

SCULPFUN S9

SCULPFUN S9 Laser Engraver Instruction Manual

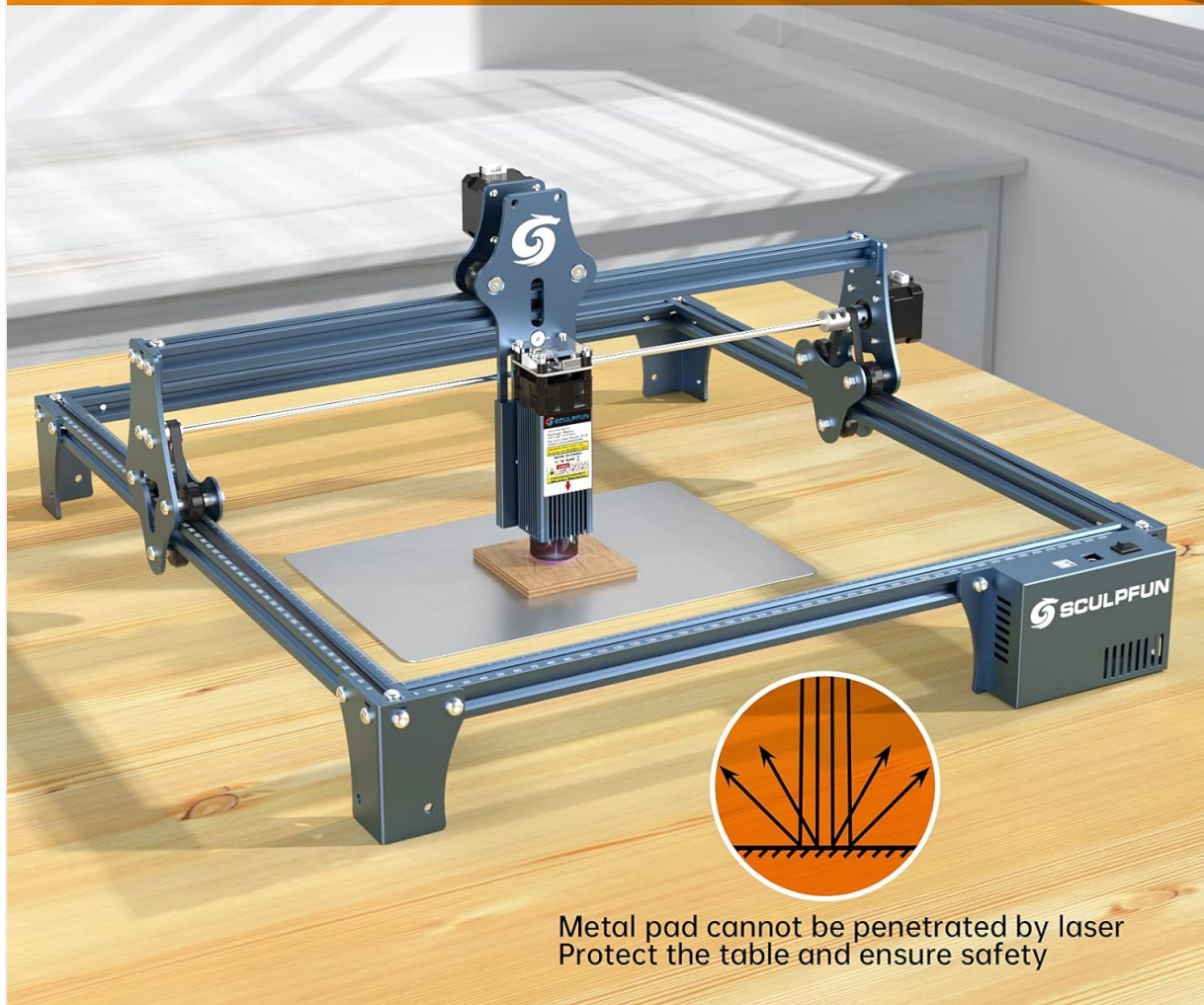
Model: S9

1. IMPORTANT SAFETY INFORMATION

Operating a laser engraver requires adherence to safety protocols to prevent injury. Please read and understand all safety guidelines before operating the SCULPFUN S9.

- Always install the laser protective cover when operating the machine. If the cover is not installed, wear appropriate laser safety goggles.
- Do not touch the laser emitter with bare hands, as it can cause burns.
- Avoid strong impacts to the machine to prevent damage and ensure proper function.
- Children under 14 years of age are not permitted to use this product. Children over 14 require adult supervision.
- The laser engraver should not be used on mirror-reflecting objects, as this can cause laser reflection and potential injury to the operator or damage to the laser module.
- The integrated laser filter cover blocks 98% of UV light, allowing observation of the engraving process without additional goggles in most cases. However, always exercise caution.
- A dedicated power switch is provided for emergency shutdown.
- Utilize the included A4 size steel pad to protect your work surface from laser damage.

