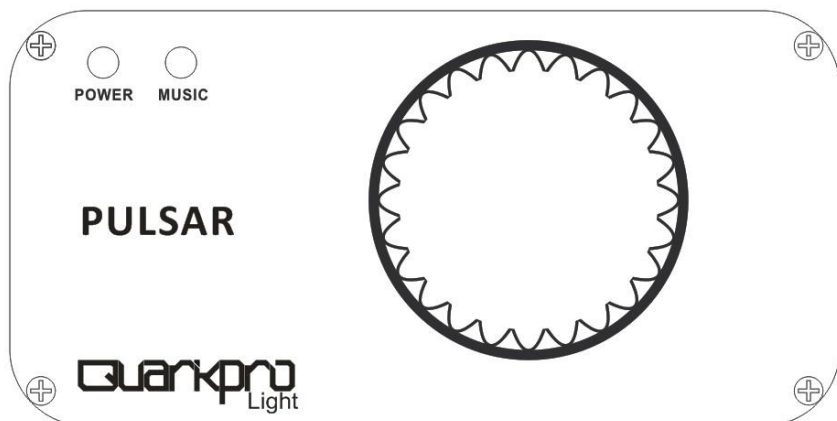


QUARKPRO Light

MANUAL DEL USUARIO

USER MANUAL

PULSAR



MANUAL DE INSTRUCCIONES

Gracias por adquirir este Laser **PULSAR** de **Quarkpro Light**.

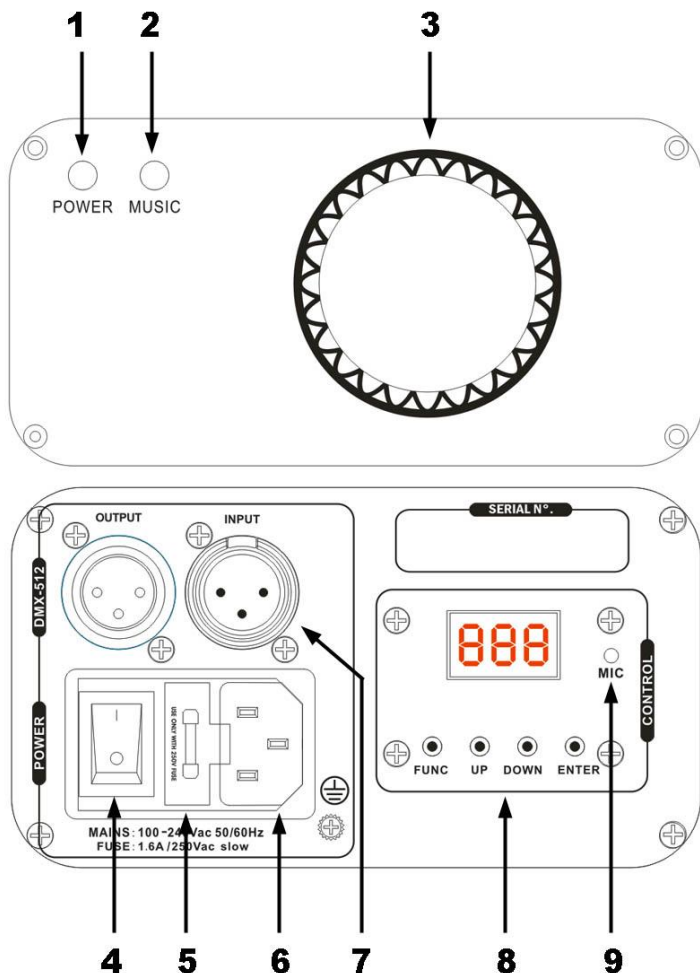
Esta unidad contiene internamente unidades de laser de alta potencia. No abra la carcasa del láser, debido a la potencial exposición a niveles altos de radiación laser. Los niveles de laser accesibles si se abre la carcasa pueden causar ceguera, quemaduras de piel y fuego.

Versión: 1.0

Este manual contiene importante información sobre el uso del láser. Para prevenir daños en los ojos y evitar el cumplimiento de la ley, lea y comprenda todas las instrucciones antes de encender el láser por primera vez y guarde este manual en un lugar seguro para futura información.

