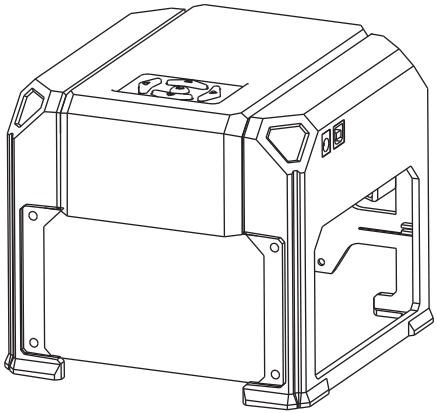
K4 User Manual



K4 Laser engraving machine

Please read this manual carefully before use

Security guideline-01

When using the laser marking system, always maintain safety and caution, and consider the following suggestions to reduce the risk:

- Laser processing is risky, users should carefully consider whether the object is applicable to laser processing.
- This product is non a toy for children to operate.
- Directly exposed to laser beams will cause severe burns and eye damage. When working with laser equipment, make sure to wear suitable laser safety protection glasses.
- Treatment objects and emissions shall meet the requirements of local laws and regulations.
- It is strictly forbidden to place any unrelated full reflection or roaming objects in the device.
- The equipment should be far from electrical equipment that is vulnerable to electromagnetic interference, otherwise it will cause interference.
- It should be carried out at low power when you focus on the laser.
- When laser equipment is working, please place a fire extinguisher nearby to prevent the accident from the use of the laser.
- Do not use machines without anyone.
- Smoke and gas will be produced during the carving/cutting process, and there will be great harm to the human body. It must keep indoor ventilation.
- Make sure that the working area under the laser is metal or non -flammable.
- Make sure that the room or area where you operate the laser has obvious signs to prevent someone from entering the laser work area without knowing it.
- When maintaining, cleaning, and repairing laser equipment, be sure to disconnect the power first.
- During the carving process, please wear appropriate laser safety protective glasses. Do not look directly at your eyes and cause serious damage to your eyes.
- Do not use it for other purposes except for predetermined.

Security guideline

Important statement!

All losses caused by improper use or failure to follow the handbook steps shall be borne by the individual. The final interpretation right of the use of the manual is owned by the company, and has the right to modify all information, data, technical details, etc. in this manual.

Notice:



1. 1.Be careful with laser
   After the laser is opened, it is forbidden to target people, animals and flammable substances, and avoid skin burns and fire.



2. Don't look directly at laser
   The brightness of the laser is harmful to the eyes, please try not to look directly at the laser.



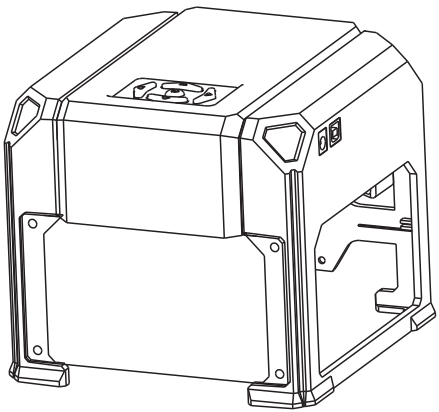
3. Don't touch the working area
   When the machine works, keep your hands away from the machine to avoid injury.



4. Turn off the machine when not in use
   When the machine is not used, turn off the machine switch to avoid third -party operations.

Welcome

This product has a unique, simple, beautiful and innovative product design, and has since enjoyed the convenience and fun of laser carvings.



