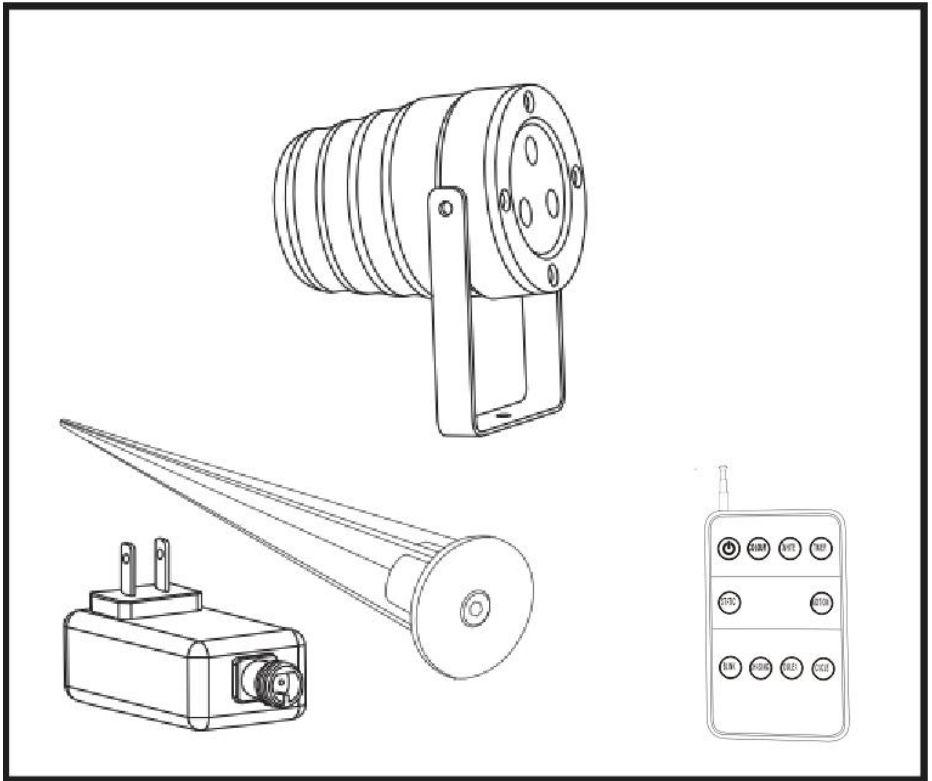


# Laser Light Projector User's Manual

**Model: AL-RGB230-RM1**



LASER RADIATION  
AVOID DIRECT EYE EXPOSURE  
CLASS IIIa LASER PRODUCT  
Diode Laser  
Max : Output < 5mW  
Wavelength 450nm(Blue),  
532nm(Green), 650nm(Red)

**WARNING:**  
Use provided  
transformer only.

**Warning: To reduce risk of injury, the user must read and understand this user manual before using the laser lights. This item is intended for home use only in accordance with the instructions provide in this manual.**

**CAUTION: Do not allow children to play with this item, it is not a toy!**

Please read these instructions carefully and retain for future use.

## **IMPORTANT SAFEGUARDS**

To reduce the risk of fire, electric shock, or injury when using any electric appliance, precautions should be made.

**These precautions include but are not limited to:**

**. Read all instructions.**

. Carefully position in such a way that pets and children cannot stare directly at the laser.

. Do Not attempt to open the protective housing or operate the device if the aperture windows are damaged. If the unit requires service that involves removing the protective housing, contact the manufacturer. Opening the protective housing voids the warranty.

## **CAUTION!**

Use only as directed. Do not look directly at the laser. Improper use may result in damage to the eyes due to direct exposure to laser radiation.

You may plug this device directly into an indoor power socket OR if an extension lead is required, it must be of a type suitable for outdoor use. Any outdoor connection must be completely dry before use and should be protected by a proprietary outdoor waterproof enclosure.

Residual Current Device (RCD) protection is recommended to be used on the circuits or outlets while operating this laser light outdoors or in a wet location. Receptacles with built-in RCD protection are available for this purpose.

## **GENERAL INFORMATION**

This laser product is comply with a CLASS 3A laser product to the requirements of the US Federal Laser Product Performance Standard (FLPPS) contained in the regulations in 21 CFR Sub-chapter J. CLASS 3A laser products can be hazardous when directly viewed.

Avoid direct viewing of a CLASS 3A laser energy. For reference the FLPPS requirements for demonstration laser products like laser pointers are limited to CLASS 3A levels of laser energy, this product uses diffractive optics to scatter the beam energy, this scattering effect causes the energy concentration to drop below the exposure limits for momentary or accidental viewing at relatively short distance from the laser aperture. As similar with all bright light sources, when you operate this device in unsupervised general public areas, it is recommended that up close access to the laser lights be restricted or prevented.

