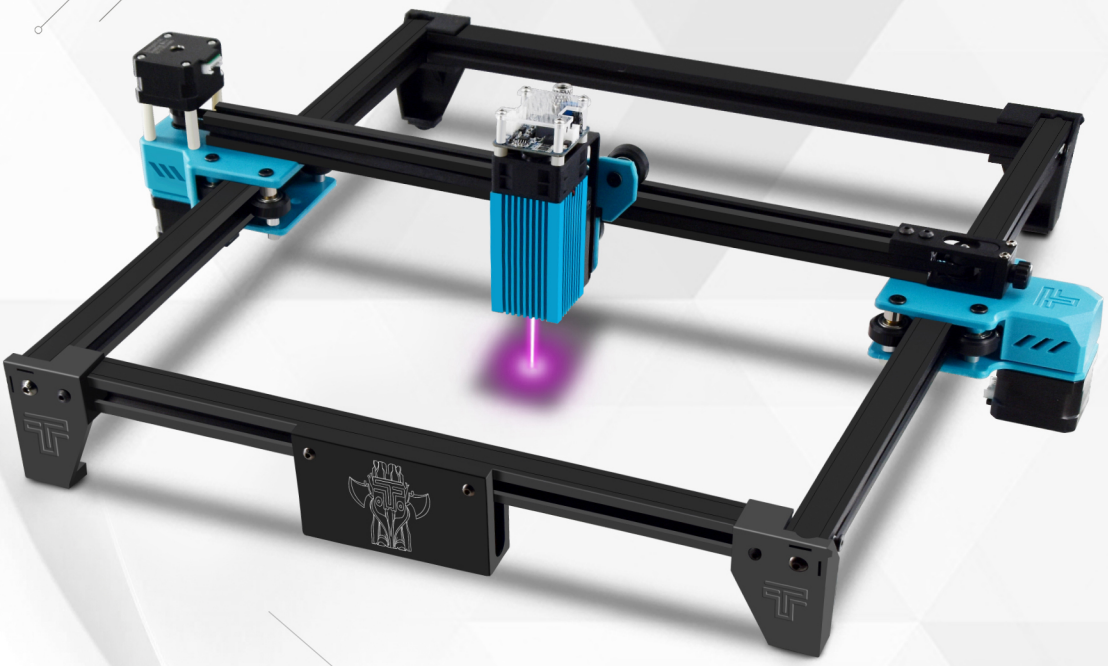
TOTEM S



WARNING LASER FOCUS REDUCE HEAT AND GLARE WHICH CAN HARM HUMAN,ANIMALS AND OBJECTS.DO FOLLOW THE INSTRUCTION.MISUSE WILL BE AT YOUROWN RISK.

Avoid direct eye contact, may lead to blindness

Avoid exposure to body surface, it burns

Put base plate under the workpiece

Avoid combustible object or gas.

Keep it away from incompetent people, such as children or pregnant women

Do NOT take apart the laser without instructions

Do NOT use it on material that reflects the light

Wear goggles while using

Turn off the power when not use

Warning: The laser engraving machine cannot directly act on any specularly reflective object. This can cause injury to the operator or burn the laser.

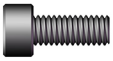
●The product has a high engraving speed and is not recommended for industrial cutting. And the laser head is a consumable.

● It is not recommended to look directly at the laser head when the machine is working. Also do not operate the laser head directly with your hands. Please wear goggles.

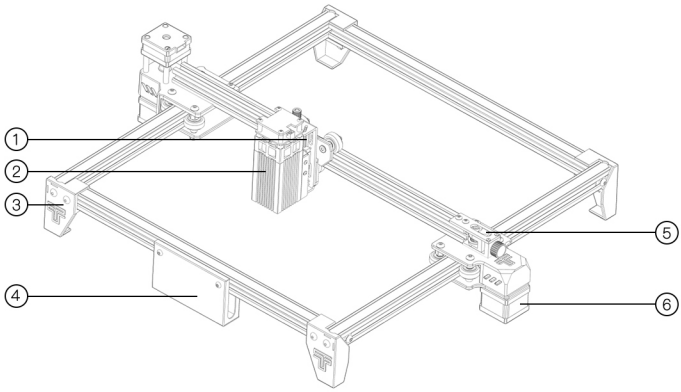
To ensure that the engraving machine is safe, fireproof and away from the children's environment.

●The laser diode is a sensitive component, please take care to prevent static damage. (This product includes an electrostatic protection design, but there is a possibility of damage).

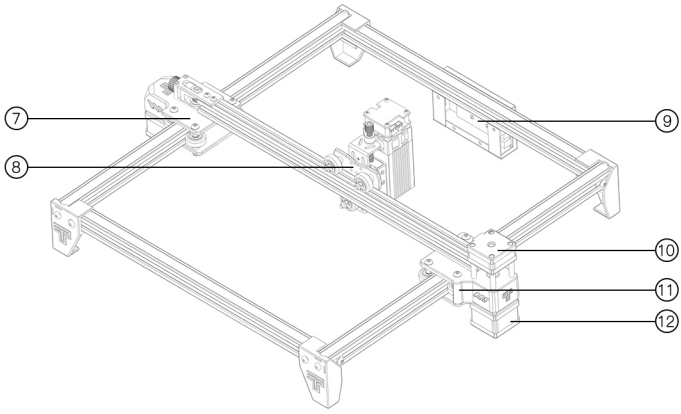
PARTS LIST

1  X-axis guide rail profile X 1 (443mm)	2  Y-axis frame front rear profiles X 2 (400mm)	3  Y-axis frame right part X 1	4  Y axis frame left part X 1
5  Z-axis fine-tuning module X 1	6  Foot Pad X 4	7  Laser head X 1	8  Carriage head X 1
9  Tensioner X 1	10 Motherboard Fixed seat X 1	11  M5*10 X 8	12  M3*8 X 4
13  M4*10 X 8	14  M4*12 X 2	15  T Nut 20-M4 X 10	16  T Nut 20-M5 X 4
17  Carved Wooden Board X 1	18  USB Cable X 1	19  Power Supply X 1	20  Closed Timing belt X 1
21  Tool KitX 1	22  Wire Package X 1	23  Laser Goggles X 1	

