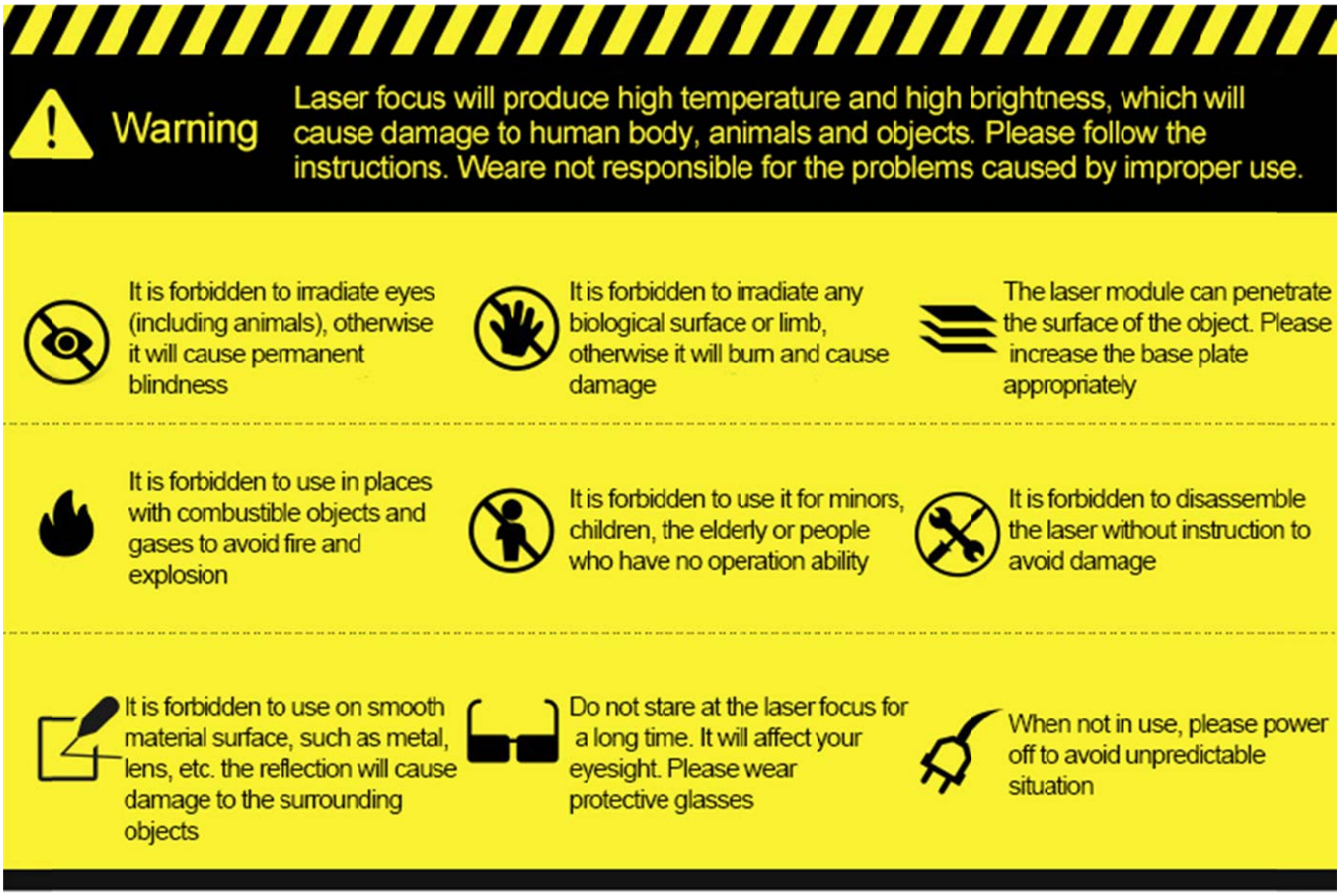
Attention: please wear protective glasses when using laser



LEKN(C1) Laser Function Manual V2.2

Powered by LEKN

1. Laser installation and wiring

[step 1] fix the laser module to the hanging board with m3-8 screw.

