ENGLISH

**CLAY PAKY**
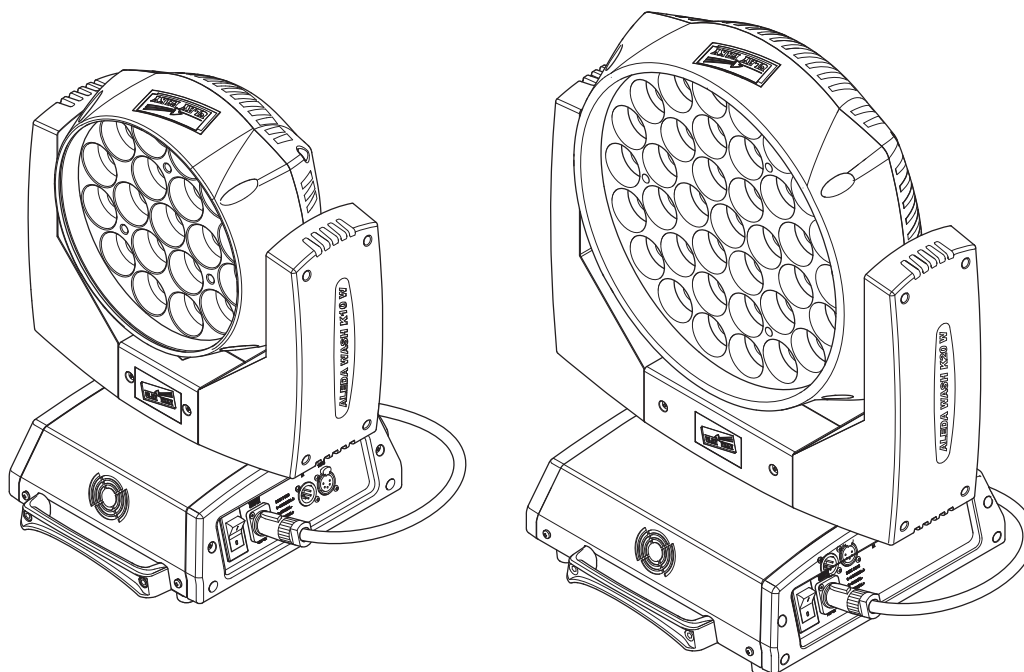AN OSRAM BUSINESS

# A.LEDA WASH K10 CC - A.LEDA WASH K10 W
# A.LEDA WASH K10 TW - A.LEDA WASH K20 CC
# A.LEDA WASH K20 W - A.LEDA WASH K20 TW

C61408
C61407
C61406
C61413
C61412
C61411

## 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

**EN**

**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: [FIS00P – Safety Information A.leda Wash 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: [FIS00P – Safety Information A.leda Wash 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: [FIS00P – Safety Information A.leda Wash 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: [FIS00P – Safety Information A.leda Wash 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. : [FIS00P – Safety Information A.leda Wash series]

**RU**

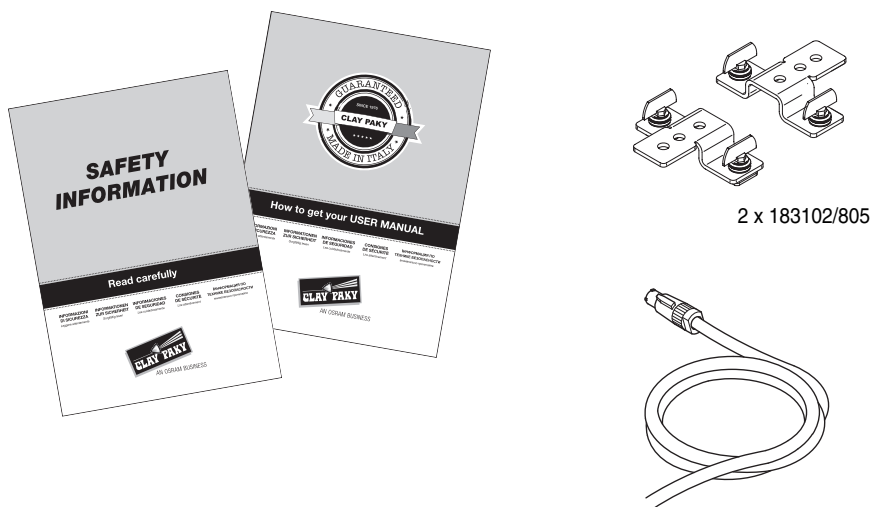**ИНСТРУКЦИЮ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ**
ВАЖНО: Clay Paky рекомендует внимательно прочитать и сохранить инструкцию по технике безопасности данного изделия, которая всегда доступна в электронном формате по следующей ссылке:
**http://www.claypaky.it/en/download**
Наименование: [FIS00P – Safety Information A.leda Wash series]

