

# Laser Marking Machine Manual

# Security Statement

Before using the laser engraving machine, please read this safety guide carefully.

It mentions situations that require special attention and includes warnings of unsafe practices that can cause damage to your property or even endanger your personal safety.

## Laser Safety

- The machines use Class IV lasers. The lasers are very powerful and can cause eye injuries and burn the skin. It is recommended to wear laser goggles when using the laser engraver.
- Avoid exposing your skin to Class IV laser beams, especially at close range
- Teens must be supervised by parents while using the machine.
- Do not touch the laser engraving beam while it is switched on.

## Material Safety

- Do not engrave materials with unknown properties.
- Materials recommended:  
Metal, including stainless steel, aluminum, bronze, brass, alloy, etc,  
Plastics, including PP, PE, ABS, etc.

## Use Safety

- It is forbidden to point the laser to people, animals or any combustible object, whether it is in working condition or not.
- Use this laser engraving device only in accordance with all applicable local and national laws and regulations.
- Use this device only in accordance with this instruction manual and engraving software manual.
- DO NOT leave this device unattended during operation. Cut off all power to the machine and contact either our customer service or repair service if anything seems to be working abnormally.
- Any untrained personnel who might be near the device must be informed the danger of the machine before operation

## Electric Safety

- Only use this device with a compatible and stable power supply with less than 5% fluctuation in its voltage.
- Turn on the power to this device when it is well grounded.
- ONLY use this device with one hand at a time. The laser is powered by an extremely high voltage connection and placing two hands on the machine at one time during operation has the potential to create a closed circuit with the human body, resulting in electrical shock.
- The area around this laser engraver device should be kept dry, well ventilated, and environmentally controlled to keep the ambient temperature between 40–95°F (5–35°C). The ambient humidity should not exceed 70%.

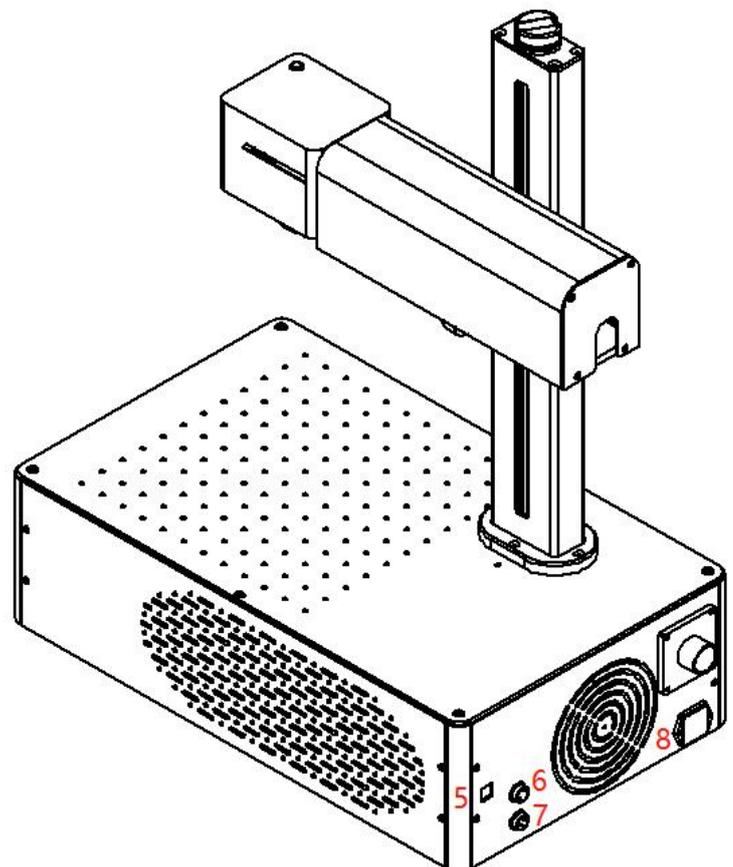
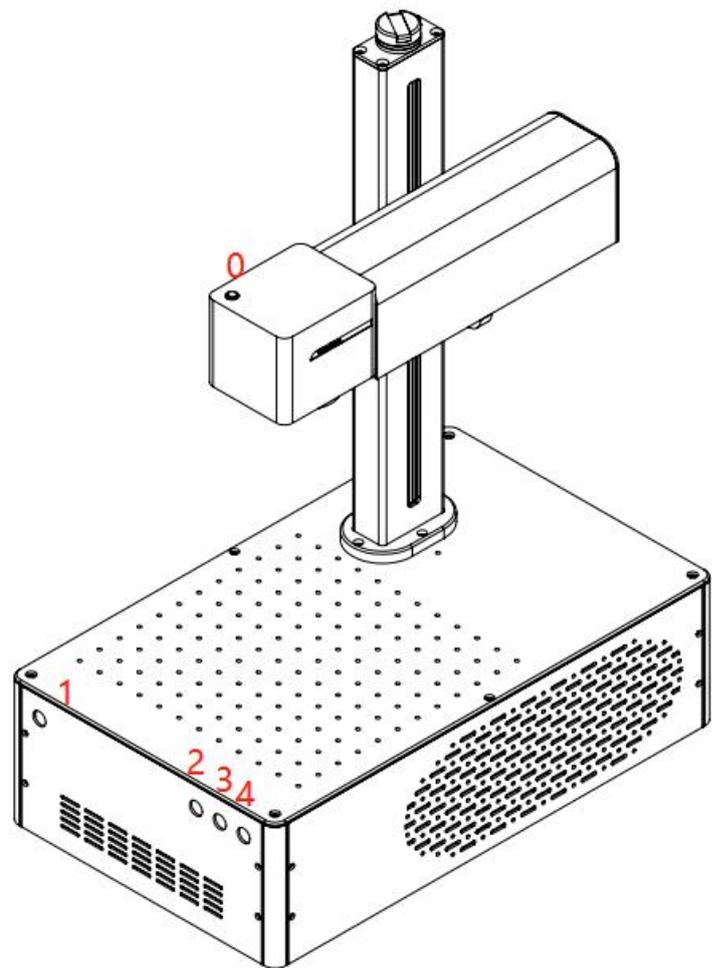
## **WARNING:**

