**CLAY PAKY**

AN OSRAM BUSINESS

# *SHARPY*

**C61375**

## INSTRUCTION MANUAL

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*Congratulations on choosing a Clay Paky product!*
*We thank you for your custom.*
*Please note that this product, as all the others in the rich Clay Paky range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.*

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

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

CLAY PAKY S.p.A. reserves the right to modify the characteristics stated in this instruction manual at any time and without prior notice.
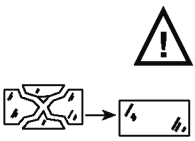
• **Installation**
Make sure all parts for fixing the projector are in a good state of repair.
Make sure the point of anchorage is stable before positioning the projector.
The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible.
If the safety chain gets used, it needs to be replaced with a genuine spare.

189W $\longleftarrow$ ........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.**

• **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 (Ta) exceeds 40° C (104° F).

$t_a$ 40°C

IP20

• **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.

$t_c$ 100°C

• **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 nill.
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.

**Risk Group 1**
According to
EN 62471

• **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.

LiFePO4
Pb

**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)

CE

**• 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.

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**• 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.

$t_a$ 40°C

**• Massima temperatura ambiente**

Non utilizzare il proiettiore se la temperatura ambiente (Ta) supera i 40°C.

IP20

**• 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 stillicidio, 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.

$t_c$ 100°C

**• 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 architetturale e simili.
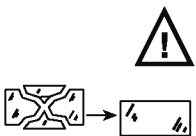
**Non adatto all'illuminazione domestica**

**Non per uso residenziale**

LiFePO4
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.

**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.
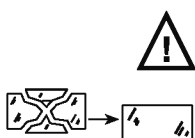
CE

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.

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**• DISTANCE MINIMUM DES OBJETS ECLAIRES**
**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**

$t_a$ 40°C

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

**• Degré de protection IP20**

IP20

L'appareil est protégé contre la pénétration de corps solides de dimension supérieure à 12 mm (premier chiffre 2), tandis qu'il craint 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**

$t_c$ 100°C

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**

Classe de dangerosité 1
Selon la norme
EN 62471

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**

**• 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 électro-niques (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)
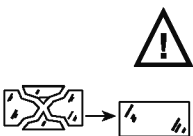
**• Installation**

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.

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**• 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 Kurzschlüssen zu schützen.

**• 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.

$t_c$ 100°C

**• 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**

LiFePO4
Pb

**• 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.

C E

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)
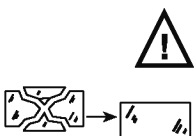
**• Instalación**
Asegúrese de que todos los elementos de fijación del proyector estén en buenas condiciones.
Controle la estabilidad del punto de anclaje antes de instalar el proyector.
La cuerda de seguridad, correctamente enganchada al aparato y fijada a la estructura de soporte, debe colocarse de 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.

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**• 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.

$t_a$ 40°C

**• Máxima temperatura ambiente**
No utilice el proyector si la temperatura ambiente (ta) supera los 40°C.

IP20

**• 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).

$\perp$

**• 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.

$t_c$ 100°C

**• 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.
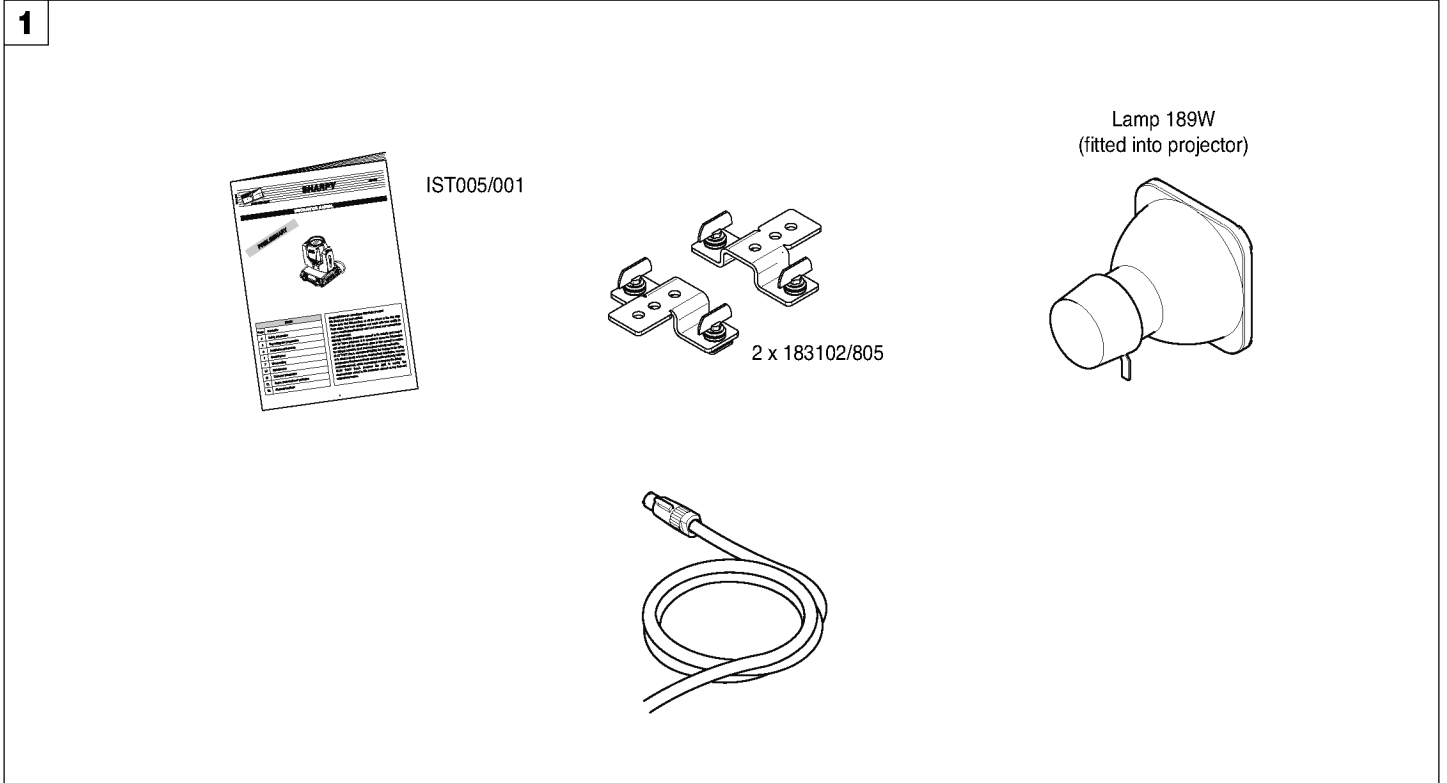
LiFePO4
Pb

**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
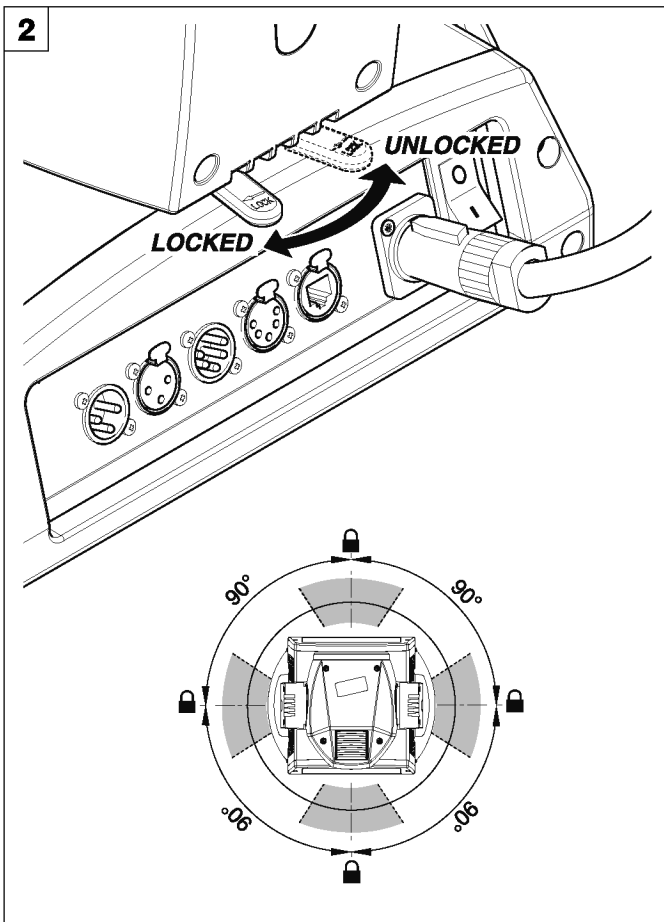
Los productos a los que se refiere este manual son conformes a las Directivas Europeas de las cuales son objeto:
• 2006/95/CE   - Seguridad de los equipos alimenticios de Baja Tensión (LVD)
- 2004/108/CE - Compatibilidad Electromagnética (EMC)
• 2011/65/UE   - Restricción del uso de determinadas sustancias peligrosas (RoHS)

**1**

Lamp 189W
(fitted into projector)

