



User Manual for Desktop Fiber Laser Cutting Machine

MC-800 MC-1200



CATALOGUE

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Precautions

1.1 Safety specification

Caution: Laser Class 1 Laser Product



Laser Hazard:
Class I Lasers

WARNING

- Operating, adjusting, or controlling the equipment without following this manual may result in danger. Therefore, operators must read and fully understand the operating procedures before operating or maintaining this system.
- The company shall not be responsible for any damage caused by improper operation.
If you have any questions or encounter any problems while using this system, please contact the manufacturer or authorized agent for assistance.

1.1.1 Safety Instructions for Optical Operation

We strongly recommend that you read the following procedures before operating the fiber laser: Never look directly into the optical output when Electrical switch is on. Make sure that a pair of appropriate and approved laser safety protective glasses is worn all the time while the laser is operating. No eyes are on the path of the laser beam (direct or reflected light, scatter light from high reflective material, etc.), at the same time, the direction of laser output must be Shelter by reliable objects.

Caution: failure to use control or adjustment devices or perform steps as described herein may result in harmful radiation exposure

1.1.2 Safety Instructions for Electrical Operation

We strongly recommend that you read the following procedures before operating the fiber laser: Make sure the power source connected to the equipment is properly grounded with PE wire. At the same time the shell of this equipment must be properly grounded. Any interruption of the ground loop may result in personal injury. Make sure that the input AC voltage and capacity meet the requirements of the very series of lasers. If the air switch shut down frequently, please contact as soon manufacturer

1.1.3 Other Safety Instructions

(1) There are often numerous secondary laser beams produced at various angles in the output port of the laser. These divergent beams are produced when the primary beam of laser reflects off a smooth surface, and they are called secular reflections. Although these secondary beams may be less powerful than the total power emitted from the primary beam, the intensity may be great enough to cause damage to the eyes and skin as well as surface of materials.

(2) Optical accessories relevant to the laser, such as light-sensitive elements that may be damaged from exposure to the laser light, video cameras, photo multipliers and photo diodes, need related protections.

(3) Please do not operate laser in darkened environments.

(4) Do not turn on the laser without an optical coupling fiber or the optical output connector.

1.2 Protective housing and interlocking system

(1) The structure and layout of the shield should be designed to ensure that the human body cannot directly enter the dangerous area.

Shields should be closed mechanisms, meeting specific safety distance and opening size requirements when a mesh structure is required.

(2) For the installation of the laser room, should follow the guidance of the professional design, installation team, in accordance with the drawings.

(3) The installation of the laser room also includes components such as the house body, internal frame, maintenance door, observation window, safety door, lighting, optical fiber hanging device, monitoring, dust removal, light source room, air conditioning, anti-collision fence.

(4) The safety door of the laser room should be connected with the product remote control chain connector. When an external person intervenes and opens the door, the terminal of the connector opens and the laser machine stops launching. Prevent external personnel or unauthorized personnel from exposure to dangerous radiation.

(5) Use of interlocking system: In the laser control zone, walls and doors can limit the hazard of laser radiation. The interlocking system connected to the door can actually operate to restrict access when a hazard occurs, allowing only trained, authorized and appropriately protective equipment to enter.

Features&Technical Parameter

2.1 Machine display



- 1. Key Switch
- 2. Emergency Stop Switch
- 3. USB Port
- 4. Indicator Light
- 5. Indicator Light
- 6. Dust Drawer
- 7. Protective Cover

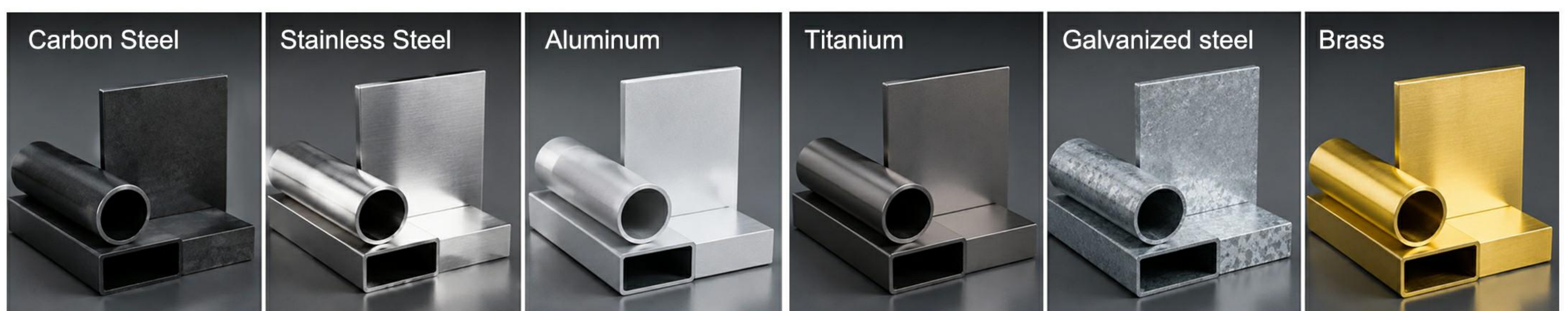


- 8. Power Cord Port
- 9. Main Switch
- 10. Network Port
- 11. Device Communication Port
- 12. Air Pipe Connector
- 13. Pressure Regulating Switch
- 14. Device Communication Port
- 15. Smoke Outlet

2.2 Product Specifications

ITEM	SPECIFICATION	
Product name	Desktop fiber laser cutting machine	
Laser source	JPT	
Model	MC-800	MC-1200
Laser power	800W	1200W
Working area	300*300mm	300*300mm
Max power consumption	3kwh	4.5kwh
Laser power adjustment range	1-100%	
Assistant gas	Compressed air	
Positioning accuracy	±0.1mm	
Working temperature range	5°C – 40°C	
Humidity requirement	≤80%	
Power supply	220 V / 50 Hz, 220 V / 60 Hz	

2.3 Suitable for a variety of metal materials



2.4 Choose Your Power

800W (3 kw/h max draw)

MATERIALS	CUTTING THICKNESS
Stainless steel	2mm
Carbon Steel	2mm
Galvanized Sheet	2mm
Aluminum	1mm
Brass	0.5mm
Titanium	0.5mm

1200W (4.5 kw/h max draw)

MATERIALS	CUTTING THICKNESS
Stainless steel	3mm
Carbon Steel	3mm
Galvanized Sheet	3mm
Aluminum	1.5mm
Brass	1mm
Titanium	1mm

2.5 Machine Indicator Light Description



Alarm



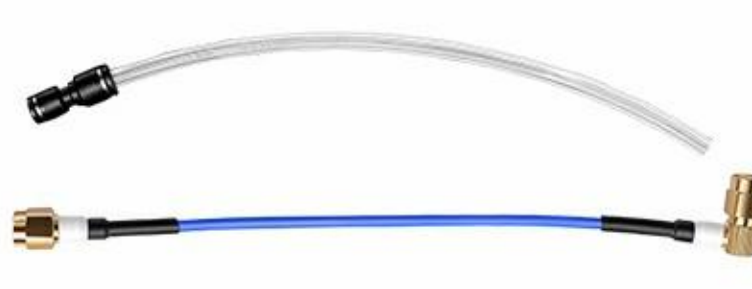
Standby



Running

Package Contents

3.1. Packing List

					
Working Platform	Main Machine Unit	Remote Controller	Ethernet Cable	Communication Cable	Power Cord
					
		Protective Lenses	Air Pipe & Amplifier Capacitor Cable	USB Flash Drive	Fixing Screws
					
				Switch Key	Cutting Nozzle

*USB flash drive (Contains the electronic manual and software)

How to Use

4.1 Machine Installation

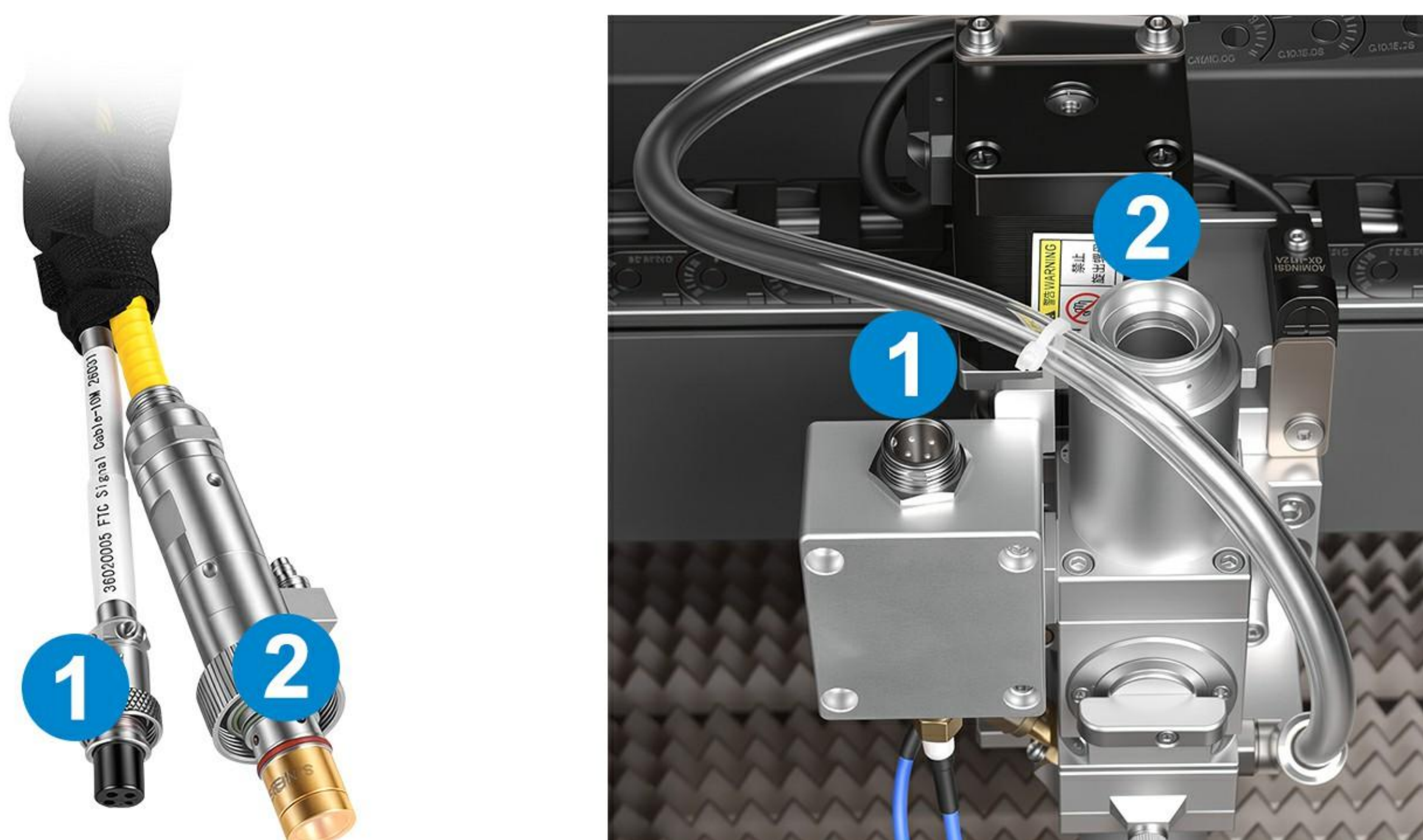
- 1.Connect the power cord to the power port ① of the main unit.
- 2.Connect the network cable to the network port.②
- 3.Connect the main unit interface and platform interface with communication cable ③
- 4.Connect the air compressor with the air pipe.④



1	 220V/110V	4	 Air Compressor
2	 Computer USB port		
3	 Communication Cable		

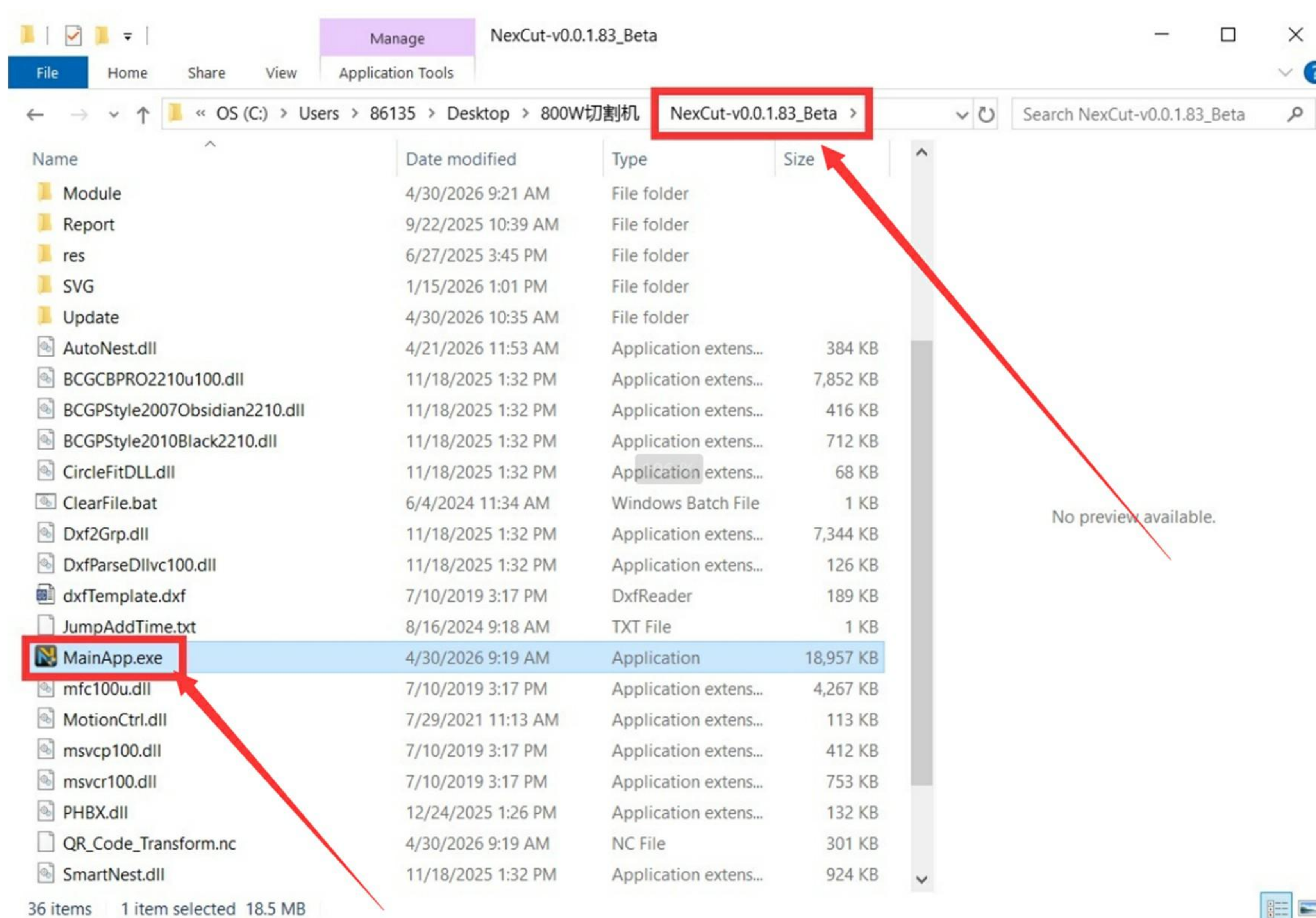
4.1.2 MiniQBH Installation

1. Fit Item 1 (Left) into Item 1 (Right), turn clockwise.
2. Fit Item 2 (Left) into Item 2 (Right), turn clockwise.

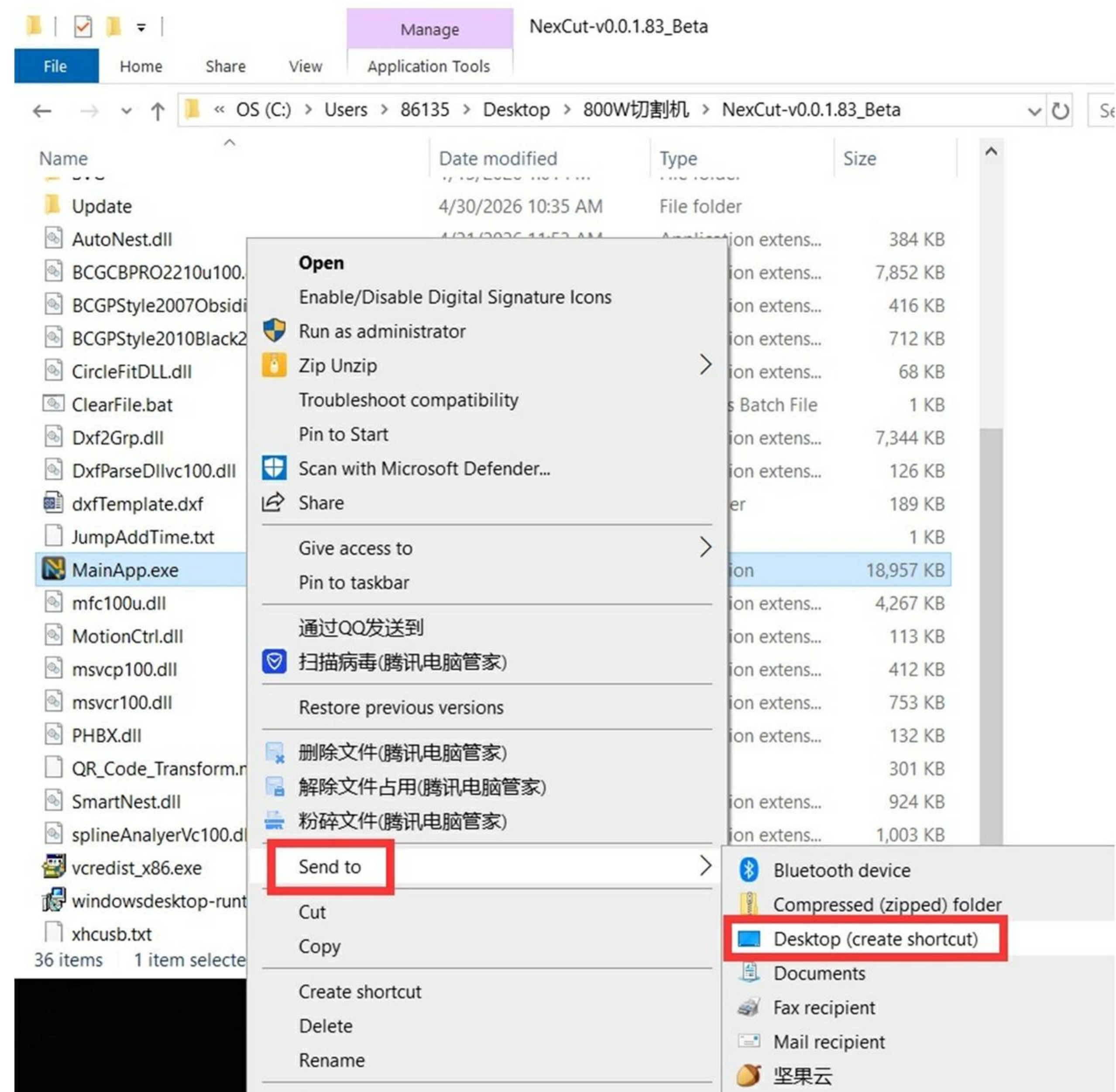


4.2 Software Installation

1. Locate the USB flash drive (which contains the electronic manual and software) and connect it to your computer.
2. Locate the software named **MainApp.exe**.