**1) Adjusting the focus is a necessary prerequisite for laser engraving, please refer to step 4 of the manual before engraving.**

**2) Make sure to remove the plastic protective cover of the field lens before engraving to avoid damage to the field lens caused by laser burning.**

# Product Structure

- 0. Auxiliary red light switch
- 1. Emergency stop switch
- 2. Up
- 3. Down
- 4. Switch
- 5. Data cable port
- 6. Rotary device port
- 7. Pedal port
- 8. Power port



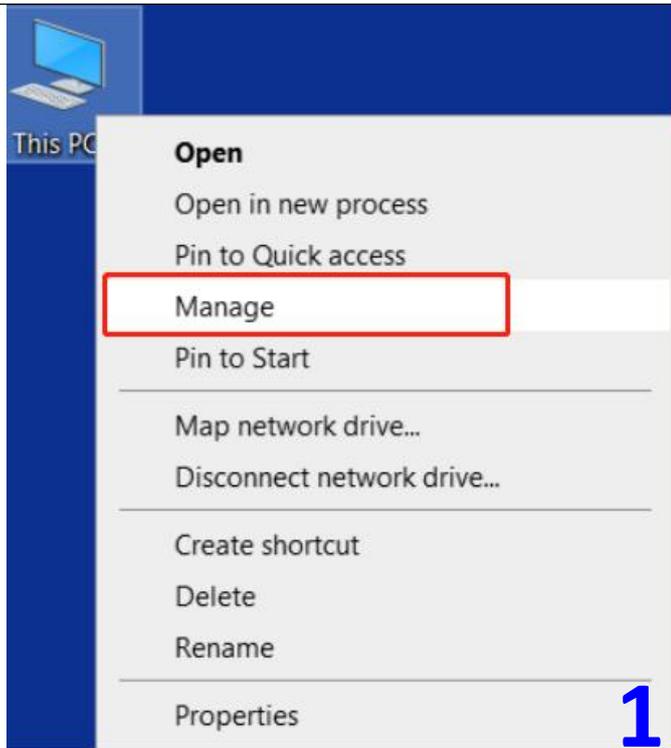
