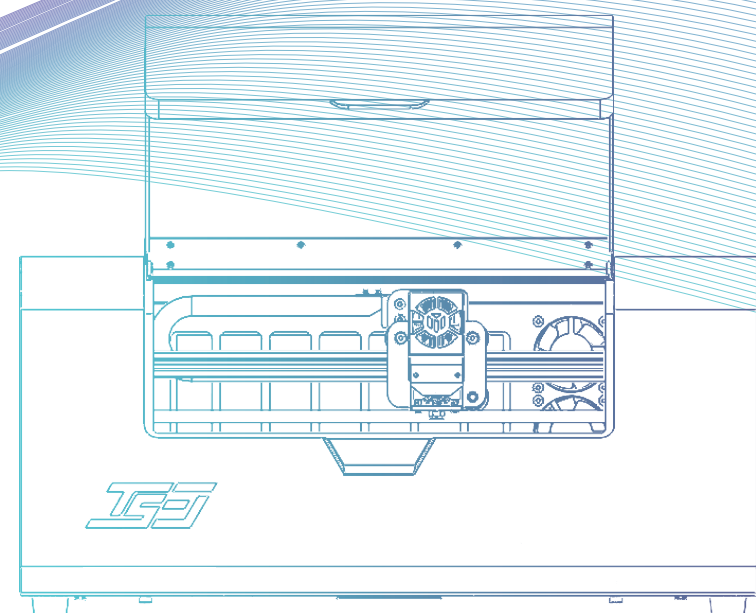




PRODUCT MANUAL

AS A MASTER, ENGRAVE AT HOME

Multiple Functions All In One



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

TEL: +0086-0755-23987110

Http: www.twotrees3d.com

E-mail: service@twotrees3d.com

Facebook: <https://www.facebook.com/twotrees3d>

Address: Room 402, Building 11, No.9 Qilin Road, Nankeng Community,
Bantian Street, Longgang District, Shenzhen, Guangdong, China, 518000



LETTER FROM TWOTREES 致客户的一封信

Dear Customers,

Thank you for choosing us.

It's customer-oriented idea, continuous innovation and pursuit of excellence that enable everybody to have wonderful experience in using process.

We believe that this manual will be helpful.

Hope you enjoy the good time with TwoTrees.

If you have any problems, please feel free to contact us via:

Website: www.twotrees3d.com

Facebook: <https://www.facebook.com/groups/twotrees3Dprinter/>

For general inquiry: info@twotrees3d.com For technical support: service@twotrees3d.com

We will contact you within 24 hours.

Sincerely yours,

TwoTrees Team

亲爱的客户：

感谢您选择了我们品牌。

我们一直以客户为导向, 不断创新, 追求卓越, 使每个人都能在使用过程中拥有丰富的体验。

希望您能享受与俩棵树相伴的好时光。

如果您有任何问题, 请随时与我们各购买平台的客服联系。

其他联系渠道有：

网站: www.twotrees3d.com

售后邮箱: service@twotrees3d.com

咨询邮箱: info@twotrees3d.com

我们将在24小时内联系上您。

祝您生活愉快!

俩棵树团队

PRECAUTIONS 注意事项

Please follow the instruction, due to misuse will be at your own risk.

请按照说明进行操作, 滥用风险自负。

- 1. Avoid looking steadily at the laser, which may damage your eyes.**
避免长时间直视激光, 可能导致视力受损。
- 2. Avoid touching directly during the machine working.**
避免在运作时用肢体接触机器。
- 3. Before engraving, put the honeycomb structure platform under the object.**
雕刻前, 把蜂窝平台放在要雕刻或切割的物体下方。
- 4. Avoid combustible object or gas.**
避免可燃物体或气体。
- 5. Keep it away from children or pregnant women.**
远离儿童或孕妇。
- 6. Do Not take apart the laser without instructions.**
请勿擅自拆解激光器。
- 7. Do Not use it on material that reflects the light.**
请勿在会反射光的材料上使用。
- 8. Wear goggles while opening the acrylic cover.**
使用时如打开盖子需戴上护目镜。
- 9. Turn off the power when not use.**
不使用时请关闭电源。

SAFETY GUIDELINES 安全指导

Warning: Laser engraving machine cannot directly carve or cut material that reflects the light; may cause injury.

警告: 激光雕刻机不能直接作用于镜面物体, 这可能会对操作员造成伤害或激光灼伤。

The product has a high engraving speed and is not recommended for industrial cutting. And the laser head is a consumable.

该产品雕刻速度快, 不建议用于工业加工。而且激光头是消耗品。

Do not operate the laser head directly with your hands. Please wear goggles.

在机器上工作时, 不建议直接看激光头。请勿直接用手操作激光头。

The laser diode is a sensitive component, please prevent static damage. (This product has an electrostatic protection design, but there is still a possibility of damage).

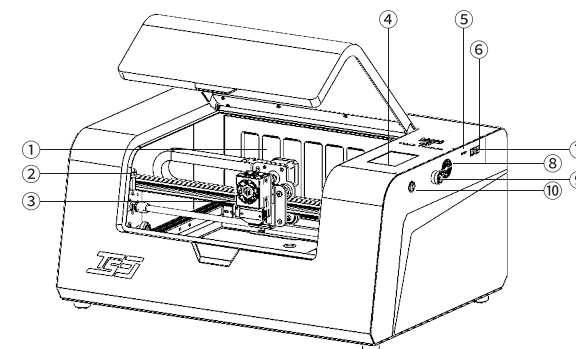
激光二极管是一个敏感组件, 请注意避免静电损坏 (本产品有静电保护设计, 但有损坏的可能)

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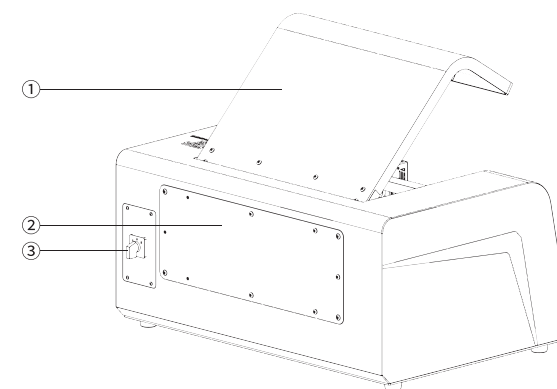
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ABOUT YOUR MACHINE 关于机器

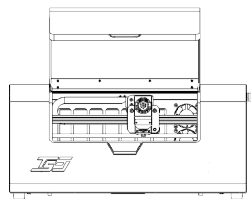
1. Smoke filtration system 烟雾过滤器
2. X-axis End Stop X轴限位开关
3. Laser Module 激光模组
4. Touch Screen 触摸屏
5. TF Card Post TF卡槽
6. Power Port 电源插口
7. USB Port USB接口
8. Fan Intake 风扇进气口
9. Flash Buzzer 闪光蜂鸣器
10. Switch 开关



