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.

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**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 (10’ 9”) from the lens of the projector.

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

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

- **Maximum ambient temperature**
  Do not operate the fixture if the ambient temperature (Ta) 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.

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

- **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 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

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

Lamp 700W
(fitted into projector)

2 x 183102/802

099102

Lamp 700W
(fitted into projector)
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
Connecting on the projector - Fig. 8
Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:

Model: Alpha SPOT
Firmware: Version X.X.X
xxx (Fixture ID)
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 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

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>OK</strong></td>
<td>Confirms the displayed value, or activates the displayed function, or enters the successive menu.</td>
</tr>
<tr>
<td><strong>DOWN</strong></td>
<td>Decreases the value displayed (with auto-repetitions) or passes to the next item in the menu.</td>
</tr>
<tr>
<td><strong>UP</strong></td>
<td>Increases the value displayed (with auto-repetitions) or passes to the previous item in a menu.</td>
</tr>
<tr>
<td><strong>LEFT</strong></td>
<td>Return to the top level</td>
</tr>
<tr>
<td><strong>RIGHT</strong></td>
<td>Commute from units, tens, hundreds, in the &quot;Address&quot;, &quot;Fixture ID&quot; and &quot;Calibration&quot; menu.</td>
</tr>
</tbody>
</table>

**USING THE MENU:**

1) Press to 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.
   - 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.
NOTE: On grey the default options

**DMX ADDRESS**
NOTE: without the DMX signal the Address (XXX) flashing
Allows you to select the DMX ADDRESS.
1) Press \( \text{F} \) - the current DMX Adress appear on the display.
2) Use the UP \( \text{U} \) and DOWN \( \text{D} \), RIGHT \( \text{R} \) keys to plan the DMX Address.
3) Press \( \text{F} \) to confirm the selection or LEFT \( \text{L} \) to keep current settings.

**CHANNEL MODE**
Allows you to select a channel arrangement from the two available.
1) Press \( \text{F} \) - the current settings appear on the display (Standard or Vector).
2) Use the UP \( \text{U} \) and DOWN \( \text{D} \) keys to select one of the following settings:
   - Standard
   - Vector
3) Press \( \text{F} \) to confirm the selection or LEFT \( \text{L} \) to keep current settings.

**FIXTURE ID**
Allows you to select the FIXTURE ID.
1) Press \( \text{F} \) - the current Fixture ID appear on the display.
2) Use the UP \( \text{U} \), DOWN \( \text{D} \), RIGHT \( \text{R} \) keys to plan the Fixture ID.
3) Press \( \text{F} \) to confirm the selection or LEFT \( \text{L} \) to keep current settings.

**ETHERNET INTERFACE**
It lets you set the Ethernet settings to be attributed to the projector.
1) Press F.
2) Use the UP \( \text{U} \) and DOWN \( \text{D} \) keys to select the “Ethernet Interface” options to set:
   - Control Protocol
   - Repeat on DMX
   - Universe
3) Press \( \text{F} \) to confirm the selection or LEFT \( \text{L} \) to keep the current setting.

**Control Protocol**
It lets you select the “Control Protocol” Art-net to assign according to the control unit used:
1) Press \( \text{F} \) the current setting appears on the display.
2) Use the UP \( \text{U} \) and DOWN \( \text{D} \) keys to select one of the following settings:
   - Disabled
   - Art-net on IP 2
   - Art-net on IP 10
3) Press \( \text{F} \) to confirm the selection or LEFT \( \text{L} \) 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 \( \text{F} \) the current setting appears on the display.
2) Use the UP \( \text{U} \) and DOWN \( \text{D} \) keys to select one of the following settings:
   - Disabled: DMX transmission disabled
   - Enabled on primary: DMX transmission enabled.
3) Press \( \text{F} \) to confirm the selection or LEFT \( \text{L} \) to keep the current setting.

