



AN OSRAM BUSINESS

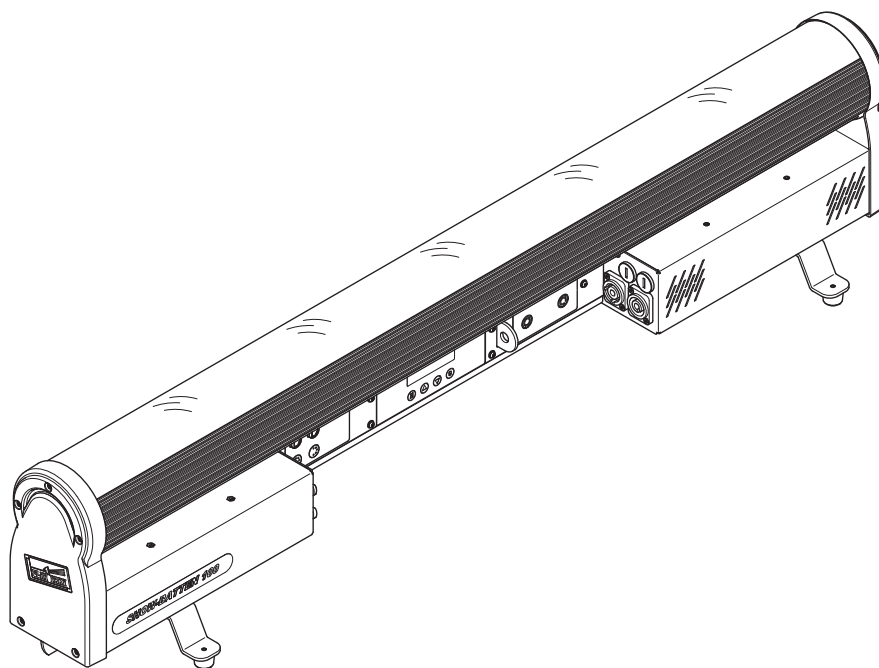
# SHOW BATTEN 100

# SHOW BATTEN 100 AS

C71085

C71086

## INSTRUCTIONS MANUAL



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*Congratulations on choosing a Clay Paky product!*

*We thank you for your choice. Please note that this product, as all the others in the rich Clay Paky range, has been designed and manufactured 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 in order 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 the other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this instructions manual, which must always accompany the fitting.

CLAY PAKY S.p.A. reserves the right to modify the characteristics stated in this instructions 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.

#### • Minimum distance of illuminated objects

The projector needs to be positioned so that the objects hit by the beam of light are at least 0.2 metres (8") from the lens of the projector.



#### • Minimum distance from flammable materials

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

#### • Maximum ambient temperature

Do not use the project if ambient temperature ( $T_a$ ) exceeds 40°C.

$t_a$  40°C

#### • 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).

IP20

#### • 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 the power mains

A qualified electrician must perform connection to the power mains.

Check that the mains frequency and voltage correspond to the frequency and voltage for which the projector was designed and indicated on the electrical data label. This label also gives the input power. Refer to the latter to evaluate the maximum number of devices to be connected to the mains to avoid overloads.

#### • External surface temperature

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 100°C (212°F).

$t_c$  100°C



#### • Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the supply mains. After switching off, do not remove any parts of the fitting for at least 10 minutes. The lenses must be mounted and, if visibly damaged, they have to be replaced with genuine spares.



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.



**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)
- 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)



$t_a$  40°C

IP20



$t_c$  100°C



Gruppo di rischio 1  
Secondo la norma  
EN 62471



#### • 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.

#### • Distanza minima degli oggetti illuminati

Il proiettore deve essere posizionato in modo tale che gli oggetti colpiti dal fascio luminoso siano distanti almeno 0,2 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 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.

#### • 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. Le lenti devono essere obbligatoriamente montate; devono inoltre, se visibilmente danneggiate, essere sostituite con ricambi originali.

#### • 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 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)
- 2009/125/CE - Specifiche per la progettazione ecocompatibile dei prodotti connessi all'energia (ErP)

#### • 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.

#### • Distance minimum des objets éclairés

Le projecteur doit être positionné de façon à ce que les objets éclairés par le faisceau lumineux soient à une distance d'au moins 0,2 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 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

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 d'entreprendre toute opération d'entretien ou de nettoyage du projecteur, couper le courant du réseau d'alimentation. Les lentilles doivent obligatoirement être montées ; de plus, si elles sont visiblement endommagées, les remplacer par des pièces détachées d'origine.

#### • 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 utilisation résidentiel**

 0.2 m

$t_a$  40°C

IP20



$t_c$  100°C



Classe de dangerosité 1  
Selon la norme  
EN 62471





• **Batterie**

Ce produit contient une batterie rechargeable au tétraphosphate de fer au lithium. Une fois la batterie parvenue à la fin de sa durée de vie, procéder à son élimination conformément à la norme en vigueur de manière à éviter toute pollution.



**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.



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- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)
- 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)

#### • 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.

 0.2 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 0,2 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 Reinigungsarbeit am Projektor, stets die Stromversorgung abschalten. Die Linsen müssen montiert sein und, falls sie sichtbar beschädigt sind, müssen sie durch Originalersatzteile 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 Lithium-Eisenphosphat-Batterie. 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/recyclen.



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- 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)

#### • Instalación

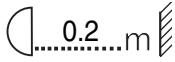
Asegúrese de que todos los elementos de fijación del proyector estén en buenas condiciones.

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.

#### • Distancia mínima 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 0.2 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.

$t_a$  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).

IP20

#### • 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.

$t_c$  100°C



#### • Mantenimiento

Antes de iniciar cualquier operación de mantenimiento o limpieza en el proyector quitar la tensión de la red de alimentación. Las lentes tienen que montarse obligatoriamente; además, si estuvieran dañadas, deberán ser sustituidas por recambios originales.



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**

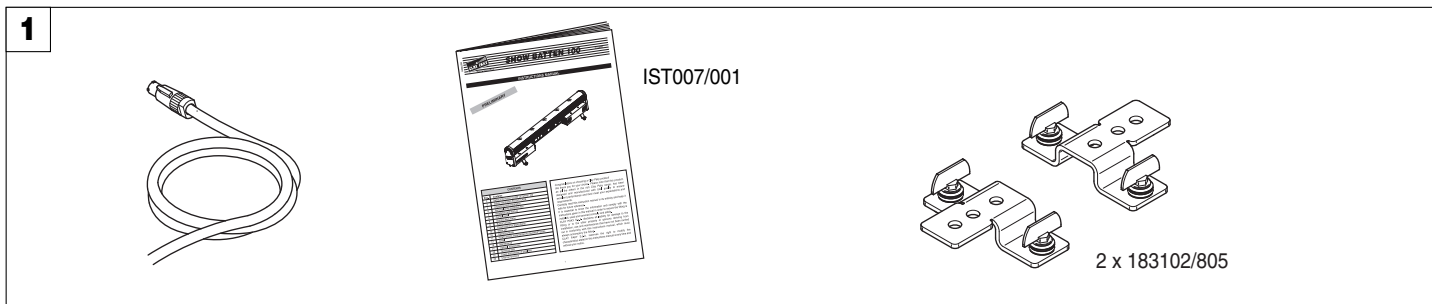
Este dispositivo es conforme a la Directiva Europea 2012/19/UE - Residuos de equipos eléctricos y electrónicos (RAEE). Con el fin de respetar el ambiente, eliminar/reciclar el producto al final de su ciclo de vida según las disposiciones de ley locales



