## **Optical fiber laser marking machine** operating specification

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

product presentation:

• optical fiber laser marking machine is a new generation of laser marking machine system developed by using the world's most advanced laser technology;

• uses optical fiber laser to output laser, and then through the high speed scanning lens system;

• fiber laser marking conversion rate of up to 70%, higher beam quality compared with semiconductor laser marking machine; • machine maintenance free time. Product features:

• fast speed, cooperate with high-speed vibration mirror;

The  $\bullet$  has no consumable consumption, low power consumption, and the power consumption is less than 500W

• is completely air-cooled, no need for water cooler, reduced energy consumption;

• is not affected by the bad environment and temperature changes, in the state of power failure can use the battery, car smoke lighter for work;

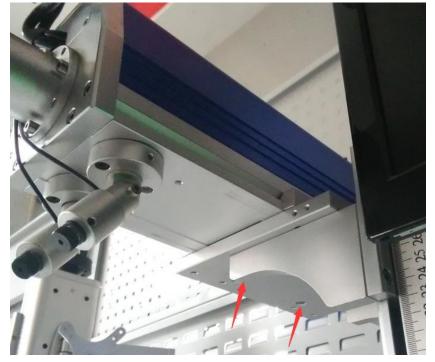
• product depreciation cost can be greatly reduced, can fully meet customers large batch, stable production. Applicable industry: the machine is made up of German or British optical fiber lasers. The service life of the machine is 100,000 hours. You can move anywhere, along with the workplace. Optical 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

plant parameter: Laser: Chuangxin Laser power: 30W Laser wavelength: 1,060 n m Beam mass: m2 <1.5 Laser repetition frequency: 100 KHz Standard marking range: 110,110mm Carving depth: 1.2mm Carving line speed: 7,000 mm/s Minimum line width: 0.01mm Minimum character: 0.05mm Duplicate accuracy: ± 0.001mm Power consumption of the whole machine: 500W 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 platform and fix the screws



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



4. Connect and plug the power plug on the back of the work table



Commissioning Profile: 1. Host operation The following buttons are visible 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 switch

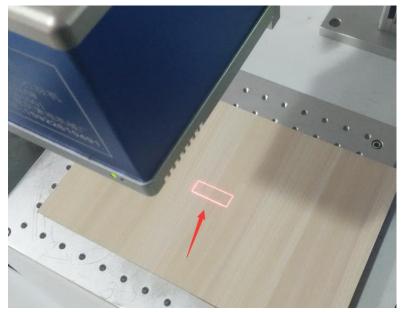
5) Emergency stop switch: often open, press in case of emergency or fault, and cut off the main circuit.

## 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 print content at will, and check "Continuous printing" (please refer to the software instructions for specific settings)

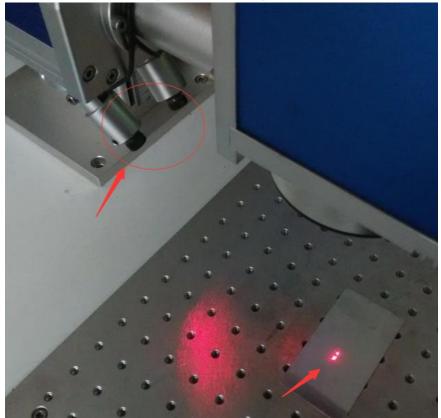
3) Click "red light" in the software, and a red outer box will appear on the workbench to indicate the size and position of the printed content, and place the plane material to the appropriate position, as shown in the figure



4) Click print in the software, and use the lifting adjustment handle at the top of the column to adjust the height (according to the field mirror, about 15 to 20 C M according to the field mirror).

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 to the printing position issued by the infrared positioning system, and adjust the two points to the same position



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