

ACMER M3

ACMER M3 Laser Rotary Roller User Manual

Comprehensive instructions for the ACMER M3 Laser Rotary Roller, designed for cylindrical engraving.

1. INTRODUCTION

The ACMER M3 Laser Rotary Roller is a Y-axis rotary module designed to enable 360° engraving on cylindrical objects. This device enhances the capabilities of compatible laser engravers by allowing precise and stable engraving on various curved surfaces.

It features a robust design with a non-slip rubber roller for consistent grip and stability, ensuring high-quality results on items such as cups, tumblers, bottles, and pens. The M3 rotary roller is engineered for ease of use, offering a plug-and-play experience with broad compatibility across many laser engraving machines.

ACMER M3 Laser Rotary Roller

Used For Almost Cylindrical Objects



8-Gear Width Adjustment



Suitable Diameter 6-164mm



Stable Structure



Budget-Friendly

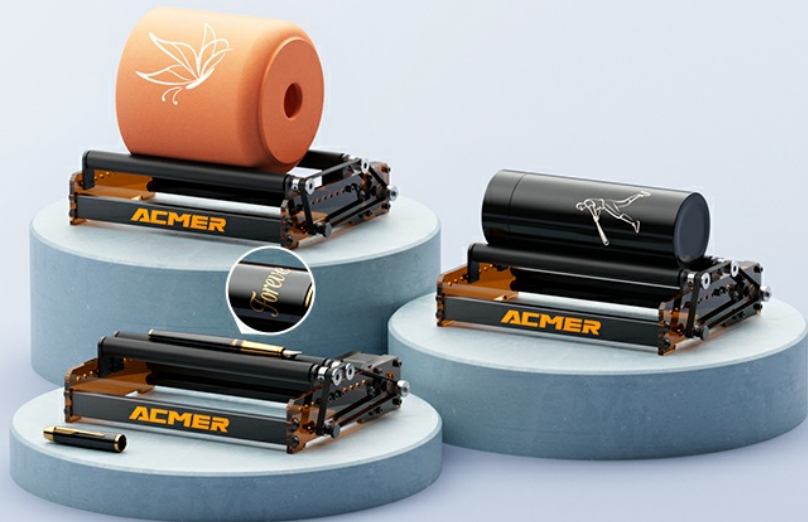


Image 1.1: The ACMER M3 Laser Rotary Roller shown with different cylindrical objects it can engrave, highlighting its versatility.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the ACMER M3 Laser Rotary Roller. Failure to follow these instructions may result in injury or damage to the device or other equipment.

- Always wear appropriate personal protective equipment (PPE), including laser safety glasses, when operating a laser engraver with the rotary module.
- Ensure the laser engraver is turned off and unplugged before connecting or disconnecting the rotary roller.
- Operate the device in a well-ventilated area to dissipate any fumes produced during engraving.
- Keep hands and loose clothing away from moving parts during operation.
- Do not attempt to engrave materials that are highly reflective, flammable, or produce toxic fumes.
- Keep children and pets away from the operating area.

3. SETUP AND INSTALLATION

The ACMER M3 Laser Rotary Roller is designed for a plug-and-play setup, requiring no complex assembly. Follow these steps to integrate it with your laser engraver:

1. **Unpack the Rotary Roller:** Carefully remove the M3 rotary roller from its packaging. Verify all components are present and undamaged.
2. **Position the Rotary Roller:** Place the rotary roller on a stable, flat surface within the working area of your laser engraver. Ensure there is sufficient clearance for the laser module to move freely above the rotary roller and the object to be engraved.
3. **Connect the Adapter Cable:** The rotary roller comes with a ready-to-use adapter cable. Identify the Y-axis motor port on your laser engraver.

- For ACMER laser engravers, use the provided 'A Cable'.
- For other brands, use the provided 'B Cable' if necessary, ensuring compatibility.

Connect the appropriate cable from the rotary roller to the Y-axis motor port of your laser engraver.

4. **Secure the Object:** Place the cylindrical object you wish to engrave onto the rollers. Adjust the roller width as needed to securely hold the object.
5. **Power On:** Once connected, power on your laser engraver. The rotary roller is now ready for use.

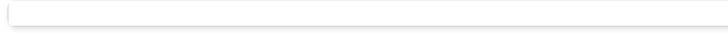


Image 3.1: The ACMER M3 Laser Rotary Roller demonstrating compatibility with various software like AcmerTool, LaserGRBL, and LightBurn, and different devices.

