



Laser Engraver Model Atelier User Manual



F03-0328-0AA1 Version: B



Video Tutorial



Official Website

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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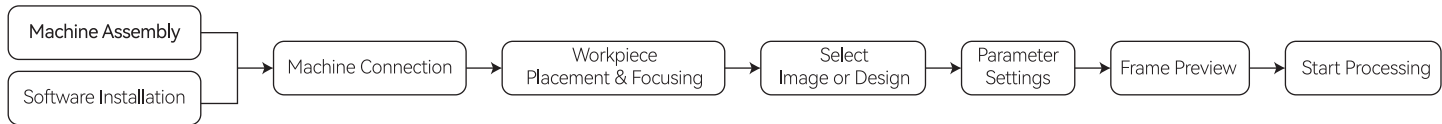
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Engraving Steps Guide



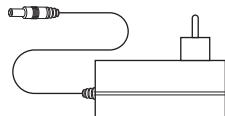
Power Supply DC 24V 3A Rated Power 72W

01

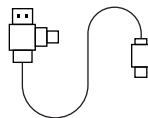
Package contents



Atelier+USB Startup Key



Power Supply



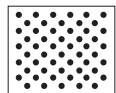
Data Cable



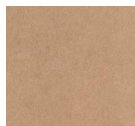
User Manual



Safety Goggles



Camera Calibration Card



Kraft Paper



Exhaust Hose



Hose Clamp



Dust-free Cloth



2× Positioning Bars
with 4× Screws



M4*16 Set Screws x4



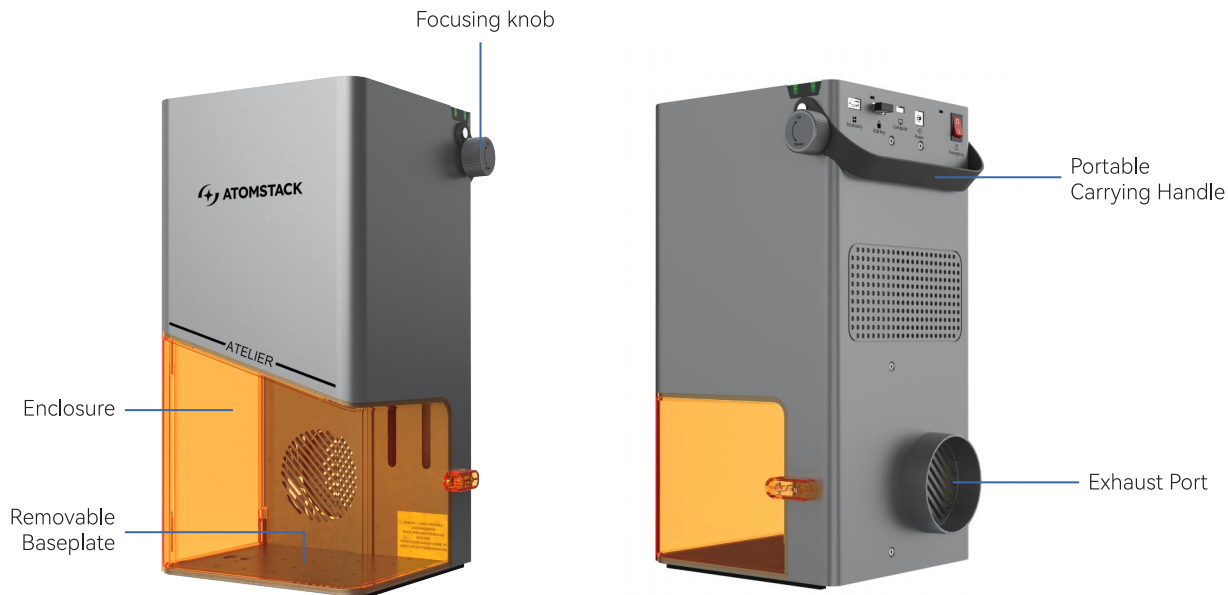
Phillips Screwdriver



H2 / H2.5
Hex wrench

02

Getting to know AtomStack Atelier



02

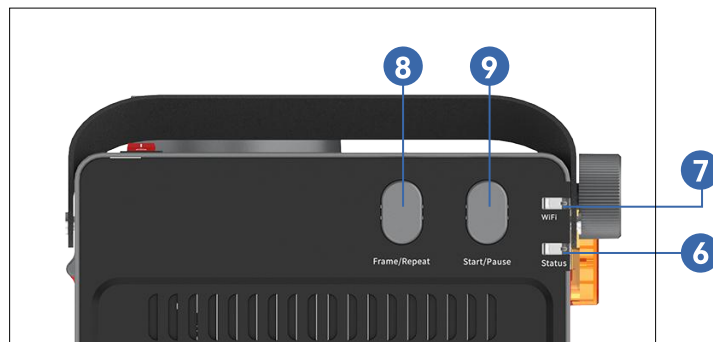
Getting to know AtomStack Atelier



1 Accessory Interface	Used for connecting accessories such as chucks, rollers, and other expansion kits.
2 USB Key	The machine can only be unlocked and used when the USB key is inserted (pre-installed at the factory).
3 Computer	Data cable port used for connecting to a computer.
4 Power	Power Input Port 24V / 3A
5 Emergency	Emergency Stop Button, Power On/Off