1. Acrylic Protective Cover 亚克力保护壳
2. Filter Cover 过滤器更换口
3. Y-axis Toggle Switch Y轴切换开关



PART LIST 配件表



TS3 Machine
整机



Tool Bag
工具包



Power Adapter
电源适配器



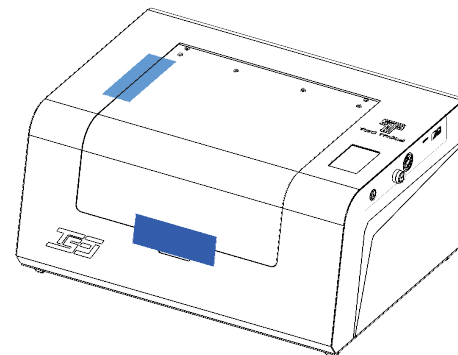
USB Cable
数据线



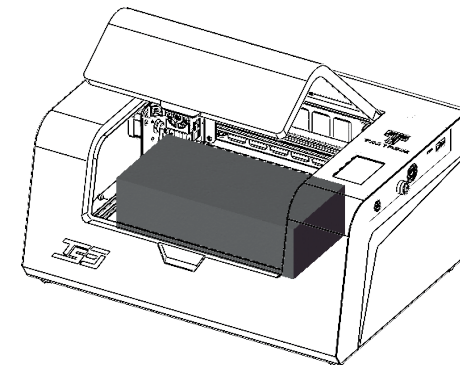
Goggle
防护眼镜



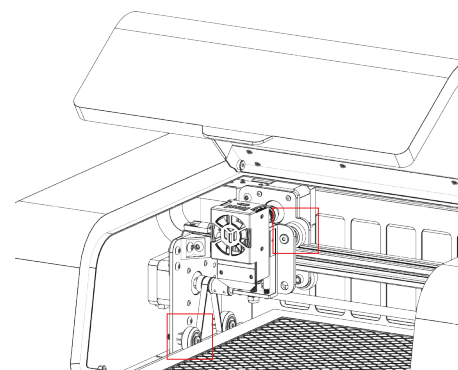
Power Cable
电源线



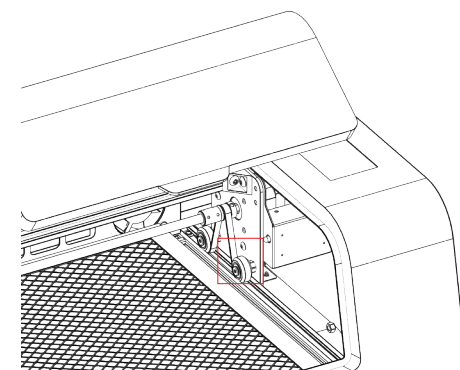
A.01



A.02



A.03

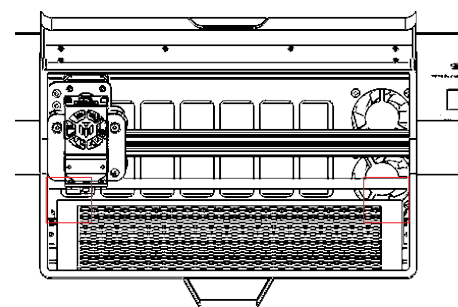


A.03

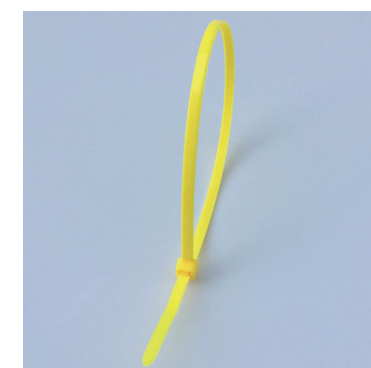
BEFORE USE 使用前准备

1. Remove the masking sticker attached on the metal housing and the acrylic cover. (Figure A.01)
2. Open the acrylic cover and take out the accessory packing box. (Figure A.02)
3. Cut the yellow ties fixed near the synchronous wheels of the X and Y axes, and check whether the laser head can move normally. (Figure A.03)
4. Cut the ties fixed on the honeycomb platform, take out it and check to ensure that there is nothing left in the machine. (Figure A.04)

1. 移除附着在金属外壳和亚克力外罩之间的美纹贴纸。(图示A.01)
2. 打开亚克力外罩, 取出配件包装盒。(图示A.02)
3. 切断拆除固定在X轴和Y轴同步轮附近的扎带, 并检查X轴和Y轴是否可以正常移动。(图示A.03)
4. 切断拆除固定于蜂窝板上的扎带, 取出蜂窝板检查确认机器内没有剩余杂物。(图示A.04)



A.04



Yellow Tie 黄色扎带

FOCUS ADJUSTMENT 焦点调整

Focus adjustment before engraving:

When engraving, the focus needs to be on the surface of the object. The focusing distance of the laser lens is 50mm. The 50mm high cushion blocks (46mm + 2mm + 2 * 1mm) can be used.

Focus adjustment before cutting:

During cutting, the focus needs to be in the middle of the fault of the engraved object. Therefore, according to different plate thickness, different cushion block combinations are used. Sometimes, it is necessary to rotate the lifting Z-axis knob on the laser head counterclockwise for more fine adjustment.

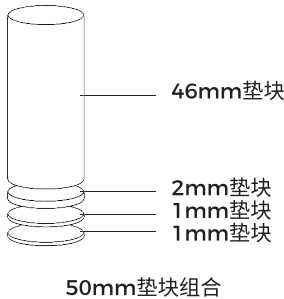
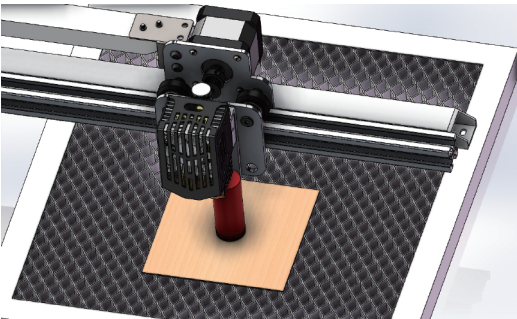
雕刻时焦点调整:

由于雕刻时, 焦点是需要在被雕刻物体表面, 激光镜片定焦距离为50mm。可以使用50mm高度的垫块组合 (46mm+2mm+2*1mm)

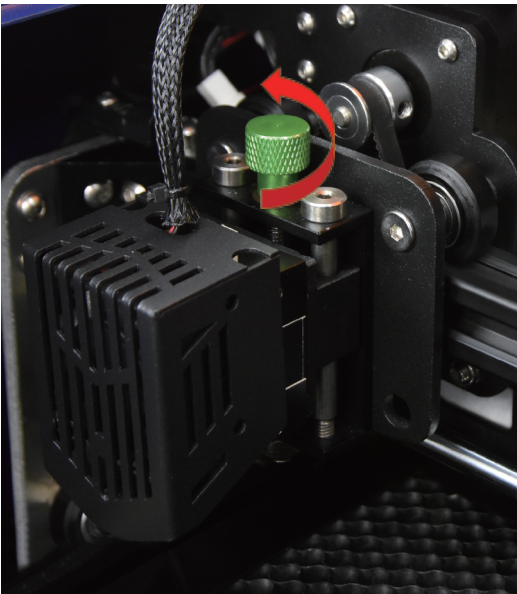
切割时焦点调整:

由于切割时, 焦点是需要在被雕刻物体断层中间, 所以应该根据不同板厚, 使用不同的垫块组合。有时需要逆时针旋转激光头上的Z轴升降旋钮进行更精细的调整。

Thickness of Plywood 木板厚度	Height of cushion block + Rotation of Z-axis Knob 垫块高度+Z轴旋钮操作
1mm	49mm (46mm + 2mm + 1mm) + half a turn 逆时针半圈 (0.5mm)
2mm	49mm (46mm + 2mm + 1mm)
3mm	48mm (46mm + 2mm) + half a turn 逆时针半圈 (0.5mm)
4mm	48mm (46mm + 2mm)
5mm	47mm (46mm + 1mm) + half a turn 逆时针半圈 (0.5mm)
6mm	47mm (46mm + 1mm)
7mm	46mm + half a turn 逆时针半圈 (0.5mm)
8mm	46mm



The position of cushion block
垫块组合使用位置



The direction shown is counterclockwise
红色箭头方向为逆时针

TEST BEFORE USE 机器测试

1. Plug in to turn on the machine.

2. Test On Move:

On the screen, click "Control" → "HHome".

