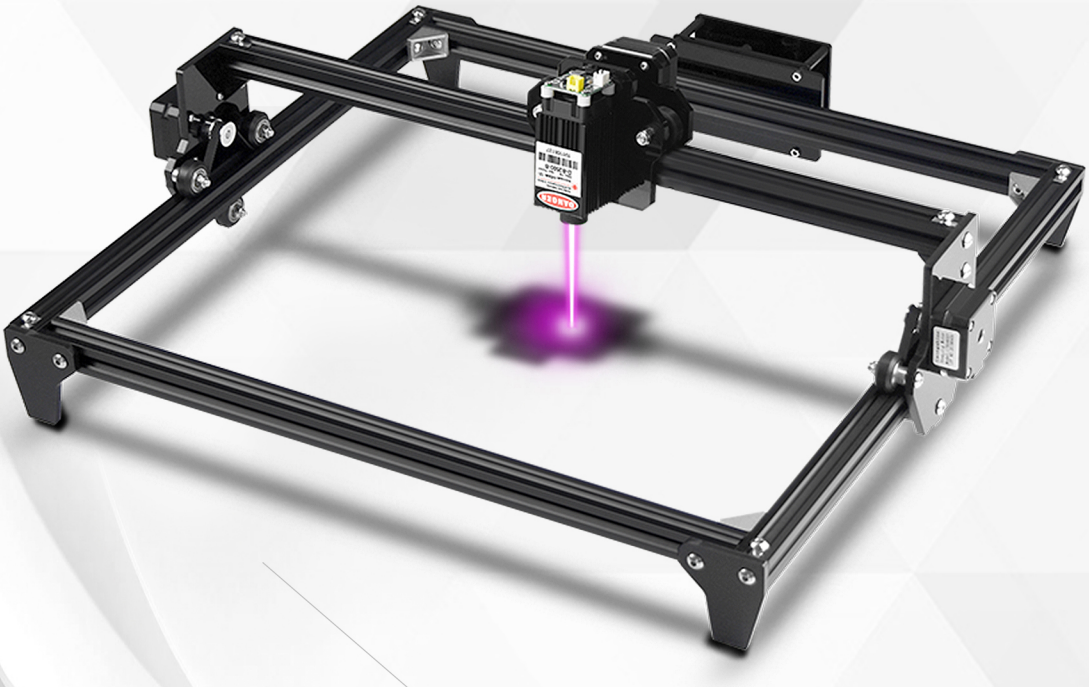
ENGRAVING MACHINE



CNC Laser Engraving Machine 2Axis DC 12V DIY

Part Number	Szie	QTY	Part Number	Szie	QTY
Laser Control Board	USB+Wire	1	Aluminum Eccentric Nut	ϕ5.1*10*6	3
Laser Module	12V 2500mw	1	Aluminum Isolation Column	ϕ5.1*10*6	8
Power supply	12V 5A	1	Nylon Column	ϕ3*6	2
2020 Aluminum Profile	2020*450	4		ϕ3*38	4
2020 Aluminum Profile	2020*492	1	Nut	Hex Nut M3	6
Nema 17 Steeper Motor	H=28mm	3		Thin Nut M5 10*15mm	6
Wire	Motor Wire 80cm	3		T-nut M5	18
Acrylic A	Y-Axis Motor Bracket	2		Self-locking M5 Nut	12
Acrylic B1	X-Axis Motor Bracket	1	Screw	Head Screw M5*8	18
Acrylic B2	Laser Bracket	1		Head Screw M5*10	12
Acrylic C	Machine Support	4		Head Screw M5*12	2
Acrylic D	PCB Box	2		Head Screw M5*30	7
POM Plastic Wheel	ID=5mm OD=24mm	9		Head Screw M5*40	2
Aluminum Pulley	GT2 20Teeth ϕ5	3		Head Screw M3*10	26
Timing Belt Rubber	GT2-6mm 550mm	3		Head Screw M3*6	2
Aluminum Black Bracket	20*20mm	2	Free Spanner	Allen Wrench M2	1
Aluminum Angle	20*20mm	4		Allen Wrench M3	1
Free	Protect Glasses	1	Free	Double Wrench 8-10mm	1
				SD Card	1

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).

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

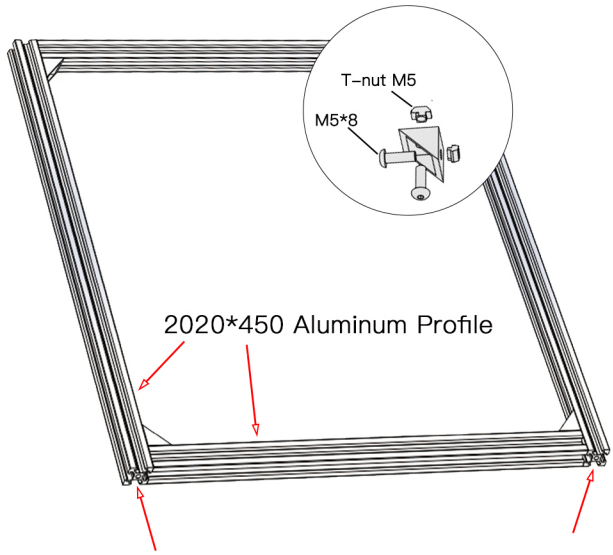
Wear goggles while using

Turn off the power when not use

How to Adjust Laser Focal Length

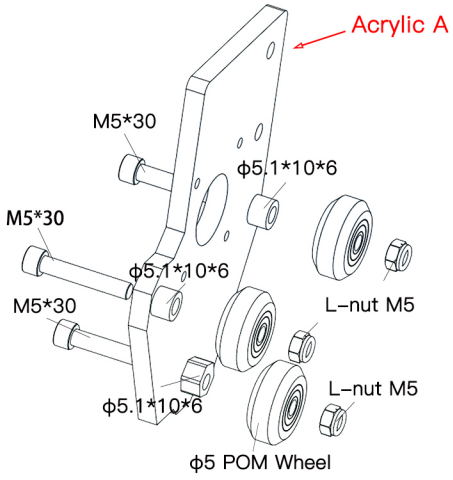
a. The focal length is adjusted by rotating the knob as shown in the figure.