IST005/001

2 x 183102/805

Packing contents - Fig. 1

**2**

UNLOCKED

LOCKED
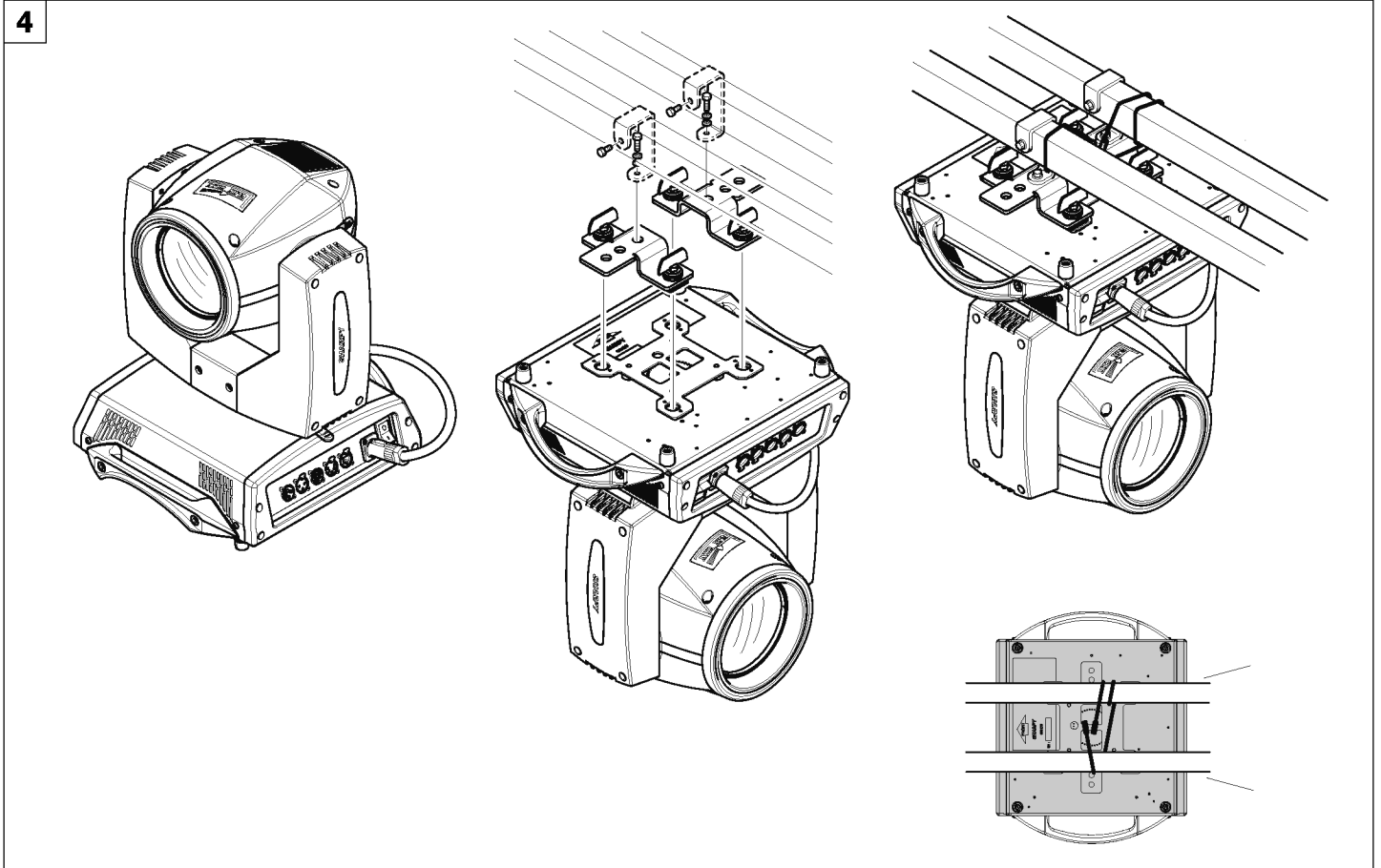
90° 90°

90° 90°

**3**

45° 45°

45° 45°

45° 45°

LOCKED

UNLOCKED

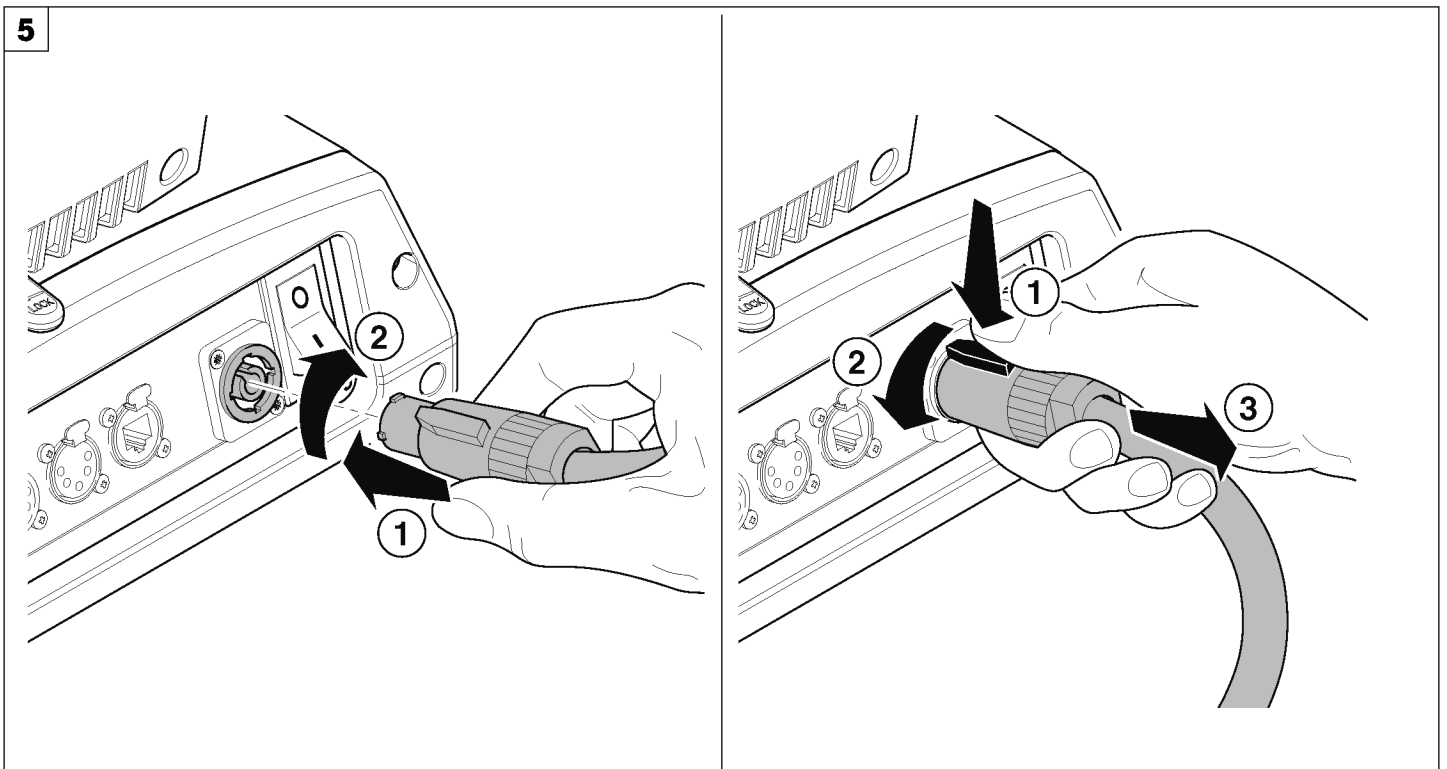PAN Mechanism Lock and Release (every 90°) - Fig. 2
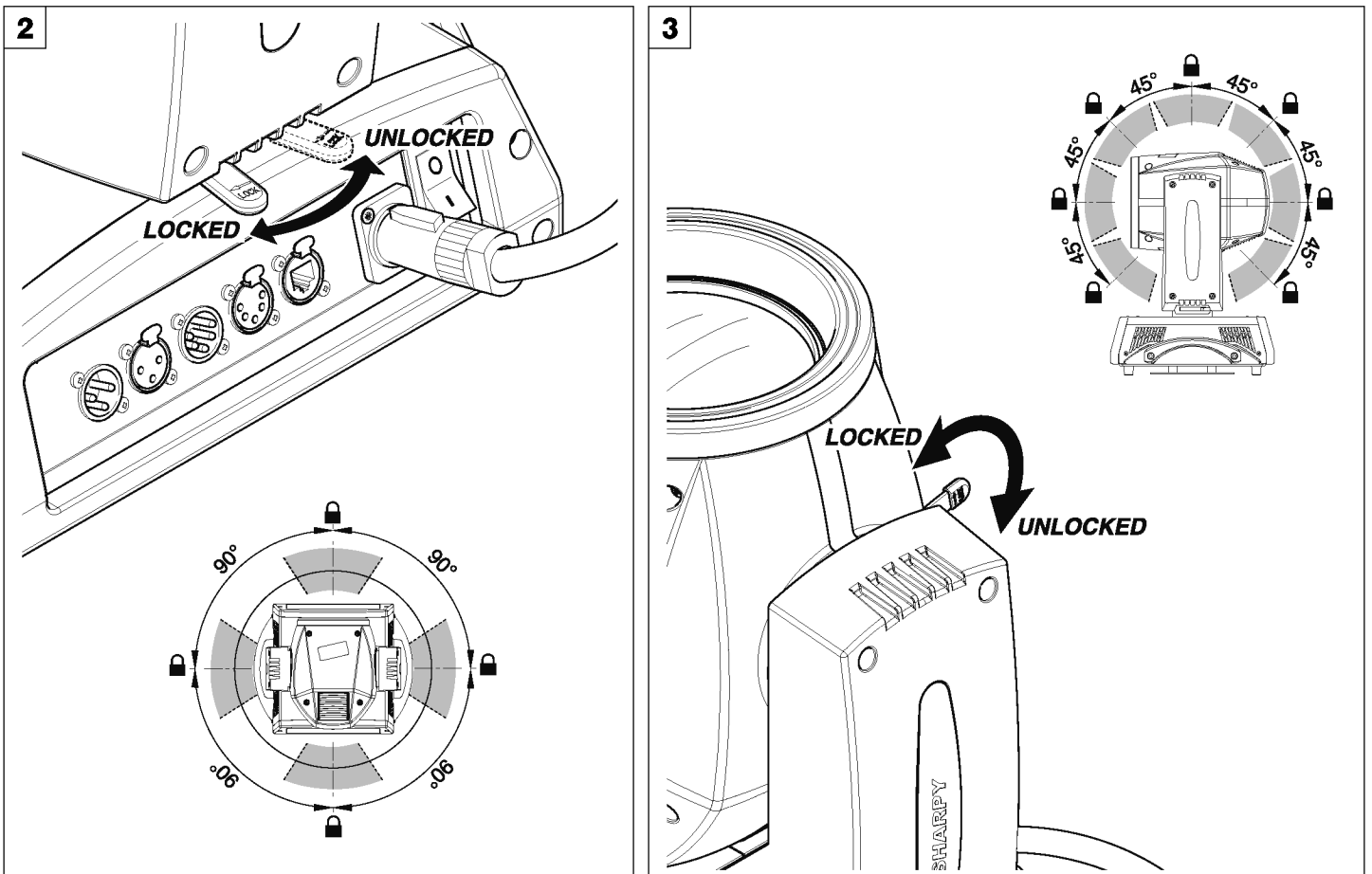
TILT Mechanism Lock and Release (every 45°) - Fig. 3

**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

**6**
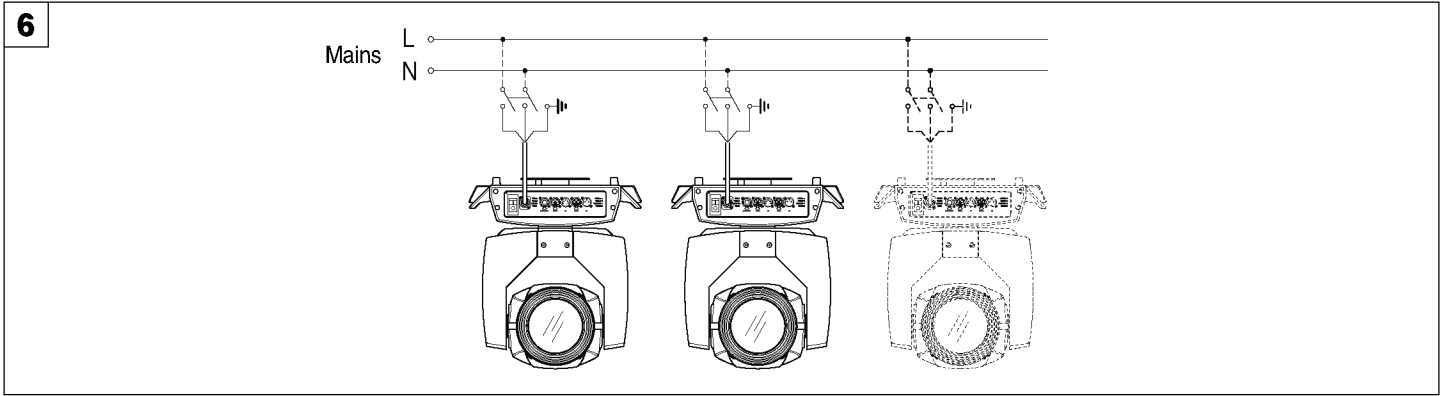
Mains

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

**7**

DMX 512

DMX 512
5 PIN

SCREEN
— SIGNAL
+ SIGNAL

DMX 512
3 PIN

SIGNAL —
SIGNAL +
SCREEN

**Connecting to the control signal line (DMX)** - Fig. 7
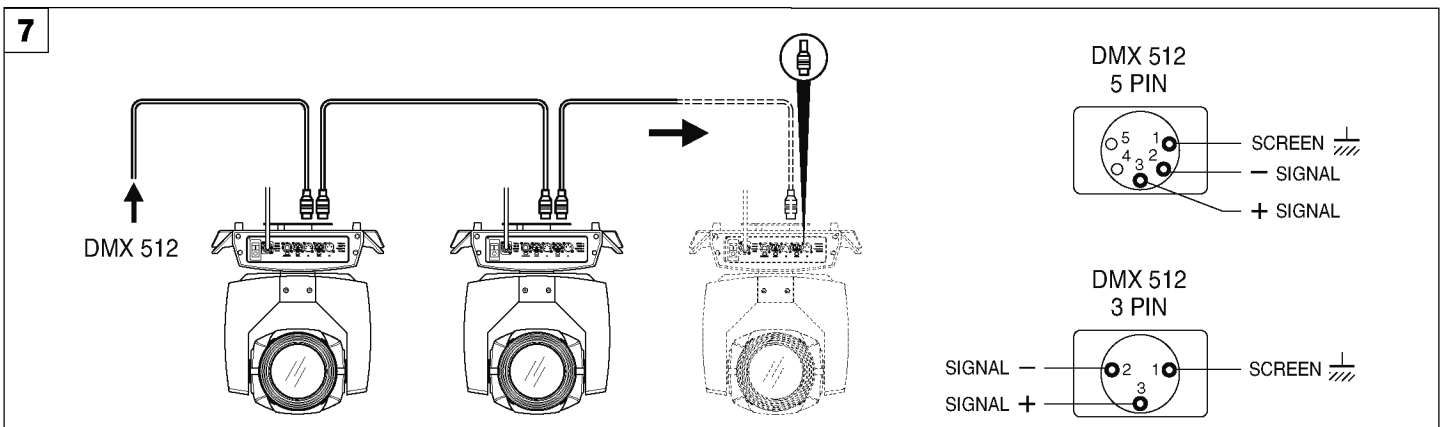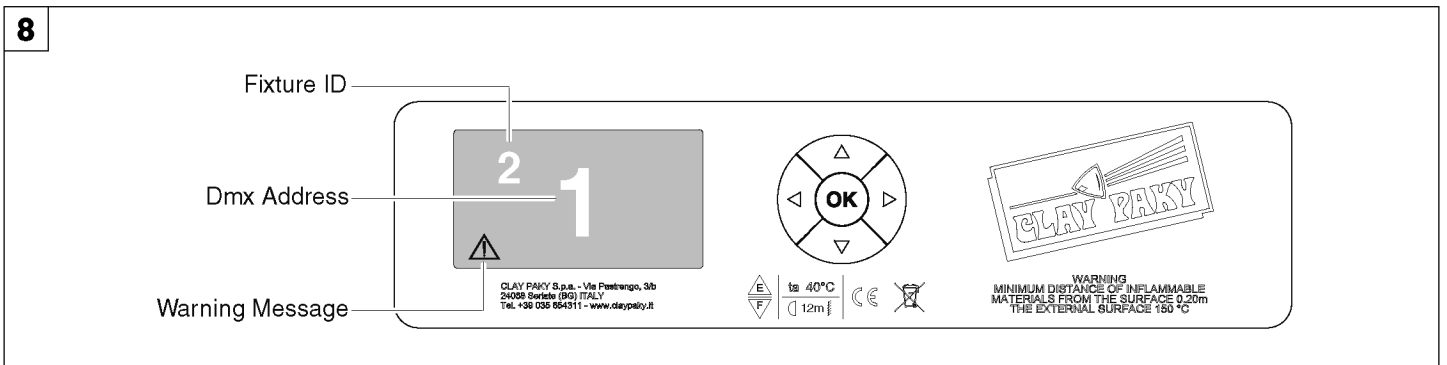Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female 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.

**8**

Fixture ID

Dmx Address

Warning Message

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

WARNING
MINIMUM DISTANCE OF INFLAMMABLE
MATERIALS FROM THE SURFACE 0.20m
THE EXTERNAL SURFACE 150 °C

**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<br>SHARPY | Firmware<br>Version X.X.X<br>Date - Hour | xxx (Fixture ID)<br>Dmx Address xxx | System errors<br>E: .........................<br>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 ⊙⊗ key will be cancelled.
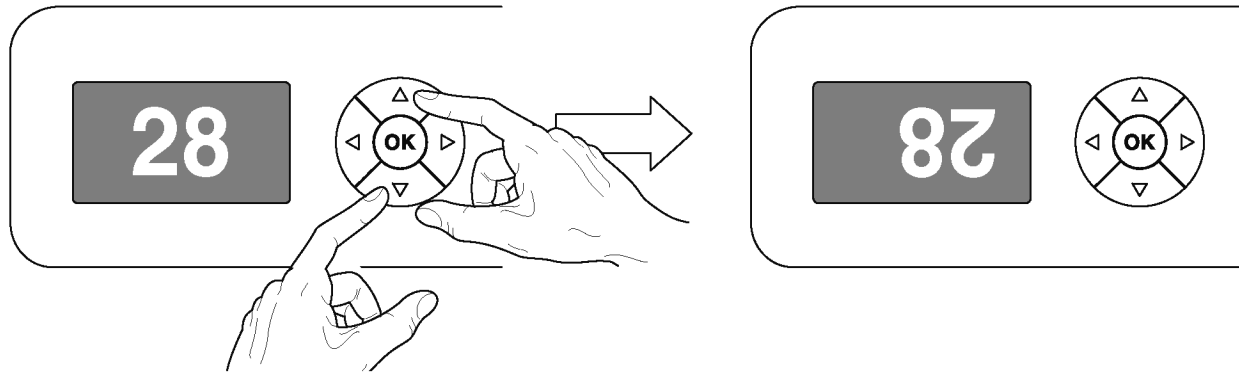
**Reversal of the display** - Fig. 9

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.
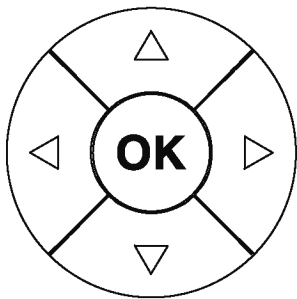
Setting the address: see pag. 8.