**1**



2 x 183102/805

**Packing contents** - Fig. 1

**2**
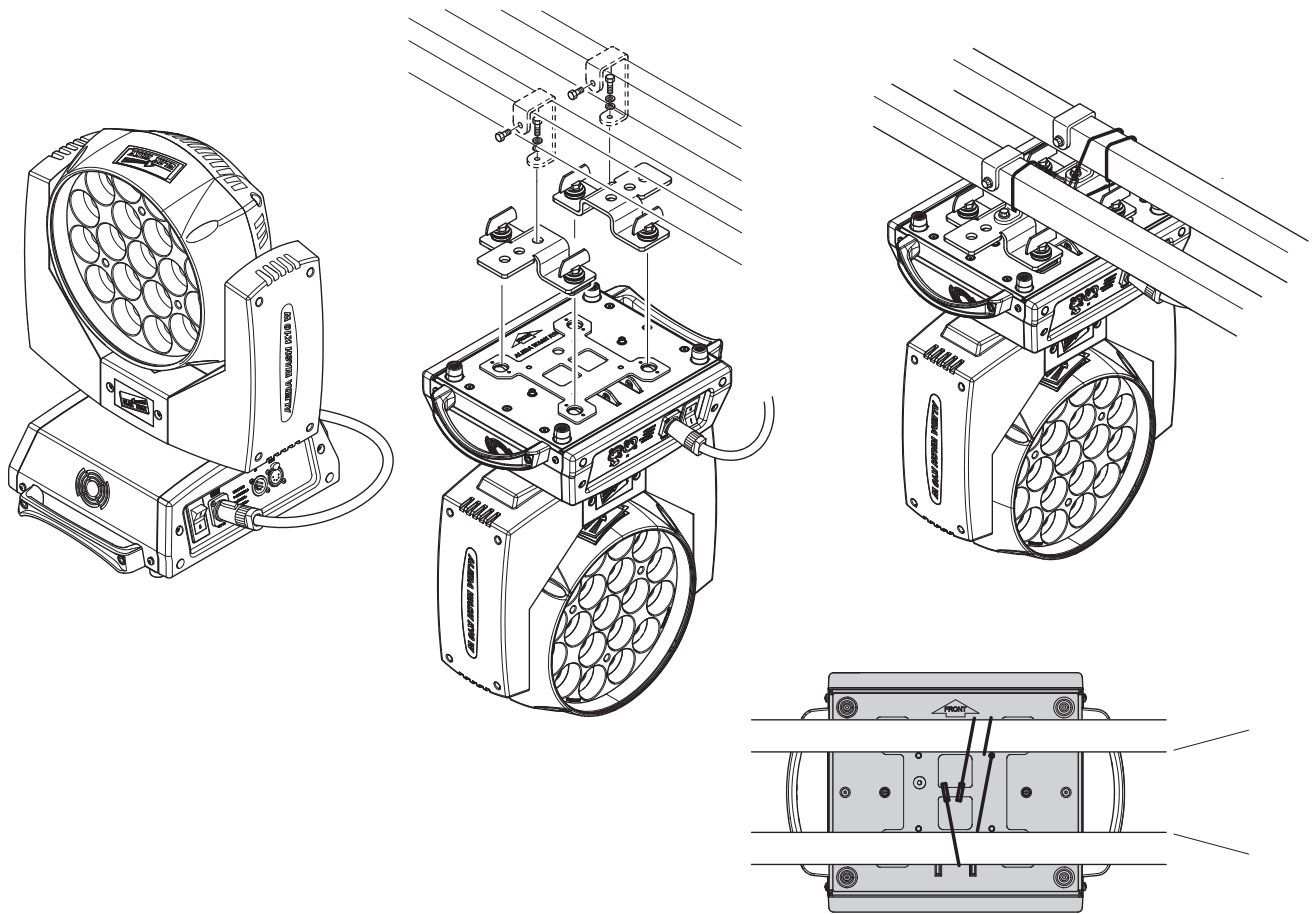
UNLOCKED

LOCKED

90° 90°

90° 90°
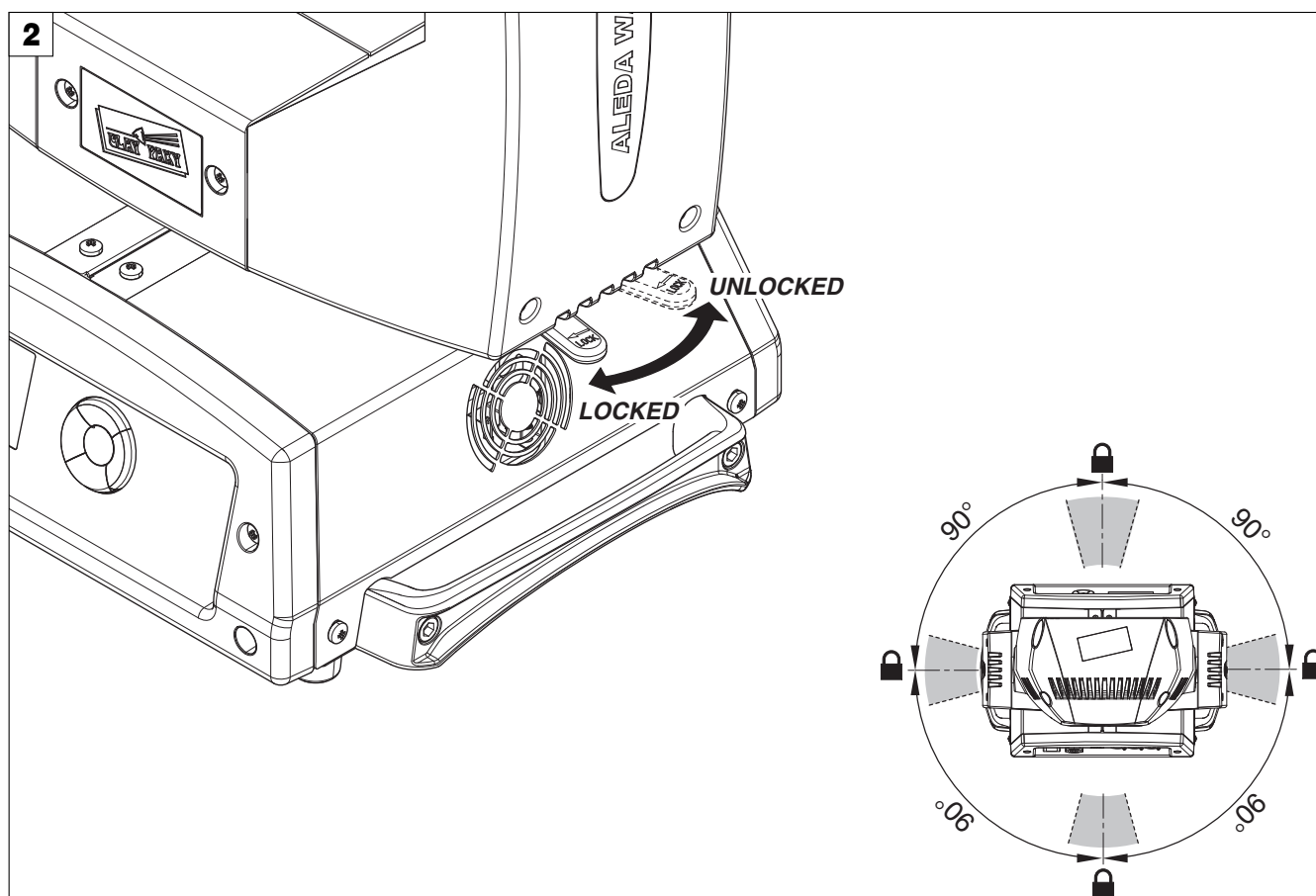


**PAN Mechanism Lock and Release (every 90°)** - Fig. 2

**3**



**Installing the projector** - Fig. 3
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**
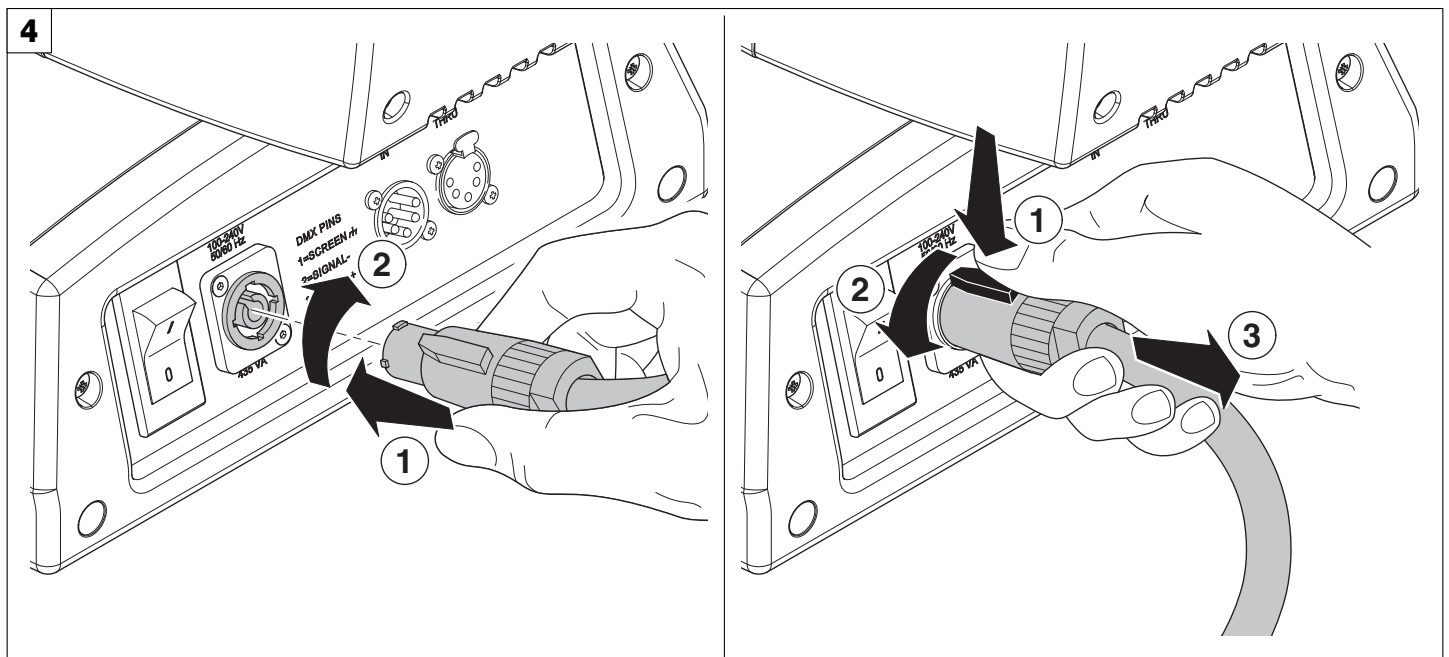


**Connecting and disconnecting power cable** - Fig. 4

**5**



**Connecting to the mains supply** - Fig. 5
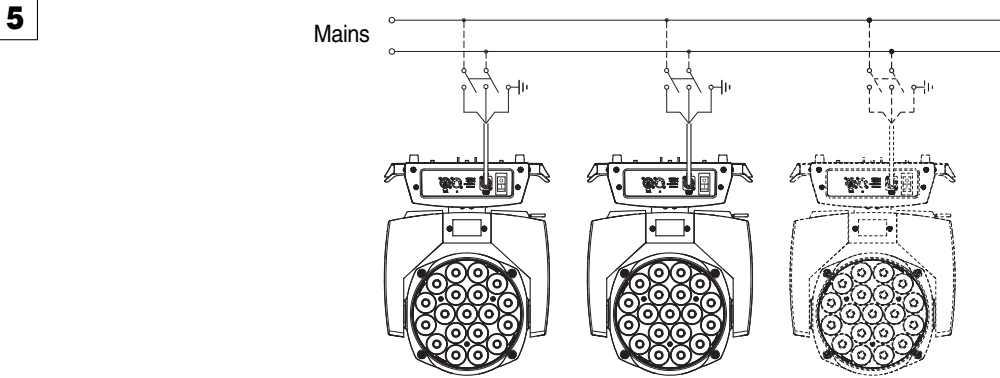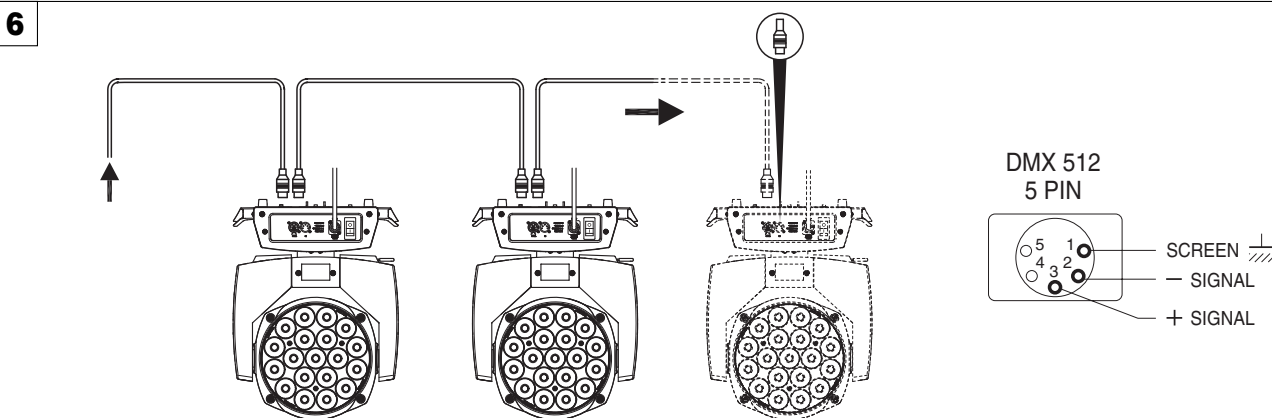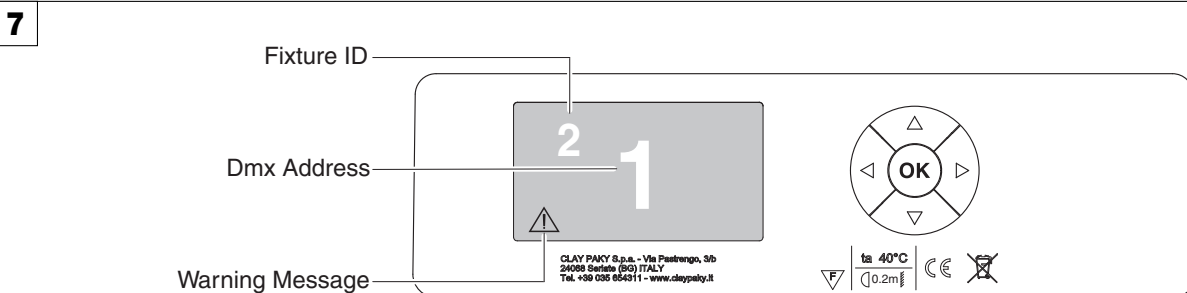
**6**



DMX 512
5 PIN

SCREEN
─ SIGNAL
+ SIGNAL

**Connecting to the control signal line (DMX)** - Fig. 6
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 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.

**7**



Fixture ID

Dmx Address

Warning Message

CLAY PAKY S.p.a. - Via Pastrengo, 3/b
24068 Seriate (BG) ITALY
Tel. +39 035 654311 - www.claypaky.it

ta 40°C
0.2m

**Switching on the projector** - Fig. 7
Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display:

| | | | |
|---|---|---|---|
| **Model** **A.leda Wash** **CC TW W** | **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. 7) has a display and buttons for the complete programming and management of the projector menu. The display can be in one of two conditions: rest status and setting status. When it is in the rest status, the display shows the projector's DMX address and the Fixture ID address (if set).
During menu setting status, after a wait time (about 30 seconds) without any key having been pressed, the display automatically returns to rest status. It should be noted than when this condition occurs, any possible value that has been modified but not yet confirmed with the ⊙ⓚ key will be cancelled.

**8**
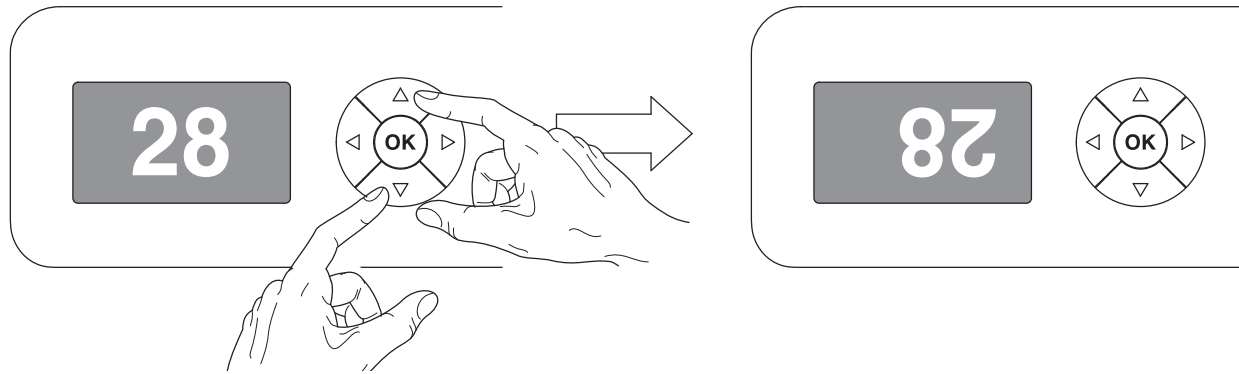
**Reversal of the display** - Fig. 8

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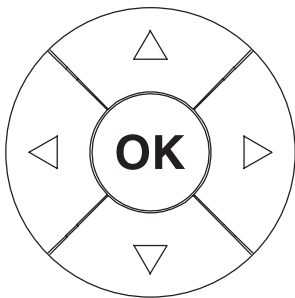
The address can also be set with the projector switched off.

