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› AlgoLaser DIY KIT MK2 Y-Axis Extension Kit: Instruction Manual

AlgoLaser ALETKDK2.0

AlgoLaser DIY KIT MK2 Y-Axis Extension Kit: Instruction Manual

Model: ALETKDK2.0

1. INTRODUCTION AND OVERVIEW

The AlgoLaser DIY KIT MK2 Y-Axis Extension Kit is designed to expand the working area of your AlgoLaser DIY KIT MK2 10W laser engraving machine. This extension kit ensures perfect compatibility, stable structure, and smooth performance after installation, allowing for larger and more ambitious engraving and cutting projects.

By integrating this kit, you can significantly increase your laser engraver's working area, providing greater creative potential for various materials such as wood panels, acrylic sheets, and other craft items.

AlgoLaser DIY KIT MK2 Extension Kit

A Smart Extension of Creativity (400*880mm)

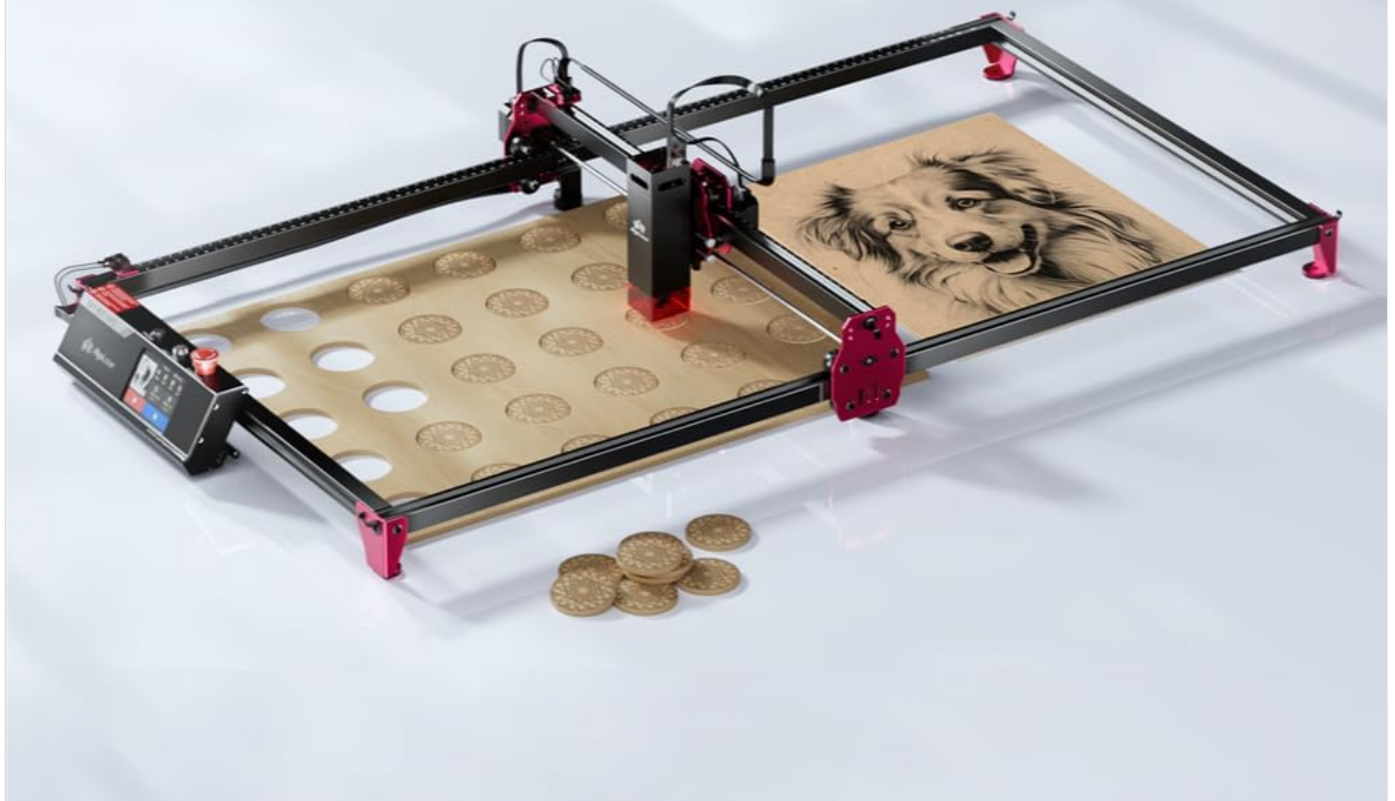


Figure 1: AlgoLaser DIY KIT MK2 Laser Engraver with Y-Axis Extension Kit.