3.Send the software to the computer desktop.

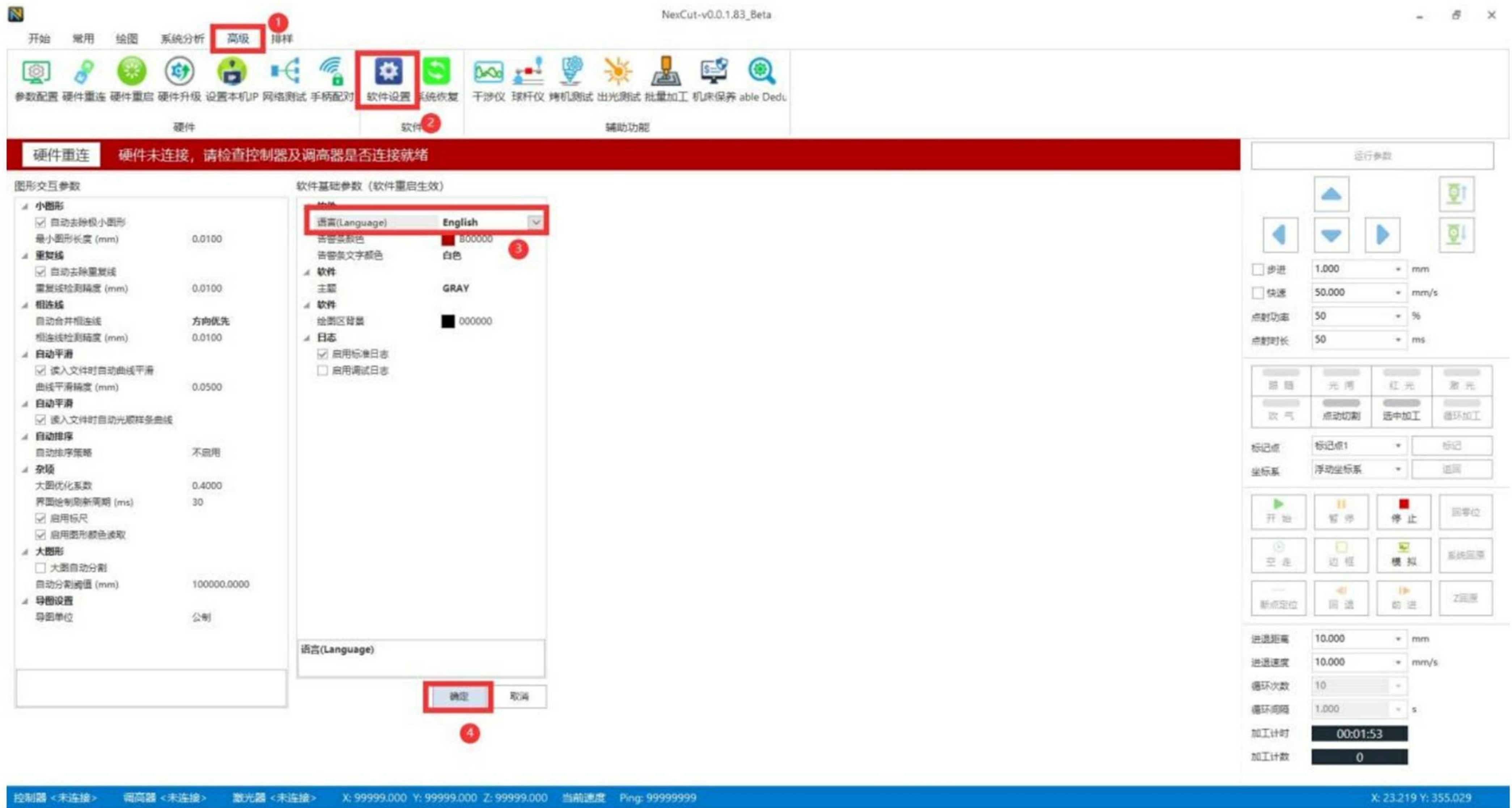


4.Double-click to open the software, enter the operation password: 3721, then click OK.

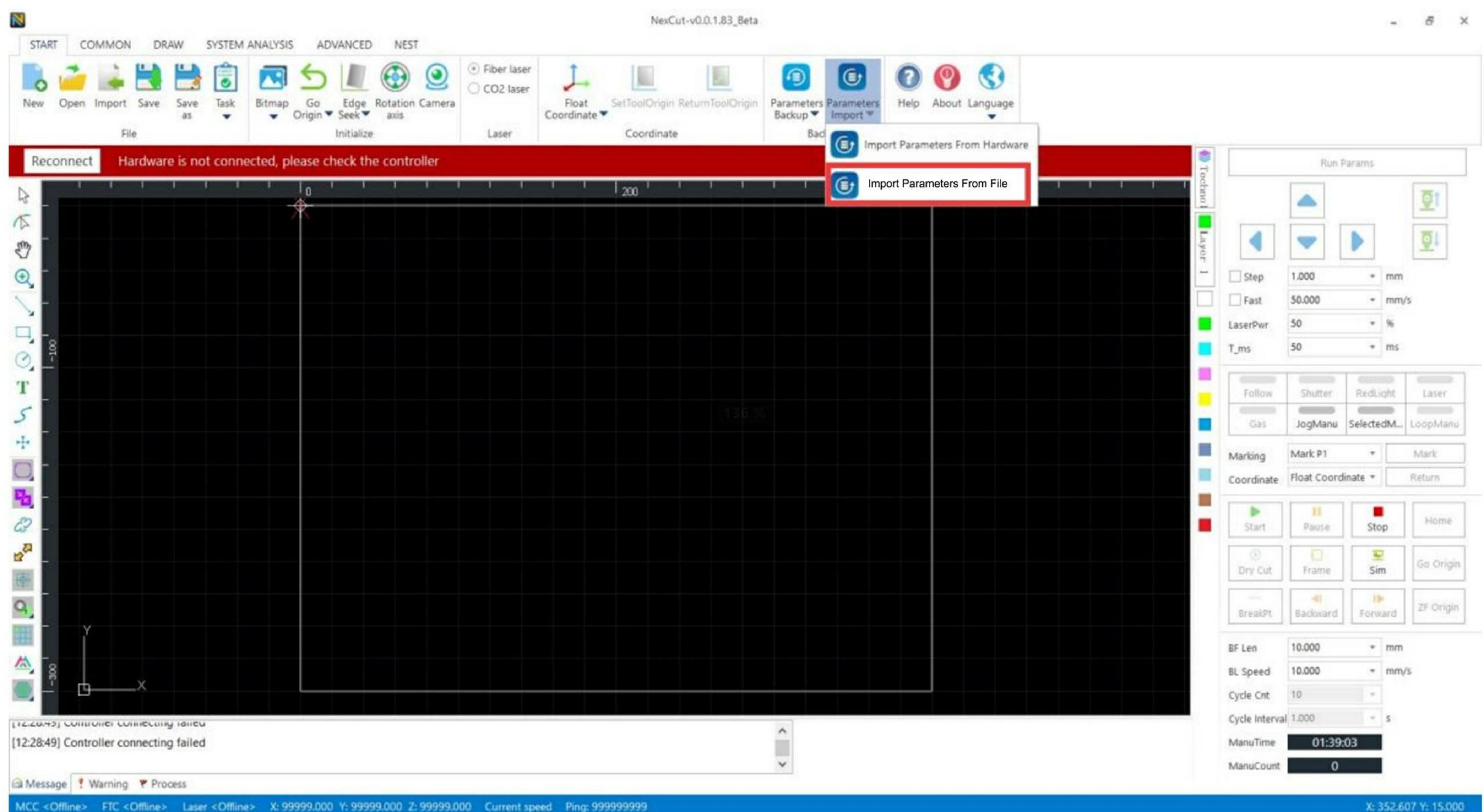


4.3 Software Language Switching

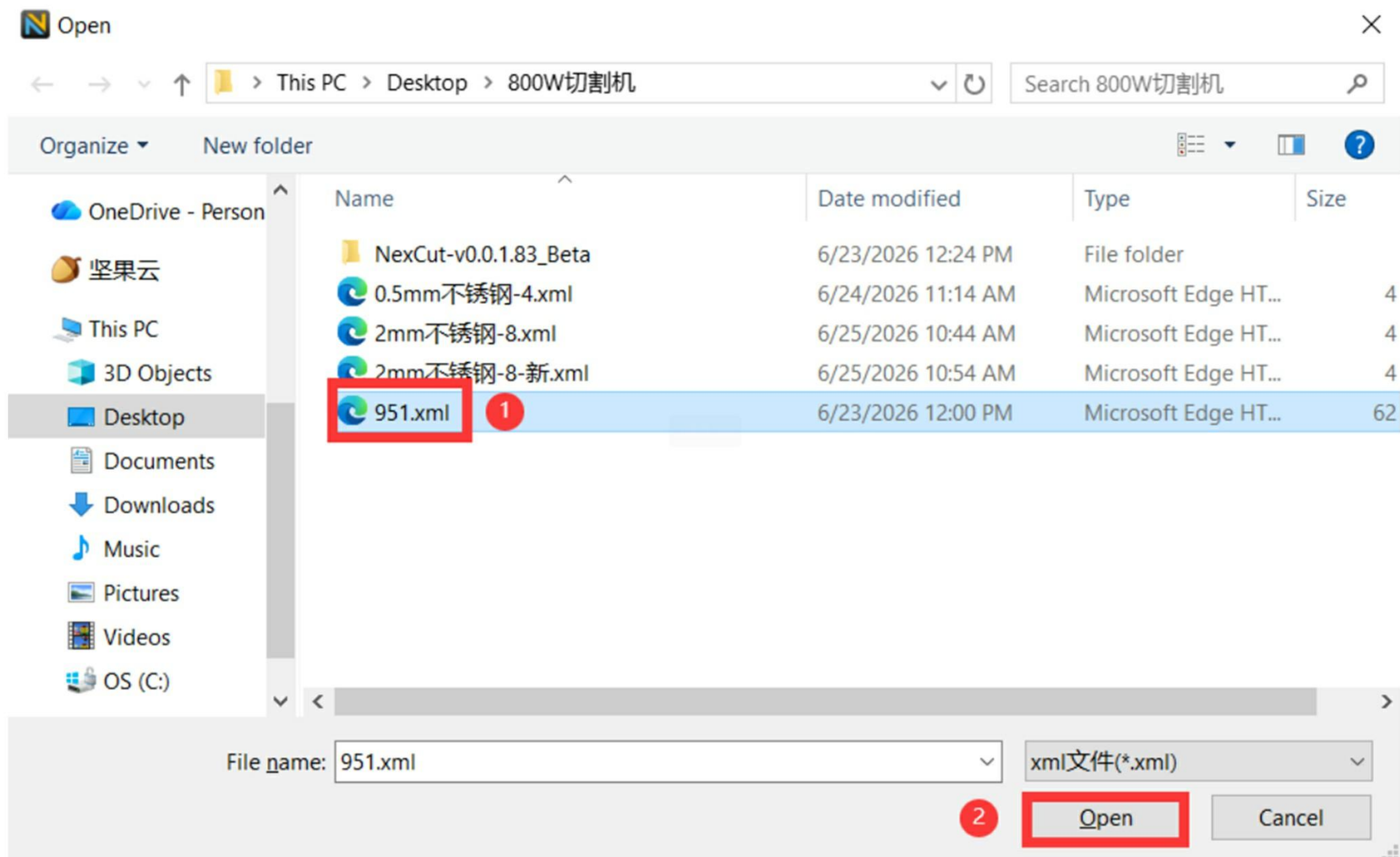
Advanced-Software Settings- Select Language-OK



4.4 Parameter Import



Parameters Import-Import Parameters From File-Select the parameter file you need -Click OK.



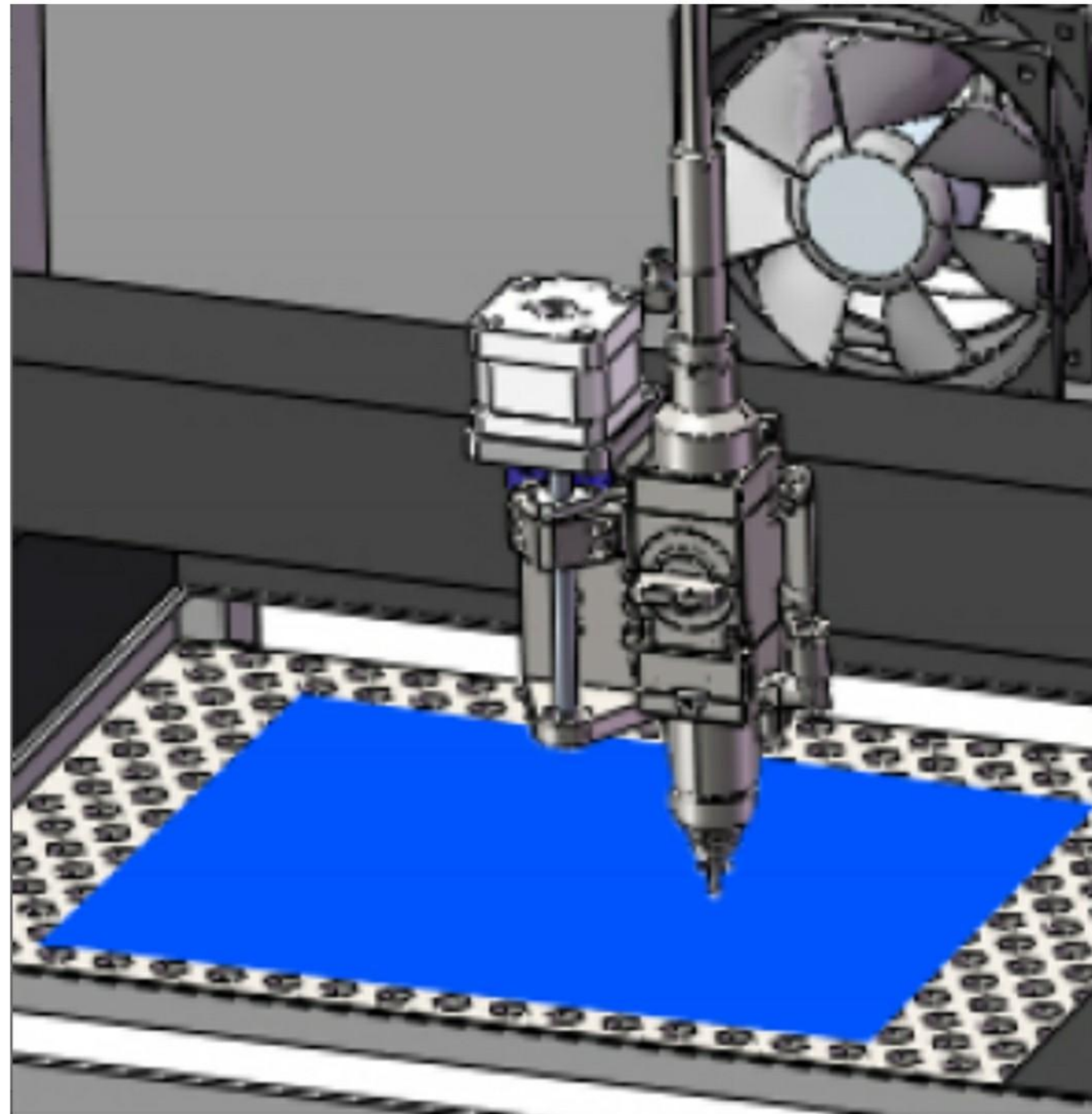
4.5 Machine Operation

4.5.1 Preparation Before Machine Use

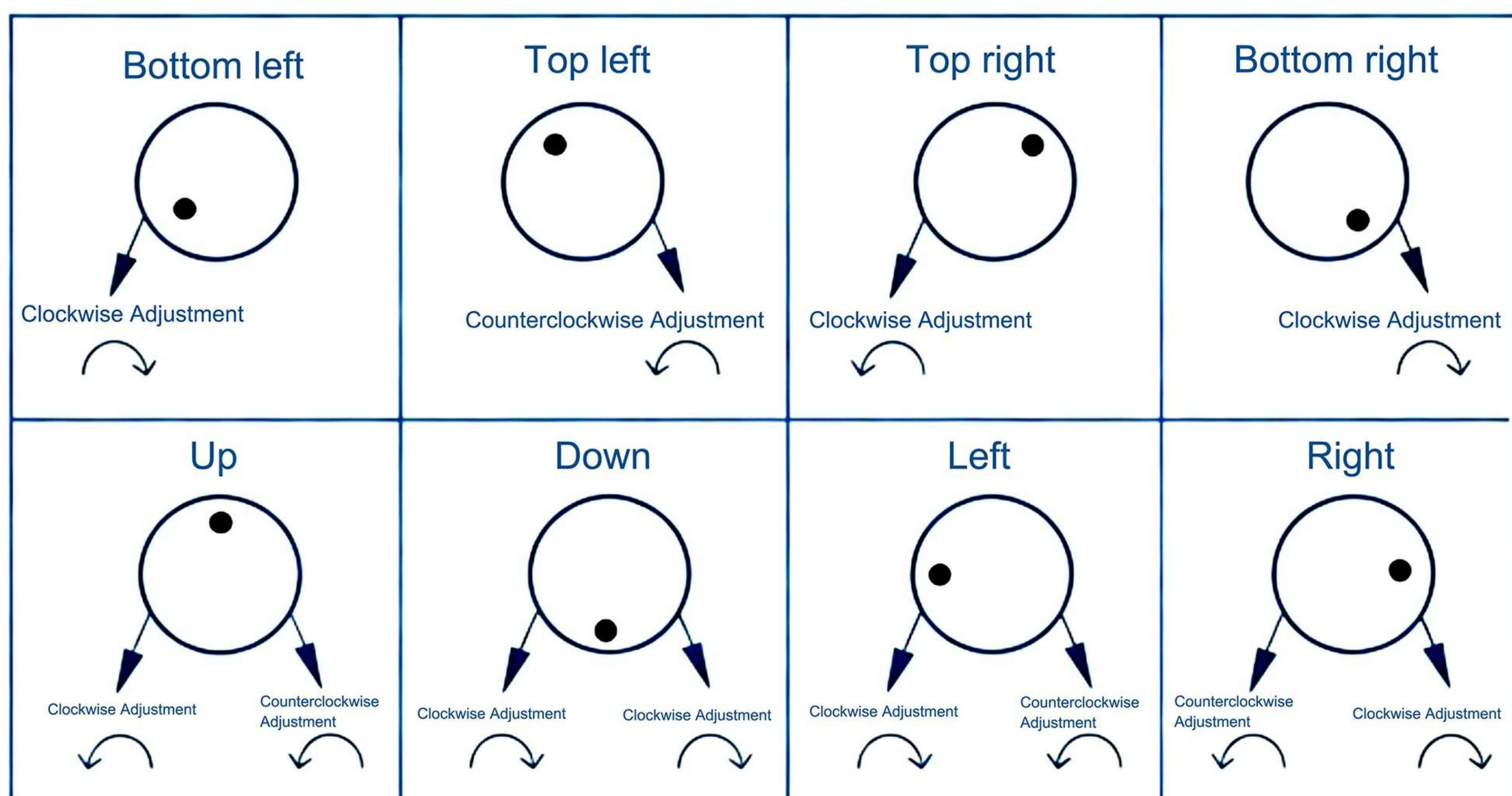
- ① Connect the power supply and ensure the equipment is properly powered on.
- ② Start the system: turn on the main power switch first, then activate the laser source, etc.
- ③ Connect the gas supply: select and connect the appropriate gas according to the processing material (such as oxygen, nitrogen, air, etc.). **If an air compressor is used, its pressure specification shall be ≥ 0.9 MPa.**



- ④ Place the material: lay the workpiece flat on the worktable.