02

Getting to know AtomStack Atelier



6 Status

- White Steady: Power on standby
- Green Steady: Laser in operation
- Green Flashing: Paused
- Red Steady: Error
- Blue Steady: Accessory mode

7 WiFi

- ⊗ Light Off: No network connection
- ⚡ White Flashing: Wireless Connecting
- Green Steady: Connected via Wireless

8 Frame/Repeat

- 👆 Click: Start / Stop framing (Last file from APP)
- 👆^{3s} Long press: Repeat engraving (Last file from APP)
- 👆 Double click: Cancel engraving

9 Start/Pause

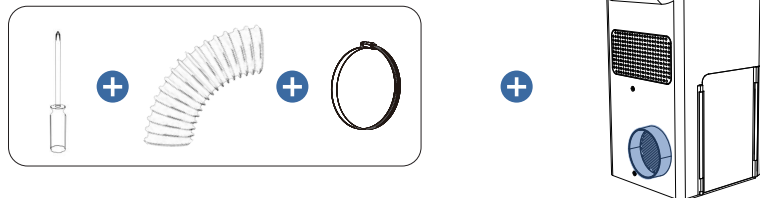
- 👆 Click: Start / Pause Engraving
- 👆^{3s} Long press: Enter Wi-Fi setup
- 👆 Double click: Cancel the exception

03

How to use

Before Use

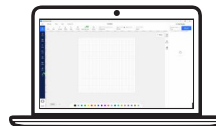
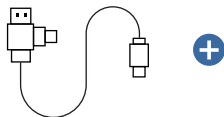
1. Attach the hose clamp to the exhaust pipe, connect it to the exhaust port, and tighten it with a Phillips screwdriver.



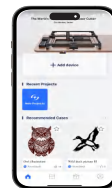
2. Connect the power supply, ensure the USB key is properly inserted, and turn on the machine.



Connect to the computer software via USB cable.



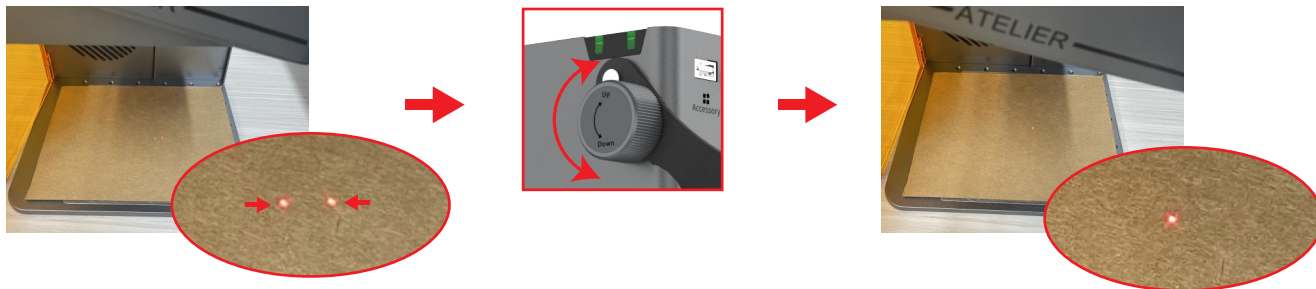
Or to the mobile app via wireless.



03

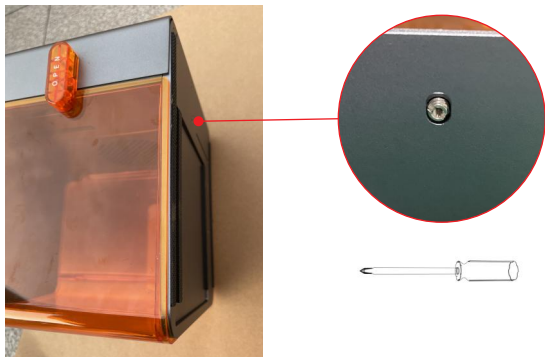
How to use

3. Focusing Method: Place the material, then adjust the hand-tightening knob until the two red laser dots overlap.

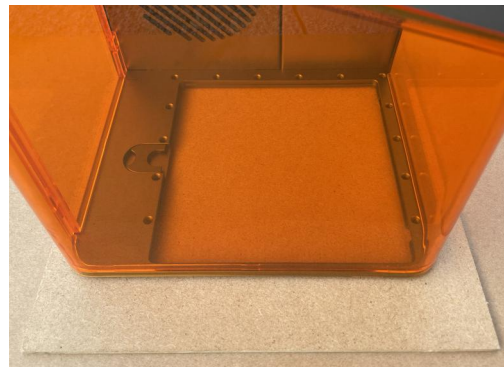


Tips

Loosen the bottom screws, then slide the latches to remove or install the baseplate.