List of Parameters

Product Dimensions：155x166x143mm

Package Dimensions：260x227x192mm

Product Weight：0.56KG

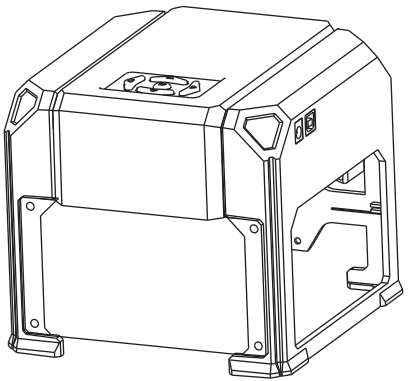
Package Weight：1.36KG

Product Material：ABS

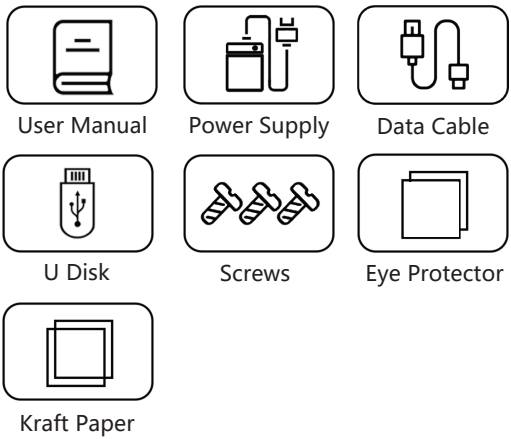
Engraving Area：80*75mm

Accessories：
User Manual+ Power Supply +Data Cable + U disk + Screws+ Eye Protector+Test Board + Kraft Paper

Products and accessories

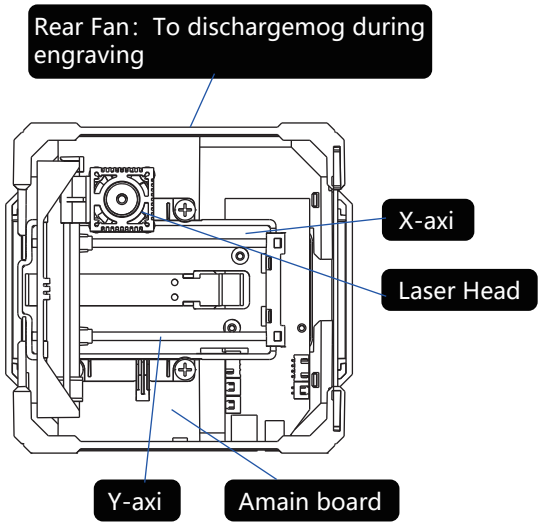


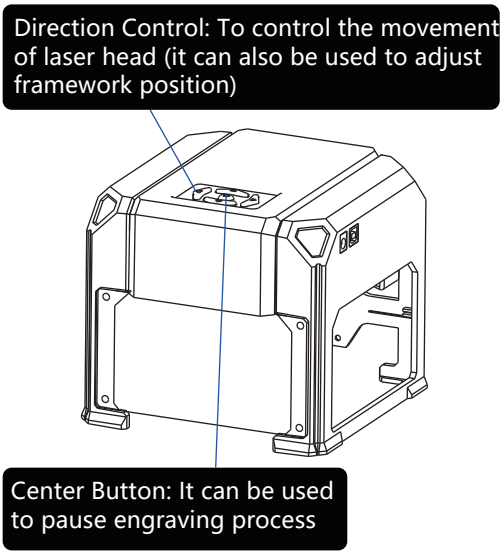
Accessories



1.User Manual: Instructions for engraving machine operationation
2.Power Supply: Power the engraving machine
3.Data Cable: Connect machine to computer
4.U Disk: Driver software, control software and picture package laser focus
5.Screws:To mount laser shield on machine
6.Eye Protector: Reduce laser brightness to protect eyes
7.Kraft Paper: For engraving test

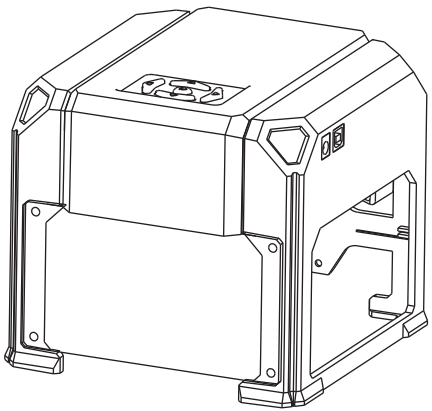
Overview


Rear Fan：To dischargemog during engraving
X-axi
Laser Head
Y-axi
Amain board

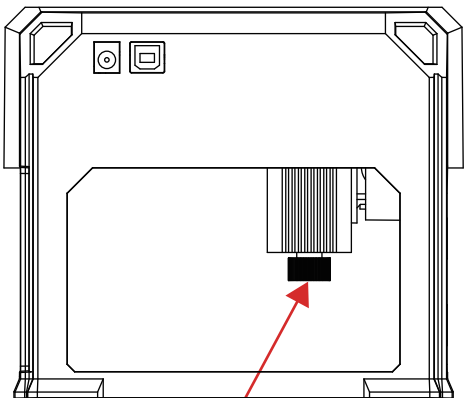

Direction Control: To control the movement of laser head (it can also be used to adjust framework position)
Center Button: It can be used to pause engraving process

Operation Mode

1.Connect machine to computer with data cable and connect power cord to socket.