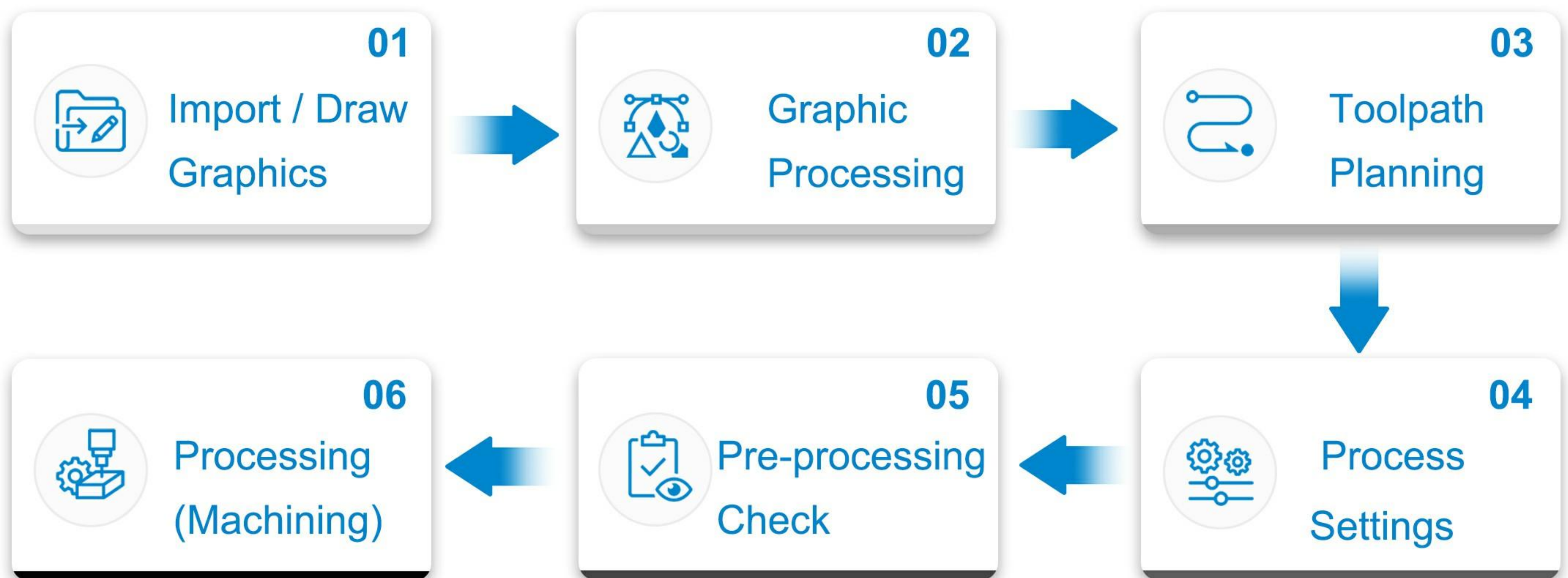
- ⑤ Machine Homing: Perform machine homing operation via the NEXCUT STUDIO control software or touch screen.
- ⑥ Laser Center Alignment Check: Verify that the laser optical center is aligned with the nozzle center. See the schematic diagram below:



- ⑦ Cutting Head Following Calibration: Perform cutting head calibration to ensure stable following during cutting.

4.6 Common Software Functions

4.6.1 Software Operation Flowchart

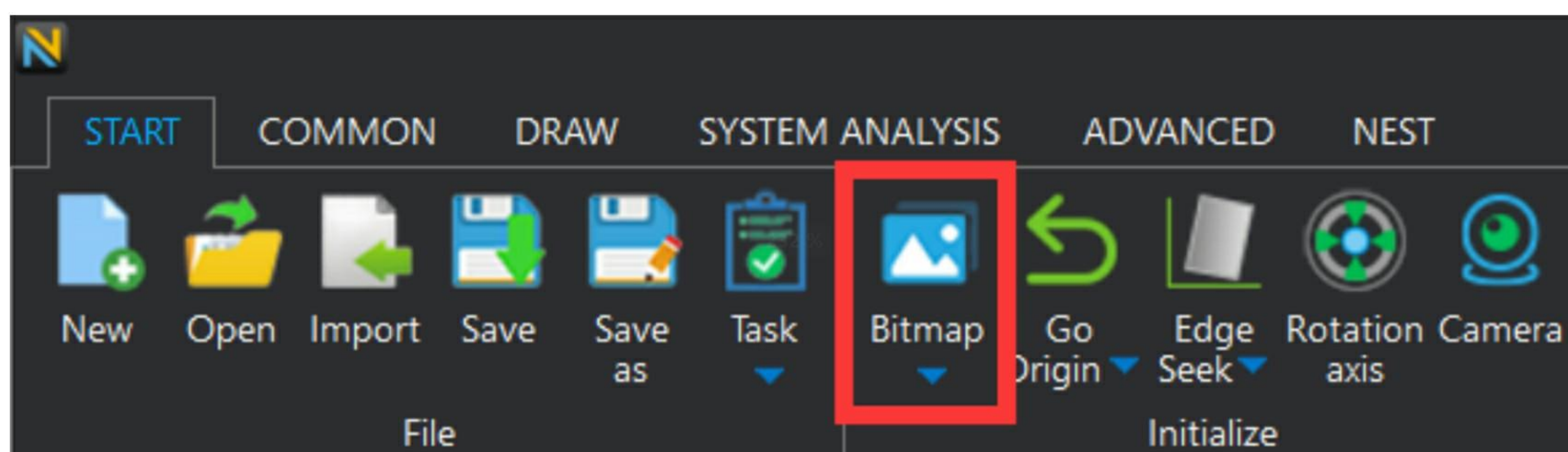


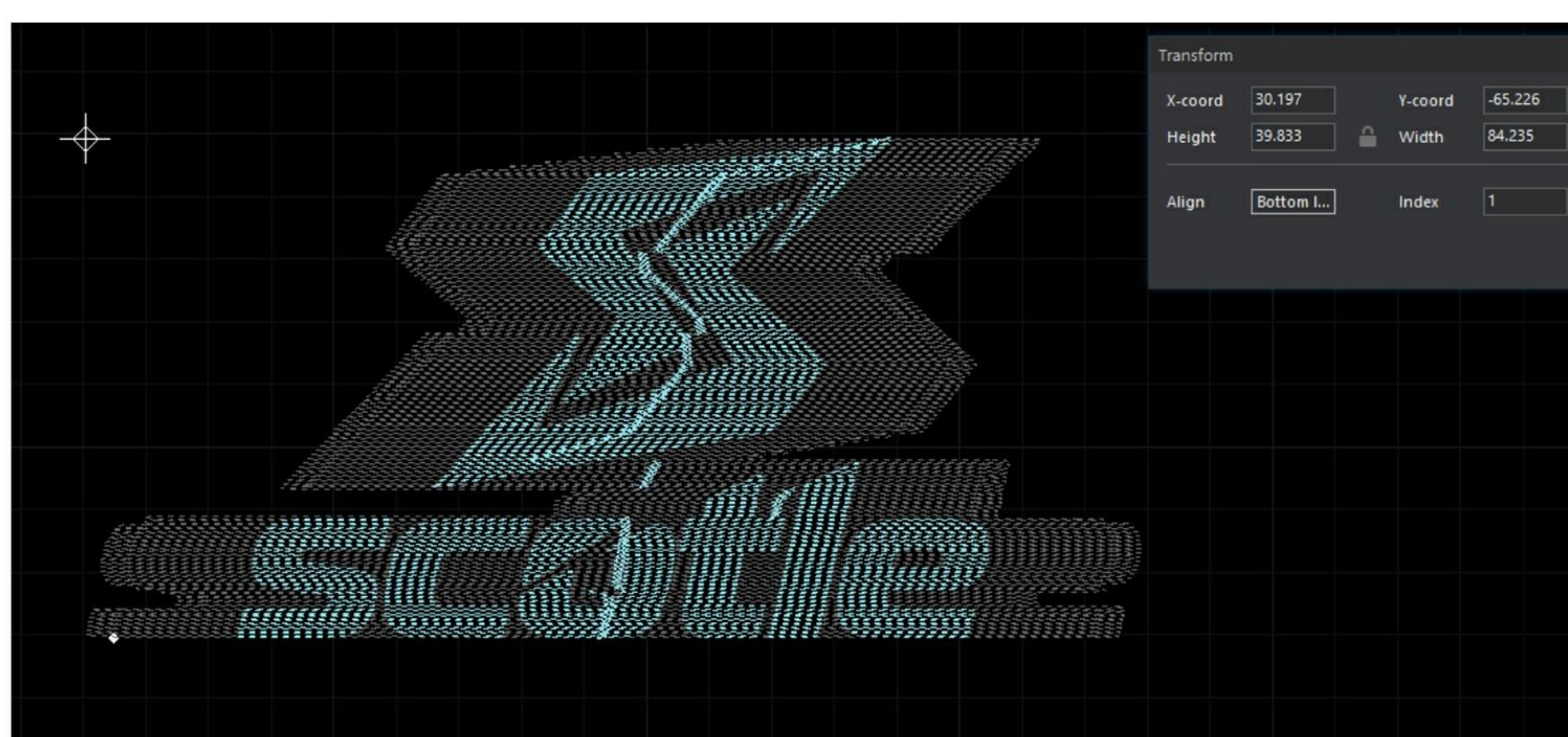
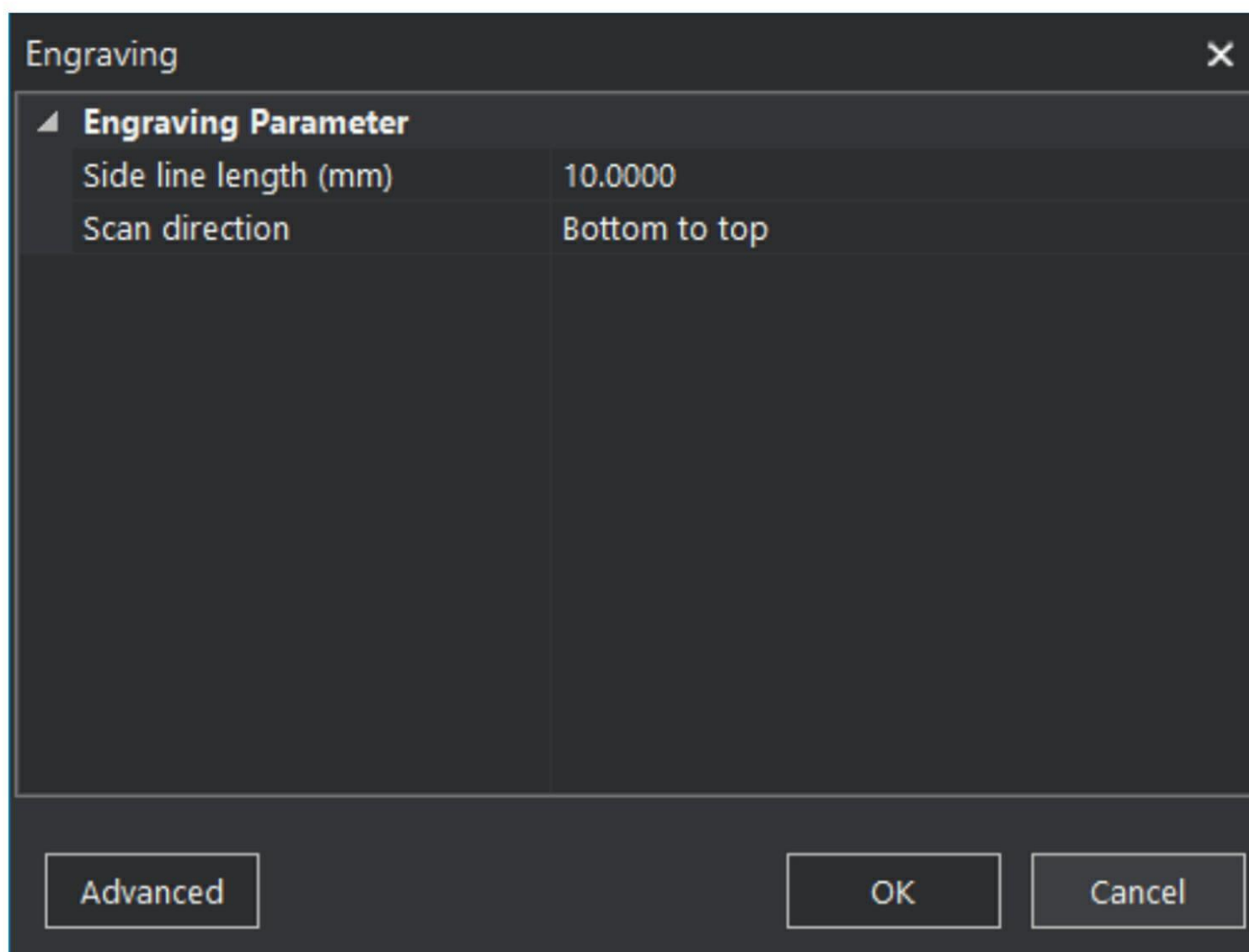
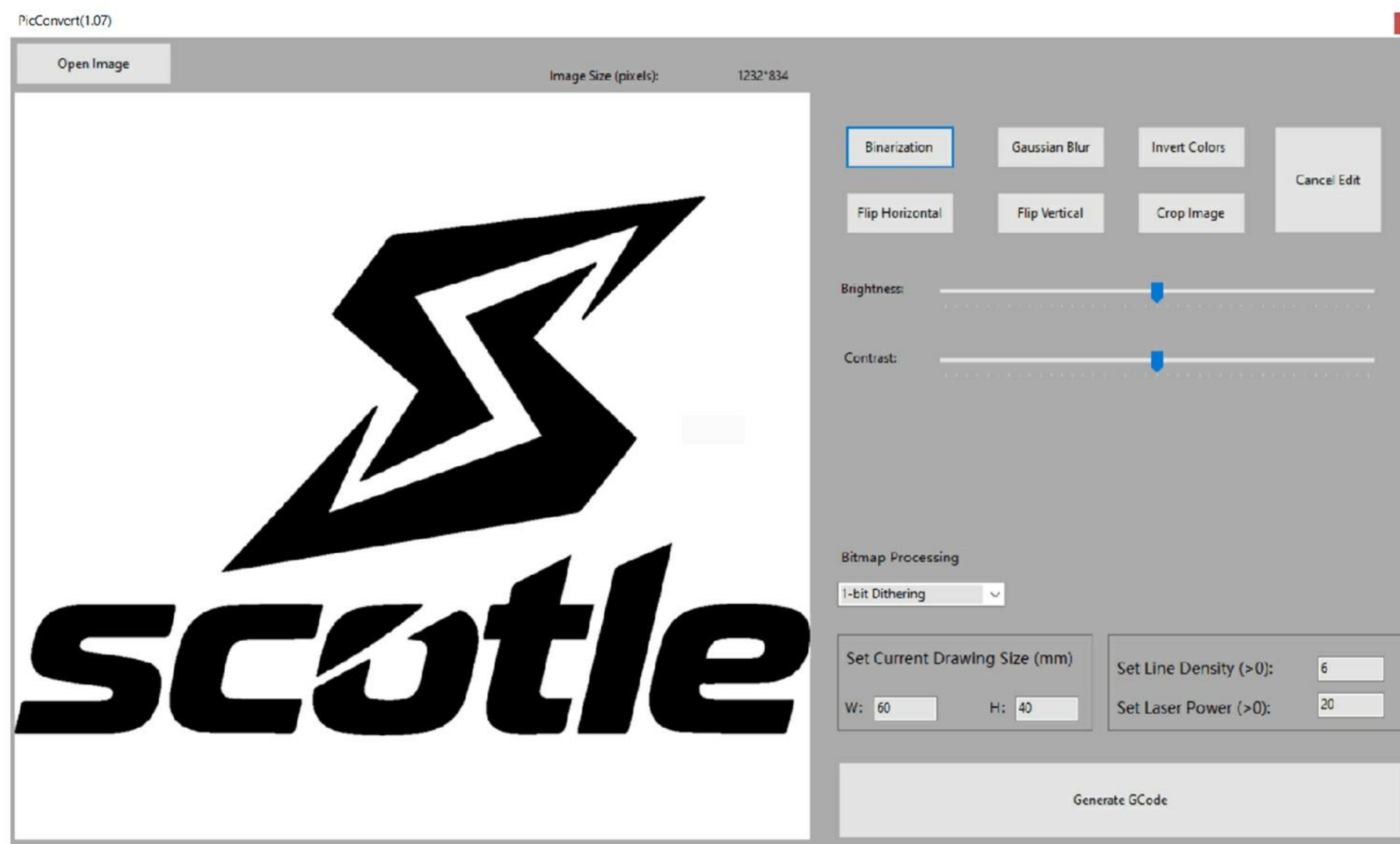
4.6.2 Engraving Function

Scanning Engraving Function

NEXCUT can generate scanning engraving toolpaths for processing by importing scanned engraving G-code files, as well as through bitmap processing and line fill methods, converting images or curves into scanning engraving trajectories.

- (1) Through the software's [Bitmap Processing] function: JPG/PNG image files can be converted into scanning engraving lines.

