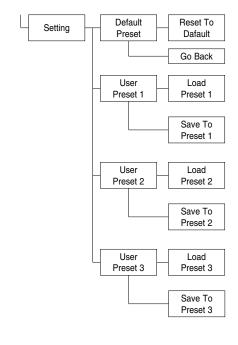
Allows you to select a Power Mode from the three available.

- 1) Press (or) 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.
- Press (N) to confirm the selection or LEFT (1) to keep current setting.

### **DISPLAY**

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

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



# System Errors Fixture Hours Total XXX Partial XXX Reset...

### SETTING

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

- 1) Press 🕟 "Default preset" appears on the display.
- 2) Use the UP 
  and DOWN 
  keys to select one of the following configurations:
  - Default preset (\*)
  - User preset 1
  - User preset 2
  - User Preset 3
- 3) Press (ox) "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  $\boldsymbol{X}$  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 \( \bar{\cup} \) key and the LEFT \( \bar{\cup} \) 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 (x), a confirmation message (Are you sure?) appears on the display.

2) Select YES to confirm the selction or NO to keep current setting.

**OPTION DEFAULT** Lamp DMX On Invert Pan Off Invert Tilt Off Swap Pan-Tilt Off **Encoder Pan-Tilt** On Color mixing **CMY** Color mixing curve Curve 1 Fixed Wheel Shortcut On Off Shutter on error 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.

- Pressing you are allowed to reset the SYSTEM ERRORS list.
   A confirmation message (Are you sure you want to clear error list ?) appears on the display.
- 2) Select YES to reset the list or NO to go back.

# **FIXTURE HOURS**

Used for displaying projector operating hours (total and partial).

1) Press 🕟 - Hours total and partial appears on the display.

# **Total counter**

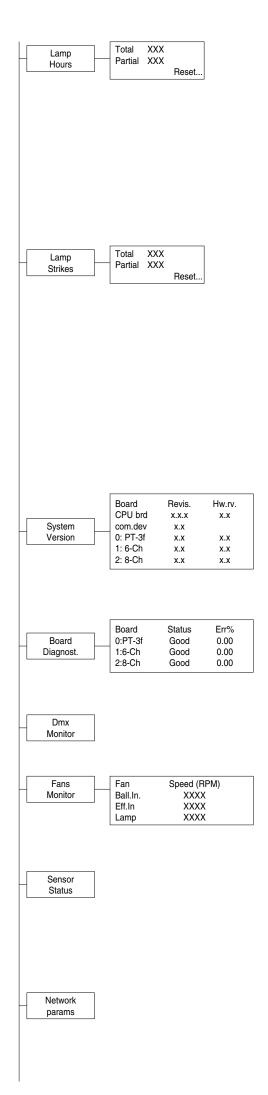
11

Counts the number of projector working life hours (from manufacture to date).

# Partial counter

Counts the number of partial projector working life hours since the last reset to date.

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



### **LAMP HOURS**

Used for displaying the lamp working hours (total and partial).

1) Press 🕟 - Hours total and partial appears on the display.

### **Total counter**

Counts the number of projector working hours with the lamp on (from manufacture to date).

### **Partial counter**

Counts the number of lamp working hours since the last reset to date.