DESCRIPCION DEL PRODUCTO

- Este producto ha sido enviado desde el proveedor en perfecto estado. Para asegurarse del correcto mantenimiento y asegurar una correcta y segura operación, es necesario para el usuario de seguir las instrucciones y notas de aviso escritas en este manual.
- El distribuidor no aceptará ninguna responsabilidad de cualquier daño causado por el resultado del no seguimiento de este manual o de cualquier modificación no autorizada de este aparato.



| N. | NOMBRE | DESCRIPCION |
|----|-----------------------|--|
| 1 | LED de Funcionamiento | Indica si el aparato esta encendido. |
| 2 | LED de Sonido | Sincronizado con el sonido detectado. |
| 3 | Salida del Laser | NUNCA MIRAR A TRAVES DE ESTA SALIDA CUANDO EL LASER ESTE |

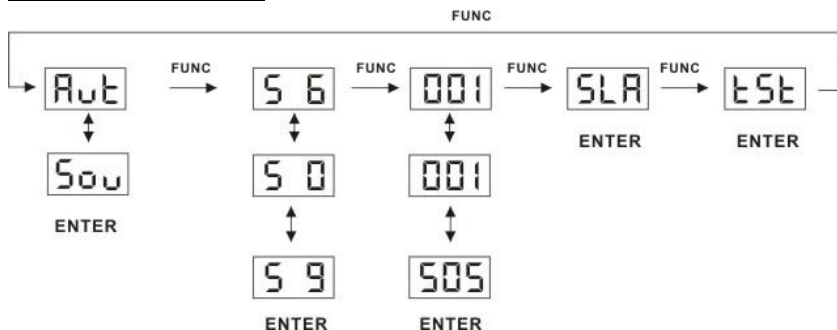
| | | |
|---|--------------------------|---|
| | | ENCENDIDO. |
| 4 | Interruptor de Encendido | Enciende o Apaga el aparato. |
| 5 | Porta-Fusibles | Para reemplazar el fusible |
| 6 | Entrada Alimentación | Con conector IEC y porta fusible. |
| 7 | DMX Entrada/Salida | 3 pin Conector XML Macho/Hembra |
| 8 | Panel de Control | Para controlar el aparato. Más información en el apartado (Control y Función) |
| 9 | Micrófono | Para detectar el audio. |

CONTROL Y FUNCION

- Es conveniente apagar el aparato regularmente entre cada Show para maximizar la vida de este. Este aparato no ha sido diseñado para un uso continuo.
- No encienda y apague la unidad en intervalos muy cortos.
- Desconecte siempre la unidad si no va a ser usada en un tiempo prolongado.
- En caso de malfuncionamiento, desconecte la unidad y contacte con su distribuidor inmediatamente.

ATENCIÓN: La emisión del Laser se activara en unos 5 segundos tras encender el aparato.

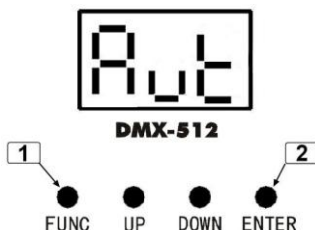
FUNCIONAMIENTO



AUTO SHOW – Modo Automático

- Pulse FUNC para entrar en la OPCION DE MODO.
- El LED parpadeara y el panel LED mostrara AUT.
- Presione ENTER para confirmar.

El Laser comenzara a trabajar en modo Automático– AUTO SHOW. Cada vez que encienda el Laser este será el Show por defecto.



SHOW ACTIVADO POR AUDIO (MUSIC SHOW) Modo Automático

- Pulse FUNC para entrar en la OPCION DE MODO.
- El LED parpadeara y el panel LED mostrara SoU.
- Presione ENTER para confirmar.
- El Laser comenzara a trabajar en modo Automático– SHOW ACTIVADO POR AUDIO. Cada vez que encienda el Laser este será el Show por defecto.