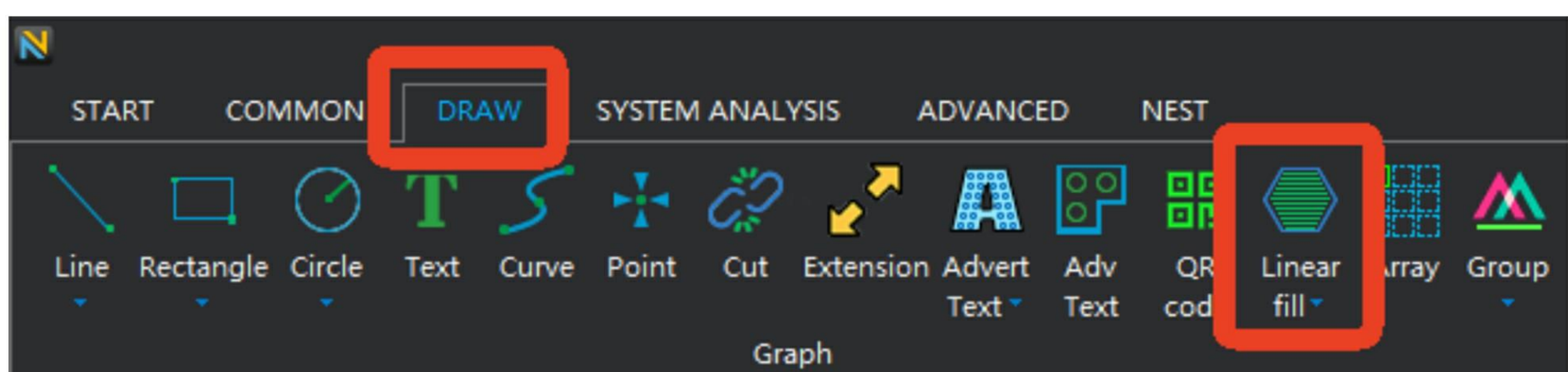




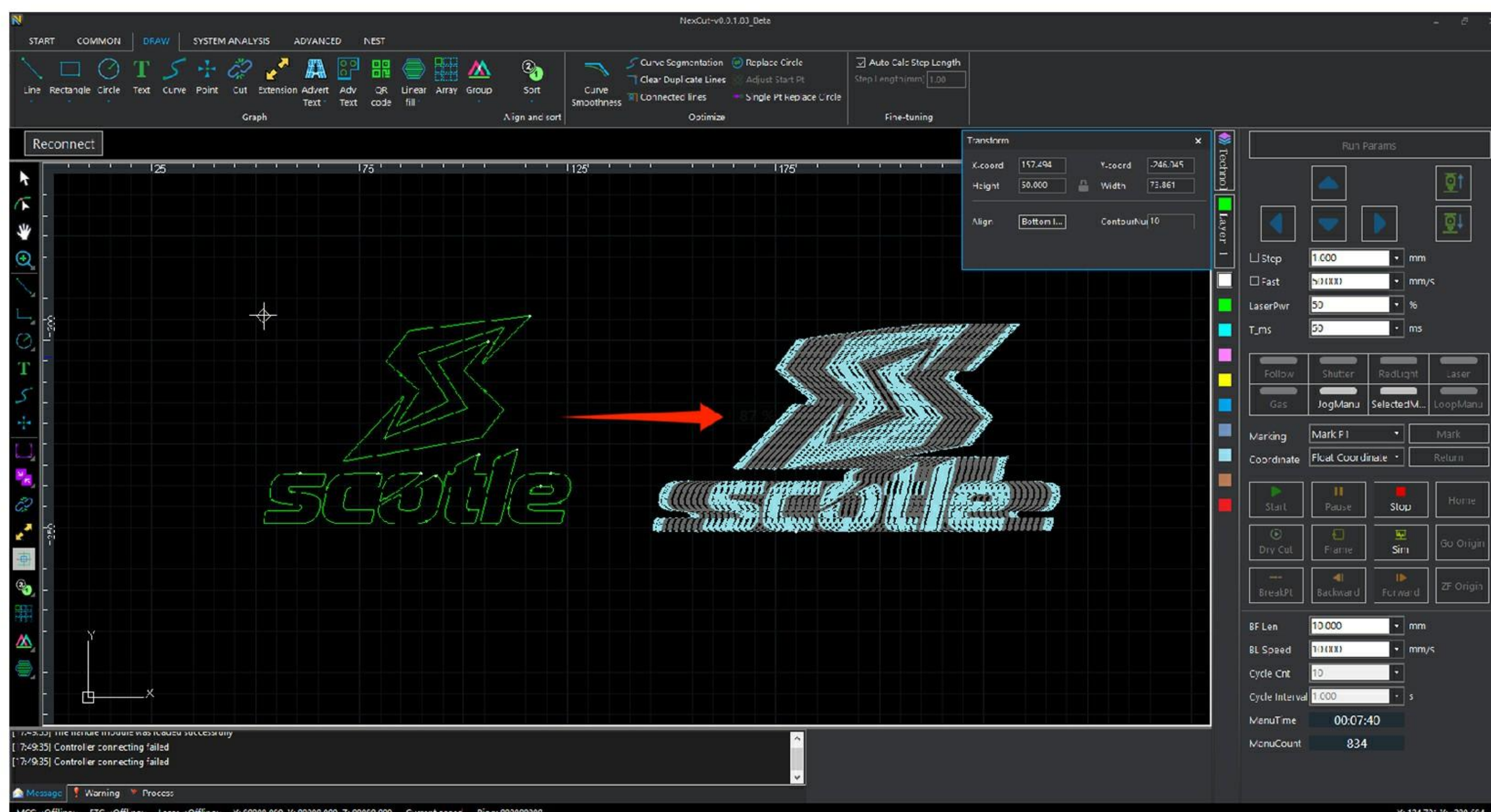
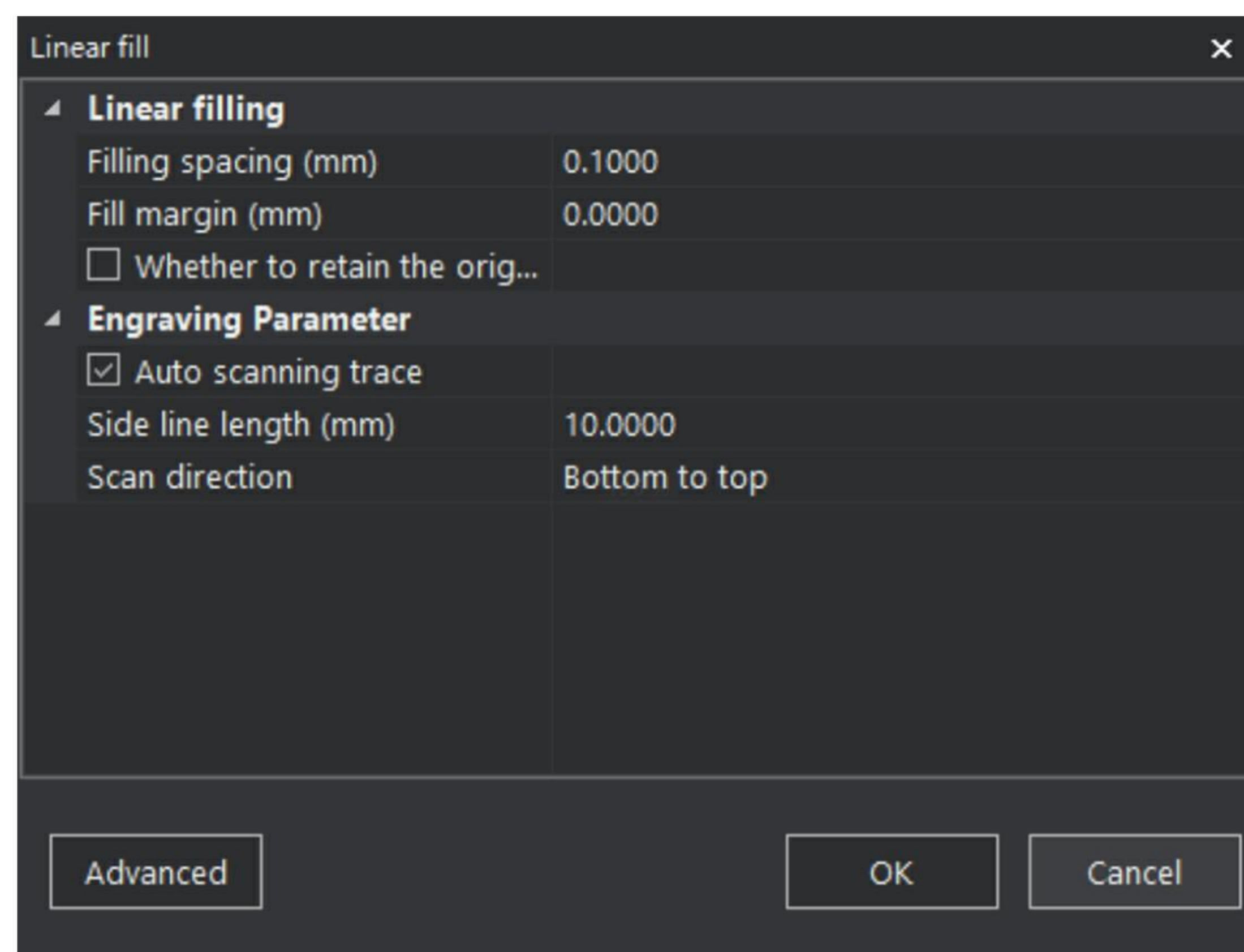
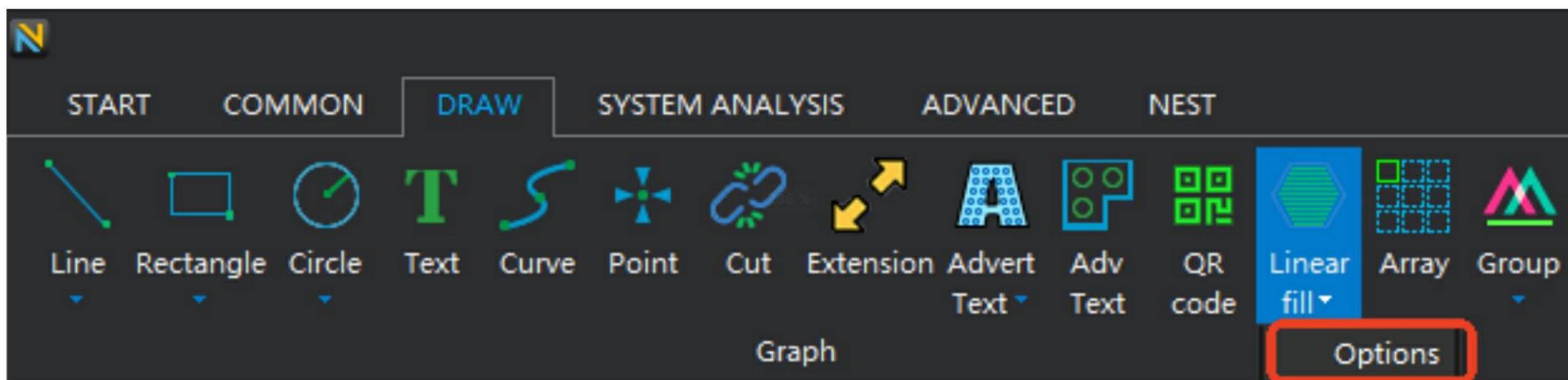
Bitmap Processing Parameter Description:

-  **Brightness:** The higher the value, the brighter the image; conversely, the lower the value, the darker the image.
-  **Contrast:** The higher the value, the stronger the contrast between light and dark; the lower the value, the smoother the transition between light and dark.
-  **Binarization Value:** Converts the image into black and white only.
-  **Grayscale:** Converts the image into grayscale mode, representing the image using different shades of gray.
-  **Gaussian Blur:** A bitmap processing technique that smooths the image by applying a weighted average of surrounding pixels based on a normal distribution. It is mainly used to reduce noise and detail levels, creating a frosted-glass-like visual effect.
-  **Invert Colors:** Reverses colors by adjusting RGB components.
-  **Horizontal Flip:** Mirrors the image along the vertical axis, creating a left-right reversed effect.
-  **Vertical Flip:** Flips the image along the horizontal axis, creating an upside-down mirror effect.
-  **Image Cropping:** Selects and removes a portion of the image, mainly used to eliminate unwanted areas while keeping the main content.
-  **Cancel Editing:** Reverts all bitmap processing operations and restores the image to its original state.
-  **Enable Halftone Screen:** Simulates grayscale or color variations using dots of different sizes and spacing.

(2)Through the software's [Line Fill] function: Curved outlines can be filled with straight lines. The filled image can be used for scanning engraving. Graphics that meet scanning engraving requirements can be converted into scanning engraving toolpaths for processing.



Adjust Fill and Scan Parameters



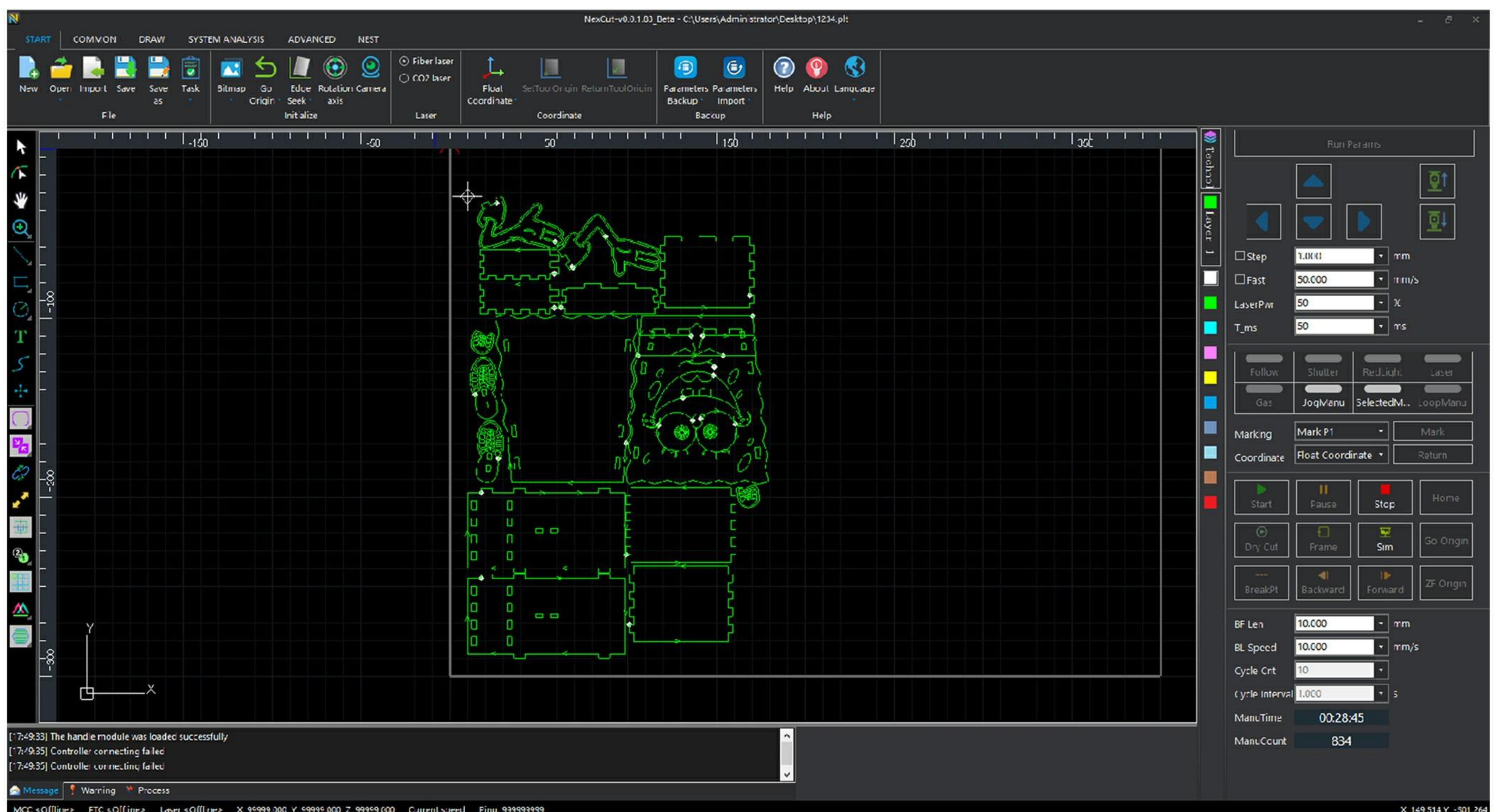
During the scanning engraving process, due to factors such as belts or mechanical components, misalignment between odd and even scan lines may occur. This can be compensated by setting the Reverse Backlash Compensation parameter.

Different scanning engraving speeds can have corresponding Reverse Backlash Compensation distances set individually.

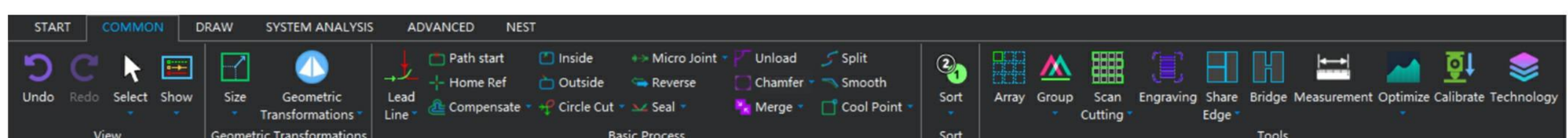
4.6.3 Cutting Function

NEXCUT can import vector format files such as DXF, PLT, and G-code to perform contour (outline) path machining.

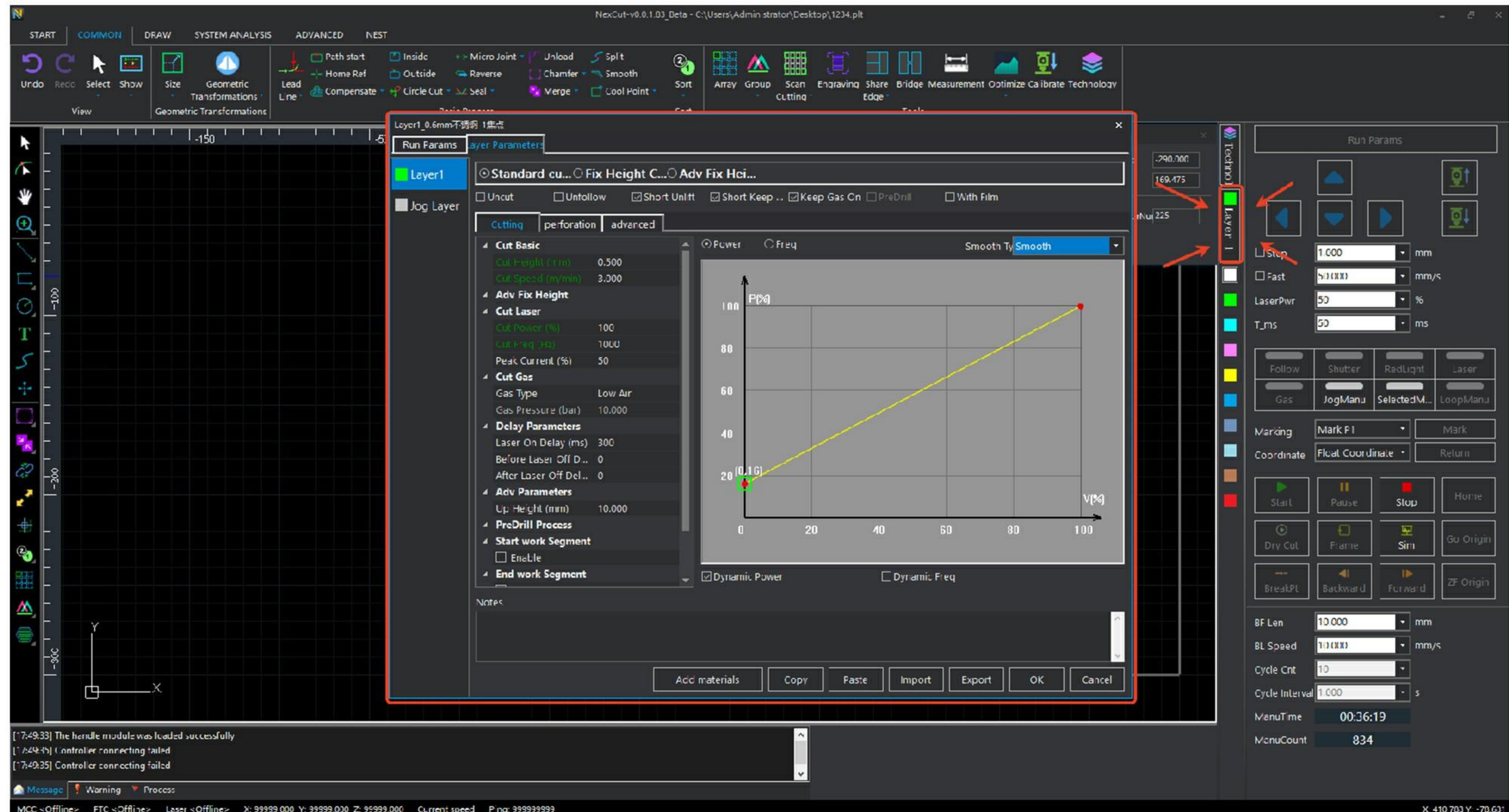
- ① **Open / Import Drawings:** Supports importing formats including DXF, chf, nc, svg, etc., as shown in the figure:



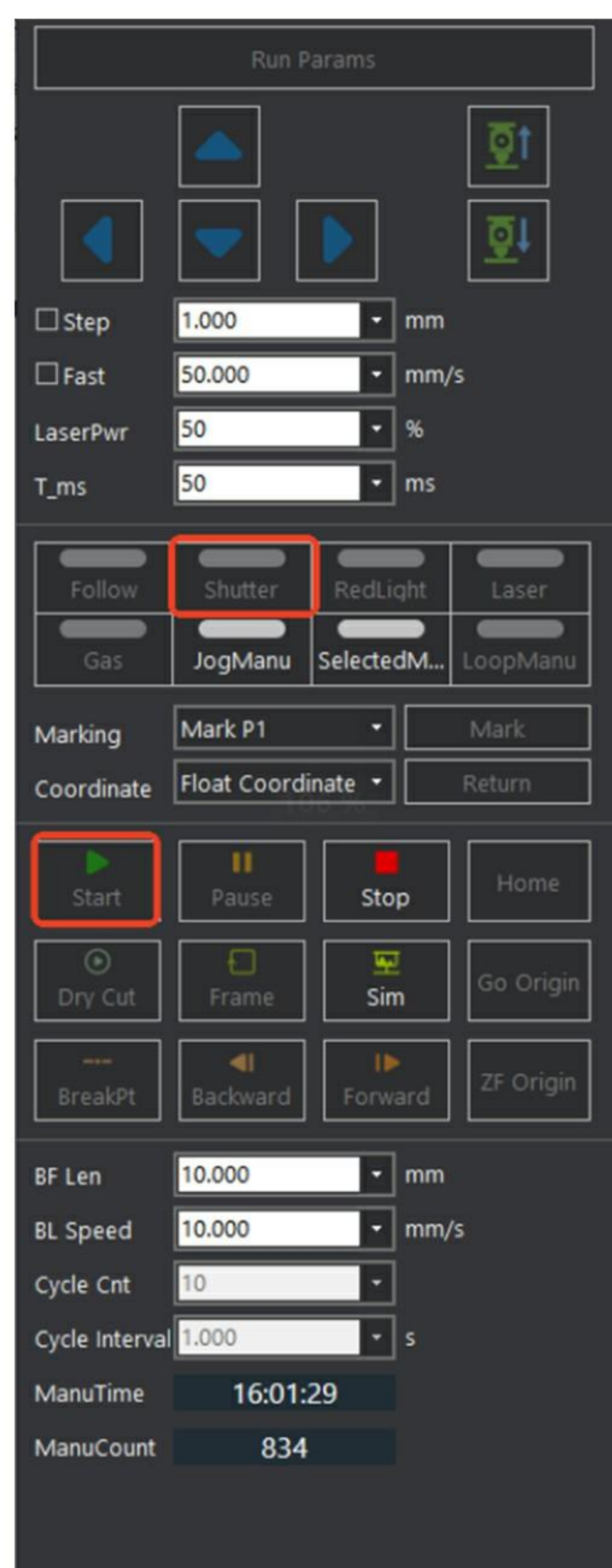
- ② **Graphic Processing:** The common toolbar provides graphic processing functions for imported drawings such as sorting, adding lead-ins, micro-joints and other graphic processes, as shown in the figure:



- ③ **Process Settings:** Set appropriate process parameters according to material type, thickness and laser power, as shown in the figure:

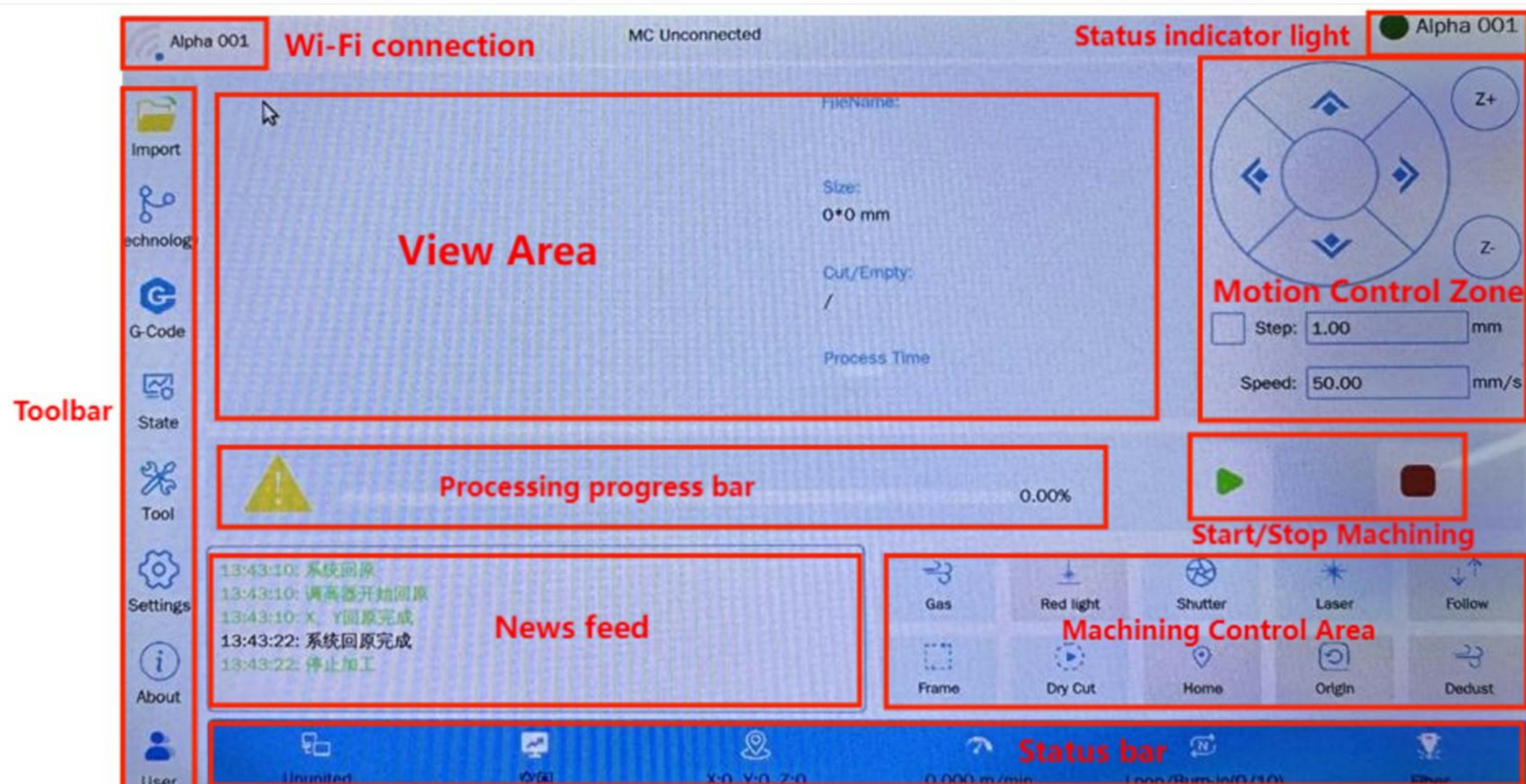


- ④ **Start machining:** After confirming that all parameters are correct, turn on the Shutter to start the processing program. As shown in the figure:



4.7 Common Functions and Operation of NEXCUT TOUCH Embedded All-in-One Machine

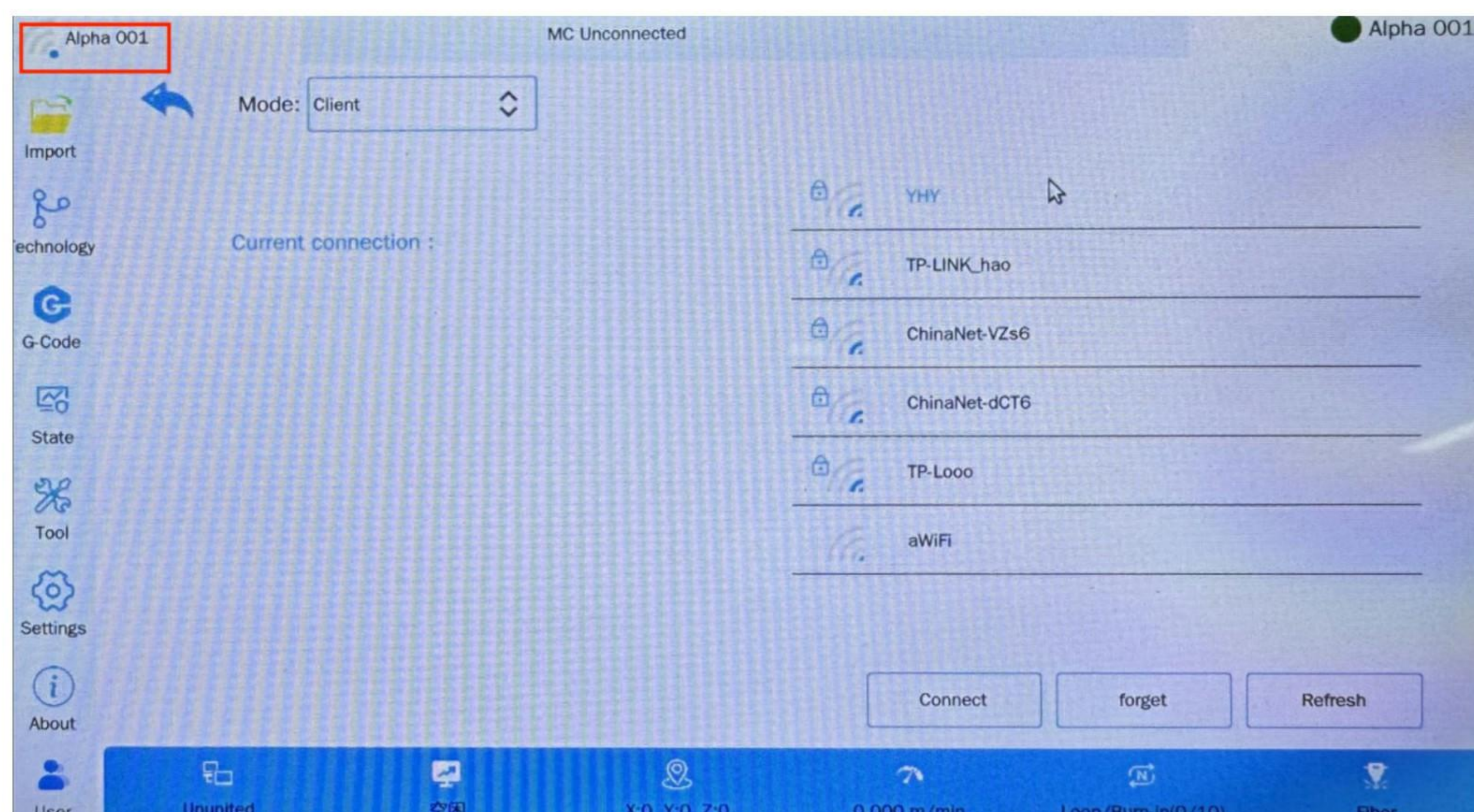
4.7.1 NEXCUT TOUCH Operation Interface



1. Wi-Fi Connection

After entering the software interface, click the Wi-Fi signal icon to display all available local networks. Select the desired Wi-Fi hotspot and enter the password. The system will then show the connected Wi-Fi name and device IP address. (Note: Offline file transfer is only available when the computer and the all-in-one machine are connected to the same Wi-Fi network or hotspot.)

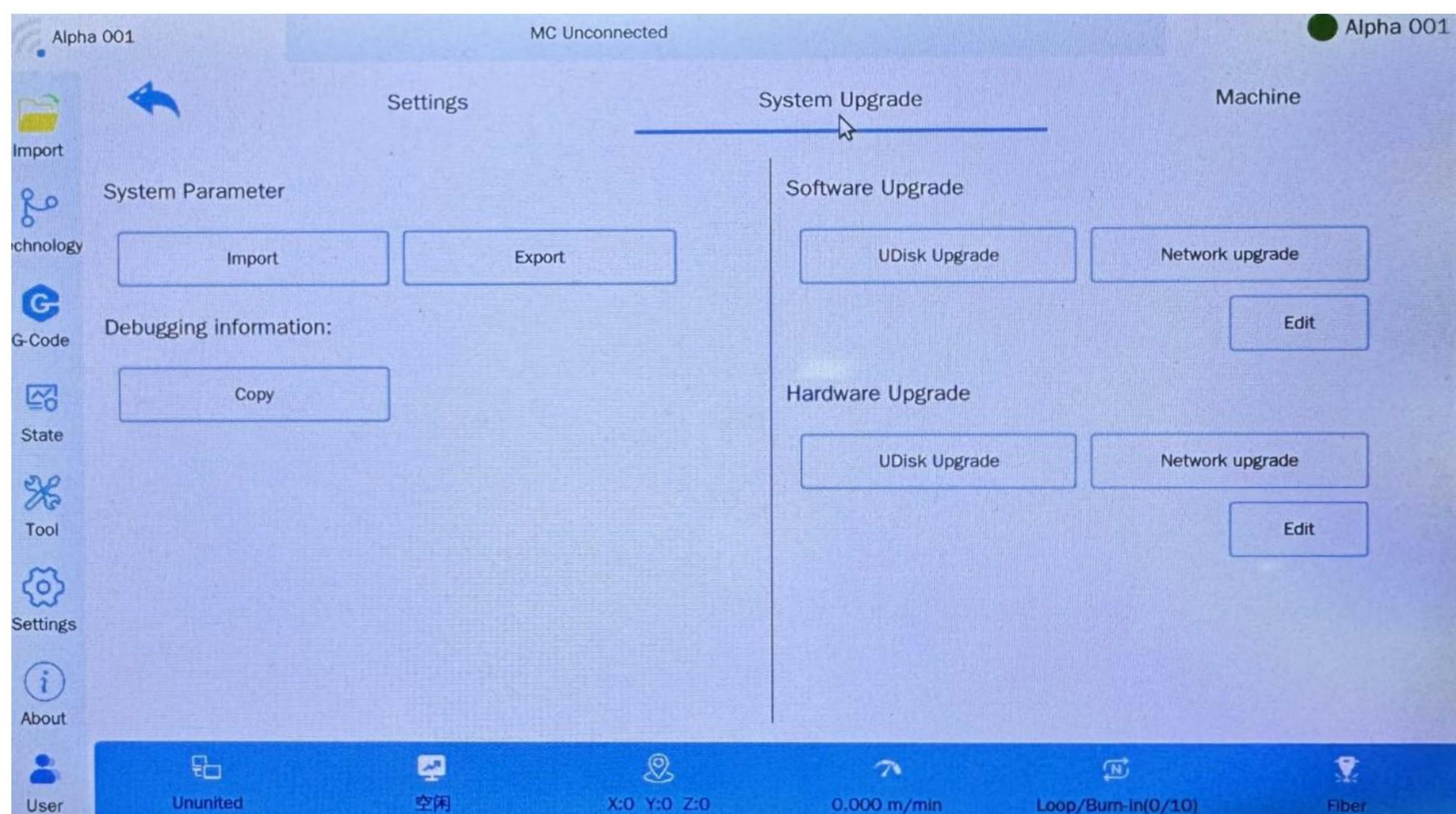
As shown in the figure



2. Machine Parameter Import

Users need to export system parameters from the computer software and copy them to a USB flash drive. Then enter the all-in-one machine software, select “User” and enter the password “3721”, click “Settings” → “System Upgrade”. After inserting the USB flash drive, load the “Hardware Parameters” and “Software Parameters” to complete the setup. The all-in-one machine can then be used for operation.

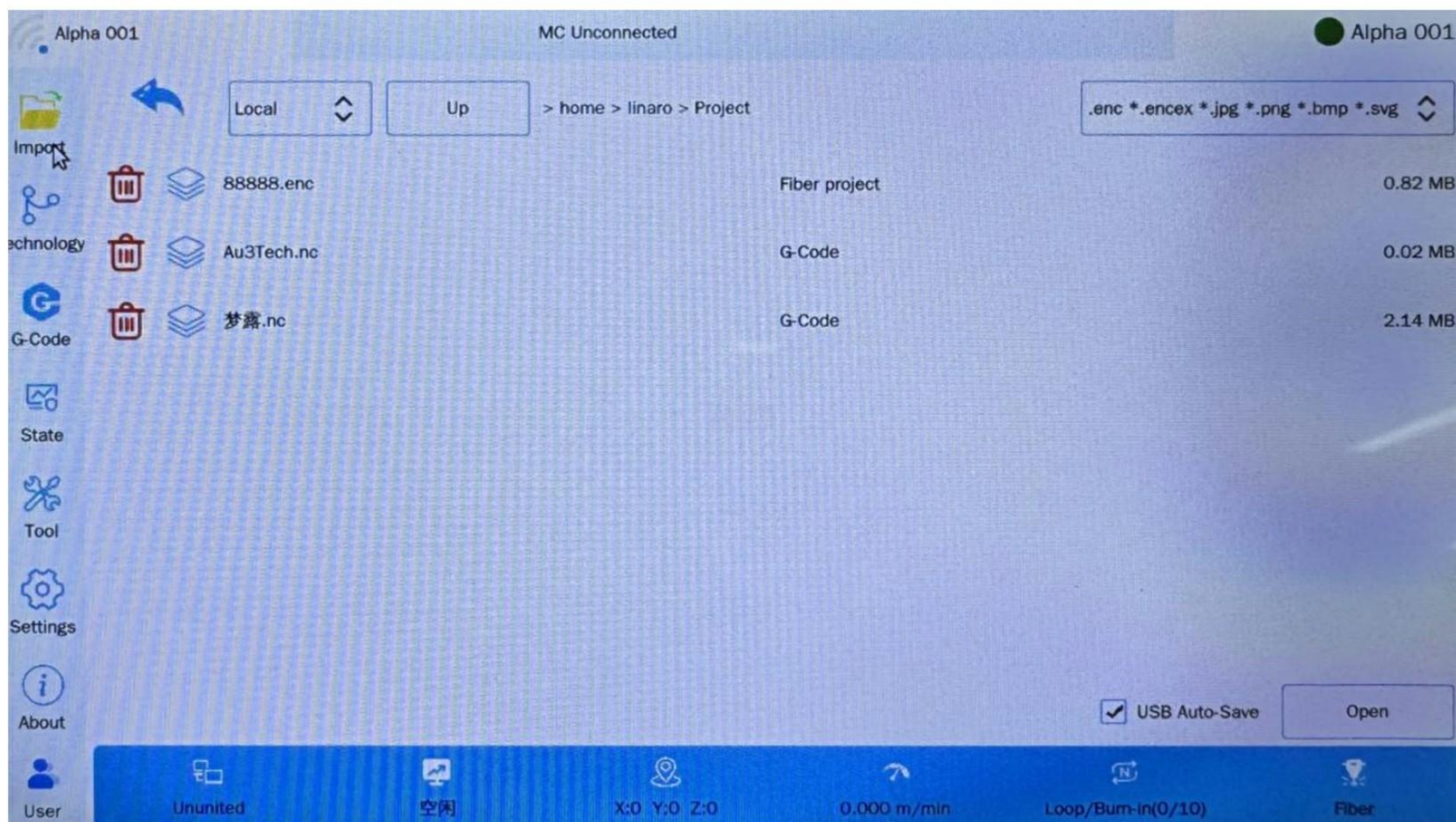
As shown in the figure.