**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



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

**USING THE MENU:**

1) Press ⊛ once – "Main Menu" appears on the display.

2) Use the UP ⊕ and DOWN ⊙ keys to select the menu to be used:
   • Setup (Setup Menu): To set the setting options.
   • Option (Option Menu): To set the operating options
   • Informations (Informations Menu): To read the counters, software version and other  information.
   • Manual Control (Manual control Menu): To trigger the test and manual control functions.
   • Test (Test Menu): To check the proper functionning of  effects
   • Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.

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

## 1

**Set Up**
- Dmx Address
- Fixture ID

**Option**

**Information**

**Manual Control**

**Test**

**Advanced**

## 2

**Option**
- **Pan / Tilt**
  - Invert Pan
  - Invert Tilt
  - Swap Pan-Tilt
  - Encoder Pan-Tilt
- **Silent Mode**
  - Standard
  - Quiet
- **Dimmer cut-off**
- **Display**
- **Special Functions**
  - Pan/Tilt speed
  - Dimmer curve
  - RGB Gamma
  - Halogen Mode
- **Setting**
  - Default Preset
  - User Preset 1
  - User Preset 2
  - User Preset 3

## 3

**Information**
- System Errors
- Fixture Hours
- Led Energy tot
- System Version
- Board Diagnost.
- Dmx Monitor
- Fans Monitor
- RDM Device UID

## 4

**Manual Control**
- Reset
- Channel

## 5

**Test**
- Pan / Tilt
- Colour
- Zoom
- All

## 6

**Advanced**
- Access code 1234
  - Upload Aleda Firmware
  - Setup Model
  - Calibration

A.LEDA WASH CC TW W

7

**NOTE: On grey the default options**

```
┌──────────┐   ┌──────────┐   ┌──────────────┐
│  Set Up  │───│   Dmx    │───│ Address xxx  │
└──────────┘   │ Address  │   └──────────────┘
      │        └──────────┘
      │
      │        ┌──────────┐   ┌──────────────┐
      │        │Fixture ID│───│  Value xxx   │
      │        └──────────┘   └──────────────┘
      │
      │
┌──────────┐   ┌──────────┐   ┌──────────────┐
│  Option  │───│ Pan/Tilt │───│   Invert     │──┬─│ On  │
└──────────┘   └──────────┘   │    Pan       │  └─│ Off │
      │                       └──────────────┘
      │
      │                       ┌──────────────┐  ┌─│ On  │
      │                       │   Invert     │──┤
      │                       │    Tilt      │  └─│ Off │
      │                       └──────────────┘
      │
      │                       ┌──────────────┐  ┌─│ On  │
      │                       │    Swap      │──┤
      │                       │  Pan-Tilt    │  └─│ Off │
      │                       └──────────────┘
      │
      │                       ┌──────────────┐  ┌─│ On  │
      │                       │   Encoder    │──┤
      │                       │  Pan-Tilt    │  └─│ Off │
      │                       └──────────────┘
      │
      │        ┌──────────┐   ┌──────────────┐
      │        │  Silent  │───│  Standard    │
      │        │   mode   │   └──────────────┘
      │        └──────────┘   ┌──────────────┐
      │                       │    Quiet     │
      │                       └──────────────┘
      │
      │        ┌──────────┐
      │        │  Dimmer  │
      │        │ cut-off  │
      │        └──────────┘
      │
      │        ┌──────────┐   ┌──────────────┐
      └────────│ Display  │──┬│     On       │
               └──────────┘  └│     Off      │
                              └──────────────┘
```
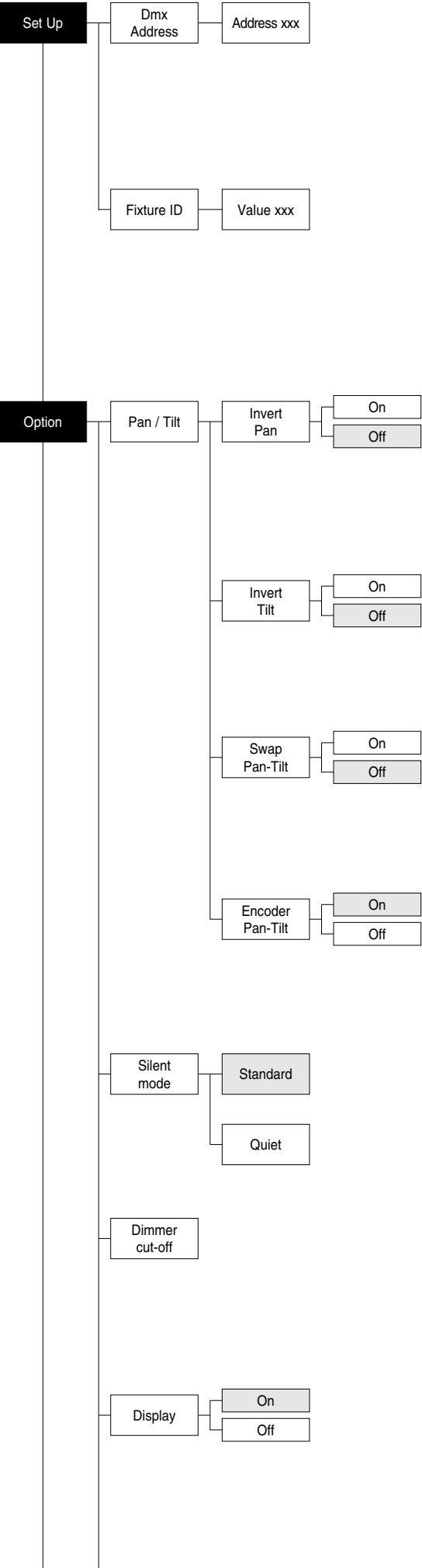
**DMX ADDRESS**

**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.
2) Use the UP ⬆ and DOWN ⬇, RIGHT ▶ keys to plan the DMX Address.
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 ⓄⓀ to confirm the selection or LEFT ◀ to keep current settings.

## OPTIONS MENU

**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.

**SILENT MODE**

Lets you set an operator mode choosing from the two available:

• **Standard**: Maximum speed and consequently maximum effect and fan noise.
• **Quiet**: reduces the speed of some effects and fans thus also reducing noise.
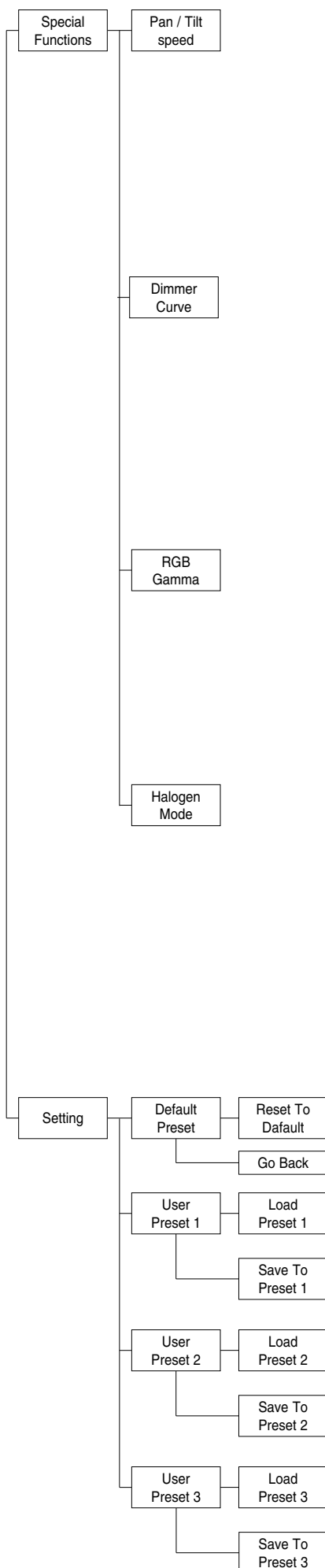
**DIMMER CUT-OFF**

Used to set a DMX fine value under which the dimmer remains to zero level.

1) Press ⓄⓀ - the current Dimmer cut-off appear on the display.
2) Use the UP ⬆ and DOWN ⬇, RIGHT ▶ keys to plan the Dimmer cut-off.
3) Press ⓄⓀ to confirm the selection or LEFT ◀ to keep current settings.

**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.

## Menu Tree

- Special Functions
  - Pan / Tilt speed
  - Dimmer Curve
  - RGB Gamma
  - Halogen Mode
- Setting
  - Default Preset
    - Reset To Default
    - Go Back
  - User Preset 1
    - Load Preset 1
    - Save To Preset 1
  - User Preset 2
    - Load Preset 2
    - Save To Preset 2
  - User Preset 3
    - Load Preset 3
    - Save To Preset 3

## SPECIAL FUNCTIONS

### Pan / Tilt speed

Lets you select two different Pan and Tilt speeds.
1) Press ⊙Ⓚ - the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   - **Normal**
   - **Fast**
3) Press ⊙Ⓚ to confirm the selection or LEFT ◁ to keep current settings.

### Dimmer Curve

Lets you select four different Dimmer channel curves.
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**
   - **Curve 3**
   - **Curve 4**
3) Press ⊙Ⓚ to confirm the selection or LEFT ◁ to keep current settings.

### RGB Gamma

Lets you select three different RGBW gamma curves.
1) Press ⊙Ⓚ - the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   - **Gamma 1.0**
   - **Gamma 1.5**
   - **Gamma 2.0**
3) Press ⊙Ⓚ to confirm the selection or LEFT ◁ to keep current settings.

