

Gruolin GL-A04

Gruolin DJ Laser Light GL-A04 User Manual

Model: GL-A04

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective operation of your Gruolin DJ Laser Light GL-A04. Please read this manual thoroughly before use and retain it for future reference. This device is designed for creating dynamic laser light effects for various events and venues.

1.1 Safety Information

- **Laser Radiation:** Avoid direct eye exposure to the laser beam. This product emits visible and invisible laser radiation.
- **Installation:** Ensure the device is securely mounted on a stable surface or truss.
- **Power Supply:** Use only the specified power adapter. Disconnect power before cleaning or servicing.
- **Ventilation:** Ensure adequate ventilation around the unit to prevent overheating. Do not block ventilation openings.
- **Environment:** Do not expose the device to rain, moisture, or extreme temperatures.
- **Children:** Keep out of reach of children.

2. PACKAGE CONTENTS

Verify that all items are present in the package:

- Gruolin DJ Laser Light GL-A04 Unit
- Power Adapter
- Remote Control (1 CR5 battery included)
- User Manual (this document)

3. PRODUCT OVERVIEW

The Gruolin DJ Laser Light GL-A04 is a versatile laser projector capable of producing 3D animated graphics and various beam effects. It supports multiple control methods including a mobile application, remote control, DMX512, and sound activation.



Figure 3.1: Gruolin DJ Laser Light GL-A04 unit with example laser effects and app interface.

3.1 Key Features

- **App Control:** Design custom 3D animations, edit text, draw patterns, and program personalized shows via a mobile application. Over 200 built-in effects.
- **3D Animation:** Built-in Galvo scanning system for projecting 3D animated graphics, beams, and patterns.
- **Full Color Output:** Produces red, green, blue, and various mixed colors (yellow, indigo, purple, white).
- **Multiple Control Modes:** Auto, DMX512, Music Sound, Master/Slave, Remote, and APP control.

3D Animation Full Color Laser Light

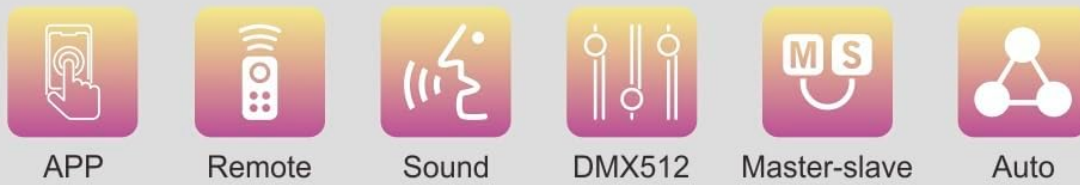


Figure 3.2: Product dimensions and available control modes.

4. SETUP

4.1 Physical Installation

1. Unpack the laser light unit and all accessories.
2. Place the unit on a stable, flat surface or mount it securely using the integrated bracket. Ensure the projection area is clear and free from obstructions.
3. Connect the power adapter to the unit and then to a suitable power outlet.

4.2 App Installation and Connection (LIGHTELF APP)

The LIGHTELF app offers advanced control and customization of the laser light.