- 2) Press (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

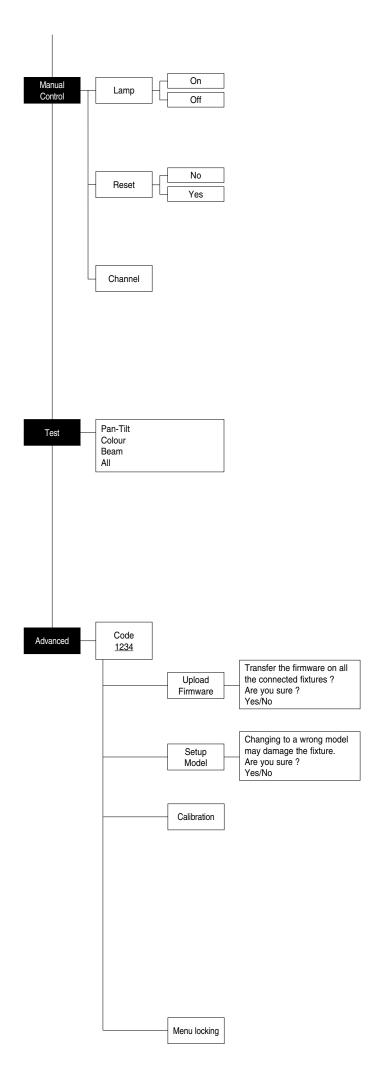
### **NETWORK PARAMS**

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



### 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 (a) and DOWN (b) keys to select the required channel:
- 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 on 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 (OK) - "Menu advanced" appears on the display

### **UP LOAD FIRMWARE**

Allows you to transfer the firmware from 1 fixture to all the connected fixtures.

- Press () , a confirmation message appears on the display.
- 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.
- 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.
- 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**

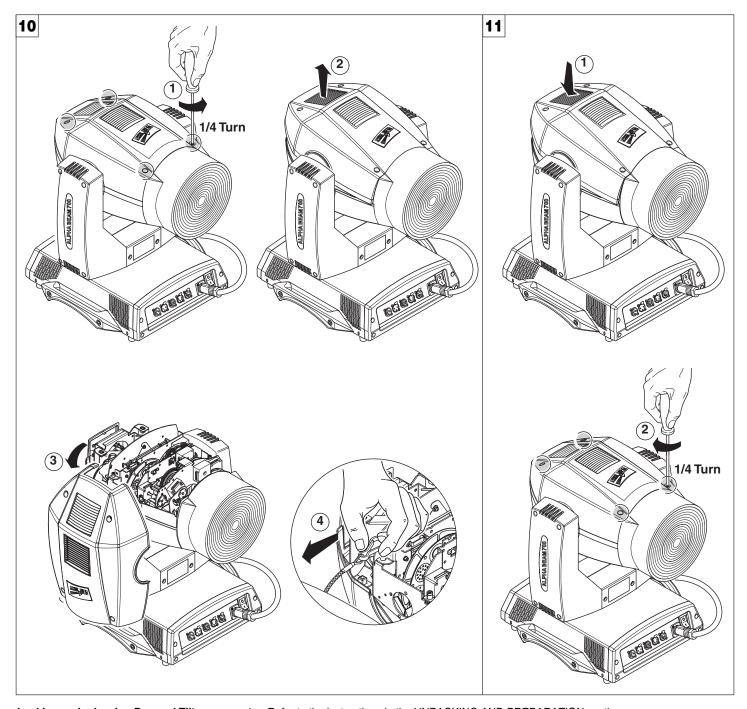
Allows you to restore default values of all channels (128).

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

### **MENU LOCKING**

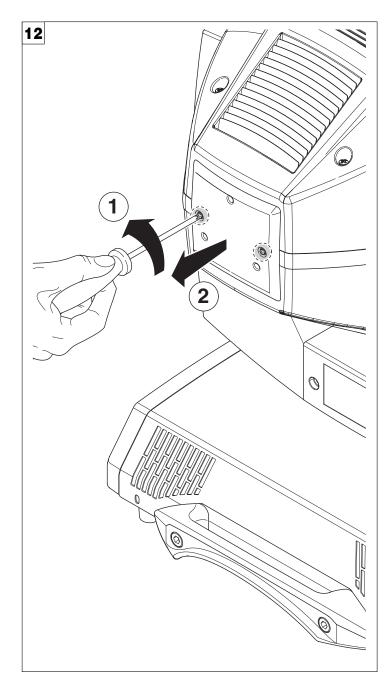
It allows you to assign a password to lock the access to the user menu, so that only users know the password can change settings. The password is 4-digit number.

