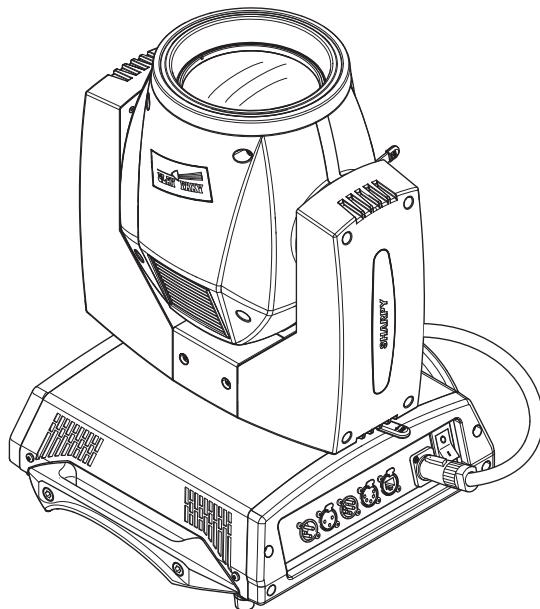


**INSTRUCTION MANUAL****INDEX**

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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.

- **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.

189W  12.....m 

- **MINIMUM DISTANCE OF ILLUMINATED OBJECTS**

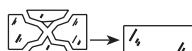
The projector needs to be positioned so that the objects hit by the beam of light are at least 12 metres (39'4") from the lens of the projector.

$t_a$  40°C

IP20



$t_c$  100°C



Risk Group 1  
According to  
EN 62471



- **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.

- **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 100°C (212°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, to avoid getting burnt for at least 35 minutes. After this time the likelihood of the lamp exploding is virtually nil.

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

- **Lamp**

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

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

- **Photobiological Safety**

CAUTION. Do not look directly at the light source.

Do not look at the light beam with optical devices or any other tool that could cause light convergence.

This product is intended for the following areas of application:

studios, stages, theaters, exhibitions, trade fairs, events, theme parks, entertainment venues, architectural lighting and similar

**Not suitable for household illumination**



**Not for residential use**



**• Battery**

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



**Disposing**

This product is supplied in compliance with European Directive 2012/19/EU - Waste Electrical and Electronic Equipment (WEEE). To preserve the environment please dispose/recycle this product at the end of its life according to the local regulation.



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)

**• Installazione**

Assicurarsi che tutte le parti per il fissaggio del proiettore siano in buona condizione.

Assicurarsi della stabilità del punto di ancoraggio prima di posizionare il proiettore.

La fune di sicurezza, debitamente agganciata all'apparecchio e fissata alla struttura di sostegno, deve essere installata in modo che, in caso di cedimento del sistema di supporto primario, si abbia la minor caduta possibile dell'apparecchio. Dopo un eventuale intervento la fune di sicurezza deve essere sostituita con il ricambio originale.

189W  12.....m 

$t_a$  40°C

IP20



$t_c$  100°C

**• DISTANZA MINIMA DEGLI OGGETTI ILLUMINATI**

Il proiettore deve essere posizionato in modo tale che gli oggetti colpiti dal fascio luminoso siano distanti almeno 12 metri dall'obiettivo del proiettore stesso.

**• Distanza minima dei materiali infiammabili**

Il proiettore deve essere posizionato in modo tale che i materiali infiammabili siano distanti almeno 0,20 metri da ogni punto della superficie dell'apparecchio.

**• Massima temperatura ambiente**

Non utilizzare il proiettore se la temperatura ambiente ( $T_a$ ) supera i 40°C.

**• Grado di protezione IP20**

L'apparecchio è protetto contro la penetrazione di corpi solidi di dimensione superiore a 12mm (prima cifra 2), mentre teme lo stilex, la pioggia, gli spruzzi e i getti d'acqua (seconda cifra 0).

**• Protezione contro la scossa elettrica**

È obbligatorio effettuare il collegamento ad un impianto di alimentazione dotato di un'efficiente messa a terra (apparecchio di **Classe I** secondo la norma EN 60598-1).

Si raccomanda, inoltre, di proteggere le linee di alimentazione dei proiettori dai contatti indiretti e/o cortocircuiti verso massa tramite l'uso di interruttori differenziali opportunamente dimensionati.

**• Collegamento alla rete di alimentazione**

Le operazioni di collegamento alla rete di distribuzione dell'energia elettrica devono essere effettuate da un installatore elettrico qualificato. Verificare che frequenza e tensione della rete corrispondano alla frequenza ed alla tensione per cui il proiettore è predisposto ed indicate sulla targhetta dei dati elettrici. Sulla medesima targhetta è pure indicata la potenza assorbita. Fare riferimento a quest'ultima per valutare il numero massimo di apparecchi da collegare alla linea elettrica, al fine di evitare sovraccarichi.

**• Temperatura della superficie esterna**

La temperatura massima raggiungibile sulla superficie esterna dell'apparecchio, in condizioni di regime termico, è di 100°C.

**• Manutenzione**

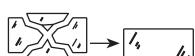
Prima di iniziare qualsiasi operazione di manutenzione o pulizia sul proiettore togliere la tensione dalla rete di alimentazione. Dopo lo spegnimento non rimuovere alcuna parte dell'apparecchio per 10 minuti. Trascorso tale tempo la probabilità di esplosione della lampada è praticamente nulla. Se è necessario sostituire la lampada, aspettare ulteriori 20 minuti per evitare scottature. L'apparecchio è progettato in modo da trattenere le schegge prodotte dall'eventuale scoppio della lampada. Le lenti devono essere obbligatoriamente montate; devono inoltre, se visibilmente danneggiate, essere sostituite con ricambi originali.

**• Lampada**

L'apparecchio monta una lampada ad alta pressione che richiede un accenditore esterno.

Tale accenditore è incorporato nell'apparecchio.

- Leggere attentamente le "istruzioni d'uso" fornite dal costruttore della lampada.
- Sostituire immediatamente la lampada se danneggiata o deformata dal calore.



Gruppo di rischio 1  
Secondo la norma  
EN 62471

**• Sicurezza fotobiologica**

ATTENZIONE. Non guardare direttamente la sorgente di luce.

Non guardare il fascio di luce con strumenti ottici o altri strumenti che potrebbero causare convergenza di luce.



Il prodotto è concepito per essere utilizzato nei seguenti ambiti:  
studi, palchi, teatri, esposizioni, fiere, eventi, parchi a tema, locali di intrattenimento, illuminazione architettonica e simili.



**Non adatto all'illuminazione domestica**



**Non per uso residenziale**



**• Batteria**

Questo prodotto contiene una batteria ricaricabile piombo-acido o Litio Ferro Tetrafosfato. A tutela dell'ambiente si prega di smaltire la batteria a fine vita in conformità alla normativa vigente.



**Smaltimento**

Questo dispositivo è conforme alla Direttiva Europea 2012/19/UE - Rifiuti di apparecchiature elettriche ed elettroniche (RAEE). Nel rispetto dell'ambiente, smaltire/riciclare il prodotto al termine del suo ciclo di vita secondo le disposizioni di legge locali.



I prodotti a cui questo manuale si riferisce sono conformi alle Direttive Europee di cui sono oggetto:

- 2006/95/CE - Sicurezza delle apparecchiature alimentate in Bassa Tensione (LVD)
- 2004/108/CE - Compatibilità Elettromagnetica (EMC)
- 2011/65/UE - Restrizione d'uso di determinate sostanze pericolose (RoHS)

**• Installation**

S'assurer que toutes les pièces pour la fixation du projecteur sont en bon état.

S'assurer de la stabilité du point d'ancrage avant de positionner le projecteur.

Le câble de sécurité, à fixer correctement à l'appareil et à la structure de support, doit être installé de façon à ce que, en cas de rupture du système de support principal, la chute de l'appareil soit la plus limitée possible. Après une éventuelle intervention du câble de sécurité suite à une chute, il faut le remplacer par une pièce de rechange d'origine.

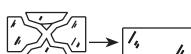
189W  12 m 

$t_a$  40°C

IP20



$t_c$  100°C



Classe de dangerosité 1  
Selon la norme  
EN 62471



**• DISTANCE MINIMUM DES OBJETS ECLAIRÉS**

Le projecteur doit être positionné de façon à ce que les objets éclairés par le faisceau lumineux soient à une distance d'au moins 12 mètres de l'objectif du projecteur.

**• Distance minimum des substances inflammables**

Le projecteur doit être positionné de façon à ce qu'il y ait une distance d'au moins 0,20 mètre entre toute substance inflammable et tout point de sa surface.

**• Température ambiante maximum**

Ne pas utiliser le projecteur quand la température ambiante ( $T_a$ ) dépasse 40°C.

**• Degré de protection IP20**

L'appareil est protégé contre la pénétration de corps solides de dimension supérieure à 12 mm (premier chiffre 2), tandis qu'il crant les gouttes d'eau, la pluie et les projections d'eau (deuxième chiffre 0).

**• Protection contre l'électrisation**

L'appareil doit obligatoirement être branché à une installation d'alimentation équipée d'une mise à la terre efficace (appareil de **Classe I** selon la norme EN 60598-1).

Nous recommandons également de protéger les lignes d'alimentation des projecteurs contre les contacts indirects et/ou les courts-circuits vers la masse en utilisant des interrupteurs différentiels de sensibilité adéquate.

**• Branchement au réseau d'alimentation**

Les opérations de branchement au réseau de distribution de l'énergie électrique doivent être exécutées par un installateur électrique qualifié. Contrôler que la fréquence et la tension de réseau correspondent à la fréquence et à la tension pour lesquelles le projecteur est prévu ; ces données sont indiquées sur la plaquette des données électriques. Cette même plaquette reporte également la puissance absorbée. Afin d'éviter des surcharges, se référer à celle-ci pour évaluer le nombre maximum d'appareils à brancher à la ligne électrique.

**• Température de la surface extérieure**

La température maximum qui peut être atteinte sur la surface extérieure de l'appareil, en conditions de régime thermique, est de 100°C.

**• Entretien**

Avant de procéder à toute opération d'entretien ou de nettoyage sur le projecteur, couper la tension d'alimentation. Après avoir éteint le projecteur, ne démonter aucun élément de l'appareil pendant les 10 minutes qui suivent. Une fois ce temps écoulé, la probabilité d'explosion de la lampe est quasiment nulle. S'il faut remplacer la lampe, attendre encore 20 minutes afin d'éviter tout risque de brûlures.

L'appareil a été conçu de façon à retenir les éclats produits en cas d'explosion de la lampe. Les lentilles doivent obligatoirement être montées sur l'appareil et doivent être remplacées par des pièces d'origine dès qu'elles sont visiblement endommagées.

**• Lampe**

L'appareil fonctionne avec une lampe haute pression avec ballast externe.

Ce dernier est incorporé dans l'appareil.

- Lire avec attention les « instructions d'utilisation » fournies par le fabricant de la lampe.

- Remplacer la lampe dès qu'elle est endommagée ou déformée par la chaleur

**• Sécurité photobiologique**

ATTENTION. Ne pas regarder directement la source de lumière.

Ne pas regarder le faisceau de lumière avec des instruments optiques ou d'autres instruments qui pourraient provoquer une convergence lumineuse.

Le produit est conçu pour être utilisé dans les milieux suivants :

studios, scènes, théâtres, expositions, salons, événements, parcs à thème, lieux de divertissement, éclairage architectural et similaires



Non adapté à l'éclairage domestique



Non indiqué pour un utilization résidentiel



LiFePO<sub>4</sub>

Pb

• **Batteria**

Questo prodotto contiene una batteria ricaricabile piombo-acido o Litio Ferro Tetrafosfato. A tutela dell'ambiente si prega di smaltire la batteria a fine vita in conformità alla normativa vigente.



**Élimination**

Ce dispositif est conforme à la Directive Européenne 2012/19/UE – Déchets d'équipements électriques et électroniques (DEEE). Dans le respect de l'environnement, écouler/recycler le produit à la fin de son cycle de vie selon les dispositions légales locales.



Les produits auxquels ce manuel se rapporte sont conformes aux Directives Européennes dont ils font l'objet :

- 2006/95/CE - Sécurité des matériels électriques de Basse Tension (BT)
- 2004/108/CE - Compatibilité Électromagnétique (CEM)
- 2011/65/UE - Limitation de l'utilisation de certaines substances dangereuses (RoHS)

- **Installation**

Sicherstellen, dass alle Teile für die Befestigung des Projektors in einwandfreiem Zustand sind.

Vor der Installation des Projektors die Stabilität der Verankerungsstelle überprüfen.

Das korrekt am Gerät eingehakte und an der Haltestruktur befestigte Sicherheitsseil muss so installiert werden, dass bei einem Nachgeben der Haupthalterung die Fallhöhe des Gerätes so gering wie möglich ist. Nach einem eventuellen Einsatz muss das Sicherheitsseil durch ein Originalersatzteil ersetzt werden.

189W  12.....m 

- **MINDESTABSTAND ZU BELEUCHTETEN OBJEKten**

**Der Projektor muss so installiert werden, dass der Abstand zwischen den vom Lichtstrahl beleuchteten Objekten und dem Objektiv des Projektors mindestens 12 Meter beträgt.**

- **Mindestabstand zu entzündbaren Materialien**

Der Projektor muss so installiert werden, dass entzündbare Materialien mindestens 0,20 Meter von jedem Punkt der Geräteoberfläche entfernt sind.

$t_a$  40°C

- **Max. Raumtemperatur**

Den Projektor nicht verwenden, wenn die Raumtemperatur (RT) 40°C überschreitet.

IP20

- **Schutzart IP20**

Das Gerät ist gegen das Eindringen von festen Fremdkörpern mit Durchmesser über 12 mm (erste Kennziffer 2) geschützt, während es gegen Tropf-, Regen- und Spritzwasser sowie Wasserstrahlen (zweite Kennziffer 0) empfindlich ist.



- **Schutz gegen Stromschlag**

Es ist Pflicht, das Gerät an eine Stromversorgungsanlage anzuschließen, die mit einer leistungsfähigen Erdung ausgestattet ist (Gerät der **Klasse I** gemäß Richtlinie EN 60598-1).

Darüber hinaus wird empfohlen, die Zuleitungen der Projektoren mit korrekt bemessenen Fehlerstromschutzschaltern vor indirekten Kontakten und/oder Kurzschlägen zu schützen.

$t_c$  100°C

- **Netzanschluss**

Der Anschluss an das Stromnetz muss von einem kompetenten Elektroinstallateur ausgeführt werden. Vergewissern Sie sich, dass Spannung und Frequenz der Netzversorgung mit den Werten übereinstimmen, für die der Projektor ausgelegt ist und die auf dem Typenschild angegeben sind. Ebenfalls auf dem Typenschild ist die Leistungsaufnahme angegeben. Um zu beurteilen, wie viele Geräte maximal an die Stromleitung angeschlossen werden können, ist auf diese Angaben Bezug zu nehmen, damit Überlastungen vermieden werden.



- **Temperatur der Außenfläche**

Die Außenfläche des Geräts kann im Wärmebetrieb eine Höchsttemperatur von 100°C erreichen.

