


## TECHNICAL SPECIFICATION

<b>Voltage</b> : 230Vac, 50/60Hz	<b>Blue</b> : 300mW 455nm
<b>Fuse</b> : 2A Slow blow	<b>DMX Channels</b> : 20
<b>Laser Class</b> : 3B 	<b>Dimensions</b> : 220 x 176 x 99mm
<b>Red Laser</b> : 100mW 638nm	<b>Power Consumption</b> : 45W
<b>Green Power</b> : 50mW 532nm	<b>Weight</b> : 1.6kg

**IMPORTANT NOTE:** This product conformed to Laser & LED Safety standard BSEN60825-1 2007 incorporating corrigendum 2008

### DISPOSAL:



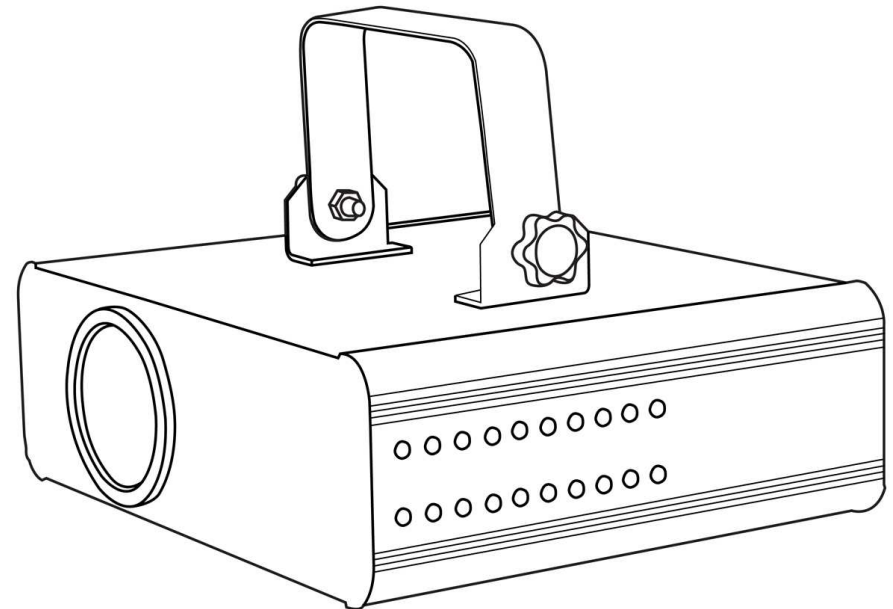
Please disposal of the unserviceable device according to the current statutory requirement

## 3D OBJECTS

### RGB LASER

Order ref: 152.762UK

User Manual



**IMPORTANT SAFETY NOTICE**  
Please Read this manual before operating

VERSION 1.0

**INTRODUCTION:**

**3D OBJECTS RGB LASER**

Thank you for purchasing this 3D Objects laser.

A laser unlike any other featuring innovative projection technology. This laser creates unique solid 3D patterns that warp and rotate when projected on to a flat surface. A truly mesmerizing effect perfect for any lighting rig. Operated in either stand-alone auto mode, sound-to-light, individual pattern select mode or DMX.

- True 3D effect
- Brighter 638nm Red laser technology
- 0.45W total laser power (Red: 100mW, Green 50mW, Blue: 300mW)
- Auto, sound-to-light, pattern select and 20 channel DMX modes
- Master/slave mode
- Easy digital display to set the mode of operation
- Key controlled for laser safety
- We recommend that this product is used within the guidelines HSG95

Cont:

<b>(14) Y axis rotation</b>	000	No rotation
	001-219	Y axis rotational position manual adjust
	220-255	Y axis auto rotation
<b>(15) Adjust speed for CH14</b>	000-255	When channel 14 is 220-255, adjust Y axis auto rotation speed
<b>(16) Z axis rotation</b>	000	No rotation
	001-215	Z axis rotational position manual adjust
	216-255	Z axis auto rotation
<b>(17) Adjust speed for CH16</b>	000-255	When channel 16 is 216-255, adjust Z axis auto rotation speed
<b>(18) Writing</b>	000	No writing
	001-254	Writing manually
	255	Auto writing
<b>(19) Adjust speed for CH18</b>	000-255	When channel 18 is 255, adjust writing speed
<b>(20) Scan speed</b>	000-255	Adjust scanning speed

Please note: Channel 3-20 is effective only under DMX 2 mode.

