

Fiber Laser Marking Machine Using Manual



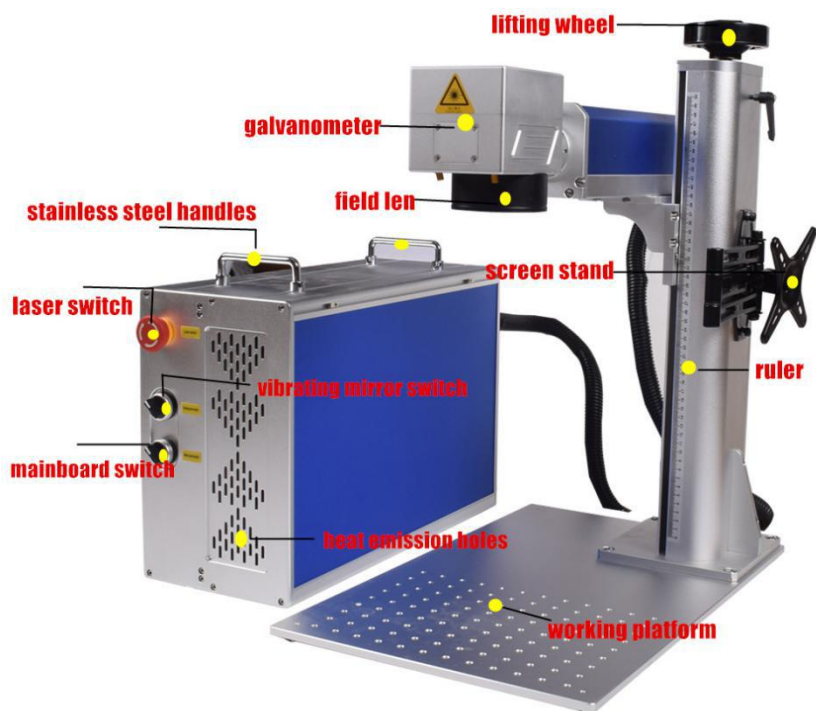
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1. Machine introduction

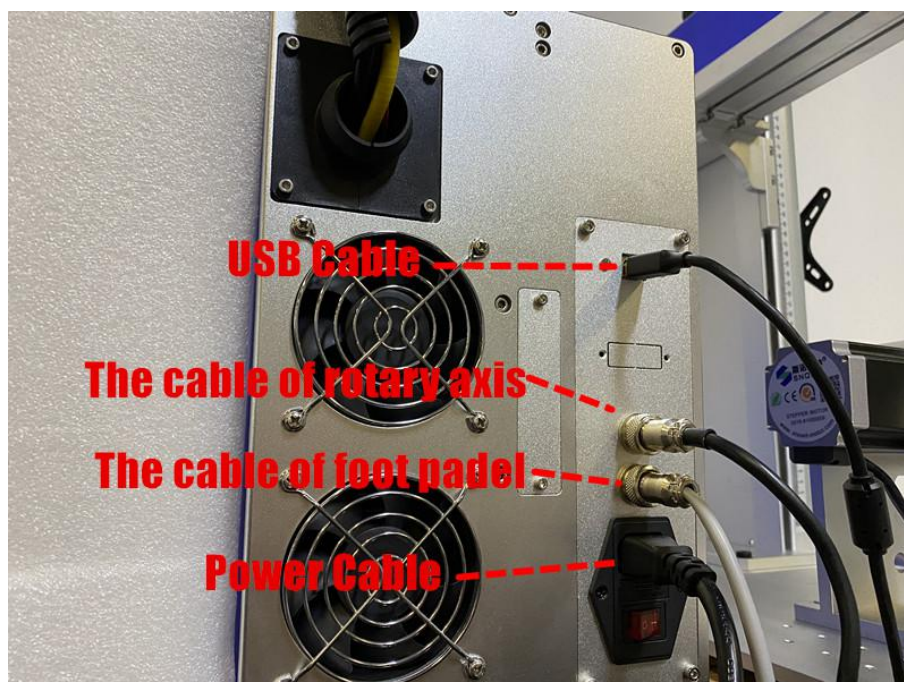


2. Connections

You will get 4 cables as following picture, USB cable, power cable, the cable for foot pedal and rotation axis (optional):



How to connect :



3. Power on

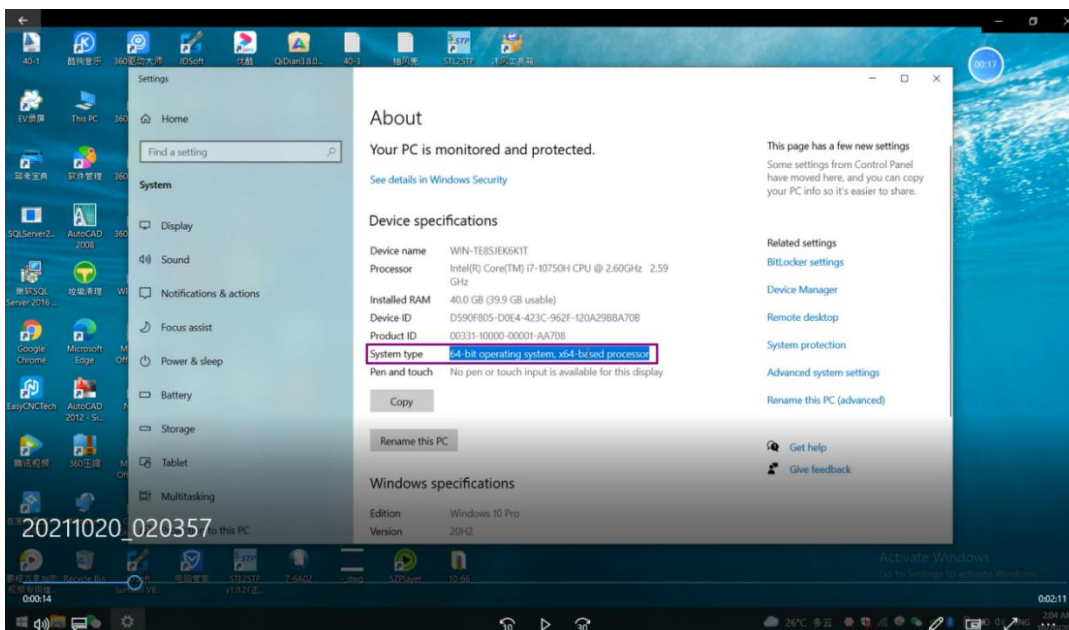
Turn on the following three switches.



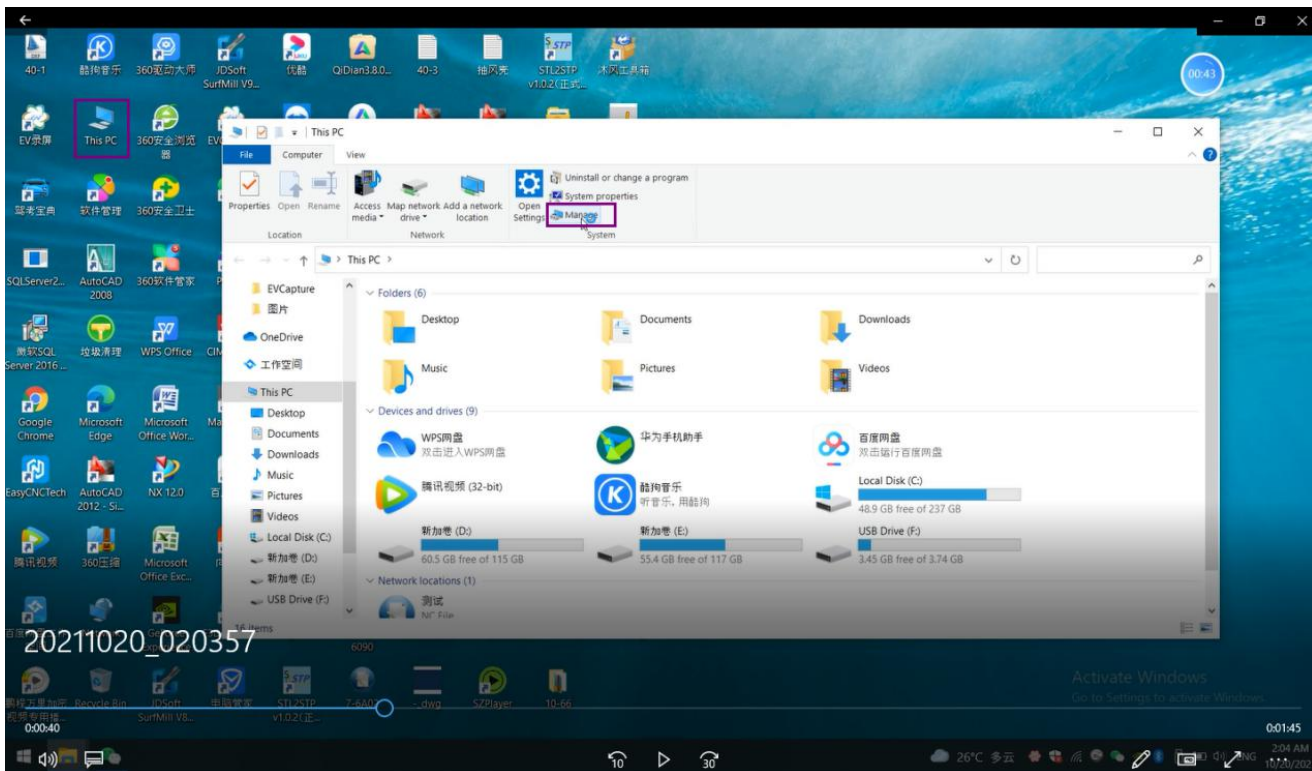
4. Software installation

Note: Turn off the anti-virus software(if there are any) and firewall before downloading and then install the software .

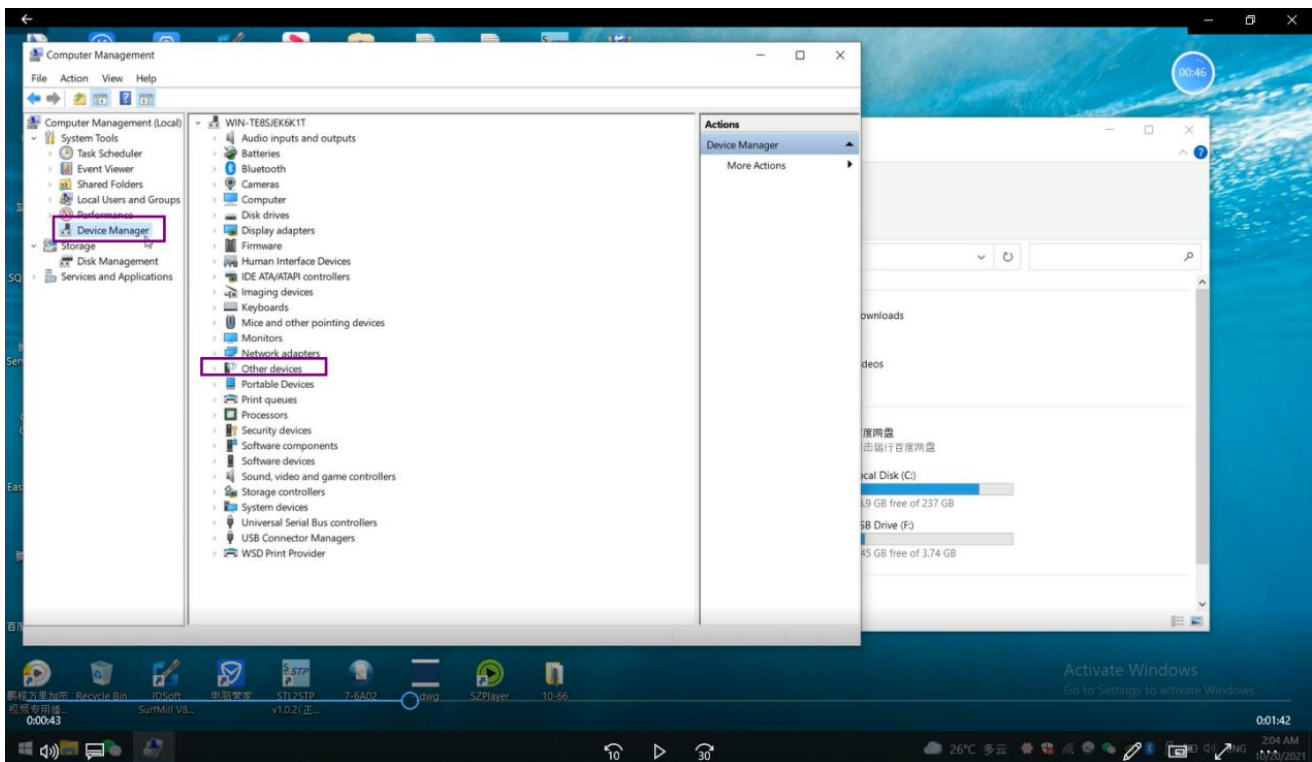
4.1 Remember your computer system, you will need to choose correct system later in updating the driver.



