

Artilume T1

Artilume T1 3000mW Foldable Laser Engraver Instruction Manual

Model: T1 | Brand: Artilume

1. PRODUCT OVERVIEW

The Artilume T1 is a 3000mW foldable laser engraver designed for precision engraving and cutting on various materials. Its compact and portable design makes it suitable for home DIY projects, educational settings, and small workshops. The T1 offers a working area of 200x150mm and achieves 0.01mm precision, allowing for detailed work.

- **Foldable and Portable:** The unique design allows for quick setup and compact storage, making it easy to transport.
- **Pre-assembled and Calibrated:** Ready for use out of the box, simplifying the initial setup process.
- **Versatile 3W Laser:** Capable of engraving on a wide range of materials including wood, leather, acrylic, coated metals, paper, and fabric.
- **Safety Features:** Includes a built-in protective laser cover and professional safety goggles for user protection.
- **Complete Kit:** Comes with the engraver, power adapter, USB cable, safety goggles, and a starter material pack.

2. SETUP INSTRUCTIONS

2.1 Unfolding the Engraver

The Artilume T1 features a foldable design for portability. To set up the engraver for use, carefully unfold it according to the following steps:

1. Remove the engraver from its packaging.
2. Gently unfold the arms of the engraver until they are fully extended.
3. Ensure all locking mechanisms are securely engaged to stabilize the frame.



Figure 2.1: Steps for unfolding the Artilume T1 laser engraver.

2.2 Connecting the Laser Module and Power

Follow these steps to connect the laser module and prepare the engraver for power:

1. Attach the laser module to the designated slot on the engraver arm. Secure it with the provided screws.
2. Connect the laser module cable to the corresponding port on the engraver.
3. Plug the power adapter into the engraver and then into a power outlet.
4. Connect the USB cable from the engraver to your computer.

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Video 2.2: Detailed guide on the initial setup, including unfolding, connecting the laser module, and focusing the Artilume T1 laser engraver.

2.3 Focusing the Laser

Accurate focusing is crucial for optimal engraving results. Use the focusing block provided:

1. Place the focusing block directly under the laser module on your material.
2. Adjust the height of the laser module until its bottom edge lightly touches the top of the focusing block.
3. Secure the laser module in this position. Remove the focusing block before starting any operation.

2.4 Software Installation

The Artilume T1 supports professional engraving software such as LightBurn (Windows/macOS) and Laser (Windows). Refer to the included software guide or the manufacturer's website for download and installation instructions.

Break Free from the Heavy, Fixed Workshop.

From Clunky Stationary to Portable.



Figure 2.4: Artilume T1 with compatible software interfaces.

3. OPERATING INSTRUCTIONS

3.1 Material Preparation

The Artilume T1 is compatible with over 100 materials, including wood, ceramic, metal, acrylic, paper, and fabric. Ensure your material is clean, flat, and securely placed within the 200x150mm working area.

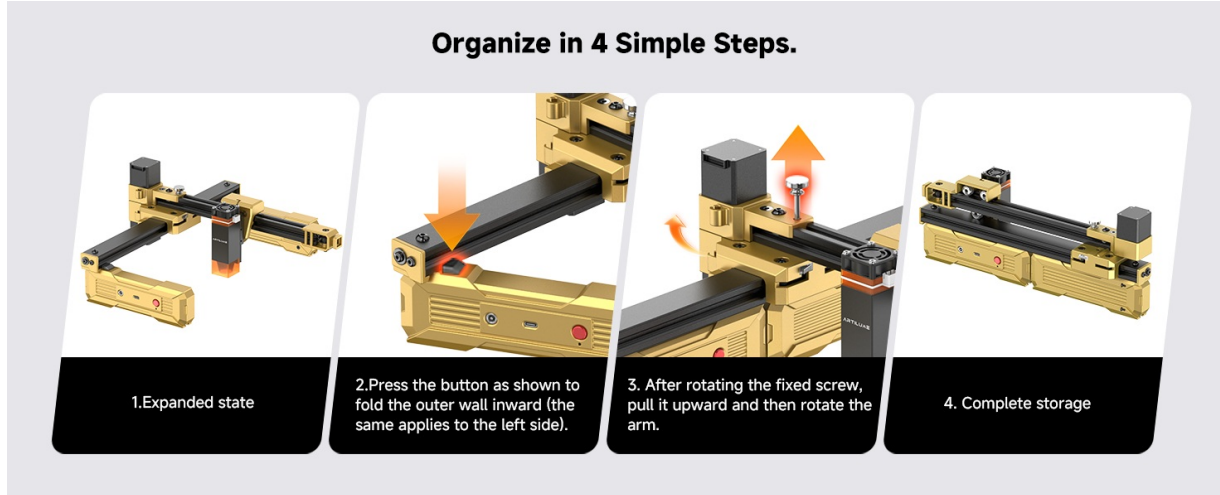


Figure 3.1: Examples of compatible materials for engraving.