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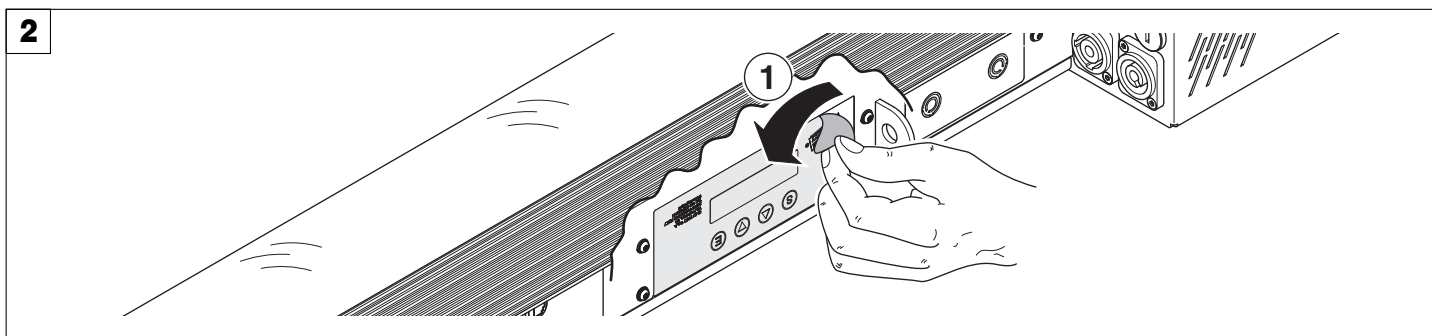
- 2006/95/EC - Safety of electrical equipment supplied at low voltage (LVD)
- 2004/108/EC - Electromagnetic Compatibility (EMC)
- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)
- 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)