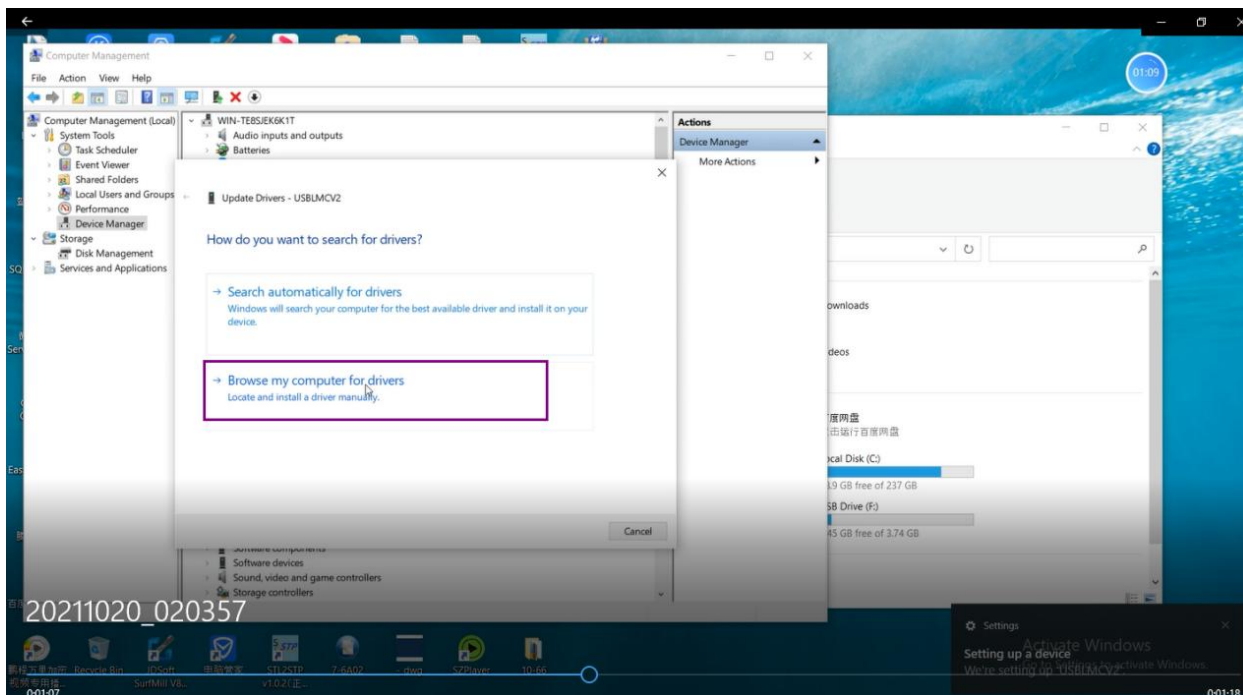
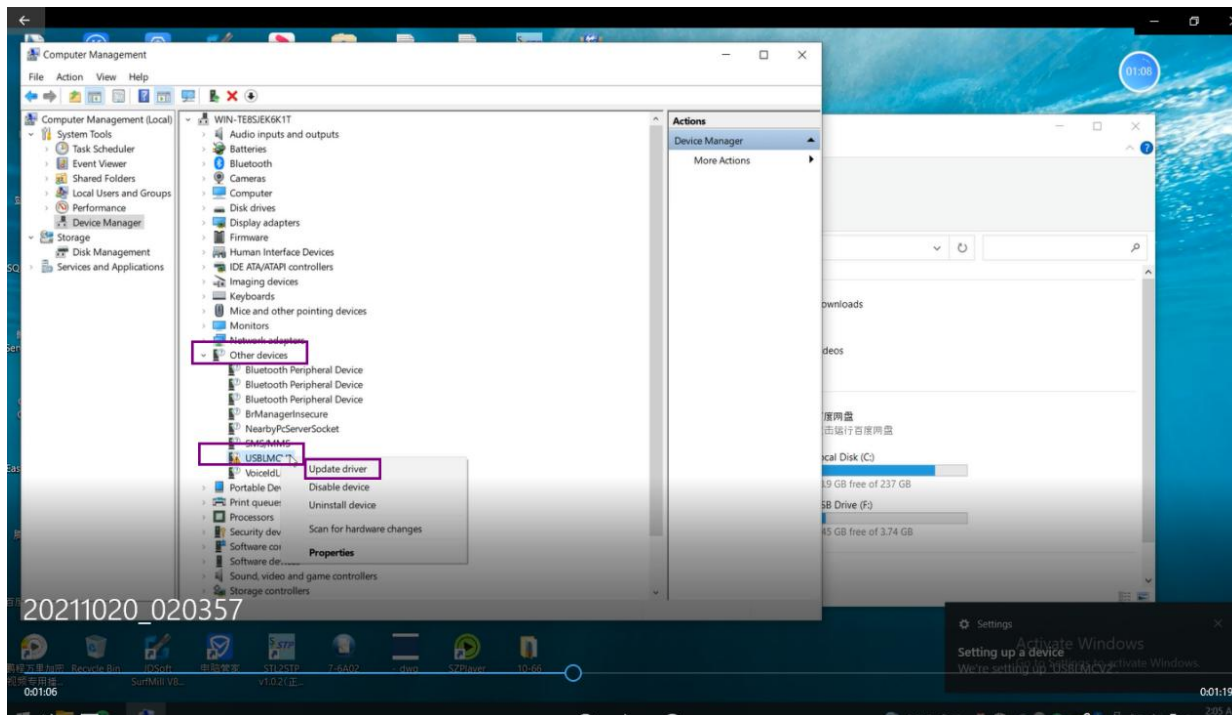
4.2 Click “This PC” and then Open the Manage

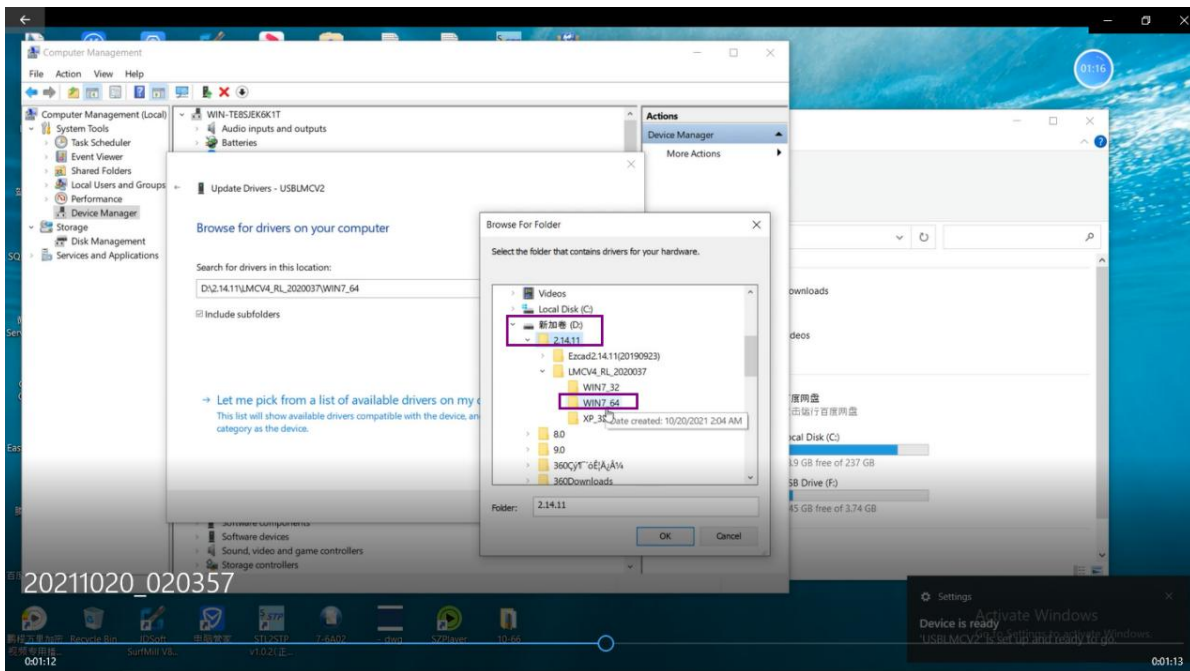


4.3 Click the “Device Manager” and open the “other devices”

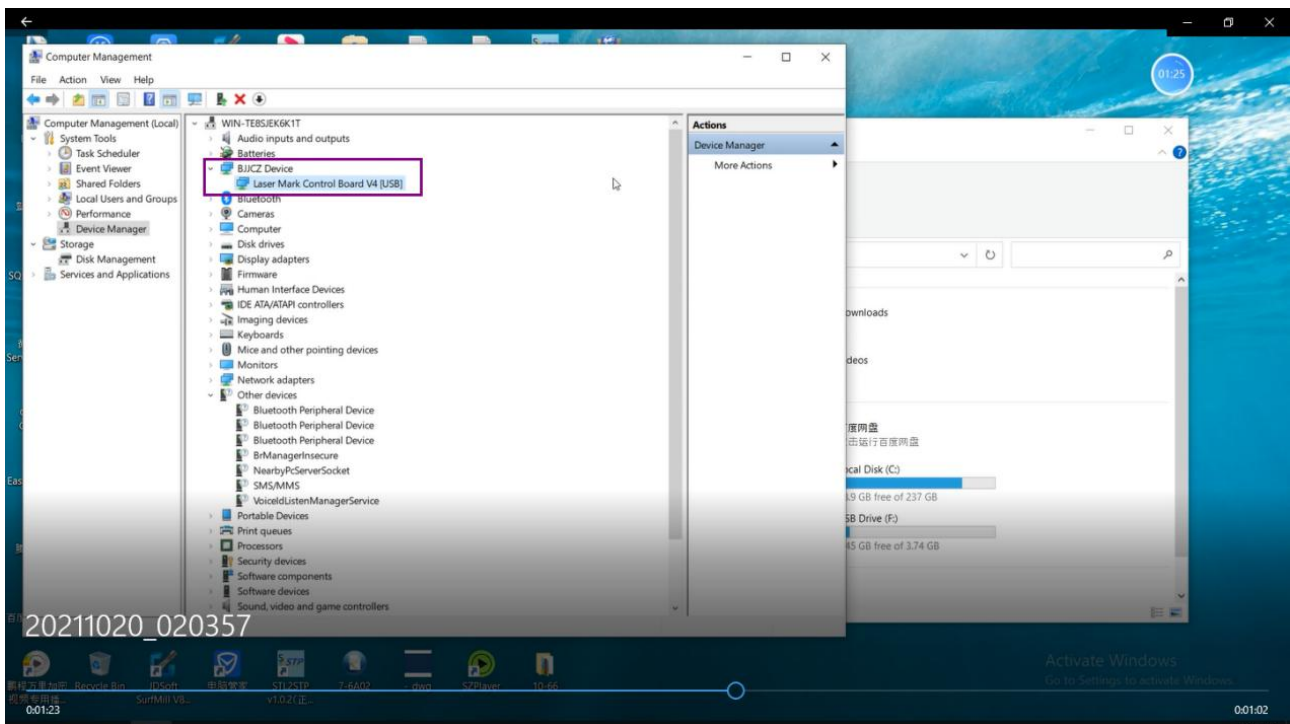


4.4 You will see all the devices connected to your computer .Select "USBLMCV2", right click the mouse and select "update driver"