**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

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

**USING THE MENU:**

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

**1**

Set Up
- Dmx Address
- Channel Mode
- Fixture ID
- Ethernet Interface

Option

Information

Manual Control

Test

Advanced

**2**

Option
- Lamp Dmx
- Safety Black Out
- Pan / Tilt
  - Invert Pan
  - Invert Tilt
  - Swap Pan-Tilt
  - Encoder Pan-Tilt
  - P/T Homing Mode
  - Pan Home Def Pos
  - Tilt Home Def Pos
- Color
  - Fixed Wheel Shortcut
  - Linear Movement
- Shutter
  - Shutter On Error
- Dimmer Filter Type
- Display
- Setting
  - Default Preset
  - User Preset 1
  - User Preset 2
  - User Preset 3

**3**

Information
- System Errors
- Fixture Hours
- Lamp Hours
- Lamp Strikes
- System Version
- Board Diagnostic
- Dmx Monitor
- Fans Monitor
- Sensor status
- Network parameters

**4**

Manual Control
- Lamp
- Reset
- Channel

**5**

Test
- Pan / Tilt
- Colour
- Beam
- Gobo
- All

**6**

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

**NOTE: On grey the default options**

```
┌─────────┐    ┌──────────┐    ┌─────────────┐
│ Set Up  │────│   Dmx    │────│ Address xxx │
└─────────┘    │ Address  │    └─────────────┘
     │         └──────────┘
     │
     │         ┌──────────┐    ┌─────────────┐
     │         │ Channel  │────│  Standard   │
     │         │  Mode    │    └─────────────┘
     │         └──────────┘
     │                         ┌─────────────┐
     │                         │   Vector    │
     │                         └─────────────┘
     │
     │         ┌──────────┐    ┌─────────────┐
     │         │Fixture ID│────│  Value xxx  │
     │         └──────────┘    └─────────────┘
     │
     │         ┌──────────┐
     │         │ Ethernet │
     │         │Interface │
     │         └──────────┘
     │              │         ┌─────────────┐
     │              │─────────│  Control    │
     │              │         │  Protocol   │
     │              │         └─────────────┘
     │              │
     │              │         ┌─────────────┐
     │              │─────────│ Repeat on   │
     │              │         │    DMX      │
     │              │         └─────────────┘
     │              │
     │              │         ┌─────────────┐
     │              │─────────│  Universe   │
     │                        └─────────────┘
```
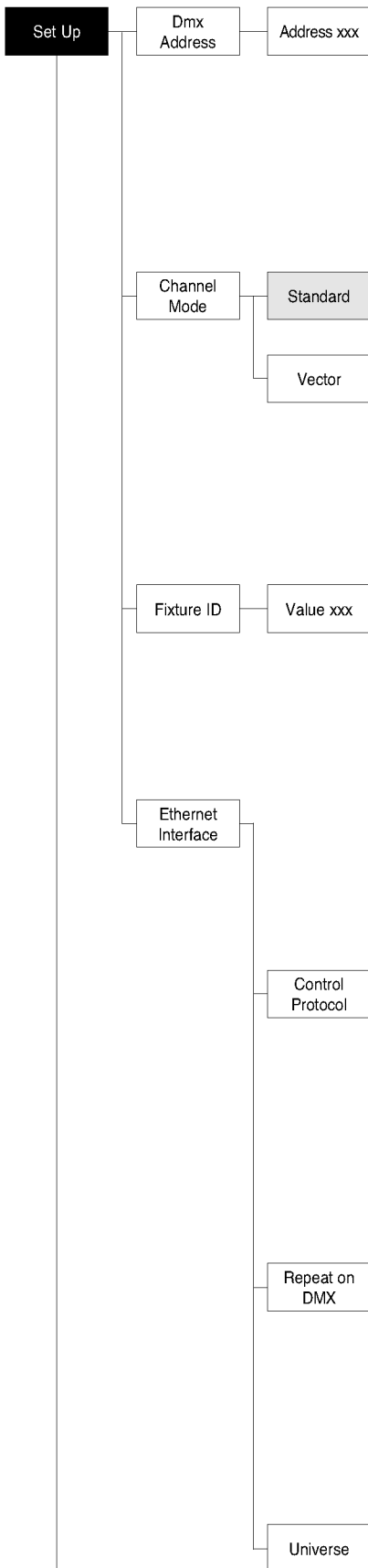
## DMX ADDRESS

**NOTE: without the DMX signal the Address (XXX) flashing**
Allows you to select the DMX ADDRESS.
1) Press ⊗ - the current DMX Adress appear on the display.
2) Use the UP ⊕ and DOWN ⊖, RIGHT ⊳ keys to plan the DMX Address.
3) Press ⊗ to confirm the selection or LEFT ⊲ to keep current settings.

## CHANNEL MODE

Allows you to select a channel arrangement from the two available.
1) Press ⊗ - 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 ⊗ to confirm the selection or LEFT ⊲ to keep current settings.

## FIXTURE ID

Allows you to select the FIXTURE ID.
1) Press ⊗ - the current Fixture ID appear on the display.
2) Use the UP ⊕, DOWN ⊖, RIGHT ⊳ keys to plan the Fixture ID.
3) Press ⊗ to confirm the selection or LEFT ⊲ to keep current settings.

## ETHERNET INTERFACE

It lets you set the Ethernet settings to be attributed to the projector.
1) Premere ⊗.
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 ⊗ 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**
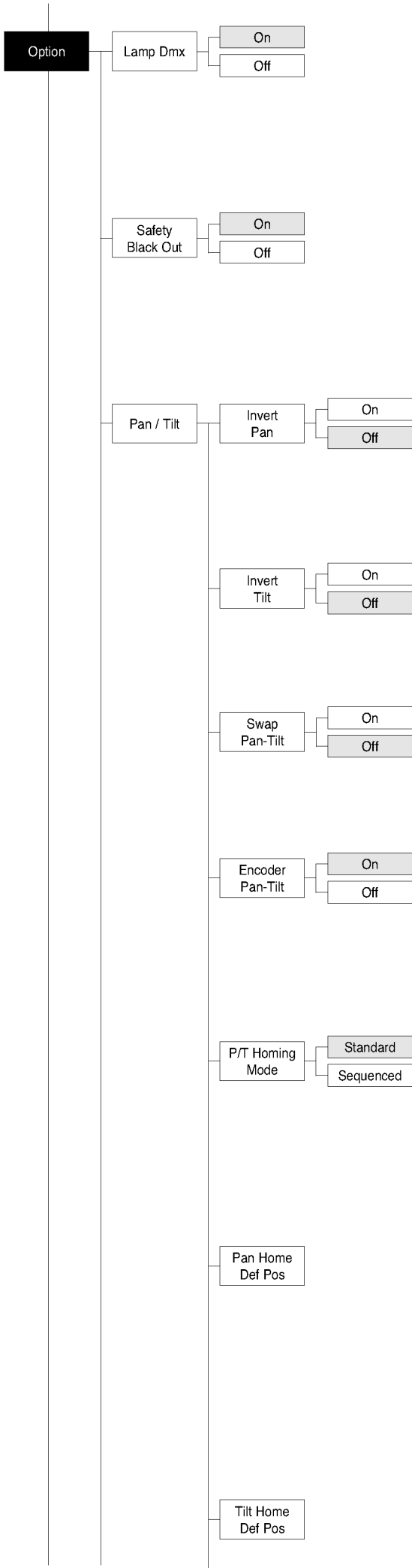3) Press ⊗ to confirm the selection or LEFT ⊲ to keep the current setting.

**Repeat on DMX**
It lets you enable the transmission of the Ethernet protocol by DMX signal to all the connected projectors.
1) Press ⊗ 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 ⊗ 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 ⊗ – the current Universe address appears on the display.
2) Use the UP ⊕, DOWN ⊖, RIGHT ⊳ keys to set the Universe address.
3) Press ⊗ to confirm the selection or LEFT ⊲ to keep the current setting.

## Diagram (left column)

```
Option ── Lamp Dmx ──┬── On
                     └── Off

         Safety ─────┬── On
         Black Out   └── Off

         Pan / Tilt ─┬── Invert ──┬── On
                     │  Pan       └── Off
                     │
                     ├── Invert ──┬── On
                     │  Tilt      └── Off
                     │
                     ├── Swap ────┬── On
                     │  Pan-Tilt  └── Off
                     │
                     ├── Encoder ─┬── On
                     │  Pan-Tilt  └── Off
                     │
                     ├── P/T Homing ─┬── Standard
                     │  Mode         └── Sequenced
                     │
                     ├── Pan Home
                     │  Def Pos
                     │
                     └── Tilt Home
                        Def Pos
```

## 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.
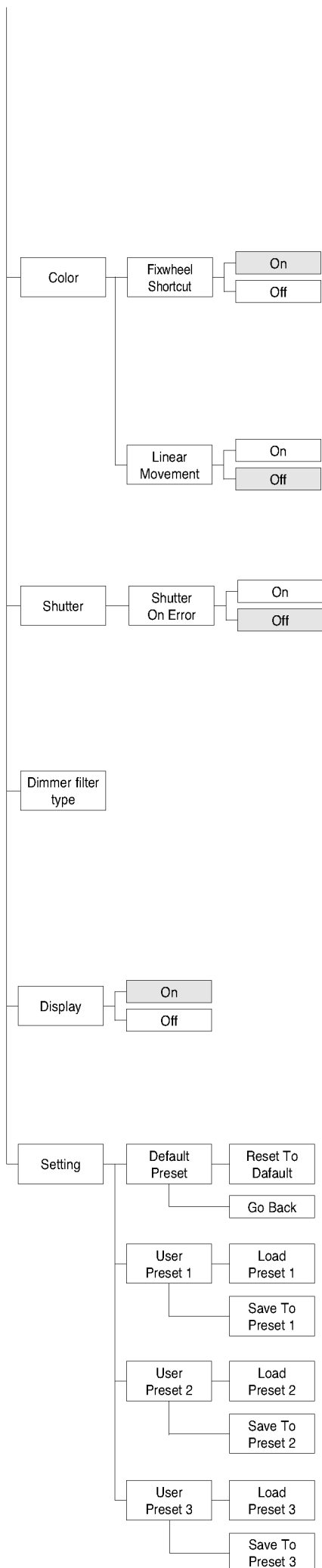3) Press (OK) to confirm the selection or LEFT ◁ to keep the current setting.

**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.

## Flowchart (left column)

- **Color**
  - **Fixwheel Shortcut**
    - On *(shaded)*
    - Off
  - **Linear Movement**
    - On
    - Off *(shaded)*
- **Shutter**
  - **Shutter On Error**
    - On
    - Off *(shaded)*
- **Dimmer filter type**
- **Display**
  - On *(shaded)*
  - Off
- **Setting**
  - **Default Preset**
    - Reset To Dafault
    - Go Back
  - **User Preset 1**
    - Load Preset 1
    - Save To Preset 1
  - **User Preset 2**
    - Load Preset 2
    - Save To Preset 2
  - **User Preset 3**
    - Load Preset 3
    - Save To Preset 3

## Right column

1) Press ⊙K , 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 ⊙K 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 ⊙K – 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 ⊙K to confirm the selection, or LEFT ⊙ to keep current settings.

### Linear Movement
It enables the linear movement of the colour wheel.
1) Press ⊙K – 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 ⊙K 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 ⊙K - 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 ⊙K 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 ⊙K - 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.
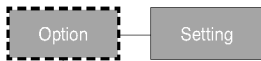3) Press ⊙K to confirm the selection or LEFT ⊙ to keep current settings.

## SETTING
Used to save 3 different settings of the items in the options menu and relative submenus.
1) Press ⊙K - "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 ⊙K - "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).**

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 selction or NO to keep current setting.

| OPTION | DEFAULT |
|---|---|
| Lamp DMX | On |
| Safety Black Out | Off |
| Invert Pan | Off |
| Invert Tilt | Off |
| Swap Pan-Tilt | Off |
| Encoder Pan-Tilt | On |
| P/T Homing Mode | Standard |
| Pan Home Def Pos | 270 degrees |
| Tilt Home Def Pos | 50% |
| Fixed Wheel Shortcut | On |
| Linear Movement | Off |
| Shutter on error | Off |
| Dimmer Filter Type | DMX follower |
| Display | On |

## INFORMATION MENU

### SYSTEM ERRORS

Shows a list of warnings and messages relevant to errors occurred since the fixtures switching-on.
1) 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.
2) Select YES to reset the list or NO to go back.