# **MAINTENANCE**

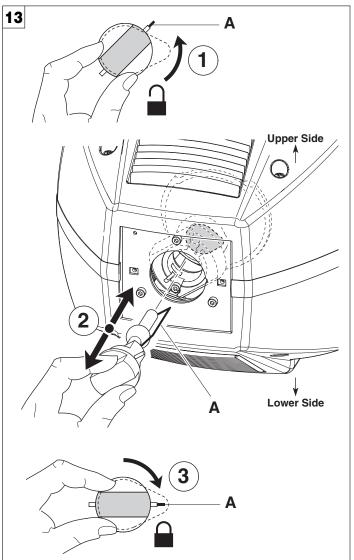


**Locking and releasing Pan and Tilt movements -** Refer to the instructions in the UNPACKING AND PREPARATION section. **Opening the head covers -** Fig. 10.

Closing the head covers - Fig. 11.



Opening and closing lamp compartment - Fig. 12



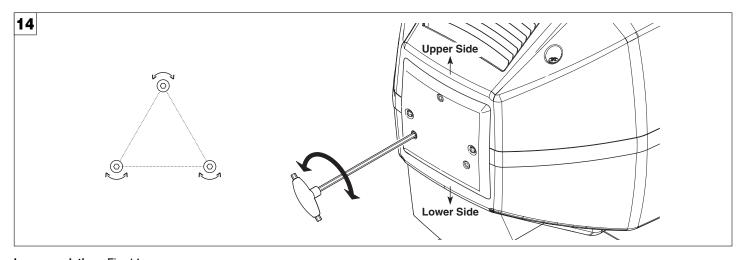
Lamp change - Fig 13

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.

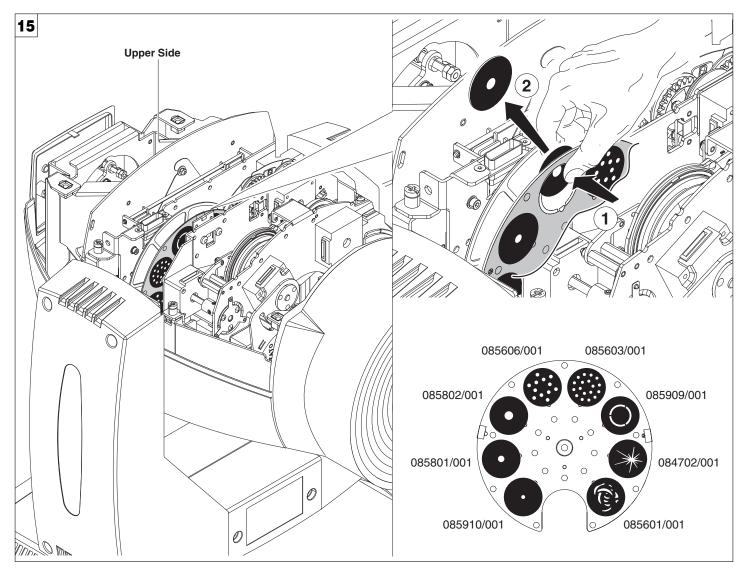
IMPORTANT: Make sure the lamp is inserted with the external contact (A) facing the elliptical reflector's slot.

