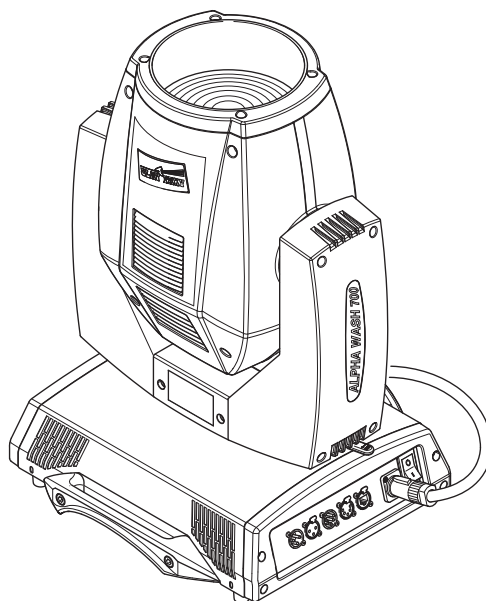




INSTRUCTION MANUAL



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21	Technical information
21	Cause and solution of problems
22	Channel functions

Congratulations on choosing a Clay Paky product!

We thank you for your custom.

Please note that this product, as all the others in the rich Clay Paky range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.

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

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

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

SAFETY INFORMATION

• Installation

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

• Minimum distance of illuminated objects

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

• Minimum distance from flammable materials

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

• Mounting surfaces

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

• Maximum ambient temperature

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

• IP20 protection rating

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

• Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing (**Class I** appliance according to standard EN 60598-1).

It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

• Connection to mains supply

Connection to the electricity mains must be carried out by a qualified electrical installer.
Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.

• Temperature of the external surface

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

• Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply.

After switching off, do not remove any parts of the fitting for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually nil. If it is necessary to replace the lamp, wait for another 20 minutes to avoid getting burnt.

The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly damaged, they have to be replaced with genuine spares.

• Lamp

The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus.

- Carefully read the "operating instructions" provided by the lamp manufacturer.
- Immediately replace the lamp if damaged or deformed by heat.

• Battery

This product contains a rechargeable lead-acid battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force. Instructions on how to remove the battery from the product are available on www.claypaky.it

700W 

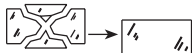


t_a 40°C

IP20



t_c 150°C

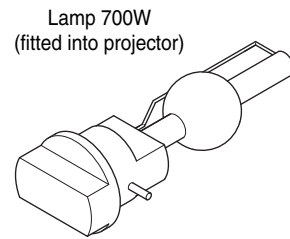
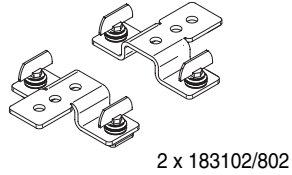
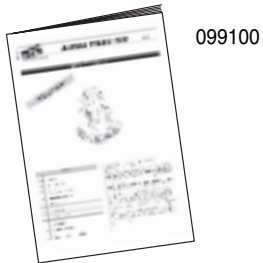


The products referred to in this manual conform to the European Community Directives to which they are subject:

- Low Voltage 2006/95/CE
- Electromagnetic Compatibility 2004/108/CE

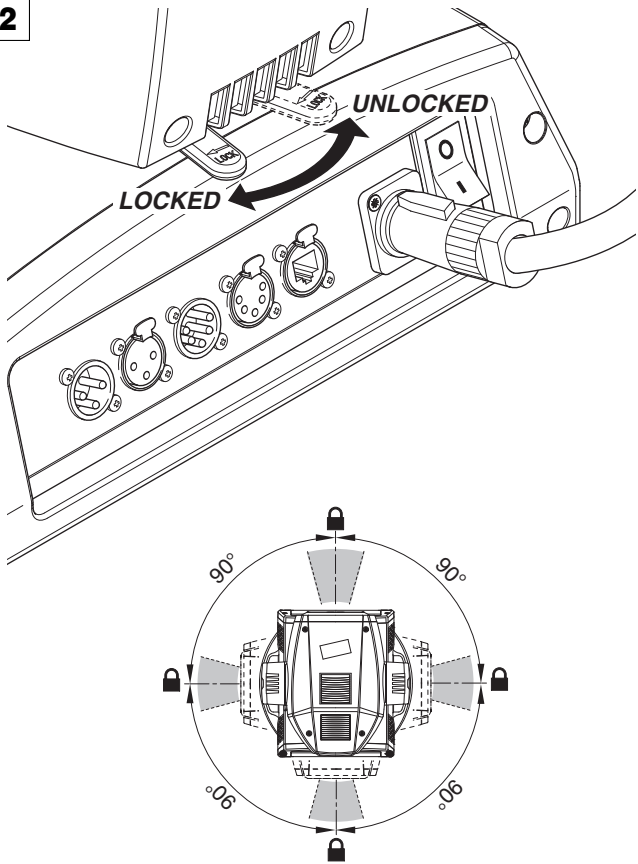
UNPACKING AND PREPARATION

1



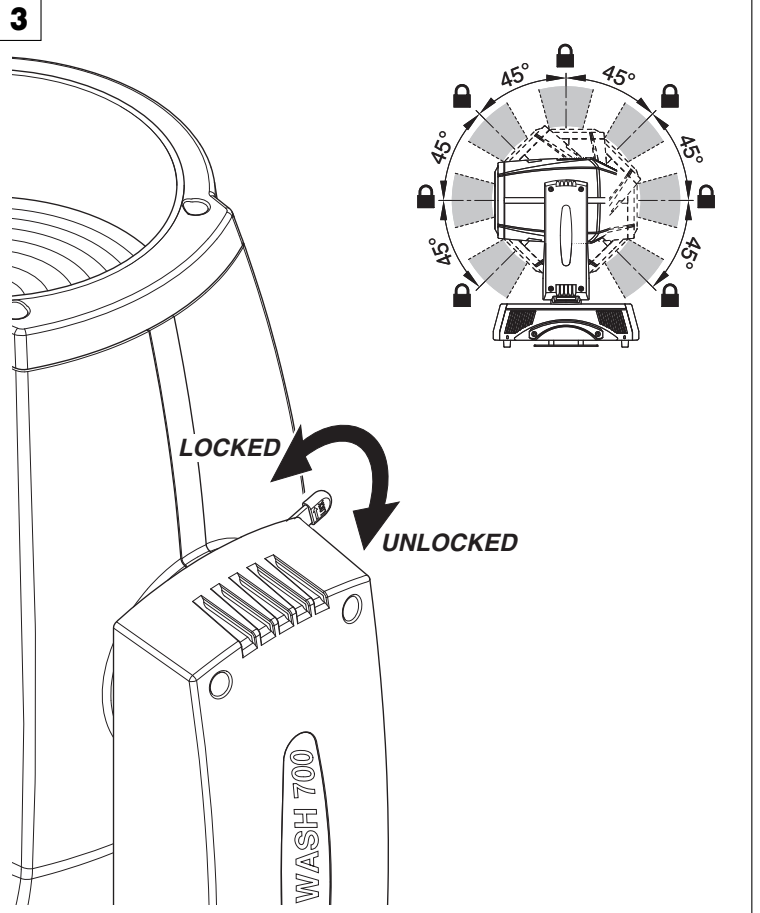
Packing contents - Fig. 1

2



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

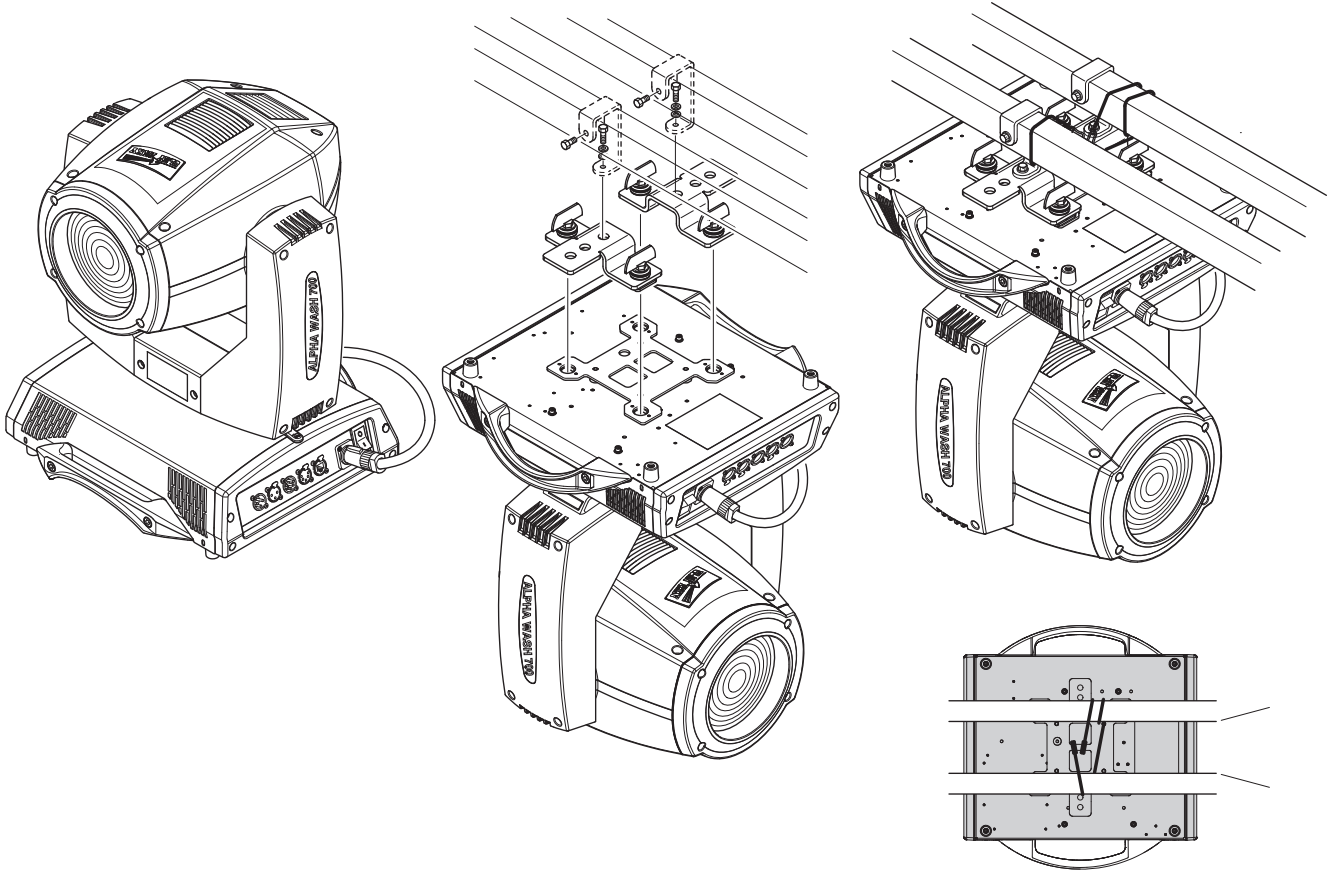
3



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

INSTALLATION AND START-UP

4

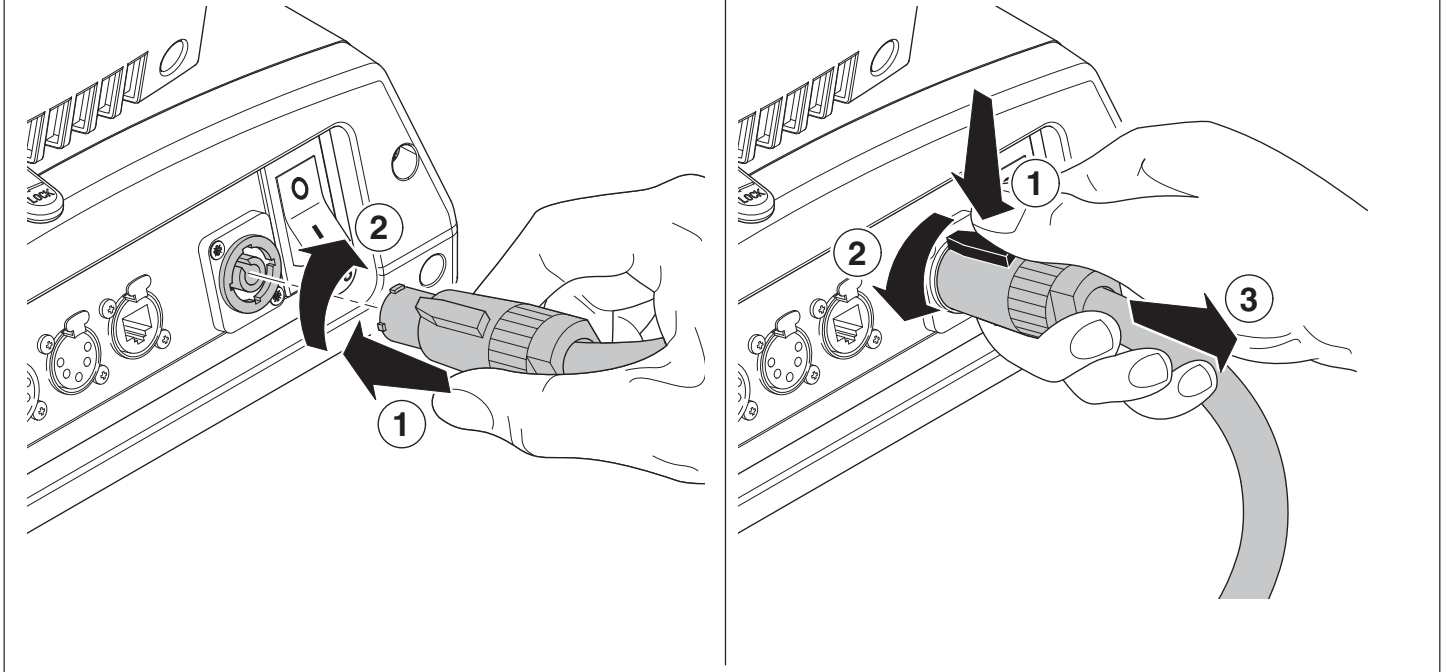


Installing the projector - Fig. 4

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

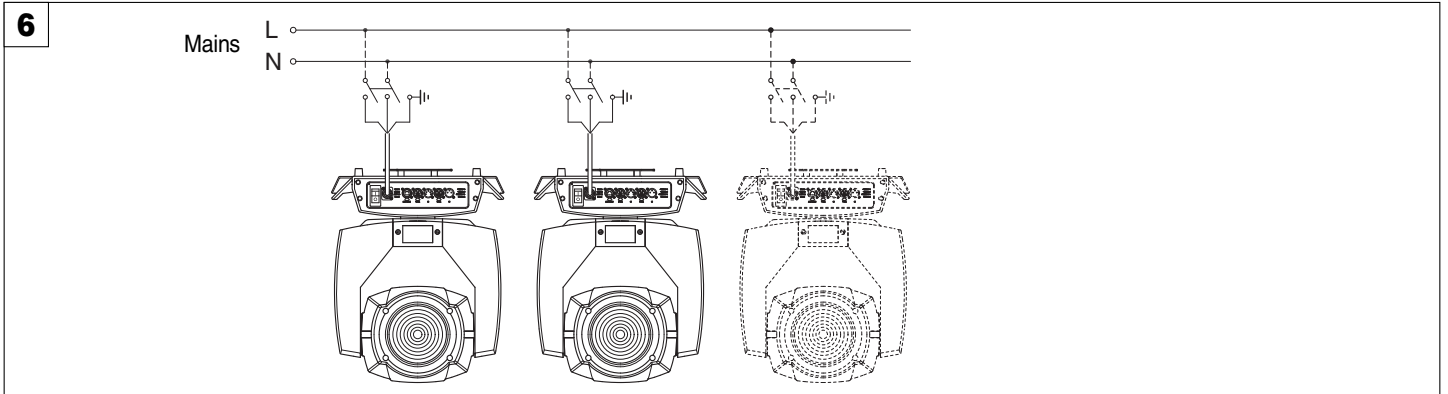
WARNING: with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

5

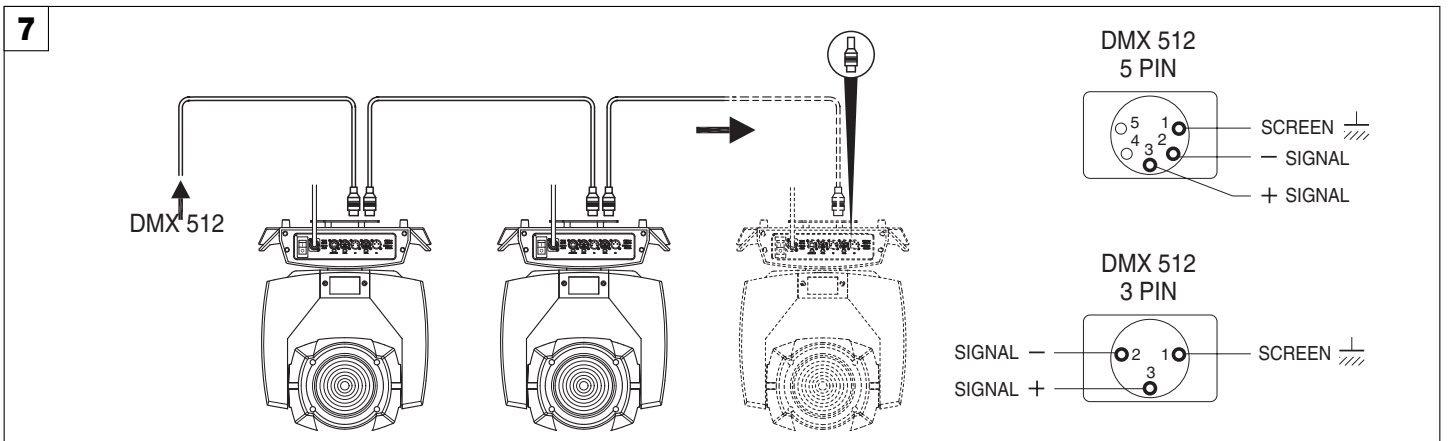


Connecting and disconnecting power cable - Fig. 5

CONTROL PANEL



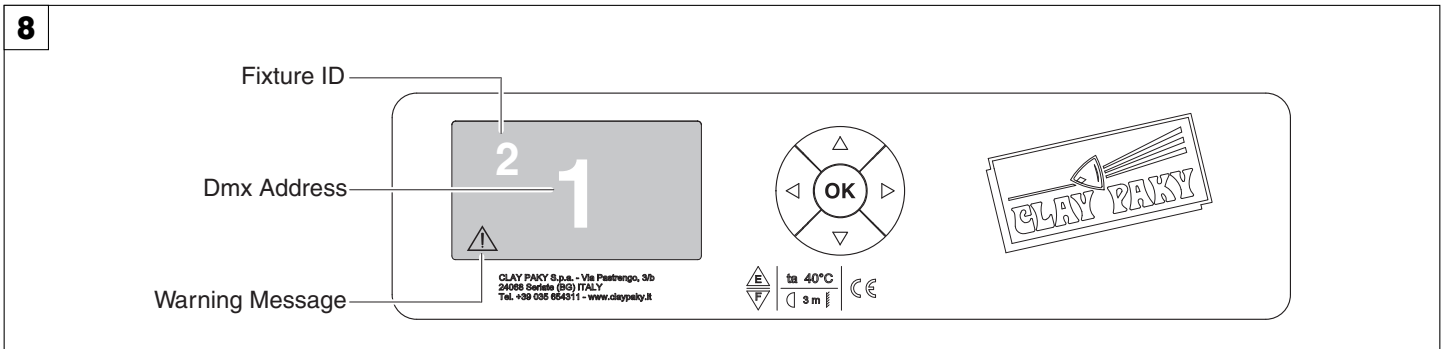
Connecting to the mains supply - Fig. 6



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

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female connectors. A terminating plug must be inserted into the last projector with a resistance of 120Ohm (minimum 1/4 W) between terminals 2 and 3.

IMPORTANT: The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.

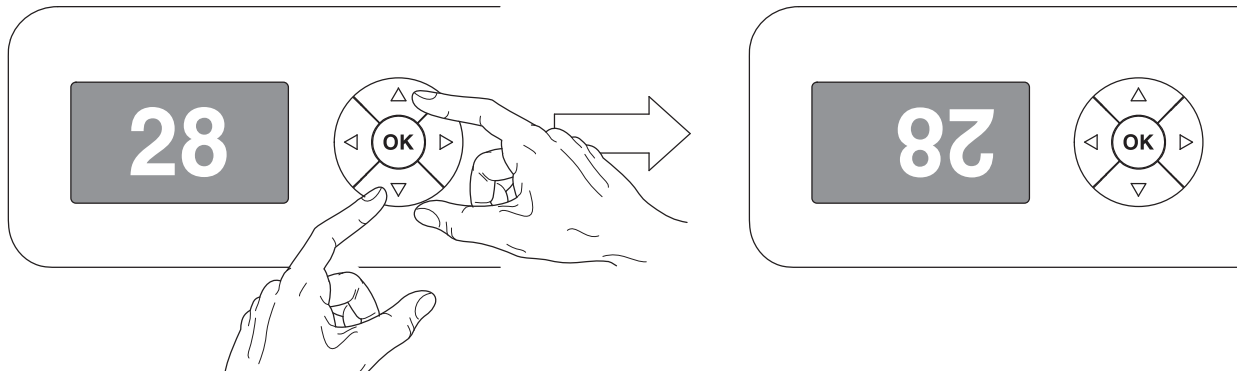


Switching on the projector - Fig. 8



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

	Model Alpha WASH 700	Firmware Version X.X.X Date - Hour	xxx (Fixture ID) Dmx Address xxx	System errors E: W:
--	-----------------------------------	---	-------------------------------------	--

On conclusion of resetting in case of absence of the dmx signal, Pan and Tilt move to the "Home" position (Pan 50% - Tilt 50%). The control panel (Fig. 8) has a display and buttons for the complete programming and management of the projector menu. The display can be in one of two conditions: rest status and setting status. When it is in the rest status, the display shows the projector's DMX address and the Fixture ID address (if set). During menu setting status, after a wait time (about 30 seconds) without any key having been pressed, the display automatically returns to rest status. It should be noted that when this condition occurs, any possible value that has been modified but not yet confirmed with the **OK** key will be cancelled.



Reversal of the display - Fig. 9

To activate this function, press UP  and DOWN  keys simultaneously while the display is in the rest mode. This status will be memorised and maintained even for the next time it will be switched on. To return to the initial state, repeat the operation all over again.

Setting the projector starting address

On each projector, the starting address must be set for the control signal (addresses from 1 to 512).

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

Setting the address: see pag. 8.

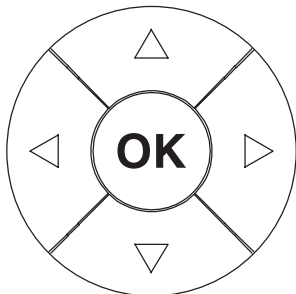
Setting the projector Fixture ID

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

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

Setting the Fixture ID: see pag. 8.

Functions of the buttons - Using the menu



Confirms the displayed value, or activates the displayed function, or enters the successive menu.



DOWN

Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.



UP

Increases the value displayed (with auto-repetitions) or passes to the previous item in a menu.