Large-size material

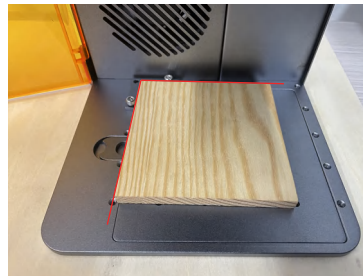
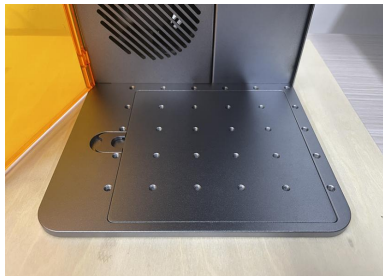


03

How to use

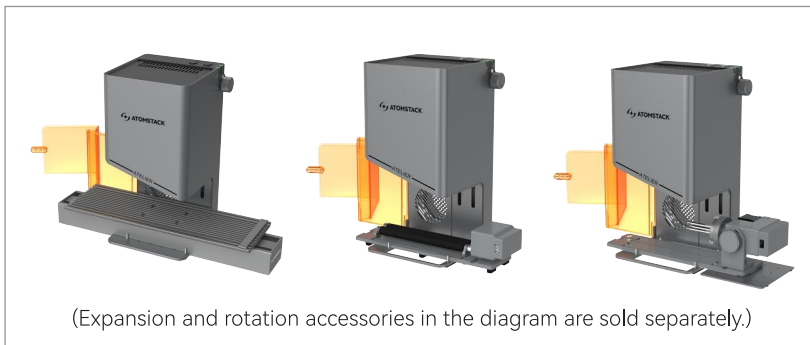
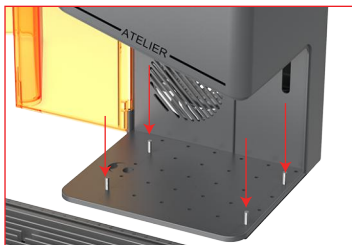
Batch Engraving

Batch Engraving: Use the positioning bar to lock a fixed position, allowing repeated placement of materials with the same size and thickness. This improves both efficiency and precision.



M4*16 Set Screws Usage method

As shown: Screw in M4*16, used with expansion and rotating accessories for positioning.



04

Software Resources and Connections



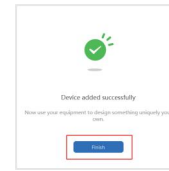
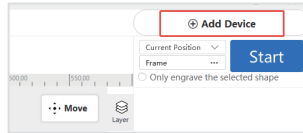
Recommended to use AtomStack official software

Simple interface, easy to operate, with optional rich material/sample libraries and built-in recommended parameters for common materials. Supports text-to-image generation, image import, parameter adjustment, border preview, and other practical functions for efficient and easy engraving.

How to get the desktop software:

Download from AtomStack official website: <https://atomstack.com/pages/atomstack-studio-software>

1. Open the AtomStack software and click the “Add Device”;
2. Connect the Atelier to the computer using the USB data cable, then click “Next”;
3. Select the “Atelier” model, click “Next”, and complete the connection.



How to Get the Mobile App:

1. Download from AtomStack official website: <https://atomstack.com/pages/atomstack-studio-software>;
2. Search for “AtomStack” in the app store ;
3. Scan the QR code to download.



iOS



Android

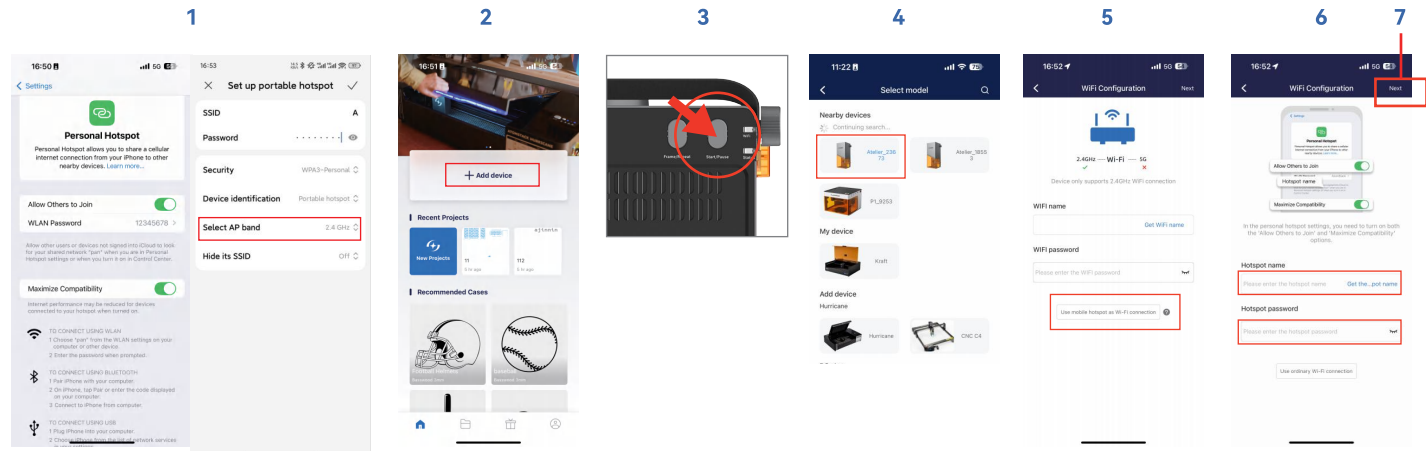
04 Software Resources and Connections

Mobile APP Connection Method

A: Using a Mobile Hotspot to Connect to Atelier:

Suitable for environments without Wi-Fi or with unstable Wi-Fi. After connecting, the phone can still use mobile data normally.

