PRODUCT MANUAL

—

COOLOOK CNC400
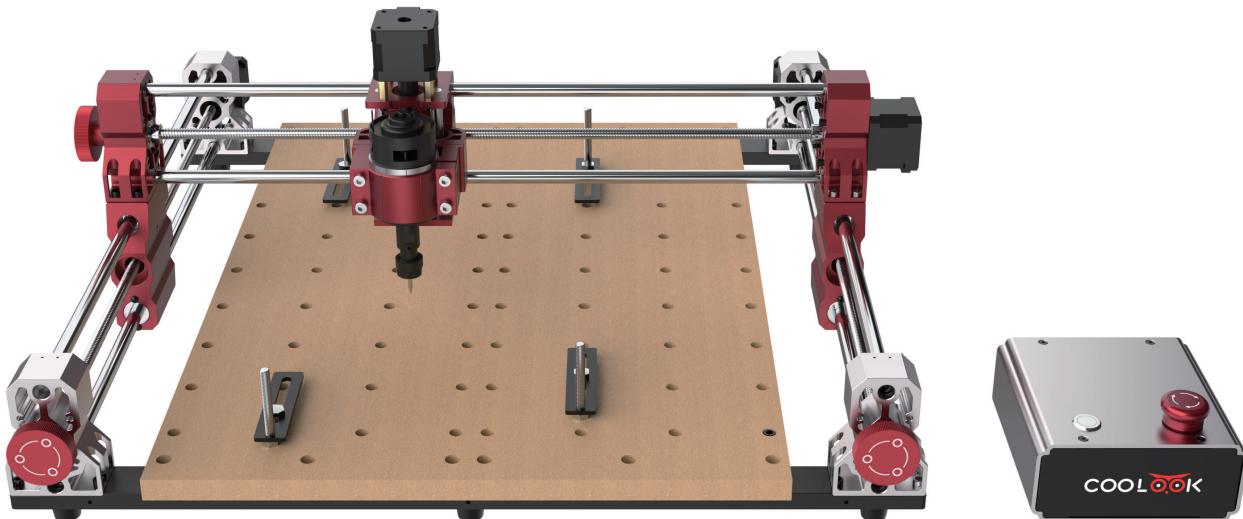
| Language:EN	Sprache:DE

CE FC RoHS ♺ ⌧

Note: The picture is for reference only, the actual product shall prevail

To our customers

Dear Customer:

   To ensure a smooth assembly and usage experience, we have prepared this assembly and user guide manual. Please read the following content carefully and follow the instructions to ensure safety and convenience when using the product. If you encounter any issues during use, you can scan the QR code, access our company' s website, and read USB drive information to access relevant instructional videos. In case of machine malfunction, please refer to the names of the corresponding parts inside the machine and inform us of the issue and the machine's condition via the after-sales email provided on this page.

After-sales Email:service@coolookmaker.com

TF card information

- 01- Install the machine
- 02- Install the software
- 03- FAQ
- 04- Test file
- 05- Firmware
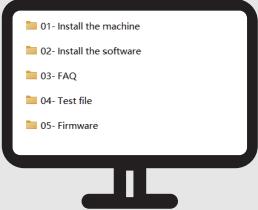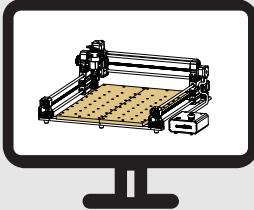
Find the USB drive in the tool kit

Safety Warning:

1. Please make sure that the machine installation is firm, when first using the machine.
2. Please press the emergency stop button quickly when danger occurs.
3. Please wear safety goggles when operating machinery.
4. Please use a brush to remove debris, do not blow with your mouth.
5. Please be careful of the sharp parts when using milling tools or grinding workpieces.
6. Please ensure they are securely fastened when installing milling tools.
7. Please ensure that the machine is stopped before loading/unloading, adjusting tools, measuring, and cleaning.
8. Never wear cotton gloves during operation.
9. Never place measuring tools or other clutter within the working area.
10. Please ensure the workpiece is securely fastened when clamping it. Never start engraving if it is loose or not properly clamped.
11. This engraving machine is intended for using in indoor settings.