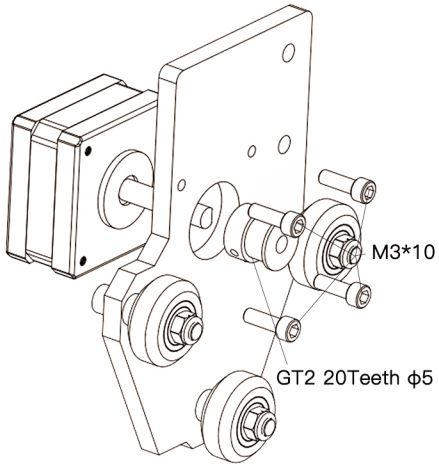
1. Install Frame



※ Attention M5*10 Holes

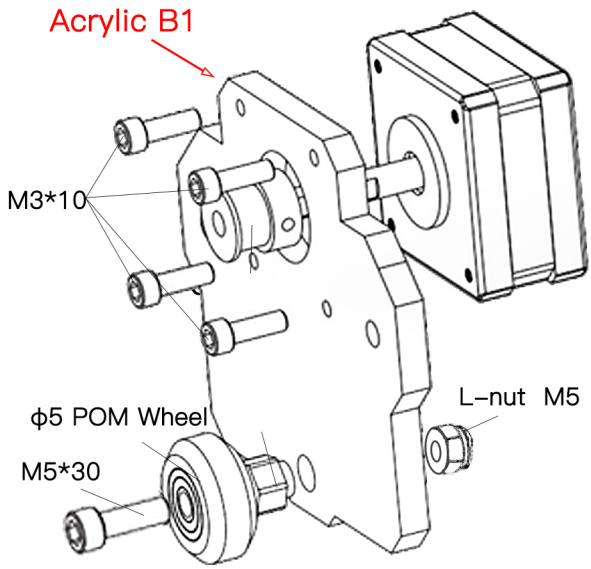
2. Install Y-axis motor bracket



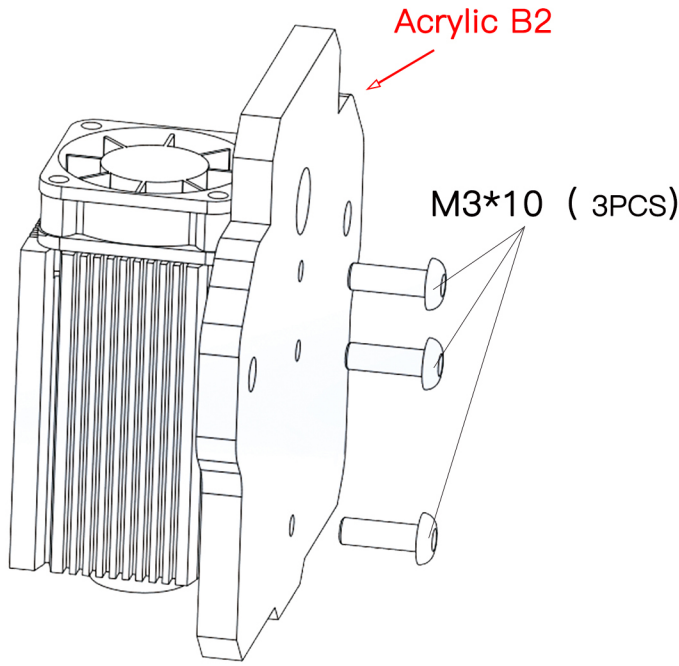


※ The two side bracket need to be installed in the same way

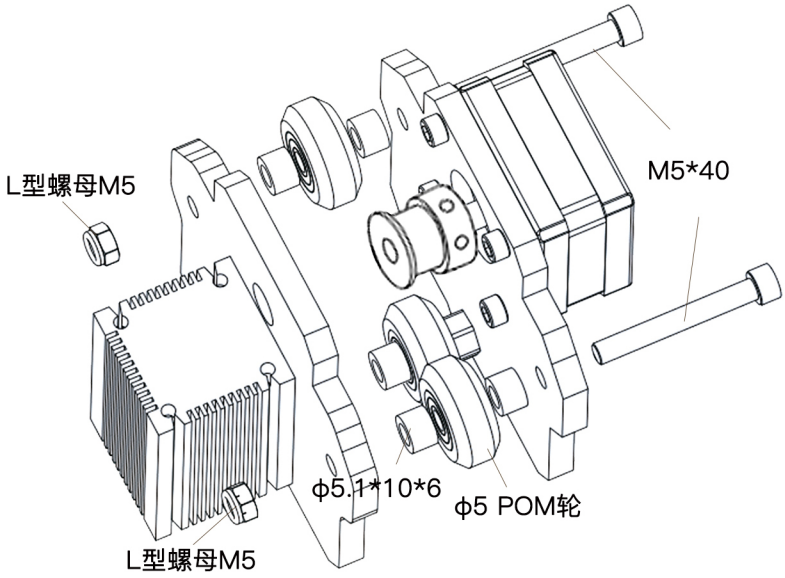