### Halogen Mode

Lets you select five different halogen lamp simulations.
1) Press ⊙Ⓚ - the current setting appears on the display.
2) Use the UP ⊙ and DOWN ⊙ keys to select one of the following settings:
   - **Halogen OFF**
   - **Halogen Lamp 1**
   - **Halogen Lamp 2**
   - **Halogen Lamp 3**
   - **Halogen Lamp 4**
   - **Halogen Lamp 5**
3) Press ⊙Ⓚ 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 ⊙Ⓚ - "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 ⊙Ⓚ - "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 ⊙Ⓚ, a confirmation message (Are you sure?) appears on the display.
2) Select YES to confirm the selction or NO to keep current setting.
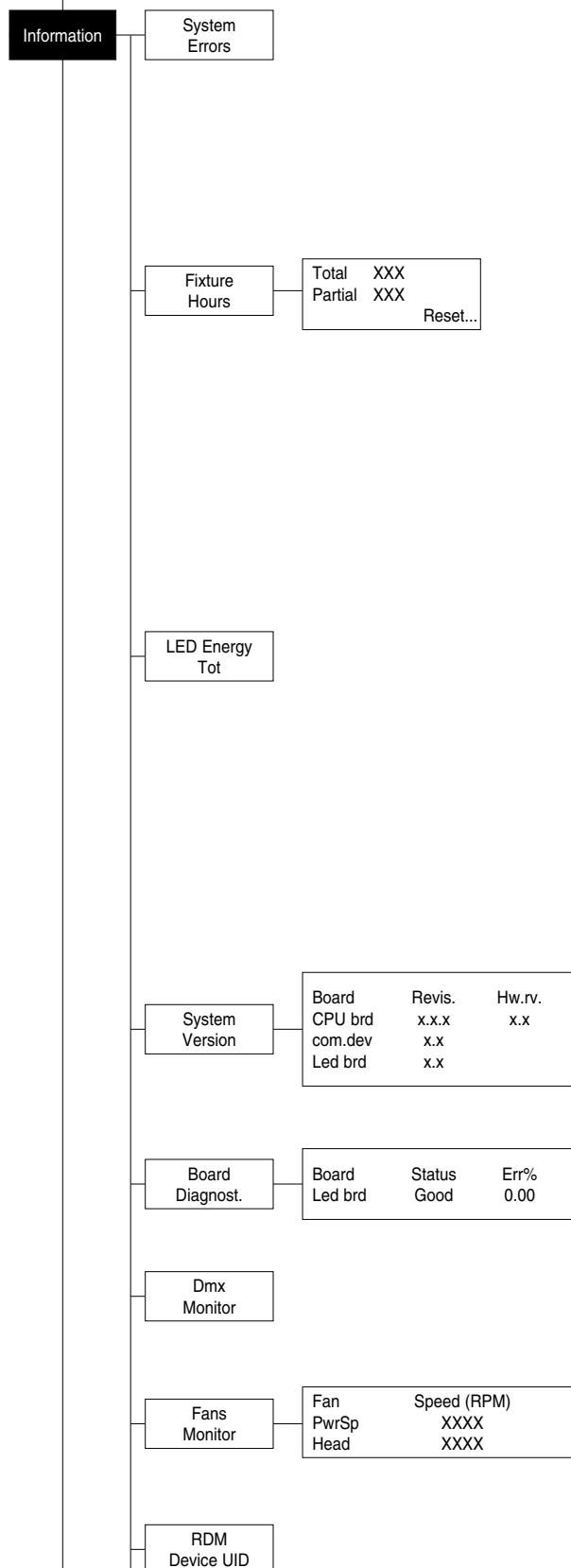
| OPTION | DEFAULT |
|---|---|
| Invert Pan | Off |
| Invert Tilt | Off |
| Swap Pan-Tilt | Off |
| Encoder Pan-Tilt | On |
| Silent Mode | Standard |
| Display | Off |
| Pan/Tilt speed | Normal |
| Dimmer Curve | Curve 3 |
| RGB Gamma | Gamma 2.0 |

## INFORMATION MENU

### SYSTEM ERRORS

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

1) 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**
   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.

### LED ENERGY TOT

Lets you view total LED working hours.

1) Press ⊗ - to display total and partial Watts/hour:
   **Total**
   Total LED working hours from construction to date.
   **Partial**
   LED working hours from last reset to date.
2) Press ⊗ to reset the partial counter. A confirmation appears on the screen (Are you sure?)
3) Select YES to reset the partial counter or NO to keep the current setting and open the next menu level.

### SYSTEM VERSION

Used for displaying the software and hardware version of each board installed in the projector:
CPU brd (CPU board)
Led board

### BOARD DIAGNOSTIC

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

### DMX MONITOR

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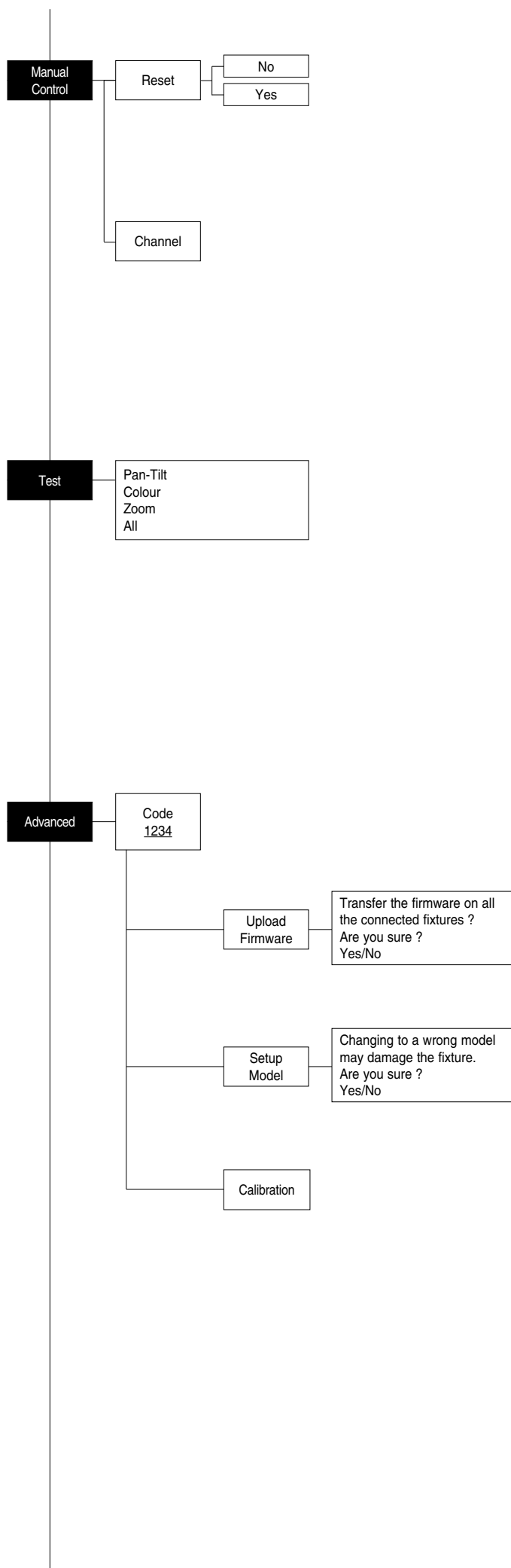
### FANS MONITOR

Used for displaying the speed of each fan installed in the projector:
PwrSp (fan PSU)
Head (fan head)

### RDM DEVICE UID

Shows the exclusive address of the fixture to use communicate via RDM.

---

Information — System Errors

Fixture Hours

| Total | XXX |
|---|---|
| Partial | XXX |
| | Reset... |

LED Energy Tot

System Version

| Board | Revis. | Hw.rv. |
|---|---|---|
| CPU brd | x.x.x | x.x |
| com.dev | x.x | |
| Led brd | x.x | |

Board Diagnost.

| Board | Status | Err% |
|---|---|---|
| Led brd | Good | 0.00 |

Dmx Monitor

Fans Monitor

| Fan | Speed (RPM) |
|---|---|
| PwrSp | XXXX |
| Head | XXXX |

RDM Device UID

## Menu tree (left column)

```
Manual
Control ─── Reset ─── No
                 └─── Yes

        └──── Channel


Test ─── Pan-Tilt
         Colour
         Zoom
         All


Advanced ─── Code
             1234 ─── Upload ─── Transfer the firmware on all
                      Firmware     the connected fixtures ?
                                   Are you sure ?
                                   Yes/No

                    └── Setup ─── Changing to a wrong model
                        Model      may damage the fixture.
                                   Are you sure ?
                                   Yes/No

                    └── Calibration
```

## MANUAL CONTROL

### RESET

Used for resetting the projector.

1) Press ⊛ 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 ⊛ - the first channel appears on the display.

2) Use the UP ⊙ and DOWN ⊙ keys to select the required channel:

3) Press ⊛ and use the UP ⊙ and DOWN ⊙ keys to select the required DMX level (value between 0 and 255).

4) Press LEFT ⊙ to return to the top menu level.

## TEST MENU

### TEST

Allows you to check the proper functioning of effects.

1) Press ⊛ to return to the top menu level.

2) Use the UP ⊙ and DOWN ⊙ keys to select the required test.

3) Press ⊛ to confirm the selection or LEFT ⊙ to keep current settings.

Test sequence:
Pan - Tilt effects (Pan & Tilt)
Colour effects
Zoom
All effects

## ADVANCED MENU

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

### UP LOAD FIRMWARE

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

1) Press ⊛ , a confirmation message appears on the display.

2) Select YES to start the firmware loading or NO to keep the current setting and return to the top menu level

### SETUP MODEL

Allows you to change the default model of projector.

1) Press ⊛ a confirmation message appears on the display.

2) Select YES to define the model of projector or NO to keep the current setting and return to the top menu level.

### CALIBRATION

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

1) Press ⊛ - "channels" appears on the display.

2) Using the UP ⊙ and DOWN ⊙ keys, select the effect you wish to regulate.

3) Press ⊛ and use the RIGHT ⊙ , UP ⊙ and DOWN ⊙ buttons to make the adjustment by setting a value between 0 and 255.

4) Press ⊛ to confirm the selection or LEFT ⊙ to keep current settings and return to the top level.

### FACTORY DEFAULT

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

1) Press ⊛ – a confirmation message appears on the display (Reset calibration to factory default ?).