# First Operation Instructions

## 1. Install the driver

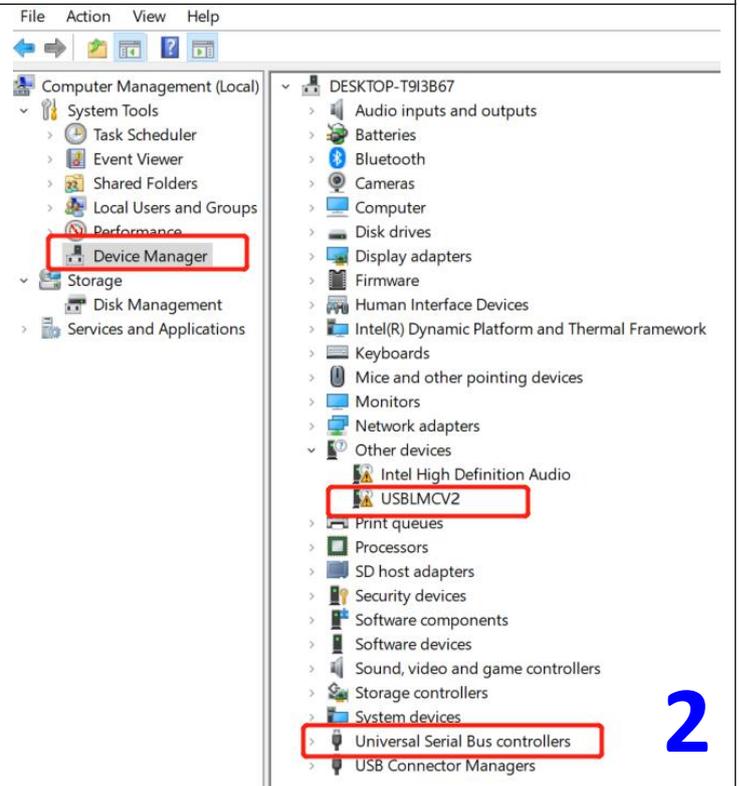
Note: please conduct the following operation before installing the driver:

- 1) The machine is on;
- 2) Keep the emergency button not pressed;
- 3) Data cable connected

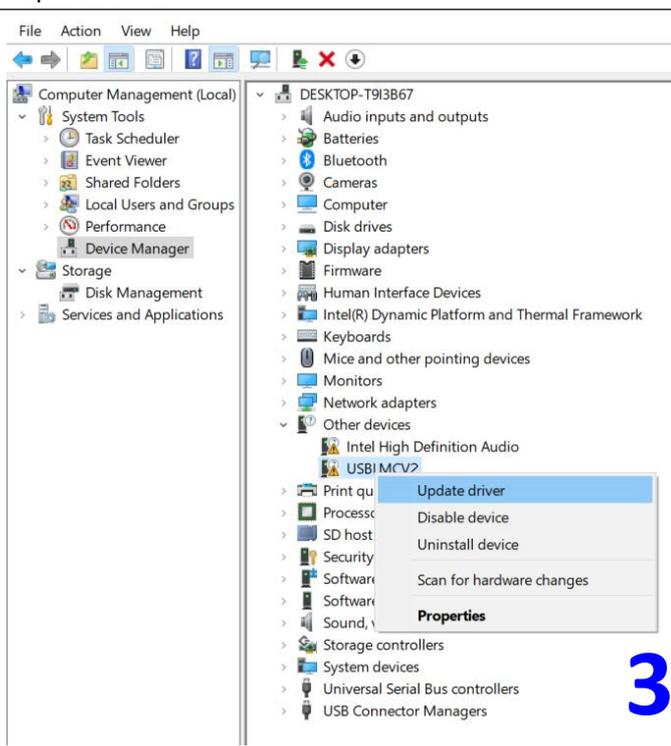
1. Right-click "this PC", click "Manage"



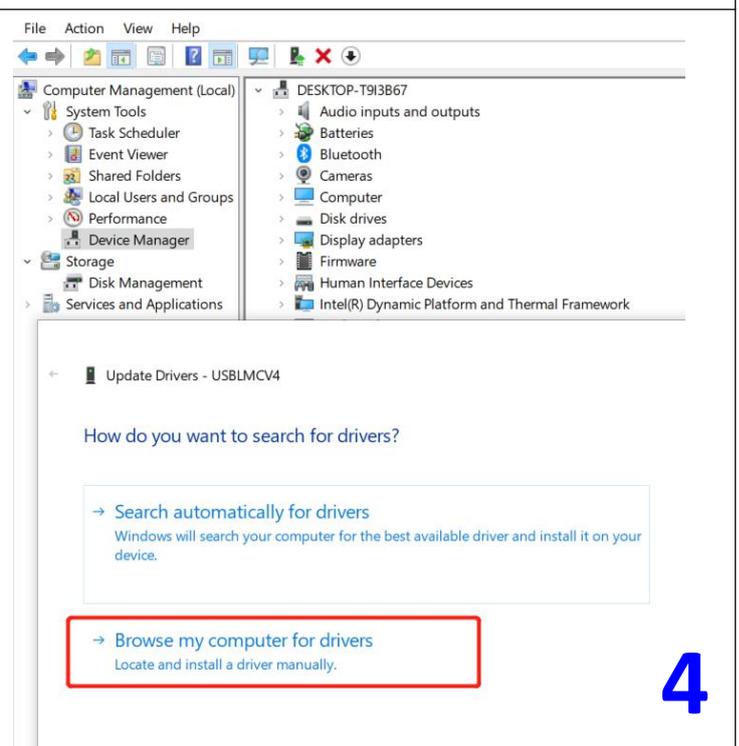
2. Click "Device Manager", find "USBLMCV2" or "Unknown Device" in "Other devices" or "Universal Serial Bus devices"