LEFT




Return to the top level






RIGHT


Commute from units, tens, hundreds, in the "Address", "Fixture ID" and "Calibration" 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 functioning of effects
 - Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.

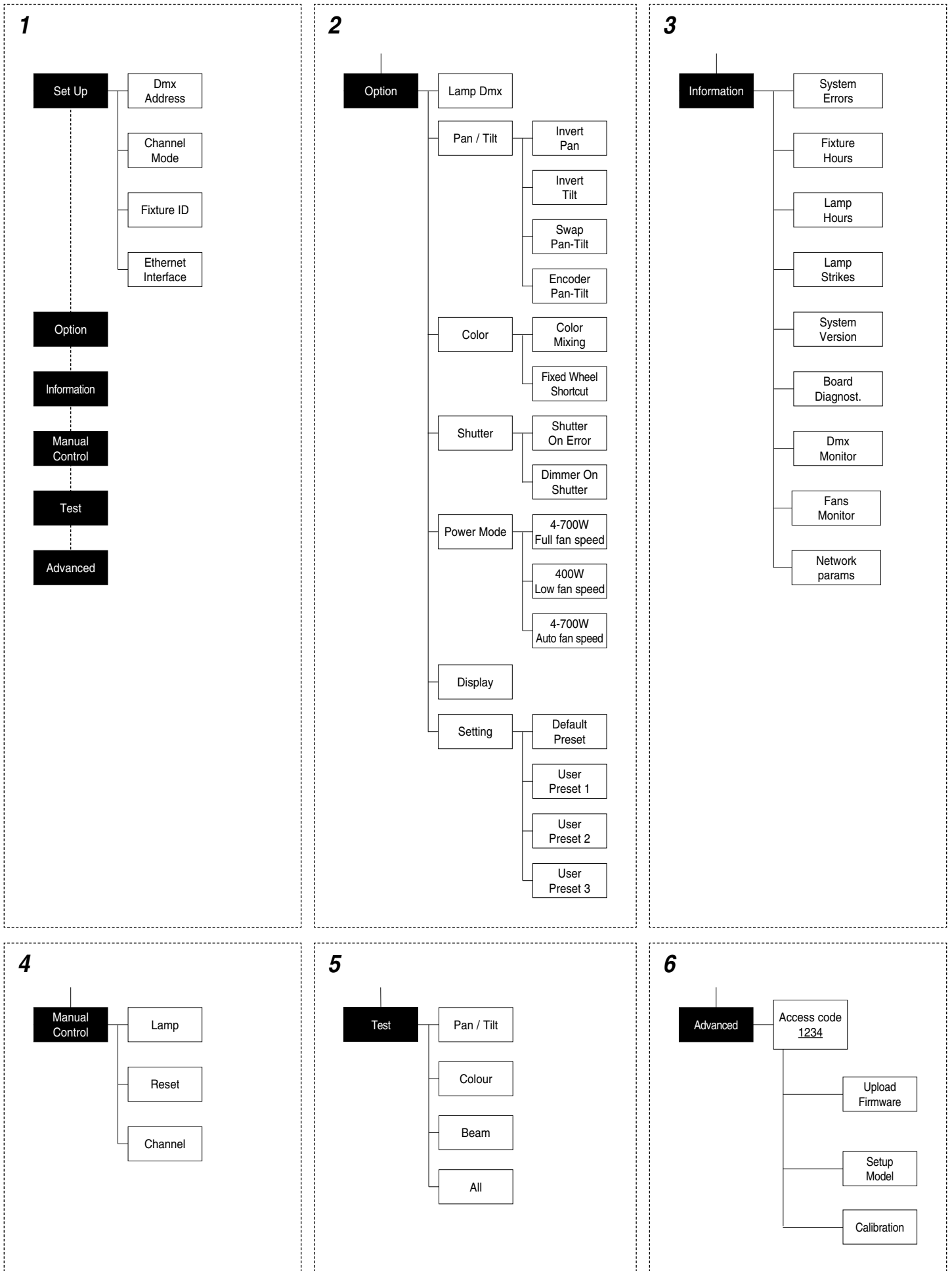
To enable the "Advanced" see pag.13
- 3) Press  to display the first item in the selected menu.
- 4) Use the UP  and DOWN  keys to select the MENU items.

Setting addresses and options with the projector disconnected

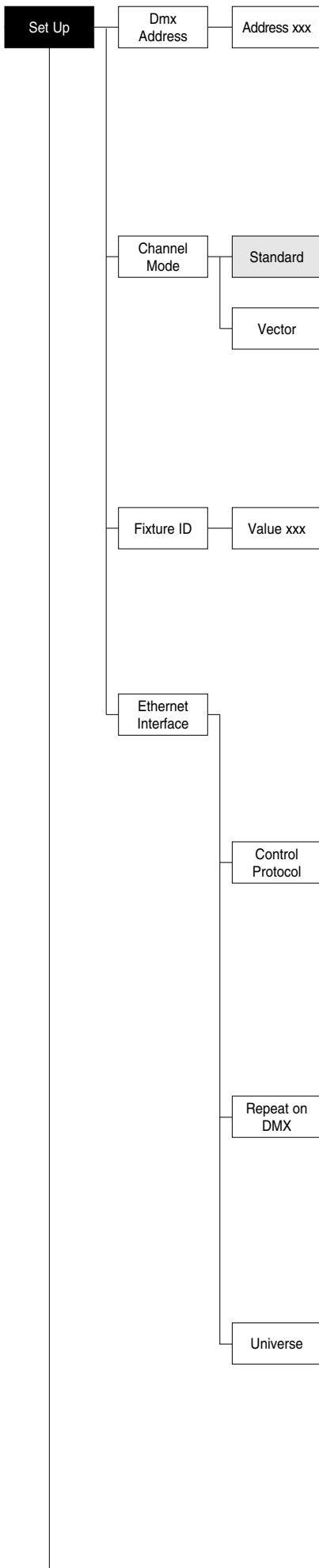
The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply. All that is needed is to press  to momentarily activate the display and thus access the settings. Once the required operations have been carried out,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

MENU SETTING

MAIN MENU



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 **OK** - the current DMX Address appear on the display.
- 2) Use the UP **▲** and DOWN **▼**, RIGHT **▶** keys to plan the DMX Address.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

CHANNEL MODE

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

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

FIXTURE ID

Allows you to select the FIXTURE ID.

- 1) Press **OK** - the current Fixture ID appear on the display.
- 2) Use the UP **▲**, DOWN **▼**, RIGHT **▶** keys to plan the Fixture ID.
- 3) Press **OK** 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 **OK**.
- 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 **OK** the current setting appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following settings:
 - **Disabled**
 - **Art-net on IP 2**
 - **Art-net on IP 10**
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep the current setting.

Repeat on DMX

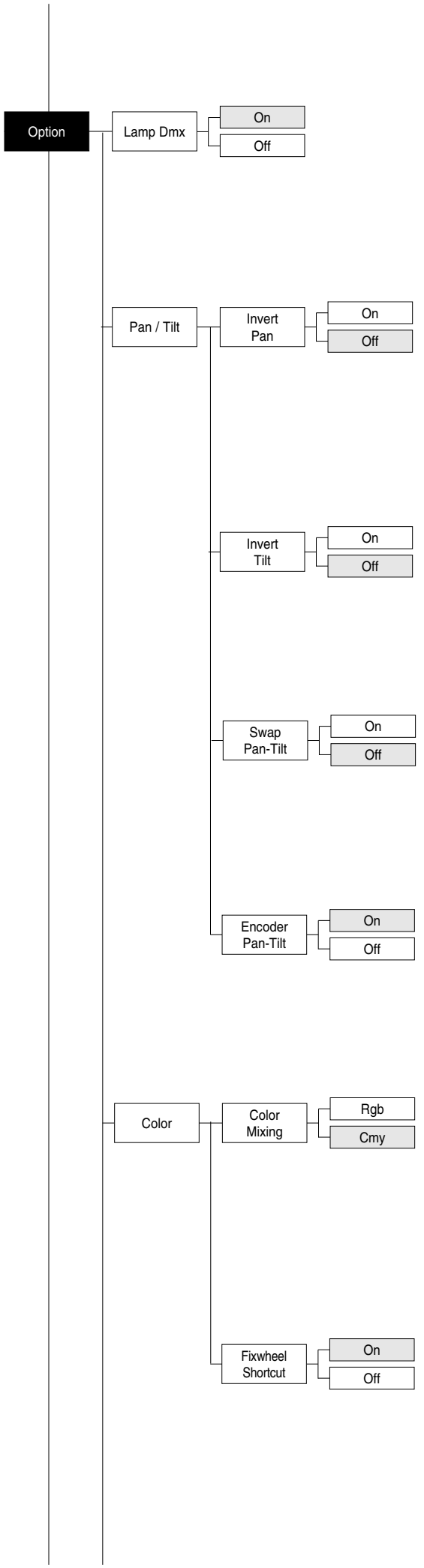
It lets you enable the transmission of the Ethernet protocol by DMX signal to all the connected projectors.

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

Universe

It lets you assign the "Universe" number to be assigned to a series of projectors.

- 1) Press **OK** - the current Universe address appears on the display.
- 2) Use the UP **▲**, DOWN **▼**, RIGHT **▶** keys to set the Universe address.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep the current setting.



OPTIONS MENU

LAMP DMX

Used for enabling lamp remote control channel.

- 1) Press **OK** - the current settings appear on the display (On or Off).
- 2) Use the UP **▲** and DOWN **▼** keys to enable (On) or disable (Off) the lamp remote control channel.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

PAN / TILT

Invert pan

Used for reversing Pan movement.

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

Invert tilt

Used for reversing tilt movement.

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

Swap Pan-Tilt

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

- 1) Press **OK** - 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 **OK** to confirm the selection or LEFT **◀** to keep current settings.

Encoder Pan-Tilt

Used for enabling the Pan / Tilt encoders.

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

COLOR

Color mixing

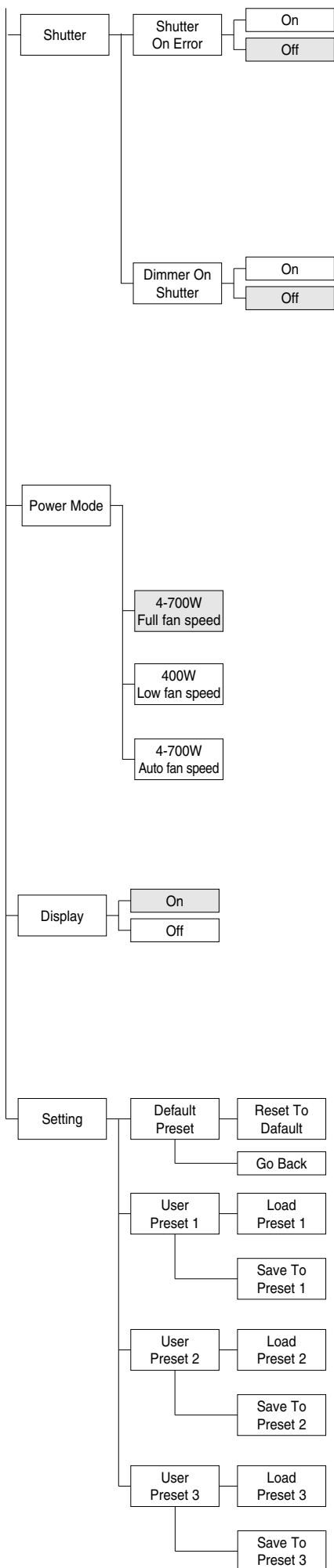
Used for reversing the CMY color mixing system.

- 1) Press **OK** - 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 **OK** to confirm the selection or LEFT **◀** to keep current settings.

Fixed wheel short-cut

Used for optimizing color change time so that the disc turns in the direction that requires shorter movement.

