



CS-500RGY DMX

USER MANUAL



Please read this manual carefully before use!

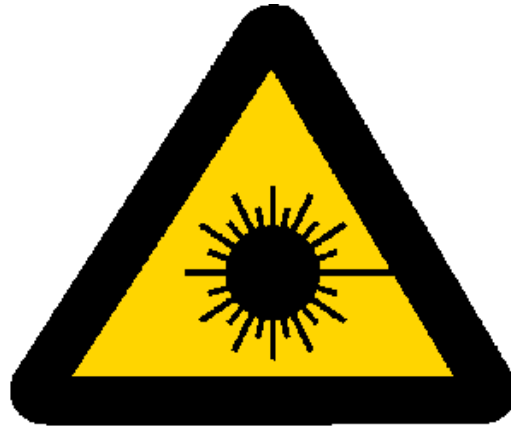
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Checking Parts

Please check if the following parts are included:

- 1 x CS-500RGY DMX Laser
- 1 x Power cable
- 1 x User manual



DANGER LASER RADIATION!

Avoid direct eye exposure!

Laser radiation can cause eye damage and/or skin damage

All protective measures for a safe operation of this laser must be applied.

1. SAFETY INSTRUCTIONS

- 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.
- 1. The laser must only be used for shows. The operation is only allowed if it is controlled by a skilled and well-trained operator.
- Never leave this device running unattended and keep it away from children and unauthorized persons.
- 2. Keep away from heaters and other heating sources. In order to safeguard sufficient ventilation, leave 50 cm of free space around the device.
- 3. Never direct the laser beam to people or animals.
- 4. CAUTION LASER DIODE: Never unscrew the housing!
There are no serviceable parts inside the device. Maintenance and service operations shall only be carried out by authorized dealers.
- 5. Always disconnect from the mains when the device is not in use or before cleaning it.
- **HEALTH HAZARD! Never look directly into the light source, as sensitive persons may suffer an epileptic shock!**

2. OPERATING DETERMINATIONS

6. The operator has to make sure that laser radiation – also reflected laser radiation – higher than the highest allowed level is avoided by technical or organisational measures.
7. Make sure that the used voltage is : AC 220V~240V, 50/60Hz
8. If the device is used in a flying installation, the mounting brackets and an appropriate safety-rope must be fixed.
9. Laser effects are not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
10. In some countries, the operator must notify the accident insurance and the authority for industrial safety, before operating a laser. For more information, contact the relevant authorities.
11. Please consider that unauthorized modifications on the device are forbidden due to safety reasons!
12. If this device will be operated in any way differently than described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

Thank you for using the Club series RGY laser projector. For the sake of safety and better Operation of this projector, please read this manual carefully before use and operate the projector , lest incur any personal injury or damage to the projector.

3. PACKAGE LIST

When you unpack the case, please take time to examine the items as follow:

- projector 1
- Power cord 1
- Owner's manual 1
- projector sling 1

4. PRODUCT INTRODUCTION

The RGY series projector adopts the latest appearance design to make it compact and light. The housing use imported paint.

The scanning System is vibratory mirror, DMX-512 Signal 10 channels, international Standard DMX-512 Signal control. It can printing 2 laser pattern at the same time. There are 128 latest laser effect patterns in it, can be used for word (Chinese, English and Japanese)performance^ animation performance^ laser beam performance, with spatial, projection and animation effects.

Control modes: DMX-512 Signal control, music control „

RGY series laser projector was applied for the place of public entertainment such as disco, night club and theater etc.

5. FUNCTION INTRODUCTION

RGY series laser performer has the powerful performance functions. Abundance laser patterns and single color or double colors orthree colors laser performance will bring you a new sensations, it will be more comfortable and convenient for your using. It has 10 DMX-512 control Signal control, it can make tunnel effect and animation, geometric, character and 3D effects, Laser sky effects, Rolling effects, Scanning effects, and Laser tunnel effects in all directions. And it also has music control. The effect can be control by music rhythm.

Laser module is semiconductor generator, laser wavelength are 532nm/green and 650nm/red, the two different laser module are combined to give off the yellow laser light. The laser light source has a long life span and highly stability, complying with the international Standard.

6. INSTRUCTIONS

After unpacking, check whether the projector has been damaged by transport such as any screw loosening, reflecting mirror broken, etc. If everything is OK, select a proper location, hang the projector and adjust its angle properly, then connect the power cord and the ground wire before switch on at the means. Notice that while using this projector the green and yellow wire has to connect the ground properly by Professionals. Please examine the electrics and voltage before power on it. We suggest customer apply 220V or a transformer. 20 seconds after powered on the projector, it will self-check and then can be used.

Because of the radiate laser generator 's own characteristic, please terminate it for 10 minutes after using it for 30 minutes to secure the laser 's long life span.