Directory

1.Unpacking operation

After opening the box, remove Y-axis Module,Control Box Module,Base Module.
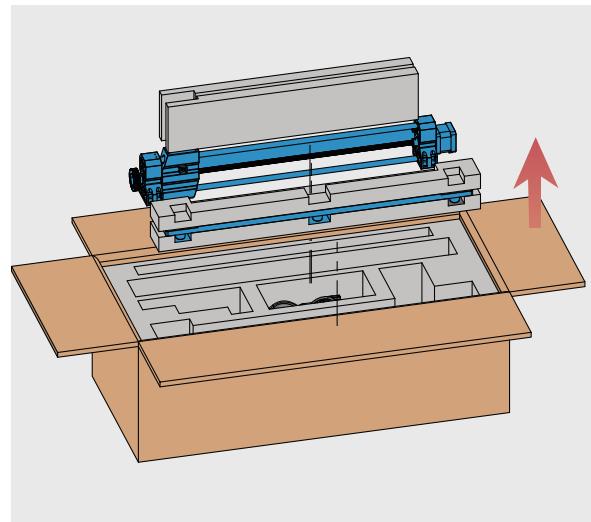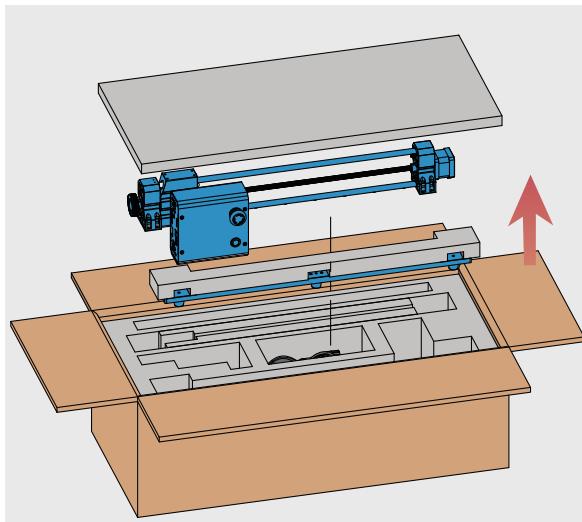
Take out the X-axis Module,Power cord,Backing
Plate,Power adapter and the Accessory Package.
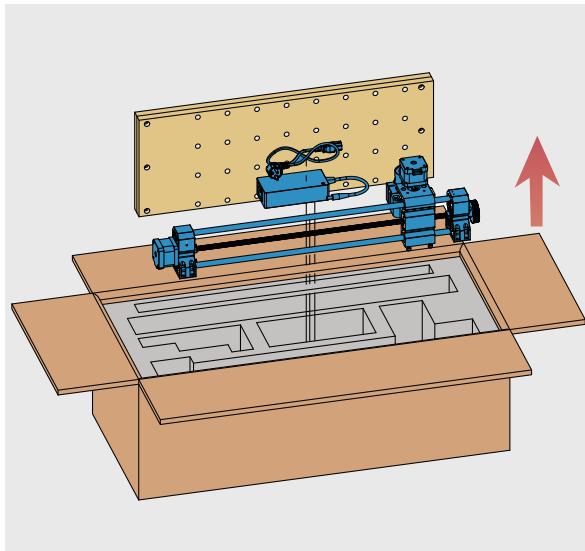
# 2.List
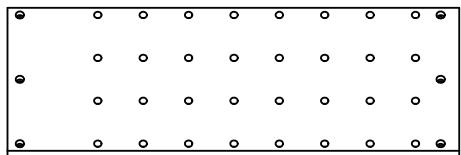
Backing Plate *2
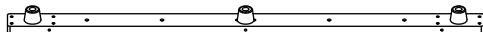
Base Module *2
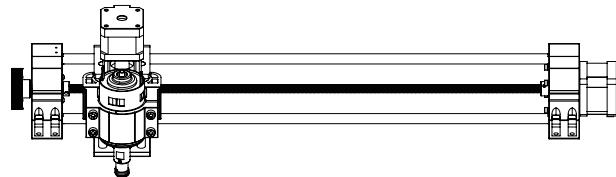
X-axis Module *1

Y-axis Module *2

COOLOOK
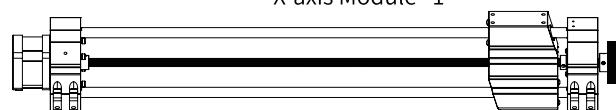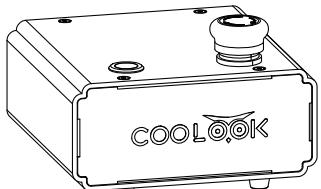
Control Box Module *1
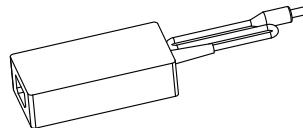
Power adapter *1
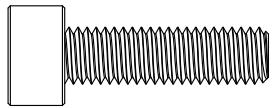
Cap head M5X15 screw *12
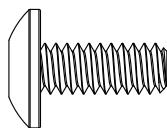
M3X6 screw *5

Fixed block *5
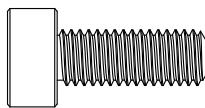
Cap head M4X8 screw *24

USB cable *1
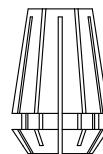
Spindle chuck *1
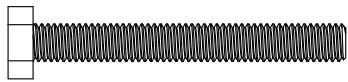
M6X50 outer hexagon screw *12

Press sheet metal *6
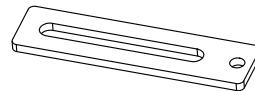
Sandwich Sheet Metal *6
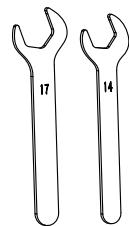
Open-end wrench *2
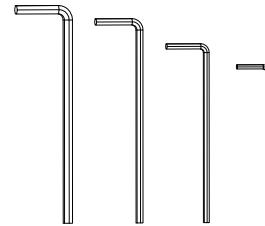
Hex socket *4

Knife box *1
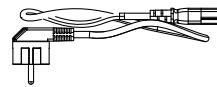
Power cord *1

3.Machine assembly

3.1 Base Mounting

Base Module *2   Backing Plate *2
Cap head M5X15 screw *12

Secure the Base Module with M5 screws.