## UNPACKING AND PREPARATION

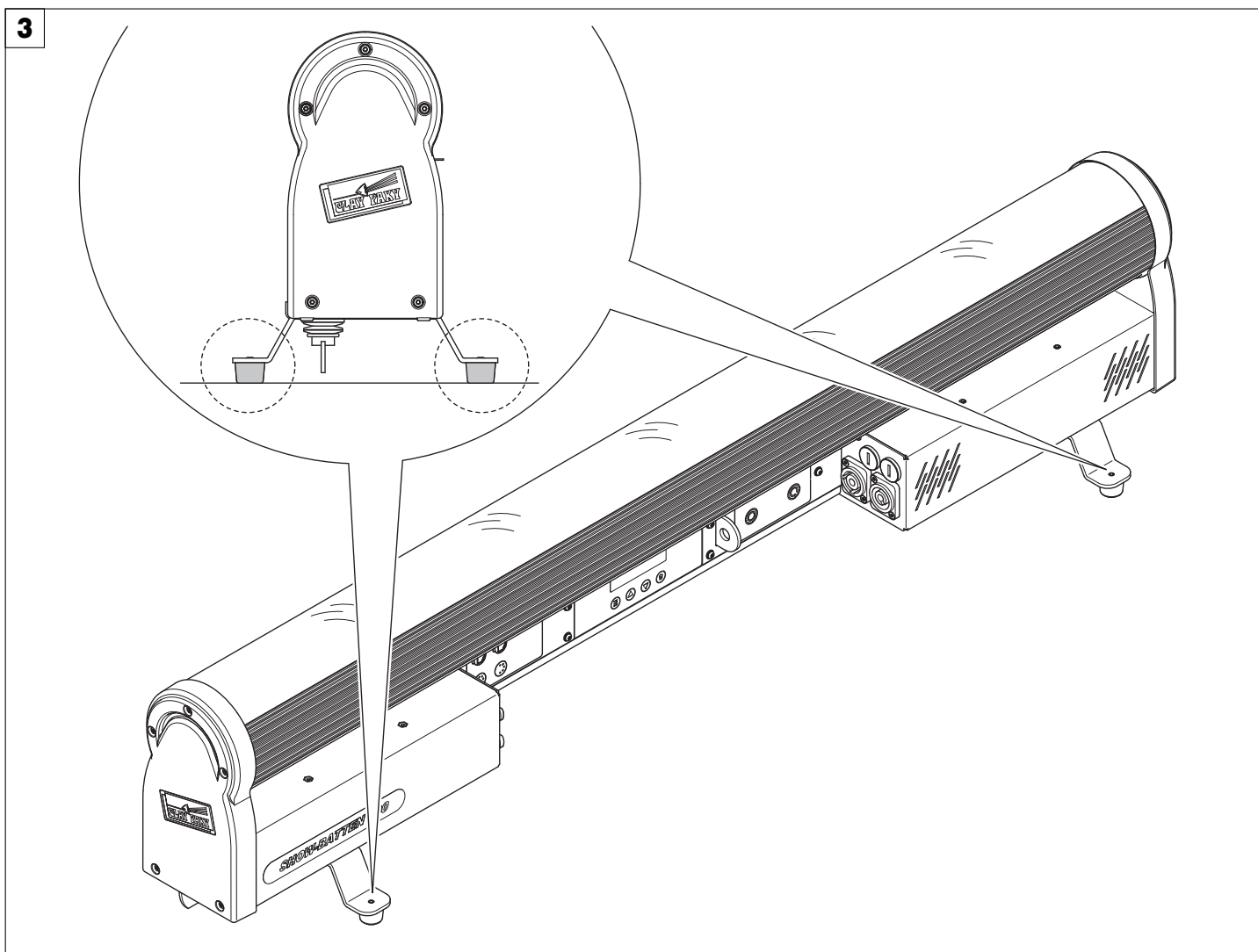


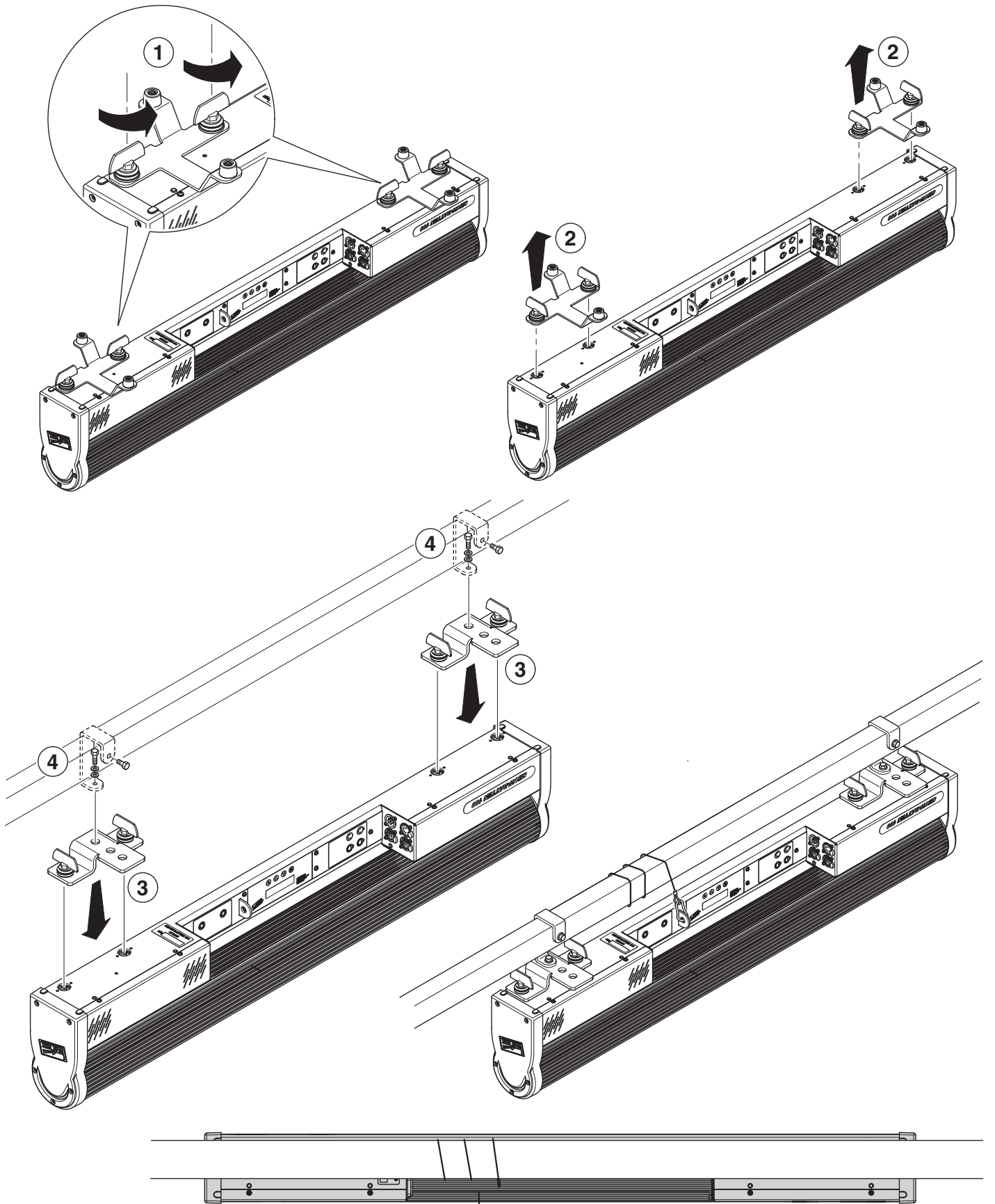
Packing content - Fig. 1

## REMOVAL OF THE PROTECTIVE FILM



## INSTALLATION AND START-UP

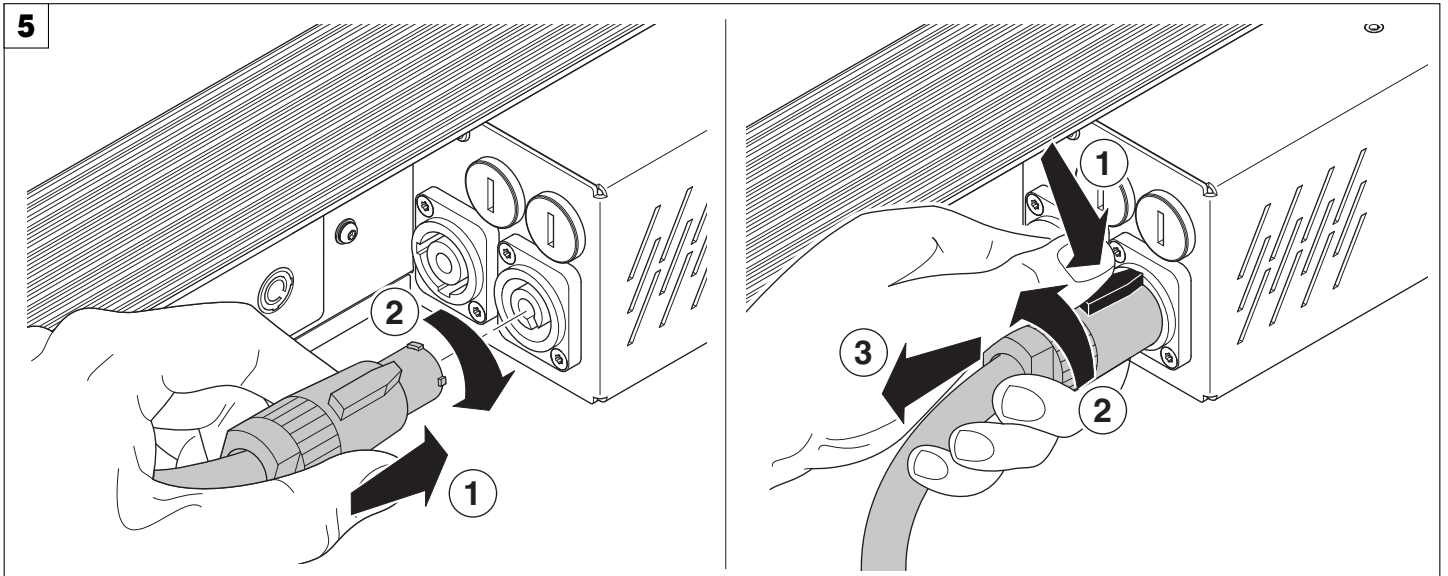




**Projector installation - Fig. 4**

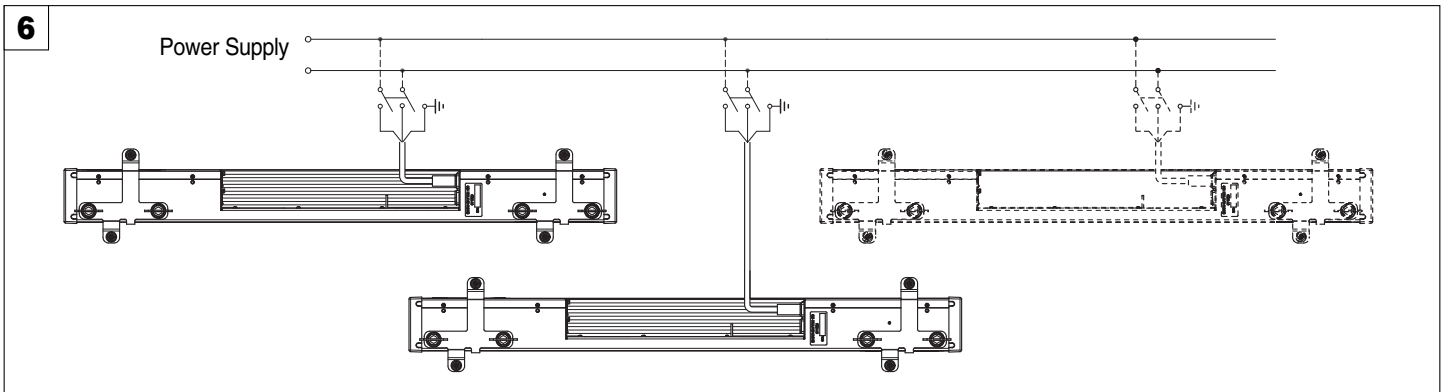
The projector can be installed on the floor resting on specific rubber feet, on a truss, on the ceiling or wall.