Wide Software Compatibility

Compatible with AcmerTool, LaserGRBL & LightBurn



ACMER



LaserGRBL



Light Burn



Image 3.2: The ACMER M3 Laser Rotary Roller showing the two types of adapter cables (A and B) for connecting to

4. OPERATING INSTRUCTIONS

4.1. Adjusting Roller Width for Different Diameters

The M3 rotary roller features 8 adjustable gear levels to accommodate cylindrical objects with diameters ranging from 6mm to 164mm. This allows for precise engraving on a wide variety of items.

- To adjust the width, gently slide the movable roller assembly to the desired gear position. Ensure the object is held securely but not overly compressed.
- Refer to the visual guide below for common diameter ranges for each gear setting.



Image 4.1: Illustration of the 8 adjustable gear levels on the ACMER M3 rotary roller, with examples of objects and their suitable diameter ranges (6-164mm).

4.2. 360° Cylindrical Engraving

The non-slip rubber rollers provide excellent grip, ensuring stable and accurate 360° rotation for consistent engraving results on curved surfaces.

- Place the cylindrical object firmly on the rollers.
- Ensure the object is centered and level to prevent engraving distortions.
- The high-performance stepper motor ensures smooth and stable rotational engraving throughout the process.

8-Gear Width Adjustment

6-164mm
Suitable Diameter

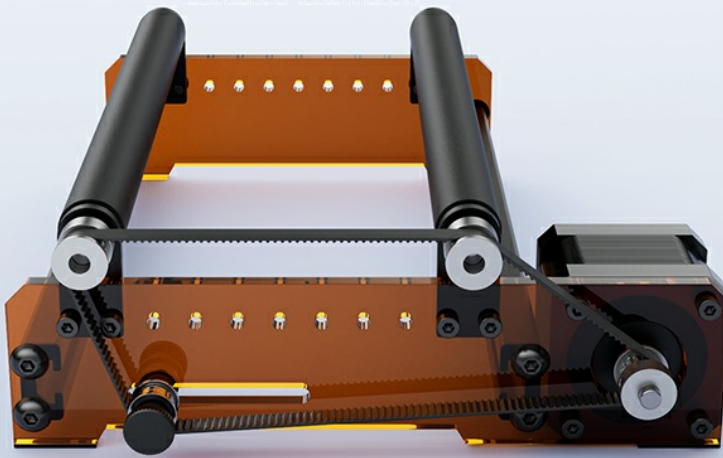


Image 4.2: The ACMER M3 rotary roller demonstrating 360-degree engraving on a bottle, highlighting the non-slip rubber roller for precise rotation.

4.3. Left-Side Open Design

The innovative left-side open design allows for engraving on longer cylindrical objects that might otherwise be restricted by the engraver's frame. This design provides additional clearance for extended items.