SAFETY METAL PAD DESIGN



Metal pad cannot be penetrated by laser
Protect the table and ensure safety

Image: The SCULPFUN S9 laser engraver shown with a metal safety pad positioned beneath the laser module to protect the work surface.



Image: A close-up view of the laser module, highlighting the protective cover and the laser beam during operation.

2. PRODUCT OVERVIEW

The SCULPFUN S9 is a full-metal CNC laser engraving machine designed for high-precision engraving and cutting tasks. It features a 5.5W diode laser with advanced beam shaping technology.



Image: The SCULPFUN S9 laser engraver in operation, showcasing a detailed butterfly design engraved on a wooden board.

Key Features:

- **Ultra-thin Laser Beam:** Equipped with a 5.5W diode laser utilizing beam shaping technology, producing an ultra-fine 0.06mm laser focus for high precision.
- **Cutting Capability:** Capable of cutting up to 15mm thick lightwood, 10mm black acrylic, and engraving on ceramics, stainless steel, and dark stone.
- **Fast Focusing:** Features a fixed focus lens and sliding design for quick and easy focusing.
- **High Accuracy:** X and Y-axis include precise scale lines for accurate measurement of engraving objects.
- **Robust Construction:** All-metal structure design ensures stability, durability, and longevity.
- **Large Engraving Area:** Offers a generous 410x420mm working area to accommodate various project sizes.



Image: An illustration detailing the laser beam shaping technology, emphasizing its precision and cutting power.

3. SETUP AND ASSEMBLY

The SCULPFUN S9 laser engraver is designed for straightforward assembly. Typically, installation and setup can be completed within 10-20 minutes.

Assembly Steps:

1. Unpack all components and verify against the packing list.
2. Follow the detailed pictorial instructions provided in the included User Manual (PDF) for step-by-step assembly.
3. Ensure all screws and connections are securely fastened for stable operation.
4. Place the assembled machine on a stable, level surface, preferably with the A4 steel pad underneath.

For a comprehensive guide, please refer to the official [User Manual \(PDF\)](#).

4. OPERATING INSTRUCTIONS

4.1 Software Compatibility

The S9 laser engraver is compatible with various engraving software and operating systems:

- **Operating Software:** LaserGRBL, LightBurn, Benbox, GrblController, LiteFire
- **Supported Systems:** Windows XP, 7, 8, 10, and MAC systems
- **Supported File Formats:** NC, BMP, JPG, PNG, DXF, SVG, G-code, and other image formats.

BROAD COMPATIBILITY	
Windows WIN XP / WIN 7 / WIN 8 / WIN 10	
MAC	
LaserGRBL	
LightBurn	
JPG	SVG
PNG	DXF
TIF	BMP
PDF	NG
AI	...



Image: Demonstrates the broad software compatibility of the SCULPFUN S9, including LaserGRBL and LightBurn.

4.2 Material Compatibility

The SCULPFUN S9 can engrave and cut a wide range of materials:

- **Engraving Materials:** Wood, paper, cardboard, plastic, leather, PCB board, aluminum oxide, 304 stainless steel, ceramic, dark stone.
- **Cutting Materials:** Wood (up to 15mm lightwood), acrylic (up to 10mm black acrylic), cardboard, fabric, bamboo, plastic board, KT board.

CUTTING BEAST —UP TO 15MM THICK WOOD

SCULPFUN S9 adopts the latest laser beam shaping technology. The super-high energy density makes it cut thicker and engrave thinner than ordinary spot compressed laser , S9 has almost 90W CO2 laser cutting effect but much cheaper.

**15MM
WOOD**



**10MM
PLYWOOD**



**10MM
ACRYLIC**

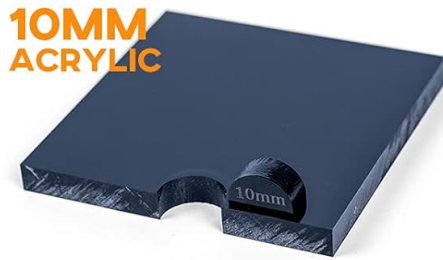


Image: Visual representation of the cutting capabilities on various materials, including wood, plywood, and acrylic, with thickness measurements.