3. Install X-axis motor bracket



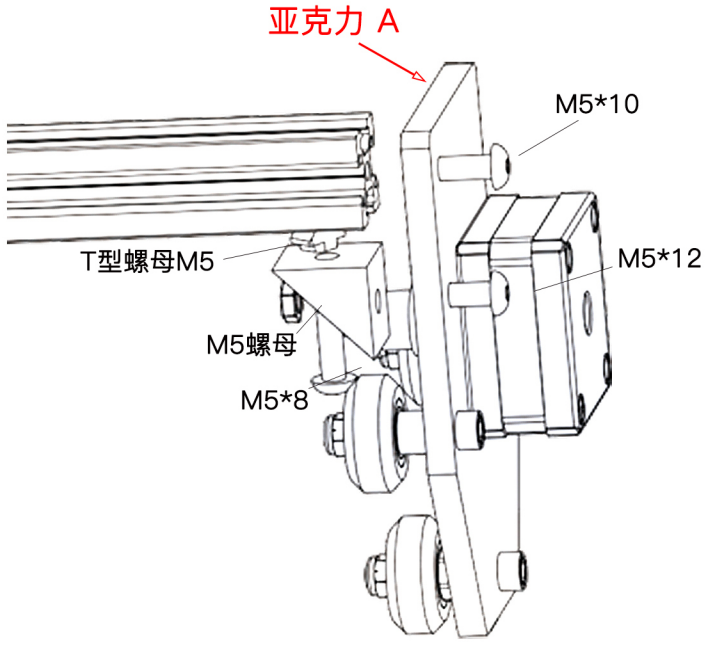
4. Install laser bracket



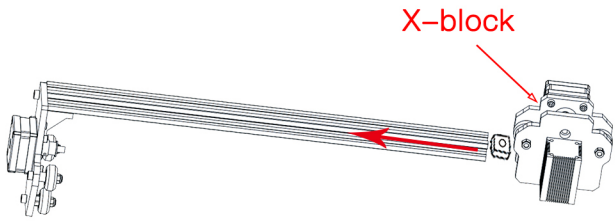
5.安装 X-block



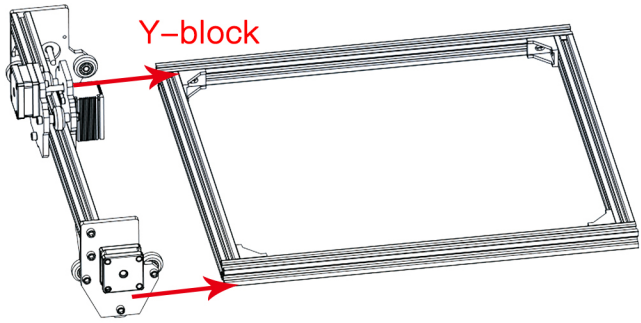
6.安装X轴横梁



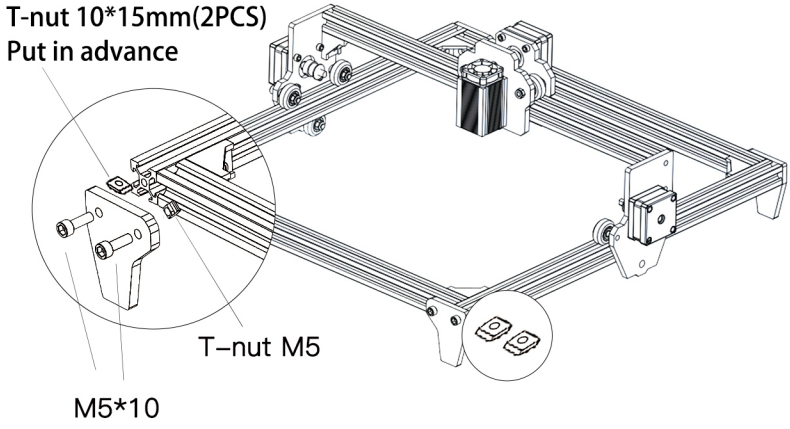
7. Install X-block & Y-block