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

Dimmer on Shutter

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

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

POWER MODE

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

- 1) Press **OK** - the current settings appear on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following settings:
 - **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 **OK** to confirm the selection or LEFT **◀** to keep current setting.

DISPLAY

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

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

SETTING

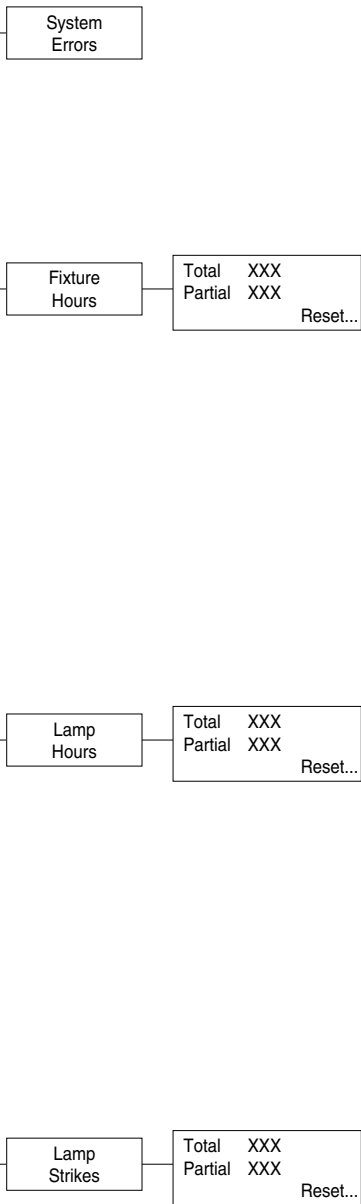
Used to save 3 different settings of the items in the options menu and relative submenus.

- 1) Press **OK** - "Default preset" appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following configurations:
 - Default preset (*)
 - User preset 1
 - User preset 2
 - User Preset 3
- 3) Press **OK** - "Load preset X" appears on the display.
- 4) Use the UP **▲** and DOWN **▼** keys to select:
 - Load preset X to recall a previously stored configuration.
 - Save to preset X to store the current configuration.
 a confirmation message (Are you sure?) appears on the display.
- 5) Select YES to confirm the selection or NO to keep the current setting and return to the next higher level.

(*) DEFAULT PRESET

Used for restoring default values on all options menu items and relevant submenus.

- 1) Press **OK**, a confirmation message (Are you sure?) appears on the display.



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

OPTION	DEFAULT
Lamp DMX	On
Invert Pan	Off
Invert Tilt	Off
Swap Pan-Tilt	Off
Encoder Pan-Tilt	On
Colour mixing	CMY
Fixed Wheel Shortcut	On
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.

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

FIXTURE HOURS

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

- Press **OK** - Hours total and partial appears on the display.
Total counter
 Counts the number of projector working life hours (from manufacture to date).
Partial counter
 Counts the number of partial projector working life hours since the last reset to date.
- Press **OK** 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

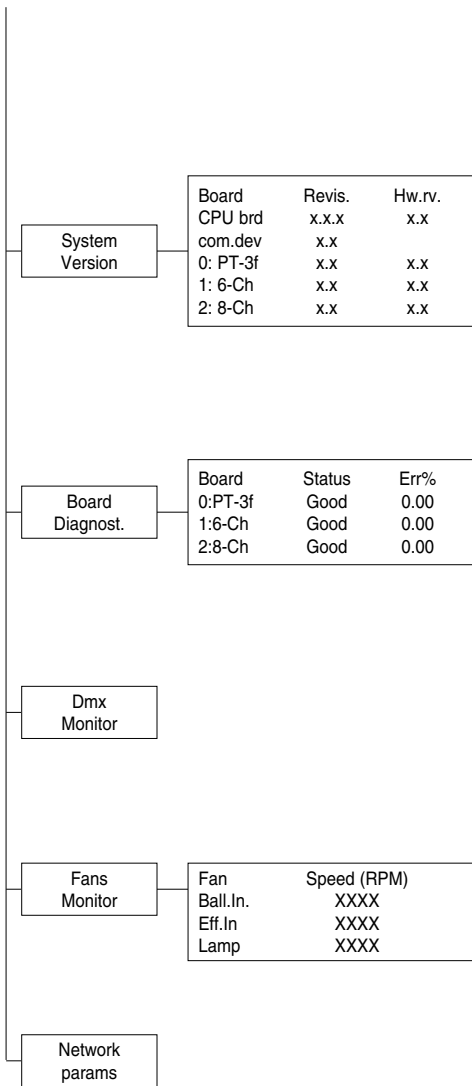
Used for displaying the lamp working hours (total and partial).

- Press **OK** - Hours total and partial appears on the display.
Total counter
 Counts the number of projector working hours with the lamp on (from manufacture to date).
Partial counter
 Counts the number of lamp working hours since the last reset to date.
- Press **OK** 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

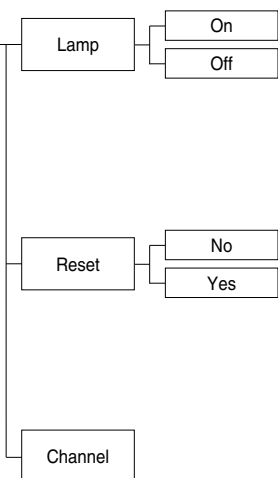
LAMP STRIKES

Used for displaying the number of times the lamp was turned on (total and partial).

- Press **OK** - the number of times the lamp was turned on (total and partial) appears on the display.
Total counter
 Counts the number of times the lamp was turned on (from manufacture to date).
Partial counter
 Counts the number of times the lamp was turned on since the last reset to date.



Manual Control



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

SYSTEM VERSION

Used for displaying the software and hardware version of each board installed in the projector.

- CPU brd (CPU board)
- 0: PT-3f (Pan / Tilt board)
- 1: 6-Ch (6 channel board)
- 2: 8-Ch (8 channel board)

BOARD DIAGNOSTIC

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

- 0: PT-3f (Pan / Tilt board)
- 1: 6-Ch (6 channel board)
- 2: 8-Ch (8 channel board)

DMX MONITOR

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

FANS MONITOR

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

- Ball. IN (Ballast IN Fan)
- Eff.IN (Effects IN Fan)
- Lamp (Lamp Fan)

NETWORK PARAMS

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

- IP address:** Internet Protocol address (two projectors must not have the same IP address)
- IP mask:**
- Mac address:** Media Access Control: the projector's Ethernet Address

MANUAL CONTROL

LAMP

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

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

RESET

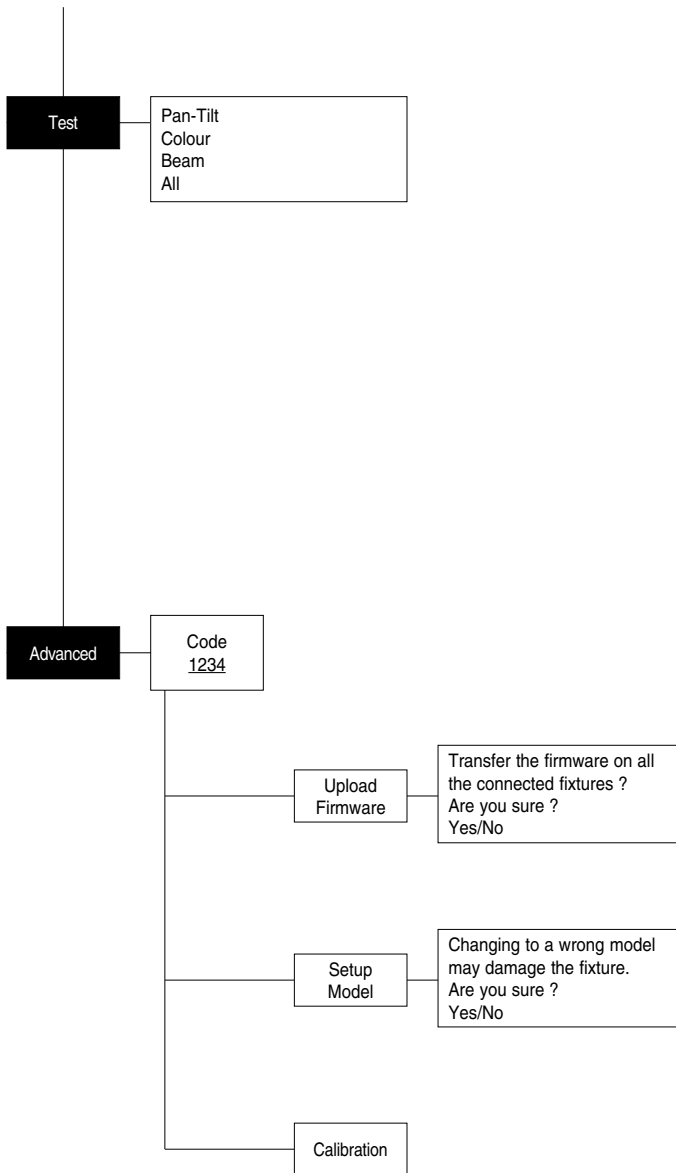
Used for resetting the projector.

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

CHANNEL

Used for setting channel levels from the projector control panel.

- 1) Press **OK** - the first channel appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select the required channel:
- 3) Press **OK** and use the UP **▲** and DOWN **▼** keys to select the required DMX level (value between 0 and 255).
- 4) Press LEFT **◀** to return to the top menu level.



TEST MENU

TEST

Allows you to check the proper functioning of effects.

- 1) Press **OK** to return to the top menu level.
- 2) Use the UP **▲** and DOWN **▼** keys to select the required test.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep current settings.

Test sequence:

Pan - Tilt effects (Pan & Tilt)

Colour effects (CMY / CTO / Colour wheel)

Beam effects (Stopper-Strobe / Dimmer / Beam shaper / Zoom)

All effects

ADVANCED MENU

To enable the "Advanced Menu" set up the "Access code" (1234) using the UP **▲**, DOWN **▼**, RIGHT **▶** keys.

Press **OK** - "Menu advanced" appears on the display

UP LOAD FIRMWARE

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

- 1) Press **OK**, a confirmation message appears on the display.
- 2) Select YES to start the firmware loading or NO to keep the current setting and return to the top menu level

SETUP MODEL

Allows you to change the default model of projector.

- 1) Press **OK** a confirmation message appears on the display.
- 2) Select YES to define the model of projector or NO to keep the current setting and return to the top menu level.