This laser display device incorporates a CLASS 3A laser system which, by itself, may be hazardous. However, this laser display device incorporates a protective housing and diffractive holographic optics in the machine design such that there is no exposure or human access to laser radiation during operation or maintenance above the CLASS 3A limits. Each individual laser beam power is under 5mw which is less than a standard laser pointer.

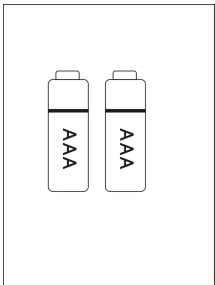
**SAVE THESE INSTRUCTIONS**

**BEFORE USE**

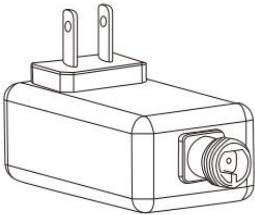
Carefully unpack package contents to make sure all parts are present some assembly is required:



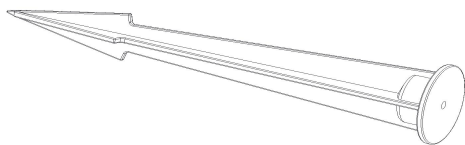
(1) Remote



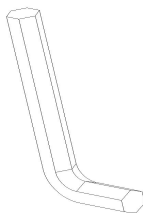
(2) 2x AAA batteries



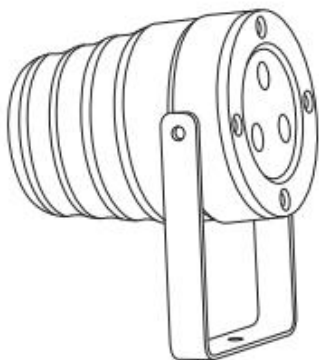
(3) AC Adapter



(4) Ground stake with screw



(5) Allen key



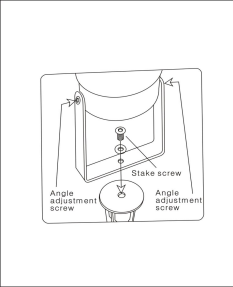
(6) Light projector

**DO NOT PULG IN LASER UNIT UNTIL PROMPTED IN THE STEPS BELOW .**

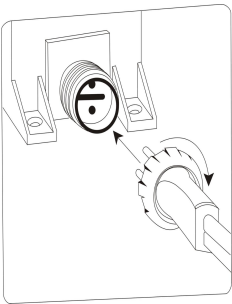
**If you already have, unplug it now and follow the steps below in order.**

## **ASSEMBLY**

- . To attach the ground stake, remove the screw and washer from the stake using the Allen key;
  - . Use the same screw & washer to attach the stake to the pivot mount (See assembly diagram “1”).
- Plug the 2-prong AC adapter into the outlet on the power supply transformer.
- Screw on the weather resistant cap tightly to help protect the connection from the weather (See assemble diagram “2”)
- Insert the stake into the ground. Be careful to avoid other wires or hoses.
- Position the projection by loosening and tightening the angle adjustment screws, using the Allen key (See assembly diagram “1”).



Assembly diagram 1



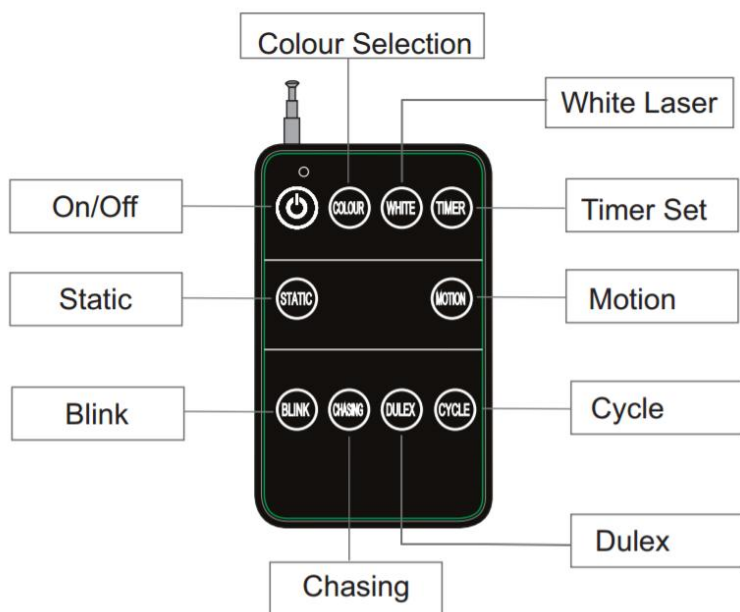
Assembly diagram 2

## REMOTE CONTROL GENERAL INFORMATION

First, install the included 23A battery in the remote. To test the remote's battery connection, press any button and the LED will illuminate for 1 second.

