
Fiber-optic laser marking machine

operating specification

**Please read the instructions before
installing and using the product**

product presentation:

- Fiber laser marking machine is our company using the world's most advanced laser technology developed by the new generation of advanced laser marking machine system;
- Using the fiber laser output laser, and then through the high-speed scanning lens system to achieve the marking function;
- Fiber laser marking electrical conversion rate of more than 70%, compared with semiconductor laser marking machine has higher beam quality;
- long-free maintenance time. Product features:
- Fast speed, cooperate with the high-speed vibration lens;
- No consumable material, low power consumption, power consumption is less than 500W
- Complete air cooling, no need for a water cooler, energy consumption is reduced;
- Not affected by the bad environment and temperature changes, in the state of power failure can use the battery, car cigarette lighter for work;
- Product depreciation cost can be greatly reduced, can fully meet customers large batch, stable production. Applicable industry: the machine is composed of German or British fiber laser. The service life of the machine is 100,000 hours. Can be moved along with the workplace. Optical fiber laser marking machine is widely used in: sanitary ware, food packaging, tobacco marking, beer marking, beverage marking, drug packaging, medical equipment, glasses and watches, auto parts, plastic paper, electronic hardware

parameter:

Laser power: 30W

Laser wavelength: 1060 nm

Beam mass: $m_2 < 1.5$

Laser repetition frequency: 100 KHz

Standard marking range: 150X150mm

Carving depth: $\leq 1.2\text{mm}$

Carve line speed: $\leq 7000\text{ mm/s}$

Minimum line width: 0.01mm

Minimum character: 0.05mm

Replicate accuracy: $\pm 0.001\text{mm}$

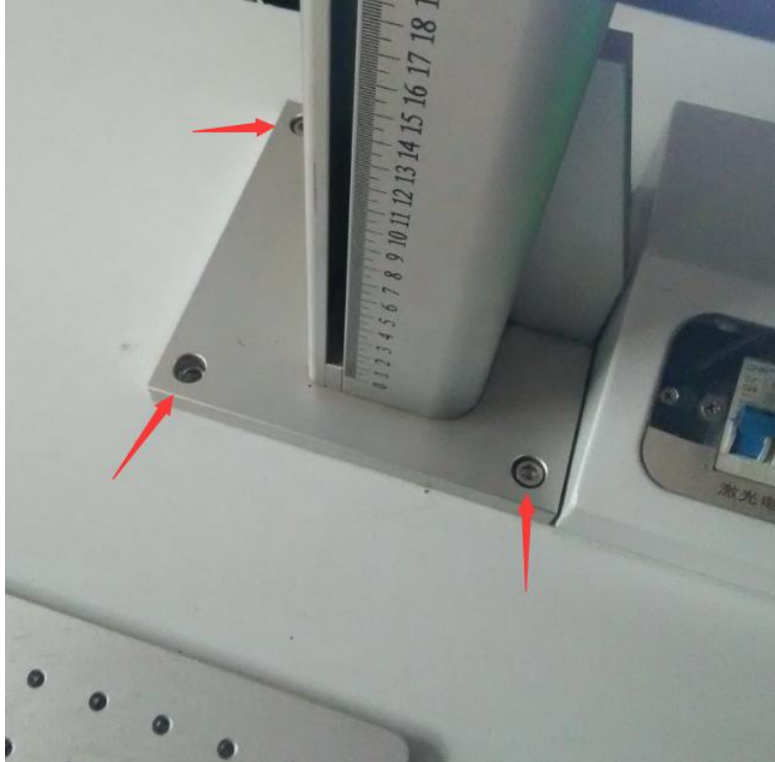
Power consumption of the whole machine: $\leq 500\text{W}$

Power demand: 200V / 50Hz / 10A

Cooling mode: air-cooled
Installation and commissioning:

install:

1. Unpack all the parts, install the column to the table, and fix the screws



2. Install the laser lens on the lifting table and fix the screws



3. Install the display screen on the column bracket, fix the screws, and connect the video signal line and power supply



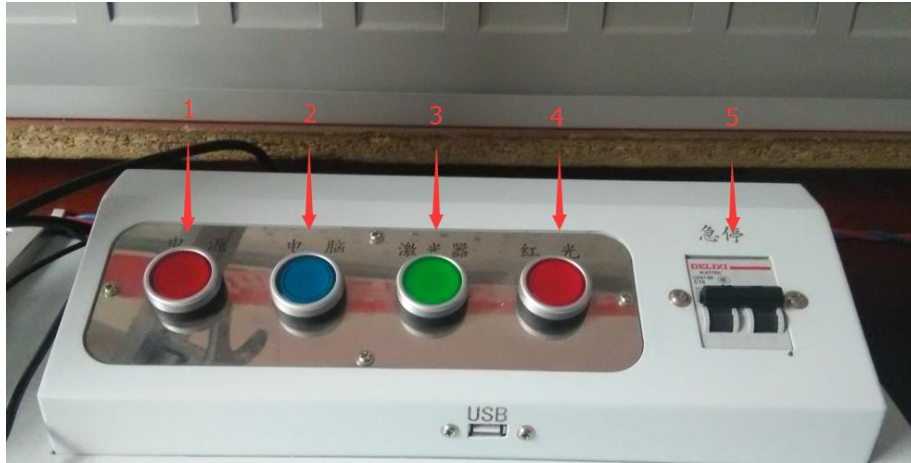
4. Connect the power plug on the back of the table and plug in the power supply



Commissioning Profile:

1. Host operation

The following buttons can be seen on the workbench



- 1) Power supply: the main power supply switch
- 2) Computer: computer power switch
- 3) Laser: laser power switch
- 4) Red light: infrared indication power supply switch
- 5) Emergency stop switch: often open, when there is an emergency or a fault, press, cut off the main circuit.

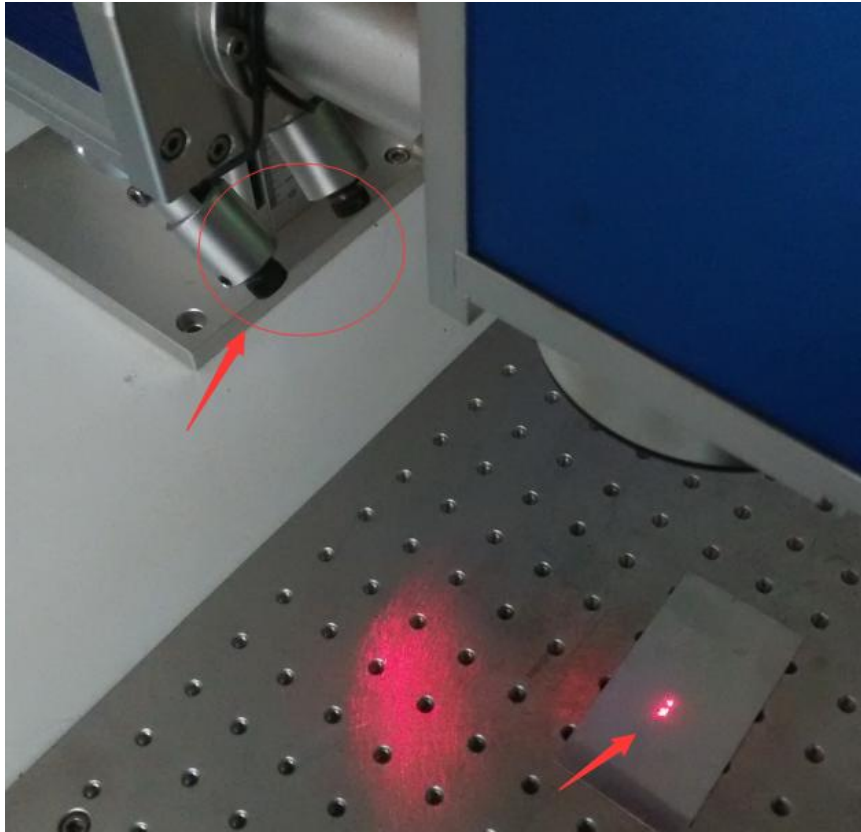
2 Debug

- 1) Turn on the power switch in the order of 1234
- 2) Turn on the power switch of the display, and open the software in the system, set a printing content at will, and check "Continuous printing" (please refer to the software manual for specific settings)
- 3) Click "red light" in the software, and a red outer box will appear on the work table to indicate the size and position of the printed content, and place the flat material to the appropriate position, as shown in the figure



4) Click print in the software, and adjust the height of the top of the column to adjust the height (according to the field mirror, the height is about 15 to 20 CM). When the white light appears on the surface of the printing position, it means that the laser focus has been found

5) Stop printing, adjust the two points of the printing position issued by the infrared positioning system, and adjust the two points to the same position



6) After the adjustment, marking at other horizontal heights only need to adjust the lift table, and adjust the two points of the infrared focusing system together on the new height plane.