2.Adjust laser focus to a minimum, if the focus is not small enough, engraving may not be done or the effect is not good.



Tune laser head for focus adjustment,the smaller focus, the better engraving effect.

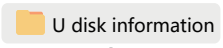
PC software download and installation

In the U disk provided, you can find the driver, software, sample diagrams, and instructions for usage.

(Note: It is recommended that you copy all files to your computer in the first use to prevent the loss of the U disk.)

PC software download and installation

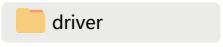
Windows Driving software installation



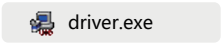
❶



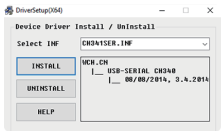
❷



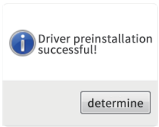
❸



❹



❺ Click to install



❻ Determine the installation

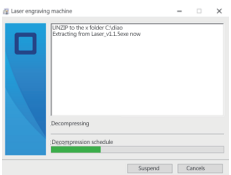
After getting the information package,
find the driver and complete the installation
according to the steps shown in the left figure.

PC software download and installation

Windows Software installation and online

1. As shown in the figure below, open the U disk/01_windows/Software, find the application and install it.





❺The installation is successful after completion

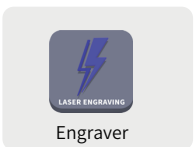
Hint:

After clicking Engraver, if the antivirus software or the computer housekeeper prompts the risk, the Engraver file is a WIN system installation package. If you are misjudged as a suspicious file, please select all operations to allow the program, that is, successfully complete the software installation and select all operations, that is, successfully complete the successful completion Software Installation

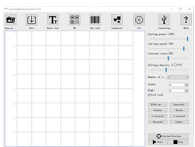
2. Online operation

Use the data cable to connect the machine with the computer

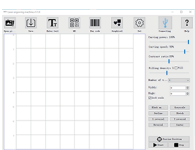
Double-click Software icon-click the connection device icon-icon becomes blue online successful



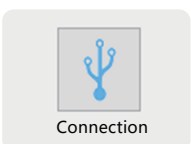
❶ Double -click software icon



❷ Click the connection device icon



❸The icon becomes blue online successful



PC software download and installation

MAC driver installation

U disk information

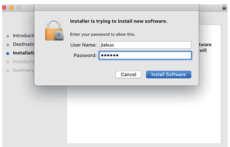
❶



❺ Click to continue

02-MAC

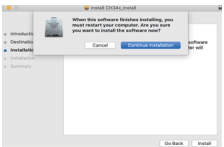
❷



❻ Enter the computer password

driver

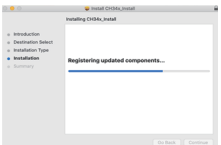
❸



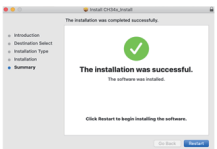
❼ Click to continue installation

CH34x_Install_V1.4.pkg

❹



❽ Continue to install



❾ finish installation

After getting the information package, find the driver and complete the installation according to the steps shown.

PC software download and installation

Mac software installation and online

U disk information

❶

02-MAC

❷

software

❸



❹ Double -click software icon



❺ Drag the icon left button to the right Applica Tions folder



❻ finish installation

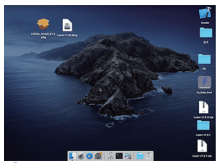
1. Software Installation

Double -click U disk/02_MAC/software /Engraver/Software icon right shift /complete installation

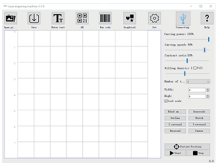
2. Online operation

Use the data cable to connect the machine with the computer

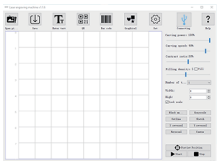
Double-click Software icon-click the connection device icon-icon becomes blue online successful