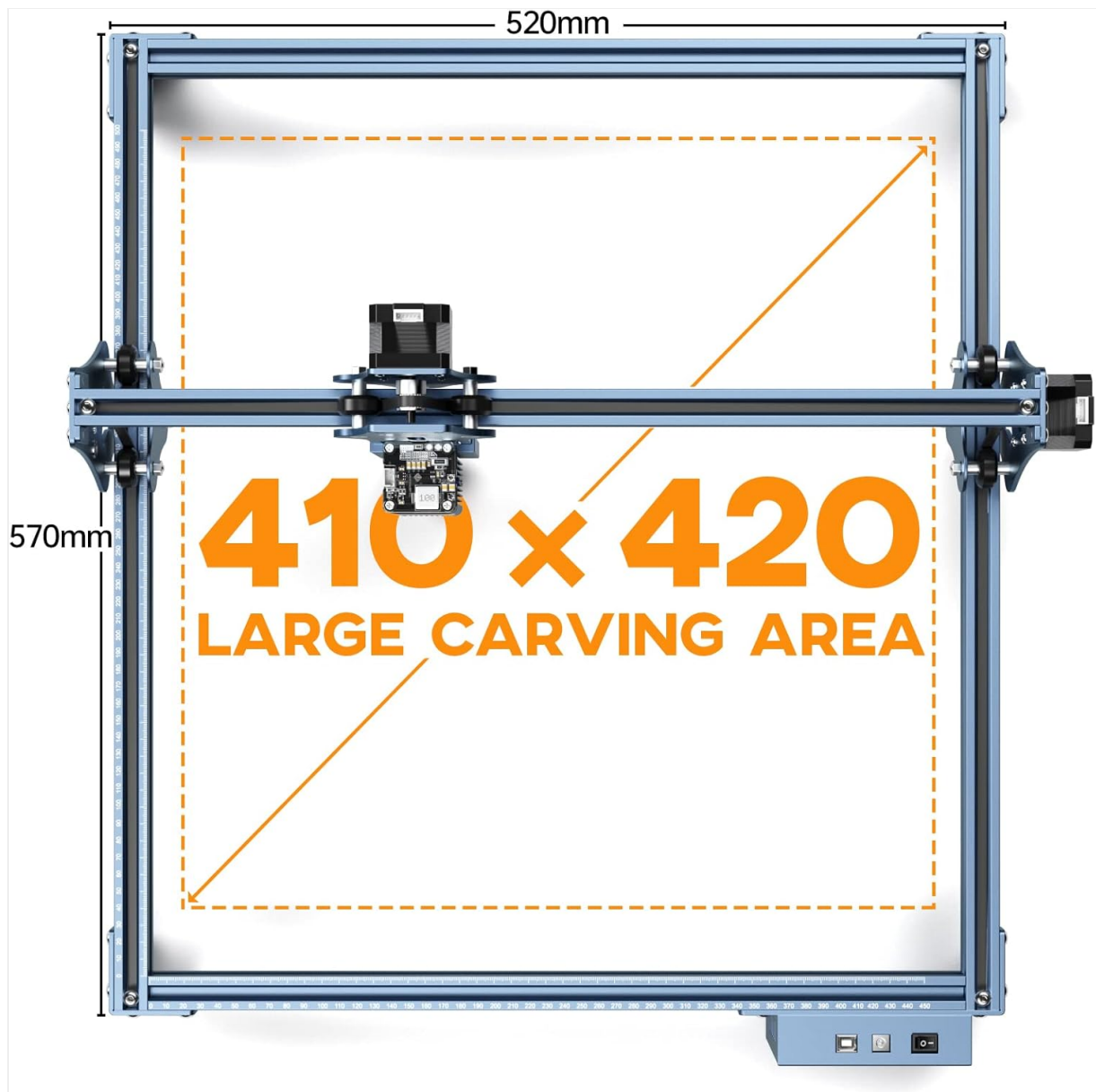


Image: Examples of engraving and cutting on diverse materials such as wood, leather, acrylic, and cloth.

4.3 Focusing and Measurement

- **Fast Focusing:** To achieve optimal focus, slide the laser module to the desired height and then tighten the screw. The fixed focus lens design simplifies this process.
- **Precise Measurement:** The X and Y-axes are equipped with precise scale lines, allowing for accurate positioning and measurement of your engraving or cutting objects.



WOODEN DIY



Image: A top-down view illustrating the large 410x420mm working area of the engraver.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your SCULPFUN S9 laser engraver.

- **Cleaning:** Periodically clean the laser lens and the machine's rails to prevent dust and debris buildup, which can affect performance. Use a soft, lint-free cloth.
- **Lubrication:** Apply a small amount of appropriate lubricant to the moving parts and rails as needed to ensure smooth operation.
- **Inspection:** Regularly inspect all cables, connections, and structural components for any signs of wear or damage. Tighten any loose screws.
- **Storage:** When not in use, store the engraver in a clean, dry environment away from direct sunlight and extreme temperatures.

6. TROUBLESHOOTING

This section addresses common issues encountered during operation.