After homing, click "Position" and click "X+" "Y-" to move. (Figure A.05)

3. Test On Light Emission:

Click "Adjustment" and choose "5%".

Wear goggles and observe whether the laser head emits blue ray.

Then click "Off" to turn off the laser. (Figure A.06)

4. Test On Engraving:

Back up the data of TF card to your computer first.

Insert the TF card into the slot on the left side of the machine.

Place Kraft paperboard at the appropriate position in the top left corner of the honeycomb platform.

On the touch screen, click "Control" and "Home" to return to the initial position.

Click "Engrave", choose "TS3-Test. NC" file (Figure A.07), enter the interface below (Figure A.08).

Click "Frame" to confirm the position. If the position is inaccurate, move the X / Y axis and click "Position" and "Frame" to reset. Click "Carve" to engrave until the position is confirmed.

1. 连接电源, 打开电源开关, 启动机器。

2. 移动测试:

在触摸屏主界面上, 点击“Control”, 进入下一界面, 点击“HHome”进行归零操作。归零完成后, 点击“Position”进行位置设定, 点击“X+”“Y-”进行移动。(图示A.05)

3. 出光测试:

点击“Adjustment”, 选择“5%”。佩戴好防护眼镜, 观察激光模组是否发射蓝光。然后点击“OFF”关闭激光。(图示A.06)

4. 雕刻测试:

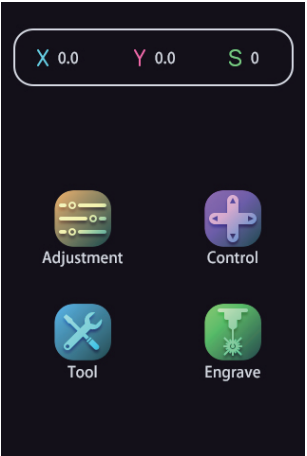
先备份TF资料至自己的电脑上。

将TF卡插入到机器左侧面的卡槽中。

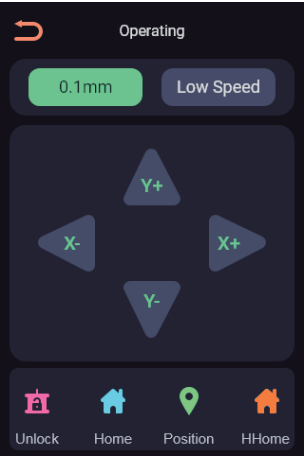
将牛皮纸板摆放到机器蜂窝左上角的合适位置。

在主界面上, 点击“Control”, 进入下一界面。点击“Home”, 回到初始位置。

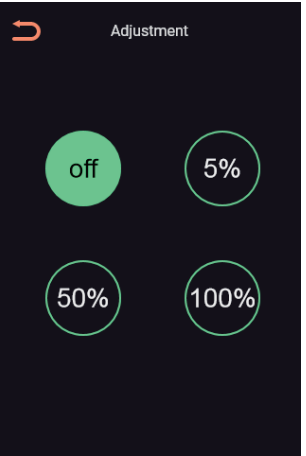
在主界面上, 点击“Engrave”, 选择“TS3-Test.NC”文件(图示A.07), 进入下界面(图示A.08), 点击“Frame”进行雕刻位置确认。如果位置错误, 移动X/Y轴, 再点击“Position”进行位置设定, 重新点击“Frame”。直到位置确认后, 点击“Carve”进行雕刻。



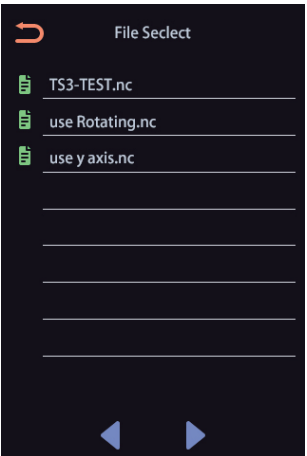
Main interface 主界面



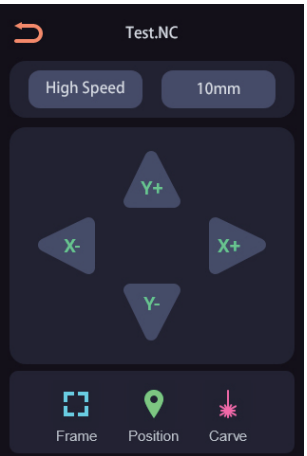
A.05



A.06



A.07



A.08

GRBL INTRODUCTION 入门使用教程

1. Software Downloading

LaserGRBL is one of the most popular DIY laser engraving software, which can be downloaded in LaserGRBL website <http://lasergrbl.com/download/> (The installation package is also available on the TF card from the manufacturer or USB flash disk).

Brief introduction:

LaserGRBL is easy to use. However, LaserGRBL only supports Windows system (Win XP/Win 7 / Win 8 / XP/Win 10).

For Mac users, you can also choose LightBurn, which is also an impressive engraving software, but it's not free. And this software also supports Windows system.

Note: The engraving machine needs to be connected with the computer during engraving, and the software of the engraving machine cannot be turned off.

2. Software Installation

Double click the software installation package to start the software installation and click "Next" until the installation is complete.

1. 软件下载

LaserGRBL是最流行的DIY激光雕刻软件之一,可以在LaserGRBL网站:<http://lasergrbl.com/download/>下载。(厂家附送的TF卡或U盘中也有安装包)

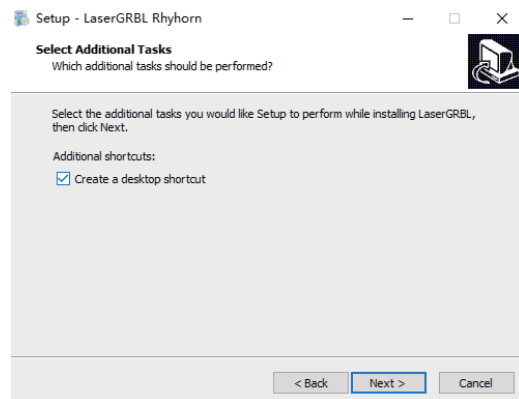
简介:LaserGRBL是一款开源、容易上手且功能强大的软件,不过遗憾的是LaserGRBL软件只支持Windows系统 (Win XP / Win 7 / Win 8 / XP / Win 10)

当然对于Mac用户,可以选择LightBurn。LightBurn也是一款非常优秀的雕刻机软件,不过这个软件是付费的。这款软件也支持Windows系统。

注意:雕刻过程中,雕刻机需要和计算机保持连接,且不能关闭软件。

2. 软件安装

双击软件安装包,开始软件安装,一直点击“下一步”直到安装完成。

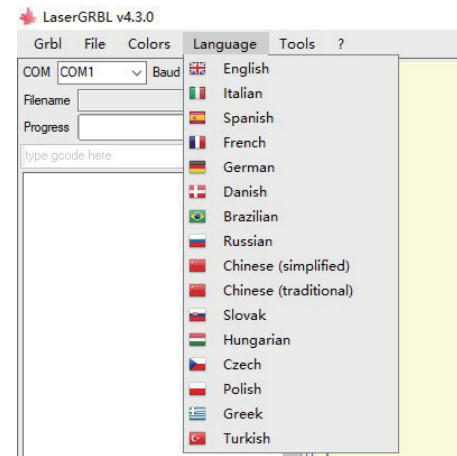


3. Language

Click "Language" on the menu at the top to select the language you need.