3. Graphic Calling (1) Import from Local Storage or USB Flash Drive

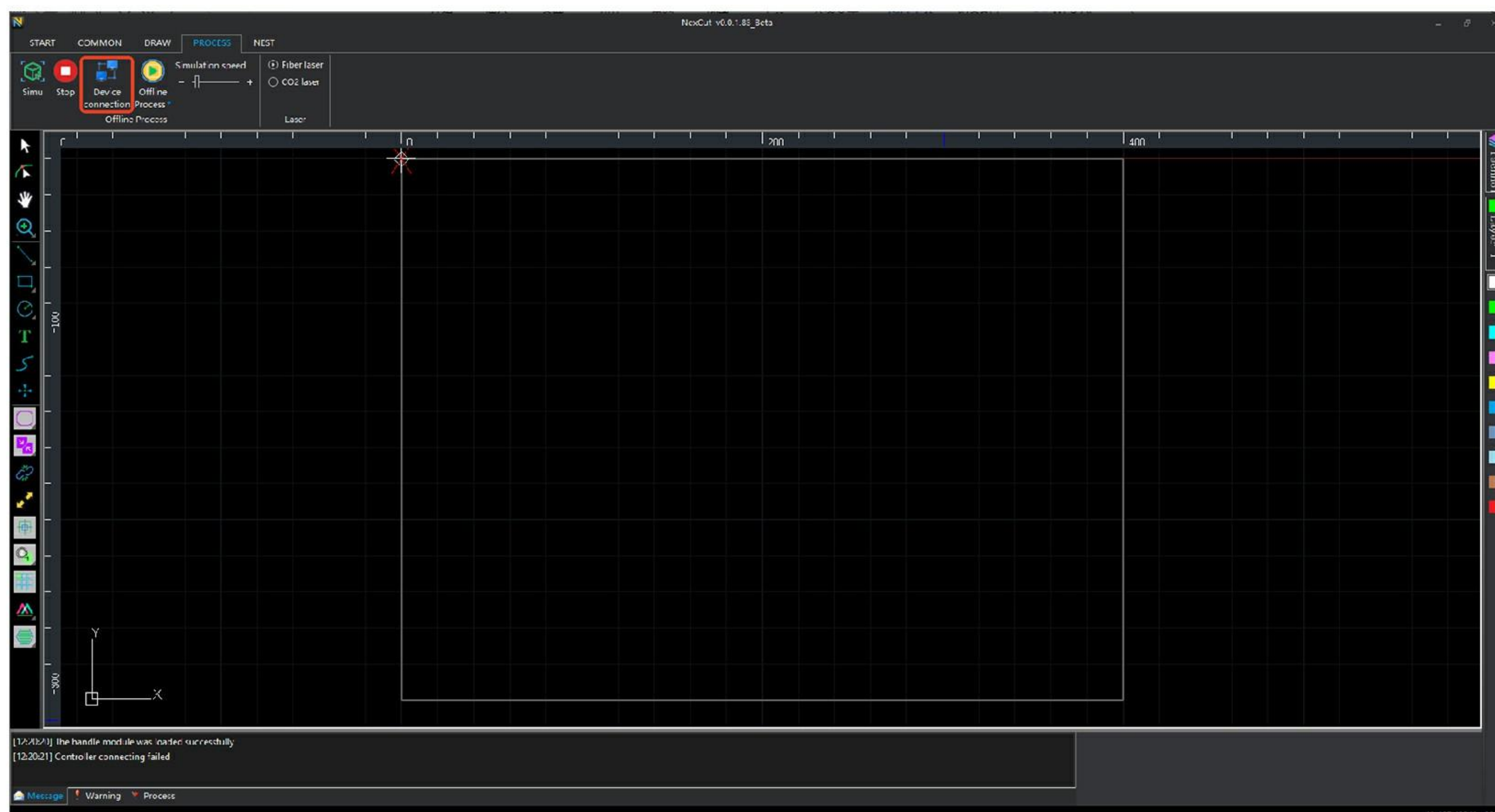
Click “Import”, then select Local or USB Flash Drive according to the file location (USB drive will be recognized and displayed automatically).

Note: Files transferred via mobile APP or offline file transfer will be automatically saved to local files). Locate the machining file, select it and click "Open" to start processing. (Note: NC files are G-code files, while ENC files are offline machining files.) As shown in the figure:



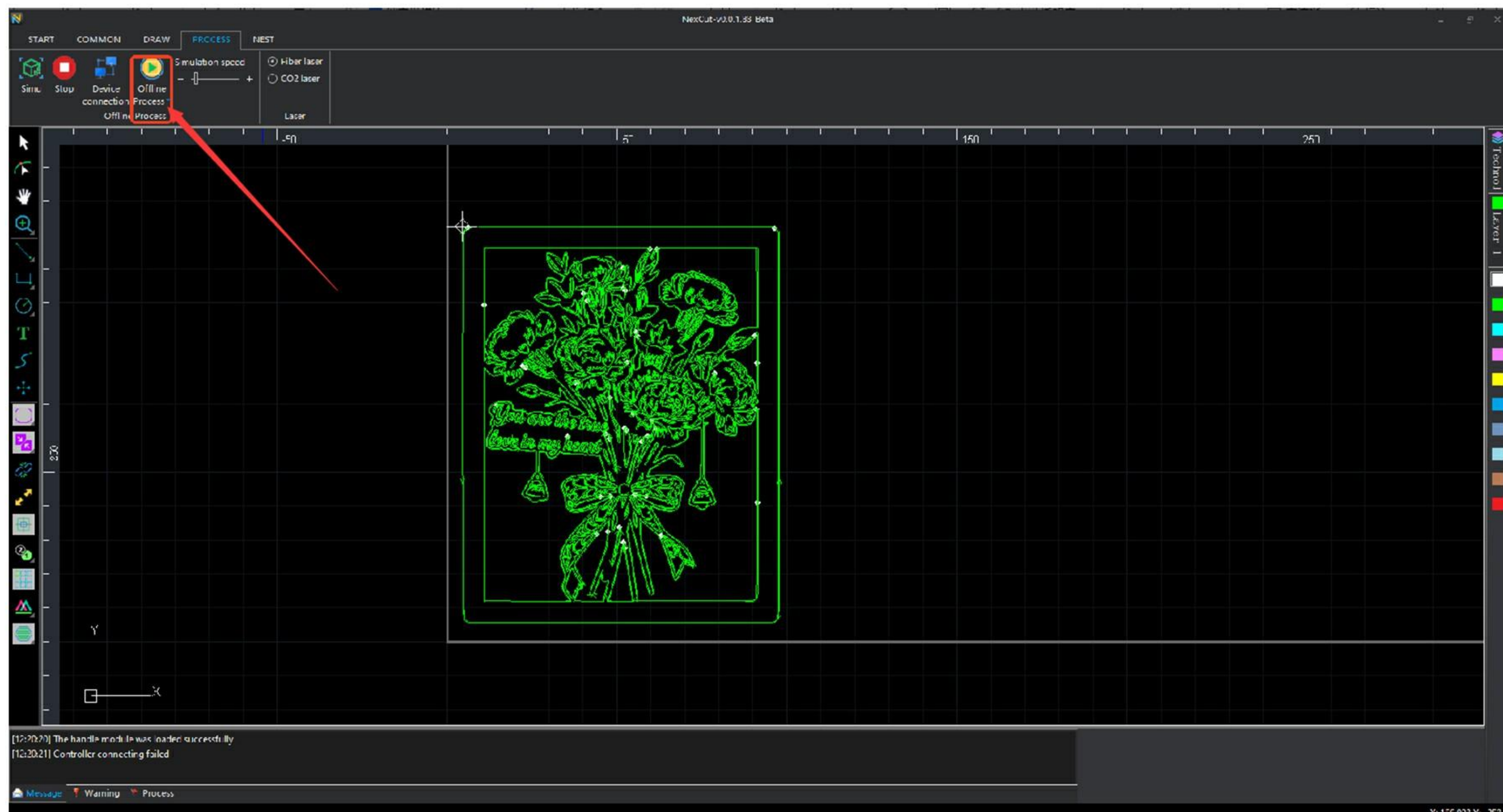
4. Offline File Import

The laser cutting upper-computer software NexCutStudio can be used to draw graphics or import files in formats such as DXF, CHF, etc. Then click “Device Connection”, select the device, and connect it until the connection status is displayed.



After successful connection, click Offline File. Save the graphic as an .nec file, and it will be automatically uploaded (you can also click the arrow to directly transfer .nc or .nec files).

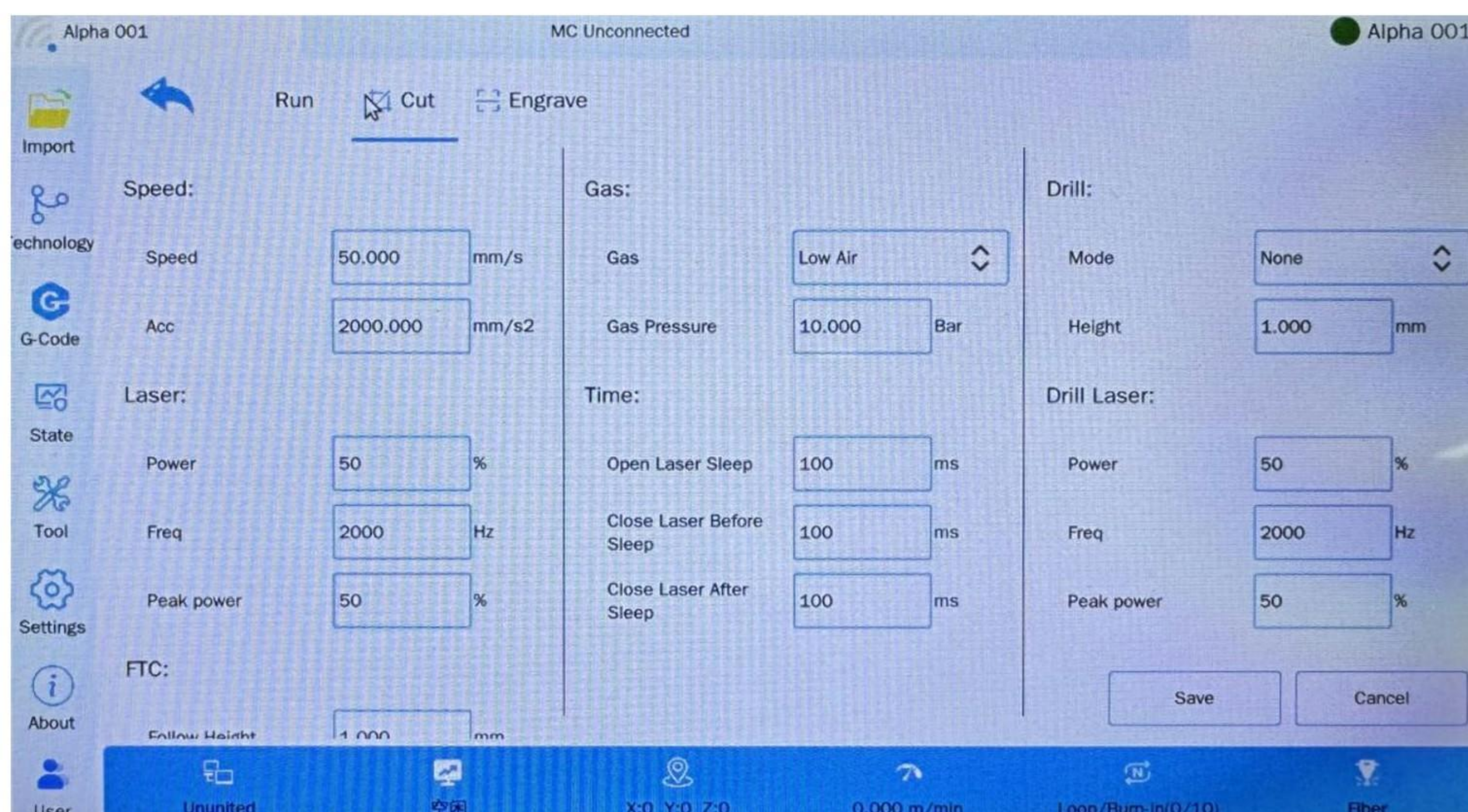
As shown in the figure.



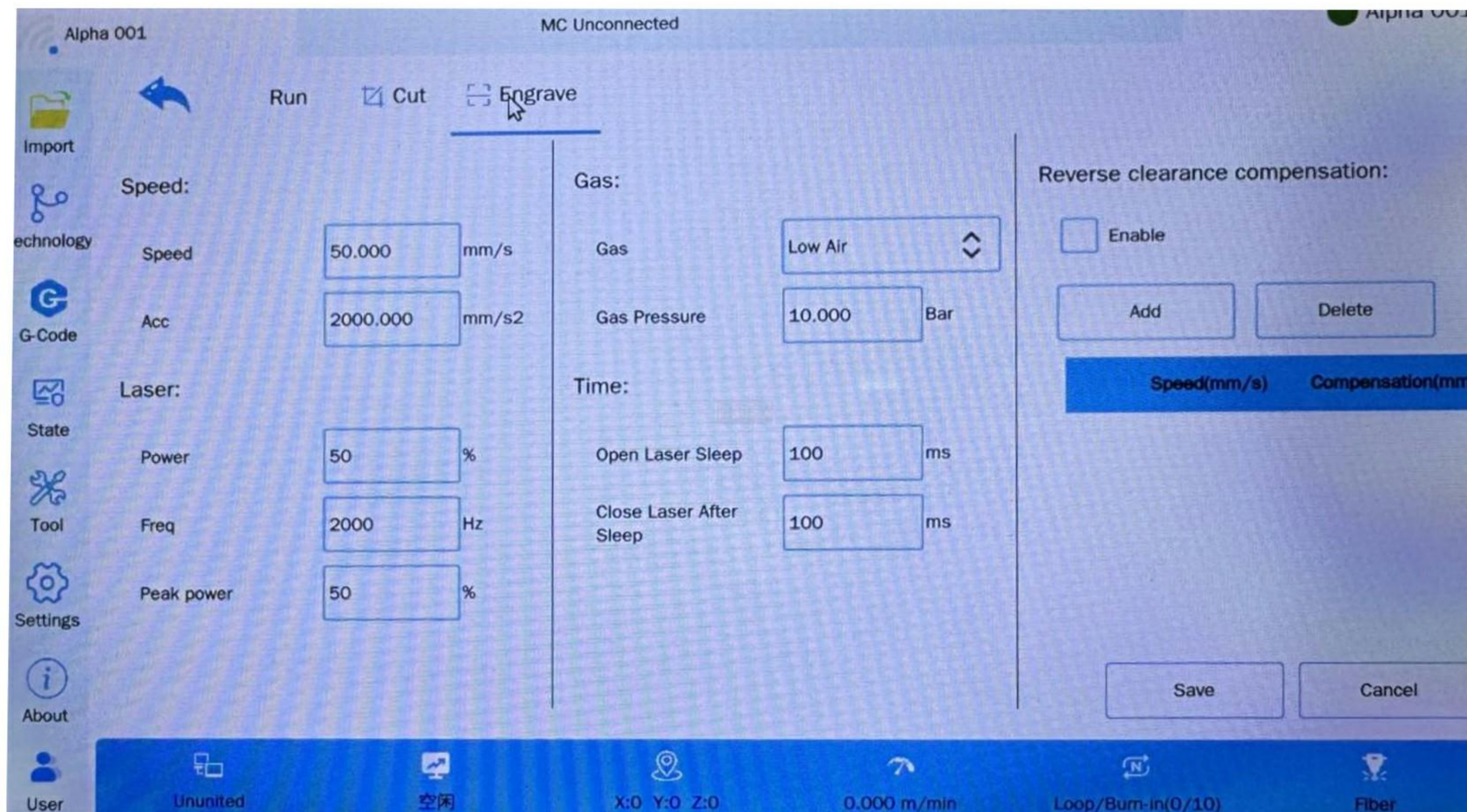
5. G-code Process Settings

After confirming that the toolpath planning is correct, start setting the cutting process. Select the corresponding process layer according to the cutting file. (Note: This process interface only supports modification for G-code files. Offline files do not support process editing. If modifications are required, please go to the upper-computer software → Layer Process Settings, complete the changes, and re-save the offline file.)

As shown in the figure.

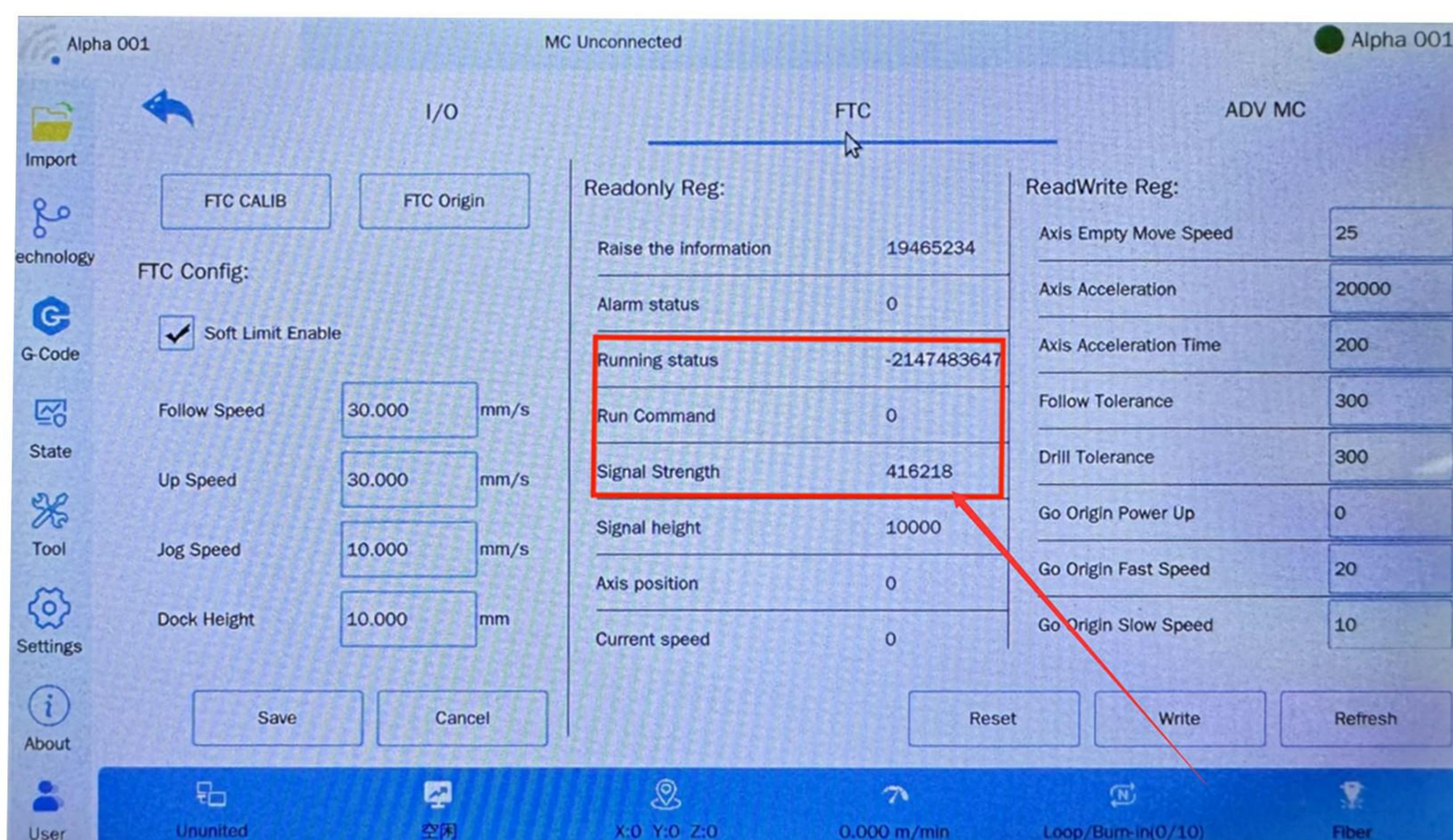


Tip: Users can set different process parameters such as cutting speed, laser power, gas type, and gas flow rate to achieve optimal cutting results.