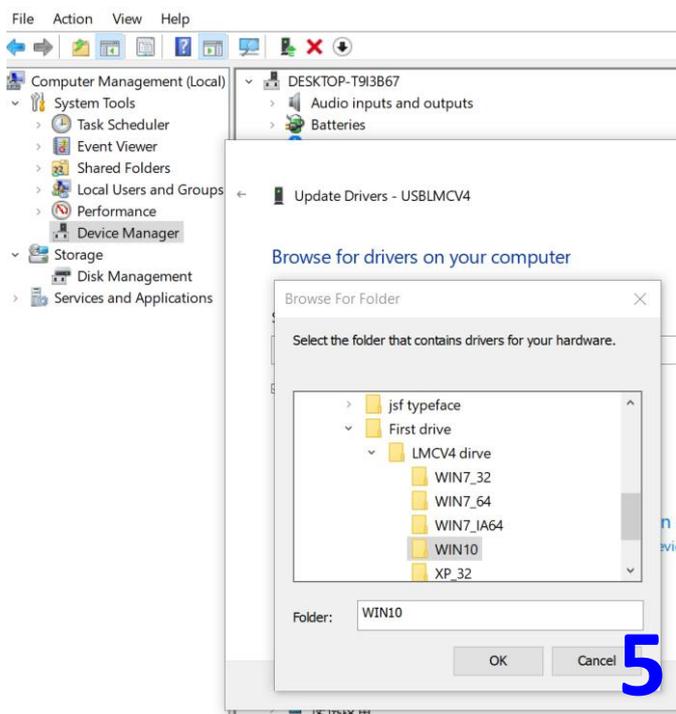
3. Right-click "Unknown device" or "USBLMCV2" and "Update driver"



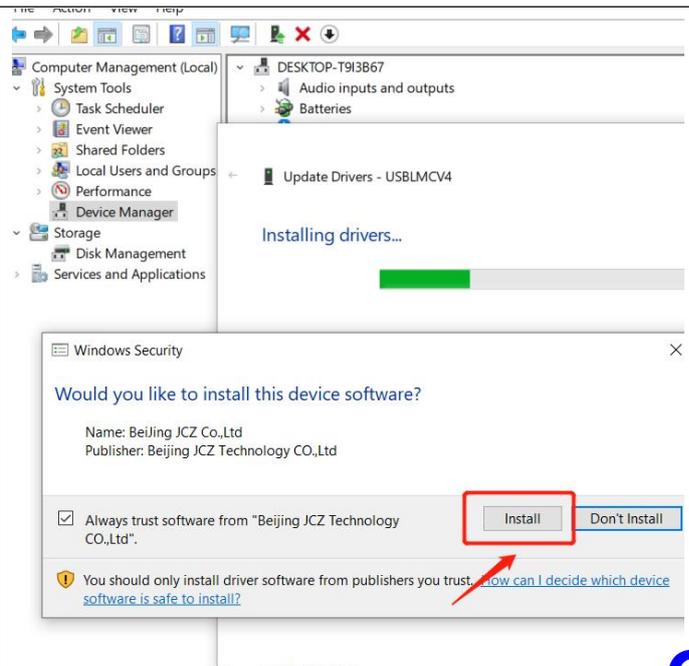
4. Select "Browse My Computer for Drivers"