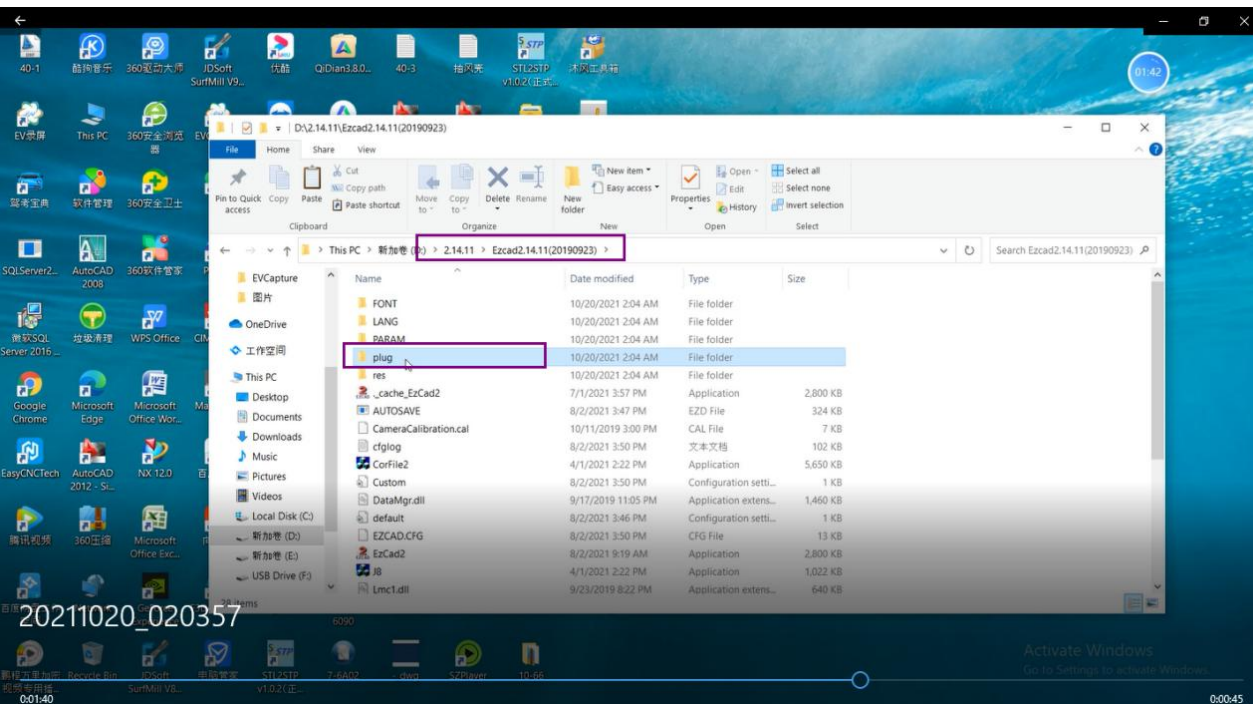
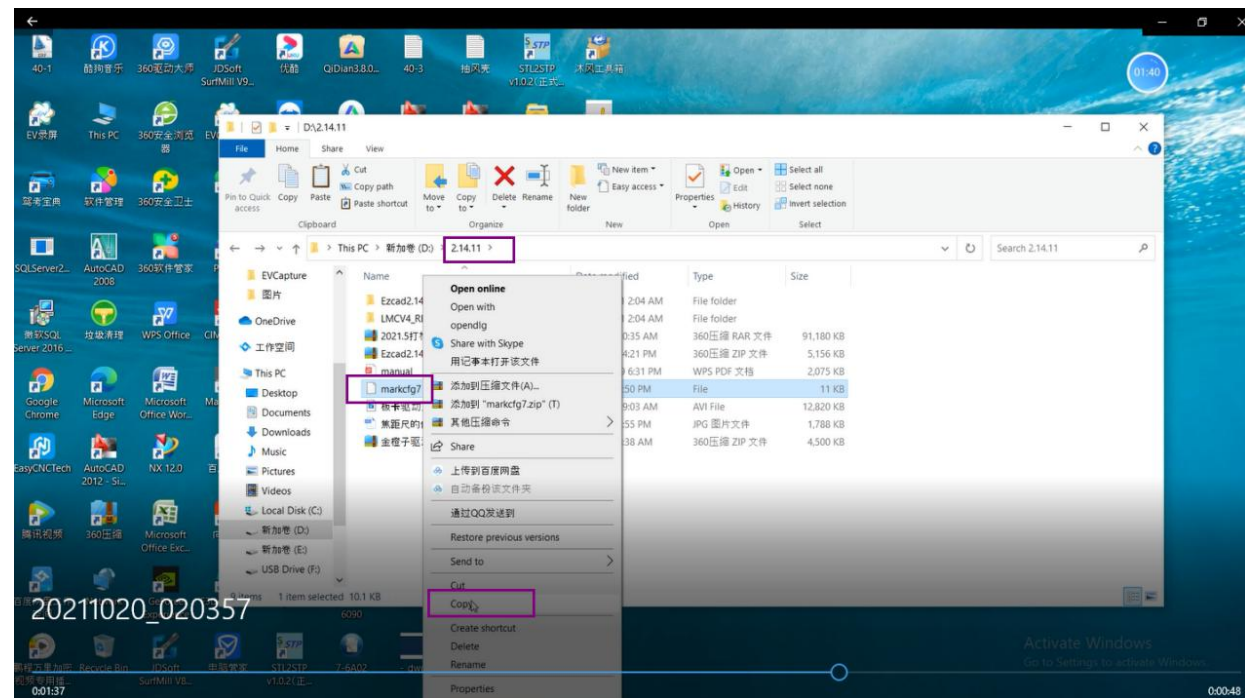


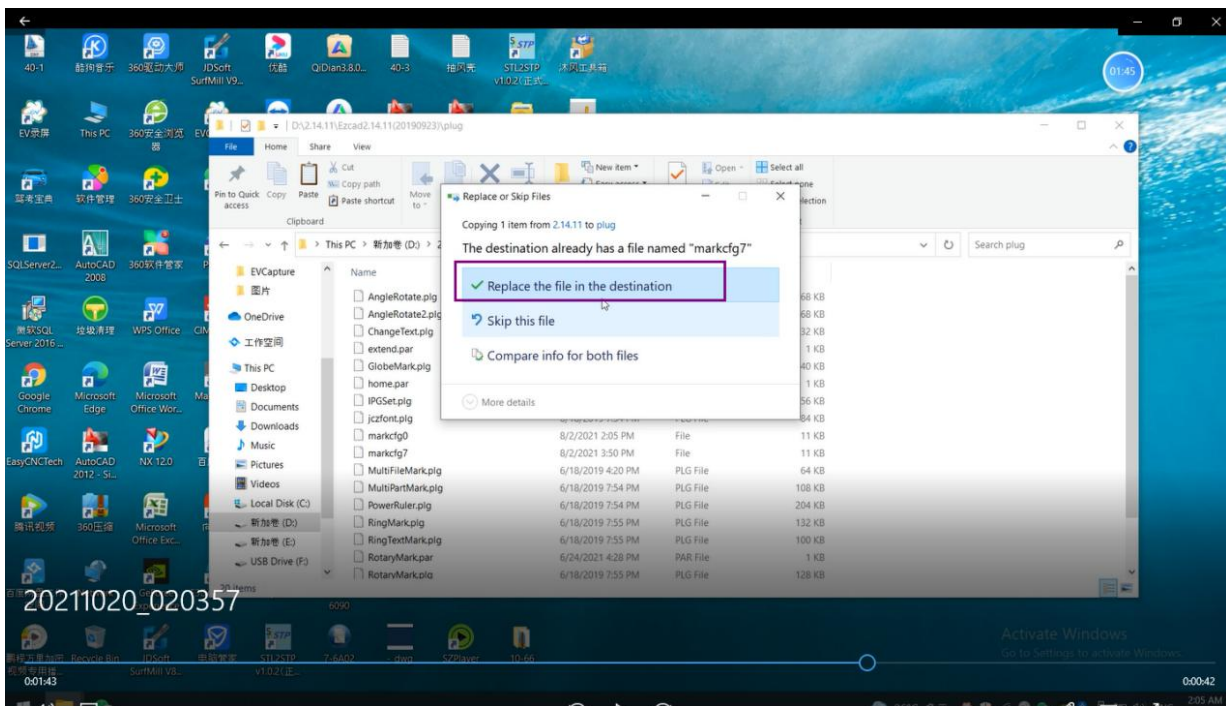


4.5 After updating the driver, you will see "BJJCZ Device" --"Laser Mark Control Board V4(USB)"

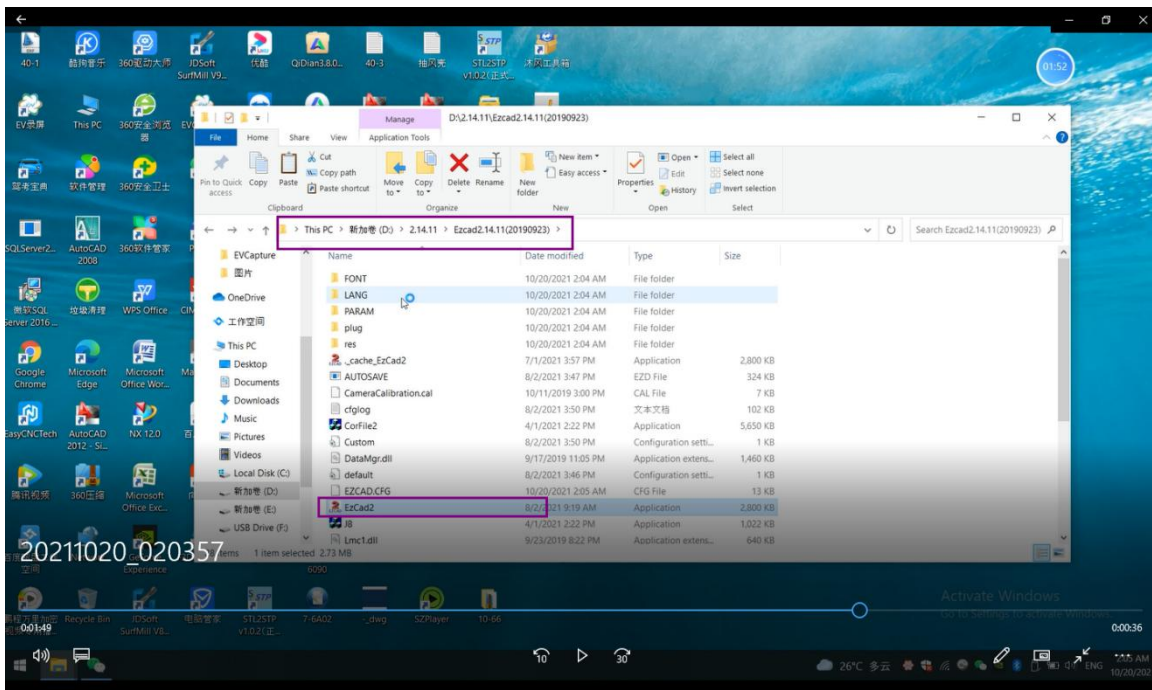


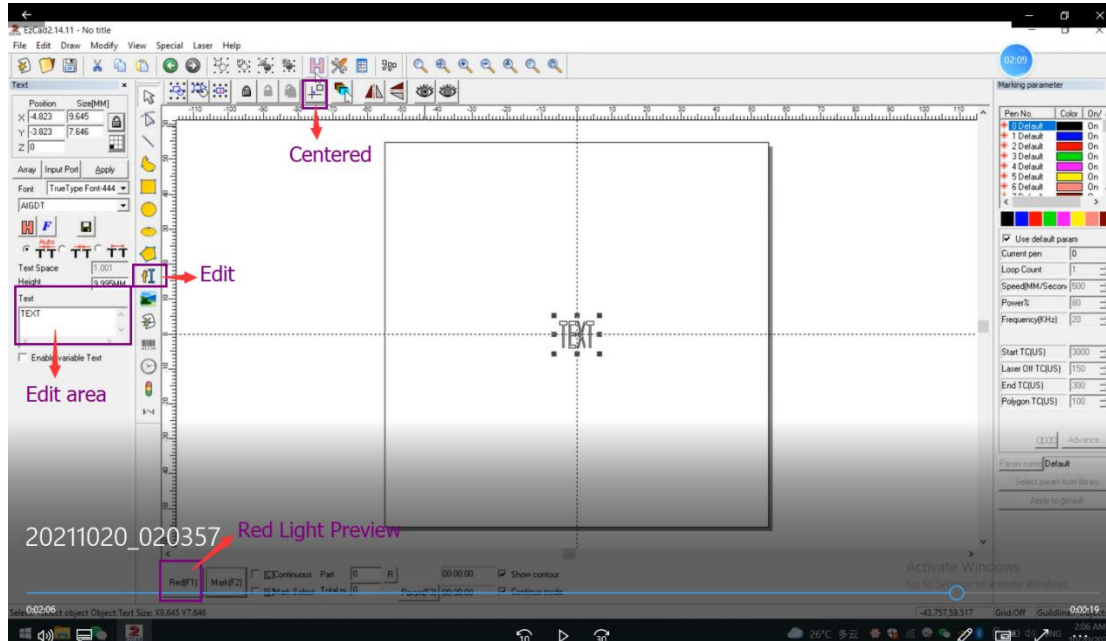
4.6 Copy the configuration file “markcfg7” and paste into the “Ezcard2.14.11 -Plug” folder