**WARNING: the safety chain must be installed except when the projector rests on the floor. (Code 105015/801 available upon request). This must be secured to the projector support structure and then hooked to the fastening point at the centre of the fixture.**

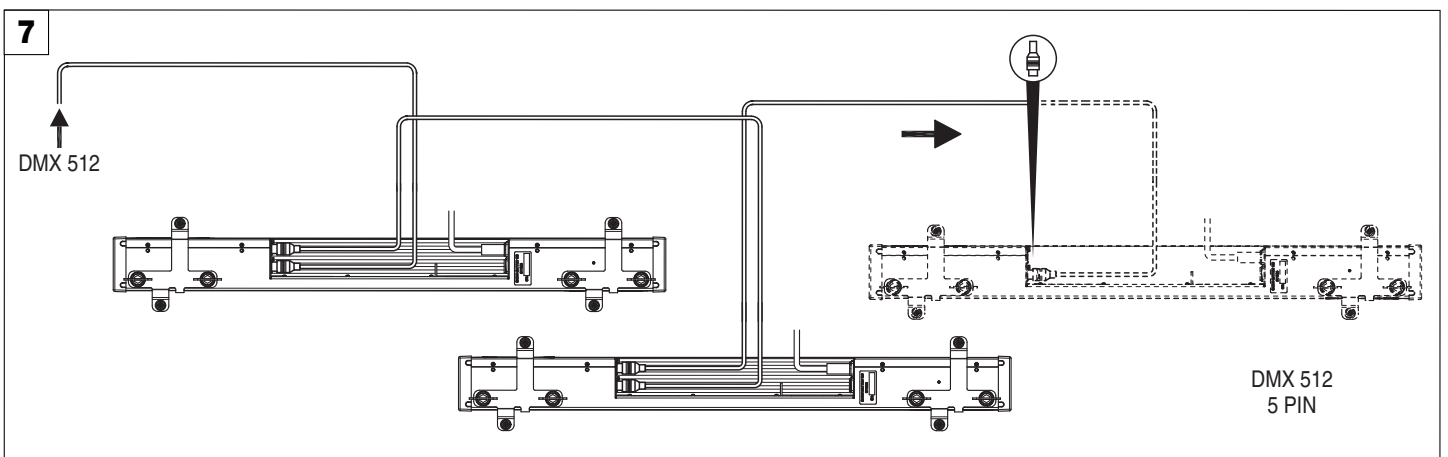


Connecting and disconnecting the power cord - Fig. 5

## CONTROL PANEL



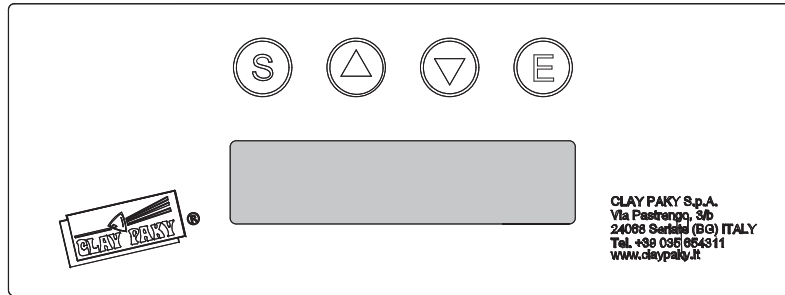
Connections to the power mains - Fig. 6



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

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120 $\Omega$  characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. End connections must be made using XLR type 3-pin male/female connectors. A terminating plug must be inserted on the last projector with a resistance of 120 (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 must be connected to the shield braid and pin 1 of the connectors.



### Switching on the projector - Fig. 8

The projector immediately turns on when the power cord is plugged.

Clay Paky  
SHOW BATTEN 100


SHOW BATTEN 100  
Software release x.x x

Address xxx  
xxxxx ??? \*





\* see pag. 12

The control panel (Figure 8) has a display and buttons for complete programming and management of the projector menu.

The display can be in one of two conditions: idle status and settings status. When idle, the projector DMX address is displayed.

If no button is pressed after a wait period (about 60 seconds) when in menu settings status, the display automatically returns to idle status. It should be noted that when this condition occurs, any modified value that has not yet been confirmed with the  key will be cancelled.

### Button functions – Menu SET

<b>SELECT</b> 	<ul style="list-style-type: none"> <li>• <b>If pressed in idle status:</b> Cyclically switches between idle status and menu settings.</li> <li>• <b>If pressed while setting a menu:</b> Moves to an upper level without changing anything (exits the function)</li> </ul>
<b>DOWN</b> 	Decreases the value displayed (with auto-repetitions), or passes to the next item on the menu For quick access to the minimum parameter value, press the UP key while holding down the DOWN key.
<b>UP</b> 	Increases the value displayed (with auto-repetitions), or passes to the previous item on the menu For quick access to the maximum parameter value, press the DOWN key while holding down the UP key.
<b>ENTER</b> 	Confirms the displayed value or activates the displayed function or opens the next menu.

## MENU SETTING

Main Menu	Level 1	Level 2	Level 3	Choices / Values
SET UP	DMX Address	Standard Address		001 - 503
		Extended Address		001 - 463
	Channel Mode			Standard
				Extended
	Art-net Interface	Control Protocol		Disabled
				Net IP 2.x.x.x.
				Net IP 10.x.x.x.
				DHCP
		Repeat on DMX		On / Off
		Universe	Standard Universe	000 - 255
	Extended Universe	016 - 031		
Network Safety		On / Off		
OPTIONS	Tilt	Invert. Tilt		On / Off
		Pos Sensor		On / Off
	Display	Backlight		On / Off
		Contrast		0 - 10
INFORMATION	System Version	Appl release		
		Boot release		
	Fixture Hours	Total Hours		
		Partial Hours		
	LED Hours	Total Hours		
		Partial Hours		
	LED Temperature	Temperature		
		Max Temperature		
	DMX Monitor	Red		000 - 255
		Green		000 - 255
		Blue		000 - 255
		White		000 - 255
		CTO		000 - 255
		Dimmer		000 - 255
		Stop-Strobe		000 - 255
		Preset Colours		000 - 255
		Zoom		000 - 255
		Tilt		000 - 255
	Tilt Sensor			
	Network parameters	IP Address		
Network Mask				
MAC Address				



Main Menu	Level 1	Level 2	Level 3	Choices / Values
MANUAL CONTROL	Red			000 - 255
	Green			000 - 255
	Blue			000 - 255
	White			000 - 255
	CTO			000 - 255
	Dimmer			000 - 255
	Stop-Strobe			000 - 255
	Preset Colours			000 - 255
	Zoom			000 - 255
	Tilt			000 - 255
TEST	n.a			
	n.a			
ADVANCED	Access Code <u>1234</u>	Firmware uploader	Appl. upload	
			Boot. upload	
		Tilt Cal		
		Reset		

## SET UP MENU

### SET UP - DMX ADDRESS

Use to set the DMX address to be assigned to the projector according to the type of preset **Channel Mode**:

- **Standard Address:** a DMX address between 1 and 503 can be selected.
- **Extended Address:** a DMX address between 1 and 463 can be selected.

PLEASE NOTE: If there is no DMX input signal, the projector address flashes.

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### SET UP - CHANNEL MODE

Use to set the projector operating mode selecting one of the following:

- **Standard:** maximum 10 DMX channels occupied.
  - **Extended:** maximum 50 DMX channels occupied.
- 

### SET UP - ARTNET INTERFACE - CONTROL PROTOCOL

Use to set the Artnet **Control Protocol** selecting one of the 4 options available:

- **Disabled:** Control protocol disabled.
  - **Net IP 2.x.x.x.:** Import the Artnet network belonged to.
  - **Net IP 10.x.x.x.:** Set the alternative Artnet network belonged to.
  - **DHCP:** IP addresses assigned by DHCP server.
- 

### SET UP - ARTNET INTERFACE – REPEAT ON DMX

Use to turn the **Repeat on DMX** function ON or OFF. When ON, the DMX flow set via Artnet is repeated on DMX cable.

