

Aufero Aufero-YRR 3.0

Aufero Rotary Roller YRR 3.0 Instruction Manual

Model: Aufero-YRR 3.0 | Brand: Aufero

1. PRODUCT OVERVIEW

The Aufero Rotary Roller YRR 3.0 is a versatile Y-axis rotary attachment designed to expand the capabilities of your laser engraver. It enables precise 360-degree engraving on cylindrical objects such as tumblers, bottles, glassware, and more. This pre-assembled unit offers ease of use and broad compatibility with various laser engraving machines, significantly enhancing productivity by eliminating the need for manual repositioning of workpieces.



Figure 1: The Aufero Rotary Roller, a Y-axis rotary attachment for laser engravers, designed for engraving cylindrical objects.

Video 1: Aufero YRR3.0 Y-axis Rotary Roller Overview. This video provides a brief visual introduction to the rotary roller's features and capabilities.

2. SETUP AND INSTALLATION

2.1 Unboxing and Components

The Aufero Rotary Roller YRR 3.0 comes pre-assembled, minimizing setup time. Upon unboxing, ensure all components are present:

- YRR3.0 main body
- Lifting bracket
- Adapter cable (x2)
- M5T type nut (x2)
- Y-axis extension
- Moving bezel
- 3mm Allen wrench
- M5*8mm screw (x2)

ADDED

Six Gears of Width

The diameter of the Y-axis could be adjusted in 6 levels from 190mm to 600mm in width



Figure 2: The Aufero Rotary Roller comes pre-assembled, requiring no complex installation.

2.2 Physical Adjustments

The rotary roller features adjustable components to accommodate various object sizes and shapes.

2.2.1 Adjusting the Mobile Stopper

Attach the M5 T-nut and M5*8mm screws to the mobile stopper. Loosen the screws to move the stopper position according to your needs, then tighten to secure.

2.2.2 Adjusting the Lifting Bracket

The lifting bracket supports longer or irregularly shaped objects. Loosen the hand screw on the bracket to adjust its height, then tighten to secure. The bracket can be adjusted from 8cm (3.15 inches) to 12cm (4.72 inches).

AUFERO

No installation required, easy to use



Figure 3: Diagram illustrating the adjustable height of the lift bracket.

2.2.3 Adjusting Roller Spacing

Remove the thumb screws on the side of the roller. Move the rollers to adjust them to the desired pitch position for your object. Ensure the synchronous belt tension is appropriate by adjusting the hand screw on the side of the unit.

Video 2: Physical Adjustments of the YRR 3.0. This segment demonstrates how to install the mobile bezel, adjust the lifting bracket, and set the roller spacing.

2.3 Connecting to Laser Engraver

The YRR 3.0 connects directly to your laser engraver. Ensure the laser engraver is powered off before connecting.

2.3.1 Connecting to Aufero Laser 1 (AL1)

1. Place the YRR 3.0 on the engraving bed, paying attention to the direction of the motor.
2. Remove the Y-axis motor cable from the AL1.
3. Connect the YRR 3.0 motor cable to the Y-axis motor cable of the AL1.
4. Plug the power cord and USB cable into the AL1.
5. Long press the power button on the AL1 to turn it on.

2.3.2 Connecting to Aufero Laser 2 (AL2)

1. Place the YRR 3.0 on the engraving bed, paying attention to the direction of the motor.
2. Unplug the Y1 and Y2 motor cables from the AL2.
3. Connect the YRR 3.0 adapter cable to the Y1 motor cable of the AL2.
4. Plug the power cord and USB cable into the AL2.
5. Long press the power button on the AL2 to turn it on.

Video 3: Connecting the YRR 3.0 to Aufero Laser 1 and Aufero Laser 2. This segment details the connection process for both laser engraver models.

3. OPERATION GUIDE

3.1 Software Setup (LightBurn & LaserGRBL)

The Aufero Rotary Roller is compatible with popular laser engraving software such as LightBurn and LaserGRBL. Proper software configuration is essential for optimal performance.