※ Put Two T-nut 10*15mm in advance

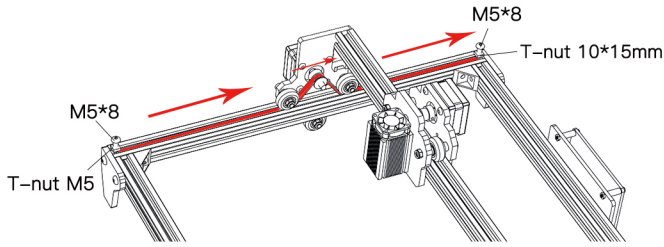


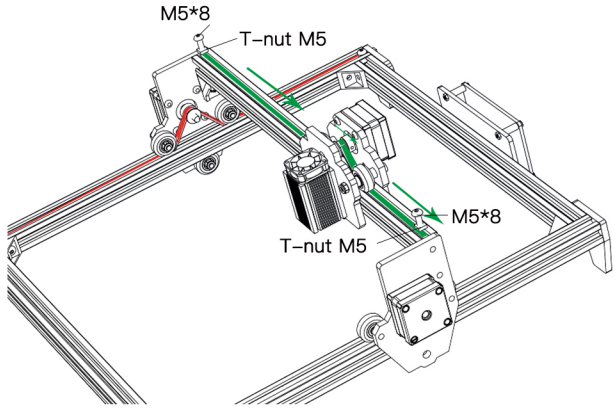
8. Install fixed foot brace



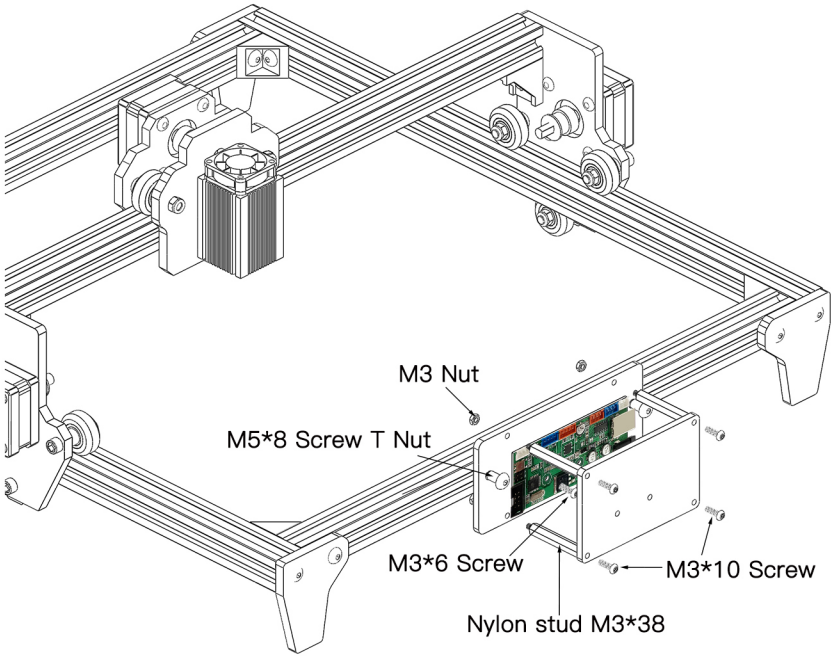
※ T-nut 10*15mm(2PCS)
Put in advance

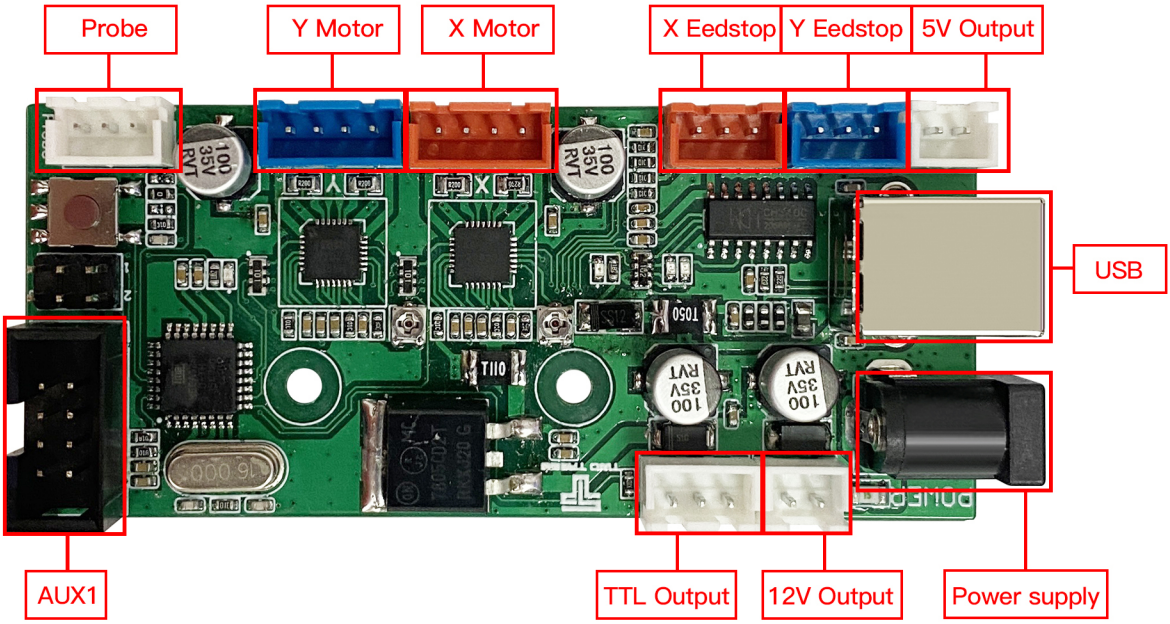
9. Install the Belt

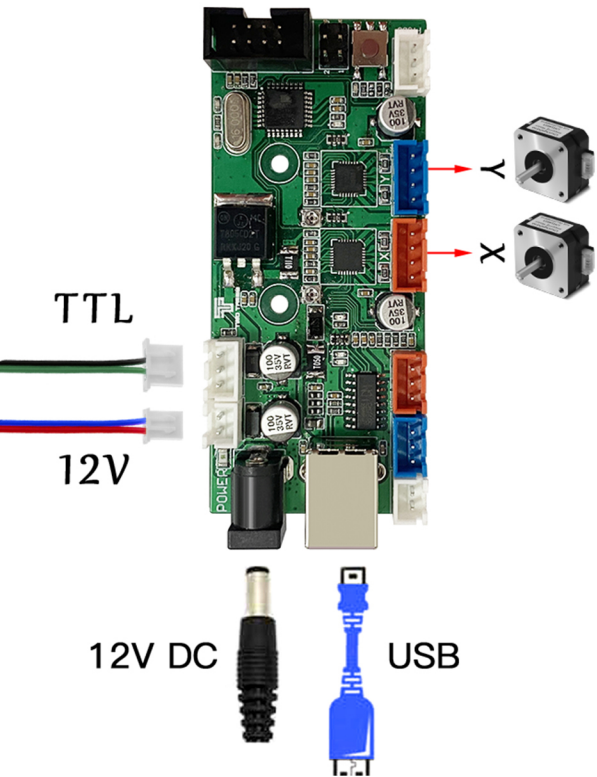