- **Wartung**

Vor Beginn von Wartungs- oder Reinigungsarbeiten am Projektor stets die Stromversorgung abschalten. Nach dem Abschalten 10 Minuten lang keine Geräteteile abnehmen. Nach Ablauf dieser Zeit besteht praktisch keine Gefahr mehr, dass die Lampe birst. Falls die Lampe ersetzt werden muss, weitere 20 Minuten warten, um Verbrennungsgefahr zu vermeiden.

Das Gerät wurde so konzipiert, dass es die Splitter bei einem eventuellen Bersten der Lampe zurückhält. Die Montage der Linsen ist obligatorisch vorgeschrieben; des Weiteren müssen sie bei sichtbarer Beschädigung durch Originalersatzteile ersetzt werden.



- **Lampe**

Das Gerät ist mit einer Hochdrucklampe bestückt, die eine externe Zündeinheit verlangt.

Diese Zündeinheit ist in das Gerät eingebaut.

- Lesen Sie die vom Lampenhersteller gelieferte "Bedienungsanleitung" aufmerksam durch.
- Eine beschädigte oder von der Hitze verformte Lampe muss sofort ersetzt werden.



Gefahrenklasse 1  
Gemäß Norm  
EN 62471

- **Photobiologische Sicherheit**

ACHTUNG. Nicht direkt in die Lichtquelle blicken.

Den Lichtstrahl nicht mit optischen Geräten oder anderen Instrumenten anschauen, die Lichtkonvergenz verursachen könnten.



Das Produkt wurde für die Verwendung in den folgenden Bereichen entwickelt:

Studios, Bühnen, Theater, Ausstellungen, Messen, Veranstaltungen, Themenparks, Unterhaltungslokale, Architekturbeleuchtung oder ähnliches.



Nicht für Haushaltsbeleuchtung geeignet



Nicht für den häuslichen Gebrauch



• Batterie

Dieses Produkt enthält eine wiederaufladbare Blei-Säure-Batterie oder Lithium-Eisen-tetraphosphat. Zum Schutz der Umwelt bitten wir Sie, diese Batterie, nachdem sie verbraucht ist, gemäß den geltenden Vorschriften zu entsorgen.



Entsorgung

Diese Vorrichtung entspricht der Europäischen Richtlinie 2012/19/UE - Abfall von elektrischen und elektronischen Gerätschaften (RAEE). Das Produkt am Ende seines Lebenszyklus unter Berücksichtigung der Umwelt nach den lokalen Gesetzesvorschriften entsorgen/recyceln.



Die Produkte, auf die dieses Handbuch sich bezieht, entsprechen den Europäischen Richtlinien, denen sie unterliegen:

- 2006/95/EG - Niederspannungsrichtlinie (LVD)
- 2004/108/EG - Elektromagnetische Kompatibilität (EMC)
- 2011/65/EU - Beschränkung der Verwendung bestimmter gefährlicher Stoffe (RoHS)

**• Instalación**

Asegúrese de que todos los elementos de fijación del proyector estén en buenas condiciones.

Controle la estabilidad del punto de anclaje antes de instalar el proyector.

La cuerda de seguridad, correctamente enganchada al aparato y fijada a la estructura de soporte, debe colocarse de modo que, si el soporte principal cede, el aparato sufra la menor caída posible. En caso de desgaste de la cuerda de seguridad, sustitúyala por el recambio original.

189W  12 ..... m 

$t_a$  40°C

IP20



$t_c$  100°C

**• DISTANCIA MINIMA DE LOS OBJETOS ILUMINADOS**

El proyector debe ser posicionado de modo tal que los objetos tocados por el haz luminoso tengan una distancia de al menos 12 metros del objetivo del mismo proyector.

**• Distancia mínima de los materiales inflamables**

El proyector debe ser posicionado de modo tal que los materiales inflamables tengan una distancia de al menos 0,20 metros de cada punto de la superficie del aparato.

**• Máxima temperatura ambiente**

No utilice el proyector si la temperatura ambiente ( $t_a$ ) supera los 40°C.

**• Grado de protección IP20**

El aparato está protegido contra la penetración de cuerpos sólidos de dimensiones superiores a 12 mm (primer dígito 2), pero no contra el goteo, la lluvia, las salpicaduras y los chorros de agua (segundo dígito 0).

**• Protección contra descargas eléctricas**

Es obligatorio efectuar la conexión a una instalación de alimentación dotada de una eficiente puesta a tierra (aparato de **Clase I** según la norma EN 60598-1).

Además, se recomienda proteger las líneas de alimentación de los proyectores de los contactos indirectos y/o cortocircuitos hacia masa, mediante el uso de interruptores diferenciales dimensionados oportunamente.

**• Conexión a la red de alimentación**

Las operaciones de conexión a la red de distribución de la energía eléctrica deben ser efectuadas por un instalador eléctrico cualificado. Constate que los valores de frecuencia y tensión de la red sean iguales a los que figuran en la placa de los datos eléctricos del proyector. En la misma placa está indicada la potencia absorbida. Hacer referencia a esta última para valorar el número máximo de aparatos que conectar a la línea eléctrica, con el fin de evitar sobrecargas.

**• Temperatura de la superficie externa**

La temperatura máxima que puede alcanzar la superficie externa del aparato, en condiciones de régimen térmico, es de 100°C.

**• Mantenimiento**

Antes de iniciar cualquier operación de mantenimiento o limpieza del proyector desconecte el aparato de la alimentación eléctrica. Después del apagado no extraiga ninguna parte del aparato durante 10 minutos. Transcurrido dicho tiempo la probabilidad de que la lámpara explote es prácticamente nula. Si fuera necesario cambiar la lámpara, espere 20 minutos más para evitar quemarse.

El aparato está proyectado para retener las astillas producidas por el posible estallido de la lámpara. Las lentes deben montarse obligatoriamente; además, si estuvieran dañadas, deberán ser sustituidas por recambios originales.

**• Lámpara**

El aparato utiliza una lámpara de alta presión que requiere un arrancador externo.

Dicho arrancador está incorporado en el aparato.

- Leer atentamente las "instrucciones de uso" suministradas por el fabricante de la lámpara.

- Sustituir la lámpara inmediatamente si estuviera dañada o deformada por el calor.



Clase de peligrosidad 1  
Según la norma  
EN 62471

**• Seguridad fotobiológica**

ATENCIÓN. No mire directamente a la fuente de luz.

No mire el haz de luz con instrumentos ópticos u otros instrumentos que puedan causar convergencia de luz.



El producto es concebido para ser utilizado en los siguientes ambientes: estudios, palcos, teatros, exposiciones, ferias, eventos, parques temáticos locales de entretenimiento, iluminación de arquitecturas y similares



No es apropiado para la iluminación doméstica



No para uso residencial



• **Batería**

Este producto contiene una batería recargable plomo-ácido o de litio tetrafosfato Hierro. Para proteger el ambiente se ruega eliminar la batería conforme a la normativa vigente.



**Eliminación**

Este dispositivo es conforme a la Directiva Europea 2012/19/UE - Residuos de equipos eléctricos y electrónicos (RAEE). Con el fin de respetar el ambiente, eliminar/reciclar el producto al final de su ciclo de vida según las disposiciones de ley locales



Los productos a los que se refiere este manual son conformes a las Directivas Europeas de las cuales son objeto:

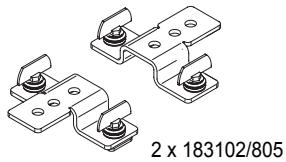
- 2006/95/CE - Seguridad de los equipos alimenticios de Baja Tensión (LVD)
- 2004/108/CE - Compatibilidad Electromagnética (EMC)
- 2011/65/UE - Restricción del uso de determinadas sustancias peligrosas (RoHS)

## UNPACKING AND PREPARATION

**1**

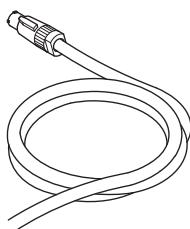
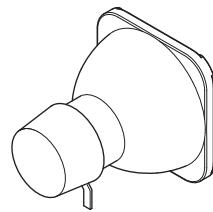


IST005/001



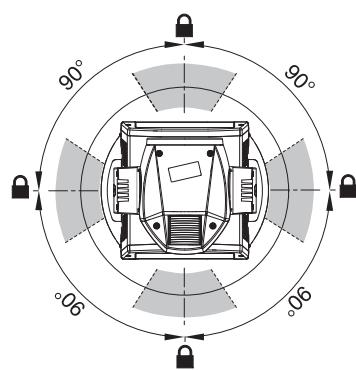
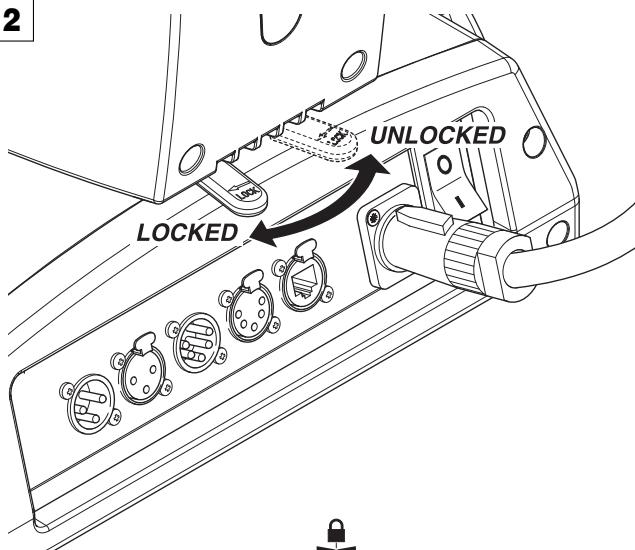
2 x 183102/805

Lamp 189W  
(fitted into projector)

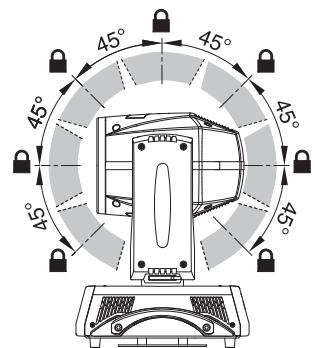
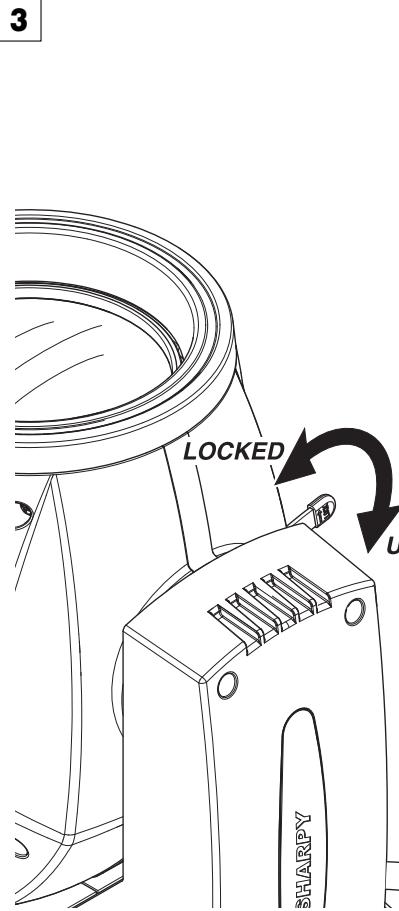


