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Longer RAY5 10W

Longer RAY5 10W Laser Engraver Instruction Manual

Model: RAY5 10W

1. INTRODUCTION

This manual provides essential information for the safe and effective operation of your Longer RAY5 10W Laser Engraver. Please read it thoroughly before assembly and use to ensure optimal performance and safety.



Image 1.1: The Longer RAY5 10W Laser Engraver with included accessories.

2. SAFETY INFORMATION

WARNING: Laser radiation can cause eye damage and skin burns. Always wear appropriate laser safety goggles during operation. Never look directly into the laser beam.

- Operate the laser engraver in a well-ventilated area to dissipate fumes and smoke.
- Keep a fire extinguisher nearby.
- Do not leave the machine unattended during operation.
- Ensure the work area is clear of flammable materials.
- Keep children and pets away from the operating machine.
- Disconnect power before performing any maintenance or adjustments.

3. SETUP

3.1 Unpacking and Assembly

Carefully unpack all components and verify against the packing list. Follow the included assembly guide for step-by-step instructions to construct the main frame and attach the laser module.

3.2 Air Assist Kit Installation

The Air Assist Kit helps to remove smoke and debris during engraving and cutting, resulting in cleaner edges and preventing yellowing. Connect the air pump to the designated port on the laser module and secure the air nozzle.

Option Air Assist

Non-yellow, more powerful when cutting and engraving

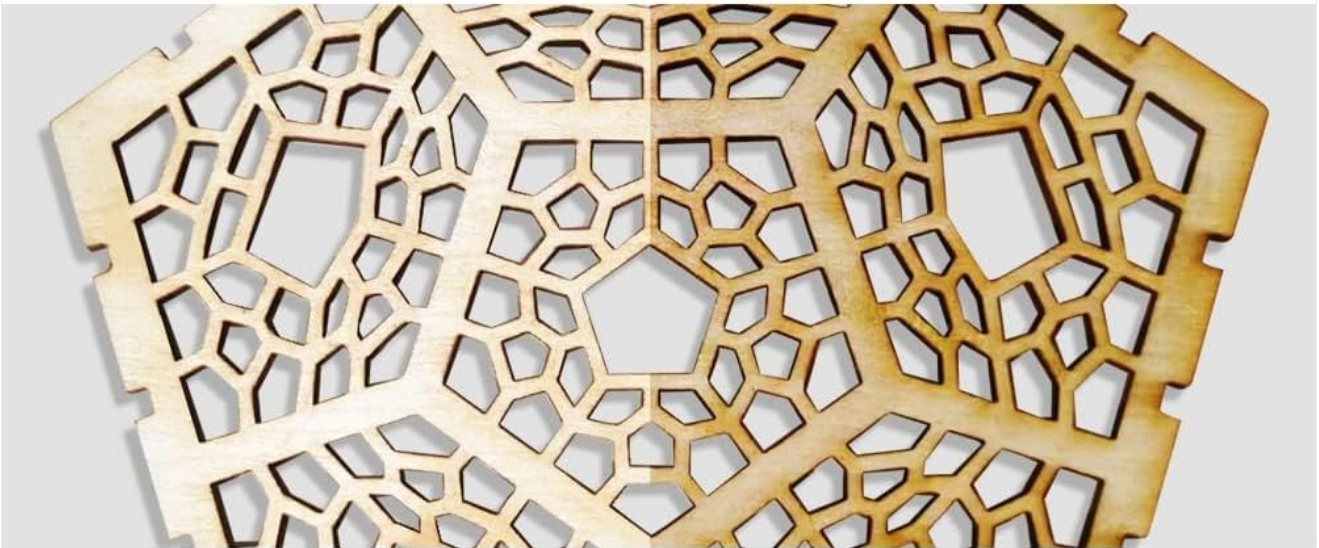


Image 3.1: Engraving results showing the benefit of using the Air Assist Kit.

3.3 4-in-1 Rotary Roller Setup

The 4-in-1 Rotary Roller is designed for engraving cylindrical, wine glass, and irregular objects. Attach the rotary roller to the engraver's base as per the separate rotary roller manual. Select the appropriate jaw set for your object.

3 Sets Jaws

meet Various Engraving Needs



L - shaped
Jaw



Ladder
Jaw



Hexagonal
Jaw



Image 3.2: The 4-in-1 Rotary Roller with L-shaped, Ladder, and Hexagonal jaws.



Image 3.3: Examples of objects being engraved using the Rotary Roller.

3.4 Riser Pads Installation

The 16 Riser Pads increase the working height of the engraver, allowing for engraving on taller objects. Place the riser pads under the engraver's feet to elevate the machine.

Enables Greater Engraving Range



Image 3.4: The 16 Riser Pads.