KNOW YOUR ENGRAVING MACHINE

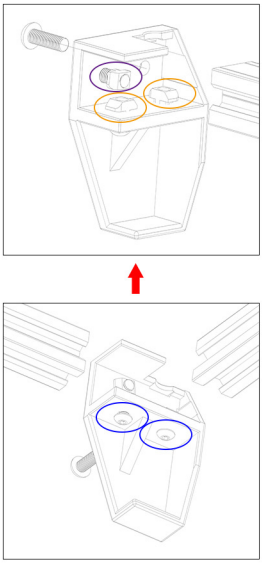


1. Z-axis Fine-Tuning Module
2. Laser Head
3. Foot Pad
4. Motherboard Fixed seat
5. Tensioner
6. Y Axis Motor

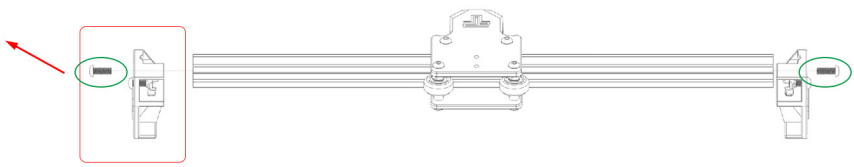


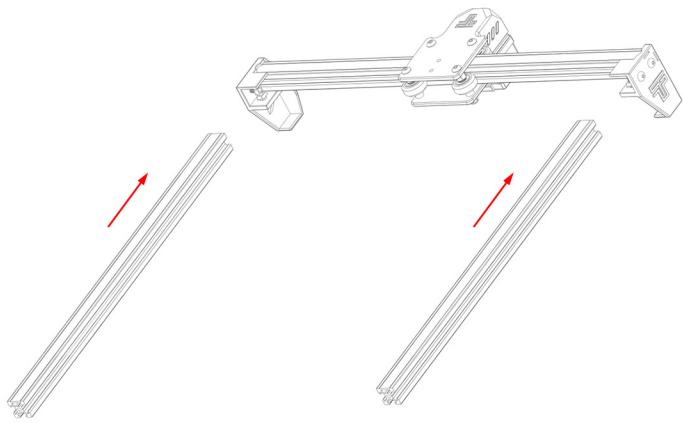
7. Y-Axis Right Injection Molded
8. Carriage Head
9. Motherboard
10. X Axis Motor
11. Y-Axis Left Injection Molded
12. Y Axis Motor

1. Install the Feet



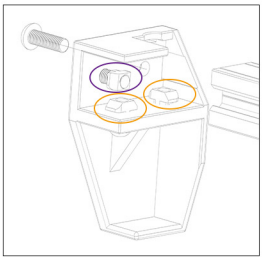
M5*10 Screws (4 Pcs) T-Nut 20-M5 (2 Pcs)
M4*10 Screws (4 Pcs) T-Nut 20-M4 (4 Pcs)



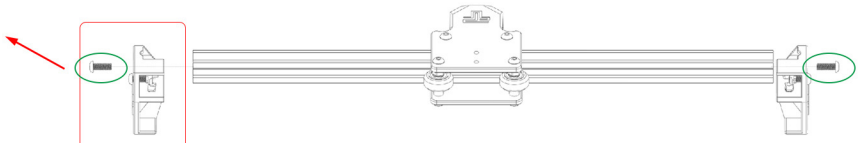


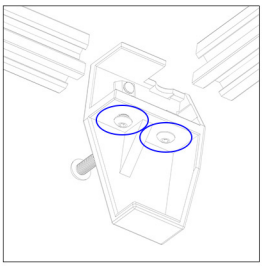
Note:
1. Install the T-nut and screw on the foot pad,
Place the T-nut to the corresponding profile
2. The smooth side of the profile is facing up

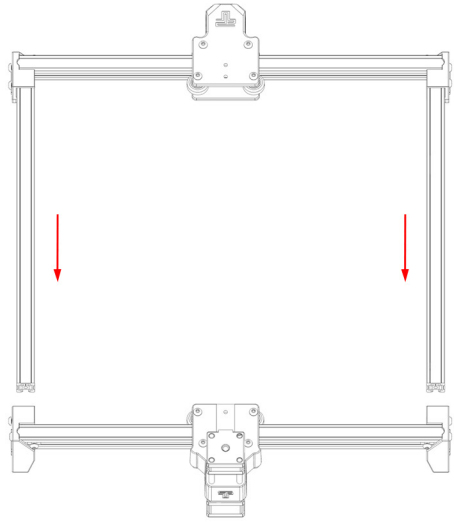
2. Install the Feet



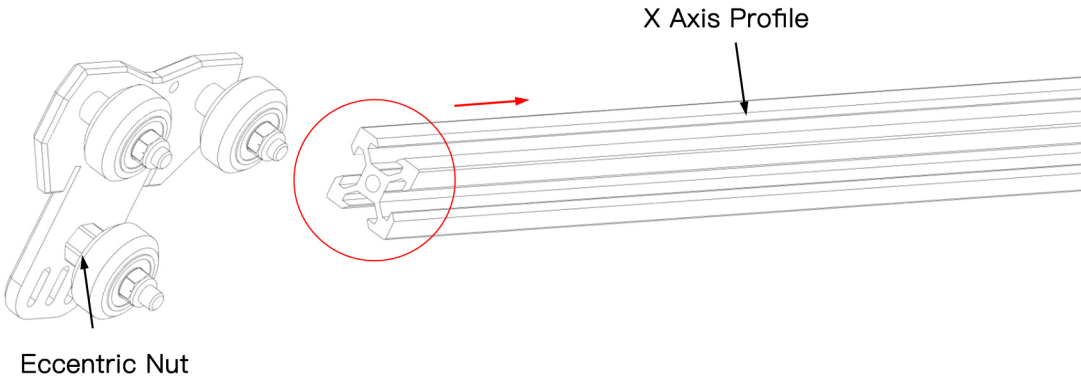
M5*10 Screws (4 Pcs) T-Nut 20-M5 (2 Pcs)
M4*10 Screws (4 Pcs) T-Nut 20-M4 (4 Pcs)







3. Install the Carriage Head



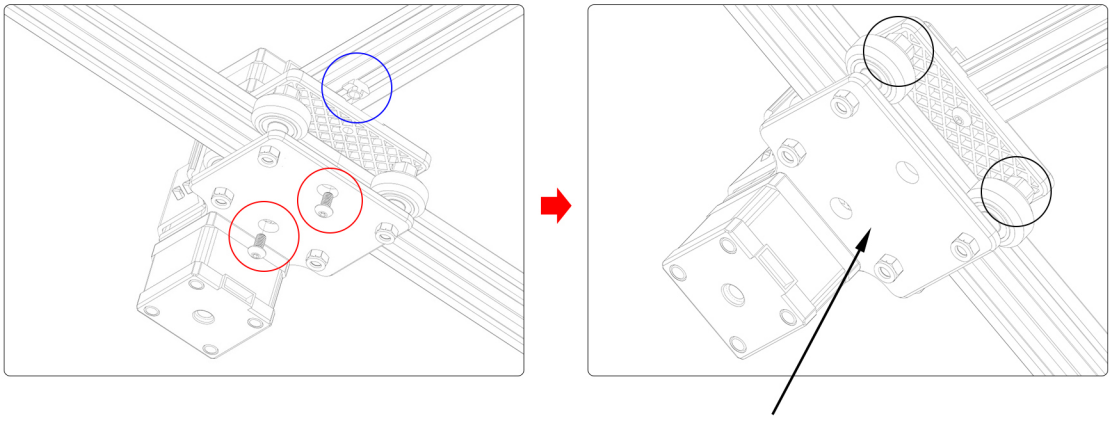
⚠ If it is difficult to push in, you can adjust the eccentric nut of the carriage head