DMX Channel	DMX Value	Control content
<b>(1) Mode</b>	000-010	Black out
	011-062	Sound control
	063-125	Auto running
	126-189	DMX control ①
	190-255	DMX control ②
<b>(2) Gobos and programs choose</b>	000-255	Select programs under DMX control ①
	000-255	Select gobos under DMX control ②
<b>(3) Strobe</b>	000	No strobe
	001-255	Strobe (Fast to slow)
<b>(4) Colour select</b>	000-139	Select single colour
	140-199	Different colours in seven sections
	200-255	Colour auto change
<b>(5) Adjust speed for CH4</b>	000-255	When channel 4 is 200-255, adjust colour change speed (Slow to fast)
<b>(6) X axis adjust</b>	000	Centre
	001-254	Manually adjust X axis position
	255	Pattern moves along the X axis
<b>(7) Adjust speed for CH6</b>	000-255	When channel 6 is 255, adjust auto-moving speed
<b>(8) Y axis adjust</b>	000	Centre
	001-254	Adjust the position of the Y axis
	255	Pattern moves along the Y axis
<b>(9) Adjust speed for CH8</b>	000-255	When channel 8 is 255, adjust auto-moving speed
<b>(10) Zoom in/out</b>	000	Static
	001-254	Manually adjust the pattern size
	255	Zoom in/out repeatedly
<b>(11) Adjust speed for CH10</b>	000-255	When channel 10 is 255, adjust zoom speed
<b>(12) X axis rotation</b>	000	No rotation
	001-219	X axis rotational position manual adjust
	220-255	X axis auto rotation
<b>(13) Adjust speed for CH12</b>	000-255	When channel 12 is 220-255, adjust X axis auto rotation speed



## **CAUTION**



- **Please read this manual fully before installing or operating this product as it contains important safety information relating to its installation and operation.**



- **This Class 3B laser product emits hazardous levels of optical radiation and will cause injury to the eyes if viewed directly.**
- **This product is not suitable for projection directly at audiences or other personnel.**
- **This product must not be used for any form of audience scanning application and is for professional use only.**

## IMPORTANT INFORMATION:

This product is a Class 3B laser and should only be installed and used by personal who are trained in the management of laser radiation and are able to operate in accordance within the guidance given by the Health and Safety Executive (HSE) in HS(G)95: "The Radiation Safety of Lasers used for Display purposes".

Copies of this guide can be downloaded from the HSE website below:

[www.hse.gov.uk/pubns/priced/hsg95.pdf](http://www.hse.gov.uk/pubns/priced/hsg95.pdf)

This product contains no user-serviceable parts. Under no circumstances should any attempt be made by the user to dismantle or modify it in any way.

## INSTALLATION AND MOUNTING INSTRUCTIONS:

This product must be securely mounted so that its emission is always directed away from people and objects that are able to reflect the emission towards people. In this regard the separation distances of 3 metres vertically and 2.5 metres horizontally, cited in HS(G)95 and shown overleaf must be observed.

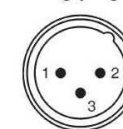
## DMX

The fixture is equipped with 3-pin XLR connectors for DMX input and output. The SE connectors are wired in parallel. Only use a shielded twisted-pair cable designed for 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

DMX - output  
XLR mounting-sockets (rear view):

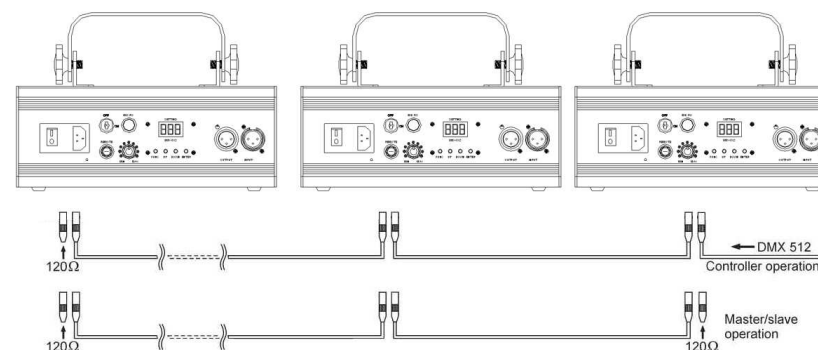


DMX-input  
XLR mounting-plugs (rear view):