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Front view：

Rear view：

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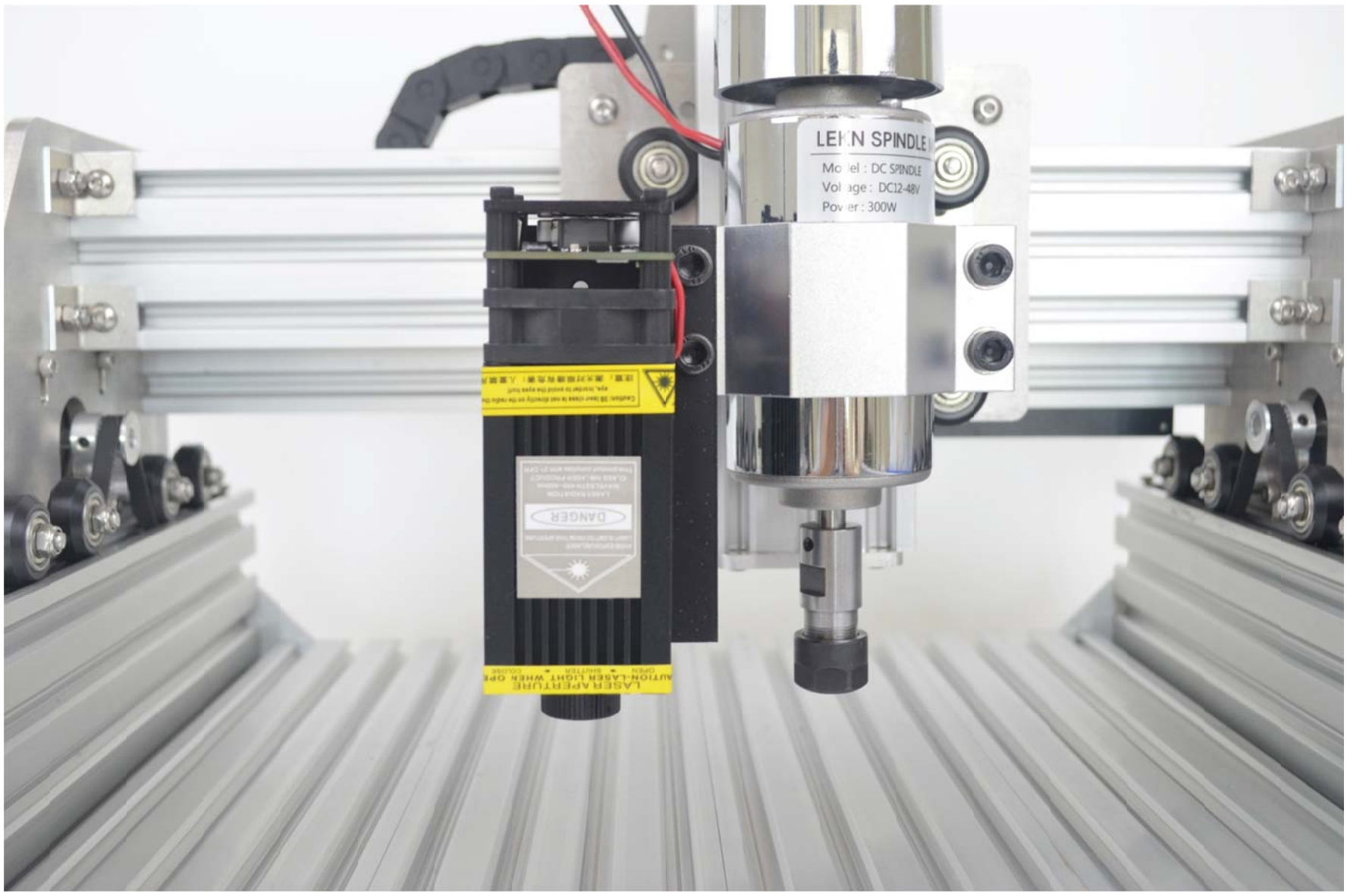
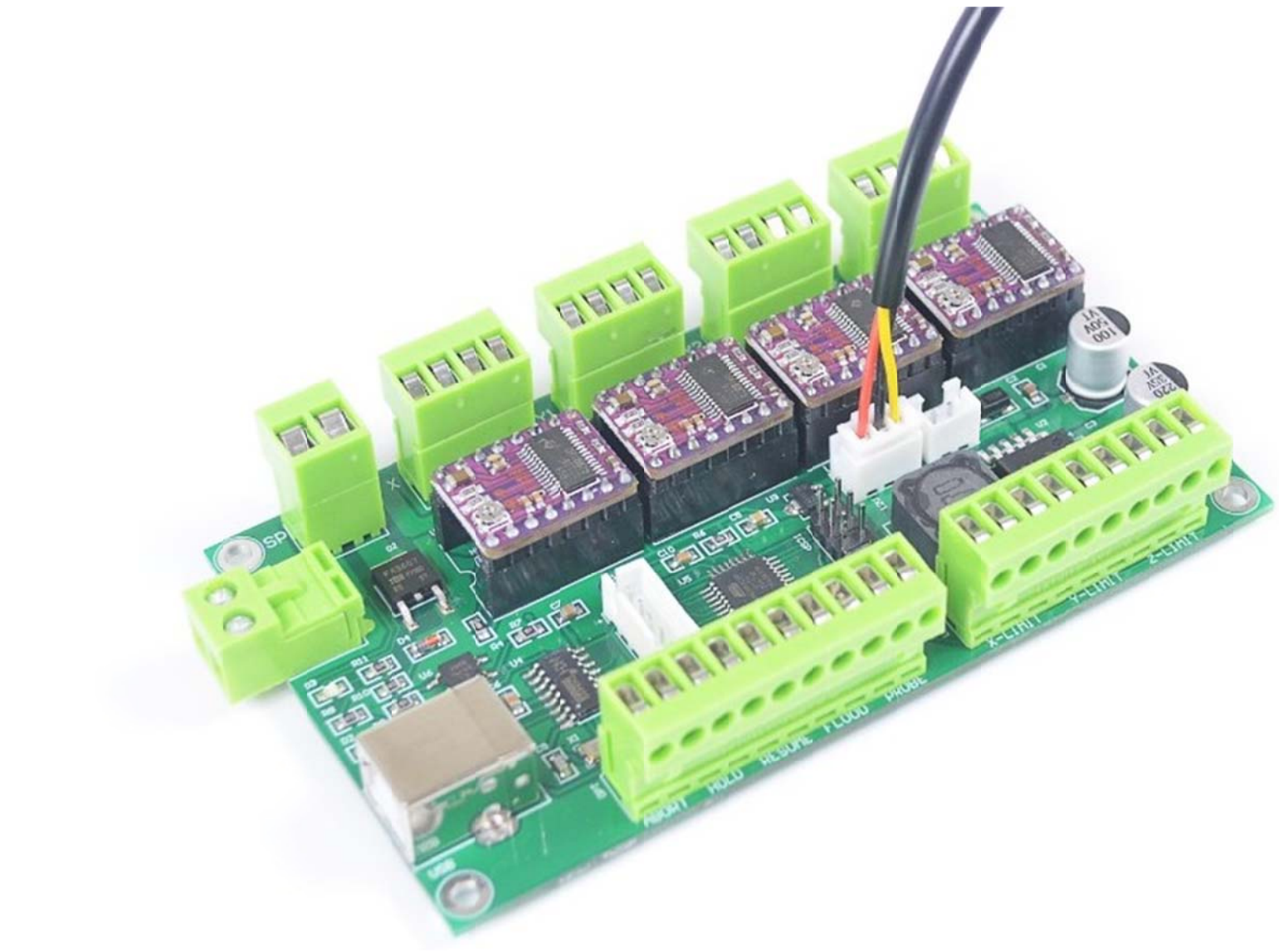
Install the machine to the spindle holder. As shown in the figure:



[step 2] laser wiring.

1) First, plug the 3P plug into the laser

2) The other end is plugged into the motherboard laser interface, as shown in the figure



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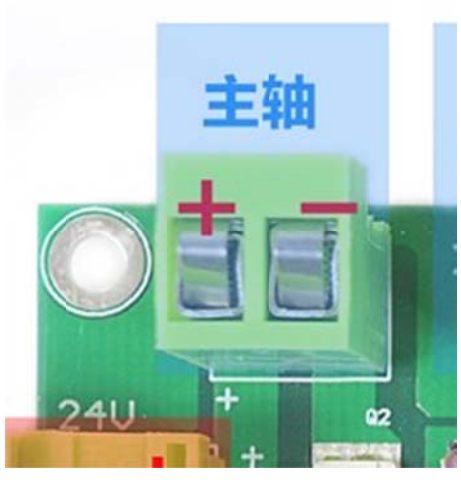
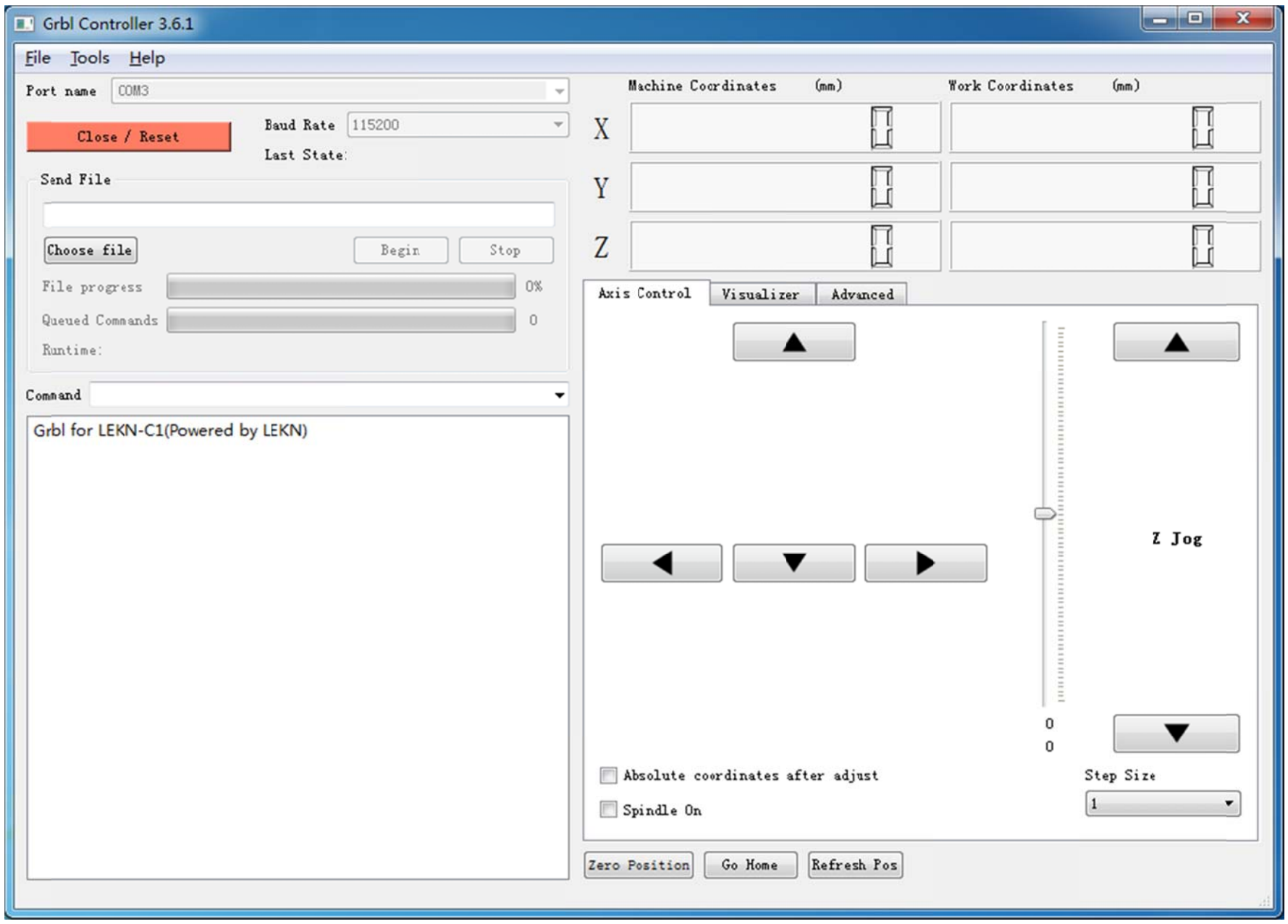
3) Unplug the terminal wire at the main board end of the spindle motor (otherwise, the spindle motor will work when the laser is turned on)