### FIXTURE HOURS

Used for displaying projector operating hours (total and partial).
1) Press (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.
2) Press (OK) to reset partial projector working hours a confirmation message (Are you sure?) appears on the display.
3) Select YES to reset partial projectors counter or NO to keep the current setting and return to the top menu level.
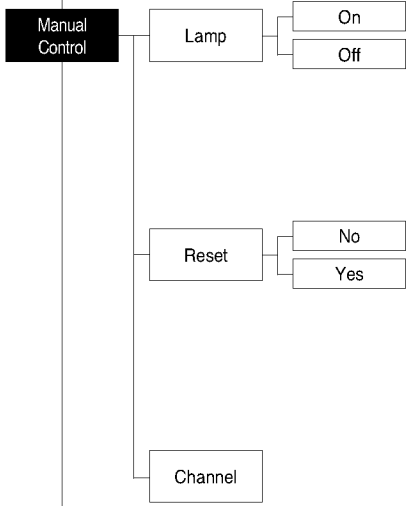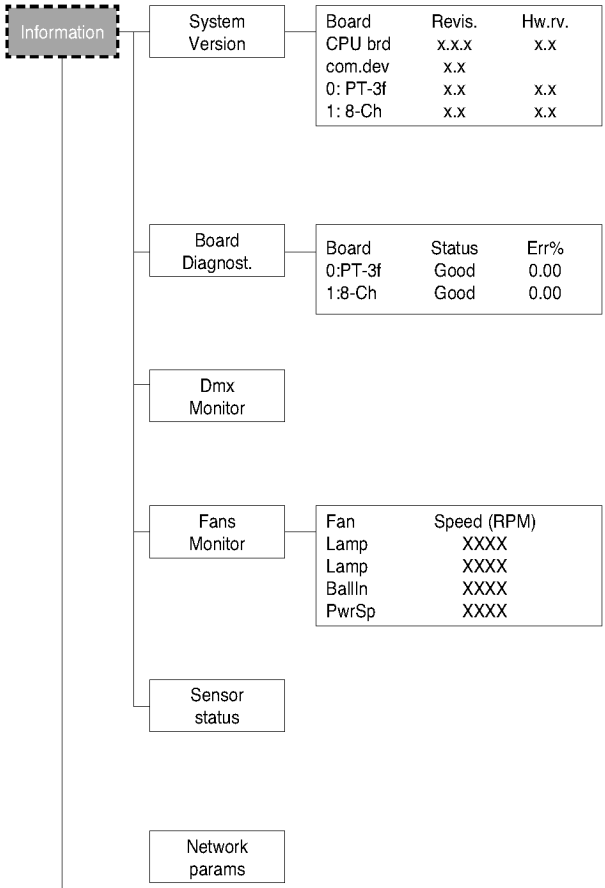
### LAMP HOURS

Used for displaying the lamp working hours (total and partial).
1) Press (OK) - Hours total and partial appears on the display.
**Total counter**
Counts the number of projector working hours with the lamp on (from manufacture to date).
**Partial counter**
Counts the number of lamp working hours since the last reset to date.
2) Press (OK) to reset partial lamp working hours, a confirmation message (Are you sure ?) appears on the display.
3) Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

### LAMP STRIKES

Used for displaying the number of times the lamp was turned on (total and partial).
1) Press (OK) - the number of times the lamp was turned on (total and partial) appears on the display.
**Total counter**
Counts the number of times the lamp was turned on (from manufacture to date).
**Partial counter**
Counts the number of times the lamp was turned on since the last reset to date.
2) Press (OK) to reset partial lamp strikes hours, a confirmation message (Are you sure ?) appears on the display.
3) Select YES to reset partial counter or NO to keep the current setting and return to the top menu level

Option — Setting

Information — System Errors

Fixture Hours — Total XXX / Partial XXX / Reset...

Lamp Hours — Total XXX / Partial XXX / Reset...

Lamp Strikes — Total XXX / Partial XXX / Reset...

## Menu Tree (left diagram)

**Information**
- System Version
  | Board | Revis. | Hw.rv. |
  |---|---|---|
  | CPU brd | x.x.x | x.x |
  | com.dev | x.x | |
  | 0: PT-3f | x.x | x.x |
  | 1: 8-Ch | x.x | x.x |

- Board Diagnost.
  | Board | Status | Err% |
  |---|---|---|
  | 0:PT-3f | Good | 0.00 |
  | 1:8-Ch | Good | 0.00 |

- Dmx Monitor

- Fans Monitor
  | Fan | Speed (RPM) |
  |---|---|
  | Lamp | XXXX |
  | Lamp | XXXX |
  | BallIn | XXXX |
  | PwrSp | XXXX |

- Sensor status

- Network params

**Manual Control**
- Lamp
  - On
  - Off
- Reset
  - No
  - Yes
- Channel

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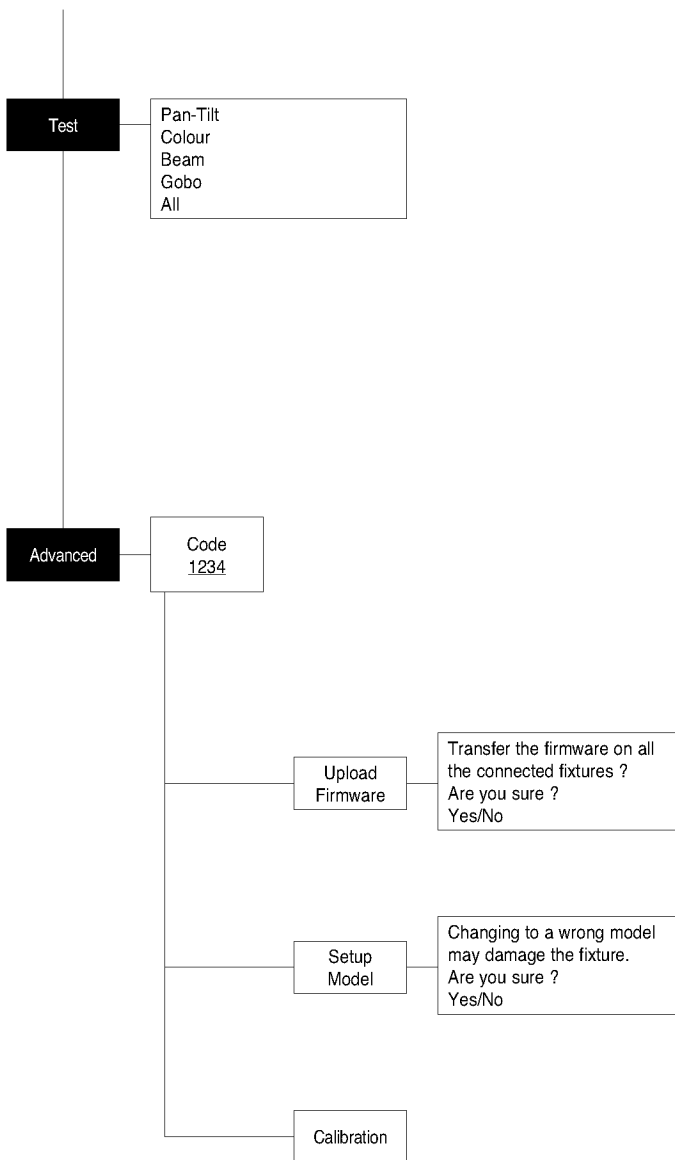
Used for resetting the projector.
1)  Press (OK) to reset the projectors, a confirmation message (Are you sure ?) appears on the display.
2)  Select YES to starting reset the fixture or NO to keep the current setting and return to the top menu level.

### 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.

```
Test ──┐
       │   ┌──────────────┐
       ├───│ Pan-Tilt     │
       │   │ Colour       │
       │   │ Beam         │
       │   │ Gobo         │
       │   │ All          │
       │   └──────────────┘
       │
       │
Advanced ──┐   ┌──────┐
           ├───│ Code │
               │ 1234 │
               └──────┘
```

┌──────────┐     ┌──────────────────────────┐
│ Upload   │─────│ Transfer the firmware on all │
│ Firmware │     │ the connected fixtures ?   │
└──────────┘     │ Are you sure ?             │
                 │ Yes/No                     │
                 └──────────────────────────┘

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

┌──────────────┐
│ Calibration  │
└──────────────┘

## 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 (Colour wheel)
Beam effects (Stopper-Strobe / Dimmer / Prism / Frost)
Gobo effects (Static gobo)
All effects

## ADVANCED MENU

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

### UP LOAD FIRMWARE

Allows you to transfer the firmware from 1 fixture to all the connected fixtures.
1) Press (OK) , a confirmation message appears on the display.
2) Select YES to start the firmware loading or NO to keep the current setting and return to the top menu level

### SETUP MODEL

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

### CALIBRATION

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

### FACTORY DEFAULT

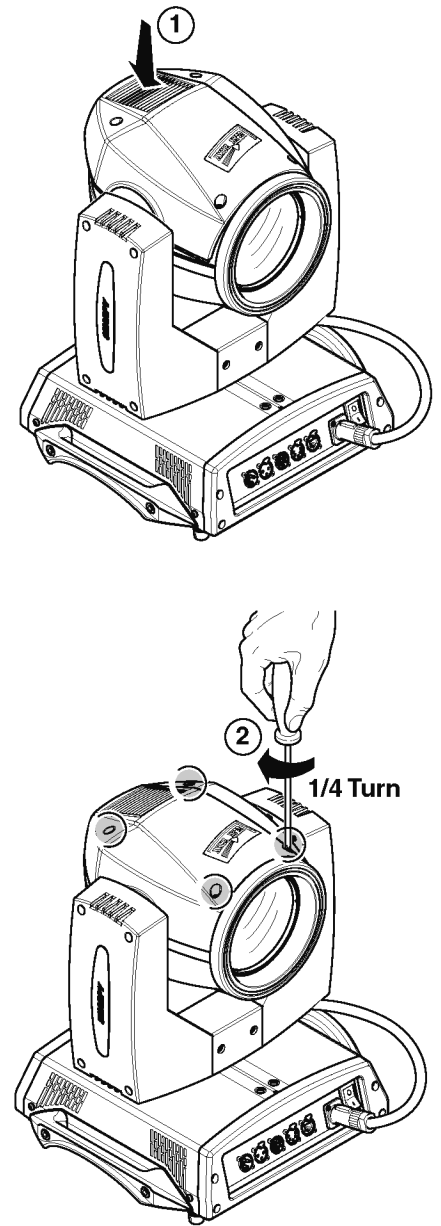Allows you to restore default values of all channels (128).
1) Press (OK) – a confirmation message appears on the display (Reset calibration to factory default ?).
2) Select YES to reset calibration to factory default or NO to keep the current setting and return to the top menu level.
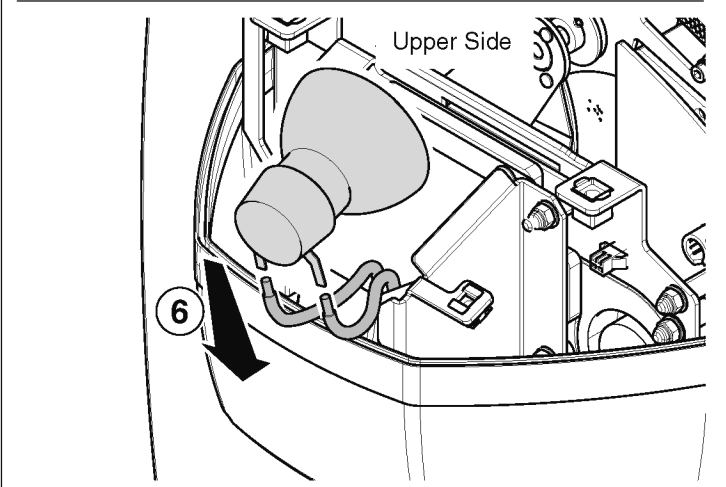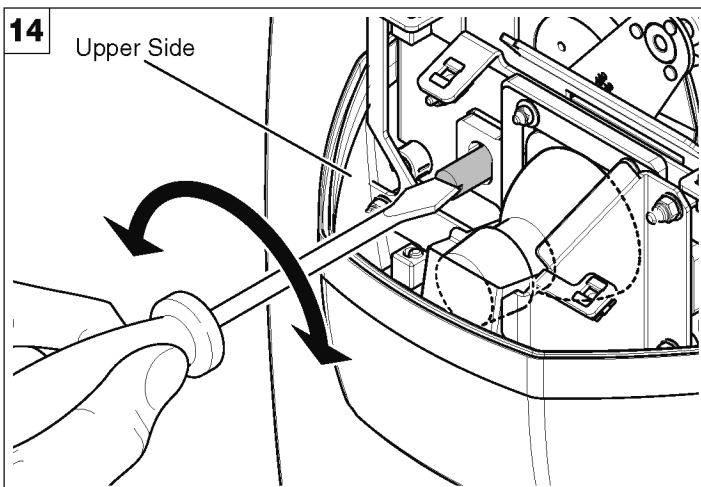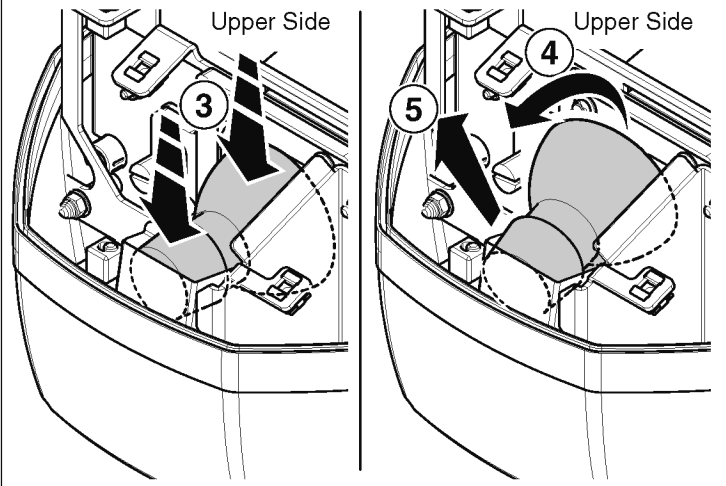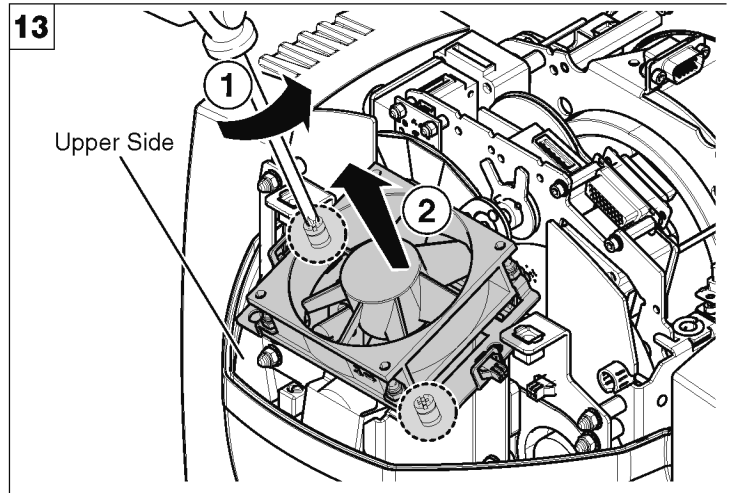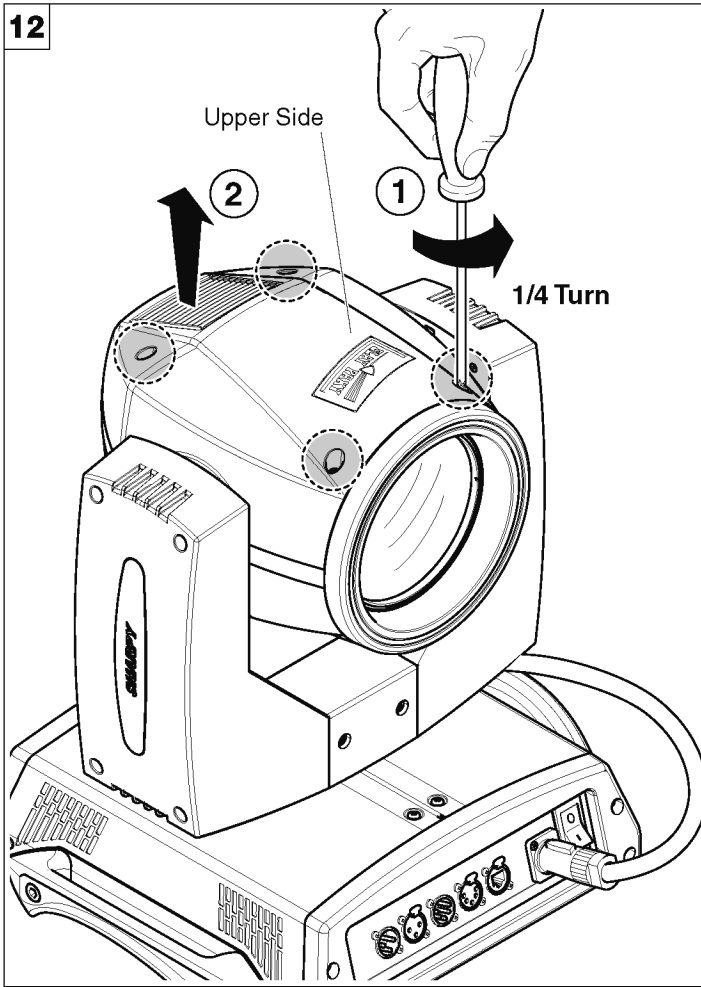
**10**