3.2 Engraving Process

Once your material is prepared and the laser is focused, you can begin the engraving process using your chosen software. The T1 offers a maximum engraving speed of 10,000mm/min for efficient project completion.



Figure 3.2: Engraving speed comparison.

3.3 Precision Engraving

The Artilume T1 provides 0.01mm ultra-fine precision, ensuring superior edge quality and intricate detail in your designs.

0.01mm Ultra-Fine Precision Superior Edge Quality



Figure 3.3: Demonstration of 0.01mm ultra-fine precision.

3.4 Engraving Examples

Observe the Artilume T1 in action on various materials:

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Video 3.4.1: The T1 laser engraver cutting a snowflake design from paper.

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Video 3.4.2: Demonstrating fabric engraving with the T1 laser engraver.

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Video 3.4.3: Engraving the Artilume logo onto kraft paper.

4. SAFETY GUIDELINES

Always prioritize safety when operating the laser engraver:

- **Wear Safety Goggles:** Always wear the provided professional laser safety goggles during operation to protect your eyes from laser exposure.
- **Protective Cover:** The laser module has a built-in protective cover. Ensure it is properly in place.
- **Stable Surface:** Operate the engraver on a stable, level surface to prevent movement and ensure engraving accuracy.
- **Ventilation:** Ensure adequate ventilation in your workspace to dissipate any fumes produced during engraving, especially with certain materials.
- **Supervision:** Do not leave the engraver unattended during operation.
- **Emergency Stop:** Familiarize yourself with the location of the emergency stop button on the device.



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Figure 4.1: Safety features including tilt alarm and laser cover.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Artilume T1 laser engraver:

- **Clean the Laser Lens:** Periodically clean the laser lens with a soft, lint-free cloth and lens cleaning solution to maintain engraving quality.
- **Clear Debris:** After each use, remove any dust or debris from the working area and the engraver's rails to prevent interference with movement.
- **Inspect Cables:** Regularly check all cables for any signs of wear or damage. Replace if necessary.
- **Storage:** When not in use, fold the engraver and store it in a dry, dust-free environment.

6. TROUBLESHOOTING

If you encounter issues with your Artilume T1, consider the following common troubleshooting steps:

- **Engraver Not Powering On:** Ensure the power adapter is securely connected to both the engraver and a working power outlet. Check the power indicator light.
- **Laser Not Firing:** Verify that the laser module is correctly attached and its cable is properly connected. Check software settings to ensure the laser is enabled.
- **Poor Engraving Quality:** Re-check the laser focus using the focusing block. Ensure the material is flat and stable. Adjust power and speed settings in your software for the specific material.
- **Software Connection Issues:** Ensure the USB cable is securely connected to both the engraver and your computer. Restart the software and the engraver. Check for updated drivers or software versions.
- **Unusual Noises:** Inspect the moving parts for any obstructions or loose components. Ensure the rails are clean and free of debris.

For further assistance, refer to the detailed troubleshooting section in the full user manual or contact Artilume customer support.

7. SPECIFICATIONS

Feature	Detail
Model	T1

Laser Power	3000mW (3W)
Working Area	200 x 150 mm
Engraving Precision	0.01 mm
Max Engraving Speed	10,000 mm/min
Supported Materials	Wood, Leather, Acrylic, Coated Metals, Paper, Fabric, Ceramic, etc.
Connectivity	USB
Supported Software	LightBurn (Windows/macOS), Laser (Windows)
Package Dimensions	17.09 x 8.7 x 6.18 inches
Item Weight	4.38 pounds
Manufacturer	Artilume

8. INCLUDED COMPONENTS

The Artilume T1 package includes everything you need to get started:

- Artilume T1 Engraver
- Laser Head
- Instruction Manual
- Toolkit
- Safety Goggles
- Glasses Cleaning Cloth
- Focus Block
- Aluminum Sheet (x2)
- Basswood Block
- A5 Kraft Paper
- Power Adapter
- Data Cable



Figure 8.1: All components included in the Artilume T1 package.

9. WARRANTY AND SUPPORT

For detailed warranty information and customer support, please refer to the official Artilume website or contact their customer service directly. Keep your purchase receipt for warranty claims.