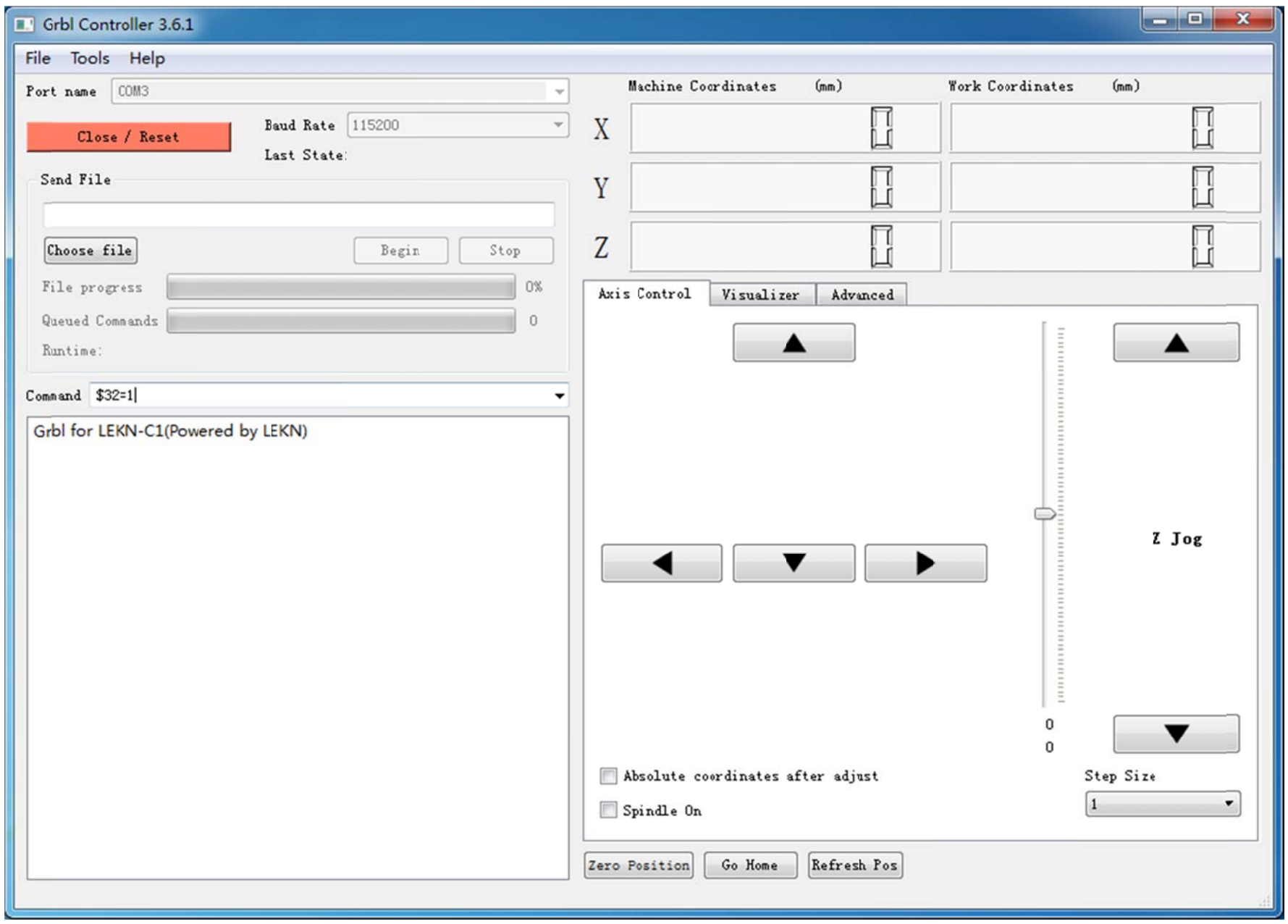


2. Use of laser

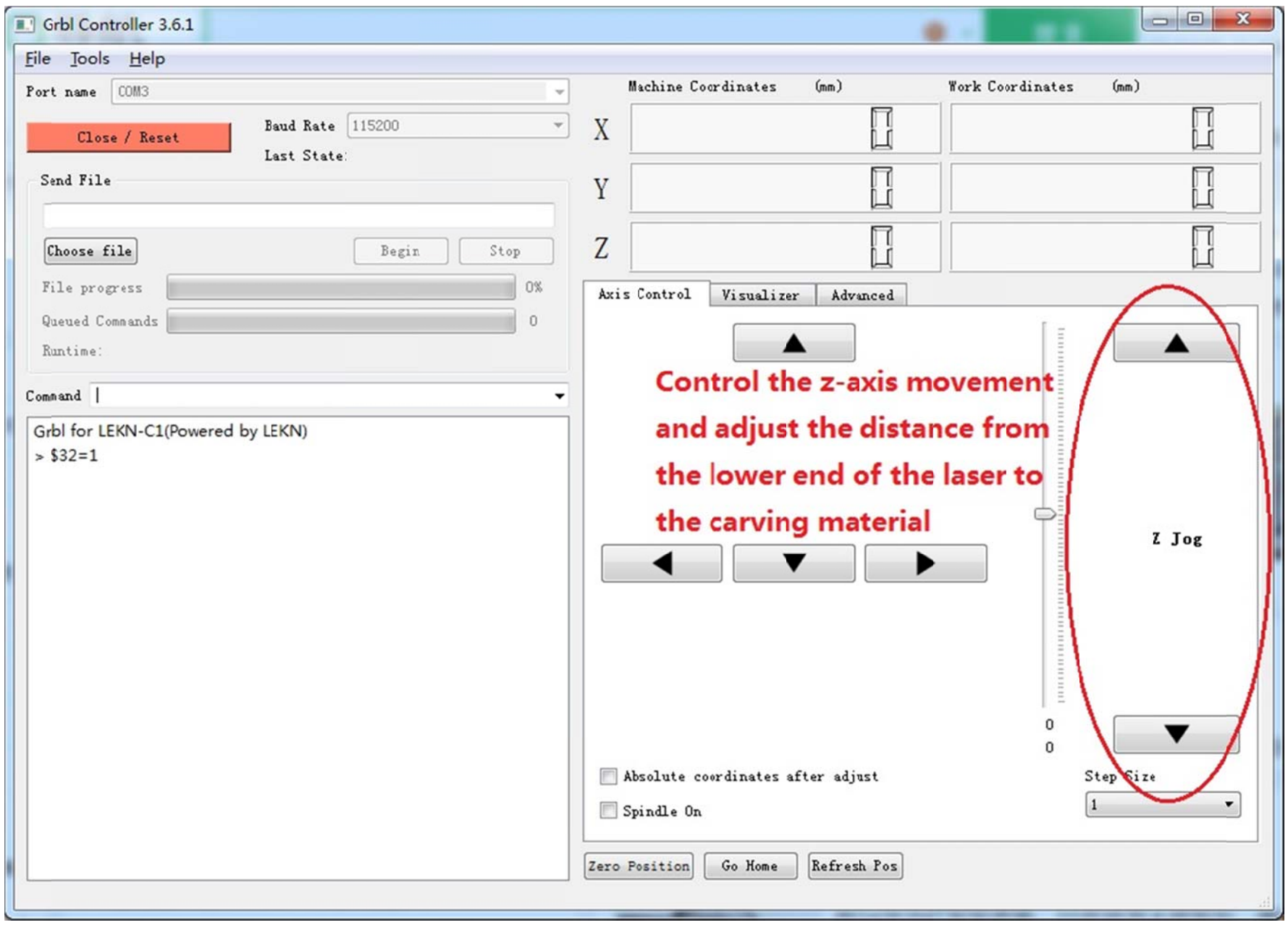
[step 1] open the main control software grbl controller of the engraving machine and connect the engraving machine. As shown in the figure:



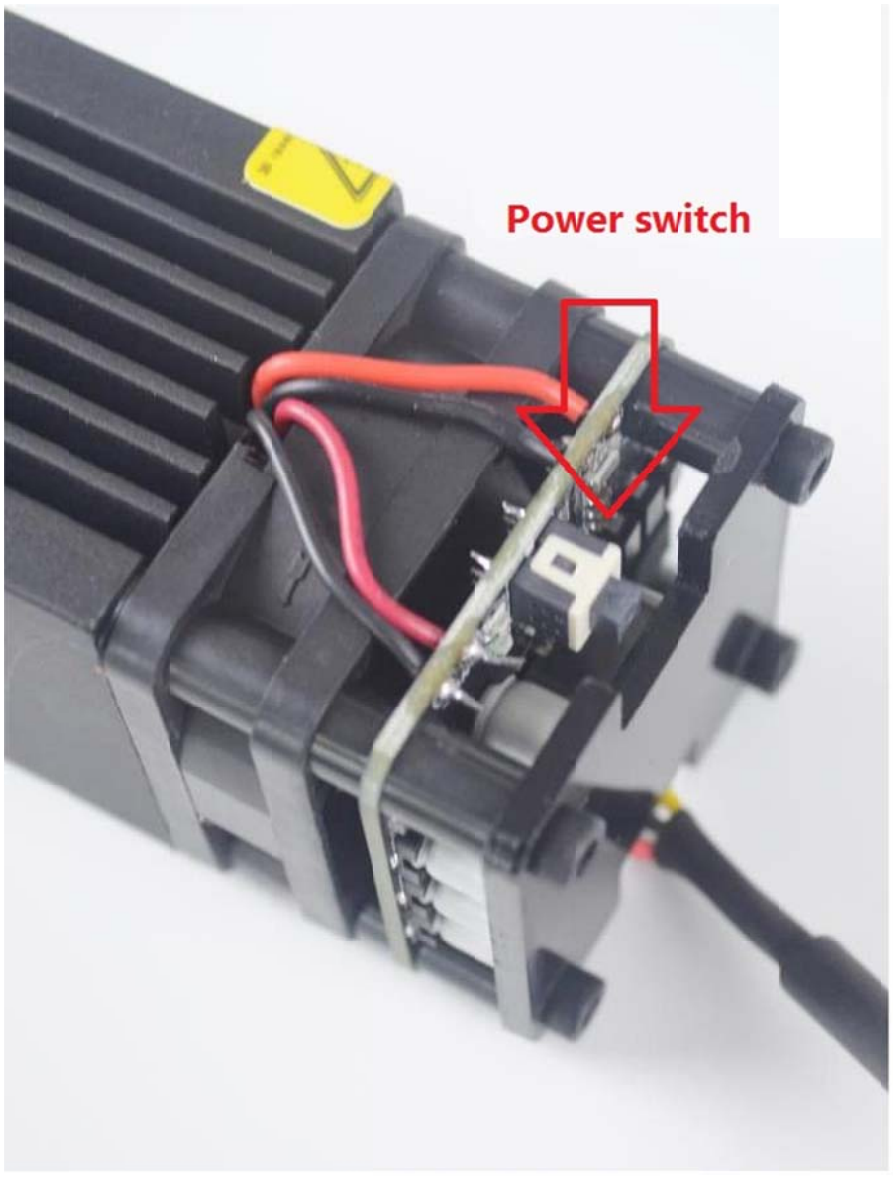
[step 2] switch the laser engraving mode. In the software command input box, enter the command "$32 = 1" enter key. As shown in the figure:

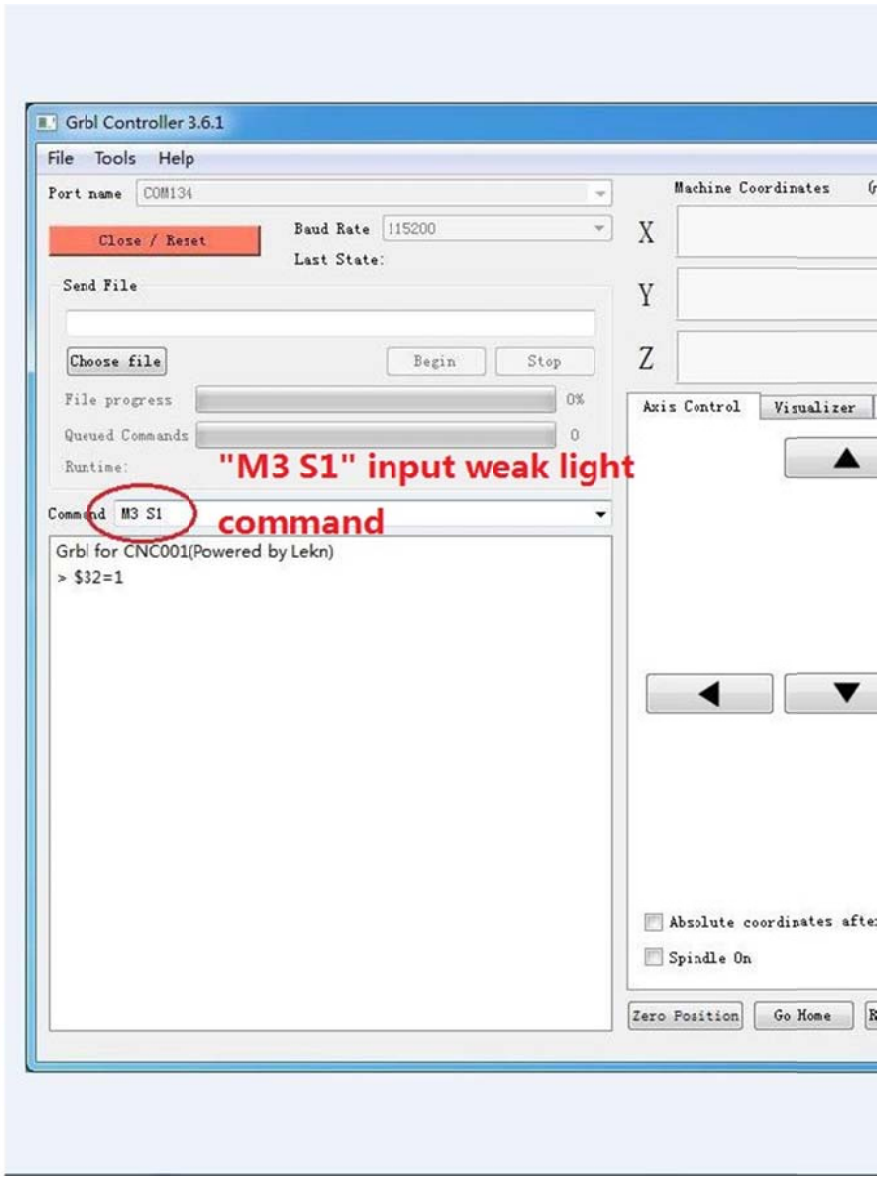


[step 3] the z-axis motion is controlled by the software, so that the distance between the lower end of the laser and the surface of the carving material is about 5-6cm. (the focal length of 2.5W laser is about 5-6cm; the focal length of 5.5W laser is about 3.5cm; the focal length of 10W / 15W laser is 1.8cm.)



[step 4] first press the power switch of the laser, and then input the command "M3 S1" in the control command box to turn on the weak light of the laser.M3: turn on the laser command, Sxx: power value of the laser, minimum 1, maximum 1000. (If the laser is not turned on, first send G1 F1000 speed command, then send M3 S1 weak light command)





[step 5] rotate the bottom lens of the laser to fine tune the focal length. Adjust the spot to the minimum (10W / 15W fixed focus does not need to be adjusted). As shown in the figure:

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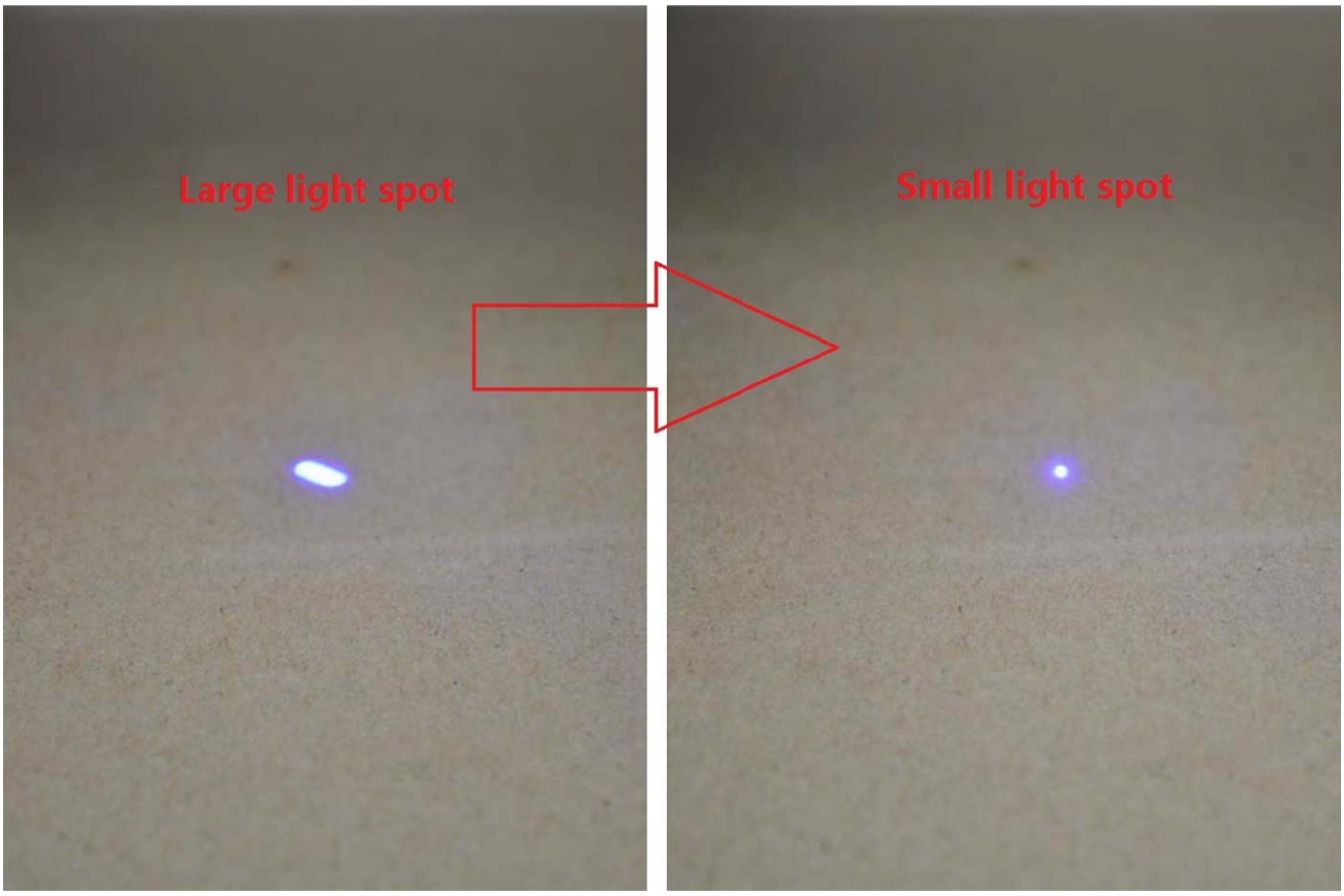
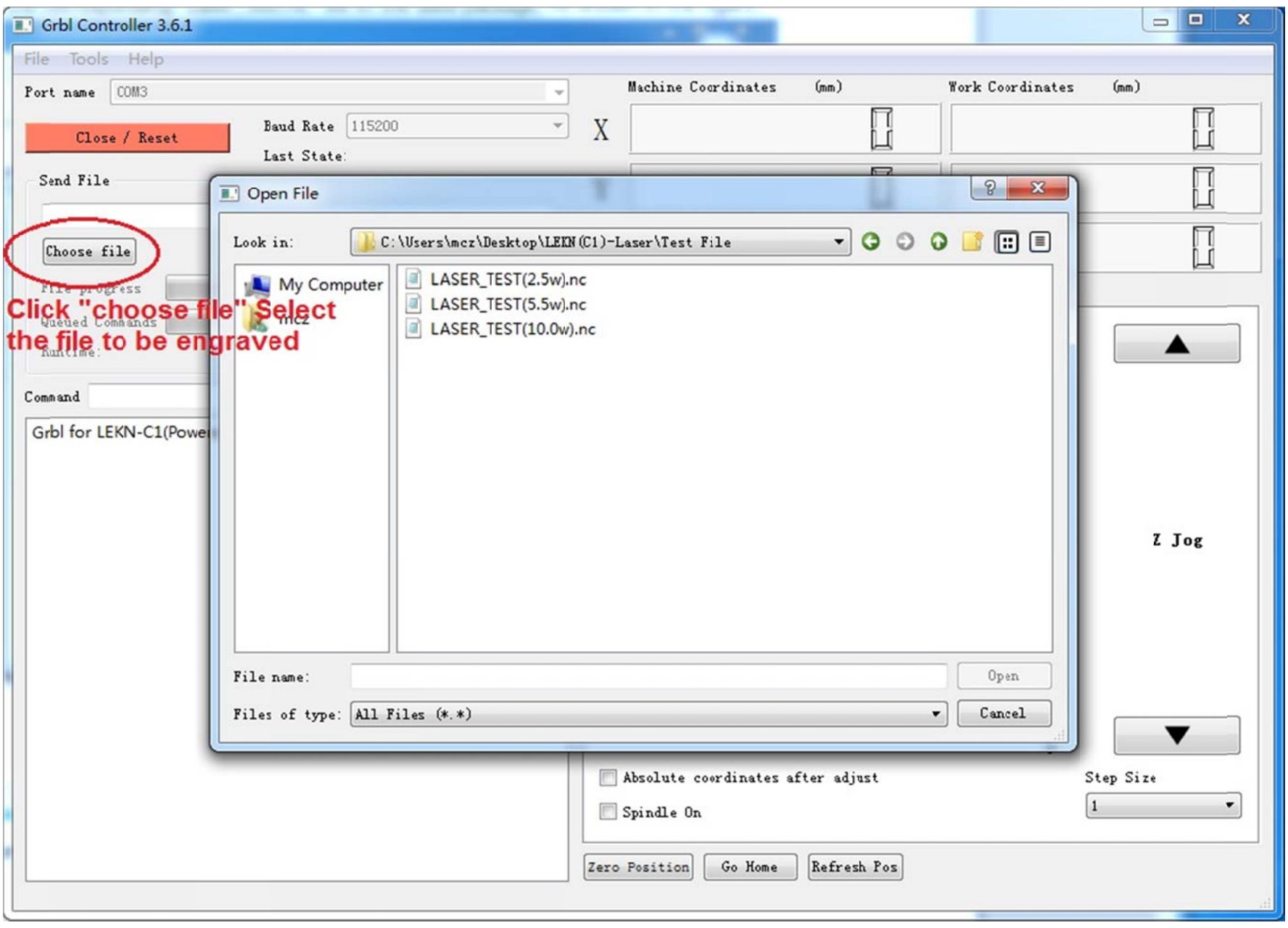
Observe the laser spot size and adjust it to the minimum. As shown in the figure:



3. Laser engraving test (just use cardboard to test here)

[step 1] Click "choose file" to select the corresponding “Laser_test.nc” file in the data package. As shown in the figure:



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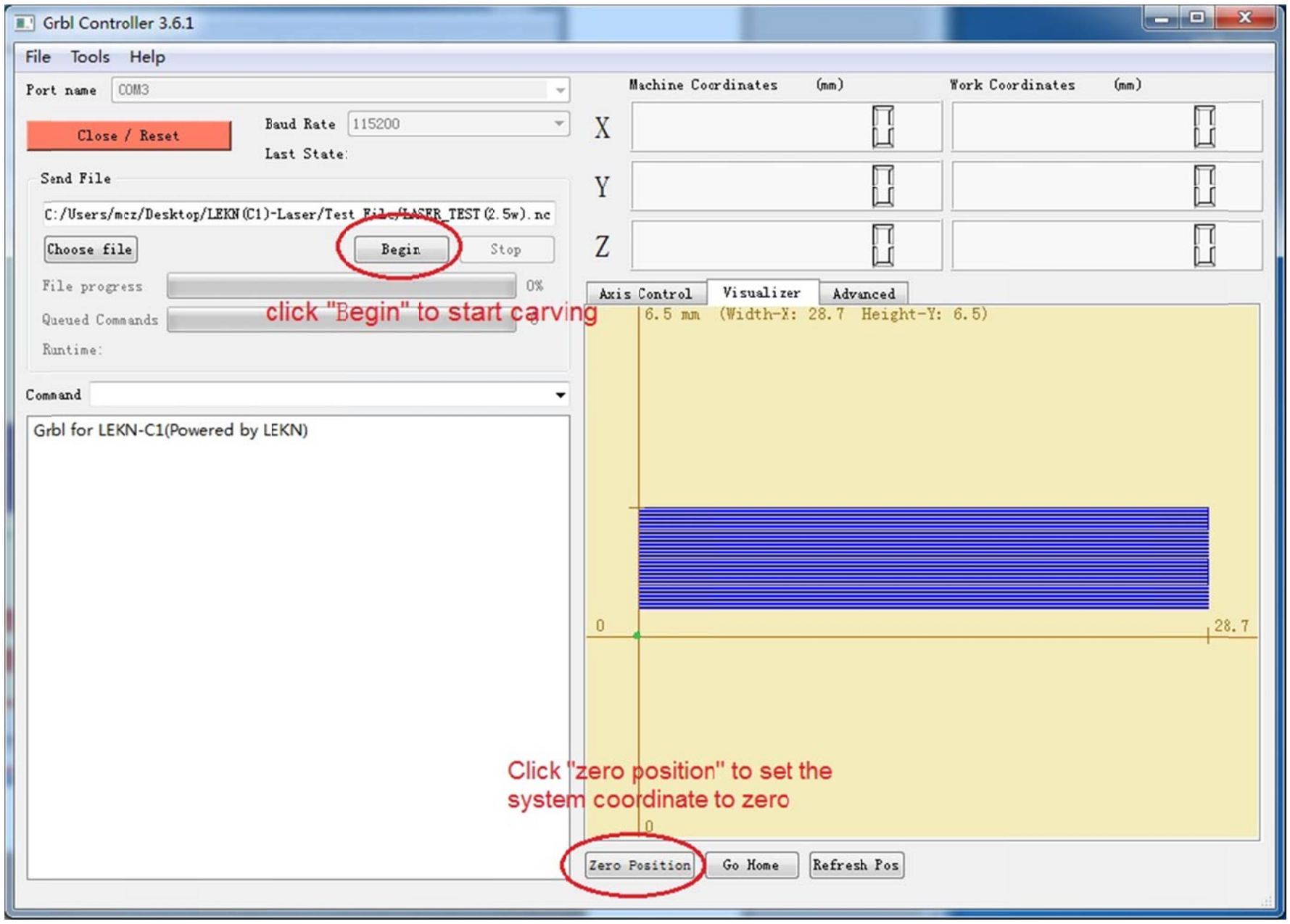
[step 2] Click "zero position" to set the system coordinate to zero, and then click "begin" to start carving. As shown in the figure:



[step 3] the test file carving is completed. As shown in the figure:

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