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### SET UP - ARTNET INTERFACE – UNIVERSE

Use to set the DMX **Universe** to be assigned to the projector according to the type of set **Channel Mode**:

- **Standard Mode:** a DMX universe between 0 and 255 can be selected.
- **Extended Mode:** a DMX universe between 0 and 15 can be selected.

PLEASE NOTE: If there is no incoming Artnet signal, the projector universe flashes ( Euni=Extended Universe / Suni=Standard Universe).

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### SET UP - ARTNET INTERFACE – NETWORK SAFETY

Use to turn the **Network Safety** function ON or OFF.

When the **Network Safety** function is on, if projectors are connected via Ethernet cable in "daisy chain", the CPU is battery powered and the Artnet signal is not interrupted but propagated when a projector is off.

## OPTIONS MENU

### OPTIONS - TILT – INV. TILT

Use to switch the Tilt inversion movement (ON) or (OFF) .

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### OPTIONS - TILT – POS SENS

Use to switch the restore Tilt position through encoder (ON) or (OFF) if steps are lost accidentally.

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### OPTIONS - DISPLAY – BACKLIGHT

Turning **Backlight** function OFF turns off display backlight after 60 seconds of disuse. Press any key to turn back on. Select (ON) to disable this option.

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### OPTIONS - DISPLAY – CONTRAST

Use the **Contrast** option to set display contrast between 0 (maximum display brightness) and 10 (minimum display brightness).

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## INFORMATION MENU

### INFORMATION MENU – SYSTEM VERSION

Use to view the **Appliance release** (Application firmware) and **Boot release** (Security software) firmware versions loaded in the CPU.

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### INFORMATION MENU – FIXTURE HOURS

Use to view total projector operating hours from manufacture to date (**Total Hours**) or operating hours since the last user reset (**Partial Hours**).

To reset **Partial Hours**, press UP and DOWN together for 5 seconds till “Rst?” appears; then press “Enter” to reset.

---

### INFORMATION MENU – LED HOURS

Use to view total LED operating hours from manufacture to date (**Total Hours**) or operating hours since the last user reset (**Partial Hours**).

To reset **Partial Hours**, press UP and DOWN together for 5 seconds till “Rst?” appears; then press “Enter” to reset.

---

### INFORMATION MENU – LED TEMPERATURE

Use to view real-time LED working temperature (**Temperature**) or maximum LED temperature from last user reset (**Max Temperature**).

To reset **Maximum Temperature**, press UP and DOWN together for 5 seconds till “Rst?” appears; then press “Enter” to reset.

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### INFORMATION MENU – DMX MONITOR

Use to view the DMX input level in bits for each projector channel (value between 0 and 255 bits).

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### INFORMATION MENU – TILT SENSOR

Use to view a projector Tilt position level (value between nn and nn).

---

### INFORMATION MENU – NETWORK PARAMETERS

Allows the “**Network**” parameters of the projector to be displayed or:

- **IP Address:** Internet Protocol address (2 projectors must not have the same IP address)
- **IPmask:** 255.0.0.0.
- **MAC address:** Media Access Control (projector’s Ethernet Address).

## MANUAL CONTROL MENU

Use to set a projector control panel channel level to manually control each effect without the need of a DMX input signal (values between 0 and 255 bits).

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## TEST MENU

Use to check correct effect operations, activating preset projector memory movements.

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## ADVANCED MENU

Enter access code 1234 to open the Advanced menu (only recommended for expert users).

### ADVANCED MENU – FIRMWARE UPLOADER

Use to transfer software from one projector to all the others connected to it selecting between **Appl. upload** and **Boot upload**.

---

### ADVANCED MENU – TILT CAL

Use to recalibrate Tilt position with any problems.

---

### ADVANCED MENU – RESET

Use to reset the projector CPU with any problems.

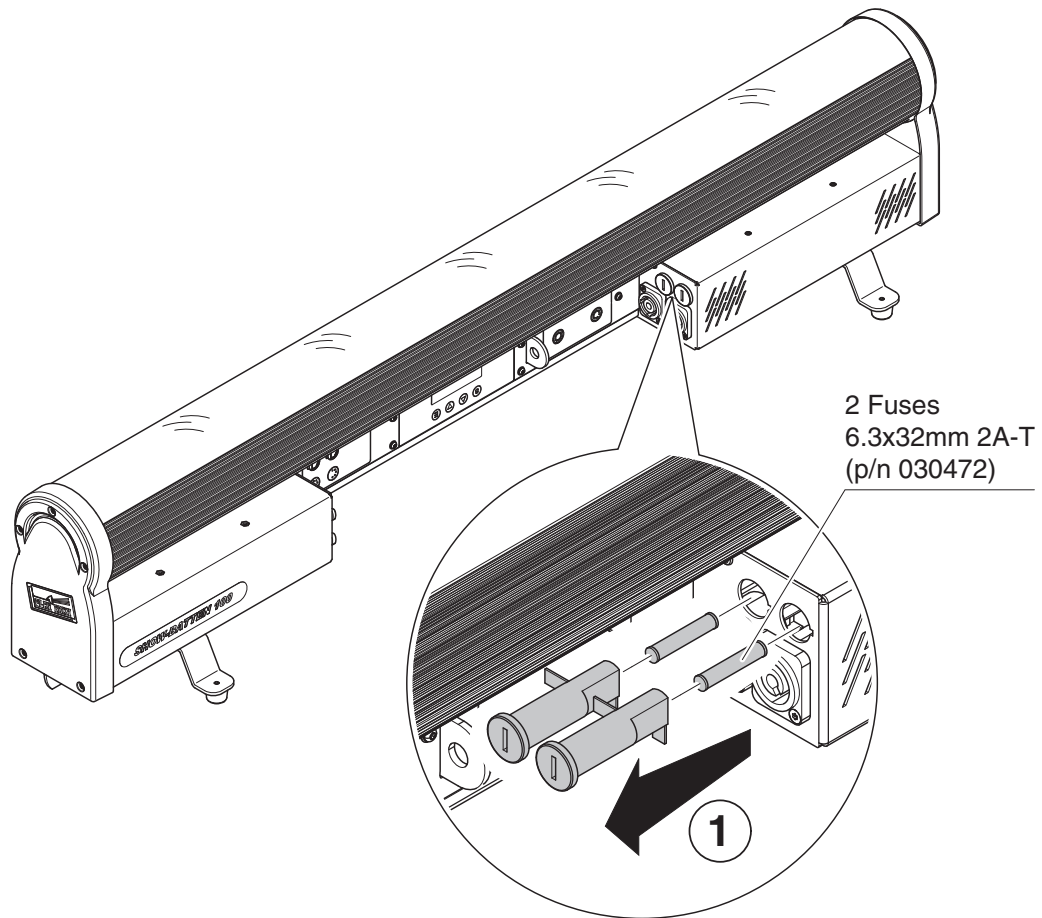
---

## ERROR LIST

Error	Identifier	Description
W04	BAT_ALERT	Battery guard voltage Display warning
W12	LED_MAX_TEMP	Board maximum temperature reached LED current derating, Display warning
E13	LED_OVER_TEMP	Board over temperature after derating Display warning, Stop working, LED power off
E33	INIT_ERROR	Startup procedure errors Display warning
W34	FW_UPLOADING	Firmware uploading in progress Display progress status, current image still running
W35	FW_UPLOADED	Firmware uploading terminated with success Display new version, new image runs after fixture restart
W36	FW_UPLOAD_ERR	Firmware uploading terminated without success Display warning, current image still running
W37	FW_BAD_CRC	Firmware uploading terminated with CRC error Display warning, current image still running
E38	FW_CORRUPTED	Firmware image corrupted Display warning, run backup image
W49	SENS_CAL_FAIL	Hall Sensor error