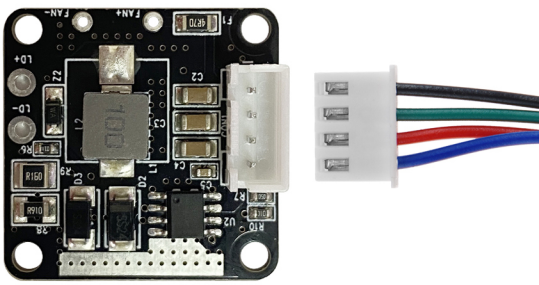


10. Install the motherboard part



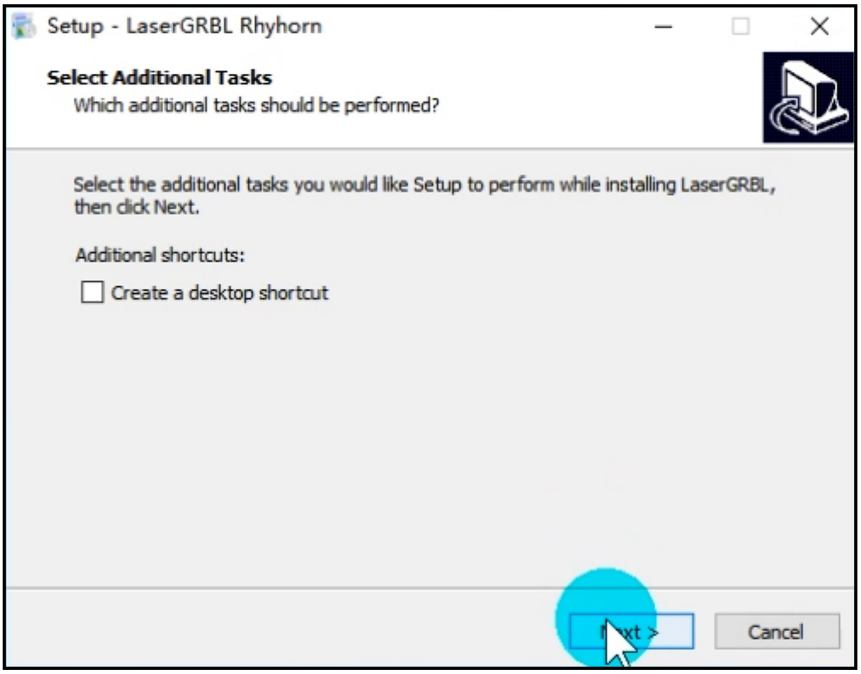




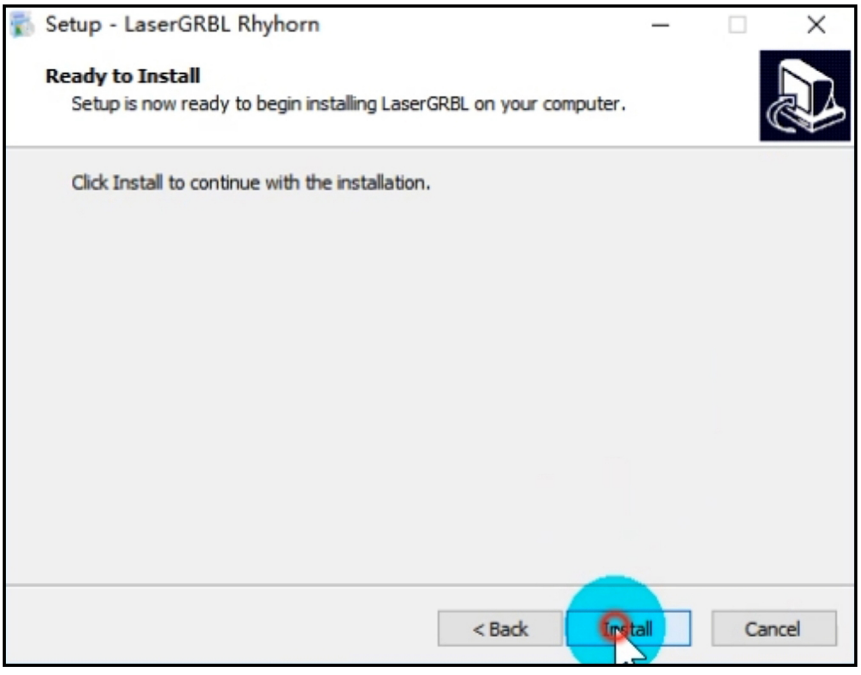


Laser wiring

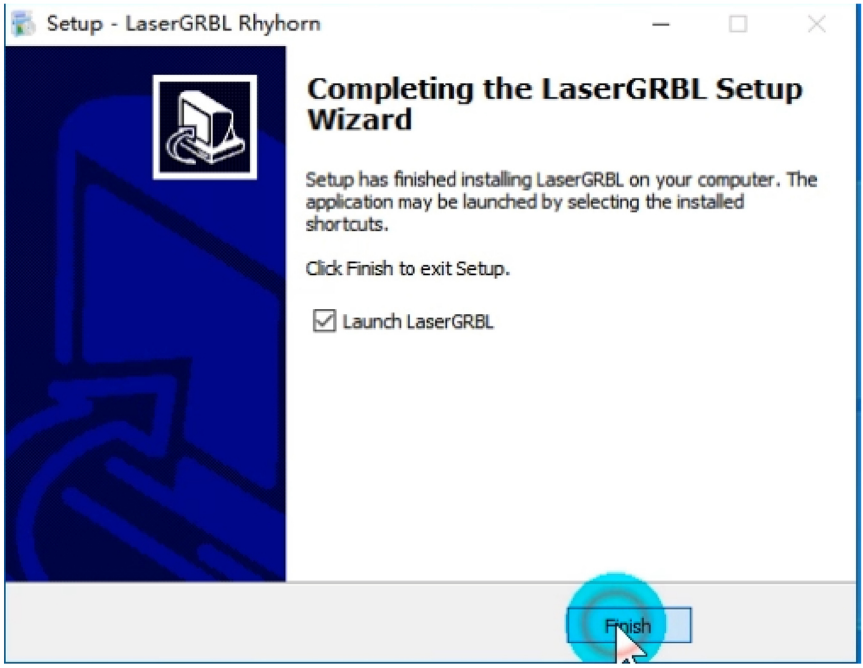
1.Find the software installation package on the SD card and install



