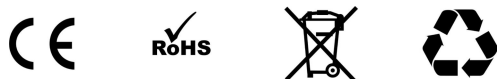# RGB Animation Laser
Instruction Manual
（**RGB-10W**）

This product manual contains important information about the safe installation and use of this product.Please read and follow these instruction carefully and keep this manual in a safe place for future reference.

CE RoHS 🗑 ♲

Security warning

- When unpacking and before disposing of the carton,check if there is any transportation damage before using the product.Should there be any damage caused by transportation,consult your dealer and do not use the apparatus.

- This equipment is not waterproof,keep it from rain,moisture and liquids.

- Do not install the product or project the beam onto inflammable surfaces.Minimum distance is 5 M ▷ 5M ∮

- The product is only intended for installation,operation and maintenance by qualified personnel.
- Product should install in a cool place.Keep away from the wall 50cm

- Avoid direct exposure to the light from the lamp.The light is harmful to eyes.

- Keep the optical system clean.Do not touch the laser reflect lens with bare hands.Do not use any alcohol liquid or any other liquit to clean the optical system.Use medicinal absorbent cotton to clean it.

- Please do not attempt to dismantle and/or modify the product inner structure.Otherwise,would not provide 1 year of free warranty.

- Electrical connection must only be carried out by qualified personnel.

- Before installation,ensure that the voltage and frequency of power supply match the power requirement of the product.

- It is essential that each product is correctly earthed and that electrical installation conforms to all relevant standards.

- Do not connect this device to any other types of dimmer apparatus.

- Make sure that the power-cord is never crimped or damaged by sharp edges.Never let the power-cord come into contact with other cables.Only handle the power-cord by the plug.Never pull out the plug by tugging th power-cord

- There is no user serviceable parts inside the product,do not open the housing and never operate the product with the cover removed.

  If you have any questions,don't hesitate to consult our dealer or manufacturer.

RGB series laser adopts embedded technology which enable laser moving,scaling,rotating,turn spin and gradually draw,animation,text,broken pen,wave laser effect can be achieved easily.

Unique functions as following:
1.Through DMX-512 Controller,you can select auto or sound control mode or to play built-in laser effects.
3.Through menu to set up scanner speed,laser color,X opposition,Y opposition
4.Unique sound control technology.Laser effect can response according to sound rhythm.

Product technical parameters

Item NO: RGB

1.Voltage: AC100-240V/50-60HZ
2.Power consumption:80W
3.Laser source:Solid semi-conductor laser diode.
4.Laser power /wavelength: 10W RGB (R3W/638nm G3w/520nm B4w/445nm)
5.Colors:RGB full color
6.Modulating signal:ANG
7.Laser Patterns:128 pieces built-in laser patterns
8.DMX Channel:32CH
9.Scanner system:30K
10.Scan angle:±40°
11.Control signal:DMX-512 international standard signal
12.Control mode:Music,auto,master-slave and DMX-512l,ILDA Control
13.Cooling system:fan
14.Operation environement:Indoor
15.Operation temperature:-20°C～45°C

Product packing list

These items are packed together with the lighting fixture.Upon unpack,please check：

Name	quantity	Unit	Note
laser light	1	set	
Power cable	1	pc	
Bracket(Hanger)	1	pc	
Hanger screw	2	pcs	
Product manual	1	pc	

Power Connections Method

Please connect power as following ：
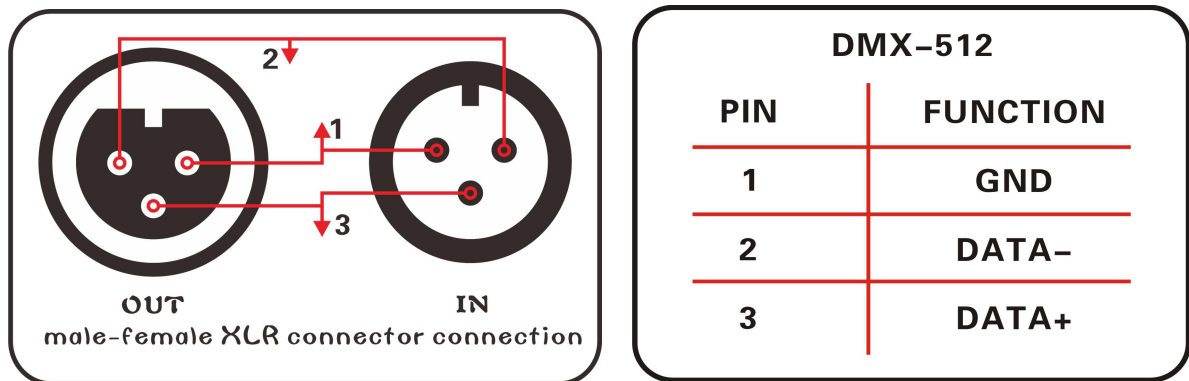L（live wire ）=brown wire
E（earth wire）=yellow/green double color wire
N（null line ）=blue wire
When connecting,ensure that the voltage and frequency of power supply match the power requirement of the product.