CALIBRATION

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

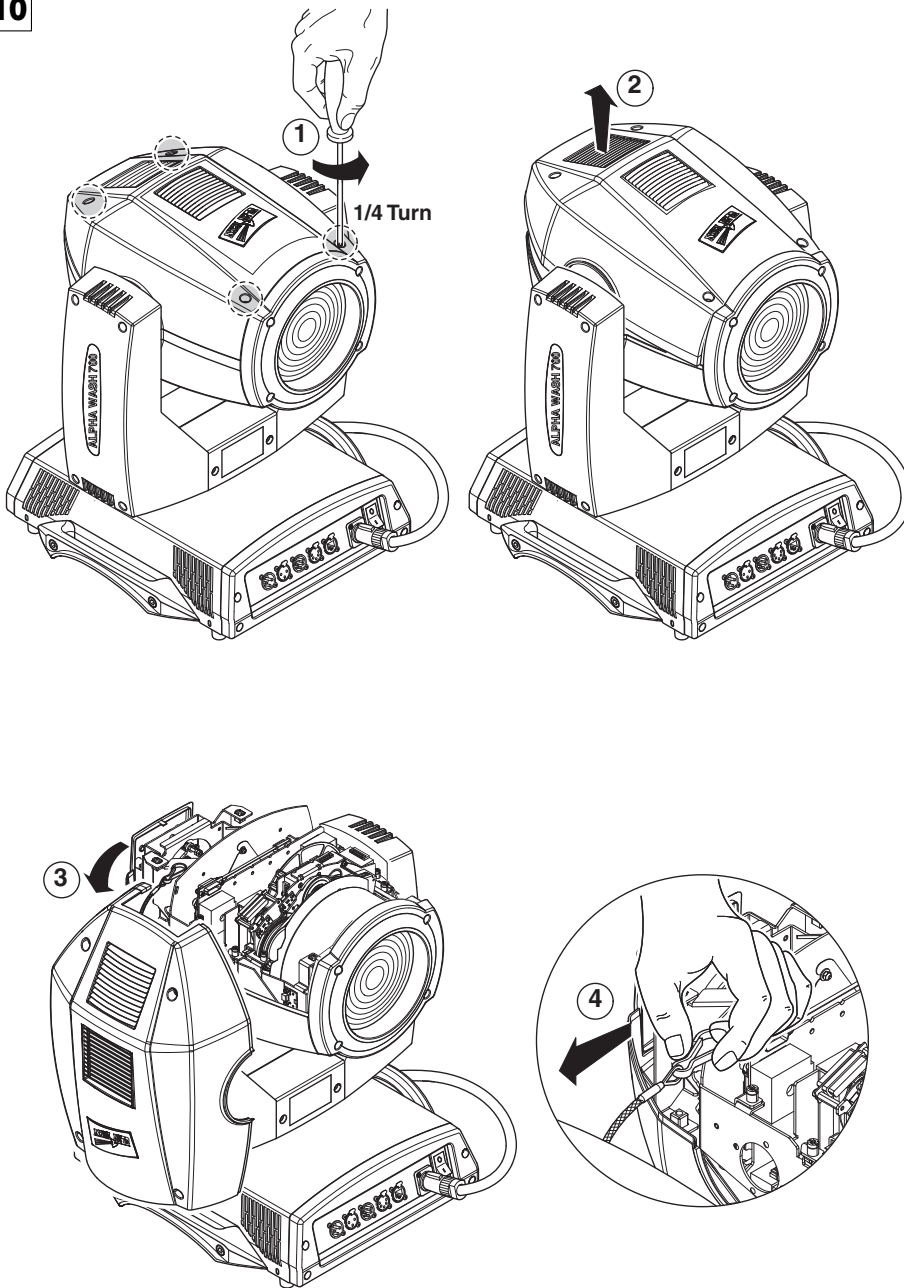
- 1) Press **OK** - "channels" appears on the display.
- 2) Using the UP **▲** and DOWN **▼** keys, select the effect you wish to regulate.
- 3) Press **OK** and use the RIGHT **▶**, UP **▲** and DOWN **▼** buttons to make the adjustment by setting a value between 0 and 255.
- 4) Press **OK** to confirm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

FACTORY DEFAULT

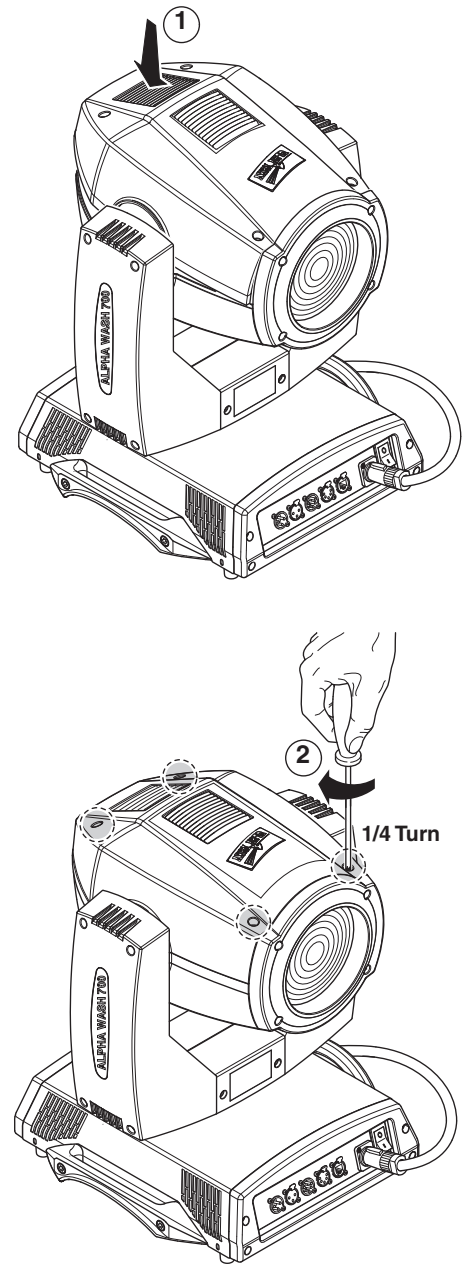
Allows you to restore default values of all channels (128).

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

10



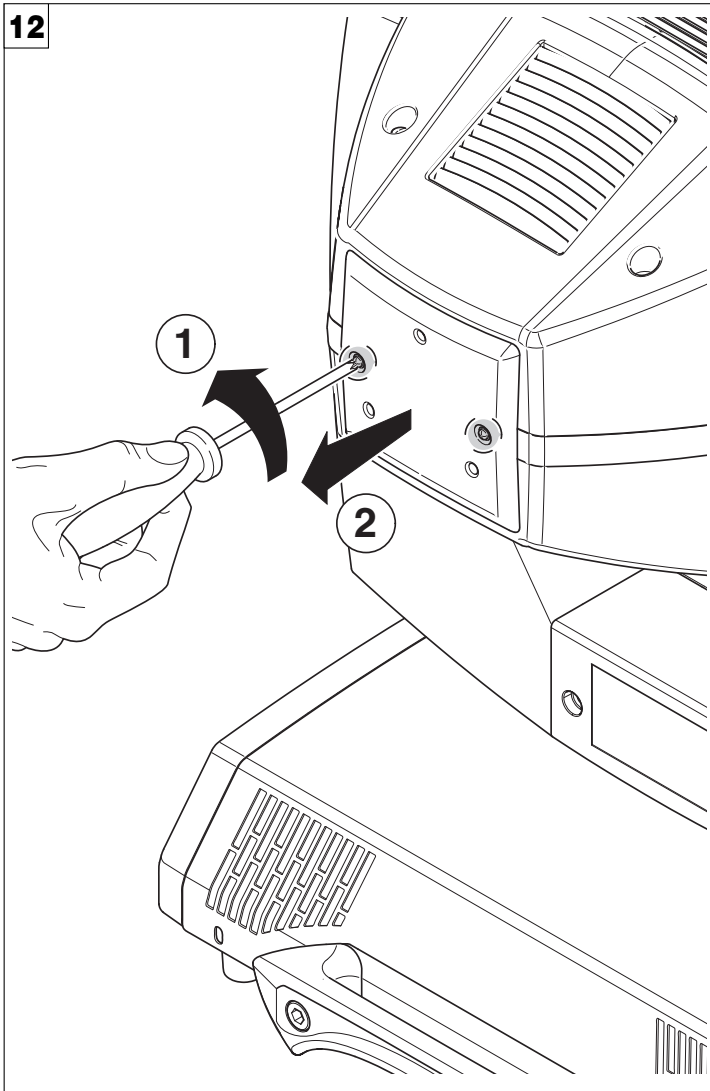
11



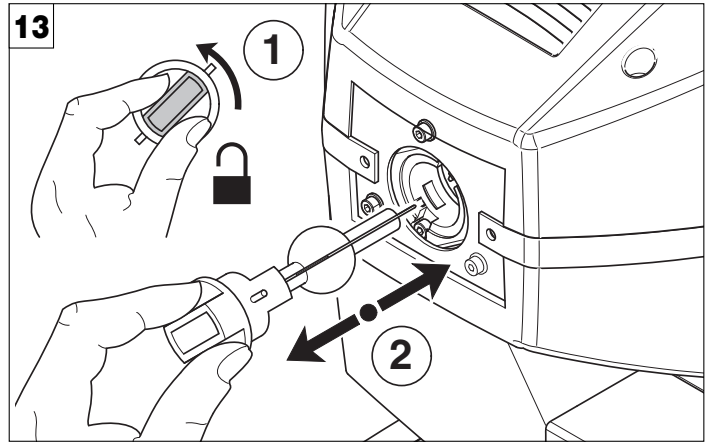
Locking and releasing Pan and Tilt movements - Refer to the instructions in the UNPACKING AND PREPARATION section.

Opening the head covers - Fig. 10.

Closing the head covers - Fig. 11.



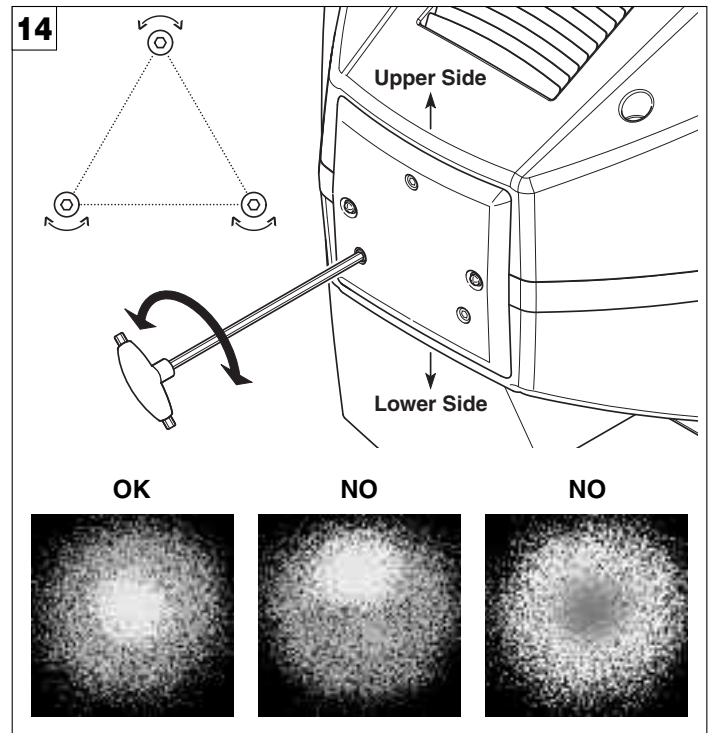
Opening and closing lamp compartment - Fig. 12



Lamp change - Fig 13

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

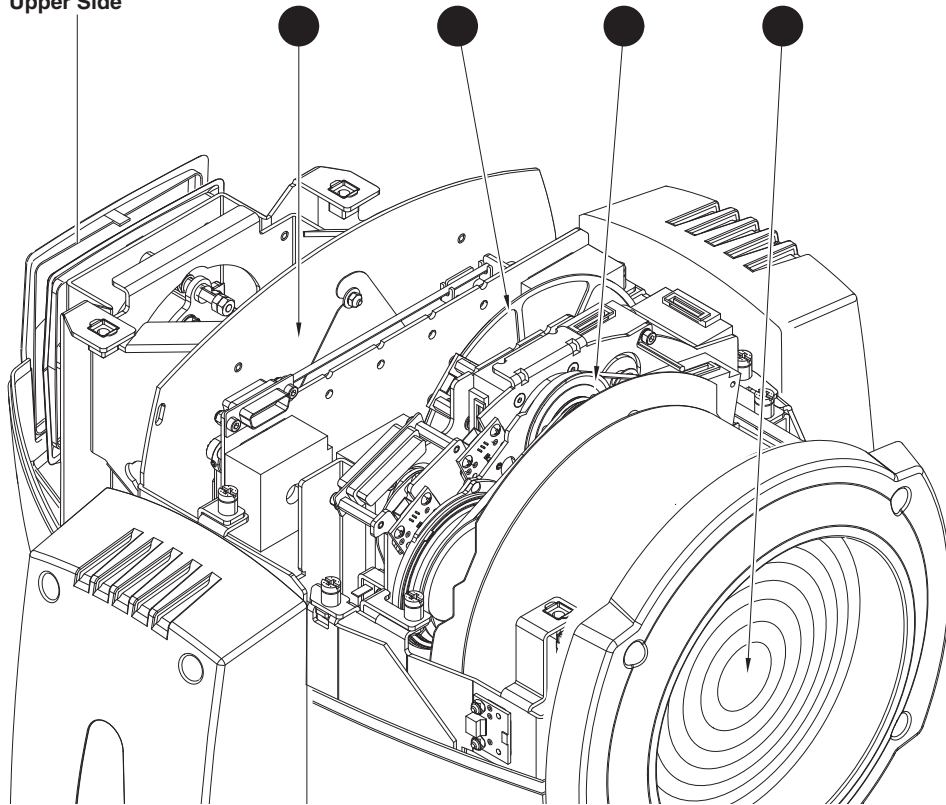
WARNING: do not touch the lamp's envelope with bare hands. Should this happen, clean the bulb with a cloth soaked in alcohol and dry it with a clean, dry cloth.