Notice: The screw holes on one side of the base plate are oriented outward.
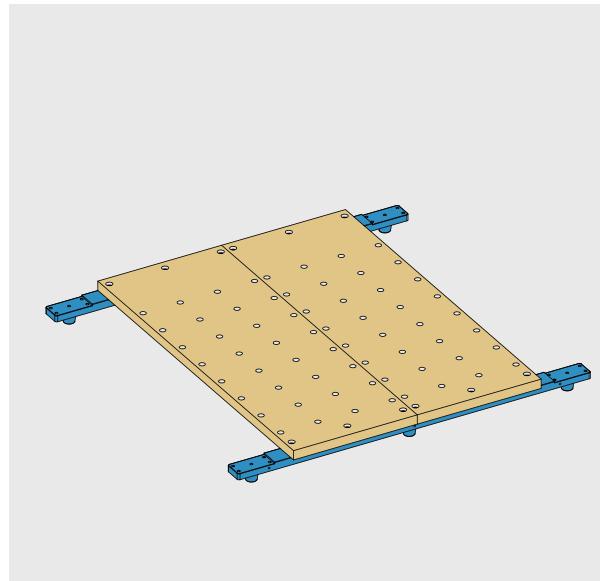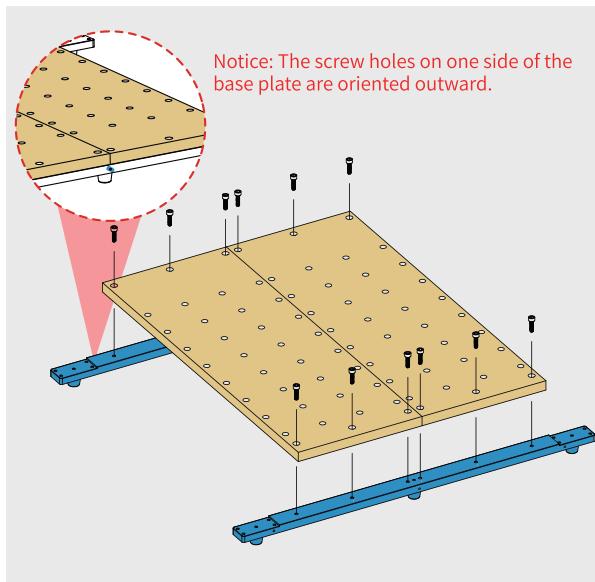
3.2 Y-axis Module installation

Y-axis Module *2　Cap head M4X8 screw *16

Secure the Y-axis Module to the Base Module using Cap head M4X8screws.

When installing, ensure the motor side is near the bottom plate and the backing plate is flush. Refer to the figure for the correct backplate hole positions.
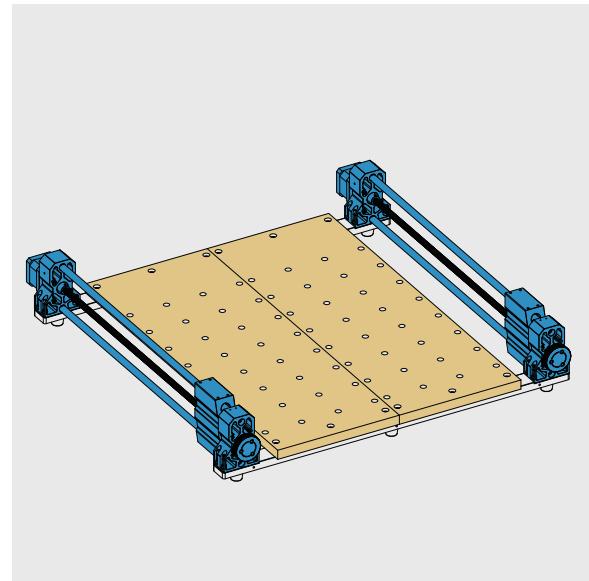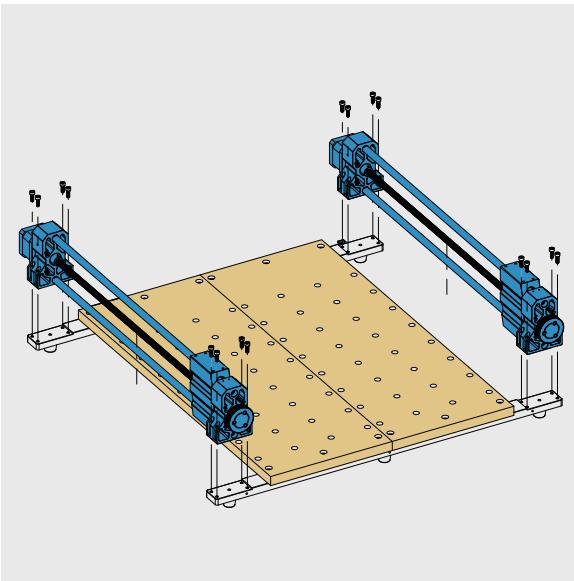
3.3 X-axis Module installatio

X-axis Module *1   Cap head M4X8 screw *8

Use the M4 screws to secure the X-axis Module to the Y-axis Module.
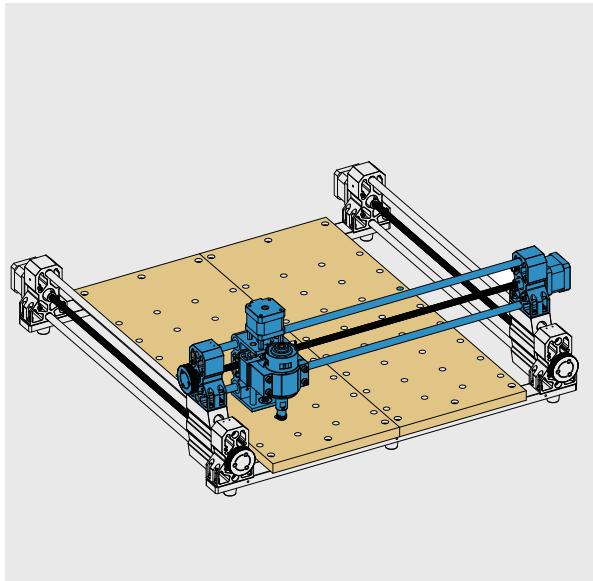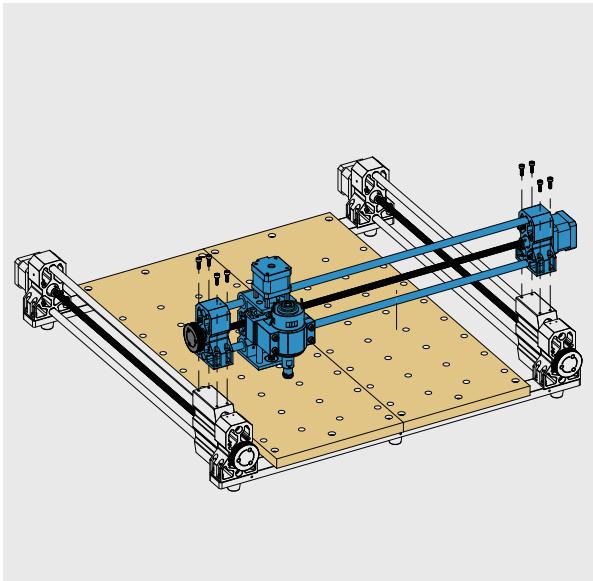
3.4 Fixed block mounting

Fixed block *5   M3X6 screw *5.