4.7 Select Ezcad2 and send it to the desktop. Now you can see the software on the desktop. Double-click the software icon"EzCad2"





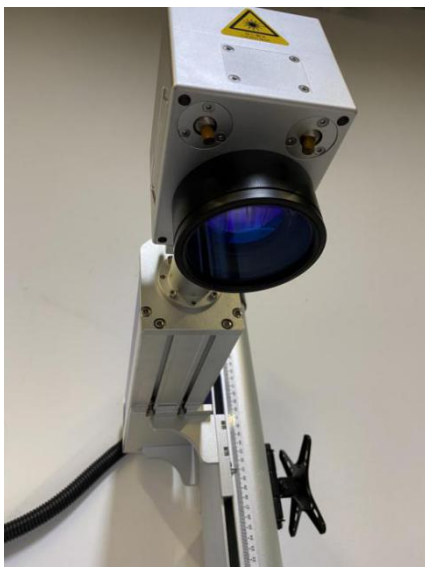
For the introduction of the software page, please read the "Manual"
Get more detail please click the below link:
<https://youtu.be/RxXOsDfdPKc>

5. Focus setting

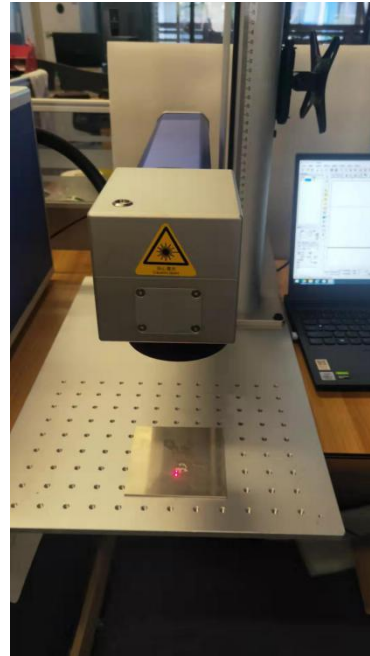
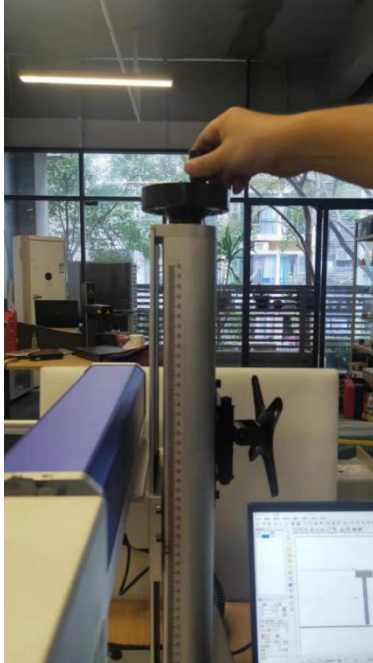
A: In the case of using the original field lens

This machine has double red lights for positioning, no need focusing ruler. Double red light help customers make focus quickly and easily.

Step 1 : Open the lid of Field lens and press the button on the top;



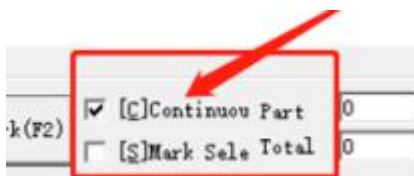
Step 2 : Spin the lifting wheel to make two red dots coincident to get the best focal length (as we already set up the best length at the two red dots coincident point before delivery), so each time after you put different thickness materials on working table, just adjust the lifting wheel to make the two dots coincident will be ok.



B: In the case of using another field lens

For example: if your machine is 30W 300*300mm type, the default factory setting of the machine is 300*300mm. when you want to change to a 110*100mm field lens for marking, there are two focusing methods for you :

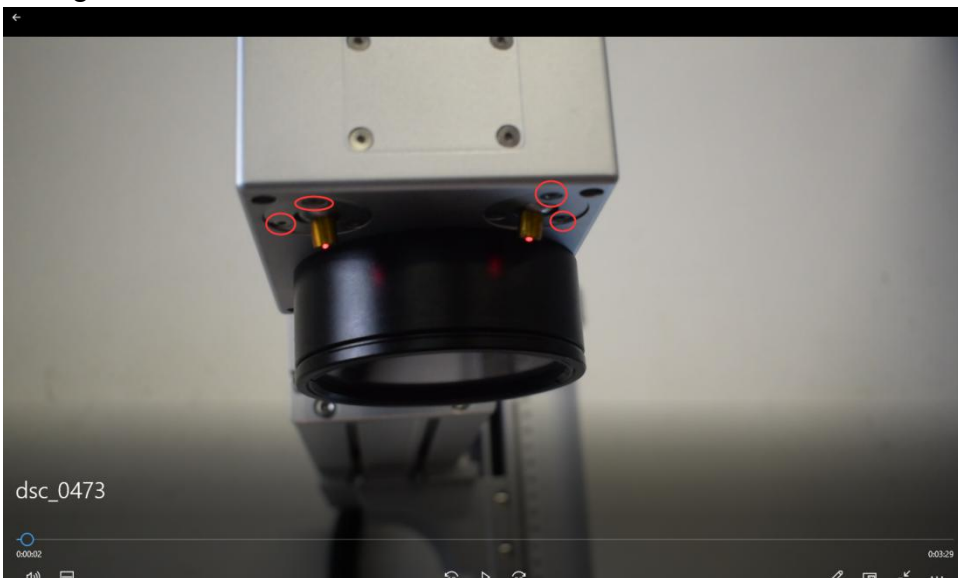
- 1). By changing the original 300*300mm to 110*110mm, the coincidence of red lights can not be used as a standard for judging whether it is the best focal length or not. you should use **the best focal length** we provided for 110*110mm.
- 2). Or find the best focus length by yourself: Marking a "TEXT" file by choosing continue , then

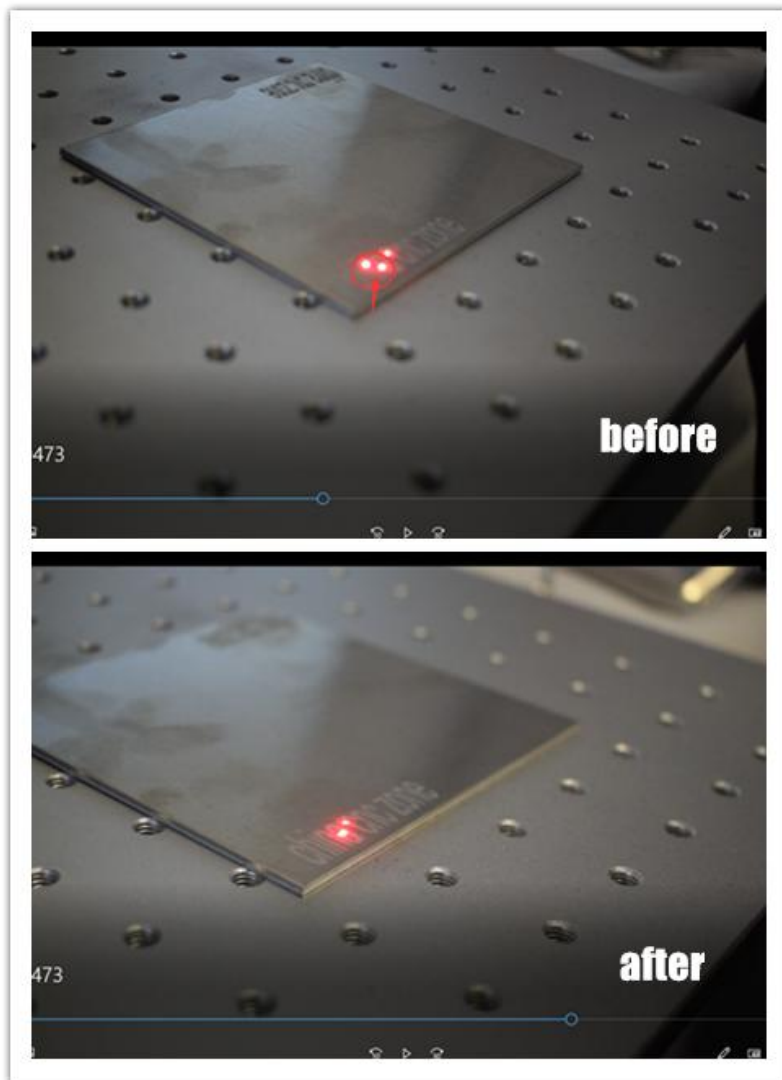


spin the lifting wheel till get the brightest spark of laser (or the sharpest voice of laser), then this point is the best focus length.



When the machine is at the best focal length, loosen the screws and adjust the angle of the two red lights to make them coincident.





When the two red dots are coincident, tighten the screws to complete setting. So each time when you put different thickness of materials, just spin the lifting wheel to make the two dots coincident will be ok.



6. Field lens replacement

Hold the field lens and then turn the field lens clockwise



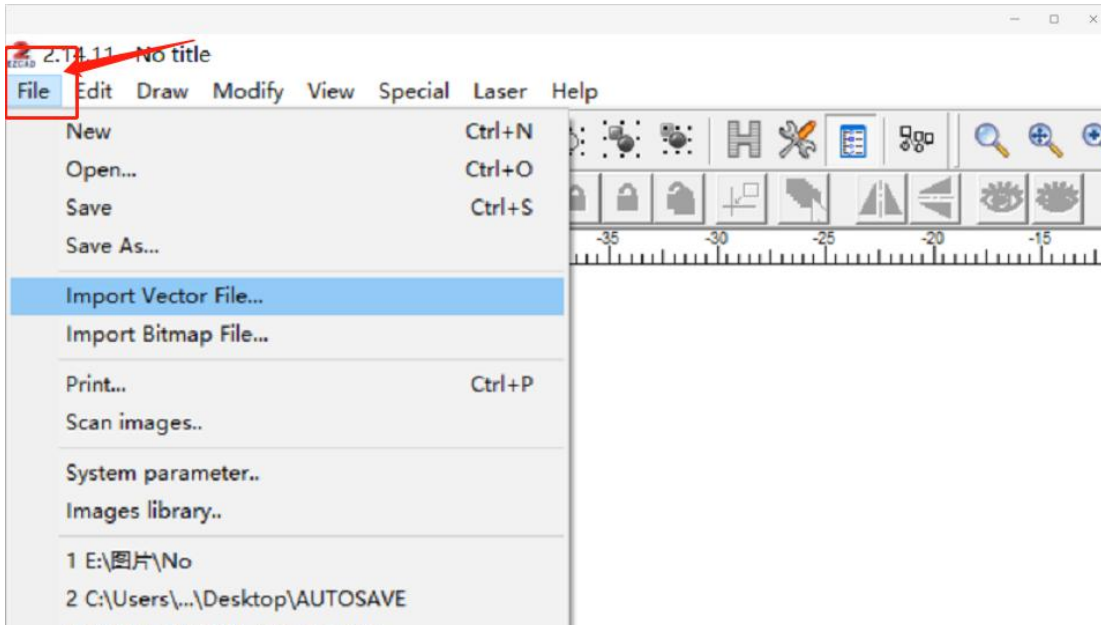
7. Light path box adjustment

When doing marking, you can adjust the light path box forward or backward by loosening the screw to move marking area where you want.