3. 语言切换

点击软件界面上方的菜单“language”,进入下拉菜单选择对应的语言。



4. Load Engraving File

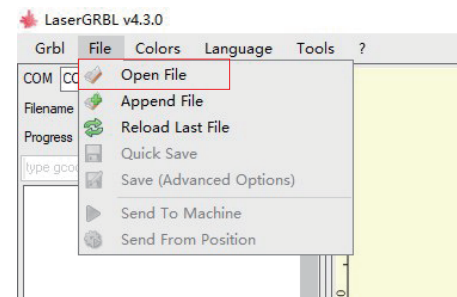
Click "File" and "Open File" in turn, as shown in figure 8.1, and then select the graph you want to engrave.

LaserGRBL supports files in the formats of NC, BMP, JPG, PNG, etc.

4. 生成GCODE文件

点击软件界面上方的菜单“文件”,进入下拉菜单选择“打开文件”。进入图片文件选择界面,选择需要雕刻的文件,并点击“打开”。

(目前LaserGRBL支持NC、BMP、JPG、PNG、等格式的文件)

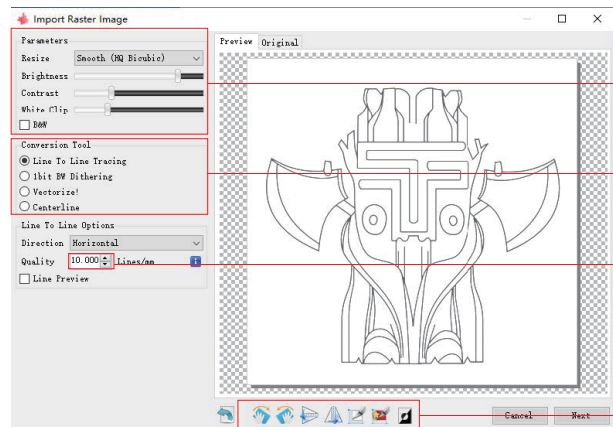


5. Set picture parameters, engraving mode and engraving quality.

1. LaserGRBL can adjust the sharpness, brightness, contrast, highlight and other properties of the target graph. We can preview window effect during adjustment, and adjust the effect to your satisfaction.
2. In the engraving mode, "Line-to-line Tracking" and "1Bit Shaking" can usually be chosen; "1Bit Shaking" is more suitable for carving grayscale graph. Please Choose "Vector Diagram" or "Center Line" if you need cutting.
3. Engraving quality essentially refers to the line width of laser scanning. This parameter mainly depends on the size of the laser spot of the engraving machine.
Note: The recommended engraving quality range is 12-15. Different materials have different reactions to laser irradiation, so the specific value depends on the specific engraving material.
4. At the bottom of the preview window, the graph can also be rotated, mirrored, cut and so on. After completing the above settings, click next to enter the settings of engraving speed, engraving energy, and engraving size.

5. 设定图片参数、雕刻模式、雕刻质量

1. LaserGRBL可以调整目标图片的锐度、亮度、对比度、高光等属性。调整时预览窗口效果，调整到自己满意的效果。
2. 雕刻模式通常选择“线到线跟踪”和“1bit抖动”。“1bit抖动”更适合雕刻灰度图形。如果要进行切割，请选择“矢量图”或者“中心线”的雕刻模式。
3. 雕刻质量本质上是指激光扫描的线宽，这个参数主要依赖于雕刻机激光斑点的大小。
建议使用的雕刻质量范围为12-15，不同的材质对于激光照射的反应不同，因此具体数值还取决于具体的雕刻材质。
4. 在预览窗口的下方还可以对图像进行旋转、镜像、剪切等操作。
在完成以上设置后，点击下一步进入雕刻速度、雕刻能量和雕刻尺寸的设置。



**Color adjustment;
intensity adjustment**
图片调色；明暗度调整

Choose engraving mode
雕刻模式选择

Quality: 12-15 (recommended)
质量：12-15（建议）

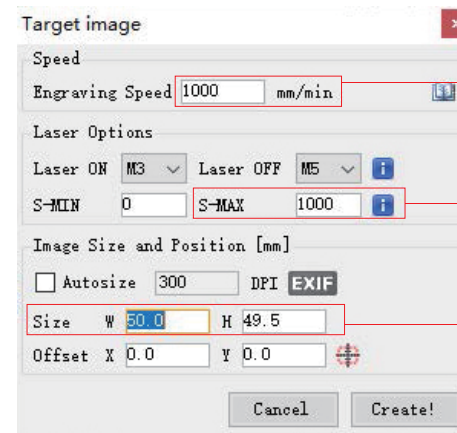
**Direction adjustment;
pattern cutting**
方向调整；图形裁剪

6. Set engraving speed, engraving energy, and engraving size

1. The recommended engraving speed is 1000, which is considered to be a relative appropriate value after repeated experiments. Of course, you can increase or decrease this speed according to your preference. A faster engraving speed will save time but lead to the decline in the engraving effect. Slower speed is the opposite.
2. In laser mode, there are two instructions: M3 and M4. M4 instruction is recommended for engraving in "1bit jitter" mode, and M3 instruction is recommended for other cases. If you have only M3 instruction on the laser, please check whether the laser mode is used in the GRBL configuration. Please refer to the official instructions of LaserGRBL for GRBL configuration.
3. Choice of engraving energy. Choose it according to different materials.
4. Finally, set the size and click the "Create" button to complete the setting of all engraving parameters.

6. 设定雕刻速度、雕刻能量和雕刻尺寸

1. 雕刻速度建议使用1000，这是经过反复实验认为雕刻效果比较合适的一个值。当然您可以根据自己的喜好增大或降低这个速度，更快的速度将节省雕刻时间，但可能会带来雕刻效果的下降，更慢的速度则与之相反。
2. 在激光模式中，打开激光有两个指令，M3和M4；用“1bit抖动”模式雕刻时建议使用M4指令，其他情况建议使用M3指令。如果您的激光只有M3指令能打开，请检查GRBL配置里面是否启用了激光模式，关于GRBL配置的说明请参考LaserGRBL的官方说明。
3. 雕刻能量的选择根据不同的材质选择不同的能量。
4. 最后设置好您想要雕刻的尺寸大小，点击“创建”按钮就完成了所有雕刻参数的设置。



**The default engraving speed is 1000
and can be adjusted as required**
默认1000雕刻速度，根据需求调整

**Set the energy value. Improper energy
will affect the engraving effect**
能量值设定，能量不合适会影响雕刻效果

**Enter the size of the graph you want
to engrave**
输入自己想要雕刻的图形大小

Save GCODE file

Click "File" in the menu at the top of the software interface, enter the drop-down menu, and select "Save". Copy the saved .nc file to the TF card and insert the TF card into the engraver to use the file to engrave your work.
Use the "MKSLaserTool" software in TF to add preview codes to Gcode files.