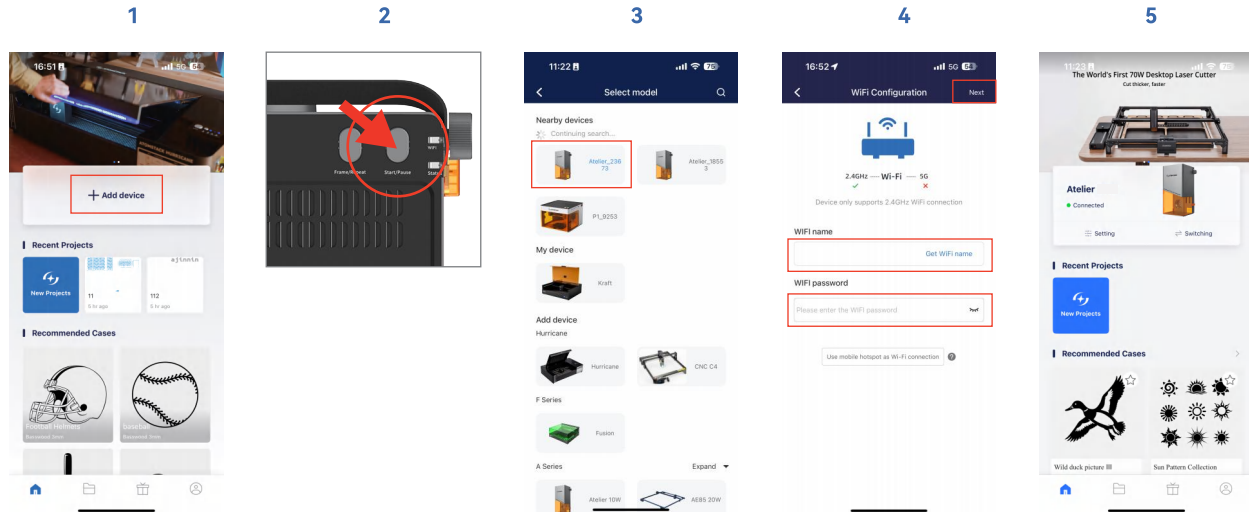
1. Turn on the mobile hotspot. For iOS devices, Enable "Maximize Compatibility"; For Android, Ensure the hotspot is set to the 2.4 GHz band.
2. Tap "Add Device" on the main page of the app.
3. After powering on the Atelier, press and hold the "Start/Pause" button for 3 seconds. A beep will sound and the Wi-Fi indicator will begin flashing.
4. Select "Atelier xxxx" from the list of Nearby devices to enter the network configuration page
5. Select "Use Mobile Hotspot for Wi-Fi Connection"
6. Input the hotspot name and password
7. Tap "Next" to complete the mobile hotspot connection



B: Use Wi-Fi to connect to Atelier

Suitable for environments with stable Wi-Fi: Please note that only the 2.4 GHz band is supported.

1. Tap "Add Device" on the main page of the app;
2. After powering on the Atelier, press and hold the "Start/Pause" button for 3 seconds. A beep will sound and the Wi-Fi indicator will begin flashing;
3. Select "Atelier xxxx" from the list of Nearby devices to enter the network configuration page;
4. Enter your Wi-Fi name and password, then tap "Next" ;
5. Wi-Fi setup complete.

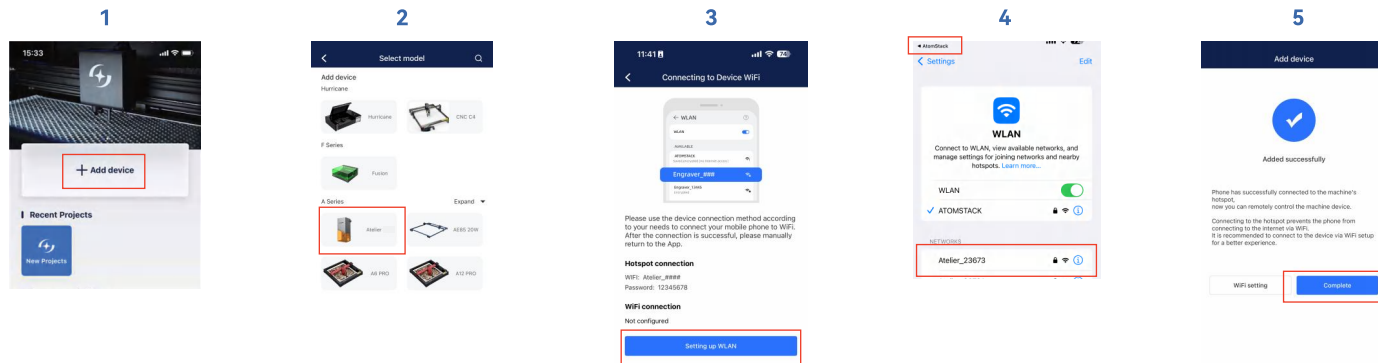


04 Software Resources and Connections

C: Connect using Atelier's Built-in Hotspot:

Suitable for environments without Wi-Fi. After connecting, the phone will not be able to use mobile data.