❶ Double -click software icon



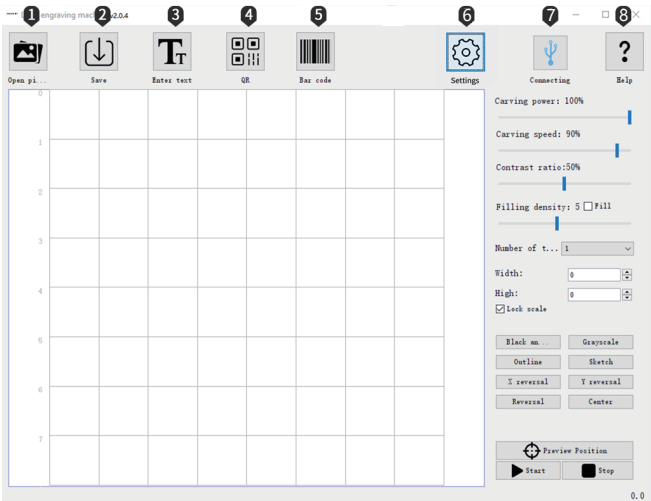
❷ Click the connection device icon



❸ The icon becomes blue online successful



Software interface icon function introduction



❶ Open picture
Load pictures from a computer

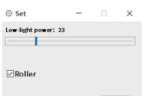
❷ Save
Save edit text pictures

❸ Enter text
Introduce text fonts horizontally
to vectorized editing function

❹ QR
Create a two -dimensional code

❺ Bar code
Create barcodes

❻ Settings
Set the weak light power parameter;
you can set whether to turn on the roller

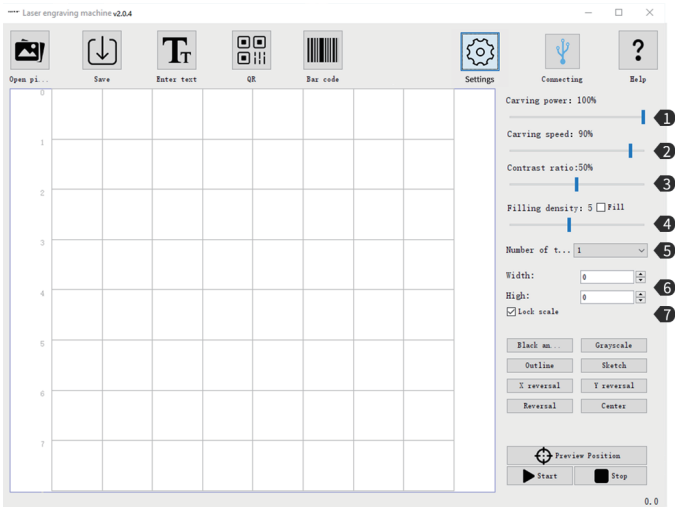


❼ Connection
The icon becomes
blue after successful
the machine is successful



❽ Help
Open the link; watch teaching
videos to consult the answers to
common questions.

Software parameter settings



❶ Carving power
Different materials can adjust the power size

❷ Carving speed
Carving speed settings, fast and slow carving speed determine the carving depth

❸ Contrast ratio
Drag the slider adjust the text picture contrast

ABCD Contrast 16 ABCD Contrast 50 ABCD Contrast 80

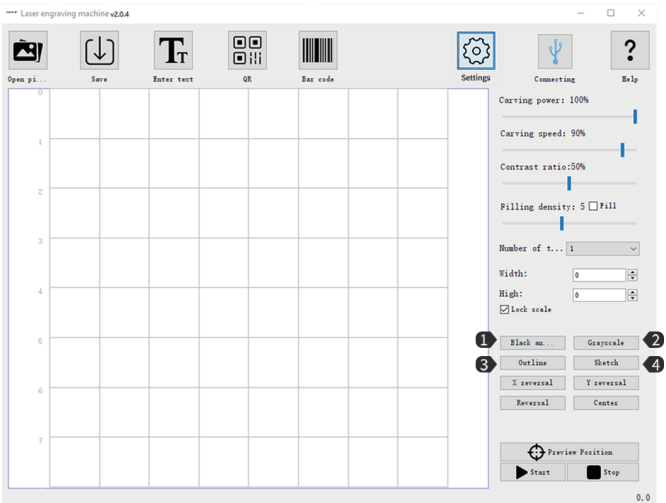
❹ Filling Density; Filling
The filling effect can only be effective for vector graphics, select vectorization,Click Fill on the text photo, drag the fill slider to adjust the filling density