- 1 - Shield
- 2 - Signal (-)
- 3 - Signal (+)

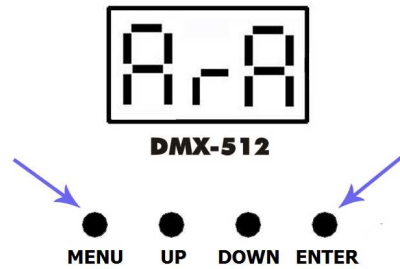
Building a serial DMX-chain:



**Caution:** At the last fixture, the DMX-cable has to end with a terminator. Solder a 120 Ohm resistor between PIN 2 (-) and PIN 3 (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

When in DMX mode there are two channels with the following function:

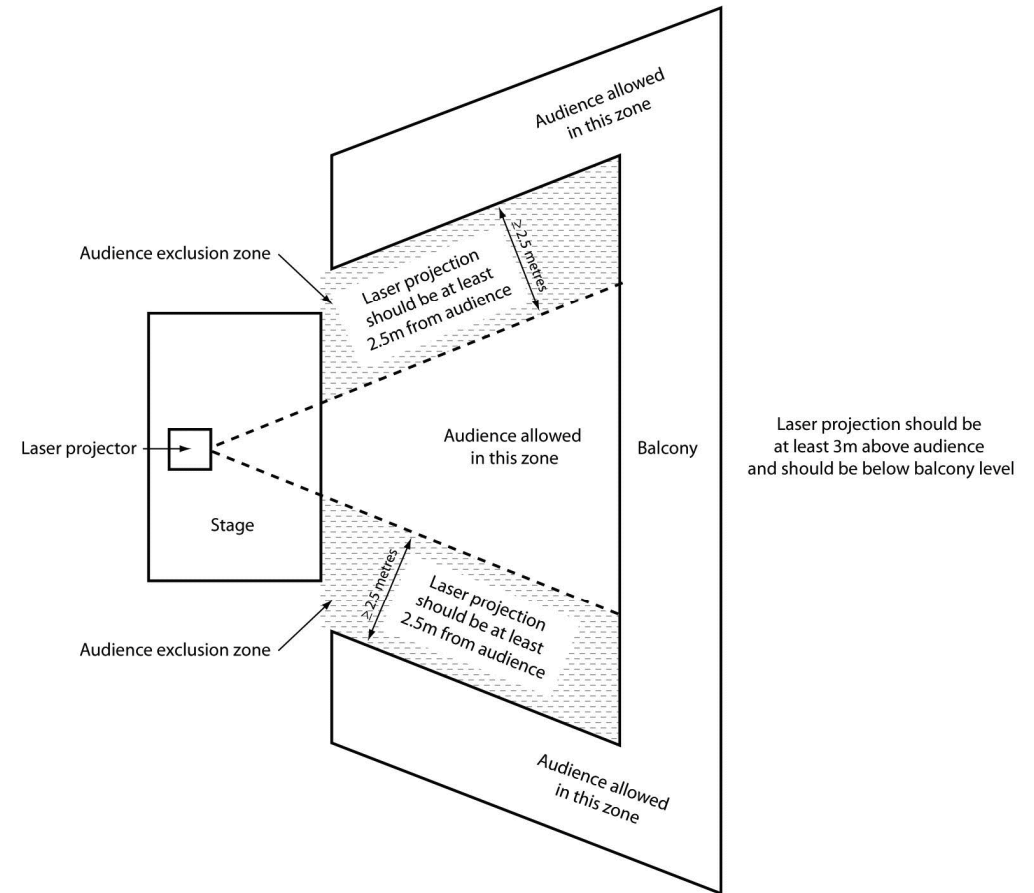