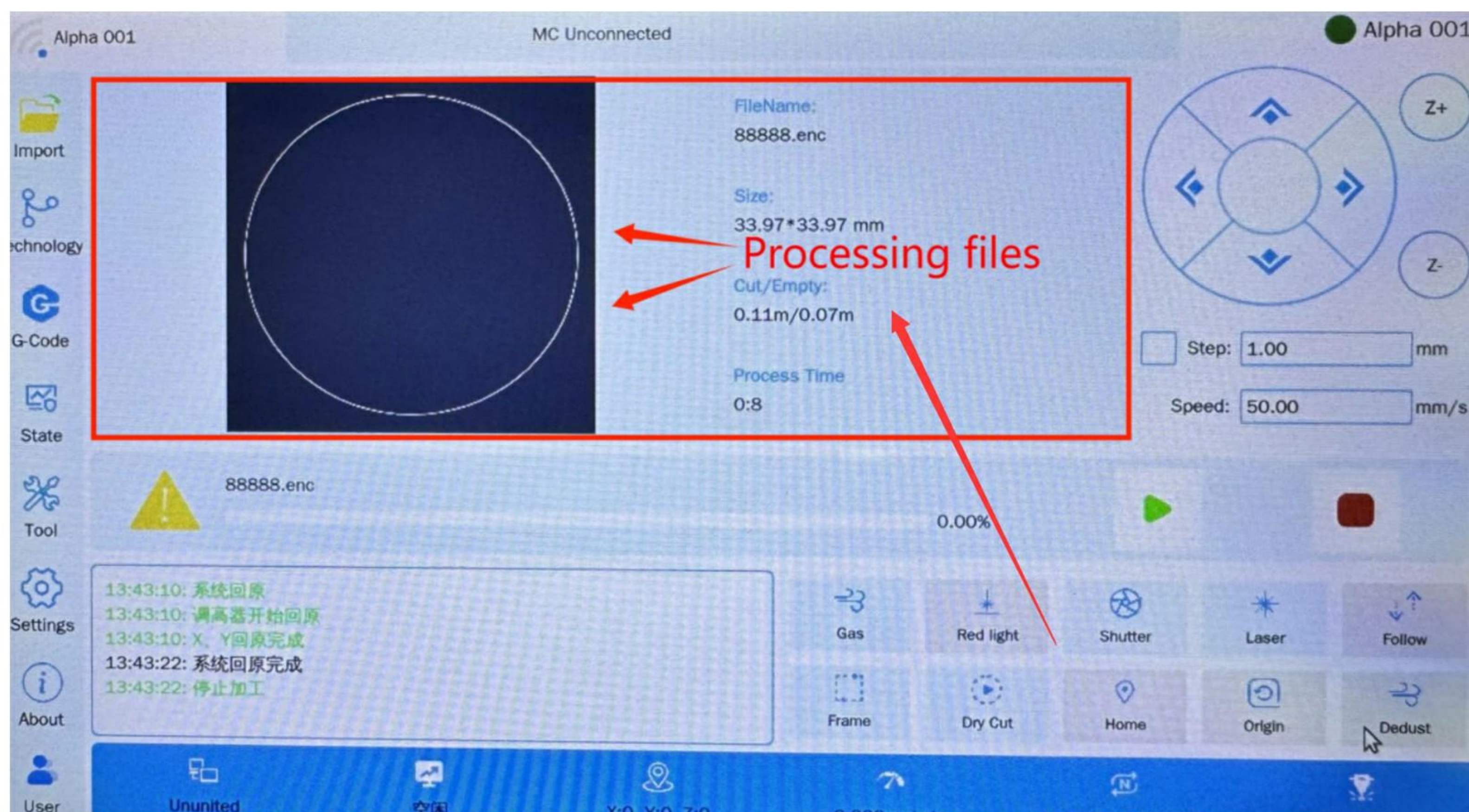
6. Height Controller Settings

Enter the “Status” page to check whether the height controller parameters are normal. Confirm that the version information, signal strength, and other data are displayed correctly, then proceed with calibration. As shown in the figure:



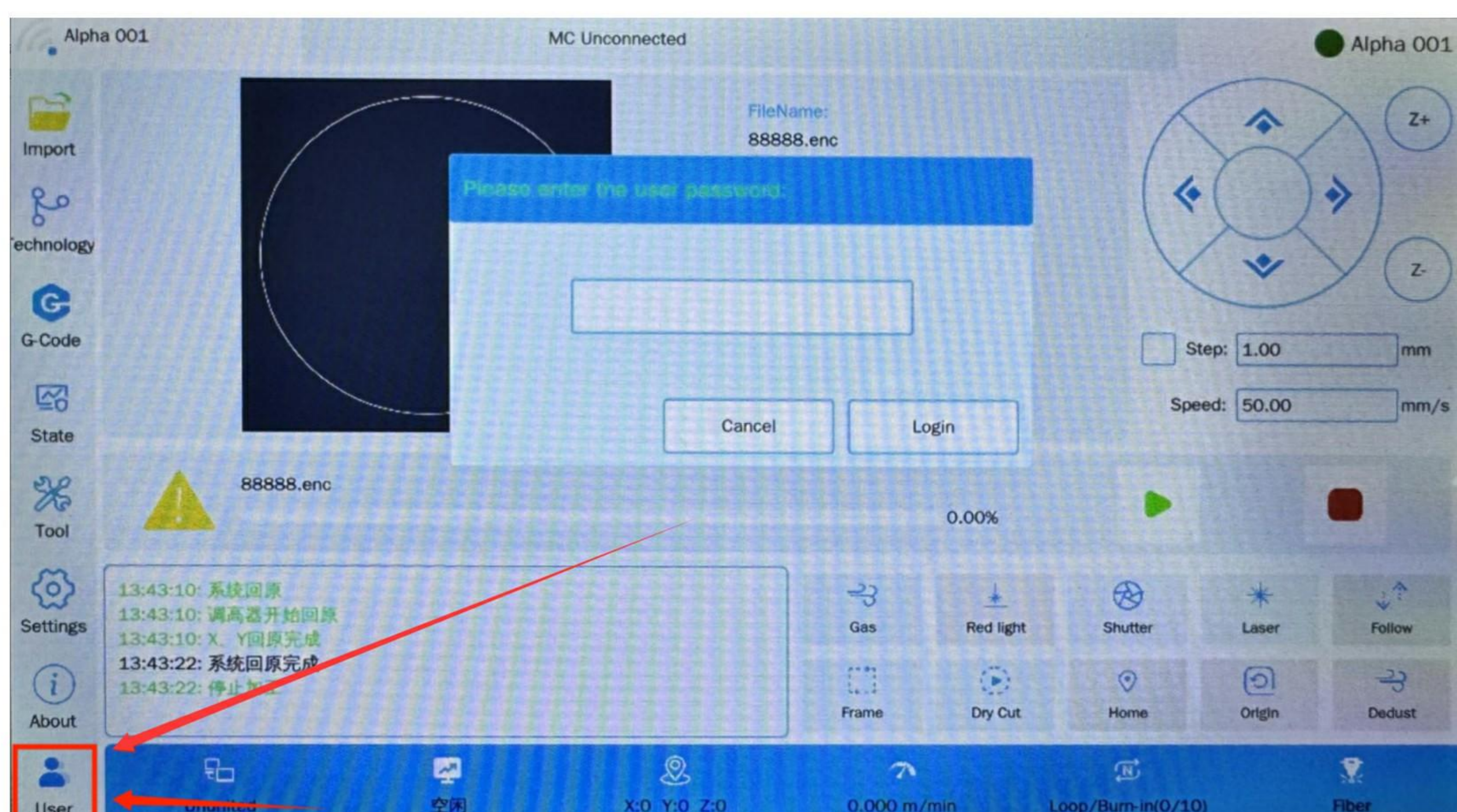
7. Processing

The processing operation must be executed on the actual machine. It requires proper communication with the hardware control board and the correct import of the processing file; otherwise, the related functions will not work. As shown in the figure.



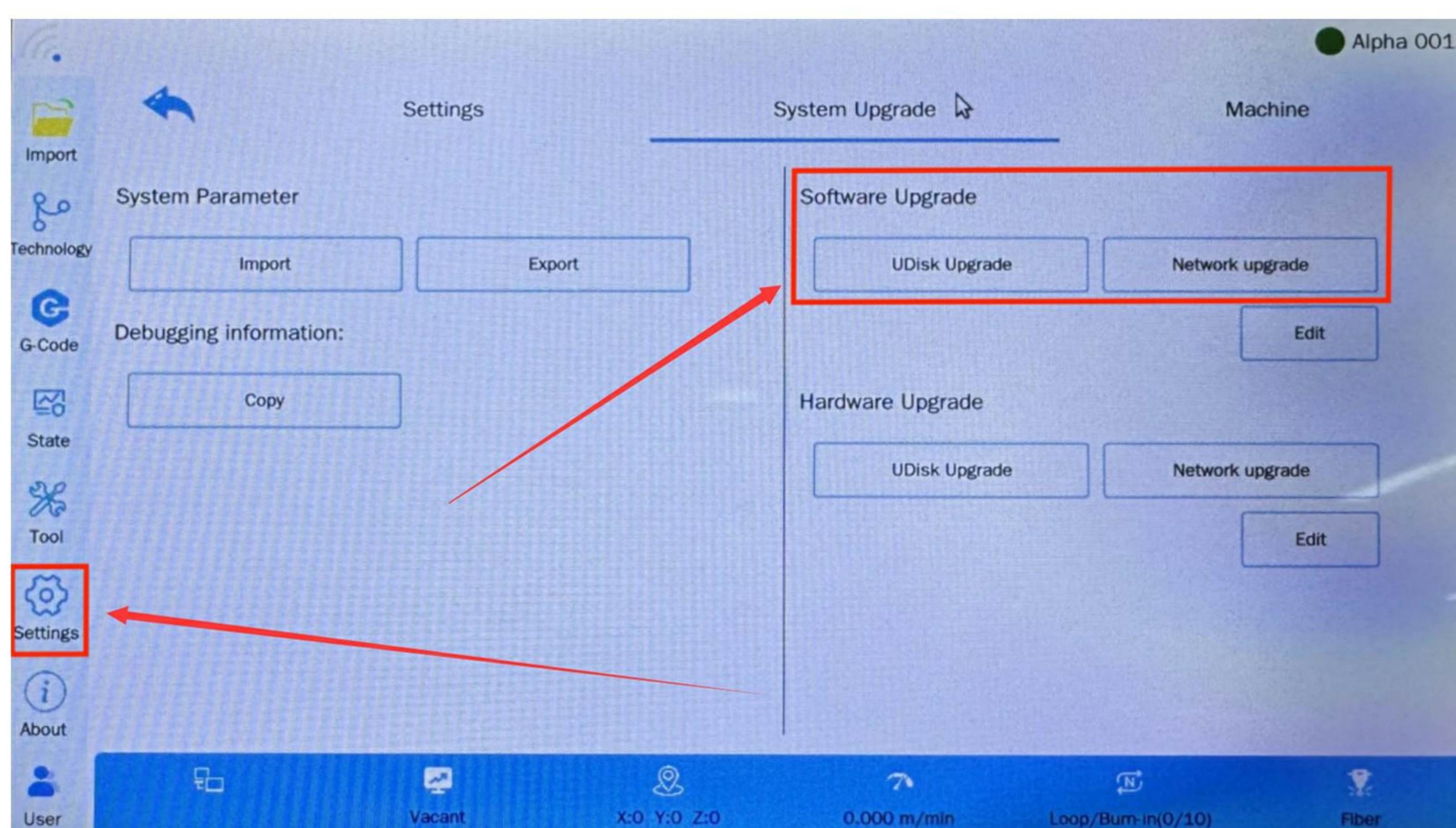
8. User Login

To view board status, upgrade files, machine information, and other system data, users must enter the User section and log in. The login password is “3721”. As shown in the figure.



9. Software Upgrade

Unzip the software upgrade package and copy it to a USB flash drive. Enter the User mode, then click “Settings” → “System Upgrade” → “Software Upgrade”. Select the corresponding software file from the USB drive to complete the upgrade. (Note: After completion, the system will automatically restart.) As shown in the figure.



Note: Due to continuous software updates and iterations, all functions and parameter interfaces are subject to the actual software in use. If there are any differences or omissions, please contact the relevant after-sales or technical support personnel. You may also refer to the latest version released on the official website.

4.7.2 Processing and Quality Inspection

Start processing: Once parameters are confirmed to be correct, start the machining program.

Real-time monitoring: Observe the cutting process to ensure there are no abnormalities, and confirm that slag discharge and the laser beam are vertically downward.

Quality inspection: After processing, check the cross-section quality, dimensional accuracy, etc.

Parameter adjustment: If the cutting result is not satisfactory, fine-tune parameters such as focus position, speed, and gas pressure according to actual conditions.

Notes:

- 1.Before operation, wear proper protective equipment to ensure safe operation.
- 2.Regularly check the cleanliness of optical lenses to avoid contamination affecting beam quality.
- 3.Different materials and thicknesses require corresponding process parameters.
It is recommended to build a process parameter database for easy reference and use.

Reference Operating Parameters

5.1 Cuttable Material Thickness and Process Parameter Settings

According to the material type, thickness, and laser power, select the appropriate process parameters.

Example: A 50mm carbon steel plate with an 800W fiber laser cutting test, parameters are as follows:

MATERIAL	Thickness (mm)	Gas	Focus	Cutting Speed (m/min)	Gas Pressure (Bar)	Nozzle Height (mm)	Nozzle Model	Power
Stainless Steel	1	Nitrogen	0	12	12	0.5	1.5S	800W
	2	Nitrogen	-3	4	12	0.5	1.5S	800W
	3	Nitrogen	-6	1.6	12	0.5	2.5S	800W
	1	Air	-3.5	12	8-9	0.5	1.5S	800W
	2	Air	-3	4	8-9	0.5	1.5S	800W
	3	Air	-6	1.6	8-9	0.5	2.5S	800W
Aluminum	1	Nitrogen	0	10	12	0.5	1.5S	800W
	2	Nitrogen	-3	2.5	12	0.5	1.5S	800W
	3	Nitrogen	-3	0.7	12	0.5	1.5S	800W
	1	Air	0	10	8-9	0.5	1.5S	800W
	2	Air	-3	2.5	8-9	0.5	1.5S	800W
	3	Air	-3	0.7	8-9	0.5	1.5S	800W

MATERIAL	Thickness (mm)	Gas	Focus	Cutting Speed (m/min)	Gas Pressure (Bar)	Nozzle Height (mm)	Nozzle Model	Power
Carbon Steel	1	Nitrogen	0	12	12	0.5	1.5S	800W
	2	Nitrogen	-5	3	12	0.5	1.5S	800W
	3	Nitrogen	-6	1.2	12	0.5	2.5S	800W
	1	Air	0	12	8-9	0.5	1.5S	800W
	2	Air	-5	3	8-9	0.5	1.5S	800W
	3	Air	-6	1.2	8-9	0.5	2.5S	800W
	2	Oxygen	+11	4.2	2	1	1.2D	800W
	3	Oxygen	+12	2.3	1	1	1.2D	800W
	5	Oxygen	+11	1.4	1	1	2.0D	800W
	8	Oxygen	+11	0.8	1	1	2.0D	800W

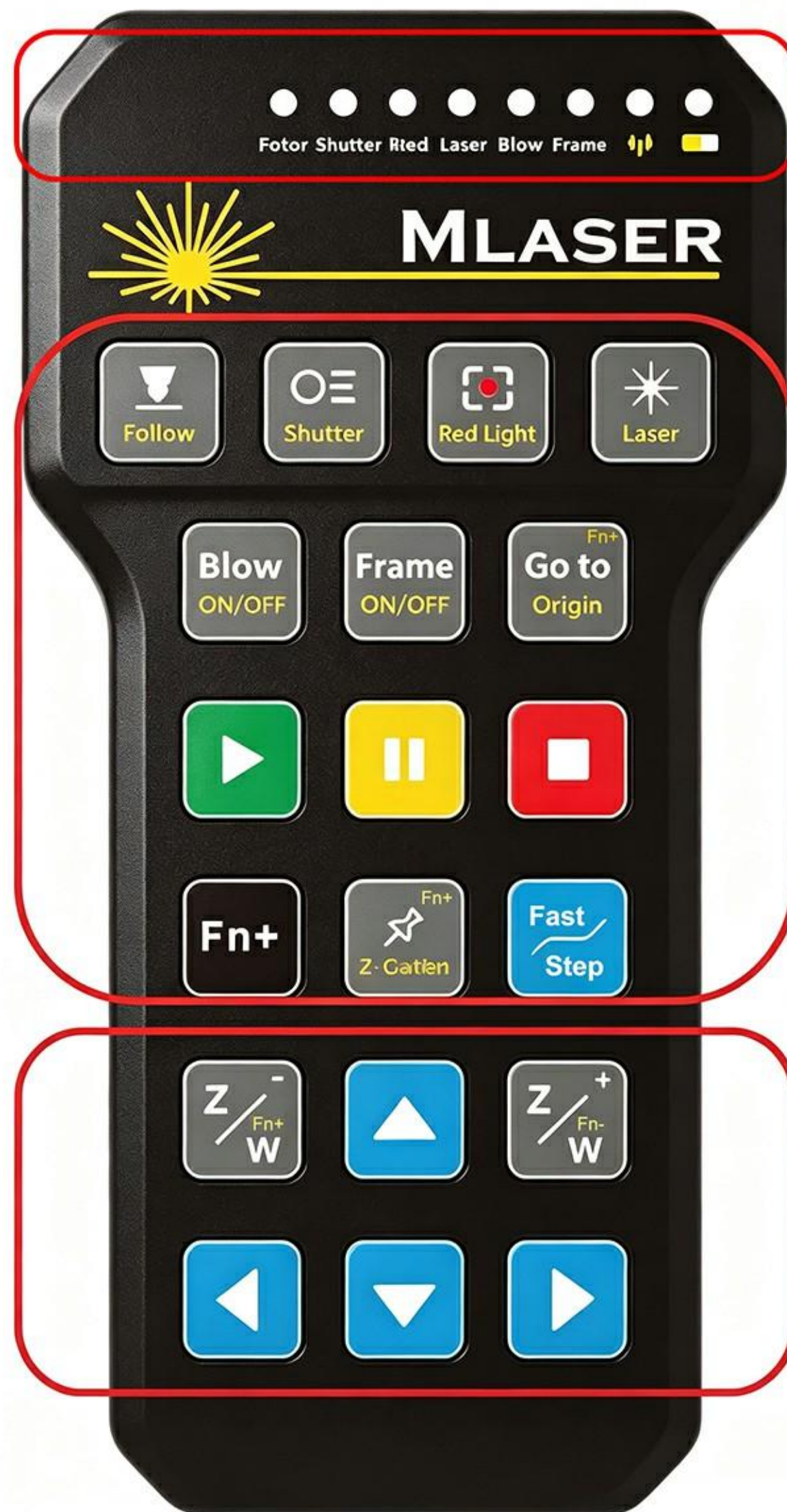
5.2 Cuttable Material Process Settings

800W Fiber Laser Cutting 1mm Stainless Steel Process Parameters:

PARAMETER	SETTING
Peak Power	30%
Duty Cycle	25%
Workpiece Thickness	1 mm
Workpiece Material	Stainless Steel
Cutting Speed	30 m/min
Gas Type	Air

How to use the remote controller

6.1 Remote Controller Button Instructions



← Button and Indicator Status Display Area

Function Button Control Area

The Z+/Z- keys are used for Z-axis control by default.