2) Select YES to reset calibration to factory default or NO to keep the current setting and return to the top menu level.
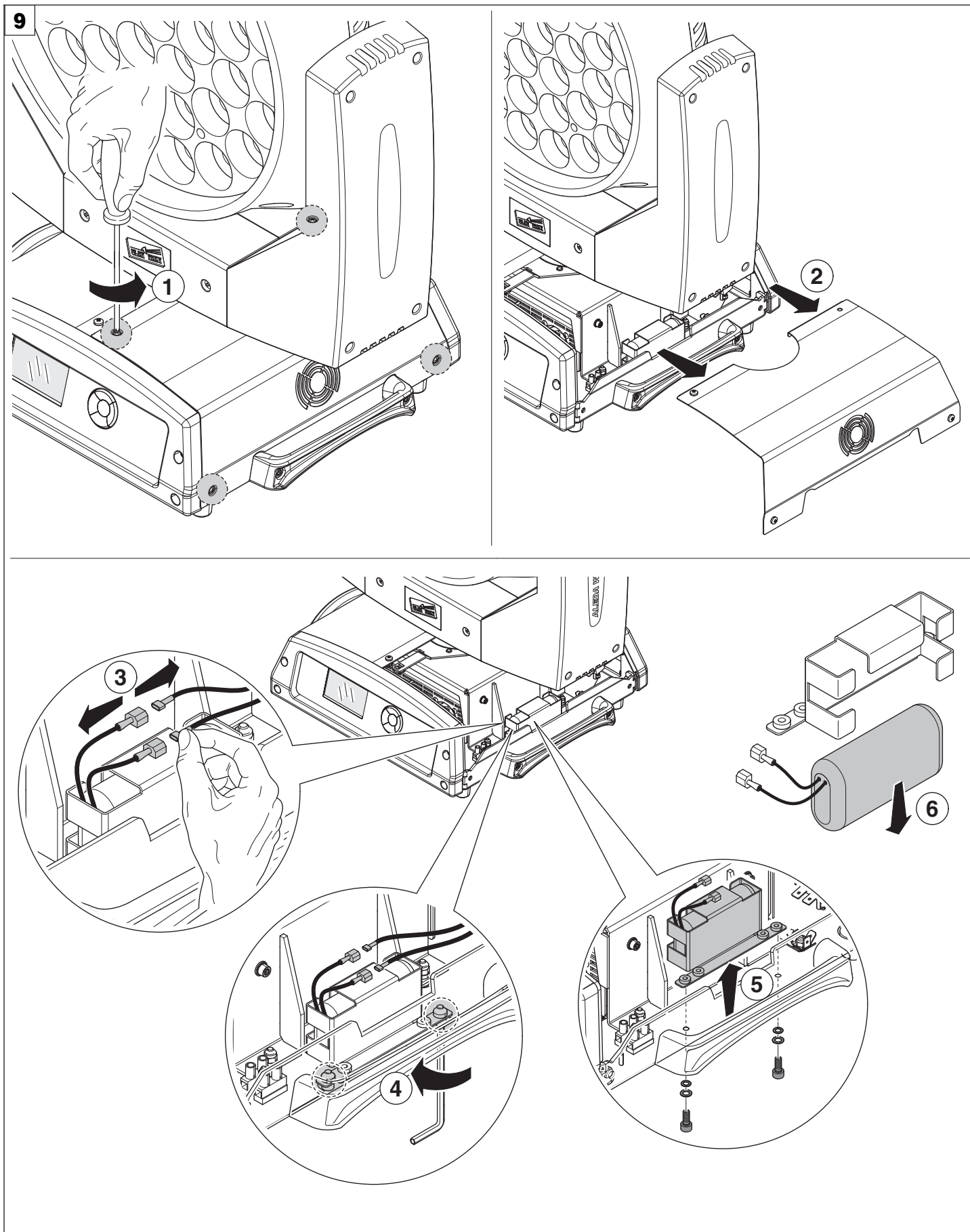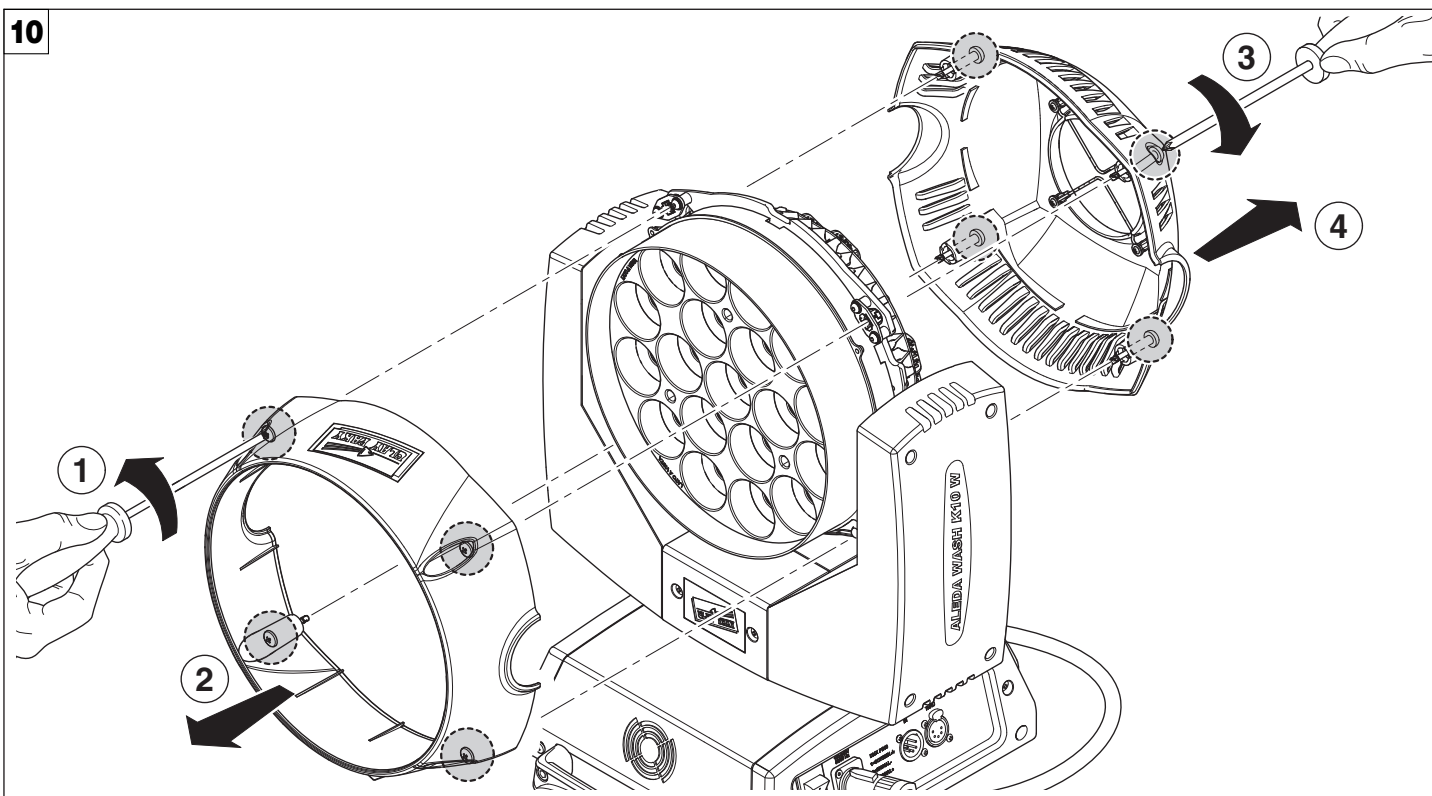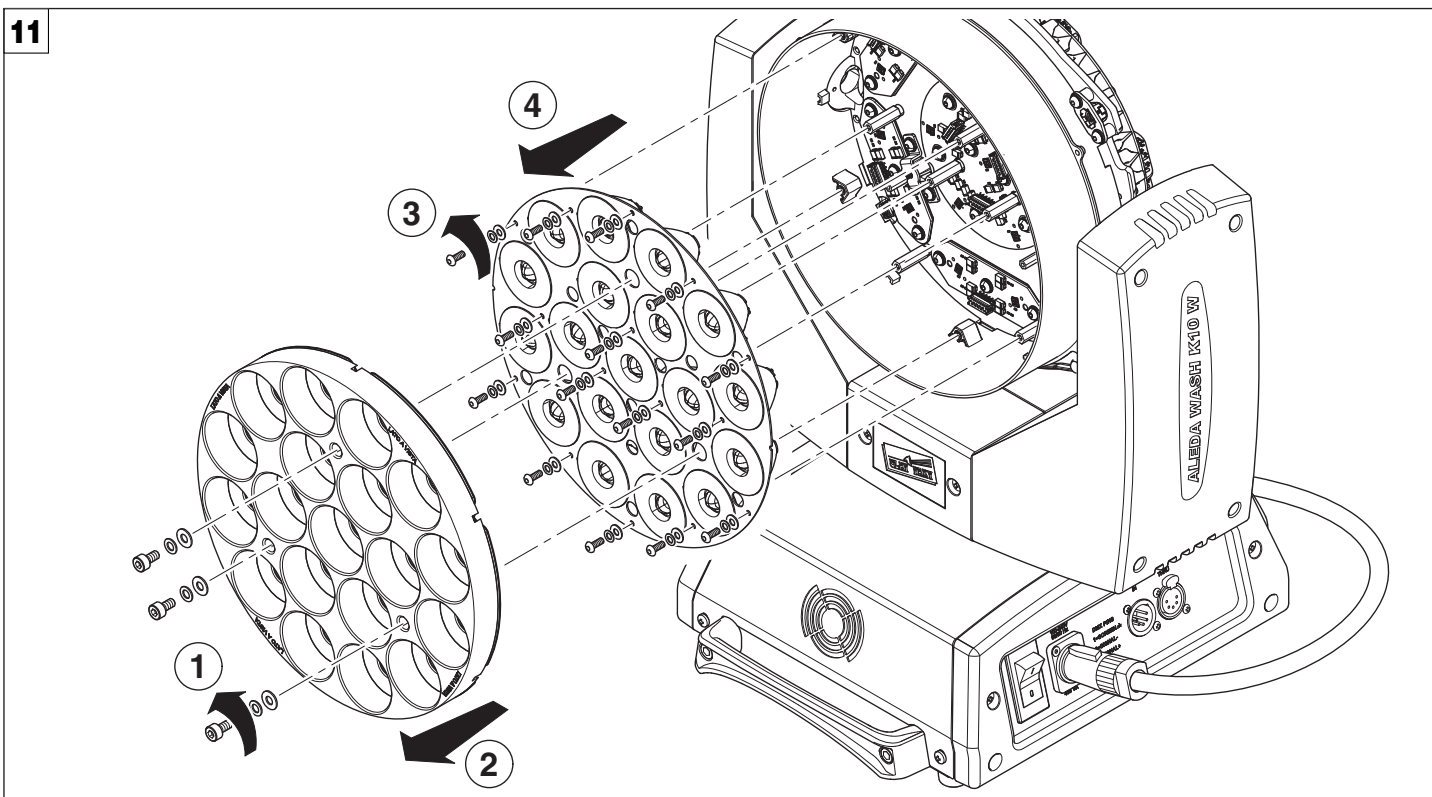
**Battery removal** - Fig. 9