1/4 Turn

**11**

1/4 Turn
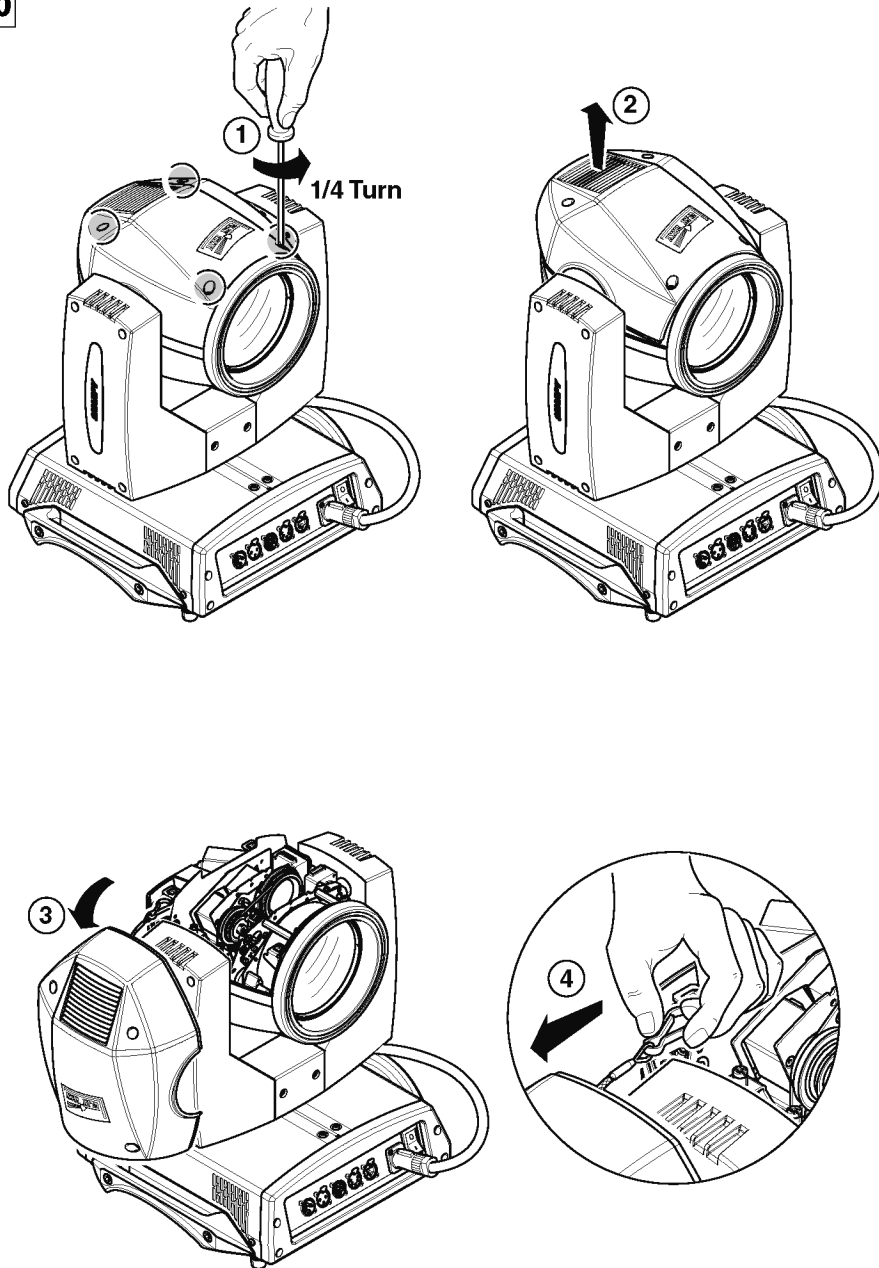
**Locking and releasing Pan and Tilt movements** - Refer to the instructions in the UNPACKING AND PREPARATION section.
**Opening the head covers** - Fig. 10.

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

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

**Lamp change** - Fig 13
Take the new lamp out of its package and insert in the fitting.
**WARNING:** *do not touch the lamp's envelope with bare hands. Should this happen, clean the bulb with a cloth soaked in alcohol and dry it with a clean, dry cloth.*

**Lamp regulation** - Fig. 14
To centre the lamp, turn the 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.*
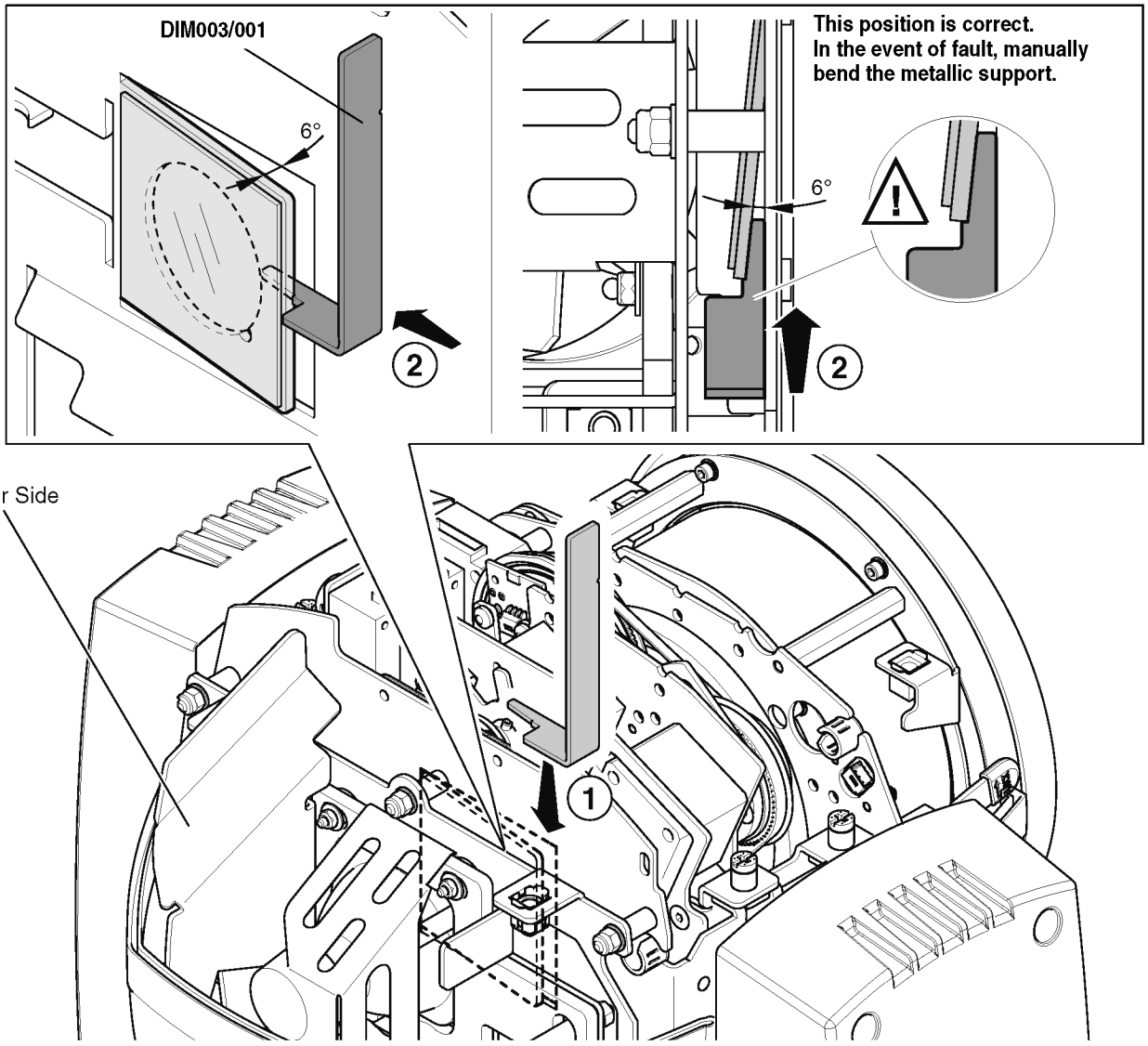**NOTE:** To adjust the lamp vertically (with regard to the Y axis) after having replaced it, it may be necessary to operate the **Calibration** in the **Menu Advanced** on the **Fixed Gobo Wheel channel**.

**CAUTION**:
Fast lamp ON-OFF cycles (for example 10 minutes ON / 10 minutes OFF) will reduce the lamp life.
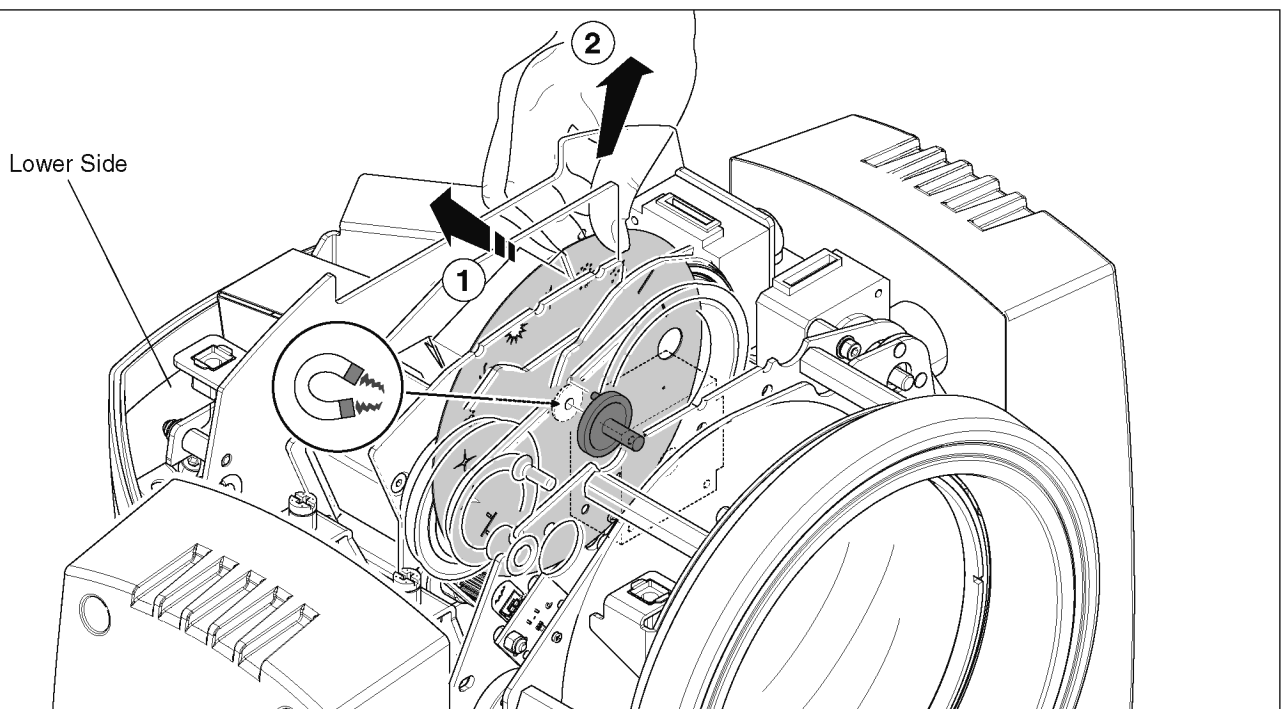
**15**

DIM003/001

6°

This position is correct.
In the event of fault, manually
bend the metallic support.