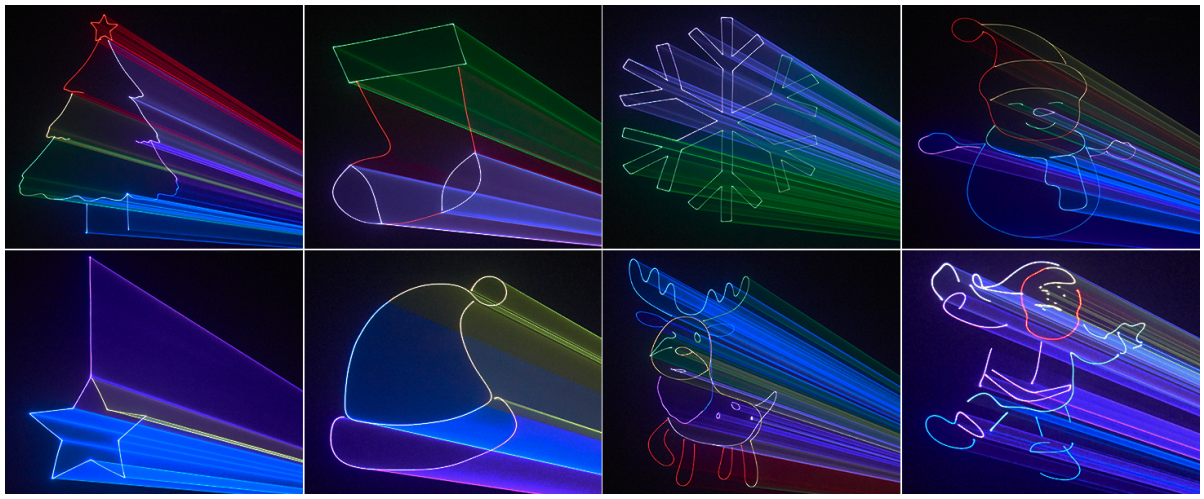


Figure 4.1: LIGHTELF App installation and connection process.

1. **Step 1: Install the app.** Search for "LightElf" in your device's app store (available for Android and iOS).
2. **Step 2: Turn on Bluetooth.** Enable Bluetooth on your mobile device.
3. **Step 3: Open the app.** Launch the LightElf application.
4. **Step 4: Connect the device.** Within the app, click to connect the device. You may need to grant location permissions for Bluetooth scanning to function correctly.

Warm reminder: In case of any malfunction or connection issues, restart your phone and the device, or restore location permissions for the app.

5. OPERATING MODES

5.1 App Control

The LightElf app offers extensive customization options:

- **Custom Drawing:** Draw your own patterns directly in the app. You can modify colors and shapes.
- **Text Playback:** Enter custom text, adjust size, display field of view, and flow speed. Up to 4 groups of text can be added, with playback duration up to 25.5 seconds per text or scene.
- **Image Scanning:** Scan simple patterns from images to project them. Note: Only simple patterns are supported.
- **Personalized Programming:** Program up to 20 scenes with your favorite patterns.



Figure 5.1: App interface for Text Playback.

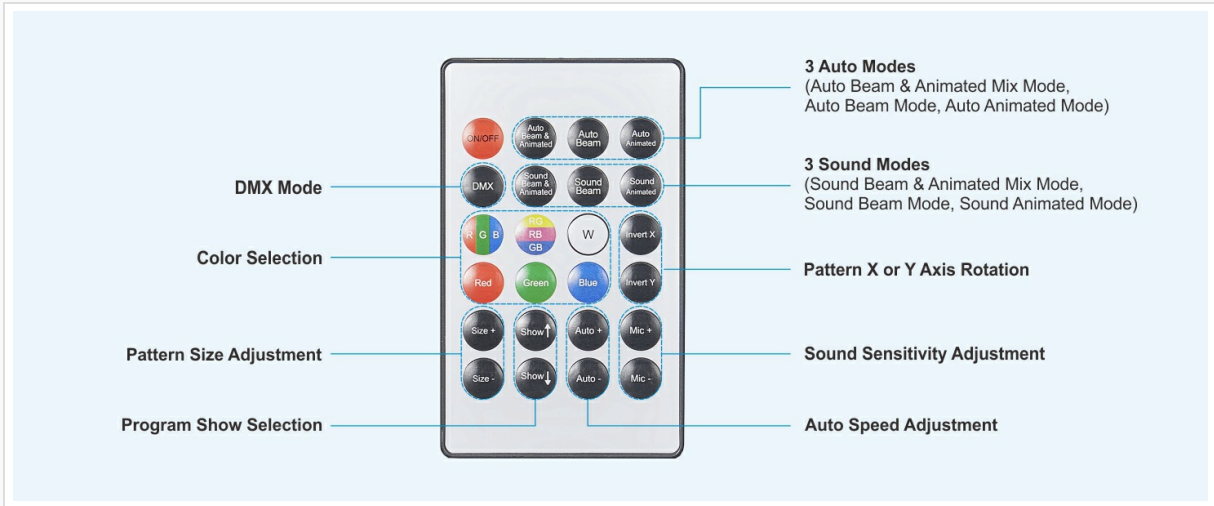


Figure 5.2: App interface for Hand-drawn Patterns.