1. Tap "Add Device" on the main page of the app;
2. Select "Atelier" on the model selection page;
3. Tap "Setting Up WLAN";
4. In the phone's system WLAN settings, select "Atelier xxxx", enter the password "12345678", then return to the app;
5. Tap "Complete" to finish the Atelier hotspot connection.



04

Software Resources and Connections



LightBurn

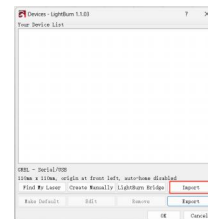
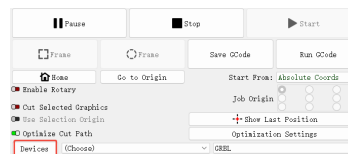
Unofficial software. Requires separate purchase

Lightburn Software Download Method: Download link: <https://lightburnsoftware.com/pages/download-trial>
LightBurn Software Connection (Baud rate must be set to 460800)

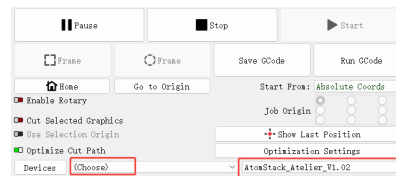
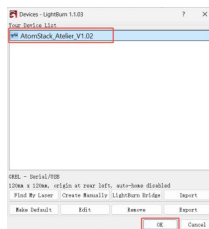
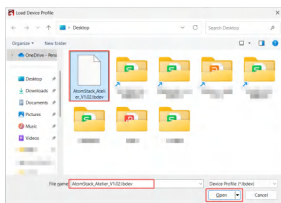
1. Scan to download the configuration file "AtomStack_Atelier_Vxxx.lbdev".



2. Open the LightBurn software, select: Devices - Import



3. Select "AtomStack_Atelier_Vxxx.lbdev", click "Open", then "OK". In the bottom right corner, select "AtomStack Atelier".
The machine will beep once to confirm the connection.



Note: If adding the device manually, set the "Baud Rate" in "Device Settings" to 460800.

05

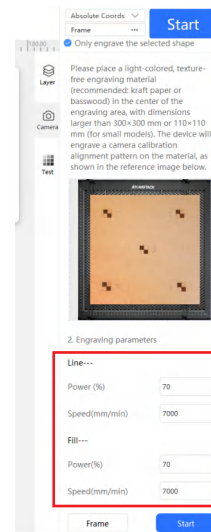
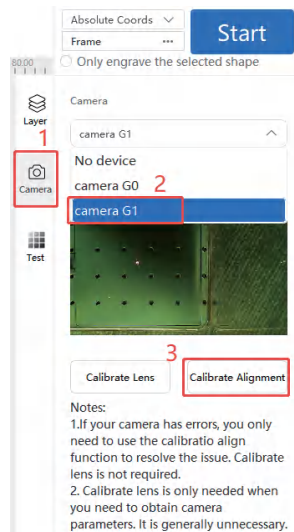
How to Use and Calibrate the Camera

Precautions:

- *Ensure the background is clean and the lighting is even during the process, which helps the camera capture better and achieve better scores.
- *The calibration circle pattern card, kraft paper, or other materials used for calibration must remain flat and stationary during the calibration process.
- *It is recommended to perform camera calibration and alignment based on the height of the material you use most commonly. Otherwise, positioning accuracy may be affected.
- *If the material height differs significantly from that used during the original calibration, re-calibration at the new height is required to achieve better positioning accuracy.

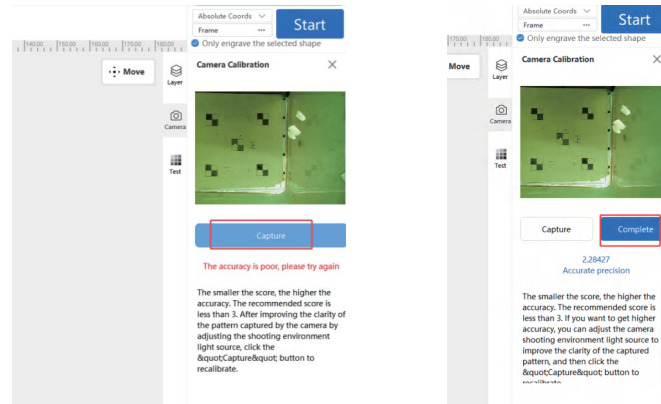
1.How to use the Camera in the Official Software AtomStack Studio

1.1 Place kraft paper inside the machine and focus,select the camera name in the Camera Control window of AtomStack Studio, set the engraving parameters, and start engraving.