4. Install the Left Support

T-nuts and screws have been fixed on the injection molded part

T-Nut 20-M4 (2 Pcs)

Half Round Head M4*10 (2 Pcs)



⚠ If the wheel is hovering and rotating, it does not fit the profile

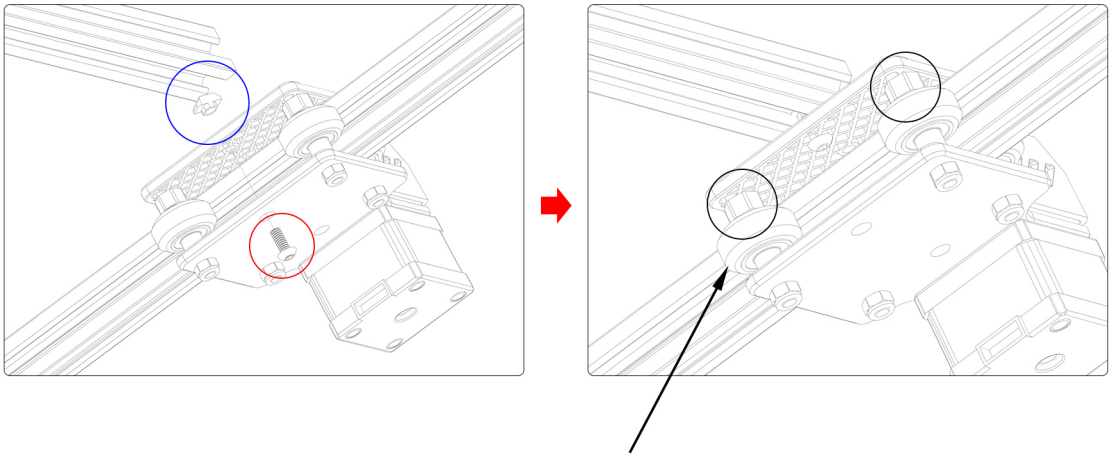
The eccentric nut can be adjusted clockwise from the screw head with a wrench

5. Install the Right Support

T-nuts and screws have been fixed on the injection molded part

T-Nut 20-M4 (1 Pcs)

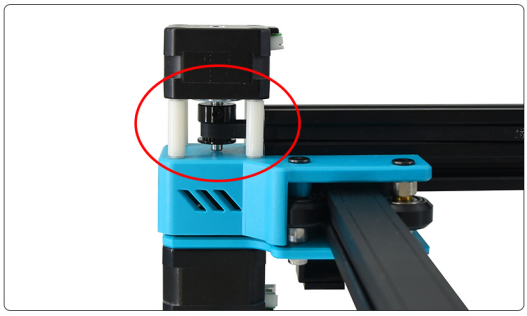
M4*10 Screw (1 Pcs)



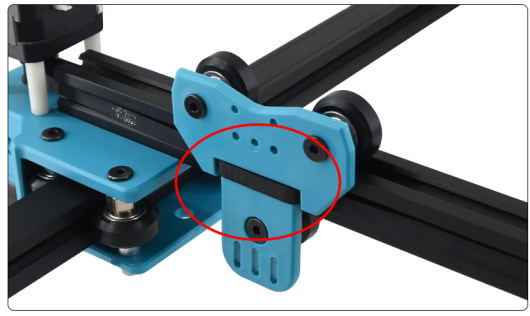
⚠ If the wheel is hovering and rotating, it does not fit the profile

The eccentric nut can be adjusted clockwise from the screw head with a wrench

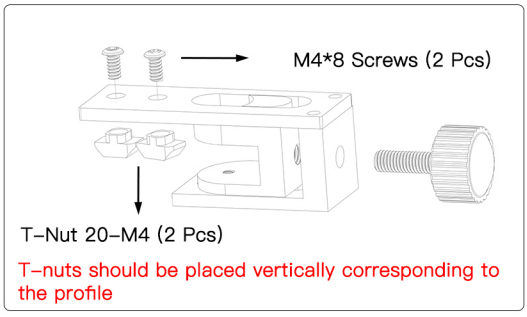
6. Install the Timing Belt



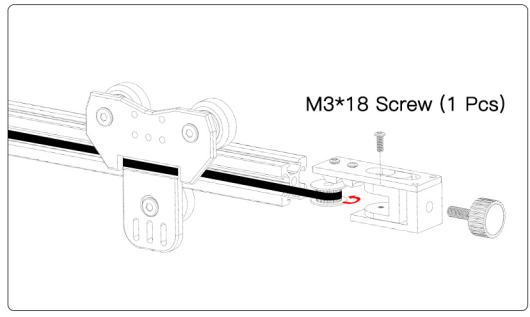
1.Put the timing belt on the pulley of the X-axis motor