6° ⚠

②

②

①

Lower Side

**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**

②

Lower Side

①

**Replacing fixed gobos wheel -** Fig. 16
**WARNING: Before using personalised gobos wheel contact Clay Paky.**

**17**

Lower Side

Lower Side

Upper Side

Upper Side
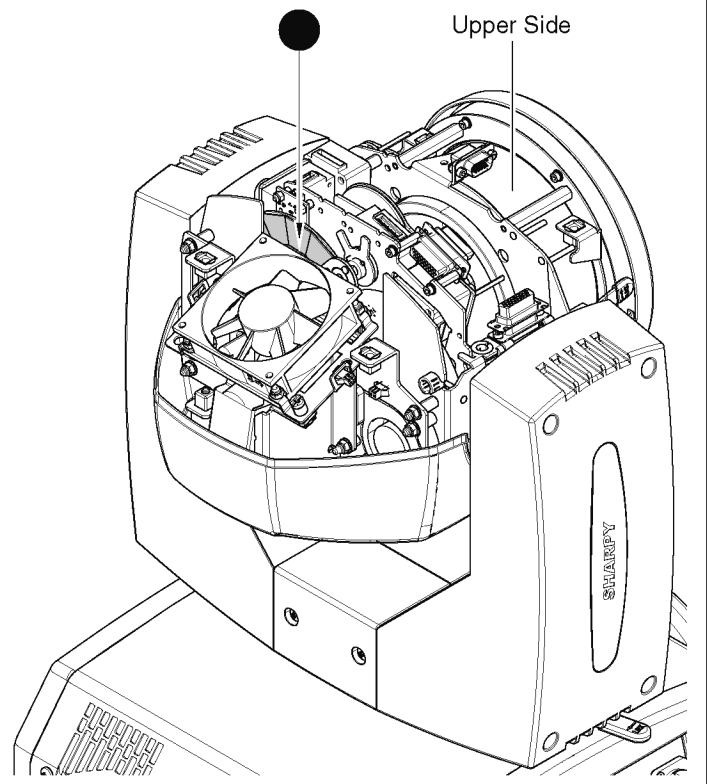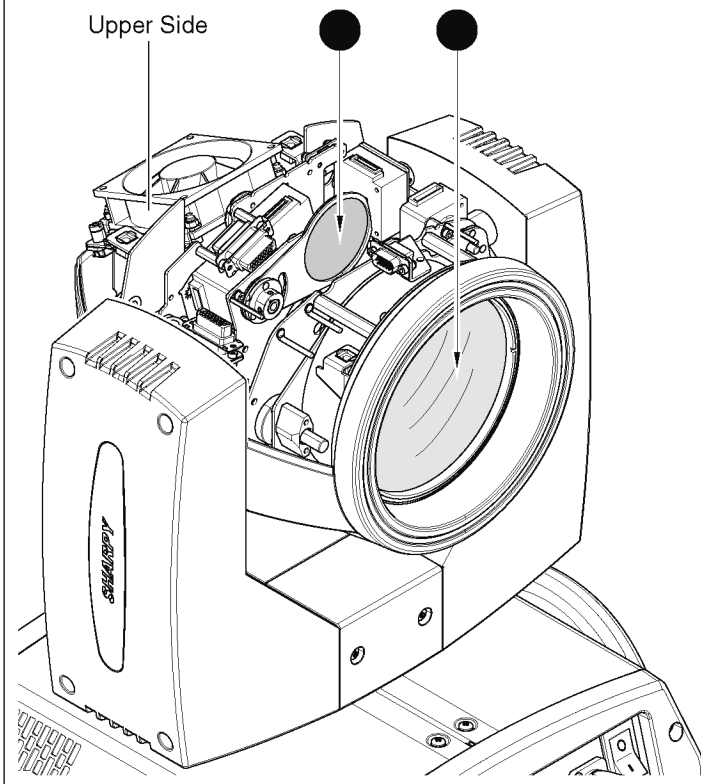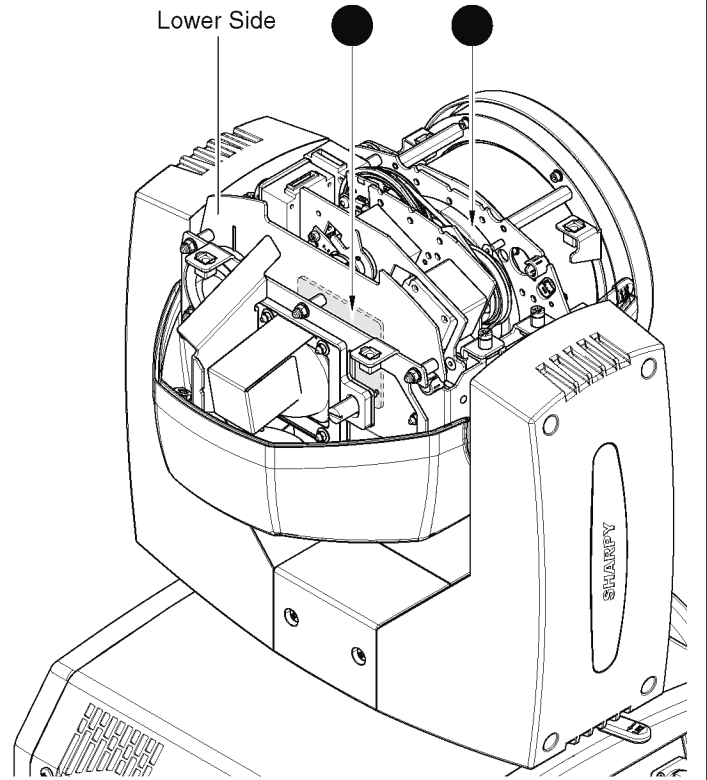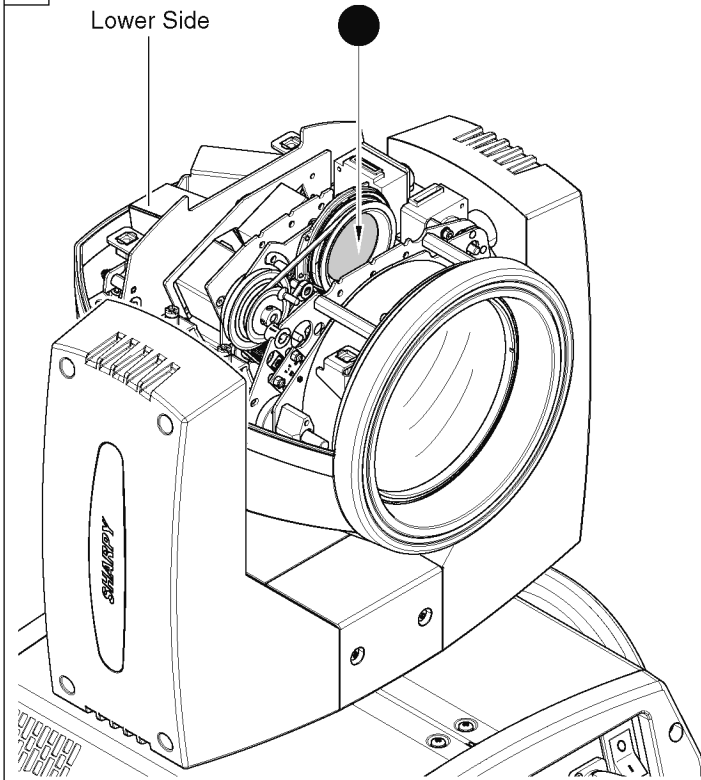
**Periodical cleaning** - Fig. 17

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.

Upper Side

1

2

3
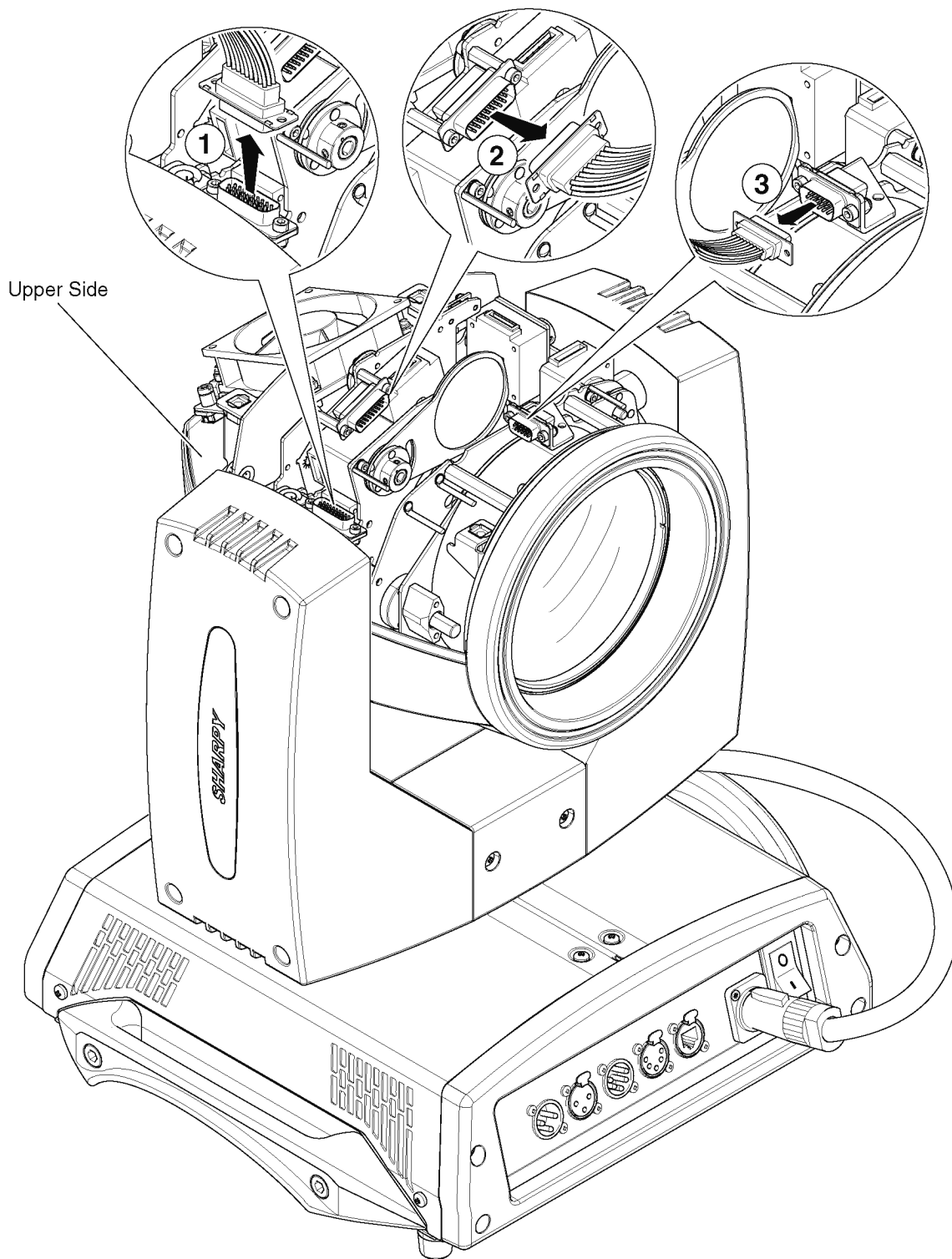
**Extraction of the effect modules: Preliminary operations** - Fig. 18

**19**

Lower Side

(1)

Lower Side

(2)

Lower Side

(3)