This product contains a rechargeable lithium iron tetraphosphate. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.
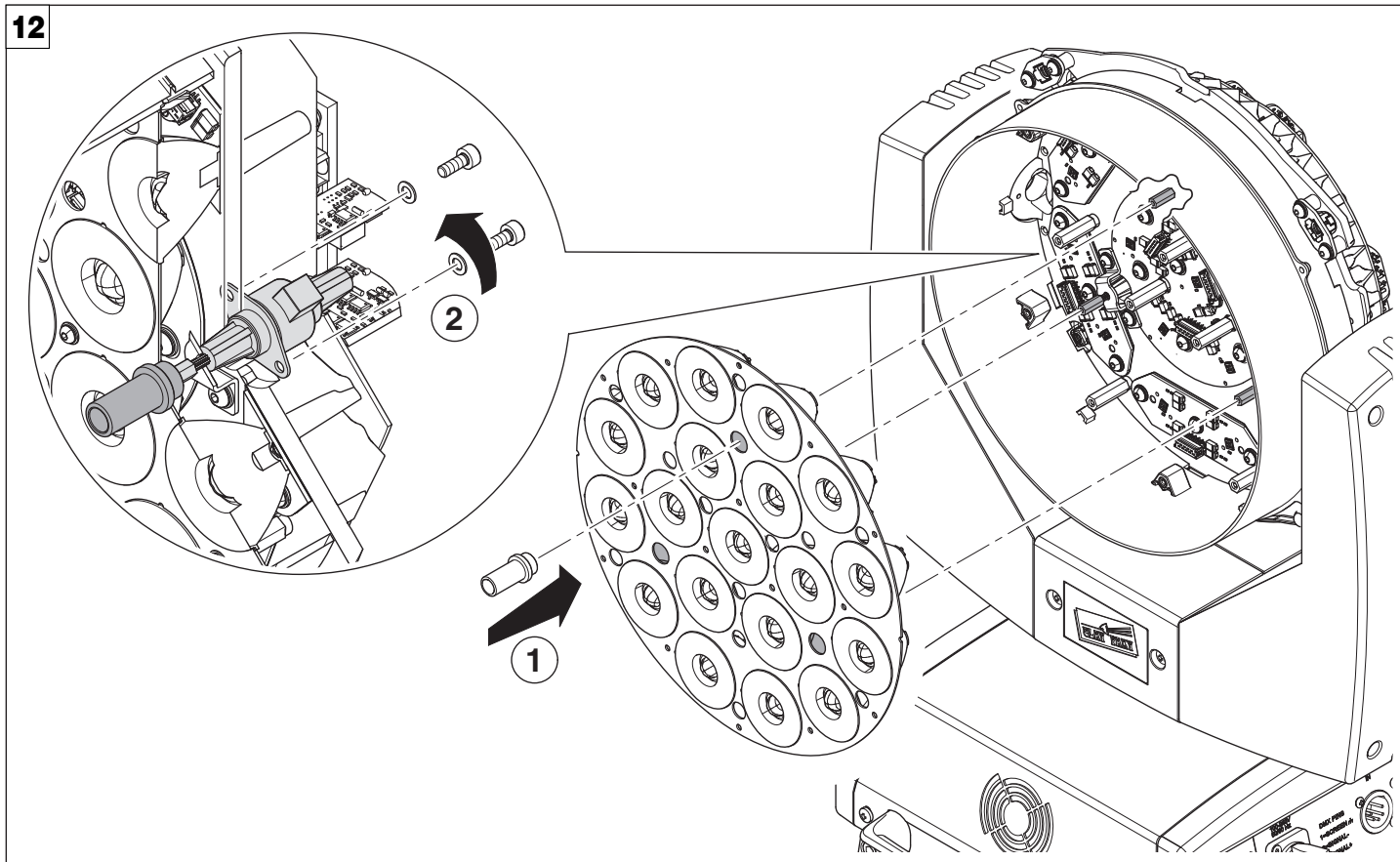
LiFePO4

**Opening the covers** - Fig. 10



**Removing/Assembling the lens unit** - Fig. 11

**NB:** Apply Loctite 222 (p/n COL002) to the threads of the 3 screws (1) before tightening them. A torque of 0.3N is recommended in order to avoid damaging the zoom movement actuators.

**Replacing the line actuator** - Fig. 12

**NB**: It is highly recommended to use the DIM002/001 (1) template whenever it is necessary to replace one of the three Zoom movement line actuators. DIM002/001 ensures the actuator group is centred correctly on the lens plate before tightening the 2 screws (2) that fasten the actuator in place.

## OPTIONAL ACCESSORIES

A.LEDA WASH K10 CC TW W

**13**
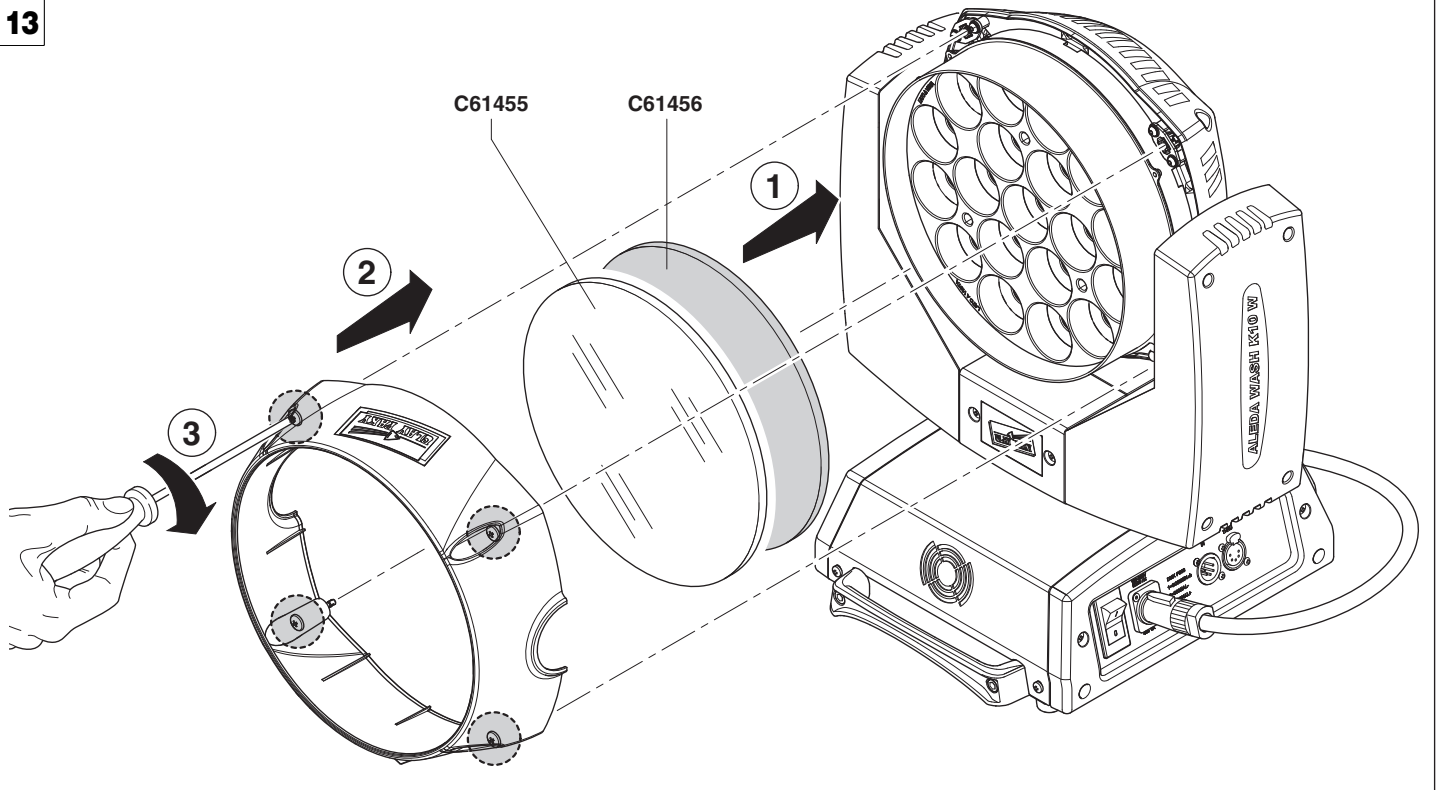
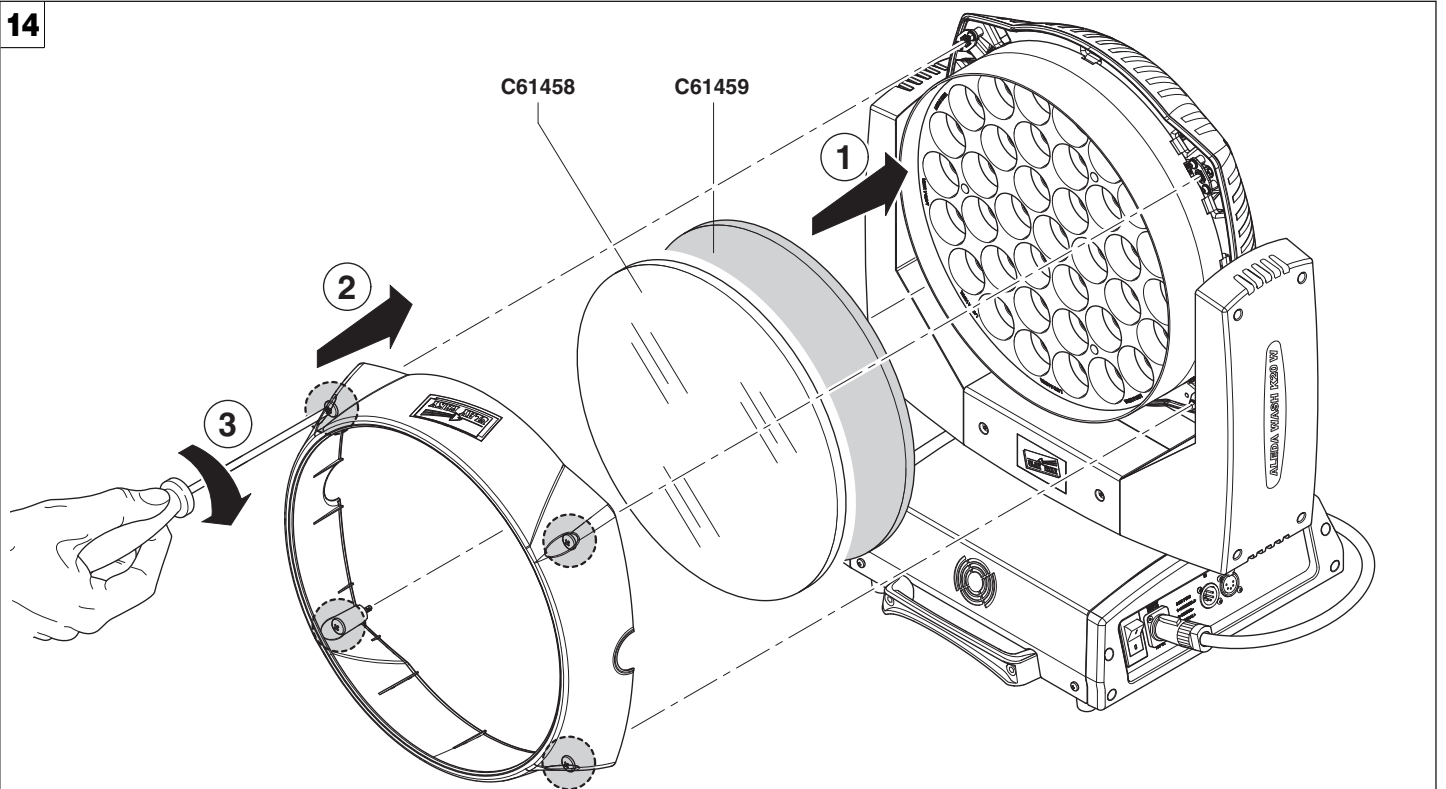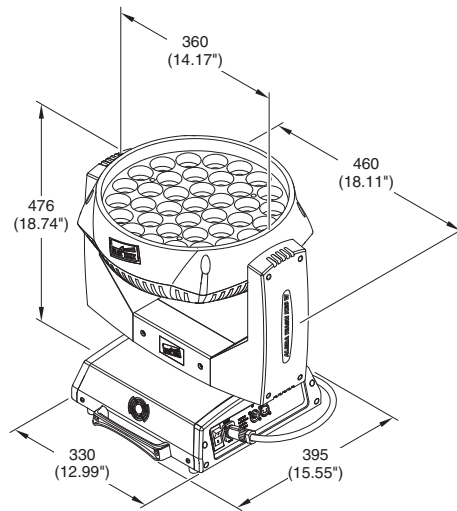

