USER MANUAL

SPECIFICATIONS

Mains Input: AC 100~240V, 50/60Hz

Total Power: 15 W

Laser Power: 50mW 532nm Green CW

150mW 650nm Red CW

Laser Classification: Class 3B

Laser Safety Standard: EN60825-1 2007

Condition Temperature:10~40 °CLED Power:9WLED Color:RGB

Measurement: 230mm*190mm*86mm

N Weight: 1.6 Kg

Fantastic Laser



This manual contains important laser system safety and 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.

Specifications subject to change without prior notice.

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

WARNING

Lasers can be hazardous and have unique safety considerations. Permanent eye injury and blindness is possible if lasers are used incorrectly. Pay close attention to each safety REMARK and WARNING statement in the user manual. Read all instructions carefully BEFORE operating this device.

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.

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.

\wedge	
	Caution

aution! Prevent damage or injury from incorrect operation.



Laser!

Laser safety warning labels.



Recycle

To protect the environment, recycle packing material wherever possible.



Indoor

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or other fluids.



Dienosa

Don't throw this product away just as general trash, please dispose of this product following the abandon electronic product regulations in your area.



0.5m Location

The projector must be installed in a location with adequate ventilation, at least 50cm (20 inches) from adjacent surfaces. Be sure that no ventilation slots are blocked.

USER MANUAL

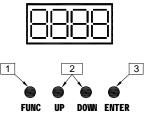
LECS	LECS	LED color change slowly
LES0	LES0	LED strobe speed from 0 to 9
[80]	LAM1	Laser motor speed to control the grating speed

MAINTENANCE

- Make sure the area below the installation place is free from unwanted persons during servicing
- switch off the fixture, unplug the mains cable and wait until the unit has been cooled down.
- Housings, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation
- The mains cables must be in impeccable condition and should be replaced immediately when even a small problem is detected
- In order to protect the fixture from overheat the cooling fans (if any) and ventilation openings should be cleaned monthly.
- The cleaning of aperture glass and scanner mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp. smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics
 - 1) Clean with a soft cloth using normal glass cleaning products.
 - 2) Always dry the parts carefully.
 - 3) Clean the Aperture glass at least once every 30 days
- The interior of the fixture should be cleaned annually using a vacuum cleaner or air-jet.

ATTENTION: We strongly recommend internal cleaning to be carried out by qualified worker!

The laser is working in stand alone. Each time when you turn on your laser, you will have this confirmed laser show.



In the MODE OPTION setting, the stand alone laser show that you are going to choose is flashing. Press UP or DOWN to change stand alone laser show, you will have 14 different stand alone preprogrammed laser show. Their DISPLAY and EFFECT are listed below:

DISP	ALY	STAND ALONE MODE LASER EFFECT
Rubo	AUTO	Auto mixed slow laser and LED effect with random show
Soud	SOUD	Sound activated
[8]	LAC1	Laser color
L850	LAS0	Laser strobe speed from 0 to 9
[1857]	LECR	LED color with Red
[1888]	LECG	LED color with Green
[[8]	LECY	LED color with Yellow
LEC9	LECB	LED color with Blue
LECP	LECP	LED color with Purple
	LECC	LED color with Cynn
[EE8]	LECW	LED color with White

LASER SAFETY WARNINGS

Potential laser injury hazard exists with this product! Read these instructions carefully, which includes important information about installation, safe use and service!

/ Caution

Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser

light..

/ Caution

This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.

Caution

It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into

their eyes.

(Caution

It is a US Federal offense to shine any laser at aircraft.

⚠ Caution

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please

contact the dealer nearest to you.

! Caution

Use of controls or adjustments or performance of procedures other than those specified herein may result

in hazardous radiation exposure.

Every person involved with installation and maintenance of this device has to:

Be qualified

Follow the instructions of this manual

CAUTION! Be careful with your operations. With a high voltage you can suffer a dangerous electric shock when touching the wires!

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.

- Please consider that damages caused by manual modifications to the devise are not subject to warranty.
- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Make sure that the available voltage is not higher than stated on the rear panel.
- Always plug in the power plug least. Make sure that the power-switch is set to off-position before you connect the device to the mains. The power-plug has to be accessed after installing the device.
- Make sure that the power-cord is never crimped or damaged by sharp edges.
 Check the device and the power-cord from time to time.
- Always disconnect from the mains, when the devise is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- It is essential to connect the yellow/green conductor to earth.
- The electric connection, repairs and servicing must be carried out by a qualified employee.
- Do not switch the fixture on and off in short intervals as this would reduce the laser diode life.
- I For replacement, please use fuses of same type and rating only.
- If the device has been exposed to drastic temperature fluctuation, do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- Do not shake the device. Avoid brute force when installing or operating the device.
- When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

CONTROL&FUNCTION

- Regular breaks during operation are essential to maximize the life of this device as it is not designed for continual use.
- I 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.

