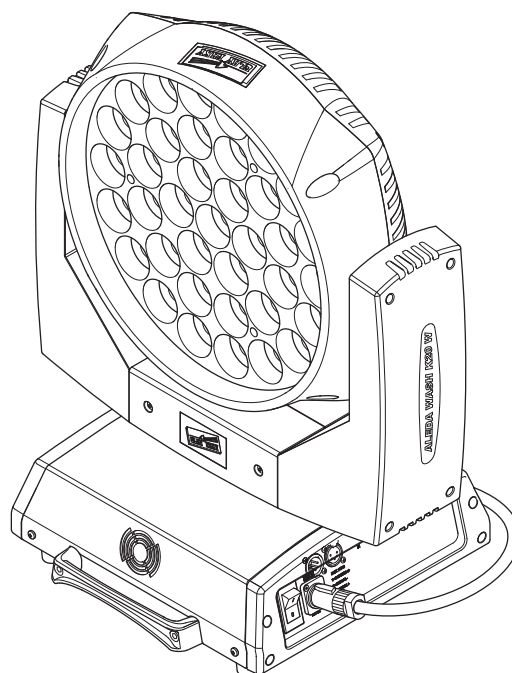
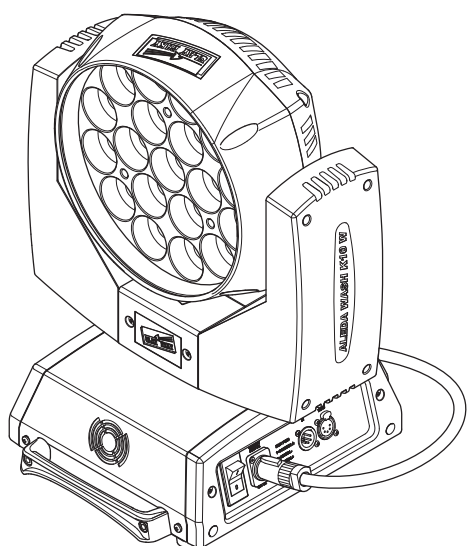




INSTRUCTION MANUAL

PRELIMINARY



INDEX

Page	Contents
2	Safety information
3	Unpacking and preparation
4	Installation and start-up
5	Control panel
7	Menu setting
14	Maintenance
16	Optional accessories
19	Technical information
19	Cause and solution of problems
20	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

LED  0.2m



t_a 40°C

IP20



t_c 90°C



• 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 0.20 metres (8") 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 90°C (194°F).

• Maintenance

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

• Battery

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

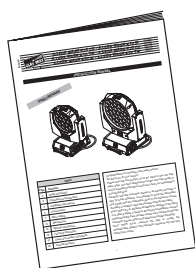
Instructions on how to remove the battery from the product are available on www.claypaky.it

The products to which this manual refers comply with the European Directives pursuant to:

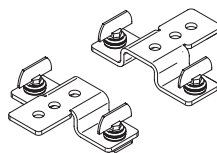
- 2006/95/EC - Safety of electrical equipment supplied at low voltage (LVD)
- 2004/108/EC - Electromagnetic Compatibility (EMC)
- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)

UNPACKING AND PREPARATION

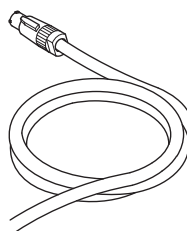
1



IST00D/001

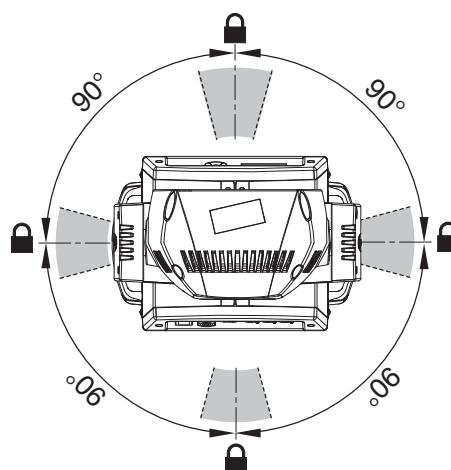
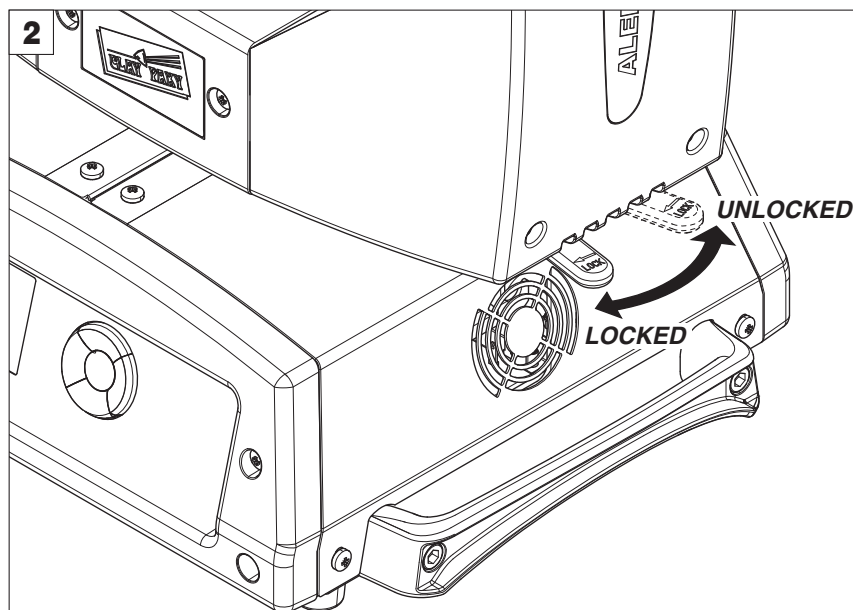