SHOW ACTIVADO POR AUDIO (Configuración de sensibilidad)

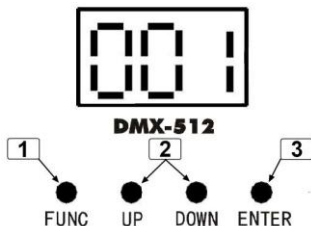
- Pulse FUNC hasta ver S 6
- Pulse UP/DOWN para configurar la sensibilidad del micrófono S 0 es sin activación, de S 1 a S 9, la sensibilidad aumenta.
- Presione ENTER para confirmar.



MODO DMX

- Pulse FUNC para entrar en la OPCION DE MODO.
- Pulse hasta que el panel muestre 001.
- Presione ENTER para confirmar.

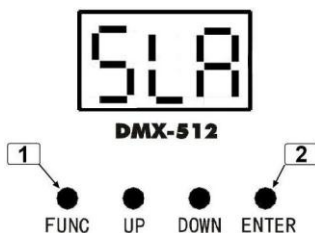
El Laser comenzara a funcionar en “MODO DMX”. Pulse UP/DOWN para cambiar la dirección DMX.











MODO MAESTRO/ESCLAVO

- Pulse FUNC para entrar en la OPCION DE MODO.
- Pulse hasta que el panel muestre SLA
- Presione ENTER para confirmar.

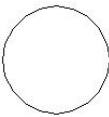








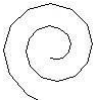
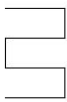





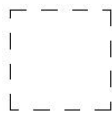











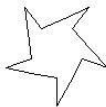

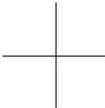

El láser comenzara a funcionar en “MAESTRO/ESCLAVO”. Conecte el Laser Maestro y los láseres Esclavos con cables DMX. Los Láseres Esclavos reproducirán exactamente lo que que el Laser Maestro reproduzca.



PROTOCOLO DMX

| CANAL | VALOR | FUNCION | |
|--|---------|--|---|
| CH 1 MODO | 000-063 | Black Out Laser |  |
| | 064-127 | SHOW AUTOMATICO | |
| | 128-191 | SHOW AUDIO (MUSICA) | |
| | 192-255 | MODO DMX (Activación de otros canales) | |
| CH 2 | 000-255 | 32 Patrones (Mostrados en la lista) | |
| CH 3 ZOOM | 0-127 | 100%-5% Tamaño |  |
| | 128-169 | Zoom In |  |
| | 170-209 | Zoom Out | |
| | 210-255 | Zoom In / Out | |
| CH 4 ROTACION EJE Y | 000-127 | 0 -359° Rotación Eje Y |  |
| | 128-191 | Rotación Derecha | |
| | 192-255 | Rotación Izquierda | |
| CH 5 ROTACION EJE X | 000-127 | 0 -359° Rotación Eje X |  |
| | 128-191 | Rotación Derecha | |
| | 192-255 | Rotación Izquierda | |
| CH 6 ROTACION EJE Y | 000-127 | 0 -359° Rotación Eje Z |  |
| | 128-191 | Rotación Derecha | |
| | 128-255 | Rotación Izquierda | |
| CH 7 MOVIMIENTO EJE X | 000-127 | 128 posiciones del Eje X |  |
| | 128-191 | Rotación Derecha | |
| | 128-255 | Rotación Izquierda | |
| CH 8 MOVIMIENTO EJE Y | 000-127 | 128 posiciones del Eje Y |  |
| | 128-191 | Rotación Derecha | |
| | 128-255 | Rotación Izquierda | |

LISTA DE PATRONES DEL CANAL 2

| DMX | PATRONES | DMX | PATRONES | DMX | PATRONES | DMX | PATRONES |
|---------|---|---------|---|---------|---|---------|--|
| 000-007 |  | 064-071 |  | 128-135 |  | 190-197 |  |
| 008-015 |  | 072-079 |  | 136-143 |  | 198-205 |  |
| 016-023 |  | 080-087 |  | 144-151 |  | 206-213 |  |
| 024-031 |  | 088-095 |  | 152-159 |  | 214-221 |  |
| 032-039 |  | 096-103 |  | 160-167 |  | 222-229 |  |
| 040-047 |  | 104-111 |  | 168-175 |  | 230-237 |  |
| 048-055 |  | 112-119 |  | 176-181 |  | 238-245 |  |
| 056-063 |  | 120-127 |  | 182-189 |  | 246-255 |  |