Pay attention to the orientation of the fixing block during installation, and fasten it with M3 screws.
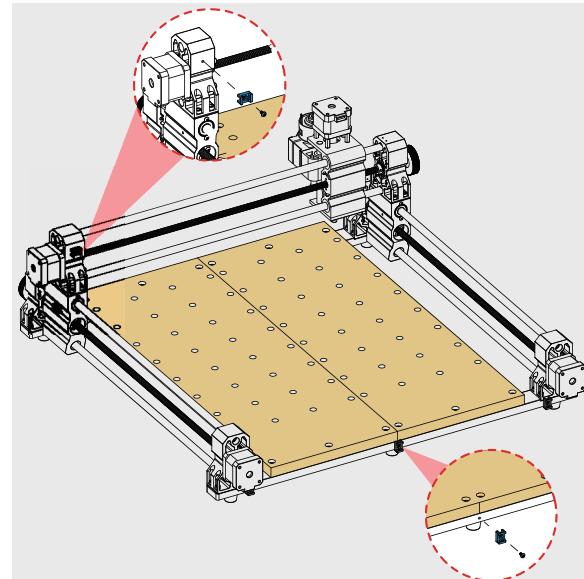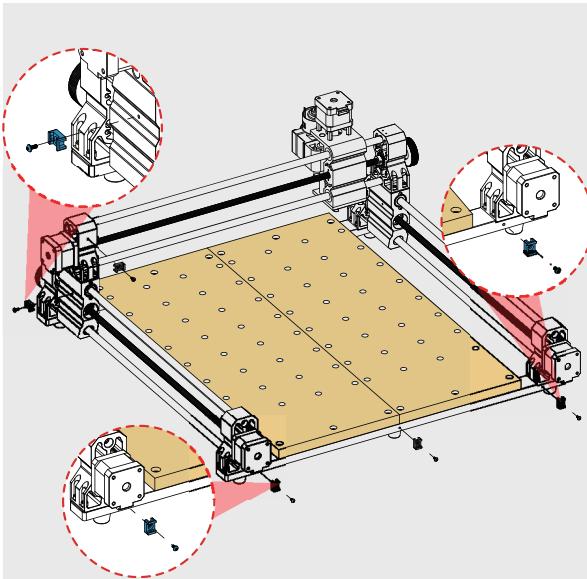
3.5 Motor wiring

Follow the following diagram to the corresponding position of the motor,and connect the motor line with the motor.
(Note: All wire ends are equipped with cable tie labels.Take out the cable ties from the accessory pack
and secure the wires to the fixed block.)

Z axis

Connection
schematic diagram

Y2 axis

X axis

Spindle motor
connection

Red wire connected to the side
of the red dot.

Y1 axis
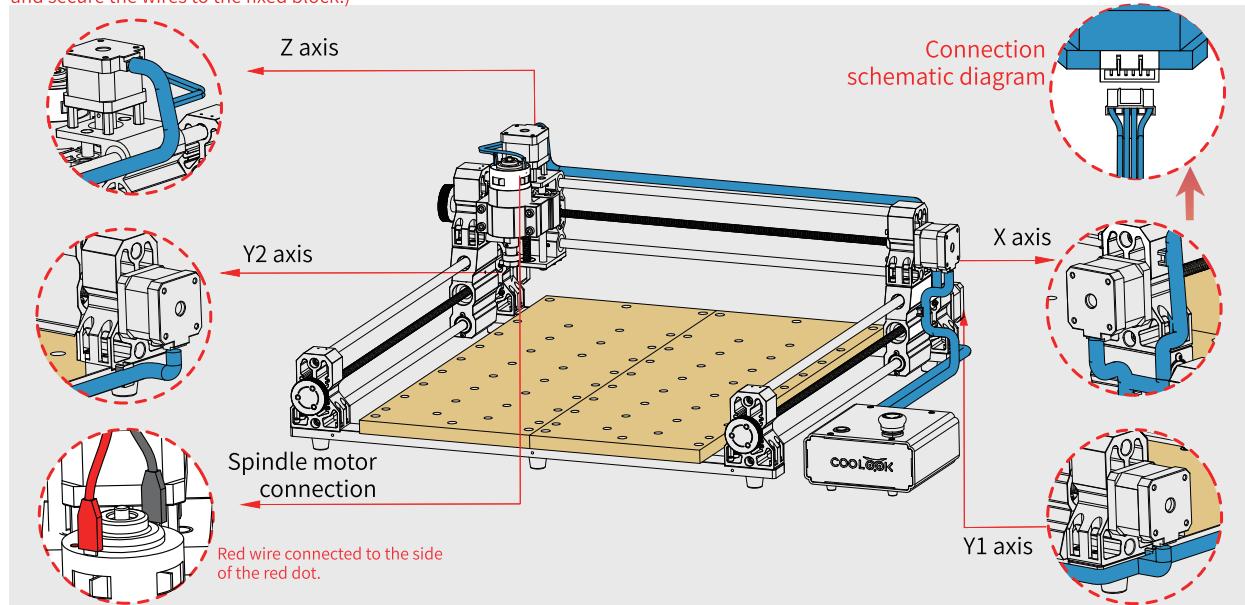
⚠ Note: When securing the Y-axis wiring, ensure its height does not exceed the workbench

3.6 Spindle tool change

First insert the tool into the chuck, then attach it to the spindle, and finally lock it with the nut.
Tool :Open-end wrench *1.

