**FD-GREEN**
LASER SHOW SYSTEM

**FD-BLUE**
LASER SHOW SYSTEM

**scand**LIGHT

## NON-INTERLOCKED HOUSING WARNING

**This unit contains high power laser devices internally. Do not open the laser housing, due to potential exposure to unsafe levels of laser radiation. The laser power levels accessible if the unit is opened can cause instant blindness, skin burns and fires.**

## LASER EMISSION DATA

| | |
|---|---|
| Laser Classification | Class 3B |
| Green Laser Medium | DPSS Nd:YVO4, 532nm |
| Green Laser Medium | LD 450nm, typical |
| Beam Diameter | <5mm at aperture |
| Pulse Data | All pulses < 4Hz (>0.25sec) |
| Divergence (each beam) | <2 mrad |
| Divergence (total light) | <160 degrees |

As measured under IEC measurement conditions for classification.

## Version: 3.0

**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.
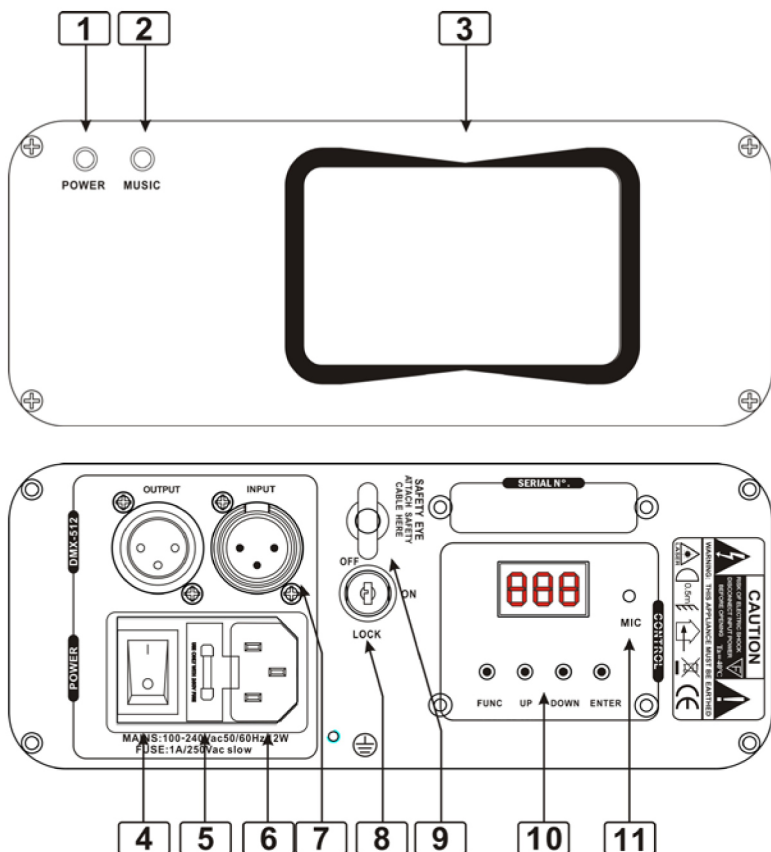
| NO. | NAME | DESCRIPTION |
|-----|------|-------------|
| 1 | Power LED | Indicates the fixture is switched on |
| 2 | Music LED | Synchronize to detected music signal |
| 3 | Laser Aperture | The laser effect output aperture. NEVER LOOK INSIDE THE FIXTURE THROUGH THIS APERTURE WHILE FIXTURE IS OPERATING. |
| 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 | Key Switch | To turn the laser effect (laser diode) ON/OFF. Be sure that only authorized operator hold the key |
| 9 | Safety Eye | Used to attach a safety cable when the fixture is rigged. Check more details in RIGGING |
| 10 | Control panel | To control the fixture with digital LED display, check more information on CONTROL & FUNCTION |
| 11 | 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.**
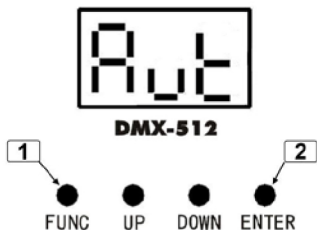
## Operation
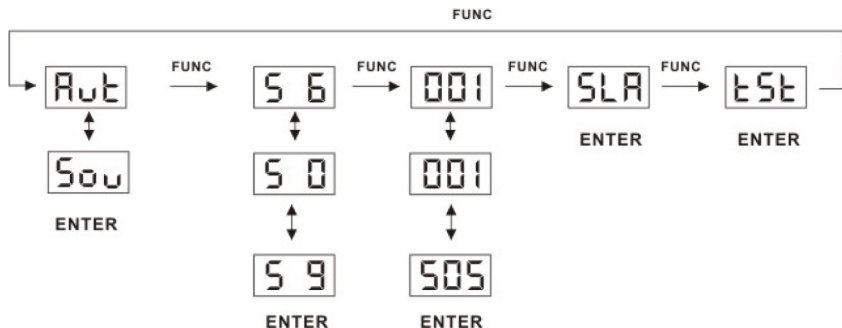


### AUTO SHOW Stand Alone Mode

- Press FUNC to enter MODE OPTION.
- 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.



