

# **MICROH**

## **PROFESSIONAL PRODUCTS**

### **Owner's Manual**

### **Red, Green and Yellow 250mw Laser Light**

# ***FIREFLY-RGY***

## ***1.2***



**PLEASE READ INSTRUCTION MANUAL BEFORE USING THE PRODUCT**

## **UNPACKING UNIT**

In order to use this product safely and correctly, please read this manual carefully before use.

When you receive this product, please check for any problems caused during shipping. Please ensure that the following parts are included in this package:

- FIREFLY/RGY – 1 pc
- Power Cable – 1 pc
- Instruction Manual

## **INSTALLATION**

Please make sure the voltage you are using is compatible with the marking on the product prior to installation.

It is important that the unit be installed by a qualified technician.

Please ensure that an area of 0.5M is clear of any flammable material when installing this unit.

Please ensure that the fan and exhaust vents are kept clean at all times. Regular maintenance must be performed on this unit in order to ensure optimal performance and laser diode life.

A safety cable must be used when installing this unit.

## **NOTICE**

Please follow the instructions outlined in this manual. This product must be repaired by a qualified person.

- Do not operate this product in wet or dusty conditions.
- This unit must be installed in a fixed position in order to minimize vibrations. Make sure your clamp is tightened properly.
- Ensure that the vent is free and clear from any obstruction.
- Ensure that plug is connected securely before turning unit on.
- Do not run unit continuously for longer than **two hours**.
- If unit is run consistently for two hours, it must be **turned off for 15 minutes in order to cool down**.
- Whenever transporting this product please ensure that original packaging is used or a proper flight case with padding to protect the unit.

## **WARNING**

This laser light has a danger rating of Class IIIB, it is dangerous to observe the beam of light directly. The minimum distance for observation is 20CM, and at that distance you should not look directly at the beam for longer than 10 seconds.

## **SPECIFICATIONS**

Laser Type:	Solid state semiconductor laser
Wavelength:	Red 650nm, Green 532nm
Power Supply:	110V-220V 50/60Hz Auto Switching 25 watt .2 amp
Laser Output:	Red 200mw, Green 50mW
DMX Channels:	11
Operating Mode:	DMX512, Sound Active and Master slave
Patterns:	64
Weight:	3.5KG

## DMX Operation

This light can be controlled using standard DMX512 controllers. In order to control the light via DMX you must assign the DMX address using the 10 dip switches at the back of the unit.

To put the unit into DMX Mode, dip switch 10 must be set to the off position. After doing this, you must then select the desired DMX Address by using dip switches 1 to 9.

Dip Switch No.	Digital Address	Dip Switch No.	Digital Address
1	1	6	32
2	2	7	64
3	4	8	128
4	8	9	256
5	16	10	FUNCTION

The following are examples of dip switch settings:-

No.	Digital	Binary	No.	Digital	Binary
1	001		12	177	
2	017		13	193	
3	033		14	209	
4	049		15	225	
5	065		16	241	
6	081		17	257	
7	097		18	273	
8	113		19	289	
9	129		20	305	
10	145		21	321	
11	161		22	337	

**DMX Channel Values**

<b>CHANNEL</b>	<b>SLIDE VALUE</b>	<b>Control content</b>
Ch 1	0~51	Black Out – Laser Off
	52~103	Solid Line (Auto Run)
	104~155	Dots (Broken Line) (Auto Run)
	156~207	Solid Line (Sound Activated)
	208~255	Dots (Broken Line) (Sound Activated)
Ch 2	0~03	V Outline
	04~07	Dot
	08~11	2 Horizontal Dots
	12~15	3 Horizontal Dots
	16~19	4 Circles with Line in Middle
	20~23	2 Circles with Line in Middle
	24~27	Broken Circle
	28~31	Broken Rectangle
	32~35	Broken Diamond with Square in Middle
	36~39	Circle with 3 Circles in Middle
	40~43	Circle with Dotted Circle in Middle
	44~47	2 Waves
	48~51	4 Lines Crossed
	52~55	Rectangle
	56~59	4-Point Star
	60~63	7 4-Point Stars
	64~67	Triangle
	68~71	V
	72~75	Broken Cross
	76~79	4 Dotted Lines Crossed
	80~83	Arch
	84~87	Line on Angle
	88~91	Broken Triangle
	92~95	Wave
	96~99	Zig-Zag
	100~103	Swirl
	104~107	Dotted Wave & Wave
	108~111	3 Triangles
	112~115	Broken Square
	116~119	%
	120~123	Stairs
	124~127	Broken V
	128~131	Line & Dotted Line
	132~135	Angled Line & Straight Line