Image 3.5: The laser engraver with riser pads installed, providing additional working height.

4. OPERATING INSTRUCTIONS

4.1 Power On and Connection

Connect the power adapter and turn on the machine. The RAY5 10W supports App Offline Control, allowing you to operate it without a constant computer connection once the file is loaded.

4.2 Material Preparation

Place your material (metal, glass, wood, etc.) securely on the engraving bed. Ensure it is flat and properly aligned. Adjust the laser focus according to the material thickness.

4.3 Engraving and Cutting

The 10W laser module provides strong cutting power and ultra-fine engraving capabilities with a laser spot as small as 0.06mm*0.06mm. This allows for high precision and detail in your projects.

Ray5 10W
0.06mm*0.06mm

Others
0.08mm*0.08mm

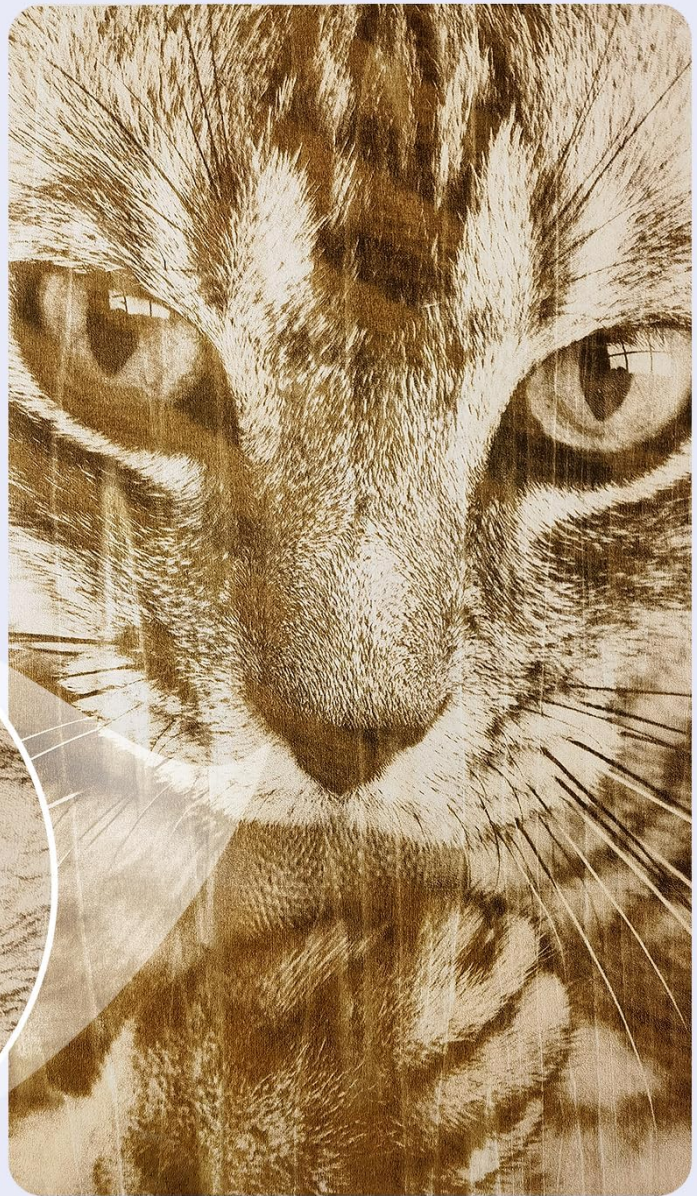


Image 4.1: Detail comparison illustrating the ultra-fine engraving capability of the RAY5 10W.