Packing contents - Fig. 1

**2**



**3**

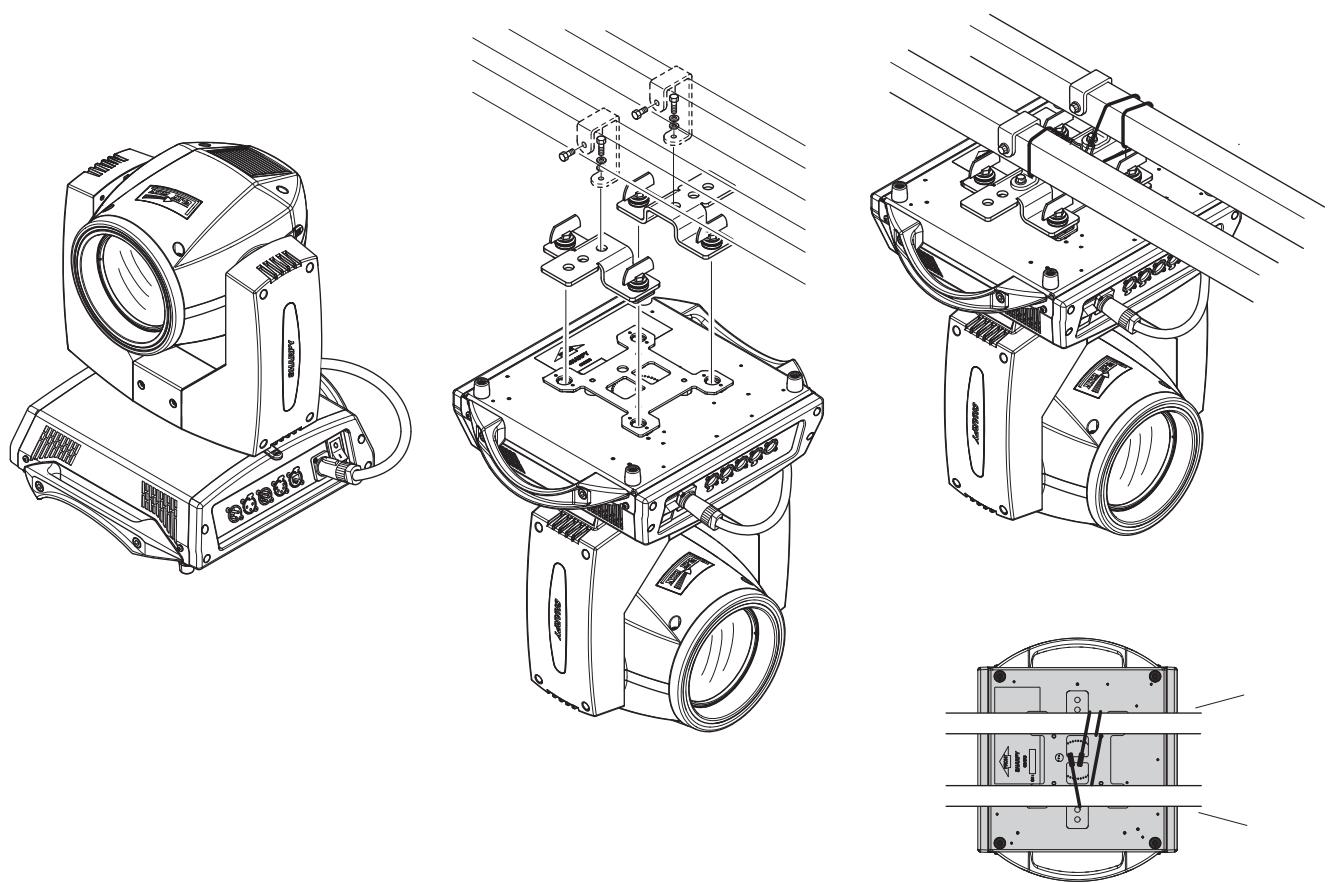


PAN Mechanism Lock and Release (every 90°) - Fig. 2

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

## INSTALLATION AND START-UP

**4**

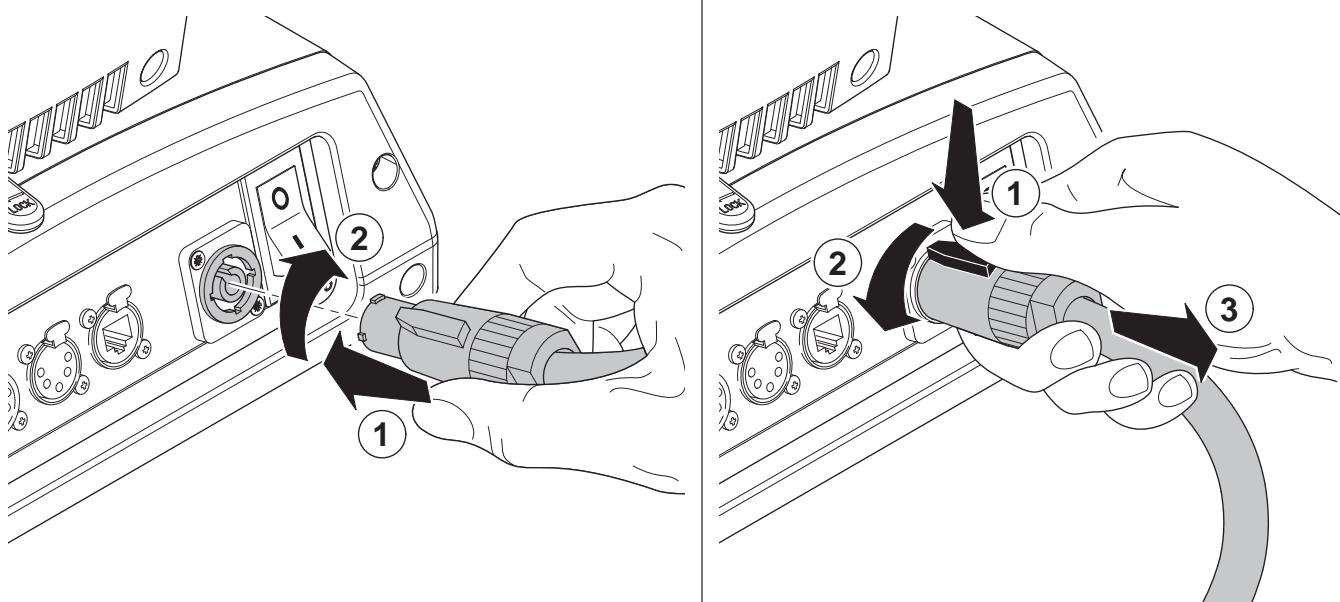


**Installing the projector - Fig. 4**

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

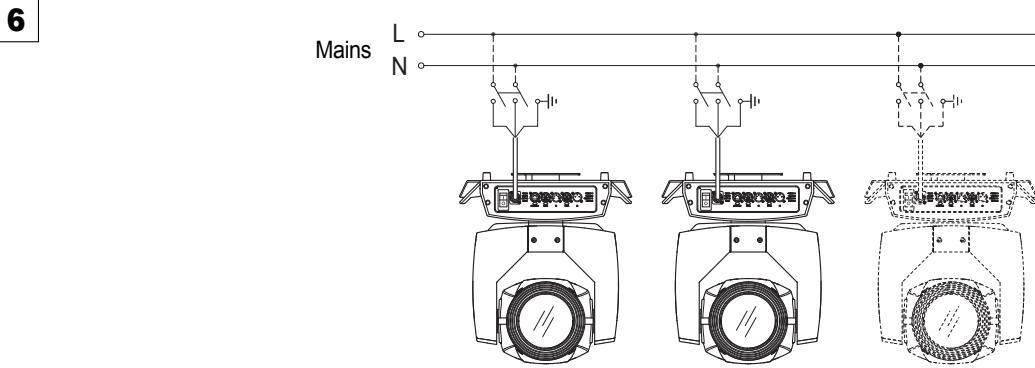
**WARNING:** *with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.*

**5**

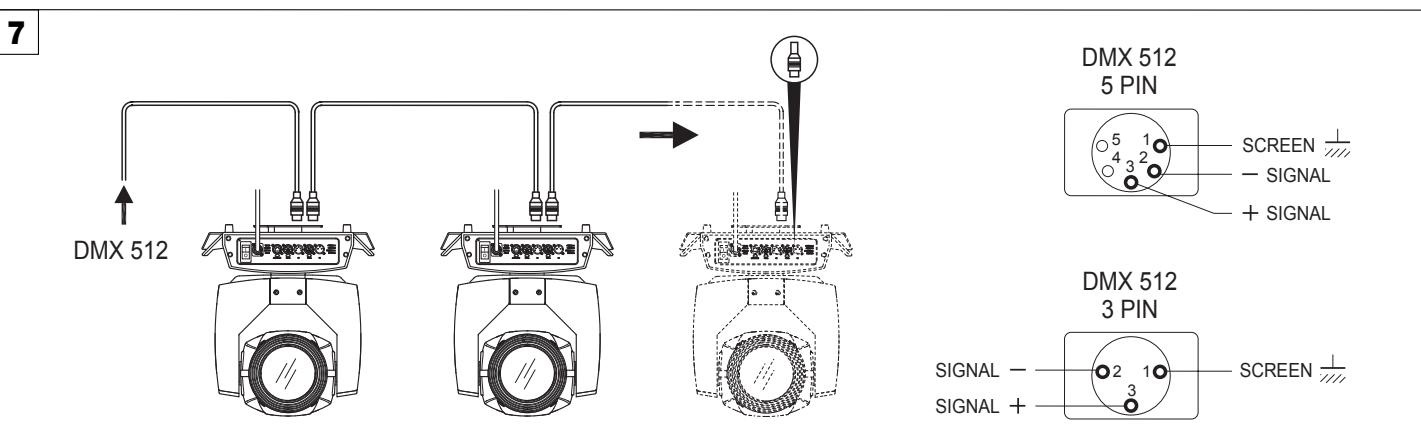


**Connecting and disconnecting power cable - Fig. 5**

## CONTROL PANEL



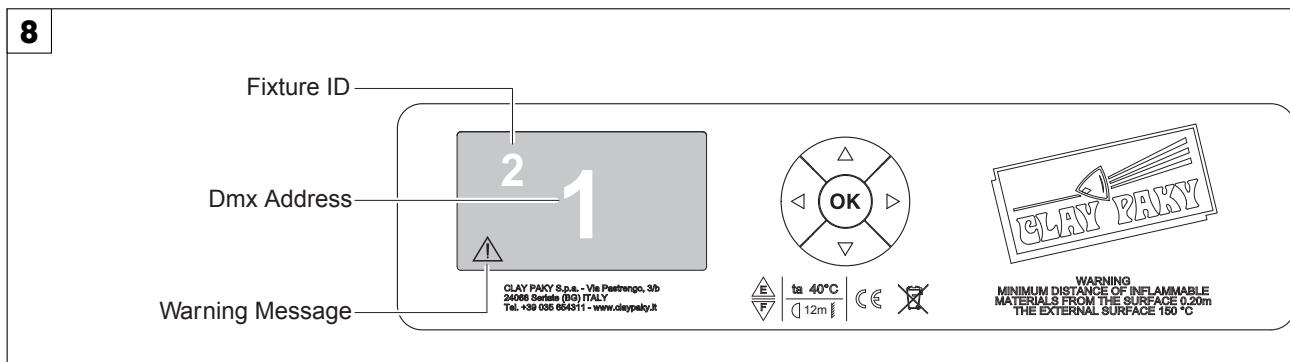
Connecting to the mains supply - Fig. 6



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

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

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



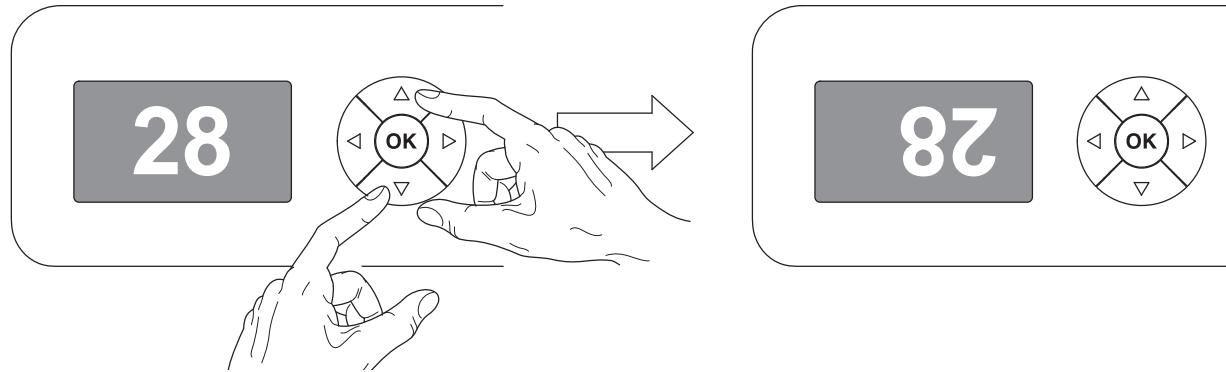
Switching on the projector - Fig. 8

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

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

On conclusion of resetting in case of absence of the dmx signal, Pan and Tilt move to the "Home" position (Pan 50% - Tilt 50%). The control panel (Fig. 8) has a display and buttons for the complete programming and management of the projector menu. The display can be in one of two conditions: rest status and setting status. When it is in the rest status, the display shows the projector's DMX address and the Fixture ID address (if set).

During menu setting status, after a wait time (about 30 seconds) without any key having been pressed, the display automatically returns to rest status. It should be noted than when this condition occurs, any possible value that has been modified but not yet confirmed with the **OK** key will be cancelled.



#### Reversal of the display - Fig. 9

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

#### Setting the projector starting address

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

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

Setting the address: see pag. 8.

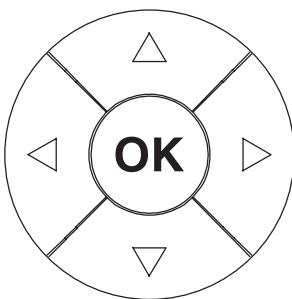
#### Setting the projector Fixture ID

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

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

Setting the Fixture ID: see pag. 8.

### Functions of the buttons - Using the menu



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



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



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



Return to the top level



Commute from units, tens, hundreds, in the "Address", "Fixture ID" and "Calibration" menu.

#### USING THE MENU:

- 1) Press once – “Main Menu” appears on the display.
- 2) Use the UP and DOWN keys to select the menu to be used:
  - Setup (Setup Menu): To set the setting options.
  - Option (Option Menu): To set the operating options
  - Informations (Informations Menu): To read the counters, software version and other information.
  - Manual Control (Manual control Menu): To trigger the test and manual control functions.
  - Test (Test Menu): To check the proper functioning of effects
  - Advanced (Advanced Menu): Access to the "Advanced menu" is recommended for a trained technical personnel.

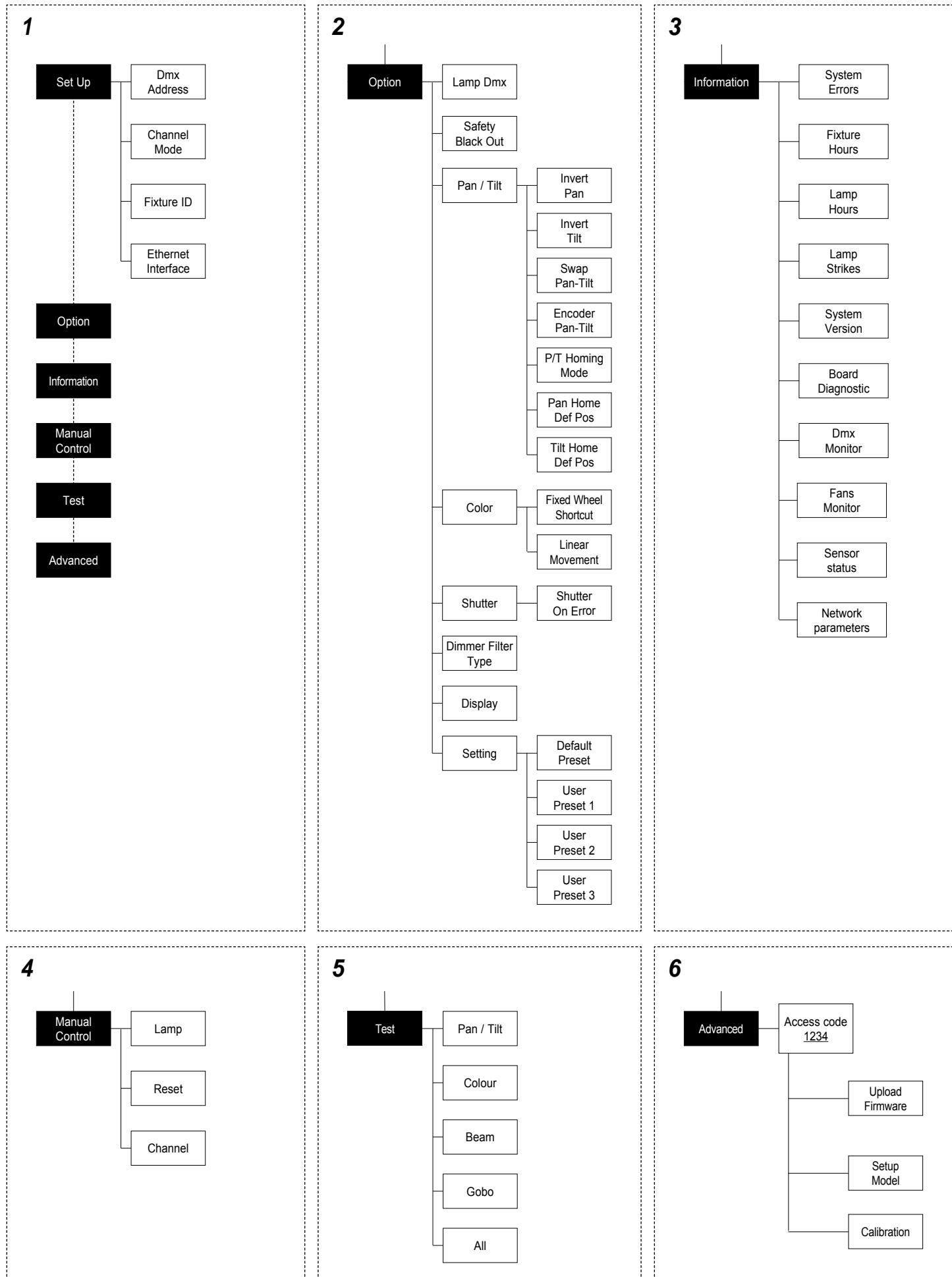
To enable the "Advanced" see pag.13

- 3) Press to display the first item in the selected menu.
- 4) Use the UP and DOWN keys to select the MENU items.