Avoid being interfered by other Signals while using the DMX-512 signal controller.

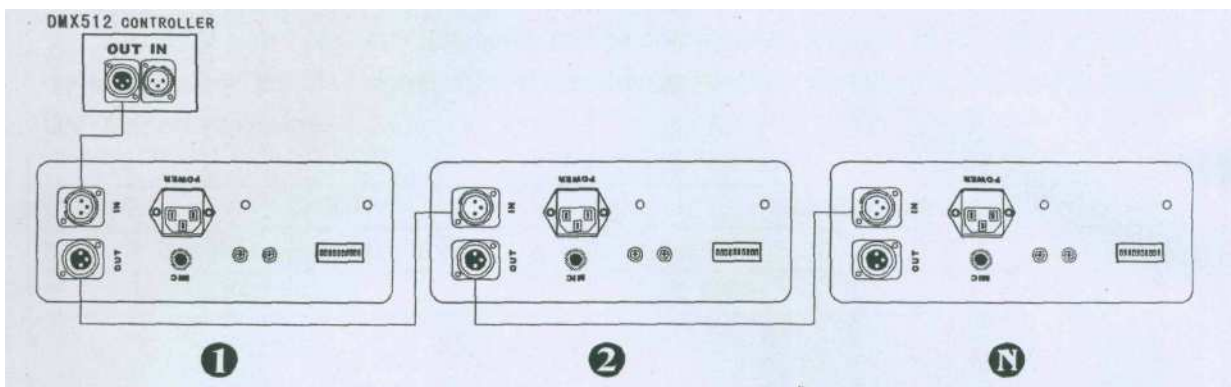
7. CHANNEL'S FUNCTION

Channel		DMX-512Value	Descriptions
CH1	Operation method	0	Close
		1~103	Automatic
		104~255	Music-active
CH2	Laser pattern selection	0~255	128 Laser patterns
CHS	Laser pattern rotation	0~127	Rotation angle adjustment
		128~255	Rotation speed adjustment
CH4	Laser pattern up/down	0~127	Adjustment of up/down turning
		128~255	Adjustment of up/down turning
CHS	Pattern left/right	0~127	Adjustment of left/right turning
		128~255	Adjustment of left/right turning
CH6	Pattern moving	0~127	Adjustment of left /right moving
		128~255	Adjustment of left /right moving
CH7	Pattern gradual	0~255	Adjustment of pattern gradual drawing speed
CHS	Pattern point	0~255	Adjust the definition of pattern point
		0~31	Yellow, red, green
		32~63	Yellow, red

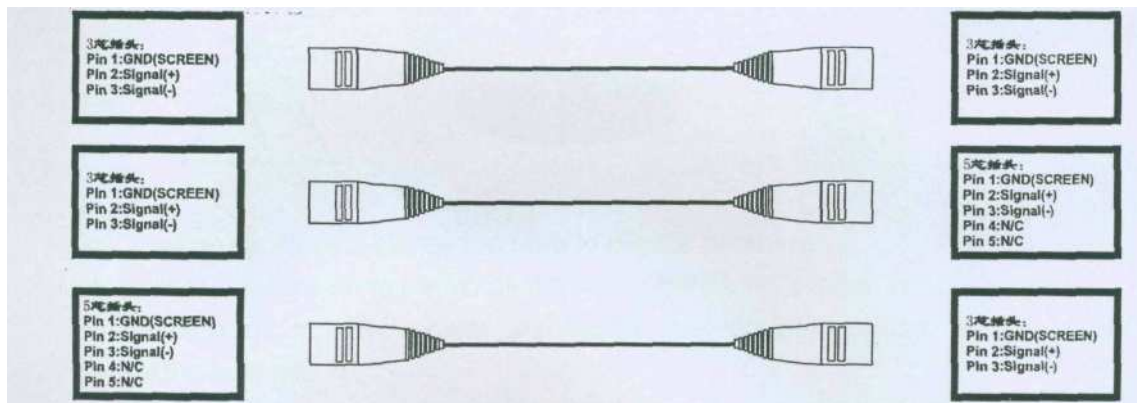
CH9	Select the pattern color	64-95	Yellow, green
		96-127	Red> green
		128-159	Red
		160-191	Green
		192-255	Yellow
CH10	Select the length of the color	0-255	Adding one color node by every 16 values of the DMX value

8. SIGNAL CONNECTION AND ADDRESS DIALING

When the Controller transmits DMX512 Standard Signals, the connection of which is accomplished through the "input" and "output" 3-pin XLR socket. When a console Signal Outputs to the unit, it must correspond to the Pin 1 Ground, Pin 2 Negative and Pin 3 Positive of the XLR socket on the unit. If it does not work just try exchanging the Pin 2 and Pin 3 (these 2 pins are generally do not need exchanged for consoles). The Signal wire length should not exceed 100m in order to avoid the interference of the other Signals by any other electric appliances.