2. The timing belt is set on the head of the carriage

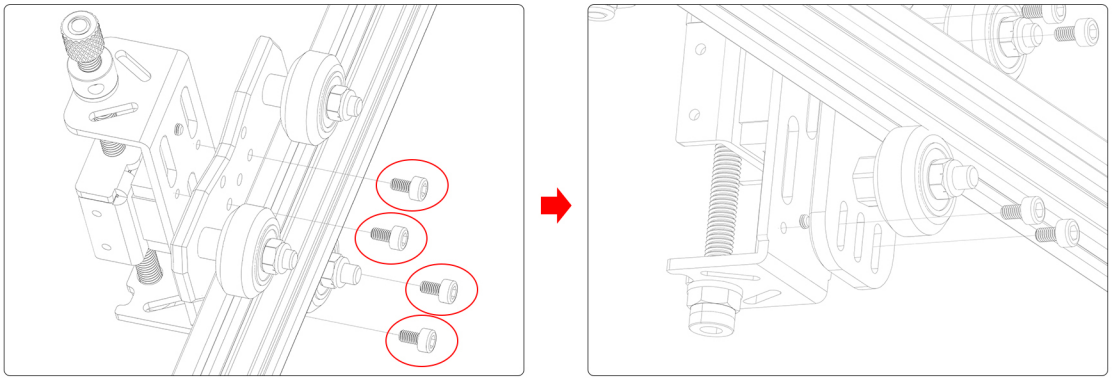


3. Fix the tensioner with screws and T-nuts



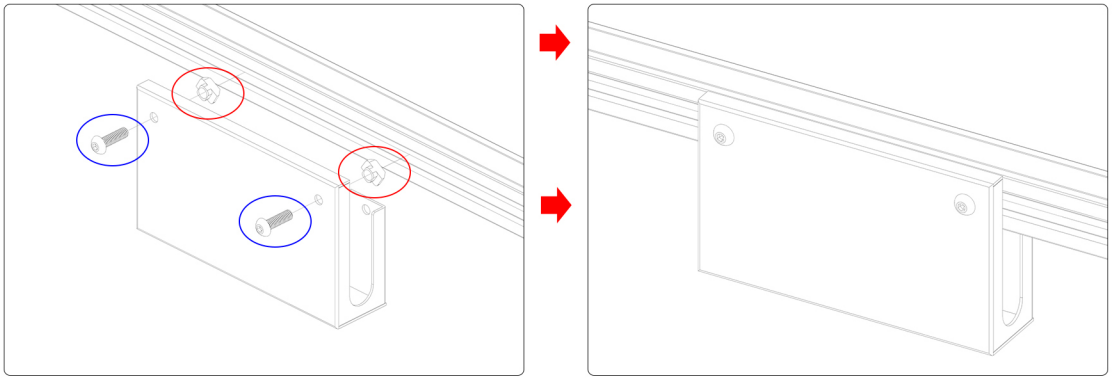
4. The timing belt line is sleeved on the idler pulley, Push it into the fixing seat and lock the screw, Then screw the nut to install it

7. Install the Lifting Platform



M3*8 Screws (4 Pcs)

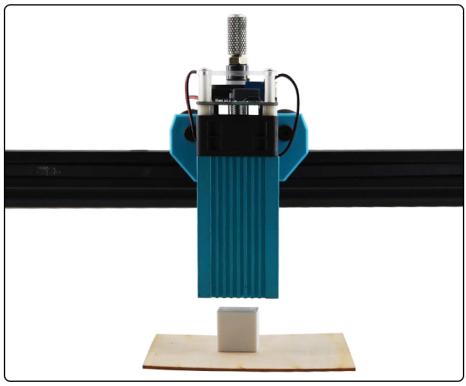
8. Install the Motherboard

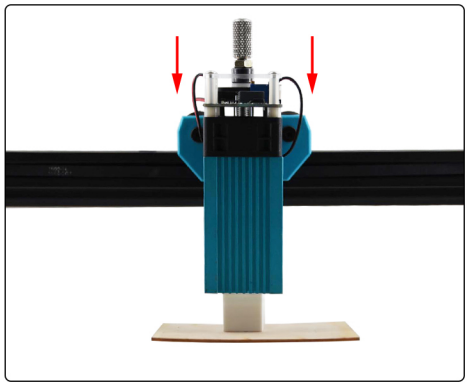


M4*12 Screws (2 Pcs)
T-Nut 20-M4 (2 Pcs)

9. Laser Head Focusing

Using a fixed focus laser head,
Control the focus of the laser head by adjusting the lift table, the fixed focus distance is 20mm