3.1.1 LaserGRBL Setup

1. Open the AL-YRR3.0 Installation Manual (PDF) to find the LaserGRBL plugin download URL.
2. Download and unzip the plugin file.
3. Open LaserGRBL and connect your machine (COM port number may vary).
4. Click on a blank space in the interface and select "Import custom buttons" to import the plugin.
5. When AL1 or AL2 are connected to YRR 3.0, click the "Other YRR" button to open it. This will set \$22=0 and \$101=80.
6. If you wish to stop using YRR 3.0, type \$22=1 in the console and press enter.

3.1.2 LightBurn Setup

1. Open LightBurn and connect your machine (COM port number may vary).
2. Turn on the "Rotation Settings Button" in LightBurn.
3. Select "Roller" as the Rotary Type.
4. Enable "Enable Rotary" and "Mirror Output to Rotary".
5. Select "Y-axis" for Rotary Axis.
6. Enter "63.00" in "mm per rotation" and "20.000mm" in "Roller Diameter".
7. If you wish to stop using YRR 3.0, turn off "Enable Rotary" or type \$22=1 in the console and press enter.

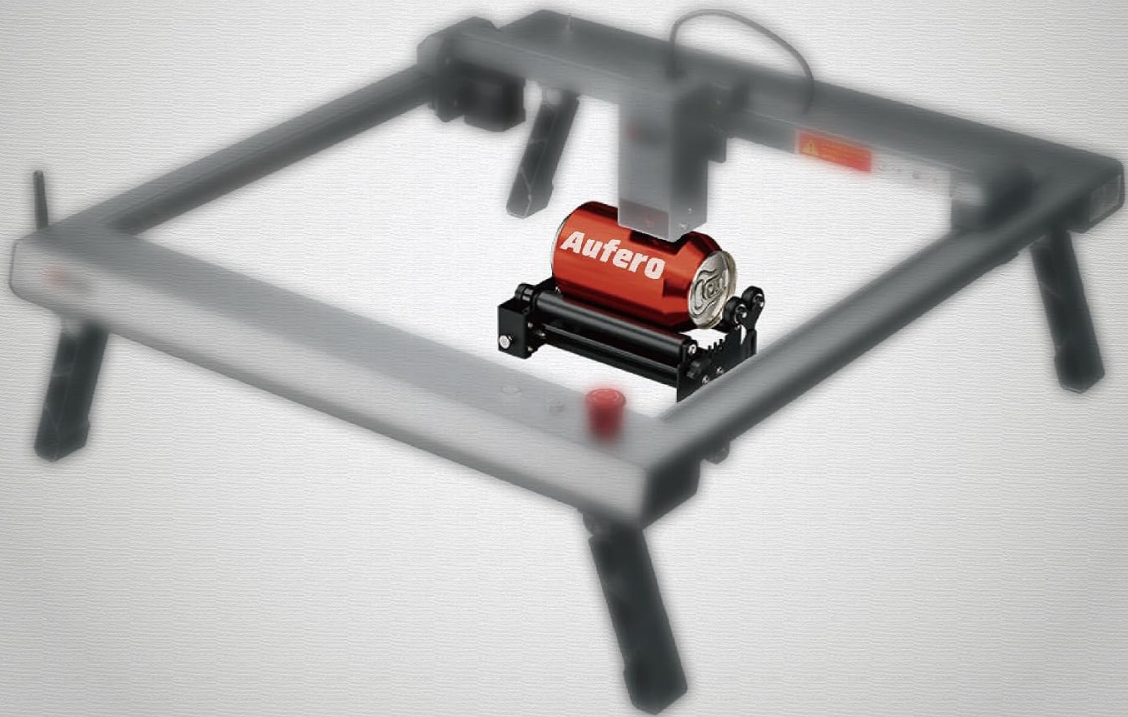
Video 4: Software Setup for LaserGRBL and LightBurn. This segment guides you through the necessary software configurations for using the YRR 3.0.

3.2 Adjusting for Different Objects

The Y-axis rotary roller can be adjusted to support engraving cylindrical objects of different sizes. The diameter of the Y-axis can be adjusted in 6 levels, accommodating widths from 190mm to 600mm.

Support Models

O*TUR/Aufero all engraving machines;
some other manufacturers of laser engraving machine;



applicable to **95%** of the engraving machines on the market

Figure 4: The Y-axis roller's width can be adjusted through six gears, accommodating diameters from 190mm to 600mm for various cylindrical objects like cans, glasses, bottles, and vases.