❺ Number of times:
The number of settings represents the carving several times

❻ Width; High
You can adjust the width and height size of the text pictures in a single item

❼ Lock scale
Lock the picture text and zoom in and adjust in proportion

Draw picture files



❶ Black and white
Picture black and white processing

❷ Grayscale
Gray mode, carved photos use this function, and process the picture gray tone processing

❸ 0utline
Cutting mode, carving machine wire frame figure cutting and use

❹ Sketch
Sketch mode, enhance the three -dimensional outline of the picture line

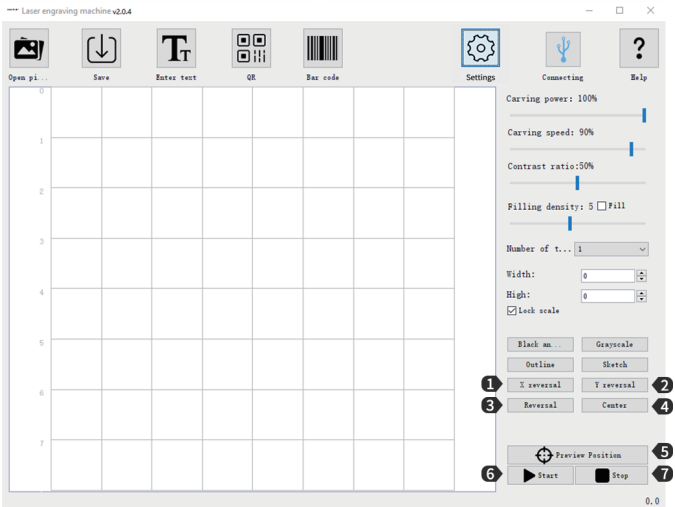

Black and white


Grayscale


0utline


Sketch

Software parameter settings



❶ X reversal
Left and right mirror reverse

❷ Y reversal
Photo reversal

❸ Reversal
Reverse the texture of text pictures

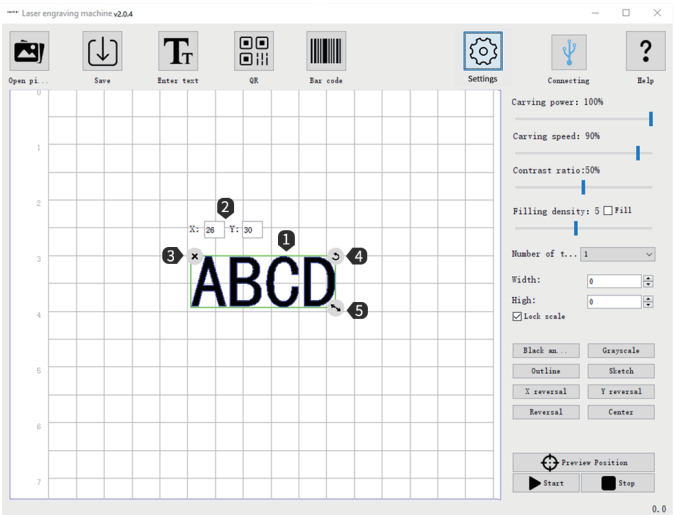
❹ Center
Stay the preview area and picture in the middle

❺ Preview Position
Carving preview, determine the carving location

❻ Start
Start carving

❼ Stop
Termination of sculpture

Introduction to the interface income content



❶ After loading the text pictures, the left mouse button can be dragged to move the text picture position. The right mouse button can translate the drawing board.

❷ X: 71 y: 122 only represents text pictures staying position seats, mobile text picture positions, seat marks will change with different positions

❸ Clear painting board text pictures

❹ Leave the mouse click to rotate the text angle of 360 ° rotating text

❺ Leave mouse button click to drag can enlarge and reduce text pictures

Introduction to mobile software use

Software download and installation

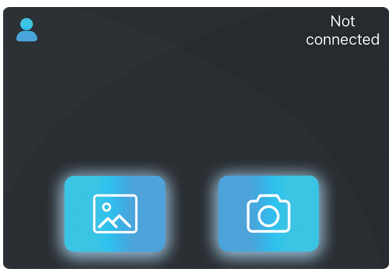
Scan the following QR code download

Google Play Android iOS

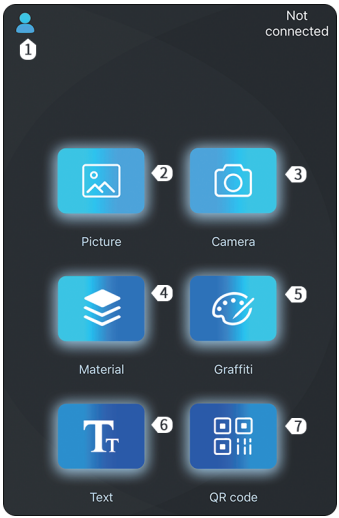
Note: 1.Android needs to use a browser to scan the QR code to download;
2.After the installation is successful, you need to give the corresponding permissions;