Figure 5.3: App interface for Image Scanning.

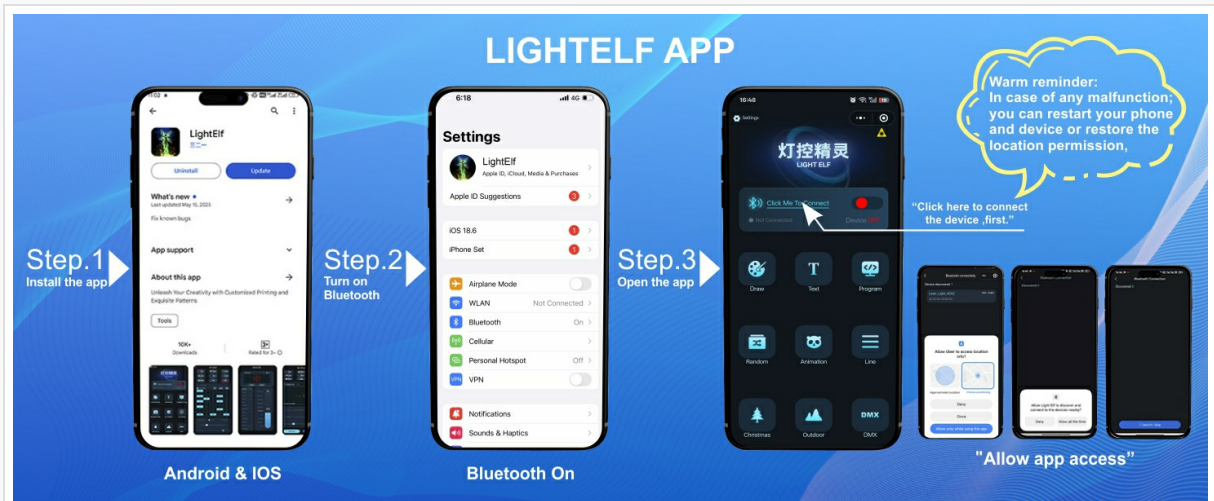


Figure 5.4: App interface for Personalized Programming.

5.2 Remote Control

The included remote control provides quick access to various functions:



Figure 5.5: Remote Control Functions.

- **ON/OFF:** Power on or off the unit.
- **Auto Modes:** Select from 3 auto modes (Auto Beam & Animated Mix, Auto Beam, Auto Animated).
- **Sound Modes:** Select from 3 sound modes (Sound Beam & Animated Mix, Sound Beam, Sound Animated).
- **DMX Mode:** Activate DMX control.
- **Color Selection:** Choose specific colors (Red, Green, Blue, RGB, W) or invert colors.
- **Pattern X or Y Axis Rotation:** Adjust pattern orientation.
- **Pattern Size Adjustment:** Increase or decrease pattern size.
- **Sound Sensitivity Adjustment:** Adjust the microphone sensitivity for sound-activated modes.
- **Program Show Selection:** Cycle through pre-programmed shows.
- **Auto Speed Adjustment:** Control the speed of auto-play effects.

5.3 DMX Control

For professional lighting setups, the GL-A04 supports DMX512 control with 16 channels. Connect a DMX controller to the unit's DMX IN port and configure the DMX address as per your lighting setup requirements. Refer to the DMX channel chart (not provided in this manual, typically found in a separate DMX guide or product appendix) for specific channel functions.