**C61455**  **C61456**

**Cover** - Fig. 13
C61455 - Transparent cover (standard)
C61456 - Frosted cover

A.LEDA WASH K20 CC TW W

**14**



**C61458**  **C61459**

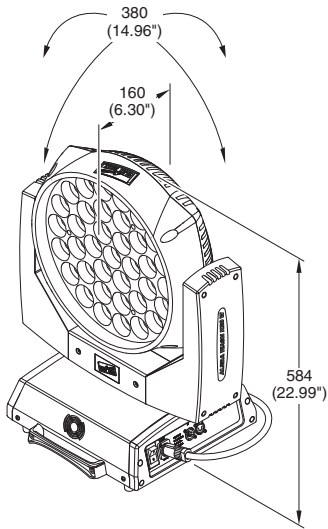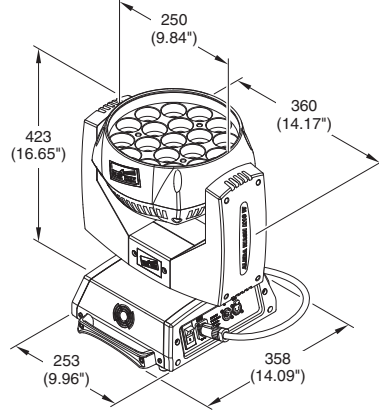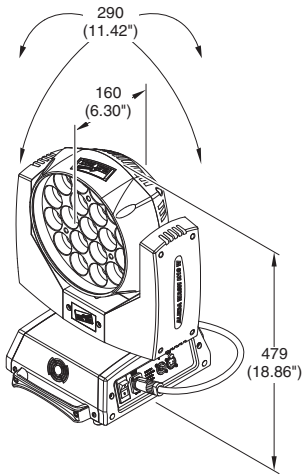**Cover** - Fig. 14
C61458 - Transparent cover (standard)
C61459 - Frosted cover

# TECHNICAL INFORMATION



**Power supplies available**
100-240V 50/60Hz

**Input power**
• K20 - 750VA
• K10 - 450VA

**Total output**
• K10 CC - Max 5300 lumens
• K10 TW - Max 6800 lumens
• K10 W - Max 10500 lumens
• K20 CC - Max 10900 lumens
• K20 TW - Max 14300 lumens
• K20 W - Max 21700 lumens

**LED source**
Osram Ostar RGBW LED - 15W
Average LED life: 50.000 h

**Motors**
5 (k10 & k20), stepper motors, operating with microsteps, totally microprocessor controlled.

**Cooling**
• High efficiency die-cast aluminium
• Forced ventilation

**Inputs**
DMX 512

**Working position**
Working in any position.

**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.
• Angle:
 - PAN = 540°
 - TILT = 270°

**IP20 protection rating**
• Protected against the entry of solid bodies larger than 12mm (0.47").
• No protection against the entry of liquids.

**Weights**
• K10:13.9 kg
• K20:19.5 kg

# CAUSE AND SOLUTION OF PROBLEMS

| | | | | POSSIBLE CAUSES | CHECKS AND REMEDIES |
|---|---|---|---|---|---|
| THE PROJECTOR WILL NOT SWITCH ON | | | | | |
| | ELECTRONICS NON-OPERATIONAL | | | | PROBLEMS |
| | | DEFECTIVE PROJECTION | | | |
| | | | REDUCED LUMINOSITY | | |
| ● | | | | No mains supply. | Check the power supply voltage. |
| ● | | | ● | LED exhausted or defective. | Call an authorised technician. |
| | ● | | | 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 broken | Call an authorised technician. |
| | | ● | ● | Dust or grease deposited. | Clean (see instructions). |

**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).**

## A.LEDA WASH K10 CC

| CHAN-NEL | CHANNEL MODE |
|---|---|
| 1 | Red |
| 2 | RedFine |
| 3 | Green |
| 4 | GreenFine |
| 5 | Blue |
| 6 | BlueFine |
| 7 | White |
| 8 | WhiteFine |
| 9 | CTO |
| 10 | Macro Colour |
| 11 | Strobe |
| 12 | Dimmer |
| 13 | Dimmer fine |
| 14 | Pan |
| 15 | Pan fine |
| 16 | Tilt |
| 17 | Tilt fine |
| 18 | Function |
| 19 | Reset |
| 20 | Zoom |

## A.LEDA WASH K10 W

| CHAN-NEL | CHANNEL MODE |
|---|---|
| 1 | Strobe |
| 2 | Dimmer |
| 3 | Dimmer fine |
| 4 | Pan |
| 5 | Pan fine |
| 6 | Tilt |
| 7 | Tilt fine |
| 8 | Function |
| 9 | Reset |
| 10 | Zoom |

## A.LEDA WASH K10 TW

| CHAN-NEL | CHANNEL MODE |
|---|---|
| 1 | WarmWhite |
| 2 | WarmWhiteFine |
| 3 | CoolWhite |
| 4 | CoolWhiteFine |
| 5 | CTO |
| 6 | Strobe |
| 7 | Dimmer |
| 8 | Dimmer fine |
| 9 | Pan |
| 10 | Pan fine |
| 11 | Tilt |
| 12 | Tilt fine |
| 13 | Function |
| 14 | Reset |
| 15 | Zoom |

## A.LEDA WASH K20 CC

| CHAN-NEL | CHANNEL MODE |
|---|---|
| 1 | Red |
| 2 | RedFine |
| 3 | Green |
| 4 | GreenFine |
| 5 | Blue |
| 6 | BlueFine |
| 7 | White |
| 8 | WhiteFine |
| 9 | CTO |
| 10 | Macro Colour |
| 11 | Strobe |
| 12 | Dimmer |
| 13 | Dimmer fine |
| 14 | Pan |
| 15 | Pan fine |
| 16 | Tilt |
| 17 | Tilt fine |
| 18 | Function |
| 19 | Reset |
| 20 | Zoom |

## A.LEDA WASH K20 W

| CHAN-NEL | CHANNEL MODE |
|---|---|
| 1 | Strobe |
| 2 | Dimmer |
| 3 | Dimmer fine |
| 4 | Pan |
| 5 | Pan fine |
| 6 | Tilt |
| 7 | Tilt fine |
| 8 | Function |
| 9 | Reset |
| 10 | Zoom |

## A.LEDA WASH K20 TW

| CHAN-NEL | CHANNEL MODE |
|---|---|
| 1 | WarmWhite |
| 2 | WarmWhiteFine |
| 3 | CoolWhite |
| 4 | CoolWhiteFine |
| 5 | CTO |
| 6 | Strobe |
| 7 | Dimmer |
| 8 | Dimmer fine |
| 9 | Pan |
| 10 | Pan fine |
| 11 | Tilt |
| 12 | Tilt fine |
| 13 | Function |
| 14 | Reset |
| 15 | Zoom |

**NOTE: On conclusion of resetting in case of absence of DMX signal, Pan & Tilt move to the "Home" position (Pan 128 bit - Tilt 128 bit) all the others channels stay at 0 bit.**

**- COOL WHITE - WARM WHITE • RED - GREEN - BLUE - WHITE**

**K10 CC**
**K10 TW**
**K20 CC**
**K20 TW**

| BIT | EFFECT |
|-----|--------|
| 255 | MAXIMUM BRIGHTNESS |
| 0 | LED OFF |

**• RED FINE – GREEN FINE – BLUE FINE – WHITE FINE - COOL WHITE FINE - WARM WHITE FINE**

**K10 CC**
**K10 TW**
**K20 CC**
**K20 TW**

| BIT | EFFECT |
|-----|--------|
| 255 | UPPER BRIGHTNESS |
| 0 | LOWER BRIGHTNESS |

**• C.T.O.**

**K10 TW**
**K20 TW**

| BIT | EFFECT |
|-----|--------|
| 255 | WARM 100% - COOL 0% |
| 128 | WARM 50% - COOL 50% |
| 10 | WARM 0% - COOL 100% |
| 0-9 | UNUSED RANGE |

**• C.T.O.**

**K10 CC**
**K20 CC**

| BIT | EFFECT |
|-----|--------|
| 255 | 2500 |
| 250 | 2600 |
| 246 | 2700 |
| 242 | 2800 |
| 237 | 2900 |
| 233 | 3000 |
| 228 | 3100 |
| 224 | 3200 |
| 219 | 3300 |
| 215 | 3400 |
| 210 | 3500 |
| 206 | 3600 |
| 201 | 3700 |
| 197 | 3800 |
| 192 | 3900 |
| 188 | 4000 |
| 184 | 4100 |
| 179 | 4200 |
| 175 | 4300 |
| 170 | 4400 |
| 166 | 4500 |
| 161 | 4600 |
| 157 | 4700 |
| 152 | 4800 |
| 148 | 4900 |
| 144 | 5000 |
| 139 | 5100 |
| 135 | 5200 |
| 130 | 5300 |
| 126 | 5400 |
| 121 | 5500 |
| 117 | 5600 |
| 112 | 5700 |
| 108 | 5800 |
| 103 | 5900 |
| 99 | 6000 |
| 95 | 6100 |
| 90 | 6200 |
| 86 | 6300 |
| 81 | 6400 |
| 77 | 6500 |
| 72 | 6600 |
| 68 | 6700 |
| 63 | 6800 |
| 59 | 6900 |
| 54 | 7000 |
| 50 | 7100 |
| 46 | 7200 |
| 41 | 7300 |
| 37 | 7400 |
| 32 | 7500 |
| 28 | 7600 |
| 23 | 7700 |
| 19 | 7800 |
| 14 | 7900 |
| 10 | 8000 |
| 0-9 | UNUSED RANGE |