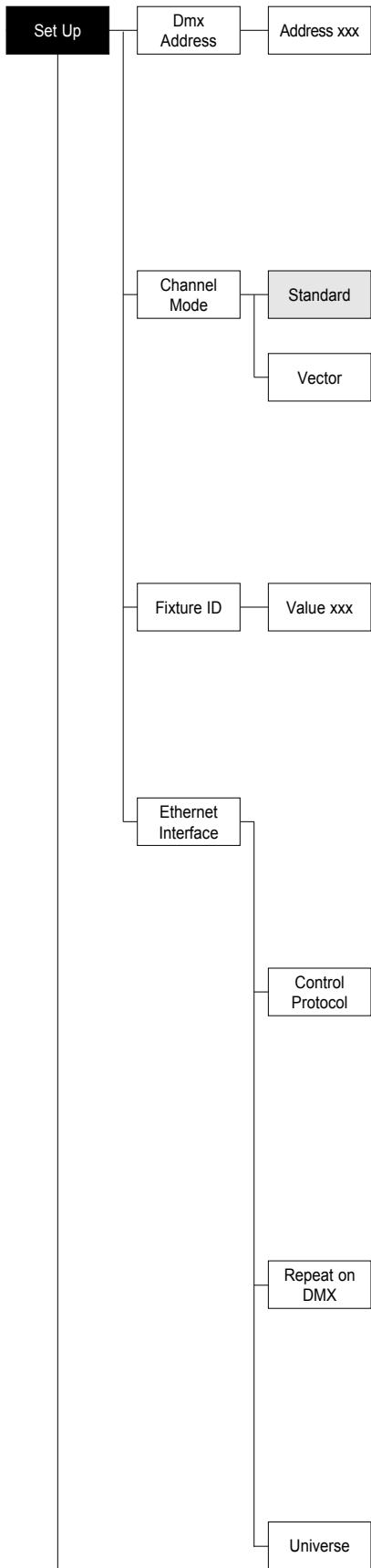
#### Setting addresses and options with the projector disconnected

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

## MENU SETTING



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

### CHANNEL MODE

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

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

### FIXTURE ID

Allows you to select the FIXTURE ID.

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

### ETHERNET INTERFACE

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

- 1) Premere **OK**.
- 2) Use the UP **▲** and DOWN **▼** keys to select the "Ethernet Interface" options to set:

### Control Protocol

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

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

### Repeat on DMX

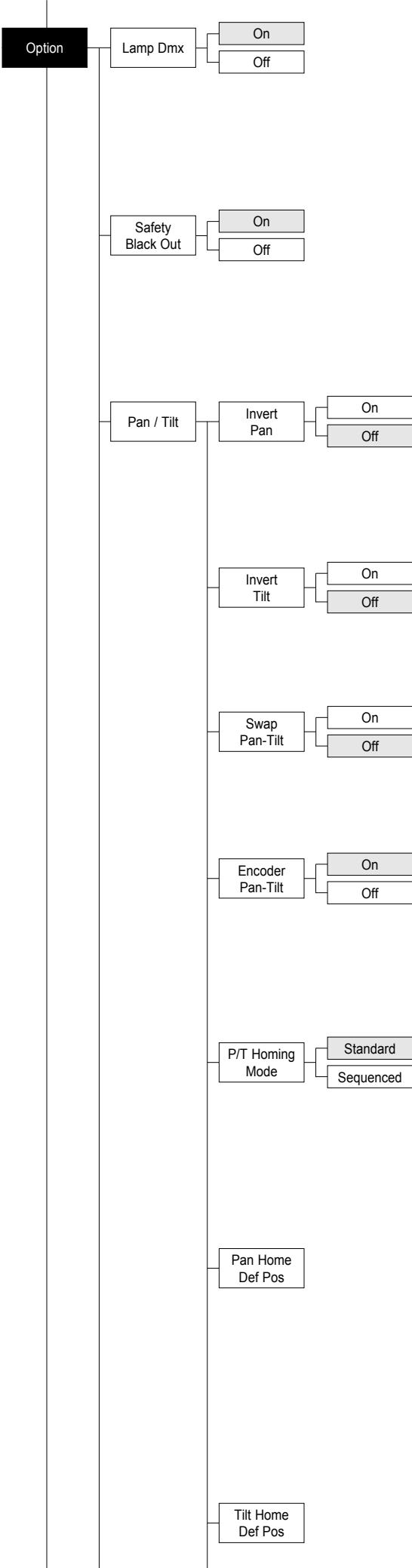
It lets you enable the transmission of the Ethernet protocol by DMX signal to all the connected projectors.

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

### Universe

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

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



## OPTIONS MENU

### LAMP DMX

Used for enabling lamp remote control channel.

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

### SAFETY BLACK OUT

This allows the Dimmer's automatic lock option to be activated after 3 seconds with no incoming DMX signal.

- 1) Press **OK** - the current setting (On or Off) appears on the display.
- 2) Use the UP **▲**, DOWN **▼** keys to enable (ON) or disable (Off) the Dimmer's lock option after 3 seconds with no incoming DMX signal.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep the current setting.

### 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.

**You can quickly disable the Pan and Tilt Encoder by simultaneously pressing the UP **▲** and DOWN **▼** keys in the "Main Menu".**

#### P/T Homing Mode

Lets you set the initial projector Reset mode.

- 1) Press **OK** , the current setting appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following settings:  
**Standard:** Pan & Tilt are simultaneously reset.  
**Sequenced:** Tilt is reset first followed by Pan.
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep the current setting.

#### Pan Home Def Pos

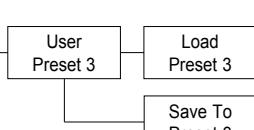
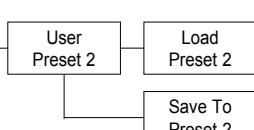
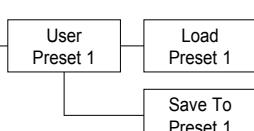
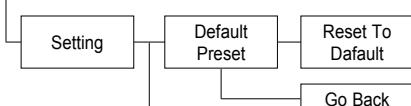
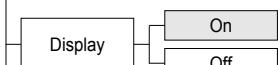
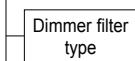
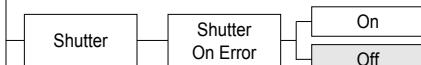
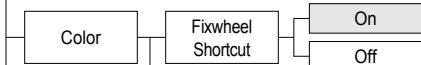
Lets you assign the Pan channel "home" position at the end of Reset, without a DMX input signal.

- 1) Press **OK** , the current setting appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following settings:  
**0 degree**  
**90 degrees**  
**180 degrees**  
**270 degrees (default)**
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep the current setting.

#### Tilt Home Def Pos

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

- 1) Press **OK**, the current setting appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following settings:  
**0%**  
**12.5%**  
**25%**  
**50% (default)**  
**75%**  
**87.5%**  
**100%**
- 3) Press **OK** to confirm the selection or LEFT **◀** to keep the current setting.



## COLOR

### Fixed wheel short-cut

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

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

### Linear Movement

It enables the linear movement of the colour wheel.

- 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 linear movement of the colour wheel.
- 3) Press **OK** to confirm the selection, or LEFT **◀** to keep current settings.

## SHUTTER

### Shutter on error

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

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

## DIMMER FILTER TYPE

It lets you best optimize the "Dimmer curve" according to that set on the control unit. One of the following 2 options can be selected:

#### • DMX follower

Dimmer movement speed/linearity follows the DMX values set by the control desk.

#### • Position dependent

Dimmer movement speed follows the DMX values set by the control unit taking into account the physical Dimmer starting position.

## DISPLAY

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

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

## SETTING

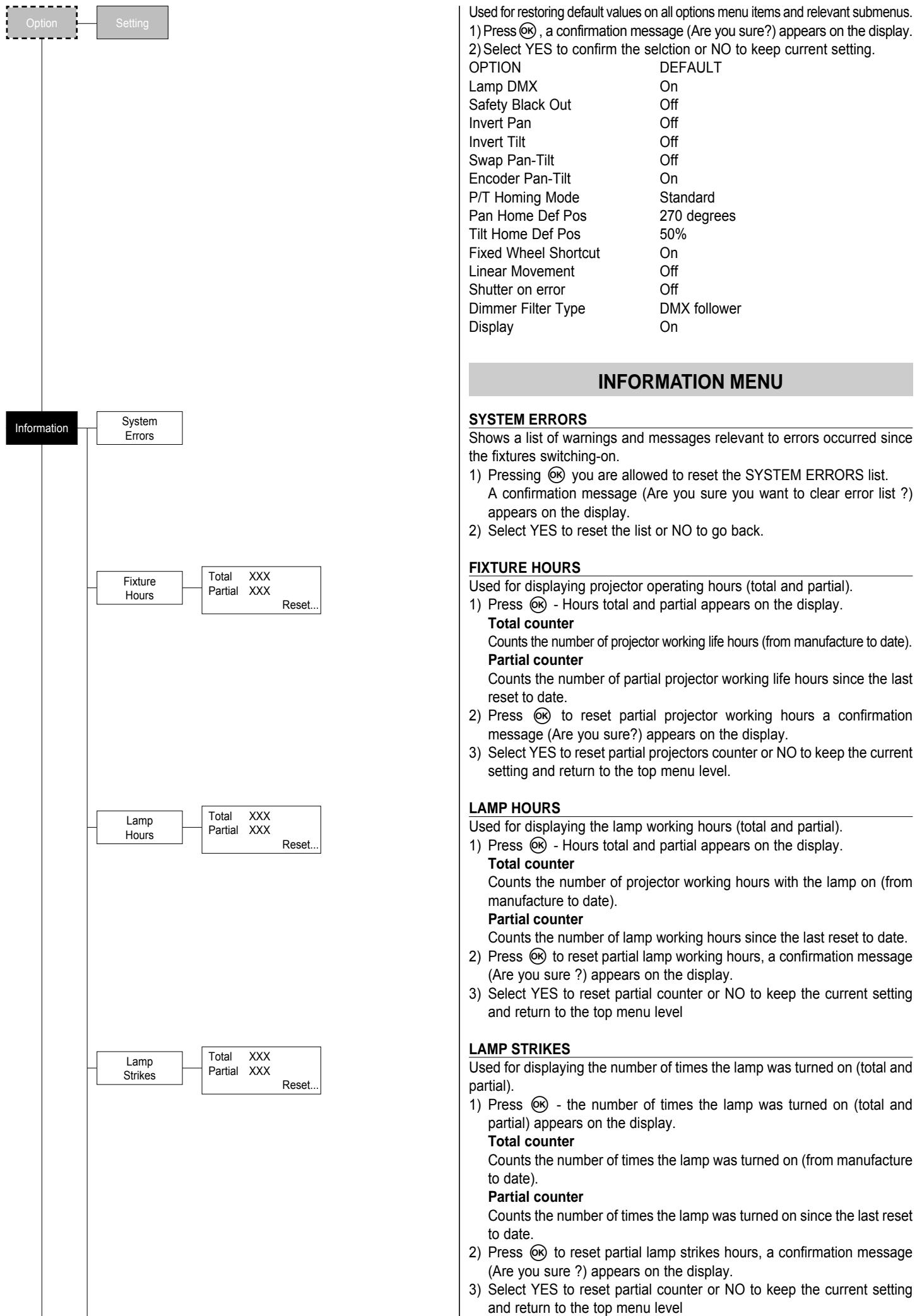
Used to save 3 different settings of the items in the options menu and relative submenus.

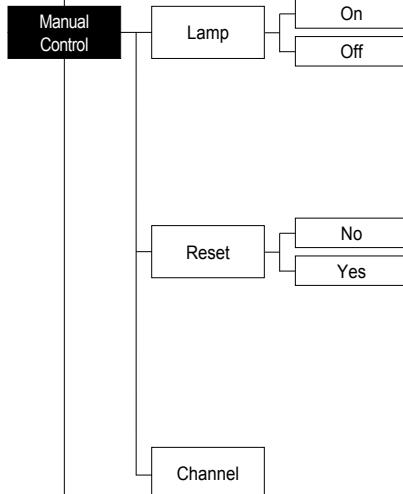
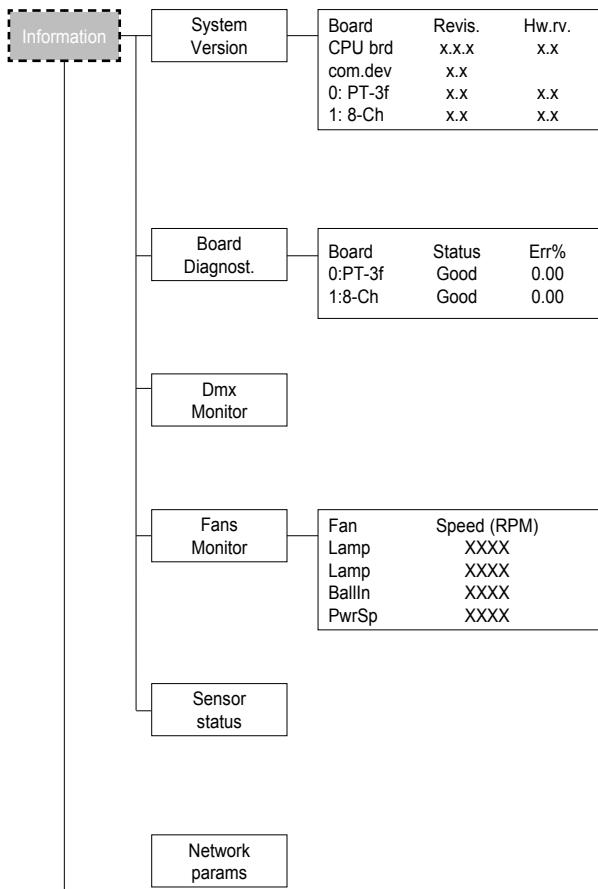
- 1) Press **OK** - "Default preset" appears on the display.
- 2) Use the UP **▲** and DOWN **▼** keys to select one of the following configurations:  
 - Default preset (\*)  
 - User preset 1  
 - User preset 2  
 - User Preset 3
- 3) Press **OK** - "Load preset X" appears on the display.
- 4) Use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

(\*) DEFAULT PRESET

By pressing the RIGHT **▶** key and the LEFT **◀** key simultaneously once entered in the "main menu" it is possible to quickly (short cut) reset the default settings (DEFAULT PRESET).