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

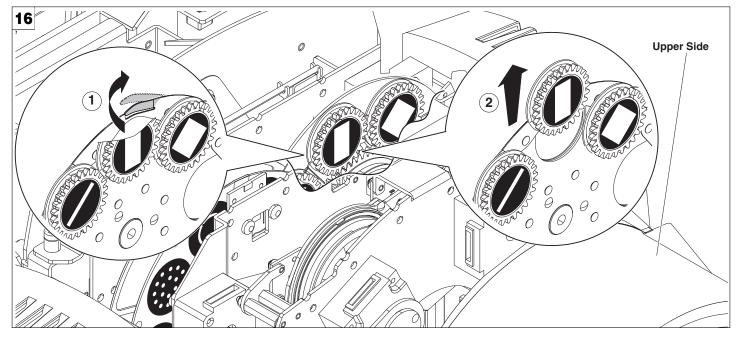


Lamp regulation - Fig. 14

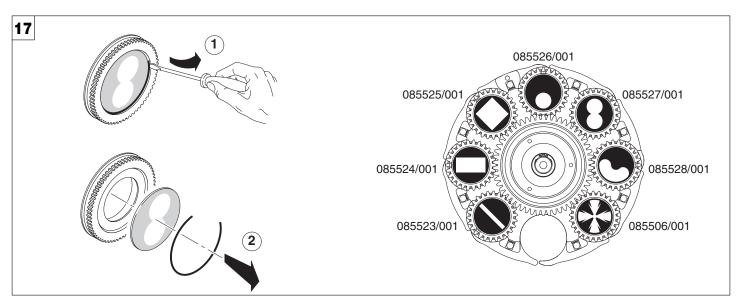
To centre the lamp, turn the three adjusting screws as shown in the figure.



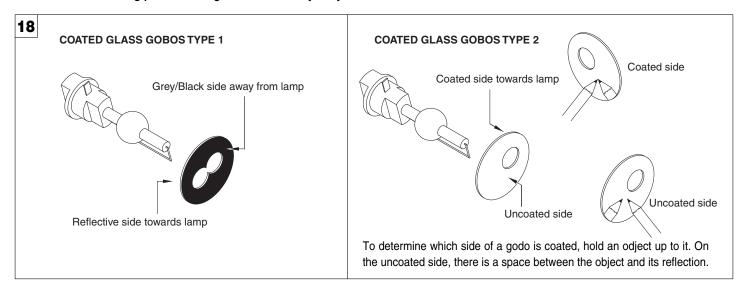
Replacing fixed gobos (ø 31.5 mm – max 25 mm image – thickness max 1.1 mm) - Fig.~15 WARNING: Before using personalised gobos contact Clay Paky.



Bearing group replacement - Fig. 16

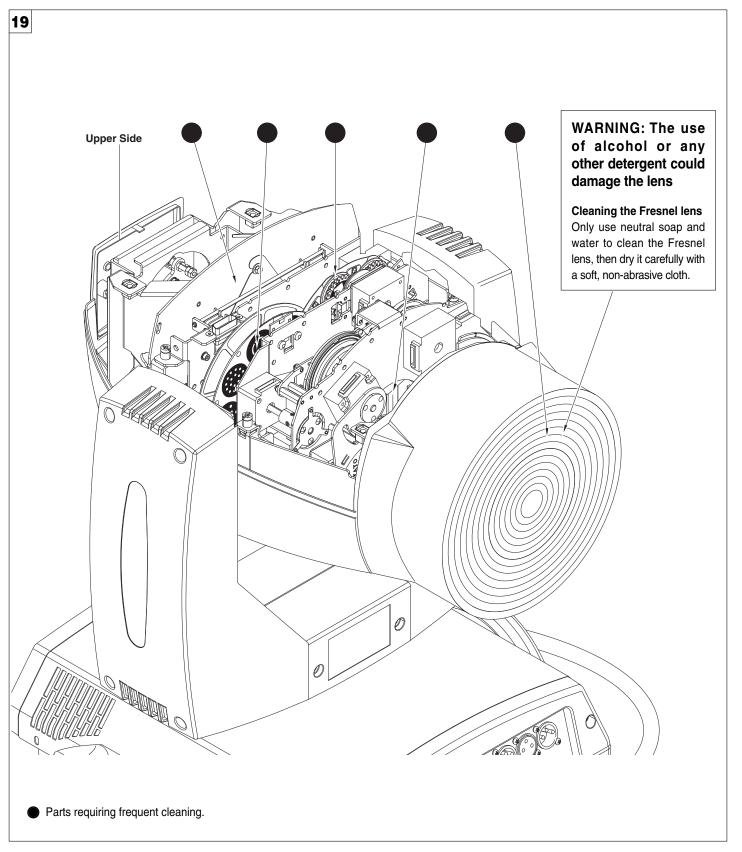


Replacing rotating gobos (ø 25.7 mm - max 23 mm image – thickness max 1.1 mm) - Fig. 17 IMPORTANT: Use only glass gobos on the rotating gobos wheels. WARNING: Before using personalised gobos contact Clay Paky.