The distance is too far, the focus is not right, and the carving cannot be made

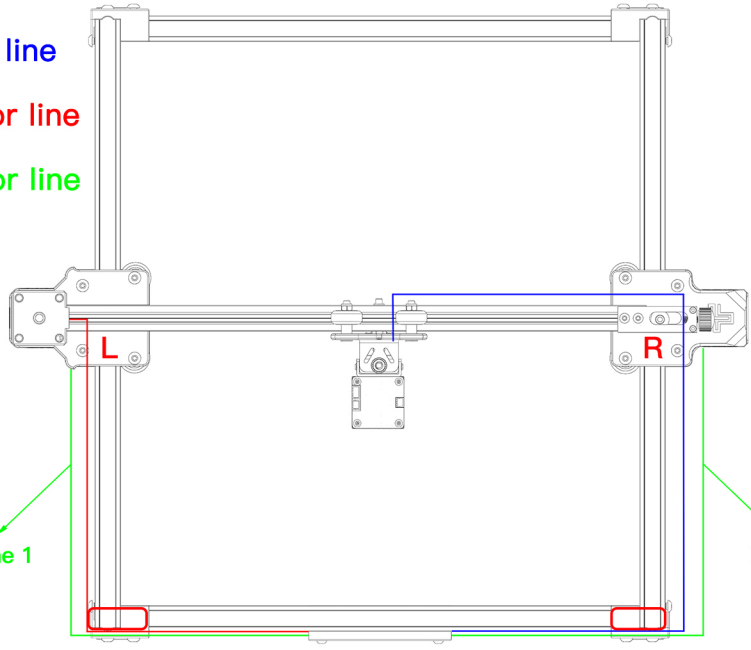
Correct focus and clear carving

10. Wiring diagram

①Laser head line

②X axis motor line

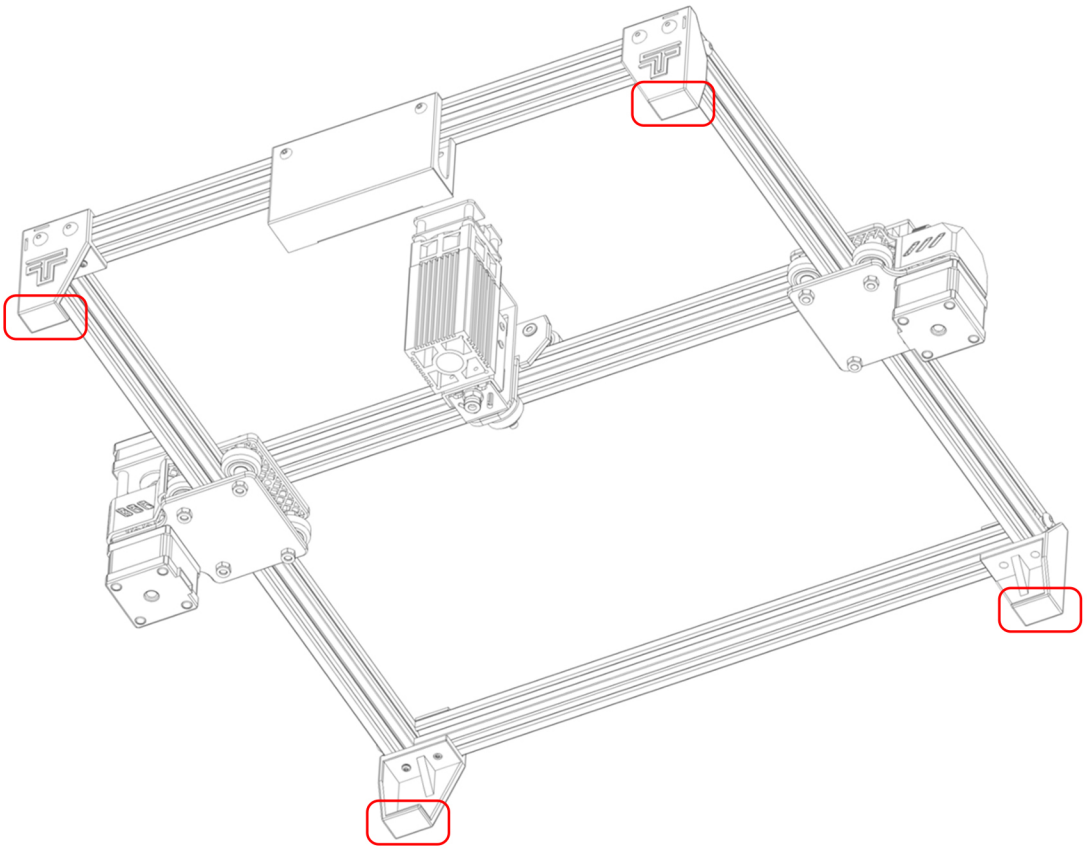
③Y axis motor line



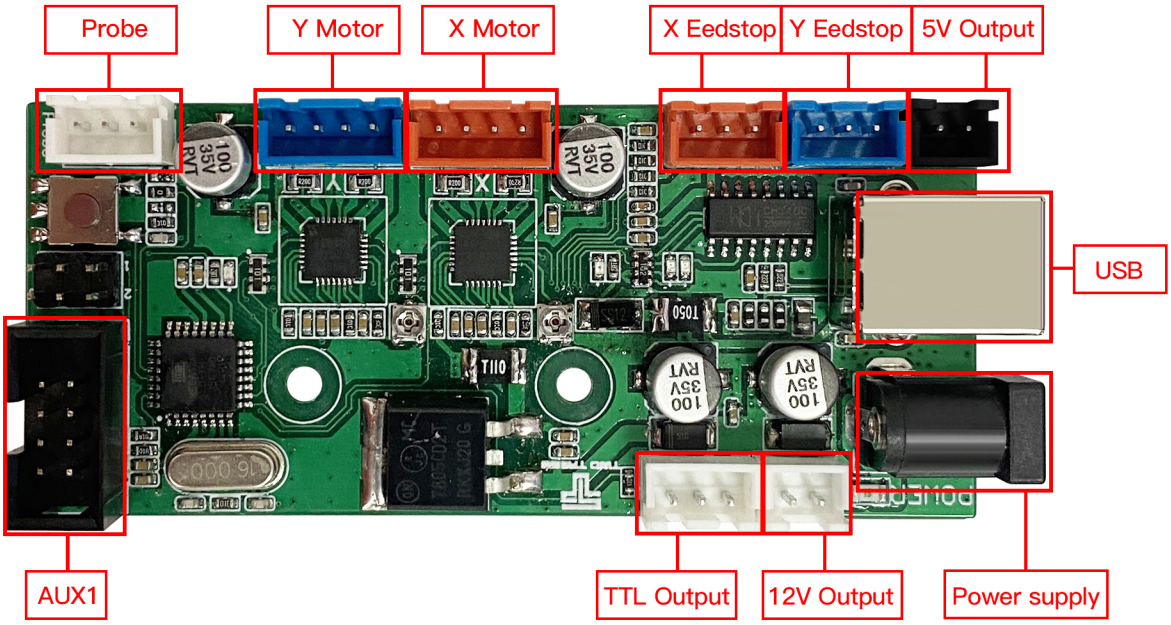
You can put a suction cup in the red box, and tie a cable tie to fix the wire

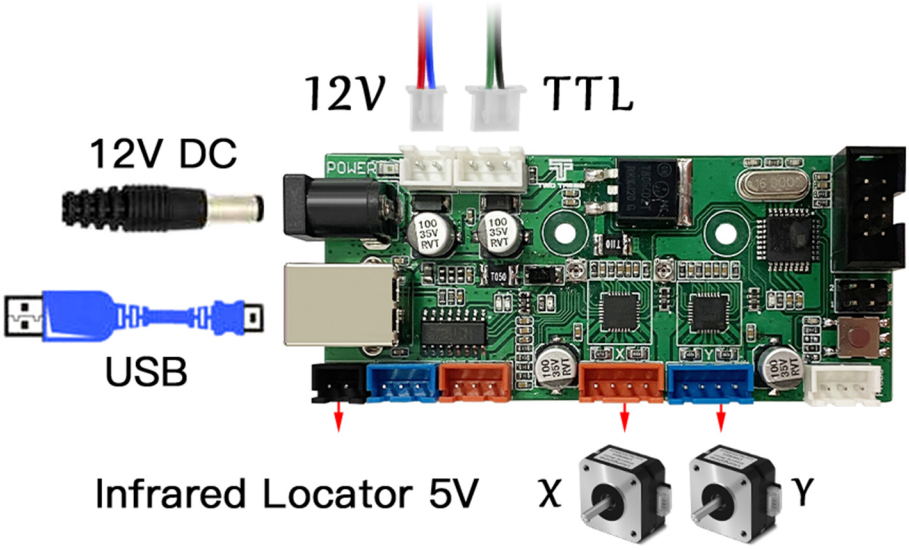
11. Install non-slip gasket

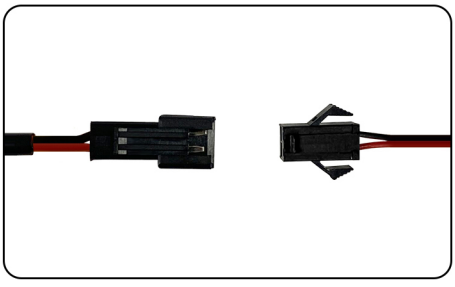
Anti-slip sheet:



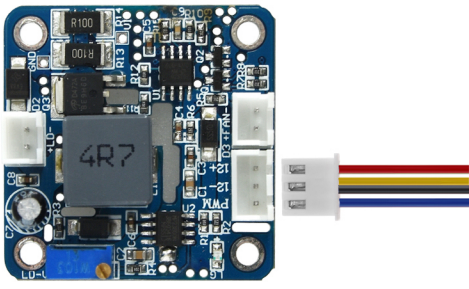
You can stick a non-slip sheet under the foot pad to stabilize the