APP connection machine

❶ Connect the equipment and turn on the power;
❷ Open the mobile phone Bluetooth function;
❸ Then turn on the mobile carving software, click "Unconnected" in the upper right corner to automatically search the device;
❹ Then click "Engraver-******";
Note: "*******" represents the machine flow number number
❺ Waiting for 1 to 2 seconds, "Connected" displayed in the upper right corner, indicating that the APP has successfully connected the machine and can perform the next operation.



Introduction to the software interface (loaded content)



❶ Set up
Novice Guidelines /Problem Feedback /User Agreement Privacy Terms /Equipment /Language Settings

❷ Carving in
The picture
Load pictures from the album Add pictures from the gallery

❸ Take pictures through the camera

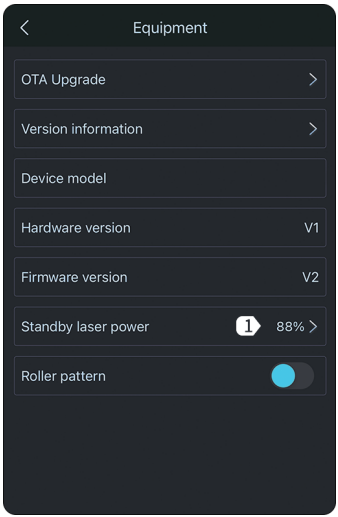
❹ Software built -in graphics

❺ Add graffiti
Draw text/graphics by yourself

❻ Edit text content

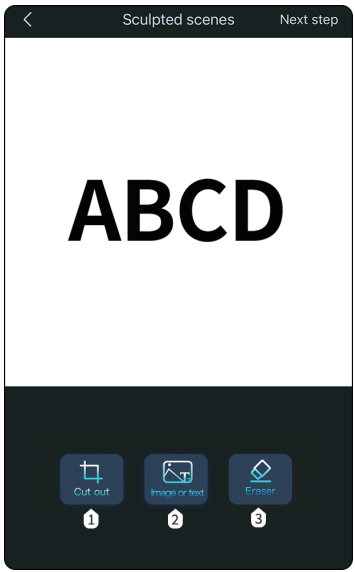
❼ Add a QR code
QR code, barcode

Roller setting



❶ Standby laser power
Set standby laser power

Introduction to the software interface (loaded content)



❶Cut out
Customized cutting
Round cutting
Square cutting

❷image or text
(The content can be superimposed)



Input text



Load pictures from the album



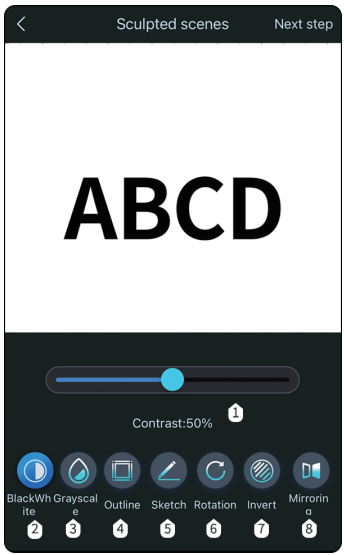
Shoot from the camera



Get pictures from the material library

❸Eraser
Can be modified with rubber rubbing

Introduction to the software interface (loaded content)



❶ Contrast
Drag the slider to adjust the text picture contrast.