6.1 Software Connection Issues

Problem: The SCULPFUN S9 laser engraver cannot connect to LaserGRBL or LightBurn software.

Solution: This issue is often caused by a missing driver. When connecting the machine to your computer for the first time, install and open your engraving software. Navigate to "Tools" (or a similar menu option) and select "Install CH340 Driver." After installation, restart your computer to establish the connection.

6.2 Engraving/Cutting Quality Issues

Problem: Engraving or cutting is not smooth or effective.

Solution: Optimal engraving and cutting results depend on correct parameter settings for your specific material. If you encounter issues, consider the following:

- Verify the laser focus is correctly set for the material thickness.
- Adjust power and speed settings in your software (LaserGRBL or LightBurn) according to the material type and thickness. Refer to the User Manual for recommended starting parameters.
- Ensure the material is flat and securely positioned on the work surface.
- Clean the laser lens for any obstructions.

If problems persist, document your software settings (screenshots), material type, and thickness, and contact customer support for further assistance.

7. SPECIFICATIONS

Specification	Detail
Model Number	SCULPFUN S9
Laser Output Power	5000mW (5.5W)
Laser Class	IV
Laser Focus	0.06mm Ultra-thin
Engraving Area	410mm x 420mm
Item Weight	10.13 pounds
Package Dimensions	24 x 14 x 5.5 inches
Manufacturer	SCULPFUN
Date First Available	October 29, 2021

8. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation included with your product or contact the seller directly. SCULPFUN is committed to providing support for its products.



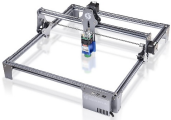






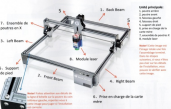
Additional Resources:

- [Certificate of Analysis \(PDF\)](#)
- [Safety Information \(PDF\)](#)
- [Certificate of Compliance \(PDF\)](#)

- [User Manual \(PDF\)](#)

For technical support or inquiries, please contact your retailer or the manufacturer directly. Provide your product model and purchase details for efficient service.

Related Documents - S9

<p>SCULPFUN S6/S9 Series Laser Engraving Machine User Manual</p> <p><small>Note: Which engraving software should I choose? For professional engraving, please choose the LightBurn. For engraving on single engraving platform, please choose the LaserGRBL software. For both have official website or YOUTUBE tutorials, you can have a quick look to choose.</small></p>  	<p>SCULPFUN S6/S9 Series Laser Engraving Machine User Manual</p> <p>A comprehensive user manual for the SCULPFUN S6 and S9 series laser engraving machines, covering software installation (LaserGRBL and LightBurn), connection, preparation, engraving settings, material recommendations, troubleshooting, and maintenance.</p>
<p>SCULPFUN S6/S9 Series Laser Engraving Machine User Manual</p> <p><small>Note: Which engraving software should I choose? For professional engraving, please choose the LightBurn. For engraving on single engraving platform, please choose the LaserGRBL software. For both have official website or YOUTUBE tutorials, you can have a quick look to choose.</small></p>  	<p>SCULPFUN S6/S9 Series Laser Engraving Machine User Manual</p> <p>User manual for the SCULPFUN S6/S9 Series Laser Engraving Machine, covering software installation (LaserGRBL, LightBurn), connection, engraving preparation, operation, material suggestions, troubleshooting, and maintenance.</p>
<p>SCULPFUN S30 Laser Engraver Assembly Instructions</p>  	<p>SCULPFUN S30 Laser Engraver Assembly Instructions and Guide</p> <p>Comprehensive assembly instructions for the SCULPFUN S30 Laser Engraver. Learn how to build your laser engraver step-by-step, including belt tensioning and focusing tips. Includes software and support information.</p>
<p>SCULPFUN S10 Laser Engraver Assembly Instructions</p>  	<p>SCULPFUN S10 Laser Engraver Assembly Instructions</p> <p>A comprehensive guide detailing the assembly process for the SCULPFUN S10 Laser Engraver, including parts identification, step-by-step instructions, and essential usage tips for optimal performance.</p>
<p>Instructions de montage du graveur laser SCULPFUN S9</p>   <p>Aperçu des pièces principales</p> 	<p>SCULPFUN S9 Laser Engraver Assembly Instructions</p> <p>Comprehensive guide for assembling the SCULPFUN S9 laser engraver, detailing parts, steps, and focusing principles. Includes software recommendations and support information.</p>
<p>SCULPFUN TS1</p> 	<p>SCULPFUN TS1 Touch Screen User Manual Laser Engraving Machine Control</p> <p>Comprehensive user manual for the SCULPFUN TS1 touch screen, detailing installation, interface navigation, control functions, settings, and computer usage for your laser engraving machine.</p>