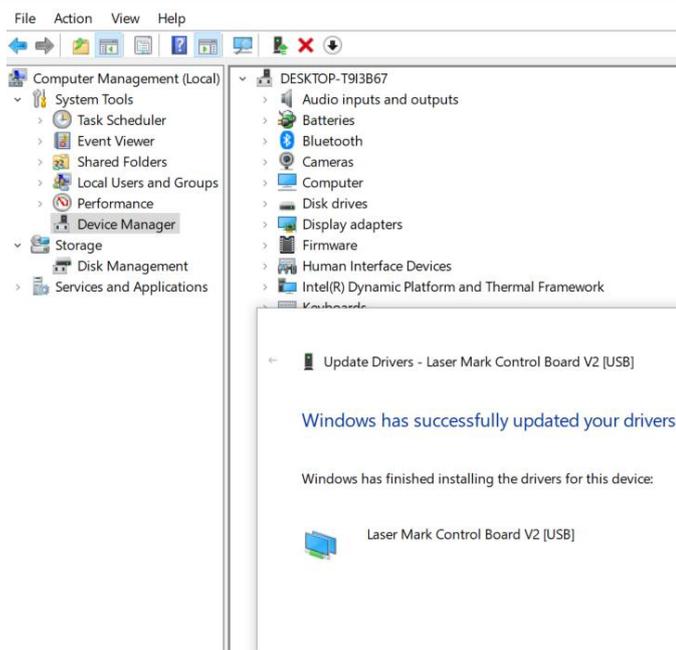
5. Find the corresponding file with window system in the USB drive, click OK



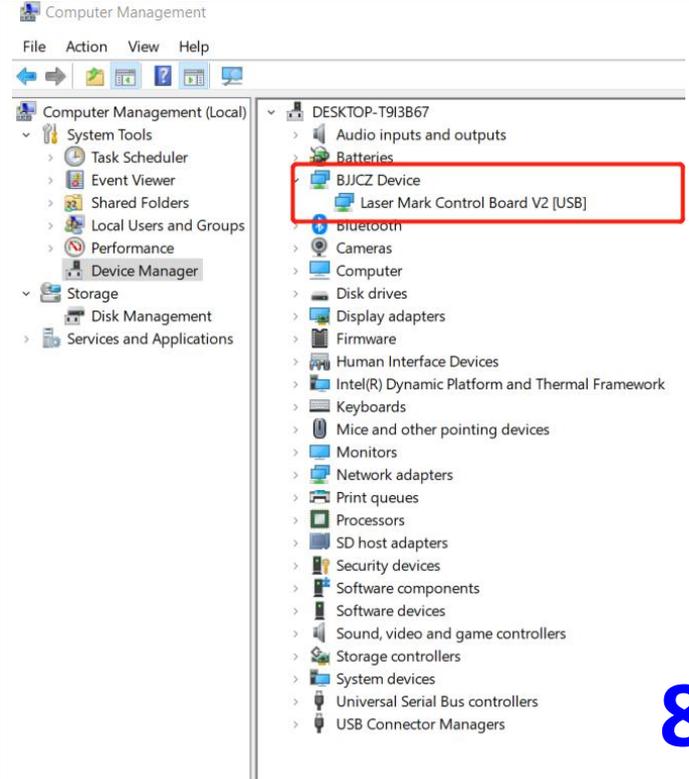
6. Click "Install"