This product is Class 1 protection equipment.The yellow-green double colors wire must be earthed by qualified personnel. Before installation,ensure that the voltage and frequency of power supply match the power requirements of product.In power supply and voltage fluctuation large areas,we suggest you to use 110V or 220V or use voltage regulator to supply power.After electrical connection,this product will have a few seconds self-check action, self-check finished can be used.
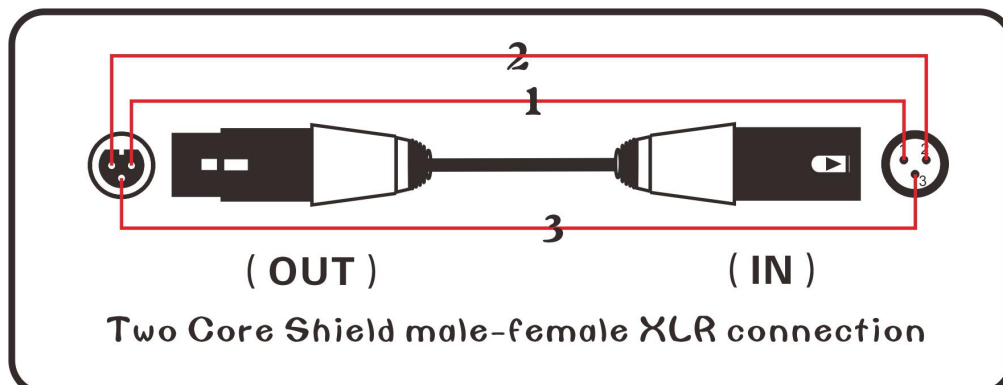
Important:It is essential that Yellow/green double color wire is correctly earthed and that electrical installation conforms to all relevant standards.

DMX Connection method

PIN	FUNCTION
1	GND
2	DATA−
3	DATA+

DMX–512

OUT   IN
male-female XLR connector connection

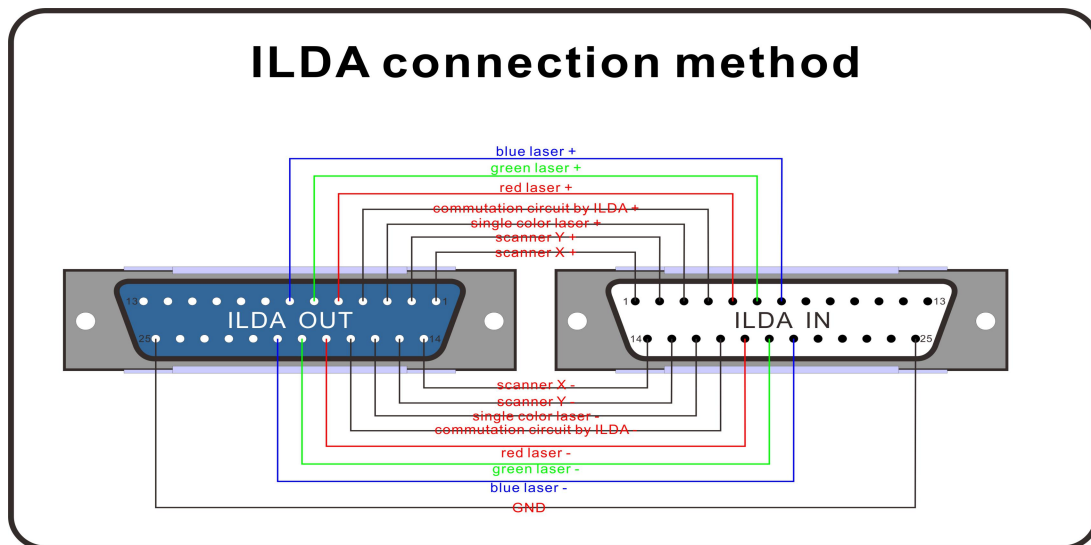DMX control signal connection must be made with a two core-screened cable,with each core having at least a 0.5mm diameter.Please use the product's signal cable OUT and IN as connection.The signal OUT and IN cables connection shown as above picture.
Note:Please do not connect the signal cable OUT and IN in other way except above shown.

(OUT)   (IN)
Two Core Shield male-female XLR connection

This product accepts digital control signals in protocol DMX512(1990).The amount of lighting fixtures connected in parallel is no more than 32.Connect the DMX controller's **Output** to the first lighting fixture's **Input** cable with a 2 core XLR signal cable(Shown as above),connect the first lighting fixture's **Output** cable to the second lighting fixture's **Input cable** and connect the rest light fixtures in the same way.Eventually,connect the last lighting fixture's Output cable to a DMX terminator

Under DMX-512 signal control mode,the last lighting fixture's DMX Output must be connected with a DMX terminator.This prevents electrical noise from disturbing and corrupting the DMX control signals.The DMX terminator is simply an XLR connector with a 120Ω(ohm) resistor connected across pins 2 and 3,which is then plugged into the output socket on the last projector in the chain.Then connections are illustrated above.