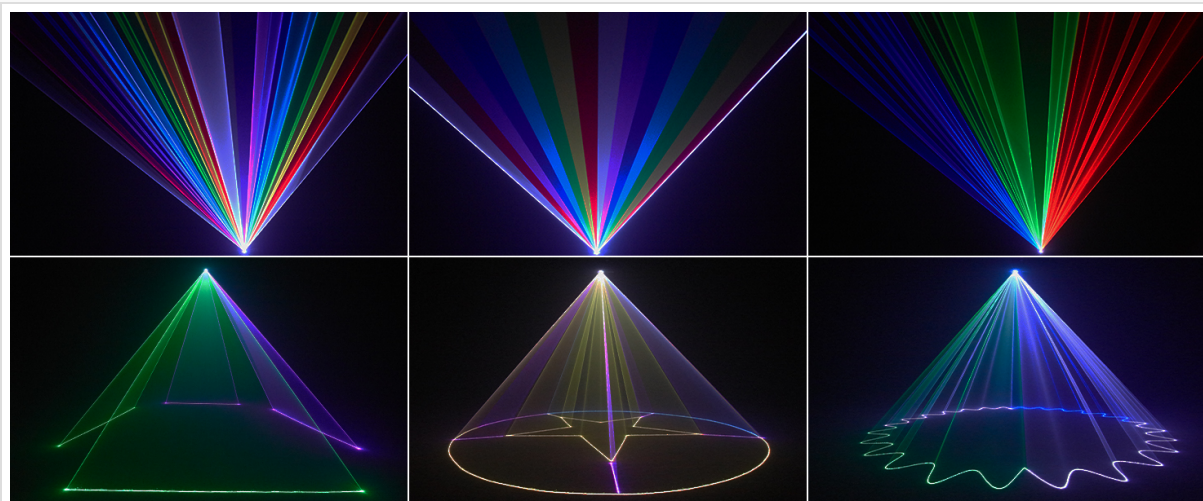


Figure 5.6: DMX Control setup.

5.4 Music Sound Mode

In Music Sound mode, the laser light reacts to ambient sound, creating dynamic effects synchronized with music. Adjust the sound sensitivity using the remote control or app to optimize responsiveness.

5.5 Master/Slave Mode

Connect multiple GL-A04 units via DMX cables to operate them in a synchronized Master/Slave configuration. One unit acts as the Master, controlling all connected Slave units.

5.6 Enhancing Visual Effects with Smoke

For the most vibrant and dynamic laser beam effects, the use of a fog or haze machine is recommended. Without atmospheric effects, you will primarily see patterns and animated graphics projected on surfaces, rather than visible beams and scanning effects in the air.