**Universe**
It lets you assign the “Universe” number to be assigned to a series of projectors.
1) Press \( \text{F} \) – the current Universe address appears on the display.
2) Use the UP \( \text{U} \), DOWN \( \text{D} \), RIGHT \( \text{R} \) keys to set the Universe address.
3) Press \( \text{F} \) to confirm the selection or LEFT \( \text{L} \) to keep the current setting.
LAMP DMX
Used for enabling lamp remote control channel.
1) Press - the current settings appear on the display (On or Off).
2) Use the UP and DOWN keys to enable (On) or disable (Off) the lamp remote control channel.
3) Press to confirm the selection or LEFT to keep current settings.

PAN / TILT
Invert Pan
Used for reversing Pan movement.
1) Press - the current settings appear on the display (On or Off).
2) Use the UP and DOWN keys to enable (On) or disable (Off) PAN inversion.
3) Press to confirm the selection or LEFT to keep current settings.

Invert Tilt
Used for reversing tilt movement.
1) Press - the current settings appear on the display (On or Off).
2) Use the UP and DOWN keys to enable (On) or disable (Off) Tilt inversion.
3) Press to confirm the selection or LEFT to keep current settings.

Swap Pan-Tilt
Used for swapping Pan and Tilt channels (as well as Pan fine and Tilt fine).
1) Press - the current settings appear on the display (On or Off).
2) Use the UP and DOWN keys to enable (On) or disable (Off) Pan and Tilt channel swap.
3) Press to confirm the selection or LEFT to keep current settings.

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

COLOR
Color mixing
Used for reversing the CMY color mixing system.
1) Press - the current settings appear on the display (On or Off).
2) Use the UP and DOWN keys to enable (On) or disable (Off) RGB color mixing mode
3) Press to confirm the selection or LEFT to keep current settings.

Color mixing curve
It lets you select the “Color mixing curve” from the two available.
1) Press - the current setting appears on the display.
2) Use the UP and DOWN keys to select one of the following settings:
   Curve 1
   Curve 2
3) Press to confirm the selection or LEFT to keep the current setting.

Fixed wheel short-cut
Used for optimizing color change time so that the disc turns in the direction that requires shorter movement.
1) Press - the current settings appear on the display (On or Off).
2) Use the UP and DOWN keys to enable (On) or disable (Off) color change optimization.
3) Press to confirm the selection, or LEFT to keep current settings.
**SHUTTER**

**Shutter on error**

Used for automatically closing the stop/strobe in the event of Pan/Tilt position error.
1) Press \(\text{F} \) - 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 \(\text{F} \) 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 \(\text{F} \) – 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 \(\text{F} \) 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 \(\text{F} \) - 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 \(\text{F} \) 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 \(\text{F} \) - 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 \(\text{F} \) to confirm the selection or LEFT to keep current setting.

**SETTING**

Used to save 3 different settings of the items in the options menu and relative submenus.
1) Press \(\text{F} \) - “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 \(\text{F} \) - “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 \(\text{F} \), a confirmation message (Are you sure?) appears on the display.
SYSTEM ERRORS
Shows a list of warnings and messages relevant to errors occurred since
the fixtures switching-on.
1) Pressing \( F \) 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 \( F \) - Hours total and partial appears on the display.
   **Total counter**
   Counts the number of projector working life hours (from manufacture to
date).
   **Partial counter**
   Counts the number of partial projector working life hours since the
last reset to date.
2) Press \( F \) 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 \( F \) - 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 \( F \) to reset partial lamp working hours, a confirmation
message (Are you sure ?) appears on the display.
3) Select YES to reset partial counter or NO to keep the current setting
and return to the top menu level.

LAMP STRIKES
Used for displaying the number of times the lamp was turned on (total and
partial).
1) Press \( F \) - 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.