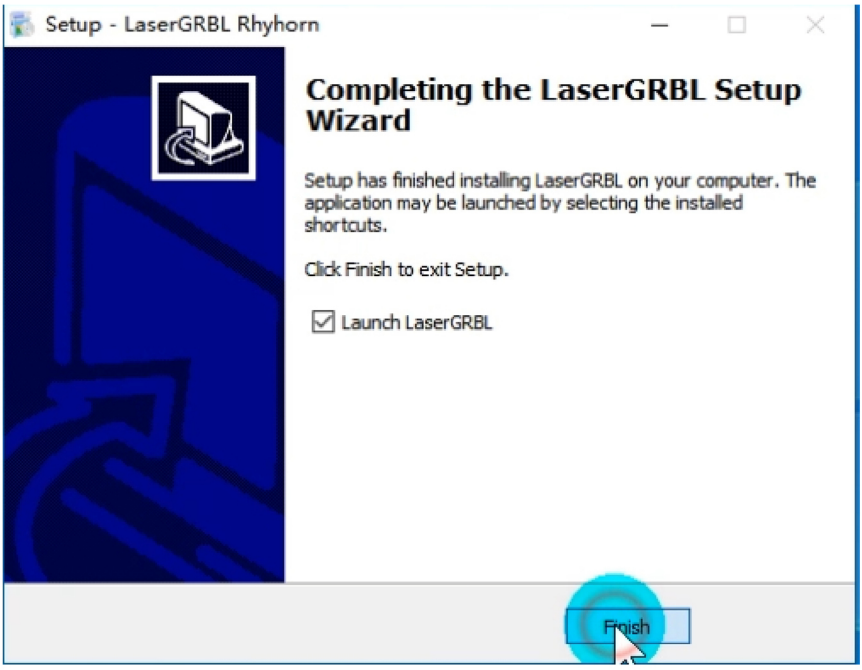


5V infrared locator wiring

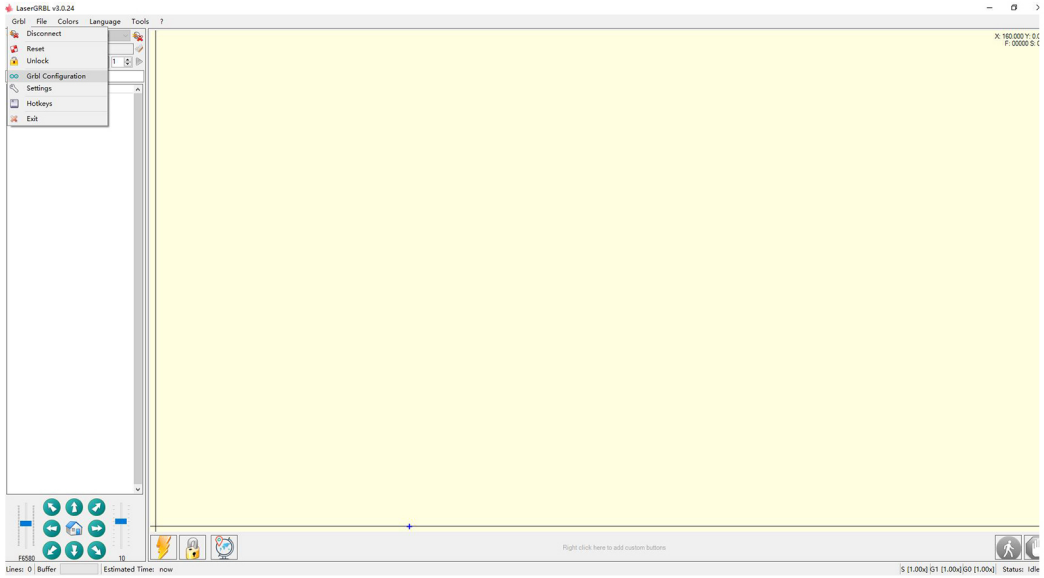


Laser wiring

1.Open the GRBL software installation package of the SD card to install the software by default according to the steps, and the installation is complete as shown in the figure

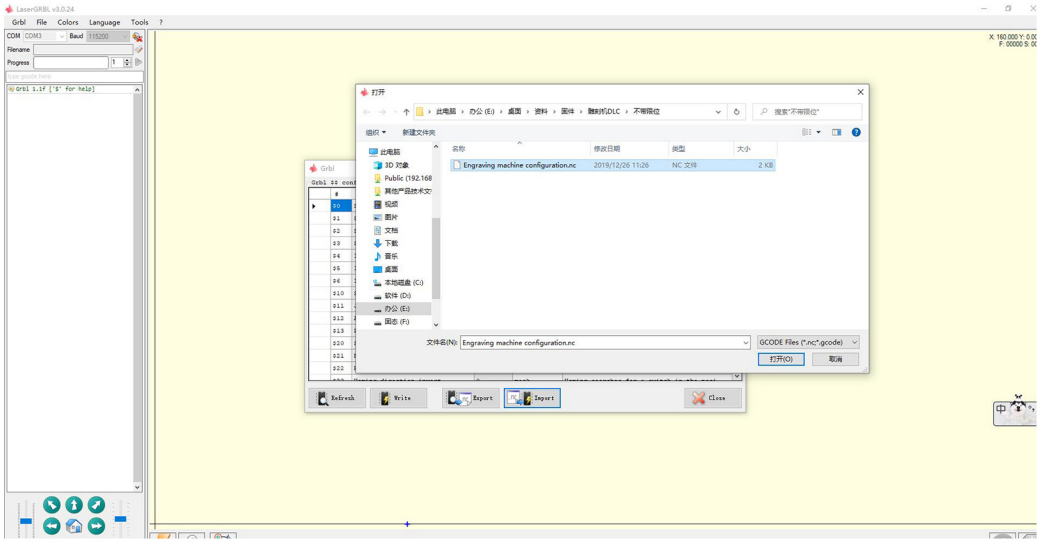


2.Open the software and select the corresponding COM. Connect to 115200 baud rate, and then click ”Configure”, as shown

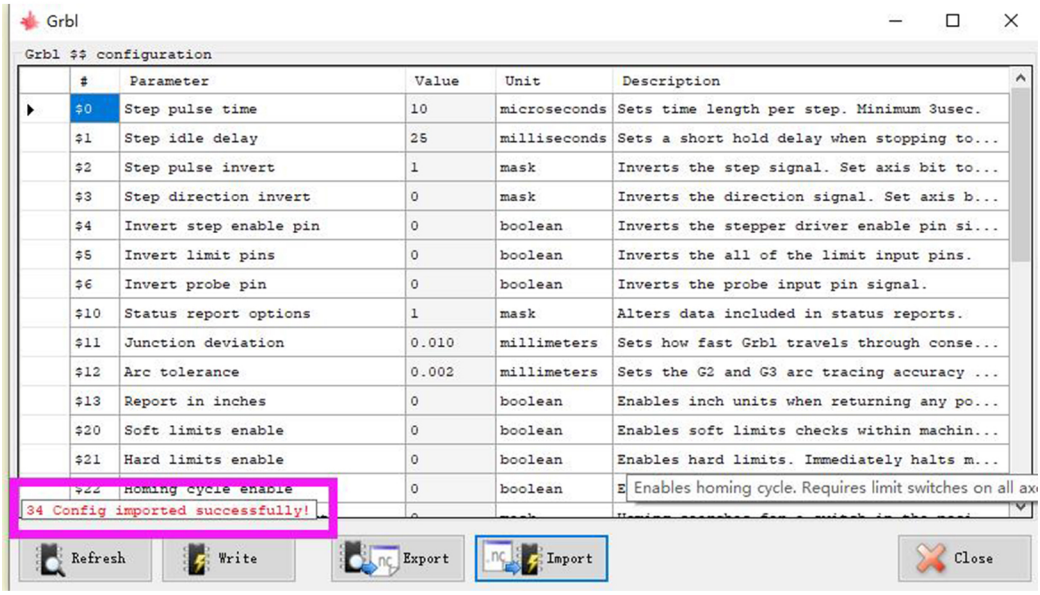


⚠ If there is no serial port or cannot be connected, you need to install the driver (CH340SER.EXE)