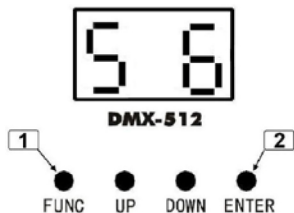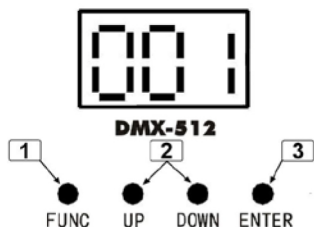### SOUND AVTIVATED SHOW (MUSIC SHOW) Stand Alone Mode

- 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.



4
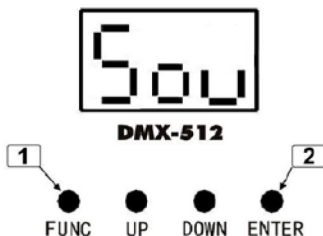
## SOUND ACTIVATED MODE sensitivity setting

- ● 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.

```
 5  6
```
**DMX-512**

1        2

●   ●   ●   ●

FUNC   UP   DOWN   ENTER

## 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.

```
 001
```
**DMX-512**

1     2     3

●   ●   ●   ●

FUNC   UP   DOWN   ENTER

## MASTER/SLAVE MODE

- ● Press FUNC to enter MODE OPTION
- ● Till to LED panel shows SLA
- ● Press ENTER to confirm the setting.
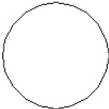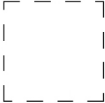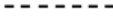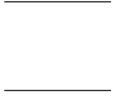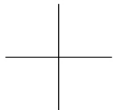
The laser is working in "SLAVE MODE". Connect MASTER laser and SLAVE lasers with DMX cable, the SLAVE lasers do what exactly MASTER laser does. Check "5.2 DMX connection" to have more details about laser connection.

```
 SLA
```
**DMX-512**

1        2

●   ●   ●   ●

FUNC   UP   DOWN   ENTER
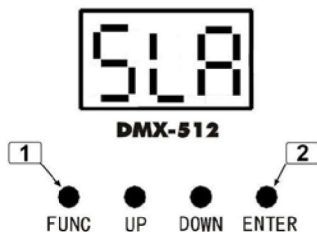
## DMX PROTOCOL

| CHANNEL | VALUE | FUNCTION | |
|---------|-------|----------|---|
| **CH 1**<br>**MODE** | 000-063 | Laser Block Out | |
| | 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**<br>**ZOOMING** | 0-127 | 100%-5% Size | |
| | 128-169 | Zooming In | |
| | 170-209 | Zooming Out | |
| | 210-255 | Zooming In & Out | |
| **CH 4**<br>**Y AXIS**<br>**ROLLING** | 000-127 | 0 -359 degree fixed Y axis rolled | |
| | 128-191 | Clockwise rolling | |
| | 192-255 | Anticlockwise rolling | |
| **CH 5**<br>**X AXIS**<br>**ROLLING** | 000-127 | 0 -359 degree fixed X axis rolled | |
| | 128-191 | Clockwise rolling | |
| | 192-255 | Anticlockwise rolling | |
| **CH 6**<br>**Z AXIS**<br>**ROTATING** | 000-127 | 0 -359 degree fixed Z axis rotate | |
| | 128-191 | Clockwise rotating | |
| | 128-255 | Anticlockwise rotating | |
| **CH 7**<br>**X AXIS**<br>**MOVING** | 000-127 | 128 different fixed position on X | |
| | 128-191 | Clockwise moving | |
| | 128-255 | Anticlockwise moving | |
| **CH 8**<br>**Y AXIS**<br>**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 | |

# LASER POWER

FIT-D(GG): 25mW-G+25mW-G CW

FIT-S( BB): 200mW-B+200mW-B CW

# SPECIFICATIONS

| | |
|---|---|
| **Mains Input:** | AC100-240V, 50/60Hz |
| **Fuse:** | 250V 1 A Slow Blow (20mm Glass) |
| **Total Power:** | 12W |
| **Music Control:** | Internal microphone |
| **Laser Power:** | Class 3B |
| **Laser Classification:** | EN60825-1 2007 |
| **Laser Safety Standard:** | 10~40℃ |
| **Condition Temperature:** | 3 pins XLR Male/Female |
| **DMX Connections:** | 8 channels |
| **DMX Channels** | 145x160x80mm |
| **Measurement:** | 1.55 Kg |
| **N Weight:** | |

Specifications subject to change without prior notice.

The availability of particular products may vary by region. Please check with the dealer.