10W Laser Module

Unmatched Cutting Power

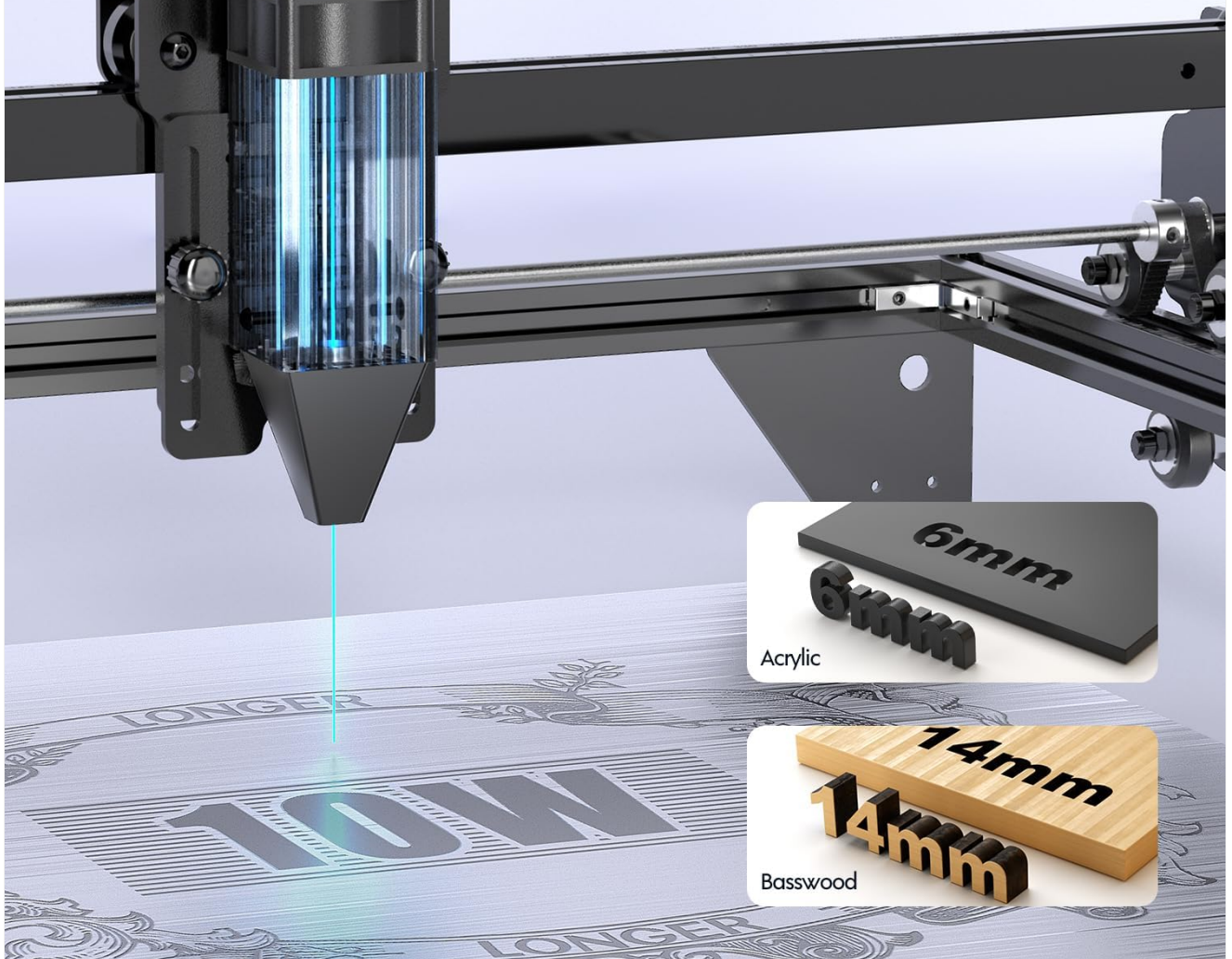


Image 4.2: The 10W Laser Module demonstrating its cutting power on various materials.

4.4 Speed and Efficiency

Equipped with dual-beam technology, the machine can achieve an engraving speed of up to 10,000mm per minute, significantly improving work efficiency.