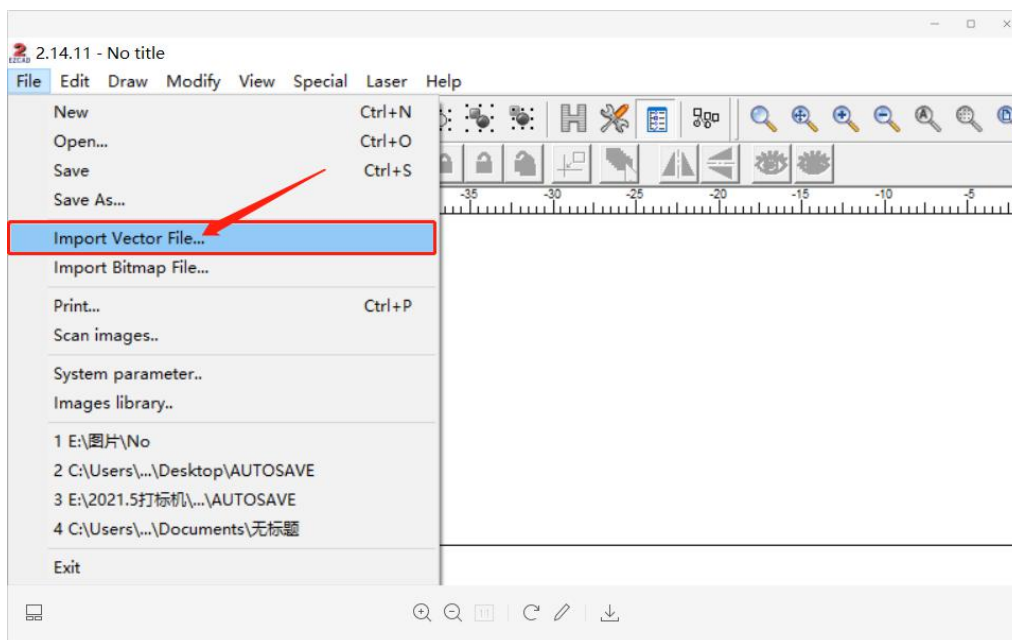


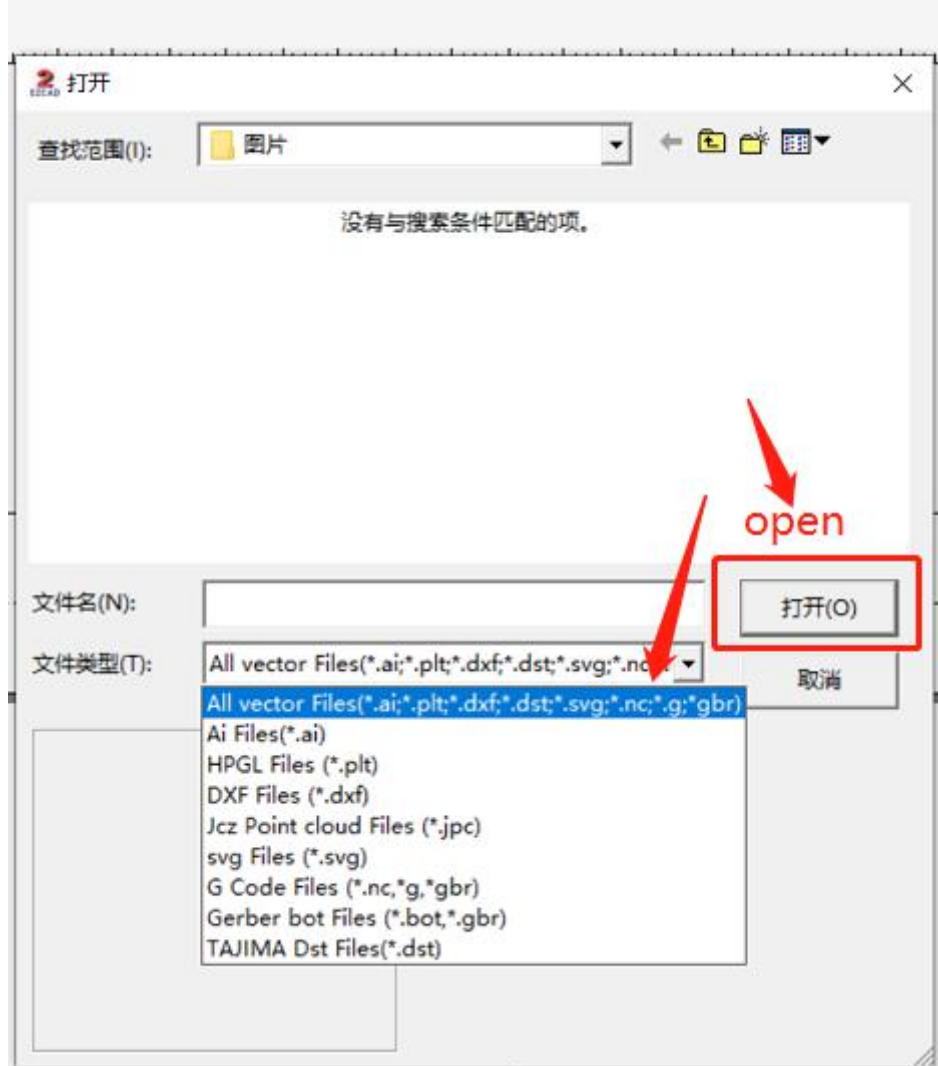
8. How to Import Files

Step 1: Click Files in the upper left corner

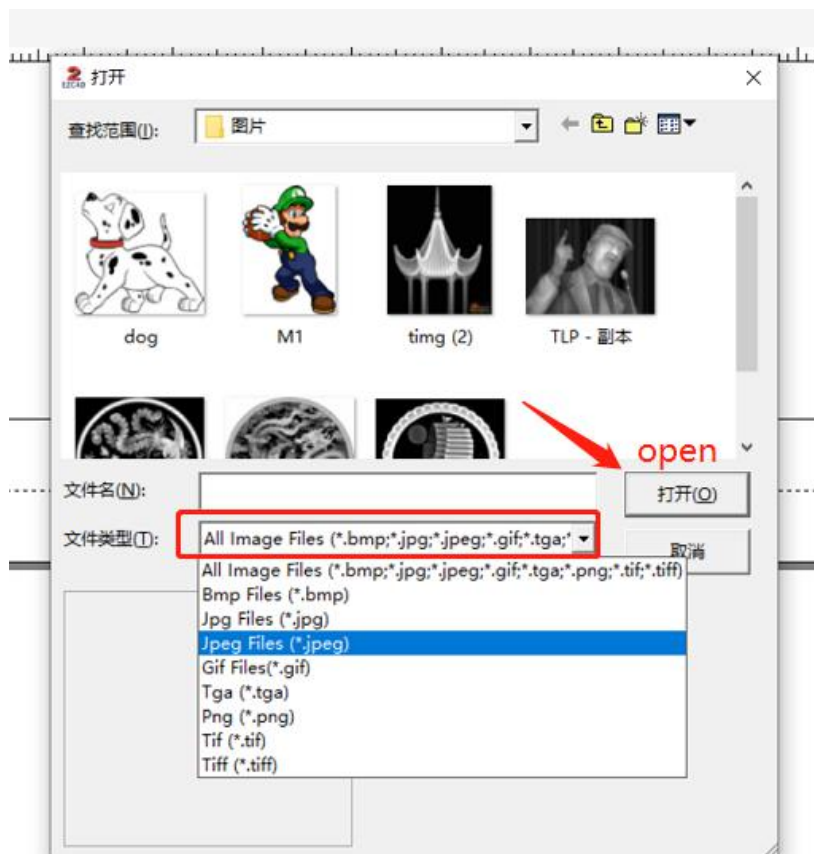
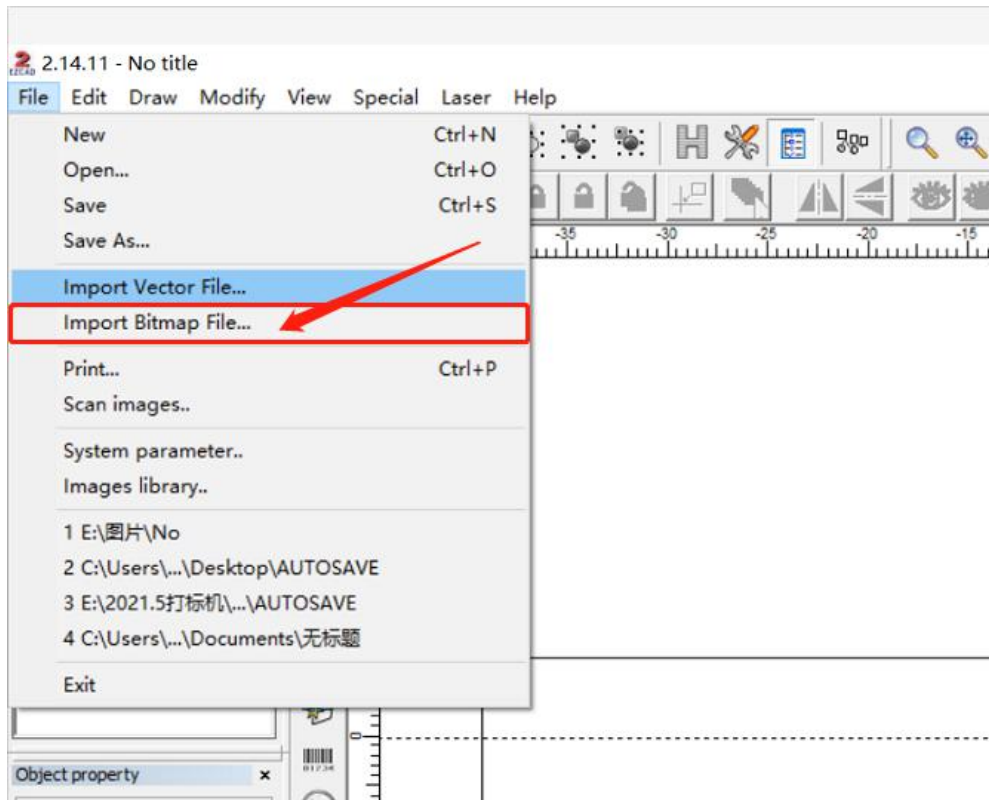


Step 2: Click Import Vector File (CAD Format), open marking File.





Click Import Bitmap File (Image Format), Look for the Picture you'd like to mark, Click Open.