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
- Shutter on error Off
- Dimmer on Shutter Off
- Power Mode 4-700 Full fan speed
- Display On

INFORMATION MENU
- System Errors
- Fixture Hours
- Lamp Hours
- Lamp Strikes
2) Press $\text{F}$ 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: 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)

**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 $\text{F}$ - the current settings appear on the display (On or Off).
2) Use the UP $\text{B}$ and DOWN $\text{C}$ keys to turn the lamp on (On) or off (Off).
3) Press $\text{F}$ to confirm the selection or LEFT $\text{D}$ to keep current settings and return to the top level.

**RESET**
Used for resetting the projector.
1) Press $\text{F}$ 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 $\text{F}$ - the first channel appears on the display.
2) Use the UP $\text{B}$ and DOWN $\text{C}$ keys to select the required channel.
3) Press $\text{F}$ and use the UP $\text{B}$ and DOWN $\text{C}$ keys to select the required DMX level (value between 0 and 255).
4) Press LEFT $\text{D}$ to return to the top menu level.
To enable the “Advanced Menu” set up the “Access code” (1234) using the UP, DOWN, RIGHT keys.

Press F - “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 F, 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 F 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 F - “channels” appears on the display.
2) Using the UP and DOWN keys, select the effect you wish to regulate.
3) Press F and use the RIGHT, UP and DOWN buttons to make the adjustment by setting a value between 0 and 255.
4) Press F 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 F – 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.

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

Test sequence:
Pan - Tilt effects (Pan & Tilt)
Colour effects (CMY, colour wheel)
Beam effects (Stoper-Strobe / Dimmer / Iris / Prism / Frost)
Gobo effects (Fixed gobo / Rotating gobo)
All effects
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.

Lamp regulation - Fig. 14
To centre the lamp, turn the three adjusting screws as shown in the figure.
Replacing fixed gobos (ø 31.5 mm – max 23 mm image – thickness max 1.1 mm) - Fig. 15
WARNING: Before using personalised gobos contact Clay Paky.
Replacing rotating gobos (ø 25.7 mm - max 23 mm image – thickness max 1.1 mm) - Fig. 17

IMPORTANT: Use only glass gobos on the rotating gobos wheel.

WARNING: Before using personalised gobos contact Clay Paky.

Gobo orientation - Fig. 18

The pictures shown the correct gobos orientation.
Periodical cleaning - Fig. 19

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

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

• General cleaning of internal parts.
• Restoring lubrication of all parts subject to friction, using lubricants specifically supplied by Clay Paky.
• General visual check of the internal components, cabling, mechanical parts, etc.
• Electrical, photometric and functional checks; eventual repairs.
Extraction of the effect modules - Fig. 20

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

Insertion of the effect modules: Repeat the operations indicated in Fig. 20, 21 and 22 in reverse order.
Extraction of the effect modules - Fig. 21

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

Insertion of the effect modules: Repeat the operations indicated in Fig. 20, 21 and 22 in reverse order.
Extraction of the effect modules - Fig. 22

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

Insertion of the effect modules: Repeat the operations indicated in Fig. 20, 21 and 22 in reverse order.
Power supplies available
100-120V 50/60Hz
200-240V 50/60Hz

Input power
• 1050VA a 230V 50Hz.

Lamp
Discharge lamp.
• Type MSR Gold 700/2 Mini Fast Fit (L10098)
  - Cap PGJX28
  - Colour temperature 7200 K
  - Luminous flux 50000 lm
  - Average life 750 h
  - Any working position

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

Optical unit
• Elliptic reflector with high luminous efficiency

Channels
Max 29 control channels.

Inputs
• DMX 512

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 = 3.77 (normal) / 3.20 (fast)
  - TILT = 2.19 (normal) / 1.89 (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

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 22.90 Kg (50lbs 6ozs).

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).

