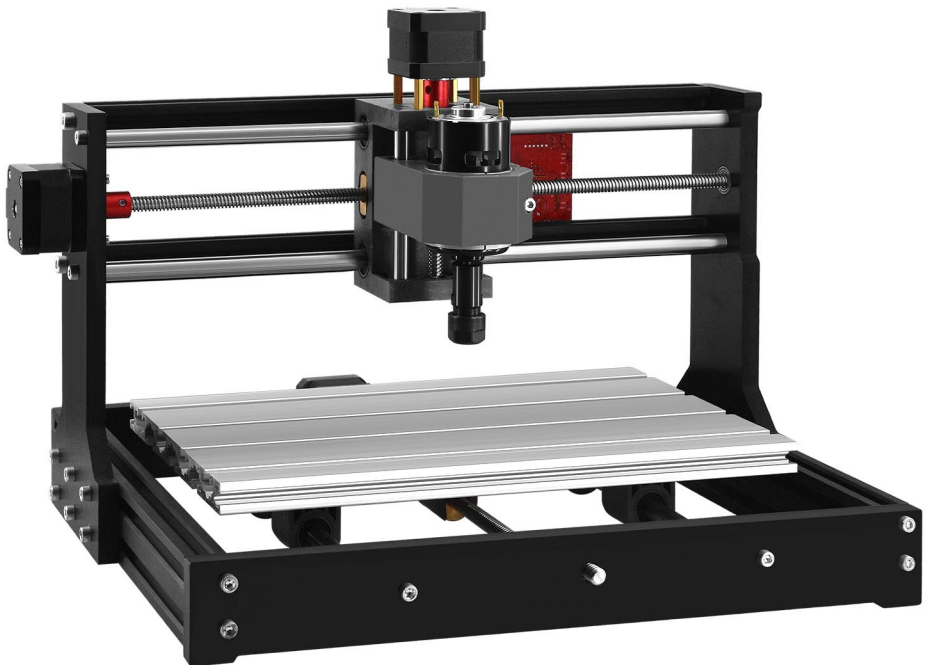


3018 PRO







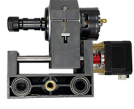

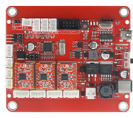







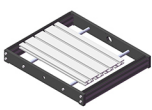






MACHINE PARAMETERS/机器参数

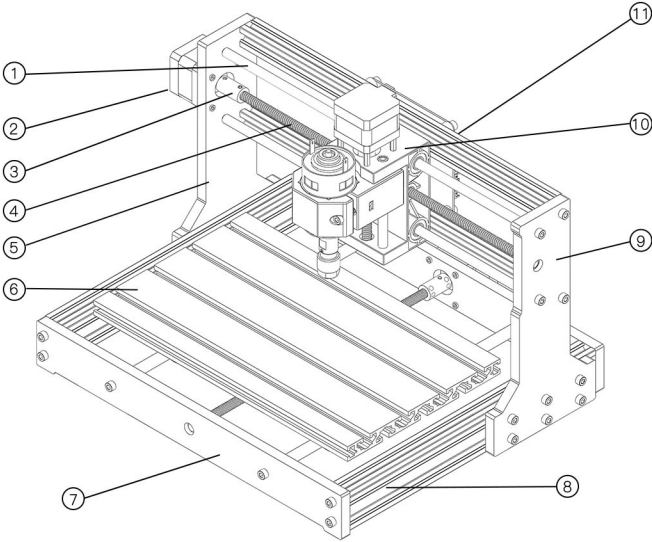
Support software (支持软件)	GRBL control 0.9
Applicable carving materials (适用雕刻材料)	Wood+plastic+aluminum plate+brass+acrylic (木材+塑料+铝板+黄铜+亚克力)
Engraving range (雕刻范围)	300*180*40mm
Machine size (机器尺寸)	420*355*280mm
Spindle parameters (主轴参数)	775 spindle motor (12-36V) : 7000r/min, 9000r/min (775主轴电机)
Stepper motor torque (步进电机扭矩)	1.3A 0.25N.m
power supply (电源供应)	24V 4A
support system (支持系统)	Windows XP / Win 7 / Win 8 / Win10 Home edition (家庭版)
Drill bits	Diameter: 3.175mm, tip:0.1mm length:30mm



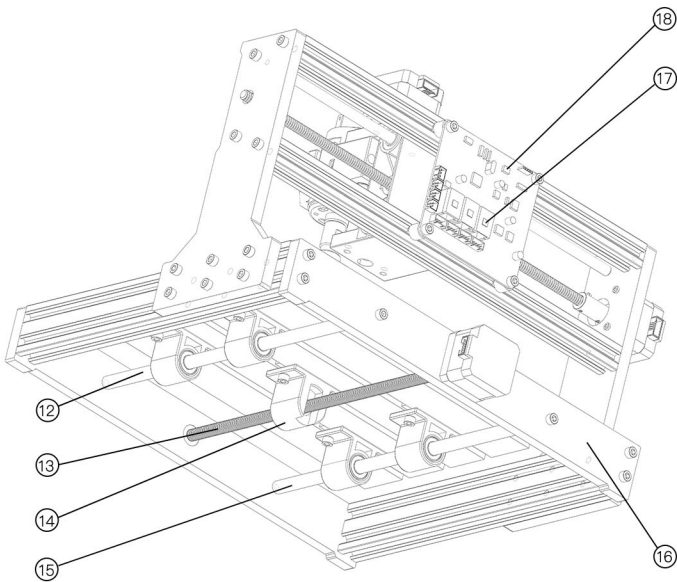
PARTS LIST/配件清单

<p>1 </p> <p>Profile/型材 (360mm) X 2</p>	<p>2 </p> <p>Optical axis/光轴 (360mm) X 2</p>	<p>3 </p> <p>Screw/丝杆 T8-4*300 (Y axis/Y轴) X 1</p>	<p>4 </p> <p>Screw/丝杆 (360mm) X 1 (X axis/X轴)</p>
<p>5 </p> <p>Left side panel 左侧板 X 1</p>	<p>6 </p> <p>Right side panel 右侧板 X 1</p>	<p>7 </p> <p>Z axis module Z轴模组 X 1</p>	<p>8 </p> <p>Power Adapter 电源适配器 X 1</p>
<p>9 </p> <p>Motherboard 主板 X 1</p>	<p>10 </p> <p>T-Nut 2020-M5 X 16</p>	<p>11 </p> <p>M5*14 X 24</p>	<p>12 </p> <p>M3*14 X 8</p>
<p>13 </p> <p>Nylon column 尼龙柱 X 4</p>	<p>14 </p> <p>Toolkit 工具包 X 1</p>	<p>15 </p> <p>Data line 数据线 X 1</p>	<p>16 </p> <p>42 stepper motor components 42步进电机组件 X 2</p>
<p>17 </p> <p>Base 底座 X 1</p>	<p>18 </p> <p>ER11 spindle motor chuck ER11 主轴电机夹头 X 1</p>	<p>19 </p> <p>Clamping screw package 装夹螺丝包 X 1</p>	<p>20 </p> <p>power cable 电源线 X 1</p>
<p>21 </p> <p>Motor wire 电机线 X 1</p>			

KNOW YOUR ENGRAVING MACHINE 了解您的雕刻机



1. $\varnothing 8$ Optical axis guide rod/ $\varnothing 8$ 光轴导杆
2. 42 stepper motor/42步进电机
3. Rigid coupling/刚性联轴器
4. X axis guide 4 screw (L=360)/X轴导4丝杆(L=360)
5. Left side panel/左侧板
6. Y-axis engraving platform/Y轴雕刻平台
7. Front side panel/前侧板
8. 2040 bottom edge profile/2040底边型材
9. Right side panel/右侧板
10. Z-axis motor engraving module/Z轴电机雕刻模组
11. X-axis guide rail profile/x轴导轨型材 (360mm)