2 x 183102/805



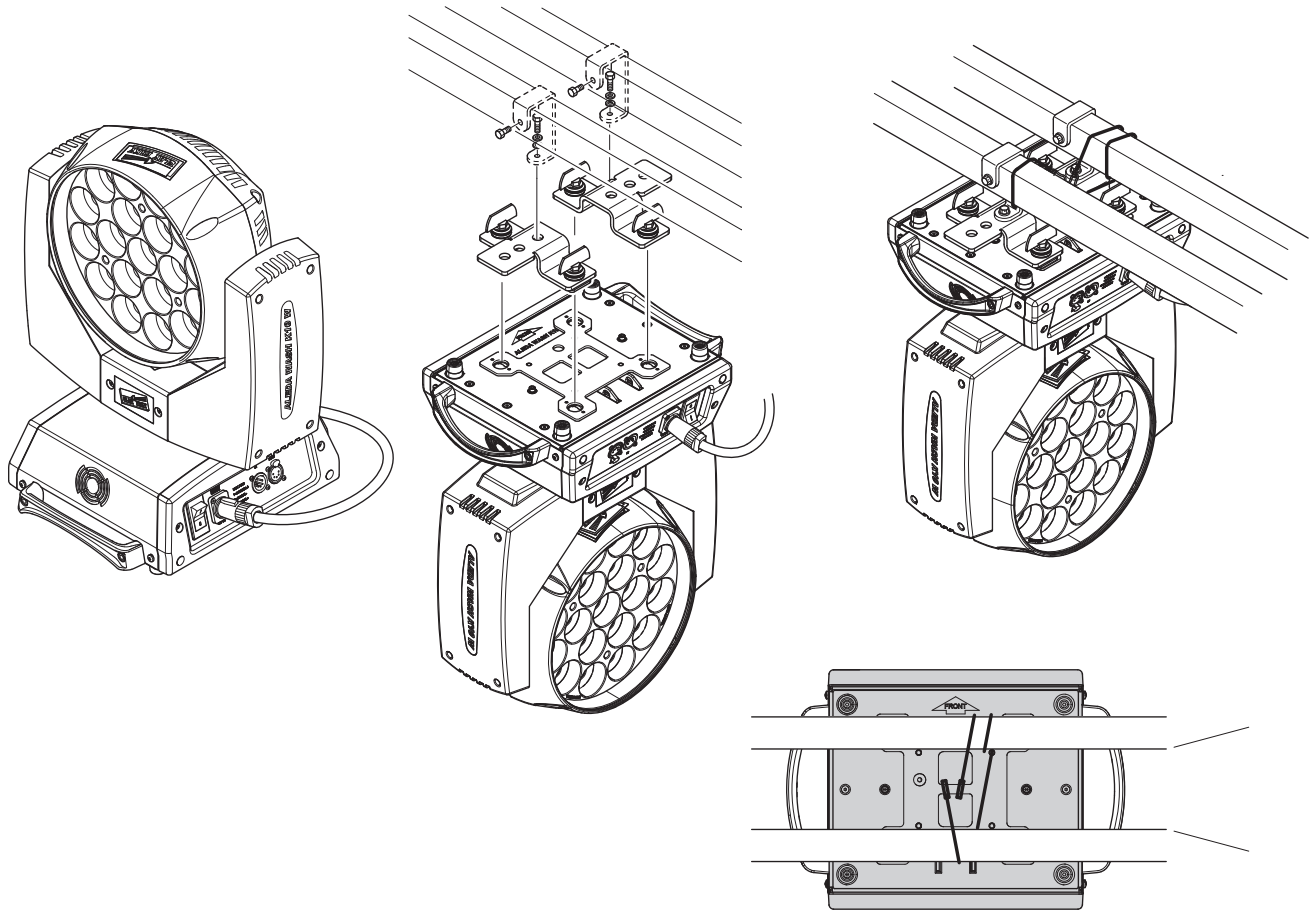
Packing contents - Fig. 1

2



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

3

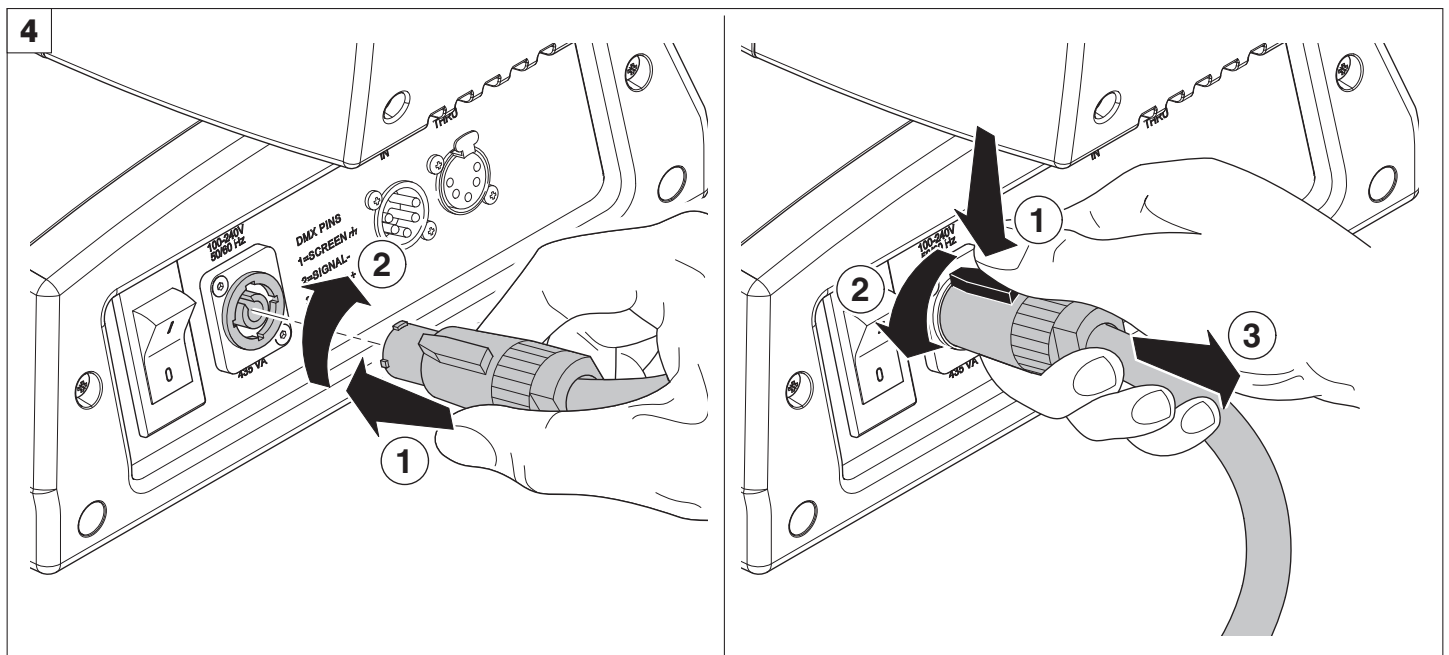


Installing the projector - Fig. 3

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

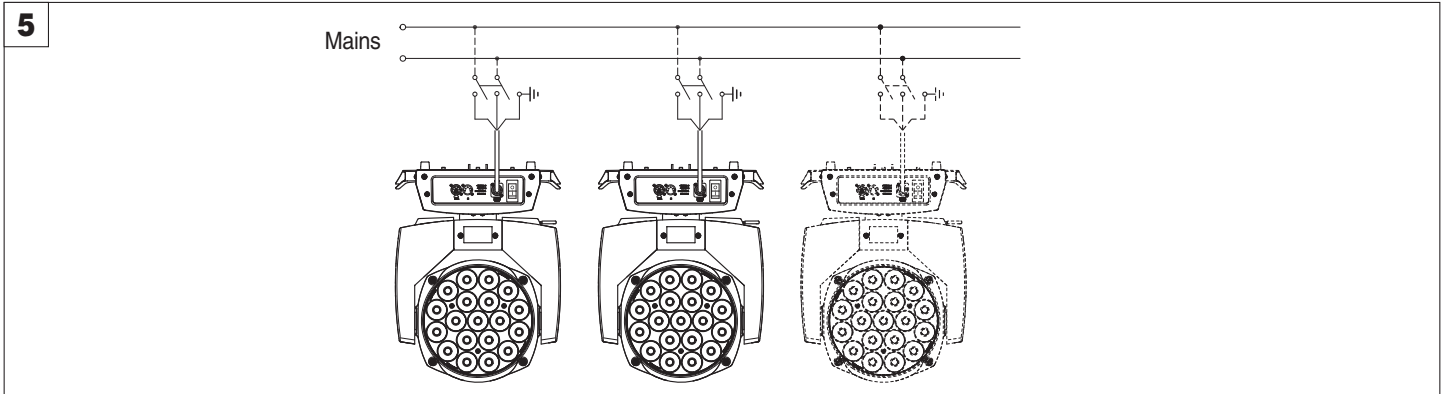
WARNING: with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