3.3 Typical Applications

The Aufero Rotary Roller is ideal for personalizing a wide range of cylindrical and irregularly shaped items, including:

- Tumblers and Mugs
- Wine Glasses and Bottles
- Cans and Beer Bottles
- Baseball Bats
- Rings and Jewelry
- Rolling Pins
- Flowerpots and Canisters

Decorating Yourself and Your Life

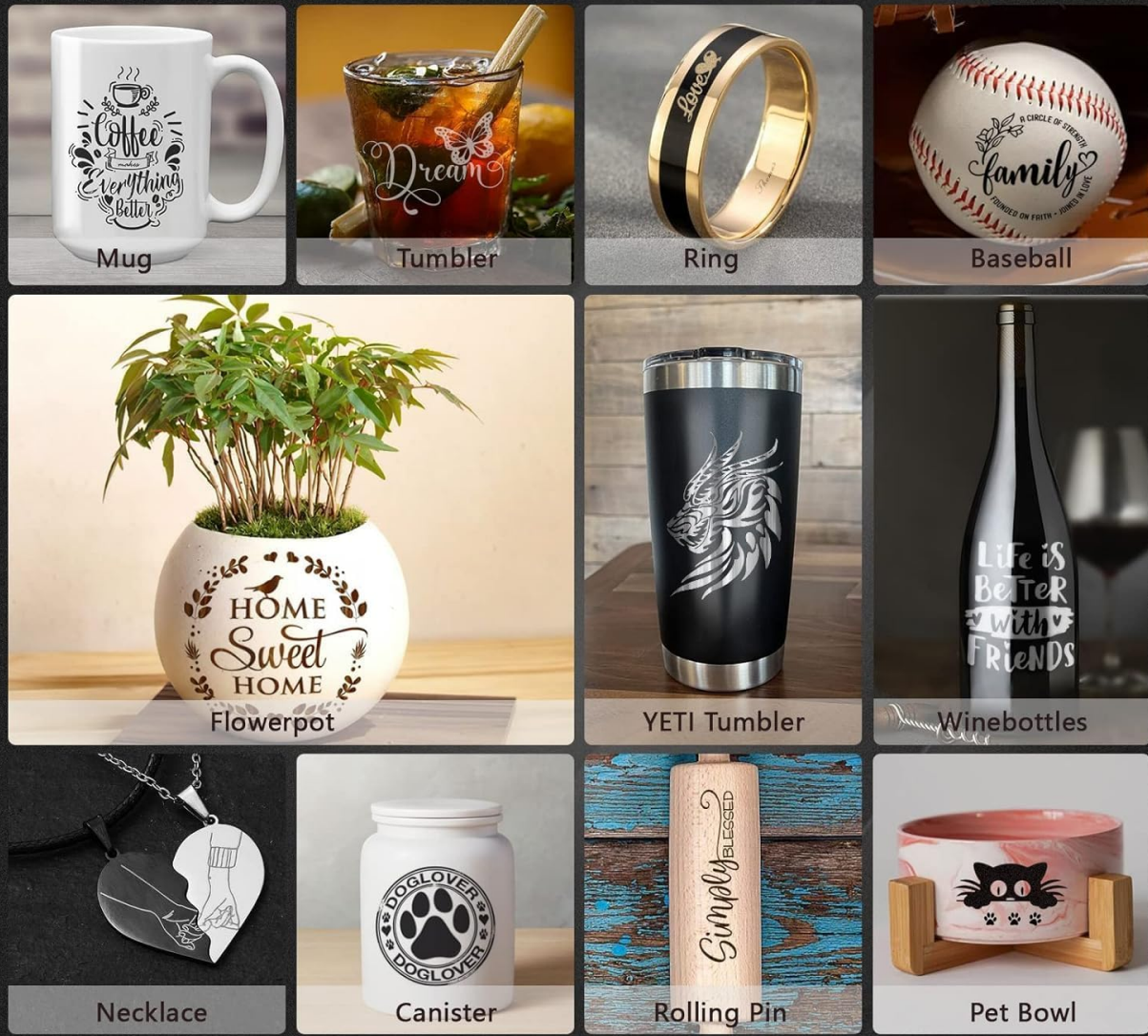


Figure 5: This rotary attachment is widely applicable for engraving various cylindrical and irregularly shaped objects such as glassware, bottles, rolling pins, and rings.