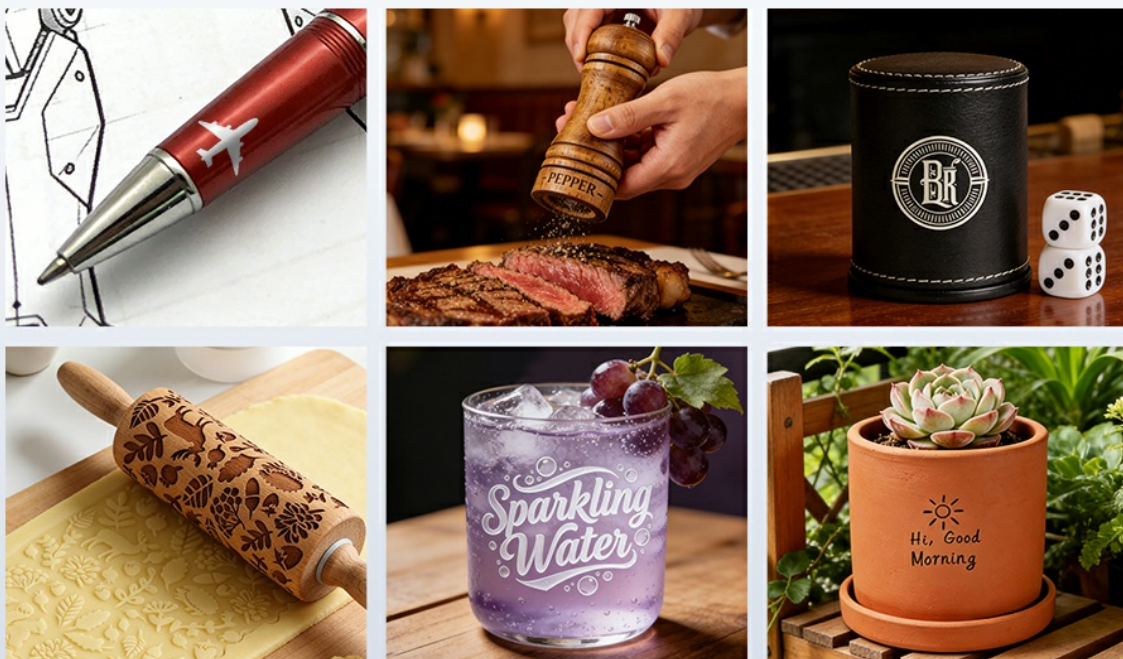


Image 4.3: The ACMER M3 rotary roller's left-side open design, illustrating how it accommodates longer cylindrical objects for engraving.

4.4. Compatible Materials and Applications

The ACMER M3 rotary roller can be used to engrave a variety of materials and objects, expanding the

creative possibilities of your laser engraver. Examples include:

- Drinkware: Tumblers, cups, bottles, glasses.
- Writing Instruments: Pens, pencils.
- Craft Items: Rolling pins, small bowls, decorative cylinders.
- Personalized Gifts: Spice grinders, small planters, dice cups.

99% Engraving Machines Compatibility



Image 4.4: A visual representation of various items that can be engraved using the ACMER M3 rotary roller, showcasing its versatility across different materials and applications.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your ACMER M3 Laser Rotary Roller.

- **Cleaning:** After each use, gently wipe down the rubber rollers and the frame with a soft, dry cloth to remove any dust or debris. Avoid using harsh chemicals that could damage the rubber or plastic components.
- **Belt Inspection:** Periodically check the drive belts for any signs of wear, cracking, or looseness. If a belt appears damaged or stretched, it may need replacement to maintain engraving accuracy.
- **Lubrication:** The stepper motor and bearings are generally maintenance-free. Do not apply lubricants unless specifically instructed by ACMER support.
- **Storage:** When not in use, store the rotary roller in a clean, dry environment away from direct sunlight and extreme temperatures.

6. TROUBLESHOOTING

If you encounter issues with your ACMER M3 Laser Rotary Roller, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Object not rotating smoothly.	<ul style="list-style-type: none"> Object not centered or balanced. Rollers are dirty or have debris. Belt is loose or damaged. 	<ul style="list-style-type: none"> Re-center and balance the object. Clean rollers with a soft cloth. Inspect and adjust/replace the drive belt.
Engraving is distorted or uneven.	<ul style="list-style-type: none"> Object slipping on rollers. Incorrect software settings (e.g., steps per mm for Y-axis). Rotary roller not level. 	<ul style="list-style-type: none"> Ensure rollers are clean and object is securely placed. Verify Y-axis settings in your engraving software. Ensure the rotary roller is placed on a level surface.
Rotary roller not recognized by engraver.	<ul style="list-style-type: none"> Incorrect cable connection. Engraver firmware not updated. 	<ul style="list-style-type: none"> Check that the correct adapter cable (A or B) is used and securely connected to the Y-axis port. Consult your laser engraver's manual for firmware updates or rotary module setup instructions.

If the problem persists, please contact ACMER customer support for further assistance.

7. SPECIFICATIONS

Feature	Detail
Model Number	M3
Engraving Type	360° Cylindrical Engraving (Y-Axis Rotary)
Adjustable Diameter Range	6mm – 164mm
Width Adjustment	8 Gear Levels
Product Dimensions	11.6 x 7.7 x 3.3 inches
Item Weight	1.9 pounds
Compatibility	ACMER S1/S2/P1/P3/P2/P1 S Pro and most other laser engraving machines
Software Compatibility	AcmerTool, LaserGRBL, LightBurn
Assembly Required	No (100% pre-assembled)

8. WARRANTY AND SUPPORT

ACMER provides a standard warranty for the M3 Laser Rotary Roller against manufacturing defects. Please refer to your purchase documentation for specific warranty terms and duration.

For technical support, warranty claims, or any questions regarding the operation or maintenance of your

device, please contact ACMER customer service through the following channels:

- **Website:** Visit the official ACMER website for support resources and contact information.
- **Email:** [Insert ACMER Support Email Here]
- **Phone:** [Insert ACMER Support Phone Number Here]

When contacting support, please have your product model number (M3) and purchase date available.

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