4

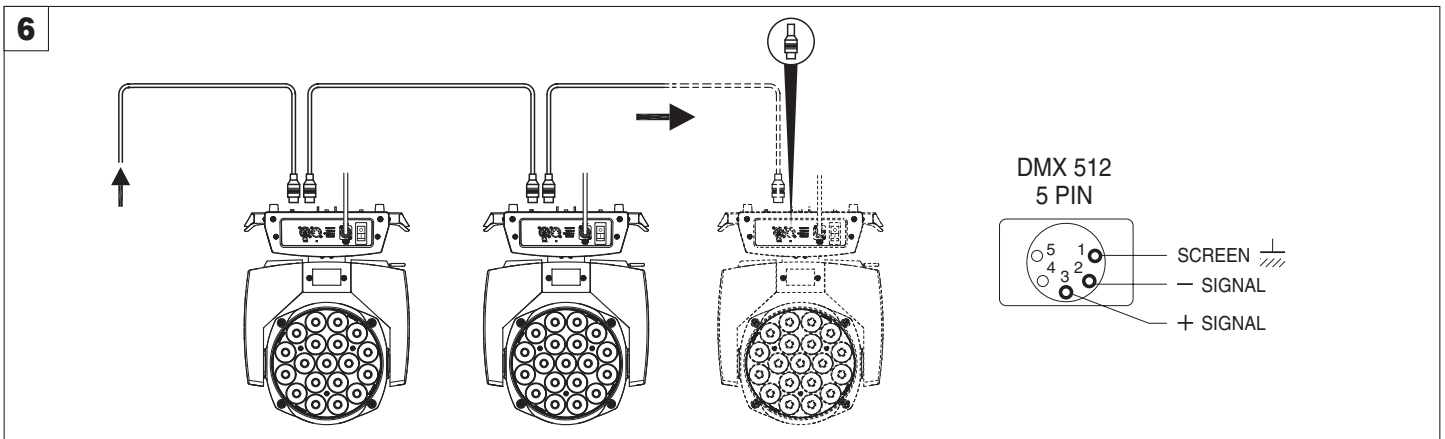


Connecting and disconnecting power cable - Fig. 4

CONTROL PANEL



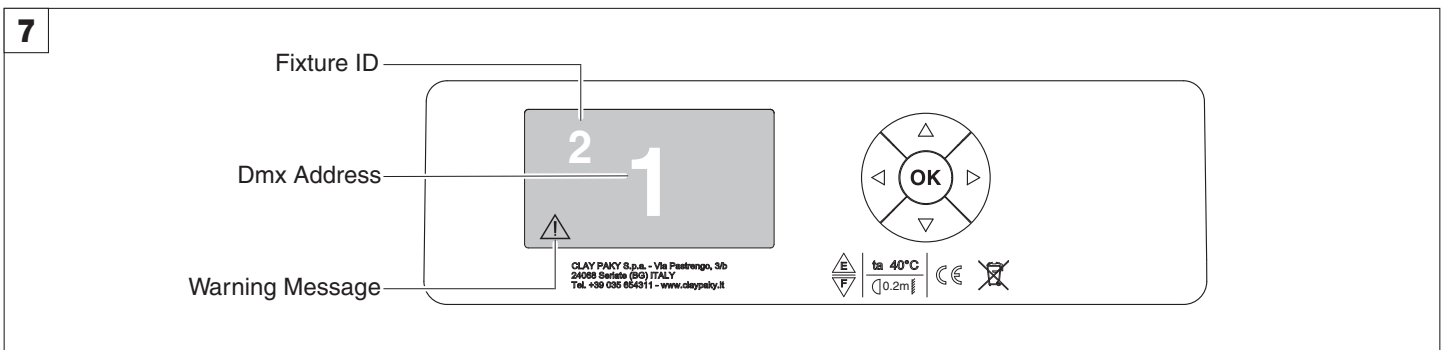
Connecting to the mains supply - Fig. 5



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.



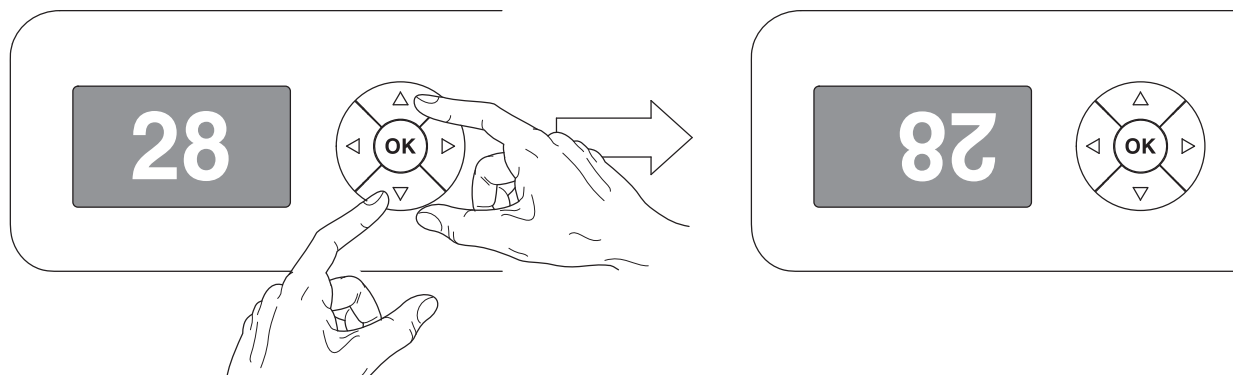
Switching on the projector - Fig. 7

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 50% - Tilt 50%). 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.



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 address: see pag. 8.

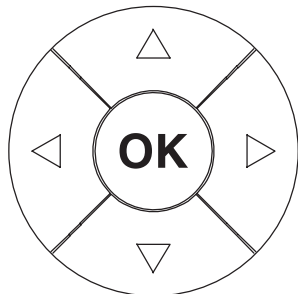
Setting the projector Fixture ID

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 **OK** 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.

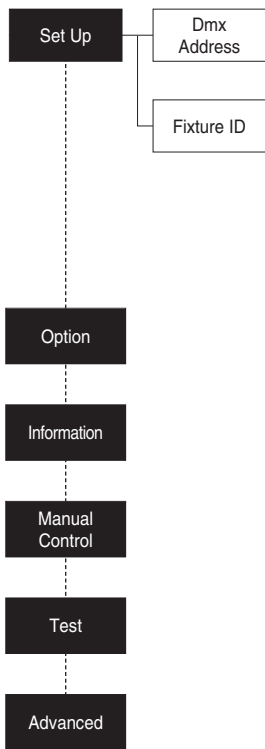
To enable the "Advanced" see pag.13
- 3) Press **OK** to display the first item in the selected menu.
- 4) Use the UP ▲ and DOWN ▼ keys to select the MENU items.

Setting addresses and options with the projector disconnected

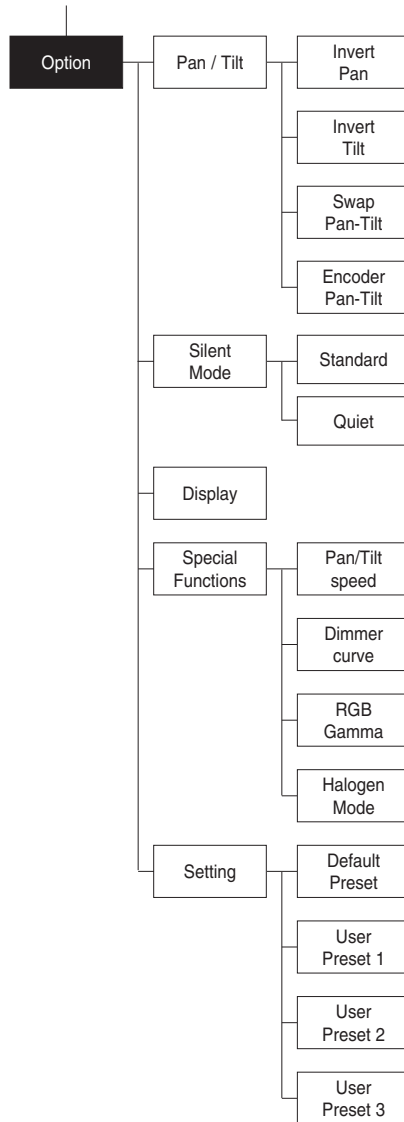
The projector's DMX address, as well as other possible operating options, can also be set when the appliance is disconnected from the electricity supply. All that is needed is to press **OK** to momentarily activate the display and thus access the settings. Once the required operations have been carried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