Continue →





## 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)

## 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)

## 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:

Lamp (Lamp Fan)

Ball. IN (Ballast IN Fan)

PwrSp (Power Supply Fan)

## SENSOR STATUS

It lets you check the correct operations of each "sensor" installed in the projector, each channel is associated with one of the following three parameters:

- n.a.= sensor not available
- ON= sensor working
- OFF= sensor defective

## NETWORK PARAMS

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

**IP address:** Internet Protocol address (two projectors must not have the same IP address)

**IP mask:** 255.0.0.0

**Mac address:** Media Access Control: the projector's Ethernet Address

## MANUAL CONTROL

### LAMP

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

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

### RESET

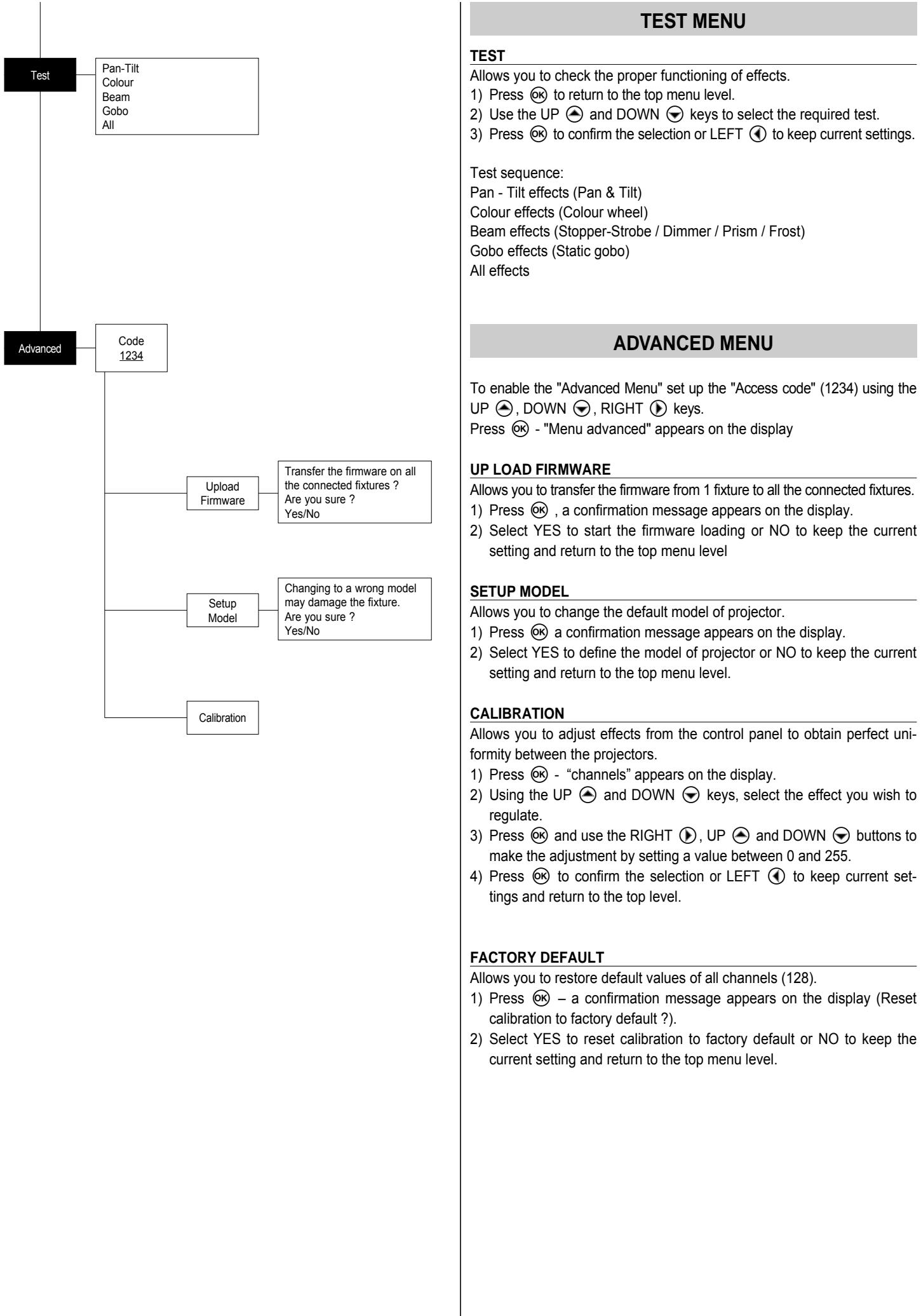
Used for resetting the projector.

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

### CHANNEL

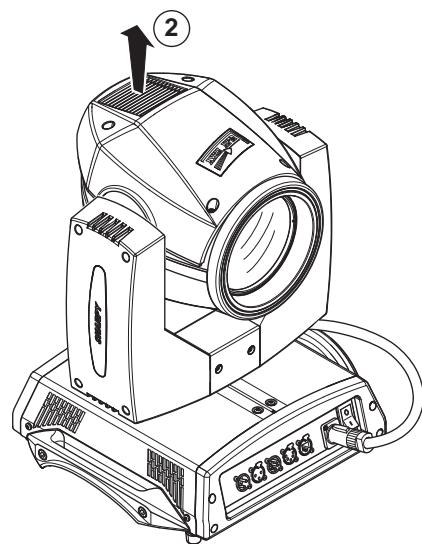
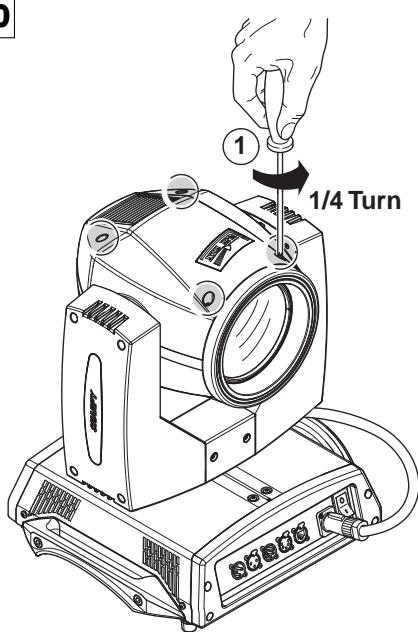
Used for setting channel levels from the projector control panel.

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

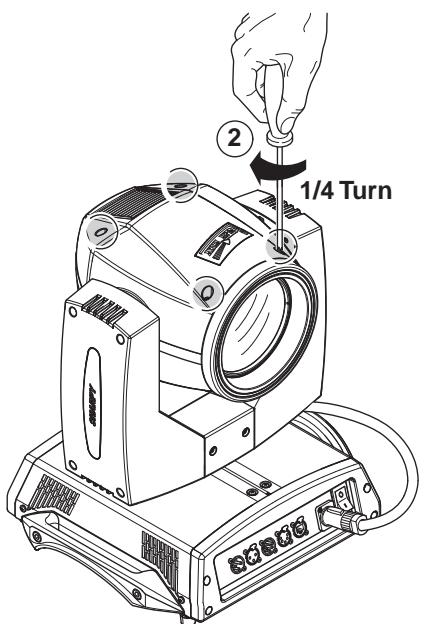
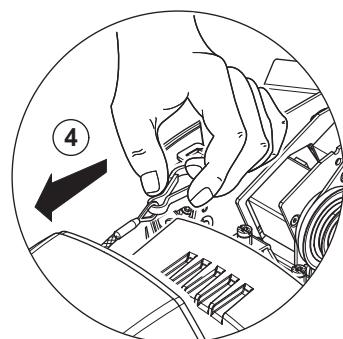
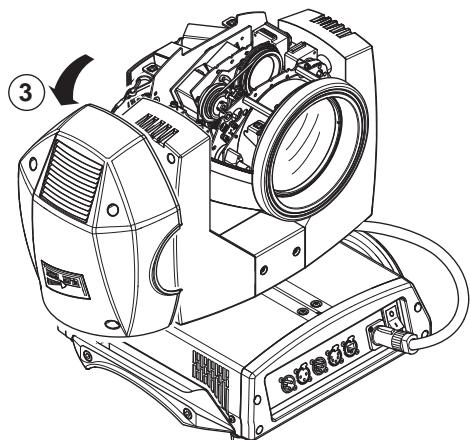
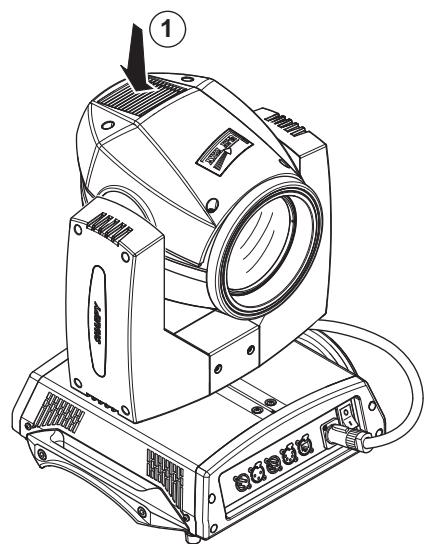


## MAINTENANCE

**10**



**11**

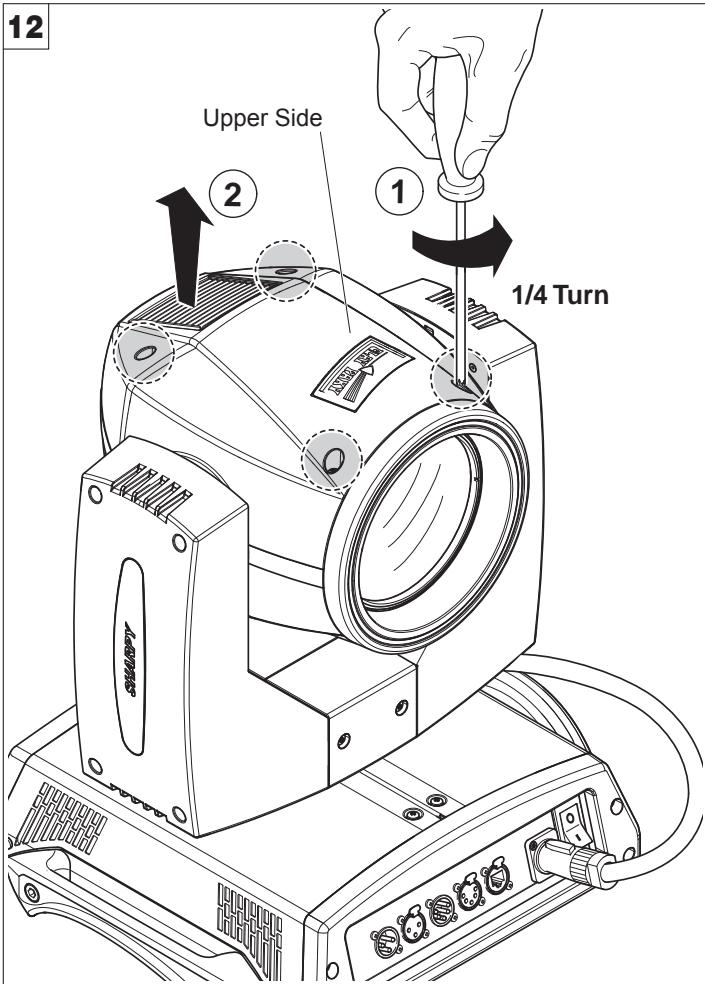


**Locking and releasing Pan and Tilt movements** - Refer to the instructions in the UNPACKING AND PREPARATION section.

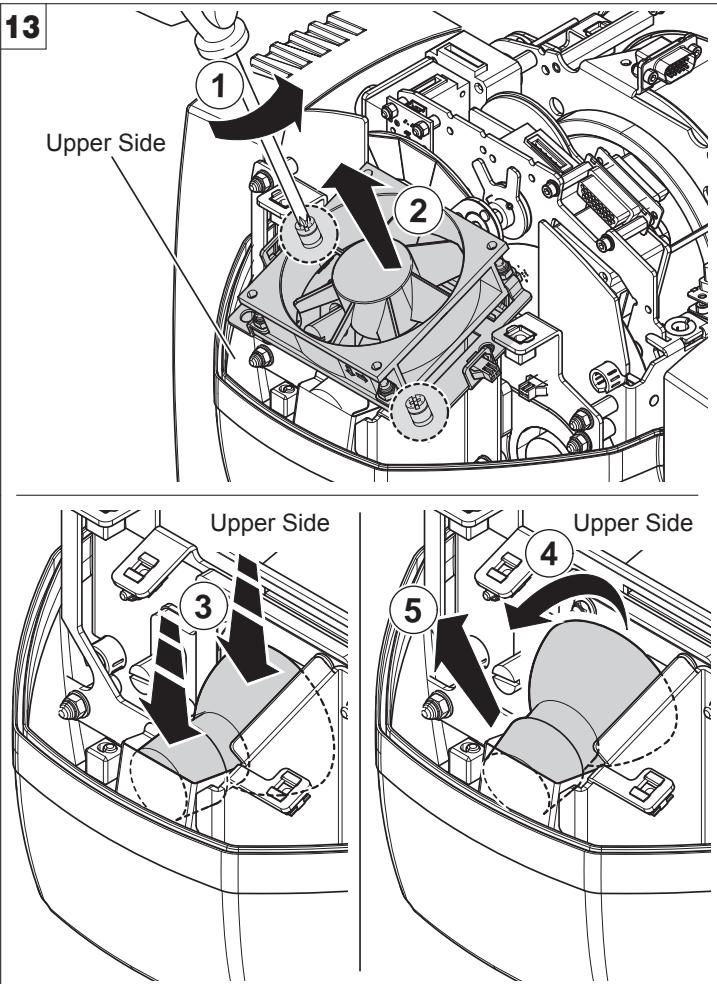
**Opening the head covers** - Fig. 10.