If the LED does not illuminate, check and make sure you have installed battery according to the correct polarity.

## THE REMOTE CONTROLLER



**On/off:** Turns the lighting on & off. When turning the lighting off, the device will save all current settings so that the device will resume with the latest mode when turning it on again.

**Colour:** Each push of the button cycles the effect through one of seven different colours (Red, Green, Blue, Red&Green, Red&Blue, Green&Blue, Red&Green,&Blue). Available modes: Static、Motion、Blink.

**White:** One-key recovery to control Red&Green&Blue laser. Push the button, the laser will come to show Red&Green&Blue when it is setting on other modes or functions.

**Timer:** Push the button to set timer. Blue flashing in 3 times:8h on/16h off; Green flashing in 3 times:6h on/18h off; Red flashing in 3 times:4h on/20h off;

**Static:** Push the button; the device will project static pattern at any mode.

**Motion speed:** This button controls the motor rotating speed. Each push of the button cycles the effect through one of six different statuses: Clockwise (Slow, Medium and Fast), Anti-clockwise (Slow, Medium and Fast). Available functions: Colour.

**Blink:** This mode makes each available laser colour blink in sequence. Each push of the button cycles through one of two different speeds: fast and slow. Available functions: Colour.

**Chasing:** This mode makes seven different laser colour changing from the brightest to dimmest in sequence(Red、Green, Blue, Red&Green, Red&Blue, Green&Blue, Red&Green,&Blue) .Each push of the button cycles through one of two different speeds: fast and slow.

**Dulex:** Push the button, each of all available colours will randomly come to work on irregular statuses that colour fading, motion speed(slow-medium-fast) and rotating directions (clockwise or anti-clockwise).

**Cycle:** A comprehensive button to collect 4 modes: **Pulse**、**Fade**、**Twinkle** and **Chasing**.

**Pulse:** This mode makes a smooth transition through all available laser colour.

**Fade:** This mode cycles through Red, Green and Blue in a fading transition.

**Twinkle:** This mode makes a twinkle effect.

**Chasing:** This mode makes seven different laser colour blink in sequence(Red 、Green, Blue, Red&Green, Red&Blue, Green&Blue, Red&Green,&Blue).

## SYNCING THE REMOTE

- With your remote ready (battery installed) and making sure you are within range of the laser (approx. 10m). Plug in the laser projector power supply adapter to the power source.
- With 1 minute after plugging in the laser, press the ON/OFF button on your remote for 5 seconds to sync it to the laser projector.
- Do not press the ON/OFF button at the same time you plug in the adapter to the power supply.
- You can sync up to 4 laser projectors with one remote control.
- Occasionally, re-syncing the remote with the laser projector may be necessary..
- To re-sync, unplug the laser projector from the power source, then repeat the first two steps.
- To sync more than one laser projector, unplug them all, wait 1 minute, then plug them back in at the same time, then press the ON/OFF button within 5 seconds.
- Remove the battery from the remote if you are planning on storing the laser projector for a long period of time.

For better signal reception please pull out the antenna as much as possible.



Make sure the the battery's positive and negative poles are correct and in good contact with the metal connection.



## NOTES:

- Only use supplied AC adapter connected to a properly grounded outdoor outlet.
- Do not use with dimmers.
- Operate in temperatures of -26°C-35°C ( -15°F ~ 95°F ) . There will be a delay if operating at a temperature of -26°C ( -15°F ). Please allow up to 10 minutes for light to warm up and reach its full projection.
- Timer inside: 6 hours power on and 18, every 24 hours a cycle;
- When handing the RG laser projector, for safety purposes it is recommended to mount using a sturdy handing clamp and safety cable.

## PRODUCT SPECIFICATIONS

Laser Classification	Class III A
Maximum Laser Classification	(Single beam) Less than 5mW
Laser Wavelength	Green: 520nm / Red: 650nm /Blue 450nm
Lifetime	8,000 hours approx.
Power Consumption	Up to 10 watt
Power Input	12V( when used with supplied AC adapter)
Operation	Indoor/Outdoor
Operation Temperature	-26°C~35°C(-15°F~95°F)
Projection Coverage	5,000 Sq Ft = 71' x 71'
Warranty	12 months

## TROUBLE SHOOTING

Problems	Solutions
Light doesn't come on	Check the product is plugged in and switched on at the mains. Check socket works with an alternative electrical product. Replace fuse in plug.
RG laser projector is making unusual noises or smells.	Switch product off immediately and disconnect from power socket. Return product to supplier.