Beware of sharp knives.
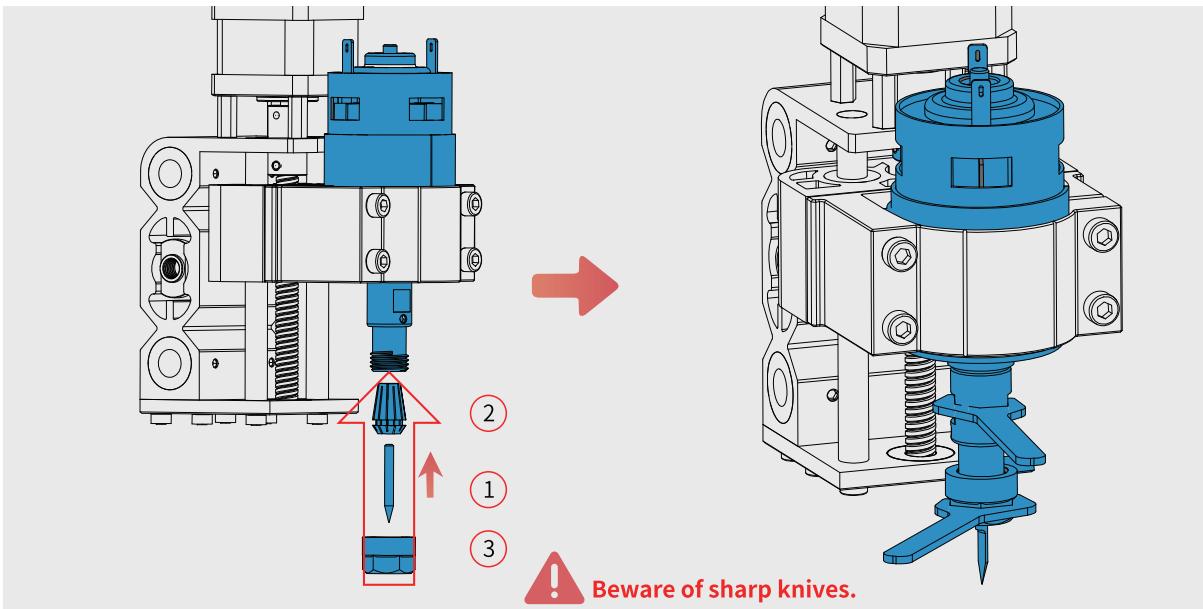
3.7 Plate fixation

First, adjust the height of screw 1 and the clamping sheet metal slightly below the height of the workpiece. Then, screw the butterfly nut onto screw 2, and subsequently fix screw 2 onto the base plate. Finally, tighten the butterfly nut to clamp the workpiece."
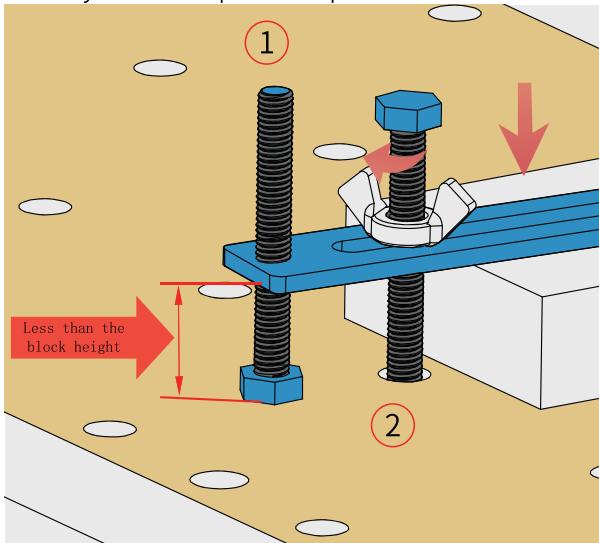
Sandwich sheet metal *4
Press sheet metal *4
M6X50 outer hexagon screw *8