Lamp regulation - Fig. 14

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

Upper Side



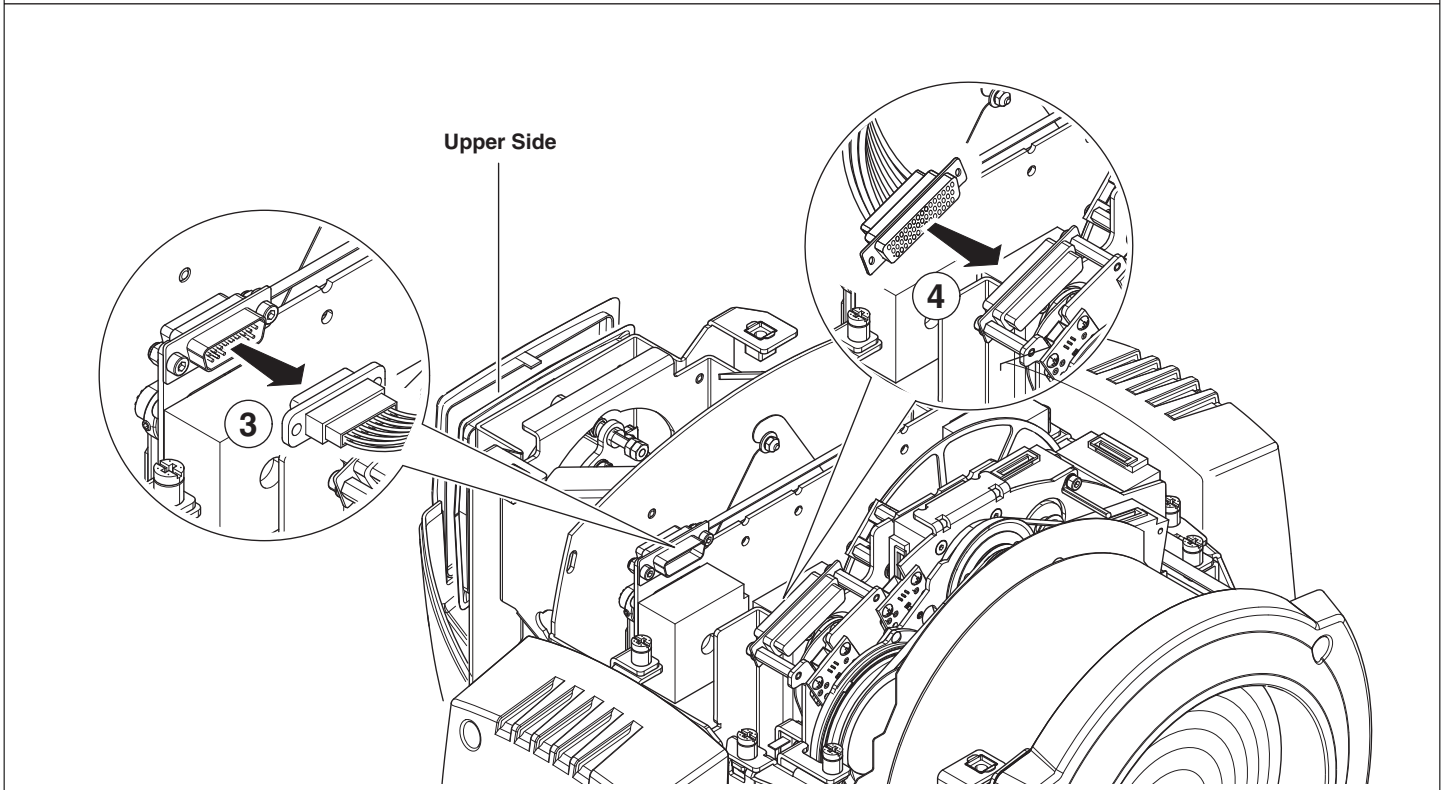
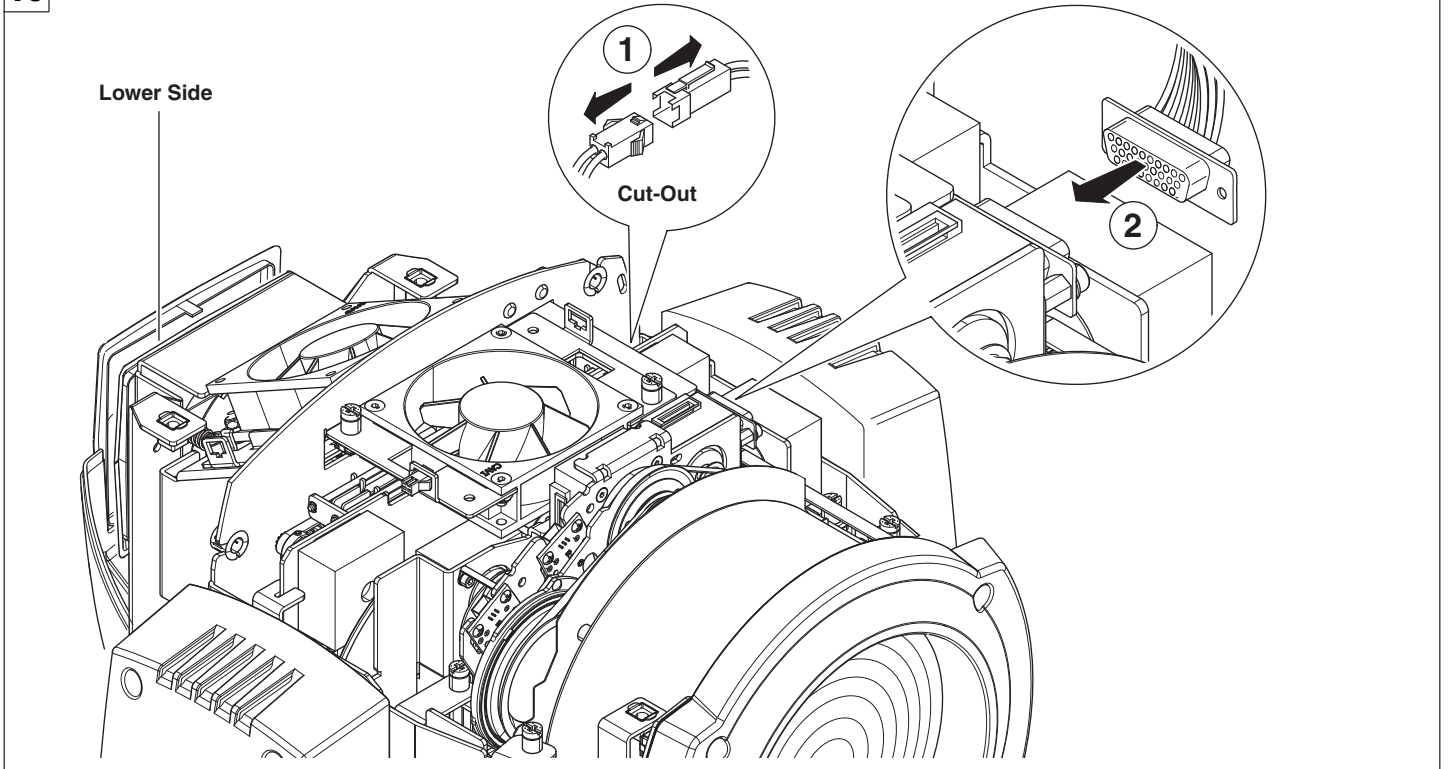
● Parts requiring frequent cleaning.

Periodical cleaning - Fig. 15

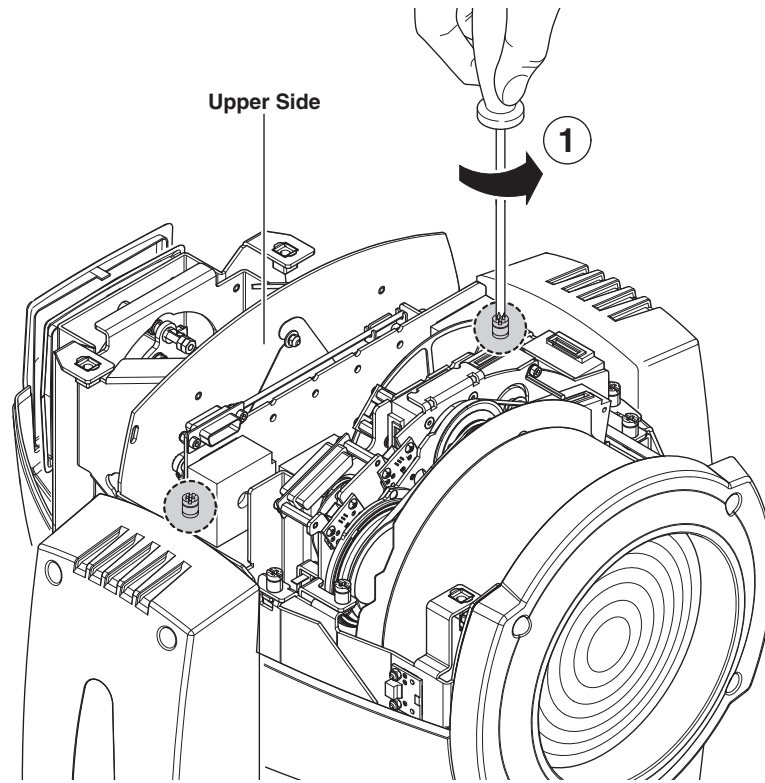
To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors, such as the amount of the effects and the quality of the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

Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors and filters. It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:

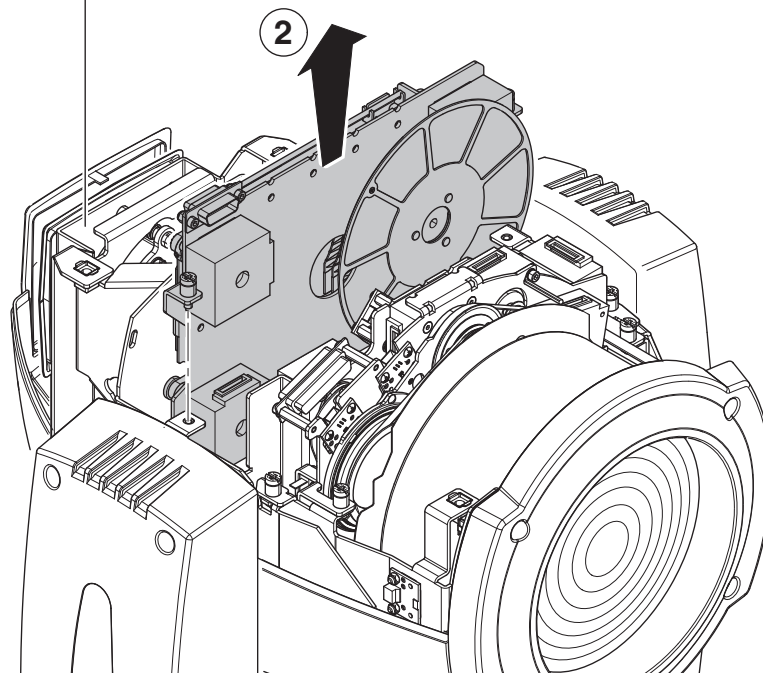
- General cleaning of internal parts.
- Restoring lubrication of all parts subject to friction, using lubricants specifically supplied by Clay Paky.
- General visual check of the internal components, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.