12. Y-axis optical axis fixing seat/Y轴光轴固定座
13. Y-axis guide 4 screw (L=290)/Y轴导4丝杆(L=290)
14. Y-axis screw fixing seat/Y轴丝杆固定座
15. Y axis optical axis (L=290)/Y轴光轴(L=290)
16. Rear side panel/后侧板
17. motor driven/电机驱动
18. Engraving machine motherboard/雕刻机主板

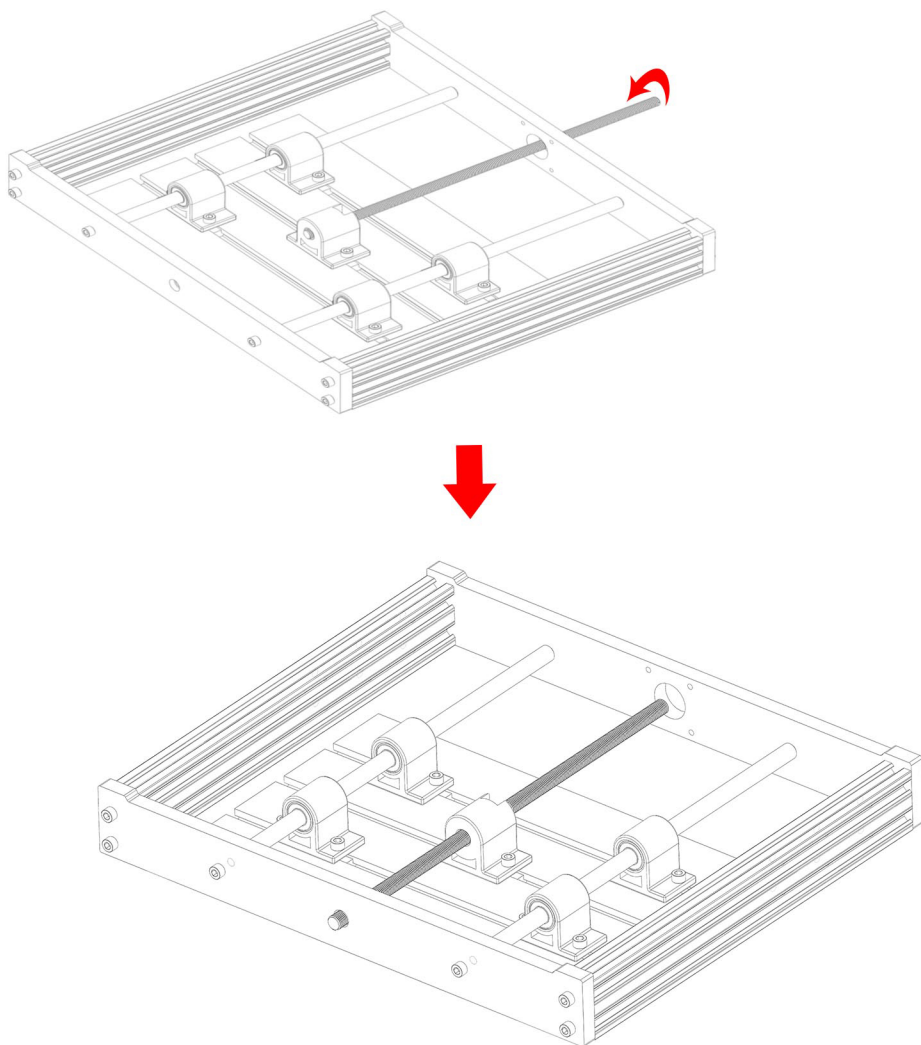
1. Installation of base, screw rod and Y-axis motor assembly 底座与丝杆以及Y轴电机组件安装

1.1. Installation of base screw/底座丝杆的安装

Pass the screw rod through the motor through hole of the rear side plate, align the Y-axis screw rod holder and rotate clockwise to the front side plate bearing hole and flush with the front side plate (to facilitate the installation of the motor in the next step).
将丝杆穿过后侧板的电机过孔，对准Y轴丝杆固定座并且顺时针旋转至前侧板轴承孔并与前侧板平齐（便于下一步电机的安装）。

Use/使用： base/底座 1PCS

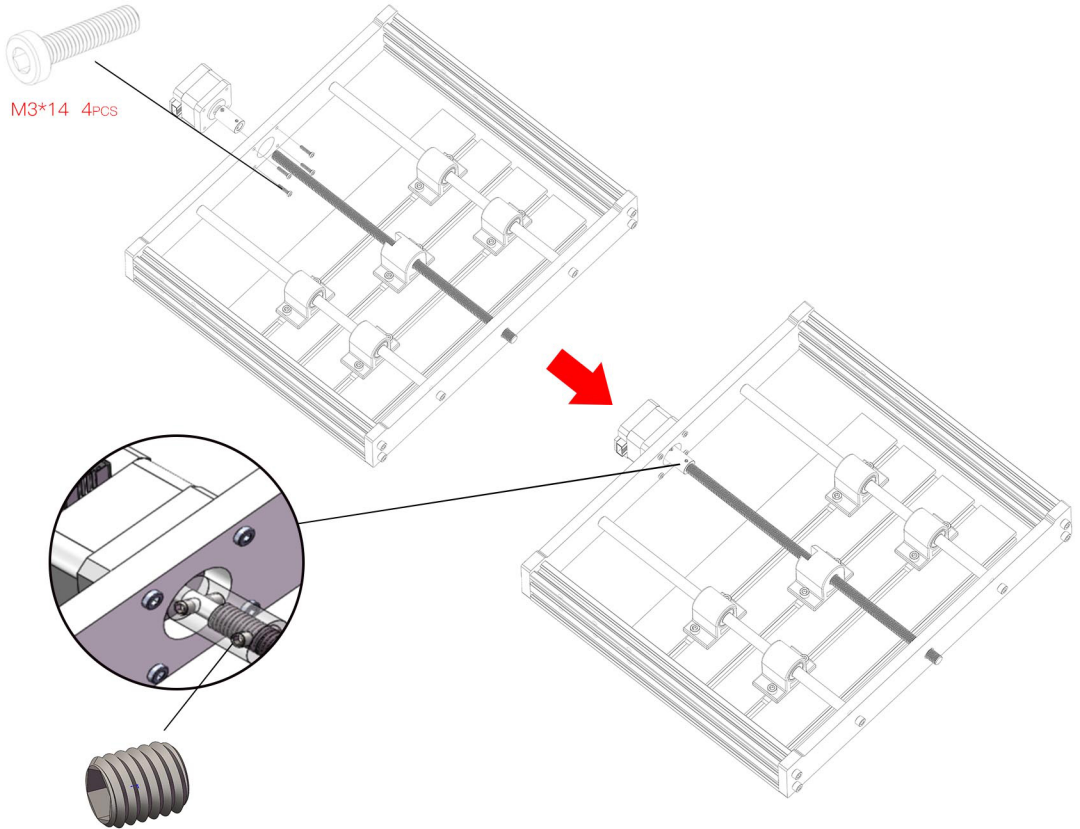
Screw/丝杆L=300MM (Y axis/Y轴) 1pcs



1.2. Installation of Y-axis motor of base/底座Y轴电机的安装

Use/使用: M3*14 4PCS

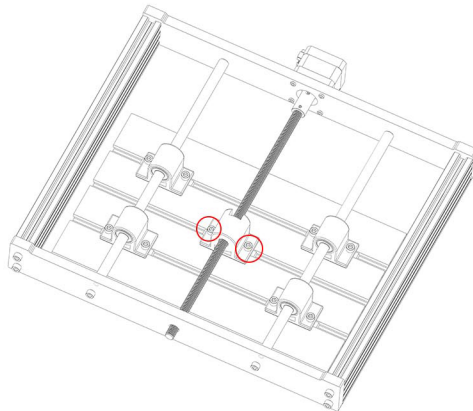
42 stepper motor components/42步进电机组件 1pcs



Assemble the motor and the screw rod, the screw rod and the motor shaft can be contacted to lock the top screw of the rigid coupling.