If your DMX-512signal Controller adopt 5 pins XLR plug, you need one transfer line, the transfer method as following:



When control Signals from the console inputs into RGY series projector. The projector must be assigned a data start address code, so that a unit may act on the corresponding control Signal. Thus, when any Controller is used, every unit must have its own data start address Accordingly, the address of the first unit is set as 1, the second unit has also 10 channels, so its address code is 11, the third unit is set at 21, so on and so forth (the setting method will also depend on the specific console, the above is just for general cases).

The details of DMX-512 Signal control mode address switch as follow:

Lamp no.	Start address	Control switch (ON)
1	1	1
2	11	1、2、4
3	21	1、3、5
4	31	1、2、3、4、5
5	41	1、4、6
6	51	1、2、5、6
7	61	1、3、4、5、6
8	71	1、2、3、7
9	81	1、5、7
10	91	1、2、4、5、7
⋮	⋮	⋮

This RGY series projector has controlled by on/off switch address code. 1 to 9 are the numerical value DMX 512 Signal, 10 is the exchange switch of sound activated control and DMX512 Signal control.

MODE		Control switch (ON)
1	Single projector controlled by sound	1-9: OFF, 10: ON
2	DMX-512 control	10: OFF

9. SAFETY MARKS



- Before maintenances, please refer to eligible personnel.
- Please make sure to switch off the power before Installation or maintenance.
- Please do not use power and lasers that do not conform to the current specifications.
- Please do not see the laser light directly, in case it might damage the eyes.
- Avoid electric shock! Bulb overheating;
- Do not use any power voltage and light type of different specifications
- Do not expose to the laser light outside.
- Do not use it frequently under the humid atmosphere.
- Keep the reflecting mirror clean and dry.

10. MAINTENANCE

Maintenance should be performed every 15-day period, by using a sponge which is dipped with alcohol, rather than wet cloth or other chemical liquid, to clean the mirror.

Always disconnect from the mains when the device is not in use or before cleaning it.

There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.

Never look directly into the light source.

Always disconnect from the mains when the device is not in use or before cleaning it.

11. TECHNICAL SPECIFICATIONS

Power supply: AC 110V/AC 220V, 50/60 Hz

DMX 512: 10 channels

Condition temperature: -10°C ~ +35°C

Operating Environment: indoor

Signal input power: -5V~+5V

Power consumption: 150W

Working mode: DMX512, Live Play @ Music (Sound Programme), ILDA

Optical power: ca. 500mW RGY

Green: ca. 150mW / 532nm; Red: ca. 350mW / 650nm

Laser classification: 4

Weight: 16 kg

Dimensions: 560 x 410 x 230 mm (L x W x H)

PLEASE NOTE

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Laserworld cannot be made liable for damages caused by incorrect installations and unskilled operation!

EU- Declaration of Conformity



We hereby confirm that the following device

Laserworld Club CS-500RGY DMX Laser Projector

complies with the essential safety requirements, laid down in the regulations of the committee to assimilate the provisions of law of all participating EU states on the electromagnetic compatibility (89/446/EWG).

The device has been classified considering the following EU-norms on electromagnetic compatibility:

DIN EN 55103-1: 1996

DIN EN 55103-2: 1996

DIN EN 61000-3-2:2000 + A2: 2005

DIN EN 61000-3-3:1995 + A1: 2001

Assessment of compliance of the product with the requirements relating to the Low Voltage Directive (LVD) was based on the following standards:

DIN EN 60065 : 2002

Furthermore, the device is verified in correspondence to the laser class regulations DIN EN 60825-1, if properly set up according to the upper mentioned laser safety regulation.

After installing the device, an inspection and official approval is indispensable for the overall setup. The inspection must follow the European guidelines EN 60825-1 and corresponding regulations for the prevention of accidents BGV-B2. This declaration is executed on behalf of the CS-500RGY DMX Laser manufacturer

Laserworld (Switzerland) AG

based in:

Rheinblick Residenz
Oberstrasse 1
8274 Tägerwil
SWITZERLAND

Authorized person:
Supervisory board Ms Rhea Gössel

place of business: 8274 Tägerwil / Schweiz
company number: CH-440.3.020.548-6
Commercial Registry Kanton Thurgau

www.laserworld.com
info@laserworld.com

Laserworld (Switzerland) AG
c/o LOG.ON GmbH
Raiffeisenstrasse 8
78658 Zimmern ob Rottweil
GERMANY

VAT number: DE252331844
WEEE-Reg.-Nr.: DE 93014361