Gobo orientation - Fig. 18

The pictures shown the correct gobos orientation.

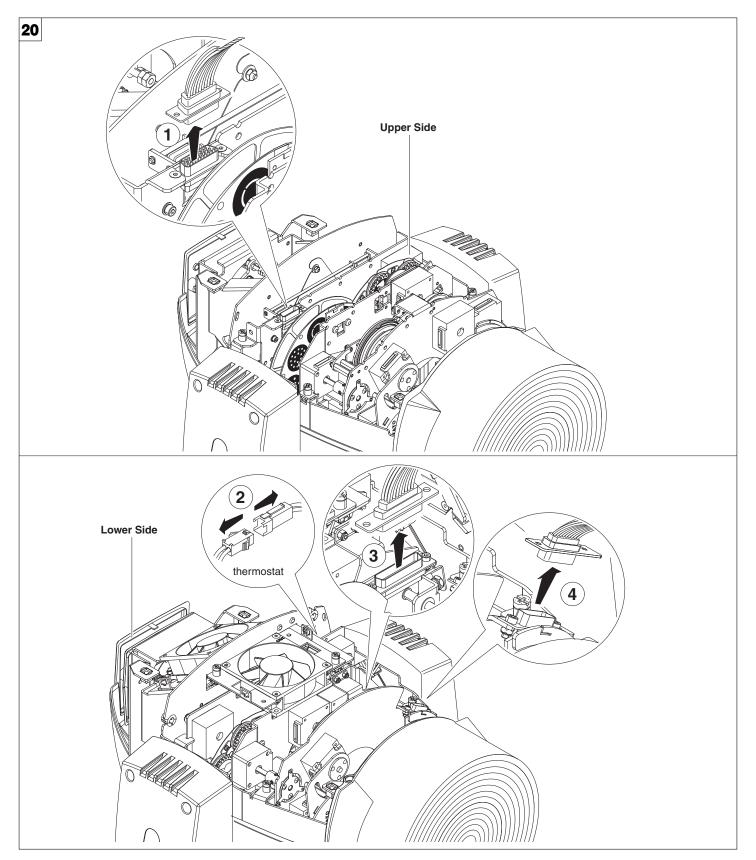


# Periodical cleaning - Fig. 19

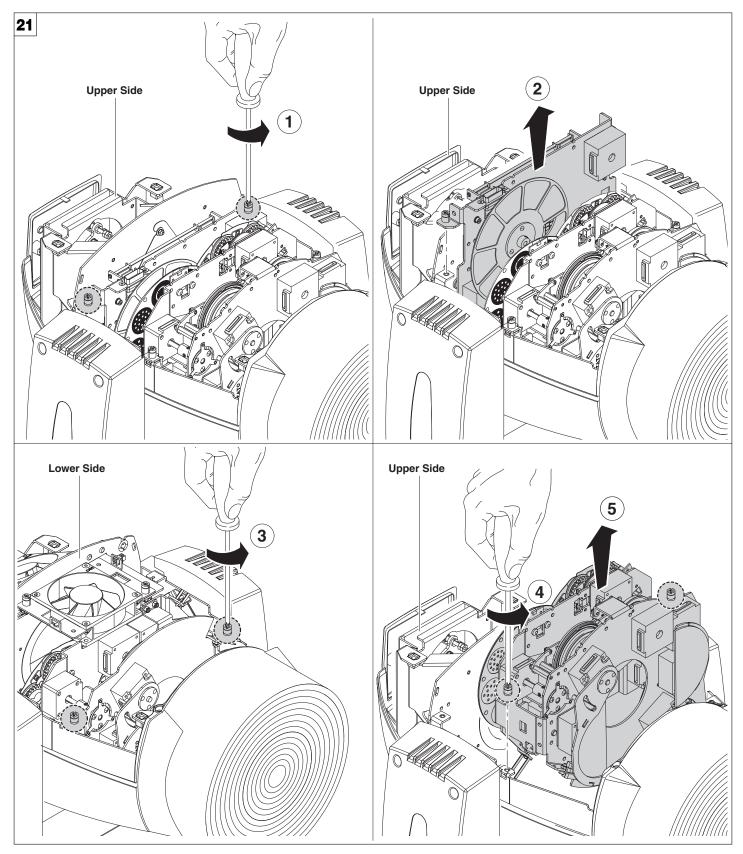
To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors, such as the amount of the effects and the quality of the 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 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.