电机与丝杆装配注意，丝杆和电机轴接触即可锁紧刚性联轴器上顶丝。

1.3. Tighten the screw fixing seat screws of the Y-axis engraving platform 锁紧Y轴雕刻平台的丝杆固定座螺丝。

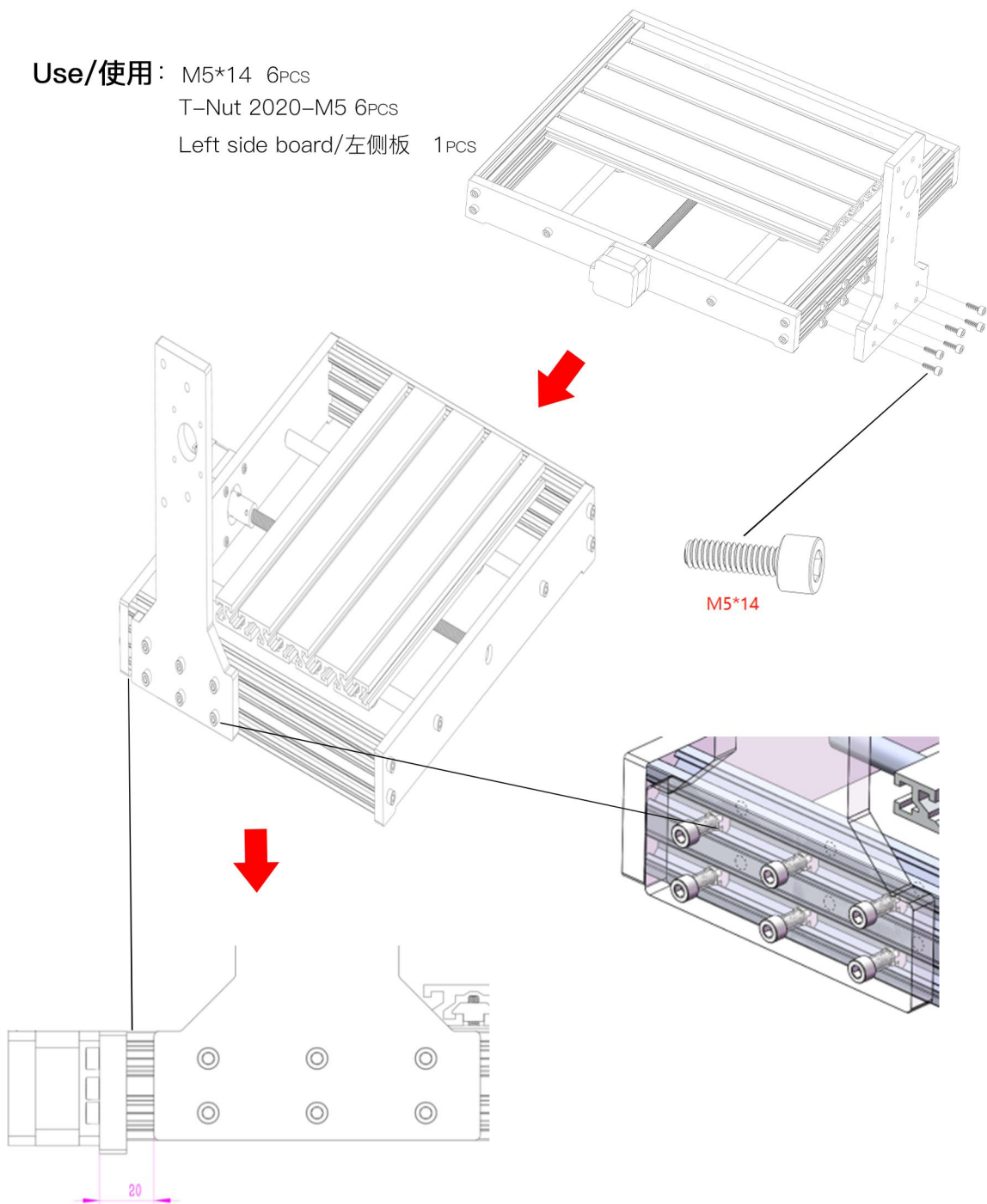


Note: When locking, you need to pay attention to whether the screw rotation is smooth

注意：锁紧时需要注意丝杆转动是否顺畅

2. Installation of the left side plate and base 左侧板与底座的安装

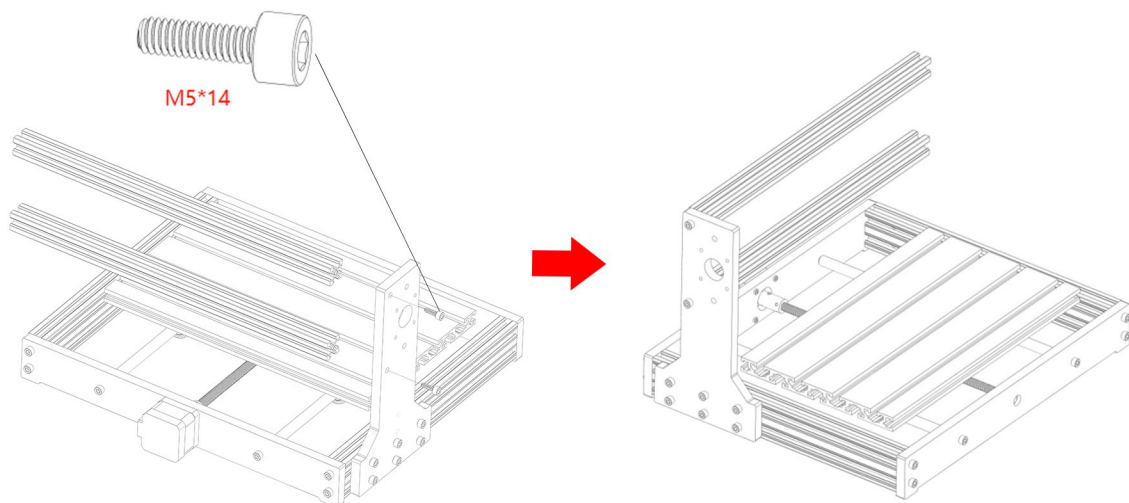
Use/使用: M5*14 6PCS
T-Nut 2020-M5 6PCS
Left side board/左侧板 1PCS



Note: The distance between the left side panel and the rear side panel is 20mm.
注意：左侧板与后侧板的间距为20MM.