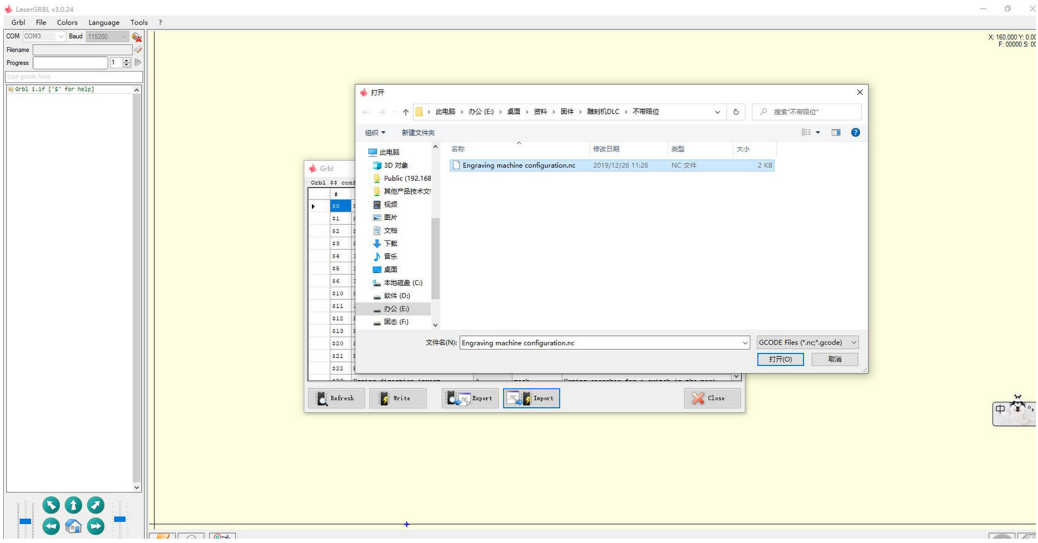
2.Click next



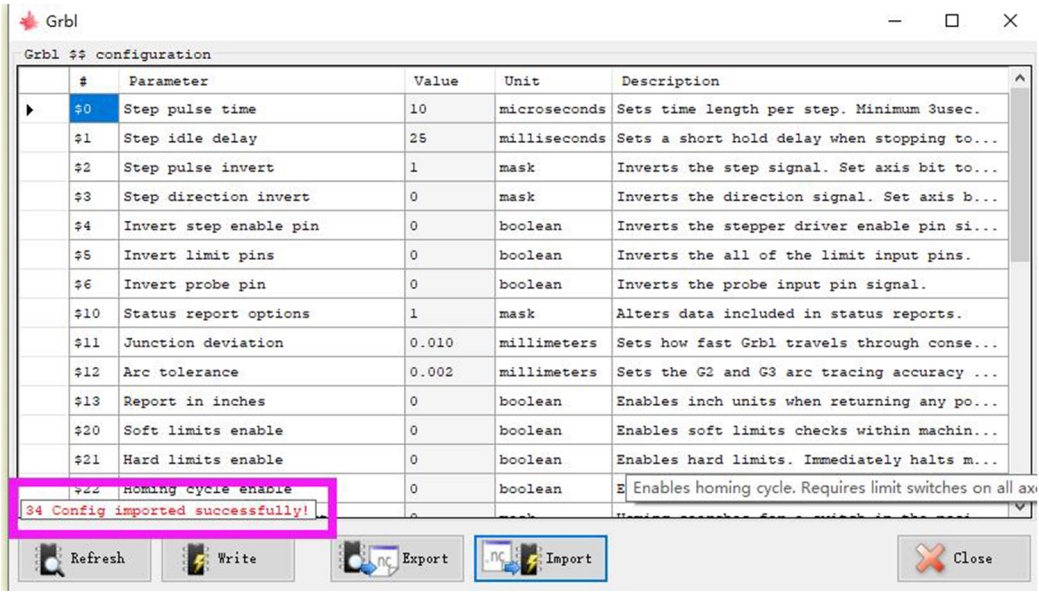
3. Click install



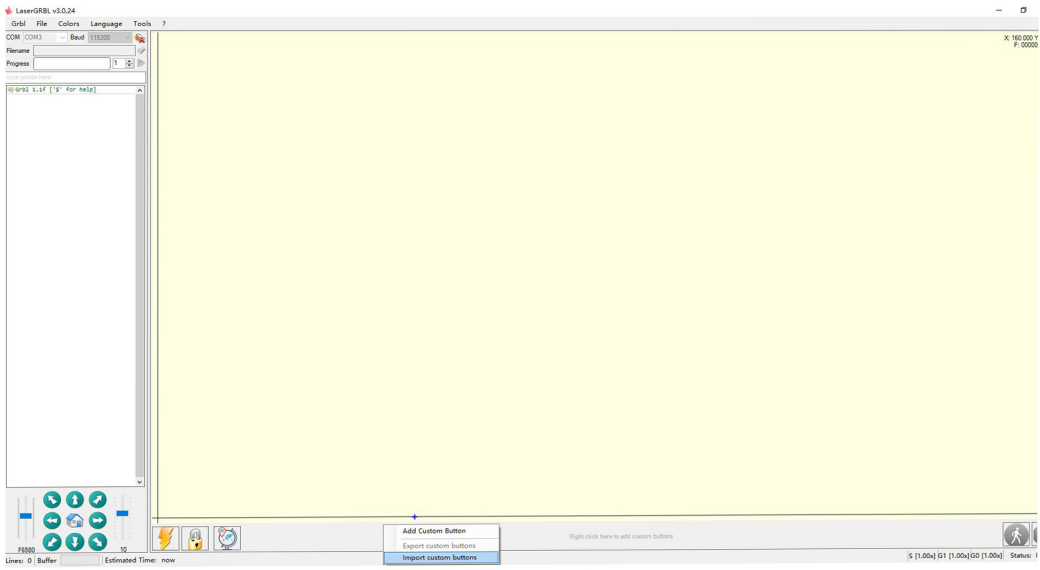
4. As shown in the figure, read the configuration file that comes with the tf card.