ESPECIFICACIONES TECNICAS

| | |
|-------------------------------------|------------------------|
| Alimentación: | AC100-240V, 50/60Hz |
| Fusible: | 250V 1 A |
| Consumo: | 12W |
| Control Audio: | Micrófono Interno |
| Potencia del Laser: | 30mW-G CW |
| Clasificación Laser: | Clase3B |
| Estándar de Seguridad Laser: | EN60825-1 2007 |
| Temp. De funcionamiento: | 10~40°C |
| Conexión DMX: | 3 pin XLR Macho/Hembra |
| Canales DMX: | 8 Canales |
| Medidas: | 145x160x80mm |
| Peso Neto: | 1.8 Kg |

Especificaciones sujetas cambios sin previo aviso.

USER MANUAL

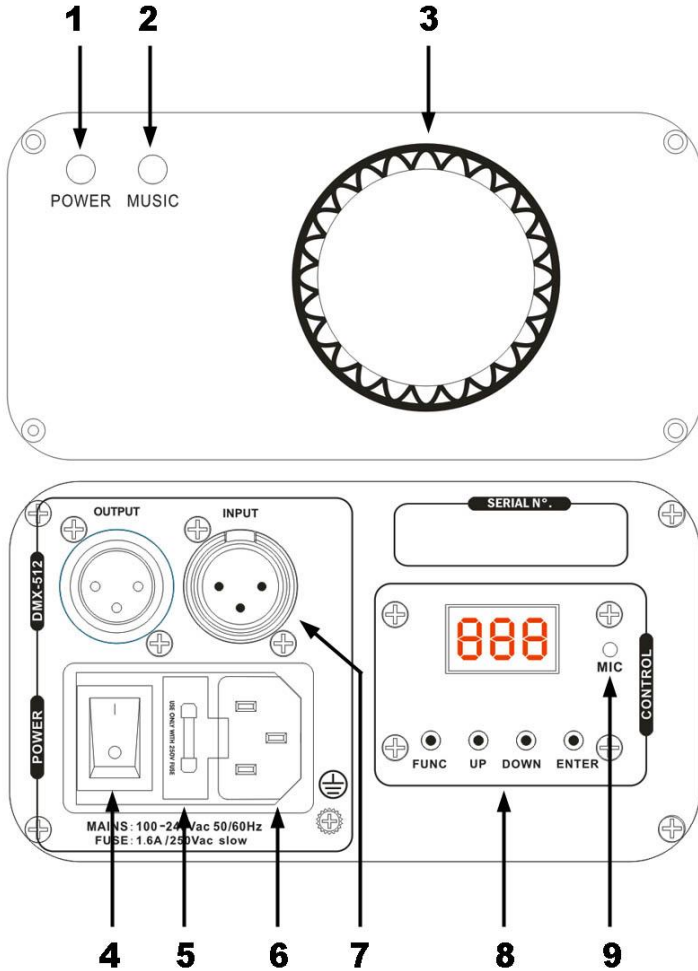
Thanks for purchasing this **Quarkpro Light – PULSAR**

Version: 1.0

This manual contains important laser operation information. Read and understand all instructions prior to powering on laser unit the first time, to avoid laser eye injury and to avoid breaking the law. Keep this manual in a safe place for future reference.