7. Click "finish" if it is successful



8. It will display "BJCZ Device" in Device Manager

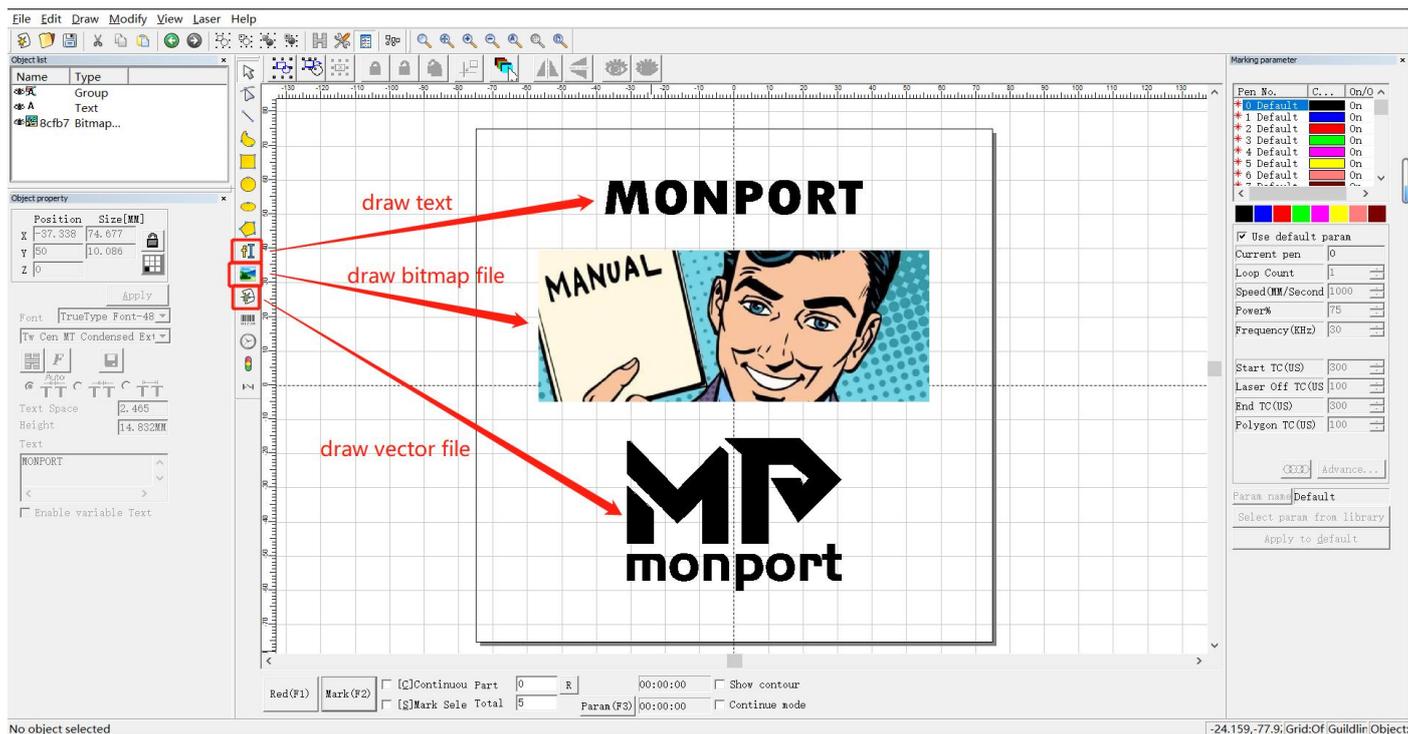


**Noted:**

**\*It is recommended to copy and paste the files of the USB disk to the computer desktop or other computer disks.**

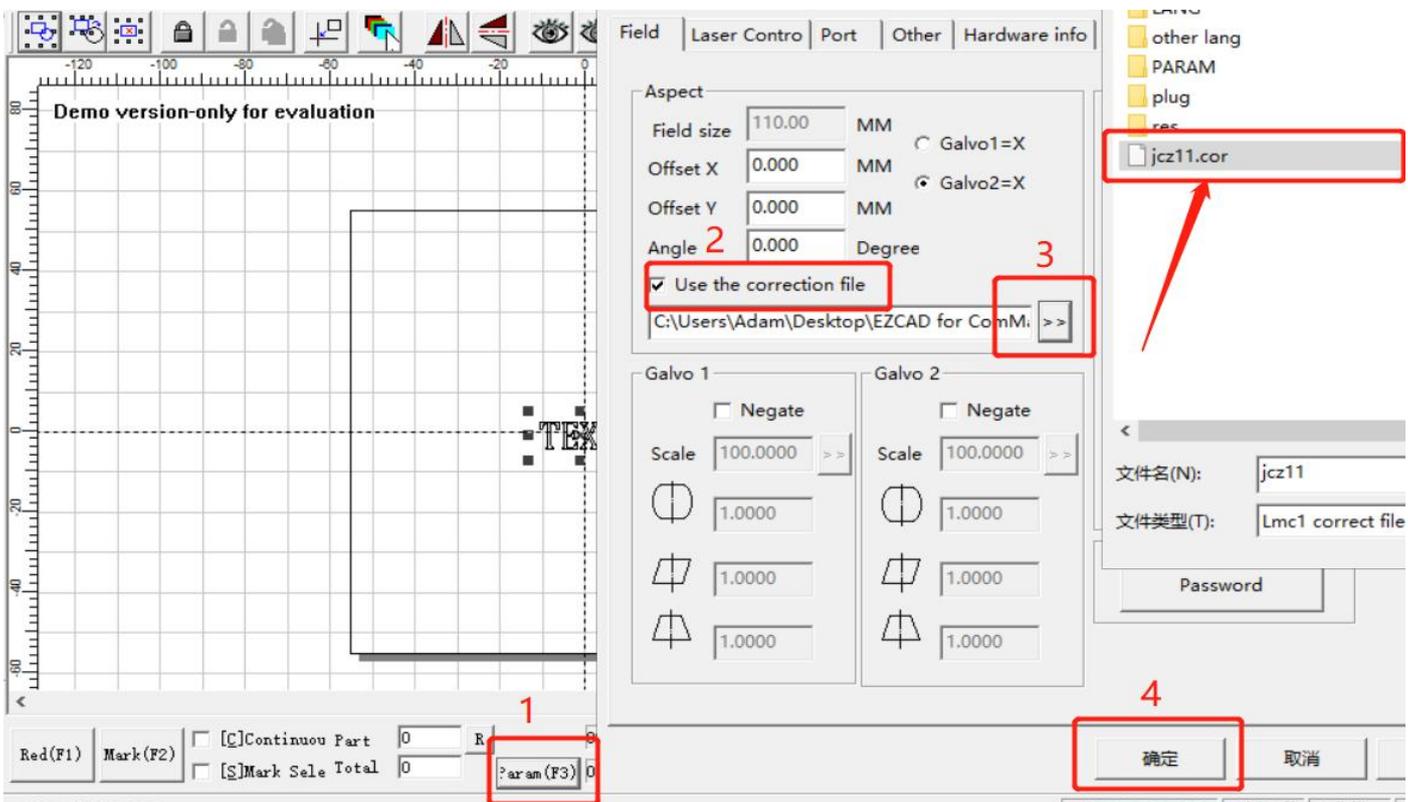
## 2. Open the software

Open the USB folder, open the "EZCAD for Monport" folder. Open the software "EZCAD2". You can enter "text", import "picture" or "vector file" as shown in the figure below. It is recommended to select the text to test first.



## 3. Import the correction file

Select "Parameter (F3)", tick "Use Correct File", select the file ending in .cor in the USB flash drive (or have been copied to the computer disk), and click "OK (确认)".