MENU SETTING

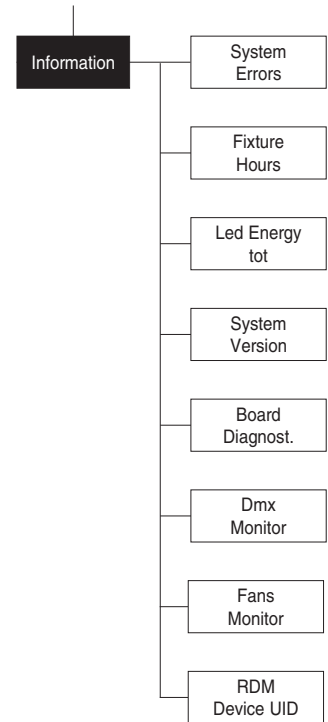
1



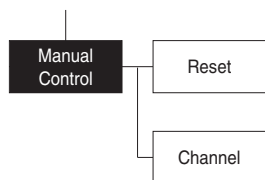
2



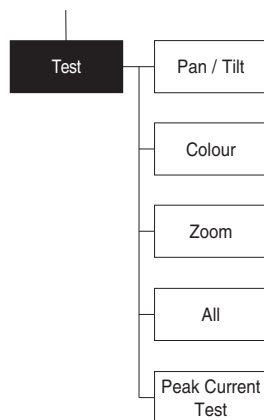
3



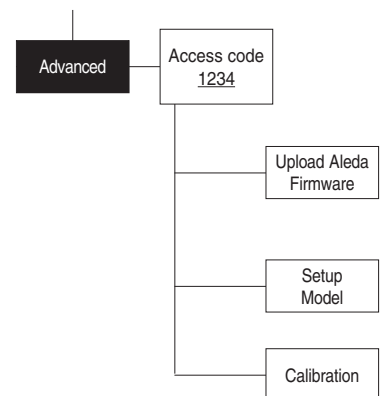
4



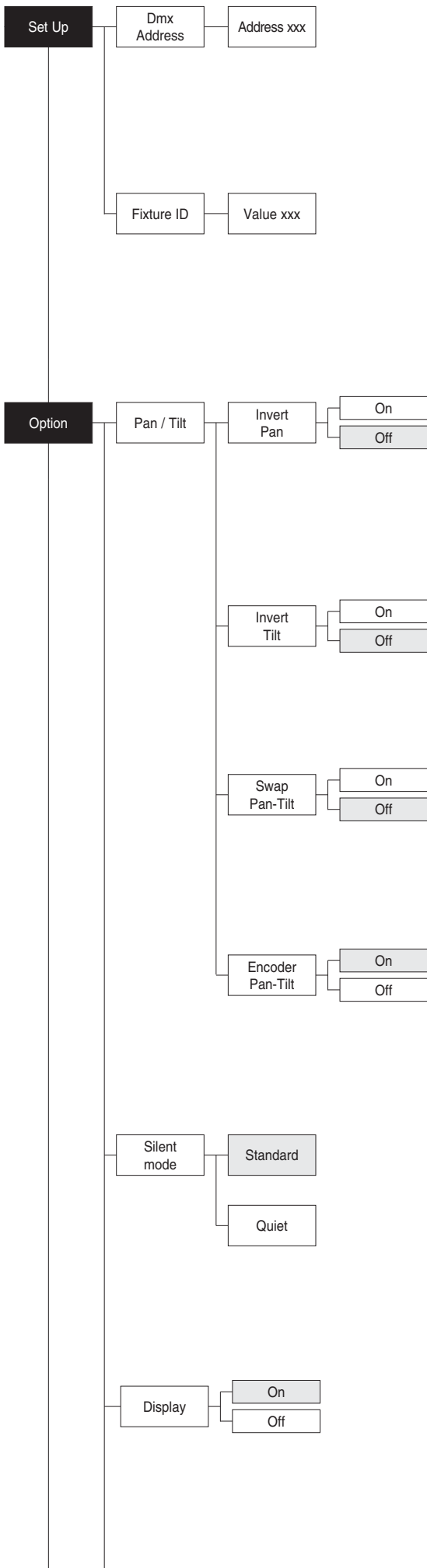
5



6



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.

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.

OPTIONS MENU

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.

SILENT MODE

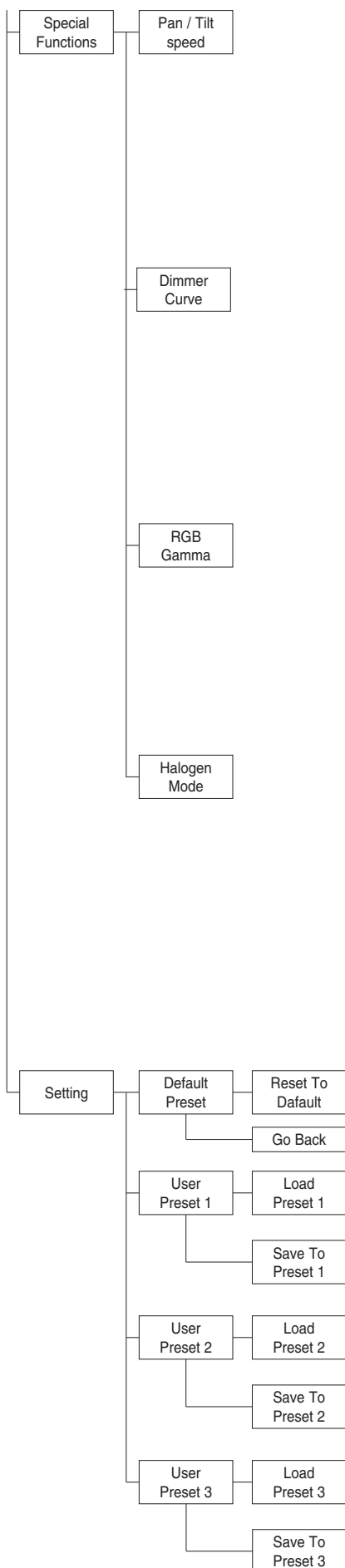
It lets you select the "Silent Mode" from the two available.

- 1) Press **OK** the current setting appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following settings:
Standard: Maximum speed and consequently maximum effects noise level.
Quiet: reduces the speed of some effects, thereby reducing their noise level.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep the 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.



SPECIAL FUNCTIONS

Pan / Tilt speed

Lets you select two different Pan and Tilt speeds.

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

Dimmer Curve

Lets you select four different Dimmer channel curves.

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

RGB Gamma

Lets you select three different RGBW gamma curves.

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

Halogen Mode

Lets you select five different halogen lamp simulations.

- 1) Press **OK** - 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 **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.

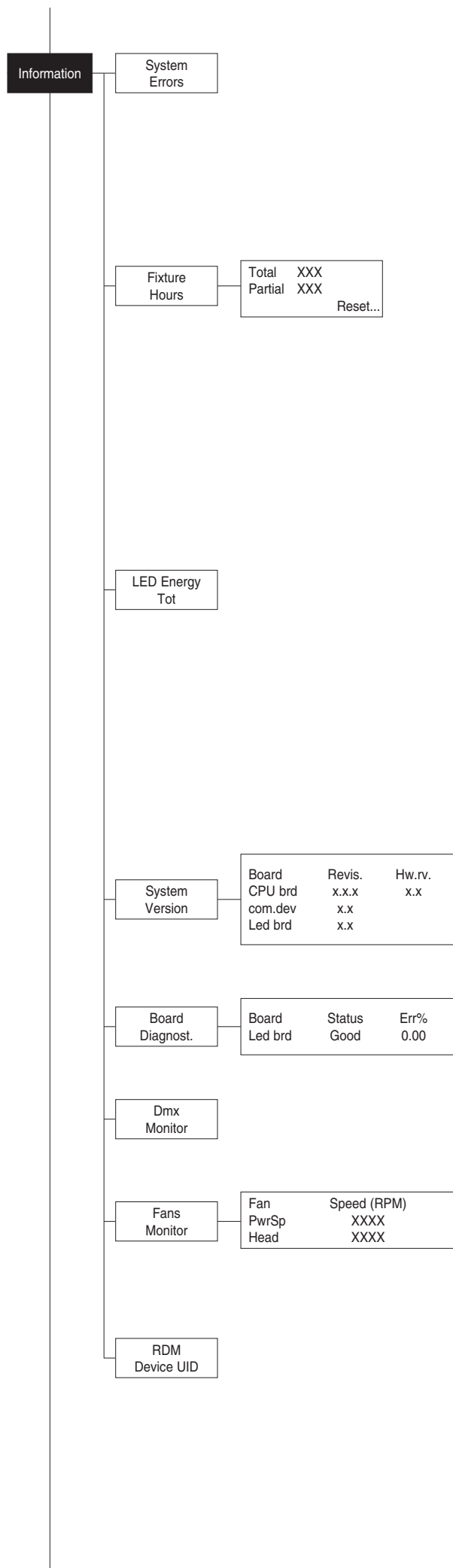
- 1) Press **OK** - "Default preset" appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following configurations:
 - Default preset (*)
 - User preset 1
 - User preset 2
 - User Preset 3
- 3) Press **OK** - "Load preset X" appears on the display.
- 4) Use the UP **▲** 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
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.

- 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.

LED ENERGY TOT

Lets you view total LED working hours.

- Press **OK** - 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.
- Press **OK** to reset the partial counter. A confirmation appears on the screen (Are you sure?)
- 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

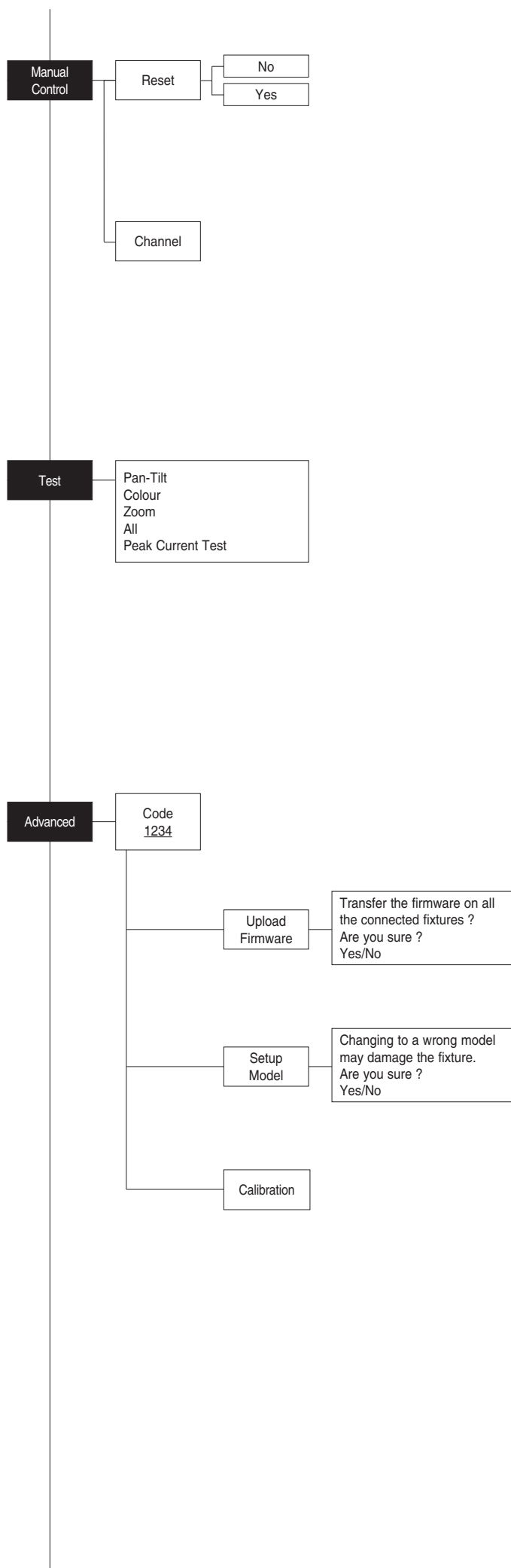
Used for displaying the speed of each fan installed in the projector:

PwrSp (fan PSU)

Head (fan head)

RDM DEVICE UID

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



MANUAL CONTROL

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

Zoom

All effects

Peak Current Test

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

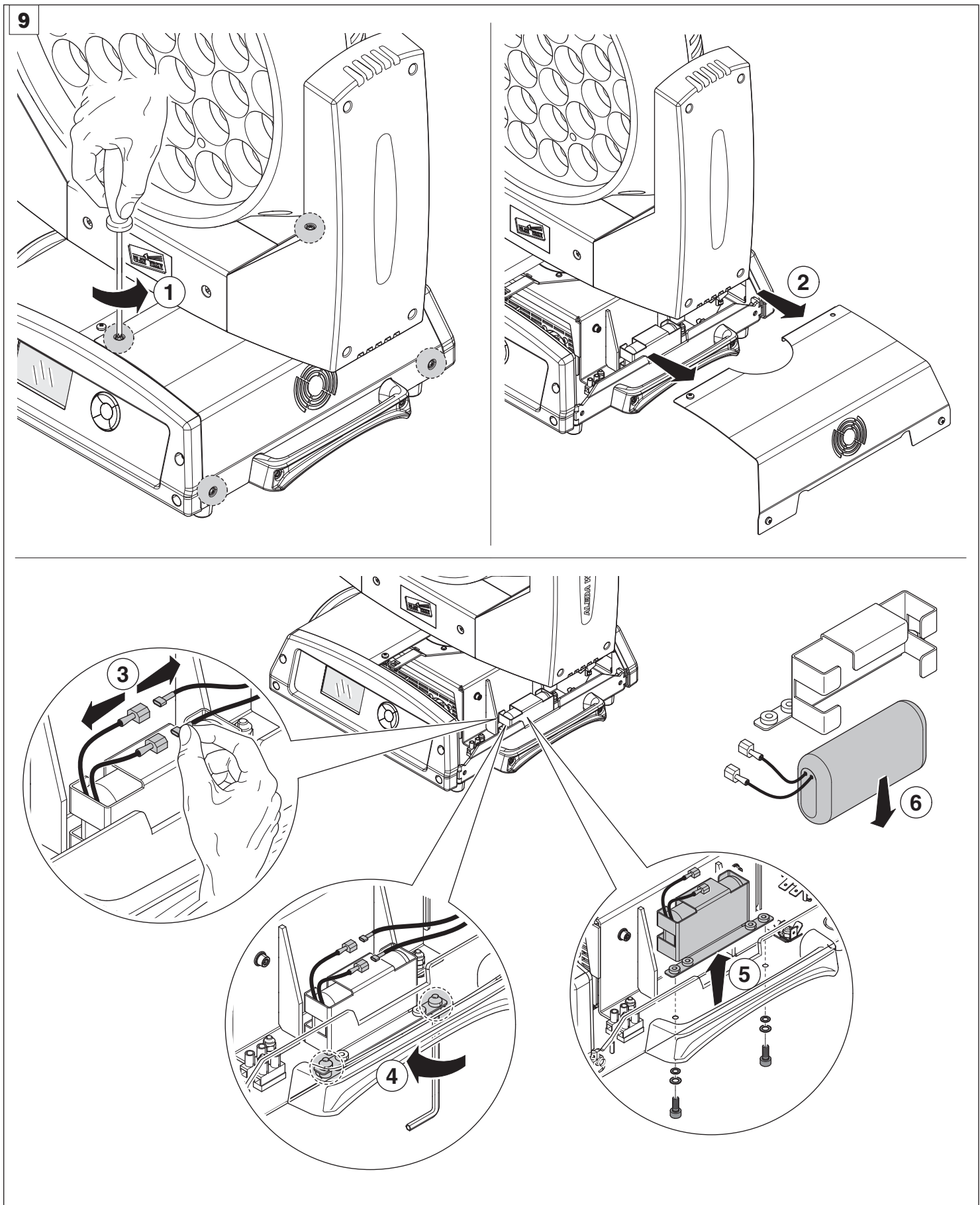
Allows you to adjust effects from the control panel to obtain perfect uniformity between the projectors.

- 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.