Lower Side

(4)
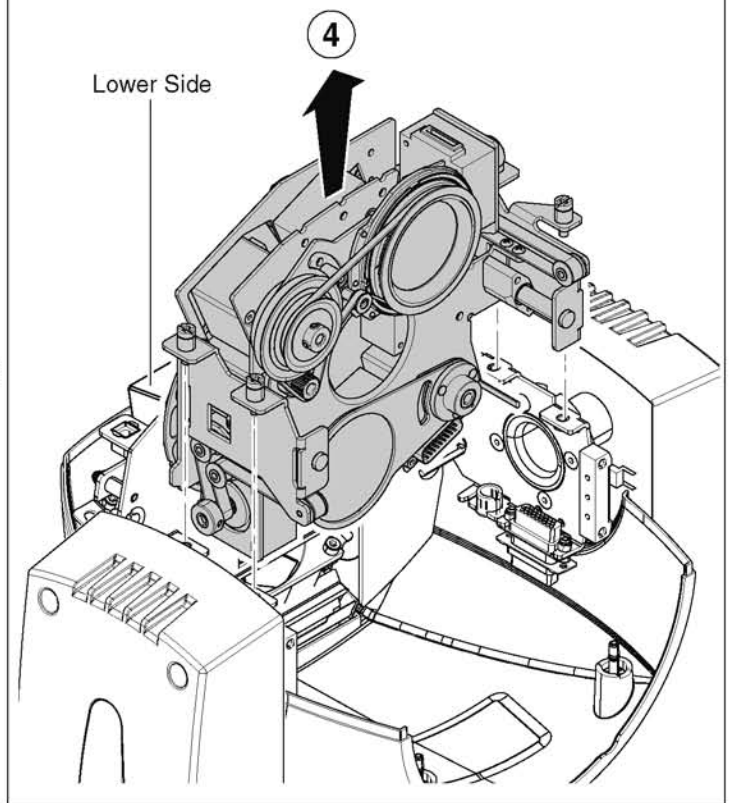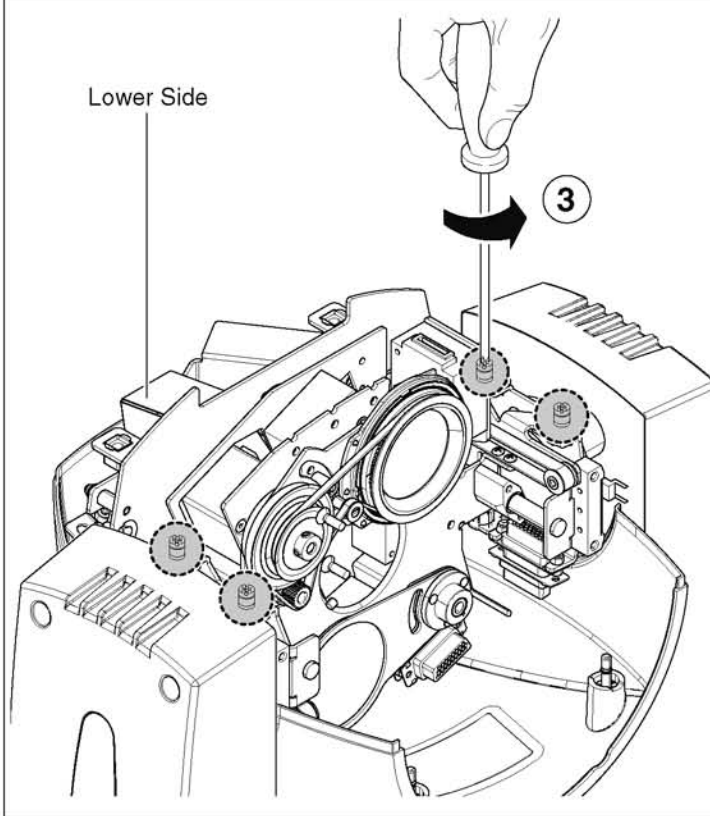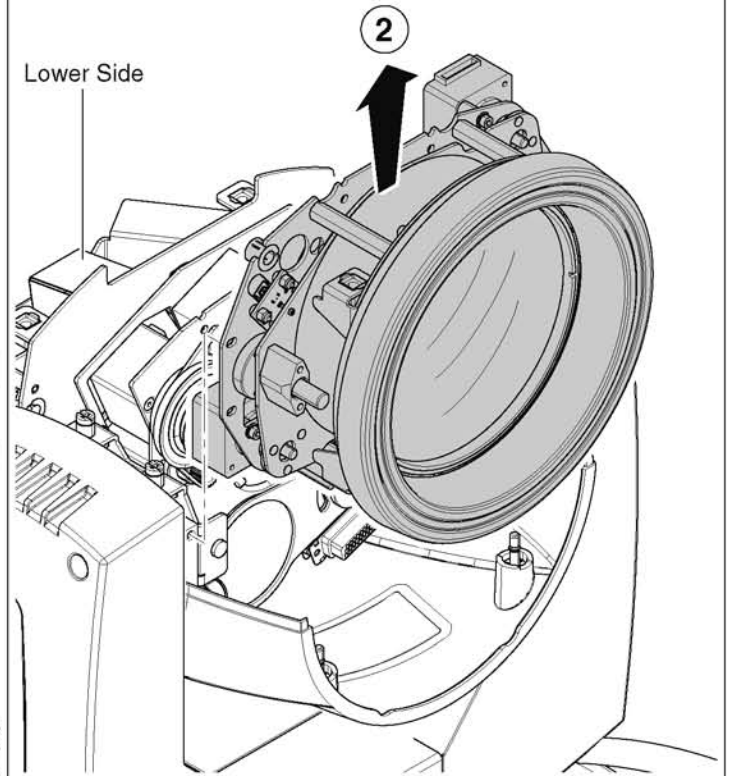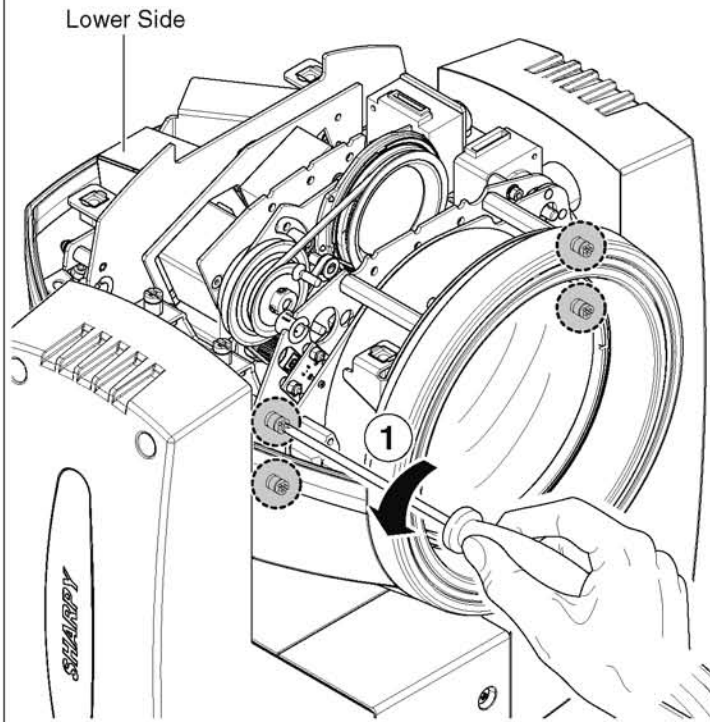
**Extraction of the effect modules** - Fig. 19
**IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.**
**Insertion of the effect modules:** Repeat the operations indicated in Fig. 17 and 18 in reverse order.
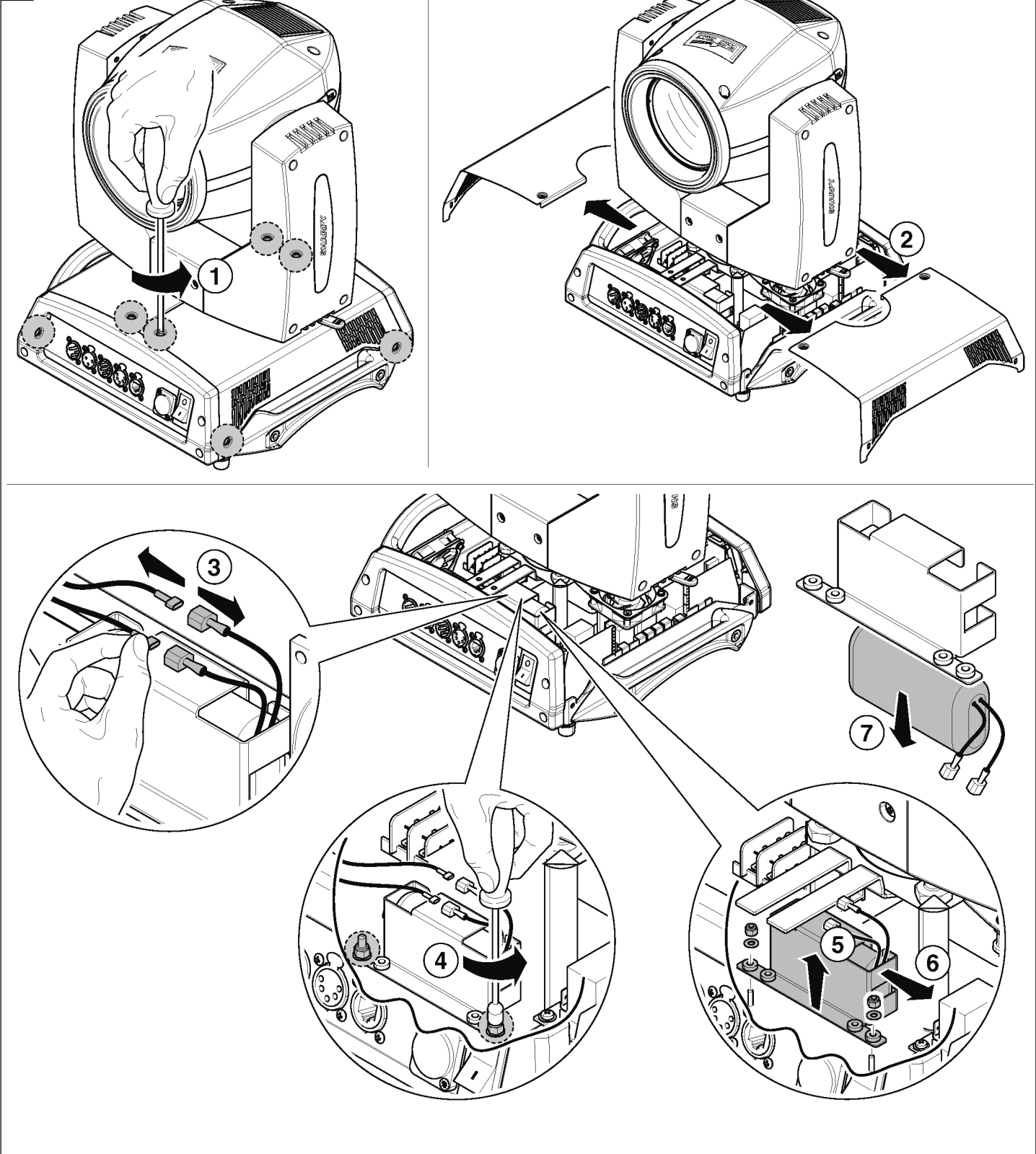
**Battery removal** - Fig. 20

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

LiFePO4
Pb

**21**

C61190

Lower Side

① ②
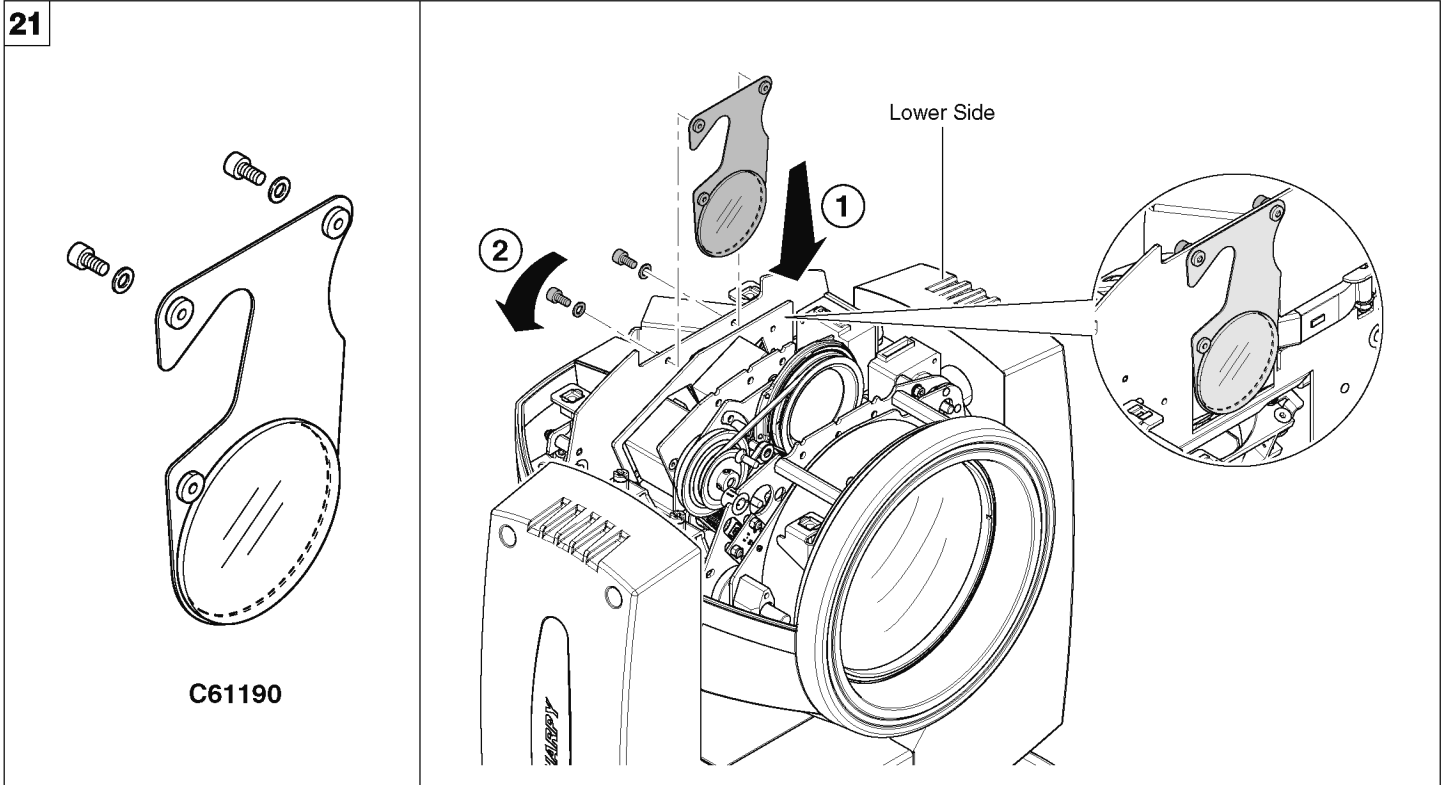
**Heat screen filter** - Fig. 21

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**

Lower Side

③ ④
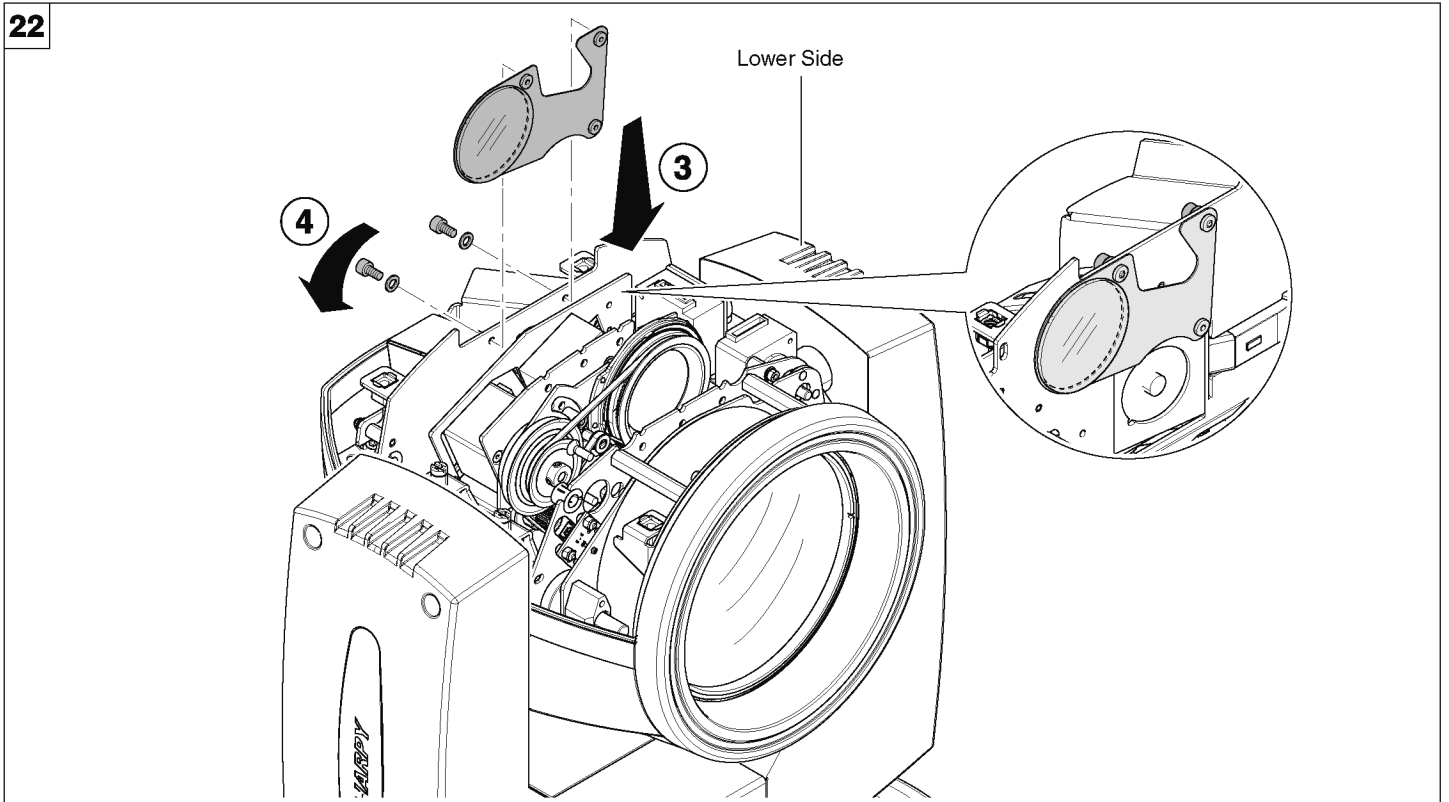
**C61190 accessory can be placed inside the projector when not in use** - Fig. 22