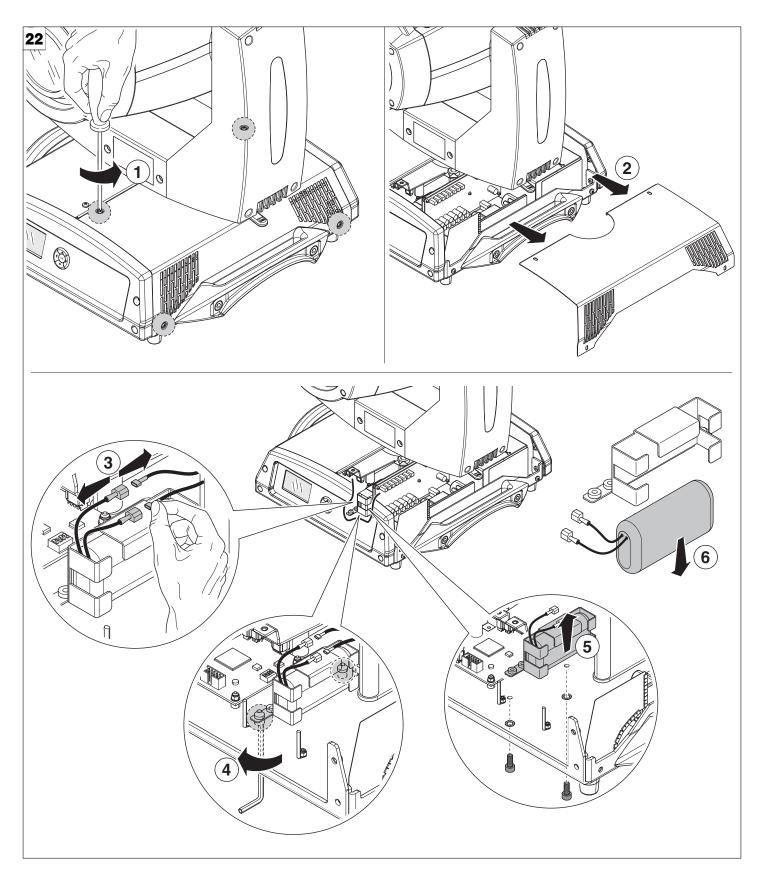
Extraction of the effect modules: Preliminary operations - Fig. 20



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 and 21 in reverse order.



# Battery removal - Fig. 22



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:

520

(20.47")

435

(17.13")

220

(8.66")

635

(25.00")

385

(15.16")

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

505

(19.88")

390

(15.35")

405

(15.94")

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

• Elliptic reflector with high luminous efficiency

### Channels

Max 26 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 = 3.20 (Normal) / 2.90 (Fast)
- TILT = 1.89 (normal) / 1.75 (Fast)
- · Resolution:
- PAN = 2.11°
- PAN FINE = 0.008°
- $TILT = 0.98^{\circ}$
- 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.

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

# Working position

Working in any position.

### Weight

• 20.80 Kg (45lbs 12ozs).