When combined with the "Fn+" key, they are used for W-axis control.

Axis Movement Control Area

The Z+/Z- keys are used for Z-axis control by default.

When combined with the "Fn+" key, they are used for W-axis control.

Button	Function	Description
	Follow	Turn on/off Z-axis follow function. Press the "Follow" button once to toggle.
	Shutter	Turn on/off the laser shutter. Press the "Shutter" button once to toggle.
	Red Light	Turn on/off the laser red light indicator. Press the "Red Light" button once to toggle.
	Laser	Turn on the laser. Press the "Laser" button to emit laser, release to turn off.
	Blow	Turn on/off gas (air). Press the "Blow" button once to toggle.
	Frame	Run the frame function to outline the processing area. Press the "Frame" button once to toggle.
	Go to Origin	Move X/Y axis to the origin point. Press "Fn+" and "Go to Origin" together.
	Start / Continue	Start or resume processing. Press the "Start" button once to start.
	Pause	Pause processing. Press the "Pause" button once to enter pause mode.

	Stop	Stop all processing actions. Press the “Stop” button once to stop.
	Combination Key	Combination key with no independent function. Use together with other buttons marked with “Fn+”.
	Z Calibration	One-click Z-axis calibration. Press “Fn+” and “Z Calibr” together.
	Fast Step	Quick/slow/continuous step switching. Press once to switch among the three step modes. Step mode explanation:1. During jog/continuous movement, press once for small step mode.2. Press “Fn+” to switch to medium step mode.3. Press “Fn+” again to switch to large step mode.
	Z / W Axis Down	Z-axis downward movement / W-axis negative direction (with Fn+).1. Press “Z-” once for a small step, hold for continuous movement.2. Press “Fn+” then “Z-” to control W-axis negative direction.
	Z / W Axis Up	Z-axis upward movement / W-axis positive direction (with Fn+).1. Press “Z+” once for a small step, hold for continuous movement.2. Press “Fn+” then “Z+” to control W-axis positive direction.
	Y-axis Negative Direction	Press “Y-” once for a small step, hold for continuous movement.
	Y-axis Positive Direction	Press “Y+” once for a small step, hold for continuous movement.
	X-axis Negative Direction	Press “X-” once for a small step, hold for continuous movement.
	X-axis Positive Direction	Press “X+” once for a small step, hold for continuous movement.

6.2 Precautions

- 1.Before using the controller, install two AAA batteries correctly and ensure that the receiver is properly connected to the computer’s USB port.
- 2.The controller and receiver have already been paired before shipment. Before use, check that the barcodes on the controller and receiver are identical. The controller can only be used normally when the barcodes match.
- 3.If the receiver is blocked or shielded, it may affect the signal transmission performance of the controller. Install the controller receiver in an open area whenever possible to ensure stable signal transmission.

Machine maintenance and upkeep

7.1 Daily Maintenance and Precautions

The machine should be placed in a clean, bright, and well-ventilated area. To ensure proper ventilation, the distance between the machine and walls or other obstacles should be maintained at at least 1 meter. After positioning the machine, adjust the anti-vibration leveling feet according to the floor conditions to ensure that the machine table is in stable contact with the ground and remains level.

The working conditions of the machine are as follows:

Environmental Conditions:



Working temperature: 5–35°C



Relative humidity: <70%

The optical system must be cleaned regularly. Failure to do so may cause laser overheating or protective lens damage.

7.2 Precautions During Machine Maintenance

1. When the machine is operating, the internal circuits are under high voltage. Non-professional personnel must not perform maintenance or repairs while the machine is powered on to avoid electric shock accidents.
2. If the machine malfunctions (such as water leakage, power cable issues, blown fuse, abnormal laser operation, etc.), immediately press the emergency stop button and disconnect the power supply.
3. Maintenance of the Optical Path System

Due to long-term operation of the equipment and harsh working environments, dust in the air may accumulate on the protective lens of the optical system.

- In minor cases, dust contamination will reduce the laser output power.
- In severe cases, dust can cause the optical lens to absorb excessive heat, resulting in lens burning or even cracking.

The optical system must be cleaned regularly. Failure to do so may cause laser overheating or protective lens damage.

Troubleshooting

8.1 Fault Analysis and Troubleshooting Methods

NO	COMMON PROBLEM	CAUSE ANALYSIS	SOLUTION
1	Cutting graphic size is incorrect	The pulse equivalent set in the software does not match the electronic gear ratio set in the servo drive.	Calculate the software pulse equivalent according to the actual mechanical transmission ratio, reduction ratio, and electronic gear ratio. (For specific calculation methods, refer to the servo drive manual.)
2	The circle cut by flying cutting is deformed, but direct cutting has no deformation	The flying cutting speed ratio is too large.	Enter the parameter setting interface with password 3721, adjust the parameters, and reduce the flying cutting speed ratio.
3	The circle drawn by the user cannot be cut by flying cutting	The circle drawn by the user cannot be cut by flying cutting	1. Use the software's graphic optimization function to replace the circle function and convert the curve into a circle.

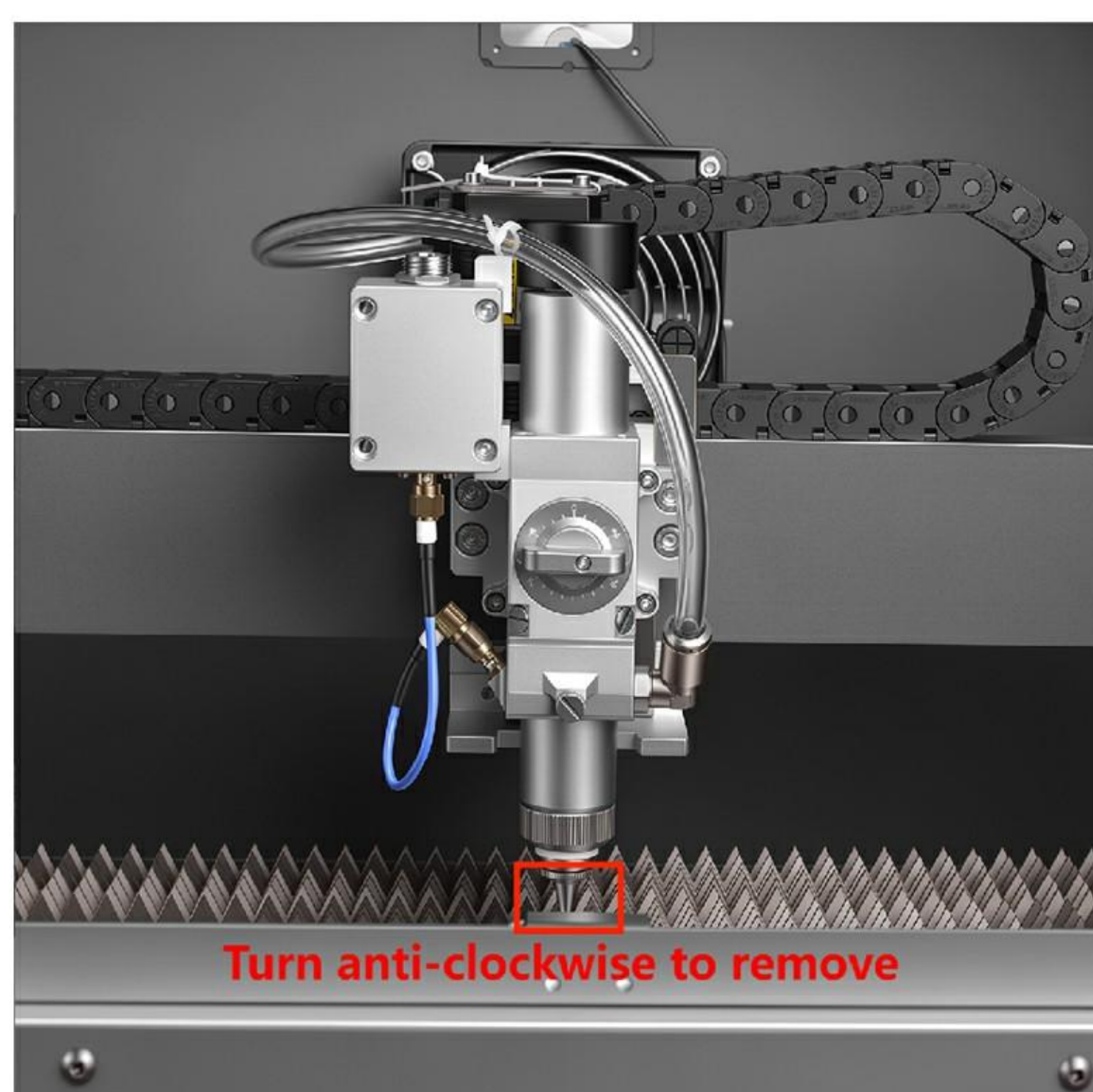
NO	COMMON PROBLEM	CAUSE ANALYSIS	SOLUTION
3			2. Flying cutting mainly recognizes circles or shapes composed of circular arcs. If the replacement circle function cannot effectively replace the original drawing, the user needs to modify the drawing method.
4	The cut graphic has waves or deformation	1. The servo rigidity is too low. 2. The mechanical clearance of the rack and pinion causes waves or deformation during cutting. 3. The servo motor rigidity is insufficient, resulting in inaccurate control.	1. Increase the servo drive rigidity parameters (refer to the servo manual). 2. The capacitor signal is unstable. 3. Adjust the machine rack and pinion clearance to improve mechanical accuracy.
5	Following error or vibration occurs	1. Servo rigidity is too high. 2. Capacitor signal fluctuates.	1. Increase the servo drive rigidity parameters (refer to the servo manual). 2. Adjust the potentiometer. When waiting, connect the oscilloscope to the cutting head capacitor signal line and observe whether the capacitor signal fluctuates. (If there is no fluctuation: the cutting head capacitor sensing circuit may be faulty. If there is fluctuation: continue troubleshooting step 3.) 3. Check the resistance between pins 1 and 2 of the 15 m signal transmission cable. Whether the resistance between pin 2 and pin 1 is less than 1/2. If the resistance between pin 1 and pin 2 does not meet the above rule, replace the signal transmission cable.

NO	COMMON PROBLEM	CAUSE ANALYSIS	SOLUTION
6	Software indicates that the capacitor signal is abnormal or too large	1.Large changes in ambient temperature and humidity within a short period. 2. No calibration of the capacitive sensor after long-term use. 3. Poor contact between the ceramic ring and capacitor sensor.	1. Perform floating calibration every day before operation. 2. Remove the ceramic ring and gently wipe the copper column end with toilet paper before reinstalling. 3. For a newly replaced ceramic ring, remove the sealing ring (the ceramic ring cannot be used until the sealing ring is removed).
7	Software indicates collision alarm	1. Short circuit of the capacitor sensor body or capacitor signal wire. 2. Check whether the 15 m signal transmission cable is short-circuited or broken. 3.The set collision alarm signal value is greater than the actual signal value.	1. Replace the capacitor sensor body or 15 cm capacitor signal wire. 2. Measure the continuity of pins 1, 2, 3, and 4 of the 15 m signal transmission cable. Check whether there is a short circuit or open circuit between corresponding pins. The four wires must correspond one-to-one and must not be short-circuited. 3. Set the collision alarm signal value in the parameter interface to 28000.
8	During processing, the cutting head follows the plate and cannot move upward after touching the plate	The electric adjustment focus module cannot move upward, causing the focus signal not to be detected.	Reconnect the power supply of the electric focus module, restart the cutting head, and power on again.
9	Hardware connection alarm	1. The computer IP address and the board card IP address are not in the same network segment. 2. Computer network card failure. 3. Poor network cable contact. 4. Board card restart.	1. Use the software function "Set Local IP" to set the computer IP address and confirm whether the computer IP is changed to 10.1.1.10 (some antivirus software may block it).

NO	COMMON PROBLEM	CAUSE ANALYSIS	SOLUTION
9			2. Replace the computer network card and cable. 3. Check whether the power supply voltage of the board card is insufficient (recommended to use a 10A switching power supply). 4. Other components or circuits connected to the switching power supply may have short circuits, causing the 24V voltage to be pulled down, resulting in board card restart and connection failure.
10	No gas output during processing	1. Solenoid valve damage. 2. Board output port failure.	1. Measure whether the solenoid valve coil resistance value is normal. 2. Measure whether the corresponding output port of the board has signal output.

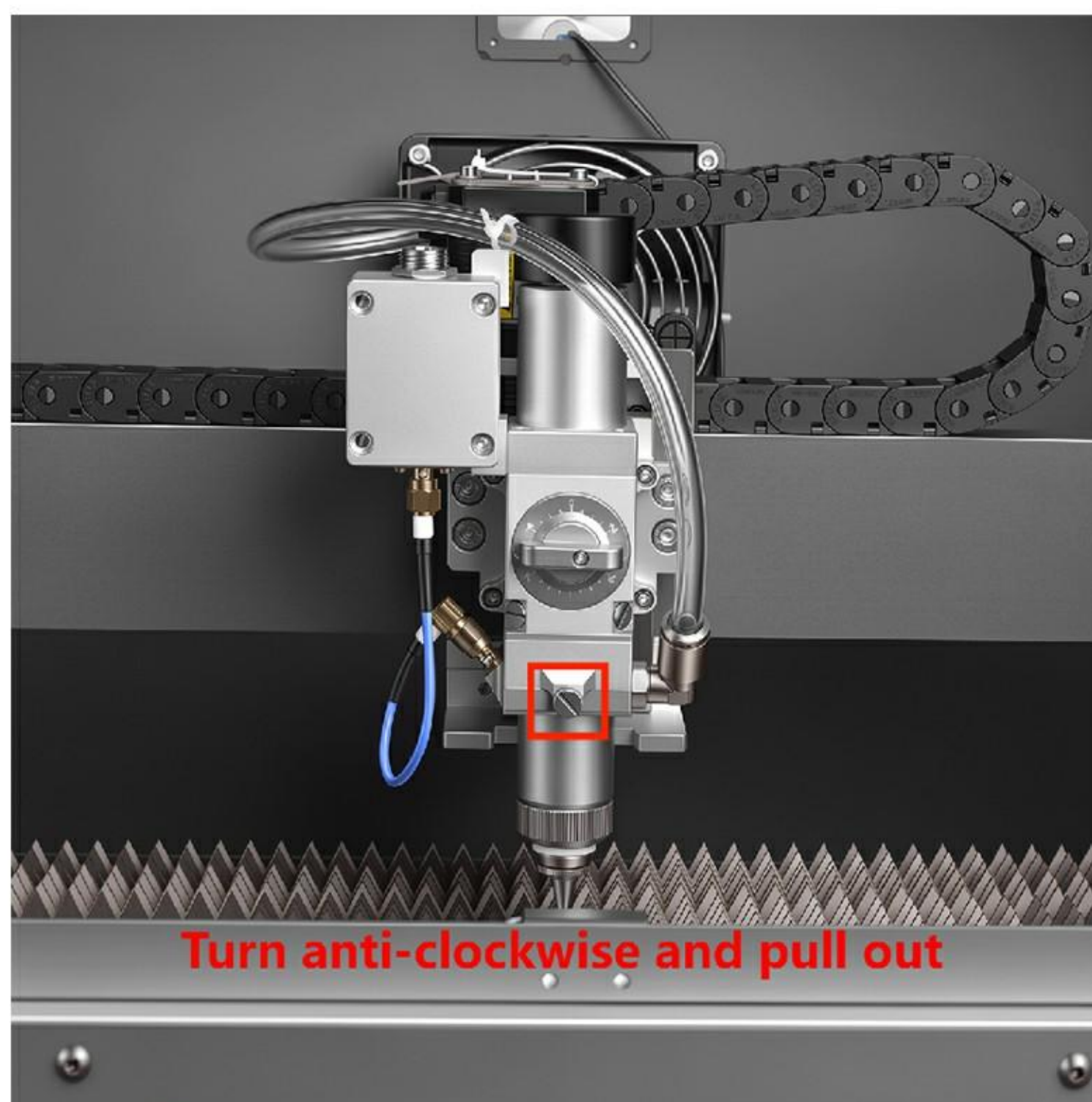
How to replace accessories

9.1 Replacement of cutting nozzle



Unscrew it counterclockwise, then install a new cutting nozzle.

9.2 Replacement of protective lens



Rotate counterclockwise and pull out the protective lens module, then replace it with a new protective lens.

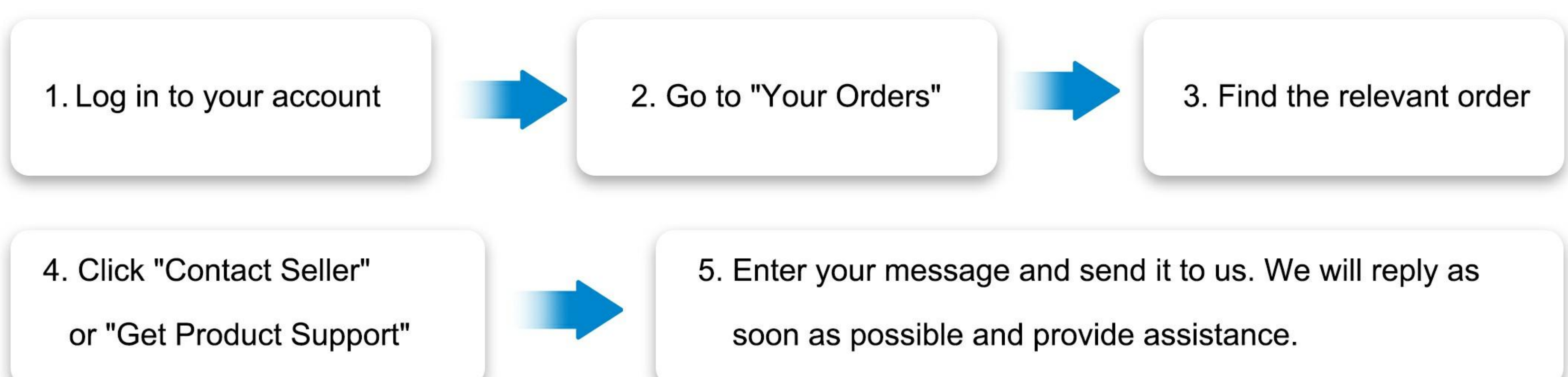
After-sales service

If you encounter any problems during the process, you will be supported by professional engineers within 24 hours.

We offer comprehensive installation videos, detailed user manuals, accessory warranties, and lifetime remote assistance.

If you need to contact us, please use the "Contact Seller" option through your order page.

Please follow these steps:



NOTE: You are suggested to write down the model & attach the video and photos showing the problems in the email or message for a quick solution.