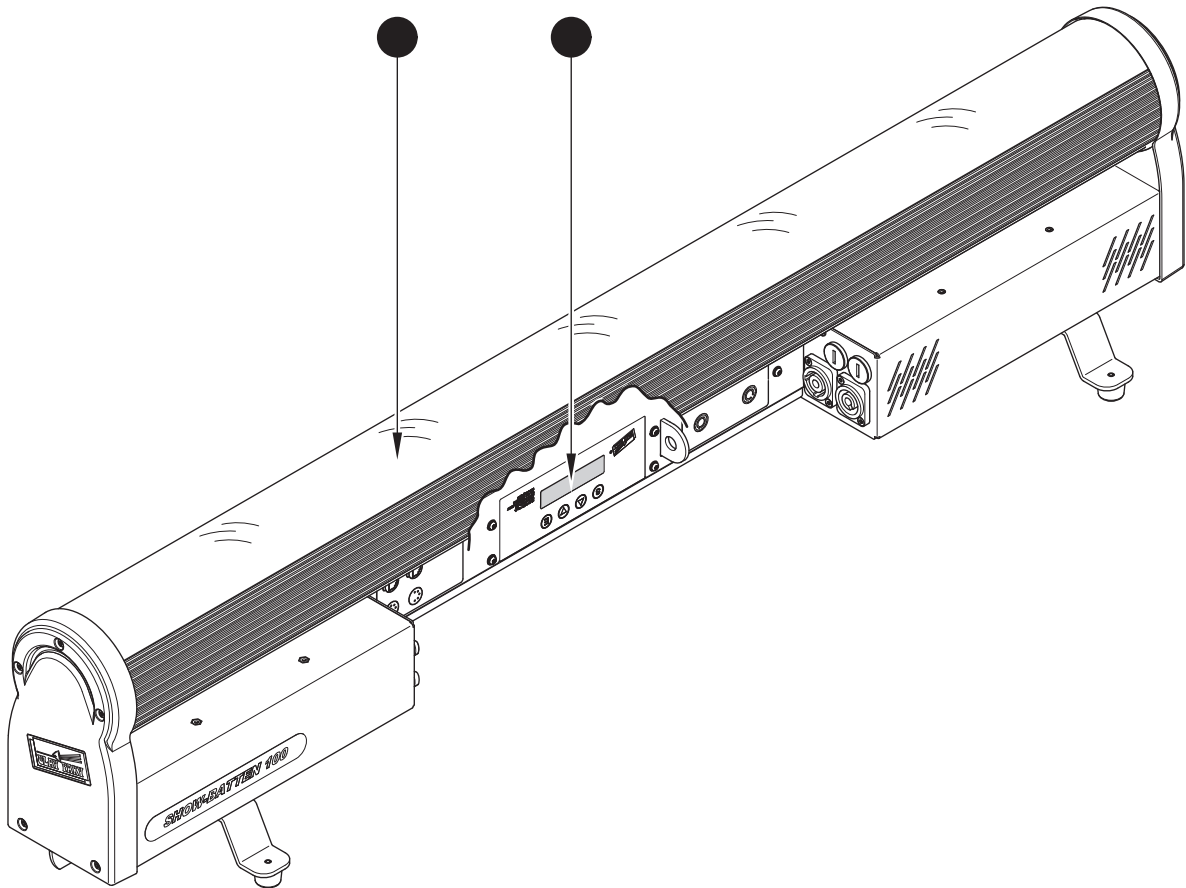
These errors can be shown on the display, the description on this list, can help the user to identify the faulty.

9



**Fuses replacing** - Fig. 9

Each Show Batten has 2 fuses associated with the main power cord connection.



● Parts requiring frequent cleaning.

#### Periodic cleaning - Fig. 10

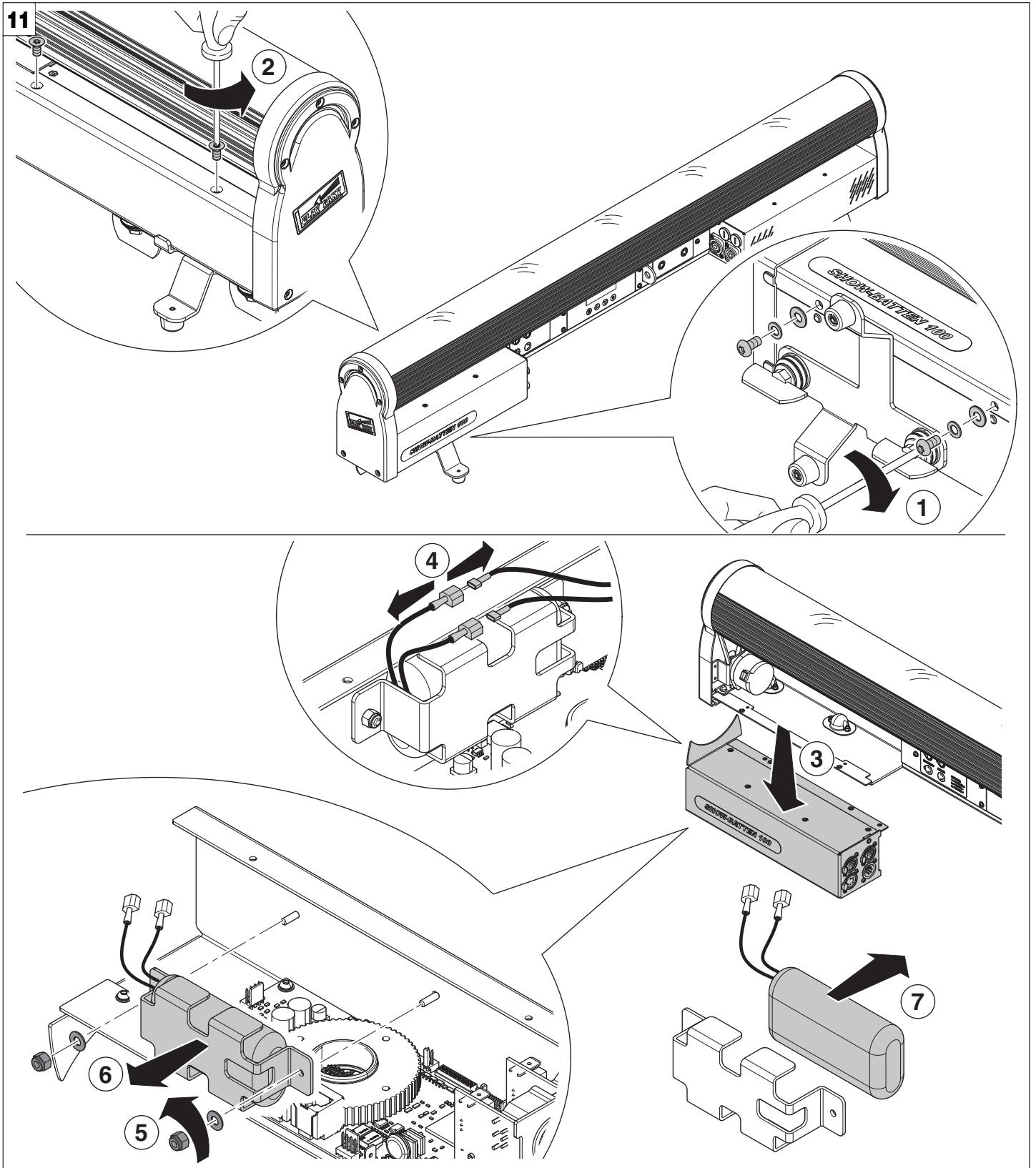
To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors such as wear and the work environment quality (air humidity, dust, salinity, etc.). To remove dirt from external parts, use a soft cloth dampened with any liquid glass cleaning detergent.

