

The guide for there' s no laser beam output when engraving

It seems to be a common problem that there' s no laser beam output before laser engraving.

When it happens, please check it by following the steps. Let' s use a fiber laser engraver as an example.

Before start checking, you need to ensure installing the driver correctly and making the f-theta lens on the focusing position. You also may change a new USB cable that connects the computer and engraver.

Firstly, Disassemble the machine cabinet and measure the voltage of 24V switch power supply which powers for laser, 5V switch power supply which powers for control board, and $\pm 15V$ switch power supply which power for galvo head. If there is any abnormality, replace it before continuing with the following steps.

Secondly, Check the back of control board to see if there is any burns. If it is, the control board is broken.

If not, you need to do some engraving tests to check the red dot and green dot on the control board. If the dot does not light, the control board is broken.

If not, please continue the third steps.



Thirdly, disassembly the f-theta lens and do some engraving files test to observe whether the lens in the galvo head vibrates. If it is, the laser is broken. If not, the problem may be on the galvo head or the laser. You' d better connect our tech support to find the reason.

When it happens on the CO2 laser engraver, the same preparation work before the inspection needs to be done.

Firstly, press the "laser" button and listen to see if the laser starts up like some noise. If yes, do some engraving tests to see if there is laser beam output. If there is no laser output, disassemble the machine cabinet, connect the USB cable directly to the control board, and test if there is laser output.

If there' s no laser output yet, Check whether 48V power supply which powers for

RF tube is normal. If not, this PS is broken.

If the 48V power supply is normal, after removing the CN2 plug connected to the laser on the control board, do some engraving test with 100% power and measure the voltage on the two signal lines in the plug.



If the voltage is about 4.5V, remove the beam combiner inside the laser path and replace it with a wooden board.



If there is no laser, the RF tube is broken,

If there is the laser output, check whether the mounting holes of the galvanometer and beam combiner are aligned with the laser.

If the voltage is far away 4.5V, the control board is faulty.

If you have other questions and need our help to solve, please provide the following documents

1. Order number
2. Laser engraving machine label picture
3. Machine fault operation video

Support Forum: forum.cloudray.com

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