## TECHNICAL INFORMATION

315
(12.40")

280
(11.02")

450
(17.72")

185
(7.28")

475
(18.70")

345
(13.58")

330
(12.99")

405
(15.94")

**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).
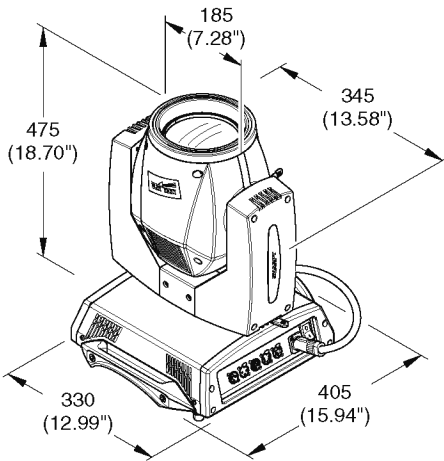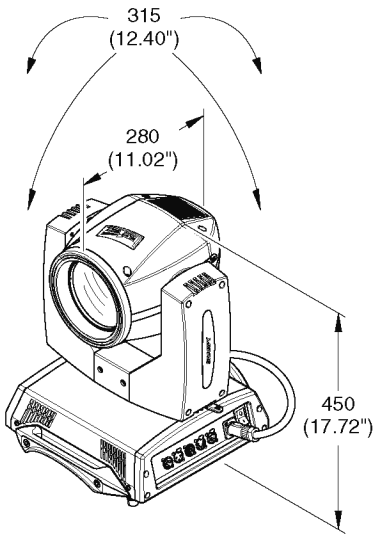
## CAUSE AND SOLUTION OF PROBLEMS

| 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). |

**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 | TILT | TILT |
| 13 | TILT FINE | TILT FINE |
| 14 | FUNCTION | FUNCTION |
| 15 | RESET | RESET |
| 16 | LAMP CONTROL (with Option "Lamp Dmx" ON) | LAMP CONTROL (with Option "Lamp Dmx" ON) |
| 17 | | PAN - TILT 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.**
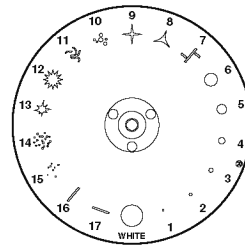
• COLOUR WHEEL - channel 1

| 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 |

• 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 |

• DIMMER - channel 3

| BIT | EFFECT |
|---|---|
| 255 | |
| | 0%-100%: 0.02 sec |
| 0 | |

• 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 |

• PRISM INSERTION - channel 5

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

• PRISM ROTATION - channel 6

| BIT | EFFECT |
|---|---|
| 255 | FAST ROTATION (43 rpm) |
| 193 | SLOW ROTATION (1.1 rph) |
| 191 - 192 | STOP |
| 190 | SLOW ROTATION (1.1 rph) |
| 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° |

**SHARPY**

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**• EFFECTS MOVEMENT - channel 7**

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

**• FROST - channel 8**

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

**• FOCUS - channel 9**
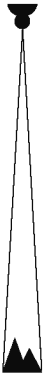
| BIT | EFFECT |
|-----|--------|
| 255 | NEAR |
| | 0%-100%: 1.11 sec |
| 0 | DISTANT |

**• PAN - channel 10**
*Operation with option InvertPan ↕ Off*
*(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)*

| BIT |
|-----|
| 255 |
| 0 |

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

| BIT |
|-----|
| 255 |
| 0 |
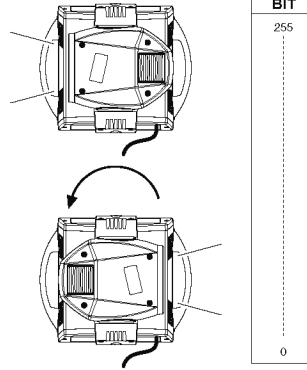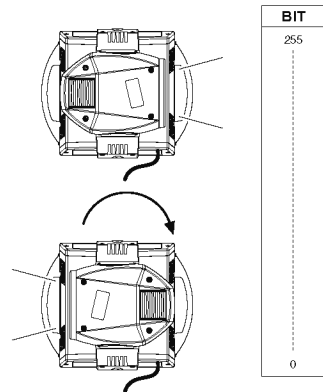
**• PAN FINE - channel 11**
*Operation with option InvertPan ↕ Off*
*(Tilt conventionally represented at 14% and option Invert Tilt ↕ Off)*

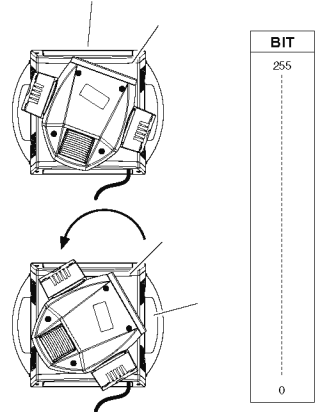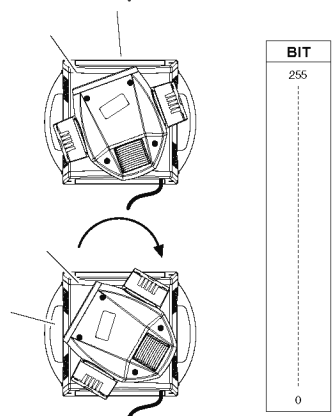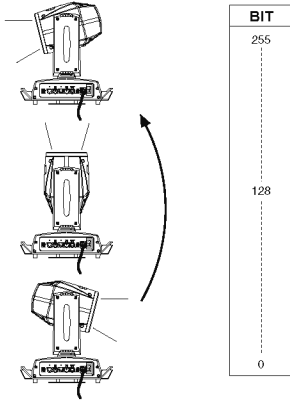| BIT |
|-----|
| 255 |
| 0 |

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

| BIT |
|-----|
| 255 |
| 0 |

**• TILT - channel 12**

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

| BIT |
|-----|
| 255 |
| 128 |
| 0 |

*Operation with option Invert Tilt ↕ On*
*(Pan conventionally represented at 0% and option Invert Pan ↕ Off)*
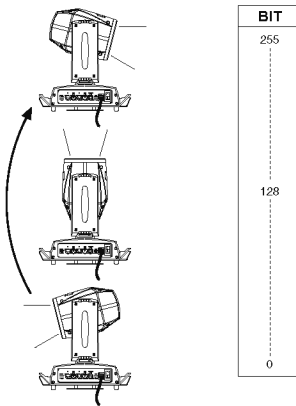
| BIT |
|-----|
| 255 |
| 128 |
| 0 |

**• TILT FINE - channel 13**

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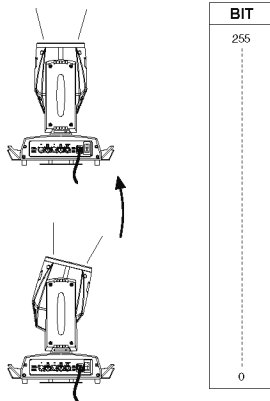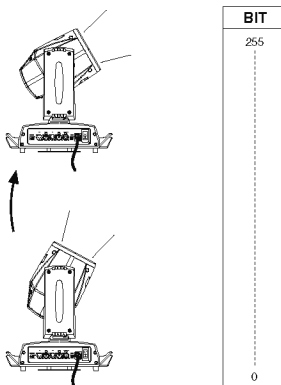*(Pan conventionally represented at 0% and option Invert Pan ↕ Off)*

| BIT |
|-----|
| 255 |
| 0 |

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

| BIT |
|-----|
| 255 |
| 0 |

**• FUNCTION - channel: 14**

| BIT | EFFECT |
|-----|--------|
| 255 | |
| | UNUSED RANGE |
| 63 | |
| 51-62 | LINEAR (Default) ─┐ |
| 38-50 | CONVENTIONAL ─┴─ DIMMER CURVE FUNCTION |
| 25-37 | NORMAL ─┐ |
| 12-24 | FAST (Default) ─┴─ PAN-TILT FUNCTION |
| 0-11 | UNUSED RANGE |

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

**• RESET - channel: 15**

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

The functions are actived 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 |
| | Lamp switch-on passing through the unused range and staying 5 sec in Lamp ON levels. |
| 101 | LAMP ON |
| 100 | LAMP OFF |
| | Lamp switch off passing throug the unused range and staying 5 s in Lamp OFF levels. |
| 26 | LAMP OFF |
| 25 | |
| 0 | UNUSED RANGE |

The functions are actived 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 |
| 1 | 0.2 |
| 2 | 0.4 |
| 3 | 0.6 |
| 4 | 0.8 |
| 5 | 1 |
| 6 | 1.2 |
| 7 | 1.4 |
| 8 | 1.6 |
| 9 | 1.8 |
| 10 | 2 |
| 11 | 2.2 |
| 12 | 2.4 |
| 13 | 2.6 |
| 14 | 2.8 |
| 15 | 3 |
| 16 | 3.2 |
| 17 | 3.4 |
| 18 | 3.6 |
| 19 | 3.8 |
| 20 | 4 |
| 21 | 4.2 |
| 22 | 4.4 |
| 23 | 4.6 |
| 24 | 4.8 |
| 25 | 5 |
| 26 | 5.2 |
| 27 | 5.4 |
| 28 | 5.6 |
| 29 | 5.8 |
| 30 | 6 |
| 31 | 6.2 |
| 32 | 6.4 |
| 33 | 6.6 |
| 34 | 6.8 |
| 35 | 7 |
| 36 | 7.2 |
| 37 | 7.4 |
| 38 | 7.6 |
| 39 | 7.8 |
| 40 | 8 |
| 41 | 8.2 |
| 42 | 8.4 |

| BIT | Seconds |
|---|---|
| 43 | 8.6 |
| 44 | 8.8 |
| 45 | 9 |
| 46 | 9.2 |
| 47 | 9.4 |
| 48 | 9.6 |
| 49 | 9.8 |
| 50 | 10 |
| 51 | 10.2 |
| 52 | 10.4 |
| 53 | 10.6 |
| 54, 55 | 11 |
| 56, 57 | 12 |
| 58, 59 | 13 |
| 60, 61, 62 | 14 |
| 63, 64, 65 | 15 |
| 66, 67 | 16 |
| 68, 69, 70 | 17 |
| 71, 72 | 18 |
| 73, 74, 75 | 19 |
| 76, 77 | 20 |
| 78, 79, 80 | 21 |
| 81, 82 | 22 |
| 83, 84, 85 | 23 |

| BIT | Seconds |
|---|---|
| 86, 87 | 24 |
| 88, 89, 90 | 25 |
| 91, 92 | 26 |
| 93, 94, 95 | 27 |
| 96, 97, 98 | 28 |
| 99, 100 | 29 |
| 101, 102, 103 | 30 |
| 104, 105 | 31 |
| 106, 107, 108 | 32 |
| 109, 110 | 33 |
| 111, 112, 113 | 34 |
| 114, 115 | 35 |
| 116, 117, 118 | 36 |
| 119, 120 | 37 |
| 121, 122, 123 | 38 |
| 124, 125 | 39 |
| 126, 127, 128 | 40 |

| BIT | Seconds |
|---|---|
| 129, 130, 131 | 41 |
| 132, 133 | 42 |
| 134, 135, 136 | 43 |
| 137, 138 | 44 |
| 139, 140, 141 | 45 |
| 142, 143 | 46 |
| 144, 145, 146 | 47 |
| 147, 148 | 48 |
| 149, 150, 151 | 49 |
| 152, 153 | 50 |
| 154, 155, 156 | 51 |
| 157, 158 | 52 |
| 159, 160, 161 | 53 |
| 162, 163 | 54 |
| 164, 165, 166 | 55 |
| 167, 168 | 56 |
| 169, 170, 171 | 57 |

| BIT | Seconds |
|---|---|
| 172, 173, 174 | 58 |
| 175, 176 | 59 |
| 177, 178, 179 | 60 |
| 180, 181 | 65 |
| 182, 183, 184 | 70 |
| 185, 186 | 75 |
| 187, 188, 189 | 80 |
| 190, 191 | 85 |
| 192, 193, 194 | 90 |
| 195, 196, 197 | 95 |
| 198, 199 | 100 |
| 200, 201, 202 | 110 |
| 203, 204, 205 | 120 |
| 206, 207 | 130 |
| 208, 209, 210 | 140 |
| 211, 212 | 150 |
| 213, 214, 215 | 160 |

| BIT | Seconds |
|---|---|
| 216, 217 | 170 |
| 218, 219, 220 | 180 |
| 221, 222 | 190 |
| 223, 224, 225 | 200 |
| 226, 227, 228 | 210 |
| 229, 230 | 220 |
| 231, 232, 233 | 230 |
| 234, 235 | 240 |
| 236, 237, 238 | 250 |
| 239, 240 | 260 |
| 241, 242 | 270 |
| 243, 244, 245 | 280 |
| 246, 247, 248 | 290 |
| 249, 250 | 300 |
| 251, 252, 253 | 310 |
| 254, 255 | Follow cue Data |