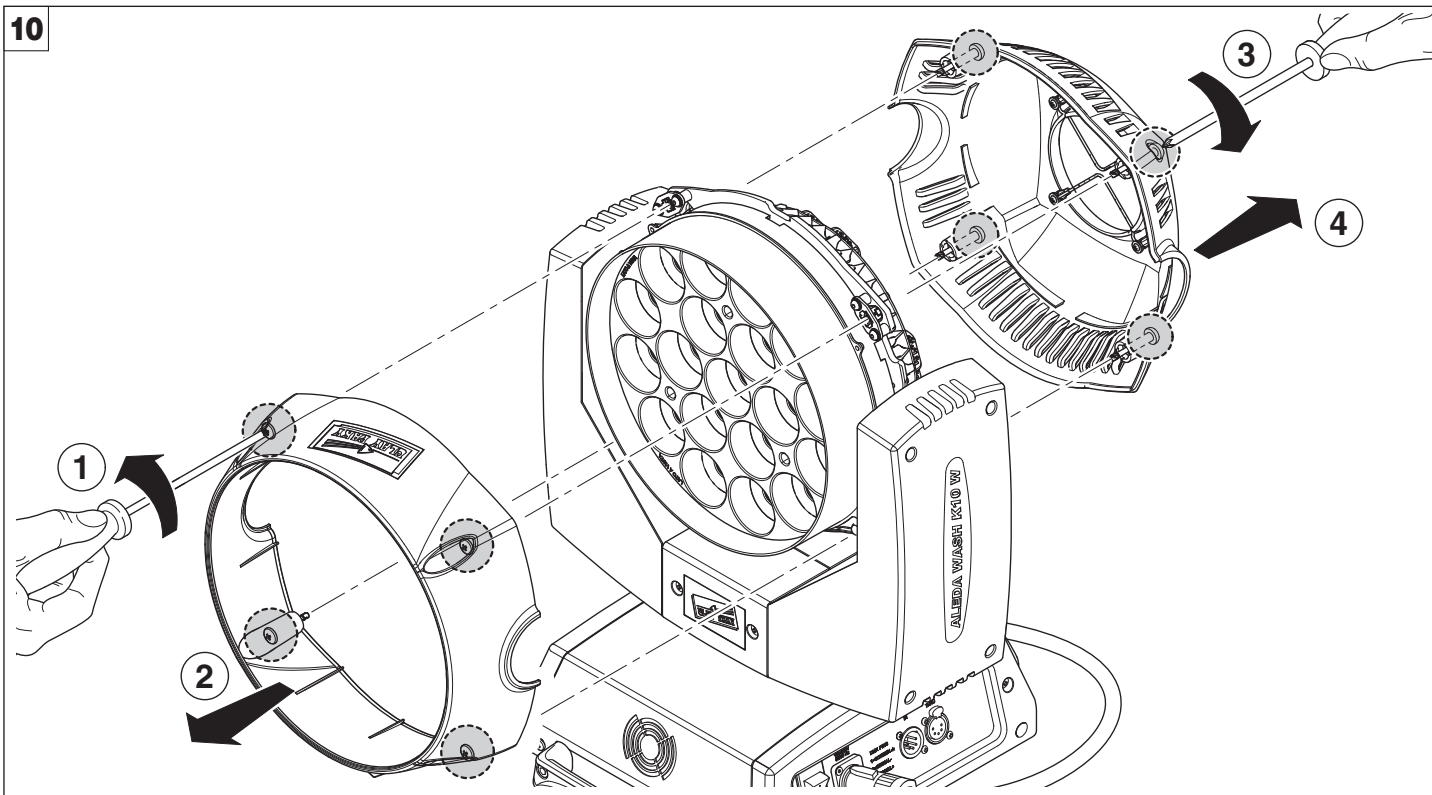


Battery removal - Fig. 9



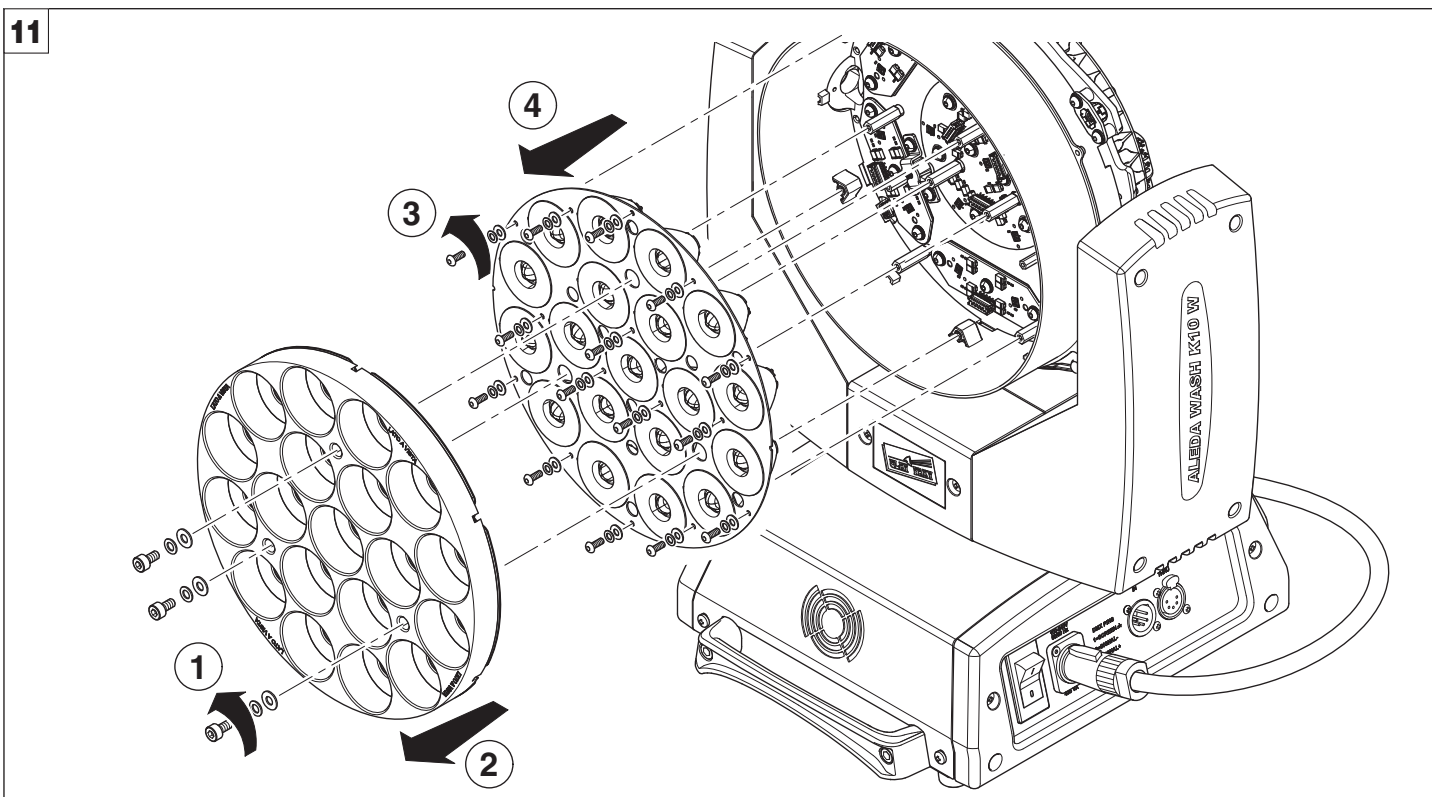
This product contains a rechargeable lithium iron tetraphosphate. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

10



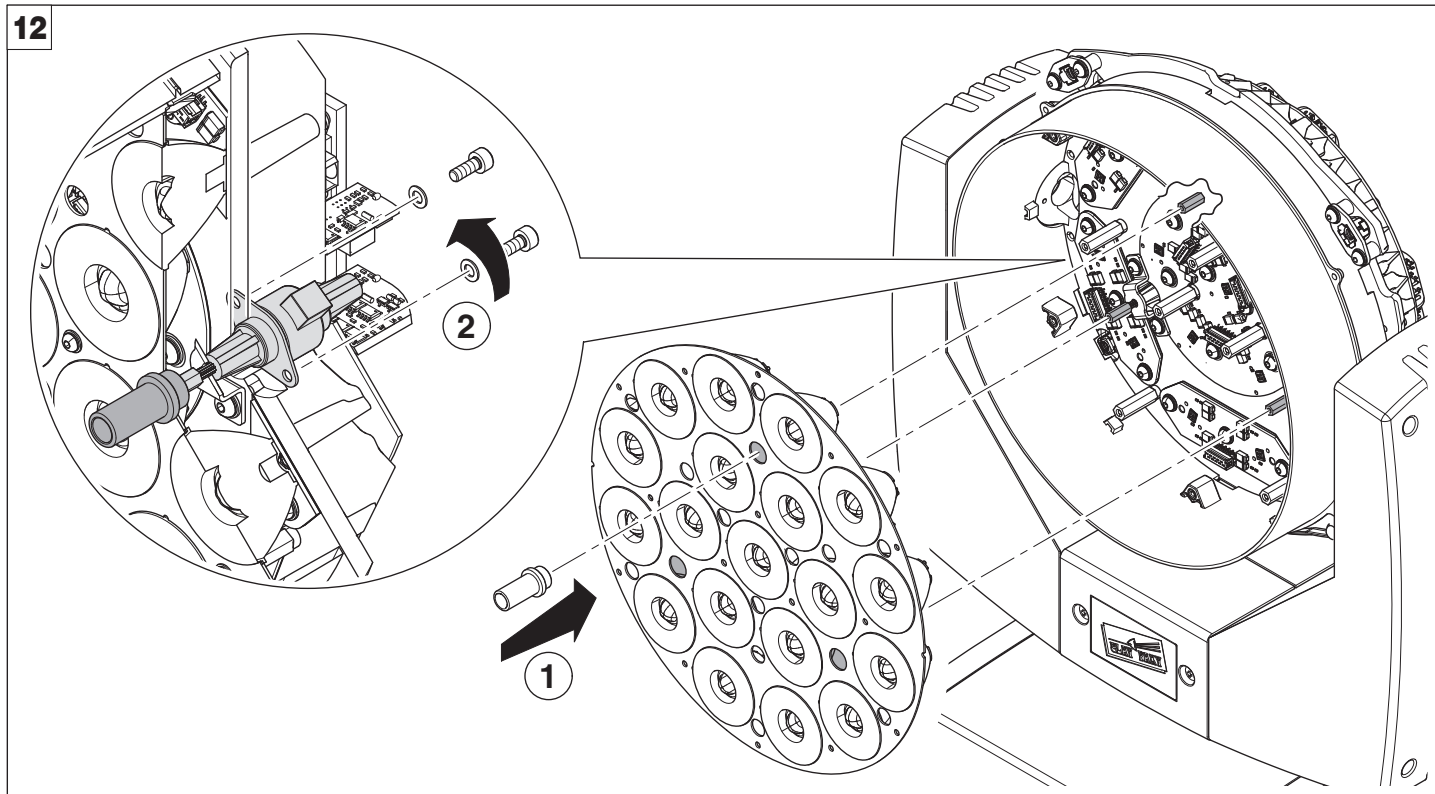
Opening the covers - Fig. 10

11



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.



