

# **MICROH DJ**

[www.microhdj.com](http://www.microhdj.com)



## **USER MANUAL**

# **SPITFIRE RGB**

**Keep this manual for future reference.**



## 1. INTRODUCTION AND UNPACKING

Thank you for purchasing the MICROH SPITFIRE RGB effect fixture. For your own safety and knowledge, please read this manual before installing or operating the device. This manual covers the important information on installation and applications. Please install and operate the fixture according to instructions. Meanwhile, please keep this manual for future reference.

The MICROH SPITFIRE RGB effect fixture is manufactured following CSA standards, complying with international standard DMX512 protocol. This fixture is applicable but not limited to large-scale live performances, theater, studio, nightclubs and discos.

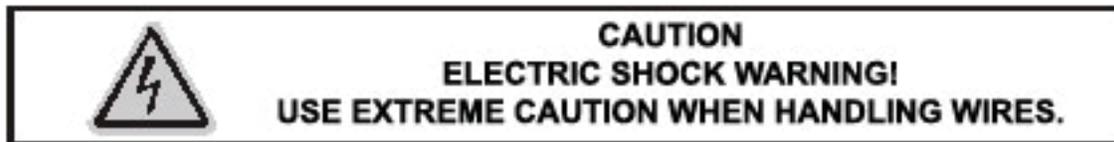
The MICROH SPITFIRE RGB laser features a RGB laser effect. Please carefully unpack it when you receive the fixture and check if it was damaged during the transportation. Please check whether the following items are included inside the box:

Fixture – One

Power Cord – One

User Manual – One

## 2. SAFETY INSTRUCTIONS



This device has been delivered in safe working condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.



**Important:**

*Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.*

If the device has been exposed to temperature changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature, and is dry.

This device falls under protection-class I, therefore it is essential that the device be grounded. The electrical connection must be carried out by a qualified technician.

The device should only be used with rated voltage and frequency. Make sure that the available voltage is not higher than 120V as stated at the end of this manual.

Make sure the power cord is never crimped or damaged in any way, as this could cause shock and damage. If your power cord is damaged in any way, please purchase a new cable from your local MICROH dealer. Always disconnect power, when the device is not in use or before cleaning it. Never pull out the plug by tugging the power cord.

During initial start-up, some smoke or smell may arise. This is a normal process, and does not necessarily mean that the device is defective. It should decrease gradually. Please do not project the beam onto combustible substances.

Fixtures cannot be installed on or near combustible substances. Keep more than 50cm distance from wall for proper ventilation and air flow. If your fixture is or has become damaged in any way, it shall be exclusively replaced or repaired by the manufacturer to avoid any hazard.

	<b>CAUTION!</b> Never touch the device during operation! The housing may heat up
	<b>CAUTION!</b> Never look directly into the light source, as sensitive persons may suffer an epileptic shock.
	<b>CAUTION!</b> The electric connection must only be carried out by a qualified electrician.

### 3. MOUNTING AND INSTALLATION

**Caution:** For added protection, mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel. Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight. Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable. Never stand directly below the device when mounting, removing, or servicing the fixture.

Whether installing inverted on a truss / ceiling or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 ft.) away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

**Mounting Points:** Overhead mounting requires extensive experience, including calculating working load limits. A knowledge of the installation material being used and periodic safety inspection of all installation material and the fixture are all imperative and should only be performed by a qualified technician. Improper installation can result in bodily injury and damage.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