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.
- General visual check of internal parts, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.

#### Cleaning transparent cover

Only use neutral soap and water to clean the transparent cover then dry it carefully with a soft, non-abrasive cloth. (WARNING: the use of alcohol or any other detergent could damage the transparent cover.)



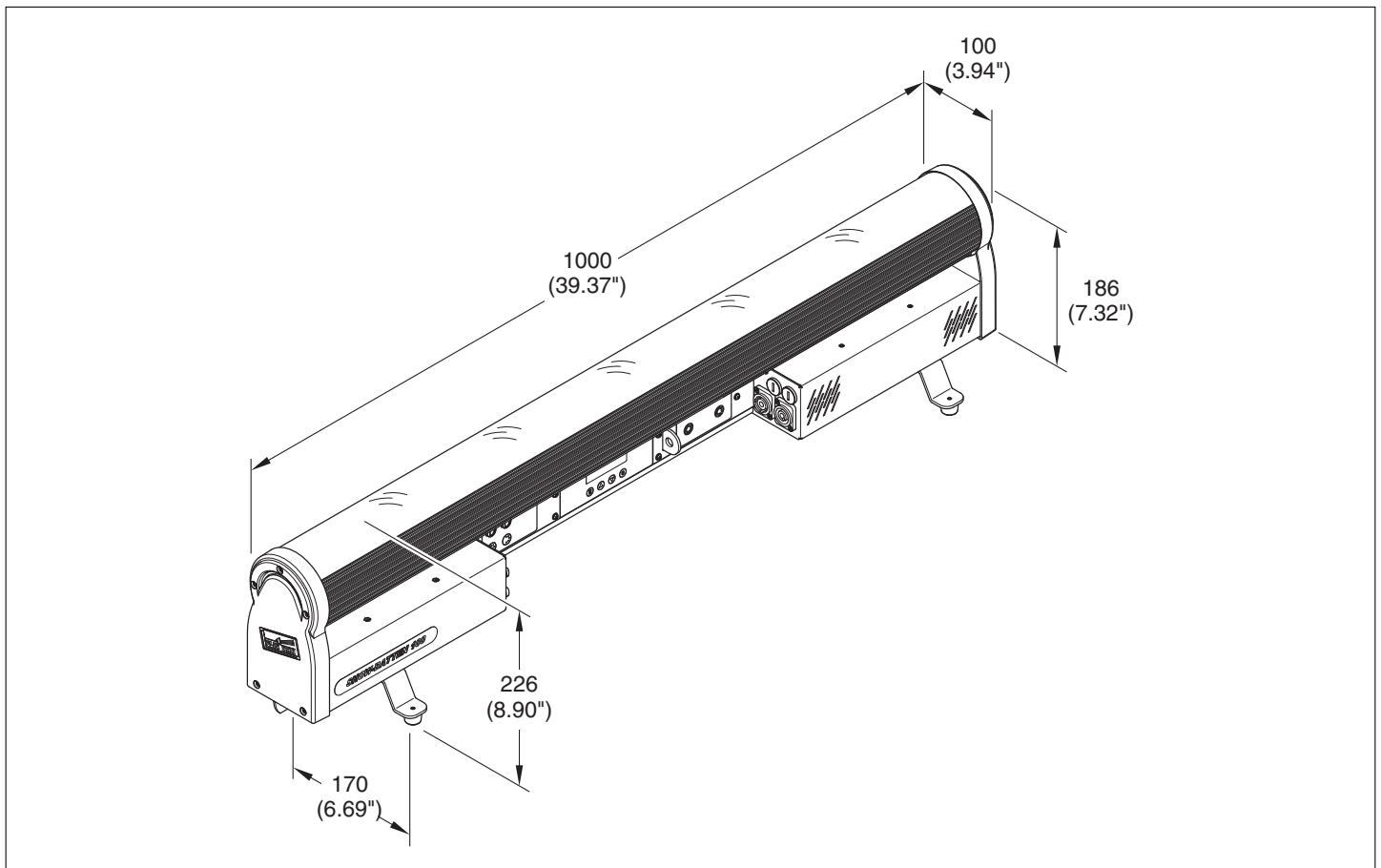
**Battery removal - Fig. 11**



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.



## TECHNICAL DATA



### Power supplies

- 100/240V 50/60 Hz
- Automatic power supply

### Input power

- 170 VA
- Max 1700VA connecting Max 10 units

### Total lumen output

- SB100:** Max 2.840 lm
- SB100AS:** Max 2.590 lm

### Light source

- 10x15W LED RGBW
- Type: OSRAM OSTAR - SMT LE RTDUW S2W
- Color Temperature: 6.000 K
- Life: 50.000 hrs
- Luminous flux: 6.800 lm

### Motors

3 stepper motors, operating with micro steps, totally microprocessor controlled

### Channels

- 10 channels DMX 512 standard mode
- 50 channels DMX 512 extended mode

### Control inputs

- DMX 512
- ART-NET

### Moving body

Automatic repositioning of TILT after accidental movement not controlled by control unit.

### PAN

No Rotation

### TILT

- Angle rotation: 240°
- Fast speed: 0,2 sec
- Resolution tilt: 0,94

### Weight

10 Kg (22 lbs)

### IP rating

- IP20
- Protected against the entry of solid bodies larger than 12mm (0,47")
- No protection against the entry of liquids

### Safety devices

- Automatic shut-down in case of power supply overcurrent or overheating
- Automatic derating, in case of LED overheating or failed operation of cooling system

### Cooling

Forced ventilation with fans and heat sink

### Body

- Body extruded in black anodized aluminum
- Aluminum and steel structure with plastic covers

### Working position

- Any working position
- Hanging system: with fast-lock omega clamps (1/4 turn) on the base

### Optics

- 45mm diam. lens
- **SB100:** Zoom: min 10°x23°, max 43°x48° (at 50%); min 23°x35°, max 66°x76° (at 10%)
- **SB100 AS:** Zoom: min 8°x25°, max 9°x45° (at 50%); min 18°x37°, max 21°x74° (at 10%)
- Fast speed: 0,3 sec

### Color system and effects section:

- Individual color RGBW control for each LED
- Global dimmer
- Color temperature control from 2.500 K to 8.000 K
- Strobe from 1 to 20 flashes/sec
- Random and macro strobe
- Macro color