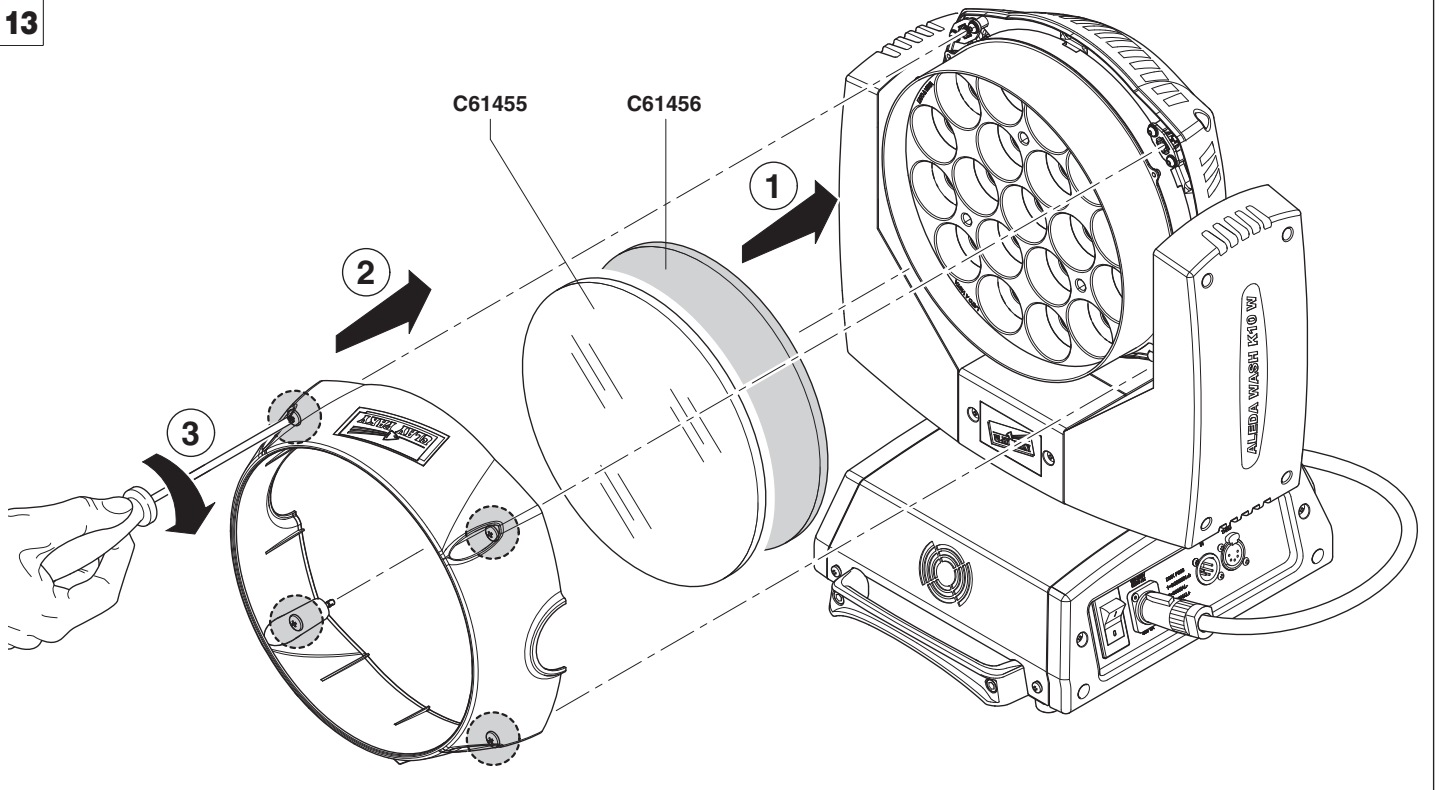
Replacing the line actuator - Fig. 12

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



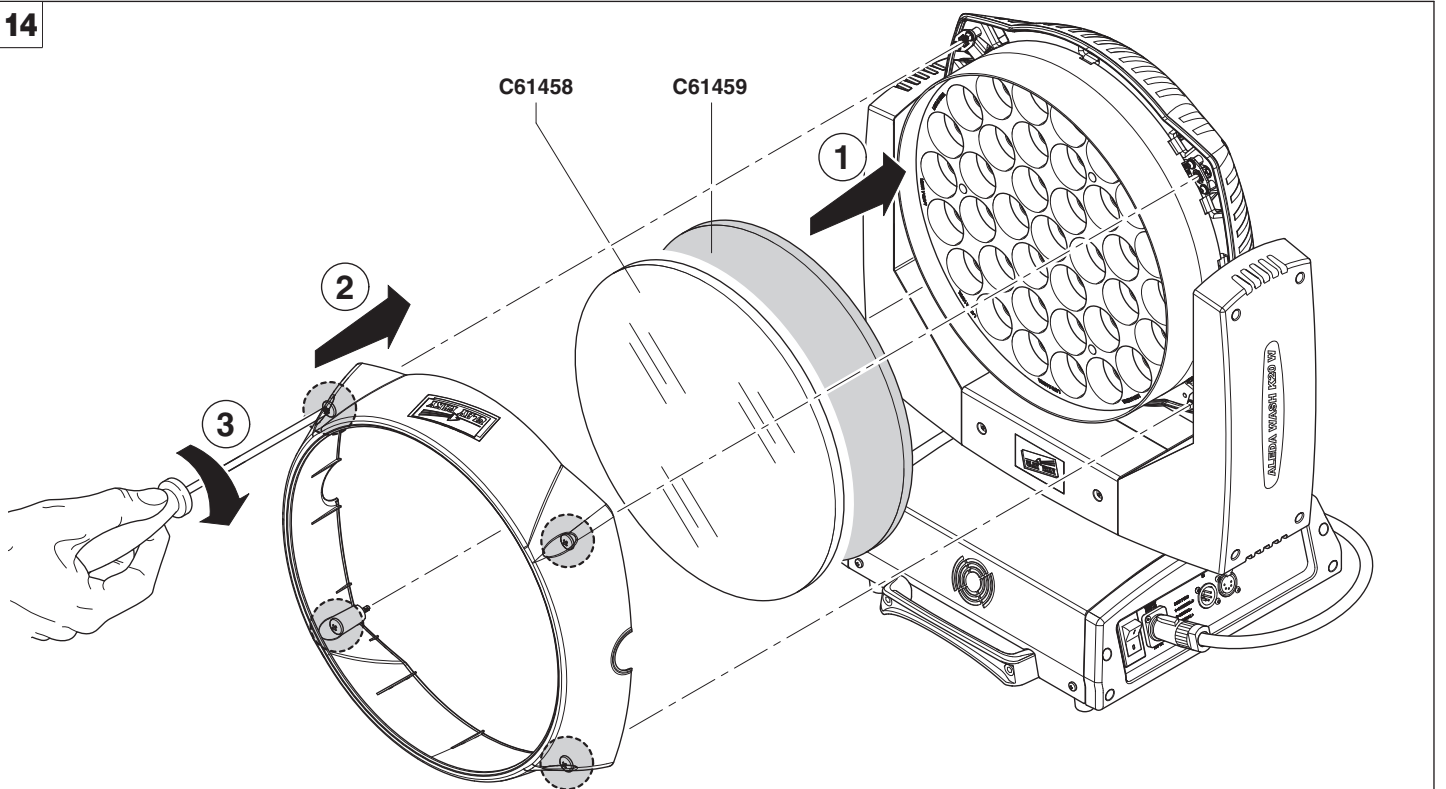
Cover - Fig. 13

C61455 - Transparent cover (standard)

C61456 - Frosted cover

A.LEDA WASH K20 CC TW W

14



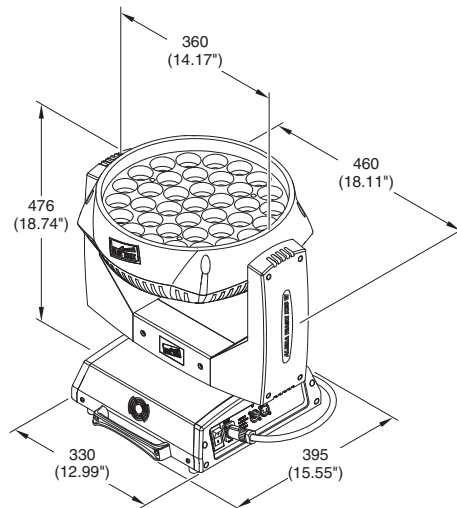
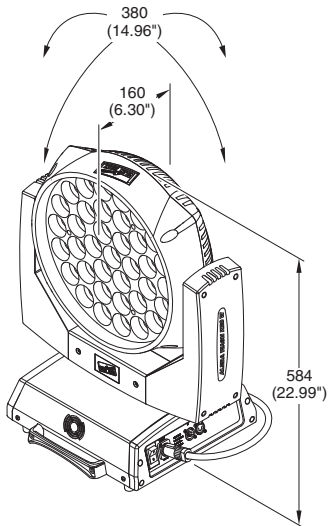
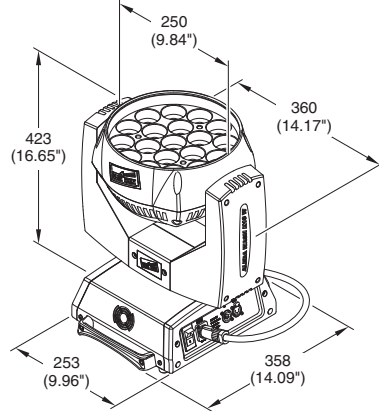
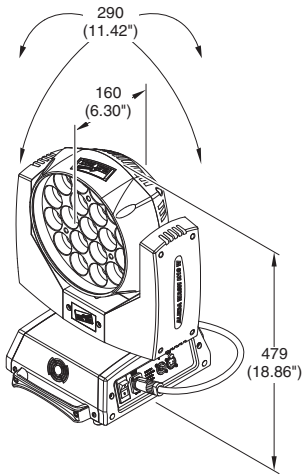
Cover - Fig. 14

C61458 - Transparent cover (standard)

C61459 - Frosted cover

A.LEDA WASH CC TW W

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
LED Osram Ostar RGBW - 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
Functioning in any position.