保存GCODE文件

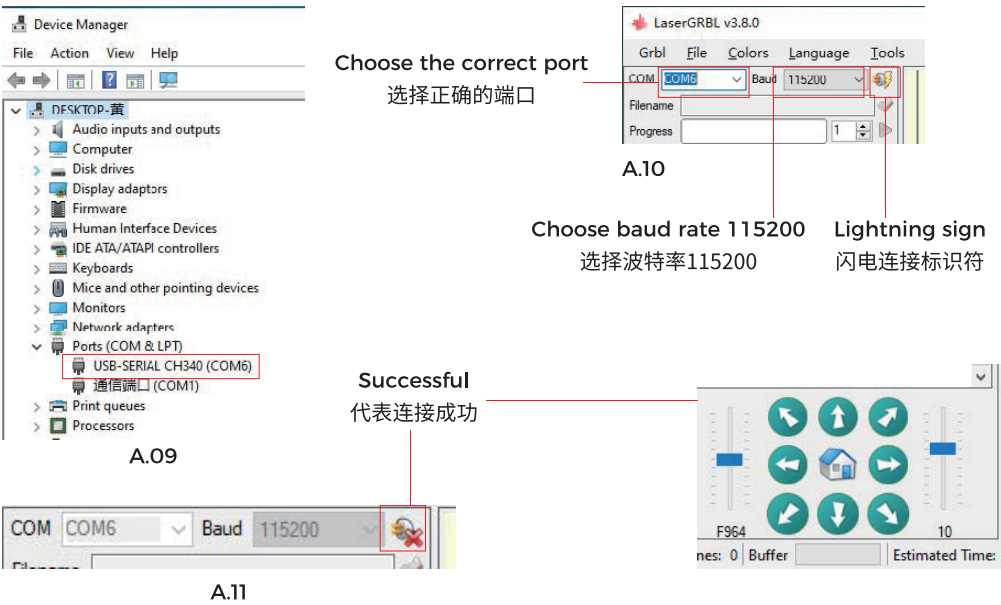
点击软件界面上方的菜单“文件”，进入下拉菜单选择“保存”。后缀名为“.nc”，拷贝保存后的.nc文件至TF卡中，放置雕刻机内即可使用该文件雕刻作品。
使用TF卡中的"MKSLaserTool"软件为Gcode文件增加预览代码。

CONNECT PC 机器连接PC端使用

- 1. Connect the machine with the computer installed with LaserGRBL software with USB data cable.
- 2. Plug in the power.
- 3. Open LaserGRBL on the computer.
- 4. Select the specific port number and baud rate—115200 (Figure A.10)
- 5. Click the lightning sign. When the lightning sign changes to the red "X" and the direction sign is lit, it indicates that the connection is successful. (Figure A.11)

Generally, the COM port does not need to be selected manually, unless multiple serial port devices are connected to the computer, you can find the port of the machine in the device manager of the windows system (as shown in Figure A.09). A simpler way is to try the displayed port number one by one.

- 1. 用USB数据线，将激光雕刻机与安装有LaserGRBL软件的电脑连接。
 - 2. 给激光雕刻机插上电源。
 - 3. 在电脑上打开LaserGRBL软件。
 - 4. 在软件中选择正确的端口号及波特率——115200。(图示A.10)
 - 5. 点击软件中的闪电连接标识，当闪电标识变为红色的X标识并且方向标被点亮则表示连接成功。(图示A.11)
- 一般情况下，COM口不用手动去选择。但是如果你有多个串口设备连接到计算机时需要手动去选择。可在Windows系统中的设备管理器中找到激光雕刻机的端口(图示A.09)，更简单的办法是把显示出来的端口号挨个试一遍。



Note:

If you cannot find the correct port in the "Ports", you may need to

Method 1: Click "Tools" in the menu to install CH340 driver (This function is not available in some software versions);

Method 2: Copy the "CH340ser. Exe" file in the TF Card (USB flash disk) to the computer and install it.

提示:如端口栏没有出现正确的端口:

方法1:点击菜单栏“Tools”安装CH340 驱动(软件部分版本无此功能);

方法2:拷贝TF卡(U盘)中的“CH340SER.EXE”文件至电脑,并安装。

- 1. After the laser head has been used for a period of time, it is necessary to clean the lens of the light outlet under the laser head to ensure normal cutting ability
- 2. Wiping the lens must be done after the machine is powered off, otherwise the laser will hurt people
- 3. After wiping the lens, please dry it naturally for about 3-5 minutes and wait for the lens to dry before powering it on, otherwise the light will cause the lens to break
- 4. You can watch the video tutorial by scanning the QR code of the manual

- 1. 激光头使用一段时间后,需清洁激光头下方出光口镜片,保证切割能力正常
- 2. 擦拭镜头必须在机器断电后进行,否则激光伤人
- 3. 擦拭镜头后请自然风干约3-5分钟等待镜头干燥后再通电使用,否则出光会导致镜片破裂
- 4. 可通过扫描说明书二维码观看视频教程

REFERENCE OF MATERIALS 常见雕刻材质参数推荐

For engraving 常见材质雕刻参数参考：

Material 材质	Speed (mm/min) 速度	Power (%) 功率	Times 次数
Plywood 胶合板	6000	50	1
Acrylic 亚克力	6000	20	1
Leather 皮革	6000	20	1
Electroplated coating 电镀层	1000	100	1
Powder coating 粉末涂层	6000	50	1
Anodic alumina 阳极氧化铝	6000	20	1
Stainless steel 不锈钢	3000	100	1
Density board 密度板	6000	60	1
Peddle 鹅卵石	6000	100	1
Plastic board 塑料板	6000	40	1
Cardboard 纸板	6000	50	1

For Cutting 常见材质雕刻参数参考：

Material 材质	Speed (mm/min) 速度	Power (%) 功率	Times 次数
Plywood 胶合板 1-3mm	700-1000	100	1
Plywood 胶合板 4mm	500	100	1
Plywood 胶合板 5mm	300	100	1
Plywood 胶合板 6mm	150	100	1
Plywood 胶合板 8mm	100	100	1-2
Acrylic 亚克力 1mm	500	100	1
Acrylic 亚克力 3mm	200	100	1
Acrylic 亚克力 6mm	100	100	1-2

Note:

The energy value is set to 500, and the laser intensity accounts for 50% of the power.
The energy value is set to 1000, and the proportion of laser intensity to power is 100%. The larger the energy, the faster the speed can be set.
The above parameters only for reference. Due to the different properties of the materials, please adjust the parameter values according to the actual situations.

提示：

能量值设定500，激光强度占比为功率的50%。能量值设定1000，激光强度占比为功率100%；能量设置越大，速度设置可以更快些；以上参数为参考值，由于所使用材质的特性不同，请根据实际情况调整参数值。

APP INTRODUCTION APP使用教程

- 1. On the touch screen, connect a Wi-Fi.
- 2. Click "Tools" on the main interface to enter the next interface.
- 3. Click "Wi-Fi" to enter the selection interface.
- 4. Select the Wi-Fi to be connected, enter the password, and click "Connect".
- 5. After the connection is successful, you will obtain an assigned IP address.

