

# User Manual

## ***DUO BEAM/RG***

### *Laser show System*



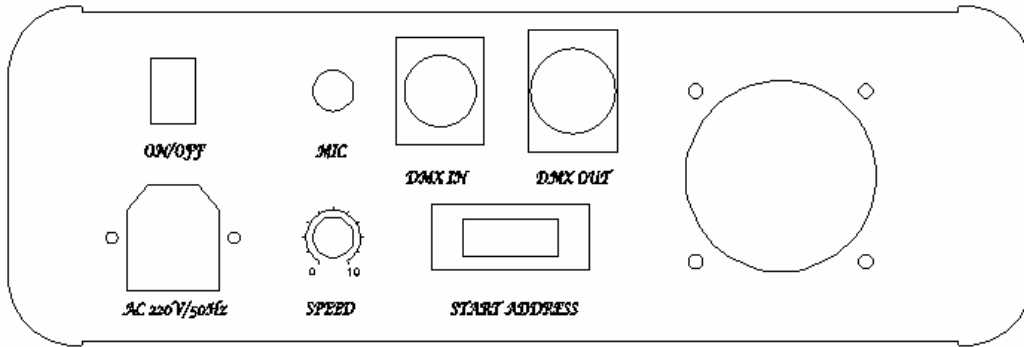
**MICROH**  
PROFESSIONAL PRODUCTS

Thank you for purchasing the DUO BEAM/RG Laser Show System. This manual is intended to help you to use the functions of the unit. It is suggested that you should refer to this instruction manual before operating the DUO BEAM/RG.

### Features of the product:

- Class IIIb Laser show product:
  - Red: Diode Laser module up to 60mW@650nm.
  - Green: Diode Pumped Solid State lasers up to 50mW @532nm.
- Built-in high speed stepping motor.
- Real-time calculating unit to generate patterns.
- Sound Active operation for scan and pattern changes.
- 48 pre programmed laser sequences.
- Compatible with standard DMX512 signal.
- The use of fog will enhance the aerial effect of this unit
- Input power: AC 120V 60Hz.
- Power consumption: Max. 50VA
- Operation temperature: Operation-temp.: 20...35°C  
storage: -20°C...+80° (humidity no condensation)
- Measure: 300mm×100mm×180mm
- Weight: 3.6kg

**The rear panel view:**



**Installation**

1. Carefully inspect your Laser Show equipment as you unpack it. If any damage is evident, such as dents or scratches on the covers or broken knobs, etc., immediately notify your carrier and your dealer.
2. Hang the unit in a safe place. Please ensure that the unit is properly secured.
3. Choose the operation mode.

Let us look at the function of the DIP switch:

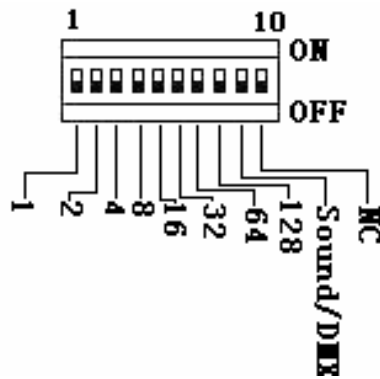
1<sup>st</sup>-8<sup>th</sup> bit: Start address (from 1-255).

The 9<sup>th</sup> bit:

**OFF:** Sound activation mode

**ON:** DMX512 mode

The 10<sup>th</sup> bit: Not Connected



## ● Sound Active Mode

When the equipment operates in this mode, the patterns will be changed by music. Please follow the instructions as below:

- 1) Set the 9<sup>th</sup> bit of DIP Switch on the back panel to the “**OFF**” position (Factory default).
- 2) Plug in the power source, the equipment will self test for about 10 seconds.
- 3) Turn the **Speed knob** (left: max., right: min.) to adjust the speed that the patterns will change.

## ● DMX 512 Mode

When the unit is operated in this mode, you can use a standard DMX512 controller to change laser colour, laser on/off, patterns, speed and so on. Please follow the instructions below:

1. Put the 9<sup>th</sup> bit of DIP Switch on the rear panel up to the “**ON**” position.
2. Set the start address (1<sup>st</sup> -8<sup>th</sup> bit) of the equipment.
3. Connect to the DMX512 controller. There are five channels totally:

| Channel | Function   |
|---------|--|
| 1       | 0 – 63 Blackout<br>64-127 Green On<br>128 – 191 Red On<br>192 – 255 Both On(red and Green) |
| 2       | Pattern Selection  |
| 3       | Speed  |
| 4       | Scanning Frequency   |
| 5       | Pattern Reset (Rest Vaue:255)  |

4. Plug in the power source, the equipment will self test about 10 seconds. Then you can change the patterns and speed through the DMX controller.
5. DMX Connectors use XLR connectors with three pins:

Pin 1: Ground

Pin 2: Negative Data –

Pin 3: Positive Data +

## **Service and repair**

The DUO BEAM/RG has no major serviceable parts. Repair of electronic components (transistors, ICs and Diodes) or changing other parts are not allowed by unauthorized service centers. If there is a problem with the DUO BEAM/RG, it must be returned to the dealer that you purchased the unit from.

## **WARNINGS**

- Visible and invisible laser-light, direct beam can damage the human eye and the eyes of animals. Do not look at any Laser light directly.
- Do not touch the laser aperture with the hand. When cleaning the laser aperture, please use cotton with rubbing alcohol or camera lens cleaner.
- Do not take apart or modify the equipment. Fire or electrical shock may result.
- If you hear unusual noises, see smoke, feel excessive heat or smell anything unusual, immediately unplug the power source and contact your retailer.  
Continued use may result in fire or electrical shock.
- Do not use flammable sprays near this equipment. Also do not spill water, liquids, or flammable liquids on the equipment. If these fluids enter this equipment and contact the electrical parts, fire or electrical shock may result. If anything enters the equipment, immediately unplug the power supply and contact your retailer.

## **CAUTION**

- Do not place the equipment in the following areas. Fire or electrical shock may result.
  - Areas with high humidity
  - Areas subject to direct sunlight
  - Areas with high temperatures
  - Areas near flame sources
- Do not place the equipment on shaky stands, unstable surfaces or surfaces subject to frequent vibrations. If the equipment falls, it may cause injuries.
- Do not place heavy object on the equipment. Objects may fall and cause injuries.
- When not in use for extended periods, unplug the power source for safety.
- When transporting the equipment, be extremely careful. Dropping it could cause an injury.