2. PACKAGE CONTENTS

Before beginning assembly, please verify that all components listed below are present in your package. If any parts are missing or damaged, contact AlgoLaser support immediately.

Higher working efficiency

The larger working area allows you to create more at one time, streamlining your production.



Figure 2: Included components of the Y-Axis Extension Kit.

- Left Y-Axis Frame
- Right Y-Axis Frame
- DIYKIT ETK Cable
- Timing Belt
- Support Foot for Extension (2 units)
- Cable Tie
- M2.5X9 Screw
- M5X14 Screw
- Wrench
- Allen Key
- Screwdriver

3. SETUP INSTRUCTIONS

This extension kit is designed for easy assembly without requiring complex modifications or drilling. Refer to your AlgoLaser DIY KIT MK2 main manual for initial setup of the base unit before installing this extension.

3.1 Preparing Your Engraver

1. Ensure your AlgoLaser DIY KIT MK2 is powered off and disconnected from the power source.
2. Clear your workspace and place the engraver on a stable, flat surface.

3.2 Assembling the Y-Axis Extension

1. Carefully remove the existing Y-axis frame components from your AlgoLaser DIY KIT MK2 as per its original disassembly instructions.
2. Attach the new Left Y-Axis Frame and Right Y-Axis Frame components to the main engraver structure using the provided M5X14 screws. Ensure a secure and flush fit.
3. Install the Support Feet for Extension at the ends of the newly extended Y-axis frames. Secure them with the M2.5X9 screws.
4. Route the Timing Belt along the extended Y-axis, ensuring it is properly tensioned and aligned with the motor pulleys. Refer to the main engraver manual for correct belt tensioning procedures.
5. Connect the DIYKIT ETK Cable, ensuring all connections are firm and correctly oriented. Use the provided Cable Ties for neat cable management, preventing interference with moving parts.

After assembly, gently move the laser module along the extended Y-axis to confirm smooth movement and no obstructions.

Double the working area
Increased to

212% 

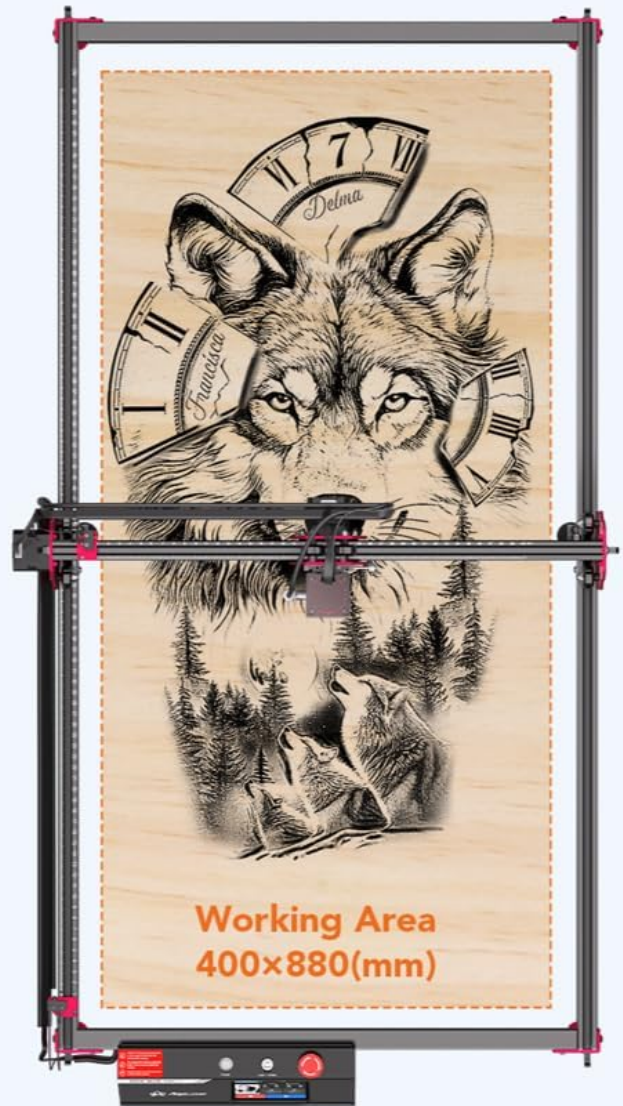


Figure 3: Comparison of standard vs. extended working area.