**Closing the head covers** - Fig. 11.

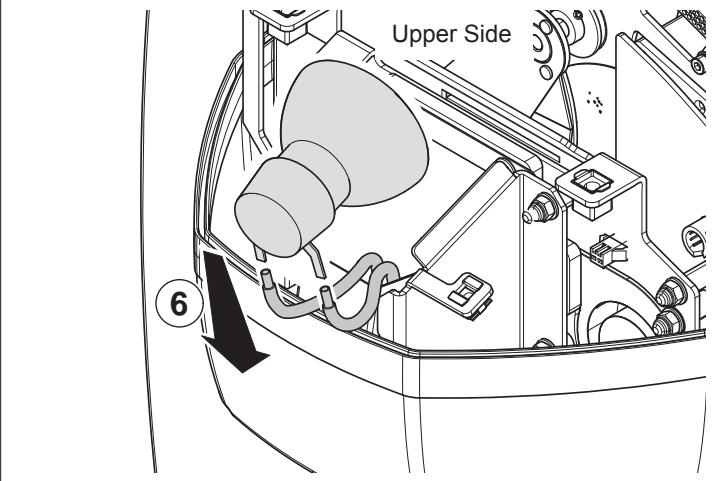
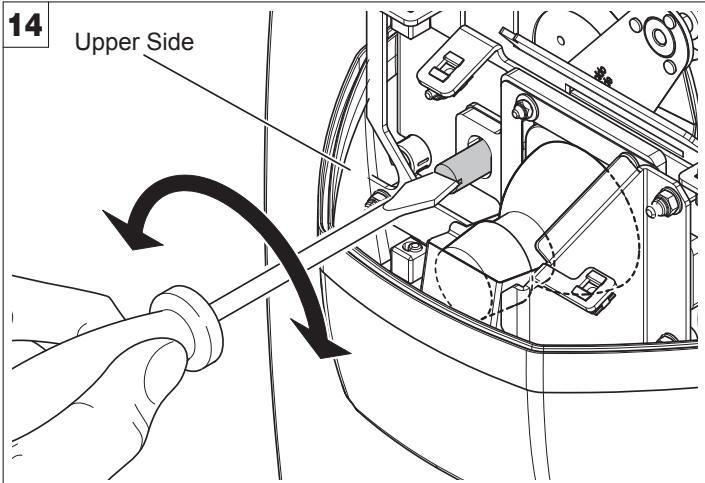
12



13



14



**Opening and closing lamp compartment - Fig. 12**

#### Lamp change - Fig 13

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

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

#### Lamp regulation - Fig. 14

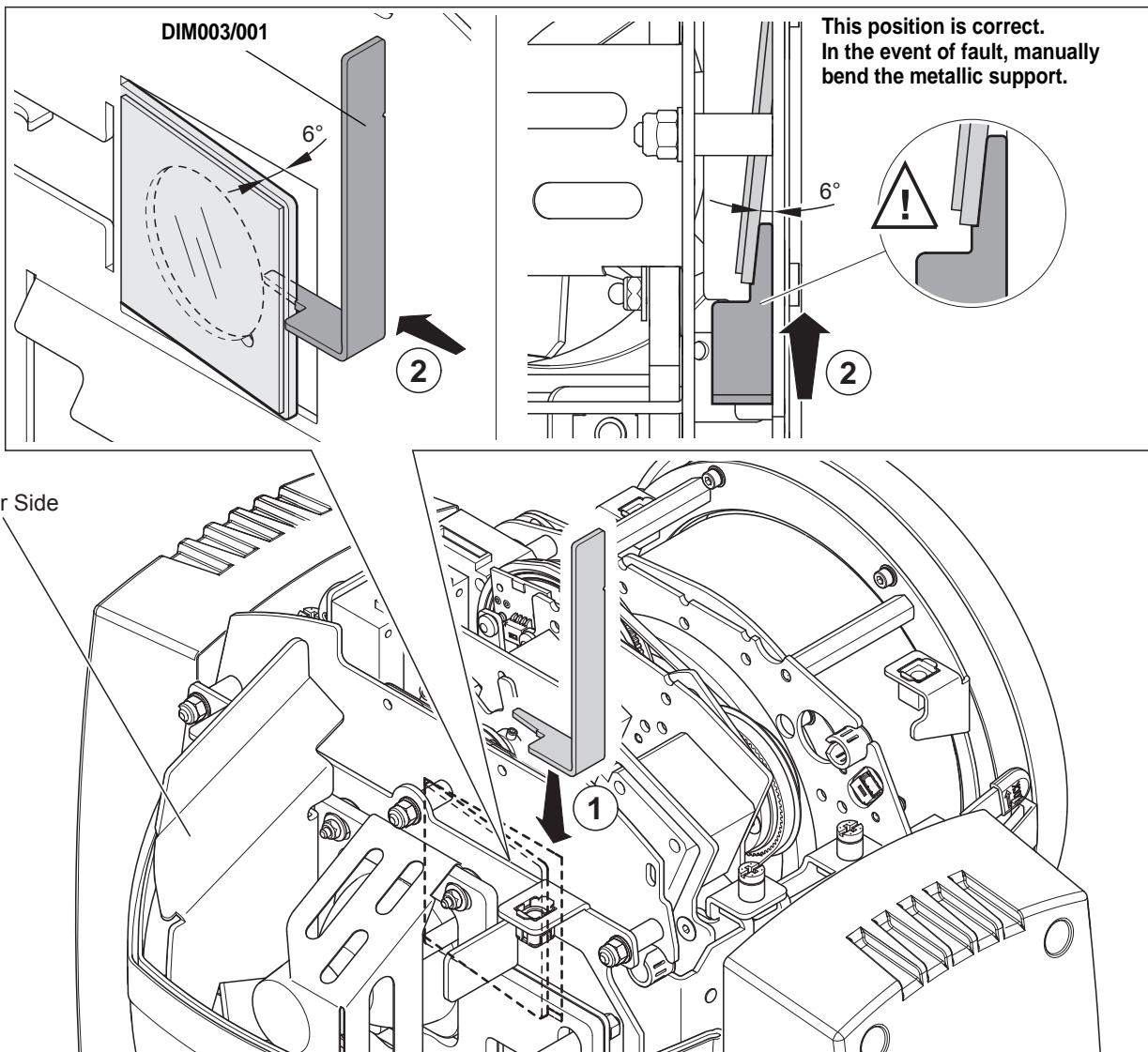
To centre the lamp, turn the adjusting screw as shown in the figure.

**WARNING:** The lamp must be adjusted with the projector switched off. After adjusting, close the effects covers, switch on the projector and check that the adjustment has been correctly made. If necessary, switch off the projector, remove the effects covers and repeat lamp adjustment.

**NOTE:** To adjust the lamp vertically (with regard to the Y axis) after having replaced it, it may be necessary to operate the **Calibration** in the **Menu Advanced** on the **Fixed Gobo Wheel** channel.

#### CAUTION:

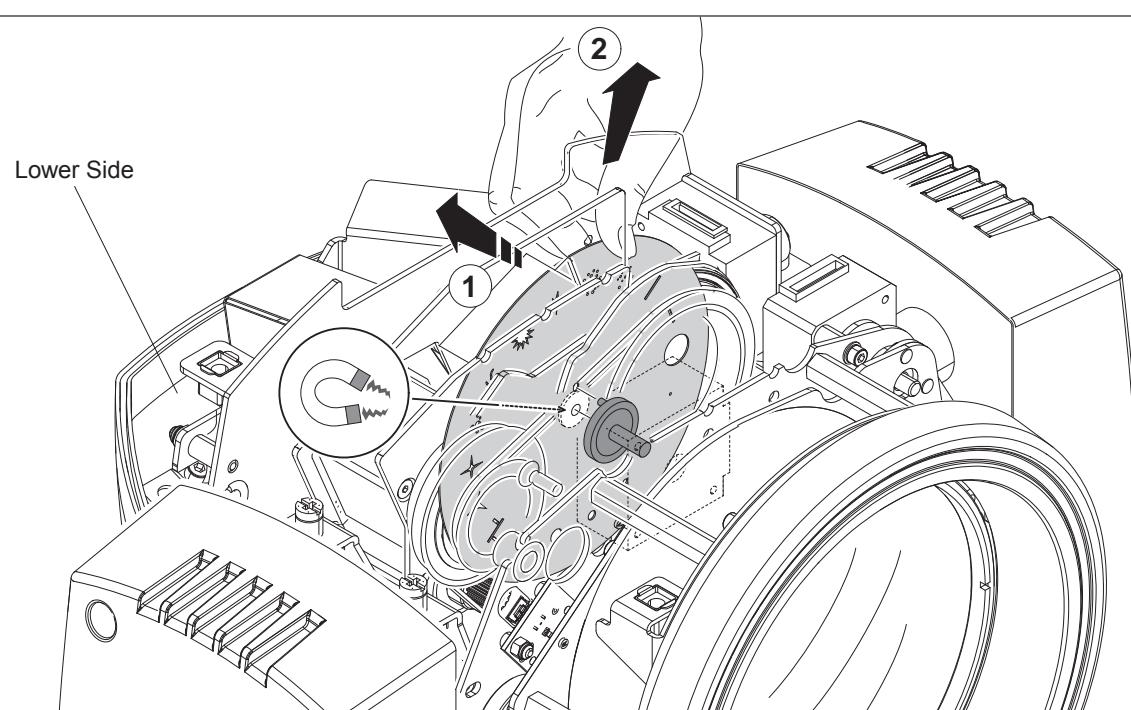
Fast lamp ON-OFF cycles (for example 10 minutes ON / 10 minutes OFF) will reduce the lamp life.

**15**

Anti IR/UV filter support template - Fig. 15

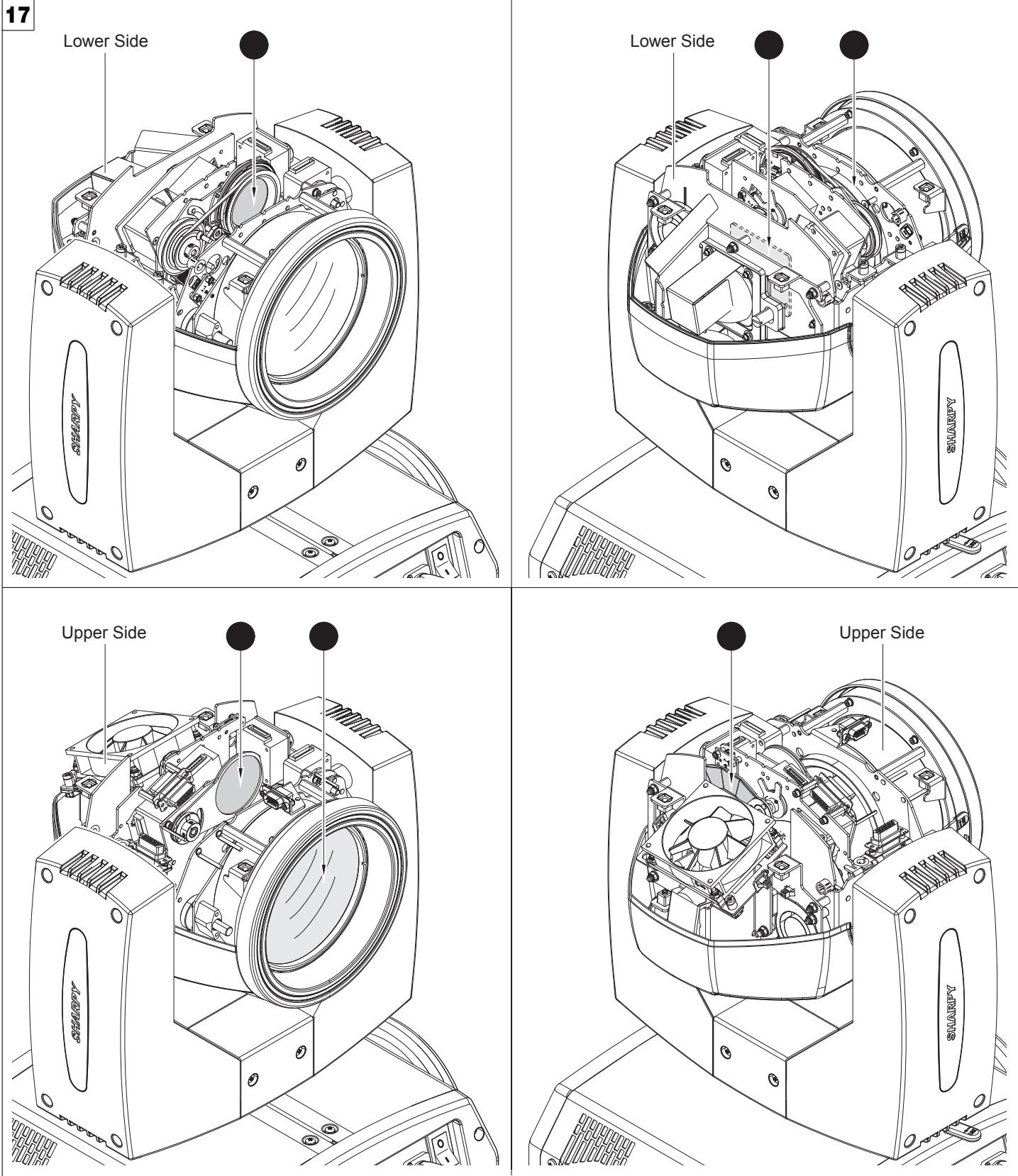
**WARNING:**

During maintenance and lamp replacement, we recommend you pay close attention to correct anti IR/UV filter support tilt. Incorrect tilt compromises lamp performance.