① ②

Less than the block height

4.About the machine

X-axis module

Y1-axis module

Z -axis module

Control Box Assembly

Y2-axis module
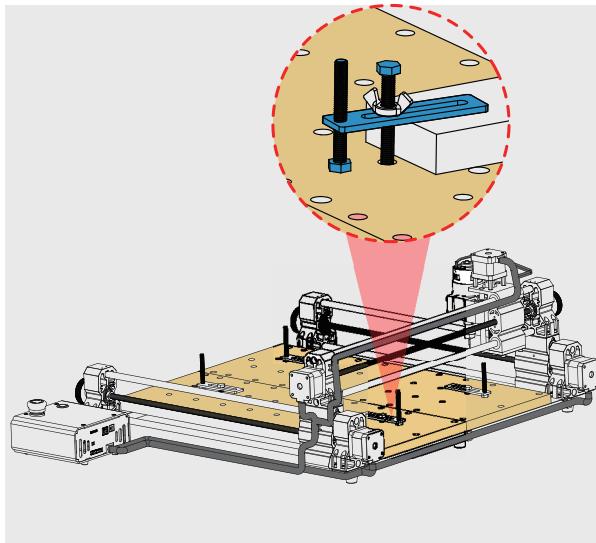
Backplane module
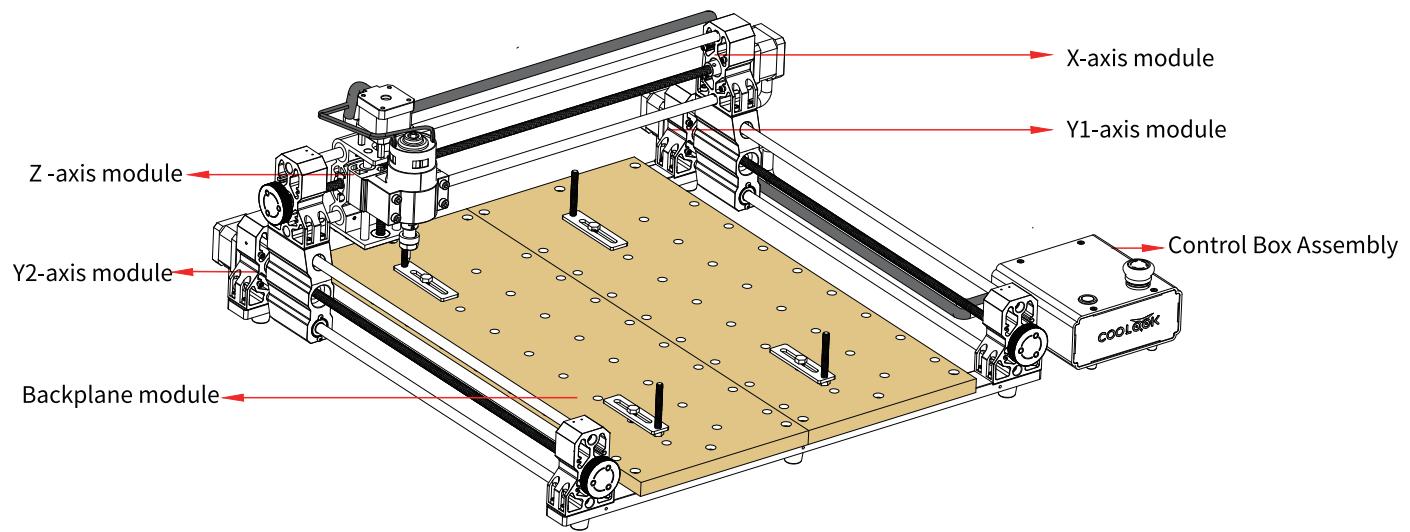
5.Function definition

Serial number	Name
1	TF Card jack
2	500W Motor Signal Interface
3	USB Communication
4	24V DC Power port
5	Emergency Stop Switch
6	Power Switch
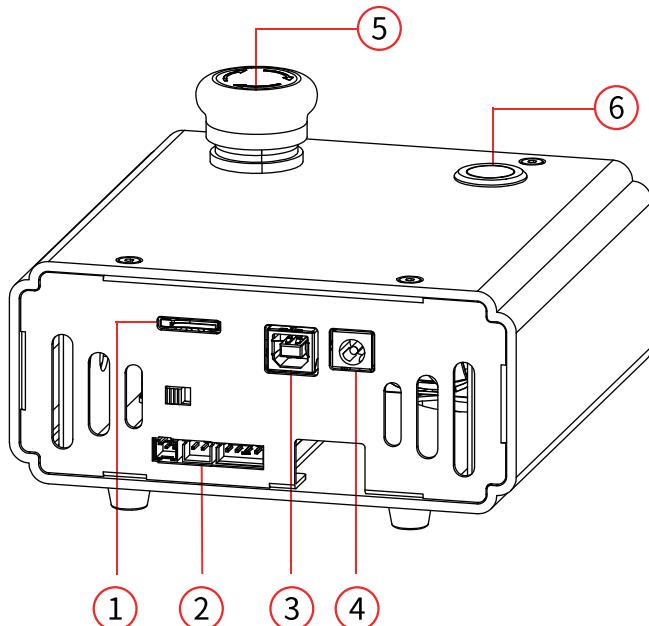
6.Turn on the machine

Connect the power cable of the adapter, plug the DC head into the DC socket of the mainboard module, check whether the switch is in OFF, plug in the plug and power on, press the switch to complete the boot.(Make sure the emergency stop switch is in the popped-up state.)
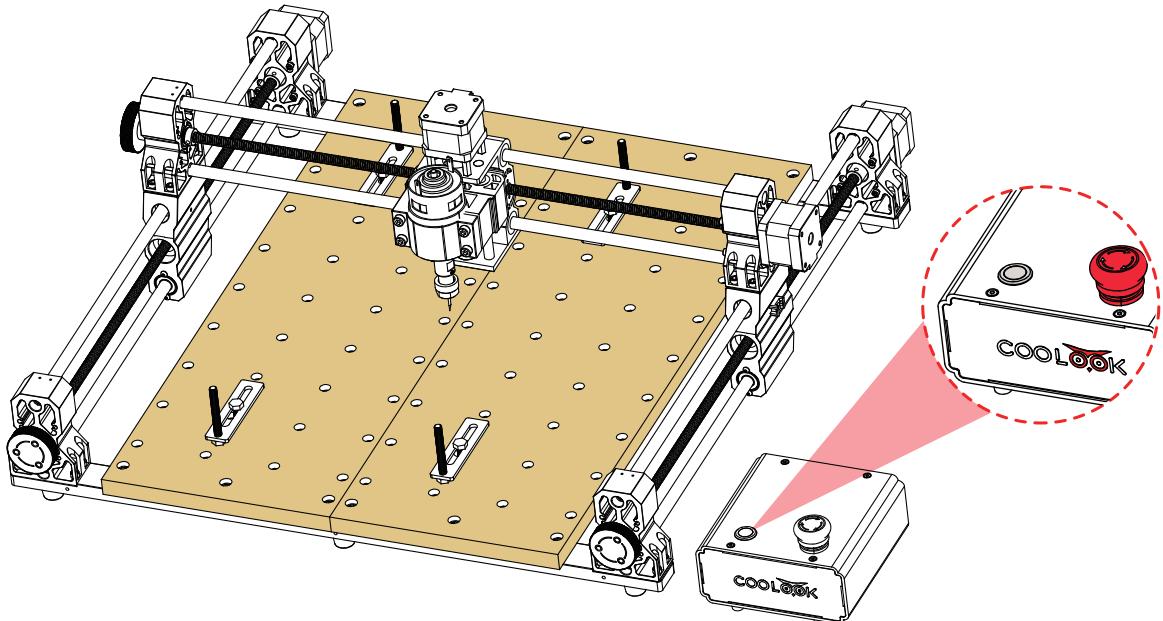
7.Instructions

7.1

Open the software folder, locate the "Candle" software application, and double-click to run it.