PRODUCT OVERVIEW

- This device has left out premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.



| NO. | NAME | DESCRIPTION |
|-----|----------------|---|
| 1 | Power LED | Indicates the fixture is switched on |
| 2 | Music LED | Synchronize to detected music signal |
| 3 | Laser Aperture | The laser effect output aperture. NEVER LOOK INSIDE THE FIXTURE THROUGH THIS APERTURE WHILE FIXTURE IS OPERATING. |

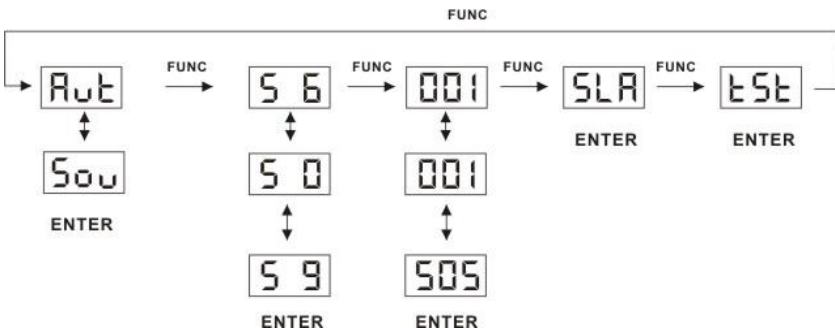
| | | |
|---|------------------|---|
| 4 | Power Switch | Switch ON and OFF the fixture |
| 5 | Fuse Holder | The replaced fuse is hold here |
| 6 | Main Power Input | With IEC socket and integrated fuse holder. |
| 7 | DMX Input/Output | 3 pins male/female XLR connector |
| 8 | Control panel | To control the fixture with digital LED display, check more information on CONTROL & FUNCTION |
| 9 | Microphone | To detect the music/sound signal |

CONTROL & FUNCTION

- Regular breaks during operation are essential to maximize the life of this device as it is not designed for continual use.
- Do not switch the unit on and off in short time intervals
- Always unplug the unit when it is not used for a longer time. Or before replacing the bulb or start servicing.
- In the event of serious operation problems, stop using the fixture and contact your dealer immediately.

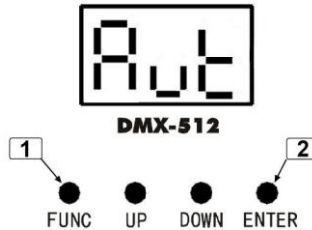
ATTENTION: Laser will be output from laser aperture in 5 seconds after the unit is powered on.

Operation



- Till to LED panel shows AuT.
- Press ENTER to confirm the setting.

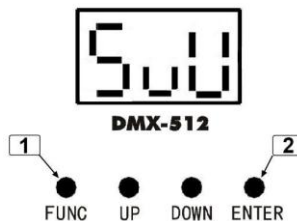
The laser is working in standalone mode – AUTO SHOW. Each time when you turn on your laser, you will have this confirmed laser show.



SOUND ACTIVATED SHOW (MUSIC SHOW) Stand Alone Mode

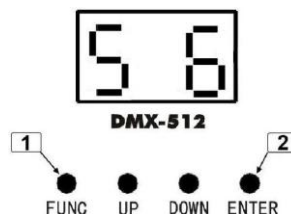
- Press FUNC to enter MODE OPTION.
- Till to LED panel shows SoU.
- Press ENTER to confirm the setting.

The laser is working in standalone mode – SOUND ACTIVATED SHOW. Each time when you turn on your laser, you will have this confirmed laser show.



SOUND ACTIVATED MODE sensitivity setting

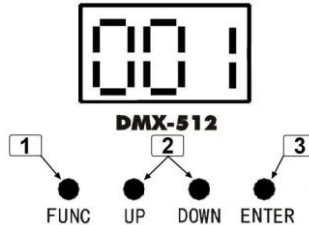
- Press FUNC till to see S 6
- Press UP/DOWN to set microphone sensitivity. S 0 is no sound activated, from S 1 to S 9, the sensitivity level is going more sensitive.
- Press ENTER to confirm and save the setting.



DMX MODE

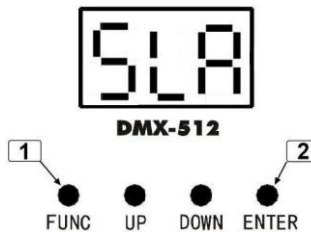
- Press FUNC to enter MODE OPTION
- Till to LED panel shows 001.
- Press ENTER to confirm the setting.

