

# **MICROH**

## **PROFESSIONAL PRODUCTS**

### **Owner's Manual**

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

# ***FIREFLY-RGY***



**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

CHANNEL	SLIDE VALUE	Control content
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	Wave
	04~07	3 Short lines at angles
	08~11	Line at angle
	12~15	Line with 2 rounded peaks
	16~19	Line zig zag
	20~23	Square
	24~27	Circle
	28~31	Broken Circle
	32~35	3 small Circles
	36~39	Half-Oval
	40~43	3 Short lines at angles
	44~47	Line zig zag
	48~51	Half-Oval
	52~55	Line at angle
	56~59	3 small circles
	60~63	Square
	64~67	3 Short lines at angles
	68~71	Line zig zag
	72~75	Circle
	76~79	3 Horizontal lines
	80~83	Broken V
	84~87	4 Lines at angles
	88~91	Broken Circle
	92~95	Brackets ( )
	96~99	Square
	100~103	Broken Triangle
	104~107	Wave
	108~111	Circle
	112~115	Broken Circle
	116~119	2 Small Circles
	120~123	Brackets ( )
	124~127	Reverse Z
	128~131	2 Straight Lines at angles
	132~135	Half Circle

Ch 2	136~139	Broken Circle
	140~143	4 Lines at angles
	144~147	Brackets ( )
	148~151	Small Circle & Large Half Circle
	152~155	2 Small Circles with Line in the Middle
	156~159	Square
	160~163	3 Small Circles
	164~167	Wave at angle
	168~171	Broken V
	172~175	Line at angle
	176~179	Figure 8
	180~183	Diamond $\diamond$
	184~187	Diamond on it's side
	188~191	3 Lines at Random Angles
	192~195	2 Small Circles
	196~199	2 Quarter Circles
	200~203	Dog Running 1
	204~207	Dog Running 2
	208~211	Dog Running 3
	212~215	Dog Running 4
	216~219	Dog Running 5
	220~223	Dog Running 6
	224~227	Dog Running 7
	228~231	Dog Running 8
	232~235	Dog Running 9
	236~239	Pelican
	240~243	Seagull
	244~247	Crab
248~251	Apple	
252~255	Christmas Tree	
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.