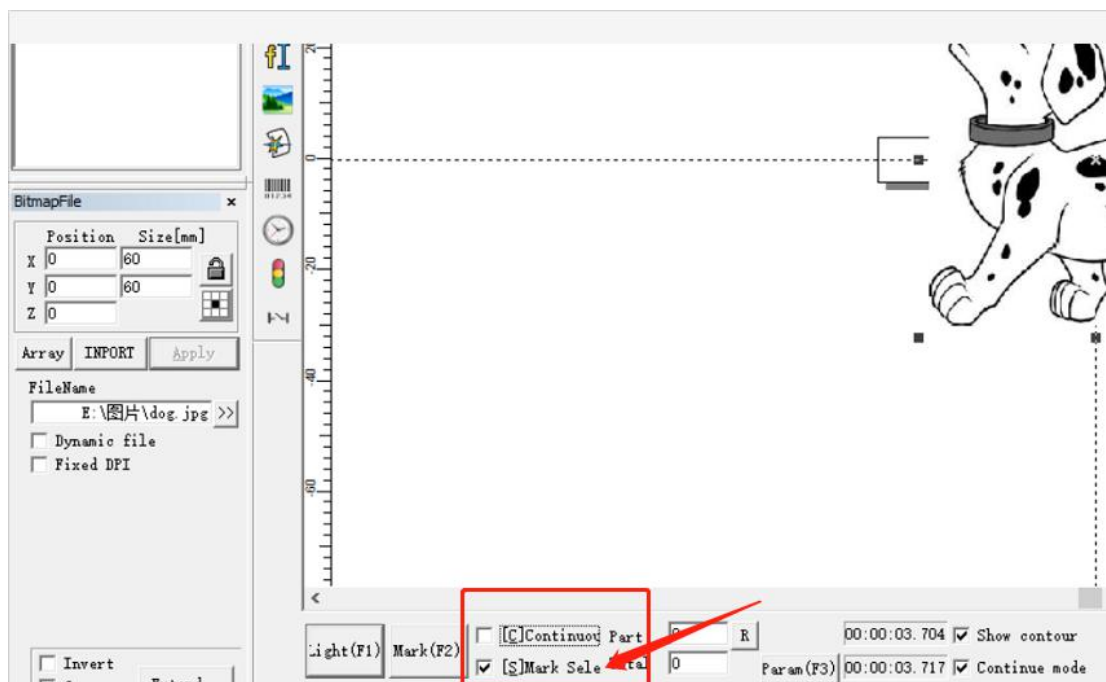
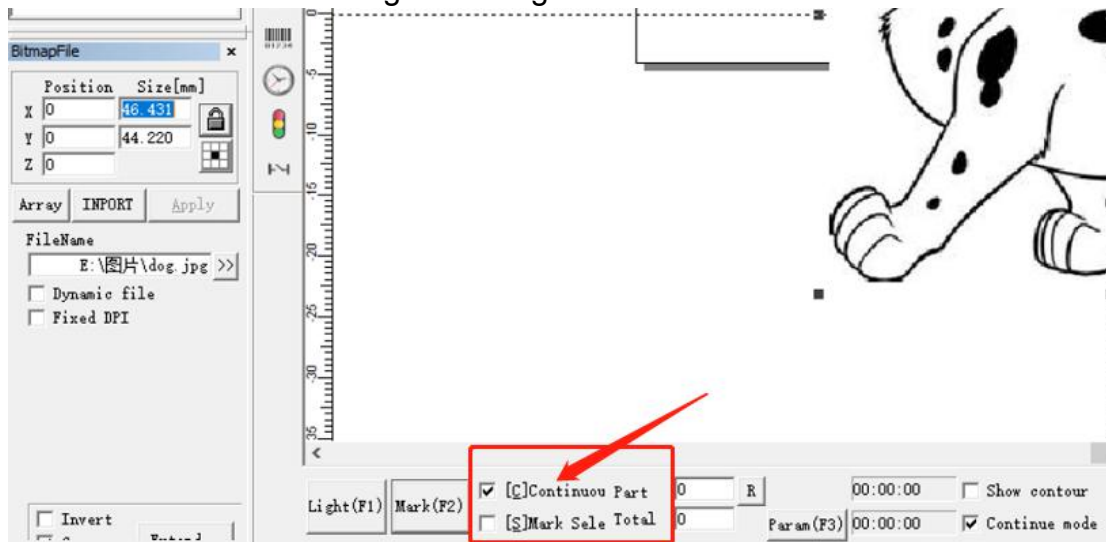


9. How to set up single marking and multiple times marking

Find out the Bottom left “Mark”

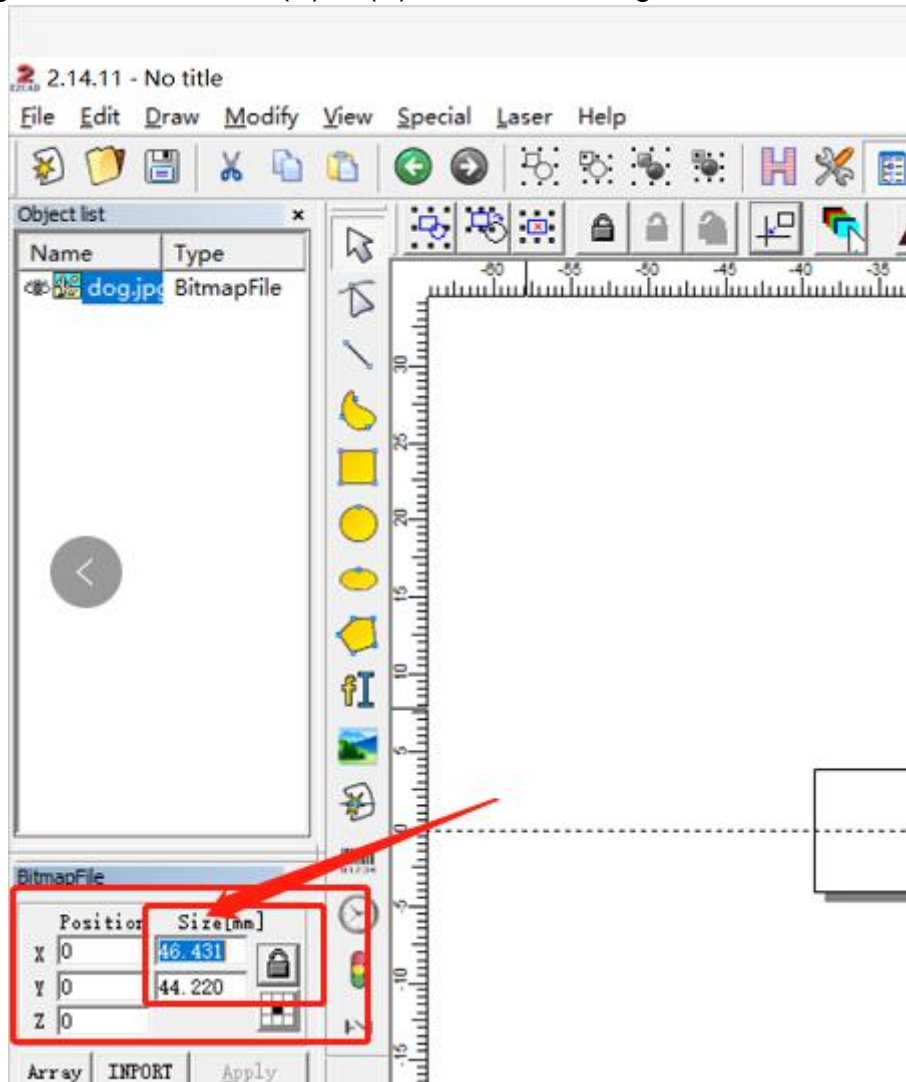
Choose ☒ continue means Marking multiple times

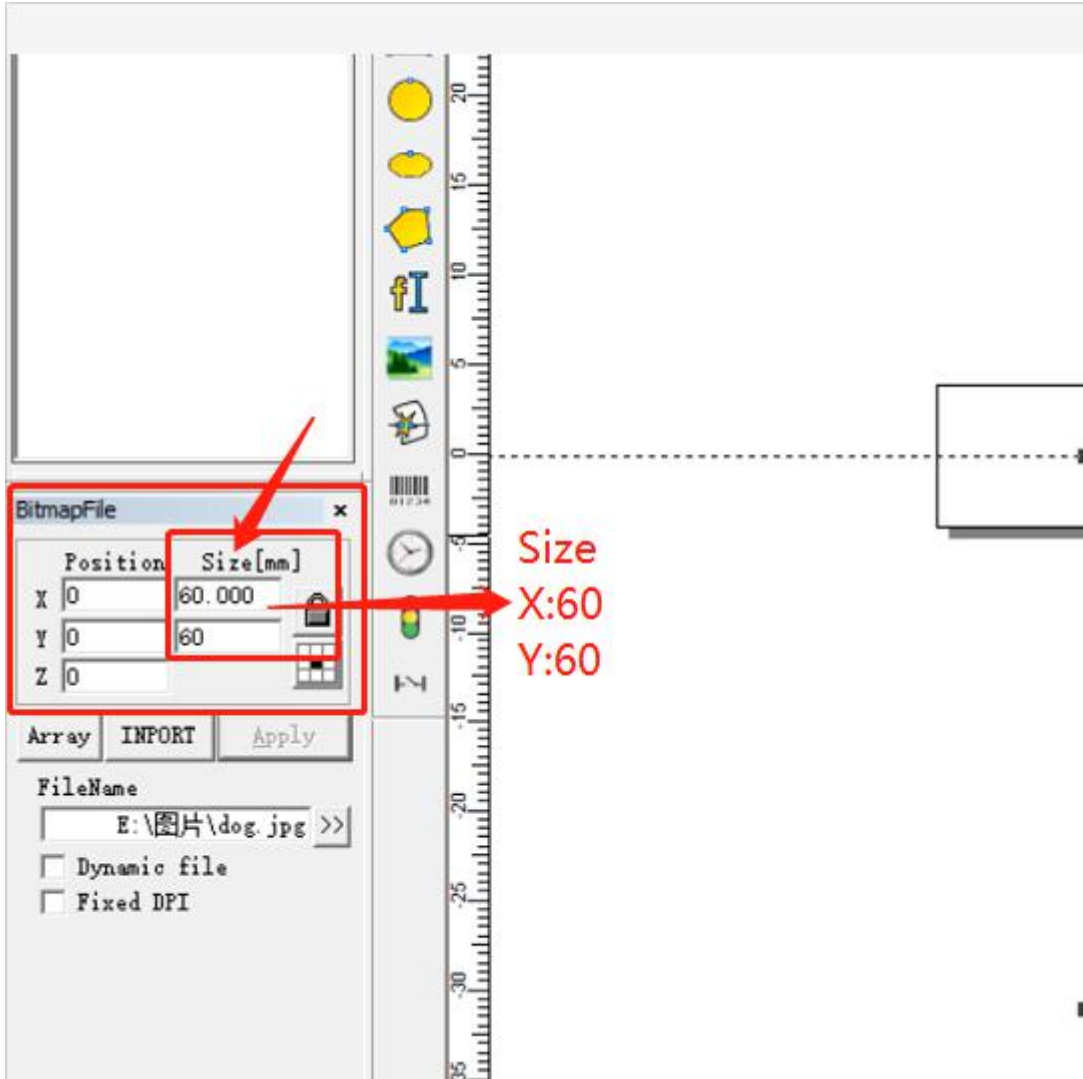
Choose ☒ sole means Single marking



10. How to set up marking range

Click Size, change the number to 60(X) 60(Y) <Standard Range>.





11. Marking parameter settings

(Take 30W 50W 300x300, 110x110 as an example)

30W 300x300 Format			
Material	Aluminum	Stainless Steel	Copper
Speed	200	200	100
Power	100	100	100
Frequency	20	20	20
Laser on TC	-8000	-8000	-1200
Other	Default		

30W 110x110 Format			
Material	Aluminum	Stainless Steel	Copper
Speed	500	500	500
Power	50	50	50
Frequency	20	20	20
Laser on TC	-300	-300	-300
Other	Default		

50W 300x300 Format			
Material	Aluminum	Stainless Steel	Copper
Speed	500	500	400
Power	50	50	90
Frequency	20	20	20
Laser on TC	-300	-800	-800
Other	Default		

50W 110x110 Format			
Material	Aluminum	Stainless Steel	Copper
Speed	500	500	500
Power	50	50	50
Frequency	20	20	20
Laser on TC	300	800	-300
Other	Default		

12. Rotary axis setting (**if you bought a rotary axis**)

Step1: Taking out the rotary axis and connect it to the machine as following picture.



