

WAINLUX JL3

WAINLUX JL3 Laser Engraver User Manual

Model: JL3
Brand: WAINLUX

1. INTRODUCTION

The WAINLUX JL3 Laser Engraver is a versatile and powerful machine designed for precision engraving and cutting. It features a unique auto power-off function for safety when the machine is offset. This manual provides essential information for setting up, operating, and maintaining your JL3 laser engraver to ensure optimal performance and safety.



Figure 1: WAINLUX JL3 Laser Engraver in operation, demonstrating an engraved owl design on a wooden surface.

2. PACKAGE CONTENTS

Upon unpacking your WAINLUX JL3, please verify that all the following items are included:

- WAINLUX JL3 Laser Engraver Unit (Aluminum profile + Acrylic frame)
- Laser Module (20W version, as specified)
- Power Supply
- Data Cable (USB)
- U Disk (containing software and drivers)
- Protective Goggles
- Kraft Paper and Black Card (for testing)
- Test Board
- User Manual (this document)
- Small Brush and Wrench (for maintenance/assembly)

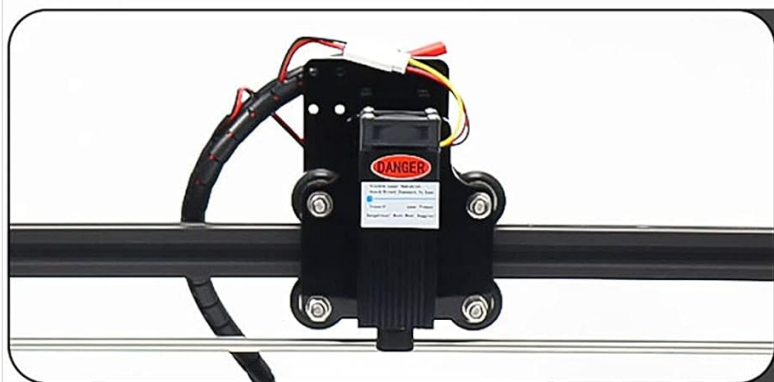


Figure 2: All components included in the WAINLUX JL3 Laser Engraver package.

3. SPECIFICATIONS

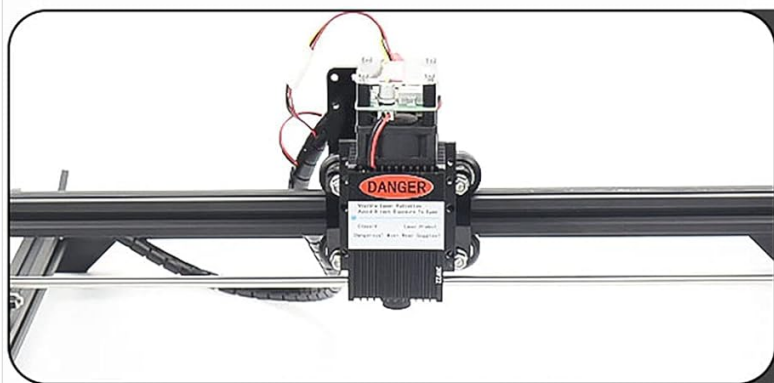
Feature	Detail
Product Model	JL3
Laser Power	20W (Electric Power)
Engraving Area	410 x 370 mm (approx. 16.1" x 14.5")
Product Dimensions	590 x 510 x 210 mm
Product Weight	2.68 kg
Product Material	Aluminum Profile + Acrylic
Connectivity	Computer USB, Mobile APP (WiFi), One-key Offline Engraving
Supported OS	Windows, MAC, Android, iOS