Lift Bracket

Can be Adjusted in Multiple Directions
to Meet Daily Engraving Needs



Figure 6: The rotary roller precisely rotates tumblers for seamless 360-degree engraving.

3.4 Compatibility

The YRR 3.0 is fully compatible with all Aufero laser engraving machine models (AL1, AL2, AL3) and O*TUR machines. It also includes an adapted conversion cable for use with other brands of desktop/hobbyist laser engravers, making it applicable to approximately 95% of the engraving machines on the market.

WIDELY APPLICABLE



Figure 7: The rotary roller is compatible with Aufero and O*TUR laser engraving machines, and can be adapted for use with 95% of other desktop/hobbyist laser engravers on the market.

4. MAINTENANCE

To ensure the longevity and optimal performance of your Aufero Rotary Roller YRR 3.0, regular maintenance is recommended:

- **Cleaning:** Periodically wipe down the rollers and main body with a soft, dry cloth to remove dust and debris. Avoid using abrasive cleaners or solvents.
- **Belt Tension:** Check the synchronous belt tension regularly. If the belt appears loose, adjust the hand screw as described in Section 2.2.3 to ensure proper tension. A properly tensioned belt prevents slippage and ensures accurate rotation.
- **Lubrication:** No specific lubrication is required for the rollers or internal mechanisms under normal operating conditions.
- **Storage:** When not in use, store the rotary roller in a clean, dry environment away from direct sunlight and

extreme temperatures.

5. TROUBLESHOOTING

If you encounter issues with your Aufero Rotary Roller YRR 3.0, refer to the following common troubleshooting steps:

- **Roller Not Rotating:**
 - Check if the motor cable is securely connected to both the rotary roller and the laser engraver.
 - Verify that the laser engraver is powered on and properly connected to your computer.
 - Ensure the correct software settings are applied (e.g., "Enable Rotary" in LightBurn, or \$22=0 in LaserGRBL).
 - Inspect the synchronous belt for any damage or excessive looseness. Adjust tension if necessary.
- **Inaccurate Engraving on Cylindrical Objects:**
 - Confirm that the object is securely placed on the rollers and not slipping.
 - Check the roller spacing and lift bracket height to ensure they are correctly adjusted for the object's dimensions.
 - Verify the "mm per rotation" and "Roller Diameter" settings in your engraving software (e.g., LightBurn) are accurate for your specific setup.
 - Ensure the "Mirror Output to Rotary" setting is enabled in LightBurn if required.
 - Check for any physical obstructions preventing smooth rotation.
- **Software Not Recognizing Rotary Roller:**
 - Ensure the USB connection between your laser engraver and computer is stable.
 - Restart both the laser engraver and the engraving software.
 - Verify that the correct COM port is selected in your software.
 - For LaserGRBL, ensure the YRR plugin is correctly imported.
- **Unusual Noises During Operation:**
 - Check for any foreign objects caught in the rollers or belt mechanism.
 - Inspect the belt for wear or damage.
 - Ensure all screws and connections are tight.

If the issue persists after following these steps, please contact Aufero customer support for further assistance.

6. PRODUCT SPECIFICATIONS

Specification	Value
Product Dimensions	7 x 5 x 3 inches

Specification	Value
Item Model Number	Aufero-YRR 3.0
Item Weight	2.79 pounds
Manufacturer	Aufero
First Available Date	November 7, 2023

7. WARRANTY AND SUPPORT

Aufero is committed to providing high-quality products and excellent customer service. We have a dedicated team of R&D engineers ready to offer professional guidance and support for your Aufero Rotary Roller YRR 3.0. We also provide comprehensive replacement of accessories to ensure your equipment runs smoothly. For your peace of mind, the Aufero Rotary Roller YRR 3.0 comes with a **one-year after-sales guarantee**, demonstrating our confidence in the reliability and durability of our machines.

For technical assistance, troubleshooting, or warranty claims, please contact Aufero customer support through the official channels provided at the point of purchase or on the Aufero website.