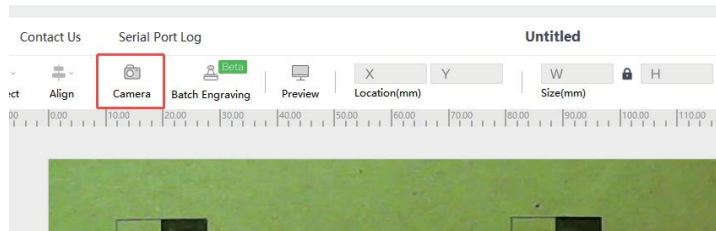


05 How to Use and Calibrate the Camera

1.2 After engraving is complete, click "capture" then "Complete" to complete the camera alignment process.



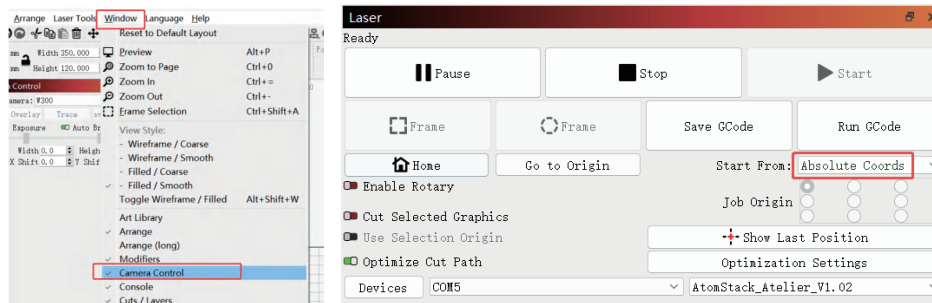
1.3 Each time after placing the material and adjusting the focus, click "Camera" to use the camera positioning function.



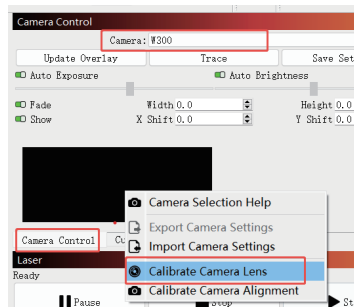
05 How to Use and Calibrate the Camera

2. How to use the camera in LightBurn

2.1 Place the kraft paper and adjust the focus, go to “Camera Control” under “window” in Lightburn, select start from “Absolute Coords”.

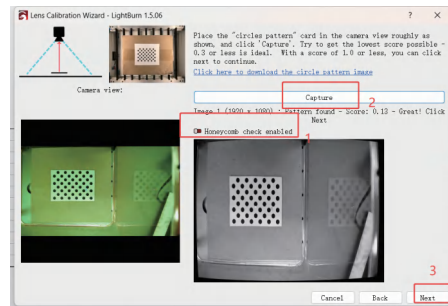
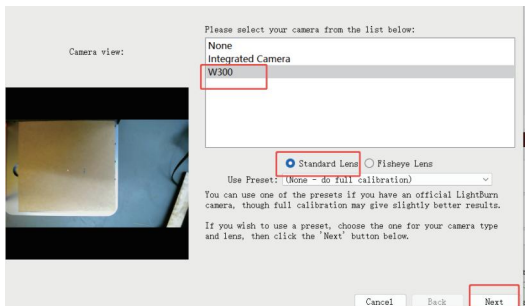


2.2 Select the camera name, right click “Camera Control” to select “Calibrate Camera Lens”.

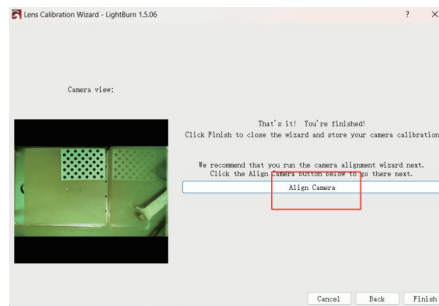


05 How to Use and Calibrate the Camera

2.3 Select the camera name and “Standard Lens”, Use Preset as “None-do full calibration”. Use the calibration circle pattern card to complete the Camera Lens Calibration following the wizard.