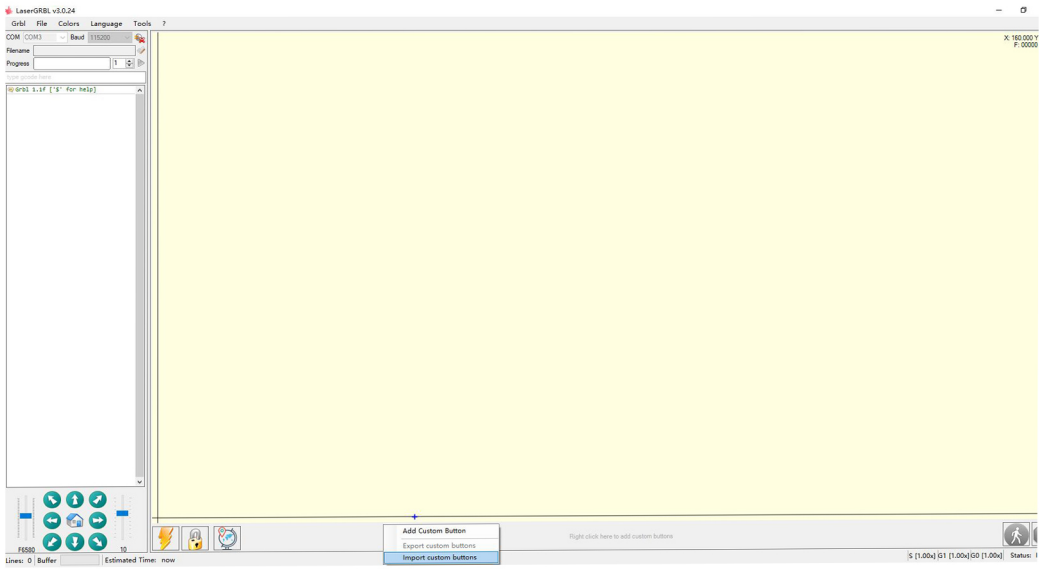
3.As shown in the figure, read the configuration file that comes with the tf card.



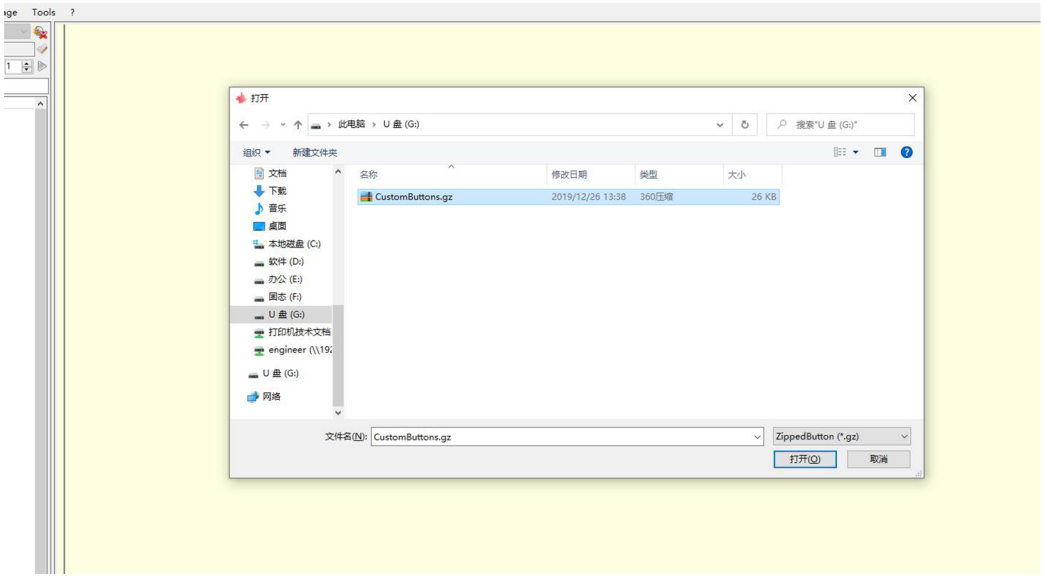
4.Show success You can also modify the configuration properties you need here For details, please refer to tf card and grbl code.



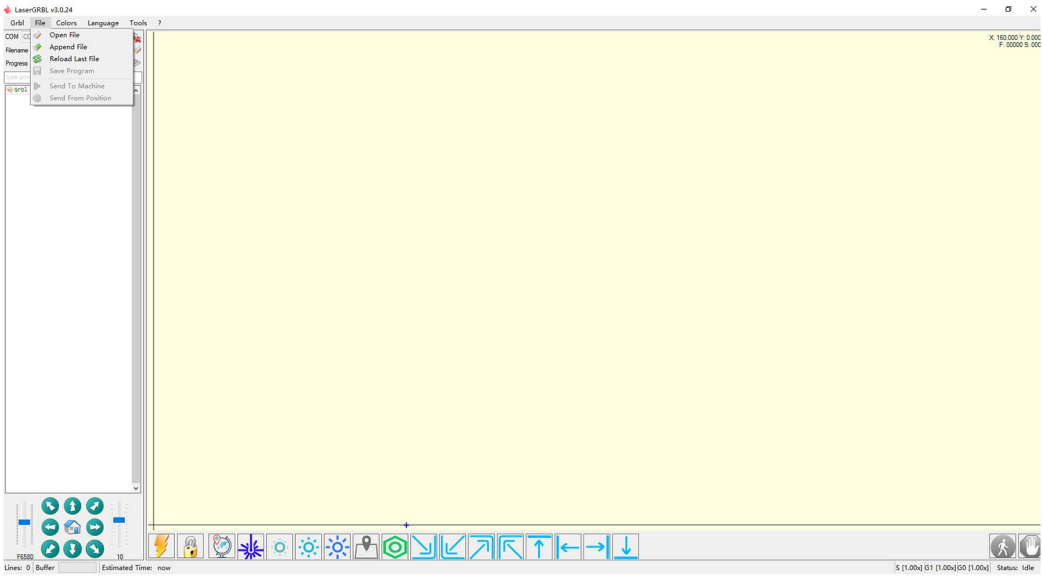
5.Right-click below the main interface and click the Import button to configure