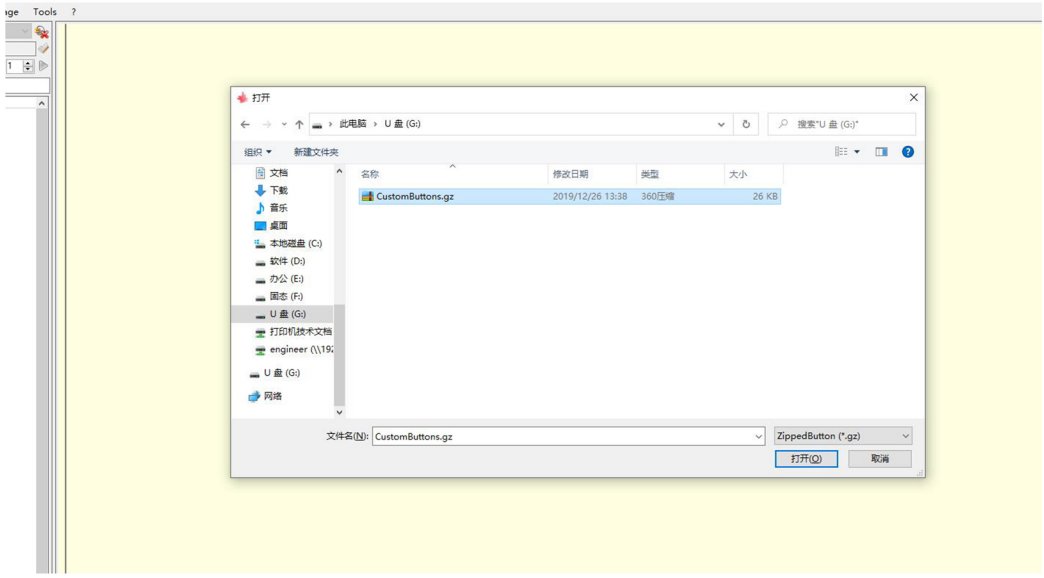
5. Show success You can also modify the configuration properties you need here For details, please refer to tf card and grbl code.



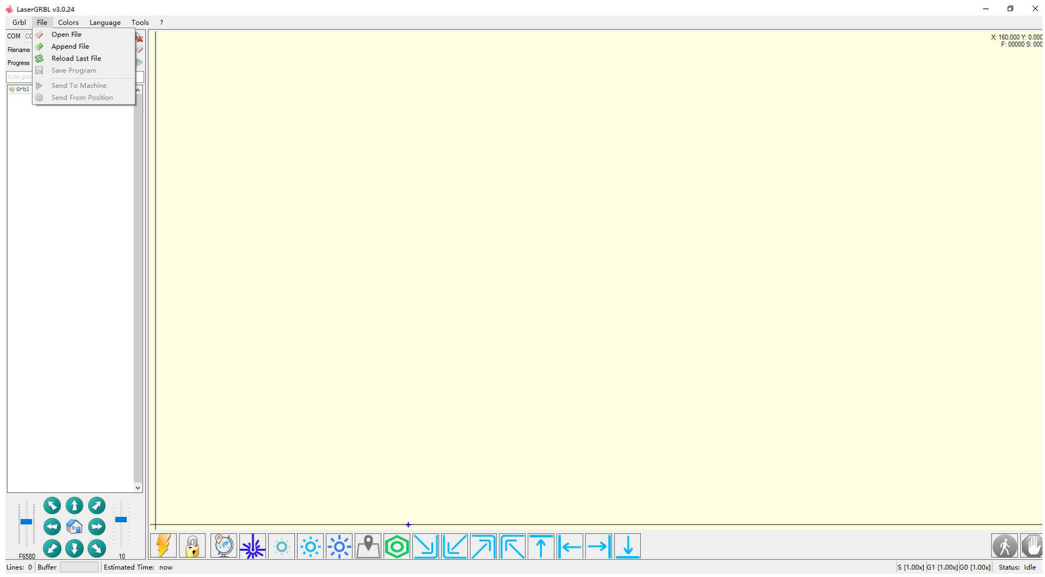
6. Right-click below the main interface and click the Import button to configure