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



Upper Side



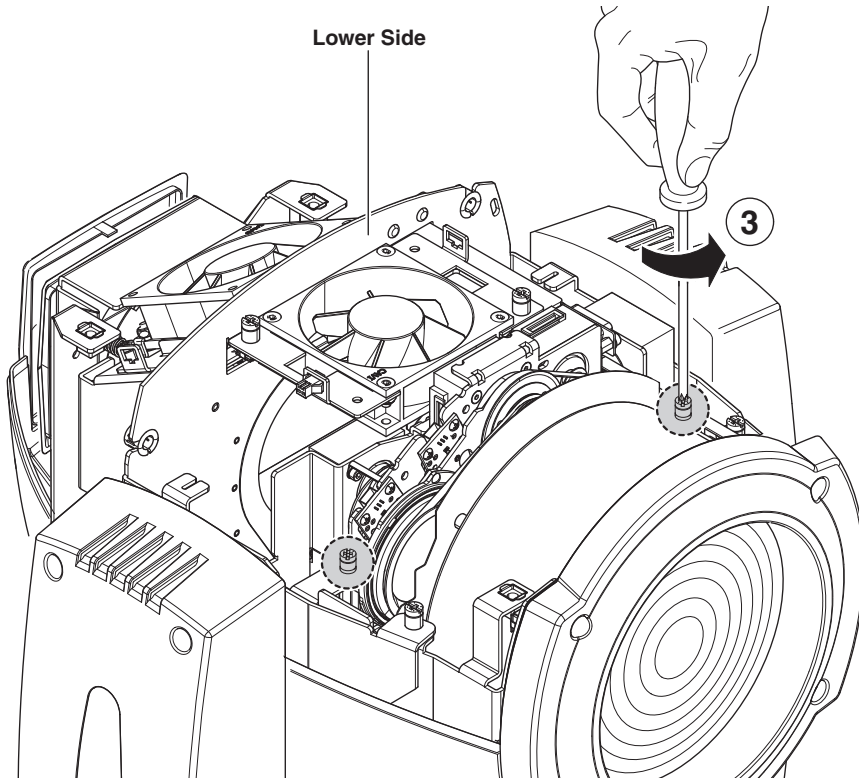
Extraction of the effect modules - Fig. 17

IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.

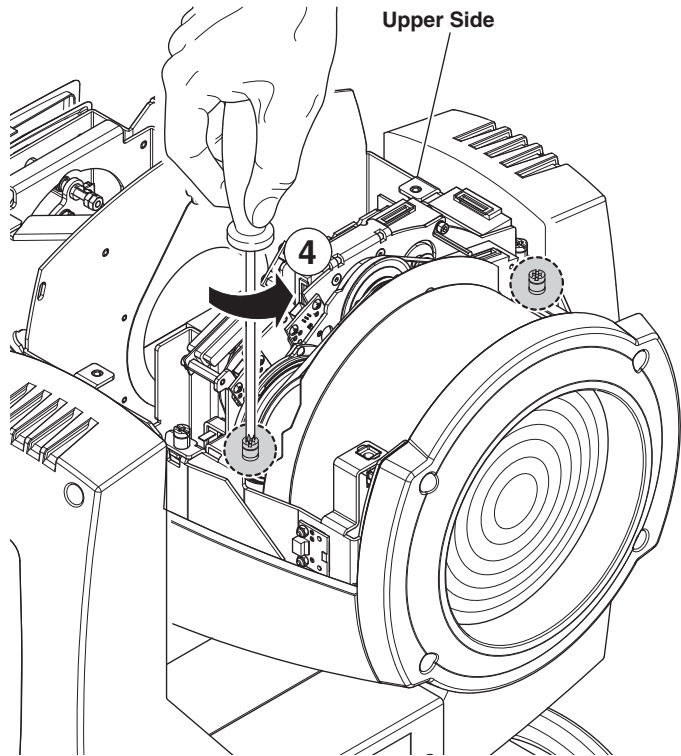
Insertion of the effect modules: Repeat the operations indicated in Fig. 16 - 17 - 18 and 19 in reverse order.

18

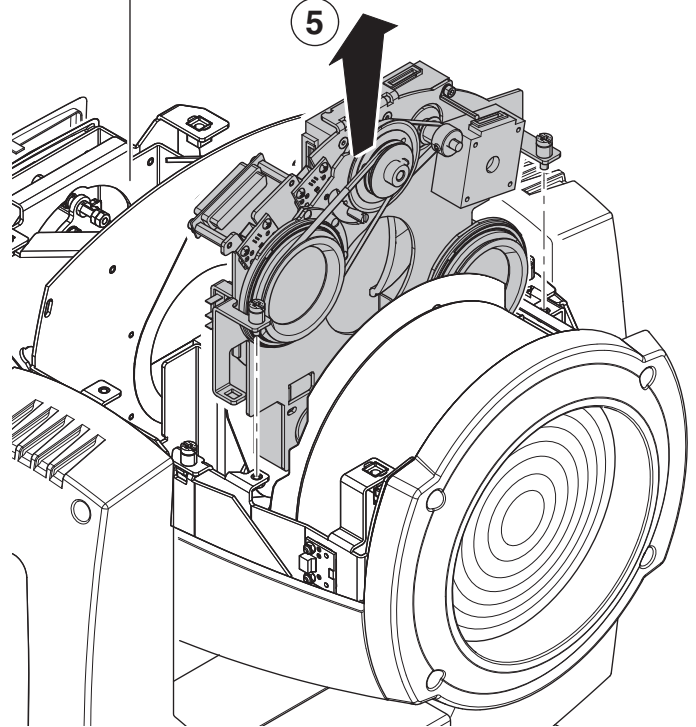
Lower Side



Upper Side



Upper Side



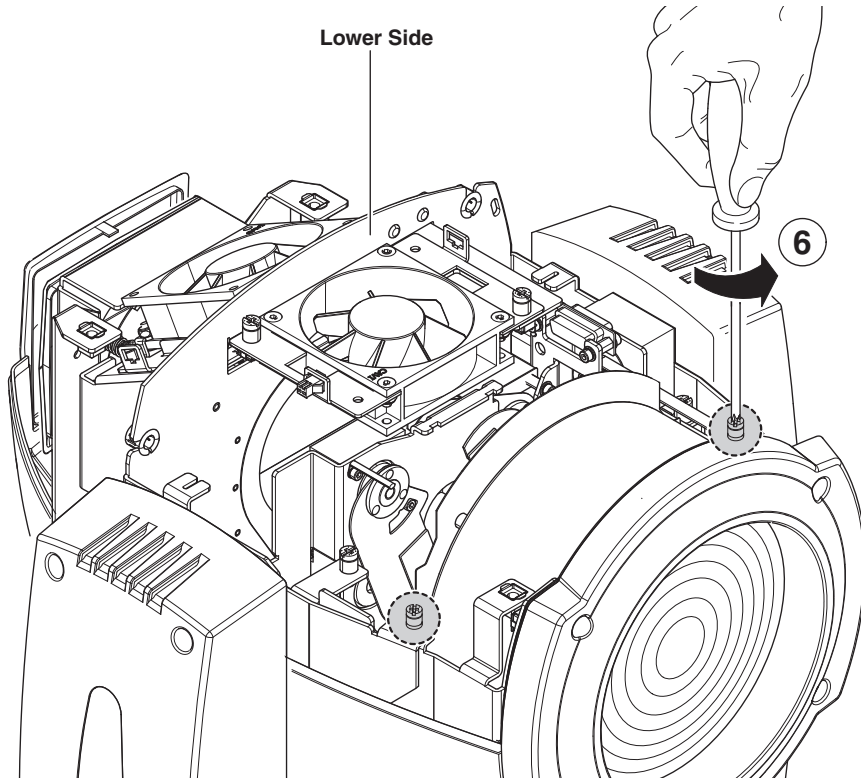
Extraction of the effect modules - Fig. 18

IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.

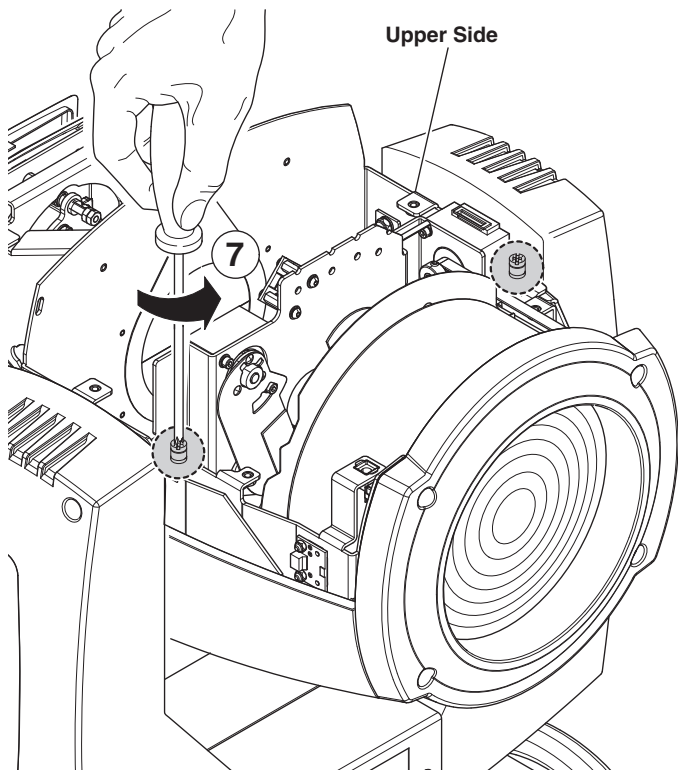
Insertion of the effect modules: Repeat the operations indicated in Fig. 16 - 17 - 18 and 19 in reverse order.

