

FAQ

Machine

1、How large is the working area?

400mm*415mm

2、What's the type of the laser source?

Semiconductor laser unit

3. What's the radius engraving on the machine profile used for?

It is convenient to measure the size of the object and assist in locating the engraving area.

4、What will happen if the machine powered off during working?

It will stop working. The machine will be initialized when powered on.

5、Why is the engraving effect so shallow?

The imported image should be clear. Make sure that focusing correctly before engraving and the power and speed are appropriate.

6、Why is the engraved effect different from the original image?

Check that the screws are tight and the belt is not too loose or too tight.

The tightness of the belt is appropriate if the laser module can slide slowly on the X-axis profile perpendicular to the desktop by gravity, and any pulley in the laser module has no empty sliding.

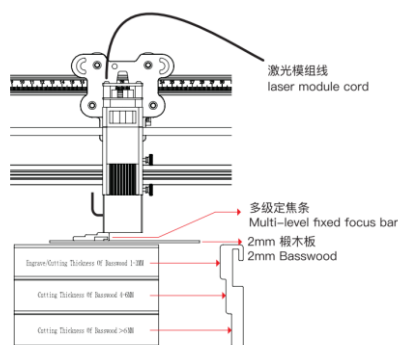
7、What should I do if the engraving effect is inconsistent in depth?

Ensure that the material to be engraved is flat. Observe the gradienter on the machine to ensure that the machine is horizontal, and has been properly adjusted according to the operation method of the user manual.

8、How to focus?

10W

Please place the multi-level fixed focus bar between the laser module and the processed material. Follow the tips and make the bottom of the laser module contact with the corresponding surface of the multi-level fixed focus bar. Finally lock it with two hand screws on the right. For example, if you engrave or cut a 2mm basswood or other material:



9、 Will the laser damage the workbench?

The laser may penetrate the material and damage the workbench (especially when cutting). It is recommended to place objects on the bottom that cannot be penetrated by the laser, such as aluminum alloy plates.

10、 Why can't I start engraving after pressed the microswitch on the control box?

Please check that there is an engraving file in the root directory of the TF card, and the TF card is inserted. Notes:

1. The machine reads the latest engraving file in the root directory of the TF card by default. It is recommended to delete other files.

2. The engraving file can only generated by LightBurn(.gcode/.gc/.g/.nc/.ngc are supported).

11、 How to replace the filter cotton in the 5W laser module?

Take out the filter cotton directly when powered off. Clean it with water, dry it and put it back (or replace it with a new one). Be careful not to touch the protective lens of the laser module.

12、 What should I do if the buzzer makes a rapid alarm sound?

In preview mode and engraving mode, if the machine turns on it side or moves, it will turn off the laser. Motor stops moving, indicator light flashing, and buzzer emits alarm.

Solution: Please move the machine to its original position and press microswitch on the control box to continue previewing or engraving after clearing abnormality (The microswitch only works during offline working).

13、 What should I do if the machine cannot be turned on?

1. Check that the power plug is plugged in properly.

2. Check that the power outlet is properly powered.

3. Check that the power switch on the machine is turned on.

14、 Do I have to wear goggles?

The machine adopts the design of shading and eye protection, and integrates the MEMS attitude sensor. The laser module will stop working when the machine turns on it side abnormally. Even so, we still recommend that you wear goggles during working.

15、 During off-line working, the laser module "HOME" abnormally and makes the sound of hitting the profile continuously. How to deal with it?

It is due to the limited switch cannot be closed normally. Ensure that:

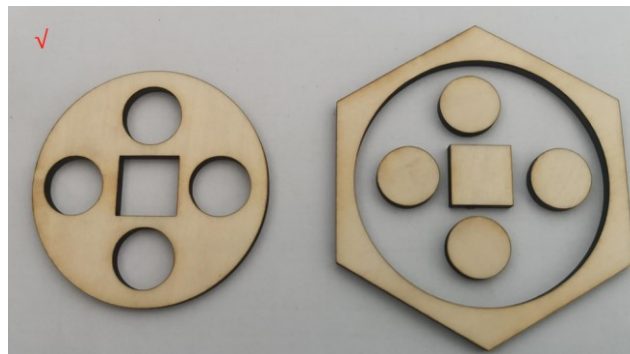
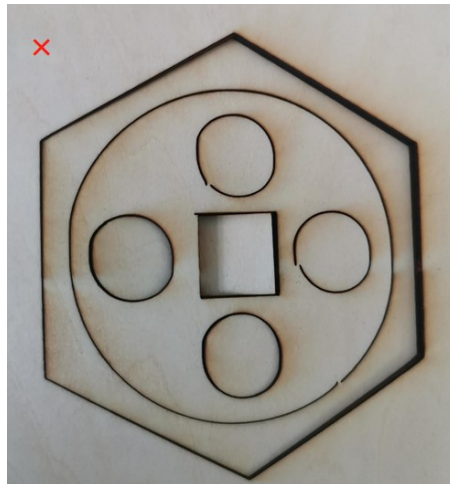
1. X direction: When the laser module moves to the end of the left side, the limited switch of X-axis can be closed normally;