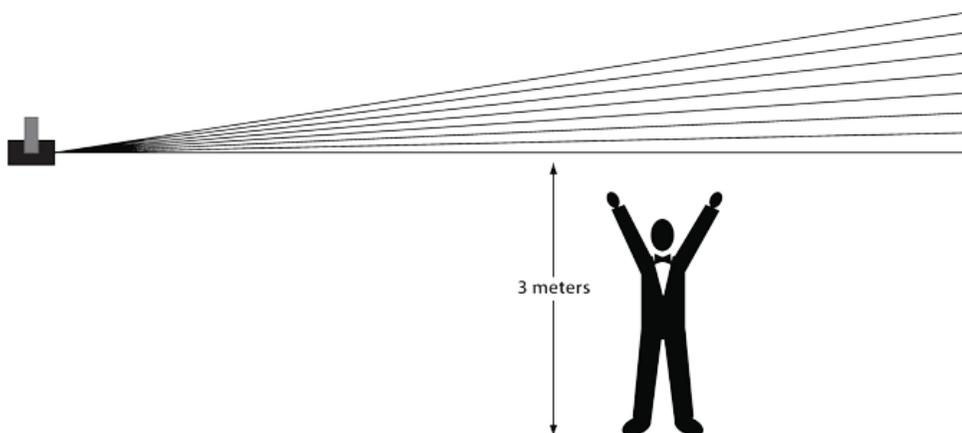
**Clamp Mounting:** The MICROH SPITFIRE RGB provides mounting bracket assembly that is to be used to mount on a truss or the floor. When mounting this fixture to truss, be sure to secure an appropriately rated clamp to the included bracket fitted through the center hole. As an added safety measure, be sure to attach at least one properly rated safety cable to the fixture.



Regardless of the rigging option you choose for your MICROH SPITFIRE RGB, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

**Proper Usage:** This product is for overhead mounting only. For safety purposes, MICROH DJ recommends mounting lighting effect products on steady elevated platforms or sturdy overhead supports using suitable hanging clamps. In all cases, use safety cables. Obtain appropriate mounting hardware from your lighting vendor.

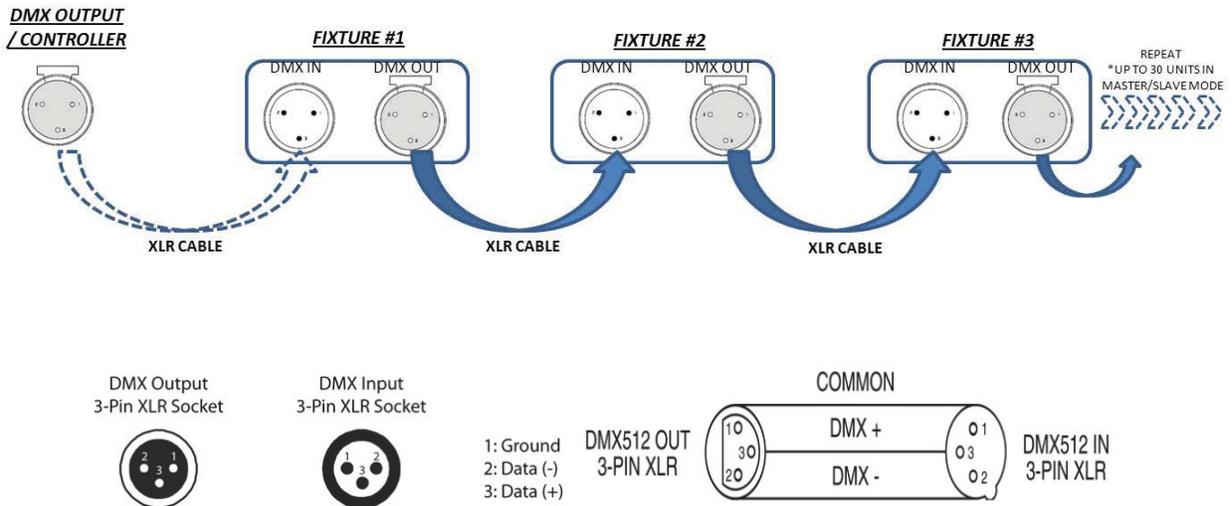
**International laser safety regulations require that laser products must be operated in the fashion illustrated below, with a minimum of 3 meters (9.8 ft) of vertical separation between the floor and the lowest laser light. Additionally, 3 meters of horizontal separation is required between laser light and audience or other public spaces.**



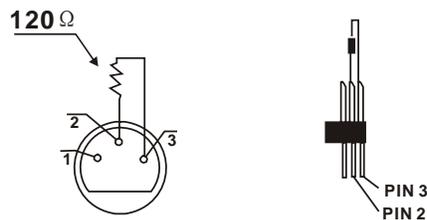
**CAUTION! USE OF CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED IN THIS USER MANUAL MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

## 4. DMX-512 CONTROL CONNECTIONS

This fixture complies with international USITT DMX standards and can be used with either a 3 pin or 5 pin DMX connector. Plug in the provided 3 pin XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the MICROH PLASMAWAVE. To connect the units to DMX, you must daisy chain the fixtures together as referred in the diagram below. Always end your DMX-512 connection with a DMX terminator.