Three Different Power Laser Module



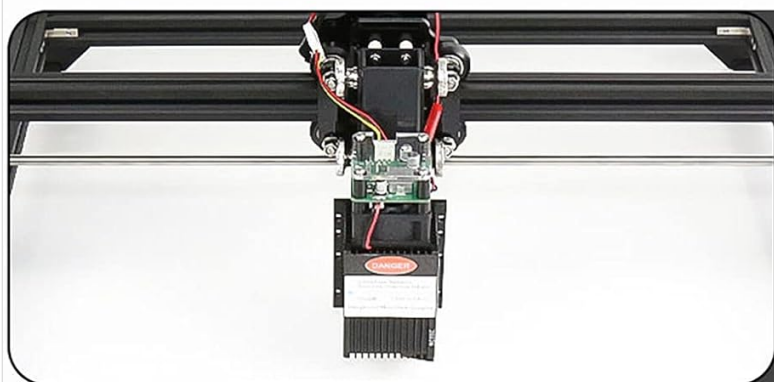
Laser Module WH-7W

Adjustable Focus
Electric Power: 7W
Luminous Power: 3000mw



Laser Module WH-20W

Adjustable Focus
Electric Power: 20W
Luminous Power: 7000mw

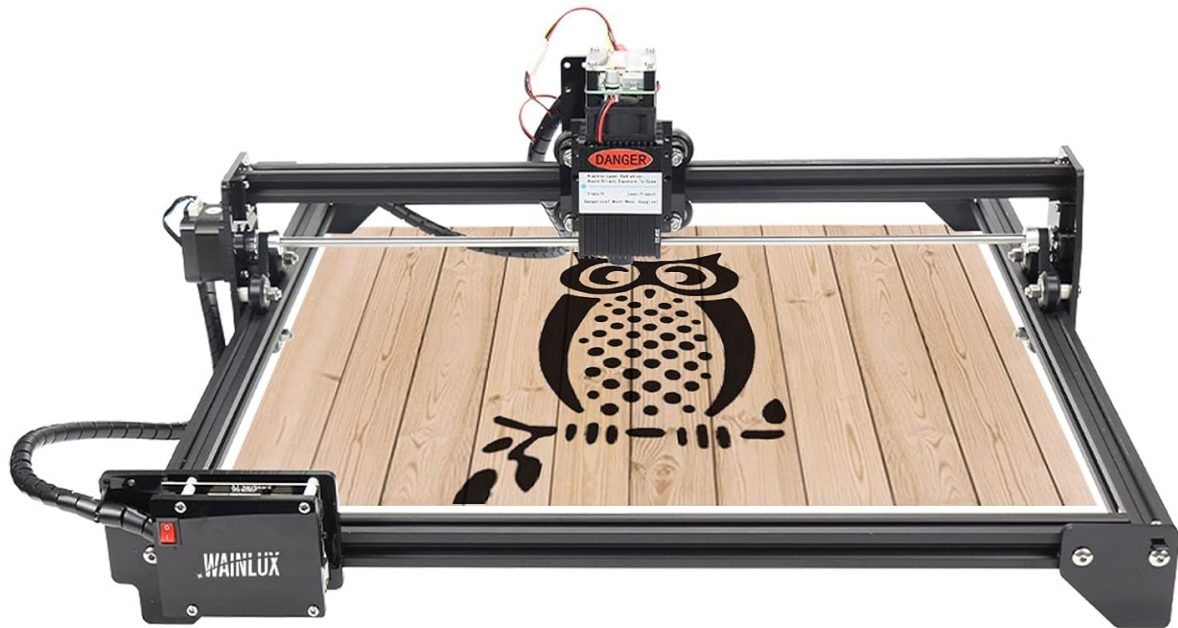


Laser Module WH-30W

Fixed Focus
Electric Power: 30W
Luminous Power: 7000mw

Figure 3: Illustration of various laser module power options available for WAINLUX engravers, including the 20W module.

410mm X 370mm Engraving Area Large



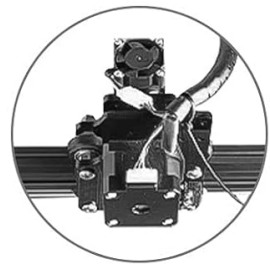
Aluminum Alloy
Acrylic Material



Laser
Module



Silent Belt
Pulley



Motor

Figure 4: Overview of the WAINLUX JL3's large engraving area and structural components.

4. SETUP

Before operating your WAINLUX JL3, ensure it is properly set up and connected.

4.1. Initial Assembly

The JL3 comes partially assembled. Follow the detailed instructions in the included physical user manual for complete assembly of the aluminum profile and acrylic components, and for mounting the laser module securely.

4.2. Software Installation

1. Insert the provided U Disk into your computer.
2. Locate and install the appropriate software and drivers for your operating system (Windows or MAC).

3. For mobile control, download the WAINLUX APP from your device's app store (Android or iOS).

4.3. Connecting the Engraver

The JL3 offers multiple connection options:

- **Computer USB Connection:** Connect the engraver to your computer using the provided USB data cable. Ensure the necessary drivers are installed for proper communication.
- **Mobile APP (WiFi) Connection:** Connect your mobile device to the engraver via WiFi using the WAINLUX APP. Follow the in-app instructions for pairing.
- **One-key Offline Engraving:** For pre-loaded designs, the machine supports offline engraving without a continuous computer or mobile connection. Refer to the software guide for preparing offline files.



Figure 5: WAINLUX software interface on both desktop and mobile devices, demonstrating connectivity options.

5. OPERATING INSTRUCTIONS

This section outlines the general steps for operating your WAINLUX JL3 Laser Engraver.

5.1. Software Overview

The WAINLUX software provides a user-friendly interface for preparing your engraving projects. It supports various input types:

- **Image Engraving:** Import common image formats.
- **Text Engraving:** Create and engrave text with various fonts.
- **Vector Diagram Engraving:** Import vector files for precise cuts and engravings.