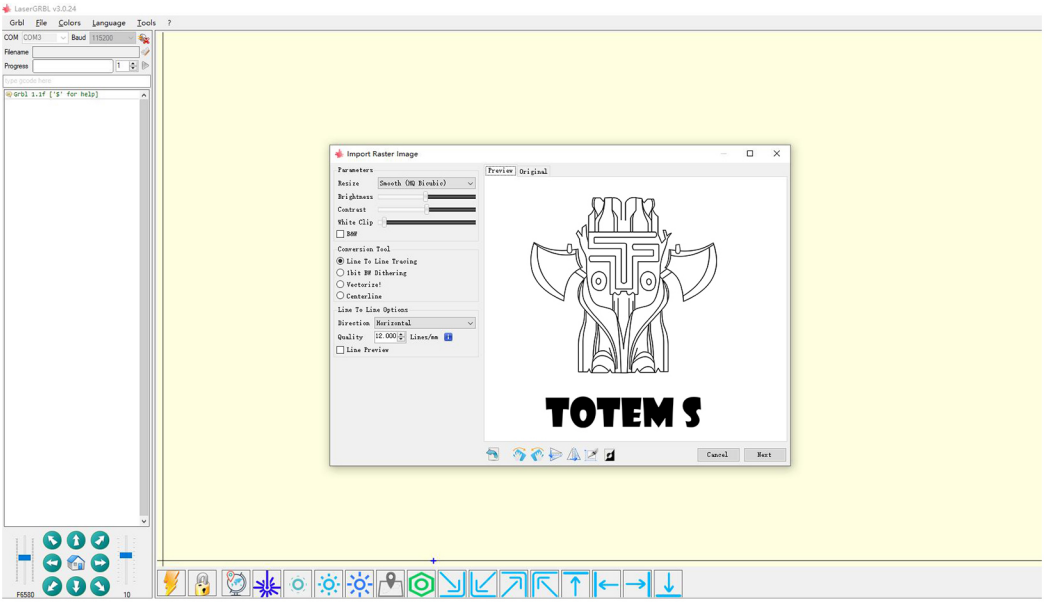
6.Click on this file to import



7.Click Open File to open the picture you need to sculpt



8.Select the engraving method according to your needs

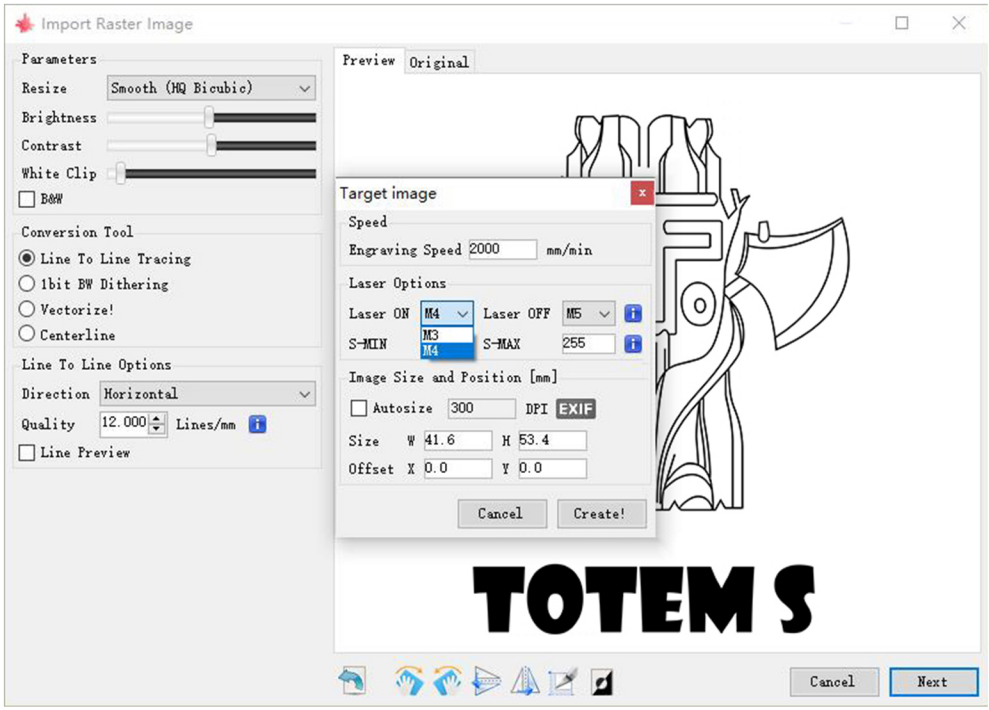


9. Click Next

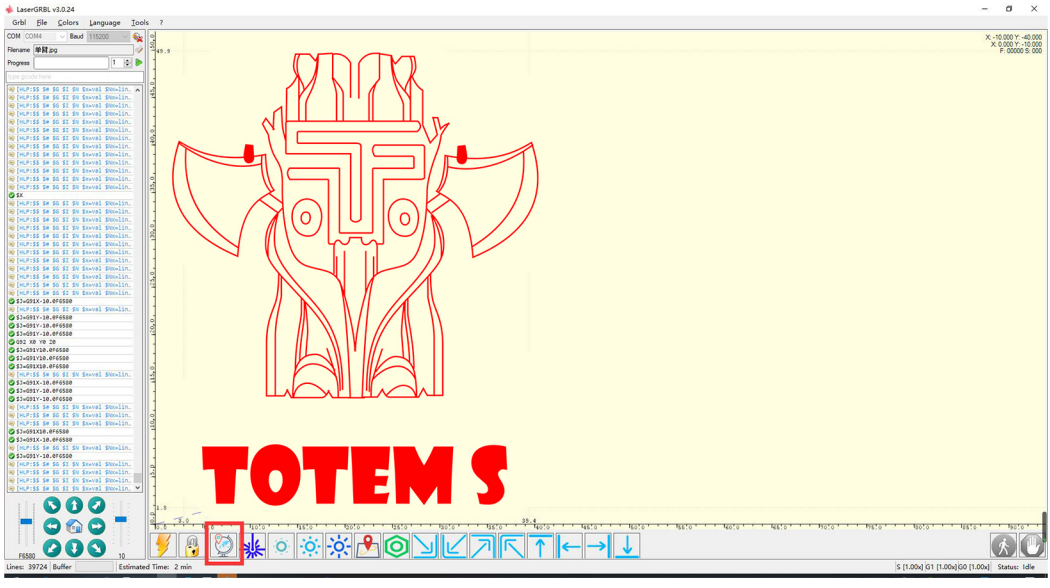
The laser is enabled with the M3 spindle CW or M4 spindle CCW commands.

These enable two different laser modes that are advantageous for different reasons each.

http://lasergrbl.com/usage/raster-image-import/target-image-size-and-laser-options



10.Click Finish to return to the main interface, Control the sculpting head to the lower left, Click to set the origin and click the engraving range option, View carving area



11.If the red font is displayed here, click the unlock button to unlock