### Control and programming:

- DMX protocol signal: USITT DMX 512
- Display: LCD 2 lines with 16 characters each, backlit LED, white on black
- Tilt Resolution: 8 bit
- Dimmer Resolution: 8 bit
- Strobe 20Hz
- DMX signal connection: 5 pole XLR input and output
- Software upload through DMX input

### Electronics

- Long life self-charging buffer battery
- Electronic monitoring with status error
- Cooling system monitoring
- DMX level monitoring on all channels
- Internal data transmission diagnostics
- Firmware upgrade with no power
- Firmware upload from another fixture

## CAUSE AND SOLUTION OF PROBLEMS

THE PROJECTOR WILL NOT SWITCH ON				<b>TROUBLE</b>
THE PROJECTOR WILL NOT SWITCH ON				
DEFECTIVE PROJECTION				
REDUCED LUMINOSITY				
<b>POSSIBLE CAUSES</b>			<b>CHECKS AND REMEDIES</b>	
●			No power supply.	Check the power supply voltage.
●		●	LED burnt out or defective.	Call an authorised technician.
	●		Signal transmission cable faulty or disconnected.	Replace the cables.
	●		Incorrect addressing.	Check addresses (see instructions).
	●		Fault in the electronic circuits.	Call an authorised technician.
		●	Optic fault.	Call an authorised technician.
		● ●	Dust or grease deposits.	Clean (see instructions).

## CHANNEL LIST

### SHOW BATTEN 100

CHANNEL	CHANNEL MODE	
	STANDARD	EXTENDED
1	RED	RED
2	GREEN	GREEN
3	BLUE	BLUE
4	WHITE	WHITE
5	CTO	CTO
6	DIMMER	DIMMER
7	STROBE	STROBE
8	MACRO COLOUR	MACRO COLOUR
9	ZOOM	ZOOM
10	TILT	TILT
11	-	RED LED 1
12	-	GREEN LED 1
13	-	BLUE LED 1
14	-	WHITE LED 1
15 - 18	-	R-G-B-W LED 2
19 - 22	-	R-G-B-W LED 3
23 - 26	-	R-G-B-W LED 4
27 - 30	-	R-G-B-W LED 5
31 - 34	-	R-G-B-W LED 6
35 - 38	-	R-G-B-W LED 7
39 - 42	-	R-G-B-W LED 8
43 - 46	-	R-G-B-W LED 9
47 - 50	-	R-G-B-W LED 10

## CHANNEL FUNCTIONS

Channel Mode		DMX Value	Function
Standard	Extended		
<b>1</b>	<b>1</b>		<b>RED</b>
		0 - 255	Red colour linearly increase from no-light to maximum intensity
<b>2</b>	<b>2</b>		<b>GREEN</b>
		0 - 255	Green colour linearly increase from no-light to maximum intensity
<b>3</b>	<b>3</b>		<b>BLUE</b>
		0 - 255	Blue colour linearly increase from no-light to maximum intensity
<b>4</b>	<b>4</b>		<b>WHITE</b>
		0 - 255	White colour linearly increase from no-light to maximum intensity
<b>5</b>	<b>5</b>		<b>CTO</b>
		0 - 9	Unused range
		10 - 255	Colour Temperature linearly change
<b>6</b>	<b>6</b>		<b>DIMMER</b>
		0 - 255	Light output linearly increase from off to maximum brightness
<b>7</b>	<b>7</b>		<b>STROBE</b>
		0 - 3	Light ON
		4 - 69	Strobe at linearly variable frequency from low (1 flash/sec) to high (24 flashes/sec)
		70 - 74	Light ON
		75 - 140	Pulsation at linearly variable speed from slow (0.5 flash/sec) to fast (24 flash/sec)
		141 - 206	Pulsation at linearly variable speed from fast (24 flash/sec) to slow (0.5 flash/sec)
		207 - 211	Light ON
		212 - 224	Random Strobe at low frequency
		225 - 237	Random Strobe at medium frequency
		238 - 250	Random Strobe at high frequency
251 - 255	Light ON		

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	<b>MACRO COLOUR</b>
0 - 9	Unused range
10	Red
11	Green
12	Blue
13	Cyan
14	Yellow
15	Magenta
16	White 7000K
17	White 3700K
18	White 5000K
19	Black
20 – 22	Medium Yellow
23 – 26	Straw Tint
27 – 28	Surprise Peach
29	Fire
30	Medium Amber
31	Gold Amber
32 – 34	Dark Amber
35 – 44	Sunrise Red
45	Light Pink
46 – 48	Medium Pink
49 – 61	Pink Carnation
62 – 67	Light Lavender
68 – 77	Lavender
78 – 88	Sky Blue
89 – 99	Just Blue
100 – 109	Dark Yellow green
110 – 111	Spring Yellow
112	Light Amber
113	Straw
114	Deep Amber
115 – 116	Orange
117	Light Rose
118	English Rose
119	Light Salmon
120	Middle Rose
121 – 122	Dark Pink
123 – 124	Magenta
125	Peacock Blue
126	Med Blue Green
127	Steel Blue
128	Light Blue
129 – 130	Dark Blue
131 – 133	Leaf Green
134 – 135	Dark Green
136 – 137	Mauve
138 – 141	Bright Pink
142 – 144	Medium Blue
145	Deep Golden Amber
146	Pale Lavender
147 – 148	Special lavender
149 – 150	Primary Green
151 – 156	Bright Blue
157 – 161	Apricot
162 – 167	Pale Gold
168 – 171	Deep Orange
172 – 173	Bastard Amber
174	Flame Red
175 – 178	Daylight Blue
179	Lilac Tint
180 – 183	Deep Lavender
184 – 190	Dark Steel Blue
191 – 206	Congo Blue
207	Alice Blue
208	Dirty White
209 - 255	White

<b>9</b>	<b>9</b>		<b>ZOOM</b>
		0 - 255	Zoom linearly moves from narrow to wide beam
<b>10</b>	<b>10</b>		<b>TILT</b>
		0 - 255	Moving batten linearly tilts from -120° to +120°
-	<b>11</b>		<b>RED LED 1</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>12</b>		<b>GREEN LED 1</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>13</b>		<b>BLUE LED 1</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>14</b>		<b>WHITE LED 1</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>15</b>		<b>RED LED 2</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>16</b>		<b>GREEN LED 2</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>17</b>		<b>BLUE LED 2</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>18</b>		<b>WHITE LED 2</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>19 - 22</b>		<b>RED - GREEN - BLUE - WHITE LED 3</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>23 - 26</b>		<b>RED - GREEN - BLUE - WHITE LED 4</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>27 - 30</b>		<b>RED - GREEN - BLUE - WHITE LED 5</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>31 - 34</b>		<b>RED - GREEN - BLUE - WHITE LED 6</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>35 - 38</b>		<b>RED - GREEN - BLUE - WHITE LED 7</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>39 - 42</b>		<b>RED - GREEN - BLUE - WHITE LED 8</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>43 - 46</b>		<b>RED - GREEN - BLUE - WHITE LED 9</b>
		0 - 255	Brightness linearly increase from off to maximum value
-	<b>47 - 50</b>		<b>RED - GREEN - BLUE - WHITE LED 10</b>
		0 - 255	Brightness linearly increase from off to maximum value

# SHOW BATTEN 100

LED reference number for pixel mapping