Ch 2	136~139	Half Circle
	140~143	3 Circles
	144~147	Brackets ( )
	148~151	2 Broken Circles
	152~155	Broken Circle
	156~159	2 Angled Lines & 2 Dotted Angled Lines
	160~163	Broken Diamond
	164~167	3 4-Pointed Stars
	168~171	Circle
	172~175	2 Small Circles
	176~179	Wedge Shape
	180~183	3 Horizontal Lines
	184~187	5 Short Horizontal Lines
	188~191	3 Sides of a Rectangle
	192~195	9-Point Star
	196~199	4 Small Circles
	200~203	Square
	204~207	Circle
	208~211	5-Point Star
	212~215	Cat
	216~219	Pelican
	220~223	Seagull
	224~227	Crab
	228~231	Apple
	232~235	Christmas Tree
	236~239	WELCOME
	240~243	Flower
	244~247	Owl
248~251	2 Angels	
252~255	Plane	
Ch 3	0~127	Rotates Image on X Axis
	128~255	Automatic Rotation of Image on X Axis (Speed Adjustable Slow to Fast)
Ch 4	0~127	Rotates Image on Y Axis
	128~255	Automatic Rotation of Image on Y Axis (Speed Adjustable Slow to Fast)
Ch 5	0~127	Rotates Image Anti Clockwise (Channels 3 & 4 <b>cannot</b> be at 0 position)
	128~255	Automatic Rotation of Image Anti Clockwise (Speed Adjustable Slow to Fast)
Ch 6	0-127	Left to Right Movement (Serpent Like)
	128~255	Automatic Undulating Image Left to Right (Speed Adjustable Slow to Fast)

Ch 7	0-127	Undulating Image (Up & Down)
	128~255	Automatic Undulating Image Up & Down (Speed Adjustable Slow to Fast)
Ch 8	0~7	Full Scan Speed
	8~255	Erase & Redraw Image (8=Fast & 255=Slow)
Ch 9	0~255	Scan Speed (0=Fast & 255=Slow)
Ch 10	0~255	Brightness (0=Full & 255=Dim)
Ch 11	0~51	Green
	52~103	Red
	104~155	Yellow
	156~207	Red, Green & Yellow (Broken Lines)
	208~255	RGY Colour Chase

## **SOUND ACTIVE MODE**

This unit can be run in Sound Active Mode. In Sound Active Mode the unit will change pattern and movement to the beat of the music.

### **SOUND ACTIVE SETTINGS**

1. To select Sound Active Mode, DMX dip switch 10 must be set to the on position.

## **MASTER SLAVE MODE**

This unit can be run in Master Slave Mode. In Master Slave Mode one unit will be the master and all units set to Slave Mode will follow the Master patterns and movement.

### **MASTER SLAVE SETTINGS**

To select Master Slave Mode you need to set up the DMX dip switches.

1. Set Dip Switch 10 to the on position on Master unit
2. Set Dip Switches 1 to 10 to the off position for Slave Unit(s)
3. Connect XLR Cable to output of Master Unit and then to the input of the slave unit.

You can connect up to 8 Slave units to one Master. More units may be connected but it will depend on the distance between Master & Slave units.