ILDA connection method

blue laser +
green laser +
red laser +
commutation circuit by ILDA +
single color laser +
scanner Y +
scanner X +

ILDA OUT

ILDA IN

scanner X -
scanner Y -
single color laser -
commutation circuit by ILDA -
red laser -
green laser -
blue laser -
GND

ILDA control signal connection method:
Connection built through product male/female DB 25 degree socket.Like above picture. In addition to the above connections, ILDA signal cannot be connected in any other w

LCD Menu and function introduction

	Menu	Setup	Notes
1	DMX Address	1-512	
2	Show Mode	ILD	When connect to DMX,automatically switch to DMX mode
		PRG	
		Auto	
		Sound	
3	Program	progr0	Program 1 - program 3 need to be edited and imported by the console
		progr1	
		progr2	
		progr3	
		progr4	
4	SD FILE	SD FILE	Only valid when playing SD card
5	Size	10-100	
6	Phasic	X+ Y+	Only valid for built-in graphics
7	Speed	8-40	According to scanner setting
8	DMX State	Show	
		Black	
9	Slave Mode	Slave	Set to slave when not online
		Master	
10	Y Phasic	Positive	It works for both laser and ILDA signals
		Reverse	
11	X Phasic	Positive	
		Reverse	
12	Color Mode	RGB	
		White	
13	Laser Lock	ON	Laser angle too small,laser off
		OFF	
14	Sound sense	0-100	
15	SD Sound	ON	
		OFF	
16	Highlight	0-100	Set high highlight at color junction
17	ILDA Lock	ON	Use RJ45 interface,select lock to switch to ILDA input
		OFF	
18	Load Flash	ON	Import programs from the < load > folder of SD card
		OFF	

19	Update Prog	OFF	Import programs from show1.yuq-show4.yuq
		progr1	
		progr2	
		progr3	
		progr4	
		all	

DMX-512 FUCTION CHANNELS:

Channel		Function	Value	Description	
	1	Channel Mode	0-49	Laser off	
			50-99	6 Channel Mode	Individually tune the built-in program
			100-159	19 Channel Mode	One pattern
			150-255	32 Channel Mode	2 pattern overlaps
6 Channel Mode	2	Program list Select	0-49	List 1	
			50-99	List 1	
			100-159	List 1	
			150-199	List 1	
			200-255	List 1	
	3	Show Select	0-255	Program effect Select	
	4	Color	0-255	Change color	
	5	Speed	0-5	Original speed	
			5-255	Speed from slow to fast	
	6	Sound	0-127	Sound Off	Auto
			128-255	Sound On	Sound
19 Channel Mode	2	Program list Select	0-49	AUTO	
			50-99	Sound	
			100-149	PRG	
			150-199	ILD	
			200-255	Built-in graphics	
	3	Pattern Select	0-255	Pattern select,every 2 value one pattern	
	4	Display Mode			
	5	Color	0-255	Reference color list	
	6	X move			
	7	Y move			
	8	Size			
	9	Rolling X			
	10	Rolling Y			
	11	Rolling Z			
	12	Drawing			
	13	X wave			
	14	Y wave			

	#	Function	Range	Description
	15	Flashing		
	16	R Red Dimmer		
	17	G Red Dimmer		
	18	B Red Dimmer		
	19	Display Effect	0-49	Rebound
			50-99	Scan size edge display
			100-149	Overstep the size edge of scan
			150-255	X move
32 Channel Mode	20	Pattern Select	0-255	Pattern select,every 2 value one pattern
	21	Display Mode		
	22	Color	0-255	Reference color list
	23	X move		
	24	Y move		
	25	Size		
	26	Rolling X		
	27	Rolling Y		
	28	Rolling Z		
	29	Drawing		
	30	X wave		
	31	Y wave		
	32	Display Effect	0-49	Rebound
			50-99	Scan size edge display
			100-149	Overstep the size edge of scan
			150-255	X move

ILDA control mode

Connect ILDA signal,the lighting fixtures will automatically switchover to ILDA working mode.This lighting fixtures' ILDA signal cable connection way is compliant to international standard.

Maintenance

To prolong the life of the product,it is very important to do maintenance work.The environment is hash outdoors,or if the product is idle for a long time,damp,smoke or particularly dirty surroundings can cause greater accumulation of dirt on its cover and housing.So it should be cleaned to maintain an optimum light output and at the same time to prevent it from corrupted by acid gas.

Cleaning frequency depends on the environment in which the fixture operates.Soft cloth and typical glass cleaning products should be used for cleaning.It is recommended to clean product at least once every 20 days.

Friendly notice:Do not use any organic solvent,e.g.alcohol to clean housing of the apparatus.

Troubleshooting

Problems	Action
The product doesn't switch on	Power connection is not correct.Re-connect the power.
	Power supply is damaged or abnormal.Call a qualified personnel to fix it.
	Connection of control board is not correct.Call a qualified personnel to fix it.
The product can turn on,but no light coming out.	Control mode is wrongly setting up.Resetting it according to instruction book
	Control section is damaged.Call a qualified personnel to fix it.
The beam appears dim	The product is too hot.Take ventilation measures to make it cool.

Note:This product is under warranty for 1 year(From the date of delivery), 1 years after can provide paid maintenance services.But if it is because of natural disasters or user's operation not according to manual.We won't provide warranty.