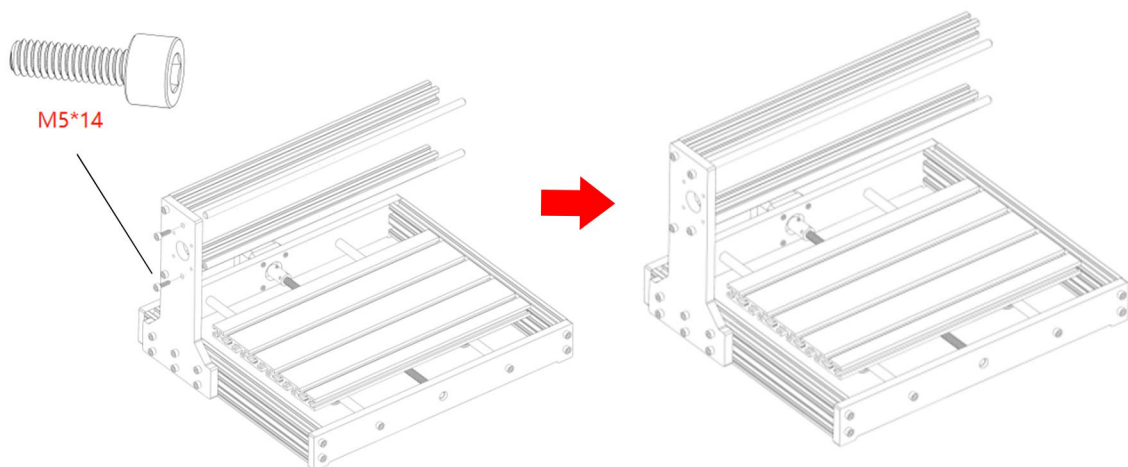
3. Installation of X-axis profile beam and left side plate X轴型材横梁与左侧板的安装

Use: Profile(360mm) 2Pcs
M5*14 2Pcs



4. Installation of X-axis optical axis (L=360mm) and left side plate X轴光轴(L=360mm)与左侧板的安装

Use/使用: Optical axis/光轴(360mm) 2Pcs
M5*14 2Pcs

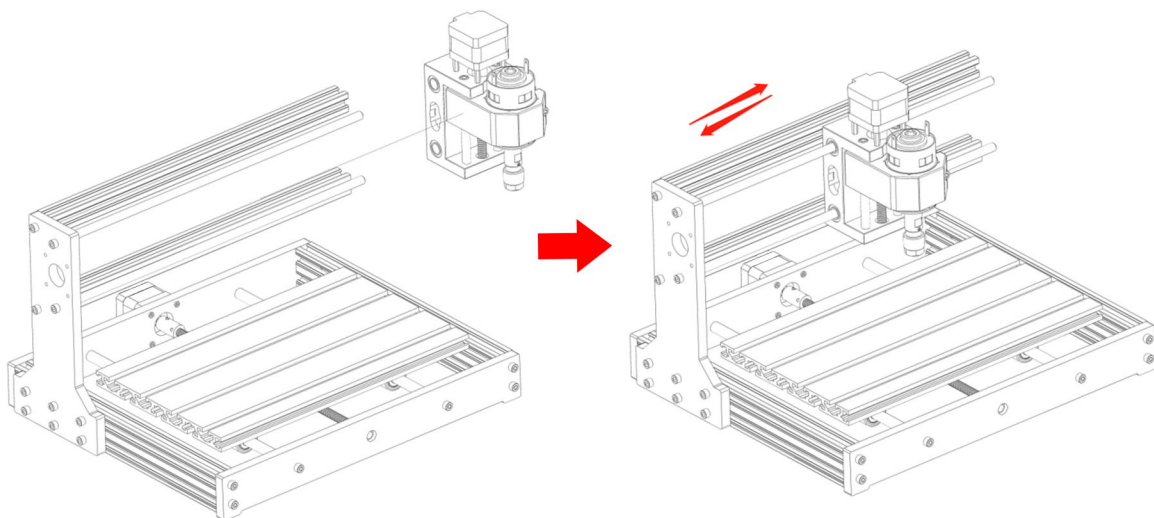


5. Installation of Z-axis module/Z轴模块的安装

Align the optical axis installation hole of the Z-axis module with the optical axis and insert it, and slide it back and forth to check whether the Z-axis module is stuck or not smooth.