19

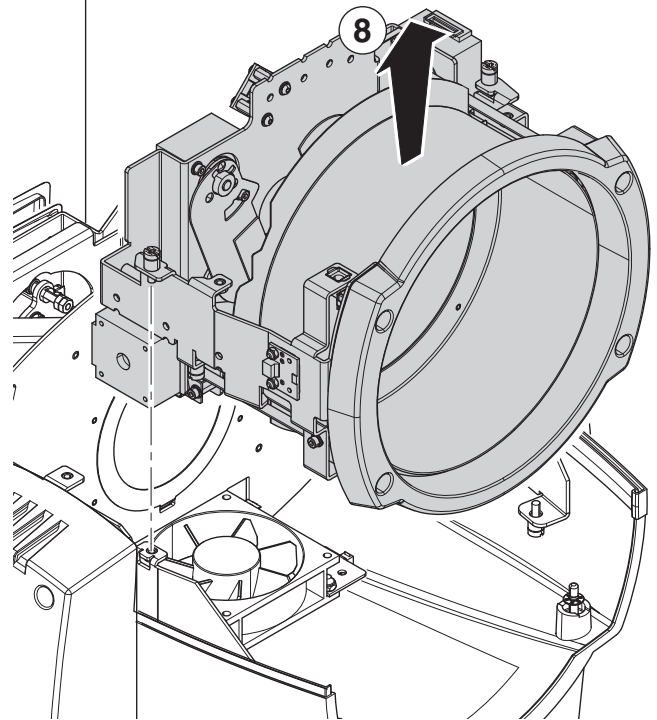
Lower Side



Upper Side



Upper Side

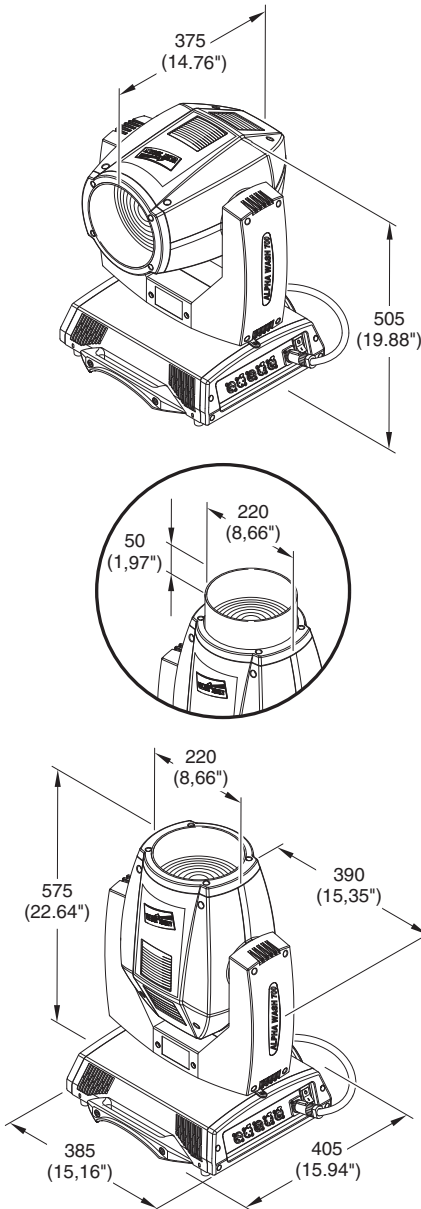


Extraction of the effect modules - Fig. 19

IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.

Insertion of the effect modules: Repeat the operations indicated in Fig. 16 - 17 - 18 and 19 in reverse order.

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
- Cap PGJX28
- Colour temperature 7200 K
- Luminous flux 50000 lm
- Average life 750 h
- Any working position

Motors

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

Optical unit

• Elliptic reflector with high luminous efficiency

Channels

Max 21 control channels.

Inputs

• DMX 512

Movable body

- Movement by means of two stepper motors, controlled by microprocessor.
- Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.
- Travel:
 - PAN = 540°
 - TILT = 250°
- Maximum speeds:
 - PAN = 3.20 (Normal) / 2.90 (Fast)
 - TILT = 1.89 (normal) / 1.75 (Fast)
- Resolution:
 - PAN = 2.11°
 - PAN FINE = 0.008°
 - TILT = 0.98°
 - TILT FINE = 0.004°

IP20 protection rating

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

CE Marking

In conformity with the European Union Low Voltage Directive 2006/95/CE and Electromagnetic compatibility Directive 2004/108/CE.

Safety Devices

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

Cooling

Forced ventilation with axial fans.

Body

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

Working position

Functioning in any position.

Weight

• about 20.60 Kg (45lbs 5ozs).

CAUSE AND SOLUTION OF PROBLEMS

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

CHANNEL FUNCTION

ALPHA WASH 700

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

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

• COLOUR MIXING - channel 1 - 2 - 3

Operation with option color mixing: RGB



BIT	%	EFFECT
255	100	COLOUR EXCLUDED
0	0.0	COLOUR INSERTED

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

Operation with option color mixing: CMY



BIT	%	EFFECT
255	100	COLOUR INSERTED
0	0.0	COLOUR EXCLUDED

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

• C.T.O. - channel 4



BIT	%	EFFECT
255	100	FILTER INSERTED
0	0.0	FILTER EXCLUDED

• COLOUR WHEEL - channel 5



BIT	%	EFFECT
255	100	FAST ROTATION (160 rpm)
128	50.0	SLOW ROTATION (0.2 rpm)
127	49.7	BLUE + WHITE
120	47.0	BLUE
112	44.0	ORANGE + BLUE
105	41.2	ORANGE
97	38.0	AQUAMARINE + ORANGE
90	35.0	AQUAMARINE
82	32.0	LAVENDER + AQUAMARINE
75	29.5	LAVENDER
67	26.2	LIGHT GREEN + LAVENDER
60	23.7	LIGHT GREEN
52	20.5	GREEN + LIGHT GREEN
45	17.5	GREEN
37	14.2	CTB + GREEN
30	11.7	CTB
22	8.7	RED + CTB
15	6.0	RED
8	3.2	WHITE + RED
0	0.0	WHITE

• STOP / STROBE - channel 6



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

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

• DIMMER - channel 7



BIT	%	EFFECT
255	100	
0	0.0	

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

• DIMMER FINE - channel 8



BIT	%	EFFECT
255	100	
0	0.0	

• BEAM SHAPER INSERTION - channel 9



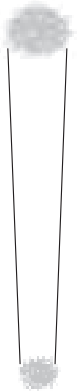
BIT	%	EFFECT
170-255	66.7-100	SHAPER 2
85-169	33.2-66.2	SHAPER 1
0 - 84	0.0 - 33.0	WHITE

• BEAM SHAPER ROTATION - channel 10



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

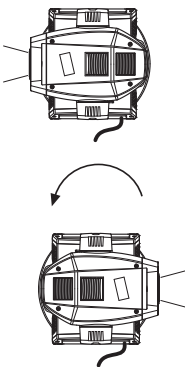
• ZOOM - channel 11



BIT	%	EFFECT
255	100	WIDE BEAM
0	0.0	NARROW BEAM

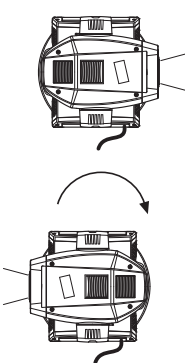
• PAN - channel 12

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



BIT	%
255	100
0	0.0

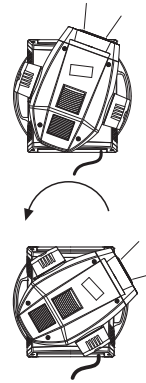
Operation with option InvertPan \diamond On
(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)



BIT	%
255	100
0	0.0

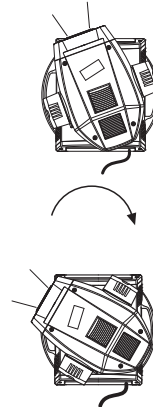
• PAN FINE - channel 13

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



BIT	%
255	100
0	0.0

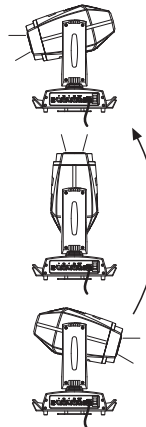
Operation with option InvertPan \diamond On
(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)



BIT	%
255	100
0	0.0

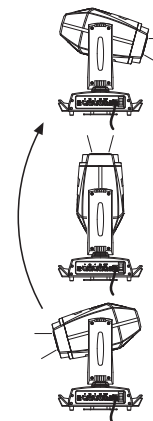
• TILT - channel 14

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



BIT	%
255	100
128	50.0
0	0.0

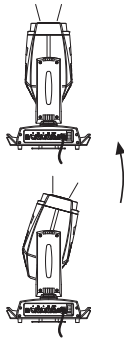
Operation with option Invert Tilt \diamond On
(Pan conventionally represented at 0% and option Invert Pan \diamond Off)



BIT	%
255	100
128	50.0
0	0.0

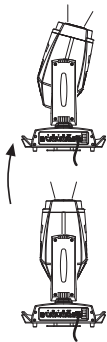
• **TILT FINE - channel 15**

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



BIT	%
255	100
0	0.0

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



BIT	%
255	100
0	0.0

• **FUNCTION - channel: 16**

BIT	%	EFFECT	
255	100	UNUSED RANGE	
52	20.5		
51	20.0		LINEAR (DEFAULT) — DIMMER CURVE FUNCTION CONVENTIONAL —
39	15.0		
26	10.0		NORMAL SPEED — PAN-TILT FUNCTION FAST SPEED (DEFAULT) —
13	5.0		
0-12	0.0-4.7		UNUSED RANGE

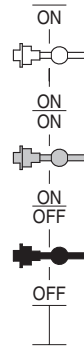
The functions are activated passing through the "unused range" and staying 5 seconds in necessary level

• **RESET - channel: 17**

BIT	%	EFFECT
255	100	COMPLETE RESET
128	50.0	COMPLETE RESET PAN / TILT RESET
127	49.7	
77	30.0	PAN / TILT RESET EFFECTS RESET
76	29.7	
26	10.0	EFFECTS RESET
25	9.7	
0	0.0	UNUSED RANGE

• **LAMP CONTROL (only with option LAMP DMX On) - channel: 18**

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



BIT	%	EFFECT
255	100	LAMP ON (FULL POWER)
180	70.5	LAMP ON (FULL POWER) LAMP ON (HALF POWER)
179	70.0	
101	39.5	LAMP ON (HALF POWER) LAMP OFF
100	39.0	
26	10.0	LAMP OFF
25	9.7	
0	0.0	UNUSED RANGE

TIMING CHANNELS

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

TIME TABLE

BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds
0	Full	43	8.6	86		129		172		216	
1	0.2	44	8.8	87	24	130	41	173	58	217	170
2	0.4	45	9	88		131		174		218	
3	0.6	46	9.2	89	25	132	42	175		219	180
4	0.8	47	9.4	90		133		176	59	220	
5	1	48	9.6	91	26	134	43	177		221	190
6	1.2	49	9.8	92		135		178	60	222	
7	1.4	50	10	93	27	136	44	179		223	200
8	1.6	51	10.2	94		137		180	65	224	
9	1.8	52	10.4	95	28	138	45	181		225	210
10	2	53	10.6	96		139		182	70	226	
11	2.2	54	11	97	29	140	46	183		227	220
12	2.4	55	12	98		141		184	75	228	
13	2.6	56	13	99	30	142	47	185		229	230
14	2.8	57	14	100		143		186	80	230	
15	3	58	15	101	31	144	48	187		231	240
16	3.2	59	16	102		145		188	85	232	
17	3.4	60	17	103	32	146	49	189		233	250
18	3.6	61	18	104		147		190	90	234	
19	3.8	62	19	105	33	148	50	191		235	260
20	4	63	20	106		149		192	95	236	
21	4.2	64	21	107	34	150	51	193		237	270
22	4.4	65	22	108		151		194	100	238	
23	4.6	66	23	109	35	152	52	195		239	280
24	4.8	67	24	110		153		196	110	240	
25	5	68	25	111	36	154	53	197		241	290
26	5.2	69	26	112		155		198	120	242	
27	5.4	70	27	113	37	156	54	199		243	300
28	5.6	71	28	114		157		200	130	244	
29	5.8	72	29	115	38	158	55	201		245	310
30	6	73	30	116		159		202	140	246	
31	6.2	74	31	117	39	160	56	203		247	310
32	6.4	75	32	118		161		204	150	248	
33	6.6	76	33	119	40	162	57	205		249	310
34	6.8	77	34	120		163		206	160	250	
35	7	78	35	121	41	164	58	207		251	310
36	7.2	79	36	122		165		208	170	252	
37	7.4	80	37	123	42	166	59	209		253	310
38	7.6	81	38	124		167		210	180	254	
39	7.8	82	39	125	43	168	60	211		255	Follow cue Data
40	8	83	40	126		169		212	190		
41	8.2	84	41	127	44	170	61	213			
42	8.4	85	42	128		171		214	200		
								215	210		