2.Y direction: When the laser module moves to the end of the control box, the limited switch of Y-axis can be closed normally;

If the limited switches cannot be closed, check whether the wire is obstructing the movement of the laser module and the X-axis assembly first. Then reinstall the X-axis assembly to make it parallel to the front and rear X-axis profiles.

16、What will cause if the belt too loose or too tight?

The engraved graphics will be deformed and dislocated obviously: like a circle changes into an ellipse.



Engraving or Cutting

1、What opaque material can I engrave or cut?

Engraving: Paper, Wood, Bamboo, Leather, Textile, Acrylic, Painted Metal, Plastic, etc.

Cutting: Paper, Wood, Bamboo, Cloth, Leather, Fabric, Acrylic(Clear acrylic cannot be cut), Plastic, etc.

2、Can I engrave on cambered material?

Yes, but the radian of the material should not be too large. Otherwise there will be slight deformation.

3、Can I engrave on reflective/transparent materials such as ceramics/glass?

Yes, but you need to apply anti-reflective material on the surface of the material before engraving to ensure the engraving effect and preventing the reflected light from damaging the laser module.

4、Why do I have different engraving effects in the same materials with different colors by using a same G-Code file?

Materials with different colors have different optical properties. They have a difference in absorbing and reflecting the energy of laser. You can achieve a desired effect by adjusting the parameters.

5、How to deal with the smoked traces on the surface of the material?

Reduce the power appropriately and enable strong airflow.

6、Why is it unable to cut through the material?

- 1.Ensure that the machine and engraving material are parallel to the workbench;
- 2.Ensure that the protective lens of the laser module is clean;
3. Refer to the user manual and focus correctly;
4. Refer to the recommended parameters in TF card;
5. Gradually increase the number of passes or reduce the cutting speed appropriately;

7、Should I use the Air-Assist?

The Air-Assist can blow away the smoke and dust effectively during engraving or cutting, protecting the lens of the laser module and ensuring the stability of the laser energy. It can also reduce the surface temperature of the cutting material quickly. Blow away the hot smoke and dust to keep material surfaces clean. Make the cutting edge smoother and more delicate.

It is recommended to turn on the weak airflow when engraving, and the larger airflow when cutting (the effect depends on the specific material).

Software

1、What software can I use for the machine?

LaserGRBL (Free)

LightBurn (Paid - 30 Days Free Trial)

2、Where can I download the software?

LaserGRBL (<https://lasergrbl.com/download/>)

LightBurn (<https://lightburnsoftware.com/pages/trial-version-try-before-you-buy>)

3、What files can I import to the software?

LaserGRBL (bmp/png/jpg/gif/svg)

LightBurn (bmp/png/jpg/jpeg/gif/tif/tiff/tga/ai/pdf/sc/dxf/hpgl/plt/rd/svg)

4. Where can I get tutorials?

The TF card comes with the machine. You can get more detailed tutorials from:

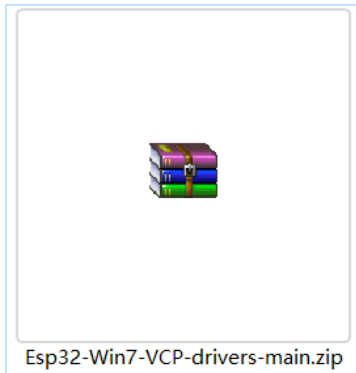
LaserGRBL (<https://lasergrbl.com/usage/>)

LightBurn (<https://lightburnsoftware.github.io/NewDocs/>)

5. What should I do if it cannot identify the COM port corresponding to the engraving machine for WIN7 system?

Unzip the package and install the driver in the device manager manually.

4. Software > Drivers for Win7



6. What should I do if the software does not respond or it cannot be connected during working with Type-C cable?

1. The data cable should have the communication function, and the end of it connected to the computer is a USB-A interface. (Mac users usually use data cables with Type-C interfaces on both ends, resulted in inability to connect. They need to purchase a separate hub with a USB-A port or use the included A-to-C adapter)
2. The lbdev file has been imported successfully according to LightBurn-User Guide in the TF card.
3. The COM port corresponding to the engraving machine is not occupied.
4. Please record a video and feed back the relevant system information and software version.