将Z轴模组光轴安装孔对准光轴套入进去，来回滑动来检查Z轴模组是否有卡顿或者不顺畅。

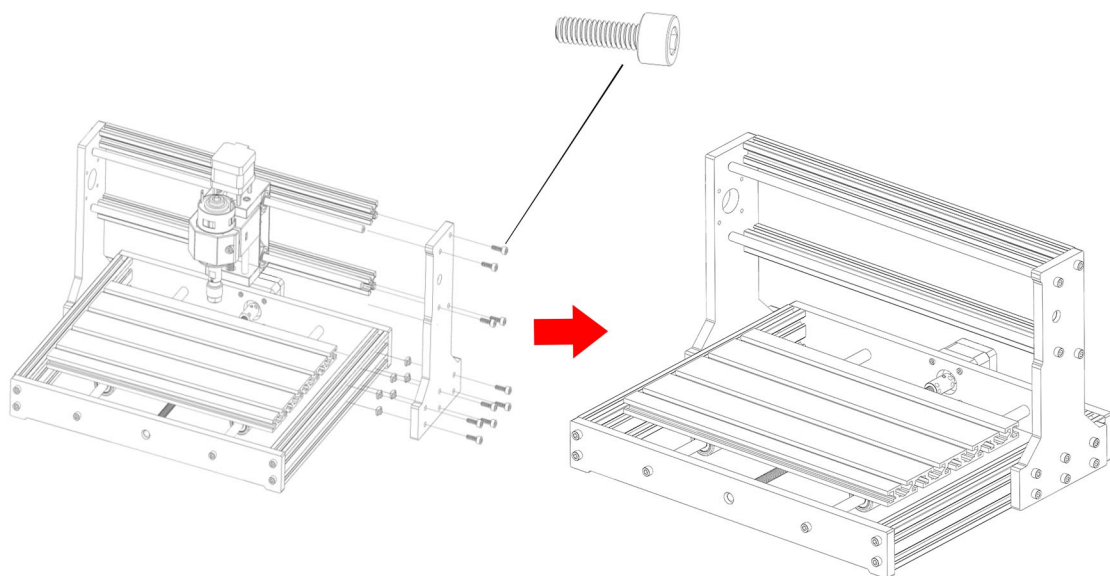
Use/使用： Z axis module/Z轴模组 1Pcs



6. Installation of the right side panel/右侧板的安装

Use/使用： T-Nut 2020-M5 6Pcs

M5*14 10Pcs

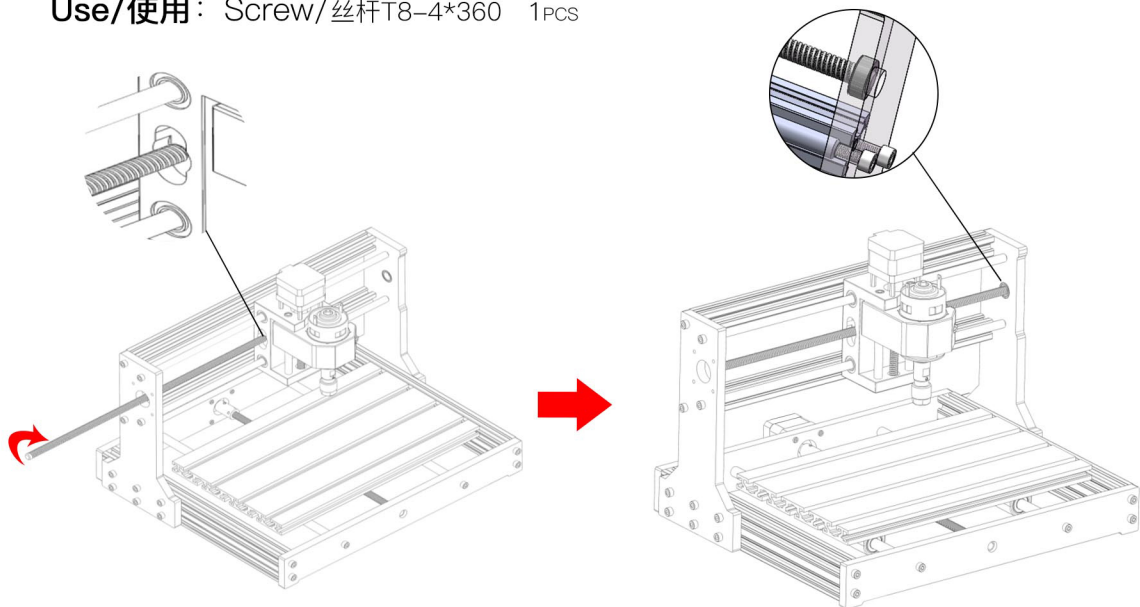


7. Installation of X-axis screw motor/X轴丝杆电机的安装

7.1. Installation of Z-axis module/Z轴模组的安装

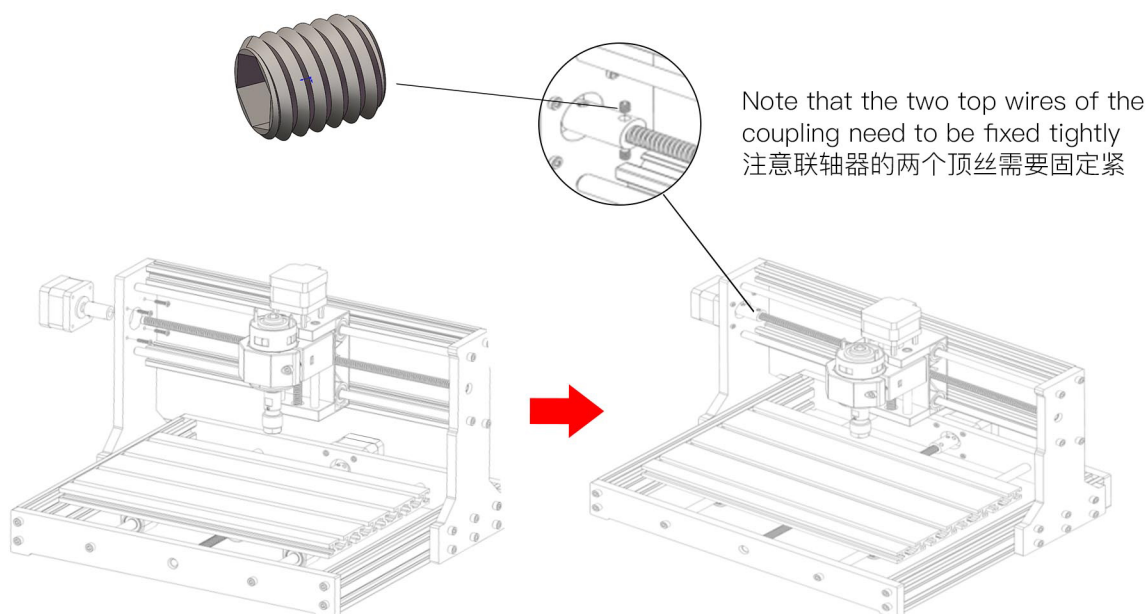
Align the screw with the copper nut of the Z-axis module, and turn it clockwise to the screw bearing installation hole on the right side plate
将丝杆对准Z轴模组的铜螺母，顺时针旋转至右侧板丝杆轴承安装孔位出

Use/使用: Screw/丝杆T8-4*360 1Pcs



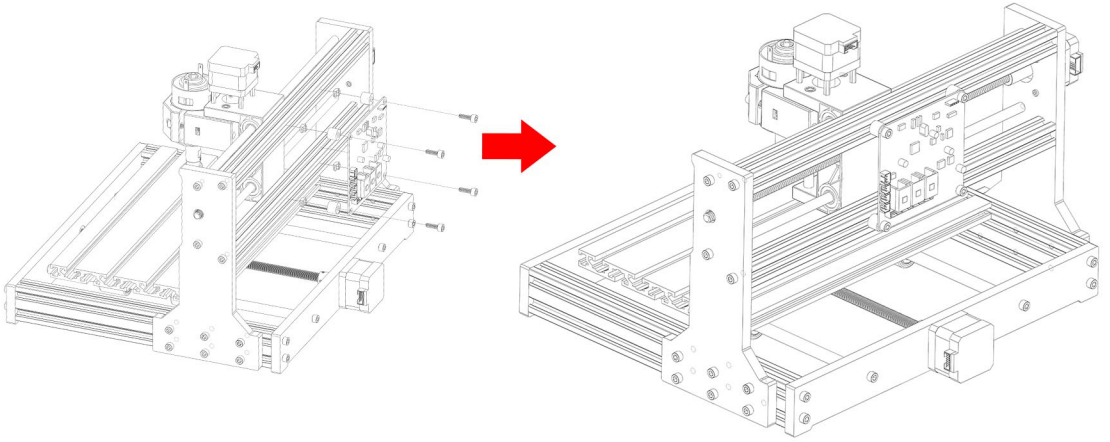
7.2. Installation of X axis motor/X轴电机的安装

Use/使用: 42 stepper motor components/42步进电机组件 1Pcs
M3*14 4Pcs



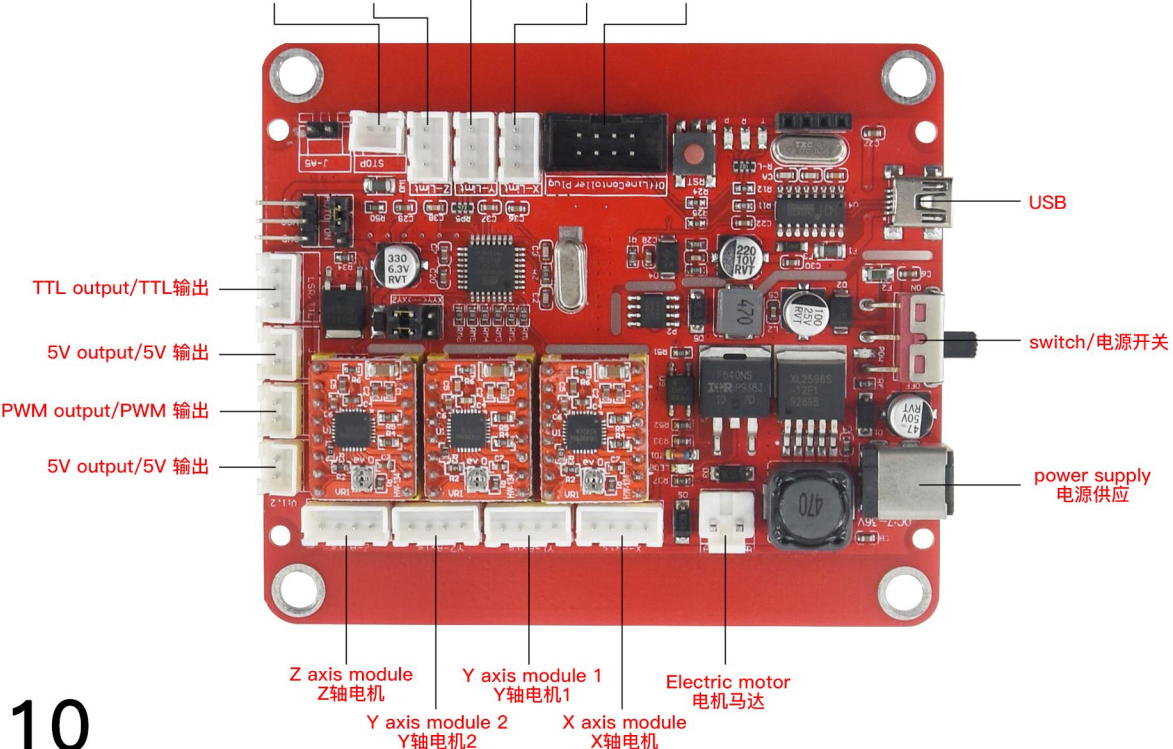
8.Motherboard installation/主板的安装

Use/使用: Motherboard/主板 1PCS
 T-Nut 2020-M5 4PCS
 M5*14 4PCS
 Nylon column/尼龙柱 4PCS