# **CAUSE AND SOLUTION OF PROBLEMS**

T	THE PROJECTOR WILL NOT SWITCH ON				
	ELECTRONICS NON-OPERATIONAL				
		DE	FECTIVE PROJECTION		PROBLEMS
			REDUCED LUMINOSITY		
			POSSIBLE CAUSES	CHECKS AND R	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.	Call an authorised technician.	
	•	•	Lenses or reflector broken	Call an authorised technician.	
	•	•	Dust or grease deposited.	Clean (see instructions).	

# **CHANNEL FUNCTION**

# **ALPHA BEAM 700**

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

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

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

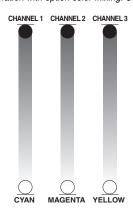
Operation with option color mixing: RGB



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

Operation with option color mixing: CMY



BIT	EFFECT
255	COLOUR INSERTED
0	COLOUR EXCLUDED

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

# • COLOUR WHEEL - channel 4



BIT	EFFECT
255	FAST ROTATION (160 rpm)
128 127 120 112 105 97 90 82 75 60 52 45 37 30 22 15 8	SLOW ROTATION (0.2 rpm) BLUE + WHITE BLUE ORANGE + BLUE ORANGE AQUAMARINE + ORANGE AQUAMARINE GREEN + AQUAMARINE GREEN + CAUGAMARINE GREEN + COTO 3500 CTO 3500 + CTO 2500 CTO 300 CTB + CTO 3200 CTB + CTO 3200 CTB + CTO 3

# • STOP / STROBE - channel 5



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

24

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

# • DIMMER - channel 6



Г	BIT	EFFECT
	255	EFFECT
	0	

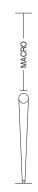
The lamp is linearly dimmed from full power to half power electronicaly and mechanically from half power to off.

### • DIMMER FINE - channel 7



BIT	EFFECT
255	
0	

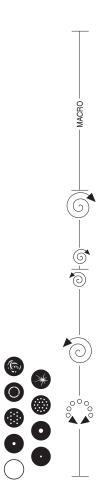
### • IRIS - channel 8



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

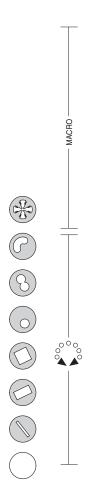
ALPHA BEAM 700

# • STATIC GOBO CHANGE - channel 9



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 10



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
130 114-129	GOBO 1 SHAKE, SLOW SPEED 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 11







255	FAST ROTATION (180 rpm)
193	SLOW ROTATION (2.2 rph)
191 - 192	STOP
190	SLOW ROTATION (2.2 rph)
128	FAST ROTATION (180 rpm)
127	540° POSITION
105	450° POSITION
84	360° POSITION
63	270° POSITION
42	180° POSITION
21	90° POSITION
0	0° POSITION

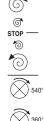
EFFECT

BIT

# • PRISM INSERTION - channel 12

BIT	EFFECT
255	PRISM INSERTED
128 127	PRISM EXCLUDED
0	

# • PRISM ROTATION - channel 13





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 14



BIT	EFFECT
255	FROST INSERTED
0	FROST EXCLUDED

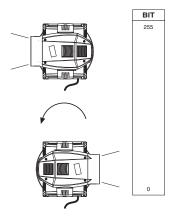
### • FOCUS - channel 15



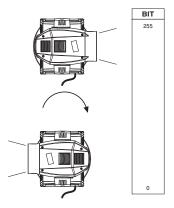
BIT	EFFECT
DII	EFFECT
255	DISTANT
0	NEAR

# • PAN - channel 16

Operation with option InvertPan \$\hat{0}\$ Off (Tilt conventionally represented at 35 bit and option Invert Tilt \$\hat{0}\$ Off)

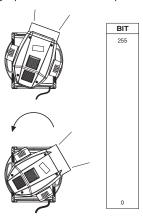


Operation with option InvertPan \$\hat{\circ}\$ On (Tilt conventionally represented at 35 bit and option Invert Tilt \$\hat{\circ}\$ Off)