ABCD Contrast 16 ABCD Contrast 50 ABCD Contrast 80

❷ Black white
Picture black and white processing

❸ Grayscale
Gray mode, carving photo uses this function to process the picture gray tone processing

❹ Outline
Cutting mode, carving machine wire frame figure cutting and use

❺ Sketch
Sketch mode, enhance the three -dimensional outline of the picture line



Black and white Gray contour sketch

❻ Rotation
It can be rotated at 90 degrees,
180 degrees or 360 degrees

❼ invert
Reverse the black and white color of the image

❽ Mirroring
Up, down, left and right mirror reversal

Introduction to the software interface (loaded content)

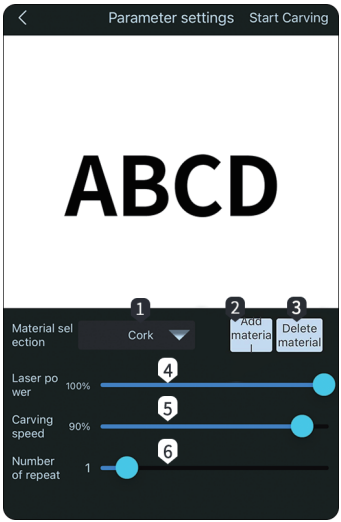


❶ Width
Set the carving width

❷ High
Set the sculpting height

❸ Locking ratio
Sculpting size and other proportions

❹ Locking ratio
Preview Carving location
Determine the carving location



❶ Material selection
The APP is built -in material, which can be selected directly according to the carving object material

❷ Add material
Add material and set the material name/laser power/carving speed

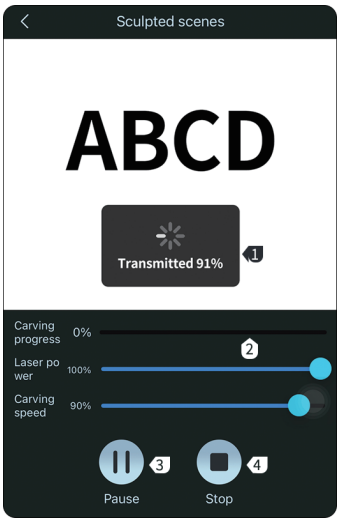
❸ Delete material

❹ Laser power
Different materials can adjust the power size

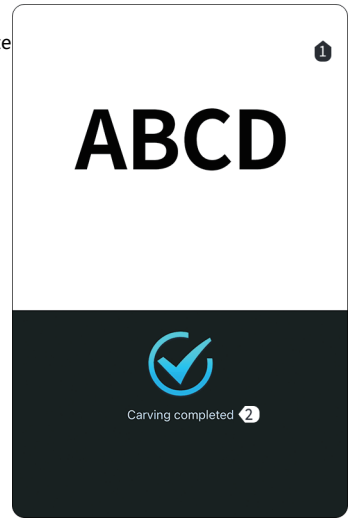
❺ Carving speed
fast and low carving speed determine the carving depth

❻ Number of repeat
The number of settings represents the carving several times

Introduction to the software interface (loaded content)



1. Transmitted
   When you complete 100%, you can start carving
2. Carving progress
   Show carving progress
3. Pause
   Portal carving
4. Stop
   Termination of sculpture



1. Save
   Save the current carving content can be viewed in the mobile phone album
2. Carving completed
   The current content has been carved

Common problem

1. The machine cannot be turned on

Check the socket, switch, fuselage power socket, etc. to ensure that it is inserted in place and normal power;

2. Can't connect to the computer

1. USB cables are not connected: Check the USB data cable computer port and machine interface to ensure that the insertion is in place. The USB interface of the front panel of some desktop computers is invalid, and the socket behind the fuselage needs to be connected;
2. The driver is not installed correctly: Please re -install the driver according to the instructions. After the installation is completed, your computer can identify the machine as a serial port. You can find a serial port in the computer's device manager;
3. If the above two methods do not work, try pulling off the USB cable and power cord, turn off the machine for at least 5 seconds, and then re -connect the power and re -connect;

3. The carving effect is very shallow or no trace

1. Focus: The most common situation is that the laser was not properly focused before starting work;
2. Carving speed: If you set the carving speed too fast, the laser will not have enough time to sculpt your workpiece, please adjust your carving settings and carve again;
3. Image quality: If the image you import is very shallow and the lines are very thin, it will also affect the quality of carving;
4. Workpiece position: The focal length of the laser module is fixed, which means that the workpiece should be placed on the plane and ensured that it is parallel to the machine, otherwise the carving effect will be poor;

4. Unexpectedly stop during carving

The carving work has not been completed, please re -connect the machine and transmit the data and engraved it to solve the problem;