Step2 : Fixing the marking material

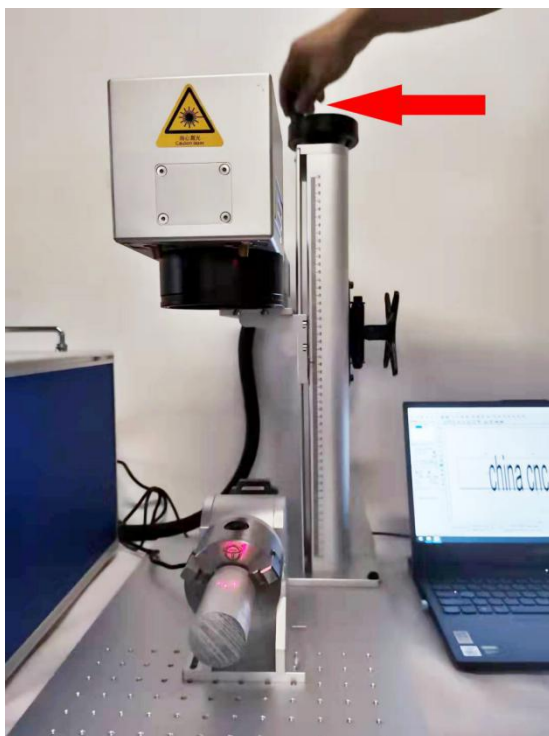
Place the rotary axis, hold the material by the tool until the material is fixed on the rotary axis.



(fix material tool)



Step 3: Focusing. Adjust the distance between the material and the field lens until the two points coincide.



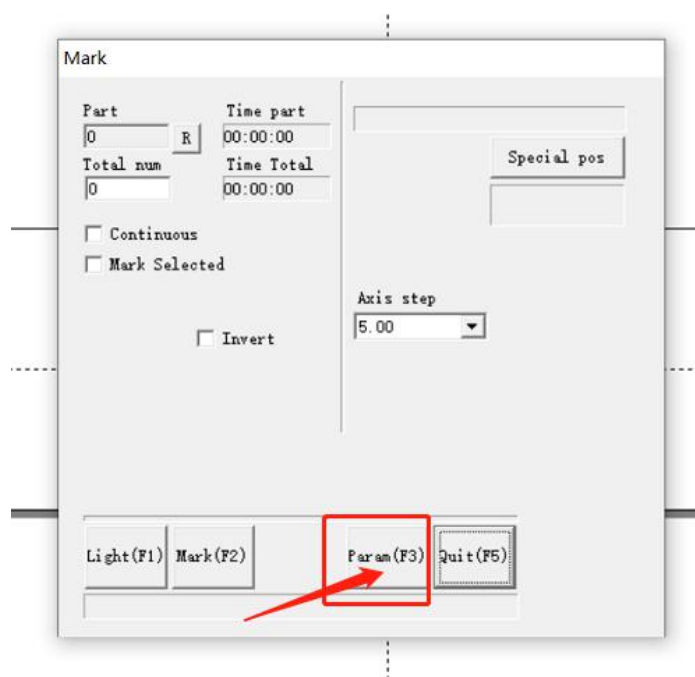
13. Doing marking on rotary axis

A: Marking TEXT

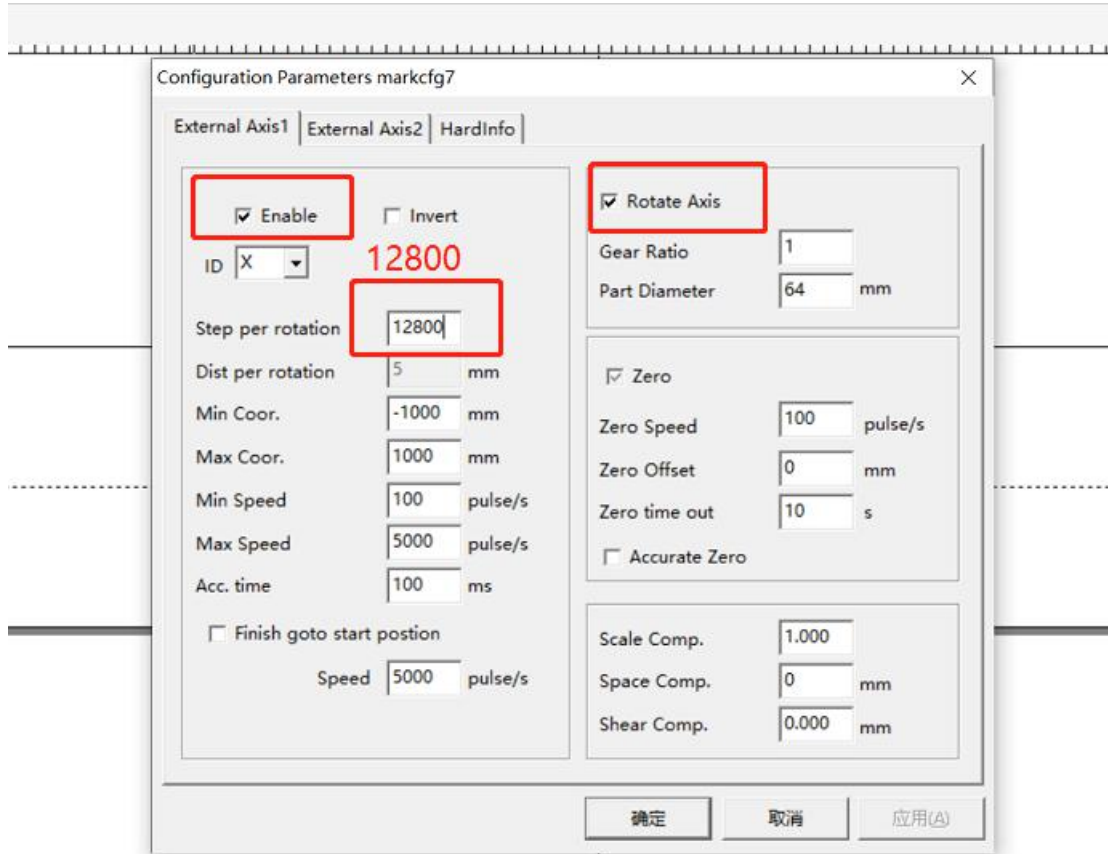
Click “Laser”, choose “rotate TextMark”



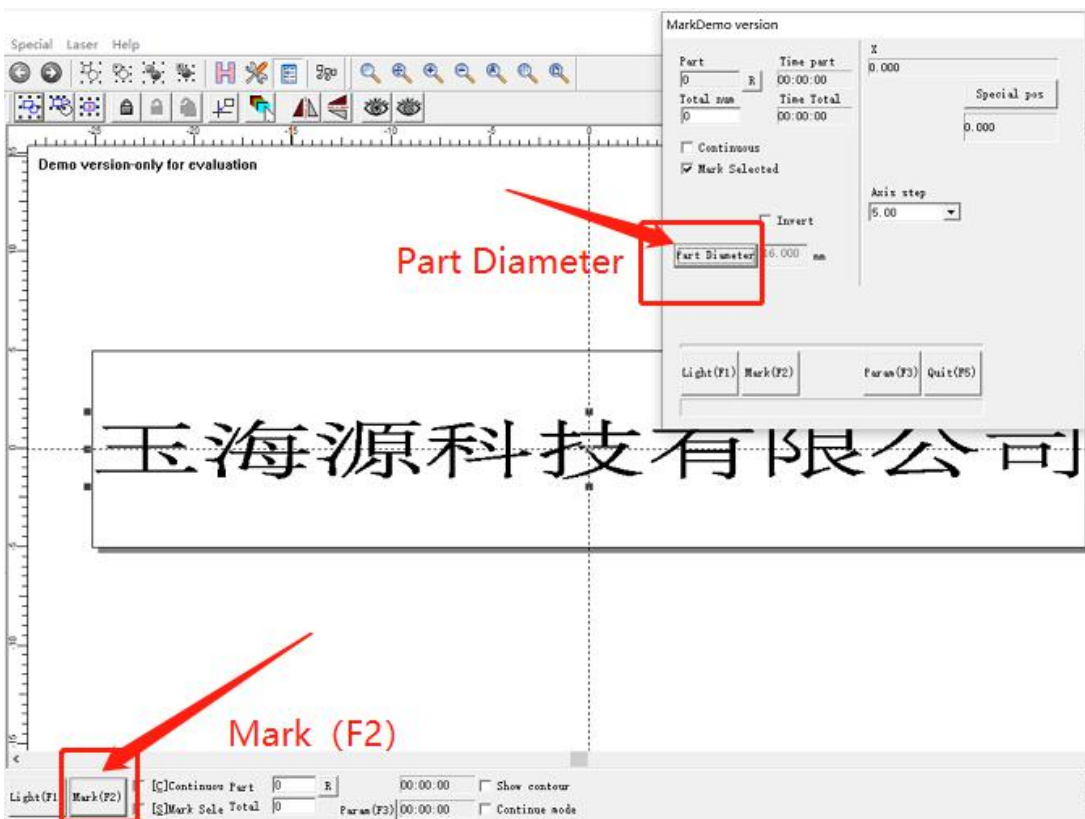
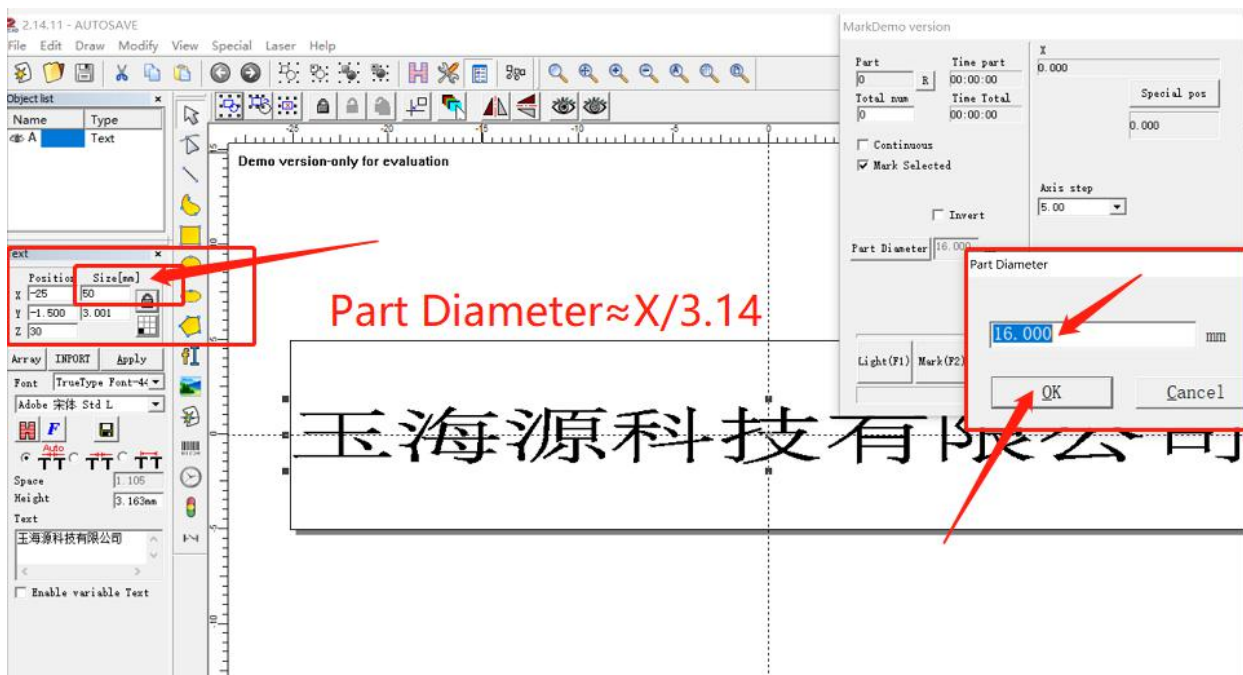
Click “Param (F3)”



Check “☒enable” “☒Rotary Axis”, set up “Step per rotation to 12800”, Click OK.