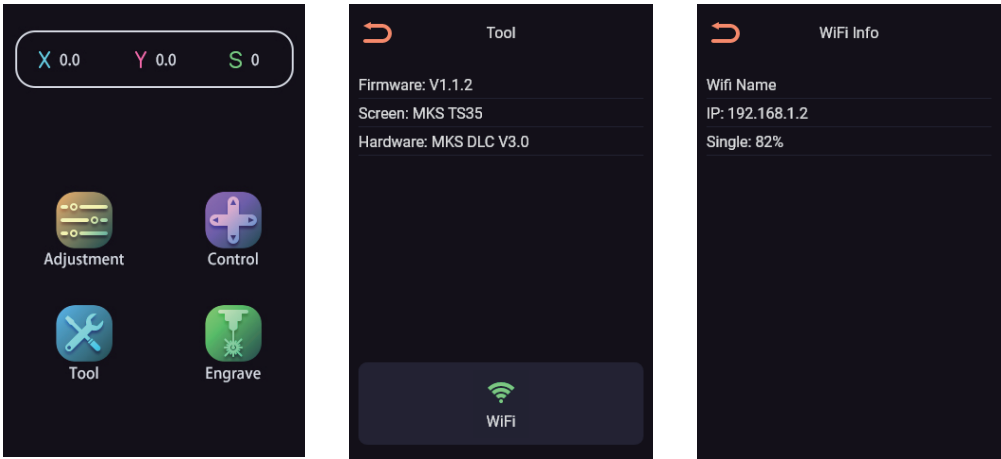
Tip: the obtained IP is used for WEB/APP connection.

Note: The Wi-Fi used at the computer or the screen must be the same. It is recommended to use the mobile hotspot.

- 1. 在触摸屏上, 进行WIFI连接。
- 2. 主界面上点击“工具”, 进入下一界面。
- 3. 点击“Wi-Fi”, 进入选择界面。
- 4. 选择需要连接的Wi-Fi, 输入密码, 点击“连接”。
- 5. 连接成功后, 获取分配IP地址。

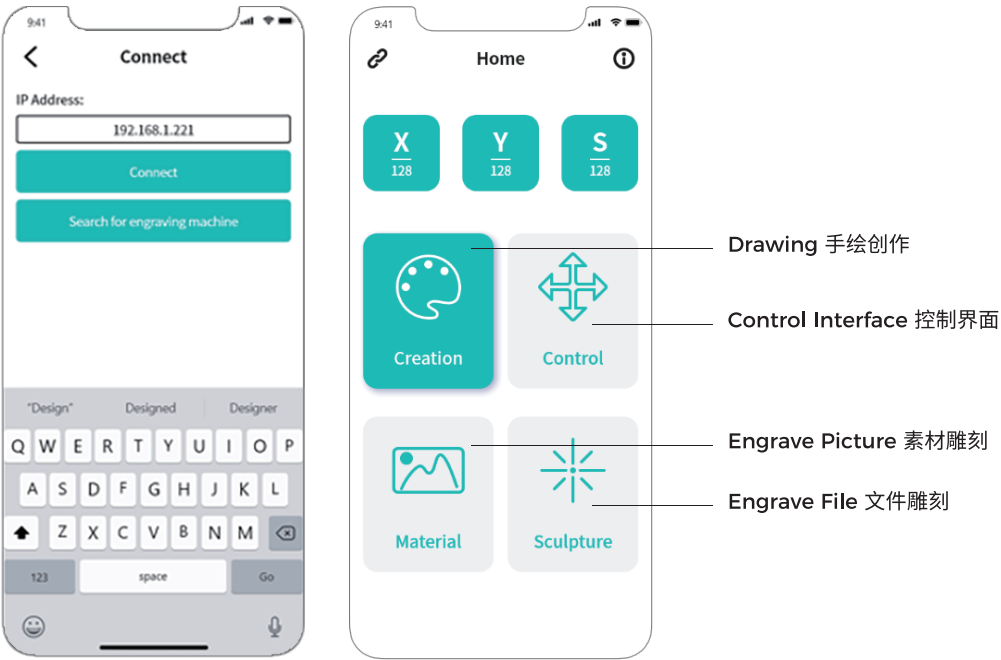
提示: 获取到的IP, 是用于WEB/APP连接的。

注意: 电脑端和屏幕端使用的Wi-Fi必须是同一个, 建议使用手机热点。

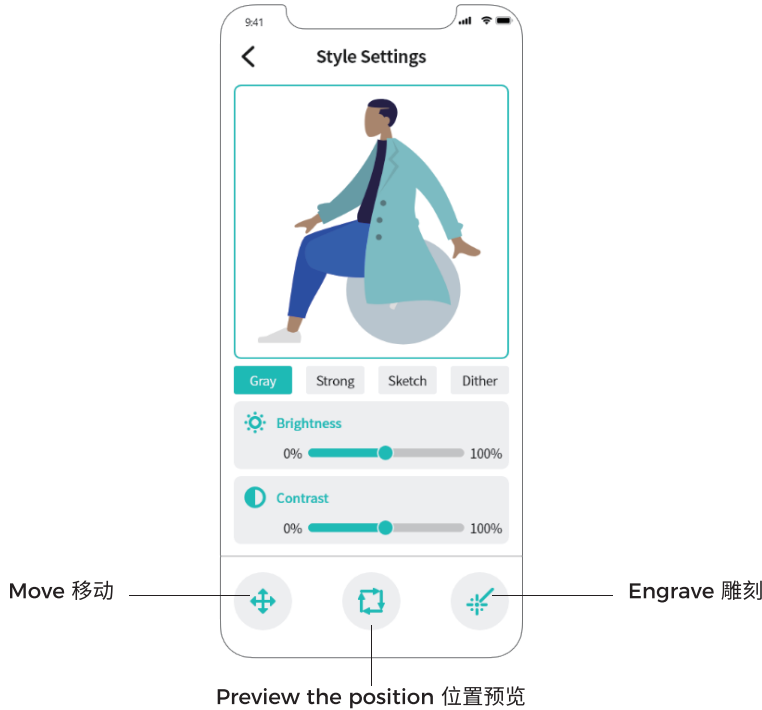


Get "MKSLaser" from the mobile application market or TF card.
Open the "MKSLaser" app and enter the connection interface (Figure A.12)
Enter the IP address obtained in the last step, and click "Connect" to enter the main interface (as shown in Figure A.12).

从手机应用市场获得“MKSLaser”或TF卡中获得。
打开“MKSLaser”APP, 进入连接界面(图示A.12)
在IP地址栏处输入上一步获得IP地址, 点击“连接”, 进入主界面(图示A.12)。



A.12



WEB INTRODUCTION WEB使用教程

- 1. On the touch screen, connect a Wi-Fi.
 - 2. Click "Tools" on the main interface to enter the next interface.
 - 3. Click "Wi-Fi" to enter the selection interface.
 - 4. Select the Wi-Fi to be connected, enter the password, and click "Connect".
 - 5. After the connection is successful, you will obtain an assigned IP address.
- Tip: The obtained IP is used for WEB/APP connection. You can type the address into your browser to enter the WEB control interface.
- Note: The Wi-Fi used at the computer or the screen must be the same. It is recommended to use the mobile hotspot.