The software offers four engraving modes:

- **Black and White:** For high-contrast images.
- **Outline:** Engraves only the contours of a design.
- **Discrete:** Creates a dotted or patterned effect.
- **Sketch:** Simulates a hand-drawn sketch.

The software also features automatic detection of the maximum carving area, simplifying project setup.

5.2. Engraving Process

1. **Prepare Material:** Place your chosen material flat and securely within the engraving area.
2. **Design in Software:** Open the WAINLUX software (on PC or mobile APP) and import or create your design.
3. **Adjust Settings:** Select the appropriate engraving mode, adjust laser power, speed, and other parameters based on your material and desired outcome.
4. **Preview and Position:** Use the software's preview function to ensure the design is correctly positioned on your material.
5. **Start Engraving:** Initiate the engraving process from the software. The machine will begin working.

5.3. Compatible Materials

The WAINLUX JL3 is capable of engraving and cutting a wide range of materials, including but not limited to:

- Cardboard
- Wood
- Leather
- Cloth
- Bamboo
- Felt
- Fruit (e.g., peels)
- Plastic (certain types)
- Acrylic (certain types)
- Metal with spray paint coating (engraves the coating)

Note: The surface of transparent or reflective materials needs to be coated with black baking paint or a similar opaque, non-reflective layer for the laser to engrave effectively.

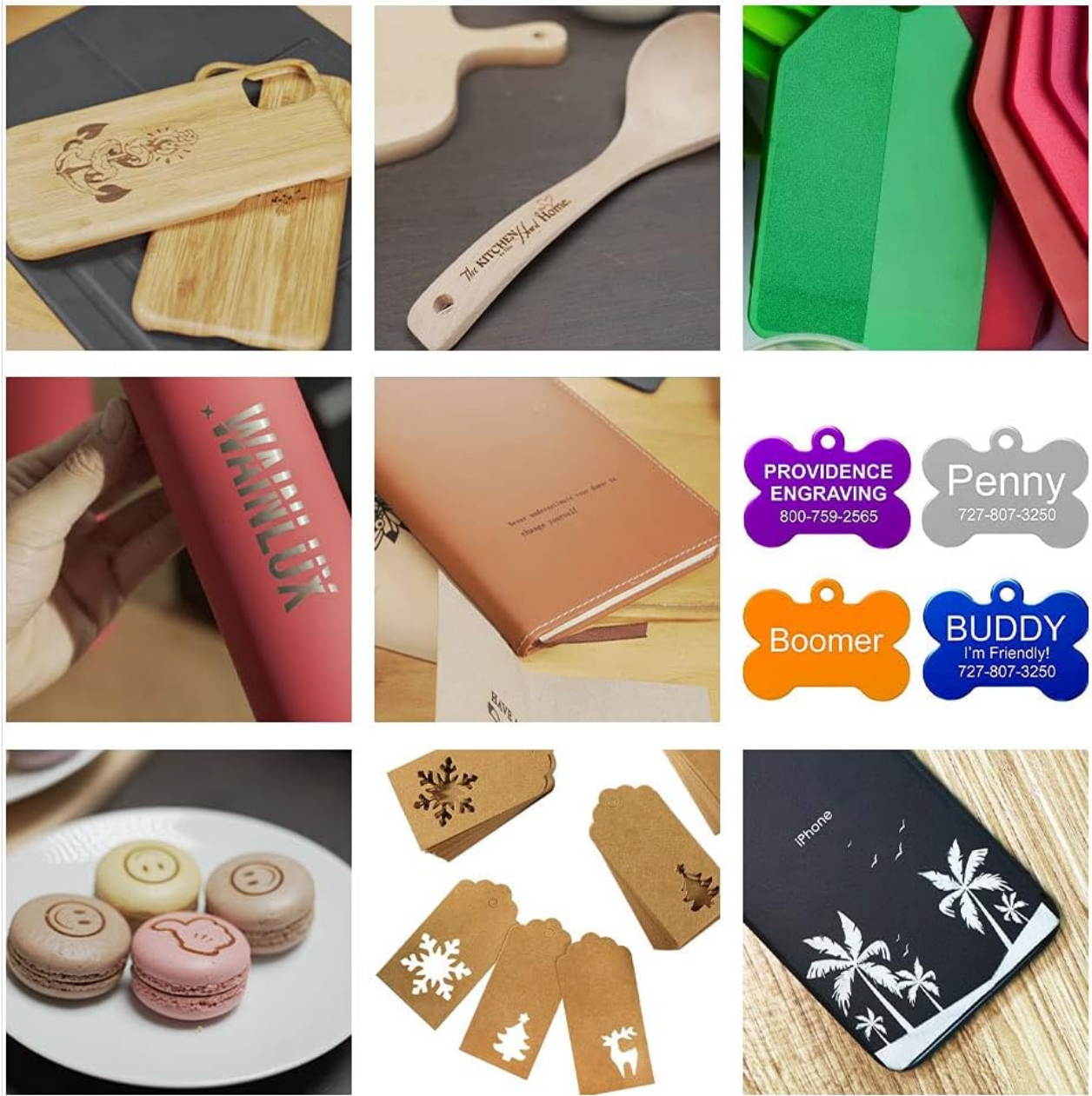


Figure 6: Examples of materials successfully engraved by the WAINLUX JL3.