10000mm/min

Improve work efficiency and achieve high productivity

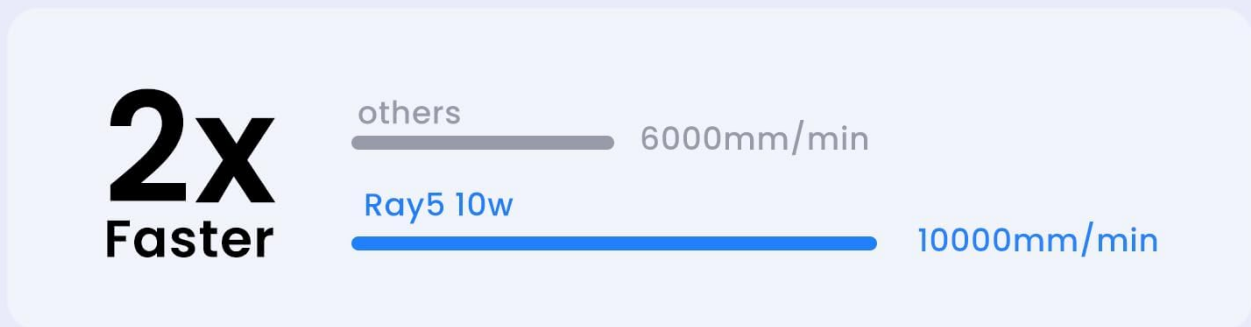
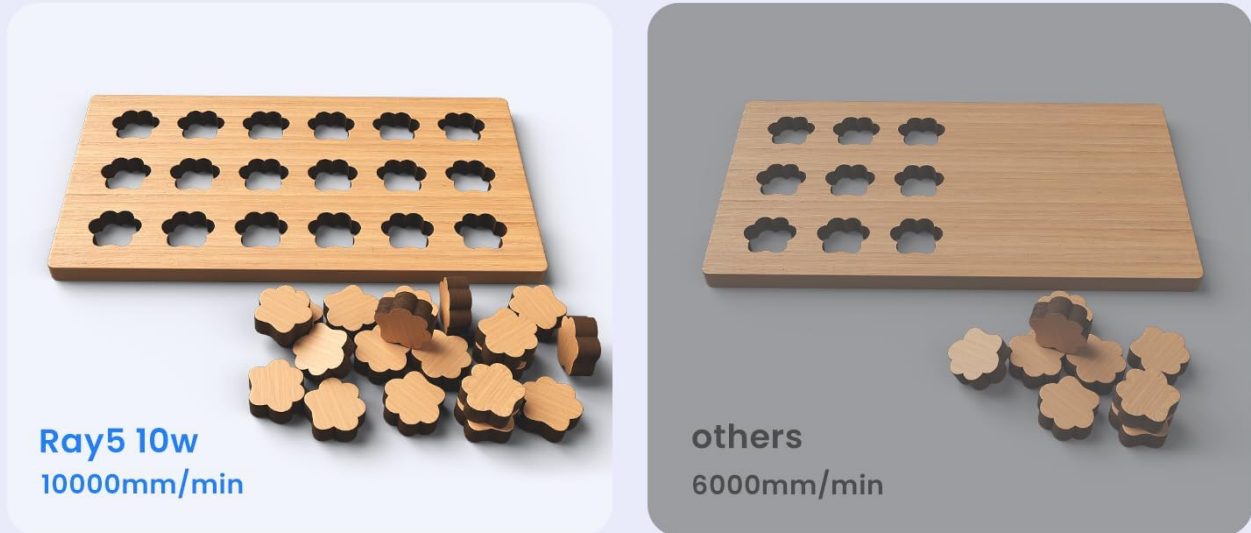


Image 4.3: Speed comparison highlighting the efficiency of the RAY5 10W.

4.5 Video Demonstration

Watch this video for a visual guide on operating the Longer RAY5 10W Laser Engraver.

Your browser does not support the video tag.

Video 4.1: Official product video demonstrating features and operation of the Longer RAY5 10W Laser Engraver.

5. MAINTENANCE

5.1 Cleaning the Laser Lens

Regularly clean the laser lens with a soft, lint-free cloth and lens cleaning solution to ensure optimal laser performance and prevent power loss. Ensure the machine is powered off before cleaning.

5.2 Rail and Belt Inspection

Check the linear rails and belts for any debris or wear. Clean the rails and lubricate them periodically. Ensure belts

are properly tensioned to maintain engraving accuracy.

5.3 General Cleaning

Keep the entire machine free from dust and debris. Use compressed air to clean hard-to-reach areas. A clean machine operates more efficiently and prolongs its lifespan.

6. TROUBLESHOOTING

6.1 Laser Not Firing

- Check if the power cable is securely connected.
- Verify the laser module is properly seated and connected.
- Ensure the safety switch or emergency stop button is not engaged.
- Confirm software settings for laser power and mode are correct.

6.2 Poor Engraving Quality

- Adjust the laser focus.
- Clean the laser lens.
- Reduce engraving speed or increase laser power for deeper marks.
- Ensure the material is flat and stable.
- Check for loose belts or mechanical components.

6.3 Connection Issues

- Restart the engraver and your control device (computer/app).
- Check USB or Wi-Fi connections.
- Ensure correct drivers are installed for computer connection.

7. SPECIFICATIONS

Feature	Detail
Manufacturer	LONGER
Model Number	20240624
Laser Power	10W
Laser Spot Size	0.06mm*0.06mm
Max Engraving Speed	10,000mm/min
Product Dimensions	24 x 12.5 x 5.9 inches
Control Method	App Offline Control, CNC
Included Accessories	Air Assist Kit, 4-in-1 Rotary Roller, 16 Pcs Riser Pads

8. WARRANTY INFORMATION

The Longer RAY5 10W Laser Engraver comes with a **1-year warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use. Please retain your proof of purchase for warranty claims. For detailed terms and conditions, refer to the official Longer website or contact customer support.

9. CUSTOMER SUPPORT

For technical assistance, troubleshooting, or any product-related inquiries, please contact Longer's customer support team:

- **Technical Support Phone:** +1 888-575-9099
- **Operating Hours (Mon-Fri):** 9:00am-6:00pm (EST, UTC-5)
- **Operating Hours (Sun-Thu):** 8:30pm-7:00am (EST, UTC-5)

Our customer service team is professionally trained to provide timely and effective help for any product issues.