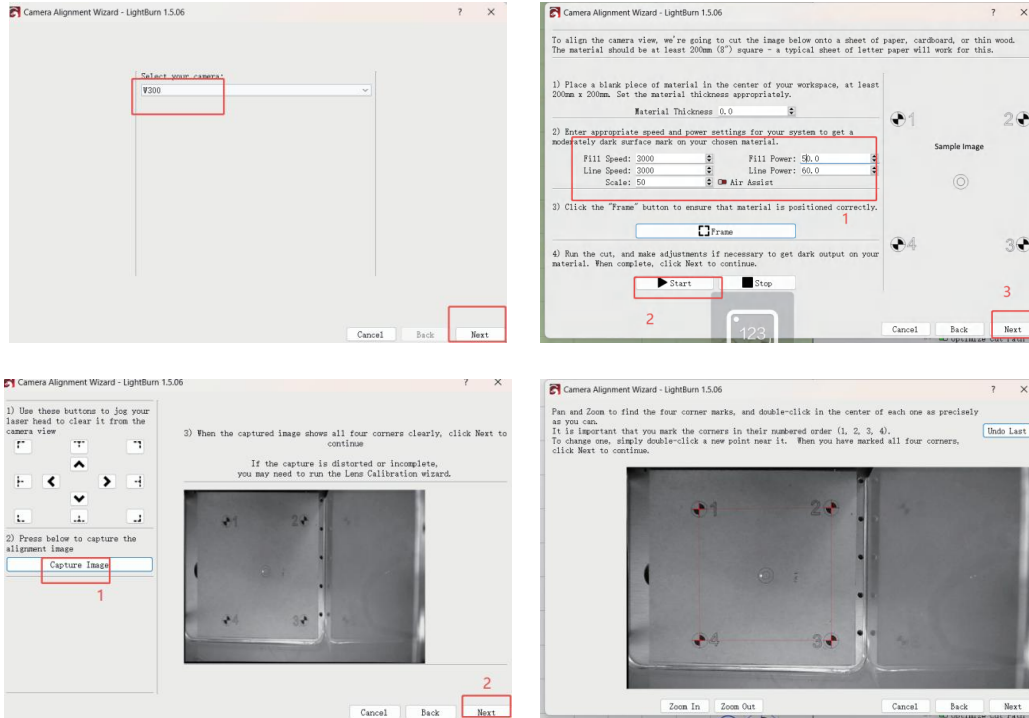
2.4 After lens calibration is complete, click "Align Camera".



05

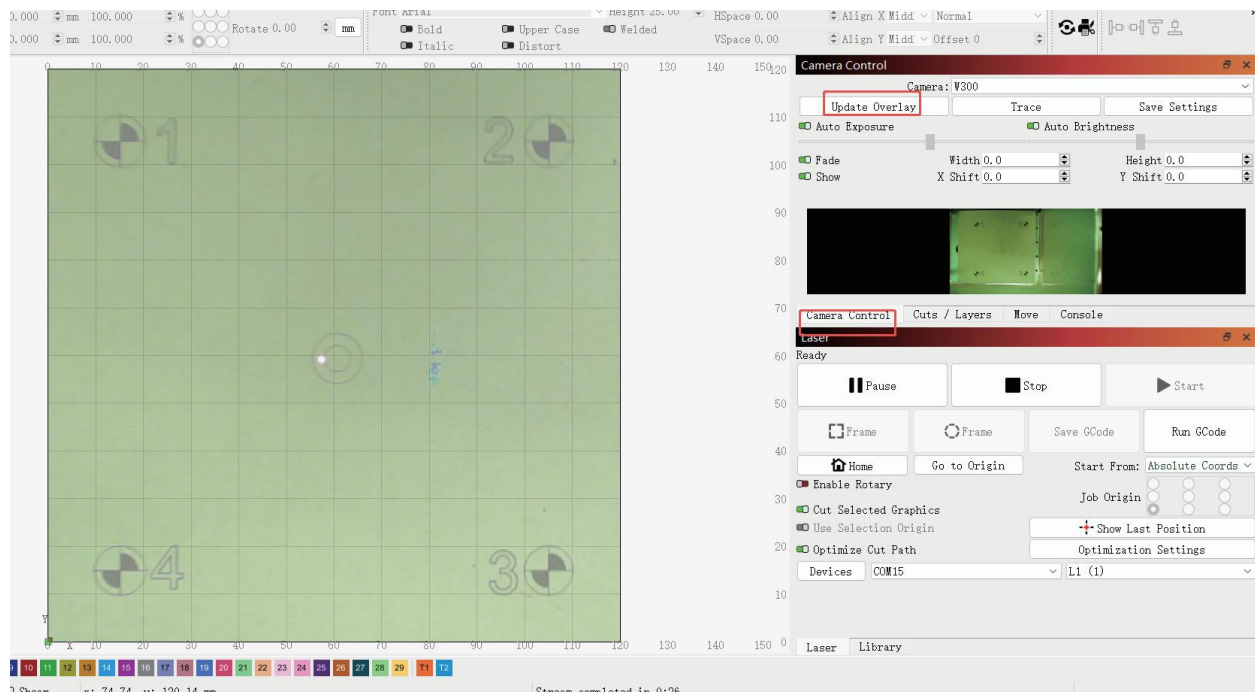
How to Use and Calibrate the Camera

2.5 Select the camera and follow the wizard to complete the subsequent steps. It is recommended to set the "Scale" to 55.



05 How to Use and Calibrate the Camera

2.6 Each time after placing the material and adjusting the focus, click "Update Overlay" in the Camera Control window to use the camera-assisted positioning function.