Figure 7: Further examples showcasing the versatility of the WAINLUX JL3 in engraving various objects.

6. SAFETY AND MAINTENANCE

Adhering to safety guidelines and performing regular maintenance will ensure the longevity and safe operation of your engraver.

6.1. Safety Precautions

- **Eye Protection:** Always wear the provided protective goggles when the laser is in operation. *Do not look directly at the laser with naked eyes to avoid injury.*
- **Hand Safety:** Never place your hands or any body parts under the laser head while the machine is working.
- **Automatic Safety Feature:** The laser head is designed to automatically close (power off) if abnormal movement is detected, enhancing safety.

- **Ventilation:** Ensure adequate ventilation in your workspace, especially when engraving materials that may produce fumes.

6.2. Maintenance

- **Laser Head:** The laser head is a consumable item and has a limited lifespan.
- **Cooling Periods:** To prolong the life of the laser module, it is recommended to follow these power-off schedules:
 - After four hours of continuous engraving, power off for ten minutes.
 - After one hour of continuous engraving, power off for ten minutes.
- **Cleaning:** Regularly clean the laser lens and the machine's frame using a soft, dry cloth to prevent dust and debris buildup.

7. TROUBLESHOOTING

If you encounter any issues during the setup or operation of your WAINLUX JL3 Laser Engraver, please consider the following general advice:

- **Connection Issues:** Ensure all cables are securely connected and that your device (computer/mobile) is properly paired via USB or WiFi.
- **Software Problems:** Verify that you have the latest version of the WAINLUX software and drivers installed. Try restarting the software or your device.
- **Engraving Quality:** Check your material type and adjust laser power and speed settings accordingly. Ensure the material surface is clean and properly prepared.
- **Laser Not Firing:** Confirm the laser module is correctly installed and connected. Check for any error messages in the software.

For persistent problems or issues not covered here, please refer to the comprehensive troubleshooting section in the physical user manual or contact WAINLUX customer support.

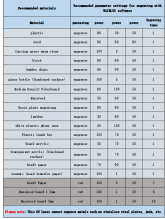



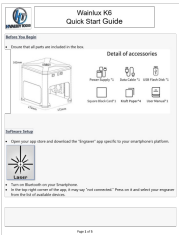
8. WARRANTY AND SUPPORT

WAINLUX is committed to providing high-quality products and excellent customer service. While specific warranty details are typically provided with your purchase documentation, WAINLUX offers support for its products.

If you encounter any problems during use, please contact WAINLUX customer support immediately. Our team is ready to assist you with troubleshooting, technical queries, and any other support needs to ensure your satisfaction with the JL3 Laser Engraver.

Please retain your purchase receipt and product serial number for any warranty claims or support inquiries.

Related Documents - JL3

	<p>WAINLUX K6 Pro Laser Engraver: Material Engraving Settings Guide</p> <p>Detailed parameter settings for engraving various materials like wood, leather, acrylic, and paper using the WAINLUX K6 Pro laser engraver with WAINLUX software.</p>
	<p>WAINLUX K10 3W Laser Engraver Software Engraving Parameter Table</p> <p>A comprehensive guide to software engraving parameters for the WAINLUX K10 3W Laser Engraver, detailing settings for various materials including wood, paper, leather, acrylic, glass, ceramics, and metals.</p>
<p>WAINLUX K6 User Manual</p> 	<p>WAINLUX K6 Laser Engraver User Manual</p> <p>A comprehensive user manual for the WAINLUX K6 laser engraver, covering setup, software download for mobile and desktop, and troubleshooting.</p>
	<p>Wainlux Laser Engraving Machine User Manual</p> <p>Comprehensive user manual for the Wainlux laser engraving machine, covering specifications, accessories, operation modes, software settings, photo and text engraving, and mobile app usage. Includes instructions for both desktop software and smartphone app control.</p>
<p>WAINLUX K6 User Manual</p> 	<p>WAINLUX K6 Laser Engraver User Manual</p> <p>Comprehensive user manual for the WAINLUX K6 laser engraver, detailing setup, software installation for PC and mobile, operation, and troubleshooting steps.</p>
	<p>Wainlux K6 Laser Engraver Quick Start Guide</p> <p>A comprehensive quick start guide for the Wainlux K6 laser engraver, covering unboxing, software setup, app usage for text and image engraving, safety precautions, and engraving operation.</p>