## 4.Adjust the focus

Press up or down button to lift or lower the laser head until the three red light point overlap, which is the best focal point. The measuring focal length of this machine is \_\_\_\_\_ mm, and the measuring distance is the length from the bottom line of the laser head to the surface of the engraving material. This parameter is measured manually, and each device has different focal lengths due to changes in laser sources and field lenses.

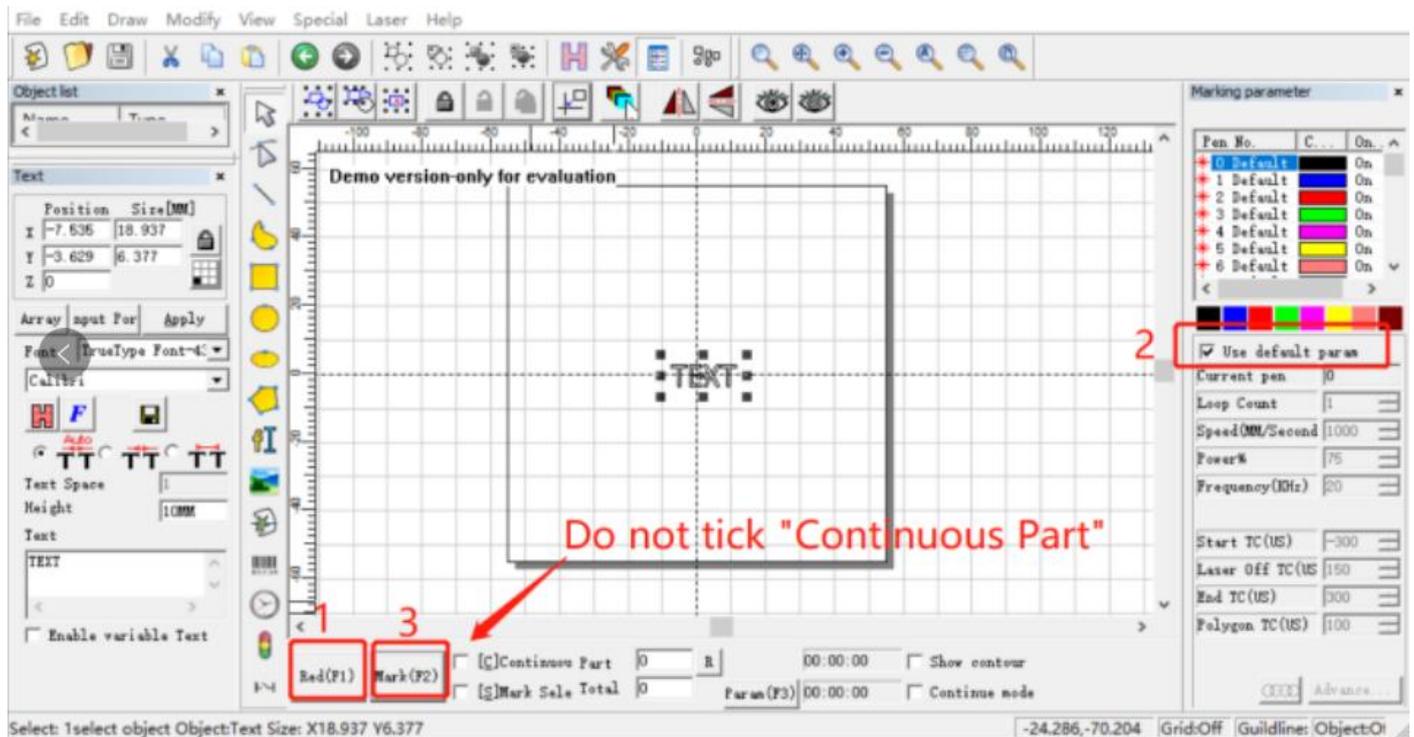
**Note: Before the machine is out of the factory, we have done red light correction . At the position where the three red light spots overlap, the laser emits the strongest light. However, due to transportation reasons, the focus point of the red lights you received may shift, and the focus point would not be the best focal length.**