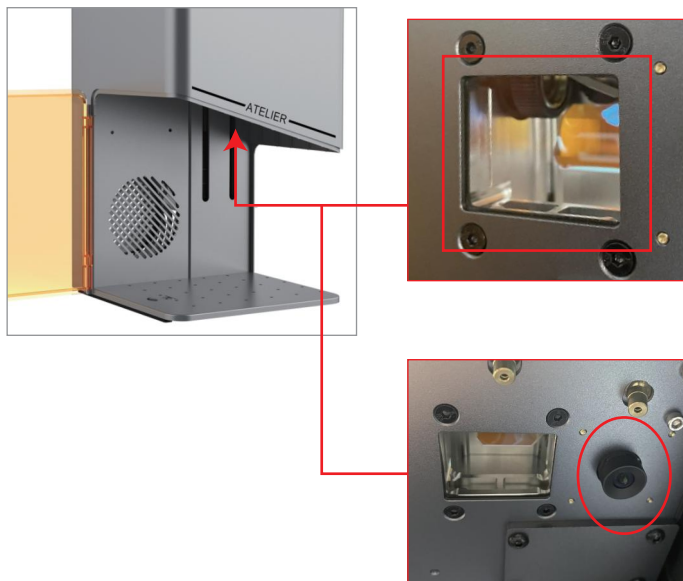


Maintenance

1. Protective Glass Cleaning

Cleaning Tools: Lint-free cloth + alcohol

Recommended Cleaning Frequency: If used for more than 4 hours per day, please clean the machine promptly after each use.



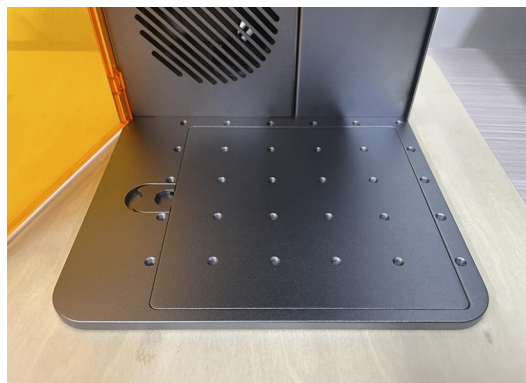
2. Bottom Plate

Cleaning Tools: Lint-free cloth + alcohol

Recommended Cleaning Frequency:

Engraving: Clean promptly after each day of use.

Cutting: Clean promptly after each use.



06

Maintenance & FAQs

3. Exhaust Fan Cleaning

Cleaning Tools: Lint-free cloth + Alcohol + Hex wrench



1. Rotate clockwise to raise the Z-axis to the top.



2. Remove the two screws on the cover plate.



3. Use your right hand to gently hold the upper part of the cover, then lift the cover upward with a screwdriver to remove it.

4. Dampen a lint-free cloth with alcohol and clean the fan blades.

4. Dampen a lint-free cloth with alcohol and clean the fan blades.

Cleaning Tools: Lint-free cloth + Alcohol + Hex wrench



1. Use a flathead screwdriver to gently pry and remove the top cover.



2. Dampen a lint-free cloth with alcohol and clean the fan blades.

1. What materials can the Atelier be used to engrave?

Wood sheets, bamboo sheets, leather, fabric, stone, ceramics, stainless steel, coated metals, bread, etc.

2. Why does the engraver not respond when powered on?

1. Check whether the adapter is properly powered and connected.
2. Check if the power switch is turned from "O" to "—".
3. Check if the device is connected to the computer.
4. Check the indicator: it should be steady white. If it is steady red, continue troubleshooting.
5. Check if the USB key is inserted. Please insert the USB key.
6. Check if the enclosure is closed. Please close the safety cover before starting engraving.
7. Check if the engraving design exceeds the working area. Please ensure the design is within the working area.

3. What is the engraving area of the Atelier?

120*120mm

4. Why won't the machine engrave, or why is the engraving quality poor?

Before engraving, please ensure the focus is correctly adjusted and the speed and power settings are appropriate. Make sure the imported image is clear and not too light in color.

5. Why is the engraving incomplete or the depth inconsistent?

Ensure that both the machine and the material are level before engraving.

6. Can I engrave on curved surfaces?

Yes, but only on slightly curved surfaces. Significant curvature can result in poor engraving due to large focus variation. For curved objects such as mugs or rings, it is recommended to use optional accessories like a rotary roller or chuck.

7. How to resolve the "Out of Bounds" warning in LightBurn?

1. Check whether the design exceeds the working area. Make sure all elements stay within the engraving range.
2. In LightBurn, ensure that "Start From" is set to Absolute Coords. Avoid using "User Origin" or "Current Position."
3. When engraving bitmaps or vector fills, make sure Overscanning is turned off.

07

Contact Us

Customer service:

For detailed warranty policy, please visit our official website: www.atomstack.com
For technical support and service, please email: support@atomstack.com

Manufacturer:

Shenzhen AtomStack Technologies Co., Ltd.

Zip code: 518172

Address:

17th Floor, Building 3A, Phase II, Intelligent Park, No. 76, Baohe Avenue, BaolongStreet,
Longgang District, Shenzhen, Guangdong, China.

QR:

Scan the QR code for more information:



- Unboxing & First Use
- Use with AtomStack APP
- Troubleshooting
- Maintenance

Complies with 21 CFR 1040.10 and 1040.11 except
for conformance with IEC60825-1 Ed. 3.,
as described in Laser Notice No.56, dated May 8, 2019.