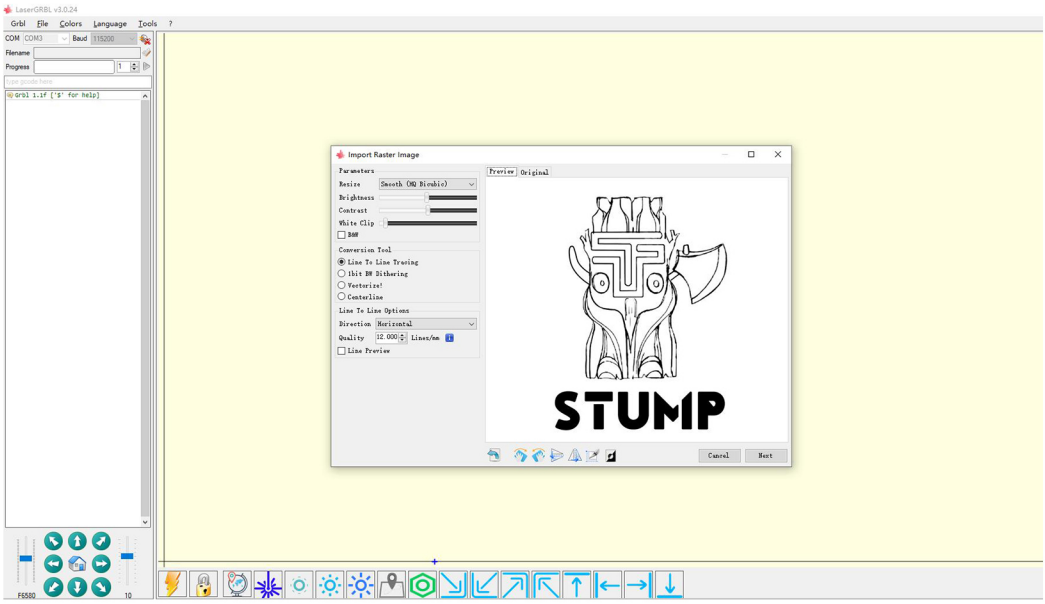
7. Click on this file to import



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



9.Select the engraving method according to your needs

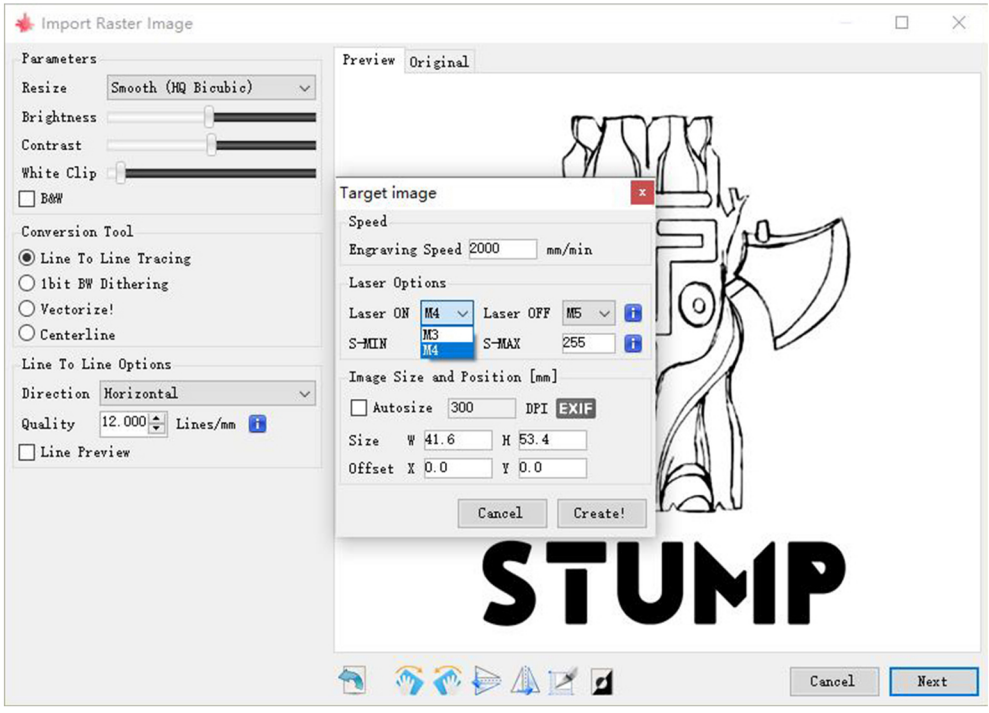


10. Click Next

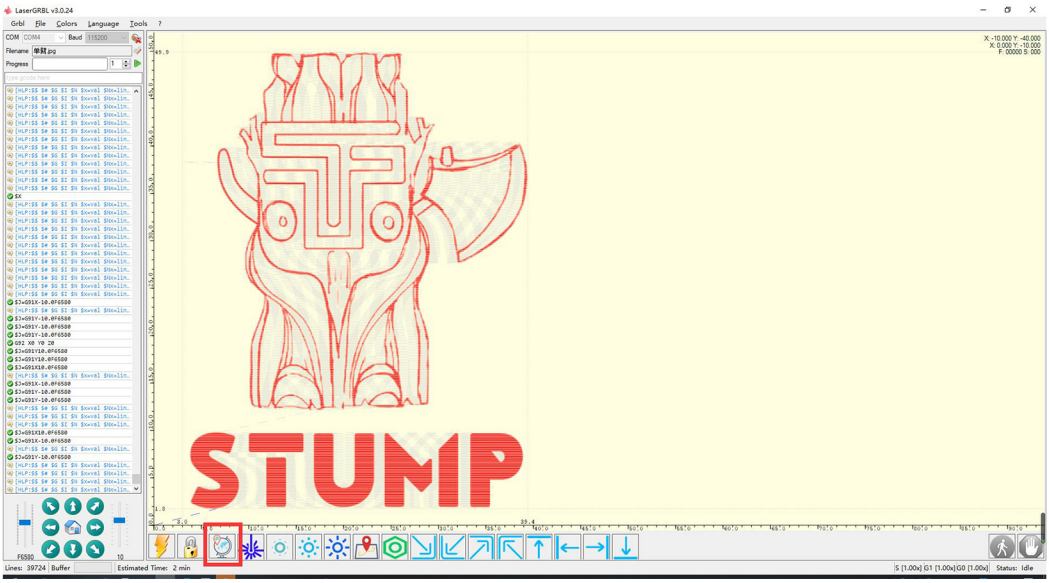
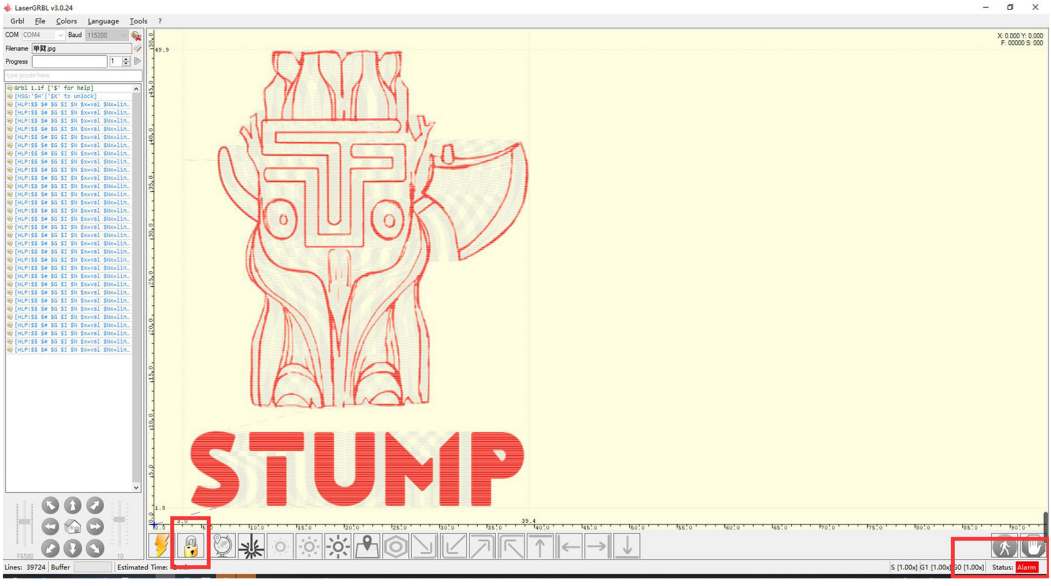
The laser is enabled with the M3 spindle CW or M4 spindle CCW commands.

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



11. 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



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