**16**

Replacing fixed gobos wheel - Fig. 16

**WARNING:** Before using personalised gobos wheel contact Clay Paky.

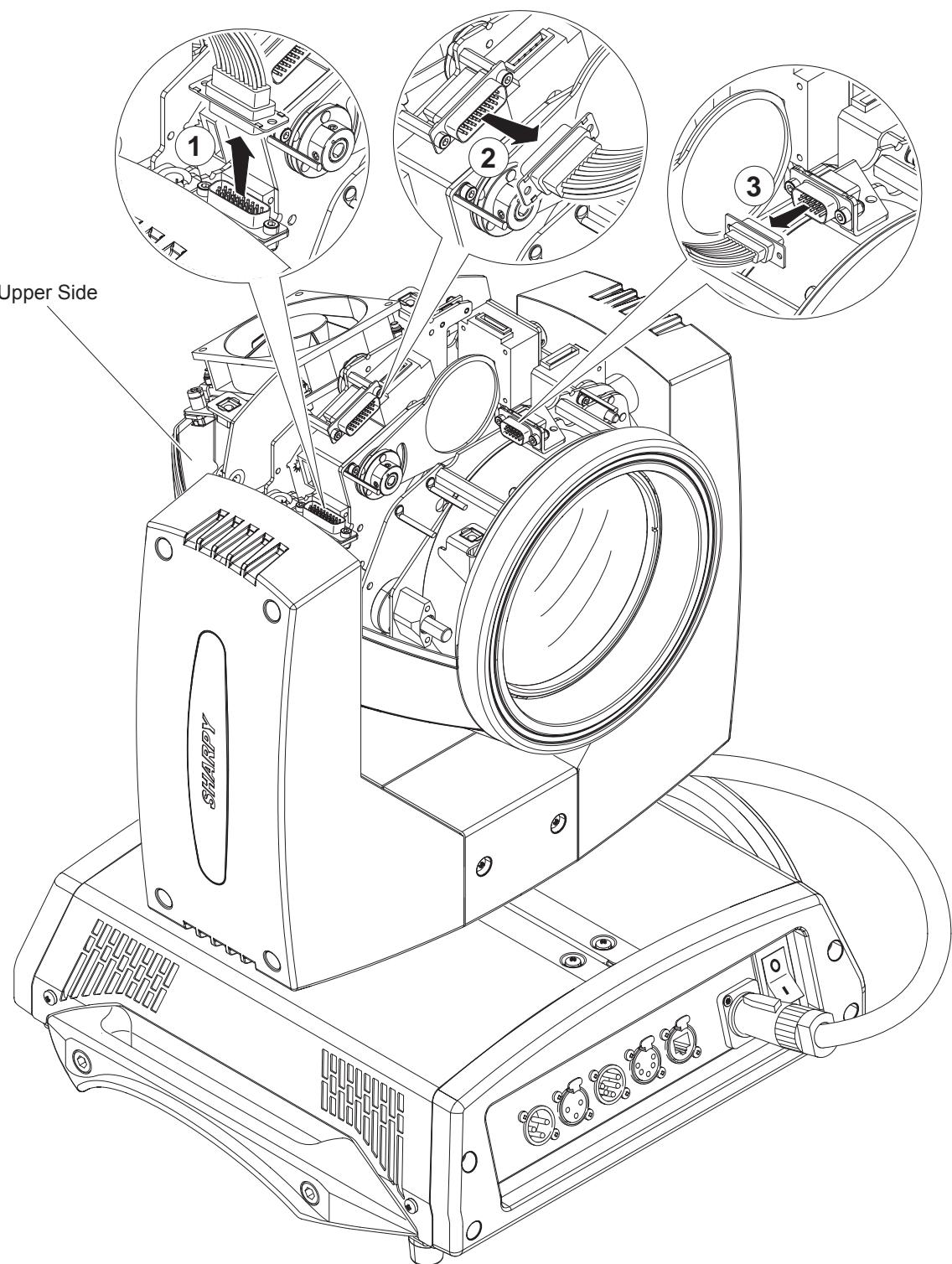


#### Periodical cleaning - Fig. 17

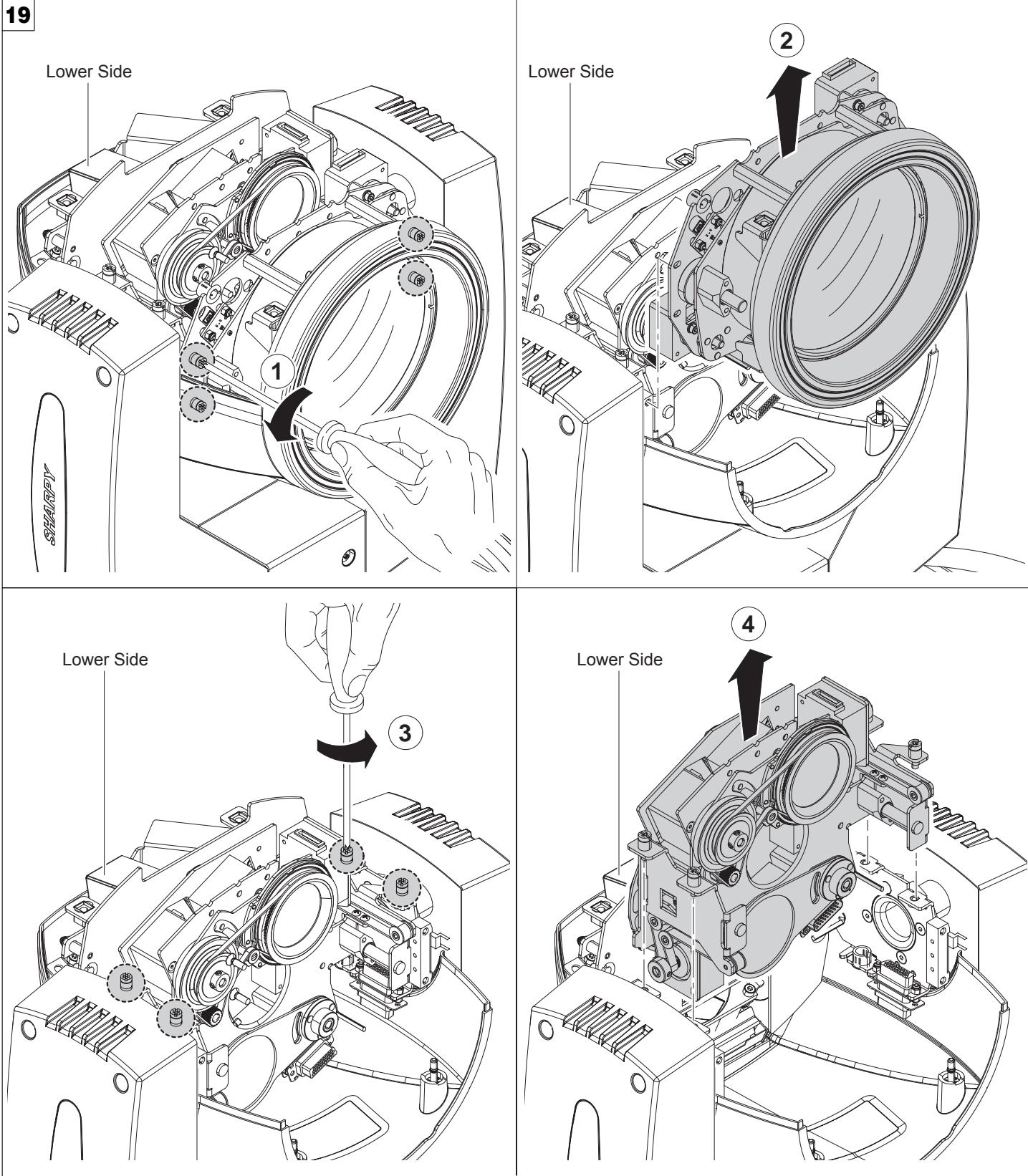
To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors, such as the amount of the effects and the quality of the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

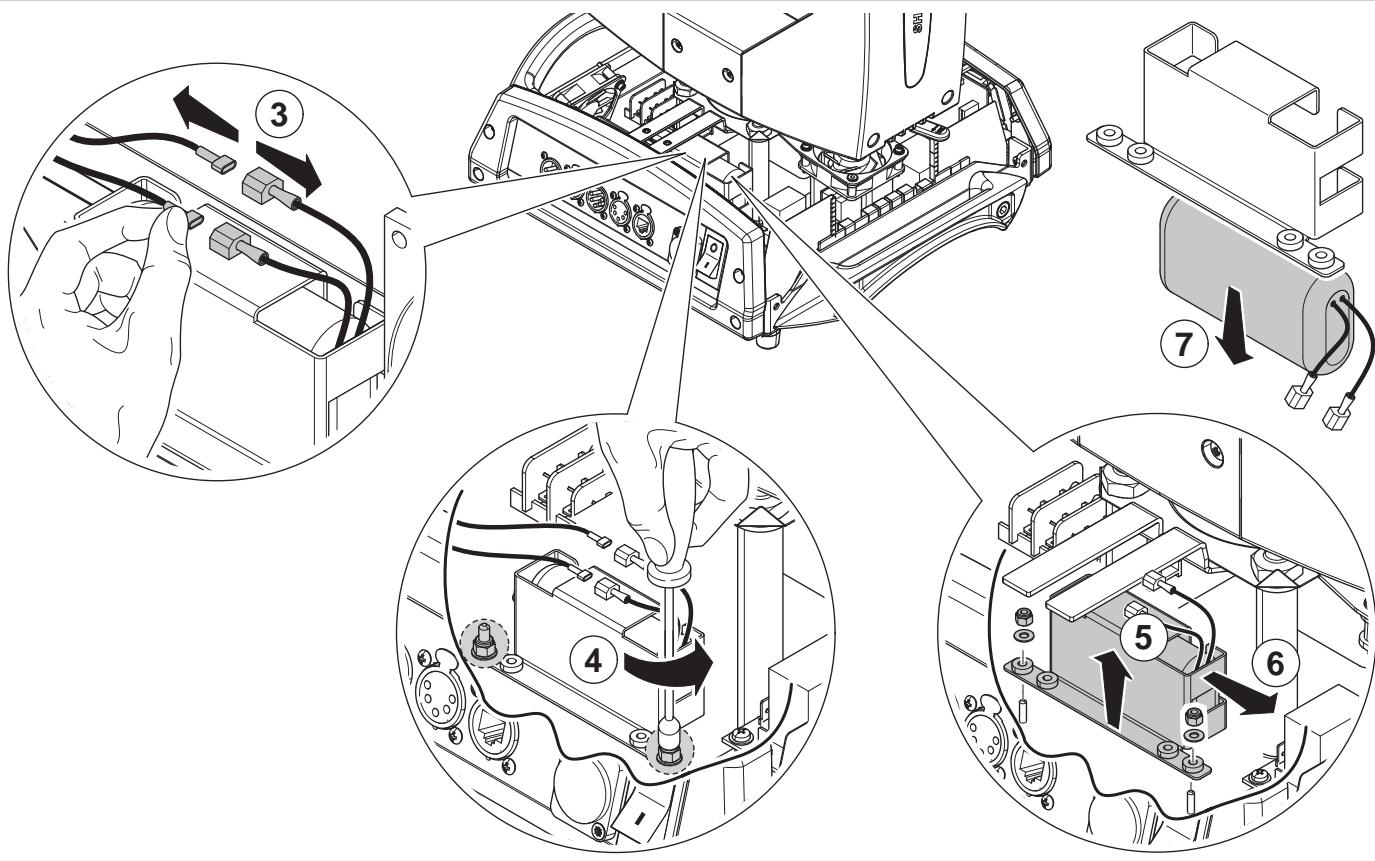
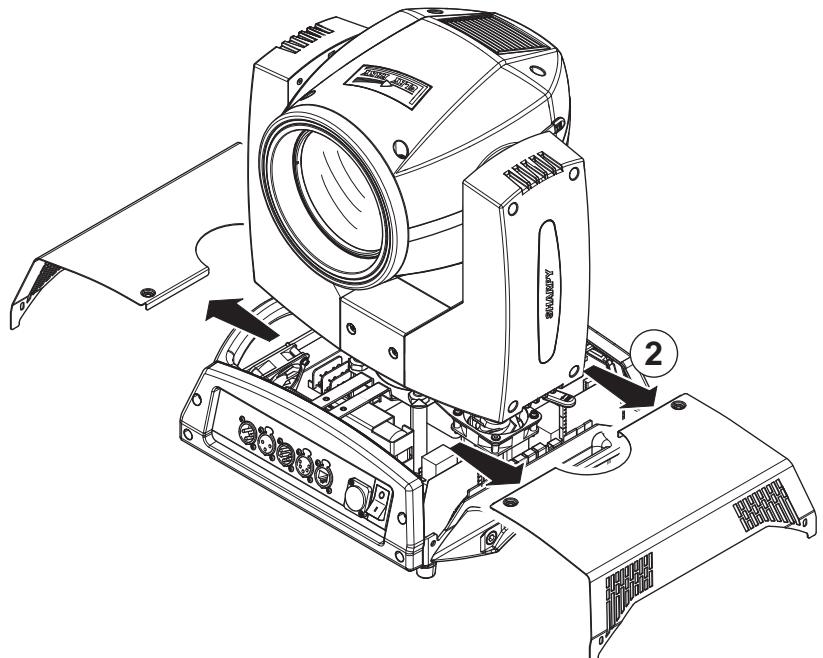
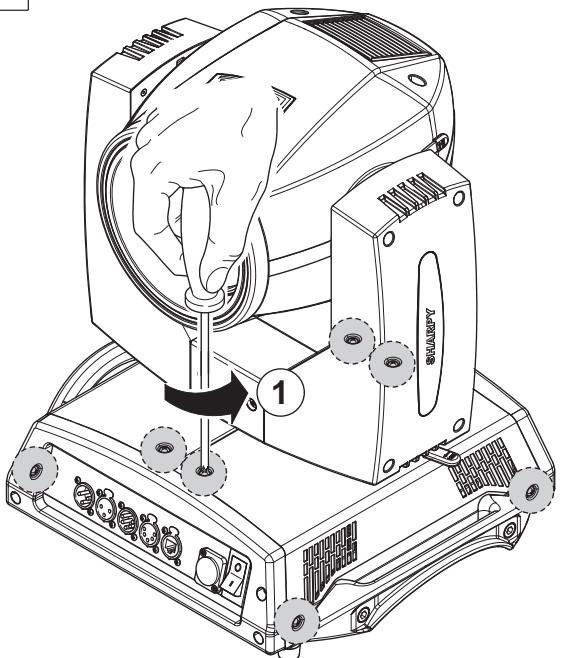
Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors and filters. It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:

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



Extraction of the effect modules: Preliminary operations - Fig. 18

**19****Extraction of the effect modules - Fig. 19****IMPORTANT:** Grasp the modules using the support structure and not the details which could get damaged.**Insertion of the effect modules:** Repeat the operations indicated in Fig. 17 and 18 in reverse order.



#### Battery removal - Fig. 20

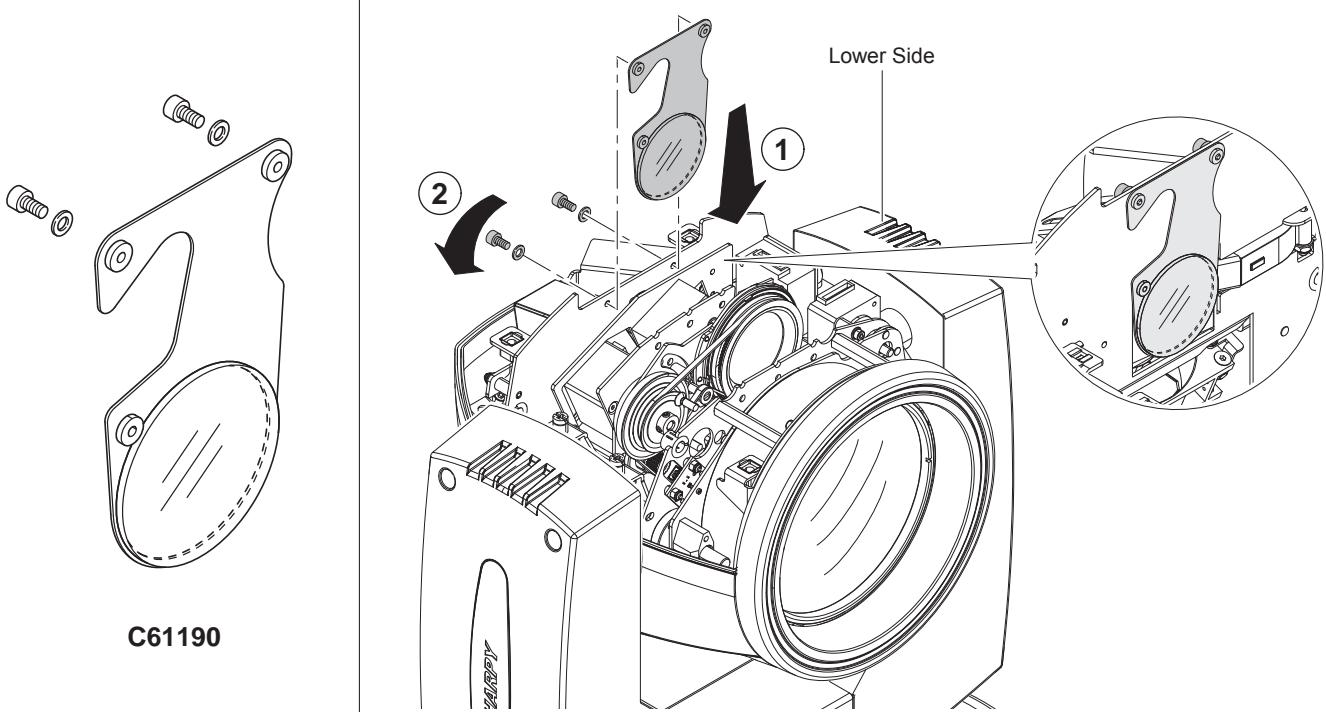


This product contains a rechargeable lead-acid or lithium iron tetrrophosphate battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