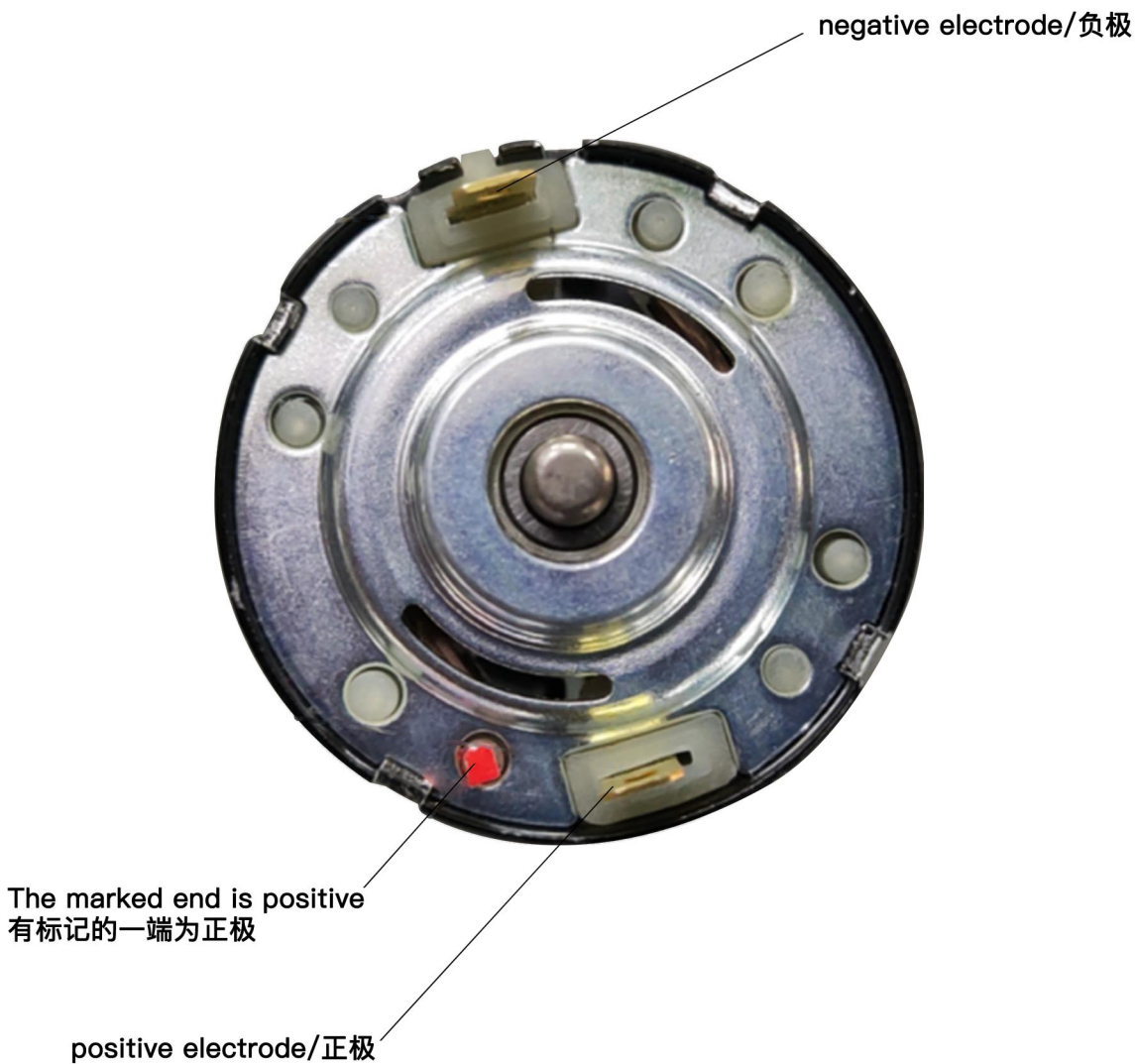


9.PCB motherboard port description/PCB主板端口说明

Z axis limit stop/停止
 Y axis limit Z轴限制
 X axis limit Y轴限制
 AUX1/显示屏 X轴限制



Special instructions for spindle motor wiring: 主轴电机接线特别说明:



GRBL installation tutorial and operation
tutorial see USB flash disk information.
GRBL安装教程以及操作教程见U盘资料.

3018 CNC WITH GUIDE

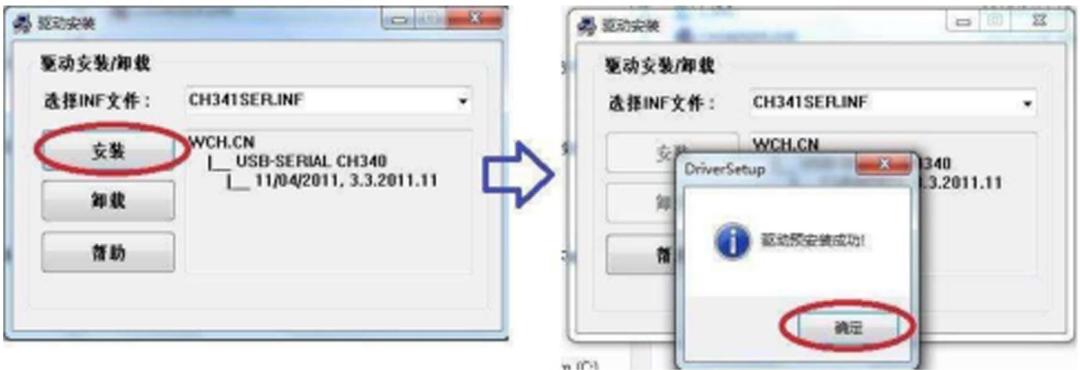
3018 操作指南

1. Debugging/调试

Install CH340 drive Program.
安装CH340驱动器程序。

Double-click CH340SER ---Click Installation--- Wait for the
双击CH340SER-单击安装-等待
installation program to end.
安装程序结束。

(This drive program Supports XP32/64WIN7 32/64)
(此驱动器程序支持XP32 / 64WIN7 32/64)



Right-click My Computer-Management-Equipment manager-Port,
check whether there is CH340 Port number.

右键单击“我的电脑”-“设备管理器”-“端口”，检查是否有“CH340”端口号。

If installation success will appear COMx, remember the number after COM
如果安装成功将出现COMx，请记住COM后面的数字