- 1. 在触摸屏上, 进行WIFI连接。
 - 2. 主界面上点击“工具”, 进入下一界面。
 - 3. 点击“WiFi”, 进入选择界面。
 - 4. 选择需要连接的WiFi, 输入密码, 点击“连接”。
 - 5. 连接成功后, 获取分配IP地址。
- 提示: 获取到的IP, 是用于WEB\APP连接的。在PC电脑端, 打开浏览器, 输入获得的IP地址即可进入WEB控制。
- 注意: 电脑端和屏幕端使用的Wi-Fi必须是同一个, 建议使用手机热点。



LightBurn INTRODUCTION LightBurn简介

LightBurn is a charging but powerful engraving software, which can be downloaded on the its official website <https://LightBurnsoftware.com/> (TF card or USB flash disk supplied by the manufacturer also has an installation package)

Introduction: LightBurn is a layout, editing and control software for laser engraving machine.

With LightBurn, you can:

- Import artwork in various common vector graphics and image formats (Including AI, PDF, SVG, DXF, PLT, PNG, JPG, GIF, BMP)
- Powerful editing function (You can edit the graphics you want to carve)
- LightBurn is a native application written for windows, Mac OS and Linux (But it needs to be activated with a key for permanent use, with a trial period of 30 days)

Note: during the engraving process, the engraving machine needs to be connected to the computer, and the engraving machine software cannot be closed.

LightBurn是一款收费软件但功能性强大的雕刻软件, 可以在LightBurn官网<https://LightBurnsoftware.com/> 下载。(厂家附送的TF卡或U盘中也有安装包)

简介: LightBurn是用于激光雕刻机的布局, 编辑和控制软件。

使用LightBurn, 您可以:

- 以各种常见的矢量图形和图像格式 (包括AI, PDF, SVG, DXF, PLT, PNG, JPG, GIF, BMP) 导入图稿
- 具有强大的编辑功能 (可以编辑自己想要雕刻的图形)
- LightBurn是为Windows, Mac OS和Linux编写的本机应用程序 (但是需要使用密钥激活永久使用, 试用期30天)

注意: 雕刻过程中雕刻机需要和计算机保持连接, 且不能关闭雕刻机软件。

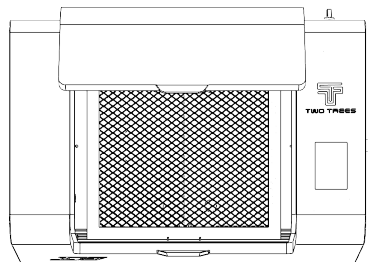
WORKING PLATFORM 工作平台

Layer 1: Honeycomb platform

Function: Suitable for cutting and engraving flat plates

第1层: 蜂窝平台

作用: 适用于切割与雕刻平板



1. How to remove the honeycomb platform?

Near the limit bracket, lift the honeycomb platform so that the platform is free from the snap bracket to remove the honeycomb platform.

2. How to install the honeycomb platform?

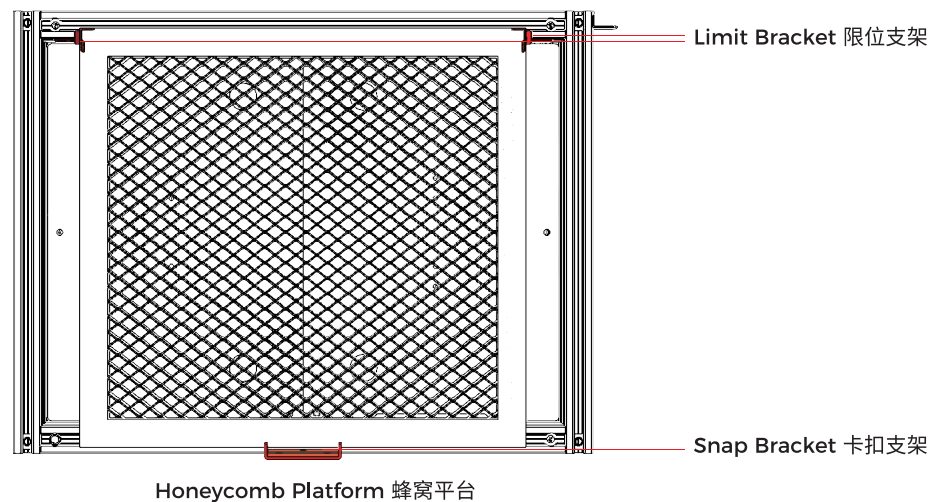
first touch the honeycomb platform to the snap bracket, align the two sides of the other side of the honeycomb platform to the limit bracket and press into the space of the three brackets.

1. 如何移除蜂窝平台?

在接近限位支架处, 将蜂窝平台提起使得平台脱离卡扣支架, 即可取出蜂窝平台。

2. 如何安装蜂窝平台?

先将蜂窝平台接触卡扣支架, 蜂窝平台另外一边的两侧对准限位支架, 压入三个支架空间中。

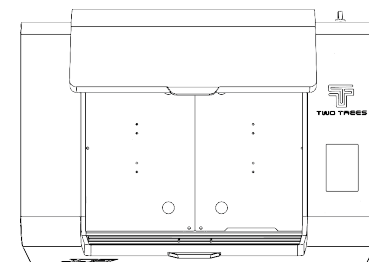


Layer 2: Aluminum platform

Function: Suitable for carving items that are on the high side

第2层: 铝合金平台

作用: 适用于雕刻偏高的物品

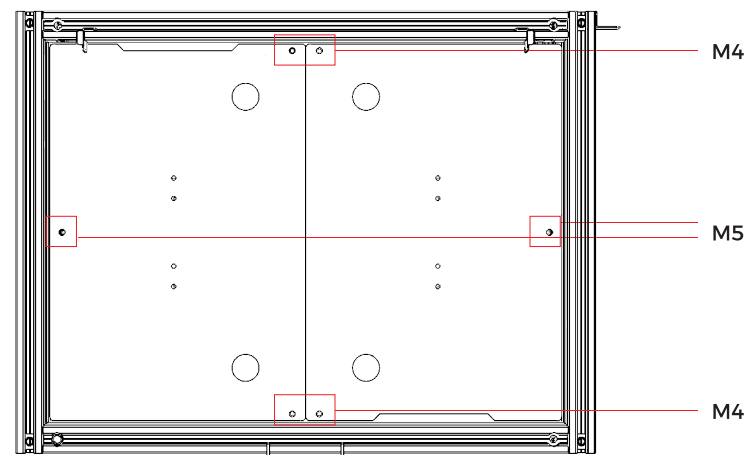


How to remove and install the Aluminum platform?

remove 4*M4 screws and 2*M5 screws to remove the aluminum platform.

如何移除和安装铝合金平台?

拧出4*M4螺丝和2*M5螺丝, 即可取出铝合金平台。

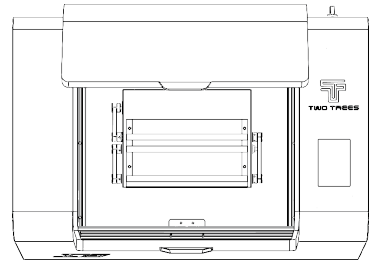


Layer 3: Rotating platform

Function: Suitable for carving cylindrical-shaped items

第3层:旋转平台

作用:适用于雕刻圆柱形状的物品



1. Before switching to use the rotating module (or the Y-axis), you need to set appropriate parameter values as follows:

1) Method 1:

When using the rotary module, please click the "use Rotating.nc" file on the screen (in the TF card), click "Carve" and load the parameters.