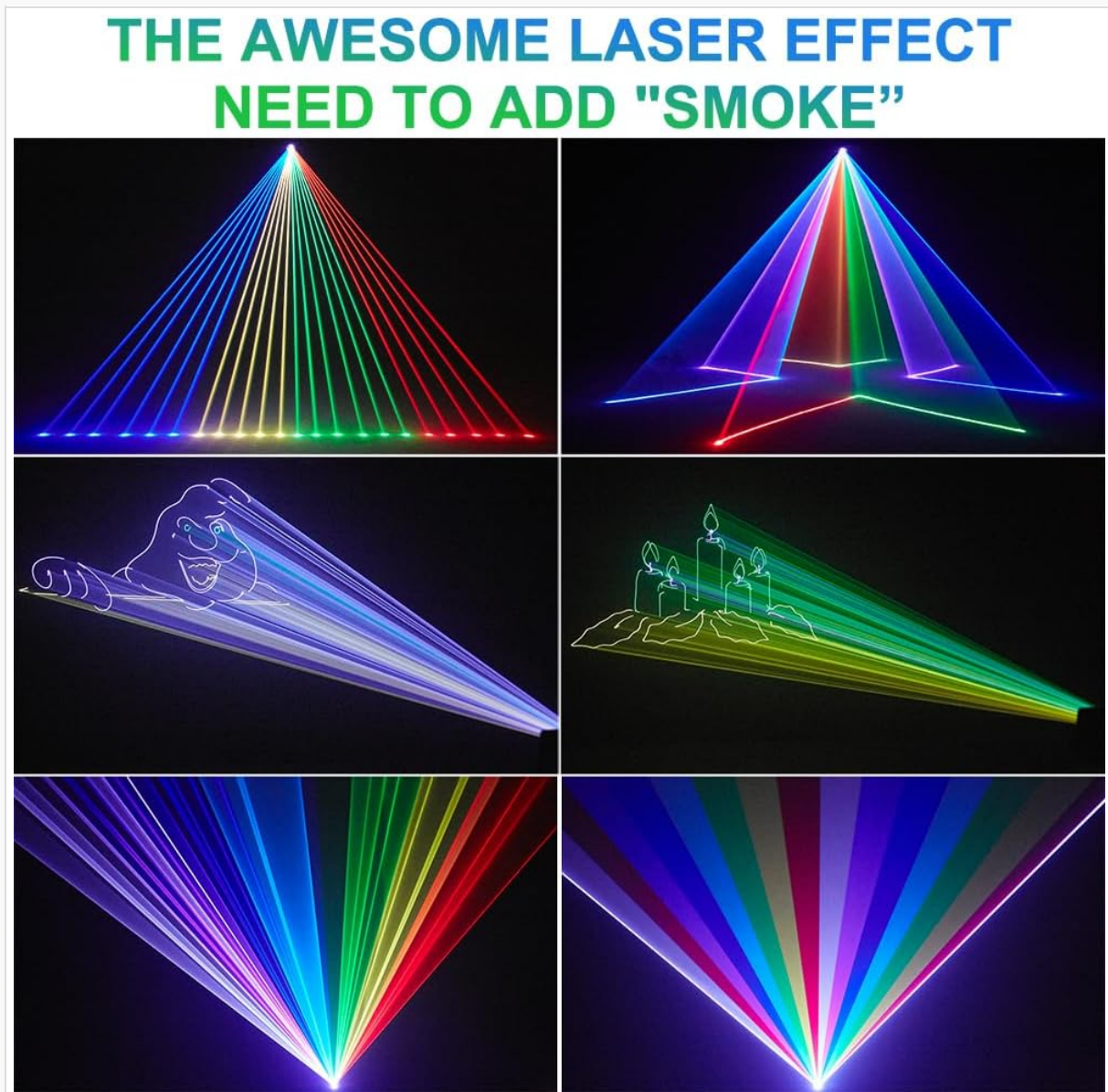


Figure 5.7: Examples of laser effects, best viewed with atmospheric haze.

6. MAINTENANCE

- **Cleaning:** Regularly clean the outer casing with a soft, dry cloth. For the laser aperture, use a lens cleaning cloth and solution specifically designed for optics. Ensure the unit is powered off and unplugged before cleaning.
- **Storage:** When not in use, store the device in a cool, dry place, away from direct sunlight and extreme temperatures.

- **Inspection:** Periodically check the power cable and connections for any signs of damage.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No laser output / Unit does not power on.	Power cable not connected. Power outlet malfunction. Unit malfunction.	Ensure power cable is securely connected. Test the power outlet with another device. Contact customer support if the issue persists.
App cannot connect to the device.	Bluetooth is off on the mobile device. Location permissions not granted to the app. Temporary software glitch.	Ensure Bluetooth is enabled. Grant necessary location permissions to the LightElf app in your phone settings. Restart your phone and the laser unit. Try reconnecting.
Remote control is unresponsive or has poor range.	Low battery in remote. Obstruction between remote and unit. Remote sensor blocked.	Replace the CR5 battery in the remote. Ensure a clear line of sight to the unit's IR receiver. Operate the remote closer to the unit.
Laser effects are not visible in the air.	Lack of atmospheric haze/smoke.	Use a fog or haze machine to create atmospheric effects for visible beams.

8. SPECIFICATIONS

Feature	Detail
Model Number	GL-A04
Dimensions (L x W x H)	8.07" x 6.62" x 4.92" (20.5cm x 16.8cm x 12.5cm)
Item Weight	3.12 pounds (1.42 kg)
Material	Aluminum
Finish Type	Polished Aluminum
Light Source Type	Light Emitting Diode (LED)
Power Source	Corded Electric
Mounting Type	Table Mount / Surface Mount
Remote Battery	1 CR5 battery (included)
Control Modes	APP, Remote, Sound, DMX512 (16 channels), Master/Slave, Auto
Bulb Features	Customizable 3D Animated Graphics, 200+ Pre-set Patterns

9. WARRANTY AND SUPPORT

Gruolin products are manufactured to high-quality standards. For warranty information and technical support, please refer to the contact details provided with your purchase or visit the official Gruolin website. Keep your proof of purchase for warranty claims.

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