CAUSE AND SOLUTION OF PROBLEMS
# CHANNEL FUNCTION

## ALPHA SPOT HPE 700

<table>
<thead>
<tr>
<th>CHANNEL</th>
<th>STANDARD</th>
<th>VECTOR</th>
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<td>YELLOW</td>
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<td>UNIFORM FIELD LENS</td>
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<tr>
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<td>COLOUR WHEEL</td>
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<tr>
<td>6</td>
<td>STOP / STROBE</td>
<td>STOP / STROBE</td>
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<tr>
<td>7</td>
<td>DIMMER</td>
<td>DIMMER</td>
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<tr>
<td>8</td>
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<td>DIMMER FINE</td>
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<td>9</td>
<td>IRIS</td>
<td>IRIS</td>
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<td>STATIC GOBO CHANGE</td>
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<td>LAMP CONTROL (with Option &quot;Lamp Dmx&quot; ON)</td>
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<td>PAN - TILT TIME</td>
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<td>BEAM TIME</td>
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• **COLOUR MIXING** - channel 1 - 2 - 3

**Operation with option color mixing: RGB**

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**Bit % Effect**

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<tr>
<td>255</td>
<td>100</td>
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**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**

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**Bit % Effect**

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</tr>
<tr>
<td>255</td>
<td>100</td>
<td>COLOUR INSERTED</td>
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**IMPORTANT:** The lamp dim to half power 1 second after all the 3 channels stay at 100% level. The lamp goes back to full power when the channels level is put lower than 100%.

• **UNIFORM FIELD LENS** - channel 4

**Bit % Effect**

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• **COLOUR WHEEL** - channel 5

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<td>212</td>
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<td>172</td>
<td>67.5</td>
<td>SLOW PULSATION</td>
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<td>132</td>
<td>51.7</td>
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• **STOPPER / STROBE** - channel 6

**Bit % Effect**

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• **DIMMER** - channel 7

**Bit % Effect**

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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**

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• **IRIS** - channel 9

**Bit % Effect**

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<td>MINIMUM APERTURE</td>
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**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%.
• FROST - channel 16

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</tr>
<tr>
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• PAN - channel 19

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

<table>
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<th>%</th>
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<tbody>
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<td>100</td>
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</tbody>
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Operation with option InvertPan ▲ On
(Tilt conventionally represented at 14% and option Invert Tilt ▲ Off)

<table>
<thead>
<tr>
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• FOCUS - channel 17

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• PAN - channel 19

(Same as above)

• ZOOM - channel 18

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</tr>
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• PAN - channel 19

(Same as above)

• PAN FINE - channel 20

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

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

<table>
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<th>%</th>
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</thead>
<tbody>
<tr>
<td>255</td>
<td>100</td>
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</table>
• TILT - channel 21
Operation with option Invert Tilt Off
(Pan conventionally represented at 0% and option Invert Pan Off)

• TILT FINE - channel 22
Operation with option Invert Tilt Off
(Pan conventionally represented at 0% and option Invert Pan Off)

• LAMP CONTROL (only with option LAMP DMX On) - channel: 25
IMPORTANT: Alpha Spot HPE 700 is not provided with hot restrike igniter

• FUNCTION - channel: 23

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

• RESET - channel: 24

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

• TILT - channel: 21
Operation with option Invert Tilt Off
(Pan conventionally represented at 0% and option Invert Pan Off)

• TILT FINE - channel 22
Operation with option Invert Tilt Off
(Pan conventionally represented at 0% and option Invert Pan Off)

• LAMP CONTROL (only with option LAMP DMX On) - channel: 25
IMPORANT: Alpha Spot HPE 700 is not provided with hot restrike igniter

• FUNCTION - channel: 23

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

• RESET - channel: 24

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

• TILT - channel: 21
Operation with option Invert Tilt Off
(Pan conventionally represented at 0% and option Invert Pan Off)

• TILT FINE - channel 22
Operation with option Invert Tilt Off
(Pan conventionally represented at 0% and option Invert Pan Off)
## TIMING CHANNELS

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<th>Timing Channel</th>
<th>Channel function</th>
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### TIME TABLE

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Follow cue Data