When using the Y-axis, please click the "use y axis.nc" file on the screen (in the TF card), click "Carve" and load the parameters.

2) Method 2:

In the GRBL software, set the value \$101=102 of rotary module, and set \$101=80 of the Y-axis.

Note: using the wrong parameter value will result in incorrect engraving scale.

1. 切换使用旋转平台或Y轴前,需要先设定合适的参数值,设置如下:

1) 方法一:

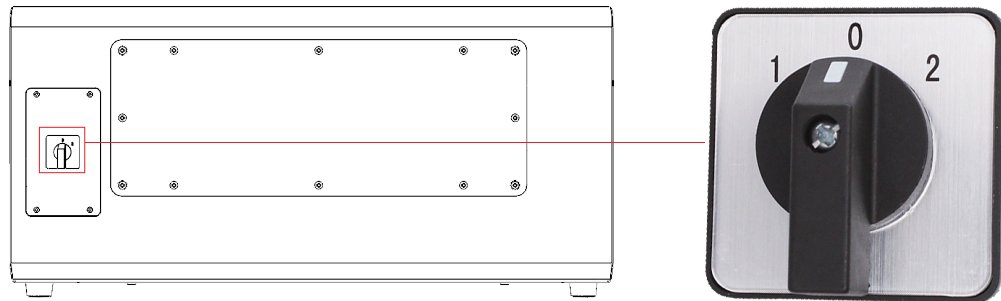
使用旋转台时,请在屏幕中调用TF卡内的“use Rotating.nc”文件,点击“Carve”,加载参数。

使用常规Y轴时,请在屏幕中调用TF卡内的“use y axis.nc”文件,点击“Carve”,加载参数。

2) 方法二:

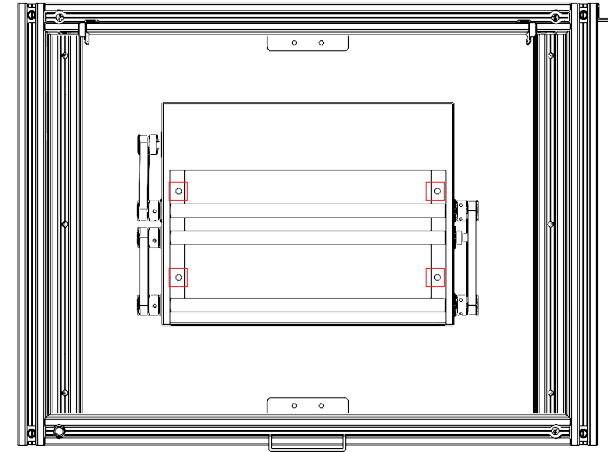
GRBL软件中,设置GRBL配置中的\$101的值,使用旋转台设置\$101=102,使用常规Y轴设置\$101=80。

注意:使用错误的参数值,会导致雕刻比例不对。



2. When using the rotary platform, please adjust the switch gear on the back of the machine to the "2" gear.

使用旋转平台的时候,请将机器背面的开关档位,调整“2”的档位。



3. How to remove and install the rotating platform?

Remove the 4*M4 screws to remove it.

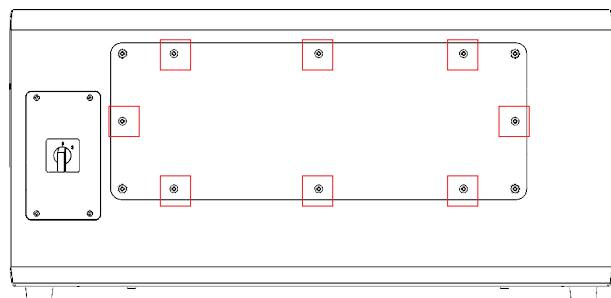
如何移除和安装旋转平台?

移除4*M4螺丝,即可取出。

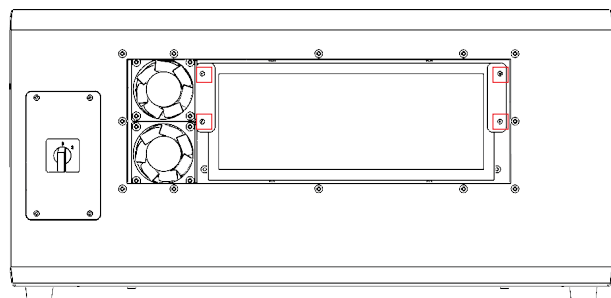
HOW TO REPLACE THE FILTER 如何更换过滤器

1. Remove the 8*M4 screws on the back of the machine and open the cover. (Figure A.13)
2. Remove the 4*M4 on the bracket that holds the filter to remove the filter and replace it. (Figure A.14)

1. 拧出机器背后8*M4的螺丝, 打开盖板。(图示A.13)
2. 拧出固定过滤器的支架上的4*M4, 即可取下过滤器并进行更换。(图示A.14)



A.13



A.14

AFTER-SALES SERVICE 售后服务

The guarantee period is 12 months from the date of purchase.

1. Missing/Damaged/Defective Parts

Within 7 days of the date of receipt, we will replace any parts for free of charge including shipping fees.

After 7 days of the date of receipt, we will replace any parts for free of charge. But you need to pay the shipping fees.

2. Customer Damaged Parts: You need to pay for the cost of the parts and the shipping fees.

3. Courier company loss, missing, damaged, and defective parts.

- a. Lost or damaged shipments must be reported to the carrier within the carrier's claim window, and you need to inform us within 7 days of the date of receipt.
- b. For any parts lost or damaged during shipping, you need to take photos or video and send them to us.
- c. Once the Carrier dispute is settled, please provide us with all communications with the carrier. It is the customer's responsibility to keep us up to date with ALL communication with the carrier.
- d. For Missing Parts, you need to fill out a Service Ticket.
- e. For Damaged Parts, you need to fill out a Service Ticket and send us the photos or video.
- f. If the part is one of the LCD Panel, Power Supply or Mainboard, you need to ship the part back to us and we will send a new one.

保修期为自购买之日起12个月内。

1. 缺少/损坏/有缺陷的部件:

签收日期后的7天内, 我们将免费更换任何部件, 包括运费;

签收日期后的7天后, 我们将免费更换任何部件。但客户需要支付运费。

2. 客户损坏部件: 客户应支付部件成本和运输费用。

3. 快递公司责任: 丢失、损坏或有缺陷的部件。

- a. 对于丢失或损坏的货物的索赔必须在承运人的索赔窗口内向承运人报告, 客户需要在签收日期后的7天内通知我们。
- b. 对于在运输过程中丢失或损坏的任何部件, 客户应拍摄照片或视频并将信息发送给我们。
- c. 一旦承运人争议解决, 请向我们提供与承运人的所有通讯。客户有责任让我们及时了解与承运人的所有通讯。
- d. 对于缺失零件, 客户应填写服务单。
- e. 对于损坏的部件, 客户应填写服务票, 并将照片或视频发送给我们。
- f. 如果部件是LCD面板, 电源或主板, 客户应将部件运回给我们, 我们将发送新部件。