The laser is working in “DMX MODE”. With help of UP/DOWN button, it could be easily change the DMX address of the laser.








**MASTER/SLAVE MODE**

- Press FUNC to enter MODE OPTION
- Till to LED panel shows SLA
- Press ENTER to confirm the setting.

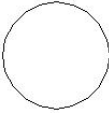








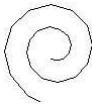
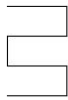

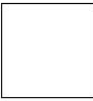







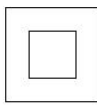











The laser is working in “SLAVE MODE”. Connect MASTER laser and SLAVE lasers with DMX cable, the SLAVE lasers do what exactly MASTER laser does. Check “5.2 DMX connection” to have more details about laser connection.



DMX PROTOCOL

| CHANNEL | VALUE | FUNCTION | |
|-------------------------------------|---------|--------------------------------------|---|
| CH 1 MODE | 000-063 | Laser Block Out | ⓪ |
| | 064-127 | AUTO SHOW | |
| | 128-191 | SOUND ACTIVATED SHOW (MUSIC) | |
| | 192-255 | DMX MODE (Other channels activated) | |
| CH 2 | 000-255 | 32 Patterns as shown in PATTERN LIST | |
| CH 3 ZOOMING | 0-127 | 100%-5% Size |  |
| | 128-169 | Zooming In |  |
| | 170-209 | Zooming Out | |
| | 210-255 | Zooming In & Out | |
| CH 4 Y AXIS ROLLING | 000-127 | 0 -359 degree fixed Y axis rolled |  |
| | 128-191 | Clockwise rolling | |
| | 192-255 | Anticlockwise rolling | |
| CH 5 X AXIS ROLLING | 000-127 | 0 -359 degree fixed X axis rolled |  |
| | 128-191 | Clockwise rolling | |
| | 192-255 | Anticlockwise rolling | |
| CH 6 Z AXIS ROTATING | 000-127 | 0 -359 degree fixed Z axis rotate |  |
| | 128-191 | Clockwise rotating | |
| | 128-255 | Anticlockwise rotating | |
| CH 7 X AXIS MOVING | 000-127 | 128 different fixed position on X |  |
| | 128-191 | Clockwise moving | |
| | 128-255 | Anticlockwise moving | |
| CH 8 Y AXIS MOVING | 000-127 | 128 different fixed position on Y |  |
| | 128-191 | Clockwise moving | |
| | 128-255 | Anticlockwise moving | |

PATTERN LIST IN CHANNEL 2

| DMX | PATTERNS | DMX | PATTERNS | DMX | PATTERNS | DMX | PATTERNS |
|---------|---|---------|---|---------|---|---------|--|
| 000-007 |  | 064-071 |  | 128-135 |  | 190-197 |  |
| 008-015 |  | 072-079 |  | 136-143 |  | 198-205 |  |
| 016-023 |  | 080-087 |  | 144-151 |  | 206-213 |  |
| 024-031 |  | 088-095 |  | 152-159 |  | 214-221 |  |
| 032-039 |  | 096-103 |  | 160-167 |  | 222-229 |  |
| 040-047 |  | 104-111 |  | 168-175 |  | 230-237 |  |
| 048-055 |  | 112-119 |  | 176-181 |  | 238-245 |  |
| 056-063 |  | 120-127 |  | 182-189 |  | 246-255 |  |

SPECIFICATIONS

| | |
|-------------------------------|---------------------------------|
| Mains Input: | AC100-240V, 50/60Hz |
| Fuse: | 250V 1 A Slow Blow (20mm Glass) |
| Total Power: | 12W |
| Music Control: | Internal microphone |
| Laser Power: | 30mW-G CW |
| Laser Classification: | Class 3B |
| Laser Safety Standard: | EN60825-1 2007 |
| Condition Temperature: | 10~40°C |
| DMX Connections: | 3 pins XLR Male/Female |
| DMX Channels | 8 channels |
| Measurement: | 145x160x80mm |
| N Weight: | 1.8 Kg |

Specifications subject to change without prior notice.

Quarkpro®

www.quarkpro.com