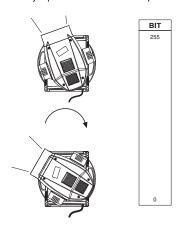


# • PAN FINE - channel 17

Operation with option InvertPan  $\,\,\hat{\circ}\,$  Off (Tilt conventionally represented at 35 bit and option Invert Tilt  $\,\,\hat{\circ}\,$  Off)

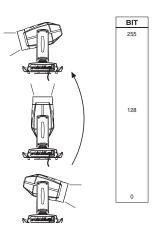


Operation with option InvertPan  $\,\,\hat{\circ}\,$  On (Tilt conventionally represented at 35 bit and option Invert Tilt  $\,\,\hat{\circ}\,$  Off)

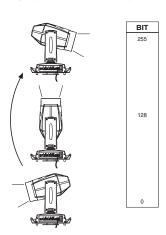


# • TILT - channel 18

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

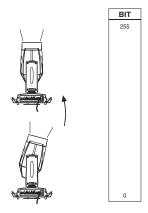


Operation with option Invert Tilt  $\,\,\hat{\circ}\,\,$  On (Pan conventionally represented at 0 bit and option Invert Pan  $\,\,\hat{\circ}\,\,$  Off)

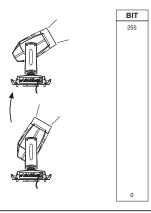


### • TILT FINE - channel 19

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



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



### • FUNCTION - channel: 20

BIT	EFFECT	
255 52	FREE	
51	LINEAR (DEFAULT) — DIMMER CURVE	
39	CONVENTIONAL FUNCTION	
26	NORMAL SPEED PAN-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.

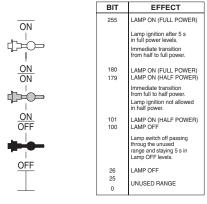
### • RESET - channel: 21

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: 22

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



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

# **TIMING CHANNELS**

	Timing Channel	Channel function	
23	Pan - Tilt time	Pan - Tilt - (Pan fine - Tilt fine)	
24	Colour time	CMY - Colour wheel	
25	Beam time	Dimmer - Frost - Iris - Prism insertion	
26	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
34	6.8
35	7
36	7.2
I	7.4
37	
38	7.6
39	7.8
40	8.2
41	
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	12
58	13
59	10
60	
61	14
62	
63	15
64	15
65	
_66	16
67	
68	17
69	17
70	
71	18
72	
73	19
74	18
_75_	
76	20
77	
78	
79	21
_80	
_81_	22
82	
_83	
0.4	00

84

85

23

BIT	Seconds
86	0.4
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	
105	31
106	
107	32
108	
109	
110	33
111	
112	34
113	0.
114	
115	35
116	
117	36
118	
119	
120	37
121	
122	38
123	50
124	
125	30
125	39
127	40
128	

BIT	Seconds
129	
130	41
131	
132	42
133	72
134	
135	43
136	
137	44
138	77
139	
140	45
141	
142	46
143	40
144	
145	47
146	
147	48
148	
149	
150	49
151	
152	
153	50
154	30
155	51
156	
157	
158	52
159	
160	53
161	-
162	
163	54
164	
165	55
166	
167	F0
168	56
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
	75
187	
188	80
189	
190	
191	85
192	
193	90
194	
195	
196	95
197	
198	100
199	100
200	
201	110
202	
203	
204	120
205	
206	
207	130
208	
209	140
210	
211	
212	150
213	
214	160
	100
215	

BIT	Seconds
216	170
217	170
218	
219	180
220	
221	190
222	
223	200
224	
225	
226	
227	210
228	
229	220
230	
231	230
232	
233	
234	240
235	
236	250
237	
238	
239	260
240	200
241	
242	270
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244	290
245	280
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247	290
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249	300
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251	
252	310
253	010
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255	Follow cue Data