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 = 270°

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

CE Marking
Complies with the following European Directives
- 2006/95/EC (LVD)
- 2004/108/EC (EMC)
- 2011/65/EU (RoHS).

Weights
• K10:13.9 kg
• K20:19.5 kg

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.
●		●	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 or reflector broken		Call an authorised technician.
		● ●	Dust or grease deposited.		Clean (see instructions).

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 50% - Tilt 50%) all the others channels stay at 0%.

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

K10 CC
K10 TW
K20 CC
K20 TW



BIT	EFFECT
255	LED ON
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	UP
0	LOW

• C.T.O.

K10 TW
K20 TW

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



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	LED ON
0	LED OFF

• DIMMER FINE

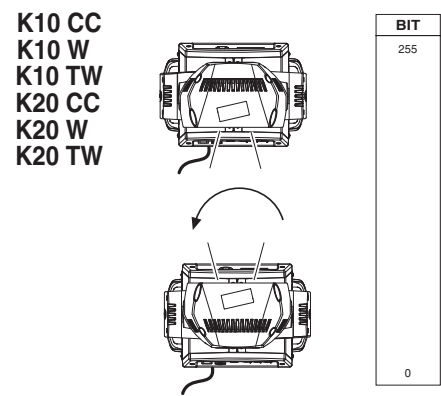
K10 CC
K10 W
K10 TW
K20 CC
K20 W
K20 TW



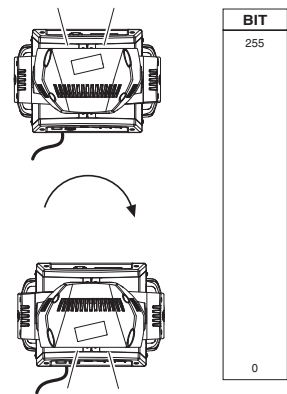
BIT	EFFECT
255	UP
0	LOW

• PAN

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

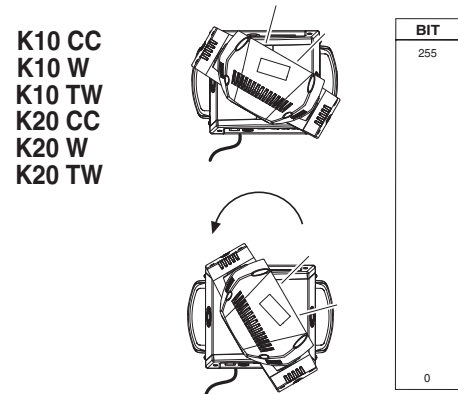


Operation with option InvertPan \diamond On
(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)

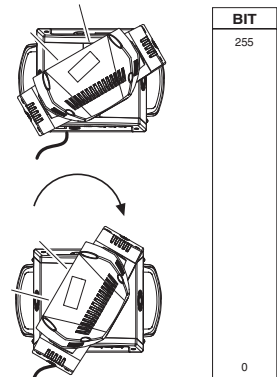


• PAN FINE

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

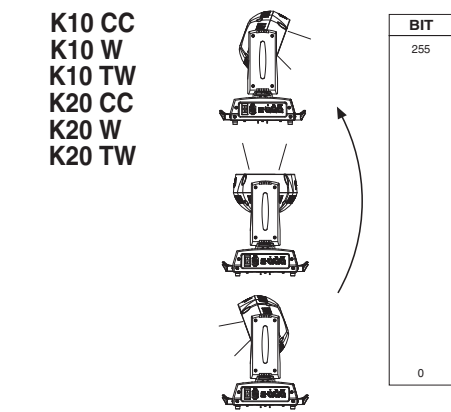


Operation with option InvertPan \diamond On
(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)

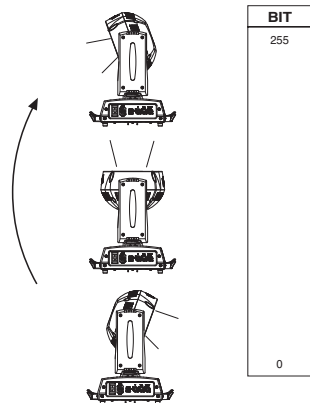


• TILT

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

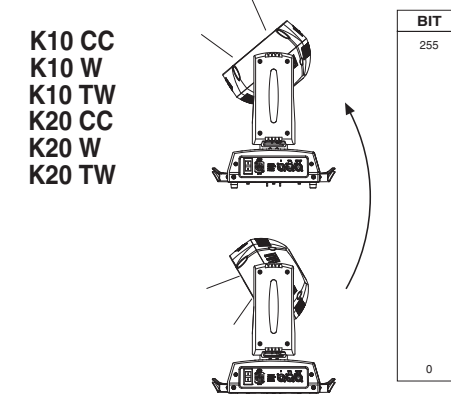


Operation with option InvertPan \diamond On
(Tilt conventionally represented at 14% and option Invert Tilt \diamond Off)

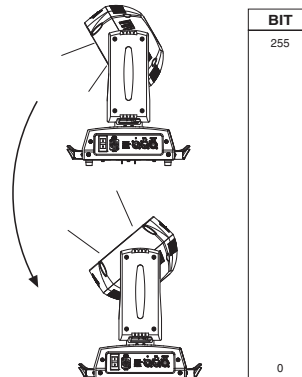


• TILT FINE

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



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



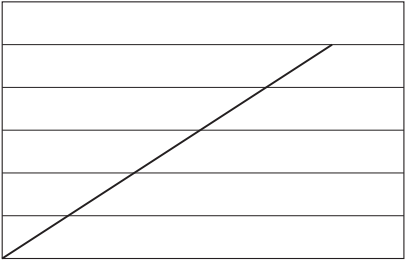
• FUNCTION

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

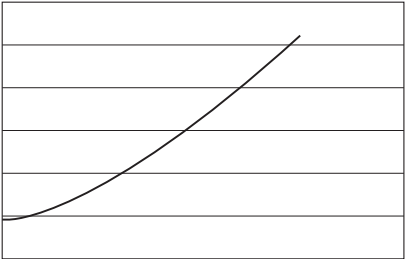
BIT	EFFECT
251 – 255	Reset to default
103 – 250	Unused Range
98 – 102	Halogen Lamp Simulation, type 5 (2500 W) Not used on TW & W models
93 – 97	Halogen Lamp Simulation, type 4 (2000 W) Not used on TW & W models
88 – 92	Halogen Lamp Simulation, type 3 (1200 W) Not used on TW & W models
83 – 87	Halogen 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 activated passing through the “unused range” and staying 5 seconds in necessary level.
Last selected function still active. Enable setting a new function.

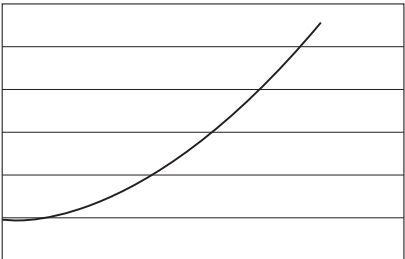
DIMMER CURVE 1 - GAMMA 1 LINEAR



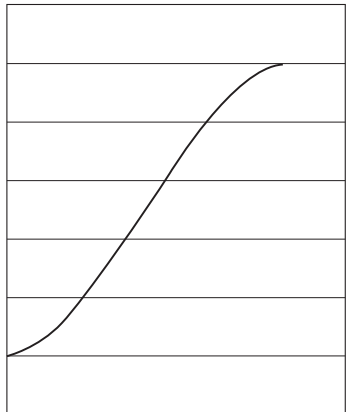
DIMMER CURVE 2 - GAMMA 1,5



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 through the unused range and staying 5 seconds in complete reset levels
128	COMPLETE RESET
127	PAN / TILT RESET
	Pan / Tilt reset is activated passing through the unused range and staying 5 seconds in Pan / Tilt reset levels
77	PAN / TILT RESET
76	ZOOM RESET
	Effects reset is activated passing through 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