LiFePO<sub>4</sub>  
Pb

## OPTIONAL ACCESSORIES

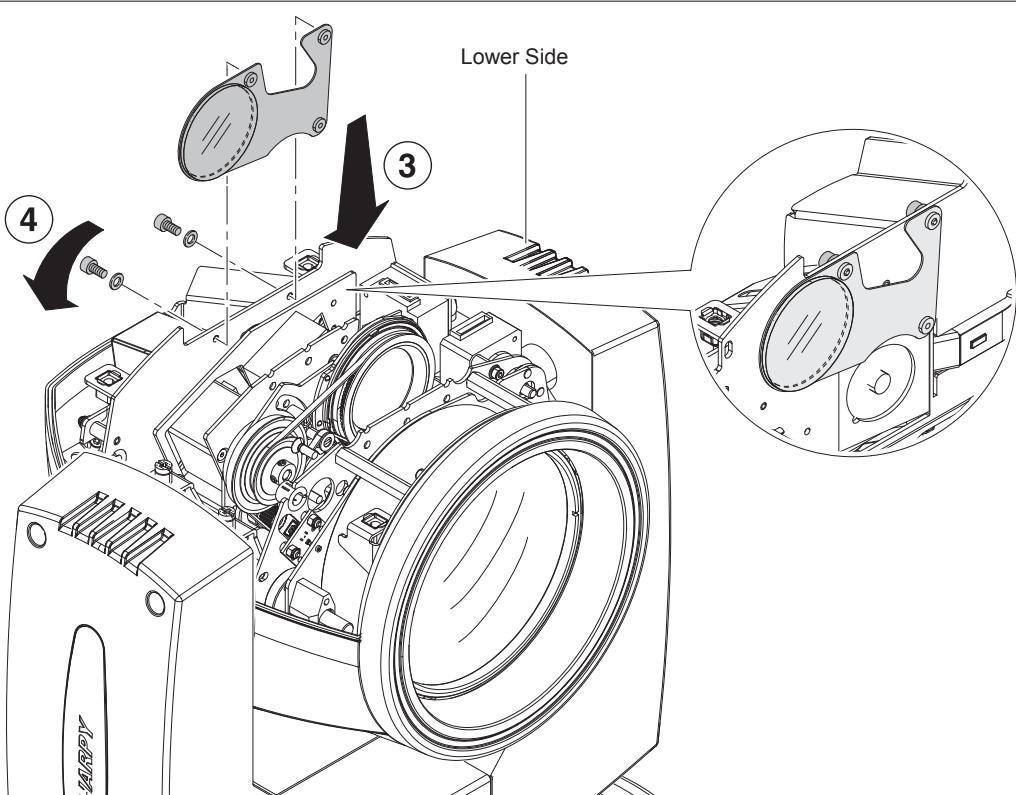
**21**



**Heat screen filter - Fig. 21**

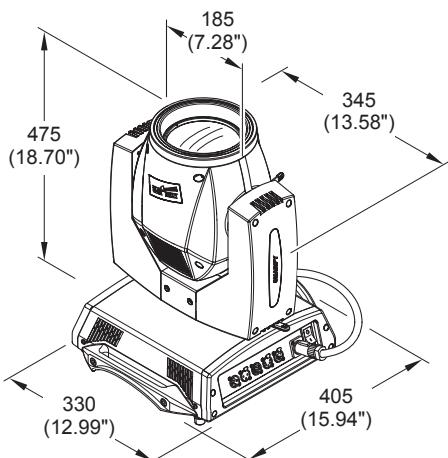
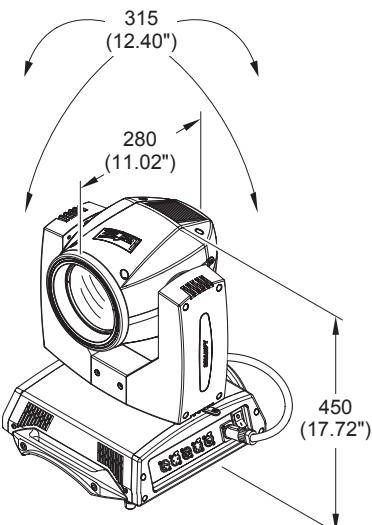
An optional filter kit is also available when the SHARPY projector is used in environments that do not meet the minimum allowed distance of **12 metres** from illuminated objects; when this kit is assembled, the projector can be used at a minimum distance of **8 metres** from illuminated objects.

**22**



**C61190 accessory can be placed inside the projector when not in use - Fig. 22**

## TECHNICAL INFORMATION



### Power supplies available

115/230V 50/60Hz

### Input power:

350VA a 230V 50Hz.

### Total output

Max 8000 lumens

### Lamp:

Lamp system with a short arc burner in a reflector  
Philips MSD Platinum 5R (L10103)

- Output Lamp power: 189W
- Colour temperature 8000 K
- Luminous flux 7950lm
- Average life 2000 h
- Any working position

Osram Sirius HRI 190+ (LAM002)

- Output Lamp power: 190W
- Colour temperature 8200 K
- Luminous flux 8100lm
- Average life 3000h
- Any working position

### Motors:

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

### Channels:

Max 20 control channels.

### Inputs:

DMX 512  
Ethernet

### 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 = 252°
- Maximum speeds:
  - PAN = 2.45 sec
  - TILT = 1.30 sec

### Resolution:

- PAN = 2.11°
- PAN FINE = 0.008°
- TILT = 0.98°
- TILT FINE = 0.004°

### Accuracy:

- Resolution ± 0,15° (Range 0,3°)

### 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).

### 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.

### Weights:

about 19 Kg (41lbs 13ozs).

## CAUSE AND SOLUTION OF PROBLEMS

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

## CHANNEL FUNCTION

**SHARPY**

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

CHANNEL	CHANNEL MODE	
	STANDARD	VECTOR
1	COLOUR WHEEL	COLOUR WHEEL
2	STOP / STROBE	STOP / STROBE
3	DIMMER	DIMMER
4	STATIC GOBO CHANGE	STATIC GOBO CHANGE
5	PRISM INSERTION	PRISM INSERTION
6	PRISM ROTATION	PRISM ROTATION
7	EFFECTS MOVEMENT	EFFECTS MOVEMENT
8	FROST	FROST
9	FOCUS	FOCUS
10	PAN	PAN
11	PAN FINE	PAN FINE
12	TIILT	TIILT
13	TIILT FINE	TIILT FINE
14	FUNCTION	FUNCTION
15	RESET	RESET
16	LAMP CONTROL (with Option "Lamp Dmx" ON)	LAMP CONTROL (with Option "Lamp Dmx" ON)
17		PAN - TIILT TIME
18		COLOUR TIME
19		BEAM TIME
20		GOBO TIME

**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.

• COLOUR WHEEL - channel 1



BIT	EFFECT
255	FAST ROTATION (160 rpm)
128	SLOW ROTATION (0.2 rpm)
124	BLUE + WHITE
120	BLUE
116	CTB 8000 + BLUE
111	CTB 8000
107	CTO 190 + CTB 8000
103	CTO 190
99	CTO 260 + CTO 190
94	CTO 260
90	CYAN + CTO 260
86	CYAN
82	MAGENTA + CYAN
77	MAGENTA
73	YELLOW + MAGENTA
69	YELLOW
64	PINK + YELLOW
60	PINK
56	LAVENDER + PINK
52	LAVENDER
47	LIGHT GREEN + LAVENDER
43	LIGHT GREEN
39	GREEN + LIGHT GREEN
35	GREEN
30	AQUAMARINE + GREEN
26	AQUAMARINE
22	ORANGE + AQUAMARINE
18	ORANGE
13	RED + ORANGE
9	RED
5	WHITE + RED
0	WHITE

• STATIC GOBO CHANGE - channel 4



BIT	EFFECT
255	GOBO 16 SHAKE FAST SPEED (600 bpm)
250	GOBO 16 SHAKE, SLOW SPEED (24 bpm)
249	GOBO 15 SHAKE FAST SPEED
244	GOBO 15 SHAKE, SLOW SPEED
243	GOBO 14 SHAKE FAST SPEED
237	GOBO 14 SHAKE, SLOW SPEED
236	GOBO 13 SHAKE FAST SPEED
231	GOBO 13 SHAKE, SLOW SPEED
230	GOBO 12 SHAKE FAST SPEED
224	GOBO 12 SHAKE, SLOW SPEED
223	GOBO 11 SHAKE FAST SPEED
218	GOBO 11 SHAKE, SLOW SPEED
217	GOBO 10 SHAKE FAST SPEED
212	GOBO 10 SHAKE, SLOW SPEED
211	GOBO 9 SHAKE FAST SPEED
205	GOBO 9 SHAKE, SLOW SPEED
204	GOBO 8 SHAKE FAST SPEED
199	GOBO 8 SHAKE, SLOW SPEED
198	GOBO 7 SHAKE FAST SPEED
192	GOBO 7 SHAKE, SLOW SPEED
191	GOBO 6 SHAKE FAST SPEED
186	GOBO 6 SHAKE, SLOW SPEED
185	GOBO 5 SHAKE FAST SPEED
180	GOBO 5 SHAKE, SLOW SPEED
179	GOBO 4 SHAKE FAST SPEED
173	GOBO 4 SHAKE, SLOW SPEED
172	GOBO 3 SHAKE FAST SPEED
167	GOBO 3 SHAKE, SLOW SPEED
166	GOBO 2 SHAKE FAST SPEED
160	GOBO 2 SHAKE, SLOW SPEED
159	FAST ROTATION (60 rpm)
118	SLOW ROTATION (5 rpm)
114-117	STOP
113	SLOW ROTATION (5 rpm)
72	FAST ROTATION (60 rpm)
68-71	GOBO 17
64-67	GOBO 16
60-63	GOBO 15
56-59	GOBO 14
52-55	GOBO 13
48-51	GOBO 12
44-47	GOBO 11
40-43	GOBO 10
36-39	GOBO 9
32-35	GOBO 8
28-31	GOBO 7
24-27	GOBO 6
20-23	GOBO 5
16-19	GOBO 4
12-15	GOBO 3
8-11	GOBO 2
4-7	GOBO 1
0-3	WHITE

• STOP / STROBE - channel 2



BIT	EFFECT
252 - 255	OPEN
239 - 251	RANDOM FAST STROBE
226 - 238	RANDOM MEDIUM STROBE
213 - 225	RANDOM SLOW STROBE
208 - 212	OPEN
207	FAST PULSATION (360 bpm)
108	SLOW PULSATION (30 bpm)
104 - 107	OPEN
103	FAST STROBE (12 flash/sec)
4	SLOW STROBE (1 flash/sec)
0 - 3	CLOSED

• PRISM INSERTION - channel 5

BIT	EFFECT
255	PRISM INSERTED 0%-100%: 0.36 sec
128	—
127	PRISM EXCLUDED
0	—

• DIMMER - channel 3



BIT	EFFECT
255	—
0	0%-100%: 0.02 sec

• PRISM ROTATION - channel 6



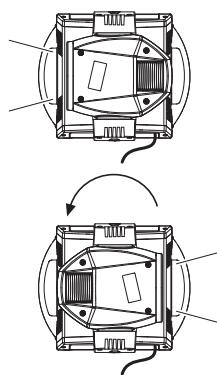
BIT	EFFECT
255	FAST ROTATION (43 rpm)
193	SLOW ROTATION (1.1 rpm)
191 - 192	STOP
190	SLOW ROTATION (1.1 rpm)
128	FAST ROTATION (43 rpm)
127	POSITION 540°
105	POSITION 450°
84	POSITION 360°
63	POSITION 270°
42	POSITION 180°
21	POSITION 90°
0	POSITION 0°

• EFFECTS MOVEMENT - channel 7

BIT	EFFECT
255	
0	0%-100%: 0.33 sec

• PAN - channel 10

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



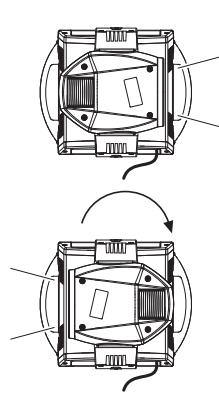
BIT
255
0

• FROST - channel 8



BIT	EFFECT
255	FROST INSERTED
0	0%-100%: 0.12 sec
0	FROST EXCLUDED

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



BIT
255
0

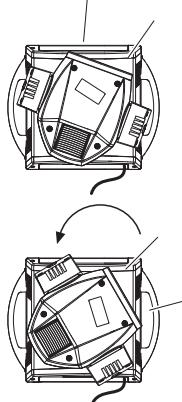
• FOCUS - channel 9



BIT	EFFECT
255	NEAR
0	0%-100%: 1.11 sec
0	DISTANT

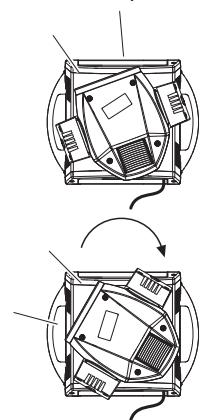
• PAN FINE - channel 11

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



BIT
255
0

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

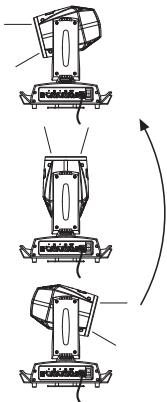


BIT
255
0

• TILT - channel 12

Operation with option Invert Tilt  $\diamond$  Off

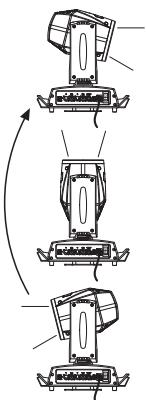
(Pan conventionally represented at 0% and option Invert Pan  $\diamond$  Off)



BIT
255
128
0

Operation with option Invert Tilt  $\diamond$  On

(Pan conventionally represented at 0% and option Invert Pan  $\diamond$  Off)

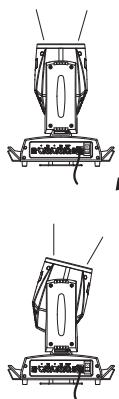


BIT
255
128
0

• TILT FINE - channel 13

Operation with option Invert Tilt  $\diamond$  Off

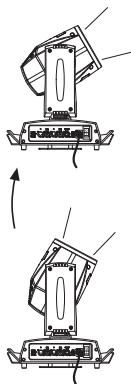
(Pan conventionally represented at 0% and option Invert Pan  $\diamond$  Off)



BIT
255
0

Operation with option Invert Tilt  $\diamond$  On

(Pan conventionally represented at 0% and option Invert Pan  $\diamond$  Off)



BIT
-----

• FUNCTION - channel: 14

BIT	EFFECT
255	UNUSED RANGE
63	
51-62	LINEAR (Default)
38-50	CONVENTIONAL
25-37	NORMAL
12-24	FAST (Default)
0-11	UNUSED RANGE

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

• RESET - channel: 15

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

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

• LAMP CONTROL (only with option LAMP DMX On) - channel: 16

**IMPORTANT:** SHARPY is not provided with hot restrike ignition



BIT	EFFECT
255	LAMP ON
101	Lamp switch-on passing through the unused range and staying 5 sec in Lamp ON levels.
100	LAMP ON
OFF	LAMP OFF
26	Lamp switch off passing through the unused range and staying 5 s in Lamp OFF levels.
25	LAMP OFF
0	UNUSED RANGE

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

## TIMING CHANNELS

	Timing Channel	Channel function
17	Pan - Tilt time	Pan - Tilt - (Pan fine - Tilt fine)
18	Colour time	Colour wheel
19	Beam time	Dimmer - Frost - Prism
20	Gobo time	Static Gobo

## TIME TABLE

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