For installations where the DMX cable has to run a long distance, or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120  $\Omega$  resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



## 5. SETUP MENU

DMX	A001
SOUND MODE	AUDI
AUTO RUN	AUTO

## 6. DMX CHANNEL MODES

CHANNEL	MODE	VALUE	DESCRIPTION
CH1	CONTROL MODE	0-69	OFF
		70-139	SOUND MODE
		140-209	AUTO
		210-255	MANUAL
CH2	PATTERN SELECTION	0-34	STATIC PATTERNS
		35-255	MOVING GEOMETRIC PATTERNS
CH3	STROBE	0-30	NO STROBE
		31-255	SPEED SLOW-FAST
CH4	PATTERN DISPLAY	0-69	SMOOTH
		70-139	SPOT & LINE
		140-209	LINE
		210-255	SPOT & LINE
CH5	HORIZONTAL SHIFT	1-160	MANUAL
		161-190	SHIFT LEFT TO RIGHT
		191-220	SHIFT RIGHT TO RIGHT
		221-255	SCROLL RIGHT & LEFT
CH6	VERTICAL SHIFT	1-160	MANUAL
		161-190	SHIFT DOWN TO UP
		191-220	SHIFT UP TO DOWN
		221-255	SCROLL UP & DOWN
CH7	ZOOM (+/-)	0-255	ZOOM
CH8	COLOUR SELECTION	0-17	RGB
		18-36	RED
		37-54	RED+GREEN
		55-71	GREEN
		72-90	CYAN
		91-107	BLUE
		108-159	RED+BLUE
		160-199	7 COLOURS IN SECTIONS
200-255	COLOUR CHANGE BY SOUND		
CH9	COLOURS MOVING	0-255	SLOW-FAST
CH10	'Y' AXIS ROTATION	0-255	'Y' AXIS ROTATION
CH11	'X' AXIS ROTATION	0-255	'X' AXIS ROTATION
CH12	'Z' AXIS ROTATION	0-255	'Z' AXIS ROTATION
CH13	MOTOR RESETTING	0-199	NO FUNCTION
		200-255	RESER 'XY' MOTORS

## 8. TECHNICAL SPECIFICATIONS

DIMENSIONS, WEIGHT and POWER	
Dimension	253mm X 198mm X 172mm
Net Weight	3.5Kgs
Gross Weight	4.5Kgs
Power input	Switched
Range	120V 60Hz
Rated Power	60W
Fuse	1A
LASER DIODE	
Red	650nm - 300mw
Green	532nm - 50mw
Blue	450nm - 200mw
CONTROL	
Modes	Sound - Auto - DMX
DMX channels	13

## 9. MAINTENANCE AND CLEANING

The following points have to be considered during the inspection:

- 1) All screws for installing the device or parts of the device must be tightly connected, and must not be corroded.
- 2) There must not be any deformations on the housing, colour lenses, fixations or installation spots (ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage must be handled by a skilled installer or technician. Any safety issues must be resolved.



**CAUTION  
DISCONNECT POWER BEFORE SERVICING.**

In order to keep the fixture in good condition and extend the life, we suggest regular cleaning to the fixture.

- 1) Clean the inside and outside lens each week to avoid the light output from darkening due to accumulation of dust, dirt, etc.
- 2) Clean the fan each week.
- 3) A detailed electrical check by approved technician every three months is advised. Ensure the circuit contacts are in good condition.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device. Please refer to the instructions under “Installation instructions”.

Should you need any spare parts, please order genuine MICROH parts from your local dealer.

***IF YOU SHOULD EXPERIENCE ANY PROBLEMS OR ISSUES PLEASE CONTACT MICROH PROFESSIONAL PRODUCTS BY EMAIL AT [info@microhdj.com](mailto:info@microhdj.com)***

**In the event that your unit is defective in any way, please contact your local dealer to obtain an RA number for service repair.**

***DISCLAIMER – MICROH believes that the information contained within this user manual is accurate. However, Microh is not responsible for any error or addendums to this manual. If you have any comments or general suggestions on how this manual can be improved please contact [info@microhdj.com](mailto:info@microhdj.com). Thank you.***

**Notes:**

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***MICROH*** 

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