After opening the software, select the "Service" command in the upper left corner, and then take out the USB data cable to establish the communication between the machine and the computer.

| 名称	修改日期	类型	大小
platforms	2018/1/31 13:07	文件夹	
translations	2018/1/31 13:07	文件夹	
Candle	2016/12/28 21:33	应用程序	791 KB
d3dcompiler_47.dll	2015/10/13 9:46	应用程序扩展	3,386 KB
icudt54.dll	2015/3/31 15:56	应用程序扩展	24,788 KB
icuin54.dll	2015/3/31 15:56	应用程序扩展	3,829 KB
icuuc54.dll	2015/3/31 15:56	应用程序扩展	2,127 KB
libEGL.dll	2015/10/13 9:46	应用程序扩展	10 KB
libgcc_s_dw2-1.dll	2014/12/21 21:07	应用程序扩展	118 KB
libGLESV2.dll	2015/10/13 9:46	应用程序扩展	1,564 KB
libstdc++-6.dll	2014/12/21 21:07	应用程序扩展	1,003 KB
libwinpthread-1.dll	2014/12/21 21:07	应用程序扩展	48 KB
LICENSE	2015/8/9 9:30	文件	35 KB
opengl32sw.dll	2014/9/23 15:36	应用程序扩展	14,864 KB
Qt5Core.dll	2016/10/9 0:17	应用程序扩展	5,265 KB
Qt5Gui.dll	2015/10/13 0:31	应用程序扩展	5,210 KB
Qt5OpenGL.dll	2015/10/13 0:43	应用程序扩展	327 KB
Qt5SerialPort.dll	2015/10/13 0:59	应用程序扩展	86 KB
Qt5Svg.dll	2015/10/13 0:48	应用程序扩展	324 KB
Qt5Widgets.dll	2015/10/13 0:37	应用程序扩展	6,389 KB
Qt5WinExtras.dll	2015/10/13 1:55	应用程序扩展	236 KB
settings	2024/5/9 17:40	配置设置	4 KB

7.2

After the communication between the machine and the computer is connected, you can select our serial port communication in the "Connection" item, set the Baud to 115200, the other parameters are default, and then click OK to save.
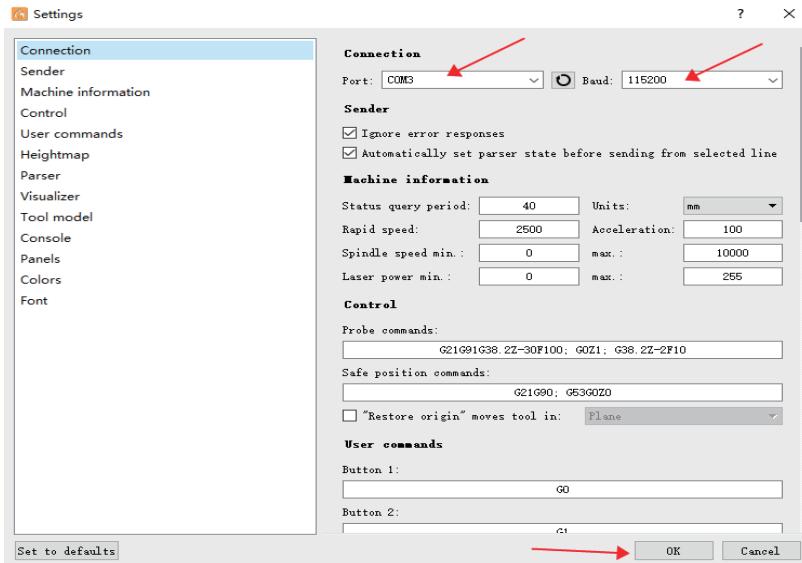
7.3