### *Please operate as the following steps:*

1. Place the stainless steel test plate on the machine table.
  2. Lift up or down the laser head to the best focus point according to the number in handwriting above.
  3. Turn on the machine, connect the computer with the machine.
  4. Import the "TEXT" for testing, select the default parameters, and tick the "continuous part" button.
  5. Press "red (F1)" to ensure it'll mark on the test material. Click "mark", and the laser would be continuously marking .
  6. Meanwhile, lift or lower the laser head and observe the obvious change of intensity of the laser beam. Stop when the it works with the strongest laser.
  7. At this time, loosen the screws for the two beams of the auxiliary red light.
  8. Manually adjust the relative position of the red light dots to make them overlap. And tighten the screws.
- Please consult customer service for operation videos.

## 5.Marking test

Place the test engraving material on the machine. Click "Red (F1)", the area shown by the red light is the marking area. Tick "Default Parameters". Click "Mark (F2)" to start marking.



## 6.Parameters

Model:	GP20	GP30	GP50	GI20	GI30	GI60
Output Power:	20W	30W	50W	20W	30W	60w
Laser Type:	Fiber					
Working Area:	11cm x 11cm/15x 15cm/20cm x 20cm (Optional: 30x 30cm/40x40cm)					
Wavelength:	1064nm					
Marking Speed:	0- 10000mm/min					
Accuracy:	0.01mm					
Graphic Format Supported:	AI/PLT/JPG/DXF.etc					
System Supported:	Window7/8/10/11 , MAC					
Cooling Type:	Air Cooling					
Voltage:	110/220V					

## Packing list

- 1 × Laser marking machine
- 1 × Power cord
- 1 × Foot switch
- 1 × Ground wire
- 1 × Date cable
- 1 × Allen wrench
- 1 × Ruler
- 1 × Goggles
- 1 × U drive
- 1 × Placing helper
- 1 × Paperboard
- 1 × Material package
- 1 × Screw package
- 1 × Instructional manual

We sincerely thank you for your trust and choosing Monport. If you are satisfied with the machines' performance, please help leave a positive review at the website listing where you made your purchase. If you have any problems regarding our products, do not hesitate to contact us with your order ID at [support@monportlaser.com](mailto:support@monportlaser.com), and our customer service team will respond **within 12 hours**. Thank you, and we hope you will choose us again for your next purchase!

## Customer Service:

- For more video and supportive materials, please visit our official website at:

[www.monportlaser.com](http://www.monportlaser.com)

- For Laser Engraver technical support and service please email:

[support@monportlaser.com](mailto:support@monportlaser.com)