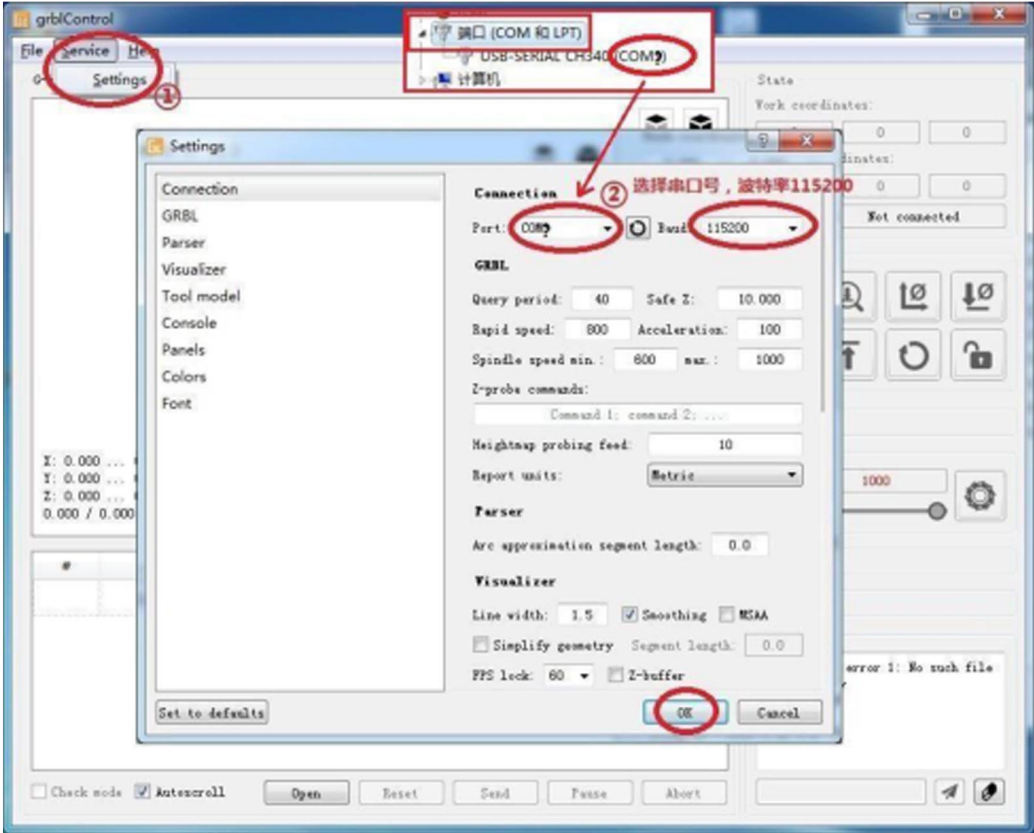
Use GrblControl(Control Software) to connect machine:

使用GrblControl (控制软件) 连接机器:



Open Control Software Grblcontrol. This software is for control CNC 3 Axis carving. First of all set port number, and then return to the main interface of software,software will connection machine automatically.

开放式控制软件GrblControl。该软件用于控制CNC 3轴雕刻。首先设置端口号，然后返回软件主界面，软件将自动连接机器。



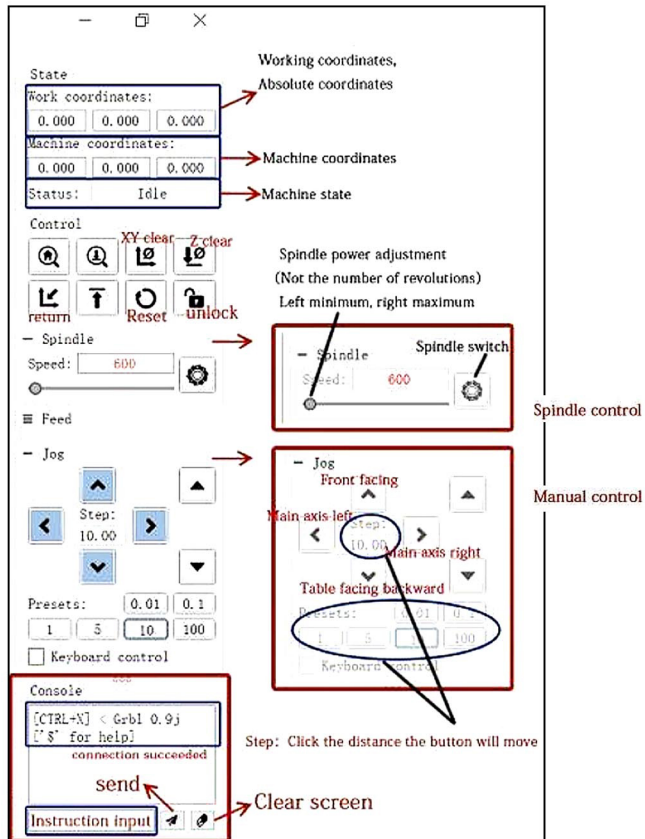
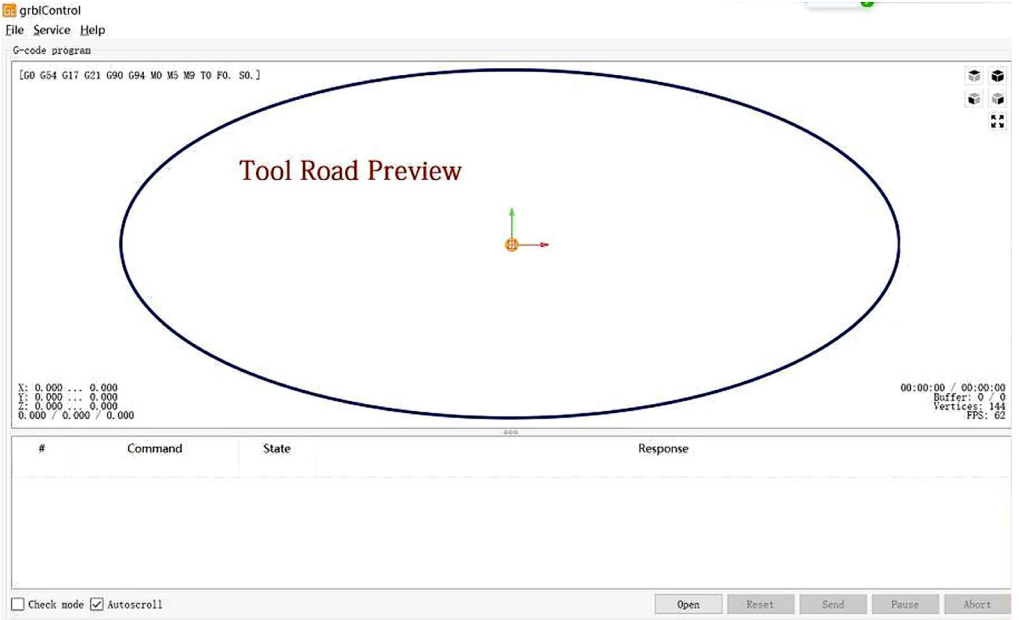
The port number must be the same as last step, otherwise software can not connect the machine. 端口号必须与上一步相同，否则软件将无法连接机器。

If connect machine successfully the main interface will display: [CTRL+X] < Grbl 0.9j ['\$' for help]. If no this display or display other information it means connection failure. Please check whether you have followed all the steps. Or close software, pull out USB wire. And connect USB wire—open software—set port number—connect machine again