Interface introduction

① The Y-axis is moving in the positive direction

② The X-axis is moving in the opposite direction

③ The Y-axis is moving in the opposite direction

④ The X-axis is moving in the positive direction

⑤ Z-axis lift

⑥ Z-axis descent
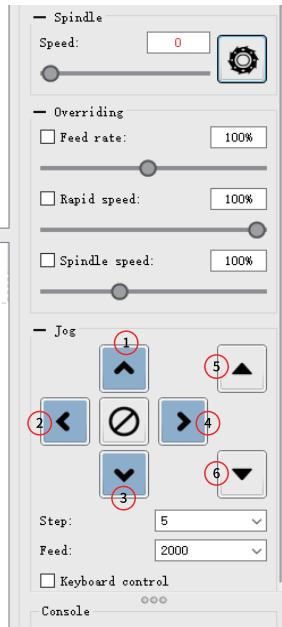
① Back to zero

② Tool setting

③ XY axis returns to zero

④ Z axis returns to zero

⑤ Set origin

⑥ Safe range

⑦ reset

⑧ lock
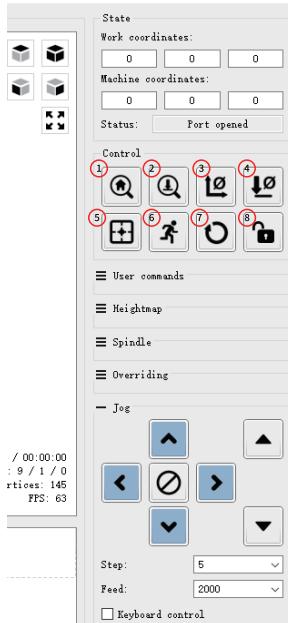
7.4

First fix the carving object on the pad, adjust the XY axis movement, so that the spindle is directly above the carving object, slowly adjust the Z-axis down, so that the tool just touches the object to be carved, and then click the tool key to complete the knife.
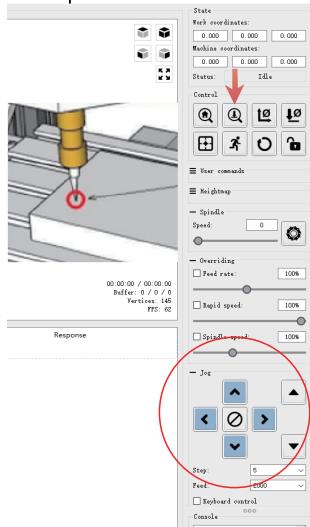
7.5

File import
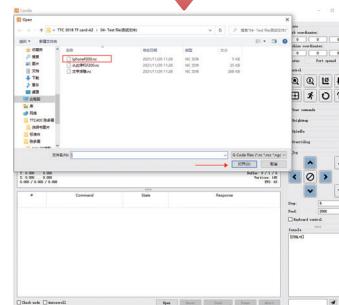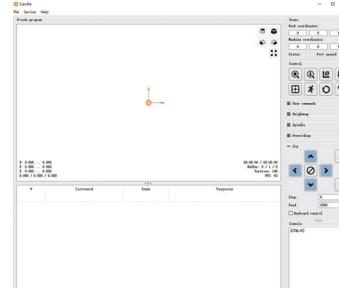
7.6

Before starting to carve, set the work origin first, by adjusting the XY axis, move the spindle to the bottom left corner of the object to be carved, and then click Set the work origin, click Start will start from here.
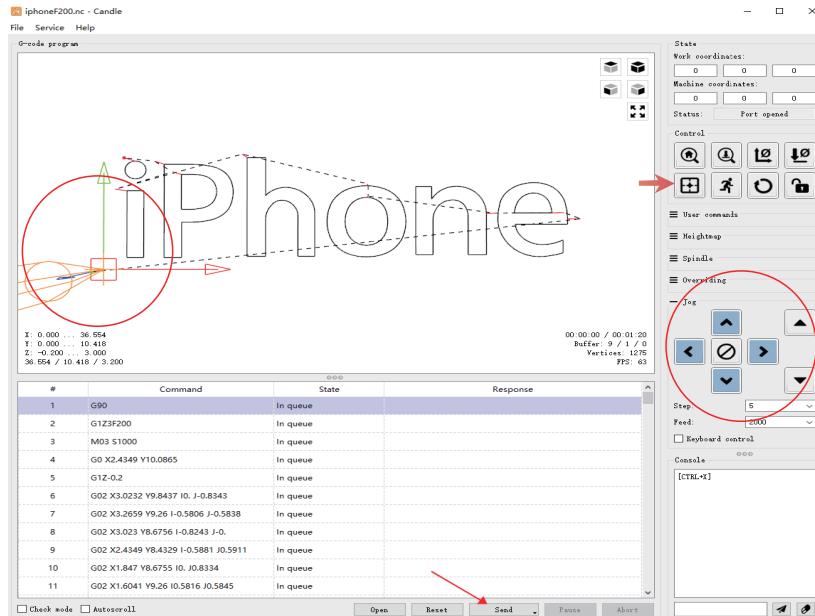
8.After-sales Service

The warranty period is 12 months from the date of purchase

1. Missing, damaged, or defective parts: Within 7 days of receipt, we will replace any parts free of charge, including shipping costs.

2. 7 days after the receipt date, we will replace any part free of charge, but the customer needs to pay the shipping fee.

3. Customer damaged parts: Customer shall pay the cost of parts and transportation costs.
   a. Claims for lost or damaged goods must be reported to the carrier within the carrier 's claim window and the customer is required to notify us within 7 days of the signature date.
    b. For any parts lost or damaged during transportation, the Customer shall take photos or videos and send the information to us.
    c. Once the carrier dispute is resolved, please provide us with all communications from the carrier. It is the customer's responsibility to keep us informed of all communications with the carrier.
    d. For missing parts, the customer should contact after-sales service at the email address provided.

9.FAQ

Question 1: Unable to recognize files in the TF card, how to handle it?

1、Please only store the required engraving files on the TF card. Having too many files on the TF card can cause the control board to be unable to search them all, and large-capacity files should be moved to the computer for storage。

2、The file formats stored on the TF card are incorrect; the machine only recognizes files with the extensions .gc and .nc.

The filename can only recognize numbers and letters, and cannot recognize special characters.

3、The TF card may need to be reformatted due to excessive insertions and removals.

Question 2: When connecting via USB, there is a failure to connect. How should this be handled?

1、The voltage of the computer port may be insufficient; try plugging the USB connection cable into a different computer port.

2、Software conflicts, caused by running multiple control software applications that occupy the ports, should be resolved by closing the conflicting software or restarting the computer or the machine.

10. Product Parameters

Model : COOLOOK CNC400

Engraving Software：Artcam、Fusion360、EASEL、CANDLE

Color：silver + black + red

Electrical Requirements：24V/5.62A DC

spindle maximum speed：8000RPM

Software Supported Languages：Chinese/English/Italian/French/German

Machine Dimensions : 710*600*410mm

Power Supply Type: US/EU Plug (optional)

Maximum Engraving Size：400*400*80mm

File Formats：NC,GCODE.

Main Body Material : aluminum part + smooth shaft

Motion structure type: XYZ

Compatible engraving materials: Plywood/MDF/Solid wood board/Acrylic/Carbon fiberAluminum/Copper/Stainless steel

Engraving Method: USB connection to PC, TF card