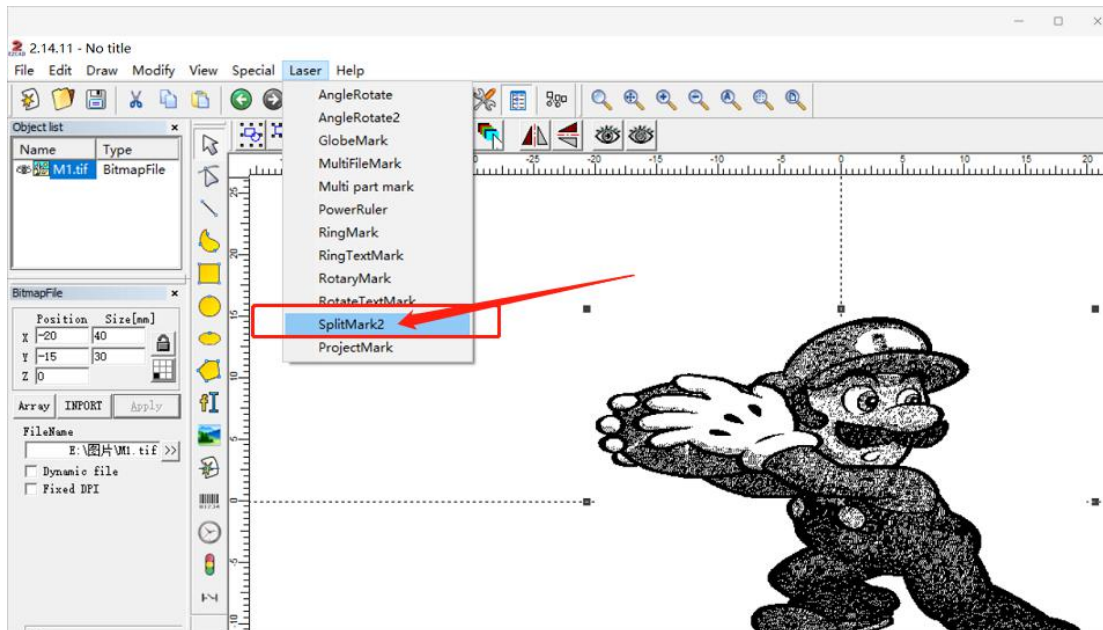
Find out the “Mark” button in the bottom left corner, Click “Part Diameter”. (Part Diameter = $X/3.14$).



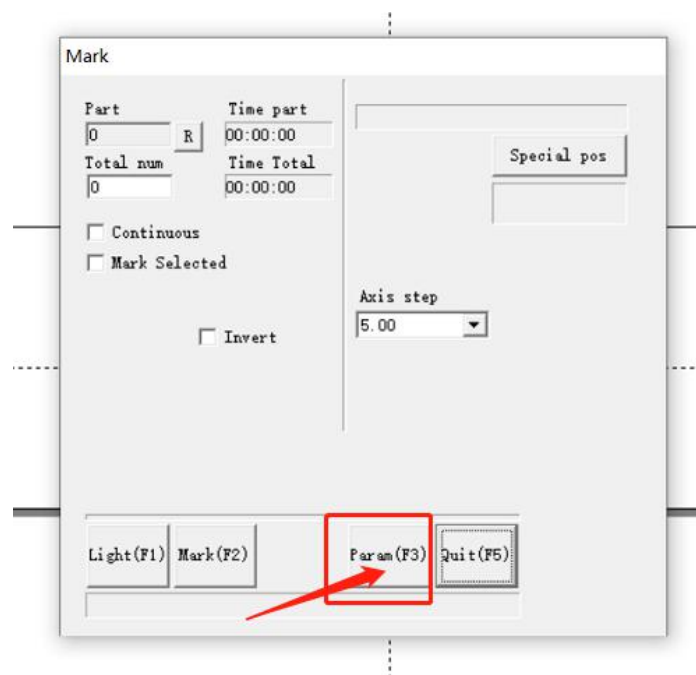
Click OK, finish rotary axis parameter setting. Start Mark.

B: Marking pictures

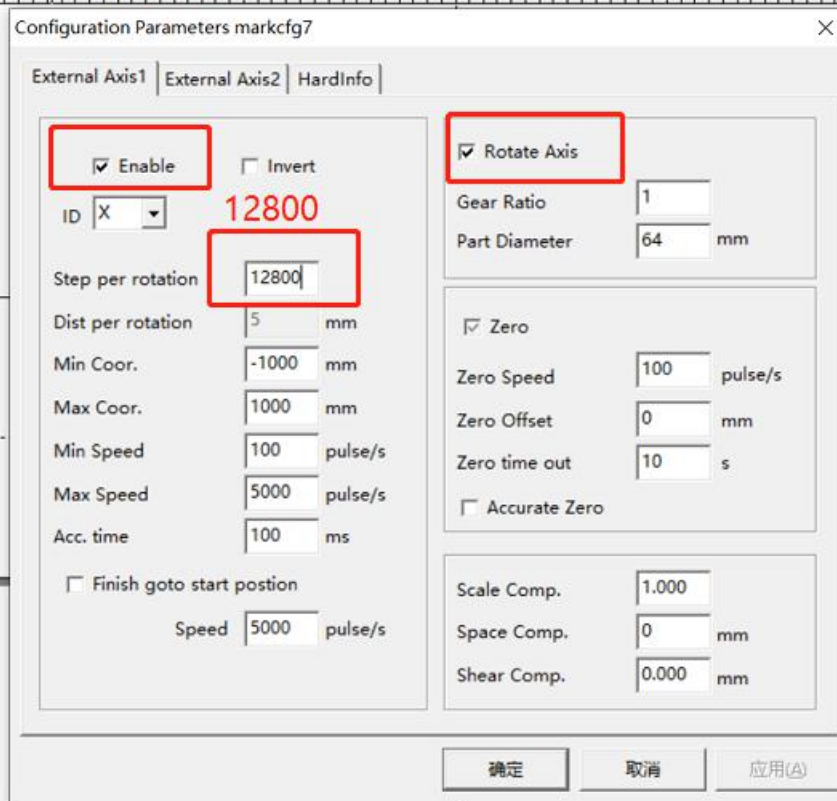
Click Laser, choose “SpilitMark2”



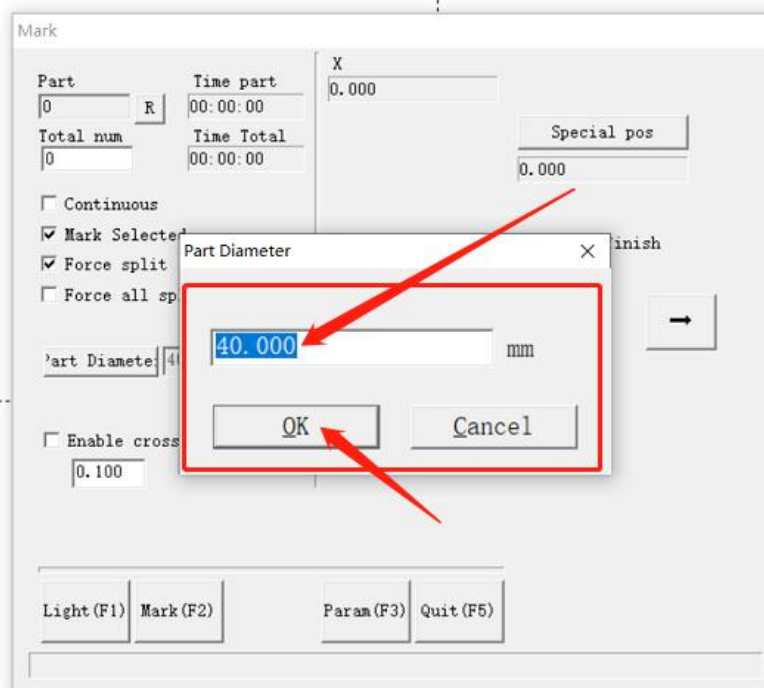
Click “Param (F3)”



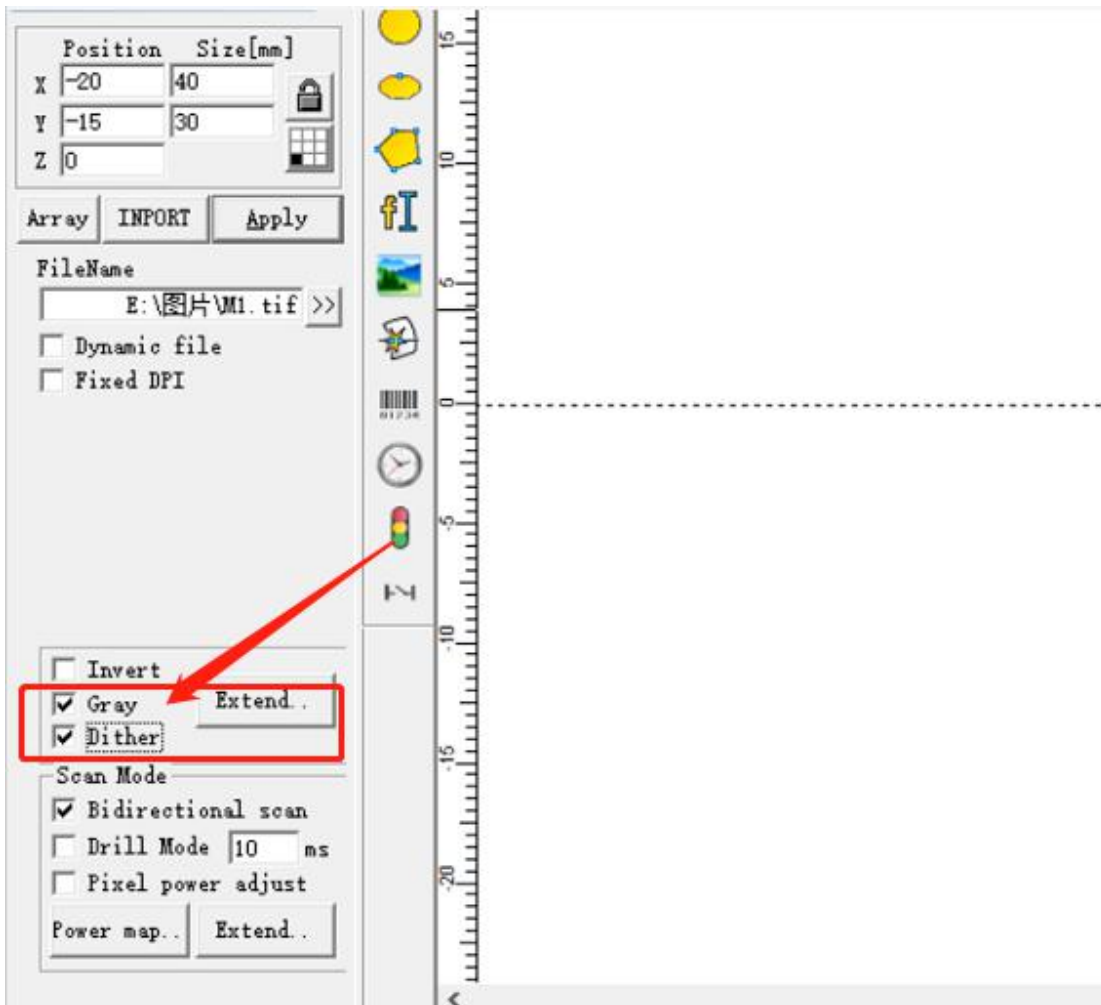
Check “☒enable” “☒Rotary Axis”, set up “Step per rotation to12800”, Click OK.



Find out the “Mark” button in the bottom left corner , Click “Part Diameter”, set up Part Diameter. (Diameter is the actual size of the material.)



Choose “Gray” and “Dither”



Choose "Gray" and "Dither" sample

Choose "Gray" sample

14. Q&A

Q: What should I do if the U-Disk is not found in the package?

A: This is because the customs took out the U disk during customs clearance.

Please contact customer service in time and leave your email. We will send you the U-Disk Files.

Q: If the computer prompts that file has a virus when I install the JCZ software, what should I do?

A: You must close all anti-virus software on your computer before installing the software.

Q: When I install the Ezcad software, it shows "Ezcad-Lite work only with UsbLmc- Lite, use Ezcad!" What should I do?

A: This is because your computer version cannot match the software.

Please contact us if you encounter this problem.

Q: What should I do if the effect of my marking is too shallow?

A: You can choose continuous marking. If you're using 300x300mm field lens, please change to 110x110mm field lens.

Q: I bought a machine with a 300x300mm field lens, can I change other size field lens?

A: Yes. You can change it to 110x110mm or 200x200mm type.