4. OPERATING INSTRUCTIONS

With the Y-Axis Extension Kit installed, your AlgoLaser DIY KIT MK2 now offers an expanded working area of 400 x 880mm (15.7" x 34.6"). This larger area allows for the creation of bigger projects and improved efficiency by processing multiple smaller items simultaneously.

4.1 Utilizing the Extended Working Area

- Software Configuration:** After installing the extension, you may need to update your engraving software (e.g., LightBurn) to reflect the new working dimensions (400x880mm). Consult your software's documentation for specific instructions on adjusting workspace size.
- Material Placement:** Place your material securely within the expanded engraving area. Ensure it is flat and properly secured to prevent movement during operation.
- Project Design:** Design your projects to take full advantage of the increased space. You can engrave or cut larger single pieces or arrange multiple smaller designs for batch processing.

4. **Higher Objects:** For engraving or cutting taller objects, consider using Universal Risers (sold separately) to increase the height clearance of your DIY KIT MK2. This allows for customization of items like skateboards, doors, or guitars.



Figure 4: Engraving a large object using the extension kit and risers.

4.2 General Operation

For detailed instructions on laser operation, material settings, and safety precautions, please refer to the comprehensive user manual provided with your AlgoLaser DIY KIT MK2 laser engraver. The extension kit primarily modifies the physical working area; core operational procedures remain consistent with the base unit.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your AlgoLaser DIY KIT MK2 Y-Axis Extension Kit.

5.1 Cleaning

- Regularly clean the Y-axis rails and belts to remove dust, debris, and material residue. Use a soft, dry cloth.

- Avoid using abrasive cleaners or solvents that could damage the components.

5.2 Belt Tension

- Periodically check the tension of the timing belt. It should be taut but not overly tight.
- An overly loose belt can lead to inaccurate engraving, while an overly tight belt can cause premature wear on the motor and belt. Adjust as necessary following the guidelines in your main engraver manual.

5.3 Connections

- Ensure all cable connections, especially the DIYKIT ETK Cable, remain secure. Loose connections can lead to intermittent operation or communication errors.

6. TROUBLESHOOTING

This section addresses common issues that may arise when using the Y-Axis Extension Kit. For issues related to the laser module or software, refer to your AlgoLaser DIY KIT MK2 main manual.

6.1 Laser Module Does Not Move Along Extended Y-Axis

- **Check Cable Connections:** Ensure the DIYKIT ETK Cable is securely connected at both ends.
- **Inspect Timing Belt:** Verify the timing belt is correctly installed, not broken, and has appropriate tension.
- **Obstructions:** Look for any physical obstructions along the Y-axis rails that might impede movement.

6.2 Inaccurate Engraving or Cutting on Extended Area

- **Software Settings:** Confirm that your engraving software's workspace dimensions are updated to 400x880mm.
- **Belt Tension:** An improperly tensioned timing belt can cause inaccuracies. Adjust the belt tension as described in the Maintenance section.
- **Frame Stability:** Ensure all screws securing the extension frames and support feet are tightened. Any wobble can affect precision.

6.3 "Lost Communication" Errors

- **Cable Integrity:** Check the DIYKIT ETK Cable for any visible damage or kinks.
- **Secure Connections:** Re-seat all cable connections to ensure they are firm.
- **Power Cycle:** Power off the engraver, wait 30 seconds, then power it back on.

If you continue to experience issues after following these troubleshooting steps, please contact AlgoLaser customer support.

7. SPECIFICATIONS

Feature	Specification
Product Model Number	ALETKDK2.0
Compatible Engraver	AlgoLaser DIY KIT MK2 10W Laser Engraver
Extended Working Area	400 x 880 mm (15.7" x 34.6")
Product Dimensions	42.9 x 4.1 x 3.1 inches
Item Weight	3.7 pounds

Feature	Specification
Manufacturer	AlgoLaser
ASIN	B0GL2WNB1H

8. WARRANTY AND SUPPORT

AlgoLaser provides reliable after-sales support for the DIY KIT MK2 Y-Axis Extension Kit. We offer a one-year warranty and 24/7 customer service.

8.1 Technical Assistance

If you encounter any issues during installation, operation, or require technical assistance, please do not hesitate to contact our support team. You can reach us via Amazon's messaging system or through our official email channels.

8.2 Warranty Information

This product is covered by a one-year limited warranty from the date of purchase. The warranty covers manufacturing defects and malfunctions under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or improper installation.



Figure 5: AlgoLaser customer support is available for assistance.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question