### OPERATION FOR 3D OBJECTS LASER



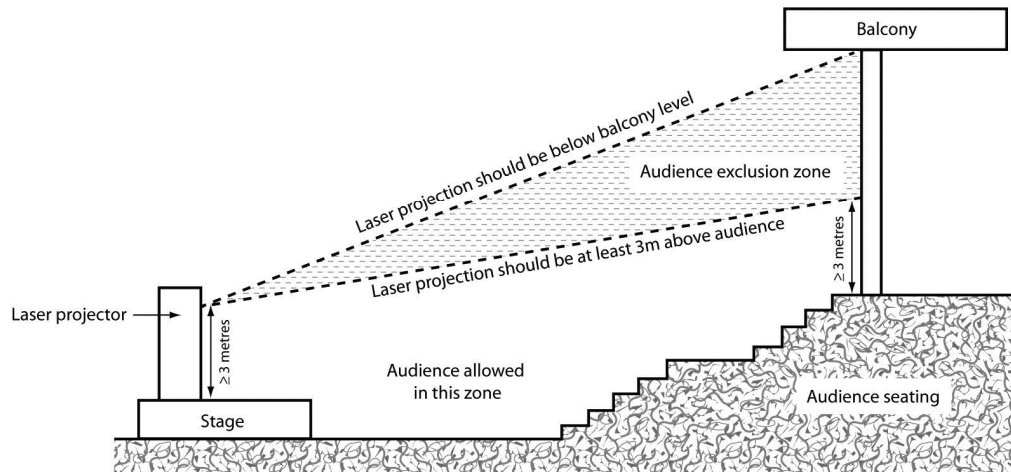
Press the "MENU" button to enter setup mode followed by the "UP" & "DOWN" keys to select the mode you desire. To confirm your selection press "ENTER"

Display	Function
AUt	Auto running random effects cycle
SOU	Sound activated random effects cycle
rgb	Colour select mode
P00-P19	Pattern select
001-512	DMX address
SLA	Slave mode

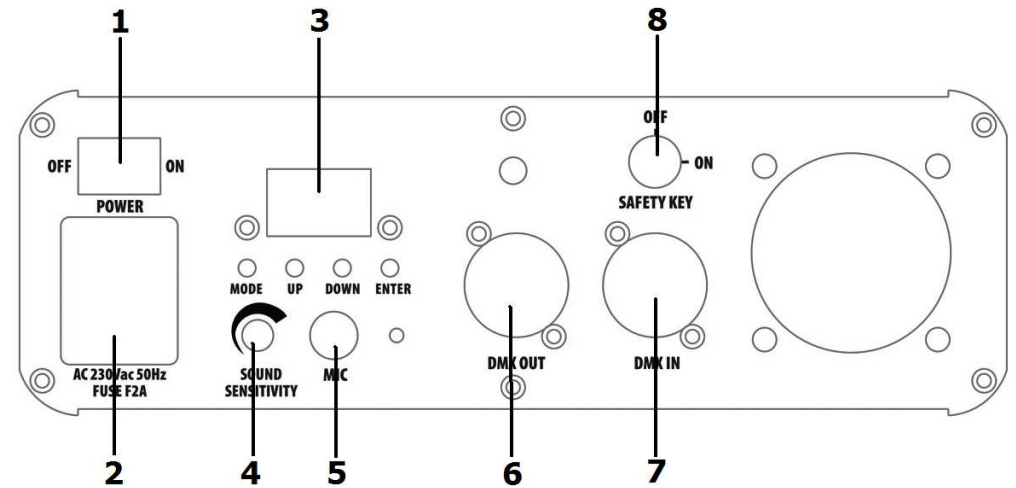
### VERTICAL BIRDS EYE VIEW:



### VERTICAL CROSS SECTIONAL VIEW:

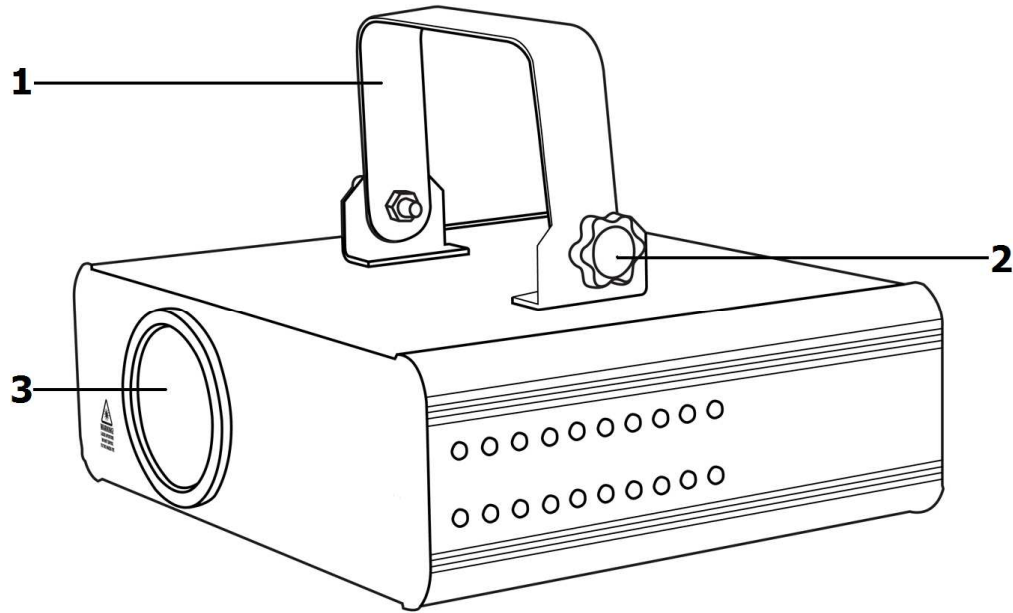


### REAR PANEL 3D OBJECTS LASER:



1. Power ON/OFF Switch
2. IEC Power IN
3. Digital display
4. Sound sensitivity
5. Microphone
6. DMX OUT
7. DMX IN
8. Safety Key

**LAYOUT 3D OBJECTS LASER:**



- 1. Mounting bracket
- 2. Thumb screw
- 3. Laser Aperture

**PACKAGE CONTENTS:**

Please check the contents to ensure that the product has been received in good condition.

Laser x 1unit	User's Guide x 1pc
IEC Power Lead x 1pc	Safety Keys x 2pcs

If you find any accessory is missing or the product has arrived with any problems, please contact your retailer at once.

This product contains no user-serviceable parts so make no attempt to try to fix or modify this item yourself as this will invalidate the warranty. We recommend you keep the original package and proof of purchase for any possible replacement or returned demand.

**SETUP:**

1. Unpack the laser ensuring all packaging and tape is removed.
2. Always test the laser before fixing in a permanent location.
3. Connect the IEC mains plug and power up.
4. Insert the safety key and turn to a quarter turn clockwise. At this moment ensure that no one is exposed to laser radiation.
5. Select which mode you want to operate the laser in.
6. Leave the laser to run for 10 minutes before installing in its location.

## CONNECT WITH POWER SUPPLY – THE GROUND WIRE MUST BE CONNECTED:

Use the supplied IEC lead to connect to the main power supply as follows:

Wire	Connection	International signal
Brown	Live	L
Blue	Neutral	N
Yellow /Cyan	Earth	

For your safety, please kindly pay attention to all of the warnings below:

- Always plug in the power plug last and disconnect from the mains when the device is not in use or before cleaning.
- Do not install and operate the device in rain or extreme heat, moisture or dusty environments.
- This device is for indoor use only and in a dry environment.
- Do not switch on immediately. Wait until the unit reaches room temperature.
- Do not shake the device and avoid brute force when installing or operating.
- Do not use the device during thunderstorms and please disconnect the power.
- Do not use solvents or aggressive detergent to clean the device. Use a soft and clean cloth.
- Do not modify the device or the connected power cord without authorisation.
- Do not stare into the aperture. This product emits hazardous levels of optical radiation and will cause serious injury to the eyes if viewed at close range.
- This product should be securely mounted so that its output emission is always directed away from people and at objects that are able to reflect emission towards people. In this regard, the separation distances cited in HS(G)95 should be observed.
- The symbol determines the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than 0.5m.

## TROUBLESHOOTING

### If the unit is not functioning properly

- Check that the IEC cable is connected properly
- Check that the mains power switch is on.
- Check the fuse hasn't blown (see below guide)
- Check that the unit isn't in DMX mode.
- Check the safety key is turned to the on position.
- If in sound to light mode ensure the microphone sensitivity is turned up.

## REPLACING FUSE

First disconnect from the mains power supply then remove the fuse holder above the IEC Socket to reveal the fuse. Replace with the correct fuse rating as stated on the product or in the user manual. Then lock the fuse holder cover back into place.

## GENERAL MAINTENANCE

Be sure to power off the fixture before conducting maintenance.

To maintain optimum performance and minimise wear, fixtures should be cleaned frequently.

Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build-up reduces light output & performance as well as overheating. This can lead to reduced life and increased mechanical wear.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when fixture is cold with a mild solution to the cloth or tissue, and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimise light output. Cleaning frequently depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can require cleaning fluid. Always dry the parts carefully. Clean the external optics at least every 20 days.