**Note: If CTO channel is active, the WHITE channel is disabled.**

**• MACRO COLOUR**

**K10 CC**
**K20 CC**

| BIT | LEE REFERENCE | COLOUR | BIT VALUE | | | |
|---|---|---|---|---|---|---|
| | | | R | G | B | W |
| 209-255 | - | White | 255 | 235 | 66 | 255 |
| 208 | - | Dirty White | 255 | 255 | 122 | 255 |
| 207 | 197 | Alice Blue | 128 | 255 | 143 | 0 |
| 191-206 | 181 | Congo Blue | 76 | 0 | 255 | 0 |
| 184-190 | 174 | Dark Steel Blue | 158 | 247 | 89 | 0 |
| 180-183 | 170 | Deep lavender | 232 | 165 | 58 | 0 |
| 179 | 169 | Lilac Tint | 246 | 208 | 45 | 0 |
| 175-178 | 165 | Daylight Blue | 75 | 218 | 90 | 0 |
| 174 | 164 | Flame Red | 211 | 27 | 2 | 0 |
| 172-173 | 162 | Bastard Amber | 227 | 176 | 23 | 0 |
| 168-171 | 158 | Deep Orange | 227 | 86 | 1 | 0 |
| 162-167 | 152 | Pale Gold | 255 | 189 | 24 | 0 |
| 157-161 | 147 | Apricot | 231 | 142 | 11 | 0 |
| 151-156 | 141 | Bright Blue | 0 | 243 | 79 | 0 |
| 149-150 | 139 | Primary Green | 59 | 229 | 1 | 0 |
| 147-148 | 137 | Special lavender | 199 | 197 | 74 | 0 |
| 146 | 136 | Pale Lavender | 225 | 196 | 54 | 0 |
| 145 | 135 | Deep Golden Amber | 255 | 48 | 1 | 0 |
| 142-144 | 132 | Medium Blue | 0 | 239 | 135 | 0 |
| 138-141 | 128 | Bright Pink | 239 | 40 | 31 | 0 |
| 136-137 | 126 | Mauve | 213 | 28 | 50 | 0 |
| 134-135 | 124 | Dark Green | 67 | 237 | 10 | 2 |
| 131-133 | 121 | Leaf Green | 171 | 232 | 1 | 0 |
| 129-130 | 119 | Dark Blue | 0 | 194 | 253 | 0 |
| 128 | 118 | Light Blue | 62 | 255 | 76 | 0 |
| 127 | 117 | Steel Blue | 185 | 255 | 48 | 0 |
| 126 | 116 | Med Blu Green | 185 | 255 | 48 | 0 |
| 125 | 115 | Peacock Blue | 39 | 249 | 43 | 0 |
| 123-124 | 113 | Magenta | 158 | 6 | 8 | 0 |
| 121-122 | 111 | Dark Pink | 225 | 107 | 27 | 0 |
| 120 | 110 | Middle Rose | 209 | 132 | 24 | 0 |
| 119 | 109 | Light Salmon | 240 | 141 | 27 | 0 |
| 118 | 108 | English Rose | 220 | 140 | 18 | 0 |
| 117 | 107 | Light Rose | 251 | 152 | 28 | 0 |
| 115-116 | 105 | Orange | 255 | 131 | 1 | 0 |
| 114 | 104 | Deep Amber | 243 | 172 | 1 | 0 |
| 113 | 103 | Straw | 216 | 158 | 0 | 80 |
| 112 | 102 | Light Amber | 210 | 158 | 1 | 0 |
| 110-111 | 100 | Spring Yellow | 220 | 199 | 1 | 0 |
| 100-109 | 90 | Dark yellow green | 35 | 225 | 1 | 0 |
| 89-99 | 79 | Just Blue | 0 | 190 | 129 | 0 |
| 78-88 | 68 | Sky Blue | 0 | 251 | 133 | 0 |
| 68-77 | 58 | Lavender | 220 | 117 | 146 | 199 |
| 62-67 | 52 | Light Lavender | 237 | 125 | 39 | 203 |
| 49-61 | 39 | Pink Carnation | 232 | 95 | 0 | 146 |
| 46-48 | 36 | Medium Pink | 255 | 79 | 0 | 130 |
| 45 | 35 | Light Pink | 228 | 102 | 0 | 156 |
| 35-44 | 25 | Sunrise Red | 249 | 83 | 2 | 0 |
| 32-34 | 22 | Dark Amber | 255 | 59 | 1 | 0 |
| 31 | 21 | Gold Amber | 214 | 90 | 1 | 0 |
| 30 | 20 | Medium Amber | 213 | 125 | 1 | 0 |
| 29 | 19 | Fire | 241 | 42 | 1 | 0 |
| 27-28 | 17 | Surprise Peach | 201 | 119 | 8 | 0 |
| 23-26 | 13 | Straw Tint | 197 | 149 | 10 | 0 |
| 20-22 | 10 | Medium Yellow | 177 | 148 | 1 | 0 |
| 19 | - | Black | 0 | 0 | 0 | 0 |
| 18 | - | White 5000 K | 251 | 137 | 0 | 229 |
| 17 | - | White 3700 K | 255 | 201 | 25 | 255 |
| 16 | - | White 7000 K | 175 | 227 | 59 | 255 |
| 15 | - | Magenta | 255 | 0 | 255 | 0 |
| 14 | - | Yellow | 226 | 255 | 1 | 0 |
| 13 | - | Cyan | 0 | 255 | 245 | 0 |
| 12 | - | Blue | 0 | 0 | 255 | 0 |
| 11 | - | Green | 0 | 255 | 0 | 0 |
| 10 | - | Red | 255 | 0 | 0 | 0 |
| 0-9 | - | Macro color OFF | - | - | - | - |

**• STROBE**

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

MACRO

| BIT | EFFECT |
|---|---|
| 252 - 255 | LED ON |
| 239 - 251 | RANDOM FAST STROBE |
| 226 - 238 | RANDOM MEDIUM STROBE |
| 213 - 225 | RANDOM SLOW STROBE |
| 208 - 212 | LED ON |
| 207 | FAST PULSATION (25 flash/sec) |
| 108 | SLOW PULSATION (0,5 flash/sec) |
| 104 - 107 | LED ON |
| 103 | FAST STROBE (25 flash/sec) |
| 4 | SLOW STROBE (1 flash/sec) |
| 0 - 3 | LED OFF |

**• DIMMER**

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

| BIT | EFFECT |
|---|---|
| 255 | MAXIMUM BRIGHTNESS |
| 0 | LED OFF |

**• DIMMER FINE**

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

| BIT | EFFECT |
|---|---|
| 255 | UPPER BRIGHTNESS |
| 0 | LOWER BRIGHTNESS |

**A.LEDA WASH CC TW W**

19

**• PAN**

*Operation with option InvertPan ↕ Off*

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

BIT
255

0

*Operation with option InvertPan ↕ On*

BIT
255

0

**• PAN FINE**

*Operation with option InvertPan ↕ Off*

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

BIT
255

0
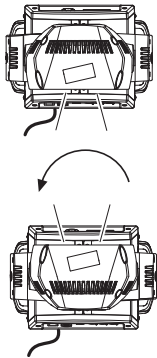
*Operation with option InvertPan ↕ On*
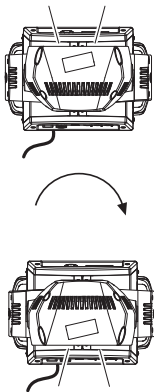
BIT
255

0

**• TILT**

*Operation with option InvertTilt ↕ Off*

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

BIT
255

0
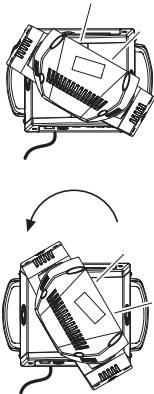
*Operation with option InvertTilt ↕ On*
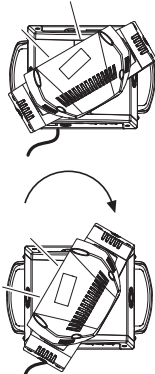
BIT
255

0

**• TILT FINE**

*Operation with option InvertTilt ↕ Off*

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

BIT
255

0
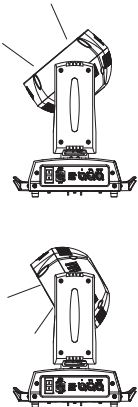
*Operation with option InvertTilt ↕ On*
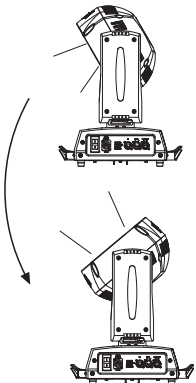
BIT
255

0

## • FUNCTION

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
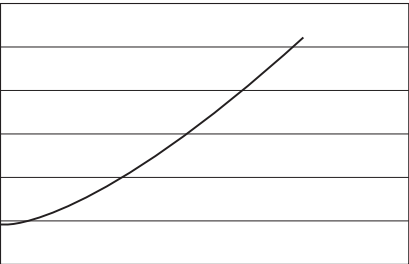**K20 W**
**K20 TW**

| BIT | EFFECT |
|---|---|
| 251 – 255 | Reset to defult |
| 103 – 250 | Unused Range |
| 98 – 102 | Halogen Lamp Simulation, type 5 (2500 W) Not used on TW & W models |
| 93 – 97 | Halogen Lamp Simulation, type 4 (2000 W) Not used on TW & W models |
| 88 – 92 | Halogen Lamp Simulation, type 3 (1200 W) Not used on TW & W models |
| 83 – 87 | Halogen Lamp Simulation, type 2 (1000 W) Not used on TW & W models |
| 78 – 82 | Halogen Lamp Simulation, type 1 (750W) Not used on TW & W models |
| 73 – 77 | Halogen Lamp Simulation OFF (Default) Not used on TW & W models |
| 68 – 72 | RGBW Gamma curve 3 – gamma = 2.0 Not used on TW & W models |
| 63 – 67 | RGBW Gamma curve 2 – gamma = 1.5 (Default) Not used on TW & W models |
| 58 – 62 | RGBW Gamma curve 1 – gamma = 1.0 Not used on TW & W models |
| 53 – 57 | Dimmer Curve 4 |
| 48 – 52 | Dimmer Curve 3 (Default) |
| 43 – 47 | Dimmer Curve 2 |
| 38 – 42 | Dimmer Curve 1 |
| 25 – 37 | Pan Tilt Normal |
| 12 – 24 | Pan Tilt Fast (Default) |
| 0 – 11 | Function off |

The functions are actived passing through the "unused range" and staying 5 seconds in necessary level.
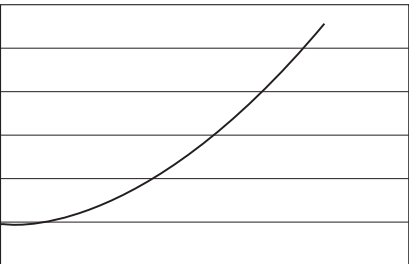Last selected function still active. Enable setting a new function.
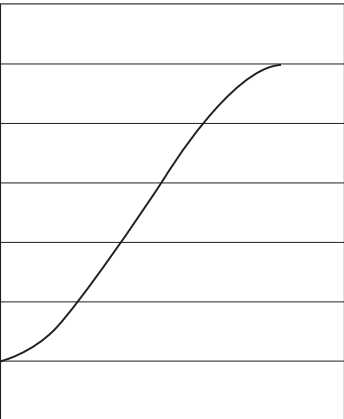
DIMMER CURVE 1 - GAMMA 1 LINEAR
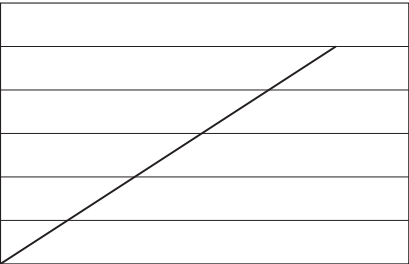


DIMMER CURVE 2 - GAMMA 1,5



DIMMER CURVE 3 - GAMMA 2,0



DIMMER CURVE 4 - S



## • RESET

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**

| BIT | EFFECT |
|---|---|
| 255 | COMPLETE RESET |
| | Complete reset is activated passing throug the unused range and staying 5 seconds in complete reset levels |
| 128 | COMPLETE RESET |
| 127 | PAN / TILT RESET |
| | Pan / Tilt reset is activated passing throug the unused range and staying 5 seconds in Pan / Tilt reset levels |
| 77 | PAN / TILT RESET |
| 76 | ZOOM RESET |
| | Effects reset is activated passing throug the unused range and staying 5 seconds in Effects reset levels. |
| 26 | ZOOM RESET |
| 25 | |
| 0 | UNUSED RANGE |

## • ZOOM

**K10 CC**
**K10 W**
**K10 TW**
**K20 CC**
**K20 W**
**K20 TW**



| BIT | EFFECT |
|---|---|
| 255 | WIDE BEAM |
| 0 | NARROW BEAM |