Operating Mode

When laser is powered on, LED monitor on rear panel shows the current operating standalone mode. With help of LED control panel, it is very easy to set and change the operating mode of laser. After every resetting and saved, the new mode information will be shown on LED monitor at next power on.

FUNC)

Mode/Function Option, to choose the operating mode of laser.

ENTER

Confirmation, to confirm all setting or change of LED control panel.

UP

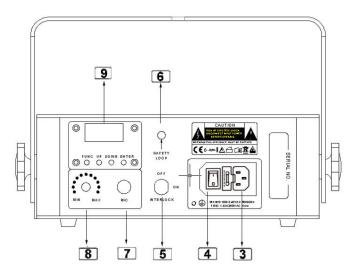
UP/DOWN, to change operating mode, parameter.

DOWN

Stand Alone Preprogram Laser Show

- I Press FUNC to enter MODE OPTION.
- I Press UP or DOWN to select your favorite Stand Alone mode as above.
- I Press ENTER to confirm the setting.

Rear Panel



NO.	NAME	DESCRIPTION
3	Power Plug	AC 100~240V, 50/60Hz
4	Power Switch	Switch on and off the power
5	Interlock Switch	To interlock laser diodes output
6	Safety Eye	Used to attach a safety cable when the fixture is rigged. Check more details in RIGGING
7	Mic Knob	To detect the music/sound signal
8	Sensitivity Knob	Turn the knob (potentiometer) until the laser works in sync with the music
9	Led Display Board	To display operation menu

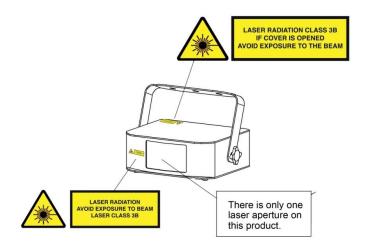
USER MANUAL

- I The minimum distance between the fixture and surrounding walls must be more than 50cm.
- I Always fix the fixture with an appropriate safety-rope. Fix the safety-rope at the safety-rope only.
- I The ambient temperature must be between 10° C to 40° C.
- I Please use the original packaging if the device is to be transported.
- Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

CAUTION! Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!

CAUTION! If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the warranty void.

LASER SAFETY LABEL REPRODUCTIONS



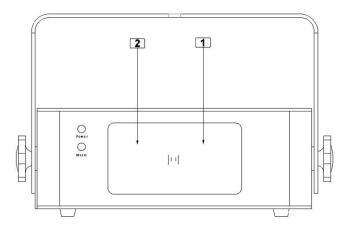
LASER EXPOSURE WARNING



LASER LIGHT AVOID DIRECT EYE EXPOSURE

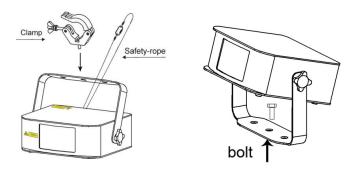
Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard "For Safe Use of Lasers", available from "www.laserinstitute.org". Many local governments, corporations, agencies, military and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association, www.laserist.org.

Front Panel



NO.	NAME	DESCRIPTION	
1	Laser Aperture	Laser effect output aperture	
2	LED Aperture	LED effect output aperture	

5



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.

LASER EMISSION DATA

Laser Classification	Class 3B
Green Laser Medium	DPSS Nd:YVO4, 532nm
Red Laser Medium	LD GaAlAs 650nm, typical
Beam Diameter	<5mm at aperture
Pulse Data	All pulses < 4Hz (>0.25sec)
Divergence (each beam)	<2mrad
Divergence (total light)	<160 degrees
Laser Power	Red>150mW, Green>50mW

^{*} As measured under IEC measurement conditions for classification.

LASER COMPLIANCE STATEMENT

According to the EN 60825-1 :1994 + A1 :2002+A2:2001 + COTT regulations, this laser fall under the classification 3B.Direct eye exposure can be dangerous.

USER MANUAL

BEFORE OPERATION

Unpacking Instructions



CAUTION! Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damage from shipping or the package itself shows signs of mishandling. Save the package and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

What is included

The carton or flight case contain following items:

NAME	QTY
Laser Light	1pc
Keys (for key switch)	2pcs
Power Supply	1pc
User Manual	1pc

7

USER MANUAL

Power Supply

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture of refer to the fixture's specifications chart. A fixture's listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power to a fixture, check that the source voltage matches the fixture's requirement.

Rigging the Fixture

CAUTION:

Please consider the respective national norms during the installation! The installation must only be carried out by an authorized employee or dealers!

- The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.
- The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.
- The fixture should be installed in the position where persons cannot reach and where persons may walk by or be seated.

CAUTION:

When installing the device, make sure there is no highly in inflammable material (decoration articles, etc.) in between a distance of min o.5 meter.