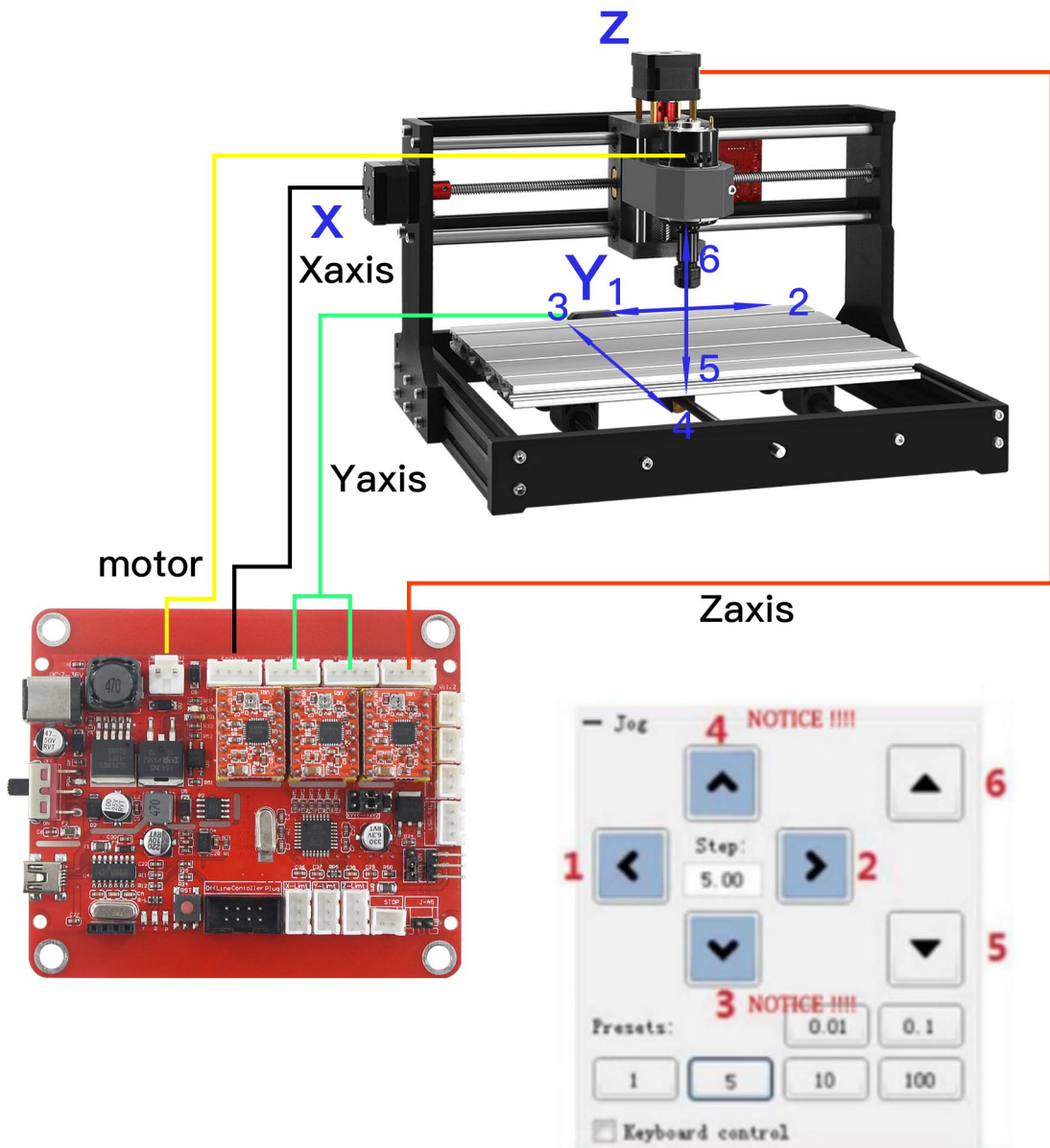
如果成功连接机器，则主界面将显示：[CTRL+X] < Grbl 0.9j ['\$' for help]。如果不显示或不显示其他信息，则表明连接失败。请检查您是否已按照所有步骤操作。或关闭软件，拔出USB线。并再次连接USB有线软件设置的端口号—连接机器

GrblControl The main interface introduction:

GrblControl主界面介绍:



Direction check: check whether the machine moves the same direction when you click on the software
 方向检查: 单击软件时检查机器是否向同一方向移动



If you click the button, The machine is not moving in the corresponding numerical direction, that means the stepper motor in this direction is reversed. Please exchange the motor wire on the control board.

如果单击该按钮，则机器未在相应的数字方向上移动，这意味着步进电机在该方向上反转。请更换控制板上的电机线。

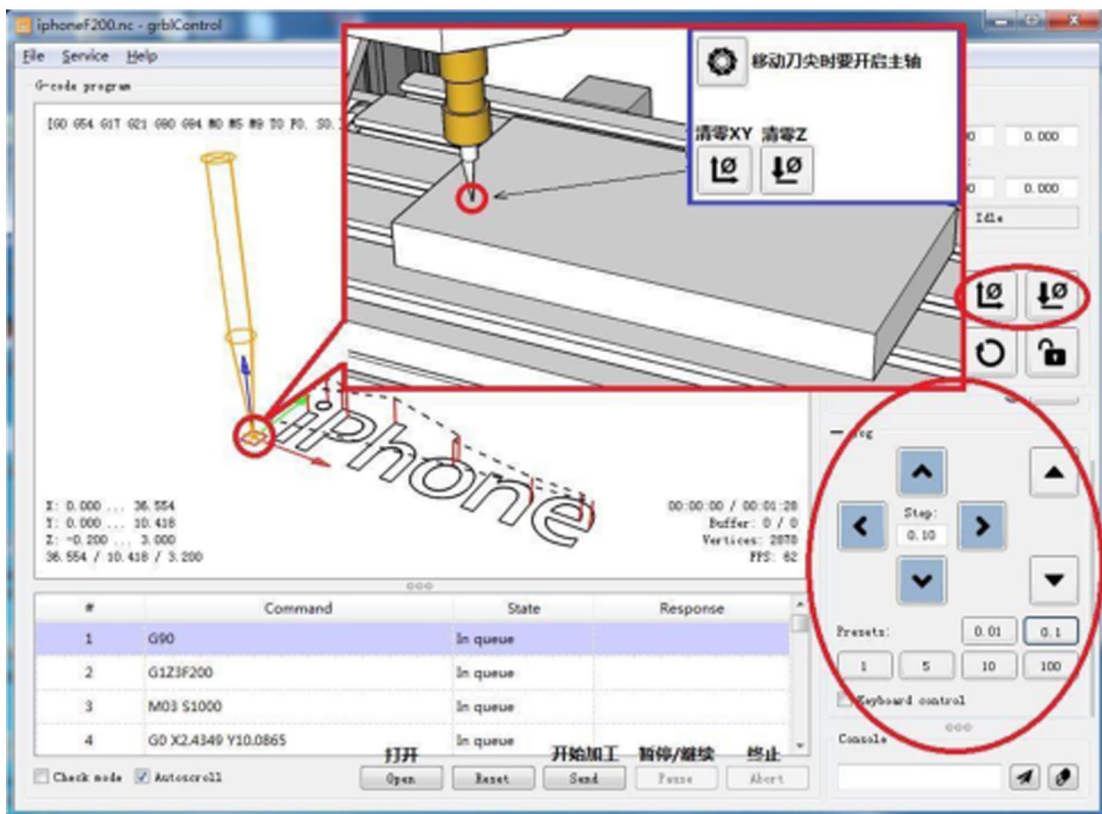
2 .After direction checking we can start to work. 经过方向检查，我们可以开始工作。

Cutter setting: to set the position where we start to work. Move cutter to the position, click xy and z axis coordinate zero clearing, then it will start to engrave at this point.

切刀设置：设置我们开始工作的位置。将刀具移至该位置，单击xy和z轴坐标清零，然后将在此处开始雕刻。

When you do last step please make the spindle running because the cutter may touch the object you want to engrave

当您执行最后一步时，请使主轴运行，因为刀具可能会碰到您想要雕刻的物体



After first testing, then you can try to make your own gcode for engraving.

经过首次测试后，您可以尝试制作自己的gcode进行雕刻。

Gcode is the command that make the machine move. It should be a .nc file. In the folder there are some .nc files. You can check.

Gcode是使机器移动的命令。它应该是一个.nc文件。该文件夹中有一些.nc文件。您可以检查。

Matched software to make .nc file is ARTCAM(In the link it is old version, if you want to get latest version you can search it on internet, it is very common software):

用于制作.nc文件的配套软件是ARTCAM（在链接中为旧版本，如果要获取最新版本，则可以在互联网上搜索它，这是非常常见的软件）：

<https://www.dropbox.com/s/n1pi86z2lu5zd8q/ArtCAM.rar?dl=0>

This is one version, you can also get some other latest version on internet.

这是一个版本，您也可以在互联网上获得其他一些最新版本。

